BOARD OF APPEALS, CITY & COUNTY OF SAN FRANCISCO

Appeal of <u>MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC,</u> Appellant(s)

vs.

DEPARTMENT OF BUILDING INSPECTION, PLANNING DEPARTMENT APPROVAL Respondent

NOTICE OF APPEAL

NOTICE IS HEREBY GIVEN THAT on December 5, 2022, the above named appellant(s) filed an appeal with the Board of Appeals of the City and County of San Francisco from the decision or order of the above named department(s), commission, or officer.

The substance or effect of the decision or order appealed from is the ISSUANCE on November 18, 2022 to Tenderloin Neighborhood Development Corporation, of a Demolition Permit (demolish a 2-story, 2-basement, office building) at 2550 Irving Street.

APPLICATION NO. 2022/06/27/7192

FOR HEARING ON February 8, 2023

Address of Appellant(s):	Address of Other Parties:
Mid-Sunset Neighborhood Association, Inc, Appellant(s)	Tenderloin Neighborhood Development Corporation,
Fife Law	Permit Holder(s)
c/o Enoch Wang, Attorney for Appellant(s)	c/o Katie Lamont, Agent for Permit Holder(s)
300 Montgomery Street, Suite 610	201 Eddy Street
San Francisco, CA 94104	San Francisco, CA 94102

Appeal No. 22-092



CITY & COUNTY OF SAN FRANCISCO BOARD OF APPEALS

PRELIMINARY STATEMENT FOR APPEAL NO. 22-092

I / We, Mid-Sunset Neighborhood Association, Inc. hereby appeal the following departmental action: ISSUANCE of

Demolition Permit No. 2022/06/27/7192 by the Department of Building Inspection which was issued or

became effective on: November 18, 2022, to: Tenderloin Neighborhood Development Corporation, for the

property located at: 2550 Irving Street.

BRIEFING SCHEDULE:

The Appellants may, but are not required to, submit a one page (double-spaced) supplementary statement with this Preliminary Statement of Appeal. No exhibits or other submissions are allowed at this time.

Appellants' Brief is due on or before: 4:30 p.m. on **January 19, 2023**, **(no later than three Thursdays prior to the hearing date)**. The brief may be up to 12 pages in length with unlimited exhibits. It shall be double-spaced with a minimum 12-point font. An electronic copy shall be emailed to: <u>boardofappeals@sfgov.org</u>, julie.rosenberg@sfgov.org, corey.teague@sfgov.org, tina.tam@sfgov.org, jrabinowitsh@tndc.org and klamont@tndc.org.

Respondent's and Other Parties' Briefs are due on or before: 4:30 p.m. on **February 2, 2023**, (no later than one Thursday prior to hearing date). The brief may be up to 12 pages in length with unlimited exhibits. It shall be doubled-spaced with a minimum 12-point font. An electronic copy shall be emailed to: <u>boardofappeals@sfgov.org</u>, julie.rosenberg@sfgov.org, corey.teague@sfgov.org, tina.tam@sfgov.org, geokimm@sbcglobal.net, enochwang@fifelawllp.com, and pbholzman@gmail.com.

Hard copies of the briefs do NOT need to be submitted to the Board Office or to the other parties.

Hearing Date: Wednesday, February 8, 2023, 5:00 p.m., Room 416 San Francisco City Hall, 1 Dr. Carlton B. Goodlett Place. The parties may also attend remotely via Zoom. Information for access to the hearing will be provided before the hearing date.

All parties to this appeal must adhere to the briefing schedule above, however if the hearing date is changed, the briefing schedule MAY also be changed. Written notice will be provided of any changes to the briefing schedule.

In order to have their documents sent to the Board members prior to hearing, **members of the public** should email all documents of support/opposition no later than one Thursday prior to hearing date by 4:30 p.m. to <u>boardofappeals@sfgov.org</u>. Please note that names and contact information included in submittals from members of the public will become part of the public record. Submittals from members of the public may be made anonymously.

Please note that in addition to the parties' briefs, any materials that the Board receives relevant to this appeal, including letters of support/opposition from members of the public, are distributed to Board members prior to hearing. All such materials are available for inspection on the Board's website at <u>www.sfgov.org/boa</u>. You may also request a hard copy of the hearing materials that are provided to Board members at a cost of 10 cents per page, per S.F. Admin. Code Ch. 67.28.

The reasons for this appeal are as follows:

See attachment to the preliminary Statement of Appeal.

Signature: Via Email

Print Name: Patrick Doolittle, agent for appellant(s)

Preliminary Statement of Appeal (filed 12/5/22)

Permit Application No. 202206277192 Issued: November 18, 2022 Property Address: 2550 Irving Street, San Francisco CA 94122

I represent Mid-Sunset Neighborhood Association, Inc. (MSNA) in this appeal. Attached is an email from MSNA president Flo Kimmerling authorizing me to file this appeal. The permit appealed from is the demolition permit issued November 18, 2022 for permit holder and owner Tenderloin Neighborhood Development Corporation (TNDC). The primary basis for the appeal is that the approval by the San Francisco Department of Public Health (SFDPH) was issued in error. "N/A" was checked by the SFDPH in response as to whether there are health and safety concerns at the property. It is unclear whether the application was reviewed by SFDPH's Environmental Health Division as it should have been. Testing has revealed significant PCE contamination beneath the 2550 Irving Street block that has spread onto neighboring properties. Unacceptable levels of PCE have been found this year in six homes adjacent to the property, and they may be present in other nearby homes that have not yet been sampled. The application information submitted by the permit holder regarding the contamination was missing or otherwise incomplete and outdated. SFDPH has acknowledged that DTSC is the responsible agency. MSNA and its environmental consultants met with DTSC on September 23, 2022. DTSC is currently investigating and its investigation has not been concluded. The permit holder's site management plan should have but did not include forensic and soil sampling, and the demolition permit did not identify contamination sources on the property. Without required forensic control conditions imposed during demolition, there is a substantial likelihood demolition will destroy critical evidence of PCE contamination in and around contaminated

piping in the subsurface.

Enoch Wang, Esq. Fife Law, LLP 300 Montgomery Ave., Ste. 610 San Francisco, CA 94104 (415) 837-3100 enochwang@fifelawllp.com

Flo Kimmerling (MSNA) geokimm@sbcglobal.net

Paul Holzman (MSNA) pbholzman@gmail.com

Permit Details Report

Report Date: 12/1/2022 10:55:17 AM

Application Number	: 202206277192
Form Number:	6
Address(es):	1724 / 038 / 0 2550 IRVING ST
Description:	DEMOLISH A 2 STORY, 2 BASEMENT, OFFICE BUILDING.
Cost:	\$200,000.00
Occupancy Code:	
Building Use:	-

Disposition / Stage:

Action Date	Stage	Comments
6/27/2022	TRIAGE	
6/27/2022	FILING	
6/27/2022	FILED	
10/28/2022	PLANCHECK	
10/28/2022	APPROVED	
11/18/2022	ISSUED	

Contact Details:

Contractor Details:

License Number:	1010621
Name:	MIGUEL GUZMAN
Company Name:	GUZMAN CONSTRUCTION GROUP INC.
Address:	2270 PALOU AV * SAN FRANCISCO CA 94124- 0000
Dhonor	

Phone:

Addenda Details: Description:

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	СРВ	6/27/22	6/27/22			6/27/22	WONG ALBERT	MOD
2	CP-ZOC	6/28/22	8/17/22			0/1//22	LAUSH MAGGIE	8/17/22: Approved - demo of existing 2-story commercial structure and surface parking lot reference new construction permit, BPA 202205053630 - Maggie.Laush@sfgov.org
3	BLDG	8/18/22	9/23/22			9/26/22	WONG IRENE	9/26/22:Approved. Route to PPC.
4	DPW- BSM	9/27/22	9/28/22			9/28/22	LIONGSON KATHLEEN	Approved. 9/28/22. Pre-construction site meeting required by BSM Street Inspection. Call (628) 271-2000 or dpw- bsminspects@sfdpw.org to schedule KVL
5	HEALTH	9/29/22	10/12/22			10/12/22	CASEY RYAN	NA
6	CP-ZOC	10/13/22	10/14/22			10/14/22	LAUSH MAGGIE	10/14/22: Missing stamp added per 8/17 approval - ML.
7	РРС	10/17/22	10/17/22			10/17/22	EAKIN MIGUEL	10/17/22: TO CPB;me 10/13/22: TO PLANNING to stamp second set of paper plans;me 9/29/22: To Health; ST 09/27/22: TO BSM;me 08/18/22: TO BLDG;me 06/28/22: TO PLANNING;me
8	СРВ	10/17/22	10/28/22			11/18/22	WONG ALBERT	11/18/22: ISSUED; 11/8/22: ASBESTOS REMOVAL PERMIT PA#202211045956; INVOICED; 10/28/22: ASBESTOS PRESENT REQ SEPARATE ASBESTOS REMOVAL PERMIT VIA OVER THE COUNTER; 10/20/22: EMAILED GC AND APPLICANT; PENDING CONTRACTOR STATEMENT, MMRP, J#, RACM SURVEY REPORT;

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

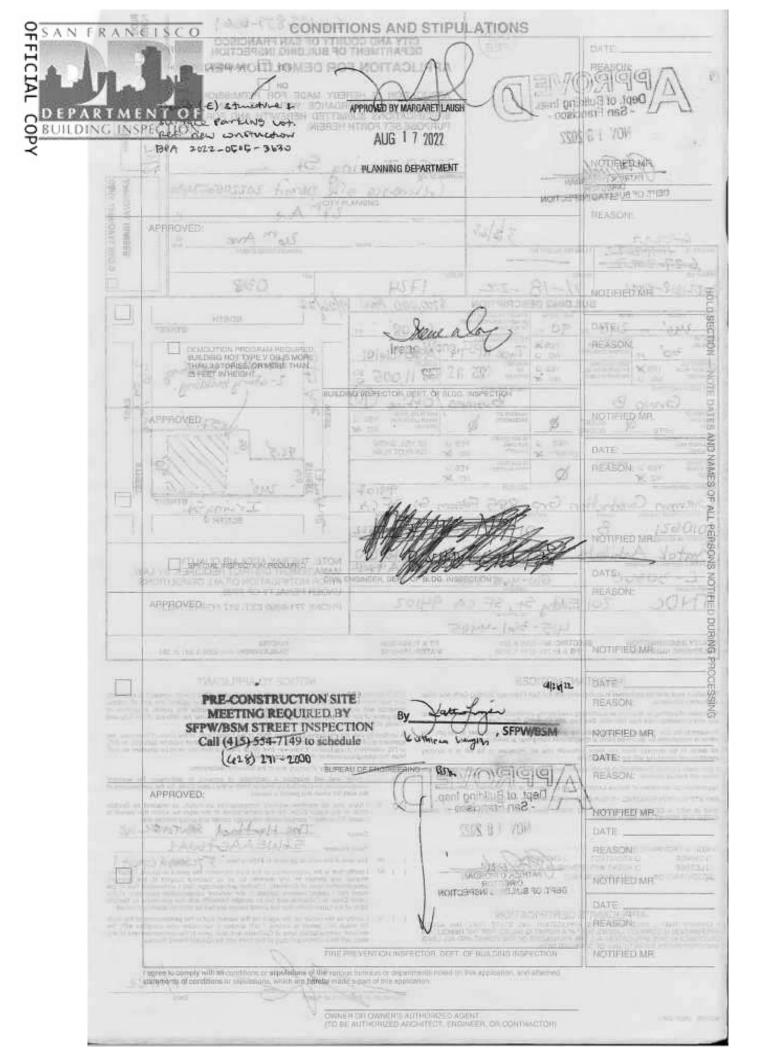
Appointment Date Appointment AM/PM Appointment Code Appointment Type Description Time Slots

Inspections:

Activity Date Inspector Inspection Description Inspection Status

< INC INC INC	MARCATION NUMBER
DEPT. OF BUILDING INSPECTION DEPT. OF BUILDING INSPECTION	APPROVA
6-22-22 FILMS PERFECTION NO. 75 8/28 17 - 750M 20th Ave 55 14-11-2022 FILMS PERFECTION NO. 75 - 750M NEWER CROSS STINUT	OSHA APPROVAL REG'D APPROVAL NUMBER:
Description Participation Participat	0
Image: State of the state	26 th Ave STREET
UTILITY DISCONNECTION ELECTRIC: 661 3000 X 324 PT 8 T: 663 3066 VIACOM UTILITY DISCONNECTION ELECTRIC: 661 3000 X 324 PT 8 T: 663 3066 VIACOM TELEPHONE NUMBERS: PG 8 E: 761 4214 X 3786 WATER: 558-3196 CABLEVISION: 490-6200 X 351 or 357	7
<section-header> Description of the start defendence of the formation of the formation of the start defendence of the start defendence</section-header>	seeps) to indemnify by and all chains, mit, negacities of se of the City and e of California, the internation of the internation of the performance of aurea for modeum international permit is per and the performance of aurea for modeum internation the performance of the permit is per and the the permit is per and the sector instand that in the visions of Sector manoe of the work perpenditions of the sector of the work perpenditions of the sector the permit is the sector the permit is the sector the sector of the sector permittion of the sector perpenditions of the sector permittion of the sector of the sector permittion of the sector of the sector permittion of the sector of the sector of the sector of the sector permittion of the sector of the s
Signature of Additions of Additions of Additional Date	u/22

soot-os (HEV, 285)



ARTMENT OFFEMENT	Quality District	ASBESTOS JOI
ACKNOWLEDGEMENT OF NOT	IFICATION & PAYMENT OF FEES	October 26, 2022
Guzman Construction Group Inc 885 FOLSOM ST	J# (JOB NUMBER)	TRI
San Francisco, CA 94107-1122	ASB126101	
Invoice No.: T139891	ASDIZOIUI	Regulation 11 Rule 2
The Bay Area Air Quality Management Removal or Demolition Plan described	District (BAAQMD) acknowledges receipt of yo as: 2550 Irving (Demolition)	ur payment and your Asbestos
Location Information:		
Site 2550 Irving St		
San Francisco, CA 94122		
Job Start Date: February 15, 2023		

Contractor or waste disposal site, you must inform the District per Section 401.5 of Regulation 11-2.



REVISIONS TO ONLINE JOB NOTIFICATIONS

For online submitted Job Notifications, revisions to Job information must be made online using the following steps:

- 1. Log into your BAAQMD account at myaironline.baaqmd.gov/account/login
- 2. Go to the My Job Notification list.
- 3. Click on the specific Job Notification to view the summary.
- 4. Click on the "Change Job Details" button

If you have trouble accessing your account online, or have questions regarding changes on Job Details, contact 415-749-4762.

NOTE: This form is not intended as verification of either the completeness of your original notification or of its compliance with BAAQMD Regulation 11-2. If you have any questions regarding this matter please contact on Air Quality Technician (415-749-4762, asbestosjobs@baagmd.gov). Please include your Asbestos Application Number and Invoice Number for any correspondence with the District.

October 25, 2022

375 Beale Street, Suite 600 - San Francisco, CA 54105 - (415) 771.6000 - WWW.BAAQMD.GOV



SF Environment Debris Compliance SF Environment Debris Compliance	ce e e e e e e e e e e e e e e e e e e	×
Building Permit No. 202206277192	77192	
MRRP Required? @ YES C NO	G YES C NO	
Env Debris Compliance Status	APPROVED V	
Green HALO Tracking No. GH693-859-6061	GH693-859-6061	
MRRP Submitted Date	11/16/2022	
MRRP Approval Date	11/16/2022	
MRRP Approved By	KAT HANRAHAN	
Completed Date		
Compliance Approved By		

SAVE EXIT





London N. Breed, Mayor Patrick O' Riordan, C.B.O., Director

Permit Application #	2022	0627 7192
Job Address: _25	SO IRU	ING ST.
Block/Lot Number: _	1724	038

DEMOLITION AFFIDAVIT

I declare under penalty of perjury that every party who has a recorded mortgage or recorded deed of trust on the property that is the subject of the application has been notified of the filing of this application as per San Francisco Building Code Section 106A.3.2.2.

Signature:	Se	the second secon
Print Name:	BEN	JAMIN AGUILAR
Date:	b/27/	22

J:COMMONUMarianne/CPIDDemolitionAffidavit



Mayor's Office of Housing and Community Development City and County of San Francisco

> London N. Breed Mayor

> > Eric D. Shaw Director

Letter Confirming City Priority Permit Status 2550 Irving

February 28, 2022

Mr. Patrick O'Riordan Director, Department of Building Inspection City and County of San Francisco 49 South Van Ness Avenue San Francisco, CA 94103

Dear Director O'Riordan:

On behalf of the Mayor's Office of Housing and Community Development (MOHCD) this letter confirms the priority status of the below project as a 100% new affordable housing project.

2550 Irving is a proposed 100% affordable housing in the Sunset neighborhood being developed to house families including those existing homelessness. The project will include total of 90 units on seven residential floors including potential community programming. The project is sponsored by MOHCD and being developed by a 501c(3) nonprofit organization, Tenderloin Neighborhood Development Corporation.

If you have questions or need anything further regarding this request, please feel free to contact me 415-602-2745 or erin carson@sfgov.org)

Thank you in advance for your assistance.

Sincerely,

Erin Carson Director of Construction Services Erin carson@sfgov.org

> One South Van Ness Avenue, Fifth Floor, San Francisco, CA 94103 Phone: 415.701.5500 Fax: 415.701.5501 TDD: 415.701.5503 www.sfmahcd.org





London N. Breed, Mayor Patrick O'Riordan, C.B.O., Director

Attachment A

LICENSED CONTRACTOR'S STATEMENT

Required documentation:	Government-issued photo ID
	Current San Francisco Business License
	Current State California contractor's license and classification (the pocket card)
Permit Application Number:	2022 06 27 7192
Permit Application Address:	2550 Irving St
Print Company Name:	Guzman Construction Group, Inc.
Print Contractor Name:	Guzman Construction Group, Inc.
CSLB Number: 1010621	Contractor Class:B Expiration Date:01/31/2024
Contractor Mailing Address:	885 Folsom St, SF Ca 94107
Contractor Telephone: 415	-821-2522 Contractor Email: admin@guzmangc.com
Contractor Signature:	Date: 10/19/2022

AUTHORIZATION OF AGENT TO ACT ON CONTRACTOR'S BEHALF

As the contractor listed above, hereby authorizes <u>Bruce Baumann</u> to obtain a building permit(s), including any supplemental permits, but not limited to electrical, plumbing or temporary street-use permits, on behalf of the company/contractor listed above, with the Department of Building Inspection for the City & County of San Francisco located at 49 South Van Ness Avenue, San Francisco, California 94103.

Print Named of Authorized Agent(s): Bruce Baumann

Address of Authorized Agent(s): 1221 Harrison Street, Suite 22, San Francisco, CA 94103

Agent's Telephone: (415) 551-7884 Agent's Email: bruce@baumannassociates.com

Pursuant to the Business and Professions Code Sec. 7031.5, I hereby affirm, under penalty of perjury, that I am licensed under the provisions of Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, and that my license is full force and effect.

Date: 10/19/2022 Contractor Signature: _ Revised 06/05/2022 **Central Permit Bureau** 49 Sobth-Van Ness Avenue, Suite 200 - San Francisco CA 94103 Office (628) 652-3240 - FAX (628) 652-3249 www.sfdbi.org



HAZARDOUS BUILDING MATERIALS SURVEY

Commercial Building 2550 Irving Street San Francisco, California

Tenderloin Neighborhood Development Corporation 201 Eddy Street San Francisco, California 94102

March 25, 2022 | Project No: 402154004



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Sociachecal & Environmental Sciences Consultente

	ENSCH nalytical, Inc. Street San Leandro, CA 94677 ENT OF 45-3675 / (510) 895-3880 (520 Convrol No. L. com / same and clab @armail.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
and the local design of th	William Larkin	Phone:	(510) 343-3000
and the loss of th	along and an and a second s	Phone: Fax:	(510) 343-3000 (510) 633-6646
STATISTICS IN CONTRACTOR INCOMENTS	William Larkin	2012/10/381	(510) 633-6646
STATISTICS IN CONTRACTOR INCOMENTS	William Larkin Ninyo & Moore	Fax:	(510) 633-6646 03/14/2022 8:00 AM
STATISTICS IN CONTRACTOR INCOME.	William Larkin Ninyo & Moore 2020 Challenger Drive	Fax: Received Date:	(510) 633-6646 03/14/2022 8:00 AM 03/17/2022

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Ar	sbestos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non Fibrous	5L Type	
ASB-01-Wailboard avaistang-nan	15T FLOOR SOUTH OFFICE - WALLBOARDUOINT OOMF	White Non-Fibrous Homogeneous		70% Gypsen 30% Non-fibrous (Other)	None Detected	
ASB-01-Joint Compound assesses-aan4	1ST FLOOR SOUTH OFFICE - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 2016 Non-Riscus (Other)	None Detected	
ASB-02-Wallboard	1ST FLR EAST OFFICE - WALLBOARDJOINT COMP	White Non-Fibrous Homogeneous		70% Gypsum 30% Non-fibrous (Other)	None Detected	
ASB-02-Joint Compound 1	18T FLR EAST OFFICE - WALLBOARDUOINT COMP	White Non-Fibrous Homogeneous		89% Ca Carbonate 20% Non fibrous (Other)	None Detected.	
ASB-02-Joint Compound 2 assesses-ages	1ST FLR EAST OFFICE - WALLBOARDUJOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
ASB-02-Joint Compound 3 executive-cost	1ST FLR EAST OFFICE - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
ASB-03-Wallboard	1ST FLR - WOFFICE AREA - WALLBOARDUJOINT COMP	White Non-Fibrous Homogeneous		70% Gypnum 30% Non-fibrous (Other)	None Deletted	
ASB-03-Joint Compound 1 measure creat	1ST FLR - WOFFICE AREA - WALLBOARDUDINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Rivous (Other)	None Detected	
ASB-03-Joint Compound 2 00220002.0004	1ST FLR - W OFFICE AREA - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		60% Ca Carbonate 20% Non-Ritrous (Other)	None Detected	
ASB-04-Wallboard	1ST FLR - N FILE ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		70% Gypsum 30% Non-fibrous (Other)	None Detected	
ASB-04-Joint Compound 1 0820002-00544	1ST FLR - N FILE ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		60% Ca Carbonate 20% Non-florous (Other)	None Detected	
ASB-04-Joint Compound 2	1ST FLR - N FILE ROOM - WALLBOARD/JDINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Tbrous (Other)	None Detected	

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OFFICIAL

SL Analytical, Inc.

mick Street San Leandro, CA 94677

DEPARTMENT OF 86-3675 (1510) 885-3680

BUILDING INSPECTION SLoom I serileandroleb@ernel.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PD: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Non-Asbestos Asbestos Sample Description Appearance % Fibrous % Non-Fibrous % Type ASB-05-Wallboard 1ST FLR - NE White 70% Gybsum None Detected RESTROOM-Non-Fibrous 30% Non-fbrous (Other) 000205002-0005 WALLBOARD(JOINT Homogeneous COMP ASB-05-Joint 1ST FLR - NE White 80% Ca Carbonale None Detected RESTROOM-Non-Fibrous 20% Non-fibrous (Other) Compound 1 WALLBOARDOOINT Homogeneous ABOOD-ROOMA COMP 1ST FLR - NE ASB-05-Joint White 80% Carbonate None Detected RESTROOM Non-Fibrous 20% Non-Strout (Other) Compound 2 WALLBOARDGOINT Homogeneous COMP 080205002-00058 ASB-06-Wallboard 2ND FLR - SW White 70% Gypeum None Detected Non-Fibrous OFFICE 30% Non-Ebroue (Other) 0003030005-0009 WALLBOARDIJOINT Homogeneous COMP ASB-08-Joint 2ND FLR - SW White 80% Ca Carbonate None Detected OFFICE Non-Fibrous 20% Non-Ebrous (Other) Compound WALLBOARDIJOINT Homogeneous 002205002-0006A COMP ASS-07-Wallboard 2ND FLR - SE White 70% Gypsum None Detected Non-Fibrous OFFICE -30% Non-Rbrous (Other) WALLBOARDIJOINT 00220.8002.d007 Homogeneous COMP ASB-07-Joint 2ND FLR - SE White AOM Ca Camonate None Celected OFFICE -Non-Fibrous 20% Non-fibrous (Other) Compound WALLBOARDOONT Homogeneous 0602050EE-3007A COMP ASB-08-Wallboard 2ND FLR - NW White 70% Dypsum None Detected UTILITY ROOM-Non-Fibrous 30% Non-fibrous (Other) 9002305052-0008 WALLBOARDUOINT Homogeneous COVE ASB-08-Joint 2ND FLR - NW White 80% Ca Carbonate None Detected UTILITY ROOM Non-Fibrous 20% Non-fibrous (Other) Compound. WALLEGARDUOINT Homogeneous COMP 000303000-00084 ASB-09-Wallboard 2ND FLR NE OFFICE White 70% Gypsum None Detected Non-Fibroux 30% Non-fibrous (Other) WALLBOARD/JOINT 002200002-0008 Homogeneous COMP ASB-09-Joint 2ND FLR NE OFFICE White 80% Ca Carbonata None Detected Non-Fibrous Compound 1 20% Non-fibrous (Other) WALLBOARDUOINT Hamogeneous 092203005-00084 COMP ASB-09-Joint 2ND FLR NE OFFICE White 80% Ca Carbonata None Detected Non-Fibrout 20% Non-fibrous (Other) Compound 2 WALLBOARDUCINT Homogeneous COMP 042305062-00048 2ND FLR NE OFFICE ASB-08-Joint White 80% Ca Carbonate None Detected Non-Fibrous 20% Non-Ribrous (Other) Compound 3 WALLBOARDUCINT Homogeneous: COMP 092205002 00580 2ND FLR - NW ASB-10-Wallboard Brown/Tan 70% Gyptum None Detected RESTROOM Non-Fibrous 30% Non-fibrous (Other) responses on a WALLBOARDUJOINT Homogeneous COMP

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SLAnalytical, Inc.

Street San Leandro, CA 94577

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CONTRACT MENT OF 25-3675 / (510) 885-3680 BUILDING INSPECTION State and and a state and a state of the state Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

		Ashestos			
Presente	Description	Annastance	% Fibrous	Non-Fibrous	% Type
Sample	2ND FLR - NW	Appearance White/Beige	36 PHOTOLAS	80% Ca Carbonate	None Datacled
ASB-10-Joint Compound	RESTROOM - WALLBOARD/JOINT	Non-Fibroux Homogeneous		20% Non-fibrous (Other)	110.00 0.0000000V
007205002-00108	COMP	A new second second second			
ASB-11-Mastic	1ST FLR - CENTRAL/FRONT -	Yellow Non-Fibrous		80% Matrix 20% Non-Ebrous (Other)	None Detected
002203009-0011	BEIGE-TAN CARPET MASTIC	Hamogeneous			
ASB-11-Cementitious	1ST FLR -	Gray/White		20% Quartz	None Detected
Material	CENTRALIFRONT + BEIGE-TAN CARPET	Non-Fibrous Homogeneous		60% Ca Carbonate 20% Non-tibrous (Other)	
osozołcoż obria Result includes a small articui	MASTIC It of magarable attached mat	torial			
ASB-12	4ST FLR +	Yellow		80% Matrix	None Detected
P 02 01 01 00 00 0	W-CENTRAL FLOOR	Non-Fibrous		20% Non-fibrous (Other)	14-1402200354925
092208042-0092	- BEIGE-TAN CARPET MASTIC	Homogeneous			
ASB-13-Vinyl Floor Tile	15T FLR, EAST SIDE SERVER ROOM - 12	White Black Not-Fibrous		20% Ca Carbonate 50% Matrix	None Detected
042206082-0073	X 12 WHITE VFT W GRAY	Homogeneous		20% Non-fibrous (Other)	
	SPECKS/YELLOW				
ASB-13-Mestic	151 FLR. EAST SIDE SERVER ROOM - 12	Yellow Non-Fibrous		80% Metrix 20% Non-Stroux (Other)	None Detected
082200002-00134	X 12 WHITE VFT W	Homogeneous		the second second fraction (
	GRAY	0.00000897700084			
	SPECKS/YELLOW MASTIC				
ASB-14-Vinyl Floor Tile	15T FLR, STORAGE ROOM - 12 X 12	White/Black Non-Fibrout		20% Ca Carbonate 60% Manix	None Detected
002209002-5014	WHITE VET W	Homogeneous		20% Non-fibrous (Other)	
	SPECKS/YELLOW MASTIC				
ASB-14-Mastic	1ST FLR, STORAGE	Yelow		80% Matrix	None Detected
discussor-stree	ROOM - 12 X 12 WHITE VET W	Non-Fibrous Homogeneous		20% Non-Stimus (Other)	
11/10/12/17/10/10	GRAY				
	SPECKS/YELLÓW MASTIC				
ASB-15-Vinyl Floor Tile	1ST FLR FILE ROOM - 12 X 12 GRAY	Gray Non-Fibrous		20% Cs Carbonate 60% Matrix	None Detected
092205002-0015	VFT/YELLOW MASTIC	Homogeneous		20% Non-fibrous (Other)	
AS8-15-Mastic	1ST FLR FILE ROOM - 12 X 12 GRAY				Insufficient Material
59235930Q-30154	VFT/YELLOW MASTIC				
ASB-16-Mastic	1ST FLR FILE ROOM - YELLOW	Gray/Yellow Non-Fibrous		5% Ca Carbonate 60% Matrix	None Detected
airestace.onia	MASTICALEVELER ASSOC. W ASB-15	Homogeneous		15% Non-fibrous (Other)	
Annual includes a small arrour		eria/			
ASB-16-Levelar	1ST FLR FILE ROOM	Gray		50% Ca Carbonate 30% Matrix	None Detected
ONUTION CONTRA	- YELLOW MASTIC/LEVELER ASSOC. W ASB-15	Non-Fibrous Homogeneous		20% Non-Fibrous (Other)	

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SL Analytical, Inc.

Correct Street San Leandro, CA 94577

DEPARTMENT OF 95-3675 / (510) 895-3680

BUILDING INSPREMENSLoom / santeandroiab@ernal.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Non-Asbestos Ashestos Description Appearance % Fibrous % Non-Fibrous % Type Sample ASB-17-Vinyl Floor Tile 2ND FLR UTILITY White/Black 20% Ca Carbonate None Detected ROOM - 12 X 12 60% Matrix Non-Fibrous 001205062-0017 WHITE Homogeneous 20% Non-fibrous (Other) **VFT/YELLOW** MASTIC (SAME AS ASB-13) ASB-17-Mastic 1 2ND FLR UTILITY Yellow 80% Matrix None Detected RCOM + 12 X 12 Non-Filtrous 20% Non-fibrous (Other) NOUTE Homogeneous 10/2 2010/02 -001 74 VFT/YELLOW MASTIC (SAME AS ASB-131 2ND FLB UTILITY ASB-17-Meetic 2 Biante 80% Mattie None Detected RDOM - 12 X 12 Non-Fibrous 20% Non-fibrous (Other) 005305065-00179 WHITE Nomogeneous VFT/YELLOW. MASTIC (SAME AS AS8-13] 1ST FLR CENTRAL 80% Matrix None Detected ASB-18-Cove Base Black HALLWAY -4" Non-Fibrous 20% Non-fibrous (Other) 10022010002-0018 BROWN COVE Homogeneous BASE/MASTIC ASB-18-Maatic 1ST FLR CENTRAL White/Beige 5% Ca Carbonate None Detected HALLWAY - 4* Non-Fibrous 80% Matrix 002205002-00164 BROWN COVE Homogeneous 15% Non-fibrous (Other) BASEMASTIC Result includes a small amount of inseparable attached material 1ST FLR SERVER. 15% Ca Carbonate None Detected ASB-19-Cove Base Tan Non-Fibrous RCOM - 4" TAN 60% Matrix 062208062-0019 COVE BASE/MASTIC Homogeneous 25% Non-fibrous (Other) ASB-19-Mastic 1ST FLR SERVER Yellow 80% Matrix None Detected ROOM - 4" TAN Non-Fibrous 20% Non-fibrous (Other) COVE BASE/MASTIC 052305008-0019A Homogeneous 2ND FLR HALLWAY ASB-20-Cove Base Black 60% Matrix None Detected -4" BROWN COVE Non-Fibrous 40% Non-fibrous (Other) 095205003-0025 BASE/MASTIC Homogeneous ASB-20-Mastic 2ND FLR HALLWAY White/Beige 60% Matrix None Detected - 4" BROWN COVE Non-Fibrous 40% Non-fibrous (Other) MESIO-530605290 BASE/MASTIC Homogeneous None Detected ASB-21-Cove Base 2ND FLR KITCHEN+ Bipwi 60% Makix 4" GREY COVE Non-Fibrout 40% Non-fibrous (Other) 092305069-0021 BASEMASTIC Homogeneous 2ND FLR KITCHEN -60% Matrix ASB-21-Mantic Cray None Detected 4" GREY COVE Non-Fibrous 40% Non-fibrous (Other) BASEMASTIC INVESTIGATION CONTACTOR Homogeneous ASB-22-Cove Base 2ND FLR UTILITY 60% Matrix None Detected Beige RCOM - 4" BEIGE Non-Fibrout 40% Non-fibrous (Other) 002205003-0022 COVE BASE/MASTIC Homogeneous ASB-22-Mastic 2ND FLR. UTILITY Tan 90% Matrix None Detected Non-Fibrous ROOM - 4" BEIGE 19% Non-fibrous (Other) ALLONG COLLARS COVE BASE/MASTIC Homogeneous RCOF - WEST AREA ASB-23-Roofing 1 White/Flack 5% Giasa 15% Quartz None Detected - ROOF ASSMEBLY Non-Fibrous 60% Metrix 092203082.0823 20% Non-fbrous (Other) Homogeneous RCOF - WEST AREA this Gines ASB-23-Felt Black 70% Matrix None Detected ROOF ASSMEBLY Fibrous 15% Non-fibrous (Other) 092205062-00234 Homogeneous

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SL Analytical, Inc.

Street San Leandro, CA 54577

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SAN FRANCISCO

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

DEPARTMENT OF 16-3675 (510) 895-3680 BUILDING INSPECTIVE KSL com / sandesandtroebgrenal com Test Report: Asbestos Analysis of B Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample			Asbestos		
	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-23-Rooting 2	ROOF - WEST AREA - ROOF ASSMEBLY	Black Non-Fibrous Homogeneous	10% Glass	70% Marrix 20% Non-Throus (Other)	None Detected
ASB-23-Roofing 3	HOOF - WEST AREA - ROOF ASSMEBLY	Black Non-Fibrous	7% Glass	70% Marix 23% Non-fbrous (Other)	None Detected
ASB-23-Insulation	ROOF - WEST AREA - ROOF ASSMEBLY	Homogeneous Brown Fibrous	90% Cellulosa	10% Non-Stimus (Other)	None Detected
CALEDO ERODO ERODORES AC		Homogeneous			
ASB-23-Foam	ROOF - WEST AREA - ROOF ASSMEBLY	Yellow Non-Florous		100% Non-1brous (Other)	Note Detected
047205082-90236		Homogeneous	1000 00000	1000 B. 100	Mana Balantad
ASB-24-Roofing 1	ROOF - EAST AREA - ROOF ASSEMBLY	White/Black Non-Fibroux Homogeneous	6% Glass	10% Quartz 70% Matrix 14% Non-fibrous (Other)	None Detected
	ROOF - EAST AREA	Black	15% Glass	85% Non-fibrous (Other)	None Detected
ASB-24-Felt (92205932-92244	-ROOF ASSEMBLY	Fibrous Homogenéous	10.11 (31895	and in the country (count)	THE DESIGN
A58-24-Roofing 2	ROOF - EAST AREA - ROOF ASSEMBLY	Black Non-Fibrous	7% Glass	70% Matrix 23% Non-fibrous (Other)	None Detected
082209002-90249		Homogeneous			
AS8-24-Roofing 3	ROOF - EAST AREA. - ROOF ASSEMBLY	Black Non-Fibrous	4% Celluiose 4% Glass	70% Matrix 22% Non-fibrous (Other)	None Detected
542395552-3524C		Homogeneous			
ASB-24-Insulation	ROOF - EAST AREA - ROOF ASSEMBLY	Brown Fibrous	90% Celuiose	10% Non-fibrous (Other)	None Detected
002255002-00240		Homogeneous			2010/02/07 02:45
ASB-24-Foem	RODF - EAST AREA - ROOF ASSEMBLY	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
392515000-0004E		Homogeneous		water (mail: the little in	None Detected
ASB-25-Rooting 1	NORTH ROOF AREA PARAPET - ROOF ASSEMBLY	White/Black Fibrous Homogeneous	10% Gisss	10% Quarte 60% Matrix 20% Non-Ritrous (Other)	None Detected
	NORTH ROOF AREA	Black	3% Celuiose	60% Matrix	None Detected
ASB-25-Roofing 2	PARAPET - ROOF ASSEMBLY	Fibrous Homogeneous	12% Glass	25% Non-fibrous (Other)	100000000000000000000000000000000000000
ASB-25-Insulation	NORTH ROOF AREA PARAPET - ROOF	Brown Fibrous	80% Celulose	20% Non-fibrous (Other)	None Detected
autosola otass	ASSEMBLY	Homogéneous			
ASB-26-Mastic	WEST-CENTRAL RODF-BLACK	Tan Non-Fibrous		80% Matrix 20% Non-fibrous (Other)	None Detected
092105062-0014	PATCH-ROOF ASSEMBLY	Homogeneous			
ASB-28-Roofing 1	WEST-CENTRAL ROOF-BLACK	Black Fibrous	9% Glass	10% Quartz 60% Matrix	None Detected
082205062-00258	PATCH - ROOF ASSEMBLY	Homogeneous		21% Non-Fbrous (Other)	
ASB-26-Roofing 2	WEST-CENTRAL ROOF-BLACK	(fileck Fibrous	10% Glass	75% Matrix 15% Non-fibrous (Other)	None Detected
pazzoszes-ecosat	PATCH - ROOF ASSEMBLY	Homogeneous			
ASB-25-Roofing 3	WEST-CENTRAL ROOF-BLACK	Black Fibroue	15% Synthetic	60% Matrix 25% Non-fibrous (Other)	None Detected
CA2306882 (ROSEC	PATCH - ROOF ASSEMBLY	Hamogeneous		P62042349483237609629538203	

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nalytical, Inc.

Street San Leandro, CA 94577

ARTMENT O F 95-3675 / (\$10) 895-3680

CONTRACTOR OF A CONTRACTOR (\$10) 885-3880 BUILDING INSPECTIVEL.com / sankeandrolab@emsl.com Test Report: Asbestos Analysis of B

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	100000000000	0.020530045	Non-Asbes	1000 ST 14 WORTS (1711)	Asbestes
	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-26-Insulation	WEST-CENTRAL ROOF-BLACK PATCH - ROOF ASSEMILLY	Brown Fibrous Homogeneous	80% Celulose	20% Non-fibrous (Other)	None Detected
ASB-35-Foam	WEST-CENTRAL ROOF-BLACK	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
082309052-0125E	PATCH - ROOF ASSEMBLY	Homogeneous			
ASB-27	WEST-CENTRAL RCOF-BLACK	Grey/Black Non-Fibrous	4% Celulose	60% Matrix 16% Non-fibrous (Other)	None Detected
982205082-0027	PATCH - BLACK SEALANT ON EDGE OF ROOF PATCH	Homogeneous			
ASB 28-Sealant	CENTRAL ROOF AREA -	White Non-Fibroux		60% Matrix 40% Non-Ebrous (Other)	None Detected
082206060-0028	TAPE/SEALANT ON HVAC DUCTING	Homogeneous		2.0	
ASB-28-Mastic	CENTRAL ROOF AREA -	Black Non-Fibroux		50% Matrix 10% Non-Recous (Other)	None Detected
M2209002-0426A	TAPE/SEALANT ON HVAC DUCTING	Homogéneous			
meeparable paint / coaking	ayer included in analysis	20			
ASB-29	1ST FLR HALLWAY CEILING - 2'X 2'	Grey Fibrous	70% Celuiose 5% Min. Wool	25% Non-fibrous (Other)	None Detected
042204022.0029	LAY-IN WHITE ACT	Homogeneous			1755 10100 1010
ASB-30	1ST FLR FRONT/CENTRAL	Tan/White Fibrous	45% Cellulose 15% Min. Wool	10% Ca Carbonate 30% Non-fibrous (Other)	None Detected
092205002-0038	AREA - 2 X 4 SECOND LOOK ACT WRANDOM HOLES/FISSURES	Homogeneous			
ASB-31-Wallboard	1ST FLR CELING - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		70% Gypsum 30% Non-Revous (Other)	None Detected
WHERE BOARD AND AND AND AND AND AND AND AND AND AN	1ST FUR CELING -	White		70% Ca Carbonale	Construction and
ASB-31-Joint Compound 1	WALLBOARD/JOINT	Non-Fibrous Homogeneous		28% Non-Roroux (Other)	2% Chrysotle
092203008-00314	Winner			Contractional Contract &	1006 0.001
ASB-31-Joint Compound 2	1ST FLR CEILING - WALLBOARDUOINT COMP	White Non-Fibrous Homogeneous		70% Ca Carbonale 28% Non-Rirous (Other)	2% Chrysotie
(92200002-000-e		0.00.00.00.00.00.00.00.00.00.000			
ASB-32-Wallboard	1ST FLR OLD ELEVATOR	Vihite Non-Fibrous	3% Glass	70% Gypsum 27% Non-fibrous (Other)	None Detected
nedantous-cosa	MACHINE ROOM - WALLBOARD/JOINT COMP	Homogeneous			
ASB-32-Joint	1ST FLR OLD	Vihise		70% Ca Carbonate	2% Chrysotle
Compound 1	ELEVATOR MACHINE ROOM -	Non-Fibrous Homogeneous		28% Non-florous (Other)	
UNIC DISTURSION CONTRA	WALLBOARD/JOINT COMP	5763 WAV WOOLL			
ASB-32-Joint	1ST FLR OLD	White		70% Ca Carbonate	2% Chrysotle
Compound 2	ELEVATOR MACHINE ROOM -	Non-Fibrous Homogeneous		28% Kon-forous (Other)	
Neuropice on the	COMP	Almano Settisci			

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SL Analytical, Inc.

Street San Leandro, CA 94577 TMENT OF 15-3675 / (510) 895-3680

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CONTRACTOR OF A R T M E N T O F 25-3675 / (510) 895-3680 BUILDING INSPECTATION / seriesendidab@emal.com Test Report: Asbestos Analysis of B Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbe	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-33-Wallboard	15T FLR. N-CENTRAL OFFICE	White Non-Fibrous		70% Gyptum 30% Non-fibrous (Other)	None Detected
082201002-0033	WALLBOARDVJOINT COMP	Homogeneous		201030-001030000000	
ASB-30-Joint Compound 1	157 FLR. N-CENTRAL OFFICE	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
982209332-00334	WALLBOARD/JOINT COMP	nancyelette			
ASB-33-Joint Compound 2	1ST FLR. N-CENTRAL OFFICE	White Non-Fibraue		80% Ca Carbonele 20% Non-fibrous (Other)	None Detected
98225902-00398	WALLBOARD/JOINT COMP	Homogeneous			
ASB-33-Joint Compound 3	IST FLR N-CENTRAL OFFICE	White/Yellow Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
00206069-00000	WALLBOARD/JOINT COMP	Homogeneous			No. of States
ASB-34-Stucco	ROOF - STAIRWAY ACCESS HUT -	Gray Non-Fibrous		20% Quartz 60% Ca Carbonnie	None Detected
062203262-0004	ASSEMBLY	Homogeneous		20% Non-fibrous (Other)	
Inseparable paint / country					
ASB-34-Meslic	ROOF - STAIRWAY ACCESS HUT -	Black Non-Fibrous		70% Matrix 30% Non-fibrous (Other)	None Detected
082205062-00944	STUCCO ASSEMBLY	Homogeneous			
Result includes a smell and	ount of inssperable atteched ma	lettai'			
ASB-35-Stucco 1	ROOF - STAIRWAY ADDESS HUT -	Gray Non-Fibrous		30% Quartz 50% Ce Carbonate	None Detected
082209032-0055	STUCCO ASSEMBLY	Homogeneous		20% Non-Fbraus (Other)	
ASB-35-Stutco 2	ROOF - STAIRWAY ACCESS HUT -	White Non-Fibrous		35% Quartz 45% Ca Carbonate	None Detected
582208002-95354	STUDDO ASSEMBLY	Homogeneous		20% Non-Ebrous (Other)	
inseparable paint / roaking	layer included in analysia				
ASB-36-Stucce 1	ROOF - STAIRWAY ACCESS HUT -	Gray Non-Fibrous		30% Quartz 50% Ca Carbonate	None Detected
002299022-30[6	STUCCO ASSEMBLY	Homogeneous		20% Non-fibrous (Other)	
ASB-36-Stucco 2	RDOF - STAIRWAY ACCESS HUT -	White Non-Fibrous		35% Quartz 45% Ca Carbonats	None Detected
00/205002-00364	STUCCO ASSEMBLY	Homogeneous		20% Non-fibrous (Other)	
A5B-36-Mastic	ROOF - STAIRWAY ACCESS HUT -	Black Fibrous	10% Colluise	70% Matrix 20% Non-Stroug (Other)	None Detected
002205000-00388	STUCCO ASSEMBLY	Homogeneous		00000000	
ASB-37	ROOF - NE: TOP OF PARAPET METAL	Gray Non-Fibrous		70% Matrix 30% Non-fibrous (Other)	None Detected
068305008-0007	COVER - GRAY CONNECTIVE MASTIC	Homogeneous			

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nalytical, Inc.

Street San Leandro, CA 94577

MENT O F 95-3675 J (510) 895-3680

CONTRACTOR OF A R T M E N T O F 95-3675 J (\$10) #95-3680 BUILDING INSPECTATION Second Sector Sector

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

2011/2/11	12000000000	2210232300	Non-Ad	2.5 AUG24, 12 NUS/2 SALL	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-38 302205022-003#	ROOF - SE, TOP OF PARAPET METAL COVER - GRAY CONNECTIVE MASTIC	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-Sbrous (Other)	None Detected
ASB-39	ROOF - CENTRALIAREA-HV	White Non-Fibrous		70% Matrix 30% Non-Strous (Other)	None Detected
002209002-0019	AC DUCTING - GRAY CONNECTIVE MASTIC	Homogeneous			
Nessit includes a small amoun	2001212/01/2114	uniar			
ASB-40	ROOF - CENTRAL/AREA-HV	Gray/White/Black Non-Fibrous		80% Matrix 20% Non-fibrous (Other)	None Detected
WG\$550000-00H0	AC DUCTING - GRAY CONNECTIVE MASTIC	Homogeneous		Head and the source of the sources	
Result includes a small emour	t of Hiseparable aspected Hisk	eral			
ASB 41 Vinyi Floor Tile	2ND FLR KITCHEN -	Ten		20% Ca Carbonate	None Detected
0022330022-0344	TAN-BROWN 12 X 12 VFT/MASTIC W/SWRLS	Non-Fibrous Homogeneous		50% Matrix 20% Non-fibrous (Other)	
ASB-41-Mastic	2ND FLR KITCHEN -	Yelow		60% Matrix	None Detected
007255/02-09/1A	TAN-BROWN 12 X 12 VFT/MASTIC W/SWIRLS	Non-Fibrous Homogeneous		20% Non-Straus (Other)	22000-00000000
ASB-41-Levelor	2NO FLR KITCHEN - TAN-BROWN 12 X	Grey Non-Fibrous		10% Cs Carbonate 70% Matrix	None Detected
893995002-02418	12 VFT/MASTIC WISWIRLS	Homogeneous		20% Non-Abrous (Other)	
ASB-42-Vinyl Floor Tile	2ND FER KITCHEN -	Gray		20% Ca Carbonate 50% Matrix	None Detected
082289002-0442	GRAY 12 X 12 VET/MABTIC WSWIRLS	Non-Fibrous Homogeneous		30% Non-Reious (Other)	
ASB-42-Mastic	2ND FLR KITCHEN -	Yellow		BO% Matrix	None Detected
202015002-0042A	GRAY 12 X 12 VET/MASTIC W/SWIRLS	Non-Fibrous Homogénéous		20% Non-fibrous (Other)	
A58-42-Leveler	2ND FLR KITCHEN -	Gray		16% Ca Carbonate	None Detected
NR23255ND2-004010	GRAY 12 X 12 VETMASTIC WSWIRLS	Non-Fibrous Homogeneous		20% Matrix 20% Non-Stribus (Dther)	
ASB-43-Mastic	2NO FLR - CENTRAL OFFICE AREA -	Yellow Non-Fibrous		50% Matrix 20% Non-5birous (Other)	None Detected
IR2555332-QM3	YELLOW CARPET MASTIC	homogeneous		server an and the server by	
AS8-43-Leveler	2ND FLR - GENTRAL OFFICE AREA -	Gray Non-Fibrous		10% Ca Carbonate 70% Matrix	None Detected
HASSARGOS-COMINA	YELLOW CARPET MASTIC	Homogeneous		20% Non-Stribus (Other)	
AS8-43-Compound	2ND FLR - CENTRAL OFFICE AREA -	Beige Non-Fibrous		80% Ca Carbonate 20% Nor-Rbrous (Other)	None Detected
##??ess12.cux3#	YELLOW CARPET MASTIC	Homogeneous			
ASB-44-Vinyl Floor Tile	2ND FLR - N-CENTRAL STAIRS	Gray_ Non-Fibrous		10% Ca Carbonate 70% Matrix	None Detected
mathematic const	LANDING - 12' GRAY VFT/GRAY MASTIC (UNDER CARPET)	Homogeneous		20% Non-Abrous (Other)	

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nalytical, Inc. SI.

Street San Leandro, CA 94677

95-35757 (810) 895-3680

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CHARTMENT OF 35-3575 / (310) 095-3580 BUILDING INSPECTION / same and clab gension Test Report: Asbestos Analysis of B Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample		Non-Astestos		bestos	Asbestos	
	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
ASB-44-Mastic represent-safe4	2ND FLR - N-CENTRAL STAIRS LANDING - 12' GRAY VFTIGRAY MASTIC (UNDER GARPET)	Yellow/Clear Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected	
ASB-45-Wallboard	N-CENTRAL STAIR - 1ST FLOOR LANDING - WALLBOARDJJOINT COMP	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fBrous (Other)	None Detected	
ASB-45-Joint Compound sezonoce.cove4	N-CENTRAL STAIR - 1ST FLOOR LANDING - WALLBOARD/JOINT COMP	Beige Non-Fibrout Homogeneous		80% Ca Carbonate 20% Non-Terous (Other)	None Detected	
ASB-46-Waliboard	N-CENTRAL STAIR - 2ND FLOOR LANDING - WALLBOARDUDINT COMP	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected	
ASB-46-Joint Compound	N-CENTRAL STAIR - 2ND FLOOR LANDING - VALLEDARD/JOINT COMP	White Non-Fibrouit Homogeneous		80% Ca Curbonate 20% Non-fibrous (Other)	None Detected	
ASB-47-Wailboard	N-CENTRAL STAIR- SRD FLOOR LANDING - WALLEDARE/JOINT COMP	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Divisched	
ASB-47-Joint Compound 1 accessore.com74	N-CENTRAL STAIR - 3RD FLOOR LANDING - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 18% Non-Rincoa (Other)	2% Chrysofie	
ASB-47-Joint Compound 2 available coine	N-CENTRAL STAIR - 3RD FLOOR LANDING - WALBOARDGOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Rerous (Other)	None Detected	
ASB-48-Stucco 1 002205062-0049	TST FLR - FILE ROOM - ELEVATOR WALL - STUCCO ASSEMBLY	Gray Non-Fibrous Homogeneous		40% Quertz 40% Ca Carbonate 20% Non-fibroas (Other)	None Detected	
ASB-48-Stucco 2 decessors co484	1ST FLR - FILE ROOM - ELEVATOR WALL - STUCCO ASSEMBLY	White Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
ASB-49-Stucco 1	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARDUDINT	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
ASB-49-Studco 2	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARD/JOINT	White Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonate 30% Non-1brous (Other)	None Detected	
ASB-49-Joint Compound	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARD/JOINT	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
082203052 20416						

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Analytical, Inc.

Street San Leandro, CA 94577

95-3675 / (510) 895-3680 MENTOF

G-INSPECIONCENSL com / sanleandrolab@emsl.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	% Fibrous	Nen-Asbestos	% Non-Fibrous	Ashestos % Type
ASB-49 Wollboard	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARD/JOINT					Layer Not Present
ASB-50-Wallhoard	1ST FLR FILE ROOM - ELEVATOR WALL -					Leyer Not Present
aazeaaco ASB-50-Joint Compound	WALLBOARDUJOINT 1ST FLR FILE ROOM - ELEVATOR WALL- WALLBOARDUJOINT					Layer Not Present
887255437-03604						
AS8-50-Silucco 1	+ ELEVATOR WALL - WALLBOARD/JOINT	Gray/White Non-Fibrous Homogeneous			30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
AS8-50-Stucce 2	1ST FLR FILE ROOM + ELEVATOR WALL -	Gray Non-Fibrous			40% Guartz 40% Ce Cerbonate	None Detected
382965802-083AC	WALLBOARD/JOINT	Homogeneous	500,200,00	0.57.52	20% Non-Shrous (Other)	320124-01630-2
ASB-51-Insulation	2ND FLR SMALL DUCT INSELATION - YELLOW BATT INS ON SMALL DUCT	Yellow Fibrous Homogeneous	90% Min	Wbol	10% Non-Sbrous (Other)	None Detected
ASB-51-V#ap	2ND FLR SMALL DUCT INSULATION - YELLOW BATT INS	Tan/Silver Fibrous Homogeneous	40% Cell 5% Glas		55% Non-Strout (Other)	None Detected
	ON SMALL DUCT					
A5B-52-Insulation	2ND FLR LARGE OUCT INSULATION - WHITE BAT INS-ON LARGE DUCT	White Fibrous Homogeneous	90%.Min	Wool	10% Non-fibrous (Other)	None Delected
ASB-52-V#ap outcosoc-cosox	2ND FLR LARGE DUCT INSULATION - WHITE BAT INS-ON LARGE DUCT	Tan/Silver Fibrous Homogeneous	40% Cell 10% Gla:	1	50% Non-fibraus (Other)	None Detected
A3B-55-Cerartic Tile	19T FLR/ N-CENTRAL RESTROOM - 8" CERAMIC FLOOR TILE W MORTAR & GROUT	Brown Non-Fibrous Homogeneous			70% Quertr 30% Non-Ritrous (Other)	None Detected
ASB-53-Grout	1ST FLIV N-CENTRAL	Brown Non-Fibrous			40% Quartz	None Detected
antyshory-anese	RESTROCH - 8" CERAMIC FLOOR TILE W MORTAR & GROUT	Homogeneous			60% Non-fibrous (Other)	
ASB-53-Mortar	1ST FLR/	Gray Non-Elimina			60% Ca Carbonale	None Detected
natusteno-ansue	N-CENTRAL RESTROOM - 8" CERAMIC FLOOR TILE WI WORTAR & GROUT	Non-Fibrous Homogeneous			40% Non-fibroux (Other)	
ASB-54-Ceramic Tile annanalasi	1ST FLEV N-CENTRAL RESTROOM - 8* WHITE CERAMIC WALL TILE WMASTIC	White Non-Floroux Homogeneous			70% Quartz 30% Non-fibrous (Other)	None Detected

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Street San Leandro, CA 94577

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CONTRACTOR OF THE PART MENT OF 35-3675 / (510) 895-3680 BUILDING INSPECTION STREAM OF THE CONTRACTOR O Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Astestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
ASB-54-Mastic dezesses-con44	TST FURV N-CENTRAL RESTROOM - 8" WHETE CERANIC WALL TILE WIMASTIC	White Non-Fibrous Homogeneous		70% Matrix 30% Non-Abrous (Other)	None Detected
ASB-54-Compound	1ST FUR/ N-CENTRAL RESTROOM - 8" WHITE CERAMIC WALL TILE W/MASTIC	Vihile Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-55-Coramic Tile	2ND FLR/NW RESTROOM - 4" BROWN/TAN CERAMIC FLOOR TILE W/MORTAR	Purple Non-Fibrous Homogeneous		70% Quartz 30% Non-fibrous (Other)	None Detected
ASB-55-Mortar 082200820-00334	2ND FLRINW RESTROOM - 4" BROWN/TAN CERAMIC FLOOR TILE WEMORTAR	Gray Non-Fibrous Homogéneous		50% Quarte 50% Non-Ritrous (Other)	None Detected
A58-55-Fiberboard	2ND FLR/NW RESTRCOM - 4" BROWNTAN CERAMIC FLOOR TILE WWORTAR	Tan Fibrous Nomogeneous	96% Celluiose	8% Non-fibrous (Other)	None Detected
A58-56 1820(90)2-8090	2ND FLRINW RESTROOM - GROUT ASSOC WASB-55	Pink Non-Fibrous Nomogéneous		40% Querte 60% Non-fibrous (Other)	None Detected
ASB-57-Ceramic Tile texteetti assr	2ND FLRINW RESTROOM - 3" X 8" CERAMIC WALL TILE & MASTIC	Purple Non-Fibrous Homogeneous		70% Quartz 30% Non-fibrous (Other)	None Detected
A58-57-Mastic 042205005-00574	2ND FLRINW RESTROOM - 5" X 8" CERAMIC WALL TILE & MASTIC	Tan Non-Fibrous Homogeneous		70% Matrix 30% Non-Forous (Other)	None Detected
ASB-57-Compound	2ND FLRINW RESTROOM - 3" X 8" CERANIC WALL TILE & MASTIC	White Non-Fibroux Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-58 092259002-0058	2ND FLR/NW RESTROOM - GROUT ASSOC W ASB-57	Pink Non-Fibrous Homogeneous		40% Quartz 60% Non-fibrous (Other)	None Detected
ASB-56-Insulation	15T FLR/ SE OFFICE - WHITE BATT INSULATION ON SMALLER DUCT	White Fibrous Homogeneous	90% Min, Wool	10% Non-Reces (Other)	None Detected
ASB-59-Wrap	15T FLRI SE OFFICE - WHITE BATT INSULATION ON SMALLER DUCT	Brown/Silver Fibrous Homogeneoue	40% Celulose	60% Non-Rorous (Other)	None Detected



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Street San Leandro, CA 94577

95-3675 / (510) 895-3680 MENT OF

E-INSPECTIVELCOM/ annieandrolab@emsi.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

211/2021	1200000000	24 E. R. M. J. P. S. S. M.	Non-Asbee	00% KI2A M125 PATA 071 FT	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-60 201215862-080	1ST FLRACENTRAL-FRO NT AREA - WHITE BATT INSULATION ON LARGER BOX DUCT	White Pibrous Homogeneous	95% Min. Web	5% Non-Sprous (Other)	None Detected
ASB-61-Wallboard	2ND FLR REAR/ NE STAIRWELL WALL - WALLEGARD/JOINT COMP	White Non-Fibrous Homogeneous		70% Gypsum 30% Non-Strous (Other)	None Detected
ASB-61-Joint Compound 1 200255802-08914	2ND FLR REAR/NE STARWELL WALL- WALLBOARD/JOINT COMP	Beige Non-Fibrous Homogeneous		50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-61-Joint Compound 2 accesses-comp	2ND FLR REAR/NE STAIRWELL WALL - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Abroux (Other)	None Ontscied
ASB-62-Waliboard	2ND FLR, FRONT/SOUTH STAIRWELL WALL- WALLBOARDIJOINT COMP	White Non-Fibrous Homogenetus		70% Ca Carbonate 30% Non-Sbrous (Other)	None Detected
ASB-62-Joint Compound 1 worksed-eeste	2ND FLR, FRONTISOUTH STAIRWELL WALL - WALLBOARDRIGINT COMP	Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Abrous (Other)	None Cetected
ASB-62-Joint Compound 2 202225302-09518	2ND FLR, FRONT/SOUTH STAIRWELL WALL - WALLBOARDUOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-farous (Other)	None Detected
ASB-63 avvisanci dari	2NO FLR, \$ OFFICE WINDOW - WHITE INT, WINDOW GASKET	White Non-Fibrous Homogeneous		10% Ca Carbonate 75% Matrix 15% Non-Rorous (Other)	None Detected
ASB-64 #8298332-6961	2NO FLR. S. OFFICE WINDOW - GRAY INT. WINDOW GASKET	Gray Non-Fibrous Homogeneous		10% Ca Carbonate 75% Matrix 15% Non-Titurous (Other)	None Detected
ASB-65	EXT. NW WINDOW FRAME - BROWN SEALANT/FRAME TO STUCCO	Brown/Black Non-Fibroux Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
ASB-66	EXT. NW WINDOW- WINDOW GASKETIFRAME TO WINDOW	Black Non-Fillroux Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
ASB-67 001155000-0467	ROOF/CENTRAL DUCTING - GRAY/WHITE HUBBERY PATCHING SEALANT	Gray/White Non-Flancus Homogareous	3% Cellulose	80% Matrix 17% Non-fibrous (Other)	None Detected
ASB-68 09235k00-0004	INT, NW WINDOW 1ST FLR - BROWN GASKET WINDOW TO FRAME	Brown/Nack Non-Fibrous Homogeneous		80% Matrix 20% Non-Florous (Other)	None Detected

(initial report from: 03/17/2022 14:31:14

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Analytical, Inc.

Street San Leandro, CA 94577

95-3675 / (510) 895-3680

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

CHARTMENT OF 95-3675 (1010) 896-3680 Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Samplo			Non-Asb	Asbestos	
	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASR-69 autosatrates	INT. SE WINDOW/ST FLR - WHITE GASKET WINDOW TO FRAME	White Non-Fibraus Homogeneous		80% Marrix 20% Non-forous (Other)	None Detected
ASB-70 cecations.come	EXT. NE WALL-AT ORIVEWAY - LIGHT-TAN SEALANT/CAULK STUCCO TO STUCCO	Brown Non-Fibrous Homogeneous		80% Manx 40% Nos-fbrows (Other)	None Detected
ASB-71 092205062-0071	EXT. SE WNDOW- BROWN SEALANT-METAL TO METAL SASH	Black Non-Fibrous Homogeneous		60% Malrix 40% Non-Storous (Other)	None Detected
ASB-72 (82209882 0072	EX7. SE WINDOW FRAME - LIGHT-TAN SEALANT FRAME TO STUCCO	Tan Non-Fibrous Homogeneous		60% Matrix 40% Non-Ebraus (Other)	None Detected
ASB-73 082209092-0079	INT. SE OFFICE - BROWN WINDOW SEALANT FRAME TO METAL SASH	Black Non-Fibroux Homogeneous		80% Matrix 40% Non-fibrous (Other)	None Detected
ASB-74	EXT. PARKING LOT - ASPHALT	Gray/Black Non-Fibrous Homogeneous		30% Quartz 40% Mattix 30% Non-fibrous (Other)	None Detected
ASB-75	EXT. PARKING LOT- ASPHALT	Gray/Black Non-Fibrous Homogeneous		30% Quertz 40% Matix 30% Non-fibrous (Other)	None Detected
ASB-76	EXT. STAIRS - CONGRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-Forous (Other)	None Detected
A58-77	EXT. STAIRS - CONCRETE	Gray Nor-Fibrous Horsogeneous		40% Quartz 40% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-78-Stuceo 1	EXT WALL-SOUTH WALL-FAKE 'STUCCO"	Gray Not-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-Tbrows (Other)	None Detected
A58-78-58ucco 2 09228500-30194	EXT WALL-SOUTH WALL-FAKE "STUDDO"	Ten Non-Fibrous Homogeneous		10% Quartz 70% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-78-Foam Insulation	EXT. WALL - SOUTH WALL - FAKE *STUCCO*	White Non-Fibrous Homogeneous	3% Glass	97% Non-fibrous (Other)	None Detected
ASB-78-Mesh	EXT WALL-SOUTH WALL-FAKE "STUCCO"	Brown/Orange Fibrous Homogeneous	95% Class	5% Non-fibrous (Other)	None Detected
ASB-79-Silucco 1	EXT. WALL - SE WALL - FAKE "STUDGO"	Gray Non-Fibrous Homogeneous		40% Quarta 40% Ca Carbonate 20% Non-Strous (Other)	None Detected
ASB-79-810000-2	EXT. WALL - SE WALL - FAKE "STUCCO"	Tan Non-Fibrous Homogeneous		10% Quartz 70% Ca Carbonate 20% Non-Sbitous (Othar)	None Detected
ASB-79-Foam insulation	EXT. WALL-SE WALL-PAKE "STUCCO"	White Non-Fibrous Humogeneous		100% Non-fibrous (Other)	None Detected



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EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

DEPARTMENTOF BUILD IN SREGONICINSL. com / santeendrotab@amal.com Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-79-Mesh	EXT. WALL - SE WALL - FAKE "STUCCO"	Brown/Orange Fibrous Homogeneous	96% Glass	5% Non-fibroux (Other)	None Delected
ASB-80-Stucco 1	EXT. WALL - NE CORNER - FAKE "STUCCO"	Gray Non-Fibrous Homogeneous		30% Guertz 40% Ca Garbonate 30% Non-Sbrous (Other)	None Detected
ASB-80-Stucco 2	EXT. WALL - NE CORNER - FAKE "STUCCO"	Brown Non-Fibrous Homogeneous		30% Guartz 50% Ca Carbonata 20% Non-Strous (Other)	None Detected
ASB-81-Stucco	EXT. PLANTER VALL - PARKING LOT - STUCCO ON CONCRETE	White Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonato 30% Non-Strous (Other)	None Detected
ASB-81-Concrete	EXT. PLANTER WALL - FARKING LOT - STUCCO ON CONGRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-82-Stucco	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	White Non-Fibrous Homogeteous		30% Quertz 40% Ca Carbonata 30% Non-Abrous (Other)	None Detected
ASB-82-Concrete ast25500-89604	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-5brous (Other)	None Detected
ASB-83-58,,coo	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	White Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonale 30% Non-fibrous (Other)	Note Delected
ASB-83-Concrete	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ce Carbonate 20% Non-(brous (Other)	None Detected
ASB-84 000305000-0004	FRONT ENTRANCE AREA - GRAY GROUT AREA ASSOC. WGRAY 12 X 12 CERAMIC FLOOR TILE	Gray Non-Fibrous Homogeneous		30% Quartz 50% De Carbonate 20% Non-Strous (Other)	None Detected
ASB 85 Walipaper	1ST FLR. N-CENTRAL OFFICE - WALLPAPER/GLUE	Gray/White Non-Fibrous Homogeneous		70% Matrix 30% Non-Stirous (Other)	None Detected
ASB-85-Glue	1ST FLR. N-CENTRAL OFFICE - WALLPAPER/GLUE	Beige Non-Fibrous Homogeneous		80% Matrix 20% Non-Stimus (Other)	None Delected



EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Analyst(s)

Brianne Franquelin (21) Gevin Lee (95) Jose Madrid (47) Karina Martinez (41) Xeena Paul (39)

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Cecilia Yu. Laboratory Manager or Other Approved Signatory

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Samples study red by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101046-3, WA C884

Initial report from: 03/17/2022 14:31:14

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EMSL	Analytical, Inc.
ARTMENTO	- Street Ban Leandro, CA 94577 910) 895-9675 / (510) 895-3680
DINGINSPECTIQ	L.com / sanleso drotab@emsi.com

EMSL Order:	092205002
Customer ID:	NOM022
Customer PO:	402154004
Project ID:	

Phone:	(510) 343-3000
Fax:	(510) 633-5646
Received:	03/14/2022 8:00 AM
Analysis Date:	03/17/2022 - 03/21/2022
Collected:	03/08/2022

Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116. Quantitation using the 1,000 Point Count Procedure

		Appearance	MoreAsbeatos		Asbeston
Sample Description	Description		% Fibrous	% Non-Fibroux	%.Туре
ASB-31-Joint Compound 2 082205002-00318	1ST FUR CEILING - WALLBOARDIJOINT COMP	While Non-Fibrous Homogeneous		99.80% Non-Abrous (Other)	e.2%Chrysotile
ASB-32-Joint Compound 2 082200062-00326	1ST FLR OLD ELEVATOR MACHINE ROOM - WALLBOARDJOINT COMP	White Non Fibrous Homogeneous		99.90% Nen-Sbross (Other)	a, 1% Chrysotile

Analyst(s)

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SAN FRANCISCO

Attention: William Larkin

Ninyo & Moore 2020 Challenger Drive

Alameda, CA 94501 Project: 402154004 - TNOC/ IRVING ST

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Jose Mathid (2)

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Cecifia Yu, Laboratory Manager or other approved signatory

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Samples analyzed by EMSE Analytical, Inc San Learnin, CA NVLAP Lab Code 101048-3, WA CB54

Initial report from: 03/17/2022 14:31:25

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ARTMENT OF DO 895-3675 / (816) 885-3600 DO INSPECTIONEL com / sanlagratulatigemsLocm	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention: William Larkin Ninyo & Moore	Phone: Fax:	(510) 343-3000 (510) 633-5646
2020 Challenger Drive	Received:	03/14/2022 8:00 AM
Suite 103	Analysis Date:	03/17/2022 - 03/21/202 03/08/2022
Alamedá, CA 94501 Project: 402154004 - TNOC/ IRVING ST	Collected:	0.0PU0DEDEE

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy, Quantitation using 400 Point Count Procedure

				Ashestos	Ashestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
ASB-47-WB/JC1UC	N-CENTRAL STAR -	White		100.0% Non-librous (Cliner)	<8,25% Chrysotlik
2 Composite	3RD FLOOR LANDING	Non-Fibrous			
092205002-0047	- WALLBOARDWOINT COMP	Homogeneous			

Anelysk(s)

Jose Madrid (1)

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Cecilia Yu, Laboratory Manager or other approved signalory

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Samplus analyted by ENSL Analytical, Ins San Leandro, CA MMLAP Lab Codu 101048-3, WA C884

Initial report from: 03/17/2022 14:31:25

Printed 3/21/2022 8:33:57AM

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Image: Consistent space Definition Recentincarte RePairs OR CONSTRUCT SIDEWALK Definition Reconstruction Repairs OR CONSTRUCT SIDEWALK Definition Reconstruction Repairs OR CONSTRUCT SIDEWALK Definition Reconstruction Reconstruction Definition ASSOCIATES LP Model Model AS	URRENT STANDARD SPECIFICATION RTMENT OF BUILDING INSPECTION VDDITIONAL INFORMATION REGARDING SPECIFICATION PERMITS IS GIVEN ON THE BACK OF THIS FORT PAID AT FILING OF REFLIND DOP FLAN CHECK DEMOLITION	1.967,00 1.967,000000000000000000000000000000000000
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49 South Van Ness Ave, Suite 400 CENTRAL PERMIT BUREAU San Francisco, CA 94103

DEPARTMENT OF BUILDING INSPECTION CITY AND COUNTY OF SAN FRANCISCO (628) 652-3200

Receipt No: 20221108-Application/Permit No: 20220627

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ADDITIONAL INFORMATION

Building Permit.

WARNING

All requests for extension of time must be in writing to Director, Deot of Building Inspection. Permits art issued subject to Appeal within 15 days to Board of Permit Appeals. Incur no ecoenses until right of Appeal has lapsed.

2. Demolition Permit.

Code (Public Works Code), certain

building permits may be issued only after the permittee analyzes the soil

Pursuant to Article 20 of Chapter 10. Part II of the San Francisco Municipal If Demolition involves Abandonment of Side Sewer Parmittee must obtain a Side Sewer Parmit. The Side Sewer will then be blocked at the Main Sewer.

If issued with Building permit time for completion is same as Building. If issued alone, complete work within 6 months Excavation should be carried out in accordance with Article 8 of Public Works Code Issued to construct Auto Runway as per Article 15. Public Works Code Permit to Lower Curb/To Excavate in Street or Sidewalk from date of Permit. Void if not started within 6 months.

å

for the presence of hazardous wastes and,where applicable, certifies that it 4. Street Space Permit.

site

the

conducted

measures,

analysis, recommended site mitigation

mitigation or checked or verified the

reports submitted or work performed

for accuracy, reliability or adherence to

employees make any representation that the soil on or about the site is free

neither the city nor any of its officers or

protocols. In issuing this permit,

officer, employee, or agency of the

has completed site mitigation.

City conducted the soil sampling and

No refuse excavated materials, concrete or mortar is to be disposed of upon Paved Streets, catch basins or into the City sewer system. No material cr equipment shall be reft on Roadway of Police Tow-Away Zone during hours when Tow-Away Rule is in force Cuthers and Waterways must be kept clear.

All provisions of Section 724.3 of the Public Works Code are incorporated into this permit by reference.

Street and sidewalk areas occupied must not exceed a width 1/2 the width of the sidewalk plus 1/3 the width of the Roadway fronting

5. Permit to Repair or Construct Sidawalk

the City's

does

Nor

wastes.

implementation of this process relieve

any person from their duties and responsibilities relating to hazardous waste contamination under state and law. Neither soil analysis

federal

pursuant to Article 20 of Public Works Code nor the issuance of this permit is

hazardous

presence of

from the

Handicep Ramps required in vicinity of Crosswalks per plan No.11-33, 982, Ch. 2. Before beginning any work under this permit contact your Area Inspector Tet: 554-5837. Permit valid for 3 months from date issued, unless extension authorized.

In addition, issuance of this permit does not limit the liability of the property owner or his or her agent if work pursuant to this permit or the ections of a third party result in damage to the sidewalk or subsidewalk structure, consequently, permittees proceed at their own risk. The City and County of San Francisco makes no representations that issuance of a sidewalk permit will or will not directly or indirectly affect a subsidewalk structure. The Department of Building Inspection, in conjunction with the Department of Public Works, issues permits to construct or after subsidemalk spaces separately from a sidewalk permit. Property owners are encouraged to seek the advice of qualified professionals to independently analyze the structural integrity of subsidewalk space and determine whether such space should be improved Some sidewalks have been constructed over a subsidewalk basement or other below ground structure. Issuance of this permit does not limit, modify, or after in any way the responsibility of the property owner to ensure that such subsidewalk space complies with the San Francisor Building Code, Electrical Code, Fire Code, Mechanical Code, Plumbing Code, Public Works Code, and other Municipal Codes. or modified

6. Hold Harmless Clause

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alter, extinguish,

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intended

transfer these reponsibilities.

against any and all claims, demands and actions for clamages resulting from operations under this permit, regardless of negligence of the City and County of San Francisco, and to assume the defense of the City and County of San Francisco against all such claims, demands The Permittee(s) by acceptance of this permit, agree(s) to indemnity and hold harmless the City and County of San Francisco from and and acticns.

BOARD OF PERMIT APPEALS STIPULATIONS

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	Department of Building Inspection	London N. Breed, Mayor
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	SPECTION	<u>.</u>
P	PERMIT APPLICANT AND AUTHORIZED	AGENT DISCLOSURE AND CERTIFICATION
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	Date: 00/27/2022 Dew	Amended
	Permit Application No. 2022 0627 7192 Job	
	Permit Application No. 1012 0021 1192 Job	Address:
		n application for a building permit (Forms 1/2, 3/8, 4/7, 6 and 8).
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	Department does not regulate permit expediters/consultants or	afford them preferential treatment.
	A. Permit Applicant Information	B. Name EVAN REATON
		Architect Architect
	I hereby certify that for the purpose of filling an application for a building or other permit with the Central Permit Bureau,	Phone No. 415-989-1004
	or completion of any from related to the San Francisco	Firm Name KPFF CONSULTING ENGINEERS
	Building Code, or to City and County ordinances and	License # Expiration Date
	regulations, or to state laws and codes. I am the owner, the	Firm Address MS FREMONT ST.
	lessee or the agent of the owner/lessee and am authorized to sign all documented connected with this application or	SAN FRANCISCO CA 94105
	permit.	City State Zip
	1#779-13.455.	Email: IVan. beaton@ Kpff. com
	I declare under penalty of perjury that the foregoing is true and correct. I am the permit applicant and I am	China Tanti Cococorio Peri riviri
	Check box[es]:	
	The owner (B) The lessee (C)	E. General Contractor Information Note: Complete separate licensed contractor's statement
	The authorized agent. Check entity(ies):	also.
	Architect (D) Engineer (D)	Name MIGVEL GUZMAN
	Contractor (E) Attorney (F)	Phone 115-821-2522
	Permit Consultant/Expediter (G) Other (H)	Firm Name GUZMAN CONSTRUCTION GROUP
	Print Applicant Name SENJAMIN AGVILAR	License # IDIO621
	Sign Name BA	Expiration Date 01-31-2024 Firm Address 885 FOLSDM ST.
	7 /	SAN FRANCISCO CA 94107
	B. Owner Information	City State Zip
	Name TNDL	
	Phone 415-361-4405	Email: migvel@qu2manqc.com
	Address 201 EDDY JT.	
	SAN FRANCISCO CA 94102	Contractor not yet selected. If this box is checked;
	City State Zip	submit an amended form when known.
	Email: jrabinowitsh@tndc.org	 Owner-Builder. If this box is checked, submit Owner- Builder Declaration Form.
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	C - Lacasa Information	F. Attorney Information
	C. Lessee Information	Name
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		G. Permit Consultant/Expediter/Authorized Agent/Others
	D. Architect/Engineer Information	Name
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	None List of all Architect(s)/Engineer(s) on project:	Address
	A Name PRATOR APROPRETS ADELANNE	·
	Architect D Engineer STE/CUEN	J City State Zip
	Phone No. 510-105-7010	Francisk.
	Firm Name PVATOK ARWITELTS	Email:
	Expiration Date	Please describe your relationship with the owner.
	Firm Address 1611 TELEGRAPH AVE. SVITE 200	
	DAKLAND LA 94612	-
	City State Zip	

Office (628)-652-3200 Website: www.sfdbi.org

BRIEF SUBMITTED BY THE APPELLANT(S)

1	ENOCH WANG (SBN 218904)
2	FIFE LAW, LLP 300 Montgomery Street, Ste. 631
3	San Francisco, CA 94104
4	Telephone: (415) 837-3101 Facsimile: (415) 837-3111
5	
6	Attorneys for Appellant Mid-Sunset Neighborhood Association, Inc.
7	BOARD OF APPEALS
8	CITY AND COUNTY OF SAN FRANCISCO
9	CITIT AND COUNTER OF SAN FRANCISCO
10	MID-SUNSET NEIGHBORHOOD) Appeal No. 22-092
11	ASSOCIATION, INC.,) APPELLANT MID-SUNSET
12	Appellant,) NEIGHBORHOOD ASSOCIATION,
13	v.) INC.'S BRIEF IN SUPPORT OF) APPEAL
14	DEPARTMENT OF BUILDING) INSPECTION,) Date: February 8, 2023
15) Time: 5:00 p.m.
16	Respondent.) Place: City Hall, Room 416
17	
18	Appellant Mid-Sunset Neighborhood Association, Inc. (MSNA) is comprised of
19	residents who live adjacent or nearby to the 2550 Irving Street property for which demolition
20	permit has been issued by DBI (Permit No. 202206277192). The demolition permit was issued
21	on November 18, 2022. Appeal was timely filed on December 5, 2022.
22	I. <u>STATEMENT OF FACTS</u>
23	Environmental investigations conducted between 2019 and 2021 at the property (2550
24	Irving Street) have found tetrachloroethylene (PCE) above the Department of Toxic Substances
25	Control (DTSC)'s risk-based environmental screening levels (ESL) in soil vapor at the property
26	(which encompasses 2520 Irving Street where the former Miracle Cleaners site was located) and
27	also north at 2520 Irving Street (former Miracle Cleaners site), and south at 2511 Irving Street
28	and the adjacent 2525 Irving Street. 2511 Irving Street (which was formerly an Albrite Cleaners
	site) was added to the DTSC Cortese List, and the owner and former operator were issued an
	Appellant's Brief in Support of Appeal

Imminent & Substantial Endangerment Order ("I&SE Order") by DTSC on October 29, 2021
 (Exhibit A). The full extent and interaction between the contamination under and at the
 property sought to be demolished and adjacent properties is currently unknown and the subject
 of ongoing DTSC investigation.

Indoor air sampling conducted in September-October 2021 and March 2022 at six
homes adjacent to the property revealed PCE levels higher than the health-based residential
screening levels. (Exhibit B – Declaration of Paul Holzman ¶ 3)

8 On June 27, 2022, the owner TNDC applied to the DBI for a demolition permit. None of
9 this was mentioned in the application. (Exhibit C – Application For Demolition Permit)

Previously, TNDC's consultant Path Forward Partners, Inc. (Path Forward) submitted a
Response Plan which was approved by DTSC on September 2, 2021. On November 24, 2021,
Path Forward prepared a Site Management Plan for the property. (Exhibit D) The report did not
mention the contamination findings at the adjacent properties or update to include the I&SE
Order at 2511 Irving Street.

15 On July 12, 2022, because of the new data regarding the contamination derived through testing and analysis, the San Francisco Board of Supervisors passed a resolution (Exhibit E -16 Resolution No. 317-22) acknowledging the interaction between the contamination at the three 17 18 properties and urging that "DTSC, in coordination with SFDPH, manage this situation with a comprehensive, coordinated investigation and cleanup approach for the PCE contamination on 19 the 2500 Irving Street block...in order to protect the health of future building occupants and 20 21 long-time residents now known to have been exposed to PCE for decades." The Board of 22 Supervisors further urged "that construction at any property impacted by the 2500 Irving PCE soil gas plume is performed only after a Response Plan is in place to remediate the 23 contamination and to prevent the exposure of nearby residents to PCE vapors." 24

On September 23, 2022, DTSC met with representatives of applicant MSNA. The
meeting was attended by MSNA geologist expert Donald Moore, PG, ARM, San Francisco
Supervisor Gordon Mar, DTSC Director Meredith Williams, and Nelline Kowbel, DTSC Chief,
Northern CA Division, Site Mitigation. Directors Williams and Kowbel acknowledged the new
findings and stated that DTSC was investigating "the data in aggregate" and that "[DTSC has]

to think about the whole, for the entire block and the entire PCE plume." (Holzman Decl. ¶ 4 Exhibit F – Meeting Minutes) None of this is reflected in the owner's Site Management Plan,
 demolition permit application, or ultimately in DBI's November 18, 2022 issuance of the
 demolition permit.

One of the required approvals is from San Francisco Department of Public Health
(SFDPH). On October 12, 2022, SFDPH wrote "NA" to whether there were any health issues
with issuance of the permit.

8 III. <u>DISCUSSION</u>

The Board of Appeals is empowered by the San Francisco Charter and related municipal 9 10 ordinances to hear and determine the controversy before it. It may draw its own conclusions 11 from the conflicting evidence before it, and in the exercise of its independent judgment, affirm 12 or overrule the issuance of the permit. See Lindell Co. v. Board of Permit Appeals of City and County of San Francisco (1943) 23 Cal.2d 303, 315. The Board is authorized to exercise 13 independent discretionary review of a demolition or building permit application. See Guinnane 14 15 v. San Francisco City Planning Comm. (1989) 209 Cal.App.3d 732, 740. This discretion includes the power to determine whether a proposed project will "affect the public health, safety 16 or general welfare." Lindell, 23 Cal.2d at 314; Guinnane, 209 Cal.App.3d at 739. 17 18 SFDPH notating "NA" to whether there are health impacts to demolition and approval

for demolition was issued in error. Based on testing results to date, indoor air and soil vapor sampling conducted at adjacent homes, proximity and relationship with contaminated sites at 2550 Irving Street, there is an imminent and substantial endangerment to the public health associated with the PCE soil vapor impacts which are likely to be affected by demolition of the 2550 Irving Street property. (Exhibit G – Don Moore, PG, ARM Declaration, ¶ 5)

From review of the Site Management Plan (SMP) and demolition permit application,
there is little consideration in the SMP regarding the PCE contamination that will be exposed
during demolition. This is particularly significant based on the fact that the location of former
Miracle Cleaners which sits on the property sought to be demolished -- and is the likely source
of all the PCE contamination north of Irving Street -- has not been adequately investigated to
assess the magnitude and full extent of the PCE in soil, soil vapor, and groundwater. Demolition

offers the last opportunity for conducting an appropriate source investigation, and if sufficient data
is not collected during demolition, the result is likely to be destruction of valuable data and
evidence which will make it difficult or impossible to confirm the source(s) and to determine
responsible parties and the appropriate remedial approach. (Moore Decl. ¶ 6)

5

Protocol for soil and soil vapor collection and investigation during demolition

6 Best practices during demolition indicate collecting soil and soil vapor samples at a 7 minimum of six locations at five and fifteen feet below grade, allowing for assessment of 8 potential PCE source areas from former sumps, drains and sewer lines. Based on existing data 9 around the former Miracle Cleaners property, there is a clear indication of potential PCE source 10 area at and around the sewer lateral on the property including potential soil matrix contamination. 11 Historic records at the building department should be reviewed prior to demolition to determine the 12 location and depth of the former or still existing sewer lateral associated with former Miracle 13 Cleaners to focus the investigation, and at least two of the borings advanced in close proximity to 14 the sewer lateral. (Moore Decl. \P 7)

Best practices during demolition requires professional geologist supervision. Sampling protocol should be established in the SMP for both soil vapor and matrix sampling. During the investigation, recovered soils should be logged by a field geologist in accordance with the Unified Soil Classification System. Soil classifications, related observations, and soil vapor probe construction details should then be recorded on field borehole logs along with all other soil encountered during the demolition process. (Moore Decl. ¶ 8)

Recovered soils should then be screened for the presence of PCE and other volatile
organic compounds (VOCs) using a photoionization detector (PID). Recovered soils would then
be placed into a sealable plastic bag and PID measurements recorded on borehole logs and field
reports. Soil vapor samples would be collected into laboratory supplied Summa canisters with
dedicated flow controllers. (Moore Decl. ¶ 9)

At each of the borehole locations, soil samples from approximately 5 and 15 feet below grade will be retained for chemical analysis of VOCs. If elevated PID readings of recovered soils suggest the presence of VOCs, additional soil samples will be retained for chemical analysis. Soil samples and Summa canisters will be labeled and transported under chain of custody to a California certified analytical laboratory for chemical analysis. Following receipt of
final laboratory analytical results, professional geologist should validate and verify chemical
data and prepare a summary report to DTSC and SFDPH. The investigation report should
include a description of site conditions and field sampling activities with a site plan showing
locations, a tabulated summary of analytical data screened against Environmental Screening
Levels (ESLs), and recommendations relevant to current soil and vapor conditions identified.
(Moore Decl. ¶ 10)

By revising the SMP to include and adhere to the above protocol during demolition, 8 9 appropriate data can be collected to identify the magnitude, extent and specific source(s) of the 10 PCE contamination associated with former Miracle Cleaners that has emanated more than 200 feet 11 from this source area into the surrounding residential neighborhood. This data is necessary to 12 assess the parties responsible for the contamination, the appropriate remedial approach and to 13 assess and ultimately mitigate the existing unacceptable health risk associated with the PCE 14 contamination to the surrounding neighbors and future residents of the property. (Moore Decl. ¶ 15 11)

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III. <u>CONCLUSION</u>

Appellant Mid-Sunset Neighborhood Association, Inc. respectfully requests that the
 Board grant its appeal, overrule the issuance of the permit, and condition demolition of the
 building structure on the property so that it will only proceed, at owner's cost, with collection
 and investigation of soil and soil vapor samples by Appellant's approved professional geologist
 experts during demolition.

²³ Date: January 18, 2023

FIFE LAW, LLP

By End

Enoch Wang Attorneys for Appellant

TABLE OF CONTENTS OF EXHIBITS

EXHIBIT	DESCRIPTION	
А	Imminent & Substantial Endangerment Order issued October 29, 2021	
В	Declaration of Paul Holzman	
С	Application for Demolition Permit	
D	Site Management Plan	
Е	San Francisco Board of Supervisors Resolution No. 317-22	
F	MSNA Meeting Minutes (meeting of September 23, 2022)	
G	Declaration of Donald W. Moore, PG, ARM	
G-1	September 9, 2022 letter from Don Moore to the California Department of	
	Toxic Substances Control	
G-2	PowerPoint slides showing details of investigation	

STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:

Former Albrite Cleaners 2511 Irving Street San Francisco, California

Respondents: Martha Jackson Liang/Cheong Family Trust Docket No. HSA-FY21/22-002

IMMINENT AND SUBSTANTIAL ENDANGERMENT DETERMINATION AND ORDER AND REMEDIAL ACTION ORDER

Health and Safety Code Sections 25355.5(a)(1)(B), 25358.3(a), 58009 and 58010

I. INTRODUCTION

1.1 <u>Parties</u>. The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) issues this Imminent and Substantial Endangerment Determination and Order and Remedial Action Order (Order) to Martha Jackson, an individual, and Qi Xiang Liang, an individual (Respondents).

1.2 <u>Property/Site</u>. This Order applies to the property located at 2511 Irving Street, San Francisco, San Francisco County, California (Property). The Property consists of 0.06 acres (2,500 square feet) and is identified by Assessor's Parcel number(s) 1781-050. A map showing the Property is attached as Exhibit A. This Order applies to the Property and the areal extent of contamination that resulted from activities on the Property (hereinafter, the "Site").

1.3 <u>Jurisdiction</u>. This Order is issued by DTSC to Respondents pursuant to its authority under Health and Safety Code (H&SC) sections 25358.3(a), 25355.5(a)(1)(B), 58009 and 58010.

H&SC section 25358.3(a) authorizes DTSC to take various actions, including issuance of an Imminent or Substantial Endangerment Determination and Order, when DTSC determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or a threatened release of a hazardous substance.

H&SC section 25355.5(a)(1)(B) authorizes DTSC to issue an order establishing a schedule for removing or remedying a release of a hazardous substance at a site, or for correcting the conditions that threaten the release of a hazardous substance. The order may include but is not limited to requiring specific dates by which the nature and extent

of a release shall be determined, and the site adequately characterized, a remedial action plan prepared and submitted to DTSC for approval, and a removal or remedial action completed.

H&SC section 58009 authorizes DTSC to commence and maintain all proper and necessary actions and proceedings to enforce its rules and regulations; to enjoin and abate nuisances related to matters within its jurisdiction which are dangerous to health; to compel the performance of any act specifically enjoined upon any person, officer, or board, by any law of this state relating to matters within its jurisdiction; and/or on matters within its jurisdiction, to protect and preserve the public health.

H&SC section 58010 authorizes DTSC to abate public nuisances related to matters within its jurisdiction.

II. FINDINGS OF FACT

DTSC hereby finds:

2.1 <u>Liability of Respondent</u>. Each Respondent is a responsible party or liable person as defined in H&SC section 25323.5. Martha Jackson owned the dry-cleaning business located at the Site from approximately 1988 to 2018. Ownership was transferred in 2018 to the Liang/Cheong Family Trust, the current owner of the Property.

2.2 <u>Physical Description of Site</u>. The Site is located on the south side of Irving Street and consists of one, two-story building. The Site is bordered by Sterling Bank & Trust to the east, 1319-1321 26th Avenue, residential units, to the south and a vacant parking lot owned and operated by The Police Credit Union to the west. The Site Plan is shown in Exhibit B.

2.3 <u>Site History</u>. Tetrachloroethene (PCE) was reportedly used at the Site between 1993 and 1994, prior to dry cleaning activities being conducted off-Site at an unspecified location. 176.9 kilograms (kg) of PCE was reported in 1993 to the Department of Toxic Substances Control (DTSC) under hazardous waste handler number CAD981647357. 61.2 kg of PCE was reported to DTSC in 1994 under the same hazardous waste handler number. The Site is currently listed in the Resource Conservation and Recovery Act (RCRA) Small Quantity Generator (SQG) database as an inactive generator of hazardous waste, ranging between 100 to 1,000 kilograms (kg) per month. The waste code for the material generated/transported was 741, halogenated organic compounds >1000 milligrams per liter (mg/L).

2.4 <u>Hazardous Substances Found at the Site</u>. The release of the hazardous substance PCE, used at the Site, is documented by measurement of PCE in soil vapor adjacent to and downgradient of the Site.

Three Subsurface Investigation were conducted in July 2019, May 2020, and August 2020 at the 2525 Irving Street property, directly west of the Site and along Irving Street, directly north of the Site. During the July 2019 investigation, two soil vapor probes were installed adjacent to the northwestern and southeastern boundaries between the 2525 Irving Street property and the Site. PCE was detected at concentrations of 1,800 micrograms per cubic meter ($\mu g/m^3$) and 1,300 $\mu g/m^3$ within the northwestern and southwestern locations, respectively (Exhibit C). Ten soil vapor samples were collected within the 2525 Irving Street property and along the southern right-of-way of Irving Street during the May 2020 site assessment. PCE was detected at concentrations up to 2,500 µg/m³ (Exhibit C). Ten soil vapor samples were collected in August 2020 within the 2525 Irving Street property. PCE was detected at concentrations up to 1,500 µg/m³ during the August 2020 sampling event (Exhibit C). Groundwater samples were collected in September 2020 along the southern right-of-way of Irving Street north adjacent to the Site and downgradient within The Police Credit Union property, samples B-12 and B-11, respectively. (Exhibit D). PCE was detected in B-12 at a concentration of 0.71 μ g/L and was not detected (<0.50 μ g/L) in B-11 (Exhibit E).

The measured levels of PCE exceed the following human health screening levels for soil gas defined by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) and DTSC by two orders of magnitude and pose a potential unacceptable health risk in soil vapor for residential land use. The SFRWQCB Environmental Screening Level (ESL) for Residential Soil Gas is 15 μ g/m³ for PCE. The DTSC-Modified Screening Levels (DTSC-SLs) for soil gas (incorporating a 0.03 slab attenuation factor for residential ambient air concentrations) is 15 μ g/m³ for PCE.

2.5 <u>Health Effects</u>.

2.5.1 PCE is a volatile, colorless liquid. Short-term exposure to PCE through ingestion of the liquid or inhalation of the vapors may cause nausea, vomiting, headache, dizziness, drowsiness, and tremors. Skin contact with the liquid induces irritation and blistering. Both liquid and vapor forms of PCE are irritating to the eyes. Liver and kidney toxicity are potential chronic effects of exposure to PCE. PCE is listed as a known carcinogen under Proposition 65.

2.6 <u>Routes of Exposure</u>.

2.6.1 Inhalation can be a route of exposure for PCE at the Site. There is a potential for subsurface intrusion of PCE in soil gas into the indoor air of the buildings on the Site along with the buildings occupied by nearby businesses. Additionally, PCE in soil gas have the potential to spread through preferential pathways such as underground pipes and ventilation systems creating a potential human health risk for areas in and around the Site.

2.7 <u>Public Health and/or Environmental Risk</u>. Employees and customers of the businesses on and adjacent to, and in the vicinity of the Site are at risk of exposure to subsurface intrusion of PCE in soil gas into indoor air. Residences adjacent to and in the Site vicinity are sensitive populations at risk for exposure to subsurface intrusion of PCE into indoor air.

2.8 <u>Immediate Action May Reduce Migration</u>. PCE has been documented to migrate in the shallow geology of this region. Immediate response action could significantly reduce migration of PCE in subsurface soil gas.

III. CONCLUSIONS OF LAW

3.1 Each Respondent is a responsible party as defined by H&SC section 25323.5.

3.2 Each of the substances listed in Section 2.4 is a "hazardous substance" as defined in Title 8 California Code of Regulations (8 CCR) section 339, and H&S section 25316.

3.3 There has been a "release" and/or there is a "threatened release" of hazardous substances listed in Section 2.4 at the Site, as defined in H&SC section 25320.

3.4 The actual and threatened release of hazardous substances at the Site may present an imminent and substantial endangerment to the public health or welfare or to the environment.

3.5 Response action is necessary to abate a public nuisance and/or to protect and preserve the public health.

IV. DETERMINATION

4.1 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that response action is necessary at the Site because there has been a release and/or there is a threatened release of a hazardous substance.

4.2 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that there may be an imminent and/or substantial endangerment to the public health or welfare or to the environment because of the release and/or the threatened release of the hazardous substances at the Site.

V. <u>ORDER</u>

Based on the foregoing FINDINGS, CONCLUSIONS, AND DETERMINATION, IT IS HEREBY ORDERED THAT Respondents conduct the following response actions in the manner specified herein, and in accordance with a schedule specified by DTSC as follows:

5.1 All response actions taken pursuant to this Order shall be consistent with the requirements of Chapter 6.8 (commencing with section 25300), Division 20 of the H&SC and any other applicable state or federal statutes and regulations.

5.1.1 <u>Site Remediation Strategy.</u> The purpose of this Order is to require for the Site: implementation of any appropriate removal actions, completion of a Remedial Investigation/Feasibility Study (RI/FS), preparation of a Remedial Action Plan (RAP) or Removal Action Workplan (RAW), preparation of California Environmental Quality Act (CEQA) documents, and Design and Implementation of the remedial actions approved in the RAP. An overall Site investigation and remediation strategy shall be developed by Respondents in conjunction with DTSC which reflects program goals, objectives, and requirements. Current knowledge of the Site contamination sources, exposure pathways, and receptors shall be used in developing this strategy.

An objective of the Site investigations shall be to identify immediate or potential risks to public health and the environment and prioritize and implement response actions using removal actions and operable units, if appropriate, based on the relative risks at the Site. Respondents and DTSC shall develop and possibly modify Site priorities throughout the course of the investigations. If necessary, for the protection of public health and the environment, DTSC will require additional response actions not specified in this Order to be performed as removal actions or separate operable units. Removal actions shall be implemented in accordance with a workplan and implementation schedule submitted by Respondents and approved by DTSC.

5.1.2 <u>Removal Actions.</u> Each Respondent shall undertake removal actions if, during the RI or FS process, DTSC determines that they are necessary to mitigate the release of hazardous substances at or emanating from the Site. DTSC may require Respondents to submit a removal action workplan that includes a schedule for implementing the workplan for DTSC's approval. Either DTSC or Respondents may identify the need for removal actions. Respondents shall implement the following removal actions.

5.1.3 <u>Site Remediation Strategy Meeting</u>. Respondent, including the Project Coordinator (Section 6.1) and Project Engineer/Geologist (Section 6.2), shall meet with DTSC within [20] days from the effective date (and concurrent with the development of the RI/FS workplan of this Order to discuss the Site remediation strategy. These discussions will include Site risks and priorities; project planning, phasing and scheduling, remedial action objectives, remedial technologies, data quality objectives, and the RI/FS workplan. Results of the discussions will be included in the Scoping Document, Section 5.2.2(b) of this Order.

5.2 <u>Remedial Investigation/Feasibility Study (RI/FS</u>). A RI/FS shall be conducted for the Site. The RI/FS may be performed as a series of focused RI/FSs, if appropriate, based on Site priorities. The RI/FS shall be prepared consistent with the U.S. Environmental Protection Agency's "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," October 1988. The purpose of the RI/FS is to assess Site conditions and to evaluate alternatives to the extent necessary to select a remedy appropriate for the Site. RI and FS activities shall be conducted concurrently and iteratively so that the investigations can be completed expeditiously. Because of the unknown nature of the Site and iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. Respondents shall fulfill additional data and analysis needs identified by DTSC; these additional data and analysis requests will be consistent with the general scope and objectives of this Order.

The following elements of the RI/FS process and those defined by DTSC in Section 5.1.3 of this Order shall be preliminarily defined in the initial Site scoping and refined and modified as additional information is gathered throughout the RI/FS process.

- (a) Conceptual Site Model identifying contamination sources, exposure pathways, and receptors;
- (b) Federal, State and local remedial action objectives including applicable legal requirements or relevant and appropriate standards;
- (c) Project phasing including the identification of removal actions and operable units;
- (d) General response actions and associated remedial technology types; and
- (e) The need for treatability studies.
- 5.2.1 RI/FS Objectives. The objectives of the RI/FS are to:
 - (a) Determine the nature and full extent of hazardous substance contamination of air, soil, subsurface soil gas, outdoor air, indoor air, surface water, and groundwater at the Site;
 - (b) Identify all actual and potential exposure pathways and routes through environmental media;
 - (c) Determine the magnitude and probability of actual or potential harm to public health, safety or welfare or to the environment posed by the threatened or actual release of hazardous substances at or from the Site;

- (d) Identify and evaluate appropriate response actions to prevent or minimize future releases and mitigate any releases which have already occurred; and
- (e) Collect and evaluate the information necessary to prepare a RAP/RAW.

5.2.2 <u>RI/FS Workplan</u>. Within thirty (30) days from the effective date of this Order, Respondents shall prepare and submit to DTSC for review and approval a detailed RI/FS Workplan and implementation schedule which covers all the activities necessary to conduct a complete RI/FS of the Site.

The RI/FS Workplan shall include a detailed description of the tasks to be performed, information or data needed for each task, and the deliverables which will be submitted to DTSC. Either Respondents or DTSC may identify the need for additional work.

These RI/FS Workplan deliverables are discussed in the remainder of this Section, with a schedule for implementation, and monthly reports. The RI/FS Workplan shall include all the sections and address each component listed below.

- (a) <u>Project Management Plan</u>. The Project Management Plan shall define relationships and responsibilities for major tasks and project management items by Respondents, its contractors, subcontractors, and consultants. The plan shall include an organization chart with the names and titles of key personnel and a description of their individual responsibilities.
- (b) <u>Scoping Document</u>. The Scoping Document shall incorporate program goals, program management principles, and expectations contained in the National Contingency Plan (NCP) (40 Code of Federal Regulations (CFR) Part 300), as amended. It shall include:
 - 1) An analysis and summary of the Site background and the physical setting. At a minimum, the following information is required:
 - A. A map of the Site, and if they exist, aerial photographs and blueprints showing buildings and structures;
 - B. A description of past disposal practices;
 - C. A list of all hazardous substances which were disposed, discharged, spilled, treated, stored, transferred, transported, handled or used at the Site, and a description of their estimated volumes, concentrations, and characteristics;
 - D. A description of the characteristics of the hazardous substances at the Site; and

- E. If applicable, a description of all current and past manufacturing processes which are or were related to each hazardous substance.
- An analysis and summary of previous response actions including a summary of all existing data including air, soil, surface water, and groundwater data and the Quality Assurance/Quality Control (QA/QC) procedures which were followed;
- 3) Presentation of the Conceptual Site Model;
- 4) The scope and objectives of RI/FS activities;
- 5) Preliminary identification of possible response actions and the data needed for the evaluation of alternatives. Removal actions shall be proposed, if needed, based on the initial evaluation of threats to public health and the environment. If remedial actions involving treatment can be identified, treatability studies shall be conducted during the characterization phase, unless Respondents and DTSC agree that such studies are unnecessary as set forth in Section 5.4; and
- 6) If applicable, initial presentation of the Site Remediation Strategy.
- (c) <u>Field Sampling Plan</u>. The Field Sampling Plan shall include:
 - 1) Sampling objectives, including a brief description of data gaps and how the field sampling plan will address these gaps;
 - 2) Sample locations, including a map showing these locations, and proposed frequency;
 - 3) Sample designation or numbering system;
 - 4) Detailed specification of sampling equipment and procedures;
 - 5) Sample handling and analysis including preservation methods, shipping requirements and holding times; and
 - 6) Management plan for wastes generated.
- (d) <u>Quality Assurance Project Plan</u>. The plan shall include:
 - 1) Project organization and responsibilities with respect to sampling and analysis;
 - Quality assurance objectives for measurement including accuracy, precision, and method detection limits. In selecting analytical methods, Respondents shall consider obtaining detection limits at or below potentially applicable legal requirements or relevant and

appropriate standards, such as Maximum Contaminant Levels (MCLs) or Maximum Contaminant Level Goals (MCLGs);

- 3) Sampling procedures;
- 4) Sample custody procedures and documentation;
- 5) Field and laboratory calibration procedures;
- 6) Analytical procedures;
- 7) Laboratory to be used certified pursuant to H&SC section 25198;
- 8) Specific routine procedures used to assess data (precision, accuracy and completeness) and response actions;
- 9) Reporting procedure for measurement of system performance and data quality;
- Data management, data reduction, validation and reporting. Information shall be accessible to downloading into DTSC's system; and
- 11) Internal quality control.
- (e) <u>Health and Safety Plan</u>. A site-specific Health and Safety Plan shall be prepared in accordance with federal (29 CFR 1910.120) and state (8 CCR section 5192) regulations. This plan should include, at a minimum, the following elements:
 - 1) Site Background/History/Workplan;
 - 2) Key Personnel and Responsibilities
 - 3) Job Hazard Analysis/Summary;
 - 4) Employee Training;
 - 5) Personal Protection;
 - 6) Medical Surveillance;
 - 7) Air Surveillance;
 - 8) Site Control;
 - 9) Decontamination;
 - 10) Contingency Planning;
 - 11) Confined Space Operations;
 - 12) Spill Containment;
 - 13) Sanitation;

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- 14) Illumination; and
- 15) Other applicable requirements based on the work to be performed.

All contractors and all subcontractors shall be given a copy of the Health and Safety Plan prior to entering the Site. Any supplemental health and safety plans prepared by any subcontractor shall also be prepared in accordance with the regulations and guidance identified above. The prime contractor will be responsible for ensuring that all subcontractor supplemental health and safety plans will follow these regulations and guidelines.

- (f) <u>Other Activities</u>. A description of any other significant activities which are appropriate to complete the RI/FS shall be included.
- (g) <u>Schedule</u>. A schedule which provides specific time frames and dates for completion of each activity and report conducted or submitted under the RI/FS Workplan including the schedules for removal actions and operable unit activities.

5.2.3 <u>RI/FS Workplan Implementation</u>. Each Respondent shall implement the approved RI/FS Workplan.

5.2.4 <u>RI/FS Workplan Revisions</u>. If Respondents proposes to modify any methods or initiates new activities for which no Field Sampling Plan, Health and Safety Plan, Quality Assurance Project Plan or other necessary procedures/plans have been established, Respondents shall prepare an addendum to the approved plan(s) for DTSC review and approval prior to modifying the method or initiating new activities.

5.3 <u>Interim Screening and Evaluation of Remedial Technologies</u>. At the request of DTSC, Respondents shall submit an interim document which identifies and evaluates potentially suitable remedial technologies and recommendations for treatability studies.

5.4 <u>Treatability Studies</u>. Treatability testing will be performed by Respondents to develop data for the detailed remedial alternatives. Treatability testing is required to demonstrate the implementability and effectiveness of technologies unless Respondents can show DTSC that similar data or documentation or information exists. The required deliverables are a workplan, a sampling and analysis plan, and a treatability evaluation report. To the extent practicable, treatability studies will be proposed and implemented during the latter part of Site characterization.

5.5 <u>Remedial Investigation (RI) Report</u>. The RI Report shall be prepared and submitted by Respondents to DTSC for review and approval in accordance with the approved RI/FS workplan schedule. The purpose of the RI is to collect data necessary to adequately characterize the Site for the purposes of defining risks to public health and the environment and developing and evaluating effective remedial alternatives. Site characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the investigation. Respondents shall identify the sources of contamination and define the nature, extent, and volume of the contamination. Using this information, the contaminant fate and transport shall be evaluated. The RI Report shall contain:

- (a) <u>Site Physical Characteristics</u>. Data on the physical characteristics of the Site and surrounding area shall be collected to the extent necessary to define potential transport pathways and receptor populations and to provide sufficient engineering data for development and screening of remedial action alternatives.
- (b) <u>Sources of Contamination</u>. Contamination sources (including heavily contaminated media) shall be defined. The data shall include the source locations, type of contaminant, waste characteristics, and Site features related to contaminant migration and human exposure.
- (c) <u>Nature and Extent of Contamination</u>. Contaminants shall be identified, and the horizontal and vertical extent of contamination shall be defined in soil, groundwater, surface water, sediment, air, and biota. Spatial and temporal trends and the fate and transport of contamination shall be evaluated.

5.6 Baseline Health and Ecological Risk Assessment. Each Respondent shall perform health and ecological risk assessments for the Site that meet the requirements of Health and Safety Code section 25356.1.5(b). Respondents shall submit a Baseline Health and Ecological Risk Assessment Report within thirty (30) days from the approval of the RI Report. The report shall be prepared consistent with U.S. EPA and California Environmental Protection Agency guidance and regulations, including as a minimum: Risk Assessment Guidance for Superfund, Volume 1; Human Health Evaluation Manual, December 1989; Superfund Exposure Assessment Manual, April 1988; Risk Assessment Guidance for Superfund, Volume 2, Environmental Evaluation Manual, March 1989; Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities (DTSC, September 1993); and all other related or relevant policies, practices and guidelines of the California Environmental Protection Agency and policies, practices and guidelines developed by U.S.EPA pursuant to 40 CFR 300.400 et seq. The Baseline Health and Ecological Risk Assessment Report shall include the following components:

(a) <u>Contaminant Identification</u>. Characterization data shall identify contaminants of concern for the risk assessment process.

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- (b) Environmental Evaluation. An ecological assessment consisting of:
 - 1) Identification of sensitive environments and rare, threatened, or endangered species and their habitats; and
 - As appropriate, ecological investigations to assess the actual or potential effects on the environment and/or develop remediation criteria.
- (c) <u>Exposure Assessment</u>. The objectives of an exposure assessment are to identify actual or potential exposure pathways, to characterize the potentially exposed populations, and to determine the extent of the exposure. Exposed populations may include industrial workers, residents, and subgroups that comprise a meaningful portion of the general population, including, but not limited to, infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subpopulations, that are identifiable as being at greater risk of adverse health effects due to exposure to hazardous substances than the general population.
- (d) <u>Toxicity Assessment</u>. Each Respondent shall evaluate the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a chemical's potential carcinogenicity in humans.
- (e) <u>Risk Characterization</u>. Risk characterization shall include the potential risks of adverse health or environmental effects for each of the exposure scenarios derived in the exposure assessment.

5.7 <u>Feasibility Study (FS) Report</u>. The FS Report shall be prepared and submitted by Respondents to DTSC for review and approval, no later than sixty (60) days from submittal of the RI Report. The FS Report shall summarize the results of the FS including the following:

- (a) Documentation of all treatability studies conducted.
- (b) Development of medium specific or operable unit specific remedial action objectives, including legal requirements and other promulgated standards that are relevant.
- (c) Identification and screening of general response actions, remedial technologies, and process options on a medium and/or operable unit specific basis.

(d) Evaluation of alternatives based on the criteria contained in the NCP including:

Threshold Criteria:

- 1) Overall protection of human health and the environment.
- 2) Compliance with legal requirements and other promulgated standards that are relevant.

Primary Balancing Criteria:

- 1) Long-term effectiveness and permanence.
- 2) Reduction of toxicity, mobility, or volume through treatment.
- 3) Short-term effectiveness.
- 4) Implementability based on technical and administrative feasibility.
- 5) Cost.

Modifying Criteria:

- 1) State and local agency acceptance.
- 2) Community acceptance.
- (e) Proposed remedial actions.

5.8 <u>Public Participation Plan (Community Relations)</u>. Each Respondent shall work cooperatively with DTSC in providing an opportunity for meaningful public participation in response actions. Any such public participation activities shall be conducted in accordance with H&SC section 25356.1 and 25358.7 and DTSC's most current Public Participation Policy and Guidance Manual and shall be subject to DTSC's review and approval.

Respondents, in coordination with DTSC, shall conduct a baseline community survey and develop a Public Participation Plan (PPP) which describes how, under this Order, the public and adjoining community will be kept informed of activities conducted at the Site and how Respondents will be responding to inquiries from concerned citizens. Major steps in developing a PPP are as follows:

- (a) Develop proposed list of interviewees;
- (b) Schedule and conduct community interviews; and
- (c) Analyze interview notes and develop objectives.

Respondents shall conduct the baseline community survey and submit the PPP for DTSC's review within forty (40) days of the effective date of this Order.

Respondents shall implement any of the public participation support activities identified in the PPP, at the request of DTSC. DTSC retains the right to implement any of these activities independently. These activities include, but are not limited to, development and distribution of fact sheets; public meeting preparations; and development and placement of public notices.

<u>5.8.1 Tribal Outreach and Consultant</u>. DTSC's assigned Project Manager will coordinate with DTSC's Office of Environmental Equity to ensure compliance with DTSC's Tribal Consultation Policy. This process may include consultation with California tribes to determine whether or not they have an interest in Site activities.

5.9 <u>California Environmental Quality Act (CEQA)</u>. DTSC will comply with CEQA for all activities required by this Order that are projects subject to CEQA. Upon DTSC request, Respondents shall provide DTSC with any information that DTSC deems necessary to facilitate compliance with CEQA. The costs incurred by DTSC in complying with CEQA are response costs and Respondents shall reimburse DTSC for such costs pursuant to Section 6.19.

5.10 <u>Removal Action Workplan</u>. If DTSC determines a removal action is appropriate, Respondents will prepare and submit no later than thirty (30) days after DTSC's approval of the FS, a draft RAW in accordance with H&SC sections 25323.1 and 25356.1. The RAW will include:

- (a) a description of the onsite contamination;
- (b) the goals to be achieved by the removal action;
- (c) an analysis of the alternative options considered and rejected and the basis for that rejection. This should include a discussion for each alternative which covers its effectiveness, implementability and cost;
- (d) administrative record list;
- (e) a description of the techniques and methods to be used in the removal action, including any excavating, storing, handling, transporting, treating, and disposing of material on or off the site;
- (f) Sampling and Analysis Plan with corresponding Quality Assurance Plan to confirm the effectiveness of the RAW, if applicable;
- (g) a brief overall description of methods that will be employed during the removal action to ensure the health and safety of workers and the public

during the removal action. A detailed community air monitoring plan shall be included if requested by DTSC.

In conjunction with DTSC, Respondents shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. DTSC will prepare a response to the public comments received. If required, the Respondents shall submit within two (2) weeks of the request the information necessary for DTSC to prepare this document].

Following DTSC's finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAW. Respondents shall modify the document in accordance with DTSC's specifications and submit a final RAW within fifteen (15) days of receipt of DTSC's comments.

If the proposed removal action does not meet the requirements of H&SC section 25356.1(h), the Respondents will prepare a Remedial Action Plan (RAP) in accordance with H&SC section 25356.1(c) for DTSC review and approval.

5.11 <u>Remedial Action Plan (RAP)</u>. No later than thirty (30) days after DTSC approval of the FS Report, Respondents shall prepare and submit to DTSC a draft RAP. The draft RAP shall be consistent with the NCP and H&SC section 25356.1. The draft RAP public review process may be combined with that of any other documents required by CEQA. The draft RAP shall be based on and summarize the approved RI/FS Reports, and shall clearly set forth:

- (a) Health and safety risks posed by the conditions at the Site.
- (b) The effect of contamination or pollution levels upon present, future, and probable beneficial uses of contaminated, polluted, or threatened resources.
- (c) The effect of alternative remedial action measures on the reasonable availability of groundwater resources for present, future, and probable beneficial uses.
- (d) Site specific characteristics, including the potential for offsite migration of hazardous substances, the surface or subsurface soil, and the hydrogeologic conditions, as well as preexisting background contamination levels.
- (e) Cost-effectiveness of alternative remedial action measures. Land disposal shall not be deemed the most cost-effective measure merely based on lower short-term cost.

- (f) The potential environmental impacts of alternative remedial action measures, including, but not limited to, land disposal of the untreated hazardous substances as opposed to treatment of the hazardous substances to remove or reduce their volume, toxicity, or mobility prior to disposal.
- (g) A statement of reasons setting forth the basis for the removal and remedial actions selected. The statement shall include an evaluation of each proposed alternative submitted and evaluate the consistency of the removal and remedial actions proposed by the plan with the NCP.
- (h) A schedule for implementation of all proposed removal and remedial actions.

In conjunction with DTSC, Respondents shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. DTSC will prepare a response to the public comments received. If required, the Respondents shall submit within two (2) weeks of the request the information necessary for DTSC to prepare this document.

Following DTSC's finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAP. Respondents shall modify the document in accordance with DTSC's specifications and submit a final RAP within fifteen (15) days of receipt of DTSC's comments.

5.12 <u>Remedial Design (RD)</u>. Within sixty (60) days after DTSC approval of the final RAP, Respondents shall submit to DTSC for review and approval a RD describing in detail the technical and operational plans for implementation of the final RAP which includes the following elements, as applicable:

- (a) Design criteria, process unit and pipe sizing calculations, process diagrams, and final plans and specifications for facilities to be constructed.
- (b) Description of equipment used to excavate, handle, and transport contaminated material.
- (c) A field sampling and laboratory analysis plan addressing sampling during implementation and to confirm achievement of the performance objectives of the RAP.
- (d) A transportation plan identifying routes of travel and final destination of wastes generated and disposed.

- (e) For groundwater extraction systems: aquifer test results, capture zone calculations, specifications for extraction and performance monitoring wells, and a plan to demonstrate that capture is achieved.
- (f) An updated health and safety plan addressing the implementation activities.
- (g) Identification of any necessary permits and agreements.
- (h) An operation and maintenance plan including any required monitoring.
- (i) A detailed schedule for implementation of the remedial action consistent with the schedule contained in the approved RAP including procurement, mobilization, construction phasing, sampling, facility startup, and testing.
- (j) A community Air Monitoring Plan.

5.13 <u>Land Use Covenant</u>. If the approved remedy in the final RAP or final RAW includes deed restrictions or land use restrictions, pursuant to 22 CCR, section 67391.1, the current owner(s) of the Site shall sign, and record deed restrictions approved by DTSC within ninety (90) days of DTSC's approval of the final RAP.

5.14 <u>Implementation of Final RAP or Final RAW</u>. Upon DTSC approval of the RD or final RAW, Respondents shall implement the final RAP or final RAW in accordance with the approved schedule in the RD or final RW. Within thirty (30) days of completion of field activities, Respondents shall submit an Implementation Report documenting the implementation of the Final RAP and RD or final RAW.

5.15 <u>Operation and Maintenance (O&M)</u>. Each Respondent shall comply with all O&M requirements in accordance with the final RAP and approved RD or final RAW. Within thirty (30) days of the date of DTSC's request, Respondents shall prepare and submit to DTSC for approval an O&M plan that includes an implementation schedule. Respondents shall implement the plan in accordance with the approved schedule. DTSC may require, consistent with the RAP/RAW, the Respondents enter an O&M agreement with DTSC.

5.16 <u>Five-Year Review</u>. Each Respondent shall review and reevaluate the remedial action after a period of five (5) years from the completion of construction and startup, and every five (5) year(s) thereafter. The review and reevaluation shall be conducted to determine if human health and the environment are being protected by the remedial action. Within thirty (30) calendar days before the end of the time-period approved by DTSC to review and reevaluate the remedial action, Respondents shall submit a remedial action review workplan to DTSC for review and approval. Within sixty (60) days of DTSC's approval of the workplan, Respondents shall implement the workplan and shall submit a comprehensive report of the results of the remedial action

review. The report shall describe the results of all sample analyses, tests and other data generated or received by Respondents and evaluate the adequacy of the implemented remedy in protecting public health, safety and the environment. As a result of any review performed under this Section, Respondents may be required to perform additional Work or to modify Work previously performed.

5.17 <u>Changes During Implementation of the Final RAP or Final RAW</u>. During the implementation of the final RAP and RD or final RAW, DTSC may specify such additions, modifications, and revisions to the RD or final RAW as DTSC deems necessary to protect public health and safety or the environment or to implement the final RAP or final RAW.

5.18 <u>Stop Work Order</u>. In the event that DTSC determines that any activity (whether or not pursued in compliance with this Order) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Respondents to stop further implementation of this Order for such period of time needed to abate the endangerment. In the event that DTSC determines that any site activities (whether or not pursued in compliance with this Order) are proceeding without DTSC authorization, DTSC may order Respondents to stop further implementation of this Order or activity for such period of time needed to obtain DTSC authorization, if such authorization is appropriate. Any deadline in this Order directly affected by a Stop Work Order, under this Section, shall be extended for the term of the Stop Work Order.

5.19 Emergency Response Action/Notification. In the event of any action or occurrence (such as a fire, earthquake, explosion, or human exposure to hazardous substances caused by the release or threatened release of a hazardous substance) during the course of this Order, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such emergency, release, or immediate threat of release and shall immediately notify the Project Manager. Respondents shall take such action in consultation with the Project Manager and in accordance with all applicable provisions of this Order. Within seven days of the onset of such an event, Respondents shall furnish a report to DTSC, signed by Respondents' Project Coordinator, setting forth the events which occurred, and the measures taken in the response thereto. In the event that Respondents fail to take appropriate response and DTSC takes the action instead, Respondents shall be liable to DTSC for all costs of the response action. Nothing in this Section shall be deemed to limit any other notification requirement to which Respondents may be subject.

5.20 <u>Discontinuation of Remedial Technology</u>. Any remedial technology employed in implementation of the final RAP or final RAW shall be left in place and operated by Respondents until and except to the extent that DTSC authorizes Respondents in writing to discontinue, move or modify some or all of the remedial technology because Respondents has met the criteria specified in the final RAP or final RAW for its discontinuance, or because the modifications would better achieve the goals of the final RAP or final RAW.

5.21 <u>Financial Assurance</u>. Each Respondent shall demonstrate to DTSC and maintain financial assurance for operation and maintenance and monitoring. Respondents shall demonstrate financial assurance prior to the time that operation and maintenance activities are initiated and shall maintain it throughout the period of time necessary to complete all required operation and maintenance activities. The financial assurance mechanisms shall meet the requirements of H&SC section 25355.2. All financial assurance mechanisms are subject to the review and approval of the DTSC.

VI. GENERAL PROVISIONS

6.1 <u>Project Coordinator</u>. Within ten (10) days from the date the Order is signed by DTSC, Respondents shall submit to DTSC in writing the name, address, and telephone number of a Project Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from DTSC. Respondents shall promptly notify DTSC of any change in the identity of the Project Coordinator. Respondents shall obtain approval from DTSC before the new Project Coordinator performs any work under this Order.

6.2 <u>Project Engineer/Geologist</u>. The work performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer or a registered geologist in the State of California, with expertise in hazardous substance site cleanups. Within fifteen (15) calendar days from the date this Order is signed by the DTSC, Respondents must submit: a) The name and address of the project engineer or geologist chosen by Respondents; and b) in order to demonstrate expertise in hazardous substance cleanup, the resumé of the engineer or geologist, and the statement of qualifications of the consulting firm responsible for the work. Respondents shall promptly notify DTSC of any change in the identity of the Project Engineer/Geologist. Respondents shall obtain approval from DTSC before the new Project Engineer/Geologist performs any work under this Order.

6.3 <u>Monthly Summary Reports</u>. Within thirty (30) days from the date this Order is signed by DTSC, and on a monthly basis thereafter, Respondents shall submit a Monthly Summary Report of its activities under the provisions of this Order. The report shall be received by DTSC by the (15th) day of each month and shall describe:

- (a) Specific actions taken by or on behalf of Respondents during the previous calendar month;
- (b) Actions expected to be undertaken during the current calendar month;

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- (c) All planned activities for the next month;
- (d) Any requirements under this Order that were not completed;
- (e) Any problems or anticipated problems in complying with this Order; and
- (f) All results of sample analyses, tests, and other data generated under this Order during the previous calendar month, and any significant findings from these data.

6.4 <u>Quality Assurance/Quality Control (QA/QC)</u>. All sampling and analysis conducted by Respondents under this Order shall be performed in accordance with QA/QC procedures submitted by Respondents and approved by DTSC pursuant to this Order.

6.5 <u>Submittals</u>. All submittals and notifications from Respondents required by this Order shall be sent simultaneously to:

Arthur Machado, Engineering Geologist Site Mitigation and Restoration Program Department of Toxic Substances Control 700 Heinz Avenue Berkeley, California 94710 <u>Arthur.Machado@dtsc.ca.gov</u>

All reports shall be submitted in one hard (paper) copy and one electronic copy in searchable portable document format (PDF).

6.6 <u>Communications</u>. All approvals and decisions of DTSC made regarding submittals and notifications will be communicated to Respondents in writing by the Site Mitigation Branch Chief, or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by Respondents shall be construed to relieve Respondents of the obligation to obtain such formal approvals as may be required.

- 6.7 DTSC Review and Approval.
 - (a) All response actions taken pursuant to this Order shall be subject to the approval of DTSC. Respondents shall submit all deliverables required by this Order to DTSC. Once the deliverables are approved by DTSC, they shall be deemed incorporated into, and where applicable, enforceable under this Order.
 - (b) If the DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, DTSC may:

- 1) Modify the document as deemed necessary and approve the document as modified; or
- Return comments to Respondents with recommended changes and a date by which Respondents must submit to DTSC a revised document incorporating the recommended changes.
- (c) Any modifications, comments or other directives issued pursuant to (a) above, are incorporated into this Order. Any noncompliance with these modifications or directives shall be deemed a failure or refusal to comply with this Order.

6.8 <u>Compliance with Applicable Laws</u>. Nothing in this Order shall relieve Respondents from complying with all other applicable laws and regulations, including but not limited to compliance with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California Regional Water Quality Control Board. Respondents shall conform all actions required by this Order with all applicable federal, state and local laws and regulations.

6.9 <u>Respondents Liabilities</u>. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of Respondents. Nothing in this Order is intended or shall be construed to limit the rights of any of the parties with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Order is intended or shall be construed DTSC from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof. Notwithstanding compliance with the terms of this Order, Respondents may be required to take further actions as are necessary to protect public health and the environment.

6.10 <u>Site Access</u>. Access to the Site and laboratories used for analyses of samples under this Order shall be provided at all reasonable times to employees, contractors, and consultants of DTSC. Nothing in this Section is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law. DTSC and its authorized representatives shall have the authority to enter and move freely about all property at the Site at all reasonable times for purposes including, but not limited to: inspecting records, operating logs, sampling and analytic data, and contracts relating to this Site; reviewing the progress of Respondents in carrying out the terms of this Order; conducting such tests as DTSC may deem necessary; and verifying the data submitted to DTSC by Respondents.

To the extent the Site or any other property to which access is required for the implementation of this Order is owned or controlled by persons other than Respondents, Respondents shall use best efforts to secure from such person's access for

Respondents, as well as DTSC, its representatives, and contractors, as necessary to effectuate this Order. To the extent that any portion of the Site is controlled by tenants of Respondents, Respondents shall use best efforts to secure from such tenants, access for Respondents, as well as for DTSC, its representatives, and contractors, as necessary to effectuate this Order. For purposes of this Section, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the Work is not obtained within forty-five (45) days of the effective date of this Order, or within forty-five (45) days of the date DTSC notifies Respondents in writing that additional access beyond that previously secured is necessary, Respondents shall promptly notify DTSC, and shall include in that notification a summary of the steps Respondents has taken to attempt to obtain access. DTSC may, as it deems appropriate, assist Respondents in obtaining access. Respondents shall reimburse the DTSC in obtaining access, including, but not limited to, attorneys fees and the amount of just compensation.

6.11 <u>Sampling, Data and Document Availability</u>. Each Respondent shall permit DTSC and its authorized representatives to inspect and copy all sampling, testing, monitoring or other data generated by Respondents or on Respondents behalf in any way pertaining to work undertaken pursuant to this Order. Respondents shall submit all such data upon the request of the DTSC. Copies shall be provided within seven (7) days of receipt of DTSC's written request. Respondents shall inform the DTSC at least seven (7) days in advance of all field sampling under this Order and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Respondents pursuant to this Order. Respondents shall maintain a central depository of the data, reports, and other documents prepared pursuant to this Order.

6.12 <u>Record Retention</u>. All such data reports and other documents shall be preserved by Respondents for a minimum of ten years after the conclusion of all activities under this Order. If the DTSC requests that some or all of these documents be preserved for a longer period of time, Respondents shall either comply with that request or deliver the documents to the DTSC or permit DTSC to copy the documents prior to destruction. Respondents shall notify the DTSC in writing at least six months prior to destroying any documents prepared pursuant to this Order.

6.13 <u>Government Liabilities</u>. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondents, or related parties specified in Section 6.26, Parties Bound, in carrying out activities pursuant to this Order, nor shall the State of California be held as party to any contract entered into by Respondents or its agents in carrying out activities pursuant to this Order.

6.14 <u>Additional Actions</u>. By issuance of this Order, DTSC does not waive the right to take any further actions authorized by law.

6.15 <u>Extension Requests</u>. If Respondents are unable to perform any activity or submit any document within the time required under this Order, Respondents may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

6.16 <u>Extension Approvals</u>. If DTSC determines that good cause exists for an extension, it will grant the request and specify a new schedule in writing. Respondents shall comply with the new schedule incorporated in this Order.

6.17 <u>Liability for Costs</u>. Each Respondent is liable for all of DTSC's costs that have been incurred in taking response actions at the Site (including costs of overseeing response actions performed by Respondents) and costs to be incurred in the future.

6.18 Payment of Costs. DTSC may bill Respondents for costs incurred in taking response actions at the Site prior to the effective date of this Order. DTSC will bill Respondents quarterly for its response costs incurred after the effective date of this Order. Respondents shall pay DTSC within sixty (60) days of receipt of any DTSC billing. Any billing not paid within sixty (60) days is subject to interest calculated from the date of the billing pursuant to H&SC section 25360.1. All payments made by Respondents pursuant to this Order shall be by cashier's or certified check made payable to this "DTSC," and shall bear on the face the project code of the Site (Site 202325) and the Docket number of this Order. Payments shall be sent to:

Department of Toxic Substances Control Accounting/Cashier 1001 I Street, 21st Floor P.O. Box 806 Sacramento, California 95812-0806

A photocopy of all payment checks shall also be sent to the person designated by DTSC to receive submittals under this Order.

6.19 <u>Severability</u>. The requirements of this Order are severable, and Respondents shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

6.20 <u>Incorporation of Plans, Schedules and Reports</u>. All plans, schedules, reports, specifications and other documents that are submitted by Respondents pursuant to this Order are incorporated in this Order upon DTSC's approval or as modified pursuant to Section 6.7, DTSC Review and Approval, and shall be

implemented by Respondents. Any noncompliance with the documents incorporated in this Order shall be deemed a failure or refusal to comply with this Order.

6.21 <u>Modifications</u>. DTSC reserves the right to unilaterally modify this Order. Any modification to this Order shall be effective upon the date the modification is signed by DTSC and shall be deemed incorporated in this Order.

6.22 <u>Time Periods</u>. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days.

6.23 <u>Termination and Satisfaction</u>. Except for Respondents obligations under Sections 5.15 Operation and Maintenance (O&M), 5.16 Five-Year Review, 5.21 Financial Assurance, 6.12 Record Retention, 6.17 Liability for Costs, and 6.18 Payment of Costs, Respondents' obligations under this Order shall terminate and be deemed satisfied upon Respondents receipt of written notice from DTSC that Respondents has complied with all the terms of this Order.

6.24 <u>Calendar of Tasks and Schedules</u>. This Section is merely for the convenience of listing in one location the submittals required by this Order. If there is a conflict between the date for a scheduled submittal within this Section and the date within the Section describing the specific requirement, the latter shall govern.

Calendar of Tasks and Schedules

	TASK	SCHEDULE
1.	Identify Project Coordinator: Section 6.1	Within 10 days from the date this Order is signed by DTSC
2.	Notice of Intent to Comply; Section 7; Section 6.2	Within 15 days from the date this Order is signed by DTSC.
3.	Identify Project Engineer/Geologist: Section 6.2	Within 15 days from the date this Order is signed by DTSC.
4.	Submit Monthly Summary Reports: Section 6.3	Within 30 days from the date this Order is signed by DTSC
5.	Attend Site Remediation Strategy Meeting: Section 5.1.3	Within 20 days from the date this Order is signed by DTSC.
6.	Submit RI/FS Workplan: Section 5.2.2	Within 30 days of the effective date of this Order.
7.	Submit interim screening and evaluation document: Section 5.3	As requested by DTSC.
8.	Submit Treatability Studies: Section 5.4	As required during Site characterization or as requested by DTSC.
9.	Submit RI Report: Section 5.5	Per approved RI Workplan Schedule.
10.	Submit Baseline Risk Assessment: Section 5.6	Within 30 days or as required from submittal of RI Report.
11.	Submit FS Report: Section 5.7;	Within 60 days from submittal of RI Report.
12. Submit Public Participation Plan: Section 5.8: DTSC initiates Tribal Outreach and Consultation: Section. 5.8.1; Submit and distribute Fact Sheets		Within 40 days from the date the Order is signed by DTSC. For projected or completed key milestones, as specified in Public Participation Plan or when requested by DTSC.
13.	Submit Draft RAW or Draft RAP: Section 5.10 or 5.11;	Within 30 days after approval of RI Report.
	Submit Information Needed to prepare the Responsiveness Summary	Within 2 weeks of DTSC request.
	Submit Final RAP or RAW	Within 15 days of receipt of DTSC's comments.
14.	Submit Remedial Design: Section 5.12	Within 60 days after DTSC's approval of the Final RAP.
15. Land Use Covenant: Section 5.13		Within 90 days of approval of Final RAP or Final RAW

16. Submit Implementation Report: Section 5.14	Within 30 days of completion of field activities.
17. Submit O&M Plan: Section 5.15	Within 30 days of DTSC's request.
18. Submit Remedial Action Review Workplan: Section 5.16;	Within 30 days before end of five-year period.
Submit 5-Year Review Report; Section 5.16	Within 60 days of DTSC's approval of Remedial Action Review Workplan.
19. Submit Emergency Response Action Report: Section 5.19	Within 7 days of an emergency response action.
20. Provide copies of sampling, data, and documentation; Provide prior notice before conducting field sampling: Section 6.11	With 7 days of receipt of DTSC's request. Inform DTSC 7 days in advance of sampling.
21. Maintain central depository of data, reports, documentation; Section 6.12	Maintain central depository for a minimum of ten years after conclusion of all activities conducted pursuant to this Order.
22. Provide prior written notice to documents: Section 6.12	At least six months prior to destroying any DTSC before destroying any documentation prepared pursuant to this Order

6.25 <u>Parties Bound</u>. This Order applies to and is binding upon Respondents, and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to, individuals, partners, and subsidiary and parent corporations. Respondents shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any work performed under this Order, within [15] days after the effective date of this Order or the date of retaining their services, whichever is later. Respondents shall condition any such contracts upon satisfactory compliance with this Order. Notwithstanding the terms of any contract, Respondents is responsible for compliance with this Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Order.

6.26 <u>Change in Ownership</u>. No change in ownership or corporate or partnership status relating to the Site shall in any way alter Respondents' responsibility under this Order. No conveyance of title, easement, or other interest in the Site, or a portion of the Site, shall affect Respondents' obligations under this Order. Unless DTSC agrees that such obligations may be transferred to a third party, Respondents shall be responsible for and liable for any failure to carry out all activities required of Respondents by the terms and conditions of this Order, regardless of Respondents' use of employees, agents, contractors, or consultants to perform any such tasks. Respondents shall provide a copy of this Order to any subsequent owners or

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successors before ownership rights or stock or assets in a corporate acquisition are transferred.

VII. NOTICE OF INTENT TO COMPLY

7.1 Not later than fifteen (15) days after the effective date of this Order, Respondents shall provide written notice, in accordance with paragraph 6.5 Submittals of this Order, stating whether or not Respondents will comply with the terms of this Order. If Respondents, or any one of them, do not unequivocally commit to perform all of the requirements of this Order, they, or each so refusing, shall be deemed to have violated this Order and to have failed or refused to comply with this Order. Respondents' written notice shall describe, using facts that exist on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondents under H&SC sections 25358.3(a) and 25355.5(a)(1)(B) or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 107(c)(3), United States Code title 42 (42 U.S.C.) section 9607(c)(3).

VIII. EFFECTIVE DATE

8.1 This Order is final and effective five days from the date of mailing, which is the date of the cover letter transmitting the Order to the Respondents.

IX. PENALTIES FOR NONCOMPLIANCE

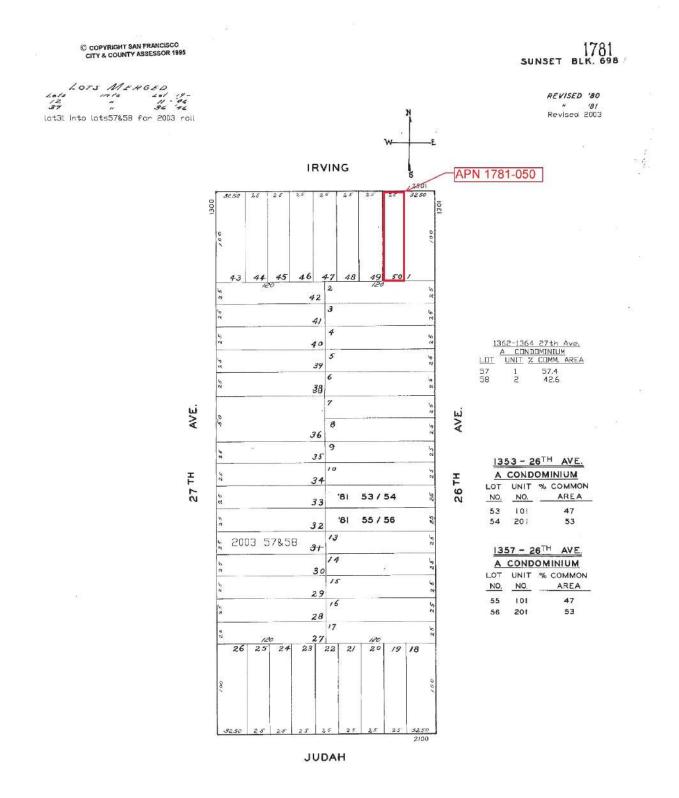
9.1 Each Respondent may be liable for penalties of up to \$25,000 for each day out of compliance with any term or condition set forth in this Order and for punitive damages up to three times the amount of any costs incurred by DTSC as a result of Respondent's(s') failure to comply, pursuant to H&SC sections 25359, 25359.2, 25359.4, and 25367(c). H&SC section 25359.4.5 provides that a responsible party who complies with this Order, or with another order or agreement concerning the same response actions required by this Order, may seek treble damages from Respondents who fail or refuse to comply with this Order without sufficient cause.

DATE OF ISSUANCE:

10/29/2021

Juliet C. Pettijohn Branch Chief Site Mitigation and Restoration Program Department of Toxic Substances Control cc: Site Mitigation Program Headquarters, Planning & Policy Office of Legal Counsel

EXHIBIT A SITE PARCEL MAP



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EXHIBIT B SITE MAP

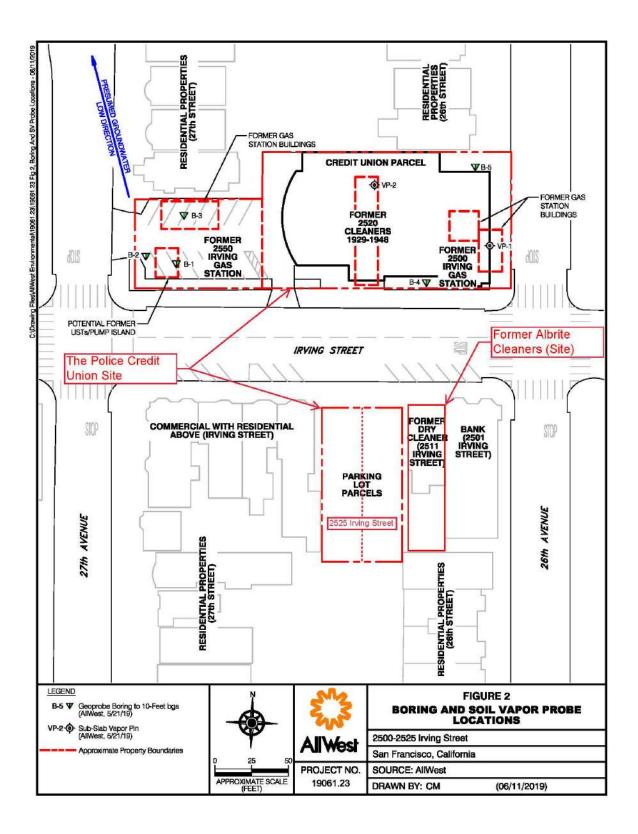


EXHIBIT C JULY 2019, MAY 2020 & AUGUST 2020 SOIL VAPOR INVESTIGATION DATA

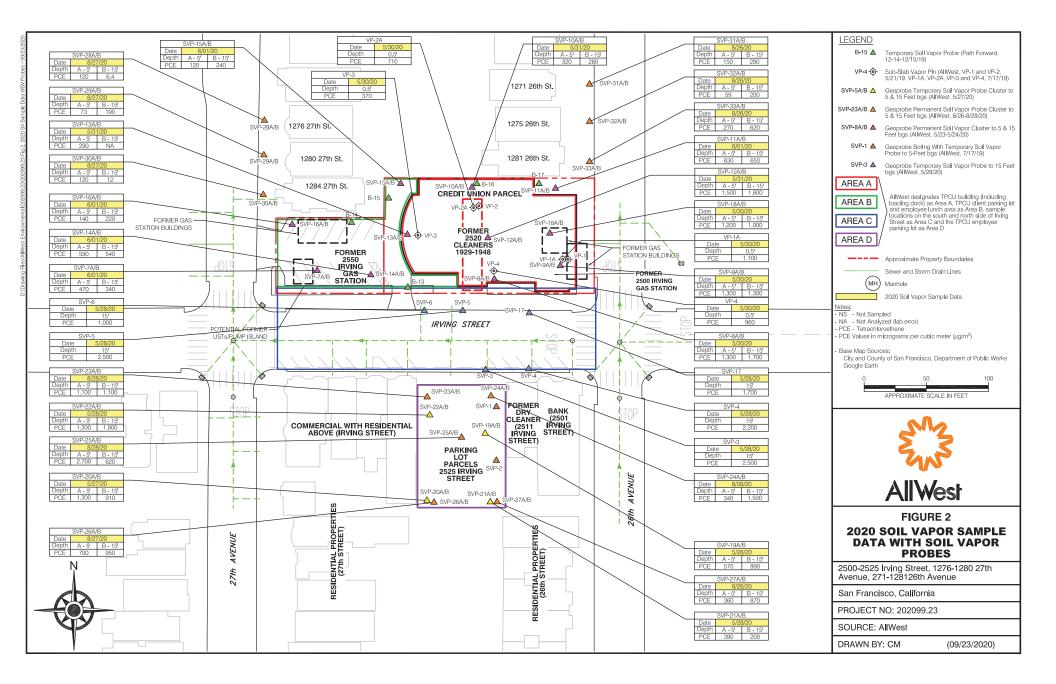


EXHIBIT D SEPTEMBER 2020 GROUNDWATER INVESTIGATION LOCATIONS

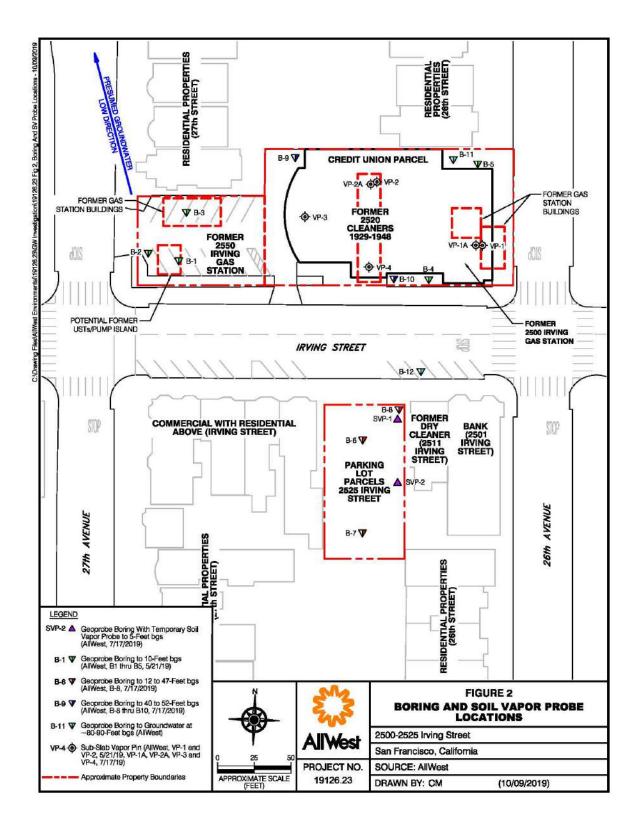


EXHIBIT E SEPTEMBER 2020 GROUNDWATER INVESTIGATION DATA

Table 2 Summary of Groundwater Analytical Data 2550 & 2511 Irving Stret San Francisco, California 94122 AllWest Project No. 19126.23								
Sample ID	Sample Date	Well Type	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Tetrachloroethene (PCE) (µg/L)	Trichloroethene (TCE) (µg/L)	Vinyl Chloride (μg/L)	
B-11 (GW)	9/27/2019	TW	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
B-12 (GW)	B-12 (GW) 9/27/2019 TW ND (<0.50) ND (<0.50) 0.71 ND (<0.50) ND (<0.50)							
	B Groundwater Tier dustrial, Drinking W		6.0 (DE)	10 (DE)	2.8 (VI)	5.0 (DE)	0.14 (VI)	

Notes:

All samples analyzed at McCampbell Analytical, Inc., Pittsburg, California by EPA Method 8260B.

cis-1,2-DCE - cis-1,2-Dichloroethene

trans-1,2-DCE - trans-1,2-Dichloroethene

PCE - Tetrachloroethene

TCE - Trichlorethene

NA - Not Analyzed

ND - Not detected at or above the laboratory reporting limit

NE - Not Established

TW - Temporary well from soil boring

bgs - below ground surface

San Francisco Bay Regional Water Quality Control Board (SFRWQCB), User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), January 2019.

Tier 1 Environmental Screening Levels (ESLs) for residential land use and soil disposal acceptance profiling were established using the Tier 1 ESL Summary Table based on a generic conceptual site model designed for use at most sites. These ESLs were established with the following assumptions: Land Use = Residential, Groundwater Use = Drinking Water Resource, MCL Priority over RIsk-based Levels = Yes, Discharge to Surface Water = Saltwater & Freshwater, Vegetation Level = Substantial, Soil Exposure Depths = Shallow (≤ 10 ft bgs).

Tier 2 Environmental Screening Levels (ESLs) for residential, commercial/industrial land use where groundwater IS a potential drinking water resource were established using the site-specific Tier 2 Interactive Tool, Table T2-1: Tier 2 ESL Input and Output. These ESLs were established with the following assumptions: Commercial property use, minimal vegetation level, drinking water resource groundwater use, discharge to surface water, and shallow soil depths (≤ 10 ft bgs) for direct exposure.

DE - Direct Exposure (Table GW-1 - Direct Exposure Human Health Risk Levels) VI = Vapor Intrusion (Table GW-3 - Groundwater Vapor Intrusion Human Health Risk Levels)

1	ENOCH WANG (SBN 218904)	
2	FIFE LAW, LLP 300 Montgomery Street, Suite 850	
3	San Francisco, CA 94104	
4	Telephone: (415) 837-3101 Facsimile: (415) 837-3111	
5		
6	Attorneys for Appellant Mid-Sunset Neighborhood	
7	Association, Inc.	
8	BOARD OF A	PPEALS
9	CITY AND COUNTY OF	F SAN FRANCISCO
10	MID-SUNSET NEIGHBORHOOD) Anneal No. 22,002
11	ASSOCIATION, INC.,) Appeal No. 22-092
12	Appellant,	 DECLARATION OF PAUL HOLZMAN IN SUPPORT OF APPELLANT MID-
13	V.) SUNSET NEIGHBORHOOD
14	DEPARTMENT OF BUILDING) ASSOCIATION, INC.'S APPEAL OF) DEMOLITION PERMIT
15	INSPECTION, Respondent.)) Date: February 8, 2023
16		Time: 5:00 PM
17		Place.: City Hall, Room 416
18	I, Paul Holzman, declare:	
19	1. I am a San Francisco resident, mem	ber and representative of Appellant, Mid-
20	Sunset Neighborhood Association, Inc. I live in clo	ose proximity to the 2550 Irving Street
21	property, regarding which appeal of the demolition	permit is being submitted. The facts
22	contained in this declaration are based on my own	personal knowledge and experience, and if I
23	were called and sworn as a witness I could and wor	uld testify competently thereto.
24	2. Since spring of 2021, I have been th	e lead representative for MSNA along with
25	MSNA's environmental consultants in discussions	with Department of Toxic Substances
26	Control (DTSC) for cleanup of the PCE contamina	tion that has been uncovered at the property
27	and surrounding neighborhood homes.	
28		
	Declaration	1

3. Indoor air sampling conducted in September-October 2021 and March 2022 at
 six homes adjacent to the property revealed PCE levels higher than the health-based residential
 screening levels.

4. On September 23, 2022, I attended a meeting with DTSC. The attendees 4 included Donald Moore, MSNA geologist expert, PG, ARM, Lenny Siegel, former Mayor of 5 6 Mountain View and Executive Director of the Center of Public Environmental Oversight, 7 Gordon Mar, San Francisco Supervisor, Craig Scholer, Cal EPA Deputy Secretary for Legislative Affairs, Meredith Williams, DTSC Director, Nelline Kowbel, DTSC Chief, 8 Northern CA Division, Site Mitigation, and myself. Director Williams and Chief Kowbel 9 acknowledged the new findings and stated that DTSC was investigating "the data in aggregate" 10 11 and that "[DTSC has] to think about the whole, for the entire block and the entire PCE plume." 12 In addition, Director Williams asked Chief Kowbel "to push wherever we can, to get the most protective remedy." This is reflected in the Meeting Minutes which I prepared, a true and 13 correct copy of which are being submitted as **Exhibit F** to the appeal. 14

I hereby declare under penalty of perjury under the laws of the State of California that this
declaration is true and correct, and that it was executed on this 18th day of January, 2023, in San
Francisco, California.

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27

28

Paul Hotzuran

2

Paul Holzman

Permit Details Report

Report Date: 12/1/2022 10:55:17 AM

Application Number	: 202206277192
Form Number:	6
Address(es):	1724 / 038 / 0 2550 IRVING ST
Description:	DEMOLISH A 2 STORY, 2 BASEMENT, OFFICE BUILDING.
Cost:	\$200,000.00
Occupancy Code:	
Building Use:	-

Disposition / Stage:

Action Date	Stage	Comments
6/27/2022	TRIAGE	
6/27/2022	FILING	
6/27/2022	FILED	
10/28/2022	PLANCHECK	
10/28/2022	APPROVED	
11/18/2022	ISSUED	

Contact Details:

Contractor Details:

License Number:	1010621
Name:	MIGUEL GUZMAN
Company Name:	GUZMAN CONSTRUCTION GROUP INC.
Address:	2270 PALOU AV * SAN FRANCISCO CA 94124- 0000
Dhonor	

Phone:

Addenda Details: Description:

Step	Station	Arrive	Start	In Hold	Out Hold	Finish	Checked By	Hold Description
1	СРВ	6/27/22	6/27/22			6/27/22	WONG ALBERT	MOD
2	CP-ZOC	6/28/22	8/17/22			0/1//22	LAUSH MAGGIE	8/17/22: Approved - demo of existing 2-story commercial structure and surface parking lot reference new construction permit, BPA 202205053630 - Maggie.Laush@sfgov.org
3	BLDG	8/18/22	9/23/22			9/26/22	WONG IRENE	9/26/22:Approved. Route to PPC.
4	DPW- BSM	9/27/22	9/28/22			9/28/22	LIONGSON KATHLEEN	Approved. 9/28/22. Pre-construction site meeting required by BSM Street Inspection. Call (628) 271-2000 or dpw- bsminspects@sfdpw.org to schedule KVL
5	HEALTH	9/29/22	10/12/22			10/12/22	CASEY RYAN	NA
6	CP-ZOC	10/13/22	10/14/22			10/14/22	LAUSH MAGGIE	10/14/22: Missing stamp added per 8/17 approval - ML.
7	РРС	10/17/22	10/17/22			10/17/22	EAKIN MIGUEL	10/17/22: TO CPB;me 10/13/22: TO PLANNING to stamp second set of paper plans;me 9/29/22: To Health; ST 09/27/22: TO BSM;me 08/18/22: TO BLDG;me 06/28/22: TO PLANNING;me
8	СРВ	10/17/22	10/28/22			11/18/22	WONG ALBERT	11/18/22: ISSUED; 11/8/22: ASBESTOS REMOVAL PERMIT PA#202211045956; INVOICED; 10/28/22: ASBESTOS PRESENT REQ SEPARATE ASBESTOS REMOVAL PERMIT VIA OVER THE COUNTER; 10/20/22: EMAILED GC AND APPLICANT; PENDING CONTRACTOR STATEMENT, MMRP, J#, RACM SURVEY REPORT;

This permit has been issued. For information pertaining to this permit, please call 628-652-3450.

Appointments:

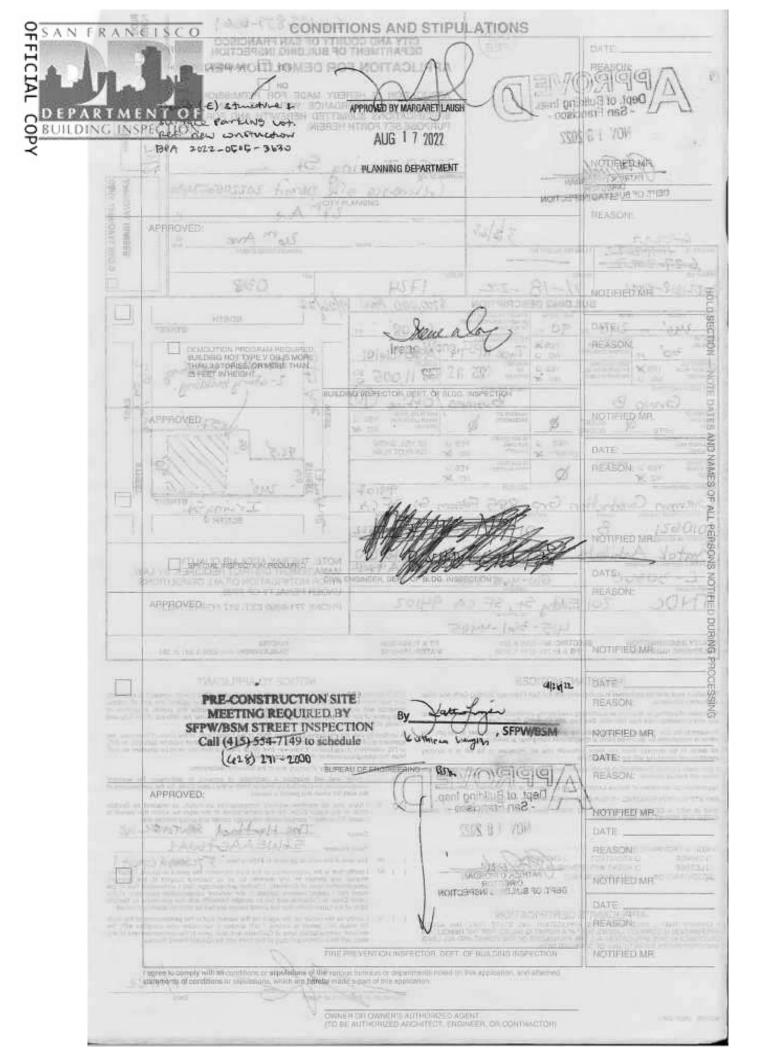
Appointment Date Appointment AM/PM Appointment Code Appointment Type Description Time Slots

Inspections:

Activity Date Inspector Inspection Description Inspection Status

< INC INC INC	MARCATION NUMBER
DEPT. OF BUILDING INSPECTION DEPT. OF BUILDING INSPECTION	APPROVA
6-22-22 FILMS PERFECTION NO. 75 8/28 17 - 750M 20th Ave 55 14-11-2022 FILMS PERFECTION NO. 75 - 750M NEWER CROSS STINUT	OSHA APPROVAL REG'D APPROVAL NUMBER:
Description Participation Participat	0
Image: State of the state	26 th Ave STREET
UTILITY DISCONNECTION ELECTRIC: 661 3000 X 324 PT 8 T: 663 3066 VIACOM UTILITY DISCONNECTION ELECTRIC: 661 3000 X 324 PT 8 T: 663 3066 VIACOM TELEPHONE NUMBERS: PG 8 E: 761 4214 X 3786 WATER: 558-3196 CABLEVISION: 490-6200 X 351 or 357	7
<section-header> Description of the start defendence of the formation of the formation of the start defendence of the start defendence</section-header>	seeps) to indemnify by and all chains, mit, negacities of se of the City and e of California, the internation of the internation of the performance of aurea for modeum international permit is per and the performance of aurea for modeum internation the performance of the permit is per and the the permit is per and the sector instand that in the visions of Sector manoe of the work perpenditions of the sector of the work perpenditions of the sector the permit is the sector the permit is the sector the sector of the sector permittion of the sector perpenditions of the sector permittion of the sector of the sector permittion of the sector of the sector permittion of the sector of the sector of the sector of the sector permittion of the sector of the s
Signature of Additions of Additions of Additional Date	u/22

soor-os (HEV, 286)



ARTMENT OFFEMENT	Quality District	ASBESTOS JOI
ACKNOWLEDGEMENT OF NOT	IFICATION & PAYMENT OF FEES	October 26, 2022
Guzman Construction Group Inc 885 FOLSOM ST	J# (JOB NUMBER)	TRI
San Francisco, CA 94107-1122	ASB126101	
Invoice No.: T139891	ASDIZOIUI	Regulation 11 Rule 2
The Bay Area Air Quality Management Removal or Demolition Plan described	District (BAAQMD) acknowledges receipt of yo as: 2550 Irving (Demolition)	ur payment and your Asbestos
Location Information:		
Site 2550 Irving St		
San Francisco, CA 94122		
Job Start Date: February 15, 2023		

Contractor or waste disposal site, you must inform the District per Section 401.5 of Regulation 11-2.



REVISIONS TO ONLINE JOB NOTIFICATIONS

For online submitted Job Notifications, revisions to Job information must be made online using the following steps:

- 1. Log into your BAAQMD account at myaironline.baaqmd.gov/account/login
- 2. Go to the My Job Notification list.
- 3. Click on the specific Job Notification to view the summary.
- 4. Click on the "Change Job Details" button

If you have trouble accessing your account online, or have questions regarding changes on Job Details, contact 415-749-4762.

NOTE: This form is not intended as verification of either the completeness of your original notification or of its compliance with BAAQMD Regulation 11-2. If you have any questions regarding this matter please contact on Air Quality Technician (415-749-4762, asbestosjobs@baagmd.gov). Please include your Asbestos Application Number and Invoice Number for any correspondence with the District.

October 25, 2022

375 Beale Street, Suite 600 - San Francisco, CA 54105 - (415) 771.6000 - WWW.BAAQMD.GOV



SF Environment Debris Compliance SF Environment Debris Compliance	ce e e e e e e e e e e e e e e e e e e	×
Building Permit No. 202206277192	77192	
MRRP Required? @ YES C NO	G YES C NO	
Env Debris Compliance Status	APPROVED V	
Green HALO Tracking No. GH693-859-6061	GH693-859-6061	
MRRP Submitted Date	11/16/2022	
MRRP Approval Date	11/16/2022	
MRRP Approved By	KAT HANRAHAN	
Completed Date		
Compliance Approved By		

SAVE EXIT





London N. Breed, Mayor Patrick O' Riordan, C.B.O., Director

Permit Application #	2022	0627 7192
Job Address: _25	SO IRU	ING ST.
Block/Lot Number: _	1724	038

DEMOLITION AFFIDAVIT

I declare under penalty of perjury that every party who has a recorded mortgage or recorded deed of trust on the property that is the subject of the application has been notified of the filing of this application as per San Francisco Building Code Section 106A.3.2.2.

Signature:	Se	the second secon
Print Name:	BEN	JAMIN AGUILAR
Date:	b/27/	22

J:COMMONUMarianne/CPIDDemolitionAffidavit



Mayor's Office of Housing and Community Development City and County of San Francisco

> London N. Breed Mayor

> > Eric D. Shaw Director

Letter Confirming City Priority Permit Status 2550 Irving

February 28, 2022

Mr. Patrick O'Riordan Director, Department of Building Inspection City and County of San Francisco 49 South Van Ness Avenue San Francisco, CA 94103

Dear Director O'Riordan:

On behalf of the Mayor's Office of Housing and Community Development (MOHCD) this letter confirms the priority status of the below project as a 100% new affordable housing project.

2550 Irving is a proposed 100% affordable housing in the Sunset neighborhood being developed to house families including those existing homelessness. The project will include total of 90 units on seven residential floors including potential community programming. The project is sponsored by MOHCD and being developed by a 501c(3) nonprofit organization, Tenderloin Neighborhood Development Corporation.

If you have questions or need anything further regarding this request, please feel free to contact me 415-602-2745 or erin carson@sfgov.org)

Thank you in advance for your assistance.

Sincerely,

Erin Carson Director of Construction Services Erin carson@sfgov.org

> One South Van Ness Avenue, Fifth Floor, San Francisco, CA 94103 Phone: 415.701.5500 Fax: 415.701.5501 TDD: 415.701.5503 www.sfmahcd.org





London N. Breed, Mayor Patrick O'Riordan, C.B.O., Director

Attachment A

LICENSED CONTRACTOR'S STATEMENT

Required documentation:	Government-issued photo ID
	Current San Francisco Business License
	Current State California contractor's license and classification (the pocket card)
Permit Application Number:	2022 06 27 7192
Permit Application Address:	2550 Irving St
Print Company Name:	Guzman Construction Group, Inc.
Print Contractor Name:	Guzman Construction Group, Inc.
CSLB Number: 1010621	Contractor Class:B Expiration Date:01/31/2024
Contractor Mailing Address:	885 Folsom St, SF Ca 94107
Contractor Telephone: 415	-821-2522 Contractor Email: admin@guzmangc.com
Contractor Signature:	Date: 10/19/2022

AUTHORIZATION OF AGENT TO ACT ON CONTRACTOR'S BEHALF

As the contractor listed above, hereby authorizes <u>Bruce Baumann</u> to obtain a building permit(s), including any supplemental permits, but not limited to electrical, plumbing or temporary street-use permits, on behalf of the company/contractor listed above, with the Department of Building Inspection for the City & County of San Francisco located at 49 South Van Ness Avenue, San Francisco, California 94103.

Print Named of Authorized Agent(s): Bruce Baumann

Address of Authorized Agent(s): 1221 Harrison Street, Suite 22, San Francisco, CA 94103

Agent's Telephone: (415) 551-7884 Agent's Email: bruce@baumannassociates.com

Pursuant to the Business and Professions Code Sec. 7031.5, I hereby affirm, under penalty of perjury, that I am licensed under the provisions of Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, and that my license is full force and effect.

Date: 10/19/2022 Contractor Signature: _ Revised 06/05/2022 **Central Permit Bureau** 49 Sobth-Van Ness Avenue, Suite 200 - San Francisco CA 94103 Office (628) 652-3240 - FAX (628) 652-3249 www.sfdbi.org



HAZARDOUS BUILDING MATERIALS SURVEY

Commercial Building 2550 Irving Street San Francisco, California

Tenderloin Neighborhood Development Corporation 201 Eddy Street San Francisco, California 94102

March 25, 2022 | Project No: 402154004



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Sociachecal & Environmental Sciences Consultente

	ENSCH nalytical, Inc. Street San Leandro, CA 94677 ENT OF 45-3675 / (510) 895-3880 (520 Convrol No. L. com / same and clab @armail.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
and the local design of th	William Larkin	Phone:	(510) 343-3000
and the loss of the local data	allower and a second	Phone: Fax:	(510) 343-3000 (510) 633-6646
STATISTICS IN CONTRACTOR INCOMENTS	William Larkin	2012/10/381	(510) 633-6646
STATISTICS IN CONTRACTOR INCOMENTS	William Larkin Ninyo & Moore	Fax:	(510) 633-6646 03/14/2022 8:00 AM
STATISTICS IN CONTRACTOR INCOME.	William Larkin Ninyo & Moore 2020 Challenger Drive	Fax: Received Date:	(510) 633-6646 03/14/2022 8:00 AM 03/17/2022

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Ar	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non Fibrous	5L Type
ASB-01-Wailboard avaistang-nan	15T FLOOR SOUTH OFFICE - WALLBOARDUOINT OOMF	White Non-Fibrous Homogeneous		70% Gypsen 30% Non-fibrous (Other)	None Detected
ASB-01-Joint Compound assesses-aan4	1ST FLOOR SOUTH OFFICE - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 2016 Non-Riscus (Other)	None Detected
ASB-02-Wallboard	1ST FLR EAST OFFICE - WALLBOARDJOINT COMP	White Non-Fibrous Homogeneous		70% Gypsum 30% Non-fibrous (Other)	None Detected
ASB-02-Joint Compound 1	18T FLR EAST OFFICE - WALLBOARDUOINT COMP	White Non-Fibrous Homogeneous		89% Ca Carbonate 20% Non fibrous (Other)	None Detected.
ASB-02-Joint Compound 2 assesses-aare	1ST FLR EAST OFFICE - WALLBOARDUJOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-02-Joint Compound 3 exectors-cost	1ST FLR EAST OFFICE - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-03-Wallboard	1ST FLR - WOFFICE AREA - WALLBOARDUJOINT COMP	White Non-Fibrous Homogeneous		70% Gypnum 30% Non-fibrous (Other)	None Deletted
ASB-03-Joint Compound 1 measure creak	1ST FLR - WOFFICE AREA - WALLBOARDUDINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Rivous (Other)	None Detected
ASB-03-Joint Compound 2 00220002.0004	1ST FLR - W OFFICE AREA - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		60% Ca Carbonate 20% Non-Ritrous (Other)	None Detected
ASB-04-Wallboard	1ST FLR - N FILE ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		70% Gypsum 30% Non-fibrous (Other)	None Detected
ASB-04-Joint Compound 1 0820002-00544	1ST FLR - N FILE ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		60% Ca Carbonate 20% Non-florous (Other)	None Detected
ASB-04-Joint Compound 2	1ST FLR - N FILE ROOM - WALLBOARD/JDINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Tbrous (Other)	None Detected

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OFFICIAL

SL Analytical, Inc.

mick Street San Leandro, CA 94677

DEPARTMENT OF 86-3675 (1510) 885-3680

BUILDING INSPECTION SLoom I serileandroleb@ernel.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PD: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Non-Asbestos Asbestos Sample Description Appearance % Fibrous % Non-Fibrous % Type ASB-05-Wallboard 1ST FLR - NE White 70% Gybsum None Detected RESTROOM-Non-Fibrous 30% Non-fbrous (Other) 000205002-0005 WALLBOARD/JOINT Homogeneous COMP ASB-05-Joint 1ST FLR - NE White 80% Ca Carbonale None Detected RESTROOM-Non-Fibrous 20% Non-fibrous (Other) Compound 1 WALLBOARDOOINT Homogeneous ABOOD-ROOMA BAR COMP 1ST FLR - NE ASB-05-Joint White 80% Carbonate None Detected RESTROOM Non-Fibrous 20% Non-Strout (Other) Compound 2 WALLBOARDGOINT Homogeneous COMP 080205002-00058 ASB-06-Wallboard 2ND FLR - SW White 70% Gypeum None Detected Non-Fibrous OFFICE 30% Non-Ebroue (Other) 0003030005-0009 WALLBOARDIJOINT Homogeneous COMP ASB-08-Joint 2ND FLR - SW White 80% Ca Carbonate None Detected OFFICE Non-Fibrous 20% Non-Ebrous (Other) Compound WALLBOARDIJOINT Homogeneous 002205002-0006A COMP ASS-07-Wallboard 2ND FLR - SE White 70% Gypsum None Detected Non-Fibrous OFFICE -30% Non-Rbrous (Other) WALLBOARDIJOINT 00220.8002.d007 Homogeneous COMP ASB-07-Joint 2ND FLR - SE White AOM Ca Camonate None Celected OFFICE -Non-Fibrous 20% Non-fibrous (Other) Compound WALLBOARDOONT Homogeneous 0602050EE-3007A COMP ASB-08-Wallboard 2ND FLR - NW White 70% Dypsum None Detected UTILITY ROOM-Non-Fibrous 30% Non-fibrous (Other) 9002305052-0008 WALLBOARDUOINT Homogeneous COVE ASB-08-Joint 2ND FLR - NW White 80% Ca Carbonate None Detected UTILITY ROOM Non-Fibrous 20% Non-fibrous (Other) Compound. WALLEGARDUOINT Homogeneous COMP 000303000-00084 ASB-09-Wallboard 2ND FLR NE OFFICE White 70% Gypsum None Detected Non-Fibrous 30% Non-fibrous (Other) WALLBOARD/JOINT 002200002-0008 Homogeneous COMP ASB-09-Joint 2ND FLR NE OFFICE White 80% Ca Carbonata None Detected Non-Fibrous Compound 1 20% Non-fibrous (Other) WALLBOARDUOINT Hamogeneous 092203005-00084 COMP ASB-09-Joint 2ND FLR NE OFFICE White 80% Ca Carbonata None Detected Non-Fibrout 20% Non-fibrous (Other) Compound 2 WALLBOARDUCINT Homogeneous COMP 042305062-00048 2ND FLR NE OFFICE ASE-08-Joint White 80% Ca Carbonate None Detected Non-Fibrous 20% Non-Ribrous (Other) Compound 3 WALLBOARDUCINT Homogeneous: COMP 092205002 00580 2ND FLR - NW ASB-10-Wallboard Brown/Tan 70% Gyptum None Detected RESTROOM Non-Fibrous 30% Non-fibrous (Other) responses on a WALLBOARDUJOINT Homogeneous COMP

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SLAnalytical, Inc.

Street San Leandro, CA 94577

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CONTRACT MENT OF 25-3675 / (510) 885-3680 BUILDING INSPECTION State and and a state and a state of the state Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

				Asbestos	
Presente	Description	Annastance	% Fibrous	Non-Fibrous	% Type
Sample	2ND FLR - NW	Appearance White/Beige	36 PHOTOLAS	80% Ca Carbonate	None Datacled
ASB-10-Joint Compound	RESTROOM - WALLBOARD/JOINT	Non-Fibroux Homogeneous		20% Non-fibrous (Other)	110.00 0.0000000V
007205002-00108	COMP	A new second second second			
ASB-11-Mastic	1ST FLR - CENTRAL/FRONT -	Yellow Non-Fibrous		80% Matrix 20% Non-Ebrous (Other)	None Detected
002203009-0011	BEIGE-TAN CARPET MASTIC	Hamogeneous			
ASB-11-Cementitious	1ST FLR -	Gray/White		20% Quartz	None Detected
Material	CENTRALIFRONT + BEIGE-TAN CARPET	Non-Fibrous Homogeneous		60% Ca Carbonate 20% Non-tibrous (Other)	
osozołcoż obria Result includes a small articui	MASTIC It of magarable attached mat	torial			
ASB-12	4ST FLR +	Yellow		80% Matrix	None Detected
P 02 01 01 00 00 0	W-CENTRAL FLOOR	Non-Fibrous		20% Non-fibrous (Other)	14-1402200354925
092208042-0092	- BEIGE-TAN CARPET MASTIC	Homogeneous			
ASB-13-Vinyl Floor Tile	15T FLR, EAST SIDE SERVER ROOM - 12	White Black Not-Fibrous		20% Ca Carbonate 50% Matrix	None Detected
042206082-0073	X 12 WHITE VFT W GRAY	Homogeneous		20% Non-fibrous (Other)	
	SPECKS/YELLOW				
ASB-13-Mestic	151 FLR. EAST SIDE SERVER ROOM - 12	Yellow Non-Fibrous		80% Metrix 20% Non-Stroux (Other)	None Detected
082200002-00134	X 12 WHITE VFT W	Homogeneous		the second second fraction (
DECEMBER OF SHE	GRAY	0.00000897700084			
	SPECKS/YELLOW MASTIC				
ASB-14-Vinyl Floor Tile	15T FLR, STORAGE ROOM - 12 X 12	White/Black Non-Fibrout		20% Ca Carbonate 60% Manix	None Detected
002209002-5014	WHITE VET W	Homogeneous		20% Non-fibrous (Other)	
	SPECKS/YELLOW MASTIC				
ASB-14-Mastic	1ST FLR, STORAGE	Yelow		80% Matrix	None Detected
discussor-stree	ROOM - 12 X 12 WHITE VET W	Non-Fibrous Homogeneous		20% Non-Stimus (Other)	
1111111111111111	GRAY				
	SPECKS/YELLÓW MASTIC				
ASB-15-Vinyl Floor Tile	1ST FLR FILE ROOM - 12 X 12 GRAY	Gray Non-Fibrous		20% Cs Carbonate 60% Matrix	None Detected
092205002-0015	VFT/YELLOW MASTIC	Homogeneous		20% Non-fibrous (Other)	
AS8-15-Mastic	1ST FLR FILE ROOM - 12 X 12 GRAY				Insufficient Material
09220930Q-30104	VFT/YELLOW MASTIC				
ASB-16-Mastic	1ST FLR FILE ROOM - YELLOW	Gray/Yellow Non-Fibrous		5% Ca Carbonate 60% Matrix	None Detected
airestace of in	MASTICALEVELER ASSOC. W ASB-15	Homogeneous		15% Non-fibrous (Other)	
Annual includes a small arrour		eria/			
ASB-16-Levelar	1ST FLR FILE ROOM	Gray More Eithers a		50% Ca Carbonate 30% Matrix	None Detected
OFFICE COSTON	- YELLOW MASTIC/LEVELER ASSOC. W ASB-15	Non-Fibrous Homogeneous		20% Non-Fibrous (Other)	

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SL Analytical, Inc.

Correct Street San Leandro, CA 94577

DEPARTMENT OF 95-3675 / (510) 895-3680

BUILDING INSPREMENSLoom / santeandroiab@emsi.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Non-Asbestos Ashestos Description Appearance % Fibrous % Non-Fibrous % Type Sample ASB-17-Vinyl Floor Tile 2ND FLR UTILITY White/Black 20% Ca Carbonate None Detected ROOM - 12 X 12 60% Matrix Non-Fibrous 001205062-0017 WHITE Homogeneous 20% Non-fibrous (Other) **VFT/YELLOW** MASTIC (SAME AS ASB-13) ASB-17-Mastic 1 2ND FLR UTILITY Yellow 80% Matrix None Detected RCOM + 12 X 12 Non-Filtrous 20% Non-fibrous (Other) NOUTE Homogeneous 10/22010/02-00174 VFT/YELLOW MASTIC (SAME AS ASB-131 2ND FLB UTILITY ASB-17-Meetic 2 Biante 80% Mattie None Detected RDOM - 12 X 12 Non-Fibrous 20% Non-fibrous (Other) 005305005-00179 WHITE Nomogeneous VFT/YELLOW. MASTIC (SAME AS AS8-13] 1ST FLR CENTRAL 80% Matrix None Detected ASB-18-Cove Base Black HALLWAY -4" Non-Fibrous 20% Non-fibrous (Other) 10022010002-0018 BROWN COVE Homogeneous BASE/MASTIC ASB-18-Maatic 1ST FLR CENTRAL White/Beige 5% Ca Carbonate None Detected HALLWAY - 4* Non-Fibrous 80% Matrix 002205002-00164 BROWN COVE Homogeneous 15% Non-fibrous (Other) BASEMASTIC Result includes a small amount of inseparable attached material 1ST FLR SERVER. 15% Ca Carbonate None Detected ASB-19-Cove Base Tan Non-Fibrous RCOM - 4" TAN 60% Matrix 062208062-0019 COVE BASE/MASTIC Homogeneous 25% Non-fibrous (Other) ASB-19-Mastic 1ST FLR SERVER Yellow 80% Matrix None Detected ROOM - 4" TAN Non-Fibrous 20% Non-fibrous (Other) COVE BASE/MASTIC 052305008-0019A Homogeneous 2ND FLR HALLWAY ASB-20-Cove Base Black 60% Matrix None Detected -4" BROWN COVE Non-Fibrous 40% Non-fibrous (Other) 095205003-0025 BASE/MASTIC Homogeneous ASB-20-Mastic 2ND FLR HALLWAY White/Beige 60% Matrix None Detected - 4" BROWN COVE Non-Fibrous 40% Non-fibrous (Other) MESIO-530605290 BASE/MASTIC Homogeneous None Detected ASB-21-Cove Base 2ND FLR KITCHEN+ Bipwi 60% Makix 4" GREY COVE Non-Fibrout 40% Non-fibrous (Other) 092305069-0021 BASEMASTIC Homogeneous 2ND FLR KITCHEN -60% Matrix ASB-21-Mantic Cray None Detected 4" GREY COVE Non-Fibrous 40% Non-fibrous (Other) BASEMASTIC INVESTIGATION CONTACTOR Homogeneous ASB-22-Cove Base 2ND FLR UTILITY 60% Matrix None Detected Beige RCOM - 4" BEIGE Non-Fibrout 40% Non-fibrous (Other) 002205003-0022 COVE BASE/MASTIC Homogeneous ASB-22-Mastic 2ND FLR. UTILITY Tan 90% Matrix None Detected Non-Fibrous ROOM - 4" BEIGE 19% Non-fibrous (Other) ALLONG COLLARS COVE BASE/MASTIC Homogeneous RCOF - WEST AREA ASB-23-Roofing 1 White/Flack 5% Giasa 15% Quartz None Detected - ROOF ASSMEBLY Non-Fibrous 60% Metrix 092203082.0823 20% Non-fbrous (Other) Homogeneous RCOF - WEST AREA this Gines ASB-23-Felt Black 70% Matrix None-Detected ROOF ASSMEBLY Fibrous 15% Non-fibrous (Other) 092205062-00234 Homogeneous

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SL Analytical, Inc.

Street San Leandro, CA 54577

OFFICIAL

SAN FRANCISCO

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

DEPARTMENT OF 16-3675 (510) 895-3680 BUILDING INSPECTIVE KSL com / sandesandtroebgrenal com Test Report: Asbestos Analysis of B Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-23-Rooting 2	ROOF - WEST AREA - ROOF ASSMEBLY	Black Non-Fibrous Homogeneous	10% Glass	70% Marrix 20% Non-Throus (Other)	None Detected
ASB-23-Roofing 3	HOOF - WEST AREA - ROOF ASSMEBLY	Black Non-Fibrous	7% Glass	70% Marix 23% Non-fbrous (Other)	None Detected
ASB-23-Insulation	ROOF - WEST AREA - ROOF ASSMEBLY	Homogeneous Brown Fibrous	90% Cellulosa	10% Non-Stimus (Other)	None Detected
CARDON EROSACEAD		Homogeneous			
ASB-23-Foam	ROOF - WEST AREA - ROOF ASSMEBLY	Yellow Non-Florous		100% Non-1brous (Other)	Note Detected
047205082-90236		Homogeneous	1000 00000	1000 B. 100	Mana Balantad
ASB-24-Roofing 1	ROOF - EAST AREA - ROOF ASSEMBLY	White/Black Non-Fibroux Homogeneous	6% Glass	10% Quartz 70% Matrix 14% Non-fibrous (Other)	None Detected
	ROOF - EAST AREA	Black	15% Glass	85% Non-fibrous (Other)	None Detected
ASB-24-Felt (92205932-92244	-ROOF ASSEMBLY	Fibrous Homogenéous	10.11 (31895	and in the country (count)	THE DESIGN
A58-24-Roofing 2	ROOF - EAST AREA - ROOF ASSEMBLY	Black Non-Fibrous	7% Glass	70% Matrix 23% Non-fibrous (Other)	None Detected
082209002-90249		Homogeneous			
AS8-24-Roofing 3	ROOF - EAST AREA. - ROOF ASSEMBLY	Black Non-Fibrous	4% Celluiose 4% Glass	70% Matrix 22% Non-fibrous (Other)	None Detected
542395552-3524C		Homogeneous			
ASB-24-Insulation	ROOF - EAST AREA - ROOF ASSEMBLY	Brown Fibrous	90% Celuiose	10% Non-fibrous (Other)	None Detected
002255002-00240		Homogeneous			2010/02/07 02:45
ASB-24-Foem	RODF - EAST AREA - ROOF ASSEMBLY	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
392515000-0004E		Homogeneous		and the second second	None Detected
ASB-25-Rooting 1	NORTH ROOF AREA PARAPET - ROOF ASSEMBLY	White/Black Fibrous Homogeneous	10% Gisss	10% Quarte 60% Matrix 20% Non-Ritrous (Other)	None Detected
	NORTH ROOF AREA	Black	3% Celuiose	60% Matrix	None Detected
ASB-25-Roofing 2	PARAPET - ROOF ASSEMBLY	Fibrous Homogeneous	12% Glass	25% Non-fibrous (Other)	100000000000000000000000000000000000000
ASB-25-Insulation	NORTH ROOF AREA PARAPET - ROOF	Brown Fibrous	80% Celulose	20% Non-fibrous (Other)	None Detected
autosola otass	ASSEMBLY	Homogéneous			
ASB-26-Mastic	WEST-CENTRAL RODF-BLACK	Tan Non-Fibrous		80% Matrix 20% Non-fibrous (Other)	None Detected
092105002-0014	PATCH-ROOF ASSEMBLY	Homogeneous			
ASB-28-Roofing 1	WEST-CENTRAL ROOF-BLACK	Black Fibrous	9% Glass	10% Quartz 60% Matrix	None Detected
082205062-00258	PATCH - ROOF ASSEMBLY	Homogeneous		21% Non-Fbrous (Other)	
ASB-26-Roofing 2	WEST-CENTRAL ROOF-BLACK	(fileck Fibrous	10% Glass	75% Matrix 15% Non-fibrous (Other)	None Detected
pazzoszes-ecosat	PATCH - ROOF ASSEMBLY	Homogeneous			
ASB-25-Roofing 3	WEST-CENTRAL ROOF-BLACK	Black Fibroue	15% Synthetic	60% Matrix 25% Non-fibrous (Other)	None Detected
CA2306882 (ROSEC	PATCH - ROOF ASSEMBLY	Hamogeneous		P62042349483237609629538203	

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nalytical, Inc.

Street San Leandro, CA 94577

ARTMENT O F 95-3675 / (\$10) 895-3680

CONTRACTOR OF A CONTRACTOR (\$10) 885-3880 BUILDING INSPECTIVEL.com / sankeandrolab@emsl.com Test Report: Asbestos Analysis of B

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

2390777970	100000000000	0.020530045	Non-Asbes	1000 ST 14 WORTS (1711)	Ashealos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type		
ASB-26-Insulation	WEST-CENTRAL ROOF-BLACK PATCH - ROOF ASSEMILLY	Brown Fibrous Homogeneous	80% Celulose	20% Non-fibrous (Other)	None Detected		
ASB-35-Foam	WEST-CENTRAL ROOF-BLACK	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected		
082309052-0125E	PATCH - ROOF ASSEMBLY	Homogeneous					
ASB-27	WEST-CENTRAL RCOF-BLACK	Grey/Black Non-Fibrous	4% Celulose	60% Matrix 16% Non-fibrous (Other)	None Detected		
982205082-0027	PATCH - BLACK SEALANT ON EDGE OF ROOF PATCH	Homogeneous					
ASB 28-Sealant	CENTRAL ROOF AREA -	White Non-Fibroux		60% Matrix 40% Non-Ebrous (Other)	None Detected		
082206060-0028	TAPE/SEALANT ON HVAC DUCTING	Homogeneous		2.0			
ASB-28-Mastic	CENTRAL ROOF AREA -	Black Non-Fibroux		50% Matrix 10% Non-Recous (Other)	None Detected		
M2209002-0426A	TAPE/SEALANT ON HVAC DUCTING	Homogéneous					
meeparable paint / coaking	ayer included in analysis	20					
ASB-29	1ST FLR HALLWAY CEILING - 2'X 2'	Grey Fibrous	70% Celuiose 5% Min. Wool	25% Non-fibrous (Other)	None Detected		
042204022.0029	LAY-IN WHITE ACT	Homogeneous			1755 10100 1010		
ASB-30	1ST FLR FRONT/CENTRAL	Tan/White Fibrous	45% Cellulose 15% Min. Wool	10% Ca Carbonate 30% Non-fibrous (Other)	None Detected		
092205002-0038	AREA - 2 X 4 SECOND LOOK ACT WRANDOM HOLES/FISSURES	Homogeneous					
ASB-31-Waliboard	1ST FLR CELLING - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		70% Gypsum 30% Non-Revous (Other)	None Detected		
WHERE BOARD AND AND AND AND AND AND AND AND AND AN	1ST FUR CELING -	White		70% Ca Carbonale	Construction and		
ASB-31-Joint Compound 1	WALLBOARD/JOINT	Non-Fibrous Homogeneous		28% Non-Roroux (Other)	2% Chrysotle		
092203008-00314	Winner			Contractional Contract &	1006 0.001		
ASB-31-Joint Compound 2	1ST FLR CEILING - WALLBOARDUOINT COMP	White Non-Fibrous Homogeneous		70% Ca Carbonale 28% Non-Rirous (Other)	2% Chrysotie		
(92200002-000-e		0.00.00.00.00.00.00.00.00.00.000					
ASB-32-Wallboard	1ST FLR OLD ELEVATOR	Vihite Non-Fibrous	3% Glass	70% Gypsum 27% Non-fibrous (Other)	None Detected		
nedantous-cosa	MACHINE ROOM - WALLBOARD/JOINT COMP	Homogeneous					
ASB-32-Joint	1ST FLR OLD	Vihise		70% Ca Carbonate	2% Chrysotle		
Compound 1	ELEVATOR MACHINE ROOM -	Non-Fibrous Homogeneous		28% Non-florous (Other)			
UNIC DISTURSION CONTRA	WALLBOARD/JOINT COMP	5763 WAV WOOLL					
ASB-32-Joint	1ST FLR OLD	White		70% Ca Carbonate	2% Chrysotle		
Compound 2	ELEVATOR MACHINE ROOM -	Non-Fibrous Homogeneous		28% Kon-forous (Other)			
Neuropice on the	COMP	Almano Settisci					

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SL Analytical, Inc.

Street San Leandro, CA 94577 TMENT OF 15-3675 / (510) 895-3680

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CONTRACTOR OF A R T M E N T O F 25-3675 / (510) 895-3680 BUILDING INSPECTATION / seriesendidab@emal.com Test Report: Asbestos Analysis of B Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbe	11017.0	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-33-Wallboard	15T FLR. N-CENTRAL OFFICE	White Non-Fibrous		70% Gyptum 30% Non-fibrous (Other)	None Detected
082201002-0033	WALLBOARDVJOINT COMP	Homogeneous		201000-0010000000	
ASB-30-Joint Compound 1	157 FLR. N-CENTRAL OFFICE	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
982209332-00334	WALLBOARD/JOINT COMP	nancyelette			
ASB-33-Joint Compound 2	1ST FLR. N-CENTRAL OFFICE	White Non-Fibraue		80% Ca Carbonele 20% Non-fibrous (Other)	None Detected
98225902-00398	WALLBOARD/JOINT COMP	Homogeneous			
ASB-33-Joint Compound 3	IST FLR N-CENTRAL OFFICE	White/Yellow Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
00206069-00000	WALLBOARD/JOINT COMP	Homogeneous			No. of States
ASB-34-Stucco	ROOF - STAIRWAY ACCESS HUT -	Gray Non-Fibrous		20% Quartz 60% Ca Carbonnie	None Detected
062203262-0004	ASSEMBLY	Homogeneous		20% Non-fibrous (Other)	
Inseparable paint / country					
ASB-34-Meslic	ROOF - STAIRWAY ACCESS HUT -	Black Non-Fibrous		70% Matrix 30% Non-fibrous (Other)	None Detected
082205062-00944	STUCCO ASSEMBLY	Homogeneous			
Result includes a smell and	ount of inssperable atteched ma	lettai'			
ASB-35-Stucco 1	ROOF - STAIRWAY ADDESS HUT -	Gray Non-Fibrous		30% Quartz 50% Ce Carbonate	None Detected
082209032-0055	STUCCO ASSEMBLY	Homogeneous		20% Non-Fbraus (Other)	
ASB-35-Stutco 2	ROOF - STAIRWAY ACCESS HUT -	White Non-Fibrous		35% Quartz 45% Ca Carbonate	None Detected
582208002-95354	STUDDO ASSEMBLY	Homogeneous		20% Non-Ebrous (Other)	
inseparable paint / roaking	layer included in analysia				
ASB-36-Stucce 1	ROOF - STAIRWAY ACCESS HUT -	Gray Non-Fibrous		30% Quartz 50% Ca Carbonate	None Detected
002219002-30(%	STUCCO ASSEMBLY	Homogeneous		20% Non-fibrous (Other)	
ASB-36-Stucco 2	RDOF - STAIRWAY ACCESS HUT -	White Non-Fibrous		35% Quartz 45% Ca Carbonats	None Detected
00/205002-00364	STUCCO ASSEMBLY	Homogeneous		20% Non-fibrous (Other)	
A5B-36-Mastic	ROOF - STAIRWAY ACCESS HUT -	Black Fibrous	10% Colluise	70% Matrix 20% Non-Stroug (Other)	None Detected
002205000-00388	STUCCO ASSEMBLY	Homogeneous		00000000	
ASB-37	ROOF - NE: TOP OF PARAPET METAL	Gray Non-Fibrous		70% Matrix 30% Non-fibrous (Other)	None Detected
068305008-0007	COVER - GRAY CONNECTIVE MASTIC	Homogeneous			

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nalytical, Inc.

Street San Leandro, CA 94577

MENT O F 95-3675 J (510) 895-3680

CONTRACTOR OF A R T M E N T O F 95-3675 J (\$10) #95-3680 BUILDING INSPECTATION Second Sector Sector

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

2011/2/11	12000000000	2210232300	Non-Ad	2.5 AUG24, 12 NUS/2 SALL	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-38 302205022-003#	ROOF - SE, TOP OF PARAPET METAL COVER - GRAY CONNECTIVE MASTIC	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-Sbrous (Other)	None Detected
ASB-39	ROOF - CENTRALIAREA-HV	White Non-Fibrous		70% Matrix 30% Non-Strous (Other)	None Detected
002209002-0019	AC DUCTING - GRAY CONNECTIVE MASTIC	Homogeneous			
Nessit includes a small amoun	2001212001211	uniar			
ASB-40	ROOF - CENTRAL/AREA-HV	Gray/White/Black Non-Fibrous		80% Matrix 20% Non-fibrous (Other)	None Detected
WG\$550000-00H0	AC DUCTING - GRAY CONNECTIVE MASTIC	Homogeneous		Head and the source of the sources	
Result includes a small emour	t of Hiseparable aspected Hisk	eral			
ASB 41 Vinyi Floor Tile	2ND FLR KITCHEN -	Ten		20% Ca Carbonate	None Detected
0022330022-0344	TAN-BROWN 12 X 12 VFT/MASTIC W/SWRLS	Non-Fibrous Homogeneous		50% Matrix 20% Non-fibrous (Other)	
ASB-41-Mastic	2ND FLR KITCHEN -	Yelow		60% Matrix	None Detected
007255/02-09/1A	TAN-BROWN 12 X 12 VFT/MASTIC W/SWIRLS	Non-Fibrous Homogeneous		20% Non-Straus (Other)	22000-00000000
ASB-41-Levelor	2NO FLR KITCHEN - TAN-BROWN 12 X	Grey Non-Fibrous		10% Cs Carbonate 70% Matrix	None Detected
893995002-02418	12 VFT/MASTIC WISWIRLS	Homogeneous		20% Non-Abrous (Other)	
ASB-42-Vinyl Floor Tile	2ND FER KITCHEN -	Gray		20% Ca Carbonate 50% Matrix	None Detected
082289002-0442	GRAY 12 X 12 VET/MABTIC WSWIRLS	Non-Fibrous Homogeneous		30% Non-Reious (Other)	
ASB-42-Mastic	2ND FLR KITCHEN -	Yellow		BO% Matrix	None Detected
202015002-0042A	GRAY 12 X 12 VET/MASTIC W/SWIRLS	Non-Fibrous Homogénéous		20% Non-fibrous (Other)	
A58-42-Leveler	2ND FLR KITCHEN -	Gray		16% Ca Carbonate	None Detected
NR23255ND2-004200	GRAY 12 X 12 VETMASTIC WSWIRLS	Non-Fibrous Homogeneous		20% Matrix 20% Non-Stribus (Dther)	
ASB-43-Mastic	2NO FLR - CENTRAL OFFICE AREA -	Yellow Non-Fibrous		50% Matrix 20% Non-5birous (Other)	None Delected
IR2555332-QM3	YELLOW CARPET MASTIC	homogeneous		server an and the server by	
AS8-43-Leveler	2ND FLR - GENTRAL OFFICE AREA -	Gray Non-Fibrous		10% Ca Carbonate 70% Matrix	None Detected
HASSARGOS-COMINA	YELLOW CARPET MASTIC	Homogeneous		20% Non-Stribus (Other)	
AS8-43-Compound	2ND FLR - CENTRAL OFFICE AREA -	Beige Non-Fibrous		80% Ca Carbonate 20% Nor-Rbrous (Other)	None Detected
##??ess12.cux3#	YELLOW CARPET MASTIC	Homogeneous			
ASB-44-Vinyl Floor Tile	2ND FLR - N-CENTRAL STAIRS	Gray_ Non-Fibrous		10% Ca Carbonate 70% Matrix	None Detected
mathematic const	LANDING - 12' GRAY VFT/GRAY MASTIC (UNDER CARPET)	Homogeneous		20% Non-Abrous (Other)	

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nalytical, Inc. SI.

Street San Leandro, CA 94677

95-35757 (810) 895-3680

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CHARTMENT OF 35-3575 / (310) 095-3580 BUILDING INSPECTION / same and clab gension Test Report: Asbestos Analysis of B Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
ASB-44-Mastic Recorder-2444	2ND FLR - N-CENTRAL STAIRS LANDING - 12' GRAY VFTIGRAY MASTIC (UNDER GARPET)	Yellow/Clear Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
ASB-45-Wallboard	N-CENTRAL STAIR - 1ST FLOOR LANDING - WALLBOARDJJOINT COMP	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fBrous (Other)	None Detected
ASB-45-Joint Compound sezonoce.cove4	N-CENTRAL STAIR - 1ST FLOOR LANDING - WALLBOARD/JOINT COMP	Beige Non-Fibrout Homogeneous		80% Ca Carbonate 20% Non-Terous (Other)	None Detected
ASB-46-Waliboard	N-CENTRAL STAIR - 2ND FLOOR LANDING - WALLBOARDUDINT COMP	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
ASB-46-Joint Compound	N-CENTRAL STAIR - 2ND FLOOR LANDING - VALLEDARD/JOINT COMP	White Non-Fibrouit Homogeneous		80% Ca Curbonate 20% Non-fibrous (Other)	None Detected
ASB-47-Wailboard	N-CENTRAL STAIR- SRD FLOOR LANDING - WALLEDARE/JOINT COMP	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Divisched
ASB-47-Joint Compound 1 accessore.com74	N-CENTRAL STAIR - 3RD FLOOR LANDING - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 18% Non-Rincoa (Other)	2% Chrysofie
ASB-47-Joint Compound 2 available coine	N-CENTRAL STAIR - 3RD FLOOR LANDING - WALBOARDGOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Rerous (Other)	None Detected
ASB-48-Stucco 1 002205062-0049	TST FLR - FILE ROOM - ELEVATOR WALL - STUCCO ASSEMBLY	Gray Non-Fibrous Homogeneous		40% Quertz 40% Ca Carbonate 20% Non-fibroas (Other)	None Detected
ASB-48-Stucco 2 decessors co484	1ST FLR - FILE ROOM - ELEVATOR WALL - STUCCO ASSEMBLY	White Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-49-Stucco 1	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARDUDINT	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-49-Studco 2	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARD/JOINT	White Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonate 30% Non-1brous (Other)	None Detected
ASB-49-Joint Compound	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARD/JOINT	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
082203052 20416					

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Analytical, Inc.

Street San Leandro, CA 94577

95-3675 / (510) 895-3680 MENTOF

G-INSPECIONCENSL com / sanleandrolab@emsl.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	% Fibrous	Nen-Asbestos	% Non-Fibrous	Ashestos % Type
ASB-49 Wollboard	1ST FLR FILE ROOM - ELEVATOR WALL - WALLBOARD/JOINT					Layer Not Present
ASB-50-Wallhoard	1ST FLR FILE ROOM - ELEVATOR WALL -					Leyer Not Present
aazeaaco ASB-50-Joint Compound	WALLBOARDUJOINT 1ST FLR FILE ROOM - ELEVATOR WALL- WALLBOARDUJOINT					Layer Not Present
887255437-03604						
AS8-50-Silucco 1	+ ELEVATOR WALL - WALLBOARD/JOINT	Gray/White Non-Fibrous Homogeneous			30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
AS8-50-Stucce 2	1ST FLR FILE ROOM + ELEVATOR WALL -	Gray Non-Fibrous			40% Guartz 40% Ce Cerbonate	None Detected
382965802-083AC	WALLBOARD/JOINT	Homogeneous	500,2000,00	0.57.52	20% Non-Shrous (Other)	320124-01630-2
ASB-51-Insulation	2ND FLR SMALL DUCT INSELATION - YELLOW BATT INS ON SMALL DUCT	Yellow Fibrous Homogeneous	90% Min	Wbol	10% Non-Sbrous (Other)	None Detected
ASB-51-V#ap	2ND FLR SMALL DUCT INSULATION - YELLOW BATT INS	Tan/Silver Fibrous Homogeneous	40% Cell 5% Glas		55% Non-Strout (Other)	None Detected
	ON SMALL DUCT					
A5B-52-Insulation	2ND FLR LARGE OUCT INSULATION - WHITE BAT INS-ON LARGE DUCT	White Fibrous Homogeneous	90%.Min	Wool	10% Non-fibrous (Other)	None Delected
ASB-52-V#ap outcosoc-cosox	2ND FLR LARGE DUCT INSULATION - WHITE BAT INS-ON LARGE DUCT	Tan/Silver Fibrous Homogeneous	40% Cell 10% Gla:	1	50% Non-fibraus (Other)	None Detected
A3B-55-Cerartic Tile	19T FLR/ N-CENTRAL RESTROOM - 8" CERAMIC FLOOR TILE W MORTAR & GROUT	Brown Non-Fibrous Homogeneous			70% Quertr 30% Non-Ritrous (Other)	None Detected
ASB-53-Grout	1ST FLIV N-CENTRAL	Brown Non-Fibrous			40% Quartz	None Detected
antyshory-anese	RESTROCH - 8" CERAMIC FLOOR TILE W MORTAR & GROUT	Homogeneous			60% Non-fibrous (Other)	
ASB-53-Mortar	1ST FLR/	Gray Non-Elimina			60% Ca Carbonale	None Detected
natusteno-ansue	N-CENTRAL RESTROOM - 8" CERAMIC FLOOR TILE WI WORTAR & GROUT	Non-Fibrous Homogeneous			40% Non-fibroua (Other)	
ASB-54-Ceramic Tile annanalasi	1ST FLEV N-CENTRAL RESTROOM - 8* WHITE CERAMIC WALL TILE WMASTIC	White Non-Floroux Homogeneous			70% Quartz 30% Non-fibrous (Other)	None Detected

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SL mnalytical, Inc.

Street San Leandro, CA 94577

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004

Project ID:

CONTRACTOR OF THE PART MENT OF 35-3675 / (510) 895-3680 BUILDING INSPECTION STREAM OF THE CONTRACTOR O Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Astes	105	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
ASB-54-Mastic dezesses-con44	TST FURV N-CENTRAL RESTROOM - 8" WHETE CERANIC WALL TILE WWMASTIC	White Non-Fibrous Homogeneous		70% Matrix 30% Non-Abrous (Other)	None Detected
ASB-54-Compound	1ST FUR/ N-CENTRAL RESTROOM - 8" WHITE CERAMIC WALL TILE W/MASTIC	Vihile Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-55-Coramic Tile	2ND FLR/NW RESTROOM - 4" BROWN/TAN CERAMIC FLOOR TILE W/MORTAR	Purple Non-Fibrous Homogeneous		70% Quartz 30% Non-fibrous (Other)	None Detected
ASB-55-Mortar 082200820-00334	2ND FLRINW RESTROOM - 4" BROWN/TAN CERAMIC FLOOR TILE WEMORTAR	Gray Non-Fibrous Homogéneous		50% Quarte 50% Non-Ritrous (Other)	None Detected
A58-55-Fiberboard	2ND FLR/NW RESTRCOM - 4" BROWNTAN CERAMIC FLOOR TILE WWORTAR	Tan Fibrous Nomogeneous	96% Celluiose	8% Non-fibrous (Other)	None Detected
A58-56 1820(90)2-8090	2ND FLRINW RESTROOM - GROUT ASSOC WASB-55	Pink Non-Fibrous Nomogéneous		40% Querte 60% Non-fibrous (Other)	None Detected
ASB-57-Ceramic Tile texteetti assr	2ND FLRINW RESTROOM - 3" X 8" CERAMIC WALL TILE & MASTIC	Purple Non-Fibrous Homogeneous		70% Quartz 30% Non-fibrous (Other)	None Detected
A58-57-Mastic 042205005-00574	2ND FLRINW RESTROOM - 5" X 8" CERAMIC WALL TILE & MASTIC	Tan Non-Fibrous Homogeneous		70% Matrix 30% Non-Forous (Other)	None Detected
ASB-57-Compound	2ND FLRINW RESTROOM - 3" X 8" CERAMIC WALL TILE & MASTIC	White Non-Fibroux Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-58 092259002-0058	2ND FLR/NW RESTROOM - GROUT ASSOC W ASB-57	Pink Non-Fibrous Homogeneous		40% Quartz 60% Non-fibrous (Other)	None Detected
ASB-56-Insulation	15T FLR/ SE OFFICE - WHITE BATT INSULATION ON SMALLER DUCT	White Fibrous Homogeneous	90% Min, Wool	10% Non-Reces (Other)	None Detected
ASB-59-Wrap	15T FLRI SE OFFICE - WHITE BATT INSULATION ON SMALLER DUCT	Brown/Silver Fibrous Homogeneoue	40% Celulose	60% Non-Rorous (Other)	None Detected



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nalytical, Inc.

Street San Leandro, CA 94577

95-3675 / (510) 895-3680 MENT OF

E-INSPECTIVELCOM/ annieandrolab@emsi.com

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

1211/22211	220020202020000	241.00 AU 740.00 M	Non-Asbee	00% (02/04/02) 04/04/07/11	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type	
ASB-60 201215862-080	1ST FLRACENTRAL-FRO NT AREA - WHITE BATT INSULATION ON LARGER BOX DUCT	White Pibrous Homogeneous	95% Min. Web	5% Non-Sprous (Other)	None Detected	
ASB-61-Wallboard	2ND FLR REAR/ NE STAIRWELL WALL - WALLEGARD/JOINT COMP	White Non-Fibroux Homogeneous		70% Gypsum 30% Non-Strous (Other)	None Detected	
ASB-61-Joint Compound 1 200255802-08914	2ND FLR REAR/NE STARWELL WALL - WALLBOARD/JOINT COMP	Beige Non-Fibrous Homogeneous		50% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
ASB-61-Joint Compound 2 accesses-comp	2ND FLR REAR/NE STAIRWELL WALL - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Abroux (Other)	None Ontscied	
ASB-62-Waliboard	2ND FLR, FRONT/SOUTH STAIRWELL WALL- WALLBOARDIJOINT COMP	White Non-Fibrous Homogenetus		70% Ca Carbonate 30% Non-Sbrous (Other)	None Detected	
ASB-62-Joint Compound 1 worksed-eeste	2ND FLR, FRONTISOUTH STAIRWELL WALL - WALLBOARDRIGINT COMP	Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-Abrous (Other)	None Cetected	
ASB-62-Joint Compound 2 202225302-09518	2ND FLR, FRONT/SOUTH STAIRWELL WALL - WALLBOARDUOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-farous (Other)	None Detected	
ASB-63 avvisanci dari	2NO FLR, \$ OFFICE WINDOW - WHITE INT, WINDOW GASKET	White Non-Fibrous Homogeneous		10% Ca Carbonate 75% Matrix 15% Non-Rorous (Other)	None Detected	
ASB-64 #8298332-6961	2NO FLR. S. OFFICE WINDOW - GRAY INT. WINDOW GASKET	Gray Non-Fibrous Homogeneous		10% Ca Carbonate 75% Matrix 15% Non-Titurous (Other)	None Detected	
ASB-65	EXT. NW WINDOW FRAME - BROWN SEALANT/FRAME TO STUCCO	Brown/Black Non-Fibroux Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected	
ASB-66	EXT. NW WINDOW- WINDOW GASKETIFRAME TO WINDOW	Black Non-Fillroux Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected	
ASB-67 001155000-0467	ROOF/CENTRAL DUCTING - GRAY/WHITE HUBBERY PATCHING SEALANT	Gray/White Non-Flancus Homogareous	3% Cellulose	80% Matrix 17% Non-fibrous (Other)	None Detected	
ASB-68 09235k00-0004	INT, NW WINDOW 1ST FLR - BROWN GASKET WINDOW TO FRAME	Brown/Nack Non-Fibrous Homogeneous		80% Matrix 20% Non-Florous (Other)	None Detected	

(initial report from: 03/17/2022 14:31:14

ASB_PLM_0008_0001 + 1.78 Printed: 3/17/2022 2:31 PM



Analytical, Inc.

Street San Leandro, CA 94577

95-3675 / (510) 895-3680

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

CHARTMENT OF 95-3675 (1010) 896-3680 BUILDING INSPECTIVE AND A Standard Clab Constant Control Constant Control Constant Control Constant Control Constant Control Constant Control Con Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asb	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASR-69 autosatrates	INT. SE WINDOW/ST FLR - WHITE GASKET WINDOW TO FRAME	White Non-Fibraus Homogeneous		80% Marrix 20% Non-forous (Other)	None Detected
ASB-70 cecations.come	EXT. NE WALL-AT ORIVEWAY - LIGHT-TAN SEALANT/CAULK STUCCO TO STUCCO	Brown Non-Fibrous Homogeneous		80% Manx 40% Nos-fbrows (Other)	None Detected
ASB-71 092205062-0071	EXT. SE WNDOW- BROWN SEALANT-METAL TO METAL SASH	Black Non-Fibrous Homogeneous		60% Malrix 40% Non-Storous (Other)	None Detected
ASB-72 (82209882 0072	EX7. SE WINDOW FRAME - LIGHT-TAN SEALANT FRAME TO STUCCO	Tan Non-Fibrous Homogeneous		60% Matrix 40% Non-Ebraus (Other)	None Detected
ASB-73 082209092-0079	INT. SE OFFICE - BROWN WINDOW SEALANT FRAME TO METAL SASH	Black Non-Fibroux Homogeneous		80% Matrix 40% Non-fibrous (Other)	None Detected
ASB-74	EXT. PARKING LOT - ASPHALT	Gray/Black Non-Fibrous Homogeneous		30% Quartz 40% Mattix 30% Non-fibrous (Other)	None Detected
ASB-75	EXT. PARKING LOT- ASPHALT	Gray/Black Non-Fibrous Homogeneous		30% Quertz 40% Matix 30% Non-fibrous (Other)	None Detected
ASB-76	EXT. STAIRS - CONGRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-Forous (Other)	None Detected
A58-77	EXT. STAIRS - CONCRETE	Gray Nor-Fibrous Horsogeneous		40% Quartz 40% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-78-Stuceo 1	EXT WALL-SOUTH WALL-FAKE "STUCCO"	Gray Not-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-Tbrows (Other)	None Detected
A58-78-58ucco 2 09228500-30194	EXT WALL-SOUTH WALL-FAKE "STUDDO"	Ten Non-Fibrous Homogeneous		10% Quartz 70% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-78-Foam Insulation	EXT. WALL - SOUTH WALL - FAKE *STUCCO*	White Non-Fibrous Homogeneous	3% Glass	97% Non-fibrous (Other)	None Detected
ASB-78-Mesh	EXT WALL-SOUTH WALL-FAKE "STUCCO"	Brown/Orange Fibrous Homogeneous	95% Class	5% Non-fibrous (Other)	None Detected
ASB-79-Silucco 1	EXT. WALL - SE WALL - FAKE "STUDGO"	Gray Non-Fibrous Homogeneous		40% Quarta 40% Ca Carbonate 20% Non-Strous (Other)	None Detected
ASB-79-Stucco 2	EXT. WALL - SE WALL - FAKE "STUCCO"	Tan Non-Fibrous Homogeneous		10% Quartz 70% Ca Carbonate 20% Non-Sbitous (Othar)	None Detected
ASB-79-Foam insulation	EXT. WALL-SE WALL-PAKE "STUCCO"	White Non-Fibrous Humogeneous		100% Non-fibrous (Other)	None Detected



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SAN FRANCISCO

EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

DEPARTMENTOF BUILD IN SREGONICINSL. com / santeendridate@emai.com Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Ast	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ASB-79-Mesh	EXT. WALL - SE WALL - FAKE "STUCCO"	Brown/Orange Fibrous Homogeneous	96% Glass	5% Non-fibroux (Other)	None Delected
ASB-80-Stucco 1	EXT. WALL - NE CORNER - FAKE "STUCCO"	Gray Non-Fibrous Homogeneous		30% Guertz 40% Ca Garbonate 30% Non-Sbrous (Other)	None Detected
ASB-80-Stucco 2	EXT. WALL - NE CORNER - FAKE "STUCCO"	Brown Non-Fibrous Homogeneous		30% Guartz 50% Ca Carbonata 20% Non-Strous (Other)	None Detected
ASB-81-Stucco	EXT. PLANTER VALL - PARKING LOT - STUCCO ON CONCRETE	White Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonato 30% Non-Strous (Other)	None Detected
ASB-81-Concrete	EXT. PLANTER WALL - FARKING LOT - STUCCO ON CONGRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-fibrous (Other)	None Detected
ASB-82-Stucco	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	White Non-Fibrous Homogeteous		30% Quertz 40% Ca Carbonata 30% Non-Abrous (Other)	None Detected
ASB-82-Concrete ast25500-89604	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ca Carbonate 20% Non-Sbrous (Other)	None Detected
ASB-83-58,,coo	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	White Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonale 30% Non-fibrous (Other)	Note Delected
ASB-83-Concrete	EXT. PLANTER WALL - PARKING LOT - STUCCO ON CONCRETE	Gray Non-Fibrous Homogeneous		40% Quartz 40% Ce Carbonate 20% Non-(brous (Other)	None Detected
ASB-84 000305000-0004	FRONT ENTRANCE AREA - GRAY GROUT AREA ASSOC. WGRAY 12 X 12 CERAMIC FLOOR TILE	Gray Non-Fibrous Homogeneous		30% Quartz 50% De Carbonate 20% Non-Strous (Other)	None Detected
ASB 85 Walipaper	1ST FLR. N-CENTRAL OFFICE - WALLPAPER/GLUE	Gray/White Non-Fibrous Homogeneous		70% Matrix 30% Non-Stirous (Other)	None Detected
ASB-85-Glue	1ST FLR. N-CENTRAL OFFICE - WALLPAPER/GLUE	Beige Non-Fibrous Homogeneous		80% Matrix 20% Non-Stimus (Other)	None Delected



EMSL Order: 092205002 Customer ID: NOMO22 Customer PO: 402154004 Project ID:

Analyst(s)

Brianne Franquelin (21) Gevin Lee (95) Jose Madrid (47) Karina Martinez (41) Xeena Paul (39)

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Cecilia Yu. Laboratory Manager or Other Approved Signatory

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Samples study red by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101046-3, WA C884

Initial report from: 03/17/2022 14:31:14

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EMSL	Analytical, Inc.
ARTMENTO	- Street Ban Leandro, CA 94577 910) 895-9675 / (510) 895-3680
DINGINSPECTIQ	L.com / sanleso drotab@emsi.com

EMSL Order:	092205002
Customer ID:	NOM022
Customer PO:	402154004
Project ID:	

Phone:	(510) 343-3000
Fax:	(510) 633-5646
Received:	03/14/2022 8:00 AM
Analysis Date:	03/17/2022 - 03/21/2022
Collected:	03/08/2022

Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116. Quantitation using the 1,000 Point Count Procedure

			More	Aabsalos	Asheslos
Sample	Description	Appearance	% Fibrous	% Non-Fibroux	% Type
ASB-31-Joint Compound 2 062205002-003178	1ST FUR CEILING - WALLBOARDIJOINT COMP	While Non-Fibrous Homogeneous		99.80% Non-Abrous (Other)	e.2%Chrysotile
ASB-32-Joint Compound 2 082200062-00326	1ST FLR OLD ELEVATOR MACHINE ROOM - WALLBOARDJOINT COMP	White Non Fibrous Homogeneous		99.90% Nen-Sbross (Other)	a, 1% Chrysotile

Analyst(s)

OFFICIAL COPY

SAN FRANCISCO

Attention: William Larkin

Ninyo & Moore 2020 Challenger Drive

Alameda, CA 94501 Project: 402154004 - TNOC/ IRVING ST

Sulle 103

Jose Mathid (2)

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Cecifia Yu, Laboratory Manager or other approved signatory

EMSL maintains failing tentiad to cost of analysis. Interpretation and use of last results are the responsibility of the clent. This report infacts only to the samples opported above, and may not be reproduced, except in full, without writen approval by EMSL. EMSL issues no responsibility for complex collection activities or analysical mathed limitations. The report reflects the samples are recorded. Possible are previous from the faild sampling data (sampling volumes and areas, locators, etc.) provided by the clent on the Count of Countey. Semplex new within specify common ordered, and may need to an end of the sampling data (sampling volumes and areas, locators, etc.) provided by the clent on the Count of Countey. Semplex, new within specify common ordered, and met method apactifications unique otherwains mated. The above moleces were performed in previous of the restrict on the Count of the Countey. Semplex, and may not collected and net method apactifications unique otherwains mated. The above molecement is previous of the restrict on the Approximation of the Countey of the C

Samples analyzed by EMSE Analytical, Inc San Learnin, CA NVLAP Lab Code 101048-3, WA CB54

Initial report from: 03/17/2022 14:31:25

Call of City 2014 Ann Printed 3/21/2022 8:33:57AM

ARTMENT OF DO 895-3675 / (816) 885-3600 DO INSPECTIONEL com / sanlagratulatigemsLocm	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention: William Larkin Ninyo & Moore	Phone: Fax:	(510) 343-3000 (510) 633-5646
2020 Challenger Drive	Received:	03/14/2022 8:00 AM
Suite 103	Analysis Date:	03/17/2022 - 03/21/202 03/08/2022
Alamedá, CA 94501 Project: 402154004 - TNOC/ IRVING ST	Collected:	0.0PU0DEDEE

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy, Quantitation using 400 Point Count Procedure

				Ashestos	Ashestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
ASB-47-WB/JC1UC	N-CENTRAL STAR -	White		100.0% Non-librous (Olher)	<8,25%Chrysolile
2 Composite	3RD FLOOR LANDING	Non-Fibrous			
092205002-0047	- WALLBOARDWOINT COMP	Homogeneous			

Anelysk(s)

Jose Madrid (1)

SAN FRANCISCO

Cecilia Yu, Laboratory Manager or other approved signalory

EMIS, registration lighting lemind to cost of analysis, interpretation and use of loss results are the responsibility of the client. This report relates only to the sample's reported above, and may not be reproduced, screeptin Ad, without writen approval by EMSL. EMSL beam no responsibility for sample collacion activities or analysical method limitations. The report relates as received. Results are generated from the field sampling date (sampling volumes and access, locations, etc.) provided by the client on the Chain of Controly. Samples are within quality control obtains and and method specifications unless otherwise rotes. The alcose analysis were performed in general complement with Apprecise 1. In Edgard E. of 40 CPR (generated VEPA UDDA+E2-020 "training Mathed") but agreented with procedures colleved in the 1003 ("final") version of the method. This specific must not be used therefore EMSL recommand, approved, or endowersem by NALAP, NIST or any specified in generating. Non-Stable agreentical proved a protect or antibiation of the restantic protect as restand an excitation, approved, or endowersem by NALAP, NIST or any specified to the following generating. Non-Stable agreentical protections (i.e. findeum, wallboard, method as a single sample generation of uncertainty is analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. findeum, wallboard, mic.) are reported as a single sample Telemator of uncertainty is available on required.

Samplus analyted by ENSL Analytical, Ins San Leandro, CA MMLAP Lab Codu 101048-3, WA C884

Initial report from: 03/17/2022 14:31:25

Printed 3/2112022 8:33:57AM

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Image:	DNICDING	18-NOV-22	THIS PERMIT IS GRANTED IN ACCORDANCE PROVISIONS OF THE CHARTER AND ORDINANO	RTN
Image: Consistence in the i	X DEMOLISH BUILDING CRADE	FILING FEE RECEIPT #	THE CITY AND COUNTY OF SAN FRANCISCO	BOG
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49 South Van Ness Ave, Suite 400 CENTRAL PERMIT BUREAU San Francisco, CA 94103

DEPARTMENT OF BUILDING INSPECTION CITY AND COUNTY OF SAN FRANCISCO (628) 652-3200

Receipt No: 20221108-Application/Permit No: 20220627

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ADDITIONAL INFORMATION

Building Permit.

WARNING

All requests for extension of time must be in writing to Director, Deot of Building Inspection. Permits art issued subject to Appeal within 15 days to Board of Permit Appeals. Incur no ecoenses until right of Appeal has lapsed.

2. Demolition Permit.

Code (Public Works Code), certain

building permits may be issued only after the permittee analyzes the soil

Pursuant to Article 20 of Chapter 10. Part II of the San Francisco Municipal If Demolition involves Abandonment of Side Sewer Parmittee must obtain a Side Sewer Parmit. The Side Sewer will then be blocked at the Main Sewer.

If issued with Building permit time for completion is same as Building. If issued alone, complete work within 6 months Excavation should be carried out in accordance with Article 8 of Public Works Code Issued to construct Auto Runway as per Article 15. Public Works Code Permit to Lower Curb/To Excavate in Street or Sidewalk from date of Permit. Void if not started within 6 months.

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for the presence of hazardous wastes and,where applicable, certifies that it 4. Street Space Permit.

site

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conducted

measures,

analysis, recommended site mitigation

mitigation or checked or verified the

reports submitted or work performed

for accuracy, reliability or adherence to

employees make any representation that the soil on or about the site is free

neither the city nor any of its officers or

protocols. In issuing this permit,

officer, employee, or agency of the

has completed site mitigation.

City conducted the soil sampling and

No refuse excavated materials, concrete or mortar is to be disposed of upon Paved Streets, catch basins or into the City sewer system. No material cr equipment shall be reft on Roadway of Police Tow-Away Zone during hours when Tow-Away Rule is in force Cuthers and Waterways must be kept clear.

All provisions of Section 724.3 of the Public Works Code are incorporated into this permit by reference.

Street and sidewalk areas occupied must not exceed a width 1/2 the width of the sidewalk plus 1/3 the width of the Roadway fronting

5. Permit to Repair or Construct Sidawalk

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implementation of this process relieve

any person from their duties and responsibilities relating to hazardous waste contamination under state and law. Neither soil analysis

federal

pursuant to Article 20 of Public Works Code nor the issuance of this permit is

hazardous

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from the

Handicep Ramps required in vicinity of Crosswalks per plan No.11-33, 982, Ch. 2. Before beginning any work under this permit contact your Area Inspector Tet: 554-5837. Permit valid for 3 months from date issued, unless extension authorized.

In addition, issuance of this permit does not limit the liability of the property owner or his or her agent if work pursuant to this permit or the ections of a third party result in damage to the sidewalk or subsidewalk structure, consequently, permittees proceed at their own risk. The City and County of San Francisco makes no representations that issuance of a sidewalk permit will or will not directly or indirectly affect a subsidewalk structure. The Department of Building Inspection, in conjunction with the Department of Public Works, issues permits to construct or after subsidemalk spaces separately from a sidewalk permit. Property owners are encouraged to seek the advice of qualified professionals to independently analyze the structural integrity of subsidewalk space and determine whether such space should be improved Some sidewalks have been constructed over a subsidewalk basement or other below ground structure. Issuance of this permit does not limit, modify, or after in any way the responsibility of the property owner to ensure that such subsidewalk space complies with the San Francisor Building Code, Electrical Code, Fire Code, Mechanical Code, Plumbing Code, Public Works Code, and other Municipal Codes. or modified

6. Hold Harmless Clause

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transfer these reponsibilities.

against any and all claims, demands and actions for clamages resulting from operations under this permit, regardless of negligence of the City and County of San Francisco, and to assume the defense of the City and County of San Francisco against all such claims, demands The Permittee(s) by acceptance of this permit, agree(s) to indemnity and hold harmless the City and County of San Francisco from and and acticns.

BOARD OF PERMIT APPEALS STIPULATIONS

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	Permit Application No2022 0027 1112_JOB	Address;
	This form must be completed in its entirety in connection with a This form must be amended for all new information or change in	information for duration of project. Please be advised that the
	Department does not regulate permit expediters/consultants or	afford them preferential treatment.
	A. Permit Applicant Information	B. Name BYAN REATON
	I hereby certify that for the purpose of filling an application	Architect 💋 Engineer
	for a building or other permit with the Central Permit Bureau,	Phone No. 415-989-1004
	or completion of any from related to the San Francisco	Firm Name KPFF CDNSULTING ENGINEERS
	Building Code, or to City and County ordinances and	Expiration Date
	regulations, or to state laws and codes, I am the owner, the lessee or the agent of the owner/lessee and am authorized to	Firm Address US FREMONT ST.
	sign all documented connected with this application or	SAN FRANCISCO CA 94105
	permit.	City State Zip
	I declare under penalty of perjury that the foregoing is true and correct. I am the permit applicant and I am	Email: Tyan. beaton@Kpff. Com
	Check box(es):	
	The owner (B) The lessee (C)	E. General Contractor Information
	The authorized agent. Check entity(les):	Note: Complete separate licensed contractor's statement also.
	Architect (D) Engineer (D)	1631500 H
	Contractor (E) Attorney (F)	Name MIGVEL GVZMAN Phone VIS-821-2522
	Permit Consultant/Expediter (G) Other (H)	Firm Name GUZMAN CONSTRUCTION GROUP
	Print Applicant Name SENJAMIN AGVILAR	License # 1010621
	Sign Name BA -	Expiration Date 01-31-2024 Firm Address 885 FOLSDM ST.
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Office (628)-652-3200 Website: www.sfdbi.org

SITE MANAGEMENT PLAN

2550 Irving Street Affordable Housing Project

San Francisco, California

EHB-SAM SMED No. 2043

November 24, 2021

Prepared for:

Tenderloin Neighborhood Development Corporation 49 Powell Street, 3rd Floor San Francisco, California 94102



Environmental Engineering & Geology

Path Forward Partners, Inc. 505 14th Street, Suite 1230 Oakland, California 94612 www.pathfw.net (510) 756-0740

Project No.: 115-102-107

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Figure 1.	Site Location Map
Figure 2.	Site Plan

Appendices

Appendix A.	Site Assessment Report and Report of Findings
Appendix B.	Final Response Plan
Appendix C.	Dust and Volatile Organic Compound (VOC) Control Plan



November 24, 2021 Page iii of iii

PROFESSIONAL CERTIFICATION

This *Site Management Plan* for the property located at 2550 Irving Street in San Francisco, California has been prepared by a California Professional Geologist and/or California Professional Engineer. This document is based on information available to Path Forward Partners, Inc. and current laws, policies, and regulations as of the date of this document. The opinions expressed in this document are based upon the information available to Path Forward Partners, Inc. and are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Path Forward Partners, Inc. in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

Neal Hughes Senior Staff Geologist

David A. Grunat, P.G., C.H.G. Principal Geologist

Gregory S. Noblet, P.E. Principal Engineer





1.0 INTRODUCTION

This *Site Management Plan* (SMP) has been prepared by Path Forward Partners, Inc. (Path Forward) on behalf of the Tenderloin Neighborhood Development Corporation (TNDC) for the property located at 2550 Irving Street in San Francisco, California (the Site; Figure 1).

This SMP is to be utilized by parties involved in activities where Site soil will be disturbed, or groundwater will be encountered during redevelopment construction activities. Contractors and subcontractors who may come in contact with soil and/or groundwater at the Site should be provided copies of the SMP. Contractors and subcontractors are responsible to safeguard their personnel's health and safety during redevelopment activities or subsequent activities as they pertain to the SMP as well as applicable safety regulations.

1.1 Proposed Development and Activities

Upon acquiring the property, TNDC plans to demolish the existing credit union building and redevelop the Site into a seven-story facility. The facility would be constructed at-grade with non-residential use (office, garage, and back of house spaces) and potentially a day care facility on the ground floor, and with residential occupancy above the ground floor. The footprint of the proposed building is presented on Figure 2.

Anticipated earthwork activities associated with Site redevelopment may include, but are not limited to:

- Demolition of current on-Site structures and improvements;
- General grading of the property including preparation for elevators and potential car stacker lifts;
- Foundation installation;
- Import and placement of soil suitable for reuse;
- Construction of future buildings and/or building additions;
- Construction of stormwater infiltration system;
- Improvements to asphalt-paved parking areas, access ways, and landscaping; and
- Excavation and trenching operations in association with installation, maintenance/repair, or removal of underground utilities.

Other earthwork activities at the Site not listed above should follow this SMP as a guide.

1.2 Objective

This SMP presents a decision framework and risk management measures for managing known and unexpected environmental conditions in soil and groundwater before and during Site



redevelopment in a manner protective of human health, in accordance with applicable regulatory requirements, and in consideration of the existing and proposed future land uses.

1.3 Applicability

This SMP applies to all workers; however, some provisions of this SMP may not be applicable to certain workers (e.g., carpenters and painters) who, based on job hazard analyses, would not be expected to perform activities that disrupt Site soils. Risk management measures described in Section 4.0 and HASP guidelines described in Section 5.0 should be followed for individuals engaged in invasive activities which disturb Site soil. This may include activities involving work in utility vaults or other subgrade areas (e.g., utility maintenance or modifications in subfloor areas of buildings) where exposure to chemicals of potential concern (COPCs) could occur.

1.4 Modifications to the SMP

Although not anticipated, if an alternate design or mitigative measures other than those referenced in this SMP is desired to be implemented, it must be demonstrated how the alternative design or mitigative measures would be protective of human health and the environment. Proposed alternate designs or mitigative measures will be included in a design report prepared by the contractor proposing such changes and submitted to TNDC for review and approval before implementation. Should a change to the SMP be necessary or desirable, a proposed SMP modification will be presented.

2.0 BACKGROUND

2.1 Site Setting

The Site occupies approximately 19,125 square feet located at 2550 Irving Street in San Francisco, California. The Assessor's Parcel Number (APN) assigned to the Site is 1724-038, which includes the addresses 2520 and 2550 Irving Street. According to the San Francisco Property Information Map (PIM) the Site is zoned under the Irving Street Neighborhood Commercial District. The Site is currently improved with an 18,561 square foot two-story commercial building, constructed in 1966, that is currently used as a bank (The Police Credit Union [TPCU]).

2.2 Historical and Current Site Use

According to the *Phase I Environmental Site Assessment* (Phase I ESA; Path Forward 2020), the Site was vacant land as early as 1895 and remained vacant until at least 1915. By 1928, two structures had been developed in the central portion. The 1928 Sanborn map depicts these as a drugstore and a cleaning business. By 1940, a gas station had been added to the southeast corner of the Site, and by 1946, a second gas station had been added to the western end of the Site. By 1950, the central buildings on the Site were occupied by an undertaker, and in 1966, this business redeveloped the entire property with the current building and open areas for use



as a mortuary and funeral chapel. The funeral business continued in the building until 1985, when the building was modified for its current use. The Site has been utilized as a bank since 1987.

2.3 Site Geology and Hydrogeology

According to information presented by the United States Geological Survey (USGS) on the 1996 7.5-Minute Series San Francisco North, California Quadrangle Topographic Map, the ground surface elevations at the Site is approximately 202 feet above mean sea level (amsl) with a slight downward slope to the west. The Site is located in an urban commercial setting within the Coast Ranges physiographic province of California. The nearest surface water body to the subject property is the Mallard Lake, approximately 961 feet to the north within Golden Gate Park. In addition, the Pacific Ocean is 1.5 mile to the west.

A subsurface investigation report (AllWest 2019) describes lithology encountered in environmental borings as coarse-grained, poorly- to well-graded sand to a depth of 90 feet below ground surface (bgs), which corresponds to the maximum depth explored. Groundwater was measured on the Site at a static depth of approximately 78 feet bgs (AllWest 2019). Flow direction has not been established but is presumed to be to the northwest.

Groundwater in the Site vicinity is a drinking water resource – the Site is located within the North Westside Groundwater Basin, which per the Basin Plan has a designated beneficial use of Municipal and Domestic Supply (SFBRWQCB 2017).

2.4 Previous Environmental Investigations

In September 2020, a Phase I ESA of the Site was prepared by Path Forward on behalf of TNDC (Path Forward 2020). The Path Forward Phase I ESA identified following recognized environmental conditions (RECs):

- Soil gas on the subject property is impacted by tetrachloroethene (PCE), which has
 resulted in a vapor intrusion condition for the existing building. Investigation is ongoing
 and TPCU has entered into a Voluntary Cleanup Agreement under oversight of the DTSC
 to investigate and mitigate effects of the condition. Data obtained during multiple
 investigations in 2019 and 2020 have not ruled out the Site as a source for the impacts;
 however, they have identified a former dry cleaner off-Site to the south as a potential
 contributing source. Based on the ongoing investigation under regulatory oversight, no
 additional investigation is warranted at this time. However, due to the known impacts at
 concentrations exceeding reference criteria, this condition is a REC.
- Article 22A of the San Francisco Health Code (the Maher Ordinance) requires San Francisco Department of Public Health (SFDPH), "oversight for characterization and mitigation of hazardous substances in soil and groundwater in designated areas zoned for industrial uses, sites with industrial uses or underground storage tanks, sites with historic bay fill, sites in close proximity to freeways or underground storage tanks." The



Site has been identified as subject to the Maher Ordinance, based on review of the current Maher Map maintained by the City and County of San Francisco. According to DataSF (a city and county government data access point), the Site was identified as a Maher property in 2013. The rationale may be related to historical gas station use, as the Site is not known to be filled land. While the Maher listing is considered to be REC, historical investigations and DTSC oversight related to historical Site use would likely satisfy the Maher requirements and further testing and mitigation beyond the DTSC requirements is unlikely to be required by the SFDPH.

A detailed summary of all previous investigations is presented in the *Site Assessment Plan and Report of Findings* (SAP-ROF; Path Forward 2021a; Appendix A). The SAP-ROF was approved by the DTSC in their June 8, 2021 letter (DTSC 2021a).

The SAP-ROF prepared pursuant to California HSC Section 25395.94 has determined that the presence of VOCs in on-Site soil gas poses an unreasonable risk to health and safety in the context of future redevelopment of the Site for mixed residential and commercial use. The exposure route of potential concern is inhalation of volatile chemicals present in indoor air as a result of transport (vapor intrusion) from the subsurface. To address these impacts in soil gas, TNDC entered into a Voluntary Cleanup Agreement with the DTSC and prepared the *Final Response Plan* (Response Plan; Path Forward 2021b; Appendix B). The Response Plan objective is to minimize or eliminate exposures between Site residents and PCE present in Site soil gas by installing a vapor intrusion mitigation system (VIMS) as part of redevelopment. Following public comment, the Response Plan was approved by the DTSC in their September 2, 2021 letter (DTSC 2021b)

2.5 Chemicals of Potential Concern

The following identifies chemicals of potential concern (COPCs) based on key findings from previous investigations and historical assessments of the Site.

2.5.1 Soil

Site soil conditions have been characterized in recent investigations that included a total of 66 soil samples collected from 36 borings. The soil samples have been analyzed for a variety of analytes; however, PCE was found to be the only compound of significance detected during these investigations. PCE was detected in one sample at a low concentration of 0.052 milligrams per kilogram (mg/kg), which is below the SFBRWQCB Tier 1 and intrusive construction worker environmental screening levels (ESLs) (SFBRWQCB 2019a, 2019b) and below the DTSC-recommended human health RBSL for residential land use (DTSC 2020).

Total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), and metals were either not detected or were detected at concentrations below their respective SFBRWQCB Tier 1 soil ESLs and DTSC-recommended human health RBSLs for residential land use.



2.5.2 Groundwater

Site groundwater conditions have been characterized in recent investigations that included a total of three on-Site grab-groundwater samples. Depth to encountered groundwater ranged from 77 to 90 feet bgs. The groundwater samples were analyzed for PCE and PCE breakdown products (one sample) or for a full suite of VOCs including PCE and PCE breakdown products (two samples). PCE was detected in two groundwater samples, at concentrations of 0.74 micrograms per liter (μ g/L) and 0.67 μ g/L, and not detected in the other. These detected concentrations are below the PCE drinking water criterion of 5 μ g/L (SWRCB 2019) and below the PCE groundwater-to-indoor air vapor intrusion screening level for commercial land use of 2.8 μ g/L (DTSC 2020, DTSC and SWRCB 2020).

2.5.3 Soil Gas

Site soil gas conditions have been well characterized through a series of recent investigations. With few exceptions, PCE is the only chemical that has been detected. The PCE breakdown products have not been detected. Chloroform was detected at a low concentration in one soil gas sample, which is common in areas serviced by water disinfected with chlorine-based disinfectants.

Detected concentrations of PCE in soil gas are fairly consistent across the Site. The highest detected concentration of PCE in shallow or sub-slab soil gas within the footprint of the proposed building is 1,500 micrograms per cubic meter (μ g/m³) – this concentration may be considered representative of the vapor intrusion concern for the proposed building.

3.0 RISK MANAGEMENT DESIGN CONSIDERATIONS PRIOR TO CONSTRUCTION

This section discusses the risk management design considerations that are to be followed prior to and during earthwork activities. Such considerations include procedures to evaluate potential import fill sources and to protect/remove groundwater monitoring wells in potential conflict with redevelopment plans.

3.1 Import Fill Criteria

Site redevelopment may require import of fill materials/soil to implement construction and landscaping plans. Potential import soil, which may be derived from a variety of sources and borrow pits, should not only meet the required geotechnical physical characteristics, but also applicable health-protective standards. The geotechnical engineer should be consulted to assess the suitability of proposed imported material prior to use on-Site. The following sections provide guidance to meet applicable health-protective standards.



3.1.1 Sampling Requirements

To minimize the potential of introducing contaminated fill material onto the Site, it is necessary to verify through documentation that the fill source is appropriate and that the fill material has been analyzed for potential contaminants based on the location and history of the source area. Documentation should include detailed information on the previous use of the land sourcing the fill material, whether an environmental site assessment was performed and its findings, and the results of any chemical testing performed. Soil proposed for import should be characterized in accordance with the Department of Toxic Substances Control (DTSC) *Information Advisory for Clean Imported Fill Material* (DTSC 2001) with respect to number of samples and analyses performed. Composite sampling may be appropriate for non-volatile analysis, depending on quality and homogeneity of source/borrow area, and specific compounds. Composite sampling shall not be performed for volatile analysis.

If no information pertaining to the fill material is available or provided, or if the existing dataset does not meet the Advisory specifications, then samples of the imported fill material will be chemically analyzed. The analytical program, determined by a qualified environmental professional¹, will be based on the source of the fill and knowledge of the previous land use. Prior to sampling, it will be demonstrated that the laboratory reporting limits will meet the data quality objectives for each analytical method to be utilized. Depending on the origin and known use of the source, the potential imported fill material may be analyzed by one or more of the following methods or other appropriate methods:

- VOCs and total petroleum hydrocarbons (TPH) in the gasoline range (TPH-g) by United States Environmental Protection Agency (USEPA) Method 8260 using USEPA collection Method 5035 to minimize volatile loss;
- Extractable TPH in the diesel range (TPH-d) and TPH in the motor oil range (TPH-mo) ranges by USEPA Method 8015M using a silica gel cleanup (SGC) preparation method;
- Semi-volatile organic compounds (SVOCs) by USEPA Method 8270;
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270 using selective ion mode (SIM);
- Title 22 total metals by USEPA Method 6010/7471;
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082 or 8080A;
- Organochlorine pesticides (OCPs) by USEPA Method 8081A or 8080A;
- Asbestos by polarized light microscopy (PLM) by USEPA Method 600/R-93-116; and/or

¹ A qualified environmental professional is defined as a California Professional Geologist or Professional Engineer, or experienced staff working under the direct supervision of a California Professional Geologist or Professional Engineer.



• California Waste Extraction Test (WET) and/or Federal Toxicity Characteristic Leaching Procedure (TCLP) to evaluate whether there are exceedances of soluble threshold limit concentrations (STLCs) and/or TCLP limits for individual analytes, as necessary.

All analyses shall be reported on a dry-weight basis. The appropriate number of samples and analytical program should be determined by a qualified environmental professional. The qualified environmental professional will evaluate whether the soil is suitable as import fill for the proposed redevelopment.

3.1.2 Data Evaluation

Sampling results for proposed import soil will be compared to San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 Environmental Screening Levels (ESLs) (SFBRWQCB 2019), screening levels proposed by TNDC's Qualified Environmental Professional, and/or background/ambient levels where appropriate; and hazardous waste characterization criteria.

Comparison to Tier 1 ESLs

Sampling results for proposed import soil will be first compared to Tier 1 ESLs (SFBRWQCB 2019). SFBRWQCB ESLs were selected as they contain a broad set of compounds and exposure pathways. USEPA Regional Screening Levels (RSLs) (USEPA 2021) and levels presented in the DTSC's HHRA Note 3 (DTSC 2020) may additionally be consulted.

Soil sampling results should meet the import criteria (Tier 1 ESLs) on an average-concentration basis. If one or more individual soil sampling results for a particular compound exceed the associated import criterion, the 95% UCL of the arithmetic mean concentration of that compound will be calculated using the USEPA statistical software package ProUCL (USEPA 2015), for comparison to the import criterion. Compounds present at concentrations exceeding their Tier 1 ESLs may be further evaluated in the context of background/ambient levels, if relevant (see below).

It is noted that ESLs are explicitly defined on a dry-weight basis. As such, soil sampling results should also be reported on a dry-weight basis for an apples-to-apples comparison to ESLs. Because dry-weight concentrations are always higher than wet-weight concentrations, it is unconservative to compare wet-weight-basis soil sampling results to the ESLs.

Use of Background Concentrations

Certain compounds may be present in soil at background or ambient levels (*i.e.*, not influenced by releases from a particular site) which are higher than their Tier 1 ESLs. These include arsenic, other metals, and carcinogenic polycyclic aromatic hydrocarbons (CPAHs). For these compounds, SFBRWQCB recommends defining a representative upper-limit background concentration, and substituting the background value for the ESL where appropriate:



"For situations where naturally occurring background concentrations exceed an ESL, it may be appropriate to substitute the background concentration for the ESL, but this is a site-specific decision that should be made in consultation with the overseeing regulatory agency" (SFBRWQCB 2019).

For arsenic, the upper limit background arsenic concentration of 11 mg/kg (Bradford et al. 1996). Path Forward recommends the upper limit background concentrations based on maximum values from the Kearny Foundation background metals dataset for the other metals (Bradford et al. 1996). For total CPAHs, DTSC has endorsed an upper limit background concentration of 0.9 mg/kg for Northern California soil (DTSC 2009).

Hazardous Waste Evaluation

Sampling results for proposed import soil will be compared to California and Federal RCRA hazardous waste criteria consisting of the total threshold limit concentration (TTLC), 10×STLC, and 20×TCLP thresholds. If any sample results exceed a 10×STLC and/or 20×TCLP threshold, then the associated soil samples should additionally be analyzed by the California WET and/or Federal TCLP, as appropriate, and the extraction results compared to STLCs and/or TCLP limits.

We note that the TTLC, 10×STLC, and 20×TCLP criteria are defined on a wet-weight basis. As such, soil sampling results should also be reported on a wet-weight basis for appropriate comparison to hazardous waste criteria. Because dry-weight concentrations are always higher than wet-weight concentrations, it would still be conservatively appropriate to compare dry-weight-basis soil sampling results to the hazardous waste criteria.

If any initial soil sample result exceeds a TTLC, or subsequent extraction test result exceeds an STLC or TCLP limit, then the associated soil would be classified as hazardous waste if disposed as waste and thus is not suitable for import.

3.1.3 Recycled Asphalt and Concrete Pavement

Reuse of recycled asphalt and concrete pavement as aggregate base material on redevelopment projects is a widely accepted and encouraged construction materials practice. As an example, the SFBRWQCB has concurred with this practice in their February 8, 2007 letter (SFBRWQCB 2007) to the California Department of Transportation, which provides additional guidance on the reuse of asphalt concrete (AC) and Portland cement concrete (PCC) materials.

Consistent with the SFBRWQCB guidance letter, recycled AC and PCC may be placed beneath pavement (e.g., roadways, sidewalks, plazas, parking lots) at the Site, without testing, provided that the materials are placed at least 5 feet above the highest predicted groundwater levels. Recycled PCC may be placed beneath buildings at the Site, without testing, provided that the material is placed at least 5 feet above highest predicted groundwater levels; but recycled AC should not be placed beneath buildings due to the potential for vapor intrusion of odorous compounds.



3.2 Protection or Destruction of Groundwater Wells

In the unlikely event that groundwater wells are encountered during prior to or during redevelopment, work will stop, and the area should be cordoned off to protect the discovered wells and the environmental professional shall be contacted to notify the appropriate agencies and to provide guidance of next steps for the redevelopment team.

4.0 RISK MANAGEMENT MEASURES DURING DEVELOPMENT

This section identifies risk management measures that may be implemented during earthwork activities to control the potential for human health exposure and environmental impacts from one or more of the COPCs beneath the Site.

4.1 Conditions and Activities Requiring Risk Management Measures

Based on the existing analytical data, the following conditions or activities require risk management to reduce the potential for impacts to human health and the environment.

- Inhalation of VOCs that volatilize from impacted groundwater (if encountered).
- Direct contact with potentially impacted soil.
- Dust and odor generation associated with excavation and trenching, grading and loading, backfilling, movement of construction and transportation equipment, and fugitive dust generation from wind.
- Off-Site transport of soil as sediments via surface water run-off or vehicle tracking from exposed soil and graded areas.
- Import/management/disposal of soil during redevelopment.
- Discovery of unexpected areas of contamination or underground structures.

Risk management measures will also be implemented during operations not listed above as deemed appropriate by a qualified environmental professional.

4.2 Contractor Qualifications

Workers that come into direct contact with contaminated soil and/or groundwater at the Site are required to conduct the work in accordance with California Occupational Safety and Health Administration (Cal/OSHA) training and worker protection rules and regulations. Cal/OSHA is the state agency responsible for monitoring compliance with worker health and safety laws and requirements. Compliance with standard Cal/OSHA regulations is important to prepare workers for the types of hazards that may be encountered during such activities. Earthwork activities conducted at the Site must comply with applicable laws, including current Cal/OSHA rules and regulations, even if not expressly noted in this SMP.



Construction contractors shall assume direct responsibility for the health and safety of their own employees and shall prepare a Site-specific HASP that meets the provisions and guidelines presented in this SMP (Section 5.0). The HASP is specific to workers who may handle or contact hazardous wastes, hazardous materials, or contaminated soil or groundwater at the Site as part of subsurface work.

To the extent that construction activities at the Site may constitute "clean-up operations" or "hazardous substance removal work" as defined in the Cal/OSHA standards for Hazardous Waste Operations and Emergency Response (HAZWOPER), contractors will ensure that all workers engaged in such activities have had training and are subject to medical surveillance, in accordance with Cal/OSHA standards (HAZWOPER-trained personnel). Soil that is visibly stained, discolored, shiny, or oily or has a noticeable solvent-like or hydrocarbon odor should be handled only by HAZWOPER-trained personnel until it is determined that such soil does not warrant such precautions.

4.3 Air Quality Requirements to Screen for VOC-Contaminated Soil

Bay Area Air Quality Management District (BAAQMD) Rule 8-40-205 imposes soil-handling protocols on sites where "contaminated" soil is exposed to the atmosphere. In the context of Rule 8-40-205 and this SMP, "contaminated" soil is soil with volatiles content greater than (1) 50 parts per million (ppm) by weight in soil as determined by USEPA Method 8015 and/or USEPA Method 8260; or (2) 50 parts per million by volume (ppmv) as methane in air just above the soil surface. While the first listed criterion requires sample collection and analysis, the second criteria may be evaluated in the field using a photoionization detector (PID).

To screen potential VOC-contaminated soil during earthwork activities, VOC levels will be periodically monitored with a PID if suspected VOC-contaminated soil is identified by the contractor during the following activities:

- demolition and removal of building floor slabs and foundations;
- removal of unexpected subsurface features such as underground storage tanks (USTs), sumps, or clarifiers that may be exposed during general grading;
- trenching for removal and installation of underground utilities; and
- removal of VOC-impacted soils, if encountered.

The following procedures will be used to screen soils.

- The probe inlet of the PID will be placed at a distance of approximately 3 inches from the surface of the excavated soil, and the instrument readout will be observed as the probe is slowly moved across the soil surface.
- If an increased meter reading is observed, the measurement will be continued until the maximum meter reading is obtained.



- The probe inlet will be left at the maximum-reading location for approximately double the instrument response time per the manufacturer's instrument specifications.
- Monitoring locations and results will be recorded on field forms or logs, and instrument calibration records will be kept on-Site.

If the VOC concentration measured above the soil surface exceeds 50 ppmv as methane, the soil will be characterized as "contaminated" per BAAQMD Rule 8-40-205. VOC-contaminated soil will be stockpiled separately from soil that is not contaminated and further managed in accordance with Section 4.6.2.

If visibly contaminated soils are not observed and PID readings are below 50 ppmv expressed as methane, then monitoring will be relaxed (e.g., once or twice per day). If a new excavation location is started or if visible signs of contamination are identified, the screening interval will return to hourly.

Excavated soils will be further managed in accordance with Section 4.6.

4.4 Dust and VOC Control Program

To reduce the risks associated with fugitive dust and VOCs during construction, a Site-specific *Dust and Volatile Organic Compound (VOC) Control Plan* (DCP) has been developed, which is presented in Appendix C.

4.5 Control of Off-Site Runoff

To reduce risks associated with storm water runoff during construction, a Site-specific Storm Water Pollution Prevention Plan (SWPPP) is required regardless of whether COPCs are present in the soil. A primary goal of a SWPPP is to reduce or eliminate off-Site discharge of sediments during construction activities through implementation of best management practices (BMPs). Components of the SWPPP are provided below.

- Descriptions of BMPs and how they will be implemented. Examples of BMPs that may be incorporated into a SWPPP may include the following.
 - Minimizing dust during demolition, grading, and construction by spraying exposed soil with water on a regular basis (see Appendix C).
 - Minimizing wind and water erosion on soil stockpiles by spraying with water during dry weather and covering with plastic sheeting or other similar material during the rainy season (October through April).
 - Minimizing the area and length of time during which the Site is cleared and graded.
 - Preventing the release of construction pollutants such as cement, mortar, paints, solvents, fuel and lubricating oils, pesticides, and herbicides by storing such



materials in a bermed or otherwise secured area that minimizes contact with storm water.

- Installing filter fences or fiber rolls around the perimeter of the construction area to prevent off-Site sediment discharge.
- Installing and maintaining sediment and oil and grease traps in local storm water intakes during the construction period, or otherwise properly controlling oil and grease discharges.
- Cleaning wheels and covering loads of trucks carrying excavated soil before they depart the construction area.
- Implementing a hazardous material spill prevention, control, and cleanup program during redevelopment activities. This program would include measures such as constructing swales and barriers that would direct potential spills toward containment basins so the impact to Site storm water will be minimized.
- Routine Site inspections to assess the effectiveness of the BMPs and identify repair needs.
- Qualifications of inspectors (training in the field of erosion and sediment control practices and familiarity with storm water pollution control rules and regulations).
- Collecting samples of runoff.
- Provisions to revise the BMPs.

4.6 Soil Management Protocols

It is anticipated that the redevelopment project will generate approximately 4,000 cubic yards (CY) of surplus soils during installation of building foundation elements and Site preparation including elevators and potential car stacker pits. These soils will require off-Site removal to one or more appropriate disposal or reuse facilities in accordance with applicable California and Federal waste regulations. It is recommended that that the contractor responsible for excavation and removal of the surplus soils work with a qualified environmental professional in discussions with potential receiving facilities regarding their acceptance criteria. Tier 1 ESLs are overly conservative and may not be appropriate for the potential designated receiving facility. Depending on a receiving site's use and location, a qualified environmental professional can assist in the development of more appropriate Tier 2 ESLs that can be used to garner soil acceptance at one or more potential receiving facilities.

4.6.1 Field Soil Screening

Soil screening is recommended during earthwork activities to identify soil that potentially do not meet reuse/import fill criteria (Section 3.1) and may require off-Site disposal (Section 4.6.3). Soil screening should be performed unless the qualified environmental professional determines that the active earthwork area and subsurface conditions do not warrant such measures. If



visibly stained soil, elevated PID readings, or chemical odors are observed, the potentially contaminated soil will be segregated, stockpiled, and managed as described in Section 4.6.2.

4.6.2 Management of Soil Stockpiles

It is anticipated that excavated soil will be directly loaded onto haul trucks for off-Site removal; excavated soil may need to be stockpiled on-Site temporarily, however, prior to off-Site transport for reuse or disposal. Concerns associated with stockpiling soil include dust generation, odors, erosion, direct contact, unauthorized access, and potential for storm water run-off. If materials are determined to be impacted, as defined in Section 4.6.1, Section 4.8, and Section 4.9, impacted materials will be temporarily stockpiled on existing concrete slabs or on plastic liners, and covered with anchored plastic sheeting until they can be evaluated for reuse and/or disposal. Soil stockpiles will be inspected regularly to confirm the effectiveness of implemented control measures.

4.6.3 Soil Disposal Off-Site

In the event that impacted soils are encountered and are determined to be unsuitable for on-Site or off-Site reuse, the soils will require off-Site removal to one or more appropriate disposal facilities in accordance with applicable California and Federal waste regulations. Existing analytical soil data will be evaluated to assess the need for additional characterization. Prior to off-Site disposal, the waste disposal facility(ies) will be contacted and the soil will be characterized according to their requirements. Depending on the disposal facility and the existing analytical data, soil samples may require one or more of the following analyses:

- VOCs by USEPA Method 8260B;
- TPH-g by USEPA Method 8015M or 8260B;
- TPH-d and TPH-mo by USEPA Method 8015M with SGC;
- SVOCs by USEPA Method 8270C;
- PCBs by USEPA Method 8082 or 8080A;
- Title 22 metals by USEPA Method 6010/7471;
- OCPs by USEPA Method 8081;
- Asbestos by PLM by USEPA Method 600/R-93-116 or CARB Method 435; and
- California WET and/or Federal TCLP for individual analytes, as necessary.

Soil profiled for acceptance will be loaded onto trucks and transported to the appropriate facility by licensed waste haulers for proper disposal under manifest.



4.7 Groundwater Management Protocols

It is unlikely that groundwater will be encountered during development. However, in the unlikely event that construction dewatering will be necessary, extracted groundwater will be appropriately managed by one of the following methods.

- Dewatering effluent may be temporarily containerized on-Site pending characterization, particularly if the volume of extracted groundwater is small. Following characterization, containerized groundwater should be disposed off-Site at a licensed facility under a nonhazardous bill of lading or hazardous waste manifest, as appropriate, in accordance with California and Federal waste regulations.
- Dewatering effluent may be discharged to the storm sewer system under a National Pollutant Discharge Elimination System (NPDES) permit from the SFBRWQCB or to the sanitary sewer system under a Batch Wastewater Discharge Permit from the San Francisco Public Utilities Commission (SFPUC). On-Site pretreatment of dewatering effluent for removal of solids and/or organics may be necessary to meet the discharge limits of either permit.

4.8 Discovery of Unexpected Areas of Contamination

If, during construction, contaminated soil or free phase liquids or product are encountered in undocumented areas, the Owner will be contacted and a qualified environmental professional and the applicable regulatory agencies will be notified to assess if additional sampling is necessary and/or mitigation is required. Indications of soil contamination may include a strong chemical, hydrocarbon-like, or solvent odor; significant discoloration; an oily or shiny appearance; and/or elevated PID readings.

4.9 Discovery of Unexpected Underground Structures

During excavation and construction, it is possible that unexpected USTs, hoists, sumps, maintenance pits, pipelines, or other underground structures may be discovered. Indications of USTs may include vent pipes that extend above the ground surface, product distribution piping that leads to the UST, fill pipes, backfill material, or the underground structure itself. Other buried structures may not have features that extend above the ground surface and could be discovered only after contact with construction equipment.

The following section outlines the measures that govern identification and removal of USTs, and appropriate measures for addressing other underground structures identified during redevelopment. In the event of such discoveries, work in the area must immediately stop until a qualified environmental professional is contacted and has assessed the potential concern and has determined the appropriate course of action.



4.9.1 Removal of USTs

If USTs or product lines are encountered during redevelopment, SFDPH and the San Francisco Fire Department will be notified. The current regulatory contact information is presented in Section 6.0.

Per Chapter 6.7 of the California Health and Safety Code, which contains specific requirements for removing and remediating contamination associated with a leaking UST, removal activities will be conducted to prevent potential damage to the UST and/or a release to the subsurface. Environmental investigations and responses required following removal of the UST will also be conducted in accordance with the specific provisions delineated in Chapter 6.7 and under the direction of the applicable regulatory agency.

4.9.2 Removal of Other Subsurface Structures

If subsurface structures other than USTs are discovered during construction activities, such as underground vaults, hoists, sumps, and associated piping, they will be inspected to assess whether chemical residuals or free liquids other than water are present. This assessment will be made by a qualified environmental professional relying on visual observations, detection of chemical odors, and field PID measurements.

If there is no indication that chemicals are or were present within the structure, then removal of the structure is not necessary for environmental reasons.

If a sump or vault contains residues (liquids or solids) that appear to be chemical-containing based on field observations (visual, odor, or PID readings), the following steps will be implemented.

- Contain and protect liquids to avoid spills to the subsurface.
- Characterize chemical-containing residues and/or soil and assess the appropriate response action. Chemical-containing substances will be sampled for profiling purposes, followed by proper removal and disposal under the direction of the qualified environmental professional (as previously defined). The appropriate regulatory agency will be notified and engaged prior to the selection of an appropriate response.
- Inspect the structure for cracks and holes once the residues and/or chemical-containing soil are removed.
- If, based on the opinion of the qualified environmental professional, it is assessed that the structure is intact, that subsurface releases of the chemicals to the underlying soil likely did not occur, and no free-phase liquids or chemical residues remain inside, removal of the structure is not required for environmental reasons.



- If physical inspection of the structure suggests that chemicals may have been released to the underlying soil, then conduct additional environmental investigations of the underlying soil to assess whether a release sufficient to warrant removal has occurred.
 - If, based on the opinion of the qualified environmental professional, it is assessed that such a release has not occurred, then removal of the structure is not required for environmental reasons; or,
 - Remove the structure under the guidance of the qualified environmental professional.

5.0 ENVIRONMENTAL HEALTH AND SAFETY GUIDELINES

Workers involved in subsurface activities during redevelopment will operate in compliance with a Site-specific HASP. Applicable contractors shall assume direct responsibility for the health and safety of their own employees and will prepare their own HASP that meets the provisions and guidelines presented in this SMP. The contractors are directly responsible for the preparation of their HASP prior to starting work. Workers who will potentially contact soil at the Site will be provided a copy of the HASP by the contractor and briefed as to its contents.

While this SMP establishes the minimum requirements for a HASP, the HASP is a stand-alone document developed by the contractor prior to the initiation of construction activities that would disrupt soil or groundwater potentially impacted with COPCs. Changes in worker health and safety rules and regulations may result in additional requirements.

5.1 Objectives of the Site Health and Safety Plan

The HASP will identify, evaluate, and control Site health and safety hazards related to soil and groundwater at the Site, and inform contractors, subcontractors, and other field personnel of chemicals known to be present at the Site. This information will enable contractors to make prudent health and safety decisions related to handling impacted soil and groundwater at the Site to protect the health of the workers and the surrounding community throughout the redevelopment.

5.2 Components of the Site Health and Safety Plan

The minimum requirements for the HASP that will be prepared prior to construction activities are presented in this section.

5.2.1 General Information

This section of the HASP will contain general information about the Site, including its location, objectives of the redevelopment work, and the name of the individual(s) who prepared the HASP. This section will also contain a brief summary of possible hazards associated with subsurface conditions at the Site.



5.2.2 Key Personnel/Health and Safety Responsibilities

This section of the HASP will identify the key personnel by name, and will include identification of the Project Manager, Site Supervisor, Site Safety Officer, and subcontractors that will be working at the Site. In addition, the health and safety responsibilities of individuals will be described.

5.2.3 Facility/Site Background

Background information should include a description of past operations, the types of contaminants that may be encountered, and a brief description of the types of construction activities that will be conducted at the Site. The description of construction activities will focus on those activities that will result in the movement of soil, and/or the potential for workers to have direct contact with the soil and groundwater beneath the Site. This section will provide a general map of the Site, highlighting those areas where earthwork activities are likely to occur.

5.2.4 Job Hazard Analysis and Hazard Mitigation

A description of the hazards associated with specific construction activities that give rise to contact or potential contact with soil and groundwater is presented in this section of the HASP. As part of the job hazard analysis, the HASP will identify the constituents likely to be encountered during construction activities and will present a table indicating the symptoms of exposure and relevant regulatory exposure limits for each compound (*i.e.*, the OSHA Permissible Exposure Limit [PEL]). The procedures to mitigate hazards identified in the job hazard analysis are also presented in this section of the HASP. The principal measure that will mitigate hazards associated with chemicals present in soil will be the use of appropriate personal protective equipment (PPE) (see Section 5.2.6).

5.2.5 Monitoring Procedures

Air and dust monitoring procedures (if proposed) will be detailed in the HASP. Currently, air and dust monitoring are not anticipated to be conducted.

5.2.6 Personal Protective Equipment

The HASP will identify appropriate required PPE that will adequately protect workers from hazards related to contact with impacted soils that may be encountered at the Site. Due to the depth of groundwater at the Site, contact with this medium is not expected. PPE will be selected based on the known contaminants present at the Site, and the known route(s) of entry into the human body. (See Section 2.5.) The primary exposure routes are the direct contact routes consisting of dermal contact, incidental ingestion, and inhalation of particulate matter and volatiles. Based on the known conditions, the minimum level of PPE for intrusive workers that may come into direct contact with soil will be modified Level D. For the Site, modified Level D protection will include a long-sleeved shirt, long pants, gloves, hard hat, and steel-toed boots.



If areas of unexpected contamination are identified during construction activities or if proposed air monitoring indicates that concentrations present in the breathing zone exceed the OSHA PELs, workers may be required to upgrade their PPE to Level C. Upgrading to Level C PPE entails donning a half-face or full-face air purifying respirator with the appropriate cartridge and wearing a Tyvek suit until it can be demonstrated through personal air monitoring that there are no exposure issues for Site workers.

5.2.7 Work Zones and Site Security Measures

Specific work zones of the Site and security measures such as the placement of barricades, fencing, access control, and access logs are described in this section. The work zone will be defined as the area of the Site where activities involving impacted soil are conducted. The support zone will be located outside of the work zone, but within Site boundaries. End-of-the-day cleanup operations, such as cleaning truck wheels (for exiting vehicles that could be tracking soil off-Site) and removal of PPE, will occur in the support zone. If possible, the support zone will be proximal to the entry and exit point of the Site. If necessary, to control pedestrian and vehicular entry, the work zones may be fenced.

5.2.8 Decontamination Measures

This section of the HASP will describe specific procedures that will be used to decontaminate both equipment and personnel. Decontamination measures will include cleaning the wheels of vehicles in the support zone prior to their exiting the Site, if applicable. Placement of shaker plates or gravel at the entrance to the Site should also be considered and implemented.

5.2.9 General Safe Work Practices

This section of the HASP will discuss the general safe work practices to be followed, including entry restrictions, tailgate safety meetings, use of PPE, personal hygiene, hand washing facilities, eating and smoking restrictions, use of warning signs and barricades, and special Sitespecific precautions. As part of the general safe work practices, the HASP will also require the Site Safety Officer to conduct periodic briefings with construction personnel (likely part of the tailgate meetings) on the reporting requirements to be followed if an underground structure is identified.

5.2.10 Contingency Plans/Emergency Information

This section of the HASP will provide information regarding procedures to be followed in the event of an emergency. The location of specific emergency equipment such as eyewash, first aid kit and a fire extinguisher, and emergency telephone numbers and contacts will be identified. A map indicating the route to the nearest hospital will also be provided in this section.



6.0 NOTIFICATIONS

If an environmental condition is encountered during Site construction activities that requires notification, the pertinent contacts are as follows:

- Mr. Jackson Rabinowitsh, TNDC, 707.494.8230, jrabinowitsh@tndc.com
- Mr. Greg Noblet, Path Forward Partners, Inc., 628.219.6622, greg@pathfw.net
- Mr. Mamdouh Awwad, SFDPH, 415.252.3927, mamdouh.awwad@sfdph.org
- Bay Area Air Quality Management District, 800.792.0787, <u>http://www.baaqmd.gov/</u>
- City of San Francisco Fire Department, 628.652.3260, https://www.sf-fire.org
- Mr. Marcos De la Cruz, SFBRWQCB Stormwater Division, 510.622.2365, marcos.delacruz@waterboards.ca.gov

TNDC is responsible for providing notification to the pertinent regulatory agencies if notable environmental conditions are encountered during redevelopment.

7.0 **REFERENCES**

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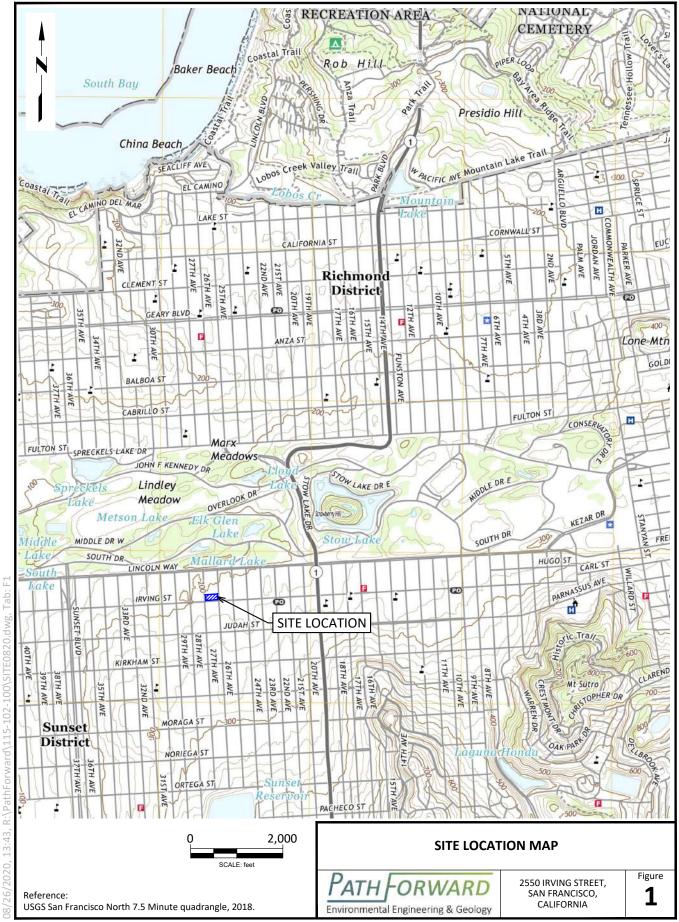
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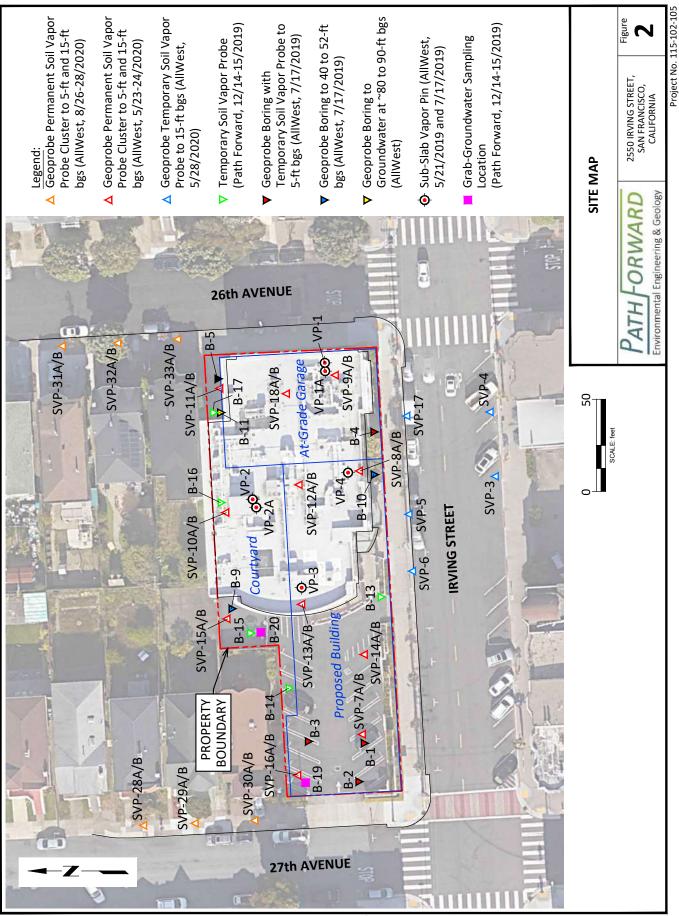
Figures





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Project No. 115-102-100



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FILE NO. 220772

RESOLUTION NO.317-22

[Urging a Coordinated Response to PCE Contamination on the Irving Street Corridor]

Resolution urging the California Department of Toxic Substances Control, San Francisco Department of Public Health, and other agencies to provide a comprehensive, coordinated response to tetrachloroethylene (PCE) contamination in the vicinity of the 2500 Irving Street block to ensure protections for occupants of neighboring homes and establishments.

WHEREAS, Urban redevelopment provides an opportunity to uncover sources of legacy contamination on properties with former commercial and industrial uses, where projects proposed for housing development and existing housing directly adjacent to sites must meet more stringent requirements for human habitation; and

WHEREAS, Contamination on the 2500 block of Irving Street of San Francisco have triggered investigations based on historical uses from past businesses, primarily two dry cleaning operations, namely Miracle Cleaners at 2520 Irving Street (north side) from the 1920s into the 1950s, and Albrite Cleaners at 2511 Irving (south side) from the 1940s until 2018, as well as potentially other yet undetermined sources of contamination; and

WHEREAS, The primary contaminant, identified from soil vapor and indoor air sampling, is identified as tetrachloroethylene, also known as perchloroethylene (PCE), a Volatile Organic Compound (VOC) commonly used in dry cleaning operations, and as a legacy contaminant PCE can migrate long distances from the source in its vapor phase, and is classified as a likely carcinogen by the U.S. Environmental Protection Agency; and

WHEREAS, Housing and mixed-use developments on this commercial corridor will provide needed housing in the City, including the affordable housing development sponsored by nonprofit developer Tenderloin Neighborhood Development Corporation (TNDC), and

Supervisor Mar BOARD OF SUPERVISORS another market rate development proposed by The Police Credit Union at 2525 Irving Street, on or adjacent to the locations of these former dry cleaners; and

WHEREAS, Multifamily housing projects meeting the criteria in California Senate Bill 35 are approved ministerially, without Planning Commission approval and bypassing the CEQA environmental review process, and TNDC's 100% affordable housing project at 2550 Irving Street was streamlined via this state legislation, limiting the ability of the City to assert environmental review subject to public scrutiny as a condition of approval; and

8 WHEREAS, Environmental testing has been conducted at multiple locations and times 9 confirming PCE as the primary contaminant in this area possibly coming from multiple 10 sources, further testing is needed to address multiple data gaps, and the State regulatory 11 framework is a patchwork of voluntary agreements and mandatory orders with fragmented 12 regulatory oversight for addressing this legacy pollutant; and

WHEREAS, Private entities have conducted tests at their own sites: The Police Credit 13 Union performed initial testing in 2019 and 2020 as owner at the time of 2550 Irving Street, 14 also current owner of 2525 Irving Street, finding PCE levels in soil gas and inside The Police 15 16 Credit Union building with samples above applicable screening levels, and TNDC conducted an Environmental Site Assessment in September 2020, identifying PCE as the principal 17 chemical detected in soil gas, with associated risks of vapor intrusion into ground level and 18 first floor of the proposed building deemed as "modest" in the Final Response Plan prepared 19 20 for TNDC in September 2021; and

WHEREAS, The California Department of Toxic Substances Control (DTSC) has
 provided regulatory oversight in these assessments, and only after public and independent
 expert comment has stepped in, using taxpayer funds, to perform air testing inside six single
 family homes near the former Miracle Cleaners site that should have been conducted and

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paid for by The Police Credit Union, with one more round of testing scheduled by DTSC for assessing seasonal variability; and

WHEREAS, The regulatory framework for these properties is fragmented, with varying levels of responsibility for cleanup by the parties associated with the legacy contaminants that are present in the high-permeability dune sands and known to be intruding into the air space of building structures above DTSC's screening level which is known to be used as an action level for remediation and/or mitigation at other State cleanup sites; and

WHEREAS, The Police Credit Union ended its voluntary agreement with DTSC in January 2022, after the sale of the 2550 Irving Street property was completed and transferred to TNDC and failed to complete adequate investigation by not sampling the former Miracle Cleaners location and not conducting step-out sampling into residential areas recommended by its own consultant; and

WHEREAS, TNDC as the current owner and nonprofit developer of 2550 Irving Street is under a California Land Reuse and Revitalization Act agreement with DTSC gives them statutory immunity without obligation to clean up contaminants beyond their development site; and

WHEREAS, DTSC has issued an order under California Health & Safety Code, Section 25358.3(a) holding the owners of the former Albrite Cleaners responsible for investigation and cleanup and thus placing the property on the State's Cortese List of contaminated sites; and

WHEREAS, San Francisco's Maher Ordinance, under Health Code, Article 22A, is designed to ensure that hazardous substances impacting soils and groundwater in specified areas of the City are assessed and mitigated prior to the issuance of a building permit, and the 2550 Irving Street development is under the Maher Program, however, the San Francisco Department of Public Health (SFDPH) has deferred oversight and cleanup authority to DTSC for the various properties, agreements and orders; and

Supervisor Mar BOARD OF SUPERVISORS WHEREAS, The September 2021, Final Response Plan from TNDC evaluated three alternatives for their planned development at 2550 Irving Street: (1) "No Further Action," (2) "Soil Excavation," and (3) "Vapor Intrusion Mitigation System (VIMS), a Land Use Covenant (LUC), and Operations and Maintenance (O&M)," recommending the VIMS, LUC and O&M alternative as most effective overall and lower in cost which involves no actual cleanup and is subject to failure if the O&M component is not conducted; and

WHEREAS, Community advocates prepared an August 2021 Response Plan Addendum calling for a fourth alternative of soil vapor extraction (SVE) which is (1) an actual PCE removal technology with the ability to reach beneath the adjacent residential areas, (2) a technology recommended by DTSC guidance for PCE and VOC remediation and (3) lower in cost relative to the VIMS, LUC and O&M alternative and is supported by DTSC SVE contractor estimates; now, therefore, be it

RESOLVED, That the Board of Supervisors strongly urges that DTSC, in coordination 13 with SFDPH, manage this situation with a comprehensive, coordinated investigation and 14 cleanup approach for the PCE contamination on the 2500 Irving Street block based upon the 15 State's preference for permanent remedies, while utilizing the State's enforcement authority to 16 hold responsible parties accountable for the contamination, in order to protect the health of 17 future building occupants and long-time residents now known to have been exposed to PCE 18 for decades as well as maintain and enhance the value of the neighborhood's century-old 19 20 homes, new housing, businesses, nonprofit establishments, and the right-of-way areas; and, 21 be it

FURTHER RESOLVED, That the Board of Supervisors strongly urges the Planning Department to take all steps necessary to ensure that construction at any property impacted by the 2500 Irving PCE soil gas plume is performed only after a Response Plan is in place to remediate the contamination and to prevent the exposure of nearby residents to PCE vapors

Supervisor Mar BOARD OF SUPERVISORS

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intruding into their homes above DTSC's own residential screening level of 0.46 ug/m³ that is known to be an action level at other cleanup projects with State oversight; and, be it

FURTHER RESOLVED, That the Board of Supervisors strongly urges SFDPH to provide robust oversight through the Maher Program requirements for a Site Mitigation Plan for 2550 Irving Street project and other future redevelopment projects impacted by PCE and to coordinate with DTSC, San Francisco Planning Department, San Francisco Department of Building Inspections, San Francisco Department of Public Works, and other agencies engaged in permitting and oversight of housing redevelopment projects to ensure that the health of San Franciscans be protected at the most protective end of the State's "risk management range" which is done at other State cleanup projects and is within DTSC's authority to do so.



City and County of San Francisco

Tails

Resolution

City Hall 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4689

File Number: 220772

Date Passed: July 12, 2022

Resolution urging the California Department of Toxic Substances Control, San Francisco Department of Public Health, and other agencies to provide a comprehensive, coordinated response to tetrachloroethylene (PCE) contamination in the vicinity of the 2500 Irving Street block to ensure protections for occupants of neighboring homes and establishments.

July 12, 2022 Board of Supervisors - ADOPTED

File No. 220772

I hereby certify that the foregoing Resolution was ADOPTED on 7/12/2022 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo Clerk of the Board

Unsigned

London N. Breed Mayor 07/21/2022

Date Approved

I hereby cartify that the foregoing resolution, not being signed by the Mayor within the time limit as set forth in Section 3.103 of the Charter, or time waived pursuant to Board Rule 2.14.2, became effective without her approval in accordance with the provision of said Section 3.103 of the Charter or Board Rule 2.14.2.

Angela Calvillo Clerk of the Board

07/21/2022

Date

DTSC, Cal EPA, Supervisor Mar, MSNA and MSNA consultants meeting

Meeting Minutes

September 23, 2022: Friday, September 23, 2022 2:00PM Zoom Remote meeting

Present:Meredith Williams, Director, DTSC – MW
Craig Scholer, Deputy Secretary for Legislative Aide, CalEPA – CS
Nelline Kowbel, Chief, Northern CA Division, Site Mitigation, DTSC – NK
Gordon Mar, Supervisor, District 4, SF – GM
Obai Rambo, Legislative Aide for Supervisor Mar – OR
Lenny Siegel, Exec Director, Center for Public Environmental Oversight, pro
bono consultant to MSNA – LS
Don Moore, (CA Professional Geologist, pro bono consultant to MSNA) – DM
Paul Holzman, Environmental liaison for Mid-Sunset Neighborhood
Association (MSNA) – PH

Next meeting: TBD

1. **Purpose**: Meeting to discuss remediation guidelines for PCE contamination on 2500 Irving block:

--Long-term efficacy of Vapor intrusion Mitigation-- DTSC oversight & Regional Water Quality Control Board (SF Bay) guidance

--Testing & remediation costs on 2500 Irving - responsible parties, state resources

2. Discussion

GM's introductory remarks stressed the "challenging and frustrating" process around the 2500 Irving St. PCE contamination problem. He noted that he and the neighborhood have experienced a "fragmented and unresponsive" oversight by DTSC. GM referenced the four separate voluntary agreements that makes it difficult to address the single issue of PCE contamination throughout the neighborhood. GM stated that he very much appreciated this high-level meeting to address a comprehensive and coordinated analysis of risk assessment and ultimately a clean-up of the contamination throughout the neighborhood.

MW appreciated that GM initiated this meeting and said that she understands that "it's been a frustrating process." MW added that she believes this meeting can "identify some opportunities to keep the conversation going." MW said her DTSC team has taken "all the input very seriously" and has found some ways to be responsive. But it is DTSC's "intent to take the information in and figure out how to make it work." She acknowledged the complexity of the situation and that it will take "creativity" on DTSC's part (especially given some of DTSC's constraints around their processes). "We have to think about the whole, for the entire block and the entire PCE plume."

PH referenced Don Moore's PCE contour map of the Irving St. neighborhood that shows the known extent of the PCE plume's reach. Even with the known data gaps the plume affects at least 40 neighborhood properties. PH said that the problem with viewing this site holistically goes back to a hastily signed CLRRA between the 2550 developer (TNDC) and DTSC that led to a flawed Response Plan. PH said that the goal for this meeting is to see how the neighborhood and DTSC can find a process within DTSC's regulatory framework that allows for "a reasonable evaluation of remedies for the entire plume."

PH pointed out that the original CLRRA agreement allowed the developer (TNDC) to select a remedy before there was any conceptual site model in place. Neither the source or lateral extent had been determined when the Response Plan was approved in September 2021. Over a year later that information is still unknown. Oddly, DTSC's two presumptive remedies (Soil Vapor Extraction or Soil Removal without assuming massive importation of clean fill) were never considered.

PH stressed that we are at an important decision point. Once TNDC begins demolition (which is scheduled for November) and moves forward with their construction plan it will make a comprehensive and permanent remedy virtually impossible. PH stated that the number one request for this meeting is that DTSC see to it that construction not be permitted to move forward on either side of Irving until a plume-wide remedy is selected. If that means construction is delayed, then so be it.

PH acknowledged that while this site is not the most contaminated site in the state it is still critical to clean up because of the duration of residential exposure—in many cases families have been breathing contaminated air for three and four decades.

MW noted that identification of sources is important and said that has been discussed internally and has to be part of how the site is approached.

LS asked if there is an update on a potential order involving the Police Credit Union (PCU) that Whitney Smith referenced at a previous meeting. The PCU had prematurely ended its voluntary agreement once it sold the land to TNDC.

NK responded that this cannot be discussed right now.

LS followed up on the issue of source identification. He contrasted the Albrite investigation (south of Irving) with the lack of source investigation on the north side of Irving where the Miracle footprint was not sampled the way Albrite was. LS also called attention to the south of Irving area parking lot, and the lateral and main sewer lines that still haven't had a source investigation but where the highest soil gas levels of PCE (2700 micrograms per cubic meter) were found. In addition, one neighbor reported having seen barrels of something stored on the south of Irving parking lot that is currently owned by the PCU.

LS pointed out that even though there are data gaps in the contour map, it's clear that there is a PCE plume centered around the street, between the two former dry cleaners. This suggests a source, whether it's the dry cleaners, the lateral sewer lines or the city's sewer line.

LS noted that were it not for the CLRRA agreement and the Response Plan, it's obvious that DTSC would be evaluating remedial alternatives starting with Soil Vapor Extraction (SVE) and Soil Excavation (SE) and maybe even a pilot study to see how well SVE would work. The problem is the Response Plan.

DM related that he was alarmed that SVE was omitted as an alternative remedy in TNDC's Response Plan when it was circulated for public comment. Before submitting MSNA public comments that he and Lenny developed, DM consulted with one of DTSC's own contractors who supported SVE as an alternative to the TNDC's Response Plan. MSNA's extensive public comments that analyzed TNDC's Response Plan also included an alternative Response Plan Addendum. This was cheaper than TNDC's vapor mitigation plan and achieved remediation for the neighborhood including TNDC's building. DM referred to two DTSC and Water Board PCE guidance documents that TNDC's response plan totally ignored. These documents state that vapor mitigation systems are temporary and that remediation should be done first followed by mitigation. DM regretted that MSNA's comments and alternative Response Plan Addendum were largely ignored by DTSC's team. The evaluation period was accelerated and completed in just several weeks at the end of the summer without fully taking into account the public's input.

LS added that he is currently working as a consultant on an EPA research project studying vapor intrusion. The discussions have been around using soil vapor extraction as a substitute for building-by-building mitigation. LS pointed out that because of the permeability of the sandy soil in the Irving St neighborhood, a robust SVE effort around the center of the plume would likely protect a number of homes without having to go in to mitigate each one. "The same geologic conditions that led to the spread of PCE contamination should make it possible with the right suction to pull it back in."

DM added that every consultant he's discussed this with (Stantech, RMD Environmental, Apex Companies) believes this is "a no brainer." He discussed a "ripple effect" if the current Response Plan is allowed to stand because the Police Credit Union wants to build housing on the parking across the street. "They look at what was done at 2550 Irving and argue that mitigation is the correct response without considering the neighbors."

NK thanked everyone at the meeting for reaching out to DTSC. She said that "the protection of the people in their homes and the protection of people that are going to be living in the lowincome housing development is critical to us." "That's the center of our mission." She said that she is bringing resources to this situation. "We're here to address your concerns and be as responsive as we can." NK said that she wants DTSC to "push as hard as we can" to get what MSNA "is asking for." NK stated that DTSC wants to be sure to implement "the right kind of remediation approach" to protect the people in the neighborhood.

NK added that there is already a meeting scheduled for the following week to discuss 2550 Irving. She is certain that these comment and concerns from MSNA will "inform" those discussions. In terms of the "fragmented approach" NK stated that DTSC is looking "at the data in aggregate" to understand the plume and the source. But she said she wants to look more closely into DTSC's "approach in light of your comments and concerns."

LS said that "the fragmentation comment is based on the fact that there is Response Plan in place for a significant portion of the plume." This is a legal issue and is the biggest concern in how to move forward. LS agreed that DTSC looks at the data holistically however the fragmentation problem is about getting to a remedy selection. "As far as we know there is not a combined approach to that."

LS said that in a meeting with TNDC's consultant, TNDC said that SVE would draw PCE into their property because all the PCE is coming from the Albrite Cleaners on the north side of the street. LS said that "the evidence so far doesn't show this." It is likely shared by several areas and responsible parties on the block. A "holistic and coordinated approach" means you don't do SVE on one part of the plume. You do the whole plume and perhaps coordinate SVE with soil excavation to eradicate hot spots if that's what's called for.

NK said that to her knowledge there hasn't been much PCE found in the soil.

LS responded that there has been no soil sampling on the 2550 Miracle site. There was one vapor pin in the northeast portion of the footprint which would likely miss if there were a sewer leak underneath the cleaners.

DM said that the important thing to keep in mind is that the data makes clear there is a "bullseye" beneath Irving Street that is 35 times the commercial ESL and 165 times the residential ESL and it has been mapped radially around that source.

LS commented that in terms of the ESL he knows that some people (in Industry and within DTSC) want to make the soil gas screening levels less protective. He would be very concerned if there was a change based on industry pressure.

DM said that he's involved with a number of projects at this time where the 10 to the minus 6 ESL is used as an action level for mitigation and/or remediation. And that isn't happening on this project. "On this project it appears that the risk range is being moved around to try to justify a different action level."

LS asked if Doctor Williams had any questions or comments.

MW promised to dig in deeper to this issue. MW addressed NK by saying that it's important for DTSC to "push wherever we can to get the most protective remedy." She stated that her legal team should be able to come up with a "creative" solution for this. MW posed the challenge: "How can we come up with this holistic solution?" She will be following up with her team and, based on this meeting, approach the contamination issue "in a different way." MW wanted to

let MSNA and its consultants know that she appreciates that "you have done your homework, your legwork, your due diligence" and that MSNA's comments have already shaped how DTSC is responding to this.

LS commented that before he offered his services to the neighborhood he determined that MSNA did not oppose building affordable housing at the site. (The SF Chronicle had falsely painted all neighborhood criticism as a NIMBY response). As a Mountain View City Council member, LS said they were able to build a number of affordable housing buildings. Some were on contaminated land. In each case they made sure they were cleaned up first. Not only for the people already living in the neighborhood, but for the future low-income residents. Because low-income residents don't have much of a choice where they live, it's particularly important that it be permanently safe. DTSC has made clear for over a decade that mitigation is great but not permanent. LS added that the Waterboard just recently re-emphasized that in their guidance. LS stated that "while I think this building will get built, it might need to be delayed."

GM added that he too is supportive of the affordable housing project but wants to "ensure the most health-protective response to the contamination" for the current residents and the future residents at 2550.

GM asked about the time frame for DTSC to complete its investigation. He said that TNDC is planning to move ahead with demolition in November so this is an opportunity right now to do some of these actions that are being proposed.

LS talked about a site in Mountain View that only discovered how contaminated the site was after they had removed the building.

NK said 2500 Irving is now "front and center in our minds in terms of the opportunity afforded after demolition and before construction." NK said DTSC has been in discussions with TNDC around "concepts central to this." But one of the important things "is this definition of a source area." NK's team is concerned because the source will affect the design of an SVE project. NK said they are concerned that with "SVE the PCE plume will repopulate. It will come right back in if you haven't addressed the source. " Her team has been trying to "think creatively" to "effectively buy us time" in the context of the development proceeding.

DM answered that "none of the experts including myself" have that concern about repopulating the PCE.

LS said that DTSC's Whitney Smith had raised the possibility that there could be a "remote source" that coincidentally released PCE in the middle of the block. However, there is no evidence of that. There are no dry cleaners that are still using PCE in San Francisco.

DM sketched out that the estimated duration of the SVE project he prepared with RMD Environmental (a DTSC consultant) is 12 – 18 months. "That is the window we have."

LS stated that his concern about time is that the paperwork can take longer than the actual cleanup.

PH asked if a Response Plan can be changed? In the case of this site, a lot of new information has come in since TNDC's Response Plan was approved.

NK said that "if there's new information that comes to light that has material impact on that decision", then the answer is "absolutely yes." NK said that DTSC can and does reopen decisions.

PH pointed out the response plan was approved before we knew there was vapor intrusion in the neighborhood.

LS speculated that it's possible TNDC wouldn't have to pay for this remediation and could, in the end, save money. LS said he gets that TNDC is concerned about delays.

GM asked about grant funding from DTSC for this. Even for a pilot SVE project. GM mentioned the India Basin grant as an example of money that DTSC has control over.

MW said that GM was referring to the Equitable Communities Revitalization Program. However, since this program is between funding cycles, DTSC would not have access to that money in this timeframe. MW mused that there may be other funding sources that they will discuss internally.

LS wondered if the ECR Program could apply to affordable housing projects that are in a more affluent neighborhood.

MW said the starting point for ranking the grants is directly impacted communities. However, we do take into account "who in the end is served by a given project." So it is within the realm of possibility.

End of meeting

1 2 3 4 5 6 7	ENOCH WANG (SBN 218904) FIFE LAW, LLP 300 Montgomery Street, Suite 850 San Francisco, CA 94104 Telephone: (415) 837-3101 Facsimile: (415) 837-3111 Attorneys for Appellant Mid-Sunset Neighborhood Association, Inc. BOARD OF A	DDEAIS
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9	CITY AND COUNTY OF SAN FRANCISCO	
10	MID-SUNSET NEIGHBORHOOD) ASSOCIATION, INC.,)	Appeal No. 22-092
11)	DECLARATION OF DONALD W.
12	Appellant,) v.)	MOORE, PG IN SUPPORT OF APPELLANT MID-SUNSET
13 14	DEPARTMENT OF BUILDING	NEIGHBORHOOD ASSOCIATION, INC.'S APPEAL OF DEMOLITION
15	INSPECTION,) Respondent.)	PERMIT
16	,,,,,,	Date: February 8, 2023 Time: 5:00 PM Place.: City Hall, Room 416
17		
18	I, Donald W. Moore, PG, ARM, declare:	
19	1. I am a California licensed professional geologist and risk management	
20	consultant. I am a principal and founder of Environmental Risk Solutions, Inc. with more than	
21	30-years consulting experience and an expert with respect to risk, remediation and management	
22	associated with contaminated properties including numerous dry cleaning facilities. The facts	
23	contained in this declaration are based on my own personal knowledge and experience, and if I	
24	were called and sworn as a witness I could and would testify competently thereto.	
25	2. Since Spring 2021, I have been an environmental consultant for Appellant Mid-	
26	Sunset Neighborhood Association, Inc. (MSNA). I am very familiar with environmental	
27	conditions at the 2550 Irving Street, San Francisco property for which the demolition permit	
28	was issued by the San Francisco Department of Building Inspection on November 18, 2022.	
	Declaration 1	

This declaration was prepared in consultation with Lenny Siegel, Executive Director of the Center of Public Environmental Oversight, another MSNA environmental consultant.

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3. As MSNA's environmental Oversight, another MSNA environmental consultant. 3. As MSNA's environmental consultant, I have analyzed technical reports and Department of Toxic Substances Control (DTSC) correspondence regarding the property and surrounding properties and participated in a number of substantive discussions with various DTSC staff regarding the nature, scope, and extent of contamination at the property and adjacent properties. Environmental investigations conducted from 2019 through 2022 at and around the property (2550 Irving Street) have found tetrachloroethylene (PCE) above DTSC's risk-based environmental screening level (ESL) in soil vapor at the property were 2520 Irving Street (former Miracle Cleaners site) was formerly located and to the south at 2511 Irving Street and adjacent 2525 Irving Street property. The 2511 Irving Street (former Albrite Cleaners site) property was added to the DTSC Cortese List in about June 2021 and the owner and former operator were issued an Imminent & Substantial Endangerment Order ("I&SE Order") by

14 DTSC on October 29, 2021.

4. 15 The full lateral and vertical extent and magnitude of the contamination under and around the four properties is currently unknown including the level of PCE contamination 16 beneath the former Miracle Cleaners site and the area is the subject of ongoing investigations 17 18 under DTSC oversight. Based on existing data, the PCE soil vapor plume, above the DTSC 19 ESL's is estimated to be beneath approximately 40 residential and commercial properties in the neighborhood. The highest PCE soil vapor levels detected to date are located adjacent both 20 21 former dry cleaning facilities along Irving Street and are more than 37-times DTSC's 22 commercial ESL and 166-times DTSC's residential ESL. To date, indoor air testing has only 23 been conducted in seven of the approximately 40 properties above the PCE soil vapor plume with vapor intrusion confirmed in four homes as high as 4-times DTSC's indoor air ESL. The 24 25 most recent soil vapor data indicates that the PCE soil vapor plume is unstable and continuing to migrate beneath the residential areas. 26

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5. The San Francisco Department of Public Health (SFDPH) "NA" notation on the demolition permit application understood to indicate an absence of public health exposure related

1 to demolition process is incorrect. Based on testing results to date, indoor air and soil vapor 2 sampling conducted at homes adjacent and proximal to 2550 Irving Street, indicate an imminent 3 and substantial endangerment to the public health associated with the PCE soil vapor impacts 4 which are likely to be affected by demolition of the 2550 Irving Street property. The DTSC I&SE 5 Order highlights the health risks associated with the PCE contamination in the area. Attached as 6 **Exhibits 1, 2** are true and correct copies of my (1) September 9, 2022 letter and supporting 7 technical work product to DTSC dating back to August 2021 regarding contamination at the 2550 8 Irving Street property and surrounding areas, significant data gaps regarding the DTSC 9 investigation oversight and recommendation for remediation, and (2) PowerPoint slides 10 highlighting details of the inadequate investigation at former Miracle Cleaners and the related 11 health risks associated with long-time residents on the north side of Irving Street. 12 6. Based on review of the current Site Management Plan (SMP) and demolition 13 permit application for the property, there is little consideration regarding the PCE contamination 14 that will be exposed during demolition. The SMP appears to be a "generic" document with little 15 property-specific information. DTSC correspondence to MSNA related to the demolition process 16 on November 9th stated, "procedures are in place to prevent spread of contamination during site 17 activities" and "the developer is required to notify DTSC if any sewer piping potentially from the 18 former Miracle Cleaner is encountered during demolition" along with other assurances; however, 19 the SMP does not satisfactorily address these specific concerns and DTSC comments. These 20 concerns are particularly significant based on the fact the location of former Miracle Cleaners, the 21 likely source of all the PCE contamination north of Irving Street has not been investigated to assess 22 the magnitude and full extent of the PCE in soil, soil vapor and groundwater. The SMP and 23 demolition process offers the last opportunity for conducting an appropriate source investigation 24 and if data is not collected during demolition, the result is likely to be destruction of valuable data 25 and evidence which will make it difficult or impossible to confirm the source(s), determine 26 responsible parties and the appropriate remedial approach. 27

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1 7. The SMP needs to include a source investigation work plan in the footprint of 2 former Miracle Cleaners consistent with the source investigation approved by DTSC and 3 conducted at the location of former Albrite Cleaners. This adequate approach included collecting 4 soil and soil vapor samples at six locations at five and fifteen feet below grade allowing assessment 5 of potential PCE source areas from former spills, sumps, drains and sewer lines. Based on existing 6 data around the former Miracle Cleaners property, there is a clear indication of a PCE source area 7 at and around the sewer lateral on the property including soil matrix contamination. Historic 8 records at the building department should be reviewed prior to demolition to determine the location 9 and depth of the former or still existing sewer lateral and other operational features associated with 10 former Miracle Cleaners to focus the investigation with at least two of the borings in close 11 proximity to the sewer lateral and former dry cleaning equipment.

8. An appropriate investigation during demolition requires professional geologist
supervision. Sampling protocol should be established in the SMP for both soil vapor and matrix
sampling. During the investigation, recovered soils should be logged by a field geologist in
accordance with the Unified Soil Classification System. Soil classifications, related observations,
and soil vapor probe construction details should then be recorded on field borehole logs along with
all other soil encountered during the demolition process.

9. Recovered soils should be screened for the presence of PCE and other volatile
organic compounds (VOCs) using a photoionization detector (PID). Recovered soils would then be
placed into a sealable plastic bag and PID measurements recorded on borehole logs and field
reports. Soil vapor samples would be collected into laboratory supplied Summa canisters with
dedicated flow controllers.

10. At each of the borehole locations, soil samples from approximately 5 and 15 feet
below grade should be retained for chemical analysis of VOCs. If elevated PID readings of
recovered soils suggest the presence of VOCs, additional soil samples should be retained for
chemical analysis. Soil samples and Summa canisters need to be labeled and transported under
chain of custody to a California certified analytical laboratory for chemical analysis. Following

1 receipt of final laboratory analytical results, professional geologist should validate and verify 2 chemical data and prepare a summary report to DTSC and SFDPH. The investigation report should 3 include a description of site conditions and field sampling activities with a site plan showing 4 locations, a tabulated summary of analytical data screened against ESLs, and recommendations 5 relevant to the soil and soil vapor conditions identified.

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11. By outlining the above protocol in the SMP and adhering to it during the demolition 7 and investigation process, appropriate data can be collected to identify the magnitude, extent and 8 specific source(s) of the PCE contamination associated with former Miracle Cleaners that has 9 emanated more than 200 feet from this source area into the surrounding residential neighborhood. 10 This data is necessary to assess the parties responsible for the contamination, the appropriate 11 remedial approach and to assess and ultimately mitigate the existing unacceptable health risk 12 associated with the PCE contamination for the current neighbors and future residents of the 2550 13 Irving Street property. This is a clear situation where the redevelopment process is moving faster 14 than the DTSC investigation process with the developer and responsible party failing to fully 15 assess, acknowledge and remediate the PCE contamination consistent with DTSC guidance and 16 ESL's and standard environmental industry practices. The lack of an agreement or order with the 17 responsible party and DTSC is also a missing element of the 2550 Irving Street property. 18

I hereby declare under penalty of perjury under the laws of the State of California that this declaration is true and correct, and that it was executed on this 18th day of January 2023, in San Francisco, California.

16 Mom

Donald W. Moore, PG, ARM





September 9, 2022

Nelline Kowbel, Chief, Northern California Site Mitigation Division Juliet Pettijohn, Branch Chief Whitney Smith, Unit Supervisor, Contra Costa/ Solano County Unit Parag Shah, Interim Project Manager Asha Setty, Public Participation Specialist **California Department of Toxic Substances Control** 700 Heinz Avenue Berkeley, CA 94710

RE: MSNA FOLLOW UP FROM AUGUST 25th DTSC COMMUNITY MEETING, TETRACHLOROETHENE CONTAMINATION, 2500 BLOCK OF IRVING STREET, SAN FRANCISCO, CA

Nelline, Julie, Whit, Parag and Asha:

The Mid-Sunset Neighborhood Association (MSNA) and Environmental Risk Solutions, Inc. (ERS), consultant for MSNA, appreciated the opportunity to meet virtually with the Department of Toxic Substances Control (DTSC) on August 25th and finally have a real opportunity to voice the concerns of the community and support a pathway to a real cleanup solution for the 2500 block of Irving Street consistent with DTSC guidance and Supervisor Mar's Resolution unanimously passed by the San Francisco Board of Supervisors on July 12th. This response addresses DTSC questions and information requests from the meeting regarding soil vapor extraction (SVE) remediation and restates our previous concerns regarding data gaps on the north side of Irving Street that were not addressed by the Police Credit Union (PCU), the party responsible for the tetrachloroethene (PCE) contamination on the north side of Irving. The PCU is also the owner of a property on the south side of Irving with known PCE contamination with plans to entitle it and sell it to a developer. We also outline timing and implementation considerations in hopes that DTSC can bring together responsible parties and stakeholders and funding for near-term SVE remediation.

Soil Vapor Extraction (SVE) is the Appropriate Technology for a Real and Comprehensive Cleanup:

- 1. The PCE source area requiring remediation is the soil vapor "bullseye" (2,500 ug/m³) centered beneath Irving Street that is more than 35-times the commercial ESL and 165-times the residential ESL. A sewer investigation would likely yield higher PCE soil vapor levels and potential soil matrix impacts beneath Irving. Based on the historic PCE discharges into the leaking sewers from the two dry cleaners over decades combined with dune sand geology, PCE vapors well above ESLs have diffused radially an estimated 200+ feet in all directions from the "bullseye" into the surrounding residential areas as displayed on Attachment A. Two other likely source areas on each side of Irving are discussed below and require further investigation.
- DTSC's 2010 Guidance identifies SVE and soil excavation as the recommended technologies for remediation of VOCs in the vadose zone. SVE was omitted in the technology evaluation in the TNDC Response Plan and the DTSC failed to consider this guidance in their review of the draft Response Plan.



- 3. The ERS Response Plan Addendum (Attachment B), submitted with MSNA's comments on the draft TNDC Response Plan, shows SVE as the most technically- and cost-effective remedial approach. As indicated on pages 2 and 4, the Addendum was supported by *RMD Environmental Solutions* (RMD) regarding technical feasibility and cost estimate development. RMD supported this effort prior to being retained by DTSC to conduct the soil vapor and IA sampling in the homes but I believe they would be open to conducting SVE remediation if given the opportunity.
- 4. Dan Grasmick, P.E., currently with *Apex Companies*, a 30+ year remediation expert, who independently reviewed the data and subsurface conditions and concluded that SVE remediation is an ideal candidate for this situation and suggested a pilot test to determine radius of influence (ROI), operating parameters and assess potential concerns with short circuiting for the final design. Dan is copied if you would like reach out and speak with him.
- 5. While *Stantec* is not likely to propose active remediation based on the recent data from the Albrite Cleaners site, if you asked their remediation experts about the most applicable active technology for this situation if one was to be implemented, they would likely identify SVE.
- 6. *Environmental Risk Solutions* is currently managing the following SVE projects: (1) horizontal SVE system started in June with SSD system under Water Board oversight, (2) SVE system under construction with DTSC oversight with startup expected in October and (3) HVDPE pilot test work plan approved by the Water Board in late 2021 planned for implementation this fall.
- Multiple experts including RMD, DTSC's own contractor, see SVE as the appropriate remedial alternative for the 2500 block of Irving and all of them recommend starting with field pilot test (2+ wells, short-term, mobile SVE unit) for proof of concept and determining ROI, flow velocity and other operating parameters for full-scale design and implementation.
- 8. DTSC's 2011 Guidance on vapor intrusion states, "A VI mitigation system is implemented to reduce contaminant entry into the building until the subsurface contamination is remediated or no longer poses a significant risk to human health. Remediation and mitigation are complementary components of a volatile chemical response action, addressing cleanup of subsurface contamination and impacts to the human receptor via the VI pathway, respectively. DTSC does not consider a VI mitigation system as a means of remediating the source of the subsurface contamination." This is further supported by the June 2022 Water Board guidance making it clear that VIMS are interim measures to be used after or concurrent with active remediation.

The Police Credit Union (PCU) is Responsible for PCE Impacts North of Irving Street, Owns a PCE Contaminated Property Planned for Development South of Irving and Should Contribute to a Comprehensive Cleanup:

The PCU failed to complete adequate characterization of the 2550 Irving property including: (1)
a source investigation of the former Miracle Cleaners location, (2) lateral delineation of PCE soil
vapor impacts in residential areas that was proposed by their own consultant and (3) vertical
delineation including soil vapor sampling below 15 feet and groundwater sampling beneath and
/ or downgradient of the former Miracle Cleaners location.



- 2. The PCU terminated their Voluntary Cleanup Agreement with DTSC including a letter to DTSC from their public relations firm critical of DTSC oversight, promoting PCU and speculating about former Albrite Cleaners while not recognizing their own data gaps (Attachment C). This letter is understood to have been transmitted around the time PCU completed what MSNA understands was a profitable real estate transaction with TNDC for the 2550 Irving Street property.
- 3. The PCE plume north of Irving is not stable as asserted by DTSC in June as PCE concentrations in vapor probes SVP-30B and SVP-28B have increased in concentration by more than 15-times and 50-times, respectively between August 2020 and March 2022 these increases 150 feet from the uninvestigated former Miracle Cleaner location and confirmed sewer "hot spot" indicate the presence of an ongoing PCE source.
- 4. The ERS letter (Attachment D) with PCE mass calculation and a simple allocation model shows that the PCU is responsible for more than half of the PCE mass on the block the recent Albrite source investigation data will be added but does not significantly change the modeling Albrite was not the "smoking gun" as everyone had hoped and speculated. ERS asserted that the PCU should be issued an ISE Order which is still warranted based on these first four points.
- 5. The DTSC is currently using taxpayer dollars to conduct soil vapor and indoor sampling data that should be conducted by the PCU which is understood to be a \$2 billion organization who "blew off" the DTSC and MSNA after their transaction with TNDC.
- 6. The PCU is still in the neighborhood as owner of their 2525 Irving Street parking lot (aka. Lot 2513) on the south side of Irving and trying to lay low as they work towards entitling and selling this property for a market rate housing development which is likely to propose a VIMS to address the PCE consistent with what DTSC approved across the street.
- 7. The highest PCE soil vapor concentration identified to date is actually a 5-foot sample (SVP-25A at 2,700 ug/m³) located near a storm drain at the center of the PCU parking lot suggesting a release may have occurred on this property. This data point is shown as a "bullseye" on the DTSC contour map presented to the MSNA in June. A local resident reported at a recent MSNA community meeting that they had observed drums stored on this property in recent years.

Next Steps and Timing for SVE Implementation

- As we expressed at the recent meeting, MSNA sees a "window of opportunity" for responsible parties and stakeholders to execute the Resolution which is essentially cleanup before construction with DTSC leadership. DTSC indicated that TNDC may be breaking ground as early as Spring 2024 so the "window" is about 18 months.
- DTSC indicated that revisiting the TNDC Response Plan was a possibility to consider SVE relative to VIMS to be consistent with DTSC guidance and as outlined in the ERS Response Plan Addendum. Based on the Addendum cost estimate prepared by RMD, a comprehensive SVE cleanup on both sides of Irving would be about \$1 million.
- The MSNA understands structures on the 2550 Irving property will be demolished this fall which along with the vacant PCU parking lot are ideal locations for conducting the SVE pilot test.



These vacant properties would provide the most-cost effective implementation approach as SVE piping could be above ground and a single mobile SVE unit could be utilized on both sides of Irving. DTSC's suggestion of SVE remediation after construction with slant drilling, related geotechnical issues, etc. is problematic and likely twice the cost.

- The SVE approach needs to be a coordinated effort to addresses the potential concerns about "moving the plume" or "pulling from another source" which now appear to be of much less concern based on the Albrite data. Pilot testing will determine the ROI which is likely to provide remediation to extend well into adjacent residential areas with SVE wells placed along the edges of the two source properties.
- MSNA and ERS request a meeting with DTSC to review this information and how your leadership can address the goals of all stakeholders including the affected community members with real health and property value concerns to achieve the goal of the Resolution and accomplish DTSC's stated mission, "...to protect the people, communities, and environment of California from harmful chemicals by cleaning up contaminated sites..."

We look forward meeting again soon. Please contact me with any questions at 415-310-0656 or <u>dmoore@cleanfinancials.com</u>.

Sincerely,

Donald W. Moore, PG, ARM Principal

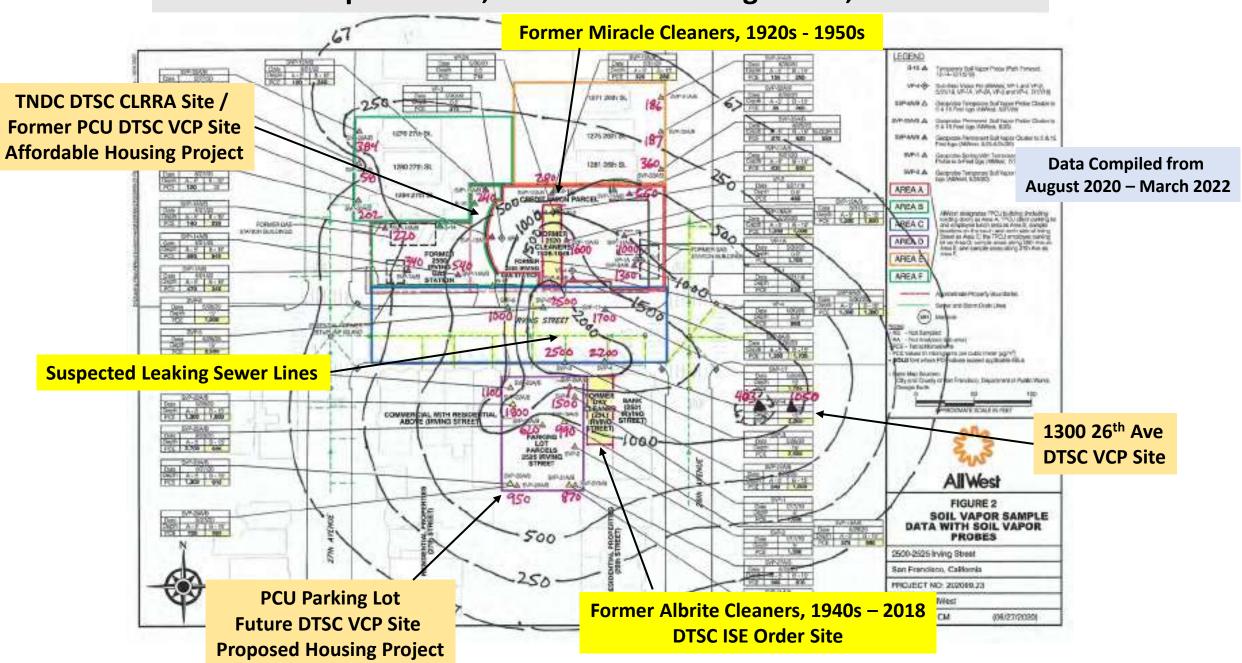
 Cc: Flo Kimmerling, Paul Holzman, Adam Michels, Tom Soper and Katie Bone, MSNA Gordon Mar, District 4 Supervisor
 Li Lovett, Legislative Aide
 Lenny Siegel, Center for Public Environmental Oversight
 Ryan Casey, SFDPH
 Will Hughen, Gabriela Pantoja, SF Planning Department
 Jessica Wolfrom, SF Examiner
 Dan Grasmick, Apex
 Angus McGrath, Stantec

Attachments

- A. PCE Soil Vapor Plume, 12-15 Feet, ERS, May 2022 Update
- B. Draft Response Plan Addendum, ERS, August 3, 2021
- C. PCU Letter to DTSC, January 10, 2022
- D. Data Gaps, Sources, Responsible Parties, Mass Calculations, Liability Allocation and Response to DTSC January 31, 2022 Letter, ERS, March 10, 2022

Attachment A: PCE Soil Vapor Plume, 12-15 Feet, ERS, May 2022 Update

PCE Soil Vapor Plume, 2500 Block of Irving Street, 12-15 Feet



Attachment B: Draft Response Plan Addendum, ERS, August 3, 2021



August 3, 2021

Arthur Machado Engineering Geologist, Project Manager Department of Toxic Substances Control 700 Heinz Avenue Berkeley, CA 94710

RE: DRAFT RESPONSE PLAN ADDENDUM, 2550 IRVING STREET AFFORDABLE HOUSING DEVELOPMENT AND THE POLICE CREDIT UNION DTSC SITES

Dear Arthur:

On behalf of the Mid-Sunset Neighborhood Association (MSNA), Environmental Risk Solutions, Inc. (ERS) evaluated the Path Forward draft Response Plan for the 2550 Irving Street Affordable Housing Development and determined that the alternatives evaluation is flawed as it failed to evaluate the most appropriate remedial technology, soil vapor extraction (SVE) based on site-specific conditions.

- 1. SVE will be highly effective based on the underlying geology consisting of coarse-grained sand with a radius of influence (ROI) expected in the 30- to 50-foot or more range.
- 2. SVE is a proven technology that can be implemented immediately with the existing building in place based on the high expected ROI as reflected on the attached Figure 1. SVE would be most easily implemented after demolition subject to project schedule considerations.
- 3. SVE is one of the two recommended remedial technologies included in DTSC's *Proven Technologies and Remedies Guidance, Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil* (April 2010). The other DTSC recommended technology is soil excavation.
- 4. SVE has a number of benefits over the mitigation-only approach recommended by Path Forward. These include: (1) actual cleanup with mass removal, (2) lower expected remedial cost, (3) enables cleanup to extend into off-site areas, (4) achieves regulatory closure and eliminates or significantly reduces vapor mitigation requirements and (5) reduces or eliminates long-term risk and liability associated with vapor intrusion both on-site and off-site.

ERS believes the addition of SVE is a technically justifiable alternative evaluation. It is unclear why Path Forward did not consider SVE as a potential response action when SVE has been the industry default remedy for VOCs in soils for more than 20 years (*Engineering Issue: Soil Vapor Extraction Technology* (EPA, February 2018)). We also offer an alternative evaluation of soil excavation with the revised rating and opinion that targeted "hotspot" excavation would likely be on the order of \$1 to \$2 million or less based on soil data with no detections above DTSC screening levels. The Path Forward mitigation-only approach misses the most fundamental concept of cleanup which is source removal. ERS presents a revised Table B below from the draft Response Plan for DTSC review and consideration that shows SVE is likely the most appropriate alternative and that soil excavation warrants additional consideration and evaluation.



	Alternative	Effectiveness	Implement- ability	Cost	Overall Rating	Estimated Cost
1.	No Action	0	0	5	5	\$0
2.	Soil Excavation	<mark>5</mark>	<mark>4</mark>	<mark>2</mark>	<mark>11</mark>	<mark>\$1,500,000</mark>
3.	VIMS, LUC and O&M	4	5	<mark>3</mark>	<mark>12</mark>	\$799,000
<mark>4.</mark>	SVE and SMP	<mark>5</mark>	<mark>5</mark>	<mark>4</mark>	<mark>14</mark>	<mark>\$496,000</mark>

Revised Table B – Summary of Response Actions Alternatives Evaluation

Note: yellow highlights are revisions to Path Forward Table B

ERS is well qualified to conduct this evaluation with 30-years of consulting experience and current involvement in more than 20 chlorinated VOC sites under DTSC and Water Board oversight with half of them being former dry cleaners. To verify this evaluation, ERS conferred with a number of industry experts including a human health risk assessment expert and a principal remediation design engineer from RMD Environmental Solutions, Inc. (RMD). RMD's principals each have over 20 years of experience in environmental consulting, including remediation of dry cleaner sites.

To support the response action alternative evaluation, RMD (<u>www.rmdes.net</u>) prepared the attached order of magnitude cost estimate for the design, operation and reporting for an SVE treatment system for 18 months. The SVE system would consist of approximately nine 20-foot SVE wells screened from 10 to 20 feet with both above and below-ground piping conveyed to an existing fenced compound where the SVE treatment unit can be located as shown on the attached Figure 1. Based on the high permeability of the underlying sand deposits, PCE reductions at vapor probes are expected to be observed within a week or two of SVE start up and overall timeframe for cleanup is likely to be less than 18 months. The RMD estimated SVE cost is \$456,000.

ERS and RMD recommend that the SVE approach be coupled with a Soil Management Plan (SMP) to be implemented during redevelopment based on the potential for residual PCE impacted soil in the vicinity of former sewer lines and / or spill "hot spots". Soil data suggest this potential is low but an SMP is appropriate and the estimated cost of SMP preparation, field oversight and small soil disposal contingency is \$40,000.

These estimates support the Revised Table B SVE-SMP cost estimate of \$496,000. ERS recommends that DTSC facilitate discussions with the responsible parties and stakeholders including The Police Credit Union (TPCU), Tenderloin Neighborhood Development Corporation (TNDC), City of San Francisco and MSNA to consider the SVE approach and revisit soil excavation based on the potential benefits for all parties involved and affected. With vapor intrusion risk to nearby homes still under assessment and uncertainty regarding residual source material, the TPCU property should not be conveyed to TNDC until an integrated response plan is put forward that includes source removal and remediation of both on-and off-site areas.



Please contact me with any questions at 415-310-0656 or <u>dmoore@cleanfinancials.com</u>.

Sincerely,

No. 81P

Donald W. Moore, PG, ARM Principal

Cc: Flo Kimmerling, MSNA Paul Holzman, MSNA Gordon Mar, District 4 Supervisor Lenny Siegel, Center for Public Environmental Oversight Kirsten Duey, RMD Ivy Inouye, RMD

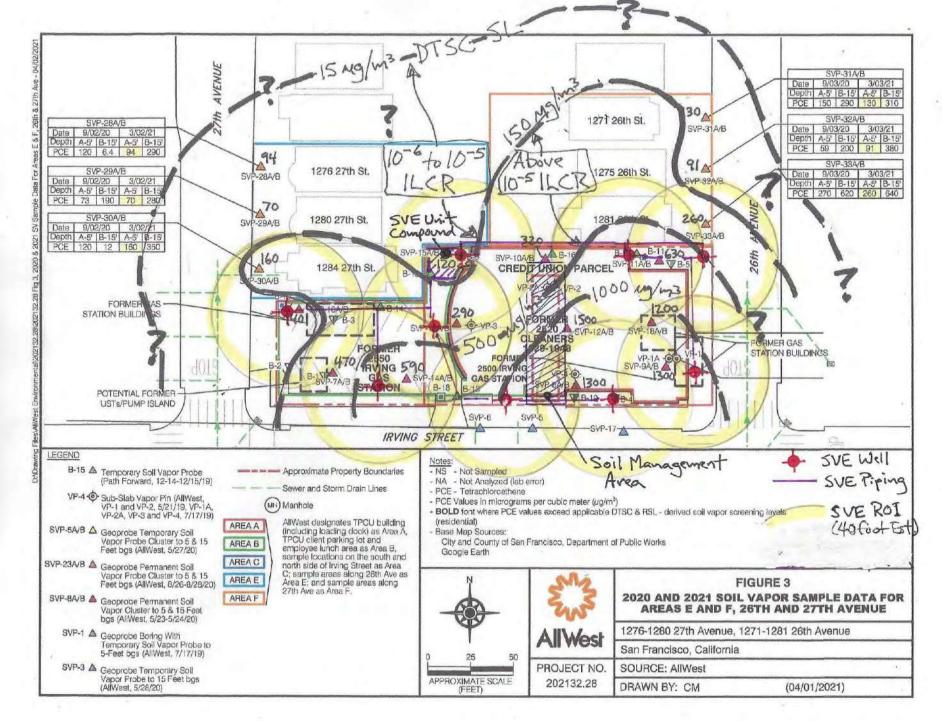
<u>Attachments</u>

- Table 1 SVE Cost Estimate
- Figure 1 Conceptual SVE-SMP Removal Action Workplan

Order of Magnitude Estimate SVE System Install & 18 Month Operation August 2, 2021

Task	Consulting Labor	Expenses		Key Assumptions/Notes
SVE Engineering Design	\$30,000		\$0	No additional data collected needed
SVE Well Install (pre-field & field)	\$10,000	Permit Allowance Utility Locating Subcontractor Drilling Subcontractor/Materials Laboratory Subcontractor (Soil) Misc Field Equipment IDW Allowance	\$3,300 \$1,500 \$16,500 \$1,000 \$1,500 \$2,000	Assumes 3 days drilling
SVE System Installation & Startup	\$20,000	SVE System Rental, 18 Months Permitting Allowance (BAAQMD and City) Construction Contractor/Power Waste Disposal Allowance Misc Field Equipment	\$63,000 \$10,000 \$70,000 \$15,000 \$5,000	Assumes 10 Days Install & Startup
SVE System Installation Report	\$30,000		\$0	
O&M - Weeks 1 & 2	\$14,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$3,500 \$1,060	Assumes daily PID Monitoring 3 samples per week
O&M - Weeks 3 - 26	\$11,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$2,750 \$6,300	Assumes biweekly PID Monitoring 6 samples per month
O&M - Months 7 - 18	\$11,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$2,750 \$5,800	Assumes monthly PID Monitoring 3 samples per month
Power Allowance - 18 months			\$27,000	
Carbon Changeout Allowance			\$20,000	
Data Evaluation/Quarterly Report (6 total)	\$54,000			
Subtotal PM/Misc Technical (10% Total Order of Magnitude Estimate	\$180,000 \$18,000 \$455,960		\$257,960	





Attachment C: PCU Letter to DTSC, January 10, 2022



January 10, 2022

Julie Pettijohn, DTSC Whitney Smith, DTSC Arthur Machado, DTSC Vivek Mathrani, DTSC

Please find attached our Response To Comments (RTC). Our next step will be to complete the final version of 'Offsite Indoor IAQ and Soil Vapor Monitoring Report' originally submitted on November 11, 2021.

The Police Credit Union (TPCU) has always taken the position of doing "what was right" for the health and safety of both its valued employees and its neighbors in the Sunset. To that end, TPCU has spent in excess of \$1.25M to follow the science through multiple tests and investigations. Many of these tests and investigations were completed prior to executing a VCA with the Department of Toxic Substance Control (DTSC). When it was discovered through these scientific investigations, that the highest levels of Vapor Intrusion (VI) were detected in front of 2509 Irving Street and directly to the west of 2509 Irving Street at 2513 Irving Street (vacant lots owned by TPCU), DTSC said to TPCU on "multiple occasions" that the current and former owners of 2509 Irving Street would be viewed as Responsible Parties (RP) and action would be taken through DTSC's Office of Legal Council (OLC) because of these scientific results. For over 18 months TPCU has waited for DTSC's OLC to act. Finally, on or about October 29, 2021 both RP's (Martha Jackson & Liang/Cheong Family Trust) received an IMMINENT AND SUBSTANTIAL DETERMINATION AND ORDER AND REMEDIAL ACTION ORDER. As of this date, January 10, 2022, no scientific testing has been done at 2509 Irving Street. Rather, due to political pressure, DTSC is now moving forward with "retesting" what has been done by TPCU's Team of Environmental Experts versus testing what has been shown by scientific testing to be higher levels of PCE at 2509 Irving Street.

Our experts stand firmly behind the scientific results and are not "hiding" behind a few open windows that are addressed in the RTC. Our Environmental Team remains steadfast that there were NO DEVIATIONS from AllWest's Workplan. To even further demonstrate TPCU's commitment to "doing the right thing", immediately following TPCU's December 20, 2021 meeting with Arthur Machado and Vivek Mathrani to discuss "next steps" at 1271 26th Avenue, I authorized an additional \$70,000 to retest that property. Rather, DTSC took the position that DTSC would be responsible for the "retest" and TPCU could be responsible for "cost recovery" of this testing. It is truly incomprehensible that DTSC is not supporting our experts results. A non-negotiable condition of TPCU voluntarily spending \$175,000 for the IAQ Testing was that a REPRESENTATIVE OF DTSC BE ONSITE AND PRESENT DURING THE IAQ TESTING, SO THERE WOULD BE NO DISPUTE AS TO THE CONDITIONS OR FINDINGS AT A LATER DATE. Yet here we are because DTSC is bowing to public and political pressure.

DTSC has been less than "honest and forthright" with TPCU regarding the agency's intentions. TPCU has "ALWAYS" attempted to do the right thing while DTSC has simply looked for a "funding source" while dragging its feet and NOT DOING what it has been chartered to do: FOLLOW THE SCIENCE AND DETERMINE THE SOURCE OF THE CONTAMINATION. It is truly a shame that the 40,000 Members of The Police Credit Union, who continue to serve and have served the "public interest" have been "USED" by an Agency that is "expected" to serve the Public Interest as well. Your collective lack of diligence regarding "following the science" is a broken promise to those you are intended to serve.

Sincerely,

Jandelma

Lawrence M. Gandelman Vice President – Project Management 415.516.0202 larry.gandelman@porterllc.com

Responses to DTSC's comments as provided in their December 15, 2021 Memorandum re: Offsite Indoor Air Quality and Soil Vapor Monitoring Report for 1271-1281 26th Avenue and 1276-1284 27th Avenue in San Francisco, Part of The Police Credit Union Project, Prepared by AllWest Environmental, are below in blue.

COMMENTS AND RECOMMENDATIONS

GENERAL COMMENTS

1. Section VII. Conclusions and Recommendations: The text states, "Considering the anomalous 1271 26th Avenue PCE and TCE data compared to concentrations documented at the five other addresses, AllWest recommends the property be reinventoried for hazardous materials and additional IAQ sampling be conducted." DTSC agrees with AllWest's recommendation to conduct additional chemical reidentification and indoor air sampling be conducted at the 1271 26th Avenue property. Along with this, DTSC recommends that indoor air sampling also be conducted within the 1276, 1280, 1284 27th Avenue residences and 1281 and 1275 26th Avenue residences to confirm that vapor intrusion does not pose a significant risk to indoor air. DTSC acknowledges that test conditions may represent "typical operating conditions" in that windows were in the operating state used by the residents immediately prior to testing. However, DTSC believes that the data collected does not reflect conditions representing an upper bound scenario for volatile organic compound (VOC) exposure. Collected data do not represent upper bound due to the multiple open airways (e.g., windows) throughout each residence. Also, per Appendix C, Standard Indoor Air Quality Sampling Procedures of the DTSC-approved Offsite Indoor Air Monitoring and Soil Vapor Monitoring Workplan, 1271-1281 26th Avenue and 1276-1284 27th Avenue, San Francisco, California 94122 dated July 16, 2021 prepared by AllWest Environmental (Workplan), the Workplan states "A second IAQ monitoring event will be performed approximately six months from the first event in order to evaluate any seasonal variability in sub-slab vapor conditions as recommended in the DTSC Vapor Intrusion Guidance ... ". DTSC agrees, consistent with DTSC guidance, and the approved Workplan, with AllWest Environmental's statement to conduct an additional indoor air sampling to assess seasonal variability along with DTSC's recommendation to confirm that no significant risk exists to indoor air under an upper bound scenario. DTSC recommends that the additional indoor air sampling take place during the first 2022 semiannual off-Site soil vapor monitoring event. We note that the intent of the work plan was stated within Section IV.B of the Workplan "to operate heating, ventilation, and air conditioning (HVAC) systems normally for the season and time of day." Accordingly, having some windows open during this round of sampling is consistent with the Workplan. We further note that this normal HVACoperation sampling condition is consistent with both the 2011 and 2020 DTSC Vapor Intrusion Guidance. Although the work plan also notes 'Since the buildings will be unoccupied during the sampling period, the windows of the building will be closed', this information was included in the Workplan in anticipation of individual resident preferences to address home security since residents did not remain in the home during



the 24-hour testing period. In summary, the intent of the Workplan was to evaluate typical exposure concentrations at the residences, not to evaluate an upper bound scenario for VOC exposure.

Nonetheless, we evaluated the data in the context of the open windows at these residences. We note that ground floor samples are anticipated to be the most representative of vapor intrusion conditions because the ground floor is closest to the source of the potential subsurface vapors. Accordingly, open windows on the ground floor would be anticipated to have the largest potential impact on vapor intrusion conditions observed. As shown on the attached table, in each of the six residences either zero or one window was open on the ground floor of the building. Moreover, at only one residence was the window open in the same room where the indoor air sample was collected. Further, lower indoor air concentrations did not correlate with the presence of limited open windows. Therefore, the open windows are anticipated to have had a limited effect, if any, on the vapor intrusion conditions observed during this round of sampling and these results are anticipated to be representative estimates of vapor intrusion conditions at these residences.

We plan to revise the report to incorporate this table and discussion in an "Uncertainties" section to document the discussion presented above.

Please also note the AllWest indoor air sampling standard operating procedure in Appendix C is generic, non-site specific, and not intended as a proposed schedule for this particular site.

HERO COMMENTS

1. Deviations from Offsite Indoor Air Monitoring and Soil Vapor Monitoring Workplan should be clearly documented and rationalized in the Report. For example, Section IV.B., the Building Survey Results Tables, and Appendix B document that windows remained open, which is inconsistent with the sampling conditions proposed in Section IV.B. of the final Workplan. The Workplan stated, "Since the buildings will be unoccupied during the sampling period, the windows of the building will be closed," with the intent of sampling indoor air under low ventilation conditions for an upper estimate of vapor intrusion risk. Indoor air samples collected while windows are open do not represent an upper estimate of risk to inform management decisions.

In Section VII. Conclusions and Recommendations, DTSC recommends interpreting the significance of the deviations from the Workplan, including acknowledgement of the deviations and how they potentially impact the indoor air data and conclusions derived from the data.

We do not agree that the presence of open windows represents a deviation from the Workplan. As noted above in response to General Comment 1 the Workplan did not state the purpose of closed windows was to achieve sampling of indoor air under low



ventilation conditions for an upper estimate of vapor intrusion risk. Instead, the intent of stating the windows would remain closed was to capture our presumption of individual resident preferences to ensure home security, since residents did not remain home during the sampling period. Moreover, the Workplan clearly stated the intent of this round of sampling was "to operate heating, ventilation, and air conditioning (HVAC) systems normally for the season and time of day." Nonetheless, as noted above in our response to General Comment 1, the open windows' impact on the data appears to be insignificant.

As described in response to General Comment 1 above, an "Uncertainties" section will be added to the report to further discuss the ventilation conditions.

 Section IV.B. The last two paragraphs of the Section seem to contradict one another and makes it unclear whether the investigation conclusively excludes the contribution of the chemical inventory to PCE detections. HERO is also not clear why the Section states, "...direct HAPSITE[™] screening of other chemicals, did not identify PCE or its breakdown products above background levels" when the Building Survey Results (Tables 1A-1F) indicate otherwise.

These paragraphs in Section IV.B will be revised to further clarify interpretations as to the extent of contribution of the chemical inventory to PCE detections. Analogous revisions will be made to Elevate's report included as Appendix B. Proposed revisions are as follows:

In addition to vapor intrusion, other possible sources of PCE and related chemicals in indoor air include glues, solvents, furnishings, flooring, and other building materials and decor items. The chemical inventories at the residences documented a number of common household and personal cleaning agents, including soaps, laundry and dishwashing detergents, perfumes, nail polishes, latex wall paint, and some items associated with hobbies like wood filler and acrylic paints. Such products that have the potential to contain PCE and other chlorinated solvents were screened using the HAPSITE[™], or their material safety data sheets (SDS) where available were reviewed for chemical content. This product evaluation at the time of investigation did not identify through direct HAPSITE[™] readings of these products any instances where PCE or its breakdown products were significantly above background levels of PCE as measured by ambient air HAPSITE[™] screening, and did not identify PCE or its breakdown products as present on SDSs that were reviewed. Of note, PCE levels in the houses did not appear to be correlated with the presence of these chemicals, and a review of the safety data sheets of selected chemicals, and direct HAPSITETM screening of other chemicals, did not identify PCE or its broakdown products above background levels. Therefore, no chemicals were removed from any residence prior to the deployment of the Summa canisters. A summary of inventoried household chemical products including those potentially



containing hazardous materials or VOCs is presented in Tables 1A through 1F of the Elevate report included in Appendix B.

It is noted that some potentially PCE-containing chemicals observed on-Site could not be screened, and/or their SDSs could not be searched, due to timing limitations during the surveys. Accordingly, such products and their potential to be contributing to indoor air concentrations at 1271 26th Avenue are proposed to be further evaluated as part of additional investigation at this building. Another round of HAPSITETm screening over a full work day is proposed to more comprehensively capture what was in this building's garage, along with subslab sampling.

In addition to vapor intrusion, other possible sources of PCE and related chemicals in indoor air include glues, solvents, furnishings, flooring, and other building materials and decor items. While the building conditions HAPSITETM survey and chemical inventory in general aim to identify likely potential sources, it is possible that other indoor sources of PCE and related chemicals may exist at these residences that were not identified or captured during these surveys are not able to capture all potential sources due to their large number and the variety of undisclosed materials that are used in manufacturing of finishes and furnishings. Further, the lack of identification of specific chemicals on an SDS does not remove the possibility that PCE is present in the product. A summary of inventoried household chemical products potentially containing hazardous materials or VOCs is presented in Tables 1A through 1F of the Elevate report included in Appendix B.

Additionally, Tables 1A-1F will be updated in the revised report to more clearly indicate which HAPSITE[™] readings were ambient (i.e. collected from the breathing zone in the center of a room), and which were directly adjacent to specific products. Those updated tables will support the statement that "...direct HAPSITE[™] screening of other chemicals, did not identify PCE or its breakdown products above background levels measured by ambient air HAPSITE[™] screening."

3. <u>Section VI.C</u>. The "anomalous" TCE soil vapor concentrations found during the second monitoring event should either be verified by the analytical laboratory or by resampling to exclude them from the potential vapor intrusion pathway. The TCE detections should be presented in a Figure to facilitate their interpretation.

The TCE soil vapor results were verified by the analytical laboratory and no TCE was detected in the method blank. Although there is not an obvious explanation for the anomalous detections of TCE during the one soil vapor sampling event in October 2021, given that TCE was not detected in the indoor air at any of the houses on 27th Ave, it does not appear that the TCE, if present in the soil vapor, is migrating into the indoor air. As requested, the TCE in soil vapor will be added to the Figures presented in Appendix B.



- 4. Section VI.D. Location IAQ-13 should be surveyed and resampled to verify if the TCE detection is from laboratory error or an onsite source. The source is unlikely atmospheric since ambient outdoor samples did not have TCE concentrations of similar magnitude. The report will be revised to propose additional investigation of the elevated TCE detection at this location. The additional investigation will propose sub-slab soil vapor sampling for TCE within the garage of the 1271 26th Ave residence. The additional investigation, in addition to the sub-slab soil vapor sampling, will also propose additional investigation using the HAPSITETM to further attempt to identify potential indoor sources of TCE in this area of the residence.
- Section VI.E. The comparison of HAPSITE[™] screening results with the indoor air Summa canister results should reconcile both their respective PCE and TCE results, or otherwise be empirically verified by resampling. The text of this section in the revised report will be replaced with the following:

HAPSITE[™] GC/MS screening results are based on samples collected over a very short (e.g. approximately 30 second) duration and may therefore be considered to be instantaneous data points. HAPSITE[™] results may therefore only be interpreted as representative at the instant of sampling, and may not capture or be representative of long-term air quality conditions. Summa canister results are based on samples collected over a longer sampling duration (i.e. approximately 24 hours for this investigation), and are therefore considered to be representative of actual average concentrations in the air over this period, and more representative of actual exposures.

Given the differences in sampling durations for these two sampling methods, it is unsurprising that the results between the two methods are not entirely consistent with respect to magnitude of detections. This is likely in part due to the fact that potential sources of contamination, including indoor sources, can be transient in nature. Where the PCE concentrations measured using the HAPSITE[™] during this investigation generally followed similar distribution trends as the concentrations detected in the Summa canisters, there were instances where the magnitude of results between the two was different. This is likely a result of the transient nature of volatilization from potential PCE sources. Similarly, where the HAPSITE[™] readings did not detect TCE at 1271 26th Avenue, the Summa canister result at this residence detected elevated concentrations of TCE. This again may be a result of intermittent volatilization from a potential source. Given that the Summa canister results are more representative of actual exposures due to the sampling duration, the HAPSITE[™] screening concentrations were used as a relative guide for placement of Summa canister sample locations within each residence, while the Summa canister concentrations should be used for evaluation and interpretation of indoor air quality.



- Appendix B: The building surveys indicate opportunities for mitigating a potential vapor intrusion pathway by repairing/sealing cracks in foundation slabs. No report revisions appear needed based on this comment.
- <u>General Comment 1</u>: Include, as a new appendix to the Report, the inventory of chemicals documented during the field effort. An inventory of chemicals/products identified at each building will be further clarified in the revised report, either as a separate appendix or within existing tables.
- 8. <u>General Comment 2</u>: Given the significant deviations from the approved Workplan, DTSC requests a cold-weather season resampling event in January or February 2021, as well as the second, warm-weather seasonal event already called for in the Workplan. We do not agree there were significant deviations from the approved Workplan. As noted in our response to DTSC's first comment above, the intent of the Workplan was stated within Section IV.B of the Workplan "to operate heating, ventilation, and air conditioning (HVAC) systems normally for the season and time of day." Accordingly, having some windows open during this round of sampling is consistent with the work plan. Further, as also stated in our response to DTSC's first comment, although there were some open windows at the time of sampling, these conditions do not appear to have had a significant impact on the validity or the ability to evaluate the data. Accordingly, the sampling event that was performed in September and October 2021 appears to be valid as a warm-weather seasonal event. As described above in our response to comment VI.D, the additional proposed sampling will be focused on 1271 26th Avenue.



TPCU 26th and 27th Avenue San Francisco, CA Table 1. Time-Weighted Average Indoor Air Sampling Conditions

Address	Floor	Date	24-hr TWA Sample Number	24-hr TWA PCE result (µg/m ³)	Windows/Doors Open on Floor	Sampling duration that windows were open for
97th Ave	Ground Floor	9/7/2021	IAQ-3	0.228	1	24 hours
1284 27th Ave	Upper Floor	9/7/2021	IAQ-2	0.215	8	24 hours
1281 26th Ave	Ground Floor	9/7/2021	IAQ-5	0.774	1*	24 hours
1281 26th Ave	Upper Floor	9/7/2021	IAQ-4	0.187	0	1
975 76th Ave	Ground Floor	9/9/2021	IAO-8	0.119	1*	24 hours
1275 26th Ave	Upper Floor	9/9/2021	IAQ-6	0.699	1*	24 hours
1271 26th Ave	Ground Floor	9/14/2021	1AQ-13	29.2	0	1
1271 26th Ave	Upper Floor	9/14/2021	IAQ-11	8.89	0	I
1780 27th Ave	Ground Floor	9/30/2021	IAQ-15	0.649	0	1
1280 27th Ave	Upper Floor	9/30/2021	IAQ-14	<0.136	2*	24 hours
1276 27th Ave	Ground Floor	9/30/2021	IAQ-18	0.156	0	1
1276 27th Ave	Upper Floor		IAQ-17	0.513	6*	24 hours

Notes:

1. Residents were not home during sampling. It is assumed that windows remained in the condition (open or closed) observed during the Hapsite survey for the duration of the 24-hr time-weighted average canister sampling.

2. PCE results are reported in micrograms per cubic meter (μg/m3). A less than sign in front of a result indicates that PCE was not

3. The PCE result shown for each floor, in the case of multiple 24-hr time-weighted average samples collected on that floor, is the maximum 24-hr time-weighted average PCE result for that floor. detected above a reporting limit of that value.

4. An asterisk (*) indicates that none of the open window(s) and/or door(s) were in the same room as the IAQ sample.



Attachment D: Data Gaps, Sources, Responsible Parties, Mass Calculations, Liability Allocation and Response to DTSC January 31, 2022 Letter, ERS, March 10, 2022



March 10, 2022

Arthur Machado Engineering Geologist, Project Manager Department of Toxic Substances Control 700 Heinz Avenue Berkeley, CA 94710

RE: DATA GAPS, SOURCES, RESPONSIBLE PARTIES, MASS CALCULATIONS, LIABILITY ALLOCATION AND RESPONSE TO DTSC JANUARY 31, 2022 LETTER TETRACHLOROETHENE CONTAMINATION, 2500 BLOCK OF IRVING STREET, SAN FRANCISCO, CA

Mr. Machado:

On behalf of the Mid-Sunset Neighborhood Association (MSNA), Environmental Risk Solutions, Inc. (ERS) has further evaluated existing data to identify data gaps, sources, responsible parties and conducted mass calculations to support a liability allocation for the tetrachloroethene (PCE) contamination along the 2500 block of Irving Street and adjacent residential areas in San Francisco, California (the Site). This letter also responds to your January 31, 2022 letter regarding the CEQA Notice of Exemption (NOE) issued for the 2550 Irving affordable housing project. The MSNA identifies the Site as the extent of PCE soil vapor and air contamination from three commingled sources including: (1) former Miracle Cleaners, (2) former Albrite Cleaners and (3) sewer lines with the source areas not yet investigated and the extent of the Site not yet delineated to environmental screening levels (ESLs) established by the Department of Toxic Substances Control (DTSC). The currently known extent of the Site at a depth of 15 feet is shown on the attached PCE soil vapor contour map. The attached PCE contour map north of Irving Street at a depth of 5 feet shows a similar form as the 15-foot interval and highlights the vapor intrusion risk with PCE levels beneath homes ranging from 10 to more than 30-times the residential ESL. Based on the commingled nature of the PCE plume(s) – particularly beneath Irving Street – the MSNA views this problem as a single Site that should be addressed with a coordinated approach by the responsible parties under DTSC oversight.

Incomplete Conceptual Site Model and Data Gaps

This evaluation is considered preliminary and subject to future adjustments due to the incomplete conceptual site model (CSM) based on the significant data gaps summarized below. It is critical to address these data gaps to develop a complete CSM identifying all sources including their magnitude, pathways and receptors to guide future decisions for the Site.

 Lateral Extent of PCE Contamination is Not Fully Delineated – the distribution of the commingled PCE soil vapor plume emanating from the three sources is not defined laterally to residential ESL in all directions. The AllWest Environmental (AllWest) Investigation Report dated November 17, 2020 recommended *"additional soil vapor investigation along 26th and 27th Avenues to further define the extent of the PCE plume"* which has not yet been conducted. This data gap does not allow for an adequate assessment of human health risk in the adjacent residential areas and is particularly evident south of Irving Street.



- 2. No Data Collected at Location of Former Miracle Cleaners no soil samples were collected by The Police Credit Union (TPCU) at the location of the former Miracle Cleaners. Based on this, it is not surprising that PCE soil sample results collected from the 2550 Irving property were below the ESL since AllWest, the consultant for TPCU, did not investigate the actual source area shown on their own maps. There is also no soil vapor data at the former Miracle Cleaners location other than one sub-slab sample at the far north end. Soil vapor data collected adjacent this location clearly identifies it as a PCE source area. The lack of data in the former Miracle Cleaners building footprint is contrary to the statement in your March 2nd email to the MSNA asserting that this source has been investigated. Your radial spread "hypothesis" in the same email is just that – a hypothesis unsupported by data. Please advise if we are missing data collected in the footprint of the former Miracle Cleaners building.
- 3. <u>No Data Collected at Former Albrite Cleaners</u> this property, on the DTSC Cortese List and subject of a DTSC Imminent and Substantial Endangerment Order and Remedial Action Order (ISE Order) is the presumed source for the majority of the PCE contamination based on the interpretation of AllWest and apparently DTSC. However, no data has been collected from the former Albrite Cleaners property and the existing data set suggests that the adjacent TPCU parking lot is part of a PCE source area. Based on your February 23rd email to the MSNA we understand a remedial investigation work plan has been prepared for sampling on this property. While we believe this is the appropriate next step to investigate this source area, it further highlights the data gap that the location of former Miracle Cleaners remains uninvestigated.
- 4. <u>No Groundwater Data Collected Downgradient of Former Miracle Cleaners</u> TPCU collected groundwater samples downgradient of the former Albrite Cleaners location but they failed to collect groundwater data below or downgradient of the former Miracle Cleaners location on their own property. The vertical extent of PCE impacts beneath the 2550 Irving property have not been delineated.
- 5. <u>No Sewer Investigation</u> existing data suggests that leaking sewer lines beneath Irving Street acted as a secondary source of PCE releases to the subsurface. The AllWest Investigation Report identified sewer lines as *"potential release pathways."* A sewer inspection and additional sampling beneath Irving Street is needed to confirm damage and assess the relative contribution of this secondary source.

Sources and Responsible Parties

Source No. 1: Former Miracle Cleaners, 2520 Irving Street – based on historic records in the AllWest Environmental Site Assessment (ESA) dated February 8, 2019, Miracle Cleaners operated an estimated 25 to 30+ years from the 1920s into the 1950s and potentially the early 1960s. AllWest maps indicate a 1929 – 1948 period of operation for "Former 2520 Cleaners"; however, a 1928 Sanborn Map shows that a "Cleaning" business was located at 2520 Irving Street at that time. An EDR Historic Cleaner listing shows that Miracle Cleaners was operating at 2520 Irving Street in 1949 and a 1950 Sanborn Map shows the dry cleaning building still present and aerial photos show that the building was still present in 1963. This expands the period of operation from 19 years to potentially more than 30 years. Please advise if there is other historic data that we are missing that supports the operational timeframe indicated by AllWest and DTSC. This period of operation was prior to environmental regulation when waste PCE was typically disposed into sewer drains or sumps.



The AllWest Assessment Report dated July 14, 2020 acknowledges former Miracle Cleaners as a source, concluding, *"the subject property has contributed to the soil vapor plume to an unknown but relatively insignificant extent."* We understand that DTSC recently suggested during a meeting with MSNA members that contamination related to the former Miracle Cleaners may be on the order of 5% of the entire PCE soil vapor plume. The AllWest conclusion clearly attempts to minimize the level of contamination assigned to TPCU and the DTSC contribution estimate is not supported by data or any analysis. With that said, both AllWest and the DTSC have indicated that former Miracle Cleaners is a source of PCE contamination. As shown by mass calculations below, ERS and the MSNA estimate a much more significant contribution from former Miracle Cleaners based on analysis of existing data.

<u>Former Miracle Cleaners Responsible Parties</u> – The Police Credit Union and other prior owners and operators are responsible parties for the PCE discharges from the 2520 Irving Street property, which is part of the 2550 Irving property recently sold by TPCU to the Tenderloin Neighborhood Development Corporation (TNDC). We understand TNDC is protected from liability based on their CLRRA agreement with DTSC; however, based on CERCLA, TPCU is joint and severally liable for the PCE contamination from the former Miracle Cleaners based on their prior ownership of the property regardless of its relative contribution to the commingled plume. The MSNA understands TPCU is a financially viable entity.

<u>Source No. 2: Former Albrite Cleaners, 2511 Irving Street / TPCU Parking Lot, 2525 Irving Street</u> – based on historic records in the AllWest ESA, Albrite Cleaners and its predecessor operated from about 1940 through 2014 with ~40-50 years of dry cleaning activities prior to environmental regulation regarding waste management practices in the 1980s. Elevated PCE soil vapor levels are present adjacent to the former Albrite Cleaners property suggesting it is a likely source; however, as noted above, the property itself has not been investigated which is considered a significant data gap. It should also be noted that the highest PCE soil vapor detection to date is a 5-foot sample in the center of the TPCU parking lot (SVP-25A) at 2,700 ug/m³ suggesting possible near surface releases or dumping on this property.

<u>Former Albrite Cleaners / TPCU Parking Lot Responsible Parties</u> – the DTSC ISE Order names Martha Jackson and Liang / Cheong Family Trust as Respondents to the Order who are understood to be potential responsible parties for the PCE discharges from the 2511 Irving Street property assuming data yet to be collected confirms that the property is a source. Existing data suggests the TPCU parking lot may be a source which would also make TPCU a responsible party for this source area.

<u>Source No. 3: Sewer Lines, 2500 Block of Irving Street</u> – existing data shows that some of the highest levels of PCE soil vapor are centered beneath Irving Street and likely associated with secondary releases from leaking sewer lines. Prior to environmental regulations in the 1980s, waste PCE was typically disposed of via sewer systems and leaking sewer lines are well documented as secondary sources of solvent releases. The highest concentrations of PCE at the 15-foot depth interval are located directly in front of former Miracle Cleaners (2,500 ug/m³), former Albrite Cleaners (2,200 ug/m³) and TPCU parking lot (2,500 ug/m³) near the sewer connection point for these properties and laterals beneath Irving Street. Based on sewers being well known as preferential pathways, sewer-related impacts could extend beyond the 2500 block of Irving Street.

<u>Sewer Line Releases, 2500 Block of Irving Street Responsible Parties</u> – responsible parties include TPCU for PCE discharges from former Miracle Cleaners into the sewer system and Martha Jackson and Liang / Cheong Family Trust for PCE discharges by former Albrite Cleaners. Addressing the sewer investigation data gap will help determine if leaking sewer lines acted as a secondary release mechanism.



Areas of Impact, Mass Calculations and Liability Allocation

The following three areas and supporting assumptions are defined for the purpose of calculating a rough order of magnitude PCE mass and relative liability allocation associated with the three source areas based on existing data from the 15-foot interval.

- 1. North of Irving Street location of former Miracle Cleaners and related PCE impacts
- 2. Irving Street location of apparent damaged sewer lines and commingled PCE impacts
- 3. South of Irving Street location of former Albrite Cleaners and related PCE impacts

Key Assumptions

- PCE concentrations at both former dry cleaner source areas are nearly identical indicating a relatively equal magnitude of impacts from each location. PCE concentrations at the former Miracle Cleaners are 1,700 ug/m³ (adjacent) and 2,500 ug/m³ (at sewer lateral) and at former Albrite Cleaners they are 1,800 ug/m³ (in adjacent TPCU parking lot) and 2,200 ug/m³ and 2,500 ug/m³ (at sewer laterals).
- PCE vapors emanate and diffuse radially away from the dry cleaner source areas both north and south of Irving Street based on the homogeneous and transmissive dune sand deposits.
- PCE vapors beneath Irving Street are commingled and primarily controlled by the preferential pathways from numerous utilities, particularly the sewers. Some migration across the block is likely but based on the relatively equal magnitude of source area impacts, those totals would be relatively equal.
- The primary PCE source area is beneath Irving Street related to secondary discharges from damaged sewer lines and laterals and related utility bedding materials where historic discharges occurred for decades.
- Former Miracle Cleaners discharged into the sewer system for ~25-30 years and former Albrite Cleaners discharged for ~40-50 years.
- Calculations are based on the aerial extent shown by the attached 15-foot PCE soil vapor contour map modeling the 10-foot interval from 10 to 20 feet below ground surface (bgs).

Mass Calculations and Liability Allocation Approach

- > Average soil vapor concentrations (in ug/m³) were calculated for each of the areas of impact
- Each area was measured in square feet and along with the 10-foot interval was converted to cubic meters (m³)
- The product of these values (average concentration and volume) yields total mass in micrograms (ug) for each area
- Converting the relative masses to a percentage provides the following source area allocation, (1) 50.2% north of Irving Street, (2) 29.4% south of Irving Street and (3) 20.4% beneath Irving Street.
- Based on the commingled impacts beneath Irving Street, that 20.4% allocation is further divided based on the relative duration of discharge into the sewer system by the two former dry cleaners.

This evaluation yields the following mass-based allocation to responsible parties.

- 1. Former Miracle Cleaners = 58.1%
 - **RP:** The Police Credit Union
- 2. Former Albrite Cleaners = 41.9%
 - RP: Martha Jackson and Liang / Cheong Family Trust



Modeling parameters, calculations and measurements are provided with the attached table and map. Addressing data gaps and refining assumptions will lead to adjustments in this allocation; however, it will not change the conclusion that former Miracle Cleaners is a significant source of PCE contamination for the Site including the majority of impacts north of Irving Street. Modeling the 0 to 10-foot bgs interval would yield a similar allocation based on the current data set as reflected by the attached PCE soil vapor plume at 5-foot depth north of Irving Street with a similar form as the 15-foot data.

Response to DTSC January 31, 2022 Letter

Thank you for clarifying that the DTSC CEQA NOE was specific to the TNDC Response Plan. However, we disagree that the 2550 Irving Street property is not on the Cortese List. This property is part of a Cortese List site based on DTSC's definition of the former Albrite Cleaners "Site" in the ISE Order and DTSC's apparent interpretation that 95% of the PCE soil vapor plume is associated with former Albrite Cleaners which is a Cortese List site. The ISE Order defines the "Site" as *"the Property and the areal extent of contamination that resulted from activities on the Property (hereinafter, the "Site")*." As indicated by the attached PCE soil vapor contour maps, the entire 2550 Irving Street property is underlain by PCE exceeding ESLs with the primary source areas yet to be investigated.

Based on DTSC's definitions and interpretations, issuance of the CEQA NOE was inappropriate and approval of the TNDC Response Plan should be rescinded based on insufficient investigation and the Cortese listing of "the Site". The MSNA comments on the draft Response Plan provided during the public notice period on August 12, 2021 showed that TNDC's draft Response Plan was technically flawed as it failed to evaluate soil vapor extraction (SVE) which is the most cost effective and technically feasible remedial approach. SVE is a preferred technology for addressing PCE in the vadose zone based on DTSC's own guidance. MSNA's comments were apparently ignored by DTSC as we received no responsive reply. The attached ERS Response Plan Addendum submitted with the MSNA comments shows that SVE with construction-related soil management is the most appropriate response action to address PCE impacts beneath 2550 Irving Street. The ERS Response Plan Addendum also showed that remedial excavation should be reconsidered, particularly if it can be integrated with redevelopment and add value for parking or other considerations.

Summary and Conclusions

The MSNA provides the following summary and conclusions requiring immediate attention by DTSC and responsible parties.

- Significant data gaps need to be addressed including source investigations at both former dry cleaner locations to develop a complete CSM. Decisions about property redevelopment and transfer were made by DTSC, San Francisco Planning Department, TNDC and TPCU without a complete understanding of environmental impacts. The lack of lateral delineation in surrounding residential areas requires further soil vapor and indoor air testing both north and south of Irving Street to assess human health risk related to vapor intrusion.
- TPCU is a responsible party for PCE discharges from former Miracle Cleaners, which are significant as shown by the PCE mass calculations. AllWest's source interpretation has been a moving target in the interest of their client and is unsupported by data. Understanding that TPCU recently terminated its agreement with DTSC prior to addressing regulatory requirements,



the DTSC needs to issue TPCU an ISE Order, just as you did for the former Albrite Cleaners responsible parties. The same conditions and health risk concerns outlined in the ISE Order, constituting an imminent and substantial endangerment to public health, exist on both sides of Irving Street. Under State guidance, they require remedial action.

- 3. Subject to conducting a sewer investigation to address the data gaps associated with potential secondary releases from leaking sewer lines, it can be determined what contribution the municipal sewer systems may have had regarding the extent of the PCE plume. Existing data shows that the highest PCE soil vapor levels are beneath Irving Street in the vicinity of the sewer laterals and main.
- 4. Based on the existing data set and reasonable assumptions, PCE mass calculations and liability assignment show the following allocation for responsible parties: (1) The Police Credit Union (58.1%) and (2) Martha Jackson / Liang-Cheong Family Trust (41.9%). The mass calculations and liability allocation can be adjusted as the data gaps are addressed with further investigation and if other responsible parties are identified.
- 5. DTSC's issuance of the CEQA NOE for TDNC's Response Plan was inappropriate based on the 2550 Irving Street property being part of a Cortese List site based on DTSC's reported interpretation of the source of PCE impacts north of Irving Street and DTSC's definition of the former Albrite Cleaners "Site" in the DTSC ISE Order. The MSNA believes the appropriate action is for the San Francisco Planning Department to conduct a CEQA review for the 2550 Irving affordable housing project which it has the authority to do in parallel with the DTSC and responsible parties addressing data gaps.
- 6. The draft TNDC Response Plan is technically flawed as shown in August 2021 as it failed to consider SVE, which may be the most cost effective and technically feasible remedial action based on subsurface conditions. Implementation of SVE can begin at the 2550 Irving property as soon as a work plan is prepared and approved by DTSC and can be expanded to the south in a phased approach to address the PCE impacts beneath and south of Irving Street. The TNDC Response Plan also failed to properly evaluate the remedial excavation alternative that could be integrated with necessary subsurface redevelopment work and / or provide value-added features such as parking.

The MSNA appreciates DTSC's indication in the January 31, 2022 letter that adding 2550 Irving Street to the Cortese List is under consideration. Based on the PCE mass calculations and liability allocation outlined above this addition is clearly warranted. However, as stated at the outset and reflected by the commingled PCE soil vapor contours, the entire PCE plume should be considered a single Site, added to the Cortese List as such and addressed in a coordinated approach by the responsible parties under DTSC direction and oversight. We look forward to DTSC's leadership to bring responsible parties to the table, address data gaps and oversee a coordinated remedial action to protect the current human receptors in the neighborhood, some who have been exposed to PCE for decades, as well as the future residents of the 2550 Irving Street affordable housing project.



Please contact me with any questions at 415-310-0656 or dmoore@cleanfinancials.com.

Sincerely,

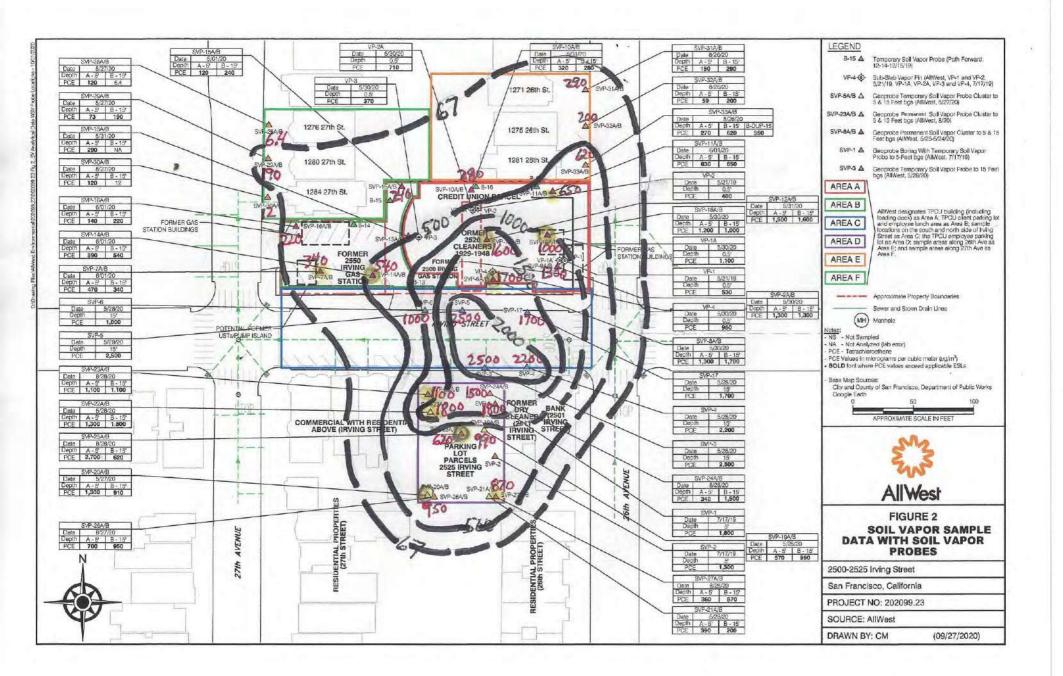


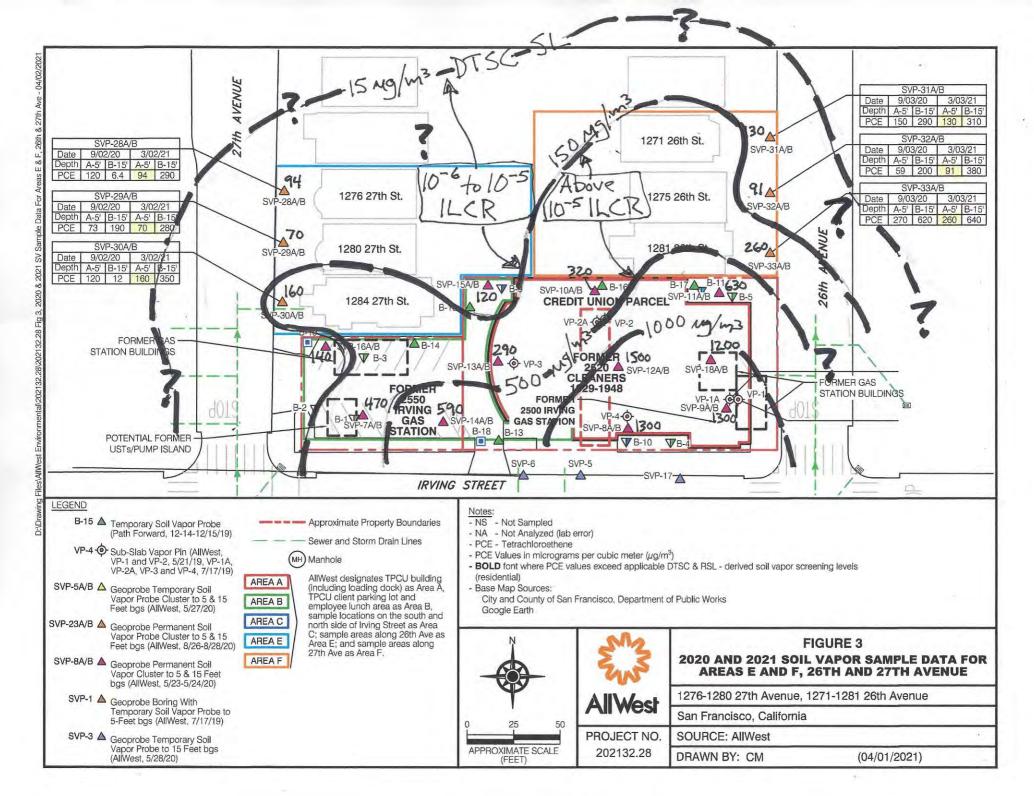
Donald W. Moore, PG, ARM Principal

Cc: Flo Kimmerling, MSNA Paul Holzman, MSNA Tom Soper, MSNA Gordon Mar, District 4 Supervisor Lenny Siegel, Center for Public Environmental Oversight Ryan Casey, SFDPH Tania Sheyner, SF Planning Department Whitney Smith, DTSC Julie Pettijohn, DTSC

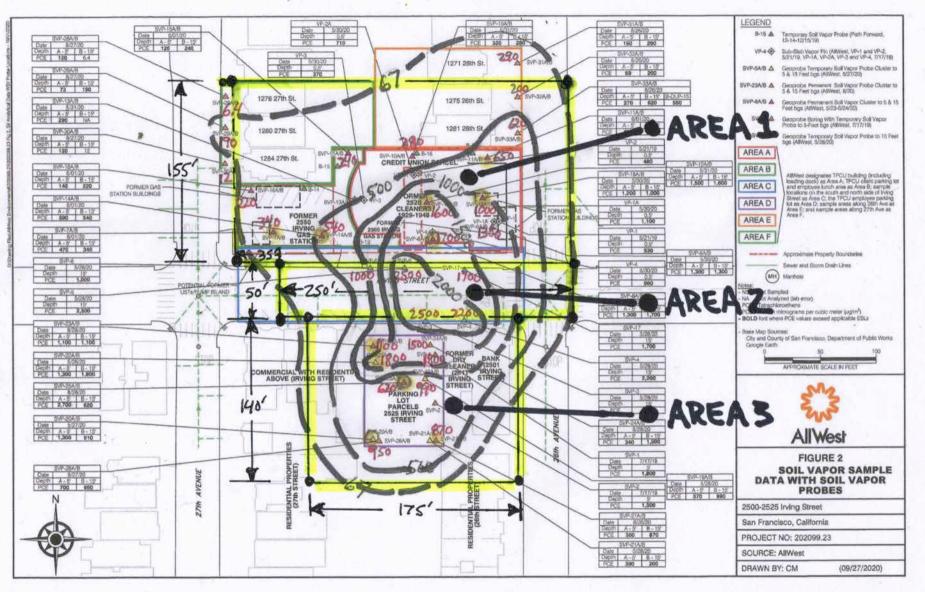
Attachments

- 1. PCE Soil Vapor Contour Map, 15-Foot Interval, ERS, June 2021
- 2. PCE Soil Vapor Contour Map, North of Irving Street, 5-Foot Interval, ERS, June 2021
- 3. PCE Mass Calculations / Liability Allocation Table and Map
- 4. Draft Alternative Response Plan, ERS, August 3, 2021





Areas of Impact for PCE Mass Calculations



1.00

PCE Mass Calculations / Liability Allocation 2500 Block of Irving Street, San Francisco, CA

	Ν	Aodeling Paramete	ers	
Base Map: AllWest,		Ŧ		
Data Set: AllWest, Ju	· · · ·			
PCE Contours: ERS,	•	-		
Interval: 10-20 ft bg				
Assumptions: See El		ted March 10, 202	2	
Area 1 - North of Irvi				
Area 2 - Irving Street	, commingled sewe	r / utility related in	npacts	
Area 3 - South of Irvi	ng, former Albrite C	leaners impacts		
A	verage Concentrati	ion (microgram pe	r cubic meter, ug/m	3)
	C/I ESL	Max	Avg Conc	entration
Area 1	67	1,700		917
Area 2	67	2,500		1,317
Area 3	67	1,800		967
	T	Volume (cubic fee	t)	
	L	W	D	Volume
Area 1	285	155	10	441,750
Area 2	250	50	10	125,000
Area 3	175	140	10	245,000
		olume (cubic mete	-	
	L	W	D	Volume
Area 1	87	47	3	12,519
Area 2	76	15	3	3,542
Area 3	53	43	3	6,943
	D/	lace (micrograme	ugl	
	Avg Conc	lass (micrograms, Volume	Mass	% Total Mass
Area 1	917	12,519	11,479,537	50.2%
Area 2	1,317	3,542	4,665,243	20.4%
Area 3	967	6,943	6,713,841	29.4%
Total	507	0,5+5	22,858,620	23.470
10101	II		22,030,020	
	Area 2 Allocation.	Commingled Sew	er / Utility Impacts	
Miracle	Est. 25 years of dis			7.9%
Albrite	12.5%			
	Est. 40 years of dis	<u> </u>	<u> </u>	
	Allocat	tion / Liability Assi	gnment	
Miracle RP	The Police Credit U	Jnion		58.1%
Albrite RP	Martha Jackson / I	Liang-Cheong Fami	ily Trust	41.9%
				100.0%



August 3, 2021

Arthur Machado Engineering Geologist, Project Manager Department of Toxic Substances Control 700 Heinz Avenue Berkeley, CA 94710

RE: DRAFT RESPONSE PLAN ADDENDUM, 2550 IRVING STREET AFFORDABLE HOUSING DEVELOPMENT AND THE POLICE CREDIT UNION DTSC SITES

Dear Arthur:

On behalf of the Mid-Sunset Neighborhood Association (MSNA), Environmental Risk Solutions, Inc. (ERS) evaluated the Path Forward draft Response Plan for the 2550 Irving Street Affordable Housing Development and determined that the alternatives evaluation is flawed as it failed to evaluate the most appropriate remedial technology, soil vapor extraction (SVE) based on site-specific conditions.

- 1. SVE will be highly effective based on the underlying geology consisting of coarse-grained sand with a radius of influence (ROI) expected in the 30- to 50-foot or more range.
- 2. SVE is a proven technology that can be implemented immediately with the existing building in place based on the high expected ROI as reflected on the attached Figure 1. SVE would be most easily implemented after demolition subject to project schedule considerations.
- 3. SVE is one of the two recommended remedial technologies included in DTSC's *Proven Technologies and Remedies Guidance, Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil* (April 2010). The other DTSC recommended technology is soil excavation.
- 4. SVE has a number of benefits over the mitigation-only approach recommended by Path Forward. These include: (1) actual cleanup with mass removal, (2) lower expected remedial cost, (3) enables cleanup to extend into off-site areas, (4) achieves regulatory closure and eliminates or significantly reduces vapor mitigation requirements and (5) reduces or eliminates long-term risk and liability associated with vapor intrusion both on-site and off-site.

ERS believes the addition of SVE is a technically justifiable alternative evaluation. It is unclear why Path Forward did not consider SVE as a potential response action when SVE has been the industry default remedy for VOCs in soils for more than 20 years (*Engineering Issue: Soil Vapor Extraction Technology* (EPA, February 2018)). We also offer an alternative evaluation of soil excavation with the revised rating and opinion that targeted "hotspot" excavation would likely be on the order of \$1 to \$2 million or less based on soil data with no detections above DTSC screening levels. The Path Forward mitigation-only approach misses the most fundamental concept of cleanup which is source removal. ERS presents a revised Table B below from the draft Response Plan for DTSC review and consideration that shows SVE is likely the most appropriate alternative and that soil excavation warrants additional consideration and evaluation.



	Alternative	Effectiveness	Implement- ability	Cost	Overall Rating	Estimated Cost
1.	No Action	0	0	5	5	\$0
2.	Soil Excavation	<mark>5</mark>	<mark>4</mark>	<mark>2</mark>	<mark>11</mark>	<mark>\$1,500,000</mark>
3.	VIMS, LUC and O&M	4	5	<mark>3</mark>	<mark>12</mark>	\$799,000
<mark>4.</mark>	SVE and SMP	<mark>5</mark>	<mark>5</mark>	<mark>4</mark>	<mark>14</mark>	<mark>\$496,000</mark>

Revised Table B – Summary of Response Actions Alternatives Evaluation

Note: yellow highlights are revisions to Path Forward Table B

ERS is well qualified to conduct this evaluation with 30-years of consulting experience and current involvement in more than 20 chlorinated VOC sites under DTSC and Water Board oversight with half of them being former dry cleaners. To verify this evaluation, ERS conferred with a number of industry experts including a human health risk assessment expert and a principal remediation design engineer from RMD Environmental Solutions, Inc. (RMD). RMD's principals each have over 20 years of experience in environmental consulting, including remediation of dry cleaner sites.

To support the response action alternative evaluation, RMD (<u>www.rmdes.net</u>) prepared the attached order of magnitude cost estimate for the design, operation and reporting for an SVE treatment system for 18 months. The SVE system would consist of approximately nine 20-foot SVE wells screened from 10 to 20 feet with both above and below-ground piping conveyed to an existing fenced compound where the SVE treatment unit can be located as shown on the attached Figure 1. Based on the high permeability of the underlying sand deposits, PCE reductions at vapor probes are expected to be observed within a week or two of SVE start up and overall timeframe for cleanup is likely to be less than 18 months. The RMD estimated SVE cost is \$456,000.

ERS and RMD recommend that the SVE approach be coupled with a Soil Management Plan (SMP) to be implemented during redevelopment based on the potential for residual PCE impacted soil in the vicinity of former sewer lines and / or spill "hot spots". Soil data suggest this potential is low but an SMP is appropriate and the estimated cost of SMP preparation, field oversight and small soil disposal contingency is \$40,000.

These estimates support the Revised Table B SVE-SMP cost estimate of \$496,000. ERS recommends that DTSC facilitate discussions with the responsible parties and stakeholders including The Police Credit Union (TPCU), Tenderloin Neighborhood Development Corporation (TNDC), City of San Francisco and MSNA to consider the SVE approach and revisit soil excavation based on the potential benefits for all parties involved and affected. With vapor intrusion risk to nearby homes still under assessment and uncertainty regarding residual source material, the TPCU property should not be conveyed to TNDC until an integrated response plan is put forward that includes source removal and remediation of both on-and off-site areas.



Please contact me with any questions at 415-310-0656 or <u>dmoore@cleanfinancials.com</u>.

Sincerely,

No. 81P

Donald W. Moore, PG, ARM Principal

Cc: Flo Kimmerling, MSNA Paul Holzman, MSNA Gordon Mar, District 4 Supervisor Lenny Siegel, Center for Public Environmental Oversight Kirsten Duey, RMD Ivy Inouye, RMD

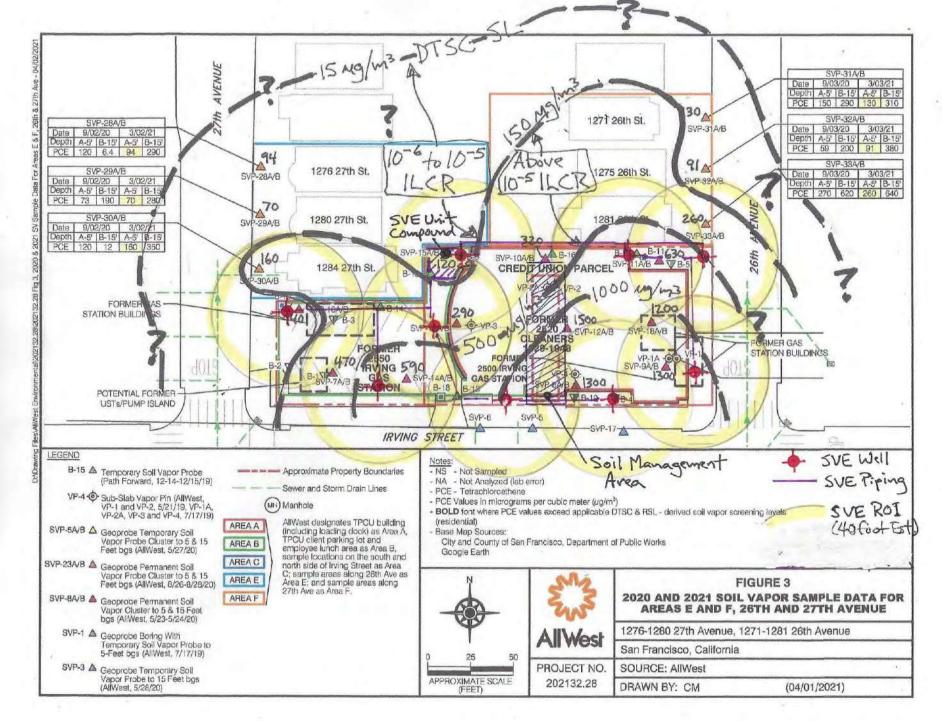
<u>Attachments</u>

- Table 1 SVE Cost Estimate
- Figure 1 Conceptual SVE-SMP Removal Action Workplan

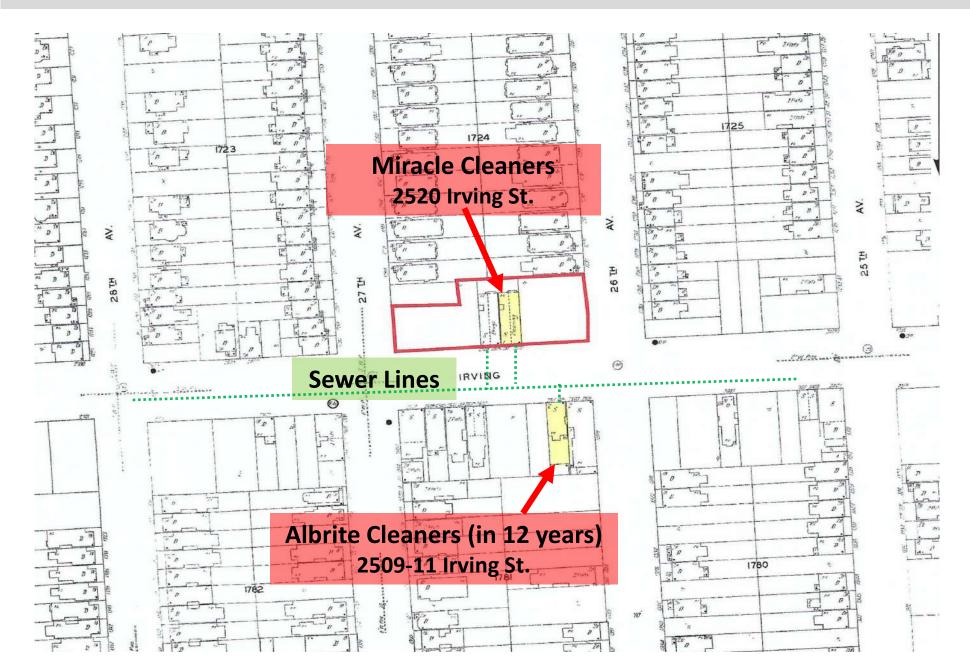
Order of Magnitude Estimate SVE System Install & 18 Month Operation August 2, 2021

Task	Consulting Labor	Expenses	Key Assumptions/Notes		
SVE Engineering Design	\$30,000		\$0	No additional data collected needed	
SVE Well Install (pre-field & field) \$10,000		Permit Allowance Utility Locating Subcontractor Drilling Subcontractor/Materials Laboratory Subcontractor (Soil) Misc Field Equipment IDW Allowance	\$3,300 \$1,500 \$16,500 \$1,000 \$1,500 \$2,000	Assumes 3 days drilling	
SVE System Installation & Startup	\$20,000	SVE System Rental, 18 Months Permitting Allowance (BAAQMD and City) Construction Contractor/Power Waste Disposal Allowance Misc Field Equipment	\$63,000 \$10,000 \$70,000 \$15,000 \$5,000	Assumes 10 Days Install & Startup	
SVE System Installation Report	\$30,000		\$0		
O&M - Weeks 1 & 2	\$14,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$3,500 \$1,060	Assumes daily PID Monitoring 3 samples per week	
M - Weeks 3 - 26 \$11,000 Misc Fie		Misc Field Equipment Laboratory Subcontractor (Soil Vapor)			
O&M - Months 7 - 18	\$11,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$2,750 \$5,800	Assumes monthly PID Monitoring 3 samples per month	
Power Allowance - 18 months			\$27,000		
Carbon Changeout Allowance			\$20,000		
Data Evaluation/Quarterly Report (6 total)	\$54,000				
Subtotal PM/Misc Technical (10% Total Order of Magnitude Estimate	\$180,000 \$18,000 \$455,960		\$257,960		

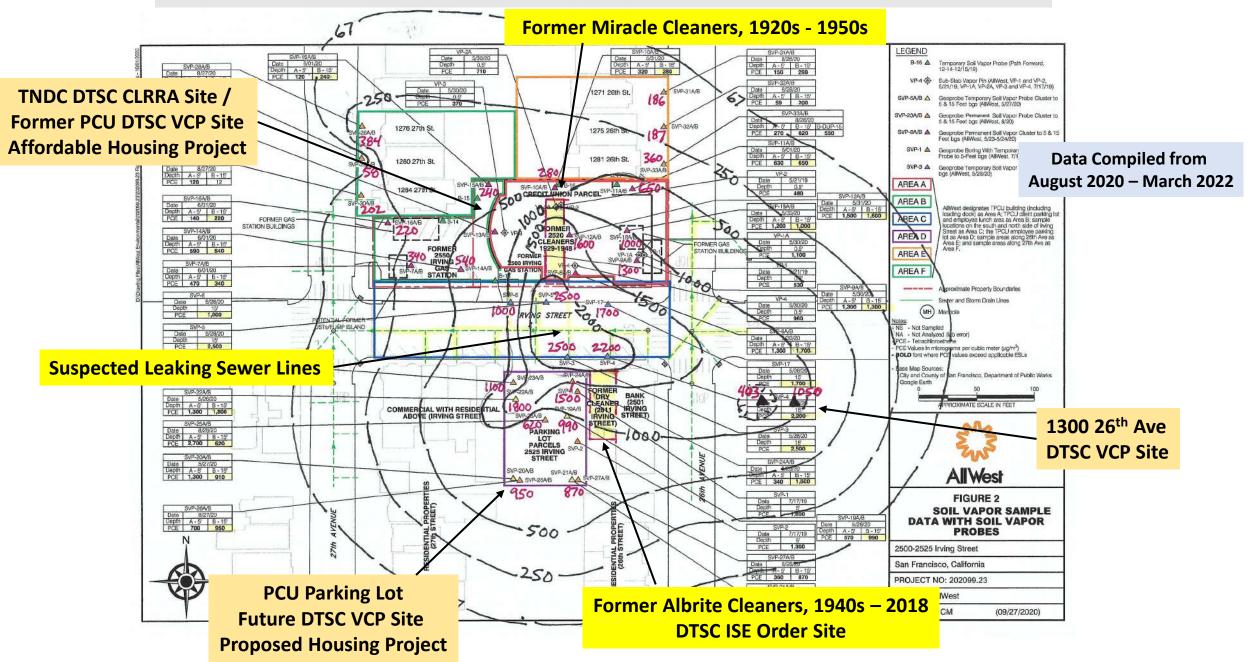




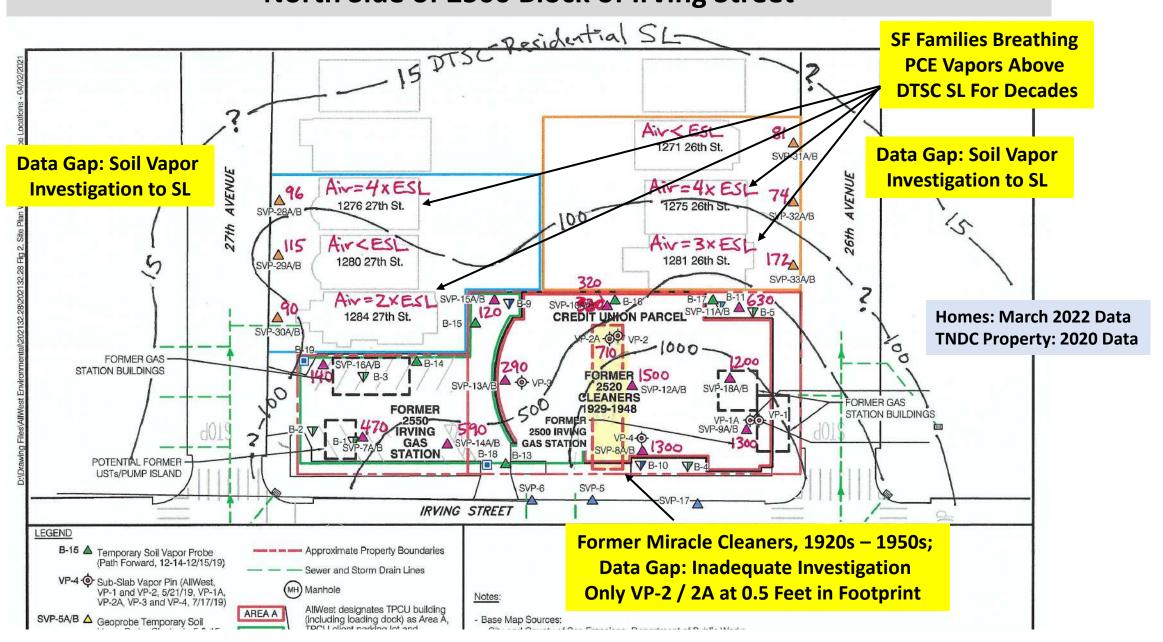
The Neighborhood – 1928 Sanborn Map



PCE Soil Vapor Plume, 2500 Block of Irving Street, 12-15 Feet



PCE Soil Vapor Plume (5 Feet) and Indoor Air Levels North Side of 2500 Block of Irving Street





Former Albrite Cleaners Source Investigation

- Six Sampling Locations within Building Footprint
- Dry Cleaner / Sewer Locations and Lateral Distribution
- Samples at 5- and 15-Feet
- Soil and Soil Vapor Analysis

Contrast with:

Former Miracle Cleaner Source Investigation

- One Sampling Location (VP-2 / 2A) within Building Footprint
- At North Margin of Footprint
- Samples at 0.5-Feet
- Only Soil Vapor Analysis

Conclusions: Stantec has performed an adequate source investigation at Albrite while AllWest never conducted a source investigation at Miracle. **DTSC, TNDC, AllWest and PCU are all speculating** that Miracle is not a significant source. Current data suggests Albrite and Miracle are equal sources.

Flawed TNDC Response Plan: Soil Vapor Extraction (SVE) Not Evaluated

Revised Table B – Summary of Response Actions Alternatives Evaluation **

	Alternative	Effectiveness	Implement- ability	Cost	Overall Rating	Estimated Cost
1.	No Action	0	0	5	5	\$0
2.	Soil Excavation	<mark>5</mark>	<mark>4</mark>	<mark>2</mark>	<mark>11</mark>	<mark>\$1,500,000</mark>
3.	VIMS, LUC and O&M	4	5	<mark>3</mark>	<mark>12</mark>	\$799 <i>,</i> 000
<mark>4.</mark>	SVE and SMP	<mark>5</mark>	<mark>5</mark>	<mark>4</mark>	<mark>14</mark>	<mark>\$496,000</mark>

Note: yellow highlights are revisions to Path Forward Table B

- ✓ SVE is lowest cost alternative estimate is supported by DTSC contractor
- ✓ Highly effective in underlying dune sands reduce PCE levels by 90% in 1 year
- ✓ Expected influence of 50+ feet reach vapors beneath affected homes
- ✓ SVE and Soil Excavation recommended by DTSC based on their 2010 guidance

Summary and Conclusions

- Development decisions were made by DTSC and SF Planning without fully understanding the environmental impacts.
- \checkmark Significant data gaps have not been addressed.
- ✓ TNDC Response Plan is technically flawed as it failed to consider SVE.
- ✓ The entire PCE plume should be managed as a single site under DTSC oversight.
- ✓ DTSC arbitrarily and conveniently suggested an indoor air action level 5-times above their own screening level.

MSNA Conclusion: Why should the community accept any "excess cancer risk" when real cleanup is simple, fast and inexpensive.

BRIEF SUBMITTED BY THE PERMIT HOLDER(S)



CHARLES J. HIGLEY cjhigley@fbm.com D 415.954.4942

February 2, 2023

Via E-Mail

Julie Rosenberg, Executive Director San Francisco Board of Appeals 49 South Van Ness Avenue, Suite 1475 San Francisco, CA 94013 boardofappeals@sfgov.org julie.rosenberg@sfgov.org

> Re: Permit Holder's Brief in Opposition to Appeal Appeal No. 22-092 Hearing Date: February 8, 2023 Permit No. 2022/06/27/7192

Dear Director Rosenberg:

This firm represents 2550 Irving Associates LP ("**TNDC**"), the sponsor of the proposed affordable housing project (the "**Project**") located at 2550 Irving Street in San Francisco (the "**Project Site**"), and the holder of the demolition permit under appeal in this matter (the "**Permit**"). The Project will provide 90 units of affordable housing, as well as a small office space for the newly-formed Sunset Chinese Cultural District. Twenty-two (22) units are dedicated to formerly homeless families referred through the City's Coordinated Entry System, and fifteen (15) units are set aside for veterans referred through Veterans Administration referral list. The remaining fifty-two (52) units are targeted to families earning no more than 60% of area median income (TCAC AMI). The Project represents a top priority for the City in its ongoing efforts to address the affordability crisis and housing shortfall in San Francisco. After years of

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predevelopment activities, TNDC is ready to begin work at the Project Site, starting with the demolition authorized by the Permit.

Appellant Mid-Sunset Neighborhood Association ("**MSNA**") claims that the San Francisco Department of Public Health ("**SFDPH**") erred by notating "NA" as to "whether there are health impacts to demolition." This argument misstates (i) the meaning of SFDPH's notation (ii) SFDPH's role in reviewing demolition permits, and (iii) the extent of SFDPH's review and approval of environmental conditions at the Project Site. SFDPH made the "NA" notation to indicate that its review of the Permit under San Francisco Health Code Article 22B (the Dust Ordinance) *is not applicable because the site is less than 0.5 acres*. SFDPH committed no error; the Permit was properly issued. MSNA's brief also suggests SFDPH and the California Department of Toxic Substances Control ("**DTSC**") have somehow failed to adequately investigate or protect against health risks associated with redevelopment of the Project Site. This is flatly false. As described below, and as described in great detail in the Declaration of David Grunat (attached to this brief as **Exhibit 1**) (the "**Grunat Declaration**"), ¹ both SFDPH and DTSC have acted in accordance with the law, and no additional site assessment is required in order to issue the Permit.

¹ David Grunat is a California licensed Professional Geologist and Certified Hydrogeologist. He is an expert with respect to redevelopment of contaminated properties with a specialty in risk assessment, vapor intrusion assessment, site characterization, remediation, and Federal, California, and San Francisco environmental regulatory requirements. He and his firm, Path Forward Partners Inc., have overseen all aspects of the subsurface environmental conditions related to TNDC's efforts to develop the Project Site. The Grunat Declaration (<u>Exhibit 1</u>) responds to all of the technical concerns MSNA raises with respect to hazardous materials (PCE) in the vicinity of the Project Site.

San Francisco Board of Appeals February 2, 2023 Page 3



The City's lack of housing, and affordable housing in particular, has created an acute crisis in San Francisco and the Bay Area. The City has a legal and moral duty to accelerate construction of projects like the one proposed for 2550 Irving Street. This Board must deny MSNA's appeal and allow TNDC to get back to the very important work of building affordable housing in San Francisco.

Background

TNDC is a San Francisco-based non-profit affordable housing developer with a long successful track record of constructing, owning, and operating affordable housing in the City. TNDC acquired the Project Site through the 2019 Proposition A Acquisition and Predevelopment Notice of Funding Availability (NOFA) issued by the Mayor's Office of Housing and Community Development (MOHCD). San Francisco voters approved Proposition A in an effort to address the City's severe housing affordability crisis. The Project Site exemplifies MOHCD's efforts to invest in the development of housing for low-income families in districts that have been historically underserved by permanent affordable housing production. Of particular importance to the Proposition A NOFA was the requirement that projects funded through the General Obligation Housing Bond exemplify "geographic equity," specifically in serving districts 1, 2, 4, 7, and 8 where affordable and housing development in general has lagged far behind the rest of the City. Following the 2019 Proposition A NOFA award, TNDC worked in close partnership with MOHCD and District 4 Supervisor Mar's office to hold an extensive yearlong community engagement process focused on education, awareness, and input regarding affordable housing and the project. Balancing a wide range of input, zoning and code



requirements, and financial feasibility resulted in a program consisting of 90 units of new affordable housing with ground floor community-serving uses.

MSNA has been actively engaged in organizing opposition to the Project since it first learned of the proposed redevelopment in January 2021. In fact, it has unsuccessfully made many of the same arguments it makes in this appeal in other forums, including in civil court.² As in its brief for this appeal, MSNA has used the discovery of tetrachloroethene (PCE) on the Project Site (and in the neighborhood) to raise alarm about the Project.

A detailed summary of the environmental review and mitigation process for the Project Site is set forth in the Grunat Declaration (Exhibit 1). We encourage the members of the Board to read the Grunat Declaration carefully, as it addresses and clarifies all of the technical arguments MSNA proffers in support of its appeal of the Permit. The incontrovertible conclusion, despite MSNA's opposition in its brief and elsewhere, is that TNDC has exercised due diligence and prudence in its effort to build affordable housing on the Project Site. TNDC has received all of the environmental approvals required for the proposed project, including all approvals related to investigation of soils conditions, response to the presence of environmental contamination, and contingency plans in the unlikely event hazardous materials that have not been detected to date are discovered during construction.

² In December 2021, MSNA filed civil litigation against TNDC, and asserted claims for breach of contract and negligence, relating to TNDC's compliance with a resolution of the San Francisco Board of Supervisors concerning funding for this project. MSNA's allegations focused on the height and scale of the project and the same environmental concerns raised in this appeal. In December 2022, the Superior Court dismissed the MSNA action, without leave to amend, for failure to state a valid legal claim. An appeal of that decision by MSNA is pending.

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SFDPH Made No Error; Permit Was Properly Issued

San Francisco Health Code Article 22B (Dust Control Ordinance) requires projects over 0.5 acres in size that are within 1,000 feet of "sensitive receptors," like residences, schools, hospitals, etc., to submit a site-specific dust control plan for the Director of SFDPH's approval. See Article 22B Section 1242(a) and Section 1242(b). *Because the Project Site is less than 0.5 acres*, TNDC was not required to submit and SFDPH was not required to review a site-specific dust control plan in connection with its demolition permit application.³ SFDPH's "NA" notation on the demolition permit was intended to confirm that SFDPH had no jurisdiction to review the permit under Health Code Article 22B. In fact, Ryan Casey of SFDPH explained to David Grunat that, upon receiving the demolition permit application for review, he requested that the Department of Building Inspection remove SFDPH from the permit routing because its review is not applicable. The Building Department suggested instead that Mr. Casey provide the "NA" notation to indicate that SFDPH's review is in applicable under the circumstances. See December 12, 2022, email from Ryan Casey to David Grunat, attached as **Exhibit 12** to this brief; see also the Grunat Declaration (**Exhibit 1**),paragraph 20.

In its brief, MSNA misstates SFDPH's role in the permit review when it claims that SFDPH made some error by "*notating 'NA' to whether there are health impacts to demolition.*" In making this claim, MSNA is inventing a standard for SFDPH's review of a permit over which it has no jurisdiction. SFDPH's notation has nothing to do with "whether there are health

³ Although the Project is not subject to review under Article 22B, the Site Management Plan (discussed below and attached to this brief as **Exhibit 8**) includes, as a voluntary precautionary measure, a Dust and Volatile Organic Compound (VOC) Control Plan (DCP). The DCP is attached as Appendix C to the SMP, and was reviewed and approved by SFDPH.



impacts" associated with issuance of the Permit – SFDPH reviews demolition permits for projects over 0.5 acres in size for compliance with the Dust Control Ordinance. Because the Project Site is less than 0.5 acres, SFDPH had no legal role in reviewing the Permit that is the subject of this appeal. SFDPH did not err in failing to review the Permit. This should end the Board of Appeal's inquiry into the propriety of the Permit's issuance.

TNDC Has Complied with Environmental Laws

After first confusing the legal issues governing SFDPH's review of demolition permits under the Health Code, MSNA uses the remainder of its brief to sow confusion regarding the legal and factual issues related to PCE contamination in the neighborhood. MSNA claims directly and indirectly that some combination of TNDC, SFDPH, and DTSC have failed to discharge their respective duties in connection with the investigation and characterization of the soils on the Project Site, and mitigation related to the discovery of PCE on the Project Site. The Grunat Declaration explains in detail the process TNDC has undertaken with DTSC to address the PCE contamination at the Project Site, culminating with DTSC's approval of a "Final Response Plan" proposing to install a vapor intrusion mitigation system (VIMS) to ensure the protection of future on-Site residents. See the Grunat Declaration (**Exhibit 1**), paragraphs 6-18; see the approved Final Response Plan and DTSC's letter of approval attached as **Exhibit 6** and **Exhibit 7**, respectively.

Subsequent to DTSC's approval of the Response Plan, SFDPH reviewed TNDC's Maher Ordinance Application and approved a "Site Management Plan" (attached to this brief as **Exhibit 8**). In approving the SMP, SFDPH explained:



"To comply with the provisions of SFHC Article 22A, a Site Management Plan (SMP) was developed and submitted to the EHB-SAM [SFDPH]. The SMP describes recommended measures to mitigate potential risks to the environment, construction workers, and the public associated with exposure to hazardous substances in soil, soil vapor, and groundwater that may be encountered during soil disturbing activities. Mitigative measures described within the SMP include entry/exit restrictions; soil and stockpile management protocols; soil import criteria; dust generation and odor controls; groundwater management; contingency procedures when encountering unexpected conditions; and general worker health and safety procedures. If an unknown environmental condition is encountered during development activities, the EHB-SAM will be notified.

Based on a review of the documents submitted to-date, the Site Management Plan is approved."

See SFDPH letter dated February 2, 2022, attached to this brief as Exhibit 13.

The Appellant MSNA would have you believe (i) the Project Site hasn't been adequately studied, and (ii) SFDPH and DTSC have done too little to address the PCE contamination. In fact, the opposite is true: the site has received an unusual amount of testing and evaluation. Both DTSC and SFDPH have reviewed and approved all investigations and remediation plans required by law. In a letter to MSNA dated April 26, 2022 (attached to this brief as **Exhibit 10**), responding to arguments similar to those MSNA and its consultant continue to make in this appeal, DTSC stated:



"If there were a release of liquid PCE in the subsurface at [the Project Site], it would be highly probable to detect significant concentrations of PCE in soil, soil vapor and/or groundwater, especially given the significant density of samples collected at [the Project Site]. However, the data indicates the contrary: PCE concentrations in site media are not observed at levels consistent with an on-site source of PCE." (emphasis added)

MSNA seeks to confuse matters by claiming that the Project Site is the source of the PCE contamination in the neighborhood, even going so far as to speculate that the former Miracle Cleaners "is the likely source of all the PCE contamination north of Irving Street." Nothing in the record supports this claim. DTSC addresses this allegation directly in the language quoted above. In fact, the likely source of the PCE in the neighborhood is the site of the former Albrite Cleaners, located across the street from the Project Site or another unidentified dry cleaner that may have operated within the neighborhood. See Grunat Declaration (**Exhibit 1**), paragraphs 15-18.

Contrary to MSNA's assertions, TNDC is following best practices for mitigating the presence of PCE on the Project Site. TNDC has complied with state and local law in obtaining approval of a Final Response Plan by DTSC and a Site Mitigation Plan from SFDPH. Further environmental study at this point would serve no purpose other than to add costs and delay the delivery of much-needed housing.

San Francisco Board of Appeals February 2, 2023 Page 9



Affordable Housing is a Top Priority for San Francisco

There is no challenge more pressing in San Francisco than providing additional affordable housing. The Association of Bay Area Governments and the California Housing and Community Development Department have identified the need in San Francisco for an additional 82,000 units of new housing, more than half of which should be affordable to very low-, low-, and moderate-income families over the next eight (8) years. The newly adopted Housing Element, Objective 4.A, identifies the need to "substantially expand the amount of permanently affordable housing." See San Francisco Housing Element (Final Draft dated December 16, 2022), p.46 (attached to this brief as **Exhibit 13**). This may be the understatement of the century. The Housing Element explains that over the past 15 years, San Francisco has only built or preserved 13,320 units. See Housing Element, p. 46. The City must drastically increase production if it has any hope of building over 40,000 units of affordable housing in the next eight (8) years.

As daunting as the Citywide need for affordable housing may be, the need in District 4, where the Project Site is located, is even more urgent. The Planning Department's Housing Balance Report dated April 21, 2022, identifies the balance between new market rate and new affordable housing production in each Supervisorial district. While the "Expanded Citywide Cumulative Housing Balance" for the period between 2011 Q1 – 2021 Q4 was 24.8%, District 4 was at the very bottom as the City's most imbalanced, with a score of -75.5%. The report explains that "negative housing balances result from the large number of units permanently withdrawn from affordability protection relative to the number of total net new units and net affordable units built in those districts." See Housing Balance Report No. 14, pp. 1-2 (attached



to this brief as **Exhibit 14**). As the need for affordable housing in the City has soared, District 4 has effectively been *losing* affordable units.

The Permit under appeal in this case will allow TNDC, after years of planning, to commence construction activities in earnest, and begin making progress toward meeting the overwhelming housing need in District 4. As Mayor's Office of Housing and Community Development Director Eric Shaw and Planning Director Rich Hillis point out in their joint opposition letter to the Board of Appeals (attached to this brief as **Exhibit 2**):

"2550 Irving Street exemplifies the City's efforts to invest in the development of affordable housing in high resource neighborhoods. There is tremendous need for affordable family housing in the Sunset. a scant 26 affordable homes were built or rehabilitated in the District in the past decade. Sunset families have virtually no affordable options in the neighborhood. The location on a commercial corridor, situated near their schools, jobs, transit, Golden Gate Park, stores, etc. will contribute to the vibrancy of the existing neighborhood."

Eric Shaw, Director of the Mayor's Office of Housing, explained in the declaration he provided in connection with MSNA's recent lawsuit against TNDC that a recent survey of neighborhood residents indicated that "housing affordability" is the #1 challenge facing District 4. See Declaration of Eric Shaw (**Exhibit 3**), paragraph 7. After describing the extensive community outreach process TNDC undertook in connection with the Project, and the rigorous review and approval process required to receive an award of public funding for the Project, Mr. Shaw notes that "*Production of new affordable housing units at 2550 Irving is critical to*



eliminating the crushing burden that lack of affordable housing places on both District 4 and the entire City." See Shaw Declaration, paragraph 21.

Anyone who has lived or worked in – or even visited – San Francisco in recent years has a visceral understanding of the dire, pressing need for more affordable housing. The Project is poised to deliver on that need.

Conclusion

TNDC is not asking for any favors or shortcuts. It has taken all appropriate steps to identify and address environmental contamination at the Project Site, and has worked with the regulatory agencies to obtain approval of a project that provides just the sort of protection from environmental risks that MSNA claims to seek. The Appellant's argument that SFDPH erred in failing to properly review the Permit lacks any basis in the law. Its suggestion that, regardless of the law, SFDPH has somehow failed to adequately review or address the PCE contamination issues at the Project is inaccurate and misleading. In light of all of the above, we respectfully request that you reject Appellant's appeal and uphold the valid issuance of the Permit.

Very truly yours,

crat 22

Charles J. Higley

cc: <u>klamont@tndc.org</u> <u>corey.teague@sfgov.org</u> <u>tina.tam@sfgov.org</u> pbholzman@gmail.com geokimm@sbcglobal.net enochwang@fifelawllp.com San Francisco Board of Appeals February 2, 2023 Page 12



Exhibit List

- **Exhibit 1** Declaration of David Grunat, P.G., C.H.G.
- Exhibit 2 Letter from Director Shaw and Director Hillis dated February 2, 2023
- **Exhibit 3** Declaration of Eric Shaw
- Exhibit 4 Site Assessment Plan and Report of Findings (SAP-ROF) dated February 2, 2021

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https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable
documents/5684620738/2550%20Irving%20St%5FSAP%2DROF%5FFINAL%202021%2D
02%2D02%2Epdf
```

- Exhibit 5 DTSC Approval of SAP-ROF dated June 8, 2021
 <u>https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents</u> %2F2261475086%2F2021%20TNDC%20Site%20Assessment%20Plan%20and%20Rep ort%20of%20Findings%20DTSC%20Approval.pdf
- Exhibit 6 Final Response Plan dated September 2, 2021 <u>https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/8461709141/Final%20Response%20Plan%2Epdf</u>
- Exhibit 7 DTSC Approval of Final Response Plan dated September 2, 2021 <u>https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_do</u> <u>cuments/3748320639/2021%20TNDC%20Response%20Plan%20DTSC%20Approval%</u> <u>20Letter%2Epdf</u>
- Exhibit 8 *Site Management Plan* dated November 24, 2021
- Exhibit 9 SFDPH SFHC Article 22A Site Management Plan Approval dated February 2, 2022
- Exhibit 10 DTSC Response to MSNA Letter of March 10, 2022 and Inquiry of April 14, 2022 dated April 26, 2022
 <u>https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents</u> %2F6621212184%2FDTSC%20response%20to%20Email%20from%20Don%20Moore-ERS%20to%20Whit%20Smith-DTSC%20-%20April%202022%20-%20final.pdf
- Exhibit 11 DTSC Albrite Cleaners Cortese Letter dated April 15, 2022 https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents %2F1817852199%2FFormer%20Albrite%20Cleaners%20Cortese%20Response%20Lett er.pdf
- Exhibit 12 Email from Ryan Casey Re: APPEAL FILED NO. 22-092 @ 2550 IRVING STREET dated December 12, 2022
- Exhibit 13 San Francisco Housing Element (2022 Update, Dec. 16, 2022) https://sfhousingelement.org/final-draft-housing-element-2022-update-clean
- Exhibit 14 Housing Balance Report No. 14 -<u>https://sfplanning.org/sites/default/files/documents/reports/HousingBalance14_PC_20210</u> <u>427.pdf</u>

EXHIBIT 1 Declaration of David Grunat, P.G., C.H.G.



DECLARATION OF DAVID GRUNAT, P.G., C.H.G. IN SUPPORT OF TNDC RESPONSE TO APPEAL 22-092

I, David A. Grunat, P.G., C.H.G., declare:

- 1. I am a California licensed Professional Geologist and Certified Hydrogeologist. I am the President and a founder of Path Forward Partners, Inc. (Path Forward) with more than 15 years of environmental consulting experience. I am an expert with respect to redevelopment of contaminated properties with a specialty in risk assessment, vapor intrusion assessment, site characterization, remediation, and Federal, California, and San Francisco environmental regulatory requirements. I have personally overseen the characterization, remediation, and redevelopment of numerous properties where chlorinated solvents are present, including tetrachloroethylene (PCE), at similar or higher levels then those observed at the 2550 Irving Street Property (Project Site).
- 2. I have been the Professional Geologist overseeing all aspects of subsurface environmental conditions related to the acquisition and redevelopment of the Project Site for affordable housing, on behalf of TNDC, since October 2019. This includes overseeing environmental investigations conducted by Path Forward, reviewing environmental investigation results performed by others, preparing environmental reports, and corresponding with regulatory agencies including the California Department of Toxic Substances Control (DTSC) and the San Francisco Department of Public Health (SFDPH).
- 3. I am over 18 years of age and a resident of San Francisco, California. The opinions set forth in this Declaration are based on my professional expertise and personal knowledge of the matters at issue, and if called upon to testify to these matters, I could and would competently do so.
- 4. This Declaration was prepared in consultation with Gregory S. Noblet, P.E., who is a California Licensed Professional Engineer with more than 30 years of civil and environmental engineering experience. Gregory has been the engineer overseeing all aspects of the subsurface environmental conditions related to the acquisition and redevelopment of the Site on behalf of TNDC since October 2019.

SUMMARY OF FACTS AND OPINIONS

5. The following declaration responds to the factual allegations and technical opinions set forth in the brief and declarations submitted by the Appellant, Mid-Sunset Neighborhood Association (MSNA). As set forth in more detail below, the key allegations and opinions presented by MSNA (1) are inconsistent with the extensive environmental data generated at and around the Project Site and (2) contradict the findings of DTSC and SFDPH, which are the regulatory agencies with relevant authority and expertise. Specifically, this declaration documents the following:

- a) The Project Site's environmental conditions, including with respect to PCE, have been fully and adequately characterized, consistent with environmental best practices and to the satisfaction of DTSC and SFDPH.
- b) The potential risks associated with PCE at the Project Site have been fully and adequately mitigated, consistent with environmental best practices and to the satisfaction of DTSC and SFDPH.
- c) DTSC has confirmed that no source of PCE has been identified at the Project Site, and no such PCE source is likely to be present.
- d) The Project Site has received all necessary and appropriate approvals from applicable agencies, including DTSC and the SFDPH.
- e) SFDPH's listing of "NA" in the City's multi-department review of Application for Demolition Permit No. 202206277192 was not made in error, but instead was meant to convey that SFDPH review of the application for compliance with the San Francisco Health Code Article 22B (the Dust Ordinance) was not applicable because the Project Site is less than 0.5 acres.
- f) TNDC's management of subsurface contamination at the Project Site was evaluated by SFDPH and approved as part of the redevelopment process, including demolition, under San Francisco Health Code Article 22A (the Maher Ordinance).
- g) TNDC's Site Management Plan (SMP) for the Project Site was specifically developed to address concerns related to PCE present in the subsurface.
- h) Despite extensive testing and evaluation of site, none of the data collected suggests the Project Site is a source of PCE contamination.
- i) Neither DTSC nor SFDPH have requested any additional investigation of the Project Site. No further investigation is warranted, given the results of the significant investigation work performed to date.

PROJECT SITE CHARACTERIZATION

6. During pre-acquisition due diligence in late 2019, it was discovered that PCE was present at relatively low levels, yet exceeding conservative screening levels in on-Site soil gas. Upon discovery, TNDC entered into a California Land Revitalization and Reuse Act (CLRRA) agreement with the DTSC. The CLRRA agreement was fully executed in February 2021. As part of the CLRRA agreement, TNDC agreed to be responsible for the investigation and selection of a response action, if necessary, to address on-Site



contamination to ensure protection of future on-Site residents, while other identified and yet to be identified parties remained responsible for the continued assessment of contamination located off-Site.

- Following execution of the CLRRA agreement, Path Forward, on behalf of TNDC, prepared and submitted to the DTSC a *Site Assessment Plan and Report of Findings* (SAP-ROF) dated February 2, 2021. The SAP-ROF, included as <u>Exhibit 4</u> to TNDC's response brief, was prepared in accordance with California Health and Safety Code (HSC) Section 25395.94 to document:
 - a) Adequate characterization of the hazardous materials released or threatened to be released at, or from, the Project Site and documentation of the findings;
 - b) Reasonably available information about the Project Site, including, where appropriate, a risk assessment that evaluates the risk posed by any hazardous materials released or threatened to be released at, or from, the Site, and information regarding reasonably anticipated foreseeable uses of the Site based on current and projected land use and zoning designations; and
 - c) If the release has impacted groundwater, reasonable characterization of underlying groundwater, including present and anticipated beneficial uses of that water.
- 8. The SAP-ROF summarized the significant on-Site characterization efforts performed by Path Forward and others. The report further presented a summary of the proposed redevelopment and included a health risk assessment to evaluate the risk to future inhabitants absent a response action. Based on these findings, the report recommended that TNDC prepare a Response Plan to mitigate the presence of PCE in soil gas in coordination with redevelopment of the Site.
- 9. The DTSC approved the SAP-ROF in their June 8, 2021, letter (attached to TNDC's response brief as **Exhibit 5**).¹ In their approval, the DTSC stated:

"The Report was prepared in accordance with California Health and Safety Code (HSC) Section 25395.94, as part of the California Land Use & Revitalization Act Agreement".

This confirms that the Project Site has been adequately characterized to the satisfaction of the DTSC.

¹<u>https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/2261475086/</u> 2021%20TNDC%20Site%20Assessment%20Plan%20and%20Report%20of%20Findings%20DTSC%20Approval%2Epd f.



10. Following the completion of the SAP-ROF, a *Final Response Plan* dated September 2, 2021, was approved proposing the installation of a vapor intrusion mitigation system (VIMS) to ensure the protection of future on-Site residents. A copy of the Final Response Plan is included as <u>Exhibit 6</u> to TNDC's response brief. The DTSC approved the *Response Plan* in their September 2, 2021 letter (attached to TNDC's response brief as <u>Exhibit 7</u>)² stating:

"DTSC hereby determines that proper completion of the Response Plan constitutes "appropriate care" for purposes of subdivision (a) of Section 25395.67 and approves the Response Plan for implementation."

Section 25395.67 defines appropriate care as either of the following:

"(a) The performance of a response action, with respect to hazardous materials found at a site, for which the agency makes the determination specified in paragraph (1) of subdivision (c) of Section 25395.96 and that meets all of the following conditions:

(1) The response action is determined by an agency to be necessary to prevent an unreasonable risk to human health and safety or the environment, as defined in Section 25395.90.

(2) The response action is performed in accordance with a response plan approved by the agency pursuant to Article 6 (commencing with Section 25395.90).

(3) The approved response plan includes a provision for oversight and approval of the completed response action by the agency pursuant to Article 6 (commencing with Section 25395.90).

(b) A determination that no further action is required pursuant to Section 25395.95."

- 11. Since the approval of the *Final Response Plan*, which is the remedy decision document under DTSC oversight, no additional data or information have been collected that changes the conclusion that the proposed remedy would be protective as designed.
- 12. Following approval of the *Final Response Plan*, in SFDPH's review of Path Forward's November 24, 2021 *Site Management Plan* (see below) the SFDPH stated in their February 2, 2022 letter:

"The project at 2550 Irving Street is under the oversight of the California Department of Toxic Substances Control (DTSC), through a California Land Reuse and Revitalization Act (CLRRA) Agreement dated February 1, 2021. In an email dated September 8, 2021, the

²<u>https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/3748320639/</u> 2021%20TNDC%20Response%20Plan%20DTSC%20Approval%20Letter%2Epdf



DTSC notified the EHB-SAM [SFDPH] that they had approved the Final Response Plan for the Site. The EHB-SAM defers environmental cleanup authority to the DTSC, a state agency, and will review all submitted items that are specifically applicable to SFHC Article 22A."

A copy of the Site Management Plan is included as **<u>Exhibit 8</u>** and a copy of SFDPH's letter is included as **<u>Exhibit 9</u>** to TNDC's brief.

NO PRESENCE OF A PCE SOURCE AT THE PROJECT SITE

13. No PCE source area has been identified at the Project Site. In an April 26, 2022 letter (attached to TNDC's response brief as <u>Exhibit 10</u>)³ responding to comments by Don Moore similar to those presented in Exhibit G of the Appellant's Brief, the DTSC stated that based on the extensive investigations performed and the subsurface conditions, if a source was present at the Project Site it would have been discovered; however, a source area has not been identified:

"If there were a release of liquid PCE in the subsurface at [the Project Site], it would be highly probable to detect significant concentrations of PCE in soil, soil vapor and/or groundwater, especially given the significant density of samples collected at [the Project Site]. However, the data indicates the contrary: PCE concentrations in site media are not observed at levels consistent with an on-site source of PCE."

- 14. At a June 23, 2022 public meeting, the DTSC further supported and restated these comments⁴. At an August 25, 2022 public meeting, the DTSC reiterated their position that the discovery of a source area on-Site is highly improbable due to the testing conducted to date and the subsurface geology⁵.
- 15. MSNA asserts in their appeal that the historical use of PCE (tetrachloroethylene) by a former on-Site cleaners business is the source of contamination documented in the neighborhood. However, this assertion is not supported by existing data, as confirmed by the DTSC (see above), and is inconsistent with the historical use of the Project Site and the history of PCE usage by the dry cleaning industry. As shown in the graphic below, the use of PCE in dry cleaning began in the mid-1940s; however, usage was initially limited due to shortages of chlorinated solvents associated with World War II⁶. Widespread use was not common until the mid-1950s⁷.

Grayson, M., eds, Kirk-Othmer Encyclopedia of Chemical Technology, 3rd Ed., Vol. 8, New York, John Wiley & Sons.



³<u>https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/6621212184/</u> DTSC%20response%20to%20Email%20from%20Don%20Moore%2DERS%20to%20Whit%20Smith%2DDTSC%20%2 D%20April%202022%20%2D%20final%2Epdf

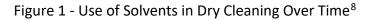
⁴ <u>https://www.youtube.com/watch?v=eyXwCdssBF0</u>

⁵ <u>https://www.youtube.com/watch?v=MxNLcgx1oi0</u>

⁶ Michelsen, E.M. 1957. *Remembering the Years 1907–1957, Silver Spring, MD, National Institute of Drycleaning.*

⁷ Reich, D.A. & Cormany, C.L. 1979. *Dry cleaning*. In: Mark, H.F., Othmer, D.F., Overberger, C.G., Seaborg, G.T. &

Solvent	Time								
	Before 1920	1920	1930	1940"	1950	1960*	1970'	1980	1990"
Camphene Benzene Naphtha Benzene soap Gasoline Stoddard solvent 140 - F solvent ^e Carbon tetrachloride						,			
Trichloroethylene Tetrachloroethylene 1,1,1-Trichloroethane' Chlorofluorocarbons' Dyeing operations'									



- 16. As noted in Path Forward's June 15, 2022 *Phase I Environmental Site Assessment*, a cleaners on the Project Site was suspected to have been present from the 1920s to the 1940s. Based on the short duration of time that the cleaners business may have been operational on-Site during the PCE-era, the fact that PCE use across the industry during that time period was relatively insignificant, and that a source of PCE has not been identified on-Site it is unlikely that PCE was ever used on-Site or was ever released from the Site, and instead the presence of PCE beneath the subject Site is more likely attributable to other businesses that operated in the neighborhood, such as the former Albrite Cleaners that operated from the 1940s to the 2010s where the use of PCE is well documented.
- 17. According to a DTSC Letter to MSNA consultant Don Moore dated April 15, 2022 (attached to TNDC's response brief as <u>Exhibit 11</u>)⁹, the former Albrite Cleaners (which was not located on the Project Site) was issued a Priority Tier Two Imminent and Substantial Endangerment Order on October 29, 2021, solely due to the unresponsiveness of the property owner after its submission of application for voluntary cleanup oversight, which automatically triggered listing on the Cortese List. According to the California Health and Safety Code Section 25356:

"Priority tier two' shall include any site that poses a substantial but less immediate threat to public health or safety or the environment and any site that will require a

⁹https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F1817852199%2FFor mer%20Albrite%20Cleaners%20Cortese%20Response%20Letter.pdf



⁸ IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. 1995. Dry Cleaning, Some Chlorinated Solvents and Other Industrial Chemicals.

response action, but presents only a limited and defined threat to human health or safety or the environment."

18. The DTSC further stated in their letter regarding the former Albrite Cleaners:

"The Cortese listing status does not change the priority status, scope of work, or any other aspects related to DTSC oversight for the Former Albrite Cleaners Site."

SFDPH REVIEW

19. On April 22, 2021, Path Forward, on behalf of TNDC, submitted a Maher Ordinance Application to the SFDPH for the proposed redevelopment of the Project Site. This application covered all aspects of redevelopment from demolition to construction of the new building. Following submission of the Maher Ordinance Application, the SFDPH requested a Site Management Plan (SMP) be prepared, to include provisions required by San Francisco Health Code Article 22A and San Francisco Building Code Section 106.3.2.4 which were not included within the DTSC-approved *Final Response Plan.* Path Forward prepared a SMP dated November 24, 2021. A copy of the SMP is included as <u>Exhibit 8</u> to TNDC's response brief. The SFDPH approved the SMP in their February 2, 2022 letter¹⁰ stating:

"To comply with the provisions of SFHC Article 22A, a Site Management Plan (SMP) was developed and submitted to the EHB-SAM [SFDPH]. The SMP describes recommended measures to mitigate potential risks to the environment, construction workers, and the public associated with exposure to hazardous substances in soil, soil vapor, and groundwater that may be encountered during soil disturbing activities. Mitigative measures described within the SMP include entry/exit restrictions; soil and stockpile management protocols; soil import criteria; dust generation and odor controls; groundwater management; contingency procedures when encountering unexpected conditions; and general worker health and safety procedures. If an unknown environmental condition is encountered during development activities, the EHB-SAM will be notified.

Based on a review of the documents submitted to-date, the Site Management Plan is approved."

20. Following receipt of MSNA's Appeal, and in reference to the Appeal's assertion that SFDPH notated the demolition permit with "NA" in error, Path Forward contacted Ryan Casey of SFDPH to clarify the agency's intent in the use of NA and to confirm that SFDPH had reviewed and confirmed the documents required under Article 22A for the Project Site redevelopment are complete and remain in compliance with Article 22A. On December 12, 2022, a teleconference was held with Path Forward, Ryan Casey, and his



¹⁰ A copy of this letter is included as **Exhibit 13** to TNDC's response brief.

supervisor, Beronica Slattengren, regarding the status of the project. In that discussion, Casey explained that SFDPH had reviewed the project for potential health concerns in connection with Article 22A, as documented in their February 2, 2022 SMP approval letter. He further stated that SFDPH separately reviews demolition permits for compliance with Article 22B (the Dust Ordinance), but because the Project Site is less than 0.5 acres, Article 22B statutorily does not apply to the Site. Casey stated that, upon receipt of the permit application, he contacted the San Francisco Department of Building Inspection (SFDBI) to remove SFDPH review from the routing; however, SFDBI recommended that SFDPH list "NA" instead of removing SFDPH from routing. Following the December 12 teleconference, this discussion was documented in an email dated the same day.¹¹ Notably, the SFDPH stated in this email:

"The proposed project is in compliance with SFHC Article 22A"

SITE MANAGEMENT PLAN

- 21. While the Response Plan was prepared to develop response actions to protect future inhabitants of the proposed development, the objective of the SMP was to present a decision framework and risk management measures for managing known and unexpected environmental conditions in soil and groundwater before and during Project Site redevelopment in a manner protective of human health, in accordance with applicable regulatory requirements, and in consideration of the existing and proposed future land uses. Specifically, the SMP discusses the presence of PCE in the subsurface and includes provisions to protect on-Site workers as well as off-Site populations.
- 22. As an example, while the concentrations of PCE in soil gas observed at the property are several orders of magnitude lower than would be considered a concern to outdoor air, the SMP includes provisions for dust and volatile organic compound monitoring during redevelopment, including demolition, to ensure protection of off-Site persons during construction. See SMP **Exhibit 8**, at Appendix C.

ADDITIONAL CHARACTERIZATION

- 23. As previously discussed, the Site has been adequately characterized to the satisfaction of the DTSC as documented in the approval of the SAP-ROF, and no on-Site sources have been identified or are suspected. Further on-Site characterization is not warranted.
- 24. The description provided by MSNA entitled "Protocol for soil and soil vapor collection and investigation during demolition" represents Project Site characterization work that has already been performed to the satisfaction of the DTSC. Based on the significant investigation work performed to date, it is highly unlikely that collection of additional samples would result in new information that would change the understanding of the



¹¹ A copy of this email is included as **<u>Exhibit 12</u>** to TNDC's response brief.

Declaration of David Grunat in Support of TNDC Response to Appeal 22-092 2550 Irving Street Property

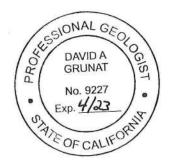
February 2, 2023 Page 9 of 9

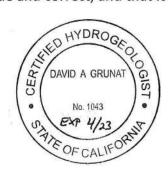
Project Site's environmental condition or the proposed redevelopment approach, would only further delay the affordable housing that will be constructed on the Project site, and force TNDC and the public to incur significant additional costs with no additional benefit.

- 25. Redevelopment of the Project Site will occur under the SFDPH-approved SMP which contains industry best practices to be implemented during demolition and redevelopment, including provisions for fenceline monitoring of dust and VOCs and to address the potential discovery of previously unexpected soil contamination or subsurface structures.
 - a) During earthwork, airborne dust and total VOC concentrations will be monitored at the Project Site fenceline. Monitoring results will be compared to pre-established action levels that are conservatively protective of off-Site persons. If Site-related monitoring results exceed action levels, then appropriate additional dust and VOC control measures would be implemented to reduce emissions.
 - b) In the unlikely event that suspect soils or structures are encountered during earthwork, work would be halted, and the area would be evaluated by an Environmental Professional. If soils are identified by the Environmental Professional as unsuitable for use on the property, DTSC and SFDPH would be notified, and the soils would be removed from the Project Site and disposed of at an appropriate facility. Additionally, if subsurface structures are encountered that may contain contamination, the DTSC and SFDPH would be notified, and the structures would be assessed and removed following provisions in the SMP.

This is the typical approach for this type of redevelopment project, and the proposed approach was approved by the SFDPH in their February 2, 2022 letter (<u>Exhibit</u>9) as part of the San Francisco Health Code Article 22A compliance.

I hereby declare under penalty of perjury under the laws of the State of California that this Declaration is true and correct, and that it was executed on February <u>2</u>, 2023, in Oakland, California.





David A. Grunat, P.G., C.H.G.



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EXHIBIT 2

Letter from Director Shaw and Director Hillis dated February 2, 2023

Mayor's Office of Housing and Community Development City and County of San Francisco



London N. Breed Mayor

> Eric D. Shaw Director

February 1, 2023

San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 via email to: <u>boardofappeals@sfgov.org</u>

Dear President Swig, Vice President Lopez, and Commissioners,

We write regarding Appeal Number 22-092, which seeks to overturn the issuance of Demolition Permit Number 202206277192 for the project located at 2550 Irving. The developer has been closely working with the California Department of Toxic Substances Control (DTSC) to implement the DTSC-approved Response Plan at the site and has complied with all DTSC and San Francisco Department of Public Health (SF DPH) requirements. Demolition of the existing building and infrastructure work is on the critical path to bring this project to construction start. This project is in direct alignment with the affordable housing goals of the City of San Francisco. Our Departments support the project and respectfully request that you reject the appeal.

The Tenderloin Neighborhood Development Corporation (TNDC) was selected through a competitive process to develop this property. MOHCD has partnered with TNDC on numerous affordable housing developments. They are a well-established and experienced developer, managing more than 3,600 affordable units throughout the city, with another 250 units under construction and over 1,000 units in predevelopment, totaling around 5,000 units. We trust TNDC's expertise and diligence in working with communities, meeting all regulatory requirements, and producing outstanding housing opportunities.

2550 Irving is an important step in implementing the City's housing goals. As approved by the Board of Supervisors and signed by the Mayor on January 31, 2023, the General Plan's Housing Element is a housing policy roadmap for the remainder of this decade. The Housing Element centers on racial and social equity and includes policies and programs that express a collective vision and values for the future of housing in San Francisco. The Housing Element identifies our housing needs and how we will work to address them. It defines priorities for decision making and resource allocation for housing programs, development, and services.

Goal 3 of the Element is to "Foster racially and socially inclusive neighborhoods though equitable distribution of investment and growth." Supervisorial District 4 is a high-resource neighborhood, one whose characteristics have been shown by research to support positive economic, educational,

and health outcomes for low-income families— particularly long-term outcomes for children. This goal requires the City to open wealthy and well-resourced neighborhoods such as the Sunset to all housing such as that proposed at 2550 Irving Street.

The severe shortage of affordable housing in San Francisco, including in Supervisorial District 4, has been widely documented. And the need is significant: in 2020 alone, 4,500 District 4 households applied for affordable housing via the City's DAHLIA housing portal.

The project at 2550 Irving Street exemplifies the City's efforts to invest in the development of affordable housing in high resource neighborhoods. There is tremendous need for affordable family housing in the Sunset; a scant 26 affordable homes were built or rehabilitated in the District in the past decade. The project's location on a commercial corridor, situated near schools, jobs, transit, Golden Gate Park, stores, etc. will contribute to the vibrancy of the existing neighborhood.

We have attached a Declaration of Eric Shaw in support of Defendant TNDC's Opposition to Plaintiff Mid-Sunset Neighborhood Association's Inc.'s Motion for Preliminary Injunction which documents the extensive community outreach conducted and the need for affordable housing in District 4. The affordable housing project at 2550 Irving exemplifies the type of affordable housing needed to meet the City's ambitious goals as laid out in the Housing Element. Your decision to deny the appeal and uphold the project will enable the construction of well-designed, thoroughly vetted, critically important affordable homes for future generations of San Franciscans.

Sincerely,

Rich Hillis Director San Francisco Planning Department

Eric D. Shaw Director Mayor's Office of Housing and Community Development

Attachment: Superior Court of the State of California County of San Francisco Case No. CGC-21-596994 Declaration of Eric Shaw in Support of Defendant Tenderloin Neighborhood Development Corporation's Opposition to Plaintiff Mid-Sunset Neighborhood Association Inc.'s Motion for Preliminary Injunction filed December 7, 2021

Copy: Maurilio Leon, Executive Director, Tenderloin Neighborhood Development Corporation Supervisor Joel Engardio, District 4

EXHIBIT 3 Declaration of Eric Shaw

1 2 3 4 5 6	235 Montgomery Street, 17th Floor		
7	CORPORATION		
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9			
10	SUPERIOR COURT OF THE STATE OF CALIFORNIA COUNTY OF SAN FRANCISCO		LIFORNIA
11			
12			
13	MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC.,	Case No. CGC-2	21-596994
14	Plaintiff,	DECLARATIO SUPPORT OF	N OF ERIC SHAW IN DEFENDANT
15	vs.	TENDERLOIN	NEIGHBORHOOD NT CORPORATION'S
16	TENDERLOIN NEIGHBORHOOD		TO PLAINTIFF MID-
17	DEVELOPMENT CORPORATION, and DOES 1 through 50, inclusive,	ASSOCIATION	N INC.'S MOTION FOR Y INJUNCTION
- 18	Defendants.	Hearing Date:	January 7, 2022
19		Time: Dept.:	9:30 am 501
20		Dopt	501
21		Action Filed:	December 7, 2021
22			
23	 I am over 18 years of age and a resident of the State of California. I have personal knowledge of the matters set forth herein and, if called upon to testify to these matters, I could and would competently do so. 		
24			
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27			
28 of Housing and Community Development at the City and County of Sa			f San Francisco ("MOHCD"). 41265/14520230.1
235 Minu(gumery Street, 17* First Sim Francesco, Califierty 94 (04 (415) 954-4400	DECLARATION OF ERIC SHAW ISO DEFENDANT'S OPPOSITION TO PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION - Case No. CGC-21-596994		

As Director I am responsible for developing, coordinating and implementing the City's affordable
 housing strategies and programs and for delivering vital services to support needy San
 Franciscans.

3. The mission of MOHCD is to coordinate the City and County of San Francisco's
("City") housing policy, to provide financing for the development, rehabilitation, and purchase of
affordable housing in San Francisco, and to strengthen the social, physical, and economic
infrastructure of San Francisco's low-income neighborhoods and communities in need.

4. The City is in the midst of a housing affordability crisis unprecedented in our
history. Increases in housing prices and displacement pressures have been a long-term trend,
driven by policy decisions first established decades ago and amplified by regional and national
economic trends. Over the last eight (8) years, the housing crisis has intensified as the San
Francisco Bay Area region's high-wage employment base has grown while local and regional
housing production has not kept pace, and these trends have been exacerbated by COVID-19.

14 5. The severe shortage of affordable housing in the City, including Supervisorial District 4 of the City ("District 4"), has been widely documented. Rents in the City have increased 15 16 up to 40% in District 4, and the median house sales price in 2019 was \$1,500,000, which is a 17 105% increase since 2012. A report in 2013 by the Board of Supervisors of the City and County of San Francisco ("Board of Supervisors") estimated, at the time, that approximately 40% of District 18 19 4 residents were "rent burdened," which means such residents were paying more than 50% of their income for housing costs such as rent. In 2020, 4,500 District 4 households applied for affordable 20 21 housing via the City's DAHLIA housing portal. Of these, 35 households found affordable 22 housing, all outside of District 4.

6. The City Planning Department is required by City Ordinance to submit the San
Francisco Housing Balance Report (the "Report") semi-annually to the Planning Commission.
One of the stated purposes of the Report is to ensure that data on meeting affordable housing
targets within neighborhoods informs the approval process for new housing development. The
Report enables the City to monitor the balance between new market rate housing and new
affordable housing production. In the decade of 2011-2020, District 4 experienced a net loss of
<u>11265\14520230.1</u>

390 affordable and rent-protected housing units, according to the April 2021 Report. According to
 the April 2021 Report, District 4 is experiencing the greatest impact of housing loss and lack of
 affordable housing, with a score of -73.9%. This means that the net loss of affordable and rent protected housing units was the greatest in District 4 of all San Francisco's 11 supervisorial
 districts when represented as a percentage of the total number of net new housing units in the
 District.

7 7. From April 2020 to January 2021, the City canvassed residents' needs and
8 documented the findings in the Sunset Forward Needs Assessment, which will serve as the
9 foundation for future community planning efforts in District 4. Within District 4, the Sunset
10 Forward Needs Assessment identified housing affordability as the #1 challenge facing District 4.

Per the Point in Time Count Survey conducted on January 24, 2019 (the "Survey"), 11 8. there were 8,035 people experiencing homelessness in the City, which is a 17% increase over the 12 Point-in-Time Count Survey conducted in 2017. A six-year trend of comparable Point-in-Time 13 Count survey data identified a 15% increase in the number of persons experiencing homelessness 14 15 in the City between 2013 and 2019. The total number of unsheltered persons counted was 5,180. Of the 2,855 individuals included in the shelter count, 84% (2,412 people) were in emergency 16 17 shelter programs while 16% (443 persons) were residing in transitional housing and safe haven programs on the night of the count. Persons in families with children, including minor children, 18 represented eight percent (8%) of the total population counted in the Survey, while 92% were 19 individuals without children. In total, 5% of those counted in the Survey were under the age of 18, 2021 14% were between the ages of 18-24, and 81% were over the age of 25.

9. When asked about their racial identity during the Survey, greater differences
between those experiencing homelessness and the general population emerged. A much higher
proportion of survey respondents in the Survey identified as Black or African-American (37%
compared to 6% in general population), and a lower percentage identified as Asian (5% compared
to 34% in general population). The majority of Survey respondents identified as either Black or
African American (37%), White (29%), or Multi-racial (22%).

Facella Braun + Mariel (18 235 Manigensery Street, 17^a Fleu San Francisco, Caldioran 943(14 (415) 954-6401)

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10. Many United States military veterans have slipped into poverty and are at risk of 3 41265/14520230.1 homelessness when either affordable housing or employment is not available. According to the
 California Research Bureau, the City has the sixth highest number of homeless veterans in
 California. Per the Survey, it is estimated that in the City at that time there were 600 chronically
 homeless veterans in the City, amounting to 9% of the chronically homeless. Of the 600
 chronically homeless veterans, most were members of minority groups: 33% were Black, 23%
 multi-racial, 20% Hispanic or Latinx, 6% Asian, and 2% Hawaiian or Pacific Islander.

7 11. On September 14, 2020, Tenderloin Neighborhood Development Corporation ("TNDC") was awarded funding to acquire and develop the property located at 2550 Irving in the 8 City ("2550 Irving") through MOHCD's Notice of Funding Availability - Acquisition and 9 Predevelopment Financing for Affordable Multifamily Rental Housing (the "NOFA"), which is 10 funded by the City's 2019 General Obligation Bond ("Proposition A"). Proposition A, approved 11 by San Francisco voters in 2019, contains a mandate to create new affordable, low-income units 12 and to serve vulnerable populations in districts that have been underserved by new affordable 13 housing production. 14

15 12. In order to secure full funding for the development of affordable housing through MOHCD, affordable housing sponsors must complete rigorous, culturally competent community 16 engagement throughout the development process. Pursuant to the NOFA, funding recipients are 17 required to implement a community engagement plan that establishes and builds relationships with 18 a full range of surrounding neighbors and the larger community, engages all interested community 19 20 members (including monolingual non-English speaking members of the community), complies 21 with the City's Language Access Ordinance, and includes racial equity strategies for engaging 22 communities that have traditionally lacked affordable housing opportunities in the City. No particular neighborhood member, community group, business, or resident is favored over another 23 24 in this process.

13. TNDC has spent countless hours engaging with a full range of community
 members, including both supporters and opposers, and has exceeded MOHCD's standards for
 community engagement. In 2021, TNDC met with Sunset neighbors, merchants, community based nonprofits, community leaders, and advocates. Specifically, TNDC held three large

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community meetings (in January, April, and September) in order to learn about the priorities and 1 needs of the community and develop guiding principles for the development. TNDC has also held 2 consistent, weekly office hours via phone or Zoom meeting for any person to attend and engage 3 with the proposed project and the project team. TNDC has held one on one meetings with 4 individuals and organizations representing neighbors and community serving organizations, 5 seeking to maximize input into the development process. TNDC created a website for the project, 6 2550lrving.com, which includes recorded community meetings and community meeting 7 presentations, updates on project progress, studies related to the project, applications TNDC has submitted to the City regarding financing and project entitlements, and multiple ways to contact 8 TNDC about the project. This website and all written materials have been translated into Chinese, 9 to maximize the ability of neighboring residents to comprehend. Real-time, oral translation has 10 also been provided at community meetings. Through its extensive outreach efforts and by creating 11 many different kinds of opportunities for engagement, TNDC has proactively sought to include a 12 diverse range of residents and stakeholders in its community engagement efforts, seeking to ensure 13 the voices of community members who have the least access to traditional public processes are heard, and seeking to ensure that the voices of those who are most able to easily engage in the 14 community process - those with access to financial resources and legal counsel, for example - do 15 not drown out those that are least comfortable in formal settings.

16

14. I have met with the plaintiffs, at their request, on two occasions to hear input and
articulate the City's goals on the project. My project management team has also shared City
reports and analysis with the plaintiffs.

19 15. The development of new housing, especially 100% affordable housing, is key to
 20 the City's COVID-19 recovery strategy. Affordable housing at 2550 Irving will prevent families
 21 from being displaced by the loss of rent-controlled apartments and by high rental and ownership
 22 costs by increasing the amount of family-friendly affordable homes in District 4. Moreover, the
 23 designation of 25% of units for families experiencing homelessness will help alleviate
 23 homelessness across the City.

Because the City has finite financial resources for affordable housing that must be
 utilized across several different housing priorities and projects, all affordable housing
 developments that are financially supported by MOHCD must also leverage other public and
 private funds to have sufficient funding for all development and construction costs. The primary
 sources of funding for affordable housing are tax exempt bonds ("Bonds") and low-income
 DECLARATION OF ERIC SHAW ISO DEFENDANT'S OPPOSITION TO PLADITIES'S MOTION FOR

Faralla Braun + Martel LLP 235 Montgomery Street, 17^a Floor San Françasez, California 94104 (415) 954-1400 housing tax credits ("Credits"), which must be utilized together. In addition, affordable housing
 projects serving extremely low-income households, such as formerly homeless and veterans, are
 eligible for additional funding from the California Department of Housing and Community
 Development ("HCD").

5 17. The California Debt Limit Allocation Committee ("CDLAC") and the California 6 Tax Credit Allocation Committee ("TCAC") hold competitions several times each year to allocate 7 Bonds and Credits, respectively. Beginning in 2020, the funding need of applicants to CDLAC 8 and TCAC outnumbered the available amount of Bonds and Credits that can be allocated in a given year (also known as "volume cap"), which has led to a severe decrease in the number of 9 10 affordable housing projects funded in the City. In 2021, the regulations that govern the allocation 11 of Credits and Bonds were amended in several ways that created a disadvantage for affordable housing projects located in the City because of the high cost to develop housing. As a result, while 12 eight San Francisco new construction projects applied for Bonds and Credits in 2020, not a single 13 project was awarded an allocation of volume cap. However, affordable housing projects that are 14 15 located in locations that are deemed "high resource" by TCAC and CDLAC can receive an extra 16 point in the competition. The promotion of high resource neighborhoods is intended to increase 17 BIPOC (Black, Indigenous, and People of Color) access to resources, such as quality public 18 schools and transportation.

18. District 4 is deemed a high resource neighborhood according to the State's
 definition, which identifies indicators and uses evidence from peer-reviewed research to document
 that the indicator is linked to improved life outcomes for low-income families, particularly
 children. Indicators considered by the State include poverty, adult education, employment, job
 proximity, median home value, proximity to environmental hazards, educational proficiency (math
 and reading proficiency, high school graduation rates) as well as poverty and racial segregation.
 These indicators are assessed by census tract.

26 19. In order for an affordable housing development to qualify for funding from TCAC,
27 CDLAC, and loans from HCD, an affordable housing development project must meet an extensive
28 set of threshold requirements and compete for Bonds, Credits, and loans from HCD. For example,
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1 an affordable housing project must demonstrate that it is "ready" to proceed, a principle that the 2 state agencies have put in place so as not to tie up public resources for long periods of time. One such "readiness" requirement is that an affordable housing project must demonstrate that it may be 3 built as proposed/is entitled by the local jurisdiction's existing zoning laws. Funds from all three 4 5 agencies are competitive, and HCD offers access to its loans only once per year. Therefore, if an affordable housing project is delayed for any reason, such project would not be eligible to apply 6 7 for funds again for an entire year. The next opportunity to apply for HCD funding is in the spring 8 of 2022, with the exact date of applications due not yet published. A delay at this particular stage 9 in a project would have the domino effect of stopping the development in its tracks.

20. TNDC submitted its project application for the development of 2550 Irving to the 10 11 City's Planning Department on December 3, 2021 for affordable housing streamlined approval 12 pursuant to California Senate Bill 35 ("SB-35"). SB-35 requires local entities to streamline the 13 approval of certain housing projects by providing a 90-day ministerial approval process if certain eligibility criteria are met, including a minimum of 50% of the units as affordable housing. 14 15 Because the City is not meeting its Regional Housing Need Allocation goal for affordable housing, only projects providing on-site affordable housing are currently eligible for SB-35 in San 16 17 Francisco. The Planning Department anticipates approving TNDC's project at 2550 Irving within 18 its required SB-35 timeline, enabling the project to apply for HCD financing in Spring 2022. 19 However, if TNDC's project at 2550 Irving cannot proceed with approvals by the City's Planning 20 Department under SB-35 and misses HCD's deadline to apply for funding, the project will have to wait until Spring 2023 to apply. This will delay an application for Bonds and Credits until the end 21 of 2023, which means construction cannot commence until 2024 (at the earliest and if the project 22 23 remains competitive) and affordable housing units will not be available until 2027 - a 1-2 year 24 delay in providing crucial affordable housing in a high resource area.

25 21. Every residential unit affordable to San Francisco residents who have been
26 excluded from the City's notoriously tight housing market matters. Production of new affordable
27 housing units at 2550 Irving is critical to eliminating the crushing burden that lack of affordable
28 housing places on both District 4 and the entire City. In order for our City to thrive, TNDC's
27 41265/14520230.1

1	project at 2550 Irving will achieve the City's goal of creating affordable housing in District 4 that
2	is losing affordable, rent-controlled units to vacancy decontrol, has high imbalance of affordable
3	housing, and is cost prohibitive to lower income households.

4

I hereby declare under penalty of perjury under the laws of the State of California that this -5 declaration is true and correct, and that it was executed on December 22, 2021, in 6

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EXHIBIT 4 Site Assessment Plan and Report of Findings (SAP-ROF) dated February 2, 2021

https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/5684620738/2550% 20Irving%20St%5FSAP%2DROF%5FFINAL%202021%2D02%2D02%2Epdf

EXHIBIT 5 DTSC Approval of SAP-ROF dated June 8, 2021

https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents% 2F2261475086%2F2021%20TNDC%20Site%20Assessment%20Plan%20and%20Report% 20of%20Findings%20DTSC%20Approval.pdf

EXHIBIT 6 Final Response Plan dated September 2, 2021

https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/ deliverable_documents/8461709141/Final%20Response%20Plan%2Epdf

EXHIBIT 7 DTSC Approval of Final Response Plan dated September 2, 2021

https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/ deliverable_documents/3748320639/2021%20TNDC%20Response%20Plan%20DTSC%20Approval% 20Letter%2Epdf

EXHIBIT 8

Site Management Plan dated November 24, 2021

SITE MANAGEMENT PLAN

2550 Irving Street Affordable Housing Project

San Francisco, California

EHB-SAM SMED No. 2043

November 24, 2021

Prepared for:

Tenderloin Neighborhood Development Corporation 49 Powell Street, 3rd Floor San Francisco, California 94102



Environmental Engineering & Geology

Path Forward Partners, Inc. 505 14th Street, Suite 1230 Oakland, California 94612 www.pathfw.net (510) 756-0740

Project No.: 115-102-107

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Figure 2. Site Plan

Appendices

- Appendix A. Site Assessment Report and Report of Findings
- Appendix B. Final Response Plan
- Appendix C. Dust and Volatile Organic Compound (VOC) Control Plan



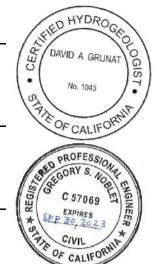
PROFESSIONAL CERTIFICATION

This *Site Management Plan* for the property located at 2550 Irving Street in San Francisco, California has been prepared by a California Professional Geologist and/or California Professional Engineer. This document is based on information available to Path Forward Partners, Inc. and current laws, policies, and regulations as of the date of this document. The opinions expressed in this document are based upon the information available to Path Forward Partners, Inc. and are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Path Forward Partners, Inc. in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

Neal Hughes Senior Staff Geologist

David A. Grunat, P.G., C.H.G. Principal Geologist

Gregory S. Noblet, P.E. Principal Engineer





1.0 INTRODUCTION

This *Site Management Plan* (SMP) has been prepared by Path Forward Partners, Inc. (Path Forward) on behalf of the Tenderloin Neighborhood Development Corporation (TNDC) for the property located at 2550 Irving Street in San Francisco, California (the Site; Figure 1).

This SMP is to be utilized by parties involved in activities where Site soil will be disturbed, or groundwater will be encountered during redevelopment construction activities. Contractors and subcontractors who may come in contact with soil and/or groundwater at the Site should be provided copies of the SMP. Contractors and subcontractors are responsible to safeguard their personnel's health and safety during redevelopment activities or subsequent activities as they pertain to the SMP as well as applicable safety regulations.

1.1 Proposed Development and Activities

Upon acquiring the property, TNDC plans to demolish the existing credit union building and redevelop the Site into a seven-story facility. The facility would be constructed at-grade with non-residential use (office, garage, and back of house spaces) and potentially a day care facility on the ground floor, and with residential occupancy above the ground floor. The footprint of the proposed building is presented on Figure 2.

Anticipated earthwork activities associated with Site redevelopment may include, but are not limited to:

- Demolition of current on-Site structures and improvements;
- General grading of the property including preparation for elevators and potential car stacker lifts;
- Foundation installation;
- Import and placement of soil suitable for reuse;
- Construction of future buildings and/or building additions;
- Construction of stormwater infiltration system;
- Improvements to asphalt-paved parking areas, access ways, and landscaping; and
- Excavation and trenching operations in association with installation, maintenance/repair, or removal of underground utilities.

Other earthwork activities at the Site not listed above should follow this SMP as a guide.

1.2 Objective

This SMP presents a decision framework and risk management measures for managing known and unexpected environmental conditions in soil and groundwater before and during Site



redevelopment in a manner protective of human health, in accordance with applicable regulatory requirements, and in consideration of the existing and proposed future land uses.

1.3 Applicability

This SMP applies to all workers; however, some provisions of this SMP may not be applicable to certain workers (e.g., carpenters and painters) who, based on job hazard analyses, would not be expected to perform activities that disrupt Site soils. Risk management measures described in Section 4.0 and HASP guidelines described in Section 5.0 should be followed for individuals engaged in invasive activities which disturb Site soil. This may include activities involving work in utility vaults or other subgrade areas (e.g., utility maintenance or modifications in subfloor areas of buildings) where exposure to chemicals of potential concern (COPCs) could occur.

1.4 Modifications to the SMP

Although not anticipated, if an alternate design or mitigative measures other than those referenced in this SMP is desired to be implemented, it must be demonstrated how the alternative design or mitigative measures would be protective of human health and the environment. Proposed alternate designs or mitigative measures will be included in a design report prepared by the contractor proposing such changes and submitted to TNDC for review and approval before implementation. Should a change to the SMP be necessary or desirable, a proposed SMP modification will be presented.

2.0 BACKGROUND

2.1 Site Setting

The Site occupies approximately 19,125 square feet located at 2550 Irving Street in San Francisco, California. The Assessor's Parcel Number (APN) assigned to the Site is 1724-038, which includes the addresses 2520 and 2550 Irving Street. According to the San Francisco Property Information Map (PIM) the Site is zoned under the Irving Street Neighborhood Commercial District. The Site is currently improved with an 18,561 square foot two-story commercial building, constructed in 1966, that is currently used as a bank (The Police Credit Union [TPCU]).

2.2 Historical and Current Site Use

According to the *Phase I Environmental Site Assessment* (Phase I ESA; Path Forward 2020), the Site was vacant land as early as 1895 and remained vacant until at least 1915. By 1928, two structures had been developed in the central portion. The 1928 Sanborn map depicts these as a drugstore and a cleaning business. By 1940, a gas station had been added to the southeast corner of the Site, and by 1946, a second gas station had been added to the western end of the Site. By 1950, the central buildings on the Site were occupied by an undertaker, and in 1966, this business redeveloped the entire property with the current building and open areas for use



as a mortuary and funeral chapel. The funeral business continued in the building until 1985, when the building was modified for its current use. The Site has been utilized as a bank since 1987.

2.3 Site Geology and Hydrogeology

According to information presented by the United States Geological Survey (USGS) on the 1996 7.5-Minute Series San Francisco North, California Quadrangle Topographic Map, the ground surface elevations at the Site is approximately 202 feet above mean sea level (amsl) with a slight downward slope to the west. The Site is located in an urban commercial setting within the Coast Ranges physiographic province of California. The nearest surface water body to the subject property is the Mallard Lake, approximately 961 feet to the north within Golden Gate Park. In addition, the Pacific Ocean is 1.5 mile to the west.

A subsurface investigation report (AllWest 2019) describes lithology encountered in environmental borings as coarse-grained, poorly- to well-graded sand to a depth of 90 feet below ground surface (bgs), which corresponds to the maximum depth explored. Groundwater was measured on the Site at a static depth of approximately 78 feet bgs (AllWest 2019). Flow direction has not been established but is presumed to be to the northwest.

Groundwater in the Site vicinity is a drinking water resource – the Site is located within the North Westside Groundwater Basin, which per the Basin Plan has a designated beneficial use of Municipal and Domestic Supply (SFBRWQCB 2017).

2.4 Previous Environmental Investigations

In September 2020, a Phase I ESA of the Site was prepared by Path Forward on behalf of TNDC (Path Forward 2020). The Path Forward Phase I ESA identified following recognized environmental conditions (RECs):

- Soil gas on the subject property is impacted by tetrachloroethene (PCE), which has
 resulted in a vapor intrusion condition for the existing building. Investigation is ongoing
 and TPCU has entered into a Voluntary Cleanup Agreement under oversight of the DTSC
 to investigate and mitigate effects of the condition. Data obtained during multiple
 investigations in 2019 and 2020 have not ruled out the Site as a source for the impacts;
 however, they have identified a former dry cleaner off-Site to the south as a potential
 contributing source. Based on the ongoing investigation under regulatory oversight, no
 additional investigation is warranted at this time. However, due to the known impacts at
 concentrations exceeding reference criteria, this condition is a REC.
- Article 22A of the San Francisco Health Code (the Maher Ordinance) requires San Francisco Department of Public Health (SFDPH), "oversight for characterization and mitigation of hazardous substances in soil and groundwater in designated areas zoned for industrial uses, sites with industrial uses or underground storage tanks, sites with historic bay fill, sites in close proximity to freeways or underground storage tanks." The



Site has been identified as subject to the Maher Ordinance, based on review of the current Maher Map maintained by the City and County of San Francisco. According to DataSF (a city and county government data access point), the Site was identified as a Maher property in 2013. The rationale may be related to historical gas station use, as the Site is not known to be filled land. While the Maher listing is considered to be REC, historical investigations and DTSC oversight related to historical Site use would likely satisfy the Maher requirements and further testing and mitigation beyond the DTSC requirements is unlikely to be required by the SFDPH.

A detailed summary of all previous investigations is presented in the *Site Assessment Plan and Report of Findings* (SAP-ROF; Path Forward 2021a; Appendix A). The SAP-ROF was approved by the DTSC in their June 8, 2021 letter (DTSC 2021a).

The SAP-ROF prepared pursuant to California HSC Section 25395.94 has determined that the presence of VOCs in on-Site soil gas poses an unreasonable risk to health and safety in the context of future redevelopment of the Site for mixed residential and commercial use. The exposure route of potential concern is inhalation of volatile chemicals present in indoor air as a result of transport (vapor intrusion) from the subsurface. To address these impacts in soil gas, TNDC entered into a Voluntary Cleanup Agreement with the DTSC and prepared the *Final Response Plan* (Response Plan; Path Forward 2021b; Appendix B). The Response Plan objective is to minimize or eliminate exposures between Site residents and PCE present in Site soil gas by installing a vapor intrusion mitigation system (VIMS) as part of redevelopment. Following public comment, the Response Plan was approved by the DTSC in their September 2, 2021 letter (DTSC 2021b)

2.5 Chemicals of Potential Concern

The following identifies chemicals of potential concern (COPCs) based on key findings from previous investigations and historical assessments of the Site.

2.5.1 Soil

Site soil conditions have been characterized in recent investigations that included a total of 66 soil samples collected from 36 borings. The soil samples have been analyzed for a variety of analytes; however, PCE was found to be the only compound of significance detected during these investigations. PCE was detected in one sample at a low concentration of 0.052 milligrams per kilogram (mg/kg), which is below the SFBRWQCB Tier 1 and intrusive construction worker environmental screening levels (ESLs) (SFBRWQCB 2019a, 2019b) and below the DTSC-recommended human health RBSL for residential land use (DTSC 2020).

Total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), and metals were either not detected or were detected at concentrations below their respective SFBRWQCB Tier 1 soil ESLs and DTSC-recommended human health RBSLs for residential land use.



2.5.2 Groundwater

Site groundwater conditions have been characterized in recent investigations that included a total of three on-Site grab-groundwater samples. Depth to encountered groundwater ranged from 77 to 90 feet bgs. The groundwater samples were analyzed for PCE and PCE breakdown products (one sample) or for a full suite of VOCs including PCE and PCE breakdown products (two samples). PCE was detected in two groundwater samples, at concentrations of 0.74 micrograms per liter (μ g/L) and 0.67 μ g/L, and not detected in the other. These detected concentrations are below the PCE drinking water criterion of 5 μ g/L (SWRCB 2019) and below the PCE groundwater-to-indoor air vapor intrusion screening level for commercial land use of 2.8 μ g/L (DTSC 2020, DTSC and SWRCB 2020).

2.5.3 Soil Gas

Site soil gas conditions have been well characterized through a series of recent investigations. With few exceptions, PCE is the only chemical that has been detected. The PCE breakdown products have not been detected. Chloroform was detected at a low concentration in one soil gas sample, which is common in areas serviced by water disinfected with chlorine-based disinfectants.

Detected concentrations of PCE in soil gas are fairly consistent across the Site. The highest detected concentration of PCE in shallow or sub-slab soil gas within the footprint of the proposed building is 1,500 micrograms per cubic meter (μ g/m³) – this concentration may be considered representative of the vapor intrusion concern for the proposed building.

3.0 RISK MANAGEMENT DESIGN CONSIDERATIONS PRIOR TO CONSTRUCTION

This section discusses the risk management design considerations that are to be followed prior to and during earthwork activities. Such considerations include procedures to evaluate potential import fill sources and to protect/remove groundwater monitoring wells in potential conflict with redevelopment plans.

3.1 Import Fill Criteria

Site redevelopment may require import of fill materials/soil to implement construction and landscaping plans. Potential import soil, which may be derived from a variety of sources and borrow pits, should not only meet the required geotechnical physical characteristics, but also applicable health-protective standards. The geotechnical engineer should be consulted to assess the suitability of proposed imported material prior to use on-Site. The following sections provide guidance to meet applicable health-protective standards.



3.1.1 Sampling Requirements

To minimize the potential of introducing contaminated fill material onto the Site, it is necessary to verify through documentation that the fill source is appropriate and that the fill material has been analyzed for potential contaminants based on the location and history of the source area. Documentation should include detailed information on the previous use of the land sourcing the fill material, whether an environmental site assessment was performed and its findings, and the results of any chemical testing performed. Soil proposed for import should be characterized in accordance with the Department of Toxic Substances Control (DTSC) *Information Advisory for Clean Imported Fill Material* (DTSC 2001) with respect to number of samples and analyses performed. Composite sampling may be appropriate for non-volatile analysis, depending on quality and homogeneity of source/borrow area, and specific compounds. Composite sampling shall not be performed for volatile analysis.

If no information pertaining to the fill material is available or provided, or if the existing dataset does not meet the Advisory specifications, then samples of the imported fill material will be chemically analyzed. The analytical program, determined by a qualified environmental professional¹, will be based on the source of the fill and knowledge of the previous land use. Prior to sampling, it will be demonstrated that the laboratory reporting limits will meet the data quality objectives for each analytical method to be utilized. Depending on the origin and known use of the source, the potential imported fill material may be analyzed by one or more of the following methods or other appropriate methods:

- VOCs and total petroleum hydrocarbons (TPH) in the gasoline range (TPH-g) by United States Environmental Protection Agency (USEPA) Method 8260 using USEPA collection Method 5035 to minimize volatile loss;
- Extractable TPH in the diesel range (TPH-d) and TPH in the motor oil range (TPH-mo) ranges by USEPA Method 8015M using a silica gel cleanup (SGC) preparation method;
- Semi-volatile organic compounds (SVOCs) by USEPA Method 8270;
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270 using selective ion mode (SIM);
- Title 22 total metals by USEPA Method 6010/7471;
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082 or 8080A;
- Organochlorine pesticides (OCPs) by USEPA Method 8081A or 8080A;
- Asbestos by polarized light microscopy (PLM) by USEPA Method 600/R-93-116; and/or

¹ A qualified environmental professional is defined as a California Professional Geologist or Professional Engineer, or experienced staff working under the direct supervision of a California Professional Geologist or Professional Engineer.



• California Waste Extraction Test (WET) and/or Federal Toxicity Characteristic Leaching Procedure (TCLP) to evaluate whether there are exceedances of soluble threshold limit concentrations (STLCs) and/or TCLP limits for individual analytes, as necessary.

All analyses shall be reported on a dry-weight basis. The appropriate number of samples and analytical program should be determined by a qualified environmental professional. The qualified environmental professional will evaluate whether the soil is suitable as import fill for the proposed redevelopment.

3.1.2 Data Evaluation

Sampling results for proposed import soil will be compared to San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 Environmental Screening Levels (ESLs) (SFBRWQCB 2019), screening levels proposed by TNDC's Qualified Environmental Professional, and/or background/ambient levels where appropriate; and hazardous waste characterization criteria.

Comparison to Tier 1 ESLs

Sampling results for proposed import soil will be first compared to Tier 1 ESLs (SFBRWQCB 2019). SFBRWQCB ESLs were selected as they contain a broad set of compounds and exposure pathways. USEPA Regional Screening Levels (RSLs) (USEPA 2021) and levels presented in the DTSC's HHRA Note 3 (DTSC 2020) may additionally be consulted.

Soil sampling results should meet the import criteria (Tier 1 ESLs) on an average-concentration basis. If one or more individual soil sampling results for a particular compound exceed the associated import criterion, the 95% UCL of the arithmetic mean concentration of that compound will be calculated using the USEPA statistical software package ProUCL (USEPA 2015), for comparison to the import criterion. Compounds present at concentrations exceeding their Tier 1 ESLs may be further evaluated in the context of background/ambient levels, if relevant (see below).

It is noted that ESLs are explicitly defined on a dry-weight basis. As such, soil sampling results should also be reported on a dry-weight basis for an apples-to-apples comparison to ESLs. Because dry-weight concentrations are always higher than wet-weight concentrations, it is unconservative to compare wet-weight-basis soil sampling results to the ESLs.

Use of Background Concentrations

Certain compounds may be present in soil at background or ambient levels (*i.e.*, not influenced by releases from a particular site) which are higher than their Tier 1 ESLs. These include arsenic, other metals, and carcinogenic polycyclic aromatic hydrocarbons (CPAHs). For these compounds, SFBRWQCB recommends defining a representative upper-limit background concentration, and substituting the background value for the ESL where appropriate:



"For situations where naturally occurring background concentrations exceed an ESL, it may be appropriate to substitute the background concentration for the ESL, but this is a site-specific decision that should be made in consultation with the overseeing regulatory agency" (SFBRWQCB 2019).

For arsenic, the upper limit background arsenic concentration of 11 mg/kg (Bradford et al. 1996). Path Forward recommends the upper limit background concentrations based on maximum values from the Kearny Foundation background metals dataset for the other metals (Bradford et al. 1996). For total CPAHs, DTSC has endorsed an upper limit background concentration of 0.9 mg/kg for Northern California soil (DTSC 2009).

Hazardous Waste Evaluation

Sampling results for proposed import soil will be compared to California and Federal RCRA hazardous waste criteria consisting of the total threshold limit concentration (TTLC), 10×STLC, and 20×TCLP thresholds. If any sample results exceed a 10×STLC and/or 20×TCLP threshold, then the associated soil samples should additionally be analyzed by the California WET and/or Federal TCLP, as appropriate, and the extraction results compared to STLCs and/or TCLP limits.

We note that the TTLC, 10×STLC, and 20×TCLP criteria are defined on a wet-weight basis. As such, soil sampling results should also be reported on a wet-weight basis for appropriate comparison to hazardous waste criteria. Because dry-weight concentrations are always higher than wet-weight concentrations, it would still be conservatively appropriate to compare dry-weight-basis soil sampling results to the hazardous waste criteria.

If any initial soil sample result exceeds a TTLC, or subsequent extraction test result exceeds an STLC or TCLP limit, then the associated soil would be classified as hazardous waste if disposed as waste and thus is not suitable for import.

3.1.3 Recycled Asphalt and Concrete Pavement

Reuse of recycled asphalt and concrete pavement as aggregate base material on redevelopment projects is a widely accepted and encouraged construction materials practice. As an example, the SFBRWQCB has concurred with this practice in their February 8, 2007 letter (SFBRWQCB 2007) to the California Department of Transportation, which provides additional guidance on the reuse of asphalt concrete (AC) and Portland cement concrete (PCC) materials.

Consistent with the SFBRWQCB guidance letter, recycled AC and PCC may be placed beneath pavement (e.g., roadways, sidewalks, plazas, parking lots) at the Site, without testing, provided that the materials are placed at least 5 feet above the highest predicted groundwater levels. Recycled PCC may be placed beneath buildings at the Site, without testing, provided that the material is placed at least 5 feet above highest predicted groundwater levels; but recycled AC should not be placed beneath buildings due to the potential for vapor intrusion of odorous compounds.



3.2 Protection or Destruction of Groundwater Wells

In the unlikely event that groundwater wells are encountered during prior to or during redevelopment, work will stop, and the area should be cordoned off to protect the discovered wells and the environmental professional shall be contacted to notify the appropriate agencies and to provide guidance of next steps for the redevelopment team.

4.0 RISK MANAGEMENT MEASURES DURING DEVELOPMENT

This section identifies risk management measures that may be implemented during earthwork activities to control the potential for human health exposure and environmental impacts from one or more of the COPCs beneath the Site.

4.1 Conditions and Activities Requiring Risk Management Measures

Based on the existing analytical data, the following conditions or activities require risk management to reduce the potential for impacts to human health and the environment.

- Inhalation of VOCs that volatilize from impacted groundwater (if encountered).
- Direct contact with potentially impacted soil.
- Dust and odor generation associated with excavation and trenching, grading and loading, backfilling, movement of construction and transportation equipment, and fugitive dust generation from wind.
- Off-Site transport of soil as sediments via surface water run-off or vehicle tracking from exposed soil and graded areas.
- Import/management/disposal of soil during redevelopment.
- Discovery of unexpected areas of contamination or underground structures.

Risk management measures will also be implemented during operations not listed above as deemed appropriate by a qualified environmental professional.

4.2 Contractor Qualifications

Workers that come into direct contact with contaminated soil and/or groundwater at the Site are required to conduct the work in accordance with California Occupational Safety and Health Administration (Cal/OSHA) training and worker protection rules and regulations. Cal/OSHA is the state agency responsible for monitoring compliance with worker health and safety laws and requirements. Compliance with standard Cal/OSHA regulations is important to prepare workers for the types of hazards that may be encountered during such activities. Earthwork activities conducted at the Site must comply with applicable laws, including current Cal/OSHA rules and regulations, even if not expressly noted in this SMP.



Construction contractors shall assume direct responsibility for the health and safety of their own employees and shall prepare a Site-specific HASP that meets the provisions and guidelines presented in this SMP (Section 5.0). The HASP is specific to workers who may handle or contact hazardous wastes, hazardous materials, or contaminated soil or groundwater at the Site as part of subsurface work.

To the extent that construction activities at the Site may constitute "clean-up operations" or "hazardous substance removal work" as defined in the Cal/OSHA standards for Hazardous Waste Operations and Emergency Response (HAZWOPER), contractors will ensure that all workers engaged in such activities have had training and are subject to medical surveillance, in accordance with Cal/OSHA standards (HAZWOPER-trained personnel). Soil that is visibly stained, discolored, shiny, or oily or has a noticeable solvent-like or hydrocarbon odor should be handled only by HAZWOPER-trained personnel until it is determined that such soil does not warrant such precautions.

4.3 Air Quality Requirements to Screen for VOC-Contaminated Soil

Bay Area Air Quality Management District (BAAQMD) Rule 8-40-205 imposes soil-handling protocols on sites where "contaminated" soil is exposed to the atmosphere. In the context of Rule 8-40-205 and this SMP, "contaminated" soil is soil with volatiles content greater than (1) 50 parts per million (ppm) by weight in soil as determined by USEPA Method 8015 and/or USEPA Method 8260; or (2) 50 parts per million by volume (ppmv) as methane in air just above the soil surface. While the first listed criterion requires sample collection and analysis, the second criteria may be evaluated in the field using a photoionization detector (PID).

To screen potential VOC-contaminated soil during earthwork activities, VOC levels will be periodically monitored with a PID if suspected VOC-contaminated soil is identified by the contractor during the following activities:

- demolition and removal of building floor slabs and foundations;
- removal of unexpected subsurface features such as underground storage tanks (USTs), sumps, or clarifiers that may be exposed during general grading;
- trenching for removal and installation of underground utilities; and
- removal of VOC-impacted soils, if encountered.

The following procedures will be used to screen soils.

- The probe inlet of the PID will be placed at a distance of approximately 3 inches from the surface of the excavated soil, and the instrument readout will be observed as the probe is slowly moved across the soil surface.
- If an increased meter reading is observed, the measurement will be continued until the maximum meter reading is obtained.



- The probe inlet will be left at the maximum-reading location for approximately double the instrument response time per the manufacturer's instrument specifications.
- Monitoring locations and results will be recorded on field forms or logs, and instrument calibration records will be kept on-Site.

If the VOC concentration measured above the soil surface exceeds 50 ppmv as methane, the soil will be characterized as "contaminated" per BAAQMD Rule 8-40-205. VOC-contaminated soil will be stockpiled separately from soil that is not contaminated and further managed in accordance with Section 4.6.2.

If visibly contaminated soils are not observed and PID readings are below 50 ppmv expressed as methane, then monitoring will be relaxed (e.g., once or twice per day). If a new excavation location is started or if visible signs of contamination are identified, the screening interval will return to hourly.

Excavated soils will be further managed in accordance with Section 4.6.

4.4 Dust and VOC Control Program

To reduce the risks associated with fugitive dust and VOCs during construction, a Site-specific *Dust and Volatile Organic Compound (VOC) Control Plan* (DCP) has been developed, which is presented in Appendix C.

4.5 Control of Off-Site Runoff

To reduce risks associated with storm water runoff during construction, a Site-specific Storm Water Pollution Prevention Plan (SWPPP) is required regardless of whether COPCs are present in the soil. A primary goal of a SWPPP is to reduce or eliminate off-Site discharge of sediments during construction activities through implementation of best management practices (BMPs). Components of the SWPPP are provided below.

- Descriptions of BMPs and how they will be implemented. Examples of BMPs that may be incorporated into a SWPPP may include the following.
 - Minimizing dust during demolition, grading, and construction by spraying exposed soil with water on a regular basis (see Appendix C).
 - Minimizing wind and water erosion on soil stockpiles by spraying with water during dry weather and covering with plastic sheeting or other similar material during the rainy season (October through April).
 - Minimizing the area and length of time during which the Site is cleared and graded.
 - Preventing the release of construction pollutants such as cement, mortar, paints, solvents, fuel and lubricating oils, pesticides, and herbicides by storing such



materials in a bermed or otherwise secured area that minimizes contact with storm water.

- Installing filter fences or fiber rolls around the perimeter of the construction area to prevent off-Site sediment discharge.
- Installing and maintaining sediment and oil and grease traps in local storm water intakes during the construction period, or otherwise properly controlling oil and grease discharges.
- Cleaning wheels and covering loads of trucks carrying excavated soil before they depart the construction area.
- Implementing a hazardous material spill prevention, control, and cleanup program during redevelopment activities. This program would include measures such as constructing swales and barriers that would direct potential spills toward containment basins so the impact to Site storm water will be minimized.
- Routine Site inspections to assess the effectiveness of the BMPs and identify repair needs.
- Qualifications of inspectors (training in the field of erosion and sediment control practices and familiarity with storm water pollution control rules and regulations).
- Collecting samples of runoff.
- Provisions to revise the BMPs.

4.6 Soil Management Protocols

It is anticipated that the redevelopment project will generate approximately 4,000 cubic yards (CY) of surplus soils during installation of building foundation elements and Site preparation including elevators and potential car stacker pits. These soils will require off-Site removal to one or more appropriate disposal or reuse facilities in accordance with applicable California and Federal waste regulations. It is recommended that that the contractor responsible for excavation and removal of the surplus soils work with a qualified environmental professional in discussions with potential receiving facilities regarding their acceptance criteria. Tier 1 ESLs are overly conservative and may not be appropriate for the potential designated receiving facility. Depending on a receiving site's use and location, a qualified environmental professional can assist in the development of more appropriate Tier 2 ESLs that can be used to garner soil acceptance at one or more potential receiving facilities.

4.6.1 Field Soil Screening

Soil screening is recommended during earthwork activities to identify soil that potentially do not meet reuse/import fill criteria (Section 3.1) and may require off-Site disposal (Section 4.6.3). Soil screening should be performed unless the qualified environmental professional determines that the active earthwork area and subsurface conditions do not warrant such measures. If



visibly stained soil, elevated PID readings, or chemical odors are observed, the potentially contaminated soil will be segregated, stockpiled, and managed as described in Section 4.6.2.

4.6.2 Management of Soil Stockpiles

It is anticipated that excavated soil will be directly loaded onto haul trucks for off-Site removal; excavated soil may need to be stockpiled on-Site temporarily, however, prior to off-Site transport for reuse or disposal. Concerns associated with stockpiling soil include dust generation, odors, erosion, direct contact, unauthorized access, and potential for storm water run-off. If materials are determined to be impacted, as defined in Section 4.6.1, Section 4.8, and Section 4.9, impacted materials will be temporarily stockpiled on existing concrete slabs or on plastic liners, and covered with anchored plastic sheeting until they can be evaluated for reuse and/or disposal. Soil stockpiles will be inspected regularly to confirm the effectiveness of implemented control measures.

4.6.3 Soil Disposal Off-Site

In the event that impacted soils are encountered and are determined to be unsuitable for on-Site or off-Site reuse, the soils will require off-Site removal to one or more appropriate disposal facilities in accordance with applicable California and Federal waste regulations. Existing analytical soil data will be evaluated to assess the need for additional characterization. Prior to off-Site disposal, the waste disposal facility(ies) will be contacted and the soil will be characterized according to their requirements. Depending on the disposal facility and the existing analytical data, soil samples may require one or more of the following analyses:

- VOCs by USEPA Method 8260B;
- TPH-g by USEPA Method 8015M or 8260B;
- TPH-d and TPH-mo by USEPA Method 8015M with SGC;
- SVOCs by USEPA Method 8270C;
- PCBs by USEPA Method 8082 or 8080A;
- Title 22 metals by USEPA Method 6010/7471;
- OCPs by USEPA Method 8081;
- Asbestos by PLM by USEPA Method 600/R-93-116 or CARB Method 435; and
- California WET and/or Federal TCLP for individual analytes, as necessary.

Soil profiled for acceptance will be loaded onto trucks and transported to the appropriate facility by licensed waste haulers for proper disposal under manifest.



4.7 Groundwater Management Protocols

It is unlikely that groundwater will be encountered during development. However, in the unlikely event that construction dewatering will be necessary, extracted groundwater will be appropriately managed by one of the following methods.

- Dewatering effluent may be temporarily containerized on-Site pending characterization, particularly if the volume of extracted groundwater is small. Following characterization, containerized groundwater should be disposed off-Site at a licensed facility under a nonhazardous bill of lading or hazardous waste manifest, as appropriate, in accordance with California and Federal waste regulations.
- Dewatering effluent may be discharged to the storm sewer system under a National Pollutant Discharge Elimination System (NPDES) permit from the SFBRWQCB or to the sanitary sewer system under a Batch Wastewater Discharge Permit from the San Francisco Public Utilities Commission (SFPUC). On-Site pretreatment of dewatering effluent for removal of solids and/or organics may be necessary to meet the discharge limits of either permit.

4.8 Discovery of Unexpected Areas of Contamination

If, during construction, contaminated soil or free phase liquids or product are encountered in undocumented areas, the Owner will be contacted and a qualified environmental professional and the applicable regulatory agencies will be notified to assess if additional sampling is necessary and/or mitigation is required. Indications of soil contamination may include a strong chemical, hydrocarbon-like, or solvent odor; significant discoloration; an oily or shiny appearance; and/or elevated PID readings.

4.9 Discovery of Unexpected Underground Structures

During excavation and construction, it is possible that unexpected USTs, hoists, sumps, maintenance pits, pipelines, or other underground structures may be discovered. Indications of USTs may include vent pipes that extend above the ground surface, product distribution piping that leads to the UST, fill pipes, backfill material, or the underground structure itself. Other buried structures may not have features that extend above the ground surface and could be discovered only after contact with construction equipment.

The following section outlines the measures that govern identification and removal of USTs, and appropriate measures for addressing other underground structures identified during redevelopment. In the event of such discoveries, work in the area must immediately stop until a qualified environmental professional is contacted and has assessed the potential concern and has determined the appropriate course of action.



4.9.1 Removal of USTs

If USTs or product lines are encountered during redevelopment, SFDPH and the San Francisco Fire Department will be notified. The current regulatory contact information is presented in Section 6.0.

Per Chapter 6.7 of the California Health and Safety Code, which contains specific requirements for removing and remediating contamination associated with a leaking UST, removal activities will be conducted to prevent potential damage to the UST and/or a release to the subsurface. Environmental investigations and responses required following removal of the UST will also be conducted in accordance with the specific provisions delineated in Chapter 6.7 and under the direction of the applicable regulatory agency.

4.9.2 Removal of Other Subsurface Structures

If subsurface structures other than USTs are discovered during construction activities, such as underground vaults, hoists, sumps, and associated piping, they will be inspected to assess whether chemical residuals or free liquids other than water are present. This assessment will be made by a qualified environmental professional relying on visual observations, detection of chemical odors, and field PID measurements.

If there is no indication that chemicals are or were present within the structure, then removal of the structure is not necessary for environmental reasons.

If a sump or vault contains residues (liquids or solids) that appear to be chemical-containing based on field observations (visual, odor, or PID readings), the following steps will be implemented.

- Contain and protect liquids to avoid spills to the subsurface.
- Characterize chemical-containing residues and/or soil and assess the appropriate response action. Chemical-containing substances will be sampled for profiling purposes, followed by proper removal and disposal under the direction of the qualified environmental professional (as previously defined). The appropriate regulatory agency will be notified and engaged prior to the selection of an appropriate response.
- Inspect the structure for cracks and holes once the residues and/or chemical-containing soil are removed.
- If, based on the opinion of the qualified environmental professional, it is assessed that the structure is intact, that subsurface releases of the chemicals to the underlying soil likely did not occur, and no free-phase liquids or chemical residues remain inside, removal of the structure is not required for environmental reasons.



- If physical inspection of the structure suggests that chemicals may have been released to the underlying soil, then conduct additional environmental investigations of the underlying soil to assess whether a release sufficient to warrant removal has occurred.
 - If, based on the opinion of the qualified environmental professional, it is assessed that such a release has not occurred, then removal of the structure is not required for environmental reasons; or,
 - Remove the structure under the guidance of the qualified environmental professional.

5.0 ENVIRONMENTAL HEALTH AND SAFETY GUIDELINES

Workers involved in subsurface activities during redevelopment will operate in compliance with a Site-specific HASP. Applicable contractors shall assume direct responsibility for the health and safety of their own employees and will prepare their own HASP that meets the provisions and guidelines presented in this SMP. The contractors are directly responsible for the preparation of their HASP prior to starting work. Workers who will potentially contact soil at the Site will be provided a copy of the HASP by the contractor and briefed as to its contents.

While this SMP establishes the minimum requirements for a HASP, the HASP is a stand-alone document developed by the contractor prior to the initiation of construction activities that would disrupt soil or groundwater potentially impacted with COPCs. Changes in worker health and safety rules and regulations may result in additional requirements.

5.1 Objectives of the Site Health and Safety Plan

The HASP will identify, evaluate, and control Site health and safety hazards related to soil and groundwater at the Site, and inform contractors, subcontractors, and other field personnel of chemicals known to be present at the Site. This information will enable contractors to make prudent health and safety decisions related to handling impacted soil and groundwater at the Site to protect the health of the workers and the surrounding community throughout the redevelopment.

5.2 Components of the Site Health and Safety Plan

The minimum requirements for the HASP that will be prepared prior to construction activities are presented in this section.

5.2.1 General Information

This section of the HASP will contain general information about the Site, including its location, objectives of the redevelopment work, and the name of the individual(s) who prepared the HASP. This section will also contain a brief summary of possible hazards associated with subsurface conditions at the Site.



5.2.2 Key Personnel/Health and Safety Responsibilities

This section of the HASP will identify the key personnel by name, and will include identification of the Project Manager, Site Supervisor, Site Safety Officer, and subcontractors that will be working at the Site. In addition, the health and safety responsibilities of individuals will be described.

5.2.3 Facility/Site Background

Background information should include a description of past operations, the types of contaminants that may be encountered, and a brief description of the types of construction activities that will be conducted at the Site. The description of construction activities will focus on those activities that will result in the movement of soil, and/or the potential for workers to have direct contact with the soil and groundwater beneath the Site. This section will provide a general map of the Site, highlighting those areas where earthwork activities are likely to occur.

5.2.4 Job Hazard Analysis and Hazard Mitigation

A description of the hazards associated with specific construction activities that give rise to contact or potential contact with soil and groundwater is presented in this section of the HASP. As part of the job hazard analysis, the HASP will identify the constituents likely to be encountered during construction activities and will present a table indicating the symptoms of exposure and relevant regulatory exposure limits for each compound (*i.e.*, the OSHA Permissible Exposure Limit [PEL]). The procedures to mitigate hazards identified in the job hazard analysis are also presented in this section of the HASP. The principal measure that will mitigate hazards associated with chemicals present in soil will be the use of appropriate personal protective equipment (PPE) (see Section 5.2.6).

5.2.5 Monitoring Procedures

Air and dust monitoring procedures (if proposed) will be detailed in the HASP. Currently, air and dust monitoring are not anticipated to be conducted.

5.2.6 Personal Protective Equipment

The HASP will identify appropriate required PPE that will adequately protect workers from hazards related to contact with impacted soils that may be encountered at the Site. Due to the depth of groundwater at the Site, contact with this medium is not expected. PPE will be selected based on the known contaminants present at the Site, and the known route(s) of entry into the human body. (See Section 2.5.) The primary exposure routes are the direct contact routes consisting of dermal contact, incidental ingestion, and inhalation of particulate matter and volatiles. Based on the known conditions, the minimum level of PPE for intrusive workers that may come into direct contact with soil will be modified Level D. For the Site, modified Level D protection will include a long-sleeved shirt, long pants, gloves, hard hat, and steel-toed boots.



If areas of unexpected contamination are identified during construction activities or if proposed air monitoring indicates that concentrations present in the breathing zone exceed the OSHA PELs, workers may be required to upgrade their PPE to Level C. Upgrading to Level C PPE entails donning a half-face or full-face air purifying respirator with the appropriate cartridge and wearing a Tyvek suit until it can be demonstrated through personal air monitoring that there are no exposure issues for Site workers.

5.2.7 Work Zones and Site Security Measures

Specific work zones of the Site and security measures such as the placement of barricades, fencing, access control, and access logs are described in this section. The work zone will be defined as the area of the Site where activities involving impacted soil are conducted. The support zone will be located outside of the work zone, but within Site boundaries. End-of-the-day cleanup operations, such as cleaning truck wheels (for exiting vehicles that could be tracking soil off-Site) and removal of PPE, will occur in the support zone. If possible, the support zone will be proximal to the entry and exit point of the Site. If necessary, to control pedestrian and vehicular entry, the work zones may be fenced.

5.2.8 Decontamination Measures

This section of the HASP will describe specific procedures that will be used to decontaminate both equipment and personnel. Decontamination measures will include cleaning the wheels of vehicles in the support zone prior to their exiting the Site, if applicable. Placement of shaker plates or gravel at the entrance to the Site should also be considered and implemented.

5.2.9 General Safe Work Practices

This section of the HASP will discuss the general safe work practices to be followed, including entry restrictions, tailgate safety meetings, use of PPE, personal hygiene, hand washing facilities, eating and smoking restrictions, use of warning signs and barricades, and special Sitespecific precautions. As part of the general safe work practices, the HASP will also require the Site Safety Officer to conduct periodic briefings with construction personnel (likely part of the tailgate meetings) on the reporting requirements to be followed if an underground structure is identified.

5.2.10 Contingency Plans/Emergency Information

This section of the HASP will provide information regarding procedures to be followed in the event of an emergency. The location of specific emergency equipment such as eyewash, first aid kit and a fire extinguisher, and emergency telephone numbers and contacts will be identified. A map indicating the route to the nearest hospital will also be provided in this section.



6.0 NOTIFICATIONS

If an environmental condition is encountered during Site construction activities that requires notification, the pertinent contacts are as follows:

- Mr. Jackson Rabinowitsh, TNDC, 707.494.8230, jrabinowitsh@tndc.com
- Mr. Greg Noblet, Path Forward Partners, Inc., 628.219.6622, greg@pathfw.net
- Mr. Mamdouh Awwad, SFDPH, 415.252.3927, mamdouh.awwad@sfdph.org
- Bay Area Air Quality Management District, 800.792.0787, <u>http://www.baaqmd.gov/</u>
- City of San Francisco Fire Department, 628.652.3260, https://www.sf-fire.org
- Mr. Marcos De la Cruz, SFBRWQCB Stormwater Division, 510.622.2365, marcos.delacruz@waterboards.ca.gov

TNDC is responsible for providing notification to the pertinent regulatory agencies if notable environmental conditions are encountered during redevelopment.

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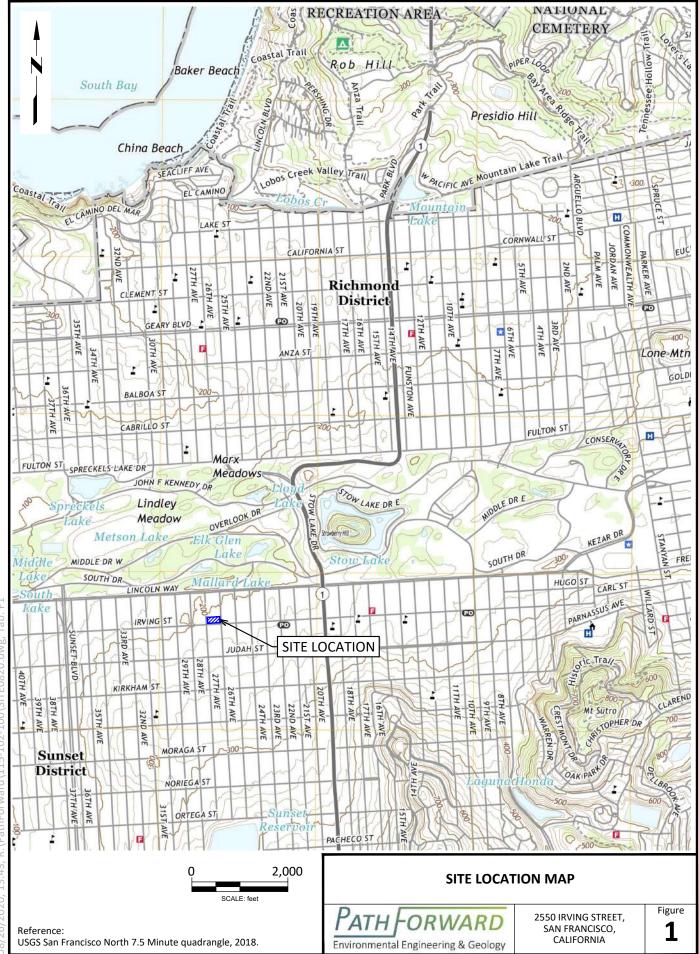
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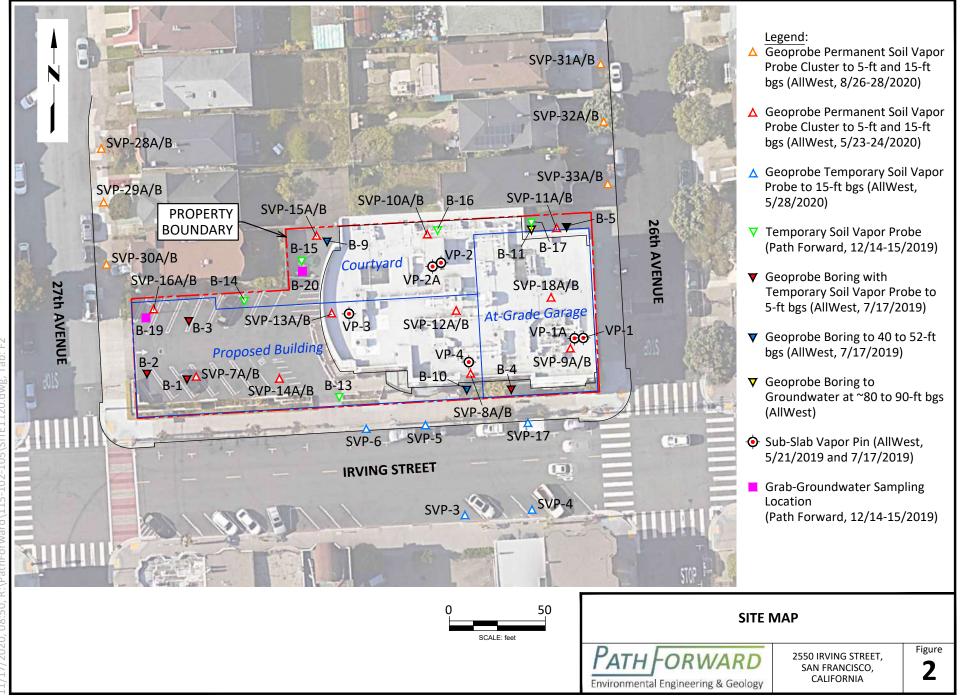
Figures





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Project No. 115-102-100



Project No. 115-102-105

Appendix A

Site Assessment Report and Report of Findings



Department of Toxic Substances Control

Jared Blumenfeld Secretary for **Environmental Protection**

Meredith Williams, Ph.D. Director 700 Heinz Avenue Berkelev, California 94710-2721

June 8, 2021

Mr. Jackson Rabinowitsh Tenderloin Neighborhood Development Corporation 49 Powell Street, 3rd Floor San Francisco, California 94102 jrabinowitsh@tndc.org

Dear Mr. Rabinowtish,

The Department of Toxic Substances Control (DTSC) has completed the review of the Site Assessment Plan and Report of Findings, 2550 Irving Street Affordable Housing Project, San Francisco, California (Report) dated February 2, 2021 for the proposed Tenderloin Neighborhood Development Corporation developed located at 2500 – 2550 Irving Street, San Francisco, California. The Report was prepared in accordance with California Health and Safety Code (HSC) Section 25395.94, as part of the California Land Use & Revitalization Act (CLRRA) Agreement. Specifically, the Report evaluates whether a release or threat of a release of hazardous materials occurred at the Site. The Report concludes that the presence of volatile organic compounds within onsite soil vapor poses an unacceptable risk to the proposed residential redevelopment. The Report determined that a Response Plan, discussing response actions and mitigation measures, will be prepared, and submitted to DTSC for review and approval prior to redevelopment activities. DTSC has no comments and hereby approves the Report.

If you have any questions, please contact me at (415) 723-0792 or by email at Arthur.Machado@dtsc.ca.gov.

Sincerely,

Arthur Machado **Engineering Geologist** Site Mitigation and Restoration Program **Department of Toxic Substances Control**





Gavin Newsom Governor

Mr. Rabinowitsh June 8, 2021 Page 2

cc: David A. Grunat, P.G., C.H.G. Path Forward Partners, Inc. (via email: <u>David@Pathfw.net</u>)

> Gregory S. Noblet, P.E. Path Forward Partners, Inc. (via email: <u>Greg@Pathfw.net</u>)

SITE ASSESSMENT PLAN AND REPORT OF FINDINGS

2550 Irving Street Affordable Housing Project

San Francisco, California

February 2, 2021

Prepared for:

Tenderloin Neighborhood Development Corporation (TNDC) 49 Powell Street, 3rd Floor San Francisco, California 94102



Environmental Engineering & Geology

Path Forward Partners, Inc. 505 14th Street, Suite 1230 Oakland, California 94612 www.pathfw.net (510) 756-0740

Project No.: 115-103-106

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Table 1.Tetrachloroethene Vapor Intrusion Cancer Risk



Site Assessment Plan and Report of Findings 2550 Irving St, San Francisco CA

Appendices

Appendix A. Summary of Historical Data



PROFESSIONAL CERTIFICATION

This *Site Assessment Plan and Report of Findings* for the 2550 Irving Street Affordable Housing Project located at 2550 Irving Street in San Francisco, California has been prepared by a California Professional Geologist and/or California Professional Engineer. This document is based on information available to Path Forward Partners, Inc. and current laws, policies, and regulations as of the date of this document. The opinions expressed in this document are based upon the information available to Path Forward Partners, Inc. and are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Path Forward Partners, Inc. in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

HED HYDROGE DAVID & OGI ŝ No. 1043 David A. Grunat, P.G., C.H.G. Principal Geologist OFCALIFORM REGIST PROFESSION Gregory S. Noblet, P.E. **Principal Engineer** CALIFOR



1.0 INTRODUCTION

This Site Assessment Plan and Report of Findings (Report) has been prepared by Path Forward Partners, Inc. (Path Forward) on behalf of the Tenderloin Neighborhood Development Corporation (TNDC) for the proposed 2550 Irving Street Affordable Housing Project located at 2550 Irving Street in San Francisco, California (the Site). The Site location is shown in Figure 1.

TNDC entered into a California Land Use & Revitalization Act (CLRRA) agreement (HSA-FY20/21-082) with the Department of Toxic Substances Control (DTSC) to address on-Site impacts associated with volatile organic compounds (VOCs) detected in on-Site soil gas. Pursuant to California Health and Safety Code (HSC) Section 25395.94, as part of the CLRRA process, a site assessment plan is required to evaluate:

- Whether a release of hazardous materials has occurred at the site, a threat of a release of hazardous materials exists at the site, or there is a threat of a release of hazardous materials from the site; and
- If a release or threatened release of hazardous materials exists at the site or there is a release or a threatened release from the site, whether the release or threatened release poses an unreasonable risk to public health and safety or the environment.

In accordance with HSC Section 25395.94, the site assessment plan must include:

- Adequate characterization of the hazardous materials released or threatened to be released at, or from, the site and documentation of the findings;
- Reasonably available information about the site, including, where appropriate, a risk assessment that evaluates the risk posed by any hazardous materials released or threatened to be released at, or from, the site, and information regarding reasonably anticipated foreseeable uses of the site based on current and projected land use and zoning designations; and
- If the release has impacted groundwater, reasonable characterization of underlying groundwater, including present and anticipated beneficial uses of that water.

Per HSC Section 25395.95, after implementation of the site assessment plan, a report of findings made pursuant to the plan is required. Based upon a review of the report of findings, DTSC will determine whether a response action is necessary to address any unreasonable risk from hazardous materials at the site.

This Report presents a site assessment plan and report of findings with respect to on-Site impacts associated with VOCs detected in on-Site soil gas, in accordance with HSC Sections 25395.94 and 25395.95. This Report does not include investigation results and/or findings associated with off-Site impacts to soil gas and/or groundwater; the current Site owner, The



Police Credit Union (TPCU), has entered into a Voluntary Cleanup Agreement with the DTSC to investigate and address those issues.

2.0 SITE ASSESSMENT PLAN

The site assessment plan presented below includes a site description, discussion of previous environmental investigations, summary of site redevelopment plans, and evaluation of human health risks in the context of unmitigated site redevelopment.

2.1 Site Description

2.1.1 Site Land Use

The Site occupies approximately 19,125 square feet located at 2520 and 2550 Irving Street in San Francisco, California. The Assessor's Parcel Number (APN) assigned to the Site is 1724-038, which includes the addresses 2520 and 2550 Irving Street. According to the San Francisco Property Information Map (PIM), the Site is zoned under the Irving Street Neighborhood Commercial District. The Site is currently improved with a 18,561-square foot two-story commercial building, constructed in 1966, that is currently used as a bank (TPCU).

2.1.2 Site Owner

The 2520 and 2550 Irving Street property is currently owned by TPCU; however, prior to redevelopment, TNDC intends to acquire the property.

2.3 Historic Uses

According to the *Phase I Environmental Site Assessment* (Phase I ESA; Path Forward 2020), the Site was vacant land as early as 1895 and remained vacant until at least 1915. By 1928, two structures had been developed in the central portion of the Site. The 1928 Sanborn map depicts these as a drugstore and a cleaning business. By 1940, a gas station had been added to the southeast corner of the Site, and by 1946, a second gas station had been added to the western end of the Site. By 1950, the central buildings on the Site were occupied by an undertaker, and in 1966, this business redeveloped the entire property with the current building and open areas for use as a mortuary and funeral chapel. The funeral business continued in the building until 1985, when the building was modified for its current use. The Site has been utilized as a bank since 1987.

2.1.4 Adjacent Properties

The Phase I ESA (Path Forward 2020) identified adjoining property and surrounding area uses as primarily commercial and residential including the following:

• North: Single family residences (1281 26th Avenue and 1280 27th Avenue).



- South: Irving Street, followed by from east to west: Sterling Bank and Trust (2501 Irving Street), vacant retail space (2511 Irving Street), surface parking lot used by employees of the bank on the subject property, apparent office building (2533, 2535 and 2537 Irving Street), residential building (2539 and 2541 Irving Street), residential building with street level retail space (the Artisans custom framing, 2549 Irving Street), and Nomad Cyclery bike shop (2555 Irving Street).
- East: 26th Avenue followed by a surface parking lot.
- West: One residential building between the north portion of the bank property and 27th Avenue (1284 27th Avenue), and 27th Avenue followed by residences.

2.1.5 Site Geology and Hydrogeology

According to information presented by the United States Geological Survey (USGS) on the 1996 7.5-Minute Series San Francisco North, California Quadrangle Topographic Map, the ground surface elevations at the Site is approximately 202 feet above mean sea level (amsl) with a slight downward slope to the west. The Site is located in an urban commercial setting within the Coast Ranges physiographic province of California. The nearest surface water body to the subject property is the Mallard Lake, approximately 961 feet to the north within Golden Gate Park. In addition, the Pacific Ocean is 1.5 mile to the west.

A subsurface investigation report (AllWest 2019f) describes lithology encountered in environmental borings as coarse-grained, poorly to well graded sand to a depth of 90 feet below ground surface (bgs), which corresponds to the maximum depth explored. Groundwater was measured on the subject property at a static depth of approximately 78 feet bgs (AllWest 2019f). Flow direction has not been established but is presumed to be to the northwest.

Groundwater in the Site vicinity is a drinking water resource – the Site is located within the North Westside Groundwater Basin, which per the Basin Plan has a designated beneficial use of Municipal and Domestic Supply (SFBRWQCB 2017).

2.2 Previous Site Characterizations

The following subsections present a summary of historical assessment and characterization activities performed at the Site. Historical sampling results from the Site characterization activities described below are provided in Appendix A.

2.2.1 Phase I Environmental Site Assessment (AllWest)

In February 2019, a Phase I Environmental Site Assessment was conducted by AllWest Environmental, Inc. (AllWest) on behalf of TPCU (AllWest 2019a). The AllWest Phase I ESA included the Site and 2525 Irving Street, a parcel across Irving Street to the south also owned by TPCU. The AllWest Phase I ESA identified historical uses of potential concern including two on-Site gas stations at 2500 and 2550 Irving Street, an on-Site clothes cleaner at 2520 Irving Street,



and an off-Site dry cleaners (Albrite Cleaners) at 2511 Irving Street (adjacent to the 2525 Irving Street parcel). The AllWest Phase I ESA recommended an underground storage tank (UST) survey to locate potential abandoned-in-place USTs and recommended a subsurface site investigation of soil, soil gas, and groundwater conditions to evaluate if a release had occurred from the on-Site or off-Site cleaners.

2.2.2 Subsurface Investigations

A series of subsurface site investigations have been performed in 2019 and 2020, including several investigations conducted by AllWest on behalf of TPCU and one investigation conducted by Path Forward on behalf of TNDC.

May 2019

In May 2019, AllWest produced a *Phase II Subsurface Investigation Report* to address concerns that were discovered in their earlier Phase I ESA. Based on the findings of the Phase I ESA, AllWest performed an investigation which involved collecting soil and sub-slab soil gas samples (AllWest 2019b).

Borings were advanced at five locations for collection of soil samples (B-1 through B-5). A total of five soil samples, collected from 4.5-5.0 feet below ground surface (bgs), were submitted for chemical analysis. Soil samples were analyzed for total petroleum hydrocarbons (TPH) in the diesel range (TPH-d) and motor oil range (TPH-mo), TPH in the gasoline range (TPH-g), VOCs, polycyclic aromatic hydrocarbons (PAHs), and LUFT-5 metals. Soil sampling results were below current DTSC HERO Note 3 risk-based screening levels (RBSLs) for residential soil (DTSC 2020) and/or ambient/background levels (Bradford et al. 1996, Duvergé 2011).

Sub-slab soil gas samples were collected at two locations beneath the existing building (VP-1 and VP-2). Tetrachloroethene (PCE) was detected in sub-slab soil gas samples at concentrations of 480 micrograms per cubic meter (μ g/m³) and 530 μ g/m³, which exceed the commercial/industrial soil gas RBSL of 67 μ g/m³ (DTSC 2020). Based on these findings, AllWest recommended additional investigation to determine the source and extent of the PCE contamination found on-Site.

July 2019

In July 2019, AllWest advanced three additional borings to collect soil samples (B-8 through B-10) and collected sub-slab soil gas samples at four locations beneath the existing building (VP-1A, VP-2A, VP-3, and VP-4) (AllWest 2019c).

Six soil samples were analyzed for PCE and its breakdown products, consisting of trichloroethene (TCE), *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, 1,1-dichloroethene, and vinyl chloride. All analytes were not detected in soil above laboratory reporting limits.



PCE was detected in all four sub-slab soil gas samples at concentrations ranging from 270 μ g/m³ to 1,100 μ g/m³. Based on these results, AllWest recommended collecting groundwater samples from the Site and the 2525 Irving Street parcel to delineate the extent and origin of PCE.

Also in July 2019, AllWest conducted an investigation at the 2525 Irving Street parcel to assess potential off-Site PCE impacts (AllWest 2019d). Two borings were advanced to collect soil samples (B-6 and B-7) and two borings were advanced to collect soil gas samples (SVP-1 and SVP-2). Soil sampling results were generally low, and VOCs were not detected. PCE was detected in the soil gas samples at concentrations of 1,800 μ g/m³ and 1,300 μ g/m³. AllWest concluded these results were similar to results from the Site and recommended additional investigation to delineate the PCE in soil gas.

September 2019

In September 2019, AllWest advanced two borings (B-11 and B-12) to a maximum depth of 90 feet bgs to investigate soil and groundwater conditions near the former Albrite Cleaners (AllWest 2019f). Soil and groundwater were analyzed for PCE and its breakdown products. PCE and its breakdown products were not detected in any soil samples. PCE was detected at a concentration of 0.71 micrograms per liter (μ g/L) in one groundwater sample. AllWest concluded that it was likely there had been a release from the Albrite Cleaners but could not rule out additional contributors to the PCE in soil gas.

December 2019

In December 2019, Path Forward conducted a soil gas and groundwater investigation at the Site.

Four temporary nested soil gas probes (B-13-5/15, B-14-5/15, B-15-8/18 and B-17-7/17) and one single-depth soil gas probe (B-17-7) were installed at depths of 4 to 8 feet bgs and 15 to 18 feet bgs. Depths were selected based on Site topography relative to the adjacent residential properties as the Site is built-up along the northern property boundary. PCE was detected in all soil gas samples at concentrations ranging from 48 μ g/m³ to 900 μ g/m³.

Groundwater was sampled at locations B-19 and B-20 where it was encountered at 77.4 and 79.2 feet bgs, respectively. PCE was detected at 0.67 μ g/L at location B-20 and not detected above laboratory reporting limits at location B-19.

May-June 2020

In May and June 2020, AllWest advanced a total of 20 borings for the installation of temporary and permanent soil gas probes throughout the Site and surrounding streets (AllWest 2020c). 48 soil samples from these borings were analyzed for PCE and its breakdown products. PCE was the only constituent detected in a single sample (SVP-12-4.5) at a concentration of 0.052 milligrams per kilogram (mg/kg) at a depth of 4.5 to 5.0 feet bgs. PCE was detected in soil gas in



all areas sampled at concentrations ranging from 120 μ g/m³ to 2,500 μ g/m³. Given the distribution of results, AllWest concluded that PCE contamination was contributed from the former Albrite Cleaners (2511 Irving Street) and that the plume likely extends off-Site to north of the TPCU building.

2.2.3 Indoor Air Investigations

AllWest has conducted indoor air quality monitoring events at the existing TPCU building on a semi-annual basis since August of 2019. Based on reports available to Path Forward, sampling events have occurred in August 2019 (AllWest 2019e), December 2019 (AllWest 2020a), and February 2020 (AllWest 2020b). Sampling events consisted of collecting four indoor air samples and one outdoor air sample over a 24-hour period. Samples were analyzed for PCE and its breakdown products. During the August 2019, December 2019, and February 2020 sampling events, results were similar with maximum detected concentrations of PCE in indoor air of $3.85 \ \mu g/m^3$, $4.3 \ \mu g/m^3$, and $3.3 \ \mu g/m^3$ respectively.

2.2.4 Phase I Environmental Site Assessment (Path Forward)

In September 2020, a Phase I ESA of the Site was prepared by Path Forward on behalf of TNDC (Path Forward 2020), The Path Forward Phase I ESA identified following recognized environmental conditions (RECs):

- Soil gas on the subject property is impacted by tetrachloroethene (PCE), which has
 resulted in a vapor intrusion condition in the building. Investigation is ongoing and TPCU
 has entered into a Voluntary Cleanup Agreement under oversight of the DTSC to
 investigate and mitigate effects of the condition. Data obtained during multiple
 investigation in 2019 and 2020 have not ruled out the subject Site as a source for the
 impacts; however, they have identified a former dry cleaner off-Site to the south as a
 potential contributing source. Based on the ongoing investigation under regulatory
 oversight, no additional investigation is warranted at this time. However, due to the
 known impacts at concentrations exceeding reference criteria, this condition is a REC.
- Article 22A of the San Francisco Health Code (the Maher Ordinance) requires San Francisco Department of Public Health (SFDPH), "oversight for characterization and mitigation of hazardous substances in soil and groundwater in designated areas zoned for industrial uses, sites with industrial uses or underground storage tanks, sites with historic bay fill, sites in close proximity to freeways or underground storage tanks." The subject property has been identified as subject to the Maher Ordinance, based on review of the current Maher Map maintained by the City and County of San Francisco. According to DataSF (a city and county government data access point), the subject property was identified as a Maher property in 2013. The rationale may be related to historical gas station use, as the Site is not known to be filled land. While the Maher listing is considered to be REC, historical investigations and DTSC oversight related to



historical Site use would likely satisfy the Maher requirements and further testing and mitigation beyond the DTSC requirements is unlikely to be required by the SFDPH.

2.3 Site Redevelopment Plans

Upon acquiring the property, TPCU may continue to occupy the building for a short period of time; however, TNDC ultimately plans to demolish the existing building and redevelop the Site with the 2550 Irving Street Affordable Housing Project featuring a seven-story mixed commercial and residential use building, other hardscape elements, and landscaped areas. The building would be constructed at-grade with ground floor parking and/or commercial use with residential occupancy above the ground floor. The footprint of the proposed building is presented on Figure 2.

2.4 Health Risk Evaluation

2.4.1 Data Evaluation

<u>Soil</u>

As discussed above, Site soil conditions have been characterized in recent investigations that included a total of 66 soil samples collected from 36 borings. The soil samples have been analyzed for a variety of analytes; however, PCE was found to be the only compound of significance detected during these investigations. PCE was detected in one sample at a low concentration of 0.052 mg/kg, which is below the SFBRWQCB Tier 1 ESL (SFBRWQCB 2019a, 2019b) and below the DTSC-recommended human health RBSL for residential land use (DTSC 2020). Total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), and metals were either not detected or were detected at concentrations below their respective SFBRWQCB Tier 1 soil ESLs and DTSC-recommended human health RBSLs for residential land use. Further, following redevelopment, Site soils will be largely covered with the proposed building and hardscape elements, eliminating potential soil exposures except in landscaped areas, if present.

<u>Groundwater</u>

As discussed above, Site groundwater conditions have been characterized in recent investigations that included a total of three on-Site grab-groundwater samples. Depth to encountered groundwater ranged from 77 to 90 feet bgs. The groundwater samples were analyzed for PCE and PCE breakdown products (one sample) or for a full suite of VOCs including PCE and PCE breakdown products (two samples). PCE was detected in two groundwater samples, at concentrations of 0.74 μ g/L and 0.67 μ g/L; and not detected in the other. These detected concentrations are below the PCE drinking water criterion of 5 μ g/L (SWRCB 2019) and below the PCE groundwater-to-indoor air vapor intrusion screening level for commercial land use of 2.8 μ g/L (DTSC 2020, DTSC and SWRCB 2020). As described in the following subsection, the controlling receptor is the ground-level commercial receptor. Other target



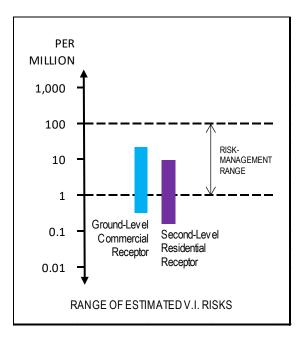
analytes were either not detected or were detected at concentrations below their respective drinking water criteria and vapor intrusion screening levels. These sampling results indicate that Site groundwater is not significantly impacted. Detected concentrations of VOCs in groundwater do not represent a health risk for future Site occupants.

Soil Gas

As discussed above, Site soil gas conditions have been well characterized through a series of recent investigations. With few exceptions, PCE is the only chemical that has been detected. The PCE breakdown products have not been detected. Chloroform was detected at a low concentration in one soil gas sample, which is common in areas serviced by water disinfected with chlorine-based disinfectants.

Detected concentrations of PCE in soil gas are fairly consistent across the Site. The highest detected concentration of PCE in shallow or sub-slab soil gas within the footprint of the proposed building is 1,500 μ g/m³ – this concentration may be considered representative of the vapor intrusion concern for the proposed building.

The proposed building is an at-grade multi-story building with commercial and other nonresidential uses on the ground level and residential uses above. As summarized in Table 1, the potential vapor intrusion risk associated with PCE in soil gas may be bounded using the previous and current DTSC-recommended attenuation factors of 0.0005 and 0.03 (DTSC 2011a, DTSC and SWRCB 2020). For ground-level commercial receptors, the soil gas conditions represent a risk level of 0.4 to 20 per million. For second-level residential receptors, assuming the SFBRWQCBrecommended inter-floor transfer factor of 0.1 (SFBRWQCB 2019c), the soil gas conditions represent a risk level of 0.2 to 10 per million.





It is noted that the controlling receptor is the ground-level commercial receptor. While the second-level residential receptor is exposed for more hours (as reflected in lower indoor air RBSLs), this is more than offset by the reduction in PCE concentration that occurs between the first and second levels. Thus, soil gas RBSLs for the ground-level commercial receptor are also protective of the residential receptors on the floors above.

The Site soil gas conditions represent a modest vapor intrusion concern for the proposed building. Under previous DTSC guidance (i.e., attenuation factor of 0.0005), estimated risks would be less than 1 per million (e.g., 0.4 per million for the controlling ground-level commercial receptor) and no mitigation would be warranted (DTSC 2011b). For a new commercial/residential building that is plumbed and ventilated to building codes, the previous DTSC-recommended attenuation factor of 0.0005 is likely more representative than the current value of 0.03, and vapor intrusion risks are likely on the lower end of the ranges discussed above.

2.4.2 Conceptual Site Model

The conceptual site model (CSM) is depicted in Figure 3. The CSM illustrates potentially complete and significant exposure pathways to on-Site receptors, after Site redevelopment, in the absence of any mitigation. Off-Site soil gas and groundwater impacts are not addressed within the scope of this Report or the CSM and will be addressed separately by TPCU.

Detected concentrations of PCE or other compounds in on-Site soil do not pose a direct contact human health risk to future on-Site residents or construction workers during redevelopment. Depth to groundwater is on the order of 80 feet bgs and sampling results indicate groundwater is not significantly impacted. Soil and groundwater exposure pathways are therefore considered incomplete and/or insignificant.

On-Site soil gas is impacted with PCE which is suspected to have leaked from on-Site and/or off-Site sanitary sewer pipelines. Location(s) of off-Site sanitary sewer pipeline release(s) and location and extent of soil impacts are unknown and are not subject to this Report. The soil gasto-indoor air vapor intrusion pathway is considered potentially complete and significant for future on-Site building occupants.

3.0 REPORT OF FINDINGS

A site assessment plan prepared pursuant to California HSC Section 25395.94 has determined that the presence of VOCs in on-Site soil gas poses an unreasonable risk to health and safety in the context of future redevelopment of the Site for mixed residential and commercial use. The exposure route of potential concern is inhalation of volatile chemicals present in indoor air as a result of transport (vapor intrusion) from the subsurface. As future owner of the Site, TNDC will submit a Response Plan to DTSC to conduct a response action at the site, to mitigate the presence of VOCs in soil gas in coordination with redevelopment of the Site. The Response Action Objective (RAO) for the Site will be to minimize or eliminate exposures between future



building occupants and VOCs present in Site soil gas. Remedial goals developed and adopted for contaminated media at the Site will be responsive to this objective.

4.0 REFERENCES

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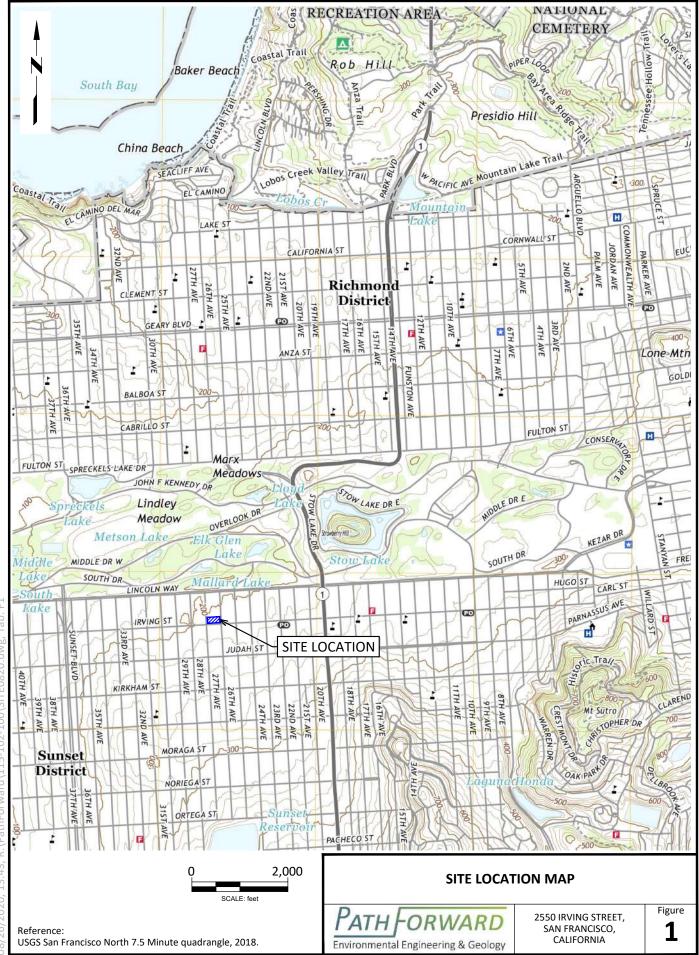


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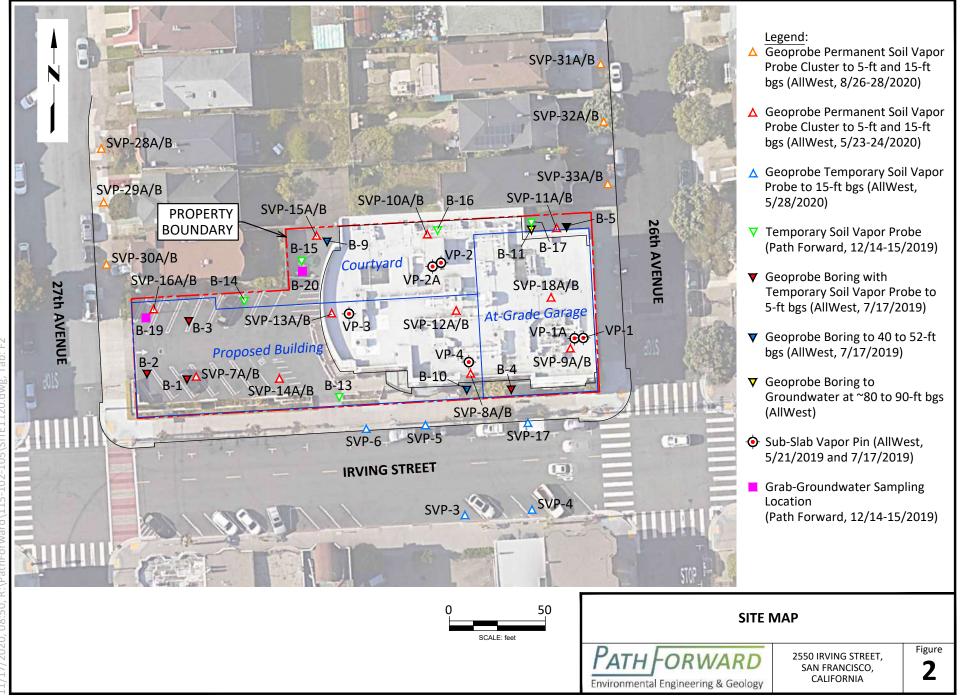
Figures





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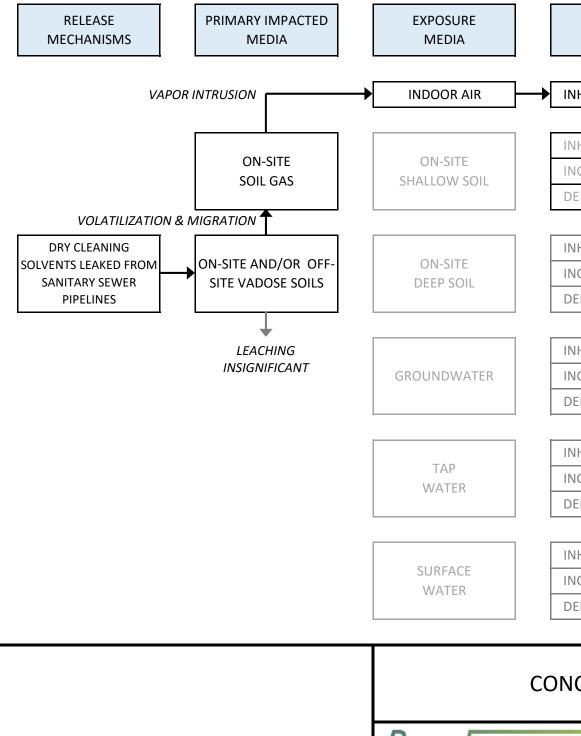
Project No. 115-102-105

<u>NOTES</u>

- (1) This CSM depicts potentially complete and significant exposure pathways to on-Site receptors, after Site redevelopment, in the absence of any mitigation. Off-Site impacts are not addressed within the scope of this Report.
- (2) On-Site soil gas is impacted with tetrachloroethene (PCE) which is suspected to have leaked from on-Site and/or off-Site sanitary sewer pipelines. Location(s) of sanitary sewer pipeline release(s), location and extent of soil impacts unknown.
- (3) Detected concentrations of PCE in on-Site soil do not pose a direct contact human health risk to future on-Site residents.
- (4) Depth to groundwater is on the order of 80 feet. Groundwater sampling results indicate the release has not impacted groundwater.

• Potentally complete and significant exposure pathway

LEGEND



EXPOSURE ROUTES	ON-SITE RESIDENT	
	•	
NHALATION	•	
NHALATION		
IGESTION		
ERMAL CONTACT		
NHALATION		
NGESTION		
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CONCEPTUAL SITE MODEL

PATH FORWARD Environmental Engineering & Geology

2550 IRVING STREET SAN FRANCISCO, CALIFORNIA FIGURE

3

Tables



Indoor Air RBSL	Attenuation Factor	Soil Gas RBSL	Soil Gas Concentration	Soil Gas Risk		
(µg/m³)		(µg/m³)	(µg/m³)	(per million)		
Ground-Level Commerci	ial Receptor					
2.0	0.03	66.7	1,500	20		
2.0	0.0005	4,000	1,500	0.4		
Second-Level Residential Receptor						
0.46	0.003	153	1,500	10		
0.46	0.00005	9,200	1,500	0.2		

Table 1. Tetrachlorothene Vapor Intrusion Risk

Notes:

(1) Tetrachloroethene (PCE) indoor air risk-based screening levels (RBSLs) are DTSC-recommended values, represent 1 per million risk level (DTSC 2020).

(2) Attenuation factors are current and previous DTSC-recommended values for future commercial buildings (DTSC 2011, DTSC and SWRCB 2020).

(3) Second-level attenuation factors incorporate SFBRWQCB-recommended inter-floor transfer factor of 0.1 (SFBRWQCB 2019).

(4) Soil gas RBSL equals indoor air RBSL divided by attenuation factor.

(5) Soil gas concentration is highest detected concentration of PCE in shallow soil gas within the footprint of proposed building (AllWest 2020c).

(6) Soil gas risk equals soil gas concentration divided by soil gas RBSL; is rounded to one significant figure.



Appendix A

Summary of Historical Data



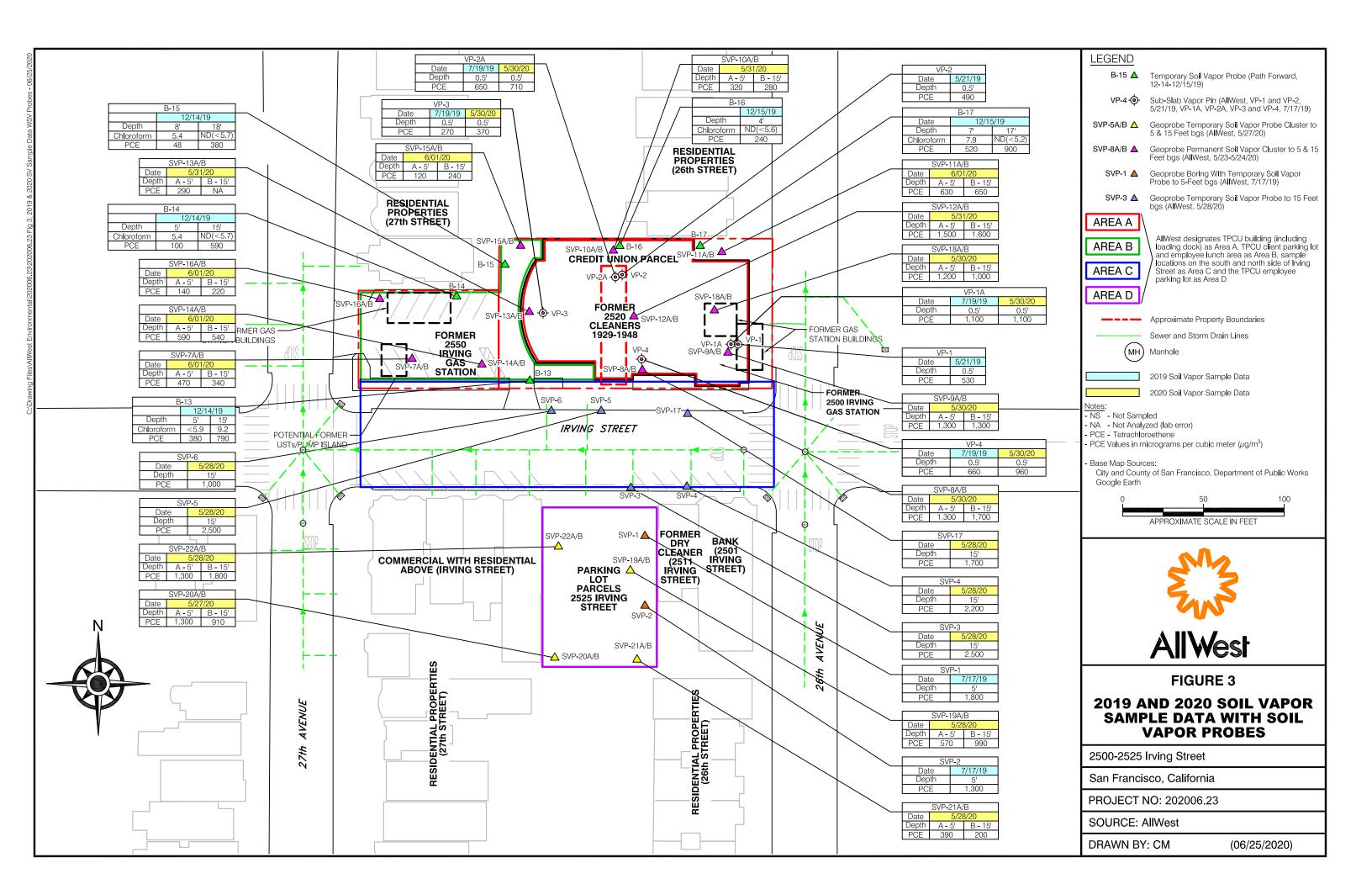


TABLE A-1 SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA 2511, 2525 & 2550 Irving Street San Francisco, California 94122 AllWest Project No. 202006.23												
Sample Name and Depth in feet bgs	Date Sampled	TPH-g (C6- C12)	TPH-d (C10-C23)	TPH-mo (C18-C36)	Tetrachloro ethane (PCE)	Other VOCs	PAHs & PNAs	Cadmium	Chromium	Lead	Nickle	Zinc
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-1 (4.5-5)	5/21/2019	ND (<1.0)	13	210	ND (<0.0050)	ND (varies)	ND (varies)	ND (<0.25)	44	9.0	24	28
B-2 (4.5-5)	5/21/2019	ND (<1.0)	3.6	70	ND (<0.0050)	ND (varies)	ND (varies)	ND (<0.25)	57	4.6	26	24
B-3 (4.5-5)	5/21/2019	ND (<1.0)	1.1	19	ND (<0.0050)	ND (varies)	ND (varies)	ND (<0.25)	49	39	26	68
B-4 (4.5-5)	5/21/2019	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<0.0050)	ND (varies)	ND (varies)	ND (<0.25)	57	10	30	45
B-5 (4.5-5)	5/21/2019	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<0.0050)	ND (varies)	ND (varies)	ND (<0.25)	45	2.5	24	21
B-6 (1-1.5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-6 (4.5-5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-6 (9.5-10)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-7 (1-1.5)	7/17/2019	ND (<0.25)	5.0	58	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-7 (4.5-5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-7 (9.5-10)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-8 (4.5-5)	7/17/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-8 (9.5-10)	7/17/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA

TABLE A-1 SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA 2511, 2525 & 2550 Irving Street San Francisco, California 94122												
				A	llWest Proj		2006.23	1				
B-9 (4.5-5)	7/17/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-9 (9.5-10)	7/17/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-10 (4.5-5)	7/18/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-10 (9.5-10)	7/18/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-12 (4.5-5)	9/27/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-12 (9.5-10)	9/27/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-12 (14.5-15)	9/27/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-12 (19.5-20)	9/27/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
B-12 (24.5-25)	9/27/2019	NA	NA	NA	ND (<0.0050)	ND (varies)	NA	NA	NA	NA	NA	NA
SFRWQCB '	Tier 1 ESLs	100 (Res-ON)	260 (Res-DE)	100 (Res-ON)	0.080 (SL)	Varies or NE	Varies or NE	1.9 (TH)	160 (TH)	32 (TH)	86 (CW-DE)	340 (TH)
SFRWQCB Tier 2 Commercial/Industrial ESLs		500 (Com-ON)	1,000 (Com-ON)	500 (Com-ON)	2.7 (DE)	Varies or NE	Varies or NE	1,100 (Com-DE)	1,800,000 (Com-DE)	320 (Com-DE)	11,000 (Com-DE)	350,000 (Com-DE)
SFRWQC Construction		500 (CW-ON)	1,000 (CW-ON)	500 (CW-ON)	33 (DE)	Varies or NE	Varies or NE	51 (CW-DE)	530,000 (CW-DE)	180 (CW-DE)	86 (CW-DE)	110,000 (CW-DE)
Title 22 TTLC (mg/kg)		NE	NE	NE	NE	Varies or NE	Varies or NE	100	2,500	1,000	2,000	5,000
Title 22 STLC (mg/L)		NE	NE	NE	NE	Varies or NE	Varies or NE	1.0	5.0 (Cr III & total)	5.0	20	250
Title 22 TCLP (mg/L)		NE	NE	NE	0.70	Varies or NE	Varies or NE	1.0	5.0	5.0	NE	NE

	TABLE A-1
	SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA
	2511, 2525 & 2550 Irving Street
	San Francisco, California 94122
	AllWest Project No. 202006.23
Notes:	All samples analyzed at McCampbell Analytical, Inc., Pittsburg, California.
	All results are reported in milligrams per kilogram (mg/kg)
	bgs = below ground surface
	VOCs - Volatile Organic Compounds, analytical method SW8260B
	TPH-g - Total Petroleum Hydrocarbons as Gasoline, analytical method SW8260B
	TPH-d - Total Petroleum Hydrocarbons as Diesel, analytical method SW8015 without Silica Gel cleanup
	TPH-mo - Total Petroleum Hydrocarbons as Motor Oil, analytical method SW8015 without Silica Gel cleanup
	ND - Not Detected above laboratory reporting limit (listed in paranthesis)
	NA - Not Analyzed
	NE - Not Established
	PAHs = Polyaromatic hydrocarbons
	PNAs = Polynuclear aromatics
	SFRWQCB ESLs = San Francisco Bay Regional Water Quality Control Board (), <i>User's Guide: Derivation and Application of Environmental Screening Levels</i> (<i>ESLs</i>), Tier 1 Environmental Screening Levels (ESLs), January 23, 2019. Based on a generic conceptual site model designated for use at most sites. See User's Guide Chapter 2. Input settings are: Land Use = Residential; Groundwater Use = Drinking Water Resource; MCL Priority over Risk-Based Levels = Yes; Intact Building Slab = Yes; Groundwater Depth = Shallow; Soil Type = Sand Scenario; Soil Exposure Depth = Shallow. Tier 2 ESLs from <i>Table S-1 - Direct Exposure Human Health Risk Levels</i> , <i>Table S-2 - Terrestrial Habiitat Levels</i> , <i>Table S-3 - Leaching to Groundwater</i> , <i>Table S-4 - Gross Contamination Levels</i> , and <i>Table S-5 - Odor Nuisance Levels</i> .
	Res-DE = Residential Direct Exposure Human Health Risk Levels (<i>Table S-1 Direct Exposure Human Health Risk Levels</i>)
	Com-DE = Commercial/Industrial Direct Exposure Human Health Risk Levels (<i>Table S-1 Direct Exposure Human Health Risk Levels</i>)
	CW-DE = Construction Worker / Any Site Use Direct Exposure Human Health Risk Levels (<i>Table S-1 Direct Exposure Human Health Risk Levels</i>)
	Res-ON = Residential Odor Nuisance Levels (<i>Table S-5 - Odor Nuisance Levels</i>)
	Com-ON = Residential Odor Nuisance Levels (<i>Table S-5 - Odor Nuisance Levels</i>)
	CW-ON = Residential Odor Nuisance Levels (<i>Table S-5 - Odor Nuisance Levels</i>)
	Concentrations exceeding the applicable ESLs are indicated in bold font
	TTLC - Total Threshold Limit Concentration value for hazardous waste established by State of California Code of Regulations Title 22, Chapter 11, Article 3, Tables II and III.
	STLC - Soluble Threshold Limit Concentration value for hazardous waste established by State of California Code of Regulations Title 22, Chapter 11, Article 3 Tables II and III.

TABLE A-1 SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA 2511, 2525 & 2550 Irving Street San Francisco, California 94122 AllWest Project No. 202006.23

TCLP - Toxicity Characteristic Leaching Procedure value for hazardous waste established by State of California Code of Regulations Title 22, Chapter 11, Article 3, Tables II and III.

	Table A-2 Soil Vapor Historical Analytical Data Summary 2125, 2500 & 2550 Irving Street San Francisco, California AllWest Project 202006.23															
Probe & Sample ID Number	Date	Depth (feet bgs)	Probe Type	Acetone µg/m ³	2-Butanone (MEK) µg/m ³	Chloroform µg/m ³	cis-1,2-DCE µg/m ³	Isopropanol µg/m ³	PCE μg/m ³	Toluene μg/m ³	TCE μg/m ³	trans-1,2- DCE μg/m ³	Vinyl Chloride µg/m ³	Other VOCs µg/m ³	TPH-g μg/m ³	Helium (Leak detect gas) (% v/v)
VP-1	5/21/2019	0.5	TSS	56	ND (<10)	8.6	ND (<4.5)	46	530	ND (<4.3)	NA	ND (<4.5)	ND (<2.9)	ND (varies)	ND (<9,300)	ND (<0.0100)
VP-2	5/21/2019	0.5	TSS	57	9.5	ND (<2.4)	ND (<2.3)	27	480	3.6	NA	ND (<2.3)	ND (<1.3)	ND (varies)	ND (<9,300)	ND (<0.0100)
SVP-1	7/17/2019	5	Т	NA	NA	NA	ND (<2.0)	NA	1,800	NA	ND (<2.7)	ND (<2.0)	ND (<1.3)	NA	NA	ND (<0.025)
SVP-2	7/17/2019	5	Т	NA	NA	NA	ND (<2.0)	NA	1,300	NA	ND (<2.7)	ND (<2.0)	ND (<1.3)	NA	NA	ND (<0.025)
VP-1A	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<6.3)	NA	1,100	NA	ND (<8.6)	ND (<6.3)	ND (<4.1)	NA	NA	ND (<0.025)
VP-2A	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<6.3)	NA	650	NA	ND (<8.6)	ND (<6.3)	ND (<4.1)	NA	NA	ND (<0.025)
VP-3	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<6.3)	NA	270	NA	ND (<8.6)	ND (<6.3)	ND (<4.1)	NA	NA	ND (<0.025)
VP-4	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<2.0)	NA	660	NA	ND (<2.7)	ND (<2.0)	ND (<1.3)	NA	NA	ND (<0.025)
SFRWQCB ESL	Comm	ercial Soil Ga	s	1,000,000 (ON)	730,000 (DE)	18 (DE)	1,200 VI	NL	67 (DE)	44,000 (DE)	100 (DE)	12,000 VI	5.2 VI	Varies or NE	330 (ON)	NE

Notes:

Laboratory analyses by Eurofins Calscience, Garden Grove, CA

µg/m³ = micrograms per cubic meter

TPH-g = total petroleum hydrocarbons as gasoline, analytical method TO-3M

VOCs = volatile organic compounds, analytical method TO-15 SIM

cis-1,2-DCE = cis-1,2-Dichloroethene

trans-1,2-DCE =trans-1,2-Dichloroethene

PCE = perchloroethylene / tetrachloroethene

TCE = trichloroethene

MEK = Methyl Ethyl Ketone (2-Butanone)

ND = Not detected above the listed reporting limit

NL = Not listed

NE = Not established

Bold Font = Detected values exceed regulatory screening levels.

TSS = Temporary Sub-Slab Vapor Pin

SPVP = Semi-Permanent Sub-Slab Vapor Pin

NA = Not Analyzed

SFRWQCB ESLs = San Francisco Regional Water Quality Control Board, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), Tier 2 ESLs from Table SG-1 - Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels, Commercial/Industrial, and Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels, Interim Final - January 23, 2019.

DE = Direct Exposure (*Table SG-1* - *Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels*)

ON = Odor Nuisance (*Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels*)

	TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2525 & 2550 Irving Street San Francisco, California AllWest Project No. 202006.23											
Sample Name and Depth in feet bgs	Date Sampled	cis-1,2- Dichloroethene (cis-1,2-DCE)	trans-1,2- Dichloroethene (trans-1,2-DCE)	Tetrachloroethane (PCE)	Trichloroethene (TCE)	Vinyl Chloride						
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)						
SVP-3 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-4 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-5 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-6 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-7 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-7 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-7 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-8 (1-1.5)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-8 (4.5-5)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-8 (9.5-10)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-8 (14.5-15)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-9 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-9 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-9 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-9 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-10 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-10 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-10 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-10 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-11 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-11 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-11 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-12 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						
SVP-12 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	0.052	ND (<0.0050)	ND (<0.0050)						
SVP-12 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)						

			TABLE ARY OF SOIL AN 2525 & 2550 Irv San Francisco, (AllWest Project N	ALYTICAL DATA ing Street California		
SVP-12 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-14 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-14 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-14 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-15 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-15 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-15 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-16 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-16 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-16 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-17 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-19 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-20 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-21 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-22 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SFRWQCB Tier ESL - Groundwa Water Re	ter is Drinking	0.19 (SL)	0.65 (SL)	0.080 (SL)	0.085 (SL)	0.0015 (SL)
SFRWQC Commercial/Ind Exposur	lustrial Direct	85 (DE)	600 (DE)	2.7 (DE)	6.1 (DE)	0.15 (DE)
		zed at McCampbell An orted in milligrams per		, California by EPA Metho	d 8260B.	

TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2525 & 2550 Irving Street San Francisco, California AllWest Project No. 202006.23

bgs = below ground surface

Concentrations exceeding the applicable ESLs are indicated in **bold font**

ND - Not Detected above laboratory reporting limit (listed in paranthesis)

San Francisco Bay Regional Water Quality Control Board (SFRWQCB), User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), January 2019.

Tier 1 Environmental Screening Levels (ESLs) for residential land use and soil disposal acceptance profiling were established using the Tier 1 ESL Summary Table based on a generic conceptual site model designed for use at most sites. These ESLs were established with the following assumptions: Land Use = Residential, Groundwater Use = Drinking Water Resource, MCL Priority over RIsk-based Levels = Yes, Discharge to Surface Water = Saltwater & Freshwater, Vegetation Level = Substantial, Soil Exposure Depths = Shallow (≤ 10 ft bgs).

Tier 2 Environmental Screening Levels (ESLs) forcommercial/industrial land use where groundwater IS a potential drinking water resource were established using the site-specific Tier 2 Interactive Tool, Table T2-1: Tier 2 ESL Input and Output. These ESLs were established with the following assumptions: Commercial property use, minimal vegetation level, drinking water resource groundwater use, discharge to surface water, and shallow soil depths (≤ 10 ft bgs) for direct exposure.

DE - Direct Exposure (*Table S-1 Direct Exposure Human Health Risk Levels*) SL = Soil Leaching (*Table S-3 - Leaching to Groundwater Levels*, *Drinking Water*)

	Table 2 Summary of Soil Vapor Analytical Data The Police Credit Union 2525 & 2550 Irving Street San Francisco, California 94122												
						co, California 9412 oject No. 202006.2.							
Probe & Sample ID Number	Date	Sample Depth feet bgs	Probe Type	Location	cis-1,2- Dichloroethene (cis-1,2-DCE) μg/m ³	trans-1,2- Dichloroethene (trans-1,2-DCE) μg/m ³	Tetrachloroethene (PCE) μg/m ³	Trichloroethene (TCE) μg/m ³	Vinyl Chloride µg/m ³	Helium** (Leak detection gas) (% v/v)			
VP-1A	5/30/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.3)	ND (<2.3)	1,100	ND (<3.1)	ND (<1.5)	ND (<0.025)			
VP-2A	5/31/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	710	ND (<2.8)	ND (<1.3)	ND (<0.025)			
VP-3	5/30/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	370	ND (<2.7)	ND (<1.3)	ND (<0.025)			
VP-4	5/30/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	960	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-3	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<9.9)	ND (<9.9)	2,500	ND (<13)	ND (<6.4)	ND (<0.025)			
SVP-4	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<9.9)	ND (<9.9)	2,200	ND (<13)	ND (<6.4)	ND (<0.025)			
SVP-5	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<9.9)	ND (<9.9)	2,500	ND (<13)	ND (<6.4)	ND (<0.025)			
SVP-6	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<6.3)	ND (<6.3)	1,000	ND (<8.6)	ND (<4.1)	ND (<0.025)			
SVP-7A	6/1/2020	5	PNC	Area B - PCU Parking Lot	ND (<2.0)	ND (<2.0)	470	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-7B	6/1/2020	15	PNC	Area B - PCU Parking Lot	ND (<2.0)	ND (<2.0)	340	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-8A	5/30/2020	5	PNC	Area A - Inside PCU	ND (<2.2)	ND (<2.2)	1,300	ND (<3.0)	ND (<1.4)	ND (<0.025)			
SVP-8B	5/30/2020	15	PNC	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	1,700	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-9A	5/30/2020	5	PNC	Area A - Inside PCU	ND (<2.1)	ND (<2.1)	1,300	ND (<2.8)	ND (<1.3)	ND (<0.025)			
SVP-9B	5/30/2020	15	PNC	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	1,300	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-10A	5/31/2020	5	PNC	Area A - Inside PCU	ND (<2.1)	ND (<2.1)	320	ND (<2.8)	ND (<1.4)	ND (<0.025)			
SVP-10B	5/31/2020	15	PNC	Area A - Inside PCU Area A- PCU	ND (<3.8)	ND (<3.8)	280	ND (<5.2)	ND (<2.5)	ND (<0.025)			
SVP-11A	6/1/2020	5	PNC	Loading Dock	ND (<2.0)	ND (<2.0)	630	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-11B	6/1/2020	15	PNC	Loading Dock Area A - Inside	ND (<2.0)	ND (<2.0)	650	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-12A	5/31/2020	5	PNC	PCU Area A - Inside	ND (<6.1)	ND (<6.1)	1,500	ND (<8.3)	ND (<3.9)	ND (<0.025)			
SVP-12B	5/31/2020	15	PNC	PCU Area A - Inside	ND (<2.0)	ND (<2.0)	1,600	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-13A	5/31/2020	5	PNC	PCU Area A - Inside	ND (<2.0)	ND (<2.0)	290	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-13B	6/13/2020	15	PNC	PCU Area B - PCU	NA	NA	NA	NA	NA	NA			
SVP-14A	6/1/2020	5	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	590	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-14B	6/1/2020	15	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	540	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-15A	6/1/2020	5	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	120	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-15B	6/1/2020	15	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	240	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-16A SVP-16B	6/1/2020 6/1/2020	5	PNC PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0) ND (<2.0)	140 220	ND (<2.7)	ND (<1.3) ND (<1.3)	ND (<0.025)			
SVP-16B SVP-17	5/28/2020	15	T	Parking Lot Area C - N. side of Irving	ND (<2.0) ND (<9.9)	ND (<2.0) ND (<9.9)	1,700	ND (<2.7) ND (<13)	ND (<1.3) ND (<6.4)	ND (<0.025)			
SVP-18A	5/30/2020	5	PNC	Street Area A - Inside	ND (<2.1)	ND (<2.1)	1,200	ND (<2.9)	ND (<1.4)	ND (<0.025)			
SVP-18B	5/30/2020	15	PNC	PCU Area A - Inside	ND (<2.0)	ND (<2.0)	1,200	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-19A	5/28/2020	5	TNC	PCU Area D - Southern	ND (<2.0)	ND (<2.0)	570	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-19B	5/28/2020	15	TNC	Parking Lot Area D - Southern Parking Lot	ND (<5.0)	ND (<5.0)	990	ND (<6.7)	ND (<3.2)	ND (<0.025)			
SVP-20A	5/27/2020	5	TNC	Parking Lot Area D - Southern Parking Lot	ND (<7.9)	ND (<7.9)	1,300	ND (<11)	ND (<5.1)	ND (<0.025)			
SVP-20B	5/27/2020	15	TNC	Area D - Southern Parking Lot	ND (<4.0)	ND (<4.0)	910	ND (<5.4)	ND (<2.6)	ND (<0.025)			
SVP-21A	5/28/2020	5	TNC	Area D - Southern Parking Lot	ND (<2.0)	ND (<2.0)	390	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-21B	5/28/2020	15	TNC	Area D - Southern Parking Lot	ND (<2.0)	ND (<2.0)	200	ND (<2.7)	ND (<1.3)	ND (<0.025)			
SVP-22A	5/28/2020	5	TNC	Area D - Southern Parking Lot	ND (<6.3)	ND (<6.3)	1,300	ND (<8.6)	ND (<4.1)	ND (<0.025)			
SVP-22B	5/28/2020	15	TNC	Area D - Southern Parking Lot	ND (<9.9)	ND (<9.9)	1,800	ND (<13)	ND (<6.4)	ND (<0.025)			

	Table 2 Summary of Soil Vapor Analytical Data The Police Credit Union 2525 & 2550 Irving Street San Francisco, California 94122 AllWest Project No. 202006.23												
Probe & Sample ID Number	DateSample Depth feet bgsProbe TypeLocationcis-1,2- 												
SFRWQCB ESL		Commer	cial Soil Gas	:	1,200 VI	12,000 VI	67 VI	100 VI	5.2 VI	NE			
SFRWQCB ESL Residential Soil Gas					280 VI	2,800 VI	15 VI	18 VI	0.32 VI	NE			

Notes:

Samples analyzed for PCE, TCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride by EPA Method TO-15, Eurofins/Calscience, Inc., Garden Grove, CA Helium by analytical method ASTM D1946, Eurofins/Calscience, Inc., Garden Grove, CA

 $\mu g/m^3$ = Micrograms per cubic meter = 0.001 micrograms per liter

bgs = below ground surface

% v/v = percent by volume

ND = Not detected at or above laboratory reporting limit

NE = Not Established

VI = Vapor Intrusion Human Health Risk Screening Level

NS = Not Sampled; No Recovery

NA = Not Analyzed due to laboratory error

Bold Font = Detected values exceed regulatory screening levels.

* = LCS or LCSD is outside acceptance limits.

** = Leak detection gas or agent

Locations:

Southern parking lot is located at 2525 Irving Street

Police Credit Union (PCU) building, parking lot and loading dock are located at 2550 Irving Street

The five sample locations along Irving Street were located within the parking lanes

AMBIENT = Helium leak detection gas shroud ambient air sample.

T = Temporary soil vapor probe (single), one time sampling event.

TNC = Temporary soil vapor probe (nested cluster), one time sampling event.

PNC = Permanent soil vapor probe (nested cluster), probe remains in the subsurface and can be sampled again. Flush-mounted vault box installation.

SPVP = Semi-Permanent Vapor Pin sub-slab soil vapor probe; remains within the floor slab and can be sampled again. Flush mounted, metal cover but no vault box, easily removed.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for sub-slab and soil gas vapor intrusion for commercial/industrial and residential land use were established using the Tier 2 *Table SG-1* - *Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels,* and *Table SG-2* - *Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs)*, Interim Final, January 24, 2019. These ESLs were established for commercial/industrial and residential property use.

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Table 1. Groundwater Sampling Results vs. Vapor Intrusion Screening Levels

Sample ID:		Screenir	ng Levels	B-19-GW	B-20-GW
Boring:		Maximum	Commercial	B-19	B-20
Depth (ft bgs):	11	Contaminant	Vapor	NA	NA
Analyte Date Collected:	Units	Level	Intrusion	2020-02-23	2020-02-23
Acetone	μg/L	None	9.8E+07	<10	18
Amyl methyl ether, tert-	μg/L	None	None	<0.50	<0.50
Benzene	μg/L	1.0	1.9	0.089 J	0.064 J
Bromobenzene	μg/L	None	2,600	<0.50	<0.50
Bromochloromethane	μg/L	None	3,000	<0.50	<0.50
Bromodichloromethane	μg/L	None	3.8	<0.50	<0.50
Bromoform	μg/L	None	500	<0.50	<0.50
Bromomethane	μg/L	None	73	<0.50	<0.50
Butanone, 2-	μg/L	None	9.5E+06	13	9.5
Butyl alcohol, tert-	μg/L	None	None	<5.0	<5.0
Butylbenzene, n-	μg/L	None	1,400	<0.50	<0.50
Butylbenzene, sec-	μg/L	None	2,500	<0.50	<0.50
Butylbenzene, tert-	μg/L	None	3,300	<0.50	<0.50
Carbon disulfide	μg/L	None	5,300	<0.50	<0.50
Carbon tetrachloride	μg/L	0.50	1.8	<0.50	<0.50
Chlorobenzene	μg/L	70	1,700	<0.50	<0.50
Chloroethane	µg/L	None	97,000	<0.50	<0.50
Chloroform	µg/L	None	3.5	0.091 J	<0.50
Chloromethane	μg/L	None	1,100	<0.50	<0.50
Chlorotoluene, 2-	μg/L	None	2,400	<0.50	<0.50
Chlorotoluene, 4-	μg/L	None	2,000	<0.50	<0.50
Dibromochloromethane	μg/L	None	18	<0.50	<0.50
Dibromochloropropane, 1,2-, 3-	μg/L	0.20	0.33	<0.20	<0.20
Dibromoethane, 1,2-	μg/L	0.050	0.75	<0.50	<0.50
Dibromomethane	μg/L	None	540	<0.50	<0.50
Dichlorobenzene, 1,2-	μg/L	600	11,000	<0.50	<0.50
Dichlorobenzene, 1,3-	μg/L	None	None	<0.50	<0.50
Dichlorobenzene, 1,4-	μg/L	5.0	11	<0.50	<0.50
Dichlorodifluoromethane	μg/L	None	31	<0.50	<0.50
Dichloroethane, 1,1-	μg/L	5.0	34	<0.50	<0.50
Dichloroethane, 1,2-	μg/L	0.50	9.7	<0.50	<0.50



Table 1. Groundwater Sampling Results vs. Vapor Intrusion Screening Levels

Sample ID:		Screenir	ng Levels	B-19-GW	B-20-GW
Boring:		Maximum	Commercial	B-19	B-20
Depth (ft bgs):		Contaminant	Vapor	NA	NA
Analyte Date Collected:	Units	Level	Intrusion	2020-02-23	2020-02-23
Dichloroethene, 1,1-	μg/L	6.0	290	<0.50	<0.50
Dichloroethene, 1,2-, cis-	μg/L	6.0	210	<0.50	<0.50
Dichloroethene, 1,2-, trans-	μg/L	10	910	<0.50	<0.50
Dichloropropane, 1,2-	μg/L	5.0	29	<0.50	<0.50
Dichloropropane, 1,3-	μg/L	None	8,800	<0.50	<0.50
Dichloropropane, 2,2-	μg/L	None	None	<0.50	<0.50
Dichloropropene, 1,1-	μg/L	None	None	<0.50	<0.50
Dichloropropene, 1,3-, cis-	μg/L	0.50	None	<0.50	<0.50
Dichloropropene, 1,3-, trans-	μg/L	0.50	None	<0.50	<0.50
Diisopropyl ether	μg/L	None	30,000	<0.50	<0.50
Ethyl tert-butyl ether	μg/L	None	None	<0.50	<0.50
Ethylbenzene	μg/L	300	15	<0.50	<0.50
Hexachlorobutadiene	μg/L	None	1.3	<0.50	<0.50
Hexachloroethane	μg/L	None	6.9	<0.50	<0.50
Hexanone, 2-	μg/L	None	34,000	2.7	0.79 J
Isopropylbenzene	μg/L	None	3,800	<0.50	<0.50
lsopropyltoluene, p-	µg/L	None	None	<0.50	<0.50
Methyl tert-butyl ether	μg/L	13	2,000	<0.50	<0.50
Methylene chloride	μg/L	0.0E+00	90	<2.0	<2.0
Methylpentanone, 4-, 2-	μg/L	None	2.3E+06	<0.50	<0.50
Naphthalene	μg/L	None	20	<1.0	<1.0
Propylbenzene, n-	μg/L	None	10,000	<0.50	<0.50
Styrene	μg/L	100	35,000	<2.0	<2.0
Tetrachloroethane, 1,1,1,2-	μg/L	None	17	<0.50	<0.50
Tetrachloroethane, 1,1,2,2-	μg/L	1.0	14	<0.50	<0.50
Tetrachloroethene	μg/L	5.0	2.8	<0.50	0.67
Toluene	μg/L	150	4,800	<0.50	<0.50
Trichlorobenzene, 1,2,3-	μg/L	None	270	<0.50	<0.50
Trichlorobenzene, 1,2,4-	μg/L	5.0	29	<0.50	<0.50
Trichloroethane, 1,1,1-	μg/L	200	6,300	<0.50	<0.50
Trichloroethane, 1,1,2-	μg/L	5.0	23	<0.50	<0.50



Sample ID:		Screenir	ng Levels	B-19-GW	B-20-GW
Boring:		Maximum	Commercial	B-19	B-20
Depth (ft bgs):	Units	Contaminant	Vapor	NA	NA
Analyte Date Collected:		Level	Intrusion	2020-02-23	2020-02-23
Trichloroethene	μg/L	5.0	7.4	<0.50	<0.50
Trichlorofluoromethane	μg/L	150	1,300	<0.50	<0.50
Trichloropropane, 1,2,3-	μg/L	0.0050	0.11	<0.50	<0.50
Trichlorotrifluoroethane, 1,1,2-, 1,2,2-	μg/L	1,200	1,000	<0.50	<0.50
Trimethylbenzene, 1,2,4-	μg/L	None	1,000	<0.50	<0.50
Trimethylbenzene, 1,3,5-	μg/L	None	730	<0.50	<0.50
Vinyl chloride	μg/L	0.50	0.14	<0.50	<0.50
Xylene, m,p-	μg/L	1,750	1,500	<0.50	<0.50
Xylene, o-	μg/L	1,750	2,100	<0.50	<0.50
Xylene, o,m,p-	μg/L	1,750	1,600	<0.50	<0.50



Table 1. Groundwater Sampling Results vs. Vapor Intrusion Screening Levels

Notes:

- (1) Less-than sign (<) indicates analyte was not detected above indicated laboratory reporting limit. En-dash (–) indicates sample was not analyzed for compound.
- (2) Abbreviations:
 - ft bgs feet below ground surface
 - mg/kg milligrams per kilogram
 - °F degrees Fahrenheit
 - TPH-g total petroleum hydrocarbons in the gasoline range
 - TPH-d total petroleum hydrocarbons in the diesel range
 - TPH-mo total petroleum hydrocarbons in the motor oil range
- (3) Data qualifiers:

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- Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
- (4) Sampling results are compared to Department of Toxic Substances Control (DTSC)-recommended groundwater vapor intrusion screening levels for commercial/industrial land use (DTSC 2020, USEPA 2020, DTSC and SWRCB 2020).
- (5) Highlighting key:
 - Detected concentration exceeds one or more screening levels.



	Sample ID:		Commorsial/II	ndustrial RBSLs	B-13-5	B-13-15	B-14-5	B-14-15	B-15-8	B-15-18	B-16-4	B-17-7	B-17-17
	Boring:		Commercial/I		B-13	B-13	B-14	B-14	B-15	B-15	B-16	B-17	B-17
	Depth (ft bgs):	Units	Cancer	Noncancer	5	15	5	15	8	18	4	7	17
Analyte	Date Collected:	Onits	Cancer	Noncancer	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-15	2019-12-15	2019-12-15
Volatile Organic Compour	nds (VOCs)		-		-	-		-	-			-	-
Acetone		μg/m³	None	4.70E+06	29	39	60	87	31	<28	<27	<27	<25
Benzene		μg/m³	1.40E+04	4.30E+05	<3.9	<4.0	<3.7	<3.8	24	<3.7	5.5	<3.6	<3.4
Benzyl chloride		μg/m³	8.30E+00	1.50E+02	<6.3	<6.4	<6.0	<6.1	<5.6	<6.0	<5.9	<5.9	<5.5
Bromodichloromethane		μg/m³	1.10E+01	1.20E+04	<8.1	<8.3	<7.7	<7.9	<7.2	<7.8	<7.7	<7.6	<7.1
Bromoform		μg/m³	3.70E+02	1.20E+04	<12	<13	<12	<12	<11	<12	<12	<12	<11
Bromomethane		μg/m³	None	7.30E+02	<47	<48	<45	<46	<42	<45	<44	<44	<41
Butanone, 2-		µg/m³	None	7.30E+05	<14	20	<14	21	<13	<14	20	<13	<12
Carbon disulfide		µg/m³	None	1.00E+05	<15	<16	<14	<15	<13	<14	<14	<14	<13
Carbon tetrachloride		µg/m³	6.70E+01	6.00E+03	<7.6	<7.8	<7.3	<7.4	<6.8	<7.3	<7.2	<7.2	<6.7
Chlorobenzene		μg/m³	None	7.30E+03	<5.6	<5.7	<5.3	<5.4	<5.0	<5.3	<5.3	<5.2	<4.9
Chloroethane		μg/m³	None	1.50E+06	<13	<13	<12	<12	<11	<12	<12	<12	<11
Chloroform		μg/m³	1.80E+01	1.40E+04	<5.9	9.2	<5.6	<5.7	5.4	<5.7	<5.6	7.9	<5.2
Chloromethane		μg/m³	None	1.30E+04	<25	<26	<24	<24	<22	<24	<24	<24	<22
Chloropropene, 3-		µg/m³	6.70E+01	1.50E+02	<15	<16	<14	<15	<14	<14	<14	<14	<13
Cyclohexane		µg/m³	None	8.70E+05	<4.2	6.3	<4.0	<4.0	<3.7	<4.0	<3.9	<3.9	<3.7
Dibromochloromethane		µg/m³	1.90E+01	1.20E+04	<10	<11	<9.8	<10	<9.2	<9.9	<9.8	<9.7	<9.1
Dibromoethane, 1,2-		µg/m³	6.70E-01	1.20E+02	<9.3	<9.6	<8.9	<9.0	<8.3	<8.9	<8.8	<8.8	<8.2
Dichlorobenzene, 1,2-		µg/m³	None	2.90E+04	<7.3	<7.5	<6.9	<7.1	<6.5	<7.0	<6.9	<6.8	<6.4
Dichlorobenzene, 1,3-		µg/m³	None	None	<7.3	<7.5	<6.9	<7.1	<6.5	<7.0	<6.9	<6.8	<6.4
Dichlorobenzene, 1,4-		µg/m³	3.70E+01	1.20E+05	<7.3	<7.5	<6.9	<7.1	<6.5	<7.0	<6.9	<6.8	<6.4
Dichlorodifluoromethane		µg/m³	None	1.50E+04	<6.0	<6.2	<5.7	<5.8	<5.3	<5.7	<5.7	<5.6	<5.3
Dichloroethane, 1,1-		µg/m³	2.60E+02	1.20E+05	<4.9	<5.0	<4.7	<4.8	<4.4	<4.7	<4.6	<4.6	<4.3
Dichloroethane, 1,2-		µg/m³	1.60E+01	1.00E+03	<4.9	<5.0	<4.7	<4.8	<4.4	<4.7	<4.6	<4.6	<4.3
Dichloroethene, 1,1-		µg/m³	None	1.00E+04	<4.8	<4.9	<4.6	<4.6	<4.3	<4.6	<4.5	<4.5	<4.2
Dichloroethene, 1,2-, cis-		µg/m³	None	1.20E+03	<4.8	<4.9	<4.6	<4.6	<4.3	<4.6	<4.5	<4.5	<4.2
Dichloroethene, 1,2-, tran	IS-	µg/m³	None	1.20E+04	<4.8	<4.9	<4.6	<4.6	<4.3	<4.6	<4.5	<4.5	<4.2
Dichloropropane, 1,2-		µg/m³	1.10E+02	6.00E+02	<5.6	<5.8	<5.3	<5.4	<5.0	<5.4	<5.3	<5.3	<4.9
Dichloropropene, 1,3-, cis	-	µg/m³	None	None	<5.5	<5.6	<5.2	<5.3	<4.9	<5.3	<5.2	<5.2	<4.8
Dichloropropene, 1,3-, tra	ans-	µg/m³	None	None	<5.5	<5.6	<5.2	<5.3	<4.9	<5.3	<5.2	<5.2	<4.8
Dichlorotetrafluoroethan	e, 1,2-, 1,1,2,2-	µg/m³	None	None	<8.4	<8.7	<8.1	<8.2	<7.6	<8.1	<8.0	<8.0	<7.4

Path Forward

	Sample ID:		Commonsiel/II	ndustrial RBSLs	B-13-5	B-13-15	B-14-5	B-14-15	B-15-8	B-15-18	B-16-4	B-17-7	B-17-17
	Boring:		Commercial/II		B-13	B-13	B-14	B-14	B-15	B-15	B-16	B-17	B-17
D	epth (ft bgs):	Units	Canaar	Nenconcor	5	15	5	15	8	18	4	7	17
Analyte Da	ate Collected:	Units	Cancer	Noncancer	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-15	2019-12-15	2019-12-15
Dioxane, 1,4-		µg/m³	8.30E+01	4.30E+03	<17	<18	<17	<17	<16	<17	<16	<16	<15
Ethanol		µg/m³	None	None	26	14	13	19	140	9.6	<8.6	<8.6	<8.0
Ethylbenzene		µg/m³	1.60E+05	1.50E+08	<5.2	<5.4	<5.0	<5.1	38	<5.0	<5.0	<4.9	<4.6
Ethyltoluene, 4-		µg/m³	None	None	<5.9	<6.1	<5.7	<5.8	29	<5.7	<5.6	<5.6	<5.2
Heptane, n-		µg/m³	None	6.00E+04	<5.0	7.3	<4.7	<4.8	8.6	<4.8	<4.7	<4.7	<4.4
Hexachlorobutadiene		µg/m³	1.90E+01	6.00E+02	<52	<53	<49	<50	<46	<49	<49	<49	<45
Hexane, n-		µg/m³	None	1.00E+05	<4.3	13	<4.1	<4.1	<3.8	<4.1	<4.0	<4.0	<3.8
Hexanone, 2-		µg/m³	None	4.30E+03	<20	<20	<19	<19	<18	<19	<19	<19	<17
Isopropanol		µg/m³	None	2.90E+04	<12	<12	<11	<12	<11	<11	<11	<11	<10
Isopropylbenzene		µg/m³	None	6.00E+04	<5.9	<6.1	<5.7	<5.8	<5.3	<5.7	<5.6	<5.6	<5.2
Methyl tert-butyl ether		µg/m³	1.60E+03	4.30E+05	<17	<18	<17	<17	<16	<17	<16	<16	<15
Methylene chloride		µg/m³	4.00E+02	6.00E+04	<42	<43	<40	<41	<38	<40	<40	<40	<37
Methylpentanone, 4-, 2-		µg/m³	None	4.30E+05	<5.0	<5.1	<4.7	<4.8	<4.4	<4.8	<4.7	<4.7	<4.4
Naphthalene		µg/m³	1.20E+04	4.30E+05	<13	<13	<12	<12	<11	<12	<12	<12	<11
Propylbenzene, n-		µg/m³	None	1.50E+05	<5.9	<6.1	<5.7	<5.8	<5.3	<5.7	<5.6	<5.6	<5.2
Styrene		µg/m³	None	1.30E+05	<5.2	<5.3	<4.9	<5.0	<4.6	<4.9	<4.9	<4.8	<4.5
Tetrachloroethane, 1,1,2,2-		µg/m³	7.00E+00	1.20E+04	<8.3	<8.5	<7.9	<8.1	<7.4	<8.0	<7.9	<7.8	<7.3
Tetrachloroethene		µg/m³	6.70E+01	6.00E+03	380	790	100	590	48	380	240	520	900
Tetrahydrofuran		µg/m³	None	2.90E+05	<3.6	<3.7	<3.4	<3.5	<3.2	<3.4	5.6	<3.4	<3.1
Toluene		µg/m³	None	4.30E+07	<4.6	10	9.3	<4.4	250	<4.4	33	<4.3	<4.0
Trichlorobenzene, 1,2,4-		µg/m³	5.70E+01	2.90E+02	<36	<37	<34	<35	<32	<34	<34	<34	<32
Trichloroethane, 1,1,1-		µg/m³	None	1.50E+05	<6.6	<6.8	<6.3	<6.4	<5.9	<6.3	<6.2	<6.2	<5.8
Trichloroethane, 1,1,2-		µg/m³	2.60E+01	2.90E+01	<6.6	<6.8	<6.3	<6.4	<5.9	<6.3	<6.2	<6.2	<5.8
Trichloroethene		µg/m³	1.00E+02	2.90E+02	<6.5	<6.7	<6.2	<6.3	<5.8	<6.2	<6.2	<6.1	<5.7
Trichlorofluoromethane		µg/m³	None	1.80E+05	<6.8	<7.0	<6.5	<6.6	<6.1	<6.5	<6.4	<6.4	<6.0
Trichlorotrifluoroethane, 1,1,2-, 1,2,	,2-	µg/m³	None	7.30E+05	<9.3	<9.5	<8.8	<9.0	<8.3	<8.9	<8.8	<8.7	<8.2
Trimethylbenzene, 1,2,4-		µg/m³	None	8.70E+03	<5.9	<6.1	<5.7	<5.8	24	<5.7	<5.6	<5.6	<5.2
Trimethylbenzene, 1,3,5-		µg/m³	None	8.70E+03	<5.9	<6.1	<5.7	<5.8	12	<5.7	<5.6	<5.6	<5.2
Trimethylpentane, 2,2,4-		µg/m³	None	None	<5.6	<5.8	<5.4	<5.5	29	<5.4	<5.3	<5.3	<5.0
Vinyl chloride		µg/m³	5.30E+00	1.50E+04	<3.1	<3.2	<3.0	<3.0	<2.8	<3.0	<2.9	<2.9	<2.7
Xylene, m,p-		µg/m³	None	None	<5.2	<5.4	<5.0	<5.1	160	<5.0	11	<5.0	<4.6

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	Sample ID:	: Commercial/In		dustrial PPSIs	B-13-5	B-13-15	B-14-5	B-14-15	B-15-8	B-15-18	B-16-4	B-17-7	B-17-17
	Boring:		Commercial/II	Commercial/Industrial RBSLs		B-13	B-14	B-14	B-15	B-15	B-16	B-17	B-17
	Depth (ft bgs):	Units	Cancer	Noncancer	5	15	5	15	8	18	4	7	17
Analyte	Date Collected:		Cancer	Noncancer	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-15	2019-12-15	2019-12-15
Xylene, o-		µg/m³	None	1.50E+07	<5.2	<5.4	<5.0	<5.1	54	<5.0	<5.0	<5.0	<4.6
Fixed Gases													
Carbon dioxide		%	None	None	0.60	0.71	0.70	0.82	1.0	0.64	0.36	0.47	0.52
Carbon monoxide		%	None	None	<0.024	<0.025	<0.023	<0.024	<0.022	<0.023	<0.021	<0.023	<0.021
Helium		%	None	None	<0.12	<0.12	<0.12	<0.12	<0.11	<0.12	<0.11	<0.11	<0.11
Methane		%	None	None	<0.00024	<0.00025	<0.00023	<0.00024	0.00058	<0.00023	0.00025	0.00034	0.00038
Oxygen		%	None	None	20	20	20	20	20	20	19	20	20



Notes:

(1) Sub-slab soil gas sampling results for VOCs reported in micrograms per cubic meter ($\mu g/m^3$). Less-than sign (<) indicates analyte was not detected above indicated laboratory reporting limit.

- (2) Sub-slab soil gas sampling results are compared to DTSC-recommended sub-slab soil gas risk-based screening levels which incorporate the following components.
 - DTSC-recommended indoor air risk-based screening levels for commercial/industrial land use (DTSC 2020, USEPA 2020); and
 - DTSC-recommended sub-slab soil gas-to-indoor air attenuation factor of 0.03 (DTSC and SWRCB 2020).

The attenuation factor for petroleum hydrocarbons (benzene, ethylbenzene, naphthalene, toluene, and xylenes) incorporates an additional factor of 0.001 to account for the bioattenuation that occurs under aerobic conditions (SWRCB 2012).

Screening levels are based on cancer (CA) or noncancer (NC) health effects.

Detected concentrations that exceed screening levels are highlighted.



Appendix B

Final Response Plan



FINAL RESPONSE PLAN

2550 Irving Street Affordable Housing Project

San Francisco, California

September 2, 2021

Prepared for:

Tenderloin Neighborhood Development Corporation (TNDC) 49 Powell Street, 3rd Floor San Francisco, California 94102

Path Forward

Environmental Engineering & Geology

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Project No.: 115-103-105

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PROFESSIONAL CERTIFICATION

This *Final Response Plan* for the redevelopment project located at 2550 Irving Street in San Francisco, California has been prepared by a California Professional Geologist and/or California Professional Engineer. This document is based on information available to Path Forward Partners, Inc. and current laws, policies, and regulations as of the date of this document. The opinions expressed in this document are based upon the information available to Path Forward Partners, Inc. and are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Path Forward Partners, Inc. in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

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EXECUTIVE SUMMARY

This *Final Response Plan* (Response Plan) has been prepared by Path Forward Partners, Inc. (Path Forward) on behalf of the Tenderloin Neighborhood Development Corporation (TNDC) for the proposed mixed-use development project located at 2550 Irving Street in San Francisco, California (the Site). TNDC entered into a California Land Use and Revitalization Act (CLRRA) agreement (HSA-FY20/21-082) with the Department of Toxic Substances Control (DTSC) to address on-Site impacts associated with volatile organic compounds (VOCs) detected in on-Site soil gas. This Response Plan does not include investigation results and/or response actions associated with off-Site impacts as The Police Credit Union (TPCU) has entered into Standard Voluntary Agreement Docket No. HAS-FY19/20-141, as amended, (the SVA) with the DTSC to investigate and address those off-Site issues.

A site assessment plan prepared pursuant to California Health and Safety Code (HSC) Section 25395.94 has determined that the presence of VOCs in Site soil gas pose an unreasonable risk to health and safety in the context of future redevelopment of the Site for mixed residential and commercial use (Path Forward 2021).

Upon review of the site assessment plan, the DTSC has determined that a response action is necessary to prevent or eliminate the unreasonable risk to public health and safety in the context of the anticipated future site use. As owner of the Site, TNDC has submitted this Response Plan to DTSC to conduct a response action at the site, to mitigate the presence of VOCs in soil gas as they pertain to future on-Site receptors in coordination with redevelopment of the Site. The Response Action Objective (RAO) for the Site is to minimize or eliminate exposures between future building occupants and VOCs present in Site soil gas. The potential exposure route to chemicals in soil gas is inhalation of VOCs present in indoor air of future site buildings as a result of transport (vapor intrusion) from the subsurface. Assessment, evaluation of risk, and/or risk mitigation, if necessary, of VOCs in soil, groundwater, and soil gas to off-Site receptors are outside of the scope of this Response Plan, and will be performed by TPCU in accordance with the SVA.

Three possible response action alternatives have been identified and evaluated:

- Alternative 1 No Action. This alternative is included to provide a baseline for comparisons among other response action alternatives. Under this alternative, the Site would be redeveloped for residential use; but no response actions would be taken, no mitigation measures would be implemented, and no costs would be incurred.
- Alternative 2 Soil Excavation. This alternative is intended to reduce concentrations of VOCs in soil to levels that are protective of human health under residential/unrestricted land use, to the extent possible.
- Alternative 3 Vapor Intrusion Mitigation System, Land Use Covenant, and Operations and Maintenance. This alternative is intended to mitigate potential vapor intrusion



concerns by incorporating a vapor intrusion mitigation system (VIMS) into the design and construction of the proposed building. The VIMS would consist of a sub-slab venting system and a sub-slab vapor-barrier membrane. This alternative would additionally provide institutional controls to ensure long-term protection from residual soil gas impacts through a Land Use Covenant (LUC). The LUC would prohibit residential use of the property unless engineering controls (i.e., the VIMS) are in place and operating as designed. The LUC would also provide a measure of protection of the floor slab that protects the VIMS and provide for periodic inspection and reporting on the condition of the floor slab and VIMS.

The three response action alternatives were evaluated and compared on the bases of effectiveness, implementability, and cost.

- The effectiveness criterion considers overall protection of human health and the environment on Site; compliance with applicable or relevant and appropriate requirements (ARARs) and to-be-considered criteria (TBCs); short-term effectiveness; long-term effectiveness and permanence; and reduction of toxicity, mobility, or volume.
- The implementability criterion evaluates the technical and administrative feasibility of
 implementing the response action alternative, as well as the availability of the necessary
 equipment and services. This includes the ability to design and perform a response
 action alternative to address on-Site risks, ability to obtain services and equipment,
 ability to monitor the performance and effectiveness of technologies, and the ability to
 obtain necessary permits and approvals from agencies, and acceptance by the state and
 the community.
- The cost criterion assesses the relative cost of each technology based on estimated fixed capital for construction or initial implementation and ongoing operational and maintenance costs.

Based on this comparative analysis, Alternative 3 – Vapor Intrusion Mitigation System, Land Use Covenant, and Operations and Maintenance, is the preferred and recommended response action alternative for the Site. Alternative 3 would achieve RAOs, be protective of human health and the environment, and a have a much lower impact on the adjacent community as compared to Alternative 2 while being a cost-effective remedy.

This Response Plan provides an overview of the implementation of the preferred response action alternative. This includes specifications for the VIMS design components and details of the long-term operations and maintenance. At the completion of construction, prior to the issuance of the system certification and certification of occupancy, indoor air sampling and analysis will be conducted to demonstrate that the system is effective in mitigating potential vapor intrusion. Also prior to building occupancy, a Response Plan Implementation Report will be prepared for DTSC review, and an Operation and Maintenance Agreement shall be executed.



Prior to approving this Response Plan, DTSC prepared a Community Letter and Survey (DTSC 2021b), a Community Profile (DTSC 2021c), a Public Notice of the Public Comment Period for 2550 Irving Street (DTSC 2021d), and a Community Update of the Public Comment Period for 2550 Irving Street (DTSC 2021e) to notify the public regarding the Site and inviting the public to comment on the Draft Response Plan. The public comment period for the Draft Response Plan was from July 12 to August 13, 2021 and included a Remote Public Meeting on July 22, 2021. Following public comment, the DTSC prepared a Responsiveness Summary (DTSC 2021f) to respond to all public comments received during the 33-day public comment period on the Draft Response Plan reflects changes which the DTSC determined were appropriate in response to public comments.



1.0 INTRODUCTION

This Final Response Plan (Response Plan) has been prepared by Path Forward Partners, Inc. (Path Forward) on behalf of the Tenderloin Neighborhood Development Corporation (TNDC) for the proposed mixed-use development project located at 2550 Irving Street in San Francisco, California (the Site). The Site location is shown in Figure 1. TNDC entered into a California Land Use and Revitalization Act (CLRRA) agreement (HSA-FY20/21-082) with the Department of Toxic Substances Control (DTSC) to address on-Site impacts associated with volatile organic compounds (VOCs) detected in on-Site soil gas. This Response Plan does not include investigation results and/or response actions associated with off-Site impacts as The Police Credit Union (TPCU) has entered into Standard Voluntary Agreement Docket No. HAS-FY19/20-141, as amended, (the SVA) with the DTSC to investigate and address those off-Site issues.

A site assessment plan prepared pursuant to California Health and Safety Code (HSC) Section 25395.94 has determined that the presence of VOCs in Site soil gas pose an unreasonable risk to health and safety in the context of future redevelopment of the Site for mixed residential and commercial use (Path Forward 2021 and DTSC 2021a).

In accordance with HSC Section 25395.96, this Response Plan contains the following elements:

- Opportunity for the public, other agencies, and the City and County of San Francisco to participate in decisions regarding the response action, taking into consideration the nature of the community interest;
- Identification of the release or threatened release that is the subject of the Response Plan and documentation that the Response Plan is based on an adequate characterization of the Site;
- An identification of the Response Plan objectives and the proposed remedy, and an identification of the reasonably anticipated future land uses of the Site and of the current and projected land use and zoning designations;
- A description of activities that will be implemented to control any endangerment to human health or the environment that may occur during the response action at the Site;
- A description of the land use controls that are part of the response action;
- A description of wastes other than hazardous materials at the Site and how they will be managed in conjunction with the response action;
- Provisions for the removal of containment or storage vessels and other sources of contamination that cause an unreasonable risk; and
- Provisions for the agency to require further response actions based on the discovery of hazardous materials that pose an unreasonable risk to human health and safety or the environment that are discovered during the course of the response action or subsequent development of the Site.



2.0 SITE DESCRIPTION

2.1 Site Land Use

The Site occupies approximately 19,125 square feet located at 2520 and 2550 Irving Street in San Francisco, California. The Assessor's Parcel Number (APN) assigned to the Site is 1724-038, which includes the addresses 2520 and 2550 Irving Street. According to the San Francisco Property Information Map (PIM) the Site is zoned under the Irving Street Neighborhood Commercial District. The Site is currently improved with a 18,561 square foot two-story commercial building, constructed in 1966, that is currently used as a bank (TPCU).

2.2 Site Owner

The 2520 and 2550 Irving Street property is currently owned by TPCU; however, prior to redevelopment, TNDC intends to acquire the property.

2.3 Historic Uses

According to the *Phase I Environmental Site Assessment* (Phase I ESA; Path Forward 2020), the Site was vacant land as early as 1895 and remained vacant until at least 1915. By 1928, two structures had been developed in the central portion. The 1928 Sanborn map depicts these as a drugstore and a cleaning business. By 1940, a gas station had been added to the southeast corner of the Site, and by 1946, a second gas station had been added to the western end of the Site. By 1950, the central buildings on the Site were occupied by an undertaker, and in 1966, this business redeveloped the entire property with the current building and open areas for use as a mortuary and funeral chapel. The funeral business continued in the building until 1985, when the building was modified for its current use. The Site has been utilized as a bank since 1987.

2.4 Adjacent Properties

The Phase I ESA (Path Forward 2020) identified adjoining property and surrounding area uses as primarily commercial and residential including the following:

- North: Single family residences (1281 26th Avenue and 1280 27th Avenue).
- South: Irving Street, followed by from east to west: Sterling Bank and Trust (2501 Irving Street), vacant retail space (2511 Irving Street), surface parking lot used by employees of the bank on the subject property, apparent office building (2533, 2535 and 2537 Irving Street), residential building (2539 and 2541 Irving Street), residential building with street level retail space (the Artisans custom framing, 2549 Irving Street) and Nomad Cyclery bike shop (2555 Irving Street).
- East: 26th Avenue followed by a surface parking lot.



 West: One residential building between the north portion of the bank property and 27th Avenue (1284 27th Avenue), and 27th Avenue followed by residences.

2.5 Site Geology and Hydrogeology

According to information presented by the United States Geological Survey (USGS) on the 1996 7.5-Minute Series San Francisco North, California Quadrangle Topographic Map, the ground surface elevations at the Site is approximately 202 feet above mean sea level (amsl) with a slight downward slope to the west. The Site is located in an urban commercial setting within the Coast Ranges physiographic province of California. The nearest surface water body to the subject property is the Mallard Lake, approximately 961 feet to the north within Golden Gate Park. In addition, the Pacific Ocean is 1.5 mile to the west.

Path Forward reviewed a subsurface investigation report for the Site (AllWest 2019e). The report describes lithology encountered in those borings as coarse-grained, poorly to well graded sand to a depth of 90 feet below ground surface (bgs), which corresponds to the maximum depth explored.

Groundwater was measured on the subject property at a static depth of approximately 78 feet bgs (AllWest 2019e). Flow direction has not been established but is presumed to be to the northwest.

Groundwater in the Site vicinity is a drinking water resource – the Site is located within the North Westside Groundwater Basin, which per the Basin Plan has a designated beneficial use of Municipal and Domestic Supply (SFBRWQCB 2017).

2.6 Previous Site Characterizations

Historical sampling results from the Site characterization activities described below are provided in Appendix A. Tables appended in Appendix A include both on- and off-Site investigation results; however, the discussion below is primarily focused on on-Site investigation results. As previously discussed, any necessary assessment, evaluation of risk, and/or risk mitigation, if necessary, of VOCs in soil, groundwater, and soil gas to off-Site receptors are outside of the scope of this Response Plan and will be performed by TPCU in accordance with the SVA.

2.6.1 Phase I Environmental Site Assessment (AllWest)

In February 2019, a Phase I Environmental Site Assessment was conducted by AllWest Environmental, Inc. (AllWest) on behalf of TPCU (AllWest 2019a). The AllWest Phase I ESA included the Site and 2525 Irving Street, a parcel across Irving Street to the south also owned by TPCU. The AllWest Phase I ESA identified historical uses of potential concern including two on-Site gas stations at 2500 and 2550 Irving Street, an on-Site clothes cleaner at 2520 Irving Street, and an off-Site dry cleaners (Albrite Cleaners) at 2511 Irving Street (adjacent to the 2525 Irving



Street parcel). The AllWest Phase I ESA recommended an underground storage tank (UST) survey to locate potential abandoned-in-place USTs and recommended a subsurface site investigation of soil, soil gas, and groundwater conditions to evaluate if a release had occurred from the on-Site or off-Site cleaners.

2.6.2 Subsurface Investigations

A series of subsurface site investigations have been performed in 2019 and 2020, including several investigations conducted by AllWest on behalf of TPCU and one investigation conducted by Path Forward on behalf of TNDC.

<u>May 2019</u>

In May 2019, AllWest produced a *Phase II Subsurface Investigation Report* to address concerns that were discovered in their earlier Phase I ESA. Based on the findings of the Phase I ESA, AllWest performed an investigation which involved collecting soil and sub-slab soil gas samples (AllWest 2019b).

Borings were advanced at five locations for collection of soil samples (B-1 through B-5). A total of five soil samples, collected from 4.5-5.0 feet below ground surface (bgs), were submitted for chemical analysis. Soil samples were analyzed for total petroleum hydrocarbons (TPH) in the diesel range (TPH-d) and motor oil range (TPH-mo), TPH in the gasoline range (TPH-g), VOCs, polycyclic aromatic hydrocarbons (PAHs), and LUFT-5 metals. Soil sampling results were below current DTSC HERO Note 3 risk-based screening levels (RBSLs) for residential soil (DTSC 2020) and/or ambient/background levels (Bradford et al. 1996, Duvergé 2011).

Sub-slab soil gas samples were collected at two locations beneath the existing building (VP-1 and VP-2). Tetrachloroethene (PCE) was detected in sub-slab soil gas samples at concentrations of 480 micrograms per cubic meter (μ g/m³) and 530 μ g/m³, which exceed the commercial/industrial soil gas RBSL of 67 μ g/m³ (DTSC 2020). Based on these findings, AllWest recommended additional investigation to determine the source and extent of the PCE contamination found on-Site.

July 2019

In July 2019, AllWest advanced three additional borings to collect soil samples (B-8 through B-10) and collected sub-slab soil gas samples at four locations beneath the existing building (VP-1A, VP-2A, VP-3, and VP-4) (AllWest 2019c).

Six soil samples were analyzed for PCE and its breakdown products, consisting of trichloroethene (TCE), *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, 1,1-dichloroethene, and vinyl chloride. All analytes were not detected in soil above laboratory reporting limits.



PCE was detected in all four sub-slab soil gas samples at concentrations ranging from 270 μ g/m³ to 1,100 μ g/m³. Based on these results, AllWest recommended collecting groundwater samples from the Site and the 2525 Irving Street parcel to delineate the extent and origin of PCE.

Also in July 2019, AllWest conducted an investigation at the 2525 Irving Street parcel to assess potential off-Site PCE impacts (AllWest 2019d). Two borings were advanced to collect soil samples (B-6 and B-7) and two borings were advanced to collect soil gas samples (SVP-1 and SVP-2). Soil sampling results were generally low, and VOCs were not detected. PCE was detected in the soil gas samples at concentrations of 1,800 μ g/m³ and 1,300 μ g/m³. AllWest concluded these results were similar to results from the Site and recommended additional investigation to delineate the PCE in soil gas.

September 2019

In September 2019, AllWest advanced two borings (B-11 and B-12) to a maximum depth of 90 feet bgs to investigate soil and groundwater conditions near the former Albrite Cleaners (AllWest 2019f). Soil and groundwater were analyzed for PCE and its breakdown products. PCE and its breakdown products were not detected in any soil samples. PCE was detected at a concentration of 0.71 micrograms per liter (μ g/L) in one groundwater sample. AllWest concluded that it was likely there had been a release from the Albrite Cleaners but could not rule out additional contributors to the PCE in soil gas.

December 2019

In December 2019, Path Forward conducted a soil gas and groundwater investigation at the Site.

Four temporary nested soil gas probes (B-13-5/15, B-14-5/15, B-15-8/18 and B-17-7/17) and one single-depth soil gas probe (B-17-7) were installed at depths of 4 to 8 feet bgs and 15 to 18 feet bgs. Depths were selected based on Site topography relative to the adjacent residential properties as the Site is built-up along the northern property boundary. PCE was detected in all soil gas samples at concentrations ranging from 48 μ g/m³ to 900 μ g/m³.

Groundwater was sampled at locations B-19 and B-20 where it was encountered at 77.4 and 79.2 feet bgs, respectively. PCE was detected at 0.67 μ g/L at location B-20 and not detected above laboratory reporting limits at location B-19.

May-June 2020

In May and June 2020, AllWest advanced a total of 20 borings for the installation of temporary and permanent soil gas probes throughout the Site and surrounding streets (AllWest 2020c). 48 soil samples from these borings were analyzed for PCE and its breakdown products. PCE was the only constituent detected in a single sample (SVP-12-4.5) at a concentration of 0.052 milligrams per kilogram (mg/kg) at a depth of 4.5 to 5.0 feet bgs. PCE was detected in soil gas in



all areas sampled at concentrations ranging from 120 μ g/m³ to 2,500 μ g/m³. Given the distribution of results, AllWest concluded that PCE contamination was contributed from the former Albrite Cleaners (2511 Irving Street) and that the plume likely extends off-Site to north of the TPCU building.

2.6.3 Indoor Air Investigations

AllWest has conducted indoor air quality monitoring events at the existing TPCU building on a semi-annual basis since August of 2019. Based on reports available to Path Forward, sampling events have occurred in August 2019 (AllWest 2019e), December 2019 (AllWest 2020a), and February 2020 (AllWest 2020b). Sampling events consisted of collecting four indoor air samples and one outdoor air sample over a 24-hour period. Samples were analyzed for PCE and its breakdown products. During the August 2019, December 2019, and February 2020 sampling events, results were similar with maximum detected concentrations of PCE in indoor air of $3.85 \ \mu g/m^3$, $4.3 \ \mu g/m^3$, and $3.3 \ \mu g/m^3$ respectively.

2.6.4 Phase I Environmental Site Assessment (Path Forward)

In September 2020, a Phase I ESA of the Site was prepared by Path Forward on behalf of TNDC (Path Forward 2020), The Path Forward Phase I ESA identified following recognized environmental conditions (RECs):

- Soil gas on the subject property is impacted by PCE, which has resulted in a vapor intrusion condition in the building. Investigation is ongoing and TPCU has entered into a Voluntary Cleanup Agreement under oversight of the DTSC to investigate and mitigate effects of the condition. Data obtained during multiple investigation in 2019 and 2020 have not ruled out the subject Site as a source for the impacts; however, they have identified a former dry cleaner off-Site to the south as a potential contributing source. Based on the ongoing investigation under regulatory oversight, no additional investigation is warranted at this time. However, due to the known impacts at concentrations exceeding reference criteria, this condition is a REC.
- Article 22A of the San Francisco Health Code (the Maher Ordinance) requires San Francisco Department of Public Health (SFDPH), "oversight for characterization and mitigation of hazardous substances in soil and groundwater in designated areas zoned for industrial uses, sites with industrial uses or underground storage tanks, sites with historic bay fill, sites in close proximity to freeways or underground storage tanks." The subject property has been identified as subject to the Maher Ordinance, based on review of the current Maher Map maintained by the City and County of San Francisco. According to DataSF (a city and county government data access point), the subject property was identified as a Maher property in 2013. The rationale may be related to historical gas station use, as the Site is not known to be filled land. While the Maher listing is considered to be a REC, historical investigations and DTSC oversight related to historical Site use will, per SFDHPH Case Officer (SFDPH 2021a), meet the SFDPH's



standard to satisfy the Maher requirements, and further testing and mitigation beyond the DTSC requirements is unlikely to be required by the SFDPH.

2.7 Site Redevelopment Plans

Upon acquiring the property, TPCU may continue to occupy the building for a short period of time; however, TNDC ultimately plans to demolish the existing credit union building and redevelop the Site into a seven-story mixed commercial and residential use facility. The facility would be constructed at-grade with ground floor parking and/or commercial use with residential occupancy above the ground floor. It is noted that the redevelopment may include a ground floor daycare with an associated residential use. The footprint of the proposed building is presented on Figure 2.

3.0 HEALTH RISK EVALUATION

3.1 Data Evaluation

3.1.1 Soil

As discussed above, Site soil conditions have been characterized in recent investigations that included a total of 66 soil samples collected from 36 borings. The soil samples have been analyzed for a variety of analytes; however, PCE was found to be the only compound of significance detected during these investigations. PCE was detected in one sample at a low concentration of 0.052 mg/kg, which is below the SFBRWQCB Tier 1 ESL and below the DTSC-recommended human health RBSL for residential land use. Samples analyzed for total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), and metals were either not detected or were detected at concentrations below their respective SFBRWQCB Tier 1 soil ESLs and DTSC-recommended human health RBSLs for residential land use. Further, Site soils will be largely covered with the proposed building and hardscape elements, eliminating potential soil exposures except in landscaped areas.

3.1.2 Groundwater

As discussed above, Site groundwater conditions have been characterized in recent investigations that included a total of three on-Site grab-groundwater samples. Depth to encountered groundwater ranged from 77 to 90 feet bgs. The groundwater samples were analyzed for PCE and PCE breakdown products (one sample) or for a full suite of VOCs including PCE and PCE breakdown products (two samples). PCE was detected in two groundwater samples, at concentrations of 0.74 μ g/L and 0.67 μ g/L; and not detected in the other. These detected concentrations are below the PCE drinking water criterion of 5 μ g/L and below the PCE groundwater-to-indoor air vapor intrusion screening level for commercial land use of 2.8 μ g/L. Other target analytes were either not detected or were detected at concentrations below their respective drinking water criteria and vapor intrusion screening levels. These



sampling results indicate that Site groundwater is not significantly impacted. Detected concentrations of VOCs in groundwater do not represent a health risk for future Site occupants.

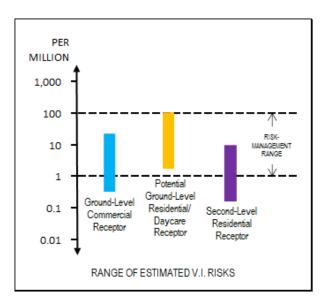
3.1.3 Soil Gas

As discussed above, Site soil gas conditions have been well characterized through a series of recent investigations. With few exceptions, PCE is the only chemical that has been detected. The PCE breakdown products have not been detected. Chloroform was detected at a low concentration in one soil gas sample, which is common in areas serviced by water disinfected with chlorine-based disinfectants.

Detected concentrations of PCE in soil gas are fairly consistent across the Site. The highest detected concentration of PCE in shallow or sub-slab soil gas within the footprint of the proposed building is 1,500 μ g/m³ – this concentration may be considered representative of the vapor intrusion concern for the proposed building.

The proposed building is an at-grade multi-story building with commercial and other nonresidential uses on the ground level and residential uses above. As summarized in Table 1, the potential vapor intrusion risk associated with PCE in soil gas may be bounded using the previous and current DTSC-recommended attenuation factors of 0.0005 and 0.03 (DTSC 2011a, DTSC and SWRCB 2020). For ground-level commercial receptors, the soil gas conditions represent a risk level of 0.4 to 20 per million. For second-level residential receptors, assuming the SFBRWQCBrecommended inter-floor transfer factor of 0.1 (SFBRWQCB 2019), unmitigated (no response action implemented) soil gas conditions represent a risk level of 0.2 to 10 per million. It is noted in Section 2.7, that the redevelopment may include a ground floor daycare with an associated residential use. Under the ground floor daycare/residential scenario the unmitigated (no response action implemented) soil gas conditions, using residential screening levels as a conservative surrogate screening level for daycare receptors, represent a risk level of 1.6 to 100 per million.





It is noted that the controlling receptor is the potential ground-level residential/daycare receptor: soil gas RBSLs for the ground-level residential/daycare receptor are thus protective of both the ground-level commercial/residential receptor and of the residential receptors on the floors above.

The Site soil gas conditions represent a modest vapor intrusion concern for the proposed building. Under previous DTSC guidance (i.e., attenuation factor of 0.0005), estimated risks would be 1.6 per million (e.g for the controlling ground-level residential/daycare receptor), which is at the low end of the risk management range. For a new commercial building that is plumbed and ventilated to building codes, the previous DTSC-recommended attenuation factor of 0.0005 is likely more representative than the current value of 0.03, and vapor intrusion risks are likely on the lower end of the ranges discussed above.

3.2 Conceptual Site Model

The conceptual site model (CSM) is depicted in Figure 3. The CSM illustrates potentially complete and significant exposure pathways to on-Site receptors, after Site redevelopment, in the absence of any mitigation. Assessment, evaluation of risk, and/or risk mitigation, if necessary, of VOCs in soil, groundwater, and soil gas to off-Site receptors are outside of the scope of this Response Plan and will be performed by TPCU in accordance with the SVA.

Detected concentrations of PCE or other compounds in on-Site soil do not pose a direct contact human health risk to future on-Site residents or construction workers during redevelopment. Depth to groundwater is on the order of 80 feet below ground surface and sampling results indicate groundwater is not significantly impacted. Soil and groundwater exposure pathways are therefore considered incomplete and/or insignificant.

On-Site soil gas is impacted with PCE which is suspected to have leaked from on-Site and/or off-Site sanitary sewer pipelines. Location(s) of off-Site sanitary sewer pipeline release(s) and



location and extent of soil impacts are unknown and are not subject to this Response Plan. These off-Site impacts will be assessed by TPCU. The soil gas-to-indoor air vapor intrusion pathway is considered potentially complete and significant for future on-Site building occupants.

While breakdown products of PCE have not been detected to date, it is possible such biotic or abiotic breakdown products may form in the future, including potentially trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride.

4.0 PURPOSE OF RESPONSE PLAN

Based on the information developed during the site characterization activities, DTSC has determined that a response action is necessary to prevent or eliminate an unreasonable risk to public health and safety in the context of future on-Site receptors associated with the anticipated redevelopment of the Site for mixed use.

• PCE is present in Site soil gas at concentrations exceeding current DTSC-recommended RBSLs that are protective of vapor intrusion under residential and commercial land uses. These soil gas impacts are widespread throughout the Site and appear to be associated with historical releases on and nearby the Site.

5.0 RESPONSE ACTION OBJECTIVES

5.1 Objective

The response action at the Site will reduce or eliminate unreasonable risk to future on-Site residential and commercial occupants posed by the presence of VOCs in Site soil gas. Assessment, evaluation of risk, and/or risk mitigation, if necessary, of VOCs in soil, groundwater, and soil gas to off-Site receptors are outside of the scope of this Response Plan and will be performed by TPCU in accordance with the SVA. As discussed above, chemicals are present in on Site soil gas as result of historical activities nearby and on the Site. Specific response action objectives (RAOs) are as follows:

Minimize or eliminate exposures between Site residents and commercial occupants to
PCE present in Site soil gas, including any future PCE breakdown products. The potential
exposure route to chemicals in soil gas is inhalation of volatile chemicals present in
indoor air of future Site buildings as a result of transport (vapor intrusion) from soil gas
to indoor air.

Remedial goals developed and adopted for contaminated media at the Site would be responsive to these objectives.



5.2 ARARs and TBC Criteria

In addition to evaluating the technical aspects of potential response action alternatives, environmental laws and regulations must be reviewed to determine whether the alternatives meet the requirements that are identified as ARARs. These ARARs are identified under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process guidance. The following section presents an overview of the ARARs process and identifies ARARs for the response action. Additional TBC criteria that are meant to complement the use of ARARs are presented herein.

5.2.1 Overview of ARARs

Identification of ARARs is a site-specific determination involving a two-part analysis: first, a determination of whether a given requirement is applicable; then if it is not applicable, whether it is relevant and appropriate.

Applicable requirements are those cleanup standards, standards of control, and/or other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address the situation at a particular site. The requirement is applicable if the jurisdictional prerequisites of the standard show a direct correspondence when objectively compared to the conditions at the site.

If the requirement is not legally applicable, then the requirement is evaluated to determine whether it is relevant and appropriate. Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that, while not applicable, address problems or situations sufficiently similar to the circumstances of the proposed response action and are well suited to the conditions of a site (USEPA 1988).

A requirement must be substantive in order to constitute an ARAR for activities conducted onsite. Procedural or administrative requirements, such as permits and reporting requirements, are not ARARs (55 Fed. Reg. 8666, 8745 (1990). ARARs are promulgated, or legally enforceable federal and state requirements.

5.2.2 Overview of TBC Criteria

The USEPA has also developed another category known as TBC criteria, that includes nonpromulgated criteria, advisories, guidance, and proposed standards issued by federal or state governments. Because TBC criteria are not potential ARARs, they are neither promulgated nor enforceable, and their identification and use are not mandatory. Rather, TBC criteria are meant to complement the use of ARARs, not to compete with or replace them. For instance, many ARARs have broad performance criteria, but do not provide specific instructions for implementation and those instructions are contained in supplemental program guidance. It



may be necessary to consult TBC criteria to interpret ARARs, or to determine preliminary remediation goals when ARARs do not exist for particular contaminants.

5.2.3 ARARs and TBC Criteria Affecting RAOs

A summary of the applicable ARARs and TBC criteria that may pertain to the proposed response alternatives for the Site is included in Table 3.

5.3 Remedial Goals

This section identifies appropriate remedial goals for the Site media that would be protective of on-Site human health under the proposed Site redevelopment for mixed commercial and residential use.

Per standard USEPA risk assessment methodology (USEPA 1989), the potential health impacts associated with exposure to a chemical or physical agent are qualified on the basis of the average concentration of the agent in the exposure medium over the duration of the exposure. Also, of relevance to establishment of remedial goals, the *de minimis* cancer risk and noncancer hazard thresholds are defined as the cumulative (multi-chemical and multi-exposure pathway) cancer risk of 1×10^{-6} (one in a million) and cumulative noncancer hazard index of 1.0, respectively. Thus, the ultimate remedial goal would be to achieve conditions such that average chemical concentration in on-Site soil, soil gas, and groundwater produce an estimated cancer risk less than 1×10^{-6} and estimated noncancer hazard index of less than 1.0, considering cumulative exposures to all chemicals in Site soil (via dermal contact, ingestion, and dust inhalation), soil gas (via vapor intrusion into indoor air), and groundwater (via use of groundwater as tap water).

Given this overall remedial goal, appropriate chemical- and media-specific target remedial goals would be risk-based values that are protective of the specific exposure under the proposed land use; or background concentrations where higher than risk-based values. Remedial goals for the Site include the following:

- DTSC-recommended indoor air RBSLs for commercial/industrial land use (DTSC 2020, USEPA 2020) (ground level of proposed building); and
- DTSC-recommended indoor air RBSLs for residential land use (DTSC 2020, USEPA 2020) (second and higher levels of proposed building).
- DTSC-recommended indoor air RBSLs for residential land use and for daycare use (with residential use as a conservative surrogate exposure scenario) (DTSC 2020, USEPA 2020) (ground-levels of proposed building).

Per DTSC (2011b), attainment of indoor air RBSLs may be demonstrated through sub-slab soil gas sampling. Therefore, remedial goals for the Site also include:

• DTSC-recommended sub-slab soil gas RBSLs that incorporate:



- DTSC-recommended RBSLs for indoor air under commercial land use (DTSC 2020);
- DTSC-recommended RBSLs for indoor air under residential land use (DTSC 2020); and
- DTSC-recommended sub-slab soil gas-to-indoor air attenuation factor of 0.03 (DTSC and SWRCB 2020).

A summary of estimated risk from PCE assuming no response action is enacted (i.e., VIMS not installed) as well as derivation of remedial goals are presented in Tables 1 and A. Although PCE-breakdown products have not been detected at the Site in soil gas, remedial goals and their derivation are presented in Tables 2 and B.

Compound	Sub-Slab Soil Gas Commercial Scenario	Sub-Slab Soil Gas Potential Residential Daycare Scenario	Ground- Level Commercial Indoor Air	Ground-Level Potential Residential Daycare Indoor Air	Second- Level Residential Indoor Air
	(µg/m³)	(μg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Tetrachloroethene	67	15	2.0	0.46	0.46

Table A – Remedial Goals

	Sub-Slab	Sub-Slab	Ground-	Ground-Level	Second-
Compound	Soil Gas	Soil Gas	Level	Potential	Level
	Commercial	Potential	Commercial	Residential	Residential
	Scenario	Residential	Indoor Air	Daycare	Indoor Air
		Daycare		Indoor Air	
		Scenario			
	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
TCE	100	16	3.0	0.48	0.48
1,1-DCE	10,000	2,400	310	73	73
cis-1,2-DCE	1,200	280	35	8.3	8.3
trans-1,2-DCE	12,000	2,800	350	83	83
Vinyl Chloride	5.3	0.32	0.16	0.0095	0.0095

6.0 EVALUATION OF RESPONSE ACTION ALTERNATIVES

The purpose of this section of the Response Plan is to identify possible response action alternatives that could achieve the objectives discussed in Section 5.1; evaluate these alternatives on the basis of their effectiveness, implementability, and cost; and recommend a preferred alternative.



6.1 Identification and Description of Response Action Alternatives

Three possible response action alternatives (alternatives) have been identified.

- Alternative 1 No Further Action;
- Alternative 2 Soil Excavation; and
- Alternative 3 Vapor Intrusion Mitigation System, Land Use Covenant, and Operations and Maintenance.

These alternatives are described below.

6.1.1 Alternative 1 – No Further Action

As required by the DTSC, the no further action alternative has been included to provide a baseline for comparisons among other response action alternatives. The no further action alternative would not require implementing any mitigative or remedial measures at the Site, and no incremental costs (i.e., beyond those associated with constructing the redevelopment project) would be incurred. This alternative includes no institutional controls, treatment of soil, or monitoring.

6.1.2 Alternative 2 – Soil Excavation

This alternative would consist of removing and transporting impacted soils to an appropriate permitted off-Site facility for disposal in association with construction of the redevelopment project. Excavation would include using loaders, backhoes, and/or other appropriate equipment, which would generate fugitive dust emissions. Dust control may be required during excavation, and workers may be required to use personal protective equipment to reduce exposure to VOCs. Additional soil profiling would be conducted to assess the quality of soil and determine the appropriate off-Site disposal facility. Additionally, confirmation soil samples would be taken to verify that cleanup goals have been achieved. Based on previous investigations, soil gas impacts are present at 15 feet bgs and as a conservative measure soils would be excavated to below the depth of these soil gas samples. Excavation of Site soils to a depth of 15 feet would produce at least 10,000 bank cubic yards (CY) of soil requiring off-Site disposal at an appropriate facility (landfill).

6.1.3 Alternative 3 –Vapor Intrusion Mitigation System, Land Use Covenant, and Operations and Maintenance

A vapor intrusion mitigation system (VIMS) would be incorporated into the design of the proposed building. The VIMS would consist of a sub-slab venting system and a sub-slab vaporbarrier membrane. The sub-slab venting system would consist of a gravel layer with horizontal perforated piping to collect impacted soil gas from beneath the building slab and route it to the edge of the building, then route soil gas upwards through a vertical riser pipe that would run along the inner or outer building wall, for discharge above the roofline. The sub-slab venting



system could also include inlets near the building exterior to dilute the sub-slab soil gas with ambient air. The sub-slab vapor-barrier membrane would be installed above the venting system and will provide a physical barrier to air flow into the building.

The ongoing effectiveness of the VIMS to prevent vapor intrusion at levels of concern at the buildings would be evaluated in accordance with the Site *VIMS Operations and Maintenance Plan* (VIMS O&M Plan; Appendix B). The VIMS O&M Plan incorporates applicable performance measures in accordance with the 2011 DTSC Vapor Intrusion Mitigation Advisory (VIMA; DTSC 2011b).

This alternative would additionally provide institutional controls to ensure long-term protection from residual soil gas impacts through a Land Use Covenant (LUC). The LUC would prohibit residential use of the property unless engineering controls (i.e., the VIMS) are in place. The VIMS would be maintained, and accessible parts inspected regularly (e.g., annually) in accordance with the LUC (to be developed), the Site Operations and Maintenance Agreement, and the VIMS O&M Plan.

6.2 Evaluation Criteria

Each response action alternative is independently analyzed below without consideration to the other alternatives. Each of the response action alternatives is screened based on effectiveness, implementability, and cost.

6.2.1 Effectiveness

In the effectiveness evaluation, the following factors are considered:

- Overall Protection of Human Health and the Environment this criterion evaluates whether the alternative provides adequate protection to on-Site human health and the environment and is able to meet the Site's RAOs.
- *Compliance with ARARs/TBCs* this criterion evaluates the ability of the alternative to comply with ARARs and TBCs.
- Short-Term Effectiveness this criterion evaluates the alternative during the construction and implementation phase until the RAOs are met. This criterion accounts for the protection of workers and the community during response activities and environmental impacts from implementing the response action.
- Long-Term Effectiveness and Permanence this criterion addresses issues related to the management of residual risk remaining on-Site after the response action has been performed and has met its RAOs.
- *Reduction of Toxicity, Mobility, or Volume* this criterion evaluates whether the response technology employed results in significant reduction in toxicity, mobility, or volume of the hazardous substance.



The effectiveness of each alternative to address off-Site risks is beyond the scope of this Response Plan.

6.2.2 Implementability

Response actions are evaluated with respect to technical and administrative feasibility of implementing the alternative and applicability to Site conditions. Some factors to consider when assessing the implementability of response action alternatives include the ability to obtain necessary permits, regulatory approval of response actions, availability of necessary equipment and skilled workers, and acceptance by the state and the community. The implementability of each alternative to address off-Site risks is beyond the scope of this Response Plan.

6.2.3 Cost

This criterion assesses the relative cost of each technology based on estimated fixed capital for construction or initial implementation and ongoing operation and maintenance. The actual costs will depend on true labor and materials costs, competitive market conditions, final project scope, and the implementation schedule.

6.3 Analysis of Response Action Alternatives

6.3.1 Alternative 1 – No Further Action

The no further action alternative would not require implementing any mitigative or remedial measures at the Site, and no incremental costs would be incurred. Consequently, there would be no additional activities that would disturb Site soil, and therefore no additional short-term risks to Site workers or the community as a result of implementing this alternative. This alternative would be highly implementable from a technical feasibility perspective; however, it is unlikely to obtain regulatory or community approval and thus is given a low overall implementability rating. Under this alternative, the impacts in soil gas would not be addressed and there would be no reduction in the potential risks. This alternative therefore does not meet the effectiveness criterion.

6.3.2 Alternative 2 – Soil Excavation

Effectiveness

The overall effectiveness of this alternative is low, given widespread and diffuse nature of PCE in soil gas. Removal of soils across the Site may lead to removal of some PCE impacted soil; however, it is believed there is an additional off-Site source that is commingled with the on-Site soil vapor plume. Therefore, it is entirely possible that, post-excavation, on-Site soil gas may become re-contaminated due to the Site's proximity to the off-Site soil vapor plume.



Implementability

Excavation and off-Site disposal is a readily-implementable technology that is a common method for cleaning up contaminated Sites. This alternative, however, would likely have the greatest impact on nearby residents and businesses due to the excavation volume, including: the duration of soil handling activities, greater potential for dust emissions, and large number of truck trips required to haul soil to and from the Site.

<u>Cost</u>

The soil excavation and off-Site disposal alternative would require high costs to implement compared to Alternatives 1 and 3, due to the off-Site disposal of a minimum estimated volume of 10,000 bank CY of soil. Costs also include importing fill to replace the excavated soil. Estimated costs for Alternative 2 are presented in Appendix C.

6.3.3 Alternative 3 –Vapor Intrusion Mitigation System, Land Use Covenant, and Operations and Maintenance

Effectiveness

The overall effectiveness of this alternative would be high; however, this alternative requires long-term operations and maintenance to meet ARARs and provide long-term effectiveness. This alternative would require additional planning during redevelopment and would likely have a minimal additional impact on nearby residents and businesses.

Implementability

This alternative is expected to achieve the RAOs and be acceptable to the DTSC. This alternative would have a low impact on the Site and the community, and would be most compatible with a practical schedule for Site redevelopment.

<u>Cost</u>

This alternative would require higher costs than Alternative 1, however, the costs for this alternative would be far lower than Alternative 2. This alternative would have reasonable costs added to the development. Associated costs would include ongoing monitoring and inspections (see Appendix B). Estimated costs for Alternative 3 are presented in Appendix C.

6.4 Evaluation Summary

Each of the criteria have been qualitatively rated with values between 1 and 5 with low values indicating a less desirable result and high values indicating a desirable result. The ratings for each of the criteria were then summed, with a maximum potential overall rating of 15, to develop an overall rating for each of the alternatives. Additionally, the estimated costs to



implement each alternative has been provided. Derivation of these costs is provided in Appendix C. A table summarizing this evaluation is presented as Table C.

Alternative	Effectiveness	Implement- ability	Cost	Overall Rating	Estimated Costs
1. No Further Action	0	0	5	5	\$0
2. Soil Excavation	1	3	1	5	\$4,088,000
3. VIMS, LUC, and O&M	4	5	4	13	\$799,000

6.5 Selection of Recommended Response Action Alternative

Based on the evaluation above, Alternative 3 – Vapor Intrusion Mitigation System, Land Use Covenant, and Operations and Maintenance, is the preferred and recommended response action alternative for the Site. Alternative 3 would achieve RAOs, be protective of human health and the environment, and a have a much lower impact on the adjacent community as compared to Alternative 2 while being a cost-effective remedy.

7.0 RESPONSE ACTION IMPLEMENTATION

This Response Plan provides specifications for the VIMS design components of the response plan (see below). As previously mentioned, details of long-term operations and maintenance are included in Appendix B.

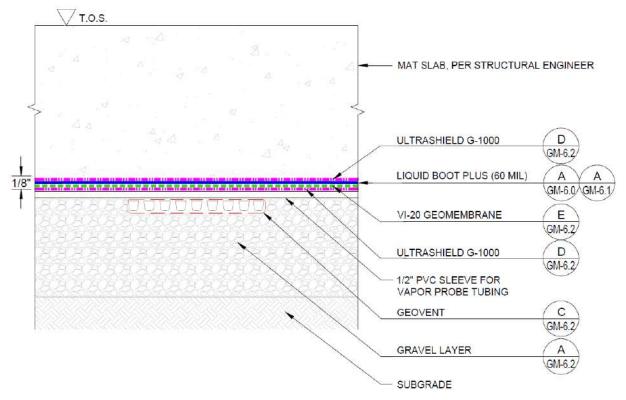
7.1 Sub-Slab Passive Venting System

7.1.1 System Design

The planned redevelopment of the Site will address the presence of VOCs in soil gas that may pose a potential vapor intrusion concern for the proposed building. The building will incorporate a VIMS consisting of sub-slab wind-assisted passive venting system and vaporbarrier membrane (see Appendix D).

The sub-slab sections which include the gravel layer, vent piping, and membrane are illustrated below.





The required components of the VIMS are summarized below, generally from bottom to top. Details and specifications are provided in Appendix D.

- **Gravel layer.** This "clean" (i.e., containing negligible soil fines content) gravel layer will provide a sub-slab region of high permeability that is ventilated by gas-collection piping and ambient air supply (see next items).
- **Gas-collection piping**. Soil gas will be vented from the sub-slab gravel layer via horizontal perforated gas-collection piping. The proposed collection-piping product is CETCO Geovent low-profile gas venting system.

The horizontal Geovent will transition to rigid pipe and connect to vertical rigid pipe risers, which will rise upwards through the building to exhaust above the building roofline. Each exhaust riser will be equipped with a wind-driven turbine ("whirlybird") to create updraft to extract soil gas from the sub-slab gravel layer.

- **Dilution-air.** Dilution air will be passively supplied to the sub-slab gravel layer via ambient air inlets at the building perimeter near ground level.
- Soil gas probes. Nine sub-slab soil gas sampling probes will be installed in the gravel layer to allow collection of sub-slab soil gas samples (or measurement of differential pressure). Each probe will consist of a 1-inch stainless steel vapor implant connected to



1/4-inch Teflon tubing which runs to a sampling port with stopcock valve located inside a restricted access cabinet.

- **Vapor-barrier membrane.** The vapor-barrier membrane will be installed above the gravel layer and will provide waterproofing protection and vapor-intrusion mitigation. The proposed membrane system is the Liquid Boot Plus.
- Upgradability. The passive venting system is designed to be upgradable to an active system by replacing any wind-driven turbine with a continuously running mechanical fan, if ever necessary. The mechanical fan would be installed on the rooftop at the location of the exhaust stack and wired to a nearby electrical circuit as shown in the VIMS design plans. Conversion to an active system would require an Authority to Construct/Permit to Operate (ATC/PTO) from the Bay Area Air Quality Management District (BAAQMD). (Passive venting systems including wind-turbine assisted systems are typically exempt from BAAQMD permitting requirements. TNDC will apply to BAAQMD prior to construction to document this exemption.)

Other products, materials, or methods may be acceptable substitutes for those specified in the VIMS design plans. Any deviation from this VIMS Design Report must be pre-approved by the Owner, General Contractor, VIMS Design Engineer, and Regulatory Agency.

7.1.2 Quality Assurance/Quality Control

Periodic inspections/observations of the VIMS will be performed by the VIMS Design Engineer (or designee) at the following stages:

- During the installation of sub-slab vent piping and sampling probes.
- After backfilling of the sub-slab vent piping.
- During the installation of the sub-slab vapor barrier.
- After the installation of the sub-slab vapor barrier. This includes the smoke testing detailed below.
- During the placement of the protective course.
- Immediately prior to placement of foundation concrete.
- During, and at the completion of, the vent riser installation.
- At the completion of construction prior to the issuance of the system certification and certification of occupancy.

Additionally, a smoke test will be performed on all gas membranes in accordance with protocols described in the VIMS design plans and certified "gas tight" by the VIMS Design Engineer.



TNDC will grant site access to DTSC for oversight and as-requested inspection of the VIMS installation and performance testing. VIMS Design Engineer will provide advanced notice to DTSC of installation and testing milestones, and support DTSC during DTSC inspections.

7.1.3 Protection of the VIMS

Following the completion of construction of the interior and exterior of the building, VIMS vent piping will be labeled where they exit the building or other locations accessible to the general public, including language to notify the building owner if damage is discovered. In addition, signage will be installed on the ground floor warning of the presence of the membrane and stating that any penetration of the slab requires a permit from the Building Department to ensure the membrane is properly repaired following the penetration. Further information regarding the signage is presented in Appendix D.

In addition, as presented in the VIMS Operations and Maintenance Plan (Appendix B), any tenant improvements or other construction project that involves cutting or drilling through the foundation slab will require notification to the Site Owner at least 14 calendar days in advance to ensure the sub-slab membrane and venting system are repaired and restored consistent with the VIMS Plans and manufacturer's specifications. To ensure the long-term protection of the VIMS, a Land Use Covenant (LUC) and CLRRA-compliant Operation and Maintenance (O&M) Agreement will be recorded, and voluntary/prudential 5-Year Reviews will be conducted. As a potential aspect of LUC implementation, DTSC may receive advanced warning (via third-party monitoring used at other DTSC sites) of most planned ground- or floor-invasive work. Third-party notifications may be triggered by building permits, required "dig alert" notices, or other construction and maintenance-related activities. Further details regarding the LUC and CLRRA-compliant O&M Agreement is presented in Section 7.4.

7.1.4 Activities to Control Endangerment

As described in Section 5.1, the response action objective is to minimize or eliminate exposures between Site residents and commercial occupants to PCE present in Site soil gas, including any future potential PCE breakdown products. The potential exposure route to chemicals in soil gas is inhalation of volatile chemicals present in indoor air of future Site buildings as a result of transport (vapor intrusion) from soil gas to indoor air. To achieve this response action objective, a VIMS has been proposed to ensure long-term protection of future residential and commercial occupants, including daycare facilities.

In the event that the response action has been discovered or suspected to be compromised, such as from fire, earthquake, explosion, or human-caused damage, the Site Owner will immediately take appropriate action to prevent, abate, or minimize exposure and immediately notify the DTSC of the discovery and action taken. Appropriate action to address these concerns may include, repairing damage to the slab and/or membrane, repairs to damaged vent risers and/or fresh-air inlets, sealing conduits and/or other preferential pathways, upgrading the passive system to an active system, additional soil gas, sub-slab and/or indoor air sampling,



and/or other activities that may be deemed appropriate in consultation with the DTSC to ensure protection of the inhabitants. The continued performance and protectiveness of the VIMS will be evaluated in future, voluntary, prudential 5-Year Reviews performed in consultation with DTSC. Further details regarding operation and maintenance of the VIMS are presented in Appendix B.

7.2 Methods to Prevent Vapor Migration through Utilities

7.2.1 Utility Trench Dams

Underground utility trench dams will be installed as a precautionary measure to reduce the potential for vapors to migrate beneath a structure through the relatively permeable trench backfill. An impermeable dam or plug constructed of bentonite-soil mixture or sand-cement slurry (or equivalent) will be installed in all utility trenches that are backfilled with sand or other permeable material for new or replacement utility lines (such as potable water, reclaimed irrigation water, fire water, sanitary sewer, storm sewer, natural gas, phone, electrical, and cable). These dams will extend for a distance of at least 3 feet from the perimeter of the structure and from at least 6 inches above the bottom of the perimeter footing to the base of the trench.

7.2.2 Conduit Seals

Conduit seals will be provided at the termination of all utility conduits to reduce the potential for soil gas migration along the conduit to the interior of the building. These seals will be constructed of closed cell polyurethane foam, or other inert gas-impermeable material, extending a minimum of six conduit diameters or 6 inches, whichever is greater, into the conduit. Wye seals should not be used for main electrical feed lines.

Electrical conduits will be provided with seals as required by the appropriate sections of the National Electrical Code (National Fire Protection Association [NFPA] 70) as presented in Article 500 Hazardous (Classified) Locations Class I, II, and III, Divisions 1 and 2. All NFPA 70 requirements will be met for all work in any classified area, given the specified classifications of the project.

7.2.3 Penetration Seals for Ground-Floor Building Slab

All penetrations through the ground floor building slab will be sealed to reduce the potential for soil gas entry. These seals will be constructed of the same materials as the vapor-barrier membrane (Section 7.1.1) and will enclose gaps that may be present around the penetrations. All portions of the vapor barrier membrane will undergo a testing procedure to verify that a gas tight seal has been achieved. Details of the membrane at slab penetrations and testing are included in Appendix D.



7.3 Confirmation Sampling

Once building construction and all vapor mitigation measures have been completed (and prior to occupancy), a confirmation sampling event will be conducted to confirm the effectiveness of vapor mitigation measures. The confirmation sampling event will consist of sub-slab soil gas sampling from the probes installed beneath the building, indoor air sampling within the ground level of the building, and outdoor air sampling to characterize ambient/background conditions and assist the evaluation of indoor air results. The sampling locations will be provided to the DTSC for approval prior to sampling activities.

7.3.1 Indoor and Outdoor Air

Indoor air samples will be collected over an approximately 24-hour period with the building heating, ventilation and air conditioning (HVAC) systems in normal operation, including for at least 24 hours prior to the start of sampling. At least six indoor air samples will be collected from the ground level of the building, including four from occupiable spaces and two from locations with utility penetrations through the building slab (e.g., restroom, telecommunications point-of-entry). Sampling locations will be biased towards the center of the building footprint as practical. Samples from occupiable spaces will be collected at breathing height near the center of rooms in accordance with DTSC guidance (DTSC 2011a).

Outdoor air samples will be collected over an approximately 24-hour period concurrent with the indoor air sampling. At least two outdoor air samples will be collected, preferably from the building roof (provided accessible) at the upwind edge and/or at HVAC intakes. Any outdoor air sample collected instead near ground level would be collected near the upwind boundary of the Site, approximately 6 feet off the ground, and 10 feet beyond a tree's drip line, to the extent practical.

Indoor and outdoor air sampling locations will be selected during a pre-sampling building walkthrough. During the walkthrough, a parts-per-billion (ppb)-level photoionization detector (PID) will be used to screen the building for indoor VOC sources and for preferential vapor intrusion pathways. Any indoor VOC sources identified during the walkthrough would be removed prior to the start of the sampling event, to the extent practical.

Indoor and outdoor air samples will be collected into pre-cleaned, individually certified, 6-liter Summa canisters at a rate of 6 liters per 24 hours. The time and canister pressure at the stop and start of sample collection will be recorded in field notes and sampling locations will be documented with photographs.

7.3.2 Sub-Slab Soil Gas

Sub-slab soil gas sampling will be conducted within the 24-hour indoor air sampling period. Subslab soil gas samples will be collected from the nine probes beneath the building. Each sub-slab



probe will be purged and sampled as follows. It is noted that the sub-slab probe sample lines terminate at sampling ports located within a restricted access cabinet.

- A shut-in test will be conducted to verify the integrity of sample train connections.
- A small amount of the leak-detection compound, 1,1-difluoroethane or 2-propanol, will be placed on a rag which will be placed near the sampling port connection.
- The probe (consisting of the sampling line internal volume) will be purged of three volumes at a rate of 100 to 200 milliliters per minute, using either a Summa canister with flow controller or a syringe.
- A sub-slab soil gas sample will be collected into a pre-cleaned, batch-certified, 1-liter Summa canister at a rate of 100 to 200 milliliters per minute. The time and canister pressure at the stop and start of sample collection will be recorded in field notes.

7.3.3 Sample Analysis

The collected indoor air, outdoor air, and sub-slab soil gas samples will be labeled and delivered under chain-of-custody protocol to a State-certified analytical laboratory. The samples will be analyzed on standard turnaround time for the following:

- PCE, contingent PCE breakdown products (TCE, 1,1-DCE, cis-,1,2-DCE, trans-1,2-DCE, and vinyl chloride), and the leak-detection compound by USEPA Method TO-15; and
- Fixed gases by ASTM Method D1946 (sub-slab soil gas samples only).

The fixed gases analysis of sub-slab soil gas samples is included to evaluate VIMS efficiency in drawing ambient dilution air to the sub-slab gravel layer as an additional line-of-evidence in demonstrating the VIMS performance.

7.3.4 Data Evaluation

Sub-slab soil gas sampling results for PCE will be compared to the DTSC-recommended sub-slab soil gas RBSL of 67 μ g/m³, which incorporates the indoor air RBSL for commercial/industrial land use of 2.0 μ g/m³ and attenuation factor of 0.03.

Ground-level indoor air sampling results for PCE will be compared to the DTSC-recommended indoor air RBSL for commercial/industrial land use of 2.0 μg/m³.

Detections of PCE in indoor air (if any) would be further evaluated to determine their source. The outdoor air sampling results and sub-slab soil gas sampling results would be used as lines of evidence to determine if indoor air PCE impacts are associated with vapor intrusion from the subsurface, outdoor/ambient air, or an indoor source.

The sub-slab soil gas and indoor air sampling results will be evaluated to quantify an empirical sub-slab soil gas-to-indoor air attenuation factor for the building. This attenuation factor may



be used to evaluate future (post-occupancy) sub-slab soil gas sampling results as an alternative to the conservative default value of 0.03.

The empirical attenuation factor may also be evaluated utilizing a radon tracer in addition to sub-slab soil gas and indoor air sampling for PCE and breakdown products. As a naturally-occurring, radioactive noble gas, radon acts as a conservative tracer for gases that originate underground and have the potential to migrate into indoor air. Radon is ubiquitous and not tied to a specific source area, so concentrations should remain relatively constant in soil vapor. Radon measurements from sub-slab probes and indoor air would be made using Durridge RAD7 Electronic Radon Detectors (or equivalent field meter) or collecting sub-slab soil gas and indoor in laboratory provided medium for off-Site analysis at a certified analytical laboratory. Utilizing paired sub-slab and indoor air results, an empirical attenuation factor would be calculated. The sub-slab and indoor air radon results could be evaluated as a second line of evidence to estimate the empirical sub-lab soil gas-to-indoor air attenuation factor for the building. Other attenuation factor derivation approaches may alternatively be considered and utilized with DTSC-approval.

If indoor air sampling results for PCE are below the indoor air RBSL, the building would be demonstrated as safe for occupancy with respect to vapor intrusion concerns. If any indoor air sampling results exceed the RBSL, further evaluation would be performed. Any additional sampling would be planned and implemented in consultation with DTSC.

7.4 Land Use Covenant and Operations and Maintenance

The VIMS will be maintained and regularly (e.g., annually) inspected in accordance with a Land Use Covenant (to be developed), CLRRA-compliant O&M Agreement, and the VIMS O&M Plan. The VIMS O&M Plan contains specifications to repair or upgrade the VIMS components, in the event that this is warranted.

The LUC will include the following elements, at a minimum:

- Prohibits residential or commercial (including daycare) occupancy without engineering controls (i.e., VIMS in place, confirmed operating as designed);
- Annual LUC inspections of building ground-floor slab, and VIMS, with LUC inspection reports submitted for DTSC approval.
- Conducting prudential, voluntary 5-year Reviews, to be submitted for DTSC approval.

The O&M Agreement shall be executed prior to building occupancy. The O&M Agreement will require a financial assurance instrument funding for the estimated 30-year O&M cost of long-term site management per the Response Plan.



7.5 Maher Ordinance Compliance and Site Management Plan

By virtue of the Site's location and historical uses, the project is required to comply with San Francisco Health Code Article 22A, known as the Maher Ordinance. The Maher Ordinance defines a process for characterization and mitigation of soil and groundwater contamination, for the protection of public health and safety during and after Site redevelopment. It is expected that the San Francisco Department of Public Health (SFDPH), who oversees activities related to the Maher Ordinance, will indicate that the Site characterization and mitigation process conducted by TNDC and TPCU under DTSC oversight will effectively meet the requirements of the Maher Ordinance. While the Site is not required to implement a Site-Specific Dust Control Plan under San Francisco Health Code Article 22B (known as the Dust Ordinance) due to parcel size, as a conservative measure, TNDC has volunteered to prepare a Site Management Plan which will include response action implementation procedures, including dust and vapor control, and monitoring measures during construction activities. Additional protective measures designed to ensure worker safety during response action implementation will be included in a health and safety section of the Site Management Plan. The Site Management Plan will also include a contingency plan to be implemented if unanticipated soil contamination is encountered during response action implementation.

8.0 PUBLIC PARTICIPATION PROCESS

This Response Plan included a public participation process that was intended to ensure full and robust participation of the affected community. Thirty-three (33) days before taking any action on the proposed Response Plan, DTSC:

- Notified other appropriate governmental entities and local agencies of the proposed Response Plan including, but not limited to, SFDPH, San Francisco Planning Department, and the San Francisco Bay Regional Water Quality Control Board;
- Placed a notice in a newspaper of general circulation, in the area of the Site including, but not limited to, a community-based newspaper, as appropriate; and
- Provided notification of a 33-day public comment period on the proposed Response Plan, in factsheet format, in English and any other language commonly spoken in the area of the Site.

The proposed Response Plan, site assessment reports, and materials listed as references in the proposed Response Plan and site assessment reports have been made accessible for public review at the DTSC office in Berkeley and in electronic format on DTSC's publicly accessible EnviroStor database. Notification of the availability of these documents was provided in the factsheet. Procedures for providing comment on the proposed Response Plan and related documents were included in the factsheet. DTSC held a public meeting to receive comments.

DTSC has considered the comments received before taking any action regarding the proposed Response Plan. As part of its communication with affected communities, DTSC has provided



information regarding the process by which decisions about the Site are made and the recourse that is available for those who may disagree with an agency decision. DTSC has considered the issue of environmental justice, as defined in subdivision (e) of Section 65040.12 of the Government Code, for communities most impacted, including low-income and racial minority populations before taking action on the Response Plan.

Prior to approving this Response Plan, DTSC prepared a Community Letter and Survey (DTSC 2021b), a Community Profile (DTSC 2021c), a Public Notice of the Public Comment Period for 2550 Irving Street (DTSC 2021d), and a Community Update of the Public Comment Period for 2550 Irving Street (DTSC 2021e) to notify the public regarding the Site and inviting the public to comment on the Draft Response Plan. The public comment period for the Draft Response Plan was from July 12 to August 13, 2021 and included a Remote Public Meeting on July 22, 2021. Following public comment, the DTSC prepared a Responsiveness Summary (DTSC 2021f) to respond to all public comments received during the 33-day public comment period on the Draft Response Plan reflects changes which the DTSC determined were appropriate in response to public comments. The Responsiveness Summary is included as Appendix E.

Prior to the start of construction at the Site, DTSC will prepare a Work Notice and will distribute the Work Notice to the project mailing list.

9.0 CEQA DOCUMENTATION

The California Environmental Quality Act (CEQA), modeled after the National Environmental Policy Act (NEPA) of 1969, was enacted in 1970 as a system of checks and balances for land use development and management decisions in California. It is an administrative procedure to ensure comprehensive environmental review of cumulative impacts prior to project approval.

A CEQA project has the potential to cause a direct physical change or a reasonably foreseeable indirect physical change in the environment. CEQA applies to discretionary projects proposed to be carried out or approved by California public agencies, unless an exemption applies.

On August 4, 2020, the San Francisco Planning Department issued a Senate Bill 35 Determination letter confirming the proposed project at 2550 Irving Street (i.e., the Site) meets the objective criterion of Senate Bill 35. Per the San Francisco Planning Department's Affordable Housing Streamlined Approval Pursuant to Senate Bill 35 and Planning Director Bulletin #5:

CEQA review is not required for SB-35 eligible projects because they are subject to a
ministerial approval process. The site or building permit will not be subject to any
applicable neighborhood notice requirements in the Planning Code, and the
Department will not accept Discretionary Review applications for these projects because
they are subject to a ministerial approval process.



DTSC has prepared and will file a notice of exemption with the State Clearinghouse within 5 days of approving this Response Action. A copy of the notice of exemption is provided in Appendix F.

10.0 OVERSIGHT AND DETERMINATION OF RESPONSE ACTION COMPLETENESS

TNDC will grant site access to DTSC for oversight and as-requested inspection of the VIMS installation and performance testing. VIMS Design Engineer will provide advanced notice to DTSC of installation and testing milestones, and support DTSC during DTSC inspections.

Pursuant to H&SC §25395.90 et seq., DTSC shall make final approval of whether the response action is complete.

DTSC may require further response actions based on the discovery of hazardous materials during the course of the response action, or during subsequent development of the Site.

If the use of the property changes, DTSC may require a new response plan, or response plan amendment.

11.0 REFERENCES AND ADMINISTRATIVE RECORD

- AllWest. 2019a. Environmental Site Assessment, 2525 & 2550 Irving Street, San Francisco, California 94122. February 8.
- AllWest. 2019b. Phase II Subsurface Investigation Report, 2500-2550 Irving Street, San Francisco, California 94122. June 21.
- AllWest. 2019c. Phase II Subsurface Investigation Report, 2500-2550 Irving Street, San Francisco, California 94122. August 19.
- AllWest. 2019d. Phase II Subsurface Investigation Report, 2525 Irving Street, San Francisco, California 94122. August 19.
- AllWest. 2019e. Indoor Air Quality Monitoring Report, 2550 Irving Street, San Francisco, California 94122. August 29.
- AllWest. 2019f. Subsurface Investigation Report, 2550 & 2511 Irving Street, San Francisco, CA 94112. October 10.
- AllWest. 2020a. Second 2019 Semiannual Indoor Air Quality Monitoring Report, Police Credit Union, 550 Irving Street [sic], San Francisco, CA 94122. January 21.
- AllWest. 2020b. First Quarter 2020 Indoor Air Quality Monitoring Report, Police Credit Union, 2550 Irving Street, San Francisco, CA 94122. February 13.



- AllWest. 2020c. Supplemental Soil and Soil Vapor Assessment Report, 2550 & 2525 Irving Street, San Francisco, California 94122. July 14.
- Bradford, G.R., Chang, A.C., Page, A.L., Bakhtar, D., Frampton, J.A., and Wright, H. 1996.
 Background Concentrations of Trace and Major Elements in California Soils. Kearney
 Foundation of Soil Science, Division of Agriculture and Natural Resources, University of
 California. March.
- DTSC. 2011a. Guidance for The Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). Final. October.
- DTSC. 2011b. Vapor Intrusion Mitigation Advisory. Final Revision 1. October.
- DTSC. 2019. HERO HHRA Note Number: 1, Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities. April 9.
- DTSC. 2020. HERO HHRA Note Number: 3, DTSC-modified Screening Levels (DTSC-SLs). June.
- DTSC. 2021a. Approval of the Site Assessment Plan and Report of Findings. June 8.
- DTSC. 2021b. Community Letter and Community Survey. April 19 (English and Chinese).
- DTSC. 2021c. Community Profile. July 13.
- DTSC. 2021d. *Public Notice of the Public Comment Period for 2550 Irving Street*. July 8 (English) and July 12 (Chinese).
- DTSC. 2021e. *Community Update of the Public Comment Period for 2550 Irving Street*. July 12 (English and Chinese).
- DTSC. 2021f. Responsiveness Summary for 2550 Irving Street. September 2.
- DTSC and SWRCB. 2020. *Supplemental Guidance: Screening and Evaluating Vapor Intrusion*. Public Draft. February.
- Duvergé, Dylan Jacques. 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region. December.
- Path Forward. 2020. Phase I Environmental Site Assessment, 2550 Irving Street, San Francisco, California. September 8.
- Path Forward. 2021. Site Assessment Plan and Report of Findings, 2550 Irving Street Affordable Housing Project, San Francisco, California. Final. February 2.

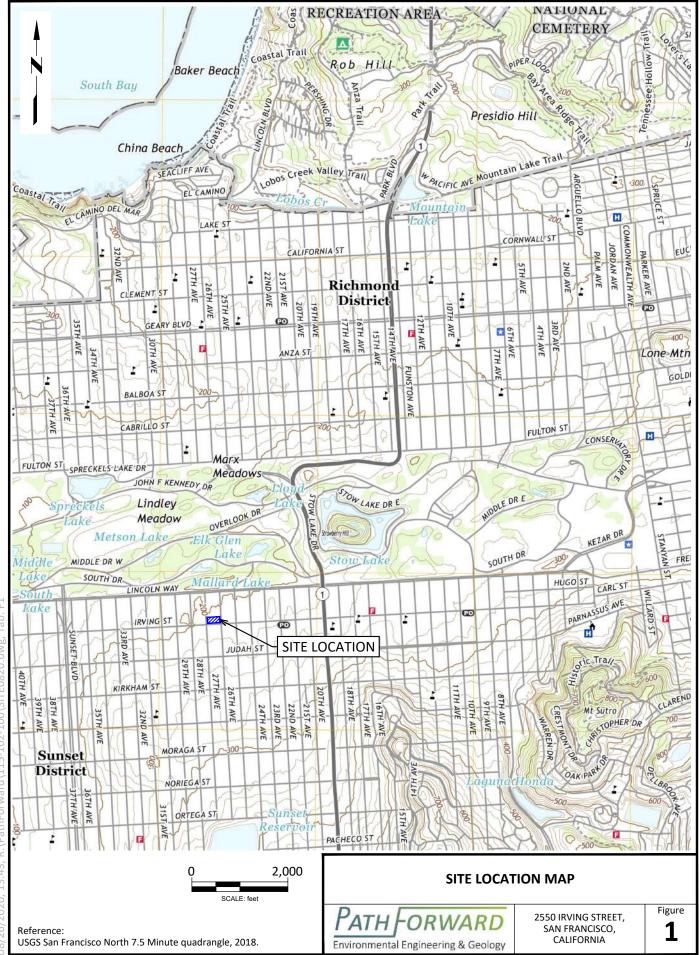


- SFBRWQCB. 2017. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). May 4.
- SFBRWQCB. 2019. Review by Ross Steenson (RAS) December 2, 2019; November 12, 2019, Meeting Minutes, Former FMC Corporation Facility, 328 West Brokaw Road, Santa Clara, CA, GeoTracker ID SL18204584. December 2.
- SFDPH. 2001a. Email, dated August 19, 2021 between David Grunat, Path Forward, and Ryan Casey, SFDPH, forwarded to Arthur Machado, DTSC Project Manager.
- USEPA. 1988. CERCLA Compliance with Other Laws Manual: Interim Final. August.
- USEPA. 1989. *Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part A).* Interim Final. Office of Emergency and Remedial Response. December
- USEPA. 2020. Regional Screening Level (RSL) Summary Table (TR=1E-06, THQ=1.0) May 2020. May.



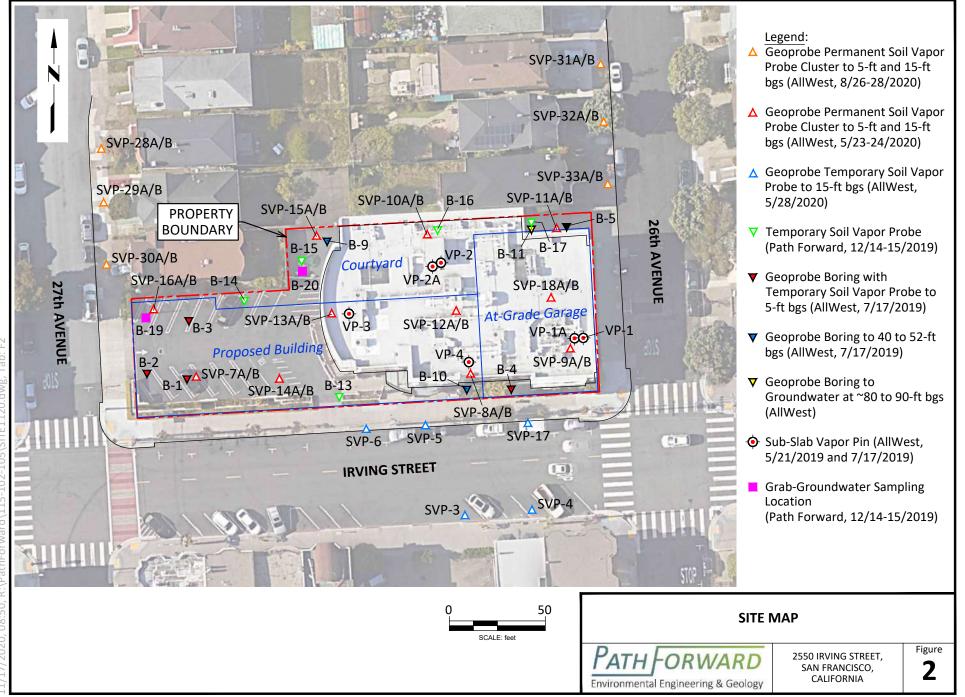
Figures





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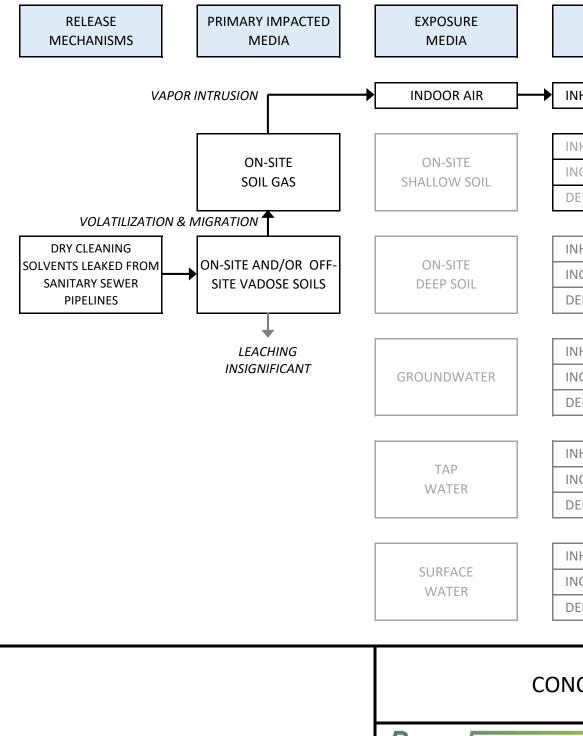
<u>NOTES</u>

- (1) This CSM depicts potentially complete and significant exposure pathways to on-Site receptors, after Site redevelopment, in the absence of any mitigation. Off-Site impacts are not addressed within the scope of this Response Plan.
- (2) On-Site soil gas is impacted with tetrachloroethene (PCE) which is suspected to have leaked from on-Site and/or off-Site sanitary sewer pipelines. Location(s) of sanitary sewer pipeline release(s), location and extent of soil impacts unknown.
- (3) Detected concentrations of PCE in on-Site soil do not pose a direct contact human health risk to future on-Site residents.
- (4) Depth to groundwater is on the order of 80 feet. Groundwater sampling results indicate the release has not impacted groundwater.

Potentally complete and significant exposure pathway

LEGEND

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EXPOSURE ROUTES	ON-SITE RESIDENT	
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CONCEPTUAL SITE MODEL

PATH FORWARD Environmental Engineering & Geology

2550 IRVING STREET SAN FRANCISCO, CALIFORNIA FIGURE

3

Tables



Indoor Air RBSL	Attenuation Factor	Soil Gas RBSL	Soil Gas Concentration	Soil Gas Risk				
(µg/m³)		(µg/m³)	(μg/m³)	(per million)				
Ground-Level Commerci	al Receptor			-				
2.0	0.03	67	1,500	20				
2.0	0.0005	4,000	1,500	0.4				
Potential Ground-Level Residential/Daycare Receptor								
0.46	0.03	15	1,500	100				
0.46	0.0005	920	1,500	1.6				
Second-Level Residentia	Second-Level Residential Receptor							
0.46	0.003	150	1,500	10				
0.46	0.00005	9,200	1,500	0.2				

Table 1. Tetrachlorothene Vapor Intrusion Risk

Notes:

(1) Tetrachloroethene (PCE) indoor air risk-based screening levels (RBSLs) are DTSC-recommended values, represent 1 per million risk level (DTSC 2020).

- (2) Attenuation factors are current and previous DTSC-recommended values for future commercial buildings (DTSC 2011, DTSC and SWRCB 2020).
- (3) Second-level attenuation factors incorporate SFBRWQCB-recommended inter-floor transfer factor of 0.1 (SFBRWQCB 2019).
- (4) Soil gas RBSL equals indoor air RBSL divided by attenuation factor.
- (5) Soil gas concentration is highest detected concentration of PCE in shallow soil gas within the footprint of proposed building (AllWest 2020c).
- (6) Soil gas risk equals soil gas concentration divided by soil gas RBSL; is rounded to one significant figure.
- (7) If the final redevelopment plan includes ground-floor residential receptors and/or other sensitive receptors, DTSC-recommended RBSLs for indoor air under residential land use will be utilized.



Table 2. Tetrachloroethene Breakdown Product Contingent Remedial Goals

PCE Breakdown Product	Indoor Air RBSL	Attenuation Factor	Soil Gas RBSL	Soil Gas Concentration	Soil Gas Risk
	(µg/m³)		(µg/m³)	(µg/m³)	(per million)
Ground-Level Commercial Recepto	or				
Trichloroethene	100	0.03	3,300	ND	NA
Dichloroethene, 1,1-	310	0.03	10,000	ND	NA
Dichloroethene, 1,2-, cis-	35	0.03	1,200	ND	NA
Dichloroethene, 1,2-, trans-	350	0.03	12,000	ND	NA
Vinyl Chloride	0.16	0.03	5.3	ND	NA
Trichloroethene	100	0.0005	200,000	ND	NA
Dichloroethene, 1,1-	310	0.0005	620,000	ND	NA
Dichloroethene, 1,2-, cis-	35	0.0005	70,000	ND	NA
Dichloroethene, 1,2-, trans-	350	0.0005	700,000	ND	NA
Vinyl Chloride	0.16	0.0005	320	ND	NA
Potential Ground-Level Residentia	l/Daycare Recepto	r	-	-	
Trichloroethene	0.48	0.03	16	ND	NA
Dichloroethene, 1,1-	73	0.03	2,400	ND	NA
Dichloroethene, 1,2-, cis-	8.3	0.03	280	ND	NA
Dichloroethene, 1,2-, trans-	83	0.03	2,800	ND	NA
Vinyl Chloride	0.0095	0.03	0.32	ND	NA
Trichloroethene	0.48	0.0005	960	ND	NA
Dichloroethene, 1,1-	73	0.0005	150,000	ND	NA
Dichloroethene, 1,2-, cis-	8.3	0.0005	17,000	ND	NA
Dichloroethene, 1,2-, trans-	83	0.0005	170,000	ND	NA
Vinyl Chloride	0.0095	0.0005	19	ND	NA
Second-Level Residential Receptor					
Trichloroethene	0.48	0.003	160	ND	NA
Dichloroethene, 1,1-	73	0.003	24,000	ND	NA
Dichloroethene, 1,2-, cis-	8.3	0.003	2,800	ND	NA
Dichloroethene, 1,2-, trans-	83	0.003	28,000	ND	NA
Vinyl Chloride	0.0095	0.003	3.2	ND	NA
Trichloroethene	0.48	0.00005	9,600	ND	NA
Dichloroethene, 1,1-	73	0.00005	1.5E+06	ND	NA



PCE Breakdown Product	Indoor Air RBSL	Attenuation Factor	Soil Gas RBSL	Soil Gas Concentration	Soil Gas Risk
	(µg/m³)		(µg/m³)	(µg/m³)	(per million)
Dichloroethene, 1,2-, cis-	8.3	0.00005	170,000	ND	NA
Dichloroethene, 1,2-, trans-	83	0.00005	1.7E+06	ND	NA
Vinyl Chloride	0.0095	0.00005	190	ND	NA

Table 2. Tetrachloroethene Breakdown Product Contingent Remedial Goals

Notes:

- (1) PCE Breakdown Product indoor air risk-based screening levels (RBSLs) are DTSC-recommended values, represent 1 per million risk level (DTSC 2020).
- (2) Attenuation factors are current and previous DTSC-recommended values for future commercial buildings (DTSC 2011, DTSC and SWRCB 2020).
- (3) Second-level attenuation factors incorporate SFBRWQCB-recommended inter-floor transfer factor of 0.1 (SFBRWQCB 2019).
- (4) Soil gas RBSL equals indoor air RBSL divided by attenuation factor.
- (5) Soil gas concentration is highest detected concentration of PCE in shallow soil gas within the footprint of proposed building (AllWest 2020c).
- (6) Soil gas risk equals soil gas concentration divided by soil gas RBSL; is rounded to one significant figure.
- (7) If the final redevelopment plan includes ground-floor residential receptors and/or other sensitive receptors, DTSC-recommended RBSLs for indoor air under residential land use will be utilized.
- (8) ND = Not detected above the laboratory reporting limit. NA = Risk not calculated as breakdown product was ND during sampling.



Statue and Regulatory Citation	Determination	Description	Comment
Federal ARARs			
National Historic Preservation Act (NHPA), 16 U.S.C. ' 470 40 CFR 6.301(b) 36 CFR 60, 63, 800	Applicable	This statute and implementing regulations require federal agencies to take into account the effect of this response action upon any district, site, building, structure, or object that is included in or eligible for the National Register of Historic Places.	If cultural resourd necessary to det may be minimize resources from p archaeological in archaeologist. There are no kno
			project area.
Archaeological and Historic Preservation Act 16 U.S.C. ' 469 40 CFR 6.301(c) 43 CFR 7	Applicable	This statute and implementing regulations establish requirements for the evaluation and preservation of historical and archaeological data, which may be destroyed through alteration of terrain as a result of a federal construction project or a federally licensed activity or program.	
Fish and Wildlife Coordination Act 16 U.S.C. " 661, et seq., 40 CFR 6.302(g) 50 CFR 83 33 CFR 320-330	Applicable	This statute and implementing regulations require coordination with federal and state agencies for federally funded projects to ensure that any modification of any stream or other water body affected by any action authorized or funded by the federal agency provides for adequate protection of fish and wildlife	If the remedial a federal agencies relevant state ag known water boo
Endangered Species Act, 16 U.S.C. ' 1531 40 CFR 6.302(h) 50 CFR 17 and 402	Relevant and Appropriate	This statute and implementing regulations provide that federal activities not jeopardize the continued existence of any threatened or endangered species. Endangered Species Act, Section 7 requires consultation with the U.S. Fish and Wildlife Service to identify the possible presence of protected species and mitigate potential impacts on such species.	If threatened or e activities must be no known threat
Migratory Bird Treaty Act, 16 U.S.C. '' 703, et seq. 50 CFR 10.13	Relevant and Appropriate	This requirement establishes a federal responsibility for the protection of the international migratory bird resource and requires continued consultation with the U.S. Fish and Wildlife Service during remedial design and remedial construction to ensure that the cleanup of the site does not unnecessarily impact migratory birds.	The selected rem affecting migrate nests. There are
Toxic Substances Control Act (TSCA) 40 CFR Part 763, Subpart G	Other Requirements	Asbestos abatement projects and asbestos worker protection. This subpart protects certain State and local government employees who are not protected by the Asbestos Standards of the Occupational Safety and Health Administration (OSHA). This subpart applies the OSHA Asbestos Standards in 29 CFR 1910.1001 and 29 CFR 1926.1101 to these employees.	The State require and 763.121 (as standard for the into the health &
40 CFR Part 763 - Asbestos Containing Materials in Schools	Other	This regulation provides provision for investigation, handling and management of	Will not apply to
Clean Air Act - (CAA) 40 CFR Part 61, Subpart M National Emission Standard for Asbestos	Requirements Relevant and Appropriate	ACM at school sites. The section of the Clean Air Act deals with management of ACMs.	Over-riding regu

urces on or eligible for the national register are present, it will be letermine if there will be an adverse effect and if so how the effect lized or mitigated. The unauthorized removal of archaeological n public or Indian lands is prohibited without a permit, and any l investigations at a site must be conducted by a professional

nown Historical or Archaeological features recognized within the

l action involves activities that affect wildlife and/or non-game fish, es must first consult with the U.S. Fish and Wildlife Service and the agency with jurisdiction over wildlife resources. There are no bodies that will be affected by the project.

or endangered species are identified within the remedial areas, t be designed to conserve the species and their habitat. There are eatened or endangered species identified within the project area.

emedial actions will be carried out in a manner to avoid adversely atory bird species, bald eagle and including individual birds or their are no known nesting sites identified within the project area.

uires that work be performed in accordance with 40 CFR 763.120 asbestos abatement projects) and 29 CFR 1926.58 (asbestos ne construction industry). These requirements will be incorporated a & safety plan but do not meet the definition of an ARAR.

to this non-school related project.

gulation for Asbestos Mitigation Management.

	Applicable to buil
ailed procedures for controlling	
	threshold volume
ing containing "regulated-asbestos	regulations are re
	asbestos contam
	Requirements un
nd disposal of asbestos containing	the ACM disposal
II.	regulatory definit
	Applicable to RAC
•	the remedial action
5	for asbestos conta RACM.
asbestos mills and manufacturing	Requirements un
nents for covering, revegetation and	asbestos contain
n place.	the facilities that
	definitions in the
	These requireme
ntrol system.	demolitions. It w
vides requirements for off site	operations. Requirements un
	asbestos containi
-	applicable becaus
	the facility definit
rds for operations that convert	These requireme
asbestos (asbestos-free) material.	treatment of asbe
	If a chemical is de
	previously establ
_	be used as a scre
•	3, ESLs, or RSLs,
	RCRA applies to n
•	at the sites will be
ument, and on-site disposal of these	
	rasbestos mills and manufacturing ments for covering, revegetation and in place. cations for air cleaning used as part ntrol system. vides requirements for off-site waste material from building ards for operations that convert - asbestos (asbestos-free) material. be used to evaluate whether a nts further investigation. RSLs are use for Site screening and should not intil the other remedy selections onal Contingency Plan (NCP), 40 CFR d e disposal of hazardous and non- y Congress in 1976 and amended in ments (HSWA). RCRA Subtitle C sets waste, and requirements governing tment, and off- site disposal of these

uilding demolitions that will occur as part of the removal if certain mes of RACM are disturbed. The dust control portions of the relevant and appropriate for soil disturbance activities and for uninated material that does not meet the strict definition of RACM.

under this regulation are considered relevant and appropriate to osal. It is not applicable because the facilities do not meet the inition of an asbestos mill.

ACM generated by building demolitions that will occur as part of ction. Relevant and appropriate for soil disturbance activities and ontaminated material that does not meet the strict definition of

under this regulation are considered relevant and appropriate to aining soils and/or debris left in place. It is not applicable because at are part of this remedial action do not meet the facility he regulation.

nents would be applicable if air cleaning is part of the building would be relevant and appropriate to other air cleaning

under this regulation are considered relevant and appropriate to aining soils and/or debris to be transported off-Site. It is not ause the facilities that are part of this remedial action do not meet initions in the regulation.

nents would be applicable if the remedial action includes any sbestos containing material.

a detected during removal actions and no cleanup level was ablished, the Hero Note 3, Water Board ESLs, or U.S. EPA RSLs will creening concentration. If the concentrations are below Hero Note s, as applicable, no further action will be taken.

o moving waste materials. Hazardous waste management efforts lbe performed in accordance with RCRA and Title 22 Requirements.



Statue and Regulatory Citation	Determination	Description	Comment
Clean Water Act (CWA) 33 USC §1342	Applicable	Section 402 of the CWA regulates discharges of pollutants under the National Pollutant Discharge Elimination System (NPDES). The storm water discharges program is regulated by the State Water Board for certain municipal, industrial, and construction storm water discharges through NPDES permits. NPDES permits include requirements to prevent or reduce discharges of pollutants that cause or contribute to violations of water quality objectives.	Any construction loads in storm wa
Safe Drinking Water Act (SDWA) 42 USC § 300g-1	To Be Considered	The National Contingency Plan (NCP) at 40 CFR §§300.43(e)(2)(i)(B)-(D) states that maximum contaminant level goals (MCLGs), established under the SDWA, that are set at levels above zero should be attained by remedial actions for surface water or groundwater that are current or potential sources of drinking water. For contaminants of concern (COCs) in groundwater that do not have MCLGs, or if the MCLGs have been set at zero, the remedial actions should achieve Maximum Contaminant Levels (MCLs).	Although no impa is intended to be
State and Local ARARs			
Title 8: Subchapter 7. General Industry Safety Orders Group 16. Control of Hazardous Substances Article 110. Regulated Carcinogens	Applicable	This regulation provides the State of California OSHA regulations for Hazardous Substance.	The necessary he HASP.
California Health and Safety Code - HSC Division 20. Miscellaneous Health and safety Provisions [24000 - 26217] Chapter 6.82. California Land Reuse and Revitalization Act of 2004 [25395.60 - 25395.109] Article 2. Definitions [25395.63 - 25395.79.2]	Applicable	 "Response plan" means a written plan submitted to an agency pursuant to Section 25395.96 If, upon review of the site assessment prepared pursuant to this article, the agency determines that a response action is necessary to prevent or eliminate an unreasonable risk, the bona fide purchaser, innocent landowner, or contiguous property owner shall submit a response plan to the agency to conduct a response action at the site, in conformance with the agreement entered into pursuant to Section 25395.92. 	This provides the
California Toxics Rule (CTR) 33 USC §1313(c)(2)(B); 40 CFR §131.38(b)(1), (2)	To Be Considered	The California Toxics Rule sets forth freshwater and saltwater criteria for a number of metals and chemical compounds.	Although no impa removal action, t
California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), Water Quality Water Quality Objectives Porter-Cologne Water Quality Control Act promulgated under California Water Code § 13240-13241, Basin Plan, Chapter 3	To Be Considered	Chapter 3 of the Basin Plan sets forth water quality objectives for surface water and groundwater.	Although no impa removal action, t
Domestic Water Quality and Monitoring Regulations Cal. Health and Safety Code §11635, 22 CCR §§64431, 64432, 64432.1, 64432.2, 64444, 64444.5	Relevant and Appropriate	These sections of the California Code of Regulations, part of the state water quality standards, establish MCLs for organic and inorganic chemicals in drinking water.	Although no impa removal action, t
Safe Drinking Water Act (SDWA) Cal. Health and Safety Code § 116375, 22 CCR § 64449	Relevant and Appropriate	This section of the SDWA establishes secondary MCLs for chemicals in drinking water that adversely affect its odor, taste, or appearance. They are desirable goals and are not enforceable.	Although no impa removal action, t

on storm water discharges will use controls to reduce pollutant water in order to prevent violations of water quality objectives.

npacts to surface or groundwater are known, the planned cleanup be protective of water quality.

health and safety precautions will be included in project-specific

he definition for the Response Plan.

npacts to surface or groundwater are known, related to this n, the planned cleanup is intended to be protective of water quality.

npacts to surface or groundwater are known, related to this n, the planned cleanup is intended to be protective of water quality.

npacts to surface or groundwater are known, related to this n, the planned cleanup is intended to be protective of water quality.

npacts to surface or groundwater are known, related to this n, the planned cleanup is intended to be protective of water quality.



Statue and Regulatory Citation	Determination	Description	Comment
State Water Resources Control Board (SWRCB) Resolution No. 88-63 Porter- Cologne Water Quality Control Act promulgated under California Water Code § 13140	Relevant and Appropriate	The resolution states that all surface and groundwaters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply, contamination, or the water source does not provide sufficient water to supply a well capable of producing 200 gallons per day.	Although no impa removal action, t
Water Board Environmental Screening Levels (ESLs) Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Revision 2, July 2019	Relevant and Appropriate	ESLs can be used to evaluate whether a chemical release may pose a risk that warrants further investigation. ESLs are not legally enforceable standards. They are used for site screening.	If a chemical is de previously establi used as a screenii ESLs or RSLs, as a
DTSC and Office of Human and Ecological Risk (OEHHA) Human Health Risk (HERO) Notes including Note 3 Title 22, California Code of Regulations (CCR), Chapter 50 Section 68400.5.	Relevant and Appropriate	For any release of hazardous waste or hazardous constituents, the human health risk assessment calculations, including, but not limited to, all cancer risk and non- cancer hazard screening levels and corrective action objectives, shall use the toxicity criteria specified in California Code of Regulations, title 22, sections 69021 and attain the human health protection specified in section 69022, subdivisions (a) and (b).	The appropriate F with known or dis removal action.
Bay Area Air Quality Management District (BAAQMD) Regulation 6 Rule 1 Section 305	Relevant and Appropriate	This section sets limits on visual particulates during construction activities.	A person shall not annoyance to any individual particle individually as inc fall on real proper
Title 22, California Code of Regulations (CCR), Chapter 39 Section 67391.1, Requirements for Land Use Covenants	Applicable	Specify that a land use covenant imposing appropriate limitations on land use shall be executed and recorded when hazardous materials, hazardous wastes or constituents, or hazardous substances will remain at the property at levels, which are not suitable for unrestricted use of the land.	This is the regulat following capping
San Francisco Police Code, Article 29, section 2908.	Applicable	This ordinance provides guidance for acceptable levels of noise and acceptable times for the emission of construction noise.	Noise between 8p
Underground Storage Tank (UST) Regulations California Code of Regulations, Title 23, Chapter 16, Article 11	To Be Considered	UST regulations protect waters of the state from discharges of hazardous substances from USTs.	No USTs are knov actions involve th requirements of t
San Francisco Bay Water Board UST Program California Health and Safety Code, Division 20, Chapters 6.7 and 6.75	To Be Considered	The San Francisco Bay Water Board UST Program gives local agencies the authority to oversee investigation and cleanup of UST leak sites.	No USTs are know actions involve th requirements of t
San Francisco Public Health Code (SFPHC) Article 22A (also referred as Maher Ordinance)	Applicable	The Site is located within the area that is subject to compliance with Article 22A. For projects which will disturb at least 50 cubic yards of soil, the applicant is required to contact the Department of Public Health and to conduct an environmental investigation and submit the documents and certifications for review and approval by the Department of Public Health prior to issuance of the permit from the Department of Building Inspection.	Provides a descrip followed during re

npacts to surface or groundwater are known, related to this n, the planned cleanup is intended to be protective of water quality.

detected during removal actions and no cleanup level was blished, Hero Note 3, Water Board ESLs, or U.S. EPA RSLs will be ening concentration. If the concentrations are below Hero Note 3, s applicable, no further action will be taken.

te HERO Notes will be followed when evaluating risks associated discovered contaminants during the implementation of the n.

not emit particles from any operation in sufficient number to cause any other person, which particles are large enough to be visible as cles at the emission point or of such size and nature as to be visible incandescent particles. This section will apply only if such particles perty other than that of the person resposible for the emission.

lation that will govern the land use covenant placed on the Site ng.

8pm and 7am is unlawful without a special Public Works permit.

nown to be present at the site. Although not anticipated, if removal the removal of a UST, the actions will comply with the substantive of these regulations.

nown to be present at the site. Although not anticipated, if removal the removal of a UST, the actions will comply with the substantive of these regulations.

cription of the Maher Ordinance which will be required to be gredevelopment.



Statue and Regulatory Citation	Determination	Description	Comment
SFPHC Article 22B	Applicable	This article is applicable to any site preparation or construction activities taking	Provides a descri
		place within the City and County of San Francisco that have the potential to	dust.
		create dust or that will expose or disturb soil be conducted and managed to	
		eliminate visible dust	

cription of the dust mitigation requirements to eliminate visible



Appendix A

Summary of Historical Data



Tables 1 and 2 from

Phase II Subsurface Investigation Report (AllWest 2020c)



TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2500-2550 Irving Street San Francisco, California AllWest Project No. 19089.23.1											
Sample Name and Depth in feet bgs	Date Sampled	TPH-g (C6- C12)	TPH-d (C10- C23)	TPH-mo (C18- C36)	Cadmium	Chromium	Lead	Nickel	Zinc	Tetrachloroethene (PCE)	Other VOCs
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-1 (4.5-5)	5/21/2019	ND (<1.0)	13	210	ND (<0.25)	44	9.0	24	28	ND (<0.0050)	ND (varies)
B-2 (4.5-5)	5/21/2019	ND (<1.0)	3.6	70	ND (<0.25)	57	4.6	26	24	ND (<0.0050)	ND (varies)
B-3 (4.5-5)	5/21/2019	ND (<1.0)	1.1	19	ND (<0.25)	49	39	26	68	ND (<0.0050)	ND (varies)
B-4 (4.5-5)	5/21/2019	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<0.25)	57	10	30	45	ND (<0.0050)	ND (varies)
B-5 (4.5-5)	5/21/2019	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<0.25)	45	2.5	24	21	ND (<0.0050)	ND (varies)
B-8 (4.5-5)	7/17/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
B-8 (9.5-10)	7/17/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
B-9 (4.5-5)	7/17/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
B-9 (9.5-10)	7/17/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
B-10 (4.5-5)	7/18/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
B-10 (9.5-10)	7/18/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
SFRWQCB	Tier 1 ESLs	100 (Res-ON)	260 (Res-DE)	100 (Res-ON)	1.9 (TH)	160 (TH)	32 (TH)	86 (CW-DE)	340 (TH)	0.080 (TH)	Varies or NE
SFRWQ0 Commercial/In	CB Tier 2 ndustrial ESLs	500 (Com-ON)	1,000 (Com-ON)	500 (Com-ON)	1,100 (Com-DE)	1,800,000* (Com-DE)	320 (Com-DE)	11,000 (Com-DE)	350,000 (Com-DE)	1,000 (Com-ON)	Varies or NE
•	CB Tier 2 Worker ESLs	500 (CW-ON)	1,000 (CW-ON)	500 (CW-ON)	51 (CW-DE)	530,000* (CW-DE)	180 (CW-DE)	86 (CW-DE)	110,000 (CW-DE)	350 (CW-DE)	Varies or NE
Title 22 TT	LC (mg/kg)	NE	NE	NE	100	2,500	1,000	2,000	5,000	NE	Varies or NE
Title 22 STLC (mg/L)		NE	NE	NE	1.0	5.0 (Cr III & total)	5.0	20	250	NE	Varies or NE

	TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2500-2550 Irving Street San Francisco, California AllWest Project No. 19089.23.1											
Sample Name and Depth in feet bgs	th in Date Sampled C12) C23) C36) (PCE)									Other VOCs		
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
	CLP (mg/L)	NE	NE	NE	1.0	5.0	5.0	NE	NE	0.70	Varies or NE	
	an/Median Concentrations	NE	NE	NE	1.1	58 (total)	7.0	68	64	NE	NE	
	Notes: All samples analyzed at McCampbell Analytical, Inc., Pittsburg, California. All results are reported in milligrams per kilogram (mg/kg) bgs = below ground surface VOCs - Volatile Organic Compounds, analytical method SW8260B TPH=g - Total Petroleum Hydrocarbons as Gasoline, analytical method SW8260B TPH-d - Total Petroleum Hydrocarbons as Diesel, analytical method SW8015 without Silica Gel cleanup TPH=mo - Total Petroleum Hydrocarbons as Motor Oli, analytical method SW8015 without Silica Gel cleanup PCE TPH=mo - Total Petroleum Hydrocarbons as Motor Oli, analytical method SW8015 without Silica Gel cleanup PCE TPH=mo - Total Petroleum Hydrocarbons as Motor Oli, analytical method SW8015 without Silica Gel cleanup PCE TCE Terrachioroentene, analytical method SW8260B PDE ND - Not Detected above laboratory reporting limit (listed in paranthesis) NA - Not Analyzed PEE NA - Not Analyzed * Chronnium III, ESL not established for total chromium SFRWQCB ESLs = San Francisco Bay Regional Water Quality Control Board, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs) for residential and use and soil disposal acceptance profiling were established using the Tier 1 ESL Summary Table based on a generic conceptual si model designed for use at most sites. These ESLs were established with the following assumptions: Land Use = Residential, Groundwater Use portindi drinking water resource were established using the site-specific Tier 2 Interactive Tool, Ta											

	TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2500-2550 Irving Street San Francisco, California AllWest Project No. 19089.23.1										
Sample Name and Depth in feet bgs	and Depth in Date Sampled C12) C23) C36) C10									Other VOCs	
		(mg/kg)	(mg/kg)	(mg/kg)							
Concentrations exceeding the applicable ESLs are indicated in bold font TTLC - Total Threshold Limit Concentration value for hazardous waste established by State of California Code of Regulations Title 22, Chapter 11, Article 3, Tables II and III. STLC - Soluble Threshold Limit Concentration value for hazardous waste established by State of California Code of Regulations Title 22, Chapter 11, Article 3, Tables II and III.											
						•	U		x ·	icle 3, Tables II and II	I.

Lawrence Berkeley National Laboratory (LBNL) Analysis of Background Distributions of Metals in the Soil at Lawrence Berkeley National Laboratory, Table 3: Summary Statistics for Background Data Sets After Removal of Outliers. April, 2009. Arithmetic mean used where available; otherwise median concentration.

	Table 2 Soil Vapor Analytical Data Summary 2500-2550 Irving Street San Francisco, California AllWest Project 19089.23.1															
Probe & Sample ID Number	ample ID Date Depth Probe Acetone (feet bas) Type ua/m^3 (MEK) ua/m^3 ua/m^3 ua/m^3 ua/m^3 ua/m^3 ua/m^3 ua/m^3 ua/m^3 ua/m^3															
VP-1	5/21/2019	0.5	TSS	56	ND (<10)	8.6	ND (<4.5)	46	530	ND (<4.3)	NA	ND (<4.5)	ND (<2.9)	ND (varies)	ND (<9,300)	ND (<0.0100)
VP-2	5/21/2019	0.5	TSS	57	9.5	ND (<2.4)	ND (<2.3)	27	480	3.6	NA	ND (<2.3)	ND (<1.3)	ND (varies)	ND (<9,300)	ND (<0.0100)
VP-1A	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<6.3)	NA	1,100	NA	ND (<8.6)	ND (<6.3)	ND (<4.1)	NA	NA	ND (<0.025)
VP-2A	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<6.3)	NA	650	NA	ND (<8.6)	ND (<6.3)	ND (<4.1)	NA	NA	ND (<0.025)
VP-3	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<6.3)	NA	270	NA	ND (<8.6)	ND (<6.3)	ND (<4.1)	NA	NA	ND (<0.025)
VP-4	7/19/2019	0.5	SPVP	NA	NA	NA	ND (<2.0)	NA	660	NA	ND (<2.7)	ND (<2.0)	ND (<1.3)	NA	NA	ND (<0.025)
SFRWQCB ESL	Comm	ercial Soil Ga	S	1,000,000 (ON)	730,000 (DE)	18 (DE)	1,200 VI	NL	67 (DE)	44,000 (DE)	100 (DE)	12,000 VI	5.2 VI	Varies or NE	330 (ON)	NE

Notes:

Laboratory analyses by Eurofins Calscience, Garden Grove, CA

µg/m³ = micrograms per cubic meter

TPH-g = total petroleum hydrocarbons as gasoline, analytical method TO-3M

VOCs = volatile organic compounds, analytical method TO-15 SIM

cis-1,2-DCE = cis-1,2-Dichloroethene

trans-1,2-DCE =trans-1,2-Dichloroethene

PCE = perchloroethylene / tetrachloroethene

TCE = trichloroethene

MEK = Methyl Ethyl Ketone (2-Butanone)

ND = Not detected above the listed reporting limit

NL = Not listed

NE = Not established

Bold Font = Detected values exceed regulatory screening levels.

TSS = Temporary Sub-Slab Vapor Pin

SPVP = Semi-Permanent Sub-Slab Vapor Pin

NA = Not Analyzed

SFRWQCB ESLs = San Francisco Regional Water Quality Control Board, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), Tier 2 ESLs from Table SG-1 - Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels, Commercial/Industrial, and Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels, Interim Final - January 23, 2019.

DE = Direct Exposure (Table SG-1 - Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels) ON = Odor Nuisance (Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels) Tables 1 and 2 from

Phase II Subsurface Investigation Report (AllWest 2019d)



				SUI	MMARY OF S 252 San Fra	TABLE 1 SOIL ANALYT 5 Irving Street ancisco, Califor roject No. 1908	nia				
Sample Name and Depth in feet bgs	Date Sampled	TPH-g (C6- C12)	TPH-d (C10- C23)	TPH-mo (C18- C36)	Cadmium	Chromium	Lead	Nickel	Zinc	Tetrachloroethene (PCE)	Other VOCs
	2/12/2010	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-6 (1-1.5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	82	26	37	62	ND (<0.0050)	ND (varies)
B-6 (4.5-5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	49	2.0	26	21	ND (<0.0050)	ND (varies)
B-6 (9.5-10)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	62	1.6	24	22	ND (<0.0050)	ND (varies)
B-7 (1-1.5)	7/17/2019	ND (<0.25)	5.0	58	ND (<0.25)	39	7.6	22	27	ND (<0.0050)	ND (varies)
B-7 (4.5-5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	61	1.9	29	23	ND (<0.0050)	ND (varies)
B-7 (9.5-10)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	65	1.8	26	23	ND (<0.0050)	ND (varies)
B-8 (4.5-5)	7/17/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
B-8 (9.5-10)	7/17/2019	NA	NA	NA	NA	NA	NA	NA	NA	ND (<0.0050)	ND (varies)
SVP-1 (1-1.5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	53	7.8	26	32	ND (<0.0050)	ND (varies)
SVP-1 (4.5-5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	59	1.6	22	21	ND (<0.0050)	ND (varies)
SVP-2 (1-1.5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	74	2.1	30	26	ND (<0.0050)	ND (varies)
SVP-2 (4.5-5)	7/17/2019	ND (<0.25)	ND (<1.0)	ND (<5.0)	ND (<0.25)	53	1.7	23	20	ND (<0.0050)	ND (varies)
SFRWQCB	Tier 1 ESLs	100 (Res-ON)	260 (Res-DE)	100 (Res-ON)	1.9 (TH)	160 (TH)	32 (TH)	86 (CW-DE)	340 (TH)	0.080 (TH)	Varies or NE
SFRWQ0 Commercial/Ir	CB Tier 2 ndustrial ESLs	500 (Com-ON)	1,000 (Com-ON)	500 (Com-ON)	1,100 (Com-DE)	1,800,000* (Com-DE)	320 (Com-DE)	11,000 (Com-DE)	350,000 (Com-DE)	1,000 (Com-ON)	Varies or NE
SFRWQ0 Construction		500 (CW-ON)	1,000 (CW-ON)	500 (CW-ON)	51 (CW-DE)	530,000* (CW-DE)	180 (CW-DE)	86 (CW-DE)	110,000 (CW-DE)	350 (CW-DE)	Varies or NE
Title 22 TT	LC (mg/kg)	NE	NE	NE	100	2,500	1,000	2,000	5,000	NE	Varies or NE
Title 22 ST	LC (mg/L)	NE	NE	NE	1.0	5.0 (Cr III & total)	5.0	20	250	NE	Varies or NE

TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2525 Irving Street San Francisco, California AllWest Project No. 19086.23.2										
Title 22 TCLP (mg/L)	NE	NE	NE	1.0	5.0	5.0	NE	NE	0.70	Varies or NE
LBNL Mean/Median Background Concentrations	NE	NE	NE	1.1	58 (total)	7.0	68	64	NE	NE
All results are re bgs = below gro VOCs - Volatile TPH-g - Total P TPH-d - Total P TPH-mo - Total PCE = Tetrachle ND - Not Detec NA - Not Analy NE - Not Establ * = Chromium I SFRWQCB ESI (<i>ESLs</i>), Tier 1 F Tier 1 Environn model designed Tier 2 Environn established usin Res-DE = Resic Com-DE = Cons Res-ON = Resic Com-ON = Resic Con-ON = Resic Con-ON = Resic Con-ON = Resic Con-ON = Resic Con-ON = Cons Cue-ON = Cons Cu	ported in mi und surface organic Co- tetroleum Hy vetroleum Hy Petroleum Hy Petroleum Hy zed ished II; ESL not el Ls = San Frai Environmenta for use at mo nental Screen g the site-spe lential Direct numercial/Industruction Wo dential Odor struction Wo dential Odor struction Wo catential Odor struction Wo catential Odor struction Wo catential Odor struction Wo catential Odor struction Wo catential Odor struction Wo catential Color struction Wo	Iydrocarbons as Me alytical method SV poratory reporting li established for total neisco Bay Regiona al Screening Levels ing Levels (ESLs) ost sites. These ESI ing Levels (ESLs) ecific Tier 2 Interac Exposure Human ustrial Direct Expo rker / Any Site Use Nuisance Levels (C r Nuisance Levels (C r Nuisance Levels (C r Nuisance Levels (C r Nuisance Levels (C r Any Land Us e applicable ESLs a hit Concentration va imit Concentration tic Leaching Procee Laboratory (LBNL	am (mg/kg) al method SW8260. bline, analytical methodoro Oil, analytical methodoro Oil, analytical methodoro Oil, analytical W8260B imit (listed in paraman chromium al Water Quality Co s (ESLs), January 2 for residential land Ls were established for residential and tive Tool, Table T. Health Risk Levels sure Human Health Direct Exposure F Table S-5) (Table S-5) se Odor Nuisance I are indicated in bol alue for hazardous value for hazardous value for hazardous	B thod SW8260B od SW8015 withou method SW8015 w athesis) ontrol Board, <i>User</i> 3, 2019 use and soil dispo with the following commercial/indust 2-1: Tier 2 ESL Inp (<i>Table S-1</i>) n Risk Levels (<i>Table</i> Levels (<i>Table S-5</i>) d font waste established b swaste established rdous waste established rdous waste established	g assumptions: Lau rial and constructio put and Output. The <i>le S-1</i>) is Levels (<i>Table S-1</i>) by State of Californ d by State of Californ ished by State of C	leanup <i>on and Application</i> iling were establis nd Use = Resident on worker/any land ese ESLs were esta () ia Code of Regula ornia Code of Regula inia Code of Regula ornia Code of Regula	shed using the Tier ial, Groundwater U d use where groun ablished with the f ations Title 22, Cha ulations Title 22, Cha ulations Title 22, Cha Berkeley National	1 ESL Summary T Jse = Drinking Wa dwater IS a potentia ollowing assumption apter 11, Article 3, Chapter 11, Article 3, 22, Chapter 11, Article 3		riority over RIsk- ource were perty use, minimal

	Table 2 Soil Vapor Analytical Data Summary 2500-2550 Irving Street San Francisco, California AllWest Project 19061.23												
Probe & Sample ID Number													
VP-1	5/21/2019	0.5	TSS	56	ND (<3.6)	ND (<10)	8.6	ND (<9.7)	46	ND (<4.3)	530	ND (<9,300)	
VP-2	5/21/2019	0.5	TSS	57	ND (<1.6)	9.5	ND (<2.4)	ND (<4.3)	27	3.6	480	ND (<9,300)	
SFRWQCB ESL	SFRWQCB ESL Commercial Soil Gas 1,000,000 (ON) 14 (DE) 730,000 (DE) 18 (DE) NL 44,000 (DE) 67 (DE) 330 (ON)												

Notes:

Laboratory analyses by Eurofins Calscience, Garden Grove, CA

 $\mu g/m^3 = micrograms$ per cubic meter

TPH-g = total petroleum hydrocarbons as gasoline, analytical method TO-3M

VOCs = volatile organic compounds, analytical method TO-15 SIM

DE = Direct Exposure

ON = Odor Nuisance

PCE = perchloroethylene / tetrachloroethene

MEK = Methyl Ethyl Ketone (2-Butanone)

ND = Not detected above the listed reporting limit

NL = Not listed

Bold Font = Detected values exceed regulatory screening levels.

TSS = Temporary Sub-Slab Vapor Pin

SFRWQCB ESLs = San Francisco Regional Water Quality Control Board, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), Tier 2 ESLs from Table SG-1 - Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels, Commercial/Industrial, and Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels, Interim Final - January 23, 2019.

Tables 1 and 2 from

Subsurface Investigation Report (AllWest 2019f)



	TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2511 & 2550 Irving Street San Francisco, California 94122 AllWest Project No. 19126.23										
Sample Name and Depth in feet bgs	Date Sampled	cis-1,2- Dichloroethene (cis-1,2-DCE)	trans-1,2- Dichloroethene (trans-1,2-DCE)	Tetrachloroethane (PCE)	Trichloroethene (TCE)	Vinyl Chloride					
D 12 (4 5 5)	0/27/2010	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)					
B-12 (4.5-5)	9/27/2019	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
B-12 (9.5-10)	9/27/2019	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
B-12 (14.5-15)	9/27/2019	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
B-12 (19.5-20)	9/27/2019	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
B-12 (24.5-25)	9/27/2019	ND (<0.0050)	ND (<0.0050)								
SFRWQCB Tier ESL - Groundwa Water R	ater is Drinking	0.19 (SL)	0.65 (SL)	0.080 (SL)	0.085 (SL)	0.0015 (SL)					
SFRWQC Commercial/In Exposu	dustrial Direct	85 (DE)	600 (DE)	2.7 (DE)	6.1 (DE)	0.15 (DE)					
Notes: All samples analyzed at McCampbell Analytical, Inc., Pittsburg, California by EPA Method 8260B. All results are reported in milligrams per kilogram (mg/kg) bgs = below ground surface Concentrations exceeding the applicable ESLs are indicated in bold font ND - Not Detected above laboratory reporting limit (listed in paranthesis) San Francisco Bay Regional Water Quality Control Board (SFRWQCB), User's Guide: Derivation and Application of Environmeted Screening Levels (ESLs), January 2019. Tier 1 Environmental Screening Levels (ESLs) for residential land use and soil disposal acceptance profiling were established us Tier 1 ESL Summary Table based on a generic conceptual site model designed for use at most sites. These ESLs were established the following assumptions: Land Use = Residential, Groundwater Use = Drinking Water Resource, MCL Priority over RIsk-based Levels = Yes, Discharge to Surface Water = Saltwater & Freshwater, Vegetation Level = Substantial, Soil Exposure Depths = S (≤10 ft bgs). Tier 2 Environmental Screening Levels (ESLs) forcommercial/industrial land use where groundwater IS a potential drinking wat resource were established using the site-specific Tier 2 Interactive Tool, Table T2-1: Tier 2 ESL Input and Output. These ESLs we established with the following assumptions: Commercial property use, minimal vegetation level, drinking water resource groundwater resource groundwat											
			Exposure Human Hea ning to Groundwater	lth Risk Levels) Levels, Drinking Water))						

	Table 2 Summary of Groundwater Analytical Data 2550 & 2511 Irving Stret San Francisco, California 94122 AllWest Project No. 19126.23												
Sample ID	Sample ID Sample Date Well Type cis-1,2-DCE trans-1,2-DCE Tetrachloroethene (PCE) Trichloroethene (TCE) Vinyl Chloride												
			$(\mu g/L)$	$(\mu g/L)$	(µg/L)	(µg/L)	$(\mu g/L)$						
B-11 (GW)	9/27/2019	TW	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)						
B-12 (GW)	B-12 (GW) 9/27/2019 TW ND (<0.50) ND (<0.50) 0.71 ND (<0.50) ND (<0.50)												
	SFRWQCB Groundwater Tier 2 ESLs - Commercial/Industrial, Drinking Water Resource6.0 (DE)10 (DE)2.8 (VI)5.0 (DE)0.14 (VI)												

Notes:

All samples analyzed at McCampbell Analytical, Inc., Pittsburg, California by EPA Method 8260B.

cis-1,2-DCE - cis-1,2-Dichloroethene

trans-1,2-DCE - trans-1,2-Dichloroethene

PCE - Tetrachloroethene

TCE - Trichlorethene

NA - Not Analyzed

ND - Not detected at or above the laboratory reporting limit

NE - Not Established

TW - Temporary well from soil boring

bgs - below ground surface

San Francisco Bay Regional Water Quality Control Board (SFRWQCB), User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), January 2019.

Tier 1 Environmental Screening Levels (ESLs) for residential land use and soil disposal acceptance profiling were established using the Tier 1 ESL Summary Table based on a generic conceptual site model designed for use at most sites. These ESLs were established with the following assumptions: Land Use = Residential, Groundwater Use = Drinking Water Resource, MCL Priority over RIsk-based Levels = Yes, Discharge to Surface Water = Saltwater & Freshwater, Vegetation Level = Substantial, Soil Exposure Depths = Shallow (≤ 10 ft bgs).

Tier 2 Environmental Screening Levels (ESLs) for residential, commercial/industrial land use where groundwater IS a potential drinking water resource were established using the site-specific Tier 2 Interactive Tool, Table T2-1: Tier 2 ESL Input and Output. These ESLs were established with the following assumptions: Commercial property use, minimal vegetation level, drinking water resource groundwater use, discharge to surface water, and shallow soil depths (≤ 10 ft bgs) for direct exposure.

DE - Direct Exposure (*Table GW-1 - Direct Exposure Human Health Risk Levels*) VI = Vapor Intrusion (*Table GW-3 - Groundwater Vapor Intrusion Human Health Risk Levels*)

	TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2525 & 2550 Irving Street San Francisco, California AllWest Project No. 202006.23										
Sample Name and Depth in feet bgs	Date Sampled	cis-1,2- Dichloroethene (cis-1,2-DCE)	trans-1,2- Dichloroethene (trans-1,2-DCE)	Tetrachloroethane (PCE)	Trichloroethene (TCE)	Vinyl Chloride					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)					
SVP-3 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-4 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-5 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-6 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-7 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-7 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-7 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-8 (1-1.5)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-8 (4.5-5)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-8 (9.5-10)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-8 (14.5-15)	5/24/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-9 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-9 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-9 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-9 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-10 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-10 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-10 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-10 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-11 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-11 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-11 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-12 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					
SVP-12 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	0.052	ND (<0.0050)	ND (<0.0050)					
SVP-12 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)					

			TABLE ARY OF SOIL AN 2525 & 2550 Irv San Francisco, (AllWest Project N	ALYTICAL DATA ing Street California		
SVP-12 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-13 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-14 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-14 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-14 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-15 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-15 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-15 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-16 (4.5-5)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-16 (9.5-10)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-16 (14.5-15)	5/26/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-17 (14.5-15)	5/28/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (1-1.5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (4.5-5)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (9.5-10)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-18 (14.5-15)	5/23/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-19 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-20 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-21 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SVP-22 (14.5-15)	5/27/2020	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
SFRWQCB Tier ESL - Groundwa Water Re	ter is Drinking	0.19 (SL)	0.65 (SL)	0.080 (SL)	0.085 (SL)	0.0015 (SL)
SFRWQC Commercial/Ind Exposur	lustrial Direct	85 (DE)	600 (DE)	2.7 (DE)	6.1 (DE)	0.15 (DE)
		zed at McCampbell An orted in milligrams per		, California by EPA Metho	d 8260B.	

TABLE 1 SUMMARY OF SOIL ANALYTICAL DATA 2525 & 2550 Irving Street San Francisco, California AllWest Project No. 202006.23

bgs = below ground surface

Concentrations exceeding the applicable ESLs are indicated in **bold font**

ND - Not Detected above laboratory reporting limit (listed in paranthesis)

San Francisco Bay Regional Water Quality Control Board (SFRWQCB), User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), January 2019.

Tier 1 Environmental Screening Levels (ESLs) for residential land use and soil disposal acceptance profiling were established using the Tier 1 ESL Summary Table based on a generic conceptual site model designed for use at most sites. These ESLs were established with the following assumptions: Land Use = Residential, Groundwater Use = Drinking Water Resource, MCL Priority over RIsk-based Levels = Yes, Discharge to Surface Water = Saltwater & Freshwater, Vegetation Level = Substantial, Soil Exposure Depths = Shallow (≤ 10 ft bgs).

Tier 2 Environmental Screening Levels (ESLs) forcommercial/industrial land use where groundwater IS a potential drinking water resource were established using the site-specific Tier 2 Interactive Tool, Table T2-1: Tier 2 ESL Input and Output. These ESLs were established with the following assumptions: Commercial property use, minimal vegetation level, drinking water resource groundwater use, discharge to surface water, and shallow soil depths (≤ 10 ft bgs) for direct exposure.

DE - Direct Exposure (*Table S-1 Direct Exposure Human Health Risk Levels*) SL = Soil Leaching (*Table S-3 - Leaching to Groundwater Levels*, *Drinking Water*) Table 2 from

Phase II Subsurface Investigation Report (AllWest 2019b)



	Table 2										
	Soil Vapor Analytical Data Summary										
	2125 Irving Street										
	San Francisco, California										
					,						
	AllWest Project 19086.23.2										
Probe & Sample ID Number	Date	Depth (feet bgs)	Probe Type	cis-1,2-DCE µg/m ³	РСЕ µg/m ³	TCE μg/m ³	trans-1,2- DCE μg/m ³	Vinyl Chloride µg/m ³	Helium (Leak detect gas) (% v/v)		
SVP-1	7/17/2019	5	Т	ND (<2.0)	1,800	ND (<2.7)	ND (<2.0)	ND (<1.3)	ND (<0.025)		
SVP-2	7/17/2019	5	Т	ND (<2.0)	1,300	ND (<2.7)	ND (<2.0)	ND (<1.3)	ND (<0.025)		
SFRWQCB ESL	Comm	ercial Soil Ga	5	1,200 VI	67 (DE)	100 (DE)	12,000 VI	5.2 VI	NE		
Notes:				·				·			
Laboratory anal	vses by Eurofins	Calscience.	Garden Gr	ove. CA							
$\mu g/m^3 = microg$											
	-		al method	TO-15 SIM							
	DCs = volatile organic compounds, analytical method TO-15 SIM s-1,2-DCE = cis-1,2-Dichloroethene										
trans-1,2-DCE =											
PCE = perchlore		chloroethene									
TCE = trichloro											
ND = Not detect		ted reporting l	imit								

NL = Not listed

NE = Not established

Bold Font = Detected values exceed regulatory screening levels.

T = Temporary Soil Vapor Probe

NA = Not Analyzed

SFRWQCB ESLs = San Francisco Regional Water Quality Control Board, User's Guide: Derivation and Application of

Environmental Screening Levels (ESLs), Tier 2 ESLs from Table SG-1 - Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels, Commercial/Industrial , and Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels , Interim Final - January

DE = Direct Exposure (*Table SG-1 - Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels*)

ON = Odor Nuisance (*Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels*)

Table 1 from

First Quarter 2020 Indoor Air Quality Monitoring Report (AllWest 2020b)



	Table 1 Summary of Indoor and Outdoor Air Analytical Data 2550 Irving Street San Francisco, California 94122 AllWest Project No. 19086.28													
Sample ID	Sample IDAir Sample Start DateAir Sample End Date1,1-Dichloroethene (1,1-DCE) µg/m3cis-1,2- Dichloroethene (cis-1,2-DCE) µg/m3Tetrachloroethane (PCE) µg/m3Trichloroethene (TCE) µg/m3Vinyl Chlorid µg/m3													
OAQ-1	8/19/2019	8/20/2019	0.0357	ND (<0.0198)	ND (<0.0198)	0.305	0.0483	ND (<0.00768)						
IAQ-1	8/19/2019	8/20/2019	1.70	ND (<0.0198)	ND (<0.0198)	3.85	0.0644	ND (<0.00768)						
IAQ-2	8/19/2019	8/20/2019	1.56	ND (<0.0198)	ND (<0.0198)	3.85	0.161	ND (<0.00768)						
IAQ-3	8/19/2019	8/20/2019	2.63	ND (<0.0198)	ND (<0.0198)	2.67	0.0859	ND (<0.00768)						
IAQ-4	8/19/2019	8/20/2019	1.41	ND (<0.0198)	ND (<0.0198)	2.87	0.0698	ND (<0.00768)						
SFRWQCB Ti	er 2 Commercial/Indu Exposure	ıstrial ESLs, Direct	310	35	350	2.0	3.0	0.16						

Notes:

Laboratory analyses by Eurofins Calscience, LLC, Garden Grove, CA

OAQ = Outdoor Air Quality (ambient air control sample)

IAQ = Indoor Air Quality

 $\mu g/m^3 = micrograms$ per cubic meter

1,1-DCE = 1,1-Dichloroethene by EPA Method TO-15

cis-1,2-DCE = cis-1,2-Dichloroethene by EPA Method TO-15

trans-1,2-DCE = trans-1,2-Dichloroethene by EPA Method TO-15

PCE = perchloroethylene / tetrachloroethene by EPA Method TO-15

TCE = Trichloroethene by EPA Method TO-15

Vinyl chloride by EPA Method TO-15

ND = Not detected above the listed reporting limit

Bold Font = Detected values exceed regulatory screening levels.

SFRWQCB Tier 2 ESLs = San Francisco Regional Water Quality Control Board, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), Tier 2 ESLs from Table IA-1 - Indoor Air Direct Exposure: Human Health Risk Levels, Interim Final - January 23, 2019.

Table 1 from

Indoor Air Quality Monitoring Report (AllWest 2019e)



	Table 1 Summary of Indoor and Outdoor Air Analytical Data 2550 Irving Street San Francisco, California 94122 AllWest Project No. 19086.28.3												
Sample ID	$\begin{array}{c c c c c c c c c c c c c c c c c c c $												
OAQ-1	8/19/2019	8/20/2019	0.305	0.0483	0.0357	ND (<0.0198)	ND (<0.0198)	ND (<0.00768)					
OAQ-1	12/29/2019	12/30/2019	ND (<0.017)	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.013)					
OAQ-1	2/2/2020	2/3/2020	ND (<0.017)	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.013)					
IAQ-1	IAQ-1 8/19/2019 8/20/2019 3.85 0.0644 1.70 ND (<0.0198) ND (<0.0198) ND (<0.00768)												
IAQ-1	12/29/2019	12/30/2019	3.6	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
IAQ-1	2/2/2020	2/3/2020	0.90	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
IAQ-2	8/19/2019	8/20/2019	3.85	0.161	1.56	ND (<0.0198)	ND (<0.0198)	ND (<0.00768)					
IAQ-2	12/29/2019	12/30/2019	4.3	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
IAQ-2	2/2/2020	2/3/2020	1.7	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
IAQ-3	8/19/2019	8/20/2019	2.67	0.0859	2.63	ND (<0.0198)	ND (<0.0198)	ND (<0.00768)					
IAQ-3	12/29/2019	12/30/2019	2.9	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
IAQ-3	2/2/2020	2/3/2020	2.4	0.53	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
IAQ-4	8/19/2019	8/20/2019	2.87	0.0698	1.41	ND (<0.0198)	ND (<0.0198)	ND (<0.00768)					
IAQ-4	12/29/2019	12/30/2019	3.5	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
IAQ-4	2/2/2020	2/3/2020	3.3	ND (<0.013)	NA	ND (<0.099)	ND (<0.099)	ND (<0.13)					
-	3 Tier 2 Commer SLs, Direct Expo		2.0	3.0	310	35	350	0.16					

	Table 1 Summary of Indoor and Outdoor Air Analytical Data 2550 Irving Street San Francisco, California 94122 AllWest Project No. 19086.28.3									
Sample ID	Air Sample Start Date	Air Sample End Date	Tetrachloroethane (PCE) µg/m ³	Trichloroethene (TCE) µg/m ³	1,1- Dichloroethene (1,1-DCE) µg/m3	cis-1,2- Dichloroethene (cis-1,2-DCE) µg/m ³	trans-1,2- Dichloroethene (trans-1,2-DCE) μg/m ³	Vinyl Chloride µg/m ³		
OAQ = Outdoo IAQ = Indoor NA = Not anal $\mu g/m^3$ = micro 1,1-DCE = 1,1 cis-1,2-DCE = trans-1,2-DCE PCE = perchlo TCE = Trichlo Vinyl chloride ND = Not dete	or Air Quality (am Air Quality yzed grams per cubic m -Dichloroethene b cis-1,2-Dichloroe = trans-1,2-Dichloroe roethylene / tetrac roethene by EPA 1 by EPA Method 7 cted above the list petected values exc	bient air control sa neter y EPA Method TO thene by EPA Methor oroethene by EPA hloroethene by EPA Method TO-15 TO-15 ed reporting limit seed regulatory scree	-15 (only analyzed by nod TO-15 Method TO-15 A Method TO-15 eening levels.	Torrent as a PCE b	oreakdown product))				

	Table 2 Summary of Soil Vapor Analytical Data The Police Credit Union 2525 & 2550 Irving Street San Francisco, California 94122											
						co, California 9412 oject No. 202006.2.						
Probe & Sample ID Number	Date	Sample Depth feet bgs	Probe Type	Location	cis-1,2- Dichloroethene (cis-1,2-DCE) μg/m ³	trans-1,2- Dichloroethene (trans-1,2-DCE) μg/m ³	Tetrachloroethene (PCE) μg/m ³	Trichloroethene (TCE) μg/m ³	Vinyl Chloride µg/m ³	Helium** (Leak detection gas) (% v/v)		
VP-1A	5/30/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.3)	ND (<2.3)	1,100	ND (<3.1)	ND (<1.5)	ND (<0.025)		
VP-2A	5/31/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	710	ND (<2.8)	ND (<1.3)	ND (<0.025)		
VP-3	5/30/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	370	ND (<2.7)	ND (<1.3)	ND (<0.025)		
VP-4	5/30/2020	0.5	SPVP	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	960	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-3	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<9.9)	ND (<9.9)	2,500	ND (<13)	ND (<6.4)	ND (<0.025)		
SVP-4	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<9.9)	ND (<9.9)	2,200	ND (<13)	ND (<6.4)	ND (<0.025)		
SVP-5	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<9.9)	ND (<9.9)	2,500	ND (<13)	ND (<6.4)	ND (<0.025)		
SVP-6	5/28/2020	15	Т	Area C - S. side of Irving Street	ND (<6.3)	ND (<6.3)	1,000	ND (<8.6)	ND (<4.1)	ND (<0.025)		
SVP-7A	6/1/2020	5	PNC	Area B - PCU Parking Lot	ND (<2.0)	ND (<2.0)	470	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-7B	6/1/2020	15	PNC	Area B - PCU Parking Lot	ND (<2.0)	ND (<2.0)	340	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-8A	5/30/2020	5	PNC	Area A - Inside PCU	ND (<2.2)	ND (<2.2)	1,300	ND (<3.0)	ND (<1.4)	ND (<0.025)		
SVP-8B	5/30/2020	15	PNC	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	1,700	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-9A	5/30/2020	5	PNC	Area A - Inside PCU	ND (<2.1)	ND (<2.1)	1,300	ND (<2.8)	ND (<1.3)	ND (<0.025)		
SVP-9B	5/30/2020	15	PNC	Area A - Inside PCU	ND (<2.0)	ND (<2.0)	1,300	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-10A	5/31/2020	5	PNC	Area A - Inside PCU	ND (<2.1)	ND (<2.1)	320	ND (<2.8)	ND (<1.4)	ND (<0.025)		
SVP-10B	5/31/2020	15	PNC	Area A - Inside PCU Area A- PCU	ND (<3.8)	ND (<3.8)	280	ND (<5.2)	ND (<2.5)	ND (<0.025)		
SVP-11A	6/1/2020	5	PNC	Loading Dock	ND (<2.0)	ND (<2.0)	630	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-11B	6/1/2020	15	PNC	Loading Dock Area A - Inside	ND (<2.0)	ND (<2.0)	650	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-12A	5/31/2020	5	PNC	PCU Area A - Inside	ND (<6.1)	ND (<6.1)	1,500	ND (<8.3)	ND (<3.9)	ND (<0.025)		
SVP-12B	5/31/2020	15	PNC	PCU Area A - Inside	ND (<2.0)	ND (<2.0)	1,600	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-13A	5/31/2020	5	PNC	PCU Area A - Inside	ND (<2.0)	ND (<2.0)	290	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-13B	6/13/2020	15	PNC	PCU Area B - PCU	NA	NA	NA	NA	NA	NA		
SVP-14A	6/1/2020	5	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	590	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-14B	6/1/2020	15	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	540	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-15A	6/1/2020	5	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	120	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-15B	6/1/2020	15	PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0)	240	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-16A SVP-16B	6/1/2020 6/1/2020	5	PNC PNC	Parking Lot Area B - PCU	ND (<2.0)	ND (<2.0) ND (<2.0)	140 220	ND (<2.7)	ND (<1.3) ND (<1.3)	ND (<0.025)		
SVP-16B SVP-17	5/28/2020	15	T	Parking Lot Area C - N. side of Irving	ND (<2.0) ND (<9.9)	ND (<2.0) ND (<9.9)	1,700	ND (<2.7) ND (<13)	ND (<1.3) ND (<6.4)	ND (<0.025)		
SVP-18A	5/30/2020	5	PNC	Street Area A - Inside	ND (<2.1)	ND (<2.1)	1,200	ND (<2.9)	ND (<1.4)	ND (<0.025)		
SVP-18B	5/30/2020	15	PNC	PCU Area A - Inside	ND (<2.0)	ND (<2.0)	1,200	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-19A	5/28/2020	5	TNC	PCU Area D - Southern	ND (<2.0)	ND (<2.0)	570	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-19B	5/28/2020	15	TNC	Parking Lot Area D - Southern Parking Lot	ND (<5.0)	ND (<5.0)	990	ND (<6.7)	ND (<3.2)	ND (<0.025)		
SVP-20A	5/27/2020	5	TNC	Parking Lot Area D - Southern Parking Lot	ND (<7.9)	ND (<7.9)	1,300	ND (<11)	ND (<5.1)	ND (<0.025)		
SVP-20B	5/27/2020	15	TNC	Area D - Southern Parking Lot	ND (<4.0)	ND (<4.0)	910	ND (<5.4)	ND (<2.6)	ND (<0.025)		
SVP-21A	5/28/2020	5	TNC	Area D - Southern Parking Lot	ND (<2.0)	ND (<2.0)	390	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-21B	5/28/2020	15	TNC	Area D - Southern Parking Lot	ND (<2.0)	ND (<2.0)	200	ND (<2.7)	ND (<1.3)	ND (<0.025)		
SVP-22A	5/28/2020	5	TNC	Area D - Southern Parking Lot	ND (<6.3)	ND (<6.3)	1,300	ND (<8.6)	ND (<4.1)	ND (<0.025)		
SVP-22B	5/28/2020	15	TNC	Area D - Southern Parking Lot	ND (<9.9)	ND (<9.9)	1,800	ND (<13)	ND (<6.4)	ND (<0.025)		

	Table 2 Summary of Soil Vapor Analytical Data The Police Credit Union 2525 & 2550 Irving Street San Francisco, California 94122 AllWest Project No. 202006.23										
Probe & Sample ID Number	Probe & Sample ID Number Date Depth feet Probe Location Dichloroethene Dichloroethene Dichloroethene (PCE) (TCE) vinyi Chloride detection							Helium** (Leak detection gas) (% v/v)			
SFRWQCB ESL	Commercial Soil Gas			1,200 VI	12,000 VI	67 VI	100 VI	5.2 VI	NE		
SFRWQCB ESL	Residential Soil Gas			280 VI	2,800 VI	15 VI	18 VI	0.32 VI	NE		

Notes:

Samples analyzed for PCE, TCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride by EPA Method TO-15, Eurofins/Calscience, Inc., Garden Grove, CA Helium by analytical method ASTM D1946, Eurofins/Calscience, Inc., Garden Grove, CA

 $\mu g/m^3$ = Micrograms per cubic meter = 0.001 micrograms per liter

bgs = below ground surface

% v/v = percent by volume

ND = Not detected at or above laboratory reporting limit

NE = Not Established

VI = Vapor Intrusion Human Health Risk Screening Level

NS = Not Sampled; No Recovery

NA = Not Analyzed due to laboratory error

Bold Font = Detected values exceed regulatory screening levels.

* = LCS or LCSD is outside acceptance limits.

** = Leak detection gas or agent

Locations:

Southern parking lot is located at 2525 Irving Street

Police Credit Union (PCU) building, parking lot and loading dock are located at 2550 Irving Street

The five sample locations along Irving Street were located within the parking lanes

AMBIENT = Helium leak detection gas shroud ambient air sample.

T = Temporary soil vapor probe (single), one time sampling event.

TNC = Temporary soil vapor probe (nested cluster), one time sampling event.

PNC = Permanent soil vapor probe (nested cluster), probe remains in the subsurface and can be sampled again. Flush-mounted vault box installation.

SPVP = Semi-Permanent Vapor Pin sub-slab soil vapor probe; remains within the floor slab and can be sampled again. Flush mounted, metal cover but no vault box, easily removed.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for sub-slab and soil gas vapor intrusion for commercial/industrial and residential land use were established using the Tier 2 *Table SG-1* - *Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels,* and *Table SG-2* - *Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs)*, Interim Final, January 24, 2019. These ESLs were established for commercial/industrial and residential property use.

Page 2 of 2

Tables 1 and 2 from

Path Forward's February 23, 2020 Subsurface Investigation



Table 1. Groundwater Sampling Results vs. Vapor Intrusion Screening Levels

Sample ID:		Screenir	ng Levels	B-19-GW	B-20-GW
Boring:		Maximum	Commercial	B-19	B-20
Depth (ft bgs):	Linita	Contaminant	Vapor	NA	NA
Analyte Date Collected:	Units	Level	Intrusion	2020-02-23	2020-02-23
Acetone	μg/L	None	9.8E+07	<10	18
Amyl methyl ether, tert-	μg/L	None	None	<0.50	<0.50
Benzene	μg/L	1.0	1.9	0.089 J	0.064 J
Bromobenzene	μg/L	None	2,600	<0.50	<0.50
Bromochloromethane	μg/L	None	3,000	<0.50	<0.50
Bromodichloromethane	μg/L	None	3.8	<0.50	<0.50
Bromoform	μg/L	None	500	<0.50	<0.50
Bromomethane	μg/L	None	73	<0.50	<0.50
Butanone, 2-	μg/L	None	9.5E+06	13	9.5
Butyl alcohol, tert-	μg/L	None	None	<5.0	<5.0
Butylbenzene, n-	μg/L	None	1,400	<0.50	<0.50
Butylbenzene, sec-	μg/L	None	2,500	<0.50	<0.50
Butylbenzene, tert-	μg/L	None	3,300	<0.50	<0.50
Carbon disulfide	μg/L	None	5,300	<0.50	<0.50
Carbon tetrachloride	μg/L	0.50	1.8	<0.50	<0.50
Chlorobenzene	μg/L	70	1,700	<0.50	<0.50
Chloroethane	μg/L	None	97,000	<0.50	<0.50
Chloroform	μg/L	None	3.5	0.091 J	<0.50
Chloromethane	μg/L	None	1,100	<0.50	<0.50
Chlorotoluene, 2-	μg/L	None	2,400	<0.50	<0.50
Chlorotoluene, 4-	μg/L	None	2,000	<0.50	<0.50
Dibromochloromethane	μg/L	None	18	<0.50	<0.50
Dibromochloropropane, 1,2-, 3-	μg/L	0.20	0.33	<0.20	<0.20
Dibromoethane, 1,2-	μg/L	0.050	0.75	<0.50	<0.50
Dibromomethane	μg/L	None	540	<0.50	<0.50
Dichlorobenzene, 1,2-	μg/L	600	11,000	<0.50	<0.50
Dichlorobenzene, 1,3-	μg/L	None	None	<0.50	<0.50
Dichlorobenzene, 1,4-	μg/L	5.0	11	<0.50	<0.50
Dichlorodifluoromethane	μg/L	None	31	<0.50	<0.50
Dichloroethane, 1,1-	μg/L	5.0	34	<0.50	<0.50
Dichloroethane, 1,2-	μg/L	0.50	9.7	<0.50	<0.50



Table 1. Groundwater Sampling Results vs. Vapor Intrusion Screening Levels

Sample ID:		Screenir	ng Levels	B-19-GW	B-20-GW
Boring:		Maximum	Commercial	B-19	B-20
Depth (ft bgs):		Contaminant	Vapor	NA	NA
Analyte Date Collected:	Units	Level	Intrusion	2020-02-23	2020-02-23
Dichloroethene, 1,1-	μg/L	6.0	290	<0.50	<0.50
Dichloroethene, 1,2-, cis-	μg/L	6.0	210	<0.50	<0.50
Dichloroethene, 1,2-, trans-	μg/L	10	910	<0.50	<0.50
Dichloropropane, 1,2-	μg/L	5.0	29	<0.50	<0.50
Dichloropropane, 1,3-	μg/L	None	8,800	<0.50	<0.50
Dichloropropane, 2,2-	μg/L	None	None	<0.50	<0.50
Dichloropropene, 1,1-	μg/L	None	None	<0.50	<0.50
Dichloropropene, 1,3-, cis-	μg/L	0.50	None	<0.50	<0.50
Dichloropropene, 1,3-, trans-	μg/L	0.50	None	<0.50	<0.50
Diisopropyl ether	μg/L	None	30,000	<0.50	<0.50
Ethyl tert-butyl ether	μg/L	None	None	<0.50	<0.50
Ethylbenzene	μg/L	300	15	<0.50	<0.50
Hexachlorobutadiene	μg/L	None	1.3	<0.50	<0.50
Hexachloroethane	μg/L	None	6.9	<0.50	<0.50
Hexanone, 2-	μg/L	None	34,000	2.7	0.79 J
Isopropylbenzene	μg/L	None	3,800	<0.50	<0.50
Isopropyltoluene, p-	μg/L	None	None	<0.50	<0.50
Methyl tert-butyl ether	μg/L	13	2,000	<0.50	<0.50
Methylene chloride	μg/L	0.0E+00	90	<2.0	<2.0
Methylpentanone, 4-, 2-	μg/L	None	2.3E+06	<0.50	<0.50
Naphthalene	μg/L	None	20	<1.0	<1.0
Propylbenzene, n-	μg/L	None	10,000	<0.50	<0.50
Styrene	μg/L	100	35,000	<2.0	<2.0
Tetrachloroethane, 1,1,1,2-	μg/L	None	17	<0.50	<0.50
Tetrachloroethane, 1,1,2,2-	μg/L	1.0	14	<0.50	<0.50
Tetrachloroethene	μg/L	5.0	2.8	<0.50	0.67
Toluene	μg/L	150	4,800	<0.50	<0.50
Trichlorobenzene, 1,2,3-	μg/L	None	270	<0.50	<0.50
Trichlorobenzene, 1,2,4-	μg/L	5.0	29	<0.50	<0.50
Trichloroethane, 1,1,1-	μg/L	200	6,300	<0.50	<0.50
Trichloroethane, 1,1,2-	μg/L	5.0	23	<0.50	<0.50



Sa	mple ID:		Screenir	ng Levels	B-19-GW	B-20-GW
	Boring:		Maximum	Commercial	B-19	B-20
Depth	n (ft bgs):	Units	Contaminant	Vapor	NA	NA
Analyte Date C	ollected:	UTIILS	Level	Intrusion	2020-02-23	2020-02-23
Trichloroethene		μg/L	5.0	7.4	<0.50	<0.50
Trichlorofluoromethane		μg/L	150	1,300	<0.50	<0.50
Trichloropropane, 1,2,3-		μg/L	0.0050	0.11	<0.50	<0.50
Trichlorotrifluoroethane, 1,1,2-,	1,2,2-	μg/L	1,200	1,000	<0.50	<0.50
Trimethylbenzene, 1,2,4-		μg/L	None	1,000	<0.50	<0.50
Trimethylbenzene, 1,3,5-		μg/L	None	730	<0.50	<0.50
Vinyl chloride		μg/L	0.50	0.14	<0.50	<0.50
Xylene, m,p-		μg/L	1,750	1,500	<0.50	<0.50
Xylene, o-		μg/L	1,750	2,100	<0.50	<0.50
Xylene, o,m,p-		μg/L	1,750	1,600	<0.50	<0.50



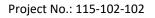
Table 1. Groundwater Sampling Results vs. Vapor Intrusion Screening Levels

Notes:

- (1) Less-than sign (<) indicates analyte was not detected above indicated laboratory reporting limit. En-dash (–) indicates sample was not analyzed for compound.
- (2) Abbreviations:
 - ft bgs feet below ground surface
 - mg/kg milligrams per kilogram
 - °F degrees Fahrenheit
 - TPH-g total petroleum hydrocarbons in the gasoline range
 - TPH-d total petroleum hydrocarbons in the diesel range
 - TPH-mo total petroleum hydrocarbons in the motor oil range
- (3) Data qualifiers:

J

- Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
- (4) Sampling results are compared to Department of Toxic Substances Control (DTSC)-recommended groundwater vapor intrusion screening levels for commercial/industrial land use (DTSC 2020, USEPA 2020, DTSC and SWRCB 2020).
- (5) Highlighting key:
 - Detected concentration exceeds one or more screening levels.





	Sample ID:		Commercial/I	ndustrial RBSLs	B-13-5	B-13-15	B-14-5	B-14-15	B-15-8	B-15-18	B-16-4	B-17-7	B-17-17
	Boring:		Commercial/1		B-13	B-13	B-14	B-14	B-15	B-15	B-16	B-17	B-17
	Depth (ft bgs):	Units	Cancer	Noncancer	5	15	5	15	8	18	4	7	17
Analyte	Date Collected:	Onits	Cancer	Noncancer	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-15	2019-12-15	2019-12-15
Volatile Organic Compoun	ds (VOCs)			-									
Acetone		µg/m³	None	4.70E+06	29	39	60	87	31	<28	<27	<27	<25
Benzene		µg/m³	1.40E+04	4.30E+05	<3.9	<4.0	<3.7	<3.8	24	<3.7	5.5	<3.6	<3.4
Benzyl chloride		µg/m³	8.30E+00	1.50E+02	<6.3	<6.4	<6.0	<6.1	<5.6	<6.0	<5.9	<5.9	<5.5
Bromodichloromethane		µg/m³	1.10E+01	1.20E+04	<8.1	<8.3	<7.7	<7.9	<7.2	<7.8	<7.7	<7.6	<7.1
Bromoform		µg/m³	3.70E+02	1.20E+04	<12	<13	<12	<12	<11	<12	<12	<12	<11
Bromomethane		µg/m³	None	7.30E+02	<47	<48	<45	<46	<42	<45	<44	<44	<41
Butanone, 2-		µg/m³	None	7.30E+05	<14	20	<14	21	<13	<14	20	<13	<12
Carbon disulfide		µg/m³	None	1.00E+05	<15	<16	<14	<15	<13	<14	<14	<14	<13
Carbon tetrachloride		µg/m³	6.70E+01	6.00E+03	<7.6	<7.8	<7.3	<7.4	<6.8	<7.3	<7.2	<7.2	<6.7
Chlorobenzene		µg/m³	None	7.30E+03	<5.6	<5.7	<5.3	<5.4	<5.0	<5.3	<5.3	<5.2	<4.9
Chloroethane		µg/m³	None	1.50E+06	<13	<13	<12	<12	<11	<12	<12	<12	<11
Chloroform		µg/m³	1.80E+01	1.40E+04	<5.9	9.2	<5.6	<5.7	5.4	<5.7	<5.6	7.9	<5.2
Chloromethane		µg/m³	None	1.30E+04	<25	<26	<24	<24	<22	<24	<24	<24	<22
Chloropropene, 3-		µg/m³	6.70E+01	1.50E+02	<15	<16	<14	<15	<14	<14	<14	<14	<13
Cyclohexane		µg/m³	None	8.70E+05	<4.2	6.3	<4.0	<4.0	<3.7	<4.0	<3.9	<3.9	<3.7
Dibromochloromethane		µg/m³	1.90E+01	1.20E+04	<10	<11	<9.8	<10	<9.2	<9.9	<9.8	<9.7	<9.1
Dibromoethane, 1,2-		µg/m³	6.70E-01	1.20E+02	<9.3	<9.6	<8.9	<9.0	<8.3	<8.9	<8.8	<8.8	<8.2
Dichlorobenzene, 1,2-		µg/m³	None	2.90E+04	<7.3	<7.5	<6.9	<7.1	<6.5	<7.0	<6.9	<6.8	<6.4
Dichlorobenzene, 1,3-		µg/m³	None	None	<7.3	<7.5	<6.9	<7.1	<6.5	<7.0	<6.9	<6.8	<6.4
Dichlorobenzene, 1,4-		µg/m³	3.70E+01	1.20E+05	<7.3	<7.5	<6.9	<7.1	<6.5	<7.0	<6.9	<6.8	<6.4
Dichlorodifluoromethane		µg/m³	None	1.50E+04	<6.0	<6.2	<5.7	<5.8	<5.3	<5.7	<5.7	<5.6	<5.3
Dichloroethane, 1,1-		µg/m³	2.60E+02	1.20E+05	<4.9	<5.0	<4.7	<4.8	<4.4	<4.7	<4.6	<4.6	<4.3
Dichloroethane, 1,2-		µg/m³	1.60E+01	1.00E+03	<4.9	<5.0	<4.7	<4.8	<4.4	<4.7	<4.6	<4.6	<4.3
Dichloroethene, 1,1-		µg/m³	None	1.00E+04	<4.8	<4.9	<4.6	<4.6	<4.3	<4.6	<4.5	<4.5	<4.2
Dichloroethene, 1,2-, cis-		µg/m³	None	1.20E+03	<4.8	<4.9	<4.6	<4.6	<4.3	<4.6	<4.5	<4.5	<4.2
Dichloroethene, 1,2-, trans	S-	µg/m³	None	1.20E+04	<4.8	<4.9	<4.6	<4.6	<4.3	<4.6	<4.5	<4.5	<4.2
Dichloropropane, 1,2-		µg/m³	1.10E+02	6.00E+02	<5.6	<5.8	<5.3	<5.4	<5.0	<5.4	<5.3	<5.3	<4.9
Dichloropropene, 1,3-, cis-	-	μg/m³	None	None	<5.5	<5.6	<5.2	<5.3	<4.9	<5.3	<5.2	<5.2	<4.8
Dichloropropene, 1,3-, tra	ns-	μg/m³	None	None	<5.5	<5.6	<5.2	<5.3	<4.9	<5.3	<5.2	<5.2	<4.8
Dichlorotetrafluoroethane	e, 1,2-, 1,1,2,2-	µg/m³	None	None	<8.4	<8.7	<8.1	<8.2	<7.6	<8.1	<8.0	<8.0	<7.4

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Sa	mple ID:	Common annial //		B-13-5	B-13-15	B-14-5	B-14-15	B-15-8	B-15-18	B-16-4	B-17-7	B-17-17
	Boring:	Commercial/I	ndustrial RBSLs	B-13	B-13	B-14	B-14	B-15	B-15	B-16	B-17	B-17
Depth	(ft bgs):	Company	Newsymmetry	5	15	5	15	8	18	4	7	17
Analyte Date C	ollected:	Cancer	Noncancer	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-15	2019-12-15	2019-12-15
Dioxane, 1,4-	μg/m³	8.30E+01	4.30E+03	<17	<18	<17	<17	<16	<17	<16	<16	<15
Ethanol	μg/m³	None	None	26	14	13	19	140	9.6	<8.6	<8.6	<8.0
Ethylbenzene	μg/m³	1.60E+05	1.50E+08	<5.2	<5.4	<5.0	<5.1	38	<5.0	<5.0	<4.9	<4.6
Ethyltoluene, 4-	μg/m³	None	None	<5.9	<6.1	<5.7	<5.8	29	<5.7	<5.6	<5.6	<5.2
Heptane, n-	μg/m³	None	6.00E+04	<5.0	7.3	<4.7	<4.8	8.6	<4.8	<4.7	<4.7	<4.4
Hexachlorobutadiene	μg/m³	1.90E+01	6.00E+02	<52	<53	<49	<50	<46	<49	<49	<49	<45
Hexane, n-	μg/m³	None	1.00E+05	<4.3	13	<4.1	<4.1	<3.8	<4.1	<4.0	<4.0	<3.8
Hexanone, 2-	μg/m³	None	4.30E+03	<20	<20	<19	<19	<18	<19	<19	<19	<17
Isopropanol	μg/m³	None	2.90E+04	<12	<12	<11	<12	<11	<11	<11	<11	<10
Isopropylbenzene	μg/m³	None	6.00E+04	<5.9	<6.1	<5.7	<5.8	<5.3	<5.7	<5.6	<5.6	<5.2
Methyl tert-butyl ether	μg/m³	1.60E+03	4.30E+05	<17	<18	<17	<17	<16	<17	<16	<16	<15
Methylene chloride	μg/m³	4.00E+02	6.00E+04	<42	<43	<40	<41	<38	<40	<40	<40	<37
Methylpentanone, 4-, 2-	μg/m³	None	4.30E+05	<5.0	<5.1	<4.7	<4.8	<4.4	<4.8	<4.7	<4.7	<4.4
Naphthalene	μg/m³	1.20E+04	4.30E+05	<13	<13	<12	<12	<11	<12	<12	<12	<11
Propylbenzene, n-	μg/m³	None	1.50E+05	<5.9	<6.1	<5.7	<5.8	<5.3	<5.7	<5.6	<5.6	<5.2
Styrene	μg/m³	None	1.30E+05	<5.2	<5.3	<4.9	<5.0	<4.6	<4.9	<4.9	<4.8	<4.5
Tetrachloroethane, 1,1,2,2-	μg/m³	7.00E+00	1.20E+04	<8.3	<8.5	<7.9	<8.1	<7.4	<8.0	<7.9	<7.8	<7.3
Tetrachloroethene	μg/m³	6.70E+01	6.00E+03	380	790	100	590	48	380	240	520	900
Tetrahydrofuran	μg/m³	None	2.90E+05	<3.6	<3.7	<3.4	<3.5	<3.2	<3.4	5.6	<3.4	<3.1
Toluene	μg/m³	None	4.30E+07	<4.6	10	9.3	<4.4	250	<4.4	33	<4.3	<4.0
Trichlorobenzene, 1,2,4-	μg/m³	5.70E+01	2.90E+02	<36	<37	<34	<35	<32	<34	<34	<34	<32
Trichloroethane, 1,1,1-	μg/m³	None	1.50E+05	<6.6	<6.8	<6.3	<6.4	<5.9	<6.3	<6.2	<6.2	<5.8
Trichloroethane, 1,1,2-	μg/m³	2.60E+01	2.90E+01	<6.6	<6.8	<6.3	<6.4	<5.9	<6.3	<6.2	<6.2	<5.8
Trichloroethene	μg/m³	1.00E+02	2.90E+02	<6.5	<6.7	<6.2	<6.3	<5.8	<6.2	<6.2	<6.1	<5.7
Trichlorofluoromethane	μg/m³	None	1.80E+05	<6.8	<7.0	<6.5	<6.6	<6.1	<6.5	<6.4	<6.4	<6.0
Trichlorotrifluoroethane, 1,1,2-, 1,2,2-	μg/m³	None	7.30E+05	<9.3	<9.5	<8.8	<9.0	<8.3	<8.9	<8.8	<8.7	<8.2
Trimethylbenzene, 1,2,4-	μg/m³	None	8.70E+03	<5.9	<6.1	<5.7	<5.8	24	<5.7	<5.6	<5.6	<5.2
Trimethylbenzene, 1,3,5-	μg/m³	None	8.70E+03	<5.9	<6.1	<5.7	<5.8	12	<5.7	<5.6	<5.6	<5.2
Trimethylpentane, 2,2,4-	μg/m³	None	None	<5.6	<5.8	<5.4	<5.5	29	<5.4	<5.3	<5.3	<5.0
Vinyl chloride	μg/m³	5.30E+00	1.50E+04	<3.1	<3.2	<3.0	<3.0	<2.8	<3.0	<2.9	<2.9	<2.7
Xylene, m,p-	μg/m³	None	None	<5.2	<5.4	<5.0	<5.1	160	<5.0	11	<5.0	<4.6

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	Sample ID:		Commercial/Industrial RBSLs		B-13-5	B-13-15	B-14-5	B-14-15	B-15-8	B-15-18	B-16-4	B-17-7	B-17-17
	Boring:				B-13	B-13	B-14	B-14	B-15	B-15	B-16	B-17	B-17
	Depth (ft bgs):	Units	Cancer	Noncancer	5	15	5	15	8	18	4	7	17
Analyte	Date Collected:		Cancer	Noncancer	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-14	2019-12-15	2019-12-15	2019-12-15
Xylene, o-		µg/m³	None	1.50E+07	<5.2	<5.4	<5.0	<5.1	54	<5.0	<5.0	<5.0	<4.6
Fixed Gases													
Carbon dioxide		%	None	None	0.60	0.71	0.70	0.82	1.0	0.64	0.36	0.47	0.52
Carbon monoxide		%	None	None	<0.024	<0.025	<0.023	<0.024	<0.022	<0.023	<0.021	<0.023	<0.021
Helium		%	None	None	<0.12	<0.12	<0.12	<0.12	<0.11	<0.12	<0.11	<0.11	<0.11
Methane		%	None	None	<0.00024	<0.00025	<0.00023	<0.00024	0.00058	<0.00023	0.00025	0.00034	0.00038
Oxygen		%	None	None	20	20	20	20	20	20	19	20	20



Notes:

(1) Sub-slab soil gas sampling results for VOCs reported in micrograms per cubic meter ($\mu g/m^3$). Less-than sign (<) indicates analyte was not detected above indicated laboratory reporting limit.

- (2) Sub-slab soil gas sampling results are compared to DTSC-recommended sub-slab soil gas risk-based screening levels which incorporate the following components.
 - DTSC-recommended indoor air risk-based screening levels for commercial/industrial land use (DTSC 2020, USEPA 2020); and
 - DTSC-recommended sub-slab soil gas-to-indoor air attenuation factor of 0.03 (DTSC and SWRCB 2020).

The attenuation factor for petroleum hydrocarbons (benzene, ethylbenzene, naphthalene, toluene, and xylenes) incorporates an additional factor of 0.001 to account for the bioattenuation that occurs under aerobic conditions (SWRCB 2012).

Screening levels are based on cancer (CA) or noncancer (NC) health effects.

Detected concentrations that exceed screening levels are highlighted.



Appendix B

Vapor Intrusion Mitigation System Operations and Maintenance Plan



VAPOR INTRUSION MITIGATION SYSTEM OPERATIONS AND MAINTENANCE PLAN

2550 Irving Street

San Francisco, California 94122

September 2, 2021

Prepared for:

Tenderloin Neighborhood Development Corporation (TNDC) 49 Powell Street, 3rd Floor San Francisco, California 94102

PATH FORWARD

Environmental Engineering & Geology

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Project No.: 115-103-105

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Appendices

Appendix A.	Vapor Intrusion Mitigation System As-Built Plans (to be inserted when available)
Appendix B.	Vapor Intrusion Mitigation System Inspection Checklist



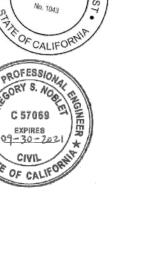
PROFESSIONAL CERTIFICATION

This Vapor Intrusion Mitigation System Operations and Maintenance Plan for the redevelopment project located at 2550 Irving Street in San Francisco, California has been prepared by a California Professional Geologist and/or California Professional Engineer. This document is based on information available to Path Forward Partners, Inc. and current laws, policies, and regulations as of the date of this document. The opinions expressed in this document are based upon the information available to Path Forward Partners, Inc. and are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Path Forward Partners, Inc. in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

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David A. Grunat, P.G., C.H.G. Principal Geologist

Gregory S. No



ED HYDR

DAVID A GRUNA



1.0 INTRODUCTION

Path Forward Partners, Inc. (Path Forward) has prepared this *Vapor Intrusion Mitigation System Operations and Maintenance Plan* (O&M Plan) on behalf of the Tenderloin Neighborhood Development Corporation (TNDC) for the development located at 2550 Irving Street in San Francisco, California (the Site). Site soil gas is known to be impacted with the volatile organic compound (VOC) tetrachloroethene (PCE) (AllWest 2020). The new building incorporates a vapor intrusion mitigation system (VIMS) consisting of sub-slab passive venting system and vapor membrane. This mitigation measure is the selected remedy for the Site, as described in the *Final Response Plan* (Path Forward 2021). As-built plans are included in Appendix A. This O&M Plan describes post-occupancy confirmation sampling and VIMS inspection and maintenance requirements to ensure the ongoing effectiveness of the remedy.

2.0 ROLES AND RESPONSIBILITIES

This O&M Plan defines three roles, consisting of Site Owner, Project Coordinator, and Environmental Professional. Their responsibilities under this O&M Plan are defined below.

2.1 Site Owner

The responsibilities of the Site Owner are to:

- Ensure implementation of the O&M Plan.
- Designate and retain the following O&M Plan personnel: Project Coordinator and Environmental Professional.
- Maintain relevant records.

2.2 Project Coordinator

The responsibilities of the Project Coordinator are to:

- Facilitate implementation of the O&M Plan.
- Be familiar with Site conditions and the VIMS components installed at the Site.
- Serve as the liaison for the Site Owner for communication with outside parties and the public, address/receive complaints etc.
- Evaluate work orders to determine if work will intrude into any component of the VIMS.
- Provide training to the contractor or other personnel retained to perform work on the Site, prior to working, about the hazards on-Site and the need to maintain integrity of the membrane system and other VIMS components.
- Require intrusive work at the Site be conducted in accordance with this O&M Plan.



- Coordinate, review, and submit permits or notifications to local agencies that may be necessary.
- Review, co-sign, and submit Annual Inspection Summary Reports, Unplanned Event Reports, and Intrusive Work Completion Reports.
- Facilitate communication of pertinent issues related to O&M of the Site vapor mitigation measures or maintenance of this O&M Plan.

2.3 Environmental Professional

The Site Owner will retain an Environmental Professional who is a California-registered professional civil engineer or professional geologist having experience with the vapor mitigation measures installed at the Site.

The responsibilities of the Environmental Professional are to:

- Conduct or supervise Site inspections.
- Provide recommendations to the Project Coordinator for maintenance or repair of mitigation measures.
- Prepare and co-sign Annual Inspection Summary Reports, Unplanned Event Reports, and Intrusive Work Completion Reports.
- Conduct the confirmation air sampling program herein.

3.0 COST ESTIMATE

For the purpose of cost estimating, it is assumed the operations and maintenance will be required for 30 years following the completion of the VIMS. Estimated costs (in current dollars) related to routine operations and maintenance activities are presented below.

Item	Number of Events	Avg Cost per Event	Cost
Annual inspection, reporting	24	\$5,000	\$120,000
Five-year review (including annual inspection)	6	\$7,500	\$45,000
Sampling Events	20	\$10,000	\$200,000
DTSC Annual review	24	\$2,884	\$69,216
DTSC five-year review	6	\$7,042	\$42,252
Total DTSC and O&M Cost Estimate			\$476,486



4.0 INSPECTIONS

Inspections of the VIMS will be conducted on regular and as-needed bases to identify issues that require repair or maintenance, towards ensuring the long-term permanence and effectiveness of the remedy. Inspections will be conducted by the Environmental Professional, at the direction of the Project Coordinator. Inspection reports will be prepared and co-signed by the Environmental Professional; and will be reviewed, co-signed, and submitted to the Site Owner by the Project Coordinator.

4.1 Frequency

The VIMS shall be inspected at the following times:

- On a regular annual basis;
- Following a significant seismic event defined in the context of the USGS Shakemap Instrument Intensity scale, with inspections occurring after any event that registers an interpolated instrument intensity level of VII or greater at the Site or an instrument intensity level of VII or greater at the monitoring station nearest to the Site. Confirmation sampling consistent with Section 6.0 should occur after any event that registers an interpolated instrument intensity level of IX or greater at the Site or an instrument intensity level of IX or greater at the Site;
- Following an unexpected event (e.g., fire or flood) that, in the judgment of the Project Coordinator, may have damaged the membrane system; and
- Following planned intrusive work activity that breaches or damages the membrane or other VIMS elements.

Inspections shall continue until it is determined by DTSC to be no longer required.

4.2 Inspection Procedure

Inspections will be conducted by, or under supervision of, the Environmental Professional. Inspection objectives and procedures are generally the same, regardless of the reason for the inspection (e.g., routine annual inspection versus post-earthquake inspection). The inspection purpose is to confirm that VIMS components are intact and functioning as intended to mitigate vapor intrusion into the building. Inspections may be documented and reported to DTSC using the Inspection Checklist (see Appendix B) or an equivalent form.

The inspector will visually survey the accessible areas on the ground level of the building that overly the sub-slab VIMS for evidence of construction activity that involved drilling or sawing through the building slab; and will visually inspect the wind turbines that cap the exhaust risers to confirm the turbines are functioning as intended. The inspector will also interview the facility manager with relevant knowledge of Site activities to ascertain whether construction activities or other events that may have damaged the VIMS had occurred during the previous 12 months.



If during an inspection it is discovered that intrusive construction work breaching the building slab was performed without being reported, the inspection will investigate whether the VIMS components were repaired and restored consistent with the VIMS plans (Appendix A) and manufacturer's specifications.

The inspector will document the results of the inspection, including photographs of questionable or deficient areas/elements potentially in need of repair, on the Inspection Checklist (Appendix B) or equivalent.

4.3 Inspection Reports

Inspection reports shall include the following information, as applicable:

- Contact information and signatures of the Project Coordinator and Environmental Professional;
- Summary of inspection findings, including conclusion that mitigation systems are intact and effective, or recommendation for maintenance or repair;
- Dates, times, and names of those who conducted Site inspections;
- Descriptions of:
 - Actions taken during the reporting period such as maintenance and repair activities, including dates work was performed and the location of the work,
 - Completions, delays, or failures to complete recommended repairs or maintenance tasks,
 - Significant changes in Site conditions or usage, construction activity, or other information relevant to the mitigation systems, and
 - Actions planned or expected to be undertaken in the next year that may impact the mitigation systems;
- Photographs depicting Site conditions of concern, if identified, with brief identifying captions or descriptions;
- Data generated under the O&M Plan and significant findings from the data;
- Documentation of additional investigation, monitoring, and/or mitigation;
- Identification of O&M Plan requirements not completed; and
- Recommendations for O&M Plan modifications.

Inspection reports shall be prepared and co-signed by the Environmental Professional, reviewed and co-signed by the Project Coordinator, and submitted to the Site Owner by the Project Coordinator.



5.0 MAINTENANCE AND REPAIR

The VIMS generally has no moving parts and is physically inaccessible – an exception being the wind turbines that cap the vent risers at the building roof. There is no required routine maintenance for the VIMS components. The primary concern to the long-term effectiveness of the VIMS, once installed, is the possibility that intrusive construction activity or other event will damage system components.

The Site Owner shall be notified 14 calendar days in advance of tenant improvements or other construction project that involves cutting or drilling through the foundation slab in those areas of the building which overly the sub-slab membrane and piping systems.

In the event that the sub-slab piping system and/or membrane are breached or damaged, whether by planned intrusive activity or by other event, the piping system, membrane, and floor slab shall be repaired and restored consistent with the VIMS plans (Appendix A) and manufacturer's specifications.

Repairs made to the VIMS shall be documented (e.g., with photographs) to the Site Owner in an *Intrusive Work Completion Report* within 14 days.

6.0 CONFIRMATION SAMPLING PROGRAM

Confirmation sub-slab soil gas sampling will be conducted on a semi-annual basis to confirm the ongoing effectiveness of the sub-slab membrane and venting system. Semi-annual sampling will be conducted for at least two years (four semi-annual events). Following two years of semi-annual sampling, the need for sampling will be reassessed and, if necessary, sampling will continue on a biannual basis (once every two years) basis. Sample collection and data evaluation protocols are discussed below.

6.1 Sample Collection

Sub-slab soil gas samples will be collected from the sub-slab soil gas probes beneath the building. Sub-slab soil gas samples will be collected with the building heating ventilation and air conditioning (HVAC) systems in normal operation. Each sub-slab probe will be purged and sampled as follows. It is noted that the sub-slab probe sample lines terminate at sampling ports located within a restricted access cabinet.

- A shut-in test will be conducted to verify the integrity of sample train connections.
- A small amount of the leak-detection compound, 1,1-difluoroethane or 2-propanol, will be placed on a rag which will be placed near the sampling port connection.
- The probe (consisting of the sampling line internal volume) will be purged of three volumes at a rate of 100 to 200 milliliters per minute, using either a Summa canister with flow controller or a syringe.



• A sub-slab soil gas sample will be collected into a pre-cleaned, batch-certified, 1-liter Summa canister at a rate of 100 to 200 milliliters per minute. The time and canister pressure at the stop and start of sample collection will be recorded in field notes.

The collected sub-slab soil gas samples will be labeled and transported under chain-of-custody to the analytical laboratory.

6.2 Laboratory Analyses

Sub-slab soil gas samples will be analyzed by a State-certified analytical laboratory on standard turnaround time for:

- PCE, contingent PCE breakdown products (trichloroethene [TCE], 1,1-dichloroethene [1,1-DCE], cis-1,2-dichloroethene [cis-,1,2-DCE], trans-1,2-dichloroethene [trans-1,2-DCE], and vinyl chloride), and the leak-detection compound by USEPA Method TO-15; and
- Fixed gases by ASTM Method D1946.

6.3 Data Evaluation

Sub-slab soil gas sampling results for PCE and contingent PCE breakdown products (TCE, 1,1-DCE, cis-,1,2-DCE, trans-1,2-DCE, and vinyl chloride) will be compared to the DTSC-recommended sub-slab soil gas risk-based screening levels (RBSLs) as follows:

Compound (i.e., Chemical of Concern [COC], or Potential COC Degradation Product)	Sub-Slab Soil Gas RBSL for Ground- Level Commercial Occupancy (µg/m³)	Sub-Slab Soil Gas RBSL for Potential Ground-Level Residential/Day Care Occupancy (µg/m³)
PCE	67	15
TCE	3,300	16
1,1-DCE	10,000	2,400
cis-1,2-DCE	1,200	280
trans-1,2-DCE	12,000	2,800
Vinyl chloride	5.3	0.32

These sub-slab soil gas RBSLs incorporate DTSC-recommended indoor air RBSLs and the conservative default attenuation factor of 0.03 (DTSC 2020, DTSC and SWRCB 2020). See Section 5.3 of the Response Plan for further details. The sub-slab results may also be evaluated



in the context of a Site-specific attenuation factor as determined from concurrent sub-slab soil gas and indoor air sampling performed during the pre-occupancy confirmation sampling event or paired sub-slab soil gas and indoor air radon testing (see Section 7.3 of the Response Plan). Other attenuation factor derivation approaches may alternatively be considered and utilized with DTSC-approval.

If sub-slab soil gas sampling results are below sub-slab soil gas screening levels, the building would be demonstrated as safe for occupancy, with respect to vapor intrusion concerns. If any sub-slab soil gas sampling results exceed screening levels, further evaluation would be performed. Additional sub-slab soil gas sampling may be performed to confirm the results. If elevated PCE concentrations persist in sub-slab soil gas, indoor air sampling may be warranted to confirm that vapor intrusion is not occurring. Any additional sampling or action would be planned and implemented in consultation with DTSC.

7.0 VOLUNTARY FIVE-YEAR REVIEWS

The Operations and Maintenance Agreement between DTSC and the Site owner does not require Fire Year Reviews. As a voluntary measure, the Site Owner has agreed to conduct Five-year Reviews, to confirm the long-term permanence and effectiveness of the selected remedy. Five-year reviews will be conducted by the Environmental Professional at the direction of the Project Coordinator. Five-year reviews will be conducted in general accordance with USEPA guidance (USEPA 2001, 2012).

The Five-year Review shall comprise a technical assessment of the protectiveness of the remedy, by answering the following questions:

- Is the remedy functioning as intended by the decision documents?
- Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy selection still valid?
- Has any other information come to light that could call into question the protectiveness of the remedy?

The Five-year Review Report will include a protectiveness statement for each component of the selected remedy and for the Site as a whole. The Five-year Review will include a Financial Assurance Review by the Site owner to determine that sufficient funds are still available. If needed, the cost to implement the O&M Plan will be updated. The Site Owner will provide the necessary guarantee that the funds are available. The Five-year Review Report will provide a list of any recommendations, including follow-up actions to ensure protectiveness, with a schedule for completion.

The Five-year Review Report will be prepared and co-signed by the Environmental Professional; and will be reviewed, co-signed, and submitted to DTSC by the Project Coordinator.



8.0 RECORDKEEPING

The documentation records prepared under the O&M Plan will be maintained by the Site Owner consistent with the Operations and Maintenance Agreement. The records will be made available for inspection by the Project Coordinator and upon request by DTSC representatives.

The DTSC administrative Record for the Site is available for public inspection during office hours at the following DTSC location:

Department of Toxic Substances Control Brownfields and Environmental Restoration Program 700 Heinz Avenue Berkeley, California 94710-2721 Attention: Arthur Machado Project Manager (770) 500-5372 <u>Arthur.Machado@dtsc.ca.gov</u>

9.0 VARIANCE FROM, OR MODIFICATION OF, O&M PLAN

The Project Coordinator may seek variance and/or modification of the O&M Plan at any time during the life cycle of the remedy. "Variance" refers to possible release from specific individual O&M Plan requirements for a limited time period, while "modification" refers to permanent revision of specific individual O&M Plan requirements.

The Project Coordinator may apply to DTSC for a written variance from the provisions of the O&M Plan. DTSC will evaluate each request and will grand a variance request only after determining that such a request would be protective of human health and the environment.

When long-term performance of the mitigation measures has been confirmed, the Project Coordinator may apply to DTSC to modify the requirements of the O&M Plan based on Sitespecific sampling results and conditions. Additionally, DTSC reserves the right to independently initiate appropriate O&M Plan modifications. As a result, DTSC may require the following O&M Plan modifications:

- Changes in the frequency of O&M activities;
- Modification, replacement, or addition of components to the O&M Plan if O&M activities fail to achieve the O&M objectives of protecting human health and the environment; and
- Evaluation, design, construction, and/or operation of additional measures to achieve the O&M objectives.



10.0 REFERENCES

- AllWest. 2020. Supplemental Soil and Soil Vapor Assessment Report, 2550 & 2525 Irving Street, San Francisco, California 94122. July 14.
- DTSC. 2020. HERO HHRA Note Number: 3, DTSC-modified Screening Levels (DTSC-SLs). June.
- DTSC and SWRCB. 2020. *Supplemental Guidance: Screening and Evaluating Vapor Intrusion*. Public Draft. February.
- USEPA. 2001. *Comprehensive Five-year Review Guidance*. Office of Emergency and Remedial Response. EPA 540-R-01-007. OSWER No. 9355.7-038-P. June.
- USEPA. 2012. Assessing Protectiveness at Sites for Vapor Intrusion; Supplement to the "Comprehensive Five-Year Review Guidance". OSWER Directive 9200.2-84.
- Path Forward. 2021. Final Response Plan, 2550 Irving Street Affordable Housing Project, San Francisco, California. September 2.



Appendix A

Vapor Intrusion Mitigation Systems As-Built Plans (to be inserted when available)



Appendix B

Vapor Intrusion Mitigation System Inspection Checklist



VAPOR INTRUSION MITIGATION SYSTEM (VIMS) INSPECTION CHECKLIST

2550 Irving St, San Francisco CA

INSPECTION INFORMATION

INSPECTION DATE:	INSPE	CTION TYPE:
INSPECTOR'S NAME:		ANNUAL
INSPECTOR'S ORGANIZATION:		POST-INTRUSIVE CONSTRUCTION
DATE OF PREVIOUS INSPECTION:		POST-UNPLANNED EVENT (E.G. EARTHQUAKE)

INSTRUCTIONS: Check true (T), false (F), or not applicable (N/A) for each criterion. Provide explanation at right for any False responses. Document below corrective actions taken to address False responses.

INSPECTION CRITERION	Т	F	N/A	EXPLANATION FOR FALSE RESPONSE
Wind turbines on vent risers are spinning freely				
No groundwater infiltration into building interior				
No intrusive activities through the building slab have been performed				
Prior approval of intrusive activities through the building slab was obtained from DTSC				
Sub-slab vapor barrier was repaired in accordance with Repair Specifications presented in VIMS Operations and Maintenance Plan				
Other component of VIMS (specify) was repaired in accordance with Repair Specifications presented in VIMS Operations and Maintenance Plan				
DESCRIBE CORRECTIVE ACTIONS TAKEN AND D	ATES (COMP	LETED	

OF

Appendix C

Cost Estimate Breakdown



COST ESTIMATE BREAKDOWN

2550 Irving Street San Francisco, CA Alternative 2 – Soil Excavation and off-Site Disposal

Description	Quantity	Units	Unit Cost	Cost
PRE-CONSTRUCTION				
Design Plans, Bid Documents				
Consulting Labor	1	LS	\$20,000	\$20,000
Ŭ			. ,	. ,
Remedial Design and Implementation Plan				
Consulting Labor	1	LS	\$30,000	\$30,000
				650 000
		Pre-Constr	uction Subtotal	\$50,000
CONSTRUCTION - Excavation and Off-Site Disposal				
Pre Characterization Sidewall Survey				
Utility Clearance	1	daily	\$2,000	\$2,000
Project Engineer/Geologist	40	hrs	\$150	\$6,000
Geoprobe Rig	4	daily	\$3,500	\$14,000
Soil Sampling Analytical	20	Sample	\$1,200	\$24,000
				\$46,000
Excavation & Off-Site Disposal				
Contractor Mob/Demob	1	LS	\$250,000	\$250,000
Excavation and Loading	10625	CY	\$250,000	\$265,625
Class 2 Disposal and Transportation (75% of Total)	13746	tons	\$60	\$824,766
Non-RCRA Disposal and Transportation (25% of Total)	4582	tons	\$160	\$733,125
Surveyor/GPS	5	daily	\$2,500	\$12,500
Construction Oversight - Labor	168	hrs	\$150	\$25,200
Daily Field Supplies	14	daily	\$75	\$1,050
		,		\$2,112,266
Excavation Backfill Operations				
Import Clean Soil	10625	CY	\$40	\$425 <i>,</i> 000
Backfill Placement	10625	CY	\$10	\$106,250
Compaction Testing	40	ea.	\$200	\$8,000
				\$539 , 250
Supplemental Plans				
SWPPP & Implementation	1	LS	\$150,000	\$150,000
HASP	1	LS	\$5,000	\$5,000
Traffic Management Plan	1	LS	\$5,000	\$5,000
Air and Dust Management Plan and Implementation	1	LS	\$80,000	\$80,000
				\$240,000
		Const	ruction Subtotal	\$2,937,516
		201.50	15% Markup	\$348,758
		Constr	ruction Subtotal	\$3,286,274
PROJECT MANAGEMENT & REPORTING				
Project Management and Reporting			4	1
Project Management	120	hrs	\$235	\$28,200
Remedial Action Completion Report	1	LS	\$40,000	\$40,000
Meetings	2	LS	\$1,000	\$2,000
	Project Ma	nagement & Rep	orting Subtotal	\$70,200
Estimated Capital Cost Subtotal				\$3,406,474
20% Contingency				\$681,295
Total Estimated Capital Cost and Contingency				\$4,088,000

Notes and Assumptions:

(1) Excavation assumes 15 feet deep soil excavation across entire 19,125 SF Site

(2) Low concentrations of VOCs, organocholorine pesticides, and metals.

- (3) 20% contingency added to account for failed sidewall step-outs in known areas
- (4) Bank CY to CY conversion includes 15% fluff factor
- (5) CY to Ton conversion factor of 1.5
- (6) Estimate includes 25% non-RCRA disposal contingency to account for previously unantipicated discovery of contamination

Definition
Lump Sum
Hours
Square Feet
Cubic Yards
Resource Conservation and Recovery Act
California Hazardous Waste
Hazardous Waste
Non-Hazardous Waste
Each



COST ESTIMATE BREAKDOWN

2550 Irving Street San Francisco, CA Alternative 3 – Vapor Intrusion Mitigation Systems, Land Use Covenant, and Operations and Maintenance

Description	Quantity	Units	Unit Cost	Cost
VIMS Design and Installation				
VIMS Design	1	LS	\$30,000	\$30,000
Geovent Piping	825	LF	\$24.73	\$20,406
Vapor Barrier	15,000	SF	\$5.62	\$84,300
Vent Risers	3	Each	\$12,700	\$38,100
Gravel Layer	15,000	SF	\$3.04	\$45,600
Inspections	20	ea.	\$1,350.00	\$27,000
		Const	ruction Subtotal	\$245,406
			12% Markup	\$29,449
		Const	ruction Subtotal	\$274,855
Project Management	20	hrs	\$235	\$4,700
Project Management and Reporting				
	-	-		
Response Plan Implementation Report and O&M Plan	1	LS	\$15,000	\$15,000
O&M Implementation Annual Inspections Reports	24	ea.	\$5,000	\$120,000
Five-Year Review Reports	6	ea. ea.	\$3,000 \$7,500	\$120,000 \$45,000
Semi-Annual Sampling Event	4	ea.	\$10,000	\$40,000
Bi-Annual Sampling Event	14	ea.	\$10,000	\$140,000
DTSC Annual Inspection Review	24	ea.	\$2,884	\$69,216
DTSC Five Year Review	6	ea.	\$7,042	\$42,252
Unexpected Condition Sampling (i.e. Earthquake, VIMS Dam	age, etc.)	%	10%	\$45,647
Meetings	2	LS	\$1,000	\$2,000
	Project Man	agement & Re	porting Subtotal	\$523,815
Total Estimated Capital Cost and Contingency				\$799,000

Notes and Assumptions:

(1) Gas Barrier: Liquid Boot Plus 60 mil over VI20 with (1) layer of G1000 below and (1) layer above barrier.

(2) Vent Piping: GeoVent low profile venting with (2) fresh air vent inlets

- (3) Vent Risers: (3) 3" cast iron from slab through roof (offset only at roof level)
- (4) 6" Gravel: ³/₄" gravel

Acronym/Abbreviations	Definition
LS	Lump Sum
yrs	Years
hrs	Hours
SF	Square Feet
ea.	Each
%	Percentage of Total O&M Activities



Appendix D

Vapor Intrusion Mitigation System Design Plans



NOTES:

The vapor intrusion mitigation system (VIMS) for the proposed development is being designed in accordance with the Department of Toxic Substances Control (DTSC) Vapor Intrusion Mitigation Advisory (VIMA).

VAPOR INTRUSION MITIGATION SYSTEM (VIMS)

A sub-slab venting system (SSV) will be installed below an impermeable vapor mitigation membrane barrier.

In accordance with the VIMA, the SSV system is intended to require minimal operations and maintenance activities. The SSV system will consist of a layer of permeable aggregate material that will be placed below an impermeable vapor mitigation membrane barrier. The impermeable membrane will be installed wherever the building is in contact with the earth, but not at foundation footings and grade beams. Above the impermeable membrane shall be a protection course. All elevator pits, sumps, tanks, and vaults shall be lined with the same impermeable membrane. This system shall double as the subterranean waterproofing membrane.

The SSV system vents soil gas from the sub-slab to the atmosphere. A series of horizontal vapor collection pipes will be installed within the sub-slab permeable aggregate layer. The horizontal vapor collection pipes will be connected to vertical ventilation pipes that terminate at roof level with wind-driven turbine fans. Each vertical ventilation pipe shall be fitted with a monitoring port to allow for post-construction operation and maintenance monitoring.

SMOKE TEST CRITERIA

- All gas membranes shall be smoke tested in accordance with the following protocol and certified 'gas tight' by the engineer prior to approval:
- 1. The gas membrane shall be visually inspected. Any apparent deficiencies and/or installation problems shall be corrected prior to smoke testing.
- 2. The date, time, address, tract#, lot#, temperature, humidity, barometric pressure, wind speed/direction and cloud cover shall be recorded on the smoke test inspection form by the engineer. The ambient air temperature at the time of testing should be in excess of 45F and the wind speed at ground level should be 15 mph or less. (Note: Visual identification of leaks becomes more difficult with increasing wind speed)
- 3. Assemble/connect smoke testing system to sub-slab vent riser (Alternative A) OR configure smoke testing system to inject smoke beneath the membrane through a temporary gas tight boot or sleeve attached to the membrane (Alternative B). Only inert, non-toxic smoke is to be utilized for the membrane smoke test.
- 4. Activate smoke generator / blower system @ nominal 150 cfm to 50 cfm flow rate and 2.0" H2O minimum duct pressure with vent riser outlet(s) uncapped. Note: Minimum 2" H2O duct pressure should be measured at or near blower outlet. Continue to purge system for 60 seconds after smoke begins to emerge from vent outlet(s)
- 5. Cap vent outlet(s). Adjust smoke generator / blower control valve to .1" to 2" H2O over-pressure in vent piping system. Alternative A only. Blower / Smoke generator system should be capable of sufficient pressure and flow to induce slight (i.e. = -") lifting of membrane. Monitor membrane for lifting. Reduce pressure / flow rate if excessive lifting occurs.
- 6. Select one membrane coupon sampling location for every 500 ft2 of membrane area. Select sampling locations so as to (1) facilitate purging of fresh air pocket from beneath membrane; and (2) provide a representative test location for confirmation of membrane thickness. Not applicable for sheet good membrane.
- 7. Label membrane coupons. Mark coupon location/designation on floor plan. Marked-up floor plan to be included with smoke testing inspection form.
- 8. Confirm adequate flow of smoke from coupon sampling location. Low rate of smoke flow may be indicative of poor communication between vent piping gravel backfill and base of membrane for Alternative A (i.e. dirt placed above trench gravel). If low rate of smoke flow from coupon sampling location(s) occurs, use Alternative B described under item #3 above for smoke injection. (Note: At least localized continuity at the sand or gravel between the vent lines and the base of the membrane should be confirmed prior to membrane installation) (if applicable).
- 9. Temporary seal at the membrane sampling locations after purging mark coupon sampling location with fluorescent green paint. Repair sampling locations per manufacturer's specifications following completion of test.
- 10. Maintain operation of smoke generator/blower system for at least 15 minutes following purging of membrane. Thoroughly inspect the entire membrane surface. Use fluorescent green paint to mark/label any leak locations. Mark/label all leak locations on the floor plan which is to be included with the smoke testing inspection form.
- 11. Repair leak locations marked in step #10 per manufacturer's specifications.

12. Repeat step #10 and #11, as necessary, to confirm integrity of membrane.

13. For areas adjacent to where the existing and new membranes have been overlapped, the frequency of smoke testing shall be increased to sufficiently test the area. The testing frequency will be at the discretion of the VIMS inspector.

14. Prepare smoke testing inspection form. Notes to include date, tract#, lot#, name of VIMS engineer, name of person who performed the test, number of leaks identified, distribution of leaks identified (i.e. tears, pin-holes or thin sections, seam leaks, boot leaks, (etc.), and building floor plan with leak location, coupon locations and test perforation locations. The inspection form is to be signed and stamped by the engineer/inspector.

15. Install a permanent weather-proof tag on front-most vent rise confirming completion of smoke testing and approval of membrane (if applicable). Tag should include:

"Smoke Test OK"

- <tract# and lot# or address>
- <date> <time>

<name of tester>

16. Disassemble/load smoke testing hardware. Confirm no equipment, materials, trash, etc. left at site.

INSPECTIONS

The inspection and periodic observations of membrane and vapor control measures shall be performed by the vapor barrier engineer (i.e. the engineer or their designee). At a minimum, inspection/observation shall take place at the following stages of the installation:

- During the installation of the (sub-slab) horizontal vapor collection pipes.
- After backfilling of the (sub-slab) horizontal vapor collection pipes.
- During the installation of the (sub-slab) impermeable vapor mitigation membrane barrier.
- After the installation of the (sub-slab) impermeable vapor mitigation membrane barrier (prior to backfilling). The impermeable vapor mitigation membrane barrier shall be smoke tested at this time in accordance with note 7. These tests shall be documented in the as-built report.
- At all field repairs, including as assessment of any repaired liner for surrounding latent damage.
- During the placement of the protection course.
- Immediately prior to placement of foundation concrete.
- During, and at the completion of the vertical ventilation pipe installation.
- At the completion of construction prior to the issuance of the system certification and certification of occupancy.

ITEMS TO BE DESIGNED BY OTHERS AND COORDINATED WITH VAPOR INTRUSION PLAN

• Architect/plumbing engineer to design routing of vertical ventilation pipes through building to roof. Contractor shall coordinate in field with building design team regarding all underground utilities.

2550 IRVING STREET SAN FRANCISCO, CA 94122

VAPOR INTRUSION MITIGATION SYSTEMI



PROJECT DESCRIPTION: MIXED-USE

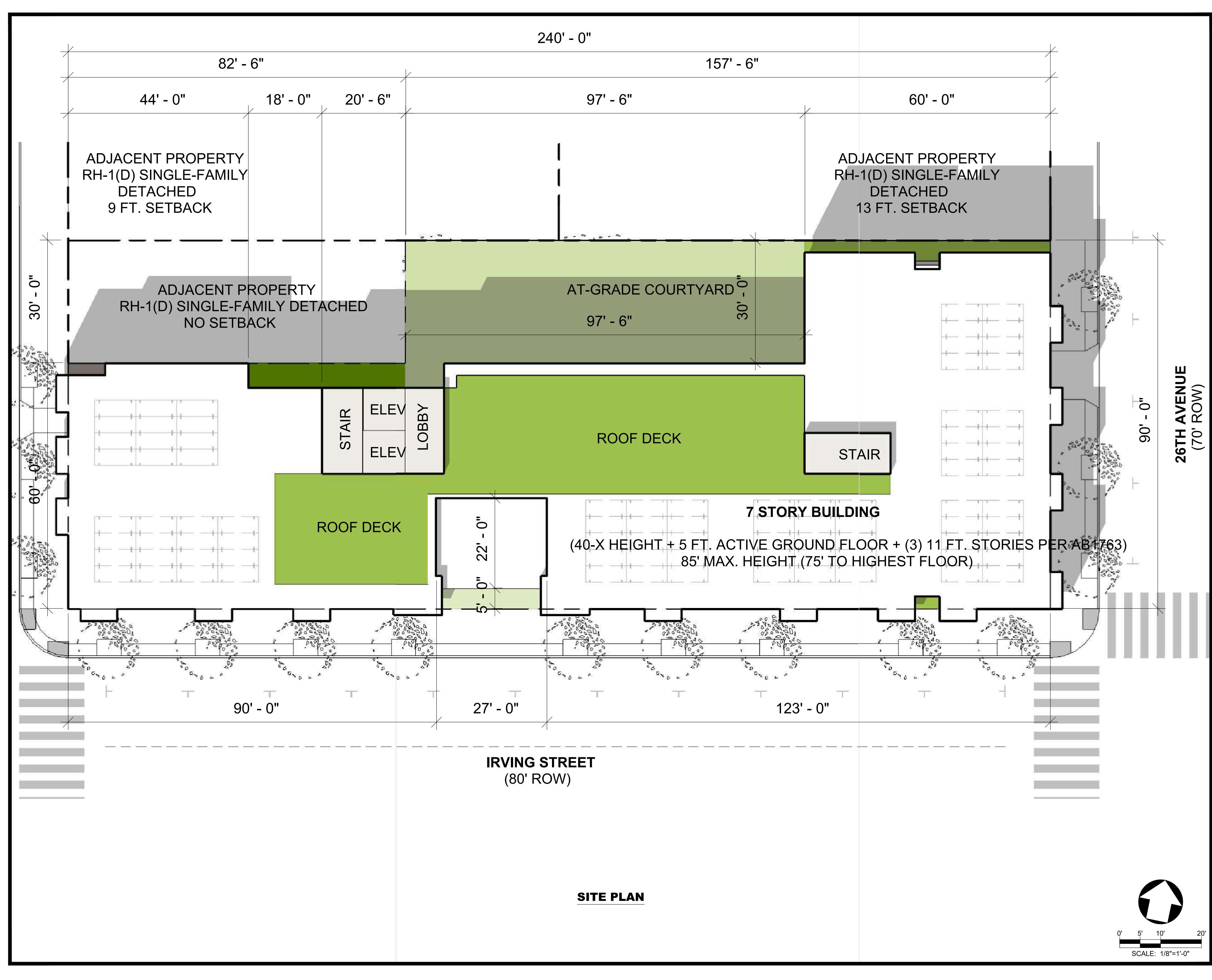
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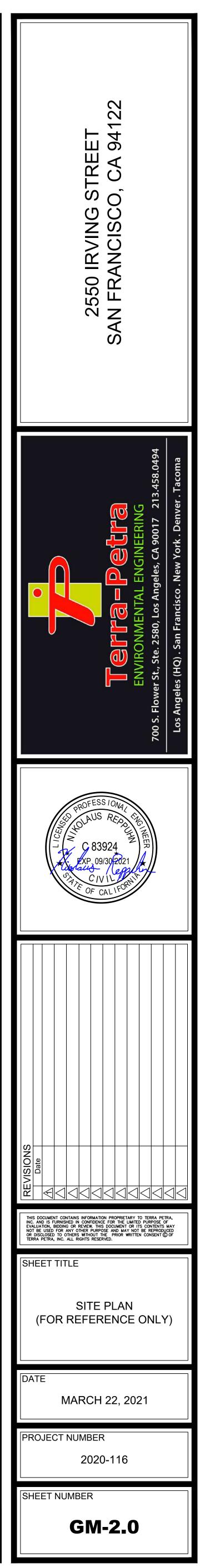
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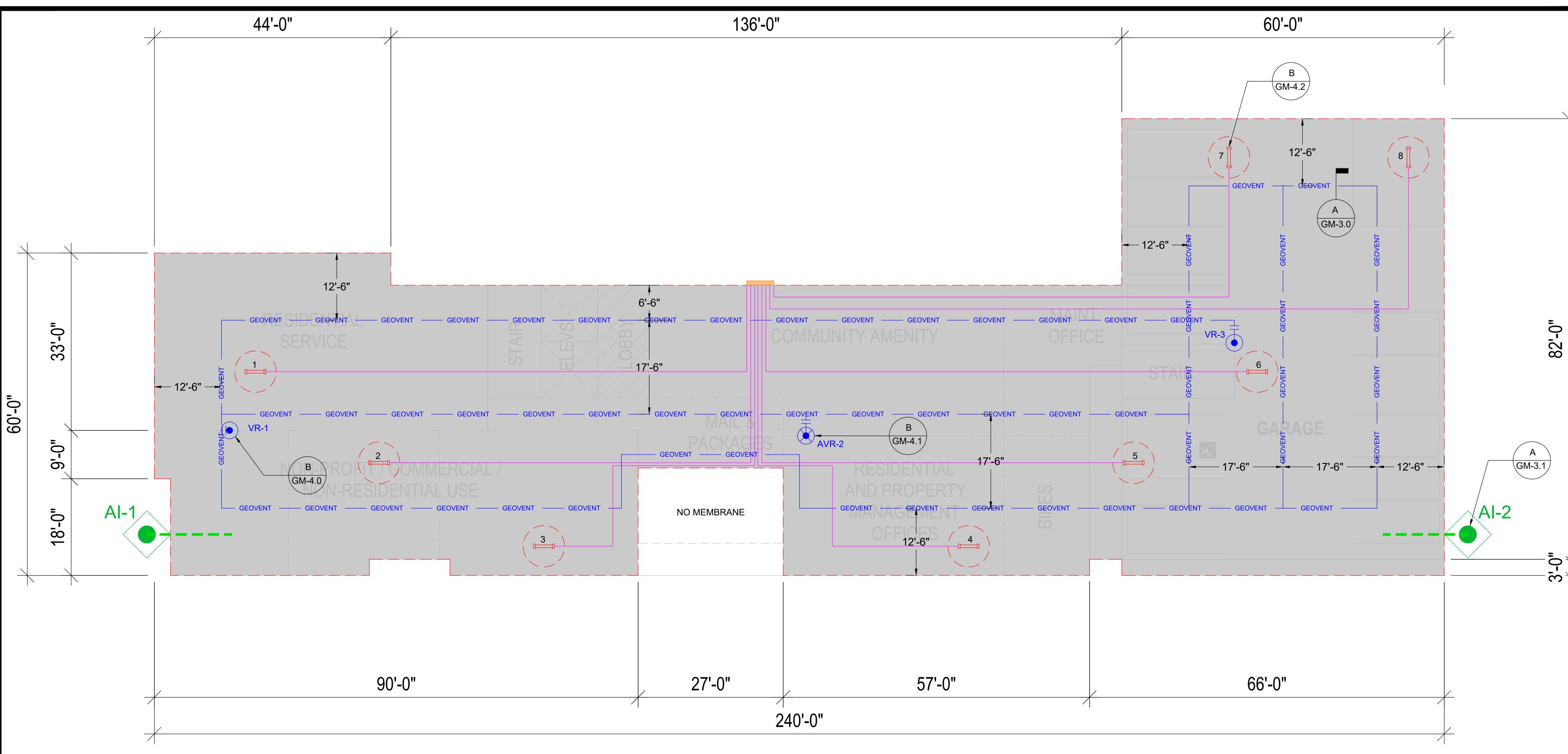
TABLE OF CONTENTS

- **GM-1.0** TITLE SHEET, MAPS, AND MITIGATION NOTES
- **GM-2.0** SITE PLAN (FOR REFERENCE ONLY)
- **GM-2.1** SUBSLAB VENT PIPE AND VENT RISER PLAN
- **GM-2.2** VENT RISER ROOF TERMINATION PLAN
- **GM-3.0** SUBSLAB MEMBRANE DETAILS
- **GM-3.1** FRESH AIR INLET DETAILS
- **GM-3.2** SUBSLAB MEMBRANE REPAIR DETAILS
- **GM-4.0** PASSIVE VENT RISER DETAILS
- **GM-4.1** ACTIVE VENT RISER DETAILS
- **GM-4.2** SUBSLAB VAPOR PROBE DETAILS AND SPECIFICATIONS
- **GM-5.0** TRENCH DAM, ELECTRICAL SEAL-OFFS AND SIGNAGE DETAILS
- **GM-6.0** LIQUID BOOT LOS ANGELES RESEARCH REPORT
- **GM-6.1** LIQUID BOOT PLUS MEMBRANE SPECIFICATIONS
- **GM-6.2** MATERIAL SPECIFICATIONS









SUBSLAB VENT PIPE **AND VENT RISER PLAN**

NOTE:

- 1. WRAP ALL PIPE AND FITTINGS EMBEDDED IN
- CONCRETE WITH 1/8" FOAM WRAP.
- 2. SEE ARCHITECTURAL/ PLUMBING PLANS FOR VENT RISER VENT PIPE ROUTING THROUGH BUILDING.
- 3. ALL VENT RISER LOCATIONS SHALL BE STUBBED UP
- 12" ABOVE SLAB. 4. CONTRACTOR TO VERIFY SUMPS, TANKS, VAULTS
- AND ELEVATORS QUANTITIES AND LOCATIONS. 5. ALL ELECTRICAL AND COMMUNICATION CONDUITS
- EMANATING FROM THE EARTH SHALL BE SEALED PER DETAIL A/GM-5.0

FRESH AIR INLET CALCULATIONS:

1 FRESH AIR INLET FOR EVERY 10,000 S.F. OF BUILDING FOOTPRINT AND 1 FOR EVERY 10,000 S.F. THEREAFTER.

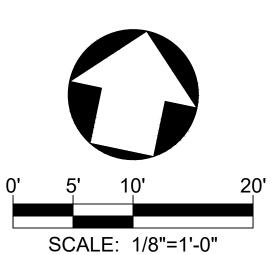
BUILDING FOOTPRINT = 14,967 S.F.

TOTAL FRESH AIR INLETS REQUIRED = 2

QUANTITIES LEGEND:

VENT PIPE - 825' L.F. VENT RISERS - 3 VAPOR PROBES - 8

2 VENT RISERS FIRST 10,000 SQ. FT. THEN 1 EVERY 10,000 SQ. FT. THEREAFTER. BUILDING FOOTPRINT = 14,967 SQ. FT.



LEGEND

MEMBRANE FIELD

2" CAST IRON VENT PIPE

2" CAST IRON VENT RISER WITH BLOWER (OPTIONAL)

FLAT PIPE TO ROUND PIPE TRANSITION

FLAT PIPE PRESSURE RELIEF, COLLECTION, AND VENTING SYSTEM

SUB-SLAB SOIL GAS PROBE

WALL-MOUNTED PROBE ENCLOSURE

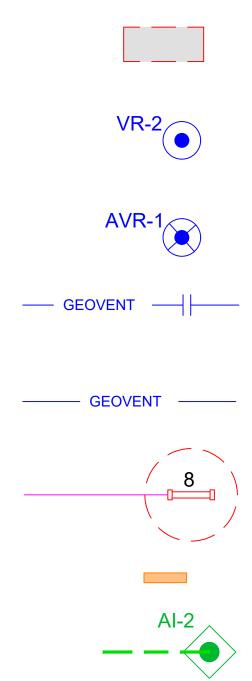
--- 4" PVC PIPE FRESH AIR INLET

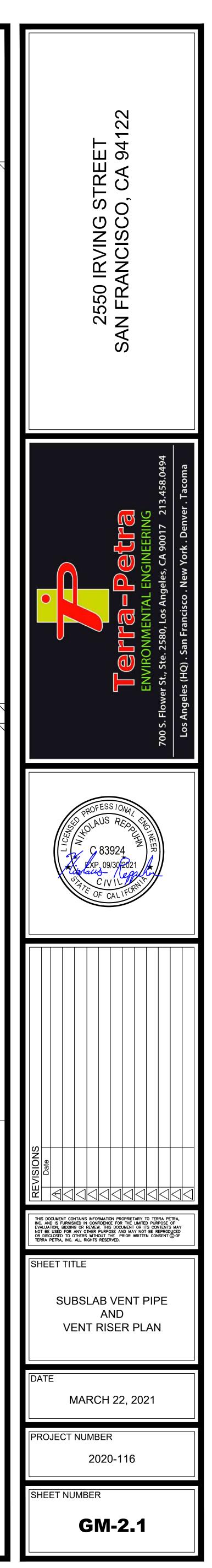
BUILDING FOOTPRINT - 14,967 S.F. MEMBRANE - 14,967 S.F.

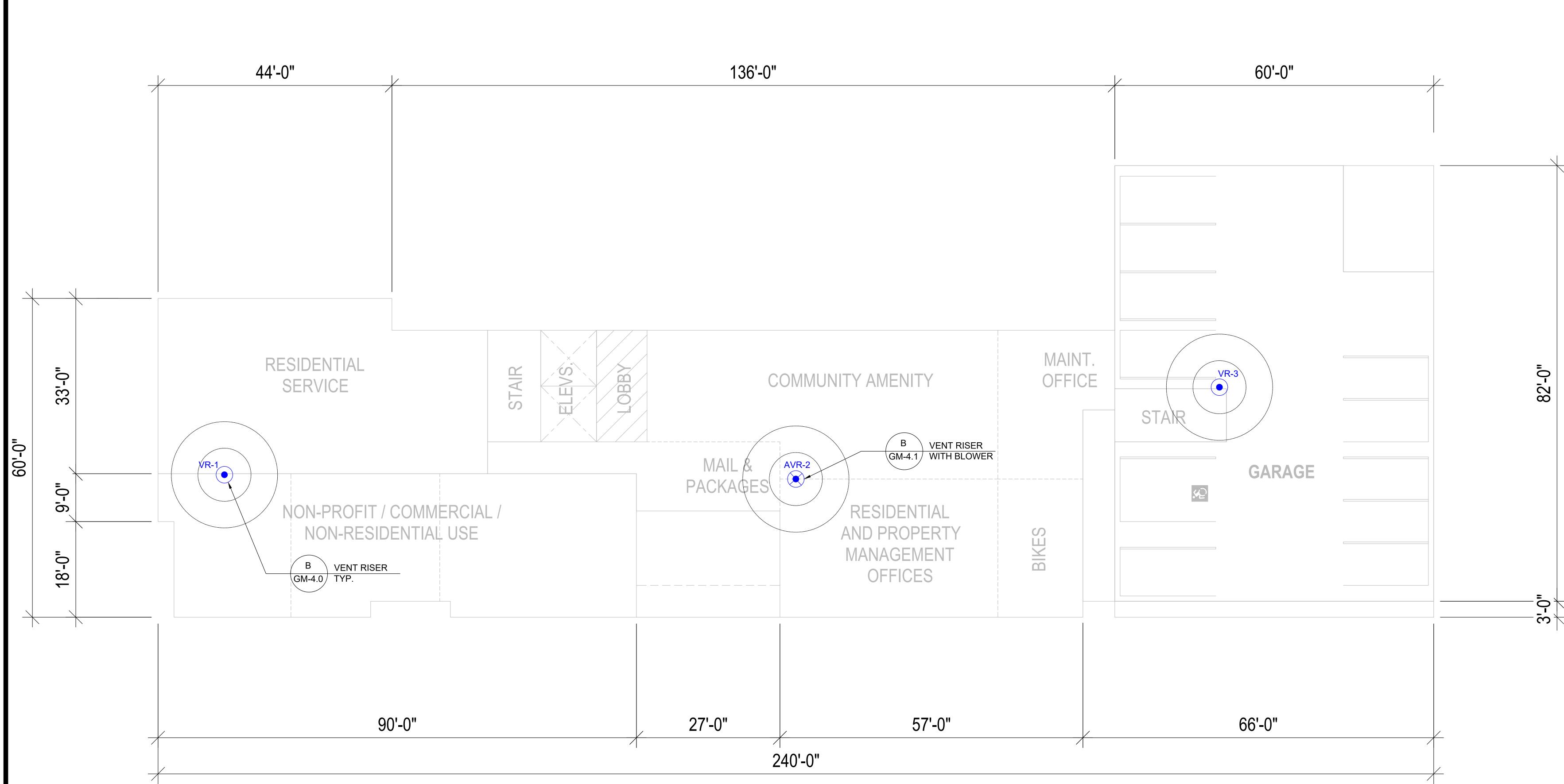
VENT RISER CALCS:

 $14,967 - 10,000 = 4,967 \div 10,000 = 0.49$

MINIMUM NUMBER OF VENT RISERS REQUIRED - 3



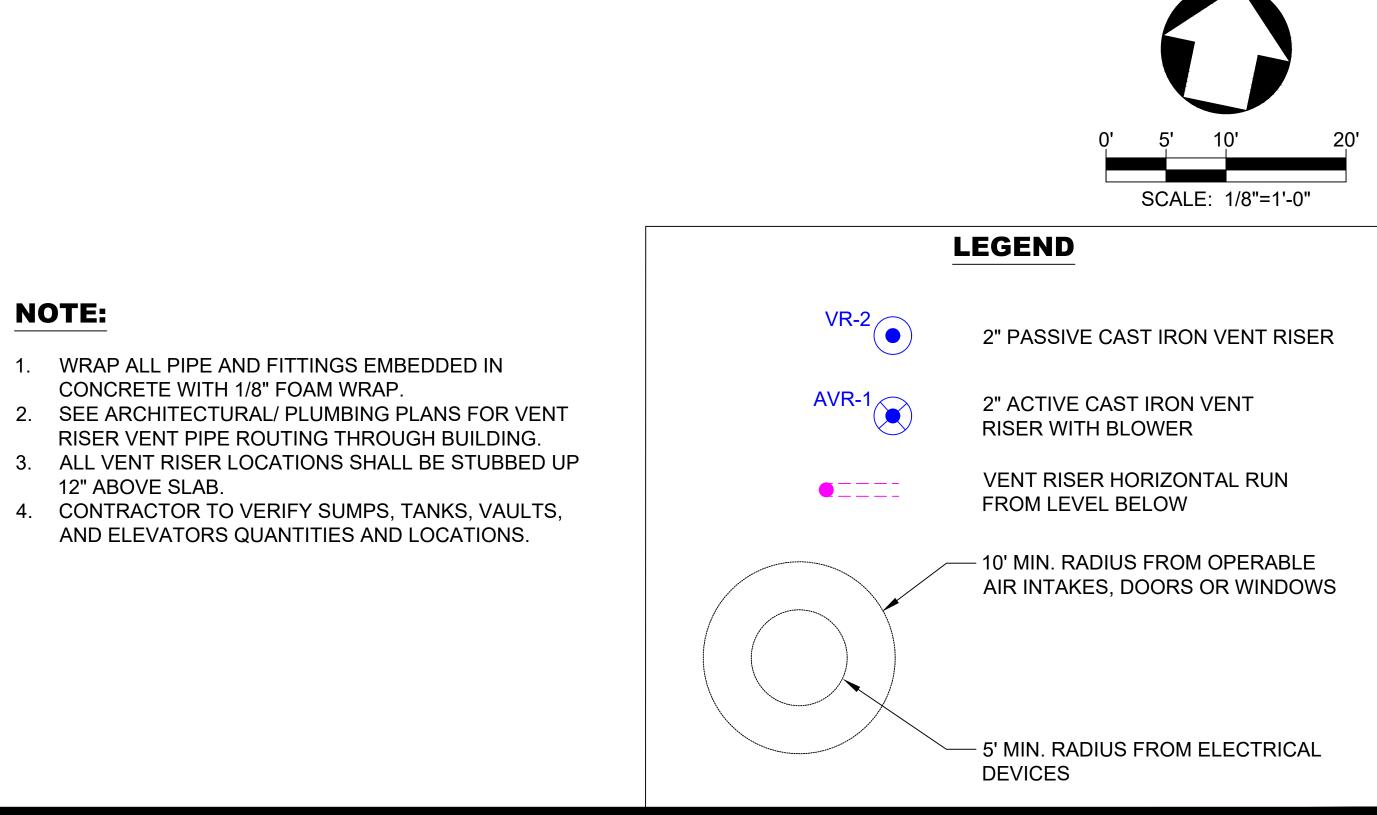




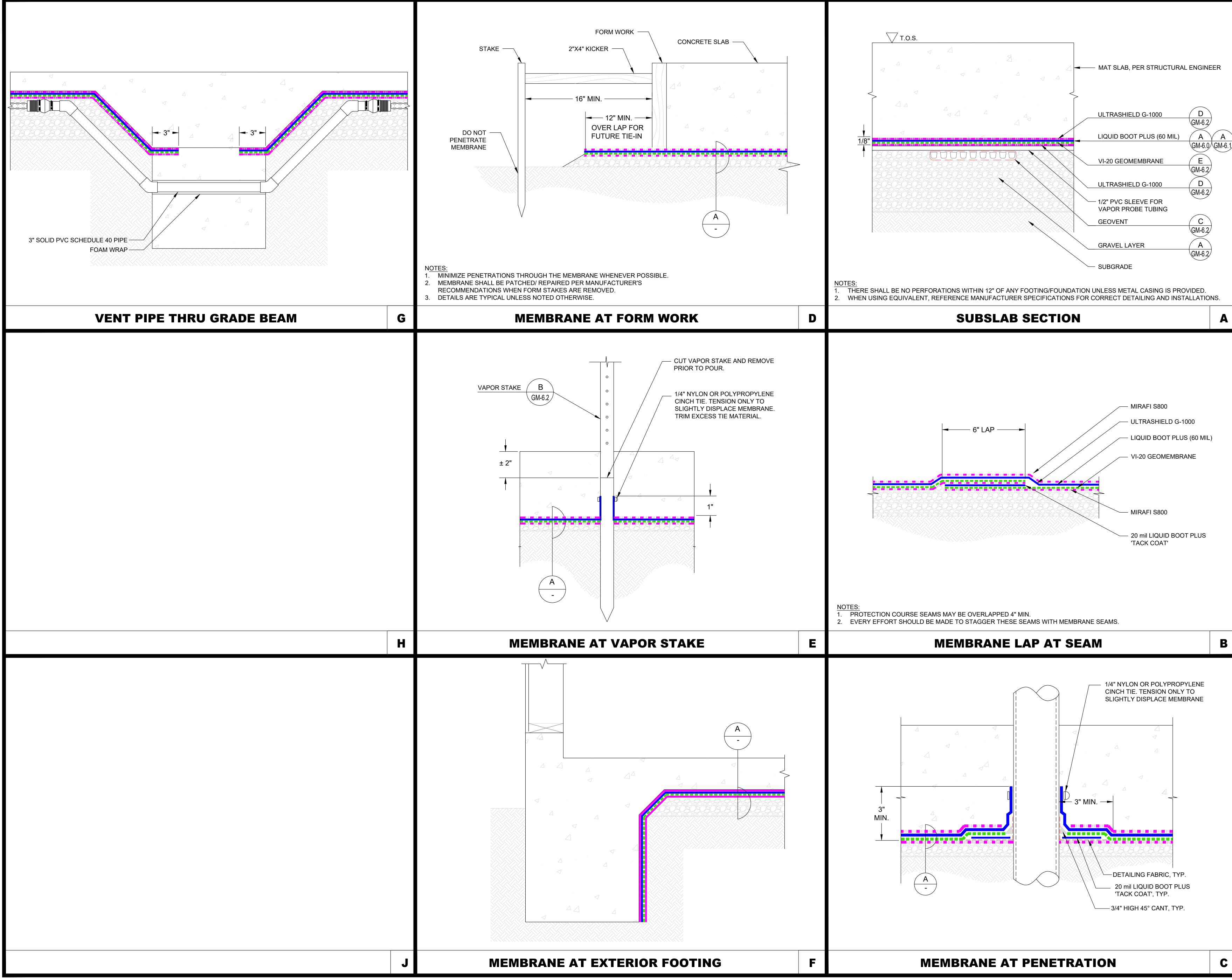
VENT RISER ROOF TERMINATION PLAN

NOTE:

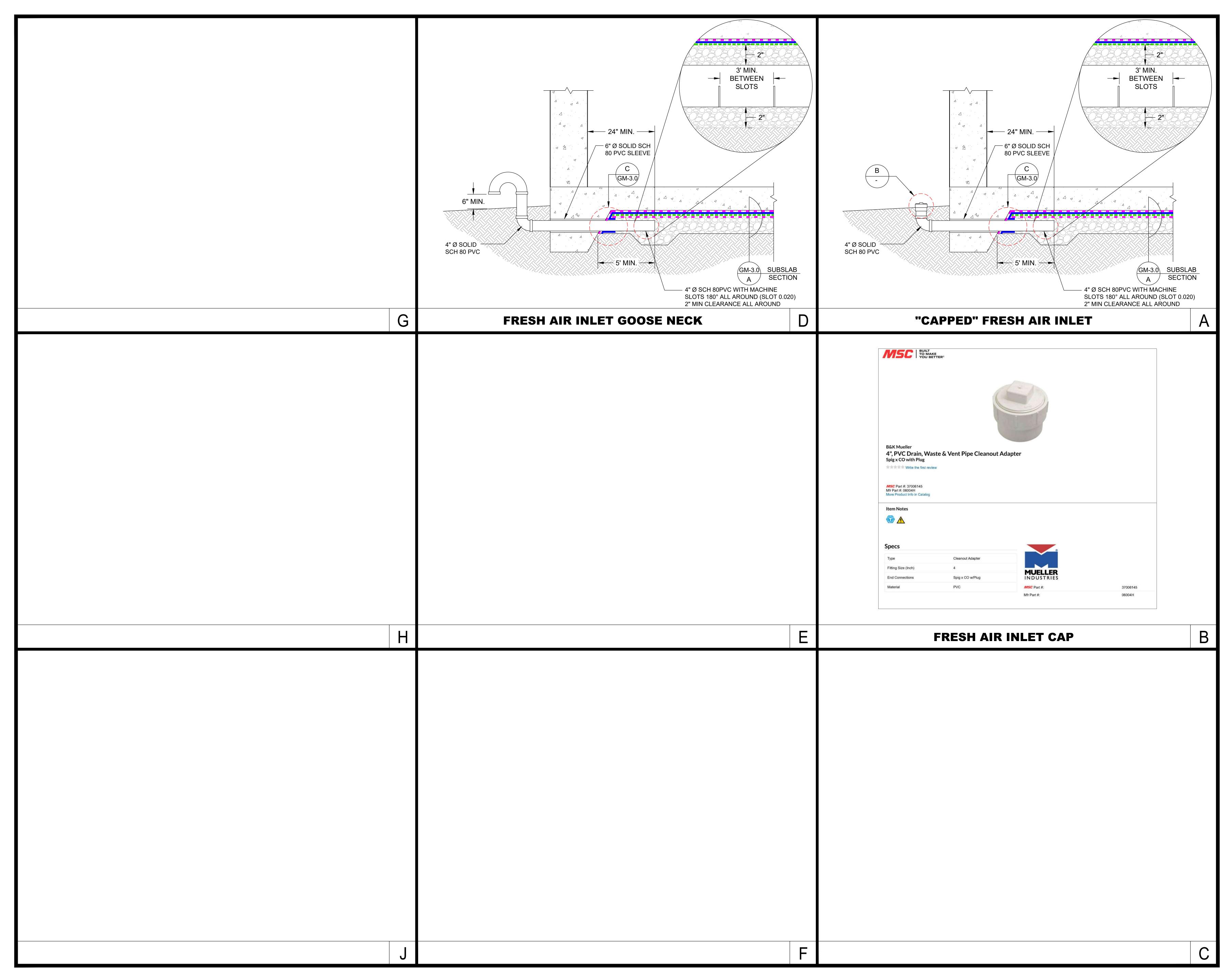
- 12" ABOVE SLAB.

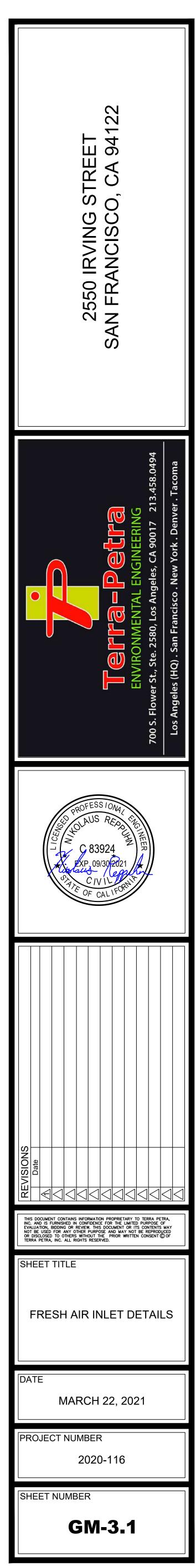


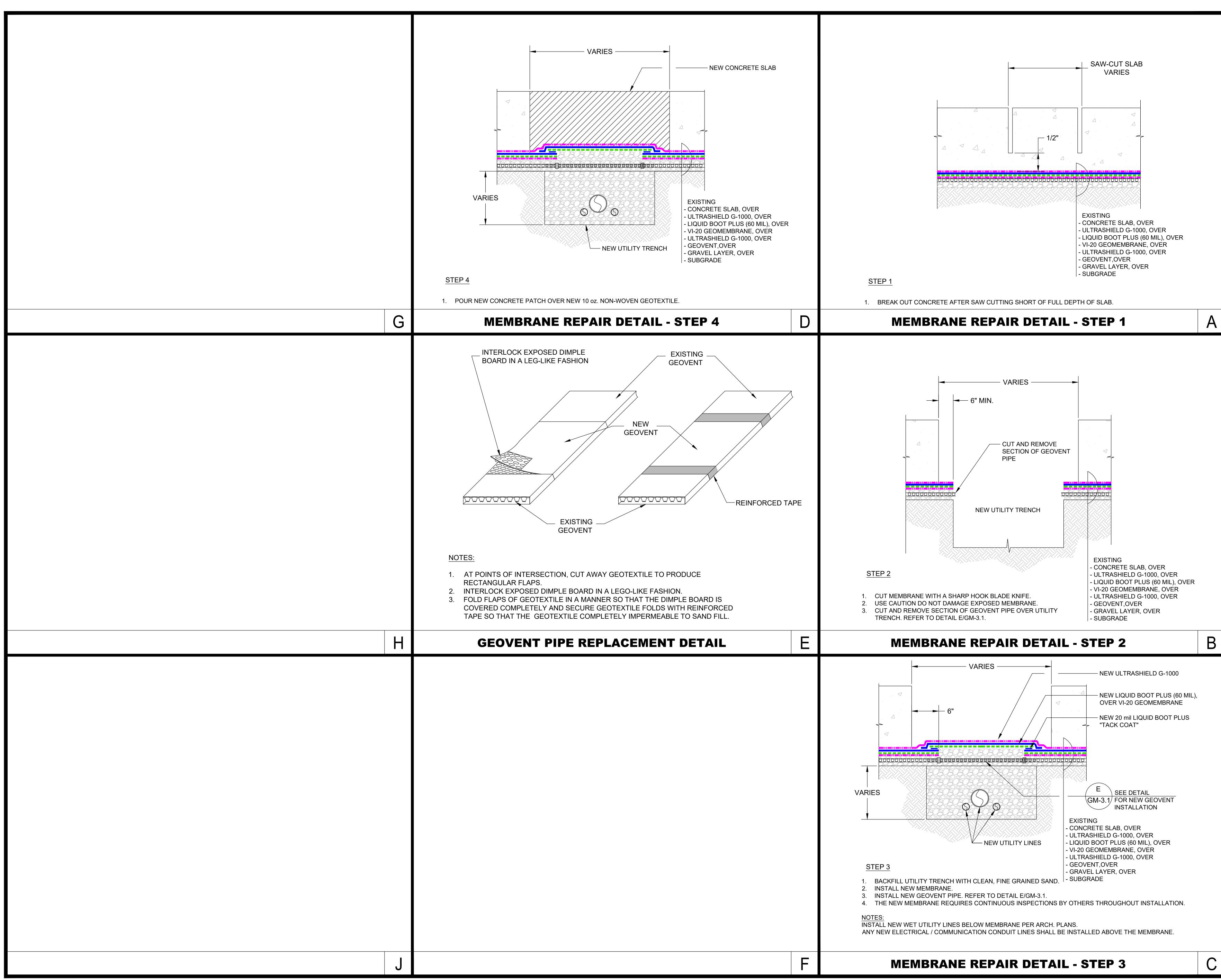


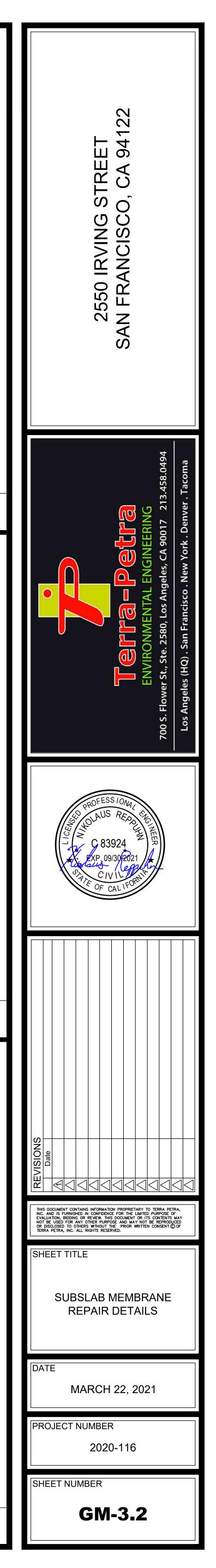


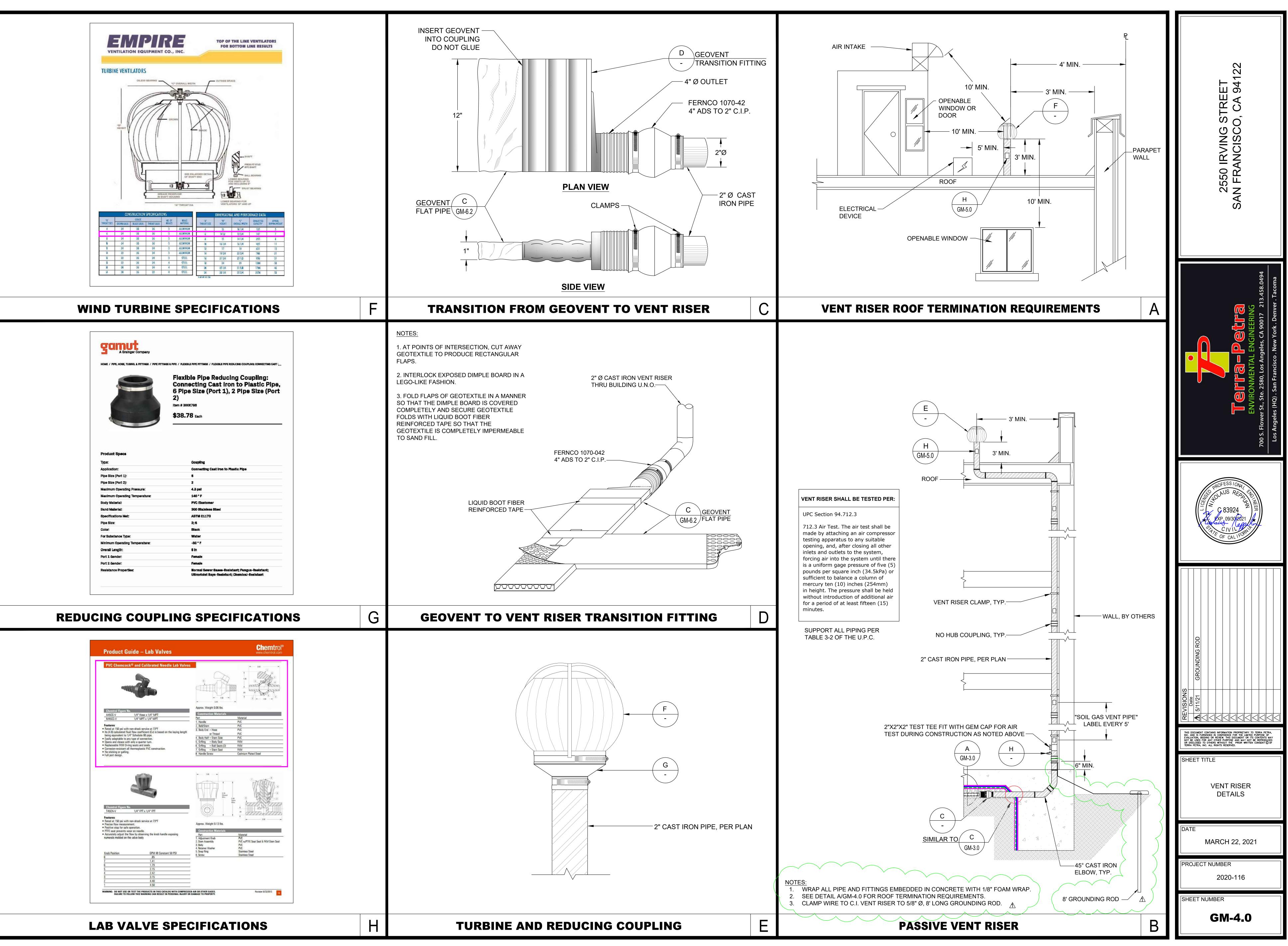




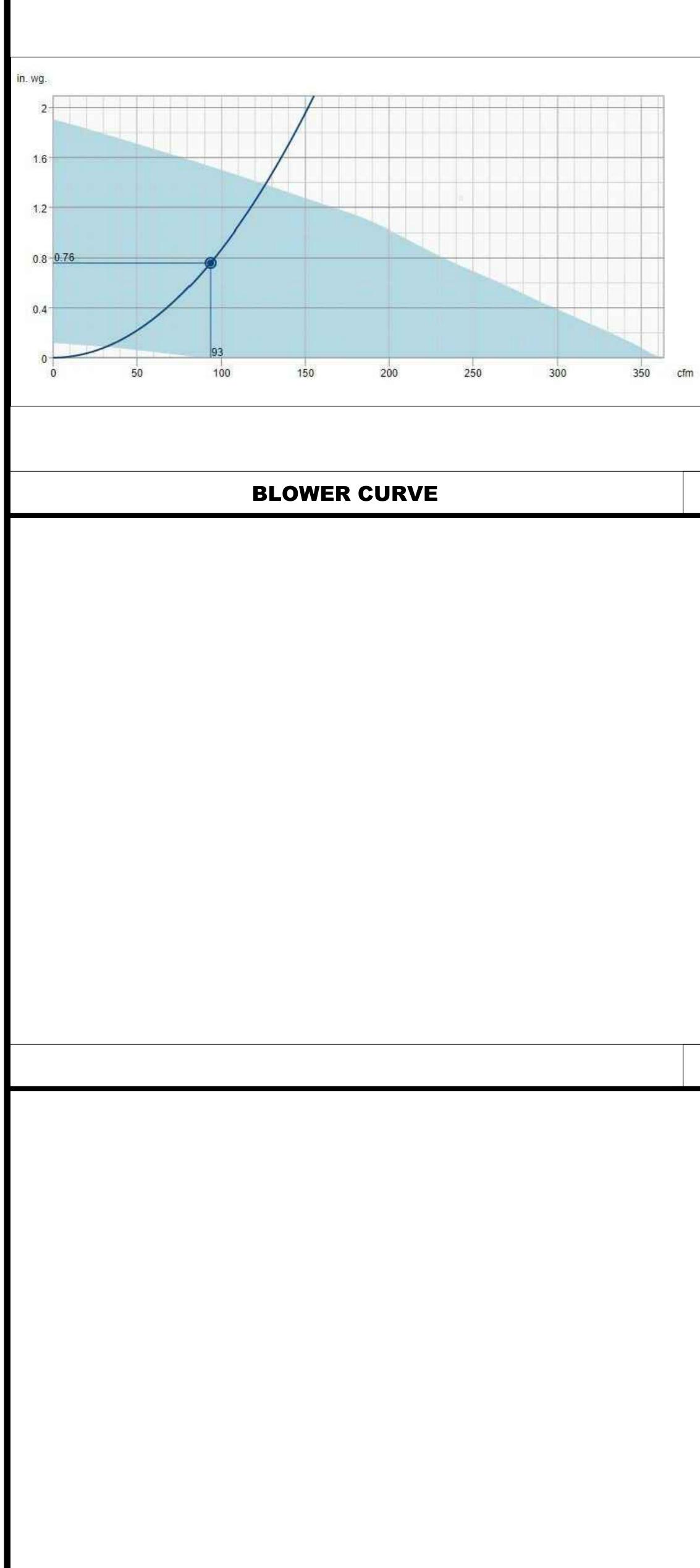




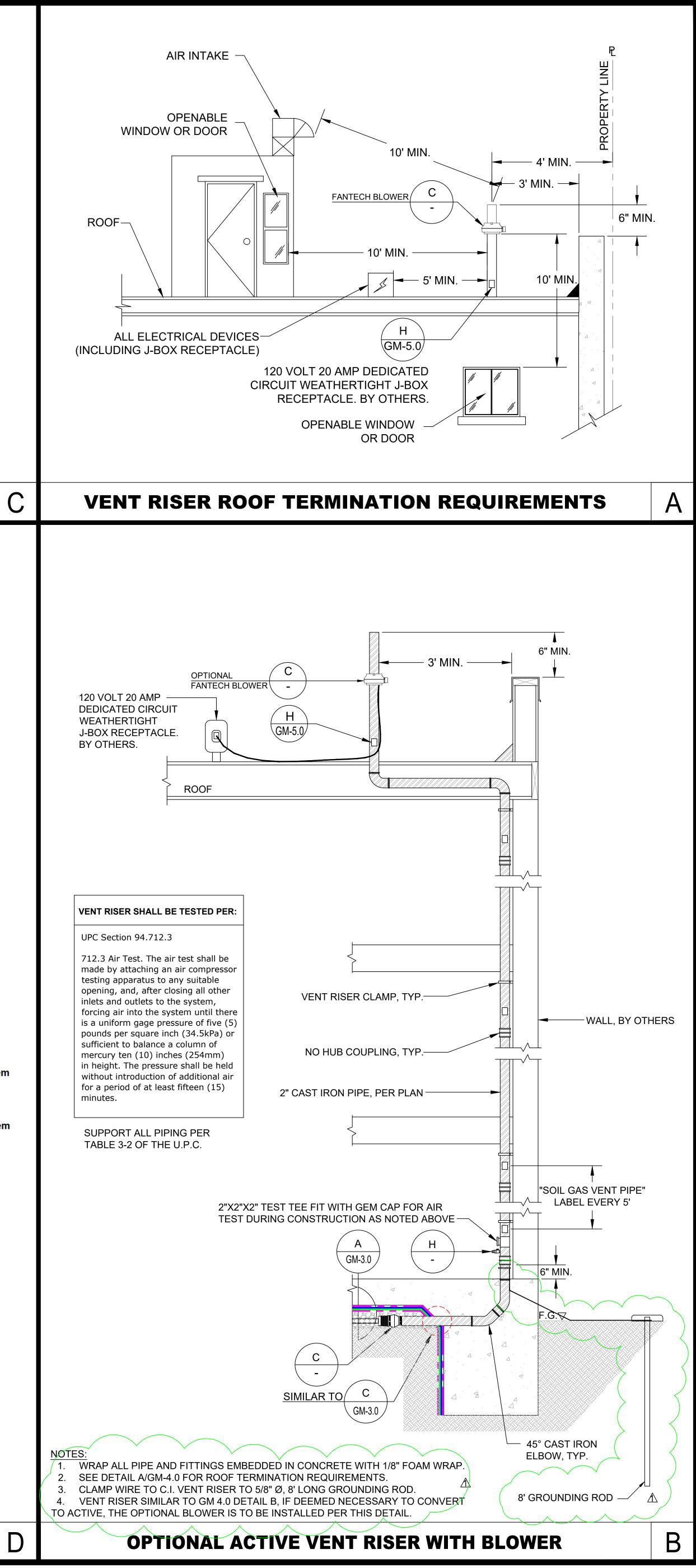


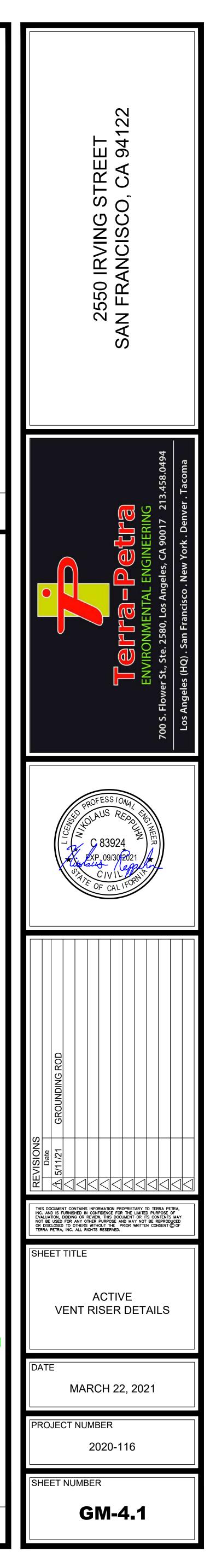


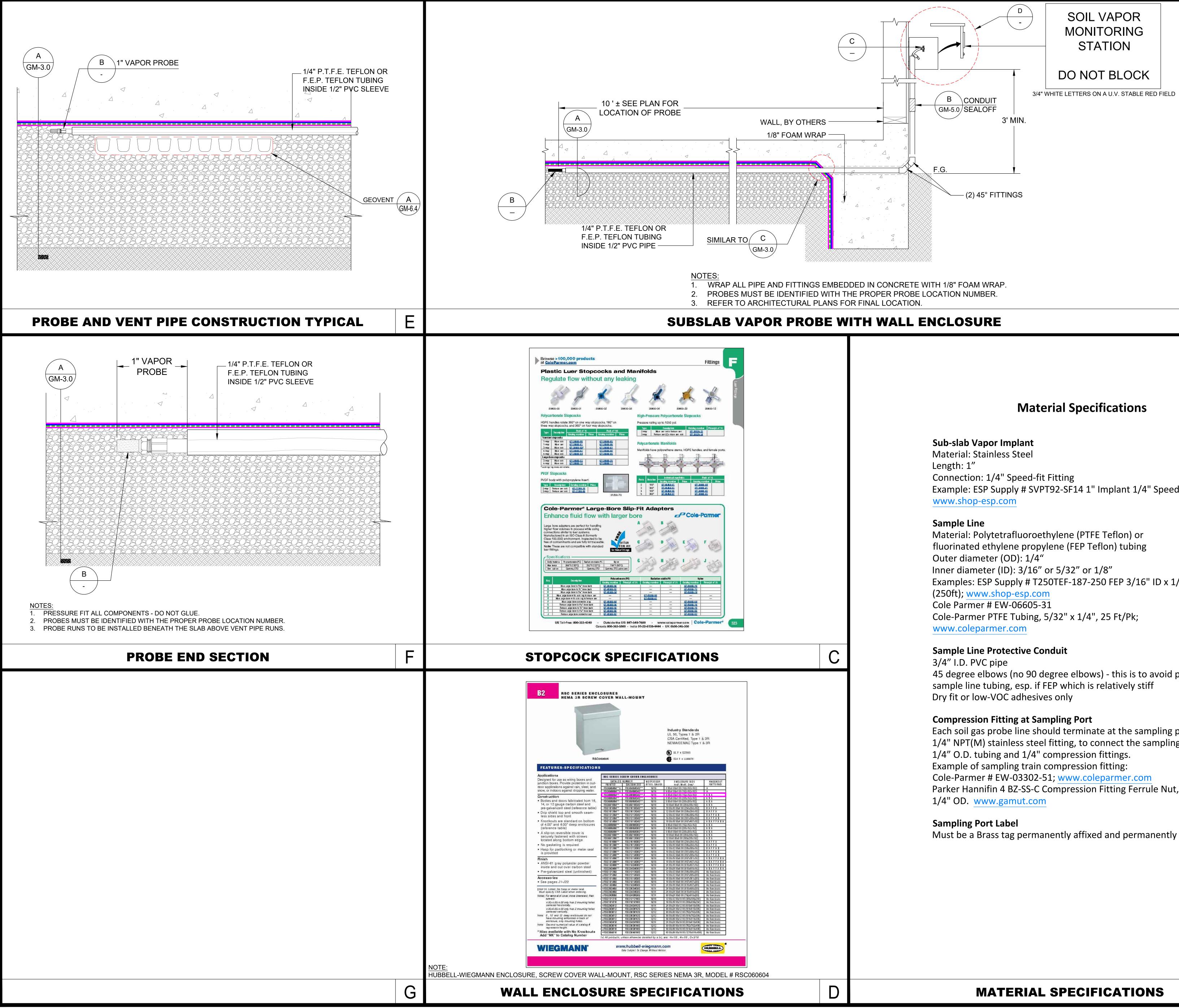
PVC Chemcock [®] and Calibrated Needle Lab Valves	\sim	· · · · · · · · · · · · · · · · · · ·
	inthe	
	- 135 -	
al 192 at	Approx. Weight 0.06 lbs.	
Chemtrol Figure No. A45CC-V 1/4* Hose x 1/4* MPT	Construction Materials	
M45CC-V 1/4" MPT x 1/4" MPT	Part 1. Handle	Material PVC
Features	2. Ball/Stem	PVC
 Rated at 150 psi with non-shock service at 73°F Its (4.8) calculated fluid flow coefficient (Cv) is based on the laying length 	3. Body End – Hose	PVC
being equivalent to 1/4" Schedule 80 pipe.	or Thread 4. Body Half – Stem Side	PVC PVC
 Easily adaptable to any type of connection. Opens and closes with only a quarter turn. 	 Body Half – Stem Side O-Ring – Body Seal 	FKM
 Replaceable FKM O-ring seats and seals. 	6. Q-Ring - Ball Seats (2)	FKM
Corrosion-resistant all thermoplastic PVC construction. No sticking or galling.	7. Q-Ring - Stem Seal	FKM
Full port design.	8. Handle Screw	Cadmium Plated Steel
and the second sec	2.19	
Chemtrol Figure No. T45CN-V 1/4" FPT x 1/4" FPT Features 8 Rated at 150 psi with non-shock service at 73°F • Precise flow measurement. • Positive stop for safe operation.	Approx. Weight 0.13 lbs.	255 Dom Max 1 44 1 2 2 1 2 2 1 2 2 2 2 2 2 2 2 2 2
T45CN-V 1/4" FPT x 1/4" FPT Features • Rated at 150 psi with non-shock service at 73°F • Precise flow measurement. • Positive stop for safe operation. • PTFE seat prevents wear on needle. • Accurately adjust the flow by observing the knob handle exposing	Approx. Weight 0.13 lbs.	, 4 , 4 , 1 ,
T45CN-V 1/4" FPT x 1/4" FPT Features Rated at 150 psi with non-shock service at 73°F Precise flow measurement. Positive stop for safe operation. PTFE seat prevents wear on needle.	Approx. Weight 0.13 lbs. Construction Materials Part 1. Adjustment Knob	1 44 1 2.20 Material PVC
T45CN-V 1/4" FPT x 1/4" FPT Features • Rated at 150 psi with non-shock service at 73°F • Precise flow measurement. • Positive stop for safe operation. • PTFE seat prevents wear on needle. • Accurately adjust the flow by observing the knob handle exposing	Approx. Weight 0.13 lbs. Construction Materials Part Adjustment Knob 2. Stem Assembly 3. Body	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC
T45CN-V 1/4" FPT x 1/4" FPT Features Bated at 150 psi with non-shock service at 73°F Precise flow measurement. Positive stop for safe operation. PTEF seat prevents wear on needle. Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body	Approx. Weight 0.13 lbs. Construction Materials Part Adjustment Knob Stem Assembly Stem Assembly Body A Betainer Washer	Material PVC PVC PVC PVC
T45CN-V 1/4" FPT x 1/4" FPT Features Rated at 150 psi with non-shock service at 73°F Precise flow measurement. Positive stop for safe operation. PTFE seat prevents wear on needle. Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body Knob Position GPM @ Constant 50 PSI	Approx. Weight 0.13 lbs. Construction Materials Part Adjustment Knob 2. Stem Assembly 3. Body	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC
T45CN-V 1/4* FPT x 1/4* FPT Features • Rated at 150 psi with non-shock service at 73°F • Precise flow measurement. • Positive stop for safe operation. • PTE seat prevents wear on needle. • Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body	Approx. Weight 0.13 lbs. Construction Materials Part Adjustment Knob Stem Assembly Body Retainer Washer S. Snap Ring	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC PVC Stainless Steel
T45CN-V 1/4* FPT x 1/4* FPT Features • Rated at 150 psi with non-shock service at 73°F • Precise flow measurement. • Positive stop for safe operation. • PTFE seat prevents wear on needle. • Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body Knob Position GPM @ Constant 50 PSI 8 .85 7 1.41 6 1.79	Approx. Weight 0.13 lbs. Construction Materials Part Adjustment Knob Stem Assembly Body Retainer Washer S. Snap Ring	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC PVC Stainless Steel
T45CN-V 1/4" FPT x 1/4" FPT Features 8 Rated at 150 psi with non-shock service at 73°F • Precise flow measurement. • Positive stop for safe operation. • PTFE seat prevents wear on needle. • Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body Knob Position GPM @ Constant 50 PSI 8 .85 7 1.41 6 1.79 5 2.15	Approx. Weight 0.13 lbs. Construction Materials Part Adjustment Knob Stem Assembly Body Retainer Washer S. Snap Ring	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC PVC Stainless Steel
T45CN-V 1/4" FPT x 1/4" FPT Features Rated at 150 psi with non-shock service at 73°F Precise flow measurement. Positive stop for safe operation. PTFE seat prevents wear on needle. Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body Knob Position GPM @ Constant 50 PSI 8 85 7 1.41 6 1.79	Approx. Weight 0.13 lbs. Construction Materials Part 1. Adjustment Knob 2. Stem Assembly 3. Body 4. Retainer Washer 5. Snap Ring	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC PVC Stainless Steel
T45CN-V 1/4" FPT x 1/4" FPT Features Rated at 150 psi with non-shock service at 73°F Precise flow measurement. Positive stop for safe operation. PTF seat prevents wear on needle. Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body Knob Position GPM @ Constant 50 PSI 8 .85 7 1.41 6 1.79 5 2.15 4 2.42 3 3.15 2 4.40	Approx. Weight 0.13 lbs. Construction Materials Part 1. Adjustment Knob 2. Stem Assembly 3. Body 4. Retainer Washer 5. Snap Ring	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC PVC Stainless Steel
T45CN-V 1/4" FPT x 1/4" FPT Features Bated at 150 psi with non-shock service at 73°F Precise flow measurement. Positive stop for safe operation. PTFE seat prevents wear on needle. Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body Knob Position GPM @ Constant 50 PSI 8 .85 7 1.41 6 1.79 5 2.15 4 2.42 3 3.15	Approx. Weight 0.13 lbs. Construction Materials Part 1. Adjustment Knob 2. Stem Assembly 3. Body 4. Retainer Washer 5. Snap Ring	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC PVC Stainless Steel
T45CN-V 1/4" FPT x 1/4" FPT Features Rated at 150 psi with non-shock service at 73°F Precise flow measurement. Positive stop for safe operation. PTFE seat prevents wear on needle. Accurately adjust the flow by observing the knob handle exposing numerals molded on the valve body Knob Position GPM @ Constant 50 PSI 8 .85 7 1.41 6 1.79 5 2.15 4 2.42 3 3.15 2 4.40	Approx. Weight 0.13 lbs. Construction Materials Part Adjustment Knob Stem Assembly Body Retainer Washer Stan Sterew Date on Other Gases.	Material PVC PVC w/PTFE Seat Seal & FKM Stem Seal PVC PVC Stainless Steel



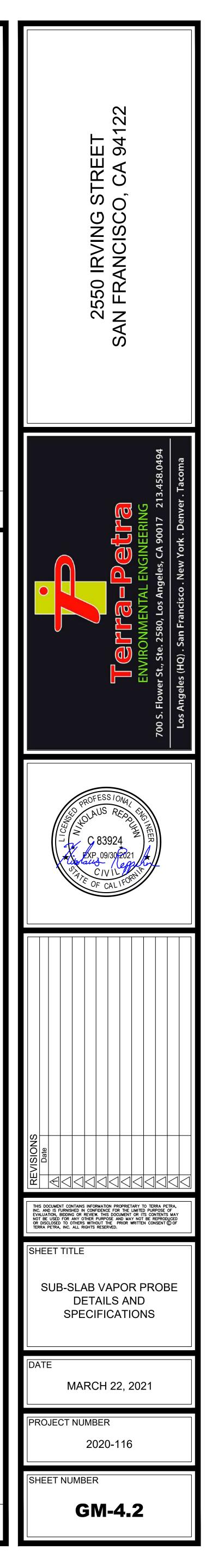
	Submittal Sheet tem #: 450371 Rev Date: 2015 12 14	
	FR Series STANDARD FEATURES	
	Inline Centrifugal Fans	
	C A A	
	FR 100 / 110 / 200 / 225 FR 125 FR 125 FR 140 / 150 / 160 / 250	
	Madel A B C D E Weight ENERGY STAR Madel A B O U Weight ENERGY STAR FR 100 / 110 3 ¹² / ₂₀ 4 ¹² / ₂ 10 1 10 ² / ₄₀ 6 / 7 YES / NO FR 140 / 150 5 ¹ / ₄₀ 1 ¹ / ₄ 9 ¹ / ₄₀ 8 MG / YES FR 125 5 ³¹ / ₂₀ 3 ³¹ / ₂₀ 9 ² / ₄₀ 1 - 6 YES FR 160 5 ¹ / ₄₀ 1 ¹ / ₄₀ 9 ¹ / ₄₀ 8 NO	
	FA 200/225 8 10 13 1/, 1 1/, 12 1/, 10 NO FA 250 10 13 1/, 1 1/, 9 1/, 12 NO A dimensional homes. Weignes i pounds.	
	Fan Specifications Motor-Specifications Line Ocy Mode No. Tag OFM SP Fan RPM Waccs Voics Phase Hercz End 1 2	
	3 4 Accessory Items 1 2 3 4 Accessory Items 1 2 3 4	
3	Project:Submitted: Customer:Approved:	
	United States 10048 Industria Bird. • Le nexa, KS 66215 • 1.800.747.1762 • www.faneon.rec Generale 50 Kanarlan, Way • Bouccoubre, NB E45 30/5 • 1.800.565.3548 • www.faneon.rec Faneon reserves the right to make depinical onlanges.	
	For updated doou mentacion please referi oo www.fantechuret	
	BLOWER SPECIFICATIONS	
	Discharge Calculations for	
	Under slab Design	
	Step 1- Design Consideration	
	1a Design Factors 14967 = A- Sq footage of area under slab for blower extraction 3 = E- Required Number of air exchanges required per Hour	
	3 = E- Required Number of air exchanges required per Hour 6 = Gt- Venting Gravel thickness 0.25 = Av- % of air voids in Gravel layer	
	1b Design Factors for Collection System (under slab) 825 = L - Length of collectin pipe /zone 825 LF of collection pipe	
	 3 = 90-c Number of 90 degree bends in longest single pipe run 0 = 45-c Number of 45 degree bends in longest single pipe run 	
	2 = Y-c Number of 180* junctions in Longest single pipe run 4 = D-c Diameter of collection pipe in inches 1a Design Factors for Discharge System (above slab)	
	1c Design Factors for Discharge System (above slab) 80 = Ld - Length of discharge pipe system 2 = 90d- Number of 90 degree bends in discharge pipe system	
	3 = 45d- Number of 45 degree bends in discharge pipe system 0 = Yd- Number of 180* junctions in discharge pipe system	
	2 = Dd- Diameter of discharge pipe in inches	
	1d Design Factors for Blower System	
	1 =Bz Number of blower zones designed for this project <u>Step 2- System Curve Head loss calculations</u>	
	2a- Calculate air flow discharge, per zone. If Design calls for collection trenches add this calculation	
	Air Flow per zc AFz= ((A*E/60)*(Gt/12)*Av)/Bz Calculate Air volumn in collection trenches Trench/iches 0 0	
_	AFz= 93.5 CF/M Venting Gravel Vo 0 CF	
	2b- Calculate air flow per zone in collect =Afz*.4 Caf= 37.4 CF/M	
	2c- Calculate friction losses, per zone, for collection systen System Curve Friction Losses for collection (under slab) system	em
	* Use Hart & Cooley Flexible Duct Fricton Loss Air Duct Calculator Design Flow 37.4	
	2d- Calculate fricton losses, per zone in Discharge System System Curve Friction Losses for Discharge (above slab syste	em
	* Use Hart & Cooley Duct Fricton Loss Air Duct Calculator Design Flow 93.5	
	Total System Curve Friction Loss* System Curve flow calculations for CFM of Design Flow Below Slab 37.4	
	Above Slab (Total Flow) 93.5	
	Sub Slab Collection System Loss 0.02 Above Slab Discharge System Loss 0.74	
	Total System Loss in Inches of Water = 0.76	
	* Fricton Loss Values obtained from "Hart & Cooley- Air Duct Calculator"	
	Step 3- Blower selection Blower selection	
	Design Factors 93.5 =Capacity in CFM	
	0.76 = System static pressure in inches of water	
	Blower- 1 Fantec FG 6M EC Centrigugal	



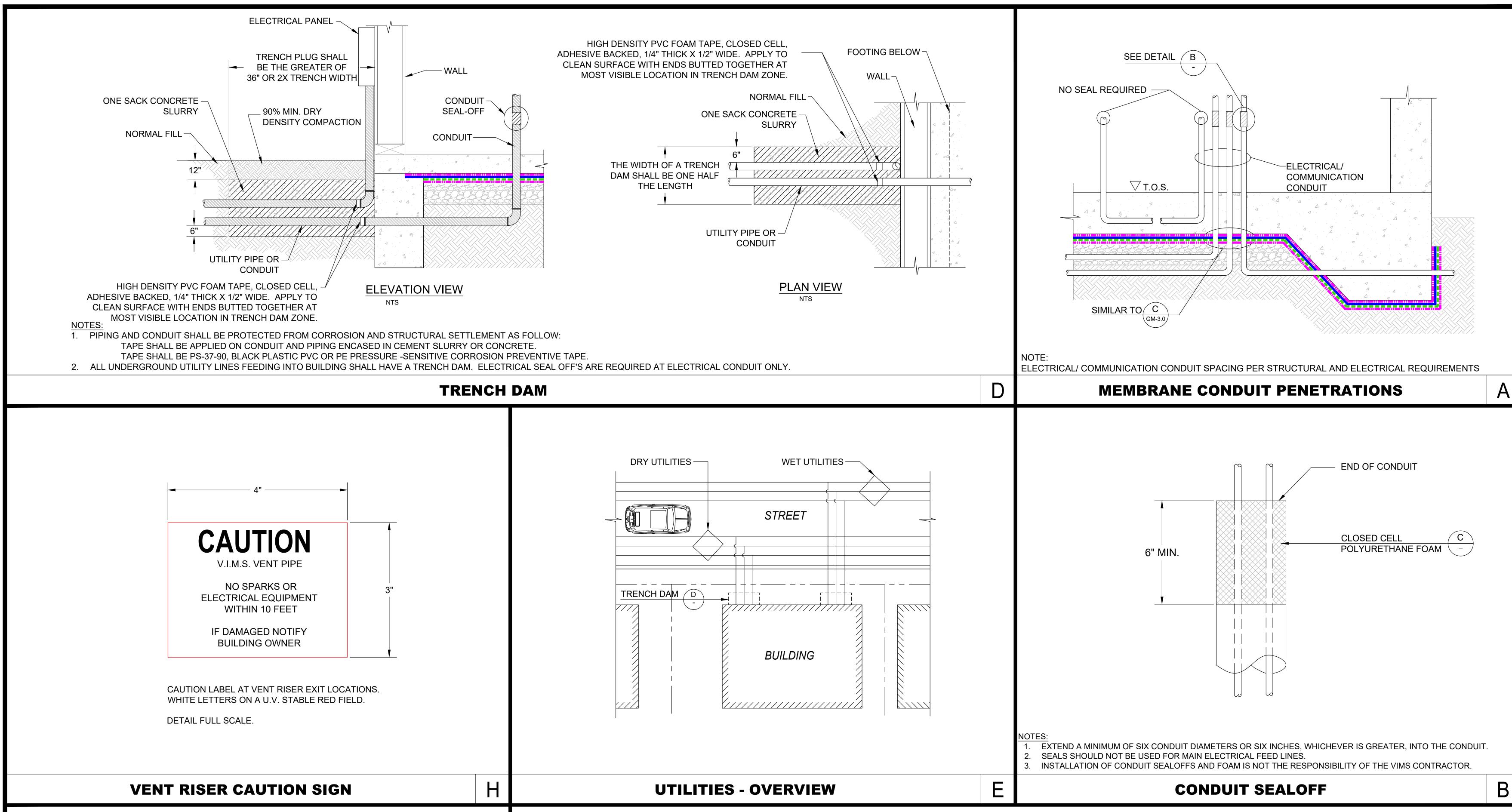




	Material Specifications	
	Sub-slab Vapor Implant Material: Stainless Steel Length: 1" Connection: 1/4" Speed-fit Fitting Example: ESP Supply # SVPT92-SF14 1" Implant 1/4" Speed-Fit Fitting www.shop-esp.com Sample Line Material: Polytetrafluoroethylene (PTFE Teflon) or fluorinated ethylene propylene (FEP Teflon) tubing Outer diameter (OD): 1/4" Inner diameter (ID): 3/16" or 5/32" or 1/8" Examples: ESP Supply # T250TEF-187-250 FEP 3/16" ID x 1/4" OD (250ft); www.shop-esp.com Cole Parmer # EW-06605-31 Cole-Parmer PTFE Tubing, 5/32" x 1/4", 25 Ft/Pk; www.coleparmer.com	
С	Sample Line Protective Conduit 3/4" I.D. PVC pipe 45 degree elbows (no 90 degree elbows) - this is to avoid pinching the sample line tubing, esp. if FEP which is relatively stiff Dry fit or low-VOC adhesives only Compression Fitting at Sampling Port Each soil gas probe line should terminate at the sampling port with an	
	 1/4" NPT(M) stainless steel fitting, to connect the sampling train using 1/4" O.D. tubing and 1/4" compression fittings. Example of sampling train compression fitting: Cole-Parmer # EW-03302-51; <u>www.coleparmer.com</u> Parker Hannifin 4 BZ-SS-C Compression Fitting Ferrule Nut, 316SS, 1/4" OD. <u>www.gamut.com</u> 	
	Sampling Port Label Must be a Brass tag permanently affixed and permanently legible.	
	MATEDIAL ODECIEICATIONO	



A



WARNING

A MEMBRANE IS INSTALLED BENEATH THE BUILDING FLOOR SLAB TO PREVENT SOIL GAS INTRUSION FROM THE SOIL. ANY PROPOSED PENETRATION OR ALTERATION OF THE FLOOR SLAB REQUIRES A PERMIT TO BE OBTAINED FROM THE BUILDING DEPARTMENT.

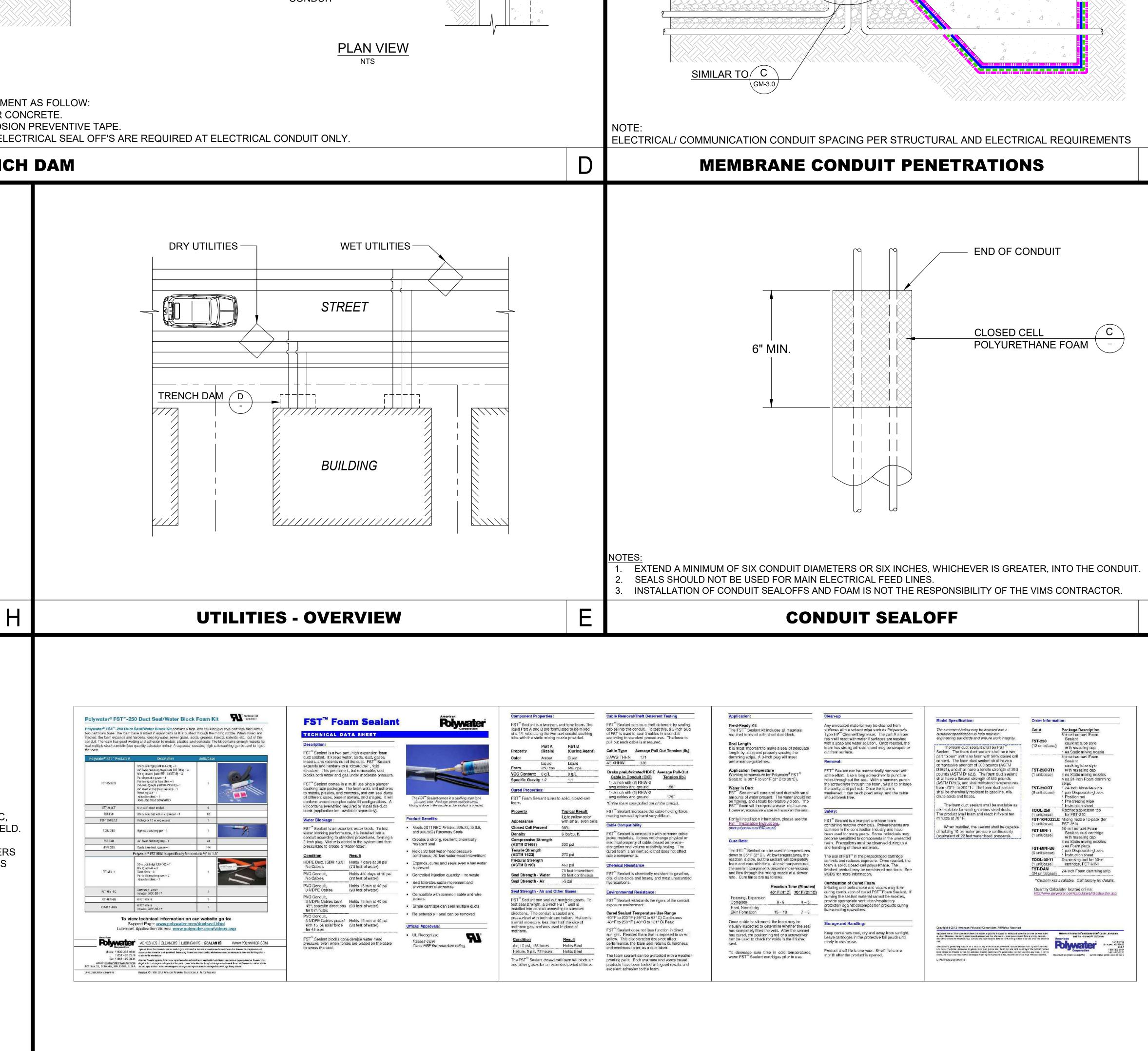
IT IS ILLEGAL TO REMOVE THIS SIGN.

TWO-PLY ENGRAVED PLASTIC, WHITE LETTERS ON A RED FIELD.

"WARNING" = 3/4" HIGH LETTERS BALANCE = 3/8" HIGH LETTERS

J

MEMBRANE WARNING SIGN



B



BOARD OF BUILDING AND SAFETY COMMISSIONERS

VAN AMBATIELOS PRESIDENT

E. FELICIA BRANNON VICE PRESIDENT

JOSELYN GEAGA-ROSENTHAL GEORGE HOVAGUIMIAN JAVIER NUNEZ

CETCO 35 Highland Avenue Bethlehem, PA 18017

Attn: Robert Valorio (484) 403-7933

CITY OF LOS ANGELES CALIFORNIA



ERIC GARCETTI MAYOR

DEPARTMENT OF BUILDING AND SAFETY 201 NORTH FIGUEROA STREET LOS ANGELES, CA 90012

FRANK M. BUSH GENERAL MANAGER SUPERINTENDENT OF BUILDING

OSAMA YOUNAN, P.E. EXECUTIVE OFFICER

RESEARCH REPORT: RR 24860 (CSI #07120)

Expires: Code:

November 1, 2021 Issued Date: November 1, 2019 2017 LABC

GENERAL APPROVAL - Renewal - Liquid Boot Spray Applied Membrane for Below-Grade Waterproofing and Gas Barrier.

DETAILS

Liquid Boot membrane is a two component system of chloroprene modified asphaltic (CMA) emulsion. Both components are waterborne and are spray applied cold to provide a monolithic, single course, 80 mil minimum membrane thickness for below grade waterproofing and 60 mil minimum membrane thickness for gas barrier.

This product is approved for below-grade waterproofing and gas barrier subject to the following conditions:

- 1. The chloroprene modified asphaltic emulsion and catalyst shall be supplied in clearly marked containers bearing the brand name and product identification. Both components shall be supplied by the same source manufacturer.
- 2. The manufacturer shall provide quality assurance of the materials supplied as to their formulation.
- 3. Application of the product shall be accomplished by an applicator approved by the manufacturer. A written statement by the manufacturer stating that the applicator is an approved applicator is required prior to use of the product.

RR 24860 Page 1 of 3

LADBS G-5 (Rev.08/05/2014)

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

CETCO Liquid Boot Company RE: Liquid Boot Spray Applied Membrane for Below-Grade Waterproofing and Gas Barrier
4. All surfaces to receive membrane shall be free of laitance, sharp projections, oil, dirt or other contaminants. Prepare surfaces in accordance with the manufacturer's instructions.
5. Installation of the materials shall be in accordance with the manufacturer's instructions, a copy of which shall be kept at the job site.
6. Complete details for the membrane system are submitted for plan check and a building permit is obtained.
 The following field tests in accordance with the Liquid Boot Field Installation and Repair Procedure are required: (A copy of the Installation and Repair Procedures is on file with Engineering Research Section.)
 a) Perform Thickness Sample Test at every 500 square feet. b) For gas barrier application, perform Smoke Test for the entire site at the interval not more than 50,000 sq. ft. each.
8. Protection for the membrane shall be provided in accordance with the written instructions by the engineer of the record.
 Prior to placing the concrete slab over the membrane, the membrane installer shall certify the membrane to be installed and tested in accordance with the manufacturer's specifications and to be free of leaks.
10. The membrane is not to be placed under the building footings.
11. For gas membrane installation, continuous inspection by a registered deputy inspector certified by CETCO Liquid Boot Company, and registered in accordance with the requirements specified in Section 91.1704.2 of the Los Angeles Municipal Code for special inspections is required.
RR 24860
RR 24860 Page 2 of 3

CETCO Liquid Boot Company RE: Liquid Boot Spray Applied Membrane for Below-Grade Waterproofing and Gas Barrier

DISCUSSION

The report is in compliance with the 2017 City of Los Angeles Building Code.

The use of Liquid Boot for a gas barrier is based on the tests in accordance with the methane barrier test criteria.

The approval is based on tests.

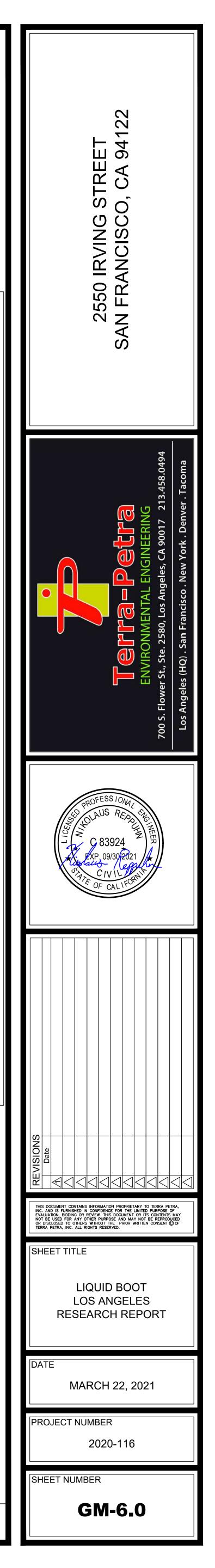
This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this Approval have been met in the project in which it is to be used.

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

DAVID CHANG, Chief **Engineering Research Section** 201 N. Figueroa St., Room 880 Los Angeles, CA 90012 Phone - 213-202-9812 Fax - 213-202-9943

DE RR24860 R10/27/2019 TLB1900170 7103/7104/1403.2

> RR 24860 Page 3 of 3



-	Section 07 2623.19 – March 2010 (Supersedes All Previous Versions) Version 5.0	 section, who can comply with manufacturer's warranty requirements. Pre-installation Conference: A pre-installation conference shall be held at the site prior to commencement of field installation to establish procedures to maintain required working conditions and to coordinate this work with related and adjacent work. Verify that final gas vapor barrier 	PART 2 - PRODUCTS
h	his guide specification has been prepared according to the principles established in the Manual of Practice published by the construction Specification Institute and may have changed. Therefore, please confirm that this specification is still current and as not been superseded by checking at <u>www.cetco.com</u> or by calling 1-714-384-0111 for the most recent version.	procedures to maintain required working conditions and to coordinate this work with related and adjacent work. Verify that that gas vapor barrier components and system details comply with gas vapor barrier manufacturer's current installation requirements and recommendations. Pre-con meeting attendees should include representatives for the owner, architect, inspection firm, general contractor, gas vapor installer/applicator, concrete contractor, excavating/backfill contractor, and mechanical and electrical contractors if work penetrates the gas vapor membrane.	 A. Provide Liquid Boot[®] Plus membranes, venting system and applicable accessories as manufa Company (CETCO), 2870 Forbs Ave, Hoffman Estates, IL 60192,, USA. Phone: (847)
<u>PART 1</u> 1.01	- GENERAL RELATED DOCUMENTS	D. Independent Inspection: Owner shall make all arrangements and payments for an independent inspection service to monitor gas vapor membrane material installation compliance with the project contract documents and manufacturer's published literature and site specific details.	http://www.sedimentremediation.com.
A.	General and Supplementary Conditions and Division 1- General Requirements applies to this section. Provide gas vapor barrier as indicated,	Independent Inspection Firm shall be an approved company participating with the gas vapor membrane manufacturer's Certified Inspection Program. Inspection service shall produce reports and digital photographs documenting each inspection. Reports shall be made available to the Contractor, gas vapor membrane installer, gas vapor membrane material manufacturer, and Architect. Inspections should include substrate	A. The gas vapor barrier manufacturer must have produced at least 22 million square feet (2 million
.02	specified and required.	examination, beginning of gas vapor membrane installation, periodic intervals, and final inspection prior to concrete or backfill placement against the gas vapor barrier.	least 22 million square feet (2,000,000 square meters) installed. 2.03 MATERIALS
	Work in this section - principal items include:	1.07 DELIVERY, STORAGE AND HANDLING	A. VI-20 [®] is a seven-layer co-extruded membrane made from ethylene vinyl alcohol (EVOH) an
.03	 Gas vapor barrier providing protection from the following gases: Methane, other Hydrocarbon vapors in concentrations up to 20,000ppm, Hydrogen Sulfide, Radon. Soil vapor extraction piping and low profile venting system beneath the gas vapor membrane. RELATED REQUIREMENTS:	A. Delivery and Handling: Deliver materials in factory sealed and labeled packaging. Sequence deliveries to avoid delays, while minimizing on-site storage. Handle and store following manufacturer's instructions, recommendations and material safety data sheets. Protect from construction operation related damage, as well as, damage from weather, excessive temperatures and prolonged sunlight. Remove damaged material from site and dispose of in accordance with applicable regulations.	resistance to VOC vapor transmission. VI-20 membrane is an under-slab barrier when used in o organic compound vapor migration through the concrete. VI-20 geomembrane barrier physical properties:
.05	Other specification Sections which directly relate to the work of this section include, but are not limited to, the following:	B. Do not allow material to freeze in containers	PROPERTIES TEST METHOD
	 Division 03 Section "Cast-In-Place Concrete" for concrete slabs. Division 07 Section "Self-Adhering Sheet Waterproofing." Division 07 Section "Cold Fluid-Applied Waterproofing." 	C. Remove and replace liquid materials that cannot be applied within their stated shelf life.	Thickness, nominal ASTM D5199 Weight ASTM D5261
	 Division 07 Section "Crystalline Waterproofing." Division 26 Section "Conduit and other Electrical Penetrations." 	 1.08 JOB CONDITIONS A. Environmental Limitations: Apply gas vapor barrier system within the range of ambient and substrate temperatures recommended by 	Tensile Strength ASTM E154 Methane Permeability ASTM D 1434 Radon Diffusion Coefficient Image: Coefficient Strength
	 Division 31 Section "Earthwork, Excavation and Fill, Shoring." Division 33 Section "Geocomposite Foundation Drainage." 	manufacturer. Do not apply gas vapor barrier system to a damp or wet substrate, when relative humidity exceeds 85 percent, or when temperatures are less than 5 deg F (3 deg C) above dew point.	B. Fluid applied gas vapor barrier system - Liquid Boot [®] ; a single course, high build, polymer modif
04	SYSTEM DESCRIPTION	B. Do not apply gas vapor barrier system in snow, rain, fog or mist, or when such weather conditions are imminent during application and curing period.	applied at ambient temperatures. A minimum thickness of 60 dry mils, unless specified otherwis thicker membrane. Non-toxic and odorless. Liquid Boot [®] Trowel Grade has similar properties Manufactured by CETCO in Santa Ana, CA and Cartersville, GA (714) 384-0111.
	Provide gas/vapor barrier system with prefabricated composite venting system to mitigate the passage of gas or vapor and install without defects, damage or failure. Gas vapor barrier shall be high performance VI-20 with EVOH core technology, Liquid Boot [®] , UltraShield protection course and applicable accessory products	C. Maintain adequate ventilation during application and curing of gas vapor barrier system materials.	LIQUID BOOT [®] gas vapor barrier physical properties:
5	SUBMITTALS	D. Ambient temperature shall be within manufacturer's specifications. If winter conditions apply, we recommend the use of space heaters and necessary cover (i.e. visqueen) to bring the ambient temperature to at least +45°F until the protection course and structural slab rebar or a	GAS VAPOR MEMBRANE TEST METHOD V
	General: Prepare and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections.	mudslab protection course has been placed.	Acid Exposure (10% H ₂ SO ₄ for 90 days) ASTM D543 Let Diesel (1000 mg/l), Ethylbenzene (1000 mg/l), Naphthalene (5000 ASTM D543 Let mg/l) and Apptone (500 mg/l) Exposure for 7 days Let Let
	Product Data: Submit manufacturer's product data, with complete general and specific installation instructions, recommendations, and limitations.	E. Surface preparation shall be per manufacturer's specification.	Radon Permeability Tested by US Dept. of Energy Zet
	Product Samples: Submit representative samples of the following for approval: 1. GeoVent – low profile vapor extraction system.	 COORDINATION Coordinate application of gas vapor barrier with installation of other construction. 	Bonded Seam Strength Tests ASTM D6392 Pathologic Micro Organism Resistance (Soil Burial)- average weight change, ASTM D4068-88 Pathologic Methane Permeability ASTM 1434-82 Pathologic
	 VI-20 – high density polyethylene (HDPE) and ethylene vinyl alcohol (EVOH) composite membrane. Liquid Boot[®] Detailing Fabric – ethylene vinyl alcohol (EVOH) and polypropylene composite membrane. 	 Positively secure plumbing, electrical, mechanical, and structural items to be under or passing through the gas vapor barrier in their proper positions and appropriately protected prior to membrane application. 	Methane Permeability ASTM 1434-82 Pathology Oil Resistance Test- average weight change, average tensile strength change, average tensile stress change, average ASTM D543-87 Pathology
	 BaseFabric T-40 or T-60 – thermally bonded non woven polypropylene fabric. Liquid Boot[®] - asphalt latex spray applied gas vapor barrier membrane. UltraShield G-1000 – polypropylene needle punched protection course. 	 Install gas vapor barrier before placement of reinforcing steel. When not possible, mask all exposed reinforcing steel prior to membrane application. 	elongation change, bonded seams, methane permeability
	 Ultrashield G-1000 – polypropylene needle punched protection course. Contractor Certificate: At time of bid, submit written certification that installer has current Approved Applicator status with gas vapor 		stress change, average elongation change, bonded seams ASTM D4068-88 Page 200 Dead Load Seam Strength City of Los Angeles Page 200
	membrane manufacturer.	 PRODUCT WARRANTY A. Upon delivery and acceptance by the Owner of material specified by this Section, the materials manufacturer will provide a written one year 	Environmental Stress-Cracking ASTM D1693-78 Pathologia PCE Diffusion Coefficient Tested at 6,000 mg/m³ 2. TOE Diffusion Coefficient Tested at 6,000 mg/m³ 2.
06	QUALITY ASSURANCE	standard material indicating the material conforms to its product specifications and is free of material defects. Factors affecting the results obtained from using this product including weather, equipment utilized, construction, workmanship and other variables are all beyond the	TCE Diffusion Coefficient Tested at 20,000 mg/m³ 8.0 Soil Burial ASTM E154-88 Pa Water Vance Permeability ASTM E96 0.0
	Manufacturer Qualifications: Gas vapor membranes and all accessory products shall be provided by a single manufacturer with a minimum of 25 years experience in the direct production and sales of gas vapor systems. Manufacturer shall be approving an acceptable installer/applicator	manufacturer's control.	Water Vapor Permeability ASTM E96 0.3 Water Vapor Transmission ASTM E96 0.3 POTABLE WATER TEST METHOD V/
	and recommending appropriate installation methods.	Under this product warranty, manufacturer will provide replacement material, at no charge, for any product proven not to meet the material properties listed in the published product literature This warranty is in lieu of any and all other warranties expressed or implied (including any	POTABLE WATER TEST METHOD V/ Toxicity Test 22 CCR 66696 Pa
201D I	OOT® GVB, version 4.2 1 © 2009 CETCO	LIQUID BOOT® GVB, version 4.2 2 © 2009 CETCO	LIQUID BOOT® GVB, version 4.2 3
	 CONCRETE: Concrete to be gas vapor proof shall be properly placed and consolidated. Reinforced structural slabs should be a minimum of 6" (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4" (100 mm) thick. At cast in place concrete surfaces, provide a light broom finish or smoother, free of any dirt, debris, loose material, release agents or curing compounds. Fill voids more than 1/4 inch deep and 1/4 inch wide. 	 3.05 INSTALLATION ON DIRT SURFACES AND MUDSLABS A. Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside corners. Apply a thin 20 mil Liquid Boot[®] spray applied within the seam overlap. Line trenches with geomembrane extending at least six inches (6") onto adjoining sub-grade if slab and footings are to be sprayed separately. 	damage. When thickness or integrity is in question the membrane should be tested in the prop
8	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4" (100 mm) thick. At cast in place concrete surfaces, provide a light broom finish or smoother, free of any dirt, debris, loose material, release agents or curing compounds. Fill voids more than 1/4 inch deep and 1/4 inch wide. At masonry joints, cold joints, and form joints, provide a struck smooth surface. Prepare penetrations in accordance with manufacturer's specifications. Provide a 3/4 inch minimum cant of Liquid Boot[®], or other suitable material as approved by manufacturer, at all horizontal to vertical transitions and other inside corners of 120 degrees or less. Allow to cure overnight before the application of Liquid Boot[®]. Completely grout all cracks or cold joints greater than 1/16 inch with non-shrink grout. Install Hardcast reinforcing tape over all cold joints, 	 A. Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside corners. Apply a thin 20 mil Liquid Boot[®] spray applied within the seam overlap. Line trenches with geomembrane extending at least six inches (6") onto adjoining sub-grade if slab and footings are to be sprayed separately. B. Minimize the use of nails to secure the geomembrane to the dirt subgrade. Remove all nails before spraying membrane, if possible. Nails that cannot be removed from the dirt subgrade are to be patched with Liquid Boot[®] Detailing Fabric or Hardcast reinforcing tape overlapping the nail head by a minimum of two inches (2"). Apply a 20 mil Liquid Boot[®] under the geomembrane patch, when patching with geomembrane. 	 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, damage. When thickness or integrity is in question the membrane should be tested in the proper sampling defeats the intent of inspections. Inspectors should always use visual and tactile metabolic control of the properties of the intent of inspection.
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If a second coat is required, remove any standing water from the membrane before proceeding with the second application. E. Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and the protection system are not penetrate. F. After membrane has cured and checked for proper thickness and flaws, install protection material pursuant to manufacturer's instructions. 1. Perform all testing or inspection to be performed prior to placing protection course. 3.06.10 OPTION 1 A. Clean all penetrations. Sand metal penetrations clean with emery cloth. B. For applications requiring VI-20, roll out geomembrane on sub-grade, overlapping seams a minimum of six inches (6"). Cut the geomembrane arround penetrations so that it hays flat on the sub-grade. Lay geotextlif light at all inside corners. Apply a thin (20 mil) LIQUID BOOT® within the seam overlap	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, i damage. When thickness or integrity is in question the membrane should be tested in the proper sampling defeats the intent of inspections. Inspectors should always use visual and tactile mere being too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking o readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. Samples may be cut from the membrane and geomembrane sandwich to a maximum arm with a mil-reading caliper, per 500 sq. feet. Deduct the geomembrane thickness of 20 mils membrane. Mark the test area for repair. 2. Patch voids let by sampling with Detailing Fabric underlay beneath the existing membrane inches overlap. Apply a thin tack coat of Liquid Boot® under the geomembrane patch. The mils minimum dry thickness, extending at least three inches (3") beyond geotextile patch. D. SMOKE TESTING FOR HOLES 1. Smoke test the membrane for holes and other breaches in accordance with the manufacture
03	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4° (100 mm) thick. 1. At cast in place concrete surfaces, provide a light broom finish or smoother, free of any dirt, debris, loose material, release agents or curing compounds. Fill voids more than 1/4 inch deep and 1/4 inch wide. 2. At masonry joints, cold joints, and form joints, provide a struck smooth surface. Prepare penetrations in accordance with manufacturer's specifications. 3. Provide a 3/4 inch minimum cant of Liquid Boot[®], or other suitable material as approved by manufacturer, at all horizontal to vertical transitions and other inside corners of 120 degrees or less. Allow to cure evenight before the application of Liquid Boot[®]. 4. Completely grout all cracks or cold joints greater than 1/16 inch with non-shrink grout. Install Hardcast reinforcing tape over all cold joints, cracks and form the holes (after holes and cracks are grouted). 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If a second coat is required, remove any standing water from the membrane before proceeding with the second application. E. Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and the protection system are not penetrated. F. After membrane has cured and checked for proper thickness and flaws, install protection naterial pursuant to manufacturer's instructions. 1. Perform all testing or inspection to be performed prior to placing protection course. 3.06.10 OPTION 1 A. Clean all penetrations. Sand metal penetrations clean with emery cloth. B. For applications requiring VI-20, roll out geomembrane on sub-grade, overlapping seams a minimum of six inches (6°). Cut the geomembrane around penetrations set that they fact around penetration section due bese of penetration. C. At the base of penetration Install a minimum ½ inch thick membrane	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, damage. When thickness or integrity is in question the membrane should be tested in the propresempling defeats the intent of inspections. Inspectors should always use visual and tactile mebeing too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking or readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. 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If a second coat is required, remove any standing water from the membrane before proceeding with the second application. E. Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and the protection system are not penetrated. F. After membrane has cured and checked for proper thickness and flaws, install protection naterial pursuant to manufacturer's instructions. 1. Perform all testing or inspection to be performed prior to placing protection course. 3.06 SEALING AROUND PENETRATIONS 3.06.10 OPTION 1 A. Clean all penetrations. Sand metal ponetrations clean with emery doth. B. For applications requiring VI-20, roll out geomembrane shree inches (5°) around the base of penetration and up the penetration and in the penetration at a finite metal as approved by manufacture. Extend the membrane at 60 mil thickness three inches (5°) around the base of penetration and up the penetration at a 60 mil thickness three inches	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, damage. When thickness or integrity is in question the membrane should be tested in the properson sampling defeats the intent of inspections. Inspectors should always use visual and tactlie membeing too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking o readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. 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Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside corners. Apply a thin 20 mil Liquid Bod[®] spray applied within the seam overlap. Line trenches with geomembrane extending at least six inches (6°) onto adjoining sub-grade if slab and footings are to be spraved separately. B. Minimize the use of nails to secure the geomembrane to the dirit subgrade. Remove all nails before spraying membrane, if possible. Nails that cannot be emoved from the dirit subgrade are to be patched with Liquid Bod[®] Orealing Fabric or Hardcast reinforcing tape overlapping the nail head by a minimum of two inches (2°). Apply a 20 mil Liquid Bod[®] under the geomembrane patch, when patching with geomembrane. C. Sealing around penetrations. D. Spray apply Liquid Bod[®] onto VI-20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotcrete is to be applied directly to membrane. If a second coat is required, remove any standing water from the membrane before proceeding with the second application. E. Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and the protection system are not penetrated. F. After membrane has cured and checked for proper thickness and flaws, install protection material pursuant to manufacturer's instructions. 1. Perform all testing or inspection to be performed prior to placing protection course. 3.06. SEALING AROUND PENETRATIONS 3.06.10 OPTION 1 A. Clean all penetrations. Sand metal penetrations clean with emery cloth. B. For applications requiring V1-20, roll out geomembrane on sub-grade, overlapping seams a minimum of six inches (6°). Cut the geomembrane seam overlap pheretrations on thit liquis Botot Detailing Fabric around penetration at out t	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, damage. When thickness or integrity is in question the membrane should be tested in the prope sampling defeats the intent of inspections. Inspectors should always use visual and tactile meabeing too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking o readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. Samples may be cut from the membrane and geomembrane sandwich to a maximum an with a mil-reading caliper, per 500 sq. feet. Deduct the geomembrane thickness of 20 mils membrane. Mark the test area for repair. 2. Patch voids left by sampling with Detailing Fabric underlay beneath the existing membra inches overlap. Apply a thin tack coat of Liquid Boot® under the geomembrane patch. The mils minimum dry thickness, extending at least three inches (3") beyond geotextile patch. D. SMOKE TESTING FOR HOLES 1. Smoke test the membrane for holes and other breaches in accordance with the manufacture
03	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4" (100 mm) thick. 1. A cast in place concrete surfaces, provide a light brown finish or smoother, free of any dirt, debris, loose material, release agents or curing compounds. Fill voids more than 1/4 inch deep and 1/4 inch wide. 2. At mesonry joints, cold joints, and form joints, provide a struck smooth surface. Prepare penetrations in accordance with manufacturer's apecifications. 3. Provide a 3/4 inch minimum cant of Liquid Boot[®], or other suitable material as approved by manufacturer, at all horizontal to vertical transitions and other inside comers of 120 degrees or less. Allow to cure overnight before the application of Liquid Boot[®]. 4. Completely grout al cracks core od joints grates than 1/16 inch with non-strink grout. Install Hardcast reinforcing tape over all cold joints, cracks and form the holes (after holes and cracks are grouted). SUFFACE PREPARATION Provide 24 inch minimum clarance out from surfaces to receive the gas vapor barrier. The application surface shall be prepared and provided to the applicator in accordance with manufacturer's specifications listed below: Remove dirt, debris, oil, grease, cement laitance, or other foreign matter which will impair or negatively affect the performance of the gas vapor barrier all venting system. Protect adjacent work areas and finish surfaces from damage or Liquid Boot[®] over spraying during product applications. INSTALLATION OF GAS COLLECTIONVENT SYSTEM Roll out Liquid Boot[®] GeoVent per approved layout Provide a Joing Boot[®] GeoVent Sieves or GeoVent End Outlets where venting penetrates interior footing A proving finesctions, cut away geotatile to produce rectangular faps. Interlock exposed dimple board in a Lego-like fashion. Fold flaps of geotestile in a manner so that the dimge board is covered completely. Secure	 A. Roli out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside comers. Apply a time 20 mil Liquid Boot[®] paray applied within the seam overlap. Line trenches with geomembrane extending at least six inches (6°) onto adjoining sub-grade if slab and footings are to be spraved separately. B. Minimize the use of nails to secure the geomembrane to the dirt subgrade. Remove all nails before spraying membrane, if possible. Nails that cannot be removed from the dirt subgrade are to be patched with Liquid Boot[®] Dataling Fabric or Hardcast reinforcing tape overlapping the nail head by a militimum of how inches (2°). Apply a 20 mil Liquid Boot[®] under the geomembrane patch, when patching with geomembrane. C. Sealing around penetrations. D. Spray apply Liquid Boot[®] onto VI-20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry milis if shotchele is to be applied directly to membrane. Keep membrane free of dirt, dabris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that membrane free of dirt, dabris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that membrane and the protection course. SEALING AROUND PENETRATIONS 3.06.10 OPTION 1 A. Clean all penetrations. Send metal penetrations clean with emery cloth. B. For applications requiring VI-20, roll out geomembrane and energy cloud, overlapping seams a minimum of six inches (5°). Cut the geomembrane around penetrations on the light at all inside corners. Apply a third (20 mil) LIQUID BOOT® within the seam overlap then lap Liquid Boot[®] Detailing Fabric around penetrations centeral, as approved by monufacture: Extend the membrane at 0 and indiviness the role sole of penetration. Cloud the penetration and inimimum dy thickness around heeretal as approved by monufactu	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, i damage. When thickness or integrity is in question the membrane should be tested in the proper sampling defeats the intent of inspections. Inspectors should always use visual and tactile mere being too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking o readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. Samples may be cut from the membrane and geomembrane sandwich to a maximum arm with a mil-reading caliper, per 500 sq. feet. Deduct the geomembrane thickness of 20 mils membrane. Mark the test area for repair. 2. Patch voids let by sampling with Detailing Fabric underlay beneath the existing membrane inches overlap. Apply a thin tack coat of Liquid Boot® under the geomembrane patch. The mils minimum dry thickness, extending at least three inches (3") beyond geotextile patch. D. SMOKE TESTING FOR HOLES 1. Smoke test the membrane for holes and other breaches in accordance with the manufacture
13	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4' (100 mm) thick. 1. At cast in place concrete surfaces, provide a light broom finish or smoother, free of any dirt, debris, loose material, release agents or curing compounds. If viods more than 14 hen deega and 14 hen wide. 2. At masonry joints, cold joints, and form joints, provide a struck smooth surface. Prepare penetrations in accordance with manufacturer's appecifications. 3. Provide 3.44 inch minimum cant of Liquid Boot[®], or other sublable material as approved by manufacturer, at all horizontal to vertical transitions and other indic compose 1/20 degrees or less. Allow to cure overight before the application full add Boot[®]. 3. Unadd the heads of the struck and other indic compose 1/20 degrees or less. Allow to cure overight before the application full cudd Boot[®]. 3. Unadd the heads and cracks are grouted). 3. SURFACE PREPARIDIN Provide 3.44 inch minimum dearance out from surfaces to receive the gas vapor barrier. The application surface shall be prepared and provided to the applicator in accordance with manufacturer's specifications listed below: Atterna diventing system. Protect adjacent work areas and finish surfaces from damage or Liquid Boot[®] over spraying during product applications. NSTALLATION OF GAS CULLETION/VENT SYSTEM Provide prelabircated Liquid Boot[®] GeoVent Sieves or GeoVent End Quilts where venting panetrates interior footing At ponts of intersections, and away geotaxile to a solid (non-perforated 2'' (inches) diameter PVC pipe at penetration through building foundation. Seafigrout piper approved hypout NSTALLATION OF CONCETESHOTCRETEMASONRY Seal around panetrations in accordance with manufacturer instructions. NSTALLATION OF cobjecter 15 overset and 10 loos	 Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside comers. Apply a thin 20 mil Liguid Bod® spray applied within the seam overlap. Une trenches with geomembrane extending at least six inches (6°) onlo adjoining sub-grade if sala and footings are to be sprayed separately. Minimize the use of nails to secure the geomembrane to the dif subgrade. Remove all nails before spraying membrane, if possible. Nails that cannot be removed from the dif subgrade are to be patched with Liguid Bod® Unating Sath and the second pate overlapping the nail head by a minimum of two inches (2°). Apply a 20 mil Liguid Bod® Under the geomembrane patch, when patching with geomembrane. Sealing around penetrations. Spray apply Liguid Bod® and V-20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotnete is to be appled directly to membrane. If a second cast is required, remove any standing water from the membrane before proceeding with the second application. Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and the protection system are not penetrated. After membrane has cared and checked for proper trickness and flaws, install protection neareral pursuant to manufacturer's instructions. Terofrom all lesting of insection to be protein protection course. SEALING AROUND PENETRATIONS Solo.10 OPTION 1 Clean all penetrations. Sand metal penetrations clean with emery cloth. For applications requiring VI-20, roll out geomembrane consub-grade, ary adouttie light at all inside corners. Apply a rule (20 mil) (20 mil) EOOTS within the seam overlap. Liquid Bod® metation. After the nail A stand fore to the sub-grade. Lay adouttie light at all matic corners. Ap	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, damage. 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Patch voids left by sampling with Detailing Fabric underlay beneath the existing membra inches overlap. Apply a thin tack coat of Liquid Boot® under the geomembrane patch. Tr mils minimum dry thickness, extending at least three inches (3") beyond geotextile patch. D. SMOKE TESTING FOR HOLES 1. Smoke test the membrane for holes and other breaches in accordance with the manufacture.
03	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4" (100 mm) thick. 1. A cask in place concrete suffaces, provide a light broom finish or smoother, free of any dirt, debris, loose material, release agents or curing compounds. If violas more than 14 hen began or light horizontal to vertical specifications. 2. A measory joints, cold joints, and form joints, provide a struck smooth surface. Prepare penetrations in accordance with manufacturer's specifications. 3. Provide 3.34 inch minimum cant of Liquid Boot[®], or other sublabie material as agrooved by manufacturer, at all horizontal to vertical transitions and other inside comes of 120 degrees on tess. Allow to cure overpid before the application fundad Boot[®]. 5. SURFACE PREPARTION- Provide 3.44 inch minimum dearasone out from surfaces to receive the gas vapor barrier. The application surface shall be prepared and provided to the applicator in accordance with manufacturer's specifications listed below: Remove dirt, debris, oil, grease, cement latance, or other foreign matter which will inpair or negatively affect the performance of the gas vapor barrier and venting system. Protect adjacent work areas and finish surfaces from damage or Liquid Boot[®] over spraying during product applications. NETALLATION OF GAS CULLETIONVENT SYSTEM Rol out Liquid Boot[®] GeoVerni Sieves or GeoVerni End Outlets where venting penetrates interior footing Ar points of interactions in social to a solid (non-perforated 2" (inches) damater PVC pipe at penetration through building foundation. Sealigrout piper agentations intrough to a solid (non-perforated 2" (inches) damater PVC pipe at penetration through building foundation. Sealigrout piper agentations intrough to cure evening before to a solid (non-perforated 2" (inches) damater PVC pipe at penetration through building foundations in sucordance with manufacturer in	 Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside comers. Apply a tim 20 mil Ligid Bod® spray applied within the seam overlap. Une trenches with geomembrane extending at least six inches (5°) onlo adjoining sub-grade if slab and footings are to be sprayed separately. Minimize the use of naits to secure the geomembrane to the dift subgrade. Remove all naits before spraying membrane, if possible. Naits that cannot be removed from the dift subgrade are to be patched with Liquid Bod® Unaited Bod® Unaited Sect® Detailing Fabric or Hardcast reinforcing tase overlapping the nail head by a minimum of two inches (2°). Apply a 20 mil Liquid Bod® under the geomembrane patch, when patching with geomembrane. Sealing around penetrations. Spray apply Liquid Bod® not VI-20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotnete is to be applied directly to membrane. If a second cast is required, remove any standing water from the membrane before proceeding with the second application. Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to issure that the membrane and the protection system are not ponetrated. After membrane has cured and checked for proper thickness and flaws, install protection meteral pursuant to manufacturer's instructions. Perform all lesting or inspection to be patche using and the mere scaleding flamb as acrued the base of penetration. Clean all penetrations. Sand metal penetrations clean with emery cloth. For applications requiring VI-20, roll out geomembrane on sub-grade, usergapping seams a minimum of six inches (6°). 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04	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4" (100 mm) thick. 1. At cast in place concrete surfaces, provide a light throom finish or smoother, free of any dirt, debris, losse material, release agents or curing compounds. The lives finance that in the index and 10 min hand work on the lines (11 minimum cant of Light Bod[®], or other suitable material as approved by manufacturer, at all information to vertical transitions and other inside concrete sites (12 degrees or thes). Allow to cur everight before the application of Light Bod[®]. 3. Provide a 34 inch minimum cant of Light Bod[®], or other suitable material as approved by manufacturer, at all information to vertical transitions and other inside concrete sites are grouted). SUFFACE PREPARATION Provide 24 inch minimum clearance out from surfaces to receive the gas vapor barrier. The application surfaces shall be prepared and provided to the application accordance with manufacturer's specifications is laced. Remove dirit, debris, ol. greases, cement latance, or other foreign matter which will impair or negatively affect the performance of the gas vapor barrier and verting system. Protect adjacent work areas and finish surfaces from damage or Liquid Bod[®] over spraying during product applications. INSTALLATION OF GAS COLLECTIONVENT SYSTEM Rel to Liquid Bod[®] Goovert para proved layout Provide praditioned Liquid Bod[®] Goovert para growed anglitic to astelly in a solid (non-performed 2" (nonher). File diameter PVC pipe at penetration through building foundation. Sealigned publications in accordance with manufacturer instructions. INSTALLATION OF CONCRETESHOTCRETEMASONEY Seal around penetrations in accordance with manufacturer instructions. Provide paditation induced one of 10 dec dby 10 feet (3m by 3m). Apply Liquid Bod[®] Tiene relation difference das and a lit is a sol	 Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside corners. Apply a thin 20 mi Liquid Bod[®] grav applied within the seam overlap. Line tranches with geomembrane extending at least axi inches (6°) onlo adjoining sub-grade if slab and foolings are to be spraved separately. Minimize the use of nails to seaure the geomembrane to the dri subgrade. Remove all nails before spraving membrane, if possible. Nails that cannot be removed from the dri subgrade are to be patched with Liquid Bod[®] Detailing Fabric or Hardcast reinforcing tape overlapping the nail head by a minimum of two inches (2°). Apply a 20 mi Liquid Bod[®] and the tigge admembrane patch. When patching with geomembrane. Gealing around penetrations. Spray apply Liquid Bod[®] onto VI-20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotcrete is to be applied directly to membrane. If a second coal is required, remove any standing water from the membrane before proceeding with the second application. Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insue that the membrane and the protector system are not penetrated. BeaLING AROUND PENETRATIONS SpeaLING AROUND PENETRATIONS SpeaLING AROUND PENETRATIONS Clean all pencitations. Sand motal penetrations clean with emery cloth. For applications requiring VI-20, roll out geomembrane on sub-grade, overlapping seams a minimum of a ix inches (6°). Cut the geomembrane around penetrations. Sand motal penetrations clean with emery cloth. For application requiring VI-20, roll out geomembrane and sub-grade, overlapping seams a minimum of a sinches (6°). Cut the geomembrane around penetrations. Sand motal penetrations clean with emery cloth. All the bas	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, damage. When thickness or integrity is in question the membrane should be tested in the propresempling defeats the intent of inspections. Inspectors should always use visual and tactile mebeing too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking or readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. Samples may be cut from the membrane and geomembrane sandwich to a maximum arwith a mil-reading caliper, per 500 sq. feet. Deduct the geomembrane thickness of 20 mils membrane. Mark the test area for repair. 2. Patch voids left by sampling with Detailing Fabric underlay beneath the existing membrane inches overlap. Apply a thin tack coat of Liquid Boot® under the geomembrane patch. The mils minimum dry thickness, extending at least three inches (3") beyond geotextile patch. D. SMOKE TESTING FOR HOLES 1. Smoke test the membrane for holes and other breaches in accordance with the manufacture.
03	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4" (100 mm) thick. 1. At cast in place concrete surfaces, provide a light broom finish or smoother, free of any dirt, debris, losse material, release agents or curing compounds. Fill works more than 14 inch deeg and 14 inch wide. 2. A masonry jorts, cold joints, and form joints, provide a struck smooth surface. Prepare penetrations in accordance with manufacturer's specifications. 3. Provide a 34 inch minimum cant of Liguid Boot⁰, or other suitable material as approved by manufacturer, at all horizontal to vertical transitions and other inside comers of 120 degrees or evenigh the fore the application of Liguid Boot⁰. 3. Struct PREPARATION 2. Provide 24 inch minimum clearance out from surfaces to neceive the gas vapor barrier. The application surface shall be prepared and provided to the application accordance with manufacturer's specifications isles do below. Remove dirt, debris, ol. grasse, cement listance, or other foreign matter which will impair or negatively affect the performance of the gas vapor barrier at verticity system. Provide 24 inch minimum clearance out from surfaces from damage or Liguid Boot⁶ over spraying during product applications. INTALLATION OF GAS COLLECTIONVENT SYSTEM Rel to Liguid Boot⁶ Geovert per approved layout. Provide pradiational Liguid Boot⁶ cover the struct as addition and and verticity applications. Fold flags of growther in abordance to struct in the boot on produce ratering late protection in a Logo-like fastron. Fold flags of growther in structure is specification? Al ports of Intersections. Out away geotentile to produce ratering late frags. Interlock socces dimple board in covered completely. Socure geotentile folds with Liguid Boot⁶. Fiber Reinforced Tags that the geotentile is completely impermeable to sard fill. Use Liguid Boo	 Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside comers. Apply a thin 20 mi Liquid Boot⁶ gray applied within the seam overlap. Line trenches with geomembrane extending at least six inches (6°) onlo adjoining sub-grade if sible and foofings are to be parked separately. Minimize the use of nails to secure the geomembrane to the dirt subgrade. Remove all nails before spraying membrane, if possible. Nails that cannot be removed from the dirt subgrade are to be patched with Liquid Boot⁶ Dotaling Fabric or Hardcast reinforcing tape overlapping the nail head by a minimum of two inches (2°). Apply a 20 mi Liquid Boot⁶ under the geomembrane patch, when patching with geomembrane. Seeling around penetrations. Spray apply Liquid Boot⁶ anto V-20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotcrete is to be applied directly to membrane. If a second coal is required, remove any standing water from the membrane before proceeding with the second application. Do not penetrate membrane. Keeo membrane and the protection system and panetrated. After membrane has cured and checked for proper thickness and flaws, install protection course. 3.66 SEALING AROUND PENETRATIONS 3.66:10 OPTION 1 A Clean all penetrations. Send melal penetrations clean with emery doln. For applications requiring V-20, roll out geomembrane on sub-grade, overlapping seams a minimum of six inches (6°). Cut the geomembrane around penetration as on the Lips fat on the sub-grade. Lips georate lipst at all inside comes. Apply a thin (20 mil) LCOUD BOOT® within the seam overlap, them methane as approved by manufacture. Extend the membrane at a gain duid, uside addinal, and the sea of penetration mating a suproved by manufacture. Extend the membrane at a lipst at lipst doce oneither penetration and the bease of the s	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, damage. When thickness or integrity is in question the membrane should be tested in the properson sampling defeats the intent of inspections. Inspectors should always use visual and tactlie membeing too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking o readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. Samples may be cut from the membrane and geomembrane sandwich to a maximum arwith a mil-reading caliper, per 500 sq. feet. Deduct the geomembrane thickness of 20 mils membrane. 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Provide 24 inch minimum charance out from surfaces to neceive the gas vapor barrier. The application surface shall be prepared and provided to the episitator in accordance with manufacturer's specifications listed below. Remove diri, debis, ol. grease, centent latance, or other foreign matter which will impair or negatively affect the performance of the gas vapor barrier an wringh system. Protect adjacent work areas and finish surfaces from damage or Liquid Boot[®] over spraying during product applications. INSTALLATION OF GAS COLLECTONVENT SYSTEM Roll out Liquid Boot[®] GeoVent per approved layout Provide GeoVent per approved layout Provide geoVent Dev Compatibility product application footing At points of intrasetions. Cure any agadestife to produce notangular flaps. Interlock exposed dimpte board in a Lago-He fashion. Fold flaps of geotesting a nature sto that the dimple board is covered completely. Secure g	 Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 6 inches. Lay geomembrane tight at all inside comers. Apply a thin 20 ml Liquid BodP serve applied within the seam overlap. Line trenches with geomembrane extending at least axi inches (6°) onlo adjoining sub-grade if siba and foofings are to be sprayed expandely. Minimize the use of nais to secure the geomembrane to the dirt subgrade. Remove all nais before spraying membrane, if possible. Nais that cannot be removed from the dirt subgrade are to be patched with Liquid BodP Detaining Fahric on Hardcast reinforcing tape overlapping the nail head by a minimum of two inches (2°). Apply a 20 ml Liquid BodP under the geomembrane patch, when patching with geomembrane. Seeling around penetrations. Spray apply Liquid BodP onto VI-20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotcrele is to be applied directly to membrane. If a second coal is required, remove any standing water from the membrane before proceeding with the second application. Do not penetratine methrane and the prodection system are not penetrated. After membrane has cured and checked for proper thickness and faxe, install protection naterial pursuant to manufacturer's instructions. Perform all testing or inspection to be performed prot to placing protection curse. SeeLING AROUND PENETRATIONS Gelin OPTION 1 Clean all penetrations. Sand metal ponetrations clean with emery doln. For applications requiring Vi-20, roll up geomembrane on sub-grade, overlapping seams a minimum of six inches (6°). Cut the geomembrane seam of preteriation material pursuant to manufacturer's instructions. All the base of penetration material and instrume seaming and motes applications requiring Vi-20, roll up geometrations existing of the samuel penetrations on the clean penetration. Seav apply Liquid	 3.07 FIELD QUALITY CONTROL A. The membrane must be cured at least overnight before inspecting for dry-thickness, holes, i damage. When thickness or integrity is in question the membrane should be tested in the proper sampling defeats the intent of inspections. Inspectors should always use visual and tactile mere being too thin to the touch should be measured with the gauges to determine the exact thick measurements with those of the gauges, fingers become very accurate tools. B. ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES 1. Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking o readings. Mark the test area for repair, if necessary. 2. If necessary, test areas are to be patched over with Liquid Boot® to a 60 mils minimum or beyond the test perimeter. C. ON DIRT AND OTHER SOFT SUBSTRATES 1. Samples may be cut from the membrane and geomembrane sandwich to a maximum arm with a mil-reading caliper, per 500 sq. feet. Deduct the geomembrane thickness of 20 mils membrane. Mark the test area for repair. 2. Patch voids let by sampling with Detailing Fabric underlay beneath the existing membrane inches overlap. Apply a thin tack coat of Liquid Boot® under the geomembrane patch. The mils minimum dry thickness, extending at least three inches (3") beyond geotextile patch. D. SMOKE TESTING FOR HOLES 1. Smoke test the membrane for holes and other breaches in accordance with the manufacture
03	 (150 mm) thick when placed on a working mud slab. Reinforced concrete slab(s) on compacted grade shall be a minimum of 4" (100 mm) thick. 1. At cast in place concrete surfaces, provide a light broom finish or smooths rifes of any dirt, debris, losse material, release agents or curing compounds. It will chind head and 11 finish wilds. 2. At masony joints, cold joints, and form joints, provide a struck smooth surface. Prepare genetations in accordance with manufacturer's genetications. 3. Provide a 344 inch minimum cant of Liguid Boot[®], or other suitable material as approved by manufacturer, at all horizontal to vertical transitions and other insice corner of 120 degrees or this. Allow to cure veringith telefore the application of Liguid Boot[®]. 3. Encode a 34 inch minimum chant of Liguid Boot[®], or other foreign matter which with mon-strink grout. Install Hardcast reinforcing tape overall codd joints, cracks and flow is and cracks are grouted. 3. Stripped 2 inch minimum chant of from surfaces to reactive the gas vapor barrier. The application in accordance with manufacturer's specifications listed below: 4. Renove dir, debris, oil, grease, coment latiance, or other foreign matter which will impair or negatively affect the performance of the gas vapor barrier and ventring system. 4. Provide relational Liguid Boot[®] Goovent per approved layout. 4. Provide relationated Liguid Boot[®] Goovent Size or Goovent End Outlets where ventring panetales interior fooling. 4. Aponts of intersections. Litters of the ask of cracks and flags. Interior strupped and truck and a lagge-life fashion. Fod flags of goother is asked from-performed 2" (nohes) dameter PVC pipe at penetration through building foundation. Sealgrout pipe panetales interior fooling. 4. Derive a strupped and provide system. 4. Derive a strupped and provide system. 4. Derive a strupped any dand panetation in accordance with manufacturer instr	 Roll out VI-20 geomembrane on sub-grade and overlap seams a minimum of 5 inches. Lay geomembrane sight at all inside comers. Apply a thin 20 mil Ligid Boot[®] spary applied with the seam overlap. Line tranches with geomembrane extending at least six inches (5°) onlo actioning sub-grade I fable and isolaring are to be synaple expandely. Minimize the use of nails to secure the geomembrane to the dirt sub-grade. Remove all nails before spraying membrane, if possible. Nails that cannot be removed from the dirt sub-grade are to be prayled geomethrane patch, when patching with geomembrane spray location of the second application. Spray spoy: Liqid Boot[®] torot VL20 geomembrane to a 60 mil minimum dry thickness. Increase thickness to 100 dry mills if shotcrele is to be applied directly to membrane. If a second cost is required, remove any standing water from the membrane before proceeding with the second application. Do not panetate membrane. Keep membrane free of dirt, debria and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and there to patched the patched or proper thickness and flaws, install protection meterial pursuant to manufacturer's instructions. Perform all tasting or imspection to be patched protection course. SeaLING AROUND PENETRATIONS Clean all penetrations. Sand motel penetrations clean with emery cloth. For explicators requiring VI20, ol out geomembrane on sub-grade. Segra-gapty Liquid Boot[®] to summating an approximation and up the penetration. Perform all sensing or imspection insults ant inform or the index standard beast of penetration. Clean all penetrations sch at tigs flate on the sub-grade. Lay gedotexilic tignt at all inside corters. Ap	 3.07 FIELD QUALITY CONTROL A. 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LIQUID BOOT PLUS MEMBRANE SPECIFICATIONS

VI-20 geomembrane barrier physical prope	arties:	
PROPERTIES	TEST METHOD	VALUE
Thickness, nominal	ASTM D5199	0.51 mm
Weight	ASTM D5261	498 g/m ²
Tensile Strength	ASTM E154	258 N/cm (58 lb/in)
Methane Permeability	ASTM D 1434	< 5 x 10-10 m2/d•atm
Radon Diffusion Coefficient		< 0.25 x 10-12 m2/s

no further liability of any kind including liability ment or otherwise.

factured by Colloid Environmental Technologies 7) 851-1800; Fax: (847) 851-1899; Web-site:

on square meters) of gas vapor barrier, with at

d polyethylene to provide strength as well as conjunction with Liquid Boot® will inhibit volatile

ified asphaltic emulsion. Water borne and spray se as some cities and engineers may require a es with greater viscosity and is trowel applied.

ALUE	
ess than 1% weight change	
ess than 1% weight change,	
ess than 1% tensile strength change	
Zero permeability to Radon (222Rn)	
Passed*	
2.74 x 10-14 m ² /sec	
3.04 x 10-14 m ² /sec	
Passed	
).24 perms	
).10 grains/h-ft ²	
ALUE	
Passed. CCR Bioassay—Flathead Minnow	

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shadow shrinkage, and any other membrane per manner as described below. However, overeasurement to guide them. Areas suspected of kness. With practice and by comparing tactile

one reading every 500 square feet. Record the dry thickness, extending a minimum of 1 inch

rea of 2 square inches. Measure the thickness s to determine the thickness of LIQUID BOOT® prane with HDPE side up and a minimum of 2 hen spray or trowel-apply Liquid Boot® to a 60

er's written instructions.

Potable Water Containment	ANSI/NSF 61	NSF Certified for tanks >300,000 gal**
Hydrostatic Head Resistance	ASTM D751	Tested to 138 feet or 60 p.s.i
GENERAL INFORMATION	TEST METHOD	VALUE
Freeze-Thaw Resistance (100 Cycles)	ASTM A742	Meets criteria. No spalling or disbondment
Accelerated Weathering & Ultraviolet Exposure	ASTM D822	No adverse effect after 500 hours
Elongation	ASTM D412	1,332% - Ø reinforcement, 90% recovery
Tensile Strength	ASTM D412	58 p.s.i. without reinforcement
Tensile Bond Strength to Concrete	ASTM D413	2,707 lbs/ft ² uplift force

*per City of Los Angeles approval for 100-mil Liquid Boot® gas vapor barrier. **per NSF approval for 80-mil Liquid Boot® potable water containment membrane

- LIQUID BOOT® Agency Approvals: 1. City of Los Angeles Research Report # 24860-Approved for "Liquid Boot® Membrane for Below-Grade Waterproofing and Gas Barrier" United States Navy-Approved for "Liquid Boot® for Use World Wide to Waterproof Earth-Covered Steel Ammunition Storage" 3. NSF International-NSF/61 approved for "Potable Water Tank Liner"
- 4. Canadian Construction Materials Board-Approved for "Waterproofing and Damp Proofing" 5. County of Los Angeles Department of public works-Approved for "Liquid Boot® Application as a Methane Gas Barrier"

ACCESSORY GAS VAPOR BARRIER PRODUCTS: All accessory gas vapor barrier materials shall be provided by the manufacturer or shall have manufacturer's written approval for substitution.

- 1. GeoVent low profile vapor extraction system. Liquid Boot® GeoVent end outlet.
- Liquid Boot® GeoVent interior Footing Sleeves. iii. Liquid Boot® GeoVent Fabric Reinforced Tape.
- Liquid Boot® Detailing Fabric ethylene vinyl alcohol (EVOH) and polypropylene composite membrane.
- Optional vertical applications, Liquid Boot® BaseFabric T-40 or T-60 thermally bonded nonwoven polypropylene fabric UltraShield – polypropylene needle punched protection mat.
- Adhesive system for Liquid Boot® UltraShield and Liquid Boot® UltraDrain: Use Liquid Boot® UltraGrip. 6. Hardcast CRT 1602 Tape 3" wide – covering cold joints, cracks form tie holes, etc.

PART 3 - EXECUTION 3.01 EXAMINATION

C.

E.

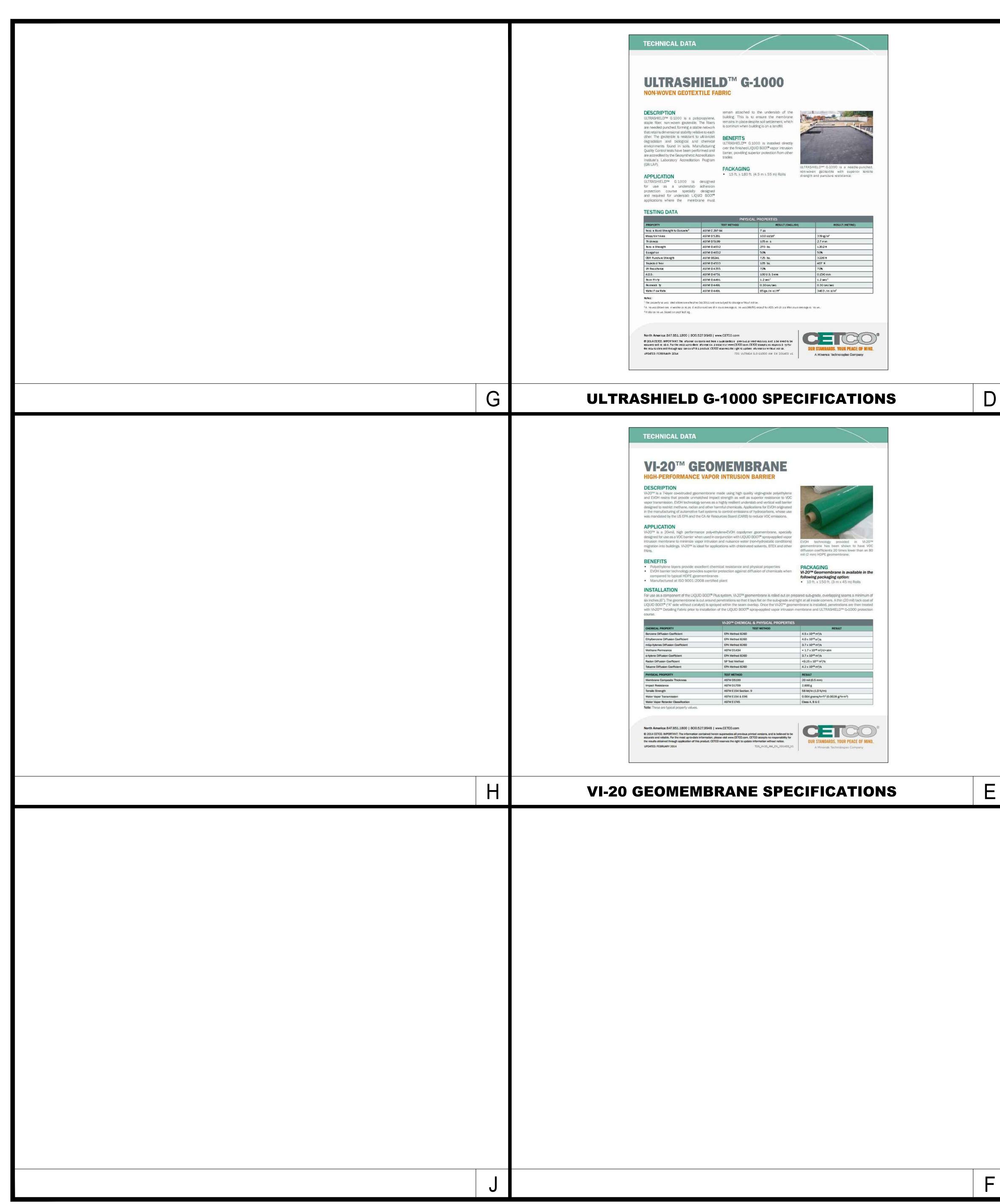
- A. The installer, with the Owner's Independent Inspector present, shall examine conditions of substrates and other conditions under which this section work is to be performed and notify the contractor, in writing, of circumstances detrimental to the proper completion of the work. Do not proceed with work until unsatisfactory conditions are corrected and are acceptable for compliance with manufacturer requirements. General substrate conditions acceptable for the gas vapor barrier installation are listed below. For conditions not covered in this Section, contact the gas vapor barrier manufacturer for guidance.
- B. SOIL SUBSTRATES:
 - 1. Moisture condition and compact sub-grade to a minimum relative compaction of 90 percent or as specified by civil/geotechnical engineer with finished surface smooth, uniform, free of debris and standing water.
 - Stones or dirt clods greater than 1/4 inch to be removed. Aggregate sub-bases shall be rolled flat, free from any protruding sharp edges. Penetrations must be prepared in accordance with manufacturer's specifications. All form stakes that penetrate the membrane shall be 3. of rebar which shall be bent over and left in the slab.
 - 4. Trenches oversize are to be cut to accommodate gas vapor barrier membrane and protection course with perpendicular to sloped sides and maximum obtainable compaction. Finish grade and compact the adjoining grade.
 - Provide excavated walls vertical or sloped back, free of roots and protruding rocks. Soil sterilant applications should at the sterilant manufacturer's recommended rate.
- C. WOOD TIMBER SHORING: Wood lagging shoring should extend to the lowest level of the gas vapor membrane installation with any voids or cavities exterior of the lagging timbers filled with compacted soil or cementitious grout. Interior surface of lagging boards should be planar and tight together with gaps less than 1" (25 mm). Gaps in excess of 1" should be filled with cementitious grout, compacted soil, wood, extruded polystyrene (40 psi min.) Do not use plywood or other surface treatment over large lagging gaps that leave the cavity void.
- D. CUT ROCK FACE OR AUGER CAST CAISSON SHORING WALLS: Interior surface of cut rock and concrete auger pile retention walls should be planar without irregular surface conditions, voids, and sharp transitions that would leave a void space to the outside of the gas vapor barrier installation. Irregular rock, void pockets, cracks, sharp concave transitions should be completely filled or smoothed with cementitious grout, shotcrete, or other approved solid material
- MECHANICAL OR OTHER PENETRATIONS: Mechanical, structural, or architectural materials that will pass through the plane of the gas vapor membrane shall be properly installed and secured in their final position prior to installation of the Liquid Boot® Plus system.

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LIQUID BOOT® GVB, version 4.2 4

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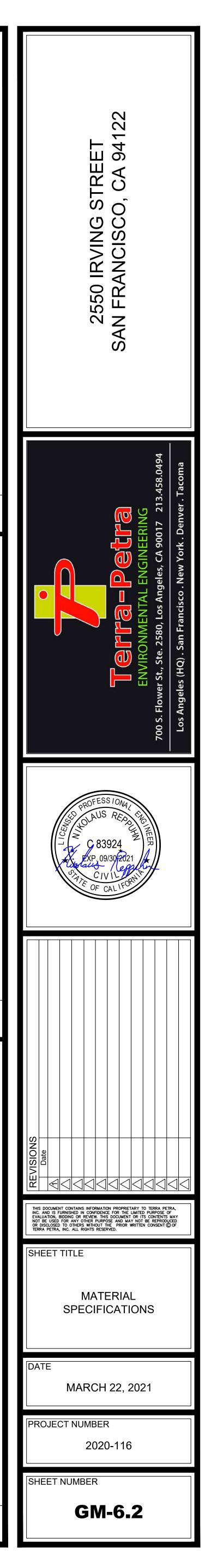




	GRA				7	
	SIEVE SIZE	_	3/4" GRAVEL	PASSING SIEVE 3/8" GRAVEL	_	
	1 -1 1/2" (37.5 mm)		100	-	-	
	1" (25.0 mm)		90 - 100	-	_	
	3/4" (19.0 mm)		55 - 85	100	-	
	3/8" (9.5 mm)		8 - 20 0 - 5	85 -100 0 - 30	-	
	No. 4 (4.75 mm) No. 8 (2.36 mm)		0 - 5	0 - 30	_	
	No. 200 (75um)		0 - 2	0 - 2	_	
	ASTM C 131 TEST GF	RADING	В	С		
	SAN	D SPECIFIC	ATIONS			
	SIEVE SIZE		PERCENTAGE F	PASSING SIEVE		
	3/8" (9.5 mm)		100			
	No. 4 (4.75 mm)		90 - 1	00		
	No. 8 (2.36 mm)		75 - 9			
	No. 16 (1.18 mm)		55 - 7			
	No. 30 (600um) No. 50 (300um)		30 - 5			
	No. 100 (150um)		2 - 1			
	No. 200 (75um)		0 - 5	5		
D	VaporSta• Non-co• 15", 24 $\pm \frac{1}{2}, \frac{3}{4}$ • Made co• Acts as• Helps r• When u• Pre-poil• Pre-poil• Pre-dri• Can be• Made i• A PaterVaporSta• Use that• Can be• C	ARE™ Description prosive, leak-resistant, 4", 30", 36" and 48" len and ± 1-¼" diameters of solid PVC a permanent plug in the meet ASTM E 1643-09 used with vapor retarder inted lled holes for 16D dup e easily drilled in field for in the USA and the USA	LLC plastic stake ngths s ne vapor retarder or's sealing mastic lex nails (15" no hole for additional holes would a typical stake vapor retarders VaporStake™ as you ake off above the finished surface orStake™ remains in the penetration ipment and procedure carrying @vaporstake.com	s		R
	GEOVENT™ consists of a three dimensional vent core that is wrapped in a non woven, needle punched filter fabric. GEOVENT™ End Outlets are available for use in corjunction with GEOVENT™ active/pas sive gas venting systems. APPLICATION GEOVENT™ is designed for use in the fol- lowing application: • An active or passive venting when used with CETCO vapor intrusion mitigation sys	BENEFITS • Installed directly on subgrade elimiterneting and potential interferer damage to existing underground util • Placed in closer proximity to the varuus on barrier allowing for more efiventing of any accumulated gas • Greater opening area per lineal foot and integral filter fabric allows for ventilation efficiency PACKAGING GEOVENT™ is available in the foliopackaging option: • 1 ft x 165 ft. (0.3 m x 50 m) Rolls • TEST METHOD • ASTM D 1821 • ASTM D 1821 • ASTM D 1821 • ASTM D 4751 • ASTM D 4751 • ASTM D 4632 • ASTM D 4431	Incel or these por in rective. of pipe higher Dowing GEOVENT™ allows for ease drectly on the subgrade. end for costly and labor intensit Dowing GEOVENT™ allows for ease drectly on the subgrade. end for costly and labor intensit Dowing GEOVENT™ allows for ease drectly on the subgrade. end for costly and labor intensit Dowing GEOVENT™ allows for ease drectly on the subgrade. end for costly and labor intensit Dowing GEOVENT™ allows for ease drectly on the subgrade. end for costly and labor intensit Dowing RESULT \$500 10.000 psf(400 10 in (2.54 30 gpm/ft width (31) TO US Siewe (0.1) 100 lbs. (0.4) 250 lbs. (1.1) 140 gpm/ft² (5.70)	liminating the need ve trenching.		
_	CEOVENT O			•		^

GEOVENT SPECIFICATIONS

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Appendix E

DTSC Responsiveness Summary







CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY Department of Toxic Substances Control

Responsiveness Summary

2550 Irving Street, San Francisco, CA 94122

September 2021

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Attachments

- 1. DTSC Community Update and Public Notice
- 2. Comment Letters

1.0 INTRODUCTION

This Responsiveness Summary has been prepared by the California Department of Toxic Substances Control (DTSC) and responds to all public comments received during the 33-day public comment period for the draft Response Plan for 2550 Irving Street, San Francisco, CA 94122 (Site). This Responsiveness Summary will be incorporated as an appendix to the final Response Plan. The final Response Plan will reflect any changes which DTSC determines are appropriate in response to public comments.

2.0 BACKGROUND

The 0.44-acre Site is located in the Sunset neighborhood of San Francisco and housed several businesses from 1895 to 1946, including a drugstore, two gas stations, and a dry cleaner. From 1946 to 1966, the property housed two gas stations. In 1966, the property was used as a mortuary and funeral chapel. The funeral business operated until 1985, when the building was modified for its current use as a bank. The property has been owned by The Police Credit Union since 1987. Environmental investigations conducted in 2019 and 2020 found tetrachloroethylene (PCE) above environmental screening levels in soil vapor (spaces between soil particles) at the Site, at the adjacent parking lot, and along Irving Street. PCE was not detected above screening levels in soil or groundwater on-site. Sampling results indicate that the indoor air of The Police Credit Union is safe for workers and customers.

The Tenderloin Neighborhood Development Corporation (TNDC) is proposing to build an affordable housing complex on the Site. Data collected during site investigations support that the Site is suitable for commercial/industrial use, however, additional actions are needed to protect the health of future residents if the Site is redeveloped as proposed.

PCE contamination identified in soil vapor to the north of 2550 Irving Street and to the south of 2550 Irving Street are being addressed by The Police Credit Union and the owners of the former Albrite Cleaners property, respectively, both operating under DTSC oversight.

3.0 DRAFT RESPONSE PLAN

TNDC is responsible for addressing on-Site contamination to support future property redevelopment. TNDC has prepared a draft Response Plan that evaluates engineering controls and recommends a preferred method to address on-Site contamination. The proposed remedy includes:

- Incorporating a vapor intrusion mitigation system under the foundation of the future Site building. This system consists of an engineered barrier and piping that allows contaminants in soil vapor to be safely vented into the atmosphere above the building where they will naturally disperse.
- Installing vapor barriers along underground utility corridors and sealing utility piping to prevent vapors from migrating onto or off the Site.
- Post-construction and prior to building occupancy, collecting indoor air and subslab (beneath building foundation) soil vapor samples from the new TNDC building to confirm the vapor intrusion mitigation system is operating as designed.
- Recording a land use covenant to allow residential use of the property with a vapor intrusion mitigation system.
- Monitoring indoor air and sub-slab (beneath building foundation) soil vapor and maintaining the system to ensure it remains effective.

The proposed project is exempt from the California Environmental Quality Act (CEQA) under California Senate Bill 35 (SB 35). SB 35 is a statute streamlining housing construction in California counties and cities that fail to build enough housing to meet state mandated housing construction requirements. DTSC will prepare and file a Notice of Exemption with the California State Clearinghouse after project approval.

By virtue of the Site's location and historical uses, the project is required to comply with San Francisco Health Code Article 22A, known as the Maher Ordinance. The Maher Ordinance defines a process for characterization and mitigation of soil and groundwater contamination, for the protection of public health and safety during and after Site redevelopment. The City of San Francisco has deferred the oversight of mitigation measures for the contaminants onsite to the DTSC. Historical investigations and DTSC oversight related to historical Site use would likely satisfy the Maher requirements and further testing and mitigation beyond the DTSC requirements discussed in the Response Plan is unlikely to be required by the SFDPH. While the Site is exempt from San Francisco Health Code Article 22B, the San Francisco Dust Ordinance, due to parcel size being less than one acre, as a conservative measure the Tenderloin Neighborhood Development Corporation (TNDC) will prepare a Site Management Plan which will include dust control and monitoring measures during construction activities.

4.0 PUBLIC REVIEW PROCESS

The following summarizes the public review process for the draft Response Plan.

Public Comment Period: DTSC held a comment period from July 12 to August 13, 2021.

Public Comment Period Notification: On July 12, 2021, DTSC published a public notice in English in the San Francisco Chronicle and in Chinese in the Sing Tao Daily. These public notices announced the start of the public comment period and solicited comments on the draft Response Plan. Copies of the public notices are included in Attachment 2.

Community Update: On July 8, 2021, DTSC distributed a Community Update in English and Chinese via U.S. Mail to 2,394 addresses which included residences and businesses located within an approximately 0.25-radius of the Site; key representatives from the County and City of San Francisco; local civic/community organizations; and DTSC's mandatory mailing list. Additionally, notification was sent by DTSC to a total of 158 email addresses and by TNDC to a total of 395 email addresses. Copies of the Community Update are provided in Attachment 2.

Public Meeting: On July 22, 2021, DTSC held a virtual public meeting to provide information on the draft Response Plan, answer questions, and receive public comments. All questions were addressed during the public meeting and are included in Section 5.

Information Repositories: The draft Response Plan was made available at the following physical and online locations:

- DTSC Berkeley Office, located at 700 Heinz Avenue, Berkeley, CA 94710. Call (510) 540-2122 to make an appointment.
- To review the draft Response Plan and related documents online, please visit: <u>https://www.envirostor.dtsc.ca.gov/public/community_involvement/4489225089/D</u> <u>RAFT%20Response%20plan_051121.pdf</u>
- For air monitoring results and additional technical documents online, please visit: <u>https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60003000</u> (select from the drop-down menu)

The following documents were made available to the public during the 33-day public comment period:

1. DTSC Public Notice (English and Chinese), Public Comment Period for 2550 Irving Street, San Francisco, Draft Response Plan Available for Review, Dated July 12, 2021

- DTSC Community Update (English and Chinese), Public Comment Period for 2550 Irving Street, Draft Response Plan Available for Review, Dated July 12, 2021
- 3. Draft Response Plan, 2550 Irving Street Affordable Housing Project, Dated May 11, 2021

5.0 COMMENTS AND RESPONSES

The following summarizes all written and oral comments received during the public comment period. Copies of comment letters provided to DTSC are included as Attachment 3. Similar written comments were received on 13 different topics. When very similar written comments were received on the same topic, we listed one comment and have noted the number of additional comments received expressing the same issue in similar language. When comments were received on the same topic expressing different concerns or observations, those comments were listed in their entirety under the topic. The comments are presented together by topic with a single response. Other written comments are addressed individually in number "14. Other".

Following the responses to written comments, we have included the oral comments received during the public meeting on July 22, 2021 and provided responses to those comments.

Response Plan – Written Comments Received During the Public Comment Period

1. Topic: Support for Project

Comment 1.1 I live right around the corner from the proposed 2550 Irving St. project. I have been receiving a steady stream of emails from the Mid-Sunset [Neighborhood] Association which adamantly opposes the 2550 Irving St. project. I have been to their meetings where they have laid out their strategies on how to defeat this project. One of those strategies is to use the toxic history of this site as a way of blocking this project. I have reviewed the environmental report and I believe that this project can be built safely based on the TNDC plan.

Response to Support for Project:

Thank you for your feedback. We have shared this information with TNDC as well.

2. Topic: Concerns Regarding Off-Site Contamination

Comment 2.1 It is a bad idea that TNDC gets to protect the residence in 2550 Irving but the rest of the neighborhood is not. That is not good for community relations.

6 other commenters expressed a comment similar to Comment 2.1

Comment 2.2 As I read in your newsletter, it seems that you are taking steps to protect future residents of the proposed affordable housing. However, it does not look like there is anything being done to protect the residents to the north of the proposed project. Because of the age of the homes of those

residents, they just have rat-proofing between them and the soil below. The Police Credit Union/TNDC ought to be required to do more to protect those neighbors. Please let me know if I have understood your report correctly.

Comment 2.3 I am extremely concerned about the dangerous PCE gas plumes below the 2500 Irving block and under the houses to the north and south of that block. I am also outraged that TNDC's response plan focuses only on protecting the 2550 Irving future residents from the PCE gas but does nothing to protect the surrounding neighborhood.

Comment 2.4 Per the July 2021 "Community Update" newsletter we received in the mail, TNDC's "on-site" response plan is to place a vapor mitigation system as a barrier over the new foundation of the building to protect the future residents from the PCE found in soil vapor at the Site from entering the indoor air (similar to what was "acceptable" for the workers and customers of The Police Credit Union). But, what about the others in this neighborhood (esp. those families with young children) who also risk exposure to the PCE when they walk by that Site?

My late father passed away in 1987 of lung cancer. I'm wondering now if all of those daily walks to 25th & Irving Supermarket over time slowly caught up with him as a result of walking past the subject Site.

Comment 2.5 I am writing you regarding the subject. I live at 27th Avenue, which is just a few houses away from the proposed development at 2550 Irving Street, TNDC's affordable housing project. I understand that AllWest Environmental has performed soil sampling and toxicology testing at the site of the proposed development, and the toxicology report has indicated the detection of Tetrachloroethene (PCE) vapor present in the soil, which is known to be carcinogenic. I also understand that DTSC has provided oversight in TNDC's design of a Vapor Intrusion Mitigation System to protect the new residents of the proposed housing development.

Having since moved in to the house at 27th Avenue in 2015, my wife has been diagnosed with cancer in 2019, at the age of 39. Given the detection of PCE at the site of the proposed development at 2550 Irving Street, what further testing procedures are required to further identify the extent of the PCE contamination in the area immediately surrounding the proposed development at 2550 Irving Street? What are the next steps to have further testing done at the surrounding homes, including our own at 1269 27th Avenue? What assurance do we have that we are not exposed to harmful PCE contamination that is now known to be present underground?

Response:

DTSC is providing oversight for three separate projects associated with the PCE contamination at 2550 Irving and in the immediate neighborhood. We are committed to ensuring the short- and long-term protection of public health as it relates to this contamination.

While it may seem like TNDC's proposed Response Plan is too narrow in scope, this is a result of environmental regulations that DTSC must follow and the established agreements with the various parties responsible for addressing the contamination. DTSC has three separate voluntary agreements in place to address on-Site PCE contamination found at 2550 Irving and off-Site PCE contamination found to the north and south of 2550 Irving.

TNDC, as the developer of future housing at the Site, is responsible for appropriately addressing on-Site contamination under the California Land Reuse and Revitalization Act (CLRRA). This framework encourages the revitalization of contaminated properties across California by providing liability protection to innocent and prospective landowners. Under CLRRA, TNDC is responsible for conducting a Site assessment and developing a response action, which allows for safe redevelopment of the property under the proposed future land use. In this case, TNDC has proposed using a vapor intrusion mitigation system, which consists of a vapor barrier and piping that vents any PCE contamination above the roofline of the building so it cannot enter the indoor air of the new development. This approach, which has been installed at hundreds of brownfields sites throughout the United States, at concentrations up to 1000 times higher than those measured at the Site (see Response to Topic 12 for example DTSC site), is a proven engineering method that prevents vapors in soil from entering into a building and provides long-term protection of future residents. DTSC has concurred that this approach will provide protection of future residents at the Site in perpetuity.

DTSC understands that area residents are concerned that the mitigation measures outlined in the Response Plan will only protect the health of future residents of the 2550 property and that measures will not be taken to investigate and mitigate and/or remediate off-Site impacts. Any off-Site soil vapor issues and associated mitigation/remediation measures will be addressed via Standard Voluntary Agreements (aka Voluntary Cleanup Agreements) that DTSC has in place with The Police Credit Union and the parties associated with the former Albrite Cleaners.

While PCE has been found in soil vapor (air in between soil particles) during various investigations north of Irving Street, it is observed at levels that do not pose a potential unacceptable health risk. Further, DTSC is requiring The Police Credit Union to monitor off-Site conditions semiannually. Monitoring events conducted in September 2020 and March 2021 are essentially stable which provides evidence that the PCE plume is neither increasing in concentration, nor

migrating at a pace that would cause potential unacceptable risks to residences further north of Irving Street.

The Police Credit Union is also voluntarily sampling indoor air, under DTSC oversight, at the six homes closest to the 2550 Irving property to ensure there are no indoor air impacts occurring from the PCE soil vapor plume. This work is not required by DTSC, based on the two semiannual soil vapor monitoring results, but The Police Credit Union has agreed to voluntarily and prudentially sample indoor air given the level of community interest and concern. Should our understanding of off-Site conditions change because of the new data collected, DTSC will require The Police Credit Union take additional actions to ensure the protection of the community. This could include additional soil vapor, indoor air sampling, and/or mitigation/remediation. We will continue to oversee the investigation and any potential remediation activities conducted by The Police Credit Union to ensure that conditions are protective for neighboring residents. Results will be reported to the community through email updates and fact sheet(s). The final reports will be posted on EnviroStor and available to the public.

We are also working with the parties associated with the former Albrite Cleaners to begin investigating the extent of impacts south of Irving Street, and will take the necessary steps to ensure the protection of those residences, where needed. Once we have analyzed the additional data from the former Albrite Cleaners investigations south of Irving Street, and Police Credit Union investigations north of Irving Street, DTSC will update the community on the results and any next steps.

While it may be confusing to have the same contamination, issue separated across three different projects and responsible parties, each is being overseen by the same DTSC project manager, Arthur Machado, who is well versed in the issues in the area and will coordinate the activities of the responsible parties. DTSC is committed to protecting the health of both future on-Site residents and the neighboring community.

We are truly sorry to hear of the instances of cancer you have shared with us. We hope there is some comfort in learning that the concentrations DTSC has observed in soil vapor in the neighborhood and estimated indoor air concentrations of PCE from vapor intrusion, if any, are unlikely to elicit adverse health effects, including Parkinson's disease or cancer. However, DTSC is charged with taking a precautionary approach in managing environmental contamination well before adverse health effects would be expected. That said, we cannot definitively establish nor rule out causality between environmental contamination and community health issues. DTSC does not have expertise in clinical toxicology. DTSC recommends that community members with health concerns consult their physician and/or the California Department of Public Health's Environmental Health Investigations Branch. DTSC will consider this information as we continue our oversight of The Police Credit Union site and evaluation of impacts to the nearby residences.

3. Topic: Comments Requesting Additional Investigation and Concerns About On-Site Contamination

Comment 3.1.1 The hot spots are likely coming from the sewer pipes. We need more investigation to determine the full extent of plumes and the danger.

9 other commenters expressed a comment similar to Comment 3.1.1

Comment 3.1.2 There are hot spots which they claimed that it is coming from the sewer pipes. They do not know for sure!!! A comprehensive findings should be taken into consideration, otherwise, the neighborhood might experience another "San Bruno Fire."

Comment 3.2 I am writing to express my family's deep concern over the PCEs at the 2550 location. The mitigation measures absolutely do not seem adequate. Myself and many neighbors have older homes with cracked foundations, potentially exposing us to the underground spreading toxic plume. Additionally, both myself and my sister are cancer survivors and in my case, the physician thought the cause could be environmental exposure. Please, do NOT allow the project to go forward as is. DTSC should do a full, thorough investigation with appropriate mitigation requirements. Thank you.

Comment 3.3 As a resident, with my husband, I am very concerned about the proposed project. There are still so many unknowns about the building site AND the surrounding neighborhood for toxins and contamination. We have many cracks in our ground level basement floor, as do most of our neighbors, and I worry about the possibility of the toxic plume entering our house.

Comment 3.4 In addition, please consider how construction of the foundation system needed to support a massive 7-story building in sandy soil conditions will affect the toxic contamination. I am concerned that this type of construction activity – that is, excavation, backfill, compaction, drilling for concrete piers, etc. – will disturb the toxic contamination in the soil and cause it to spread. How will that affect the construction workers, the residents of the existing homes around the site, and the general public?

Comment 3.5 Please take 3 steps to protect the health of neighbors in the area: 1. Develop a comprehensive plan to remove/contain the source of the PCE leaks at the site. 2. Do more sampling of the soil so the full margins of the spill can be determined. 3. Test the air in selected houses for PCI- on both sides of Irving Street- near 2550 Irving.

Your Community Update referenced above proposes the installation of a vapor intrusion mitigation system underneath the proposed building – a barrier to be installed as part of the building foundation to prevent PCE found in soil vapor at the site from entering the indoor air. Additionally, your flyer states the levels of PCE found at the site are suitable for commercial/industrial use. And further that action is needed to ensure the site is suitable for residential use.

Comment 3.6 I am writing as well as emailing my response to the DTSC during the public comment phase. After the meeting, which I attended, it was clear that your proposal to use an intrusion mitigation system will clearly fall short of our goal to eradicate the existence of all the identified toxins and contaminants in the ground in and around 2550 Irving Ave.

Mere mitigation of the condition is not in the best interests of the direct neighbors of 2550 Irving Ave. All homes in close proximity to 2550 should be monitored until a margin of clearance is determined. In the past few years, a disproportionate number of residents have contracted cancers and Parkinson's Disease. incidentally, I heard at the Zoom public meeting that toxins are released in an indiscriminate plume. Please consider that we live in a thick fog belt much of the year, which could trap toxic emissions and hover perniciously, not dissipating as might be expected.

We believe that the State of California should be concerned about the current residents' health with the same zeal evidenced for our future neighbors. Please consider this proposal to not only keep our new neighbors safe, but existing ones as well. We need more testing!!

Comment 3.7 I live at 27th Avenue, my property is located in the immediate vicinity of the proposed 2550 Irving St. TNDC project. It is my understanding that the site of the project is and has been seriously contaminated. It is also my understanding that TNDC has not proposed any believable plan to remedy such contamination.

Considering the scope of the project it is inevitable that much of the contamination will be disturbed and consequently spread into neighboring areas. I feel that your department should carry a more thorough research and investigation of the full scope of the possible consequences of such project.

Thanks for your understanding and support.

Response:

DTSC understands that area residents are concerned about possible data gaps in our understanding of the extent of on-Site contamination and that TNDC's construction may move on-Site contamination from the Site to off-Site locations.

No PCE source area has been identified on Site. Site groundwater contains low concentrations of PCE (concentrations that are lower than California drinking water standards for PCE). Sixty-six soil samples have been collected from the Site and tested for PCE: 65 had no detectible PCE, and one sample had PCE, but at concentrations below human health screening levels. Site soil gas contains up to 1,500 ug/m3 of PCE, which is well below soil gas levels that would be typical near a liquid PCE source in the subsurface; Site soil gas appears to contain dilute PCE concentrations that have migrated from a more distant source. The former Albright Cleaners site, located south of Irving Street, had historical use of PCE, and sample results from Albright Cleaners are relatively high, suggesting that may be a PCE source area. DTSC is working with the responsible party for former Albright Cleaners to investigate this area. In summary, no on-Site source area of PCE has been identified. On-Site soil gas concentrations of PCE are low, but warrant mitigation to protect future on-site residents, and on-Site soil and groundwater concentrations of PCE do not pose unacceptable risk.

Project development at the Site will therefore not disturb a PCE source area. Project development is expected to include a shallow layer of surface soil/surface fill (prior to placing the imported, clean gravel layer of the project's vapor intrusion mitigation system [VIMS]), shallow trenching for new underground building utilities, and excavation for elevator pits. There may be some shallow excavations (to a similar depth range as for underground utilities) for building deep foundation elements (if any). None of these shallow construction activities are expected to move the dilute PCE in groundwater (which is encountered at depths of 70 to 90 feet below ground surface). Site soil does not have significant PCE, so construction disturbance of PCE in Site soil is not an issue. Site soil gas containing PCE is not expected to be impacted by the construction activities listed above (weather-induced changes in barometric pressure likely move Site soil gas more significantly than will construction activities). A Site Management Plan, which will include a dust control plan, will be prepared consistent with San Francisco's Maher Ordinance, to protect the surrounding community from general construction dust, and any low-level contamination of Site soil.

Once the project is constructed, PCE concentrations in soil gas are not expected to grow more concentrated, nor to be "pushed" off-Site. The project will have a soil gas collection system that draws soil gas into the building's VIMS gravel layer and vents the soil gas containing PCE at the top of the new building. This movement of soil gas through the VIMS system is achieved through a

combination of wind turbines, and a combination of natural pressure and chemical gradients, including diffusion, soil gas/atmospheric pressure differences, and other factors.

The responsible parties for The Police Credit Unit and the former Albright Cleaners will continue to be responsible for monitoring PCE in soil gas in the off-Site areas of the neighborhood, under DTCS oversight under separate voluntary cleanup agreements.

While the presence of PCE in soil vapor maybe concerning, results to date support DTSC's determination there is no potential unacceptable health risk for nearby residents from PCE. Results from both semiannual monitoring events north of Irving Street have shown that the source area of the contaminant plume north of Irving Street is stable. A third semiannual soil vapor monitoring event will take place in September 2021 which will refine the characterization of the soil gas plume's extent and stability over the past year.

DTSC is working with the other Responsible Parties identified, The Police Credit Union and the former Albrite Cleaners, to collect additional soil vapor data both north and south of Irving Street. These investigations will evaluate whether the sewer system could be a potential pathway for soil vapor contamination migration in the neighborhood. The San Bruno fire comment referenced above was related to pressurized natural gas lines, which is unrelated to conditions at this Site. To clarify, we are investigating the spaces between soil particles which is referred to as soil vapor or soil gas. Soil gas is typically composed of atmospheric gases at essentially ambient pressure.

The Police Credit Union has voluntarily agreed to sample the indoor air of the six homes closest to the 2550 Irving Street property under DTSC oversight to confirm the safety of indoor air. This work is not required by DTSC, based on the two semiannual soil vapor monitoring results, but The Police Credit Union has agreed to sample indoor air given the level of community interest and concern. Once we have analyzed the additional data from these efforts, DTSC will update the community on the results and any next steps. Similarly, DTSC will notify the community when the parties of the former Albrite Cleaners begin investigation work to the south of Irving Street. The forthcoming Albrite Cleaners investigation will help further define the lateral and vertical extent of PCE contamination. We will also share the results of those investigations and any next steps with the community. Data from these investigations will be used to develop a cleanup plan, if needed, that addresses PCE contamination in the neighborhood. DTSC will send additional mailers for both The Police Credit Union and Albrite Cleaners projects to keep residents apprised of current conditions, and the steps being taken to address any significant PCE impacts.

Finally, the construction of the building at 2550 Irving Street has the potential to help reduce PCE contamination in soil vapor. By removing the existing on-Site building structures and pavement, PCE will have another pathway to safely move upwards into the outdoor air, where it naturally dissipates without posing a health risk. Even with foggy conditions, there is sufficient onshore wind to support this natural process. Following construction, the vapor intrusion mitigation system includes venting which will ensure that concentrations of PCE are unable to build-up beneath the building slab. Although not required by DTSC, nor San Francisco Building Code, nor San Francisco Health Code (SFHC) Article 22B, TNDC has voluntarily offered to prepare a Dust Control Plan that includes a perimeter air monitoring program that will be submitted to the San Francisco Department of Health and DTSC prior to starting construction. This Dust Control Plan will detail how TNDC will monitor air for airborne dust and volatile organic compounds during construction to ensure the protection of the surrounding community and onsite workers. This will include stringent, health protective action levels and, if these levels are exceeded, prescribed additional measures will be implemented to decrease concentrations to acceptable levels.

We empathize with you and thank you for sharing the health problems you and your family have experienced. We can understand how learning about contamination in the neighborhood could be concerning. It may be of some comfort to know that the concentrations DTSC has observed in soil vapor and estimated indoor air concentrations of PCE from vapor intrusion, if any, are unlikely to elicit adverse health effects, including Parkinson's disease or cancer. Results to date support DTSC's determination there is no unacceptable health risk for nearby residents. DTSC is charged with taking a precautionary approach in managing environmental contamination well before adverse health effects would be expected. That said, DTSC cannot definitively establish nor rule out causality between environmental contamination and community health issues. DTSC does not have expertise in clinical toxicology. DTSC recommends that community members with health concerns consult their physician and/or the California Department of Public Health's Environmental Health Investigations Branch. DTSC will consider this information as we continue our oversight of The Police Credit Union site and evaluation of impacts to the nearby residences. It may also be of some comfort to know that the contamination at the TNDC Site is minimal compared to other sites that we oversee. We have made this assessment based on Site soil and soil vapor sampling data and are confident that the proposed vapor mitigation system will protect Site future residents. We are also confident that existing PCE data indicates no unacceptable health risk, to the surrounding community, and will continue to evaluate PCE impacts outside of the proposed development area.

4. Topic: Concerns Regarding Adequacy of Response Plan

Comment 4.1.1 I am angry at the unfairness and selfishness of the developer TNDC. TNDC's poison clean-up plan only protects their new buildings without any funds or plans to protect the communities adjacent to the project, preventing the fragrance and dust from increasing in the construction process. Pollution has spread throughout the community, and cleanup will cause cancer. The DTSC for Parkinson's disease conducts more investigations to determine the scope of the poison spread and the extent of the harm.

21 other commenters expressed a comment similar to Comment 4.1.1

Comment 4.1.2 We are angry at the unfairness and selfishness of the developer TNDC. TNDC's toxic substance cleanup plan only protects its new buildings, and there are no funds or plans to protect communities adjacent to the project and prevent dust containing toxic substances from contaminating the entire community during the construction process, or to cleanup toxic substances such as PCE that will cause cancer and Parkinson's disease. We request DTSC to conduct further investigations to determine the direction, route, scope of the toxic substance spread and the level of their damage.

2 commenters expressed this comment

Comment 4.2.1 TNDC's response plan is inadequate and only protects the 2550 building and future residents. The response plan must include cleanup of the toxins that are already under the houses north of the 2550 site.

4 commenters expressed this comment

Comment 4.2.2 TNDC's response plan is totally inadequate to cleaning up the toxins.

6 other commenters expressed a comment similar to Comment 4.2.2

Comment 4.3 Your Response Plan addresses on-site contamination ONLY. You do not address, discuss, nor present any plans to remedy any such contamination in the surrounding buildings and houses in the immediate area. As mentioned above there have been diseases experienced by dwellers of the nearby houses.

I live within 1 2/3rds blocks of the 2550 Irving site, and urge you to locate and remedy contamination in the homes of my neighbors nearby the site- none of which has been mentioned by you to date.

Comment 4.4 There are two dangerous plumes of PCE gas below the 2500 Irving block and under the houses to the north and south of that block. The full extent of plumes is not fully known until more investigation is done. The

developer at 2550 Irving St. (TNDC) has submitted a response plan to DTSC that puts a vapor barrier over the new foundation of the building to protect the future residents from the gas which can slip through foundation cracks.

6 other commenters expressed a comment similar to Comment 4.4

Comment 4.5 The response plan does nothing to clean up the toxins and it leaves the neighborhood vulnerable to the contamination and health risks and protects only the future residents of 2550 Irving. This is totally unacceptable for the neighborhood. We want remediation (clean up) not mitigation (protecting the building from the contamination).

7 other commenters expressed a comment similar to Comment 4.5

Comment 4.6 It is unfair and unacceptable that TNDC's response plan only protects their building but does nothing to a) protect the neighborhood or b) remove the contamination or c) clean up the PCEs that we know cause cancer and Parkinson's disease. This is very concerning for my family and the neighborhood as this can severely jeopardize our health.

5 other commenters expressed a comment similar to Comment 4.5.1

Comment 4.7 I am outrage about the unfair plan TNDC put together, which only protects their building but does nothing to protect the neighborhood which has cracked foundation and PCE plumes can easily travel sideway to our houses.

3 commenters expressed this comment

Comment 4.8 I am extremely dismayed that the City and the Tenderloin Neighborhood Development Corp do not have a response plan to clean up the toxic contamination in the soil, but instead, only intend to install a vapor barrier under the new concrete foundation and slab. This plan only seeks to protect the residents of the new 2550 Irving Street building, but would do nothing to protect the residents of the surrounding properties – despite the strong possibility that the contamination extends beyond the footprint of 2550 Irving St. My understanding is that the neighborhood has been exposed to the toxic contamination for decades, and at least five people on the block have already contracted cancer.

Comment 4.9 The proposed mitigation and response plan seems inadequate, particularly since testing, both at 2550 and 2513, has not been completed. It also appears that TNDC and the Police Credit Union have not addressed concerns beyond the building site itself, especially with reports that the toxic plume is currently and will continue to drift northward towards my house.

The site purchase and the loan funding it should be delayed at the least until more is known and there is a better response plan. We appreciate that DTSC is reaching out to neighbors of the proposed project and we trust that you will do the right thing to protect us. Thank you for listening.

1 other commenter expressed a comment similar to Comment 4.9

Comment 4.10 I am very upset by the response plan submitted by TNDC, developer at 2550 Irving Street site. There are two dangerous plumes of PCE gas below the 2500 Irving block and under the houses to the north and south of that block. TNDC proposes to put a vapor barrier over the new foundation of the building with a selfish goal to protect their building only. They do not care about the life or death of the many residents in the neighborhood. (A significant number of the population here are senior or having long- term illness or chronic health condition). I request that TNDC MUST remove the contamination and clean up the PCEs which can be a potential cause of cancer. The current response plan is totally acceptable because it is inadequate to clean up the toxins.

Comment 4.11 There is a wonderful lady in my neighborhood. On occasion I see her walking her dog or riding her bicycle through Golden Gate Park. I've met her. She is my neighbor. She lives near 2550 Irving St. She has been diagnosed with cancer. Her name is Flo.

I was born in San Francisco in 1968 and have lived here most of my life. It's saddening that in the 21st century TNDC's response plan does nothing to clean up the PCEs that we know cause cancer and Parkinson's disease. That's not a good neighbor. TNDC's response plan is a totally inadequate response to cleaning up the toxins at 2550 Irving St.

Keeping in mind the already exorbitant proposed cost per unit at 2550 Irving St., the willingness of the developer to invest double for what the property is valued at and the developer's unwillingness to invest in cleanup of the property are inconsistent messages and make for terrible community relations.

Comment 4.12 I live on 26th Ave. for more than two decades with my husband and kids; many families with children live in this area. The current response plan by TNDC for the building on 2550 Irving St. is totally inadequate and unacceptable; it is only a patch-up job – of only putting a vapor barrier over the new foundation of the new building. When the site is being dug up, it seems extremely logical and better to potentially clean all the PCEs now than leaving future generations to deal with the consequences.

Comment 4.13 The remediation plan is not ACCEPTABLE and UNFAIR. It only protects the building and does not address the immediate neighborhood.

The plan also does not remove the contamination or clean up PCEs (which are known carcinogens).

What DTSC should consider:

- 1: Any remediation plan should address the concerns of neighbors.
- 2: Remove the contamination and clean up the PCEs
- 3: Explore using Soil Vapor Extraction (SVE) to clean up the contamination.

Until these concerns are addressed, the 2550 Irving project cannot go forward. Neighborhood residents could get very sick and die if exposed to these contaminants.

Please consider this in your next briefing.

3 commenters expressed a comment similar to Comment 4.13

Comment 4.14 I'm writing to express my displeasure with the Tenderloin Neighborhood Development Corporation (TNDC) response plan for dealing with the Perchloroethylene (PCE) contamination under the 2500 Irving block.

I live at 27th Ave, cross street Lincoln, down the block from the site of the PCE plume under Irving Street. We have lived in our house for 30 years (purchased 1991). I'm a professor of medicine at UCSF Parnassus campus.

As you are aware, PCEs are very toxic to humans. As I understand it, the PCE contamination at this site came from a dry cleaning establishment and potentially a gas station, located on the Irving block in the 1950s (and maybe earlier). The site now houses the SF Police Credit union, whose staff are affected by the PCE containing vapors that come up through the building. The Credit Union has closed one floor of the building because of the toxic vapors. This contamination issue has certainly contributed to the Credit Union's desire to sell the building to the TNDC.

The TNDC response plan to deal with the contamination includes putting a vapor barrier under the foundation of the new housing development proposed for the site. This is totally inadequate. This will only partially protect the residents of the building (since the PCE plume extends beyond the actual site of the building) and does nothing for neighbors around the building. There are much better remedies that will better protect the entire neighborhood, such as soil vapor extraction. A partial solution does not help anyone. If the TNDC wishes to develop this site, they must remediate the problem. Indeed, it would seem logical that remediation is the responsibility of both the SF Police Credit Union and the TNDC. It is simply unfair to the residents and the neighborhood for the Credit Union to abandon this site and the TNDC to not properly address the problem. **Comment 4.15** Thank you for providing a notice of availability of the draft response plan for the above site. I live in the vicinity of 2550 Irving Street and am submitting these comments on the draft response plan for this site.

I have several concerns about the proposed plan:

1. It does not propose any actual removal of PCE found in soil vapor at the site above acceptable levels for a residential use and fails to convincingly justify the alternative selected.

2. It does not take environmental justice considerations into account even though the site is proposed for families seeking affordable housing and will undoubtedly serve minority populations.

3. It does not discuss all proposed potential remedial options for the site.

4. It does not provide a serious proposal for how it will assure that engineered/institutional controls will be maintained and complied with for the life of the project.

Response Plan Choice Not Adequately Supported.

The proposed plan relies entirely on engineering and institutional controls. Why is no real consideration given to removal of PCE in soil vapor from the site? The stated justification of cost and possible recontamination of the site by offsite sources seems inadequate. While removal is more expensive, no suggestion is made that it is infeasible. The statement that offsite sources will possibly recontaminate the site is not explored in any detail. Further, the likelihood of recontamination seems contradicted by DTSC's own notice of public comment on the plan. DTSC's notice states that PCE levels immediately offsite on Irving Street are within acceptable levels for residential use and will be monitored by the Police Credit Union. This information suggests that a concern may be offsite migration from the site to Irving Street rather than the other way around. While elevated levels of PCE in soil vapor appear to be likely associated with the Albright Cleaners site on the other side of Irving Street, the DTSC notice states that DTSC will be providing oversight for the investigation of that site. Given the available information, no facts support the conclusion that offsite sources will likely recontaminate the site. The draft plan needs to provide more analysis of the feasibility of simply removing soil from the site that is causing the onsite – and possibly offsite - problem. A further justification needs to be provided as to why recontamination of the site is likely if site soil is removed.

Comment 4.16 You must be aware of the toxic ground at the proposed new human warehousing project. Please see that this project is halted until the neighborhood is free of toxic ground. Your proposal of cover it up is not acceptable to people who have been here a long time. I personally have been here for 50 years. We hope you will stand up for the right decision and completely remove the toxic properties that exist at 2550 Irving street.

Comment 4.17 I'm dissatisfied with the TNDC's response plan with respect to the contaminants located at the project site. The remediation plan inadequately addresses the toxins and the people affected by them. The developer should be forced to address the area surrounding the site and not just within the perimeter of their project - the should be part of the solution to creating a cleaner, safer place for residents to live. Sadly, they won't own the right way to do things - they need to be told by you! Please demand that the TNDC plan include a Soil Vapor Extraction.

Comment 4.18 I am 77 years old with poor health. I have lived in this address for thirty four years. I have seen the transformation of the neighborhood since then. Before, it was quiet and peaceful until it turned out to be the 3rd China Town of San Francisco.

With the initial findings that I have read... I am very angry and outraged. The toxic contamination is very dangerous to the health of the neighborhood. It has to be cleaned thoroughly, excavated and to be dried for a long time before any construction has to be done.

The remedy should not be "band-aid." It has to be done with the utmost care and diligence, considering the welfare and health of the community.

We will further appreciate any future development on this project so the community would fully understand the predicament they are facing in the near future.

We appreciate your efforts and continue the good work for the community. It is truly appreciated, thank you and I remain.

Comment 4.19 I respect the decision from the TNDC in constructing a apartment for low-income households. However, I heard about concerning development plans from the TNDC, especially in regards to the neighborhood's potential exposure to PCE during the construction process. I have heard that TNDC's poison clean-up plan only protects their new buildings and they don't have plans to protect the communities adjacent to the project. Exposure to PCE could cause life threatening disease, so I think more thorough investigation needs to be conducted to determine the scope of the poison spread and the extent of the harm. I just want to make my voice heard in regards to the potential toxic chemical, and I hope that a plan will be made to let people in the community be less worried.

Comment 4.20 I am writing to you in response to your "Community Update" letter, dated July 2021. I have lived in the Sunset for 40+ years and in that time, I have seen many, many changes to the neighborhood. Most I have viewed as positive but now, the proposed residential development at 2550 Irving Street I

find very disconcerting and worrisome. As per your letter, there is dangerous PCE gas below that entire block. The developer, TNDC has submitted a plan to put a vapor barrier over their residential development site only.

What? No Clean Up? Who will monitor and maintain the proposed system? And, how is this a positive change for our entire neighborhood?

In my humble opinion, covering up the problem is not a viable solution for our community. I have raised 2 children here and as adults, they still live and love the neighborhood. I am looking forward to their raising my grandchildren here as well and in light of the proposed TNDC inadequate response to their 2550 Irving St. development, I feel a strong need to write to you and share my feelings about the site toxins.

Shouldn't there be more investigation into the full extent of the gas plumes and their danger before going forward with the building plan? And who has the responsibility for clean up? The current owner of the site or TNDC? Shouldn't these issues be resolved before more legal complications and (possible) finger pointing ensues?

In this time of Covid pandemic and the primal knowledge and understanding that "we are all in this together" I feel very strongly that the proposal for cleanup should benefit the entire neighborhood for now and in future.

Please consider there should be no transfer of ownership from the current owners to the TNDC until there is a clear and unequivocal plan to clean up the site.

Thank you for your time and consideration. I appreciate it very much.

Comment 4.21 Thank you so much for your team's presentation on different ways to remove toxin for the community. Here are some of my thoughts: I am opposed to the cleanup method that TNDC proposed. The vapor barrier only protects the future residents of the building and does nothing to benefit the community. If they are what they claim a nonprofit organization that cares for basic human rights, their action should match their mission.

Comment 4.22 I request DTSC demand TNDC have the full plan to clean up the mess, not only for the project building, should for the surrounding community. Especially, during a few years construction period, the toxic dust will spread to the entire district. DTSC and TNDC have responsibility/obligation to protect public health safety. Hold on the project before have the full cover remedies.

Comment 4.23 I have been very involved in the issues surrounding the proposed building at 2550 Irving and am writing to address my concerns

regarding toxicity. The site has PCE's and TNDC proposed to clean up the site, but is neglecting to address contamination of the adjacent homes. This is inadequate and unacceptable. TNDC needs to be part of a bigger solution to address contamination of the neighborhood. We need a thorough examination of all aspects of this problem <u>before</u> the property sale goes through.

Thank you for your work and listening to my concerns, to the concerns of my neighbors. We seek a transparent investigation and a resolution that will leave our neighborhood safe for present and future residents.

Comment 4.24 I am extremely concerned that the TNDC response plan to clean up the PCE toxins is inadequate.

To move forward with the existing TNDC response plan would be irresponsible and with the knowledge we have, criminal.

Thank you for conducting this essential and responsible public response period. I look forward to hearing back from DTSC and for confirmation that DTSC will follow this essential request to do the right thing.

2 commenters expressed this comment

Comment 4.25 I have lived in the San Francisco Sunset district almost 30 years. I am greatly disappointed with the proposed project at 2550 Irving St. and the lack of investigation to protect the safety of the surrounding community. Specifically, the PCE toxicity of the project.

Comment 4.26 I have lived at Noriega since January 1993 -- 28.5 years. The proposed project at 2550 Irving St. is a complete abomination. But I want to focus on the toxicity of the project.

Comment 4.27 Similar to abatement of other toxic chemicals (e.g., lead paint or asbestos) that is required for other real estate projects (e.g., residential upgrades), doesn't TNDC have to FIRST remove 100% of the PCE prior to construction -OR- is TNDC not responsible for the cleanup? If not TNDC, then who is responsible for cleaning up contaminated sites, especially knowing that long-term exposure to PCE can lead to dangerous diseases like cancer? Can we be 100% certain that TNDC's plan will contain the PCE problem 30 years from now (i.e., is their plan 100% fail proof, factoring in the potential for seismic activity)?

So, my perception is that the draft response plan will NOT fix the problem (i.e., leave the PCE in the soil), protect the future residents of the new building with a vapor mitigation system, but the rest of the neighborhood is on their own. Is the

draft response plan the best plan to both safeguard the future residents and the neighborhood? What are the specific plans to safeguard the neighborhood?

Thank you Mr. Machado and the Department of Toxic Substances Control for giving us the opportunity to provide feedback. I look forward to a reply email addressing my concerns.

Comment 4.28 The Albrite Cleaners operated for 20 years until around 1950, but the perc is still there; if removal is not done then it may be decades before the perc dissipates on its own, if you will. Therefore, I wonder if it would make some sense to look at other technologies. One is to perhaps build a barrier around the perc source down to the groundwater table so that, if you will, the perc will be funneled through the project site. Or, do this in combination or alone using soil vapor extraction technologies? This could shorten decades of sampling and monitoring and possibly onsite and offsite remediation. Also, from my research I have found that bioventing has been used in these cases. Finally, I came across a case study which I have attached via email involving PersulfOx [available at https://regenesis.com/wp-content/uploads/2019/02/PersulfOx-Cabeno-Chicago-Dry-Cleaner-2020-01-21-02-DIGITAL-1.pdf], an activated persulfate, which was mixed in-situ with contaminated soils at an old dry cleaning facility at a Chicago suburb. Cabeno Environmental worked with RENENESIS (they have a couple of offices in CA) to do the clean up. They claimed that their technology was about 50% of the cost of other technologies....

In conclusion, I urge that other cleanup technologies such as the above be evaluated. The lowest cost clean up technology could very well be overall more cost effective in the long run and this might eliminate the potential need to develop an Offsite Response Plan, if you will, as apparently the developers will have to do. Also, I don't know if Path Forward's preference for Alternative #2 (VIMS) incorporated treatment/permit state fees as well.

Just for the record my family and I reside in the Parkside area about eight blocks from the project site.

Response:

DTSC is providing oversight for three separate projects to address both on- and off-Site contamination and ensure the long-term protection of future residents and the larger neighborhood. For on-Site contamination, TNDC has entered into a CLRRA agreement with responsibility for addressing on-Site contamination to support future redevelopment of the property, consistent with 2004 CLRRA legislation. For off-Site PCE contamination, The Police Credit Union remains responsible for addressing off-Site conditions north of Irving Street regardless of the sale of its property at 2550 Irving Street. DTSC is also in the process of entering into a voluntary agreement with the owners of the former Albrite

Cleaners property to address off-Site conditions both north and south of Irving Street. Arthur Machado is the DTSC project manager for all of these projects. Mr. Machado, along with the broader DTSC team, will coordinate the three projects to ensure an integrated approach to fully address both on- and off-Site PCE contamination.

On-Site conditions have been adequately defined to allow for TNDC to prepare their current draft Response Plan. Investigations found the levels of PCE in soil vapor on-Site are at or below state and federal concentrations that would indicate unacceptable health risks in a future residential scenario. The air inside the 2550 Irving Street building was also tested and was found to be below state and federal levels for unacceptable commercial occupancy health risks. This means that under its current use as a credit union, it is safe for credit union employees and members. The use of the building was not adjusted in response to the PCE levels in soil vapor; rather, it was due to downsizing and relocating operations. Currently, certain floors are not being used by The Police Credit Union.

As part of the CLRRA process, following the completion of the Site Assessment Plan and Report of Findings, TNDC concluded a response action was necessary and submitted a draft Response Plan to DTSC to define methods to achieve acceptable conditions for future residential development at the Site. Under the CLRRA statute, the Proponent is only required to propose one method to achieve acceptable conditions for future development. This is why there is no in-depth evaluation of possible alternatives. TNDC did however evaluate soil removal as another alternative, even though it has been determined that soil contamination is minimal. Based on its review of the Response Plan, DTSC concurs with the findings that soil removal is not an effective remedy for this Site. While soil removal is technically feasible, it is not an effective remedy because there is no source (i.e., liquid PCE) in on-Site soil. Soil removal is an effective way to address PCE in soil vapor in circumstances where the source PCE contamination is highly concentrated and localized in soil. However, at this Site there was only one location in soil where PCE was detected out of 66 sampling locations throughout the Site, and this one detection was below associated residential screening levels. Based on the concentrations of soil vapor observed, it is highly unlikely that significant sources of soil contamination are present on-Site. There is also the possibility that clean backfill placed could become contaminated by future PCE soil gas migration from off-Site sources (for example, potential sources to the south of Irving Street that are still being evaluated) and as such, DTSC concurred that the vapor intrusion mitigation system was a more appropriate remedy because it effectively protects future residents from existing conditions and any potential future soil gas migration of contaminants from off-Site sources. The Response Plan also requires TNDC to conduct monitoring of the vapor intrusion mitigation system to ensure that it provides long-term protection of future residents. While cost was a factor that was evaluated for both options, ensuring the long-term health and safety of future residents from current and potential future impacts is one of the primary criteria of DTSC's remedy evaluation process, and it was determined that the vapor intrusion mitigation system better met those criteria than soil excavation.

For a discussion of on-Site soil vapor extraction as an alternate remedy, please see the Response to Topic 5: Preference for Soil Vapor Extraction (SVE) and **Cleanup over Mitigation** below. In response to the comment suggesting other cleanup technologies (such as bioventing, installing a barrier around the source of contamination and in-place treatment), these technologies are similar to excavation in that they are used when a significant source of soil contamination is present. Based on our review of the soil and soil vapor sampling data, this site has minimal contamination compared to other sites that we oversee. Because there is not a significant source for the contamination on Site, other techniques for remediation are likely to be unnecessary or unsuccessful. We are committed to characterizing the areas surrounding the Site to find the residual source of contamination (if any) and will assess other suitable techniques for remediation of off-Site source areas, including soil vapor extraction. For a discussion of Environmental Justice referenced in comment above, please see the Response to Topic 10: Environmental Justice Considerations below. For a discussion of maintenance referenced in comment above, please see the Response to Topic 11. Long-term Engineering/Institutional Controls.

The construction of the building at 2550 Irving Street has the potential to help reduce PCE contamination in soil vapor. By removing the existing on-Site building structures and pavement, PCE will have another pathway to escape into the outdoor air where it naturally dissipates and does not create a health risk to onsite workers or the neighboring community. Following construction, the vapor intrusion mitigation system includes venting which will ensure that PCE concentrations are unable to build-up beneath the building slab. Although not required by DTSC, nor San Francisco Building Code, nor San Francisco Health Code (SFHC) Article 22B, TNDC has voluntarily prepared a Dust Control Plan that includes a perimeter air monitoring program that will be submitted to the San Francisco Department of Public Health and DTSC prior to starting construction. This Dust Control Plan will lay out details of how TNDC will monitor air for airborne dust and volatile organic compounds during construction to ensure the protection of the surrounding community and on-site workers. This will include stringent, health protective action levels and if these levels are exceeded, prescribed additional measures to be implemented to decrease concentrations to acceptable levels.

Finally, DTSC agrees that additional investigation is needed to better understand off-Site conditions both north and south of Irving Street. This work is being done separately by The Police Credit Union and the former Albrite Cleaners parties under DTSC oversight. DTSC currently requires The Police Credit Union to monitor off-Site soil vapor conditions to the north of Irving Street semiannually.

Based on the data we have to date, there are no unacceptable health risks to off-Site residents. The Police Credit Union has also voluntarily agreed to test the indoor air of the homes where soil vapor is monitored north of Irving Street. DTSC will review the forthcoming indoor air data, and DTSC may require The Police Credit Union to conduct additional measures, if needed, to ensure the long-term protection of the community. We are in the planning stages with the owners of the former Albrite Cleaners for investigations north and south of Irving Street that will help us refine the lateral and vertical extent of contamination. Once that data is collected along with the data from the north of Irving Street, DTSC can then work with the Responsible Parties to determine an appropriate remedy to address the extent of the contamination, if needed. DTSC will send additional mailers for both projects to keep residents apprised of current conditions and the steps being taken to address impacts.

We are saddened by the instances of cancer you have shared with us. The concentrations DTSC has observed in soil vapor from the neighborhood and estimated indoor air concentrations of PCE from vapor intrusion, if any, are unlikely to elicit adverse health effects, including Parkinson's disease or cancer. Results to date support DTSC's determination there is no unacceptable health risk for nearby residents. However, DTSC is charged with taking a precautionary approach in managing environmental contamination well before adverse health effects would be expected. That said, DTSC cannot definitively establish nor rule out causality between environmental contamination and community health issues. DTSC does not have expertise in clinical toxicology. DTSC recommends that community members with health concerns consult their physician and/or the California Department of Public Health's Environmental Health Investigations Branch. DTSC will consider this information as we continue our oversight of The Police Credit Union site and evaluation of potential impacts to the nearby residences. DTSC is committed to continuing to investigate the area to evaluate the PCE contamination outside of the proposed development area.

5. Topic: Preference for Soil Vapor Extraction (SVE) and Cleanup over Mitigation

Comment 5.1.1 There are better remedies or solutions for this that can make the neighborhood safer. One of them is Soil Vapor Extraction (SVE). We demand that TNDC's plans consider it. Cleaning it up (via SVE) will save TNDC and the neighborhood decades of having to monitor for PCEs.

9 other commenters expressed a comment similar to Comment 5.1.1

Comment 5.1.2 There is a much better solution that keeps people safe, one of them is Soil Vapor Extraction (SVE). Please require TNDC's clean up contamination via SVE, it is the right thing to do if you value human life over real estate development, and will save TNDC decades of having to monitor for PCEs,

while at the same time the neighborhood can be assured that it is a safe place to live.

Comment 5.2 Also [the response] plan is not good for community relations. Their plan only protects their building. A better remedy to make the whole neighborhood safer is Soil Vapor Extraction.

Comment 5.3 I have a toddler and am planning an upcoming pregnancy. I am VERY concerned about the health implications at the site. The current plan does not protect the neighborhood whatsoever. I feel very strongly that soil vapor extraction should be petitioned for. I am horrified at the prospect that my children will not be protected from lifelong cancer risk. TNDCs current plan is wholly inadequate. CLEAN UP, don't just mask the problem and sicken the neighborhood. Please protect our health and the health of the next generation by advocating for soil vapor extraction.

Comment 5.4 "Soil Vapor Extraction" or soil removal for the neighborhood seems to be the sensible way of dealing with this public health crisis. As most of us who live in the community are not toxicology scientists and engineers, we are counting on your agency to help us come up with a sensible solution that guarantees long-term results for everyone living in this community. Again, thank you so much for soliciting the voices and concerns of the neighborhood. Your involvement gives us hope.

Comment 5.5 We should choose to invest in Soil Vapor Extraction so no one else gets diagnosed with cancer. Please.

Feel free to contact me if at all necessary. Your time and attention in the matter are greatly appreciated. Let's clean-up the toxic mess at 2550 Irving St. with Soil Vapor Extraction. No sale until there is a plan to clean up the PCEs with Soil Vapor Extraction.

Comment 5.6 Other than the installation of a vapor barrier, there are better available methods to address the toxic contamination in the soil. Please consider Soil Vapor Extraction. Now that both the City and TNDC are aware that a toxic contamination problem exists, it makes sense to fully address the problem now when you have the opportunity, instead of relying on future generations to remediate the problem. Let's not put people at risk any further. Thank you very much for your consideration.

Comment 5.7 I would like to make use of the public comment period to express my hopes and fears about the proposed affordable housing developer (TNDC) and the current owner of the property, the Police Credit Union (PCU), at 2550 Irving St.

I represent 170 families, all of whom live within .5 miles of 2550 Irving. We are deeply concerned about the PCE levels and their potential effect on us, our children, our parents. We know that basically the PCU wishes to do as little as possible to remediate the problem. We are grateful that you have helped encourage them to take the first step, measuring the vapor intrusion levels into six homes in the immediate area. We have also read the proposed mitigation plan of TNDC. We find it woefully inadequate. We want the problem remediated, through soil vapor extraction, rather than a simple barrier of concrete and ventilation adaptations made to the proposed new building.

Comment 5.8 I would like to hear of better solutions that can make the neighborhood safer. TNDC needs to consider SVE (Soil Vapor Extraction). My understanding is that the neighborhood has been exposed to these PCEs for decades. TNDC needs to be part of the solution to clean this up now.

Comment 5.9 Please make it mandatory for TNDC to carry out Soil Vapor Extraction to clean up for the neighborhood as a prior condition for any transfer of ownership.

Comment 5.10 In the last several months I have made it a priority to carefully follow the steady stream of new information from DTSC, TNDC and MSNA about the toxic issues surrounding the 2550 development. Before these issues came to my attention I was looking forward to welcoming our new neighbors but that excitement has been taken over by a deep sense of anger at the way the health of those new residents, all my present neighbors, and my own family is being ignored.

Remove toxins from the soil or allow them to continue to poison the land under our houses and, potentially, in our homes? I'm furious that this is even a question up for debate! Where's the care, attention and respect we all deserve when it comes to our health?

I moved into this neighborhood with two small children. It's too late for my husband and I to make an informed choice about how best to protect their health, but it's not too late for DTSC -- it seems to me that you now have all the information you need to know that SVE or soil removal is not only the scientific way of moving forward, but the just and moral one.

I very much appreciate the work you and your organization has put into protecting all of us. Please don't let TNDC's agenda and financial needs supersede the health of current residents of the Sunset or the new neighbors we hope to welcome in the future. **Comment 5.11** Both TNDC and the Police Credit Union should provide better solutions, such as Soil Vapor Extraction; this will save TNDC and the neighborhood decades of monitoring for PCEs. This neighborhood is deeply concerned about the health of everyone who lives here, from the very young to the elderly – some who may not have the ability to pay for any future medical problems.

Comment 5.12 I believe that is unacceptable for TNDC to respond to the contamination problem by simply putting a vapor barrier under the new building that supposedly protects the new residents. The presumptive remedy would appear to be either soil vapor extraction or soil removal. These two methods would not require monitoring, which would be an ongoing cost for perpetuity, and these two methods would protect the neighboring properties as well as the new residents.

Comment 5.13 My mother, Suet Louie asked me to write you. Suet Louie is not satisfied with TNDC's response plan and does not believe covering up the toxin with a vapor barrier is a resolution for the neighborhood. She wants a cleanup.

Comment 5.14 I'm very concerned with the toxic material that's discovered at 2550 Irving street. The plumes of PCE gas below the 2500 Irving block needs to be cleared up prior to construction as this is harmful to people, children, pets, pregnant women, adults all can be affected. Given the extent of this toxic material is unknown, the city can be subject to many lawsuits down the road which would be costly to our city. There may be many issues that is unknown today but may be discovered years later. The best method to avoid this potential issue is to clean it up prior to construction. This is very important to protect our environment and our citizens. Appreciate your consideration of this very important issue.

Comment 5.15 I'm writing to say I am very unhappy with TNDC's response plan. How are you protecting the neighborhood? We need removal (not just adding a barrier) of the contamination and clean up of the PCEs that we know are causes of cancer and Parkinson's. My mother passed away in December 2019 and she had been suffering from Parkinson's for many years before she passed.

Comment 5.16 TNDC needs to: 1. remove the contamination or 2. clean up the PCEs that we know are cause cancer and Parkinson's disease.

3 commenters expressed this comment

Comment 5.17 Considering the nature of the development (affordable and funded by the state and the city), how big the proposed 2550 Irving development

is (it will span the whole block along Irving St) and considering that the plumes of PCE are under and in close proximity to the site, this is the best opportunity to insist on a cleanup rather than just mitigation for the new building. This is the best opportunity for the health and well-being of the whole neighborhood. Another one like this might not present itself ever, leaving us, current residents as well as new residents, in constant fear and stress over how this can potentially affect us and our children.

I urge you to please consider the above and push for TNDC's plan to also include a cleanup in addition to any proposed mitigation plan. Our neighborhood is really counting on you to make the right decision in this case. Thank you for all you do!

Comment 5.18 Thank you for providing a notice of availability of the draft response plan for the above site. I live in the vicinity of 2550 Irving Street and am submitting these comments on the draft response plan for this site.

I have several concerns about the proposed plan:

1. It does not propose any actual removal of PCE found in soil vapor at the site above acceptable levels for a residential use and fails to convincingly justify the alternative selected.

2. It does not take environmental justice considerations into account even though the site is proposed for families seeking affordable housing and will undoubtedly serve minority populations.

3. It does not discuss all proposed potential remedial options for the site.

4. It does not provide a serious proposal for how it will assure that engineered/institutional controls will be maintained and complied with for the life of the project....

Incomplete Remedial Options Considered.

The response plan only considers soil removal and engineered/institutional solutions. Why is soil vapor extraction (SVE) not analyzed as an option? Is it infeasible for some reason at this site? We don't know whether SVE is feasible because the response plan does not mention this possible remedial technique. The plan should be revised to evaluation SVE as a remedial option.

Comment 5.19 As I mentioned to Vivek and you, Arthur, today, there are far too many people with cancer and Parkinson's in the immediate vicinity. We wish to live in peace in our neighborhood, not worried that each breath brings us one step closer to cancer or neurologic diseases. We know that without your guidance, neither PCU nor TNDC will pursue the most complete and thorough remediation. Only you can ensure this. And that is what I am imploring you to do.

Please continue to prod the PCU to investigate the limits of the PCE plume in our neighborhood and protect the neighbors. Please insist that TNDC change its plan

from the current proposal to one of soil vapor extraction, before the new building is actually put up.

Thank you for taking the time to read this letter. We are all putting our faith in you.

Comment 5.20 My family has lived at 28th Avenue for more than 25 years. We are not in agreement with the TNDC's flawed plan to mitigate the known toxins with a vapor barrier.

Response:

DTSC understands that the community's preference is for the installation and operation of a soil vapor extraction (SVE) system or full remediation at the 2550 Irving Site to address the presence of PCE in soil vapor. Under CLRRA statute, TNDC is only required to propose one remedy that provides long-term protection for residents of the future development. However, based on the frequent requests from the community, DTSC has considered SVE as a remedial option for this Site and concurs with the Draft Response Plan that a vapor intrusion mitigation system is still the preferred protective measure. Use of a mitigation system such as this is effective, commonly accepted by DTSC, consistent with our current guidance (DTSC and SWRCB 2020) and is being used successfully on other sites with VOC contamination that presents a significantly higher potential risk.

Based on the sampling performed to date, the observed concentrations do not suggest that there is a significant source of PCE in soil vapor present on Site that would warrant operation of an SVE system. Such a system has the potential to exacerbate soil vapor concentrations beneath the Site, by drawing PCE from off-Site source areas. An additional source of soil vapor impacts, including the highest observed concentrations, is located off-Site to the south, at the former Albrite Cleaners site. Operation of an SVE system on-Site has the potential to draw the soil vapor plume from Albright Cleaners northward onto the Site. Based on the on- and off-Site distribution of PCE concentrations, it is unlikely that SVE would be effective at treating low-level PCE on-Site and would not be more protective of future on-Site residents than VIMS.

However, as part of investigations and any required cleanup associated with off-Site impacts where there is a more significant source of contamination, DTSC may determine that SVE would be an effective cleanup measure in areas south of the Site where PCE concentrations are higher. This will be determined after a more detailed investigation has been conducted south of Irving Street, which will be handled under DTSC oversight by the Responsible Party for the former Albrite Cleaners. DTSC will continue to keep the community informed of those investigations via additional mailers. DTSC will also announce a proposed cleanup plan, if needed, for that area after significant investigation work has been conducted that allows for alternatives to be proposed and reviewed.

With regards to why a vapor intrusion mitigation system was selected over on-Site soil removal, please see the Response to **Topic 4: Concerns Regarding Adequacy of Response Plan**. For a response on maintenance, please see **Topic 11: Long-term Engineering/Institutional Controls**.

Resources

DTSC and SWRCB. 2020. Public Draft. February. Link to document: <u>https://dtsc.ca.gov/wp-</u> <u>content/uploads/sites/31/2020/02/Public-Draft-Supplemental-VI-Guidance_2020-</u> 02-14.pdf

For a discussion of Environmental Justice referenced in comment above, please see the Response to **Topic 10: Environmental Justice Considerations** below.

We empathize with you and thank you for sharing the health problems you and your family have experienced. We can understand how learning about contamination in the neighborhood could be concerning. It may be of some comfort to know that the concentrations DTSC has observed in soil vapor from the neighborhood and estimated indoor air concentrations of PCE from vapor intrusion, if any, are unlikely to elicit adverse health effects, including Parkinson's disease or cancer. Results to date support DTSC's determination there is no unacceptable health risk for nearby residents. However, DTSC is charged with taking a precautionary approach in managing environmental contamination well before adverse health effects would be expected. That said, DTSC cannot definitively establish nor rule out causality between environmental contamination and community health issues. DTSC does not have expertise in clinical toxicology. DTSC recommends that community members with health concerns consult their physician and/or the California Department of Public Health's Environmental Health Investigations Branch. DTSC will consider this information as we continue our oversight of The Police Credit Union site and evaluation of impacts to the nearby residences. This includes sensitive receptors such as young children and the elderly. We are committed to continuing to investigate the area to find potential sources of the contamination.

6. Topic: Stop Transfer of Ownership / Make TNDC and Credit Union Both Responsible

Comment 6.1.1 We need more investigation to determine the full extent of plumes and the danger. There should be no transfer of ownership from the Police Credit Union to TNDC until there is a clear plan to clean up the mess. Both

TNDC and the Police Credit Union should be part of a plan to clean up the site. Not just put a band-aid under the building.

21 other commenters expressed a comment similar to Comment 6.1.1

Comment 6.1.2 Further investigation is needed of the sewer pipes in the area to determine the full extent of plumes and the danger. All players here (TDNC, the Police Credit Union, and the City of San Francisco) should be part of a plan to totally clean up the contamination wherever it is found around the proposed building site. There should be no transfer of ownership from the Credit Union to TDNC until a total cleanup of the neighborhood is completed. Don't just allow a band aid to be applied on this neighborhood safety and health situation.

Comment 6.2.1 We know the neighborhood has been exposed to these PCE for decades. TNDC needs to be part of the solution to clean this up now before future generations are exposed as well.

10 other commenters expressed a comment similar to Comment 6.2.1

Comment 6.2.2 We are shocked that the neighborhood has been exposed to these PCE for decades. TNDC needs to be part of the solution to clean this up now before future generations are exposed as well. The TNDC should be following the zoning regulations and laws just like the rest of the taxpayers of SF. They should not be so easily granted special permissions to build on a site which has known toxic issues.

Comment 6.2.3 We know the neighborhood has been exposed to these PCE for decades. TNDC needs to be part of the solution to cleaned this up now before future generations are further exposed as well, we need to put peoples future health and well being ahead of housing, what is housing if you don't have health to enjoy it.

Comment 6.2.4 We know the neighborhood has been exposed to these PC for decades. TNDC and Police Credit Union should be responsible for taking care of the toxic waste before building the Housing Project. Not just put a band-aid under the building. Thank you for your time and consideration.

Comment 6.3 Before a clear plan for cleanup, land ownership should not be removed from the police credit union. The transfer of cooperatives to TNDC must prevent toxic substances from polluting the entire community through dust and underground penetration due to the construction process.

22 other commenters expressed a comment similar to Comment 6.3

Comment 6.4 I strongly urge the Dept of Toxic Substance Control (DTSC) to oppose the transfer of ownership of the Credit Union to the TNDC until the extent of the PCE contamination is completely evaluated and a solution for the problem is worked out. The DTSC's role is to protect the citizens of San Francisco from just these sort of contamination problems. We are lucky to live in a city that has an effective DTSC. Our health depends on it.

Comment 6.5 For the sake of the vulnerable elderly population in the 2550 Irving neighborhood, please prohibit the transfer of ownership from Police Credit Union, the current occupant, to TNDC until there is a clear plan to clean up the site.

Response:

DTSC's oversight authority is to ensure that contamination is addressed for current and future land uses. We do not have the authority to prevent the transfer or sale of land due to environmental contamination on that property. DTSC has determined that TNDC's Response Plan for on-Site contamination is protective of the health and safety of future residents, consistent with the legislative intent of the CLRRA statute.

DTSC is committed to ensuring a thorough response to both the on- and off-Site PCE contamination. Under CLRRA, TNDC is only responsible for ensuring that on-Site contamination is addressed in a manner that provides long-term protection for future residents of the proposed development. However, The Police Credit Union and the owners of the former Albrite Cleaners have entered into voluntary cleanup agreements with DTSC that will ensure ongoing investigation work to determine the full lateral and vertical extent of PCE contamination in the neighborhood. This will include investigations to determine if the sewer pipes could be acting as a preferred pathway for PCE contamination to migrate. Based on the data from these additional off-Site investigations, DTSC will determine whether The Police Credit Union and/or the owners of the former Albrite Cleaners will be required to conduct remediation (cleanup) activities to ensure the long-term health and safety of the community.

Based on the data DTSC has reviewed to date conditions do not pose a potential unacceptable health risk to the community, including children and the elderly. In other words, there is no imminent health threat from the PCE found in soil vapor underground. Should DTSC's understanding of the situation change at any time as a result of the additional data collected from the investigations, DTSC will require The Police Credit Union and/or the owners of the former Albrite Cleaners to take steps to ensure the protection of the community. A Site Management Plan will lay out details of how TNDC will monitor air for airborne dust and volatile organic compounds (including PCE) during construction to ensure the protection of the surrounding community, and on-site workers. The construction of the

building at 2550 Irving Street has the potential to help reduce PCE contamination in soil vapor by creating a pathway for release into the outdoor air where in naturally dissipates.

7. Topic: Protecting Public Health of Larger Community First

Comment 7.1 Per your Response Plan Environmental investigations in 2019 and 2020 have found PCE at the site, adjacent parking lot, and along Irving Street which the Response Plan indicates is "within acceptable risk range."

I urge Department of Toxic Substance Control to look at the whole picture and into the toxic problems caused to people living close to this proposed cleanup and building. Should TNDC purchase the building, please demand TNDC clean up all toxins in the neighborhood beyond 2550 Irving Street. Please put the neighborhood at the center of this process rather than the Police Credit Union or TNDC. Thank you for your consideration.

Comment 7.2 For DTSC to accept the TNDC proposed vapor barrier over the foundation of its project without further investigation into the risks posed by the plumes sounds like selling out to the developer. Many possible questions await clarification: for example, what is the extent of the plumes and what effect may the vapor barrier have on the neighboring structures? Would the barrier divert the toxic plumes to the surrounding area in a more concentrated form as a result of the reduced space for dispersal? A possible solution to one structure does not resolve the environmental issues affecting that city block and beyond. Please consider the health and welfare of the community, not just the interest of the developer, in your decision. Thank you for your attention.

Comment 7.3 I have two children. I am very concerned PCE issues. And I am very very angry, SF CITY, TDNC and DTSC is not think we are living here already. This area has many children and you are thinking not future for them. Please don't think you can fix something happens after!! Just make clean and fix now! Even cost money do now! If you do later cost more and more and not just money destroyed many humans health and life. I really hope you are working for San Francisco residence like us. I am paying a lot of Tax so I really hope people like you work for city use correct way.

Comment 7.4 To be frank, we are disappointed and down right angry at how you DTSC is handling the project with bias and focus on only getting the TNDC project through and not addressing the real toxic dangers of improper clean up at this site, your department is not a rubber stamp for developers, might I remind you of your responsibilities and your conscience to the residence living in the neighbourhood to clean up throughly and to prevent toxic exposure to our neighbourhood, ask this question if this was your neighbourhood what level of clean up would you expose your family and love ones to? You see, that is why we insist that you clean up properly by removing the contamination, and throughly clean up the PCEs, that you and I know causes Cancer and Parkinson's disease. Will you be the reason so many people in the future will get sick and die from such horrible disease or will you be the reason such diseases are prevented, please we are pleading with you to do the right thing, clean up not cover up the toxic contamination.

Comment 7.5 This letter responds to a DTSC request for public comment regarding toxic contamination of the proposed development at 2550 Irving Street, San Francisco. Employment of an intrusion mitigation system will not eradicate the existence of all the identified toxins and contaminants in the ground, and during construction, would likely be released in appreciable amounts greater than current baselines. Homes near 2550 should be monitored until a margin of clearance is determined. We are aware of a disproportionate number of residents who have contracted cancers and Parkinson's Disease. If PCE toxins are released in an indiscriminate plume, also consider that we live in a thick fog belt much of the year, which could trap toxic emissions and prevent them from dissipating, strengthening their toxic effect.

We ask that the area of testing for toxicity be expanded beyond the 2550 development site and then eradicated by whatever means necessary. Then, and only then, should the development be considered for approval.

Response:

As many comments have rightly noted, DTSC is responsible for providing protection of public health and the environment and this extends not just to the future residents at 2550 Irving, but also to the neighboring community. Based on the data collected from off-Site locations to date, DTSC has determined that PCE contamination found in soil vapor does not present an unacceptable health risk. However, we have requested that The Police Credit Union continue to monitor off-Site conditions and they will also be voluntarily sampling the indoor air of select homes north of Irving Street so we can evaluate for vapor intrusion into residences, if any. Based on the data from this forthcoming investigation, and from the ongoing semiannual sampling of the PCE in soil vapor, DTSC will determine what additional steps, if any, are needed to protect the short – and long-term health of the community.

We have also begun working with the owners of the former Albrite Cleaners to investigate PCE impacts north and south of Irving Street. Based on the results from these investigations DTSC will require that they also implement any next steps to ensure the health and safety of the community. We assure the community that DTSC is not bowing to development pressures. The extent of on-Site contamination is characterized, and the draft Response Plan which focuses solely on protecting the health of future on-Site residents. DTSC determined that the proposed vapor intrusion mitigation system will adequately protect future residents without causing PCE conditions in soil vapor to worsen in the surrounding areas. Further, it is likely that the construction of the building and vapor barrier will improve conditions by removing on-Site buildings and pavement, thereby allowing PCE to naturally dissipate into outdoor air without posing a health risk. After construction, the building will not divert contaminated soil vapor to the adjacent properties, but rather will capture contaminated soil vapor to outdoor air at the building rooftop, where the PCE concentrations will further dissipate. Even with foggy conditions, there is sufficient onshore wind to support this natural process.

Our oversight authority is solely focused on protection of human health and the environment, and we do not get involved with, nor have authority over, future land uses and proposed developments. That authority lies with the County and City of San Francisco. However, we are confident that a vapor intrusion mitigation system (VIMS) will provide long-term protection to future residents of the proposed development and conforms with DTSC's current understanding of site conditions and DTSC guidance for addressing soil vapor contamination and the related possibility for vapor intrusion.

DTSC's focus does not end with TNDC and their plans to address on-Site contamination. We will continue to monitor and require additional steps from The Police Credit Union and the owners of the former Albrite Cleaners to ensure the long-term health and safety of the off-Site, neighboring community. We will continue to search for a source(s) for the contamination and pursue a cleanup that will benefit the neighboring community.

8. Topic: Redevelopment Concerns

Comment 8.1 From my personal experience the toxic substances and their abuse are about to disturb the somewhat unproblematic neighborhood that I live and work in for 32 years. Frightened locals that spend their livelihood to move to a save neighborhood. The scale of the project problematic.

I am a Doctor in the neighborhood and in the last months my African American patients that come for treatments Veterans etc. are viewed such that locals change street there is fear. Fear of racists attacks. Most done by one minority to another say the numbers, most done by homeless...those are the real-life statistics today. Like it, hate it, no opinion but that is what I See and hear. Tell everybody not to worry...changes nothing. The mind does not work that way. I will likely move and close my office...I had burglaries, trash, feces in the last years form the homeless, patients harassed, a police system that is not working and crime trash graffiti everywhere.

So sad to see the city become a 'project' is my fear and prediction. This notion is what even police officers and city officials that come for care tell me when they have a private ear. The frustration and the attacks they face and next day can catch the same guy again and again.

We made 5 arrests this week, all the same guy is the joke. It used to be that thief's burglars or criminals were afraid to be prosecuted or arrested. Now that crowd comes to SF because there is no need to fear law enforcement because it is not enforced.

Please do not respond neither do I care about your opinion. A used to be happy and proud San Franciscan

Comment 8.2 Please read the room and understand the Sunset does not want this massive building in its neighborhood. It is like you are not even thinking about the local residents and how it affects us. WE don't want you building your vapor mitigation system near our houses. We have children and all the dust particles from the dumb project will blow all over the local residence.

Comment 8.3 Family housing is absolutely needed. What I object to is NOT that there is a plan for such construction in the Sunset, it is the HEIGHT of the building that is troubling. PLEASE consider modifying the plans to a height of 4 or 5 stories, NOT 7 STORIES. Thanks for considering this suggestion. My hope is that there will be family housing construction IN EVERY NEIGHBORHOOD IN San Francisco.

Comment 8.4 Please try to slow down this process. There are new homeless folks making up an encampment here, the debris on the streets has increased and the air is much worse -- for whatever reason.

I have a bad liver (PBC), and assorted autoimmune issues--my health and emergency requirements are being impaired.

I have written everywhere because I can't be in group situations, and I am 71.

The additional motor vehicle traffic has made increased (Silt?) on my plants and stucco--in fact the grout between my bricks is now grey.

I implore you to direct me in which path I should use to improve my situation as moving isn't an option. Please help!

Comment 8.5 My Personal Opinion (with whom many San Franciscans agree): Has SF shouldered its density burden? San Francisco is the most dense city west of the Hudson River. Here alternatives, such as empty downtown skyscrapers, exist that can accommodate residential uses. Other areas plagued by fire and the lack of healthy food choices, both in and out of the city, need and desire economic and corresponding housing development. To instead force development unwanted by local residents that diminishes their quality of life, threatens their livelihoods and health smells of motives only hidden by the cry for affordable housing.

Comment 8.6 I live only two blocks away from 2550 Irving. I been here for more than 20 years. This is terrible decision build the house there. Not just toxic problem, everything will be awful! Right now already has homeless people lay down just in the corner next to our house, then right now already hard to find a parking space, if build the house there will be more harder to find a parking space. Also will be more homeless people and more criminal. Sunset will become a bad place. All of our family member disagree build the house at 2550 Irving. Honestly is a ridiculous plan. Hope someone really cares what we feel about this unacceptable plan. Thanks.

Comment 8.7 I oppose about the 2550 Irving Street building project because the planned building will affect public order, environment, parking and community, and there is TNDC gas underground 2550 Irving Street, and the gas underground will affect our sunset residents' health and community, so I am not satisfied about the planned 2550 Irving Street 7-storey tall building.

Comment 8.8 My husband owns a home and we live in the Central Sunset neighborhood, this email is to voice out concerned about the proposed development at 2550 Irving St. We opposed the proposed development.

Comment 8.9 I am opposed the object at 2550 Irving St. Please stop the TNDC's poison plan. Thank you for your attention.

Comment 8.10 No crime in Sunset! It isn't Chicago!

Response:

We appreciate that you have shared concerns about your neighborhood and will share your concerns about the proposed development with TNDC. We encourage you to share concerns you have about the neighborhood with Supervisor Mar, as DTSC does not oversee land use and land planning decisions. Rather, DTSC works with Responsible Parties to ensure that the appropriate actions are taken to ensure the long-term protection of public health and the environment from toxic substances, consistent with current and proposed land uses. DTSC has determined that the vapor intrusion mitigation system proposed in the Response Plan will be an effective measure to ensure the longterm health and safety of future on-Site residents.

9. Topic: Health Concerns

Comment 9.1 Previously there has been a mortuary, dry cleaners, 2 gas stations, and a drug store on the 2550 Irving site. This is more than a triple threat. It was contaminated with PCE and PERC- a colorless and odorless gas-vapors, is toxic and will be outlawed in California in 2022. High levels of PCE were found at the site and are found to be drifting north from the existing building. As you may be aware a ventilation system had to be installed at the current Police Credit Union building if they wanted people in the building, this was to protect workers. Because of lack of ventilation the 2nd floor of that building is not currently used.

TNDC now plans to purchase the building for twice its value and I am advised TNDC states it will be responsible for toxicity in the building, but not for neighbors/neighboring homes. I am advised that 5 people living within 100' of 2550 Irving Street have developed cancer or Parkinson's Disease. PCE is a known carcinogen and can cause neurological problems in humans. Please reevaluate the risk for my neighbors residing very close to the proposed building- in this dense neighborhood.

Comment 9.2.1 My mother-in-law is severely ill, who suffers from cold autoimmune hemolytic anemia and severe back pain, not sure if the diseases are due to the exposures to PCE leaked from 2550 Irving Street.

Comment 9.2.2 My mother is severely ill, who suffers from cold auto-immune hemolytic anemia and severe back pain. She is highly sensitive to plumes such as PCE.

2 commenters expressed this comment

Comment 9.3 In addition to these methods, I would urge DTSC to disallow the conversion from commercial use to residential use, which will triple the exposure of these chemicals on humans if they leak through the cracks of an aging building.

Why would DTSC allow residences to be built on contaminated land? Any presence of PCEs can be harmful to human health. If you want to protect humans, then tell the San Francisco to keep the site commercial.

Comment 9.4 My mother and I both feel that the response plan isn't adequate. TNDC wants to put a barrier under the new building and continue to monitor the toxic situation which would only protect future residents.

We have been exposed to the toxins for over 45 years. So far we have been lucky and don't have cancer or Parkinson's but many of my neighbors haven't been as fortunate. The plan to create a barrier under the new building and monitor the progression of the toxins isn't fair or safe. Our houses are 100 years old and all have cracks in the foundations.

I heard your presentation that the current level isn't dangerous but this isn't reassuring. How many times have experts changed their minds when they get more data? What are the long term effects for the young children in the neighborhood who play in their backyards?

The fair thing would be to eliminate the dangerous PCE immediately and monitor to make sure all toxins are removed. We are angry that we didn't know about the toxins sooner and that there is no clean up plan to remove them ASAP.

Comment 9.6 In a recent meeting regarding the 2550 Irving Street project, I did not know that we have been exposed PCE for decades. In 2000 I was diagnosed with bladder cancer by my urologist. The doctor asked me if I worked around chemicals, I said no I work in the US Postal Service delivering mail (at that time 37 years). The doctor said he did not know how I got the bladder cancer usually it's people that work around chemicals. I said I am the first one in the family (that I know of) that got cancer. Now I believe I got the cancer from PCE from the 2550 Irving site. I wish I had the money to sue. Now TNDC want to build their building there. I hope they clean up the PCE and contamination without making the residence sick with cancer. If we get sick, I hope can get a good lawyer and sue.

Comment 9.7 As for the attenuation factor of 0.03 for soil vapor to indoor air what is the scientific basis for that? I ask because the previous factor was about 100 times lower. Also, it has been stated that if the concentration levels of the soil vapor samples are 100 times the SL it would be of concern to DTSC. But, why not if it is 10 times? In addition, how does the SLs take that into account vulnerable populations? Finally, it is not clear to me if future monitoring will continue to include vinyl chloride, which is a known human carcinogen per the National Toxicology Program whereas perc is a probable human carcinogen per EPA.

I believe part of the Plan calls for venting the perc at the rooftops of the proposed building. Wouldn't it be more preventative if the perc was captured with activated carbon; otherwise, the vented perc may attached to airborne particles which may settle and result in exposures to residents. **Comment 9.8** I am very concerned about the effects this project may have on the health and well being of my family and my community. My family has lived at location for nearly half of a century, we very much like and greatly care for this safe and wonderful neighborhood and would like to keep it that way.

Comment 9.9 Thank for you the opportunity to comment on the Tenderloin Neighborhood Development Corporation's draft Response Plan for 2550 Irving Street, San Francisco. I have more than an idle interest in this area. I have had family on Irving Street for five decades. As you know, I have provided pro bono technical assistance to the Mid-Sunset Neighborhood Association in the development of their comments on the draft Response Plan as well as other aspects of the PCE plume investigation. I associate myself with those comments.

As you might not know, I have developed a reputation in my part of the Bay Area as a persistent and effective advocate for affordable housing development, as a community activist, an environmental advocate, and a four-year member of the Mountain View City Council.

As a member of Santa Clara County's Housing Bond (2016 Measure A) Oversight Committee, I am fully aware of the challenges facing affordable housing developers as they struggle to win planning approval and obtain financing for their sorely needed projects. However, I believe it essential not to compromise the health and safety of future occupants of these buildings as developers and governments design these projects. It is possible to costeffectively address the contamination at 2550 Irving and protect the neighbors, without taking any environmental shortcuts.

Furthermore, in my position at the Center for Public Environmental Oversight I have participated in two Interstate Technology Regulatory Council vapor intrusion work teams and innumerable EPA workshops. I have participated in the development and/or provided comment on virtually all of California's vapor intrusion guidance documents.

In general, they are valuable, robust documents, and it's my hope that the Supplemental Guidance, which adjusts default attenuation factors to match empirical data, will be finalized soon. But I have seen the continuing pressure from some development interests to weaken the requirements for both investigation and remediation. Please do not bend the rules under such pressure.

The science for addressing vapor intrusion had advanced since 2002, when we started on this journey, and today we know how to protect the public, enable development, and save money. Please listen to the neighbors, in the Mid-Sunset and elsewhere, because your primary job is to protect them.

Response:

Investigations found the levels of PCE in soil vapor on-Site are at or below state and federal concentrations that would indicate unacceptable health risks in a future residential scenario. The air inside the 2550 Irving Street building was also tested and was found to be below state and federal levels for unacceptable commercial occupancy health risks. This means that under its current use as a credit union, the building is safe for credit union employees and members. While The Police Credit Union replaced the air filters in their HVAC system in January 2020, this was done as a precautionary measure, and not because contamination warranted this action. Based on the data we have to date, there are no unacceptable health risks to adults or children living near the Site, including for those who play in their backyards or spend time outdoors.

With regards to screening levels, the risk evaluation was performed in accordance with guidance by the United States Environmental Protection Agency (USEPA), DTSC, and the State Water Resources Control Board (SWRCB) (USEPA 1989, USEPA1991, DTSC 2011, DTSC and SWRCB 2020). The potential vapor intrusion risk associated with Site soil gas conditions was assessed using both historical and current recommended attenuation factors (DTSC 2011 and DTSC and SWRCB 2020). Using the former default DTSC attenuation factor of 0.001 resulted in the evaluation that remediation was not necessary as the estimated risk was calculated to be less than 1 per million. Using the revised, default attenuation factor of 0.03 included in DTSC and SWRCB 2020 draft guidance resulted in an estimated risk within the risk management range (i.e., between 1 and 100 per million). Based on the findings of this risk evaluation using the new draft guidance, TNDC prepared a response action for DTSC's evaluation. In this case, use of updated, draft vapor intrusion guidance is resulting in more stringent guidelines that is even more protective of human health.

With respect to the question regarding the passive venting, emissions such as those from vapor intrusion mitigation systems are regulated by the Bay Area Air Quality Management District (Air District) under Regulation 2 Rule 5. Based on the low concentrations observed at this Site, permitting and treatment of emissions would be exempt under Regulation 2-5-110: Exemption, Low Emission Levels. As part of the development, TNDC will submit an application to the Air District to document this exemption.

We empathize with you and thank you for sharing information about the health problems in the community. We can understand how learning about contamination in the neighborhood could be concerning. DTSC takes the protection of community health seriously. It may be of some comfort to know that off-Site investigations north of Irving Street have found soil vapor concentrations of PCE well below state and federal unacceptable risk level of 1,500 μ g/m³. During the most recent sampling

event in March 2021, the highest concentration was 260 μ g/m³ which is similar to the sampling results from the September 2020 event. This provides evidence that the PCE soil vapor plume has remained stable, and that soil vapor from the source area is not migrating significantly.

DTSC does not oversee land use decisions. Instead, we review environmental investigation results and proposed redevelopment plans to ensure that environmental conditions are addressed in a manner that is safe for future occupants. In this instance, DTSC has determined that TNDC's proposed vapor intrusion mitigation system will provide long-term protection for the health of future residents by safely venting any PCE in soil vapor from the below the building foundation, through piping, to discharge above the roofline, where it will naturally dissipate. This will prevent soil vapor from entering the indoor air of the future building.

DTSC uses a variety of methods to cleanup or remediate sites. It is not always feasible to remove the source of contamination, so when we evaluate remedies, we ensure that exposure pathways are managed in order to protect human health. It is common practice to construct buildings with a vapor intrusion mitigation system (VIMS) when soil vapor contamination is present, even at sites where PCE concentrations are much, much greater than those at 2550 Irving Street. VIMS can manage a vapor intrusion pathway even with low-level, residual PCE in soil vapor. DTSC does not have authority to prevent residential use of a site; land use and building permitting is handled at the local City/County level.

However, and to reiterate, at this time DTSC has determined that there is no potential unacceptable risk to nearby off-Site residents and that ongoing monitoring is sufficient. The Police Credit Union has also agreed to voluntarily collect indoor air samples at select homes adjacent to the Site to determine the indoor air quality. These additional data will further our understanding of the conditions in the area and, based on the data received, DTSC will take the appropriate next steps to ensure the health and safety of the community.

10. Topic: Environmental Justice Considerations

Comment 10.1 Thank you for providing a notice of availability of the draft response plan for the above site. I live in the vicinity of 2550 Irving Street and am submitting these comments on the draft response plan for this site.

I have several concerns about the proposed plan:

1. It does not propose any actual removal of PCE found in soil vapor at the site above acceptable levels for a residential use and fails to convincingly justify the alternative selected. 2. It does not take environmental justice considerations into account even though the site is proposed for families seeking affordable housing and will undoubtedly serve minority populations.

 It does not discuss all proposed potential remedial options for the site.
 It does not provide a serious proposal for how it will assure that engineered/institutional controls will be maintained and complied with for the life of the project....

Environmental Justice Considerations Overlooked.

The draft response plan does not discuss environmental justice considerations. While the immediate neighbors have a voice, it is not clear whether the proposed future low-income occupants of the site have a voice too. I understand that the housing will be designed for families. The vast majority of persons with the lowest incomes in San Francisco are nonwhite. It is reasonable to presume that the housing at this site will largely serve a minority population with children. If this was a market rate development, would the developer choose to leave all of the contamination at the site with no effort made to clean it up? How does the proposed plan compare to response plans at market rate housing sites? Some discussion is needed in the plan to demonstrate that the draft plan for this site favorably compares to other housing sites with comparable problems. This affordable housing site should not be treated to a less rigorous cleanup than market rate housing sites.

Comment 10.2 Who thought it was a good idea to put the poorest people in the city on a toxic site? DTSC has got to say that is no longer acceptable in San Francisco, which has done this many times in the past (in Hunter's Point), unless all the toxics are completely removed. There have been so many businesses at this site that have used toxic chemicals, that it would be irresponsible to put humans on top of this site. Eventually, PCE vapor will rise through the cracks, as the building ages, just as it is rising through the cracks in my home's foundation, and hundreds of people will be affected by your decision to allow humans to live here.

Comment 10.3 My name is Jeanine and I live 2 blocks from 2550 Irving Street. I participated in the DTSC call back in July and I'm extremely unhappy about TNDC's response plan. I feel that it doesn't make any financial and common sense to put in barriers to temporarily block the toxin from getting into the building. It makes more sense to do a thorough cleanup of the toxin so that occupants of the building will not have to worry about future exposure. I think TNDC's response plan is inadequate, and they should come up with better remedies or solutions.

Just because the building is for low-income people, it doesn't mean that their safety and health are not important. We do not want to send a message that Poor People's Lives DO NOT Matter because they do. Please do not approve

TNDC's response plan until both TNDC and the Police Credit Union agree to clean up the site.

Thank you for hearing my concerns and I look forward to hearing from you.

Response:

DTSC's mission is to protect California's people, communities, and environment from toxic substances including enhancing economic vitality by restoring contaminated land. This Site is being treated no differently from any other contaminated land and is considerably less contaminated than many properties with the same contaminant (PCE) where we provide oversight. DTSC takes environmental justice considerations very seriously and strives to ensure that lower-income communities receive the same level of protection as more affluent communities. DTSC is part of the California Environmental Protection Agency, a state agency that promotes environmental justice to prevent harm and protect California's most vulnerable and environmentally burdened communities. We work to broaden the transparency of DTSC's programs, support precautionary approaches, and challenge existing inequities. DTSC's Environmental Justice program is part of the Office of Environmental Equity, which includes its Public Participation and Tribal Affairs programs.

Vapor intrusion mitigation systems (VIMS), such as the one proposed by TNDC. are frequently used to provide long-term protection from PCE impacts at development sites throughout the San Francisco Bay Area and United States. VIMSs are used at both affordable housing and market rate housing sites and are a proven engineering control method that allows for the safe redevelopment of brownfield sites. It is common for developers to manage soil vapor contamination in place when conditions underground (for example, soil type, concentrations of contaminants, etc.) do not support contaminant removal as an effective alternative, which is the case for the 2550 Irving Street property. Soil removal was evaluated, and it was found to not be as effective as a vapor intrusion mitigation system. This is because soil removal is effective in addressing soil vapor contamination when that contamination is highly concentrated and localized in soil. PCE in soil was found at the 2550 Irving Street Site in only one out of 66 soil samples collected, and this one detection was below associated screening levels. This Site is not suitable for a soil vapor extraction system because of low concentrations of PCE, lack of a significant source on-Site, and the risk of drawing PCE toward the Site from a potential off-Site source area. Under the California Land Reuse and Revitalization Act, the Responsible Party is only required to propose one method to achieve acceptable conditions for future development. This is why there is no in-depth evaluation of all possible alternatives. For a response to maintenance referenced in the

comment above, please see **Topic 11: Long-term Engineering/Institutional Controls**

11. Topic: Long-term Engineering/Institutional Controls

Comment 11.1 Thank you for providing a notice of availability of the draft response plan for the above site. I live in the vicinity of 2550 Irving Street and am submitting these comments on the draft response plan for this site.

I have several concerns about the proposed plan:

1. It does not propose any actual removal of PCE found in soil vapor at the site above acceptable levels for a residential use and fails to convincingly justify the alternative selected.

2. It does not take environmental justice considerations into account even though the site is proposed for families seeking affordable housing and will undoubtedly serve minority populations.

3. It does not discuss all proposed potential remedial options for the site.

4. It does not provide a serious proposal for how it will assure that

engineered/institutional controls will be maintained and complied with for the life of the project....

Long-Term Use of Engineering/Institutional Controls Needs Further Analysis. The response plan relies on an installed vapor intrusion mitigation system operating effectively for the life of the project. To be effective, it has to be inspected and maintained adequately. The response plan does not discuss how long the building is expected to remain at the site but residential buildings in the immediately adjacent blocks such as on my block are over 100 years old. The cost estimate for the proposed plan only assumes the filing of 24 annual reports of how the system is operating. Will the soil vapor go away after 24 years or will the building be removed? Alternatively, is longer term inspection, maintenance and reporting going to be needed? Does the proposed cost estimate truly include all of the costs associated with inspection, maintenance and reporting for the life of the building at this site? Affordable housing in San Francisco has a history of failed maintenance. Is it realistic to expect that the engineered controls will truly be maintained for the life of the project and funds will be available to pay for the costs of doing so? The long-term maintenance of the engineered solution and the feasibility of assured funding the required institutional controls should be more thoroughly discussed in the plan.

Response:

The draft Response Plan provides a conceptual overview of the proposed remedy and notes that soil vapor conditions and the vapor intrusion mitigation system will continue to be monitored in perpetuity, and that a land use restriction will be recorded for the property. The land use restriction will only allow occupancy at the Site with a fully functional vapor intrusion mitigation system in place. This will allow DTSC to continue to provide oversight for the vapor intrusion mitigation system even if the building's owner changes. DTSC will also require annual inspections and reports to review the effectiveness of the vapor intrusion mitigation system and require that repairs be made, if needed. As the environmental regulatory oversight agency, DTSC has the authority – separate from the City – to ensure that the annual inspection and any maintenance of the vapor intrusion mitigation system be conducted in a timely manner to ensure the long-term protection of future residents.

As part of land use restrictions, DTSC requires that the Responsible Party provide financial assurance. This is a 30-year agreement to cover all costs associated with the long-term operations and maintenance of the remedy in case the Responsible Party fails to meet its obligations due to financial insolvency or other reasons. The agreement and its associated financial assurance instruments are reviewed and adjusted every five years to ensure that there are sufficient funds in reserve to support the ongoing monitoring and maintenance of the system in perpetuity. This way, DTSC can ensure that human health and the environment are protected without placing a burden upon California taxpayers.

For Items 1-3, please refer to **Topic 4 (Concerns Regarding the Adequacy of the Response Plan)** and **Topic 10 (Environmental Justice Considerations)**.

12. Topic: Request for Excavation of Contaminants with Underground Parking

Thank you for the opportunity to comment as both a neighbor and a practicing architect for over 40 years. Very briefly, my professional experience has included most building types, including several types of residential buildings and scales up to one million square feet and up to 30 stories at national, international and statewide sites. These sites have involved a variety of subsurface conditions.

The following are my observations, concerns, and recommendations for remediation of soils contamination at this particular site and with this particular building type. Considering the impact on 100% affordable housing residents, and in particular, families with children requires closer attention to "environmental justice".

This project is controversial in many ways, and a positive outcome for the future residents as well as the community depends upon thoughtful and comprehensive toxic remediation, and this should be the imperative. However under SB 35, without the normal rigors of CEQA, most due process has been bypassed. Therefore, I hope you will accept my comments in this light and will calibrate your criteria to focus on broad-based public health and welfare.

Putting teams of design professionals together to collaborate on complicated projects is critical at the onset and this is one of my specialties. Protecting health, safety, and welfare is also part of an architect's standard of care and is a condition of licensing. The State relies on the architectural profession to overall, be objective and exercise professional judgment, particularly when cost is at competing odds with public health and welfare.

The manner in which the 2550 Irving Street project team has been assembled and structured to "divide and conquer" rather than conduct community outreach has been seriously detrimental and inconsistent with this standard. 2550 Irving is in contrast to similarly contaminated parcels within the Sunset District, such as 3601 Lawton Street, which is an example whose proposed response plan has been handled with common sense and a thorough emphasis on public health and welfare. This has not been the case with 2550 Irving Street and is of significant concern.

Excavation

TNDC's Draft Response Plan hastily mischaracterized the excavation option as bad. It argues that digging down 15 feet and then replacing the contaminated soil with good soil does not ensure that new soil does not become re-contaminated from adjacent contaminated soil. This however is telling. The backfill decoy highlights the problem of the vicinity being contaminated, blurring a focus on a holistic solution, which is to simultaneously address the adjacent contaminated soil.

Also, placing an unreasonably high \$4 million price tag on the excavation option unsupported by budget estimates appears to be part of the decoy to make their vapor barrier option under the CLRRA seem more reasonable to DTSC; this however ignores closer scrutiny that the vapor barrier option is inherently a solution overly dependent on perfect workmanship. A vapor barrier would be penetrated by literally hundreds of pipes and conduits, all creating pathways for vapors from contaminated, compacted soil below to enter into the new building. It is likely that the same deficiency caused the Police Credit Union to evacuate 75% of its population on or about March 2019. On top of this, the vapor barrier is an expedient way to save costs allowing the deleterious effects to pass onto working class neighbors. Temporarily inert plumes are not forever inert and there are utilities as pathways to consider.

Excavation is considered one of DTSC's presumptive remedies for addressing chlorinated VOCs in the vadose zone and I would recommend not varying from this tried and trusted remedy. Excavation has the added financial and practical benefit to future residents and neighbors of simultaneously creating underground parking. Unfortunately, Path Forward seems to have biased its analysis against excavation of any type. TNDC's plan further obfuscates the presumptive remedy by dividing remediation into three separate projects, when in reality one

comprehensive solution is needed including the context of the site's foundation system.

Multiple and reliable benefits of underground parking with excavation This neighborhood already suffers from substantial traffic gridlock with crammed street parking interrupted by curb cuts in front of largely multi-family structures, which is compounded by prohibited parking times for street cleaning 4 times a month. Public transit, while it flanks Irving Street, is substandard and is getting worse.

In the "Blueprint for the Sunset" a needs assessment document authored by the former District Supervisor's Office and assisted by the Planning Department in 2014, a plan was made for SFMTA to have long overdue improvements in place by 2019. Recently, SFMTA pushed back this projection and is now estimating to be ready to begin a study, two years from today. And yet, besides forcing new residents to be dependent on already substandard public transit, it is entirely reasonable to assume many new residents in this 100-unit family building will need cars to get to their places of employment outside the bounds of public transit.

In contrast, the disparity in the City's policy is demonstrated in two other new affordable housing projects in the vicinity: one with 43 and the other 135 apartment units in the Outer Sunset. Each have been recently approved by the City for 24 and 48 <u>underground</u> parking spaces respectively, but in significantly much less congested areas. Why the lack of parity for these new families?

Closer to 2550 Irving Street, there is also <u>underground</u> parking for a circa 1980 four-story housing structure, one block to the east. For other nearby larger prewar apartment buildings, there is on-site parking. But these buildings do not generate the exponential volume of traffic compared to the 2550 Irving Street building, which is 3.3 times more massive. Finally, for a new market rate, 8-unit, 4 story apartment building project proposed by the Police Credit Union directly across the street from 2550 Irving Street at 2513 Irving Street, onsite parking for 9 spaces is planned. What is environmentally just about this disparity?

Flawed and inconsistent City policy and the need for practicality

Though the "Blueprint for the Sunset" in 2014 asked the public to seek alternate means of transport across the district, new bike paths, added approximately five years ago, have not shown a reduction of gridlock, but rather have increased traffic congestion particularly during COVID. Nevertheless, the City still maintains that the 2550 Irving Street project is exempt from parking requirements. Allowing only 11 surface onsite spaces at this time is ignoring the fact that a building for 100 families is <u>a much more traffic-intensive project</u> as compared to the previously mentioned affordability projects. Where is the environmental justice in this position?

In consideration of the need for services such as deliveries to families, multiple destinations for families, pickup and drop off for families, family gatherings, existing substandard public transit, trash removal for 100 families at least twice a week and many other family-related activities, it is additionally reasonable to assume, as mentioned before, that some residents will need vehicles. Many of these above mentioned circumstances of congestion are <u>substantially mitigated</u> by underground parking with a dual purpose of a reliable, long-term contamination remediation scenario through excavation.

Underground parking at 2550 Irving Street could provide 40 spaces conservatively, serving the diversity of the families and reducing the expected severe negative traffic impacts. In contrast, the present design for onsite at grade parking for 11 spaces is constrained by parcel dimensions. The minimum parking dimensions also do not allow the spaces at grade to be located farther away from gridlock at 26th Avenue and Irving Street, as argued by the project architect. But if all the parking is underground, the extremely valuable grade level real estate can be put to higher priority, better uses for the families that will live there.

Comprehensive plan to improve outcome for residents

On page 15 of the draft Response Plan and as mentioned before, Path Forward suggests that excavation and backfill could lead to soil recontamination due to the presence of offsite soil vapor. But this would not be an issue with permanent excavation and basement walls with requisite waterproofing. Further, these basement walls would also have much, much fewer pipe penetrations with greater, reliable workmanship. Additionally, as a backup system to any vapor intrusion, the code required ventilation of the basement is another layer of added protection. Lastly, all of the pipe penetrations coming through the first floor slab are no longer in contact with contaminated soil. The underground parking would vastly outperform all other options and be a long lasting reliable solution.

Finally, an excavation with conventional lagging and basement wall solution needs to be understood simultaneously and contrasted with the probable <u>grade</u> <u>foundation systems</u> that TNDC is faced with choosing from: a drilled pier system or a very robust, thick mat slab system at grade. Both of these grade systems already require some excavation, adding another trade's means and method involvement and expense. This is not efficient construction planning. Further, the drilled pier system, which requires slightly less excavation, still is going to unpredictably test the 100-year-old, brittle, unreinforced foundations of adjacent residential neighbors (which I have personally visited) to the North, East and West of the site through its inherent unavoidable ground tremors. Permanent excavation would reallocate the estimated \$539,000 backfill cost to the cost of the basement walls and avoid all the unforeseen costs of a slab-on-grade system, and simultaneously solve the contamination issue in a more observable way. It creates a permanent, reliable, coordinated and comprehensive design solution for these new families and a grateful community.

Please do not hesitate to contact me if I can clarify anything else.

Response:

DTSC's mission is to protect California's people, communities and environment from toxic substances including enhancing economic vitality by restoring contaminated land. We do not determine land use plans, nor do we have the authority to require a developer to change its future land use plans such as requiring underground parking. Rather, we ensure that the appropriate measures are taken to address environmental contamination at a property in a manner that provides long-term protection for future site users in accordance with the proposed land use plans for the site. Since underground parking is not being proposed for the 2550 Irving Street property, DTSC concurs with the Draft Response Plan to not proceed with a soil removal option that includes underground parking.

As part of our review of the proposed alternatives in the Response Plan, DTSC concurred with TNDC's determination that soil removal is not the preferred remedial alternative for this Site. This is because PCE was detected in only one out of 66 soil samples collected and well below screening levels. Soil removal is most effective under circumstances where contamination is highly concentrated and localized in soil, which is not the case at this Site. As such, DTSC concurred that a vapor intrusion mitigation system will provide long-term protection of future residents by preventing soil vapor from entering the indoor air of the proposed building. To ensure the workmanship of the sub-slab venting system and vapor barrier will be high guality and effective, DTSC's engineering unit will review the proposed technical design of the vapor intrusion mitigation system and will not approve for the system to be constructed until it concurs that the plans will be effective. After construction, DTSC will also require that tests, such as smoke testing and pre-occupancy indoor air sampling, be conducted to ensure the system has been installed and is operating as designed before allowing residential occupancy of the building. Finally, DTSC will require ongoing monitoring and maintenance of the system through semiannual indoor air and sub-slab soil vapor sampling and annual inspections. Further details on the maintenance and repairs required for the VIMS are explained in greater detail in the Response Plan.

With regards to concerns around a more holistic approach, DTSC is bound by the regulatory agreements established with the Responsible Parties. As such, TNDC is under a CLRRA agreement where TNDC is statutorily only responsible for addressing on-Site contamination to allow for future residential use at the Site. The Draft Response Plan as prepared will provide that level of long-term protection for future residents. However, DTSC is also overseeing the investigation and any potential remediation associated with off-Site impacts to the north of Irving Street that The Police Credit Union is responsible for, and to the south of Irving Street which the owners of the former Albrite Cleaners are responsible for. To ensure a holistic, integrated approach, the same DTSC project manager and support staff will direct work, review data and approve reports associated with those projects to ensure the protection of the larger community. To be clear, the separation of on- and off-Site impacts was not done by or at TNDC's request but reflects the environmental regulations that are currently in place to help restore contaminated land.

It is important to note that The Police Credit Union employees did not vacate the majority of the building in 2019 as a result of the PCE contamination, as stated in comments above. Rather, The Police Credit Union moved a majority of its operations to a new location, and then evaluated selling this property, which led to the discovery of the PCE contamination, and ultimately the work DTSC is now doing to address PCE in soil vapor for future Site residents, and the surrounding community.

In regard to the differences between the DTSC 2550 Irving Street Affordable Housing Development Site and the referenced San Francisco Regional Water Quality Control Board (SFRWQCB) 76 Gas Station site located at 3601 Lawton Street, San Francisco (76 Gas Station), DTSC has performed its oversight in full compliance with the Health and Safety Code Chapter 6.82 §25395.60 -25395.109. The 76 Gas Station site has various innate differences compared to the 2550 Irving Street site such as: historical site use and related contaminants, impacted media (soil, groundwater, and soil vapor vs. solely soil vapor at TNDC), and proposed response actions. The primary contaminants of concern for the 76 Gas Station site are related to petroleum hydrocarbons, including total petroleum hydrocarbons (TPH)-diesel (TPHd), TPH gasoline (TPHg), methyl tert-butyl ether (MTBE), benzene, toluene, ethylbenzene, xylenes, and lead. Based on reports available on the RWQCB's public website, GeoTracker, the media impacted at the 76 Gas Station are soil, groundwater, and soil vapor. The primary contaminant concern with the 2550 Irving Street site, PCE, is associated with the former clothing cleaner, and has impacted only the soil vapor media at the Site. The 76 Gas Station site was closed by the SFRWQCB in 2014 following a remedial soil excavation. However, on November 14, 2019, the San Francisco Watershed Protection Alliance issued Appeal No.: 20-053 at 3601 Lawton Street stating that leaking underground storage tanks and unmitigated contaminated soil and groundwater are located at the proposed development site at 3601 Lawton Street. Environmental investigations confirmed that a largely uncharacterized plume of contaminants exists beneath the site and adjacent properties. The San Francisco Planning Commission approved plans for a proposed development at the site without conducting additional investigations and no response actions are proposed for the development. In comparison,

DTSC is currently providing oversight for the proposed 2550 Irving Street development, which includes a DTSC-approved response action, and continuing to evaluate impacts to the properties outside of the 2550 Irving Street parcel.

In Topic 2 above, DTSC mentioned a site under DTSC oversight where a vapor intrusion mitigation system was implemented as a response action to PCE concentrations 1000 times greater than what are present at the 2550 Irving Street Affordable Housing Development Site. Hotel Abri is a 3-star hotel located in the Tenderloin neighborhood of San Francisco. A Phase I Environmental Site Assessment (ESA) Report was prepared for the property in 2018 and concluded that various types of cleaners, including dry cleaners, operated at a portion of the site from 1915 to 1983. An environmental investigation occurred on site following the Phase I ESA and found PCE in soil and soil vapor within the sandy lithology beneath the site. Groundwater was not encountered during the investigation at the site. PCE concentrations in soil ranged from 0.0695 to 11.1 milligrams per kilogram (mg/kg), exceeding the DTSC commercial/industrial soil screening level of 2.77 mg/kg. Soil vapor samples collected showed PCE concentrations ranging from 910,000 to 170,000,000 micrograms per cubic meter (μ g/m³), exceeding the DTSC-recommended commercial/industrial soil vapor screening level of 67 μ g/m³. Indoor air samples were collected from within the site and PCE concentrations ranged from 24 to 295 µg/m³ exceeding the DTSC indoor air screening level of 2.0 µg/m³. Mitigation measures were evaluated, and a subslab depressurization system (SSDS) was selected to protect the occupants of Hotel Abri. The SSDS includes piping installed within various points in the foundation of the building, situated at the surface of the soil column. These points were connected to a pump to apply negative pressure, drew vapor beneath the building into vapor treatment vessels, and discharged vapors above the building's roofline. While the proposed mitigation system at the 2550 Irving Street Site is similar to the Hotel Abri SSDS, the 2550 Irving system is not expected to employ active, mechanical venting due to the comparatively low PCE concentrations at the Site. The system is designed to be convertible to active, mechanical venting as a contingency, if on-Site, post-construction monitoring results exceed remedial action objectives discussed in the Response Plan.

Finally, environmental justice considerations are core to DTSC's mission. We hold this project to the same environmental standards we would hold any oversight project, whether for an affordable housing development, or for market-rate development. Vapor intrusion mitigation systems (VIMS) are a common and proven method used throughout the Bay Area and United States and this VIMS will provide long-term protection of health and safety for future on-Site residents. One example of a VIMS overseen by DTSC in San Francisco is 1598 Bay Street (www.1598bay.com), which is a high-end residential property. The EnviroStor link to 1598 Bay Street is as follows, for public reference: https://www.envirostor.dtsc.ca.gov/public/profile report?global id=60002282.

In regard to community outreach, DTSC is committed to tailoring community engagement efforts to community interest. As such, we have gone beyond the requirements set forth by the California Land Reuse and Revitalization Act. Examples of community outreach that we have conducted include: mailout of Community Letter and Survey prior to public comment period, briefings with neighborhood groups, interviews with interested individuals, Community Update mailed to the neighborhood to announce public comment period, Public Notice in SF Chronicle and Sing Tao, public meeting during comment period, and ongoing communications between project manager and interested community members, and elected officials. We are open to suggestions from the community for additional community outreach and will continue to provide updates on continued investigations in the area.

10. Topic: Mid-Sunset Neighborhood Association Comments

The Mid-Sunset Neighborhood Association (MSNA) calls on the Department of Toxic Substances Control (DTSC) to reject the Tenderloin Neighborhood Development Corporation's (TNDC) draft Response Plan as faulty and inadequate in large part because it fails to address our community's health and safety concerns.

The MSNA is an organization of over 170 individuals and families many of whom live in the immediate vicinity to the 2500 block of Irving Street. This is the area where a series of environmental assessments have found tetrachloroethene (PCE) contamination in soil gas at levels that are an unreasonable risk to our health. Long-term residents have been unknowingly exposed to PCE for decades—likely at higher levels than exist today. They live in houses with old foundations that are particularly susceptible to the PCE vapor intrusion from the subsurface.

PCE exposure is likely to increase the risk of Parkinson's disease, birth defects, and multiple forms of cancer. The CDC reports, "Studies in humans suggest that exposure to tetrachloroethylene might lead to a higher risk of getting bladder cancer, multiple myeloma, or non-Hodgkin's lymphoma. In animals, tetrachloroethylene has been shown to cause cancers of the liver, kidney, and blood system." ¹

Rather than accepting the TNDC draft Response Plan as is, we, the neighbors, want the PCE cleaned up. The need for the timely construction of affordable housing should not override the requirement that future residents not be at an unacceptable risk from the contamination. In fact, construction without remediation would be environmental injustice.

Working with expert advisors², MSNA has identified five major areas of concern that must be further investigated and resolved before an effective response plan

can be evaluated. In the following comments we will also outline four different solutions requiring evaluation that will protect both the current community and the future residents of the 2550 Irving Street affordable housing building in ways the draft Response Plan's recommended "band aid" solution does not. These alternatives are more technically effective and would reduce risk for all affected parties. Some of these alternatives are less expensive than the alternatives evaluated in the draft Response Plan.

The Irving Street PCE contamination is not isolated. It is part of at least two soil gas plumes related to historic dry cleaner operations and leaky city sewer lines that have been identified and are now co-mingled beneath Irving Street. The plumes have spread into the neighborhood in all directions – most concerningly to the north and south into single-family residential areas – and they are not stable based on the most recent data. The PCE plumes—which have not yet been fully mapped to DTSC's own residential screening levels—exist beneath numerous homes presenting a clear and unacceptable risk to their occupants.

The MSNA's major areas of concern are:

1) Incomplete site modeling and community safety:

Sewer line-related leaks and associated hotspots have not yet been identified. These are referenced in the draft Response Plan as potential PCE sources. Adequate characterization might need to wait until after demolition to complete this investigation. We argue that the long-term safety of the neighborhood depends on having confidence there is an accurate model of PCE sources, pathways, and receptors. The draft Response Plan does nothing to address the safety of the current community and will likely hinder efforts to do this by ignoring it now.

2) Faulty risk assessment and incomplete data:

Path Forward consistently downplays health risks to the future affordable housing residents and essentially ignores the risk to the surrounding community, some of whom have been exposed to PCE vapors for decades. Risk underestimation can be seen in Path Forward's use of a misleading attenuation factor as well as in their callous "acceptable risk" assumption that asks the future low-income residents to accept a 100 times greater cancer risk. Accepting more risk for low-income people is all too frequent a pattern. This assertion that future vapor intrusion risk will be acceptable is being used to justify TNDC proposing mitigation instead of permanent remediation, as called for in DTSC guidance documents.

In addition, Path Forward seems unconcerned or unaware that new data will be forthcoming over the next year from an off-site PCE vapor intrusion investigation

that will begin in September 2021. The Police Credit Union (TPCU) off-site investigation is directly related to remaining on-site sources; indoor air testing is planned but not yet conducted. This important data and vapor intrusion evaluation won't be fully available for another year. This is one of the reasons why coordination of multiple responsible parties (including the city) is important. The California Land Reuse and Revitalization Act (CLRRA) agreement calls for a health risk assessment (HRA) and allows for TNDC, TPCU and City of San Francisco (City) to come together and do the right thing under DTSC guidance and conduct an actual cleanup.

3) The PCE soil gas plumes must be delineated to protect the community's health.

To date, the full extent of the PCE plumes is unknown. The Irving Street PCE soil gas plumes need further delineation in all directions to DTSC's own stated residential screening levels. There should be a unified conceptual site model that shows the sources, pathways and receptors for the combined sites.

4) Insufficient and unfunded cost estimates for the Vapor Intrusion Mitigation System and O&M Plan.

It is difficult to discern how both the VIMS and the ongoing 30-year O&M plan are going to be financed. While the draft Response Plan includes an O&M plan, it is important to note there is insufficient detail in the Plan to know how this will be funded and monitored over time. The same is true for the VIMS—the Plan contains no cost detail for VIMS installation. There is no contingency cost estimate in the event the VIMS system needs to be converted to an active system. One of the weaknesses of this part of the draft Response Plan is that there are no financial bonds or assurances in place—especially for the on-going yearly costs.

5) The draft Response Plan ignores the most applicable cleanup alternatives.

For a site like 2550 Irving Street, with the known amount of contamination and potential risk, DTSC's *Supplemental Guidance for Screening and Evaluating Vapor Intrusion* states that "remediation should be the preferred response action to reduce VI risk by permanent reduction of contaminants. Mitigation is considered an interim response action until VFCs in soil, soil gas, or groundwater are confirmed to be at acceptable levels." ³ The Path Forward remedial alternative evaluation is an incomplete and faulty analysis because they omitted the clear presumptive remedy (Soil Vapor Extraction or SVE.⁴

Additionally Path Forward rejected a soil removal alternative on the basis of expense, but entirely missed how it could be a cost effective and better alternative than mitigation. Removing contaminated soil for an underground parking garage/foundation could solve many of the ongoing contentious issues around this building, e.g., neighborhood traffic congestion, pedestrian safety, residential parking, and negative effects of a grade-level foundation on the neighbor's brittle 100-year old foundations.

The MSNA has identified the following alternatives that require consideration by Path Forward and TNDC that are actual cleanup solutions to remediate the PCE and address the concerns of the existing community:

- Soil Vapor Extraction before demolition
- Soil Vapor Extraction after demolition
- Excavation targeted to remove hot spot source material
- Excavation full soil removal with potential parking component

The attached *Draft Response Plan Addendum* dated August 3, 2021, prepared by Environmental Risk Solutions, Inc. (ERS), signed and stamped by a California Professional Geologist, highlights the faulty alternative evaluation by Path Forward and omission of the SVE technology. The Addendum is supported by cost detail from RMD Environmental Solutions, which is prepared to implement the SVE technology at a lower cost than the TNDC mitigation approach with its potential future hidden contingency costs and unfunded O&M costs as highlighted above. The ERS Addendum also calls into question Path Forward's evaluation of the soil excavation alternative, thus supporting the MSNA's position on inadequate alternative evaluation.

Our experts have also prepared the attached technical comments that support and add detail to the MSNA's statements and positions outline above.

While our comments in this document have been focused on the narrow scope of the TNDC/Path Forward *Draft Response Plan*, they also demonstrate the need for a more holistic way to address the problem of the carcinogenic PCE contamination in our neighborhood. We ask DTSC to coordinate TNDC's investigation and remediation with any investigation and remediation conducted by the other responsible parties including TPCU and the City. The CLRRA agreement may have some protections, but the individual goals of the responsible parties cannot allow community concerns to slip through the cracks— like the PCE vapors may be slipping up through the cracks of our 100-year old foundations and into our homes. That would include full delineation of the soil gas plume, identification of all sources of PCE, and implementation of an SVE or soil removal alternative. To be clear, the only responsible party for the PCE contamination north of Irving Street at this time is TPCU – this is the case until the property is transferred. The MSNA insists that the property transaction

be put on hold until TPCU and TNDC come together and prepare an actual cleanup plan that is acceptable to all parties. DTSC has the power to do that and it is written into the Board of Supervisors' loan agreement as an amendment that Supervisor Mar made to that agreement.

The MSNA is deeply appreciative of this comment period at a time when we know there is intense pressure by the City, its agencies and the developer to rush past these environmental issues so that financing for this project can speed ahead. This was recently highlighted by the Mayor's Office of Housing and Community Development's (MOHCD's) Amy Chan in her answer to Supervisor Mar when he asked at a San Francisco Board of Supervisors (BOS) meeting why it was necessary to approve the TNDC predevelopment loan before the DTSC comment period is complete. In response, Ms. Chan said they wanted to act quickly because there was a purchasing agreement deadline in August, the BOS was soon going on vacation, and MOHCD didn't feel they needed to wait for the DTSC comment period because:

"We don't believe that there would be any new information coming from DTSC. As Jacob [Noonan of MOHCD] has mentioned the *Draft Response Plan* has already been reviewed and preliminarily approved. And there won't be any new information coming from that process, which will conclude in mid-August."⁵

Ms. Chan is wrong to assume this and we would expect you to concur. A draft plan is a draft plan. The comment period is a chance to evaluate new information. We ask DTSC to see the long-range picture, use a wider focus and to look carefully at the faults and omissions in TNDC's *Draft Response Plan*. The MSNA's concerns are justified and must be addressed before any approval to this plan is given. Our community's concerns have been ignored by this faulty plan that should be designed to protect all people who live in the neighborhood now and in the future. We thank you for your consideration and look forward to engaging with you in a discussion around these issues.

Response:

Thank you for your thorough review and comments on the Draft Response Plan for the 2550 Irving Street property (Site). After a review of the comments and supplemental documents provided, DTSC has determined that the vapor intrusion mitigation system, or VIMS, is still the appropriate and preferred remedy for the Site. The following points summarize DTSC's reasoning and responses to the comments provided in your letter.

1) DTSC is providing oversight for three separate projects associated with PCE contamination both at 2550 Irving and in the larger neighborhood. We are committed to ensuring the short- and long-term protection of public health as it

relates to this contamination. We believe that the Site has been adequately characterized, and that sufficient investigation has been done to move forward with the response action. We will continue to work towards monitoring the areas north and south of Irving and are committed to adequate characterization of those areas. We are committed to working with you to ensure the long-term safety of the neighborhood. Going forward with the remediation for the Site will not hinder efforts to characterize PCE sources, exposure pathways, and risks to receptors.

DTSC must follow environmental regulations set forth by USEPA and DTSC that establish agreements with the parties responsible for addressing the contamination. Under CLRRA statute, TNDC, as the developer of future housing at the Site, is responsible for only the on-Site contamination. The CLRRA framework encourages the revitalization of contaminated properties across California by providing liability protection to innocent and prospective landowners. Under CLRRA, TNDC is responsible for conducting an environmental assessment and developing a response action only for the Site, which allows for safe redevelopment of the property under the proposed future land use.

2) As the draft Response Plan focuses on risks to future residents, as discussed above, the Response Plan does not address the surrounding community. consistent with the CLRRA statute. Comments from the Mid-Sunset Neighborhood Association, including those by their consultants, suggest that the risk evaluation allows for higher level of risk for the future occupants of the building than would be considered under a different land use. This is not correct; the objective of the Draft Response Plan is to reduce the vapor intrusion risk to building occupants to less than 1 per million incremental lifetime cancer risk (Section 5.3, Remedial Goals), independent of the financial status of the occupants. The risk evaluation was performed in accordance with guidance by the United States Environmental Protection Agency (USEPA), Department of Toxic Substances Control (DTSC), and the State Water Resources Control Board (SWRCB) (USEPA 1989, USEPA 1991, DTSC 2011, DTSC and SWRCB) 2020). The potential vapor intrusion risk associated with Site soil gas conditions was assessed using both historical and current recommended attenuation factors (DTSC 2011 and DTSC and SWRCB 2020). Using the DTSC 2011 default screening attenuation factor of 0.001 resulted in the evaluation that remediation was not necessary as the estimated risk was calculated to be less than 1 per million. Using the revised default attenuation factor included in DTSC and SWRCB 2020 draft guidance resulted in an estimated risk within the riskmanagement range (i.e., between 1 and 100 per million). It is noted that this risk evaluation was performed for future building users in the absence of any

response action, to determine if action was necessary. Based on the findings of this evaluation using the new draft guidance, the Draft Response Plan recommended that a response action be performed to ensure the protection of the building users (i.e., to mitigate the vapor intrusion risk to less than 1 per million). Following implementation of the mitigation measure, the building will be protective for all receptors including potential ground floor residents and/or daycare that may be included in the building design. We concur that it is critical that there is coordination of the multiple responsible parties, including the City, and are committed to doing so and keeping the neighborhood informed as well.

3) We concur that the PCE in soil vapor needs to continue to be evaluated to protect the community's health. We will provide ongoing oversight for this work, but as stated above, this work is not part of the Draft Response Plan for this Site. We concur that there should be a unified conceptual site model for this area of the neighborhood that shows the sources, pathways and receptors for the combined sites; again, this will not be part of the Draft Response Plan for this Site and will be pursued as a separate effort. Off-Site investigations will be performed by TPCU and others, as necessary, to refine the delineation of PCE impacts north and south of Irving Street. DTSC will continue to keep you informed of our progress on this effort.

Several rounds of investigation have been performed by both AllWest and Path Forward to adequately characterize PCE impacts to on-Site soil, groundwater, and soil gas. Based on the findings of these investigations, a significant source of PCE was not identified on Site, and the results of the soil gas sampling suggest a significant source is not present. The MSNA's experts opined that a surface release may have occurred and refer to location SVP-20A/B, which is located off Site, to the south. Samples collected on Site generally indicated similar PCE concentrations between the 5- and 15-foot-deep sample interval, suggesting that Site conditions represent diffuse migration from an off-Site source, rather than a source associated with a localized surface spill or release from on-Site sewer lines. It is noted that during redevelopment of the property, the on-Site utilities will be replaced to service the new building. Utility seals are also proposed on-Site in the Draft Response Plan to prevent migration from potential off-Site source via new sewer laterals, storm drains, or other new underground utilities.

4) While not specifically stated in the Draft Response Plan, a Financial Assurance mechanism is required for the Site. Proponents working with the DTSC under voluntary agreements, such as CLRRA, are required by statute and regulation to provide adequate financial resources to pay for the long-term operation of certain types of cleanup systems. These financial resources, and the associated legal instrument controlling the financial resources, are known as financial assurance mechanisms. These mechanisms ensure that financial resources are available for DTSC to take over the management and stewardship of a cleanup, in case a Proponent fails to meet its obligations due to financial insolvency or other reasons. Through use of financial assurance, DTSC can ensure that human health and the environment are protected without placing a burden upon California taxpayers. DTSC reviews and approves the Proponent's financial assurance estimates for each particular project. The estimate must include costs associated with managing, operating, inspecting, and maintaining long-term systems, including Land Use Covenants, for a minimum of 30 years and/or until the remedial goals are met, as described in the cleanup plan and in coordination with the Responsible Party's technical team and DTSC staff.

5) Certain Proponents are exempt from Financial Assurance under Health and Safety Code 25355.2(c)(4):

"(c) The department or the regional board shall waive the financial assurance required by subdivision (a) if the department or the regional board makes one of the following determinations:

(4) The responsible party is a federal, state, or local government entity." However, TNDC is not exempt from Financial Assurance and would be required to comply with this regulation until DTSC determines that cleanup is completed, and the system is no longer required for the protection of human health and the environment. As a matter of practice, long-term cleanup systems are reviewed by DTSC every five years to confirm continuing protectiveness of human health.

6) Under CLRRA, the Responsible Party is only required to propose one method to achieve acceptable conditions for future development. This is why there is no indepth evaluation of all possible alternatives. However, TNDC voluntarily evaluated soil removal as an alternative, even though it was determined that soil contamination was minimal. Based on this evaluation, DTSC concurs with the findings that soil removal is not an effective remedy for this Site. The MSNA states that including a vapor intrusion mitigation system (VIMS) beneath the building is not a permanent and/or appropriate remedy. Based on the concentrations observed, utilizing a VIMS was found to be an appropriate alternative for implementation at the Site to protect the future on-Site residents. Mitigation is a commonly employed approach by the DTSC, is consistent with current guidance (DTSC and SWRCB 2020), is used on sites with significantly higher potential risk that at this Site, and the selection of this particular mitigation is independent of the financial status of the occupants.

While SVE systems success are partially based on the geology, the nature and

extent of the contamination and the design and implementation of the system have a greater influence on successful implementation. Based on results of sampling performed to date, the observed concentrations do not suggest a significant source of PCE to soil gas is present on-Site that would warrant operation of a SVE system. The system, as conceptually designed by Environmental Risk Solutions, is unlikely to successfully remediate soil gas concentrations within the proposed timeframe and has the potential to exacerbate soil gas concentrations on Site and off Site. As a source of PCE in soil gas, including the highest observed PCE concentrations in soil gas, is located off Site to the South, on-Site operation of an SVE system has the potential to induce northward migration of a more concentrated soil gas plume onto the Site, and toward some off-Site residences.

Soil removal is an effective way to address PCE in soil vapor in circumstances where the contamination is concentrated and localized in soil. Based on the concentrations of soil vapor observed, it is highly unlikely that significant sources of soil contamination are present on-Site. Of all the soil samples collected on-Site, only one was found to contain PCE. That one PCE detection was at a concentration well below applicable screening levels. While cost was a factor that was evaluated for both options, ensuring the long-term health and safety of future residents from current and potential future impacts is one of the primary criteria of DTSC's remedy evaluation process. DTSC has determined that the VIMS better met selection criteria than did soil excavation. It appears that MSNA's experts agree with the position that it is unlikely that there are significant sources of soil contamination on Site, as they state:

"ERS and RMD recommend that the SVE approach be coupled with a Soil Management Plan (SMP) to be implemented during redevelopment based on the potential for residual PCE impacted soil in the vicinity of former sewer lines and / or spill "hot spots". **Soil data suggest this potential is low** but an SMP is appropriate and the estimated cost of SMP preparation, field oversight and small soil disposal contingency is \$40,000."

By virtue of the Site's location and historical uses, the project is required to comply with San Francisco Health Code Article 22A, known as the Maher Ordinance. The Maher Ordinance defines a process for characterization and mitigation of soil and groundwater contamination, for the protection of public health and safety during and after Site redevelopment. The City of San Francisco has deferred the oversight of mitigation measures for the contaminants onsite to the DTSC. Historical investigations and DTSC oversight related to historical Site use would likely satisfy the Maher requirements and further testing and mitigation beyond the DTSC requirements discussed in the Response Plan is unlikely to be

required by the SFDPH. While the Site is exempt from San Francisco Health Code Article 22B, the San Francisco Dust Ordinance, due to parcel size being less than one acre, as a conservative measure the Tenderloin Neighborhood Development Corporation (TNDC) will prepare a Site Management Plan which will include dust control and monitoring measures during construction activities.

<u>References</u>

DTSC. 2011. Guidance for The Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance).

DTSC and SWRCB. 2020. Supplemental Guidance: Screening and Evaluating Vapor Intrusion. Public Draft. February.

USEPA. 1989. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part A). Interim Final. Office of Emergency and Remedial Response. December.

USEPA. 1991. Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals). Interim. Office of Emergency and Remedial Response. EPA/540/R-92/003. December.

11. Topic: Other

Comment 11.1 [Mr Machado], your name is given as the contact person concerning the decision of whether to clean up the site at 2550 Irving St San Francisco, or to cover it with a barrier for 30 years and then clean it up.

Are you working on such a decision? Have you formulated a plan yet?

In my view, a prompt cleanup would seem to be desirable since the polluter was evidently a known dry cleaner who elected to leak toxic tetrachloroethylene into the soil, and who is obligated to clean it up.

Hoping to hear of your decision and decision process.

Response: Thank you for your interest in this site and perspective. Yes, DTSC is providing regulatory oversight at 2550 Irving Street in San Francisco. There are two Proponents associated with the 2550 Irving Street property: The Police Credit Union and TNDC. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) the current landowner during the time of the discovered release is responsible for the contamination originating on-Site and its extent off-Site. TPCU, as the current landowner, is responsible for the impacts of PCE off-Site and has been monitoring soil vapor adjacent to residences north of Irving Street. TNDC on the other hand, has entered into a

California Land Reuse and Revitalization Act (CLRRA) agreement which grants the prospective purchaser immunity to any off-Site responsibilities to contamination originating on-Site. TNDC, however, is still responsible for contamination on-Site and any response actions necessary to protect future on-Site users (residents).

TNDC has submitted a draft Response Plan that proposes to install a vapor intrusion mitigation system underneath the foundation of the proposed building which will prevent PCE from entering indoor air of the new building. DTSC has reviewed and provided comments, which have been incorporated into the current version of the draft Response Plan that can be found here: https://www.envirostor.dtsc.ca.gov/public/community_involvement/4489225089/D RAFT%20Response%20plan_051121.pdf

DTSC has determined that a vapor intrusion mitigation system provides effective long-term protection of the health of future residents as required under CLRRA. We will be working with The Police Credit Union and neighboring Responsible Party, former Albrite Cleaners, to address PCE contamination in off-Site areas. For both of these sites we are currently working to collect additional data and with that information will work with both parties to determine appropriate actions to ensure the long-term protection of the health of neighboring residents. We will share additional information with the community as we learn more.

Comment 11.2 Personally, I think that references to killings and death by laborers with little construction jobs at my neighbors' homes preceding this large construction job down at 2550 Irving St. might only be a peculiar coincidence. And considering the torment my family went through at the same time (please refer to the enclosures), it is probably all just a very peculiar coincidence.

Never mind that one neighbor put up stairs in his backyard up to his second story that go right up just a few feet from my daughter's bedroom window and that atop the Cyclone fence partitioning our backyards, where the ends of the wires turn and hook down so there aren't any pointy tips, in several spots those wires are undone, in two instances right beneath the added stairs in the backyard and in a third instance right above two 12x1 boards that are stacked width-wise and braced with a 2x4 to make what would otherwise be a 6-foot Cyclone fence a 4-foot Cyclone fence; or another neighbor that added a room and raised his backyard several feet such that people from the room or backyard can look right into my bedroom and through a walk-through closet and into the bathroom where I brush my teeth; or another neighbor that extended his home in the backyard and added stairs that see into my bedroom and that of my daughter's bedroom; or another neighbor Robert that had a laborer that I could hear through an open window scraping away at something on the roof near my light well, even though the laborer parked two doors down at Ricky the plumber's house. It was a nice

sunny day and when I ran the faucet, I heard the scraping immediately stop. I turned off the water and listened to the silence in silence for a long time.

Response: We are sorry to hear about the disruptions to your home life. DTSC will provide oversight during the construction of the vapor intrusion mitigation system to ensure that it is constructed safely and to standards that will allow for the long-term protection of human health and the environment. However, we do not have oversight for the development itself.

Comment 11.3 FYI, I mentioned in my PCE mitigation plan by TNDC that we have a 76-year old oncology patient who is at high risk. This email is serve as supporting documentation that we indeed have someone immunocompromised and high risk living next to 2550 Irving St, SF.

FYI, yesterday (6/12/2021, 11:30-13:00) I attended the shadow study presentation (of proposed 7-story building at 2550 Irving Street, SF) at the Church located at 1370 19th Ave, SF. I raised the question of home-bound highrisk hematological oncology patient (my mom- in-law) who needs sunshine for her health, since the simulation shows 3 seasons out of 4 seasons per year, my house is completely covered by the proposed building's shadow. The Pyatok architect Adrean said perhaps they can offer my mom-in-law the right to use their yard as a compensation, and everyone else was booing her. Obviously, that is not an acceptable solution for us.

Our family members all think high-risk patient's lives matter. Please put this on your file.

Response: We empathize with your concerns about the effect of the proposed building on your home and how it will affect your mother-in-law. DTSC does not have the authority to require changes in the building plans to address height and shadow concerns. We will pass this on to TNDC for consideration.

Comment 11.4 The subject Plan's proposed responses may also harm the property values etc. of nearby buildings and housing. I wonder if sellers of these properties will have to put covenants in their sales agreements besides informing potential buyers of their perc situation. I believe they will have to declare in the Natural Hazardous Disclosure (NHD) when they list their properties for sale that their property and/or nearby properties are contaminated. Also, will there be a reserve fund if it proves necessary for neighbors to do some sort of remediation as a result of perc intrusion?

Response: Properties that have contamination above screening levels that remains in place require Land Use Covenants to be recorded with the County, as is the case for 2550 Irving. Tenants signing leases would also need to be notified in writing through a disclosure by the property owner/leasing agent. DTSC will require that the Responsible Parties cover the cost of any remediation activities

associated with PCE contamination in the neighborhood. TNDC will be responsible for on-Site impacts, The Police Credit Union is responsible for off-Site impacts north of Irving Street, and the owners of the former Albrite Cleaners are responsible for impacts south of Irving Street.

With regards to covenants in sales agreements or other forms of disclosures associated with the sale of a property, the Natural Hazard Disclosure (NHD) applies to properties within a natural hazard zone, unrelated to man-made pollutants such as PCE. Natural hazards include earthquakes, tornados, wildfires, hurricanes, etc. It is likely earthquakes were included in a NHD report, however DTSC recommends consulting with a real estate agent on the appropriate disclosure that would be required to include to the NHD.

Comment 11.5 After all is said and done, I would appreciate it very much if you could furnish us the names of the person/s who approve of this project, what department they are working for and the name/s of their department head/s. We in the community want proper accountability of this project.

Response:

DTSC is only involved in the environmental oversight of the 2550 Irving Street project and not the development efforts. DTSC has a thorough review process for all draft remediation plans including this Response Plan. This plan was reviewed by the following individuals:

- Arthur Machado/DTSC Project Manager, Berkeley Office
- Whitney Smith/DTSC Unit Supervisor, Berkeley Office
- Julie Pettijohn/DTSC Branch Chief, Berkeley Office

Response Plan – Questions/Comments Received During the Public Meeting

1. Commenter: Anonymous Attendee

Comment 1.1 Would the DTSC have initiated indoor testing if the community had not demanded it? Why was this not done earlier in the assessment process?

Response: DTSC became involved in mid-2020 after signing a voluntary cleanup agreement with the Police Credit Union which is responsible for any offsite impacts north of Irving Street. DTSC first collected soil vapor samples to better understand the extent of the current soil vapor plume and what the concentrations are off-Site. We also requested that the Credit Union do the first and second soil vapor monitoring sampling events, one in September 2020 and one in March 2021. The March 2021 report was provided to DTSC in May. Based on the concentrations, DTSC did not see potential unacceptable or imminent risk, so indoor air testing was not warranted immediately. Instead, we needed to collect data to establish a baseline to then come up with a plan on what's the next step in evaluating the area. At the same time, there was a lot of community interest and community push, and DTSC in discussions with the Credit Union both decided to then do indoor air sampling because that additional data will help us evaluate if vapor intrusion is occurring.

2. Commenter: Anonymous Attendee

Comment 2.1 Would you please explain how construction at the site will impact the PCE vapors?

Response: What DTSC has noticed is that construction typically helps reduce concentrations of soil vapor contaminants because you give the contaminants a pathway to the atmosphere where they naturally attenuate and dissipate.

Based on the low concentrations observed, there does not appear to be high enough concentrations to create an outdoor air concern during construction. Although not required by DTSC and/or San Francisco Building Code and San Francisco Health Code (SFHC), Article 22B, TNDC has voluntarily offered to prepare a Dust Control Plan that includes a perimeter air monitoring program that will be submitted to the San Francisco Department of Health and DTSC prior to starting construction. This Dust Control Plan will lay out details of how they will monitor air for airborne dust and volatile organic compounds during construction to ensure the protection of the surrounding community. This will include stringent, health protective action levels and if these levels are exceeded, prescribed additional measures to be implemented to decrease concentrations to acceptable levels.

From what we understand, the construction will not increase concentrations or pose more of a risk for the community. Again, we'd actually expect it to actually lessen the concentrations on-Site and since our understanding is the site is one of the source areas in the Irving Street vicinity, that would also better the impact to the outside.

3. Commenter: Chuck Kwan

Comment 3.1 Are you just going to be air sampling and analyzing for PCE or other chemicals as well?

Response: When the Credit Union was first investigating the property in 2019/2020, they did the full suite of analysis for TO-15, which is the analysis for the majority of contaminants in the environment that are detectable, and from

there, PCE was the only contaminant concern identified. Everything else was not detected or detected below screening criteria, so now our analysis is focused on PCE and its breakdown products: TCE, cis-/trans-DCE, and vinyl chloride. That is the suite of analyses that we've narrowed it down to since PCE is the only contaminant of concern related to the Site.

Comment 3.2 Have you done any health surveys, around the Site, of people to see if they've had health effects that could be associated with PCE exposures?

Response: It is not in DTSC's jurisdiction to conduct health surveys as we do not specialize in clinical toxicology. Instead, we focus on the contaminants found underground so that we can ensure the long-term protection of public health and the environment. We do take into consideration all information shared with us including information from the community such as the types of impacts and diseases experienced.

Comment 3.3 Are you using exposure limits from EPA or using something more stringent from your own program?

Response: The State of California approaches PCE more conservatively than the federal EPA does, so our screening level, compared to EPA's screening level for inhalation, is actually 25 times more stringent because of the difference in the assumed toxicity. The default exposure assumptions for a residential scenario are the same.

But it's the toxicity value that we ascribe to PCE specifically that makes us act on it and identify it as a contaminant of concern at 25-fold lower than what federal EPA would.

Comment 3.4 Is there a groundwater system underneath the site that could be used as drinking water?

Response: The Site is located within the North Westside Groundwater Basin which is considered a drinking water resource. PCE was not detected above maximum contaminant levels or environmental screening levels in groundwater, and it was not listed as a contaminant of concern in that media either. Maximum contaminant levels are the highest level of a contaminant that is allowed in drinking water.

4. Commenter: Anonymous Attendee

Comment 4.1 What are the remediation solutions for the off-site neighbors in the future?

Response: That's a very good question. DTSC is at the early stages of this investigation, and we need to conduct various types of sampling to have enough data to go back to a Responsible Party or proponent and say we are now at the stage where remedies should be developed.

For this area, it's difficult to say at this time because there are so many different types of remedies that you can choose, and it is hard to just pinpoint one in this area. However, we will select one when we are the point where a remedy will be necessary, and the remedy will benefit the community as a whole. But right now, we are evaluating if vapor intrusion is happening in the homes off-Site. We need to figure out what that looks like before we can determine what the potential remedy should be. We will keep you updated.

5. Commenter: 'stokesimac'

Comment 5.1 Is a typical Vapor Intrusion System cheaper than Soil Excavation?

Response: There is a cost analysis that is presented in the Response Plan, and I believe that soil excavation was more expensive in the short-term than a vapor intrusion mitigation system. However, it depends on the scope of the soil excavation and the size of the building that would have the vapor intrusion mitigation system so the cost can vary. But there is a cost outline for both of those remedial alternatives in the draft Response Plan.

Comment 5.2 Does the lifetime of a Vapor Intrusion System outlast the time these contaminants typically persist in soil?

Response: That's an interesting question. I don't think there has been a system that has outlived us yet. But when DTSC is involved, and when we attach a land use covenant and engineering controls, we are going through and reviewing these and assuming that they will exist for the building's lifetime and that they have to be as effective as when they are first built throughout the building's lifetime.

So, to answer your question, if the material or the system doesn't survive the building's lifetime and resources start to deteriorate, that will be known through the monitoring that's a part of its operation, and at that point, repairs can be made to ensure that it stays effective throughout its lifetime and the building's lifetime.

Comment 5.3 In your professional opinion, do you think potential outcomes for mitigation or remediation would be different if this Site were to undergo a full CEQA investigation?

Response: A vapor intrusion mitigation system would still likely be the preferred alternative even if this project were to undergo a full CEQA review. However, this project is exempt under SB-35. DTSC will still file a Notice of Exemption once the Response Plan has been approved, as is our process with sites like this. We have to abide by SB-35 as this project is exempt.

Comment 5.4 For the record, there are many of us who are deeply concerned at sidestepping the CEQA process is not in the best interest to the future residents of this Site, as well as the surrounding neighbors. Who will be held accountable years from now, if issues arise with health impacts to residents, because a thorough process was not followed at this point?

Response: While this Site is exempt from CEQA, DTSC is under a voluntary cleanup agreement with The Police Credit Union and the owners of the former Albrite Cleaners and any remediation associated with impacts they are responsible for will undergo a full CEQA process. The vapor intrusion mitigation system and required monitoring will also provide long-term protection for Site residents.

6. Commenter: Deborah Murphy

Comment 6.1 I live on 26th Avenue, and all this talk of waiting and seeing what's going to happen, I know for a fact that a lot of my neighbors have cancer. Long-term residents have cancer. I've lived here since 1976. I think it should just be cleaned up. Get rid of the toxins now. I don't see... I know there might be some cost benefit for living here. For peace of mind, I would feel much safer, if you just got rid of these toxins. I don't want to have you monitor for the next few years to see if I'm going to be the next one getting cancer.

Response: DTSC takes your concerns very seriously. The same project manager will be in charge of the investigations and any related cleanup that are happening for the three different properties: the 2550 Irving Site with TNDC, off-Site areas north of Irving Street with The Police Credit Union and off-Site areas south of Irving Street with the owners of the former Albrite Cleaners. What is being proposed here by TNDC was to just address contamination found on-Site to ensure the protection of future residents. We do not have enough data yet to propose a cleanup plan for the off-Site impacts, which is why we are overseeing indoor air sampling being conducted by The Police Credit Union and further investigations by Albrite Cleaners. We are looking at the indoor air in homes closest to the source area as these are the homes where we would expect to see impacts, if any.

DTSC will stay in touch with the community and make sure you are informed of everything we are doing. We will update you when we have new information to

share. We absolutely take your concerns very seriously, so thank you for your comment.

7. Commenter: 'adammichels'

Comment 7.1 Why are you not considering vapor extraction as one possible response? Doesn't it make more sense than excavation? Also it would protect neighboring properties from a plume, wouldn't it?

Response: At the time of the public meeting DTSC did not have a formal evaluation to say whether or not soil vapor extraction would be successful at this Site. Under the CLRRA process, we reviewed the response alternatives presented in DTSC's draft Response Plan and concurred that the vapor intrusion mitigation system would protect the health of future residents. However, after hearing from the community extensively that their preference was for soil vapor extraction at this Site, DTSC conducted an evaluation of that as a possible remedial alternative. Our evaluation determined that a vapor intrusion mitigation system was still a more appropriate choice for this Site than soil vapor extraction because, based on the sampling performed to date, the observed concentrations do not suggest a significant source of PCE in soil vapor is present on-Site that would warrant the operation of a soil vapor extraction system. Such a system also has the potential to exacerbate conditions on-Site by encouraging the northward migration of the soil vapor plume onto the Site from the south. Instead, the vapor intrusion mitigation system is appropriate because it will prevent vapors from entering into the building entirely. We can then address the soil vapor plumes off-Site after further investigation work is conducted by The Police Credit Union and the former owners of the Albrite Cleaners.

Comment 7.2 How long would vapor extraction take?

Response: That's difficult to estimate because typically you would conduct a pilot study first to see if a soil vapor extraction system would be effective and what rate it would pull contaminants out of the ground. However, based on the geology, distribution of concentrations and a typical system, it is unlikely that a soil vapor extraction system would be effective at cleaning up the property in a time frame that would allow for the proposed redevelopment project to move forward.

Comment 7.3 How do you know both plumes did not originate with Albright?

Response: That was the original hypothesis when DTSC was first involved. However, while DTSC was reviewing soil data collected at the Credit Union Site, there was 66 soil samples collected at various steps, and there was one detection of PCE, below screening levels, at the location of a former on-Site dry cleaner. The data showed a high concentration south of Irving Street, a slight dip as you went north, and then the concentration increased again. And that's when DTSC noticed the detection of PCE in soil and realized there seems to be two PCE plumes instead of just one."

Comment 7.4 Is this situation common or unique? (2 plumes etc)

Response: It is a pretty common phenomenon to have separate released sources, depending on the site history use. There are many contaminated sites with chemical plumes with various different types of contaminants that can overlap each other.

Comment 7.5 Why do we have to leave our house during the testing of indoor air?

Response: In-home activities like opening doors and windows, using personal care products and household cleaners, can interfere with the results of an indoor air evaluation.

Comment 7.6 Is Vapor Extraction the only remedy that would protect the surrounding homes from potential plume movement?

Response: That's hard to say because we would need a more thorough evaluation of off-Site impacts and of soil vapor extraction to be completed. Without the proper evaluation and data, it would be wrong to opine on this right now.

Comment 7.7 If the same person comments more than once, does that make a stronger case?

Response: DTSC takes all comments into consideration, and it is helpful for us to know how the community feels. When we receive a large volume of comments for a site, we take additional steps for community outreach. We will evaluate the science behind any comments or suggestions made and how such a comment or suggestion would affect the Site and then respond accordingly.

Comment 7.8 If I spoke today, should I send in a letter saying the same thing?

Response: Comments shared today will be included in the Responsiveness Summary that will be finalized after the close of the comment period. However, you are more than welcome to also submit comments in writing. Both would be included in some form in the Responsiveness Summary if you do.

8. Commenter: John and Joan Barkan

Comment 5.1 What was the site usage from 1947-1965 (not included in presentation)?

Response: DTSC apologizes for not including that in the public meeting presentation. According to The Police Credit Union's Phase I Environmental Site Assessment the property gas stations operated at the corner of 26th and Irving and 27th and Irving during this time. You can find this information on page 8 at the following link:

https://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/742252051 8/18190.20_2550IrvingSt-ESA.pdf

Comment 5.2 Is the PCU required to disclose any health impacts on both current (mentioned in presentation) and past employees which may be related to site toxics?

Response: This is outside of our jurisdiction.

Comment 5.3 Following on the question above, shouldn't you know if the PCU closed its second floor offices due to toxics, and moved to other locations to unload an unsafe building on the taxpayers?

Response: Based off DTSC's evaluation of the indoor air data, and based on discussions with the Credit Union, the Credit Union moved to a new headquarters, and that is why there were rooms in that area of the building that were not occupied. But based off the indoor air data that was collected in the areas that were occupied, actively used, and ventilated, the concentrations were below screening levels. And, even with the samples taken in the building of the areas that were unoccupied, they were slightly above screening criteria, but they were not at the point where there was a health risk or a potential unacceptable health risk either.

9. Commenter: Doreen Silk

Comment 9.1 Hi, I have been living in the neighborhood, like many of our other senior residents, for over 50 years, and we have been living across the street from these dangerous chemicals for years. And I understand that I am in close proximity and, as a matter of fact, my husband is undergoing a test and a study through UCSF, because he did contract Parkinson's. And so, you're telling me, and we are north of this project, but you have limited it to the houses across the street, when a gas plume is a gas plume, you can't say which side of the street it's going to go, and I am hoping that, despite the fact that I think they should reach farther than these building confines, which is a square block, that

they should consider these immediate neighbors and clean it up and just, you know, mitigating it is one thing, but if you have to follow it for 10 years... who knows if I'll be around in 10 years?

Response: DTSC hears your concerns and has taken that into consideration. While we have determined that the vapor intrusion mitigation system will be effective at protecting the health of future on-Site residents, we are still overseeing ongoing investigations in off-Site areas being conducted by The Police Credit Union and the owners of the former Albrite Cleaners. We are planning to conduct an indoor air investigation of the homes closest to the Site to the north of Irving Street. Should results show vapor intrusion is occurring, we will require that The Police Credit Union take additional steps to ensure the protection of the community, which could include expanding the indoor air investigation and/or cleanup measures.

10.Commenter: Anonymous Attendee

Comment 10.1 Why is no indoor testing being done on the south side of Irving Street?

Response: That's a very good question. When the Credit Union was first doing their investigation, they investigated both the southern property and their northern current property. While investigating the southern property, they saw that there was higher concentrations adjacent to the former Albrite Cleaners at 2511 Irving Street.

DTSC looked through this data and determined that it was possible that there was another release associated with the operation of Albrite Cleaners. So, DTSC went through a detailed search, and found hazardous waste manifests that showed that PCE was used at Albrite in the late 1980s, before they stopped using it in 1990.

This confirmed DTSC's belief that there was another source, being Albrite Cleaners, that may have contributed to the PCE contamination, making them responsible for any impact south of Irving Street. DTSC is now getting involved with them to conduct investigations and whatever else will be necessary to address the soil vapor PCE impacts south of Irving Street.

11. Commenter: Anonymous Attendee

Comment 11.1 Excavation sounds like a better path to clean up this Site as it would reduce the PCE plume for the benefit of the new residents as well as existing ones. Is that correct? Why was the vapor intrusion mitigation chosen instead? And why doesn't DTSC push for the best possible remediation option

for this Site so that it benefits existing residents as well as new ones at 2550 Irving?

Response: I believe it's very difficult to choose soil excavation as its proposed in the Response Plan because it was intended to excavate across the site down to 15 feet below ground surface, which would be very difficult to achieve, because logistically it would require 650 plus truckloads.

Logistics and its impact on the community, as in the amount of construction it would need and the nuisance it would cause to the community makes it difficult for DTSC to select this as the preferred alternative for the Site. In addition, the effectiveness of excavation as a remedy for the soil vapor plume was fairly low based off the evaluation.

There is, like I mentioned, a secondary release at Albrite that has stayed fairly stagnant, but we are still seeing some off-gassing and potential off-gassing into the 2550 Irving Street property. So, even if soil excavation were to occur at the 2550 Irving Street property, there may be a chance of potential recontamination. Since the Response Plan proposed soil excavation with no vapor intrusion mitigation system, then that would also put the future residents at potential risk from this recontamination. So, the uncertainty, cost, difficulties in logistics, and impacts on the community posed by excavation led us to choose the vapor intrusion mitigation system as the remedy, which is more effective in the long run.

12. Commenter: Kathleen

Comment 12.1 In regard to effects of construction, do you know what foundation system TNDC expects to use and its effect on the spread of contamination?

Response: At this time, TNDC is still finalizing its development plans so we do not know what foundation system they expect to use for sure, yet. The construction of the building at 2550 Irving Street actually has the potential to help reduce PCE contamination in soil vapor. By removing the existing on-Site building structures and pavement, PCE will have another pathway to escape into the outdoor air where it naturally dissipates. Following construction, the vapor intrusion mitigation system includes venting which will ensure that concentrations of PCE are unable to build-up beneath the building slab. See the Response to **Comment 12.2** for a discussion of foundation design.

Comment 12.2 For example, what does soil compaction do to the contamination and if they use a drilled pier foundation will it push the soil contamination down with that foundation system? This site will have to be excavated a minimum of three feet, depending on the foundation system that they choose. That material, once it's excavated down a minimum of three feet,

will have to be compacted with machinery that forces the plume downwards towards the groundwater table, and so... what is your experience with that construction technique, as it relates to soil contamination?

Response: Right, I have seen that on other sites where you have a shallower groundwater table and in those cases the drilling down of the foundations could create a potential risk of contaminating groundwater with contaminated soil or soil vapor. But in this case, the groundwater table is at around 80 feet below the ground surface. In terms of soil contamination, there was no soil contamination found on-site directly. There was one sample of PCE that was detected at a very, very low concentration, almost 0.002 milligrams per kilogram above the laboratory reporting limit, which significantly lower than the screening levels. So, we would not expect any type of soil contamination to then go with the foundation to the groundwater table.

And in terms of the PCE soil vapor plume, PCE seems to be confined in the upper 15 feet of the soil column, so if there were to be excavation or drilling, it would attenuate. But I would not expect the soil vapor plume to then recontaminate the groundwater. However, we will discuss and review this further with TNDC to ensure this will be the case before any kind of proposed development occurs.

Comment 12.3 It sounds like with a mitigation approach you are over reliant on your trust in vapor intrusion prevention.

Response: These go through our engineering and special projects office. These chemically-rated barriers and mitigation measures have various studies, are used at various sites, and have different efficacy and efficiency depending on the situation. Their effectiveness is tested and observed to be very effective in preventing vapor intrusion.

And we'll also be gathering Site-specific data too to validate that the vapor mitigation system is effective if that is the remedy chosen for the Site.

Comment 12.4 Has it occurred to DTSC that TNDC lawyers have invented 3 projects to obfuscate and confound responsibilities of the vicinity?

Response: TNDC did not set up three separate projects to address the PCE contamination. That was established by DTSC based on the agreements established between TNDC, The Police Credit Union and the owners of the former Albrite Cleaners. TNDC is under a California Land Reuse and Revitalization Act (CLRRA) agreement which makes it responsible for addressing on-Site contamination in a manner that will provide long-term protection of the health and safety of future Site users. Under this type of agreement, TNDC's liability stops there, and this has been set up under regulatory legislation to help

promote the safe and successful cleanup of contaminated properties to ensure they continue in their best possible use. Since there is still off-Site PCE contamination, The Police Credit Union has signed a voluntary cleanup agreement with DTSC that makes it responsible for all off-Site contamination north of Irving Street. DTSC has also established a similar agreement with the owners of the former Albrite Cleaners for contamination south of Irving Street. While responsibility is split between three separate parties, DTSC will ensure the same staff and management are responsible for providing oversight for all onand off-Site activities to ensure a holistic approach to address PCE contamination in the neighborhood.

Comment 12.5 What if the monitoring system detects vapor intrusion failure after the floor slab is poured? Do you have you have to jackhammer the concrete out to correct the failed vapor barrier?

Response: Yes, there may need to be saw cutting to access and fix any issues with the vapor barrier itself if it is found to have been compromised. However, DTSC provides oversight throughout the construction process and ongoing monitoring after the system is operational to ensure that the system continues to be effective. Mistakes can happen when a contractor potentially is not aware that a vapor barrier is there and in which case, we would ensure any issue was rectified as quickly as possible. However, these situations are rare and DTSC has a thorough process to ensure successful monitoring and maintenance of the vapor mitigation system once operational.

13. Commenter: Mid Sunset Neighborhood Association

Comment 13.1 Hello, my name is Remasia. I live on 26th Avenue, and my question is all of the remediation or risk mitigation that's being discussed so far is limited to the 2550 Irving property. My understanding is the DTSC should protect all the residents of the State of California and not just the residents of a specific parcel of property. So, why are we not thinking more broadly about this? And I understand there's the legal obligation to the TNDC and the document that you referred to earlier, which just limits their obligation to the property, but the DTSC has a broader obligation to the residents of the State of California.

Response: In the agreement that DTSC is under, TNDC is only responsible for the on-Site contamination and how to protect their future residents. However, DTSC is also working with the current landowner, the Credit Union, who is responsible for the off-Site impacts north of Irving Street.

That is something we're not going to abandon or stop being involved with until we know that there's no risk to the community outside of the 2550 Irving Street project. This presentation is really just focused on the response actions that TNDC presented to DTSC as that is the topic of tonight's meeting.

Comment 13.2 I keep hearing mitigation as something that's being considered, but why are we not just focusing on remediation? I guess funding is always an issue, but it doesn't seem to be an issue for this particular project at a million dollars per unit, there seems to be lots of money flowing around in support of it, so if we're going to do it right, why not just do it, above and beyond, and ensure that there's no issues for the future residents of the community at 2550 or elsewhere?

Response: DTSC reviewed the alternatives proposed in TNDC's draft Response Plan and determined that the vapor intrusion mitigation system would provide adequate protection for future on-Site residents. These systems are a very, very common mitigation measure, and based on our review of the impacts at the Site DTSC concurs that this will be effective in preventing any kind of risk to the on-Site residents. Please include your preference for remediation as a written comment so we can consider it and bring it back to TNDC (see the Response to **Topic 5: Preference for Soil Vapor Extraction (SVE) and Cleanup over Mitigation** for DTSC's analysis of remediation measures over mitigation measures).

Comment 13.3 Why does the TNDC have to propose the solutions? Why can't DTSC propose solutions? Isn't that like your area of expertise?

Response: We work closely with Responsible Parties to discuss, recommend and review potential cleanup options for sites where we provide oversight. Based on the review of the alternatives proposed by TNDC, we concurred that a vapor intrusion mitigation system was an appropriate on-Site measure. After the close of the comment period and based on the comments received, DTSC also reviewed alternate cleanup methods such as soil vapor extraction and still determined that the vapor intrusion mitigation system was appropriate for the Site (see the Response to **Topic 5: Preference for Soil Vapor Extraction (SVE) and Cleanup over Mitigation**).

Comment 13.4 What would be helpful, is to understand why the residents, the community, would have to rely on TNDC to provide solutions. And to Arthur's former point, even if the DTSC made a recommendation that this is the best course of action, the TNDC can just override it and propose something that is say, less costly or just impacts them and doesn't impact the community broadly? Like, I'm trying to understand why a government agency doesn't have more oversight of this issue, and it seems to me, is bowing to the demands and requirements of a private developer?

Response: I misspoke earlier, and I am sorry, but we are not bowing down to the developer. When we evaluated the situation, we knew we had another proponent who was responsible for off-Site conditions. With this knowledge, we reviewed

the draft Response Plan prepared by TNDC that proposed a vapor intrusion mitigation system. Our engineering department reviewed the proposal and did not find it necessary for soil vapor extraction to be a remedy for this Site and that the remedy that they proposed was adequate. So that's why it's up for public comment right now.

Clearly DTSC has a responsibility to protect public health in the neighborhood, so we're not confining our attention to a single alternative proposed by a developer. We have three projects going on in the area, the project that we're talking about tonight is one of three and it's focused on making sure that we can do the redevelopment safely. There are two other projects that are going to be looking at the contamination in the neighborhood more broadly, and to make sure that we are adequately protecting the surrounding community.

So, I hear what you're saying, and I just want to make it really clear that DTSC is committed to protecting the entire community.

I should just mention, too, that our department is receiving funding to be able to do investigations without you know, waiting for a developer, a proponent to come to us to engage in a voluntary cleanup agreement or a response plan. We have more funding coming our way so we can more proactively investigate properties throughout the State. So, look to hear from us more as we continue our investigations around the State.

Comment 13.5 I would recommend DTSC host another session that doesn't directly conflict with weekday dinner schedule. Perhaps, a Saturday morning session when more of the community can be available to understand these impacts?

Response: We do take into consideration what the best availability is for the community. And what we did find when we sent out the community letter and survey is that weekday evenings would be best. But we're happy to supplement with a Saturday morning session. We are available for briefings to any interested parties, so please do get in touch with us if you have a group that would like to participate in a Saturday morning session. Also, we're recording this meeting, so this will be posted and available to anyone who missed it. We do hope that folks who weren't able to join us view the recording and provide us with any feedback they have after viewing the recording.

14. Commenter: Anonymous Attendee

Comment 14.1 2550 on a very windy corner. What will they do to lessen the dust blowing into neighboring houses and yards?

Response: Although not required by DTSC and/or San Francisco Building Code and San Francisco Health Code (SFHC), Article 22B, TNDC has voluntarily offered to prepare a Dust Control Plan that includes a perimeter air monitoring program that will be submitted to the San Francisco Department of Health and DTSC prior to starting construction. This Dust Control Plan will lay out details of how they will monitor air for airborne dust and volatile organic compounds during construction to ensure the protection of the surrounding community. This will include stringent, health protective action levels and if these levels are exceeded, prescribed additional measures will be implemented to decrease concentrations to acceptable levels.

Once we have the details, we're happy to share information. And we can post another meeting to provide you with the details of what that plan looks like and how we're protecting the community. We understand that is of utmost importance to you.

15. Commenter: Helena

Comment 15.1 I'm afraid the current plume will continue flowing in the next two years before plugging is done when building is constructed. If it's tested and deemed not dangerous later in 2021, won't that change by 2023? So should the indoor be tested again in two years in 2023? It's continuously flowing. So testing today would be just this years info. What about in two years time?

Response: That's a good question. We had the Credit Union install and monitor the soil vapor wells north of Irving Street to monitor the PCE plume's off-Site impacts. We just established what we call a baseline dataset to measure this data against. We also had one sampling event in September and another sampling event in March to account for the seasonal variations that can occur.

Once we get this soil vapor sample again in September, which will also be at the same time as the indoor air, then we will understand if the concentrations are increasing, remaining the same, or decreasing. That will tell us the spatial distribution of this plume, because if the concentrations are increasing, then we'll know the plume is moving and in what direction.

So, right now, based on what we've seen in the preliminary data, it seems to be very stable. However, we still need the September data to confirm how this plume is moving. Right now it's not moving at an alarming rate, because at an alarming rate, you would see the concentrations increase greatly from September to March. But DTSC needs to confirm this with additional sampling. And depending on the data we receive in September, we may likely require additional monitoring of the situation again the following March. But again, September will be very telling of what the off-Site conditions are like. **Comment 15.2** Do indoor air cleaners help filter out PCE?

Response: Active carbon filtration can absorb PCE, yes.

16. Commenter: Anonymous Attendee

Comment 16.1 Could you discuss exposure levels and how long term exposure is taken into your risk analysis?

Response: The screening levels that we apply for our decision framework for risk management address chronic exposure scenarios, so over a lifetime. A basic principle of toxicology is the longer the exposure term, the lower the concentration is tolerated over that long term. Whereas in a very short period, a higher concentration would be tolerated for the same chemical. That's just a basic concept of toxicology, of a dose-response relationship and dose-exposure relationship. That being said, exposure in this case is measured by indoor air and outdoor air samples, because that is what we call an exposure point concentration. That is available for inhalation to extrapolate from soil vapor samples, while we have screening levels for those soil vapor concentrations in the neighborhood.

We are assuming a model, and we are taking a very health protective and stringent approach to the model to inform whether we act on it or not, and in this case because the soil vapor concentrations exceed those screening levels, further action is needed. We cannot dismiss PCE as a contaminant of potential concern.

17. Commenter: Anonymous Caller

Comment 17.1 Arthur, I think I heard you say that indoor air concentrations for PCE are different... are rated differently... I'm not sure if I'm using the correct terminology... for commercial as opposed to residential air. Is that correct? And if they are, can you explain what the difference is and why?

Response: Thank you for the question. It's actually based on the exposure time and exposure duration that is assumed to come up with the screening level. So, under a residential scenario, we assume that someone is breathing the concentration 24 hours a day, seven days a week, for 26 years, over a lifetime of 70 years, from age zero, so from birth, through sensitive developmental milestones, through age 26. So that's a 26-year duration, acknowledging that specific to this community, there are people who have lived in the community longer.

Whereas in a commercial scenario, we do not assume that a commercial worker is there 24 hours. We assume eight hours a day, five days a week, 250 days a

year for 25 years of work tenure. And those are the default assumptions of exposure time and duration that go into the math that come up with the calculation of a screening level for a residential scenario and commercial scenario respectively.

Comment 17.2 Okay, so, given that information, why would the wells outside of these six homes be monitored without monitoring the indoor air quality of those potential residences and the residents living there, and, as you said, 24 hours a day X number of years? Why would it take the community pushing for indoor air quality monitoring before anybody would do that? Because it seems to me, if you put the wells in front of these six homes, you... someone, not necessarily the DTSC, but someone, suspected that there might be a problem inside these six homes? So why wouldn't you just be proactive, monitor the air, be done with the issue?

Response: Well, DTSC follows a stepwise process which is typical with our investigations of vapor intrusion. We try to follow the vapor intrusion pathway, which is measure concentrations in the subsurface, and if the concentration warrant, move to indoor air to evaluate the pathway further. So, it is a stepwise process.

These external soil vapor samples outside of the residences to the north, that was the first step in seeing whether the plume was actually encroaching that far north. We have data for that, and that data informed us that there is a potential, I would say, a small potential, but still a potential because it exceeds our screening level, for there to be a vapor intrusion pathway. Those concentrations do not mean necessarily that PCE will be detected, but we are charged with going to see.

With community engagement and community feedback about the condition of the buildings and the age of the buildings, we determined that it is a good idea to go and look at indoor air, because the attenuation might be less than what we would normally expect it to be.

Comment 17.3 So, then, the numbers generated that you guys are going off of for acceptable or unacceptable levels, are they generated by you guys at DTSC, or is that state or federal?

Response: They're generated under a federal process, so the equations that inform or allow us to calculate screening levels are from the risk assessment guidance for superfund sites from US EPA. However, the toxicity value, as I said earlier, we consider in California PCE to be 25 times more toxic than EPA does, as a health-protective assumption to guide our investigation process. For the levels that we have measured outside of the residents, if US EPA had

jurisdiction, we would not be looking at indoor air because they would have screened out.

18. Commenter: Anonymous Attendee

Comment 18.1 You are our last resort. TNDC, the Police Credit Union have only showed they care about themselves. We need your help. As a government agency, funded by us taxpayers, in finding a solution that cleans up this site and removes our worst health fears about what PCE's can do to us. Don't forget us.

Response: Thank you for your comment and we take your concerns very seriously.

19. Commenter: Diana Lau

Comment 19.1 Is there a remediation plan for excavation to get rid of the PCE?

Response: There was soil excavation proposed in the Response Plan, however, that evaluation was not deemed as effective as the vapor intrusion mitigation system with the land use restrictions and engineering controls.

Comment 19.2 How big is the area of PCE invasion? Is there a map outlying the area and depth?

Response: DTSC will learn more information about off-Site conditions, how the plume is migrating, and what the concentrations are like after the next sampling event. When we have a very robust dataset of three sampling events at that point, DTSC will make sure to map out the soil vapor plume as it relates to the south of Irving Street and north of Irving Street.

This will be available on EnviroStor as part of the next monitoring plan, which will be taking place in September. So, the report may be available in October, or early November at the latest.

Comment 19.3 In the use of the site as a mortuary, did you look into the commonly used preservatives such as formaldehyde for corpses and if these chemicals also caused any site contamination?

Response: Yes, that was something that we looked at, but it degrades very quickly in the environment. However, DTSC will include in our comments to TNDC as part of their evaluation, that while they are monitoring the soil vapor mitigation system, they will have to include formaldehyde on their suite of analyses, to ensure that it is not impacting the building.

Comment 19.4 What about the East and West sides of Albrite?

Response: The east and west of Albrite Cleaners will definitely be investigated. That's absolutely a part of the preempted plans already. And DTSC's plans for having Albrite involved in the project and evaluating those areas are just so we have an understanding of what the conditions are like there. So, it's on the radar. It's coming. We just don't have definitive times yet. But of course, we will keep the community updated as Site activities continue.

Comment 19.5 The TDNC indicated that the PCE was a common neighborhood contamination. But PCE comes from dry cleaners and not general household cleaners. Is this organization trying to misinform and try to make the contamination like a common thing that happens in all urban areas??

Response: Several craft glues and household cleaners continue to use trace amounts of PCE. This is why a survey of household products is conducted to identify sources other than vapor intrusion before measuring indoor air.

20. Commenter: Joan Klau

Comment 20.1 Given the high concentration at the center of the site that got flagged as unacceptable for residential use, and knowing the plume is likely flowing north/northwest, will you be measuring the soil vapors in the backyards to the north/northwest?

Response: That's a good question. I would not rule that out. It will depend on what we see in indoor air and the monitoring wells in the street in September. Results may warrant an additional investigation in backyards with more vapor wells. This is definitely something to consider, for sure, as we continue to evaluate the off-Site impacts.

Comment 20.2 Given the sandy soil of this site, can the plume migrate beyond the VIMS?

Response: The vapor mitigation system will be beneath the foundation of the entire Site, so the system will cover the building in its entirety. That is part of the Design Plan. In terms of its migration, this is why we are monitoring the soil vapor off-Site. We do not have definitive data yet to see how it's behaving spatially, but this September 2021 data will clearly show what the plume's behavior is like in terms of its mobility.

However, we already know it is not moving at a rapid pace because you would see that after the first two monitoring events that have been completed, and right now, it does not seem to be moving at a rapid pace. But again, we can definitely confirm and speak more about this plume's migration behavior after this next sampling event in September.

Comment 20.3 Given the chance of recontamination of the northern lot by the more contaminated southern lot, why not come up with a remediation plan that covers BOTH lots?

Response: That's a good point. It has to do with liability. So, the Albrite Cleaners is going to be liable for the southern impacts, once more investigations have taken place on their site and south of Irving Street. We are still in the very early process of DTSC being involved, so we are still in that evaluation phase where there are a lot more questions than answers.

But in terms of this project with TNDC, there was enough data collected on the Site to determine an appropriate response action. This is what's being proposed here as a plan, but there's still much more work to be done in terms of the off-Site impact with south of Irving Street before we can effectively prepare a remedy selection document for those impacts.

One of the best ways that DTSC can look at the area holistically is having the same project manager to work on these three projects, because Arthur is very well versed in the data that's been collected so far and he'll be looking at all three projects overlapping. So, I think that's probably one of our best ways of ensuring a holistic approach.

Comment 20.4 Does PCE contamination show up in edible vegetation? I.e., is it safe to eat fruits & veg grown in contaminated soil?

Response: The soils in the vicinity have not shown PCE detections, likely due to its volatile nature and relative low concentrations at the site. Studies have shown that these solvents transpire out and are usually not detected in vegetables or fruits grown in soil contaminated with chlorinated solvents like PCE.

Comment 20.5 You know that the plume's levels to the east and west (measured at the street curb) are lower, but the plume is rolling north and you have not measured north of the site, correct? So do we know the levels to the north, and how far north before they drop off to an acceptable level?

Response: We do have sampling locations north of the 2550 Irving Street property. As I mentioned, they do exceed a screening level, but they're not at the potential unacceptable risk level. So, again, once you exceed the screening level, it means more evaluations are necessary. We're proposing indoor air and we cannot rule out further investigations to the north, depending on how those results come back. But yes, they're not at a level where there's a potential unacceptable risk for residential land use. That's based off soil vapor, but again,

we're evaluating indoor air because we want to be extra sure and extra protective.

Comment 20.6 Yes, it's insufficient to mitigate and protect just the 2550 parcel/residents. If the contamination goes beyond the border of the parcel, either emanating from 2550 or flowing under it from the southern lot, then the best solution would be to protect all the affected residents – not just those at 2550 Irving Street. And as someone who is raising babies and children across the street from a monitoring well for most of their first 26 years, I'd like to know the plumes beyond the borders of 2550 are removed, not just monitored for 1/26th of their life, or mitigated just for 2550.

Response: Thank you for your comment.

21. Commenter: Anonymous Attendee

Comment 21.1 Your mission is to protect our health from toxic harm. You must require a clean up of the site!!!!

Response: Thank you for your comment.

22. Commenter: Anonymous Attendee

Comment 22.1 Why wasn't Soil Vapor Extraction considered as an alternative by TNDC?

Response: As I mentioned, with the CLRRA process, TNDC does not have to evaluate alternatives. They can propose an alternative, but in this case, they just proposed soil excavation as the other remedial alternative to the vapor intrusion mitigation system. When DTSC reviewed the mitigation system internally, we deemed it an appropriate action for the site. However, as a result of the comments received during the comment period, DTSC also evaluated soil vapor extraction as a possible alternative but determined that the vapor intrusion mitigation system would still be the most protective option for the Site. Please see the Response to Topic 5: Preference for Soil Vapor Extraction (SVE) and Cleanup over Mitigation.

23. Commenter: Anonymous Caller

Comment 23.1 With your knowledge and expertise, knowing what you know, I'm wondering how comfortable you guys would feel with soil vapor extraction, as opposed to the mitigation of a vapor barrier if you were living in this building or this neighborhood. Would you feel safe? Which would make you feel safer or more comfortable? **Response:** So, the way that I would look at that is, it depends on the data that we generate. Right? Both systems are monitored to make sure that they're protective, so obviously if a system fails, we are not going to be comfortable with it. We would not be comfortable with it for the community, we would not be comfortable with it for the community, we would not be comfortable with it for ourselves. So, it really depends on what the data show us on the operation of these systems.

24. Commenter: Robert Ho

Comment 24.1 Do you really have a good grasp of how much toxins are in the ground and how widespread the problem is?

Response: Based off the data that we have so far, we feel like we have an understanding of the plume's extent. However, we are still evaluating, and especially on the south side of Irving Street, there's still much more work to be done. I want you all to know... these sites are very much on the front of our radar. It is very much a part of my life, and so I am very much going to continue evaluating, investigating, and doing whatever is needed to make sure that the community is protected.

25. Commenter: Anonymous Attendee

Comment 25.1 As a tax payer funded agency, why doesn't DTSC push for the best possible remediation option for this site so that it benefits existing residents as well as new ones at 2550 Irving? For example, push for extraction as opposed to the vapor intrusion

Response: Yes, we are in this agreement with this particular proponent at this Site. When DTSC evaluated the Response Plan, it was limited to the Site itself. However, as a result of the comments received throughout the comment period DTSC also evaluated soil vapor extraction as a possible remedial alternative for the Site. However, it was determined that a vapor intrusion mitigation system would still be the best alternative for the Site. For more details, please see the Response to Topic 5: Preference for Soil Vapor Extraction (SVE) and Cleanup over Mitigation.

DTSC is a cost recovery organization, not everything is funded by taxpayers. We do see cost recovery from our proponents and responsible parties. That means we are largely funded by the entities that come to us either proposing a redevelopment and wanting our oversight for the redevelopment, or a responsible party responsible for contamination of a site. So, a large proportion of our funding comes directly from what the community might call the polluters.

26. Commenter: Yi-Kuan Lee

Comment 26.1 Does public comment determine the appropriate response plan? Why? If the public wants vapor extraction, will that be considered?

Response: Yes, we will definitely consider these comments. We have the public comment period to hear from the public because we consider your comments with a lot of weight.

27. Commenter: Anonymous Attendee

Comment 27.1 Then why not do both, excavation and vapor intrusion?

Response: I believe that it has to do with more of a cost analysis and the costs would be pretty exorbitant from my understanding. After further review DTSC has determined that the vapor intrusion mitigation system will be sufficient to provide long-term protection of on-Site residents meeting the cleanup goals of the Response Plan.

28. Commenter: Anonymous Attendee

Comment 28.1 What information do you currently have that the north and south plumes may have come together. How do you assign responsibility at that point? Will there be more investigation needed to determine this?

Response: If that were the case, and the data can prove that they both are commingled on Irving Street, then that could be the responsibility of both proponents, the Credit Union and Albrite Cleaners. As we investigate more, as we have more understanding of the plumes, then we can start to understand what the best course of action is and who is responsible for it.

29. Commenter: Richard

Comment 29.1 Would an immunocompromised patient (with autoimmune hemolytic anemia) living next to the proposed site be more susceptible to lower threshold of PCE level?

Response: Concentrations at or near the screening level are intended to be protective of sensitive populations, which are evaluated in the toxicity assessment of the chemical.

30. Commenter : Mei

Comment 30.1 We want remediation of the block not just mitigation of 2550. That hurts the neighborhood and it will damage the relations between the people who live in the protected building and the rest of us.

Response: DTSC is very interested in the larger PCE contamination issue in the neighborhood, not just the on-Site residents. It may appear to be a piecemeal approach, but DTSC's project manager will be look at all of these projects and how they come together. This meeting is for the public comment period for this particular Site within these particular boundaries. But in future meetings, we will do our best to share the intersection of all these investigations and provide a more holistic approach. Thank you for that comment.

31. Commenter : Leyla Alieva

Comment 31.1 As I understand, TNDC's loan for 2550 Irving is contingent on the fact that DTSC is happy with and approves the mitigation plan. So it seems like DTSC has the power to push for the best possible solution here. Why doesn't DTSC push for the best possible solution then?

Response: You know, the best possible solution is very subjective in this case because while we have enough information to determine an appropriate on-Site response action to allow for the development, we do not have enough data to conclude what the best possible solution will be to address off-Site contamination. I'm assuming you're saying soil vapor extraction is the best possible solution...that is an unknown in this. Under the agreement TNDC has with DTSC, they only had to propose one response action. They did two.

When DTSC evaluated their Response Plan, we could only evaluate the data we were provided with and we determined that the vapor intrusion mitigation system would be effective at addressing the contamination TNDC is responsible for addressing, which is solely within their property boundaries. And I know it's difficult to hear, but that's where TNDC is and that's where this Response Plan is geared towards.

DTSC would not accept a response, a proposed response, that wasn't fully protective of human health, so that threshold has to be met by any alternative or any remedy that is proposed. So, then, a number of other criteria might come into play and community acceptance is one of those criteria. And that's why we're here tonight, to take the community's input.

Comment 31.2 For example, push for both extraction and vapor intrusion

Response: Thank you for your comment.

32. Commenter: YY

Comment 32.1 Has there been class action lawsuit in the past regarding insufficient PCE mitigation plan from a developer of a piece of land?

Response: I'm not sure actually. I have not heard of one, but I don't know. It's possible.

33. Commenter: Anonymous Attendee

Comment 33.1 So if you are a cost-recovery agency, then does TNDC directly pay to DTSC for this process?

Response: Yes, they cover the cost of the project that they bring to us for oversight. That does not mean that they have the ability to control the way that we conduct our oversight, or the types of comments we might make, or the input that we have to the project. That's based on science, and engineering, and our commitment to protect public health.

34. Commenter: Anonymous Attendee

Comment 34.1 I am sending a +1 for vapor intrusion mitigation and extraction as my community response. I am one of the immediate neighbors that are heavily impacted by the development and contamination.

Response: Thank you for your comment.

35. Commenter: Anonymous Attendee

Comment 35.1 How difficult is it to clean up the toxin completely?

Response: That's a tough question to answer. I can't speak to that just yet, because you would have to evaluate a remedy and we would have to see how effective that remedy would be, given the Site conditions and the contamination. It's tough to say right now.

We will have more information to share as we continue to do the other investigations. As the project progresses and remedies become more realized, we will absolutely keep the public involved. And you will have more information on how effective this will be, and how it will impact the community. We are just getting started here.

36. Commenter: Anonymous Attendee

Comment 36.1 This development will span the whole block and come with a massive amount of funding from the city, state and federal levels. This seems like a perfect opportunity for the DTSC to demand now that the TNDC's plan include both extraction and vapor intrusion mitigation for the best benefit for the neighborhood as there might not be another opportunity like this for this community.

Response: Thank you, we'll take that as a comment.

37. Commenter: Jean

Comment 37.1 Does it make more sense to clean it up completely before you actually start building anything on it?

Response: Again, you have to evaluate the proposed remedy and everything, but based off what our engineers and what we at DTSC reviewed in the Response Plan, the vapor intrusion mitigation system as proposed is very protective. And, of course, we have you know caveats tied with how to sample, monitor, and everything tied to it, to make sure that it is protective and the people and the future residents will be protected.

Comment 37.2 Hi, I asked questions earlier because... about how difficult it is to clean up the toxin, because I heard like you say, "Well we're going to do all these monitoring, we're going to do all that, while we're working on it." That just seems so dangerous. What if there's something slip through the crack and then...

Because from my standpoint, is always to clean up, thorough clean up of everything, then you build on it. It will be safer to say, "Hey let's build on toxic land first and then increase, like put on these barriers and then let's hope that nothing happens..." I mean, what's going to happen to people living there? I mean, it's going to be families.

I mean just because it's low income people doesn't mean that their life doesn't matter, you know? I mean, I'm really concerned about this, because I feel like this is something that doesn't seem right. If you're going to do something right, you should do it from the start.

If you don't know how much it's going to cost to do, then you wait and do more research, provide that before? Then you analyze to see if this plan is actually, you know, feasible to do. Sometimes the land might not be, or it will cost too much. Because I'm a taxpayer, I don't want my money to be wasted... you know, on doing something that's extra and not safe. I mean we built these affordable housing to help people, not to put them in like, some sort of "we don't know," you know. I'm concerned about this because my mom, my dad passed away from cancer.

And my mom she... a couple years ago, you know she has surgery. So, this is very you know, this is very real. Cancer is very real. You don't know yet. So, I mean, are you going to like you know...

I mean to me, the easiest thing is to clean this up and reuse this land. I don't understand why you have to like build on it first when there's so many issues.

Response: In the Response Plan, TNDC proposes a measure that prevents vapor intrusion, which is the media where the contaminant concern lies. There are measures in place to prevent that from impacting the future residents there.

Comment 37.3 Are they one hundred percent fool-proof though? That's my question.

Response: The measures are very effective remedies that are used throughout the state with concentrations much greater than what we find here and they are very effective in preventing vapor intrusion.

Under the operations and maintenance plan for a vapor mitigation system as the one proposed in the Response Plan, it would undergo several rounds of monitoring, which may include sampling the sub-slab for soil vapor and doing indoor air sampling. It would undergo an engineering review at the DTSC and would undergo annual inspections.

It's a very common remedial alternative that's selected as such sites where volatile organic compounds are contaminating the subsurface, because of the ubiquity of volatile organic compounds in the Bay Area.

And, just to be clear that validation, that data collection, happens before occupancy is allowed in these buildings. Then, once the buildings are occupied, the monitoring continues over time.

Comment 37.4 So, what happens if people start moving in, and then you monitor, and then there's something leak out? Then there will be additional costs, continue costs, right, to go into it, right?

Then that's my question: wouldn't it be more effective to, when you have nothing on the land right now, wouldn't it be easier to just clean it up first? Versus where you have like buildings and people in it, then you're trying to clean up using jackhammer whatever. Wouldn't that be more disruptive and costly?

Response: Theoretically if this system didn't work, people would not be able to occupy the property, because the air's sampled before occupancy. DTSC has the authority to allow building permits to close out. DTSC gives an approval for occupancy. And if the levels are not at the levels that we find adequate for people to be there, then there will be no occupancy.

Comment 37.5 Well, I see what you're saying, but do you see what I'm saying? We already spend like 100 million building this thing, but then there's no occupancy?

If it's like the air? Does that even make sense? You know what I mean? That's what I'm trying to say. Like what if you built this thing and then the whatever measure you guys try to do does not work and there's, yeah. Just say, "Okay, people can live in it now." You have the seven story building that taxpayers spend like what 100 million dollar in building this over the course of how many years and it's sitting there still.

Response: Right. So, it's not like no one would be able to live here ever. Instead, there are more measures that would need to take place, these systems also have the capability of being active, which increases their effectiveness, and that can also lower levels in the air. But again, it is not like the building is just going to be abandoned if we determine the levels are not safe for occupancy after construction. We can take additional measures. And it's early to speak on that, but that would be the game plan if that were to happen.

These systems can be upgraded. So once again, our processes are always data driven, so if we see problematic data, we usually have decision rules and response actions that can address and ameliorate the concentrations.

So, with a vapor intrusion mitigation system DTSC can require the conversion of a system from a passive system, a passive ventilation system for vapor mitigation, to an active one, where you are actually running fans and actively ventilating the subsurface.

38. Commenter: Anonymous Caller

Comment 38.1 Previously, one of our community members asked if public comment would help inform DTSC of a potential remedy, if we are so allowed and if we wanted vapor extraction as the remedy, would that be considered? And I just want to go on record saying I want vapor extraction.

Response: Thank you so much for your comment.

39. Commenter: Anonymous Attendee

Comment 39.1 If you discover a problem while monitoring how does it get fixed?

Response: In the monitoring process, if we do see a level rise above that unacceptable risk level, if it starts to show concentrations, even outside of someone's home, of a risk level that may be potentially unacceptable or harmful,

then DTSC will take an imminent action to make sure that the receptors, people in the area, are safe. And that can be a variety of things: increasing ventilation, going on site... There are many different things that we could do, but I will let you know the DTSC, depending on what the levels were like and what the media was that was impacted, there would be an immediate action. It would not be a wait and see kind of situation.

40. Commenter: Anonymous Attendee

Comment 40.1 I totally agree with Jean!

Response: Thank you for your comment.

41. Commenter : 'celestemarty'

Comment 41.1 Thank you for your time and expertise in answering our questions

Response: Thank you for your comment.

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Prepared by:

09/02/2021

Date

Arthur Machado DTSC Project Manager Attachment 1 DTSC Community Update and Public Notice

COMMUNITY UPDATE

Department of Toxic Substances Control – Our mission is to protect the people, communities, and environment of California from harmful chemicals by cleaning up contaminated sites, enforcing hazardous waste laws, and compelling the development of safer products.

Public Comment Period for 2550 Irving Street Draft Response Plan Available for Review

The California Department of Toxic Substances Control (DTSC) invites you to review and comment on the draft Response Plan for 2550 Irving Street, San Francisco, CA 94122 (Site). The Tenderloin Neighborhood Development Corporation (TNDC) is proposing to build an affordable housing complex on the property. TNDC is responsible for addressing on-site contamination to support future property redevelopment. The draft Response Plan proposes the installation of a vapor intrusion mitigation system underneath the proposed building. This vapor mitigation system is a barrier that is installed as part of the building foundation to prevent tetrachloroethylene (PCE) found in soil vapor (spaces between soil particles) at the Site from entering the indoor air.

PUBLIC COMMENT PERIOD July 12, 2021 TO August 13, 2021

DTSC invites you to review and comment on the draft Response Plan for the 2550 Irving Street. All comments must be mailed or emailed by **August 13, 2021** to: Arthur Machado DTSC Project Manager 700 Heinz Avenue Berkeley, CA 94710 <u>Arthur.Machado@dtsc.ca.gov</u>

REMOTE PUBLIC MEETING: DTSC will host a remote public meeting to provide information on the draft Response Plan, answer questions and receive public comments:

Date: Thursday, July 22, 2021

Time: 6:30 to 8:30 p.m.

Link: https://tinyurl.com/2550Irving

Phone Number: Call 1-669-900-9128 and enter Meeting ID 849 7778 3128#

Contact Asha Setty, DTSC Public Participation Specialist, at (510) 540-3910, toll-free at (866) 495-5651 or <u>Asha.Setty@dtsc.ca.gov</u> for assistance.

Site History and Environmental Investigations

The 0.44-acre Site housed several businesses from 1895 to 1946, including a drugstore, two gas stations, and a dry cleaner. In 1966, the property was used as a mortuary and funeral chapel. The funeral business operated until 1985, when the building was modified for its current use as a bank.

The property has been owned by The Police Credit Union since 1987. Environmental investigations conducted in 2019 and 2020 found PCE above environmental screening levels in soil vapor at the Site, at the adjacent parking lot, and along Irving Street. PCE was not detected above screening levels in soil or groundwater on-site. PCE is a volatile organic compound that is commonly used in dry-cleaning operations and in household products such as cleaning supplies, paints, adhesives and air fresheners. The California Air Resources Board is phasing PCE out of dry-cleaning operations by 2023. Sampling results indicate that the indoor air of The Police Credit Union is acceptable for workers and customers.

The levels of PCE at the Site are suitable for commercial/industrial use. Action is needed in order to ensure the Site is suitable for residential use. Environmental investigations for areas along Irving Street indicate that PCE in soil vapor is within the acceptable risk range for residential use. The Police Credit Union is responsible for monitoring off-site contamination. DTSC will prepare a separate mailer to update the community about this monitoring. In addition, DTSC will be providing oversight for the investigation of the former Albright Cleaners located across the street (2511 Irving Street) and will prepare an additional mailer for this process.

Draft Response Plan

The draft Response Plan evaluates engineering controls and recommends a preferred method to address on-Site contamination. The proposed remedy includes:

- Incorporating a vapor intrusion mitigation system under the foundation of the future building. This system consists of an engineered barrier and piping that allows contaminants in soil vapor to be vented into the atmosphere above the building where they will naturally dissipate.
- Installing plugs along underground utility corridors and sealing utility piping to prevent vapors from travelling into or off-site.
- Collecting samples to confirm the vapor intrusion mitigation system is operating as designed prior to building occupancy.
- Recording a land use covenant to allow residential use of the property with a vapor intrusion mitigation system.
- Monitoring and maintaining the system to ensure it remains effective.

If the draft Response Plan is approved, it is anticipated that the demolition of the existing building and construction of the new building would begin in 2023. A work notice would be mailed to the community prior to the start of work.

Safety Measures

The vapor intrusion mitigation system would be installed at the same time the building is constructed. To protect the health of the community during this work, the following engineering controls and safety measures would be used:

• Active work areas would be fenced off and include Site signage with a phone number to report any concerns.

- Dust monitoring would occur upwind and downwind of excavation areas and along the Site perimeter.
- Various methods would be used to control dust including water, spray foam, and plastic sheeting.

California Environmental Quality Act (CEQA)

DTSC will prepare a Notice of Exemption for this affordable housing project because it is exempt from CEQA under California Senate Bill 35. The Notice of Exemption would be filed with the State Clearinghouse after project approval.

Next Steps

DTSC will review and consider all public comments before making a decision on the draft Response Plan for the project. At the end of the public comment period, DTSC will evaluate all comments received and make any necessary changes to these documents. DTSC will send a Response to Comments document to all those who submit comments and provide their contact information.

Information Repositories

You can review a hard copy of the draft Response Plan at the following location:

- DTSC Berkeley Office, located at 700 Heinz Avenue, Berkeley, CA 94710. Please call the office at (510) 540-2122 to make an appointment to view the documents.
- To review the draft Response Plan and related documents online, please visit: <u>https://www.envirostor.dtsc.ca.gov/public/</u> (type site code 60003063 and select from the dropdown menu)
- For air monitoring results and additional technical documents online, please visit: <u>https://www.envirostor.dtsc.ca.gov/public/</u> (type site code 60003000 and select from the dropdown menu)

DTSC Contact Information

- Arthur Machado, Project Manager at (415) 723-0792 or Arthur.Machado@dtsc.ca.gov
- Asha Setty, Public Participation Specialist at (510) 540-3910, toll-free at (866) 495- 5651 or <u>Asha.Setty@dtsc.ca.gov</u>
- For Media Inquiries: Russ Edmondson, Public Information Officer, (916) 323-3372 or <u>Russ.Edmondson@dtsc.ca.gov</u>

Department of Toxic Substances Control



Figure 1: Site Location and Soil Vapor Sampling Locations





Additional information on DTSC sites can be found through our **EnviroStor**. (rev. 5-2020)



有毒物質控制局- 我們的使命是通過清潔受污染的場地、實施危險廢棄物相關法律、並强制製造化學屬性安全的 產品來保護加利福尼亞州人民、社區和環境免受有害化學物質的影響。

歐文街 2550 號的公眾意見徵詢期

應對計劃草案現可供審查

加利福尼亞州有毒物質控制局 (DTSC)邀請您對加州舊金山歐文街2550號(郵編94122)(場地)的應對 計劃草案進行審查和評論。 田德隆鄰里開發公司(TNDC)提議在該物業上建造一棟可負擔住房。 田德 隆鄰里開發公司(TNDC) 負責解決現場污染問題,以支持未來的物業重建。 響應計劃草案建議在擬建 建築物下方安裝蒸汽入侵緩解系統。 該蒸氣緩解系統是作為建築物地基的一部分所安裝的屏障,以防 止場地土壤蒸氣(土壤顆粒之間的空間)中發現的四氯乙烯 (PCE)進入室內空氣。

公眾評論期

2021年7月12日至2021年8月13日

加利福尼亞州有毒物質控制局 (DTSC)邀請您對歐文街 2550 號的響應計劃草案進行審查和評論。 所有 評論必須在 2021 年 8 月 13 日之前郵寄或通過電子郵件發送至: Arthur Machado/阿瑟·查多 DTSC Project Manager/DTSC 項目經理 地址: 700 Heinz Avenue Berkeley, CA 94710 電郵: <u>Arthur.Machado@dtsc.ca.gov</u>

遠程公開會議:加利福尼亞州有毒物質控制局 (DTSC)將舉辦遠程公開會議,以提供有關響應計劃草案 的信息、回答問題並接收公眾意見: 日期: 2021年7月22日,星期四 時間:下午6點半至晚上8點半。 鏈接:<u>https://tinyurl.com/2550Irving</u> 電話號碼: 撥打 1-669-900-9128 並輸入會議 ID 849 7778 3128# 聯繫 加利福尼亞州有毒物質控制局 (DTSC)公共參與專家阿莎·塞蒂 (Asha Setty),電話 (510) 540-3910,免費電話 (866) 495-5651 或電郵 Asha.Setty@dtsc.ca.gov 尋求幫助。

場地歷史和環境調查

從 1895 年到 1946 年,這個佔地 0.44 英畝的場地上設有多家企業,包括一家藥店、兩個加油站和一家乾洗店。 1966 年,該物業被用作太平間和葬禮教堂。殯葬業務一直經營到 1985 年,當時該建築被改建為目前的銀行。該物業自 1987 年以來一直歸警察信用合作社所有。 2019 年和 2020 年進行的環境調查發現,現場、鄰近停車場和歐文街沿線的土壤蒸氣中的四氯乙烯(PCE)高於環境篩檢標準。在現場土壤或地下水中未檢測到高於篩檢標準的四氯乙烯(PCE)。四氯乙烯(PCE)是一種揮發性有機化合物,常用於乾洗店運營和家用產品,如清潔用品、油漆、粘合劑和空氣清新劑。加州空氣資源委員會將在 2023 年之前逐步淘汰乾洗業務。抽樣結果表明,警察信用合作社的室內空氣對工人和客戶來說是可以接受的。

現場的四氯乙烯(PCE)水平適合商業/工業用途。需要採取行動以確保該場地適合住宅使用。歐文街 沿線地區的環境調查表明,土壤蒸氣中的四氯乙烯(PCE)在住宅使用的可接受風險範圍內。警察信用 合作社負責監測場外污染。 加利福尼亞州有毒物質控制局 (DTSC)將準備一個單獨的郵寄傳單來向社區 更新有關此監控的信息。此外,加利福尼亞州有毒物質控制局 (DTSC)將對位於街對面(歐文街 2511 號)的前奧爾布賴特乾洗店的調查進行監督,並將為此過程準備一份額外的郵寄傳單。

應對計劃草案

應對計劃草案對工程控制加以評估並推薦首選方法來解決現場污染。提議的整治措施包括:

- 在未來建築的地基下加入蒸汽入侵緩解系統。該系統由工程屏障和管道組成,允許土壤蒸氣中的 污染物排放到建築物上方的大氣中,然後自然消散。
- 沿地下公用設施走廊安裝塞子並密封公用設施管道,以防止蒸汽進入或離開現場。
- 收集樣本以確認蒸氣入侵緩解系統在入住建築物之前按設計運行。
- 登記土地使用契約,允許使用蒸汽入侵緩解系統將該物業用於住宅用途。
- 監控和維護蒸汽入侵緩解系統以確保其保持有效。

如果應對計劃草案獲得批准,預計2023 年將開始拆除現有建築和建造新建築。工作開始前將向社區郵 寄工程作業通知。

安全措施

蒸汽入侵緩解系統將在建造建築物的同時安裝。為了在這項工程中保護社區的健康,將使用以下工程控 制和安全措施:

- 施工區將被圍起來,並包括帶有電話號碼的場地標牌,以便報告任何問題。
- 將在開挖區域的上風向和下風向以及沿場地周邊進行粉塵監測。
- 將使用各種方法來控制灰塵,包括噴水、噴泡沫和遮蓋塑料布。

加州環境質量法案 (CEQA)

加利福尼亞州有毒物質控制局 (DTSC)將為這個可負擔住房項目起草一份豁免通知,因為它根據加州參 議院第 35 號法案免於加州環境質量法案 (CEQA)。在項目批准後,豁免通知將提交給州規劃研究局。

後續步驟

加利福尼亞州有毒物質控制局 (DTSC) 將在對項目的應對計劃草案做出決定之前審查和考慮所有公眾意 見。在公眾意見徵詢期結束時,加利福尼亞州有毒物質控制局 (DTSC) 將評估收到的所有意見並對這些 文件進行必要的更改。 加利福尼亞州有毒物質控制局 (DTSC) 將向所有提交評論並提供其聯繫信息的 人發送評論回复文件。

資料庫

您可以在以下地點查看響應計劃草案的紙質副本:

- 加利福尼亞州有毒物質控制局 (DTSC) 伯克利市辦公室,地址為 700 Heinz Avenue, Berkeley, CA 94710。請致電 (510) 540-2122 與該辦公室預約查看文件。
- 欲在線查看響應計劃草案和相關文件,請訪問: <u>https://www.envirostor.dtsc.ca.gov/public/</u>(輸入場地代碼 60003063 並從下拉菜單中選擇)
- 有關在線空氣監測結果和其他技術文件,請訪問: <u>https://www.envirostor.dtsc.ca.gov/public/</u>(輸入場地代碼 60003000 並從下拉菜單中選擇)

加利福尼亞州有毒物質控制局 (DTSC) 聯係方式

- 項目經理阿瑟·查多(Arthur Machado),電話 (415) 723-0792 或電郵 <u>Arthur.Machado@dtsc.ca.gov</u>
- 公共參與專家阿莎·塞蒂 (Asha Setty), 電話 (510) 540-3910, 免費電話 (866) 495-5651 或電郵 <u>Asha.Setty@dtsc.ca.gov</u>
- 媒體諮詢:公共信息官拉斯·埃德蒙森(Russ Edmondson),電話 (916) 323-3372 或電郵 <u>Russ.Edmondson@dtsc.ca.gov</u>



圖 1:場地位置和土壤蒸汽採樣位置



聽力有障礙的人士可以撥打711或800-735-2929(聾啞人電話 / 只聽不說 / 只說不聽的加利福尼亞中繼服務)來發聲。



有毒物質控制局負責監管場地的其他信息可以通過我 (rev. 5-2020) 們的EnviroStor查詢。

DTSC PUBLIC NOTICE

Department of Toxic Substances Control - Our mission is to protect the people, communities, and environment of California from harmful chemicals by cleaning up contaminated sites, enforcing hazardous waste laws, and compelling the development of safer products.

Public Comment Period for 2550 Irving Street, San Francisco Draft Response Plan Available for Review

WHAT IS BEING PROPOSED? The California Department of Toxic Substances Control (DTSC) invites you to review and comment on the proposed draft Response Plan for the 2550 Irving Street property in San Francisco, CA 94122 (Site). The Tenderloin Neighborhood Development Corporation (TNDC) is proposing to build an affordable housing complex on the property. TNDC is responsible for addressing on-site contamination to support future property redevelopment. The draft Response Plan proposes the installation of a vapor intrusion mitigation system underneath the proposed building. This vapor mitigation system is an engineered barrier paired with a network of perforated piping. It would be installed as part of the building foundation to prevent tetrachloroethylene (PCE) found in soil vapor (spaces between soil particles) at the Site from entering the indoor air. Environmental investigations conducted in 2019 and 2020 found PCE above screening levels in soil vapor at the Site, at the adjacent parking lot, and along Irving Street. PCE was not detected above screening levels in soil or groundwater on-site. The draft Response Plan proposes the installation of a vapor intrusion mitigation system to support future property redevelopment. This system is a barrier that is installed as part of the building foundation to prevent PCE from entering indoor air. It would be monitored and maintained for a minimum of 30 years, and a land use covenant would restrict residential use of the property unless the vapor intrusion mitigation system is in place.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA): DTSC will prepare a Notice of Exemption for this affordable housing project because it is exempt from CEQA under California Senate Bill 35.

HOW DO I PARTICIPATE? During the public comment period, from July 12, 2021 to August 13, 2021, you can review the draft Response Plan. Please send comments no later than August 13, 2021 to: Arthur Machado, Project Manager, DTSC Berkeley Office, 700 Heinz Avenue, Berkeley, CA 94710 or at Arthur.Machado@dtsc.ca.gov. You are invited to attend a remote public meeting on July 22, 2021 from 6:30 p.m. to 8:30 p.m. at https://tinyurl.com/2550lrving or call 1-669-900-9128 and Meeting ID 849 7778 3128#.

WHERE DO I GET MORE INFORMATION? To review the draft Response Plan and related documents, please visit: https://www.envirostor.dtsc.ca.gov/public/ (site codes 60003063 and 60003000). You may also contact DTSC staff for more information: Arthur Machado, Project Manager at (415) 723-0792 or Arthur.Machado@dtsc.ca.gov; Asha Setty, Public Participation Specialist at (510) 540-3910, toll-free at (866) 495-5651 or Asha.Setty@dtsc.ca.gov; For Media Inquiries: Russ Edmondson, Public Information Officer, (916) 323-3372 or Russ.Edmondson@dtsc.ca.gov



Hearing impaired individuals may use the California Relay Service at 711 or 800-735-2929 TTY/VCO/HCO to voice.





Additional information on DTSC sites can be found through our EnviroStor. (rev. 5-2020)

有毒物質控制局通告

有毒物質控制局- 我們的使命是通過清潔受污染的場地、實施危險廢棄物相關法律、並强制製造化學屬性安全的 產品來保護加利福尼亞州人民、社區和環境免受有害化學物質的影響。

舊金山歐文街 2550 號公眾意見徵詢期 應對計劃草案現供審查

有何建議?加利福尼亞州有毒物質控制部 (DTSC)邀請您審查和評論針對加利福尼亞州舊金山歐文街2550 號(郵編94122)(場地)的應對計劃草案進行審查和評論。田德隆鄰里開發公司(TNDC)提議在該物 業上建造一棟可負擔住房。田德隆鄰里開發公司(TNDC)負責解決現場污染問題,以支持未來的物業重 建。響應計劃草案提議在擬建建築物下方安裝蒸汽入侵緩解系統。這種蒸汽緩解系統是一種工程屏障,與 穿孔管道網絡配對。它將作為建築物基礎的一部分安裝,以防止場地土壤蒸氣(土壤顆粒之間的空間)中 發現的四氯乙烯 (PCE)進入室內空氣。2019年和 2020年進行的環境調查發現,場地、鄰近停車場和歐 文街沿線的土壤蒸氣中四氯乙烯 (PCE)高於環境篩檢標準。在現場土壤或地下水中未檢測到高於篩檢標 準的四氯乙烯 (PCE)。響應計劃草案建議安裝蒸汽入侵緩解系統,以支持未來的物業重建。該系統是作為 建築物基礎的一部分安裝的屏障,以防止四氯乙烯 (PCE)進入室內空氣。它將受到至少 30年的監控和 維護,除非安裝了蒸汽入侵緩解系統,否則土地使用契約將限制該物業的住宅用途。

加州環境質量法案 (CEQA): 加利福尼亞州有毒物質控制局 (DTSC)將為這個可負擔住房項目起草一份豁 免通知,因為它根據加州參議院第 35 號法案免於加州環境質量法案 (CEQA)。

我如何参與?在 2021 年 7 月 12 日至 2021 年 8 月 13 日的公眾意見徵詢期內,您可以審核響應計劃草案。 請在 2021 年 8 月 13 日之前將評論發送至:: Arthur Machado, Project Manager, DTSC Berkeley Office, 700 Heinz Avenue, Berkeley, CA 94710 或電郵 <u>Arthur.Machado@dtsc.ca.gov</u>. 您受邀参加 2021 年 7 月 22 日下午 6:30 到晚上 8:30 舉行的遠程公開會議。鏈接 <u>https://tinyurl.com/2550Irving</u> 或致電 1-669-900-9128 , 會議 ID 849 7778 3128#。

我從哪裡獲得更多信息? 欲在線查看響應計劃草案和相關文件,請訪問: https://www.envirostor.dtsc.ca.gov/public/ (場地代碼 60003063 和 60003000)。 您也可以聯繫加 利福尼亞州有毒物質控制局 (DTSC) 工作人員了解更多信息:項目經理阿瑟·查多(Arthur Machado),電話 (415) 723-0792 或電郵 <u>Arthur.Machado@dtsc.ca.gov;</u>公共參與專家阿莎·塞蒂 (Asha Setty),電話 (510) 540-3910,免費電話 (866) 495-5651 或電郵 <u>Asha.Setty@dtsc.ca.gov</u>; 媒體諮詢:公共信息官拉斯·埃德蒙森(Russ Edmondson),電話 (916) 323-3372 或電郵 <u>Russ.Edmondson@dtsc.ca.gov</u>.



聽力有障礙的人士可以撥打711或800-735-2929(聾啞人電話 / 只聽不說 / 只説不聽的加利福尼亞中繼服務)來發聲。





有毒物質控制局負責監管場地的其他信息可以通過我 (rev. 5-2020) 們的EnviroStor查詢。

Attachment 2 Comment Letters San Francisco, CA 94122

July 14, 2021

Mr. Arthur Machado DTSC Project Manager 700 Heinz Avenue Berkeley, CA 94710

Re: 2550 Irving Street, S.F. – project Public Comment Period 7/12/21 – 8/13/21

Dear Mr. Machado and DTSC:

This letter references your Community Updated dated July, 2021 for the above referenced property at 2550 Irving Street, San Francisco, CA.

Previously there has been a mortuary, dry cleaners, 2 gas stations, and a drug store on the 2550 Irving site. This is more than a **triple threat**. It was contaminated with PCE and PERC – a colorless and odorless gas – vapors, is toxic and will be outlawed in California in 2022. High levels of PCE were found at the site and are found to be drifting north from the existing building. As you may be aware a ventilation system had to be installed at the current Police Credit Union building if they wanted people in the building, this was to protect workers. Because of lack of ventilation the 2^{nd} floor of that building is not currently used.

TNDC now plans to purchase the building for twice its value and I am advised **TNDC states it will be responsible for toxicity in the building, but not for neighbors/neighboring homes.** I am advised that 5 **people living within 100' of 2550 Irving Street have developed cancer or Parkinson's Disease.** PCE is a know carcinogen and can cause neurological problems in humans. Please re-evaluate the risk for my neighbors residing very close to the proposed building – in this dense neurological. Please take 3 steps to protect the health of neighbors in the area:

1. Develop a comprehensive plan to remove/contain the sources of the PCE leaks at the site.

2. Do more sampling of the soil so the full margins of the spill can be determined.

3. Test the air in selected houses for PCI – on both sides of Irving Street – near 2550 Irving.

Your Community Update referenced above proposes the installation of a vapor intrusion mitigation system underneath the proposed building – a barrier to be installed as part of the building foundation to prevent PCE found in soil vapor at the site from entering the indoor air. Additionally, your flyer states the levels of PCE found at the site are suitable for commercial/industrial use. And further that action is needed to ensure the site is suitable for residential use.

Your Response Plan addresses on-site contamination ONLY. You do not address, discuss, nor present any plans to remedy any such contamination in the surrounding buildings and houses in the immediate area. As mentioned above there have been diseases experienced by dwellers of the nearby houses.

I live within 1 2/3rds blocks of the 2550 Irving site, and urge you to locate and remedy contamination in the homes of my neighbors nearby the site – none of which has been mentioned by you to date.

Per your Response Plan Environmental investigations in 2019 and 2020 have found PCE at the site, adjacent parking lot, and along Irving Street which the Response Plan indicates is "within acceptable risk range."

I urge Department of Toxic Substance Control to look at the whole picture and into the toxic problems caused to people living close to this proposed cleanup and building. Should TNDC purchase the building, please demand TNDC clean up all toxins in the neighborhood beyond 2550 Irving Street. Please put the neighborhood at the center of this process rather than the Police Credit Union or TNDC.

Thank you for your consideration.

July 26, 2021

Arthur Machado DTSC Project Manager 700 Heinz Avenue Berkeley, CA 94710

Re: Draft Response Plan for 2550 Irving St.

Dear Mr. Machado,

Thank you for providing a notice of availability of the draft response plan for the above site. I live in the vicinity of 2550 Irving Street and am submitting these comments on the draft response plan for this site.

I have several concerns about the proposed plan:

- 1. It does not propose any actual removal of PCE found in soil vapor at the site above acceptable levels for a residential use and fails to convincingly justify the alternative selected.
- 2. It does not take environmental justice considerations into account even though the site is proposed for families seeking affordable housing and will undoubtedly serve minority populations.
- 3. It does not discuss all proposed potential remedial options for the site.
- It does not provide a serious proposal for how it will assure that engineered/institutional controls will be maintained and complied with for the life of the project.

Response Plan Choice Not Adequately Supported.

The proposed plan relies entirely on engineering and institutional controls. Why is no real consideration given to removal of PCE in soil vapor from the site? The stated justification of cost and possible recontamination of the site by offsite sources seems inadequate. While removal is more expensive, no suggestion is made that it is infeasible. The statement that offsite sources will possibly recontaminate the site is not explored in any detail. Further, the likelihood of recontamination seems contradicted by DTSC's own notice of public comment on the plan. DTSC's notice states that PCE levels immediately offsite on Irving Street are within acceptable levels for residential use and will be monitored by the Police Credit Union. This information suggests that a concern may be offsite migration from the site to Irving Street rather than the other way around. While elevated levels of PCE in soil vapor appear to be likely associated with the Albright Cleaners site on the other side of Irving Street, the DTSC notice states that DTSC will be providing oversight for the investigation of that site. Given the

available information, no facts support the conclusion that offsite sources will likely recontaminate the site. The draft plan needs to provide more analysis of the feasibility of simply removing soil from the site that is causing the onsite – and possibly offsite - problem. A further justification needs to be provided as to why recontamination of the site is likely if site soil is removed.

Environmental Justice Considerations Overlooked.

The draft response plan does not discuss environmental justice considerations. While the immediate neighbors have a voice, it is not clear whether the proposed future low-income occupants of the site have a voice too. I understand that the housing will be designed for families. The vast majority of persons with the lowest incomes in San Francisco are nonwhite.¹ It is reasonable to presume that the housing at this site will largely serve a minority population with children. If this was a market rate development, would the developer choose to leave all of the contamination at the site with no effort made to clean it up? How does the proposed plan compare to response plans at market rate housing sites? Some discussion is needed in the plan to demonstrate that the draft plan for this site favorably compares to other housing sites with comparable problems. This affordable housing site should not be treated to a less rigorous cleanup than market rate housing sites.

Incomplete Remedial Options Considered.

The response plan only considers soil removal and engineered/institutional solutions. Why is soil vapor extraction (SVE) not analyzed as an option? Is it infeasible for some reason at this site? We don't know whether SVE is feasible because the response plan does not mention this possible remedial technique. The plan should be revised to evaluation SVE as a remedial option.

Long-Term Use of Engineering/Institutional Controls Needs Further Analysis.

The response plan relies on an installed vapor intrusion mitigation system operating effectively for the life of the project. To be effective, it has to be inspected and maintained adequately. The response plan does not discuss how long the building is expected to remain at the site but residential buildings in the immediately adjacent blocks such as on my block are over 100 years old. The cost estimate for the proposed plan only assumes the filing of 24 annual reports of how the system is operating. Will the soil vapor go away after 24 years or will the building be removed? Alternatively, is longer term inspection, maintenance and reporting going to be needed? Does the proposed cost estimate truly include all of the costs associated with inspection, maintenance and reporting for the life of the building at this site? Affordable housing in San Francisco has a history of failed maintenance. Is it realistic to expect that the engineered controls will truly be maintained for the life of the project and funds will be available to pay for the costs of doing so? The long-term maintenance of the engineered

¹ San Francisco Housing Needs and Trends Report, San Francisco Planning Department, 2018.

solution and the feasibility of assured funding the required institutional controls should be more thoroughly discussed in the plan.

Thank you for providing an opportunity to submit comments on the draft response plan.

Sincerely,

San Francisco, CA 94122

7/27/21

Arthur Machado DTSC Project Manager 700 Heinz Ave. Berkeley, CA 94710

I am writing as well as emailing my response to the DTSC during the public comment phase. After the meeting, which I attended, it was clear that your proposal to use an intrusion mitigation system will clearly fall short of our goal to eradicate the existence of all the identified toxins and contaminants in the ground in and around 2550 Irving Ave.

Mere mitigation of the condition is not in the best interests of the direct neighbors of 2550 Irving Ave. All homes in close proximity to 2550 should be monitored until a margin of clearance is determined. In the past few years, a disproportionate number of residents have contracted cancers and Parkinson's Disease. incidentally, I heard at the Zoom public meeting that toxins are released in an indiscriminate plume. Please consider that we live in a thick fog belt much of the year, which could trap toxic emissions and hover perniciously, not dissipating as might be expected.

We believe that the State of California should be concerned about the current residents' health with the same zeal evidenced for our future neighbors. Please consider this proposal to not only keep our new neighbors safe, but existing ones as well. We need more testing!!

Respectfully,

San Francisco, CA 94122

Email cc: Asha.setty@cltsc.gov 🗸

July 27, 2021

Arthur Machado DTSC Project Manager 700 Heinz Ave. Berkeley, CA 94710

This letter responds to a DTSC request for public comment regarding toxic contamination of the proposed development at 2550 Irving Street, San Francisco. Employment of an intrusion mitigation system will not eradicate the existence of all the identified toxins and contaminants in the ground, and during construction, would likely be released in appreciable amounts greater than current baselines Homes near 2550 should be monitored until a margin of clearance is determined. We are aware of a disproportionate number of residents who have contracted cancers and Parkinson's Disease. If PCE toxins are released in an indiscriminate plume, also consider that we live in a thick fog belt much of the year, which could trap toxic emissions and prevent them from dissipating, strengthening their toxic effect.

We ask that the area of testing for toxicity be expanded beyond the 2550 development site and then eradicated by whatever means necessary. Then, and only then, should the development be considered for approval.

Yours trulv.

San Francisco, CA 94122

Email cc: Asha.setty@cltsc.gov



August 2, 2021

My name isI bought my home at42 years ago. In arecent meeting regarding the 2550 Irving street project I did not know that we have beenexposed PCE for decades.

In 2000 I was diagnosed with badder cancer by my urologist. The doctor asked me if I worked around chemicals I said no I work in the US Postal Service delivering mail (at that time 37 years). The doctor said he did not know how I got the badder cancer usually its people that work around chemicals. I said I am the first one in the family (that I know of) that got cancer.

Now I believe I got the cancer from PCE from the 2550 Irving site. I wish I had the money to sue. Now TNDC want to build their building there. I hope they clean up the PCE and contamination without making the residence sick with cancer. If we get sick I hope can get a good lawyer and sue

OF TOXIC SUBSTANC SITE MITIGATION BRAN DEPARTMEN 5 2021 STATE OF CALIFORNIA RECEIVES

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August 7, 2021

ARTHUR MECHADO DTSC Project Managen 700 Heinz Avenue BERKELEY: CA 94710



STATE OF CALIFORNIA EPA RECEIVED

SUBJECT: 2550 IRVING STREET, SAN FRANCISCO, CA 94122

Dean MR. Mechado: My name 15 old with poon health. I have lived in this address for thirty four years. I have seen the transformation of the neighborhood Simce then i Before, it was quiet and peaceful until it turned out to be the 3rd Chima Town of Sam Francisco.

With the initial findings that I have pead I am Very among and bithogious. The toxic contamination is very damgenious to the health of the neighborhood. It has to clean thomoughly, excavated and to be dried for a long time before any construction has to be dried. The nemedy should NOT BE "BAND-AID." It has to be done with utmost care and diligence, considering the welfare and health of the community.

Aften all is said and done. I would appeciate it very much if you could furnish us the names of the Petison/s who approve of this project, what department they are working for and the name/s of their

12 - 2550 Inving Street

department head/s. We in the community wants proper accountability of this project.

We will further appreciate any future development on this project so the community would fully understand the predicament this are facing in the rear future.

We appreciate your efforts and continue the good work for the community. It is truly appreciated, thank you and I hemain

Very truly yours,

Sam Francisco, CA 94122

P.S. - There are HOT SPOTS which they claimed that it is coming from the Sewien pipes. They do not know for sure !!! A comprehensive findings shuld be taken into consideration, otherwise, the neighborhood might experience another "SAN BRUNO FIRE." August 7, 2021

Arthur Machado DTSC Project Manager 700 Heinz Avenue Berkeley, CA 94710

RE: Response Plan for 2550 Irving Street

Dear Mr. Machado,

There is a wonderful lady in my neighborhood. On occasion I see her walking her dog or riding her bicycle through Golden Gate Park. I've met her. I've spoken with her. She is my neighbor. She lives near 2550 irving St. She has been diagnosed with cancer. Her name is

I was born in San Francisco in 1968 and have lived here most of my life. It's saddening that in the 21st century TNDC's response plan does nothing to clean up the PCEs that we know cause cancer and Parkinson's disease. That's not a good neighbor. TNDC's response plan is a totally inadequate response to cleaning up the toxins at 2550 living St.

Keeping in mind the already exorbitant proposed cost per unit at 2550 Irving St., the willingness of the developer to invest double for what the property is valued at and the developer's unwillingness to invest in cleanup of the property are inconsistent messages and make for terrible community relations.

There are better solutions that can make our neighborhood safer and cleaner. One of them is Soil Vapor Extraction. Investing in Soil Vapor Extraction to clean up the neighborhood will save TNDC and the neighborhood decades of having to continually invest and re-invest time and resources to monitor PCEs. We should choose to invest in Soil Vapor Extraction so no one else gets diagnosed with cancer. Please.

We know the neighborhood has been exposed to these PCEs for decades. TNDC and Police Credit Union need to be good neighbors and be part of the solution to cleaning up the property and our neighborhood before future generations are exposed to the PCEs as well.

My understanding is that the hotspots are likely coming from the sewer pipes. I believe circumstances warrant a serious investigation to determine the full extent of pollution and the danger from PCEs at 2550 Irving St. There should be no transfer of ownership from the Police Credit Union to TNDC until there is a clear plan to clean up the toxic mess at 2550 Irving St.

TNDC and Police Credit Union should be part of the plan to clean up the site and not leave a toxic mess under the building while they walk away with gross profits.

TOXIC SUBST SITE MITIGATION BRA BERKELEN AUG

STATE OF CALIFORNIA

Personally, I think that references to killings and death by laborers with little construction jobs at my neighbors' homes preceding this large construction job down at 2550 Irving St. might only be a peculiar coincidence. And considering the torment my family went through at the same time (please refer to the enclosures), it is probably all just a very peculiar coincidence.

Never mind that one neighbor put up stairs in his backyard up to his second story that go right up just a few feet from my daughter's bedroom window and that atop the Cyclone fence partitioning our backyards, where the ends of the wires turn and hook down so there aren't any pointy tips, in several spots those wires are undone, in two instances right beneath the added stairs in the backyard and in a third instance right above two 12x1 boards that are stacked width-wise and braced with a 2x4 to make what would otherwise be a 6-foot Cyclone fence a 4-foot Cyclone fence; or another neighbor that added a room and raised his backyard several feet such that people from the room or backyard can look right into my bedroom and through a walk-through closet and into the bathroom where I brush my teeth; or another neighbor that extended his home in the backyard and added stairs that see into my bedroom and that of my daughter's bedroom; or another neighbor Robert that had a laborer that I could hear through an open window scraping away at something on the roof near my light well, even though the laborer parked two doors down at Ricky the plumber's house. It was a nice sunny day and when I ran the faucet, I heard the scraping immediately stop. I turned off the water and listened to the silence in silence for a long time.

Feel free to contact me if at all necessary. Your time and attention in the matter are greatly appreciated. Let's clean-up the toxic mess at 2550 Irving St. with Soil Vapor Extraction. No sale until there is a plan to clean up the PCEs with Soil Vapor Extraction.

Regards,

CC: The Honorable Mayor London N. Breed SFPD Chief William Scott

Enclosures: Order and Narrative

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it is necessary for the PCS/lar enforcement to fatersize the fallskywa) along, suitable the presence and fathernor of their parcelymetian/other adult is prove to means the delicitient's suffer and a pandid statement.

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Judge Newson Jam of the Superior Court of the City and County of San Princises signed and dated an order on Jammary 25, 2016, to have my daughter laken away from no and to have my daughter subjected in medical cambanitors. My daughter was have away from no and he have my daughter subjected in medical cambanitors. My daughter was have away from its on Peberary 12, 2016, You a slapp person indice the grower manual of the City and County V San Francisco vill tell new why my daughter was taken from new and subjected in medical cambanitors, period a single-person from the Son Francisco Baseri of Education, Child Protective Services, Presides Mindels School, San Francisco United School District, San Francisco, Buier Songerment, Megrecol, or the Superior Court of the City and County of San Francisco, net even Sudge Nutriton Laus.

On February 4, 2016, when my daughter une 12-years sold in the severatin grade at SPUSD's Prasticle Middle: School, i received a call from a government agent with Child Periotechic Sterriors of the City and County of four Eruncices tanking and the severation for the City and both my daughter and anest with me the next day of my beam is discuss it. Mary Payette war wit dae word furtherming preserve when lasted har for details about her visit. Despite that, I igneed for instal Mary. Payetie at my beam die period day.

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After separating me from my damphier, Mary Payetid and Patricia Plytin coercively ensised and to sign all sorth of forms. At modier panis, Challer no loce appeared dispondent in the ballway with no. One of the forms proce consult is modified examinations of any damphier at a facility at 25th Ary, and Wachek Sk in Sam Prancipes called Edgewood,

After the meeting, I went immediately to Régensond at 25th Ave. and Vinceste St. To the best of reconceptor, it seek at least 64 to 30 minutes or more after my arrival at Régensond before Mary Payets arrived with my daughter. Then Many Payette did met check in with me for the longest time after marines with my daughter is Régensond. at of my ore difery

Many Payetto at Edgewood had my daughter tabjected in medical examinations.

It washing until offer 7 PRs. still February 12, the Mary Payette and the shaft at Edgewood returned my daughter to no. Staft at Régenerad and that my daughter wanted to go bouce with her father, that my daughter felt and with her father, that my daughter wanted to go to Japanese achool the serve day. Then my daughter and I went home.

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Provides Mindle School's "Parent's Typicker Student Americation" got an email dram but abaset communicative main field despendet by My dampher and me in a workly servicitier flast gots out in private and permitting of particulars attending Provide Middle School; and I got a reply seggesting Gat () may want to keep the mether pervise.

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()n. Nevenher: 2, my mother was visiting and had perpared my daughter's feverite disk for dianer. My mother, my daughter, and I were part about to sit down to dianter when the doarbelt rang.

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The very next day, Nevember 3, I called the energency line for Child Protective Services, Every the Lealast file energency line at Child Protective Services, Child Protective Services would statewall. But in the morning of Nevember 3, it was really different.

In the morning of Nevember 3, a woman appropriat the line at Child Protective Services and instant of characteristing, the symmetry are not may usely. We materised the situation works better own!" She quickly continuous, using it was an antergraph these and the twait in the situation of the she long up a two sourceds. I called hack, hay this time a gentlemme asswered the phase and have been store protosimoted, and and then it was an accorrectly the phase asswered the phase and have a store protosimoted. The source of the two and the two and the two the constraints the 1 constitution put at Child Drodection Services that I was pind about the emergency lines age fined and thirt. I would respect the emergency line.

I consider Child Protective Services every morning for about six weeks a first but about whether. Child Productive Services was any more or ican concerned about the antery of my daughter. Child Freedrive Services accers registeria.

Then perperture in Dotember 2016 (I tichticht wirk), I speeke in Andrea Lege, who lebertifted herricht ar ine Child Russective Services separatives of Mary Expetite, Patricia Physic, Alabier Lee, and Leser Sammer. Jasked Andrea Lege, Child Protective Services aspectises, about the process her ubberdinester pas is that Children stray form latter parents. Andrea Lege, Child Protective Services impervises, repland that the data hours. I suboit Andrea Lege, Child Protective Services impervises, repland that the data hours. I suboit Andrea Lege, Child Protective Services Services and Silleron stray form due parents. Andrea Lege, Child Protective Services supervises, repland that the data hours. I suboit Andrea Lege, Child Protective Services impervises, repland that the data hours are the Andrea Lege, Child Protective Services spartifies, and the data hours.

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Then William, Michael Quina, Sr., Senior Deputy General Counsel with SPUSD, perif me 2 di speer in crass-and-desire connecting SPUSD shaft and sourcelding about my beliavior at the Ba of Rescalation meeting on Decumber 13, Lapska in my abouted time on the Board of Education perifing met any loss was commensured with any message. I have been at external and enter-with my messages. Mays be William Michael Quinn, Jr., Scener Deputy General Counsel with SMUSD, doin't like the message. view of the Record

These, in March 2017, my despiter and I were expecting the SFUED high school letter of anigument, beet due to a stating emergency, SFUED was hate mobileg out the high school letters of antigement. We surver received my doughter's high school letter of sedgmmand in the well. I smalled Preside Middle School Principal Tensors Skhoo and SFUED School Toperty Grammin Comment Within, Michael Quinn, Jr., at least twice in the mouth of April, with one of the two comments within Michael Quinn, Jr., at least twice in the mouth of April, with one of the two comments and structure to an email, and there is SFUED based for school of my dampter's high school letter of anigments. It is not coment, and there is a school be back in the school and get a hard copy of my dampher's SRUSD high school letter of anigments.

n I gut to thinking of more events that box occurred in my daughter's life and my life.

The United States Fastal Service definered loss of must to one beams over the yours that had on the backede of the survelops a fear in the source place on the left side of the flags. I expected it in the Office of the hospically General with the United States Postal Service. Then, ten's combined in the same place has the flags of the local wave place is block half the size of what flags had been before. Lastry, Through , how and in sector wave source block is block and the size of what flags had been before.

Also, any designifier want to SFUSIP's Been Parks Elementary School Japanese programs. My designed per good grades, but there was some assessment that rated my daughter's performance a yearly lew. Something is do with No Child Latt Behind. One day I approached Principal Paus Element is any my Bally, and for whethere reason, Principal Paul Socrisson just related bits veloce at the and and a child and days in frain of Join of people in the front office, when I dated has any charge for any date grades in a state of the source program with the two measures at the source of the and and a child and days in a fail of the other for day way with the low assessment when any daughter was grades grade grades in the regular overas of shorty. I let it ge.

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an Winns, San Francisco Beard of Education Commissioner, during her talk also said (Just Ale Jary Payesia had said when Mary Payette had visited our house), "16's about the children. It's about the children."

ten if wild my form to speech. I bet the Sam Prancisco Beard' of Education know that on February my simplifier was taken provy from me with the cooperation of SEUSD and that it was the most risks day of was falle, that I ance trasted SEUSD, but not arymore. I made tectain that my some i continuousness with my meaning.

After 'I finished speaking at the Sun Krancium Baard of Education meading. I walked out of the meeting teem and into the correlate on may way back beside when I heard Deard of Education. Commission: Emily Meeting any over the interval system, that "__there was a problem at that meeting room a Companyationer J

ners, of Education Commissioner, when it was any tora to address the commissioner about

What are made "mechanisms"? I smalled all the commissioners on the Bowel of Education, but I still have not heard from moreor.

And it is a percettor coincidence that when my dampiter's grades were suffering in Seventh grade, whis my dampiter's most was suffering, that SFURD Preside Middle School econorior Joangied Miarda and Child Protective Services again Mary Payelle, without my inservicelys, had Soom mechanism of the suffering and the white.

) also called the SFFE Cale's number every day for about air weeks after November 2. But ng rinry about Failful to be SFFE to alsy away from my bouts, it stay away from me, and predaily to stay went of our my dampton.

res] bill a meaning that i would exercise my right in first meach and go to all 2200 of their min and do in them what they had duit to me Anyhow, I wouldn't be anything like that, Bet

These in the initiality of Discretion I and surved with a TRO (interpretary vertexising order). The Department of Parking and Territor with Size CRy and Consty of Sax Pranciscs had in came in our largest. Data way is vehicle blocking use driverys, Jest seam cannot. The blocky meeting with an agent free the Directions of Parking and Directle; the Department of Parking and Traffic called and direction of Low pring available. That's then is partnesses everal new with the TRO. The TRO are analysis for the pring available. That's then is partnesses everal new with the TRO. The TRO are analysis for the pring available. That's then is partnesses everal new with the TRO. The TRO are analysis for the Discretion of the TRO. The TRO and the State of Parking and Traffic called and and the bandway on the TRO. (Safe in the construction toold not with the TRO. The main analysis for the construction tools not partness of present (1), 2017, we had our draft sectors of present of the the state the state of the state of the state of the state of the term of the state of the state of present of the state of the s

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Jermert Jungh Mart Pereis of an SEUGO Su

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Page 7 of 9

8-9-21 Mr. Machado, My name is . My family has lived at Avenue for 34 years. I have been very involved in the issues Merroundry the proposed building at 2550 Irving and an writing to address my Concerns regarding toxicity. The site has PCES + TNDC poposed to clean up the site, but is neglecting to address contamination of the adjacent homes. This is inadequate and unacceptable. TNDC needs to be part of a bigger solution to address contamination of the neighborhood. We need a thorough examination of all aspects of this problem before the property sale goes through. thank you for your work and for listenop to my concerns, to the concerns of my neighbors. We seek a transparent investigation + a resolution that will leave our neighbot hood safe for present a giture residents Sincerely Ave SF 94122

Holle: AVE 1 am , 1 Live ST-CA94122 for 20 years, I am angly at the developet TNPC, TNPC'S poison clean-up plan only protects their new buildings without any funds. or plans to protect the communities adjacent to the project, preventing the fraghance and dust from increasing in the construction Process. Pollution has spread throughout the community, and cleanup will cause cancer. The PTSC for patkinson's disease conducts more investigations to determine the scope of the poison spread and the extent of the spread and the extent of the harm. Before a clear plan for cleanup land and ownership should not be removed from the police credit we which . The transfer of cooperatives to must prevent toxic substances from polluting the

entitle community through dust and underground penetration due to the construction process. Thank You. 8-10-2021

August 12, 2021

Arthur Machado DTSC Project Manager 700 Heinz Avenue Berkeley, CA 94710

RE: 2550 IRVING ST - NEIGHBOR RESPONSE

Dear Mr. Machado,

My name is ______ and I am writing to you in response to your "Community Update" letter, dated July 2021. I have lived in the Sunset for 40+ years and in that time, I have seen many, many changes to the neighborhood. Most I have viewed as positive but now, the proposed residential development at 2550 Irving Street I find very disconcerting and worrisome. As per your letter, there is dangerous PCE gas below that entire block. The developer, TNDC has submitted a plan to put a vapor barrier over their residential development site only.

What? No Clean Up? Who will monitor and maintain the proposed system? And, how is this a positive change for our entire neighborhood?

In my humble opinion, covering up the problem is not a viable solution for our community. I have raised 2 children here and as adults, they still live and love the neighborhood. I am looking forward to their raising my grandchildren here as well and in light of the proposed TNDC inadequate response to their 2550 Irving St. development, I feel a strong need to write to you and share my feelings about the site toxins.

Shouldn't there be more investigation into the full extent of the gas plumes and their danger before going forward with the building plan? And who has the responsibility for clean up? The current owner of the site or TNDC? Shouldn't these issues be resolved before more legal complications and (possible) finger pointing ensues?

In this time of Covid pandemic and the primal knowledge and understanding that "we are all in this together" I feel very strongly that the proposal for cleanup should benefit the entire neighborhood for now and in future.

Please consider there should be no transfer of ownership from the current owners to the TNDC until there is a clear and unequivocal plan to clean up the site.

Thank you for your time and consideration. I appreciate it very much.

best regards,

San Francisco, CA 94122



CENTER FOR PUBLIC ENVIRONMENTAL OVERSIGHT A project of the Pacific Studies Center P.O. Box 998, Mountain View, CA 94042

http://www.cpeo.org

August 12, 2021

Arthur Machado DTSC Project Manager 700 Heinz Avenue Berkeley, CA 94710

Dear Arthur:

Thank for you the opportunity to comment on the Tenderloin Neighborhood Development Corporation's draft Response Plan for 2550 Irving Street, San Francisco. I have more than an idle interest in this area. I have had family on Irving Street for five decades.

As you know, I have provided *pro bono* technical assistance to the Mid-Sunset Neighborhood Association in the development of their comments on the draft Response Plan as well as other aspects of the PCE plume investigation. I associate myself with those comments.

As you might not know, I have developed a reputation in my part of the Bay Area as a persistent and effective advocate for affordable housing development, as a community activist, an environmental advocate, and a four-year member of the Mountain View City Council.

As a member of Santa Clara County's Housing Bond (2016 Measure A) Oversight Committee, I am fully aware of the challenges facing affordable housing developers as they struggle to win planning approval and obtain financing for their sorely needed projects. However, I believe it essential not to compromise the health and safety of future occupants of these buildings as developers and governments design these projects. It is possible to cost-effectively address the contamination at 2550 Irving *and* protect the neighbors, without taking any environmental shortcuts.

Furthermore, in my position at the Center for Public Environmental Oversight I have participated in two Interstate Technology Regulatory Council vapor intrusion work teams and innumerable EPA workshops. I have participated in the development and/or provided comment on virtually all of California's vapor intrusion guidance documents.

In general, they are valuable, robust documents, and it's my hope that the Supplemental Guidance, which adjusts default attenuation factors to match empirical data, will be finalized soon. But I have seen the continuing pressure from some development interests to weaken the requirements for both investigation and remediation. Please do not bend the rules under such pressure.

The science for addressing vapor intrusion had advanced since 2002, when we started on this journey, and today we know how to protect the public, enable development, and save money. Please listen to the neighbors, in the Mid-Sunset and elsewhere, because your primary job is to protect them.

Sincerely,

Lenny Siegel Executive Director

August 12, 2021

Arthur Machado, DTSC Project Manager 700 Heinz Avenue Berkeley, CA. 94710

RE: Path Forward's May 21, 2021 Draft Response Plan for 2550 Irving Street, SF, Project

Dear Mr. Machado,

As for the attenuation factor of 0.03 for soil vapor to indoor air what is the scientific basis for that? I ask because the previous factor was about 100 times lower. Also, it has been stated that if the concentration levels of the soil vapor samples are 100 times the SL it would be of concern to DTSC. But, why not if it is 10 times? In addition, how does the Sls take that into account vulnerable populations? Finally, it is not clear to me if future monitoring will continue to include vinyl chloride, which is a known human carcinogen per the National Toxicology Program whereas perc is a probable human carcinogen per EPA.

I believe part of the Plan calls for venting the perc at the rooftops of the proposed building. Wouldn't it be more preventative if the perc was captured with activated carbon; otherwise, the vented perc may attached to airborne particles which may settle and result in exposures to residents.

The Albrite Cleaners operated for 20 years until around 1950, but the perc is still there; if removal is not done then it may be decades before the perc dissipates on its own, if you will. Therefore, I wonder if it would make some sense to look at other technologies. One is to perhaps build a barrier around the perc source down to the groundwater table so that, if you will, the perc will be funneled through the project site. Or, do this in combination or alone using soil vapor extraction technologies? This could shorten decades of sampling and monitoring and possibly onsite and offsite remediation. Also, from my research I have found that bioventing has been used in these cases. Finally, I came across a case study which I have attached via email involving PersulfOx, an activated persulfate, which was mixed in-situ with contaminated soils at an old dry cleaning facility at a Chicago suburb. Cabeno Environmental worked with RENENESIS (they have a couple of offices in CA) to do the clean up. They claimed that their technology was about 50% of the cost of other technologies.

The subject Plan's proposed responses may also harm the property values etc of nearby buildings and housing. I wonder if sellers of these properties will have to put covenants in their sales agreements besides informing potential buyers of their perc situation. I believe they will have to declare in the Natural Hazardous Disclosure (NHD) when they list their properties for sale that their property and/or nearby properties are contaminated. Also, will there be a reserve fund if it proves necessary for neighbors to do some sort of remediation as a result of perc intrusion?

In conclusion, I urge that other cleanup technologies such as the above be evaluated. The lowest cost clean up technology could very well be overall more cost effective in the long run and this might eliminate the potential need to develop an Offsite Response Plan, if you will, as apparently the developers will have to do. Also, I don't know if Path Forward's preference for Alternative #2 (VIMS) incorporated treatment/permit state fees as well.

Just for the record my family and I reside in the Parkside area about eight blocks from the project site.

Sincerely,

Irving StProject Draft Response Plan Comments To DTS CAugust 2021

EXECUTIVE SUMMARY

Mr. Arthur Machado DTSC Project Manager 700 Heinz Avenue Berkeley, CA 94710

August 12, 2021

Dear Mr. Machado:

The Mid-Sunset Neighborhood Association (MSNA) calls on the Department of Toxic Substances Control (DTSC) to reject the Tenderloin Neighborhood Development Corporation's (TNDC) draft Response Plan as faulty and inadequate in large part because it fails to address our community's health and safety concerns.

The MSNA is an organization of over 170 individuals and families many of whom live in the immediate vicinity to the 2500 block of Irving Street. This is the area where a series of environmental assessments have found tetrachloroethene (PCE) contamination in soil gas at levels that are an unreasonable risk to our health. Long-term residents have been unknowingly exposed to PCE for decades—likely at higher levels than exist today. They live in houses with old foundations that are particularly susceptible to the PCE vapor intrusion from the subsurface.

PCE exposure is likely to increase the risk of Parkinson's disease, birth defects, and multiple forms of cancer. The CDC reports, "Studies in humans suggest that exposure to tetrachloroethylene might lead to a higher risk of getting bladder cancer, multiple myeloma, or non-Hodgkin's lymphoma. In animals, tetrachloroethylene has been shown to cause cancers of the liver, kidney, and blood system." ¹

Rather than accepting the TNDC draft Response Plan as is, we, the neighbors, want the PCE cleaned up. The need for the timely construction of affordable housing should not override the requirement that future residents not be at an unacceptable risk from the contamination. In fact, construction without remediation would be environmental injustice.

Working with expert advisors², MSNA has identified five major areas of concern that must be further investigated and resolved before an effective response plan can be evaluated. In the following comments we will also outline four different solutions requiring evaluation that will protect both the current community and the future residents of the 2550 Irving Street affordable housing building in ways the draft Response Plan's recommended "band aid" solution does not. These alternatives are more technically effective and would reduce risk for all affected parties. Some of these alternatives are less expensive than the alternatives evaluated in the draft Response Plan.

The Irving Street PCE contamination is not isolated. It is part of at least two soil gas plumes related to historic dry cleaner operations and leaky city sewer lines that have been identified and are now co-mingled beneath Irving Street. The plumes have spread into the neighborhood in all directions – most concerningly to the north and south into single-family residential areas – and they are not stable based on the most recent data. The PCE plumes—which have not yet been fully mapped

¹ CDC: <u>PCE ToxFaq</u>

² **Don Moore**, California professional geologist and principal of Environmental Risk Solutions. **Lenny Siegel**, former mayor of Mountain View, CA and Executive Director, Center for Public Environmental Oversight. **Thomas Soper**, AIA Architect, NCARB LEED.

to DTSC's own residential screening levels—exist beneath numerous homes presenting a clear and unacceptable risk to their occupants.

The MSNA's major areas of concern are:

1) Incomplete site modeling and community safety:

Sewer line-related leaks and associated hotspots have not yet been identified. These are referenced in the draft Response Plan as potential PCE sources. Adequate characterization might need to wait until after demolition to complete this investigation. We argue that the long-term safety of the neighborhood depends on having confidence there is an accurate model of PCE sources, pathways, and receptors. The draft Response Plan does nothing to address the safety of the current community and will likely hinder efforts to do this by ignoring it now.

2) Faulty risk assessment and incomplete data:

Path Forward consistently downplays health risks to the future affordable housing residents and essentially ignores the risk to the surrounding community, some of whom have been exposed to PCE vapors for decades. Risk underestimation can be seen in Path Forward's use of a misleading attenuation factor as well as in their callous "acceptable risk" assumption that asks the future low-income residents to accept a 100 times greater cancer risk. Accepting more risk for low-income people is all too frequent a pattern. This assertion that future vapor intrusion risk will be acceptable is being used to justify TNDC proposing mitigation instead of permanent remediation, as called for in DTSC guidance documents.

In addition, Path Forward seems unconcerned or unaware that new data will be forthcoming over the next year from an off-site PCE vapor intrusion investigation that will begin in September 2021. The Police Credit Union (TPCU) off-site investigation is directly related to remaining on-site sources; indoor air testing is planned but not yet conducted. This important data and vapor intrusion evaluation won't be fully available for another year. This is one of the reasons why coordination of multiple responsible parties (including the city) is important. The California Land Reuse and Revitalization Act (CLRRA) agreement calls for a health risk assessment (HRA) and allows for TNDC, TPCU and City of San Francisco (City) to come together and do the right thing under DTSC guidance and conduct an actual cleanup.

3) The PCE soil gas plumes must be delineated to protect the community's health.

To date, the full extent of the PCE plumes is unknown. The Irving Street PCE soil gas plumes need further delineation in all directions to DTSC's own stated residential screening levels. There should be a unified conceptual site model that shows the sources, pathways and receptors for the combined sites.

4) Insufficient and unfunded cost estimates for the Vapor Intrusion Mitigation System and O&M Plan.

It is difficult to discern how both the VIMS and the ongoing 30-year O&M plan are going to be financed. While the draft Response Plan includes an O&M plan, it is important to

note there is insufficient detail in the Plan to know how this will be funded and monitored over time. The same is true for the VIMS—the Plan contains no cost detail for VIMS installation. There is no contingency cost estimate in the event the VIMS system needs to be converted to an active system. One of the weaknesses of this part of the draft Response Plan is that there are no financial bonds or assurances in place—especially for the on-going yearly costs.

5) The draft Response Plan ignores the most applicable cleanup alternatives.

For a site like 2550 Irving Street, with the known amount of contamination and potential risk, DTSC's *Supplemental Guidance for Screening and Evaluating Vapor Intrusion* states that "remediation should be the preferred response action to reduce VI risk by permanent reduction of contaminants. Mitigation is considered an interim response action until VFCs in soil, soil gas, or groundwater are confirmed to be at acceptable levels." ³ The Path Forward remedial alternative evaluation is an incomplete and faulty analysis because they omitted the clear presumptive remedy (Soil Vapor Extraction or SVE.⁴

Additionally Path Forward rejected a soil removal alternative on the basis of expense, but entirely missed how it could be a cost effective and better alternative than mitigation. Removing contaminated soil for an underground parking garage/foundation could solve many of the ongoing contentious issues around this building, e.g., neighborhood traffic congestion, pedestrian safety, residential parking, and negative effects of a grade-level foundation on the neighbor's brittle 100-year old foundations.

The MSNA has identified the following alternatives that require consideration by Path Forward and TNDC that are actual cleanup solutions to remediate the PCE and address the concerns of the existing community:

- Soil Vapor Extraction before demolition
- Soil Vapor Extraction after demolition
- Excavation targeted to remove hot spot source material
- Excavation full soil removal with potential parking component

The attached *Draft Response Plan Addendum* dated August 3, 2021, prepared by Environmental Risk Solutions, Inc. (ERS), signed and stamped by a California Professional Geologist, highlights the faulty alternative evaluation by Path Forward and omission of the SVE technology. The Addendum is supported by cost detail from RMD Environmental Solutions, which is prepared to implement the SVE technology at a lower cost than the TNDC mitigation approach with its potential future hidden contingency costs and unfunded O&M costs as highlighted above. The ERS Addendum also calls into question Path Forward's evaluation of the soil excavation alternative, thus supporting the MSNA's position on inadequate alternative evaluation.

Our experts have also prepared the attached technical comments that support and add detail to the MSNA's statements and positions outline above.

³ DTSC, (2020) Draft<u>"Supplemental Guidance for Screening and Evaluating Vapor Intrusion</u>", p.28 (or p.40 in PDF)

⁴ DTSC, "Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil"

While our comments in this document have been focused on the narrow scope of the TNDC/Path Forward *Draft Response Plan*, they also demonstrate the need for a more holistic way to address the problem of the carcinogenic PCE contamination in our neighborhood. We ask DTSC to coordinate TNDC's investigation and remediation with any investigation and remediation conducted by the other responsible parties including TPCU and the City. The CLRRA agreement may have some protections, but the individual goals of the responsible parties cannot allow community concerns to slip through the cracks— like the PCE vapors may be slipping up through the cracks of our 100-year old foundations and into our homes. That would include full delineation of the soil gas plume, identification of all sources of PCE, and implementation of an SVE or soil removal alternative. To be clear, the only responsible party for the PCE contamination north of Irving Street at this time is TPCU – this is the case until the property is transferred. The MSNA insists that the property transaction be put on hold until TPCU and TNDC come together and prepare an actual cleanup plan that is acceptable to all parties. DTSC has the power to do that and it is written into the Board of Supervisors' loan agreement as an amendment that Supervisor Mar made to that agreement.

The MSNA is deeply appreciative of this comment period at a time when we know there is intense pressure by the City, its agencies and the developer to rush past these environmental issues so that financing for this project can speed ahead. This was recently highlighted by the Mayor's Office of Housing and Community Development's (MOHCD's) Amy Chan in her answer to Supervisor Mar when he asked at a San Francisco Board of Supervisors (BOS) meeting why it was necessary to approve the TNDC predevelopment loan before the DTSC comment period is complete. In response, Ms. Chan said they wanted to act quickly because there was a purchasing agreement deadline in August, the BOS was soon going on vacation, and MOHCD didn't feel they needed to wait for the DTSC comment period because:

"We don't believe that there would be any new information coming from DTSC. As Jacob [Noonan of MOHCD] has mentioned the *Draft Response Plan* has already been reviewed and preliminarily approved. And there won't be any new information coming from that process, which will conclude in mid-August."⁵

Ms. Chan is wrong to assume this and we would expect you to concur. A draft plan is a draft plan. The comment period is a chance to evaluate new information. We ask DTSC to see the long-range picture, use a wider focus and to look carefully at the faults and omissions in TNDC's *Draft Response Plan*. The MSNA's concerns are justified and must be addressed before any approval to this plan is given. Our community's concerns have been ignored by this faulty plan that should be designed to protect all people who live in the neighborhood now and in the future. We thank you for your consideration and look forward to engaging with you in a discussion around these issues.

⁵ BOS Budget and Finance Committee, July 14, 2021 (time: 02:12:05 -02:12:38)

Please contact us with any questions:

Sincerely,

Ho Kummerling Flo Kimmerling

Flo Kimmerling President, Mid-Sunset Neighborhood Association

Paul Hokman

Paul Holzman Environmental Liaison, Mid-Sunset Neighborhood Association

Cc:

Gordon Mar, District 4 Supervisor London Breed, Mayor of San Francisco Andrea Bruss, Deputy Chief of Staff, Mayor's Office Donald W. Moore, PG, ARM, Environmental Risk Solutions Lenny Siegel, Executive Director, Center for Public Environmental Oversight

Attachments:

- 1. MSNA Expert Technical Comments, August 12, 2021
- 2. Draft Response Plan Addendum, Environmental Risk Solutions, August 3, 2021

ATTACHMENT 1

MSNA Expert Technical Comments August 12, 2021

MSNA EXPERT TECHNICAL COMMENTS (August 12, 2021)

The *Draft Response Plan* for the 2550 Irving Street Affordable Housing Project, dated May 11, 2021, is deficient. This property is one of the sources of the PCE vapor plume that needs further characterization to DTSC's own stated risk levels. The response should be integrated with other responses for the same co-mingled PCE soil gas plume and not separated by different responsible parties and property boundaries. Subsurface *remediation*, not just the "band-aid" of *mitigation*, should be evaluated and implemented in accordance with DTSC's own guidance to eliminate future health risk and liability for all parties involved and affected.

1. INCOMPLETE SITE MODELING AND LONG-TERM COMMUNITY HEALTH & SAFETY

The conceptual site model provided in the *Draft Response Plan*¹ is incomplete because it excludes critical information not considered within the scope of TNDC's agreement with DTSC. Not enough is known about PCE contamination in the vicinity of Irving Street and 26th and 27th Avenues to move safely forward with remediation, let alone redevelopment.

To determine the best way to protect both current neighborhood residents and future occupants of the proposed TNDC project, it is essential to know where the PCE was released, how it is moving through the environment, and who has been, is, and may be exposed. The *Draft Response Plan* proposes a temporary, limited solution to a problem whose nature and extent has not yet been fully investigated. *It is like placing a band-aid on a cancer.*

The *Draft Response Plan* speculates that the PCE soil gas contamination, "is suspected to have leaked from on-site and/or off-site sanitary sewer lines."² This is likely, but to our knowledge, no one has sought to identify those leaks. If the presence of the building prevents such an investigation now, then it should be completed after demolition and should be anticipated in any response plan.

Meanwhile, AllWest Environmental, in its *Soil Gas Investigation Report* dated November 17, 2020 and prepared for The Police Credit Union (TPCU), argues, "the former Albrite Cleaners at 2511 Irving was likely the primary release source, likely via the main and lateral sewer lines."³ Again, no one has identified the location of those leaks. Furthermore, the conclusion that Albrite is primarily responsible for contamination north of Irving Street—a conclusion that serves TPCU's interests—is inadequately justified.

There is another possibility: PCE or PCE-containing waste may have been dumped directly on the ground or on the floors of the former dry-cleaning operations. For example, in AllWest's *Soil Gas Report*⁴, both SVP-20 and SVP-25 show substantially higher concentrations of PCE in soil gas at a depth of five feet, as compared to 15 feet. That differential is typical of sites where the volatile compound was released at the surface.

¹ Path Forward (May 11, 2021) *Draft Response Plan*, Figure 3

² Path Forward (May 11, 2021) Draft Response Plan, p.9

³ AllWest Environmental (Nov. 17, 2020) Soil Vapor Investigation Report p.2

⁴ AllWest Environmental (Nov. 17, 2020) <u>Soil Vapor Investigation</u> Report, Figure 2

A comprehensive investigation of the entire co-mingled PCE soil gas plume, including the inspection of past and present sewer lines and sampling on the Albrite property, is necessary to determine the sources, pathways, and receptors—that is, to complete the conceptual site model.

This is important for at least three reasons: 1) Remedies that extract contamination may not be successful if contamination moves into the areas where the contamination is removed, so it is important to know all the sources. 2) Providing long-term protection to nearby residences depends upon knowing whether the contamination has spread directly through the vadose zone or has been transported via off-site sewer lines. 3) Further investigation should help assess the responsibility of TPCU and Albrite for the presence of PCE in the immediate environment.

Under its CLRRA Agreement, TNDC is not alone in their responsibility for completing the investigation. But its planned construction activities could interfere with investigations carried out by other responsible parties. DTSC should arrange a cooperative, comprehensive investigation, even if that delays redevelopment.

2. FAULTY RISK ASSESSMENT AND INCOMPLETE DATA

While the *Draft Response Plan* focuses on the 2550 Irving project site itself, neighbors of the site have been at risk of exposure for decades. Nearly every home is built on foundations that are particularly susceptible to the intrusion of PCE vapors from the subsurface. However, thus far no one has taken the time to measure indoor air or delineate the PCE soil gas plume.

PCE exposure is likely to dramatically increase the risk of Parkinson's disease, birth defects, and multiple forms of cancer. The CDC reports, "Studies in humans suggest that exposure to tetrachloroethylene might lead to a higher risk of getting bladder cancer, multiple myeloma, or non-Hodgkin' s lymphoma. In animals, tetrachloroethylene has been shown to cause cancers of the liver, kidney, and blood system."⁵

Yet TNDC's consultants consistently downplay the risk of exposure. This is disrespectful to the neighborhood and the future low-income residents. DTSC should not accept these assertions because they will affect both investigations and remedies at and around the site. In particular, the claim that future vapor intrusion risk will be acceptable appears to justify the failure to propose a permanent remedy, as called for in DTSC guidance documents: "Remediation should be the preferred response action to reduce VI risk by permanent reduction of contaminants. Mitigation is considered an interim response action until VFCs in soil, soil gas, or groundwater are confirmed to be at acceptable levels (DTSC, 2011b)."⁶ VFC stands for vapor-forming chemicals.

The *Draft Response Plan* posits a range of acceptable excess lifetime cancer risk up to 100 in a million (10⁻⁴ or one in ten thousand). While there may be extreme cases where such a range may be used, it is unacceptable to this neighborhood and any other residential community. It appears that TNDC is arguing that low-income people, the future residents of

⁵ PCE ToxFaq

⁶ DTSC, (2020) <u>Draft Supplemental Guidance for Screening and Evaluating Vapor Intrusion</u> p.28 (or p.40 in PDF)

the proposed affordable housing, must accept cancer risks higher than other receptors would. This is a clear example of environmental injustice.

Even DTSC seems to have accepted a 100-times-higher cancer risk for the future low-income residents at 2550 as well as for the current Sunset neighbors. We believe this is a critically important oversight that needs to be corrected not only because all city agencies are looking to DTSC for guidance on this, but TNDC has used it to justify their faulty response plan. In a letter dated July 2, 2021 to San Francisco Supervisor Gordon Mar, the DTSC Manager for this project states that "the levels of PCE found in soil vapor at the 2550 Irving Street were at or below state and federal concentration for unacceptable risks, which is 1,500 ug/m³. The levels of PCE for indoor air in a commercial setting at the 2550 Irving Street are also below the state and federal concentrations for unacceptable risks, which is 200 ug/m³."

As a threshold for acceptable risk, we've been unable to find this standard (10^{-4}) in any DTSC publications. Instead, in a guidance document developed with public input, DTSC has determined "acceptable risk" "to be at or less than a 1 x 10^{-6} risk level or a hazard index (HI) of 1."⁸ Again, this suggests the all-too-common pattern of accepting greater risk for low-income people.

Although still a draft document, the (2020) *Draft Supplemental Guidance for Screening and Evaluating Vapor Intrusion* uses the same standard (seen in the chart below) as the *Vapor Intrusion Mitigation Advisory*.⁹

		₹.		
Current VI Risk and Hazard Estimate primarily using indoor air data	Future VI Risk and Hazard Estimate primarily using subslab / soil gas data	Risk Management Decision	Potential Response Actions	
$\frac{\text{Risk} < 1 \times 10^{-6}}{\text{and HI} < 1}$	Risk < 1x10 ⁻⁶ <u>and</u> HI < 1	Low Priority	None	
Risk from 1x10 ⁻⁶ to 1x10 ⁻⁴ <u>and</u> HI ≤ 1	Risk from 1x10 ⁻⁶ to 1x10 ⁻⁴ <u>and</u> HI ≤ 1	Determine Appropriate Action	 None Institutional Controls Additional Investigation/Sampling Monitoring Refine Risk Assessment Mitigation Remediation 	
Risk > 1x10 ⁻⁴ <u>or</u> HI > 1	Risk > 1x10 ⁻⁴ <u>or</u> HI > 1	Response Action Needed	MitigationRemediation	

Risk Management Decision Framework for Vapor Intrusion

⁷ DTSC, Arthur Machado, *Letter to Supervisor Gordon Mar, July 2, 2021*

⁸ DTSC, Vapor Intrusion Mitigation Advisory, p.6 and p.19

⁹ DTSC, (2020) <u>Draft Supplemental Guidance for Screening and Evaluating Vapor Intrusion</u> p.28 (or 40 in PDF)

Attenuation Factors

Path Forward is off the mark in suggesting that 0.0005 is an appropriate attenuation factor¹⁰ for projecting future risk at the site. The empirical attenuation factor for the current building can be calculated as 0.013 in the western portion: In August, 2019, AllWest Environmental measured PCE in the indoor air behind the bank teller counter (VP-1) at 3.85 μ g/m³. In May, 2020, the PCE soil gas concentration, at a depth of five feet, was 290 μ g/m³ at the same location (SVP-13A). The actual ratio could have been higher, closer to EPA's default attenuation factor of .03, because across the country measured vapor intrusion is low in the summer months.

This may prove significant as DTSC determines which off-site homes should be sampled. Like communities across the United States, the MSNA takes the position that the best way to determine indoor air contamination is to measure it, not model it. There are numerous ways that background sources—false positives—can be eliminated. Moreover, it should be noted that the soil gas sampling points associated with nearby residences are further from the PCE sources than the homes themselves, so soil gas levels directly under the homes could be higher than those measured at the sidewalks.

Furthermore, the *Draft Response Plan* asserts, "For a new commercial/residential building that is plumbed and ventilated to building codes, the previous DTSC-recommended attenuation factor of 0.0005 is likely more representative than the current value of 0.03."¹¹ If there are no vapor barrier leaks or perforations created during construction, it's possible that a new building may better attenuate intrusion than an old building. However, the building will not be new forever. Ground movement or minor building modifications could create pathways that would lead to vapor intrusion. The PCE in the subsurface has been there for decades. Thus, in the absence of active remediation, it is unlikely to disappear.

Finally, the use of an inter-floor transfer factor to predict reduced contamination concentrations, and thus risk, in residential portions of the building, is unjustified for two reasons.

- 1. The architect's floor plan of the building's street-level shows a residential unit on the ground floor. The developer is also considering putting in a day-care center on the ground floor. Knowing how the developer intends to use the ground floor is critical to achieving a successful response lan for the residents.
- 2. The two planned elevators can act as pumps, moving air and associated contamination from the ground floor to the upper floors. This can occur even if the elevator base is sealed.

¹⁰ The attenuation factor is the ratio of the indoor air concentration for a substance compared to its concentration in underlying soil gas.

¹¹ Path Forward, (May 11, 2021) Draft Response Plan, p.9

3. THE SOIL GAS PLUME MUST BE FULLY DELINEATED TO PROTECT THE COMMUNITY'S HEALTH

The full extent of PCE contamination originating on the 2500 block of Irving Street must be adequately delineated to protect public health. As at many other sites, this task is complicated by the division of responsibility among multiple responsible parties. DTSC should create a plan that coordinates the activities of those parties to ensure that the co-mingled soil gas plume is delineated in every direction to DTSC screening levels.

While groundwater contamination moves with the groundwater, flowing "downhill" underground, soil gas contamination emanates radially from the source and along preferential pathways. Yet, thus far, the only soil gas sampling conducted in the surrounding residential neighborhood has been carried out to the immediate north of known source areas. Not only should soil gas sampling be conducted in every direction from the former dry cleaners, but it should be continued outwardly (distally) until PCE soil gas measurements consistently fall below the soil gas screening level of 15 µg/m³, based on one in a million (10⁻⁶) excess lifetime cancer risk. The attached PCE soil vapor plume maps at 5- and 15-foot depths prepared by Environmental Risk Solutions, Inc. (ERS) support the MSNA's position that these plumes require further delineation in all directions. A DTSC response to the MSNA dated July 14⁻ 2021 states that their 15 ug/m³ screening level "informs DTSC of a starting point for risk assessment." Based on this response there is no current starting point for evaluating risk since the lowest 5-foot PCE concentrations based on the most recent data is 70 ug/m³ – nearly 5-times above the screening level.

Past sampling demonstrates that elevated levels of PCE in shallow soil gas may extend significantly beyond historic sampling locations. The northernmost readings are actually higher than those just to the south. Figure 3 in Allwest Environmental's *First 2021 Semi-Annual Soil Vapor Monitoring Report* dated June 10, 2021 shows that at five feet below ground surface, SVP-28A has had higher readings (94 μ g/m³ and 120 μ g/m³ on March 2, 2021 and September 2, 2020) than SVP-29A (70 μ g/m³ and 73 μ g/m³ on the same dates), and that SVP-31A has had higher readings (130 μ g/m³ and 150 μ g/m³ on March 3, 2021 and September 3, 2020) than SVP-32A (91 μ g/m³ and 59 μ g/m³ on the same dates).

These data bring into question AllWest's conclusion in its *Soil Gas Investigation Report* dated November 17, 2020, which states, "The overall declining PCE concentration gradient north from Area D to Areas E and F indicate the lateral extent of the PCE plume likely does not significantly extend past soil vapor probes SVP-28A/B and SVP-31A/B."¹² As one moves northward, the increase could indicate a larger soil gas plume, or it may indicate preferential pathways. That same Figure 2 shows sewer lines flowing north on both 26th and 27th Avenues.

DTSC has stated that TNDC is not responsible for offsite investigation, remediation, or mitigation, yet its excavation and construction activities could uncover sources and pathways that impact off-site receptors. If our soil vapor extraction alternative is utilized at the site, it could move or even remove soil gas contamination from nearby properties. Therefore, the TNDC response must be coordinated with activities conducted by the other parties. As we

¹² AllWest Environmental, (Nov. 17, 2020), Soil Vapor Investigation Report p.2

suggested above, not only have likely receptors of PCE contamination not been identified, but the sources and pathways have not been pinpointed.

4. INSUFFICIENT CONSIDERATION OF LONG-TERM CONTINGENCIES, COSTS, AND LIABILITIES

The proposed Vapor Intrusion Mitigation System (VIMS) would consist of a vapor membrane and a passive venting system. DTSC has consistently determined that vapor membranes are a necessary but insufficient component of mitigation in new construction because there is no data to determine their longevity.

The proposed passive venting system, with the option to upgrade to active subsurface depressurization, is a standard approach in new construction. However, the *Draft Response Plan* offers no criteria or procedures for determining if and when such an upgrade is necessary.

The Plan should provide such criteria and procedures, as well as a contingency cost estimate for the operation, maintenance, and management of active mitigation for the life of the building.

Furthermore, there should be a financial assurance to cover long-term management of the VIMS—operation, maintenance, and monitoring—for the life of building, covering both passive-only and active scenarios. All too often at vapor intrusion sites, long-term management is ignored because no provision has been made to pay for it.

Finally, while it is difficult to quantify, the mitigation-only approach exposes the parties involved to long-term liabilities if the PCE soil vapors remain unaddressed.

5. VIABLE RESPONSE PLAN ALTERNATIVES NOT CONSIDERED BY PATH FORWARD: SOIL VAPOR EXTRACTION AND OTHER EXCAVATION APPROACHES

The MSNA technical experts have identified the following viable remedial alternatives to clean up TPCU property and also reduce PCE concentrations in off-site areas. DTSC should direct TNDC and its consultant Path Forward, to evaluate each of these solutions:

- Soil Vapor Extraction before demolition
- Soil Vapor Extraction after demolition
- Excavation targeted to remove hot spot source material
- Excavation of full soil removal with potential parking component

TNDC and Path Forward's *Draft Response Plan* is a band-aid on a much larger problem. The risk for the future residents is already high enough that TNDC and Path Forward must look toward full and permanent remediation of this property. DTSC must keep the pressure on them to come up with a solution that does that. As mentioned above, DTSC's Supplemental Guidance for Screening and Evaluating Vapor Intrusion (with a reference to the Mitigation

Advisory), states, "Remediation should be the preferred response action to reduce VI risk by permanent reduction of contaminants. Mitigation is considered an interim response action until VFCs in soil, soil gas, or groundwater are confirmed to be at acceptable levels (DTSC, 2011b)." ¹³

Soil vapor extraction (SVE) is a glaring omission in the Path Forward alternative evaluation particularly based on the favorable subsurface geology. SVE is particularly effective when the soil consists of course-grained sand, which is present beneath the property. The SVE technology is also supported by environmental regulatory guidance documents including the following:

- 1. Proven Technologies and Remedies Guidance, Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil, DTSC, April 2010
- 2. Engineering Issue: Soil Vapor Extraction Technology, US EPA, February 2018

ERS, one of MSNA's technical experts, prepared a *Draft Response Plan* Addendum. Included as an attachment, it highlights Path Forward's omission of the SVE technology. The Addendum is supported by cost detail from RMD Environmental Solutions, Inc. (RMD), a dry cleaner contamination expert that has implemented the SVE technology at numerous sites in California. The SVE technology is the obvious choice for this site based on discussions with multiple experts and ERS and RMD are prepared to implement this Addendum for responsible parties, TPCU and/or TNDC.

The TNDC *Draft Response Plan* also fails to properly evaluate all potential excavation alternatives, such as permanent excavation and "hot spot" source area excavation to remove the high concentration source material. Not only is excavation one of DTSC's presumptive remedies for addressing chlorinated VOCs in the vadose zone, but one could also argue that it is an opportunity to create underground parking that would be of financial value, as well as practical value to future residents and the neighborhood.¹⁴ Unfortunately, Path Forward seems to have biased its analysis against excavation of any type.

This neighborhood already suffers from insufficient street parking and congestion. Though the project is exempt from parking requirements, it is reasonable to assume that some of the 300 plus residents will need vehicles, either because they have children or to carry out their employment. Underground parking could add at least 30 more spaces to the 11 already planned for the development, serving the residents and reducing the impact on the neighborhood. Underground parking is common in similar developments in the Sunset.

If underground parking were incorporated into the building design, the net cost of permanent excavation would be substantially less than the \$4,088,000 projected in the *Draft Response Plan*. The floor or land value of underground parking should be subtracted from the out-of-pocket cost of the excavation alternative to determine the net cost. Furthermore, while there are costs associated with the construction of an underground parking garage, permanent excavation would eliminate the estimated \$539,000 backfill cost.

¹³ DTSC, (2020) <u>Draft Supplemental Guidance for Screening and Evaluating Vapor Intrusion</u>, p.28 (or p.40 in PDF)

¹⁴ MSNA's consultant, Thomas Soper, AIA, is submitting his own letter to DTSC detailing this solution.

Appendix C of the *Draft Response Plan* includes estimates totaling over \$1.5 million for the disposal of excavated soil at Class 2 and "Non-RCRA" landfills. That number is unsubstantiated and should be justified, given the non-detect sampling results for PCE in soil, at all depths, shown in Table A-1 of Path Forward's February 2, 2021 *Site Assessment Plan and Report of Findings.*

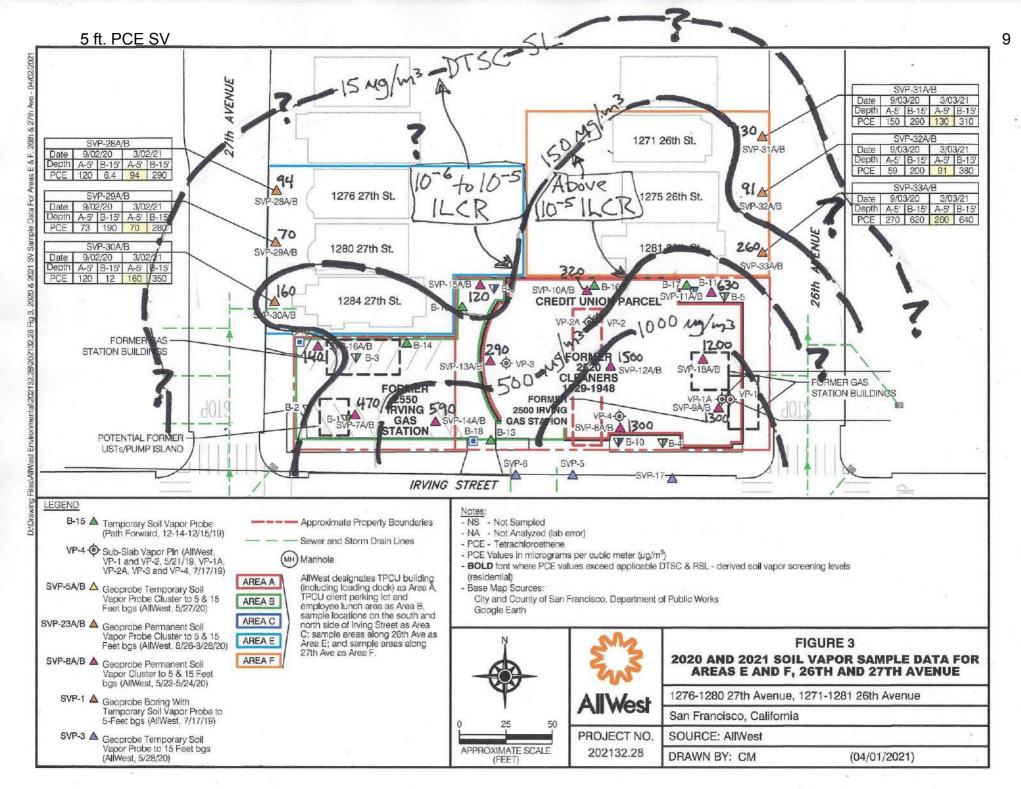
Path Forward suggests that excavation and backfill could lead to soil recontamination due to off-site soil vapor.¹⁵ With permanent excavation, there would be no soil to re-contaminate. The risk that PCE vapors could migrate into the garage if the garage walls are not properly sealed is minimal. With the ventilation normally required for underground parking—to address fuel and exhaust fumes—there would be a system in place to remove the contamination and prevent migration into living and working spaces.

The *Draft Response Plan*¹⁶ correctly warns that excavation would increase dust and truck traffic, to say nothing of noise. To us, this is disingenuous. The project, no matter what the response plan or ultimate design, will be disruptive to the neighborhood.

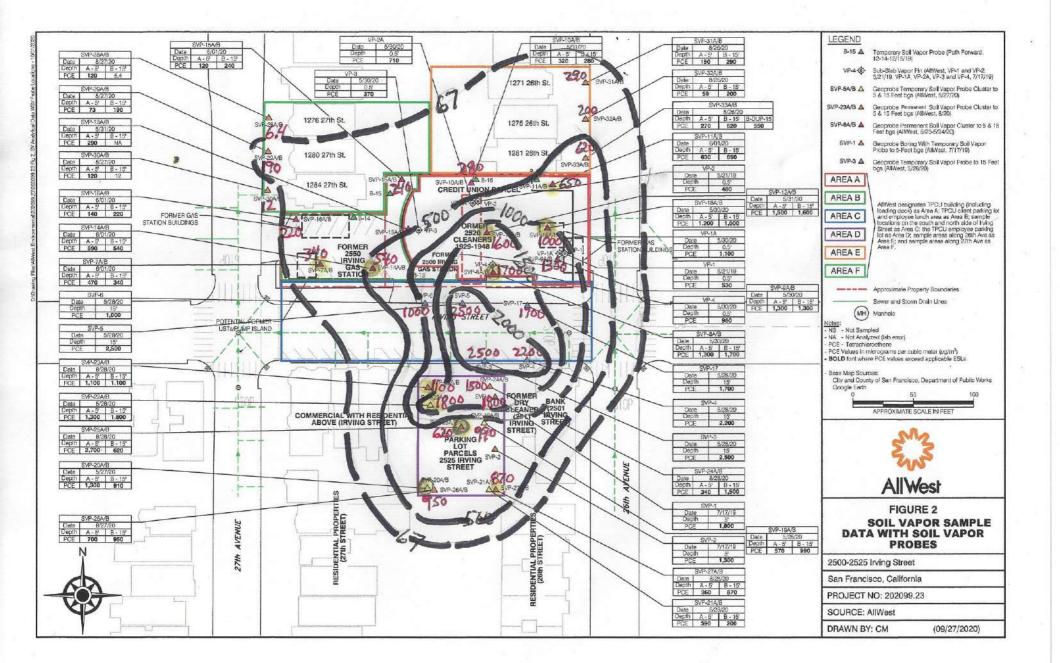
Finally, by permanently removing much of the contamination from one of its source areas, excavation would benefit neighboring residents and businesses currently and historically at risk from vapor intrusion. To be truly permanent, however, off-site remediation—the responsibility of other parties—may be necessary.

¹⁵ Path Forward (May 11, 2021) Draft Response Plan, p.15

¹⁶ Path Forward (May 11, 2021) Draft Response Plan, p.16



Contour line drawing by Don Moore, Environmental Risk Solutions



ATTACHMENT 2

Draft Response Plan Addendum Environmental Risk Solutions, Inc.

August 3, 2021



August 3, 2021

Arthur Machado Engineering Geologist, Project Manager Department of Toxic Substances Control 700 Heinz Avenue Berkeley, CA 94710

RE: DRAFT RESPONSE PLAN ADDENDUM, 2550 IRVING STREET AFFORDABLE HOUSING DEVELOPMENT AND THE POLICE CREDIT UNION DTSC SITES

Dear Arthur:

On behalf of the Mid-Sunset Neighborhood Association (MSNA), Environmental Risk Solutions, Inc. (ERS) evaluated the Path Forward draft Response Plan for the 2550 Irving Street Affordable Housing Development and determined that the alternatives evaluation is flawed as it failed to evaluate the most appropriate remedial technology, soil vapor extraction (SVE) based on site-specific conditions.

- 1. SVE will be highly effective based on the underlying geology consisting of coarse-grained sand with a radius of influence (ROI) expected in the 30- to 50-foot or more range.
- 2. SVE is a proven technology that can be implemented immediately with the existing building in place based on the high expected ROI as reflected on the attached Figure 1. SVE would be most easily implemented after demolition subject to project schedule considerations.
- 3. SVE is one of the two recommended remedial technologies included in DTSC's *Proven Technologies and Remedies Guidance, Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil* (April 2010). The other DTSC recommended technology is soil excavation.
- 4. SVE has a number of benefits over the mitigation-only approach recommended by Path Forward. These include: (1) actual cleanup with mass removal, (2) lower expected remedial cost, (3) enables cleanup to extend into off-site areas, (4) achieves regulatory closure and eliminates or significantly reduces vapor mitigation requirements and (5) reduces or eliminates long-term risk and liability associated with vapor intrusion both on-site and off-site.

ERS believes the addition of SVE is a technically justifiable alternative evaluation. It is unclear why Path Forward did not consider SVE as a potential response action when SVE has been the industry default remedy for VOCs in soils for more than 20 years (*Engineering Issue: Soil Vapor Extraction Technology* (EPA, February 2018)). We also offer an alternative evaluation of soil excavation with the revised rating and opinion that targeted "hotspot" excavation would likely be on the order of \$1 to \$2 million or less based on soil data with no detections above DTSC screening levels. The Path Forward mitigation-only approach misses the most fundamental concept of cleanup which is source removal. ERS presents a revised Table B below from the draft Response Plan for DTSC review and consideration that shows SVE is likely the most appropriate alternative and that soil excavation warrants additional consideration and evaluation.



	Alternative	Effectiveness	Implement- ability	Cost	Overall Rating	Estimated Cost
1.	No Action	0	0	5	5	\$0
2.	Soil Excavation	<mark>5</mark>	<mark>4</mark>	<mark>2</mark>	<mark>11</mark>	<mark>\$1,500,000</mark>
3.	VIMS, LUC and O&M	4	5	<mark>3</mark>	<mark>12</mark>	\$799,000
<mark>4.</mark>	SVE and SMP	<mark>5</mark>	<mark>5</mark>	<mark>4</mark>	<mark>14</mark>	<mark>\$496,000</mark>

Revised Table B – Summary of Response Actions Alternatives Evaluation

Note: yellow highlights are revisions to Path Forward Table B

ERS is well qualified to conduct this evaluation with 30-years of consulting experience and current involvement in more than 20 chlorinated VOC sites under DTSC and Water Board oversight with half of them being former dry cleaners. To verify this evaluation, ERS conferred with a number of industry experts including a human health risk assessment expert and a principal remediation design engineer from RMD Environmental Solutions, Inc. (RMD). RMD's principals each have over 20 years of experience in environmental consulting, including remediation of dry cleaner sites.

To support the response action alternative evaluation, RMD (<u>www.rmdes.net</u>) prepared the attached order of magnitude cost estimate for the design, operation and reporting for an SVE treatment system for 18 months. The SVE system would consist of approximately nine 20-foot SVE wells screened from 10 to 20 feet with both above and below-ground piping conveyed to an existing fenced compound where the SVE treatment unit can be located as shown on the attached Figure 1. Based on the high permeability of the underlying sand deposits, PCE reductions at vapor probes are expected to be observed within a week or two of SVE start up and overall timeframe for cleanup is likely to be less than 18 months. The RMD estimated SVE cost is \$456,000.

ERS and RMD recommend that the SVE approach be coupled with a Soil Management Plan (SMP) to be implemented during redevelopment based on the potential for residual PCE impacted soil in the vicinity of former sewer lines and / or spill "hot spots". Soil data suggest this potential is low but an SMP is appropriate and the estimated cost of SMP preparation, field oversight and small soil disposal contingency is \$40,000.

These estimates support the Revised Table B SVE-SMP cost estimate of \$496,000. ERS recommends that DTSC facilitate discussions with the responsible parties and stakeholders including The Police Credit Union (TPCU), Tenderloin Neighborhood Development Corporation (TNDC), City of San Francisco and MSNA to consider the SVE approach and revisit soil excavation based on the potential benefits for all parties involved and affected. With vapor intrusion risk to nearby homes still under assessment and uncertainty regarding residual source material, the TPCU property should not be conveyed to TNDC until an integrated response plan is put forward that includes source removal and remediation of both on-and off-site areas.



Please contact me with any questions at

Sincerely,

No. 6197 D. 8/31/2

Donald W. Moore, PG, ARM Principal

Cc: Flo Kimmerling, MSNA Paul Holzman, MSNA Gordon Mar, District 4 Supervisor Lenny Siegel, Center for Public Environmental Oversight Kirsten Duey, RMD Ivy Inouye, RMD

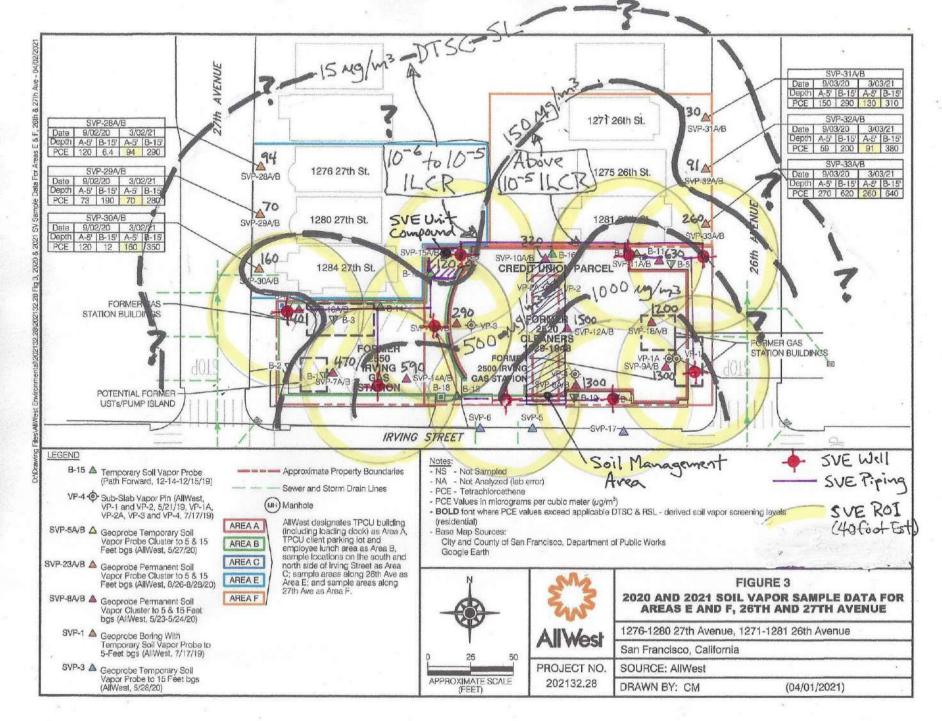
<u>Attachments</u>

- Table 1 SVE Cost Estimate
- Figure 1 Conceptual SVE-SMP Removal Action Workplan

Order of Magnitude Estimate SVE System Install & 18 Month Operation August 2, 2021

Task	Consulting Labor	Expenses		Key Assumptions/Notes
SVE Engineering Design	\$30,000		\$0	No additional data collected needed
SVE Well Install (pre-field & field)	\$10,000	Permit Allowance Utility Locating Subcontractor Drilling Subcontractor/Materials Laboratory Subcontractor (Soil) Misc Field Equipment IDW Allowance	\$3,300 \$1,500 \$16,500 \$1,000 \$1,500 \$2,000	Assumes 3 days drilling
SVE System Installation & Startup	\$20,000	SVE System Rental, 18 Months Permitting Allowance (BAAQMD and City) Construction Contractor/Power Waste Disposal Allowance Misc Field Equipment	\$63,000 \$10,000 \$70,000 \$15,000 \$5,000	Assumes 10 Days Install & Startup
SVE System Installation Report	\$30,000		\$0	
O&M - Weeks 1 & 2	\$14,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$3,500 \$1,060	Assumes daily PID Monitoring 3 samples per week
O&M - Weeks 3 - 26	\$11,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$2,750 \$6,300	Assumes biweekly PID Monitoring 6 samples per month
O&M - Months 7 - 18	\$11,000	Misc Field Equipment Laboratory Subcontractor (Soil Vapor)	\$2,750 \$5,800	Assumes monthly PID Monitoring 3 samples per month
Power Allowance - 18 months			\$27,000	
Carbon Changeout Allowance			\$20,000	
Data Evaluation/Quarterly Report (6 total)	\$54,000			
Subtotal PM/Misc Technical (10% Total Order of Magnitude Estimate	\$180,000 \$18,000 \$455,960		\$257,960	





12 August 2021

Department of Toxic Substances Control 700 Heinz Avenue Berkeley, CA 94710

Re: 2550 Irving Street Toxic Remediation- Public Comments

Dear Mr. Machado:

Thank you for the opportunity to comment as both a neighbor and a practicing architect for over 40 years. Very briefly, my professional experience has included most building types, including several types of residential buildingsand scales up to one million square feet and up to 30 stories at national, international and statewide sites. These sites have involved a variety of subsurface conditions.

The following are my observations, concerns, and recommendations for remediation of soils contamination at this particular site and with this particular building type. Considering the impact on 100% affordable housing residents, and in particular, families with children requires closer attention to "environmental justice".

This project is controversial in many ways, and a positive outcome for the future residents as well as the community depends upon thoughtful and comprehensive toxic remediation, and this should be the imperative. However under SB 35, without the normal rigors of CEQA, most due process has been bypassed. Therefore, I hope you will accept my comments in this light and will calibrate your criteria to focus on broad-based public health and welfare.

Putting teams of design professionals together to collaborate on complicated projects is critical at the onset and this is one of my specialties. Protecting health, safety, and welfare is also part of an architect's standard of care and is a condition of licensin.gThe State relies on the architectural profession to overall, be objective and exercise professional judgment, particularly when cost is at competing odds with public health and welfare.

The manner in which the 2550 Irving Street project team has been assembled and structured to "divide and conquer" rather than conduct community outreach has been seriously detrimental and inconsistent with this standard. 2550 Irving is in contrast to similarly contaminated parcels within the Sunset District, such as 3601 Lawton Street, which is an example whose proposed response plan has been handled with common sense and a thorough emphasis on public health and welfare. This has not been the case with 2550 Irving Street and is of significant concern.

Excavation

TNDC's Draft Response Plan hastily mischaracterized the excavation option as bad. It argues that digging down 15 feet and then replacing the contaminated soil with good soil does not ensure that new soil does not become re-contaminated from adjacent contaminated soil. This however is telling. The backfill decoy highlights the problem of the vicinity being contaminated, blurring a focus on a holistic solution, which is to simultaneously address the adjacent contaminated soil.

Also, placing an unreasonably high \$4 million price tag on the excavation option unsupported by budget estimates appears to be part of the decoy to make their vapor barrier option under the CLRRA seem more reasonable to DTSC; this however ignores closer scrutiny that the vapor barrier option is inherently a solution overly dependent on perfect workmanship. A vapor barrier would be penetrated by literally hundreds of pipes and conduits, all creating pathways for vapors from contaminated, compacted soil below to enter into the new building. It is likely that the same deficiency caused the Police Credit Union to evacuate 75% of its population on or about March 2019. On top of this, the vapor barrier is an expedient way to save costs allowing the deleterious effects to pass onto working class neighbors. Temporarily inert plumes are not forever inert and there are utilities as pathways to consider.

Excavation is considered one of DTSC's presumptive remedies for addressing chlorinated VOCs in the vadose zone and I would recommend not varying from this tried and trusted remedy. Excavation has the added financial and practical benefit to future residents and neighbors of simultaneously creating underground parking. Unfortunately, Path Forward seems to have biased its analysis against excavation of any type. TNDC's plan further obfuscates the presumptive remedy by dividing remediation into three separate projects, when in reality one comprehensive solution is needed including the context of the site's foundation system.

Multiple and reliable benefits of underground parking with excavation

This neighborhood already suffers from substantial traffic gridlock with crammed street parking interrupted by curb cuts in front of largely multi-family structures, which is compounded by prohibited parking times for street cleaning 4 times a month. Public transit, while it flanks Irving Street, is substandard and is getting worse.

In the "Blueprint for the Sunset" a needs assessment document authored by the former District Supervisor's Office and assisted by the Planning Department in 2014, a plan was made for SFMTA to have long overdue improvements in place by 2019. Recently, SFMTA pushed back this projection and is now estimating to be ready to begin a study, two years from today. And yet, besides forcing new residents to be dependent on already substandard public transit, it is entirely reasonable to assume many new residents in this 100-unit family building will need cars to get to their places of employment outside the bounds of public transit.

1

In contrast, the disparity in the City's policy is demonstrated in two other new affordable housing projects in the vicinity: one with 43 and the other 135 apartment units in the Outer Sunset. Each have been recently approved by the City for 24 and 48 <u>underground</u> parking spaces respectively, but in significantly much less congested areas. Why the lack of parity for these new families?

Closer to 2550 Irving Street, there is also <u>underground</u> parking for a circa 1980 four-story housing structure, one block to the east. For other nearby larger pre-war apartment buildings, there is on-site parking. But these buildings do not generate the exponential volume of traffic compared to the 2550 Irving Street building, which is 3.3 times more massive. Finally, for a new market rate, 8-unit, 4 story apartment building project proposed by the Police Credit Union directly across the street from 2550 Irving Street at 2513 Irving Street, onsite parking for 9 spaces is planned. What is environmentally just about this disparity?

Flawed and inconsistent City policy and the need for practicality

Though the "Blueprint for the Sunset" in 2014 asked the public to seek alternate means of transport across the district, new bike paths, added approximately five years ago, have not shown a reduction of gridlock, but rather have increased traffic congestion particularly during COVID. Nevertheless, the City still maintains that the 2550 Irving Street project is exempt from parking requirements. Allowing only 11 surface onsite spaces at this time is ignoring the fact that a building for 100 families is <u>a much more traffic-intensive project</u> as compared to the previously mentioned affordability projects. Where is the environmental justice in this position?

In consideration of the need for services such as deliveries to families, multiple destinations for families, pickup and drop off for families, family gatherings, existing substandard public transit, trash removal for 100 families at least twice a week and many other family-related activities, it is additionally reasonable to assume, as mentioned before, that some residents will need vehicles. Many of these above mentioned circumstances of congestion are <u>substantially</u> mitigated by underground parking with a dual purpose of a reliable, long-term contamination remediation scenario through excavation.

Underground parking at 2550 Irving Street could provide 40 spaces conservatively, serving the diversity of the families and reducing the expected severe negative traffic impacts. In contrast, the present design for onsite at grade parking for 11 spaces is constrained by parcel dimensions. The minimum parking dimensions also do not allow the spaces at grade to be located farther away from gridlock at 26th Avenue and Irving Street, as argued by the project architect. But if all the parking is underground, the extremely valuable grade level real estate can be put to higher priority, better uses for the families that will live there.

Comprehensive plan to improve outcome for residents

On page 15 of the draft Response Plan and as mentioned before, Path Forward suggests that excavation and backfill could lead to soil recontamination due to the presence of offsite soil vapor. But this would not be an issue with permanent excavation and basement walls with requisite waterproofing. Further, these basement walls would also have much, much fewer pipe penetrations with greater, reliable workmanship. Additionally, as a backup system to any vapor intrusion, the code required ventilation of the basement is another layer of added protection. Lastly, all of the pipe penetrations coming through the first floor slab are no longer in contact with contaminated soil. The underground parking would vastly outperform all other options and be a long lasting reliable solution.

Finally, an excavation with conventional lagging and basement wall solution needs to be understood simultaneously and contrasted with the probable <u>grade foundation systems</u> that TNDC is faced with choosing from: a drilled pier system or a very robust, thick mat slab system at grade. Both of these grade systems already require some excavation, adding another trade's means and method involvement and expense. This is not efficient construction planning. Further, the drilled pier system, which requires slightly less excavation, still is going to unpredictably test the 100-year-old, brittle, unreinforced foundations of adjacent residential neighbors (which I have personally visited) to the North, East and West of the site through its inherent unavoidable ground tremors. Permanent excavation would reallocate the estimated \$539,000 backfill cost to the cost of the basement walls and avoid all the unforeseen costs of a slab-on-grade system, and simultaneously solve the contamination issue in a more observable way. It creates a permanent, reliable, coordinated and comprehensive design solution for these new families and a grateful community.

Please do not hesitate to contact me if I can clarify anything else.

Respectfully submitted,

Thomas Soper, AIA, NCARB, LEED AP Architect

Appendix F

CEQA Notice of Exemption



CALIFORNIA ENVIRONMENTAL QUALITY ACT NOTICE OF EXEMPTION

To: Office of Planning and Research State Clearinghouse P.O. Box 3044, 1400 Tenth Street, Room 212 Sacramento, CA 95812-3044 From: Department of Toxic Substances Control Site Mitigation and Restoration Program 700 Heinz Avenue, Suite 200 Berkeley, CA 94710

Project Title: Response Plan, 2550 Irving Street Affordable Housing Development

Project Location: San Francisco, California

County: San Francisco

Project Applicant: Tenderloin Neighborhood Development Corporation

Approval Action Under Consideration by DTSC: Response Plan

Statutory Authority: California Health and Safety Code, Chapter 6.82

Project Description: The project involves the installation of a vapor intrusion mitigation system (VIMS) comprised of a chemically rated vapor barrier liner and perforated sub-slab soil vapor collection piping within the 2550 Irving Street Affordable Housing project (Site). The Response Plan summarizes the evaluation of remedial alternatives and proposed response actions to protect human health and the environment. This alternative would additionally provide institutional controls to ensure long-term protection from residual soil gas impacts through a Land Use Covenant (LUC) and includes a VIMS Operations and Maintenance Plan (O&M Plan), California Land Reuse and Revitalization Act (CLRRA)-type Site O&M Agreement, Financial Assurance, and voluntary/prudential 5-Year Reviews. The anticipated start date for this project has not been determined but is expected to begin sometime in early 2023 to 2024.

Background: The Site occupies approximately 19,125 square feet located at 2520 and 2550 Irving Street in San Francisco, California. The Assessor's Parcel Number (APN) assigned to the Site is 1724-038, which includes the addresses 2520 and 2550 Irving Street. According to the San Francisco Property Information Map (PIM) the Site is zoned under the Irving Street Neighborhood Commercial District. The Site is currently improved with a 18,561 square foot two-story commercial building, constructed in 1966, that is currently used as a bank (The Police Credit Union).

According to the Phase I Environmental Site Assessment (Phase I ESA; Path Forward 2020), the Site was vacant land as early as 1895 and remained vacant until at least 1915. By 1928, two structures had been developed in the central portion. The 1928 Sanborn map depicts these as a drugstore and a cleaning business. By 1940, a gas station had been added to the southeast corner of the Site, and by 1946, a second gas station had been added to the western end of the Site. By 1950, the central buildings on the Site were occupied by an undertaker, and in 1966, this business redeveloped the entire property with the current building and open areas for use as a mortuary and funeral chapel. The funeral business continued in the building until 1985, when the building was modified for its current use. The Site has been utilized as a bank since 1987.

Various subsurface investigations were conducted at the Site in 2019 and 2020 and were memorialized in the Site Assessment Plan (SAP) and Report of Findings (ROF) (Path Forward 2021). These efforts concluded that tetrachloroethene (PCE) in soil vapor is the main contaminant of concern (COC) on the Site. The source of the Site COC is likely associated with the historical cleaning business that operated from the 1920s through 1940s. Based on the SAP and ROF, the Response Plan was developed to address the soil vapor with elevated concentrations of PCE above health goals, and (as a contingency) breakdown products of PCE that may form in the future.

The Response Plan will be implemented by Path Forward with DTSC oversight. Project activities required to protect human health and the environment are being completed under a CLRRA Agreement with DTSC.

The San Francisco (City) Planning Department has determined that this project meets the criterion under Senate Bill No. 35 (SB35) and the City, in its role as the California Environmental Quality Act (CEQA) Lead Agency, will make a SB35 Determination for development of the Site.

<u>Project Activities</u>: Based on the comparative analysis presented in the Response Plan, Alternative 3 was selected as the proposed response action for the Site. Alternative 3 is comprised of:

- Installation of the VIMS;
- Operations and Maintenance; and

• Land Use Covenant

A VIMS would be incorporated into the design of the proposed building. The VIMS would consist of a sub-slab venting system and a sub-slab vapor-barrier membrane. The sub-slab venting system would consist of a gravel layer with horizontal perforated piping to collect impacted soil gas from beneath the building slab and route it to the edge of the building, then route soil gas upwards through a vertical riser pipe that would run along the inner or outer building wall, for discharge above the roofline. The sub-slab venting system could also include inlets near the building exterior to dilute the sub-slab soil gas with ambient air. The sub-slab vapor-barrier membrane would be installed above the venting system and will provide a physical barrier to air flow into the building.

The ongoing effectiveness of the VIMS to prevent vapor intrusion at levels of concern at the buildings would be evaluated in accordance with the Site VIMS O&M Plan.

As mentioned above, this alternative would provide institutional controls to ensure long-term protection from residual soil gas impacts through a LUC that would prohibit residential use of the property unless engineering controls (i.e., the VIMS) are in place. The VIMS would be maintained, and accessible parts inspected regularly (e.g., annually) in accordance with the LUC (to be developed), the Site O&M Agreement, the VIMS O&M Plan, voluntary/prudential 5-Year Reviews, and a Financial Assurance instrument.

By virtue of the Site's location and historical uses, the project is required to comply with San Francisco Health Code Article 22A, known as the Maher Ordinance. The Maher Ordinance defines a process for characterization and mitigation of soil and groundwater contamination, for the protection of public health and safety during and after Site redevelopment. The City of San Francisco has deferred the oversight of mitigation measures for the contaminants onsite to the DTSC. Historical investigations and DTSC oversight related to historical Site use would likely satisfy the Maher requirements and further testing and mitigation beyond the DTSC requirements discussed in the Response Plan is unlikely to be required by the SFDPH. While the Site is exempt from San Francisco Health Code Article 22B, the San Francisco Dust Ordinance, due to parcel size being less than one acre, as a conservative measure the Tenderloin Neighborhood Development Corporation (TNDC) will prepare a Site Management Plan which will include dust control and monitoring measures during construction activities. It is expected that the San Francisco Department of Public Health (SFDPH), who oversees activities related to the Maher Ordinance, will indicate that the Site characterization and mitigation process conducted by TNDC and The Police Credit Union under DTSC oversight will effectively meet the requirements of the Maher Ordinance.

In the event biological, cultural, or historical resources are discovered during project activities, work will be suspended while a qualified biologist or cultural or historical resource specialist assesses the area and arrangements are made to protect or preserve any resources that are discovered. If human remains are discovered, no further disturbance will occur in the location where the remains are found and the County Coroner will be notified pursuant to the Health and Safety Code, Chapter 2, Section 7050.5.

Name of Public Agency Approving Project: Department of Toxic Substances Control

Name of Person or Agency Carrying Out Project: Tenderloin Neighborhood Development Corporation

Exempt Status: Categorical Exemption: [CCR Title 14, Sec. 15330]

Minor Actions Take to Prevent, Minimize, Mitigate or Eliminate the Release or Threat of Release of a Hazardous Waste or Hazardous Substance.

Reasons Why Project is Exempt:

- 1. The project is a minor action designed to prevent, minimize, stabilize, mitigate or eliminate the release or threat of release of hazardous waste or hazardous substances.
- 2. The project is a response action that will not exceed \$1 million in cost.
- 3. The project does not involve the onsite use of a hazardous waste incinerator or thermal treatment unit or the relocation of residences or businesses and does not involve the potential release into the air of volatile organic compounds as defined in Health and Safety Code Section 25123. No County or Bay Area Air Quality permits are anticipated to be required for the operation of the VIMS.
- 4. The project will be consistent with applicable state and local environmental permitting requirements. A grading permit from the City of San Francisco will be obtained if one is needed apart from the site development permit. No County or Bay Area Air Quality permits are anticipated for the mitigation.
- 5. The exceptions pursuant to Cal. Code Rags., title 14, § 15300.2 have been addressed as follows:

- a. Cumulative Impact. The project will not result in cumulative impacts because it is designed to be a short-term, final remedy that would not lead to a succession of projects of the same type in the same place over time.
- b. Significant Effect. The environmental safeguards and monitoring procedures that are enforceable and made a condition of project approval will prevent unusual circumstances from occurring so that there is no possibility that the project will have a significant effect on the environment.
- c. Scenic Highways. The project will not damage scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, because it is not located within view of a highway officially designated as a state scenic highway.
- d. Hazardous Waste Sites. The project is not located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.
- e. Historical Resources. The project is not expected to cause a substantial adverse change in the significance of a historical resource because none are anticipated. Outreach to Native American tribes is being conducted by the City in their role as the CEQA Lead Agency for the development.

The administrative record for this project is available to the public by appointment at the following location:

Department of Toxic Substances Control Site Mitigation and Restoration Program 700 Heinz Avenue, Suite 200 Berkeley, CA 94710

Additional project information is available on EnviroStor: <u>https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60003063</u>

Contact Person Arthur Machado Contact Title Engineering Geologist Phone Number (415) 723-0792

(510) 540-3843

Approver's Signature:

Date:

Click or tap to enter a date.

Approver's Phone Number

Approver's Name Juliet C. Pettijohn Approver's Title Branch Chief

TO BE COMPLETED BY OPR ONLY

Date Received for Filing and Posting at OPR:

Appendix C

Dust and Volatile Organic Compound (VOC) Control Plan



DUST AND VOLATILE ORGANIC COMPOUND (VOC) CONTROL PLAN

2550 Irving Street

San Francisco, California

EHB-SAM SMED No. 2043

November 24, 2021

Prepared for:

Tenderloin Neighborhood Development Corporation 49 Powell Street, 3rd Floor San Francisco, California 94102



Environmental Engineering & Geology

Path Forward Partners, Inc. 505 14th Street, Suite 1230 Oakland, California 94612 www.pathfw.net (510) 756-0740

Project No.: 115-102-107

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Figure 4.	San Francisco Wind Rose



PROFESSIONAL CERTIFICATION

This *Dust and Volatile Organic Compound (VOC) Control Plan* for the property located at 2550 Irving Street in San Francisco, California has been prepared by a California Professional Geologist and/or California Professional Engineer. This document is based on information available to Path Forward Partners, Inc. and current laws, policies, and regulations as of the date of this document. The opinions expressed in this document are based upon the information available to Path Forward Partners, Inc. and are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Path Forward Partners, Inc. in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

Collin Quesenberry, G.I.T. *Staff Geologist*

Gregory S. Nowet, P.E Principal Engineer





1.0 INTRODUCTION

Path Forward Partners, Inc. has prepared this *Dust and Volatile Organic Compound (VOC) Control Plan* (DCP) on behalf of Tenderloin Neighborhood Development Corporation (TNDC) for the property located at 2550 Irving Street in San Francisco, California (the Site; Figure 1). The Site is being redeveloped by TNDC with a new seven-story mixed-use building. The Site is enrolled in the San Francisco Department of Public Health (SFDPH) Maher Program. Though the Site is under 0.5 acres (approximately 0.43 acres) and thus a DCP is not statutorily required, this DCP has been created to assuage anticipated neighborhood concerns related to dust and VOCs.

2.0 DUST CONTROL MEASURES

The project will implement (1) the general dust control measures specified in Section 106A.3.2.6.3 of the San Francisco Building Code and (2) Site-specific enhanced dust control measures that are as-effective as those specified in Section 1242 of the San Francisco Health Code Article 22B (Dust Ordinance). These dust control measures (other than dust monitoring) will be implemented by the general contractor at the direction of the project proponent.

2.1 General Measures

In accordance with Section 106A.3.2.6.3 of the San Francisco Building Code, the project will implement the following general dust control measures:

- A person or persons responsible for monitoring compliance with dust control requirements will be available on-Site or by telephone or other means during all times that Site construction activities may be in progress, including holidays and weekends. The name and telephone number of the compliance monitor will be provided to SFDPH prior to commencement of work.
- All active construction areas will be sufficiently watered to prevent dust from becoming airborne. Watering frequency will be increased as necessary when wind speeds exceed 15 miles per hour.
- As much water as necessary to control dust (without creating run-off) will be provided in any area of land clearing, earth movement, excavation, drilling, and other dust generating activity.
- Trackout onto public streets and sidewalks will be removed using wet power vacuum sweepers as needed.
- Inactive (no disturbance for more than 7 days) stockpiles containing greater than 10 cubic yards or 500 square feet of material will be covered with a 10-mil (0.01-inch) polyethylene tarpaulin or will be stabilized by equivalent techniques.



• Dust enclosures, curtains, or dust collectors will be used as necessary to control dust in the excavation area.

2.2 Enhanced Site-Specific Measures

In accordance with Section 1242 of the Dust Ordinance, the project will implement the following enhanced Site-specific dust control measures:

- Areas around soil improvement operations, visibly dry disturbed soil surface areas, and visibly dry disturbed unpaved driveways will be wetted down at least three times per shift per day.
- A "hotline" will be established for community members to call and report visible dust problems. The hotline phone number will be clearly posted around the Site perimeter.
- The amount of excavated material or waste materials stored at the Site will be minimized.
- Unpaved roads, parking areas, and staging areas will be either paved, watered three times daily, or treated with non-toxic soil stabilizers.
- Haul trucks will be loaded so the material does not extend above the walls or back of the truck bed. Soil, sand, and other loose materials will be tightly covered with tarpaulins or other effective covers before leaving the loading area. Loaded materials will be wetted, if needed, prior to covering.
- On-Site vehicle traffic will be limited to 15 miles per hour.
- Trucks and equipment leaving the Site will be cleaned with wheel washers or by brushing before reentering public streets.
- If significant trackout onto public streets is observed, it will be removed using wet power vacuum, as needed.
- An independent (of the general contractor) third party will be retained by the project proponent to conduct dust monitoring at the project boundary (see Section 3.0).

If visible dust is observed crossing the Site boundary or if dust monitoring results exceed the short-term action level (see Section 3.3), additional dust mitigation measures will be implemented. The specific measures taken will depend on the source and nature of the exceedance – a typical mitigation measure would be application of additional water. If visible dust or high dust concentrations associated with Site activities persist, then dust-generating activities would be halted until fenceline conditions are acceptable.

3.0 DUST AND VOC MONITORING PROGRAM

Dust and VOC monitoring will be conducted by an independent (from the general contractor) third party retained by the project proponent to confirm the effectiveness of dust control



measures. The monitoring program will include real-time measurements of respirable particulate matter (PM_{10}) and total VOC concentrations at the project fenceline and comparison of the monitoring results to preestablished action levels. If Site-related monitoring results exceed action levels, then appropriate additional dust and VOC control measures would be implemented to reduce emissions and fenceline concentrations of construction dust or VOCs.

3.1 Monitoring Locations

The Site vicinity is depicted in Figure 2. Adjacent land uses consist of mixed commercial and residential development to the south and west, and residences to the north, south, east, and west. The prevailing wind direction in the area is from the west/northwest, as demonstrated by the wind rose from the nearby San Francisco Airport (ARB 2003) (see Figure 4), thus the prevailing downwind direction is east/southeast, i.e., the 26th Avenue side of the Site.

Typical upwind and downwind monitoring locations are shown in Figure 3. Monitoring locations will be adjusted in the field based on Site conditions including current wind direction; conflicts with construction activities, equipment, or materials staging; and obstructions to air flow such as buildings, trees, and fences. The monitoring locations will be sited, laterally and vertically, to provide the most representative characterization of the air blowing across the Site boundary.

3.2 Monitoring Equipment

Dust monitoring will be performed with a pDR-1000AN, TSI DustTrak, or comparable instrument. Monitoring instruments will be calibrated (zeroed) and operated in accordance with manufacturer instructions.

VOC monitoring will be performed with a parts per billion as volume (ppbv) photoionization detector (PID), such as a ppbRAE 3000 or comparable instrument.

3.3 Monitoring Procedure

Paired upwind and downwind measurements will be taken on an approximately hourly basis, for each of dust and total VOCs. Prior to each set of measurements, the field person will determine the current wind direction and select appropriate upwind and downwind locations. Upwind and downwind measurements will be taken in succession with a single instrument, or concurrently with multiple instruments. Each measurement will comprise a time-weighted average over a period of approximately 10 to 15 minutes. The upwind measurements will be subtracted from the downwind measurements to calculate the net dust and total VOC concentrations associated with Site emissions, for comparison to short-term action levels (see Section 3.4).



3.4 Action Levels

Dust and total VOC action levels are established to provide real-time feedback to earthwork personnel regarding the need for additional dust or VOC mitigation measures. It is emphasized that an exceedance of a dust or VOC action level would not be indicative of unacceptable health risks to offsite populations. The action levels are very conservative, in that 1) the action levels do not account for the dispersion that occurs as chemicals are transported downwind from the point of measurement at the project fenceline to the locations of actual offsite receptors; 2) the VOC action level assumes the VOC mixture is comprised entirely of tetrachloroethene (PCE).

3.4.1 Dust Action Levels

Dust action levels are based on the California Ambient Air Quality Standard (CAAQS) for PM₁₀, which is 50 micrograms per cubic meter (μ g/m³) averaged over 24 hours. Construction dust emissions are expected to occur over approximately 8 hours each workday. Therefore an 8-hour action level of **150 µg/m³** (=50×24/8) is protective of the CAAQS. A short-term (e.g., 15-minute) action level is also established at 150 µg/m³, so that timely feedback can be relayed to the general contractor to increase dust control measures (e.g., apply more water) to ultimately keep the 8-hour concentration below 150 µg/m³.

Averaging Period	Value	Response
Short-term (approximately 15 minutes)	150 μg/m³	Notify general contractor to increase dust control measures (e.g., apply more water)
8 hours (or workday)	150 μg/m³	Notify general contractor to increase dust control measures and consider implementing additional dust control measures not already in place

Summary of Dust Action Levels and Response Actions

Note: Action levels are applicable to Site-related (less background) fenceline measurements.

The PM₁₀ monitoring instruments cannot distinguish construction dust from other particulate matter such as diesel exhaust, fine water droplets (fog/mist), regional haze, smoke from wildfires, etc. The field person will note any suspected confounding sources. If a nominal exceedance of the dust action level is determined to be caused by other than Site construction dust, then additional Site dust control measures would not be warranted.

3.4.2 Total VOC Action Levels

The total VOC action level is based on the acute (1-hour) reference exposure level (REL) for the primary VOC of concern at the Site, PCE, which is 2.9 parts per million by volume (ppmv) (OEHHA 2019). A 1-hour VOC action level is established at the equivalent concentration of **5.2 ppmv as isobutene**, which assumes an isobutene-to-PCE conversion factor of 0.57 (RAE



Systems 2018). A short-term (e.g., 15-minute) action level is also established at 5.2 ppmv as isobutene, so that timely feedback can be relayed to the general contractor to increase VOC control measures (e.g., apply more water) to ultimately keep the 1-hour concentration below 5.2 ppmv as isobutene.

Averaging Period	Value	Response
Short-term (approximately 15 minutes)	5.2 ppmv isobutene	Notify general contractor to increase VOC control measures (e.g., apply more water)
1 hour	5.2 ppmv isobutene	Notify general contractor to increase VOC control measures and consider implementing additional VOC control measures not already in place

Note: Action levels are applicable to Site-related (less background) fenceline measurements.

3.5 Monitoring Frequency and Duration

Monitoring will be performed daily for 2 weeks (or for at least 10 active workdays) at the beginning of each significant discrete dust-generating activity, including clearing and grubbing, grading, and excavation. Monitoring will be conducted throughout the construction workday, typically between 7 AM and 4 PM. Monitoring will not be conducted during or following significant rainfall events if the ground is sufficiently wetted. If monitoring results from the first 10 days are below primary action levels (i.e., 8-hour action level for dust and 1-hour action level for total VOCs), then monitoring will be discontinued for the remainder of the dust generating activity.

3.6 Recordkeeping and Reporting

Relevant information will be recorded daily in field notes, including weather conditions, instrument calibrations, on-Site dust generating activities, measurement locations, measurement intervals (start and stop times), measured upwind and downwind dust and total VOC concentrations, calculated net dust and total VOC concentrations, and action level exceedances (if any) and response actions taken.

4.0 REFERENCES

Air Resources Board (ARB). 2003. *Meteorological Wind Roses, Data for the ISCST3 Air Quality Model*. July 8.

Office of Environmental Health Hazard Assessment (OEHHA). 2019. *OEHHA Acute, 8-hour and Chronic Reference Exposure Level (REL) Summary*. November 4.

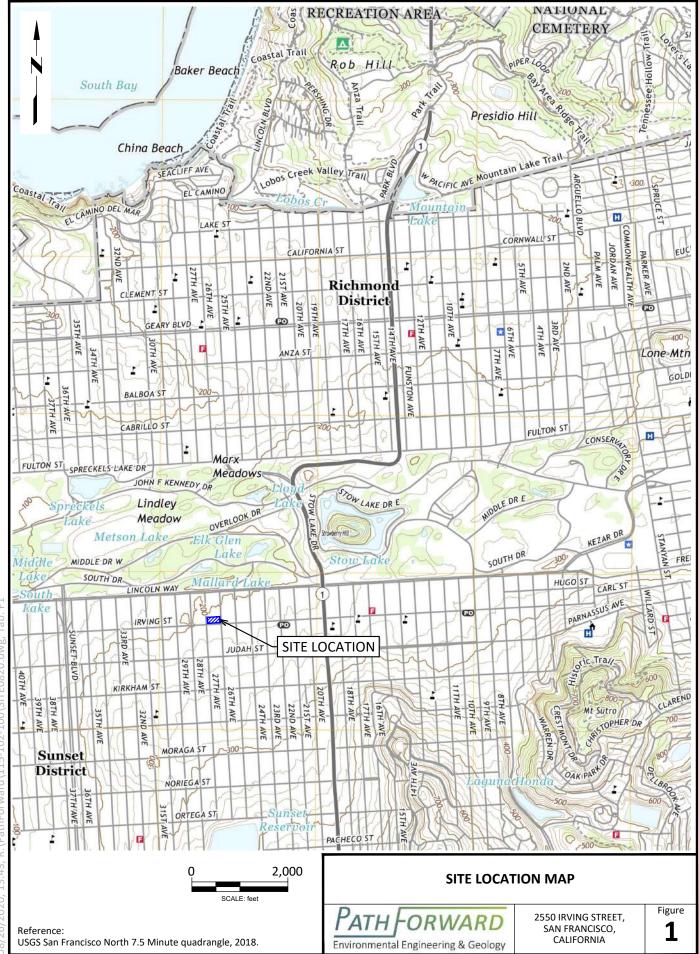


RAE Systems. 2018. *Technical Note TN-106, A Guideline for PID Instrument Response*. Version 11/18/VK.



Figures





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Project No. 115-102-100

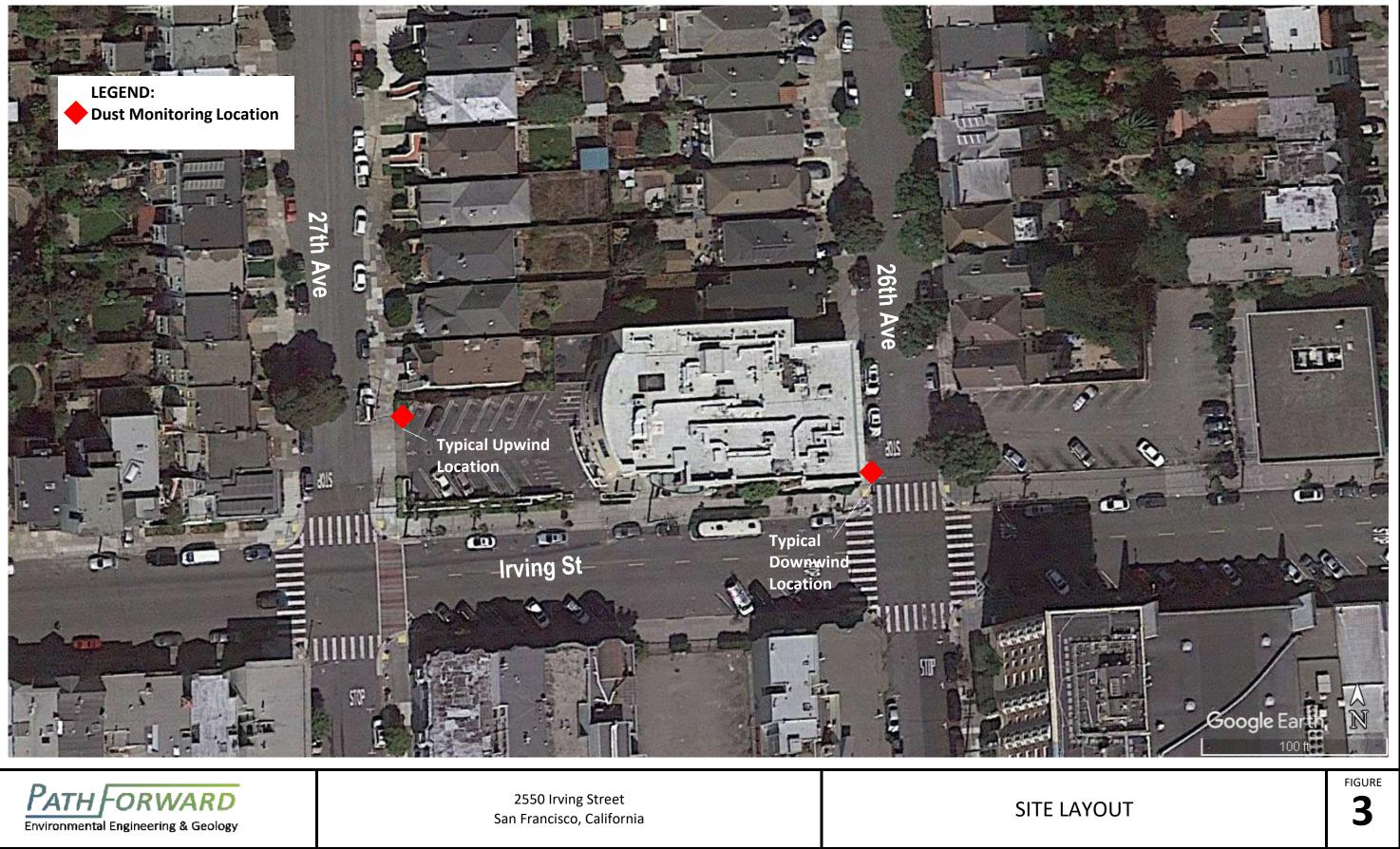


Path Forward Environmental Engineering & Geology

2550 Irving Street San Francisco, California

SITE VICINITY





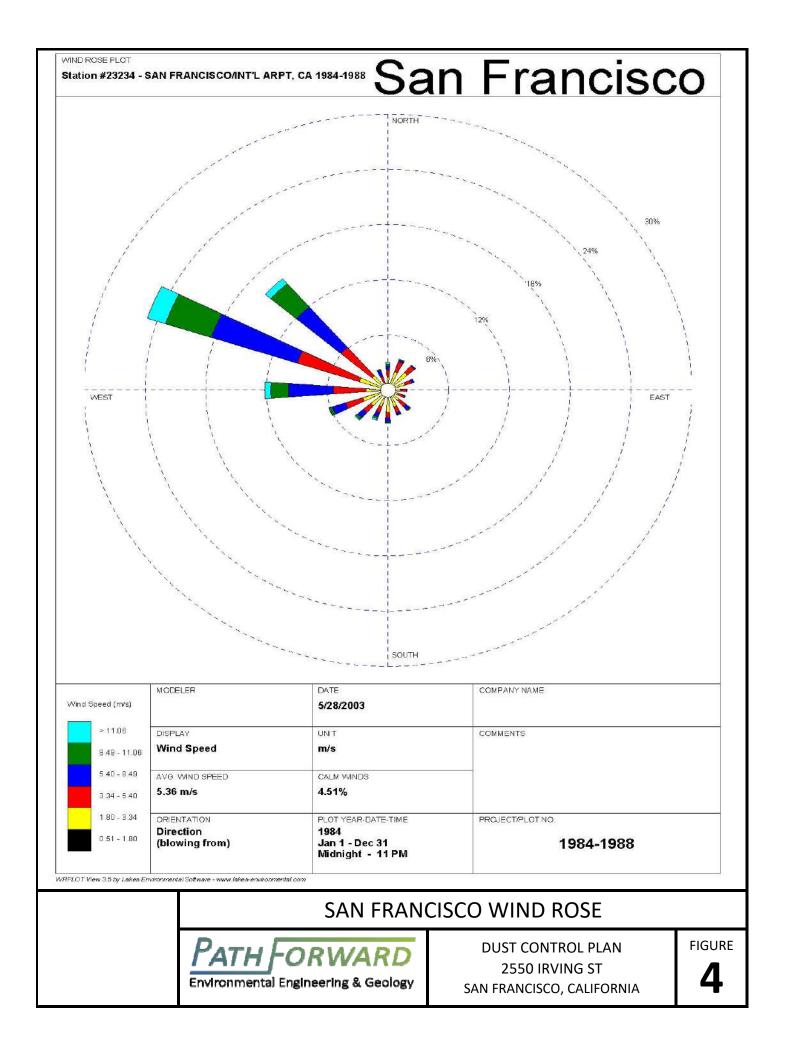


EXHIBIT 9

SFDPH SFHC Article 22A – Site Management Plan Approval dated February 2, 2022



City and County of San Francisco DEPARTMENT OF PUBLIC HEALTH ENVIRONMENTAL HEALTH

Patrick Fosdahl, MS, REHS Environmental Health Director

February 2, 2022

Tenderloin Neighborhood Development Corporation Attn: Jackson Rabinowitsh 201 Eddy Street San Francisco, CA 94102

Subject: SFHC Article 22A – Site Management Plan Approval 2550 Irving Street, San Francisco, CA 94122 EHB-SAM Case Number: 2043

Dear Jackson Rabinowitsh:

In accordance with San Francisco Health Code (SFHC) Article 22A and San Francisco Building Code Section 106.3.2.4, the San Francisco Department of Public Health, Environmental Health Branch, Contaminated Sites Assessment and Mitigation Program (EHB-SAM) has received and reviewed the following documents related to the property located at 2550 Irving Street, San Francisco, California (the Site):

- PathForward, 2021a. Final Response Plan, 2550 Irving Street Affordable Housing Project, San Francisco, California. 2 September.
- PathForward, 2021b. Site Management Plan, 2550 Irving Street Affordable Housing Project, San Francisco, California. 24 November.

The project at 2550 Irving Street is under the oversight of the California Department of Toxic Substances Control (DTSC), through a California Land Reuse and Revitalization Act (CLRRA) Agreement dated February 1, 2021. In an email dated September 8, 2021, the DTSC notified the EHB-SAM that they had approved the Final Response Plan for the Site. The EHB-SAM defers environmental cleanup authority to the DTSC, a state agency, and will review all submitted items that are specifically applicable to SFHC Article 22A.

SITE BACKGROUND AND PROPOSED DEVELOPMENT

The Site is located on the north side of Irving Street, between 26th Avenue and 27th Avenue, and is approximately 0.44 acres in size. The property is identified by the San Francisco County Assessor's Parcel Number (APN) 1724-038 and is currently occupied by a two-story commercial building used as a bank, with an adjacent parking lot. Groundwater was measured at the Site at a static depth of approximately 78 feet below ground surface (bgs).

The proposed development at the Site includes demolition of the existing Site structures and construction of a new seven-story affordable housing building with ground-floor residential amenities, commercial spaces, and potentially a daycare facility. Development activities include

2550 Irving Street February 2, 2022 Page 2

excavation and off-site disposal of approximately 4,000 cubic yards, related to construction of the new building's foundation elements and potential car stacker pits.

HISTORICAL SITE USE, INVESTIGATIONS, AND RESPONSE PLAN

Based on a review of available historical documents, the Site was originally an undeveloped and vacant lot from the mid-1890s until at least 1915. Two structures were constructed in the central area of the Site by the late 1920s, used as a drugstore and cleaning business. By the 1940s, two gasoline stations were constructed at the Site – one in the southeast corner and one along the western edge of the property. In 1966, the entire property was redeveloped with the current two-story building, originally used as a mortuary and funeral chapel. The current building was used as a bank since 1987.

Several environmental investigations were conducted in 2019, under the oversight of the DTSC. These investigations determined that elevated volatile organic compounds (VOCs), specifically tetrachloroethene (PCE), were impacting on-site soil gas. The September 2021 Response Plan was developed to describe the environmental impacts to the Site and identify/evaluate the most appropriate response action. Based on the evaluation criteria, Alternative 3 – Vapor Intrusion Mitigation System (VIMS), Land Use Covenant, and Operations and Maintenance, was selected as the recommended response action alternative for the Site. The Response Plan includes specifications for the VIMS; details for long-term operation and maintenance; and post-construction certification and monitoring. The DTSC approved the Response Plan in a letter dated September 2, 2021.

SITE MANAGEMENT PLAN

To comply with the provisions of SFHC Article 22A, a Site Management Plan (SMP) was developed and submitted to the EHB-SAM. The SMP describes recommended measures to mitigate potential risks to the environment, construction workers, and the public associated with exposure to hazardous substances in soil, soil vapor, and groundwater that may be encountered during soil disturbing activities. Mitigative measures described within the SMP include entry/exit restrictions; soil and stockpile management protocols; soil import criteria; dust generation and odor controls; groundwater management; contingency procedures when encountering unexpected conditions; and general worker health and safety procedures. If an unknown environmental condition is encountered during development activities, the EHB-SAM will be notified.

EHB-SAM REVIEW

Based on a review of the documents submitted to-date, the Site Management Plan is **approved**. Following completion of development activities, a Final Report and Certification shall be submitted to the EHB-SAM for review and approval.

If you have any questions or comments, please contact Ryan Casey at <u>ryan.casey@sfdph.org</u> or (415) 252-3992.

2550 Irving Street February 2, 2022 Page 3

Sincerely,

Ryan Casey, P.E. (CA) Engineer

CC: David Grunat and Gregory Noblet (Path Forward) Arthur Machado (DTSC) Beronica Slattengren (EHB-SAM) Jeanie Poling (SFCPC) Carrie Pei and Gary Ho (SFDBI)

EXHIBIT 10

DTSC Response to MSNA Letter of March 10, 2022 and Inquiry of April 14, 2022 dated April 26, 2022

https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F6621212184% 2FDTSC%20response%20to%20Email%20from%20Don%20Moore-ERS%20to%20Whit%20Smith-DTSC%20-% 20April%202022%20-%20final.pdf

EXHIBIT 11 DTSC Albrite Cleaners Cortese Letter dated April 15, 2022

https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F1817852199% 2FFormer%20Albrite%20Cleaners%20Cortese%20Response%20Letter.pdf

EXHIBIT 12

Email from Ryan Casey Re: APPEAL FILED NO. 22-092 @ 2550 IRVING STREET dated December 12, 2022

From:	<u>Casey, Ryan (DPH)</u>
То:	David A. Grunat
Cc:	Slattengren, Beronica (DPH), Jackson Rabinowitsh
Subject:	FW: APPEAL FILED NO. 22-092 @ 2550 IRVING STREET
Date:	Monday, December 12, 2022 1:22:28 PM
Attachments:	APPEAL FILED NO. 22-092 @ 2550 IRVING STREET.pdf Special Instructions for Parties (revised 3-2-22).pdf

Good Afternoon David,

Please see my responses below, in red.

Thanks,

Ryan Casey, P.E. (CA) | Engineer | SFDPH | Office: 415-252-3992

From: David A. Grunat <David@Pathfw.net>
Sent: Monday, December 12, 2022 12:55 PM
To: Casey, Ryan (DPH) <ryan.casey@sfdph.org>; Slattengren, Beronica (DPH)
<beronica.slattengren@sfdph.org>
Cc: Jackson Rabinowitsh <jrabinowitsh@tndc.org>
Subject: APPEAL FILED NO. 22-092 @ 2550 IRVING STREET

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Ryan,

I have two questions that I was hoping you could respond to regarding the attached appeal:

- Can you please provide why "NA" was listed on the Demolition Permit #202206277192? Our program may review demolition permits for projects over half an acre in size to verify compliance with SFHC Article 22B. The "NA" comment means that a DPH review of this specific demolition permit is "not applicable".
- Can you confirm that SFDPH has reviewed and confirmed the necessary documents applicable for Article 22A for the proposed Site redevelopment are complete and in compliance with Article 22A as noted on Permit #202205053630? I can confirm that our program has reviewed and approved permit no. 202205053630. The proposed project is in compliance with SFHC Article 22A.

Best,

David A. Grunat, P.G., C.H.G.

Partner/Principal Geologist Path Forward Partners, Inc. P: 510.756.0741 C: 415.602.8500 F: 510.756.0747 www.pathfw.net

EXHIBIT 13 Housing Balance Report No. 14

https://sfplanning.org/sites/default/files/documents/reports/HousingBalance14_PC_20210427.pdf

EXHIBIT 14 San Francisco Housing Element (2022 Update, Dec. 16, 2022)

https://sfhousingelement.org/final-draft-housing-element-2022-update-clean

ABBREVIATIONS

KD

KIT

KPL

LAU

LAV

LIN

LVT

LVL

MR

MC

MTL

MFF

MIN

N/A

NIC

OC

OD

OH

P.L.

PT

PV

REF

RO

SAF

SC

SM

SV

TYP

W.O.

WRE

WSCT WWF WATER HEATER

WHERE OCCURS

WELDED WIRE FABRIC

WATER RESISTIVE BARRIER

WATERPROOF

WHEELSTOP WAINSCOT

WITHOUT

AB	ANCHOR BOLT
ABV . A/C	ABOVE AIR CONDITIONING
AC	ASPHALTIC CONCRETE ACCESSIBLE
A.C.P.	ACOUSTIC CEILING PANEL ACOUSTIC CEILING TILE
A.D.	AREA DRAIN
ADDM	ADDITIONAL ADDENDUM
ADJ	ADHESIVE ADJACENT OR ADJUSTABLE
	ABOVE FINISED FLOOR ALUMINUM
	ALTERNATIVE AMOUNT
	ANODIZED ACCESS PANEL
APL	ASSUMED PROPERTY LINE APPROXIMATE
ARCH	ARCHITECT(URAL)
ASSY A/V	ASSEMBLY AUDIO VISUAL
AUTO B	AUTOMATIC
BATT BALC	BATTING BALCONY
BATT BD	BATTING BOARD
BLDG BLKG	BUILDING BLOCKING
BM B.O.C.	BEAM BOTTOM OF CURB
B.O.D.	BASIS OF DESIGN BOTTOM
B.O.W.	BACK OF SIDEWALK BRACKET
BRK	BRICK
BUR	BETWEEN BUILT UP ROOFING
C CAB	CABINET
CEM CEM PLAS	CEMENT CEMENT PLASTER
CIP CJ	CAST IN PLACE CONTROL JOINT
CL CL.	CENTERLINE CLOSET
CLG	CEILING
CLKG CLR	CAULKING CLEAR
CMU COL	CONCRETE MASONRY UNIT COLUMN
CONC CONN	CONCRETE CONNECTION
CONT CONST	CONTINUOUS CONSTRUCTION
CONTR	CONTRACTOR CASEMENT
СТ	CERAMIC TILE COUNTERSINK
CTSK D	
D DBL	DRYER DOUBLE
DEMO DF	DEMOLISH OR DEMOLITION DOUGLAS FIR
DIA DIM	DIAMETER DIMENSION
DN DS	DOWN DOWNSPOUT
DTL DW	DETAIL DISHWASHER
DII	DIOTIVINIONEI
DWG	DRAWING
E (E)	EXISTING
E (E) EA EB	EXISTING EACH EXPANSION BOLD
E (E) EA EB EJ ELEV	EXISTING EACH EXPANSION BOLD EXPANSION JOINT ELEVATION OR ELEVATOR
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JAN JANITOR JOINT **KILN DRIED KITCHEN** KICK PLATE ANGLE LAUNDRY LAVATORY LINOLEUM LUXURY VINYL TILE LEVEL MAXIMUM MAX MACHINE BOLT MEDICINE CABINET MECH MECHANICAL METAL MANUFACTURER MINIMUM MTD MOUNTED NOT APPLICABLE NOT IN CONTRACT NTS NOT TO SCALE OVER ON CENTER OUTSIDE DIAMETER OFFICE OFC **OVERFLOW DRAIN** OFD **OVERHEAD** OUTSIDE-INSIDE TRANSMISSION CLASS OITC OPPOSITE OPP OPP HD, **OPPOSITE HAND** OPH OPNG OPENING PCC PRECAST CONCRETE PERF PERFORATED PLATE PROPERTY LINE PLAM PLASTIC LAMINATE PAIR PRESSURE TREATED OR POST TENSIONED PAINTED PTD PLYWD, PLYWOOD PLY PREFAB PREFABRICATED PHOTOVOLTAIC POLYVINYL CHLORIDE (RIGID) PVC QTY QUANTITY RISER REFLECTED CEILING PLAN RCP REFER(ENCE) OR REFRIGERATOR REINFORCE(D) (ING) (MENT) REINF REQ REQUIRED RESILIENT RESIL RFG ROOFING ROOM ROUGH OPENING RWL RAINWATER LEADER SELF-ADHERED FLASHING SOLID CORE SEE CIVIL DRAWINGS OR SEE CONCRETE S.C.D. DRAWINGS STORM DRAIN SHV SHELVES (ING) SQUARE INCH SQ IN S.S.D. SEE STRUCTURAL DRAWINGS SECT SECTION S.E.D. SEE ELECTRICAL DRAWINGS SQUARE FOOT OR SUBFLOOR SAFETY GLAZING SIM SIMILAR S.L.D. SEE LANDSCAPE DRAWINGS SHEET METAL S.M.D. SEE MECHANICAL DRAWINGS STANDPIPE S.P.D. SEE PLUMBING DRAWINGS SPECS SPECIFICATIONS SQUARE STAINLESS STEEL OR SANITARY SEWER SSTL STAINLESS STEEL STC SOUND TRANSMISSION CLASS STANDARD STD STEEL STL STORAGE STOR STRUCT, STRUCTURAL STR'L SUSPENDED SUSP SUSP CLG SUSPENDED CEILING SHEET VINYL SYSTEM SYS TEMPERED TONGUE AND GROOVE T&G TIE DOWN SYSTEM TDS TELEPHONE TEMPORARY OR TEMPERATURE TEMP TEMP GL TEMPERED GLASS THICK(NESS) TOP OF TOP OF CONCRETE T.O.C. T.O.PL. TOP OF PLATE TOP OF SLAB T.O.S. T.O.SF TOP OF SUBFLOOR TOP OF WALL T.O.W. TOILET PAPER DISPENSER TPD TYPICAL UNDERWRITER'S LABORATORY UNLESS OTHERWISE NOTED UON VCT VINYL COMPOSITION TILE VERT VERTICAL VESTIBULE VEST VERTICAL GRAIN DOUGLAS FIR VGDF **VERIFY IN FIELD** WASHER WITH WATER CLOSET W/D STACKED WASHER AND DRYER WOOD WINDOW

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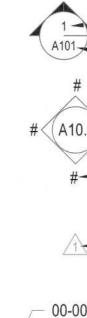
AND THE FAIR HOUSING ACT. ACCESSIBLE UNITS **REQUIREMENTS -**MINIMUM 15% MOBILITY &

NAME

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<u>ARCHITECT</u>

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ACCESSIBLE UNITS

PROJECT TO COMPLY WITH THE CA TAX CREDIT ALLOCATION COMMITTEE (TCAC) GUIDELINES, CBC CHAPTERS 11-A & 11-B

AMOUNT AND DISTRIBUTION PER TCAC

10% COMMUNICATIONS PROVIDED IN ACCORDANCE WITH CBC CH. 11B

ALL REMAINING UNITS TO BE ADAPTABLE IN ACCORDANCE WITH CBC CH. 11A

UNIT TYPE - ACCESSABILITY TYPE	COUNT	% OF TYPE
STUDIO - ADAPTABLE	5	56%
STUDIO - MOBILITY ACCESSIBLE	3	33%
STUDIO - ADAPTABLE, COMMUNICATIONS	1	11%
STUDIO - TOTAL	9	
1 BEDROOM - ADAPTABLE	25	74%
1 BEDROOM - MOBILITY ACCESSIBLE	5	15%
1 BEDROOM - ADAPTABLE, COMMUNICATIONS	4	12%
1 BEDROOM - TOTAL	34	
2 BEDROOM - ADAPTABLE	14	61%
2 BEDROOM - MOBILITY ACCESSIBLE	6	26%
2 BEDROOM - ADAPTABLE, COMMUNICATIONS	3	13%
2 BEDROOM - TOTAL	23	
3 BEDROOM - ADAPTABLE	15	63%
3 BEDROOM - MOBILITY ACCESSIBLE	6	25%
3 BEDROOM - ADAPTABLE, COMMUNICATIONS	3	13%
3 BEDROOM - TOTAL	24	
ADAPTABLE - TOTAL	59	66%
MOBILITY ACCESSIBLE - TOTAL	20	22%
ADAPTABLE COMMUNICATIONS - TOTAL	11	12%
GRAND TOTAL	90	

ADDENDUM SCHEDULE

DESCRIPTION	DATE
GRADING	
SUBSTRUCTURE	
SUPERSTRUCTURE	
ARCHITECTURAL & MEP	
FIRE SPRINKLER	
FIRE ALARM	
PRE MANUFACTURED STAIRS	
DAS / ERRCS	
EXTERIOR BUILDING MAINTENANCE	
SOLAR	
EXTERIOR BUILDING SIGNAGE	
TOWER CRANE	

CONTACTS: RAY KEANE KIM ZYLKER PHONE: (415) 354-0006 EMAIL: ray@engineering350.com kim@engineering350.com ACOUSTICS WILSON IHRIG 5900 HOLLIS STREET, SUITE T1 EMERYVILLE, CA 94608 CONTACTS: LEISA NALLS PHONE: (510) 658-6719 Inalls@wilsonihrig.com EMAIL: ENVELOPE/WATERPROOFING m.steyer@tippingstructural.com SGH 1999 HARRISON STREET, SUITE 2400, OAKLAND, CA 94612 CONTACTS: LIYEN KAN PHONE: (415) 343-3072 EMAIL: LKan@sgh.com

SUSTAINABILITY / ENERGY MODELING

EMAIL: sharon@brightgreenstrategies.com

BRIGHT GREEN STRATEGIES

CONTACTS: SHARON BLOCK

SAN FRANCISCO, CALIFORNIA 94123

PHONE: (510) 863-1109

820 DELAWARE STREET,

BERKELEY CA 94710

M.E.P ENGINEERS

ENGINEERING350

3106 FILLMORE STREET

PROJECT DESCRIPTION

2550 IRVING STREET IS A 100% AFFORDABLE, MOHCD FUNDED, FAMILY HOUSING RENTAL DEVELOPMENT, OF 90 UNITS IN SEVEN STORIES, 73 FEET TALL, EXCLUDING MECHANICAL, STAIR AND ELEVATOR PENTHOUSES, WITH GROUND FLOOR RESIDENTIAL AMENITIES AND SUPPORT SERVICE PROGRAM OFFICES, PROPERTY MANAGEMENT OFFICES, ELECTRICAL ROOM, SERVICE SPACES, TRASH TERMINATION ROOM, BICYCLE PARKING, AND RESIDENT PARKING UTILIZING A PUZZLE LIFT AND PIT STACKER SYSTEM. THE PROPOSED UNIT MIX INCLUDES STUDIOS, ONE-BEDROOM, TWO-BEDROOM, AND THREE-BEDROOM UNITS. AT LEAST 50% OF THE UNITS WILL BE TWO- AND THREE-BEDROOM UNITS. OPEN SPACE IS PROVIDED IN AN AT-GRADE BACKYARD, AND A ROOF DECK. STREETSCAPE IMPROVEMENTS WILL INCLUDE NEW LANDSCAPING, STREET TREES, AND VEHICLE CURB CUTS FOR GARAGE ENTRY. EXISTING PEDESTRIAN CURB CUTS AT CROSSWALKS TO REMAIN.

THE PROJECT WILL PURSUE SB35 AND STATE DENSITY BONUS LAW AB 1763 FOR ZONING MODIFICATIONS AND PRIORITY PROCESSING. UNDER STATE DENSITY BONUS LAW AB 1763, THE PROJECT SEEKS CONCESSIONS AND WAIVERS AS NOTED IN THE ZONING SUMMARY TABLE (THIS SHEET).

THE EXISTING 2-STORY STRUCTURE AND SITE ELEMENTS (THE SAN FRANCISCO POLICE CREDIT UNION, SURFACE PARKING AND LANDSCAPING) WILL BE DEMOLISHED FOR THE NEW CONSTRUCTION.

PROJECT DATA & UNIT MIX

ADDRESS: PARCEL (BLOCK/LOT): ZONING:

2550 IRVING STREET, SAN FRANCISCO 1724/038 NCD - IRVING STREET NEIGHBORHOOD COMMERCIAL DISTRICT (SEC. 732)

PLANNING GROSS FLOOR AREA: 102,118 SF, SEE SHEET G2.01

CONSTRUCTION TYPE (PER CBC): (7) TYPE I-B

OCCUPANCY / USE TYPES (PER CBC): RESIDENTIAL GROUP R-2, STORAGE GROUP S-2, ASSEMBLY GROUP A-3, BUSINESS GROUP B

APPLICABLE CODES

APPLICABLE BUILDING CODES: 2019 CALIFORNIA BUILDING CODE, INCLUDING MECHANICAL, PLUMBING, ELECTRICAL, AND CALGREEN & SAN FRANCISCO AMENDMENTS TO THE ABOVE NFPA 13 FIRE SPRINKLERS NFPA 14 STANDPIPES

NFPA 24 UNDERGROUND FIRE SERVICE NFPA 72 FIRE ALARMS AND SIGNALING

VICINITY MAP



DRAFTING SYMBOLS

AME .XX ation	ROOM NUMBER VIEW REFERENCE UNIT CLASSIFICATION	1 A10.00	SECTION DETAIL NUMBER
#	SECTION NUMBER	A10.00	CALLOUT DETAIL NUMBER SHEET NUMBER
0.0) # #-	SHEET NUMBER INTERIOR ELEVATION NUMBER	A10.00	ELEVATION NUMBER SHEET NUMBER
1	REVISION NUMBER	Al	WINDOW, STOREFRONT, OR LOUVER TYPE
00 -00-	KEYNOTE		DOOR OR GATE TYPE
A	GRID NUMBER/LETTER GRID LINE	101 OCCUPANCY	ROOM NUMBER
A	CONCRETE GRID NUMBER/LETTER GRID LINE	E	PROJECT NORTH TRUE NORTH

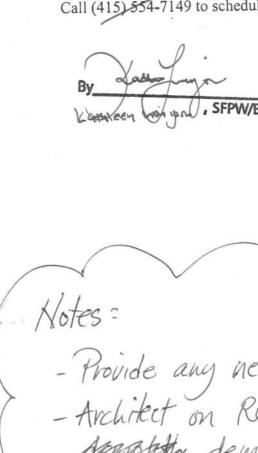
2550 IRVING STREI 100% AFFORDABLE HO



HEIGHT/BULK DISTRICT: 40-X* LOT SIZE: 19,125 SF (0.44 ACRE)

UNIT COUNT & MIX: (9) STUDIO (34) 1 BEDROOM 37.8% (23) 2BED (24) 3BED 26.7% (90) TOTAL UNITS

10.0% 25.6%



USING		ERMIT SI DRITY PR			PYATOK 1611 TELEGRAPH AVE. SUITE 200 OAKLAND, CA 94612 T. 510.465.7010 F. 510.465.8575 www.pyatok.com
			APPROVED BY MARGAN AUG 17 2 PLANNING DEPAR	2022	TNDC 201 Eddy Street San Francisco, CA 94102
MEETINC SFPW/BSM S Call (415) 5	STRUCTION SITE GREQUIRED BY TREET INSPECTION 54-7149 to schedule	9/22/22	NOV 18 PATRICK ORIC DIRECTOR DEPT. OF BUILDING	Le DEDAN	No No No
Hotes = - Provid - Archin deand - Comple	le any nese let on Rece station demoli y with Dem	essary fence a ba and shall continue itions work per olition Debris Reco	arnicade with lights. ously supervise the s-04 Information sheet very Plan (DDRP). June Nong, Dai Irena Wong, Dai SEP 25 202	t.	
*				2	\mathbf{O}
ZONING CATEGORY	REFERENCE	JIVIIVIAR Y	PROPOSED	CONCESSION / WAIVER / EXCEPTION	
ZONING CATEGORY MASSING AND SETBACKS		CONTROLS BUILDING LOCATED IN 40-X* HEIGHT DISTRICT	PROPOSED 73 FT PROPOSED BUILDING HEIGHT - MEASURED	EXCEPTION	
ZONING CATEGORY MASSING AND SETBACKS HEIGHT AND BULK LIMITS ROOF APPURTENANCES	REFERENCE	CONTROLS BUILDING LOCATED IN 40-X* HEIGHT DISTRICT *AB 1763 DENSITY BONUS LAW (+ 3 STORIES / 33 FEET) 16' MAXIMUM FOR BUILDINGS WITH	PROPOSED 73 FT PROPOSED BUILDING HEIGHT - MEASURED TO TOP OF FINISHED ROOF SURFACE	EXCEPTION	
ZONING CATEGORY MASSING AND SETBACKS HEIGHT AND BULK LIMITS ROOF APPURTENANCES & PENTHOUSES	REFERENCE	CONTROLS BUILDING LOCATED IN 40-X* HEIGHT DISTRICT *AB 1763 DENSITY BONUS LAW (+ 3 STORIES / 33 FEET) 16' MAXIMUM FOR BUILDINGS WITH HEIGHT LIMITS OVER 65' PER SF PLANNING CODE § 260(B)(1)(B) 25% LOT DEPTH, NO LESS THAN 15 FT. REQUIRED AT 2ND STORY AND EACH SUCCEEDING STORY	PROPOSED 73 FT PROPOSED BUILDING HEIGHT - MEASURED	EXCEPTION	L S S
	REFERENCE § 260	CONTROLS BUILDING LOCATED IN 40-X* HEIGHT DISTRICT *AB 1763 DENSITY BONUS LAW (+ 3 STORIES / 33 FEET) 16' MAXIMUM FOR BUILDINGS WITH HEIGHT LIMITS OVER 65' PER SF PLANNING CODE § 260(B)(1)(B) 25% LOT DEPTH, NO LESS THAN 15 FT. REQUIRED AT 2ND STORY AND EACH	PROPOSED 73 FT PROPOSED BUILDING HEIGHT - MEASURED TO TOP OF FINISHED ROOF SURFACE 16' MAXIMUM ABOVE ROOF LEVEL	EXCEPTION	1NG ST 94122
ZONING CATEGORY MASSING AND SETBACKS HEIGHT AND BULK LIMITS ROOF APPURTENANCES & PENTHOUSES REAR YARD FRONT SET BACK &	REFERENCE § 260 § 134 § 134 §§ 130, 131, 132, 133 IC REALM	CONTROLS BUILDING LOCATED IN 40-X* HEIGHT DISTRICT *AB 1763 DENSITY BONUS LAW (+ 3 STORIES / 33 FEET) 16' MAXIMUM FOR BUILDINGS WITH HEIGHT LIMITS OVER 65' PER SF PLANNING CODE § 260(B)(1)(B) 25% LOT DEPTH, NO LESS THAN 15 FT. REQUIRED AT 2ND STORY AND EACH SUCCEEDING STORY 90 FT X 25% = 22.50 FT.; 60 FT X 25% = 15 FT NOT REQUIRED (§ 732) REQUIRED	PROPOSED 73 FT PROPOSED BUILDING HEIGHT - MEASURED TO TOP OF FINISHED ROOF SURFACE 16' MAXIMUM ABOVE ROOF LEVEL DEPTH VARIES. SEE PLANS.	EXCEPTION WAIVER	eet CA 94122
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PRELIMINARY - Not for Construction

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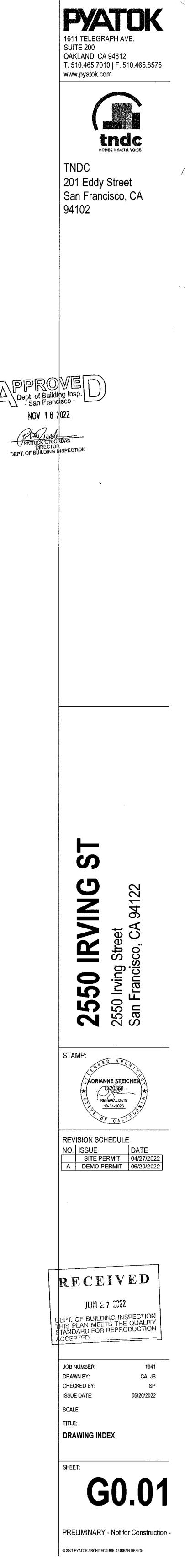
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G2.00	SITE PHOTOS	•	*	
G2.01	PLANNING CODE DIAGRAMS	•		
<u>32.02</u>	PLANNING CODE DIAGRAMS	•		
G2.03	PLANNING CODE DIAGRAMS	•		
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G3.02	CODE DIAGRAMS - OCCUPANT LOAD & FIRE RATED SHAFTS	•		
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G4.01	FIRE CODE - COMPLIANCE	•		
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* - SHEET INCLUDED FOR REFERENCE

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Irene Wong. DE









27TH AND IRVING LOOKING NORTH

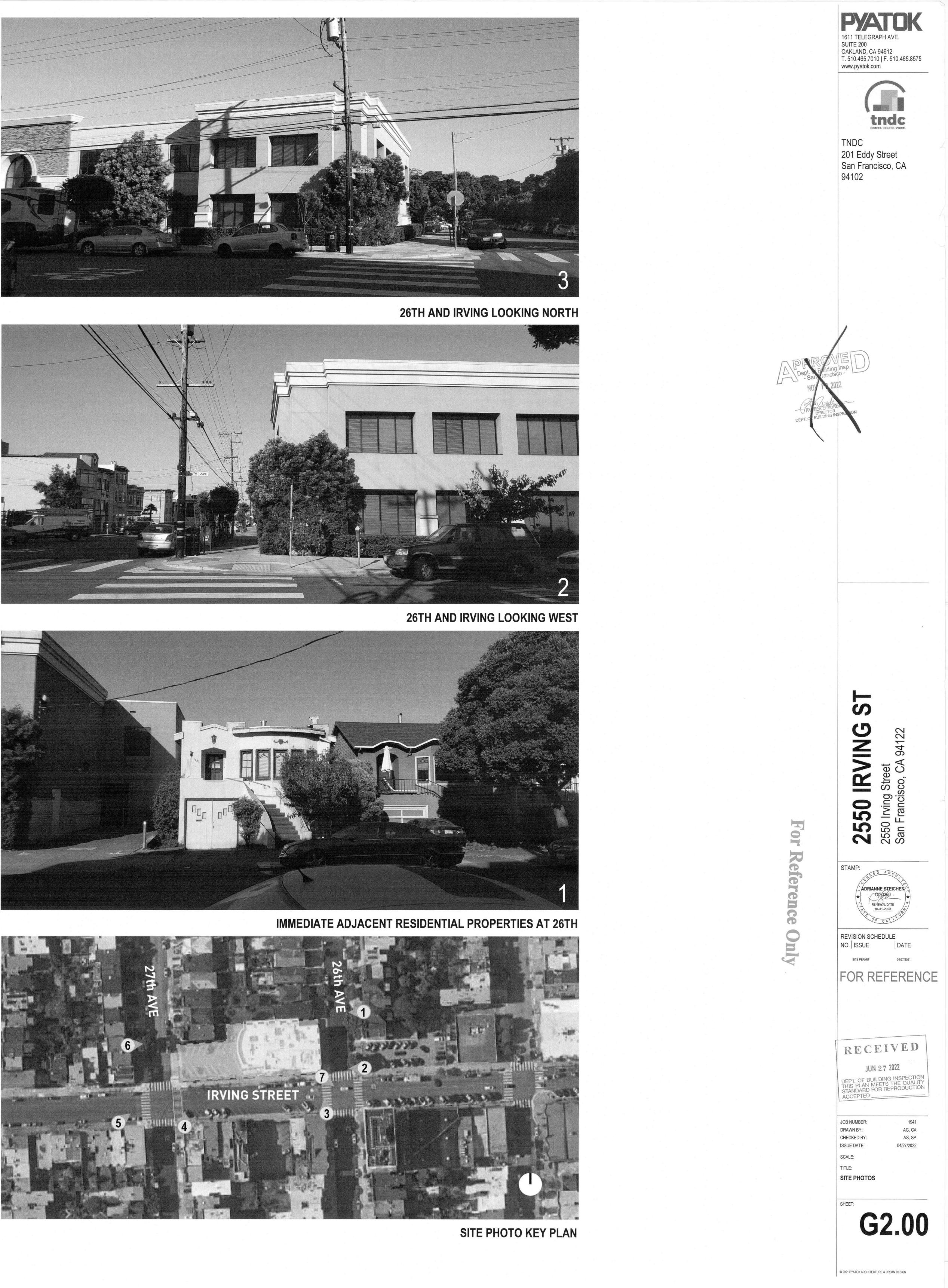
27TH AND IRVING LOOKING NORTHEAST

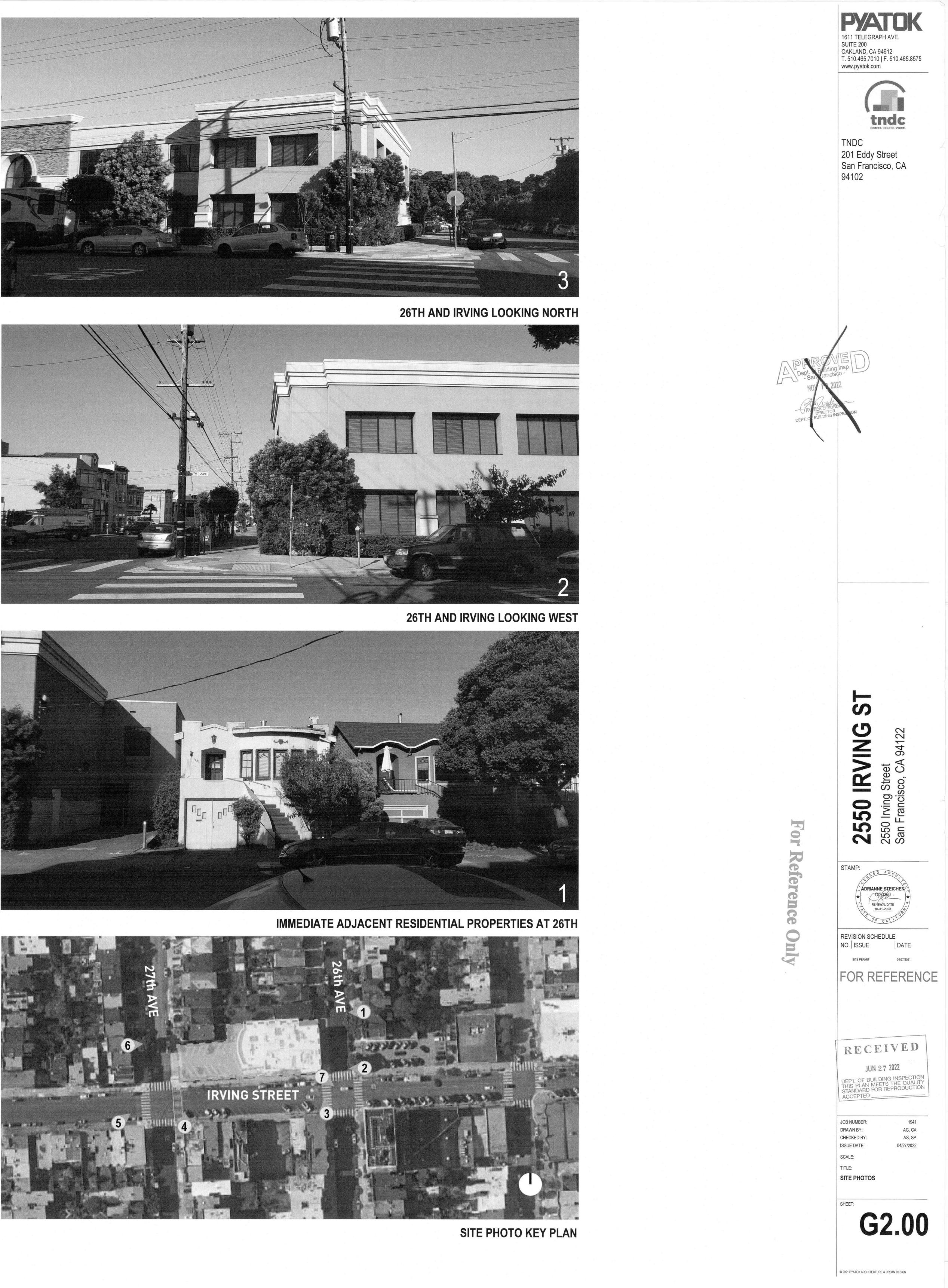
IMMEDIATE ADJACENT RESIDENTIAL PROPERTIES AT 27TH

7 STORY RESIDENTIAL PROPERTY AT 26TH AND IRVING









TITLE REPORT

PRELIMINARY REPORT ORDER NO. 0227022715-MN, EFFECTIVE DATE OCTOBER 30, 2020 AT 7:30 A.M., REFERRED TO HEREON AS THE "PTR".

TITLE TO SAID ESTATE IS VESTED IN: S F POLICE CREDIT UNION, A CALIFORNIA CORPORATION

THE ESTATE OR INTEREST IN THE LAND IS:

LEGAL DESCRIPTION

FRANCISCO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS: (A) BEGINNING AT THE POINT OF INTERSECTION OF THE NORTHERLY LINE OF IRVING STREET WITH

OF IRVING STREET 82 FEET AND 6 INCHES; THENCE AT A RIGHT ANGLE NORTHERLY 90 FEET; THENCE AT A RIGHT ANGLE EASTERLY 82 FEET AND 6 INCHES TO THE WESTERLY LINE OF 26TH AVENUE: THENCE SOUTHERLY ALONG THE WESTERLY LINE OF 26TH AVENUE 90 FEET TO THE POINT OF BEGINNING.

BEING A PORTION OF OUTSIDE LAND BLOCK NO. 647.

(B) BEGINNING AT A POINT ON THE NORTHERLY LINE OF IRVING STREET, DISTANT THEREON 82 FEET AND 6 INCHES WESTERLY FROM THE WESTERLY LINE 26TH AVENUE; RUNNING THENCE WESTERLY ALONG THE NORTHERLY LINE OF IRVING STREET 25 FEET; THENCE AT A RIGHT ANGLE NORTHERLY 90 FEET; THENCE AT A RIGHT ANGLE EASTERLY 25 FEET; THENCE AT A RIGHT ANGLE SOUTHERLY 90 FEET TO THE POINT OF BEGINNING.

BEING A PORTION OF OUTSIDE LAND BLOCK NO. 647.

(C) BEGINNING AT A POINT ON THE NORTHERLY LINE OF IRVING STREET, DISTANT THEREON 107 FEET AND 6 INCHES WESTERLY FROM THE WESTERLY LINE OF 26TH AVENUE: RUNNING THENCE WESTERLY ALONG THE NORTHERLY LINE OF IRVING STREET 25 FEET; THENCE AT A RIGHT ANGLE NORTHERLY 90 FEET: THENCE AT A RIGHT ANGLE EASTERLY 25 FEET; THENCE AT A RIGHT ANGLE SOUTHERLY 90 FEET TO THE POINT OF BEGINNING.

BEING A PORTION OF OUTSIDE LAND BLOCK NO. 647.

(D) BEGINNING AT A POINT ON THE NORTHERLY LINE OF IRVING STREET, DISTANT THEREON 82 FEET AND 6 INCHES EASTERLY FROM THE POINT FORMED BY THE INTERSECTION OF THE NORTHERLY LINE OF IRVING STREET WITH THE EASTERLY LINE OF 27TH AVENUE; RUNNING THENCE EASTERLY ALONG SAID NORTHERLY LINE OF IRVING STREET 25 FEET; THENCE AT A RIGHT ANGLE NORTHERLY 90 FEET: THENCE AT A RIGHT ANGLE WESTERLY 25 FEET; THENCE AT A RIGHT ANGLE SOUTHERLY 90 FEET TO THE NORTHERLY LINE OF IRVING STREET AND THE POINT OF BEGINNING.

BEING A PORTION OF OUTSIDE LAND BLOCK NO. 647.

(E) BEGINNING AT THE POINT OF INTERSECTION OF THE EASTERLY LINE OF 27TH AVENUE AND THE NORTHERLY LINE OF IRVING STREET; RUNNING THENCE NORTHERLY ALONG SAID LINE OF 27TH AVENUE 60 FEET: THENCE AT A RIGHT ANGLE EASTERLY 82 FEET AND 6 INCHES: THENCE AT A RIGHT ANGLE SOUTHERLY 60 FEET TO THE NORTHERLY LINE OF IRVING STREET; THENCE AT A RIGHT ANGLE WESTERLY ALONG SAID LINE OF IRVING STREET 82 FEET AND 6 INCHES TO THE POINT OF BEGINNING.

BEING PART OF OUTSIDE LAND BLOCK NO. 647.

ASSESSOR'S LOT 038; BLOCK 1724

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THE TITLE REPORT USED IN THIS SURVEY WAS ISSUED BY OLD REPUBLIC TITLE COMPANY,

THE LAND REFERRED TO IS SITUATED IN THE COUNTY OF SAN FRANCISCO, CITY OF SAN

THE WESTERLY LINE OF 26TH AVENUE: RUNNING THENCE WESTERLY ALONG THE NORTHERLY LINE

EXCEPTIONS TO TITLE

- THE HEREIN DESCRIBED PROPERTY LYING WITHIN THE PROPOSED BOUNDARIES OF THE CITY AND COUNTY OF SAN FRANCISCO SPECIAL TAX DISTRICT NO. 2009-1 (SAN FRANCISCO SUSTAINABLE FINANCING), AS FOLLOWS DISTRICT NO. 2009-1, FOR SAN FRANCISCO SUSTAINABLE FINANCING, DISCLOSED BY MAP FILED DECEMBER 7, 2009, IN BOOK 1 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, PAGE 33. (EXC. 5 - NOT PLOTTABLE).
- AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING GRANTED TO PACIFIC GAS AND ELECTRIC COMPANY, A CORPORATION, FOR WIRES AND CABLES FOR THE DISTRIBUTION OF ELECTRICITY, RECORDED APRIL 21, 1924 IN REEL 862 OF OFFICIAL RECORDS, IMAGE 240, UPON THE TERMS AND CONDITIONS CONTAINED THEREIN (EXC. 6 - PLOTTED).
- CONDITIONS CONTAINED AND/OR REFERRED TO IN AN INSTRUMENT, ENTITLED NOTICE OF SPECIAL RESTRICTIONS UNDER THE CITY PLANNING CODE, BY EDWARD J. SUMMERVILLE, AGENT, RECORDED JUNE 16, 1989 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER E381845, NOTE REFERENCE IS MADE TO SAID INSTRUMENT FOR FULL PARTICULARS (EXC. 7 - NOT PLOTTABLE).
- CONDITIONS CONTAINED AND/OR REFERRED TO IN AN INSTRUMENT, ENTITLED DECLARATION OF USE, BY DOME CONSTRUCTION, RECORDED MAY 17, 2002 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER 2002-H168982-00, NOTE REFERENCE IS MADE TO SAID INSTRUMENT FOR FULL PARTICULARS (EXC. 8 – NOT PLOTTABLE).

<u>NOTES</u>

- 1. DATE OF FIELD SURVEY: NOVEMBER 19, 20, 2020 AND JANUARY 21, 2021 AS TO THE BOUNDARY AND TOPOGRAPHIC SURVEY OF THE SUBJECT PROPERTY.
- 2. THE UTILITIES SHOWN HEREON ARE BY SURFACE OBSERVATION AND RECORD INFORMATION ONLY AND NO WARRANTY IS GIVEN HEREIN AS TO THEIR EXACT LOCATION. IT IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO VERIFY THE EXACT LOCATION OF THE UTILITIES WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY.
- 3. UTILITY JURISDICTIONS / PROVIDERS ARE AS FOLLOWS: STORM DRAINS: CITY AND COUNTY OF SAN FRANCISCO SANITARY SEWER: CITY AND COUNTY OF SAN FRANCISCO CITY AND COUNTY OF SAN FRANCISCO WATER: ELECTRICITY: PACIFIC GAS & ELECTRIC COMPANY NATURAL GAS: PACIFIC GAS & ELECTRIC COMPANY
- 4. THERE ARE NO CEMETERIES ON OR WITHIN 100 FEET OF THE SUBJECT PROPERTY
- 5. THE SURVEYED PROPERTY IS THE SAME PROPERTY DESCRIBED IN THE TITLE REPORT.
- 6. THE LEGAL DESCRIPTION AS SHOWN IN THE TITLE REPORT MATHEMATICALLY CLOSES.
- 7. THE SUBJECT PROPERTY HAS ACCESS TO AND FROM IRVING STREET, 26TH AVENUE, AND 27TH AVENUE, PUBLIC RIGHT OF WAYS.
- 8. THERE IS NO OBSERVED EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
- 9. THE TITLE REPORT USED AS THE BASIS FOR THIS SURVEY WAS ISSUED BY OLD REPUBLIC TITLE COMPANY, ORDER NUMBER 0227022715-MN, DATED OCTOBER 30, 2020 AT 7:30 A.M.

BASIS OF SURVEY

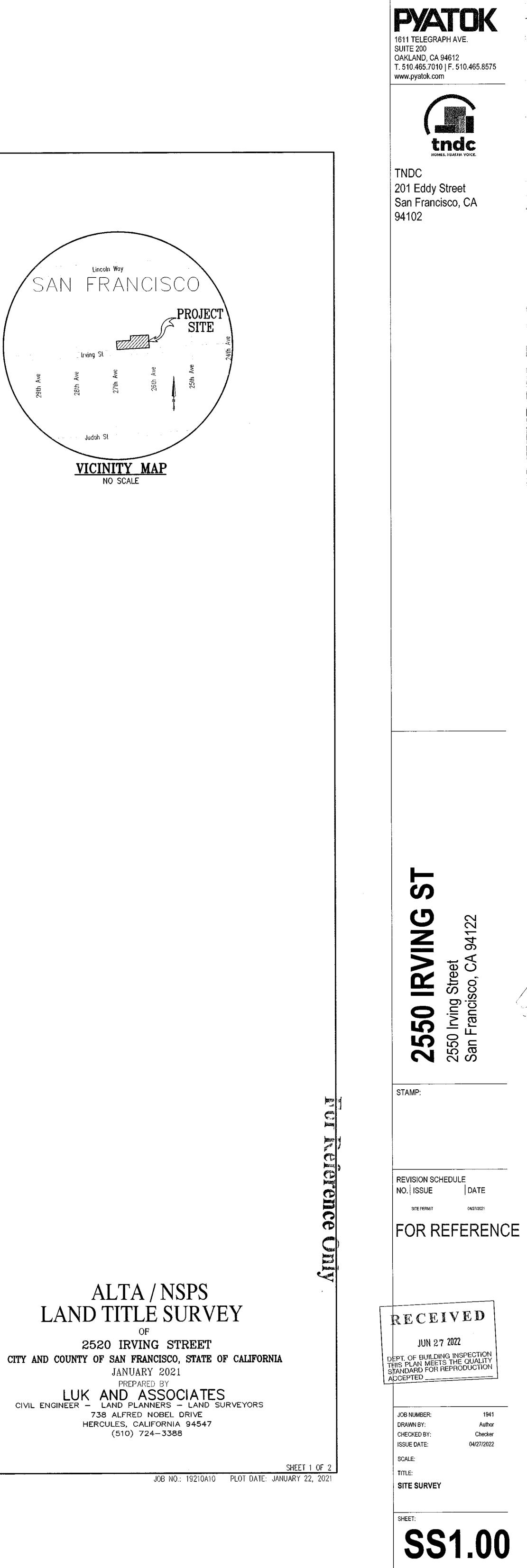
MONUMENT LINE ON 26TH AVENUE BETWEEN LINCOLN WAY AND LAWTON STREET, AS SHOWN ON MONUMENT MAPS NO. 150 AND 152, ON FILE IN THE OFFICE OF THE CITY AND COUNTY SURVEYOR.

RECORD REFERENCES

MONUMENT MAPS NO. 150, 151, AND 152, ON FILE IN THE OFFICE OF THE CITY AND COUNTY SURVEYOR.

BENCHMARK

BM11187, BEING A SET CCSF STANDARD 1/2" DOMED STAINLESS STEEL ANCHOR SCREW WITH WASHER STAMPED "CCSF CONTROL", LOCATED AT THE SOUTHEAST CORNER OF LINCOLN WAY AND 26TH AVENUE. IN CURB AT SOUTHEASTERLY RETURN, LINCOLN WAY & 26TH AVENUE AT CATCH BASIN. 0.3' SOUTHERLY RADIAL FROM FACE OF CURB AT CATCH BASIN, 1.7' EASTERLY OF CENTER/CENTER CATCH BASIN, 6.8' WESTERLY OF CENTER/CENTER STREET SIGN POLE, 16.8' WESTERLY OF CENTER/CENTER STREET SIGN POLE. ELEVATION = 195.709, SAN FRANCISCO VERTICAL DATUM OF 2013 (SFVD13).



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TABLE A NOTES

1. MONUMENTS ARE SHOWN ON SHEET 2 OF THE SURVEY.

- 2. THE STREET ADDRESS OF THE PROPERTY IS 2520 IRVING STREET, SAN FRANCISCO, CA 94122.
- 3. FLOOD ZONE: THIS SITE IS NOT LOCATED IN A FLOOD ZONE PER SAN FRANCISCO PRELIMINARY FLOOD PLAIN MAPS PUBLISHED NOVEMBER 2015. SOURCE: HTTPS: //SFGSA.ORG/SAN-FRANCISCO-FLOODPLAIN-MANAGEMENT-PROGRAM.
- THIS SITE IS LOCATED IN A FLOOD ZONE PER SF WATER 100-YEAR STORM FLOOD RISK MAP PUBLISHED JULY 2019. SOURCE: HTTPS://SFPLANNINGGIS.ORG/FLOODMAP
- 4. THE TOTAL GROSS LAND AREA IS: 19,125 SQUARE FEET +/- OR 0.439 ACRES MORE OR LESS.
- 6. (A/B) ZONING REQUIREMENTS: PER THE CITY OF SAN FRANCISCO PLANNING AND DEVELOPMENT. THE PROPERTY IS ZONED "NC-D", DEFINED AS "IRVING STREET NEIGHBORHOOD COMMERCIAL DISTRICT"

REFERENCE IS MADE HERE TO THE CITY OF SAN FRANCISCO ZONING CODE, ARTICLE 7, SECTION 732. REGARDING PROPERTY DEVELOPMENT STANDARDS, MINIMUM YARDS, BUILDING HEIGHT LIMITATION. BUILDING SETBACK REQUIREMENTS ARE AS FOLLOWS:

MINIMUM FRONT SETBACK: NON-REQUIRED MINIMUM SIDE SETBACK: NON-REQUIRED

MAXIMUM HEIGHT: 40 FEET

MINIMUM REAR SETBACK: REQUIRED AT FIRST STORY IF IT CONTAINS A DWELLING UNIT HEIGHT AND BULK DISTRICT: 40-X

PARKING SPACES REQUIRED: NO PARKING REQUIRED

- 7. (A/B1/C) EXTERIOR DIMENSIONS AND SQUARE FOOTAGE OF BUILDINGS AT GROUND LEVEL, AND NUMBER OF STORIES ARE SHOWN ON SHEET 2 OF THE SURVEY.
- 8. SUBSTANTIAL IMPROVEMENTS OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY ARE
- SHOWN ON SHEET 2 OF THE SURVEY. THERE ARE 13 REGULAR PARKING SPACES AND 2 HANDICAP SPACES ON THE SUBJECT PROPERTY.
- 10. (A) THERE ARE NO DIVISION OR PARTY WALLS ON THE SUBJECT PROPERTY.
- 11. LOCATION OF UTILITIES EXISTING ON OR SERVING THE SURVEYED PROPERTY AS DETERMINED BY OBSERVED EVIDENCE TOGETHER WITH EVIDENCE FROM PLAN OBTAINED FROM UTILITY COMPANIES OR PROVIDED BY CLIENT ARE SHOWN ON SHEET 2 OF SURVEY.
- 13. NAMES OF ADJOINING OWNERS OF PLATTED LANDS ARE SHOWN ON SHEET 2 OF THE SURVEY.
- 14. DISTANCE TO THE NEAREST INTERSECTING STREET IS SHOWN ON SHEET 2 OF THE SURVEY.
- 16. THERE IS NO OBSERVABLE EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OF BUILDING ADDITIONS.
- 17. THERE IS NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
- 18. THERE ARE NO WETLAND AREAS IN THE SUBJECT PROPERTY.
- 19. THERE ARE NO OFFSITE EASEMENTS.

20. PROFESSIONAL LIABILITY INSURANCE IN THE AMOUNT OF \$2,000,000 IS HELD BY THE SURVEYOR.

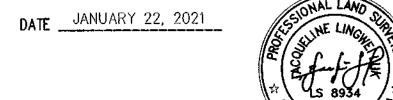
SURVEYOR'S CERTIFICATE

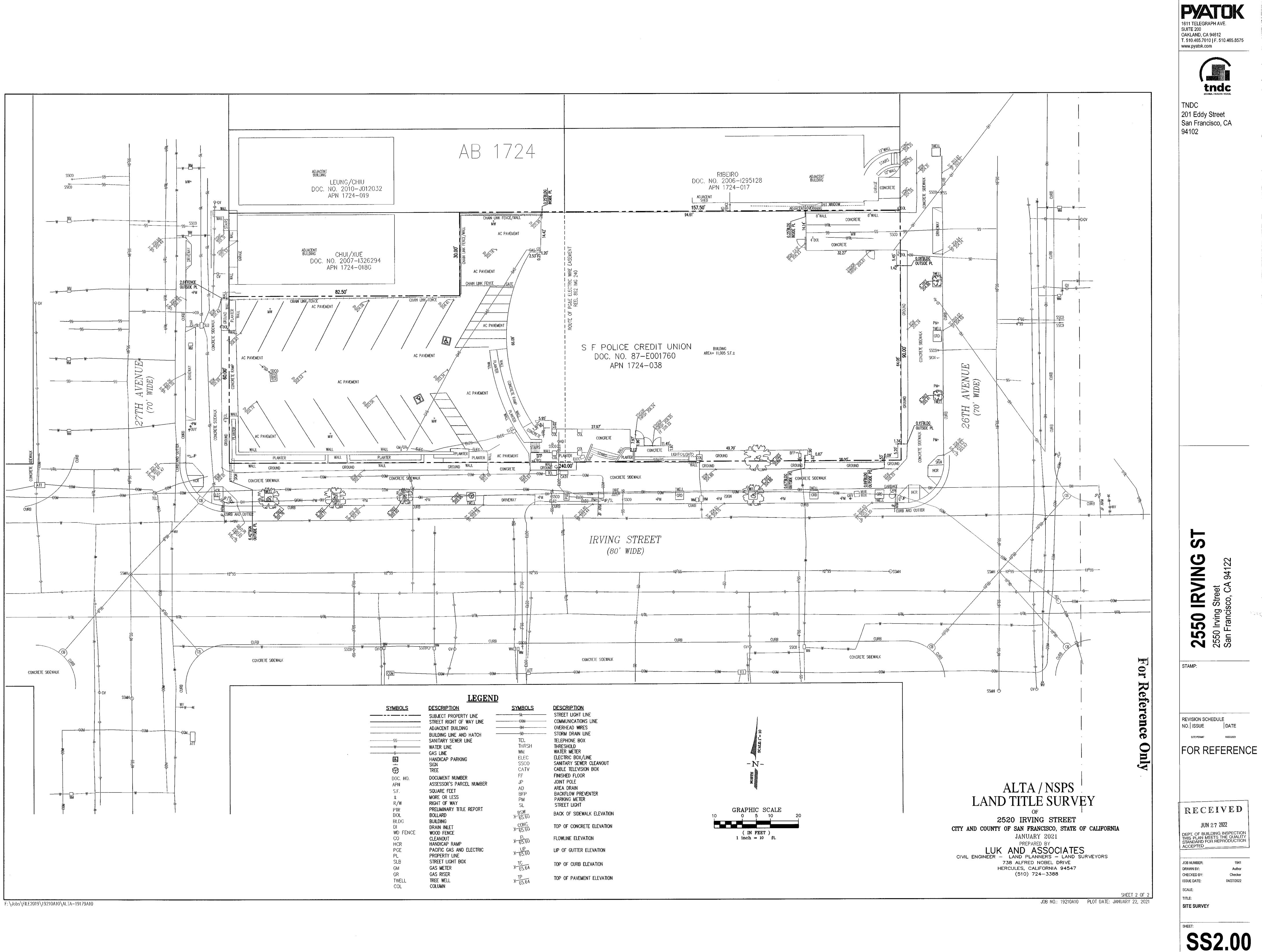
TO S F POLICE CREDIT UNION, A CALIFORNIA CORPORATION; AND OLD REPUBLIC TITLE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(A), 6(B), 7(A), 7(B1), 7(C), 8, 9, 10(A), 11, 13, 14, 16, 17, 18, 19, AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON NOVEMBER 19, 20, 2020 AND JANUARY 21, 2021.

tartit

ACQUELINE LUK P.L.S. 8934 FOR LUK & ASSOCIATES, INC.





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GENERAL NOTES:

- WORK SHOWN HEREON SHALL BE DONE IN ACCORDANCE WITH THE "CALTRANS STANDARD SPECIFICATIONS," LATEST EDITION AND SUPPLEMENTS, THE CALIFORNIA BUILDING CODE (EXCAVATION AND GRADING), AND CITY OF SAN FRANCISCO LOCAL ORDINANCES AS APPLICABLE.
- 2. EXISTING TOPOGRAPHY SHOWN HEREON WAS TAKEN FROM A SURVEY DATED JANUARY 2021 BY LUK AND ASSOCIATES.
- 3. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
- 4. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS FOR GRADING, DRAINAGE AND UNDERGROUND FACILITIES INCLUDING LOCATION AND ELEVATION OF EXISTING UNDERGROUND FACILITIES AT CROSSINGS WITH PROPOSED UNDERGROUND FACILITIES. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
- 5. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
- 6. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
- 7. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- 8. THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- 9. IF AT ANY TIME DURING GRADING OPERATIONS, ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, GRADING IN THAT AREA WILL

STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED.

- 10. THE PROPOSED GRADE IS THE FINAL GRADE AND NOT THE ROUGH GRADE. THE CONTRACTOR SHALL SUBTRACT THE THICKNESS OF THE PAVED SECTION AND/OR LANDSCAPE TOPSOIL SECTION TO ARRIVE AT THE ROUGH GRADE ELEVATION.
- 11. STRAIGHT GRADE SHALL BE MAINTAINED BETWEEN CONTOUR LINES AND SPOT ELEVATIONS UNLESS OTHERWISE SHOWN ON THE PLANS.
- 12. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.
- 13. ALL FILL SOILS OR SOILS DISTURBED OR OVEREXCAVATED DURING CONSTRUCTION SHALL BE COMPACTED PER THE REQUIREMENTS OF THE SOILS REPORT BUT NOT LESS THAN 90% MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D-1557.
- 14. THE CONTRACTOR SHALL OBTAIN AN O.S.H.A. PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER.
- 15. DIMENSIONS TO PIPELINES ARE TO CENTERLINE UNLESS OTHERWISE NOTED.
- 16. ALL WATER LINES SHALL BE INSTALLED WITH 36" MINIMUM COVER FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
- 17. THRUST BLOCKS SHALL BE INSTALLED AT WATERLINE HORIZONTAL AND VERTICAL BENDS, TEES, CAPPED ENDS AND REDUCERS ACCORDING TO THE DETAILS PROVIDED ON THESE PLANS.
- 18. CONSTRUCTION STAKING FOR IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR.
- 19. THE CONTRACTOR SHALL REPLACE ALL EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION TO MATCH EXISTING, INCLUDING PERMANENT TRENCH
- 20. CONTRACTOR TO CONTACT UNDERGROUND SERVICE ALERT (800-227-2600)
- PRIOR TO EXCAVATION. 21. ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF.

RESURFACING.

- 22. ALL CURB DIMENSIONS AND RADII ARE TO PAVEMENT FACE OF CURB.
- 23. CONTRACTOR TO BE AWARE OF ALL OVERHEAD LINES AT ALL TIMES, SO AS NOT TO DISTURB THEM.
- 24. CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS FROM THE CITY OF NEWARK FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- 25. STORM DRAINAGE SYSTEMS SHOWN ON THESE PLANS HAVE BEEN DESIGNED FOR THE FINAL SITE CONDITION AT COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE OF THE SITE, DURING INTERIM CONDITIONS OF CONSTRUCTION.
- 26. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, INCLUDING NPDES, FROM THE APPROPRIATE JURISDICTIONAL AGENCIES FOR DISCHARGE OF GROUNDWATER THAT MAY BE NECESSARY TO ACCOMPLISH EXCAVATIONS SHOWN ON THESE PLANS.

LEGEND:

CONTOUR	<u>PROPOSED</u>
SPOT ELEVATION	FS 177.89
	6
FLOW (DIRECTION AND SLOPE)	<u>2.00%</u>
SANITARY SEWER	\$\$
WATER	
DOMESTIC WATER	DW
STORM DRAIN	SD
GAS	G
ELECTRIC	E
FIRE WATER	FW
STORM DRAIN INLET	
SAND TRAP	
SEWER CLEANOUT	© _{co}
AREA DRAIN	⊕ _{AD}
CAP OR PLUG]
FIRE HYDRANT	${}^{(\bullet)}$
FDC	പ
PIV	M
WATER VALVE	\otimes
WATER METER	
INLET PROTECTION	\oslash
FILTER BAGS	
SAWCUT	
CURB AND GUTTER	
LIMIT OF DISTURBANCE	
TO BE DEMOLISHED	
PROPERTY LINE/R.O.W.	
GRADE BREAK LINE	
CHAINLINK FENCE	×
SEDIMENT BARRIER	<u> </u>
BUILDING FOOTPRINT	
CONCRETE PAVEMENT	
ASPHALT PAVEMENT	
LANDSCAPE AREA	
BIORETENTION ON STRUCTURE	$\begin{array}{c} + + + + + \\ + + + + + + \\ + + + + + + $
BIORETENTION ON GRADE	
CONCRETE PAVEMENT REMOVAL	
DEMOLISH STRUCTURE	

ASPHALT CONCRETE PAVEMENT REMOVAL

2550 IRVING ST. SITE IMPROVEMENTS

2550 IRVING ST. SAN FRANCISCO, CA 94122

ABBREVIATIONS:

AC	ASPHALTIC CONCRETE	мн	MANHOLE
BW	BACK OF WALK	NTS	NOT TO SCALE
BLDG	BUILDING	PA	PLANTER AREA
BM	BENCH MARK	POC	POINT OF CONNECTION
BOS	BOTTOM OF STAIRS	PIV	POST INDICATOR VALVE
СВ	CATCH BASIN	PCC	PORTLAND CEMENT CONCRETE
CI	CAST IRON	PRV	PRESSURE REDUCING VALVE
CL	CENTER LINE	PVC	POLYVINYL CHLORIDE
CMU	CONCRETE MASONRY UNIT	R	RADIUS
со	CLEANOUT	RCIP	RECTANGULAR CAST IRON PIPE
CONC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
CF	CURB FACE	RD	ROOF DRAIN
DW	DOMESTIC WATER	SD	STORM DRAIN
EL. OR ELEV	ELEVATION	SSMH	SANITARY SEWER MANHOLE
ELEC	ELECTRIC, ELECTRICAL	SS	SANITARY SEWER
EX. OR EXIST.	EXISTING	STD	STANDARD
FDC	FIRE DEPARTMENT CONNECTION	SDMH	STORM DRAIN MANHOLE
FF	FINISHED FLOOR	TC	TOP OF CURB
FG	FINISHED GRADE (LANDSCAPE)	TEL	TELEPHONE
FS	FINISHED SURFACE (HARDSCAPE)	TG	TOP OF GRATE
FH	FIRE HYDRANT	TOS	TOP OF STAIRS
FL	FLOW LINE	TW	TOP OF WALL
FT	FOOT OR FEET	TS	TRAFFIC SIGNAL
FS	FIRE SERVICE	TSB	TRAFFIC SIGNAL BOX
GV	GATE VALVE	TY P	TYPICAL
HDPE	HIGH DENSITY POLYETHEYNE	τv	TELEVISION
HP	HIGH POINT	VIF	VERIFY IN FIELD
INV.	INVERT	VLT	VAULT
LP	LOW POINT	VCP	VITRIFIED CLAY PIPE
MAX.	MAXIMUM	W	WATER
MIN.	MINIMUM	WM	WATER METER
		WV	WATER VALVE

CITY OF SAN FRANSCISO APPLICABLE STANDARD DETAILS

• 87,170 - STANDARD COMBINED CURB AND PARKING STRIP OR GUTTER • 87,171 - DRIVEWAY CONSTRUCTION

• 87,173 - STANDARD CONSTRUCTION JOINTS FOR CONCRETE SIDEWALK AND CURB • 87,196 - TYP INSTALLATION OF BUILDING SEWER AND SIDE SEWER 102,858 – STANDARD CURB RAMP PLANS



II CO.1

C0.2

C0.3

C1.1

C1.2

C2.1

C3.1

C4.1

C5.1

SHEET INDEX: CIVIL DRAWINGS TITLE SHEET & GENERAL NOTES EXISTING CONDITIONS FIRE ACCESS PLAN DEMOLITION PLAN EROSION CONTROL PLAN NOTES SITE LAYOUT PLAN GRADING AND DRAINAGE PLAN UTILITY PLAN DETAILS

Irving St



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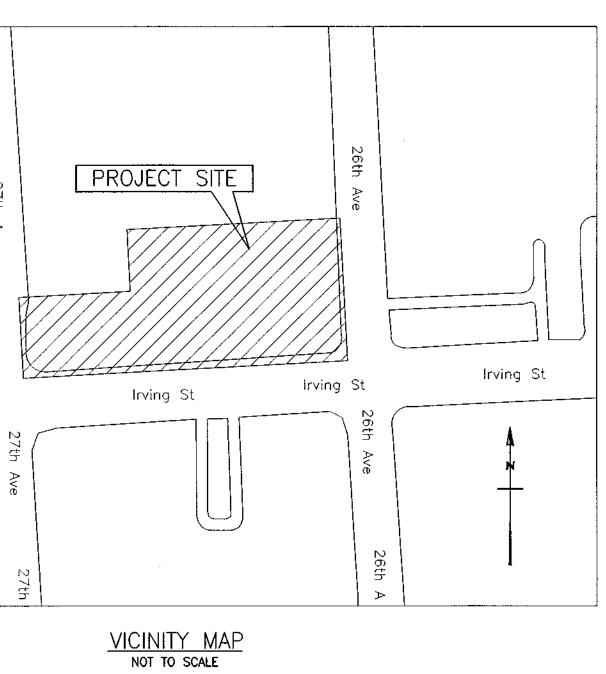


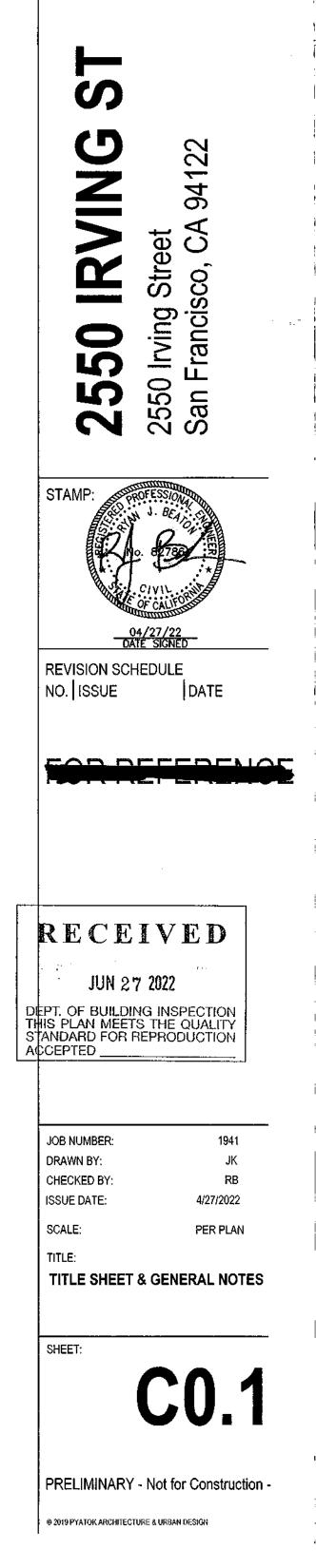
Irene Wong, DBI SEP 2 6 107

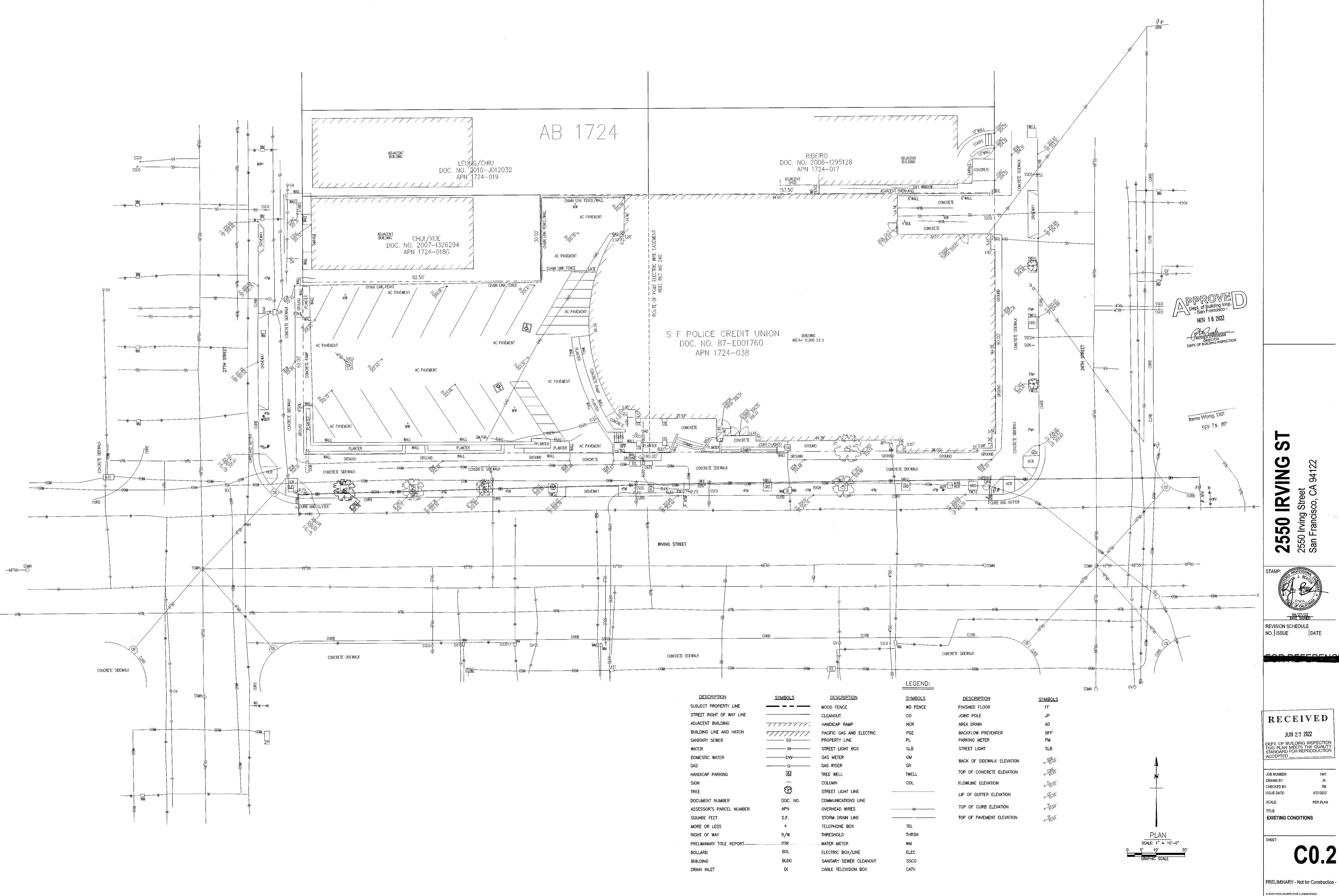
45 Fremont Street, 28th Floor

San Francisco, CA 94105 415.989.1004 | kpff.com

CEOR Name: Ryan Beaton CEOR Email: ryan.beaton@kpff.com



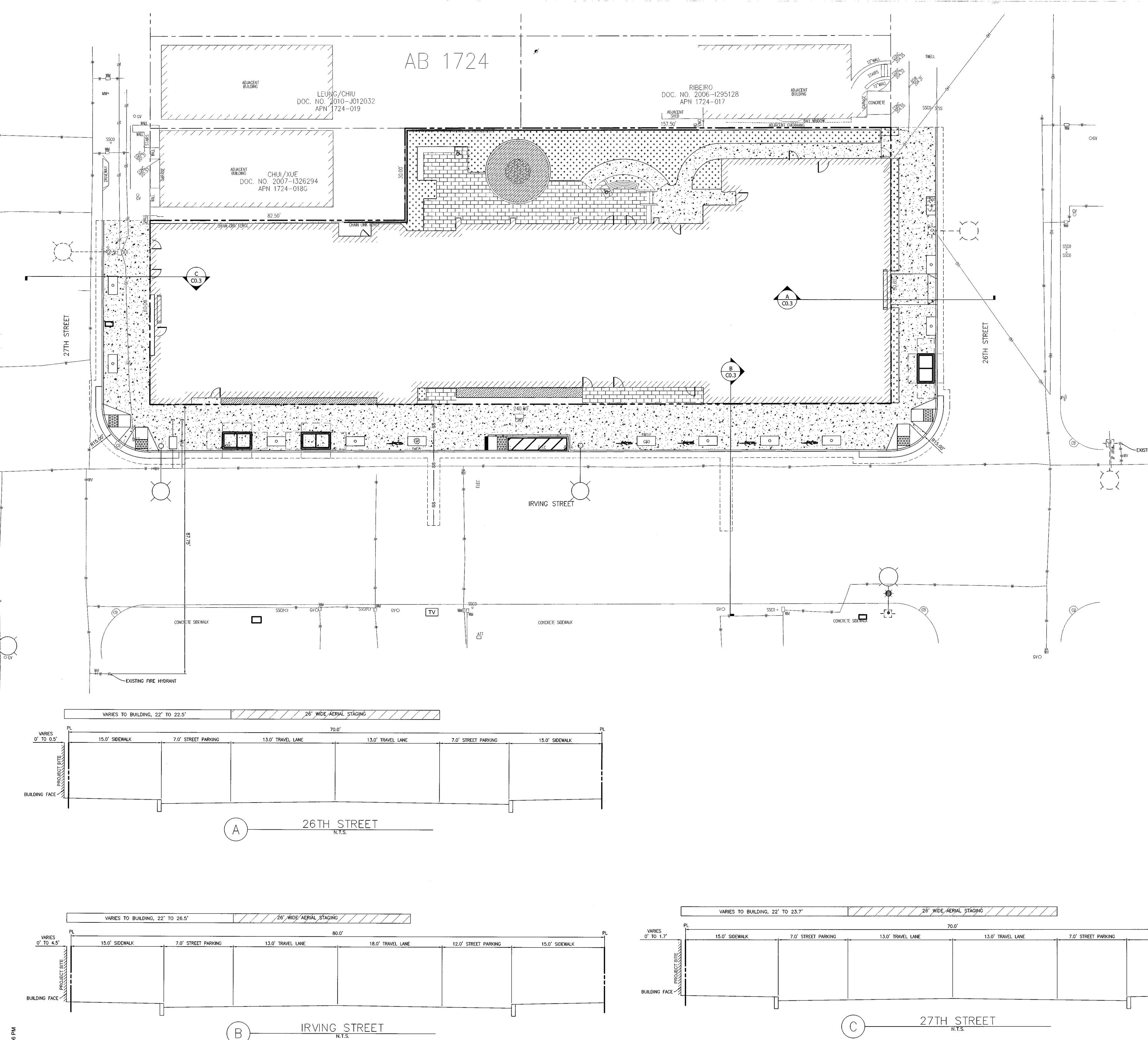




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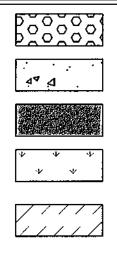
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	70	0.0'	
7.0' STREET PARKING	13.0' TRAVEL LANE	13.0' TRAVEL LANE	7.0' STREET PARKING

LEGEND



TRUNCATED DOMES - SEE DETAIL 1- SHEET C5.1 CONCRETE PAVING - SEE DETAIL 2 - SHEET C5.1 ASPHALT PAVING - SEE DETAIL 3 - SHEET C5.1 LANDSCAPING/TREE WELL (SEE LANDSCAPE PLAN) BUILDING FACE

PROPERTY LINE

15.0' SIDEWALK PLAN SCALE: 1" = 10'-0"

S (\mathbf{D}) L 5 N CIVIL REVISION SCHEDULE NO. ISSUE DATE FOR REFERENCE

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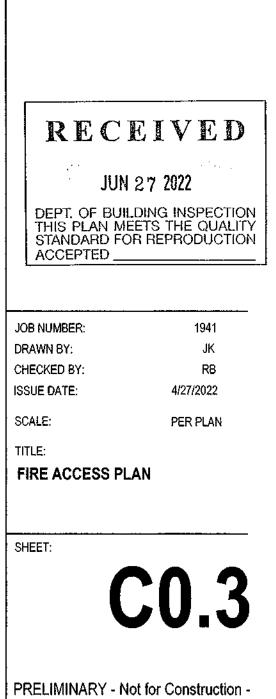
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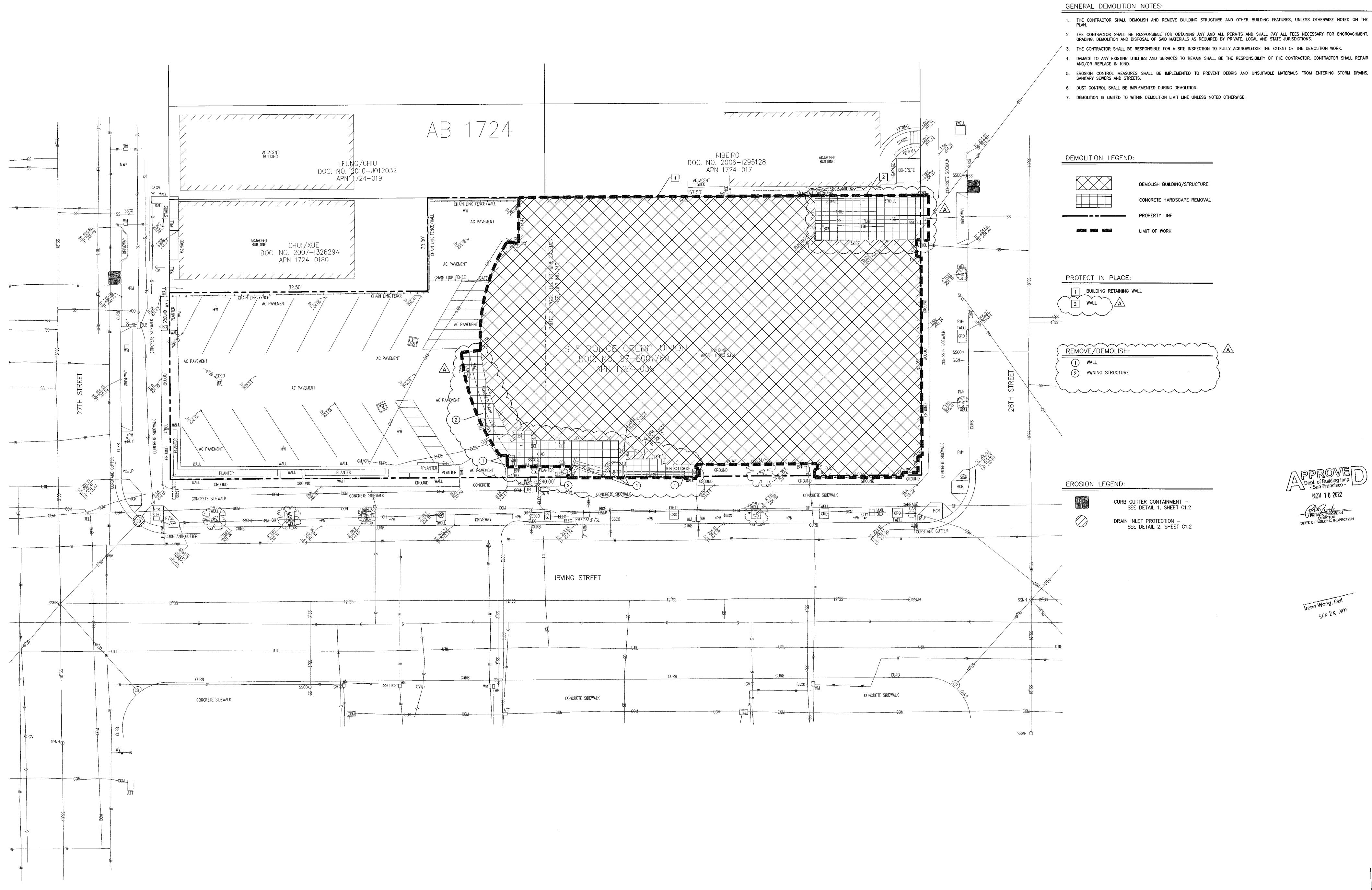
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1. THE CONTRACTOR SHALL DEMOLISH AND REMOVE BUILDING STRUCTURE AND OTHER BUILDING FEATURES, UNLESS OTHERWISE NOTED ON THE PLAN.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS AND SHALL PAY ALL FEES NECESSARY FOR ENCROACHMENT, GRADING, DEMOLITION AND DISPOSAL OF SAID MATERIALS AS REQUIRED BY PRIVATE, LOCAL AND STATE JURISDICTIONS.

4. DAMAGE TO ANY EXISTING UTILITIES AND SERVICES TO REMAIN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL REPAIR

Francisco NOV 18 2022 DEPT. OF BUILDING INSPECTION

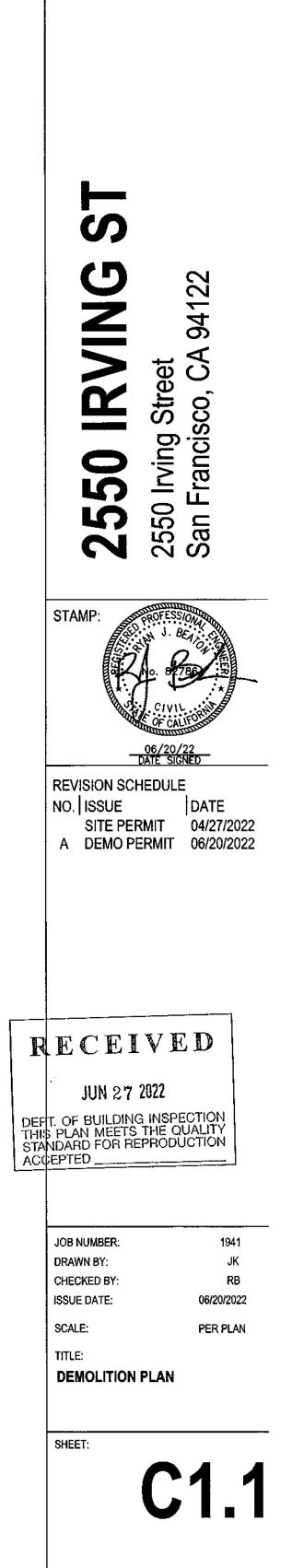
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PLAN scale: 1" = 10'-0" 0 5' 10' GRAPHIC SCALE

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- 1. THIS PLAN MAY NOT COVER ALL THE SITUATIONS OR PHASES THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING SEDIMENT STORM RUNOFF FROM LEAVING THE SITE, SEDIMENT ROLLS AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
- 2. EROSION CONTROL FACILITIES SHALL BE MAINTAINED DAILY. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT FREE STORM WATER INTO EXISTING AND PROPOSED STORM DRAIN FACILITIES, DESIGN OF THESE FACILITIES MUST BE APPROVED AND UPDATED EACH YEAR BY THE ENGINEER (OCTOBER 1 TO APRIL 15)
- 3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE ENGINEERING DIVISION OF THE PUBLIC SERVICES DEPARTMENT OR CITY OF SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS. CONTROL MEASURES ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DIVISION OF THE PUBLIC SERVICES DEPARTMENT OR CITY OF SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SUB-CONTRACTORS AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES & IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED CONSTRUCTION WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS, AND/OR A PROJECT STOP ORDER.
- 5. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
- 6. IF EXISTING DRIVEWAY IS REMOVED DURING CONSTRUCTION, THE CONTRACTOR SHALL PLACE DRAIN ROCK AS A GRAVEL ROADWAY (8" MINIMUM THICKNESS FOR THE FULL WIDTH AND LENGTH OF SITE EGRESS AREA AS DEFINED IN THESE PLANS) AT ENTRANCE TO THE SITE. LOCATION TO BE APPROVED BY CITY ENGINEER IN THE FIELD. CONSTRUCTION EGRESS SHALL BE EQUIPPED WITH A TRUCK WASHING STATION. ALL TRUCKS SHALL WASH TIRES AND UNDERSIDE OF VEHICLES AS APPROPRIATE WHEN LEAVING THE SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THE SAME DAY AS REQUIRED BY THE CITY ENGINEER.
- 7. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT RUNOFF TO ANY STORM DRAIN SYSTEM.
- 8. DURING PERIODS WHEN STORMS ARE FORECAST:
- A. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS. B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY. C. WHERE STOCKPILING IS NECESSARY, USE A TARPAULIN OR SURROUND THE
- STOCKPILED MATERIAL WITH FIBER ROLLS, GRAVEL SEDIMENT BARRIER, SILT FENCE, OR OTHER RUNOFF CONTROLS. D. USE INLET CONTROLS AS NEEDED (E.G. BLOCK & GRAVEL SEDIMENT BARRIER) FOR
- STORM DRAIN ADJACENT TO THE PROJECT SITE OR STOCKPILED SOIL.
- 9. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT. 10. STAND-BY CREWS SHALL BE ALERTED BY THE PERMIT APPLICANT OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.
- 11. AFTER OCTOBER 1ST TO APRIL 15TH, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM. BREACHES IN DIKES AND TEMPORARY SWALES WILL BE REPAIRED AT THE CLOSE OF EACH DAY AND WHENEVER RAIN IS FORECAST.

...

- 12. AS A PART OF THE EROSION CONTROL MEASURES, UNDERGROUND STORM DRAIN FACILITIES SHALL BE INSTALLED COMPLETE AS SHOWN ON THE IMPROVEMENT PLANS.
- 13. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER.
- 14. SANDBAGS SHALL BE STOCKPILED ON SITE AND PLACED AT INTERVALS SHOWN ON EROSION CONTROL PLANS, WHEN THE RAIN FORECAST IS 40% OR GREATER, OR WHEN DIRECTED BY THE INSPECTOR.
- 15. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE SAND, DECOMPOSED GRANITE AND/OR GRAVEL, OR OTHER MATERIALS APPROVED BY THE INSPECTOR.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFETY OF VEHICLES OPERATING IN THE ROADWAY ADJACENT TO EROSION CONTROL FACILITIES.
- 17. AFTER RAINSTORMS CONTRACTOR SHALL CHECK FOR AND REMOVE SEDIMENT TRAPPED BY SAND BAGS AT STAGING AREA. REPLACE SAND BAGS IF DETERIORATION IS EVIDENT.
- 18. DUST CONTROL SHOULD BE PRACTICED ON ALL CONSTRUCTION SITES WITH EXPOSED SOILS AS NEEDED. IT IS IMPORTANT IN WINDY OR WIND-PRONE AREAS. DUST CONTROL IS CONSIDERED A TEMPORARY MEASURE AND AS AN INTERMEDIATE TREATMENT BETWEEN SITE DISTURBANCE AND CONSTRUCTION, PAVING, OR REVEGETATION. REFER TO EROSION CONTROL AND SEDIMENT CONTROL FIELD MANUAL, 3RD EDITION, PREPARED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION.

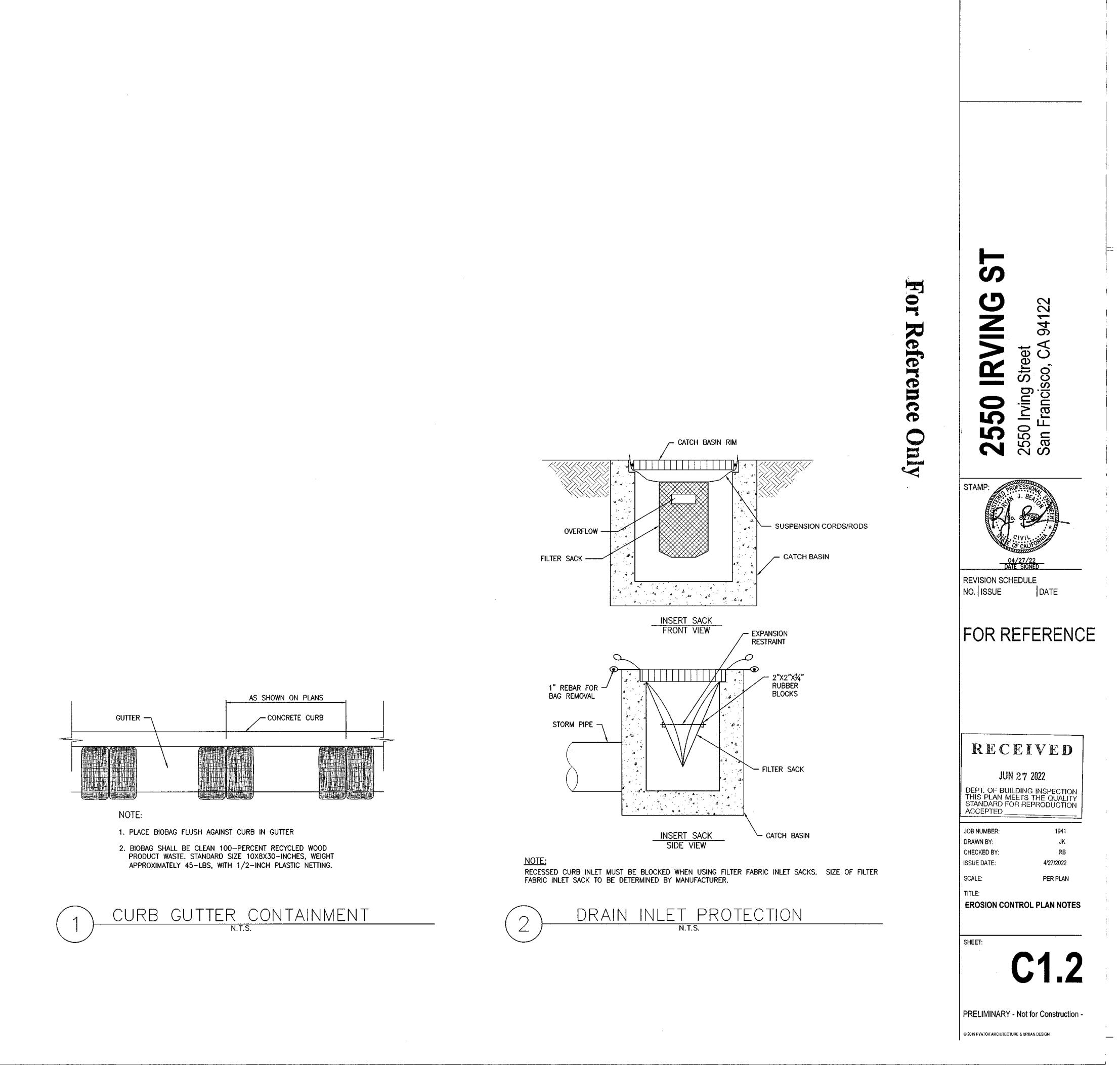
- NOTIFIED 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE SFPUC.

, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED PLAN.

1. THE BUREAU OF ENVIRONMENTAL REGULATION AND MANAGEMENT MUST BE

. REVIEW AND/OR APPROVAL OF THE EROSION CONTROL PLAN SHOULD NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES WITH THE REQUIREMENTS OF THE CONSTRUCTION SITE RUNOFF CONTROL ORDINANCE, NOR SHOULD AN APPROVED EROSION CONTROL PLAN RELIEVE TEH CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN. 3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED ADDITIONAL SEDIMENT AND

.



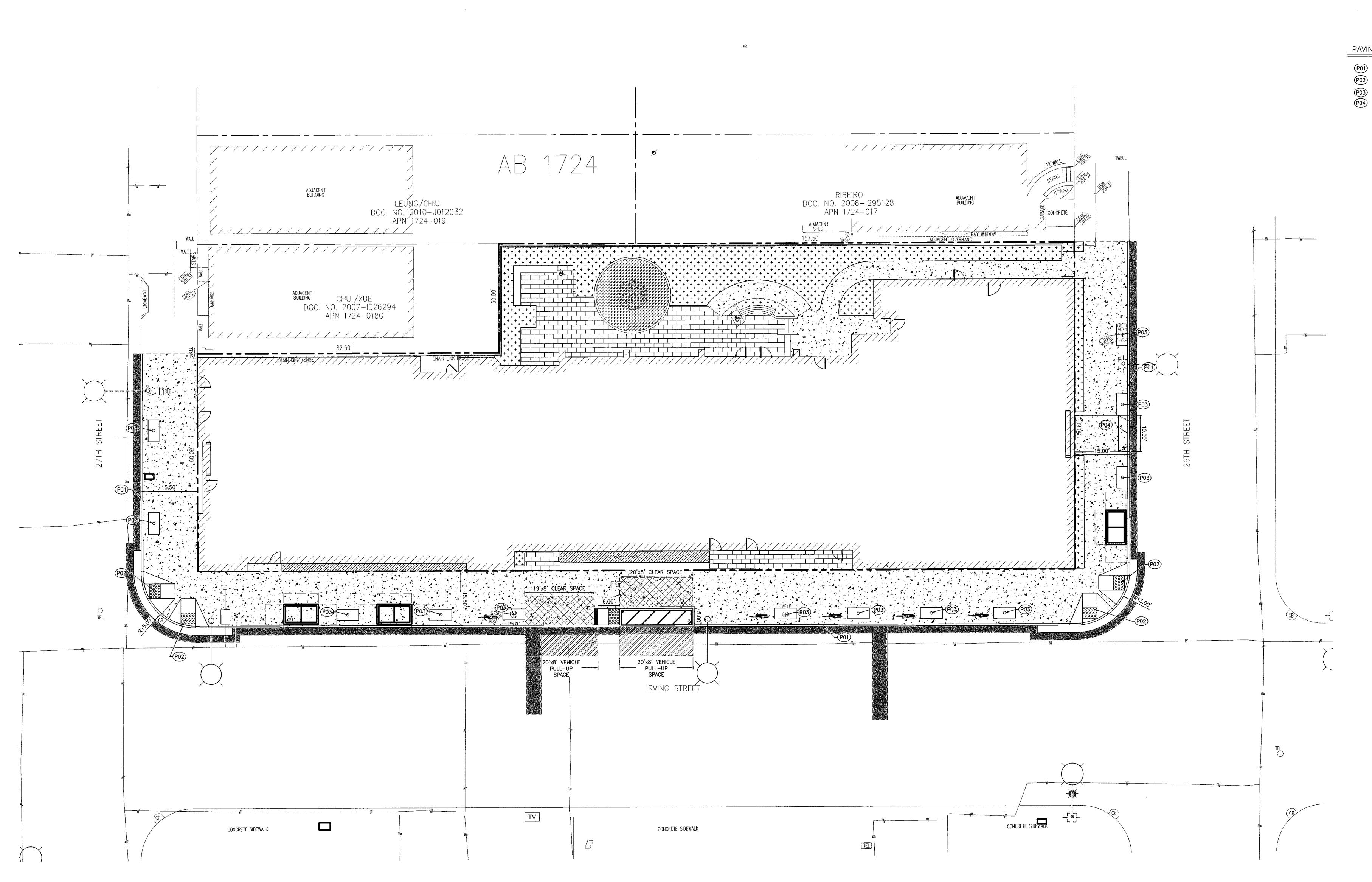
SUITE 200 OAKLAND, CA 94612 T. 510.465.7010 | F. 510.465.8575 www.pyatok.com TNDC 201 Eddy Street

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San Francisco, CA



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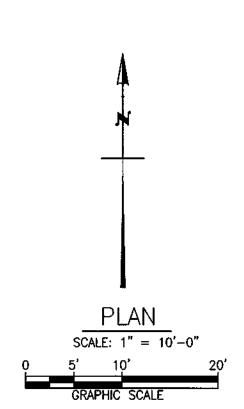
PAVING NOTES:

1. SEE LANDSCAPE PLANS FOR PAVING MATERIALS AND LIMITS.

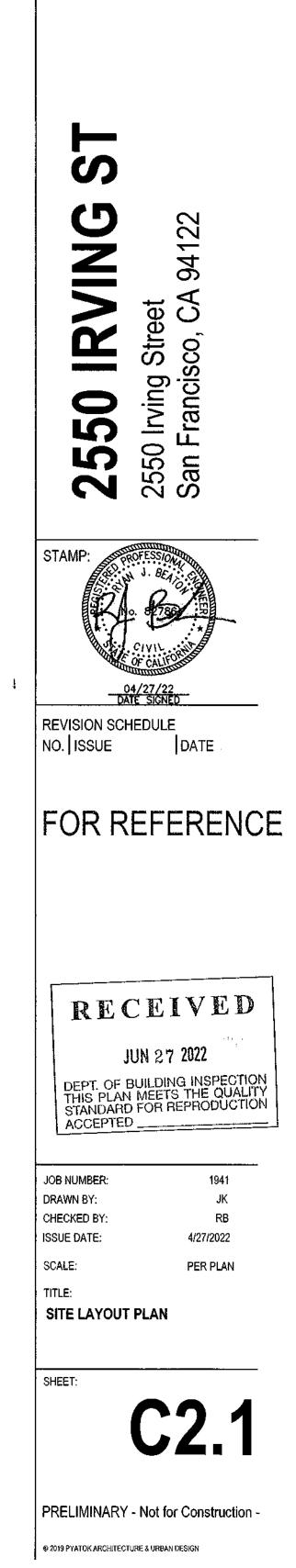
LEGEND	
	CAST IN PLACE CONCRETE DETECTABLE WARNINGS PER SF PUBLIC WORKS STANDARD PLAN RX-6.
44 4	CONCRETE PAVING - SEE DETAIL 1 - SHEET C5.1
	ASPHALT PAVING – SEE DETAIL 2 – SHEET C5.1
	PROPERTY LINE
	BUILDING FACE

PAVING CONSTRUCTION NOTES:

- (P01) CONCRETE CURB SEE SFDPW DETAIL 87,169, SHEET C5.1
- (PO2) CITY STANDARD CURB RAMP SEE SFDPW DETAIL 102,858, SHEET C5.1
- TREE WELL SEE LANDSCAPE PLANS.
- CITY STANDARD DRIVEWAY CURB CUT SEE SFDPW DETAIL 87,171, SHEET C5.1



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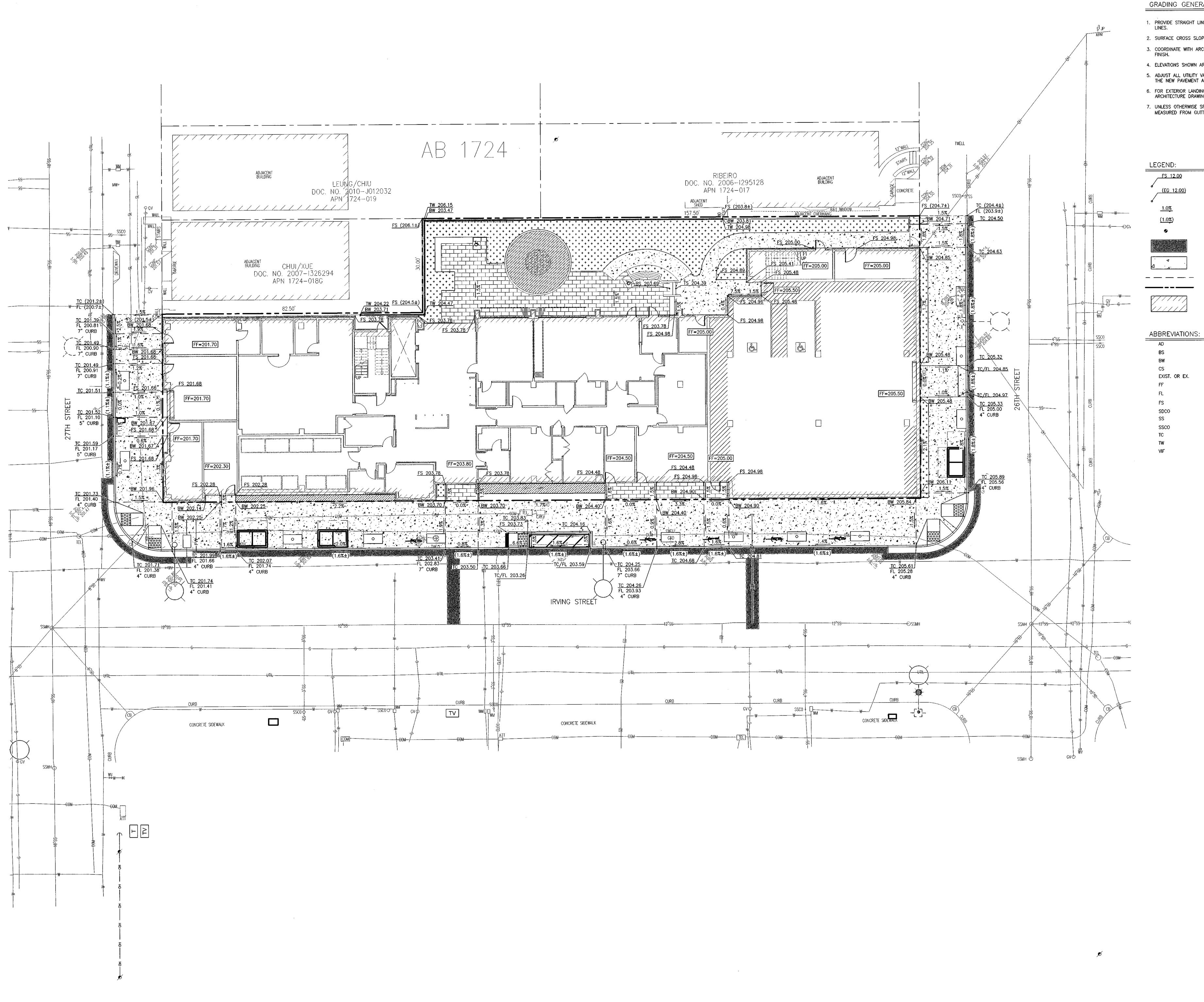
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GRADING GENERAL NOTES:

1. PROVIDE STRAIGHT LINE GRADING BETWEEN SPOT ELEVATIONS AND CONTOUR

2. SURFACE CROSS SLOPES OF SIDEWALKS SHALL NOT EXCEED 2%. 3. COORDINATE WITH ARCHITECT/LANDSCAPE ARCHITECT PLAN FOR SIDEWALK

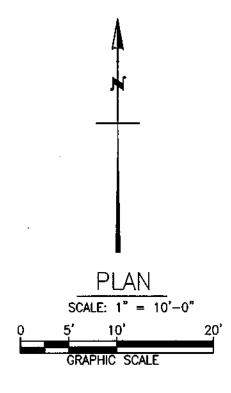
4. ELEVATIONS SHOWN ARE TO TOP OF PAVEMENT, UNLESS NOTED OTHERWISE. 5. ADJUST ALL UTILITY VAULTS AND LIDS WITHIN THE WORK AREA TO MATCH THE NEW PAVEMENT AND FINISHED GRADE ELEVATIONS AND SLOPES. 6. FOR EXTERIOR LANDINGS, SEE WATERPROOFING DRAWINGS, SEE ARCHITECTURE DRAWINGS.

7. UNLESS OTHERWISE SPECIFIED, THE NOMINAL SPECIFIED HEIGHT OF CURB MEASURED FROM GUTTER TO TOP OF CURB SHALL BE 6".

ND:	
12.00	PROPOSED ELEVATION
<u>G_12.00)</u>	EXISTING ELEVATION
%	PROPOSED SLOPE
<u>)%</u>)	EXISTING SLOPE
-	CONFORM TO EXISTING PAVEMENT GRADE
	2" ASPHALT OVER 6" CONCRETE PER CITY AND COUNTY STANDARDS
4 A:	4" CONCRETE SIDEWALK PER CITY AND COUNTY STANDARDS
	GRADE BREAK
	PROPERTY LINE
//// ///	BUILDING FACE

	AREA DRAIN
	BOTTOM OF STEP
	BACK OF WALK
	COMBINED SYSTEM
EX.	EXISTING
	FINISHED FLOOR
	FLOW LINE
	FINISHED SURFACE
	STORM DRAIN CLEANOUT
	SANITARY SEWER
	SANITARY SEWER CLEAN
	TOP OF CURB
	TOP OF WALL
	VERIFY IN FIELD

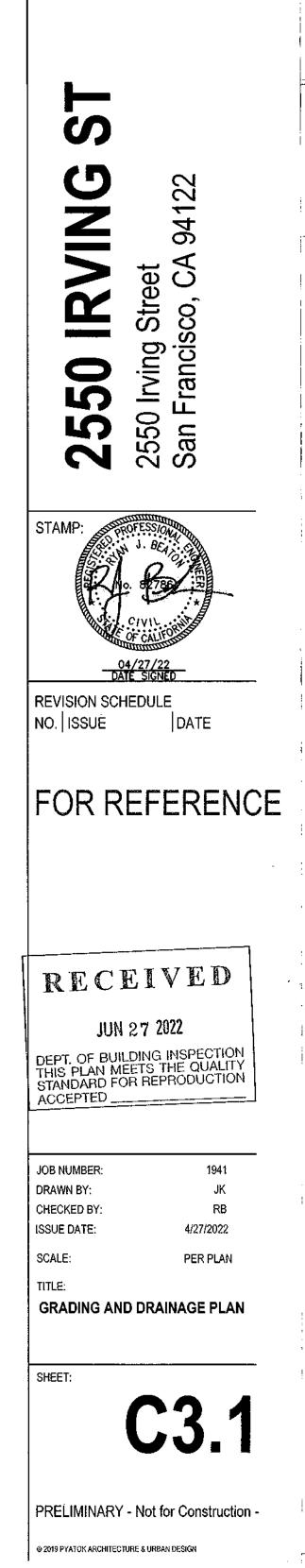


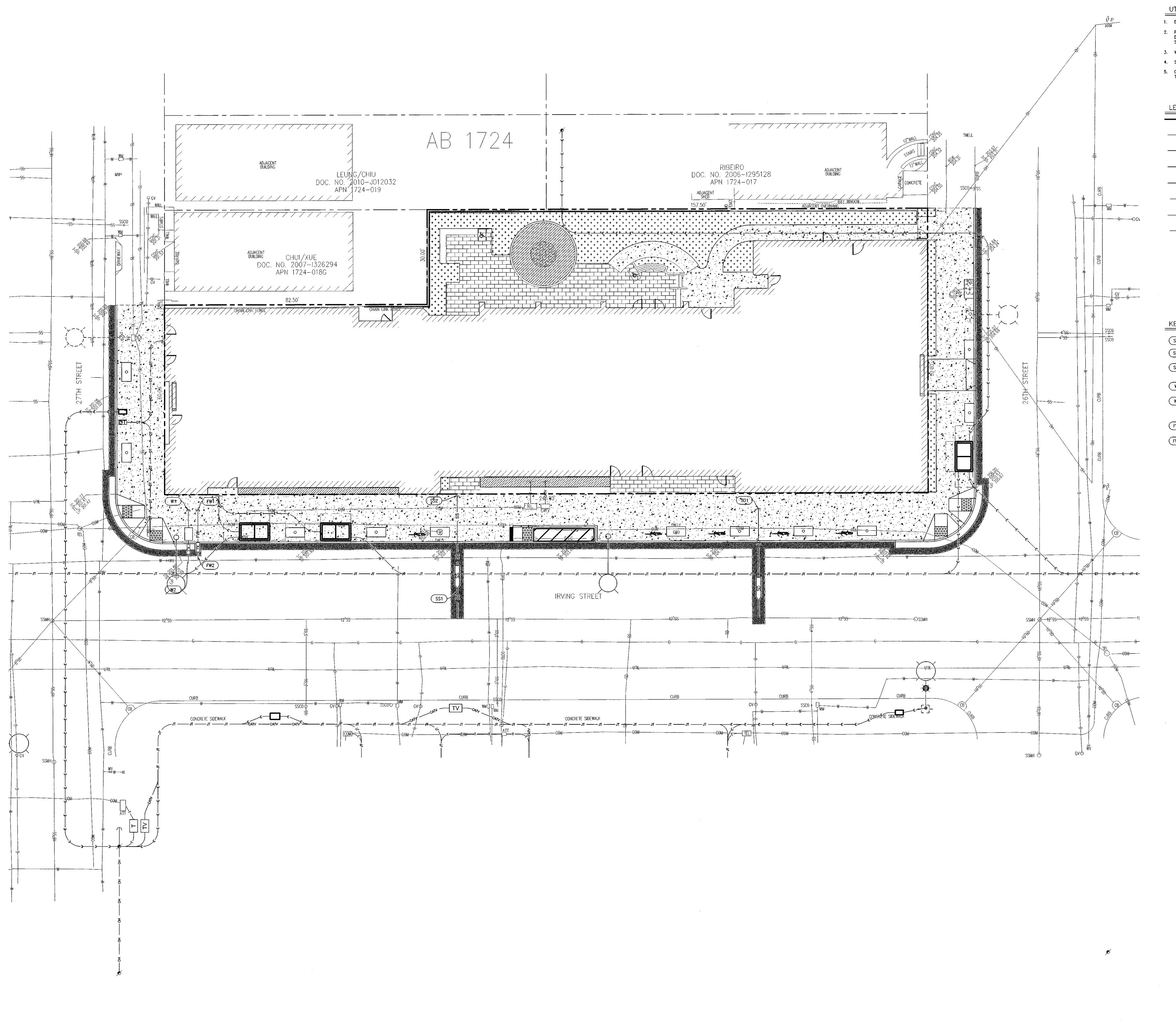




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UTILITY NOTES:

1. EXISTING UTILITIES SHOWN FOR INFORMATION ONLY.

PRIOR TO CONSTRUCTION, CONTRACTOR SHALL POTHOLE EXISTING SEWER CONNECTION(S) TO CONFIRM EXISTING INVERT ELEVATION IS AT, OR BELOW, THE PROPOSED CONNECTION ELEVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES

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3. WATER/SEWER CROSSINGS SHALL MAINTAIN 12" MINIMUM VERTICAL CLEARANCE.

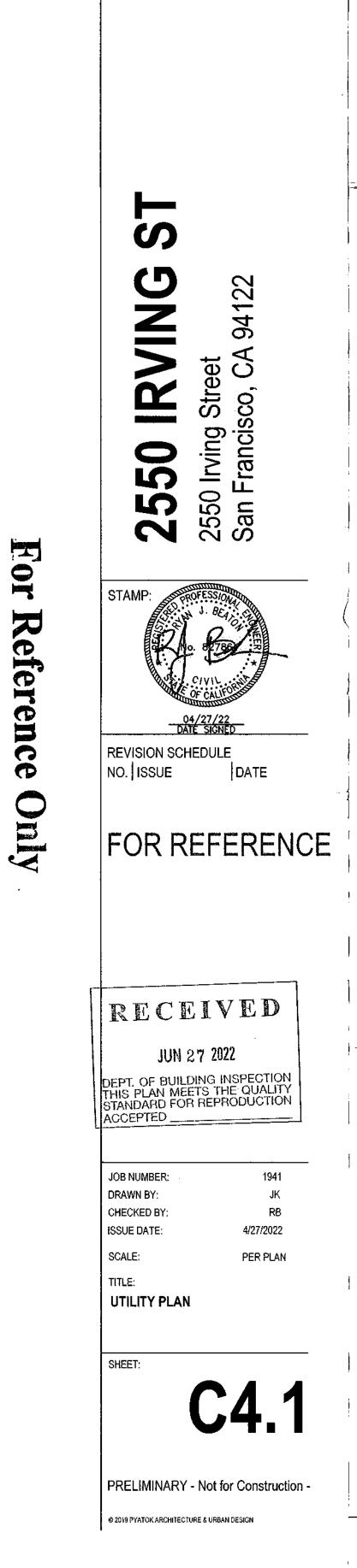
4. SEE DETAIL 3 - SHEET C5.1 FOR UTILITY TRENCHING DETAIL. CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH PATCHING PAVEMENT WHERE TRENCHES EXTEND INTO THE PUBLIC RIGHT-OF-WAY.

EGEND:	
	PROPERTY LINE
W	DIP DOMESTIC WATER LINE, SIZE PER PLAN
FW	DIP FIRE WATER LINE, SIZE PER PLAN
SS	VCP SANITARY SEWER LATERAL, SIZE PER PLAN
SD	VCP STORM DRAIN LATERAL, SIZE PER PLAN
E	ELECTRICAL LINE, SEE JOINT TRENCH PLANS
JT	JOINT TRENCH, SEE JOINT TRENCH PLANS
T	TELECOM LINE, SEE JOINT TRENCH PLANS
ዯ	FIRE DEPARTMENT CONNECTION
8	TYTON JOINT DUCTILE IRON TAPPING GATE VALVE PER PLAN CDD-LP-203A
WM	3" WATER METER - CDD TO INSTALL PER PLAN CDD-LP-203D
	AIR VENT AND TRAP

KEY NOTES:

SS1	INSTALL SANITARY SEWER LATERAL PER SFDPW STANDARD 87,196
(SS2)	STUB SANITARY SEWER LATERAL 5' FROM FACE OF BUILDING. SEE PLUMBING PLANS FOR CONNECTION TO BUILDING SERVICE.
(SD1)	STUB STORM DRAIN LATERAL 5' FROM FACE OF BUILDING. SEE PLUMBING PLANS FOR CONNECTION TO BUILDING SERVICE.
W1	STUB DOMESTIC WATER LINE 5' FROM FACE OF BUILDING. SEE PLUMBING PLANS FOR CONNECTION TO BUILDING SERVICE.
W 2	INSTALL PER CDD PLAN LP-203 A/B. CONTRACTOR TO COORDINATE WATER SERVICE INSTALLATION WITH CDD/SFDPW. CDD TO INSTALL WATER LATERAL, METER, AND STUB PAST METER.
FW1	STUB FIRE WATER LINE 5' FROM FACE OF BUILDING. SEE FIRE SPRINKLER PLANS FOR CONNECTION TO BUILDING SERVICE.

INSTALL PER CDD PLAN LP-203 A/B. CONTRACTOR TO COORDINATE (FW2) WATER SERVICE INSTALLATION WITH CDD/SFDPW. CDD TO INSTALL WATER LATERAL 2' PAST CURB FACE.



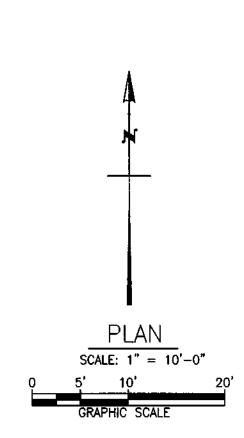
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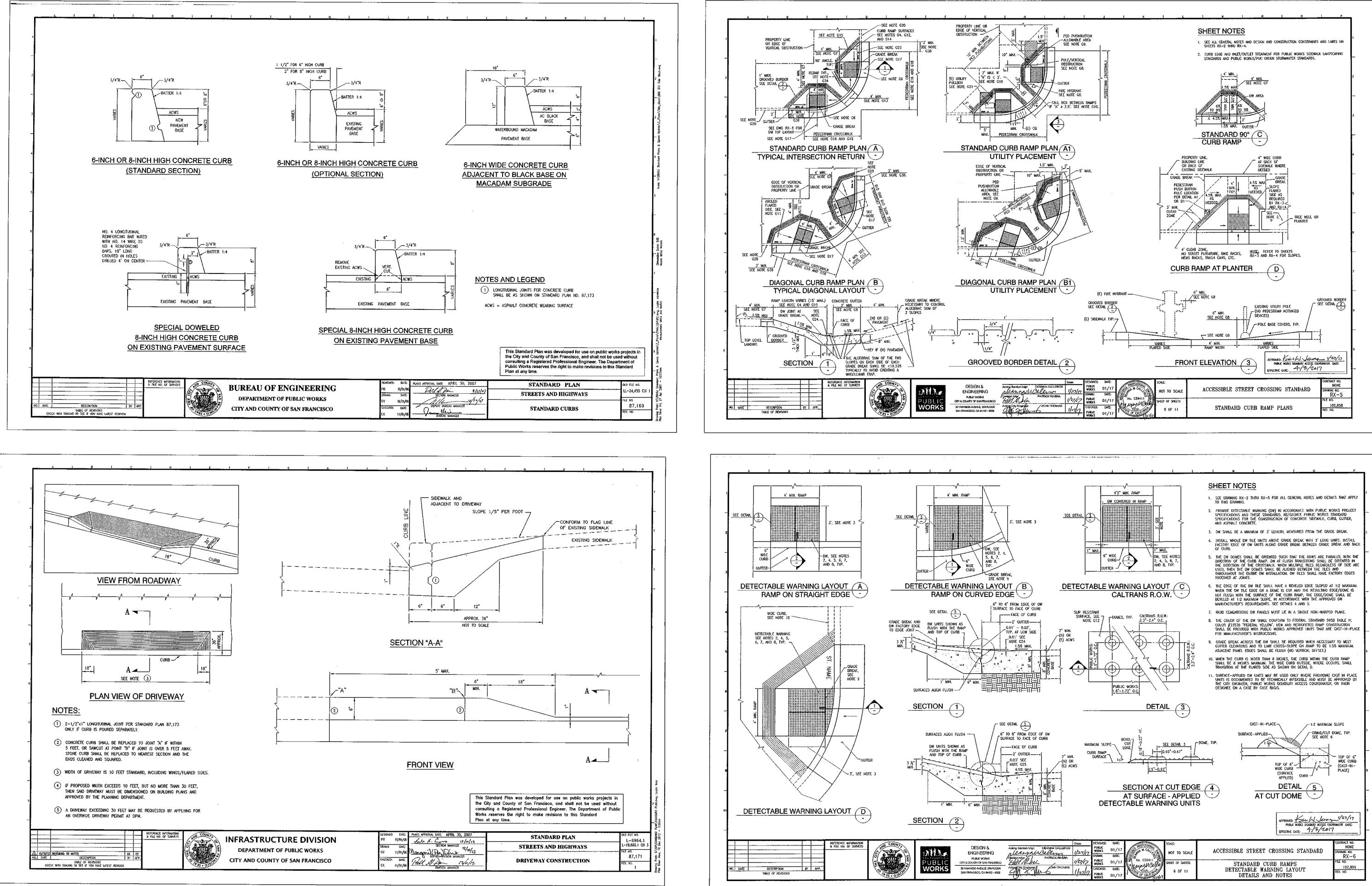
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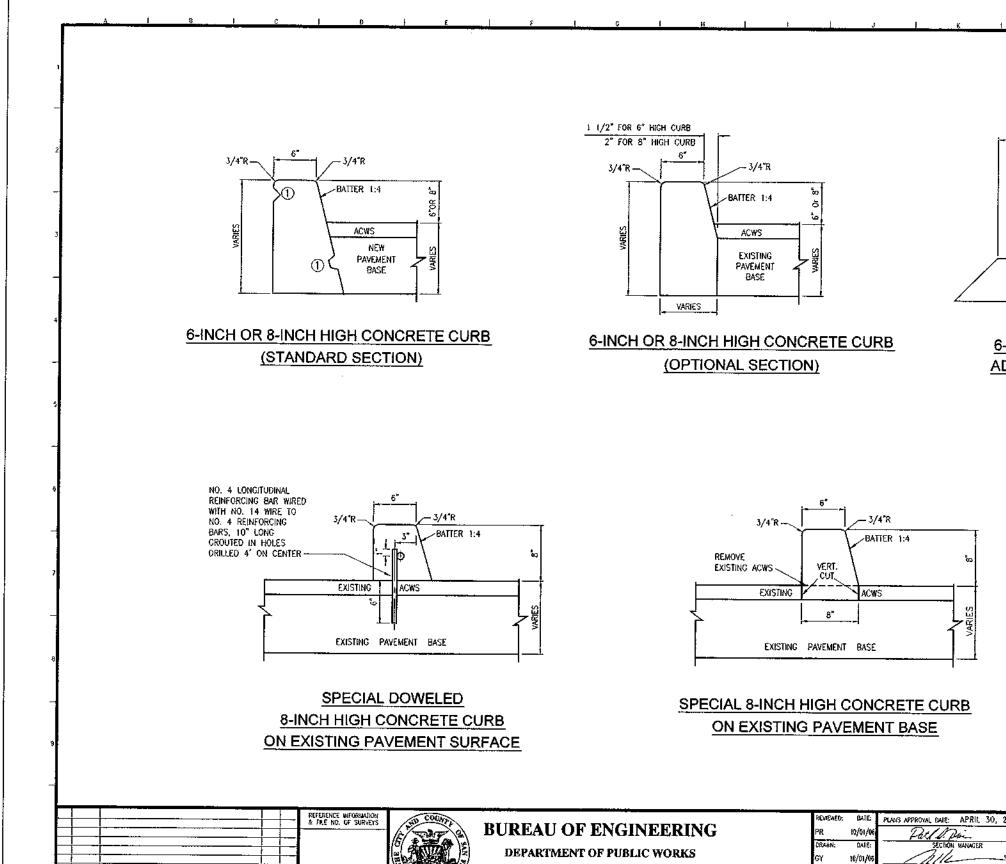
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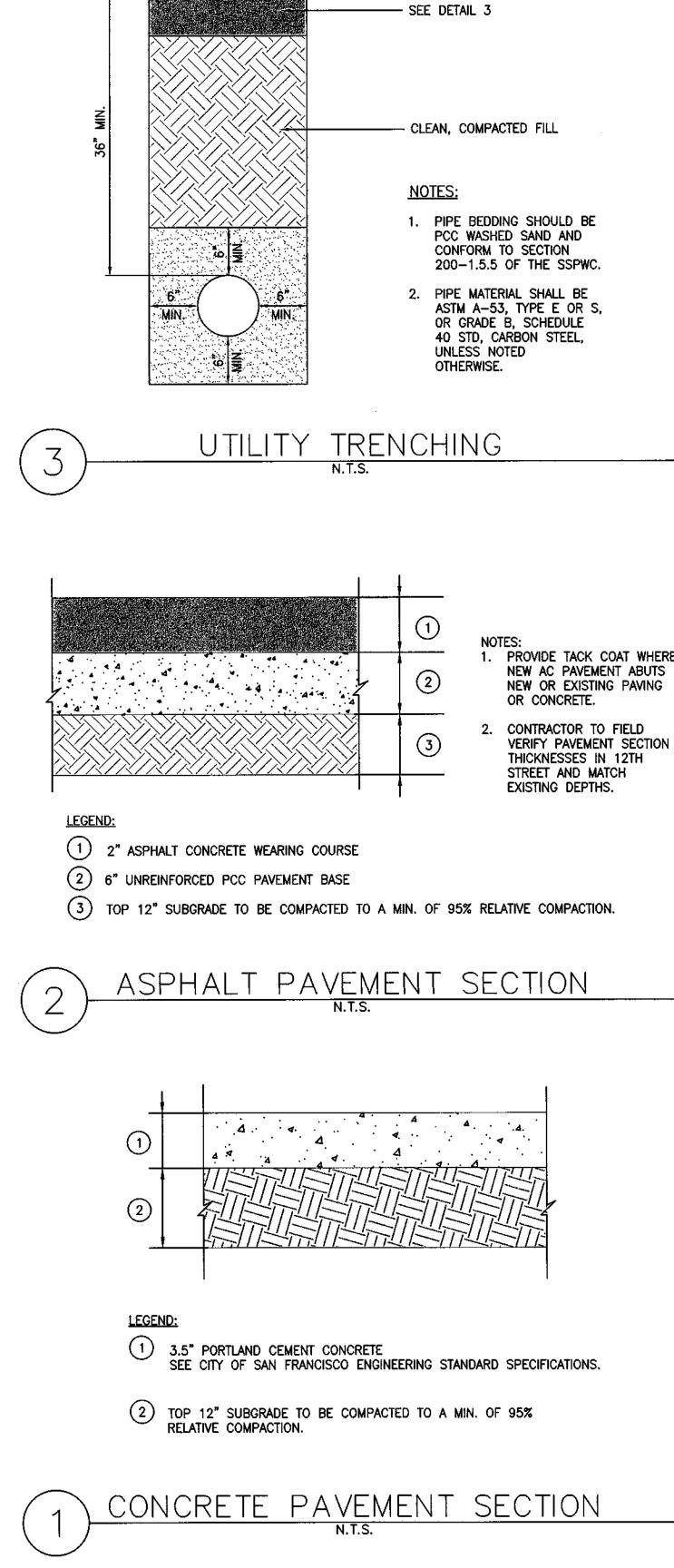
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1. PROVIDE TACK COAT WHERE NEW AC PAVEMENT ABUTS NEW OR EXISTING PAVING 2. CONTRACTOR TO FIELD

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REVISION SCHEDULE

RECEIVED

JUN 27 2022

DEPT. OF BUILDING INSPECTION THIS PLAN MEETS THE QUALITY STANDARD FOR REPRODUCTION

ACCEPTED _____

4/27/2022

PER PLAN

JOB NUMBER:

DRAWN BY:

CHECKED BY:

ISSUE DATE:

DETAILS

SCALE:

TITLE:

NO. ISSUE

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FOR REFERENCE

PYATO 1611 TELEGRAPH AVE. SUITE 200 OAKLAND, CA 94612 T. 510.465.7010 | F. 510.465.8575

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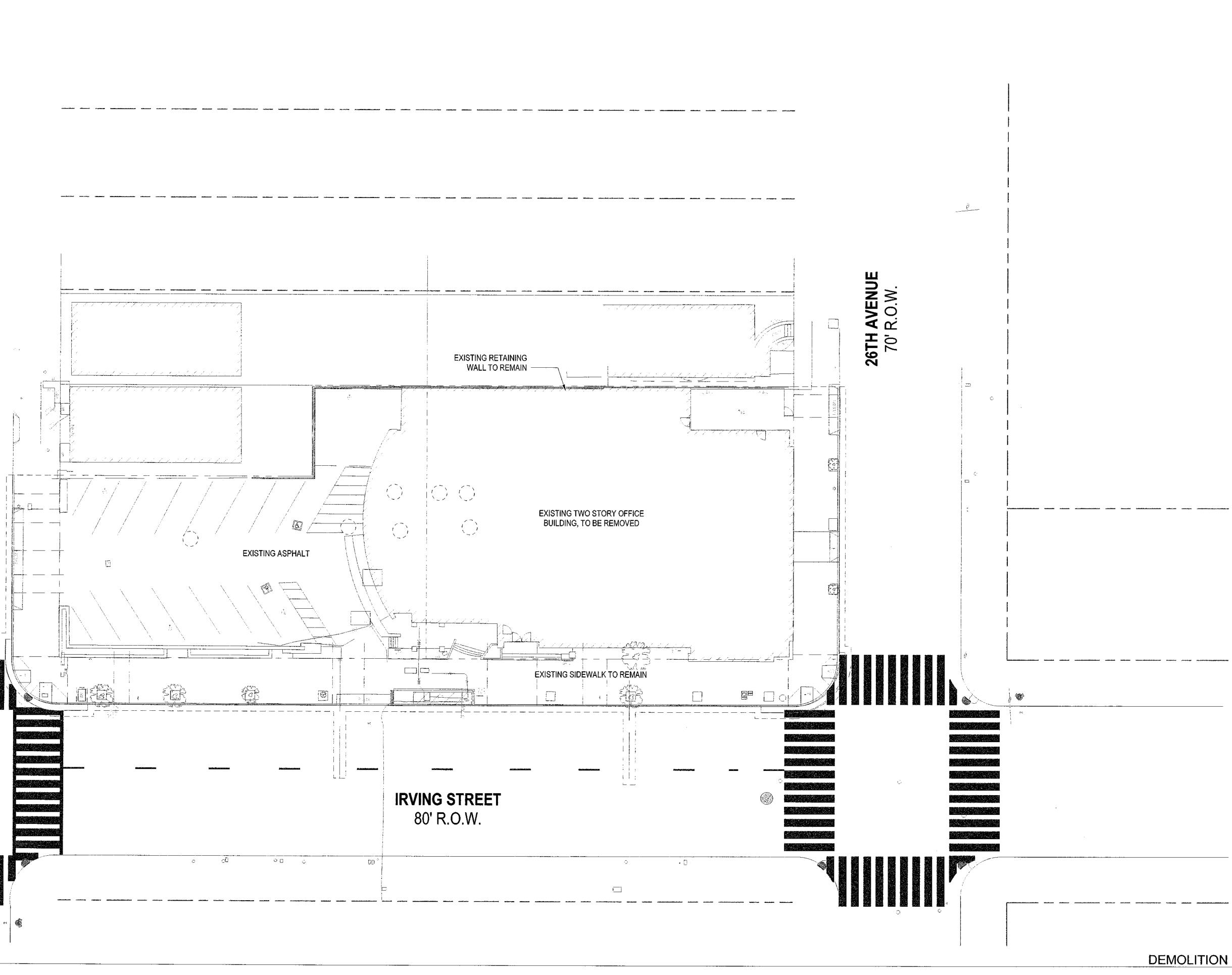
SHEET: **C5**.

PRELIMINARY - Not for Construction -© 2019 PYATOK ARCHITECTURE & URBAN DESIGN

14 A.S. بيني 114

VENUE Ăα **27TH** 70'

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 REVISION SCHEDULE

 NO.
 ISSUE

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 DEMO PERMIT

 06/20/2022

 RECEIVED JUN 27 2022 DEPT. OF BUILDING INSPECTION THIS PLAN MEETS THE QUALITY STANDARD FOR REPRODUCTION ACCEPTED JOB NUMBER: 1941 DRAWN BY: CA, JB CHECKED BY: AS, SP, KSS ISSUE DATE: 06/20/2022 SCALE: 1/16" = 1'-0" TITLE: SITE PLAN - DEMOLITION N \square TRUE NORTH PRELIMINARY - Not for Construction -© 2021 PYATOK ARCHITECTURE & URBAN DESIGN

DEMOLITION SITE PLAN 1/16" = 1'-0"

PUBLIC COMMENT

Mayor's Office of Housing and Community Development City and County of San Francisco



London N. Breed Mayor

> Eric D. Shaw Director

February 1, 2023

San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 via email to: <u>boardofappeals@sfgov.org</u>

Dear President Swig, Vice President Lopez, and Commissioners,

We write regarding Appeal Number 22-092, which seeks to overturn the issuance of Demolition Permit Number 202206277192 for the project located at 2550 Irving. The developer has been closely working with the California Department of Toxic Substances Control (DTSC) to implement the DTSC-approved Response Plan at the site and has complied with all DTSC and San Francisco Department of Public Health (SF DPH) requirements. Demolition of the existing building and infrastructure work is on the critical path to bring this project to construction start. This project is in direct alignment with the affordable housing goals of the City of San Francisco. Our Departments support the project and respectfully request that you reject the appeal.

The Tenderloin Neighborhood Development Corporation (TNDC) was selected through a competitive process to develop this property. MOHCD has partnered with TNDC on numerous affordable housing developments. They are a well-established and experienced developer, managing more than 3,600 affordable units throughout the city, with another 250 units under construction and over 1,000 units in predevelopment, totaling around 5,000 units. We trust TNDC's expertise and diligence in working with communities, meeting all regulatory requirements, and producing outstanding housing opportunities.

2550 Irving is an important step in implementing the City's housing goals. As approved by the Board of Supervisors and signed by the Mayor on January 31, 2023, the General Plan's Housing Element is a housing policy roadmap for the remainder of this decade. The Housing Element centers on racial and social equity and includes policies and programs that express a collective vision and values for the future of housing in San Francisco. The Housing Element identifies our housing needs and how we will work to address them. It defines priorities for decision making and resource allocation for housing programs, development, and services.

Goal 3 of the Element is to "Foster racially and socially inclusive neighborhoods though equitable distribution of investment and growth." Supervisorial District 4 is a high-resource neighborhood, one whose characteristics have been shown by research to support positive economic, educational,

and health outcomes for low-income families— particularly long-term outcomes for children. This goal requires the City to open wealthy and well-resourced neighborhoods such as the Sunset to all housing such as that proposed at 2550 Irving Street.

The severe shortage of affordable housing in San Francisco, including in Supervisorial District 4, has been widely documented. And the need is significant: in 2020 alone, 4,500 District 4 households applied for affordable housing via the City's DAHLIA housing portal.

The project at 2550 Irving Street exemplifies the City's efforts to invest in the development of affordable housing in high resource neighborhoods. There is tremendous need for affordable family housing in the Sunset; a scant 26 affordable homes were built or rehabilitated in the District in the past decade. The project's location on a commercial corridor, situated near schools, jobs, transit, Golden Gate Park, stores, etc. will contribute to the vibrancy of the existing neighborhood.

We have attached a Declaration of Eric Shaw in support of Defendant TNDC's Opposition to Plaintiff Mid-Sunset Neighborhood Association's Inc.'s Motion for Preliminary Injunction which documents the extensive community outreach conducted and the need for affordable housing in District 4. The affordable housing project at 2550 Irving exemplifies the type of affordable housing needed to meet the City's ambitious goals as laid out in the Housing Element. Your decision to deny the appeal and uphold the project will enable the construction of well-designed, thoroughly vetted, critically important affordable homes for future generations of San Franciscans.

Sincerely,

Rich Hillis Director San Francisco Planning Department

Eric D. Shaw Director Mayor's Office of Housing and Community Development

Attachment: Superior Court of the State of California County of San Francisco Case No. CGC-21-596994 Declaration of Eric Shaw in Support of Defendant Tenderloin Neighborhood Development Corporation's Opposition to Plaintiff Mid-Sunset Neighborhood Association Inc.'s Motion for Preliminary Injunction filed December 7, 2021

Copy: Maurilio Leon, Executive Director, Tenderloin Neighborhood Development Corporation Supervisor Joel Engardio, District 4

1 2 3 4 5 6	235 Montgomery Street, 17th Floor		
7	CORPORATION		
8			
9			
10	SUPERIOR COURT OF THE STATE OF CALIFORNIA		
11	COUNTY OF SAN FRANCISCO		
12			
13	MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC.,	Case No. CGC-2	21-596994
14	Plaintiff,	DECLARATIO SUPPORT OF	N OF ERIC SHAW IN DEFENDANT
15	vs.	TENDERLOIN	NEIGHBORHOOD NT CORPORATION'S
16	TENDERLOIN NEIGHBORHOOD		TO PLAINTIFF MID-
17	DEVELOPMENT CORPORATION, and DOES 1 through 50, inclusive,	ASSOCIATION	N INC.'S MOTION FOR Y INJUNCTION
- 18	Defendants.	Hearing Date:	January 7, 2022
19		Time: Dept.:	9:30 am 501
20		Dopt	501
21		Action Filed:	December 7, 2021
22			
23	I, ERIC D. SHAW, declare as follows:		
24	1. I am over 18 years of age and a resident of the State of California. I have personal		
25	knowledge of the matters set forth herein and, if called upon to testify to these matters, I could and		
26	would competently do so.		
27	2. Since April 27, 2020, I have been the Director of the San Francisco Mayor's Office		
28 Fatcha Braun + Martel 61.7	of Housing and Community Development at the City and County of San Francisco ("MOHCD"). 41265\t4520230.1 DECLARATION OF ERIC SHAW ISO DEFENDANT'S OPPOSITION TO PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION – Case No. CGC-21-596994		
235 Minu(gumery Street, 17* First Sim Francesco, California 94104 (415) 954-4400			

As Director I am responsible for developing, coordinating and implementing the City's affordable
 housing strategies and programs and for delivering vital services to support needy San
 Franciscans.

3. The mission of MOHCD is to coordinate the City and County of San Francisco's
("City") housing policy, to provide financing for the development, rehabilitation, and purchase of
affordable housing in San Francisco, and to strengthen the social, physical, and economic
infrastructure of San Francisco's low-income neighborhoods and communities in need.

4. The City is in the midst of a housing affordability crisis unprecedented in our
history. Increases in housing prices and displacement pressures have been a long-term trend,
driven by policy decisions first established decades ago and amplified by regional and national
economic trends. Over the last eight (8) years, the housing crisis has intensified as the San
Francisco Bay Area region's high-wage employment base has grown while local and regional
housing production has not kept pace, and these trends have been exacerbated by COVID-19.

14 5. The severe shortage of affordable housing in the City, including Supervisorial District 4 of the City ("District 4"), has been widely documented. Rents in the City have increased 15 16 up to 40% in District 4, and the median house sales price in 2019 was \$1,500,000, which is a 17 105% increase since 2012. A report in 2013 by the Board of Supervisors of the City and County of San Francisco ("Board of Supervisors") estimated, at the time, that approximately 40% of District 18 19 4 residents were "rent burdened," which means such residents were paying more than 50% of their income for housing costs such as rent. In 2020, 4,500 District 4 households applied for affordable 20 21 housing via the City's DAHLIA housing portal. Of these, 35 households found affordable 22 housing, all outside of District 4.

6. The City Planning Department is required by City Ordinance to submit the San
Francisco Housing Balance Report (the "Report") semi-annually to the Planning Commission.
One of the stated purposes of the Report is to ensure that data on meeting affordable housing
targets within neighborhoods informs the approval process for new housing development. The
Report enables the City to monitor the balance between new market rate housing and new
affordable housing production. In the decade of 2011-2020, District 4 experienced a net loss of
<u>11265\14520230.1</u>

390 affordable and rent-protected housing units, according to the April 2021 Report. According to
 the April 2021 Report, District 4 is experiencing the greatest impact of housing loss and lack of
 affordable housing, with a score of -73.9%. This means that the net loss of affordable and rent protected housing units was the greatest in District 4 of all San Francisco's 11 supervisorial
 districts when represented as a percentage of the total number of net new housing units in the
 District.

7 7. From April 2020 to January 2021, the City canvassed residents' needs and
8 documented the findings in the Sunset Forward Needs Assessment, which will serve as the
9 foundation for future community planning efforts in District 4. Within District 4, the Sunset
10 Forward Needs Assessment identified housing affordability as the #1 challenge facing District 4.

Per the Point in Time Count Survey conducted on January 24, 2019 (the "Survey"), 11 8. there were 8,035 people experiencing homelessness in the City, which is a 17% increase over the 12 Point-in-Time Count Survey conducted in 2017. A six-year trend of comparable Point-in-Time 13 Count survey data identified a 15% increase in the number of persons experiencing homelessness 14 15 in the City between 2013 and 2019. The total number of unsheltered persons counted was 5,180. Of the 2,855 individuals included in the shelter count, 84% (2,412 people) were in emergency 16 17 shelter programs while 16% (443 persons) were residing in transitional housing and safe haven programs on the night of the count. Persons in families with children, including minor children, 18 represented eight percent (8%) of the total population counted in the Survey, while 92% were 19 individuals without children. In total, 5% of those counted in the Survey were under the age of 18, 2021 14% were between the ages of 18-24, and 81% were over the age of 25.

9. When asked about their racial identity during the Survey, greater differences
between those experiencing homelessness and the general population emerged. A much higher
proportion of survey respondents in the Survey identified as Black or African-American (37%
compared to 6% in general population), and a lower percentage identified as Asian (5% compared
to 34% in general population). The majority of Survey respondents identified as either Black or
African American (37%), White (29%), or Multi-racial (22%).

Facella Braun + Mariel (18 235 Manigensery Street, 17^a Fleu San Francisco, Caldioran 943(14 (415) 954-6401)

28

10. Many United States military veterans have slipped into poverty and are at risk of 3 41265/14520230.1 homelessness when either affordable housing or employment is not available. According to the
 California Research Bureau, the City has the sixth highest number of homeless veterans in
 California. Per the Survey, it is estimated that in the City at that time there were 600 chronically
 homeless veterans in the City, amounting to 9% of the chronically homeless. Of the 600
 chronically homeless veterans, most were members of minority groups: 33% were Black, 23%
 multi-racial, 20% Hispanic or Latinx, 6% Asian, and 2% Hawaiian or Pacific Islander.

7 11. On September 14, 2020, Tenderloin Neighborhood Development Corporation ("TNDC") was awarded funding to acquire and develop the property located at 2550 Irving in the 8 City ("2550 Irving") through MOHCD's Notice of Funding Availability - Acquisition and 9 Predevelopment Financing for Affordable Multifamily Rental Housing (the "NOFA"), which is 10 funded by the City's 2019 General Obligation Bond ("Proposition A"). Proposition A, approved 11 by San Francisco voters in 2019, contains a mandate to create new affordable, low-income units 12 and to serve vulnerable populations in districts that have been underserved by new affordable 13 housing production. 14

15 12. In order to secure full funding for the development of affordable housing through MOHCD, affordable housing sponsors must complete rigorous, culturally competent community 16 engagement throughout the development process. Pursuant to the NOFA, funding recipients are 17 required to implement a community engagement plan that establishes and builds relationships with 18 a full range of surrounding neighbors and the larger community, engages all interested community 19 20 members (including monolingual non-English speaking members of the community), complies 21 with the City's Language Access Ordinance, and includes racial equity strategies for engaging 22 communities that have traditionally lacked affordable housing opportunities in the City. No particular neighborhood member, community group, business, or resident is favored over another 23 24 in this process.

13. TNDC has spent countless hours engaging with a full range of community
 members, including both supporters and opposers, and has exceeded MOHCD's standards for
 community engagement. In 2021, TNDC met with Sunset neighbors, merchants, community based nonprofits, community leaders, and advocates. Specifically, TNDC held three large

4

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community meetings (in January, April, and September) in order to learn about the priorities and 1 needs of the community and develop guiding principles for the development. TNDC has also held 2 consistent, weekly office hours via phone or Zoom meeting for any person to attend and engage 3 with the proposed project and the project team. TNDC has held one on one meetings with 4 individuals and organizations representing neighbors and community serving organizations, 5 seeking to maximize input into the development process. TNDC created a website for the project, 6 2550lrving.com, which includes recorded community meetings and community meeting 7 presentations, updates on project progress, studies related to the project, applications TNDC has submitted to the City regarding financing and project entitlements, and multiple ways to contact 8 TNDC about the project. This website and all written materials have been translated into Chinese, 9 to maximize the ability of neighboring residents to comprehend. Real-time, oral translation has 10 also been provided at community meetings. Through its extensive outreach efforts and by creating 11 many different kinds of opportunities for engagement, TNDC has proactively sought to include a 12 diverse range of residents and stakeholders in its community engagement efforts, seeking to ensure 13 the voices of community members who have the least access to traditional public processes are heard, and seeking to ensure that the voices of those who are most able to easily engage in the 14 community process - those with access to financial resources and legal counsel, for example - do 15 not drown out those that are least comfortable in formal settings.

16

I have met with the plaintiffs, at their request, on two occasions to hear input and
 articulate the City's goals on the project. My project management team has also shared City
 reports and analysis with the plaintiffs.

19 15. The development of new housing, especially 100% affordable housing, is key to
 20 the City's COVID-19 recovery strategy. Affordable housing at 2550 Irving will prevent families
 21 from being displaced by the loss of rent-controlled apartments and by high rental and ownership
 22 costs by increasing the amount of family-friendly affordable homes in District 4. Moreover, the
 23 designation of 25% of units for families experiencing homelessness will help alleviate
 23 homelessness across the City.

Because the City has finite financial resources for affordable housing that must be
 utilized across several different housing priorities and projects, all affordable housing
 developments that are financially supported by MOHCD must also leverage other public and
 private funds to have sufficient funding for all development and construction costs. The primary
 sources of funding for affordable housing are tax exempt bonds ("Bonds") and low-income
 DECLARATION OF ERIC SHAW ISO DEFENDANT'S OPPOSITION TO PLADITIES'S MOTION FOR

Faralla Braun + Martel LLP 235 Montgomery Street, 17^a Floor San Françasev, California 94104 (415) 954-4409 housing tax credits ("Credits"), which must be utilized together. In addition, affordable housing
 projects serving extremely low-income households, such as formerly homeless and veterans, are
 eligible for additional funding from the California Department of Housing and Community
 Development ("HCD").

5 17. The California Debt Limit Allocation Committee ("CDLAC") and the California 6 Tax Credit Allocation Committee ("TCAC") hold competitions several times each year to allocate 7 Bonds and Credits, respectively. Beginning in 2020, the funding need of applicants to CDLAC 8 and TCAC outnumbered the available amount of Bonds and Credits that can be allocated in a given year (also known as "volume cap"), which has led to a severe decrease in the number of 9 10 affordable housing projects funded in the City. In 2021, the regulations that govern the allocation 11 of Credits and Bonds were amended in several ways that created a disadvantage for affordable housing projects located in the City because of the high cost to develop housing. As a result, while 12 eight San Francisco new construction projects applied for Bonds and Credits in 2020, not a single 13 project was awarded an allocation of volume cap. However, affordable housing projects that are 14 15 located in locations that are deemed "high resource" by TCAC and CDLAC can receive an extra 16 point in the competition. The promotion of high resource neighborhoods is intended to increase 17 BIPOC (Black, Indigenous, and People of Color) access to resources, such as quality public 18 schools and transportation.

18. District 4 is deemed a high resource neighborhood according to the State's
 definition, which identifies indicators and uses evidence from peer-reviewed research to document
 that the indicator is linked to improved life outcomes for low-income families, particularly
 children. Indicators considered by the State include poverty, adult education, employment, job
 proximity, median home value, proximity to environmental hazards, educational proficiency (math
 and reading proficiency, high school graduation rates) as well as poverty and racial segregation.
 These indicators are assessed by census tract.

26 19. In order for an affordable housing development to qualify for funding from TCAC,
27 CDLAC, and loans from HCD, an affordable housing development project must meet an extensive
28 set of threshold requirements and compete for Bonds, Credits, and loans from HCD. For example,
41265/14520230.1

1 an affordable housing project must demonstrate that it is "ready" to proceed, a principle that the 2 state agencies have put in place so as not to tie up public resources for long periods of time. One such "readiness" requirement is that an affordable housing project must demonstrate that it may be 3 built as proposed/is entitled by the local jurisdiction's existing zoning laws. Funds from all three 4 5 agencies are competitive, and HCD offers access to its loans only once per year. Therefore, if an affordable housing project is delayed for any reason, such project would not be eligible to apply 6 7 for funds again for an entire year. The next opportunity to apply for HCD funding is in the spring 8 of 2022, with the exact date of applications due not yet published. A delay at this particular stage 9 in a project would have the domino effect of stopping the development in its tracks.

20. TNDC submitted its project application for the development of 2550 Irving to the 10 11 City's Planning Department on December 3, 2021 for affordable housing streamlined approval 12 pursuant to California Senate Bill 35 ("SB-35"). SB-35 requires local entities to streamline the 13 approval of certain housing projects by providing a 90-day ministerial approval process if certain eligibility criteria are met, including a minimum of 50% of the units as affordable housing. 14 15 Because the City is not meeting its Regional Housing Need Allocation goal for affordable housing, only projects providing on-site affordable housing are currently eligible for SB-35 in San 16 17 Francisco. The Planning Department anticipates approving TNDC's project at 2550 Irving within 18 its required SB-35 timeline, enabling the project to apply for HCD financing in Spring 2022. 19 However, if TNDC's project at 2550 Irving cannot proceed with approvals by the City's Planning 20 Department under SB-35 and misses HCD's deadline to apply for funding, the project will have to wait until Spring 2023 to apply. This will delay an application for Bonds and Credits until the end 21 of 2023, which means construction cannot commence until 2024 (at the earliest and if the project 22 23 remains competitive) and affordable housing units will not be available until 2027 - a 1-2 year 24 delay in providing crucial affordable housing in a high resource area.

25 21. Every residential unit affordable to San Francisco residents who have been
26 excluded from the City's notoriously tight housing market matters. Production of new affordable
27 housing units at 2550 Irving is critical to eliminating the crushing burden that lack of affordable
28 housing places on both District 4 and the entire City. In order for our City to thrive, TNDC's
27 41265/14520230.1

1	project at 2550 Irving will achieve the City's goal of creating affordable housing in District 4 that
2	is losing affordable, rent-controlled units to vacancy decontrol, has high imbalance of affordable
3	housing, and is cost prohibitive to lower income households.

4

I hereby declare under penalty of perjury under the laws of the State of California that this -5 declaration is true and correct, and that it was executed on December 22, 2021, in 6

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Fartila Braas + Mariet LLP 235 Minigamery Street, 17* Flear San Francisco, Califernia 94104 (415) 954-4400		8 SO DEFENDANT'S OPPOSITION TO PL RY INJUNCTION – Case No. CGC-21-596	

Member, Board of Supervisors District 4



City and County of San Francisco

JOEL P. ENGARDIO

February 2, 2023

Statement in Support of Appeal DBI Permit Application No. 202206277192 Issued: November 18, 2022 Property Address: 2550 Irving Street, San Francisco CA 94122

To the San Francisco Board of Appeals:

I support the demolition of 2550 Irving Street and construction of 100% affordable housing at this site. This project will provide much needed housing along the Irving Street commercial corridor for formerly homeless veterans, at-risk families, and vulnerable Sunset District community members.

However, I support the Mid-Sunset Neighborhood Association, Inc. (MSNA)'s appeal of Department of Building Inspection (DBI) demolition permit no. 202206277192 for 2550 Irving Street.

Soil beneath the 2500 block of Irving Street is contaminated from previous dry cleaning businesses that operated from the 1920s into the 1950s. The primary subsurface contaminant, based on soil vapor and indoor air sampling, is identified as tetrachloroethylene, also known as perchloroethylene (PCE), a Volatile Organic Compound (VOC) commonly used in dry cleaning operations. As a legacy contaminant, PCE can migrate long distances from the source in its vapor phase. The U.S. Environmental Protection Agency classifies PCE as a "likely carcinogen."

Environmental testing conducted by a patchwork of public and private entities at multiple locations adjacent to and within the 2550 Irving Street project site suggests soil contamination possibly coming from multiple sources. In 2019 and 2020, consultants repeatedly found samples of PCE contamination above applicable screening levels within the Police Credit Union building at 2550 Irving Street.

In October 2021, the owners and former operators for the Albrite Cleaners site located at 2511 Irving Street received an Imminent & Substantial Endangerment ("I&SE") Order by California's Department of Toxic Substances Control. In fall 2021 and March 2022, indoor air sampling conducted at residences within the immediate vicinity of the project site also revealed PCE levels higher than the health-based residential screening levels. Page 2 - Letter of Support from Supervisor Engardio

In June 2022, the 2550 Irving Street project sponsor applied for a demolition permit, which was issued in November 2022. Their application failed to mention recent PCE contamination findings or I&SE Order.

Based on testing results to date, indoor air and soil vapor sampling conducted at adjacent homes, proximity and relationship with contaminated sites at 2550 Irving Street, there is an imminent and substantial endangerment to the public health associated with the PCE soil vapor impacts, which are likely to be affected by demolition of the 2550 Irving Street property.

The Board of Appeals should consider recently collected data, the I&SE Order for the 2511 Irving Street property, and population risks posed by the demolition of the Police Credit Union at 2550 Irving Street. Demolition should not proceed until there is a revised Site Management Plan, a completed contamination study and investigation, and a finalized plan and timeline to remediate subsurface gaseous PCE at the project site.

Please grant MSNA's appeal of DBI demolition permit No. 202206277192 for 2550 Irving Street.

Thank you for your consideration.

Sincerely:

Joél P. Engardio Supervisor, District 4 San Francisco Board of Supervisors

Mejia, Xiomara (BOA)

From: Sent: To: Subject: BoardofAppeals (PAB) Friday, January 27, 2023 10:30 AM Mejia, Xiomara (BOA) FW: 2550 Irving St. - Please ALLOW Demolition as planned

JAN 272023 APPEALS 22-092

HD 28/23

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Ben Golombek <bengolombek@gmail.com>
Sent: Thursday, January 26, 2023 8:16 PM
To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>
Subject: 2550 Irving St. - Please ALLOW Demolition as planned

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please allow the demolition at 2550 Irving St. to continue as planned. We need additional housing urgently. Any delays to demolition will only exacerbate the housing crisis in our city. We live only 4 blocks away on 21st Ave. and we are urging you to allow demolition to continue.

Thanks,

Ben

Ben Golombek (310) 621-6910

HD 3/8/93

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Friday, January 27, 2023 1:56 PM Adam Michels Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Demolition Permit at 2550 Irving Street JAN 27 2023

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Adam Michels <adamgmichels@yahoo.com> Sent: Thursday, January 26, 2023 7:05 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Demolition Permit at 2550 Irving Street

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the San Francisco Board of Appeals:

I live one house away from the demolition site at 2550 Irving Street. California's Department of Toxic Substances and Control has tested the air in my house twice (a third time is scheduled in February), and each time it has found air contaminated with PCE gas at four times DTSC's health-based screening level. DTSC has determined that one of the places the gas is entering my home is through the downstairs shower drain. PCE is a known carcinogen, and the longer my family breathes this gas, the more likely we are to suffer from its effects, which could include cancer. We have been exposed to these vapors since we moved into our home in the year 2000.

This poisonous gas is a big enough threat to human health that the developer at 2550 Irving (The Tenderloin Neighborhood Development Corporation) has proposed to put a vapor barrier under the new building it is constructing. This barrier will do nothing to protect the neighboring residents (such as myself) from the plume of gas that is spreading underneath neighboring homes. It will only protect the residents of the new building. Also, this vapor barrier would not last forever; it is only a temporary solution; these barriers typically start deteriorating after twenty years. Other agencies (such as the California Water Board) have recognized that such barriers should no longer be seen as an adequate solution to stop PCE vapor.

Environmental consultant and CA Professional Geologist Don Moore has mapped the concentrations, migration and extent of these gasses based on available data and has confirmed with remediation experts that

the gas plumes could be removed effectively using soil vapor extraction, regardless of where they originally came from; the original sources (dry cleaners) are long since gone but the gasses remain. Mr. Moore has the technical expertise and regulatory perspective to see that DTSC is not following their own technical guidance and stated mission to protect human health by conducting cleanup – and that TNDC is taking advantage of the DTSC missteps and staffing issues. As an expert in VOC / PCE site management and part of our greater Sunset District community his conscience has driven him to try to protect the health and value of this neighborhood – free of charge and with no conflicts – because he sees that DTSC is failing.

It is my sincere hope that you will also see this failure to protect neighbors as an opportunity to inject yourself into this process. This is not simply an administrative error that was made on the permit application. This is a purposeful omission to minimize costs and maximize profits. The people who have lived here for decades are the ones paying the external costs. You have the power to change this.

I urge the Board of Appeals to only permit the demolition of the old Police Credit Union building at 2550 Irving if TNDC and DTSC do the necessary soil sampling and testing needed to determine if the former Miracle Cleaners (which was a dry cleaners that used to by located at 2550 Irving) is a source of the PCEs. The old sewer pipes also need to be preserved to see if they are leaking, because these pipes could also help determine the path of the PCE vapors.

As my neighbor, Paul Holzman has argued, "The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and there is a plan to remediate the PCEs from the area."

Thank you for your consideration.

Sincerely,

Adam Michels 1275 26th Ave. San Francisco, CA 94122



HD 2/8/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)JAN 2 7 2023Sent:Friday, January 27, 2023 1:56 PMJAN 2 7 2023To:Kathleen KelleyAPPEALCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: SUPPORT for Appeal No 22-192 2550 Irving Street Demolition, Permit #
2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Kathleen Kelley <kks2200@gmail.com> Sent: Friday, January 27, 2023 1:00 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Cc: Kathleen Kelley <kks2200@gmail.com> Subject: SUPPORT for Appeal No 22-192 2550 Irving Street Demolition, Permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources,

To:SF Board of AppealsFrom:Kathleen Kelley 2200 Kirkham Street, San Francisco, CA 94122

RE: Support for Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals,

- 1. I am writing in support of the Appeal noted above for a comprehensive clean-up of the known chemical contamination in and around the site of 2550 Irving Street. The demolition, as planned is dangerous and I support the Appeal to do the following:
- During and immediately after demolition there should be a forensic examination to determine the source(s) of contamination. This is important or allocating responsibility and for designing a remedy. This requirement should be in writing – that is, enforceable.

- The best, most permanent solution to the spread of PCE into neighborhood homes is likely to be <u>soil vapor</u> <u>extraction</u>. The design of such a system may depend upon data generated during demolition. There needs to be a written plan to collect such data.
- Allowing demolition to take place now will increase the risk that TNDC will begin construction without there being a plume-wide response in place, as called for by the Board of Supervisors. Allowing TNDC to invest in demolition is likely to cause it to try to protect its investment by moving toward construction quickly.
- The project's CEQA exemption makes it difficult for neighbors to raise environmental issues, even though the
 intrusion of unacceptably high levels of toxic vapors into homes is likely to have a direct environmental impact
 on more than the four households with proven high levels of PCE. This project should not move forward until
 there is a plume-wide plan to protect current and future residents.
- 2. Approving demolition implies acceptance of the plan to build without first remediating the known contamination.

Here's an additional list of important points surrounding my concern about why I am asking that the project be put on pause until there is a remediation plan in place.

- For three years we have known that 2550 Irving sits over a toxic PCE plume. How far has it spread into the neighborhood? No one can say—except that it has.
- The area around 2550 Irving—the demolition site—is currently an active investigation site.
- The south side of Irving is under a California Imminent and Substantial Endangerment Order.
- The investigation is incomplete and there are no plans to complete it.
- There are data gaps that need to be completed before we can know how far out the soil needs to be remediated.
- Path Forward, TNDC's environmental advisor, drafted an environmental response plan for TNDC, <u>BEFORE</u> all important data was collected including testing of neighbor's homes - which was only done when the community insisted on it.
- TNDC's plan includes a temporary vapor barrier solution.
- Some of that data showed that PCE from the Irving site has entered at least 4 houses. These are next to 2550 Irving. There are likely more homes.
- The PCE gas in these home are ABOVE the state risk screening level set by the Water Board and DTSC. Unfortunately, there are still no plans to do further step-out testing to see the extent of the PCE movement.
- These families have been exposed to PCE over decades. As Dr. Samuel Goldman, a UCSF epidemiologist who studies PCE, says: "longer the exposure the worse it is for you" For some in the area that is 20, 30 even 40 years. We need this cleaned up now before you start exposing a new group of people at 2550 to the potential of living above a PCE plume.
- Over three years into this investigation and no one is adequately addressing this community's concerns. The concerns are spelled out in the unanimously passed SF Board of Supervisors resolution. This was passed last August.
- In part the resolution states the 2550 site should not go forward until a remediation plan is developed to
 address the plume under Irving St and the area surround it on the South (2550 Irving) and to the North (2511
 Irving)
- That includes finally a complete investigation of Miracle Cleaners (which is on the footprint of the proposed demolition site). Neither the former owners (the Police Credit Union) or the new owners (TNDC) have any plans to do this.
- The BOS resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood.
- Recently DTSC went on record saying for the area around 2550 Irving, this is a single plume and DTSC needs to "push wherever we can to get the most protective remedy" for the neighborhood.
- TNDC's Jackson Rabinowitsh told a community meeting held to inform the neighborhood about the demolition that the vapor barrier TNDC is including as part of their PCE mitigation response would protect the employees

and residents at 2550 "in perpetuity." Besides doing nothing for the adjacent families that are exposed to the same PCE, this is false and runs counter to DTSC's own publish presumed remedy which TNDC failed to evaluate.

• The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and a plan to remediate the PCE from the area.

Thank You for your time to review my letter of support for the appeal.

Respectfully Submitted,

Kathleen Kelley, San Francisco Sunset resident since 1982

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Friday, January 27, 2023 1:56 PM june jobin Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Vapor barrier at 2550 Irving BOUTTOFAPPEALS JAN 272023 AFTEAL 22-092

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email boardofappeals@sfgov.org or call 628-652-1150 if you would like to meet with a staff member.

-----Original Message-----From: june jobin <junejobin@sbcglobal.net> Sent: Friday, January 27, 2023 1:33 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Vapor barrier at 2550 Irving

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board Members,

It is beyond me why we are still asking for something to be done for neighbors of the planned project to protect us from toxic vapors that are spreading to adjacent properties. TNDC seems to have little interest in anything other than its own development. The Board of Supervisors resolution requested a study before the project went forward into how to deal with the vapor issue. Nothing has been done. The silence is deafening!!! We need action. June Jobin 1229 27th Ave. Sent from my iPhone

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Monday, January 30, 2023 8:11 AM rosek10@gmail.com Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: 2550 Irving - Appeal the demolition

ROATIN OF APPEALS

JAN 3 0 2023 22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: rosek10@gmail.com <rosek10@gmail.com> Sent: Sunday, January 29, 2023 9:16 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: 2550 Irving - Appeal the demolition

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Good morning lady / gentleman

I live on 22nd and Irving streets for years. I buy groceries mostly from the Chinese Supermarket across your project. Ever since the proposed project was announced, I was worried about the health of my family. I have 2 young grand children, their parents and my husband and I live there for over 25 years. For those years we live with toxic air, water, and soils, I don't know how much as those substances been trapped in our bodies. I am not opposed to the project, but please take care of the toxic substances before any construction begin. I am AFRAID that our health will be continuing deteriorated if the TOXIC NOT being removed. Thanks.

We Proposed:

- During and immediately after demolition there should be a forensic examination to determine the source(s) of contamination. This is important or allocating responsibility and for designing a remedy. This requirement should be in writing that is, enforceable.
- The best, most permanent solution to the spread of PCE into neighborhood homes is likely to be <u>soil vapor</u> <u>extraction</u>. The design of such a system may depend upon data generated during demolition. There needs to be a written plan to collect such data.

- Allowing demolition to take place now will increase the risk that TNDC will begin construction without there being a plume-wide response in place, as called for by the Board of Supervisors. Allowing TNDC to invest in demolition is likely to cause it to try to protect its investment by moving toward construction quickly.
- The project's CEQA exemption makes it difficult for neighbors to raised environmental issues, even though the
 intrusion of unacceptably high levels of toxic vapors into homes is likely to have a direct environmental impact
 on more than the four households with proven high levels of PCE. This project should NOT move forward until
 there is a plume-wide plan to protect current and future residents.
- Approving demolition implies acceptance of the plan to build without first remediating.

THANK YOU AND HAPPY NEW YEAR!

AD 2823

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)JAN 3 0 2023Sent:Monday, January 30, 2023 8:10 AMJAN 3 0 2023To:MLaffanAndrew Control of the sentence of th

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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-----Original Message-----From: MLaffan <marianlaffan@comcast.net> Sent: Sunday, January 29, 2023 2:04 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Members of Board of Appeals

I'm writing regarding the above mentioned appeal to halt planned demolition at 2550 Irving Street.

I am sure the Board are familiar with the toxicity at this site. All we (community groups, neighbors and SF Board of Supervisors) are asking is for a remediation plan to clean up the site be in place BEFORE the demolition begins.

The concerns are spelled out in the unanimously passed SF Board of Supervisors resolution passed last August.

In part the resolution states the 2550 site should not go forward until a remediation plan is developed to address the plume under Irving St and the area surround it on the South (2550 Irving) and to the North (2511 Irving).

Think about this, ALL elected SF Supervisors voted for this resolution, these Supervisors represent all the residents of SF. This means that the residents of the city want this site cleaned up properly. As city employees your job is to look after this city on behalf of it residents.

I strongly urge you to support this appeal and to require a detailed cleanup plan be in place before demolition begins.

Thank You, Marian Laffan (homeowner and property tax payer) 1458 26th Avenue.

Sent from my iPhone

2

40 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB)Monday, January 30, 2023 8:10 AMNick StokesRosenberg, Julie (BOA); Mejia, Xiomara (BOA)RE: Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Nick Stokes <nickjc.stokes@gmail.com> Sent: Saturday, January 28, 2023 3:19 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Cc: EngardioStaff (BOS) <EngardioStaff@sfgov.org>; Christie Lyke Stokes <Christie.l.stokes@gmail.com> Subject: Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

We are writing in opposition to the demolition of 2550 Irving Street (appeal no. 22-192, permit #2022/06/27/7192).

The developer TNDC and the general contractor have not put forward a plan that adequately protects neighbors, workers or members of the public in close proximity to the site from exposure to toxic PCE gas that has been detected in the soil in and around the site. If demolition proceeds without a written plan to address this, it will endanger the health and safety of residents living close to the site.

We ask that the following be put in place before demolition can begin:

- During and immediately after demolition there should be a forensic examination to determine the source(s) of contamination. This is important for allocating responsibility and for designing a remedy. This requirement should be in writing that is, enforceable []]
- The best, most permanent solution to the spread of PCE into neighborhood homes is likely to be <u>soil vapor</u> <u>extraction</u>. The design of such a system may depend upon data generated during demolition. There needs to be a written plan to collect such data spread of the spread of PCE into neighborhood homes is likely to be soil vapor.

- Allowing demolition to take place now will increase the risk that TNDC will begin construction without there being a plume-wide response in place, as called for by the Board of Supervisors.
 Allowing TNDC to invest in demolition is likely to cause it to try to protect its investment by moving toward construction quickly.
- The project's CEQA exemption makes it difficult for neighbors to raise environmental issues, even though the
 intrusion of unacceptably high levels of toxic vapors into homes is likely to have a direct environmental impact
 on more than the four households with proven high levels of PCE areas This project should not move forward
 until there is a plume-wide plan to protect current and future residents.
- Approving demolition implies acceptance of the plan to build without first remediating.

We strongly suggest you consider the following points as you make your decision:

- For three years we have known that 2550 Irving sits over a toxic PCE plume. How far has it spread into the neighborhood? No one can say—except that it has.
- The area around 2550 Irving—the demolition site—is currently an active investigation site.
- The south side of Irving is under a California Imminent and Substantial Endangerment Order.
- The investigation is incomplete and there are no plans to complete it.
- There are data gaps that need to be completed before we can know how far out the soil needs to be remediated.
- Path Forward, TNDC's environmental advisor, drafted an environmental response plan for TNDC BEFORE all
 important data was collected inlcuding testing of neighbors homes which was only done when the community
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- TNDC's plan includes a temporary vapor barrier solution this is not adequate!
- Some of that data showed that PCE from the Irving site has entered at least 4 houses. These are next to 2550
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- The PCE gas in these home are ABOVE the state risk screening level set by the Water Board and DTSC. Unfortunately, there are still no plans to do further step-out testing to see the extent of the PCE movement.
- These families have been exposed to PCE over decades. As Dr. Samuel Goldman, a UCSF epidemiologist who
 studies PCE, says: "longer the exposure the worse it is for you" For some in the area that is 20, 30 even 40
 years. We need this cleaned up now before you start exposing a new group of people at 2550 to the potential
 of living above a PCE plume.
- Over three years into this investigation and no one is adequately addressing this community's concerns. The concerns are spelled out in the unanimously passed SF Board of Supervisors resolution. This was passed in August 2022.
- In part the resolution states the 2550 site should not go forward until a remediation plan is developed to address the plume under Irving St and the area surround it on the South (2550 Irving) and to the North (2511 Irving)
- That includes finally a complete investigation of Miracle Cleaners (which is on the footprint of the proposed demolition site). Neither the former owners (the Police Credit Union) or the new owners (TNDC) have any plans to do this.
- The BOS resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood.
- Recently DTSC went on record saying for the area around 2550 Irving, this is a single plume and DTSC needs to "push wherever we can to get the most protective remedy" for the neighborhood.
- TNDC's Jackson Rabinowitsh told a community meeting held to inform the neighborhood about the demolition that the vapor barrier TNDC is including as part of their PCE mitigation response would protect the employees and residents at 2550 "in perpetuity." Besides doing nothing for the adjacent families that are exposed to the same PCE, this is false and runs counter to DTSC's own publish presumed remedy which TNDC failed to evaluate. The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and a plan to remediate the PCE from the area.

As long term residents of the Sunset, we support the need for more affordable housing in our district. However, we remain greatly concerned about the developer proceeding at the expense of known problems with this site and willfully ignoring the neighborhood's suggestions for safer and more dignified alternatives at this location.

Please don't hesitate to reach out if you have any questions or need further information.

Yours sincerely:

÷.

(6);

Nicholas and Christina Stokes 1261 28th Avenue San Francisco, CA 94122

Mejia, Xiomara (BOA)

Cc:

From: BoardofAppeals (PAB) Sent: Monday, January 30, 2023 8:10 AM JAN 3 0 2023 To: Steve Ward Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Grant Pending MSN Appeals to Stop Demolition of 2550 Irving 39-072 Subject:

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email boardofappeals@sfgov.org or call 628-652-1150 if you would like to meet with a staff member.

From: Steve Ward <seaward94133@yahoo.com> Sent: Friday, January 27, 2023 2:04 PM To: BoardofAppeals (PAB) < boardofappeals@sfgov.org>; Board of Supervisors (BOS) < board.of.supervisors@sfgov.org>; Mid Sunset Neighboorhood Association <2550irvingcommunity@gmail.com>; Marina Community Association <csfninfo@gmail.com>; SON-SF SaveOurNeighborhoodsSF <info@sonsf.org>; AIA Thomas Soper <tsaia@sbcglobal.net>; Rachel Grant <rgrant06@gmail.com>; Steve Ward <seaward94133@yahoo.com>; Westside Observer <editor@westsideobserver.com>; Mari Eliza <zrants@gmail.com> Subject: Grant Pending MSN Appeals to Stop Demolition of 2550 Irving

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

The entire plan for building at 2550 Irvine should be retracted for many reasons not the least of which is the lack of an appropriate plan for keeping the toxic gas, tetrachloroethylene, (PCE) from entering the homes and the air in the immediate neighborhood. The disregard for the health and welfare of San Francisco's outlying neighborhoods by imposing burdensome and architecturally inappropriate density projects on them while 21 million sq. ft. of empty office space cries out for repopulation in a city of declining numbers just feeds the suspension that planning is driven by development and real-estate interests who have the deep pockets to contribute to campaign coffers. Encourage affordable housing where building makes sense.

Avoid the bulldozer re-imagine, retrofit and help save the environment while we preserve the character and vitality of San Francisco's local communities.

Steve Ward Native Son LPP Council Member

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Tuesday, January 31, 2023 8:57 AM Drago Maximov Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Support of Appeal no. 22-192, 2550 Irving Street demolition,

HD algebra

28-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Drago Maximov <drago@corporateflights.com> Sent: Monday, January 30, 2023 4:14 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition,

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

We are writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted, Drago & Lisa Maximov 1490 29th ave San Francisco, CA 94122

HD 2/8/83

Mejia, Xiomara (BOA)

From:	BoardofAppeals (PAB)	
Sent:	Tuesday, January 31, 2023 8:58 AM	
То:	knittyme@yahoo.com	
Cc:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)	20 03
Subject:	RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 22-092 2022/06/27/7192	

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: knittyme@yahoo.com <knittyme@yahoo.com> Sent: Monday, January 30, 2023 4:15 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition,permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Judy Yee 1511 27th Avenue San Francisco, CA. 94122

Sent from my iPhone

HD alslas

22-092

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject:

BoardofAppeals (PAB) Tuesday, January 31, 2023 8:58 AM JJ Hollingsworth Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: 2550 Irving

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: JJ Hollingsworth <fortehouse1498@gmail.com> Sent: Monday, January 30, 2023 4:36 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: 2550 Irving

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals,

We are writing about concerns over the demolition of 2550 Irving. The reasons the plans that are in place are dangerous to public health are listed below. In addition to these dangers, we believe that any person who suffers because of these dangers that we all are fully aware of will have a valid legal case against all involved in supporting this unfortunate plan. Our tax dollars will be used to payout plaintiffs.

- During and immediately after demolition there should be a forensic examination to determine the source(s) of contamination. This is important or allocating responsibility and for designing a remedy. This requirement should be in writing – that is, enforceable.
- The best, most permanent solution to the spread of PCE into neighborhood homes is likely to be <u>soil vapor</u> <u>extraction</u>. The design of such a system may depend upon data generated during demolition. There needs to be a written plan to collect such data.
- Allowing demolition to take place now will increase the risk that TNDC will begin construction without there being a plume-wide response in place, as called for by the Board of Supervisors. Allowing TNDC to invest in demolition is likely to cause it to try to protect its investment by moving toward construction quickly.
- The project's CEQA exemption makes it difficult for neighbors to raise environmental issues, even though the intrusion of unacceptably high levels of toxic vapors into homes is likely to have a direct environmental impact

on more than the four households with proven high levels of PCE. This project should not move forward until there is a plume-wide plan to protect current and future residents.

Approving demolition implies acceptance of the plan to build without first remediating.

Here's an additional list of important points surrounding our concern about why we're asking that the project be put on pause until we have a remediation plan in place.

- For three years we have known that 2550 Irving sits over a toxic PCE plume. How far has it spread into the neighborhood? No one can say—except that it has.
- The area around 2550 Irving—the demolition site—is currently an active investigation site.
- The south side of Irving is under a California Imminent and Substantial Endangerment Order.
- The investigation is incomplete and there are no plans to complete it.
- There are data gaps that need to be completed before we can know how far out the soil needs to be remediated.
- Path Forward, TNDC's environmental advisor, drafted an environmental response plan for TNDC BEFORE all
 important data was collected inlcuding testing of neighbors homes which was only done when the community
 insisted on it
- TNDC's plan includes a temporary vapor barrier solution
- Some of that data showed that PCE from the Irving site has entered at least 4 houses. These are next to 2550
 Irving. There are likely more homes.
- The PCE gas in these home are ABOVE the state risk screening level set by the Water Board and DTSC. Unfortunately, there are still no plans to do further step-out testing to see the extent of the PCE movement.
- These families have been exposed to PCE over decades. As Dr. Samuel Goldman, a UCSF epidemiologist who studies PCE, says: "longer the exposure the worse it is for you" For some in the area that is 20, 30 even 40 years. We need this cleaned up now before you start exposing a new group of people at 2550 to the potential of living above a PCE plume.
- Over three years into this investigation and no one is adequately addressing this community's concerns. The concerns are spelled out in the unanimously passed SF Board of Supervisors resolution. This was passed last August.
- In part the resolution states the 2550 site should not go forward until a remediation plan is developed to address the plume under Irving St and the area surround it on the South (2550 Irving) and to the North (2511 Irving)
- That includes finally a complete investigation of Miracle Cleaners (which is on the footprint of the proposed demolition site). Neither the former owners (the Police Credit Union) or the new owners (TNDC) have any plans to do this.
- The BOS resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood.
- Recently DTSC went on record saying for the area around 2550 Irving, this is a single plume and DTSC needs to "push wherever we can to get the most protective remedy" for the neighborhood.
- TNDC's Jackson Rabinowitsh told a community meeting held to inform the neighborhood about the demolition that the vapor barrier TNDC is including as part of their PCE mitigation response would protect the employees and residents at 2550 "in perpetuity." Besides doing nothing for the adjacent families that are exposed to the same PCE, this is false and runs counter to DTSC's own publish presumed remedy which TNDC failed to evaluate. The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and a plan to remediate the PCE from the area.

Judy Hollingsworth and Alemayehu Mergia Property owners at 1498 24th Avenue San Francisco, CA 94122

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HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Tuesday, January 31, 2023 8:59 AM Robert Ho Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Robert Ho <ho.robt@gmail.com> Sent: Monday, January 30, 2023 8:33 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources,

To: The Board of Permit Appeals City and County of San Francisco

I am writing in support of the Appeal noted above. My wife and I own a fourplex that is located near the project noted above. We are substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing, but there must be concurrent and comprehensive clean-up of the known PCE contamination in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the 2500 block of Irving Street. This contamination is known to cause cancer and stretches to the North and South of the street and below homes and businesses.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and will do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until there is a comprehensive Site Management Plan (SMP) that is satisfactory to the people who are most affected by the PCE contamination, the residents and businesses of the neighborhood.

Respectfully Submitted,

1

Robert Ho 95 Cerritos Ave San Francisco

Mejia, Xiomara (BOA)

From:	BoardofAppeals (PAB)	
Sent:	Wednesday, February 1, 2023 12:37 PM	
To:	Lorinda Zheng	22-092
Cc:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)	,
Subject:	RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, 2022/06/27/7192	permit #

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Lorinda Zheng <lorinda321@yahoo.com>
Sent: Wednesday, February 1, 2023 12:32 PM
To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>
Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has sidestepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). Respectfully Submitted,

Jin You Zheng, 1850 Lawton St

HD 2823

Mejia, Xiomara (BOA)

From:	BoardofAppeals (PAB)		
Sent:	Wednesday, February 1, 2023 12:37 PM 🗢 🗢	10	
To:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)	22-092	
Subject:	FW: Support of Appeal no. 22-192, 2550 Irving Street demolition, permi	it #	
	2022/06/27/7192 Dear Board of Appeals: I am writing in support of the Appeal noted		
	above. I am a neighbor to the project noted above and a substantial sta	keholders in this	

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

matter...

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From: Aileen Chen <aileenchen3434@gmail.com> Sent: Wednesday, February 1, 2023 12:06 PM

To: BoardofAppeals (PAB) < boardofappeals@sfgov.org>

Subject: Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192 Dear Board of Appeals: I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter...

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Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:37 PMTo:Ivan SoonCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Ivan Soon <isoon76@gmail.com> Sent: Wednesday, February 1, 2023 11:13 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition

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City of San Francisco

Re: Support of Appeal no. 22-192, **2550 Irving Street**demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has sidestepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). Respectfully Submitted,

Ivan Soon 2480 39th Avenue San Francisco, Ca 94116

Sent from my iPhone

AD 2/8/23

Mejia, Xiomara (BOA)

From: Sent:	BoardofAppeals (PAB) Wednesday, February 1, 2023 12:35 PM		
To: Cc:	BECKY LEE Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)	22-092	
Subject:	RE: Support of Appeal no. 22-192, 2550 Irving Street c 2022/06/27/7192	t demolition, permit #	

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: BECKY LEE <blee42003@yahoo.com> Sent: Tuesday, January 31, 2023 11:28 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause

cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Becky Lee 1658 26th Avenue San Francisco, CA 94122

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:35 PMTo:Fannie LamCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit #
2022/06/27/7192

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Fannie Lam <fannielam@gmail.com>
Sent: Tuesday, January 31, 2023 11:23 PM
To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>
Subject: Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

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Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has sidestepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully,

Fannie Lam

1240 27th Avenue, San Francisco

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Wednesday, February 1, 2023 12:35 PM Lin J Wong Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Demolition at 2550 Irving

22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Lin J Wong <elemjw@gmail.com> Sent: Tuesday, January 31, 2023 10:59 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Demolition at 2550 Irving

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing to appeal the demolition at 2550 Irving. Even though the project intends to provide much needed affordable housing in our City and neighborhood, the Developer (TDNC) does not appear to have a viable, comprehensive site management plan in place.

For instance, is there a plan to prevent damage to the surrounding homes; a plan for keeping the toxic gas, tetrachloroethylene, (PCE) from entering the homes and the air in the immediate neighborhood; a plan to not destroy any evidence that could be used forensically to identify the original sources of the PCE? It appears not.

And there are still a lot of unanswered questions regarding the toxins discovered since the building was purchased by the Developer.

Even the contractor of the demolition, when I heard him speak at a neighborhood meeting in August 2022, did not know that there were harmful levels of PCE in the soil, air, and nearby homes.

I am well aware that time is money but it seems just a bit reckless and irresponsible to go ahead with demolition when there are still so many unanswered questions and issues regarding the site. After all, once the project has been completed and inhabited by SF citizens, wouldn't the scope of the problems just increase if the environmental concerns are not addressed before demolition and construction?

As well, the SF Board of Supervisors have unanimously approved a resolution (Aug 22) to address some of these issues and it seems this is a most prudent approach before demolition, and in the interests of all concerned.

In part the resolution states the 2550 site should not go forward until a remediation plan is developed to address the plume under Irving St and the area surrounding it on the South (2550 Irving) and to the North (2511 Irving). The BOS resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood.

Please consider not just the current community but also our future neighbors and 2550 Irving residents' health and well being.

respectfully, Lin Joe



Mejia, Xiomara (BOA)

From: Sent:

To:

Cc:

Subject:

BoardofAppeals (PAB) Wednesday, February 1, 2023 12:35 PM Christy Tam Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Support of Appeal no. 22-192, 2550 Irving Street demolition

22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Christy Tam <christystam@yahoo.com> Sent: Tuesday, January 31, 2023 10:43 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to cleanup the surrounding area. We respectfully ask the Board of Appeals to

deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). Respectfully Submitted,

Neighbor : Christy T 13xx 24th Ave, SF CA 94122

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Wednesday, February 1, 2023 12:35 PM Amy Lao Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Support of appeal no. 22-192

22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Amy Lao <icloud218@icloud.com> Sent: Tuesday, January 31, 2023 10:19 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of appeal no. 22-192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Streets demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Neighbor Name and Address Amy Yu 2037 Irving Street, SF

Sent from my iPhone

HD 2823

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Wednesday, February 1, 2023 12:34 PM winnie fung Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: 2550 Irving Street demolition

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: winnie fung <mswinnie55@yahoo.com> Sent: Tuesday, January 31, 2023 10:13 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Re: 2550 Irving Street demolition

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Sent from my iPhone To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Winnie Fung 1534 19th Ave, San Francisco, Ca 94122

HD 2823

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:34 PMTo:John BarkanCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: 2550 Irving Street demolition permit #2022/06/27/7192

22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: John Barkan <johnbarkan1@gmail.com> Sent: Tuesday, January 31, 2023 3:48 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: 2550 Irving Street demolition permit #2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

This letter is in opposition to granting the demolition permit at this time as part of Appeals no. 22-091 and 22-192. It should be postponed until at least conditions have been met which address neighborhood concerns about toxic contamination of the site. Further testing needs to be implemented and evaluated BEFORE demolition which could destroy evidence linking PCE contamination to specific sources and the liability of property owners. The BOS has recognized this and resolved that a site plan needs to be in place before demolition, let alone construction, can commence. The act of demolition itself might further contaminate the 2550 site and adjoining neighbors' homes, which testing done so far shows evidence of toxic PCE intrusion.

Because of the project's CEQA exemption and the lack of DTSC action, it is imperative that the Board of Permit Appeals intervenes to prevent further harm. As 40+ year residents of the project's block, we are worried about the project's past and future unknown impact on our health.

Sincerely, John and Joan Barkan 1221 27th Avenue

HD 2/8/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:38 PMTo:Lorinda ZhengCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit #
2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board,

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Lorinda Zheng <lorinda321@yahoo.com> Sent: Wednesday, February 1, 2023 12:34 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has sidestepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Shun Mei Zheng, 1850 Lawton St, SF CA 94122

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:37 PMTo:aebokenCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Strongly Supporting Appeal no. 22-192 for 2550 Irving Street Demolition Permit #
2020/06/27/7192

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: aeboken <aeboken@gmail.com> Sent: Wednesday, February 1, 2023 12:30 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Cc: Timony, Simon (BOS) <Simon.Timony@sfgov.org>; EngardioStaff (BOS) <EngardioStaff@sfgov.org> Subject: Strongly Supporting Appeal no. 22-192 for 2550 Irving Street Demolition Permit # 2020/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

TO: Board of Appeals

FROM: Eileen Boken, President Sunset-Parkside Education and Action Committee (SPEAK)

RE: Strongly Supporting Appeal no. 22-192 for 2550 Irving Street Demolition Permit # 2020/06/27/7192

Sunset-Parkside Education and Action Committee (SPEAK) is a 501(c)3 incorporated in 1970.

SPEAK has a decades long record of advocacy for land use issues in District 4.

Therefore, SPEAK is strongly supporting the Mid-Sunset Neighborhood Association and their appeal no. 22-192 which is scheduled to be heard at the Board of Appeals on February 8, 2023.

SPEAK strongly supports this appeal based on issues of PCE contamination from two (2) different dry cleaners formerly located on the 2500 block of Irving Street.

These issues have already been documented in the appeal.

It's questionable that the previous owner of the property, the San Francisco Police Credit Union, withdrew from its voluntary agreement with the California Department of Toxic Substances Control (DTSC) without providing the rationale for this decision.

Finally, the project sponsor, Tenderloin Neighborhood Development Corporation (TNDC), has yet to comply with the provisions of Board of Supervisors Resolution 220772 in addressing PCE contamination at the site.

Sent from my Verizon, Samsung Galaxy smartphone

HD 2/8/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:36 PMTo:Wendy LinCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit#
2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Wendy Lin <splendidholidays168@gmail.com> Sent: Wednesday, February 1, 2023 10:43 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit# 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). Respectfully Submitted

Respectfully Submitted,

Neighbor Name and Address: Wendy Lin 1826 33rd Ave. San Francisco, CA 94122

8

HD 28/23

22-092

Mejia, Xiomara (BOA)

To:

Cc:

From: BoardofAppeals (PAB) Sent: Wednesday, February 1, 2023 12:36 PM munzer dajani Rosenberg, Julie (BOA); Mejía, Xiomara (BOA) Subject: RE: demo permit regarding 2550 Irving street

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: munzer dajani <munzer3@msn.com> Sent: Wednesday, February 1, 2023 10:43 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: demo permit regarding 2550 Irving street

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Honorable members of the board,

Please deny the demolition permit concerning the above-referenced project. At this time, the company doing the demolition does not satisfy the need for getting rid of the harmful products on the site of the abovementioned project. The residents in the area need the assurance and action necessary first to satisfy the environmental and health concerns before any demolition can occur.

Thanks.

M. Dajani

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:36 PMTo:Lau ManagementCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition. permit #
2022/06/27/7192

HD 218/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Lau Management <47irving@gmail.com> Sent: Wednesday, February 1, 2023 10:11 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Re: Support of Appeal no. 22-192, 2550 Irving Street demolition. permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: City of San Francisco

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor right cross the street to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

1

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted, Yun-fai Lau 2545 Irving St. San Francisco, Ca 94122

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:36 PMTo:Randall MazzeiCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit #
2022/06/27/7192

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Randall Mazzei <randymazzei@hotmail.com> Sent: Wednesday, February 1, 2023 8:46 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

How is it possible for San Francisco to overlook the health and safety of existing and future residents? The contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

I support the Appeal noted above. Eask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully, Randall Mazzei 2562 21st Avenue

<u>randymazzei@hotmail.com</u> (415) 279-8702 C (415) 681-8464 H

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Wednesday, February 1, 2023 12:36 PM Gloria Leung Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Please help us

22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Gloria Leung <leungg11@yahoo.com> Sent: Wednesday, February 1, 2023 8:18 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Please help us

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Liang H. Zhen 1726 26th Ave S.F. CA 94122

40 2/8/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:36 PMTo:Martin DikyCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit #
2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Martin Diky <martindiky@gmail.com> Sent: Wednesday, February 1, 2023 7:36 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

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Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). Respectfully Submitted,

Martin Diky 1615 30th ave san francisco ca 94122

40 2/8/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)Sent:Wednesday, February 1, 2023 12:35 PMTo:Gabriel LiangCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: support of Appeal no .22-192,2550 Irving Street demolition permit #2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Gabriel Liang <ggabrielgabo@yahoo.com> Sent: Wednesday, February 1, 2023 12:32 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: support of Appeal no .22-192,2550 Irving Street demolition permit #2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Streetdemolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

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Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area. We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Gabriel Liang 1250 28th Avenue San Francisco, CA94122

Sent from my iPhone

AD 2/8/23

Mejia, Xiomara (BOA)

From:	BoardofAppeals (PAB)	
Sent:	Wednesday, February 1, 2023 12:35 PM	
To:	Elmond Leung	
Cc:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)	22-149
Subject:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Support of Appeal no.22-192,2550 Irving Street demolition permit # 20 -092 2022/06/27/7192	

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Elmond Leung <eleung50@yahoo.com> Sent: Wednesday, February 1, 2023 12:28 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no.22-192,2550 Irving Street demolition permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Streetdemolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a

comprehensive Site Management Plan (SMP).

Respectfully Submitted, Elmond Leung 1250 28th Ave San Francisco

Sent from my iPhone

40 28 23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Wednesday, February 1, 2023 12:34 PM J X Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: 2550 Irving - Oppose the demolition

22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: J X <happyjx1@yahoo.com> Sent: Tuesday, January 31, 2023 9:48 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>; BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: 2550 Irving - Oppose the demolition

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing to oppose the demolition of 2550 Irving st.

For three years we have known that 2550 Irving sits over a toxic PCE plume. The area around 2550 Irving the demolition site—is currently an active investigation site. The south side of Irving is under a California Imminent and Substantial Endangerment Order.

The investigation is incomplete and there are no plans to complete it.

The PCE gas in these home are ABOVE the state risk screening level set by the Water Board and DTSC. Unfortunately, there are still no plans to do further step-out testing to see the extent of the PCE movement.

Over three years into this investigation and no one is adequately addressing this community's concerns. The concerns are spelled out in the unanimously passed SF Board of Supervisors resolution. This was passed last August.

In part the resolution states the 2550 site should not go forward until a remediation plan is developed to address the plume under Irving St and the area surround it on the South (2550 Irving) and to the North (2511 Irving)

The BOS resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood.

The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and a plan to remediate the PCE from the area.

Thank you!

32

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent:	BoardofAppeals (PAB) Wednesday, February 1, 2023 12:34 PM	22-092
To:	ada ling	
Cc:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)	
Subject:	RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, 2022/06/27/7192	permit #

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: ada ling <yimling2004@yahoo.com>
Sent: Tuesday, January 31, 2023 9:35 PM
To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>
Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted.

Yim ling 1256 27th Ave, SF Sent from my iPhone

40 2/8/23

Mejia, Xiomara (BOA)

From: Sent:	BoardofAppeals (PAB) Wednesday, February 1, 2023 12:34 PM	
To:	Brony L	
Cc:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) $22 - 29/2$	
Subject:	RE: Support of Appeal no. 22-192, 2550 Irving Street demo permit # 2022/06/27/7192	

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Brony L <brownenlemmon@gmail.com> Sent: Tuesday, January 31, 2023 5:09 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Re: Support of Appeal no. 22-192, 2550 Irving Street demo permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

We are writing in support of Appeal no. 22-192 for the following reasons. We live in the neighborhood of the 2550 project and support a toxin cleanup prior to a permit for demolition being issued.

We, like so many San Franciscan's, care about fair and equitable housing and continually support sound plans for affordable housing. However, we believe all residential housing locations and structures should be safe and healthy at the planning stages. Air is fundamental to life for everyone and we support all efforts to keep air clean. 2550 Irving, and its surroundings, have been verified to be contaminated with PCE. We ask that all contamination be cleaned up before work proceeds.

We understand, currently, the developer intends to allow the contamination to remain in the soil, under the pending new homes, and not clean it up. We also understand that the contractor

for 2550 Irving, when asked, said he had "no idea" PCE contaminants were involved in this project. It gives us the impression that people don't care to talk about or clean up the PCE.

In closing, we respectfully ask the Board of Appeals to deny any Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted, Louis Roussel, Ph.D. and Bronwen Lemmon, MFT 2111 Kirkham Street, 94122

Bronwen Lemmon and Louis Roussel, 2111 Kirkham Street San Francisco CA 94122

HD a/8/23



Mejia, Xiomara (BOA)

BOARD OF APPEALS

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:54 PM Tiffany Xue Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Letter in support the opposition of demolition of 2550 Irving St, SF as planned

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Tiffany Xue <tx0808@outlook.com> Sent: Thursday, February 2, 2023 12:43 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Cc: Tiffany Xue <TX0808@OUTLOOK.COM> Subject: Letter in support the opposition of demolition of 2550 Irving St, SF as planned

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeal Officers,

I am writing to support the opposition of demolition of 2550 Irving St, SF as planned.

Below are some of the reasons the demolition as planned is dangerous.

- During and immediately after demolition there should be a forensic examination to determine the source(s) of contamination. This is important or allocating responsibility and for designing a remedy. This requirement should be in writing that is, enforceable.
- The best, most permanent solution to the spread of PCE into neighborhood homes is likely to be <u>soil vapor extraction</u>. The design of such a system may depend upon data generated during demolition. There needs to be a written plan to collect such data.
- Allowing demolition to take place now will increase the risk that TNDC will begin construction without there being a plume-wide response in place, as called for by the Board of

Supervisors.Allowing TNDC to invest in demolition is likely to cause it to try to protect its investment by moving toward construction quickly.

- The project's CEQA exemption makes it difficult for neighbors to raise environmental issues, even though the intrusion of unacceptably high levels of toxic vapors into homes is likely to have a direct environmental impact on more than the four households with proven high levels of PCE. This project should not move forward until there is a plume-wide plan to protect current and future residents.
- Approving demolition implies acceptance of the plan to build without first remediating.

Here's an additional list of important points surrounding our concern about why we're asking that the project be put on pause until we have a remediation plan in place.

- For three years we have known that 2550 Irving sits over a toxic PCE plume. How far has it spread into the neighborhood? No one can say—except that it has.
- The area around 2550 Irving—the demolition site—is currently an active investigation site.
- The south side of Irving is under a California Imminent and Substantial Endangerment Order.
- The investigation is incomplete and there are no plans to complete it.
- There are data gaps that need to be completed before we can know how far out the soil needs to be remediated.
- Path Forward, TNDC's environmental advisor, drafted an environmental response plan for TNDC.
 BEFORE all important data was collected inlcuding testing of neighbors homes which was only done when the community insisted on it
- TNDC's plan includes a temporary vapor barrier solution
- Some of that data showed that PCE from the Irving site has entered at least 4 houses. These are next to 2550 Irving. There are likely more homes.
- The PCE gas in these home are ABOVE the state risk screening level set by the Water Board and DTSC. Unfortunately, there are still no plans to do further step-out testing to see the extent of the PCE movement.
- These families have been exposed to PCE over decades. As Dr. Samuel Goldman, a UCSF epidemiologist who studies PCE, says: "longer the exposure the worse it is for you" For some in the area that is 20, 30 even 40 years. We need this cleaned up now before you start exposing a new group of people at 2550 to the potential of living above a PCE plume.
- Over three years into this investigation and no one is adequately addressing this community's concerns. The concerns are spelled out in the unanimously passed SF Board of Supervisors resolution. This was passed last August.
- In part the resolution states the 2550 site should not go forward until a remediation plan is developed to address the plume under Irving St and the area surround it on the South (2550 Irving) and to the North (2511 Irving)
- That includes finally a complete investigation of Miracle Cleaners (which is on the footprint of the proposed demolition site). Neither the former owners (the Police Credit Union) or the new owners (TNDC) have any plans to do this.
- The BOS resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood.

- Recently DTSC went on record saying for the area around 2550 Irving, this is a single plume and DTSC needs to "push wherever we can to get the most protective remedy" for the neighborhood.
- TNDC's Jackson Rabinowitsh told a community meeting held to inform the neighborhood about the demolition that the vapor barrier TNDC is including as part of their PCE mitigation response would protect the employees and residents at 2550 "in perpetuity." Besides doing nothing for the adjacent families that are exposed to the same PCE, this is false and runs counter to DTSC's own publish presumed remedy which TNDC failed to evaluate. The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and a plan to remediate the PCE from the area.

Tiffany Xue

1284 27th Ave, San Francisco, CA 94122

4D 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:54 PM Barbara Delaney Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Appeal no. 22-192, 2550 Irving Street demolition,

BOARD OF APPEALS

FEB 0 2 2023 APPEAL # 22-0

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Barbara Delaney

barbarabdelaney@gmail.com>

Sent: Thursday, February 2, 2023 12:20 PM

To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>

Subject: Appeal no. 22-192, 2550 Irving Street demolition,

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the appeal for a permit to demolish existing structures at 2550 Irving to allow for the construction of low income housing for those currently unhoused or without and/or with limited financial resources. I understand the soil under and around the existing structures is contaminated by PCE at levels considered unhealthy by the EPA but in spite of this, there will be no requirement for the developer to clean up the site before constructing the housing.

I have heard that if this were market rate housing, site clean-up would be required before housing construction began but with affordable housing, this requirement is waived. Once again, it seems to be the poor and disenfranchised citizens who are getting the short end of the stick, or, more aptly, the housing on toxic soil.

Quite apart from any issues of ethics or conscience, It is hard to believe that in these litigious times you would condone this situation by approving this permit without requiring any remediation of the soil in and around it, as is required for projects designed for people with more assets.

I am supporting the appeal and siding with the appellants that the site should be cleaned up, before anything is built there.

If there is no clean up, I think there should be a requirement to place a sign in the building in a prominent place notifying the tenants of the contamination of the soil and the consequences of this. In this way, they will be fully informed of the condition of the housing and associated risks before they move in..

IS PCE DANGEROUS TO HUMANS?

Yes, long-term exposure to PCE can be dangerous to humans. The contamination can potentially impact the indoor air and drinking water in the surrounding area of the release or spill site. <u>The International Agency for Research on Cancer</u> has classified PCE as a Group 2A carcinogen. Non-cancerous effects include skin irritation, dizziness, headache, liver and kidney damage, and reproductive issues in women. <u>The United States Environmental Protection Agency</u> (EPA) identified the primary health concern as neurological effects from short and long-term exposure to PCE. They evaluated the health risk as "unreasonable to workers, occupational non-users, consumers, bystanders, and the environment from certain users." Read the <u>EPA's full Draft Risk Evaluation for Perchloroethylene</u>.

Barbara Delaney 1279 44th Avenue

Barbara Delaney

FILE

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB)BOARD OF APPEALSThursday, February 2, 2023 12:49 PMFEB 0 2 2023JOE MESSINAFEB 0 2 2023Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)APPEAL # 33-093RE: Support of Apppeal no.22-192, 2550 Irving St. demolition, permit #2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: JOE MESSINA <messinaangel@comcast.net> Sent: Thursday, February 2, 2023 12:05 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>; messinaangel <messinaangel@comcast.net> Subject: Support of Apppeal no.22-192, 2550 Irving St. demolition, permit #2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above in the subject area, and a substantial stakeholders in this matter. The address to the shortage of affordable housing at this location needs immediate attention. In trying to resolve this, an evironmental -human endangerment condition is not being resolved. I support affordable housing as long as there is a comprehensive clean-up of the

known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. This PCE contamination engulfs the entire Irving Street block 26th-27th avenues and more. Known to cause Cancer.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do Nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan.

Respectfully Submitted, Loreta Colabianchi

1

1270-27th Avenue



HD 26/22

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:48 PM Michael Weiss Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Opposition to 2550 Irving Street Demolition Permit FEB 0 2 2023

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Michael Weiss <MWeiss@msn.com> Sent: Thursday, February 2, 2023 11:33 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Opposition to 2550 Irving Street Demolition Permit

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the Board of Appeals:

I am contacting you to express my opposition to the Tenderloin Neighborhood Development Corporation's demolition permit for 2550 Irving Street.

I live directly across the street from this location. While my house has yet to be tested for PCE vapors, the elevated levels discovered at 1300 26th Avenue (directly across Irving Street from me) strongly suggest that my property, too, suffers from PCE levels in excess of those permitted by California environmental regulations. My 88-year-old father-in-law lives on the ground floor in my house, precisely where the highest concentration of PCE would be expected.

It is clear that a comprehensive cleanup of the soil around 26th and Irving is needed. DTSC has said as much, as did the San Francisco Board of Supervisors in a unanimous vote last year. A comprehensive cleanup requires a comprehensive plan, and a comprehensive plan requires adequate knowledge of the conditions and parameters of the project. There is a significant area that has not yet been tested, specifically underneath the site once occupied by Miracle Cleaners, which has been suggested as a potential contributing source to the PCE plume in the area.

This is critical for two reasons. First, without knowing the sources, any cleanup plan is likely to require subsequent revisions that will further delay constructing the 2550 housing project. Second, there are important liability considerations; indeed, if Miracle Cleaners is a source, then the Police Credit Union may be liable to pay for a portion of

the cleanup. A demolition in advance of making that determination runs substantial risk of destroying the very evidence needed to identify Miracle Cleaners as a source. The upshot is that the rest of us must pay the Police Credit Union's share via our tax dollars.

I recognize and acknowledge that demolition of building at 2550 Irving is inevitable, and that San Francisco is in dire need of additional housing. My concern here is strictly about *timing*, and the *order of events*. This impacts me and my family personally, given our proximity to the site. Demolition must not be permitted until Miracle Cleaners has been ruled in or out as a source of the PCE plume, and a comprehensive cleanup plan has been established.

Best regards, Michael Weiss

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:48 PM T Lee Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: 2550 Irving demolition APPEALS FEB 0 2 2023

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

HD

28/23

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email boardofappeals@sfgov.org or call 628-652-1150 if you would like to meet with a staff member.

-----Original Message-----From: T Lee <terrilee888@yahoo.com> Sent: Thursday, February 2, 2023 11:21 AM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: 2550 Irving demolition

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Board of appeals

Here is our concern

In order to prevent Damage to the surrounding homes. Previous owners or the board must have a plan for keeping the toxic gas from entering the air in the immediate neighborhood. Please reconsider

Terri and David

Sent from my iPhone

The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> To: **City of San Francisco**

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition permit # 2022/06/27/7192

40 28 23

FEB 02 2023 APPEAL # 22-092

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a stakeholder in this matter of public health.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Neighbor Name and Address

Mejia, Xiomara (BOA)

From:	BoardofAppeals (PAB)
Sent:	Thursday, February 2, 2023 12:46 PM
То:	Christy Mccampbell
Cc:	Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)
Subject:	RE: Clean Up Appeal

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Christy Mccampbell <christymccampbell@icloud.com> Sent: Wednesday, February 1, 2023 11:53 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Clean Up Appeal

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please require the neighborhood cleanup

Sent from my iPhone

HD 2/0/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:45 PM xiaolian xuan Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE:

BOARD OF APPEALS

FEB 02 2023

APPEAL # 22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: xiaolian xuan <xiaolianxuan@gmail.com> Sent: Wednesday, February 1, 2023 10:26 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject:

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Neighbor Name and Address Xiao lian Su 1619 20th ave SF CA

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:42 PM 1791587023 Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE:

FEB 0 2 2023

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: 1791587023 <1791587023@qq.com> Sent: Wednesday, February 1, 2023 10:24 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject:

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: boardofappeals@sfgov.org

City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition,

permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakehol ders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensi ve clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has sidestepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do noth ing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Neighbor Name and Address

AD 2/5/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)BOARD OF APPEALSSent:Thursday, February 2, 2023 12:41 PMTo:In LeiFEB 0 2 2023Cc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no.22-192 2550 Irving Street demolition Permit # 27-072
2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: In Lei <gloriaiml66@gmail.com> Sent: Wednesday, February 1, 2023 7:38 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no.22-192 2550 Irving Street demolition Permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Sent from my iPhone To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer

and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). Respectfully Submitted,

Neighbor Name and Address Gloria Lei 2624 Ulloa St. San Francisco CA 94116

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:40 PM Suzy Tung Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: 2550 Irving RE: 2550 Irving

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email boardofappeals@sfgov.org or call 628-652-1150 if you would like to meet with a staff member.

-----Original Message-----From: Suzy Tung <chenerystreet@gmail.com> Sent: Wednesday, February 1, 2023 7:12 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: 2550 Irving

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To Whom it May concern:

Please delay the construction of the site at 2550 Irving Street. A better plan needs to be in place. There are toxic PCE contamination at this site and I am concerned about the exposures. I am in a neighboring home and have young vulnerable family members.

Further testing is requested by neighbors to protect our neighborhood. Stop ignoring our community. It is your fiduciary responsibility to consider the safety of the neighborhood and the future residents of this property.

Please get a remediation plan in place before exposing the neighborhood to demolition!

Suzy Tung



Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB)BOARD OF APPEALSThursday, February 2, 2023 12:35 PMBOARD OF APPEALSnoah stroeFEB 0 2 2023Mejia, Xiomara (BOA); Rosenberg, Julie (BOA)FEB 0 2 2023RE: Re:opposition to permit to demolish 2550 irving stappeal #33-093

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: noah stroe <nstroe@gmail.com> Sent: Wednesday, February 1, 2023 6:19 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Cc: 2550Irvinginfo@gmail.com Subject: Re:opposition to permit to demolish 2550 irving st.

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear members of the Board of appeals , This email is written to oppose permit number 22–192 of 2550 Irving St., 2020 //27 /7192.

It would be unconscionable to destroy evidence, and to allow the demolition of the old San Francisco police credit Union without finding out exactly where the toxic plume of PCE is coming from.

This building has been known to be A toxic building and that is the reason why it was abandoned by the credit union in the first place only to build a new facility two blocks east of the current one on Irving Street.

It is a well-known fact that the more exposure there is to this toxin the higher the danger becomes for developing such diseases as various cancers and Parkinson's disease.

If this demolition is allowed to go through, I believe that the city and County of San Francisco will be opening itself a very very wide window of vulnerability if and when any of the local residence become ill. Please oppose this demolition.

Noah Stroe DVM 1265 27th Ave SF 94122

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:36 PM S F Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, 22-permit # 2022/06/27/7192

4D 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: S F <sfyl2020@yahoo.com> Sent: Wednesday, February 1, 2023 6:52 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter. I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted.

Shing Fung 1256 27th Ave, SF

Sent from my iPhone

HD 2823

BOARD OF APPEALS FEB 0 2 2023 APPEAL # 23 - 072

To: City and County of San Francisco, Board of Appeals Re: Notice of Appeal Hearing (Nos. 22-091, 22-092) at 2550 Irving Street, San Francisco Date: February 1, 2023

We are the property owners at 2501 Irving Street, San Francisco. Our building is directly across the street from the 2550 Irving Street project proposed by the Tenderloin Neighborhood Development Corporation. We lease out commercial space to Sterling Bank on the ground floor and the second-floor apartments we lease out to residential tenants.

We are writing this letter to state our opposition to the project as detailed currently including the density and height of the proposed building. The TNDC did not follow through on their promise to compromise on the design with the community, except for minor aesthetic details. We are also opposed to the plan of demolishing this building without taking the health and safety considerations of working with toxic soil and dust, specifically tetrachloroethylene or PCE, into account. People who live and work in this neighborhood deserve remediation not mitigation, a vapor barrier is simply not acceptable. We are alarmed that the TNDC is ignoring the EPA's environmental recommendations for this project and ultimately, we are concerned for our commercial and residential tenants' health and the health of surrounding neighbors. Finally, we are concerned with demolition vibrations affecting the integrity of our building at 2501 Irving Street and want a guarantee that the demolition will have no impact on our structure.

Thank you for your consideration.

Sincerely,

Veronica McGee and Sean McGee Owners, 2501 Irving Street, San Francisco

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:33 PM Lin Chen Mejia, Xiomara (BOA); Rosenberg, Julie (BOA) RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Lin Chen <lin.chen.ng@gmail.com> Sent: Wednesday, February 1, 2023 5:37 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire fiving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

1

Lin Chen, Ruinan Chen, Ruizhen Ding

2434 Judah St. San Francisco CA 94122

HD 218/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)BOATT CAPPEALSSent:Thursday, February 2, 2023 12:33 PMFEB 0 2 2023To:Richard ChuiFEB 0 2 2023Cc:Mejia, Xiomara (BOA); Rosenberg, Julie (BOA)FEB 0 2 2023Subject:RE: Letter in support of the opposition of demolition of 2550 Irving St, San Francisco

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Richard Chui <Richard.Chui@outlook.com> Sent: Wednesday, February 1, 2023 4:07 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Cc: Richard Chui <richard.chui@outlook.com>; Tiffany Xue <tx0808@yahoo.com> Subject: Letter in support of the opposition of demolition of 2550 Irving St, San Francisco

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeal Officers,

I am writing to support the opposition of demolition of 2550 Irving St, SF as planned,

Below are some of the reasons the demolition as planned is dangerous.

- During and immediately after demolition there should be a forensic examination to determine the source(s) of contamination. This is important or allocating responsibility and for designing a remedy. This requirement should be in writing – that is, enforceable.
- The best, most permanent solution to the spread of PCE into neighborhood homes is likely to be <u>soil vapor extraction</u>. The design of such a system may depend upon data generated during demolition. There needs to be a written plan to collect such data.
- Allowing demolition to take place now will increase the risk that TNDC will begin construction without there being a plume-wide response in place, as called for by the Board of

Supervisors.Allowing TNDC to invest in demolition is likely to cause it to try to protect its investment by moving toward construction quickly.

- The project's CEQA exemption makes it difficult for neighbors to raise environmental issues, even though the intrusion of unacceptably high levels of toxic vapors into homes is likely to have a direct environmental impact on more than the four households with proven high levels of PCE. This project should not move forward until there is a plume-wide plan to protect current and future residents.
- Approving demolition implies acceptance of the plan to build without first remediating.

Here's an additional list of important points surrounding our concern about why we're asking that the project be put on pause until we have a remediation plan in place.

- For three years we have known that 2550 Irving sits over a toxic PCE plume. How far has it spread into the neighborhood? No one can say—except that it has.
- The area around 2550 Irving—the demolition site—is currently an active investigation site.
- The south side of Irving is under a California Imminent and Substantial Endangerment Order.
- The investigation is incomplete and there are no plans to complete it.
- There are data gaps that need to be completed before we can know how far out the soil needs to be remediated.
- Path Forward, TNDC's environmental advisor, drafted an environmental response plan for TNDC BEFORE all important data was collected inlcuding testing of neighbors homes - which was only done when the community insisted on it
- TNDC's plan includes a temporary vapor barrier solution
- Some of that data showed that PCE from the Irving site has entered at least 4 houses. These are next to 2550 Irving. There are likely more homes.
- The PCE gas in these home are ABOVE the state risk screening level set by the Water Board and DTSC. Unfortunately, there are still no plans to do further step-out testing to see the extent of the PCE movement.
- These families have been exposed to PCE over decades. As Dr. Samuel Goldman, a UCSF epidemiologist who studies PCE, says: "longer the exposure the worse it is for you" For some in the area that is 20, 30 even 40 years. We need this cleaned up now before you start exposing a new group of people at 2550 to the potential of living above a PCE plume.
- Over three years into this investigation and no one is adequately addressing this community's concerns. The concerns are spelled out in the unanimously passed SF Board of Supervisors resolution. This was passed last August.
- In part the resolution states the 2550 site should not go forward until a remediation plan is developed to address the plume under Irving St and the area surround it on the South (2550 Irving) and to the North (2511 Irving)
- That includes finally a complete investigation of Miracle Cleaners (which is on the footprint of the proposed demolition site). Neither the former owners (the Police Credit Union) or the new owners (TNDC) have any plans to do this.
- The BOS resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood.

- Recently DTSC went on record saying for the area around 2550 Irving, this is a single plume and DTSC needs to "push wherever we can to get the most protective remedy" for the neighborhood.
- TNDC's Jackson Rabinowitsh told a community meeting held to inform the neighborhood about the demolition that the vapor barrier TNDC is including as part of their PCE mitigation response would protect the employees and residents at 2550 "in perpetuity." Besides doing nothing for the adjacent families that are exposed to the same PCE, this is false and runs counter to DTSC's own publish presumed remedy which TNDC failed to evaluate. The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and a plan to remediate the PCE from the area.

In summary, TNDC needs to do the right thing to protect the health and safety of its current neighbors and future residents in 2550 Irving Street building. Please do not compromise people's health due to political pressure to build more affordable housing fast and put environmental concerns under the carpet. I trust the board of appeal to be fair and listens to every neighbor's voice seriously.

Regards,

Richard Chui

1284 27th Ave, San Francisco, CA 94122



HD 2/8/83

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:32 PM Tom Cheung Mejia, Xiomara (BOA); Rosenberg, Julie (BOA) RE: Appeal for demolition of 2550 Irving

BOARD OF APPEALS FEB 0 2 2023 APPEAL # 28 -092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Tom Cheung <kwtomcheung@icloud.com> Sent: Wednesday, February 1, 2023 3:09 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Appeal for demolition of 2550 Irving

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Sent from my iPhone To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do

nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). Respectfully Submitted,

Tom Cheung

1479 22nd Avenue

,

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:31 PM Artisans Mejia, Xiomara (BOA); Rosenberg, Julie (BOA) RE: Support of Appeal no.22-192, 2250 Irving Street demolition, permit # 2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Artisans <artisans2u@gmail.com> Sent: Wednesday, February 1, 2023 2:44 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no.22-192, 2250 Irving Street demolition, permit #2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Support of Appeal no.22-192, 2250 Irving Street demolition, permit #2022/06/27/7192

Dear Board of Appeals:

We are writing in support of the appellant and the appeal number noted above. We are a merchant in close proximity to the project noted above and are substantial stakeholders in this matter.

We support affordable housing that addresses the critical shortage of below market rate housing but there must also be a comprehensive clean up of known PCE toxins in the entire affected contamination field.

This Appeal is responding to the permit procedure which has side-stepped the necessary priority of public health. PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination, known to cause cancer, stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area. We disagree.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Sincerely,

Artisans of San Francisco 2549 Irving Street San Francisco, CA 94122 415-921-0456 Artisans2u@gmail.com

HD 2/8/33

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:31 PM Doreen Silk Mejia, Xiomara (BOA); Rosenberg, Julie (BOA) RE: Demolition Letter

 BOARD OF APPEALS

 FEB 02 2023

 APPEAL # 22 -093

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Doreen Silk <doreen.silk@gmail.com> Sent: Wednesday, February 1, 2023 2:23 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Fwd: Demolition Letter

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

------Forwarded message ------From: Doreen Silk <<u>doreen.silk@gmail.com</u>> Date: Wed, Feb 1, 2023 at 2:20 PM Subject: Fwd: Demolition Letter To: <u>boardofappeals@sfgov.org</u> <<u>boardofappeals@sfgov.org</u>>

------ Forwarded message ------From: Hal Silk <<u>halsilk@gmail.com</u>> Date: Wed, Feb 1, 2023 at 1:25 PM Subject: Demolition Letter To: <u>doreen.silk@gmail.com</u> <<u>doreen.silk@gmail.com</u>>, Hal Silk <<u>halsilk@me.com</u>> The best and most permanent solution to the spread of PCE into our neighborhood homes is likely to be soil vapor extraction. The design of such a system may depend upon data generated during demolition. But there needs to be an enforceable written plan to collect the data.

The PCE gas levels in homes that have already been tested are above the California State risk screening level set by the Water Board and DTSC.

Unfortunately, there still are no plans to do further step-out testing to see the extent of the PCE spread.

As a neighbor of this site, I am against the demolition until TNDC and their contractor have established a DTSC approved and enforceable remediation plan to deal with the potential release of toxins.

Doreen Silk

1270 26th Ave.

San Francisco, CA 94122

415 519-6766

HD 2823

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB)CHAPPEALSThursday, February 2, 2023 12:30 PMFEB 0 2 2023ray wongMejia, Xiomara (BOA); Rosenberg, Julie (BOA)APPEAL # 22-072RE: Support of appeal 22-192, 2550 Irving St demolition, permit 2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Boarda

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: ray wong <ray_wong23@hotmail.com>
Sent: Wednesday, February 1, 2023 1:11 PM
To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>
Subject: Support of appeal 22-192, 2550 Irving St demolition, permit 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted, Raymond Wong ray_wong23@hotmail.com 1293 27th Ave SF CA 94122

40 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:29 PM Pamela Barrango Mejia, Xiomara (BOA); Rosenberg, Julie (BOA) RE: Support of Appeal no. 22-192, 2550 Irving St demolition permit # 2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

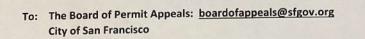
The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Pamela Barrango <pamelabarrango@barrango.com> Sent: Tuesday, January 31, 2023 4:47 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving St demolition permit # 2022/06/27/7192

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Please find my letter below in Support of the Appeal named above.

Pamela Barrango



Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a stakeholder in this matter of public health.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Kanang 2233 Kirkhams **Neighbor Name and Address**

Sent from my iPhone

HD 2/8/23

Mejia, Xiomara (BOA)

From: Sent: To: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 12:35 PM Mejia, Xiomara (BOA); Rosenberg, Julie (BOA) FW: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

APPEAL # 22-092

FEB 02 2023

TO OF APPEALS

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Ruinan Chen <chenruinan@gmail.com> Sent: Wednesday, February 1, 2023 6:03 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire lrving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Ruinan Chen

2434 Judah St. San Francisco CA 94122

Mejia, Xiomara (BOA)

From:

Sent:

To:

Cc:

Subject:

BoardofAppeals (PAB)BOARD OF APPEALSThursday, February 2, 2023 4:40 PMFEB 0 2 2023Robert HoFEB 0 2 2023Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)22-092RE: Support of Appeal No. 22-192, 2550 Irving Street Demolition, Permit #2022/06/27/7192

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Robert Ho <ho.robt@gmail.com>
Sent: Thursday, February 2, 2023 4:24 PM
To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>
Cc: Joel Engardio <jengardio@gmail.com>
Subject: Support of Appeal No. 22-192, 2550 Irving Street Demolition, Permit #2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals,

As a member of the Mid-Sunset Neighborhood Association, I gathered signed letters of support from Merchants on Irving Street who are English as a Second Language Speakers and are not proficient in Email communications. Please see the attached signed letters of support from these businesses. This is my second of two emails. Thank you.

-Robert Ho

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB)SOARD OF APPEALSThursday, February 2, 2023 4:40 PMtsaia@sbcglobal.netRosenberg, Julie (BOA); Mejia, Xiomara (BOA)RE: Appeal No. 22-092, 2550 Irving Street, demolition permit # 2022/06/27/7192

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Subject: Re: Support of Appeal No. 22-092, 2550 Irving Street, demolition permit # 2022/06/27/7192

Dear Board members-

I am writing as a licensed architect and master planner practicing from San Francisco since 1982 for large and small projects locally, statewide, nationally, and internationally. I support the appellant's argument to not have the demolition permit issue until there are updated conditions imposed and included on the permit documents to create a lawful obligation for soil collection and PCE testing during demolition. I recommend a pause because I strongly advocate genuine and appropriate affordable housing for this property. However, having reviewed these documents, there is a critical omission from the demolition documents for which a permit was issued. They are based on a superseded response plan dated 2021 which does not recognize new information acquired since then. The demo permit was issued without a detailed and up-to-date Site Management Plan.

Present development procedures where State and local AHJ's are involved, are susceptible to insufficient oversight and different circumstances, particularly for BMR housing. Contamination is not exempted from SB35 projects under local or State ministerial review and this confusion played a role in setting Owner/Developer expectations that future discoveries would challenge. The original landowner (Police Credit Union) wanting to sell its land and hoping not to find contamination, hired a contamination specialist to study their properties, one a large parcel to the North of Irving (2550)

and a small parking lot on the south side of Irving (2525). In order to manage development costs and maximize purchase acquisition, compounded with the developer's hope to yield the maximum unit count on this property, the developer (TNDC) and original landowner negotiated a voluntary agreement. They have argued that difficulty of access to study the soil under the existing building on the north property was not needed. However, as the State has explained to the Appellants Experts, new information can change that.

There were other deficiencies in their plan but there were two onerous initial discoveries by the contamination specialist in this early phase: First, the study found very high concentrations of PCE on the south side of the street. Second, protective measures had to be employed for employees working in the building on the North Parcel. But the study was basically limited.

It has taken some time to discover the responsible party for the contamination on the South Side of Irving. But in about June of 2021, with those initial findings, the South side of Irving was place on the State Cortese list. This can be explained by the fact that a dry cleaner who had operated there for years had recently closed their business by the name of Albrite Cleaners.

It is unusual that the developer did not want purchase to the property to the south side of the street in order to maximize their unit count. The developer relied on the land owner's omission in failing to thoroughly investigate the north side of the street for contamination, in spite of historical documents that showed a demolished dry cleaner buried below the existing building on the north parcel, led to soils experts to preliminarily conclude there was only one source of the contamination, and that was from the south side of the street.

In order to demonstrate that some effort was being made to trace the extremities of the contamination to the north of 2550 Irving, the landowner took a few core samples from the sidewalks. These samples did not exceed readings of dangerous levels of PCE, which appeared to support the notion that there was only one contamination source and that was to the south. These samples were taken just about two years before the project was publically announced to the adjacent residential neighbors, the Appellant. Neighbors had noticed while workmen were taking core samples from the sidewalk and asked what they were doing to the sidewalks, but none of them said they were checking for PCE in the soil.

One month after the announcement by the developer and City of the project, it was leaked to the neighbors that the soil was contaminated. The neighbors who remembered the reticent workmen from two years earlier started their own investigation and were fortunate to find a licensed geologist specializing in contamination. This expert will be presenting to you on Feb 8 regarding the north side as a contamination source, in addition to the south side, and to substantiate the science, standard of care, and best practices to undertake during demolition with regards to soil collection and testing.

I respectfully request that the Board of Appeals deny this permit until a satisfactory site management plan is approved by the Appellant's licensed professional geologist.

Sincerely,

Thomas Soper

Thomas Soper AIA Architect P 1.415.902.9457 F 1.415.566.0465

Mejia, Xiomara (BOA)

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 4:40 PM Robert Ho Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: Support of Appeal No. 22-192, 2550 Irving Street Demolition, Permit # 2022/06/27/7192

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BOARD OF APPEALS

To: The Board of Permit Appeals: boardofappeals@sfgov.orgFEB 0 2 2023City of San FranciscoAPPEAL # 32 - 092

HD 2/8/23

Re: Support of Appeal no. 22-092, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

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This Appeal is responding to the permit procedure which has side-stepped the necessary priority of public health. PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below the Streets, resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area. We disagree.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

VAO GU. Mei shen Corp.

Merchant Name / Name of Store and Address

Merchant Signature / Date

2/2/2023.

BOARD OF APPEALS

FEB 0 2 2023

HD 2/8/23

致:舊金山市許可證申訴委員會:boardofappeals@sfgov.org ♣♀♀♀♀

主旨:支持申訴號 22-092, 2550 歐文街拆除, 許可證# 2022/06/27/7192

敬愛的申訴委員會:

我們寫信支持申訴人和上述申訴號。 我們是與上述項目臨近的商家, 並且是此事的重要利益相關人。

我們支持舊金山蓋可負擔房,以解決低於市場價格的住房短缺問題,但 前提是必須全面清理整個地區已知的 PCE 污染物和毒素。

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在申訴人對全面的場地管理計劃(SMP)感到滿意之前,我們恭敬地請求申訴委員會拒絕頒發拆除許可證。

2309 Irving ST. SP 商家名稱/商店名稱和地址 m Miduodup 02/02/2023 Mm 商家簽名/日期

HD 2/8/23 BOARD OF APPEALS FEB 0 2 2023 APPEAL # 22-092

致:舊金山市許可證申訴委員會:boardofappeals@sfgov.org

主旨:支持申訴號 22-092, 2550 歐文街拆除, 許可證# 2022/06/27/7192

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StB Supermarket Elaine 2203 Inving ST 2201 Frving ST Huana 商家名稱/商店名稱和地址 2-2-2023

商家簽名/日期

40 2/8/23

MOADD OF APPEALS

- To:
 The Board of Permit Appeals:
 boardofappeals@sfgov.org
 FEB 0 2 2023

 City of San Francisco
 All PEAL # 고리 여러
- Re: Support of Appeal no. 22-092, 2550 Irving Street demolition, permit # 2022/06/27/7192

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Merchant Name/-Name of Store and Address

Merchant Signature / Date

40 2/8/23

BOARD OF APPEALS

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2142 Inving. ST. SF CA 94122

CHUNDINUM Not Lathe 2142 SF. CA 94122

Merchant Name/ Name of Store and Address

0000 x/x/ 223 Merchant Signature / Date

HD 2/8/23

BOARD OF APPEALS

FEB 022023

致:舊金山市許可證申訴委員會:boardofappeals@sfgov.org

主旨:支持申訴號 22-092, 2550 歐文街拆除, 許可證# 2022/06/27/7192

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Wah Food Inc. 2102 Inving. ST. SF CA 94/2 商家名稱/商店名稱和地址 2-2-2023 tholy in

商家簽名/日期

HD 2/8/23

BOARD OF APPEALS

FEB 02 2023

- To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u>AL # <u>20-092</u> City of San Francisco
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Kengthung: S/L Ten 2250 Erving St

Merchant Name/ Name of Store and Address

Merchant Signature / Date

HD 2/8/23

BOARD OF APPEALS

FEB 0 2 2023

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HD 2/8/23

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obsan Merchant Name / Name of Store and Address

Merchant Signature / Date

40 2/8/23

OF APPEALS

1 22-092

FEB 0 2 2023

致: 舊金山市許可證申訴委員會: boardofappeals@sfgov.org

主旨:支持申訴號 22-092, 2550 歐文街拆除, 許可證# 2022/06/27/7192

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Cargylizz. 商家名稱/商店名稱和地址 2123 商家簽名/日期

致: 舊金山市許可證申訴委員會: boardofappeal s@sfgov. org

主旨:支持申訴號 22~092, 2550 歐文街拆除, 許可證# 2022/06/27/7192

FEB 02 2023

MEAL # 22-092

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orth June Greenwerket 2425 Juny Gut, 商家名稱/商店名稱和地址 Surfinger Chyly, 2 copietas bene 商家簽名/日期

HD 2/8/23

BOARD OF APPEALS

FEB 022/2023

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very wang

Merchant Name / Name of Store and Address 220 Merchant Signature / Date 2/2/2023

2218 INTING 2023 2218 INTING-ST ST MAUIZZ

HD 2 8 23

BOARD OF APPEALS

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<u>G2</u> Hua Wang Bon Salon. 2230 FrVing Merchant Name/Name of Store and Address

Merchant Signature / Date

40 2/8/23

U UF APPEALS

3 2 2023

22-092

致:舊金山市許可證申訴委員會:boardofappeals@sfgov.org

主旨:支持申訴號 22-092, 2550 歐文街拆除, 許可證# 2022/06/27/7192

敬愛的申訴委員會:

我們寫信支持申訴人和上述申訴號。 我們是與上述項目臨近的商家, 並且是此事的重要利益相關人。

我們支持舊金山蓋可負擔房,以解決低於市場價格的住房短缺問題,但 前提是必須全面清理整個地區已知的 PCE 污染物和毒素。

此次申訴是為表達對於執意忽略大**眾衛生安全的許可證取得程序的擔憂** 和反對。PCE 污染已經蔓延到第 26 和 第 27 街整個歐文街區。**眾所周** 知,這種污染會導致癌症,並延伸到街道的北部和南部,並正潛藏在居 民的房屋和商業地產的土地裡。

目前開發商打算讓污染留在待建的新住宅下,而不做任何清理周邊地區 的工作。我們不同意。

在申訴人對全面的場地管理計劃(SMP)感到滿意之前,我們恭敬地請 求申訴委員會拒絕頒發拆除許可證。

WEATHOOPRY Bakety 1. Then 商家名稱/商店名稱和地址 IVIng -9 ST- Ca 94/22 2253 1212 L. 2Ken 2-2-2023 商家簽名/日期

HD 2/8/23

BOARD OF APPEALS

The Board of Permit Appeals: boardofappeals@sfgov.org FEB 0 2 2023 To: **City of San Francisco** APPEAL \$22-092

Support of Appeal no. 22-092, 2550 Irving Street demolition, Re: permit # 2022/06/27/7192

Dear Board of Appeals:

We are writing in support of the appellant and the appeal number noted above. We are a merchant in close proximity to the project noted above and are substantial stakeholders in this matter.

We support affordable housing that addresses the critical shortage of below market rate housing but there must also be a comprehensive cleanup of known PCE toxins with excessively allowable intensities across the affected contamination field..

This Appeal is responding to the permit procedure which has side-stepped the necessary priority of public health. PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below the Streets, resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area. We disagree.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP). 2200 Trin

Merchant Name/ Name of Store and Address

Merchant Signature / Date

40 2/8/23

DOADO OF APPEALS

- To:The Board of Permit Appeals:boardofappeals@sfgov.orgFEB0.22023City of San FranciscoAPPEAL # 22-092
- Re: Support of Appeal no. 22-092, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

We are writing in support of the appellant and the appeal number noted above. We are a merchant in close proximity to the project noted above and are substantial stakeholders in this matter.

We support affordable housing that addresses the shortage of below market rate housing but there must be a comprehensive clean up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure which has side-stepped the necessary priority of public health. PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area. We disagree.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

2227 Irving

Merchant Name/ Name of Store and Address

Merchant Signature / Date

AD 2/8/23

致: 舊金山市許可證申訴委員會: boardofappeals@sfgov.org

主旨:支持申訴號 22-092, 2550 歐文街拆除, EDARD OF APPEALS 許可證# 2022/06/27/7192 FEB 0 2 2023

APPEAL # 22-093

敬愛的申訴委員會:

我們寫信支持申訴人和上述申訴號。 我們是與上述項目臨近的商家, 並且是此事的重要利益相關人。

我們支持舊金山蓋可負擔房,以解決低於市場價格的住房短缺問題,但 前提是必須全面清理整個地區已知的 PCE 污染物和毒素。

此次申訴是為表達對於執意忽略大**眾衛生安全的許可證取得程序的擔憂** 和反對。PCE 污染已經蔓延到第 26 和 第 27 街整個歐文街區。眾所周 知,這種污染會導致癌症,並延伸到街道的北部和南部,並正潛藏在居 民的房屋和商業地產的土地裡。

目前開發商打算讓污染留在待建的新住宅下,而不做任何清理周邊地區 的工作。 我們不同意。

在申訴人對全面的場地管理計劃(SMP)感到滿意之前,我們恭敬地請 求申訴委員會拒絕頒發拆除許可證。

Ling Huang 18 FODD GINSENGECO. 商家名稱/商店名稱和地址 2409 Mingst. San Francisco, CA 9412! 商家簽名/日期 Ling Huang 02-02-23

HD 3823

FEB 0 2 2023

APPEAL \$ 23-092

致: 舊金山市許可證申訴委員會: boardofappeals@sfgov.org

主旨: 支持申訴號 22-092, 2550 歐文街拆除, 許可證# 2022/06/27/7192

敬愛的申訴委員會:

我們寫信支持申訴人和上述申訴號。 我們是與上述項目臨近的商家, 並且是此事的重要利益相關人。

我們支持舊金山蓋可負擔房,以解決低於市場價格的住房短缺問題,但 前提是必須全面清理整個地區已知的 PCE 污染物和毒素。

此次申訴是為表達對於執意忽略大**眾衛生安全的許可證取得程序的擔憂** 和反對。PCE 污染已經蔓延到第 26 和 第 27 街整個歐文街區。**眾所周** 知,這種污染會導致癌症,並延伸到街道的北部和南部,並正潛藏在居 民的房屋和商業地產的土地裡。

目前開發商打算讓污染留在待建的新住宅下,而不做任何清理周邊地區 的工作。 我們不同意。

在申訴人對全面的場地管理計劃(SMP)感到滿意之前,我們恭敬地請求申訴委員會拒絕頒發拆除許可證。

Wer, TY avoc Lown - boar thuan 2337 IDVING ST GD96122 商家名稱/商店名稱和地址 and Lead 2/2/2023 商家簽名/日期

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco FEB 0 2 2023

APPEAL #22-092

Re: Support of Appeal no. 22-092, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

We are writing in support of the appellant and the appeal number noted above. We are a merchant in close proximity to the project noted above and are substantial stakeholders in this matter.

We support affordable housing that addresses the shortage of below market rate housing but there must be a comprehensive clean up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure which has side-stepped the necessary priority of public health. PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area. We disagree.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

MANGVANSFMU: 2391 TRVING ST SF, LA 94122 rchant Name/Name of Store and Address Merchant Name/ Name of Store and Address Merchant Signature / Date

40 2/8/23

BOARD OF APPEALS

FEB 0/2/2028

- To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> <u>PPEAL</u> # 27-092 City of San Francisco
- Re: Support of Appeal no. 22-092, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

We are writing in support of the appellant and the appeal number noted above. We are a merchant in close proximity to the project noted above and are substantial stakeholders in this matter.

We support affordable housing that addresses the shortage of below market rate housing but there must be a comprehensive clean up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure which has side-stepped the necessary priority of public health. PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area. We disagree.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

isiyam (Marnee Thai)

Merchant Name/ Name of Store and Address

Merchant Signature / Date

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Thursday, February 2, 2023 2:57 PM Nickolopoulos, Sheila (MYR) Rosenberg, Julie (BOA); Mejia, Xiomara (BOA) RE: 2550 Irving

FEB 02 2023

218123

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Nickolopoulos, Sheila (MYR) <sheila.nickolopoulos@sfgov.org>
Sent: Thursday, February 2, 2023 2:48 PM
To: BoardofAppeals (PAB) <boardofappeals@sfgov.org>; Swig, Rick (BOA) <rick.swig@sfgov.org>
Cc: Romero, Anne (MYR) <anne.romero@sfgov.org>; Engardio, Joel (BOS) <joel.engardio@sfgov.org>; maurilio leon
<mleon@tndc.org>
Subject: 2550 Irving

Attached please find a letter from the Mayor's Office of Housing and Community Development and the San Francisco Planning Department regarding the appeal related to 2550 Irving Street.

Thank you, Sheila

Sheila Nickolopoulos

Director of Policy and Legislative Affairs Mayor's Office of Housing and Community Development 1 South Van Ness Avenue, Fifth Floor San Francisco, CA 94103

HD 28/23

To the Board of Appeals:

FEB 0 2 2023

Our family lives within 70 feet of the proposed development site at 2550 Irving. We have lived in our home for over 8 years with our children and elderly family members with existing health conditions, which are considered "sensitive groups" in terms of health impacts from air pollution, including indoor air pollution.

As part of the sale and redevelopment of 2550 Irving St, there has been a series of environmental investigations conducted in the area under the oversight of the CA Department of Toxic Substances Control (DTSC). It was discovered that, likely due to past activities at 2 dry cleaners that existed here, Miracle Cleaners at 2550 Irving site and Albrite Cleaners at 2511 Irving, there are levels of toxic carcinogenic tetrachloroethylene (PCE) vapors in the soil above the DTSC's screening levels. The contamination was found to span the whole block of Irving St between 26th Ave and 27th Ave and expanding in all directions, including North towards residential single family homes like ours.

The levels of PCE vapors at 2511 Irving were found high enough that it was put on the Toxic Sites Cortese List and there was an Imminent Endangerment Order issued by the DTSC. The levels of PCE vapors were high enough at 2550 Irving St to warrant a requirement by the DTSC that a vapor barrier and monitoring be installed at the future TNDC building at this site to protect the health of future residents. After persistent requests from the community, DTSC has agreed to evaluate PCE indoor air intrusion at 6 homes immediately adjacent to 2550 Irving, one of which is where we reside. So far the testing done at and in front of these homes has shown PCE vapor levels above the DTSC's screening levels, which means potentially increased cancer risk for us and our family members.

The DTSC investigation is still ongoing. When TNDC got their environmental mitigation plan approved by the DTSC before conclusive results of the overall investigation, their "hunch" at the time was that the Albrite Cleaners across the street was the source of the contamination. Now that the DTSC has done more testing at the Albrite site, they know it's not the main/only source. In fact, they still haven't identified a conclusive source and last theory we heard was that perhaps there are 2 old plumes from both Miracle cleaners and Albrite that over time merged together into one giant plume. However, so far no comprehensive testing has been conducted specifically at the site of the former Miracle Cleaners which used to be located within the 2550 Irving St site, similar to the testing DTSC has done at Albrite/2511 Irving.

Which is why it's so important that the demolition plan takes all of the above and residents' health risks into account and is modified to preserve any evidence of past toxic releases within the 2550 frving site and to provide an opportunity for DTSC to conduct comprehensive testing at the footprint of the former Miracles Dry Cleaners.

In conclusion, I'd like for all members of the Board of Appeals to put yourselves in our shoes as residents of this city. Imagine living for many years in a house with your family including small children and a toxic contamination is discovered close by that could be affecting your and your family members' health for years to come. All we want is for this investigation to be properly conducted and concluded so there can ultimately be a complete remediation as outlined in the SF Board of Supervisors' resolution passed unanimously last year. None of this is possible without proper testing at the potential source site of former Miracle Cleaners at 2550 Irving St. Which will be much harder once TNDC starts construction at this site or if demolition removes important evidence.

We are not asking to prevent the demolition altogether. We are simply asking that the TNDC's demolition plan be modified to include considerations for the PCE contamination investigation by the DTSC at the site. This is a very reasonable ask that anybody would want to see done if they were in our situation.

From: Sent: To: Cc: Subject: BoardofAppeals (PAB)BOARD OF APPEALSThursday, February 2, 2023 4:18 PMBOARD OF APPEALSSarah BonkSarah BonkRosenberg, Julie (BOA); Mejia, Xiomara (BOA)FEB 0 2 2023RE: Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

HD 2/8/23

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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-----Original Message-----From: Sarah Bonk <bonko123@yahoo.com> Sent: Thursday, February 2, 2023 2:56 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the SF Board of Appeals:

I am a resident of San Francisco and live at 1300 26th Avenue on the corner opposite from the proposed building at 2550 Irving Street.

First, I would like to note that I generally support increasing affordable housing in San Francisco and agree that this is a suitable spot for increased housing density in the Sunset district.

That said, it is unconscionable not to fully remediate the toxic substances in the ground prior to building.

For several years we have known that 2550 Irving sits over a toxic PCE plume but we still do not know how far has it spread into the neighborhood. The investigation is incomplete and there are no plans to complete it. This must be done prior to moving forward.

Some of the data show that PCE fumes from the Irving site have entered at least four houses. The PCE gas levels in these homes are well above the state risk level set by the Water Board and DTSC. Unfortunately, there are still no plans to do further testing to see the extent of the PCE movement. This is an ostrich with its head in the sand approach.

We need this cleaned up before building. Simply covering it up with a temporary vapor solution will lead to the exposure of a new residents at 2550 once built and inhabited. It is ethically abhorrent to knowingly expose humans to such dangerously toxic substances.

Please postpone the demolition of 2550 Irving Street until there is a complete plan to:

1) assess the extent of PCE spread

2) hold accountable the cleaners who dumped toxic substances, and

3) fully remediate the toxic soil/sand such that the health of current neighbors and future residents will be fully protected.

Thank you, Sarah Bonk



From:BoardofAppeals (PAB)BOARD OF APPEALSSent:Thursday, February 2, 2023 4:18 PMTo:Shelley KoCc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit #
2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Shelley Ko <ko.shelley5@gmail.com> Sent: Thursday, February 2, 2023 2:26 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area. This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Shelley Ko 2110 35th Avenue San Francisco, CA 94116

HD 218123

MOARD OF APPEALS

FEB 0 2 2023

To the San Francisco Board of Appeals:

APPEAL # 22-092 I live 1/2 block away from the old Police Credit Union at 2550 Irving Street. California's

Department of Toxic Substances and Control has tested the air in some of my neighbors houses twice (a third time is scheduled in February), and each time it has found air contaminated with PCE gas at four times DTSC's health-based screening level. PCE is a known carcinogen. I don't know how much I've been exposed since only 6 houses have been tested.

This poisonous gas is a big enough threat to human health that the developer at 2550 Irving (The Tenderloin Neighborhood Development Corporation) has proposed to put a vapor barrier under the new building it plans to construct. The barrier will only last 20 years and won't protect the nearby homes. Other agencies (such as the California Water Board) have recognized that such barriers should no longer be seen as an adequate solution to stop PCE vapor.

I find it morally reprehensible that The Police Credit Union was able to sell 2550 Irving for ten million dollars and not clean up the PCE toxins. TNDC bought the land with the provision they would only have to protect future residents. TNDC should have insisted that the PCE's were cleaned up before they bought the property.

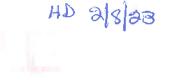
Environmental consultant and CA Professional Geologist Don Moore has mapped the concentrations, migration and extent of these gasses based on available data and has confirmed with remediation experts that the gas plumes could be removed effectively using soil vapor extraction, regardless of where they originally came from; the original sources (dry cleaners) are long since gone but the gasses remain. Mr. Moore has the technical expertise and regulatory perspective to see that DTSC is not following their own technical guidance and stated mission to protect human health by conducting cleanup - and that TNDC is taking advantage of the DTSC missteps and staffing issues. As an expert in VOC / PCE site management and part of our greater Sunset District community his conscience has driven him to try to protect the health and value of this neighborhood – free of charge and with no conflicts – because he sees that DTSC is failing.

I urge the Board of Appeals to only permit the demolition of the old Police Credit Union building at 2550 Irving if TNDC and DTSC do the necessary soil sampling and testing needed to determine if the former Miracle Cleaners (which was a dry cleaners that used to by located at 2550 Irving) is a source of the PCEs. The old sewer pipes also need to be preserved to see if they are leaking, because these pipes could also help determine the path of the PCE vapors.

The demolition should not be allowed to proceed until there is a completed plan to finish the investigation at 2550 Irving and the surrounding areas and there is a plan to remediate the PCEs from the area."

Thank you for your consideration.

Sincerely, Deborah Murphy 1254 26th Ave. San Francisco, CA 94122



From:BoardofAppeals (PAB)BOARD OF APPEALSSent:Thursday, February 2, 2023 4:17 PMFEB 0 2 2023To:larrydelaney1@aol.comFEB 0 2 2023Cc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)APPEAL # 33 - 092Subject:RE: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit #
2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: larrydelaney1@aol.com <larrydelaney1@aol.com> Sent: Thursday, February 2, 2023 1:54 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: boardofappeals@sfgov.org

City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a long-time resident of the Sunset and very familiar with the project location. It would be very alarming and precedent setting to not meet public health standards. This demolition permit should be halted until there is a comprehensive remediation plan agreed upon with adjacent neighbors and commercial tenants.

I support affordable housing but for the permit holder and other responsible parties to compromise on the public's health is unacceptable. Given the appellant's experts oversight of a new ministerial process, there is no substitute for a comprehensive clean-up of the known cancer-causing contaminants in this vicinity for future <u>or</u> present residents.

It is in everybody's best interest, including the City, to not allow any affordable housing to be located above remaining contamination without careful oversight. It is wrong that the South Side of Irving is protected by its Cortese listing, a law that is protecting Market rate housing, but <u>not</u> below market rate housing across the street.

This Appeal is also responding to the permit procedure where the local health department states their role is "not applicable". While PCE contamination is commonly found, this still engulfs the entire Irving Street block from 26th to 27th Avenues and is no less an issue. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built, and <u>does nothing to clean-up the surrounding area.</u> The demolition documents do not instruct the Contractor to remedy the toxins in a <u>comprehensive</u> way.

I respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully submitted,

Larry Delaney

1279 44th Ave

San Francisco, CA 94122

HD 2/8/23

Mejia, Xiomara (BOA)

From:BoardofAppeals (PAB)DOAD OF APPEALSSent:Thursday, February 2, 2023 4:15 PMFEB 0 2 2023To:rd@consolidated-elec.comFEB 0 2 2023Cc:Rosenberg, Julie (BOA); Mejia, Xiomara (BOA)APPEAL # 222/06/27/7192Subject:RE: Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: rd@consolidated-elec.com <rd@consolidated-elec.com> Sent: Wednesday, February 1, 2023 9:15 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

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Dear Board of Appeals:

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I support affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has sidestepped the necessary priority of public health. The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

PUBLIC SAFETY IS THE FIRST PRIORITY. KNOWINGLY EXPOSING PEOPLE TO HARMFUL CONTAMINANTS IS COMMITTING A CRIME AGAINST HUMANITY.

Ray Dudum

2837 Irving Street

From: Sent: To: Cc: Subject: BoardofAppeals (PAB)COMPEALSFriday, February 3, 2023 8:46 AMFEB 0 3 2023Hal SilkFEB 0 3 2023Mejia, Xiomara (BOA); Rosenberg, Julie (BOA)22-092RE: Appeal No.22-192, 2550 Irving St Demo., Permit #2022/06/7192

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

The Board's physical office is open to the public by appointment only. Please email <u>boardofappeals@sfgov.org</u> or call 628-652-1150 if you would like to meet with a staff member.

From: Hal Silk <haisilk@gmail.com> Sent: Thursday, February 2, 2023 4:50 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: Appeal No.22-192, 2550 Irving St Demo., Permit #2022/06/7192

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A serious question must be answered regarding the application to demolish the existing structure occupying the site of 2550 Irving in San Francisco. Before it is approved, the extent and removal of known toxins must be determined and appropriately handled. Some residents have lived in the silent grip of a PCE plume for decades. And the proposed structure without a written remediation procedure would entitle its underprivileged new tenants to a proven hazard. Even our Board of Supervisors last August unanimously passed a resolution that requires a remediation plan before development of the site commences. The BOS resolution also recognizes that a sampling of houses in the neighborhood should be tested until a margin of clearance from toxicity is determined. So far only houses virtually adjacent to the 2550 parcel have been tested, and they tested positive. Don't countenance the poisoning of current and future residents of this neighborhood by permitting this demolition before a written and enforceable remediation plan is developed.

Hal Silk 1270 26th Ave. San Francisco 415 519-8037

From: Sent: To: Cc: Subject:

 BoardofAppeals (PAB)

 Friday, February 3, 2023 9:11 AM

 Joan Klau

 Mejia, Xiomara (BOA); Rosenberg, Julie (BOA)

 FEB 0 3 2023

 RE: LOS for Appeals #22-091 and #22-092 re: 2550 Irving Street

 APPEals

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: Joan Klau <joan@klau.biz> Sent: Thursday, February 2, 2023 5:04 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: LOS for Appeals #22-091 and #22-092 re: 2550 Irving Street

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the Board of Appeals:

I am writing in support of two appeals (#22-091 and #22-092) asking that TNDC's demolition permit for 2550 Irving Street be denied.

I am frustrated yet optimistic that all parties – DTSC, TNDC, the SFPCU, MOHCD and MSNA and others – have not yet reached an agreement allowing DTSC to test the soil and pipes under 2550 Irving Street so we can better understand and remediate the source, flow and volume of toxins known to be present onsite.

While DTSC has identified one potential source (Albrite Cleaners) across the street, they agree that plume is flowing downhill into a second plume under 2550 Irving Street, site of the former Miracle Cleaners. TNDC's environmental consultant, PATH Forward has argued that the 66 soil sampling sites around the *perimeter* of 2550 Irving Street's parcel have provided more than enough info for DTSC to approve the current mitigation plan – however, *only one* of the 66 soil sampling sites was within the footprint of Miracle Cleaners – most of the Miracle Cleaners' footprint is buried under the Police Credit Union building so soil testing cannot be done until demolition. To approve a demolition permit without an agreement between DTSC and TNDC over how, when and what kind of testing DTSC - or other agencies such as the SF Department of Public Health - may conduct before/during demolition is needlessly reckless. During demolition, we have the prime opportunity to understand whether the soil vapors proven to be off-gassing into at least six neighboring homes are solely from an offsite source or is comingled from on and offsite

sources. Knowing this would aid DTSC in identifying the responsible parties, and most importantly developing the most appropriate response plan that insures the health and safety of future site residents and their neighbors.

I was present on March 17, 2022 for negotiations with TNDC and MSNA over a compromise design. During this meeting, I stressed to TNDC that the primary concern with proceeding with demolition and construction was that DTSC did not yet know the source(s) or perimeter of contamination – we only know that all 6 homes directly north and downhill of the site have shown elevated levels of PCE contamination - not just in their homes' outdoor soil, but in the indoor air they breathe. I asked Katie Lamont and Jackson Rabinowitsh, both of TNDC, if it was reasonable for the neighborhood to ask TNDC to cooperate with DTSC's investigation by allowing DTSC to conduct additional soil gas testing during both demolition and construction phases. Ms Lamont agreed this was a reasonable ask, and something they would discuss with DTSC. It is now almost a year since that meeting – ample time for TNDC and DTSC to have reached an agreement over more testing before proceeding with demolition – but they have not. Having failed to honor the neighborhood's "reasonable" ask for cooperation with more onsite testing by DTSC, I would ask that you deny TNDC's request for a demolition permit until such an agreement is reached.

My concern is not just civic – it's personal. I live directly across the street from the 3 houses on 27th Avenue with unacceptably high PCE levels in their homes. I certainly worry for my neighbors, and I worry for the future residents, but I must also worry for my family – because while DTSC knows 100% of the homes they have tested are indeed impacted, they have not yet expanded testing across the street to determine the perimeter of concern. As the mother of 2 small children, ages 3 and 7, who lives between two other families with kids ages 1-14, it causes me great stress not knowing the boundaries of this toxic plume. If you look at DTSC's own plume map, it predicts the toxins are flowing in a northwesterly direction – with an arrow pointing straight at my home. Without more testing at the sources, DTSC will not expand testing to determine the perimeter. So I need to know that San Francisco and DTSC have done everything we can to identify the source, strength, direction and perimeter of the plumes flowing under 2550 Irving Street and into neighboring homes. And so again, I ask that you deny TNDC's demolition permit until TNDC and DTSC reach an agreement to conduct additional testing during demolition.

Sincerely, Joan Klau 1273 – 27th Avenue, San Francisco, CA 94122

From: Sent: To: Cc: Subject: BoardofAppeals (PAB) Friday, February 3, 2023 9:11 AM jerry motaka Mejia, Xiomara (BOA); Rosenberg, Julie (BOA) RE: 2550 Irving, S.F. middle sunset distict

POGTO OF APPEALS

FEB 03 2023

APPEAL # 22-092

Thank you for your email. We will add your letter to the appeal file and give a copy to the commissioners of this Board.

Alec Longaway Legal Assistant, San Francisco Board of Appeals 49 South Van Ness, Suite 1475 San Francisco, CA 94103 Work PH: 1-628-652-1152 Cell: 1-415-746-0119

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From: jerry motaka <chessmaster2054@yahoo.com> Sent: Thursday, February 2, 2023 6:30 PM To: BoardofAppeals (PAB) <boardofappeals@sfgov.org> Subject: 2550 Irving, S.F. middle sunset distict

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Dear board of appeals:

We, the Leung-Motak Families at 1238-28th ave. oppose the demolition of the building at 2550 Irving, until a Environmental impact report is performed about the impact on the immediate neighborhood of the middle sunset district residential houses. Cordially

Jeremiah O'keefe Motak

From:	aeboken
То:	BoardofAppeals (PAB)
Subject:	Amended Submission: Strongly Supporting Appeal no. 22-192 for 2550 Irving Street Demolition Permit # 2020/06/27/7192
Date:	Sunday, February 5, 2023 1:09:08 PM

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Please amend the final paragraph to read Board of Supervisors file #220772 resolution 317-22.

Sent from my Verizon, Samsung Galaxy smartphone

------ Original message ------From: aeboken <aeboken@gmail.com> Date: 2/1/23 12:30 PM (GMT-08:00) To: boardofappeals@sfgov.org Cc: Simon Timony <simon.timony@sfgov.org>, engardiostaff@sfgov.org Subject: Strongly Supporting Appeal no. 22-192 for 2550 Irving Street Demolition Permit # 2020/06/27/7192

TO: Board of Appeals

FROM: Eileen Boken, President Sunset-Parkside Education and Action Committee (SPEAK)

RE: Strongly Supporting Appeal no. 22-192 for 2550 Irving Street Demolition Permit # 2020/06/27/7192

Sunset-Parkside Education and Action Committee (SPEAK) is a 501(c)3 incorporated in 1970.

SPEAK has a decades long record of advocacy for land use issues in District 4.

Therefore, SPEAK is strongly supporting the Mid-Sunset Neighborhood Association and their appeal no. 22-192 which is scheduled to be heard at the Board of Appeals on February 8, 2023.

SPEAK strongly supports this appeal based on issues of PCE contamination from two (2) different dry cleaners formerly located on the 2500 block of Irving Street.

These issues have already been documented in the appeal.

It's questionable that the previous owner of the property, the San Francisco Police Credit Union, withdrew from its voluntary agreement with the California Department of Toxic Substances Control (DTSC) without providing the rationale for this decision.

Finally, the project sponsor, Tenderloin Neighborhood Development Corporation (TNDC), has yet to comply with the provisions of Board of Supervisors Resolution 220772 in addressing PCE contamination at the site.

Sent from my Verizon, Samsung Galaxy smartphone

From:	Jean Barish
То:	BoardofAppeals (PAB)
Subject:	Appeal No. 22-192, 2550 Irving Street Demolition Permit # 2022/06/27/7192
Date:	Monday, February 6, 2023 8:18:17 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing to urge you not to permit the demolition of 2550 Irving Street by TNDC until further action is taken to assure that there are no environmental hazards. There are dangerous toxins in the soil on this site, most notably gaseous tetrachloroethylene (PCE). Yet TNDC does not have a plan to keep this toxic gas from being released and entering the air and adjoining homes during the demolition. This will expose families living in homes near this project to toxic PCE's, as well as poison the atmosphere. The PCE gas in these homes is ABOVE the state risk screening level set by the Water Board and DTSC. As Dr. Samuel Goldman, a UCSF epidemiologist who studies PCE, says: "longer the exposure the worse it is for you." For some in the area that is 20, 30 even 40 years. The area must be thoroughly cleaned up before demolition is permitted.

Additionally, TNDC must preserve all evidence that could be used to identify the original sources of the PCE. Further, it does not appear that the demolition company hired to do this work even knows that there are serious health hazards involved. This demolition should not be approved until all measures have been taken to protect the surrounding community and the environment.

Following are additional reasons to grant this Appeal stopping demolition:

- The area around 2550 Irving St. —the demolition site—is currently an <u>active</u> <u>investigation</u> site. The investigation is incomplete and there are no plans to complete it. Data shows that PCE from the Irving St. site has entered at least 4 houses. These are next to 2550 Irving. There are likely more homes.
- Path Forward, TNDC's environmental advisor, drafted an environmental response plan for TNDC BEFORE all important data was collected including testing of neighbors' homes. This report is incomplete and does not qualify TNDC to proceed with a demolition.
- The community's concerns are spelled out in a Resolution the SF Board of Supervisors passed in August, 2022. The Resolution states the 2550 Irving St. site should not go forward until a remediation plan is developed to address the PCE plume under Irving St and the area surrounding it on the South (2550 Irving) and to the North (2511 Irving). The Resolution also includes a call for step-out sampling of neighborhood homes to determine the extent of the PCE into the neighborhood
- The south side of Irving St., just across the street from the demolition site, is under a California Imminent and Substantial Endangerment Order.

In view of the environmental hazards of the demolition as currently scheduled, please grant this Appeal denying the TNDC Demolition Permit until there is a thorough, competent remediation plan in place. Lives are at risk. This demolition must not go forward until there is assurance that everyone is protected.

Thank you for your consideration of this important issue.

Sincerely,

Jean

Jean B Barish, Esq., MS, MA jeanbbarish@hotmail.com This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: The Board of Permit Appeals: <u>boardofappeals@sfgov.org</u> City of San Francisco

Re: Support of Appeal no. 22-192, 2550 Irving Street demolition, permit # 2022/06/27/7192

Dear Board of Appeals:

I am writing in support of the Appeal noted above. I am a neighbor to the project noted above and a substantial stakeholders in this matter.

I support limited affordable housing that addresses the shortage of below market rate housing as long as there is a comprehensive clean-up of the

known PCE contaminants and toxins in the entire area.

This Appeal is responding to the permit procedure of the Developer and Planning Department which has side-stepped the necessary priority of public health.

The PCE contamination engulfs the entire Irving Street block from 26th to 27th avenues. This contamination is known to cause cancer and stretches to the North and

South of the street and is below resident's houses and commercial properties.

Presently, the Developer intends to allow the contamination to remain under the new residences to be built and do nothing to clean-up the surrounding area.

We respectfully ask the Board of Appeals to deny the Demolition Permit until the Appellant is satisfied with a comprehensive Site Management Plan (SMP).

Respectfully Submitted,

Mary Ellen O'Connor 1462 - 26th Avenue SF, CA 94122