



Limited Good Faith Survey

August 31, 2023

Post-IAF Airline Realignment Package 4: Zone 4 (N00030)

Seattle-Tacoma International Airport

17801 International Blvd, Seattle, WA 98158

Executive Summary

A limited “good faith” survey was performed to support the Post-IAF Airline Realignment Package 4: Zone 4 (N00030). The current survey was performed by Port Construction Services (PCS). Results of this survey are summarized below.

Asbestos

Asbestos was not detected in the materials sampled. The following materials are presumed to contain asbestos (PACM):

Material	Material Location	Asbestos Content
Older beige fireproofing	East side of column G.10/L3 Above ceiling on portion of L3 beam just east of column G.10/L3	PACM
Fireproofing overspray and debris	Below terrazzo flooring throughout project area	PACM

Lead

Lead was not detected in the project area.

Introduction

A limited “good faith” survey was performed for the Post-IAF Airline Realignment Package 4: Zone 4 (N00030). The survey was limited to areas of the Main Terminal Building that will be impacted by the referenced Project, as shown on the 60% submittal drawings dated June 15, 2023.

This survey was performed in June 23, 2023 by the following Asbestos Hazard Emergency Response Act (AHERA) Building Inspector:

- Gerald Dunbar, Port Construction Services (PCS)
Certification Number: 185431, Expiration: 9/28/2023
Email: dunbar.g@portseattle.org
Cell: (206) 321-6442

Methods

Asbestos

This survey was conducted in accordance with the requirements of Washington Administrative Code (WAC) 296-62-07721 and Puget Sound Clean Air Agency (PSCAA) Regulation III, Article 4, Section 4.02. Suspect asbestos-containing materials were sampled in accordance with AHERA sampling guidelines (40 CFR 763.86) and analyzed by a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory using polarized light microscopy (PLM) by United States Environmental Protection Agency (EPA) Method 600.

Results

Table 1 – Asbestos Sample Results

Asbestos sample results for the current good faith survey are summarized below. Additional sample results are provided in the previous survey documents attached to this report.

Sample Number	Material	Material Location	Lab Result	Quantity
24-T-GR-01	Tan ceramic tile grout	Ceramic tile systems in project area	ND	N/A
24-T-SEA-01	Grey sealant	HVAC ducting joints/seams	ND	N/A
24-T-CT-01	White suspended ceiling tiles	Ceiling in project area	ND	N/A
24-T-FP-01 24-T-FP-02 24-T-FP-03	Newer beige fireproofing	Above ceilings on structural beams and overspray on pandecking in project area	ND	N/A
24-T-CRT-01	Grey ceramic tile with tan grout/mortar	Ceramic tile systems in project area	ND	N/A
24-T-FRP-01	White wall panel with tan mastic	Backsplash on walls in places	ND	N/A
24-T-GWB-01	White gypsum wallboard with white joint compound	Walls and hard lid ceilings in project area	ND	N/A
24-T-VFT-01	Beige vinyl floor tiles with yellow mastic	Vinyl tile flooring in project area	ND	N/A

Notes:

1. ND – None detected
2. N/A – Not Applicable (quantity not required for non-asbestos materials)

Recommendations

Asbestos

Asbestos-containing material (ACM) and presumed asbestos-containing material (PACM) that may be impacted by demolition/renovation activities must be removed by a licensed asbestos abatement contractor prior to disturbance. The asbestos work must be performed in compliance with Washington State worker protection and environmental protection regulations. See WAC 296-62, WAC 296-65, and Puget Sound Clean Air Agency Regulation III, Article 4 for additional information.

Lead

Materials that have been shown to contain detectable levels of lead are regulated by L&I due to the potential for occupational exposure to lead if these materials are disturbed. Necessary precautions (e.g., exposure assessments, respiratory protection) must be taken to prevent or minimize worker exposure to lead, as outlined in WAC 296-155-176. Demolition waste that contains lead must be characterized and disposed in accordance with the provisions of the Dangerous Waste Regulations (WAC 173-303).

Limiting Conditions

This survey was limited to observation, minimal destructive sampling, and analysis of suspect building materials in accessible portions of the Post-IAF Airline Realignment Package 4: Zone 4 Project Areas that may be impacted by construction. Common construction techniques render portions of any building inaccessible; as a result, additional asbestos- and lead-containing building materials may be present in inaccessible areas of the building that were not observed during the survey. Inaccessible areas should be presumed to contain asbestos and lead until extensive destructive sampling is performed in those areas. In addition, any suspect materials that were not sampled during the referenced survey activities should be presumed to contain asbestos and lead until otherwise indicated by sampling and analysis.

Limitations of the Assessment

The conclusions of this report are based solely upon visual site observations and interpretations of laboratory analyses, as described in this report. The opinions presented herein apply to the site conditions existing at the time of the investigation and interpretation of current regulations pertaining to asbestos and lead. Therefore, these opinions and recommendations may not apply to future conditions that may exist at the site which we have not had the opportunity to evaluate. All applicable state, federal, and local regulations should always be verified prior to any work that will disturb materials containing asbestos and lead.

This survey report is not intended to replace specifications or bidding documents, and should not be used as such. Material quantities are estimates only, and are not intended for bidding purposes. Contractors are responsible for verifying quantities prior to bid.

Attachments

Figures

Bulk Sample Analytical Reports

Figures

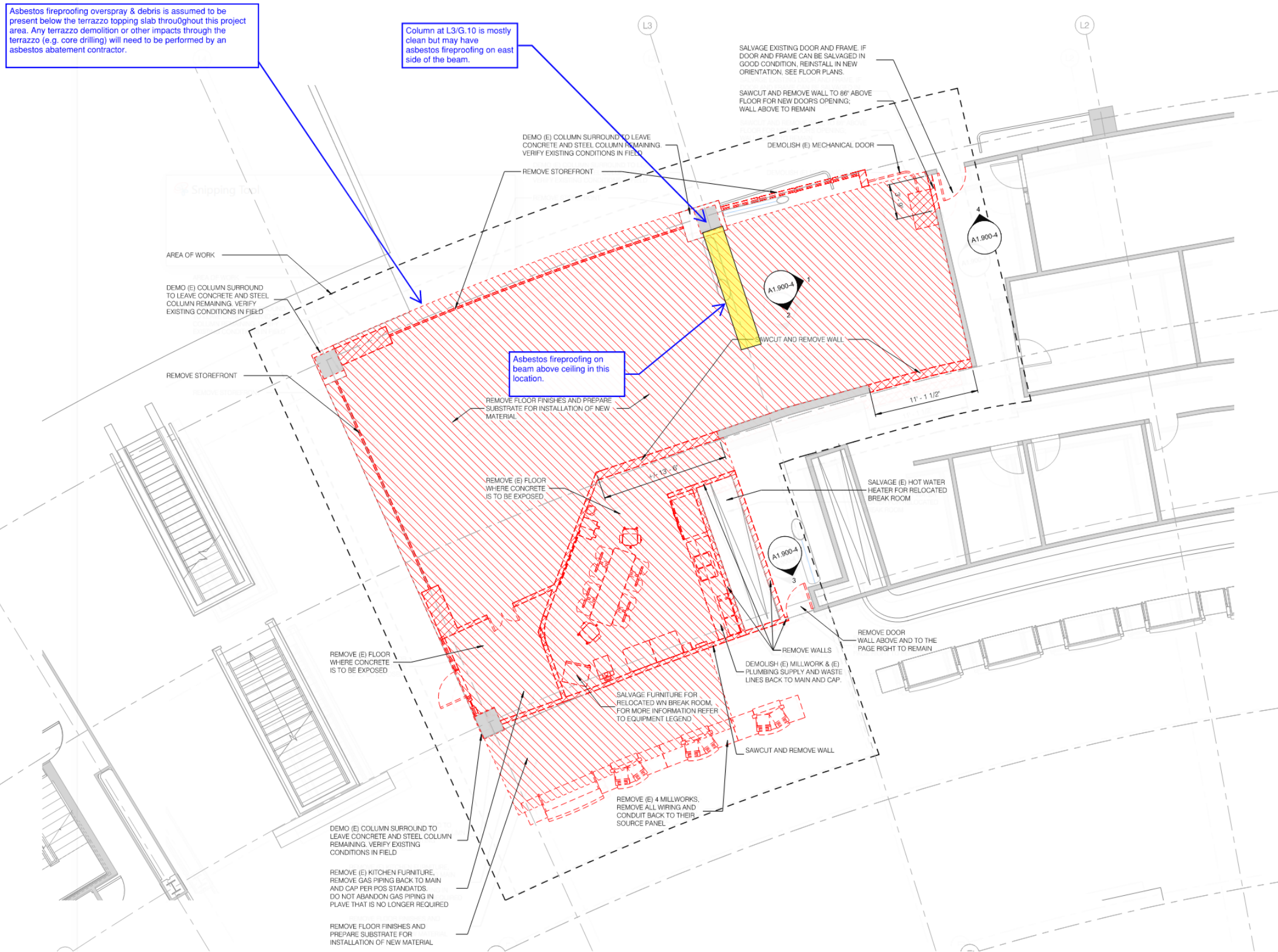


Figure 1
**Zone 4 Ticketing Level
 PACM Locations**

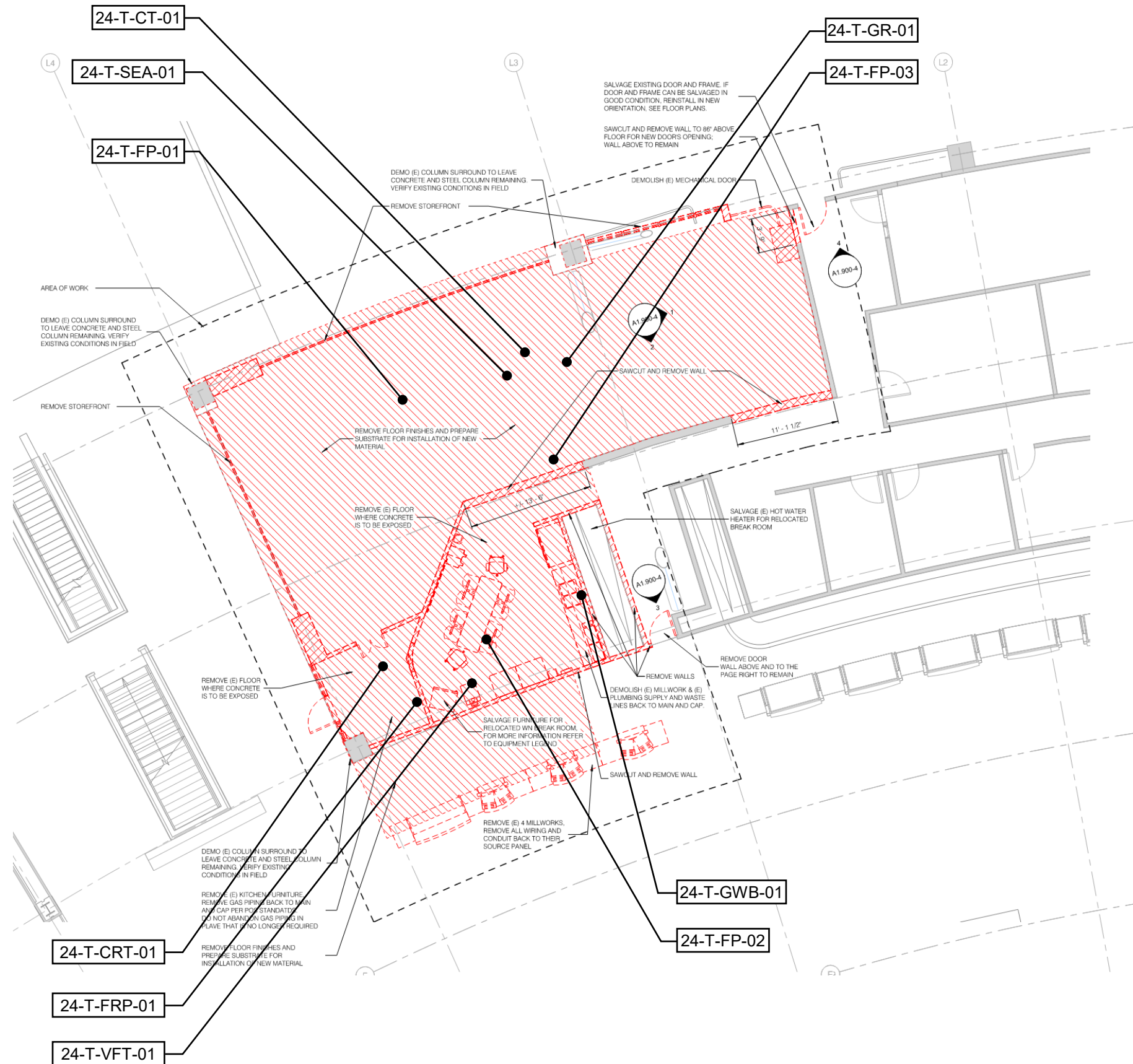


Figure 1
**Zone 4 Ticketing Level
 Sample Locations**

Bulk Sample Analytical Reports

June 28, 2023



Scott Rinear
Port of Seattle - PCS
17900 International Blvd., Suite 400-C
SeaTac, WA 98188

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2309948.00

Client Project: Zone GFS N0030-Admin
Location: Port of Seattle Zone L2-L4

Dear Mr. Rinear,

Enclosed please find test results for the 10 sample(s) submitted to our laboratory for analysis on 6/23/2023.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

A handwritten signature in black ink that reads "Kunga Woser".

Kunga Woser, Senior Laboratory Analyst



Testing

Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516



Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Port of Seattle - PCS
 Address: 17900 International Blvd., Suite 400-C
 SeaTac, WA 98188

Batch #: 2309948.00

Client Project #: Zone GFS N0030-Admin
 Date Received: 6/23/2023
 Samples Received: 10
 Samples Analyzed: 10
 Method: EPA/600/R-93/116

Attention: Mr. Scott Rinear

Project Location: Port of Seattle Zone L2-L4

Lab ID: 23060217 Client Sample #: 24-T-GR-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 1 **Description:** Beige crumbly material

Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
Binder/Filler, Fine particles	None Detected ND	None Detected ND

Lab ID: 23060218 Client Sample #: 24-T-SEA-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 1 **Description:** Gray soft material

Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
Binder/Filler	None Detected ND	None Detected ND

Lab ID: 23060219 Client Sample #: 24-T-CT-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 1 **Description:** Beige compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
Binder/Filler, Fine particles, Glass beads	Cellulose 83%	None Detected ND
Paint, Perlite		

Lab ID: 23060220 Client Sample #: 24-T-FP-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 1 **Description:** Beige fibrous material

Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
Binder/Filler	Glass fibers 91%	None Detected ND

Lab ID: 23060221 Client Sample #: 24-T-FP-02

Location: Port of Seattle Zone L2-L4

Sampled by: Client		
Analyzed by: Carena Lan	Date: 06/26/2023	<i>Kunga Woser</i>
Reviewed by: Kunga Woser	Date: 06/28/2023	Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Port of Seattle - PCS
Address: 17900 International Blvd., Suite 400-C
SeaTac, WA 98188

Batch #: 2309948.00

Client Project #: Zone GFS N0030-Admin

Date Received: 6/23/2023

Samples Received: 10

Samples Analyzed: 10

Method: EPA/600/R-93/116

Attention: Mr. Scott Rinear

Project Location: Port of Seattle Zone L2-L4

Layer 1 of 1	Description: Beige fibrous material	Non-Fibrous Materials: Binder/Filler	Other Fibrous Materials:% Glass fibers 93%	Asbestos Type: % None Detected ND
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Lab ID: 23060222 Client Sample #: 24-T-FP-03

Location: Port of Seattle Zone L2-L4

Layer 1 of 1	Description: Beige fibrous material	Non-Fibrous Materials: Binder/Filler	Other Fibrous Materials:% Glass fibers 90%	Asbestos Type: % None Detected ND
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Lab ID: 23060223 Client Sample #: 24-T-CRT-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 2	Description: Gray ceramic tile	Non-Fibrous Materials: Ceramic/Binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
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Layer 2 of 2	Description: Beige crumbly material	Non-Fibrous Materials: Binder/Filler, Fine particles	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
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Lab ID: 23060224 Client Sample #: 24-T-FRP-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 2	Description: White vinyl	Non-Fibrous Materials: Vinyl/Binder	Other Fibrous Materials:% Glass fibers 41%	Asbestos Type: % None Detected ND
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Layer 2 of 2	Description: Cream soft material	Non-Fibrous Materials: Binder/Filler	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
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Sampled by: Client

Analyzed by: Carena Lan

Reviewed by: Kunga Woser

Date: 06/26/2023

Date: 06/28/2023

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Port of Seattle - PCS
 Address: 17900 International Blvd., Suite 400-C
 SeaTac, WA 98188

Batch #: 2309948.00

Client Project #: Zone GFS N0030-Admin

Date Received: 6/23/2023

Samples Received: 10

Samples Analyzed: 10

Method: EPA/600/R-93/116

Attention: Mr. Scott Rinear

Project Location: Port of Seattle Zone L2-L4

Lab ID: 23060225 Client Sample #: 24-T-GWB-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 2	Description: White compacted powdery material with paint	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Calcareous binder, Calcareous particles, Paint	Cellulose 15%	

Layer 2 of 2	Description: White chalky material with paper	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
		Gypsum/Binder, Calcareous particles	Cellulose 17%		None Detected ND
			Glass fibers 8%		

Lab ID: 23060226 Client Sample #: 24-T-VFT-01

Location: Port of Seattle Zone L2-L4

Layer 1 of 2	Description: Beige vinyl	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Vinyl/Binder, Fine particles, Mineral grains	None Detected ND	

Layer 2 of 2	Description: Yellow soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Mastic/Binder	None Detected ND	

Sampled by: Client		<i>Kunga Woser</i>
Analyzed by: Carena Lan	Date: 06/26/2023	
Reviewed by: Kunga Woser	Date: 06/28/2023	

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES



Company Port of Seattle - PCS	NVL Batch Number 2309948.00
Address 17900 International Blvd., Suite 400-C SeaTac, WA 98188	TAT 3 Days AH No
Project Manager Mr. Scott Rinear	Rush TAT
Phone (206) 787-5390	Due Date 6/28/2023 Time 8:00 AM
Cell (206) 787-5472	Email rinear.s@portseattle.org
	Fax (206) 787-5198

Project Name/Number: Zone GFS N0030-Admin **Project Location:** Port of Seattle Zone L2-L4

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 10 **Rush Samples** _____

Lab ID	Sample ID	Description	A/R
1	23060217	24-T-GR-01	A
2	23060218	24-T-SEA-01	A
3	23060219	24-T-CT-01	A
4	23060220	24-T-FP-01	A
5	23060221	24-T-FP-02	A
6	23060222	24-T-FP-03	A
7	23060223	24-T-CRT-01	A
8	23060224	24-T-FRP-01	A
9	23060225	24-T-GWB-01	A
10	23060226	24-T-VFT-01	A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Airport Drop Box				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Carena Lan		NVL	6/23/23	800
Analyzed by	Carena Lan		NVL	6/26/23	
Results Called by					
<input type="checkbox"/> Faxed <input type="checkbox"/> Emailed					

Special Instructions: _____

Date: 6/23/2023
 Time: 8:40 AM
 Entered By: Shazia Hasan



2309948

ASBESTOS CHAIN OF CUSTODY

Turn Around Time

- 1 Hour 24 Hours 4 Days
- 2 Hours 2 Days 5 Days
- 4 Hours 3 Days 10 Days

Please call for TAT less than 24 Hours

Laboratory | Management | Training

Company Port of Seattle - PCS
 Address 17900 International Blvd., Suite 400-C
Seatac, WA 98188
 Phone _____

Project Manager Scott Rinear
 Cell (206) 351-3121
 Email Rinear.S@PortSeattle.org
 Fax () _____

Project Name/Number 20164 973 N00030 / Admin Project Location Port of Seattle Zone L2-L4

- PCM Air (NIOSH 7400) TEM (NIOSH 7402) TEM (AHERA) TEM (EPA Level II Modified)
- PLM (EPA 600/R-93-116) EPA 400 Points (600/R-93-116) EPA 1000 Points (600/R-93-116)
- PLM Gravimetry (600/R-93-116) Asbestos in Vermiculite (EPA 600/R-04/004) Asbestos in Sediment (EPA 1900 Points)
- Asbestos Friable/Non-Friable (EPA 600/R-93/116) Other _____

Reporting Instructions Please email Rinear.S@PortSeattle.org
 Call () _____ Fax () _____ Email Dunbar.G@PortSeattle.org

Total Number of Samples _____

Sample ID	Description	A/R
1 24-T-GR-01	TAN grout see MAP For Location ①	①
2 24-T-SEA-01	grey duct sealant 11	②
3 24-T-CT-01	16x16 ceiling tile 11	③
4 24-T-FP-01	Fireproofing 11	④
5 24-T-FP-02	Fireproofing 11	⑤
6 24-T-FP-03	Fireproofing 11	⑥
7 24-T-CRT-01	CERAMIC TILE 11	⑦
8 24-T-FRP-01	FRP BACK SPLASH 11	⑧
9 24-T-GWB-01	gwb w/ TAPE 11	⑨
10 24-T-VFT-01	12x12 VFT MASTIC 11	⑩
11		
12		
13		
14		
15		

Print Name	Signature	Company	Date	Time
Sampled by <u>Nerald Dunbar</u>	<u>[Signature]</u>	Port of Seattle (POS)	6/23/23	12A
Relinquish by <u>Drop Box</u>	<u>[Signature]</u>	Port of Seattle (POS)	6/24/23	5A

Office Use Only

Print Name	Signature	Company	Date	Time
Received by <u>Carenna Lan</u>	<u>[Signature]</u>	NVL	06-23-23	0600 PD
Analyzed by				
Called by				
Faxed/Email by				

Project Name: ZONE 4 gfs		POS Project ID #: N00030 L2-L4		Activity#: ADMIN		Date: 6/23/23		
Building: SEA TAC AIRPORT			Area(s): ZONE 4 - TICKETING			Room number(s): HUDSON / SOUTHWEST		
Sample Number	Color	Material	Sample Location			Quantity		
Z4-T-GR-01	TAN	TAN grout BETWEEN TAN Tiles + BLACK Tiles	L3-L4 Tickiting see MAP HUDSON / SOUTHWEST ①					
Z4-T-SEA-01	grey	grey Duct SEALANT	②					
Z4-T-CT-01	WHITE/TAN FB	16" x 16" ceiling Tile	③					
Z4-T-FP-01	grey/TAN	Fireproofing / ou beam	④					
Z4-T-FP-02	grey/TAN		⑤					
Z4-T-FP-03	grey/TAN		⑥					

Typical building surfaces to be tested (This list is not necessarily complete. Other components should also be tested if encountered.)

Walls	Stair stringers	Baseboards	Newel posts	Built-in cabinets	Air conditioners	Lampposts
Ceilings	Stair treads and risers	Counters	Chair rails	Shelf supports	Heating units	Electrical fixtures
Floors	Stools and aprons	Gutters	Railing caps	Shelves	Light fixture	Fences
Columns	Bulkheads	Downspouts	Crown molding	Counter tops	Conveyor	Laundry line posts
Beams	Siding	Balustrades	Lattice work	Bathroom vanities	Duct	Painted curbing and signs
Stairs	Fascias	Flashings	Window sashes	Rake boards	Fan	Storage sheds
Doors	Soffits	Handrails	Window casings	Gutters and	Safe	Swing sets and other play equipment
Door Jambs	Joists	Baseboards	Railing caps	downspouts	Radiators	
Elevator Doors	Painted roofing	Jambs	Door trim	Mailboxes	Fireplaces	
Ceiling Decks		Corner boards	Sashes		Chimneys	

Inspector Name: Merced Durban Signature: [Signature] Firm: PCS Certificate # 186431 Exp. Date: 9/28/23

2309948

Project Name: ZONE 4 gfs		POS Project ID #: N00030		Activity#: ADMIN	Date: 6/23/23
Building: SEATAc AIRPORT		Area(s): ZONE 4 TICKETING L2-L4		Room number(s): HUDSON / SOUTHWEST	
Sample Number	Color	Material	Sample Location	Quantity	
24-T-CET-01	grey	CERAMIC TILE / KITCHEN	L4-L2 ZONE 4 TICKETING SEE MAP HUDSON / SOUTHWEST (7)		
24-T-FRP-01	WHITE TAN	FRP BACK SPLASH	(8)		
24-T-GWB-01	WHITE	gWB w/ Filler	(9)		
24-T-VFT-01	WHITE	12X12 VFT / MASTIC	(10)		

Typical building surfaces to be tested (This list is not necessarily complete. Other components should also be tested if encountered.)

Walls	Stair stringers	Baseboards	Newel posts	Built-in cabinets	Air conditioners	Lampposts
Ceilings	Stair treads and risers	Counters	Chair rails	Shelf supports	Heating units	Electrical fixtures
Floors	Stools and aprons	Gutters	Railing caps	Shelves	Light fixture	Fences
Columns	Bulkheads	Downspouts	Crown molding	Counter tops	Conveyor	Laundry line posts
Beams	Siding	Balustrades	Lattice work	Bathroom vanities	Duct	Painted curbing and signs
Stairs	Fascias	Flashings	Window sashes	Rake boards	Fan	Storage sheds
Doors	Soffits	Handrails	Window casings	Gutters and	Safe	Swing sets and other play equipment
Door Jambs	Joists	Baseboards	Railing caps	downspouts	Radiators	
Elevator Doors	Painted roofing	Jambs	Door trim	Mailboxes	Fireplaces	
Ceiling Decks		Corner boards	Sashes		Chimneys	

Inspector Name: **David Rubin**
Rev.03, Jan 4, 2017

Signature: *[Handwritten Signature]*

Firm: PCS

Certificate # **186431**

Exp. Date: **9/28/23**