

Addendum #1

RFT – WWTP Primary Building 2025 Roof Replacement Project

ISSUE DATE: March 14, 2025
ISSUED BY: Kathryn Risso
REFERENCE: Questions from bidders

The Documents for this work are revised as noted herein. All such revisions become a part of the work and shall be included in your Tender. No consideration will be allowed for extras due to the tenderer not being familiar with this addendum.

1. **Questions from tenderers:**
 Insulated cladding panel is listed twice in the tender form (lines 7 and 9). Are these meant to be distinct separate areas of cladding?
Response:
 Remove: Section 00 40 00.01 - SCHEDULE OF QUANTITIES AND PRICES
 Replace with: Section 00 40 00.01 – APPENDIX 1 - SCHEDULE OF QUANTITIES AND PRICES

2. **Questions from tenderers:**
 Separate Price #2 (ref. 2.13.2 of Section 01 11 00) is not listed on the bid form. Please clarify this scope and whether it should be included.
Response:
 Remove: Section 00 40 00.01 - SCHEDULE OF QUANTITIES AND PRICES
 Replace with: Section 00 40 00.01 – APPENDIX 1 - SCHEDULE OF QUANTITIES AND PRICES

3. **Remove:**
 Delete Section 01 11 00 2.13.2 in its entirety.

4. **Questions from tenderers:**
 New Roof Assemblies (ref. drawing BE1.02) describe roof systems that do not match up with the ones described in the project specifications. For example, polyiso insulation is listed for inverted roofs R2 and R3, and a second layer of drain mat over insulation listed while specifications describe a Tyvek layer over insulation... Please confirm/clarify roof assemblies on BE1.02.
Response:
 The new inverted roof assemblies for Roof Assemblies (Drawing BE1.02) R2 and R3 require new Extruded Polystyrene (XPS) insulation. Note: Delete the word “POLYISO” and add “Extruded Polystyrene (XPS)”. “Tyvek” is required over the insulation layer on both inverted Roof Assemblies (Drawing BE1.02) R2 and R3. A second layer of drain mat over the insulation will not be required provided the concrete pavers are supported by pedestals. Pedestals or pavers will allow for air flow above the pavers.

5. **Questions from tenderers:**
 Is there a cost to the roofing contractor for security escort (ref. 1.2.2 of Section 01 14 00) when interior access is required?
Response:
 Remove: Section 01 14 00 - 1.2.2

6. Questions from tenderers:

What is the detail for the 20x20 sumps (ref. 2.7.4 of Section 07 52 16)? What % slope? Is there a minimum insulation thickness at the drain?

Response:

Drawing 7.01 Detail 1 shows the drain / sump assembly with 1 layer of insulation thickness at the drain. The slope around the perimeter of the sump is approximately 45 degrees.

7. Questions from tenderers:

Roofmate DC is specified as the inverted roof insulation. Please confirm if the intent is XPS roof insulation with drainage channels?

Response:

Delete the word "Roofmate DC" and add "Roofmate". Drainage channels are not required due to the installation of a drain mat below the insulation layer.

8. Questions from tenderers:

It is unclear if paving stones should be simply laid flat on 1" XPS, or levelled on adjustable pedestals. Please confirm intent for paving stone finish

Response:

The intent is to create a level surface to walk on. Because the roof decks are sloped (slightly), the pavers would be required to be levelled.

9. Questions from tenderers:

Prefinished steel is described (ref. 2.1.1 of Section 07 62 00.03) as having silicone modified polyester finish, but colors chosen from 10,000-series (a PVDF finish) range. Please confirm if flashings are SMP or PVDF.

Response:

PVDF

10. Questions from tenderers:

What is an acceptable form of bonding for the Performance Bond? Assuming an LOC

Response:

Performance Bond is to be provided in the form of surety in the format provided by CCDC 221 and issued by a surety licensed to carry on the business of suretyship in the province of British Columbia.

11. Questions from tenderers:

Has a material hazard assessment been completed for the project?

Response:

See attached Addendum #1 - Appendix 2 – Hazard Survey Report

Site Visit: The RMOW will hold a non-mandatory meeting on **Thursday, March 20, from 10:00 to 11:30 a.m.** Please note that access to Roof Areas 1 and 2 will be restricted due to safety concerns, and bidders are advised that Roof Areas 3 and 4 may be impacted by seasonal snow, which could limit visibility of the existing structure.

All tenderers shall acknowledge receipt of Addendum #1 (2 (2) pages), Appendix 1 - 00 40 00.01 Schedule Of Quantities And Prices, and Appendix 2 – Hazard Survey Report, by signing in the space provided and submitting this signed addendum with the tender. Tenders submitted without acknowledgment of this addendum may be considered incomplete.

Receipt acknowledged and conditions agreed _____ day of _____, 2025

Tenderer Signature

End of Addendum #1

**ADDENDUM #1 –
APPENDIX 1 - 00 40 00.01 SCHEDULE OF QUANTITIES AND PRICES**

ADDENDUM #1

| | | | | | | |
|---|---|--|-------|-----|-------|-------|
| 5 | Roof Cap | Separate Price #1: Roof Areas 1 and 2 Fire Rated Cap Sheet. Provide for separate price to be included in the Tender Price to install a Fire Rated Cap sheet in lieu of the specified cap sheet. (Ref: 01 11 00 2.13.1) | LS | 1 | _____ | _____ |
| 6 | Concrete Pavers | Provide and place, 2'-0" x 2'-0" Concrete Pavers | Each | 1 | _____ | _____ |
| 7 | Metal Cladding | Insulated Cladding Panel | Each | 1 | _____ | _____ |
| 8 | Anti-Insect treatment of existing sheathing and wood blocking | 50 sq.ft or less | Sq.ft | 50 | _____ | _____ |
| | | 51 sq.ft to 200 sq.ft. | Sq.ft | 200 | _____ | _____ |
| | | Over 200 sq.ft. | Sq.ft | 300 | _____ | _____ |
| TENDERED AMOUNT (GST EXCLUDED) | | | | | | |
| GST (5%) | | | | | | |
| TOTAL TENDERED AMOUNT (GST INCLUDED) | | | | | | |

| Description of Work | Change to Date of Substantial Performance |
|---|---|
| Separate Price # 1: Roof Areas 1 and 2 Fire Rated Cap Sheet. Provide for a Separate Price to be included in the Bid Price to install a Fire Rated Cap sheet in lieu of the specified cap sheet. | |

The Total Tendered Amount includes all *Work* shown on the drawing, described in the specifications and reasonably visible or apparent at the close of bids. If during the performance of the *Work*, additional concealed existing construction is uncovered which requires replacement with new materials such as decayed plywood, framing members, deteriorated batt insulation and damaged interior finishes, such additional work will be paid for in accordance with the provisional unit prices. The Total Tendered Amount will become the *Contract Value* in CCDC 2 A-4 less provisional items which will be approved by the *Owner*.

Tenderer's Initials

ADDENDUM #1

Contract Name: Resort Municipality of Whistler | Primary Building Re-Roofing Project

(All prices including the Tendered Amount shall include all *Value Added Taxes*, but shall not include GST, GST shall be shown separately.)

| Item | Description | | Unit of Measure | Qty | Unit Rate | Extended Rate |
|--------------------------|-------------------|---|-----------------|-----|-----------|---------------|
| BASE ITEMS | | | | | | |
| 1 | Bonding/Insurance | Performance Bond | LS | 1 | _____ | _____ |
| | | Labour & Material Bond | LS | 1 | _____ | _____ |
| | | Construction Insurance | LS | 1 | _____ | _____ |
| | | | | | | |
| 2 | Roof Replacement | Roof Area 1 | LS | 1 | _____ | _____ |
| | | Roof Area 2 | LS | 1 | _____ | _____ |
| | | Roof Area 3 | LS | 1 | _____ | _____ |
| | | Roof Area 4 | LS | 1 | _____ | _____ |
| | | Fixed Ladder | LS | 1 | _____ | _____ |
| | | Skylights | LS | 1 | _____ | _____ |
| | | Access Equipment | LS | 1 | _____ | _____ |
| PROVISIONAL ITEMS | | | | | | |
| 3 | 2x4 Wood Framing | 2x4 - 3.0m (10') Height 50 L.F. or Less Remove and Replace | L.F. | 50 | _____ | _____ |
| | | 2x4 - 3.0m (10') Height 51 L.F. to 150 L.F. Remove and Replace | L.F. | 100 | _____ | _____ |
| | | 2x4 - 3.0m (10') Height >150 L.F. Remove and Replace | L.F. | 150 | _____ | _____ |
| | | | | | | |
| 4 | 2x6 Wood Framing | 2x6 - 3.0m (10') Height 50 L.F. or Less Remove and Replace | L.F. | 50 | _____ | _____ |
| | | 2x6 - 3.0m (10') Height 51 L.F. to 150 L.F. Remove and Replace | L.F. | 100 | _____ | _____ |
| | | 2x6 - 3.0m (10') Height >150 L.F. Remove and Replace | L.F. | 150 | _____ | _____ |
| | | | | | | |

Tenderer's Initials _____

ADDENDUM #1
APPENDIX 2 - HAZARD SURVEY REPORT



June 13, 2024

WSP

840 Howe Street, Suite 1000
Vancouver, BC V6Z 2S9

Attention: Mr. Tim Stubbins, AScT
Senior Project Manager

Ref: PRE-PROJECT HAZARDOUS BUILDING MATERIALS SURVEY FOR THE PLANNED RE-ROOFING OF THE PRIMARY TREATMENT BUILDING AT THE WHISTLER WASTEWATER TREATMENT PLANT AT 1135 CHEAKAMUS LAKE ROAD, WHISTLER, BC

1.0 INTRODUCTION

Astech Consultants Ltd. (Astech) were retained by WSP to conduct a Pre-Project Hazardous Building Materials Survey and compile a detailed report on the presence and location of asbestos containing building materials, lead, polychlorinated biphenyls (PCBs), mercury, stored chemicals, and silica to be impacted by the planned Re-Roofing Project at the Primary Treatment Building at the Whistler Wastewater Treatment Plant located at 1135 Cheakamus Lake Road, Whistler, BC. The subject areas of this report include areas listed in Section 4.1 below.

Astech's survey and report format is designed specifically to satisfy the current applicable regulation from the Workers' Compensation Board of British Columbia (WCB) Occupational Health and Safety Regulation 20.112 regarding hazardous building material assessments by a Qualified Person for buildings and structures.

This survey was conducted on May 31, 2024 by Sean Habkirk of Astech. It must be emphasized that this survey was concerned exclusively with the subject areas. The site survey was destructive in nature and thorough in investigating layered roofing systems and other specific areas. However, inaccessible areas which would require the actual dismantling of substantial portions of the building in order to gain access were not investigated. No attempt was made to investigate other areas of the building, underground services, or the surrounding property. Therefore, if during work activities, other hazardous materials, asbestos containing materials, or potential asbestos containing materials not included in this report are discovered, work should immediately cease in the affected area. At that time, Astech should be contacted so that they can initiate immediate appropriate action so that there are no undue delays.

2.0 BUILDING DESCRIPTION

The subject building on site is described as a two-storey commercial building faced with concrete. The building has had a few renovations over the years. It is estimated that the building was originally constructed in the early 1990's. At the time of survey, the subject areas of the building were in good condition.

3.0 METHODOLOGY

3.1 ASBESTOS CONTAINING MATERIALS

A visual inspection was undertaken in order to determine the type, location, and homogeneous nature of asbestos and potential asbestos containing building materials located at the subject areas of the building. During this inspection, fifty-five (55) bulk samples of potential asbestos containing materials were collected from specific locations of the building. The number of samples collected during this survey are in accordance with the guidelines established by the WCB in their 2023 publication Safe Work Practices for Handling Asbestos, and as indicated by actual site conditions. The samples collected were submitted for analysis at our in-house laboratory in accordance with the WCB Occupational Health and Safety Regulation, utilizing polarized light microscopy, and dispersion staining techniques. Results of laboratory analysis of the samples collected during this survey are attached.

3.2 LEAD FINISHES

A visual inspection was undertaken in order to determine the type and location of paints, primers, and/or coatings suspected of containing lead at the subject areas of the building. During this inspection, one (1) bulk sample of a potential lead finish was collected from a specific location of the building. The sample collected was submitted for analysis at our in-house laboratory in accordance with US EPA methods and the requirements of the WCB Occupational Health and Safety Regulation. Results of laboratory analysis of the sample collected during this survey are attached.

3.3 LEAD CONSTRUCTION MATERIALS, PCBs, MERCURY, STORED CHEMICALS, AND SILICA

A visual inspection was undertaken at the subject areas of the buildings in order to determine the presence of:

- construction materials suspected of containing lead and other heavy metals,
- fluorescent and high intensity discharge (HID) light fixtures suspected of containing PCB ballasts or capacitors,
- thermostats, light tubes/bulbs, and associated equipment suspected of containing mercury,
- stored chemicals suspected of being toxic, flammable, or explosive, and
- building materials suspected of containing silica in crystalline and non-crystalline forms.

4.0 INSPECTION RESULTS

4.1 ASBESTOS CONTAINING MATERIALS

The visual inspection and/or analytical results determined that asbestos containing materials are located at the following specific locations.

INTERIOR (SUBJECT AREAS)

Compressor Room

- Non-asbestos grey caulking on concrete floor.
- Non-asbestos black mastic patch on concrete floor.
- Non-asbestos black mastic at mechanical pipe floor penetration.
- Non-asbestos mortar on concrete block walls.
- Non-asbestos black mastic where metal wall cladding abuts metal.
- Non-asbestos fibreglass insulation on mechanical piping system.
- No asbestos materials observed.

EXTERIOR (SUBJECT AREAS)

Outside of Compressor Room

- Non-asbestos grey caulking on west concrete wall.
- No asbestos materials observed.

Lower East Rooftop

- Non-asbestos multi-layered roofing membrane, mastics, felts, and foam insulation.
- No asbestos materials observed.

Upper West Rooftop

- Non-asbestos multi-layered roofing felts and mastics.
- Non-asbestos black mastic on metal exhaust vent.
- No asbestos materials observed.

Lower East Rooftop

- Non-asbestos multi-layered roofing felts and mastics (beneath concrete pavers).
- Non-asbestos concrete block mortar on parapet wall.
- Non-asbestos grey caulking on parapet wall.
- No asbestos materials observed.

Lower South Rooftop

- Non-asbestos mortar at concrete pavers.
- Non-asbestos cementitious patch on non-asbestos caulking patch on concrete floor.
- Non-asbestos grey caulking at concrete wall.
- Non-asbestos grey caulking at joint(s) of mechanical piping.
- No asbestos materials observed.

4.2 LEAD

The visual inspection determined the following at the subject areas:

Exterior

- beige paint containing less than (<)9 parts per million (PPM) of **lead** was used on concrete block walls.

4.3 PCBs

The visual inspection determined that there are no fluorescent or HID light fixtures suspected of having PCB containing ballasts or capacitors to be impacted by project at the subject areas.

4.4 MERCURY

The visual inspection determined that there are no thermostats that contain mercury to be impacted by project at the subject areas. There are also no light tubes/bulbs that contain mercury to be impacted by project at the subject areas.

4.5 STORED CHEMICALS AND OTHER HAZARDOUS MATERIALS

The visual inspection has determined that there were no chemicals or other hazardous materials to be impacted by project at the subject areas.

4.6 SILICA

All concrete, cement, mortars, and any other cementitious building materials are suspected of containing silica in crystalline and non-crystalline forms.

4.7 GYPSUM BOARD

The visual inspection determined that there is no gypsum board products located at the subject areas.

5.0 RECOMMENDATIONS

5.1 ASBESTOS CONTAINING MATERIALS

Prior to the renovation of a building or its components, the asbestos containing materials that are **directly impacted by the work** must first be removed and disposed of by a qualified hazardous materials abatement contractor's trained and authorized personnel, or for renovations may be left in place where and when possible. Asbestos and potential asbestos containing materials not impacted by the work may remain in place in their existing stable condition in which they are considered to be safely enclosed or encapsulated. Workers must be advised in writing of their presence and location so that the asbestos containing materials are not inadvertently disturbed. Removing, enclosing, encapsulating, or otherwise disturbing (e.g. drilling) asbestos containing materials must be performed by a qualified contractor's trained personnel in accordance with the WCB Occupational Health and Safety Regulation. Disposal of asbestos containing materials must be performed in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.2 LEAD

Paints/Primers

Where lead (or potential lead) based paints and/or primers are affected by a project, the work must be performed by a qualified contractor in accordance with the WCB Occupational Health and Safety Regulation and their 2020 publication entitled Safe Work Practices For Handling Lead.

Where the base substrate material is to be removed in conjunction with lead paint removal, the base substrate and lead based paints and/or primers should be removed intact by the contractor, in accordance with the contractor's risk assessment and site specific work procedures. The workers conducting the work and workers in close proximity to the work being performed, should be protected with personal protective equipment as determined by the contractor's risk assessment and site specific work procedures.

Lead containing paints which remain attached to wood and/or other building materials must be labelled as lead based paints (LBP) for transporting to a licensed/approved disposal site or recycling facility. A licensed/approved facility receiving the waste must be informed of the lead content of these materials and be agreeable to receiving these materials. Prior to acceptance of waste with lead paints at a licensed/approved disposal facility, the contractor generating the waste must ensure that all waste materials containing LBP's are sampled intact, fastened directly to the base substrate, and representative of the waste stream created by demolition. The contractor shall have the representative sample analyzed utilizing a Toxicity Characteristic Leachate Procedure for lead (TCLP lead) test to determine the potential for soil and/or groundwater contamination, if deemed necessary by the site receiving the waste.

If the lead paints are to be separated or removed from the building materials by means of sanding, scraping, abrading, blasting, etc., more stringent work procedures would apply. The removed lead paints, depending on lead concentrations and leachate results, may become a Hazardous Waste and therefore

must be disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act - Hazardous Waste Regulation*.

5.3 SILICA

Where cementitious building materials that are suspected of containing silica in crystalline form are directly impacted by the project (i.e. drilling, cutting, abrading, etc.), the work should be performed in a controlled manner to avoid the release of crystalline silica dust. Cutting, drilling, or otherwise disturbing these building materials must be performed by a qualified contractor’s trained personnel in accordance with the WCB Occupational Health and Safety Regulation.

6.0 OWNER'S AND ABATEMENT CONTRACTOR’S RESPONSIBILITIES

Owner’s Responsibilities

For the remediation of hazardous building materials, contract specifications, quality control, and final acceptance of the work remain the responsibility of the Owner. In order to ensure that the Owner has acted in a responsible manner, and to ensure regulatory board compliance, it is recommended that the work be performed by a qualified and properly insured (with proof of necessary asbestos inclusion rider) Hazardous Materials Abatement Contractor.

Abatement Contractor’s Responsibilities

The Abatement Contractor upon completing the work shall have their “Qualified Person” inspect the worksite in its entirety to confirm that asbestos and other hazardous building materials have been properly removed, then promptly provide the Owner with a signed Letter of Completion.

As well, prior to transport of hazardous waste, the Abatement Contractor shall assist the Owner by completing and submitting the BC Ministry of Environment Waste Generator Number Registration Form (Schedule 5 Form 1), once signed by the Owner, if no BC Generator number exists. If a BC Generator number exists and requires updating for this specific project, the Abatement Contractor shall assist with completing and submitting the update.

Project Documentation should also be provided to the Owner including, but not necessarily limited to, a Notice of Project for work involving Asbestos and/or Lead Paint, Risk Assessment, Exposure Control Plan, and Site Specific Work Procedures, Worker Respirator Fit Test Forms/Logs and Training Acknowledgement Forms, Certification of DOP Testing of HEPA Filtered Equipment used on site, Air Sample Results, Material Safety Data Sheets (MSDS) for products used on site, Transportation Waybills, and Waste Manifest Forms.

7.0 APPROXIMATE QUANTITIES FOR HAZARDOUS MATERIALS

The following approximate quantities for hazardous materials are provided as a means to satisfy the requirements of the WCB, and are provided for reference only. Contractors shall be responsible for verifying exact quantities for the purpose of bidding the work.

| HAZARDOUS MATERIALS | APPROXIMATE QUANTITIES |
|--|------------------------|
| Lead Paint (with < 90 PPM of lead) Remaining Attached to Building Materials for Recycle/Disposal, as Normal Construction Waste (where no hot work is involved) | Not Applicable |

We hope you have found the above information useful. If you have any questions, or require clarification please contact this office.

Sincerely,

Rob Kingsley
Astech Consultants Ltd.
Ref: 27454HE01.AEH



ASBESTOS BULK SAMPLE REPORT

Date: June 13, 2024
 Client: WSP
 Location: **Primary Treatment Building
 Whistler Wastewater Treatment Plant
 1135 Cheakamus Lake Road
 Whistler, BC**

Comments: 1) Asbestos (bulk) by PLM analyzed as per NIOSH 9002 Issue 2.
 2) Workers' Compensation Board of British Columbia (WCB) defines asbestos containing material as 0.5% or more asbestos, with the exception of Vermiculite Insulation which is defined as "any asbestos".
 3) Samples will be disposed of after 90 days, unless the Client requests otherwise.

Sample(s) Collected on May 31, 2024

| Sample | Location | Description | Layer: Colour | Non-Asbestos | Asbestos |
|-------------|--------------------|--|-----------------------|----------------------------------|---------------|
| | | | | % Type | % Type |
| 27454 BS01a | Upper East Rooftop | Roofing Membrane (West) | 1: Grey | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS01b | Upper East Rooftop | Roofing Mastic (West) | 2: Black | 100% Non-Fibrous | None Detected |
| 27454 BS01c | Upper East Rooftop | Roofing Felt (West) | 3: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS01d | Upper East Rooftop | Roofing Mastic (West) | 4: Black | 100% Non-Fibrous | None Detected |
| 27454 BS01e | Upper East Rooftop | Foam Insulation Roofing Mastic (West) | 5: Yellow 6: Black | 100% Non-Fibrous | None Detected |
| 27454 BS01f | Upper East Rooftop | Roofing Felt (West) | 7: Black | 65% Glass 35% Non-Fibrous | None Detected |
| 27454 BS01g | Upper East Rooftop | Roofing Mastic (West) | 8: Black | 100% Non-Fibrous | None Detected |
| 27454 BS02a | Upper East Rooftop | Roofing Membrane (East) | 1: Grey | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS02b | Upper East Rooftop | Roofing Mastic (East) | 2: Black | 100% Non-Fibrous | None Detected |
| 27454 BS02c | Upper East Rooftop | Roofing Felt (East) | 3: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS02d | Upper East Rooftop | Roofing Mastic (East) | 4: Black | 100% Non-Fibrous | None Detected |
| 27454 BS02e | Upper East Rooftop | Foam Insulation Roofing Mastic (East) | 5: Yellow 6: Black | 100% Non-Fibrous | None Detected |

| Sample | Location | Description | Layer: Colour | Non-Asbestos | Asbestos |
|-------------|---------------------|--|---------------|----------------------------------|---------------|
| | | | | % Type | % Type |
| 27454 BS02f | Upper East Rooftop | Roofing Felt (East) | 7: Black | 65% Glass 35% Non-Fibrous | None Detected |
| 27454 BS02g | Upper East Rooftop | Roofing Mastic (East) | 8: Black | 100% Non-Fibrous | None Detected |
| 27454 BS03 | Upper West Rooftop | Mastic (on West Metal Exhaust Vent) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS04 | Upper West Rooftop | Mastic (on West Metal Exhaust Vent) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS05 | Upper West Rooftop | Mastic (on West Metal Exhaust Vent) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS06a | Upper West Rooftop | Roofing Mastic (West) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS06b | Upper West Rooftop | Roofing Felt (West) | 2: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS06c | Upper West Rooftop | Roofing Mastic (West) | 3: Black | 100% Non-Fibrous | None Detected |
| 27454 BS06d | Upper West Rooftop | Roofing Felt (West) | 4: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS07a | Upper West Rooftop | Roofing Mastic (East) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS07b | Upper West Rooftop | Roofing Felt (East) | 2: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS07c | Upper West Rooftop | Roofing Mastic (East) | 3: Black | 100% Non-Fibrous | None Detected |
| 27454 BS07d | Upper West Rooftop | Roofing Felt (East) | 4: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS08a | Upper West Rooftop | Roofing Mastic (South) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS08b | Upper West Rooftop | Roofing Felt (South) | 2: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS08c | Upper West Rooftop | Roofing Mastic (South) | 3: Black | 100% Non-Fibrous | None Detected |
| 27454 BS08d | Upper West Rooftop | Roofing Felt (South) | 4: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS09a | Lower East Rooftop | Roofing Mastic (North) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS09b | Lower East Rooftop | Roofing Felt (North) | 2: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS09c | Lower East Rooftop | Roofing Mastic (North) | 3: Black | 100% Non-Fibrous | None Detected |
| 27454 BS09d | Lower East Rooftop | Roofing Felt (North) | 4: Black | 65% Synthetic 35% Non-Fibrous | None Detected |
| 27454 BS10 | Lower East Rooftop | Concrete Block Mortar (on East Parapet Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS11 | Lower East Rooftop | Concrete Block Mortar (on East Parapet Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS12 | Lower East Rooftop | Concrete Block Mortar (on East Parapet Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS13 | Lower East Rooftop | Caulking (on East Parapet Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS14 | Lower South Rooftop | Concrete Paver Mortar (East Side) | 1: Grey | 5% Synthetic 95% Non-Fibrous | None Detected |

| Sample | Location | Description | Layer: Colour | Non-Asbestos | Asbestos |
|------------|----------------------------|---|---------------|---------------------------------|---------------|
| | | | | % Type | % Type |
| 27454 BS15 | Lower South Rooftop | Concrete Paver Mortar (South Side) | 1: Grey | 5% Synthetic 95% Non-Fibrous | None Detected |
| 27454 BS16 | Lower South Rooftop | Concrete Paver Mortar (South Side) | 1: Grey | 5% Synthetic 95% Non-Fibrous | None Detected |
| 27454 BS17 | Lower South Rooftop | Cementitious Patch (on Concrete) | 1: Grey | 5% Synthetic 95% Non-Fibrous | None Detected |
| 27454 BS18 | Lower South Rooftop | Caulking Patch (on Concrete) | 2: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS19 | Lower South Rooftop | Caulking (at South Concrete Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS20 | Lower South Rooftop | Caulking (at Joint of Mechanical Piping) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS21 | Compressor Room | Concrete Block Mortar (North Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS22 | Compressor Room | Concrete Block Mortar (North Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS23 | Compressor Room | Concrete Block Mortar (North Wall) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS24 | Compressor Room | Mastic (at Mechanical Pipe Floor Penetration, East) | 1: Black | 100% Non-Fibrous | None Detected |
| 27454 BS25 | Compressor Room | Mastic Patch (on Concrete Floor) | 1: Black | 3% Cellulose 97% Non-Fibrous | None Detected |
| 27454 BS26 | Compressor Room | Mastic (on South Metal Wall Cladding) | 1: Black | 3% Cellulose 97% Non-Fibrous | None Detected |
| 27454 BS27 | Compressor Room | Mastic (on South Metal Wall Cladding) | 1: Black | 3% Cellulose 97% Non-Fibrous | None Detected |
| 27454 BS28 | Compressor Room | Mastic (on South Metal Wall Cladding) | 1: Black | 3% Cellulose 97% Non-Fibrous | None Detected |
| 27454 BS29 | Compressor Room | Caulking (on Concrete Floor) | 1: Grey | 100% Non-Fibrous | None Detected |
| 27454 BS30 | Compressor Room | Preformed Insulation (on Mechanical Piping) | 1: Yellow | 99% Glass 1% Non-Fibrous | None Detected |
| 27454 BS31 | Exterior - Compressor Room | Caulking (on West Concrete Wall) | 1: Grey | 100% Non-Fibrous | None Detected |

Analyst(s): Jessica Young

American Industrial Hygiene Association (AIHA) Bulk Asbestos Proficiency Analytical Testing (BAPAT)
Astech Consultants Ltd. Laboratory Participant ID# 200542



LEAD BULK SAMPLE REPORT

Date: June 13, 2024
Client: WSP
Location: Primary Treatment Building
Whistler Wastewater Treatment Plant
1135 Cheakamus Lake Road
Whistler, BC

Comments: 1) The Workers' Compensation Board of British Columbia (WCB) no longer allows reference to Health Canada's definition of a lead-containing surface coating material.
2) WCB does not define a safe level for a lead-containing surface coating material.
3) Analyzed by X-Ray Fluorescence (XRF) with direct read parts per million (PPM).
4) Sample results report lead only.
5) < means less than, > means more than.
6) Samples will be disposed of after 90 days, unless the Client requests otherwise.

Sample(s) Collected on May 31, 2024

| Sample | Location | Description | Colour | Lead PPM |
|------------|--------------------|-------------------------------------|--------|----------|
| 27454 LS01 | Lower East Rooftop | Paint (on East Concrete Block Wall) | Beige | < 9 PPM |

Analyst(s): Jessica Young



Certified to ISO:20807; and Health Canada's and Natural Resources Canada's requirements for compliance with Health Canada Safety Code 32 & 34