Geotechnical Assessment:

Anahim Lake Airport Apron Expansion

Prepared for:
HM Aero Aviation Consulting

July 11, 2026

Project Manager: Hans Jorgensen, P. Eng.
Project Number: 26-H-041

CCIB CERTIFIED INDIGENOUS BUSINESS

SoilTech

Version History		
Revision	Description	Date
0	Final Version	July 11, 2026

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1. Introduction

HM Aero Aviation Consulting (HM Aero) commissioned SoilTech to conduct a geotechnical assessment for the apron expansion project at the in Anahim Lake Airport. The project area is outlined in Figure 1. The proposed development will take place across one land parcel; the legal description for the property is: DISTRICT LOT 249, COAST RANGE 3 LAND DISTRICT, AIR STRIP ANAHIM AIRPORT (PID: 016-943-538)

To conduct this assessment, we have:

- Discussed the project with HM Aero and reviewed preliminary plans.
- Carried out a site assessment of the property and surrounding area including:
    - A desktop study of existing geotechnical information, internal project information and public data relevant to the development, geology, and water conditions at the site.
    - A field assessment, including a site investigation and site reconnaissance.
- Determined the subsurface conditions.

Based on the assessment findings, we have provided geotechnical analysis, discussion, and recommendations for:

- The anticipated subsurface conditions in the development area
- Frost environment and conditions
- General site preparation
- Re-use of in situ soils
- Pavement structures
- Drainage considerations
- Temporary excavations

2. Project Description

We understand the apron expansion project will involve/require:

- A new section of apron on existing apron:
    - A new pavement structure
    - Raising the subgrade of the area
    - Storm drainage around the apron through ditches and swales
- Resurfacing of some of the existing apron
- Pavement Load Rating (PLR) of 7
- The target aircraft being a Beechcraft 1900D

3. Site Assessment

To assess the site, we carried out a desktop study and a field assessment. For the desktop study we reviewed:

- *Preliminary Design Report* prepared by AVIA NG Airport Consultants, dated March 6, 2019, consultants Project No. 18-0067-00 (Avia Report)
- *Geotechnical Exploration and Pavement Report, Airport Apron Expansion, Anahim Lake Airport, Anahim Lake, BC* prepared by EXP Services Inc., dated November 29, 2018, consultants Project No. VAN-00248871-A0
- Government of Canada Open Maps – Surficial Geology
- Google Earth Imagery
- 2024 LiDAR BC data

- BC Groundwater Wells and Aquifers Database

The field assessment was carried out on June 4, 2026, and included a test pit investigation program.

3.1 Site Description and Background

The airport site consists of an existing runway, a taxiway connection, an existing apron, and storm drainage infrastructure (i.e. ditches and a pond). The proposed project site is located southeast of the existing apron. The area is relatively flat, undeveloped area that has been cleared and is predominantly covered with grass. A shallow pond is present to the immediate southwest of the project area. Undocumented fill and disturbed soils may be present because of previous earthworks, site development, and airport operations.

3.2 Geomorphology and Surficial Geology

The geomorphology and surficial geology of the Anahim Lake area can be attributed to a few major events during the Fraser Glaciation:

- Glacial ice sheets advanced through the area. The ice sheet movement grinded and bulldozed the earth beneath them to simultaneously create and deposit lodgement till. The till is contoured to the substratum; the result being a hummocky till plain.
- During the melting period ice sheets stagnated over the area. The melt water formed supraglacial (on top of the ice), sub-glacial (under the ice), englacial (within the ice) and proglacial (in front of or along the margins of the ice) meltwater channels.
- Within depressions and cavities of the ice sheets ablation till and fluvial sediments from the melt water channels collected. As the ice melted the accumulated soil dropped in place over the ground surface forming isolated or clustered hills (kames).
- Within the proglacial meltwater channels the underlying lodgement till and other soil deposits were eroded. Sediments were transported down stream creating fluvial deposits within the channel bed and alluvial deposits in the adjacent low-lying lands.

The Anahim lake area lies withing a hummocky till plain with isolated and clustered kame formations. The area is intersected with meltwater channels. Shallow wetlands, swamps and ponds are present where water has collected depressions of the till plain and historical meanders of the meltwater channels. The apron project site is within the till plain adjacent to an ancient meltwater channel where some wetland and pond features are present.

3.3 Site Investigation

We carried out a test pit investigation on the subject property on June 4, 2026. Subsurface conditions were reviewed in seven test pits, TP26-01 to TP25-07, at the locations shown in Figure 1. The test pits were excavated with a Hitachi 210 excavator (John Williams Contracting Ltd.) under the direction of our field personnel. As the test pits were advanced, we observed and recorded subsurface conditions encountered at each location. At select depths we performed field soil tests and collected soil samples from the excavated soil. The samples were submitted to our laboratory for soil index tests. Following our review and sample collection the test pits were backfilled with the excavated soil.

Figure 1. The subject property and investigation locations (Google Earth Imagery)

We classified the soil conditions in accordance with the Modified Unified Soil Classification System (MUSCS). Soil index tests were carried out on select samples to determine soil properties and to confirm our field observations. The observed soil and groundwater conditions, sampling depths, field measurements, and index test results are detailed in the test pit logs in **Appendix A**. Detailed laboratory reports for the soil index tests are in **Appendix B**.

3.4 Subsurface Conditions

The natural surficial soil deposit consists of glacial Till which can be described as follows:

- Sand and gravel in a matrix of silt and trace clay with low plasticity
- Well consolidated
- In situ moisture contents between 9% and 16%

The till is deposited in a thick blanket (at least 5 m thick). A surficial layer of fill and disturbed soil, from frost and previous earthworks, is present over the site but was not observed to extend deeper than 0.6 m thought most of the project area. The area near TP26-02 is an exception as we observed 1.8 m of fill there. We observed some seepage in the fill in this location which is to be due to inflow from the adjacent drainage channel. No groundwater was observed in any of the investigation locations.

3.5 Frost Conditions

Frost penetration depth is based on the air-freezing index and mean annual temperature for the site. For the Anahim Lake, BC area, the air freezing index is 1220 Degree-Days °C and the mean annual temperature is 0.9 °C. The estimated maximum frost penetration depth is 2.4 m.

3.6 Existing Apron

The original section of the apron was constructed in 1977 and was gravel surfaced. It was expanded and upgraded to asphalt in 2000. The asphalt surface is generally in fair condition and is due for rehabilitation. The Airfield Construction History Report included in the Avia Report detailed the aprons structures. Table 1 details the structures and associated Pavement Load Rating (PLR) rating.

Table 1. Existing Apron Structures and PLR

Pavement Component	Original Apron Section	2000 Arpon Expansion
Asphalt	65 mm	65
Base	235 mm	230 mm
Subbase	300 mm	300 mm
Pavement Load Rating	7	6

4. Discussion and Recommendations

Subsurface conditions at the site are suitable for the proposed apron expansion. The following sections detail the anticipated conditions and the relevant geotechnical design, recommendations, and considerations.

4.1 Anticipated Subsurface Conditions and Soil Characteristics

We expect the natural soil conditions within the project area and infrastructure depths to consist of glacial Till which has the following characteristics and properties:

- Sand and gravel in a matrix of low to non-plastic silt and trace clay
- Is well consolidated
- Has low permeability and is frost susceptible
- Can be moisture sensitive making it prone to weakening if disturbed or remolded in a wet condition
- Suitable for common and subgrade fill.
- Will provide good bearing for the pavement structure in its natural state or as properly prepared subgrade fill (refer to Section 4.3.2)

The disturbed soil and undocumented fill found over the project area will not provide good support for the pavement structure and will have to be remediated.

4.2 General Site Preparation

Topsoil, undocumented fill, disturbed soils, soft or wet fine-grained soil, organic soil, and deleterious materials (wood, and construction debris, etc.) should be removed below the proposed new apron footprint and drainage infrastructure.

Common fill can be used in landscaped areas. The native soil at the site may be suitable for common fill if adequately moisture conditioned for compaction. Alternatively, approved imported soil can be used. To minimize settlement and erosion, fill should be placed in uniform layers and compacted to 95% Standard Proctor Density (SPD).

4.3 Pavement Structures

The design criteria for the apron pavement structure are:

- The target aircraft being a Beechcraft 1900D
- Minimum PLR of 7
- Maximum tire pressure of 1.0 MPa

The pavement structure was designed using the legacy Transport Canada Pavement Load Rating (PLR) methodology We estimate the natural or prepared subgrade will meet at least a Category C subgrade which corresponds to a nominal bearing strength of 70 kN. The required Equivalent Granular Thickness (EGT) was determined from the Transport Canada flexible pavement design charts and converted into the recommended asphalt, granular base, and granular subbase layer thicknesses detailed in Table 2

Transport Canada now uses the ICAO Aircraft Classification Number/Pavement Classification Number (ACN–PCN) system for pavement reporting. We converted the pavement design from the legacy PLR system using Transport Canada's published PLR-to-PCN conversion methodology to determine the resulting pavement classification in accordance with the current ACN–PCN reporting standard. We then verified the result to be compatible with the design aircraft (Beechcraft 1900D).

Table 2. Recommended Pavement Structures

Pavement Component	Apron
Hot Mix Asphalt (Class 1 Medium Mix)	65 mm
Base (WGB)	300 mm
Subbase (SGSB)	300 mm
Mirafi 160N Geotextile (or equivalent) Over the Subgrade	Yes
Pavement Load Rating	7

The pavement structure's design is based on it being supported by an adequately prepared subgrade as described in Section 4.3.2 . The addition of a non-woven geotextile will add a separation layer to prevent fines migration into the pavement structure, improving its performance and life cycle. Use materials meeting the requirements detailed in Section 4.3.1.

4.3.1 Materials

Given the remote location of the community economically sourcing material meeting the Transport Canada airport specific standards will be challenging. Instead, we recommend using aggregates and asphalt meeting the British Columbia Ministry of Transportation and Transit (BC MoTT) Standard Specifications for Highway Construction (MoTT Standards) which are more widely available.

Aggregates should withstand the deleterious effects of exposure to freeze-thaw, water, and general construction such as placing, grading, packing, etc. Use aggregates that meet the Aggregate Quality specifications detailed in Section 202.04 of the current MoTT Standards. For Well Graded Base (WGB) use a crushed material with a minimum 60% one-face fracture by mass on particles larger than 4.75 mm. The Select Granular Subbase (SGSB) can be a processed or pit run gravel. Gradation specifications for the aggregates can be found in Table 3. Use asphalt meeting the specifications for a Class 1 Medium Hot Mix Asphalt.

Table 3. Aggregate Gradation Specifications

Particle Size (mm)	Percent Passing	
	WGB[1]	SGSB
75	–	95 – 100
37.5	–	–
25	100	–
19	80 – 100	35 – 100
9.5	50 – 85	–
4.75	35 – 70	15 – 60
2.36	25 – 50	–
1.18	15 – 35	–
0.300	5 – 20	3 – 15
0.075	2 – 7	0 – 5

[1]Aggregate particles ≥ 4.75 mm should have a minimum 60% one-face fracture by mass

4.3.2 Subgrade Preparation

The prepared subgrade should consist of competent natural soil or adequately compacted fill of a similar consistency. We recommend the following to prepare the subgrade:

- Remove any undocumented fill, organic soil, deleterious materials, soft or wet fine-grained soil, and disturbed soil from below the proposed paved area. Extend the excavation beyond the edges of the pavement by a horizontal distance equal to the depth of the fill required below the pavement.
- Raise the grade of low areas to the design subgrade elevation with compacted soil that has similar properties and gradations to the surrounding subgrade soils.
- Place the fill material in uniform layers not exceeding 200 mm for fine-grained soil and 300 mm for granular soil.
- Compact the initial layers to 95% MPD and the final 300 mm of subgrade fill to 98% MPD. Bring the soil to near its optimum moisture content for compaction where required.
- Proof-roll the subgrade and repair any soft areas prior to installing the pavement structure.

4.3.3 Pavement Structure Construction

Apply the following recommendations and specifications to the construction of the pavement structures:

- Install the non-woven geotextile over the prepared subgrade.
- Place aggregates in maximum 300 mm thick layers and compact to 98% MPD. Bring the soil to near its optimum moisture content for compaction where required.
- Proof-roll the base layer and repair any soft areas before placing any asphalt.
- Place the asphalt surface as per the supplier's recommended procedures. Asphalt should be placed in layers no thicker than four (4) times the nominal aggregate size. Compact it to a minimum average degree of compaction of 98% when comparing the in-situ density to the measured 75 Blow Marshall briquette density for the mix, with no single measured location less than 95%.

4.3.4 Existing Apron Remediation

The original pavement structures have an acceptable PLR. We analyzed the structures assuming the subgrade conditions are the same as those used in our pavement design and found them to be in adequate for the target aircraft in accordance with the latest Canadian pavement design guidelines. The asphalt surface should be milled and overlaid to extend the life cycle of the existing apron.

4.4 Drainage Considerations

Establishing effective drainage around the apron will prevent weakening of the subgrade soils, we recommend the following:

- Provide perimeter ditches or swales to collect and direct surface runoff away from the apron subgrade.
- Construct ditch/swale inverts at least 0.3 m below the subgrade elevation.
- Grade the apron surface and drainage swales to prevent ponding.
- Tie new drainage features into the existing airport drainage system or approved discharge locations.
- Maintain adequate drainage during construction to protect the subgrade.

4.5 Temporary Excavations

We recommend using slopes of 1 Horizonal to 1 Vertical (1H:1V) or shallower for excavations in the natural soil or adequately compacted fill. Measures should be taken to prevent erosion of side excavation slopes. Groundwater or surface water encountered during construction should be directed away from excavations. Prevent water from ponding in excavations. Flatter excavation slopes may be required if loose non-cohesive soil, soft soil, fill, seepage, etc. is encountered in excavations or if unfavourable weather conditions are encountered. Consult a qualified engineer if such conditions are encountered or if excavation deeper than 5 m is required.

5. Review and Quality Assurance

This assessment and our recommendations are based on preliminary site plans and conversations with the Client. The final design drawings should be reviewed by SoilTech to confirm the intentions of the geotechnical design recommendations included in this report have been incorporated and are appropriate for the development. Subsurface conditions should be confirmed during construction. If the conditions (i.e., soil, groundwater, etc.) encountered during construction differ from those in our assessment they should be reviewed, as alternate or additional recommendations may be required.

During the subgrade preparation and construction of the pavement structure have SoilTech review excavations, fill materials, fill placement and compaction, proof rolls, and the installation of any geotextile or geogrid products. Depending on weather and site conditions, materials may need to be placed in smaller lift thicknesses, dried, or have water added to achieve the recommended degree of compaction. Testing should be completed on pipe bedding, subgrade fill, pavement structure layers, and the materials used to confirm the respective specifications are met.

6. Limitations

The information discussed in this report is based on SoilTech's interpretation and understanding of current site conditions and the referenced documents. This assessment was limited to the references used in our desktop study and the scope of our site investigation. The discussion and recommendations provided are based on the necessary assumption that subsurface conditions across the site are consistent with our findings. If conditions encountered at the site are inconsistent with the findings described above, they should be reviewed by SoilTech, as alternate recommendations or design parameters may be required.

7. Closure

This assessment has been completed by or under the supervision of a qualified professional registered with the Engineers and Geoscientists of British Columbia. This report is intended for the exclusive use of the recipient and their agents. We take no responsibility for any damages suffered from any use of or reliance on information contained within this report by third parties, or for use other than the intended purpose.

If there are any questions or if additional information is required, please contact the undersigned.

Sincerely,

Pavail Sian, E.I.T.

Reviewed by,

Permit to Pratice
No. 1001832

PROFESSIONAL
PROVINCE OF
H. S. JORGENSEN
51184
BRITISH COLUMBIA
ENGINEER

July 11, 2026

Hans Jorgensen, P. Eng.

Appendix A:

Investigation Logs

Modified Unified Classification System for Soils

Major Division			Group		Soil Description	Classification Criteria
Coarse Grained Soils more than 50% larger than 75 µm (dual symbols used for soils with 5 to 12% fines)	**Gravels**	Clean Gravels < 5% fines	GW		Well graded gravels and sandy gravels with trace or no fines	$C_u = D_{60}/D_{10} > 4$ $C_C = (D_{30})^2/D_{10}D_{60} = 1$ to 3
			GP		Poorly graded gravels and sandy gravels with trace or no fines	Not meeting GW requirements
		Dirty Gravels > 12% fines	GM		Silty gravels and silty sandy gravels	Plasticity below A-Line or $I_p < 4$
			GC		Clayey gravels and clayey sandy gravels	Plasticity below A-Line or $I_p < 7$
	Sands	Clean Sands < 5% fines	SW		Well graded sands and gravelly sands with trace to no fines	$C_u = D_{60}/D_{10} > 4$ $C_C = (D_{30})^2/D_{10}D_{60} = 1$ to 3
			SP		Poorly graded sands and gravelly sands with trace to no fines	Not meeting SW requirements
		Dirty Sands > 12% fines	SM		Silty sands and sand/silt mixtures	Plasticity below A-Line or $I_p < 4$
			SC		Clayey sands and sand/clay mixtures	Plasticity below A-Line or $I_p < 7$
Fine Grained Soils more than 50% smaller then 75 µm	**Silts**	$W_L < 50\%$	ML		Inorganic silts and sandy silts with slight plasticity	Based on Placitity Chart (see below)
		$W_L > 50\%$	MH		Inorganic silts with high plasticity	
	Clays	$W_L < 30\%$	CL		Inorganic clay and silty clays with low plasticity	
		$30\% < W_L < 50\%$	CI		Inorganic clay and silty clays with intermediate plasticity	
		$W_L > 30\%$	CH		Inorganic clay and silty clays with high plasticity	
	Organic Silts and Clays	$W_L < 50\%$	OL		Organic silts and silty clays with low plasticity	
		$W_L > 50\%$	OH		Organic silts and silty clays with high plasticity	
	Highly Organic		PT		Peat and other highly organic soils	

Soil Components

Fraction	Size	Weight Percentage	Description
Gravel			
Coarse	75 mm to 19 mm		
Fine	19 mm to 4.75 mm	35 - 50	and
Sand			
Coarse	4.75 mm to 2 mm	20 - 35	y/ey
Medium	2 mm to 425 µm		
Fine	425 µm to 75 µm	10 - 20	some
Silt or Clay	< 75 µm		
Cobbles	200 mm to 75 mm	1 - 10	trace
Boulders	> 200 mm		

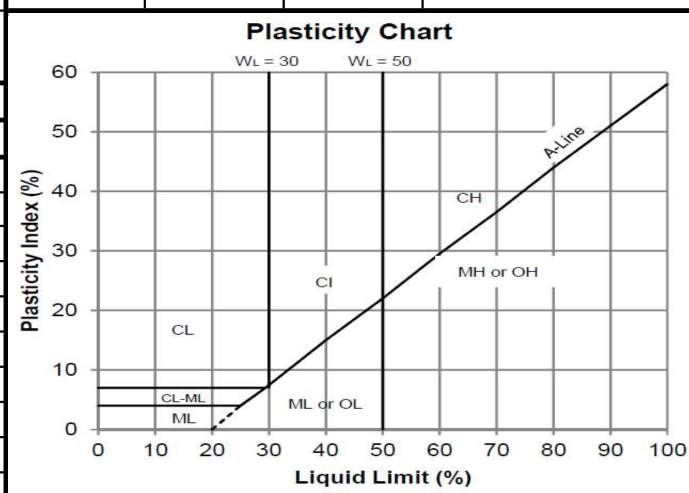
Relative Density and Consistency

Cohesionless		Cohesive	
Relative Density	**SPT Value (N)**	**Consistency**	**Undrained Shear Strength (kPa)**
Very Loose	0 - 4	Very Soft	0 - 10
Loose	4 - 10	Soft	10 - 25
Compact	10 - 30	Firm	25 - 50
Dense	30 - 50	Stiff	50 - 100
Very Dense	> 50	Very Stiff	100 - 200
		Hard	> 200

Relative Moisture

Coarse Grained	
Dry	Non-cohesive and free running
Moist	Darker colour and sticks together
Wet	Darker colour, sticks together and free water forms

Fine Grained	
Moist, dry of plastic limit	hard, friable and powdery
Moist, near plastic limit	Can be moulded
Moist, wet of plastic limit	Usually weak and free water forms
Wet, near liquid limit	
Wet of plastic limtic	



SoilTech Consulting Ltd

TP26-01

Client:	HM Aero Aviation Consulting	**Date Started:**	June 4, 2026
Project Number:	26-H-041	**Date Finished:**	June 4, 2026
Project:	Anahim Lake Airport Apron Expansion	**Logged By:**	PS
Subcontractor:	John Williams Contracting Ltd.	**Equip./Method:**	Hitachi 210
Location:	10U 343243 m E 5814298 m N	**Elevation:**	Existing Elevation

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticicy Index
0		**Fill:** Gravel and sand, some to trace silt, trace clay, loose, moist, brown								
		Fill/Distrubed: Silt and sand, some to trace clay, trace gravel, loose, moist, brown								
		MLS: Silt, sandy, some to trace clay, trace gravel, trace cobbles, very stiff to hard, low plasticity, moist, brown (glacial till)								
1			Bulk				11.4			
2										
		-3.8% Gravel, 31.2% Sand, 65.0% Silt and Clay	Bulk				9.9			

End of test pit at 2.5 m
No groundwater encountered
Test pit backfilled with excavated material

TP26-02

SoilTech Consulting Ltd

Client:	HM Aero Aviation Consulting	**Date Started:**	June 4, 2026
Project Number:	26-H-041	**Date Finished:**	June 4, 2026
Project:	Anahim Lake Airport Apron Expansion	**Logged By:**	PS
Subcontractor:	John Williams Contracting Ltd.	**Equip./Method:**	Hitachi 210
Location:	10U 3433312 m E 5814234 m N	**Elevation:**	Existing Elevation

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticity Index
0		**Fill/Disturbed:** Silt and sand, some to trace clay, some gravel, loose, damp, brown, sloughing, frequent organics, garbage and debris -Minor seepage								
1										
2		**MLS:** Silt, sandy, some to trace clay, trace gravel, trace cobbles, very stiff to hard, low plasticity, moist, brown (glacial till)	Bulk				9.2			

End of test pit at 2.4 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP26-03

Client: HM Aero Aviation Consulting
Project Number: 26-H-041
Project: Anahim Lake Airport Apron Expansion
Subcontractor: John Williams Contracting Ltd.
Location: 10U 343369 m E 5814232 m N

Date Started: June 4, 2026
Date Finished: June 4, 2026
Logged By: PS
Equip./Method: Hitachi 210
Elevation: Existing Elevation

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits: Plastic Limit	Atterberg Limits: Liquid Limit	Atterberg Limits: Plasticity Index
0		**Fill/Disturbed:** Silt and sand, some to trace clay, some gravel, loose, moist, brown								
		MLS: Silt, sandy, some to trace clay, trace gravel, trace cobbles, very stiff to hard, low plasticity, moist, brown (glacial till)	Bulk				11.8			
1										
			Bulk				15.5			
2										

End of test pit at 2.1 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP26-04

Client: HM Aero Aviation Consulting
Project Number: 26-H-041
Project: Anahim Lake Airport Apron Expansion
Subcontractor: John Williams Contracting Ltd.
Location: 10U 343315 m E 5814264 m N

Date Started: June 4, 2026
Date Finished: June 4, 2026
Logged By: PS
Equip./Method: Hitachi 210
Elevation: Existing Elevation

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticicy Index
0		**Fill/Disturbed:** Silt and sand, some to trace clay, some gravel, loose, moist, brown								
		SM: Sand, silty, trace gravel, trace clay, trace cobbles, compact to dense, moist, brown, (glacial till)	Bulk				10.0			
1										
		-4.9% Gravel, 67.6% Sand, 27.5% Silt and Clay	Bulk				14.1			

End of test pit at 1.9 m
No groundwater encountered
Test pit backfilled with excavated material

TP26-05

Client:	HM Aero Aviation Consulting	**Date Started:**	June 4, 2026
Project Number:	26-H-041	**Date Finished:**	June 4, 2026
Project:	Anahim Lake Airport Apron Expansion	**Logged By:**	PS
Subcontractor:	John Williams Contracting Ltd.	**Equip./Method:**	Hitachi 210
Location:	10U 343343 m E 5814279 m N	**Elevation:**	Existing Elevation

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticicy Index
0		**Fill/Disturbed:** Silt and sand, some to trace clay, some gravel, loose, moist, brown								
		SM: Sand, silty, some gravel, trace clay, trace cobbles, compact to dense, moist, brown, (glacial till)	Bulk				11.9			
1		-11.6% Gravel, 60.6% Sand, 27.8% Silt and Clay	Bulk				11.8			

End of test pit at 1.8 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP26-06

Client:	HM Aero Aviation Consulting	**Date Started:**	June 4, 2026
Project Number:	26-H-041	**Date Finished:**	June 4, 2026
Project:	Anahim Lake Airport Apron Expansion	**Logged By:**	PS
Subcontractor:	John Williams Contracting Ltd.	**Equip./Method:**	Hitachi 210
Location:	10U 343330 m E 5814311 m N	**Elevation:**	Existing Elevation

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**Fill/Disturbed:** Silt and sand, some to trace clay, some gravel, loose, moist, brown								
		MLS: Silt, sandy, some to trace clay, trace gravel, trace cobbles, very stiff to hard, low plasticity, moist, brown (glacial till)	Bulk				13.7			
1										
2		-7.9% Gravel, 39.0% Sand, 46.2% Silt, and 6.8% Clay	Bulk				11.6			

End of test pit at 2.1 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP26-07

Client:	HM Aero Aviation Consulting	**Date Started:**	June 4, 2026
Project Number:	26-H-041	**Date Finished:**	June 4, 2026
Project:	Anahim Lake Airport Apron Expansion	**Logged By:**	PS
Subcontractor:	John Williams Contracting Ltd.	**Equip./Method:**	Hitachi 210
Location:	10U 343281 m E 5814308 m N	**Elevation:**	Existing Elevation

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits: Plastic Limit	Atterberg Limits: Liquid Limit	Atterberg Limits: Plasticity Index
0		**Fill:** Gravel and sand, some to trace silt, trace clay, loose, moist, brown								
		Fill/Disturbed: Silt and sand, some to trace clay, trace gravel, loose, moist, brown								
1		**MLS:** Silt, sandy, some to trace clay, trace gravel, trace cobbles, very stiff to hard, low plasticity, moist, brown (glacial till)								
			Bulk				11.1			
2		-4.2% Gravel, 25.5% Sand, 70.3% Silt and Clay	Bulk				13.2			

End of test pit at 2.4 m
No groundwater encountered
Test pit backfilled with excavated material

Appendix B:

Soil Index Test Reports

1215 Babine Road
Prince George, BC V2N 6E1
250-301-5024
hans@soiltech.ca

Particle Size Distribution Analysis

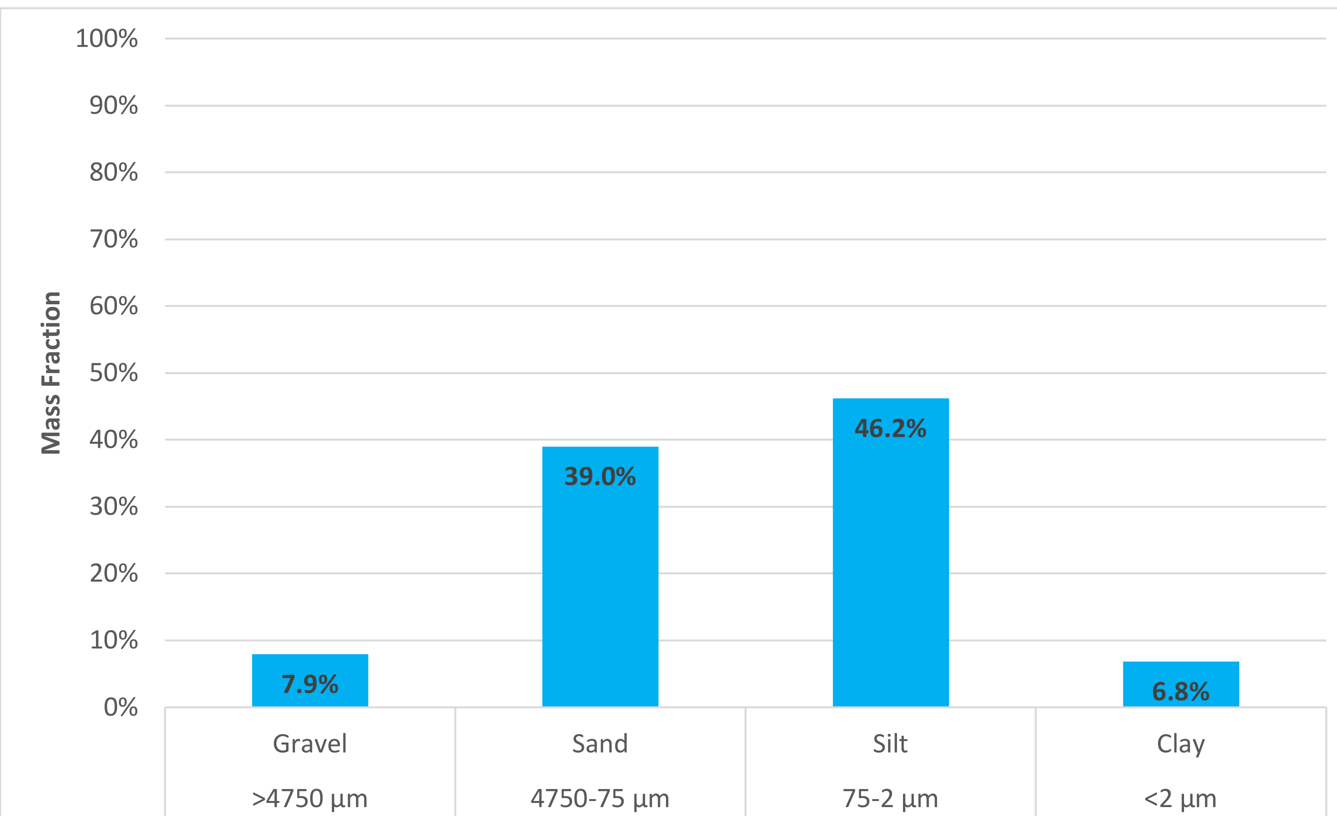
Reference ISO 13317-1 and ISO 13317-2.

Project Details

Client	HM Aero Aviation Consulting	**Project No.**	26-H-041
Project	Anahim Lake Airport Apron Expansion	**PSD Report No.**	1

Sample Details

Source	TP26-06	**Sampling Date**	June 4, 2026
Depth	2 m	**Date Received**	June 5, 2026
Major Component(s)	Till	**Date Tested**	July 9, 2026
Tested By	SD	**Sampled By**	PS



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Sieve Analysis

Reference ASTM C117 and C136

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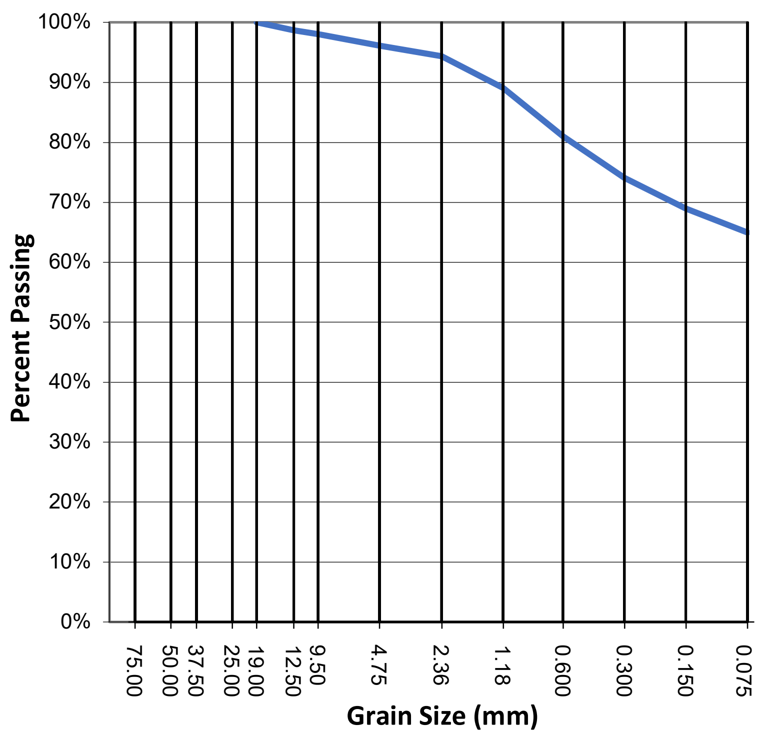
Project Details

Client	HM Aero Aviation Consulting	**Project No.**	26-H-041
Project	Anahim Lake Airport Apron Expansion	**Sieve Report No.**	SI01

Sample Details

Supplier	Native	**Sampling Date**	June 4, 2026
Source	TP26-01	**Date Received**	June 5, 2026
Location	2.4 m	**Date Tested**	June 17, 2026
Description	Till	**Sampled By**	PS
Specification		**Tested By**	Caleb M

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	100.0%		
25.0	100.0%		
19.0	100.0%		
12.5	98.7%		
9.5	98.1%		
4.75	96.2%		
2.36	94.3%		
1.18	89.0%		
0.600	81.0%		
0.300	74.1%		
0.150	69.0%		
0.075	65.0%		



Moistur Content 15.4%

Comments

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Sieve Analysis

Reference ASTM C117 and C136

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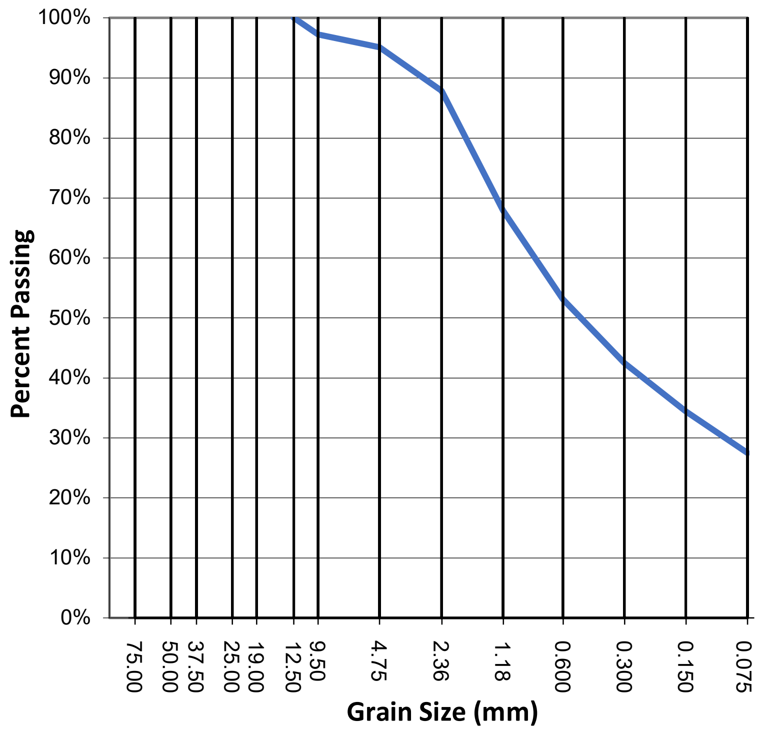
Project Details

Client	HM Aero Aviation Consulting	**Project No.**	26-H-041
Project	Anahim Lake Airport Apron Expansion	**Sieve Report No.**	SI02

Sample Details

Supplier	Native	**Sampling Date**	June 4, 2026
Source	TP26-04	**Date Received**	June 5, 2026
Location	1.2 m	**Date Tested**	July 1, 2026
Description	Till	**Sampled By**	PS
Specification		**Tested By**	Caleb M

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	100.0%		
25.0	100.0%		
19.0	100.0%		
12.5	100.0%		
9.5	97.2%		
4.75	95.1%		
2.36	87.9%		
1.18	67.9%		
0.600	53.1%		
0.300	42.5%		
0.150	34.5%		
0.075	27.5%		



Moisture Content 12.7%

Comments

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Sieve Analysis

Reference ASTM C117 and C136

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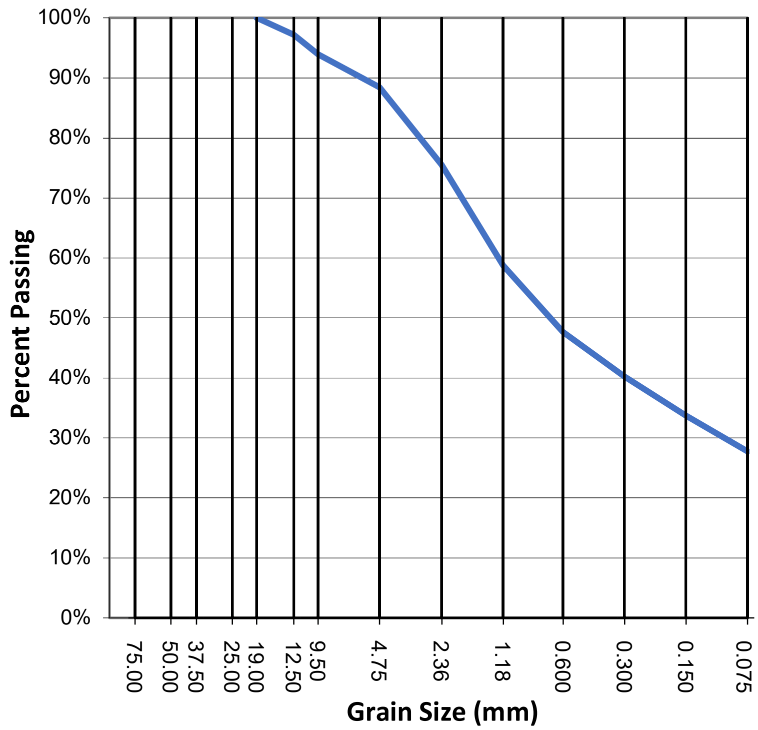
Project Details

Client	HM Aero Aviation Consulting	**Project No.**	26-H-041
Project	Anahim Lake Airport Apron Expansion	**Sieve Report No.**	SI03

Sample Details

Supplier	Native	**Sampling Date**	June 4, 2026
Source	TP26-05	**Date Received**	June 5, 2026
Location	1.2 m	**Date Tested**	July 1, 2026
Description	Till	**Sampled By**	PS
Specification		**Tested By**	Caleb M

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	100.0%		
25.0	100.0%		
19.0	100.0%		
12.5	97.2%		
9.5	93.9%		
4.75	88.4%		
2.36	75.5%		
1.18	58.8%		
0.600	47.7%		
0.300	40.2%		
0.150	33.7%		
0.075	27.8%		



Moistur Content 11.9%

Comments

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Sieve Analysis

Reference ASTM C117 and C136

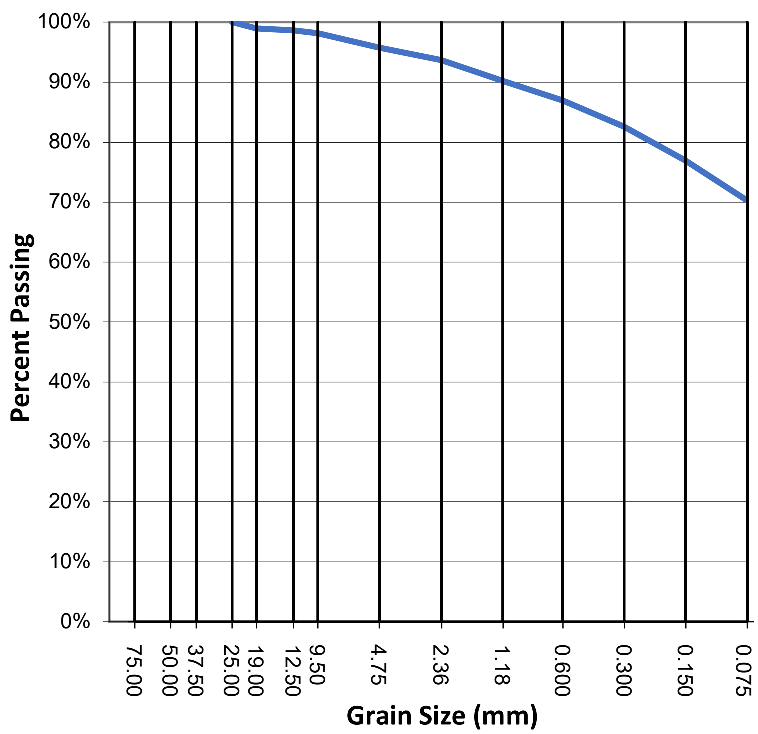
Project Details

Client	HM Aero Aviation Consulting	**Project No.**	26-H-041
Project	Anahim Lake Airport Apron Expansion	**Sieve Report No.**	SI04

Sample Details

Supplier	Native	**Sampling Date**	June 4, 2026
Source	TP26-07	**Date Received**	June 5, 2026
Location	2.1 m	**Date Tested**	June 17, 2026
Description	Till	**Sampled By**	PS
Specification		**Tested By**	Caleb M

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	100.0%		
25.0	100.0%		
19.0	98.9%		
12.5	98.6%		
9.5	98.2%		
4.75	95.8%		
2.36	93.7%		
1.18	90.2%		
0.600	87.0%		
0.300	82.6%		
0.150	76.9%		
0.075	70.3%		



Moisture Content 13.2%

Comments