

TECHNICAL SUMMARY REPORT

Updated: November 17, 2008

Pit Name: Timber Lake Pit

Provincial Pit #: 5575

Location

The Timber Lake Pit is located on Hwy 118, approximately 4km south of the Fulton River Bridge.

Legal Description

The Timber Lake Gravel Reserve is legally described as "Unsurveyed Crown Land, Range 5, Coast District." The layout of the reserve boundaries and the pit features are shown on the attached plan (Figure 2).

Material Gradation

The material gradation and durability characteristics are based on the 1981 subsurface investigation results. It should be noted that the area investigated in 1981 is probably mined out and that the material gradation values may differ in the areas that have not been investigated. The investigated area is shown on attached sketch plan.

Fines <0.075mm	Sand 0.075 - 4.75mm	Gravel 4.75 - 75mm	Oversize Material >75mm
9%	42%	49%	not recorded

Material Durability

Test Hole #	Degradation Value	Sand Equivalent Value
81-2	31	68
81-7	26	69
81-12	20	73

Magnesium Sulphate soundness test result shows a loss for the course and fine aggregate size ranges of 12 and 4% respectively.

Volume Estimates

The gravel volume is estimated to be 50,000m³ in the area investigated in 1981.

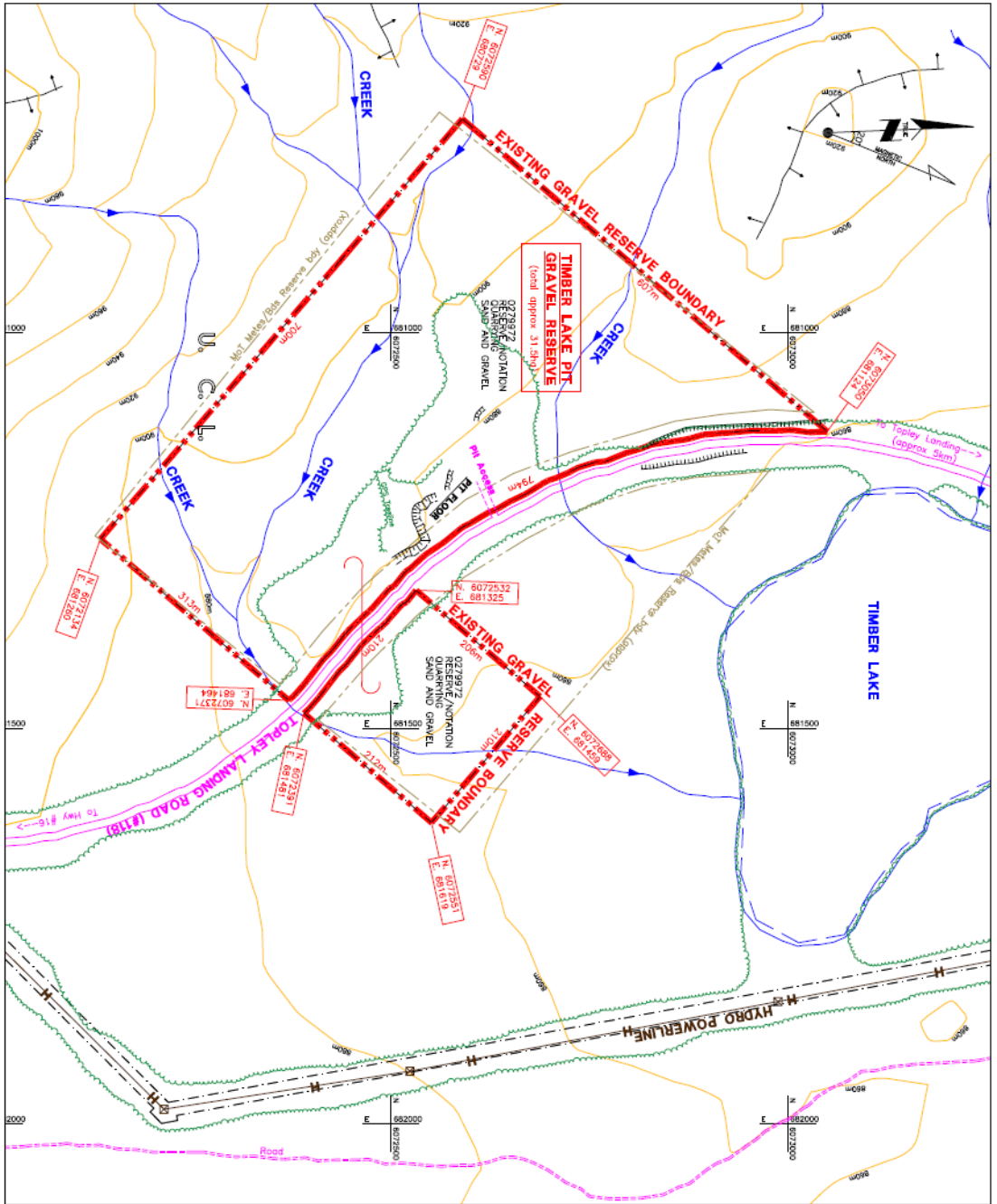
Material Suitability

With approximately 9% fines (silt & clay fraction) passing the 0.075mm screen, and the possibility of additional fines being generated during gravel crushing, it is felt that the aggregate within the outlined areas is best suited for high fines surfacing aggregate. However, with additional processing, it may be possible to produce base course and paving aggregates.

Pit Development

- The area investigated is an outwash deposit subsequently reworked by the existing stream.
- For the most part, the investigation area has been cleared and stripped although small brush is now regenerating in the cleared areas.
- The water table was not encountered during the 1981 investigation.
- Access to the pit is available off Hwy # 118.

Pit Plan



PIT LEGEND

	NATURAL DITCHMARK		STAKE
	PIT FACE		OBEX
	TEST PIT		BALANCE (Symbol)
	TEST HOLE		FENCE
	POWER ROAD		SIGN POST
	TAIL		UTILITY POLE
	TRENCH		GRAVEL RESERVE BOUNDARY
	DISTRICT LTR LINE		Contour Line (10m Interval)
	BOUNDARY		Contour Line (20m Interval)
	IRON PIN		

TRIM NOTE:

- Contour Interval @ 20 metres
- TRIMMING Method:
 - Map No.: 92L/16-001
 - Contour/Zone: 10M (N=837.9)

LEGAL NOTE:

- District Lot lines are derived from digital Crown Cadastre reference mapping applied by CROWN LAND REGISTRAR, Victoria

DRAWING NOTES:

- Updated pit topography derived from Mart Geotech 0025 (Geobridge-remodified), surveyed Nov 2005.

Scale = 1:5,000

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GOVERNMENT OF BRITISH COLUMBIA
 MINISTRY OF TRANSPORTATION
 Geotechnical & Materials Engineering

Figure 2
PIT PLAN (2008)
TIMBER LAKE PIT
 BILULEY-STIKINE HIGHWAY DISTRICT

Drawn: drh/JV Date: Nov /08 Scale: As Shown
 File No.: 92L/16-001 ACAD File: 27m-1608.dwg

Test Pit Summary

MINISTRY OF TRANSPORTATION, COMMUNICATION & HIGHWAYS GEOTECHNICAL & MATERIALS BRANCH AGGREGATE TESTHOLE SUMMARY SHEET																				
PROJECT <u>TIMBER LK PIT</u>												FILE NO <u>MSS-10-5575</u>								
REGION <u>5</u> DISTRICT <u>BURNS LK.</u>												DATE: <u>AUG. 4/81</u>								
												CALCULATIONS BY <u>S. LIKNESS</u>								
												SHEET <u>1</u> OF <u>3</u>								
TESTHOLE NO.	DEPTH OF OVERBURDEN WASTE MAT.	DEPTH OF BOUNDARIES	SOIL CLASSIFICATION	GRADATION OF MATERIALS							SOUNDNESS INDICATORS		SOUNDNESS TEST				MATERIAL AT BOTTOM OF HOLE	WATER LEVEL (METRES)	REMARKS	
				75/150 m.m.	150/225 m.m.	+225 (FINES)	GRAVEL	SAND	FINES	ORGANIC	DOMINANT ROCK TYPE	SOUNDNESS	SAND LOSS (%)	MAGNESIUM SULPHATE		L.A. ABRASION				
														F.A.	C.A.	F.A.				C.A.
81-1	2.0	0.0 2.0	ML				-	3	97	0								ML	OVERBURDEN END OF HOLE	
81-2	2.0	0.0 2.0 3.0	SM3 SP				20	45	20	0								SP	OVERBURDEN END OF HOLE	
81-3	1.0	0.0 1.0	SM4				25	35	40	0									OVERBURDEN	
	2.0	1.0 2.0	GM1				65	23	12	0									"	
	3.0	2.0 3.0	SM2				18	62	20	0								SM2	" END OF HOLE	
81-4	1.5	0.0 1.5	GM1				59	27	14	0								GM1	0.5 OVERBURDEN END OF HOLE	

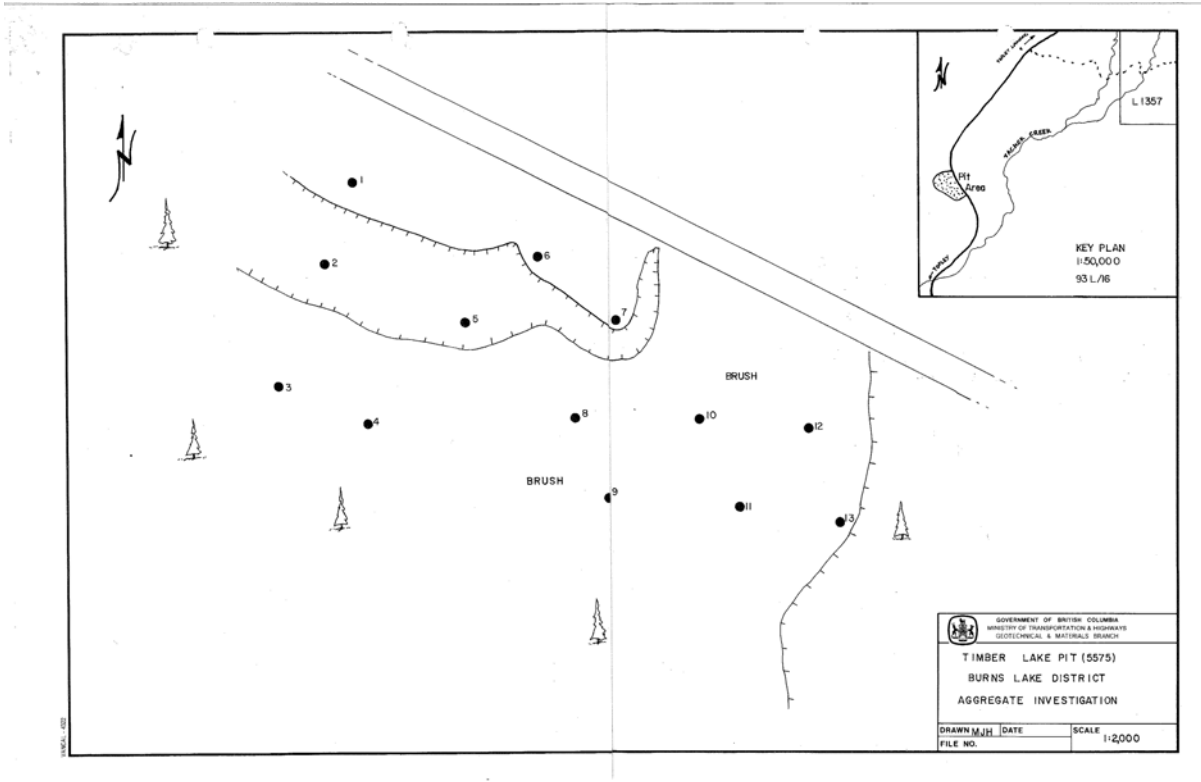
MINISTRY OF TRANSPORTATION, COMMUNICATION & HIGHWAYS
 GEOTECHNICAL & MATERIALS BRANCH
 AGGREGATE TESTHOLE SUMMARY SHEET

PROJECT JIMBER LK PIT
 REGION 5 DISTRICT BURNS LK.

FILE NO M55-10 5575
 DATE AUG 4/81
 CALCULATIONS BY S. L. IKNESS
 SHEET 2 OF 3

TESTHOLE NO.	DEPTH OF OVERBURDEN WASTE MAT. & DEPTH OF BINDERIES	SOIL CLASSIFICATION	GRADATION OF MATERIALS								DOMINANT ROCK TYPE	SOUNDNESS INDICATORS		SOUNDNESS TEST				MATERIAL AT BOTTOM OF HOLE	WATER LEVEL (METRES)	REMARKS
			75/150 #/m.	150/225 #/m.	#225 #/m.	GRAVEL	SAND	FINES	ORGANIC	SOUNDNESS		EXPANSION	MAGNESIUM SULPHATE		L.A. ABRASION					
													F.A.	C.A.	F.A.	C.A.				
81-5	0.0 3.0	SM ₁				34	50	16	0									SM ₁	1.5	END OF HOLE
81-6	0.0 1.5	GM ₄				35	20	45	0									GM ₄	1.5	END OF HOLE
81-7	0.0 2.0	SP-SM				35	56	9	0			26	69					SP-SM	1.5	END OF HOLE
81-8	0.0 2.0	SP				20	76	4	0											
	2.0 3.5	CL				—	10	90	0									CL		END OF HOLE
81-9	0.0 0.5	ML				10	10	80	0											OVERBURDEN
	0.5 3.0	GM ₄				50	10	40	0									GM ₄		END OF HOLE
81-10	0.0 1.5	GP				85	12	3	0											
	1.5 3.0	GP				52	45	3	0									GP		END OF HOLE

Sketch Plan



Photos: Nov 2008







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