

**TECHNICAL SUMMARY REPORT**  
Updated November 2008-11-17

Pit Name: Strimboldt Pit

Provincial Pit #: P5579

Location

Strimboldt Pit is located on Hwy 16 east, approximately 0.5 kilometres west of the Hwy 16 and Hwy 118 intersection. The pit is on the north side of Hwy 16.

Legal Description

The Strimboldt Gravel Reserve is legally described as the “East half of unsurveyed portion of District Lot 2629, Range 5, Coast District.”

Material Gradation

The material gradation and durability characteristics are based on the 1993 subsurface investigation results. The investigated areas are shown on the attached sketch plan.

The table below shows the average overall gradation of the granular areas.

<b>Fines</b> <b>&lt;0.075mm</b>	<b>Sand</b> <b>0.075 -</b> <b>4.75mm</b>	<b>Gravel</b> <b>4.75 -</b> <b>75mm</b>	<b>Oversize</b>	
			<b>75 - 150mm</b>	<b>&gt;150mm</b>
2%	54%	42%	2%	0%

Material Durability

<b>Average Degradation</b>	<b>Durability Index</b>		<b>MgSO<sub>4</sub> Soundness</b>		<b>Average Sand Equivalent</b>
	<b>Course Aggregate</b>	<b>Fine Aggregate</b>	<b>Course Aggregate</b>	<b>Fine Aggregate</b>	
69	73	75	4.1% loss	7.8% loss	87

The generally accepted durability index value for base course & paving aggregates is above 65 on the coarse fraction.

### Gravel Volume Estimates

<b>Area</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>Total</b>
<b>Volume (m<sup>3</sup>)</b>	14,000	89,000	30,000	133,000

Based on the useable gravel thickness of 2.8 – 4.0m, the gravel volume is estimated to be 133,000m<sup>3</sup> in the areas investigated.

### Suitability

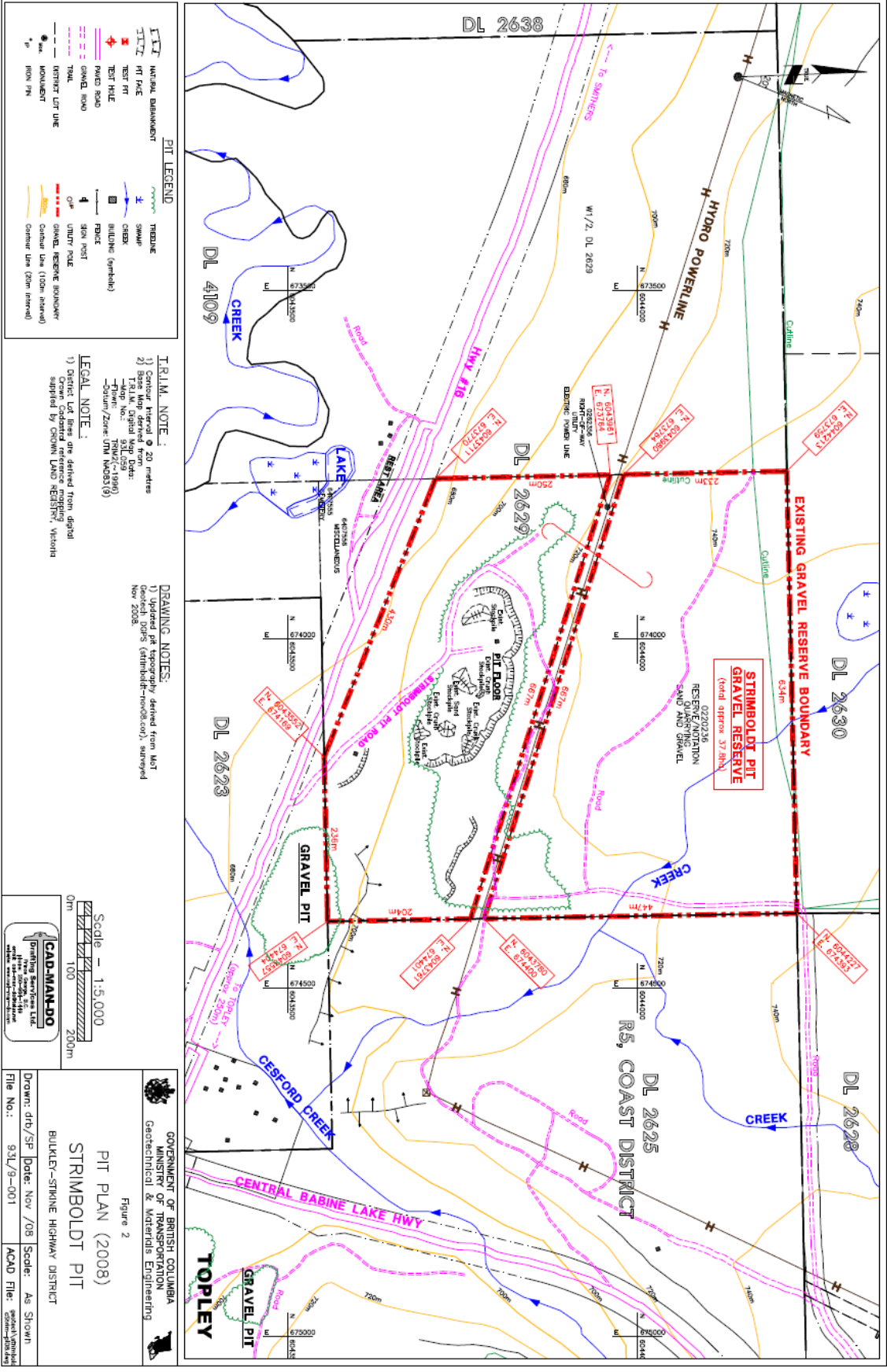
Based on the 1993 investigation results, the gravel within the investigated areas at the Strimboldt Gravel Reserve is suitable for the production of 25mm Base Course and Paving Aggregates. Production of these may require selective screening to achieve the required fracture counts.

Due to the high durability characteristics of the gravel in this pit, it is recommended that the gravel be used for the production of only quality aggregates.

### Pit Development Notes

- The landform in which the gravel is found is a glacial outwash terrace.
- The water table was not encountered during this investigation but was encountered at 1.5 metres below the pit floor in the earlier 1989 investigation.
- Most of the pit area south of the hydro power lines is cleared except for some patches of light brush. The area north of the hydro power lines is treed with mixed poplar, pine, and spruce.
- Overburden, where present, consists of an average of 0.5 metre thick silty sand or silt.
- Access to the pit is directly off Highway 16.

## Pit Plan



**PIT LEGEND**

	NATURAL EMBANKMENT		SWAMP
	PIT PIT		ALLUVIAL (Gravel)
	TEST PIT		FENCE
	TEST HITZ		30m POST
	PAVED ROAD		UTILITY POLE
	TRAIL		GRAVEL RESERVE BOUNDARY
	EXISTING LRT LINE		GRAVEL RESERVE BOUNDARY (100m Inward)
	MONUMENT		Centre Line (20m Inward)
	IRON PIN		

**T.R.L.M. NOTE:**  
 1) Contour Interval @ 20 metres  
 2) Base Map derived from  
 T.R.L.M. Digital Map Data  
 Project No.: TRM/07-1996  
 Datum/Zone: UTM NAD83(19)

**DRAWING NOTES:**  
 1) Updated pit topography derived from MAT  
 Geotech 00P5 (strimboldt-trm06.co), surveyed  
 Nov 2008.

**LEGAL NOTE:**  
 1) District Lot lines are derived from digital  
 Crown Land Records.  
 supplied by CROWN LAND RECORDS, Victoria

Scale - 1:5,000  
 0m 100m 200m

**CAD-MAN-DO**  
 Drafting Services Ltd.  
 1000-10th Street, Victoria, BC V8W 2G7  
 Tel: 250-383-3333

GOVERNMENT OF BRITISH COLUMBIA  
 MINISTRY OF TRANSPORTATION  
 Geotechnical & Industrial Engineering

Figure 2  
**PIT PLAN (2008)**  
**STRIMBOLDT PIT**  
 BULKHEAD-STRIKINE HIGHWAY DISTRICT

Drawn: dth/SF Date: Nov /08 Scale: As Shown  
 File No.: 931/3-001 ACAD File: strimboldt





MINISTRY OF TRANSPORTATION AND HIGHWAYS  
 GEOTECHNICAL AND MATERIALS ENGINEERING  
 AGGREGATE TESTHOLE SUMMARY SHEET

PROJECT STRIMBOLD PIT  
 REGION 5 DISTRICT LAKES

FILE No. \_\_\_\_\_  
 DATE SEPT 16/93  
 CALCULATIONS BY J.P.  
 SHEET 3 OF 4

TESTHOLE #	DEPTH OF OBSERVATION	DEPTH OF SOIL SAMPLES	SOIL CLASSIFICATION	GRADATION OF MATERIALS							PLASTIC FINES SAND EQUIVALENT	SOUNDNESS / DURABILITY				MATERIAL AT BOTTOM OF HOLE	WATERBABLE DEPTH	COMMENTS
				OVERSIZE			NO. OF SAMPLES	FINES (CONT)	MAXIMUM SIZE (mm)	MAGNESIUM SULPHATE SOUNDNESS		DURABILITY INDEX						
				75/100 μm	150/200 μm	200 μm				FINE AGG		COARSE AGG	FINE AGG	COARSE AGG				
11	.5M	0.0	OB															
		0.3	GPBM 4				60	32	8	150							WASTE	
		3.0	GC3 1				50	20	30	150						GC3		
12	.5M	0.0	OB													WASTE		
		3.0	GC3 1				50	20	30	200						GC3		
13	1M	0.0	GP 2				60	35	5	125								
		3.0	GM3 1				50	20	30	200						GM3		
14		0.0	OB													WASTE		
		3.0	GP 1				59	40	1	150			75	74	GP			
15	.5M	0.0	OB													WASTE		
		1.5	SP 1				45	53	2	100								
		4.0	SP 1				45	51	4	100	78	69			SP			
16		0.0																
		3.0	SP 2				39	59	2	100	96	69			SP			

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PROJECT STRIMBOLD PIT

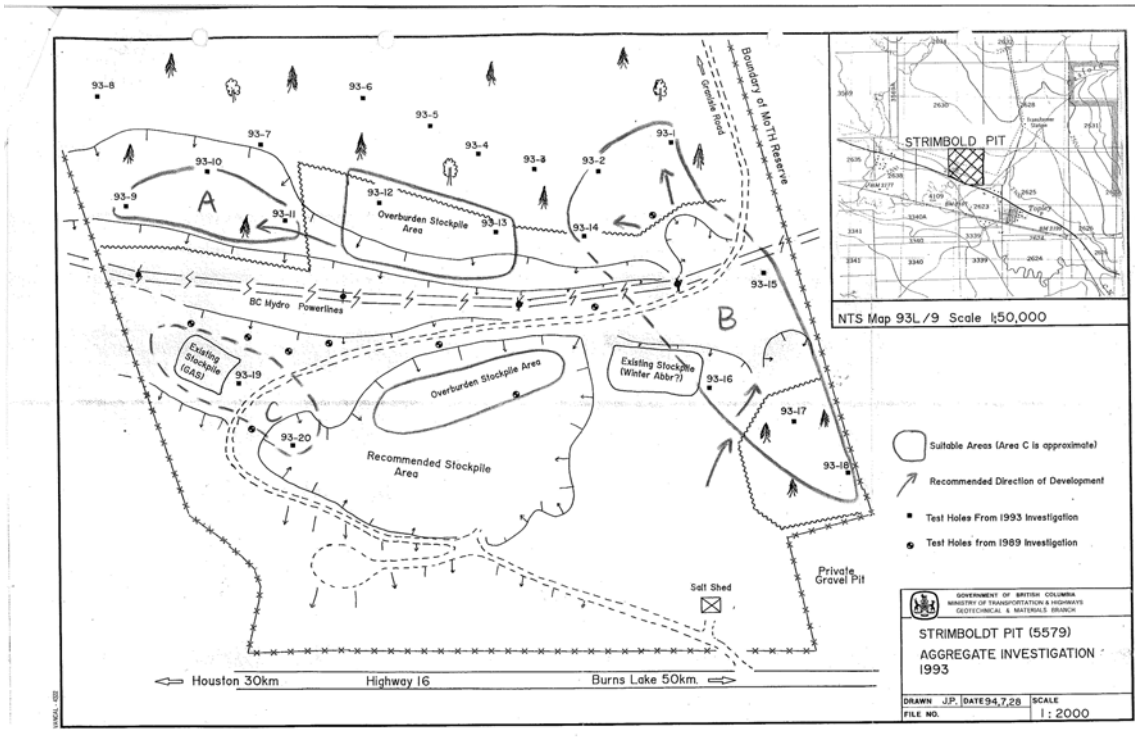
FILE No. \_\_\_\_\_  
 DATE SEPT 16/93

REGION 5 DISTRICT LAKES

CALCULATIONS BY J.P.  
 SHEET 4 OF 4

TESTHOLE #	DEPTH OF OVERBURDEN	DEPTH OF SOIL SAMPLES	SOIL CLASSIFICATION	GRADATION OF MATERIALS						PLASTIC FINES (%)	SAND EQUIVALENT	SOUNDNESS / DURABILITY				MATERIAL AT BOTTOM OF HOLE	WATER TABLE DEPTH	COMMENTS
				OVERSIZE								MAGNESIUM SULPHATE SOUNDNESS		DURABILITY INDEX				
				75/100	150/250	>250	NO. 20	NO. 40	NO. 60			FINES (CONT)	MAXIMUM SIZE (mm)	FINES (CONT)	MAXIMUM SIZE (mm)			
17	.5M	0.0	OB														WASTE	
		0.5																
		2.0		SP	2				55	38	7	150						
		3.0		SP					30	67	3	75						
18	.5M	0.0	OB													WASTE		
		0.5																
		2.5		SP	2				44	55	1	100			75		73	
		3.5		SP	1				35	63	2							
19	.5M	0.0	OB													WASTE		
		0.5																
		0.5		SP	1				48	51	1	100						
		4.0																
20		4.0	SP				8	90	2	100	90	65						

Sketch Plan





Photos: taken in Nov 2008





Prepared by:  
Julie Vineham  
Geoscientist In Training  
Northern Region

For:  
Regional Aggregate Resources Manager  
Northern Region