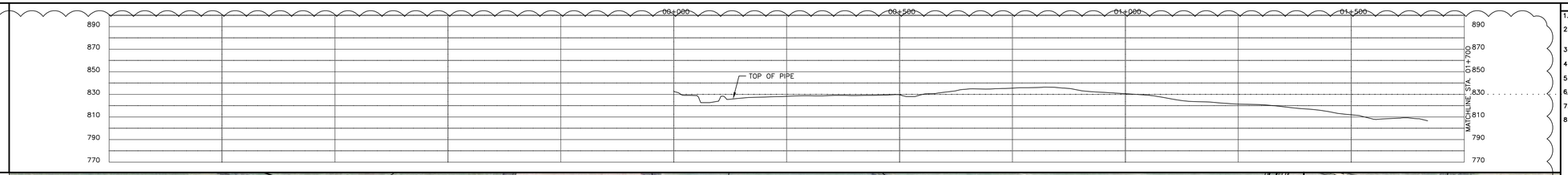
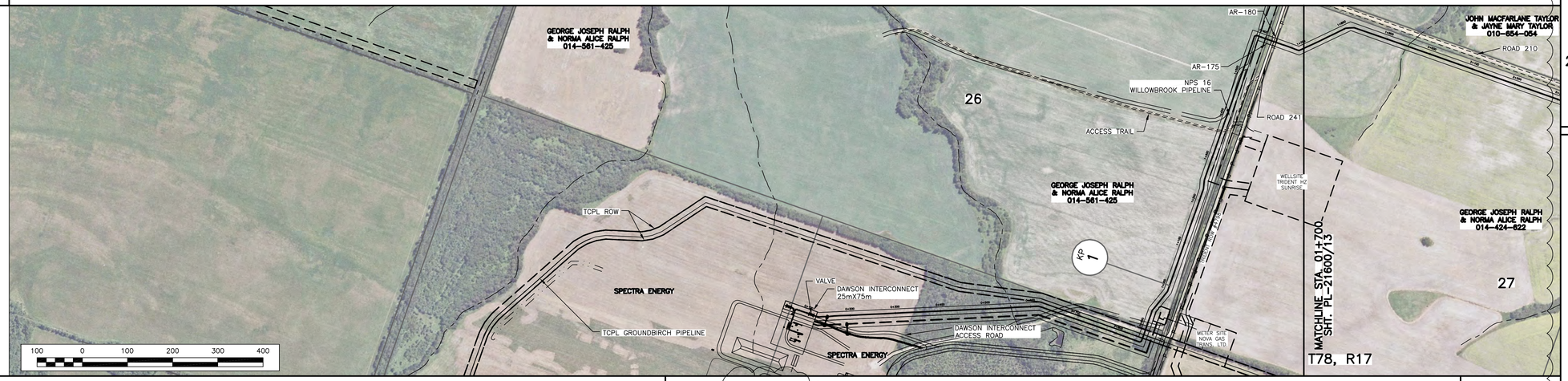
PROFILE

HOR. SCALE 1:5000
VERT. SCALE 1:2000





AERIAL PHOTO: pl-21600-12.sid

GENERAL NOTES

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6. MAXIMUM ALLOWABLE OPERATING TEMPERATURE = 49 C
7. MINIMUM TEST PRESSURE = 12,413 KPA (1800 PSIG)
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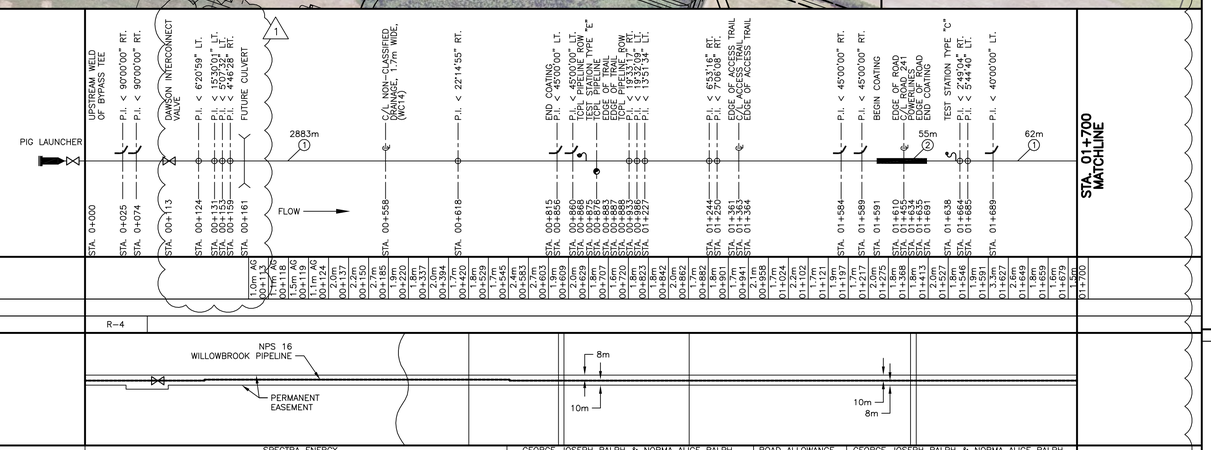
ENVIRONMENTAL NOTES

CONSTRUCTION SCHEMATIC



MINIMUM DEPTH OF COVER (SEE NOTE 4)

CROSSING METHOD

TYP./DETAIL/SITE SPECIFIC DWG. NO. R-4

EASEMENT

TRACT

OWNERNAME
APN NUMBER
TITLE NUMBER
METERS

SPECTRA ENERGY – 887M | GEORGE JOSEPH RALPH & NORMA ALICE RALPH (014-561-425) 722.25M | ROAD ALLOWANCE (ROAD 241) 25.26M | GEORGE JOSEPH RALPH & NORMA ALICE RALPH (014-424-622) 73.85M

ENVIRONMENTAL PROTECTION

TOPSOIL SALVAGE: PROCEDURE; DEPTH (cm)

SEED MIX

TIMBER SALVAGE: ROLLBACK

POTENTIAL ENVIRONMENTAL ISSUES

VEHICLE WATERCOURSE CROSSING METHOD

P/L WATERCOURSE CROSSING METHOD

ENVIRONMENTAL PROTECTION MEASURES

PIPELINE DETAILS

PIPE SPECIFICATIONS

No.	PIPE CODE	O.D.	W.T.	STANDARD GRADE / PROCESS	COATING CODE #	PIPE COATING	SET SPEC	NET M
1	–	406.4	9.53	CSA Z245.1, GRADE 359, CAT II M18C, SOUR	–	FBE	ES-PC 1.9	1695
2	–	406.4	9.53	CSA Z245.1, GRADE 359, CAT II M18C, SOUR	–	ARO	ES-PC 1.9	55
								1

MISCELLANEOUS MATERIALS

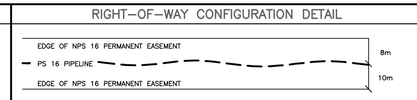
QTY.	DESCRIPTION	PART No.	REQ'N. No.
2	NPS 16, INDUCTION BEND, 90 DEG, 6D 11.1mm W.T., 1.0 M	–	–
	TAN, CSA Z245.1, GRADE 386, CAT II M5C, SS,		
4	NPS 16, INDUCTION BEND, 45 DEG, 6D 11.1mm W.T., 1.0 M		
	TAN, CSA Z245.1, GRADE 386, CAT II M5C, SS,	–	–
	LIQUID EPOXY COATED		
1	NPS 16, INDUCTION BEND, 40 DEG, 6D 11.1mm W.T., 1.0 M		
	TAN, CSA Z245.1, GRADE 386, CAT II M5C, SS,	–	–
	LIQUID EPOXY COATED		
3	TEST STATION TYPE "C"		

LEGEND

TEST LEAD/BONDING WIRE; SACK BREAKER; CROSSOVER/CROSSUNDER; ANCHOR BLOCK; SCRAPER BARREL ASSEMBLY; SCREW TYPE ANCHORS; INDUCTION BEND; WELL HEAD; ADDITIONAL TEMPORARY WORKSPACE

BOLT-ON WEIGHTS; BAG WEIGHTS; CONCRETE PAD/SLAB; CONCRETE ROCK JACKET; CONTINUOUS CONCRETE; HEAVY WALL PIPE; BALL VALVE; CHECK VALVE; GATE VALVE; TRANSITION PIECE; ABOVE GROUND MARKER

RIGHT-OF-WAY CONFIGURATION DETAIL



NOTES:
1. RIGHT-OF-WAY CONFIGURATION APPROXIMATE. ACTUAL CENTERLINE OF INSTALLED PIPELINE MAY DEVIATE FROM RIGHT-OF-WAY CONFIGURATION DETAIL.

DETAIL NO.	REFERENCE DRAWING	DRAWING NO.
R-4	PLOT PLAN – DAWSON PLANT PIGGING AREA DPPA	PL-20600-100/01
	KP 0 (MP 0), LSD 11-26-78-17	
	ALIGNMENT SHEET – NPS 16 WILLOWBROOK PIPELINE	PL-21500/02

ENGINEERING STAMP / P2P STAMP

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA F. T. EVANS # 33306 ENGINEERING PERMIT

July 26 2012

REV.	DATE	REVISION	BY	APP'D
3	2012/07/27	ISSUED FOR FINAL RECORD – SET PROJECT # S1167	DDN	CMR
		TRANSFERRED ASSETS TO WESTCOAST ENERGY		
2	2011/07/15	ISSUED FOR FINAL RECORD – SET PROJECT #	CLJ	CMR
		M0511 (CH2MHILL PROJECT # 400652)		
1	2011/01/11	RE-ISSUED FOR CONSTRUCTION – SET PROJECT #	SEH	CMR
		M0511 (CH2MHILL PROJECT # 400652)		
0	2010/07/09	ISSUED FOR CONSTRUCTION – SET PROJECT # M0511	SEH	CMR
		(FORMERLY S1167) (CH2MHILL PROJECT # 400652)		
B	2010/05/28	ISSUED FOR BID – SET PROJECT # S1167	SEH	CMR
		(CH2MHILL PROJECT # 400652)		

Westcoast Energy

CH2MHILL

ALIGNMENT SHEET
NPS 16 WILLOWBROOK PIPELINE
STA. 0+000 TO STA. 1+700

PEACE RIVER LAND DISTRICT — PROVINCE OF BRITISH COLUMBIA

DRAWN	DESIGN ENGINEER	NETWORK ACTIVITY	SCALE	DATE
SEH	DEB	S1167	1:5000	12/07/24

DRAWING CHECK	DESIGN CHECK	DRAWING NUMBER	REVISION
AWM	CMR	PL-21500/01	3

WEI PROJECT APPROVAL: JL

IMAGE: pl-21600-12.sid

PCP/PC2/CTB: topo-gen.ctb

ACAD: PL-21500/01

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ENVIRONMENTAL NOTES

ENGINEERING STAMP / P2P STAMP

PROFILE

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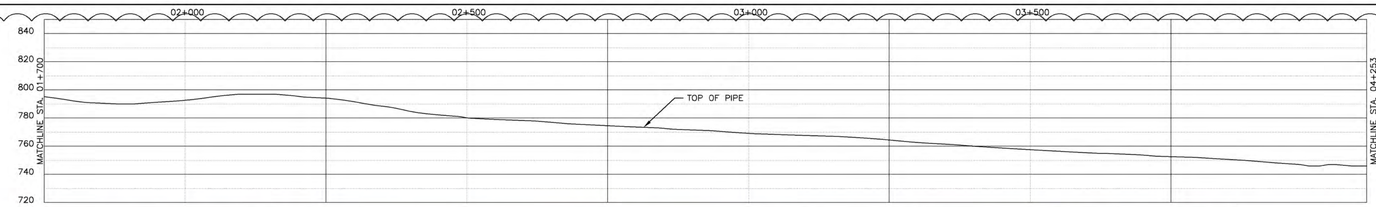
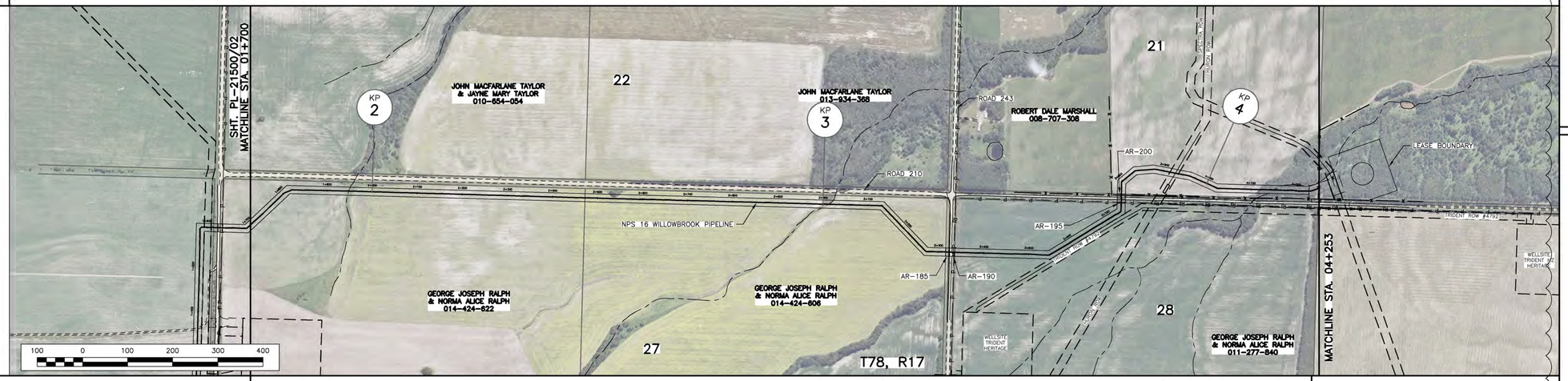
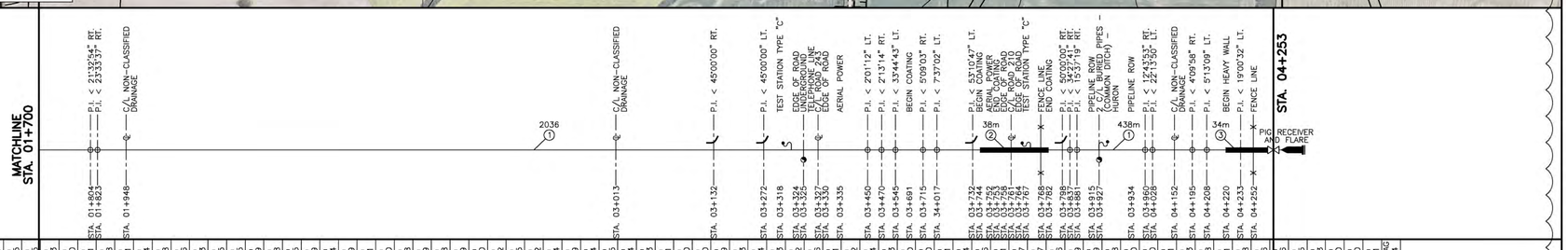




AERIAL PHOTO: M-21600-13.sid

CONSTRUCTION SCHEMATIC



MINIMUM DEPTH OF COVER (SEE NOTE 4)

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