



**Parks Canada  
Agency**

**L'Agence Parcs  
Canada**

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

**YOHO NATIONAL PARK  
BRITISH COLUMBIA**

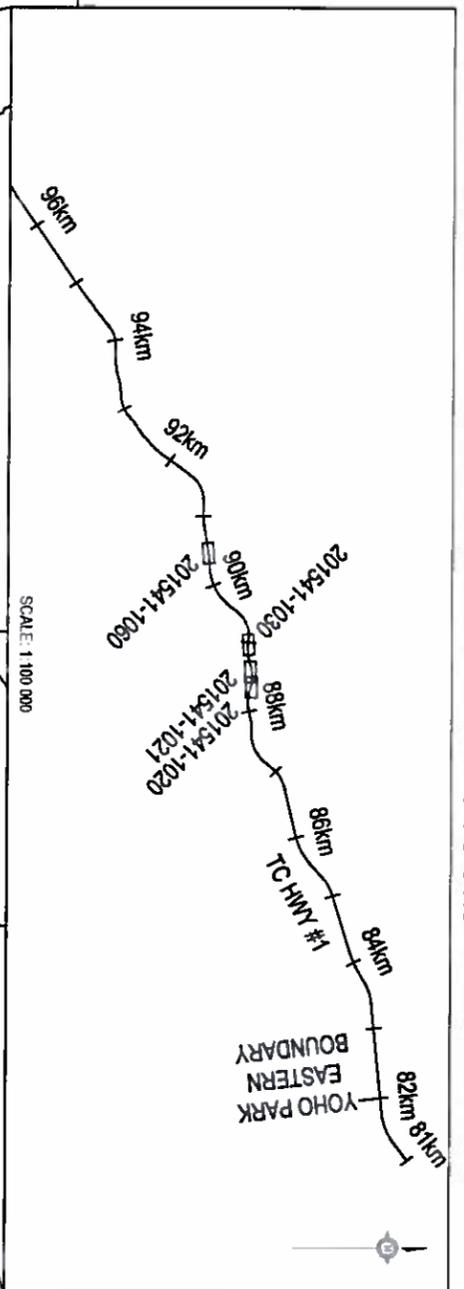
**PCA PROJECT No.**



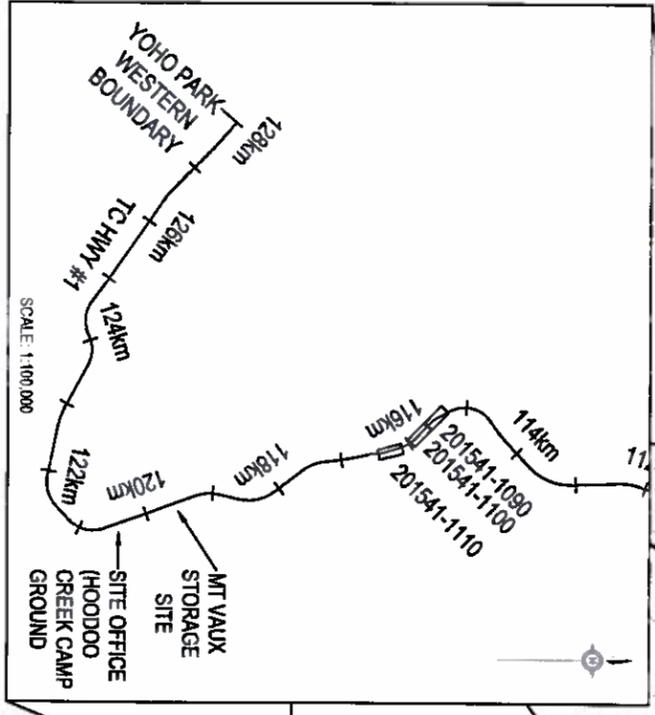
**TETRA TECH EBA**

**ISSUED FOR TENDER  
FEBRUARY 2016**

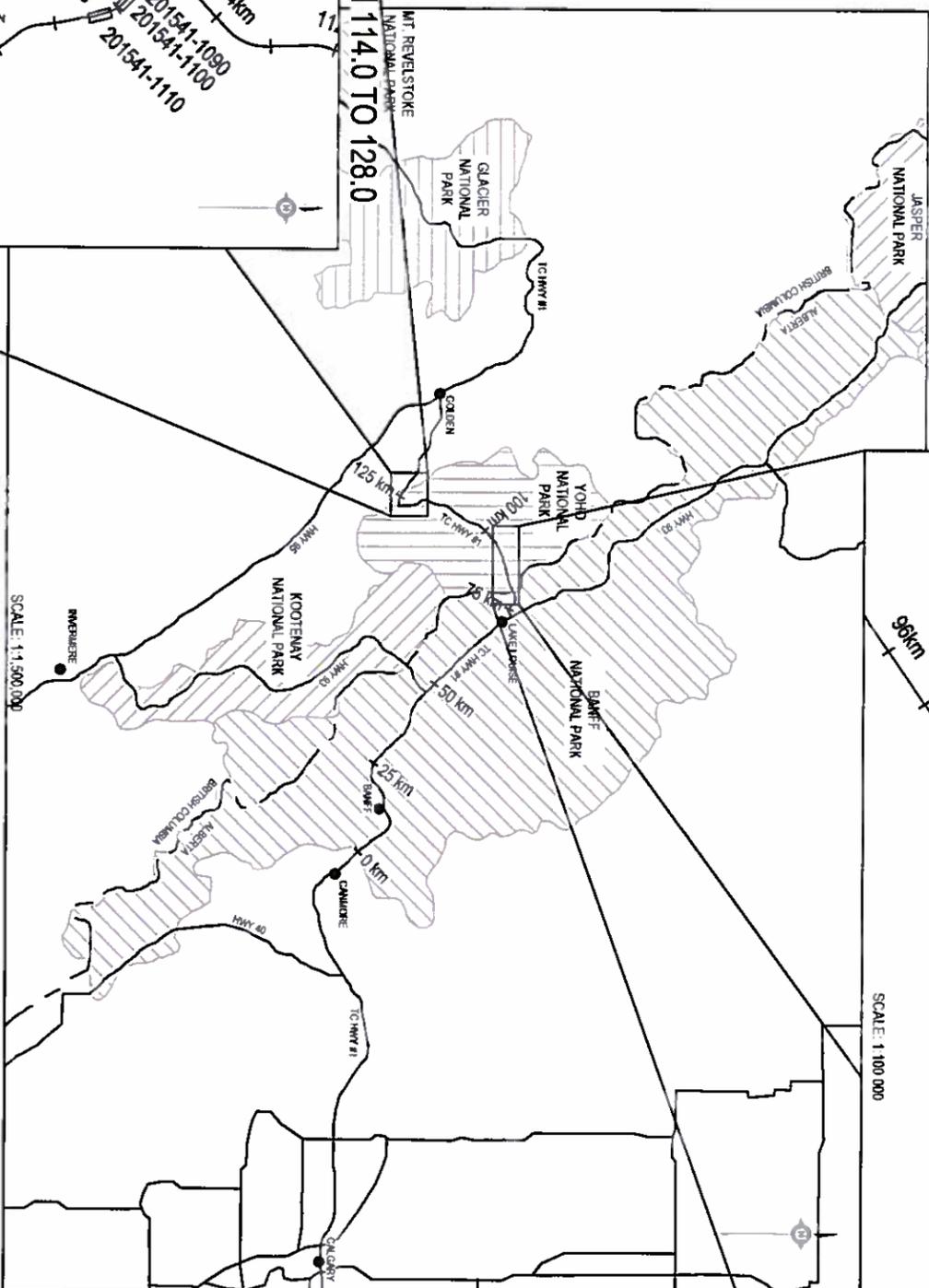
PROJECT KEY PLAN: KM 88.0 TO 91.0



PROJECT KEY PLAN: KM 114.0 TO 128.0



PROJECT LOCATION PLAN



Parks Canada / Agence Parcs Canada



ISSUED FOR TENDER

Revision	Date/Date	Description/Description	AF	AD	AF
0	16/02/16	ISSUED FOR REVIEW			

YOHO NATIONAL PARK  
BRITISH COLUMBIA  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concept par  
A. FRAPPELL  
Drawn by/Dessiné par  
A. DEEPWELL



Client/Client  
PARKS CANADA AGENCY  
Project No./No. du projet  
201541-0801

Sheet/Feuille  
0



**GENERAL**

1. ALL COORDINATES ARE IN YORK LOCAL COORDINATES SYSTEM AND ALL ELEVATIONS ARE TO (MVD) 1983 SET AT 800 METRES. SEE DWG 201541-0004 ESTABLISHMENT OF SURVEY MONUMENTS.
2. ALL ELEVATIONS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. AZIMUTHS IS MEASURED AS A POSITIVE ANGLE CLOCKWISE FROM NORTH.
4. QUALITY OF CONSTRUCTION REQUIRED, PERFORMANCE LEVELS OF WORKMANSHIP, MANUFACTURING AND INDUSTRY STANDARDS, STRENGTH AND PHYSICAL REQUIREMENTS OF MATERIALS, COMPLIANCE TO CODES AND REGULATIONS, GUARANTEES AND OTHER PROJECT REQUIREMENTS ARE SPECIFIED IN THE SPECIFICATIONS.
5. IF THE MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED, OR NOTED SHALL BE PROVIDED.
6. PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. ANY CHANGES PROPOSED BY THE CONTRACTOR TO THE STRUCTURAL SYSTEMS SHALL BE SUBMITTED TO DEPARTMENTAL REPRESENTATIVE FOR APPROVAL PRIOR TO BEGINNING THE WORK. WHERE APPLICABLE, DESIGN CHANGES SHALL BE SUBMITTED FOR APPROVAL AND DESIGN BY THE COMPANY REPRESENTATIVE. ALL DESIGN CHANGES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA.
7. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE WORKS AND ITS COMPONENT PARTS DURING CONSTRUCTION UNLESS SPECIFICALLY NOTED ON DRAWINGS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE THAT RESULT IF DESIGN LOADS ARE EXCEEDED, AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE IF THE DESIGN LOAD IS EXCEEDED.
9. ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR WITH THE CONSTRUCTION EQUIPMENT AND MATERIALS TO CONFORM TO THE DESIGN REQUIREMENTS AND SUIT THE CONTRACTOR'S MEANS AND METHODS.
10. EXISTING SITE INFORMATION SHOWN ON THESE DRAWINGS IS FROM AS-BUILT REFERENCE DRAWINGS AND A SURVEY PERFORMED BY MELBURN CONSULTING SERVICES LTD. & A.T.U.S SURVEY. THIS INFORMATION HAS BEEN PRESUMED TO BE AN ACCURATE REPRESENTATION OF THE CONDITIONS AT THE SITE WORK PERFORMED AT EACH SITE OR WITHIN THE PUBLIC RIGHT-OF-WAY SINCE THE DATE OF THE SURVEY MAY NOT BE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AT EACH SITE AND REPORT SIGNIFICANT DIFFERENCES, IF ANY, TO DEPARTMENTAL REPRESENTATIVE IMMEDIATELY.
11. THE CONTRACTOR IS REQUIRED TO UNDERTAKE A PRE-MOBILIZATION SURFACE UTILITY INVESTIGATION TO LOCATE EXISTING UTILITIES & STRUCTURES TO PERFORM THE WORK UNDERGROUND UTILITY LOCATIONS WERE IDENTIFIED THROUGH RECORDS PROVIDED BY BC ONE CALL VERTICAL AND HORIZONTAL LOCATION AND SIZE OF UTILITIES MAY VARY FROM THE PLAN.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF EXISTING UTILITIES, STRUCTURES, AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR IS ALSO RESPONSIBLE FOR COORDINATION OF ANY NECESSARY RELOCATIONS WITH PARKS CANADA AGENCY (PCA) AND THE OWNER.
13. FINAL FACE TOLERANCE SHALL BE WITHIN 0.25 m FURTHER THAN THE HIGHWAY OR 0.25 m CLOSER TO THE HIGHWAY.
14. EXISTING GRADE SHOWN IN PROFILE IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY AS NECESSARY TO PERFORM WORK.
15. REFER TO GEOTECHNICAL FACTUAL DATA REPORT (DECEMBER 2015) FOR ALL EXPLORATION DATA OBTAINED AS PART OF THE CONTRACT.
16. EXCAVATION LINES SHOWN ARE NOT INTENDED TO BE REPRESENTATIVE OF ANTICIPATED GROUND CONDITIONS OR AMOUNT OF ONSHORE BREAK THAT MAY OCCUR DURING EXCAVATION. FOR AVAILABLE GEOLOGIC DATA, SEE THE GEOTECHNICAL DATA REPORT (DECEMBER 2015).

**ROCK BLASTING**

1. TRAFFIC HOLD TIMES AS PER SPECIFICATION 01.14.00 WORK RESTRICTIONS, CLAUSE 1.5.8 F & G.
2. PEAK PARTICLE VELOCITIES SHALL BE LESS THAN 50 mm/s AS MEASURED AT ANY OF RAIL INFRASTRUCTURE.
3. ALL ETVRCK SHALL BE RETRIEVED FROM OUTSIDE OF THE WORK SITE AT THE EXPENSE OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL UNDERTAKE A PRE-CONSTRUCTION SURVEY WITH THE DEPARTMENTAL REPRESENTATIVE PRIOR TO WORK AT ANY LOCATION.
5. HORIZONTAL BLAST HOLES SHALL ONLY BE CONSIDERED FOR HOMEERING ACCESS ROADS AT THE DEPARTMENTAL REPRESENTATIVE'S WRITTEN ACCEPTANCE.
6. THE CONTRACTOR SHOULD ANTICIPATE EXISTING CAMPOLAGED ROCK BOLTS / ANCHORS MAY BE PRESENT IN ANY OF THESE ROCK FACES.

**ENVIRONMENTAL NOTES:**

1. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION ENVIRONMENTAL PROTECTION PLAN (EPP) TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW AND ACCEPTANCE PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE EPP SHALL DESCRIBE DETAILED, SITE-SPECIFIC ENVIRONMENTAL MITIGATION AND MANAGEMENT MEASURES, AS WELL AS ENVIRONMENTAL EMERGENCY AND SPILL RESPONSE PROCEDURES, CONSISTENT WITH PCA'S CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (EEMP), AS PER THE EPP. THE INTENT OF THE EPP SHALL BE TO PROTECT EXISTING LAND, WATER, VEGETATION AND WILDLIFE VALUES IN THE PROJECT AREA, MINIMIZE ENVIRONMENTAL DISTURBANCE, AND PREVENT ANY ADVERSE ENVIRONMENTAL EFFECTS.
2. THE CONTRACTOR SHALL RETAIN A QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) WITH PROFESSIONAL EXPERTISE AND EXPERIENCE ON CONSTRUCTION PROJECTS OF A SIMILAR NATURE AND SCOPE TO ASSIST IN THE DEVELOPMENT AND IMPLEMENTATION OF ITS EPP. THE QEP SHALL BE AVAILABLE TO DELIVER TECHNICAL, ENVIRONMENTAL ADVICE, GUIDANCE, TAILOR THE TRAINING SESSIONS FOR CONSTRUCTION CREWS, AND OVERSIGHT MONITORING SERVICES TO THE CONTRACTOR THROUGHOUT THE CONTRACT TERM.
3. AS PART OF ITS CONSTRUCTION ENVIRONMENTAL MANAGEMENT PROGRAM, PCA WILL RETAIN A QUALIFIED ENVIRONMENTAL MONITOR (QEM) TO MONITOR CONTRACTOR COMPLIANCE WITH RESPECT TO REGULATORY REQUIREMENTS AND WORK PRACTICES AND PROCEDURES SET OUT IN THE EPP AND EPP AND TO EVALUATE THE EFFECTIVENESS OF CONTRACTOR'S MITIGATION AND MANAGEMENT MEASURES. AND EMERGENCY RESPONSE PROCEDURES. THE CONTRACTOR IS ADVISED THAT THE ENVIRONMENTAL MONITOR WILL HAVE AUTHORITY TO MAKE DECISIONS REGARDING THE SELECTION AND USE OF ENVIRONMENTAL MITIGATION MEASURES AND TO DIRECT THAT CONSTRUCTION ACTIVITIES BE STOPPED IF THOSE ACTIVITIES POSE AN IMMEDIATE DETRIMENTAL RISK TO THE ENVIRONMENT AND/OR CONTRAVENE THE INTENT OF THE EPP, EPP, REGULATORY REQUIREMENTS OR RIA ENVIRONMENTAL STANDARDS.
4. PCA'S CONSTRUCTION EEMP SETS OUT REQUIREMENTS TO BE FOLLOWED BY THE CONTRACTOR WITH RESPECT TO ISSUES INCLUDING, BUT NOT LIMITED TO:
  - ESTABLISHMENT OF ENVIRONMENTAL PROTECTION ZONES (EPZ)
  - PROTECTION OF SURFACE AND GROUNDWATER QUALITY
  - EROSION AND SEDIMENT CONTROL
  - MATERIALS AND WASTE MANAGEMENT
  - WILDLIFE PROTECTION
  - CONTROL OF DUST, NOISE AND VIBRATION
  - MANAGEMENT OF HAZARDOUS SUBSTANCES
  - BLASTING MANAGEMENT
  - SPILL PREVENTION AND EMERGENCY RESPONSE
  - CULTURAL RESOURCES
  - NATIONAL HISTORIC SITES
  - ARCHAEOLOGICAL SITES
5. THROUGHOUT THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ALL MEMBERS OF THE CONSTRUCTION CREW WITH ON-SITE TRAINING REGARDING BUT NOT LIMITED TO, PCA, DEPARTMENTAL REPRESENTATIVE, ENVIRONMENTAL STANDARDS APPLICABLE FEDERAL AND PROVINCIAL REGULATORY REQUIREMENTS, SITE-SPECIFIC ENVIRONMENTAL VALUES, IMPLEMENTATION OF PROJECT-SPECIFIC ENVIRONMENTAL MITIGATION AND SPILL RESPONSE MEASURES, AND ENVIRONMENTAL MONITORING REPORTING PROTOCOLS AND PROCEDURES.



Parks Canada Agency / L'Agence Parcs Canada

**ISSUED FOR TENDER**

Revision	Date/Date	Description/Description	By/Par	Check/Contrôler
0	19/02/2016	ISSUED FOR REVIEW	AF	AD
			AF	AD

YOH0 NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçu par  
**A. FRAPPPELL**  
Drawn by/Dessiné par  
**A. DEEPWELL**



Client/Client  
**PARKS CANADA AGENCY**

**GENERAL NOTES**

Project No./No. du projet	201541-0002	Revision no./No. de révision	0
---------------------------	-------------	------------------------------	---





**ISSUED FOR TENDER**

Revision No./No. de révis.	Issue Date/Date de mise à jour	Author/Auteur	Checked/Contrôlé
0	18/02/09	ISSUED FOR TENDER	AF AD AF

Project Name/Nom de projet  
**YOHO NATIONAL PARK**  
**BRITISH COLUMBIA**  
**KM 88 TO 91 AND KM 114 TO 128**  
**TRANS-CANADA HIGHWAY**  
**SLOPE REPROFILING**

Designed by/Conçu par  
**A. FRAPPELL**  
 Drawn by/Dessiné par  
**A. DEEPWELL**



Client/Client  
**PARKS CANADA AGENCY**  
 Drawing Title/Titre de dessin  
**DRAWING INDEX & LEGEND**

**LEGEND**

**MISCELLANEOUS ABBREVIATIONS**

- BH - BORE HOLE
- BW - BACK OF SIDEWALK
- CB - CATCH BASIN
- CG - CURB AND GUTTER
- CIP - CAST IN PLACE
- CONCRETE
- CI - CULVERT INLET
- CO - CULVERT OUTLET
- DES - DESIGN
- EP - EDGE OF PAVEMENT
- EX - EXISTING
- LOG - LIP OF GUTTER
- LS - LIGHT STANDARD
- MH - MANHOLE
- PROP - PROPOSED
- PP - POWER POLE
- S - SANITARY
- ST - STORM
- W - WATER
- NB - NORTHBOUND
- SB - SOUTHBOUND
- EB - EASTBOUND
- WB - WESTBOUND
- N/C - NOT IN CONTACT

**ROAD CONSTRUCTION**

EXISTING	DESCRIPTION	PROPOSED
	TEST PIT # ID	
	BORE HOLE # ID	
	CONTROL LINE AND STAIRING	
	ANCHOR AT THE POINTS, SLOPING	
	EDGE OF PAVEMENT GRAVEL ROAD	
	EDGE OF PAVEMENT	
	EDGE OF PAVED SHOULDER	
	SHOULDER ELEVATION	
	THROUGH ROCK FACING	
	CURB AND GUTTER	
	CONCRETE BARRIER	
	CLAWD PAL COMPOST	
	DRAINAGE BARRIER	
	DRAINAGE SIDE DITCH	
	DRAINAGE MEDIUM DITCH	
	DATE LIGHT LINE	
	CANADIAN PAVEMENT	
	EXISTING PAVEMENT	
	PAVEMENT REMOVAL	
	SLOPE (GRADE) (M/D #)	
	TRIPLE LINE	
	UNDERGROUND TEL. & CABLES	
	WATER LINE	
	CULVERT	
	RETAINING WALL	
	DITCH/DECK	
	DITCH DWA	
	SMALL CSP CULVERT	
	CATCH BASIN AND 300mm PIPE	
	WALL/FACE FINISH	
	WALDFINE ZONE BOUNDARY	
	CONTROL POINT	
	CAVE	
	BARRIER DOWN AND 300 mm PIPE	
	RR RAP SHOULDER	
	ROCKLINE	
	LIMIT OF CLEARANCE	
	ROCK CUT FACE	
	TREES FLEED BY OWNERS	

**DRAWING INDEX**

DRAWING No.	DESCRIPTION
201541-0000	COVER PAGE
201541-0001	PROJECT LOCATION & KEY PLAN
201541-0002	GENERAL NOTES
201541-0003	DRAWING INDEX & LEGEND
201541-0004	ESTABLISHMENT OF SURVEY MONUMENTS
201541-1001	ROCK CUT CONSTRUCTION LAYOUT TYPICAL SECTIONS
201541-1002	ROCK CUT CONSTRUCTION LAYOUT TYPICAL SECTIONS
201541-1003	CONTROL LINE LAYOUT AND WORK POINT TABLES
201541-1004	CONTROL LINE LAYOUT AND WORK POINT TABLES
201541-1020	SHERBROOKE CREEK ROCK SLOPE PLAN, STA 88+580 TO 88+820
201541-1021	SHERBROOKE CREEK ROCK SLOPE PLAN, STA 88+820 TO 89+060
201541-1022	SHERBROOKE CREEK ROCK SLOPE OVERBURDEN REPROFILING
201541-1030	LOWER SHERBROOKE ROCK SLOPE PLAN, STA 89+195 TO 89+435
201541-1060	SPIRAL TUNNELS HILL ROCK SLOPE PLAN, STA 90+210 TO 90+360
201541-1090	SPIRAL TUNNELS HILL ROCK SLOPE PLAN, STA 90+360 TO 90+700
201541-1100	LITTLE TOPPLE ROCK SLOPE PLAN, STA 115+675 TO 115+820
201541-1110	MT. VAUX ROCK SLOPE PLAN, STA 116+115 TO 116+475
201541-1111	MT. VAUX ROCK SLOPE PLAN, STA 116+475 TO 116+865
201541-2001	TYPICAL CROSS SECTIONS
201541-2002	ROCK SUPPORT TYPICAL DETAILS
201541-2003	CATCHMENT AND SLOPE DRAINAGE TYPICAL DETAILS
201541-2004	RESTORATION OR REMOVAL TYPICAL DETAILS
201541-2005	TYPICAL DETAIL S SOIL SLOPE
201541-3002	MT. VAUX STORAGE SITE
201541-4020	SHERBROOKE CROSS SECTIONS
201541-4021	SHERBROOKE CROSS SECTIONS
201541-4022	SHERBROOKE CROSS SECTIONS
201541-4023	SHERBROOKE CROSS SECTIONS
201541-4024	SHERBROOKE CROSS SECTIONS
201541-4025	SHERBROOKE CROSS SECTIONS
201541-4026	SHERBROOKE CROSS SECTIONS
201541-4030	LOWER SHERBROOKE CROSS SECTIONS
201541-4031	LOWER SHERBROOKE CROSS SECTIONS
201541-4032	LOWER SHERBROOKE CROSS SECTIONS
201541-4060	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4061	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4062	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4063	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4064	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4090	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4091	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4092	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4093	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4100	LITTLE TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4110	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4111	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4112	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4113	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4114	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4115	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4116	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4117	MT. VAUX ROCK SLOPE CROSS SECTIONS

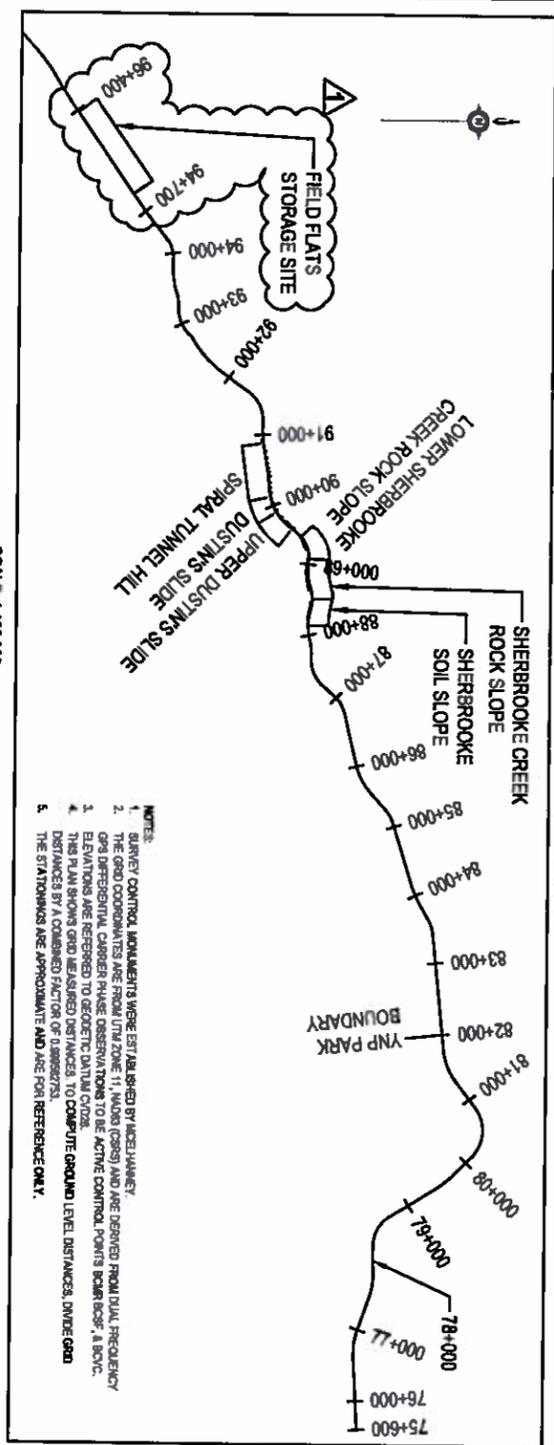


### YHOHO CONTROL MONUMENTS

MONUMENT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION	LOCATION
1238	5698552.932	543722.045	1510.583	TH	88+242	SHERBROOKE SOIL SLOPE
1239	5698562.787	543654.634	1566.206	TH	88+310	SHERBROOKE SOIL SLOPE
1906	5698572.137	543599.691	1563.273	TH	88+365	SHERBROOKE SOIL SLOPE
1240	5698587.207	543525.981	1539.966	TH	88+442	SHERBROOKE SOIL SLOPE
2077	5698588.380	543329.171	1550.343	TH (3001)	88+451	SHERBROOKE CREEK ROCK SLOPE
2076	5698546.342	54323.142	1548.381	TH (3003)	88+709	SHERBROOKE CREEK ROCK SLOPE
2075	5698542.152	543234.137	1547.168	TH (3002)	88+747	SHERBROOKE CREEK ROCK SLOPE
2074	5698534.687	543183.637	1546.082	TH (3002)	88+797	SHERBROOKE CREEK ROCK SLOPE
2073	5698526.086	543133.986	1544.282	TH (3002)	88+846	SHERBROOKE CREEK ROCK SLOPE
2072	5698522.826	543086.518	1542.400	TH (3002)	88+892	SHERBROOKE CREEK ROCK SLOPE
2071	5698527.283	543037.585	1539.829	TH (3024)	88+939	SHERBROOKE CREEK ROCK SLOPE
2070	5698532.791	542986.188	1537.027	TH (3024)	88+990	SHERBROOKE CREEK ROCK SLOPE
2069	5698540.342	542920.379	1533.635	TH (3023)	88+057	SHERBROOKE CREEK ROCK SLOPE
2067	5698515.470	542757.464	1525.629	TH (3021)	88+230	SHERBROOKE CREEK ROCK SLOPE
1947	5698492.143	542719.031	1523.624	TH	88+277	SHERBROOKE CREEK ROCK SLOPE
2066	5698474.004	542670.840	1521.315	TH (3020)	88+331	SHERBROOKE CREEK ROCK SLOPE
2065	5698465.427	542633.252	1520.140	TH (3019)	88+368	SHERBROOKE CREEK ROCK SLOPE
2063	5698437.519	542597.113	1518.322	TH (3018)	88+415	SHERBROOKE CREEK ROCK SLOPE
1241	5698331.528	542479.083	1510.731	TH	88+572	SHERBROOKE CREEK ROCK SLOPE
1242	5698276.149	542436.231	1506.898	TH	88+642	SHERBROOKE CREEK ROCK SLOPE
2285	5698249.926	542408.009	1502.271	TH (3004)	88+681	SHERBROOKE CREEK ROCK SLOPE
1243	5698229.454	542395.581	1505.238	TH	88+705	SHERBROOKE CREEK ROCK SLOPE
1244	5698189.437	542331.825	1501.248	TH	88+795	SHERBROOKE CREEK ROCK SLOPE
1245	5698091.880	542234.807	1495.528	TH	88+922	SHERBROOKE CREEK ROCK SLOPE
2167	5698086.821	542222.860	1494.864	TH (3002)	88+935	SHERBROOKE CREEK ROCK SLOPE
2168	5698055.816	542160.347	1491.570	TH (3003)	90+005	SHERBROOKE CREEK ROCK SLOPE
2169	5698040.130	542120.459	1489.539	TH (3004)	90+049	SHERBROOKE CREEK ROCK SLOPE
2170	5698020.733	542066.284	1487.158	TH (3005)	90+107	SHERBROOKE CREEK ROCK SLOPE
2318	5698010.525	541988.698	1483.633	TH	90+188	SHERBROOKE CREEK ROCK SLOPE
91	5698007.086	541970.471	1483.151	TH	90+204	SHERBROOKE CREEK ROCK SLOPE
1246	5698002.963	541915.470	1479.999	TH	90+250	SHERBROOKE CREEK ROCK SLOPE
1427	5698001.933	541844.889	1477.155	TH	90+330	SHERBROOKE CREEK ROCK SLOPE
1428	5697998.777	541780.879	1473.398	TH	90+414	SHERBROOKE CREEK ROCK SLOPE
92	5697992.380	541701.637	1471.195	TH (3001)	90+474	SHERBROOKE CREEK ROCK SLOPE
93	5697973.271	541642.516	1468.412	TH (3001)	90+534	SHERBROOKE CREEK ROCK SLOPE
94	5697963.102	541581.516	1465.381	TH (3001)	90+596	SHERBROOKE CREEK ROCK SLOPE
95	5697950.472	541502.669	1461.811	TH (3001)	90+676	SHERBROOKE CREEK ROCK SLOPE
96	5697937.365	541413.250	1457.938	TH (3001)	90+766	SHERBROOKE CREEK ROCK SLOPE
434	5697892.288	541267.434	1450.511	TH	90+916	SHERBROOKE CREEK ROCK SLOPE

Note: All coordinates are grid UTM Zone 11 NAD83

### OVERVIEW PLAN - KM 88.0 TO 91.0 - TCH

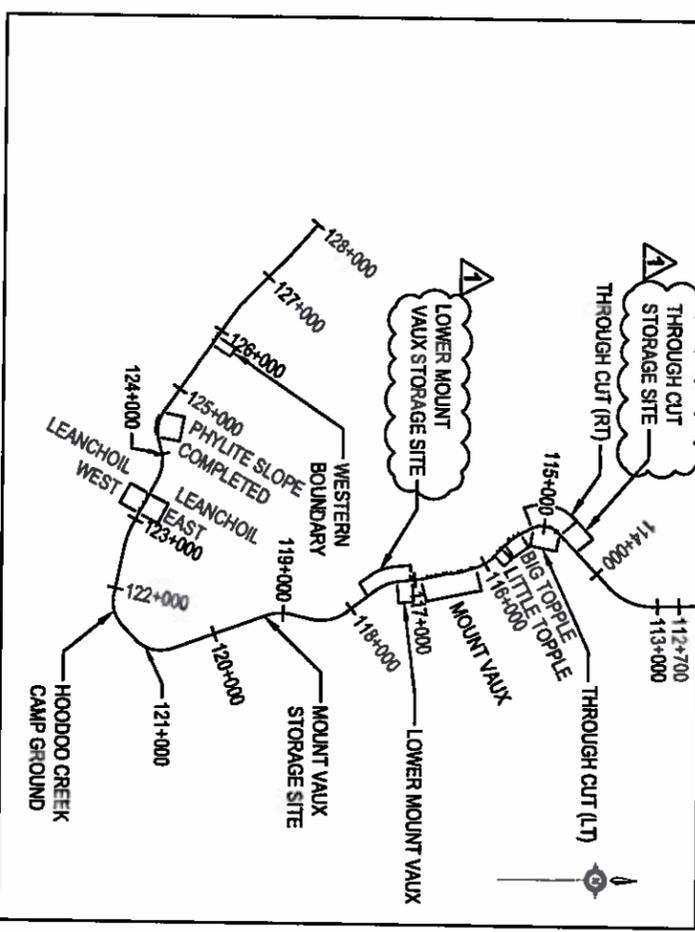


### YHOHO CONTROL MONUMENTS

MONUMENT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION	LOCATION
149	5680157.726	528105.238	1140.175	BM 94C19	114+429	THROUGH CUT (LEFT + RIGHT)
1430	5680168.129	528082.030	1141.025	TH	114+830	THROUGH CUT (LEFT + RIGHT)
1429	5680076.821	528036.569	1143.032	TH	114+931	THROUGH CUT (LEFT + RIGHT)
1431	5679999.049	528018.968	1142.903	TH	115+009	THROUGH CUT (LEFT + RIGHT)
1432	5679917.960	528018.927	1141.624	TH	115+088	THROUGH CUT (LEFT + RIGHT)
2062	5679643.178	528139.551	1127.888	TH (3017)	115+385	BIG TOPPLE
1290	5679575.853	528173.935	1125.555	TH	115+459	BIG TOPPLE
2061	5679512.285	528211.408	1123.871	TH (3016)	115+431	BIG TOPPLE
1288	5679292.916	528343.000	1121.554	TH	115+706	LITTLE TOPPLE
2058	5679350.323	528388.683	1120.839	TH (3014)	115+768	LITTLE TOPPLE
1287	5679298.696	528465.629	1120.955	TH	115+880	LITTLE TOPPLE
2057	5678994.639	528616.017	1117.269	TH (3013)	115+205	MOUNT VALX
1285	5678858.023	528660.999	1118.527	TH	116+349	MOUNT VALX
2056	5678813.240	528673.905	1119.384	TH (3012)	116+397	MOUNT VALX
2054	5678718.142	528688.519	1121.088	TH (3010)	116+495	MOUNT VALX
1284	5678656.786	528695.611	1122.889	TH	116+556	MOUNT VALX
2053	5678604.968	528703.269	1123.912	TH (3009)	116+608	MOUNT VALX
2052	5678503.315	528724.230	1123.895	TH (3008)	116+711	MOUNT VALX
2051	5678437.400	528738.989	1124.223	TH (3007)	116+779	MOUNT VALX
2050	5678388.040	528749.716	1124.545	TH (3006)	116+829	MOUNT VALX
1279	5678149.875	528754.327	1128.610	TH	117+068	LOWER MOUNT VALX
112	5678143.846	528785.508	1129.471	BM 94C112	117+078	LOWER MOUNT VALX
1445	5674385.013	527854.831	1124.245	TH	123+170	LEANCHOIL EAST
1441	5674431.972	527767.221	1126.431	TH	123+269	LEANCHOIL EAST
1439	5674483.948	527670.671	1127.881	TH	123+379	LEANCHOIL EAST
1282	5674602.825	526794.678	1131.887	TH	124+313	PHYLITE SLOPE
2049	5674599.393	526760.758	1132.201	TH (3005)	124+349	PHYLITE SLOPE
2048	5674599.276	526716.053	1132.089	TH (3004)	124+396	PHYLITE SLOPE
2046	5674608.761	526652.076	1131.469	TH (3003)	124+463	PHYLITE SLOPE
1281	5674623.527	526567.234	1130.695	TH	124+511	PHYLITE SLOPE
2045	5674644.701	526561.865	1129.374	TH (3002)	124+561	PHYLITE SLOPE
1442	5673382.273	525496.568	1115.219	TH	125+857	WESTERN BOUNDARY
1443	5673415.023	525449.425	1115.784	TH	125+914	WESTERN BOUNDARY
1444	5673445.284	525405.404	1116.304	TH	125+988	WESTERN BOUNDARY

Note: All coordinates are grid UTM Zone 11 NAD83

### OVERVIEW PLAN - KM 114.0 TO 128.0 - TCH



**ISSUED FOR TENDER**



Parks Canada / L'Agence Parcs  
Canada

YHOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concepted by  
**A. FRAPPELL**  
Drawn by/Designed per  
**A. DEEPWELL**



**ESTABLISHMENT OF SURVEY  
MONUMENTS**

Project No./No. du projet: **201541-0004**  
Sheet no./No. de la feuille: **1**



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO

Yoho National Park  
British Columbia

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concepted by  
A. FRAPPEL / E. YANG

Drawn by/Designé par  
T. TAEEDA



CONTROL LINE LAYOUT AND  
WORK POINT TABLES

Project No./No. du projet: 201541-1003  
Revision no./La Révision no.: 0

**CONTROL LINE DATA - km 88 - km 91**

SEGMENT #	RADIUS	LENGTH	LINE / CHORD BEARING	SPIRAL A	BC STATION	EC STATION	A / Gs	P COORD
L1	None	23.825	257° 00' 16"	180.000	87+480.000	88+053.825	4° 00' 30"	N 558833.444 E 54399.438
C1	500	162.554	710° 19' 44"	180.000	88+053.825	88+716.379	1° 17' 30"	N 558833.444 E 54399.438
L2	None	70.000	303° 30' 12"	180.000	88+716.379	88+786.379	4° 00' 30"	N 558833.444 E 54399.438
C2	400	92.775	263° 46' 05"	180.000	88+786.379	88+909.154	2° 11' 04" 40"	N 558833.444 E 54399.438
L3	None	80.000	254° 33' 05"	180.000	88+909.154	88+989.154	4° 00' 30"	N 558833.444 E 54399.438
C3	400	374.945	241° 22' 17"	180.000	88+989.154	89+414.141	4° 00' 30"	N 558833.444 E 54399.438
L4	None	129.032	285° 27' 01"	244.948	89+414.141	89+543.173	7° 31' 40"	N 558833.444 E 54399.438
C4	600	506.949	241° 38' 11"	244.948	89+543.173	90+455.912	1° 12' 25"	N 558833.444 E 54399.438
L5	None	80.000	263° 07' 41"	244.948	90+455.912	90+535.912	1° 42' 00"	N 558833.444 E 54399.438
C5	1000	111.253	265° 42' 42"	244.948	90+535.912	91+016.639	1° 42' 00"	N 558833.444 E 54399.438
L6	None	80.000	210° 37' 04"	244.948	91+016.639	91+096.639	1° 42' 00"	N 558833.444 E 54399.438

**SHERBROOKE ROCK CUT CONSTRUCTION LAYOUT**

STATION	WORK POINT #1	WORK POINT #2	WORK POINT #3	WORK POINT #4
88+000.000	12.285m	13.17m	13.42m	13.67m
88+010.000	13.74m	14.62m	14.87m	15.12m
88+020.000	15.20m	16.08m	16.33m	16.58m
88+030.000	16.66m	17.54m	17.79m	18.04m
88+040.000	18.12m	19.00m	19.25m	19.50m
88+050.000	19.58m	20.46m	20.71m	20.96m
88+060.000	21.04m	21.92m	22.17m	22.42m
88+070.000	22.50m	23.38m	23.63m	23.88m
88+080.000	23.96m	24.84m	25.09m	25.34m
88+090.000	25.42m	26.30m	26.55m	26.80m
88+100.000	26.88m	27.76m	28.01m	28.26m
88+110.000	28.34m	29.22m	29.47m	29.72m
88+120.000	29.80m	30.68m	30.93m	31.18m
88+130.000	31.26m	32.14m	32.39m	32.64m
88+140.000	32.72m	33.60m	33.85m	34.10m
88+150.000	34.18m	35.06m	35.31m	35.56m
88+160.000	35.64m	36.52m	36.77m	37.02m
88+170.000	37.10m	37.98m	38.23m	38.48m
88+180.000	38.56m	39.44m	39.69m	39.94m
88+190.000	40.02m	40.90m	41.15m	41.40m
88+200.000	41.48m	42.36m	42.61m	42.86m
88+210.000	42.94m	43.82m	44.07m	44.32m
88+220.000	44.40m	45.28m	45.53m	45.78m
88+230.000	45.86m	46.74m	46.99m	47.24m
88+240.000	47.32m	48.20m	48.45m	48.70m
88+250.000	48.78m	49.66m	49.91m	50.16m
88+260.000	50.24m	51.12m	51.37m	51.62m
88+270.000	51.70m	52.58m	52.83m	53.08m
88+280.000	53.16m	54.04m	54.29m	54.54m
88+290.000	54.62m	55.50m	55.75m	56.00m
88+300.000	56.08m	56.96m	57.21m	57.46m
88+310.000	57.54m	58.42m	58.67m	58.92m
88+320.000	59.00m	59.88m	60.13m	60.38m
88+330.000	60.46m	61.34m	61.59m	61.84m
88+340.000	61.92m	62.80m	63.05m	63.30m
88+350.000	63.38m	64.26m	64.51m	64.76m
88+360.000	64.84m	65.72m	65.97m	66.22m
88+370.000	66.30m	67.18m	67.43m	67.68m
88+380.000	67.76m	68.64m	68.89m	69.14m
88+390.000	69.22m	70.10m	70.35m	70.60m
88+400.000	70.68m	71.54m	71.79m	72.04m
88+410.000	72.14m	73.00m	73.25m	73.50m
88+420.000	73.60m	74.46m	74.71m	74.96m
88+430.000	75.06m	75.92m	76.17m	76.42m
88+440.000	76.52m	77.38m	77.63m	77.88m
88+450.000	77.98m	78.84m	79.09m	79.34m
88+460.000	79.44m	80.30m	80.55m	80.80m
88+470.000	80.90m	81.76m	82.01m	82.26m
88+480.000	82.36m	83.22m	83.47m	83.72m
88+490.000	83.82m	84.68m	84.93m	85.18m
88+500.000	85.28m	86.14m	86.39m	86.64m
88+510.000	86.74m	87.60m	87.85m	88.10m
88+520.000	88.20m	89.06m	89.31m	89.56m
88+530.000	89.66m	90.52m	90.77m	91.02m
88+540.000	91.12m	91.98m	92.23m	92.48m
88+550.000	92.58m	93.44m	93.69m	93.94m
88+560.000	94.04m	94.90m	95.15m	95.40m
88+570.000	95.50m	96.36m	96.61m	96.86m
88+580.000	96.96m	97.82m	98.07m	98.32m
88+590.000	98.42m	99.28m	99.53m	99.78m
88+600.000	99.88m	100.74m	101.00m	101.25m
88+610.000	101.34m	102.20m	102.45m	102.70m
88+620.000	102.80m	103.66m	103.91m	104.16m
88+630.000	104.26m	105.12m	105.37m	105.62m
88+640.000	105.72m	106.58m	106.83m	107.08m
88+650.000	107.18m	108.04m	108.29m	108.54m
88+660.000	108.64m	109.50m	109.75m	110.00m
88+670.000	110.10m	110.96m	111.21m	111.46m
88+680.000	111.56m	112.42m	112.67m	112.92m
88+690.000	113.02m	113.88m	114.13m	114.38m
88+700.000	114.48m	115.34m	115.59m	115.84m
88+710.000	115.94m	116.80m	117.05m	117.30m
88+720.000	117.36m	118.22m	118.47m	118.72m
88+730.000	118.82m	119.68m	119.93m	120.18m
88+740.000	120.24m	121.10m	121.35m	121.60m
88+750.000	122.60m	123.46m	123.71m	123.96m
88+760.000	124.06m	124.92m	125.17m	125.42m
88+770.000	125.52m	126.38m	126.63m	126.88m
88+780.000	127.04m	127.90m	128.15m	128.40m
88+790.000	128.50m	129.36m	129.61m	129.86m
88+800.000	130.02m	130.88m	131.13m	131.38m
88+810.000	131.48m	132.34m	132.59m	132.84m
88+820.000	132.94m	133.80m	134.05m	134.30m
88+830.000	134.40m	135.26m	135.51m	135.76m
88+840.000	135.86m	136.72m	136.97m	137.22m
88+850.000	138.18m	139.04m	139.29m	139.54m
88+860.000	139.64m	140.50m	140.75m	141.00m
88+870.000	141.10m	141.96m	142.21m	142.46m
88+880.000	142.56m	143.42m	143.67m	143.92m
88+890.000	144.02m	144.88m	145.13m	145.38m
88+900.000	145.48m	146.34m	146.59m	146.84m
88+910.000	147.30m	148.16m	148.41m	148.66m
88+920.000	148.76m	149.62m	149.87m	150.12m
88+930.000	150.22m	151.08m	151.33m	151.58m
88+940.000	151.68m	152.54m	152.79m	153.04m
88+950.000	153.10m	153.96m	154.21m	154.46m
88+960.000	154.56m	155.42m	155.67m	155.92m
88+970.000	156.02m	156.88m	157.13m	157.38m
88+980.000	157.48m	158.34m	158.59m	158.84m
88+990.000	158.94m	159.80m	160.05m	160.30m
89+000.000	160.80m	161.66m	161.91m	162.16m

**LOWER SHERBROOKE ROCK CUT CONSTRUCTION LAYOUT**

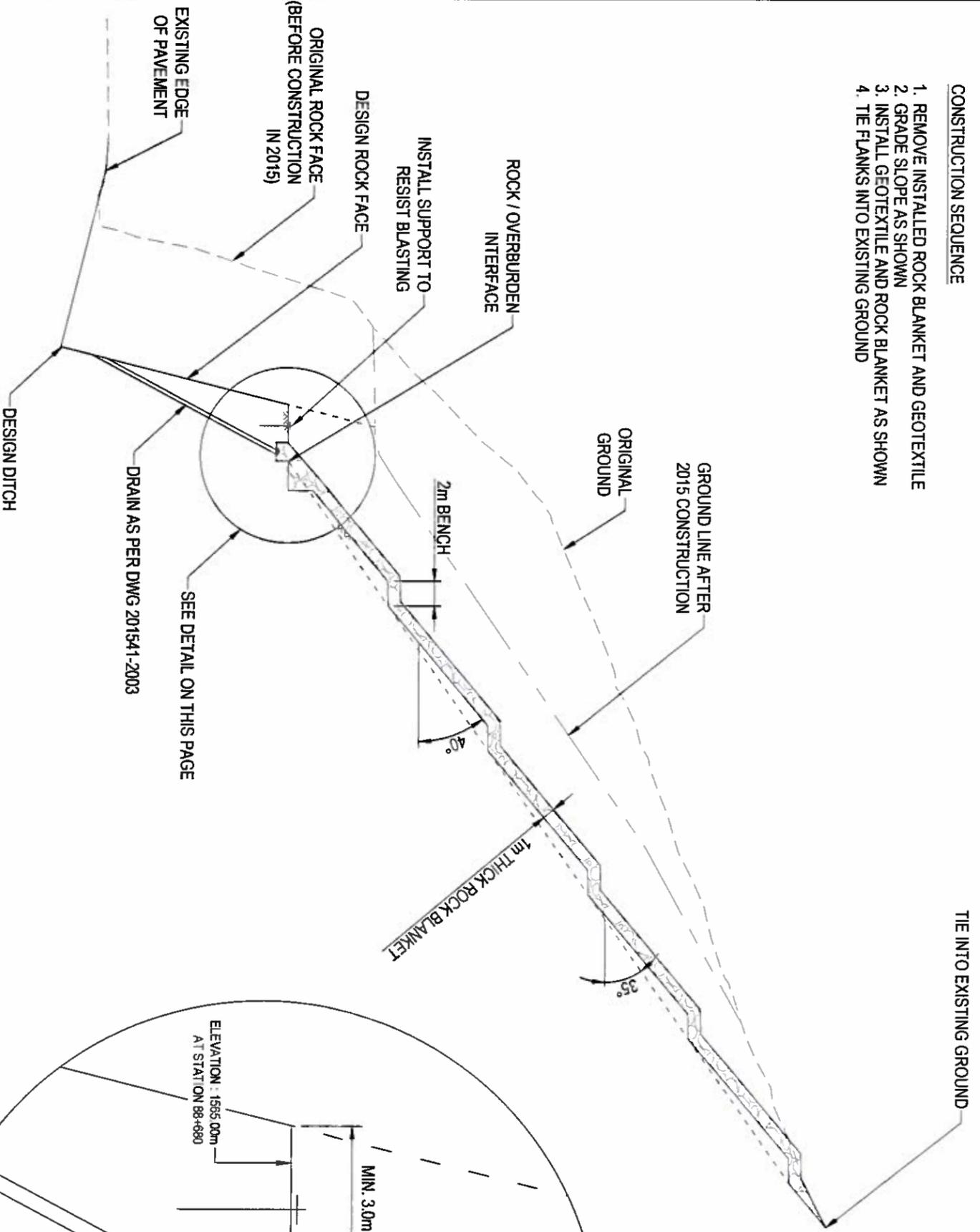
STATION	WORK POINT #1	WORK POINT #2	WORK POINT #3	WORK POINT #4
88+160.000	17.26m	18.14m	18.39m	18.64m
88+170.000	18.72m	19.60m	19.85m	20.10m
88+180.000	20.18m	21.06m	21.31m	21.56m
88+190.000	21.64m	22.52m	22.77m	23.02m
88+200.000	23.10m	23.98m	24.23m	24.48m
88+210.000	24.56m	25.44m	25.69m	25.94m
88+220.000	26.02m	26.90m	27.15m	27.40m
88+230.000	27.48m	28.36m	28.61m	28.86m
88+240.000	28.94m	29.82m	30.07m	30.32m
88+250.000	30.40m	31.28m	31.53m	31.78m
88+260.000	31.86m	32.74m	32.99m	33.24m
88+270.000	33.32m	34.20m	34.45m	34.70m
88+280.000	34.78m	35.66m	35.91m	36.16m
88+290.000	36.24m	37.12m	37.37m	37.62m
88+300.000	37.70m	38.58m	38.83m	39.08m
88+310.000	39.16m	40.04m	40.29m	40.54m
88+320.000	40.62m	41.50m	41.75m	42.00m
88+330.000	42.08m	42.96m	43.21m	43.46m
88+340.000	43.54m	44.42m	44.67m	44.92m
88+350.000	45.00m	45.88m	46.13m	46.38m
88+360.000	46.46m	47.34m	47.59m	47.84m
88+370.000	47.92m	48.80m	49.05m	49.30m
88+380.000	49.38m	50.26m	50.51m	50.76m
88+390.000	50.84m	51.72m	51.97m	52.22m
88+400.000	52.30m	53.18m	53.43m	53.68m
88+410.000	53.76m	54.64m	54.89m	55.14m
88+420.000	55.22m	56.10m	56.35m	56.60m
88+430.000	56.68m	57.56m	57.81m	58.06m
88+440.000	58.14m	59.02m	59.27m	59.52m
88+450.000	59.60m	60.48m	60.73m	60.98m
88+460.000	61.06m	61.94m	62.19m	62.44m
88+470.000	62.52m	63.40m	63.65m	63.90m
88+480.000	63.98m	64.86m	65.11m	65.36m
88+490.000	65.44m	66.32m	66.57m	







- CONSTRUCTION SEQUENCE**
1. REMOVE INSTALLED ROCK BLANKET AND GEOTEXTILE
  2. GRADE SLOPE AS SHOWN
  3. INSTALL GEOTEXTILE AND ROCK BLANKET AS SHOWN
  4. TIE FLANKS INTO EXISTING GROUND



**SHERBROOKE ROCK SLOPE OVERBURDEN REPROFILE**  
NTS

**SHERBROOKE ROCK / OVERBURDEN DETAIL**  
NTS

**VOLUME OF EXCAVATION**

2280	m <sup>3</sup> rip rap	INSTALL	3400	m <sup>2</sup> geotextile
8200	m <sup>3</sup> overburden		3400	m <sup>2</sup> rock blanket
2280	m <sup>2</sup> geotextile			
130	m <sup>2</sup> clear & grub			

REUSE OF GEOTEXTILE AND RIP RAP IS ACCEPTABLE

- NOTE:**
- LOCAL STAGING AREA AND PIONEER ACCESS REQUIRED

 Parks Canada Agency  
 L'Agence Parcs Canada  
 **TETRA TECH EBA**  

# ISSUED FOR TENDER

  
 PCA PROJECT NO. TETRA TECH EBA NO.

0	1602098	ISSUED FOR TENDER	AF	TT	AF
1					
2					
3					
4					
5					
6					
7					
8					
9					

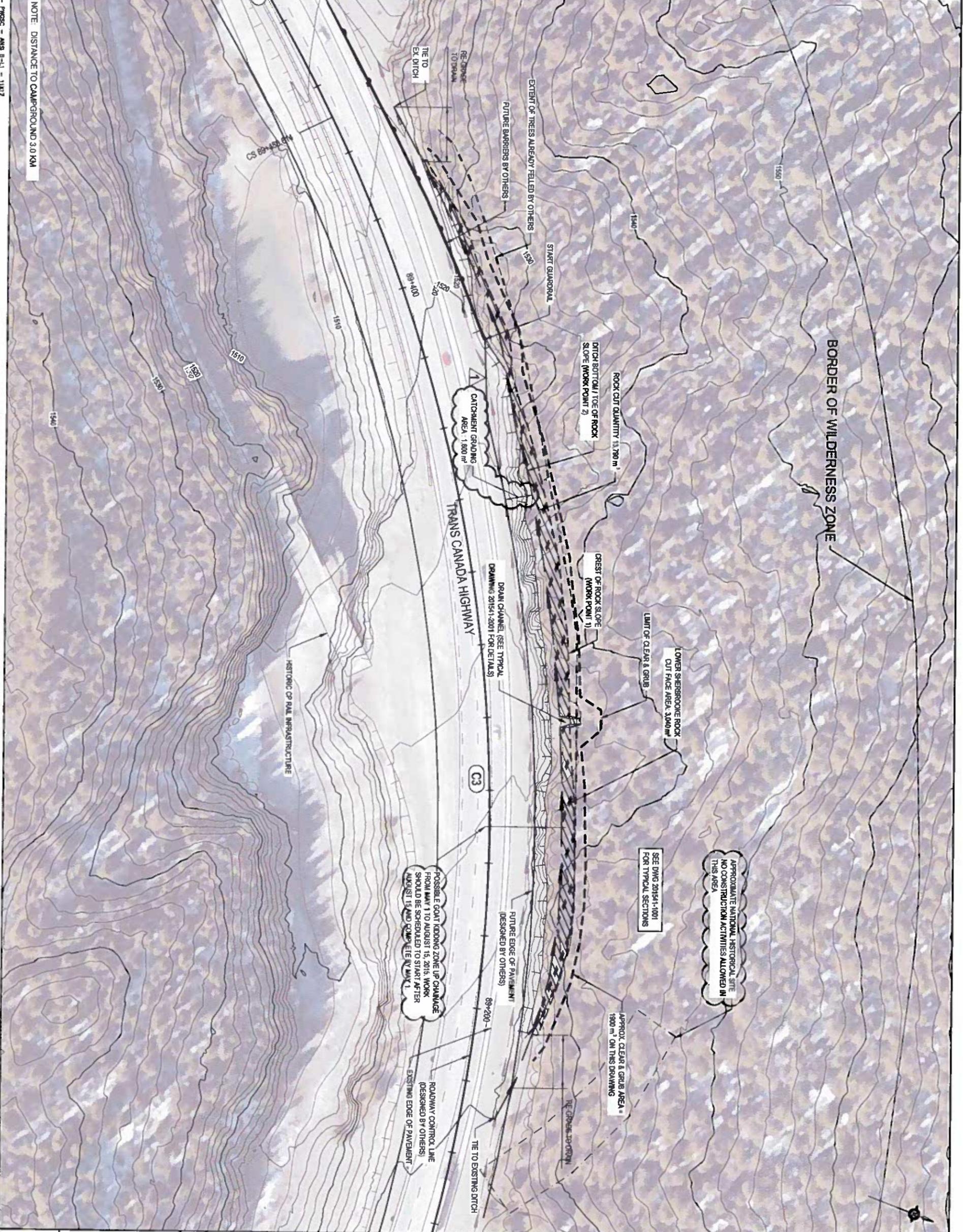
Project title / Titre du projet  
**YOHU NATIONAL PARK**  
**BRITISH COLUMBIA**  
**KM 88 TO 91 AND KM 114 TO 128**  
**TRANS-CANADA HIGHWAY**  
**SLOPE REPROFILING**  
 Drawn by / Dessiné par  
**A. FRAPPELL / E. YANG**  
 Design / Conçu par  
**T. TAKEEDA**



Client / Client  
**PARKS CANADA AGENCY**  
 Drawing title / Titre du dessin  
**SHERBROOKE ROCK SLOPE**  
**OVERBURDEN REPROFILING**  
**(STA 88+640 TO 88+720)**

Project No./No. du projet	Sheet/Feuille	Revision no./No. de révision
201541-1022		0





NOTE: DISTANCE TO CAMPGROUND 3.0 KM

40 - PMSOC - AMS B-11 - 11X17



# ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



NO.	REVISION	DATE	DESCRIPTION	BY	CHK
1	ISSUED FOR TENDER			AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT

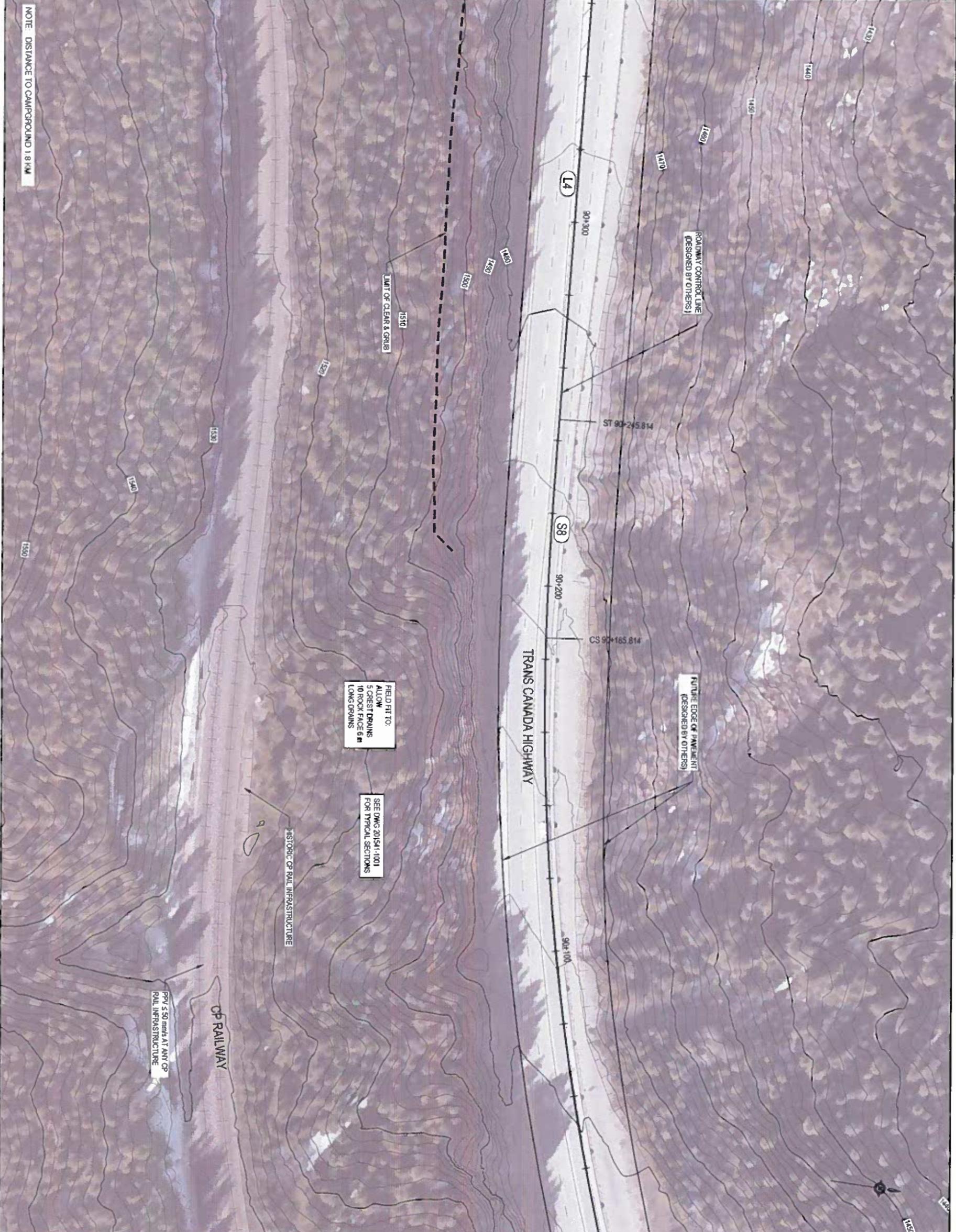
YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Conceptor: A. FRAPPELL / E. YANG  
 Drawn by/Designer: T. TAKEDA



Client: PARKS CANADA AGENCY  
 Drawing Title: LOWER SHERBROOKE CREEK  
 ROCK SLOPE PLAN  
 STA 89+195 TO 89+435



NOTE: DISTANCE TO CAMPGROUND 1.8 KM

AD - PWSG - AMS B-11 - 11117

Client/Client  
 Parks Canada / L'Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



Revision	Date/Date	Description	AF	TT	AF
0	18/02/2016	ISSUED FOR TENDER			
			AF	TT	AF
			DES	OWN	CHK

Project title/Titre du projet  
 YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

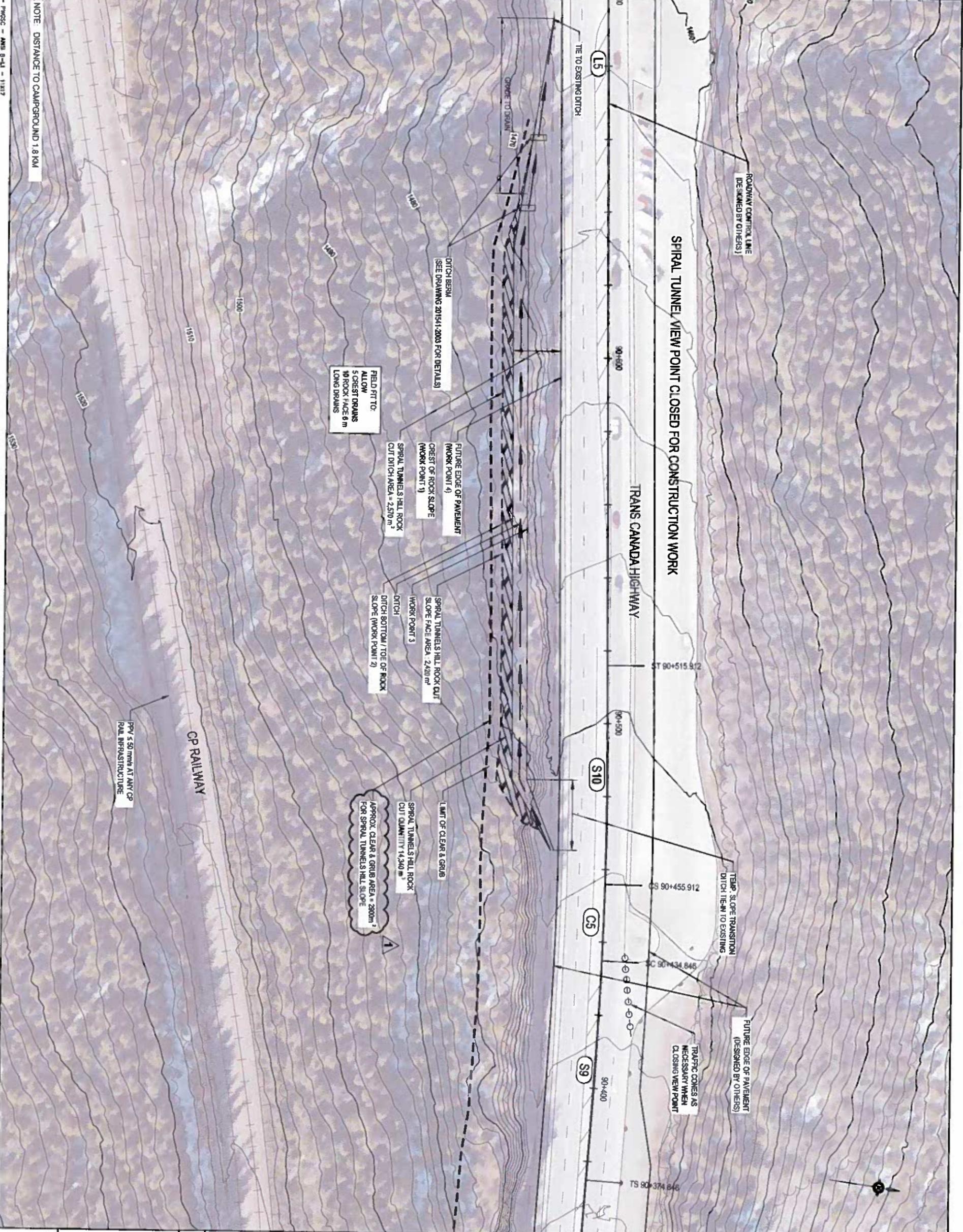
Designed by/Concept par  
**A. FRAPPELL / E. YANG**  
 Drawn by/Dessiné par  
**T. TAKEEDA**



Client/Client  
**PARKS CANADA AGENCY**  
 Drawing title/Titre du dessin  
**SPIRAL TUNNELS HILL  
 ROCK SLOPE PLAN  
 STA 90+210 TO 90+360**

Project No./No. du projet	Sheet/Feuille	Revision no./La Revision no.
201541-1060	0	0





NOTE: DISTANCE TO CAMPGROUND 1.8 KM

40 - PMSOC - ANS B-41 - 11X17

Client/Owner  
 Parks Canada / L'Agence Parcs Canada  
 Agency



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



Revision	Date/Date	Description/Description	AF	TT	AF
1	18MAR16	ISSUED FOR TENDER	AF	TT	AF
			CCS	OWN	CHK

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

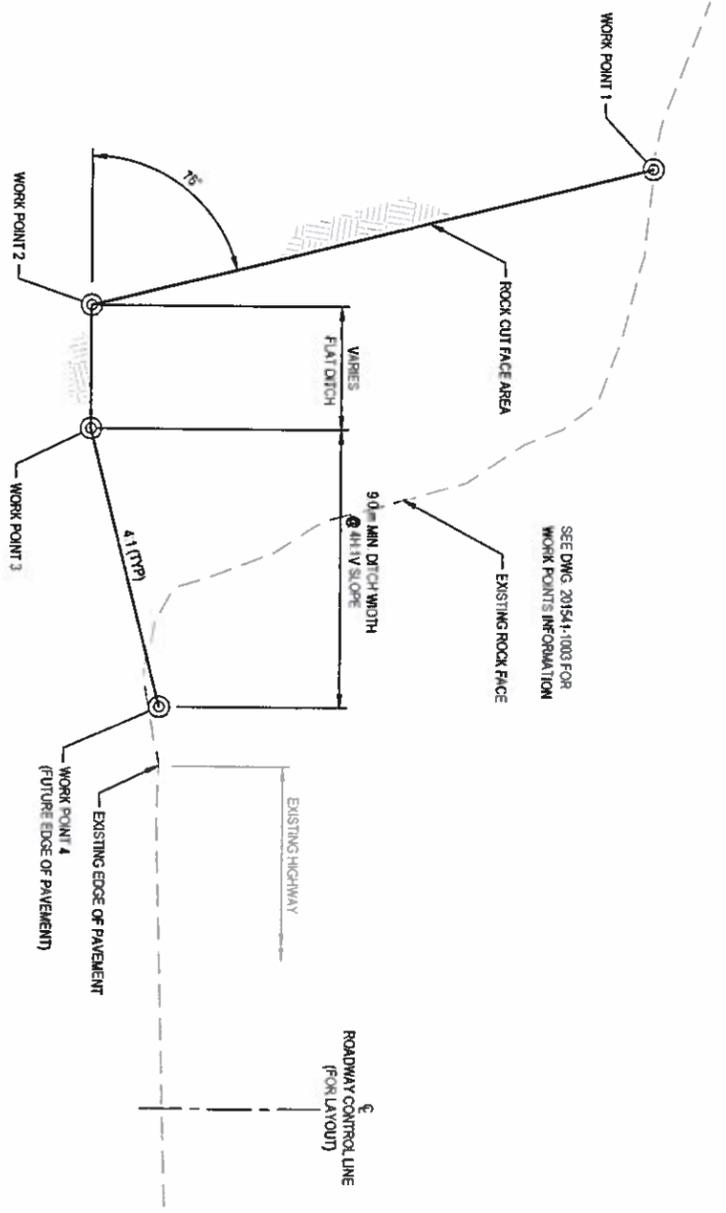
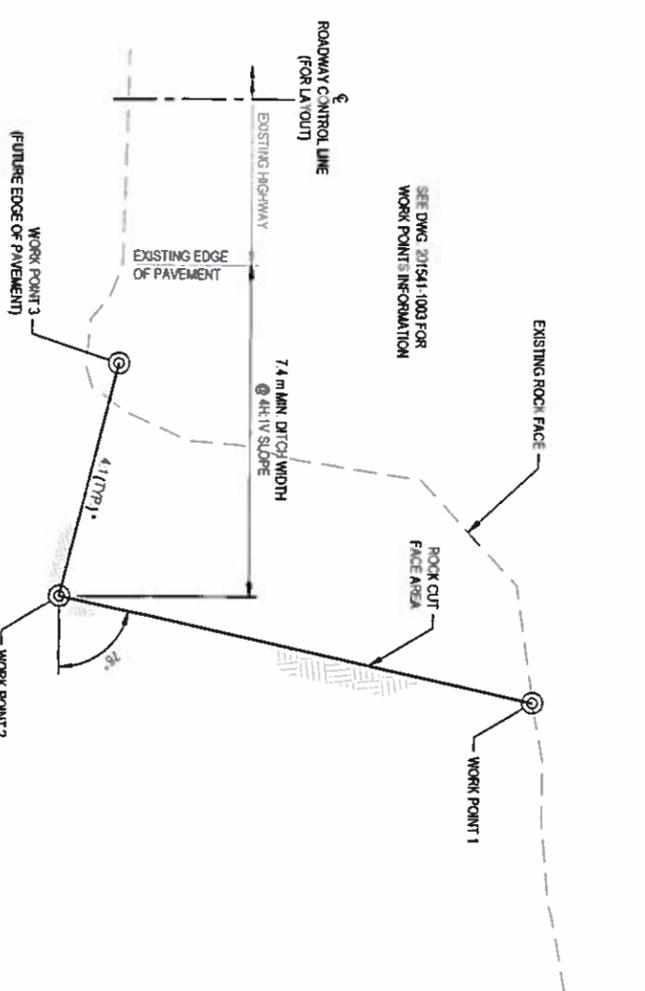
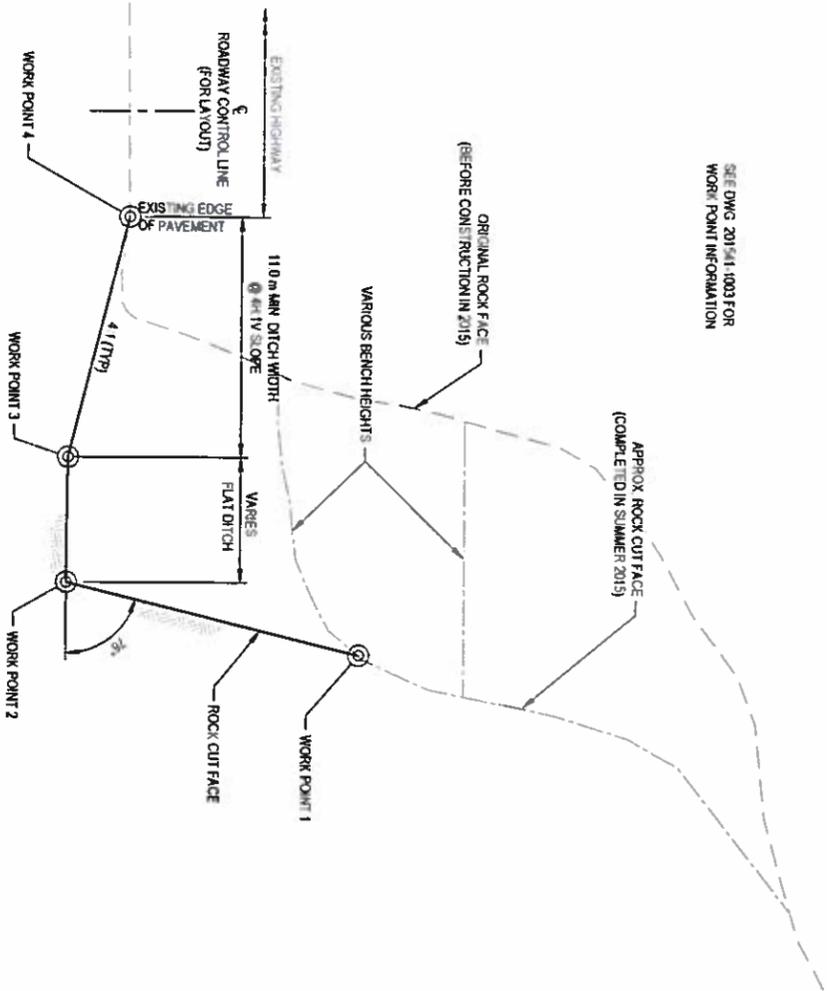
Designed by/Concepts par  
**A. FRAPPPELL / E. YANG**  
 Drawn by/Drawings par  
**T. TAKEDA**



Client/Client  
**PARKS CANADA AGENCY**  
 Drawing Title/Titre du dessin  
**SPIRAL TUNNELS HILL  
 ROCK SLOPE PLAN  
 STA 90+360 TO 90+700**

Project No./No. du projet  
**201541-1061**  
 Sheet/Feuille  
**1**

SEE DWG 201541-1003 FOR WORK POINT INFORMATION



**LOWER SHERBROOKE CREEK ROCK SLOPE CONSTRUCTION LAYOUT POINTS**  
STA. 89+195 TO 89+430  
NOT TO SCALE

**SPIRAL TUNNELS HILL ROCK SLOPE CONSTRUCTION LAYOUT POINTS**  
STA. 90+465 TO 90+645  
NOT TO SCALE

- GENERAL NOTES**
1. FOR RE-PLANTING SPECIES OF TREES AND SPACING REFER TO SPECIFICATION
  2. LARGER TREES SAVED FROM STRIPPING WILL BE PLACED FOR HABITAT PURPOSES.
  3. NO EQUIPMENT, PERSONNEL, OR MATERIAL WILL ENTER SHERBROOKE CREEK.
  4. SILT FENCES OR OTHER SUITABLE CONTAINMENT MEASURES SHALL BE USED TO PROTECT CREEK DOWN RIDGE LINE.
  5. NO WORK TO OCCUR WITHIN RIPARIAN ZONE OF CREEKS (30 m OFFSET FROM CREEK BOUNDARY).

**ROCK CUT CONSTRUCTION LAYOUT TYPICAL SECTIONS**



Designed by/Concepted by  
**A. FRAPPELL / E. YANG**  
Drawn by/Designé par  
**T. TAKEDA**

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

**YOHO NATIONAL PARK  
BRITISH COLUMBIA**

Project No./Titre de projet  
**180208 ISSUED FOR TENDER**

Project No./Titre de projet	Issue No./N° de version	Date	By	For
180208	ISSUED FOR TENDER		AF	TT
			AF	AF

PCA PROJECT NO. **TETRA TECH EBA NO.**

**ISSUED FOR TENDER**



Client/Client  
 Parks Canada  
 Agency  
 Agence Parcs Canada





**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA No

Revision	Date/Date	Description/Description	By	TT	AE
0	18/02/2018	ISSUED FOR TENDER			

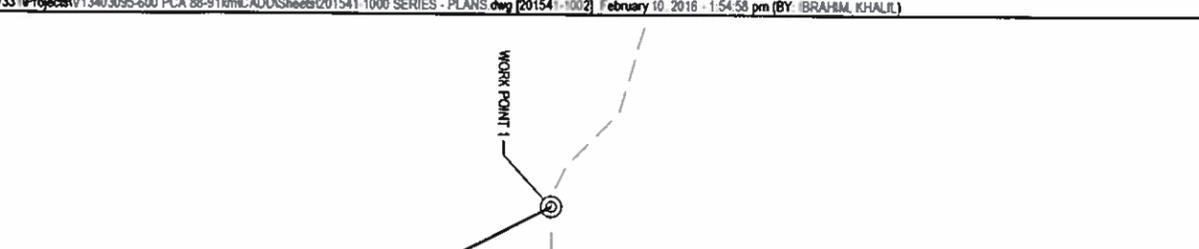
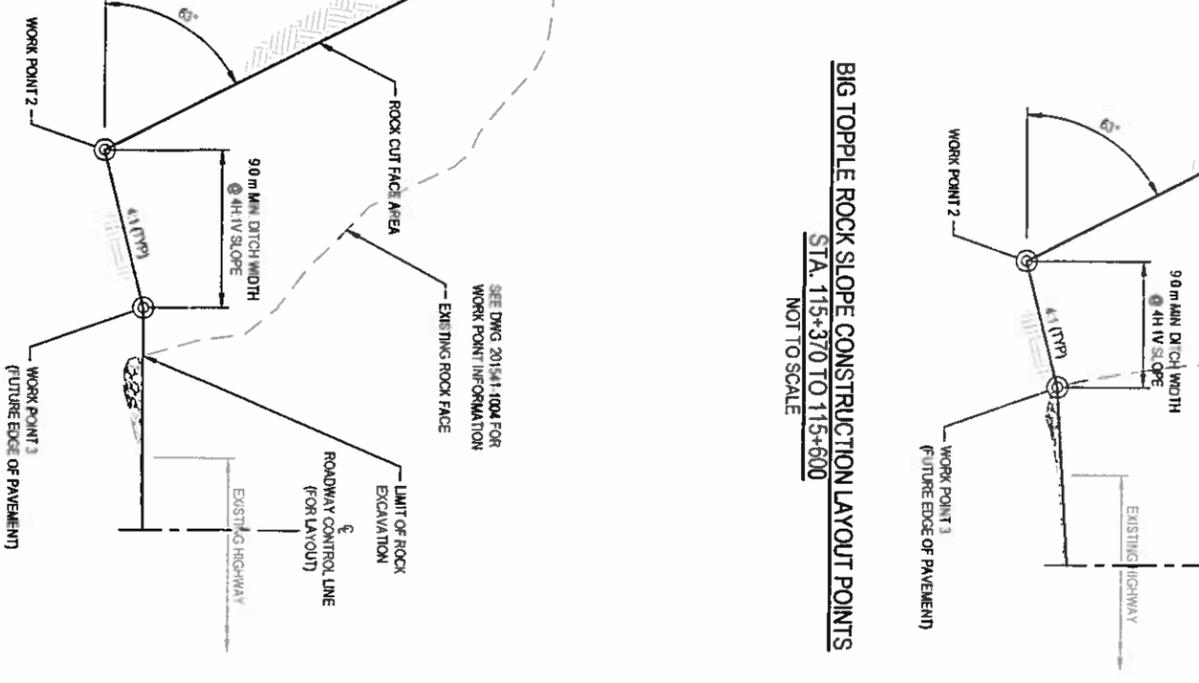
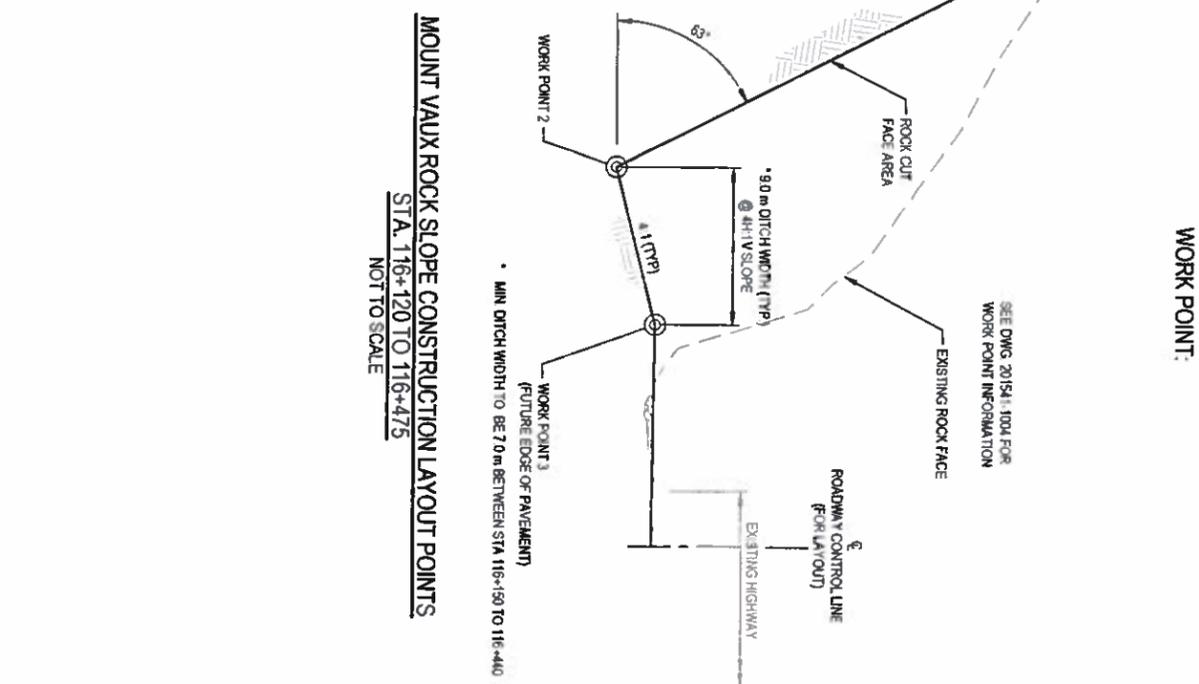
YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concept par  
 A. FRAPPELL/E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



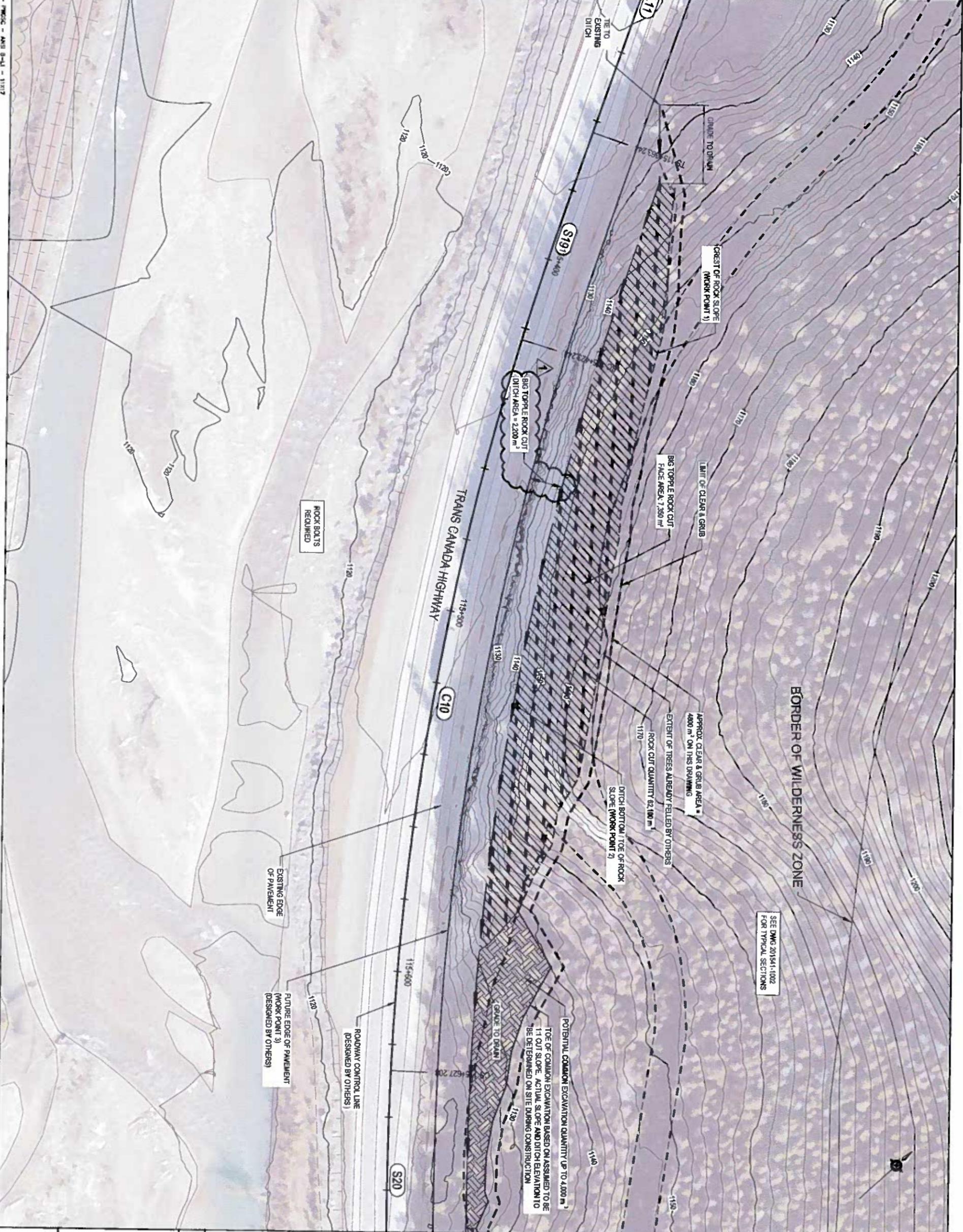
Client/Client  
 PARKS CANADA AGENCY  
 Dessiné par/Drawn by  
 T. TAKEDA  
**ROCK CUT CONSTRUCTION LAYOUT  
 TYPICAL SECTIONS**

Project No./No. du projet	201541-1002	Revision no./No. de révision	0
---------------------------	-------------	------------------------------	---



- GENERAL NOTES:**
1. ACCESS ROAD REMOVAL WILL OCCUR AT LOCATIONS WHERE THE OLD EXISTING HIGHWAY IS USED TO GET TO SLOPES (E.g. 115+050 TO 115+050 AND 116+150 TO 116+300).
  2. FOR RE-PLANTING SPECIES OF TREES AND SPACING REFER TO SPECIFICATION
  3. LARGER TREES SAVED FROM STRIPPING WILL BE PLACED FOR HABITAT PURPOSES
  4. NO EQUIPMENT PERSONNEL, OR MATERIAL WILL BE PLACED FOR HABITAT PURPOSES
  5. SILT FENCES OR OTHER SUITABLE CONTAINMENT MEASURES SHALL BE USED TO PROTECT CREEK/DOWN RIDGE LINE
  6. NO WORK TO OCCUR WITHIN RIPARIAN ZONE OF CREEKS (30 m OFFSET FROM CREEK BOUNDARY)





# ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.  
 0 10 1:1000 50m

Item No.	Date/Date	Description/Description	AP	TT	AF
1	16/03/18	ISSUED FOR TENDER	AP	TT	AF

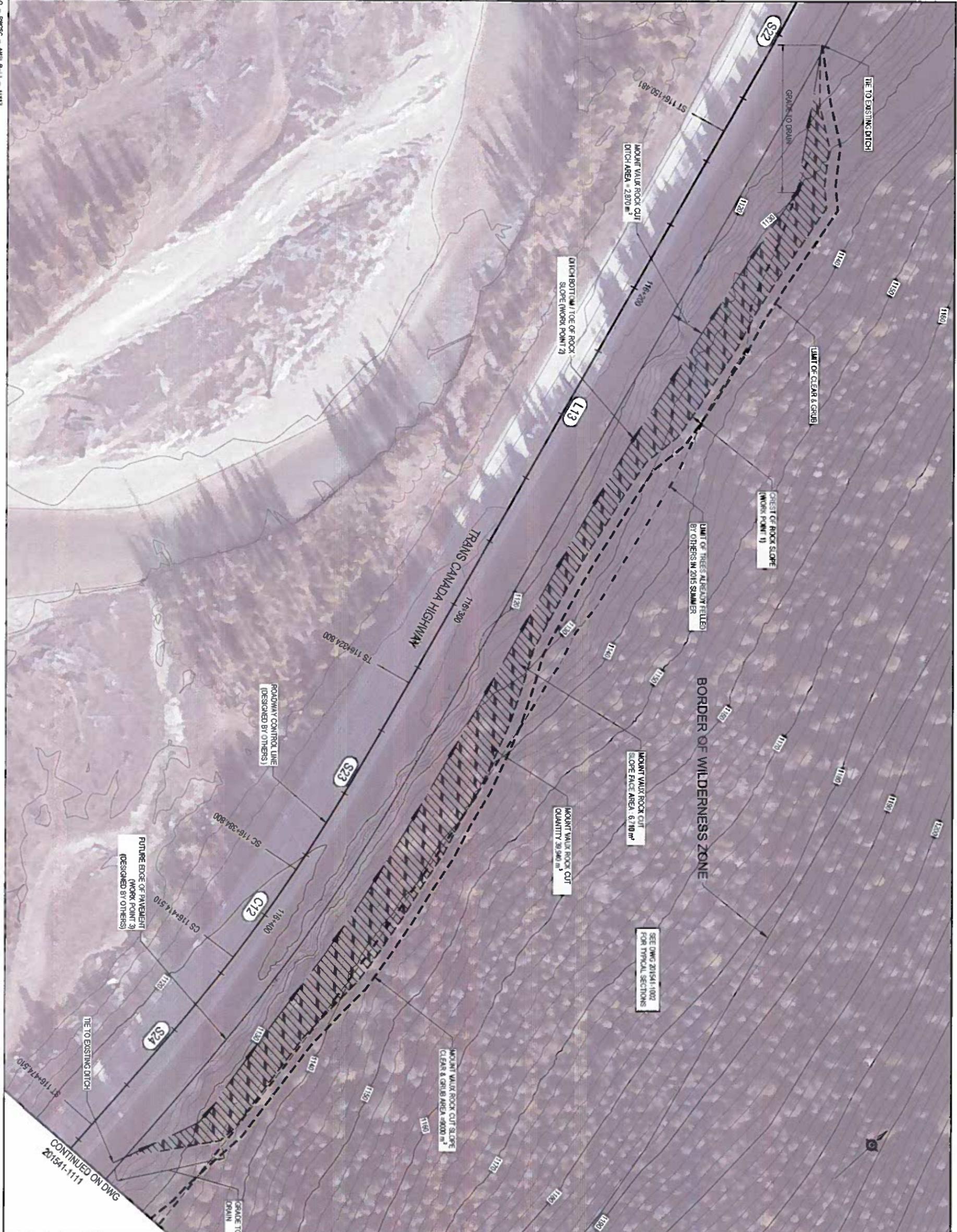
Project: km88/tra8 du projet  
 YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 SLOPE REPROFILING  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY

Designed by/Conçue par  
 A. FRAPPELL / E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing Title/Titre du dessin  
**BIG TOPPLE ROCK SLOPE PLAN**  
 STA 115+370 TO 115+600





Partners Canada  
 Agency  
 L'Agence Parcs  
 Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



NO.	DATE	DESCRIPTION	BY	TT	AF
0	16/02/2016	ISSUED FOR TENDER	AF	TT	AF

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concept par  
**A. FRAPPELL / E. YANG**  
 Drawn by/ Dessiné par  
**T. TAKEDA**



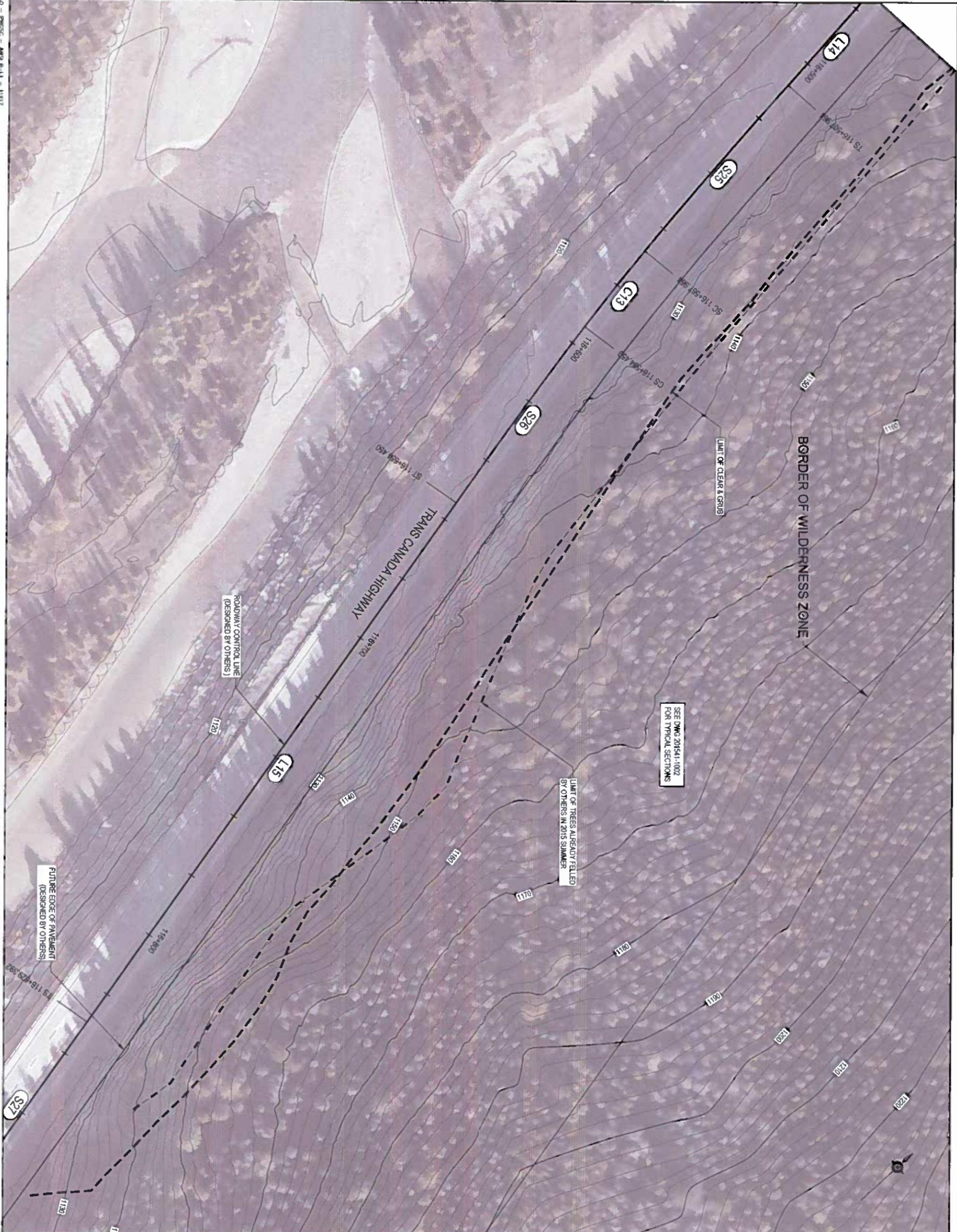
Client/Client  
**PARKS CANADA AGENCY**

**MOUNT VAUX  
 ROCK SLOPE PLAN  
 STA 116+115 TO 116+475**

Project No./No. du projet  
**201541-1110**

Revision no./  
 Révision no.  
**0**





Client/Client  
 Parks Canada / L'Agence Parcs  
 Canada / Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



Analysis	Date/Date	Inspector/Inspecteur	DES	DRAWN	CHK
0	16/02/09	ISSUED FOR TENDER	AF	TT	AF

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concept par  
 A. FRAPPELL/E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



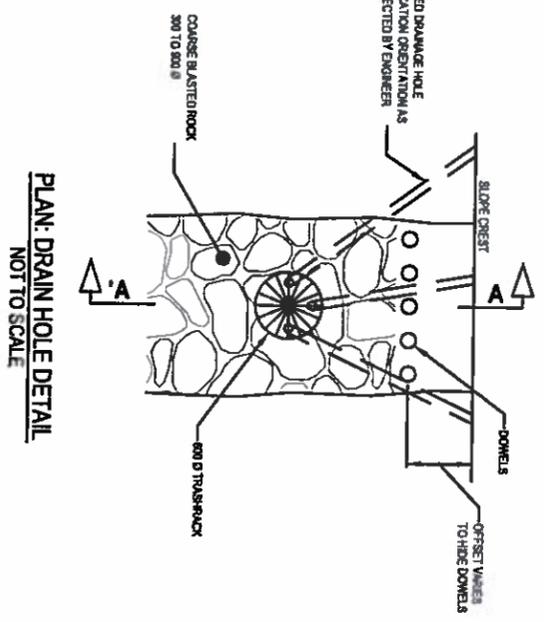
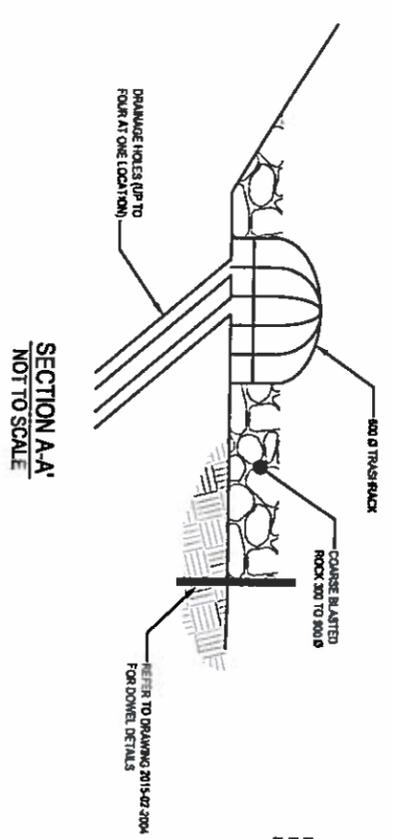
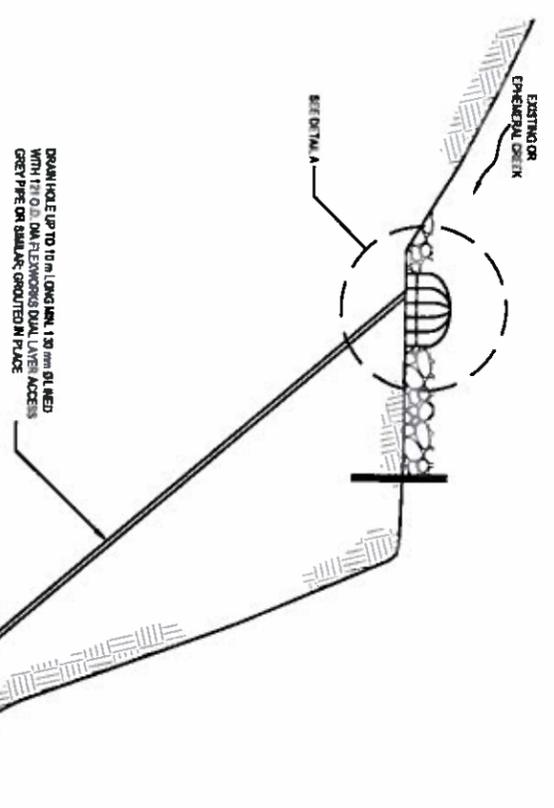
Client/Client  
 PARKS CANADA AGENCY  
 Drawing title/Titre du dessin  
**MOUNT VAUX  
 ROCK SLOPE PLAN  
 STA 116+475 TO 116+865**

Project No./No. du projet	Sheet/Feuille	Revision no./ La révision no.
201541-1111		0

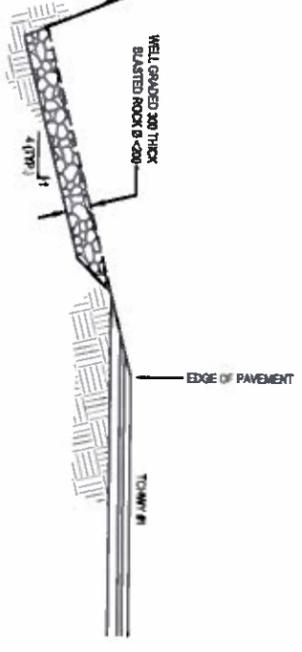




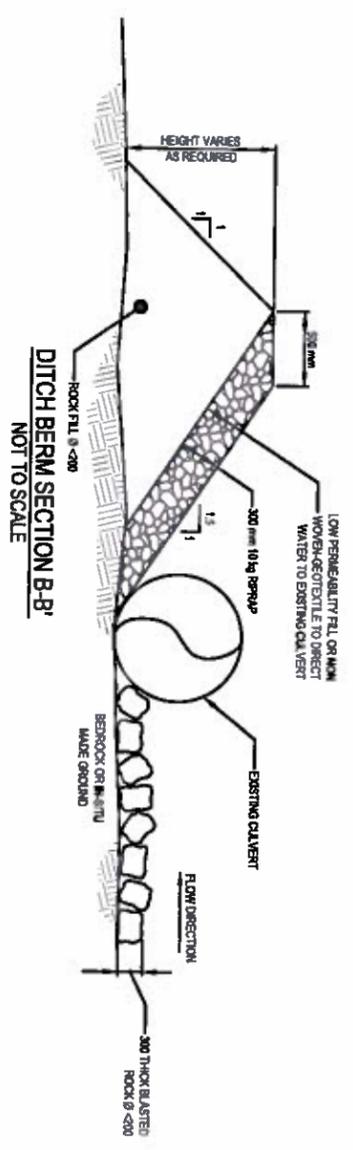
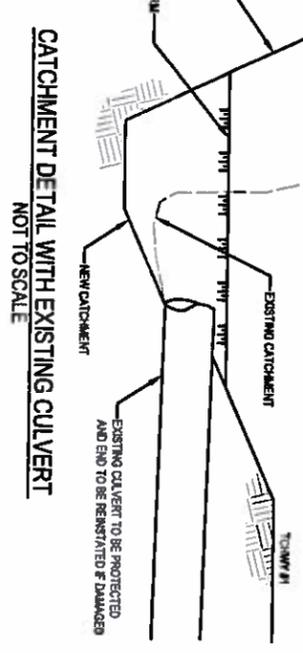
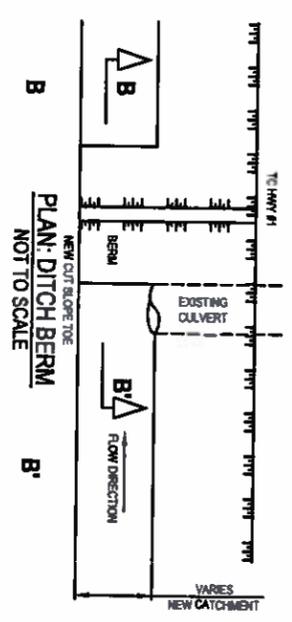




**DRAIN HOLE DETAIL & TYPICAL CATCHMENT DETAIL**  
NOT TO SCALE



- GENERAL NOTE:**
1. BLASTED ROCK TO BE PLACED IN CATCHMENT LOOSELY TAMPED WITH EXCAVATOR BUCKET
  2. AT LOCATIONS OF EXISTING CULVERTS, THESE SHOULD BE PROTECTED DURING COURSE OF THE WORK. IF DAMAGED ENDS SHOULD BE REPLACED AT THE LOCATIONS. A SWALE WILL BE CONSTRUCTED IN THE CATCHMENT TO ENSURE DRAINAGE.
  3. AT LOCATIONS OF LOW CREEK FLOW, DRAIN HOLES WILL BE INSTALLED TO CONTROL FLOW OF WATER DOWN SLOPE AS DIRECTED BY THE DEPARTMENT REPRESENTATIVE.



Client/Agency  
 Parks Canada Agency  
 L'Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.

Rev/No	Date/Date	Description/Description	By	TR	AP
1	2015/04/14	ISSUED FOR TENDER	AY	TY	AY

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

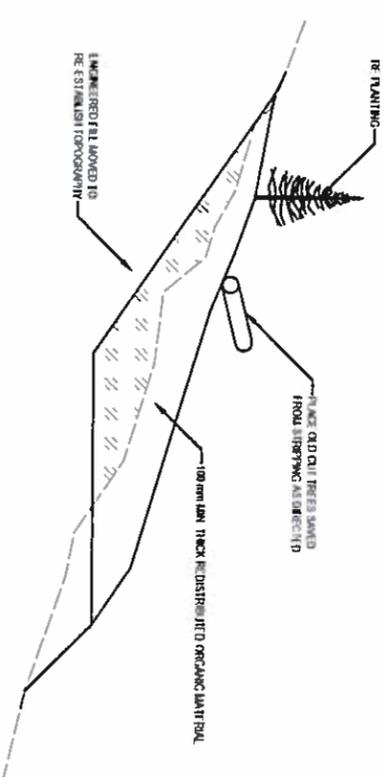
Designed by/Concept par  
 A. FRAPPELL / E. YANG  
 Drawn by/Design par  
 T. TAKEDA



Client/Agency  
**PARKS CANADA AGENCY**  
 Drawing Title/Title du dessin  
**CATCHMENT AND SLOPE DRAINAGE TYPICAL DETAILS**

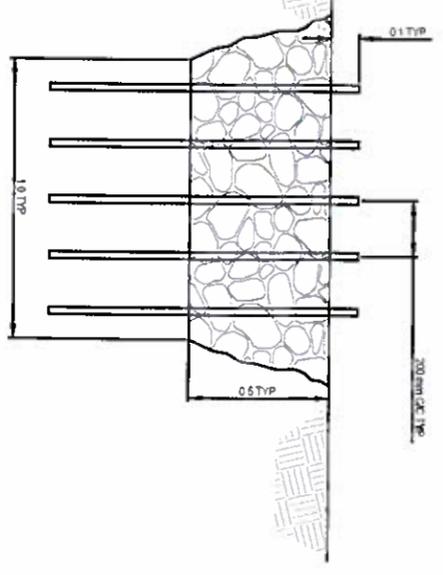
Project No./No. du projet	30007/30006	Revision No./No. de révision	1
Project No./No. du projet	201541-2003	Revision No./No. de révision	1

**ACCESS ROAD REMOVAL/RESTORATION WHERE NOT FORMING CREST OF NEW CUT**  
NOT TO SCALE

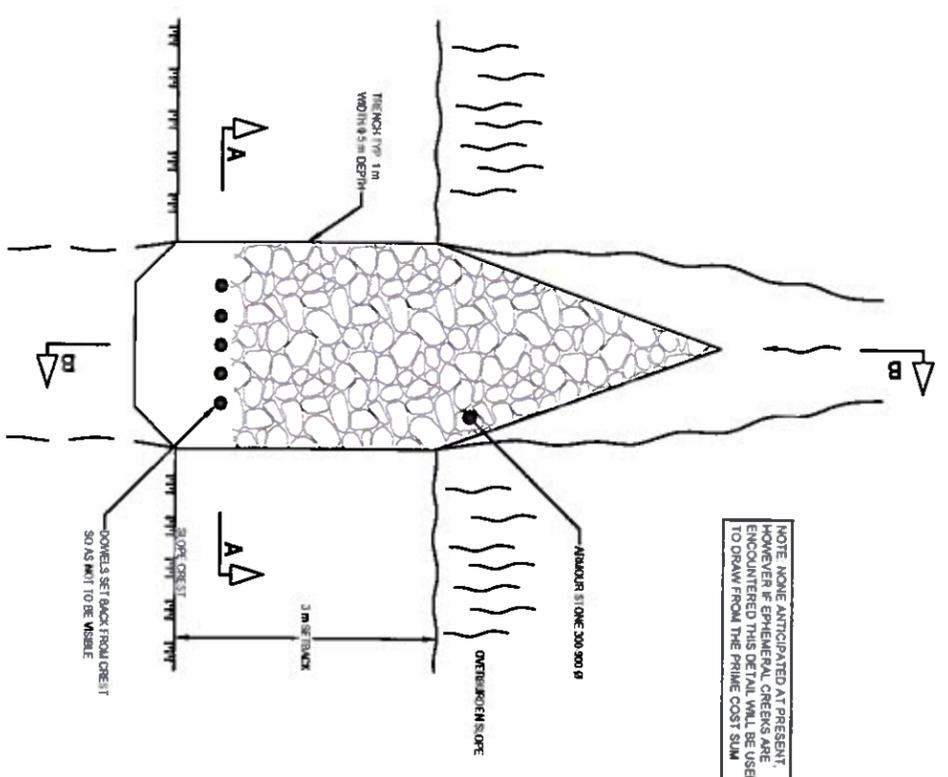


- GENERAL NOTES:**
1. THE OUTSIDE EDGE OF THE ACCESS ROAD FORMS THE EDGE OF THE ROCK CUT
  2. THE 3 m SET BACK AT THE CREST IS SET FOR INSPECTION AND SAFETY THE TOLERANCE ON THIS SET BACK IS ±0.5 m
  3. ACCESS ROAD REMOVAL WILL OCCUR AT LOCATION WHERE THE OLD EXISTING HIGHWAY IS USED TO GET TO SLOPES (eg. 1:1.5+0.50 TO 1:1.5+0.50 AND 1:1.5+1.50 TO 1:1.5+0.50)
  4. FOR REPLANTING SPECIES OF TREES AND SPACING REFER TO SPECIFICATION
  5. LARGER TREES SAVED FROM STRIPPING WILL BE REPOSITIONED FOR HABITAT PURPOSES
  6. DRILL OFFSETS SHALL BE REMOVED
  7. DOWNHILL SLOPES SHALL BE SLOPED AT 2H:1V UNLESS DIRECTED BY THE DESIGNER
  8. CRESTS BLENDING INTO ADJACENT SOIL SLOPES SHALL BE ROUNDED TO REDUCE EROSION

**SECTION A-A**  
NOT TO SCALE

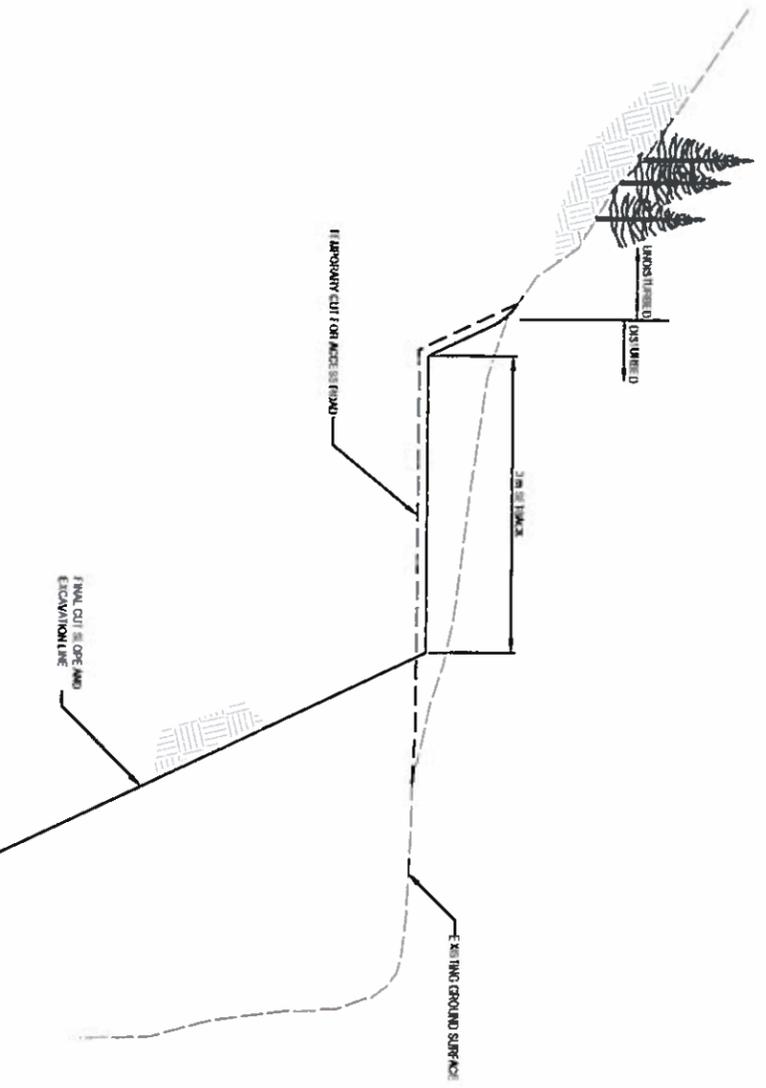


**PLAN VIEW OF NATURAL CREEK**  
NOT TO SCALE

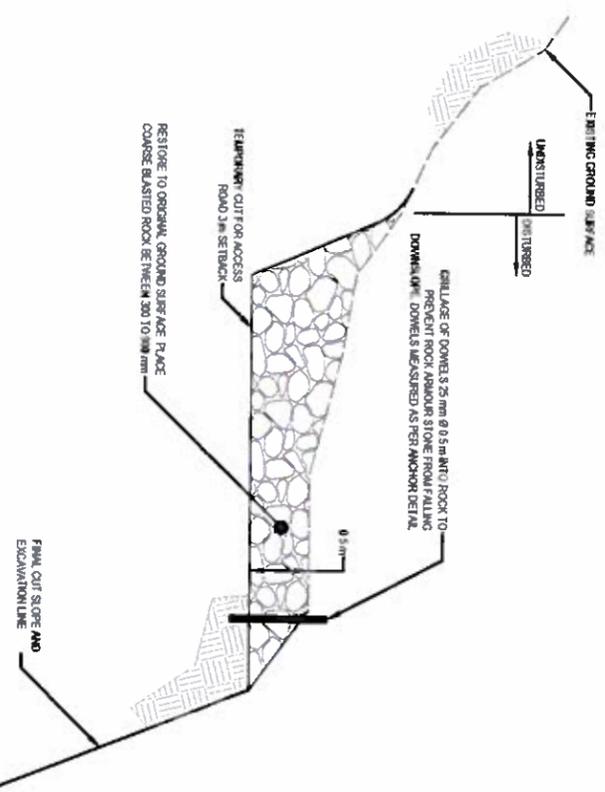


NOTE: NONE ANTICIPATED AT PRESENT, HOWEVER IF EPHEMERAL CREEKS ARE ENCOUNTERED THIS DETAIL WILL BE USED TO DRAW FROM THE PRIME COST SUM

**TYPICAL ACCESS ROAD RESTORATION WHERE FORMING CREST OF NEW CUT**  
NOT TO SCALE



**SECTION B-B TYPICAL ACCESS ROAD RESTORATION AT CREEK CROSSINGS**  
NOT TO SCALE



Client/Client  
 Parks Canada Agency  
 L'Agence Parcs Canada

**TETRA TECH EBA**

**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.

Revision	Date/Date	Description/Description	AF	TT	AF
0	18/02/08	ISSUED FOR TENDER	AF	TT	AF

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concepé par  
**A. FRAPPELL / E. YANG**  
Drawn by/Dessiné par  
**T. TAKEKA**

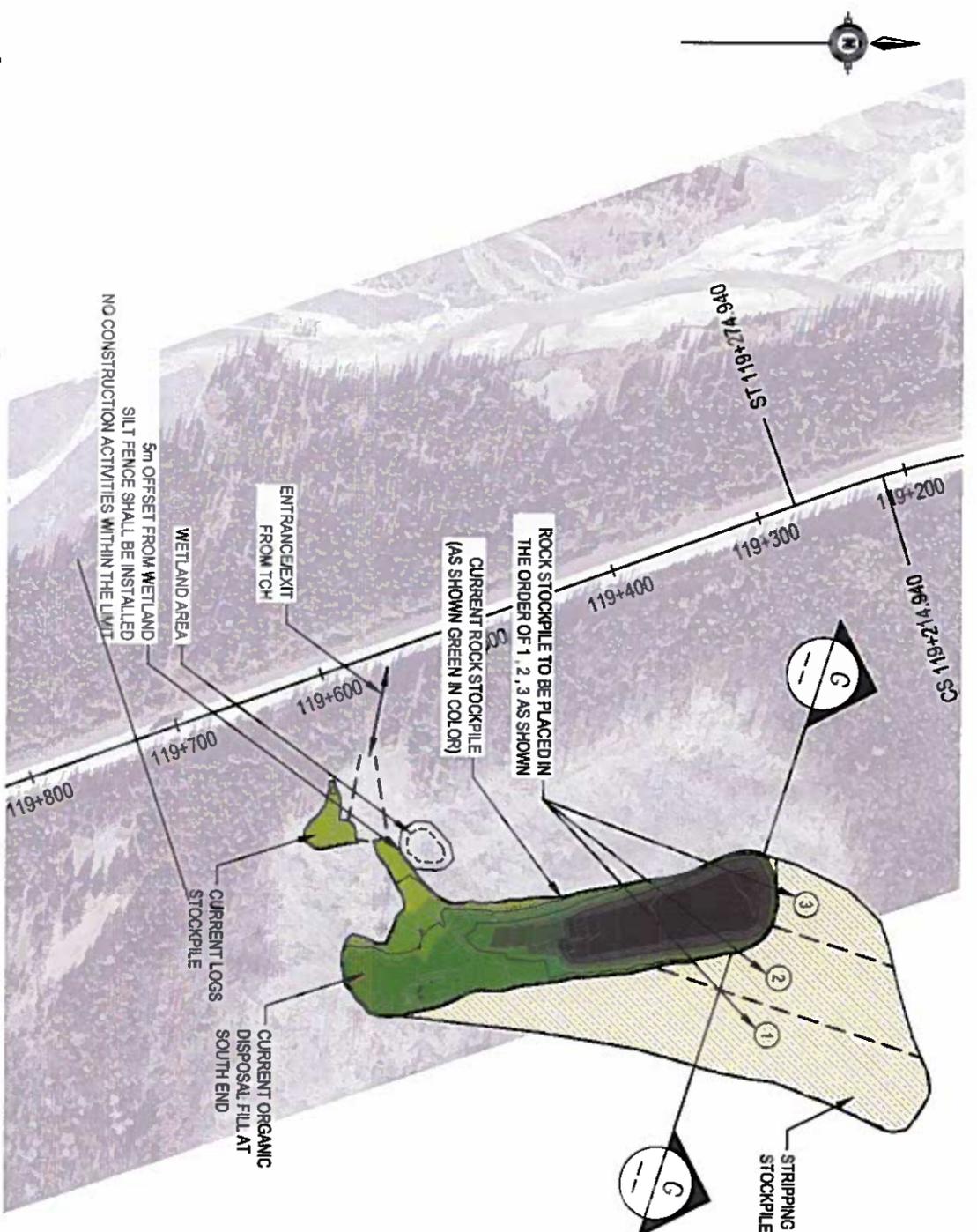


Client/Client  
**PARKS CANADA AGENCY**  
Drawing title/Titre du dessin  
**RESTORATION OR REMOVAL TYPICAL DETAILS**

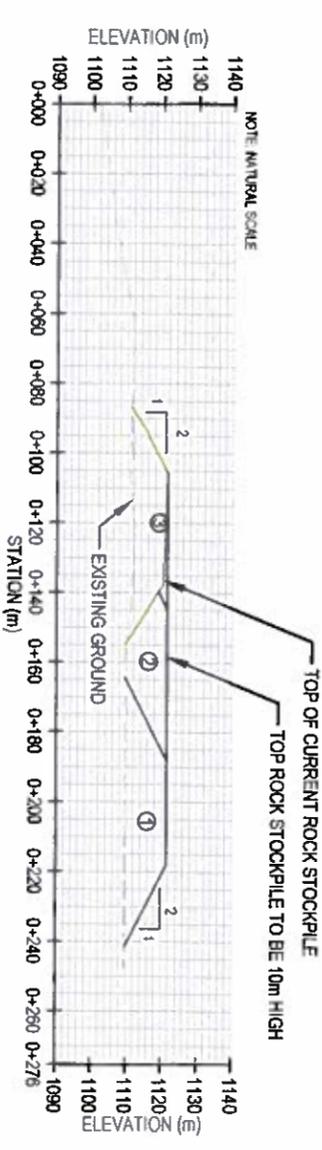
Project No./No. du projet  
**201541-2004**  
Sheet/Feuille  
**0**







**PLAN - MT. VAUX DISPOSAL - STORAGE SITE 4**



**SECTION G-G'**

- NOTES:**
1. STOCKPILE CAPACITY WITHIN FOOT PRINT: 300,000 m<sup>3</sup>
  2. EXISTING CONTOURS ARE APPROXIMATE
  3. ONLY STRIP AREA THAT WILL BE REQUIRED UNDER THIS PROJECT
  4. SIDE SLOPES ON EASTERN SIDE OF MT. VAUX STOCKPILE ARE AT 2H:1V
  5. ORGANICS AND TOPSOIL WILL BE STRIPPED AND PLACED AT MT. VAUX SOUTH DISPOSAL
  6. CREEK AND DRAINAGE WILL BE REINSTATED THROUGH OR AROUND STOCKPILE
  7. EQUIPMENT SHOULD BE CONTAINED WITHIN DISPOSAL SITE FOOTPRINT AS MUCH AS POSSIBLE
  8. UNDER THIS CONTRACT DISPOSAL WILL OCCUR IN 3 STAGES. THE ACCESS FOOTPRINT MUST BE KEPT TO THE DASHED STAGED AREA, UNLESS APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.
  9. SILT FENCES AND OTHER PROTECTION MEASURES SHALL BE INSTALLED AROUND THE WETLAND AREA
  10. BOULDERS SHALL BE PLACED TO AVOID ACCIDENTAL ENCROACHMENT INTO THE WETLAND AREA

Client/Client  
**Parks Canada** / **L'Agence Parcs Canada**



**ISSUED FOR TENDER**

PCA PROJECT No. **TETRA TECH EBA No.**

Revision	Date/Date	Author/Author	Check/Check	Drawn/Drawn
0	16/02/09	ISSUED FOR TENDER	AF	TT
			AF	AF
			DES	DM
			CHK	CHK

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Conçue par  
**A. FRAPPELL / E. YANG**  
 Drawn by/Dessiné par  
**T. TAKEDA**



Client/Client  
**PARKS CANADA AGENCY**

Drawing Title/Titre du dessin  
**PLAN / PROFILE  
 MT. VAUX STORAGE SITE**

Project No./No. du projet	201541-3002	Revision no./No. Révision	0
---------------------------	-------------	---------------------------	---





**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



Revision	Date/Date	Description/Description	AE	TT	AE
0	18/02/2018	ISSUED FOR TENDER			

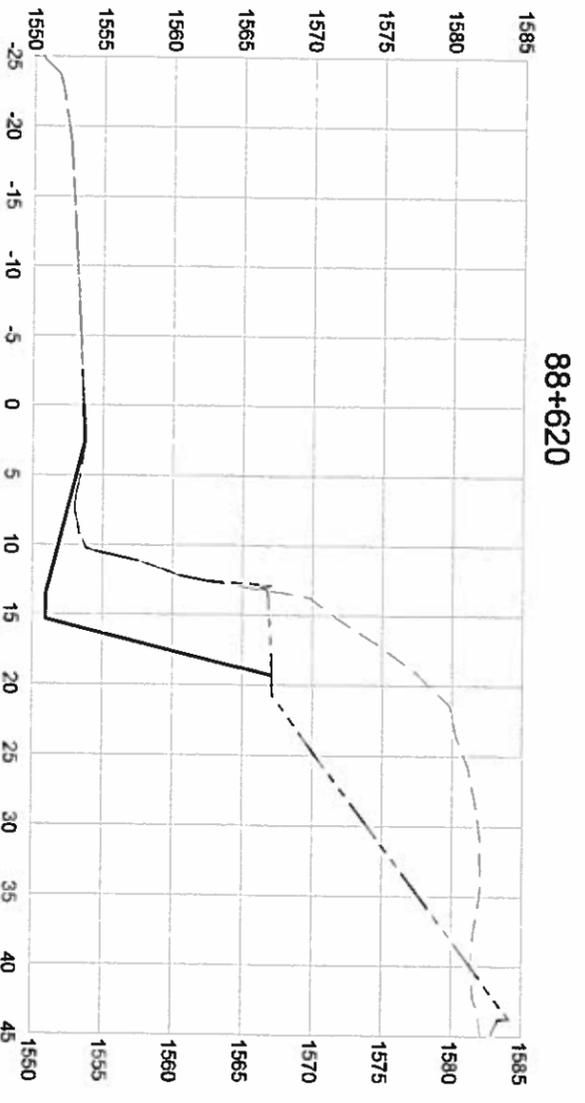
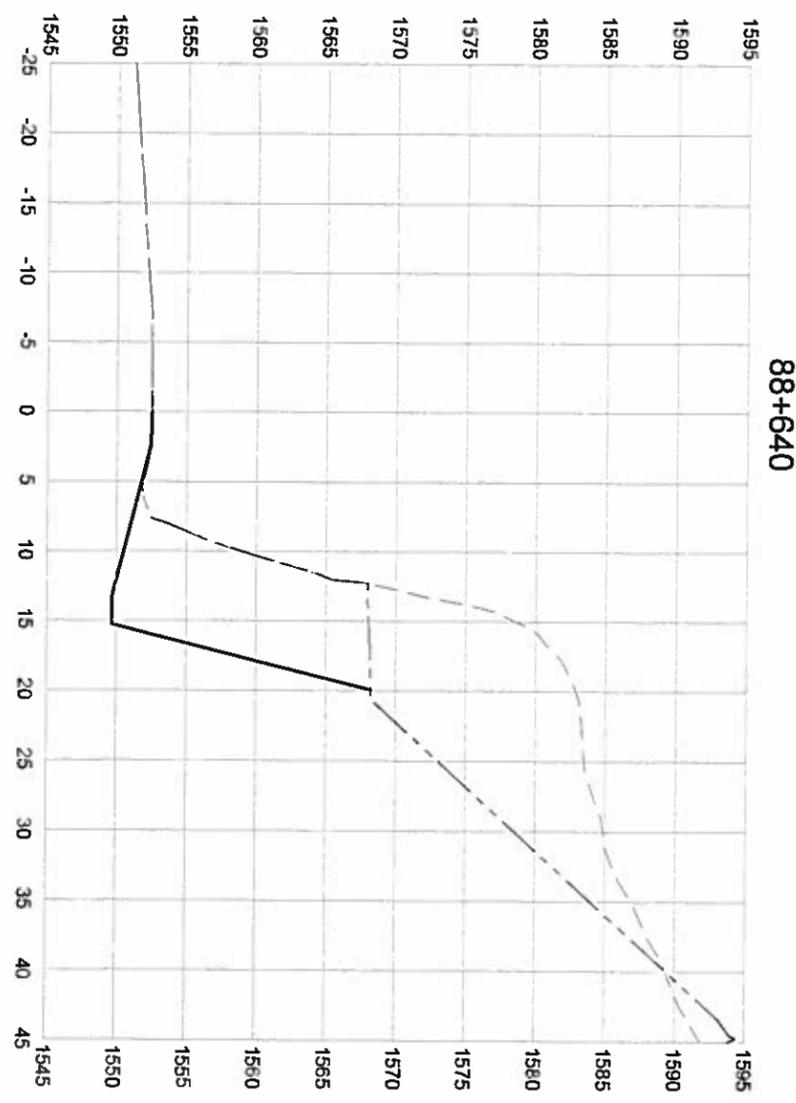
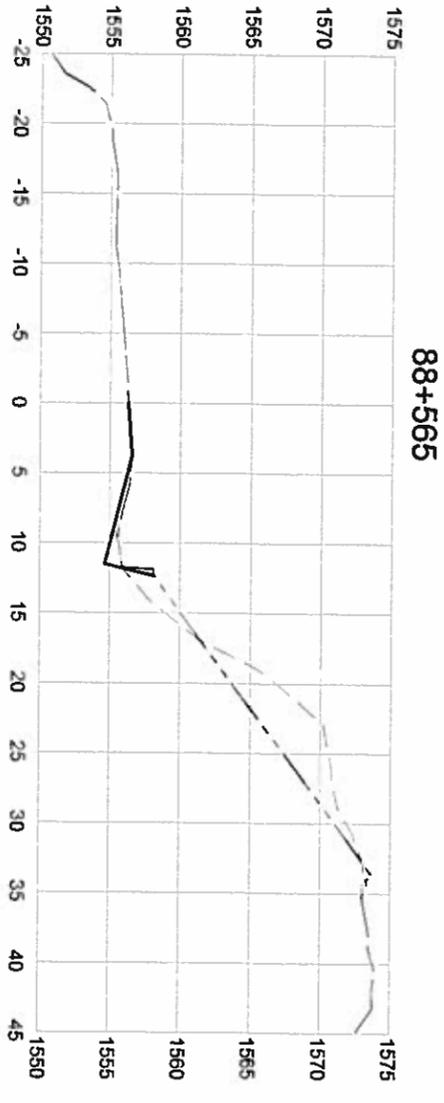
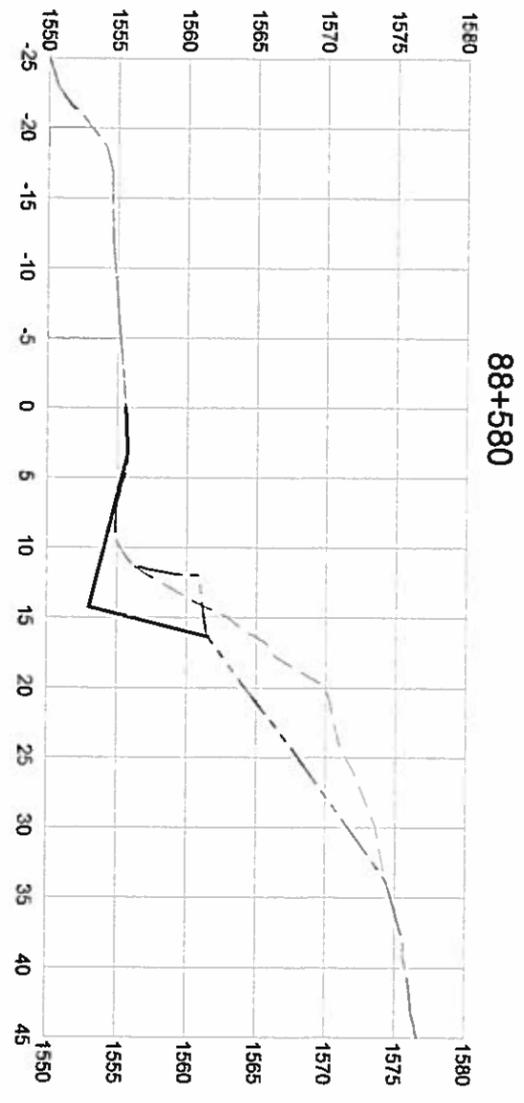
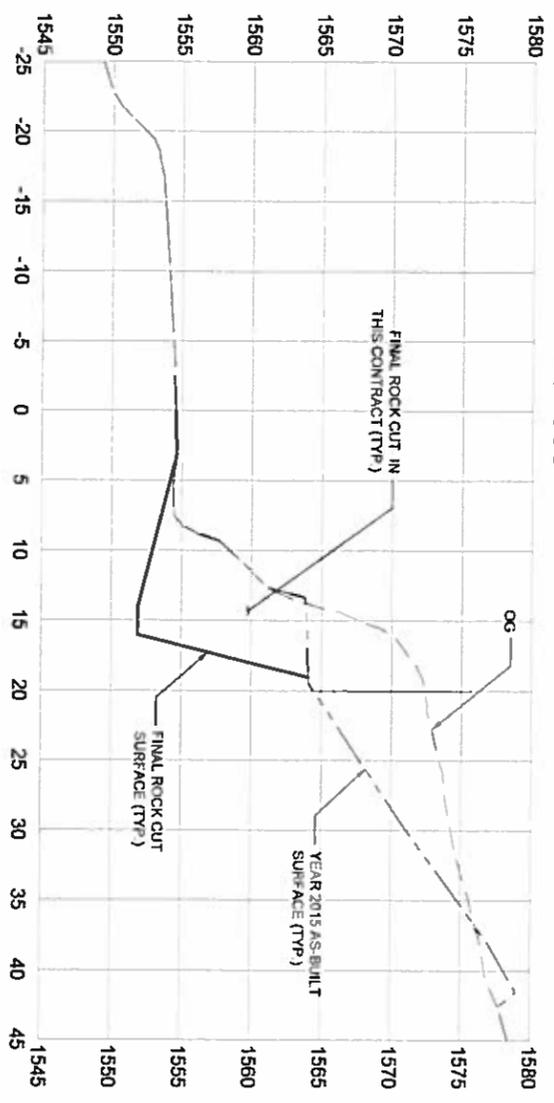
YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

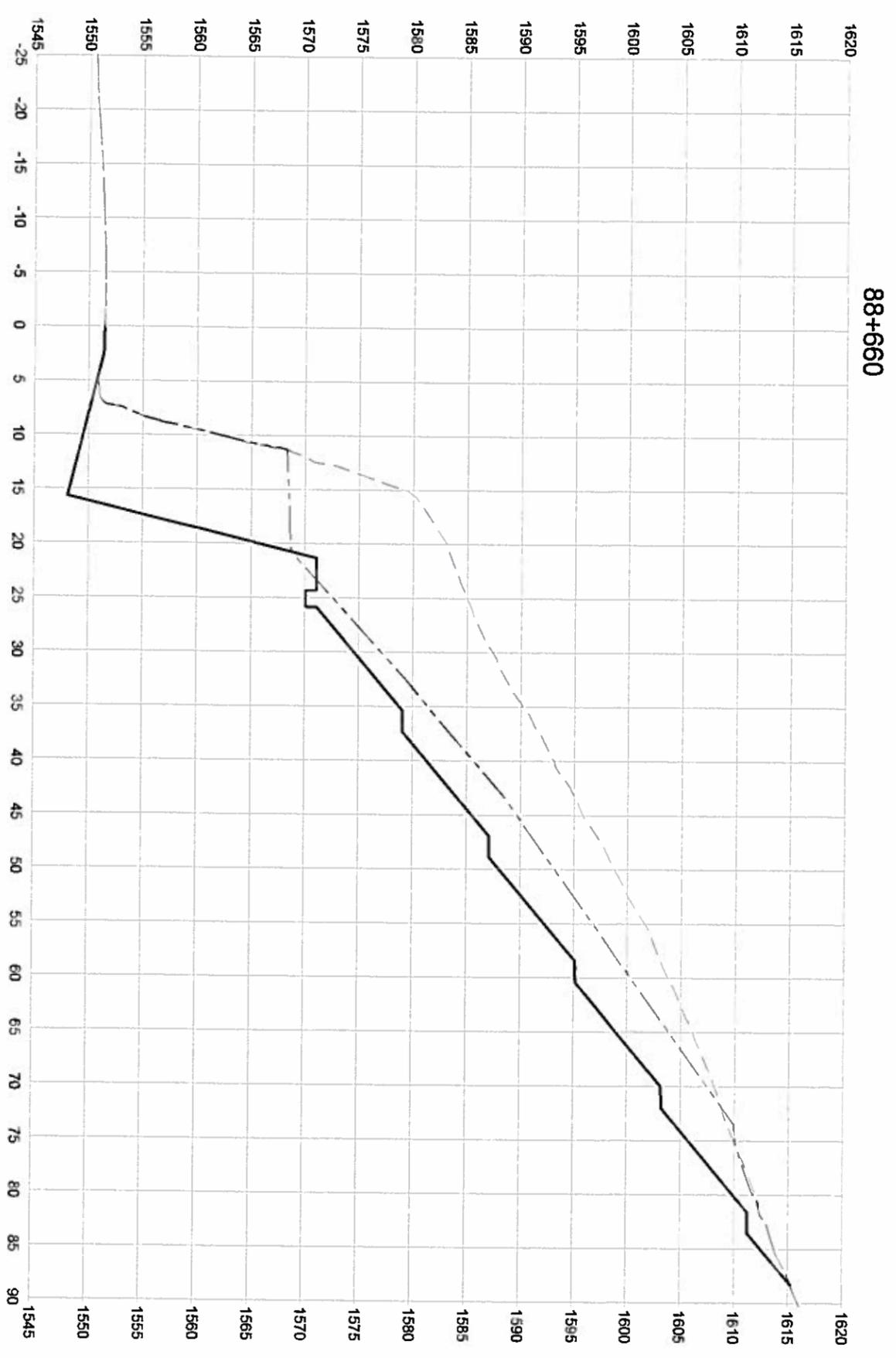
Designed by/Conçu par  
 A. FRAPPELL/E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing Title/Titre du dessin  
 SHERBROOKE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 88+565 TO 88+640

Project No./No. du projet	201541-4020	Revision No./No. de révision	0
---------------------------	-------------	------------------------------	---





88+660

Client/Client  
 Parks Canada / L'Agence Parcs  
 Agency / Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA No.



Station	Prop/Draw	Description/Description	AF	TT	AF
0	160206	ISSUED FOR TENDER	AF	TT	AF

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

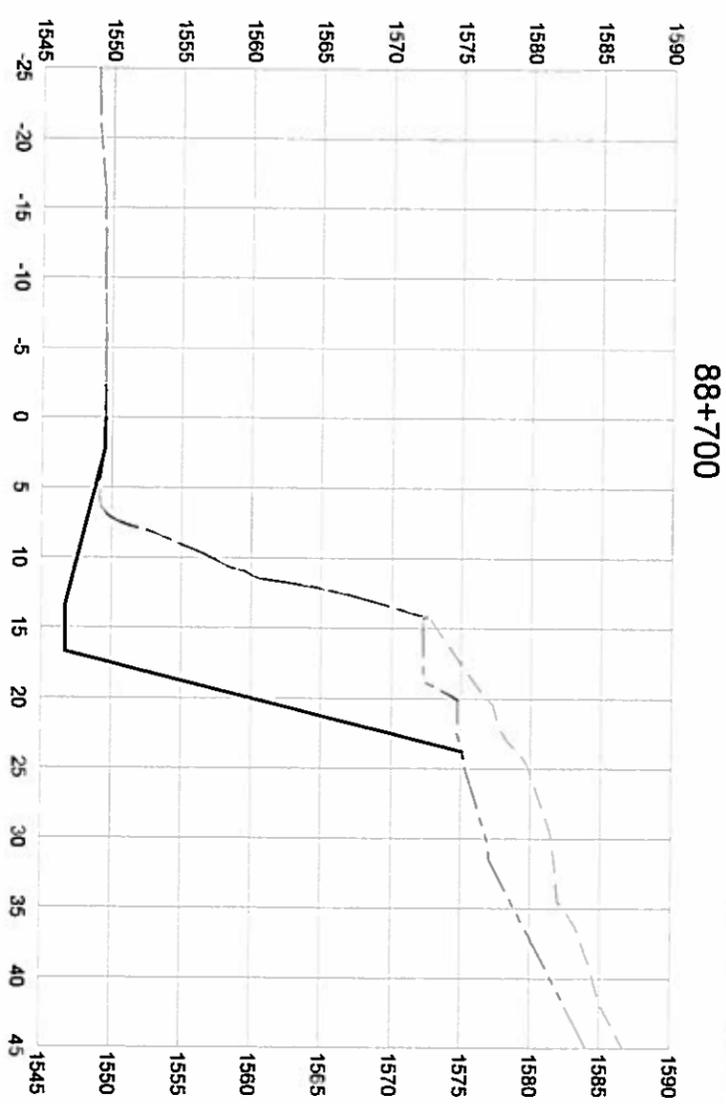
Designed by/Concept par  
 A. FRAPPELL/E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing Title/Titre du dessin  
 SHERBROOKE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 88+660

Project No./No. du projet	201541-4021	Revision No./No. de révision	0
---------------------------	-------------	------------------------------	---





Client/Client  
 Parks Canada  
 Agency  
 L'Agence Parcs  
 Canada



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



Revision No./Date	Description/Description	By	Check	Date
0	ISSUED FOR TENDER	AF	TT	AF

Project title/ titre du projet  
 YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Conçue par  
 A. FRAPPELL/E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing title/ titre du dessin  
**SHERBROOKE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 88+680 TO 88+700**

Project No./No. du projet	Sheet/Feuille	Revision No./No. de révision
201541-4022		0





**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



Revision	Date/Date	Description/Description	By	TT	AP
0	16/02/09	ISSUED FOR TENDER	AF	TT	AP

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

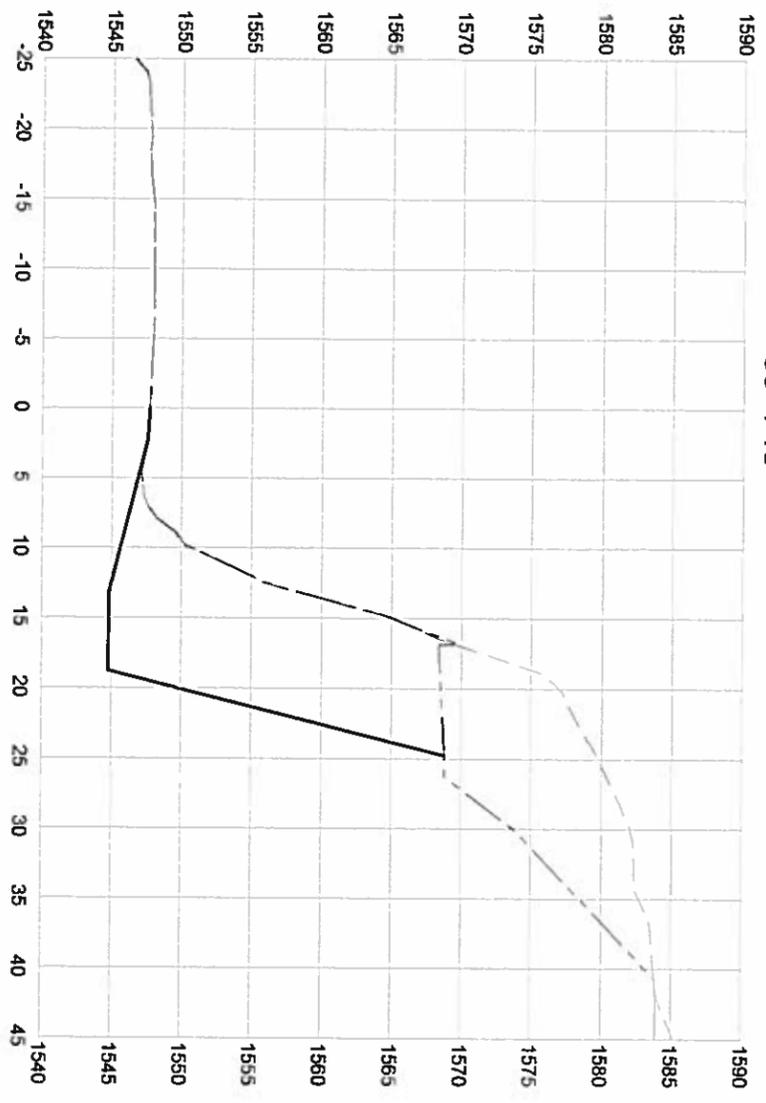
Designed by/Conçu par  
A. FRAPPELLI/E. YANG  
Drawn by/Drawné par  
T. TAKEDA



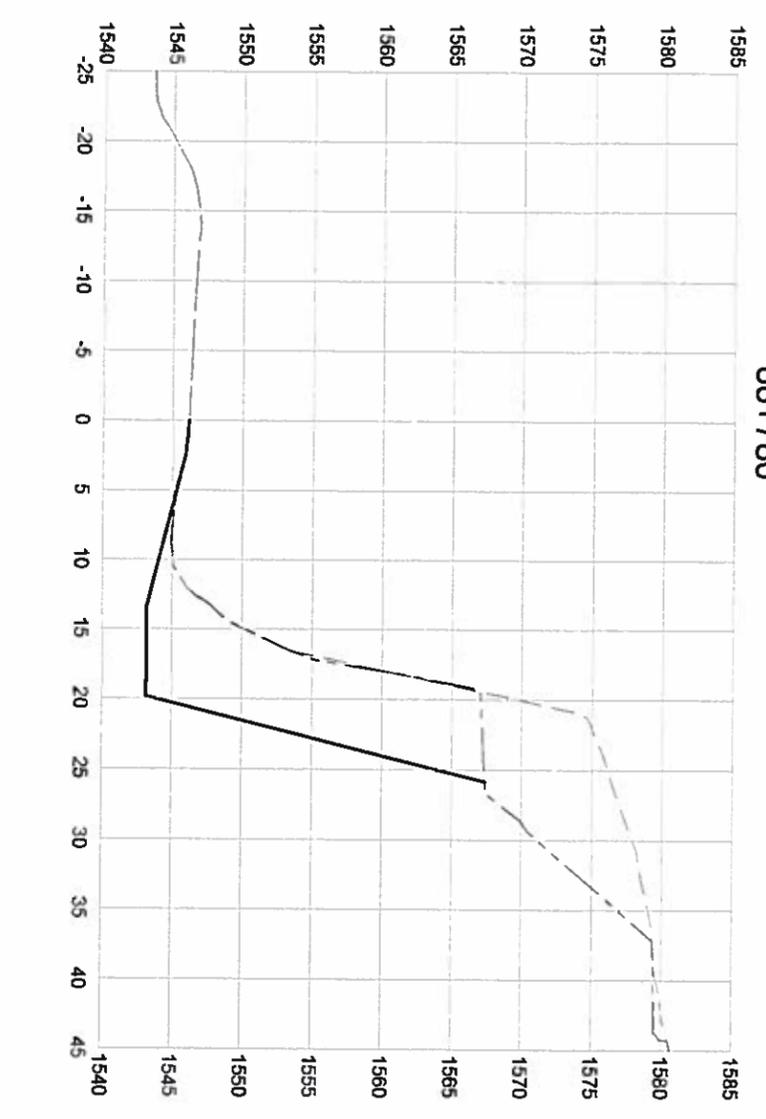
Client/Client  
PARKS CANADA AGENCY

Working title/Titre du dessin  
SHERBROOKE ROCK SLOPE  
CROSS SECTIONS  
STA. 88+720 TO 88+780

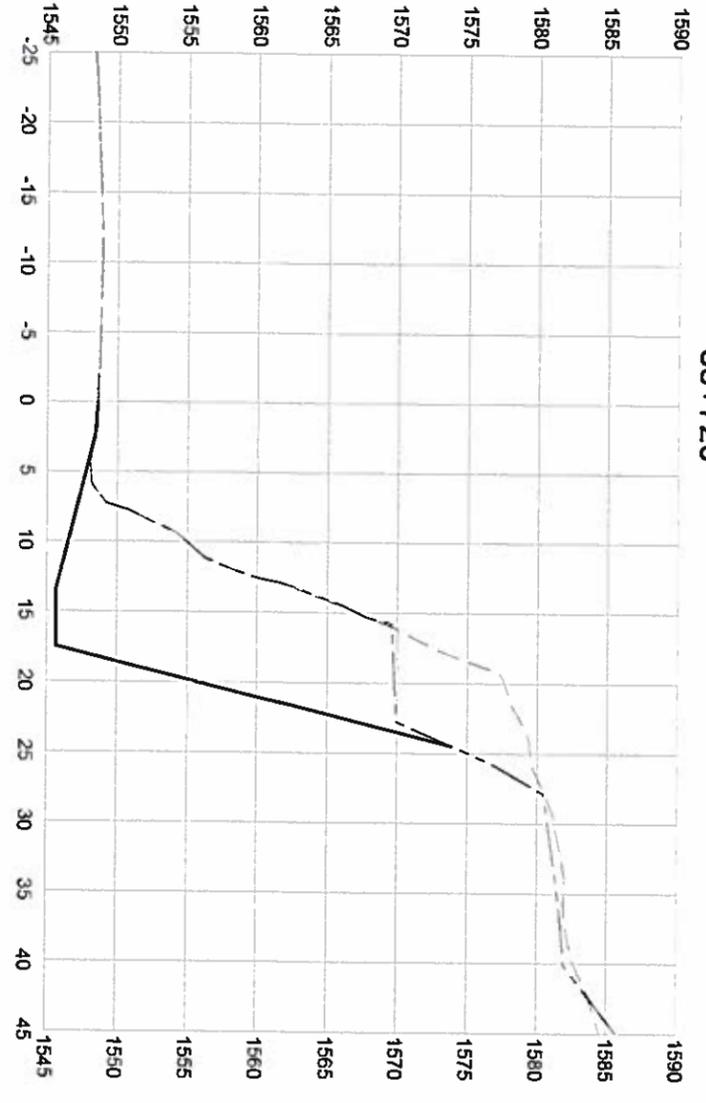
Project No./N <sup>o</sup> du projet	Sheet/Feuille	Revision No./N <sup>o</sup> de révision
201541-4023	0	0



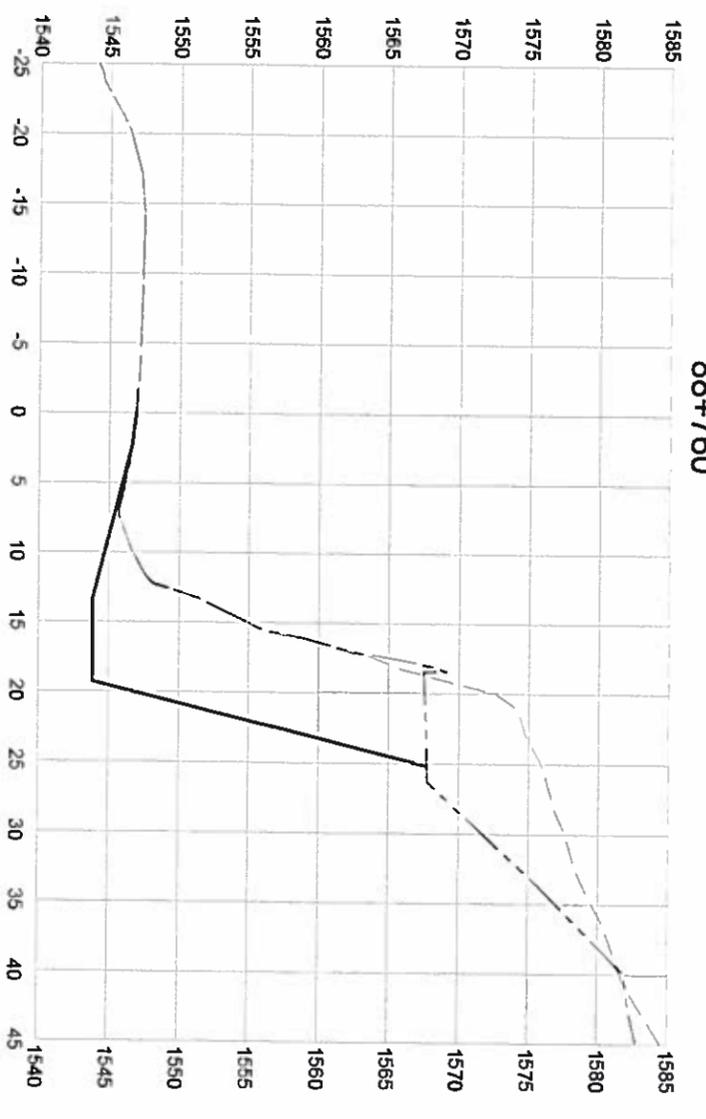
88+740



88+780

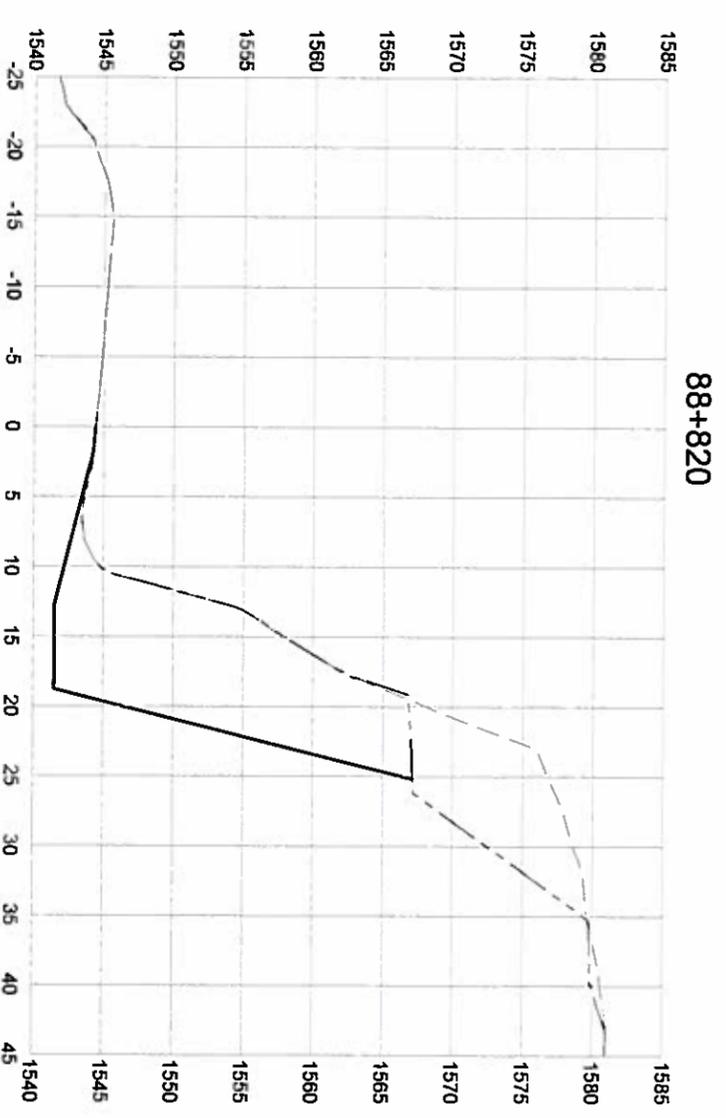


88+720

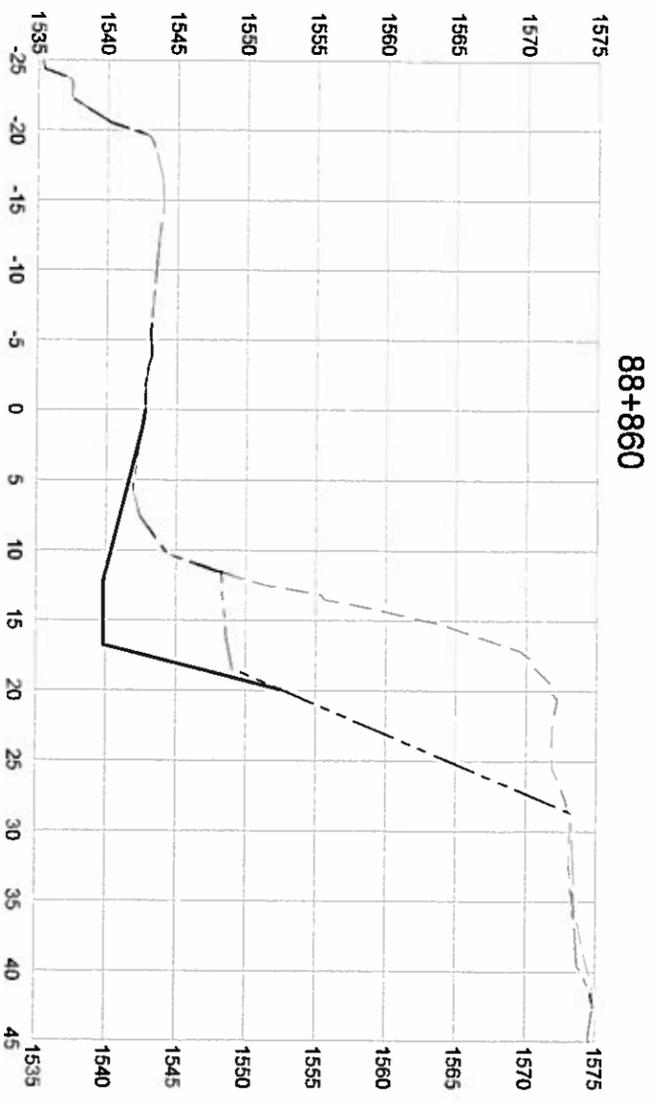


88+760

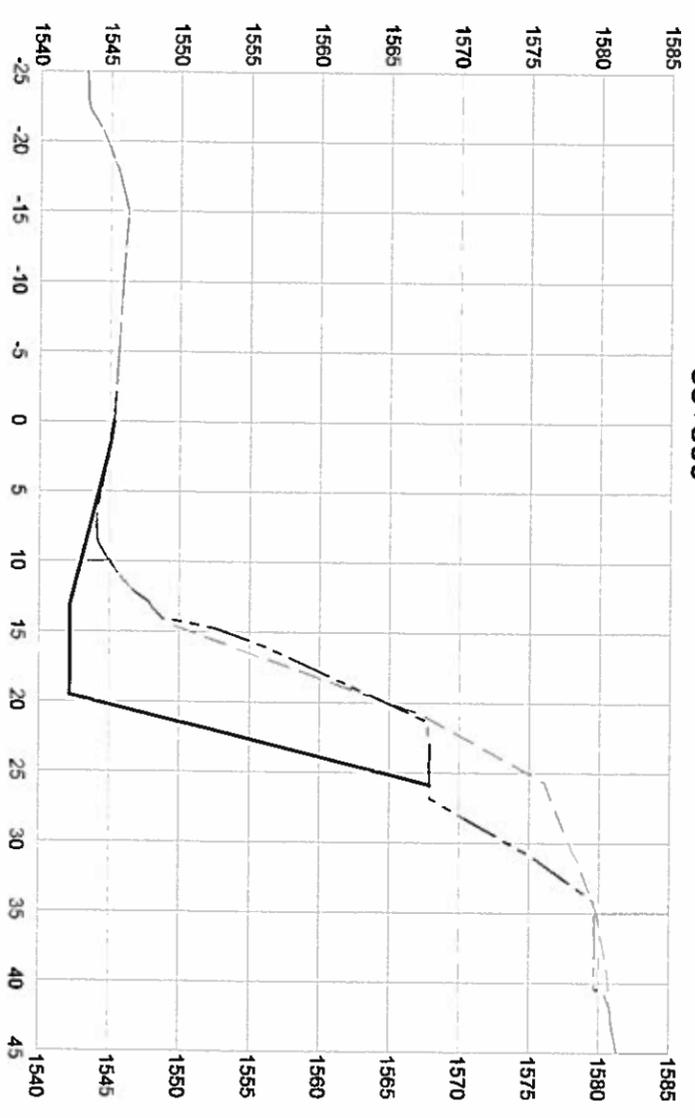




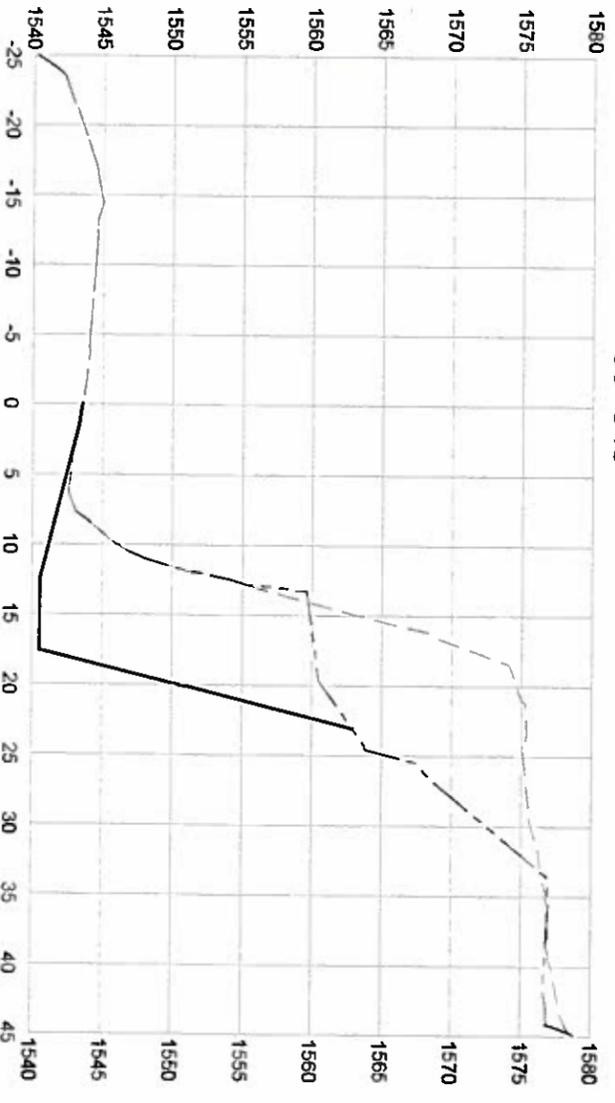
88+820



88+860



88+840



Client  
 Parks Canada  
 L'Agence Parcs Canada

TETRA TECH EBA

**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



Revision	Date/Date	Description/Description	AF	TT	AE
0	18/02/09	ISSUED FOR TENDER			

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concept par  
 A. FRAPPELL/E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY

Project/Projet  
 SHERBROOKE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 88+800 TO 88+860

Project No./No. du projet  
 201541-4024  
 Revision no./  
 de l'édition no.  
 0





**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



Revision	Date/Date	Description/Description	By	IT	AE
0	18/02/2018	ISSUED FOR TENDER	AE	TT	AE

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

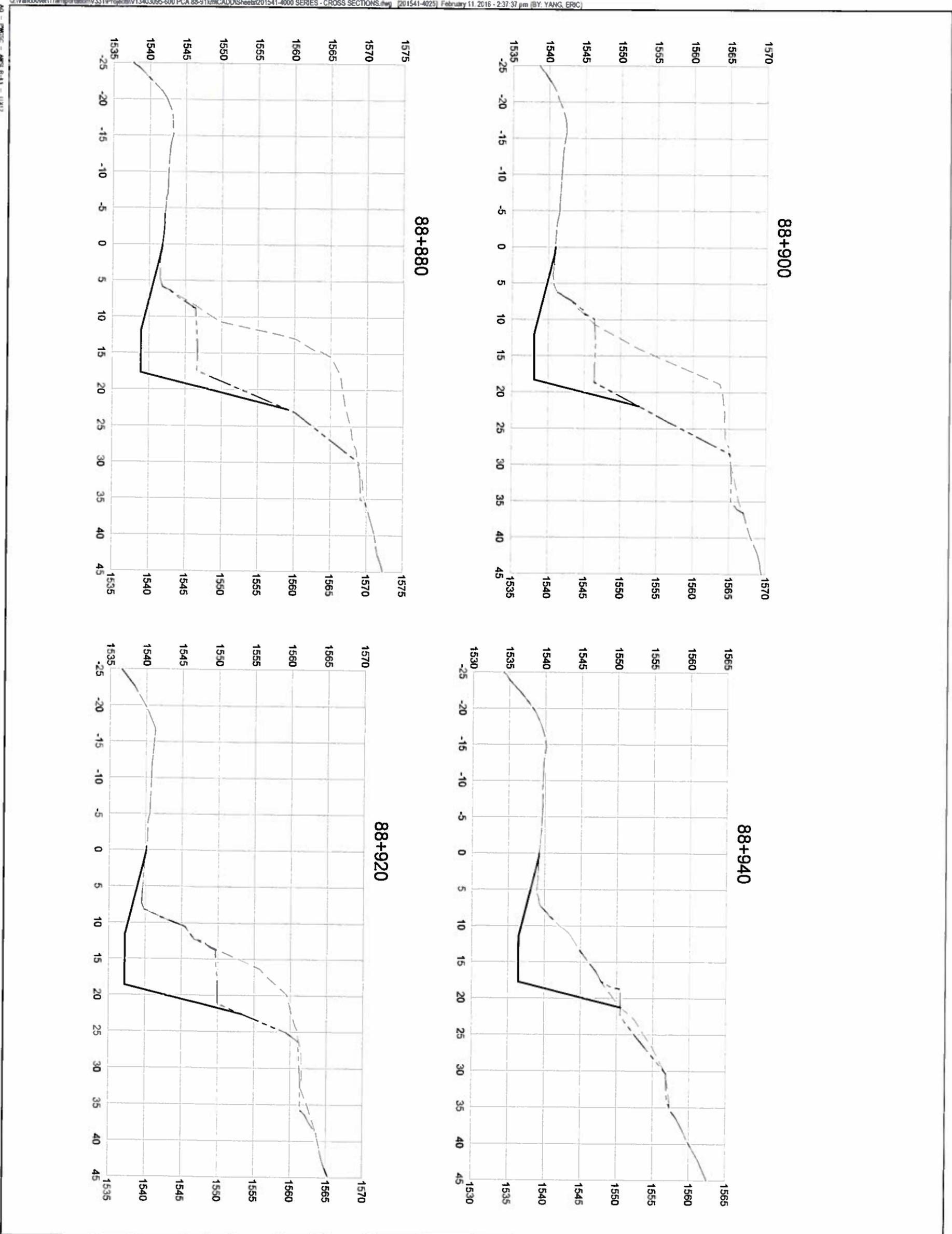
KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

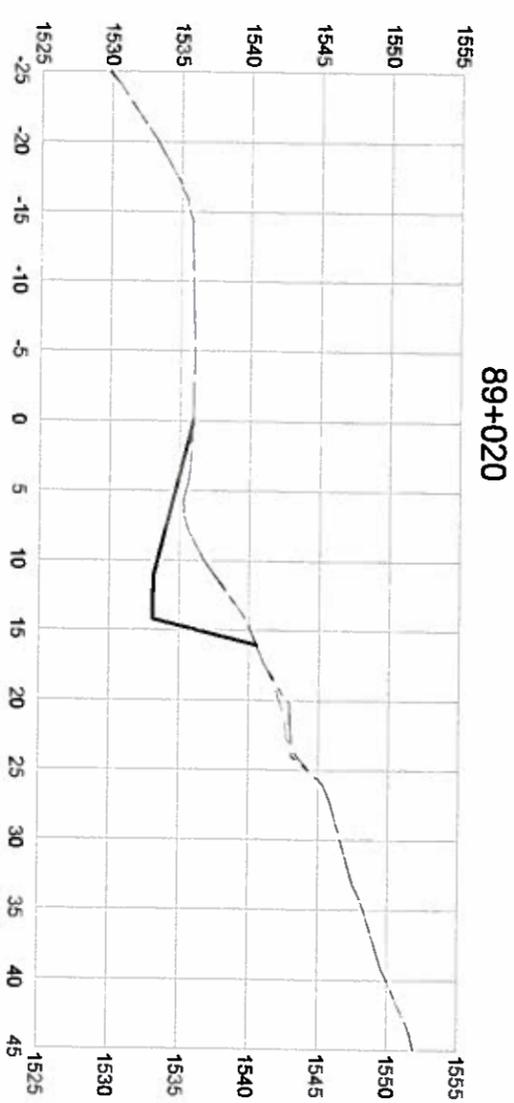
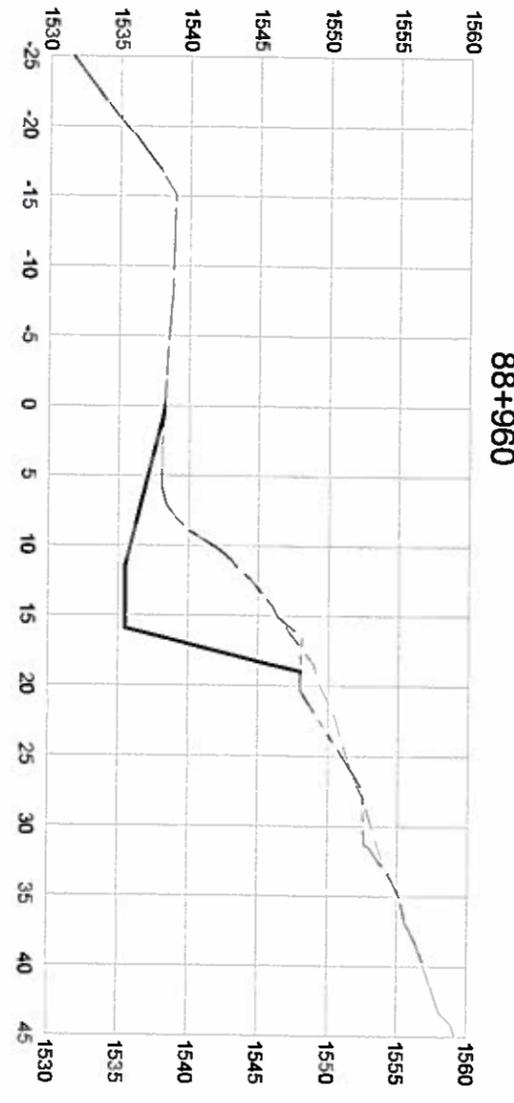
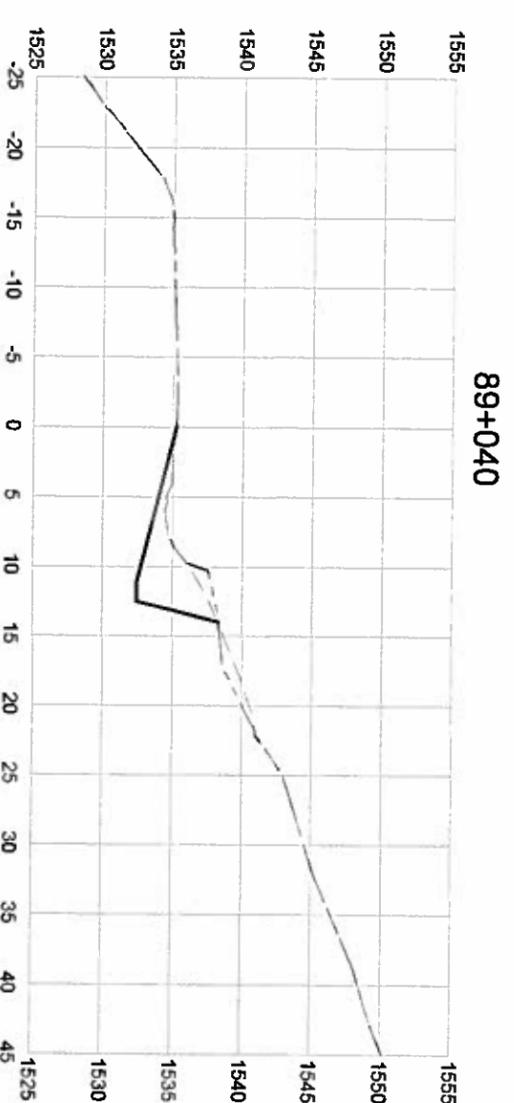
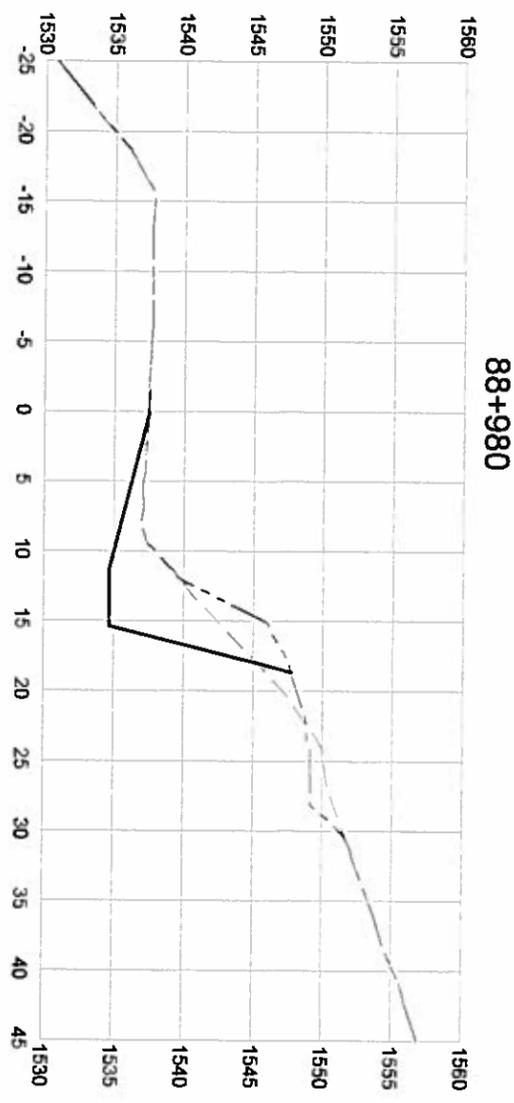
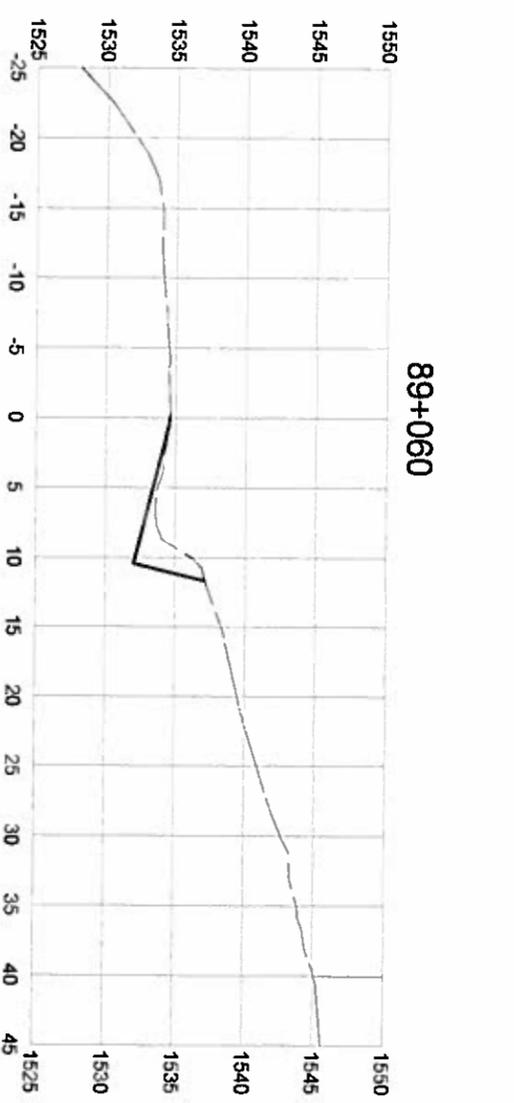
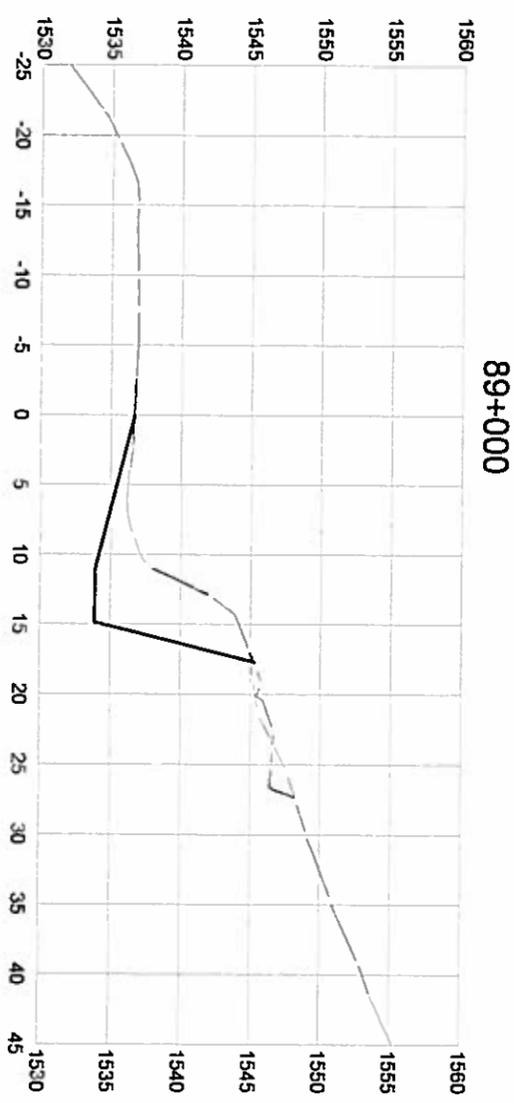
Designed by/Concept par  
**A. FRAPPELL/E. YANG**  
 Drawn by/Dessiné par  
**T. TAKEDA**



Client/Client  
**PARKS CANADA AGENCY**  
 Drawing File/Title de dessin  
**SHERBROOKE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 88+880 TO 88+940**

Project No./No. du projet	Sheet/Feuille	Section no./ de section no.
201541-4025	0	0





Client/Client  
 Parks Canada Agency  
 L'Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



Issue No.	Date/Date	Description/Description	By/Par	Checked/Contrôlé
0	18/02/09	ISSUED FOR TENDER	AF	TT
			AF	TT
			AF	TT

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

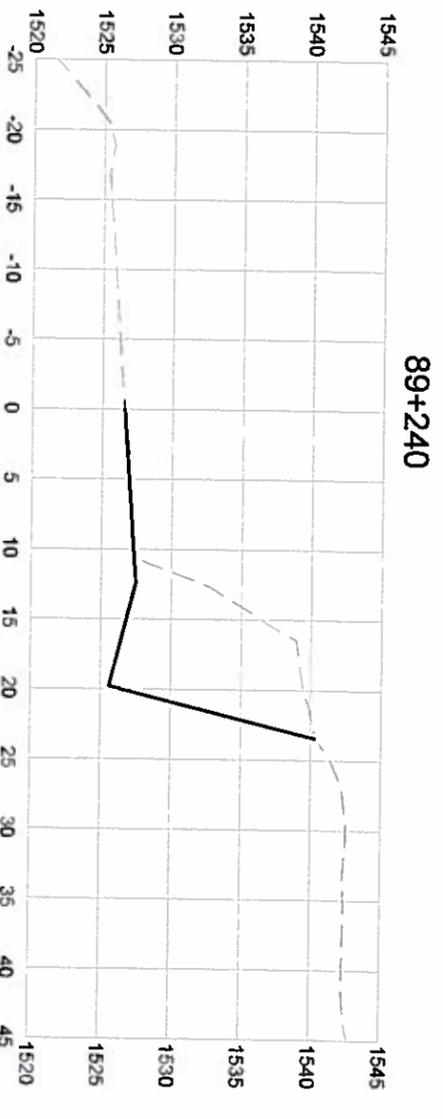
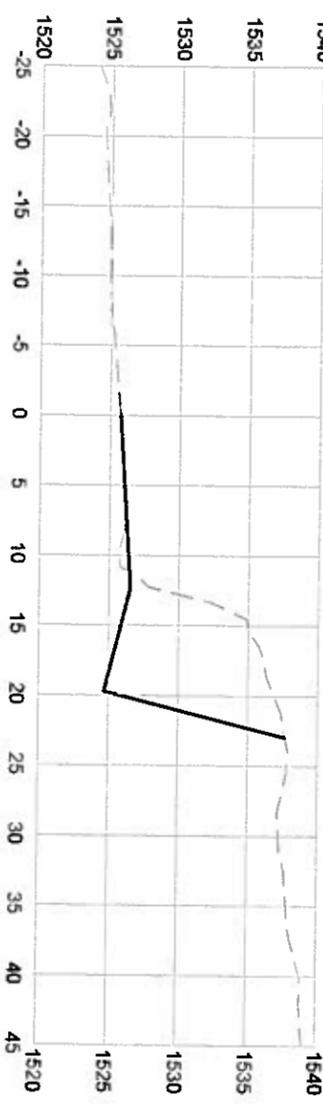
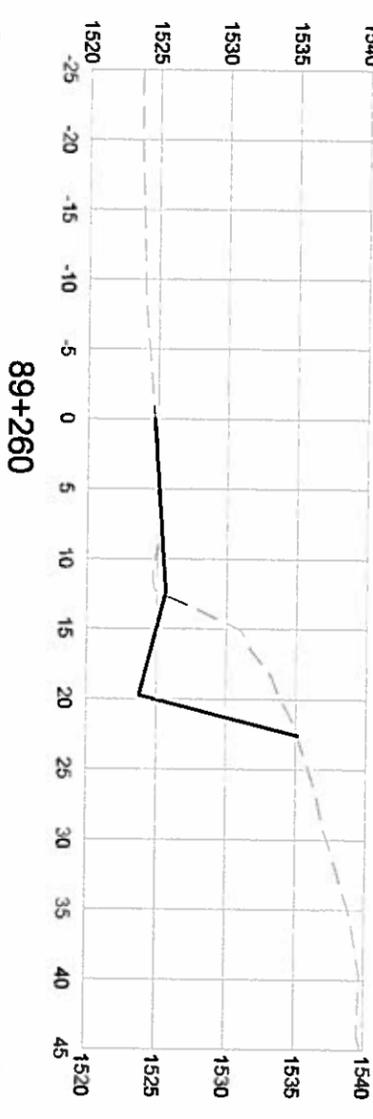
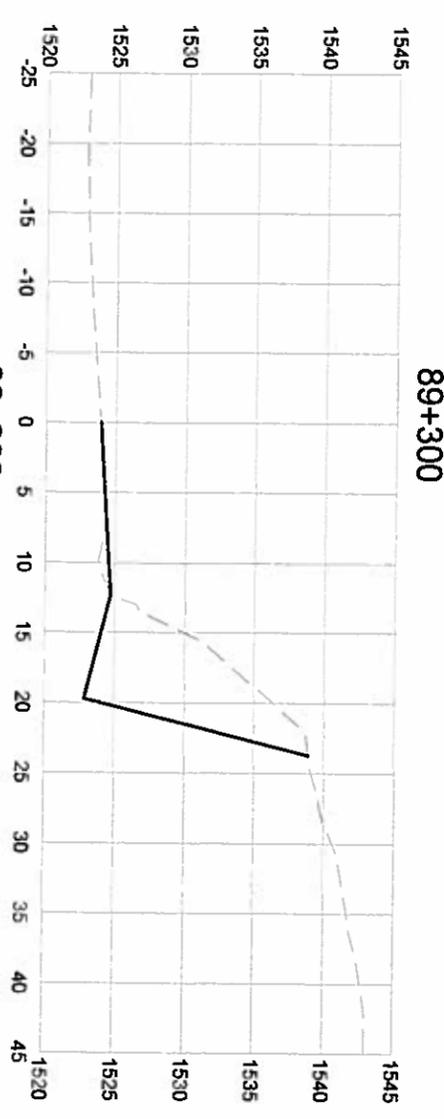
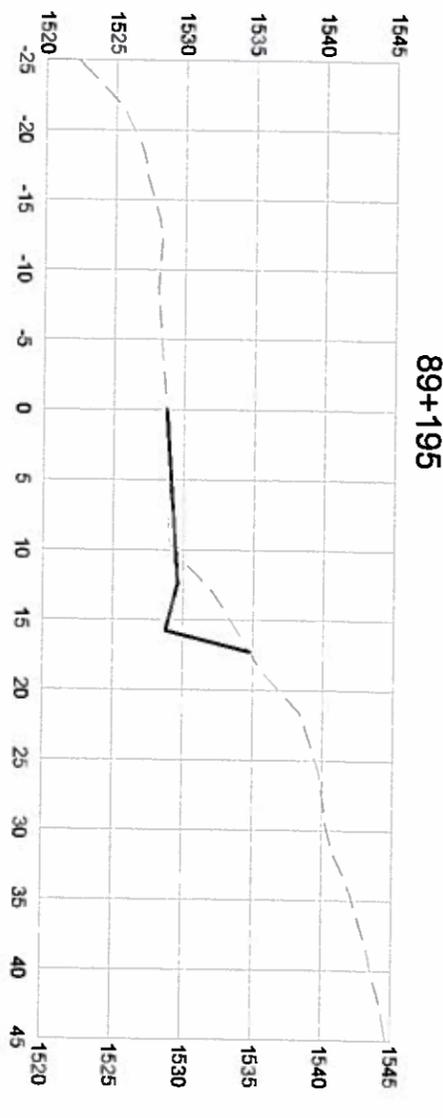
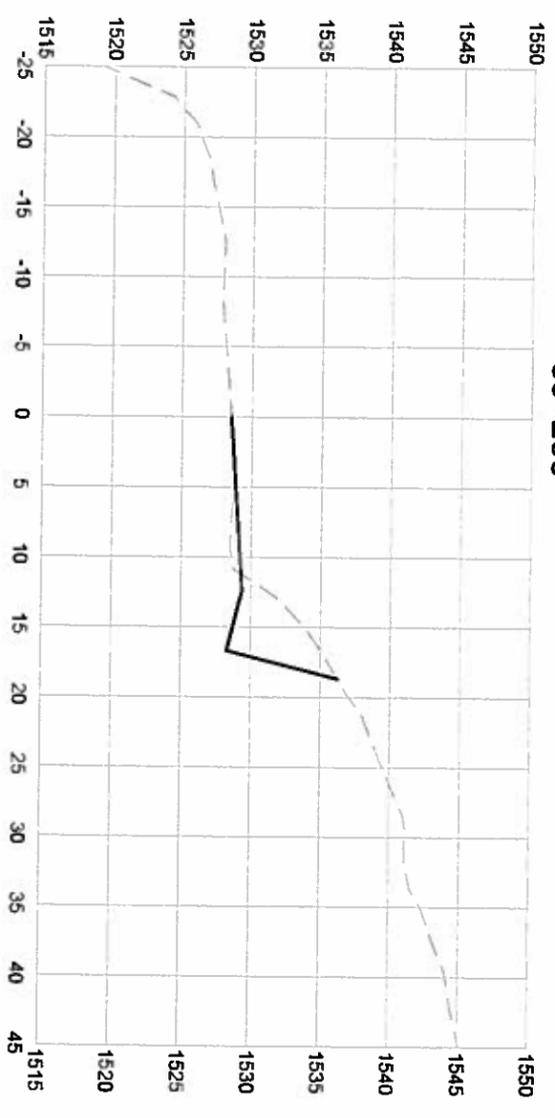
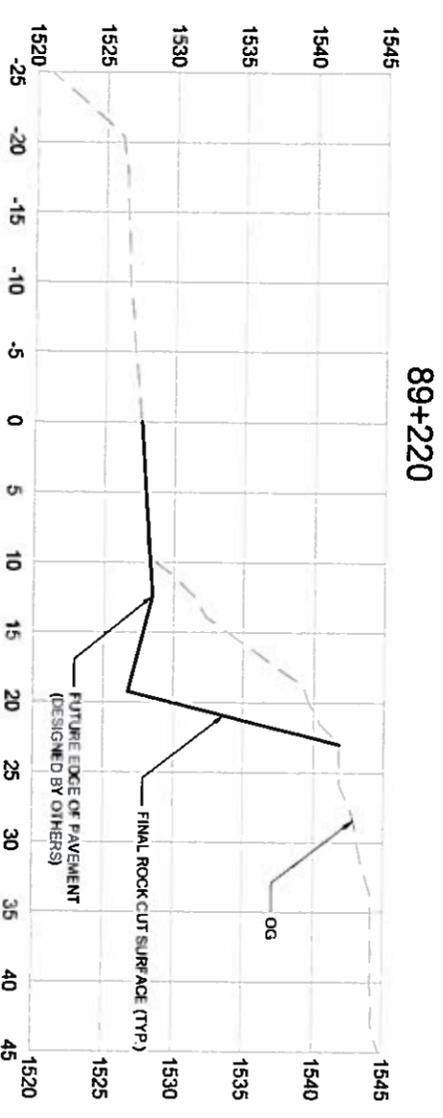
Designed by/Concepté par  
 A. FRAPPELLI / E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing name/Titre de dessin  
 SHERBROOKE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 88+960 TO 89+060

Project No./No. du projet	201541-4026	Revision No./No. de révision	0
---------------------------	-------------	------------------------------	---





Client/Client  
 Parks Canada  
 Agency  
 L'Agence Parcs  
 Canada



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



0	ISSUED FOR TENDER	AF	TT	AF
1802069	Checked/Verified/Designation	AF	TT	AF
013	Drawn/Issued	AF	TT	AF
013	Checked/Verified/Designation	AF	TT	AF
013	Drawn/Issued	AF	TT	AF
013	Checked/Verified/Designation	AF	TT	AF

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concept par  
 A. FRAPPELL / E. YANG  
 Drawn by/Issued par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing title/Titre de dessin  
**LOWER SHERBROOKE  
 ROCK SLOPE  
 CROSS SECTIONS  
 STA. 89+195 TO 89+300**

Project No./No. du projet	Sheet/Feuille	Revision no./ La Revision no.
201541-4030		0





**ISSUED FOR TENDER**

PCA PROJECT No. **TETRA TECH EBA No.**



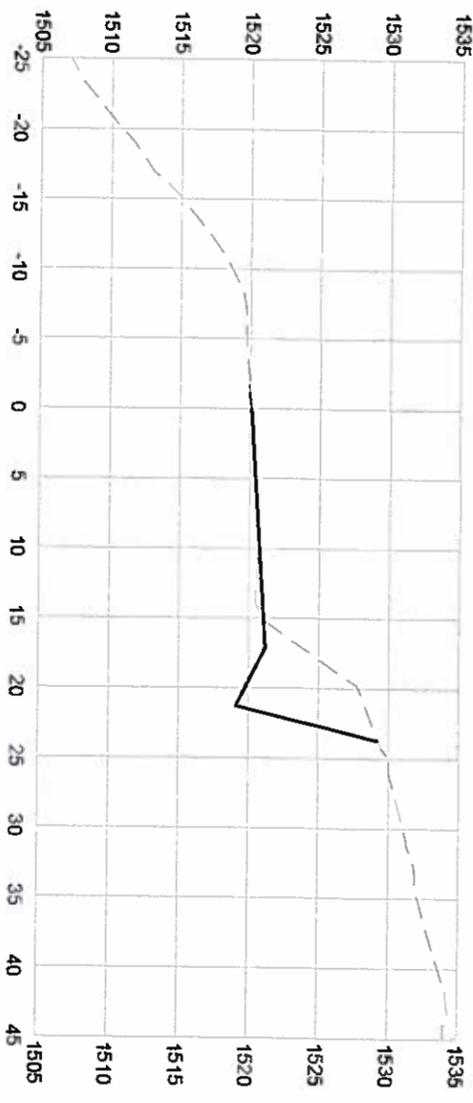
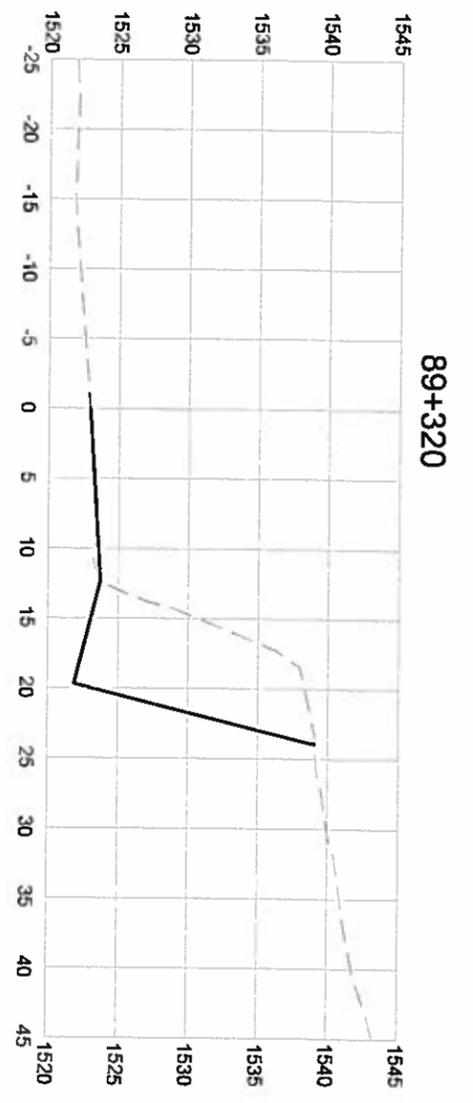
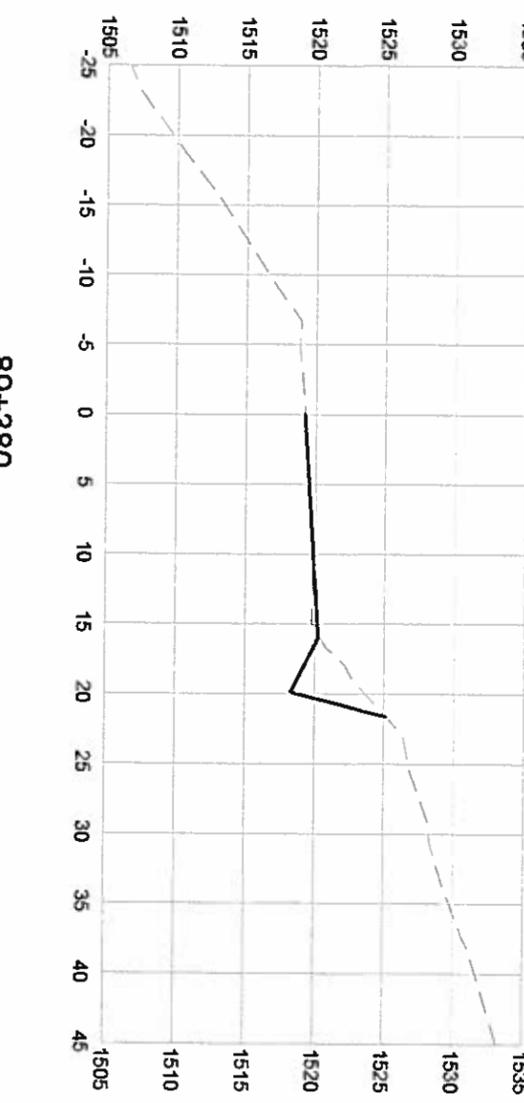
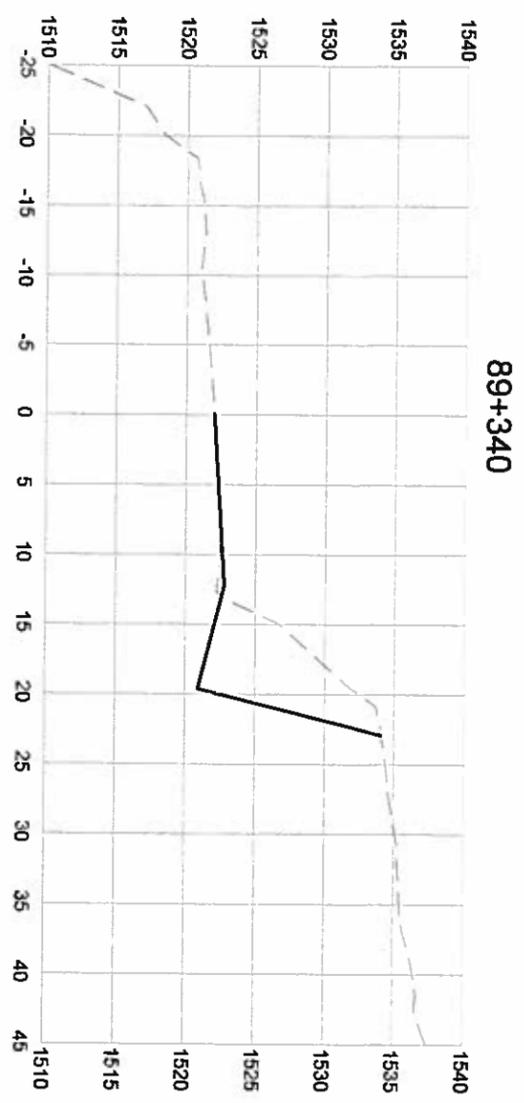
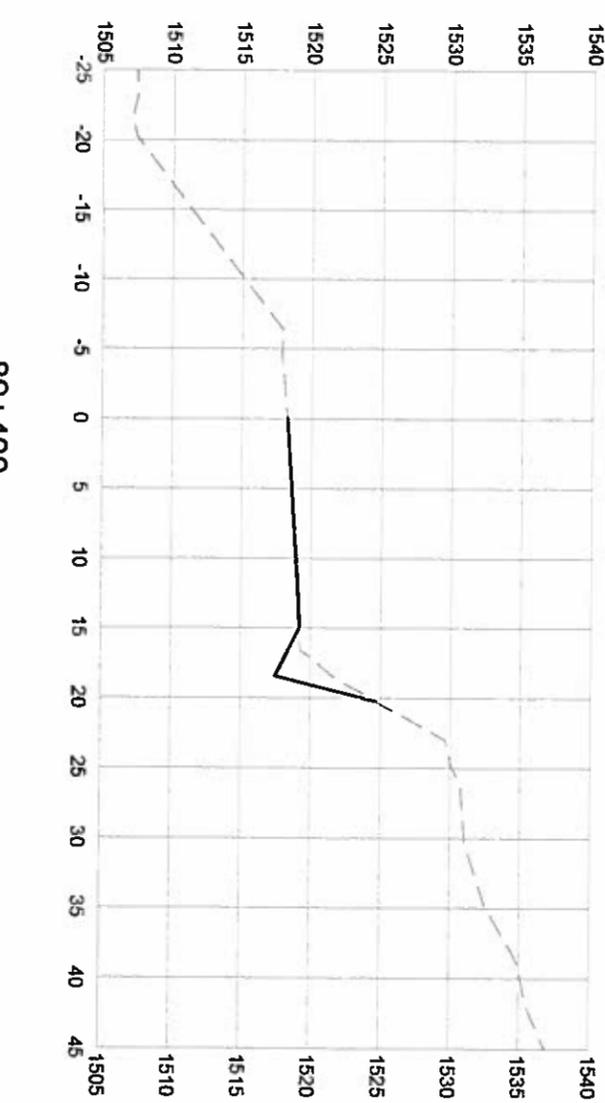
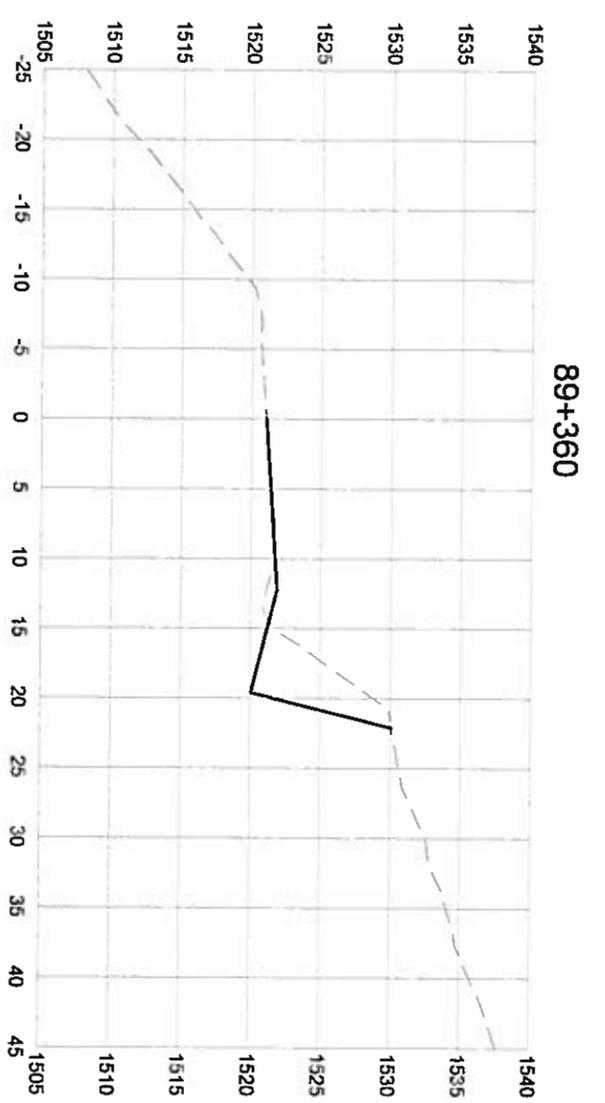
NO.	DESCRIPTION	DATE	BY	CHK
0	ISSUED FOR TENDER		AF	TT

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING  
 Designed by/Conc'd by  
**A. FRAPPELL / E. YANG**  
 Drawn by/Issued by  
**T. TAKEDA**



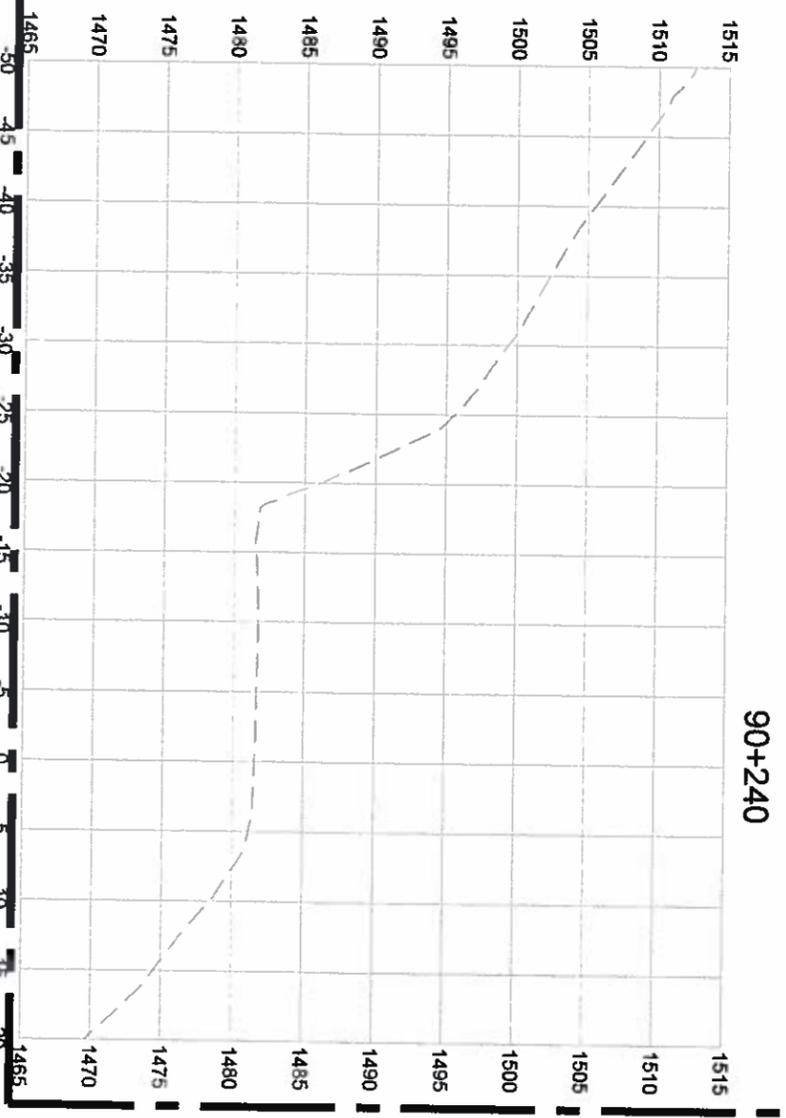
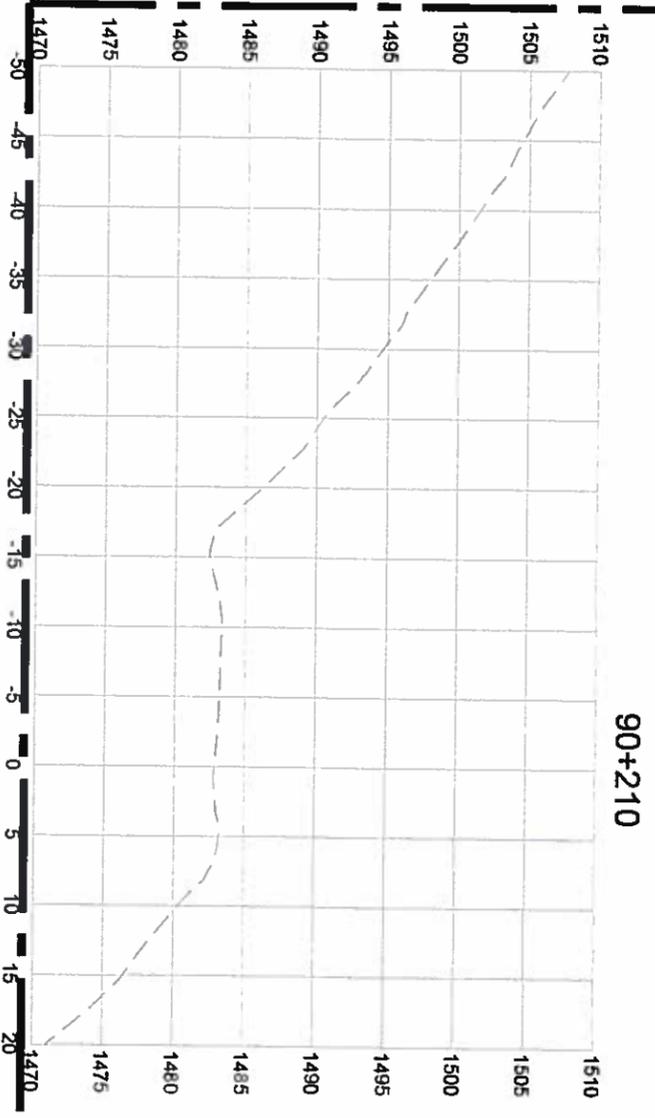
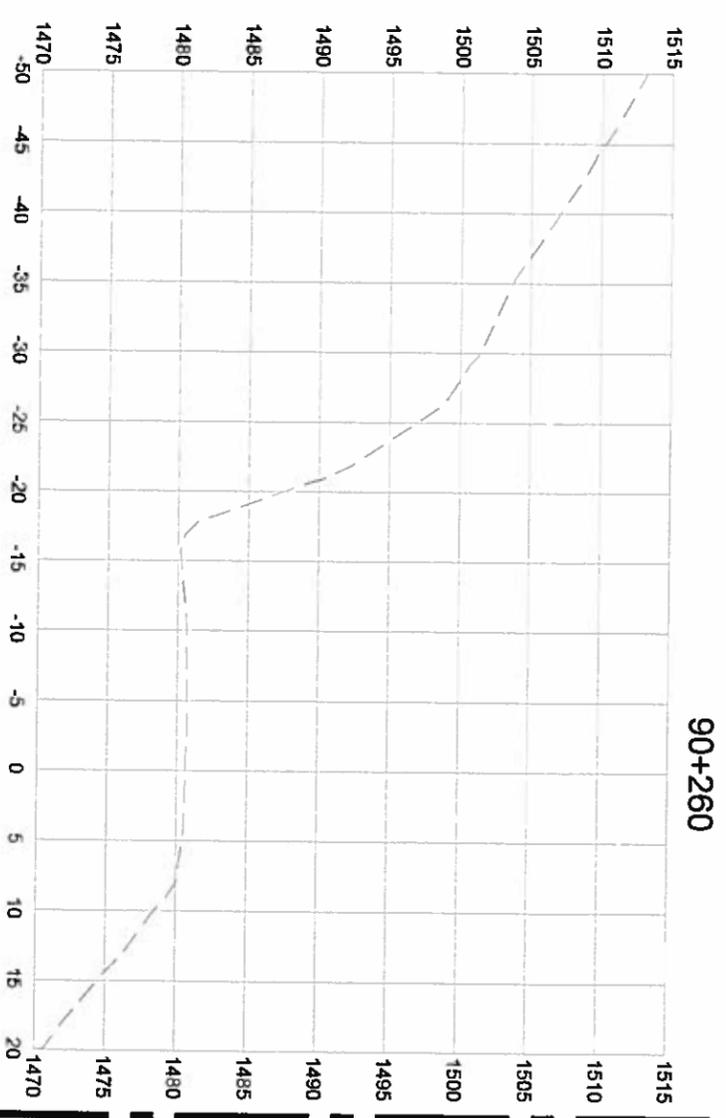
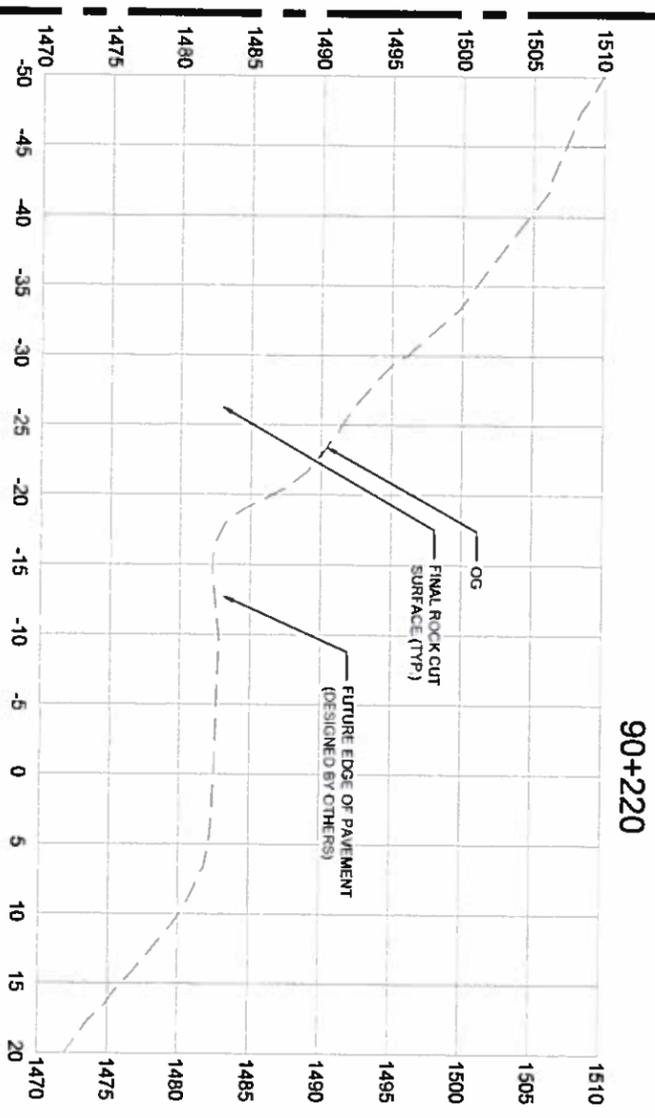
Client/Owner  
**PARKS CANADA AGENCY**  
 Drawing Title/Type: **ROCK SLOPE CROSS SECTIONS STA. 89+320 TO 89+420**

Project No./Doc. No. Page	Sheet/Total	Revision No./of Revision(s)
	<b>201541-4031</b>	<b>0</b>





**FUTURE WORK**  
(NOT IN BILL OF QUANTITIES)



Partners Canada / Agence Parcs Canada  
 TETRA TECH EBA

**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA No.



NO.	DESCRIPTION	DATE	BY	CHK
0	ISSUED FOR TENDER	AF	TI	AF

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Conçu par:  
 A. FRAPPELL / E. YANG  
 Drawn by/Dessiné par:  
 T. TAKEDA



Client/Client: PARKS CANADA AGENCY  
 Drawing title/Titre de dessin: SPIRAL TUNNELS HILL ROCK SLOPE CROSS SECTIONS  
 STA. 90+210 TO 90+260

Project No./No. du projet	201541-4060	Revision No./No. de révision	0
---------------------------	-------------	------------------------------	---



# ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



NO.	DESCRIPTION	DATE	BY	CHK
0	ISSUED FOR TENDER		AF	AF
			TT	AF
			DCS	OWN
			CHK	

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concep par  
 A. FRAPPELL / E. YANG  
 Drawn by/ Dessiné par  
 T. TAKEDA

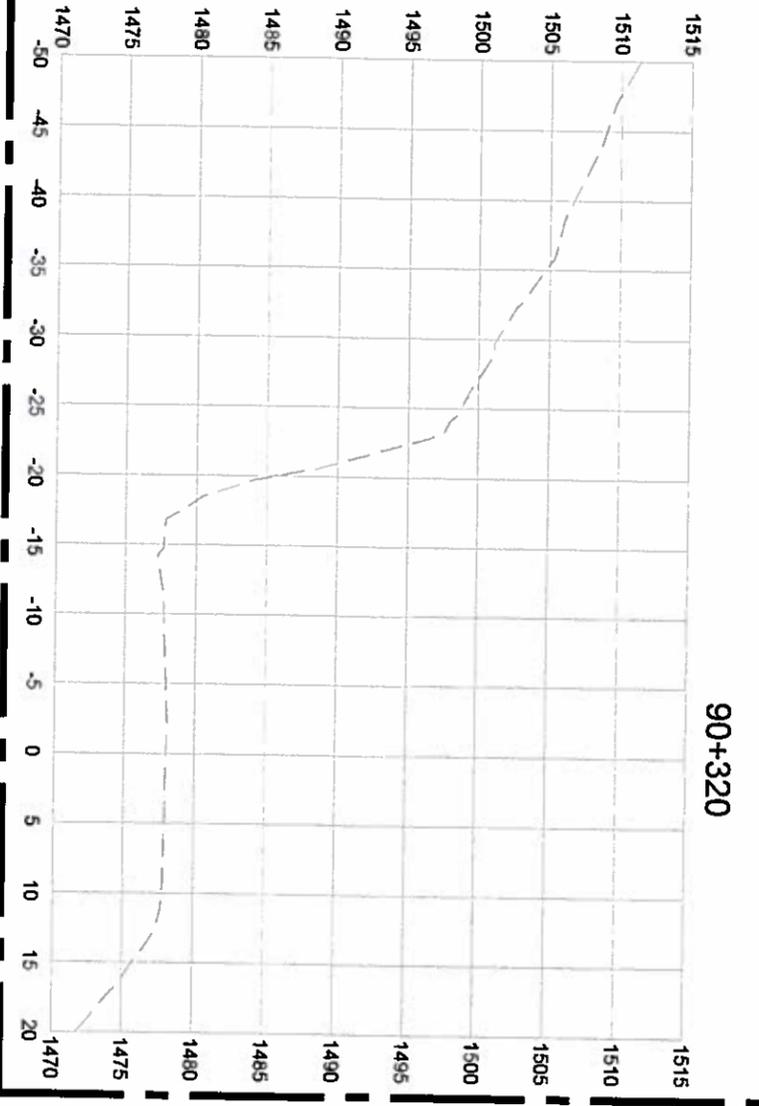
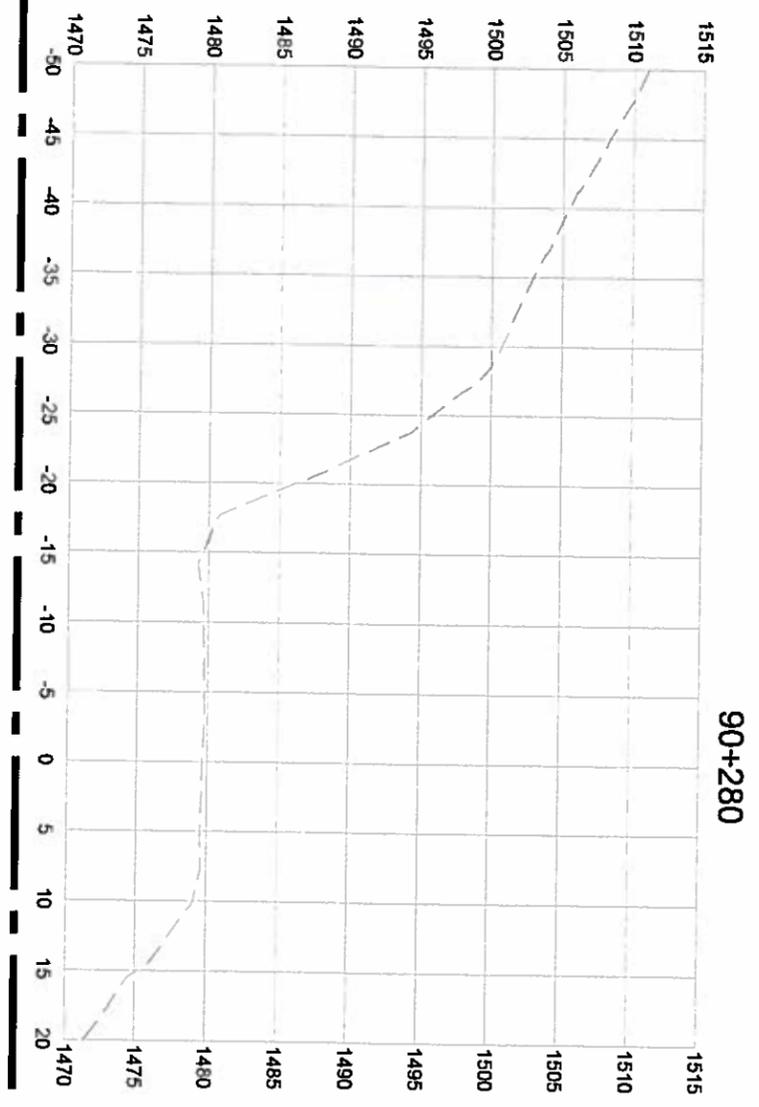
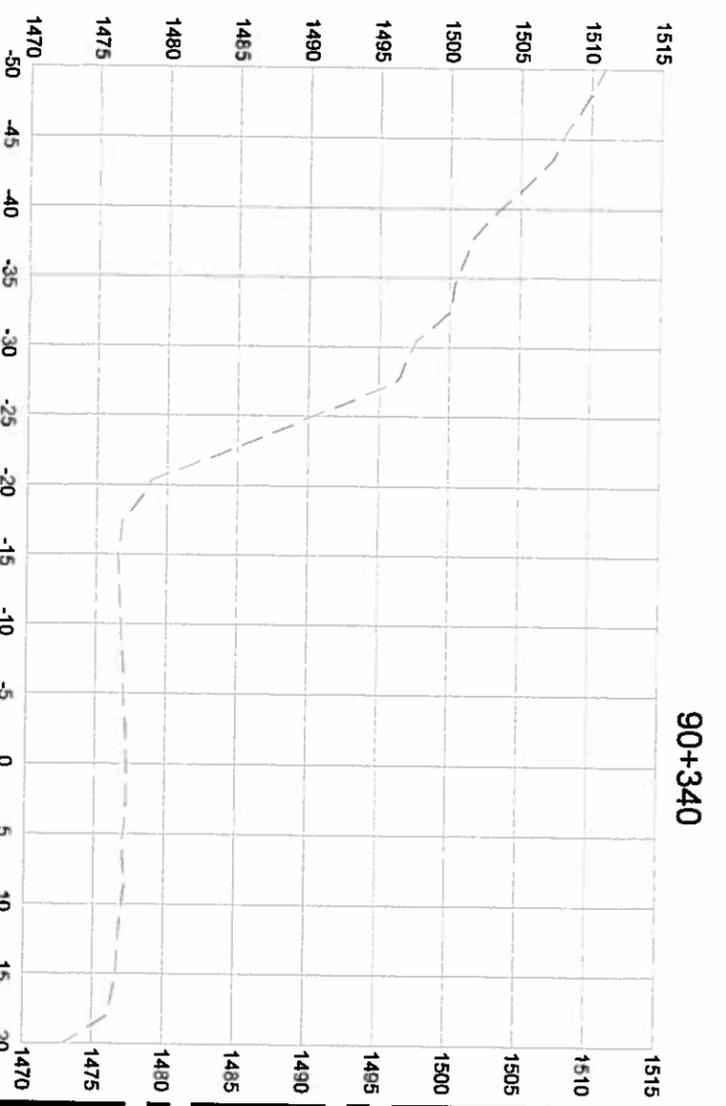
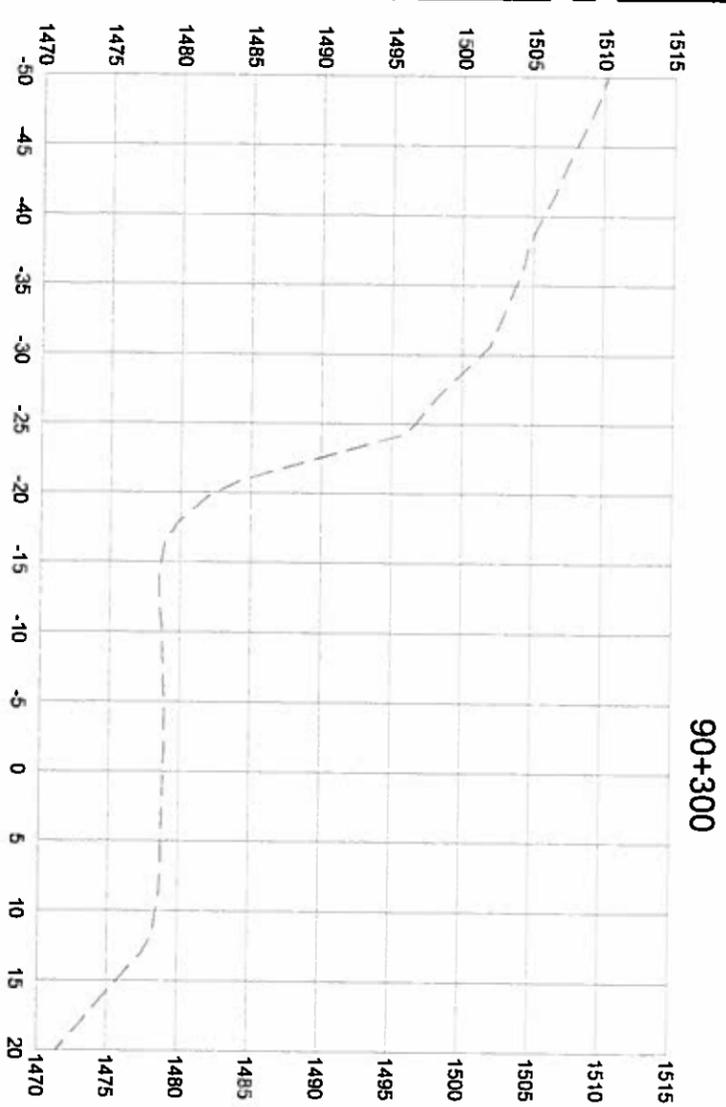


Client/Client  
 PARKS CANADA AGENCY

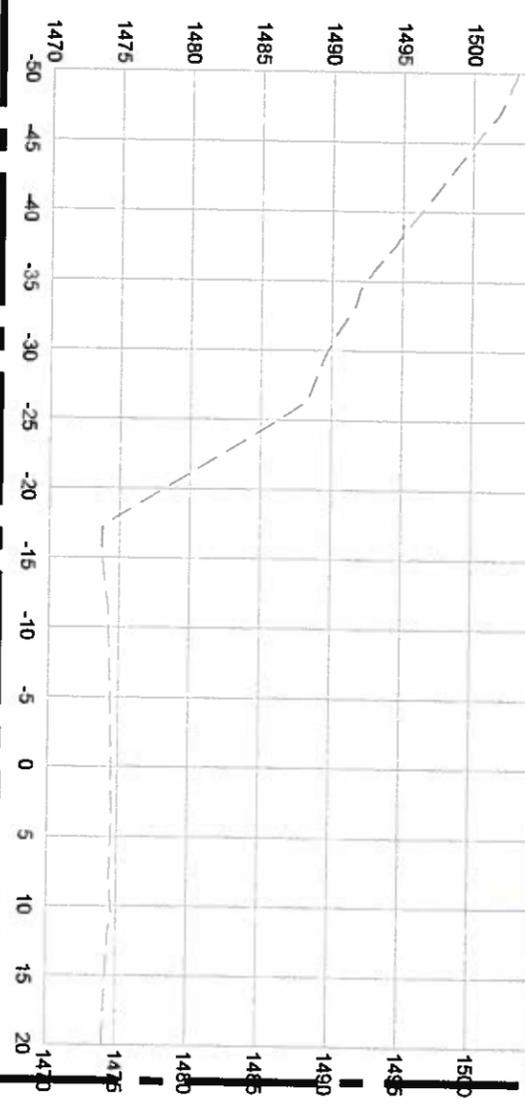
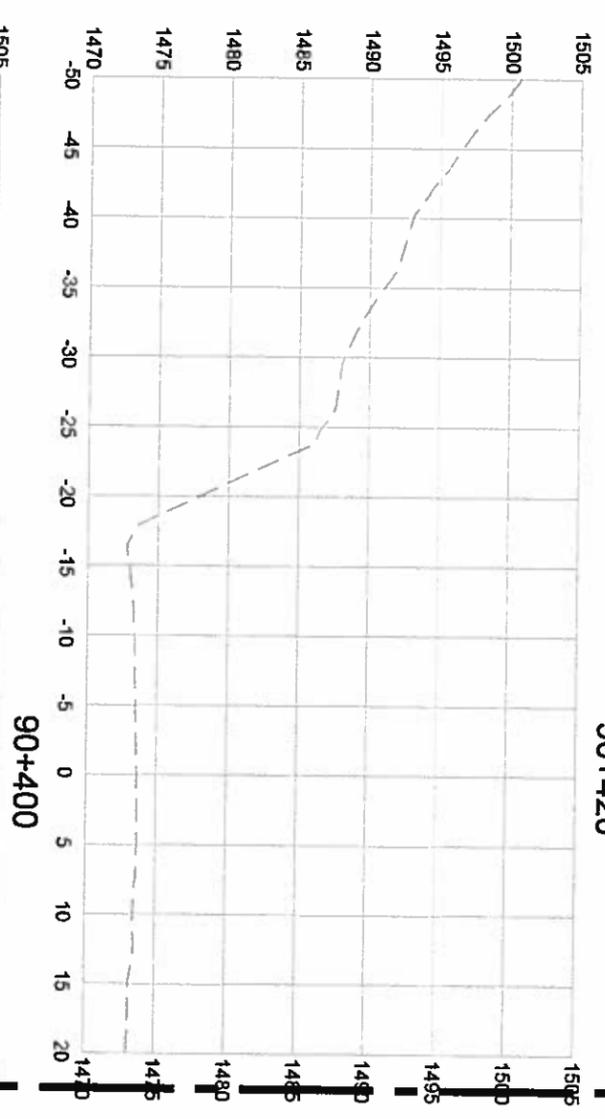
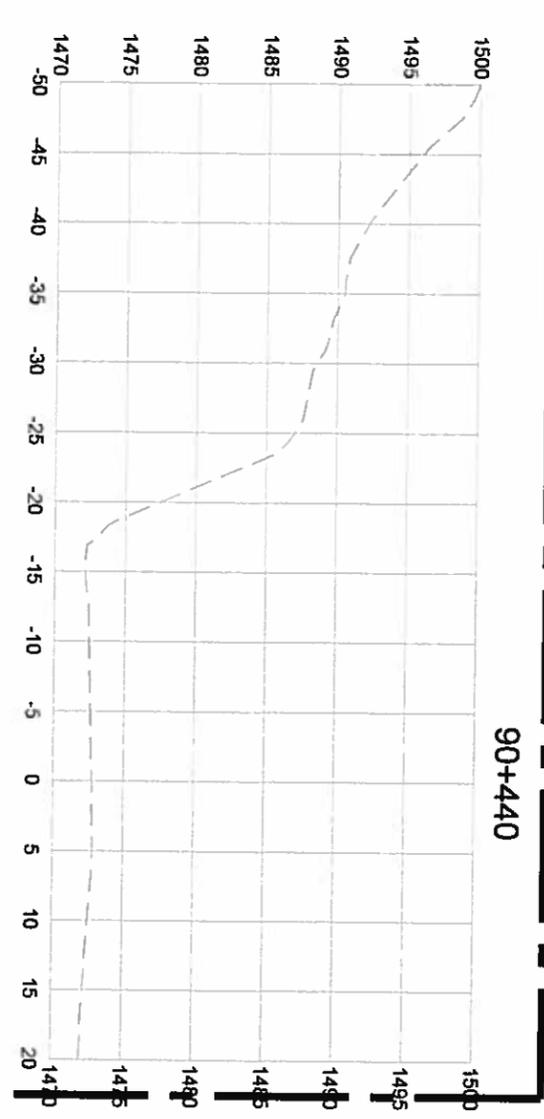
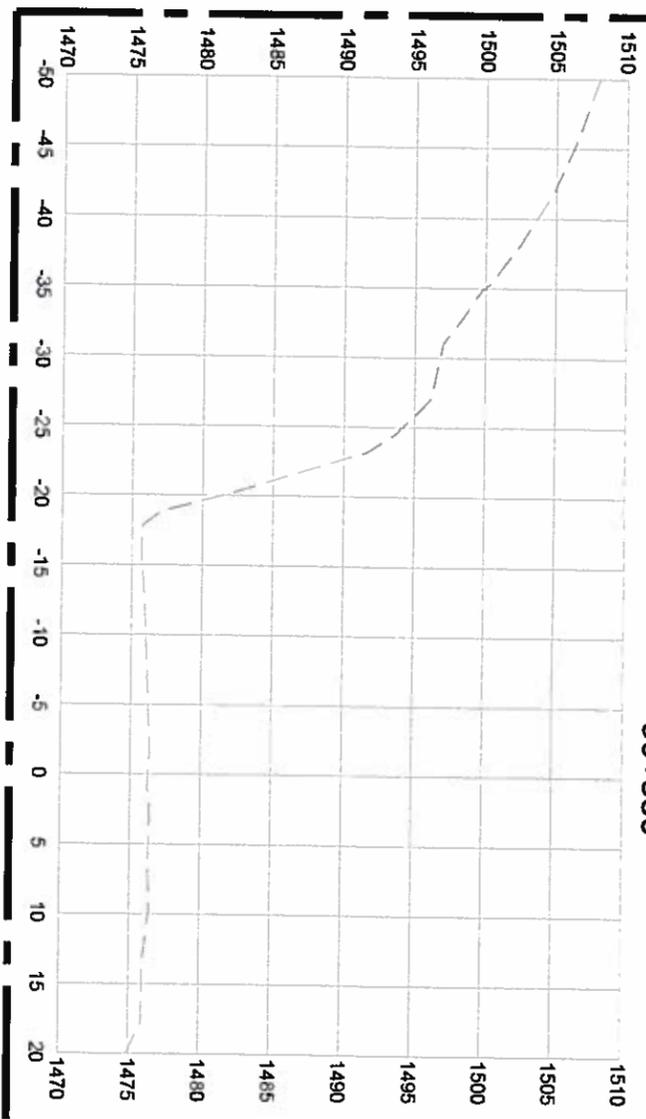
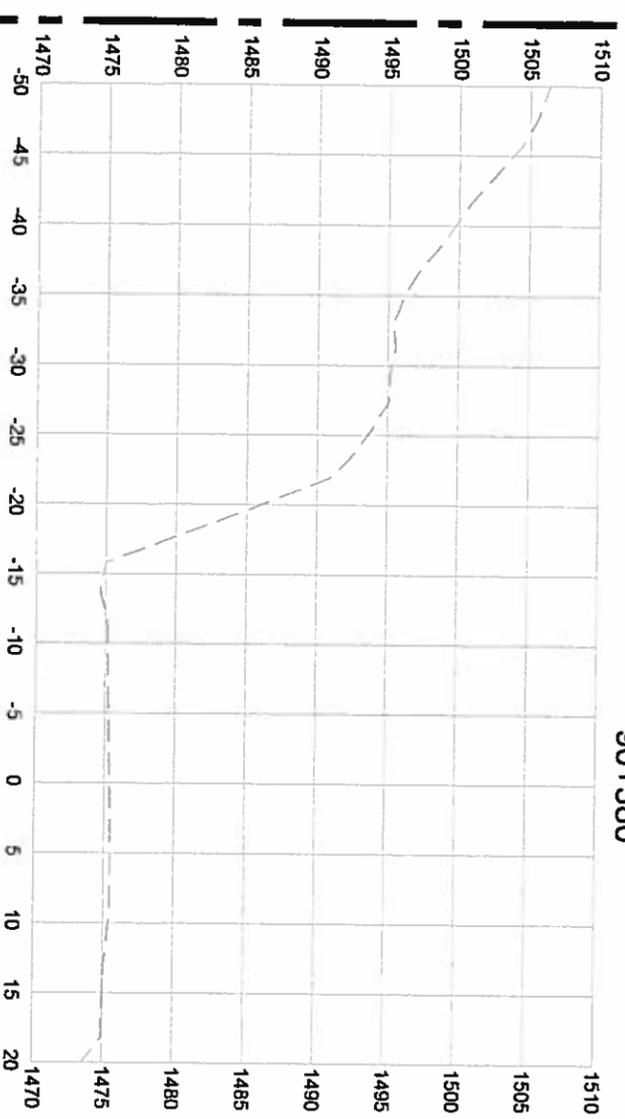
SPIRAL TUNNELS HILL ROCK SLOPE  
 CROSS SECTIONS  
 STA. 90+280 TO 90+340

Project No./No. du projet	Sheet/Feuille	Revision no./ Le Révision no.
201541-4061		0

## FUTURE WORK (NOT IN BILL OF QUANTITIES)



**FUTURE WORK**  
(NOT IN BILL OF QUANTITIES)



Partners Canada  
Agency

L'Agence Parcs  
Canada



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



0	160206	ISSUED FOR TENDER	AF	TT	AF
DATE	DATE	DESCRIPTION/DESCRIPTION	REV	BY	CHK

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/checked by  
A. FRAPPELL / E. YANG

Drawn by/checked by  
T. TAKEDA

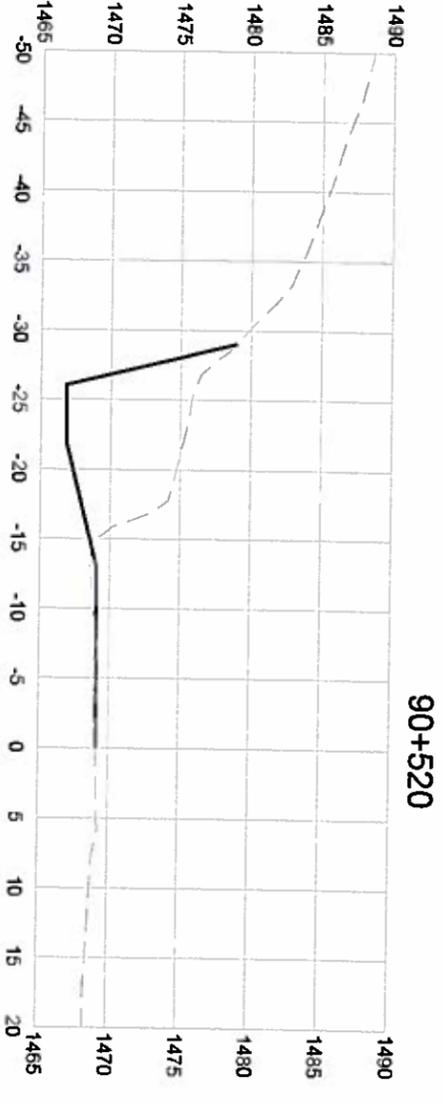
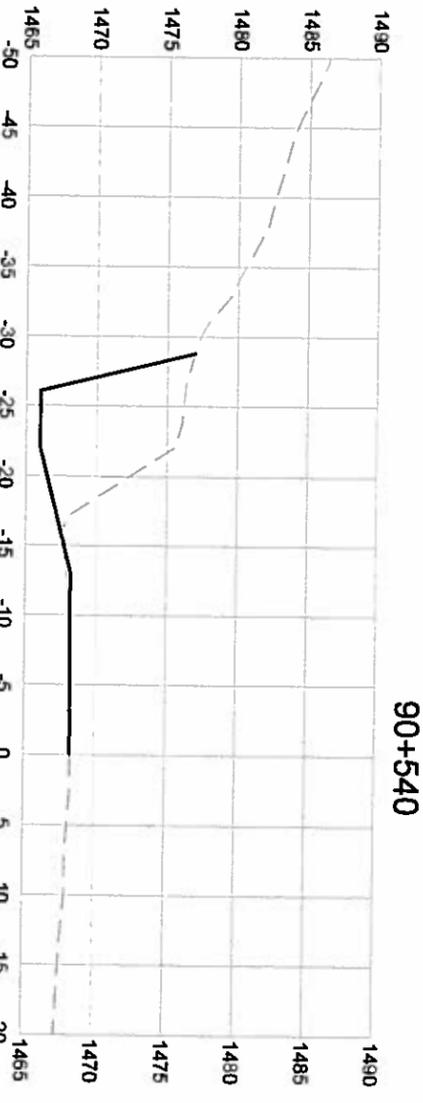
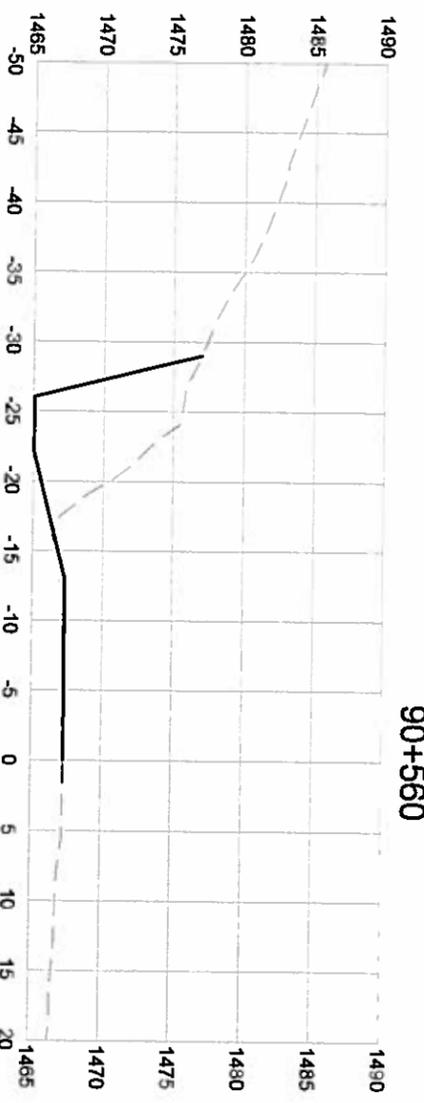
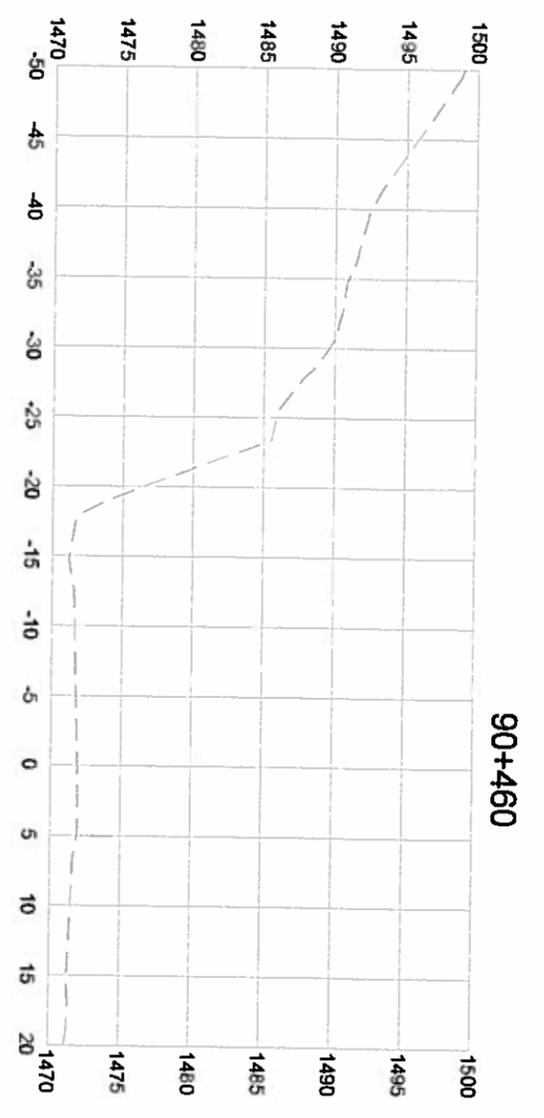
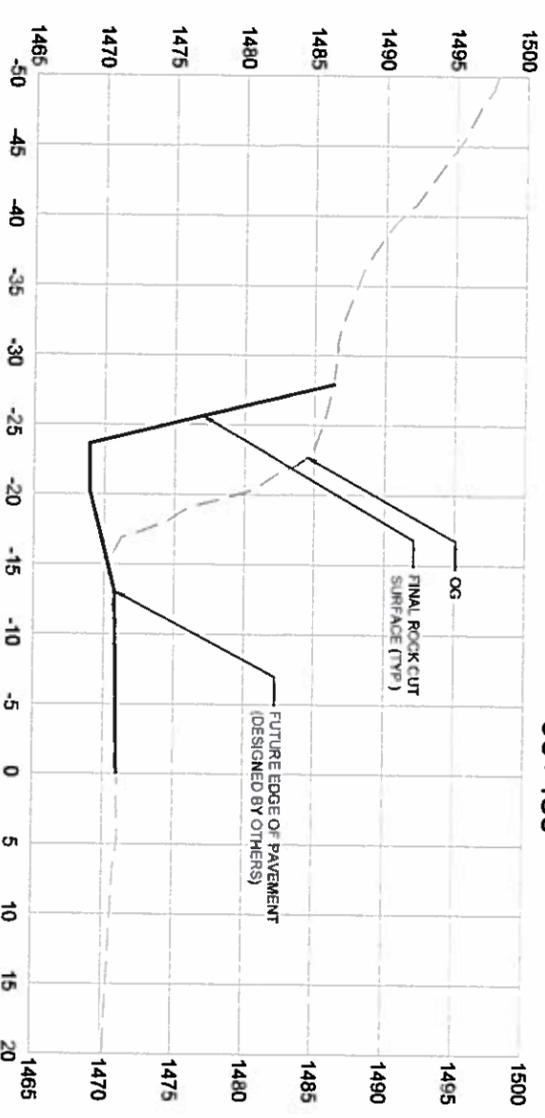
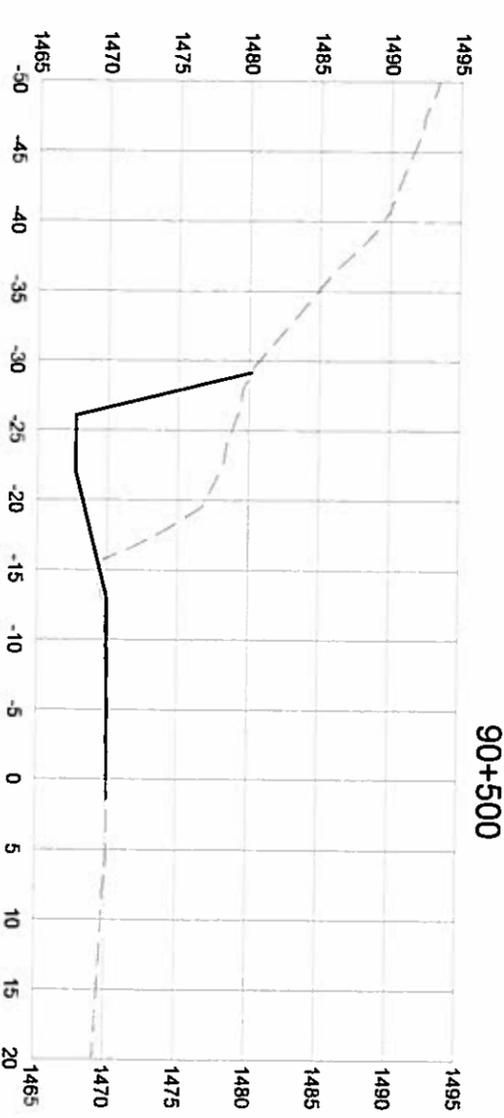


Client/Owner  
PARKS CANADA AGENCY

Preparing work/Drawn by  
SPIRAL TUNNELS HILL ROCK SLOPE  
CROSS SECTIONS  
STA. 90+360 TO 90+440

Project No./No. on print	Sheet/Total	Station No./to Revision No.
201541-4062	0	





Client/Client  
 Parks Canada / Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



NO.	REV./Date	Description/Description	AF	TT	AF
0	160209	ISSUED FOR TENDER			
PROJECT MANAGER/Le gestionnaire de projet					
DESIGNED BY/Conçu par					
CHECKED BY/Contrôlé par					
PROJECT ENGINEER/Ingénieur de projet					

YHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Conçu par  
 A. FRAPPELL/E YANG  
 Checked by/Contrôlé par  
 T. TAKEEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing title/Titre du dessin  
**SPIRAL TUNNELS HILL ROCK SLOPE  
 CROSS SECTIONS  
 STA. 90+460 TO 90+560**

Project No./No. du projet	Sheet/Feuille	Revision no./La révision no.
201541-4063		0





# ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



NO.	REV.	DATE	BY	CHK	DESCRIPTION
0			AF	TT	ISSUED FOR TENDER

Project title/Titre du projet

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

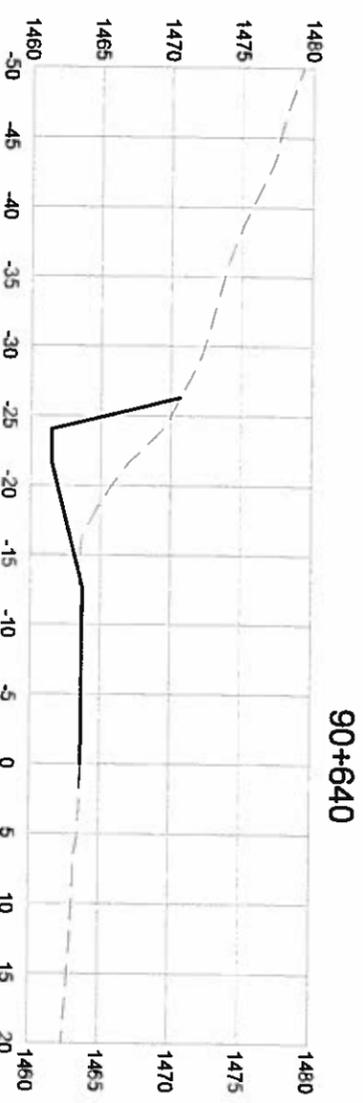
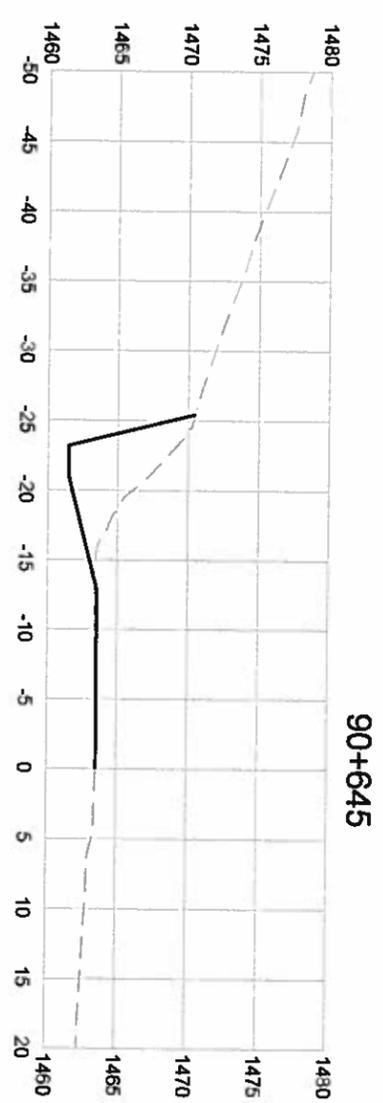
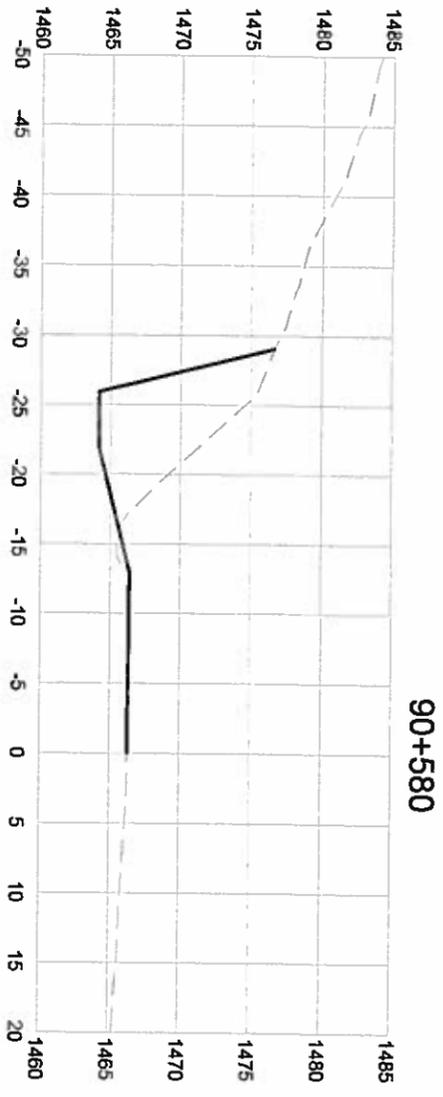
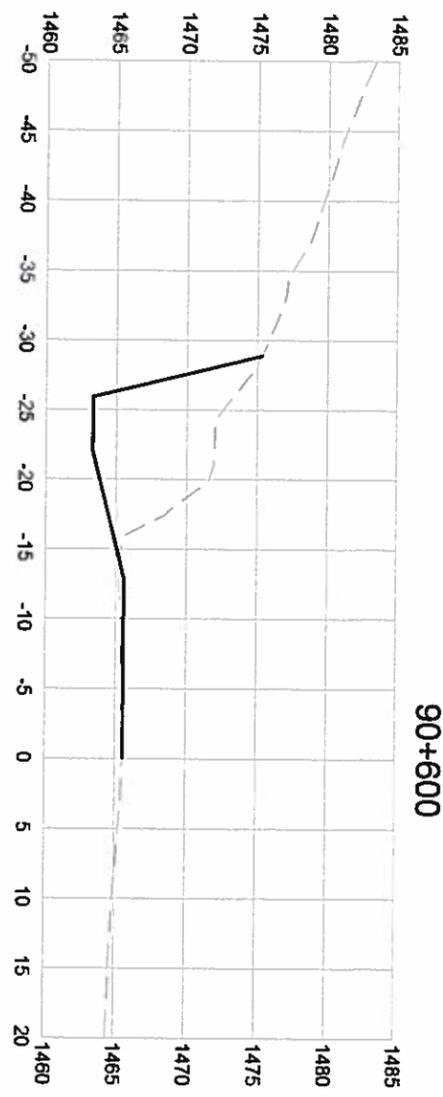
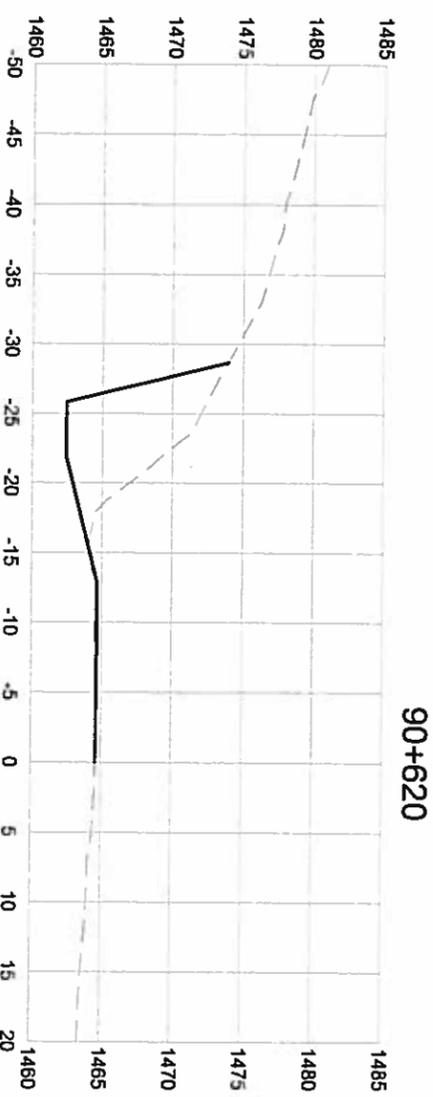
Prepared/Préparé par:  
 A. FRAPPETT / E. YANG  
 Checked/Contrôlé par:  
 T. TAKEDA

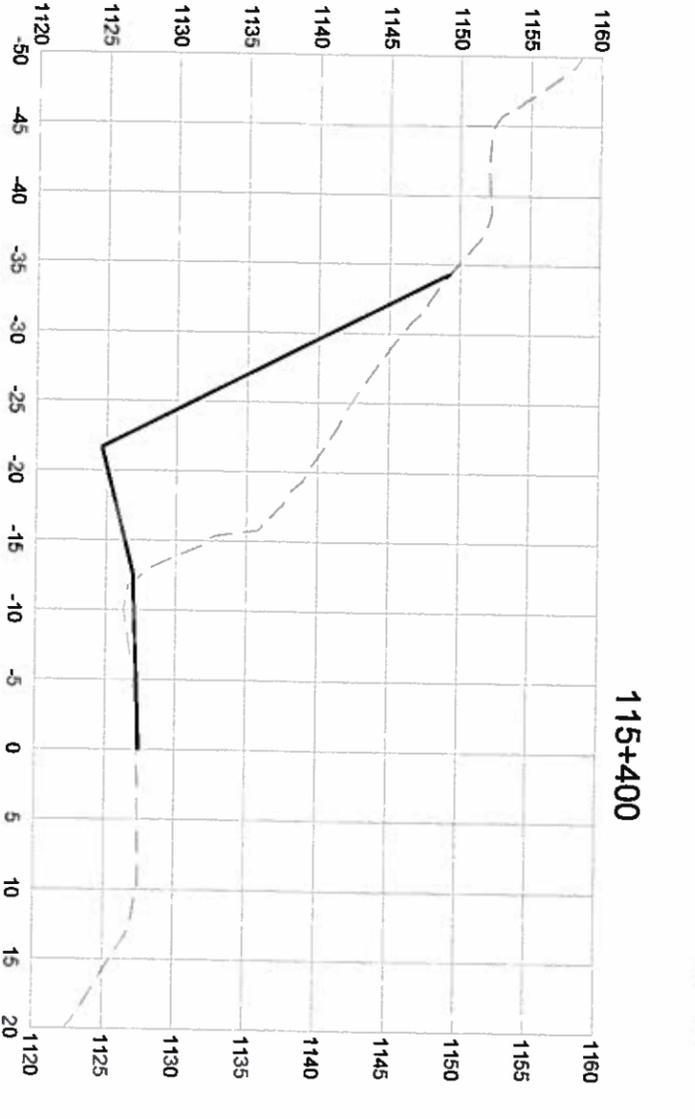
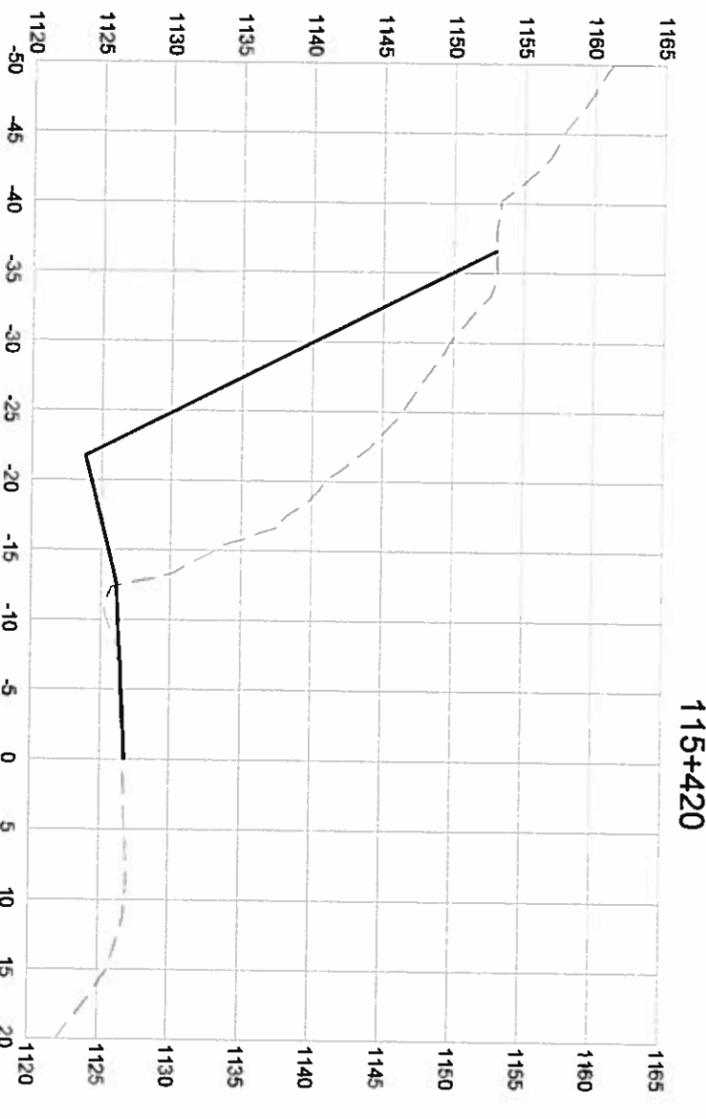
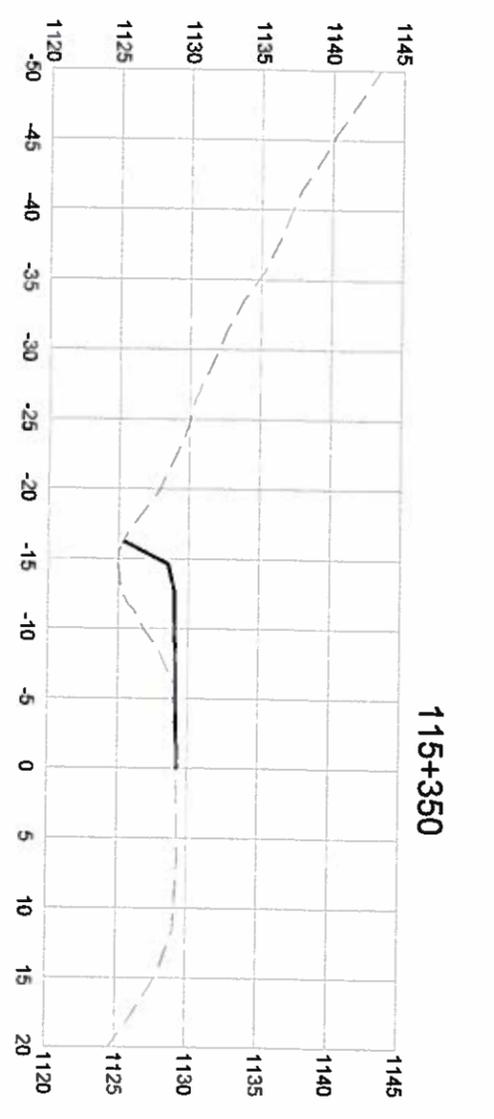
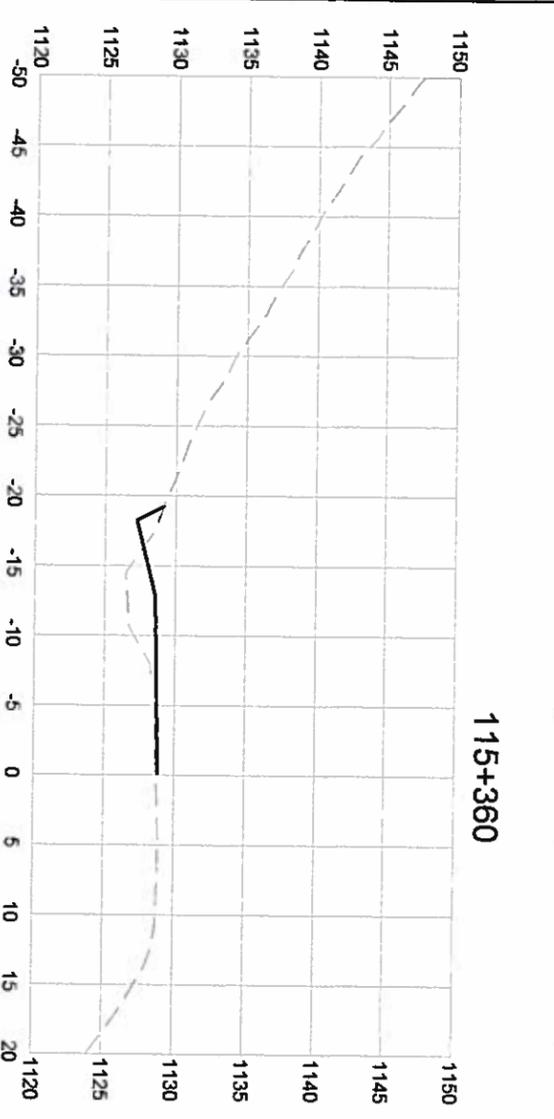
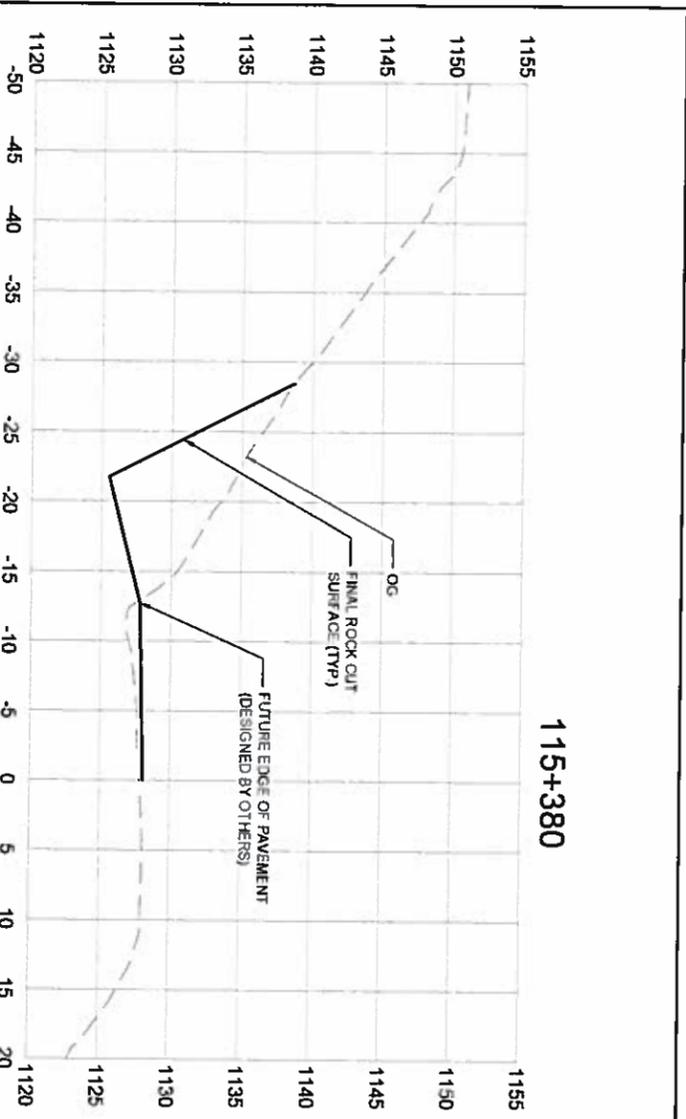


Client/Client  
 PARKS CANADA AGENCY

SPIRAL TUNNELS HILL ROCK SLOPE  
 CROSS SECTIONS  
 STA. 90+580 TO 90+645

Project No./No. du projet	201541-4064	Revision No./ 10 Revision No.	0
---------------------------	-------------	----------------------------------	---





Partners Canada  
Agency  
L'Agence Parcs  
Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA No



NO.	DESCRIPTION	DATE	BY	CHK	APP
0	ISSUED FOR TENDER		AP	TT	AP

YOHO NATIONAL PARK  
BRITISH COLUMBIA  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

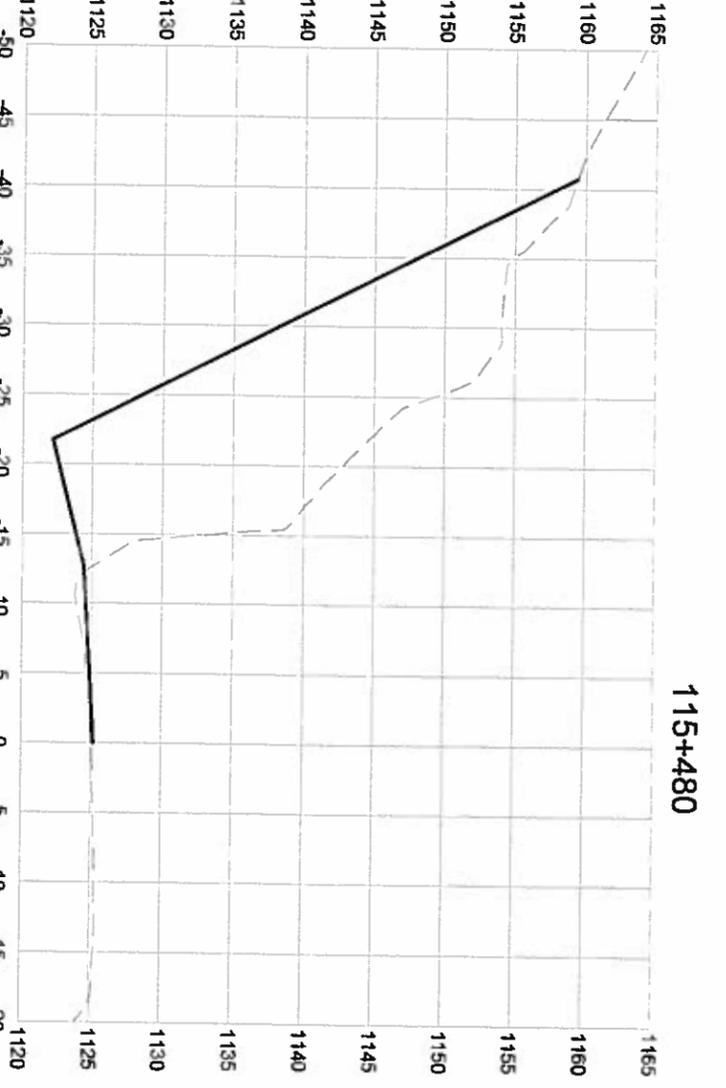
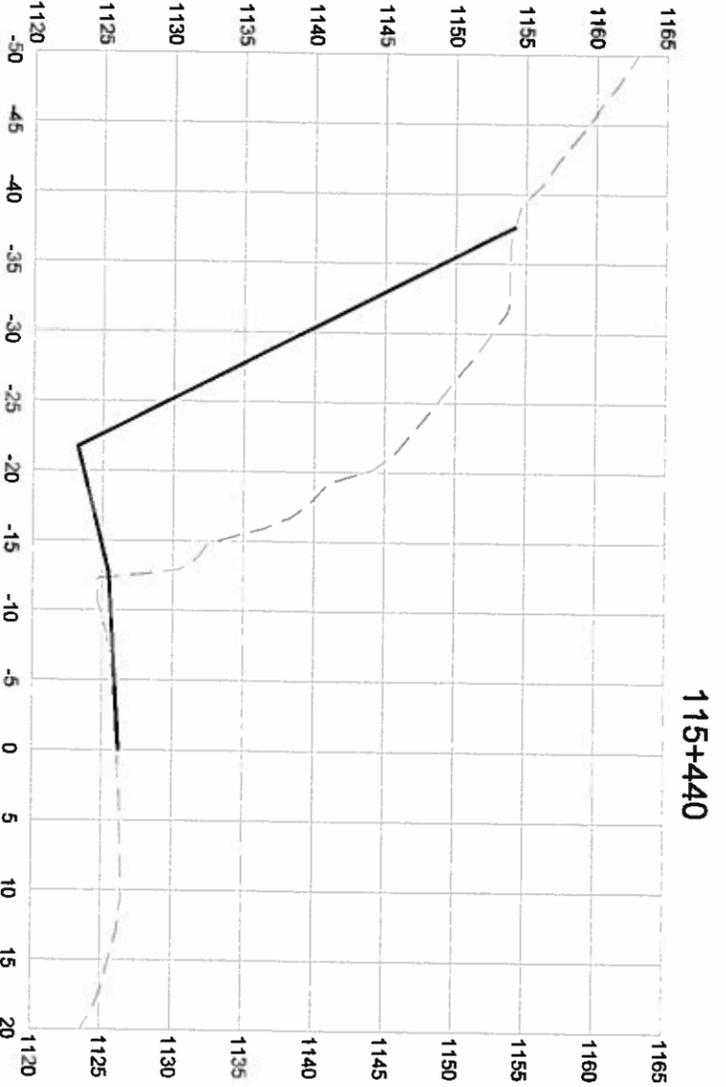
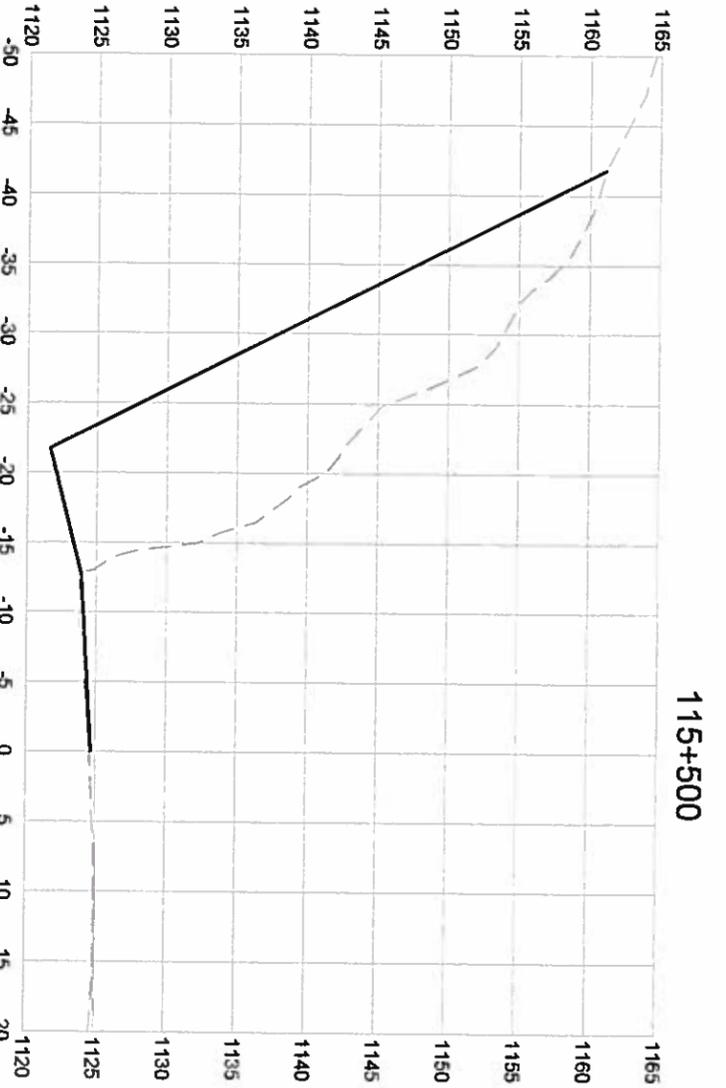
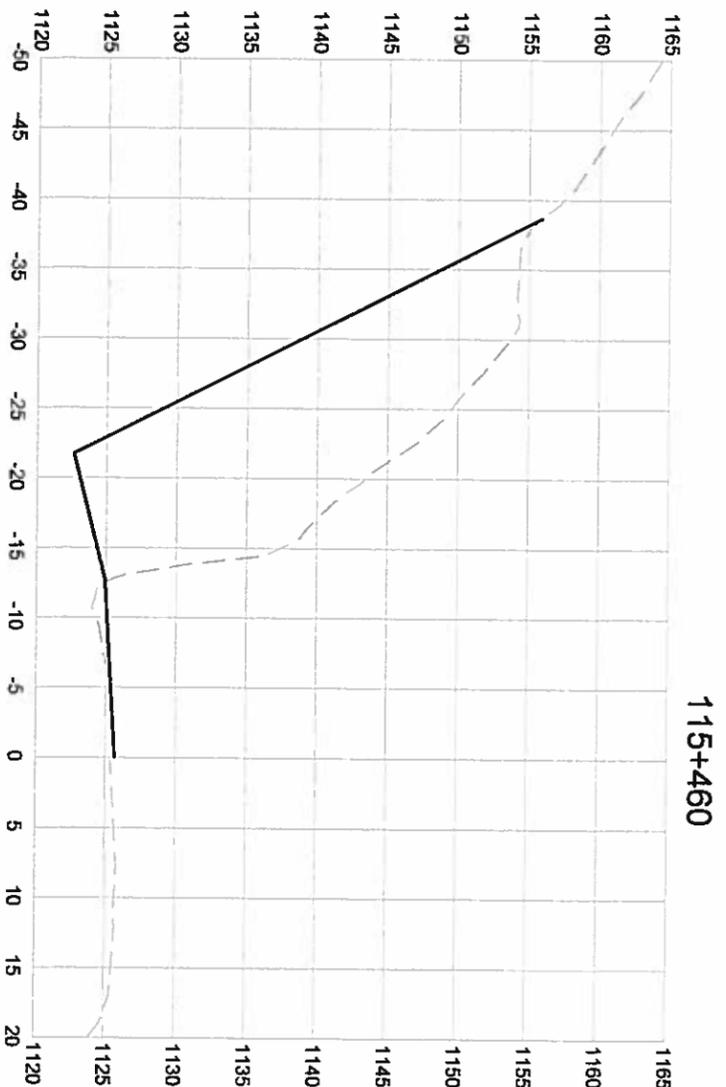
Designed by/Checked by  
A. FRAPPPELL / E. YANG  
Drawn by/Checked by  
T. TAKEDA



Client/Owner  
PARKS CANADA AGENCY  
Drawing No./Title  
BIG TOPPLE ROCK SLOPE  
CROSS SECTIONS  
STA. 115+350 TO 115+420

Project No./Doc. No. Project  
201541-4090  
Sheet/Revision  
0





**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



NO.	REV.	DATE	DESCRIPTION	BY	CHK
0	180208		ISSUED FOR TENDER	AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT
				AF	TT

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

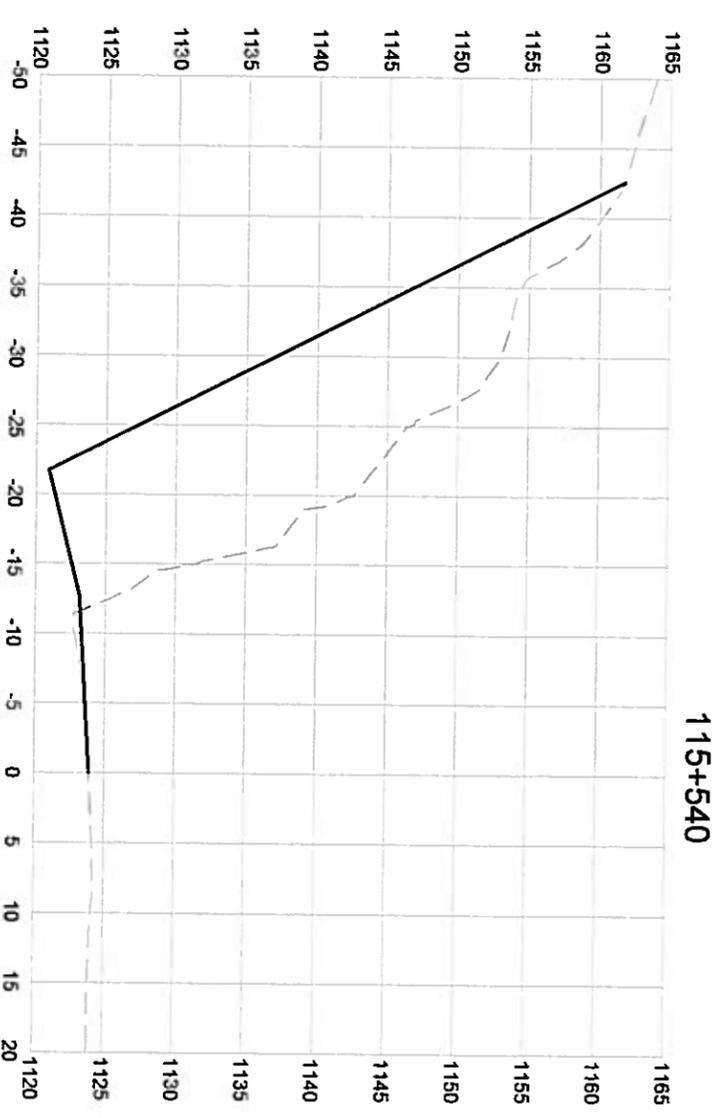
Designed by/Conçu par:  
 A. FRAPPELL / E YANG  
 Checked by/Contrôlé par:  
 T. TAKEDA



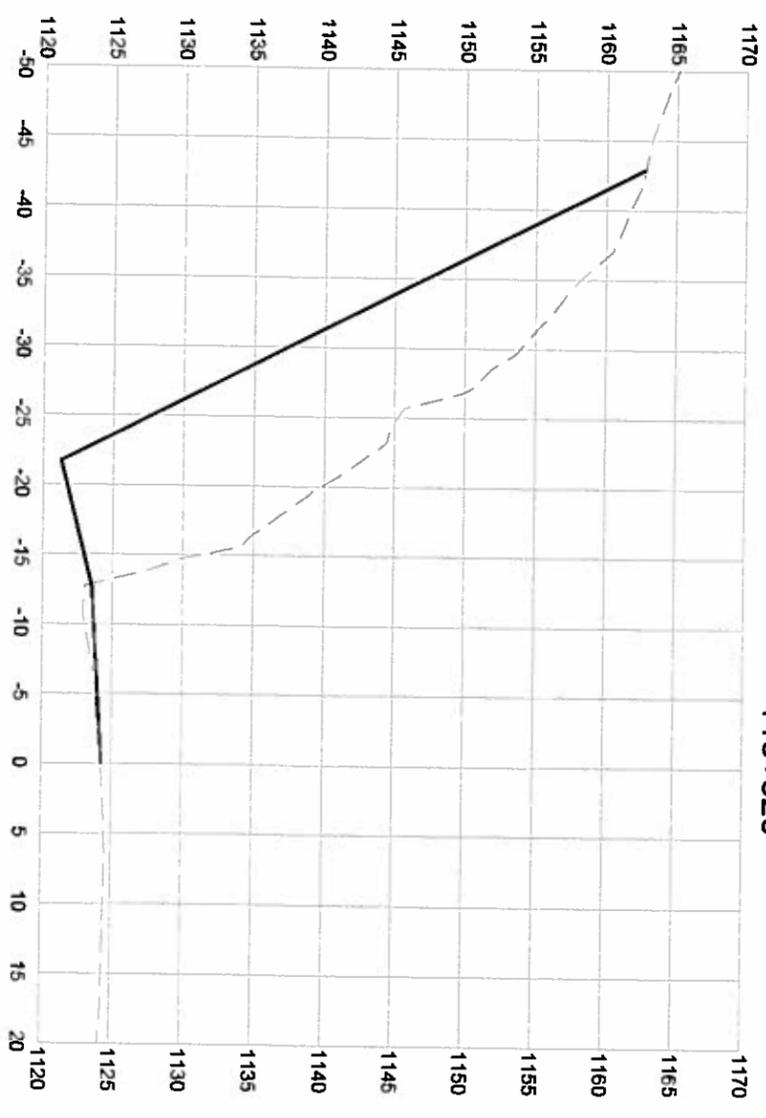
Client/Client: PARKS CANADA AGENCY  
 Drawing title/Titre de la notice: BIG TOPPLE ROCK SLOPE CROSS SECTIONS  
 STA. 115+440 TO 115+500

Project No./No. du projet	201541-4091	Revision No./No de révision	0
---------------------------	-------------	-----------------------------	---

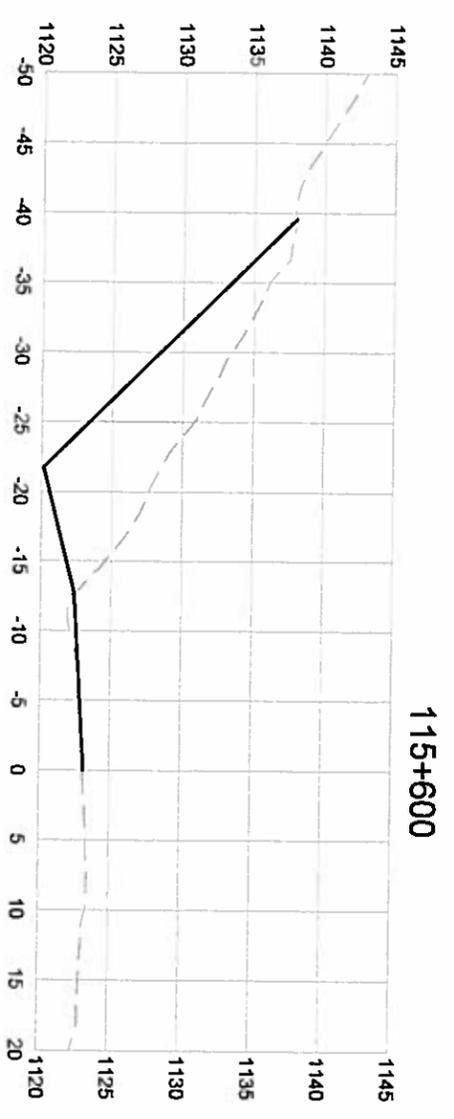




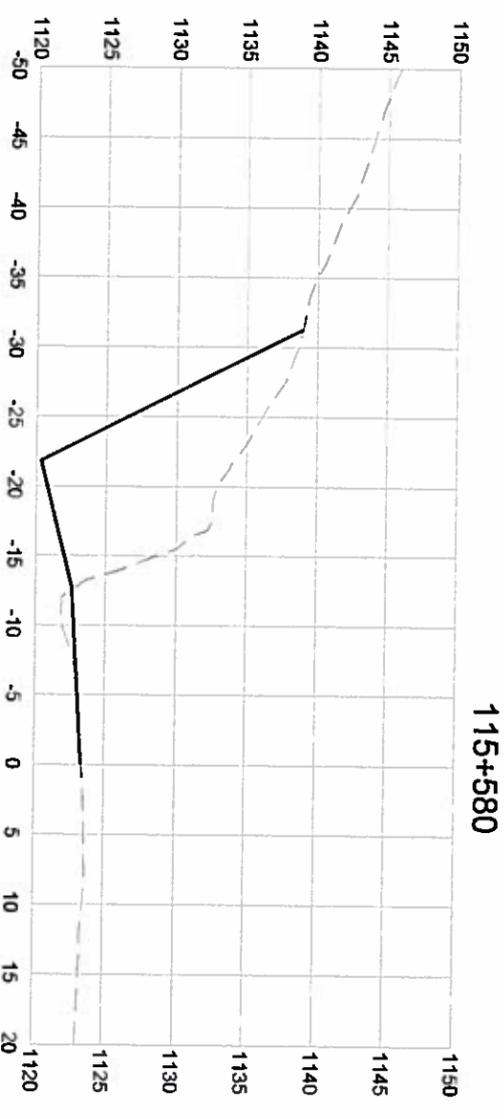
115+540



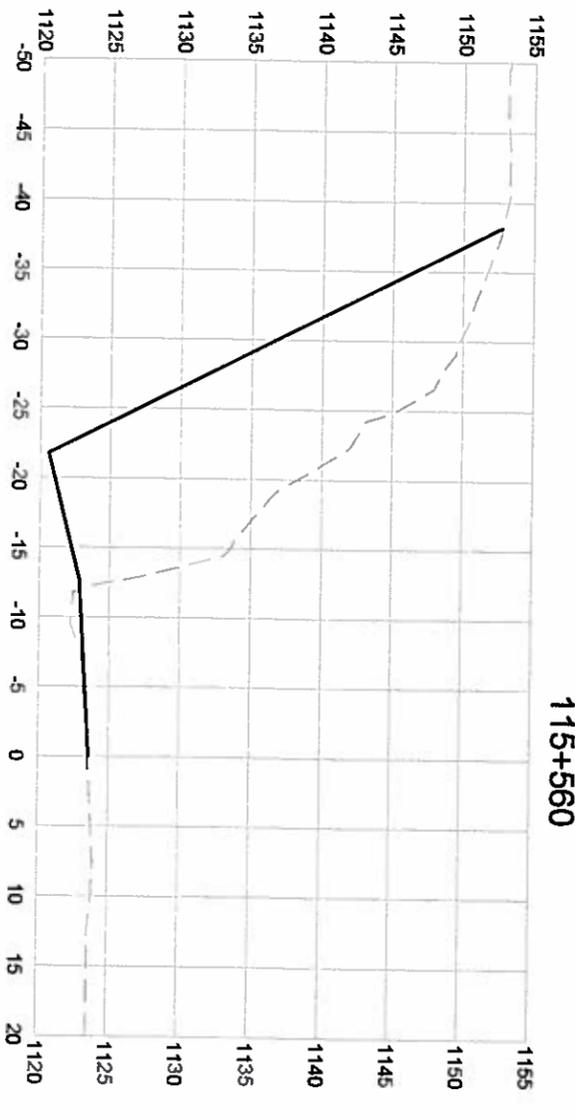
115+520



115+600



115+580



115+560

Client/Owner  
**Parks Canada** Agency  
 L'Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. **TETRA TECH EBA No.**



NO.	DATE	DESCRIPTION	BY	CHK
0	18/02/16	ISSUED FOR TENDER	AF	TT
			AF	AF
			DES	OWN
			CHK	CHK

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

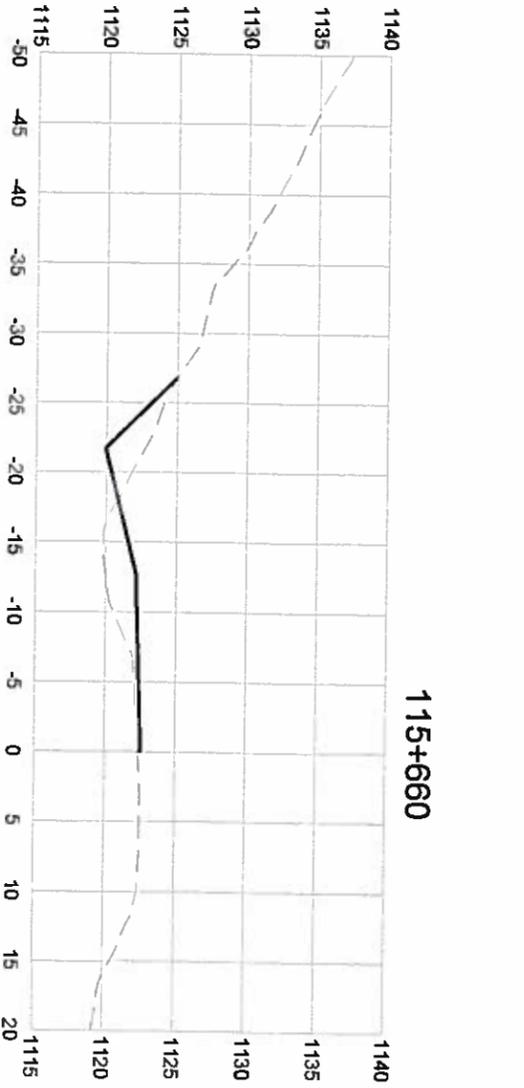
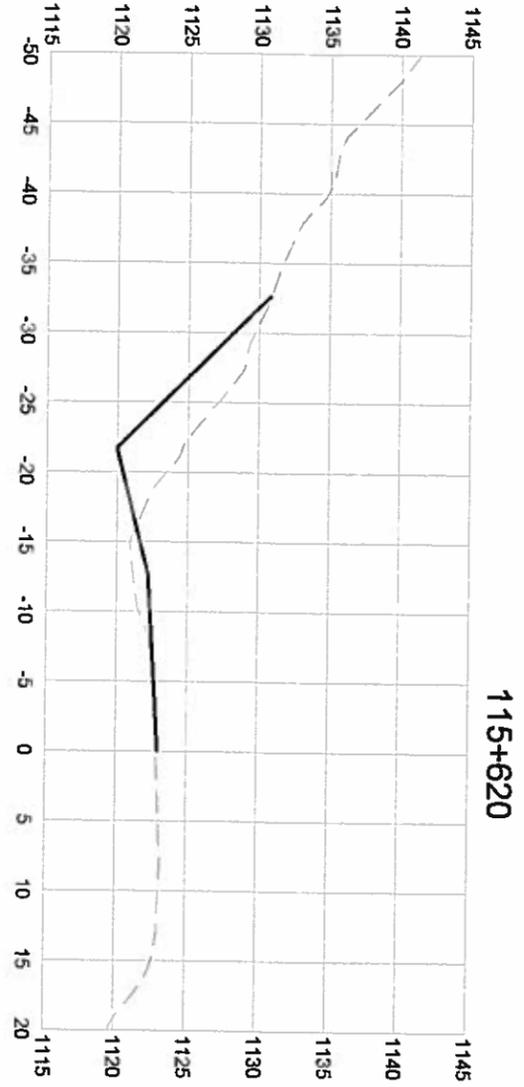
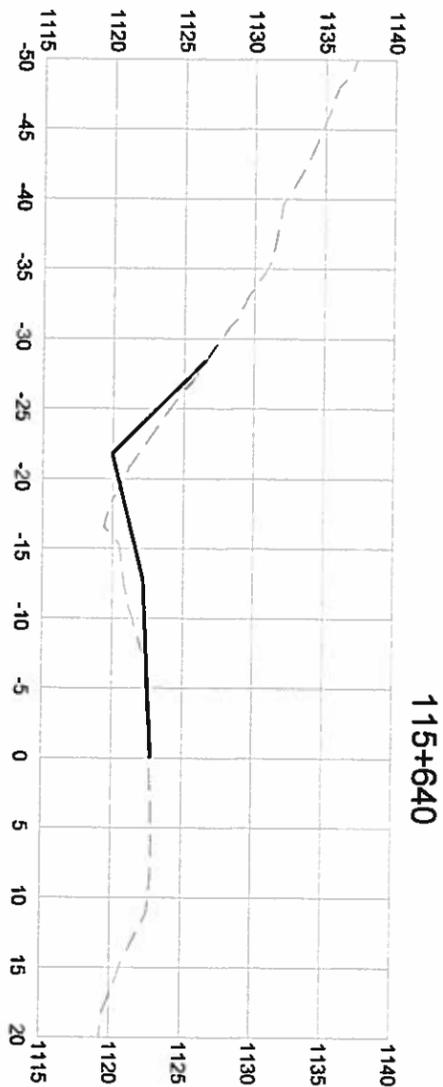
Designed by/Checked by:  
**A. FRAPPELL / E. YANG**  
 Drawn by/Checked by:  
**T. TAKEDA**



Client/Owner  
**PARKS CANADA AGENCY**  
 Drawing Title/Title du dossier  
**BIG TOPPLE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 115+520 TO 115+600**

Project No./No. du projet	Sheet/Feuille	Revision no./ No. de révision
201541-4092		0





# ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



Item No.	Description	Unit	Quantity	Price	Total
0	ISSUED FOR TENDER	AS	TT	AE	
160208	ISSUED FOR TENDER	AS	TT	AE	
		AS	TT	AE	
		AS	TT	AE	
		AS	TT	AE	
		AS	TT	AE	
		AS	TT	AE	
		AS	TT	AE	
		AS	TT	AE	
		AS	TT	AE	

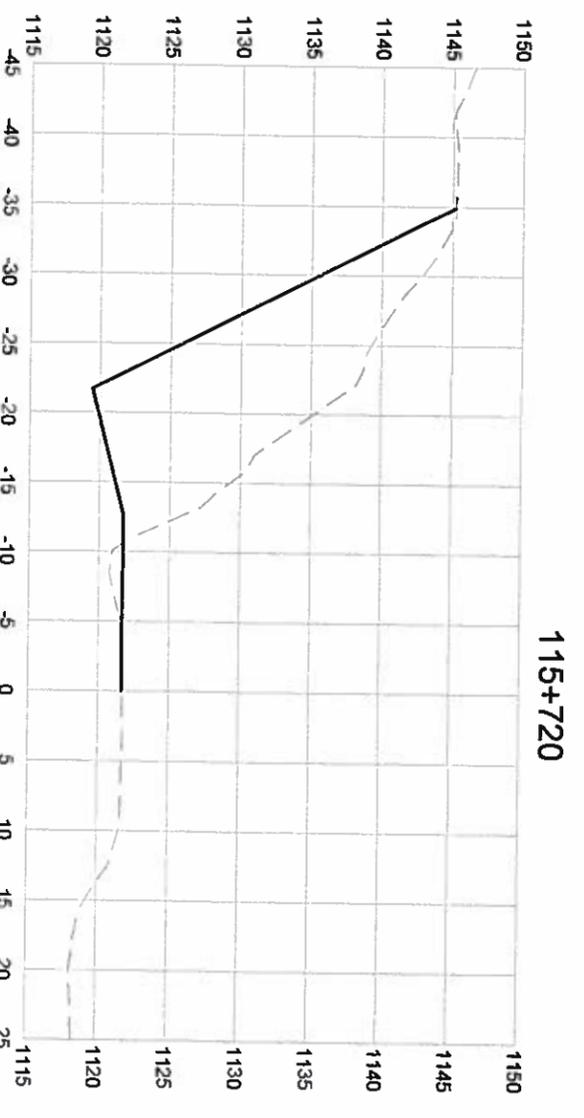
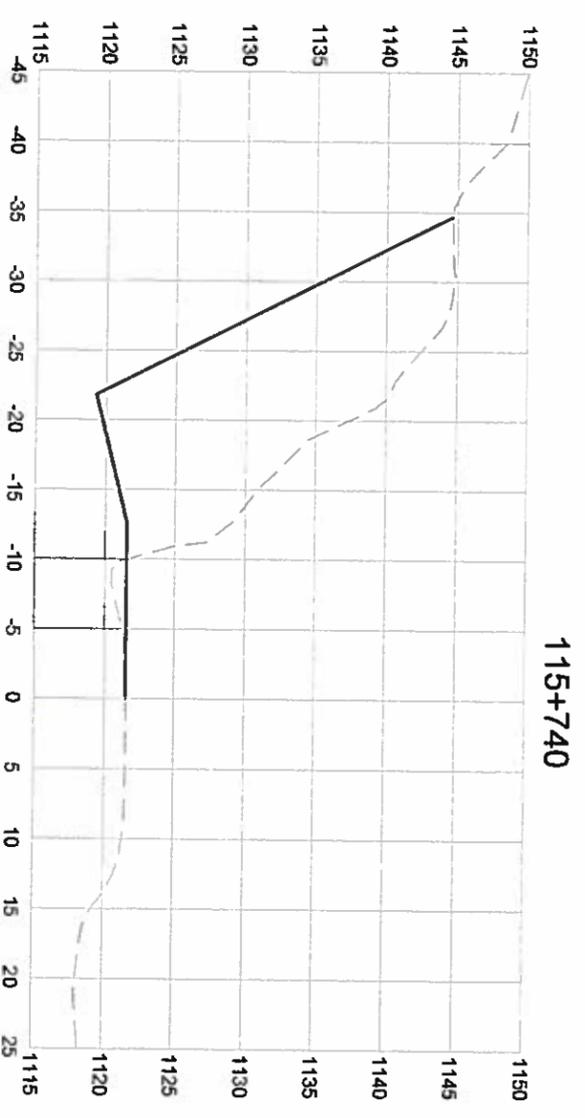
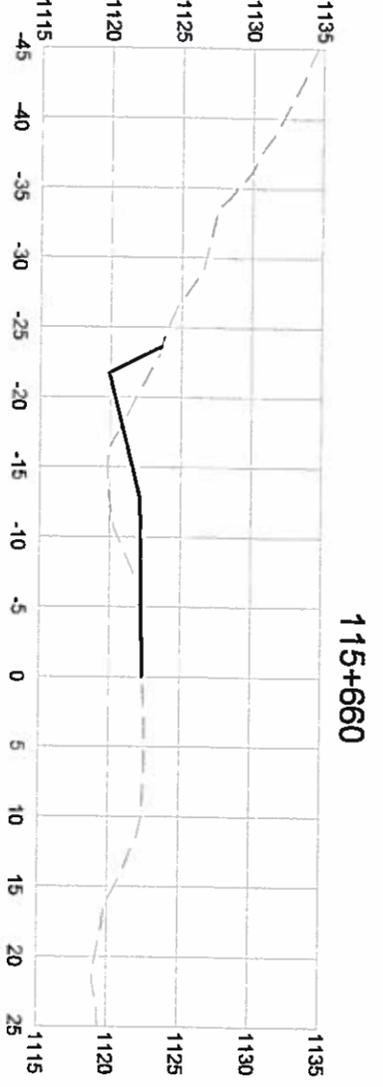
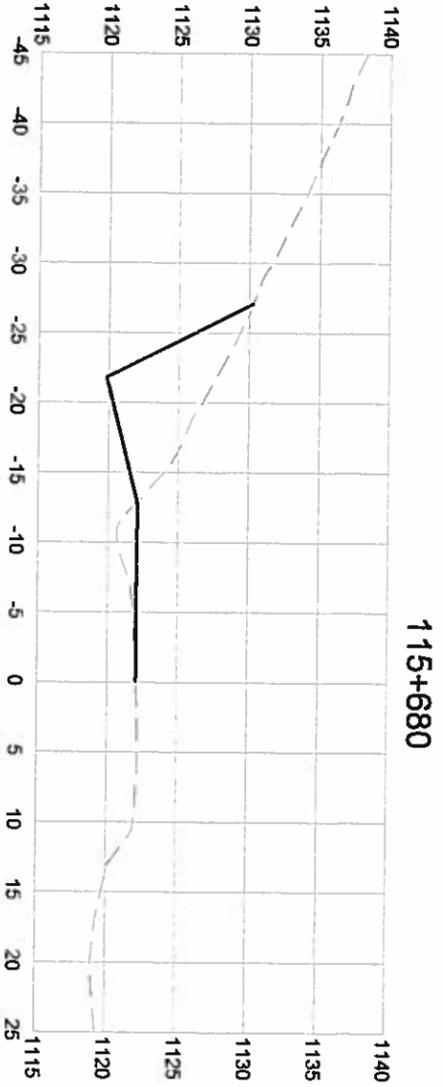
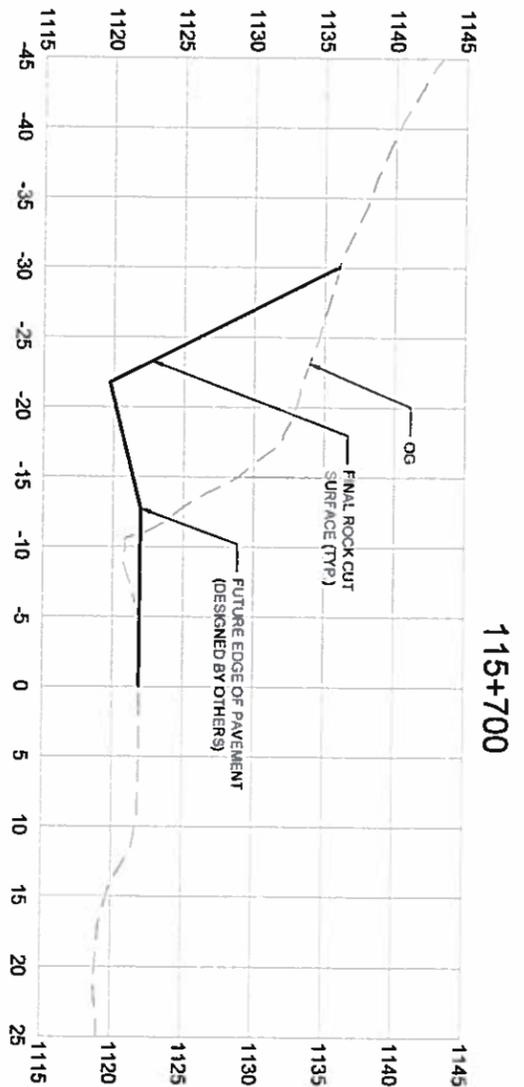
YOHU NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Prepared by/checked by:  
 A. FRAPPELL / E. YANG  
 Date: 02/08/2016  
 T. TAKEEDA



Client/Owner:  
 PARKS CANADA AGENCY  
 Drawing Title/Type of work:  
**BIG TOPPLE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 115+620 TO 115+660**





# ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



Issue No.	Issue Date	Issue Description	AF	TT	AE
0	18/02/09	ISSUED FOR TENDER	AF	TT	AE

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concepted par  
 A. FRAPPELL / E. YANG

Drawn by/Échelle par  
 T. TAKEDA



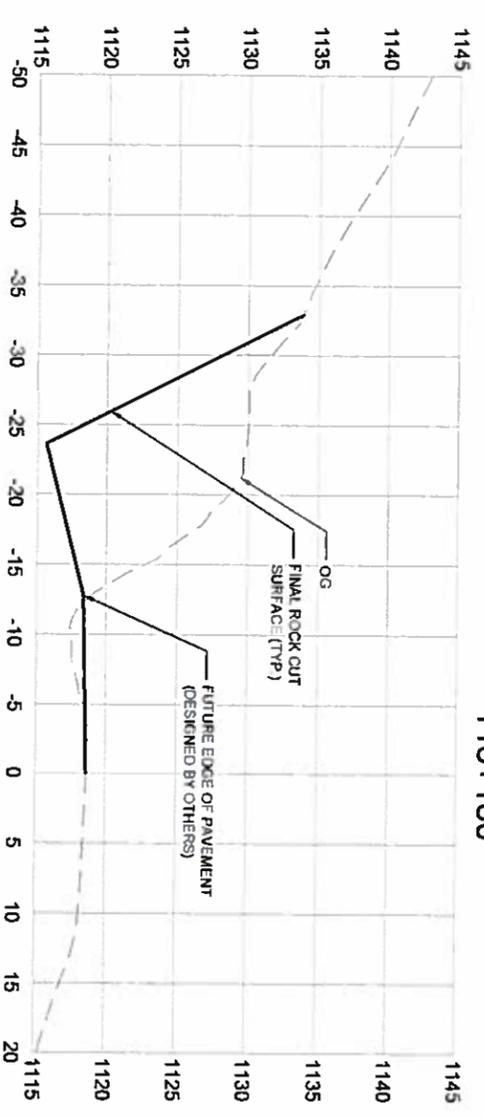
Client/Client  
 PARKS CANADA AGENCY

Drawing title/Titre du dessin  
 LITTLE TOPPLE ROCK SLOPE  
 CROSS SECTIONS  
 STA. 115+660 TO 115+740

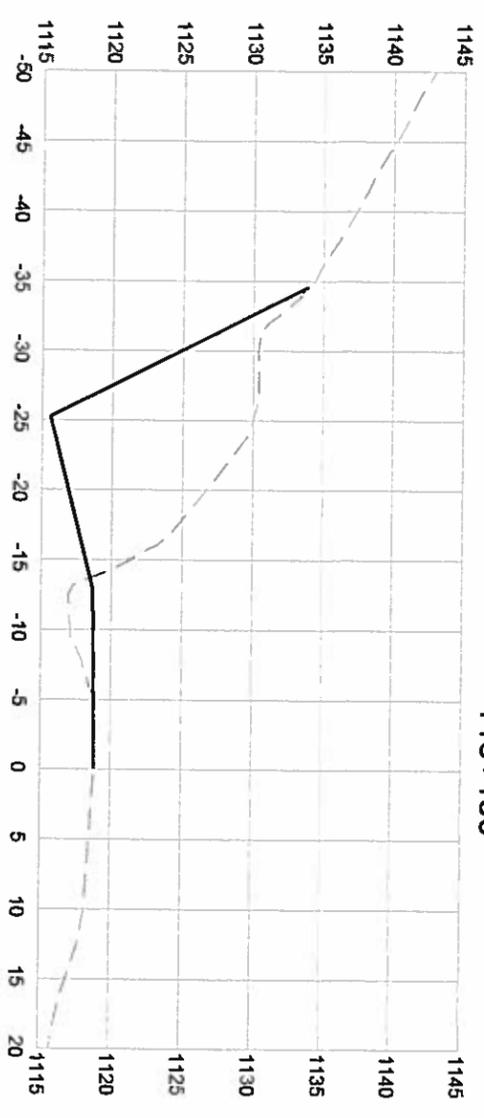
Project No./No. du projet	201541-4100	Revision No./ L'Édition No.	0
---------------------------	-------------	--------------------------------	---



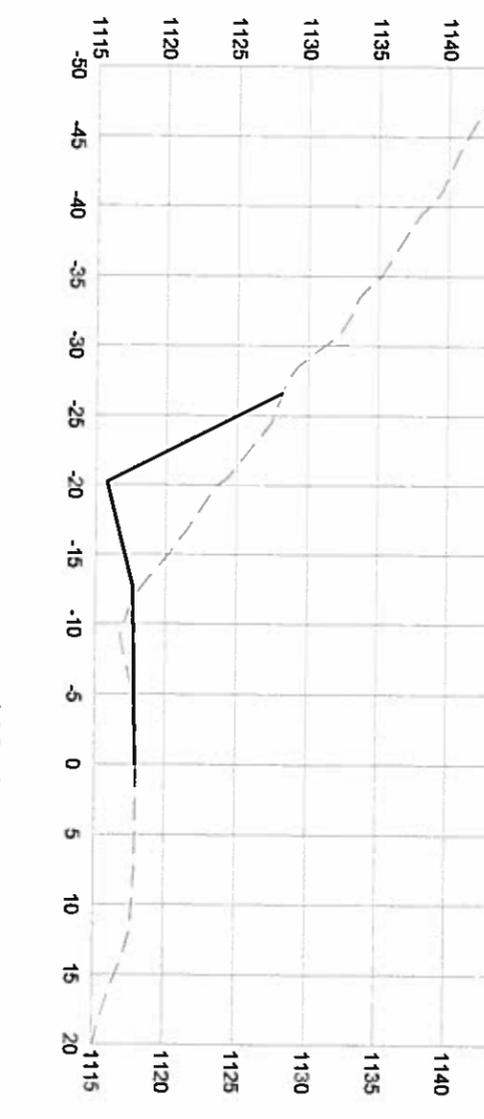




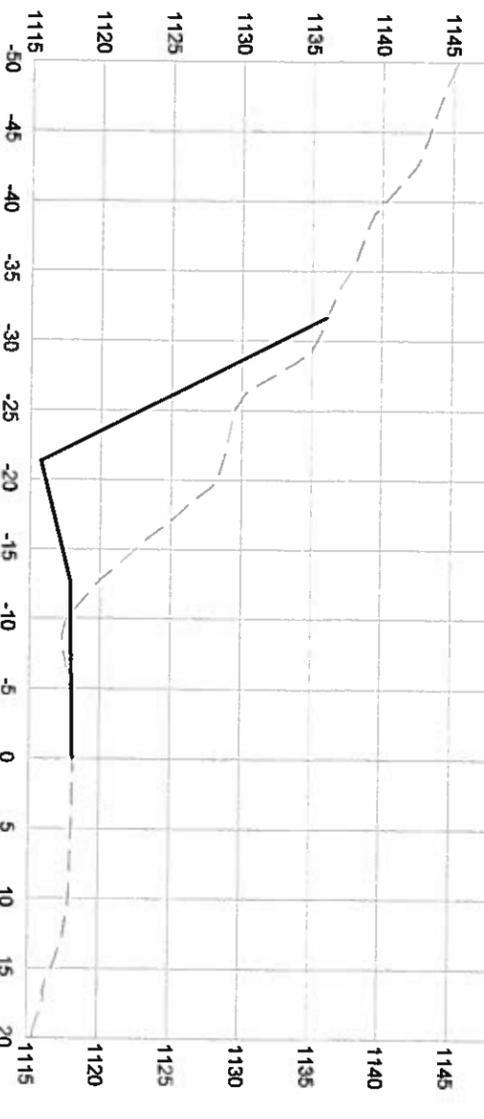
116+180



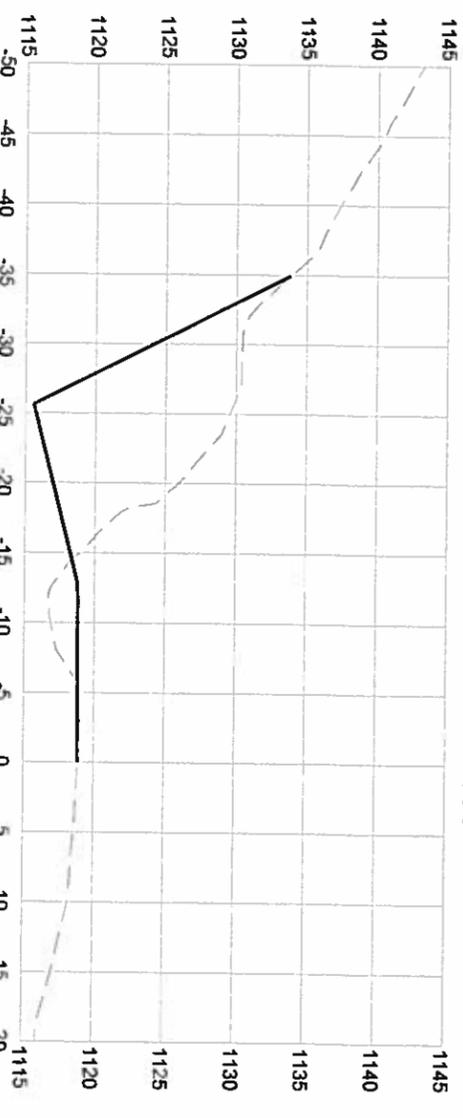
116+160



116+240



116+220



116+155



116+200

Perks Canada  
Agency  
L'Agence Parcs  
Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



REV	DATE	BY	CHK	DESCRIPTION	
0	16/02/09	ISSUED FOR TENDER	AP	TT	AP

YOHO NATIONAL PARK  
BRITISH COLUMBIA  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

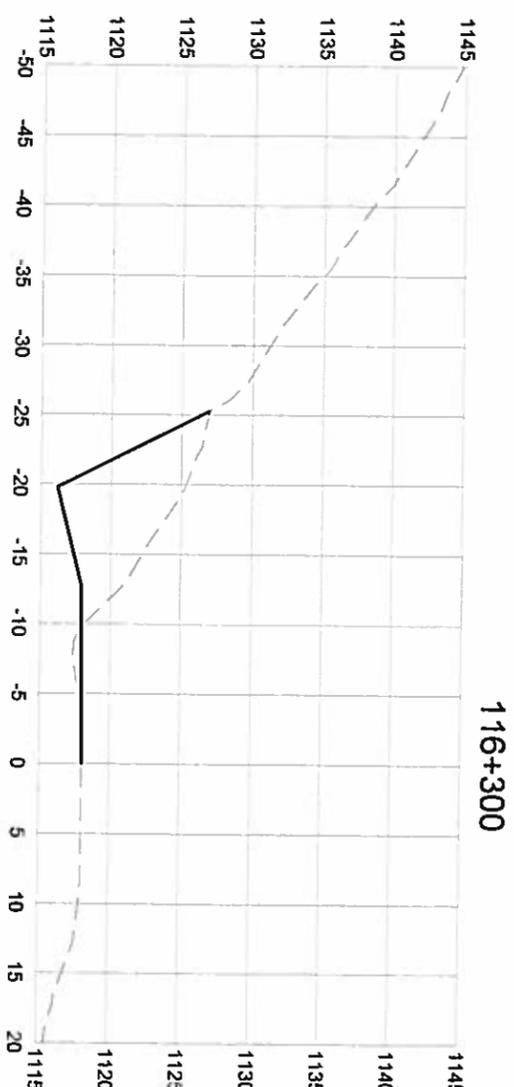
Designed/Drawn/Checked by:  
A. FRAPPELL / E. YANG  
T. TAKEEDA



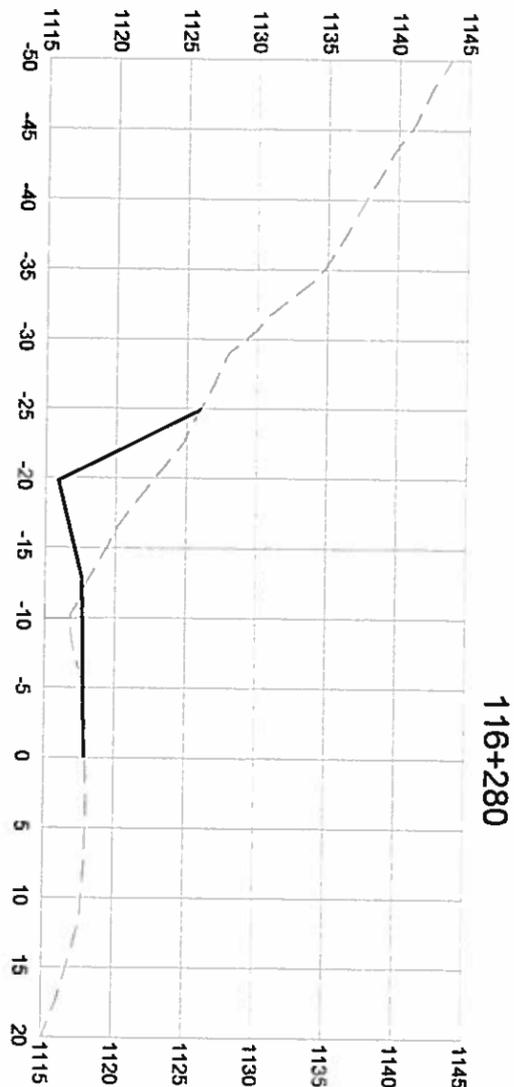
PARKS CANADA AGENCY  
MOUNT VAUX ROCK SLOPE  
CROSS SECTIONS  
STA. 116+155 TO 116+240

Project No./No. du projet	201541-4110	Station No./No. Station	0
---------------------------	-------------	-------------------------	---

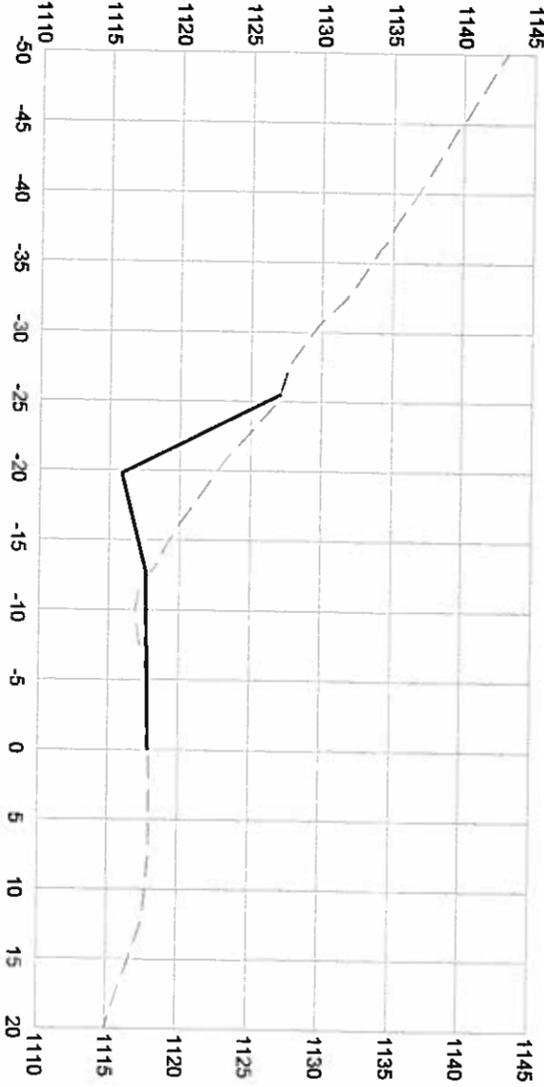




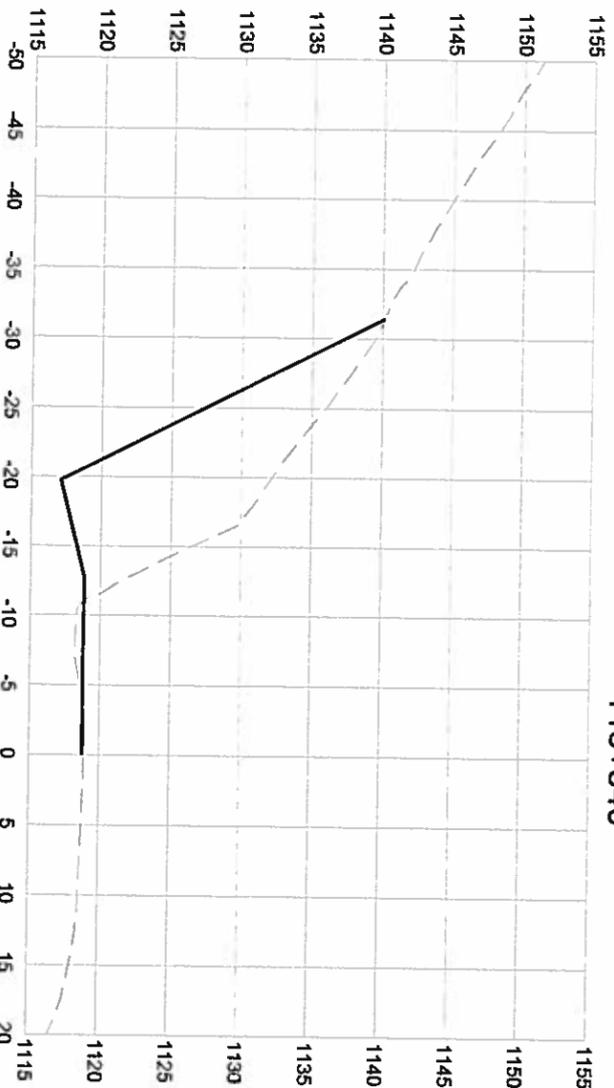
116+300



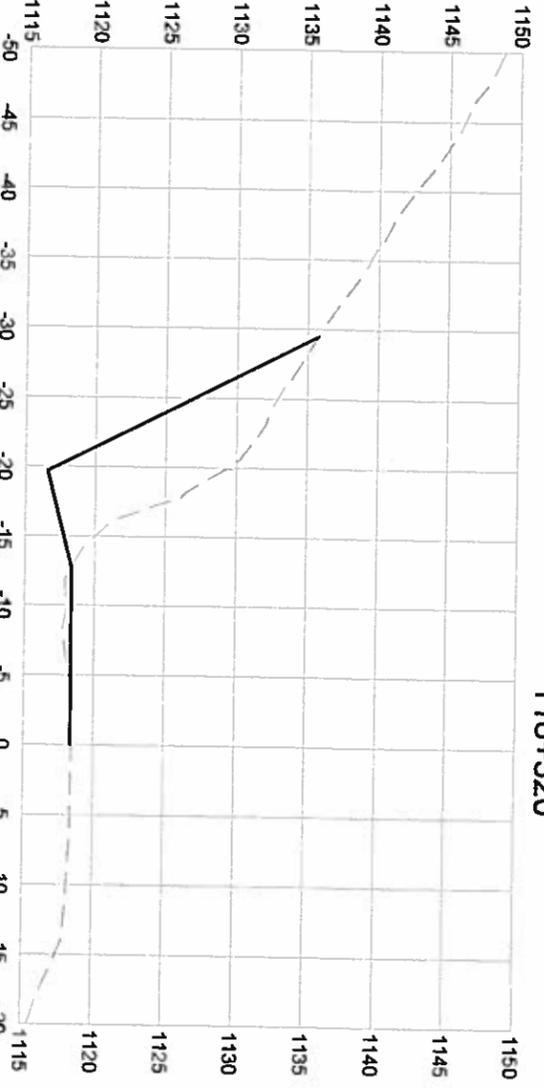
116+280



116+260



116+340



116+320

Client/Owner  
 Parks Canada  
 Agency  
 Agence Parcs Canada



# ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



NO.	DESCRIPTION	DATE	BY	CHK
0	ISSUED FOR TENDER		AE	TT
1	DESIGN/DEVELOPMENT		AE	TT
2	CONSTRUCTION		AE	TT

YOHO NATIONAL PARK  
 BRITISH COLUMBIA  
 KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Concated par  
 A. FRAPPELL / E. YANG  
 Drawn by/ Dessiné par  
 T. TAKEEDA

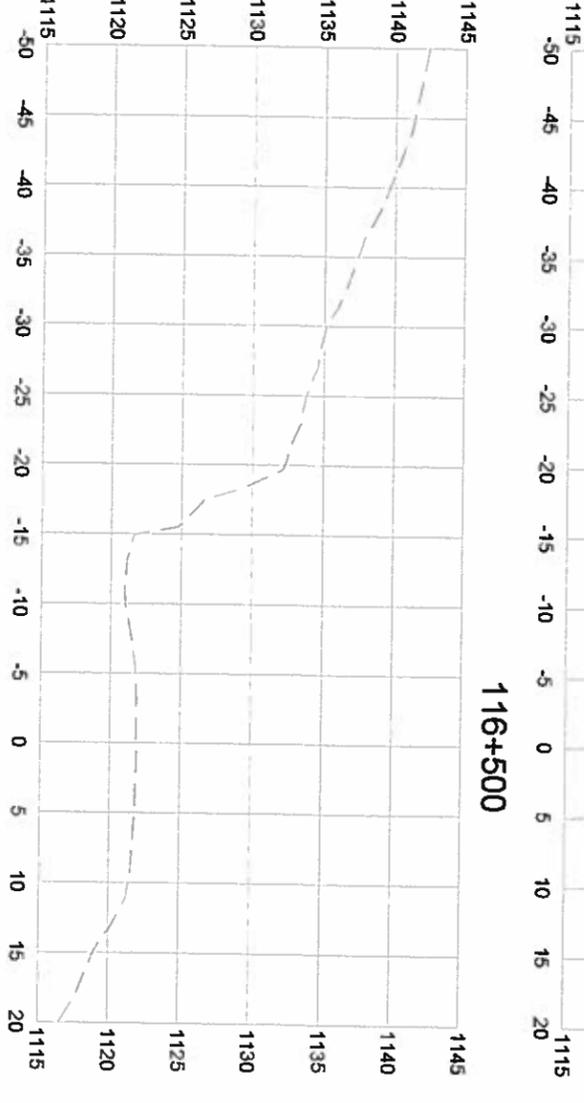
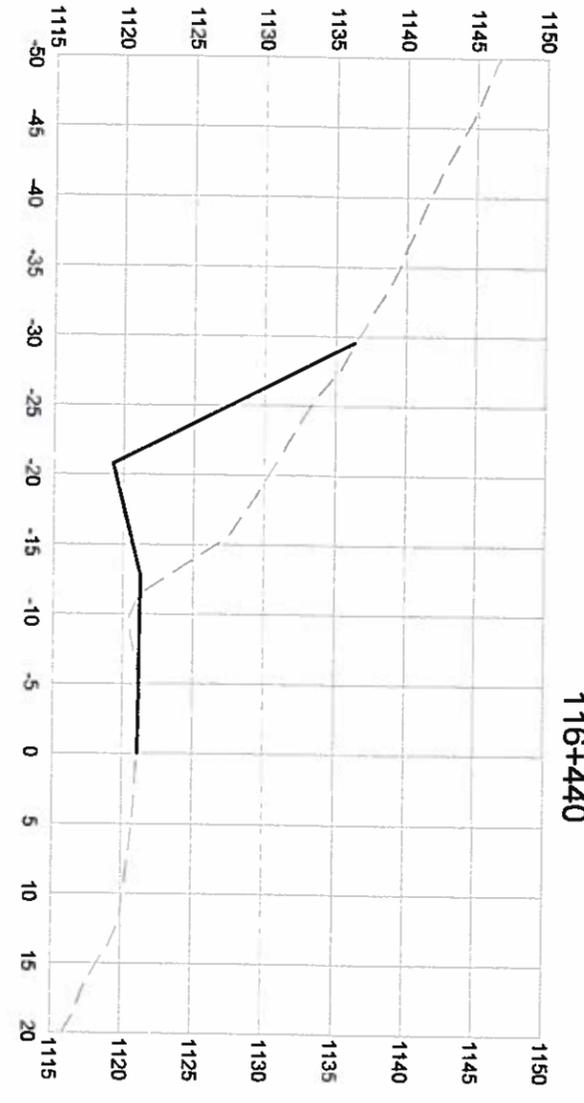
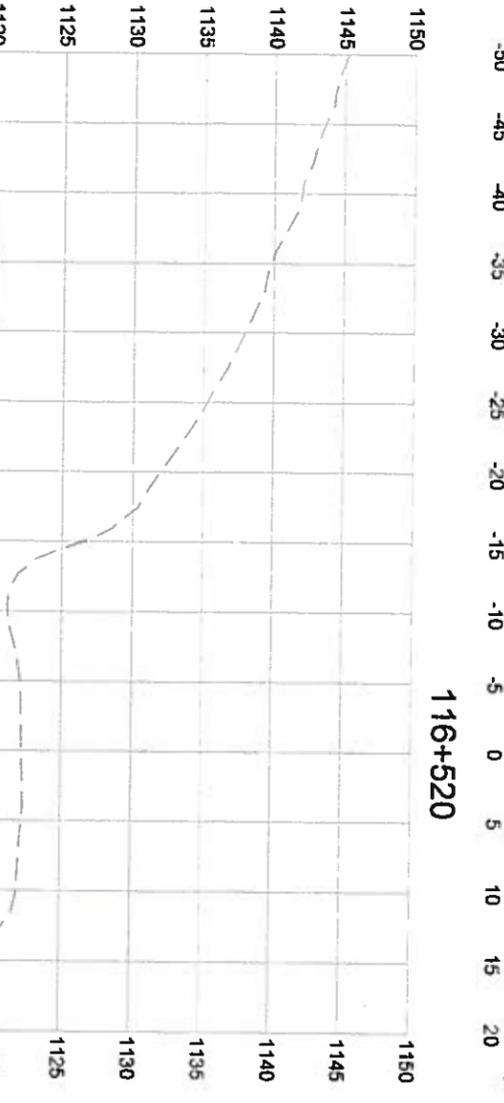
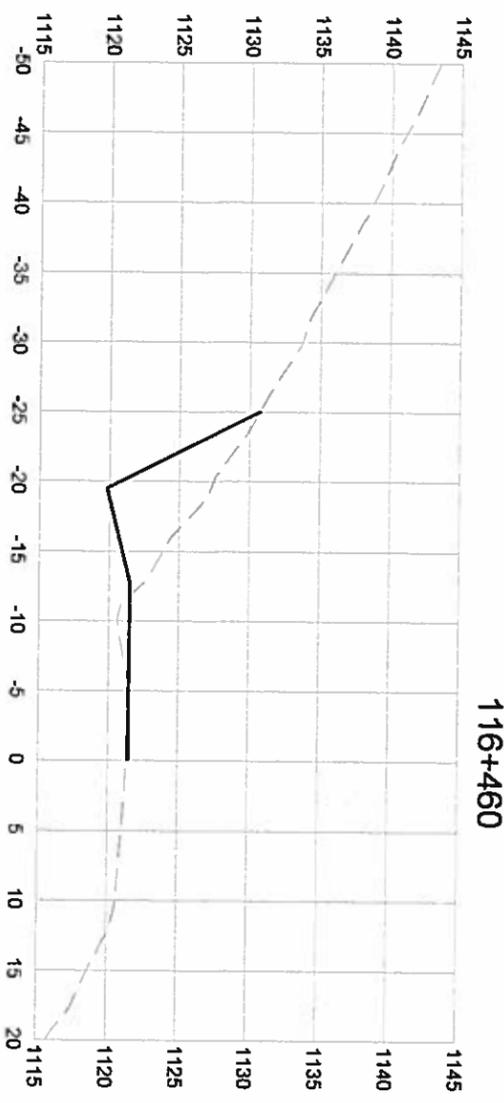
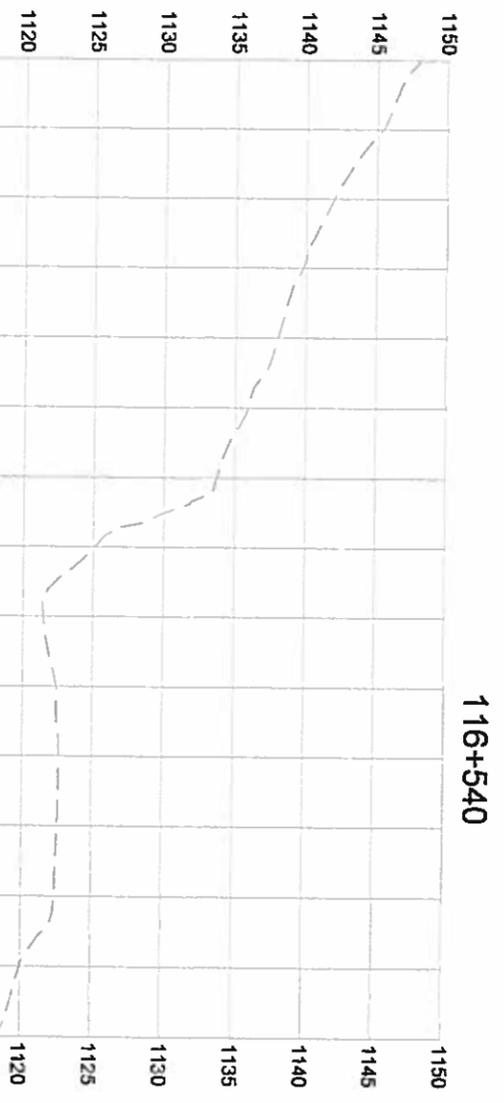
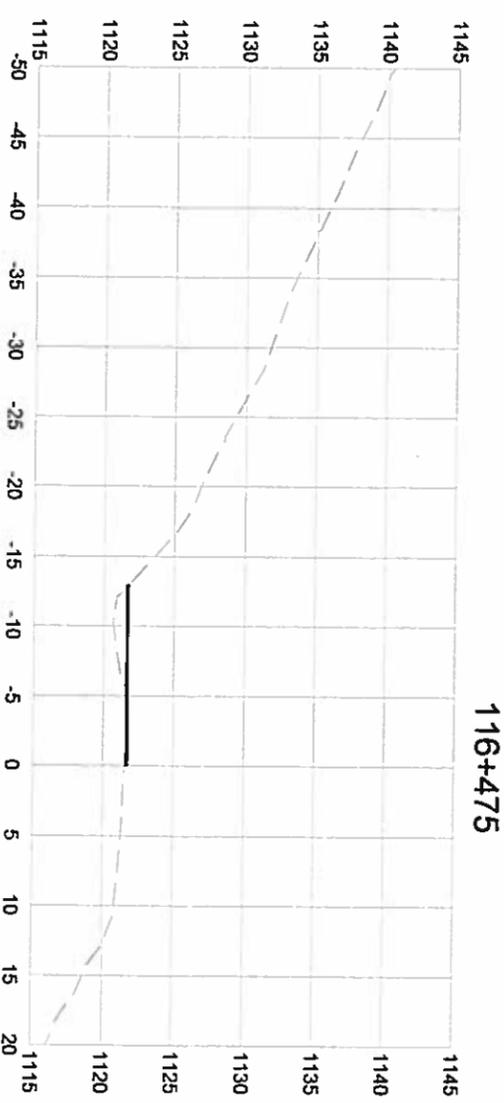


Client/Owner  
 PARKS CANADA AGENCY  
 Drawing Title/ Titre de l'ouvrage  
 MOUNT VAUX ROCK SLOPE  
 CROSS SECTIONS  
 STA. 116+260 TO 116+340

Project No./No. du projet	201541-4111	Revision No./ No. de Révision	0
---------------------------	-------------	----------------------------------	---







Parks Canada / L'Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



NO.	DESCRIPTION	DATE	BY	CHK
0	ISSUED FOR TENDER		AE	TT
			AE	TT
			AE	TT

YOHO NATIONAL PARK  
BRITISH COLUMBIA  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

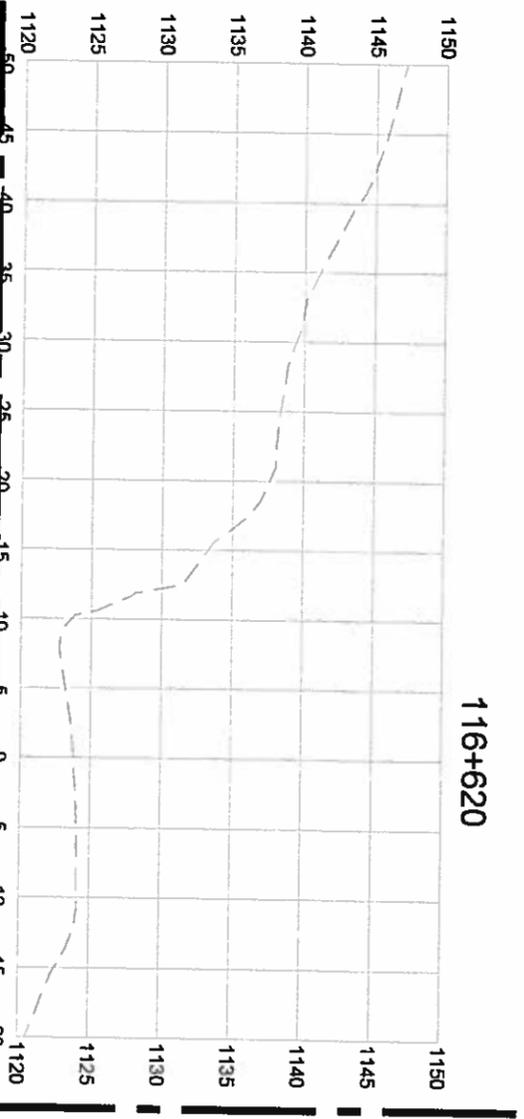
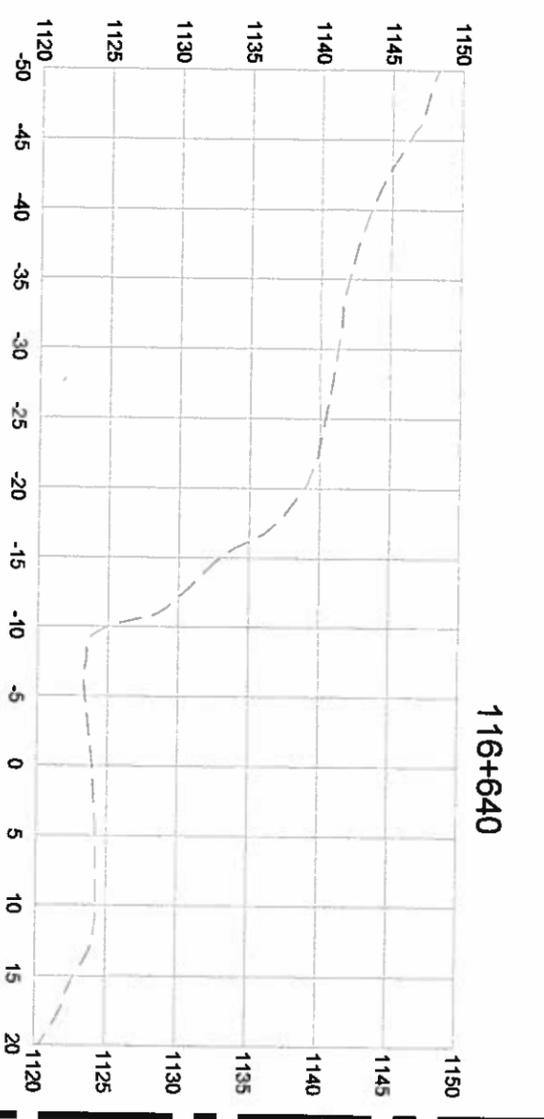
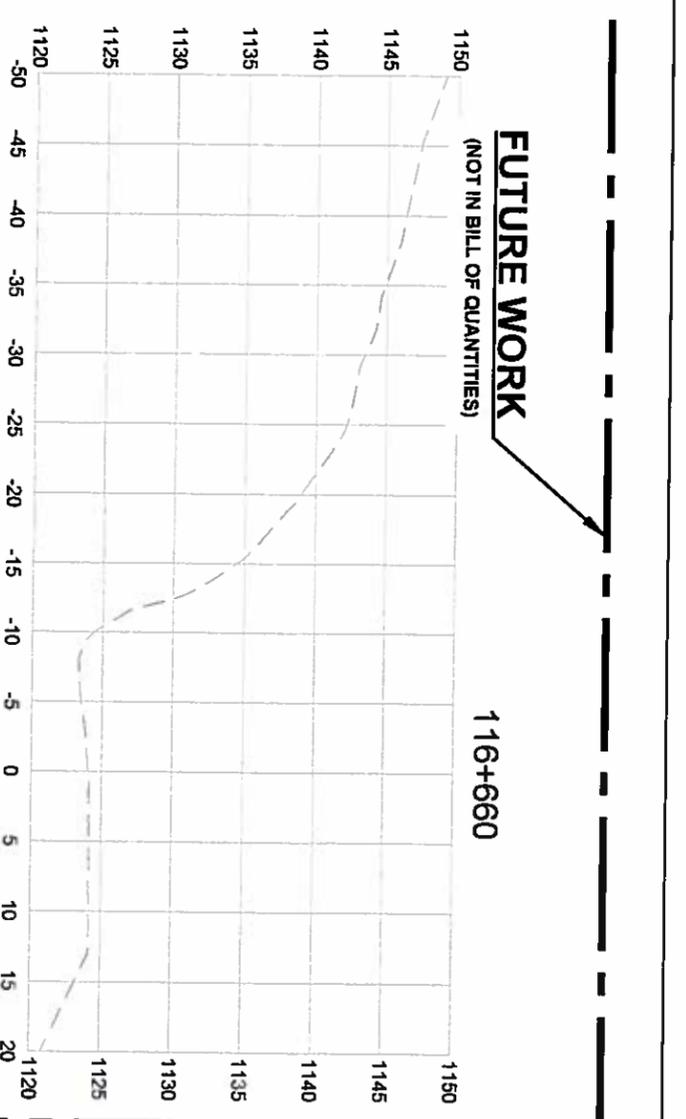
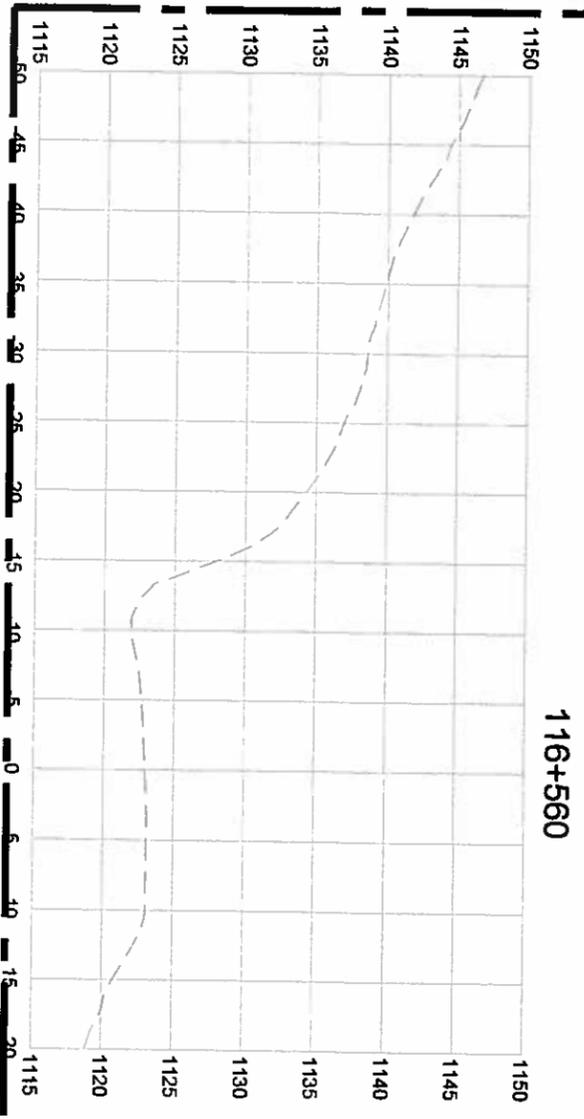
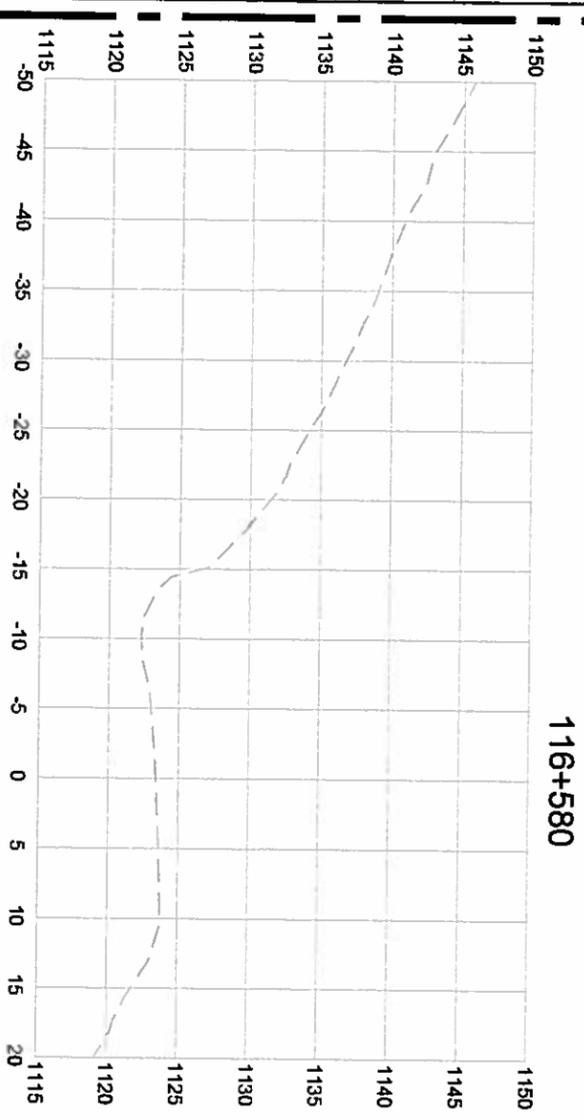
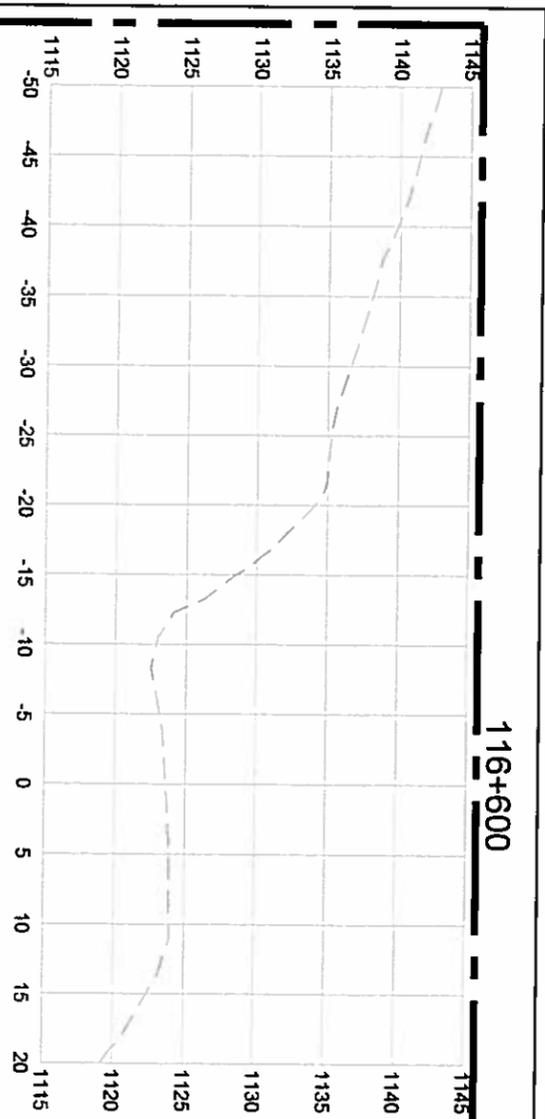
Designed/Prepared by:  
A. FRAPPELL / E. YANG  
Checked/Reviewed by:  
T. TAKEDA



Client/Owner:  
PARKS CANADA AGENCY  
Drawing title/Title de la feuille:  
**MOUNT VAUX ROCK SLOPE  
CROSS SECTIONS  
STA. 116+440 TO 116+540**

Project No./No. du projet	201541-4113	Revision No./No. de révision	0
---------------------------	-------------	------------------------------	---





Parks Canada  
Agency

L'Agence Parcs  
Canada



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



NO.	DESCRIPTION/REVISION	DATE	BY	CHK
0	ISSUED FOR TENDER		AF	TT
			AF	TT
			AF	TT
			AF	TT

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Checked by  
A. FRAPPELL/E. YANG

Drawn by/Checked by  
T. TAKEDA



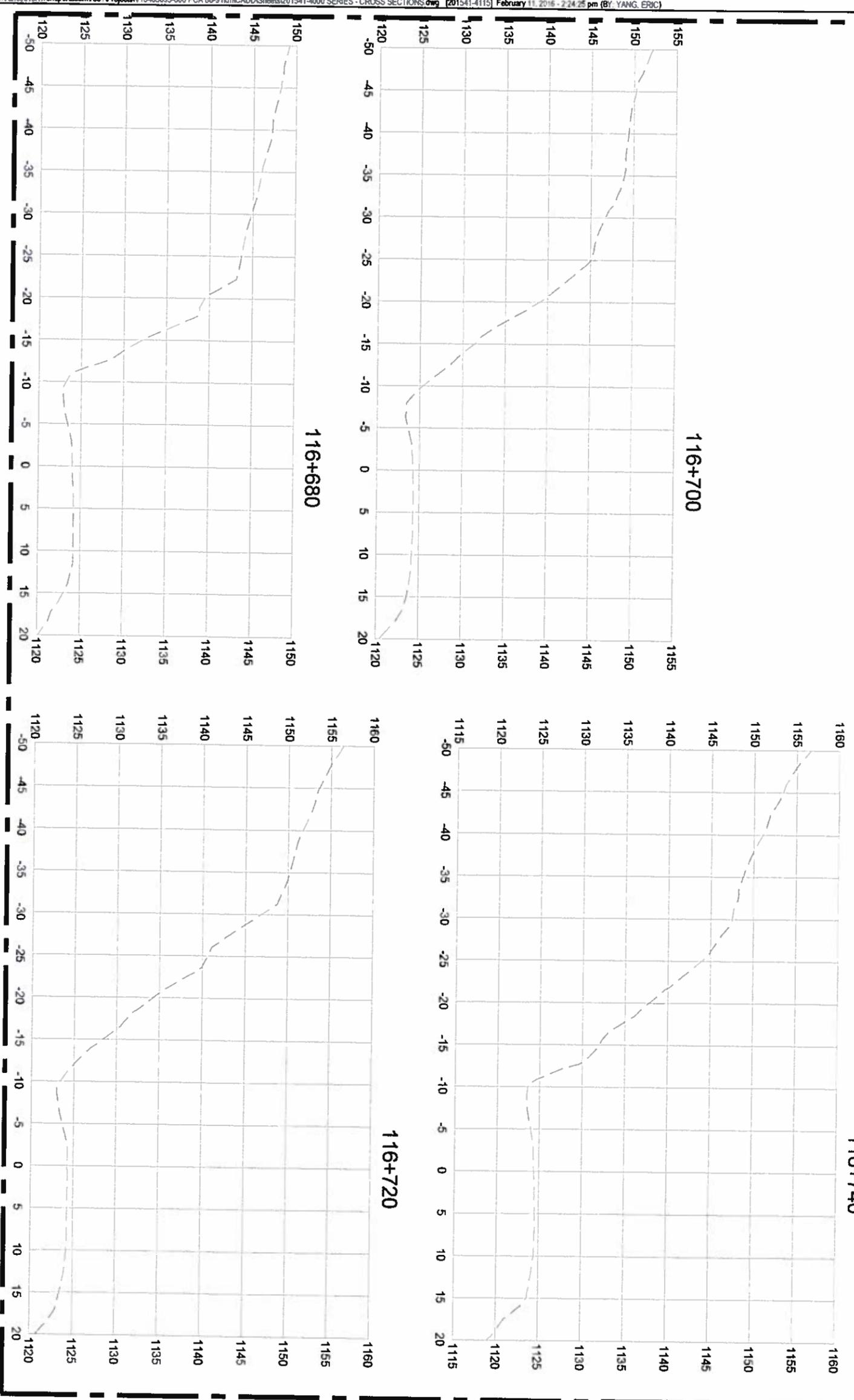
Client/Client  
PARKS CANADA AGENCY

Project Name/Title of contract  
MOUNT VAUX ROCK SLOPE  
CROSS SECTIONS  
STA. 116+560 TO 116+660

Project No./Name of Project	Sheet/Total	Revision No./of Revision (if any)
201541-4114		0



**FUTURE WORK**  
(NOT IN BILL OF QUANTITIES)



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



Item No.	Description	Unit	Quantity
0	ISSUED FOR TENDER	AF TT AF	

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conceded by  
A. FRAPPELL/E. YANG  
Checked by/Revised by  
T. TAKEDA



PARKS CANADA AGENCY

MOUNT VAUX ROCK SLOPE  
CROSS SECTIONS  
STA. 116+680 TO 116+740

Project No./No. de projet	201541-4115	Revision No./ La section no.	0
---------------------------	-------------	---------------------------------	---



**ISSUED FOR TENDER**

PCA PROJECT No. TETRA TECH EBA No.



0	180209	ISSUED FOR TENDER	AF	TT	AF
DATE	DATE	DESCRIPTION/REVISION	BY	TT	BY

YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/checked by:  
 A. FRAPPELL / E. YANG  
 Date: 01/20/2016  
 T. TAKEEDA

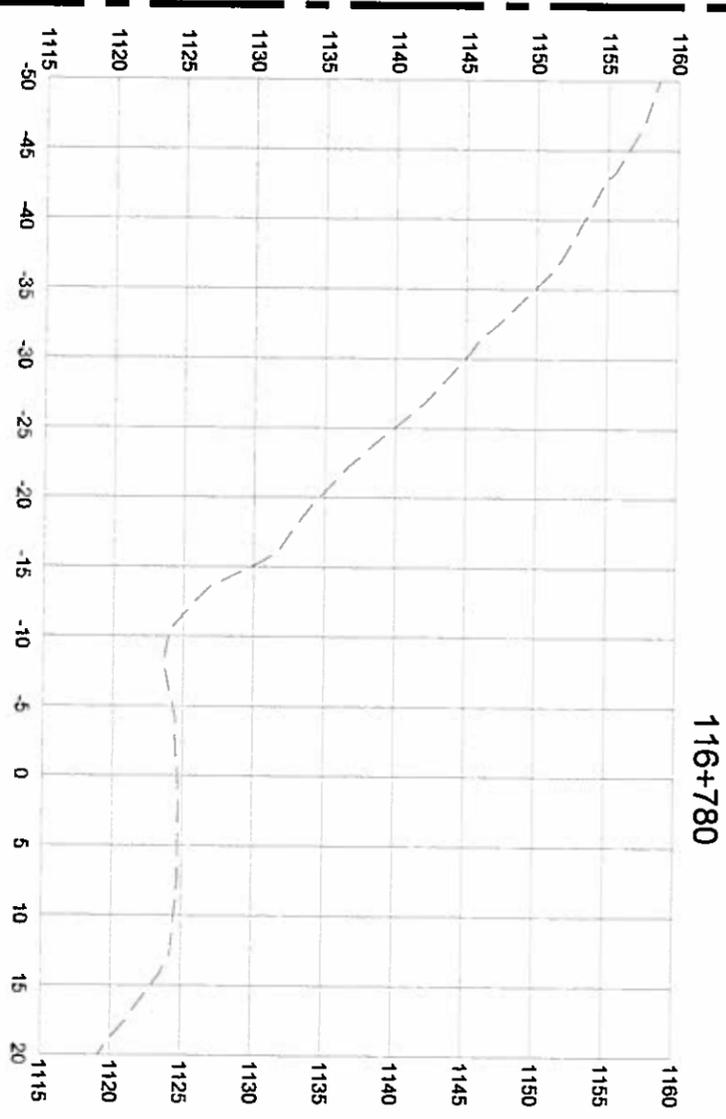


Client/Owner:  
 PARKS CANADA AGENCY

Project Name:  
 MOUNT VAUX ROCK SLOPE  
 CROSS SECTIONS  
 STA. 116+760 TO 116+820

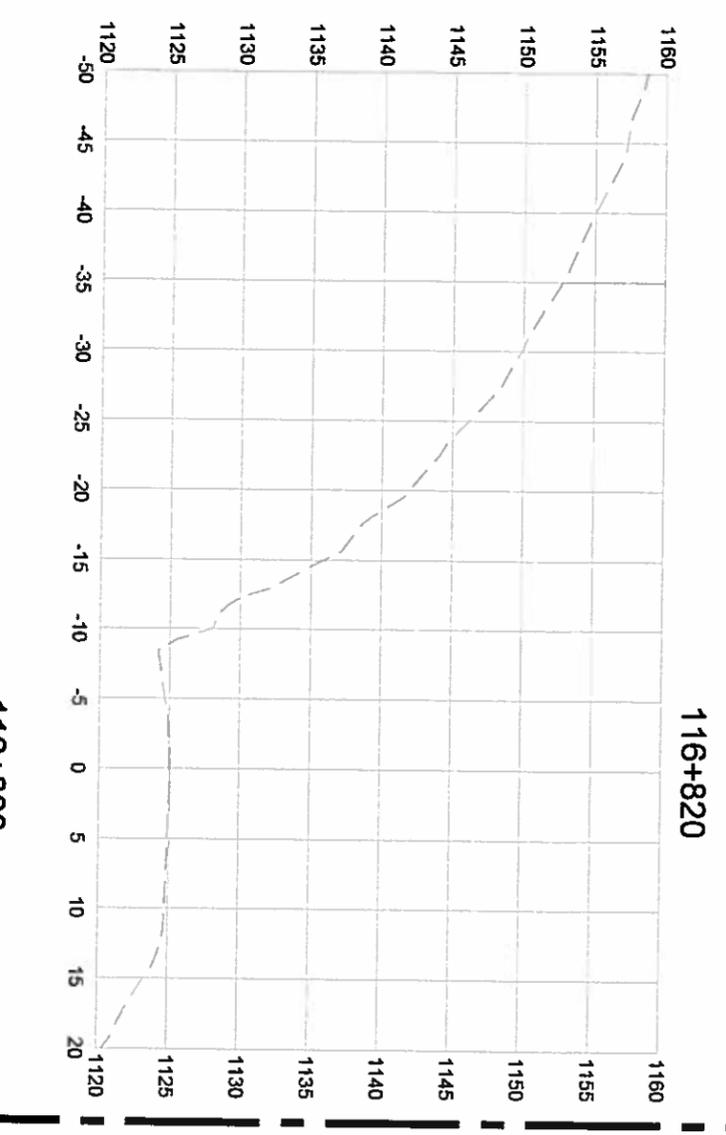
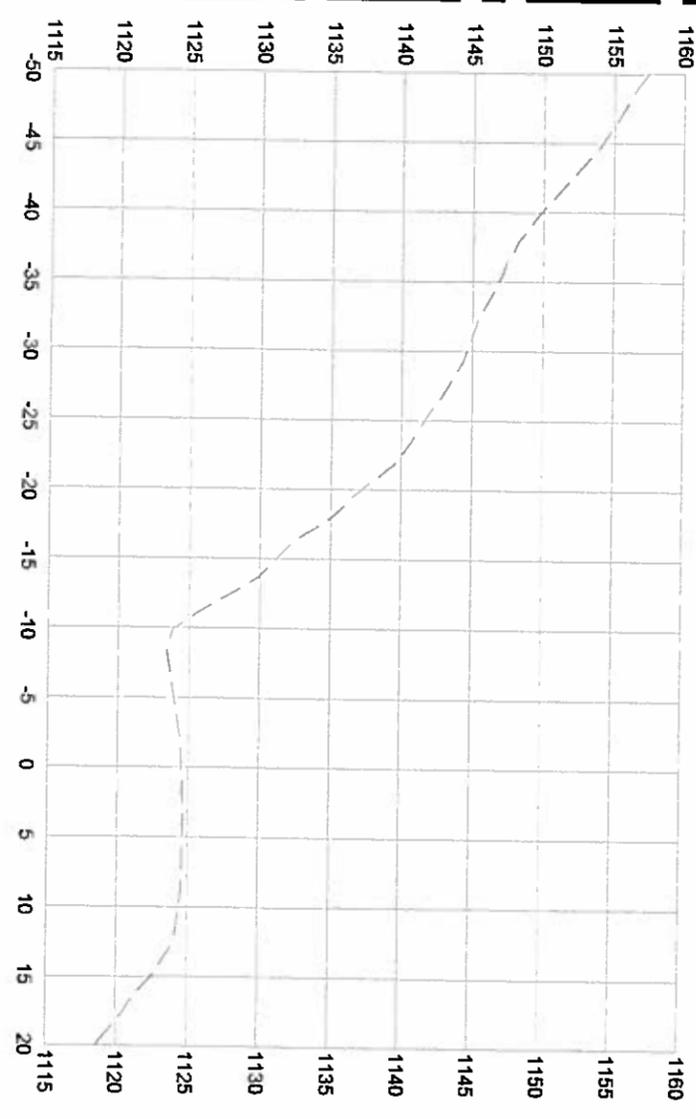
Project No./ Lot No.	201541-4116	Quantity 0
-------------------------	-------------	---------------

**FUTURE WORK**  
 (NOT IN BILL OF QUANTITIES)



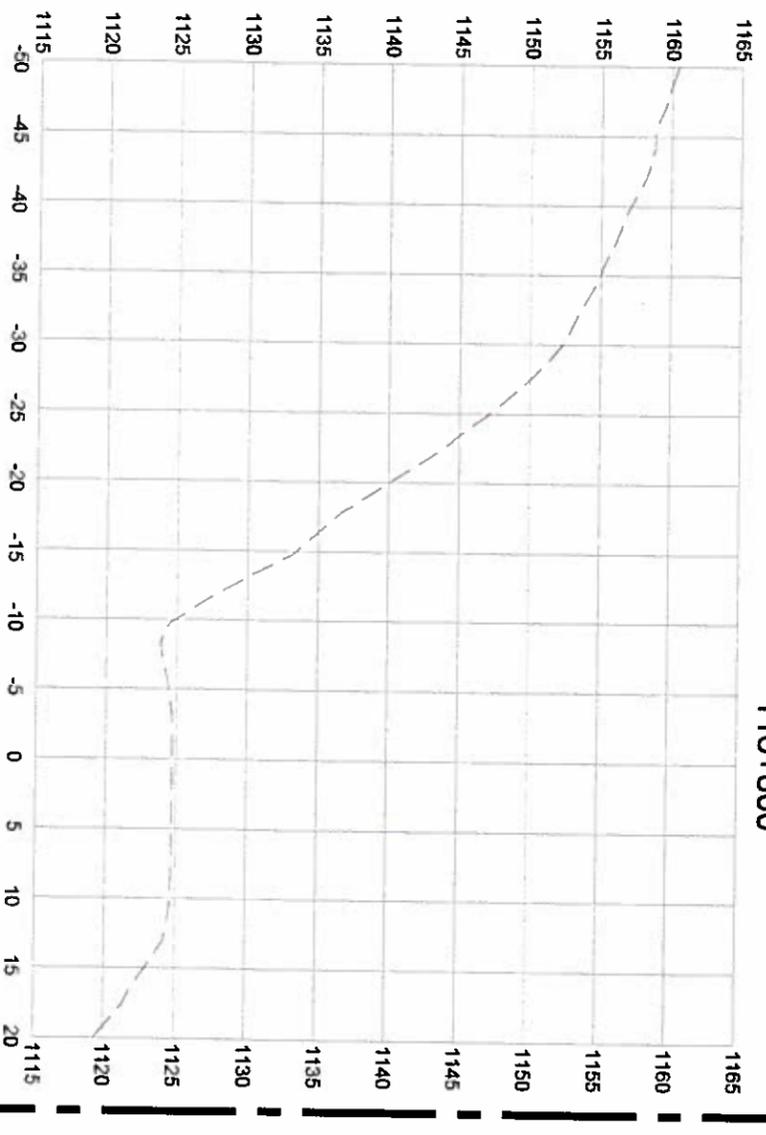
116+780

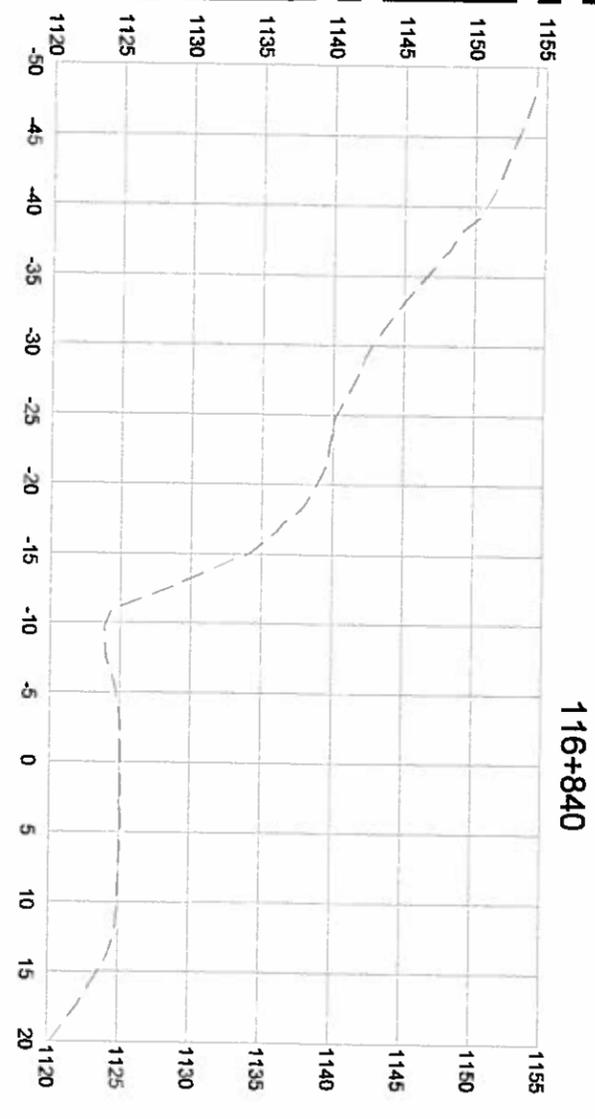
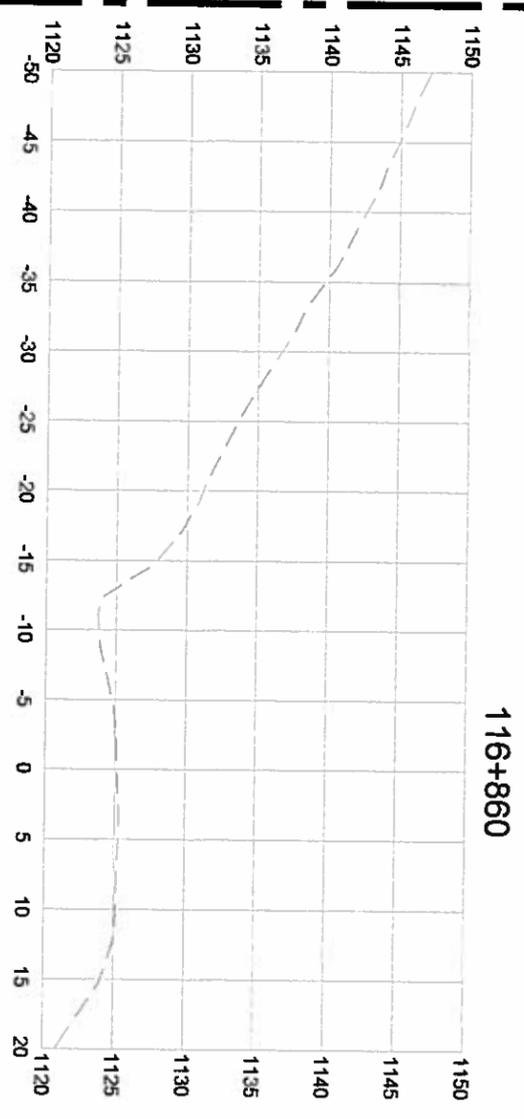
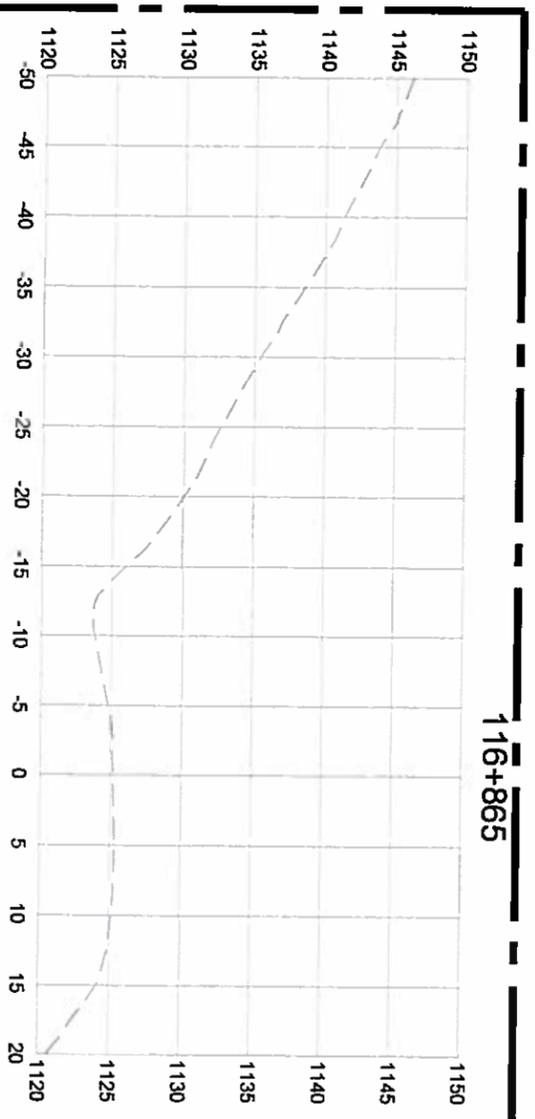
116+760



116+820

116+800





**FUTURE WORK**  
(NOT IN BILL OF QUANTITIES)

Parks Canada / Agence Parcs Canada  
L'Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



NO.	DATE	DESCRIPTION	BY	CHK
0	18/02/2016	ISSUED FOR TENDER	AF	TT
			AF	TT

YOHO NATIONAL PARK  
BRITISH COLUMBIA  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

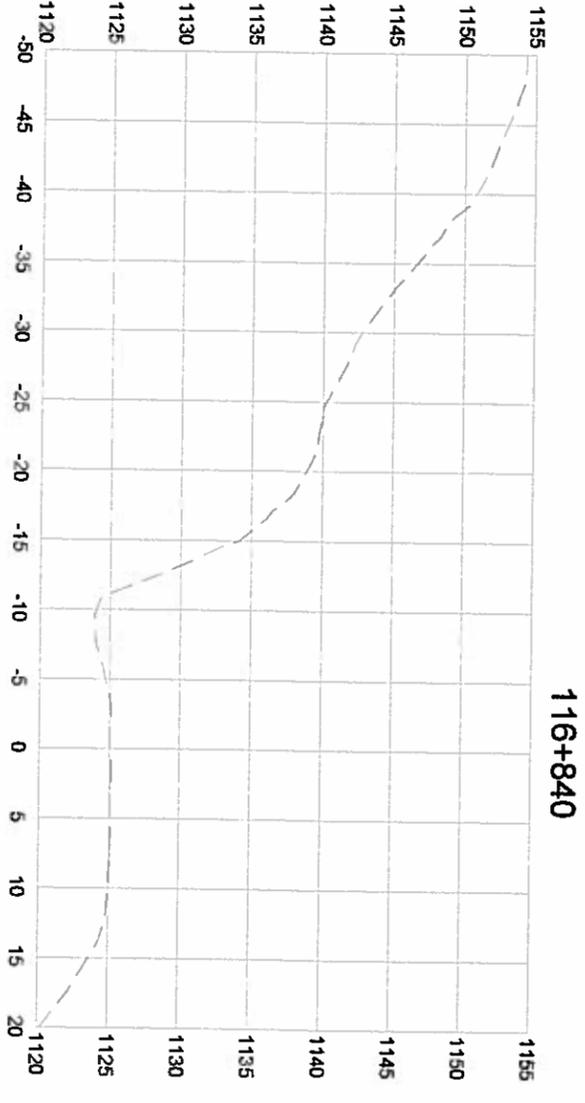
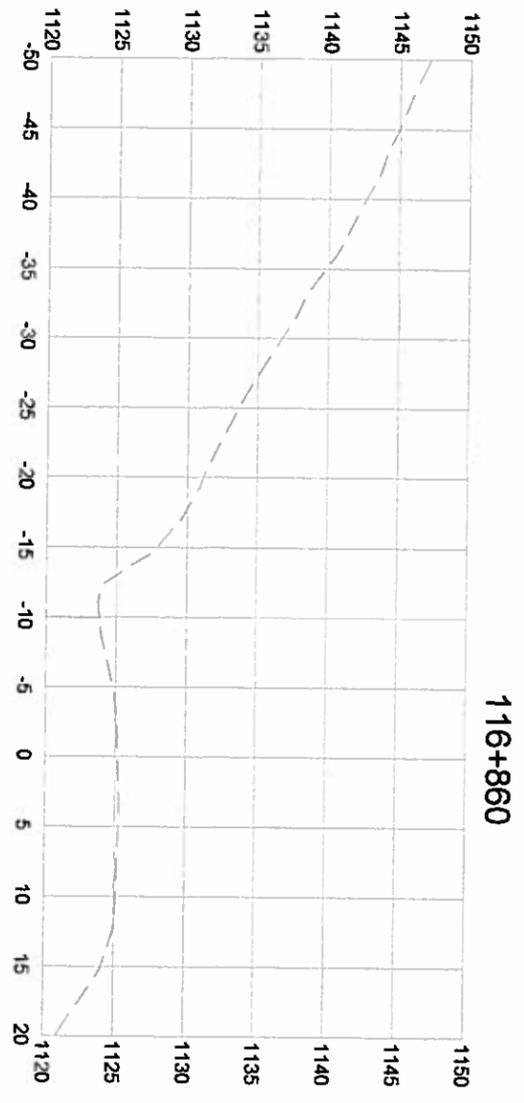
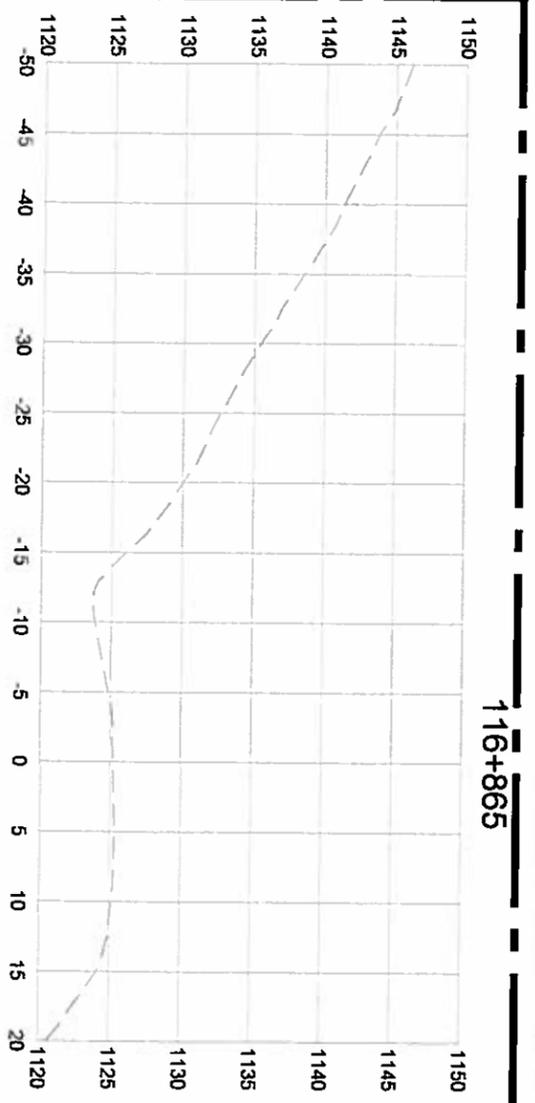
Prepared by/Prepared par  
A. FRAPPELL/E. YANG  
Checked by/Checked par  
T. TAKEEDA



PARKS CANADA AGENCY  
MOUNT VAUX ROCK SLOPE  
CROSS SECTIONS  
STA. 116+840 TO 116+865

Project No./No. du projet: 201541-4117  
Revision No./No. de révision: 0





**FUTURE WORK**  
(NOT IN BILL OF QUANTITIES)

Client/Client  
 Parks Canada Agency  
 Agence Parcs Canada



**ISSUED FOR TENDER**

PCA PROJECT NO. TETRA TECH EBA NO.



Revision	Date/Date	Description/Description	AF	TT	AF
0	16/02/09	ISSUED FOR TENDER	AF	TT	AF

Project title/titre du projet  
 YOHO NATIONAL PARK  
 BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
 TRANS-CANADA HIGHWAY  
 SLOPE REPROFILING

Designed by/Conçu par  
 A. FRAPPELLE / E. YANG  
 Drawn by/Dessiné par  
 T. TAKEDA



Client/Client  
 PARKS CANADA AGENCY  
 Drawing title/titre de dessin  
**MOUNT VAUX ROCK SLOPE  
 CROSS SECTIONS  
 STA. 116+840 TO 116+865**

Project No./No. de projet 201541-4117	Sheet/Feuille 0	Revision no./ La révision no. 0
--	--------------------	---------------------------------------

