

SEA ISLAND

LULU ISLAND

DYKE IMPROVEMENTS
CH 1611+00 TO CH 1617+00
SEE 4795-19-6

DITCH CROSSING
AT CH 670+74
SEE 4795-19-7

RICHMOND GARBAGE
DISPOSAL AREA

DYKE IMPROVEMENTS
CH 1012+00 TO CH 1034+65
SEE 4795-19-2 & 3

BANK PROTECTION
CH 1164+00 TO CH 1166+00
SEE 4795-19-4

LANDSIDE SLOPE IMPROVEMENTS
CH 1189+50 TO CH 1194+50
SEE 4795-19-4

DYKE IMPROVEMENTS
CH 1300+25 TO CH 1315+85
SEE 4795-19-5



266 428 434

NO. BY	REVISIONS	DATE	RECOMMENDED <i>B. H. Cameron</i> PROJECT MANAGER	BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	DESIGNED	SURVEYED
			DATE <i>Jan. 4, 1979</i>		DRAWN <i>Wn</i>	DATE
NO. BY	REVISIONS	DATE	APPROVED <i>[Signature]</i> FOR DIRECTOR	PROJECT NO. 3 TOWNSHIP OF RICHMOND CONTRACT NO. 19 GENERAL PLAN	CHECKED <i>DLC</i>	FILE NO. <i>0281550-C10-19</i>
			DATE <i>Jan 4/79</i>		SCALE <i>AS SHOWN</i>	DATE <i>Jan, 1979</i>
					DWG. NO. <i>4795-19-1A</i>	SHEET <i>...</i> OF <i>...</i> SHEETS

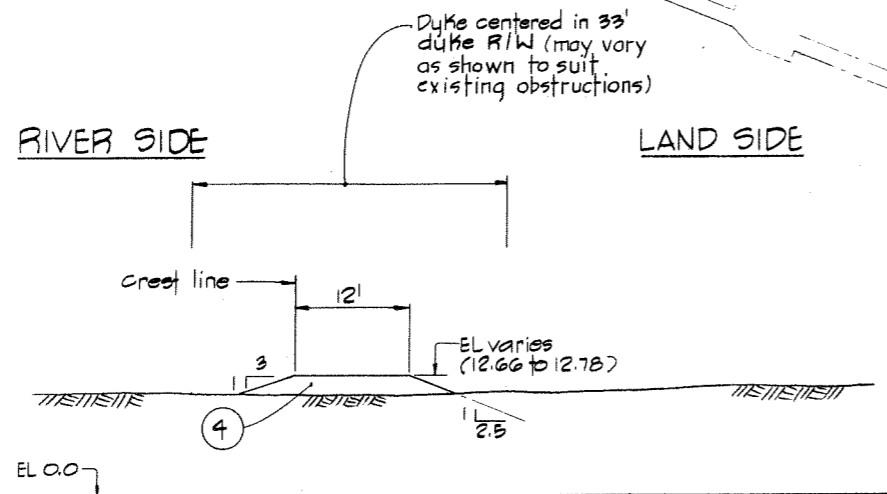
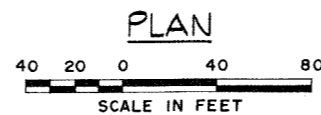
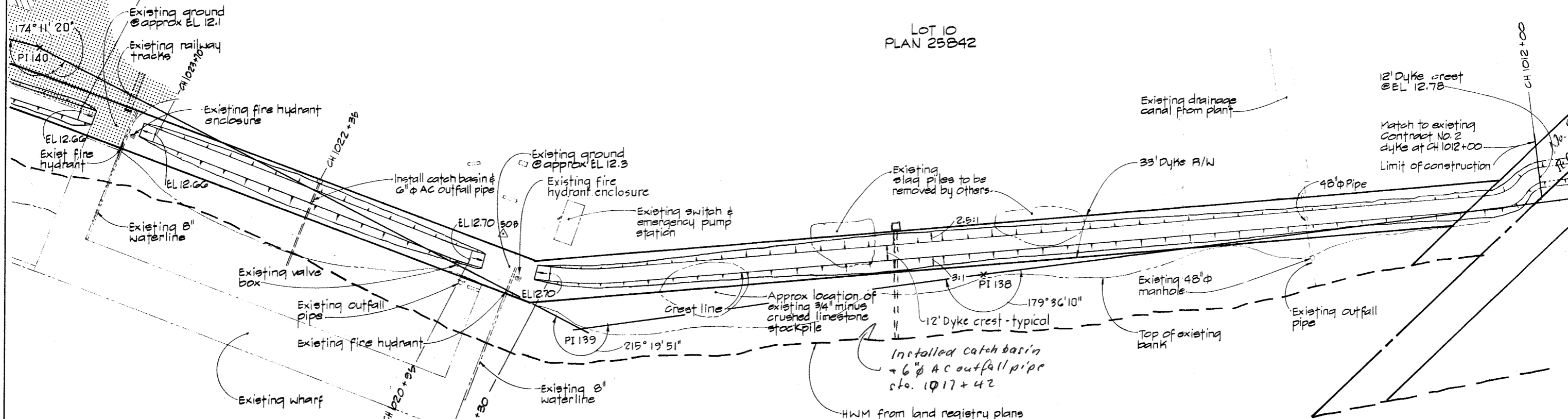


SURVEY MONUMENTS			
MON	TYPE	CO-ORDINATES	
		NORTH	EAST
50A	PIPE IN CONCRETE	458.78	66495.04
50B	DITTO	871.17	67397.99

NOTE:
For descriptive location of monuments & bench marks see specifications.

CANADA CEMENT LAFARGE LTD

LOT 10
PLAN 25842



TYPICAL SECTION
BTWN CH 1012+00 TO 1020+30
& CH 1020+05 TO 1023+70



PI	BEARING	CHAINAGE	INTERVAL	CO-ORDINATES	
				N/SOUTH	EAST
137	S 36° 20' 01" W	1009 + 20.19	740.20	1725.54	68133.73
138	S 35° 56' 10" W	1016 + 60.39	328.80	1129.35	67695.25
139	S 71° 16' 02" W	1019 + 89.19	499.40	863.18	67502.31
140	S 65° 27' 23" W	1024 + 88.59	587.70	702.84	67029.50
141	S 48° 17' 48" W	1030 + 76.29	229.55	458.78	66495.04
142	N 80° 37' 14" W	1033 + 05.84	333.20	306.10	66323.70
143		1036 + 39.04		361.17	65990.31

MATERIALS LEGEND

- ① silty-clay
- ② sand
- ③ sand gravel & cobbles
- ④ Crushed gravel
- ⑤ Light rip-rap
- ⑥ Rip-rap

LEGEND

- Existing ground surface (section)
- - - Existing ground & structures (Plan)
- ⓑ section identification letter
- Ⓒ Drawing number on which the section is drawn (ie) 4795-19-L37
- Ⓓ detail identification number
- Ⓔ Drawing number on which the detail is drawn (ie) 4795-19-L77
- ▭ concrete pavement
- ▨ Existing asphalt pavement
- △ 50A Survey monuments

NOTES

- Elevations refer to the Geodetic Survey of Canada
- A smooth alignment should be maintained over the entire length of the dike
- Offset distances from base line to crest line are taken at the design crest elevation
- The angle of offset is 20° to base line unless otherwise indicated.
- The line defined as the crest line is the river side shoulder of the dike
- Terminal parts of the work shall be constructed to blend with the existing ground

GENERAL NOTES - STRUCTURAL

- All concrete work shall be in accordance with C.S.A. A 23.1
- Concrete shall have a compressive strength of not less than 3000 psi at 28 days
- Reinforcing shall be deformed and conform to C.S.A. G 30.12, grade 60.
- Concrete cover for reinforcing bars in walls shall be 2 in. except as shown otherwise.



<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	<p>RECOMMENDED <i>R. M. Prescott</i> PROJECT MANAGER</p> <p>DATE <i>Jan. 2, 1979</i></p> <p>APPROVED <i>[Signature]</i> DIRECTOR</p> <p>DATE <i>Jan 4/79</i></p>	<p>BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1988 AGREEMENT</p> <p>PROJECT NO. 3 TOWNSHIP OF RICHMOND CONTRACT NO. 19 DYKE IMPROVEMENTS CH. 1012+00 TO CH. 1023+70</p>	DESIGNED <i>MH</i>	SURVEYED
			DRAWN <i>Wn</i>	DATE
			CHECKED <i>DLC</i>	FILE NO. <i>0281550-C10-19</i>
			SCALE <i>AS SHOWN</i>	DATE <i>Jan, 1979</i>
			DWG. NO. <i>4795-19-2A</i>	SHEET <i>OF</i> SHEETS

266 489 433

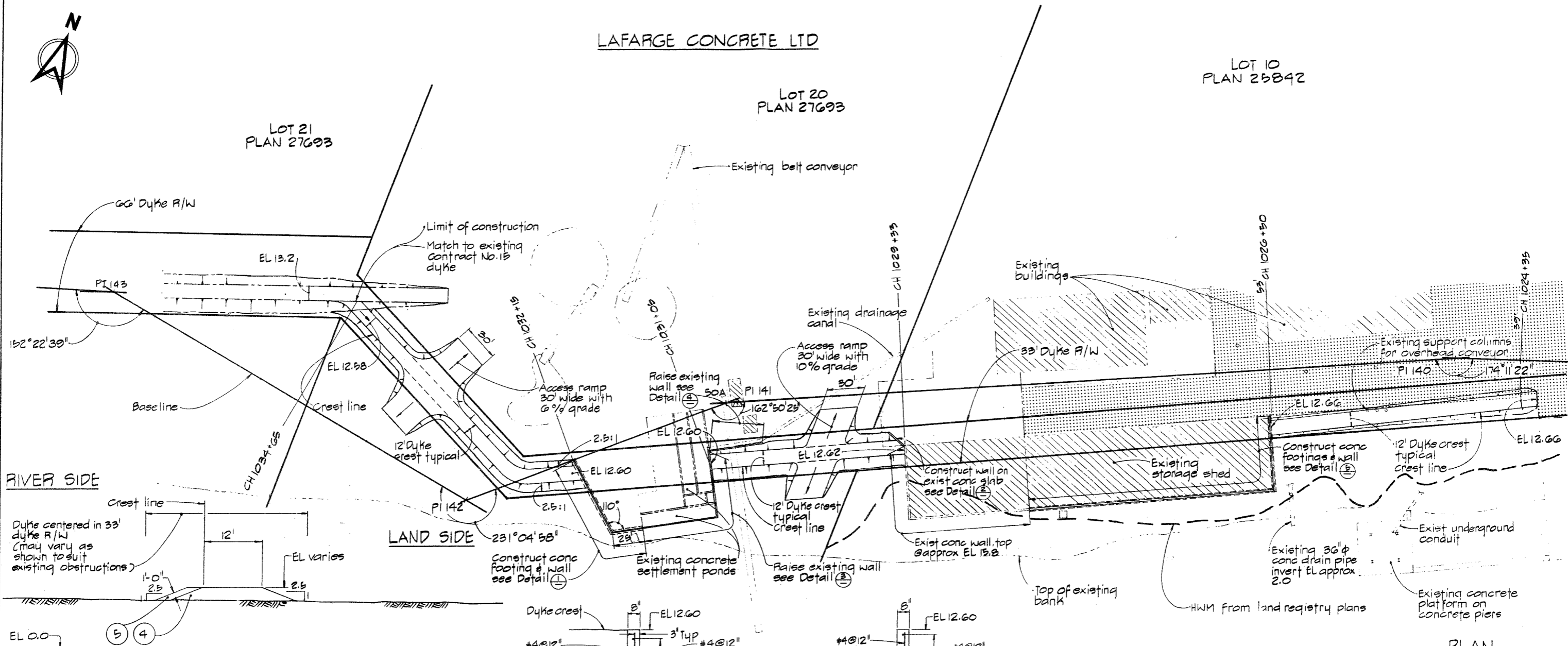


LAFARGE CONCRETE LTD

LOT 10
PLAN 25842

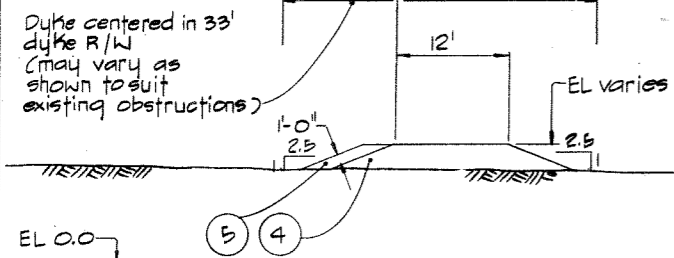
LOT 20
PLAN 27693

LOT 21
PLAN 27693

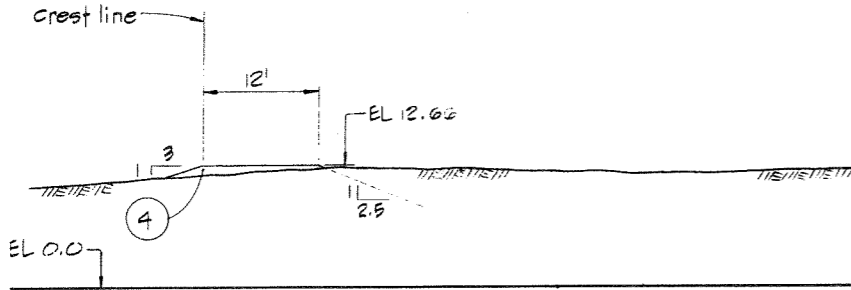


RIVER SIDE

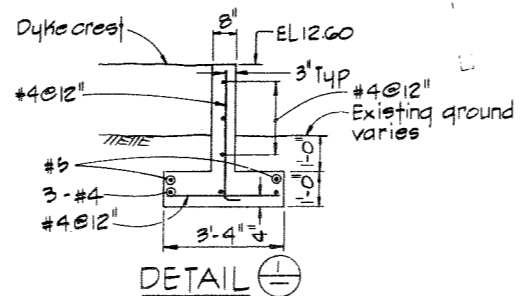
LAND SIDE



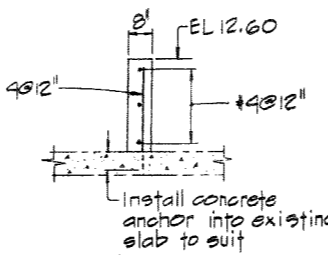
TYPICAL SECTION
BTWN CH 1029+33 TO 1031+05
& CH 1032+15 TO 1034+65



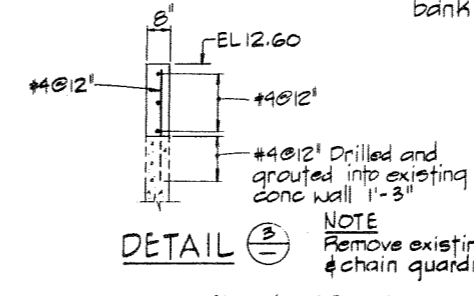
TYPICAL SECTION
BTWN CH 1024+35 TO 1026+50



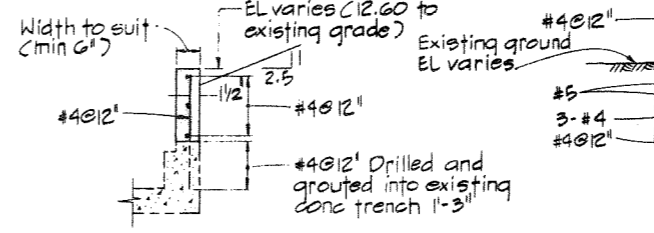
DETAIL 1



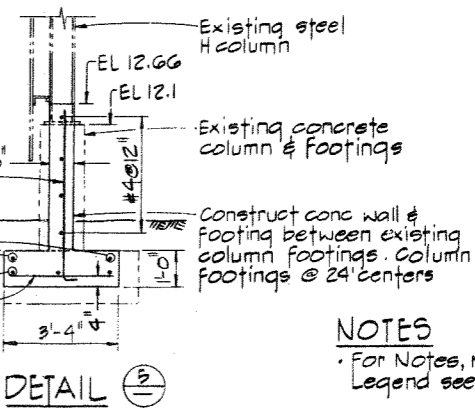
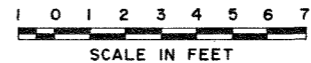
DETAIL 2



DETAIL 3



DETAIL 4




DETAIL 5

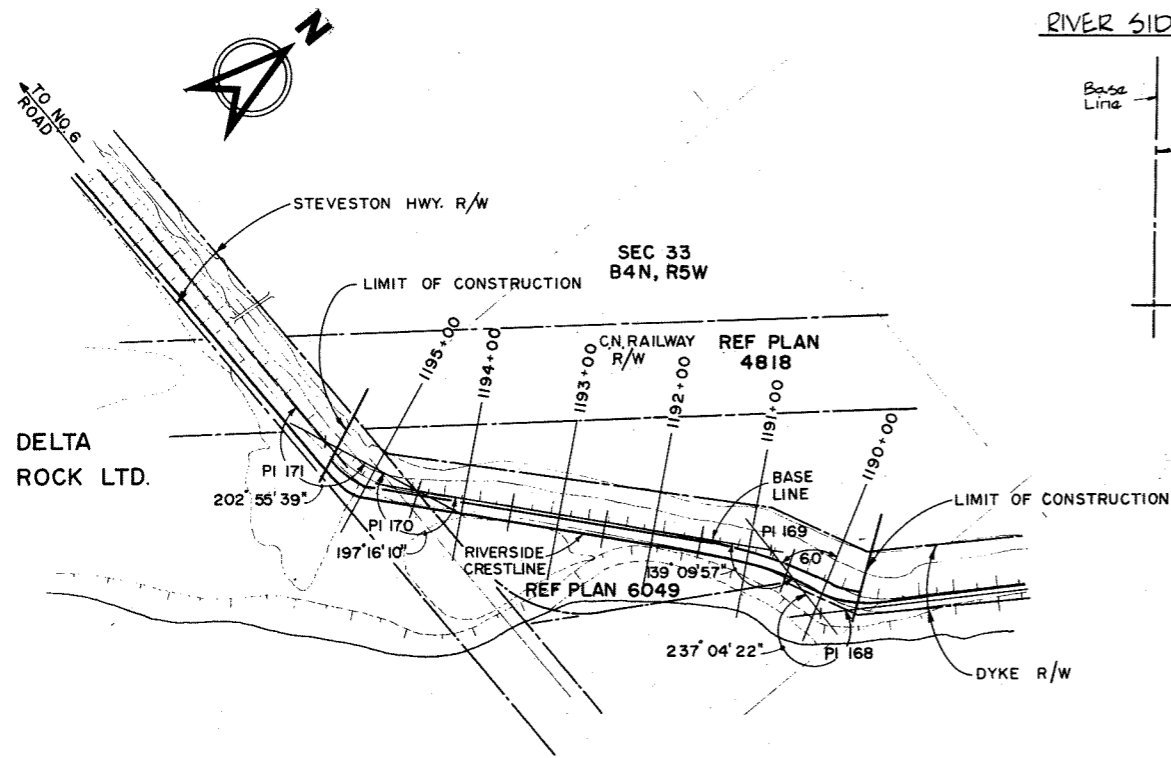


NOTES
For Notes, Material Legend and Legend see 4795-19-2

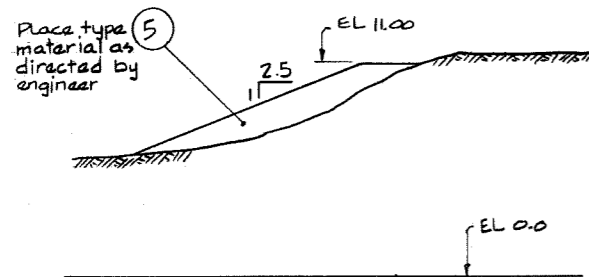


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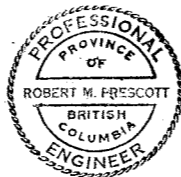
 CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA	RECOMMENDED <i>R.N. Cameron</i> PROJECT MANAGER	BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1988 AGREEMENT	DESIGNED <i>MH</i>	SURVEYED
	DATE <i>Jan 4, 1979</i>		DRAWN <i>Wn</i>	DATE
	APPROVED <i>John Fuller</i> For DIRECTOR		CHECKED <i>DLC</i>	FILE NO. <i>0281550-C10-19</i>
	DATE <i>Jan 4/79</i>		SCALE <i>AS SHOWN</i>	DATE <i>Jan, 1979</i>
NO. BY REVISIONS DATE	PROJECT NO. 3 TOWNSHIP OF RICHMOND CONTRACT NO. 19 DYKE IMPROVEMENTS CH 1024+20 TO CH 1034+65	DWG. NO. <i>4795-19-3 A</i>	SHEET OF SHEETS	



BASE LINE DATA					
PI	BEARING	CHAINAGE	INTERVAL	CO-ORDINATES	
				SOUTH	EAST
168	N 89° 03' 47" W	1189 + 91.49	86.06	7244.07	53 469.88
169	S 50° 06' 09" W	1190 + 77.55	371.31	7242.66	53 383.85
170	S 67° 22' 19" W	1194 + 48.86	109.82	7480.77	53 099.04
171	S 67° 22' 19" W	1195 + 58.68		7523.01	52 997.71

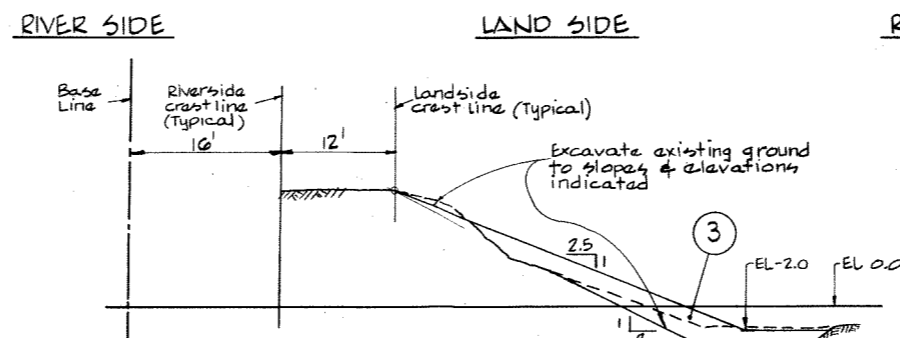


BANK PROTECTION
 TYPICAL SECTION CH 1164+00 TO 1166+00
 SCALE IN FEET

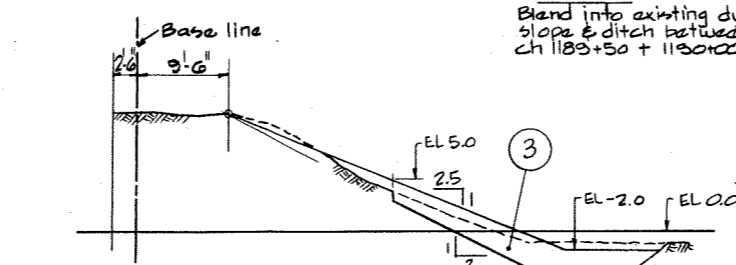


CBA ENGINEERING LTD.
 CONSULTING ENGINEERS - VANCOUVER - CANADA

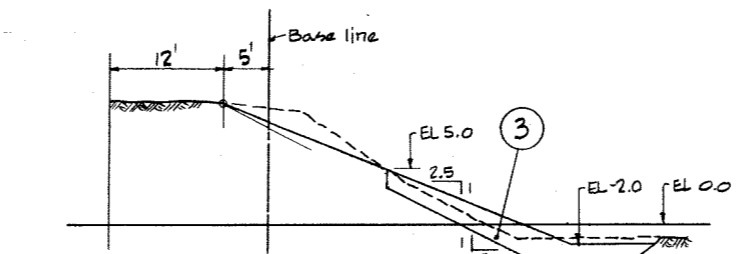
NO.	BY	REVISIONS	DATE
		Revised A/B	



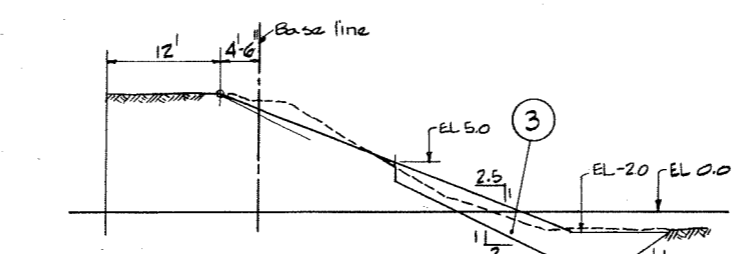
SECTION @ CH 1190+00



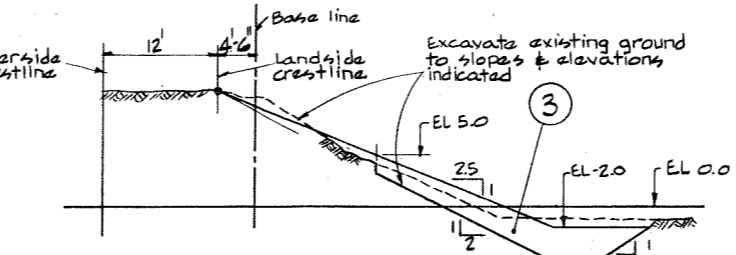
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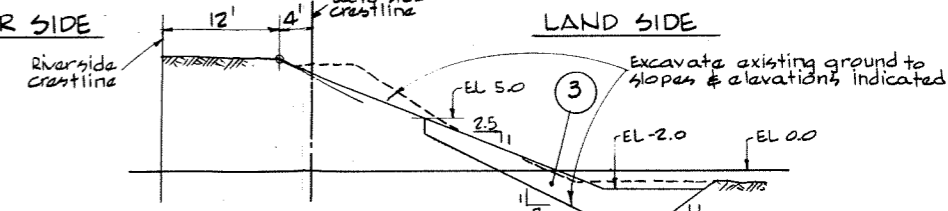
SECTION @ CH 1191+00



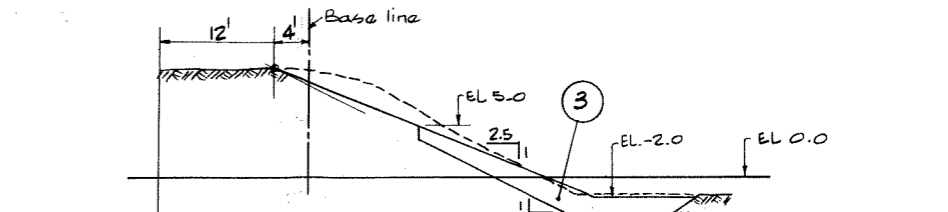
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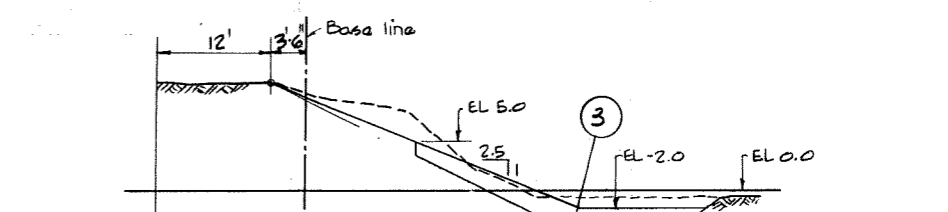
SECTION @ CH 1192+00



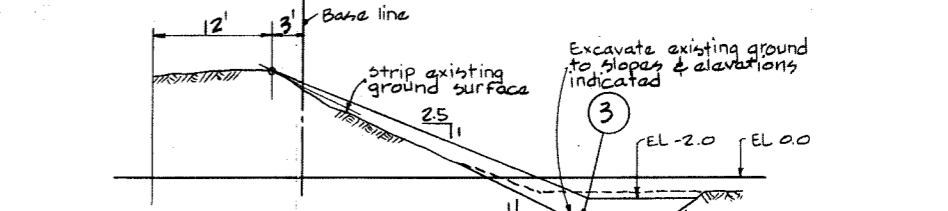
SECTION @ CH 1192+50



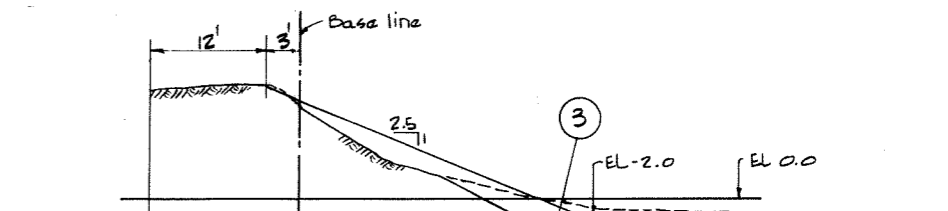
SECTION @ CH 1193+00



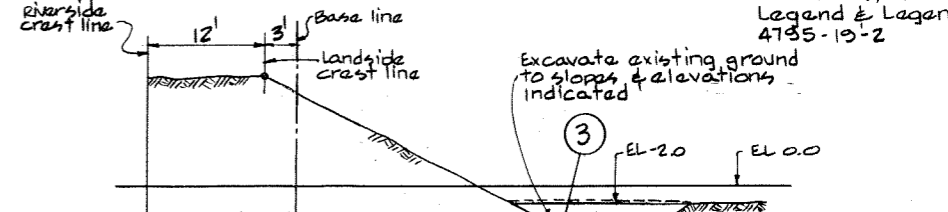
SECTION @ CH 1193+50



SECTION @ CH 1194+00



SECTION @ CH 1194+27



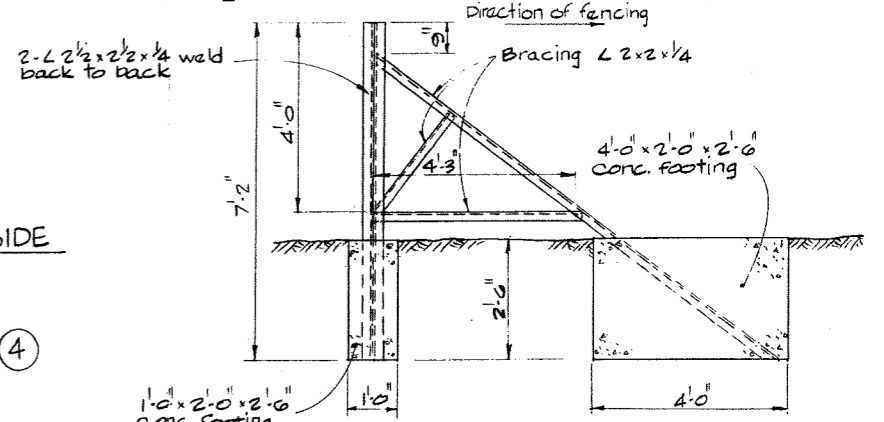
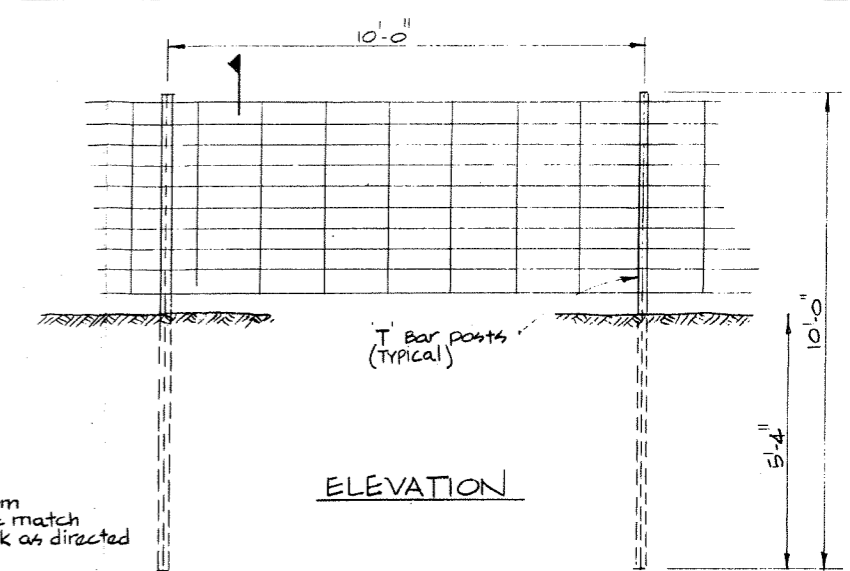
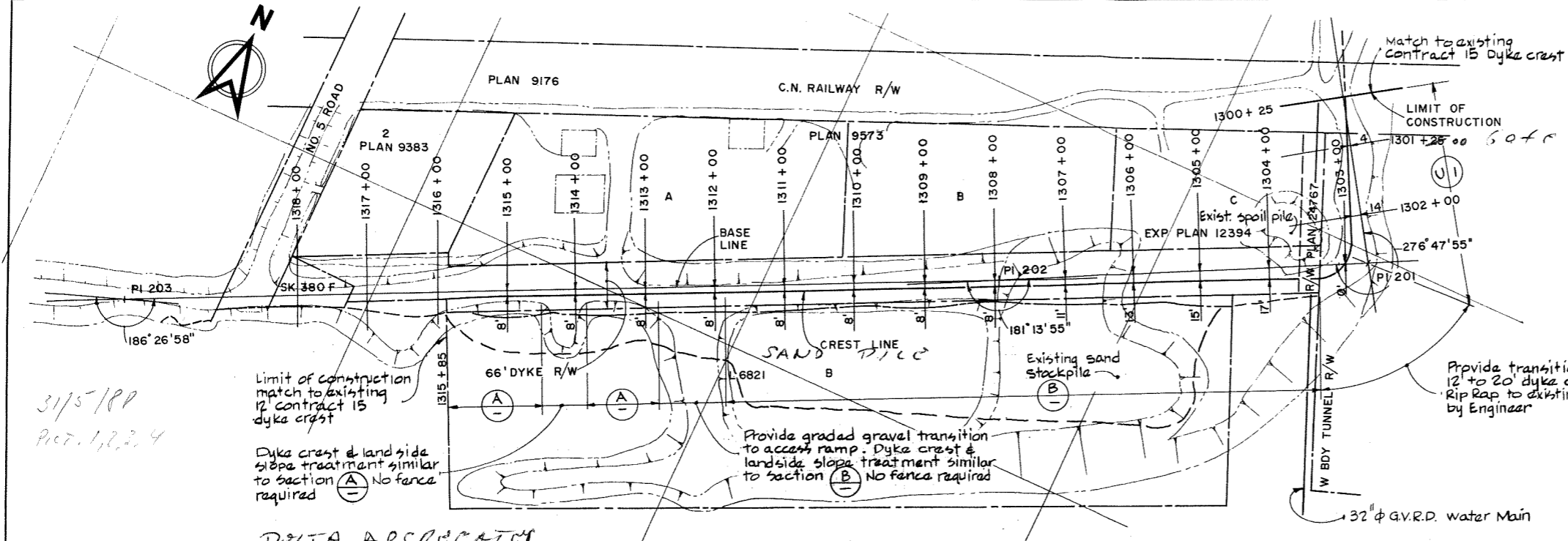
SECTION @ CH 1194+50

NOTE Blend into existing dyke slope & ditch between CH 1194+50 & 1195+00

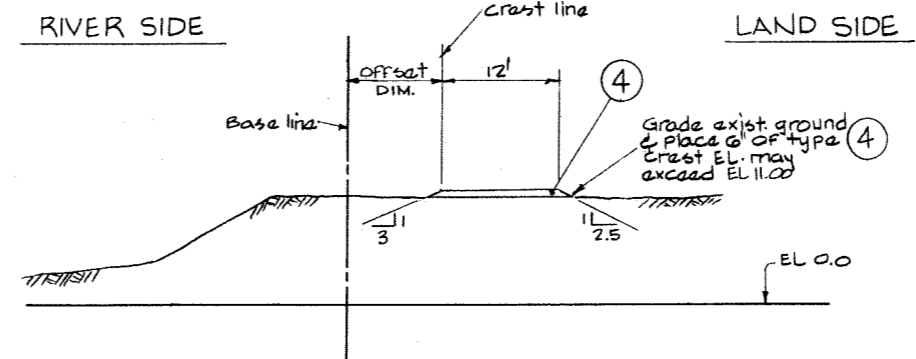
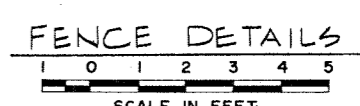


NOTES
 For Notes, Material Legend & Legend see 4795-19-2

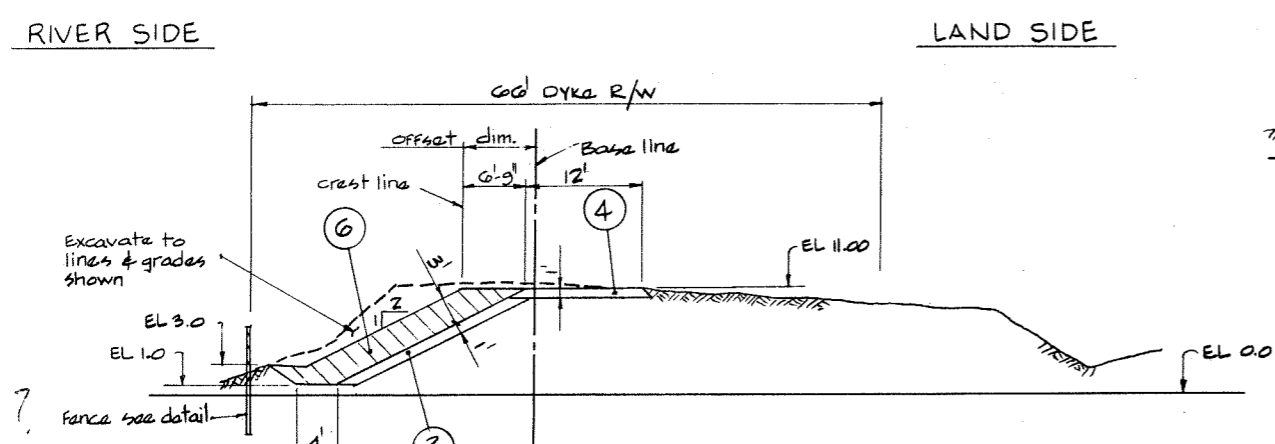
RECOMMENDED <i>R.A. Cameron</i> PROJECT MANAGER	BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1988 AGREEMENT	DESIGNED <i>MH</i>	SURVEYED
DATE <i>Jan. 4, 1979</i>	PROJECT NO 3 TOWNSHIP OF RICHMOND CONTRACT NO. 19	DRAWN <i>Duaid</i>	DATE
APPROVED <i>[Signature]</i> DIRECTOR	LAND SLOPE IMPROVEMENTS CH. 1189+50 TO CH. 1194+50 & BANK PROTECTION CH. 1164+00 TO CH. 1166+00	CHECKED <i>DLC</i>	FILE NO. <i>0281550-C10-19</i>
DATE <i>Jan 4/79</i>		SCALE <i>AS SHOWN</i>	DATE <i>Jan, 1979</i>
		DWG. NO. <i>4795-19-4A</i>	SHEET <i>OF</i> SHEETS



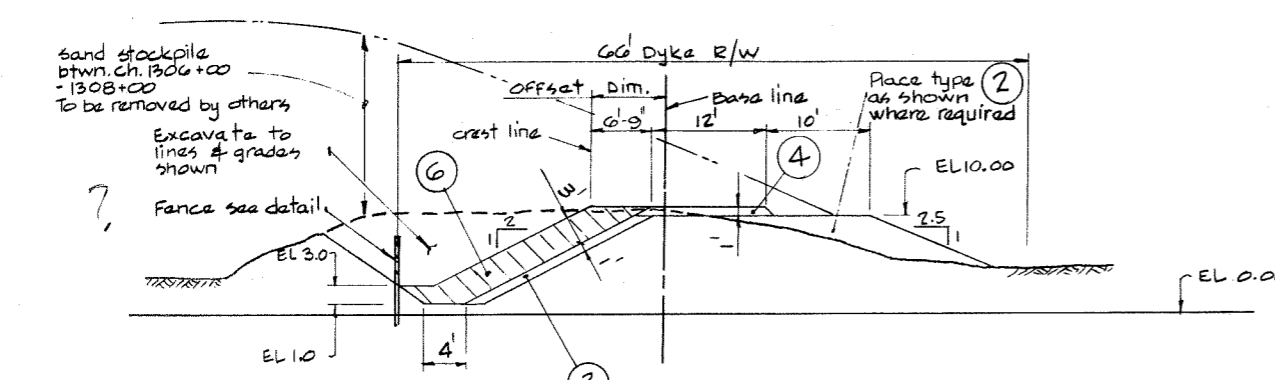
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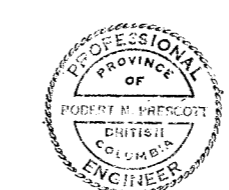
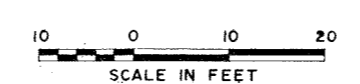
SECTION (C)
TYPICAL BTWN CH 1300+25 to 1302+50



SECTION (A)
TYPICAL BTWN CH 1312+85 to 1313+80 & 1314+50 to 1315+85

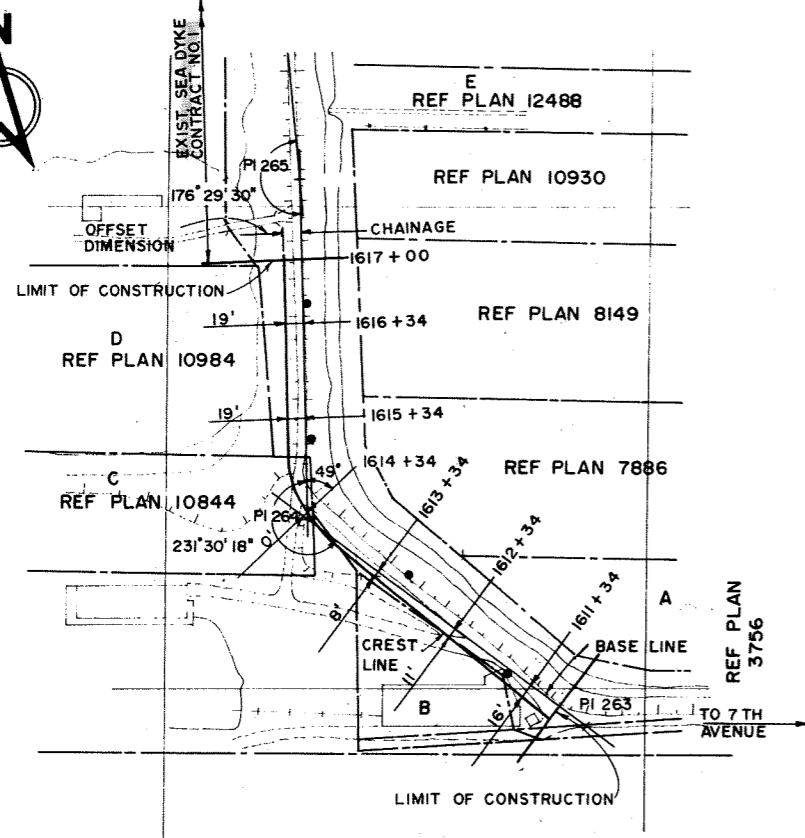


SECTION (B)
TYPICAL BTWN CH 1303+50 to 1311+85

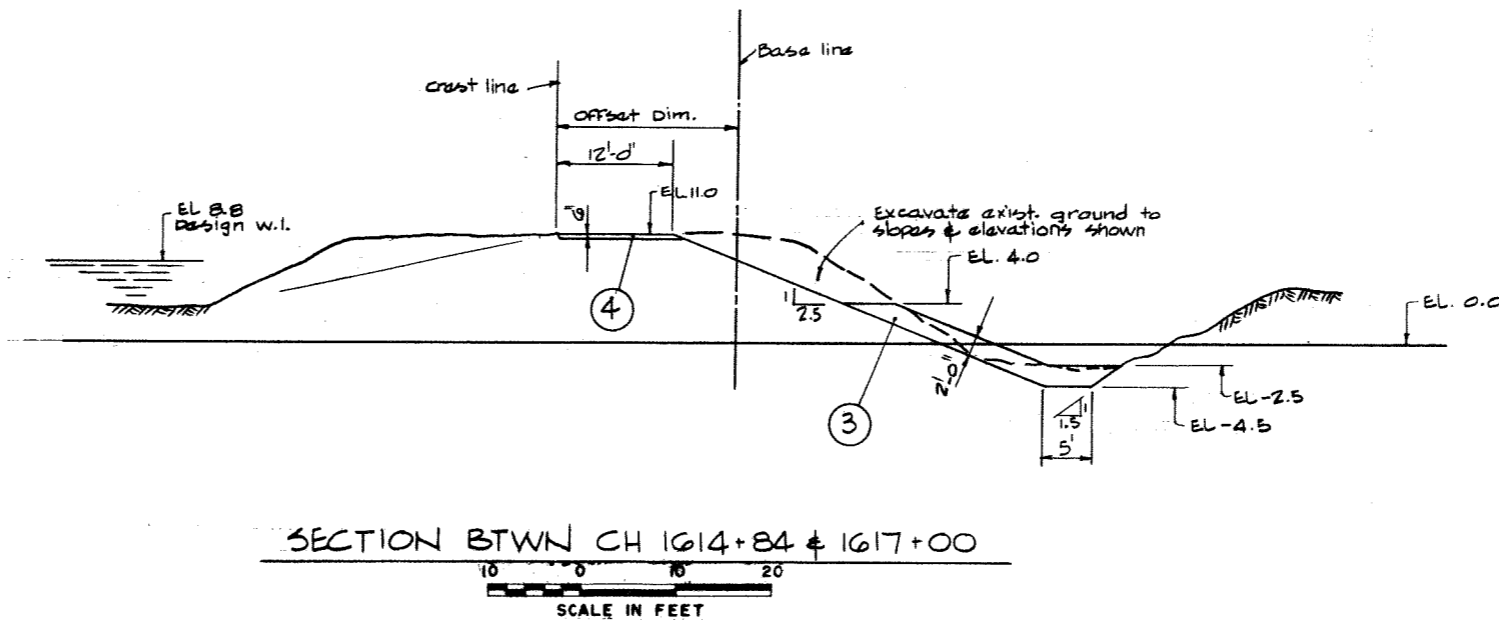
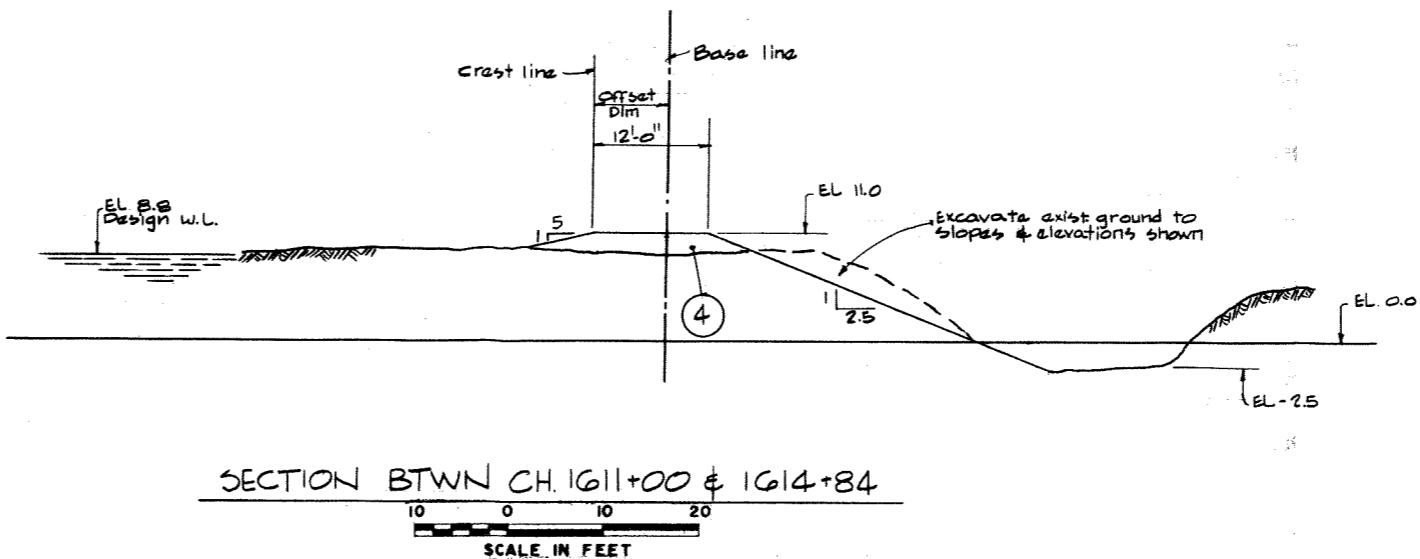


NOTES
• For Notes, Material Legend & Legend see 4795-19-2

CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA	NO. BY: A REVISIONS: Revised R/B DATE:	RECOMMENDED: R.N. Cameron PROJECT MANAGER DATE: Jan 3, 1979 APPROVED: [Signature] DIRECTOR DATE: Jan 4, 1979	BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 TOWNSHIP OF RICHMOND CONTRACT NO. 19 DYKE IMPROVEMENTS CH 1300+25 TO CH 1315+85	DESIGNED: MH DRAWN: DGL/D CHECKED: DLG SCALE: AS SHOWN DWG. NO: 4795-19-5A	SURVEYED: DATE: 0281550-C10-19 FILE NO: 0281550-C10-19 DATE: Jan, 1979 SHEET: OF SHEETS
	266 430				



PLAN
SCALE IN FEET
100 50 0 100 200



BASE LINE DATA					
PI	BEARING	CHAINAGE	INTERVAL	CO-ORDINATES	
				SOUTH	EAST
263		1612 + 26.84		10 041.05	21 940.68
264	N 53°25' 51" W	1614 + 28.20	201.36	9 822.17	21 645.63
265	N 01° 55' 33" W	1617 + 81.98	353.78	9 468.59	21 633.74

1610+60.83
367.37

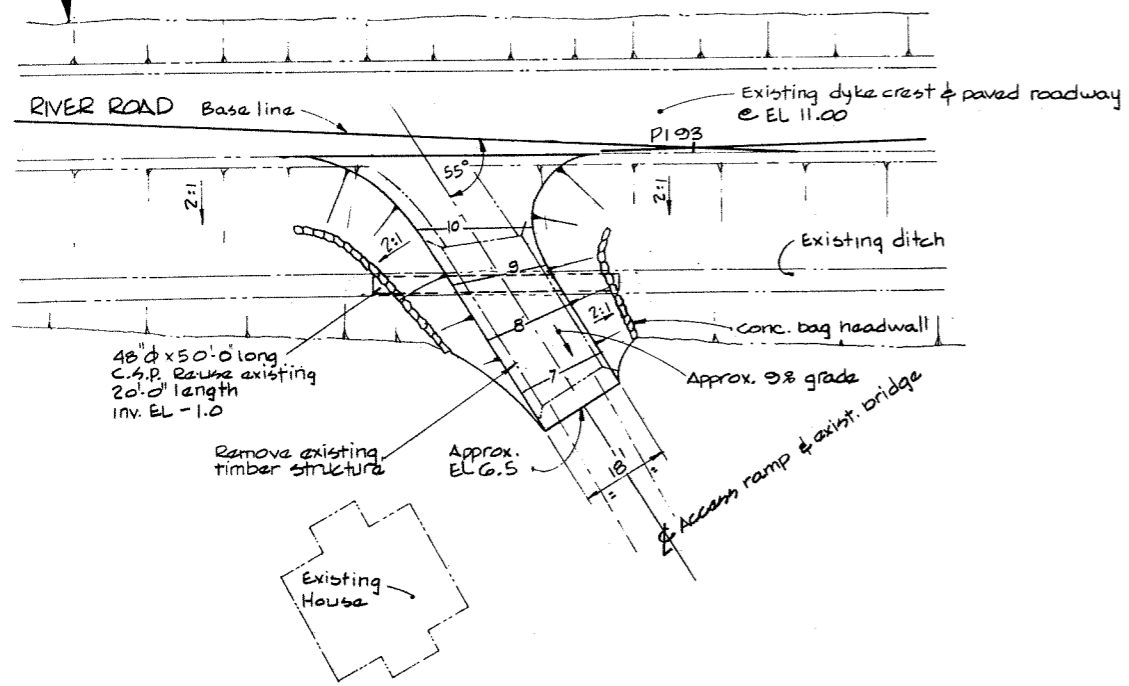


NOTES

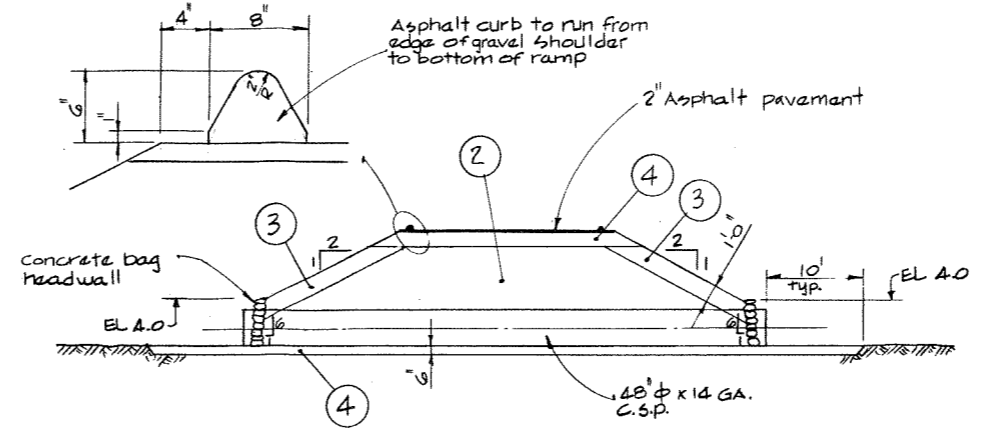
For Notes, Material legend & Legend see 4795-19-2

266429

<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	<p>NO. BY REVISIONS DATE</p> <p>A. Revison A/D</p>	<p>RECOMMENDED <i>R.A. Cameron</i> PROJECT MANAGER</p> <p>DATE <i>Jan 4, 1979</i></p>	<p>BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1988 AGREEMENT</p>	<p>DESIGNED <i>DLC</i></p> <p>DRAWN <i>DLC</i></p> <p>CHECKED <i>DLC</i></p> <p>SCALE AS SHOWN</p> <p>DWG. NO. 4795-19-6A</p>	<p>SURVEYED</p> <p>DATE</p> <p>FILE NO. 0281550-C10-19</p> <p>DATE Jan. 1979</p> <p>SHEET OF SHEETS</p>
		<p>APPROVED <i>John Fuller</i> DIRECTOR</p> <p>DATE <i>Jan 4/79</i></p>	<p>PROJECT NO. 3 TOWNSHIP OF RICHMOND CONTRACT NO. 19</p> <p>DYKE IMPROVEMENTS CH. 1611+00 TO CH. 1617+00</p>		

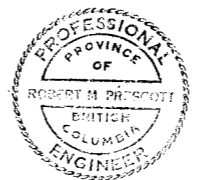


DITCH CROSSING @ 18700 RIVER ROAD
 SCALE IN FEET
 20 10 0 20 40



TYPICAL SECTION
 N.T.S.

NOTES
 - For Notes, Material Legend & Legend
 See 4795-19-2



<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	NO. BY A-1 REVISIONS Revised A/B DATE 	RECOMMENDED <i>R. M. Prescott</i> PROJECT MANAGER DATE <i>Jan 4, 1979</i>	BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	DESIGNED <i>MH</i> SURVEYED
		APPROVED <i>John Lella</i> DIRECTOR DATE <i>Jan 4, 79</i>	PROJECT NO. 3 TOWNSHIP OF RICHMOND CONTRACT NO. 19 DITCH CROSSING AT CH. 670 + 74	CHECKED <i>DLC</i> FILE NO. 0281550-C10-19 SCALE AS SHOWN DATE Jan, 1979 DWG. NO. 4795-19-7 SHEET OF SHEETS

266 428

