

The Government of the Province of British Columbia
 Department of Lands, Forests and Water Resources
 Water Resources Service

Canada – British Columbia
 Fraser River Flood Control 1968 Agreement
 Project No. 3 The Township of Richmond

DRAWING LIST

CONTRACT DRAWINGS

4795-10-1	GENERAL PLAN	4795-10-14	MISCELLANEOUS DETAILS SHEET 5 OF 5
4795-10-2	ALIGNMENT PLAN CHAINAGE 478+75 TO 486+75	4795-10-15	DITCH CROSSING DETAILS SHEET 1 OF 3
4795-10-3	ALIGNMENT PLAN CHAINAGE 486+75 TO 545+75	4795-10-16	DITCH CROSSING DETAILS SHEET 2 OF 3
4795-10-4	ALIGNMENT PLAN CHAINAGE 545+75 TO 605+74	4795-10-17	DITCH CROSSING DETAILS SHEET 3 OF 3
4795-10-5	ALIGNMENT PLAN CHAINAGE 605+74 TO 647+10	4795-10-18	TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 1 OF 7
4795-10-6	TYPICAL DYKE SECTIONS SHEET 1 OF 4	4795-10-19	TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 2 OF 7
4795-10-7	TYPICAL DYKE SECTIONS SHEET 2 OF 4	4795-10-20	TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 3 OF 7
4795-10-8	TYPICAL DYKE SECTIONS SHEET 3 OF 4	4795-10-21	TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 4 OF 7
4795-10-9	TYPICAL DYKE SECTIONS SHEET 4 OF 4	4795-10-22	TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 5 OF 7
4795-10-10	MISCELLANEOUS DETAILS SHEET 1 OF 5	4795-10-23	TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 6 OF 7
4795-10-11	MISCELLANEOUS DETAILS SHEET 2 OF 5	4795-10-24	TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 7 OF 7
4795-10-12	MISCELLANEOUS DETAILS SHEET 3 OF 5		
4795-10-13	MISCELLANEOUS DETAILS SHEET 4 OF 5		

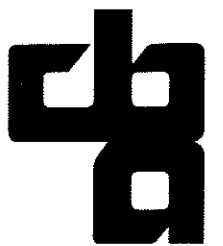
REFERENCE DRAWINGS

4795-10-25	PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 1 OF 7
4795-10-26	PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 2 OF 7
4795-10-27	PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 3 OF 7
4795-10-28	PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 4 OF 7
4795-10-29	PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 5 OF 7
4795-10-30	PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 6 OF 7
4795-10-31	PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 7 OF 7

Contract No. 10

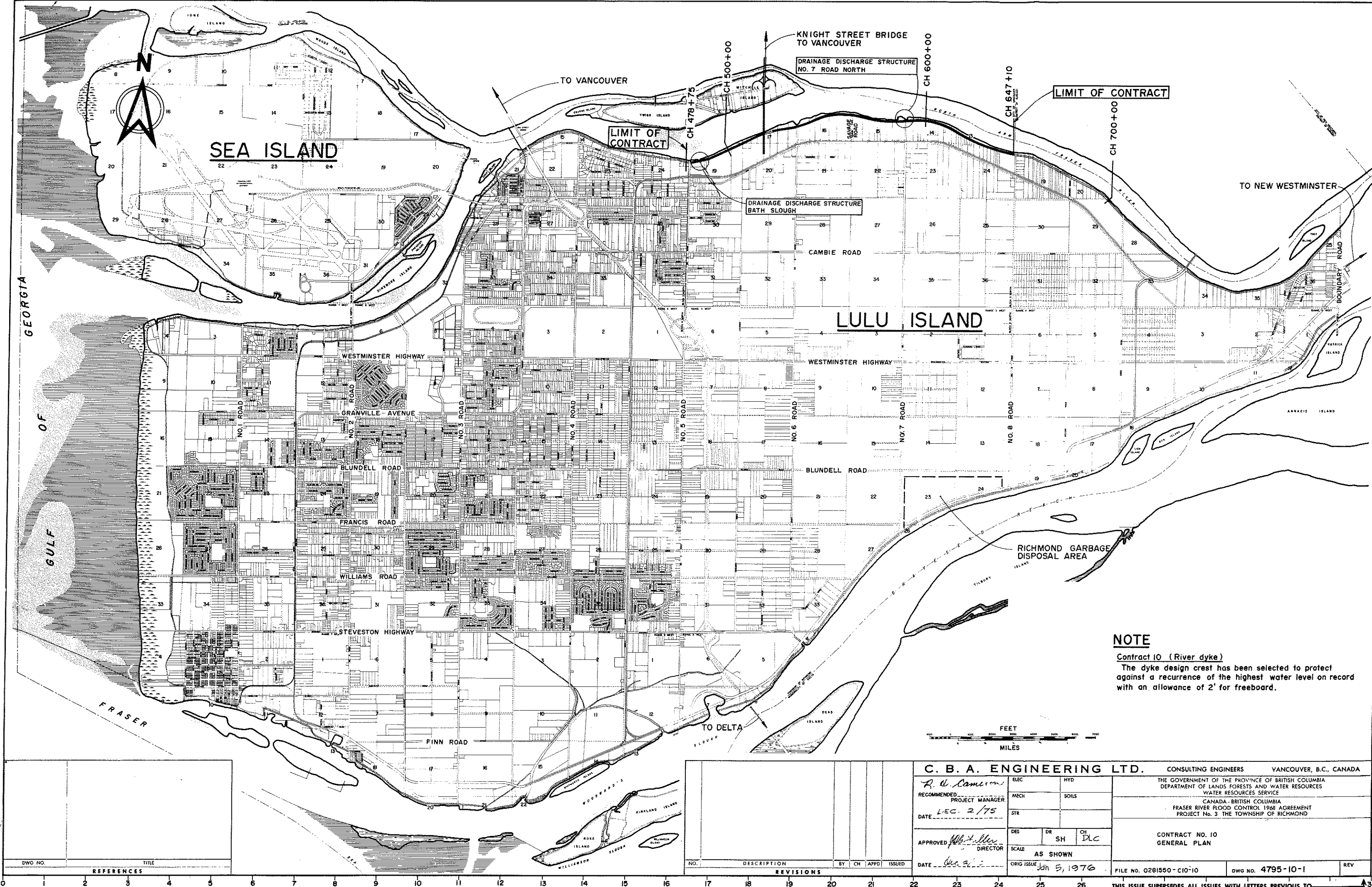
North Dyke Improvements

No. 5 Road to No. 8 Road



CBA ENGINEERING LTD

Consulting Engineers
 Vancouver, Canada



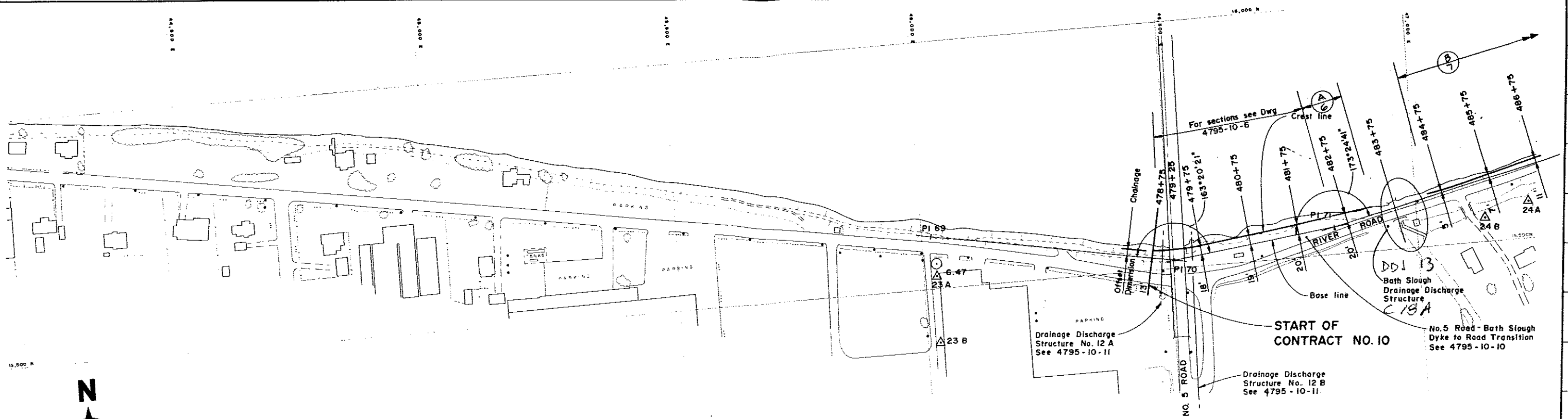
NOTE
 Contract 10 (River dyke)
 The dyke design crest has been selected to protect against a recurrence of the highest water level on record with an allowance of 2' for freeboard.

DWG NO.	TITLE
REFERENCES	

NO.	DESCRIPTION	BY	CH	APPD	ISSUED
REVISIONS					

C. B. A. ENGINEERING LTD.					
CONSULTING ENGINEERS			VANCOUVER, B.C., CANADA		
<i>R. H. Cameron</i> RECOMMENDED PROJECT MANAGER DATE: DEC. 2/75 APPROVED: <i>W. J. Miller</i> DIRECTOR DATE: Dec 21, 1975 ELEC MECH CIV DES DR SH CH DC SCALE AS SHOWN ORIG ISSUE: Jan 5, 1976					

THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND	
CONTRACT NO. 10 GENERAL PLAN	
FILE NO. 0281550-C10-10	DWG NO. 4795-10-1
THIS ISSUE SUPERSEDES ALL ISSUES WITH LETTERS PREVIOUS TO	



BASE LINE DATA					
P I	BEARING	CHAINAGE	INTERVAL	CO-ORDINATES	
				NORTH	EAST
69	S 79° 51' 04" E	474 + 24.70	498.17	15 605.68	46 020.87
70	N 83° 29' 17" E	479 + 22.87	324.98	15 517.95	46 510.98
71	N 76° 53' 58" E	482 + 47.85	465.81	15 554.79	46 833.71
72		487 + 13.26		15 660.24	47 286.84

SURVEY MONUMENTS			
MON	TYPE	CO ORDINATES	
		NORTH	EAST
23A	PIPE IN CONCRETE	15 527.40	46 026.50
23B	DITTO	15 391.30	46 025.89
24A	DITTO	15 575.66	47 228.61
24B	DITTO	15 548.64	47 139.38

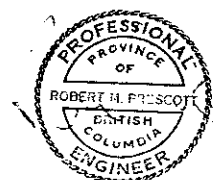
NOTE:
For descriptive location of monuments & bench marks see specifications.

LEGEND
 Δ 20A - Survey monuments
 850⊙ 112A - Bench mark & Geodetic elevation

ⓐ — Section identification letter
 ⓐ — Dwg No. on which the section is drawn (ie) 4795-10-[6].

NOTES

- Elevations refer to the Geodetic Survey of Canada.
- A smooth alignment should be maintained over the entire length of the dyke.
- Offset distances from base line to crest line are taken at the design crest elevation.
- The angle of offset is 90° to base line unless otherwise indicated.
- The line defined as the crest line is the river side shoulder of the dyke.
- Terminal parts of the work shall be constructed to blend with the existing bank.



C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA

RECOMMENDED PROJECT MANAGER
 DATE DEC. 2/75
 APPROVED DIRECTOR
 DATE Dec 2/75

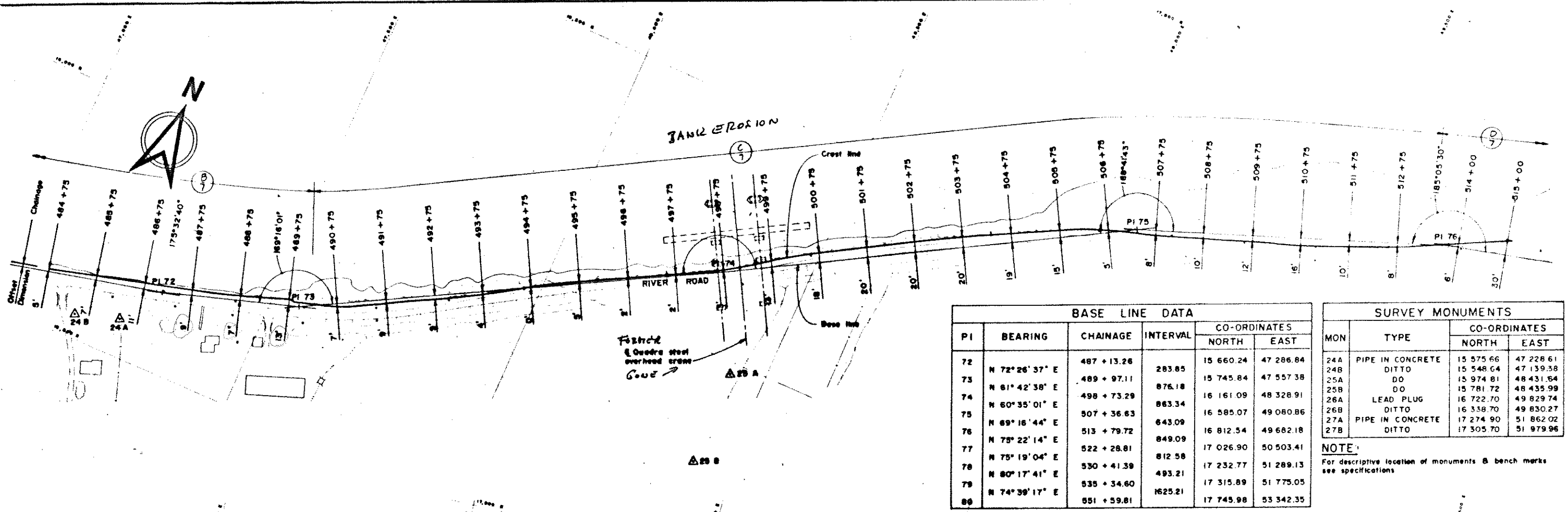
ELEC HYD
 MECH SOILS
 STR
 DES DLC DR SH CH DLC
 SCALE AS SHOWN
 ORIG ISSUE Jan 5, 1976

THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA
 DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES
 WATER RESOURCES SERVICE
 CANADA - BRITISH COLUMBIA
 FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
 PROJECT No. 3 THE TOWNSHIP OF RICHMOND

CONTRACT NO. 10
 ALIGNMENT PLAN
 CH 478+75 TO CH 486+75

FILE NO. 0281550-C10-10 DWG NO. 4795-10-2 REV

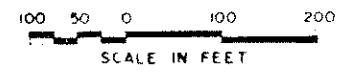
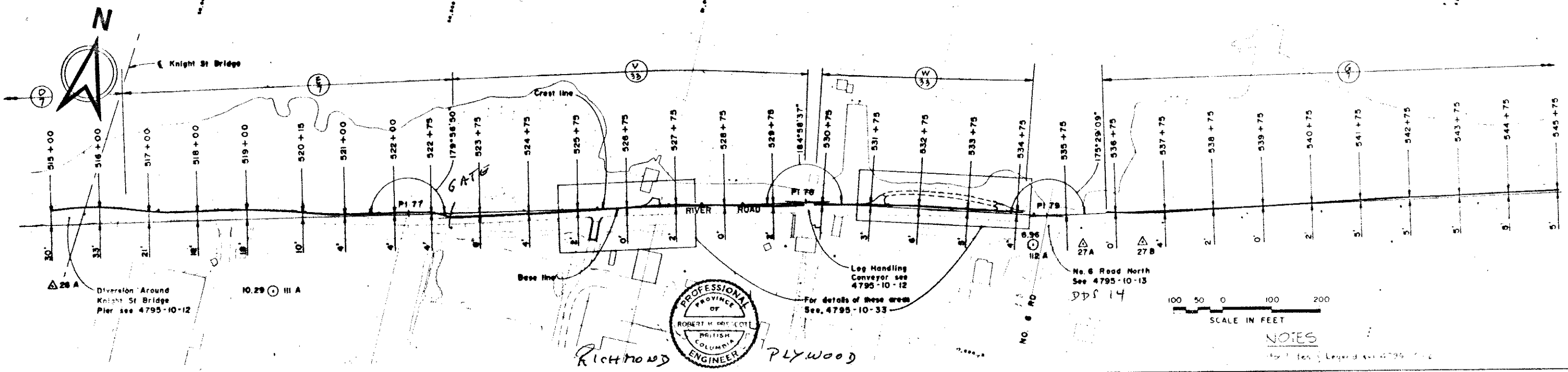
DWG NO.	TITLE	NO.	DESCRIPTION	BY	CH	APPD	ISSUED	NO.	DESCRIPTION	BY	CH	APPD	ISSUED
	REFERENCES												



BASE LINE DATA					
PI	BEARING	CHAINAGE	INTERVAL	CO-ORDINATES	
				NORTH	EAST
72	N 72° 26' 37" E	487 + 13.26	283.85	15 660.24	47 286.84
73	N 61° 42' 38" E	489 + 97.11	876.18	15 745.84	47 557.38
74	N 60° 35' 01" E	498 + 73.29	863.34	16 161.09	48 328.91
75	N 69° 16' 44" E	507 + 36.63	643.09	16 585.07	49 080.86
76	N 75° 22' 14" E	513 + 79.72	849.09	16 812.54	49 682.18
77	N 75° 19' 04" E	522 + 28.81	812.58	17 026.90	50 503.41
78	N 80° 17' 41" E	530 + 41.39	493.21	17 232.77	51 289.13
79	N 74° 39' 17" E	535 + 34.60	1625.21	17 315.89	51 775.05
80		551 + 59.81		17 745.98	53 342.35

SURVEY MONUMENTS			
MON	TYPE	CO-ORDINATES	
		NORTH	EAST
24A	PIPE IN CONCRETE	15 575.66	47 228.61
24B	DITTO	15 548.64	47 139.38
25A	DO	15 974.81	48 431.64
25B	DO	15 781.72	48 435.99
26A	LEAD PLUG	16 722.70	49 829.74
26B	DITTO	16 338.70	49 830.27
27A	PIPE IN CONCRETE	17 274.90	51 862.02
27B	DITTO	17 305.70	51 979.96

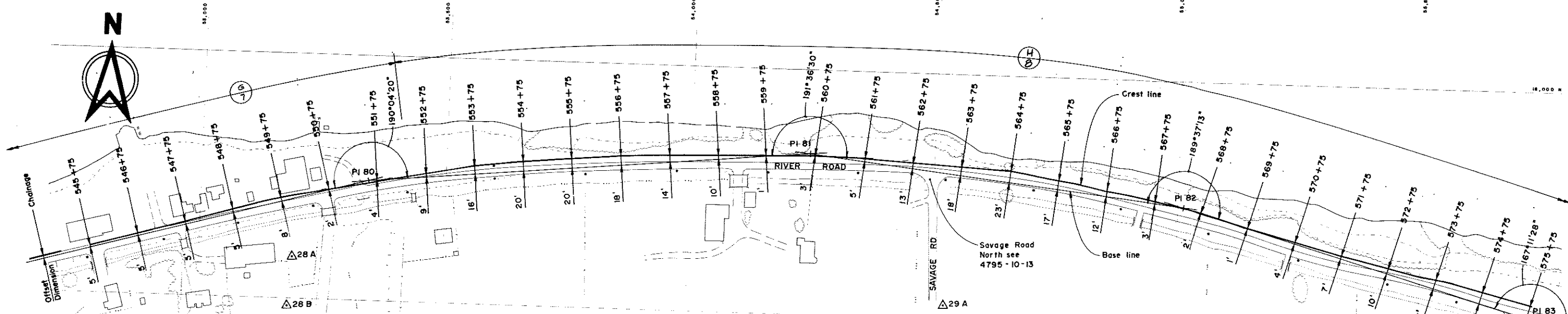
NOTE:
For descriptive location of monuments & bench marks see specifications



NOTES
For details of these areas see 4795-10-33

13911 VULCAN WAY										C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA									
RECOMMENDED PROJECT MANAGER DATE DEC 2/75										THE GOVERNMENT OF BRITISH COLUMBIA DEPARTMENT OF LAND, AIR AND WATER RESOURCES WATER RESOURCES SERVICE CANADA-BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 THE TOWNSHIP OF RICHMOND									
APPROVED FOR DIRECTOR DATE DEC 4/75										CONTRACT NO. 10 ALIGNMENT PLAN CH 486+75 TO CH 545+75									
A Alignment Revision ch. 522+75 to 534+90										FILE NO. 028/550-C10-10 DWG NO. 4795-10-3									
REVISIONS										REVISIONS									
NO. DESCRIPTION BY CH APPD. REVD.										NO. DESCRIPTION BY CH APPD. REVD.									

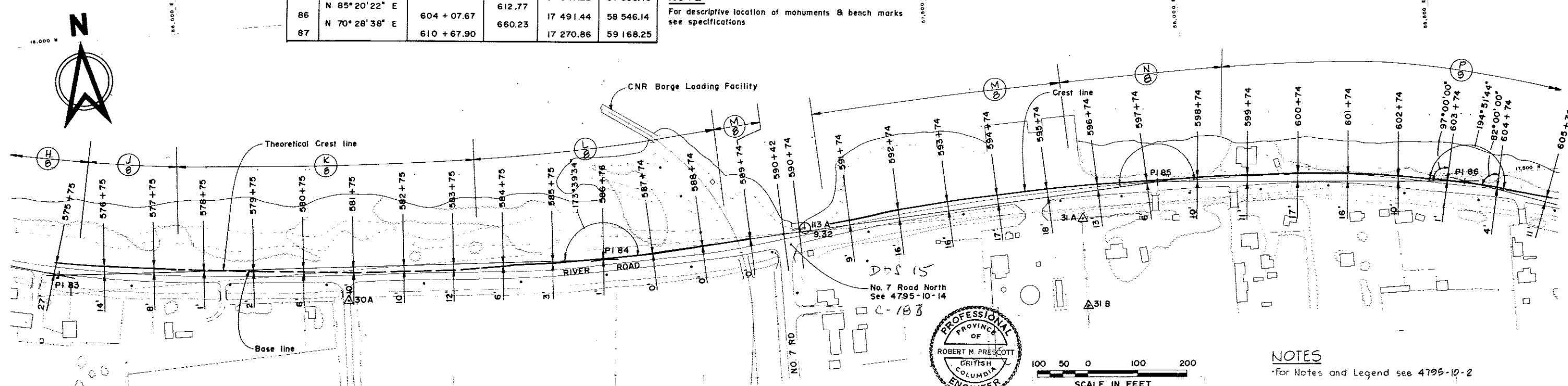
THIS ISSUE SUPERSEDES ALL ISSUES WITH LETTERS PREVIOUS TO



BASE LINE DATA					
PI	BEARING	CHAINAGE	INTERVAL	CO-ORDINATES	
				NORTH	EAST
80		551 + 59.81		17 745.98	53 342.35
81	N 84°43'37" E	560 + 65.92	906.11	17 829.24	54 244.43
82	N 63°39'54" E	568 + 37.72	771.80	17 744.10	55 011.31
83	N 74°02'41" E	575 + 84.98	747.26	17 538.78	55 729.45
84	N 86°51'13" E	586 + 76.26	1091.28	17 478.90	56 818.84
85	N 86°48'21" E	597 + 94.90	1118.64	17 941.22	57 935.49
86	N 85°20'22" E	604 + 07.67	612.77	17 491.44	58 546.14
87	N 70°28'38" E	610 + 67.90	660.23	17 270.86	59 168.25

SURVEY MONUMENTS			
MON	TYPE	CO-ORDINATES	
		NORTH	EAST
28A	PIPE IN CONCRETE	17 584.92	53 192.18
28B	DITTO	17 485.60	53 185.80
29A	DO	17 528.91	54 529.18
29B	DO	17 236.78	54 534.79
30A	DO	17 439.04	56 302.82
30B	DO	17 225.05	56 300.61
31A	DO	17 480.05	57 780.95
32B	DO	17 305.86	57 779.95

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



NOTES
For Notes and Legend see 4795-10-2

C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA

RECOMMENDED PROJECT MANAGER: *R. N. Cameron* DATE: DEC 21 75

APPROVED: *[Signature]* FOR DIRECTOR DATE: Dec 21/75

SCALE: AS SHOWN

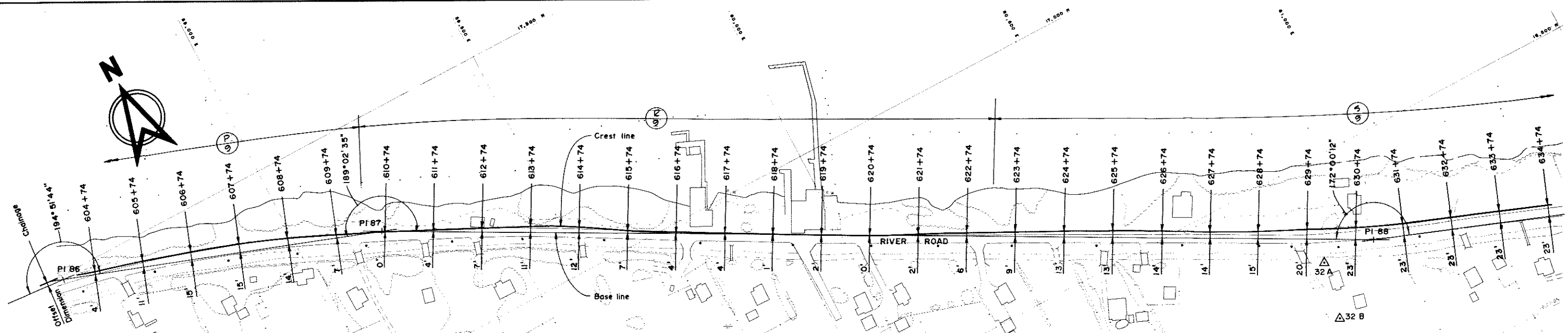
CONTRACT NO. 10
ALIGNMENT PLAN
CH 545 + 75 TO CH 605 + 74

FILE NO. 0281550-C10-10 DWG NO. 4795-10-4

NO.	DESCRIPTION	BY	CH	APPD	ISSUED	NO.	DESCRIPTION	BY	CH	APPD	ISSUED
REVISIONS											

DWG NO.	TITLE
	REFERENCES

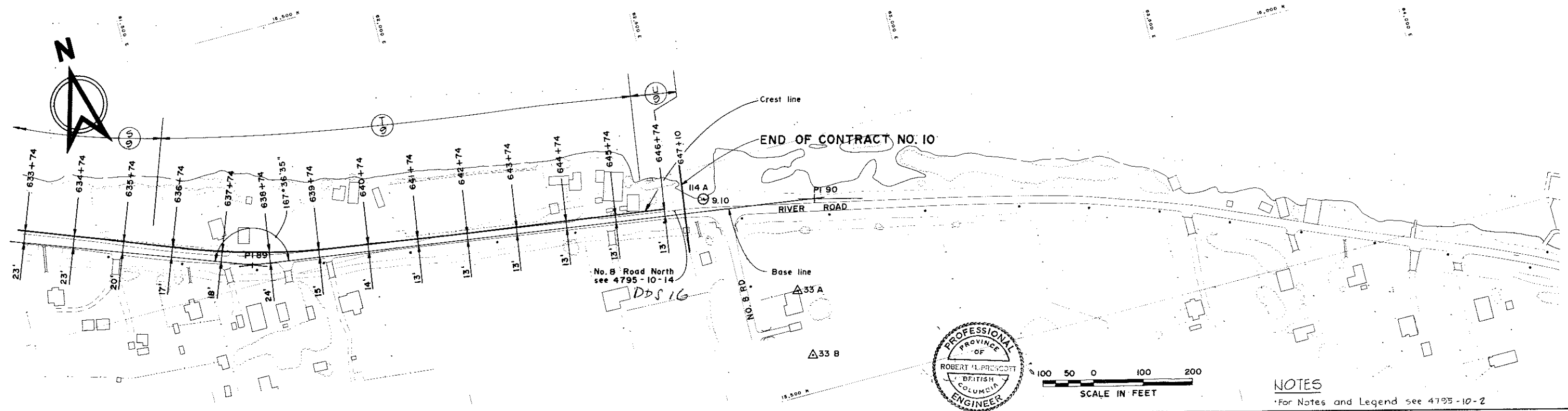
THIS ISSUE SUPERSEDES ALL ISSUES WITH LETTERS PREVIOUS TO



BASE LINE DATA					
PI	BEARING	CHAINAGE	INTERVAL	CO-ORDINATES	
				NORTH	EAST
87	S 61° 26' 03" E	610 + 67.90	2042.85	17 270.86	59 168.25
88	S 69° 25' 51" E	631 + 10.75	726.08	16 294.40	60 961.75
89	S 81° 49' 16" E	638 + 36.83	1139.96	16 039.37	61 641.36
90		649 + 76.79		15 877.22	62 769.55

SURVEY MONUMENTS			
MON	TYPE	CO-ORDINATES	
		NORTH	EAST
32A	PIPE IN CONCRETE	16 301.10	60 848.97
32B	DITTO	16 183.95	60 825.87
33A	DO	15 707.50	62 692.04
33B	DO	15 574.03	62 691.61

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

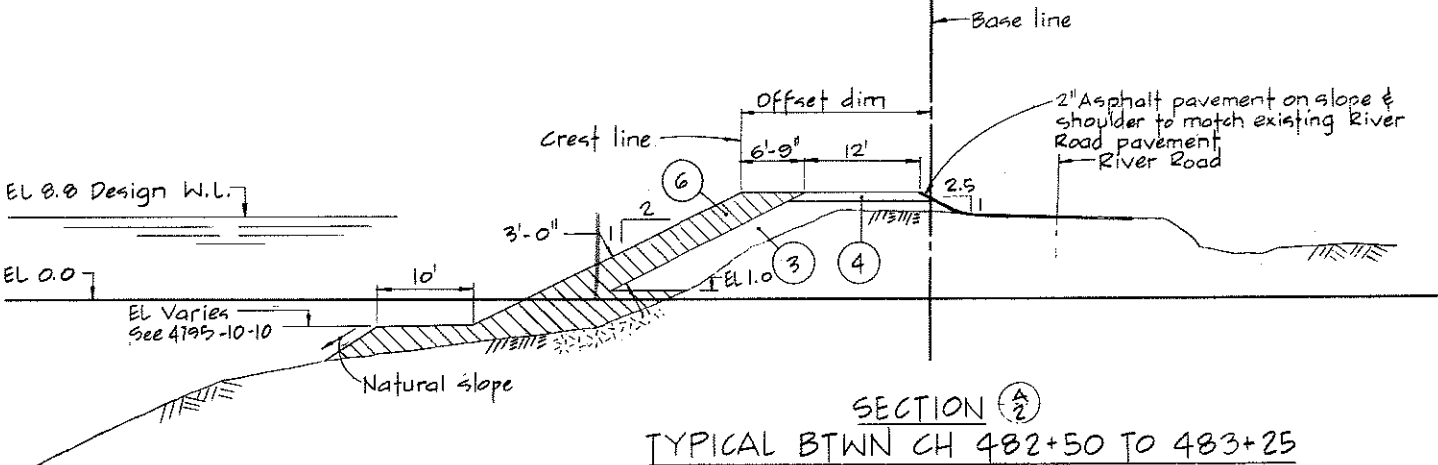
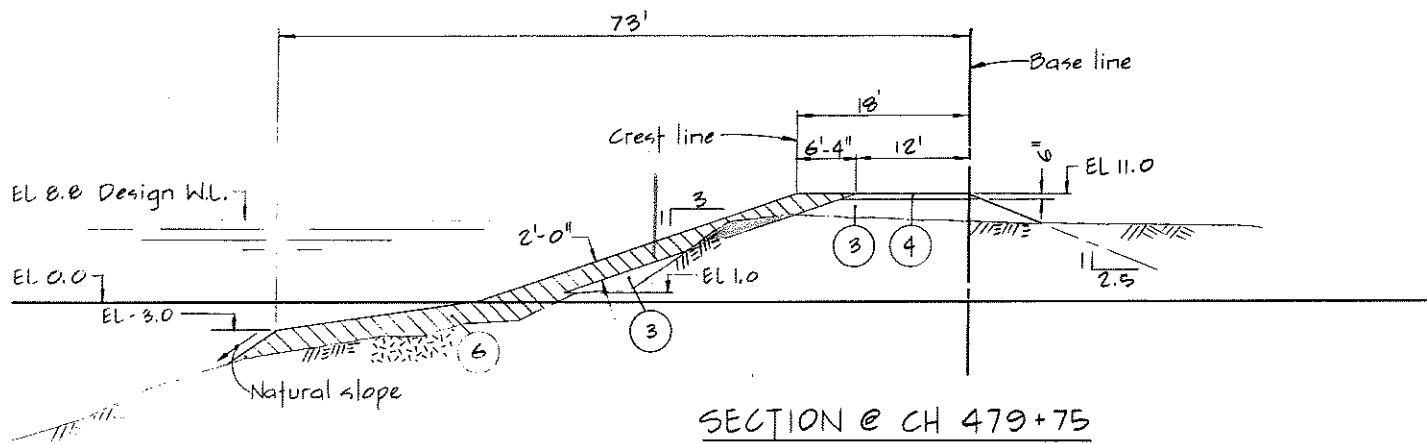
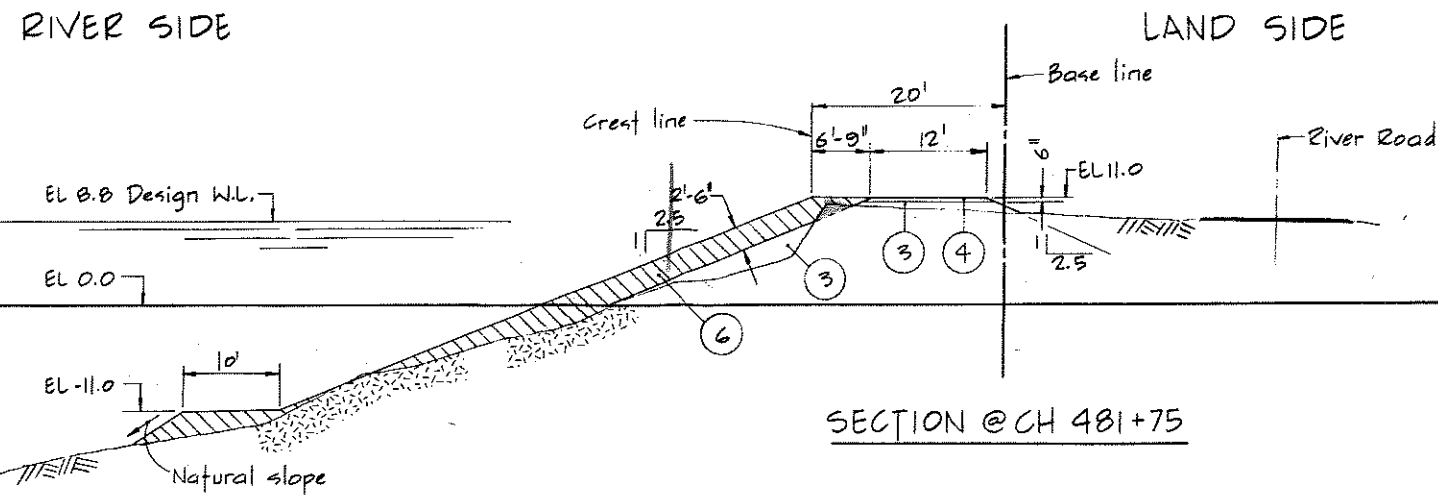
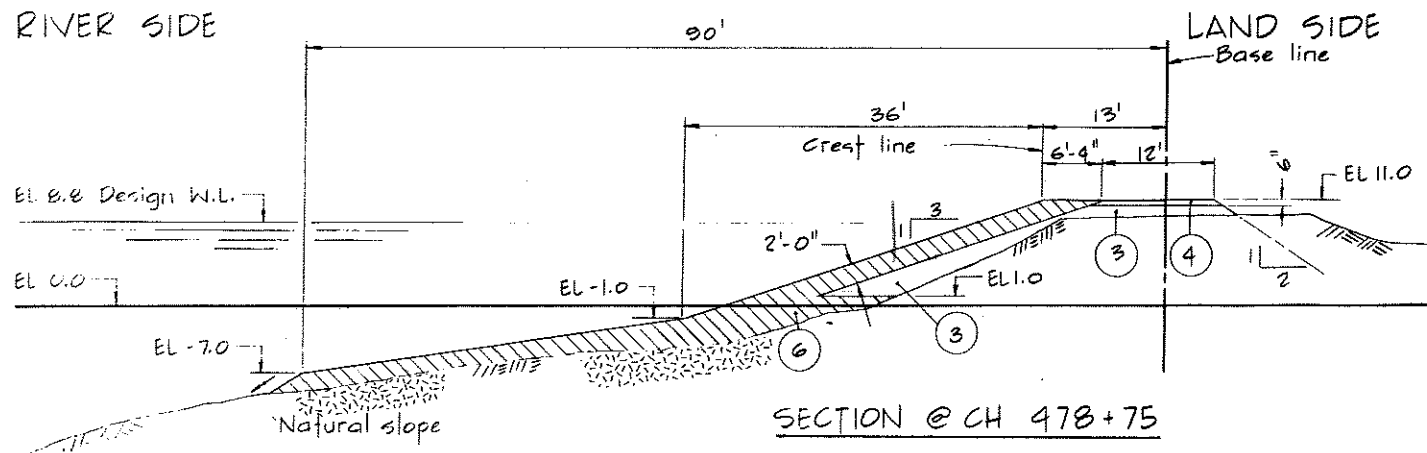


NOTES
For Notes and Legend see 4795-10-2

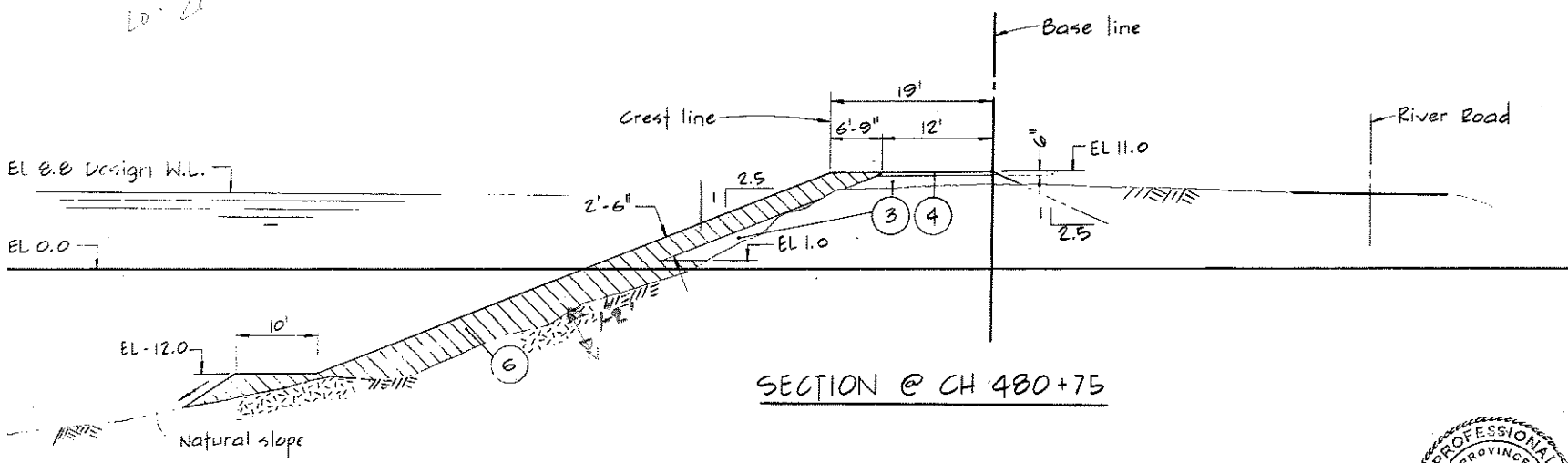
DWG NO.	TITLE	NO.	DESCRIPTION	BY	CH	APPD	ISSUED	NO.	DESCRIPTION	BY	CH	APPD	ISSUED
	REFERENCES												

C. B. A. ENGINEERING LTD.		CONSULTING ENGINEERS		VANCOUVER, B.C., CANADA	
<i>R. K. Cameron</i> RECOMMENDED PROJECT MANAGER DATE: DEC. 2/75		ELEC MECH STR		HYD SOILS	
APPROVED <i>[Signature]</i> for DIRECTOR DATE: Dec 2/75		DES: DLC DR: SH CH: DLC		SCALE: AS SHOWN ORG ISSUE: Jan 6, 1976	
THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE		CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND		CONTRACT NO. 10 ALIGNMENT PLAN CH 605+74 TO CH 647+10	
FILE NO. 0281550-G10-10		DWG NO. 4795-10-5		REV	

THIS ISSUE SUPERSEDES ALL ISSUES WITH LETTERS PREVIOUS TO



521-964
10'-20'



MATERIALS LEGEND

- ① Silt
- ② Sand
- ③ Sand gravel & cobbles
- ④ Crushed gravel
- ⑤ Light rip-rap
- ⑥ Rip-rap

LEGEND

- Existing ground
- Section identification letter Drawing No. on which section is located (ie) 4795-10-(3)
- Detail identification number, Drawing No. on which detail is located (ie) 4795-10-(9)
- Existing rip-rap

NOTES

- Elevations refer to the Geodetic Survey of Canada.
- For offset dimensions see appropriate Alignment plan.
- Offset distances from base line to crest line are taken at the design crest elevation.
- Dimensions of Rip-Rap measured horizontally @ EL 11.0 are approximate only and have been calculated to the nearest inch.
- Rock Rip-Rap is to be as specified in the detailed specifications.
- The minimum acceptable thickness of rock rip-rap in areas of existing bank protection shall be 2 1/2 ft, provided that the bank is stable and slope is not steeper than 1 1/2 to 1.
- Where the thickness of existing bank protection is less than 2 1/2 ft new rock shall be blended with the existing rock until a minimum thickness of 3 ft is achieved.
- Terminal parts of the work shall be constructed to blend with the existing bank.



CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

RECOMMENDED *R. K. Cameron*
PROJECT MANAGER
DATE *DEC. 2/75*
APPROVED *J. B. Fuller*
for DIRECTOR
DATE *Dec 2/75*

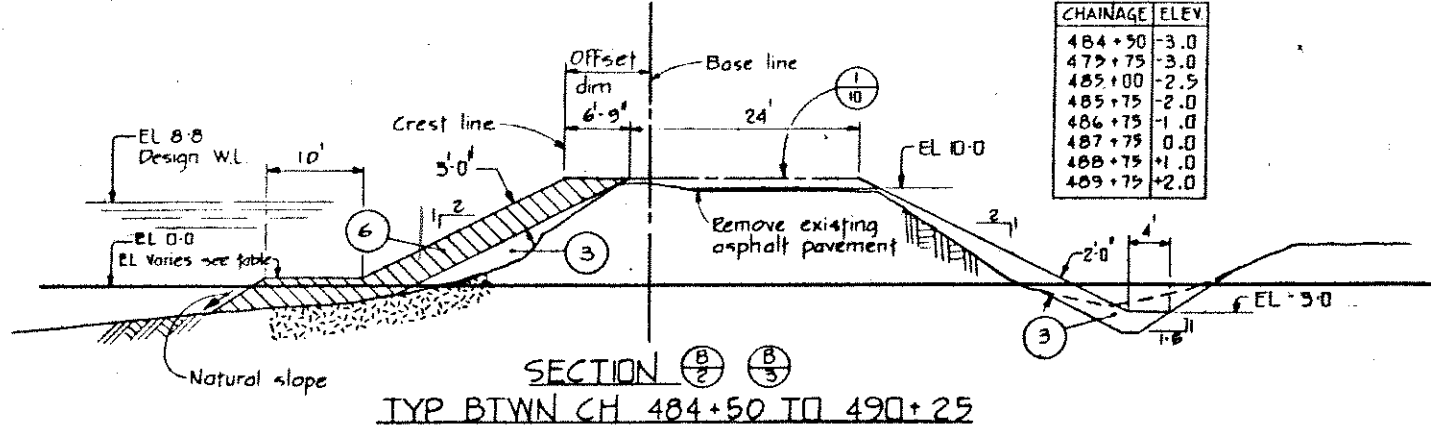
BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
PROJECT NO. 3 THE TOWNSHIP OF RICHMOND
CONTRACT NO. 10
TYPICAL DYKE SECTIONS

DESIGNED *EMH & DLC*
DRAWN *Wn*
CHECKED *DLC*
SCALE *AS SHOWN*
DWG. NO. *4795-10-6*
SURVEYED *ES & WJB*
DATE *1969/70 & 1975*
FILE NO. *0281550-C10-10*
DATE *Jan 5, 1976*
SHEET *1* OF *4* SHEETS

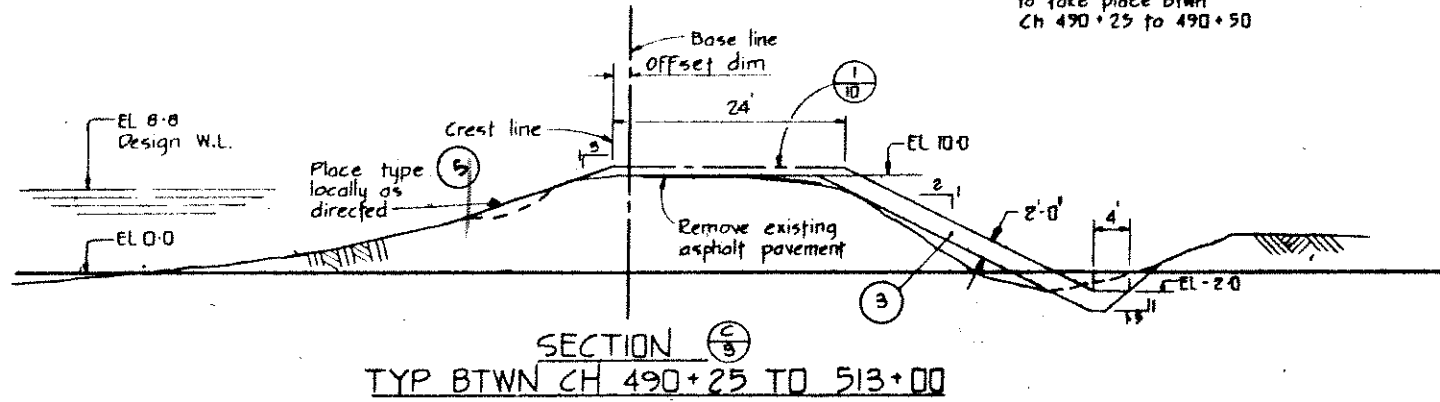
NO.	BY	REVISIONS	DATE

RIVER SIDE

LAND SIDE

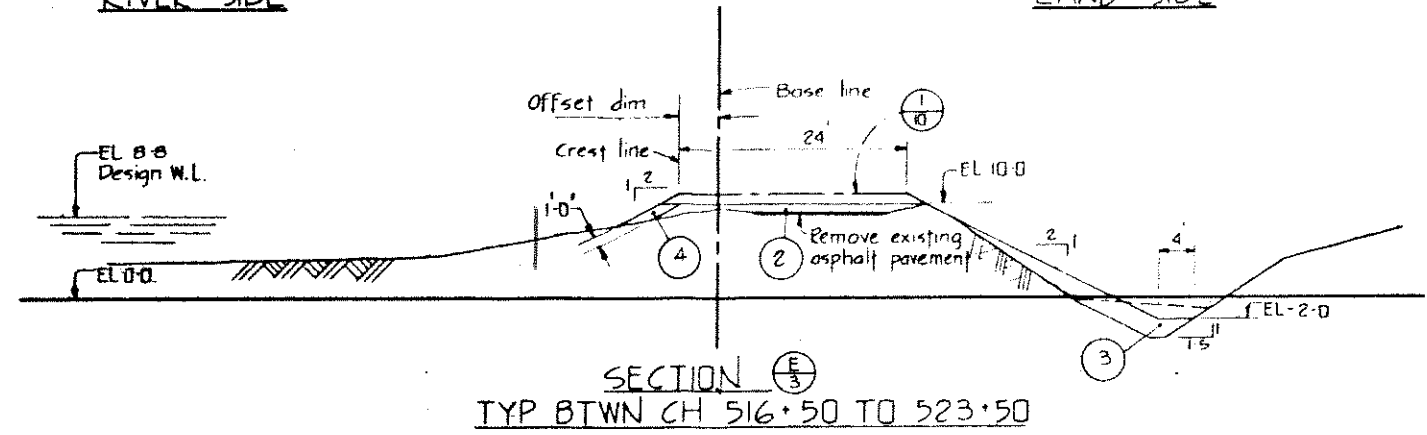


NOTE
Transition in ditch invert to take place btwn Ch 490+25 to 490+50



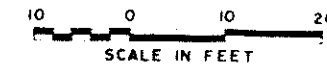
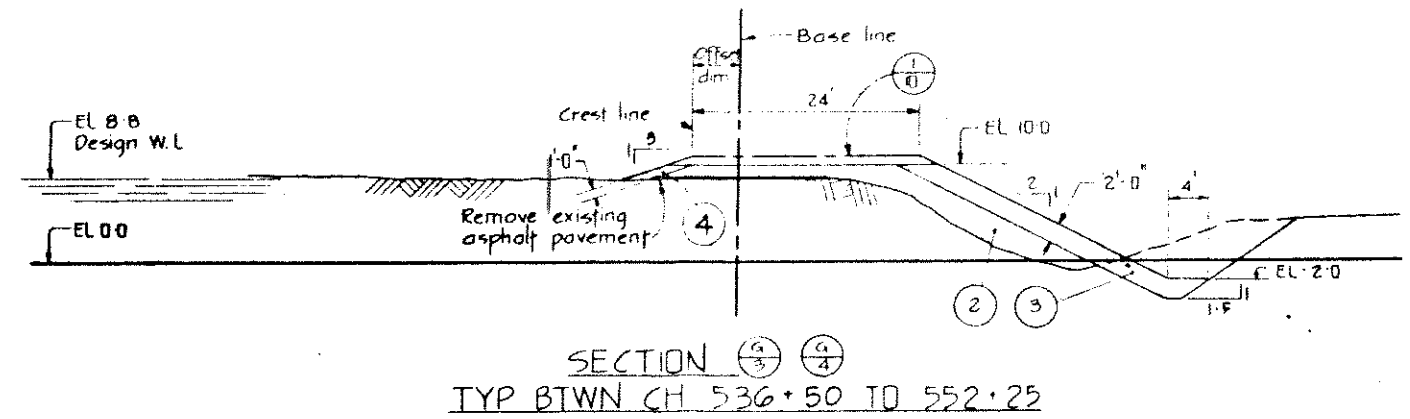
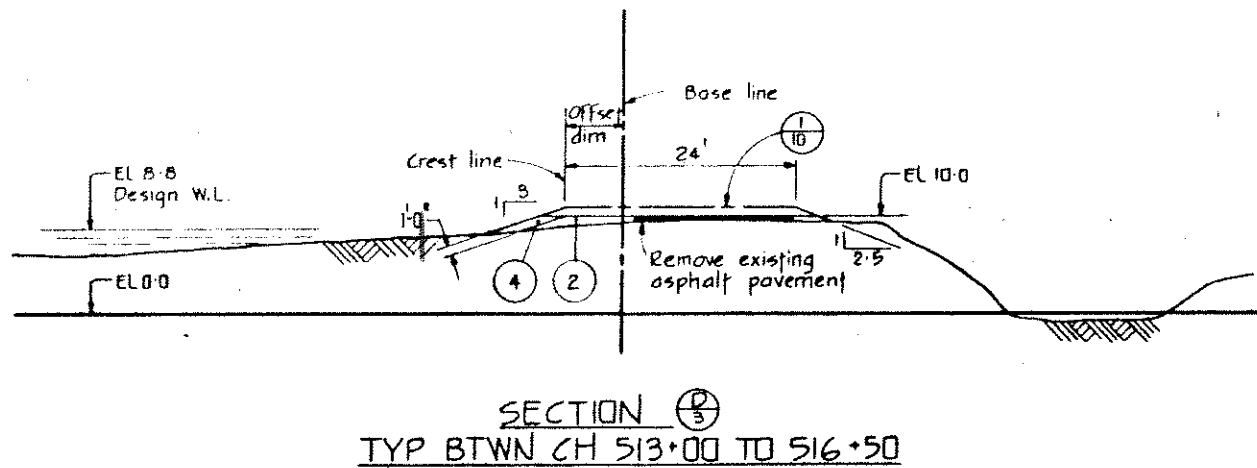
RIVER SIDE

LAND SIDE



NOTE
For new Sections see 4795-10-33

SECTION $\frac{F}{3}$
TYP BTWN CH 523+50 TO 530+35
& CH 530+60 TO 534+90



NOTES
For General Notes, Legend & Material Legend see 4795-10-6

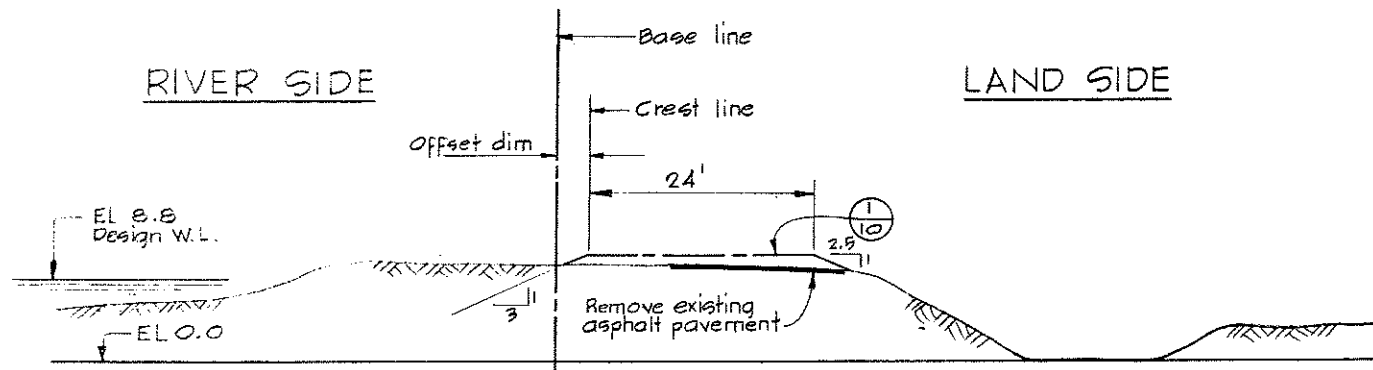
CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

RECOMMENDED	<i>H.R. Conner</i>		
PROJECT MANAGER			
DATE	Dec 2/75		
APPROVED	<i>John Fuller</i>		
DIRECTOR			
DATE	Dec 2/75		
NO.	BY	REVISIONS	DATE
A	WZ	Deleted section $\frac{E}{3}$ & Note added	Sept 15 1976

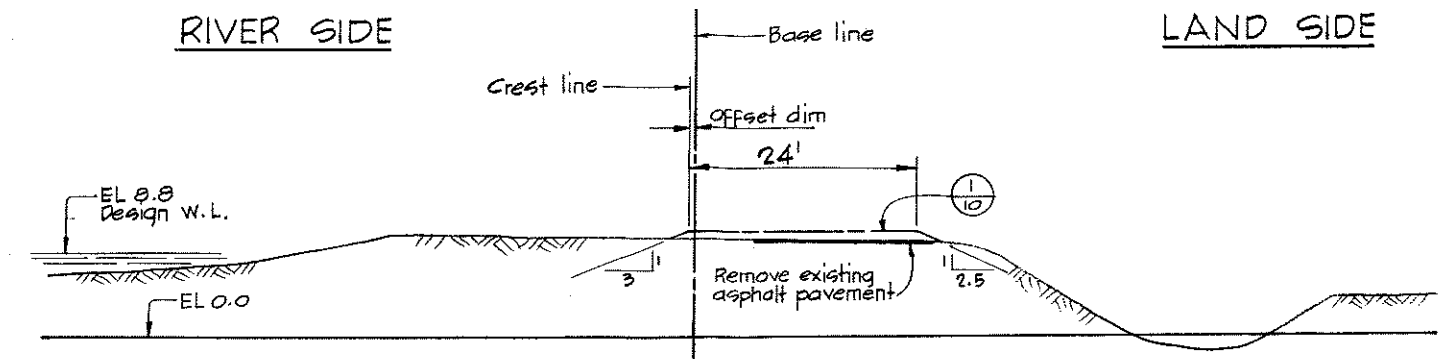
BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

PROJECT NO 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO 10
TYPICAL DYKE SECTIONS

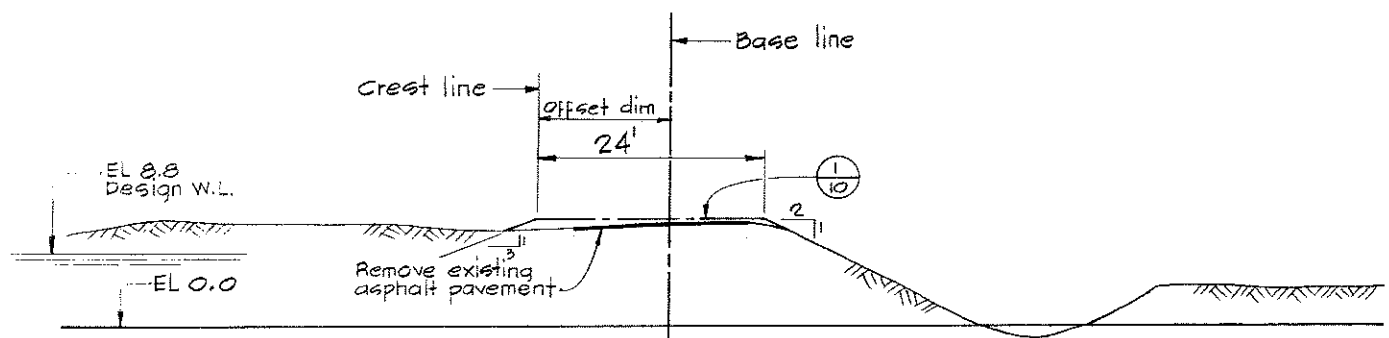
DESIGNED	EMH&DLC	SURVEYED	ES
DRAWN	SD	DATE	1969/70
CHECKED	DLC	FILE NO	0281530-C10-10
SCALE	AS SHOWN	DATE	Jan 5, 1976
DWG NO	4795-10-7	SHEET	2 OF 4 SHEETS



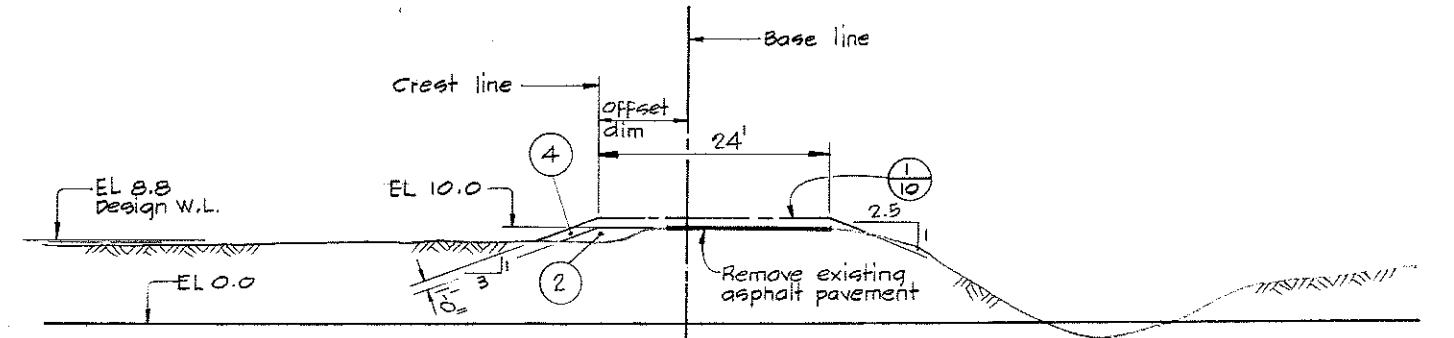
SECTION $\frac{H}{4}$
TYP BTWN CH 552+25 TO 576+25



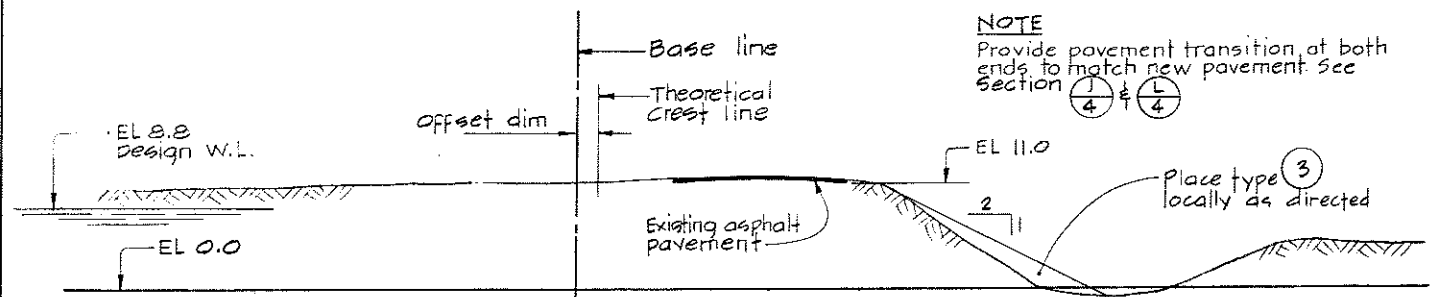
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TYP BTWN CH 584+25 TO 589+25



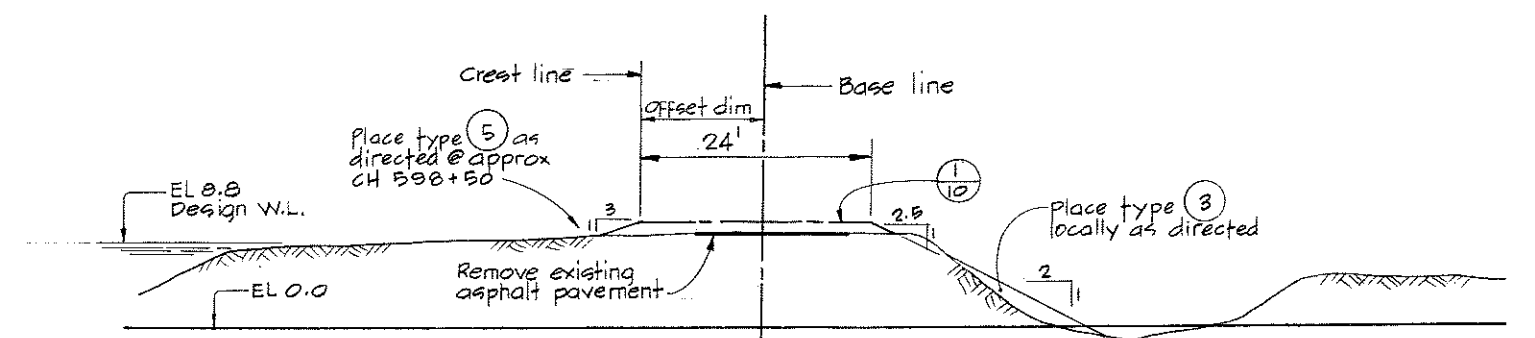
SECTION $\frac{J}{4}$
TYP BTWN CH 576+25 TO 578+25



SECTION $\frac{M}{4}$
TYP BTWN CH 589+24 TO 589+74
& CH 591+24 TO 596+24



SECTION $\frac{K}{4}$
TYP BTWN CH 578+25 TO 584+25



SECTION $\frac{N}{4}$
TYP BTWN CH 596+24 TO 599+24

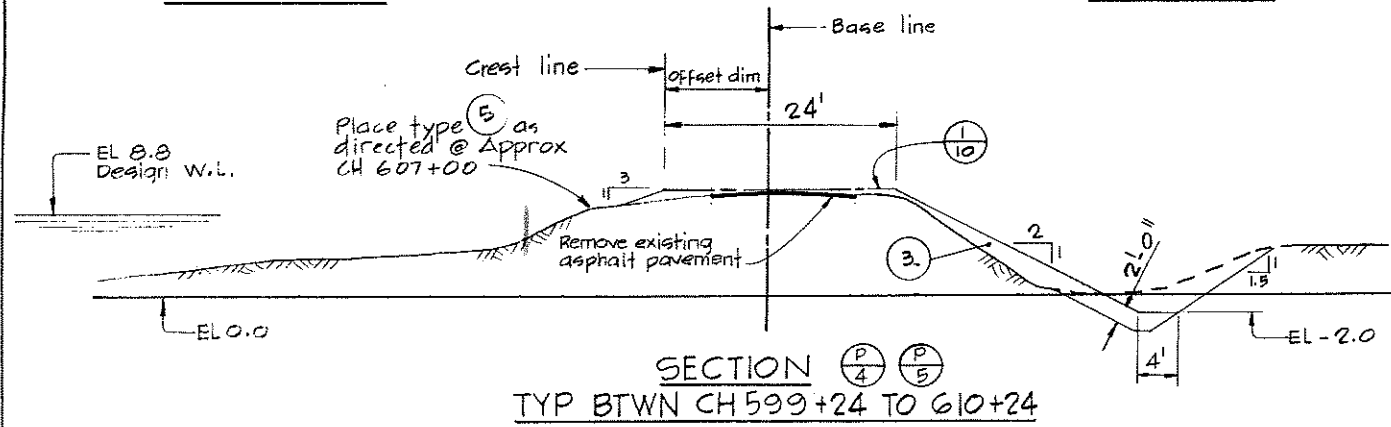


NOTES
For General Notes, Legend & Material Legend see 4795-10-6

<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	<table border="1"> <tr><th>NO.</th><th>BY</th><th>REVISIONS</th><th>DATE</th></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>	NO.	BY	REVISIONS	DATE					<p>RECOMMENDED <i>R.H. Comen</i> PROJECT MANAGER DATE <i>DEC. 2/75</i></p>	<p>BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT</p>	<p>DESIGNED <i>EMH & DLC</i> DRAWN <i>WZ</i> CHECKED <i>DLC</i> SCALE AS SHOWN DWG. NO. 4795-10-8</p>	<p>SURVEYED <i>ES</i> DATE <i>1969/70</i> FILE NO. <i>0281550-C10-10</i> DATE <i>Jan 5, 1976</i> SHEET <i>3</i> OF <i>4</i> SHEETS</p>
		NO.	BY	REVISIONS	DATE								
<p>APPROVED <i>Robt H. P. [unclear]</i> DIRECTOR DATE <i>Dec 2/75</i></p>	<p>PROJECT NO. 3 THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 TYPICAL DYKE SECTIONS</p>												

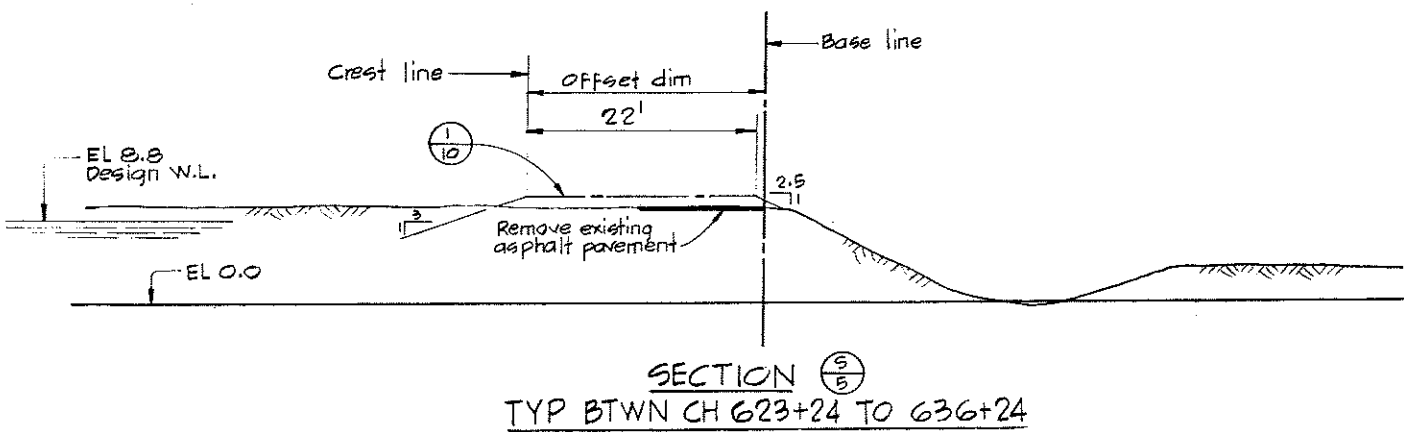
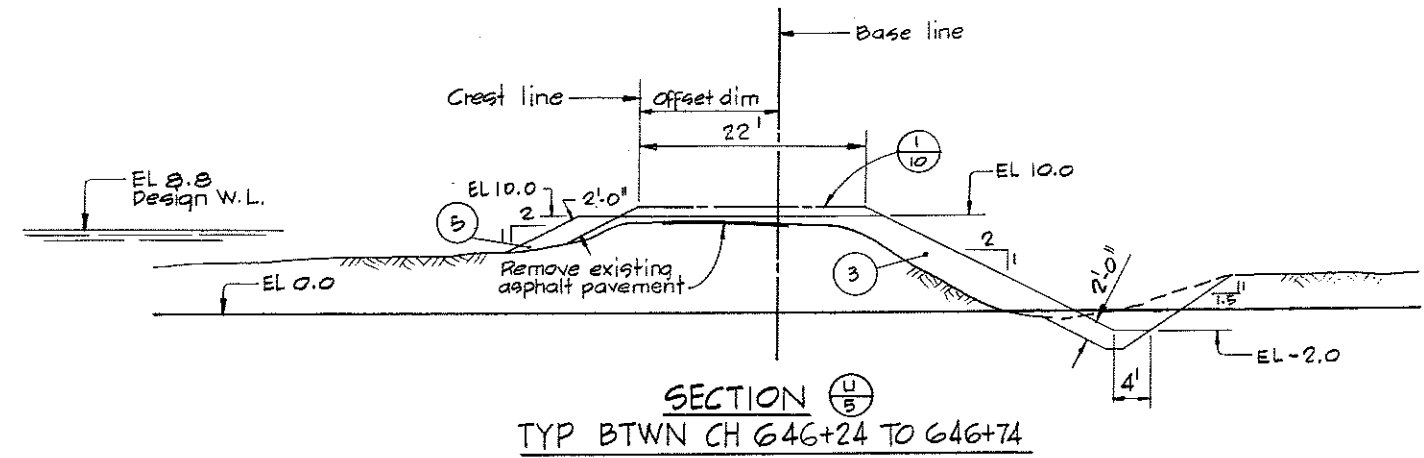
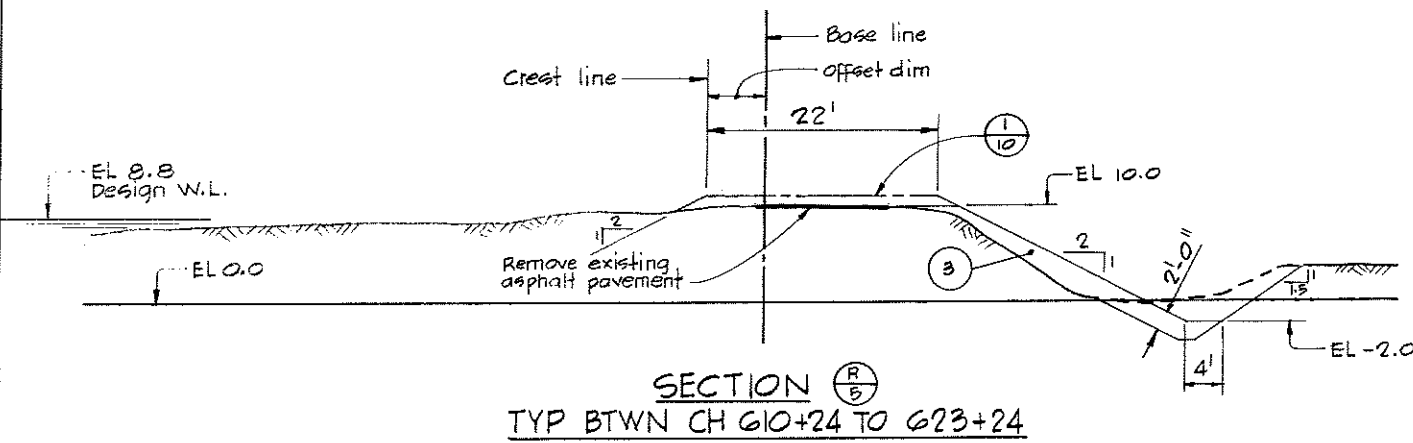
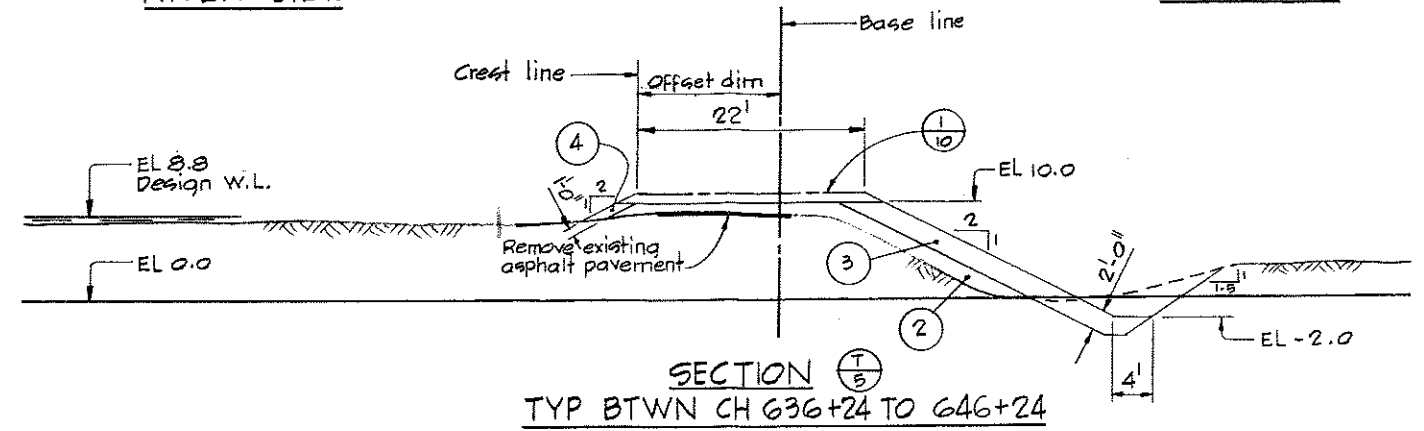
RIVER SIDE

LAND SIDE



RIVER SIDE

LAND SIDE



NOTES

For General Notes, Legend & Material Legend see 4795-10-6



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CONSULTING ENGINEERS - VANCOUVER - CANADA

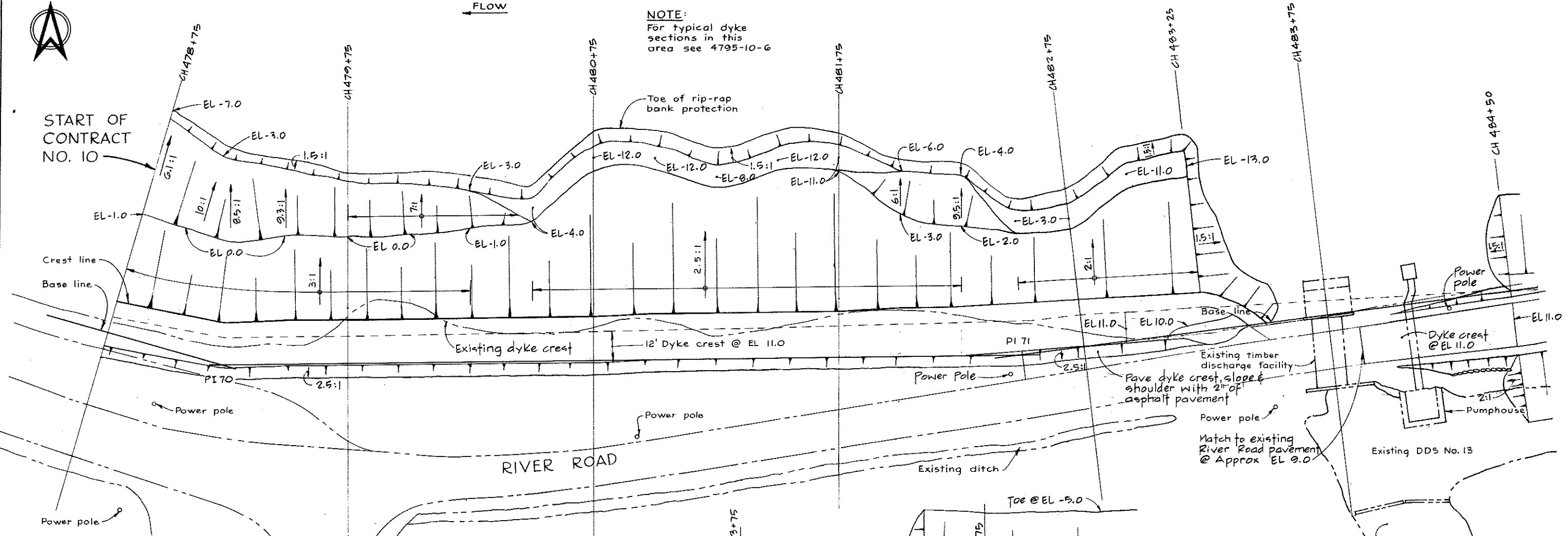
NO.	BY	REVISIONS	DATE	RECOMMENDED <i>R.H. Cameron</i>	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	DESIGNED <i>EMH & DLC</i>	SURVEYED <i>ES</i>
				DATE <i>DEC. 2/75</i>		DRAWN <i>WZ</i>	DATE <i>1969/70</i>
				APPROVED <i>W. J. Sullivan</i>	PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 TYPICAL DYKE SECTIONS	CHECKED <i>DLC</i>	FILE NO. <i>0281550-C10-10</i>
				DATE <i>Dec 2/75</i>		DIRECTOR	SCALE <i>AS SHOWN</i>
						DWG. NO. <i>4795-10-9</i>	SHEET <i>4</i> OF <i>4</i> SHEETS



FRASER RIVER

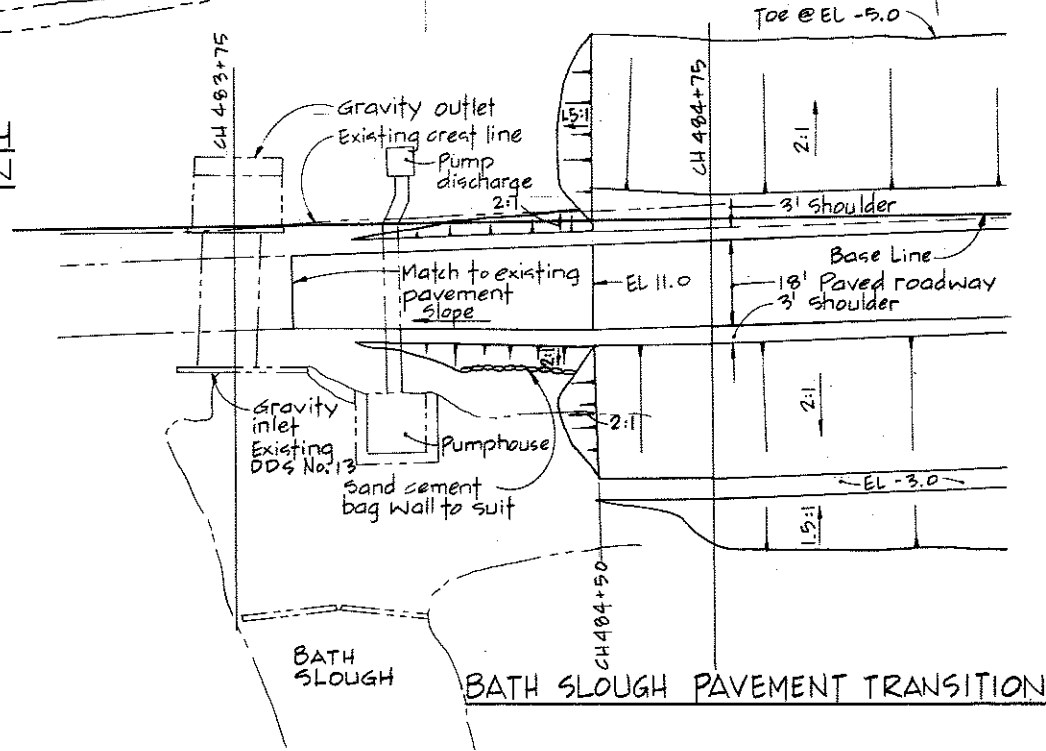
← FLOW

NOTE:
For typical dyke sections in this area see 4795-10-6



NOTE
For details of removal of DDS 12A & 12B & additional drainage work in this area see 4795-10-11.

No. 5 ROAD - BATH SLOUGH DYKE TO ROAD TRANSITION



MATERIAL LEGEND

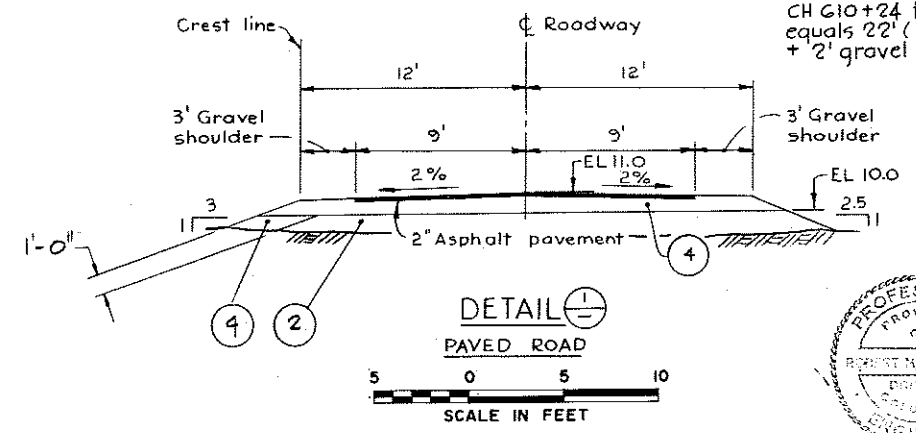
- ① Silt
- ② Sand
- ③ Sand, gravel, cobbles
- ④ Crushed gravel
- ⑤ Light rip-rap
- ⑥ Rip-rap

LEGEND

- Existing ground surface (section)
- Existing ground & structures (plan)
- Ⓧ Section identification letter
- Ⓧ Drawing No. on which the section is drawn (ie) 4795-10-[7]
- Ⓧ Detail identification number
- Ⓧ Drawing No. on which the detail is drawn (ie) 4795-10-[7]

NOTES

- Elevations refer to the Geodetic Survey of Canada
- For offset dimensions see appropriate chainage on Alignment Plans.
- Offset distances from base line to crest line are taken at EL 11.0



NOTE
Road width btwn CH 610+24 to CH 647+24 equals 22' (18' pavement + 2' gravel shoulders)

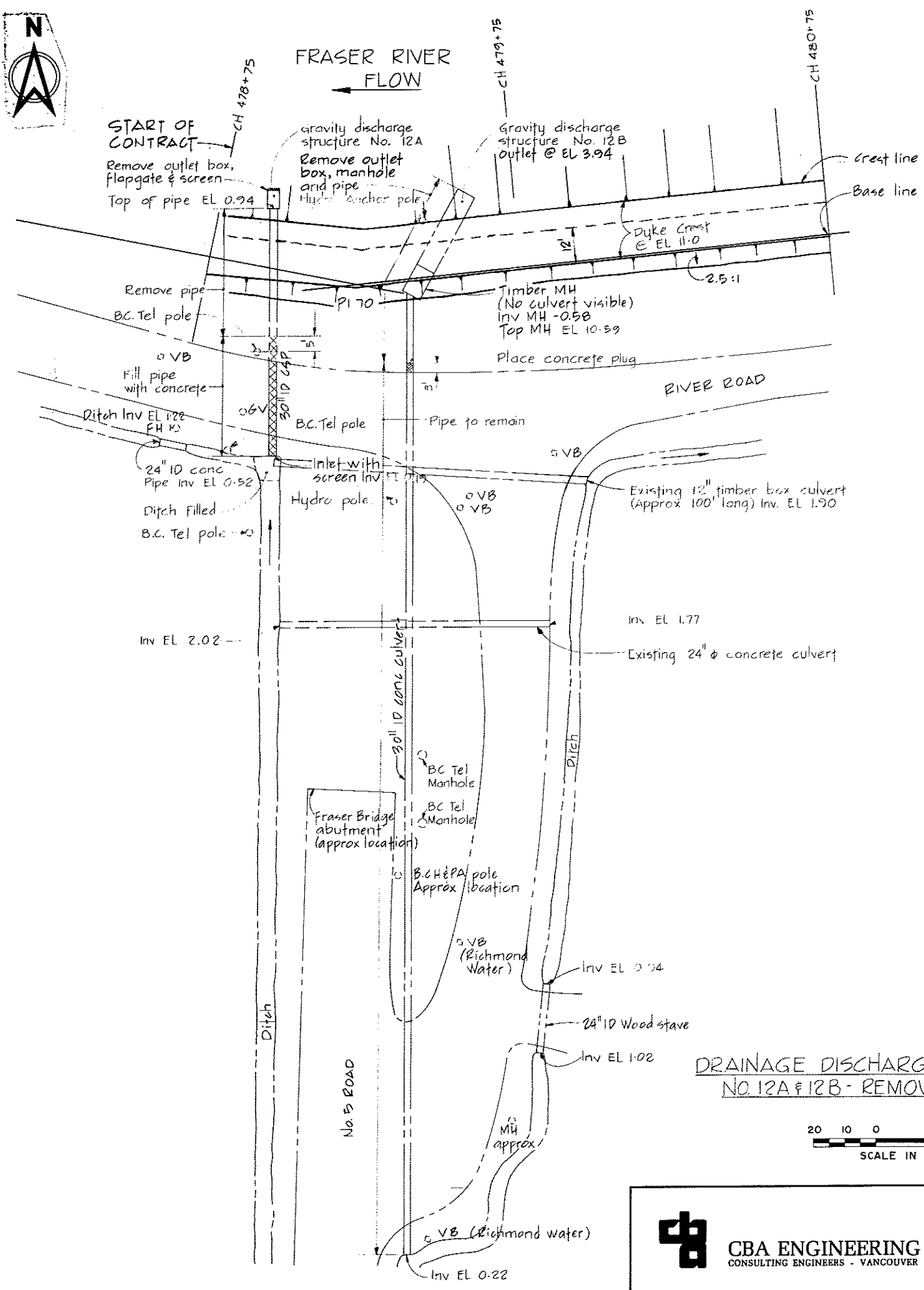


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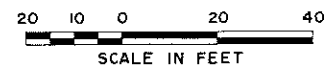
RECOMMENDED *R. H. Cameron*
PROJECT MANAGER
DATE *DEC. 2/75*
APPROVED *[Signature]*
DIRECTOR
DATE *Dec 2/75*

BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO. 10
MISCELLANEOUS DETAILS


DESIGNED	DLC	SURVEYED	ES & W1B
DRAWN	Win	DATE	1969/10/1975
CHECKED	DLC	FILE NO.	0281550 - C10-10
SCALE	AS SHOWN	DATE	Jan 5, 1976
DWG. NO.	4795-10-10	SHEET	1 OF 5 SHEETS

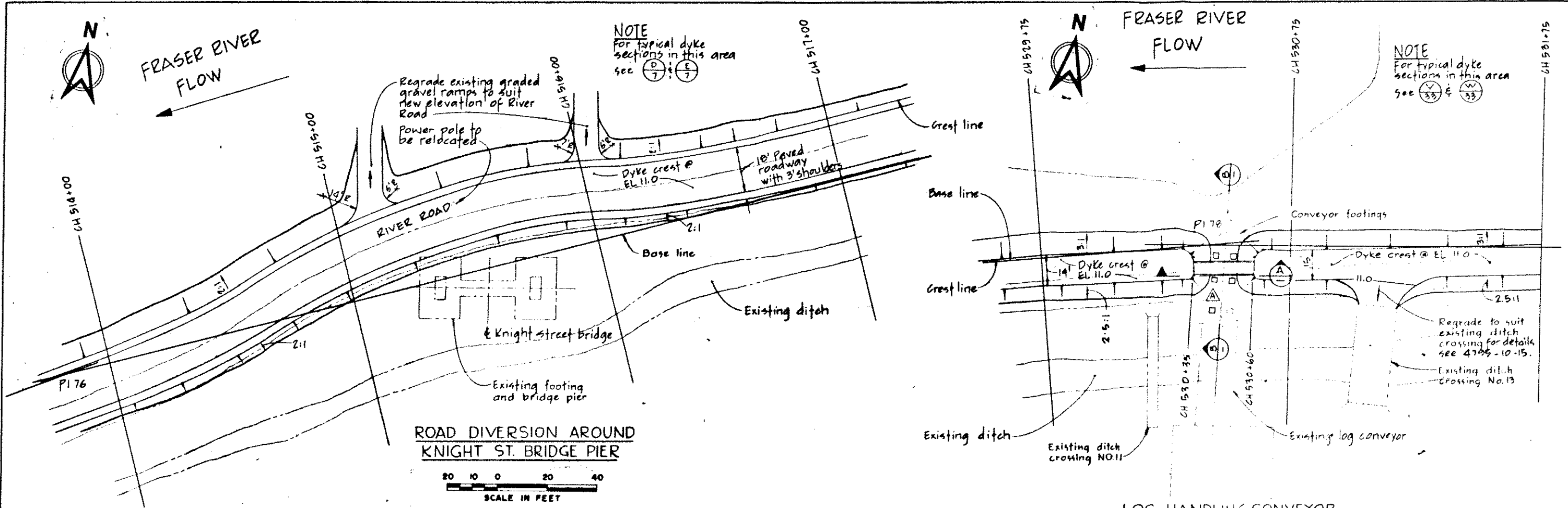


**DRAINAGE DISCHARGE STRUCTURES
NO. 12A & 12B - REMOVAL DETAILS**



NOTES
For Notes, Material Legend & Legend
see 4795-10-10

 CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA	NO.	BY	REVISIONS	DATE	RECOMMENDED <i>R.H. Lamson</i> PROJECT MANAGER. DATE <i>DEC. 2/75</i>	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	DESIGNED <i>EMH</i>	SURVEYED <i>ES & CBA</i>
					APPROVED <i>W. J. Feller</i> DIRECTOR DATE <i>Dec 2/75</i>		DRAWN <i>SP & H.M.</i> DATE <i>1969/10/19/75</i>	CHECKED <i>EMH</i> FILE NO. <i>0281550-C10-10</i>
						PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 MISCELLANEOUS DETAILS	DWG. NO. <i>4795-10-11</i>	SHEET <i>2</i> OF <i>5</i> SHEETS



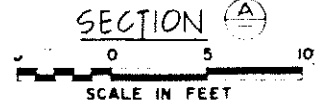
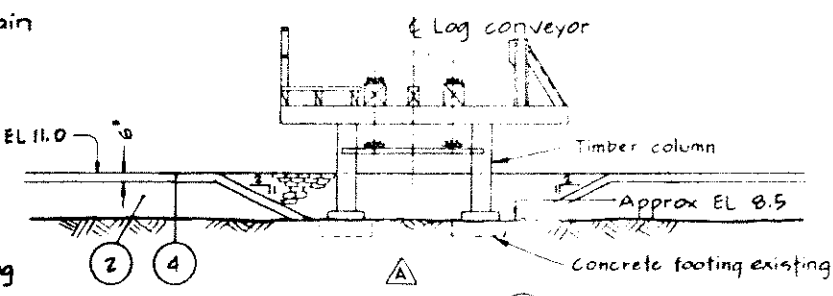
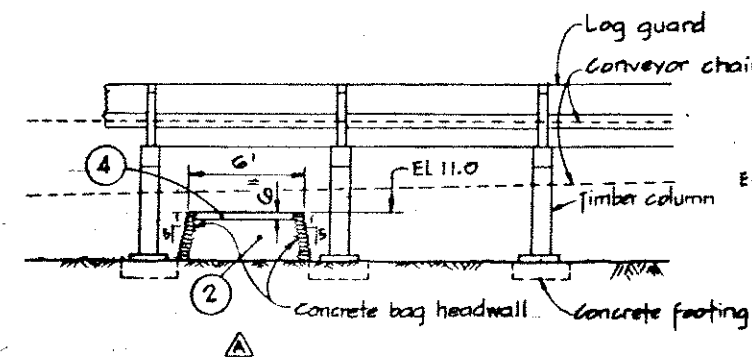
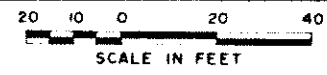
NOTE
For typical dyke sections in this area see (D/7) & (E/7)

NOTE
For typical dyke sections in this area see (V/33) & (W/33)

ROAD DIVERSION AROUND KNIGHT ST. BRIDGE PIER



LOG HANDLING CONVEYOR



NOTES

For Notes, Material Legend, and Legend see 4795-10-10



<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	<p>RECOMMENDED <i>R.R. Loman</i> PROJECT MANAGER</p>	<p>BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT</p>	<p>DESIGNED: <i>DLC</i> DRAWN: <i>nm</i> CHECKED: <i>DLC</i> SCALE: AS SHOWN DWG NO: 4795-10-12</p>	<p>SURVEYED: <i>ES & CBA</i> DATE: 10/6/1975 FILE NO: 0281550-C10-10 DATE: Jan 5, 1976 SHEET 3 OF 5 SHEETS</p>
	<p>DATE: DEC 2/75</p>	<p>PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 MISCELLANEOUS DETAILS</p>	<p>APPROVED: <i>W. Fuller</i> DIRECTOR</p> <p>DATE: Dec 2/75</p>	<p>NO. 172 REVISED DYKE @ Sept 13 LOG HANDLING CONVEYOR 1976</p>

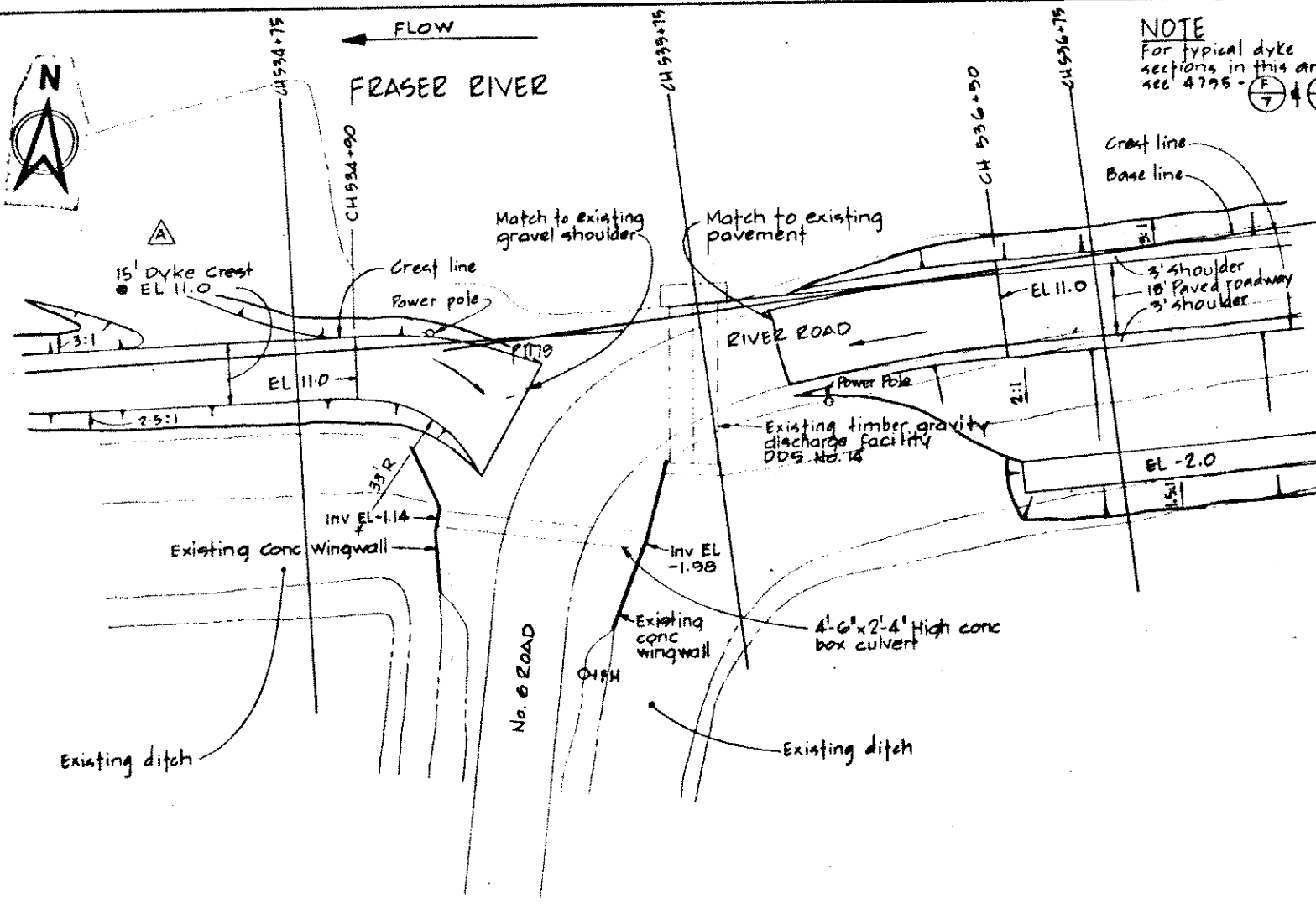


← FLOW →

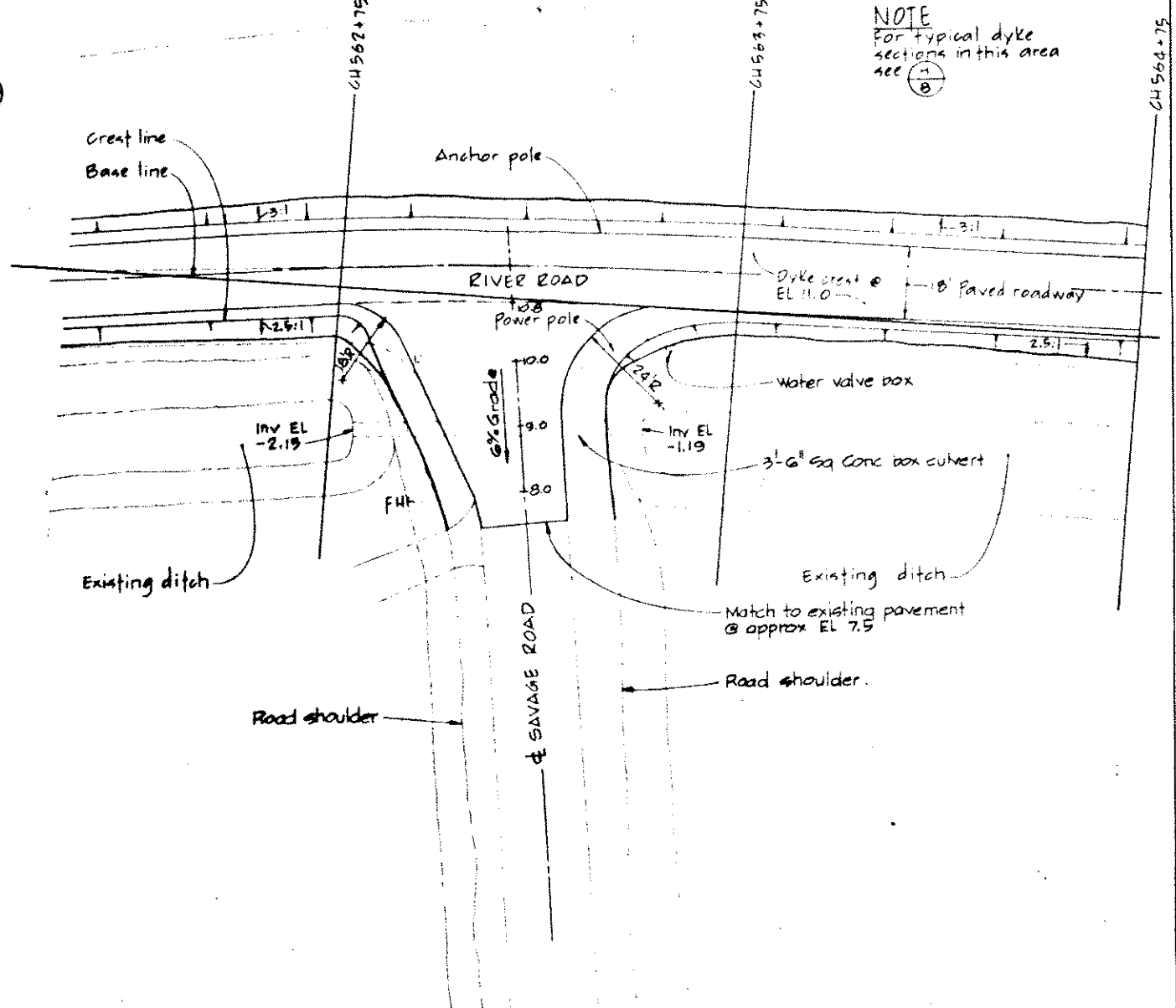
FRASER RIVER

NOTE
For typical dyke sections in this area see 4795-
⑦ ⑧

NOTE
For typical dyke sections in this area see
④ ⑧



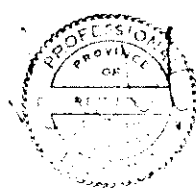
No. 6 ROAD NORTH



SAVAGE ROAD NORTH



NOTES
• For Notes, Material Legend & Legend see 4795-10-10



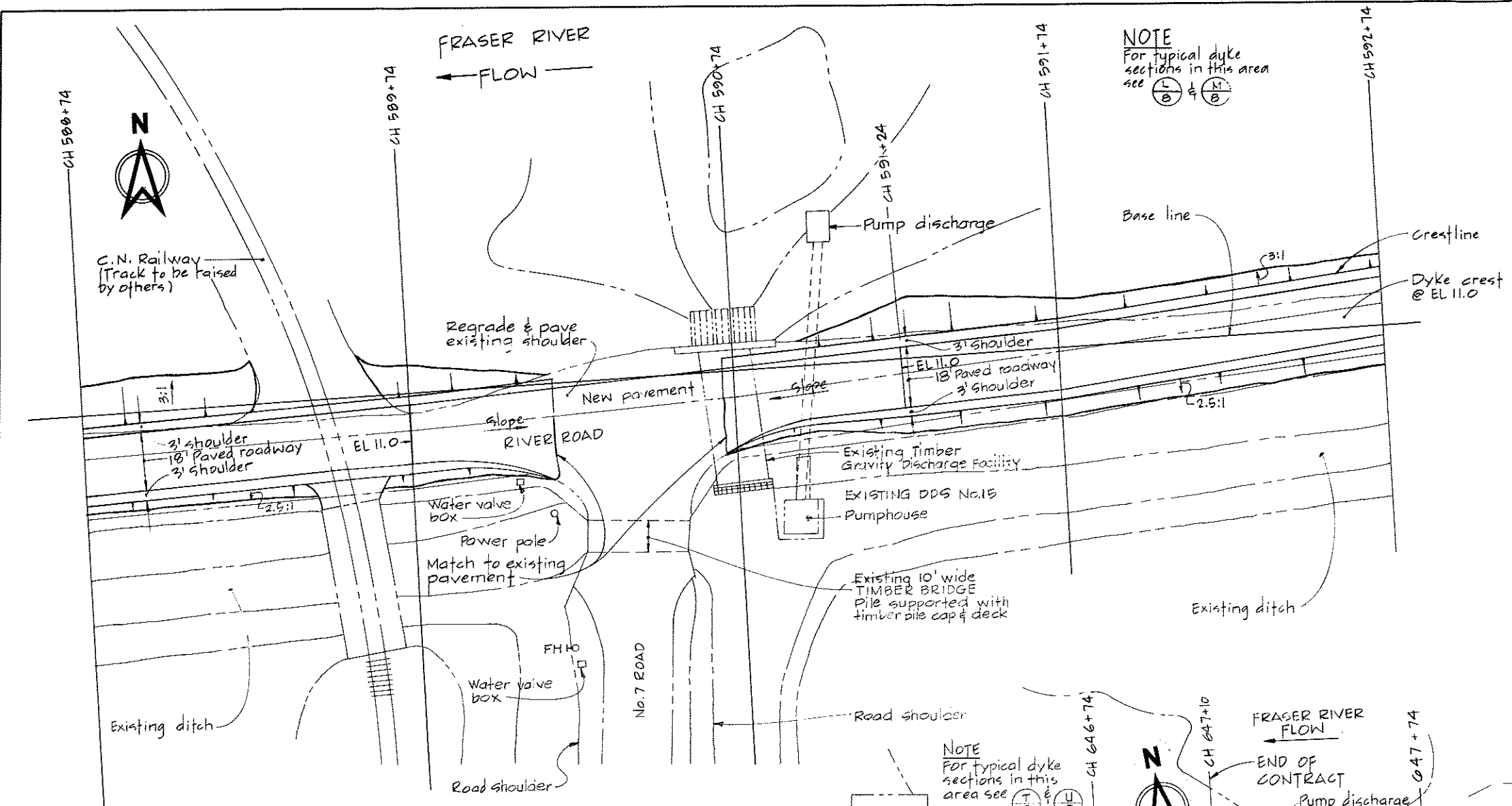
CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

RECOMMENDED	<i>J.L. Dyke</i> PROJECT MANAGER
DATE	DEC. 2 / 75
APPROVED	<i>J.L. Dyke</i> DIRECTOR
DATE	Dec 2 / 75

BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

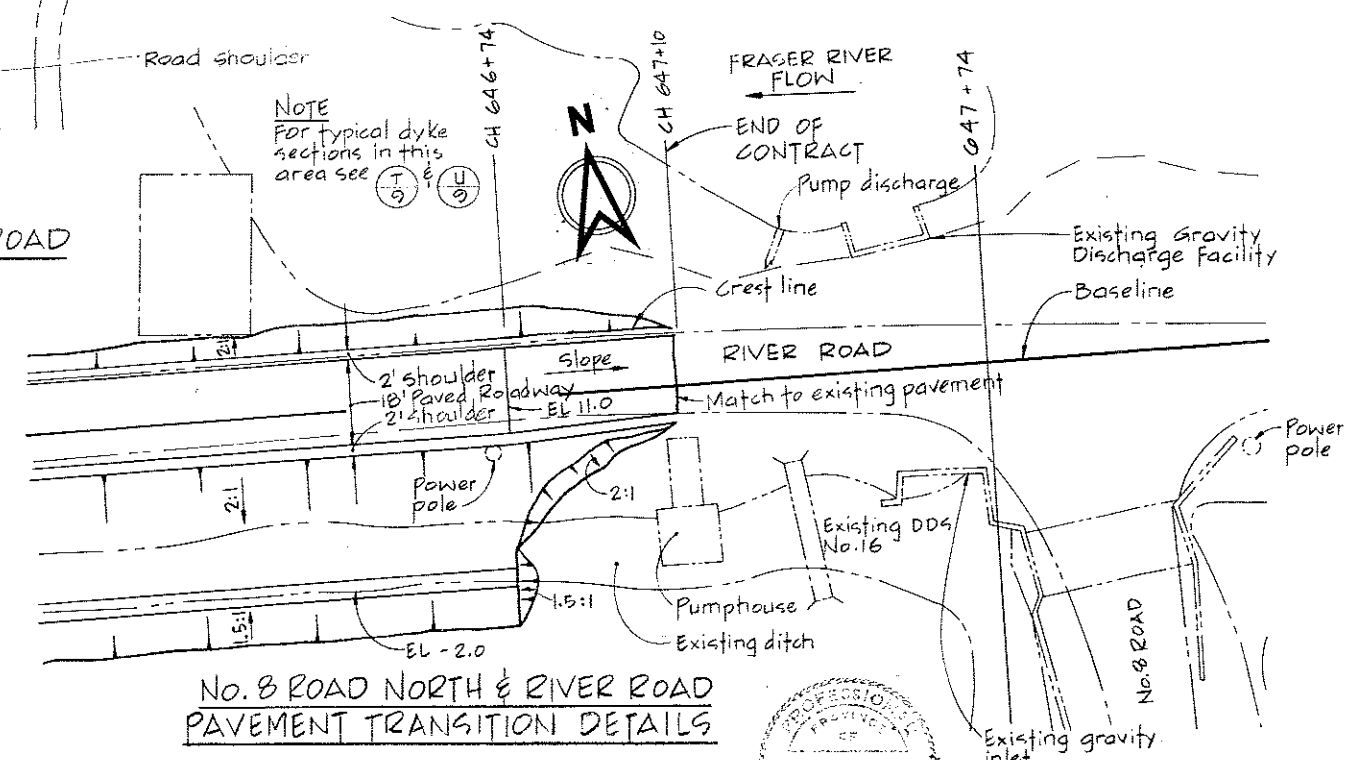
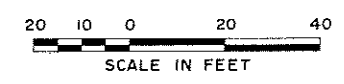
PROJECT NO 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO 10
MISCELLANEOUS DETAILS

DESIGNED	DLC	SURVEYED	ES & CBA
DRAWN	WJ	DATE	10/6/70 & 1975
CHECKED	DLC	FILE NO	0281550 - C10 - 10
SCALE	AS SHOWN	DATE	Jan 5, 1976
DWG NO	4795-10-13	SHEET	4 OF 5 SHEETS

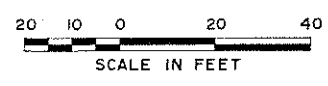


NOTE
For typical dyke sections in this area see $\frac{L}{B}$ & $\frac{M}{B}$

**INTERSECTION No. 7 RD NORTH & RIVER ROAD
PAVEMENT TRANSITION DETAILS**



**No. 8 ROAD NORTH & RIVER ROAD
PAVEMENT TRANSITION DETAILS**



NOTES
For Notes, Material Legend & Legend see 4795-10-10



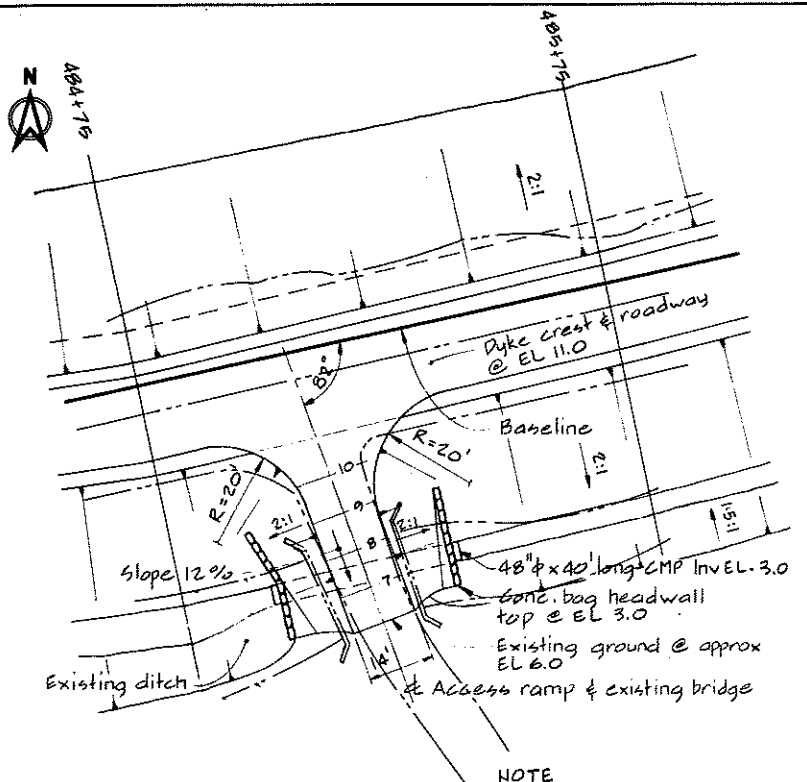
CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

NO.	BY	REVISIONS	DATE

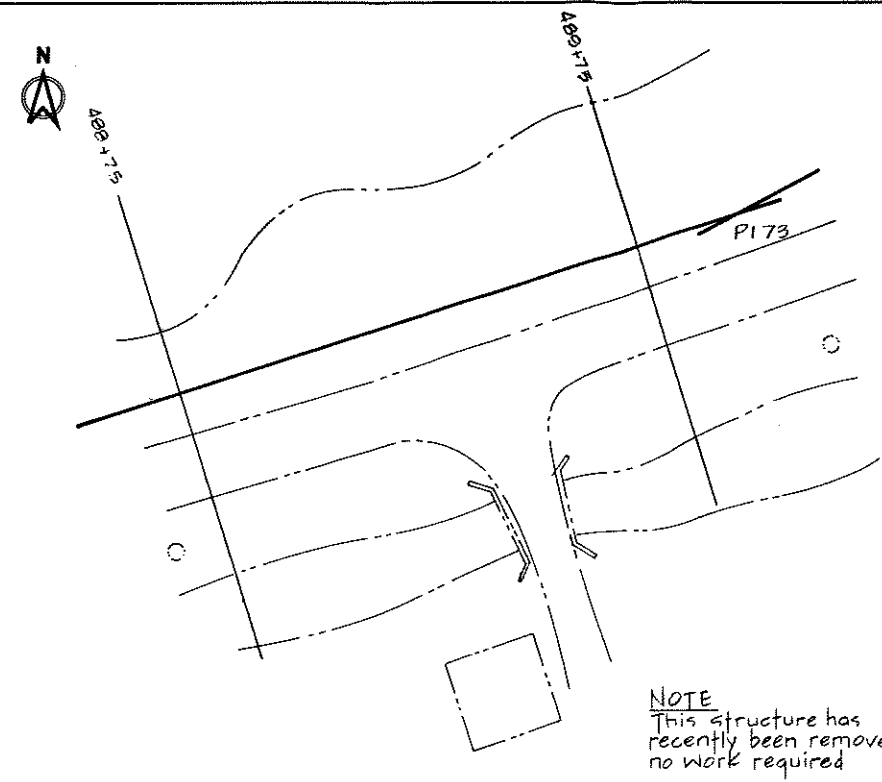
RECOMMENDED *B. L. Cameron*
PROJECT MANAGER
DATE *DEC 2/75*
APPROVED *[Signature]*
DIRECTOR
DATE *Dec 2/75*

BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO. 10
MISCELLANEOUS DETAILS

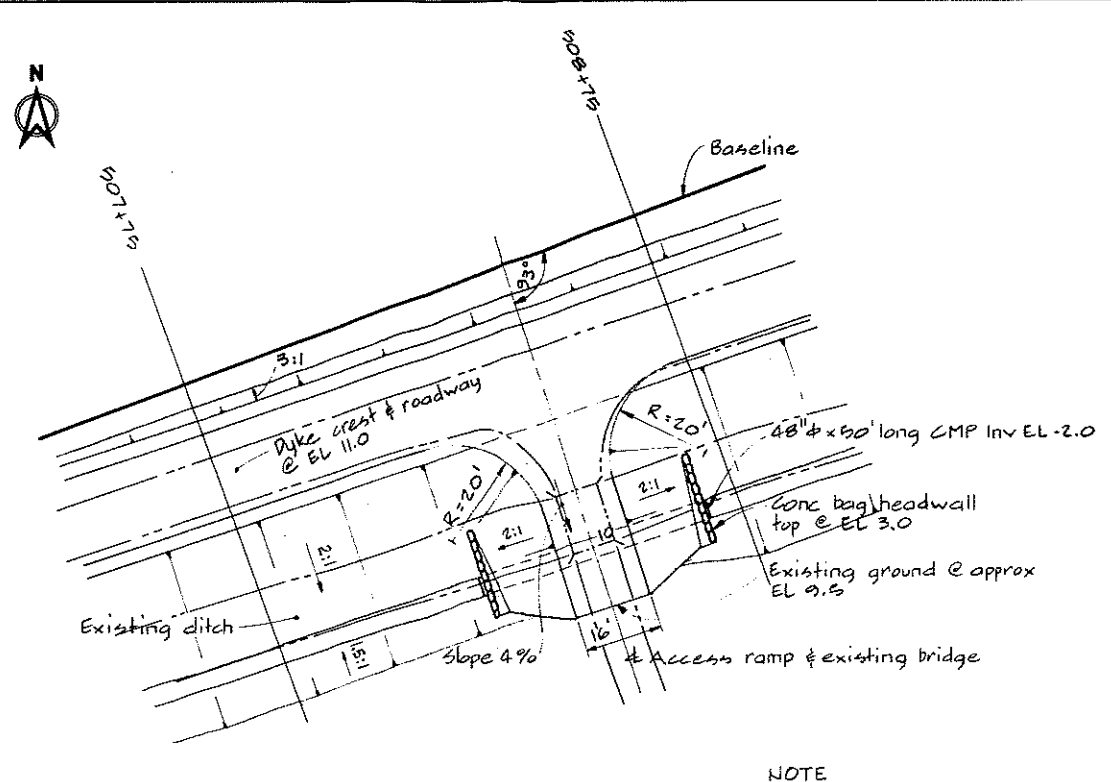
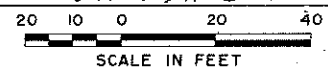
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DRAWN	Win	DATE	1969/70 & 1975
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SCALE	AS SHOWN	DATE	Jan 5, 1976
DWG. NO.	4795-10-14	SHEET	5 OF 5 SHEETS



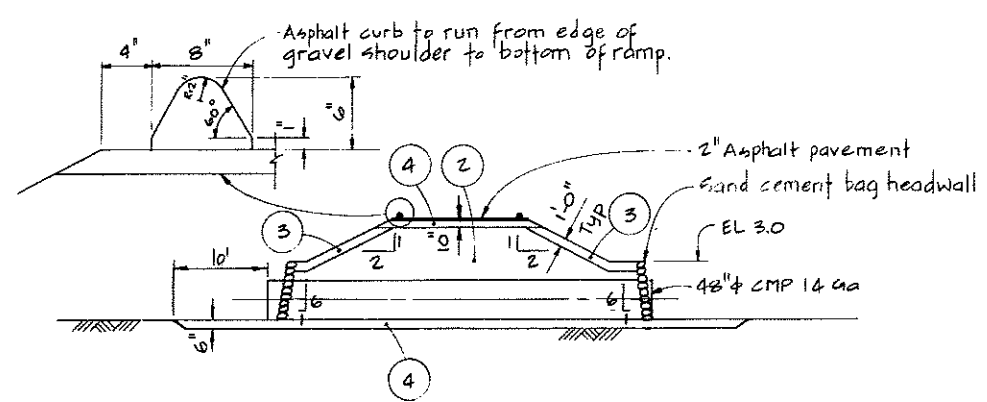
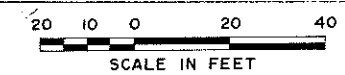
DITCH CROSSING NO. 1



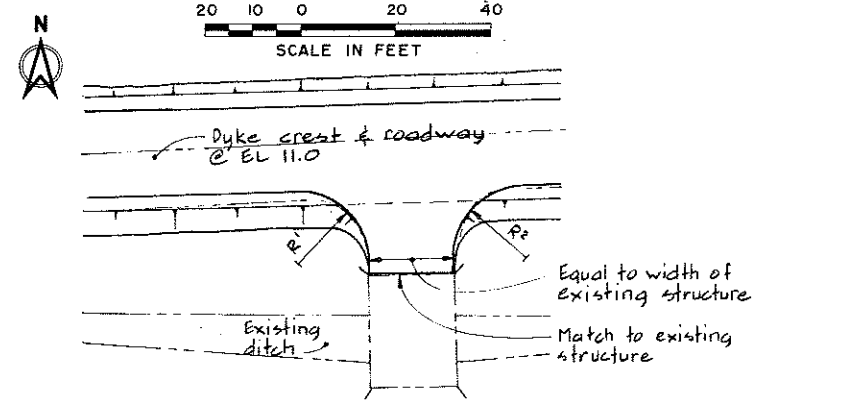
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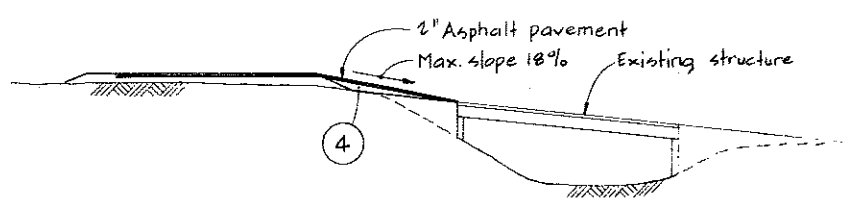
DITCH CROSSING NO. 6



TYP DITCH CROSSING SECTION
NT6



TYP PLAN
NT5



TYP PROFILE
NT5

Structure No.	Approx chainage	R ¹	R ²
6A	512+20	30'	20'
9	526+25	20'	20'
13	531+00	20'	20'
17	548+00	20'	20'
20	559+13	20'	20'
22	575+36	15'	15'
26	595+50	30'	30'
27	597+93	15'	15'
32	610+07	15'	15'
40	622+96	30'	15'
41	624+54	15'	15'
42	625+57	15'	15'
43	626+38	15'	15'
44	629+55	15'	15'
45	632+93	15'	15'
46A	635+35	15'	15'
47	635+68	15'	15'
51	640+00	15'	15'
52	641+98	15'	15'

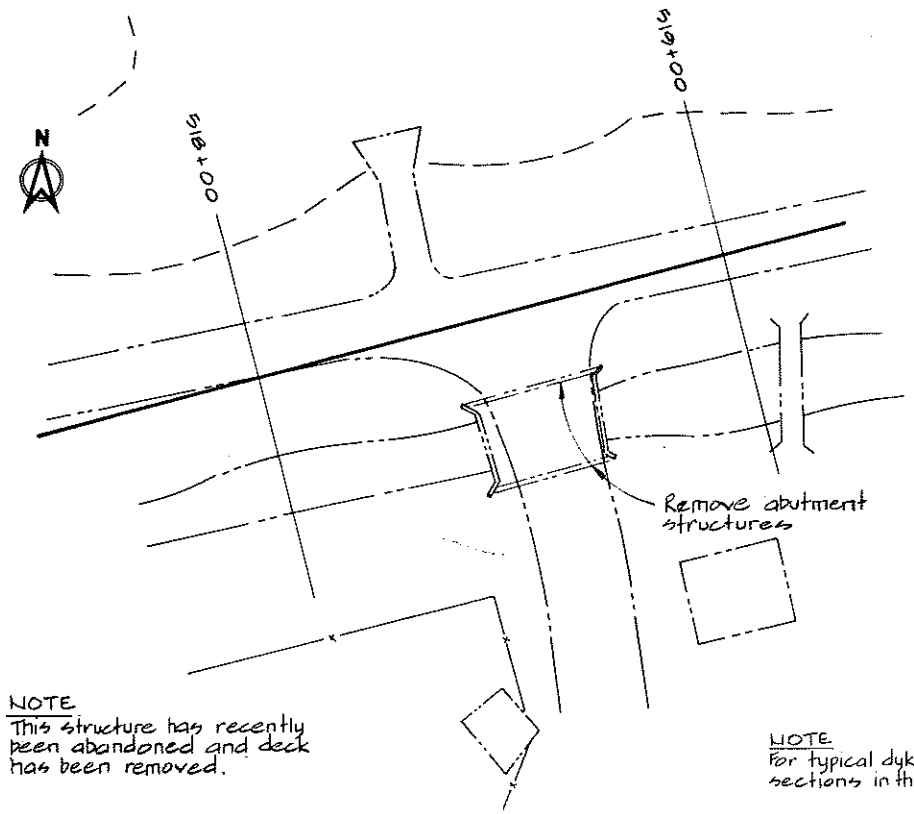
NOTES

- For Notes, Material Legend & Legend see 4795-10-10
- For location of ditch crossings see 4795-10-12 to 24 incl.

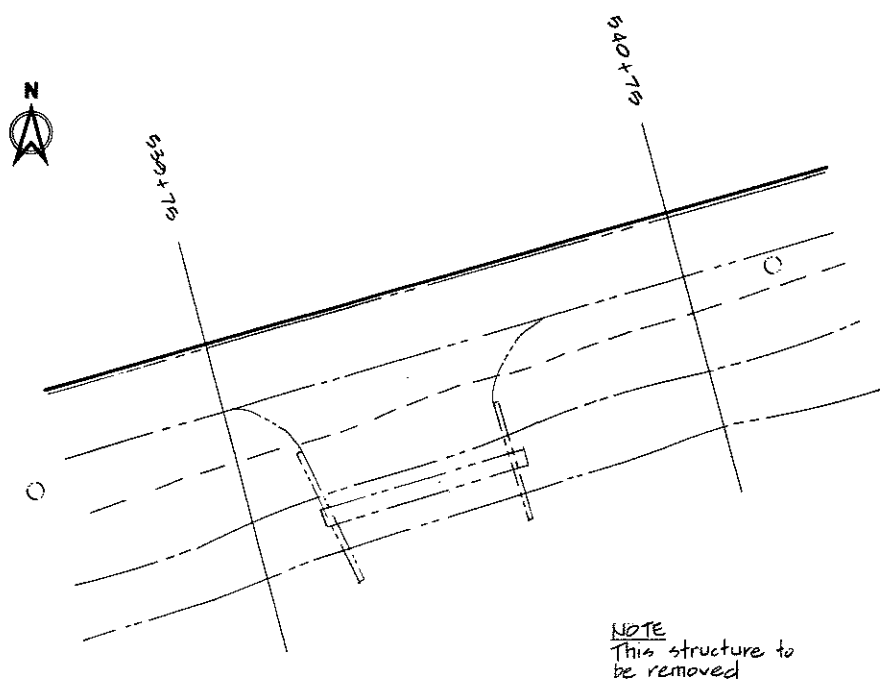
REGRADING OF APPROACHES TO EXISTING STRUCTURES



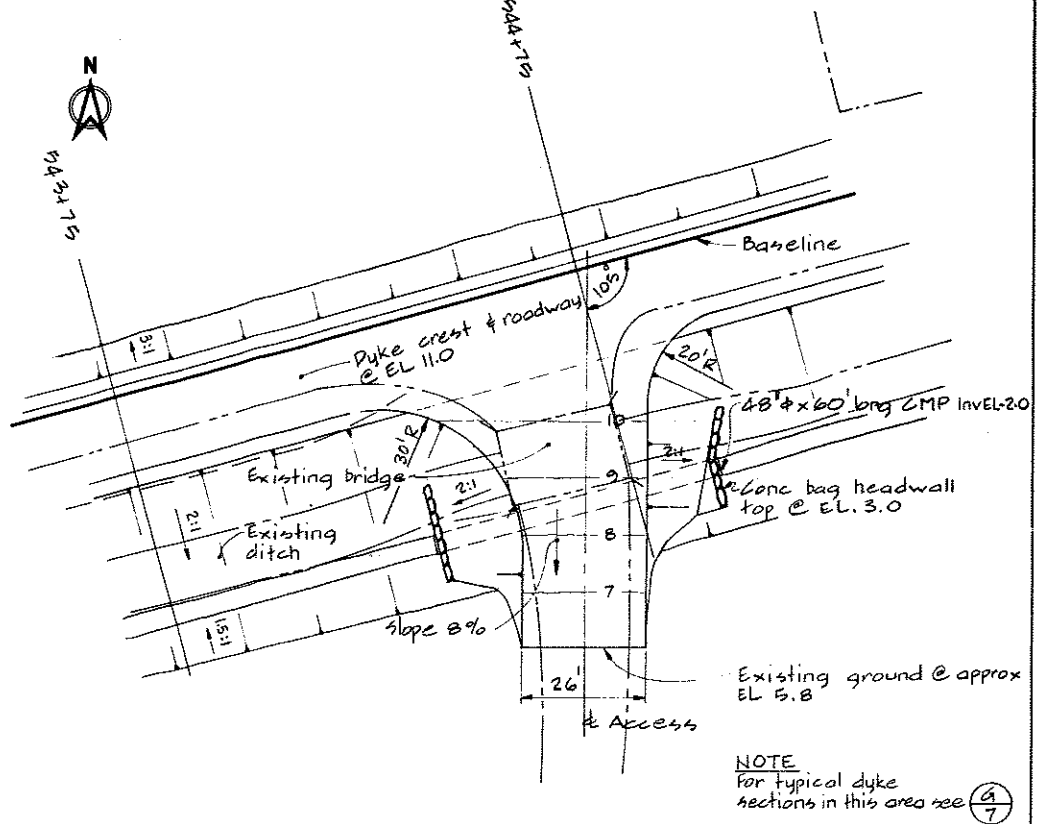
<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	<p>RECOMMENDED <i>R. H. Cameron</i> PROJECT MANAGER</p>	<p>BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT</p>	<p>DESIGNED <i>EMH</i></p>	<p>SURVEYED <i>CBA FIELD</i></p>
	<p>DATE <i>DEC. 2/75</i></p>	<p>PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND</p>	<p>DRAWN <i>AR</i></p>	<p>DATE <i>1975</i></p>
<p>APPROVED <i>J. H. Sullivan</i> DIRECTOR</p>	<p>CONTRACT NO. 10 DITCH CROSSING DETAILS</p>	<p>CHECKED <i>DLC</i></p>	<p>FILE NO. <i>0281550-C10-10</i></p>	<p>DATE <i>Jan 5, 1976</i></p>
<p>DATE <i>Dec 2/75</i></p>	<p>NO. BY REVISIONS DATE</p>	<p>SCALE <i>AS SHOWN</i></p>	<p>DWG. NO. <i>4795-10-15</i></p>	<p>SHEET <i>1</i> OF <i>3</i> SHEETS</p>



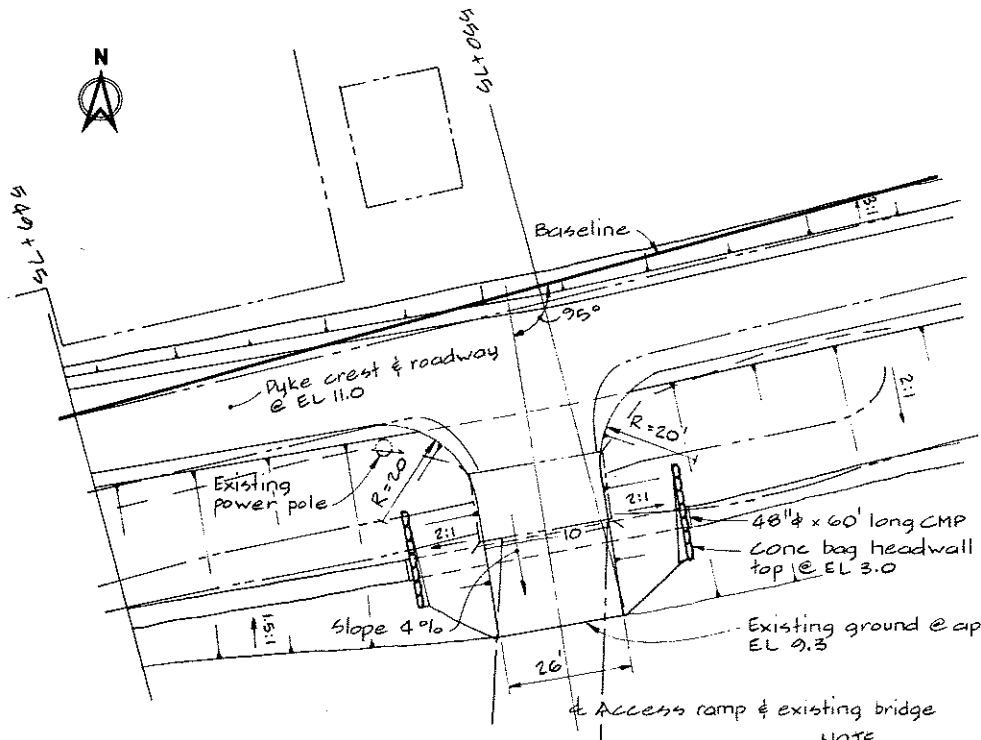
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SCALE IN FEET



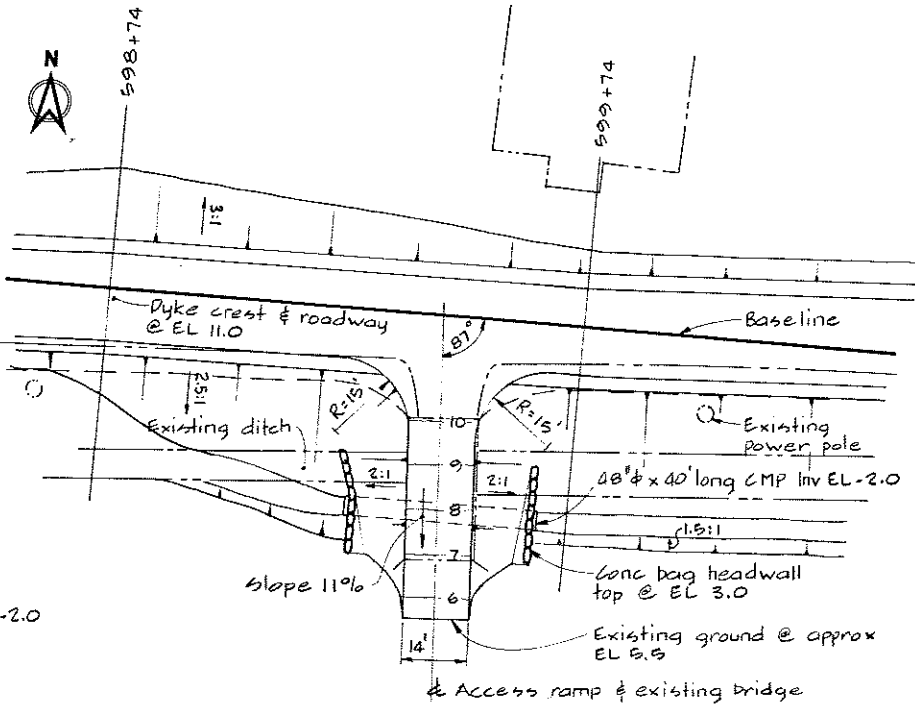
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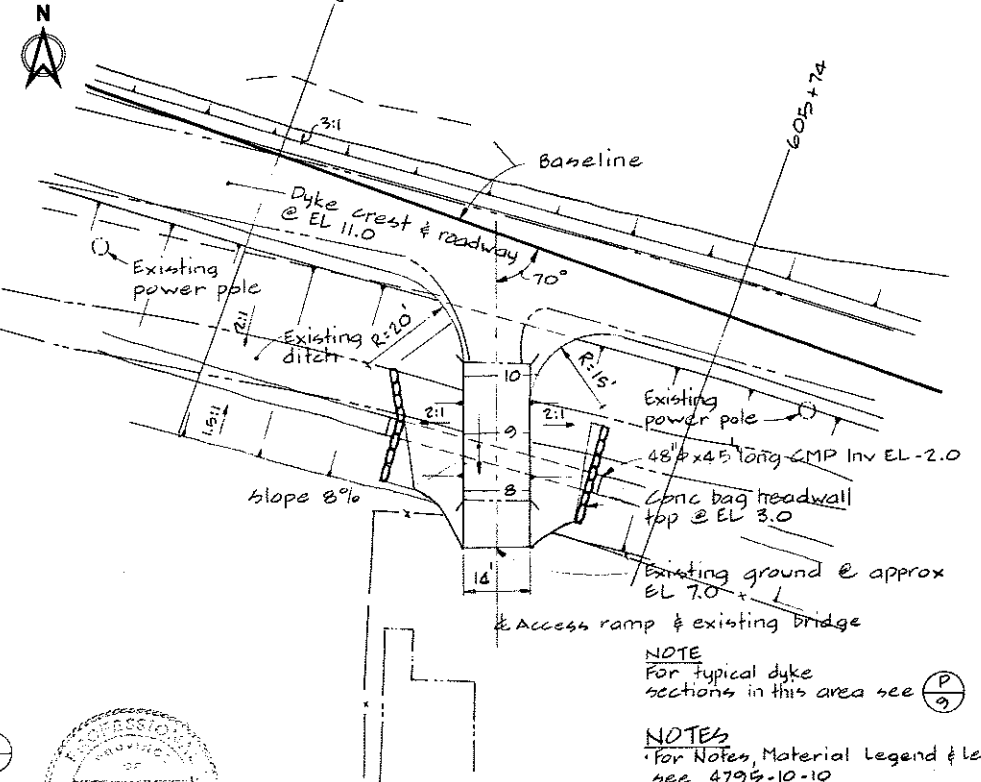
DITCH CROSSING NO. 15
SCALE IN FEET



DITCH CROSSING NO. 18
SCALE IN FEET



DITCH CROSSING NO. 28
SCALE IN FEET



DITCH CROSSING NO. 29
SCALE IN FEET



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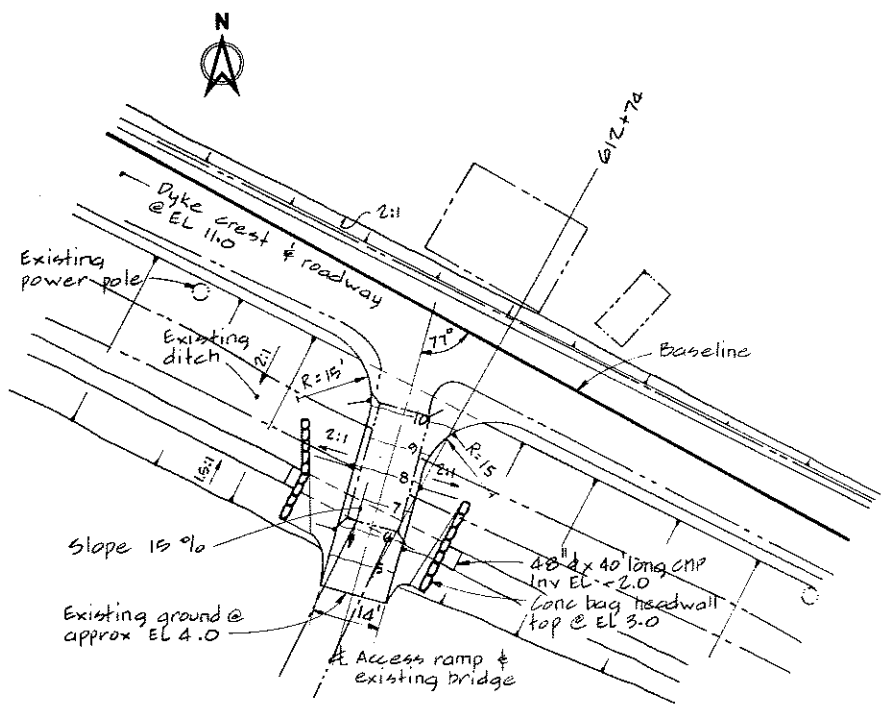
NO.	BY	REVISIONS	DATE

RECOMMENDED: *R. H. Cameron*
PROJECT MANAGER
DATE: DEC 2/75
APPROVED: *[Signature]*
FOR DIRECTOR
DATE: Dec 2/75

BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO. 10
DITCH CROSSING DETAILS

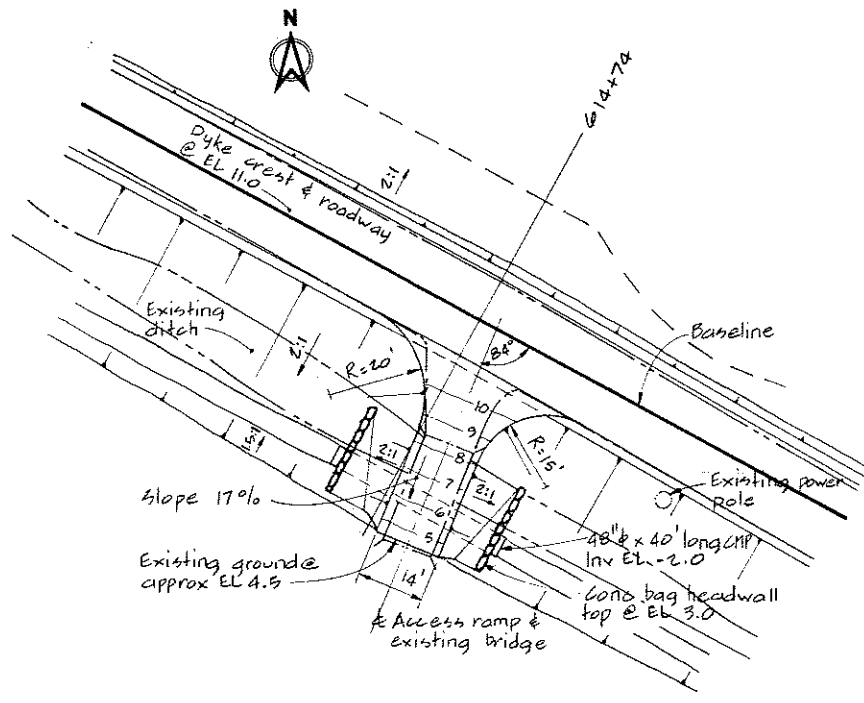
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DRAWN: AR	DATE: 1975
CHECKED: DLC	FILE NO.: 0281550-C10-10
SCALE: AS SHOWN	DATE: Jan 5, 1976
DWG. NO.: 4795-10-16	SHEET 2 OF 3 SHEETS

NOTES
For Notes, Material Legend & Legend see 4795-10-10
For typ ditch section see 4795-10-14
For location of ditch crossings see 4795-10-18 to 24" incl.



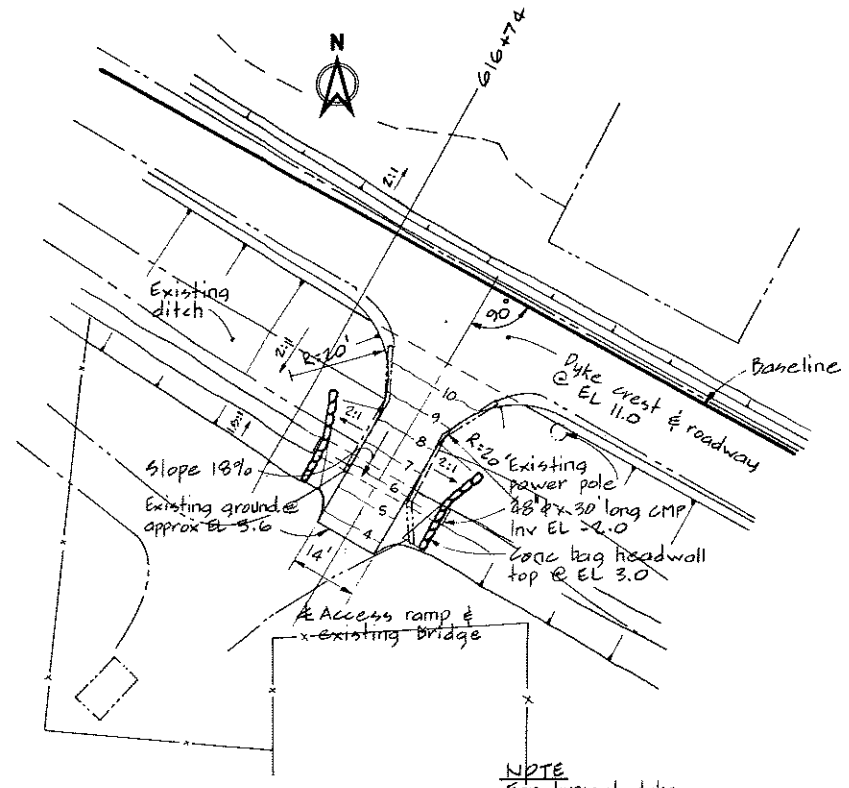
NOTE
For typical dyke sections in this area see (R/9)

DITCH CROSSING NO. 34



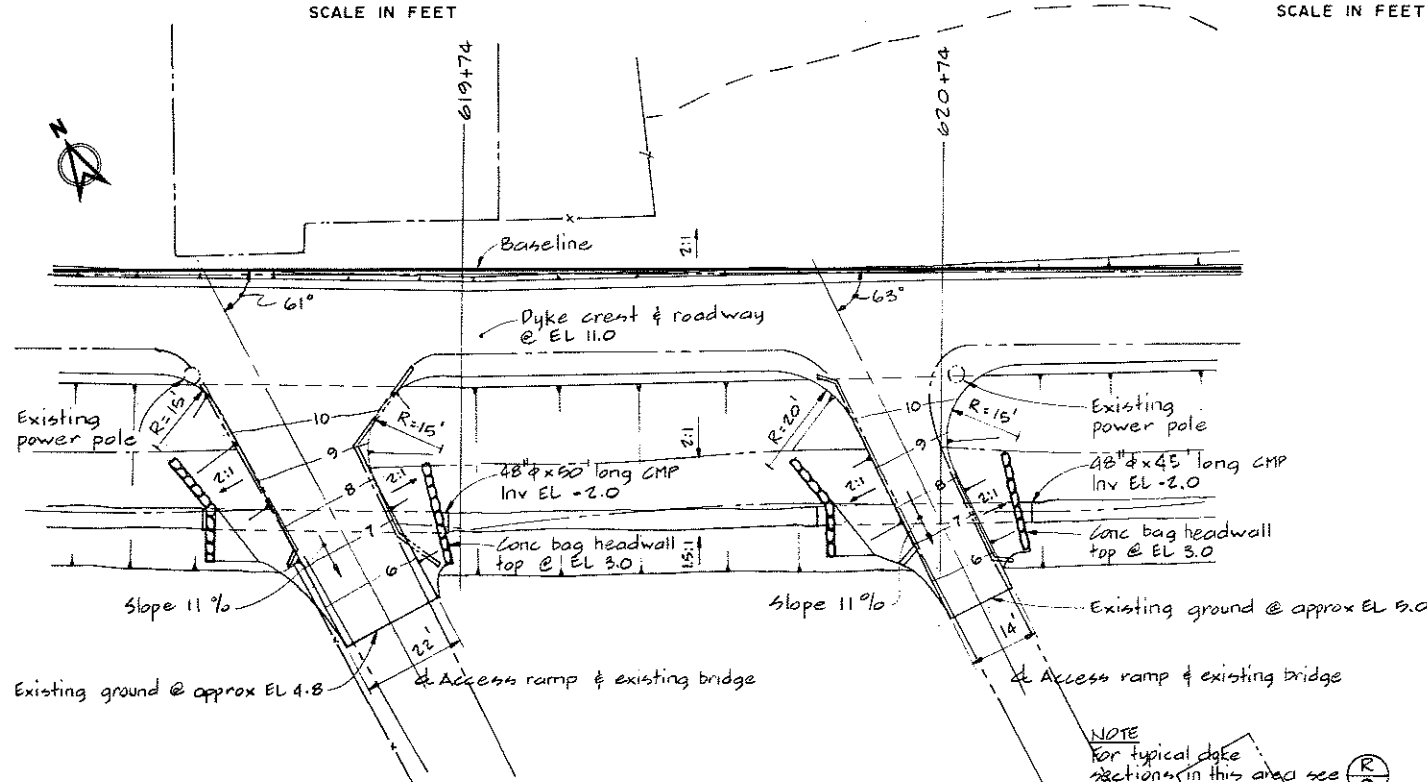
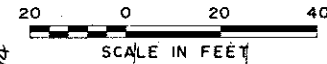
NOTE
For typical dyke sections in this area see (R/9)

DITCH CROSSING NO. 35



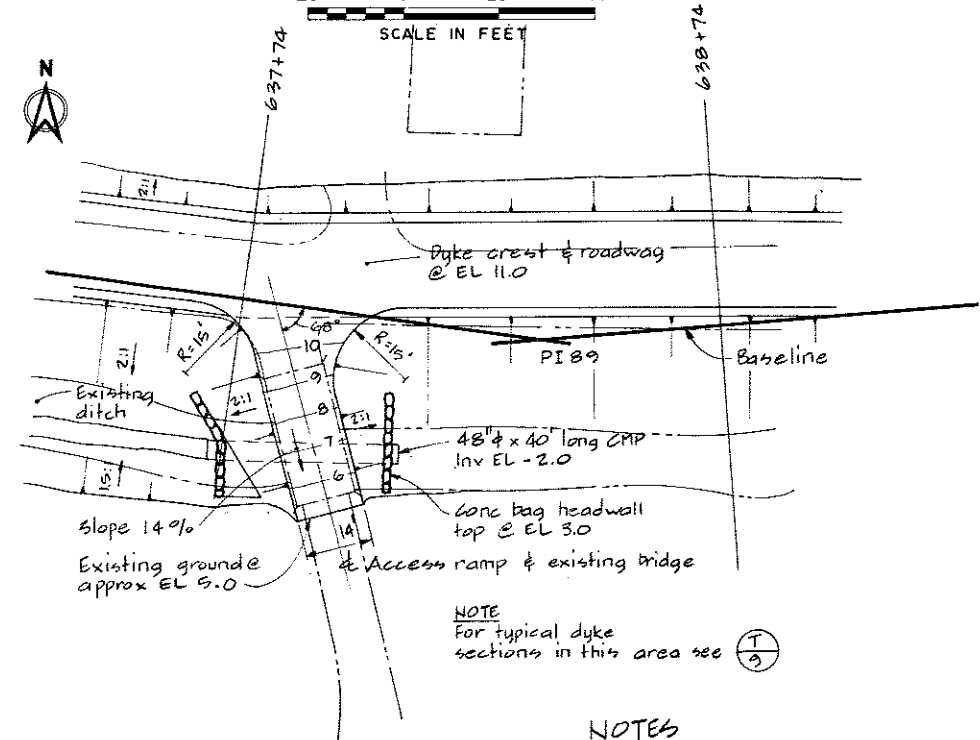
NOTE
For typical dyke sections in this area see (R/9)

DITCH CROSSING NO. 36



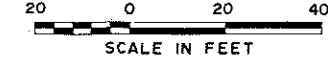
NOTE
For typical dyke sections in this area see (R/9)

DITCH CROSSING NO. 38 & 39



NOTE
For typical dyke sections in this area see (T/9)

DITCH CROSSING NO. 49



NOTES
• For Notes, Material Legend & Legend see 4795-10-10
• For typical ditch section see 4795-10-14
• For location of ditch crossings see 4795-10-13 to 24 incl



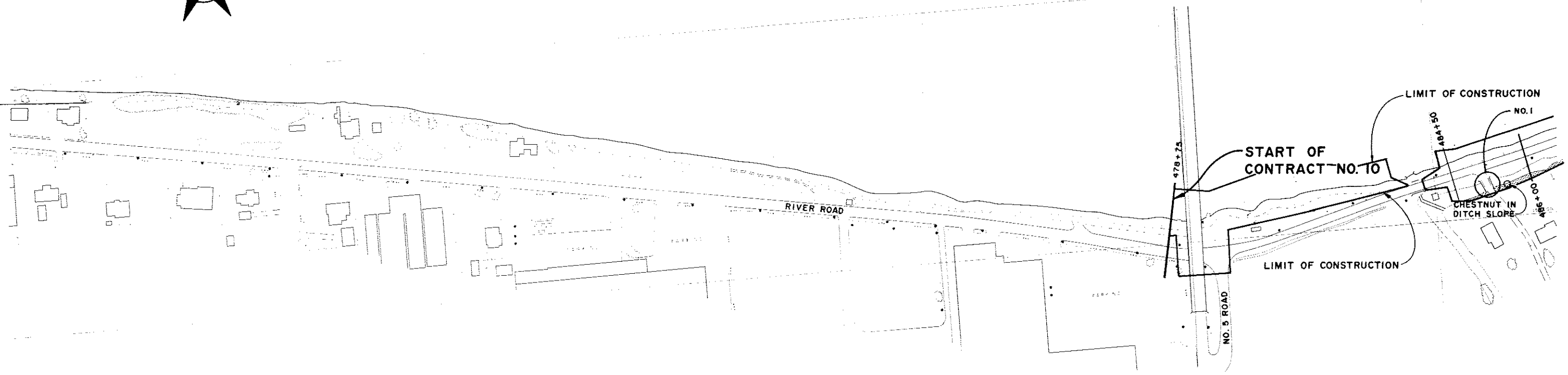
CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

NO.	BY	REVISIONS	DATE

RECOMMENDED *R. H. Cameron*
PROJECT MANAGER
DATE *DEC. 2/75*
APPROVED *R. H. Cameron*
DIRECTOR
DATE *Dec 2/75*

BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO. 10
DITCH CROSSING DETAILS

DESIGNED <i>EMH</i>	SURVEYED <i>CBA FIELD</i>
DRAWN <i>AR</i>	DATE <i>1975</i>
CHECKED <i>DLC</i>	FILE NO. <i>0281550-C10-10</i>
SCALE <i>AS SHOWN</i>	DATE <i>Jan 5, 1976</i>
DWG. NO. <i>4795-10-17</i>	SHEET <i>3</i> OF <i>3</i> SHEETS



LEGEND

- Tree to be removed
- Tree to stay
- Pop Poplar
- W Willow
- B Birch
- CH Cherry
- A Alder
- C Cedar
- MTN Mountain Ash
- Ash
- NO. 3 Location of ditch crossing
- ▨ Areas to be cleared and grubbed

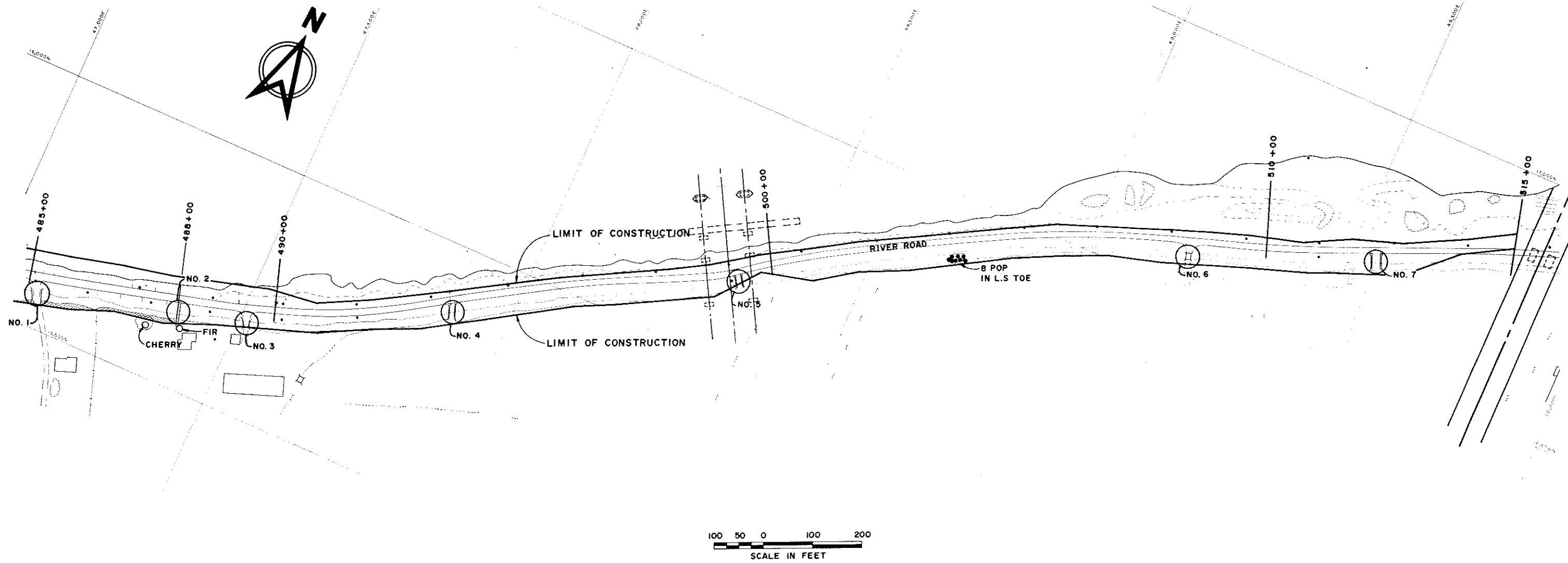
NOTES

For details of ditch crossings see 4795-10-15, 16 & 17
Only trees larger than 6" φ are shown individually

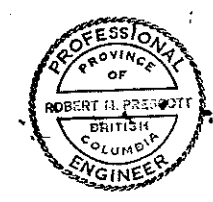


DWG NO.	TITLE	NO.	DESCRIPTION	BY	CH	APPD	ISSUED	NO.	DESCRIPTION	BY	CH	APPD	ISSUED
	REFERENCES												

C. B. A. ENGINEERING LTD.		CONSULTING ENGINEERS		VANCOUVER, B.C., CANADA	
RECOMMENDED PROJECT MANAGER DATE: DEC. 3/75		ELEC	HYD	THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE	
APPROVED DIRECTOR DATE: DEC. 3/75		MECH	SOILS	CANADA-BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND	
		STR		CONTRACT NO. 10 TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 1 OF 7	
		DES EMH	DR Wm	CH DLC	SCALE AS SHOWN
		ORIG ISSUE		DATE: JAN 5, 1976	FILE NO. 0281550-C10-10
				DWG NO. 4795-10-18	REV

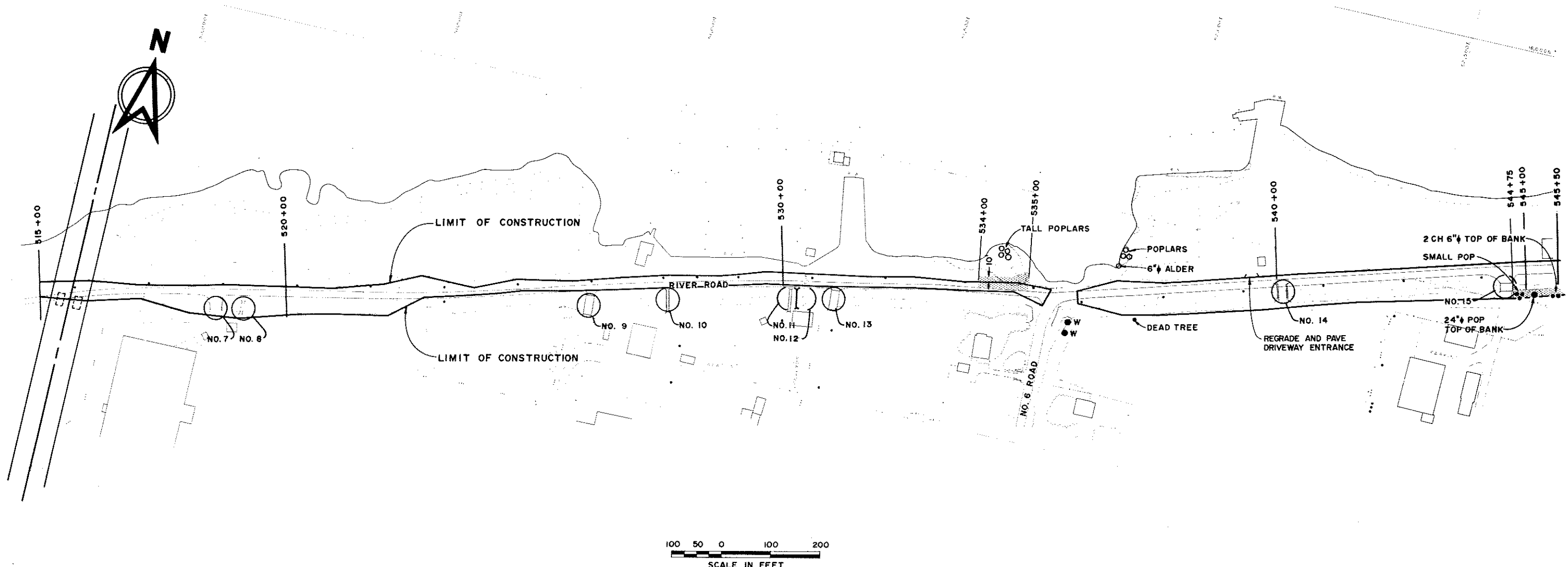


NOTE
 For Notes and Legend see 4795-10-18

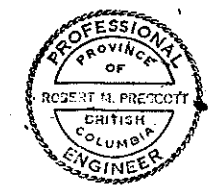


C. B. A. ENGINEERING LTD.		CONSULTING ENGINEERS		VANCOUVER, B.C., CANADA	
RECOMMENDED PROJECT MANAGER DATE DEC 2/75		ELEC MECH STR		HYD SOILS	
APPROVED DIRECTOR DATE Dec 2/75		DES EMH SCALE AS SHOWN ORIG ISSUE JAN 5, 1976		THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 2 OF 7	
DWG NO.		TITLE		FILE NO. 0281550-C10-10	DWG NO. 4795-10-19

NO.	DESCRIPTION	BY	CH	APPD	ISSUED	NO.	DESCRIPTION	BY	CH	APPD	ISSUED
REFERENCES						REVISIONS					

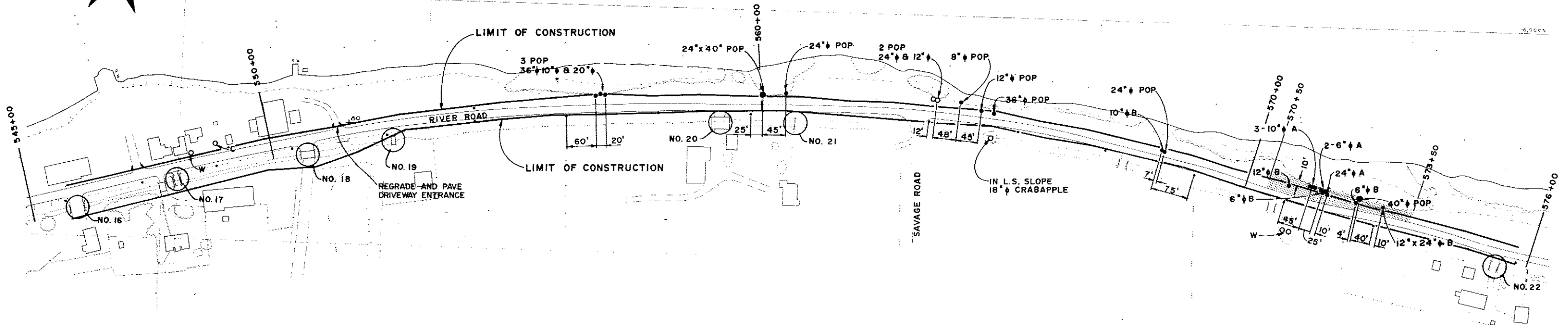


NOTE
 For Notes and Legend see 4795-10-18



										C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND	
										CONTRACT NO. 10 TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 3 OF 7	
DWG NO. _____ TITLE _____ REFERENCES		NO. _____ DESCRIPTION _____ BY CH APPD ISSUED _____ REVISIONS		NO. _____ DESCRIPTION _____ BY CH APPD ISSUED _____ REVISIONS		PROJECT MANAGER: <i>R. A. Cameron</i> DATE: <i>DEC 2/75</i>		ELEC _____ HYD _____ ANCH _____ SOILS _____ STR _____		DES: EMH _____ DR: Wn _____ CH: DLC _____ SCALE: AS SHOWN ORIG ISSUE: <i>Jan 5, 1976</i>	
										FILE NO. 0281550-C10-10 DWG NO. 4795-10-20 REV _____	

THIS ISSUE SUPERSEDES ALL ISSUES WITH LETTERS PREVIOUS TO



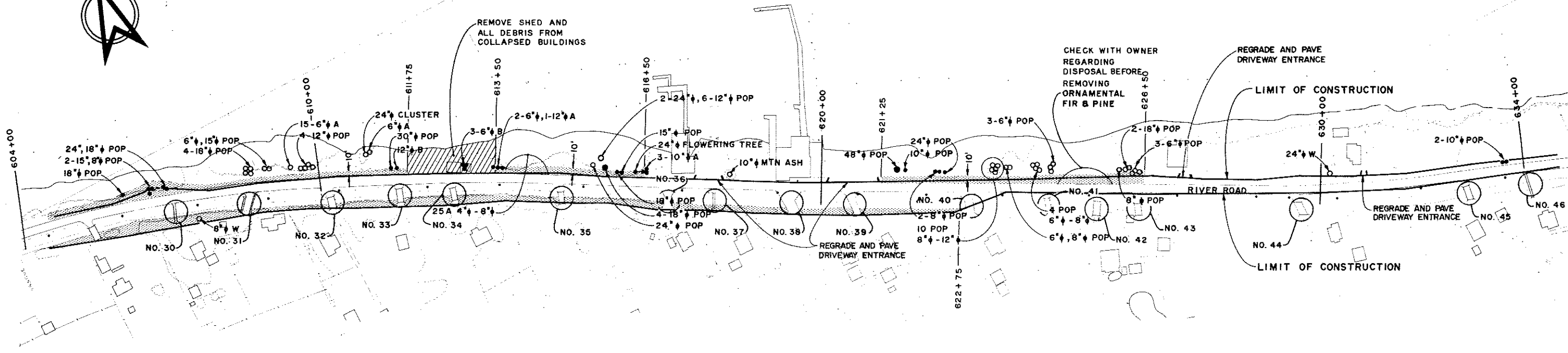
NOTE
: For Notes and Legend see 4195-10-18



C. B. A. ENGINEERING LTD.		CONSULTING ENGINEERS	VANCOUVER, B.C., CANADA
RECOMMENDED PROJECT MANAGER <i>R. N. Cameron</i>	ELEC	HYD	THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND
DATE <i>DEC. 2/75</i>	MECH	SOILS	
APPROVED DIRECTOR <i>[Signature]</i>	STR		
DATE <i>Dec 2/75</i>	DES EMH	DR Wn	CH DLC
	SCALE	AS SHOWN	
	ORIG ISSUE	Jan 5, 1976	
	FILE NO.	0281550-C10-10	DWG NO. 4795-10-21
			REV

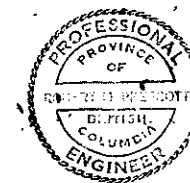
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	REFERENCES												

THIS ISSUE SUPERSEDES ALL ISSUES WITH LETTERS PREVIOUS TO



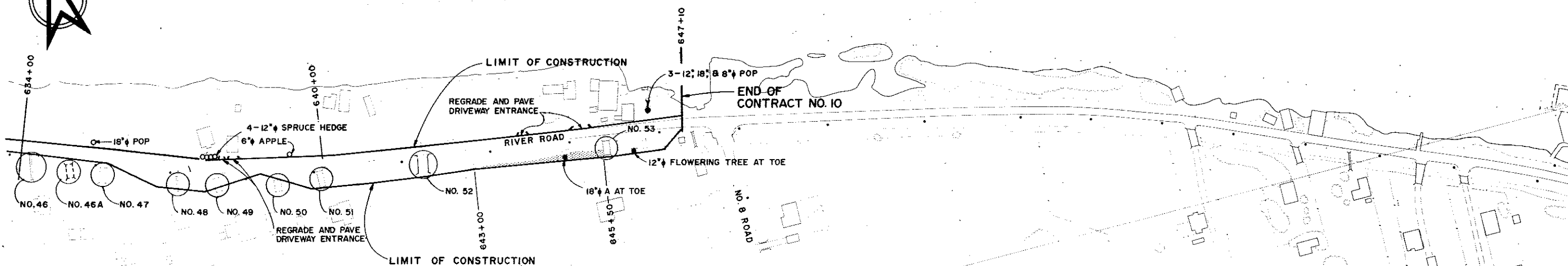
NOTE

For Notes and Legend see 4795-10-18

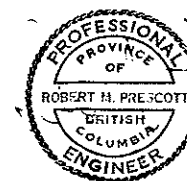


DWG NO.		TITLE		NO.		DESCRIPTION		BY		CHK		APPD		ISSUED		NO.		DESCRIPTION		BY		CHK		APPD		ISSUED	
		REFERENCES																									

C. B. A. ENGINEERING LTD.		CONSULTING ENGINEERS VANCOUVER, B.C., CANADA	
PROJECT MANAGER <i>R. S. Cameron</i> DATE: DEC. 2/75		ELEC MECH STR	
APPROVED <i>[Signature]</i> DIRECTOR DATE: Dec 2/75		DES EMH Wn CH DLc	
ORIG ISSUE Jan 5, 1976		HYD SOILS	
SCALE AS SHOWN			
THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND		CONTRACT NO. 10 TREE REMOVAL, CLEARING, GRUBBING AND DITCH CROSSINGS SHEET 6 OF 7	
FILE NO. 0281550-C10-10		DWG NO. 4795-10-25	



NOTE
 For Notes & Legend see 4795-10-18



C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA

R. H. Cameron
 RECOMMENDED PROJECT MANAGER
 DATE DEC. 2/75

APPROVED *[Signature]*
 FOR DIRECTOR
 DATE Dec 2/75

ELEC	HYD
MECH	SOILS
STR	
DES	OR CH
EMH	Wn <i>[Signature]</i> DLC
SCALE	AS SHOWN
ORG ISSUE	JAN 5, 1976

THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA
 DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES
 WATER RESOURCES SERVICE
 CANADA - BRITISH COLUMBIA
 FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
 PROJECT No. 3 THE TOWNSHIP OF RICHMOND

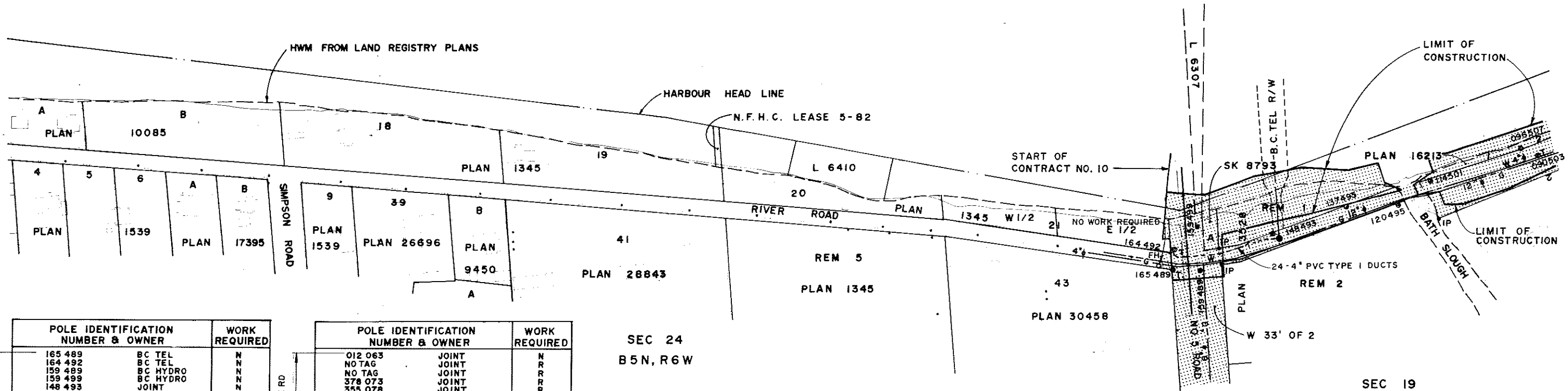
CONTRACT NO. 10
 TREE REMOVAL, CLEARING, GRUBBING
 AND DITCH CROSSINGS
 SHEET 7 OF 7

FILE NO. 0281550-C10-10 DWG NO. 4795-10-24 REV

NO.	DESCRIPTION	BY	CH	APPD	ISSUED	NO.	DESCRIPTION	BY	CH	APPD	ISSUED
REFERENCES						REVISIONS					



NORTH ARM FRASER RIVER



POLE IDENTIFICATION NUMBER & OWNER	WORK REQUIRED	
165 489	BC TEL	N
164 482	BC TEL	N
159 489	BC HYDRO	N
148 493	JOINT	N
137 495	JOINT	N
120 495	JOINT	N
114 501	JOINT	N
096 507	JOINT	N
090 503	BC TEL	N
081 512	JOINT	N
079 508	BC TEL	N
066 517	JOINT	N
066 513	JOINT	N
051 523	JOINT	N
049 519	JOINT	N
036 530	JOINT	N
034 525	JOINT	N
021 537	JOINT	N
007 544	JOINT	N
390 552	JOINT	N
377 560	JOINT	N
347 576	JOINT	N
333 585	JOINT	N
321 591	JOINT	N
306 600	JOINT	N
290 606	JOINT	N
279 002	JOINT	N
266 007	JOINT	N
252 012	JOINT	N
250 003	JOINT	N
240 016	JOINT	N
198 030	JOINT	N
201 024	BC HYDRO	N
214 025 (215 030)	JOINT	N
201 029	JOINT	N
187 031	JOINT	N
175 033	JOINT	N
164 034	JOINT	N
147 039	JOINT	N
146 034	JOINT	N
128 044	JOINT	N
115 048	JOINT	N
103 050	JOINT	N
092 053	JOINT	N
080 057	JOINT	N
068 059	BC HYDRO	N
056 061	BC HYDRO	N
042 064	BC HYDRO	N
027 066	BC HYDRO	N

POLE IDENTIFICATION NUMBER & OWNER	WORK REQUIRED	
012 063	JOINT	N
NO TAG	JOINT	N
378 073	JOINT	R
355 078	JOINT	R
336 083	JOINT	R
312 090	JOINT	R
287 096	JOINT	R
284 105	JOINT	R
272 099	JOINT	R
273 108	BC TEL	R
256 103	JOINT	R
256 108	BC HYDRO	R
241 103	JOINT	R
226 107	JOINT	R
227 111	JOINT	R
193 108	JOINT	R
179 109	JOINT	R
164 109	JOINT	R
148 108	JOINT	R
149 113	JOINT	R
124 103	JOINT	R
110 101	JOINT	R
082 085	JOINT	R
054 080	JOINT	R
040 087	JOINT	R
025 083	JOINT	R
010 081	JOINT	R
392 078	JOINT	R
378 076	JOINT	R
370 076	JOINT	R
350 074	JOINT	R
334 074	JOINT	R
321 074	JOINT	R
299 075	JOINT	R
299 082	BC HYDRO	R
278 076	JOINT	R
286 073	JOINT	R
267 076	JOINT	R
247 077	JOINT	R
247 082	JOINT	R
230 077	JOINT	R
211 076	JOINT	R
193 076	JOINT	R
175 073	JOINT	R
175 078	JOINT	R
158 069	JOINT	R
143 065	JOINT	R
129 058	JOINT	R
129 063	JOINT	R

POLE IDENTIFICATION NUMBER & OWNER	WORK REQUIRED	
115 052	JOINT	N
104 047	JOINT	N
092 042	JOINT	N
077 034	JOINT	N
059 026	JOINT	N
045 018	JOINT	N
055 031	BC HYDRO	N
027 009	JOINT	N
012 001	JOINT	N
395 600	JOINT	N
380 593	JOINT	N
365 585	JOINT	N
350 577	JOINT	N
335 569	JOINT	N
320 562	JOINT	N
306 555	JOINT	N
290 548	JOINT	N
275 542	JOINT	N
NO TAG	PRIVATE	N
263 537	JOINT	N
NO TAG	PRIVATE	N
249 533	JOINT	N
232 530	JOINT	N
221 529	JOINT	N
219 538	BC HYDRO	N
206 526	JOINT	N
192 523	JOINT	N
179 522	JOINT	N
166 520	JOINT	N

PROPERTY LEGEND

Right-of-way which Province will make available to Contractor

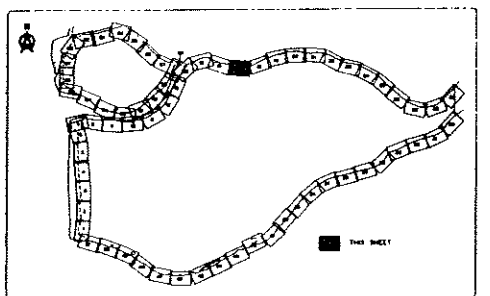
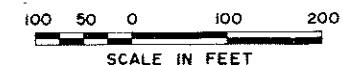
SURVEY LEGEND

Iron pin found or set during legal survey by Matson, Peck & Toplis Surveyors & Engineers.

SERVICES LEGEND

- W— Watermain
- G— Gas main
- S— Sanitary sewer
- D— Storm sewer
- UE— Underground electrical cables
- T—T— Underground Tel cables
- H—H— Underground Hydro
- 157 012 Hydro pole & pole no.
- 156 045 Joint pole with Hydro & B.C. Tel services & pole no.
- 155 018 B.C. Tel pole & pole no.
- Manhole
- Catch basin
- FH Fire Hydrant

LEGEND:
 N NO WORK REQUIRED
 R POLE TO BE RELOCATED
 * DETAILED CONSTRUCTION SURVEY REQUIRED BEFORE IT CAN BE DETERMINED WHETHER OR NOT POLE SHOULD BE REMOVED

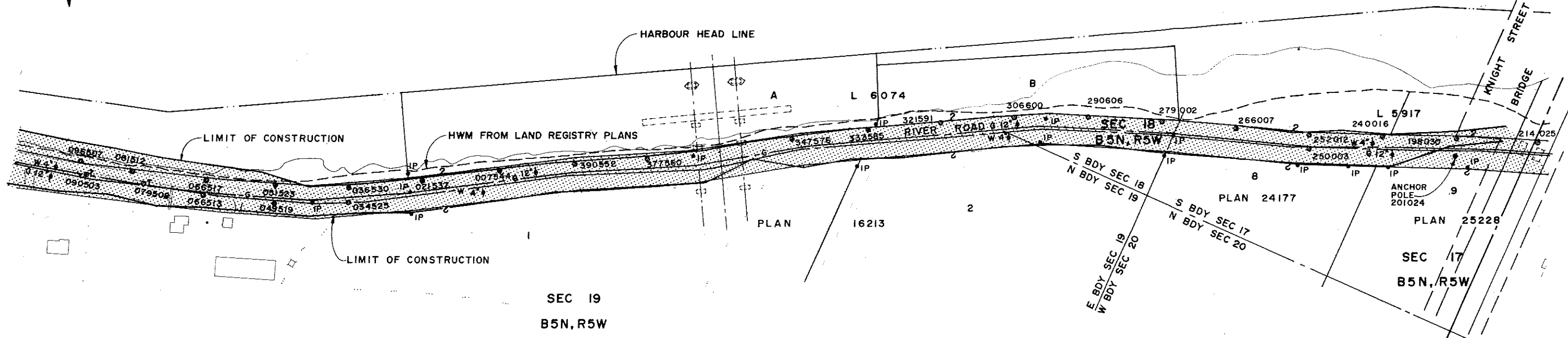


Property data shown on this drawing has been compiled from reference maps listed in the reference column. This data has been recorded in good faith but is subject to errors inherent in assembling information from various sources without field measurement. This drawing is for information only and does not constitute a legal document.

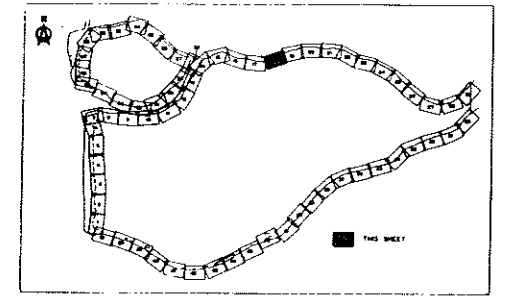
DATA COMPILED IN 1970

C. B. A. ENGINEERING LTD.				CONSULTING ENGINEERS VANCOUVER, B.C., CANADA			
<i>R.L. Cameron</i> RECOMMENDED PROJECT MANAGER DATE DEC. 2/75		ELEC MECH SITE		HYD SOILS		THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 THE TOWNSHIP OF RICHMOND	
APPROVED <i>[Signature]</i> DIRECTOR		DES Wn DR DLC		CONTRACT NO. 10 PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 1 OF 7		CONTRACT NO. 10 PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 1 OF 7	
DATE DEC 2/75		SCALE AS SHOWN		DATE Jan. 5, 1976		FILE NO. 02B1550-C10-10	
DWG NO.		TITLES		NO.		REV	
REFERENCES		REVISIONS		REVISIONS		C.B.A. DWG NO. 4795-10-25	

NORTH ARM FRASER RIVER



NOTE
 For Legends see 4795-10-25



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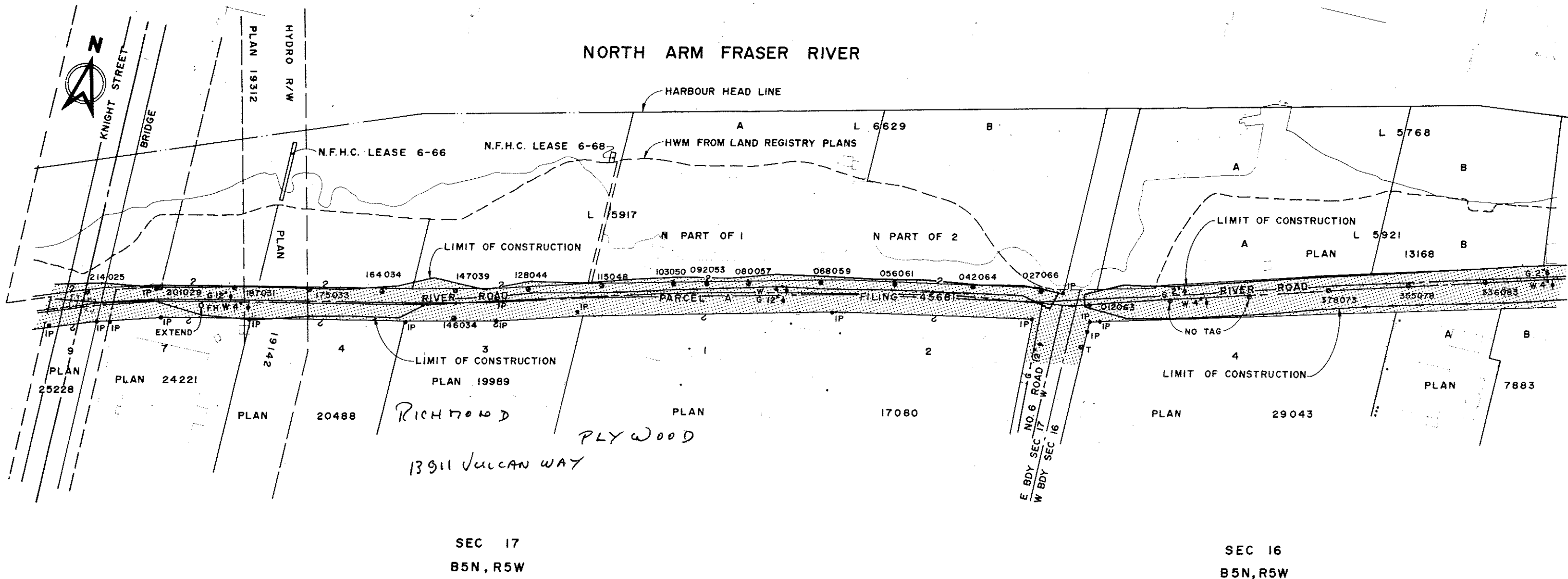
DATA COMPILED IN 1970

C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA									
THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE									
CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND									
CONTRACT NO. 10 PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 2 OF 7									
FILE NO. 0281550 - C10-10 DWG NO. 4795-10-26 REV									

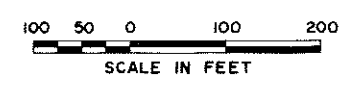
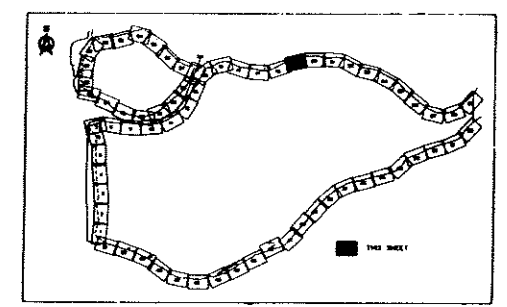
RECOMMENDED	<i>R. E. Cameron</i>	ELEC	HYD						
PROJECT MANAGER		MECH	SOILS						
DATE	Dec. 2/75	STR							
APPROVED	<i>W. J. Balle</i>	DES	DR	CH	DLC				
FOR DIRECTOR		SCALE	AS SHOWN						
DATE	Dec. 2/75	ORIG ISSUE	Jan 5, 1976						

NO.	DESCRIPTION	BY	CH	APPD	ISSUED	NO.	DESCRIPTION	BY	CH	APPD	ISSUED
REVISIONS											

NORTH ARM FRASER RIVER



NOTE
For Legends see 4795-10-25



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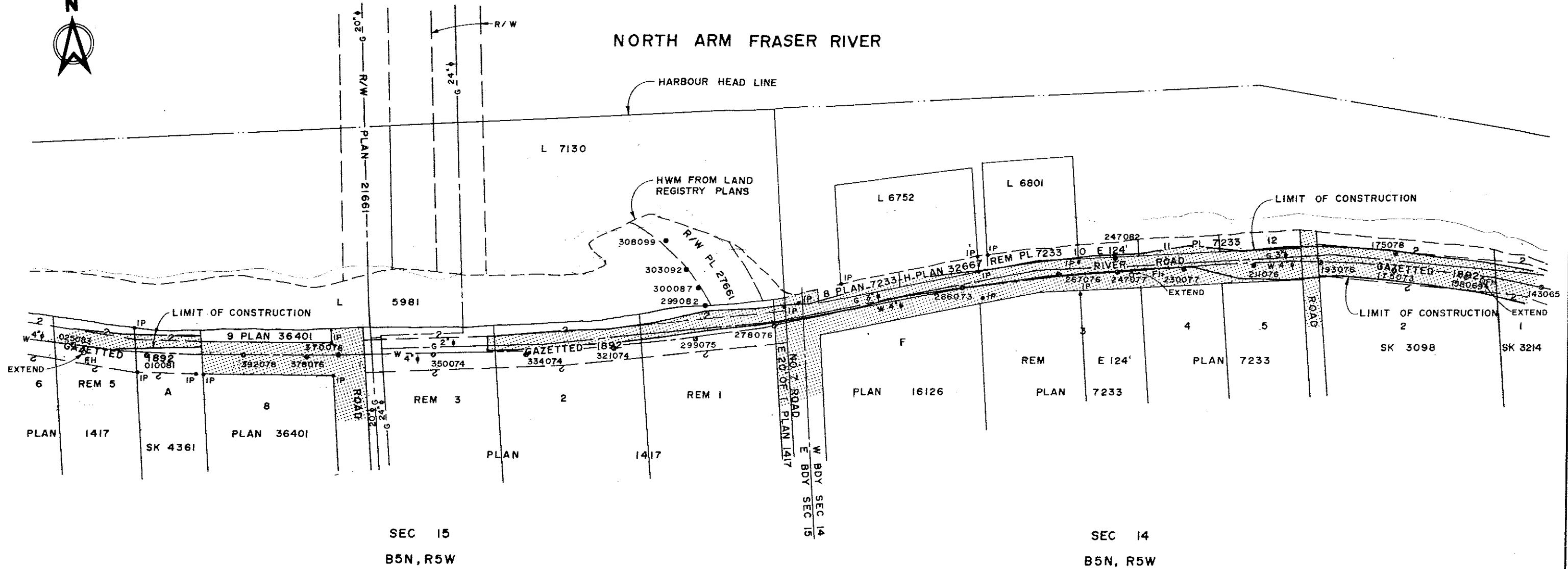
DATA COMPILED IN 1970

		C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA									
		THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND									
		PROJECT MANAGER <i>R. B. Cameron</i> DATE <u>DEC. 2/75</u>		ARCH STR		HYD SOILS		CONTRACT NO. 10 PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 3 OF 7			
		APPROVED <i>[Signature]</i> FOR DIRECTOR DATE <u>Dec 2/75</u>		DES <input type="checkbox"/> ARCH <input type="checkbox"/> STR <input type="checkbox"/>		CH <input type="checkbox"/> Wn <input type="checkbox"/> CH <input type="checkbox"/> DLC <input type="checkbox"/>		SCALE AS SHOWN ORIG ISSUE <u>Jan 3, 1976</u>			
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		THIS ISSUE SUPERSEDES ALL ISSUES WITH LETTERS PREVIOUS TO									

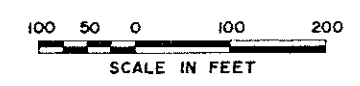
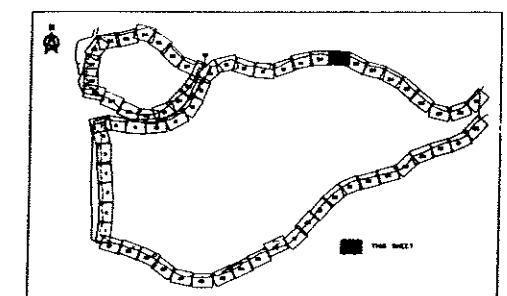


NORTH ARM FRASER RIVER

HARBOUR HEAD LINE



NOTE
For Legends see 4795-10-25



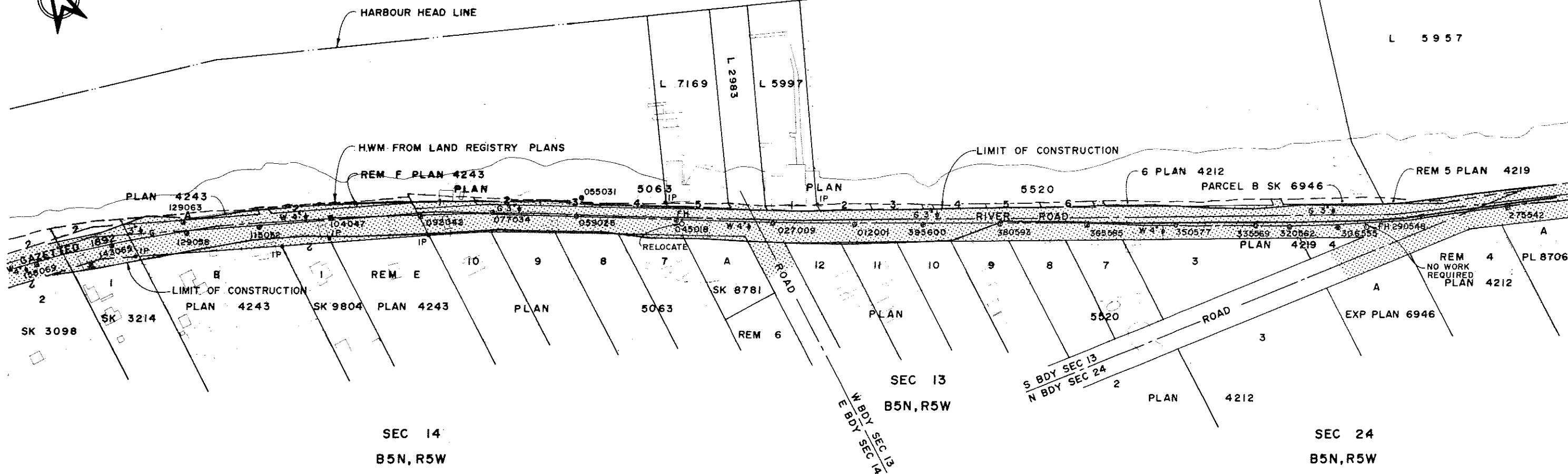
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DATA COMPILED IN 1970

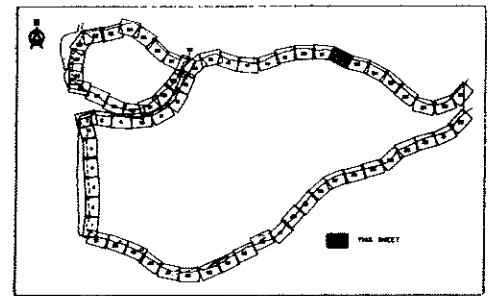
										C. B. A. ENGINEERING LTD.				CONSULTING ENGINEERS VANCOUVER, B.C., CANADA									
										RECOMMENDED PROJECT MANAGER <i>R. H. Cameron</i>		ELEC		HYD		THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA-BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 PLAN, SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 5 OF 7							
										DATE DEC. 2/75		MECH		SOILS									
										APPROVED <i>[Signature]</i> DIRECTOR		DES		DR Wn CH DLC									
										DATE Dec 2/75		SCALE AS SHOWN		ORG ISSUE		JAN 5, 1970		FILE NO. 0281550-C10-10		DWG NO. 4795-10-29		REV	
REFERENCES										REVISIONS													
NO. DESCRIPTION BY CH APPD ISSUED NO. DESCRIPTION BY CH APPD ISSUED										NO. DESCRIPTION BY CH APPD ISSUED NO. DESCRIPTION BY CH APPD ISSUED													



NORTH ARM FRASER RIVER



NOTE
For Legends see 4795-10-25



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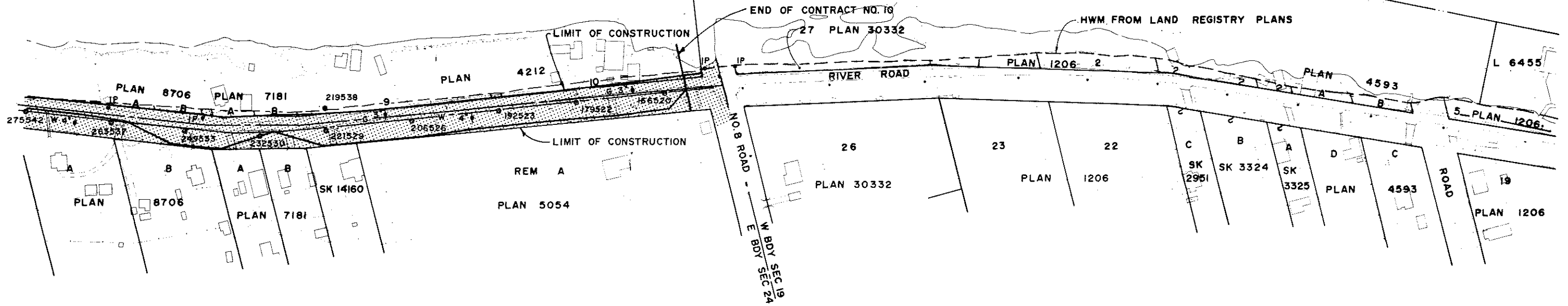
DATA COMPILED IN 1970

		C. B. A. ENGINEERING LTD.										CONSULTING ENGINEERS VANCOUVER, B.C., CANADA	
		<i>F. H. Cameron</i> RECOMMENDED PROJECT MANAGER DATE DEC. 2/75										THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND	
		APPROVED <i>[Signature]</i> DIRECTOR DATE Dec 2/75										CONTRACT NO. 10 PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 6 OF 7	
		SCALE AS SHOWN ORG ISSUE Jan 5 1976										FILE NO. 0281550-C10-10 DWG NO. 4795-10-30 REV	
DWG NO.		REFERENCES											
TITLE		REVISIONS											
		REVISIONS											



NORTH ARM FRASER RIVER

L 5957

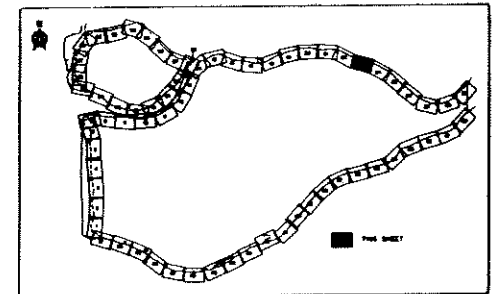


SEC 24
B5N, R5W

SEC 19
B5N, R4W

NOTE

For Legends see 4795-10-25

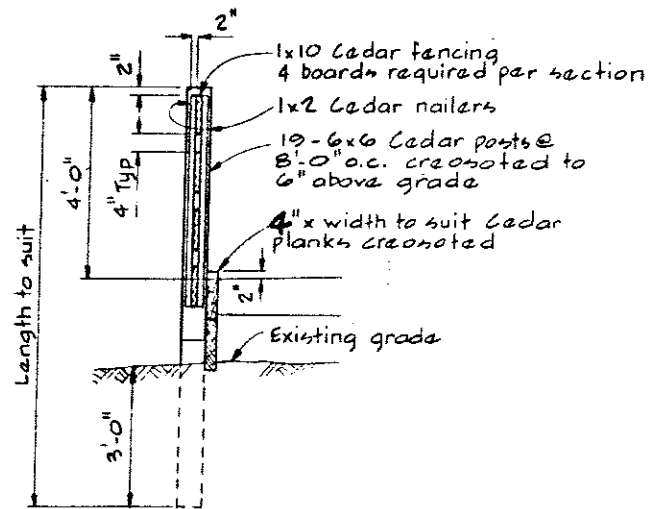
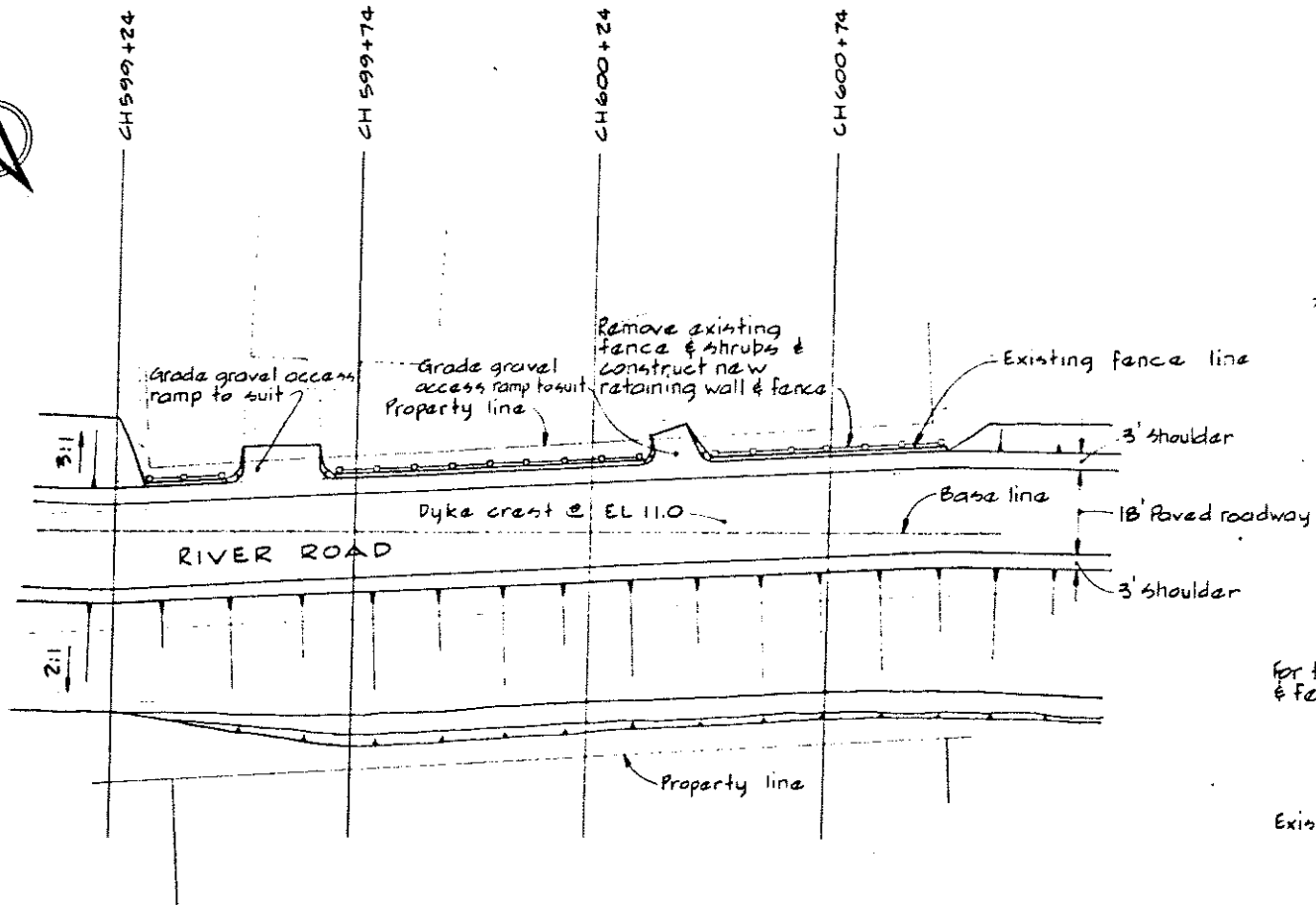


Property data shown on this drawing has been compiled from reference maps listed in the reference column. This data has been recorded in good faith but is subject to errors inherent in assembling information from varied sources without field measurement. This drawing is for information only and does not constitute a legal document.

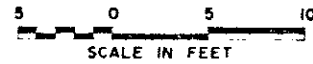
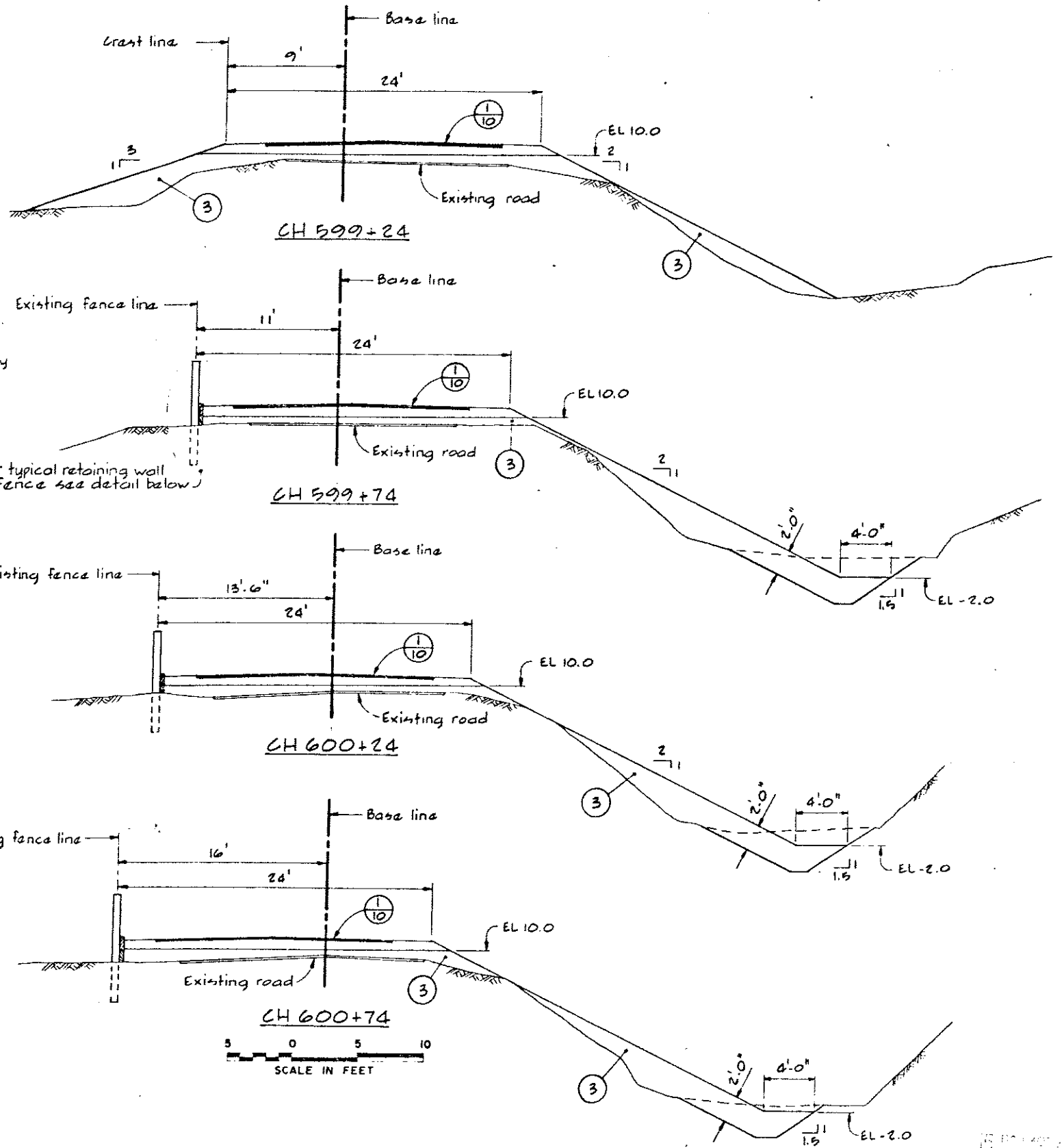
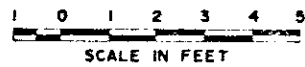


DATA COMPILED IN 1970

C. B. A. ENGINEERING LTD. CONSULTING ENGINEERS VANCOUVER, B.C., CANADA																							
RECOMMENDED PROJECT MANAGER <i>R. H. Cameron</i> DATE <u>DEC. 2/75</u>						ELEC		HYD		THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF LANDS FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT No. 3 THE TOWNSHIP OF RICHMOND													
						MECH		SOILS															
APPROVED <i>[Signature]</i> DIRECTOR DATE <u>Dec 4/75</u>						STR		DES		CONTRACT NO. 10 PLAN SHOWING LOCATION OF DYKE RIGHT-OF-WAY EXISTING SURVEY MARKERS & UTILITIES SHEET 7 OF 7													
						SCALE AS SHOWN		DR Wn				CH Dlc											
DWG NO.						TITLE						NO.		DESCRIPTION		BY		CH		APPD		ISSUED	
REFERENCES						REVISIONS						REVISIONS											
ORG ISSUE						Jan 5, 1976		FILE NO. 0281550 - C10-10		DWG NO. 4795-10-31		REV											



RETAINING WALL & FENCE DETAIL

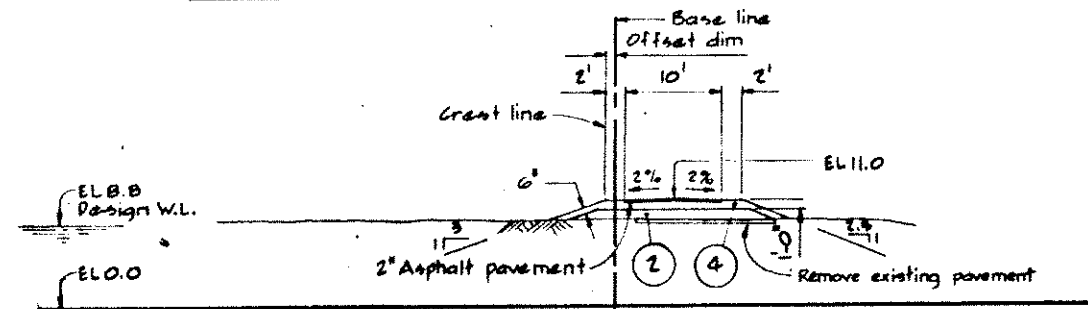


NOTES
 • For General Notes, Legend & Material Legend see 4795-10-6

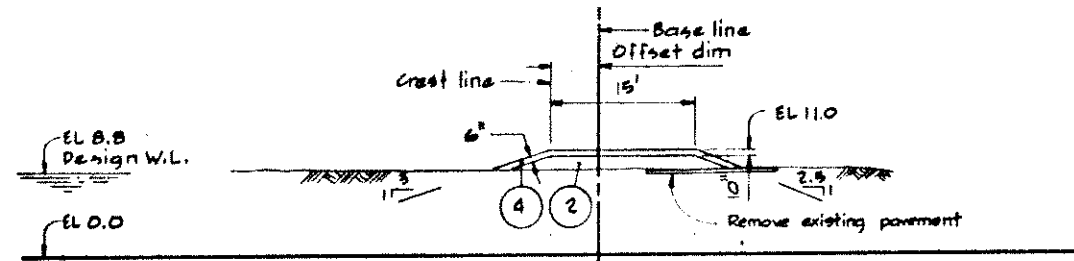
<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	RECOMMENDED	BRITISH COLUMBIA DEPARTMENT OF ENVIRONMENT WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	DESIGNED	EMH & DLG	SURVEYED
	DATE	PROJECT MANAGER	DRAWN	AR	DATE
APPROVED	DIRECTOR	PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 REVISED DYKE SECTIONS CH 599+00 TO CH 601+00	CHECKED	DLG	FILE NO. 0281550-C10-10
NO. BY	REVISIONS	DATE	SCALE	AS SHOWN	DATE July 30, 1976
			DWG. NO.	4795-10-32	SHEET ... OF ... SHEETS

RIVERSIDE

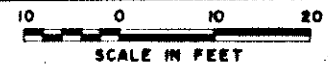
LANDSIDE



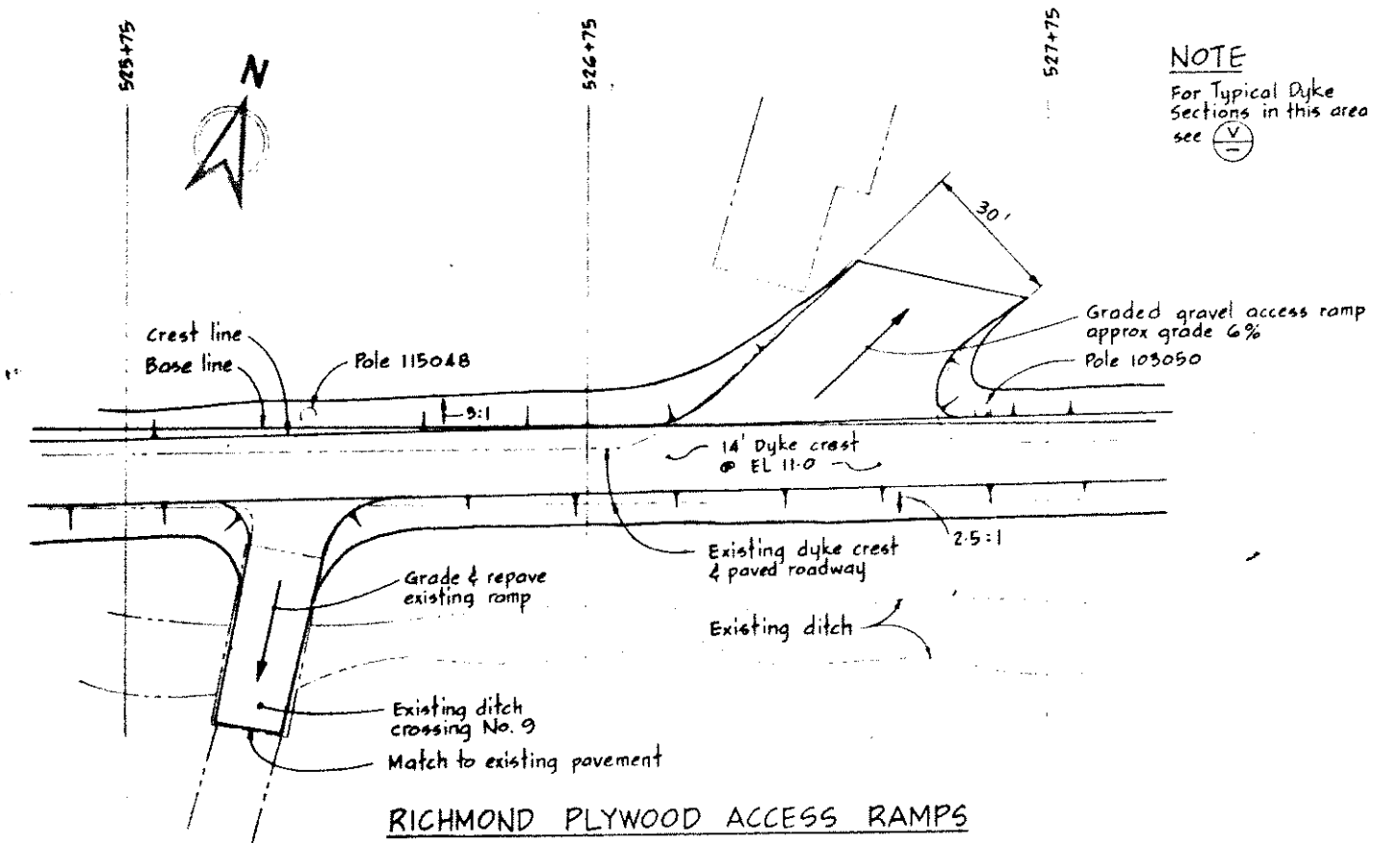
SECTION $\text{\textcircled{V}}$
TYP BTWN CH 523+25 TO 530+25



SECTION $\text{\textcircled{W}}$
TYP BTWN CH 530+75 TO 535+90



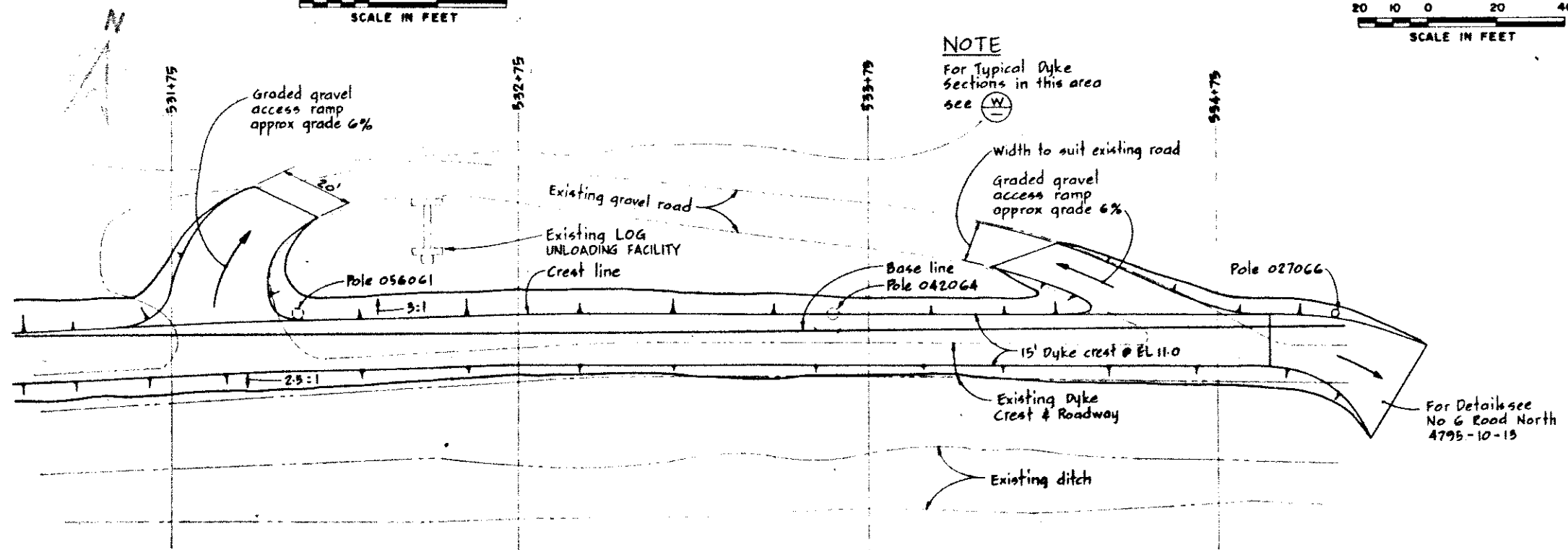
NOTE
For Typical Dyke Sections in this area see $\text{\textcircled{V}}$



RICHMOND PLYWOOD ACCESS RAMPS
WEST OF CONVEYOR



NOTE
For Typical Dyke Sections in this area see $\text{\textcircled{W}}$



RICHMOND PLYWOOD ACCESS RAMPS EAST OF CONVEYOR



NOTES
For Notes, Material Legend & Legend see 4795-10-10



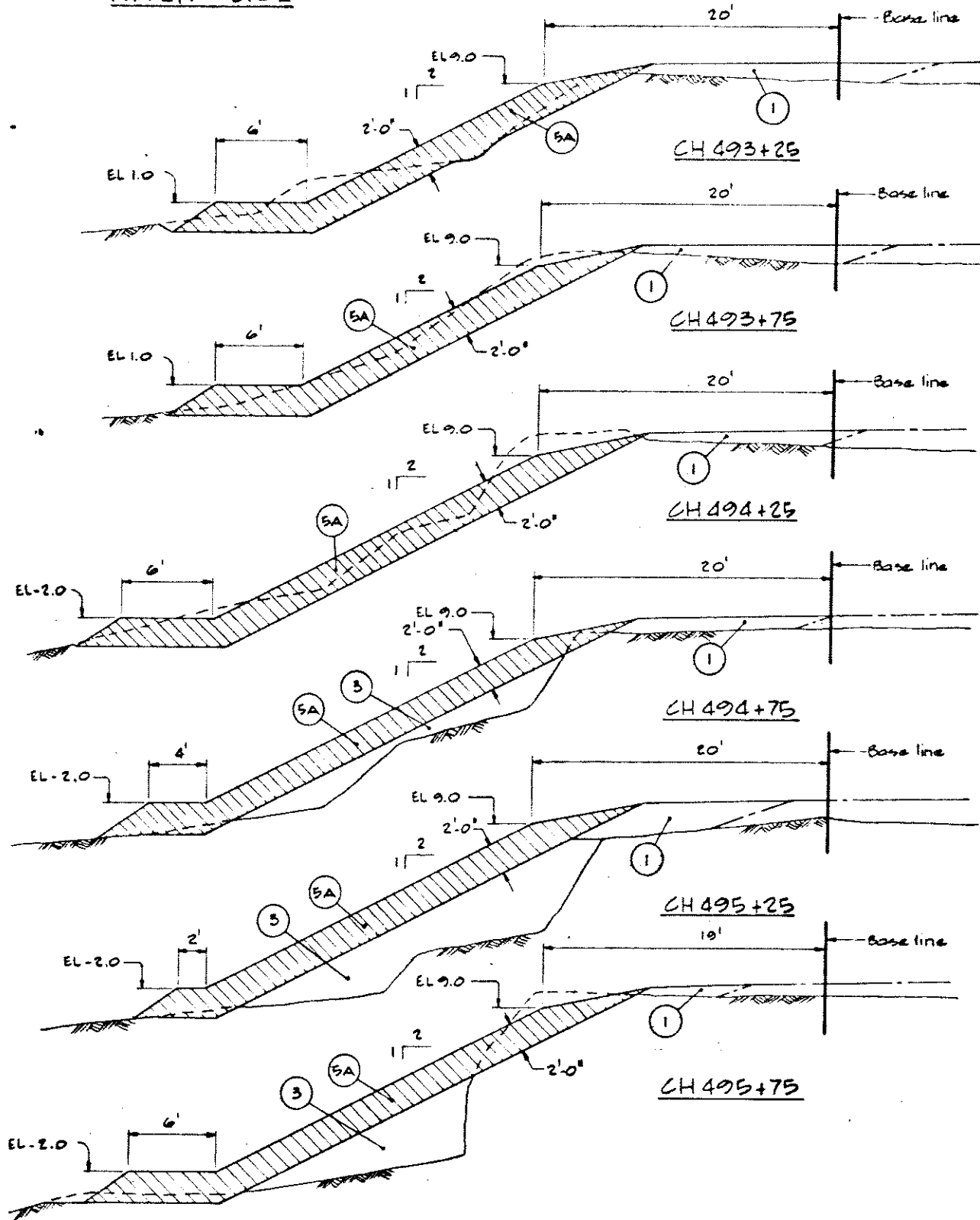
CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

RECOMMENDED	PROJECT MANAGER	DESIGNED	SURVEYED
DATE		DRAWN JL	DATE
APPROVED	DIRECTOR	CHECKED DLC	FILE NO. 0281550-C10-10
DATE		SCALE AS SHOWN	DATE Sept 13, 1976
		DWG NO. 4795-10-33	SHEET OF SHEETS

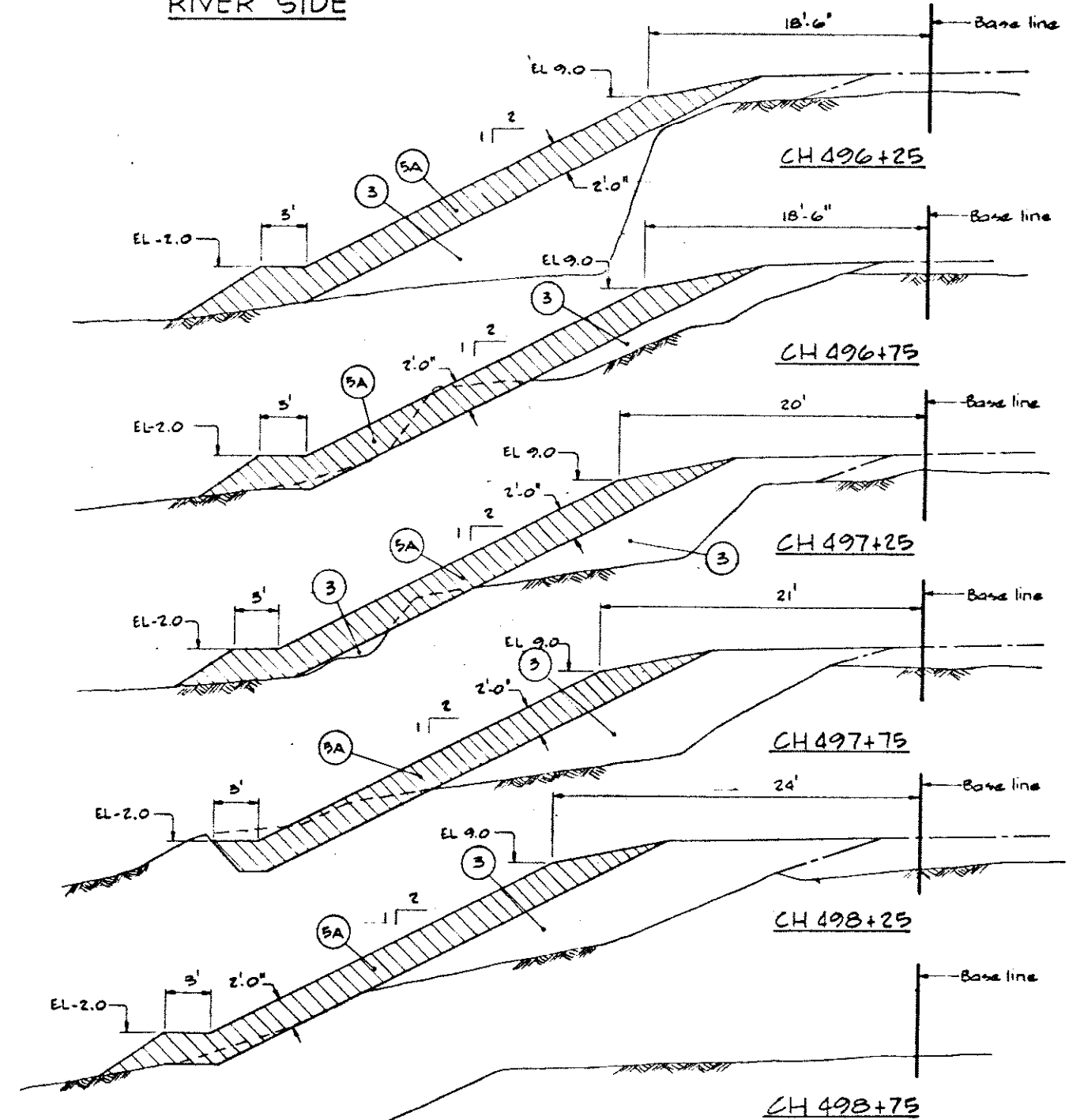
BRITISH COLUMBIA
DEPARTMENT OF ENVIRONMENT
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1988 AGREEMENT

PROJECT NO 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO 10
DYKE DETAILS CH 523+25 TO 535+90

RIVER SIDE




RIVER SIDE

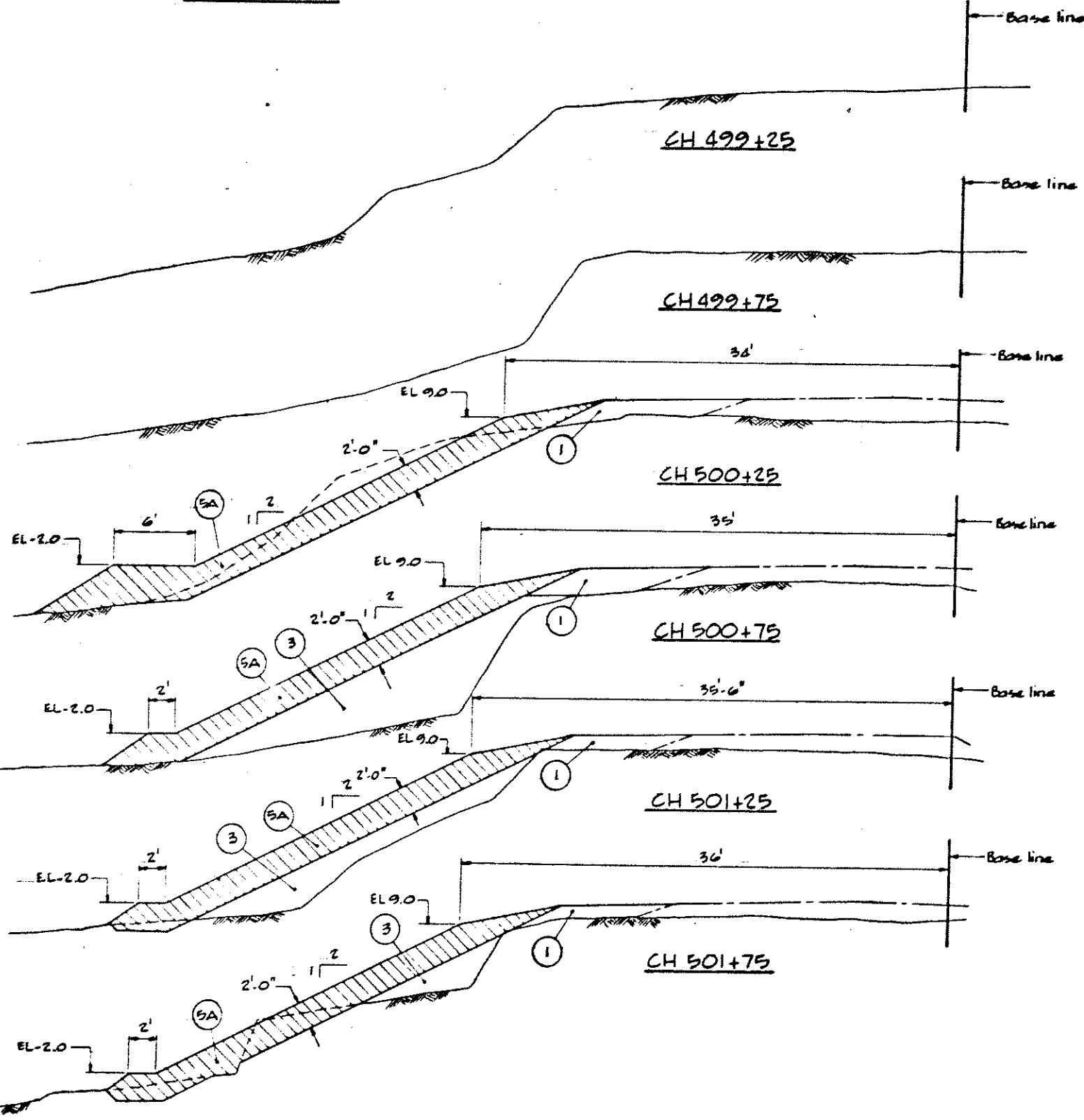


MAR 3 1977

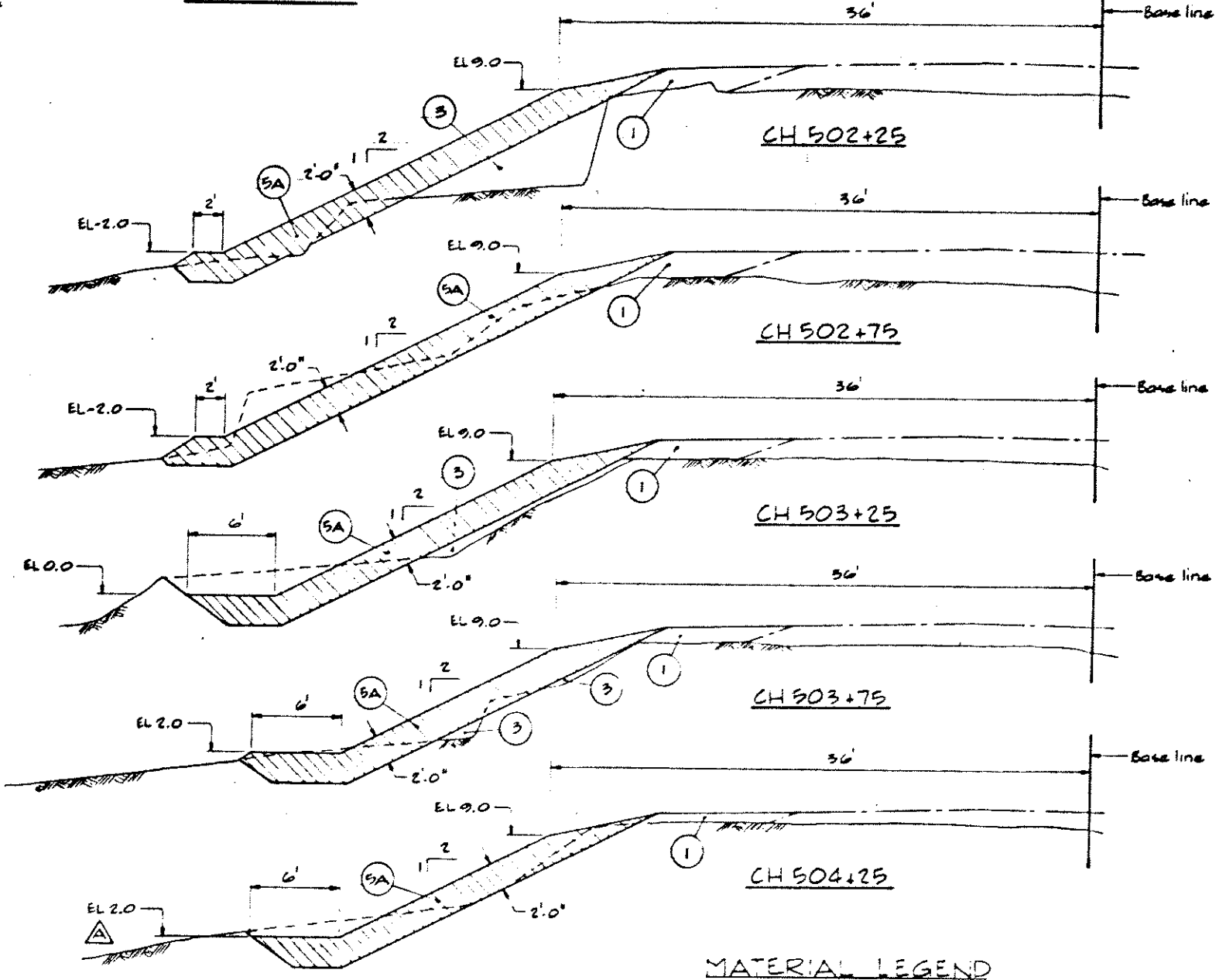


 CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA	NO	BY	REVISIONS	DATE	RECOMMENDED <i>B. L. Cameron</i> PROJECT MANAGER DATE <i>FEB 25 1977</i>	BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1986 AGREEMENT PROJECT NO. 3 THE TOWNSHIP OF RICHMOND CONTRACT NO. 10 BANK PROTECTION AT QUADRA STEEL CH 493+25 TO 498+75	DESIGNED	EMH	SURVEYED	
					APPROVED <i>A. L. Lyle</i> DIRECTOR DATE <i>26 5 77</i>		DRAWN	AR	DATE	
							CHECKED	EMH	FILE NO.	
							SCALE	As shown	DATE	March 2/77
							DWG NO.	325-D-260	SHEET	1 OF 2 SHEETS

RIVER SIDE



RIVER SIDE



QUANTITIES
Excavation - 950 cu yd
Type 1 - 350 cu yd
Type 3 - 2400 Tons
Type 5A - 3900 Tons

NOTES
Elevations refer to the Geodetic Survey of Canada.
Terminal parts of the work shall be constructed to blend with the existing bank.

MATERIAL LEGEND
① Compacted silt-clay - suitable excavation material as approved by the engineer.

③ Pitrun gravel or quarried stone

U.S. Standard sieve sizes	Percentage by Weight Passing
8"	100
3"	60 to 90
3/8"	30 to 65
#20	5 to 30
#100	0 to 10

⑤A Quarried stone

Screen size	Percentage by Weight Passing
8"	100
2"	50 to 70
3/4"	25 to 50
5"	5 to 30
3"	0 to 10



MAR - 7 1977

CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

RECOMMENDED <i>P. H. ...</i> PROJECT MANAGER	BRITISH COLUMBIA MINISTRY OF THE ENVIRONMENT WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL TMA AGREEMENT	DESIGNED EMU	SURVEYED
DATE FEB 25 1977		DRAWN OR	DATE
APPROVED <i>[Signature]</i> DIRECTOR	PROJECT NO 3 THE TOWNSHIP OF RICHMOND CONTRACT NO 10 BANK PROTECTION AT QUADRA STEEL CH 499+25 TO 504+25	CHECKED G.M.H.	FILE NO
NO. BY REVISIONS DATE	DATE Feb 25 1977	SCALE As shown	DATE March 2/77
		DWG NO. 325-D-261	SHEET 2 OF 2 SHEETS