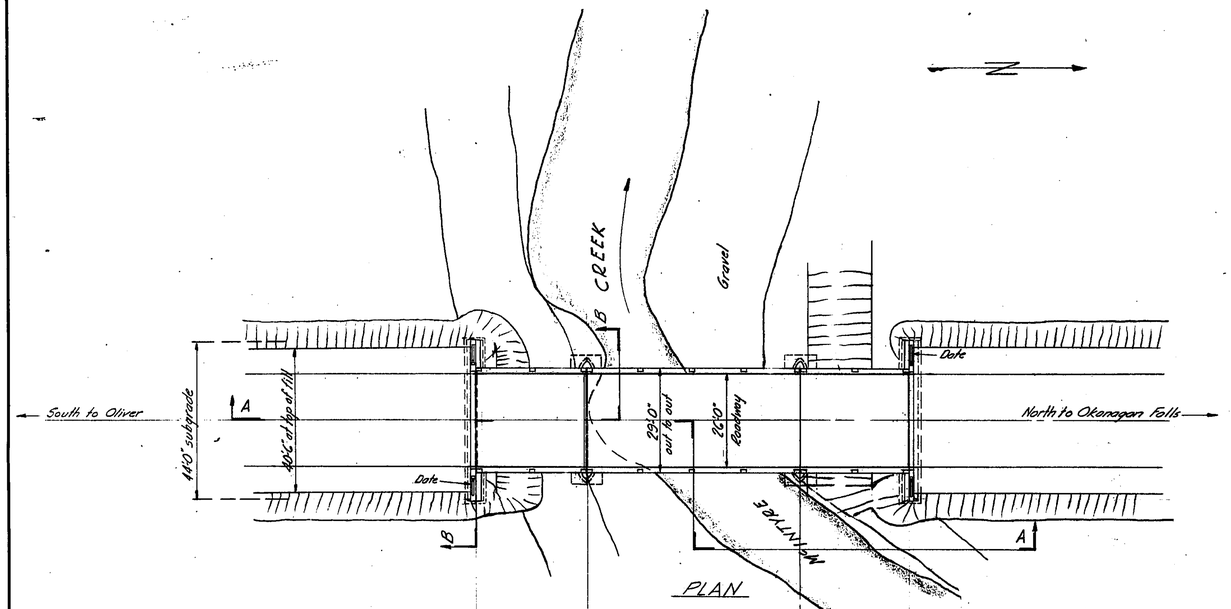
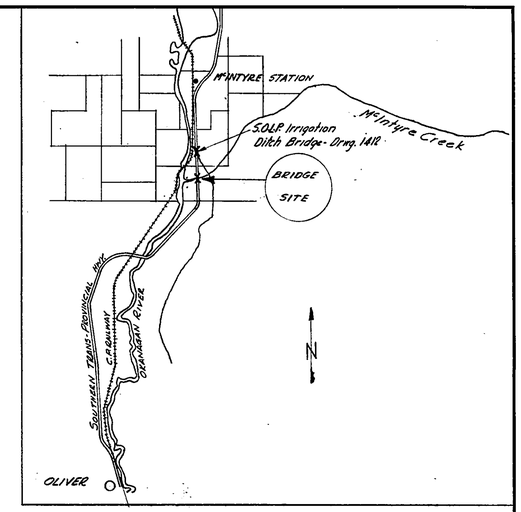
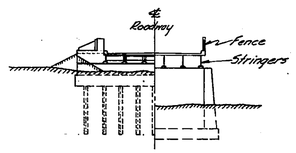


SECTION A-A



KEY MAP
1" = 1 mile



SECTION B-B

LIST OF DRAWINGS	
DWG. N°	TITLE
255-10	Layout, Anchor bolt plan & Key map
- 11	Abutments & Piers
- 12	Steelwork
- 13	Deck
2092	198A-2 Std. 60' beam span - steelwork
2092	198A-5 Std. 30' beam span - steelwork
1810	~~997-C~~ Std. Fence
2133	195A-10 Anchor Bolt Assembly

Specifications - Dept of Public Works
Live Load - C.E.S.A. - 20T
Survey by G. Cameron Dec. 1953
Datum. Deck of existing bridge Elev. 1003.00

SIMILKAMEEN DISTRICT
SOUTHERN TRANS-PROVINCIAL HIGHWAY
McINTYRE CREEK BRIDGE
LAYOUT, ANCHOR BOLT PLAN & KEY MAP
SCALE - 1" = 20' AND AS NOTED

REVISIONS			
Rev.	Particulars	Init.	Date
A	Datum note added	MR	19/12/'55

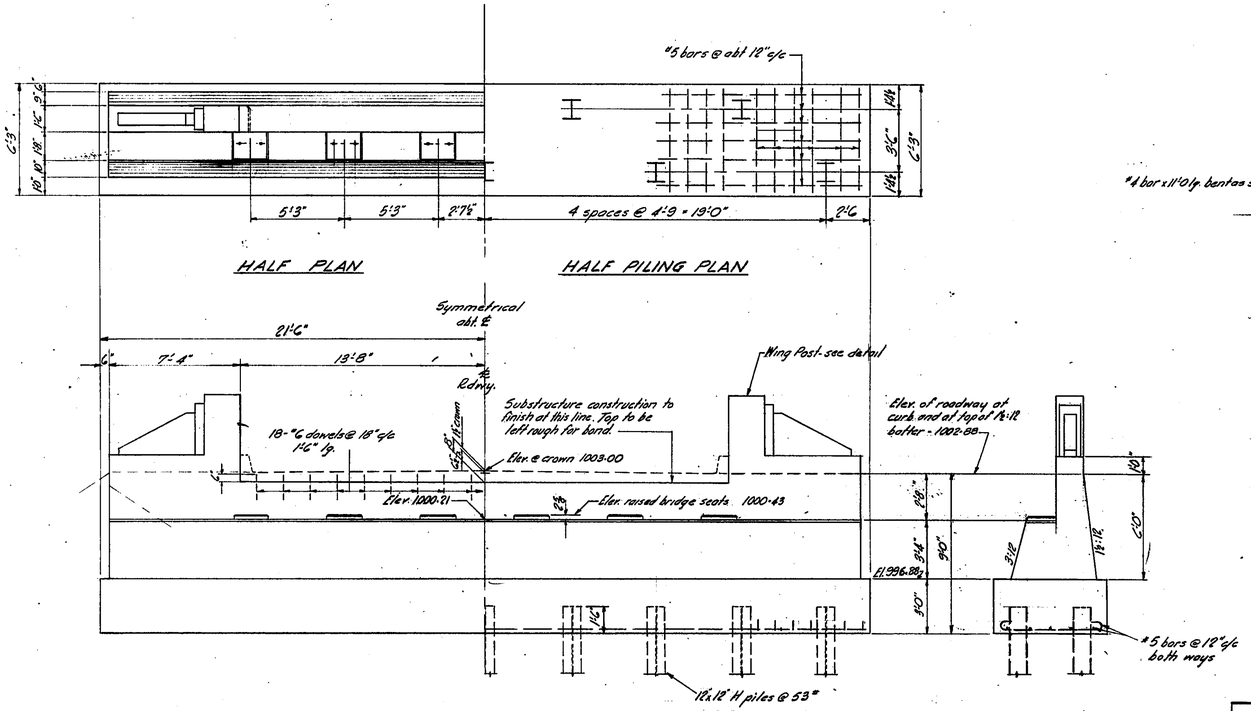
GOVT. OF BRITISH COLUMBIA
DEPT. OF PUBLIC WORKS
BRIDGE ENGINEER'S OFFICE

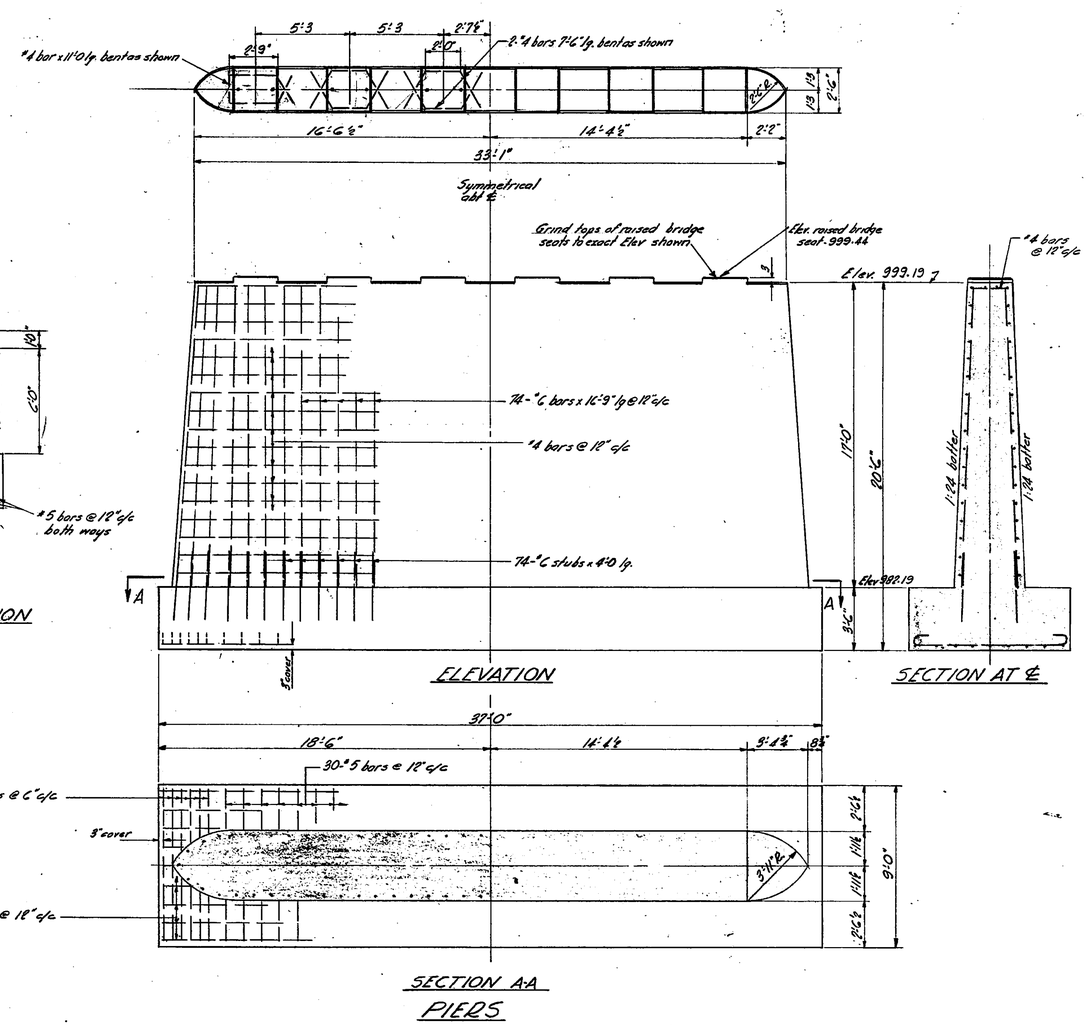
	Init.	Date
Made by	AL	19-6-54
Checked by	G.E.K.	14-7-54
Approved		

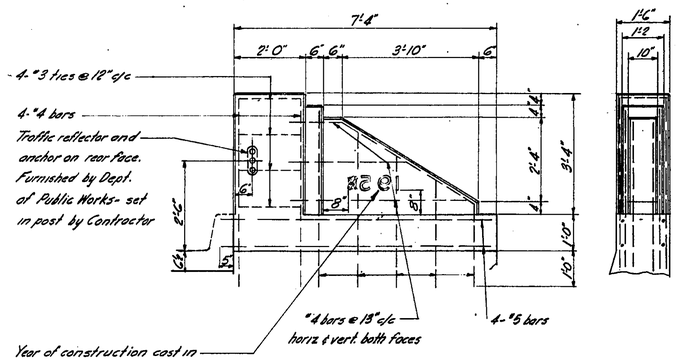
DRAWING NO. BRIDGES 255-10 A

Cancel prints bearing earlier letter

20346

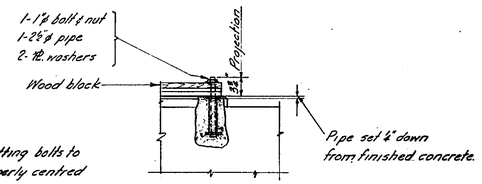






WING POST
Scale: ½" = 1'0"

NOTE: Chamfer all edges ¾" where shown
Minimum reinf. cover 1½"



Care to be taken in setting bolts to ensure pipes are properly centred thereon. Open ends of pipes to be sealed with blocks as shown to exclude water until erection of steelwork. Use Tarvia gum or equal to ensure water tightness

RAISED BRIDGE SEAT
Scale: ½" = 1'0"

1. Concrete in piers to be Class A throughout
2. Piles to be driven to Elev. 81.0
3. Concrete in abutments to be Class 'X' throughout except wing posts which are to be Class 'A'
4. Exposed edges are to be chamfered 1" except where noted.
5. Footings are to be carried down to elevations shown or to such lower elevations as may be ordered by the Engineer.
6. A 12" drainage course of coarse gravel is to be placed at back of abutments
7. Anchor bolt pipes are to be filled with sand-cement grout by erector of steelwork immediately before final positioning of steelwork.
8. All reinforcing to have 2" cover except where noted
9. Reinforcing - Min. dias. of pins to be used for bending bars, (including hooks) to be 2x d for stirrups and ties. 6x d for "8 bars and under. 8x d for "9 bars and over. Extension of free ends on hooks to be 4x d. Lap of bars for splices to be 40x d.

	ESTIMATED QUANTITIES		
PART	CONC. CLASS 'A'	CONC. CLASS 'X'	REINFORCING
Abutments	4	113	1100
Piers	214		8100

SIMILKAMEEN DISTRICT
SOUTHERN TRANS-PROVINCIAL HIGHWAY

McINTYRE CREEK BRIDGE
SUBSTRUCTURE DETAILS

SCALE - ¼" = 1'0" AND AS NOTED

REVISIONS			
Rev.	Particulars	Init.	Date

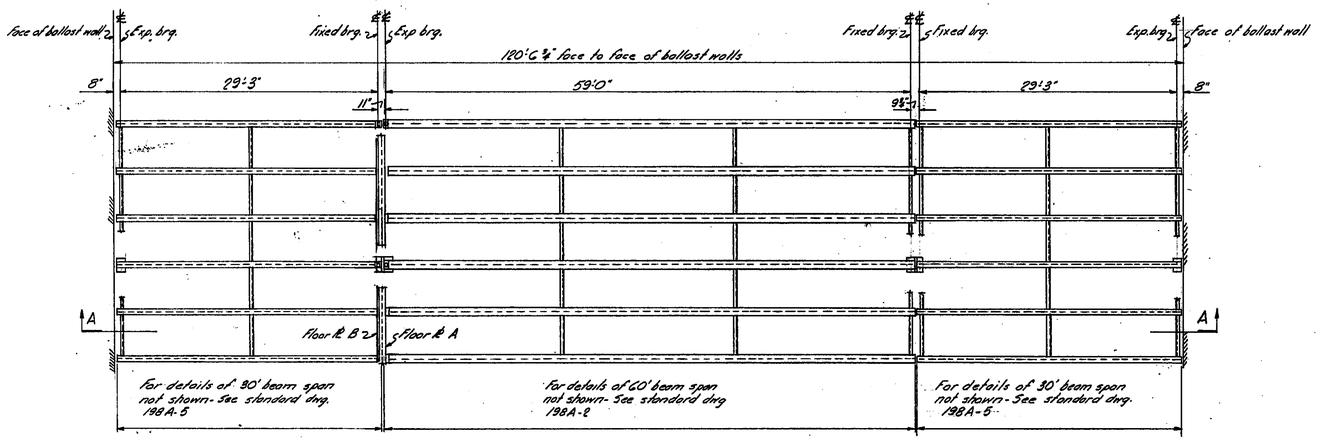
GOVT. OF BRITISH COLUMBIA
DEPT. OF PUBLIC WORKS
BRIDGE ENGINEER'S OFFICE

	Init.	Date
Made by	RL	6-7-54
Checked by	G.S.K.	14-7-54
Approved		

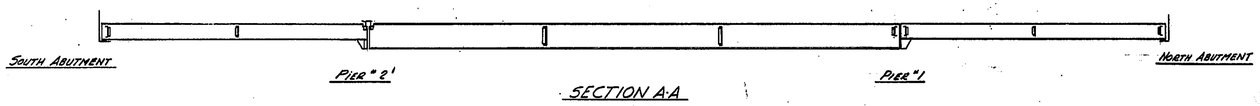
DRAWING No. BRIDGES 255-11

Cancel prints bearing earlier letter

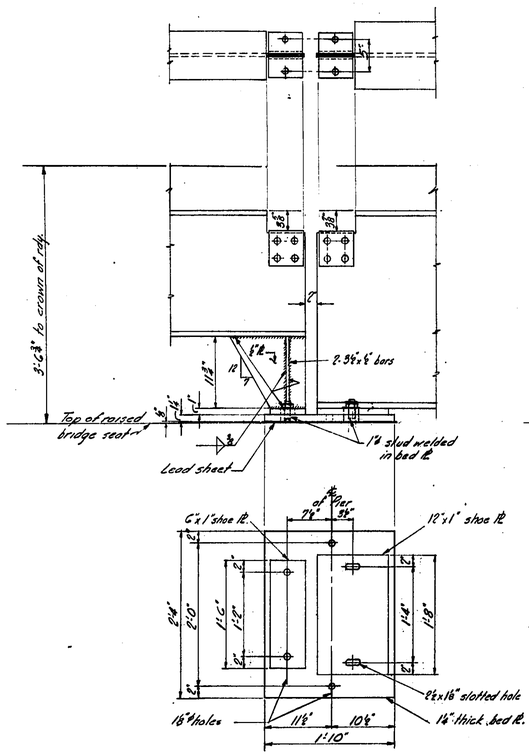
20347



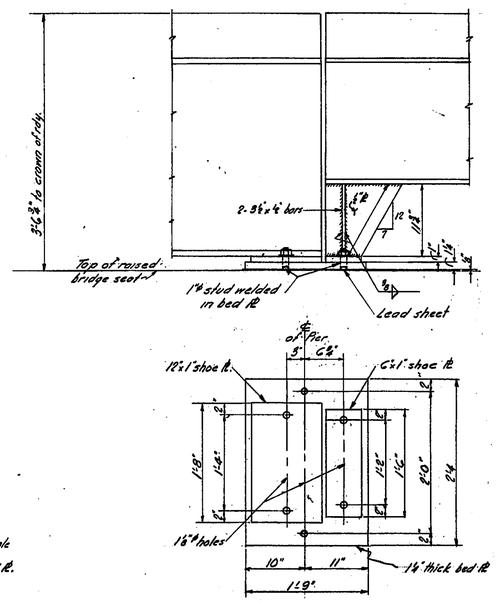
LAYOUT
Scale - ½" 1'0"



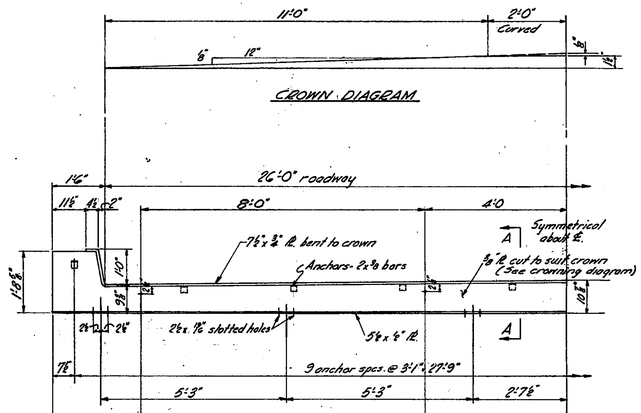
SECTION A-A
Scale - ½" 1'0"



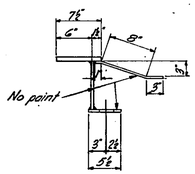
DETAIL AT PIER "2"
Scale - 1" 1'0"



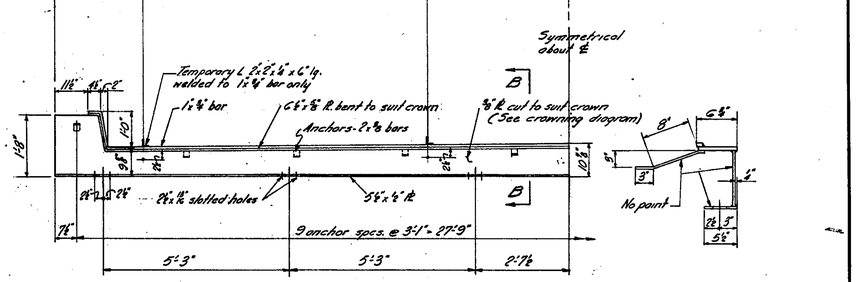
DETAIL AT PIER "1"
Scale - 1" 1'0"



FLOOR PLATE - TYPE A
Scale - ½" 1'0"

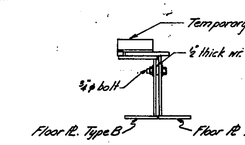


SECTION A-A
Scale - 1" 1'0"



FLOOR PLATE - TYPE B
Scale - ½" 1'0"

SECTION B-B
Scale - 1" 1'0"



ASSEMBLY OF PARTS FOR SHIPMENT AND INSTALLATION
Scale - 1" 1'0"

NOTES

1. Steelwork required consists of 1-60' and 2-30' Standard Beam Spans (Dwg 198A-2 and 198A-5 respectively) modified as shown on this drawing.
2. Rivets ⅞"ø. Open holes 1⅛"d.
3. Paint all steelwork one shop coat red lead and one shop coat aluminum "2, except where noted.

FOR AS BUILT DETAILS SEE SHOP DRAWING

Estimated weight of steelwork = 94,900 lbs

SIMILKAMEEN DISTRICT
SOUTHERN TRANS-PROVINCIAL HIGHWAY

McINTYRE CREEK BRIDGE
STEELWORK DETAILS

SCALE - ½" 1'0" AND AS NOTED

REVISIONS			
Rev.	Particulars	Init.	Date

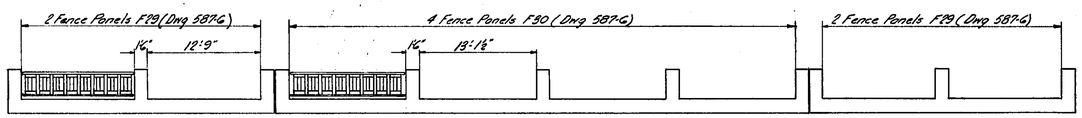
GOVT. OF BRITISH COLUMBIA
DEPT. OF PUBLIC WORKS
BRIDGE ENGINEER'S OFFICE

	Init.	Date
Made by	[illegible]	2-7-54
Checked by	G.S.K.	4-7-54
Approved	[signature]	

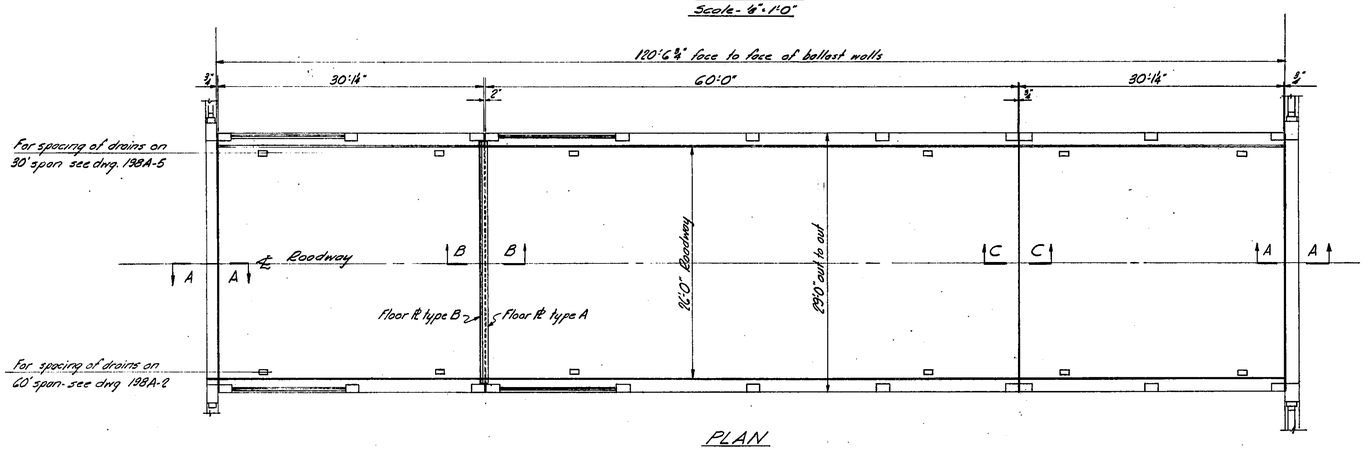
DRAWING No. BRIDGES 255-12

Cancel prints bearing earlier letter

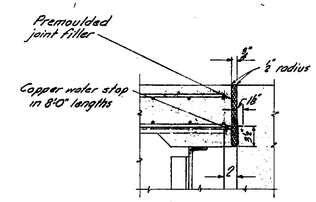
20348



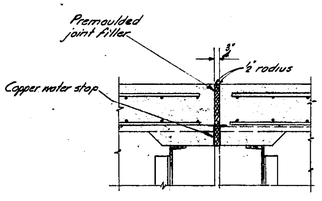
ELEVATION
Scale - ⅜" = 1'-0"



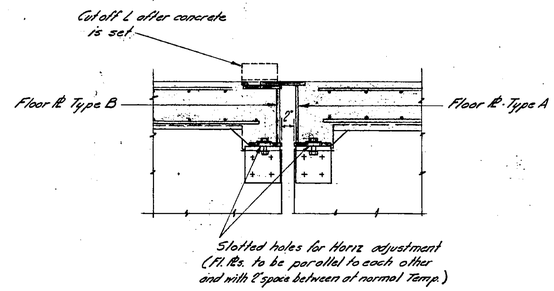
PLAN
Scale - ⅜" = 1'-0"



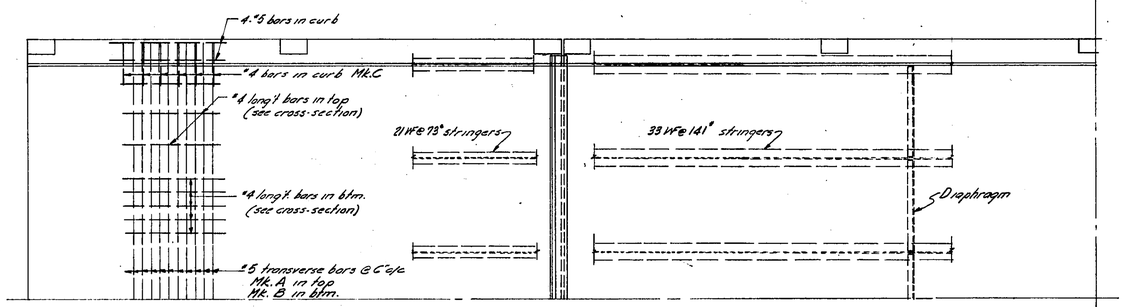
SECTION A-A
Scale - 1" = 1'-0"



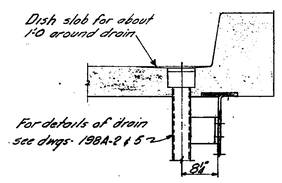
SECTION C-C
Scale - 1" = 1'-0"



SECTION B-B
Scale 1" = 1'-0"



PART PLAN
Scale - ¼" = 1'-0"



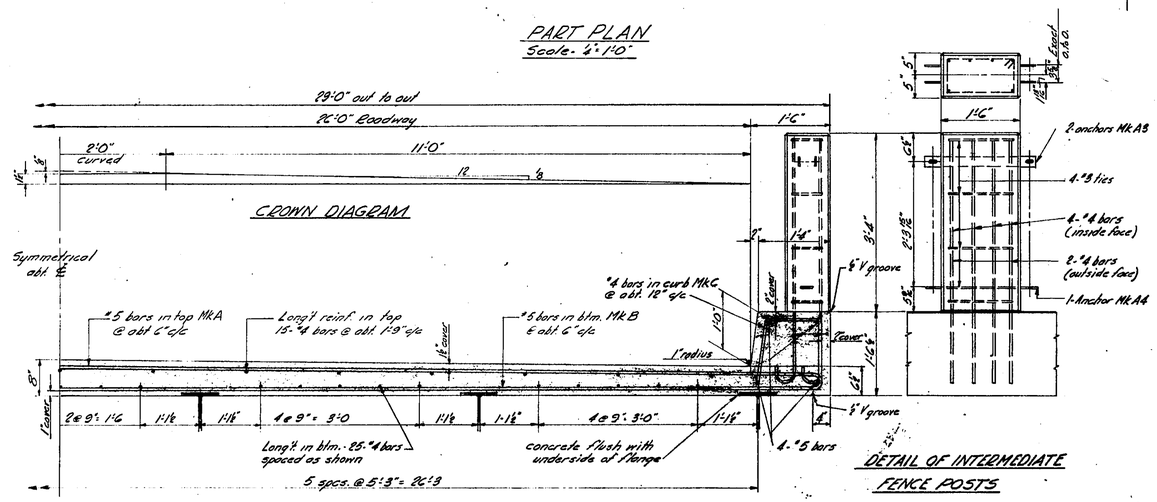
DETAIL AT DRAIN
Scale - ¾" = 1'-0"

NOTES

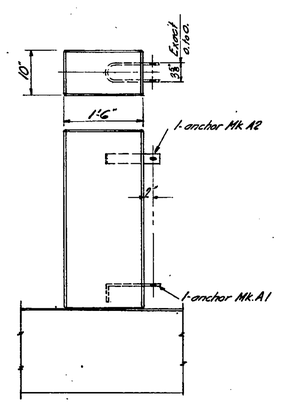
1. All concrete to be class 'A'
2. Each span to be poured in one continuous operation
3. Reinforcing - Min dias. of pins to be used for bending bars (including hooks) to be 2"ø for stirrups and ties. 4"ø for #8 bars and under. 8"ø for #9 bars and over. Extension of free ends on hooks to be 4"ø. Lap of bars for splices to be 40"ø.
4. All exposed edges to have ¾" chamfer, unless noted otherwise.
5. Reinforcing steel to have 1½" cover except where shown otherwise.

BAR BENDING	
MARK	BENDING DIAGRAM
A	28'-8" 5" 1'-3"
B	28'-8" 1'-3"
C	1'-10" 1'-3" 25" 1'-3"

ESTIMATED QUANTITIES		
PART	CONC. CLASS A	REINFORCING
Deck	95 cu. yds.	21,200 lbs



TYPICAL HALF SECTION
Scale - ¾" = 1'-0"



DETAIL OF FENCE POSTS AT JUNCTIONS AND ENDS

SIMILKAMEEN DISTRICT
SOUTHERN TRANS-PROVINCIAL HIGHWAY

McINTYRE CREEK BRIDGE

DECK DETAILS

SCALE - ¾" = 1'-0" AND AS NOTED

REVISIONS			
Rev.	Particulars	Init.	Date

GOVT. OF BRITISH COLUMBIA
DEPT. OF PUBLIC WORKS
BRIDGE ENGINEER'S OFFICE

	Init.	Date
Made by	RL	18-7-54
Checked by	G.S.K.	19-7-54
Approved		

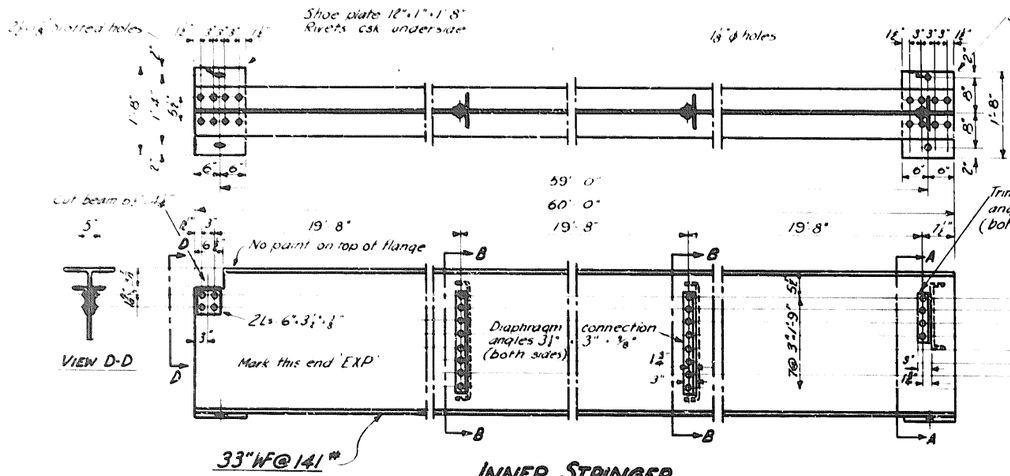
DRAWING No. BRIDGES 255-13

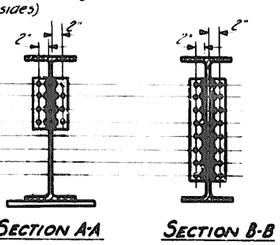
Cancel prints bearing earlier letter

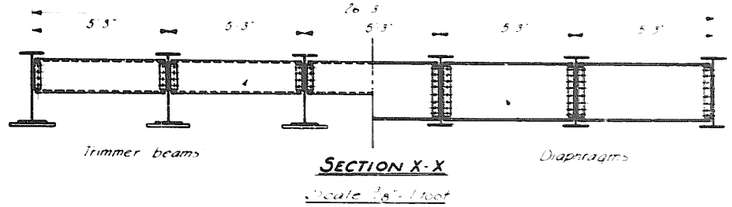
20349

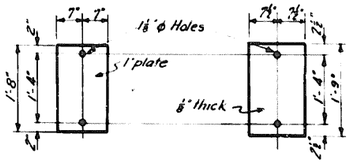
QUANTITIES REQUIRED FOR ONE BRIDGE

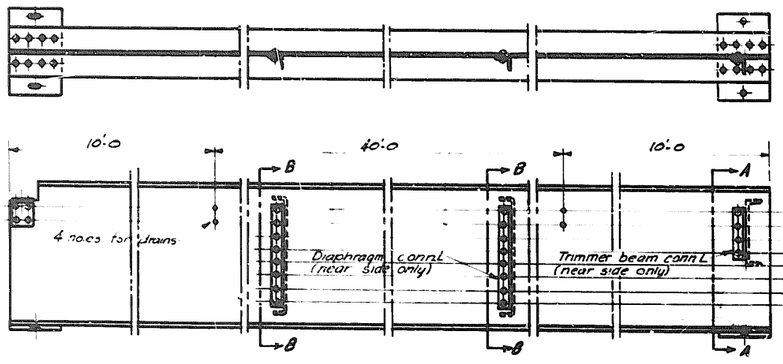
DESCRIPTION	No. REQ'D
Stringer, Inner - Complete with shoe plates and connection angles for floor plates, diaphragms & trimmer beams	4
Stringer, outer RH (as drawn) complete as above	1
Stringer, outer LH (opposite hand) complete as above	1
Trimmer beam	5
Diaphragm	10
Bed Plate	6
Lead sheet	12
Drain. Complete as drawn	4
Field bolt - $\frac{3}{4}$"Ø - $1\frac{1}{4}$"lg with nut & washer (including 5% spares)	24
Do Do - $\frac{3}{4}$"Ø - $2\frac{1}{2}$"lg Threaded 2" with nut & washer (for floor plate)	12

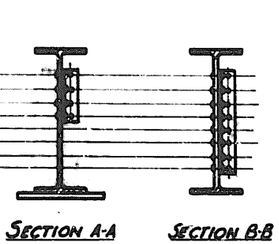


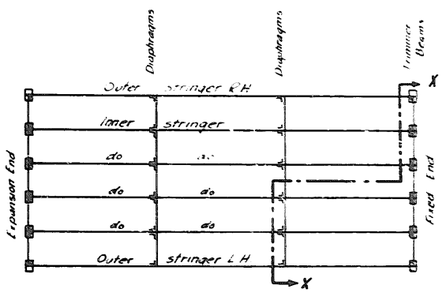






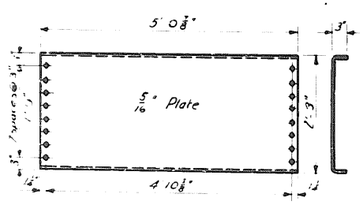


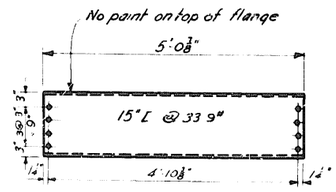


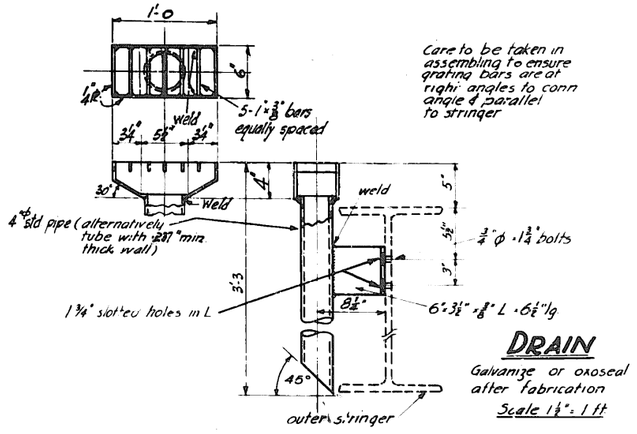


LIST OF CONTRACTS

NAME	DWG FILE No.
Trowell Creek Br	65
Adair Creek Br (2 spans)	512
Little Qualicum Br	1284
Boundary Falls Br. 1.35	1282
~~[illegible]~~	~~[illegible]~~
Eric Creek Bridge	1385
Revision A - Part 6 Drain	
Alexander Bridge M.99	667
Revision 8 - See P. Lead Sheet" wedge"	
Diamond Creek Bridge 99	1445







Care to be taken in assembling to ensure grating bars are at right angles to conn angle & parallel to stringer

STANDARD BEAM SPANS
60' SPAN
STEELWORK DETAILS

Scale ¾" = 1 ft & as noted

Notes
Rivets ¾"Ø Open holes ⅞"Ø
Shoe plates may be welded to stringers instead of riveted as shown in either case underside of plate must be flat
Paint all steelwork one shop coat red lead [illegible] except where noted.
Estimated weight of steelwork
= ~~56,~~ 0 LBS
= 56,590 LBS

GOVT OF BRITISH COLUMBIA
DEPT. OF HIGHWAYS
VICTORIA

Made by J.G.F. June/48	DRAWING NO.
Traced by K.S. July/48	
Checked by J.R. Aug./48	2092-25

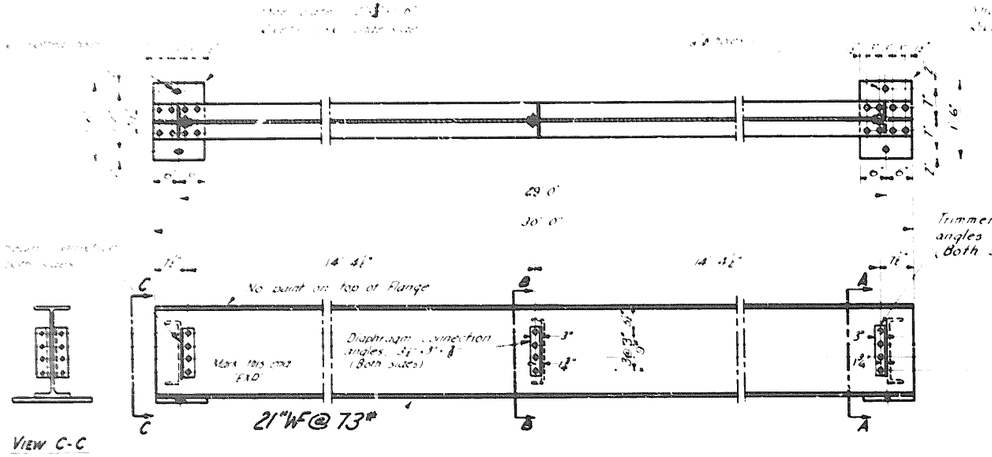
Chief Highway Engineer

Formerly Std Bridges 198A-2B

16317

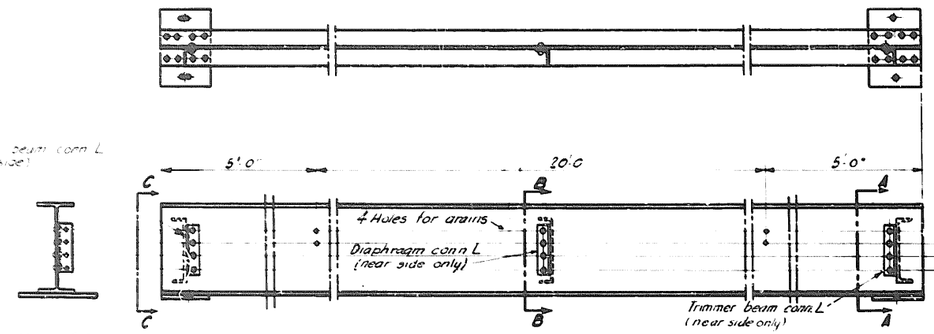
QUANTITIES REQUIRED FOR ONE BRIDGE

DESCRIPTION	No Reqd
Stringer, Inner - Complete with shoe plates & connection angles for trimmer beams & diaphragms	4
Stringer, Outer - RH As drawn, complete as above	1
Stringer, Outer - LH (opposite hand) complete as above	1
Trimmer Beam	2
Diaphragm	5
Bed Plate	6
Lead Sheet	2
Drain complete as drawn	1
Field bolt 1 3/8" ø x 4 1/2" lg with nut & washer (including 5% spares)	44



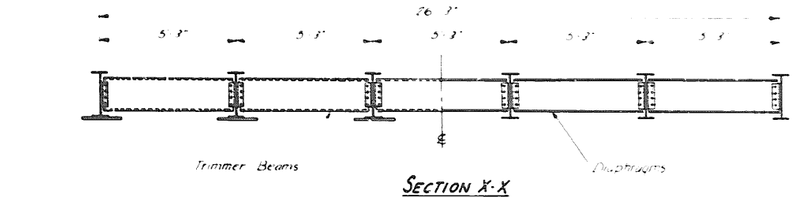
INNER STRINGER

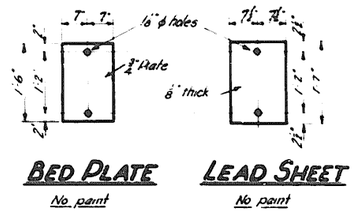
No camber



OUTER STRINGER

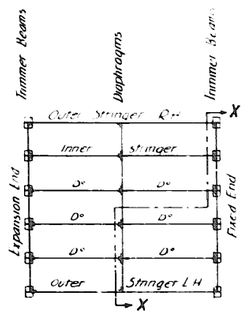
Same as inner stringer except as noted





BED PLATE — No paint

LEAD SHEET — No paint

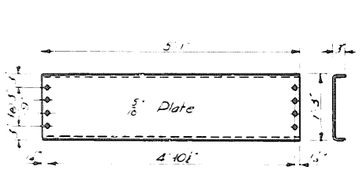


STEELWORK LAYOUT

Erection Note - Anchor bolts to be grouted immediately before final positioning of stringers

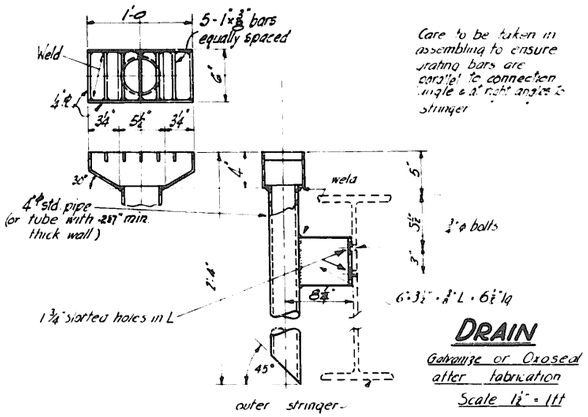
LIST OF CONTRACTS

NAME	Dwg. File No
Revision 1 - Paint & drain	
Revision "B" - Bed P., Lead Sheet, & Legs"	



DIAPHRAGM

TRIMMER BEAM



Care to be taken in assembling to ensure stating bars are parallel to connection angle & ⅜" right angles to stringer

DRAIN

Galvanize or Oxbosed after fabrication

Scale 1½" = 1 Ft

STANDARD BEAM SPANS
30 FT. SPAN
STEELWORK DETAILS

Scale ¼" = 1 Ft & as noted

Notes

Rivets ¾" ø - open holes 13/16" ø

Shoe plates may be welded to stringers instead of riveted as shown in either case underside of plate must be flat

Paint all steelwork one shop coat red lead and one shop coat aluminum "2 except as noted.

Estimated weight of steelwork

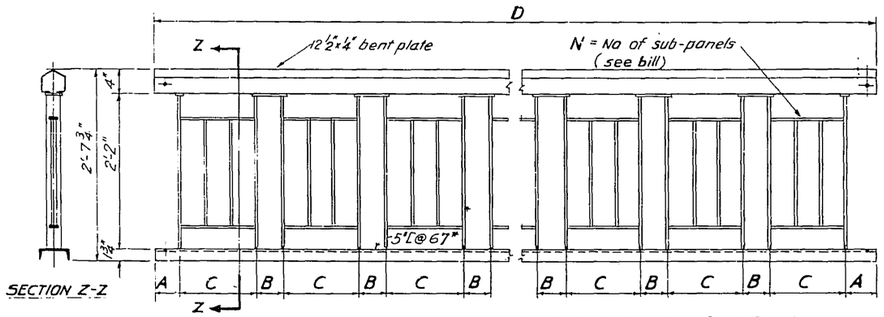
~~17,454 LBS.~~

= 17,354 LBS

GOVT. OF BRITISH COLUMBIA
DEPT. OF PUBLIC WORKS
VICTORIA

Made by W.T. June 1948	DRAWING No.
Traced by W.S. July 1948	2092-5
Checked by J.A. Sept 8 48	
Chief Engineer	

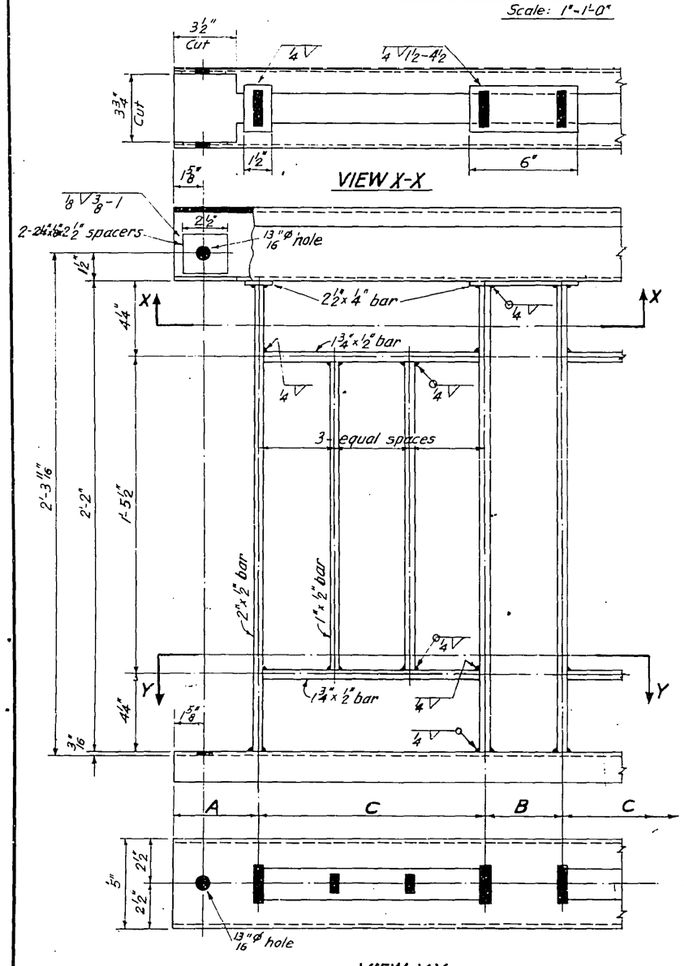
Formerly Std. Bridges 198 A-5 B



See table of dimensions for =A,B,C & D

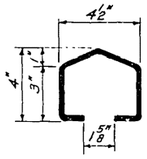
GENERAL ARRGT. OF FENCE PANEL

Scale: 1"=1'-0"



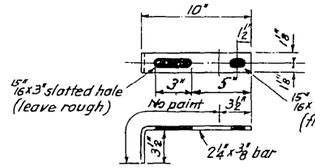
PANEL DETAILS

Scale:- 3"=1'-0"



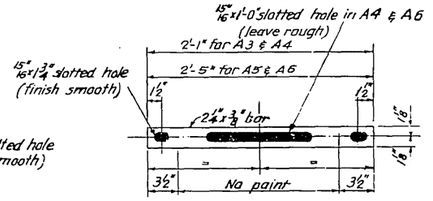
SECTION THRO. TOP RAIL

Scale:- 3"=1'-0"



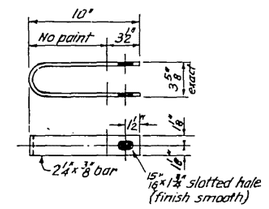
ANCHOR MK. A1.

Scale: 1 1/2"=1'-0"



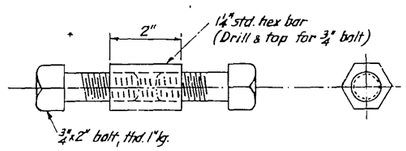
ANCHORS MK. A3, A4, A5 & A6

Scale:- 1 1/2"=1'-0"



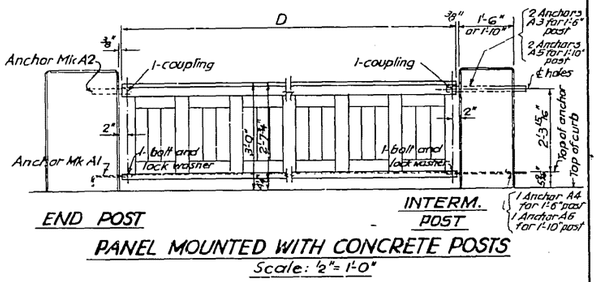
ANCHOR MK. A2

Scale: 1 1/2"=1'-0"



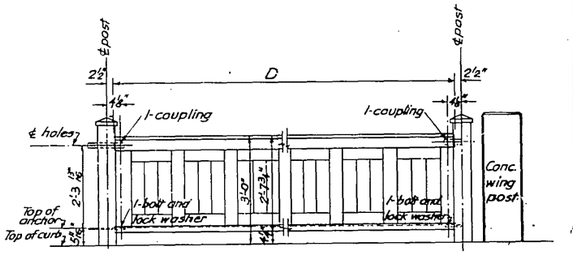
TOP RAIL COUPLING

Half size



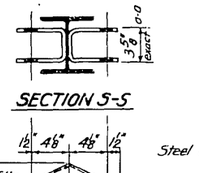
PANEL MOUNTED WITH CONCRETE POSTS

Scale: 1/2"= 1'-0"

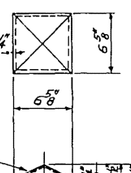


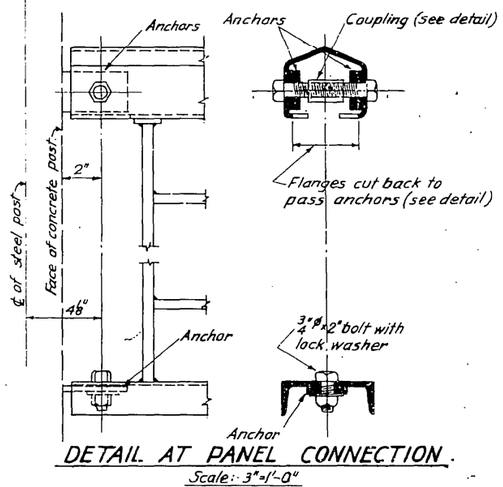
PANEL MOUNTED WITH STEEL POSTS

Scale: 1/2"= 1'-0"



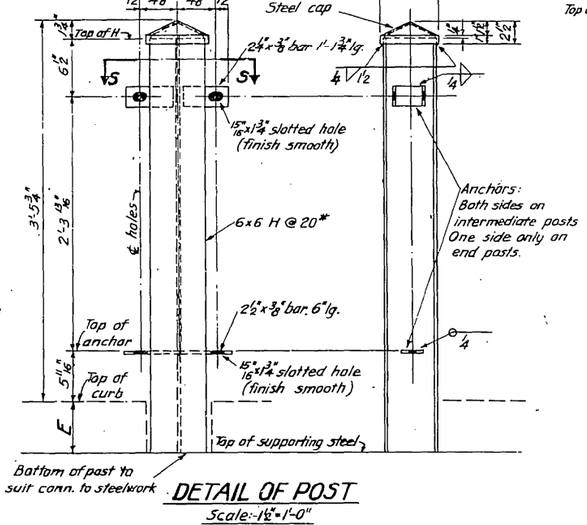
SECTION S-S





DETAIL AT PANEL CONNECTION.

Scale:- 3"=1'-0"



DETAIL OF POST

Scale:-1 1/2"=1'-0"

MAX. & MIN. DIMENSIONS			
A	B	C	D
Max. 5'6" Min. 4 1/2"	Max. 5" Min. 4"	Max. 1'-3" Min. 1'-0"	Max. 15'-0"

TABLE OF WEIGHTS

Fence panel - excl. connecting couplings and bolts		see bill
Top rail couplings with hex. nuts and 2 bolts	each	1.40 lbs.
Bottom rail bolt with lockwasher and nut	"	0.91 "
Anchors A1	"	3.22 "
A2	"	5.14 "
A3 & A4	"	6.00 "
A5 & A6	"	7.00 "

Note:
All Steel work painted one shop coat of red lead paint except where noted.

REDUCED PLAN
APPROX. HALF SIZE

BRITISH COLUMBIA DEPARTMENT OF HIGHWAYS
BRIDGE ENGINEER'S OFFICE

STANDARD 3'-0" FENCE

REVISIONS			
F	Anchors, Weld & Title	A.S.	21/2/63

DESIGN			SCALE: As noted
DRAWN	P.P.	31/5/56	Approved: Chief Engineer
CHECKED	R.L.	24/6/56	DRAWING No. 1810-6 F

Cancel prints bearing earlier letter

DEPARTMENT OF PUBLIC WORKS
BRIDGE ENGINEER'S OFFICE

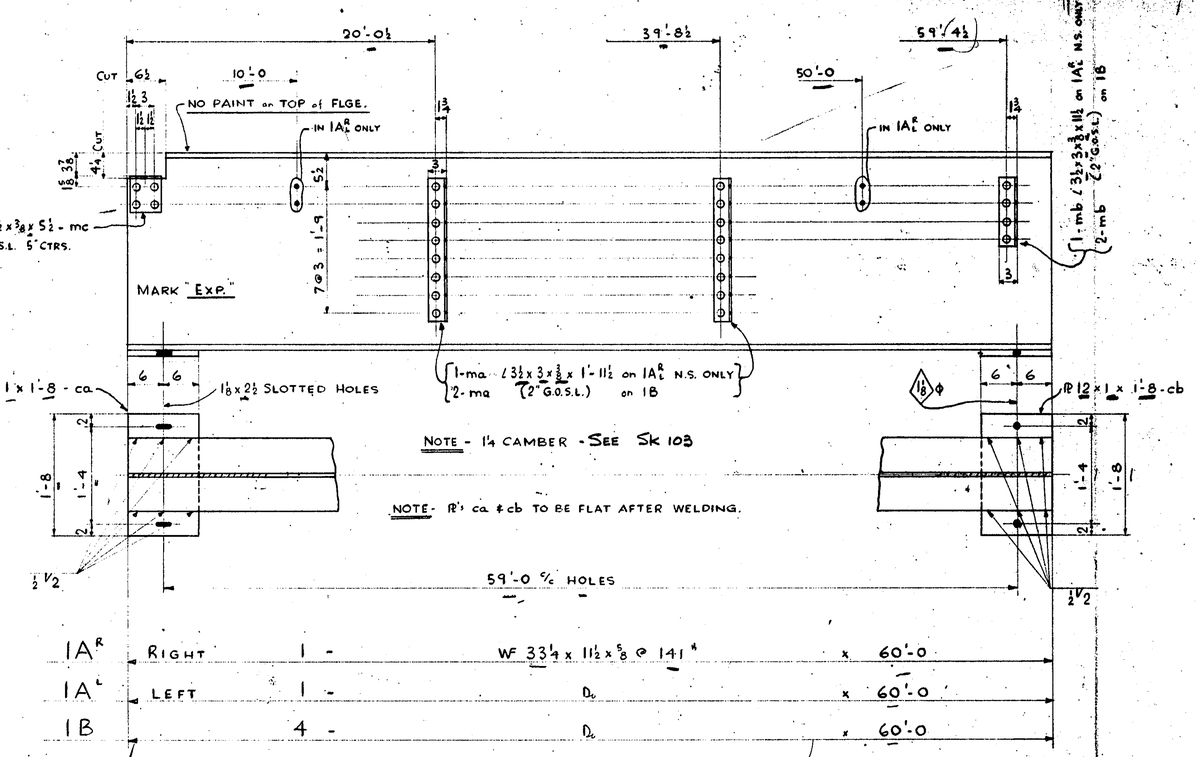
SCHEDULE OF MATERIAL

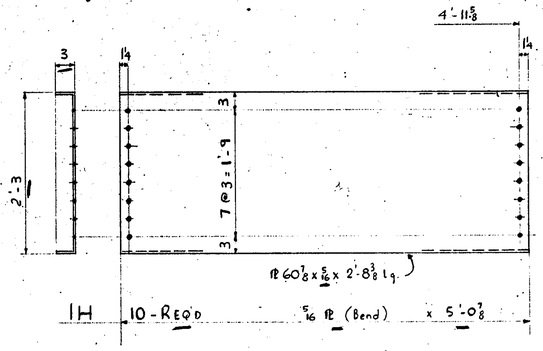
For McINTYRE CREEK BRIDGE
SOUTHERN TRANS-PROVINCIAL HIGHWAY
SIMILKAMEEN DISTRICT

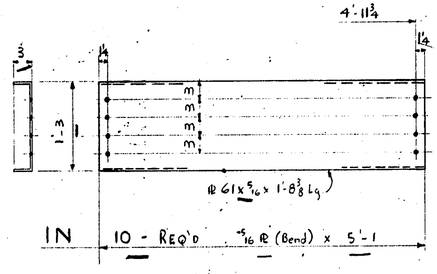
Sheet No. 1 of 1
Dwg. File No. 255
Corr. File No. 3832
Made by RL.
Date 14-7-54
Checked by W.M.B.
Date 15-7-54

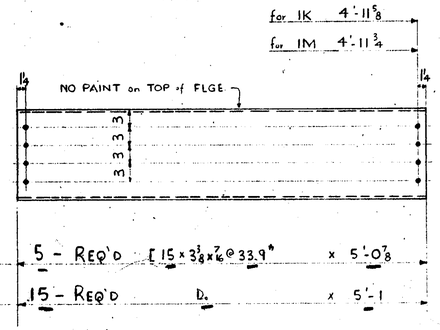
ITEM	QUANTITY	DESCRIPTION	BILL	DRAWING	WEIGHT lbs	REQ'N
		SUBSTRUCTURE				
1	6 pcs.	12x12 steel H piles at 28'-0" (lengths)			15,900	
2	2800 sks	Cement incl. 5% spares				
3	1 set	Date numerals 1954				
4	4 only	Traffic reflectors				
5	4 only	Reflector anchors		590-M		
6	1 lot	Reinforcing steel - abutments			1100	
7	1 lot	Reinforcing steel - piers			8100	
8	48 sets	Anchor bolt assemblies		195A-10	BGK	
		SUPERSTRUCTURE				
9	1 lot	Steelwork incl stringers, floor Rs and drains		255-18 198A-5 198A-2	34,200	
10	1 lot	Fence Posts and anchors		587-6	7580	
11	10 gals.	Aluminum paint N°2				
12	6 gals.	Exterior bronzing liquid				
13	12 lbs.	Aluminum bronze paste				
14	2 gals.	Jade green N°1				
15	2 gals	do do N°2				
16	1 pint	Cobalt drier				
17	1 gal.	Red lead paint N°1				
		DECK				
18	630 sks.	Cement incl. 25 spares				
19	1 lot	Reinforcing steel			21,000	
20	96 lin ft	Armoured joint Filler ¾x8"				
21	12 pcs	Copper water stops 8' long		195A-9		

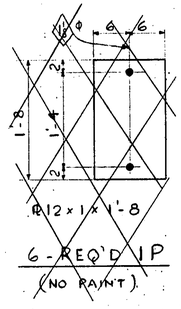
20351

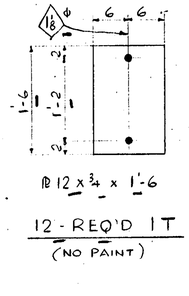


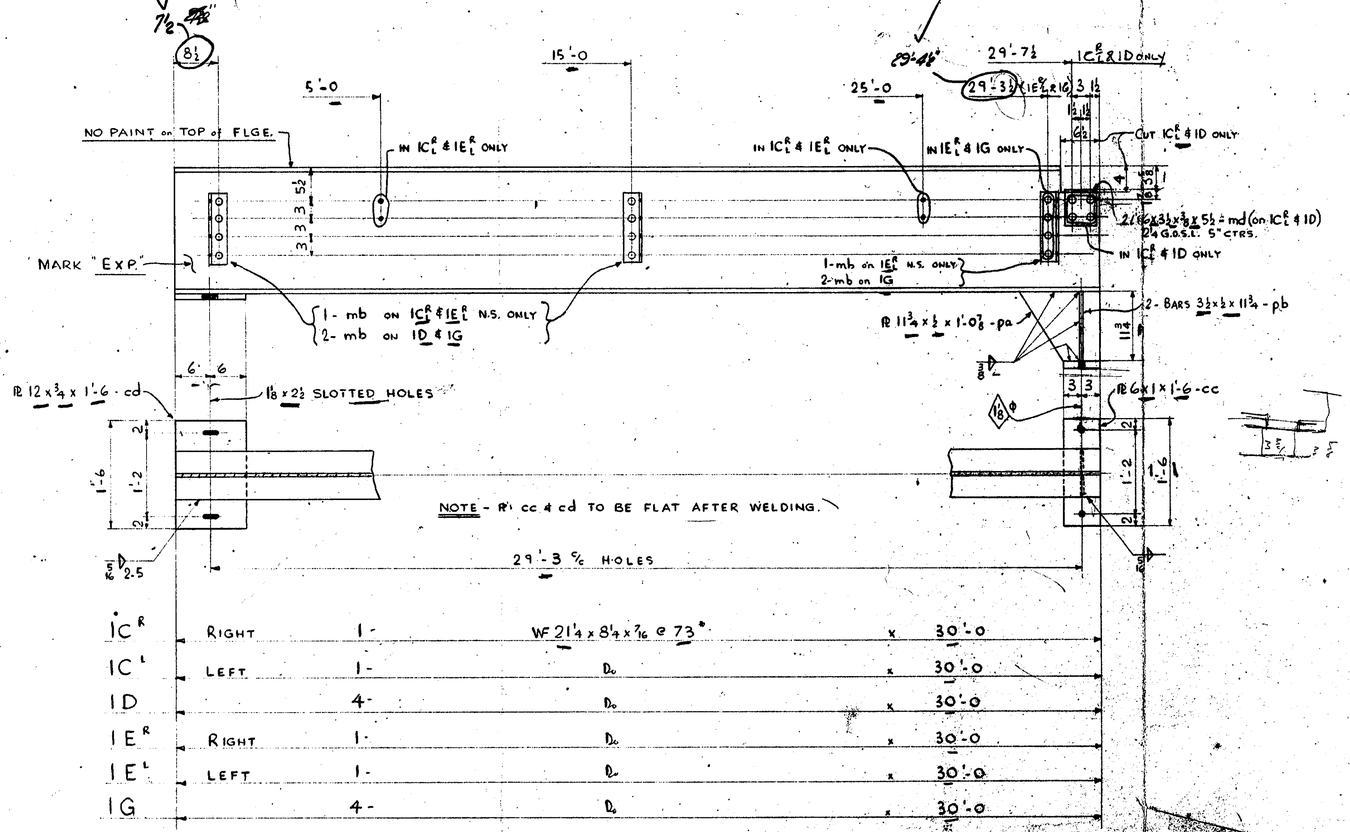


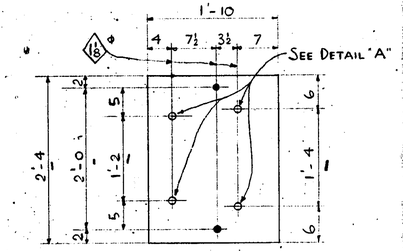


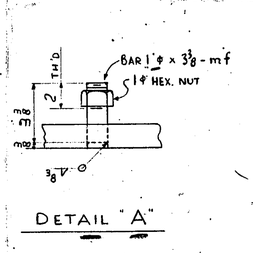


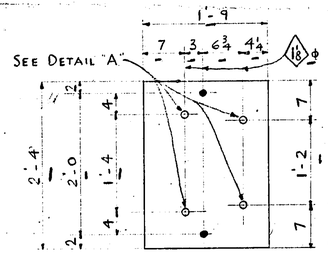


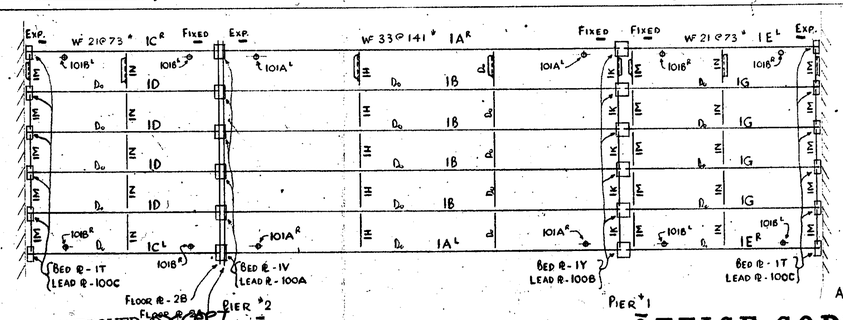












APPROVED EXCEPT

CHIEF ENGINEER OF B.P.W.

26/11/57

ERECTION DIAGRAM

98451

OFFICE COPY
O.K except as noted
Checked by Rh. - Nov-26-57

REF. - DEPT. of P.W. DRG's 255-12, 198A-5A, 198A-2A

MATERIAL ON LOOSE BILL No. 1a ✓
SPECIFICATION
CONNECTIONS ¾ϕ RIVETS & WELDED
OPEN HOLES 13/16ϕ EXCEPT AS NOTED
PAINT ONE COAT RED LEAD & ONE COAT ALUMINUM #2
REVISIONS EXCEPT AS NOTED.

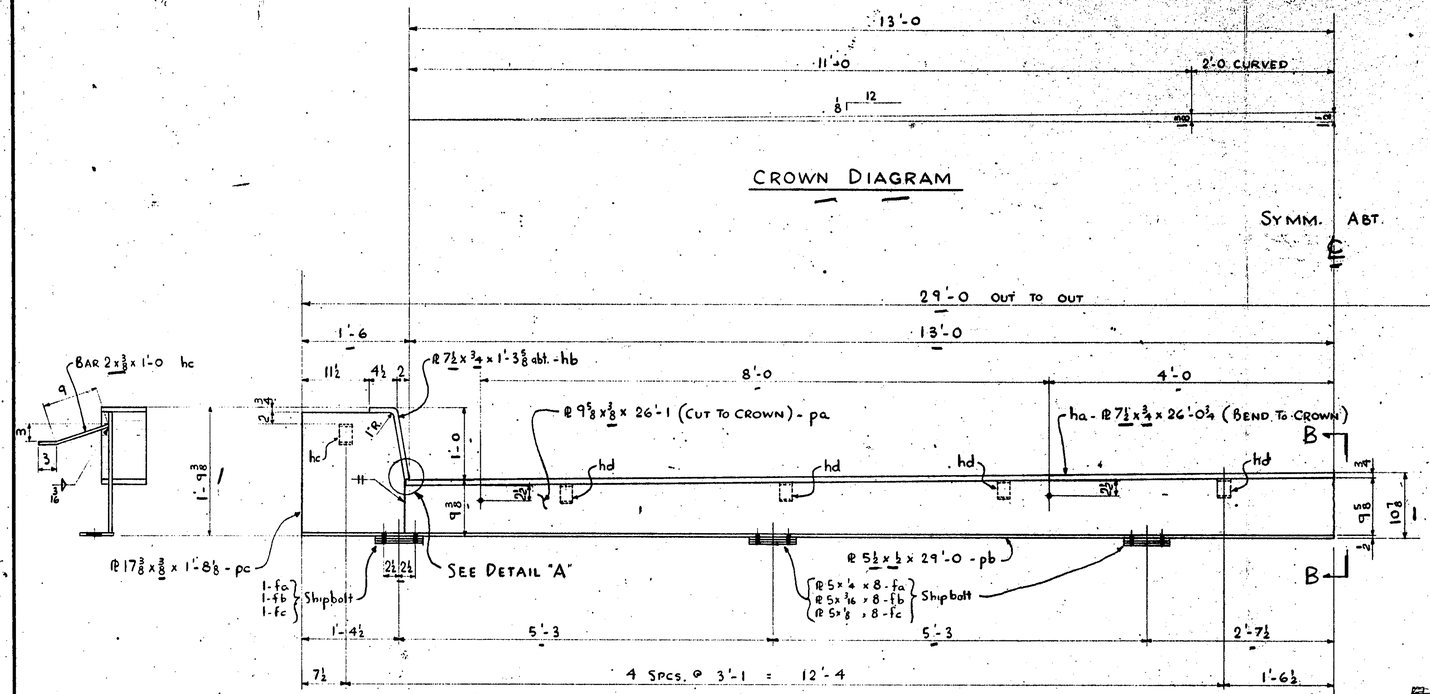
DOMINION BRIDGE COMPANY LIMITED — Vancouver, B.C.

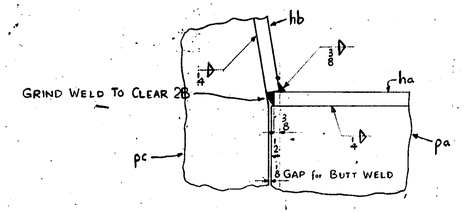
DRAWN GB Nov 17/57
CHECKED RB Nov 25/57
APPROVED
SCALE

PROPRIETOR GOV'T of B.C.
PURCHASER DEPT. of P.W.
DESCRIPTION McINTYRE CREEK BRIDGE (1-60'-0 SPAN & 2-30'-0 SPANS)
DETAIL STRINGERS, DIAPHRAGMS & TRIMMERS & MISC.

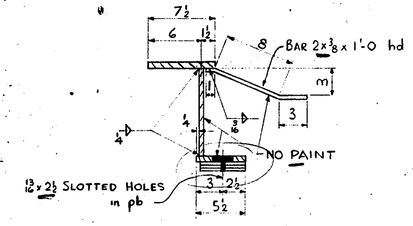
CONTRACT No. S-3944
DRAWING No. 1

VOID PRINTED IN CANADA

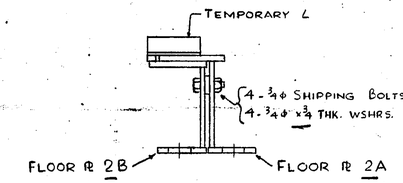




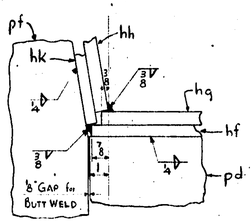
DETAIL "A"



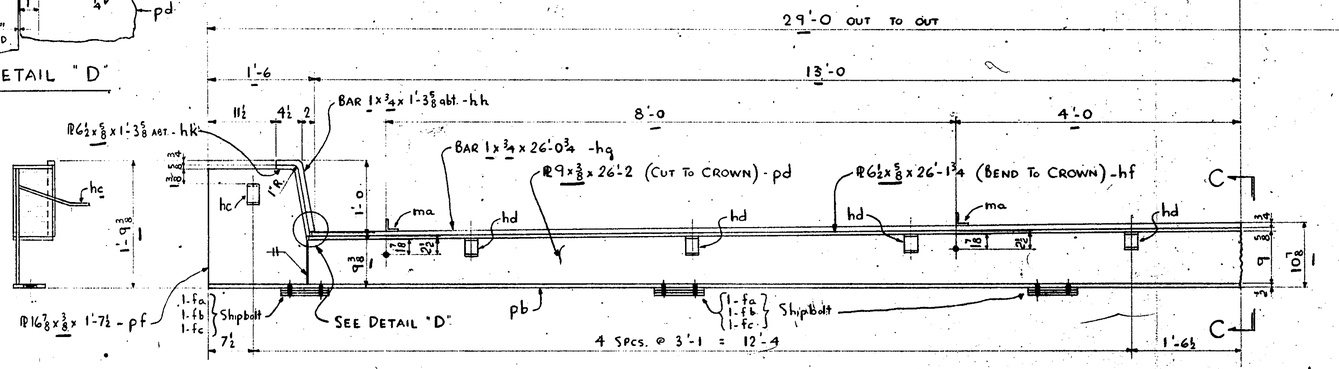
SECTION B-B
ENLARGED

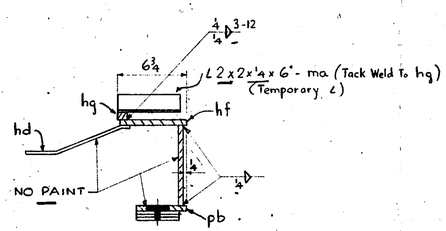


ASSEMBLY for SHIPMENT.



DETAIL "D"





SECTION C-C
ENLARGED

APPROVED
CHIEF ENGINEER OF D.P.W.
26/11/54

OFFICE COPY

O.K.
Checked by kh - Nov 26-54

98452

MATERIAL ON LOOSE BILL No. 20✓
SPECIFICATION
CONNECTIONS WELDED -
OPEN HOLES 13/16ϕ UNLESS NOTED.
PAINT ONE COAT RED LEAD & ONE COAT ALUMINUM #2
REVISIONS EXCEPT AS NOTED.

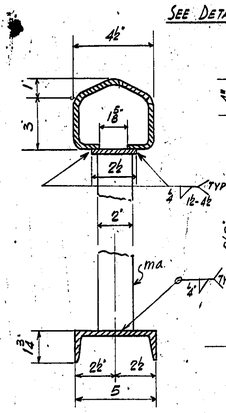
DOMINION BRIDGE COMPANY LIMITED — Vancouver, B.C.

DRAWN GB Nov 11/54	PROPRIETOR GOVT. of B.C.	CONTRACT No. S3344
CHECKED JGF 25-11-54	PURCHASER DEPT. of P.W.	
APPROVED	DESCRIPTION McINTYRE CREEK BRIDGE	DRAWING No. 2
SCALE	DETAIL FLOOR PL's	

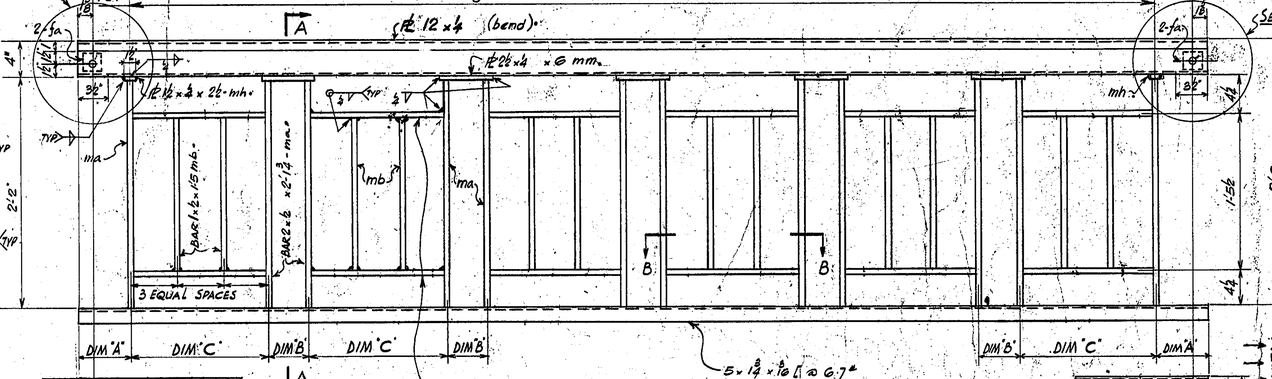
WOOD PRINTED IN CANADA

F48	7'-9½ c/c HOLES
F47	8'-8 c/c HOLES
F46	11'-5½ c/c HOLES
F45	11'-3 c/c HOLES
F25	14'-8¾ c/c HOLES
F32	12'-8 c/c HOLES
F31	12'-11 c/c HOLES
F30	12'-9½ c/c "
F29	12'-5 c/c "

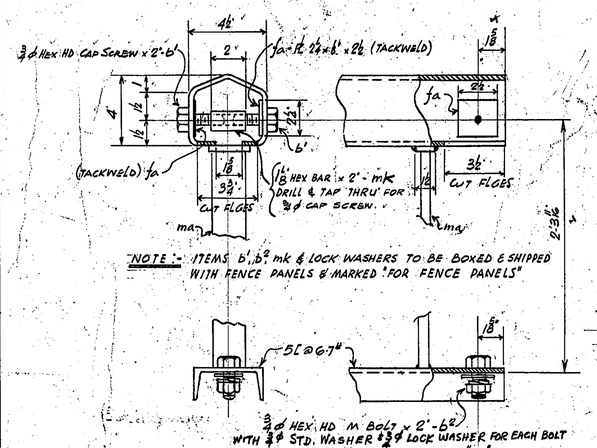
F48	5 - SUB PANELS =	7'-2
F47	5 - SUB PANELS =	7'-11½
F46	7 - SUB PANELS =	10'-10¼
F45	7 - SUB PANELS =	10'-9
F25	10 - SUB PANELS =	14'-3"
F32	8 - SUB PANELS =	12'-1⅜"
F31	8 - SUB PANELS =	12'-3⅜"
F30	8 - " " =	12'-1¾"
F29	8 - " " =	11'-9¾"



ENLARGED SECTION A-A



F29	12'-8¼" OUT TO OUT
F30	13'-0¾" " " "
F31	13'-2⅜" OUT TO OUT
F32	12'-11⅛" OUT TO OUT
F25	15'-0" OUT TO OUT
F45	11'-6¼" OUT TO OUT
F46	11'-8⅜" OUT TO OUT
F47	8'-11¼" OUT TO OUT
F48	8'-0⅜" OUT TO OUT

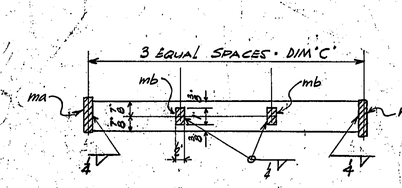


NOTE - ITEMS b', b², mk & LOCK WASHERS TO BE BOXED & SHIPPED WITH FENCE PANELS & MARKED "FOR FENCE PANELS"

END VIEW

DETAIL 'E'

DETAIL OF RAILING CONNECTIONS



ENLARGED SECTION B-B

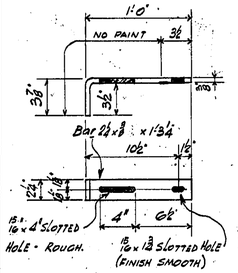
FOR F29 - BAR 1⅜ x 2 x 1'-1⅛ - mc²⁹
FOR F30 - BAR 1⅜ x 2 - 1'-2 - mc³⁰
FOR F31 - BAR 1¾ x ½ x 1'-2¾ - mc³¹
FOR F32 - BAR 1⅜ x ½ x 1'-2 - mc³²
FOR F25 - BAR 1½ x ½ x 1'-1 - mc²⁵
FOR F45 - BAR 1½ x ½ x 1'-2⅜ - mc⁴⁵
FOR F46 - BAR 1⅜ x ½ x 1'-2¾ - mc⁴⁶
FOR F47 - BAR 1⅜ x ½ x 1'-3" - mc⁴⁷
FOR F48 - BAR 1⅜ x ½ x 1'-1⅜ - mc⁴⁸

1 Bolt unit comprises
2-b'
1 mk
1 b²
1 cut washer
1 lock washer

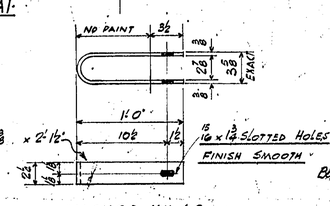
TYPE	NO OF SUB PANELS	DIM 'A'	DIM 'B'	DIM 'C'		
F29	8	5¼"	4¼"	1'-2"		
F30	8	5½"	4¾"	1'-2¼"		
F31	8	5½"	4½"	1'-2⅜"		
F32	8	4½"	4½"	1'-2¼"		
F25	10	4½"	4"	1'-1½"		
F45	7	4⅝"	4"	1'-3"		
F46	7	5¼"	4½"	1'-2⅜"		
F47	5	5⅞"	4½"	1'-3⅜"		
F48	5	5⅜"	4"	1'-2"		

LOCATION	FENCING CONTRACT	F29	F30	F31	F32	F25	F45	F46	F47	F48	A1	A2	A3	A4	A5	A6	Bolt Units
TERRACE BRIDGE	S3318			9	8						4	4	30	15			
McINTYRE CREEK	S3344	8	8								12	12	20	10			
SPRINGBROOK BRIDGE	S3591					16					8	8	24	12			
LOST CREEK BRIDGE	S3933						6				4	4	8	4			14
ANDERSON CREEK BRIDGE	S3933							4			4	4	4	2			10
NICOAMEN RIVER BRIDGE	S3933								11	22	16	16			72	36	69

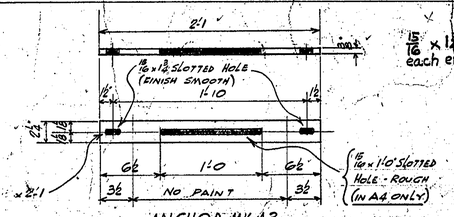
Spares



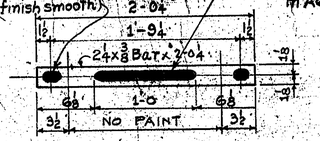
ANCHOR MK-A1



ANCHOR MK-A2



ANCHOR MK-A3
ANCHOR MK-A4



ANCHOR MK-A5
ANCHOR MK-A6

PAINT 1 COAT RED LEAD & 1 COAT ALUM. EXCEPT AS NOTED FOR CONTRACTS S3318, S3344

1 COAT GOVT RED LEAD EXCEPT AS NOTED FOR CONTRACT {S3591, S3933

REF DEPT OF P.W. DRG # 587-GE-2 1489-1

MATERIAL ON LOOSE BILL No. S-101 a, b, c
SPECIFICATION
CONNECTIONS WELDED - (WF) 1 PER SUB PANEL
OPEN HOLES Ø'd UNLESS NOTED
PAINT SEE NOTE ABOVE
REVISIONS ALUMINIZING

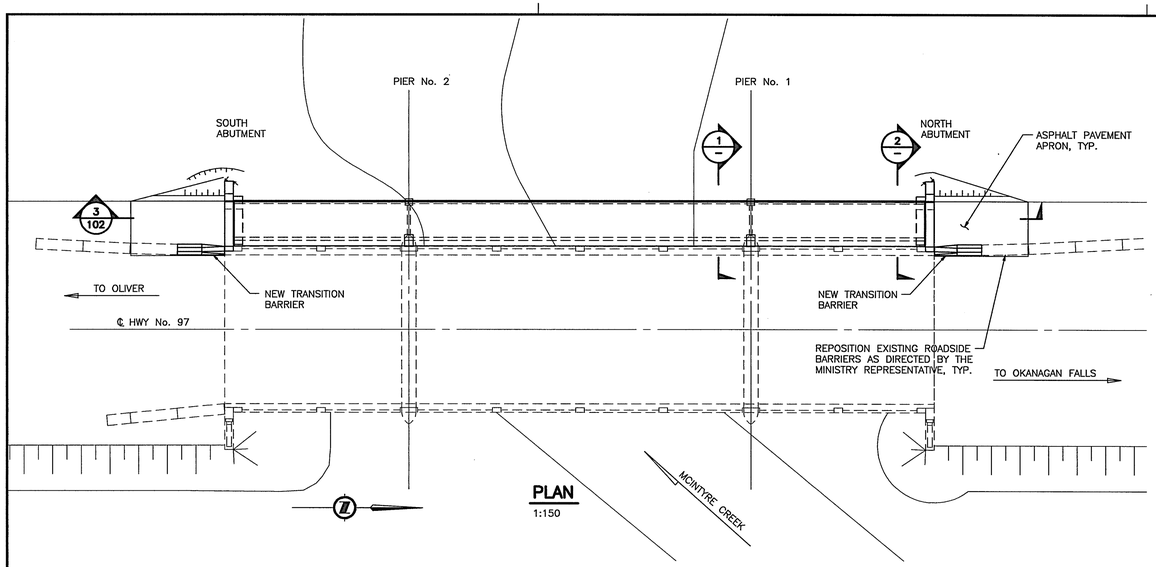
DOMINION BRIDGE COMPANY LIMITED — Vancouver, B.C.

DRAWN K.H.S. TRACED AUG
CHECKED AUG
APPROVED AUG 58

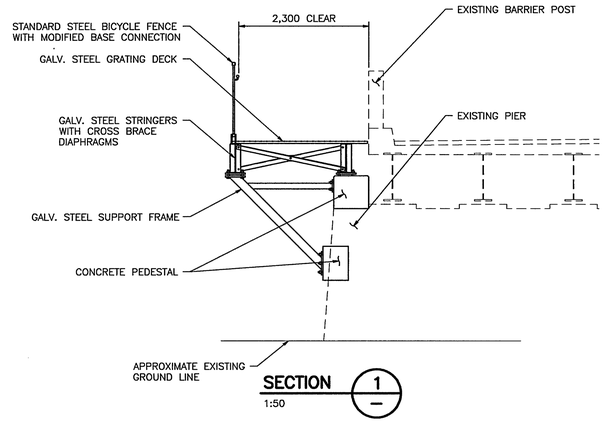
PROPRIETOR GOVT OF B.C.
PURCHASER DEPT OF HIGHWAYS
DESCRIPTION STD STEEL ROADWAY FENCE (HT 3'-0")
DETAIL FENCE PANELS

CONTRACT No. SEE ABOVE
DRAWING No. S-101

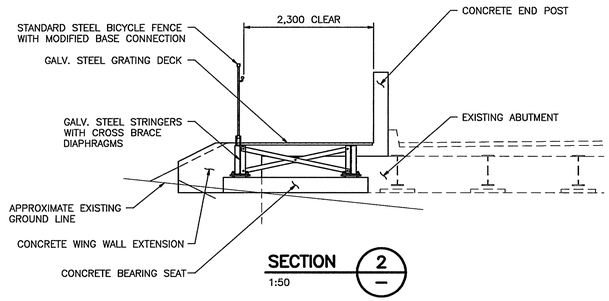
SCALE
58763
V-101D PRINTED IN CANADA



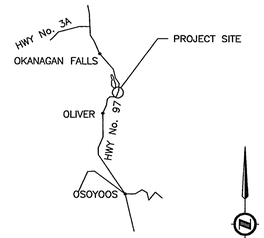
PLAN
1:150



SECTION 1/—
1:50



SECTION 2/—
1:50



KEY MAP
N.T.S.

LIST OF DRAWINGS

DWG. No.	TITLE
0255-101	GENERAL ARRANGEMENT
0255-102	PIER AND STEELWORK DETAILS
0255-103	ABUTMENT DETAILS
0255-104	TRANSITION BARRIER

STANDARD DRAWINGS

DWG. No.	TITLE	REV.
2891-2	STANDARD STEEL BICYCLE FENCE	G

REFERENCE DRAWINGS

DWG. No.	TITLE	REV.
0255-10	LAYOUT, ANCHOR BOLT PLAN & KEYMAP	A
0255-11	SUBSTRUCTURE DETAILS	
0255-12	STEELWORK DETAILS	
0255-13	DECK DETAILS	
2092-2	STANDARD BEAM SPANS, 60' SPAN, STEELWORK DETAILS	B
2092-5	STANDARD BEAM SPANS, 30' SPAN, STEELWORK DETAILS	B

GENERAL NOTES:

1. DESIGN SPECIFICATIONS: – CAN/CSA–S6–06
2. DESIGN LOADS: – SIDEWALK LIVE LOAD = 4.0 kPa
3. SEISMIC DESIGN PARAMETERS: – A=0.05
4. CLIMATIC INFORMATION:
   - MINIMUM DESIGN TEMPERATURE: – –37° C
   - MAXIMUM DESIGN TEMPERATURE: – 53° C
   - GROUND SNOW LOAD: Ss: – 1.0 kPa; Sr: – 0.1 kPa
   - HOURLY WIND: 1/10: – 0.3 kPa; 1/50: – 0.5 kPa
5. GEOMETRY SHOWN AT REFERENCE TEMPERATURE OF 15° C
6. ELEVATIONS AND DIMENSIONS SHOWN HAVE BEEN DIRECTLY CONVERTED TO METRIC BASED ON EXISTING BRIDGE DRAWINGS. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL INFORMATION PERTAINING TO THE EXISTING STRUCTURE.
7. DATUM: ASSUMED

STRUCTURAL STEELWORK NOTES:

1. ALL STEELWORK TO CONFORM TO CSA SPECIFICATION CAN3–G40.21M, GRADE AS FOLLOWS:
   (A) HSS – 350W CLASS C
   (B) ALL OTHER STEEL – 300W
2. FOR BOLTED CONNECTIONS THREADS TO BE EXCLUDED FROM THE SHEAR PLANE U.N.O. ALL BOLTS TO BE ASTM A325 TYPE 3, 22 DIAMETER, U.N.O., C/W WASHERS CONFORMING TO ASTM A–436 TYPE 3.
3. ALL OPEN HOLES 24 DIAMETER EXCEPT AS NOTED.
4. WELDING TO CONFORM TO CSA W59.
5. DECK GRATING TO BE TYPE 30–102M, WITH 38x4.8 BEARING BARS AT 30 O/C AND TWISTED CROSS BARS AT 102 O/C. GRATING PANEL WIDTHS TO BE 915 NOMINAL.
6. ALL STEELWORK TO BE GALVANIZED AFTER FABRICATION. GALVANIZING TO BE IN ACCORDANCE WITH C.S.A. SPECIFICATION G164, TABLE 1.
7. ALL FIELD WELDS TO BE THOROUGH CLEANED, AND PAINTED WITH TWO COATS OF MINISTRY–APPROVED ORGANIC ZINC–RICH PAINT.
8. ALL HSS CLOSED SECTIONS TO HAVE ONE 10ø VENT/DRAIN HOLE IN UNDERSIDE AT LOW END. ALL HORIZONTAL HSS CLOSED SECTIONS TO HAVE 10ø VENT/DRAIN HOLES AT EACH END.

CONCRETE NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 30MPa AT 28 DAYS EXCEPT AS NOTED.
2. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 20 UNLESS NOTED OTHERWISE.
3. ALL REINFORCING STEEL SHALL CONFORM TO C.S.A. SPECIFICATION G30.18M GRADE 400, UNLESS NOTED OTHERWISE. REINFORCING STEEL REQUIRING WELDED CONNECTIONS SHALL BE GRADE 400W.
4. ALL REINFORCING STEEL SHALL HAVE 60 COVER UNLESS NOTED OTHERWISE.
5. ALL LAPS OF REINFORCING SPLICES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE: 10M = 400 15M = 600 20M = 800
6. ALL ANCHOR BOLTS TO BE 25 DIAMETER U.N.O., CONFORMING TO CSA SPECIFICATION CAN3–G40.21M, GRADE 300W. THREADS TO BE EXCLUDED FROM THE SHEAR PLANE U.N.O. ALL ANCHOR BOLTS, NUTS, AND WASHERS TO BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH C.S.A. SPECIFICATION G164, TABLE 1.
7. ALL REINFORCING BARS AND ANCHOR BOLTS SPECIFIED AS EPOXY GROUTED TO BE INSTALLED USING 'HILTI' HY150 EPOXY GROUT OR EQUIVALENT PRODUCT AS APPROVED BY THE MINISTRY REPRESENTATIVE. STRICTLY ADHERE TO THE MANUFACTURERS RECOMMENDATIONS FOR HOLE SIZE AND ALL OTHER INSTALLATION PROCEDURES.
8. EXISTING CONCRETE SURFACE BETWEEN OLD AND NEW TO BE CLEANED BY ABRASIVE BLASTING AND COATED WITH AN APPROVED BONDING AGENT PRIOR TO PLACING NEW CONCRETE. BONDING AGENT TO CONFORM TO ASTM C881M–02, TYPE II, GRADE 2. THE CLASS OF BONDING AGENT SHALL BE APPROPRIATE FOR THE TEMPERATURE AT THE TIME OF APPLICATION. STRICTLY ADHERE TO THE MANUFACTURERS RECOMMENDATIONS FOR ALL APPLICATION PROCEDURES.
9. EXISTING REINFORCING BARS EXPOSED AFTER DEMOLITION TO BE CLEANED BY HIGH PRESSURE LOW VOLUME WATER BLASTING AND INCORPORATED INTO NEW CONCRETE AS SHOWN.

CWMM CONSULTING ENGINEERS LTD.
200–1854 Kirschner Road
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Fax: (250) 868–2374
kelowna@cwmm.ca

K2606

Rev	Date	Description	Init
A	JUNE 17, 2008	AS BUILT	GW

REVISIONS

BRITISH COLUMBIA | Ministry of Transportation, Southern Interior Region

OKANAGAN–SHUSWAP HIGHWAY DISTRICT
HIGHWAY NO. 97

MCINTYRE BRIDGE NO. 0255 SIDEWALK ADDITION
GENERAL ARRANGEMENT

AUTHORIZED BY

ORIGINAL SIGNED BY DON SHAW	ORIGINAL SIGNED BY KEVIN RICHTER
REGIONAL MANAGER, ENGINEERING	REGIONAL DIRECTOR, TRANSPORTATION
DATE JAN. 18, 2008	DATE JAN. 19, 2008

PREPARED UNDER THE DIRECTION OF
ENGINEER OF RECORD
DATE June 17/08

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA X. F. WANG #27800

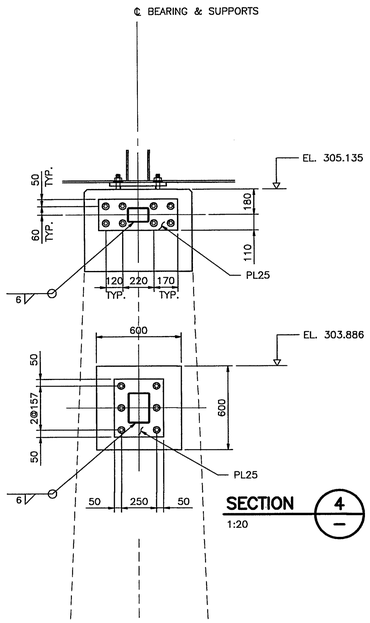
DESIGNED	GW	DATE JAN. 11/08
CHECKED	DB	DATE JAN. 11/08
DRAWN	TT	DATE JAN. 11/08

SCALE AS NOTED
NEGATIVE No.
FILE No. | PROJECT No. | REG. | DRAWING No. 0255–101 | A

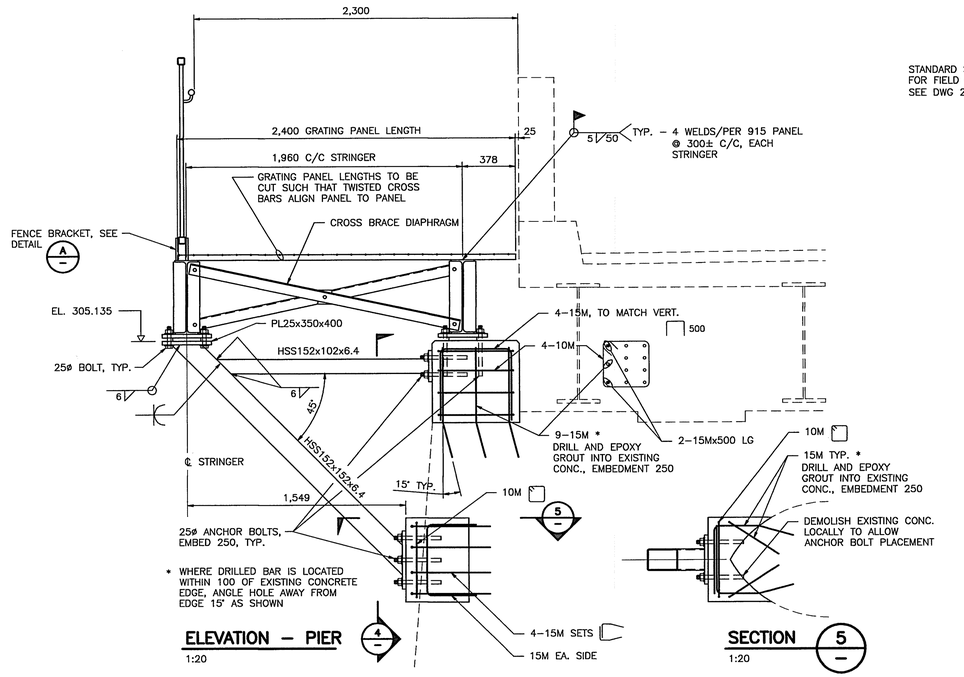
H–308–12–4a(03–07)

604215

CANCEL PRINTS BEARING PREVIOUS LETTER

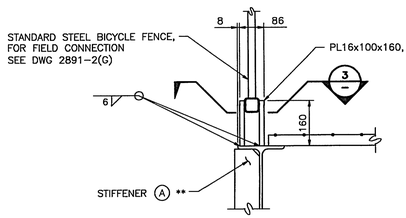


SECTION 4
1:20



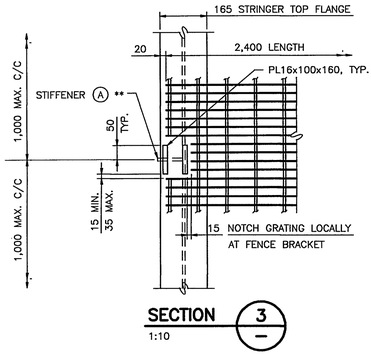
ELEVATION – PIER 4
1:20

SECTION 5
1:20

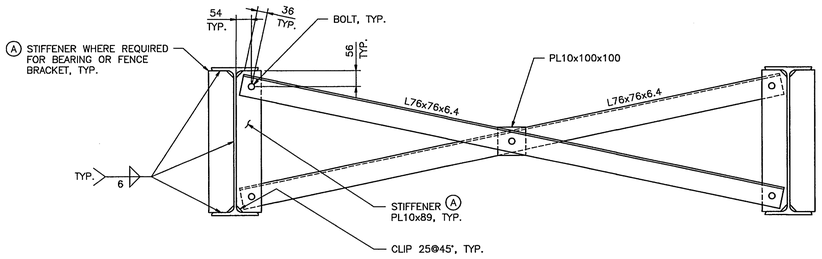


DETAIL A
1:10

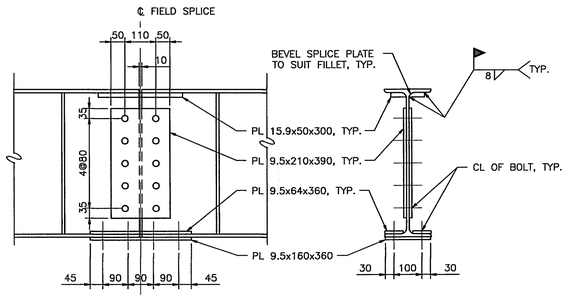
** OMIT IF EXTERIOR BEARING STIFFENER IS LOCATED WITHIN 150 OF CENTRELINE OF FENCE BRACKET



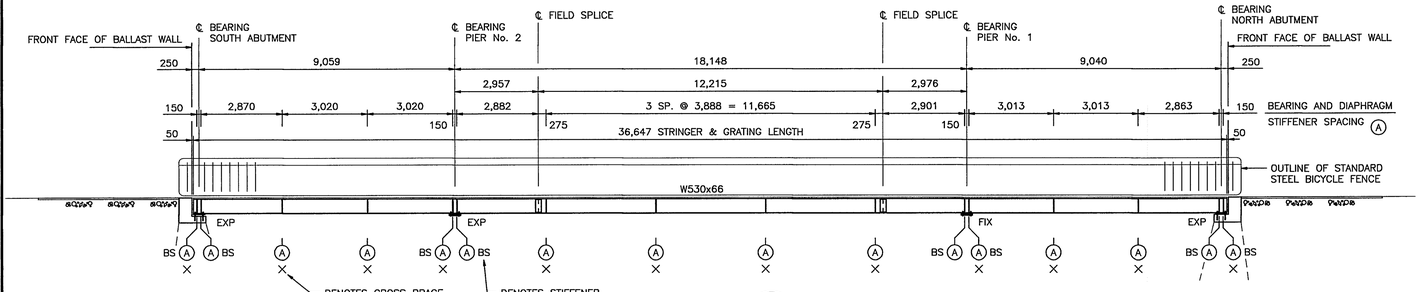
SECTION 3
1:10



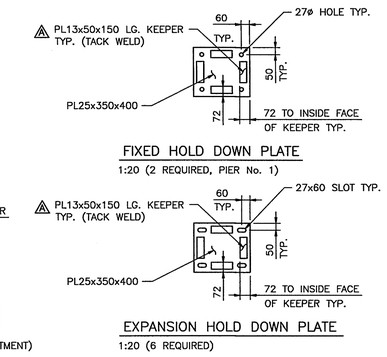
TYPICAL CROSS BRACE DIAPHRAGM
1:10



FIELD SPLICE DETAIL
1:10



SECTION 3/101
1:100
EXTERIOR STRINGER SHOWN, INTERIOR STRINGER SIMILAR



BEARING PAD 'A'
1:10 (6 REQUIRED)

BEARING PAD 'B'
1:10 (2 REQUIRED, SOUTH ABUTMENT)

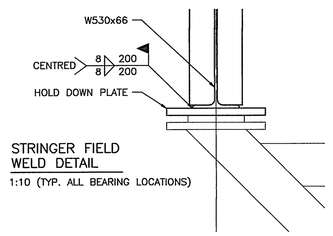
FIXED HOLD DOWN PLATE
1:20 (2 REQUIRED, PIER No. 1)

EXPANSION HOLD DOWN PLATE
1:20 (6 REQUIRED)

BEARING PADS TO BE NEOPRENE OR NATURAL RUBBER, 55 DURO, IN ACCORDANCE WITH CAN/CSA–S6–06 CLAUSE 11.6

STEEL PLATES TO CONFORM TO CSA SPECIFICATION CAN3–G40.21M, GRADE 300W

BEARING DETAILS



STRINGER FIELD WELD DETAIL
1:10 (TYP. ALL BEARING LOCATIONS)

CWMM CONSULTING ENGINEERS LTD.
200–1854 Kirschner Road
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kelowna@cwmm.ca

K2606

Rev	Date	Description	Init
A	JUNE 17, 2008	AS BUILT	GW

REVISIONS

BRITISH COLUMBIA | Ministry of Transportation, Southern Interior Region

OKANAGAN–SHUSWAP HIGHWAY DISTRICT
HIGHWAY NO. 97

MCINTYRE BRIDGE NO. 0255 SIDEWALK ADDITION
PIER AND STEELWORK DETAILS

PREPARED UNDER THE DIRECTION OF
ENGINEER OF RECORD
DATE June 17/08

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA X. F. WANG #27800

DESIGNED	GW	DATE JAN. 11/08
CHECKED	DB	DATE JAN. 11/08
DRAWN	TT	DATE JAN. 11/08
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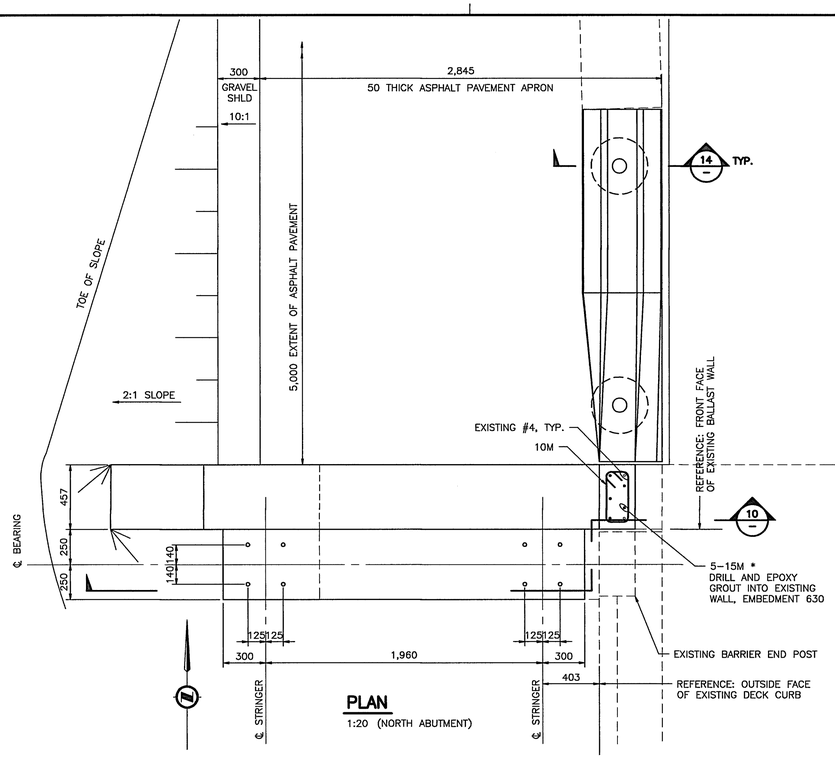
NEGATIVE No.		
FILE No.	PROJECT No.	REG. DRAWING No. 0255–102 A

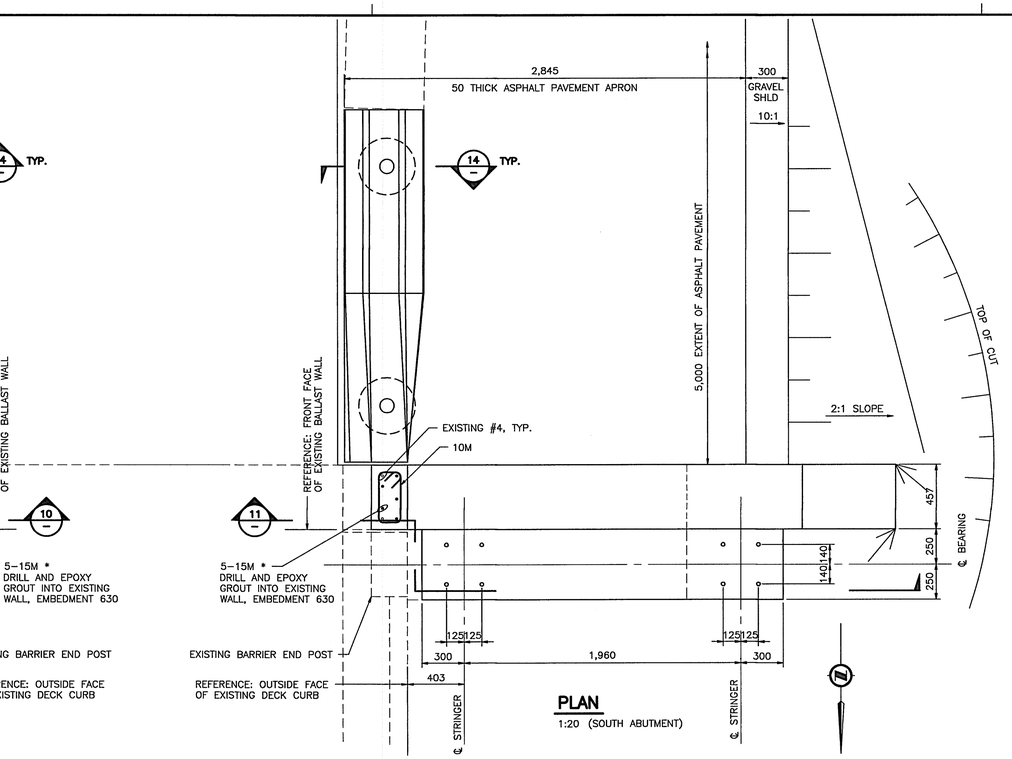
H–308–12–c(03–07)

604216

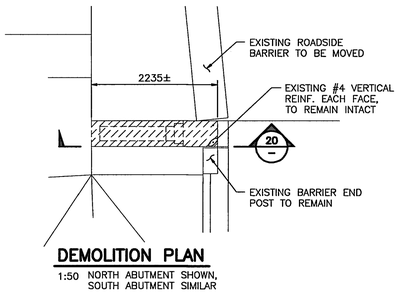
CANCEL PRINTS BEARING PREVIOUS LETTER



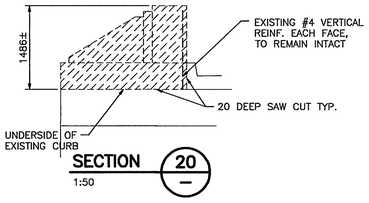
PLAN
1:20 (NORTH ABUTMENT)



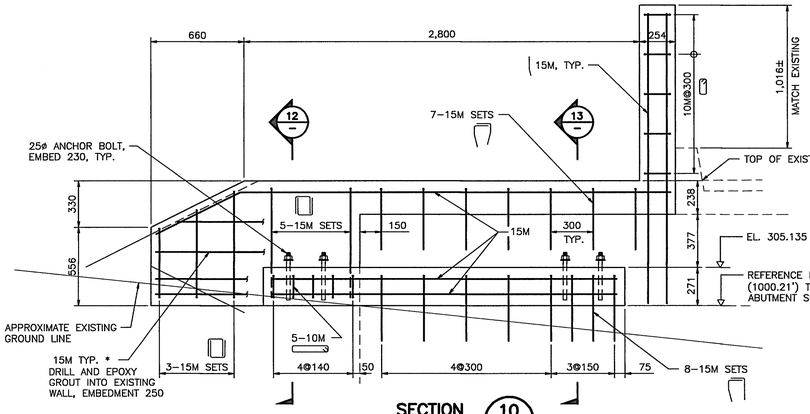
PLAN
1:20 (SOUTH ABUTMENT)



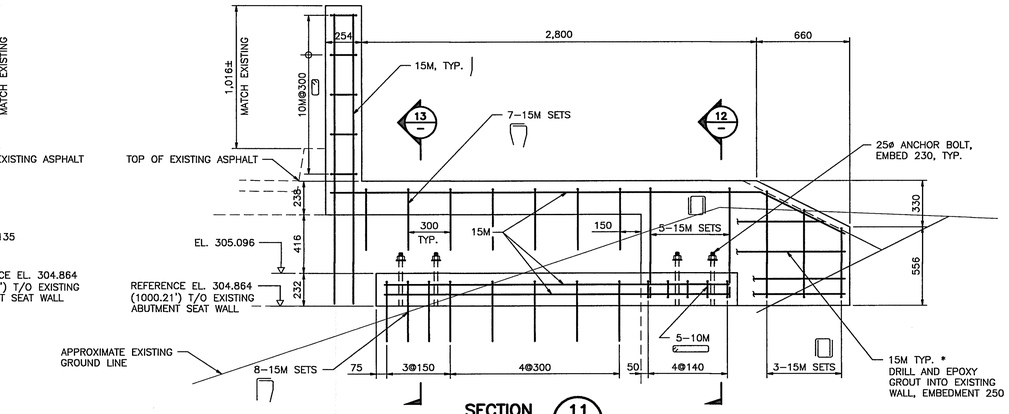
DEMOLITION PLAN
1:50 NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR



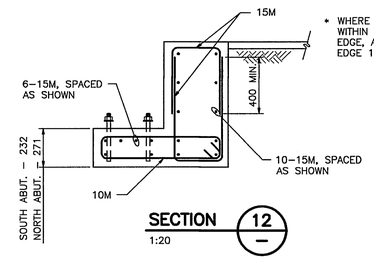
SECTION 20 —
1:50



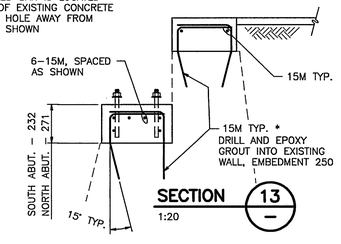
SECTION 10 —
1:20



SECTION 11 —
1:20



SECTION 12 —
1:20



SECTION 13 —
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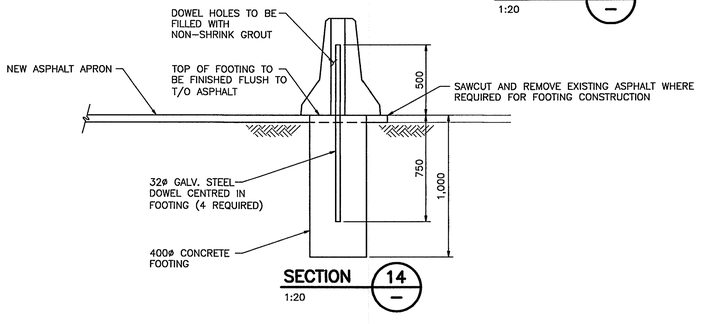

SECTION 14 —
1:20

CWMM CONSULTING ENGINEERS LTD.
200-1854 Kirschner Road
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REVISIONS

BRITISH COLUMBIA | Ministry of Transportation, Southern Interior Region

OKANAGAN-SHUSWAP HIGHWAY DISTRICT
HIGHWAY NO. 97

MCINTYRE BRIDGE NO. 0255 SIDEWALK ADDITION
ABUTMENT DETAILS

PREPARED UNDER THE DIRECTION OF
ENGINEER OF RECORD
DATE June 17/08

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — X. F. WANG #27800

DESIGNED	GW	DATE JAN. 11/08
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DRAWN	TT	DATE JAN. 11/08
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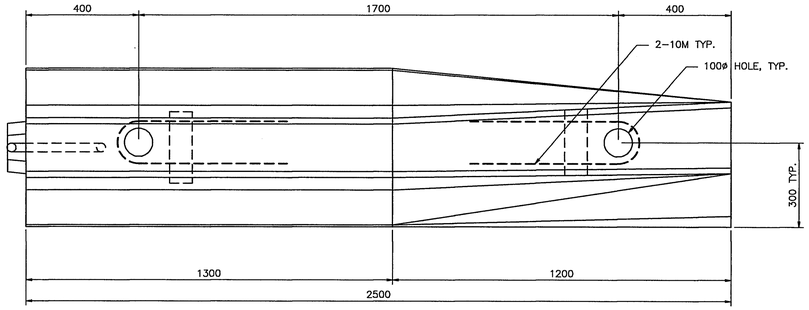
FILE No.	PROJECT No.	REG. DRAWING No. 0255-103 A

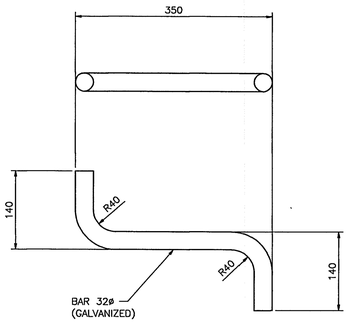
H-308-12-2-(03-07)

604217

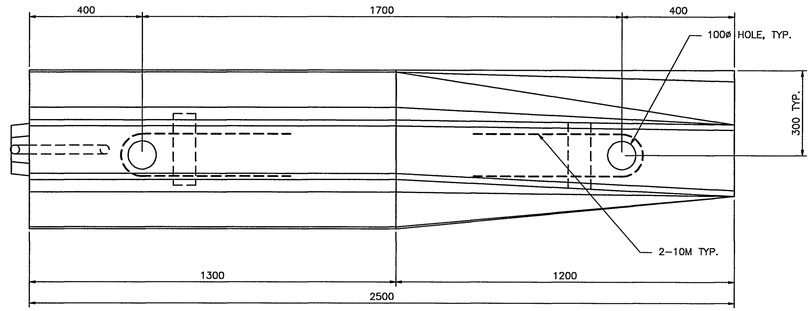
CANCEL PRINTS BEARING PREVIOUS LETTER



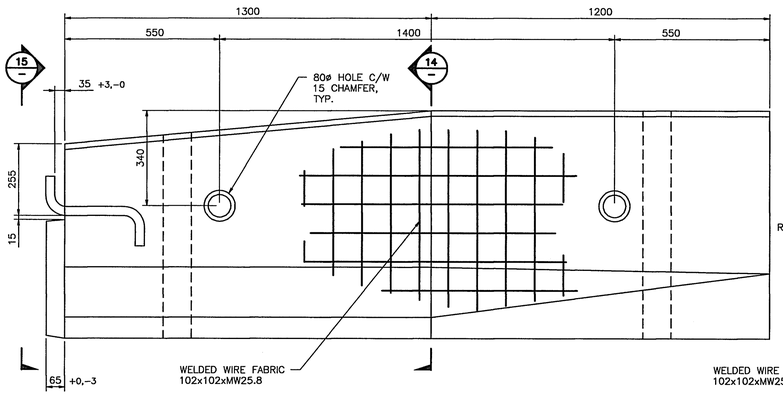
PLAN
LEFT HAND TRANSITION
1:10 (SOUTH ABUTMENT)



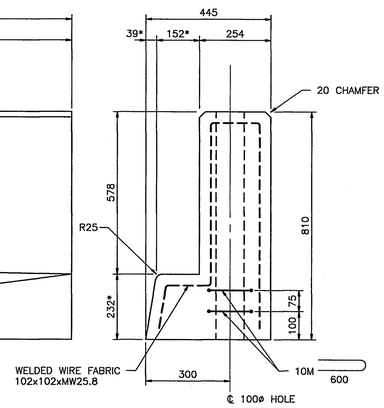
ANCHOR DETAIL
1:5



PLAN
RIGHT HAND TRANSITION
1:10 (NORTH ABUTMENT)

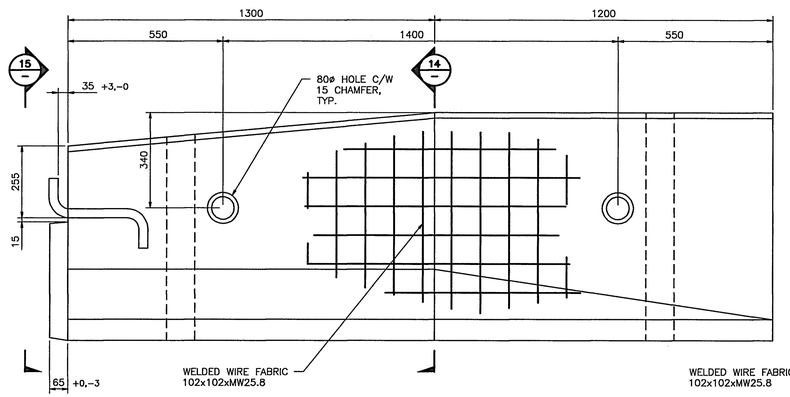


ELEVATION
1:10

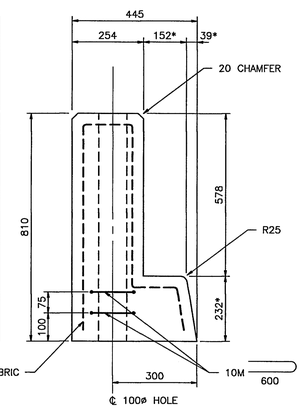


END VIEW
1:10

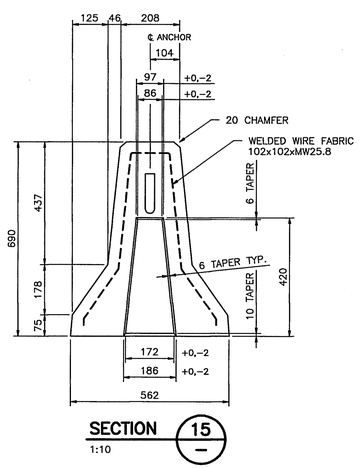
* FIELD CONFIRM DIMENSIONS WILL MATCH PROFILE OF EXISTING CURB AND END POST PRIOR TO CASTING



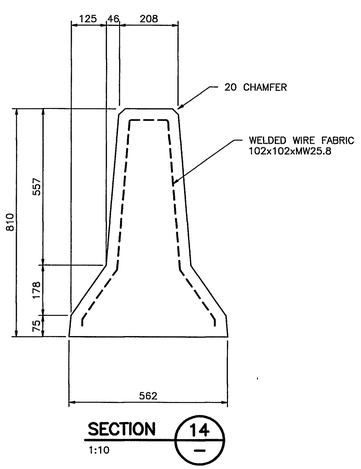
ELEVATION
1:10



END VIEW
1:10



SECTION 15 —
1:10



SECTION 14 —
1:10

NOTES:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 35 MPa AT 28 DAYS.
2. CONCRETE SURFACES SHALL BE GIVEN A CLASS 3 FINISH.
3. EXPOSED EDGES TO BE CHAMFERED 20 UNLESS NOTED OTHERWISE.
4. REINFORCING STEEL TO HAVE 50 COVER UNLESS NOTED OTHERWISE.
5. REINFORCING STEEL SHALL CONFORM TO C.S.A. SPECIFICATION G30.18M GRADE 400R.
6. WELDED WIRE FABRIC SHALL CONFORM TO C.S.A. SPECIFICATION G30.5–M.
7. TRANSITIONS TO BE MANUFACTURED ACCORDING TO STANDARD SPECIFICATION 941.
8. ALL STEELWORK TO CONFORM TO C.S.A. SPECIFICATION CAN3–G40.21M GRADE 300W.
9. ALL STEELWORK TO BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH C.S.A. SPECIFICATION G164 TABLE 1.

CWMM CONSULTING ENGINEERS LTD.
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REVISIONS

BRITISH COLUMBIA | Ministry of Transportation, Southern Interior Region

OKANAGAN–SHUSWAP HIGHWAY DISTRICT
HIGHWAY NO. 97

MCINTYRE BRIDGE NO. 0255 SIDEWALK ADDITION
TRANSITION BARRIER

PREPARED UNDER THE DIRECTION OF

ENGINEER OF RECORD

DATE June 17/08

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA X. F. WANG #27800

DESIGNED	GW	DATE	JAN. 11/08
CHECKED	DB	DATE	JAN. 11/08
DRAWN	TT	DATE	JAN. 11/08

SCALE AS NOTED

NEGATIVE No.

FILE No.

PROJECT No.

REG. DRAWING No. 0255–104 A

H–308–12–(03–07)

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CANCEL PRINTS BEARING PREVIOUS LETTER