NEAR SIDE

FAR SIDE

CAST-IN-PLACE EXTENSION OF EXISTING ABUTMENT TO ACCOMMODATE NEW FILL REQUIREMENTS.

FLOW

FLOW

14.1°

PLAN
SCALE 1:150

95300± O/O

℄ BRG. | 39200 C/C | ℄ PIER #1 | 39929 C/C | ℄ PIER #2 | 15337 C/C | ℄ BRG.

APPROACH BARRIERS TO M.o.T. L.V.R. STANDARDS, TYP.

BRIDGE DELINEATOR, TYP. (4 REQ'D)

FINISHED GRADE TO MATCH EXISITNG

2% GRADE

1.5
1

COMPACTED FREE DRAINING GRANULAR BACK FILL

PRECAST CONCRETE BALLAST WALL, TYP.

PRECAST CONCRETE FOOTING

STEEL COLUMN

EXISTING CONCRETE PIER

STEEL CAP BEAM, OR PRECAST CONCRETE CAP BEAM, TYP.

STEEL PIER, TYP.

EXISTING CONCRETE PIER

TOP OF PIER #1
EL. 21.9
(TO BE FIELD CONFIRMED)

EXISTING CONCRETE PIER, 12.2m x 0.914m x 8.8m±
(PIER #1)

WATER LEVEL – 3rd OCTOBER 2006
EL. 13.0

STEEL PIER, TYP.

EXISTING CONCRETE ABUTMENT & WING WALL, MODIFIED TO SUIT NEW SUPERSTRUCTURE CROSS FALL TYP.

EXISTING GROUNDLINE, TYP.

EXISTING CONCRETE PIER

EXISTING CONCRETE PIER, 12.2m x 0.914m x 2.5m±
(PIER #2)

TOP OF PIER #2
EL. 21.9
(TO BE FIELD CONFIRMED)

45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11

ELEVATION (LOOKING DOWNSTREAM)
SCALE 1:150

Rev	Date	Description	Init

ISSUE RECORD

SCALE AS SHOWN

DESIGNED H.D. DATE OCT. 10/06
CHECKED M.G.J. DATE OCT. 10/06
DRAWN W.R. DATE OCT. 10/06

Rev	Date	Description	Init

REVISIONS

BRITISH COLUMBIA Ministry of Forests

FARWELL CANYON BRIDGE – CHILCOTIN RIVER
GENERAL ARRANGEMENT – SHEET 1

ACCEPTED FOR CONSTRUCTION
REGIONAL DIRECTOR
DATE

Design Consultant
Associated Engineering

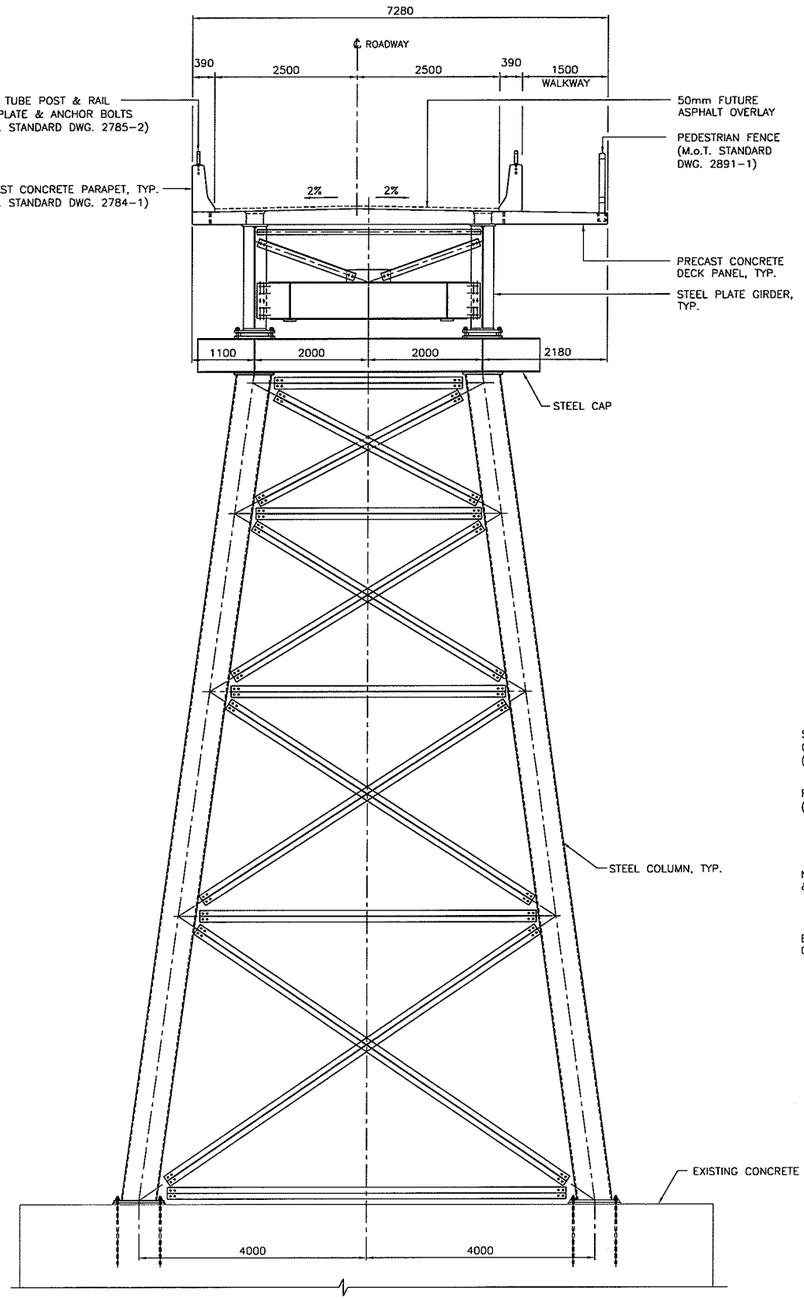
PREPARED UNDER THE DIRECTION OF
CONSULTANT
DATE

DRAWING No.
2916-SK-101 | A

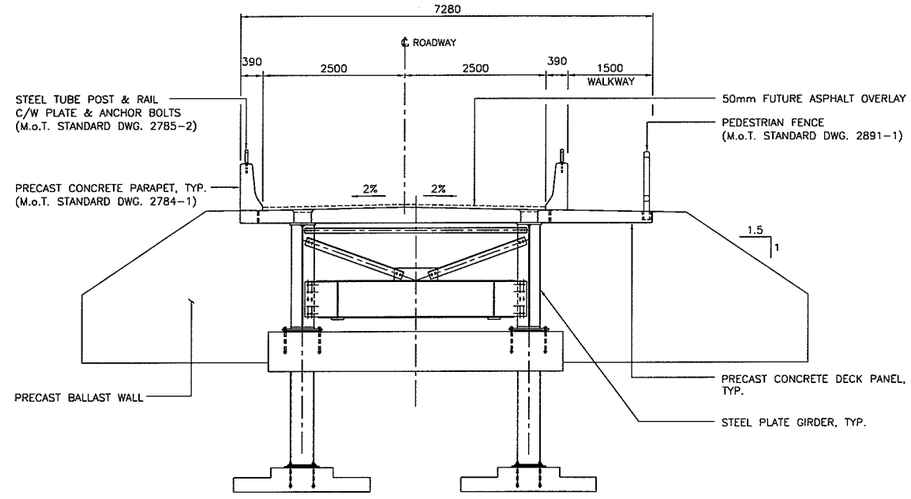
CANCEL PRINTS BEARING PREVIOUS LETTER

T-308F02-90

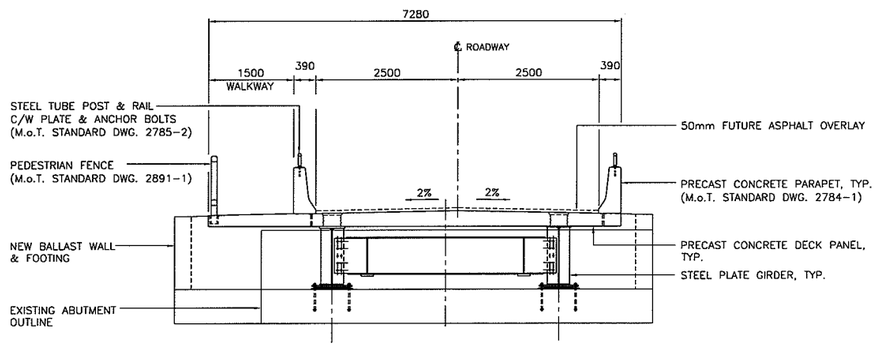
cad filename: 0628750205



CROSS SECTION AT PIERS
SCALE 1:50
(PIER #1 SHOWN, PIER #2 SIMILAR)



CROSS SECTION AT NEAR SIDE ABUTMENT (LOOKING EAST)
SCALE 1:50



CROSS SECTION AT FAR SIDE ABUTMENT (LOOKING WEST)
SCALE 1:50

GENERAL NOTES:

1. DESIGN SPECIFICATIONS:
   - CAN/CSA-S6-00 CANADIAN HIGHWAY BRIDGE DESIGN CODE.
2. DESIGN LOADS:
   - LIVE LOAD: CL-625
   - FATIGUE: HIGHWAY DESIGN CLASS "C"
   - DEAD LOAD INCLUDES ALLOWANCE FOR 50mm THICK ASPHALT TOPPING.
   - EFFECTIVE TEMPERATURE RANGE: MAXIMUM +26°C.
     MINIMUM -44°C.

   SEISMIC DESIGN DATA: (WILLIAMS LAKE BC) Za=1, Zv=2, A=0.05, V=0.1
3. DESIGN SPEED: 50 km/hr.
4. DESIGN LIFE: 75 YEARS.
5. RUBBER BEARING TO CONFORM TO CAN-CSA-S6-00, 60 DURO.

SUBSTRUCTURE

1. PRECAST MANUFACTURE AND ERECTION IN ACCORDANCE WITH MOT SS415.
2. STEEL WORK TO CONFORM TO CSA-G40.21 GRADE 350A.
3. SUPPLY AND INSTALLATION OF MISCELLANEOUS STEEL COMPONENTS SHALL BE IN ACCORDANCE WITH MOT SS422.
4. STEEL PILES TO CONFORM TO ASTM A252 GRADE 3.
5. FIELD WELDERS TO BE CERTIFIED TO CSA-W47.
6. WELDING TO CONFORM TO CSA W59.
7. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 35MPa AT 28 DAYS EXCEPT AS NOTED.
8. ALL EXPOSED EDGES OF CONCRETE TO BE CHAMFERED 20 EXCEPT AS NOTED.
9. ALL REINFORCING STEEL TO CONFORM TO CSA G30.18 GRADE 400.
10. ALL REINFORCING STEEL TO HAVE 70 COVER EXCEPT AS NOTED.
11. REINFORCING SPLICES ARE NOT PERMITTED.
12. WELDING OF REINFORCING IS NOT PERMITTED.
13. LIFTING DEVICES SATISFACTORY TO THE ENGINEER SHALL BE PROVIDED FOR ALL PRECAST MEMBERS. CARE SHALL BE TAKEN TO PREVENT SUDDEN IMPACT LOADS.
14. THE CONCRETE IMMEDIATELY SURROUNDING ALL LIFTING DEVICES SHALL HAVE A FORMED RECESS. THE RECESS SHALL BE THOROUGHLY SAND BLASTED IN THE SHOP. AFTER ERECTION THE LIFTING DEVICES SHALL BE BURNED OFF AT THE BOTTOM OF THE RECESS AND THE RECESS SHALL BE PATCHED WITH AN APPROVED SHRINKAGE-COMPENSATING GROUT.
15. ROCK TO HAVE MIN. 250kPa BEARING CAPACITY.

STEEL GIRDER

1. ALL STEELWORK TO CONFORM TO CSA SPECIFICATIONS CAN3-G40.21M GRADE AS FOLLOWS: ALL FLANGES AND WEBS: 350AT CATEGORY 3
   ALL OTHER STEEL: 350A
2. ALL BOLTS TO CONFORM TO ASTM A-325 TYPE 3 M22ø UNLESS NOTED OTHERWISE, C/W WASHERS CONFORMING TO ASTM A-436 TYPE 3.
3. BOLTED CONNECTIONS ARE DESIGNED AS SLIP CRITICAL, DETAIL SO THAT THREADS ARE EXCLUDED FROM SHEAR PLANE.
4. ALL OPEN HOLES 24ø EXCEPT AS NOTED.
5. SHEAR STUD CONNECTORS TO CONFORM TO ASTM A108 GRADE 1020.
6. FLANGE TO WEB WELDS SHALL BE BY AN AUTOMATIC PROCESS WHICH PROVIDES A CONTINUOUS WELD THROUGHOUT THE LENGTH OF EACH GIRDER SEGMENT.
7. TENSION FLANGE BUTT WELDS SHALL BE PERMITTED ONLY IF APPROVED BY THE MINISTRY REPRESENTATIVE.
8. TENSION FLANGE BUTT WELDS, IF APPROVED, SHALL BE X-RAYED AND GROUND SMOOTH.
9. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH MoT SS421.
10. ERECTION LOADING: MAXIMUM POINT LOAD/GIRDER=230kN.
11. GIRDER STABILITY DURING ALL STAGES OF CONSTRUCTION SHALL BE PROVIDED FOR BY THE CONTRACTOR.

PRECAST DECK PANEL

1. PRECAST MANUFACTURE AND ERECTION IN ACCORDANCE WITH MoT SS415.
2. HARDWARE TO BE HOT DIPPED GALVANIZED TO CSA G164-TABLE 1.
3. MISCELLANEOUS STEEL WORK TO CONFORM TO CSA-G40.21 GRADE 350A (GALV).
4. SUPPLY AND INSTALLATION OF MISCELLANEOUS STEEL COMPONENTS. SHALL BE IN ACCORDANCE WITH MOT SS422.
5. GROUT TO BE 35 MPa SHRINKAGE COMPENSATING GROUT INSTALLED IN ACCORDANCE WITH MANUFACTURES INSTRUCTIONS.
6. CORRUGATED STEEL PIPE FORM SHALL CONFORM TO CPSI SPEC. No. 501.
   MIN. WALL THICKNESS = 1.6mm
   CORRUGATION PITCH = 50mm NOM.
   CORRUGATION DEPTH = 11mm TO 13mm
7. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 35MPa AT 28 DAYS EXCEPT AS NOTED.
8. ALL EXPOSED EDGES OF CONCRETE TO BE CHAMFERED 20 EXCEPT AS NOTED.
9. TOP OF DECK TO HAVE BROOMED / TYNED FINISH, UNDERSIDE OF DECK AND CURBS TO HAVE CLASS 2 FINISH.
10. ALL REINFORCING STEEL TO CONFORM TO CSA G30.18 GRADE 400.
11. ALL REINFORCING STEEL TO HAVE 50 COVER EXCEPT AS NOTED.
12. DECK TOP LAYER REINFORCING STEEL TO BE EPOXY COATED.
13. REINFORCING SPLICES ARE NOT PERMITTED.
14. WELDING OF REINFORCING NOT PERMITTED.
15. DRIP GROOVE CONTINUOUS ALONG FULL LENGTH OF BRIDGE.

Rev	Date	Description	Init

ISSUE RECORD

SCALE AS SHOWN

DESIGNED H.D. DATE OCT. 10/06
CHECKED M.G.J. DATE OCT. 10/06
DRAWN W.R. DATE OCT. 10/06

Rev	Date	Description	Init

REVISIONS

BRITISH COLUMBIA — Ministry of Forests

FARWELL CANYON BRIDGE - CHILCOTIN RIVER
GENERAL ARRANGEMENT - SHEET 2

ACCEPTED FOR CONSTRUCTION
REGIONAL DIRECTOR
DATE

Design Consultant
Associated Engineering

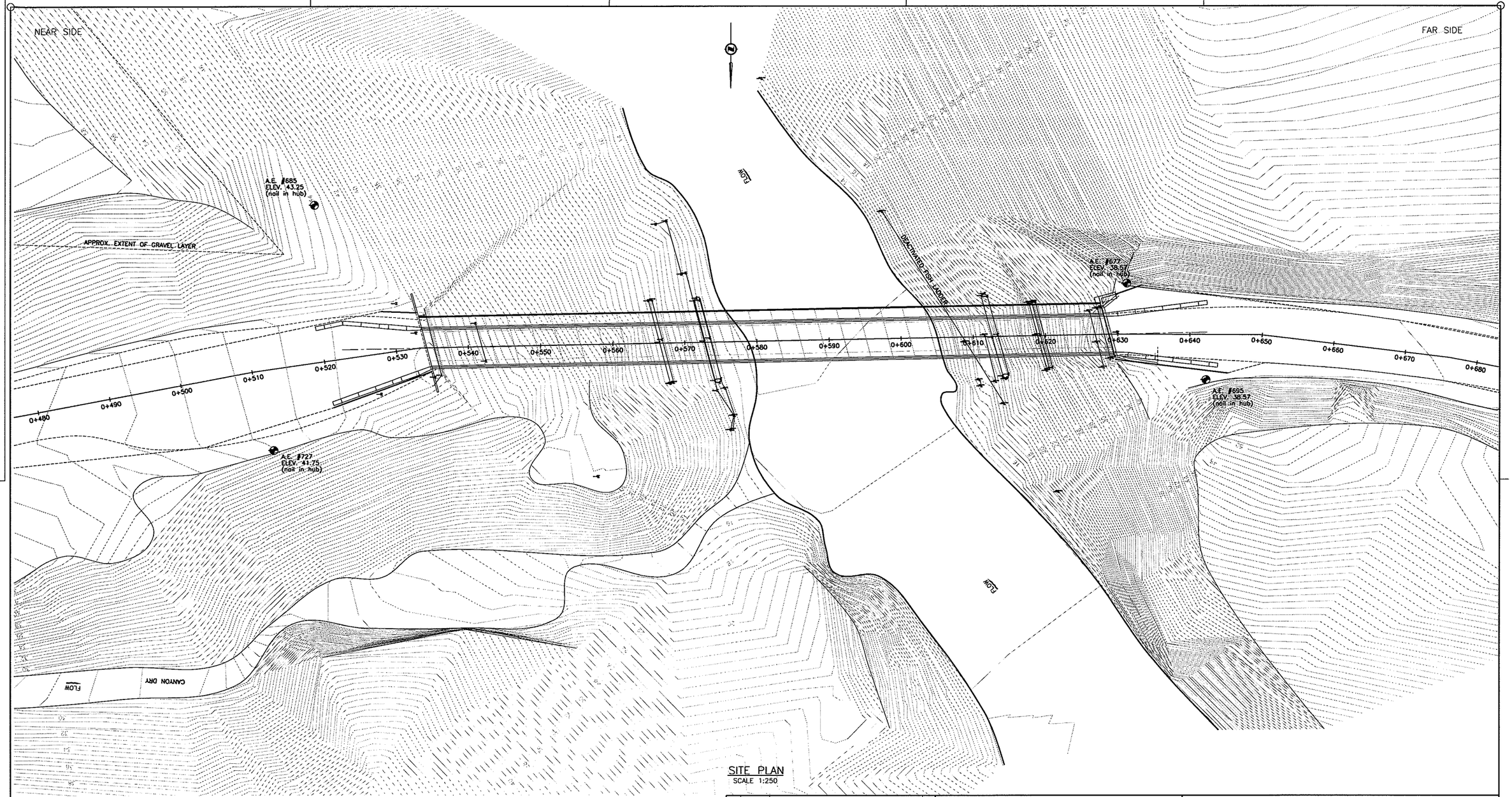
PREPARED UNDER THE DIRECTION OF
CONSULTANT
DATE

DRAWING No.
2916-SK-102 | A

CANCEL PRINTS BEARING PREVIOUS LETTER

TI-308F(02-90)

cad filename: 0628750206



SITE PLAN
SCALE 1:250

Rev	Date	Description	Init

ISSUE RECORD

SCALE AS SHOWN

DESIGNED H.D. DATE OCT. 10/06
CHECKED M.G.J. DATE OCT. 10/06
DRAWN W.R. DATE OCT. 10/06

Rev	Date	Description	Init

REVISIONS

BRITISH COLUMBIA Ministry of Forests

FARWELL CANYON BRIDGE – CHILCOTIN RIVER
SITE PLAN – PROPOSED BRIDGE

ACCEPTED FOR CONSTRUCTION

REGIONAL DIRECTOR

DATE

Design Consultant
Associated Engineering

PREPARED UNDER THE DIRECTION OF

CONSULTANT

DATE

DRAWING No.
2916–SK–103 | A

CANCEL PRINTS BEARING PREVIOUS LETTER

H-308F(02-90)

cad filename: 0628750209