

Ministry of Transportation and Infrastructure

Bridge Project

12469-0002

Mission Overhead No. 2736 - Sidewalk Extension Highway No. 11

RECORD DRAWING

1. GENERAL

- 1.1 THE METRIC SYSTEM OF MEASUREMENT IS USED ON ALL DRAWINGS. ELEVATIONS AND STATIONS ARE SHOWN IN METERS AND ALL OTHER DIMENSIONS ARE SHOWN IN MILLIMETERS.
- 1.2 GRADING AND DRAINAGE DESIGN BY URBAN SYSTEMS.
 GEOTECHNICAL DESIGN BY THURBER ENGINEERING LTD.
- 1.3 TOPOGRAPHICAL INFORMATION AND SURVEY OF EXISTING BRIDGE SUPPLIED BY THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE.
- 1.4 SPECIFIC STRUCTURAL DRAWING NOTES SUPERSEDE GENERAL NOTES WHERE THERE ARE DIFFERENCES.
- 1.5 CONSTRUCTION OF THE WORKS TO COMPLY WITH THE BC MOTI "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", 2012 EDITION.

2. <u>DESIGN DATA</u>

2.1 DESIGN CODE: -CAN/CSA-S6-06 WITH SUPPLEMENT #1 (2010)
-MoTI BRIDGE STANDARDS AND PROCEDURES

MANUAL (AUGUST 2007)

2.2 DESIGN LIVE LOAD: BCL-625 FOR ROADWAY

PEDESTRIAN LOAD FOR SIDEWALK

2.3 DYNAMIC LOAD ALLOWANCE: AS PER CAN/CSA-S6-06 WITH SUPPLEMENT #1 (2010)

2.4 FATIGUE DESIGN: CLASS A HIGHWAY ADTT

2.5 DESIGN LIFE: 50 YEARS

2.6 CLIMATIC INFORMATION:

MINIMUM DAILY MEAN TEMPERATURE: -16°C MAXIMUM DAILY MEAN TEMPERATURE: 29°C

3. FOUNDATION NOTES

- 3.1 FOR GEOTECHNICAL DESIGN, SEE REPORT BY THURBER ENGINEERING LTD., FILE NO. 19-5161-143, FEBRUARY 6, 2013
- 3.2 THE GEOTECHNICAL ENGINEER SHALL BE NOTIFIED WHEN ALL EXCAVATIONS HAVE BEEN CARRIED OUT TO DESIGN ELEVATIONS FOR INSPECTION.
- 3.3 TEMPORARY SHORING IS REQUIRED FOR WIDENING OF THE ABUTMENTS. THE EXTENT AND DETAILS OF SHORING SYSTEM EMPLOYED SHALL BE SUBMITTED TO THE MINISTRY FOR APPROVAL PRIOR TO START OF CONSTRUCTION. SEE SPECIFICATION FOR DETAILS OF TRAFFIC MANAGEMENT PLAN.
- 3.4 BACKFILL BEHIND ABUTMENT DIAPHRAGMS SHALL BE PLACED SIMULTANEOUSLY AT BOTH ENDS.
- 3.5 BACKFILL SHALL NOT BE PLACED AGAINST THE ABUTMENTS AND WALLS UNTIL THE CONCRETE HAS ACHIEVED THE FULL 28-DAY STRENGTH.
- 3.6 HEAVY EARTH COMPACTING EQUIPMENT, OR OTHER HEAVY CONSTRUCTION EQUIPMENT SHALL NOT BE USED WITHIN 2.0m OF THE ABUTMENTS AND WALLS.

4. CONCRETE NOTES

- 4.1 PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD A5, TYPE GU, WITH C3A CONTENT LESS THAN 7.5%. FLY ASH SHALL CONFORM TO CSA STANDARD A3001 TYPE F OR C1.
- 4.2 CONCRETE SHALL CONFORM TO CAN/CSA-A23.1 AND SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH, EXPOSURE CLASS AND W/C RATIO AS FOLLOWS:

	EXPOSURE CLASS TO		MAX. W/C RATIO ^a	NOM. AGG. SIZE		EMENTARY MATERIALS ^a
	A23.1-04				FLY ASH	SILICA FUME
SUBSTRUCTURE: PIER CAPS ABUTMENTS, DIAPHRAGMS	C1	35MPa	0.40	20mm	40% MAX.	8% MAX.
SUPERSTRUCTURE: DECK	C-XL	35MPa	0.37	20mm	20% MAX.	8% MAX.
PRECAST GIRDERS	C1	55MPa	0.40	20mm	25% MAX.	8% MAX.

a PERCENTAGE BY MASS OF CEMENTING MATERIAL.

4.3 CONCRETE COVER TO REINFORCEMENT TO BE AS FOLLOWS (mm):

SURFACES CAST AGAINST EARTH	100
WING WALLS EXPOSED TO EARTH	70
DECK SLAB	
TOP	50
SOFFITS CAST-IN-PLACE	50
OTHER SURFACES NOT SPECIFIED ABOVE	70
RATIO OF COVER TO MAX. NOMINAL AGGREGATE SIZE	1.5

- 4.4 ALL EXPOSED EDGES OF CONCRETE TO BE CHAMFERED 20mm UNLESS NOTED OTHERWISE.
- 4.5 FORMED CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH MoTI SPECIFICATIONS AS FOLLOWS:
 - CLASS 1 (BASIC FORMED FINISH): ALL SUBMERGED OR BURIED SURFACES
 - (NOT EXPOSED TO VIEW).
 - CLASS 2 (ORDINARY FORMED FINISH EXPOSED TO VIEW FROM MODERATE DISTANCE): EXPOSED SUBSTRUCTURE ELEMENTS, OUTER EDGES OF DECK, UNDERSIDE OF DECK, OP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH MOTI SPECIFICATIONS AS FOLLOWS
 - TOP OF DECK: BROOM FINISHBEARING SEAT: SMOOTH TROWELLED FINISH
 - CONSETTE DECK CHALL BE MOIST OUDED FOR A MINIMUM OF CONFE
- 4.6 CONCRETE DECK SHALL BE MOIST CURED FOR A MINIMUM OF SEVEN DAYS AS PER DIRECTION IN THE MOTI STANDARD SPECIFICATIONS.

4.7 EPOXY ADHESIVE SHALL MEET THE REQUIREMENTS OF ASTM C881 AND APPROPRIATE CLASS FOR THE SITE TEMPERATURE:

BONDING AGENT - TYPE II, GRADE 2
REBAR AND ANCHOR BOLT - TYPE IV, GRADE 1, 2 OR 3
LEVELING COURSE - TYPE I. GRADE 3

- 4.8 ROUGHENED CONCRETE SURFACES SHALL BE WET ABRASIVE BLAST CLEANED TO SOUND CONCRETE IN ACCORDANCE WITH ASTM STANDARD D4259 TO A MINIMUM PROFILE OF 6mm, 15mm SPACING.
- 4.9 ALL CONSTRUCTION JOINTS FORMING FINISHED DECKS WITH INSITU CONCRETE SHALL BE SOAKED WITH WATER PRIOR TO CONCRETE PLACEMENT. THIS SOAKING MUST ACHIEVE A SATURATED SURFACE DRY (SSD) CONDITION AS DEFINED IN THE SS 209.04.06 CLAUSE. WEATHER CONDITIONS WILL DICTATE THE LENGTH OF SOAKING REQUIRED. THE SURFACE SHOULD BE TESTED TO CONFIRM SSD HAS BEEN ACHIEVED BY ADDING WATER TO SEE IF IT IS ABSORBED. ABSORPTION INDICATES A SSD CONDITION HAS NOT BEEN ACHIEVED. ONCE SSD HAS BEEN CONFIRMED ALL FREE STANDING WATER SHOULD BE REMOVED PRIOR TO CONCRETE PLACEMENT
- 4.10 PRIOR TO POURING CONCRETE, THE CONTRACTOR SHALL CHECK FOR ALL OPENINGS, ANCHOR BOLTS. INSERTS AND EMBEDDED ITEMS.

5. REINFORCING STEEL NOTES

5.1 ALL REINFORCING STEEL WITHIN 100mm OF THE DECK SURFACE, AND ALL OTHER REINFORCING STEEL INDICATED ON THE DRAWING AS "MS" SHALL BE STAINLESS STEEL IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A955M. ALL STAINLESS STEEL REINFORCEMENT SHALL HAVE A MINIMUM YIELD TENSILE STRENGTH OF 420MPg. FIELD WELDING OF STAINLESS STEEL IS NOT ACCEPTABLE WITHOUT PRIOR APPROVAL FROM THE ENGINEER. ALL STAINLESS STEEL REINFORCEMENT SHALL BE ONE OF THE FOLLOWING GRADES:

TYPE / ASTM DESIGNATION	UNS DESIGNATION
316LN	S31653
DUPLEX 2205	S31803
DUPLEX 2304 *	S32304

- * CHEMICAL COMPOSITION OF DUPLEX 2304 SHALL BE WITHIN THE RANGES IDENTIFIED IN TABLE 1 AND IN CONFORMANCE TO THE REQUIREMENTS OF ASTM A276. THE DIMENSIONAL AND MECHANICAL PROPERTIES OF THE REINFORCEMENT MUST BE IN CONFORMANCE WITH ASTM A955.
- 5.2 ALL REINFORCING STEEL IDENTIFIED ON THE DRAWING AS "M" SHALL BE GRADE 400R CARBON STEEL IN ACCORDANCE WITH CAN/CSA-G30.18.
- 5.3 SPLICING OF TRANSVERSE DECK REINFORCING BARS, OTHER THAN AT LOCATIONS SHOWN ON THE DRAWINGS, IS NOT PERMITTED. LONGITUDINAL BAR SPLICES ARE TO BE STAGGERED SO THAT NO MORE THAN EVERY THIRD BAR IS SPLICED AT ANY CROSS SECTION OF THE DECK.
- 5.4 LAP SPLICES OF REINFORCING BARS SHALL BE AS FOLLOWS (mm) U.N.O.

BAR	UNCOATED	UNCOATED TOP BAR
SIZES	(35MPa	(35MPa
	CONCRETE)	CONCRETE)
10M	390	470
15M	510	660
20M	620	800
25M	1000	1300
30M	1190	1540
35M	1410	1840

SPLICE LENGTHS ASSUME CLASS B TENSION SPLICES. SPLICE LENGTHS FOR STAINLESS STEEL BARS ARE SAME AS UNCOATED STEEL BARS.

- 5.5 MECHANICAL COUPLERS SHALL CONFORM TO CAN/CSA-S6 CLAUSE 8.4.4.4 AND MUST BE SUBMITTED TO THE MINISTRY REPRESENTATIVE FOR APPROVAL BEFORE INSTALLATION. NO OFFSET REBAR COUPLERS SHALL BE USED.
- 5.6 DOWEL EMBEDMENT DEPTHS SHALL BE AS FOLLOWS U.N.O. BAR SIZES EMBEDMENT DEPTH (mm)

AR SIZES	EMBEDMENT D
10M	200
15M	280
20M	340
25M	550
30M	650

6. PRECAST CONCRETE GIRDER NOTES

- 6.1 PRESTRESSING STRANDS SHALL BE 12.7 DIA., 7 WIRE UNCOATED LOW RELAXATION STRANDS TO CSA G279 GRADE 1860MPa. MINIMUM TENSILE FORCE IMMEDIATELY BEFORE RELEASE OF STRANDS SHALL BE 75% OF THE ULTIMATE STRENGTH OF THE STRAND. MAXIMUM TENSILE FORCE AT JACKING SHALL NOT EXCEED 78% OF THE ULTIMATE STRENGTH.
- 6.2 CONCRETE: MINIMUM COMPRESSIVE STRENGTH AT TIME OF RELEASE SHALL BE 40MPa.
- 6.3 BOTTOM EDGES OF GIRDERS SHALL BE CHAMFERED 20mm EXCEPT AT ENDS AS NOTED.
- 6.4 EXPOSED VERTICAL SURFACE OF EXTERIOR GIRDERS SHALL RECEIVE A CLASS 2 FINISH RUBBED FINISH. ALL OTHER VERTICAL SURFACES AND SOFFIT SHALL RECEIVE A SMOOTH FORMED SURFACE FINISH.
- 6.5 SANDBLAST ROUGHENING IS REQUIRED ON ALL GIRDER ENDS AND RECESSES TO BE CAST IN THE END DIAPHRAGMS.
- 6.6 LIFTING DEVICES SATISFACTORY TO THE MINISTRY REPRESENTATIVE SHALL BE PROVIDED OVER THE BEARINGS. ONLY VERTICAL LIFTS SHALL BE PERMITTED. CARE SHALL BE TAKEN TO PREVENT ANY SUDDEN IMPACT LOADS ON THE GIRDER. LIFTING SHALL BE DONE ONLY BY LIFTING HOOKS.
- 6.7 GIRDERS SHALL BE SUPPORTED ONLY AT POINTS DIRECTLY BELOW LIFTING HOOKS WHILE BEING STORED OR TRANSPORTED.

- 6.8 GIRDERS SHALL BE KEPT IN AN UPRIGHT POSITION DURING HANDLING AND TRANSPORTING.
- 6.9 ALL PLAN DIMENSIONS ARE GIVEN IN A HORIZONTAL PLANE. ALLOWANCE IN LENGTH SHALL BE MADE FOR THE EFFECTS OR ELASTIC SHORTENING, SHRINKAGE, CREEP AND SLOPE.
- 6.10 DIMENSION TOLERENCES: LONGITUDINAL AND TRANSVERSE AS PER MoTI STANDARD SPECIFICATIONS 415.
- 6.11 REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CSA G30.18M GRADE 400R.
 REINFORCING STEEL SHALL HAVE 35 MINIMUM COVER UNLESS NOTED OTHERWISE.
 PRESTRESSING STRANDS SHALL HAVE 40 MINIMUM COVER.
- 6.12 ELEVATIONS HAVE BEEN CALCULATED ASSUMING A NOMINAL 60mm GIRDER HAUNCH.
- 6.13 CONSTRUCTOR SHALL FIELD SURVEY GIRDER CAMBERS AFTER ERECTION AND SUBMIT TO DESIGNER FOR REVIEW AND FINAL CALCULATIONS OF ACTUAL HAUNCH HEIGHT PRIOR TO PLACEMENT OF DECK FORMWORK.
- 6.14 REINFORCEMENT BAR SPLICES ARE TO BE STAGGERED SO THAT NO MORE THAN EVERY SECOND BAR IS SPLICED AT ANY CROSS SECTION.
- 6.15 GIRDERS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE MoTI STANDARD SPECIFICATION 415, "MANUFACTURE AND ERECTION OF PRECAST AND PRESTRESSED CONCRETE MEMBERS".
- 6.16 THE CONTRACTOR SHALL ENSURE GIRDER STABILITY DURING ALL STAGES OF CONSTRUCTION. CONSTRUCTION PROCEDURES SHALL BE SIGNED AND SEALED BY A BRITISH COLUMBIA PROFESSIONAL ENGINEER. ALL STEEL BRACING MATERIALS TO BE PERMANENTLY LEFT IN PLACE SHALL BE GALVANIZED.
- 6.17 GIRDERS SHALL NOT BE SET ON THEIR BEARINGS, NOR SHALL THE BRIDGE DECK BE CAST, UNTIL 60 DAYS AFTER THE CASTING OF THE GIRDERS.

7. MISCELLANEOUS METAL NOTES

- 7.1 MISCELLANEOUS STEEL SHALL CONFORM TO CAN/CSA-G40.21, GRADE 300W.
- 7.2 WELDING OF MISCELLANEOUS STEEL SHALL CONFORM TO CSA STANDARD W59, INCLUDING CLAUSE 11, WITH A MINIMUM WELD SIZE OF 5mm.
- 7.3 ALL MISCELLANEOUS STEEL AND EMBEDDED PLATE SHALL BE HOT DIPPED GALVANIZED TO CAN/CSA-G164.
- 7.4 ANCHOR BOLTS SHALL CONFORM TO ASTM STANDARD A307, HOT DIPPED GALVANIZED.
- 7.5 ALL EMBEDDED METALS AND BEARING PLATES USED IN CONJUNCTION WITH PRESTRESSED CONCRETE GIRDERS SHALL BE HOT DIPPED GALVANIZED TO CAN/CSA-G164.
- 7.6 WHERE GALVANIZING IS DAMAGED, REPAIR WITH TWO COATS OF "ZINGA" OR APPROVED EQUAL.
- 7.7 SHEAR PINS SHALL CONFORM TO CAN/CSA G40.20/G40.21 GRADE 350W.

8. BEARING NOTES

- 8.1 BEARINGS SHALL BE SHIPPED WITH CLEAR MARKINGS FOR LOCATION AND ORIENTATION.
- 8.2 BEARING PADS SHALL BE SET LEVEL.
- 8.3 ELASTOMER SHALL BE VIRGIN POLYISOPRENE (NATURAL RUBBER) HAVING A DUROMETER HARDNESS OF 55±5 SHORE A POINTS. ELASTOMER SHALL EXHIBIT GRADE 3 LOW—TEMPERATURE BEHAVIOUR.
- 8.4 STEEL REINFORCING PLATES SHALL CONFORM TO CSA G40.21M GRADE 230G MATERIAL. PLATES SHALL BE FREE OF SHARP EDGES AND BURRS AND SHALL BE BLAST-CLEANED TO SSPC-SP5-85 WHITE METAL BLAST CLEANING.
- 8.5 BONDING ADHESIVE BETWEEN ELASTOMER AND STEEL REINFORCING PLATES SHALL DEVELOP A MINIMUM PEEL STRENGTH OF 7kN/m.
- 8.6 BEARINGS SHALL BE LOAD TESTED IN ACCORDANCE WITH MoTI REQUIREMENTS.
- 8.7 LAMINATED BEARINGS SHALL CONFORM TO CAN/CSA-S6-06 CLAUSE 11.6.6
- 8.8 STEEL TAPER PLATES SHALL CONFORM TO CSA G40.21M GRADE 300W UNLESS NOTED OTHERWISE. STEEL PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH CSA G164, TABLE 1.
- 8.9 FIELD WELDS SHALL BE CLEANED AND PAINTED WITH 2 COATS OF ZINGA OR APPROVED EQUAL. SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION.
- 8.10 GRIND OFF GALVANIZING ON TOP OF BEARING PLATE TO ACCOMMODATE WELDING.
 PAINT WELDS AND EXPOSED STEEL WITH AN APPROVED GALVANIZING AGENT AFTER
 ERECTION. WELDER TO CONTROL HEAT TO NOT DAMAGE RUBBER BEARINGS.

9. JOINT FILLERS

- 9.1 COMPRESSIBLE MATERIAL SHALL BE EVAZOTE EV50 (ETHYLENE VINYL ACETATE) WITH A NOMINAL, RECOVERABLE COMPRESSIVE STIFFNESS OF 42KPd @ 25% STRAIN.
- 9.2 ASPHALT IMPREGNATED FIBREBOARD SHALL MEET THE REQUIREMENTS OF ASTM D 1751. THE BOARD SHALL HAVE A MINIMUM DENSITY OF 300Kg/m² WITH THE WEIGHT OF THE FINISHED BOARD TO ASPHALT. THE COMPRESSIVE STRENGTH OF THE BOARD SHALL BE BETWEEN 0.7MPa AND 5.0MPa @ 50% STRAIN.

10. PVC DECK DRAINAGE SYSTEM

10.1 SCHEDULE 40 PVC-DWV PIPE SHALL MEET CSA B181.2 SPECIFICATIONS, SHALL BE UV RESISTANT, ALL COMPONENTS SHALL BE UNIFORM GREY IN COLOUR AND SHALL BE SUPPLIED BY THE SAME MANUFACTURER. 10.2 PVC PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES. ALL JOINTS MUST BE CONNECTED USING COMPATIBLE TWO-STEP CEMENT WITH PRIMER SUPPLIED BY THE MANUFACTURER

11. CHAIN LINK FENCE

- 11.1 ALL HSS STEELWORK FOR FENCES TO BE CSA SPECIFICATION G40.21M GRADE 350W CLASS C. ALL OTHER STEELWORK TO BE GRADE 260W. PIPE TO BE ASTM STANDARD A53.
- 11.2 STEEL WIRE FABRIC WILL BE VINYL COATED, ZINC COATED WIRE AS PER SPECIFICATION. STEEL PIPE POSTS, RAILS, BRACES, BRACKETS AND ANCHORS SHALL BE GALVANIZED AFTER FABRICATION AS PER SPECIFICATION. GALVANIZING TO BE IN ACCORDANCE WITH CSA SPECIFICATION G614, TABLE 1.
- 11.3 FIELD CONNECTIONS TO BE WELDED EXCEPT AS NOTED.
- 11.4 FIELD WELDS TO BE PAINTED WITH 2 COATS OF "GALVACON" OR APPROVED EQUAL AND COLOUR MATCHED TO BASE METAL.
- 11.5 ALL CHAIN LINK FENCE DETAILS TO CONFORM TO THE MINISTRY'S STANDARD SPECIFICATIONS SECTION 316 AND SECTION 741 EXCEPT AS NOTED ON THESE DRAWINGS

	LIST OF DRAWINGS
DWG. No.	TITLE
2736-101	GENERAL NOTES
2736-102	SITE PLAN
2736-103	GENERAL ARRANGEMENT
2736-104	ABUTMENT EXTENSION — SHEET 1 OF 2
2736-105	ABUTMENT EXTENSION - SHEET 2 OF 2
2736-106	PIER CAP EXTENSION - SHEET 1 OF 2
2736-107	PIER CAP EXTENSION - SHEET 2 OF 2
2736-108	NEW GIRDER LAYOUT
2736-109	NEW GIRDER DETAILS
2736-110	DECK PLAN
2736-111	DIAPHRAGM DETAILS
2736-112	DECK SLAB REINFORCING
2736-113	BEARING DETAILS
2736-114	CABLE RESTRAINER DETAILS
2736-115	RAILWAY PROTECTION FENCE DETAILS
2736-116	DRAIN RELOCATION DETAILS

	REFERENCE DRAWINGS
2736-3	MISSION OVERHEAD — SITE PLAN
2736-4	MISSION OVERHEAD — GEN. ARRANGEMENT
2736-5	MISSION OVERHEAD - ABUTMENTS
2736-6	MISSION OVERHEAD - PIERS
2736-7	MISSION OVERHEAD - STRINGERS
2736-8	MISSION OVERHEAD - DECK
2736-9	MISSION OVERHEAD - DRAIN DETAILS
2736-10	MISSION OVERHEAD - TEST HOLES
2784-1	STANDARD BRIDGE PARAPET
2784-2	STANDARD BRIDGE PARAPET TRANSITION
2785-1	STANDARD BRIDGE PARAPET STEEL RAILING
2803-1	STANDARD DECK JOINT
2891-2	STANDARD STEEL BICYCLE FENCE

THESE DRAWINGS ACCURATELY RECORD ALL THE SIGNIFICANT DESIGN CHANGES AS PROVIDED TO ME BY THE MINISTRY REPRESENTATIVE AND THE DESIGN AS REPRESENTED BY THESE RECORD DRAWINGS SUBSTANTIALLY CONFORMS WITH THE DESIGN INTENT AND SOUND ENGINEERING PRACTICE.





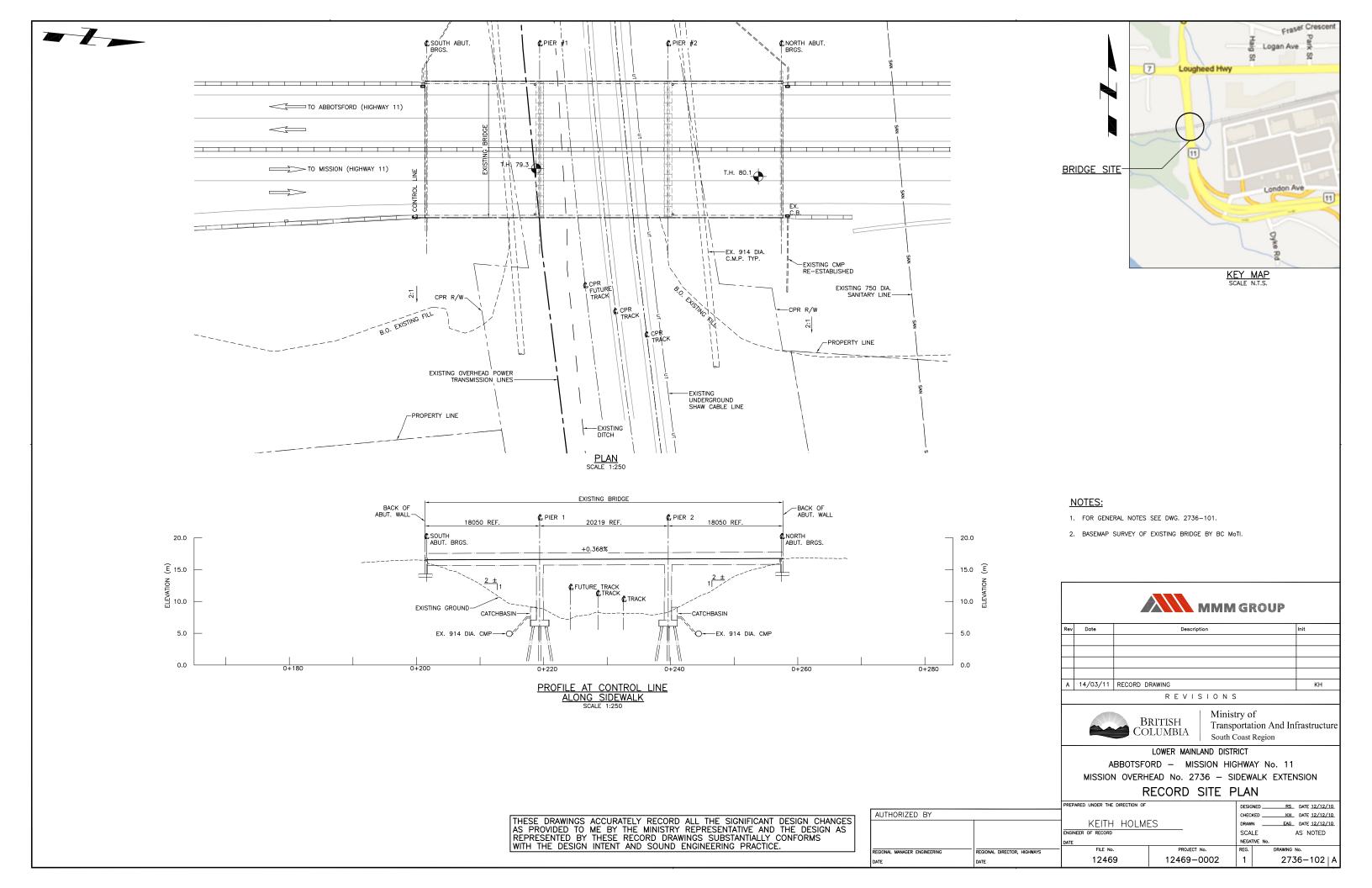
RITISH Ministry of
Transportation And Infrastructure

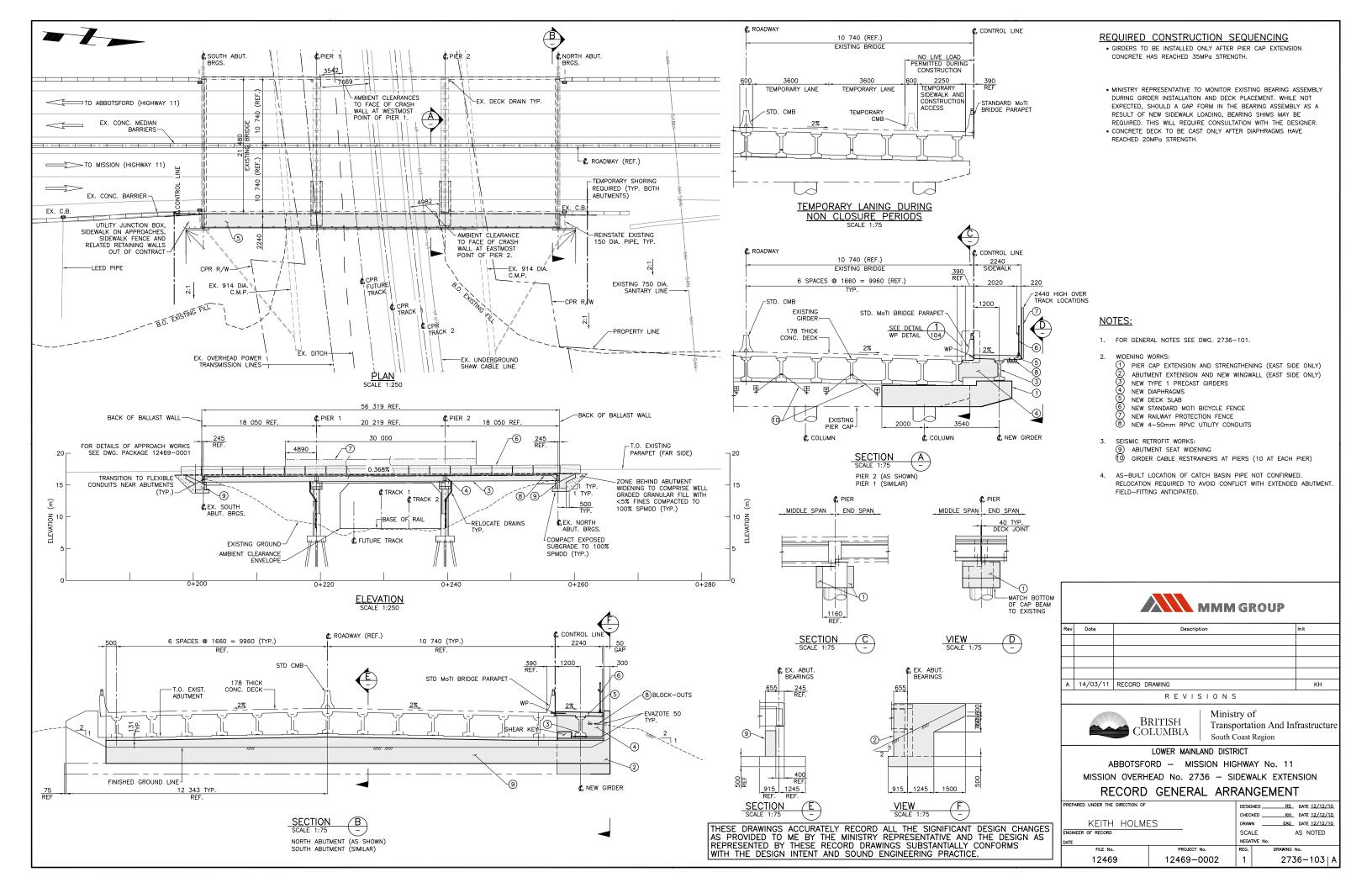
LOWER MAINLAND DISTRICT

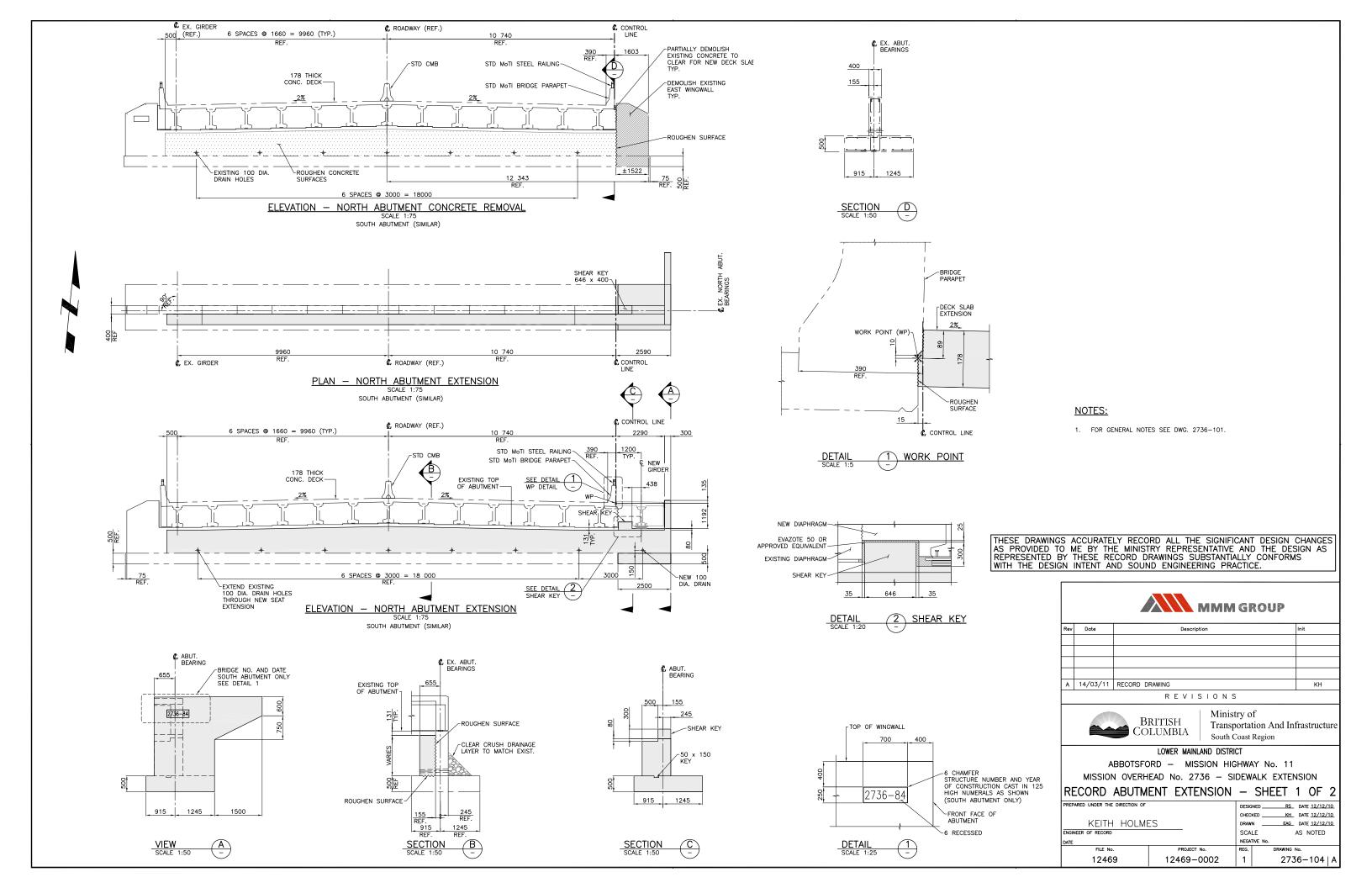
ABBOTSFORD — MISSION HIGHWAY No. 11 MISSION OVERHEAD No. 2736 — SIDEWALK EXTENSION

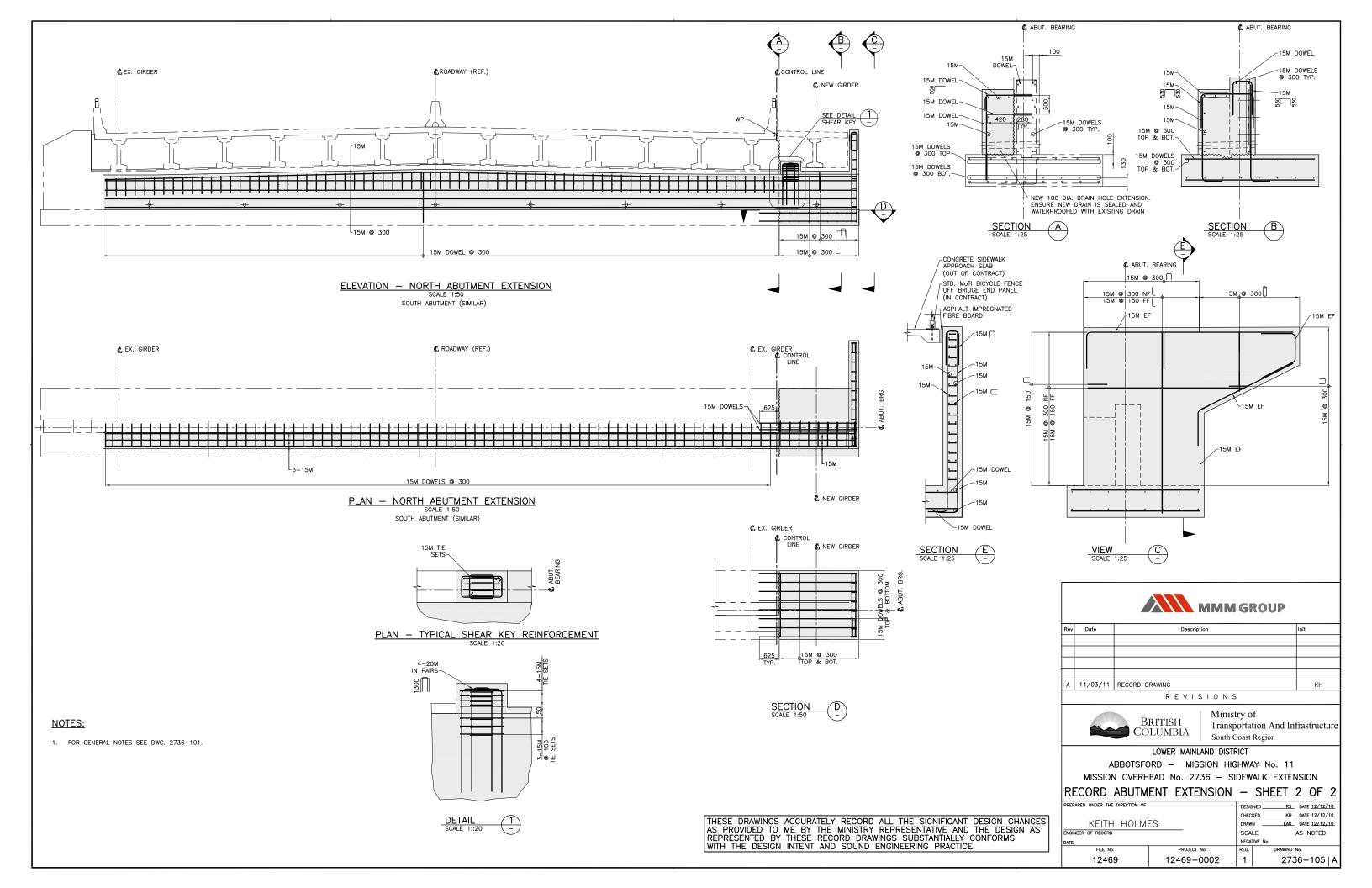
South Coast Region

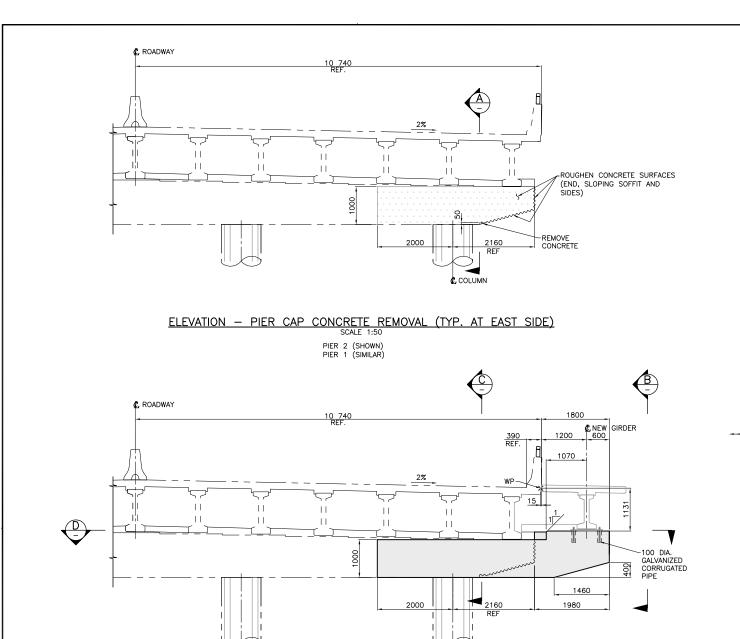
RECORD GENERAL NOTES

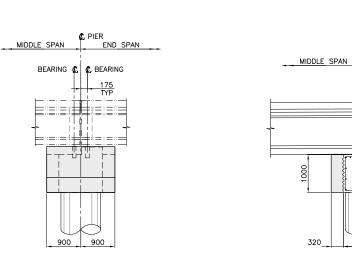












C PIER

END SPAN

SURFACE TYP.

MIDDLE SPAN

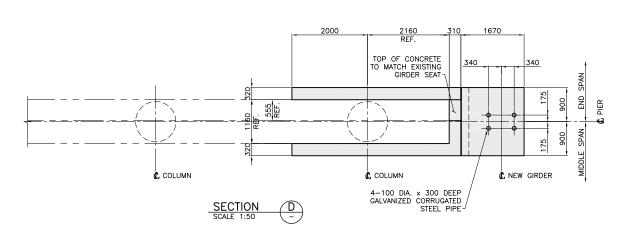


- 1. FOR GENERAL NOTES SEE DWG. 2736-101.
- 2. FOR WORK POINT LOCATION SEE DWG. 2736-104.

ELEVATION - PIER CAP EXTENSION

SCALE 1:50

PIER 2 (SHOWN)
PIER 1 (SIMILAR)



C COLUMN

VIEW B
SCALE 1:50

SECTION C

1160 REF

₡. PIER

END SPAN

BRITISH COLUMBIA

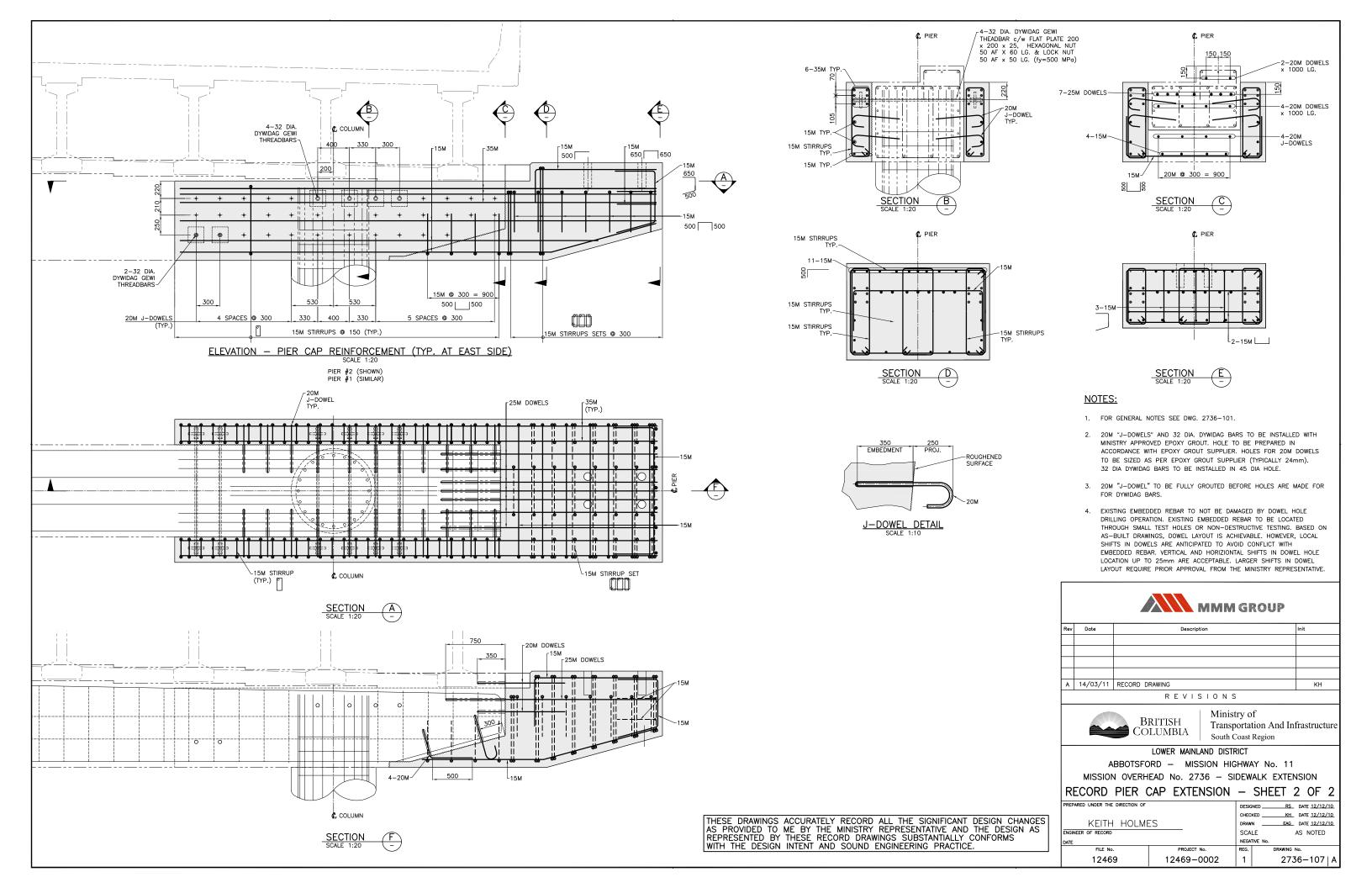
Ministry of

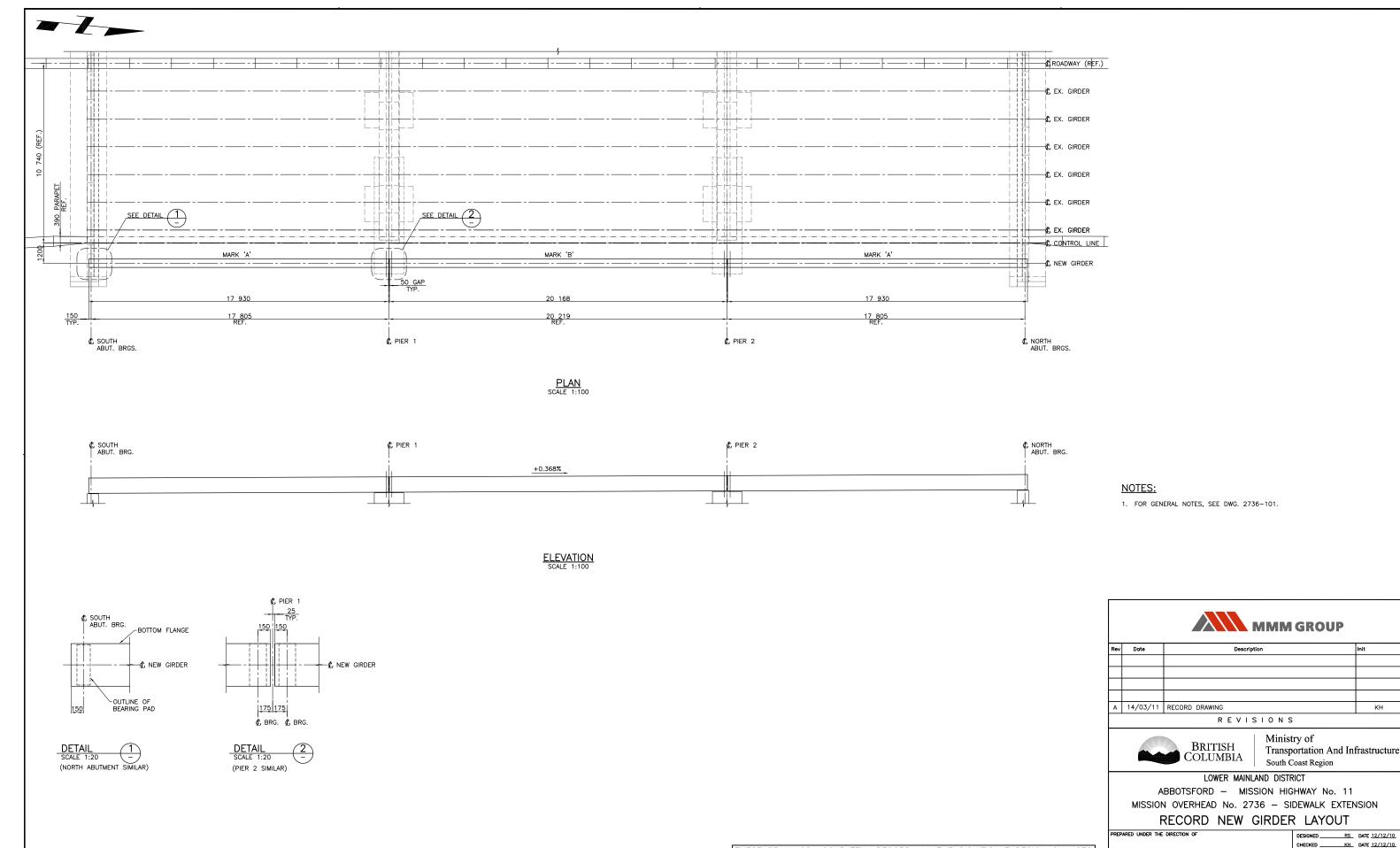
Transportation And Infrastructure
South Coast Region

LOWER MAINLAND DISTRICT

ABBOTSFORD - MISSION HIGHWAY No. 11

MISSION OVERHEAD No. 2736 - SIDEWALK EXTENSION





THESE DRAWINGS ACCURATELY RECORD ALL THE SIGNIFICANT DESIGN CHANGES AS PROVIDED TO ME BY THE MINISTRY REPRESENTATIVE AND THE DESIGN AS REPRESENTED BY THESE RECORD DRAWINGS SUBSTANTIALLY CONFORMS WITH THE DESIGN INTENT AND SOUND ENGINEERING PRACTICE. ENGINEER OF RECORD KH

EAG DATE 12/12/10

AS NOTED

2736-108 | A

SCALE

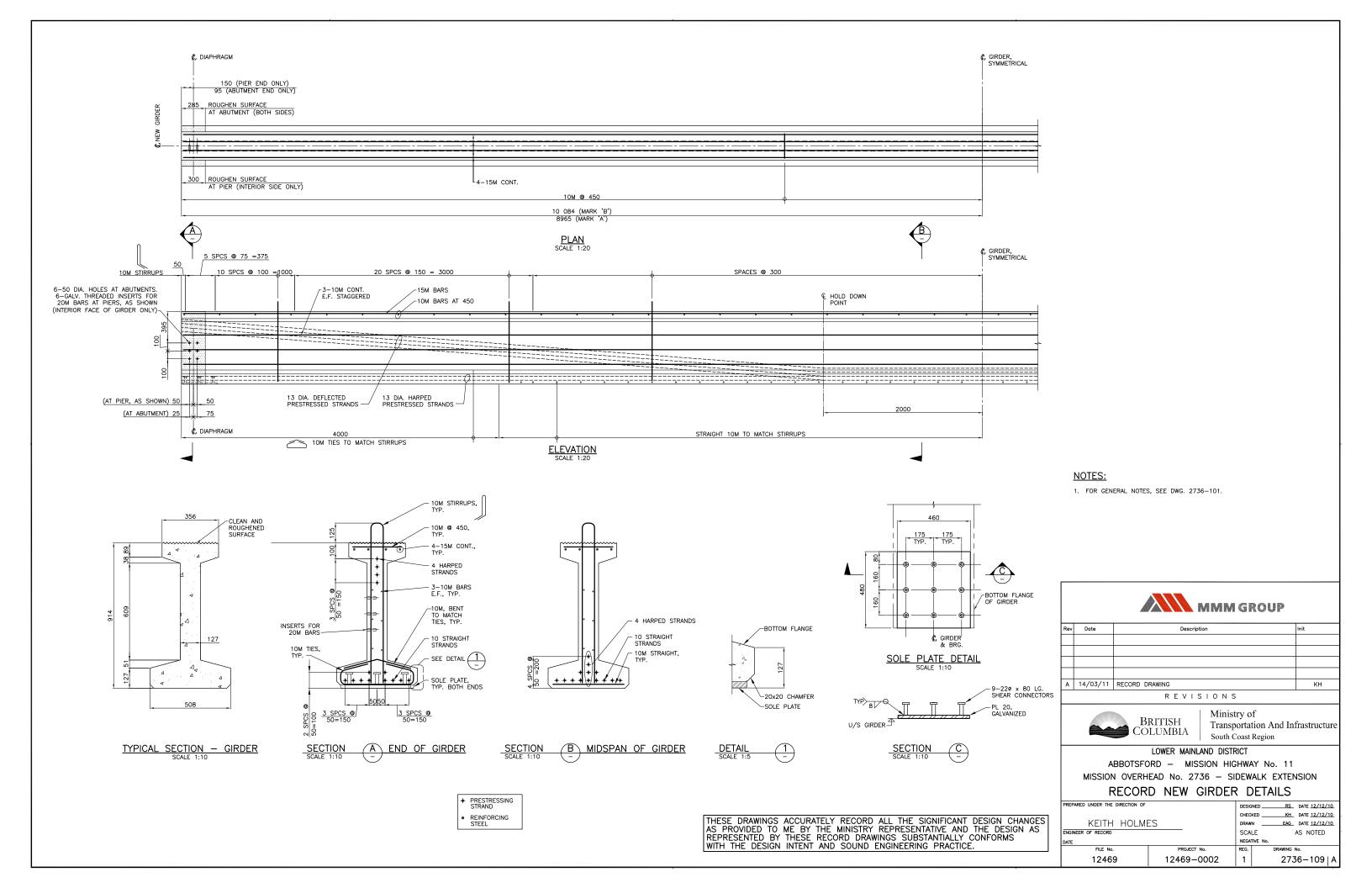
PROJECT No

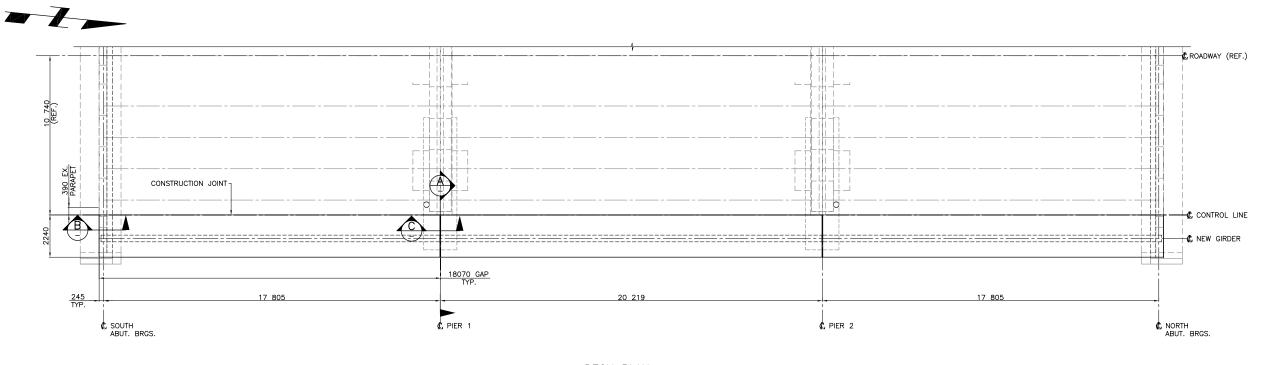
12469-0002

NEGATIVE No.

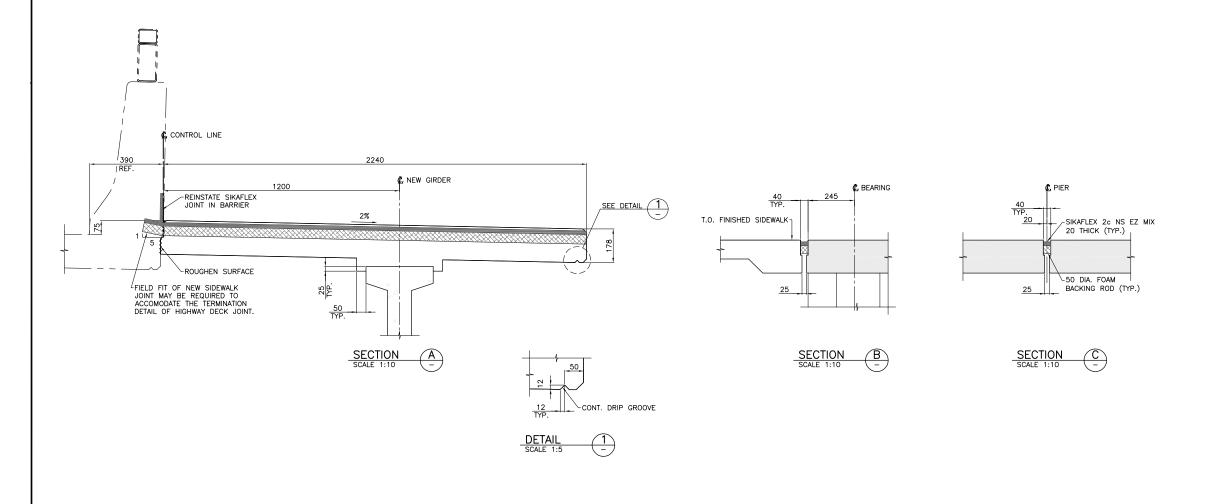
KEITH HOLMES

12469









THESE DRAWINGS ACCURATELY RECORD ALL THE SIGNIFICANT DESIGN CHANGES AS PROVIDED TO ME BY THE MINISTRY REPRESENTATIVE AND THE DESIGN AS REPRESENTED BY THESE RECORD DRAWINGS SUBSTANTIALLY CONFORMS WITH THE DESIGN INTENT AND SOUND ENGINEERING PRACTICE.

NOTES:

1. FOR GENERAL NOTES, SEE DWG. 2736-101.





RITISH Ministry of

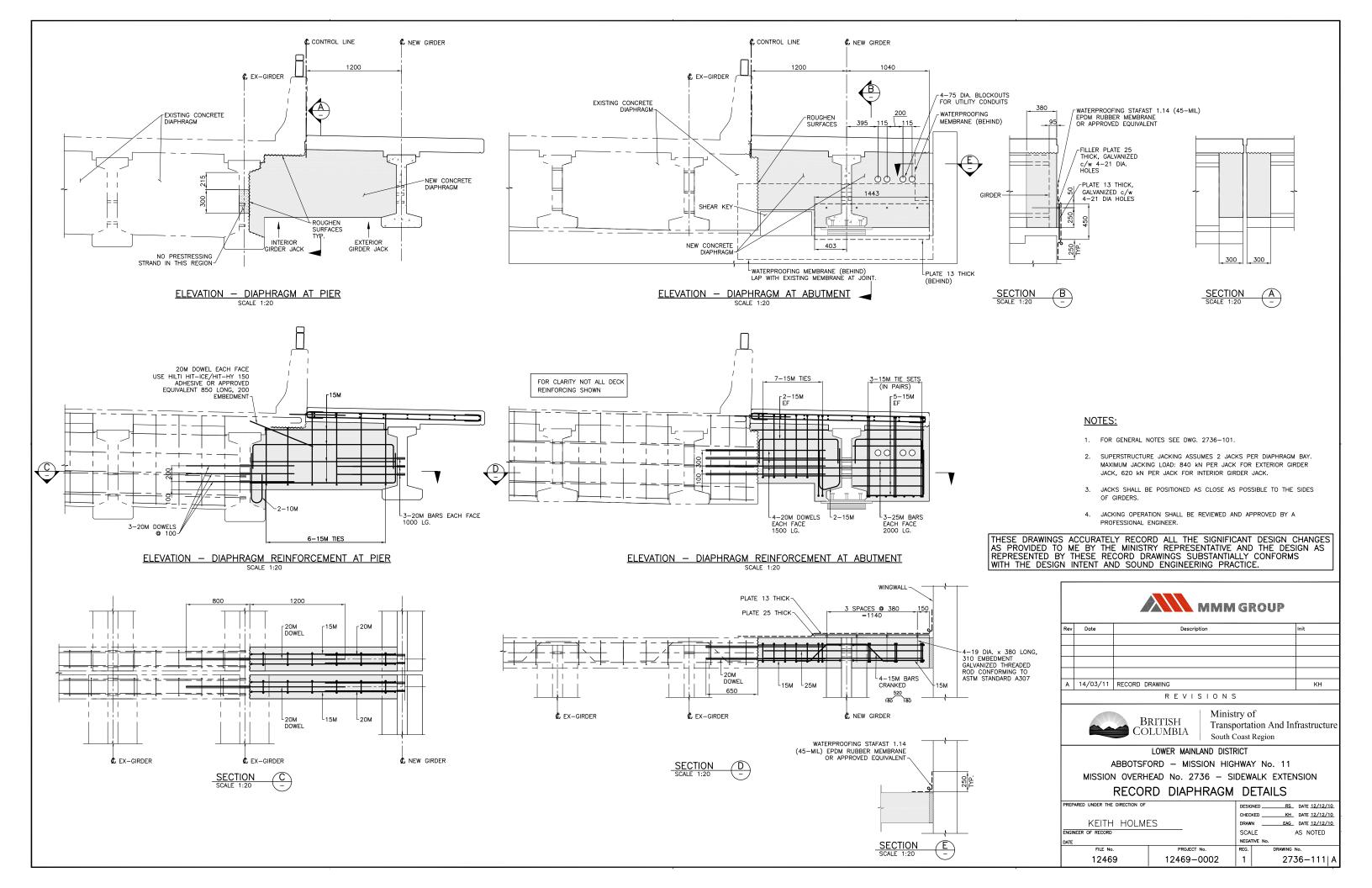
Transportation And Infrastructure
South Coast Region

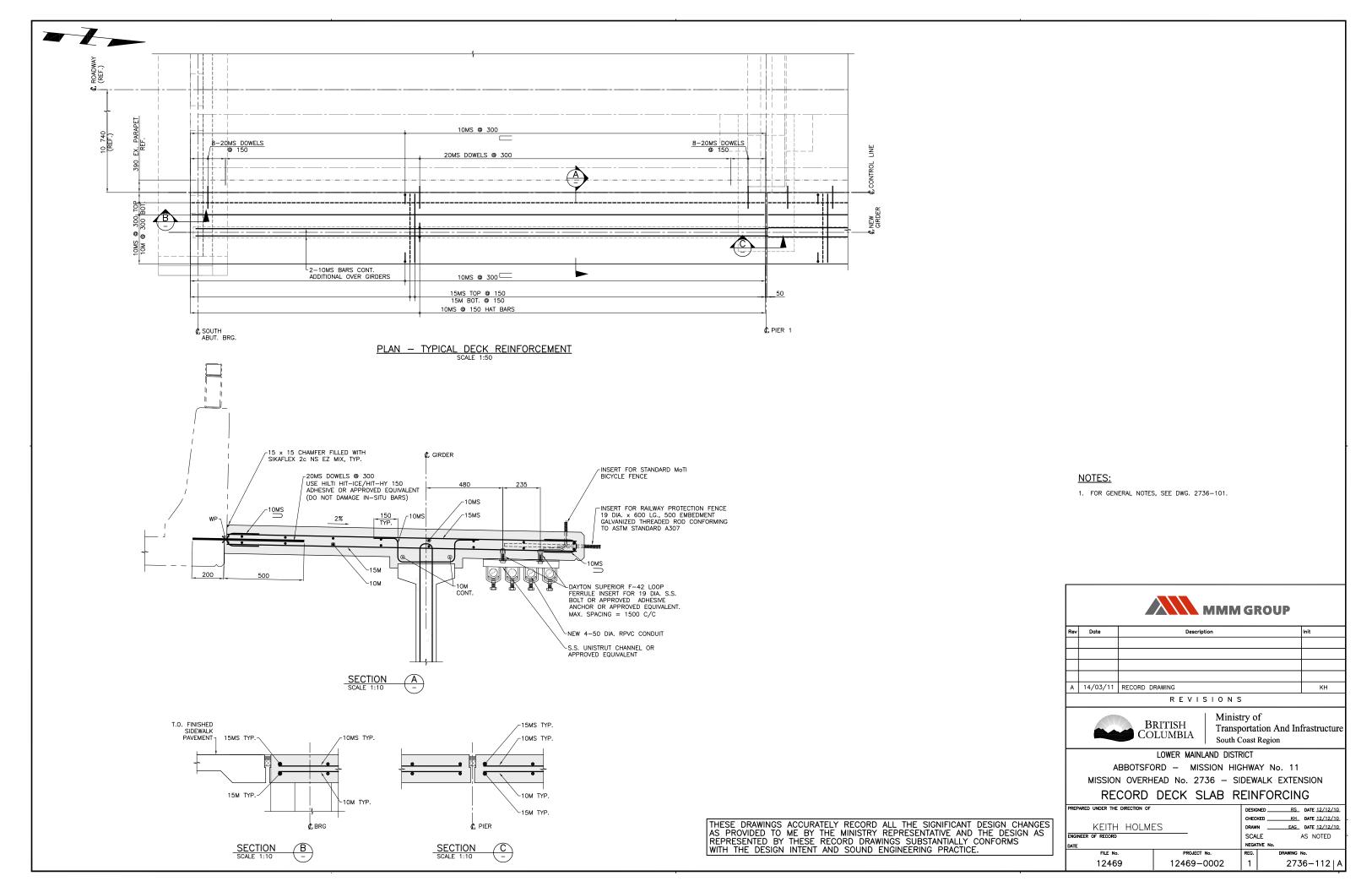
LOWER MAINLAND DISTRICT

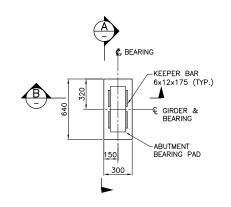
ABBOTSFORD - MISSION HIGHWAY No. 11
MISSION OVERHEAD No. 2736 - SIDEWALK EXTENSION

RECORD DECK PLAN

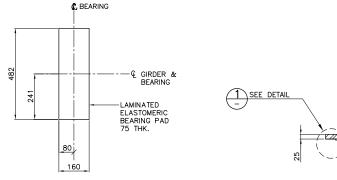
PARED UNDER THE DIRECTION OF		DESIG	NED RS DATE 12/12/10
		CHEC	KEDKH_ DATE 12/12/10
KEITH HOLME	ES	DRAW	N <u>EAG</u> DATE <u>12/12/10</u>
NEER OF RECORD		SCA	LE AS NOTED
		NEGA*	ΠVE No.
FILE No.	PROJECT No.	REG.	DRAWING No.
12469	12469-0002	1	2736-110 A



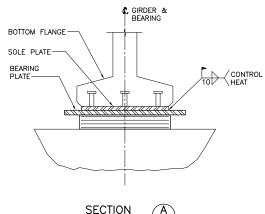




ABUTMENT BEARING PLATE DETAIL SCALE 1:20

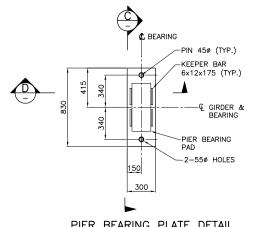


ABUTMENT BEARING PAD DETAIL SCALE 1:10

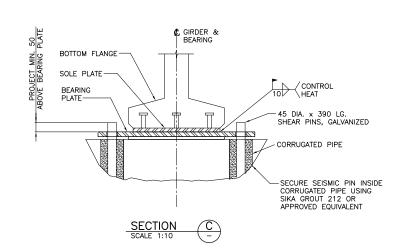


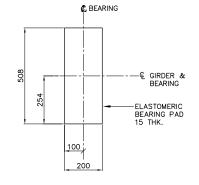


🕻 BEARING

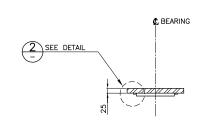


PIER BEARING PLATE DETAIL





PIER BEARING PAD DETAIL SCALE 1:10



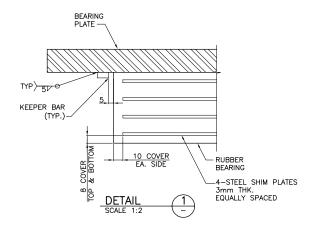
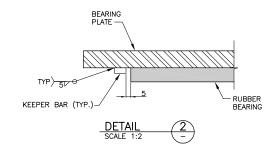


TABLE 113-1: GIRDER BEARING DATA								
LOCATION	TOTAL VERTICAL DEMAND PER BEARING (kN)					HORIZONTAL MOVEMENT	BEARING ROATION	
LOCATION	SLS			ULS			DEMAND (mm)	DEMAND (rad)
	DEAD	LIVE	TOTAL	DEAD	LIVE	TOTAL	(11111)	(100)
PIERS	170	70	240	200	130	330	0	0.005
ABUTMENTS	150	60	210	175	115	290	±21	

NOTE: POSITIVE REACTION REPRESENTS COMPRESSION



NOTES:

- 1. FOR GENERAL NOTES SEE DWG 2736-101.
- BEARING PADS SHALL CONFORM TO CAN/CSA-S6-06 AND SATISFY DEMANDS LISTED IN TABLE 113-1.





Ministry of Transportation And Infrastructure South Coast Region

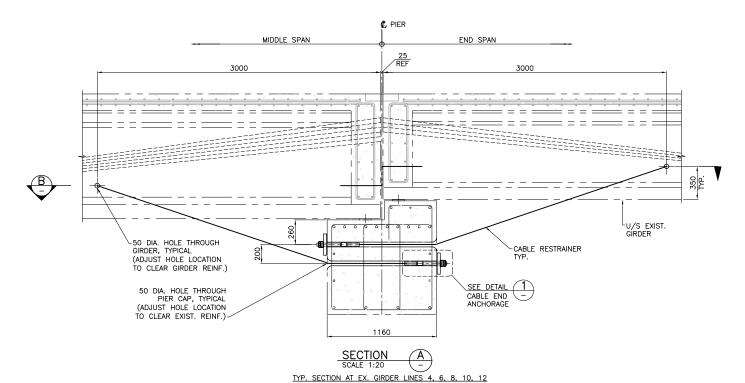
LOWER MAINLAND DISTRICT

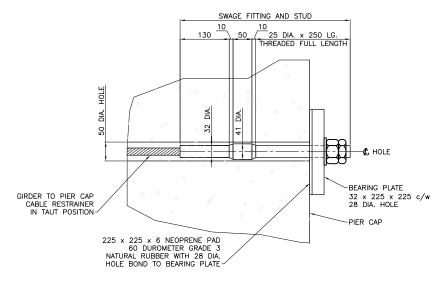
ABBOTSFORD - MISSION HIGHWAY No. 11 MISSION OVERHEAD No. 2736 - SIDEWALK EXTENSION

RECORD BEARING DETAILS EPARED UNDER THE DIRECTION OF DESIGNED RS DATE 12/12/10 CHECKED KH DATE 12/12/10 KEITH HOLMES EAG DATE 12/12/10 SCALE AS NOTED PROJECT No. 12469 12469-0002 2736-113 | A

C, ROADWAY & C, EX. GIRDER C, EX. GIRDER C, EX. GIRDER C, EX. GIRDER LINE 5 LINE 4 LINE 3 C EX. GIRDER C EX. GIRDER LINE 13 LINE 12 C. EX. GIRDER C. EX. GIRDER C. EX. GIRDER LINE 11 LINE 10 LINE 9 LINE 8 £ EX. GIRDER LINE 2 NEW DECK SLAB 6 SPACES @ 1660 = 9960 6 SPACES @ 1660 = 9960

CROSS SECTION OF MIDDLE SPAN AT PIER SCALE 1:50

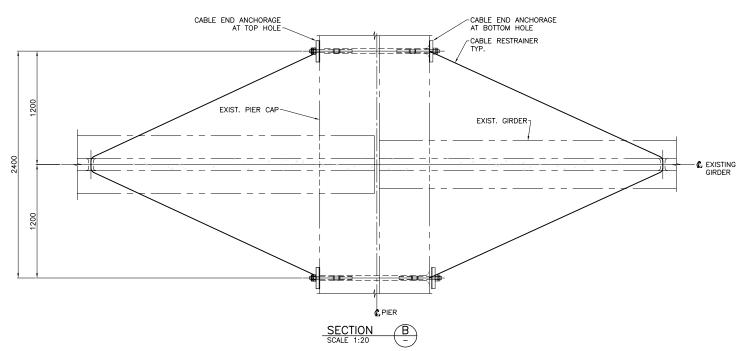




DETAIL SCALE 1:5 1 CABLE END ANCHORAGE

NOTES:

- 1. FOR GENERAL NOTES SEE DWG. 2736-101.
- 2. CABLE RESTRAINERS SHALL CONFORM TO ASTM STANDARD A-603
- CABLE RESTRAINERS TO BE 19 DIA. WIRE ROPE WITH MINIMUM BREAKING STRENGTH OF 275kN.
- ALL DRILLED HOLES TO BE ROUNDED SMOOTH TO 50 RADIUS AT ALL CABLE CONTACT AREAS.
- ALL CABLE RESTRAINERS AND ANCHORAGE COMPONENTS TO BE GALVANIZED. WHERE FIELD WELDING IS REQUIRED, GRIND OFF GALVANIZING AND TOUCH UP WITH GALVACON 6C-243 OR APPROVED EQUIVALENT.



THESE DRAWINGS ACCURATELY RECORD ALL THE SIGNIFICANT DESIGN CHANGES AS PROVIDED TO ME BY THE MINISTRY REPRESENTATIVE AND THE DESIGN AS REPRESENTED BY THESE RECORD DRAWINGS SUBSTANTIALLY CONFORMS DATE WITH THE DESIGN INTENT AND SOUND ENGINEERING PRACTICE.



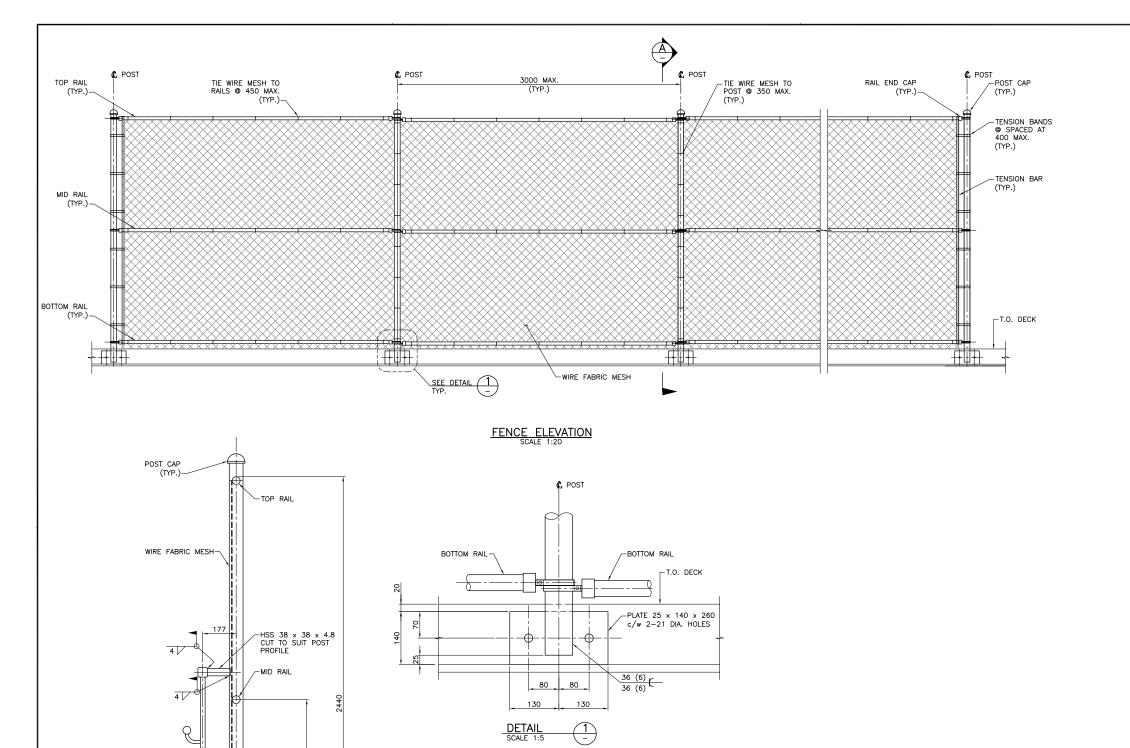
BRITISH COLUMBIA Ministry of Transportation And Infrastructure South Coast Region

LOWER MAINLAND DISTRICT

ABBOTSFORD - MISSION HIGHWAY No. 11 MISSION OVERHEAD No. 2736 - SIDEWALK EXTENSION

RECORD CABLE RESTRAINER DETAILS

PARED UNDER THE DIRECTION OF		DESIG	NED RS DATE 12/12/10
		CHEC	KED KH DATE 12/12/10
KEITH HOLMES			N <u>EAG</u> DATE <u>12/12/10</u>
NEER OF RECORD		SCA	LE AS NOTED
		NEGA	TIVE No.
FILE No.	PROJECT No.	REG.	DRAWING No.
12469	12469-0002	1	2736-114 A



STANDARD MoTI BICYCLE FENCE-

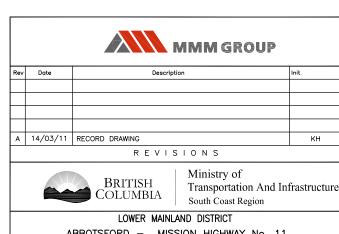
-воттом

T.O. DECK

RAIL

NOTES:

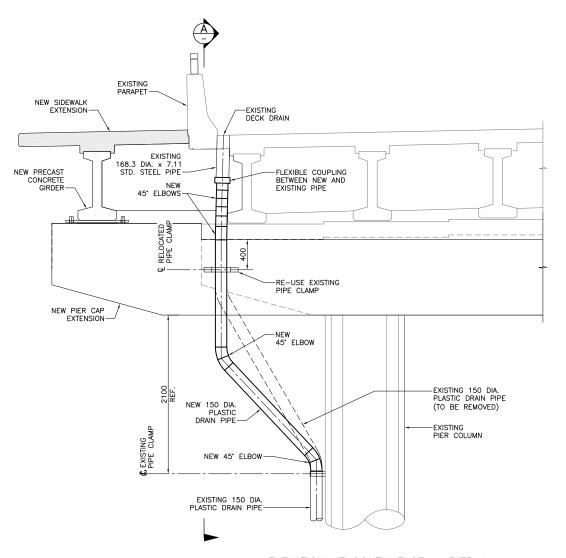
- 1. FOR GENERAL NOTES SEE DWG. 2736-101.
- 2. ALL MATERIALS AND CONSTRUCTION FOR THE RAILWAY PROTECTION FENCE SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, SECTION 316 AND SECTION 741.
- 3. ALL POSTS SHALL BE 73 O.D. ASTM STANDARD (SCHEDULE 40).
- 4. ALL RAILS SHALL BE 42.2 O.D. ASTM STANDARD (SCHEDULE 40).
- 5. WIRE FABRIC SHALL BE TYPE A SPECIAL WIRE FABRIC FENCE FOR USE ON RAILWAY RIGHT-OF-WAY WITH OPENINGS NOT LARGER THAN 50 \times 50.
- 6 ALL FENCING COMPONENTS AND ANCHORS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH CSA SPECIFICATION G164.

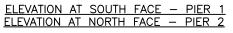


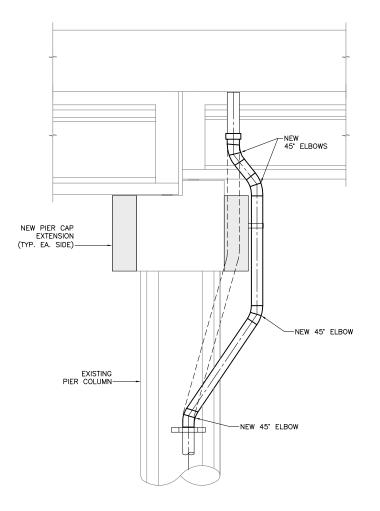
ABBOTSFORD - MISSION HIGHWAY No. 11

MISSION OVERHEAD No. 2736 - SIDEWALK EXTENSION

RECORD RAILWAY PROTECTION FENCE DETAILS REPARED UNDER THE DIRECTION OF DESIGNED ______ RS__ DATE 12/12/10 CHECKED KH DATE 12/12/10 KEITH HOLMES EAG DATE 12/12/10 SCALE AS NOTED PROJECT No. 2736-115 | A 12469 12469-0002







SECTION (A)

TYPICAL DECK DRAIN RELOCATION DETAIL
AT EAST SIDE OF EXISTING BRIDGE

NOTES:

1. FOR GENERAL NOTES SEE DWG. 2736-101.



Rev	Date	Description	Init			
Α	14/03/11	RECORD DRAWING	кн			
	·					

REVISIONS



Ministry of Transportation And Infrastructure South Coast Region

LOWER MAINLAND DISTRICT

ABBOTSFORD - MISSION HIGHWAY No. 11
MISSION OVERHEAD No. 2736 - SIDEWALK EXTENSION
RECORD DRAIN RELOCATION DETAILS