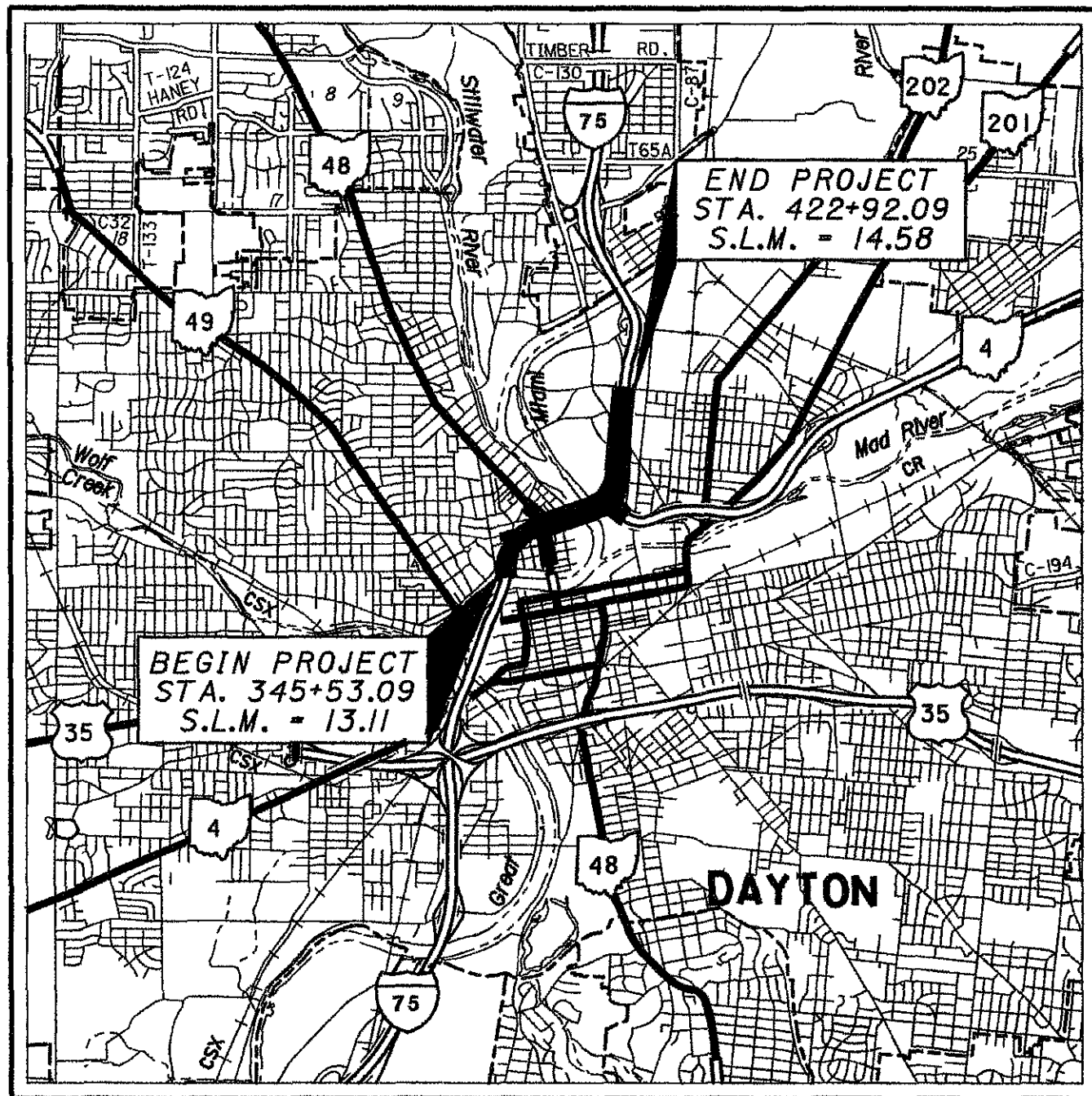


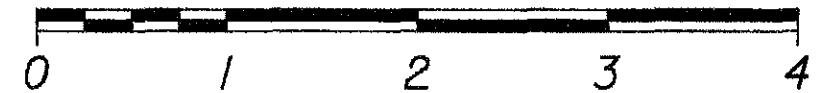
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
MOT-75-13.11
CITY OF DAYTON
MONTGOMERY COUNTY



LOCATION MAP

LATITUDE: N 39° 46' 15" LONGITUDE: W 84° 11' 30"

SCALE IN MILES



PORTION TO BE IMPROVED	—————
INTERSTATE & DIVIDED HIGHWAY	=====
UNDIVIDED STATE & FEDERAL ROUTES	—————
OTHER ROADS	—————

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA	= 75.56 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	= 34.33 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA	= 109.89 ACRES

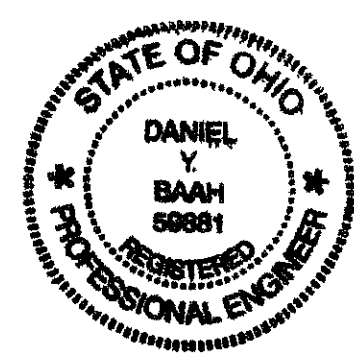
DESIGN DESIGNATION
(SEE SHEET 2)

DESIGN EXCEPTIONS
(SEE SHEET 2)

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:
CH2MHILL
ONE DAYTON CENTRE, SUITE 1100
ONE SOUTH MAIN STREET
DAYTON, OHIO 45402-1828
TEL: 937.228.4285
FAX: 937.228.7572

ENGINEERS SEAL:



SIGNED: *Daniel Y. Baah*
DATE: 3/22/07

TITLE SHEET	1	BIKEWAY PLAN	760-775
DESIGN DESIGNATION	2	RETAINING WALL AND NOISE BARRIER LAYOUT PLAN	776-790
SCHEMATIC PLAN AND BENCHMARKS	3-4	RETAINING WALLS (MSE WALLS AND SPL WALL)	791-966
HORIZONTAL AND VERTICAL CONTROL	5-6	TEMPORARY RETAINING WALLS	967-1002,1002A,1002B,1002C, 1003-1022,1022A,1023-1026
HORIZONTAL AND VERTICAL CONTROL	5-6	NOISE BARRIERS	1027-1045
INTERCHANGE GEOMETRIC LAYOUT	7-11	EXISTING UTILITY PROTECTION DETAILS	1046-1048
TYPICAL SECTIONS	12-47	SANITARY SEWER & WATER WORKS	1049-1083
GENERAL NOTES	48-57	INSERT SHEETS	1055A thru 1055K
ENVIRONMENTAL COMMITMENTS	52	SIGNING AND PAVEMENT MARKINGS	1084-1151A
MAINTENANCE OF TRAFFIC	58-60,60A,61-67,67B,67C,68-94,94A,96-105	TRAFFIC SIGNALS AND ITS	1152-1171
105A, 106,106A,107-113,113A,113B,114-134,134A,135-153,153A,154-180,182-222, 222A,223-240,242-246,255-262,262A,263-280,280A, 281-291,291A,291B,291C		TEMPORARY TRAFFIC SIGNALS	1172-1196
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GENERAL SUMMARY	292-299,299A	LIGHTING	1200-1235
REMOVAL SUBSUMMARY	300-309	STRUCTURES OVER 20 FEET	
SHEET NOT USED	310	EXISTING I-75 OVER GRAND AVENUE REMOVAL	
ROADWAY SUBSUMMARY	311-316	STRUCTURE NO. MOT-75-1330L&R	1236-1242
SHEETS NOT USED	317-318	NB I-75 TEMP WIDENING OVER MAIN STREET	
EROSION CONTROL SUBSUMMARY	319	STRUCTURE NO. MOT-75-1346R	1243-1262
DRAINAGE SUBSUMMARY	320-327	I-75 OVER MAIN ST.	
MISCELLANEOUS CALCULATIONS	328, 328A	STRUCTURE NO. MOT-75-1347	1263-1317
PROJECT SITE PLAN	329-330	RAMP E1 OVER MAIN STREET	
PLAN AND PROFILE (I-75)	331-341	STRUCTURE NO. MOT-75-1347E	1318-1347
PLAN AND PROFILE (RAMPS)	342-367	RAMP E1 OVER D5	
CROSS SECTIONS LAYOUT	368-370	STRUCTURE NO. MOT-75-1352	1348-1376,1376A,1377-1379
CROSS SECTIONS (I-75)	371-474	RAMPS D3 & E1 OVER RIVERSIDE DR.	
CROSS SECTIONS (RAMPS)	475-538	STRUCTURE NO. MOT-75-1366	1380-1409
PLAN AND PROFILE (MAIN STREET)	539-543	I-75 OVER GREAT MIAMI RIVER	
PLAN AND PROFILE (SIDE ROADS)	544-565	STRUCTURE NO. MOT-75-1367	1410-1419, 1419A, 1419B-1437, 1437A-1439, 1439A-1441, 1441A-1443, 1443A-1516
CROSS SECTIONS (MAIN STREET)	566-575	RAMPS D4 & E2 OVER GREAT MIAMI RIVER	
CROSS SECTIONS (SIDE ROADS)	576-586	STRUCTURE NO. MOT-75-1367W	1517-1523, 1523A-1528, 1528A, 1528B, 1528C-1594
SHEETS NOT USED	580-582	RAMP E2 OVER I-75; RAMPS E4-E5	
I-75 REMOVAL PLAN	587-601	STRUCTURE NO. MOT-75-1393	1595-1610A, 1610B-1634
EXISTING PAVEMENT REMOVAL PLAN	602-604	I-75 OVER RAMPS E4 & E5	
SHEETS NOT USED	605-611	STRUCTURE NO. MOT-75-1396	1635-1647A, 1647B, 1647C, 1648-1651A, 1652-1658, 1658A, 1658B-1669, 1669A-1670
INTERCHANGE GRADING PLAN	612-615	RAMP D4 OVER RAMP E5	
SUPERELEVATION TABLES	616-633	STRUCTURE NO. MOT-75-1401	1671-1701
RAMP PAVEMENT ELEVATION DETAILS	634-649	I-75 OVER KEOWEE ST.	
PAVEMENT JOINT DETAILS	650-653	STRUCTURE NO. MOT-75-1433	1702-1704A, 1705-1753
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UNDERDRAIN SUBSUMMARY/DETAILS	678-710, 710A, 710B, 710C, 710D, 710E	SOIL PROFILE/FOUNDATION INVESTIGATION	
STORM DRAINAGE LAYOUT	711-714		
STORM DRAINAGE PROFILES	715-746		
DETENTION BASIN	747		
DRAINAGE STRUCTURES DETAIL	748-759, 759A, 759B		

STANDARD CONSTRUCTION DRAWINGS
(SEE SHEET 2)

PROJECT DESCRIPTION

THE FIRST PHASE (PHASE 1A) OF A 3-PHASE RECONSTRUCTION OF THE I-75 DAYTON SUBCORRIDOR TO PROVIDE THREE CONTINUOUS THROUGH LANES; INCREASE SPACING BETWEEN RAMPS; AND REMOVE LEFT-HAND ENTRANCE AND EXIT RAMPS, WHILE MAINTAINING LOCAL ACCESS. THIS IMPROVEMENT INVOLVES UPGRADING OF APPROXIMATELY 1.52 MILES OF URBAN INTERSTATE INCLUDING RECONSTRUCTION OF I-75/SR-48 (MAIN STREET) AND I-75/SR-4 INTERCHANGES; CONSTRUCTION OF ELEVEN HIGHWAY BRIDGES; AND RECONSTRUCTION OF APPROXIMATELY 0.53 MILES OF SIDE ROADS.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2005 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS SHOWN ON SHEETS NO. 109-113, AND THAT THE PROVISIONS FOR MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE REVISED CODE OF OHIO, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED: *Thomas R. Achom*
DATE 3/26/07 CITY OF DAYTON, DEPARTMENT OF WATER, SANITARY, & CITY OWNED AND OPERATED STORM

APPROVED: *Rex Dickey, P.E., P.S./P.E.N*
DATE 3-27-07 DISTRICT DEPUTY DIRECTOR

APPROVED: *James A. Bandy, M.E.*
DATE 6-8-07 DIRECTOR, DEPARTMENT OF TRANSPORTATION

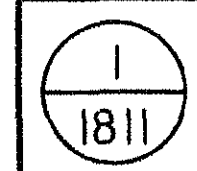
FEDERAL PROJECT NO.
E040793

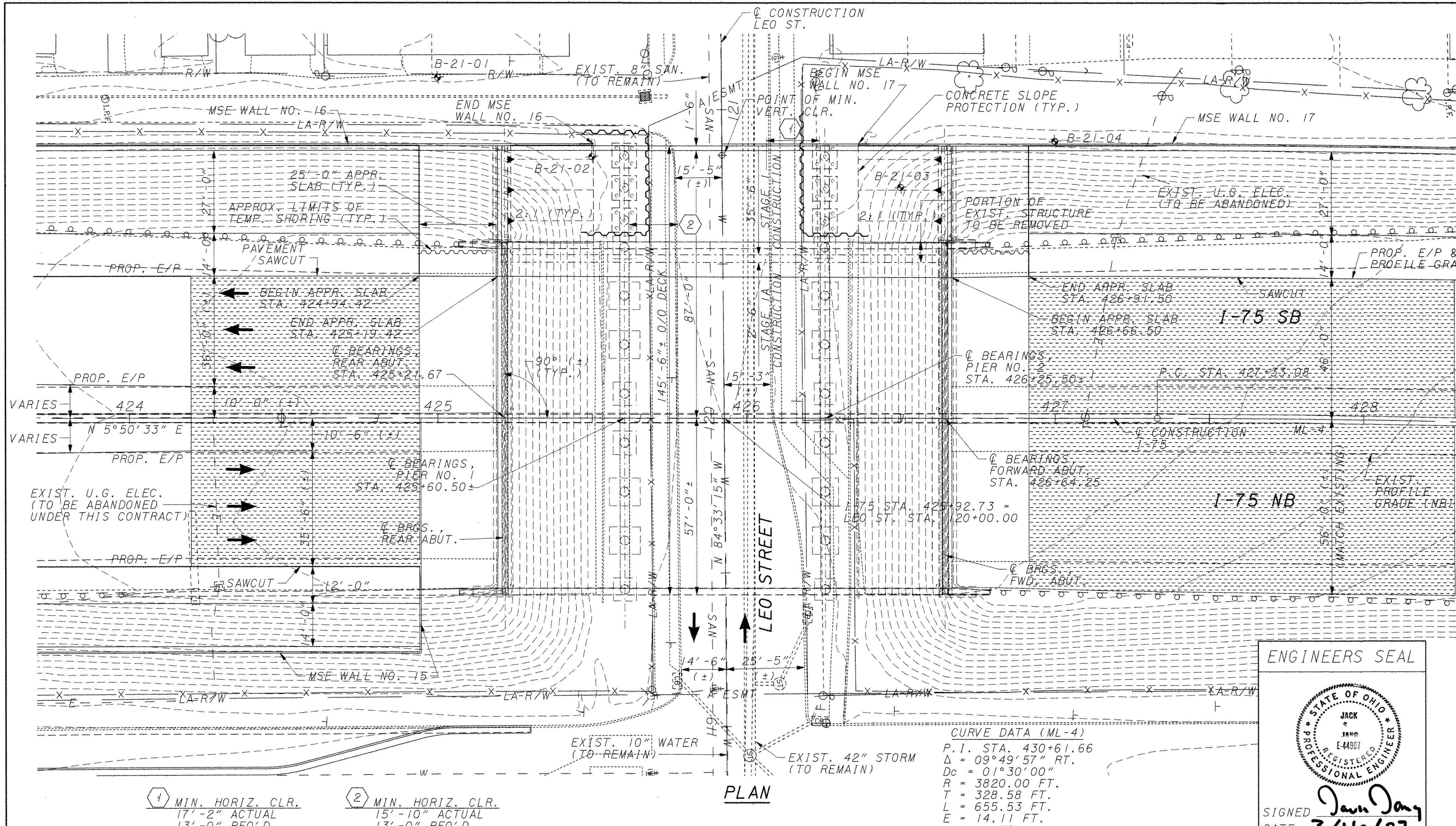
PID NO.
75927

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

MOT-75-13.11





BENCHMARKS

BM-36: CHISLED SQUARE, CONCRETE CURB AT CATCH BASIN - N.E. CORNER LEO ST. & HALL AVE. INTERSECTION ELEV. 746.86

BM-37: CHISLED SQUARE, N.E. CORNER CONCRETE CATCH BASIN - N.E. CORNER LEO ST. & HILLROSE AVE. INTERSECTION ELEV. 746.87

TRAFFIC DATA

CURRENT ADT (2005): 105,700
 DESIGN ADT (2025): 124,400
 CURRENT ADTT: 27,600
 DESIGN ADTT: 32,500

LEGEND:

◆ INDICATES BORING LOCATION

LB - LEFT BRIDGE E/P - EDGE OF PAVEMENT
 RB - RIGHT BRIDGE TOS - TOP OF SLOPE

NOTES:

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

EXISTING STRUCTURE

TYPE: 3-SPAN CONTINUOUS ROLLED BEAM BRIDGE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES

LENGTH OF SPAN: 38'-10", 65'-0", 38'-9"
 C/C BEARINGS, MEASURED ALONG Q CONSTRUCTION

ROADWAY: 53'-8" (±) TOE/TOE PARAPETS (LB)
 53'-8" (±) TOE/TOE PARAPETS (RB)

DESIGN LOADING: CF 2000

SKUEW ANGLE: NONE

WEARING SURFACE: 1" (±) MONOLITHIC CONCRETE WITH 1/2" (±) MSC OVERLAY

APPROACH SLABS: AS-1-54 (25'-0" (±) LONG)

ALIGNMENT: TANGENT

STRUCTURE FILE NUMBER: 5708613

DATE BUILT: 1959

DATE REHABILITATED: 1989

PROPOSED STRUCTURE

TYPE: 3-SPAN CONTINUOUS NON-COMPOSITE STEEL BEAMS (ASTM A 709 GR50, PAINTED) WITH REINFORCED CONCRETE DECK, CAP AND COLUMN PIERS, AND STUB ABUTMENTS

LENGTH OF SPAN: 38'-10", 65'-0", 38'-9"
 C/C BEARINGS, MEASURED ALONG Q CONSTRUCTION

ROADWAY: 85'-8" (±) TOE/TOE PARAPETS (LB)
 53'-8" (±) TOE/TOE PARAPETS (RB)

SIDEWALK: NONE

DESIGN LOADING: HS20 (CASE 1) AND THE ALTERNATE MILITARY LOADING FWS = 60 PSF

SKUEW ANGLE: NONE

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81 (25'-0" LONG)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

LATITUDE: N 39°46'58"

LONGITUDE: W 84°11'06"

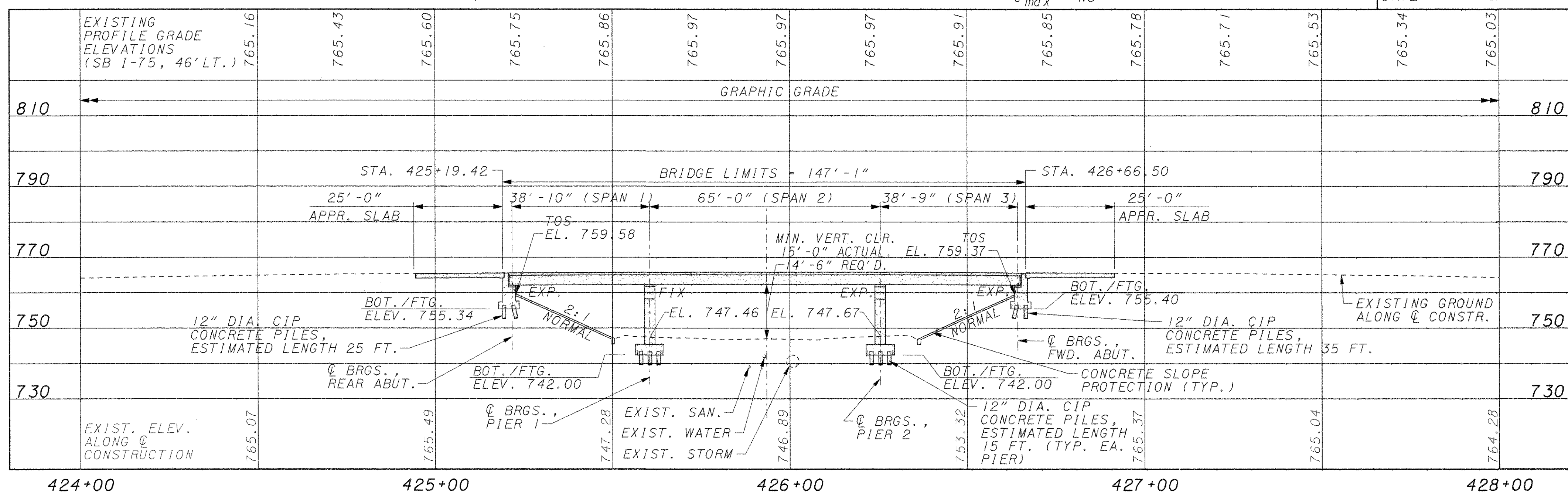
CURVE DATA (ML-4)

P.I. STA. 430+61.66
 $\Delta = 09^{\circ}49'57''$ RT.
 $D_c = 01^{\circ}30'00''$
 $R = 3820.00$ FT.
 $T = 328.58$ FT.
 $L = 655.53$ FT.
 $E = 14.11$ FT.
 $e_{max} = NC$

ENGINEERS SEAL

STATE OF OHIO
 JACK
 E-44907
 REGISTERED PROFESSIONAL ENGINEER

SIGNED: *Jack Jack*
 DATE: 3/16/07



PROFILE ALONG SB PROFILE GRADE LINE, I-75

NOTE: FOR UTILITY DISPOSITIONS, SEE PLAN VIEW.

DESIGN AGENCY: COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43261 TEL: 614-228-3500

DATE: 02/06
 TT: STRUCTURE FILE NUMBER: 5708613

DRAWN: MME
 CHECKED: J.J.

DESIGNED: SKT
 CHECKED: J.J.

MONTGOMERY COUNTY
 STA. 425+19.42 TO STA. 426+66.50

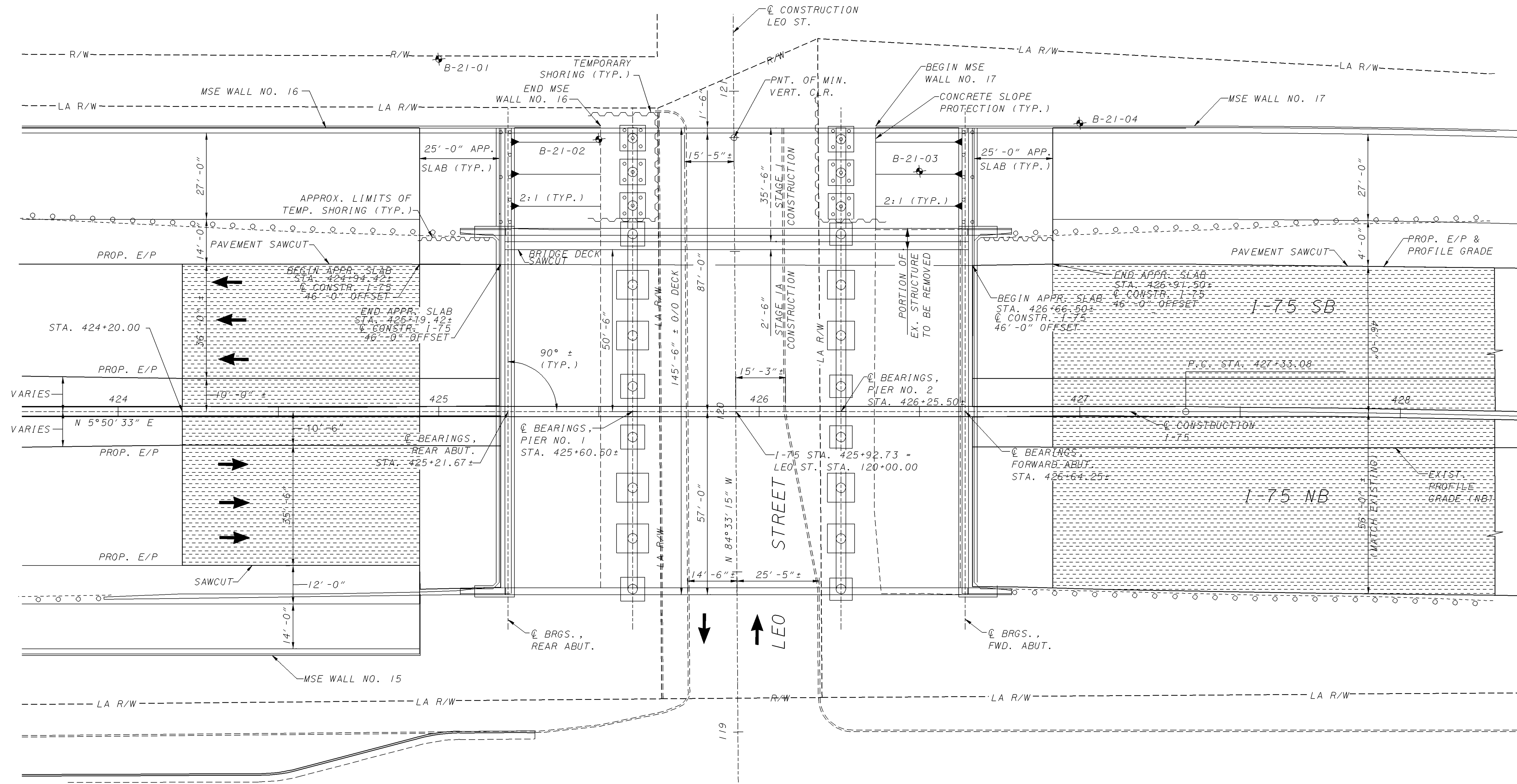
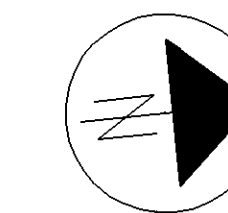
S I T E P L A N

BRIDGE NO. MOT-75-1462
 I-75 MAINLINE OVER LEO STREET

MOT-75-13.11

1 / 20

1754
 1811



GENERAL PLAN

DESIGN AGENCY:
COLUMBUS ENGINEERING
CONSULTANTS, INC.
840 MICHIGAN AVENUE, COLUMBUS, OH 43215
TEL: 614/228-3500

DATE	REVIEWED	DRAWN	DESIGNED
06/06 <td>TH <td>MME <td>SKT</td> </td></td>	TH <td>MME <td>SKT</td> </td>	MME <td>SKT</td>	SKT
	STRUCTURE FILE NUMBER	REVISED	CHECKED
	5708613	JJ	JJ

GENERAL PLAN
BRIDGE NO. MOT-75-1462
I-75 MAINLINE OVER LEO STREET

MOT-75-13.11
PID 75927

GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81 REVISED 07-19-02
 GSD-1-96 REVISED 07-19-02
 PCB-91 REVISED 07-19-02
 SBR-1-99 REVISED 07-19-02

AND TO SUPPLEMENTAL SPECIFICATIONS:

885 DATED 11-04-05
 898 DATED 07-16-04

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, 2002, AND THE O.D.O.T BRIDGE DESIGN MANUAL.

DESIGN LOADING:

HS20-44 CASE I, AND THE ALTERNATE MILITARY LOADING. FUTURE WEARING SURFACE (FWS) OF 60 PSF.

DESIGN STRESSES:

CONCRETE CLASS OSC2 - COMPRESSIVE STRENGTH 4500 P.S.I. (SUPERSTRUCTURE)
 CONCRETE CLASS OSC1 - COMPRESSIVE STRENGTH 4000 P.S.I. (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615, OR A996
 GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.
 SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615.

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50,000 P.S.I.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
 2-1/2" CONCRETE COVER
 SEALING OF CONCRETE SURFACES

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

ITEM 202, PORTION OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING PARAPETS, RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAMS TYPE OF EQUIPMENT IS PROHIBITED. SEE STAGE CONSTRUCTION DETAILS SHOWN ON SHEETS 6/20 & 7/20.

THE EXISTING I-75 BRIDGE OVER LEO STREET SUPPORTS INACTIVE GREATER DAYTON RTA OVERHEAD ELECTRIC TROLLEY LINES OVER THE WESTBOUND LANES. THE GREATER DAYTON RTA SHALL BE CONTACTED 30 DAYS PRIOR TO COMMENCING DEMOLITION ACTIVITIES ON THE BRIDGE, AND AGAIN WHEN ALL PROPOSED WORK ON THE BRIDGE, INCLUDING PAINTING, IS SUBSTANTIALLY COMPLETE. REMOVAL AND RE-ERECTION OF THE RTA OVERHEAD ELECTRIC TROLLEY LINES WILL BE PERFORMED BY THE RTA CONTRACTOR.

RTA CONTACT: RANDY FOGLE
 GENERAL DAYTON REGIONAL TRANSIT AUTHORITY
 ELECTRICAL DISTRIBUTION MANAGER
 OFFICE: 937-425-8531
 CELL: 937-478-6303
 FAX: 937-425-8681

SUBSTRUCTURE CONCRETE REMOVAL:

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SEE STAGE CONSTRUCTION DETAILS SHOWN ON SHEETS 6/20 & 7/20.

PROTECTION OF TRAFFIC:

PRIOR TO DEMOLITION OF ANY PORTIONS OF THE EXISTING SUPERSTRUCTURE, SUBMIT PLANS FOR THE PROTECTION OF TRAFFIC (VEHICULAR & PEDESTRIAN) ADJACENT TO AND/OR UNDER THE STRUCTURE TO THE DIRECTOR AT LEAST 30 DAYS BEFORE CONSTRUCTION BEGINS. THESE PLANS SHALL INCLUDE PROVISIONS FOR ANY DEVICES AND STRUCTURES THAT MAY BE NECESSARY TO INSURE SUCH PROTECTION. MAINTAIN THE TEMPORARY VERTICAL CLEARANCES SPECIFIED ON THE PLANS OR IN THE PROPOSAL AT ALL TIMES EXCEPT AS OTHERWISE APPROVED BY THE DIRECTOR. ALL COSTS ASSOCIATED WITH THIS TRAFFIC PROTECTION WILL BE INCLUDED WITH ITEM 202 FOR PAYMENT.

ITEM 503, COFFERDAMS, CRIBS, AND SHEETING:

THIS WORK SHALL CONSIST OF THE TEMPORARY SHORING REQUIRED TO SUPPORT EXCAVATIONS FOR THE PROPOSED PIER FOOTINGS.

ITEM 503, COFFERDAMS, CRIBS, AND SHEETING, AS PER PLAN:

THIS WORK SHALL CONSIST OF TEMPORARY SHEET PILING AT THE ABUTMENT STAGE CONSTRUCTION JOINTS. THE WORK SHALL BE IN ACCORDANCE WITH ITEM 503, EXCEPT THAT STEEL SHEET PILING SATISFYING THE MINIMUM SECTION AND MATERIAL PROPERTIES LISTED BELOW SHALL BE USED.

MINIMUM SECTION MODULUS: 45.7 IN³ FT.
 MINIMUM MOMENT OF INERTIA: 382.6 IN⁴ FT.
 STRUCTURAL STEEL: A709
 MINIMUM YIELD STRENGTH: 50,000 PSI
 MINIMUM EMBEDMENT LENGTH: 16 FT.
 MAXIMUM HEIGHT OF RETAINED FILL: 10.5 FT.

ITEM 507, 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN:

THE CONTRACTOR HAS THE OPTION OF DRIVING ABUTMENT PILES BEFORE OR AFTER THE MSE ABUTMENT RETAINING WALLS ARE CONSTRUCTED.

IF PILES ARE DRIVEN BEFORE MSE WALLS ARE CONSTRUCTED, PREPARE MSE WALL SUBGRADE PRIOR TO DRIVING PILES. DRIVE PILES TO REQUIRED ULTIMATE BEARING VALUES. ALL PILE SPLICES MUST BE INSPECTED AFTER BEING DRIVEN A MINIMUM OF 150 BLOWS, AS SPECIFIED IN CMS 507.09. DO NOT SPLICE ADDITIONAL PILE LENGTH AFTER DRIVING HAS BEEN COMPLETED. INSTALL SLEEVES CENTERED ON DRIVEN PILES AND THEN CONSTRUCT MSE WALLS. AFTER MSE WALLS HAVE BEEN CONSTRUCTED TO BOTTOM OF ABUTMENT FOOTING ELEVATION AND MONITORED SETTLEMENT RATES SATISFY THE REQUIREMENTS GIVEN IN THE MSE WALL PLANS ON SHEET 793 OF 1811, RESTRIKE ALL PILES WITH 20 BLOWS OF THE HAMMER OR UNTIL THE PILE IS DRIVEN TWO INCHES, WHICHEVER OCCURS FIRST. USE THE SAME PILE HAMMER AND FUEL SETTING (IF APPLICABLE) AS UTILIZED FOR INITIAL DRIVING. RESTRIKES REQUIRED BY THIS NOTE SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED FOR PAYMENT WITH ITEM 507, 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN.

IF PILES ARE DRIVEN AFTER MSE WALLS ARE CONSTRUCTED, MONITORED SETTLEMENT RATES MUST SATISFY THE REQUIREMENTS GIVEN IN THE MSE WALL PLANS ON SHEET 793 OF 1811 PRIOR TO DRIVING PILES. DISTRICT 7 HAS REVISED THE RECOMMENDED ALLOWANCE FOR PILE SPLICES TO 10% OF THE TOTAL NUMBER OF PILES.

ITEM 507, PILING MISC.: PILE SPLICES FOR 12" CAST-IN-PLACE REINFORCED CONCRETE PILES:

AN ALLOWANCE FOR PILE SPLICES HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES TO LENGTHEN PILES BEYOND THE ORDER LENGTH SHOWN ON THE PLANS, FOR USE WHERE NECESSARY AND AS DIRECTED BY THE ENGINEER. CONSTRUCT PILE SPICES ACCORDING TO CMS 507.09. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE PER EACH PILE SPLICE. THE DEPARTMENT WILL NOT PAY FOR PILES SPLICES MADE WITHIN THE PILE ORDER LENGTHS SHOWN ON THE PLANS.

ITEM 509, REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN:

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE.

REPLACE ALL EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED ACCEPTABLE TO THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

ITEM 510, DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN:

DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE DOWEL HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, THE DOWEL HOLE SHALL BE MOVED TO EITHER SIDE OF THE EXISTING BAR.

ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

THE FINISH COAT COLOR FOR THE PIERS, ABUTMENTS, AND PARAPETS SHALL BE TAN, MEETING NO. FS-595B-33690.

ITEM 885, SURFACE PREPARATION OF EXISTING STEEL, WITH WARRANTY:

ALL EXISTING STRUCTURAL STEEL SHALL BE PREPARED FOR PAINTING AND PAINTED UNDER THE APPROPRIATE 885 ITEMS.

ITEM 885, FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, WITH WARRANTY:

THE FINISH COAT COLOR FOR THE EXTERIOR WEB FACES AND BOTTOM FLANGES OF THE FASCIA BEAMS SHALL BE BROWNISH RED, MEETING NO. FS-595B-12160. THE FINISH COAT COLOR FOR THE INTERIOR WEB FACES OF THE FASCIA BEAMS AND ALL INTERIOR FRAMING SHALL BE TAN, MEETING NO. FS-595B-13690.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 86 TONS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 65 TONS PER PILE FOR THE PIER PILES.

REAR ABUTMENT PILES (12" DIA. CIP CONCRETE PILES):
 8 PILES 30 FEET LONG, ORDER LENGTH
 1 DYNAMIC LOAD TESTING ITEMS

FORWARD ABUTMENT PILES (12" DIA. CIP CONCRETE PILES):
 8 PILES 40 FEET LONG, ORDER LENGTH

PIERS 1 & 2 PIER PILES (12" DIA. CIP CONCRETE PILES):
 30 PILES 20 FEET LONG, ORDER LENGTH

BATTERED PILES:

THE BLOW COUNT FOR BATTERED PILES SHALL BE THE BLOW COUNT DETERMINED FOR VERTICAL PILES OF THE SAME ULTIMATE BEARING VALUE DIVIDED BY EFFICIENCY FACTOR (D). COMPUTE THE EFFICIENCY FACTOR (D) AS FOLLOWS:

$$D = \frac{1-UG}{\sqrt{1+G^2}}$$

U = COEFFICIENT OF FRICTION, WHICH IS ESTIMATED AT 0.05 FOR DOUBLE-ACTING AIR OPERATED OR DIESEL HAMMERS; 0.1 FOR SINGLE-ACTING AIR OPERATED OR DIESEL HAMMERS; AND 0.2 FOR DROP HAMMERS.
 G = RATE OF BATTER (1/3, 1/4, ETC.)

UTILITY LINES:

THE UTILITY SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

DESIGN AGENCY COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/428-3500	DATE 06/06	REVIEWED TH	DRAWN CEC	DESIGNED JJ	STRUCTURE FILE NUMBER 5708613	REVISOR PFJ	GENERAL NOTES BRIDGE NO. MOT-75-1462 I-75 MAINLINE OVER LEO STREET	MOT-75-13.11 PID 75927
3 / 20								
1756 1811								

GENERAL NOTES (CONTINUED)

EXISTING STRUCTURE PLANS:

PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 7 OFFICES, 1001 ST. MARYS AVENUE, SIDNEY, OH 45365 (PHONE: 937-492-1141)

PILE DRIVING CONSTRAINTS:

PRIOR TO DRIVING ABUTMENT PILES, CONSTRUCT THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS UP TO THE LEVEL OF THE SUBGRADE ELEVATIONS FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. AT THE ABUTMENTS, CONSTRUCT THE NEW EMBANKMENT AND MSE RETAINING WALLS UP TO THE BOTTOM OF ABUTMENT FOOTING ELEVATIONS PRIOR TO PREBORING HOLES THROUGH THE NEW EMBANKMENT AND INSTALLING PILES THROUGH THE MSE WALL PILE SLEEVES OR PREBORED HOLES.

ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLABS, T=15"), AS PER PLAN:

FURNISH APPROACH SLABS CONFORMING TO CMS 526 EXCEPT CONCRETE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 898, QA/QC CONCRETE, CLASS QSC2. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, PARAPETS, REINFORCING STEEL, JOINT FILLERS, JOINT SEALERS, JOINT SEALS, WATERPROOFING, AND SEALING OF APPROACH SLAB PARAPET CONCRETE SURFACES. THE DEPARTMENT WILL MEASURE APPROACH SLABS BY THE NUMBER OF SQUARE YARDS. THE DEPARTMENT WILL INITIALLY PAY THE FULL BID PRICE TO THE CONTRACTOR UPON COMPLETING THE WORK. THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS. PARAPETS ON THE APPROACH SLABS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS SHOWN ON SHEETS [9/20]. SAWCUTTING AND PARTIAL REMOVAL OF THE EXISTING APPROACH SLABS SHALL BE INCLUDED FOR PAYMENT UNDER THIS ITEM.

ITEM 898-QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN:

THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

DESIGN AGENCY
COLUMBUS ENGINEERING
CONSULTANTS, INC.
840 MICHIGAN AVENUE, COLUMBUS, OH 43215
TEL: 614/228-3500

DATE
06/06
REVISED
TH
STRUCTURE FILE NUMBER
5708613

DRAWN
CEC
REVISOR
CHECKED
JJ
PFJ

GENERAL NOTES
BRIDGE NO. MOT-75-1462
I-75 MAINLINE OVER LEO STREET

MOT-75-13.11
PID 75927

3A / 20

1756A
1811

COMPUTED BY : PFJ DATE: 06/06
 CHECKED BY : JJ DATE : 06/06

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIER	SUPER	GEN	AS PER PLAN SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	3
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING				LUMP	
503	11101	LUMP		COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN				LUMP	3
503	21100	365	CU. YD.	UNCLASSIFIED EXCAVATION	237	128			
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00501	930	FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	480	450			3
507	00550	1160	FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	560	600			
507	92200	128	FT.	PREBORED HOLES	128				
507	98010	5	EACH	PILING, MISC.: PILE SPLICES FOR 12" CAST-IN-PLACE REINFORCED CONCRETE PILES	2	3			
509	10000	64673	POUND	EPOXY COATED REINFORCING STEEL	7507	19848	37318		
509	20001	1000	POUND	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	300		700		3
510	10001	32	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	32				3
512	10100	372	SO. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	52	133	187		
512	10300	64	SO. YD.	SEALING OF CONCRETE BRIDGE DECKS WITH HMWM RESIN			64		
512	33000	8	SO. YD.	TYPE 2 WATERPROOFING	8				
513	10060	LUMP		STRUCTURAL STEEL MEMBERS, LEVEL 3			LUMP		
516	13600	4	SO. FT.	1" PREFORMED EXPANSION JOINT FILLER	4				
516	13900	57	SO. FT.	2" PREFORMED EXPANSION JOINT FILLER	57				
516	31000	64	FT.	JOINT SEALER	64				
516	46900	12	EACH	BEARING DEVICE, MISC: LOW-PROFILE EXPANSION BEARING	8	4			
516	46900	4	EACH	BEARING DEVICE, MISC: LOW-PROFILE FIXED BEARING		4			
518	21230	LUMP		POROUS BACKFILL WITH FILTER FABRIC	LUMP				
518	40000	56	FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	56				
518	40010	8	FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	8				
523	20000	1	EACH	DYNAMIC LOAD TESTING				1	
601	21000	176	SO. YD.	CONCRETE SLOPE PROTECTION				176	
885	00100	LUMP		SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, WITH WARRANTY			LUMP		
885	00200	LUMP		FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, WITH WARRANTY			LUMP		
885	00300	LUMP		FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, WITH WARRANTY			LUMP		
885	00400	LUMP		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, WITH WARRANTY			LUMP		
898	10201	152	CU. YD.	QC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			152		3
898	11000	23	CU. YD.	QC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (PARAPET)			23		
898	10705	236	SO. YD.	QC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (APPROACH SLAB), T=15", AS PER PLAN				236	3
898	20100	43	CU. YD.	QC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		43			
898	20160	77	CU. YD.	QC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING)	77				
898	20300	43	CU. YD.	QC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (FOOTING)		43			

DESIGN AGENCY:
 COLUMBUS ENGINEERING
 CONSULTANTS, INC.
 840 MICHIGAN AVENUE, COLUMBUS, OH 43215
 TEL: 614/228-3500

DATE: 06/06
 TH
 STRUCTURE FILE NUMBER: 5708613

DESIGNED: JJ
 CHECKED: PFJ

ESTIMATED QUANTITIES
 BRIDGE NO. MOT-75-1462
 I-75 MAINLINE OVER LEO STREET

MOT-75-13.11
 PID 75927

PROPOSED WORK:

IN GENERAL, THE PROPOSED WORK SHALL CONSIST OF THE REMOVAL OF A PORTION OF THE EXISTING SOUTHBOUND I-75 BRIDGE OVER LEO STREET AND THE CONSTRUCTION OF THE PROPOSED WIDENED SOUTHBOUND BRIDGE IN STAGES, AND THE PAINTING OF ALL NEW AND EXISTING STRUCTURAL STEEL. REMOVAL AND CONSTRUCTION OPERATIONS ARE TO BE PERFORMED WHILE MAINTAINING TWO-WAY, SIX LANE TRAFFIC ON I-75. THE MAJOR ITEMS OF WORK REQUIRING STAGED CONSTRUCTION ARE DESCRIBED BELOW. SOME PROJECT WORK ITEMS, SUCH AS SEALING OF CONCRETE SURFACES, MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION DURING THE CONTRACT SCHEDULE PERIOD; HOWEVER, THE PERFORMANCE OF ALL WORK MUST BE COORDINATED TO SATISFY MAINTENANCE OF TRAFFIC AND SAFETY REQUIREMENTS. SEE M.O.T. PLANS FOR ADDITIONAL MAINTENANCE OF TRAFFIC REQUIREMENTS.

STAGE I CONSTRUCTION:

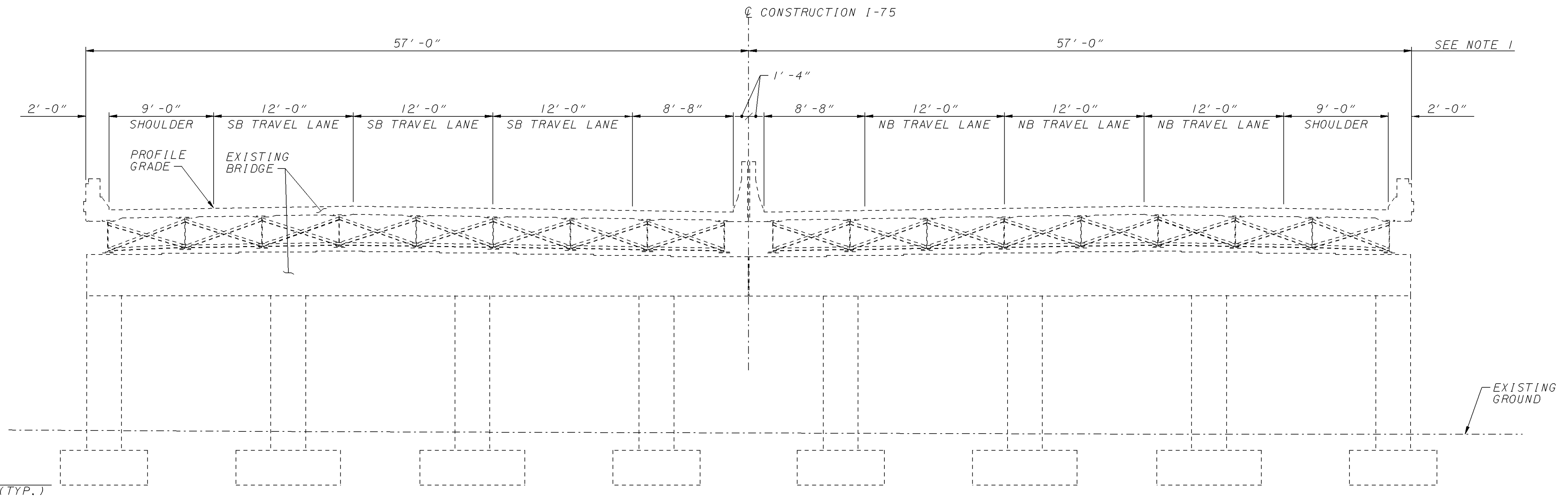
1. INSTALL PORTABLE CONCRETE BARRIER ON SOUTHBOUND BRIDGE AND APPROACHES ACCORDING TO MAINTENANCE OF TRAFFIC PLANS. ROUTE SOUTHBOUND I-75 TRAFFIC ACROSS EXISTING SOUTHBOUND BRIDGE.
2. PARTIALLY REMOVE THE EXISTING SOUTHBOUND I-75 BRIDGE AS SHOWN ON PLANS.
3. CONSTRUCT TEMPORARY SHORING THROUGH SHOULDERS BEHIND EXISTING WINGWALLS AS SHOWN ON PLANS.
4. CONSTRUCT THE WIDENED LEFT APPROACH EMBANKMENTS, INCLUDING THE LEFT REAR (MSE WALL NO. 16) AND LEFT FORWARD (MSE WALL NO. 17) RETAINING WALLS, WITH SLEEVES THROUGH MSE BACKFILL AT SPECIFIED ABUTMENT PILE LOCATIONS.
5. PREDRILL HOLES THROUGH NEW EMBANKMENT AND DRIVE ABUTMENT PILES.
6. CONSTRUCT WIDENED SOUTHBOUND BRIDGE ABUTMENT SECTIONS.
7. ROUTE TRAFFIC ON LEO STREET ACCORDING TO MAINTENANCE OF TRAFFIC PLANS. CONSTRUCT TEMPORARY SHORING AT PIERS AND WIDENED SOUTHBOUND BRIDGE PIER SECTIONS.
8. ERECT 4 LEFT STRUCTURAL STEEL BEAMS AND ALL CROSSFRAMES.
9. RELEASE EXISTING CROSSFRAMES IN EXTERIOR BAY BENEATH DECK CLOSURE POUR.
10. CONSTRUCT STAGE I WIDENED REINFORCED CONCRETE DECK, PARAPET, AND APPROACH SLAB SECTIONS.

STAGE IA CONSTRUCTION:

1. RECONNECT EXISTING CROSSFRAMES IN EXTERIOR BAY AND CONSTRUCT THE STAGE IA BRIDGE REINFORCED CONCRETE DECK CLOSURE POUR.

REMAINING CONSTRUCTION:

1. RELOCATE PORTABLE CONCRETE BARRIER AND ROUTE NORTHBOUND AND SOUTHBOUND TRAFFIC ONTO COMPLETED WIDENED SOUTHBOUND AND EXISTING NORTHBOUND BRIDGES AS SHOWN ON MAINTENANCE OF TRAFFIC PLANS, AS PROPOSED APPROACH ROADWAY CONSTRUCTION IS COMPLETED IN PHASES.
2. REMOVE PORTABLE CONCRETE BARRIER ACCORDING TO MAINTENANCE OF TRAFFIC PLANS AND ROUTE FINAL I-75 TRAFFIC ONTO WIDENED SOUTHBOUND AND EXISTING NORTHBOUND BRIDGES.
3. COMPLETE REMAINING WORK, SUCH AS SEALING OF CONCRETE SURFACES AND STRUCTURAL STEEL PAINTING, AS APPLICABLE.



EXISTING BOT/FTG
ELEV. 742.42 (±) (TYP.)

EXISTING CONDITION

NOTES:

1. ALL EXISTING DIMENSIONS ARE ±.

STAGE CONSTRUCTION DETAILS - I
BRIDGE NO. MOT-75-1462
I-75 MAINLINE OVER LEO STREET

MOT-75-13.11
PID 75927

5 / 20

1758
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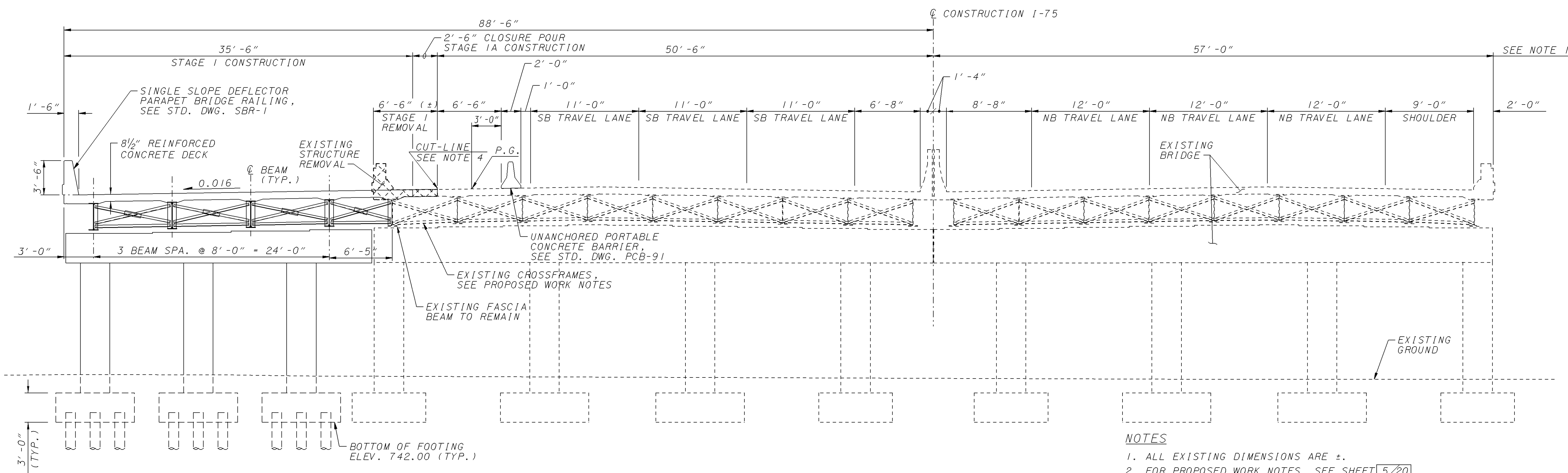
DESIGNED
SKT
CHECKED
J. J.

DRAWN
SKT
REVISED

REVIEWED
TH
STRUCTURE FILE NUMBER
5708613

DATE
06/06

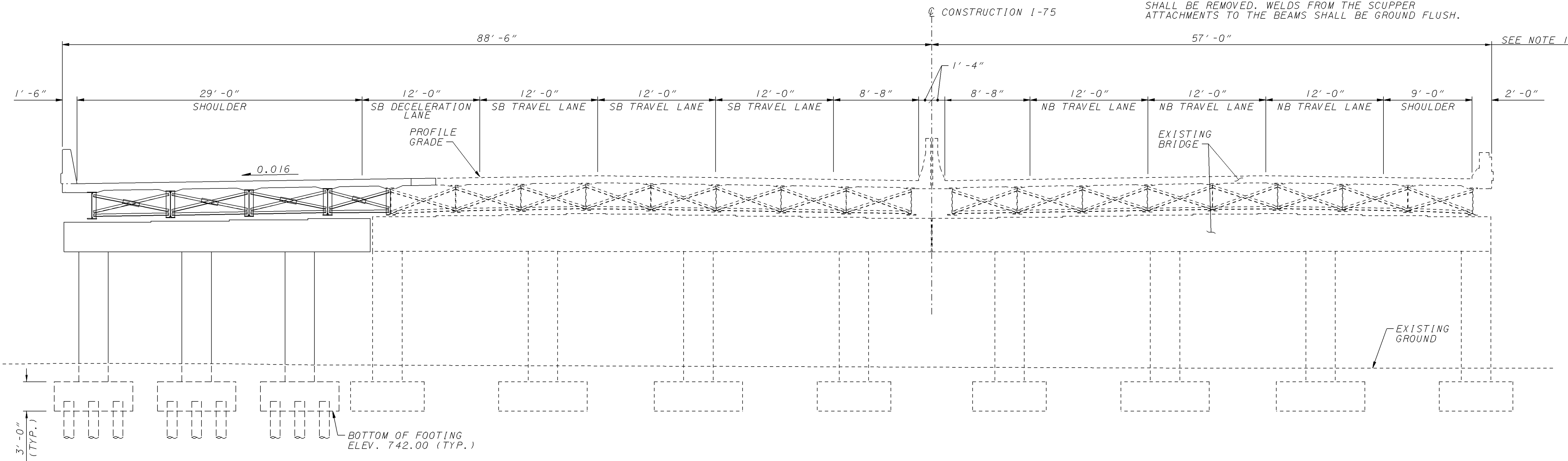
DESIGN AGENCY
COLUMBUS ENGINEERING
CONSULTANTS, INC.
890 MICHIGAN AVE., COLUMBUS, OH 43226
TELEPHONE 614-228-3500



STAGE I AND IA CONSTRUCTION

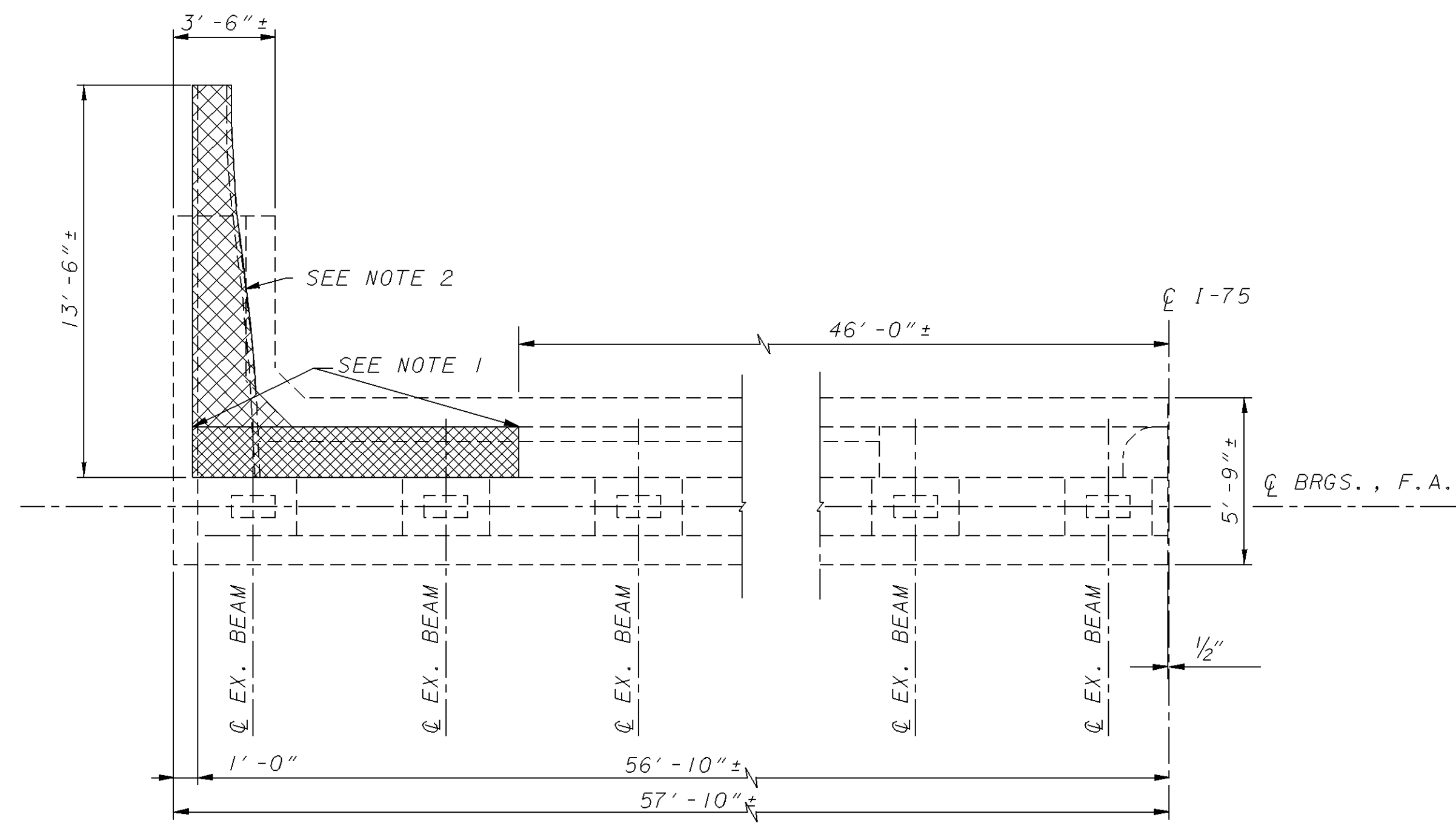
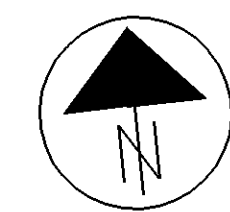
ABBREVIATIONS:
P.G. - PROFILE GRADE

- NOTES**
1. ALL EXISTING DIMENSIONS ARE ±.
 2. FOR PROPOSED WORK NOTES, SEE SHEET 5/20.
 3. PCB IS INCLUDED WITH ITEM 622 IN MOT PLANS FOR PAYMENT.
 4. SEE SHEET 12/20 FOR FURTHER DETAILS.
 5. THE EXPANSION JOINT CUT LINE AND THE DECK CUT LINE ARE NOT AT THE SAME LOCATION. SEE EXPANSION JOINT CUT LINE ON SHEET 18/20.
 6. THE EXISTING SCUPPERS AND SCUPPER ATTACHMENTS SHALL BE REMOVED. WELDS FROM THE SCUPPER ATTACHMENTS TO THE BEAMS SHALL BE GROUND FLUSH.

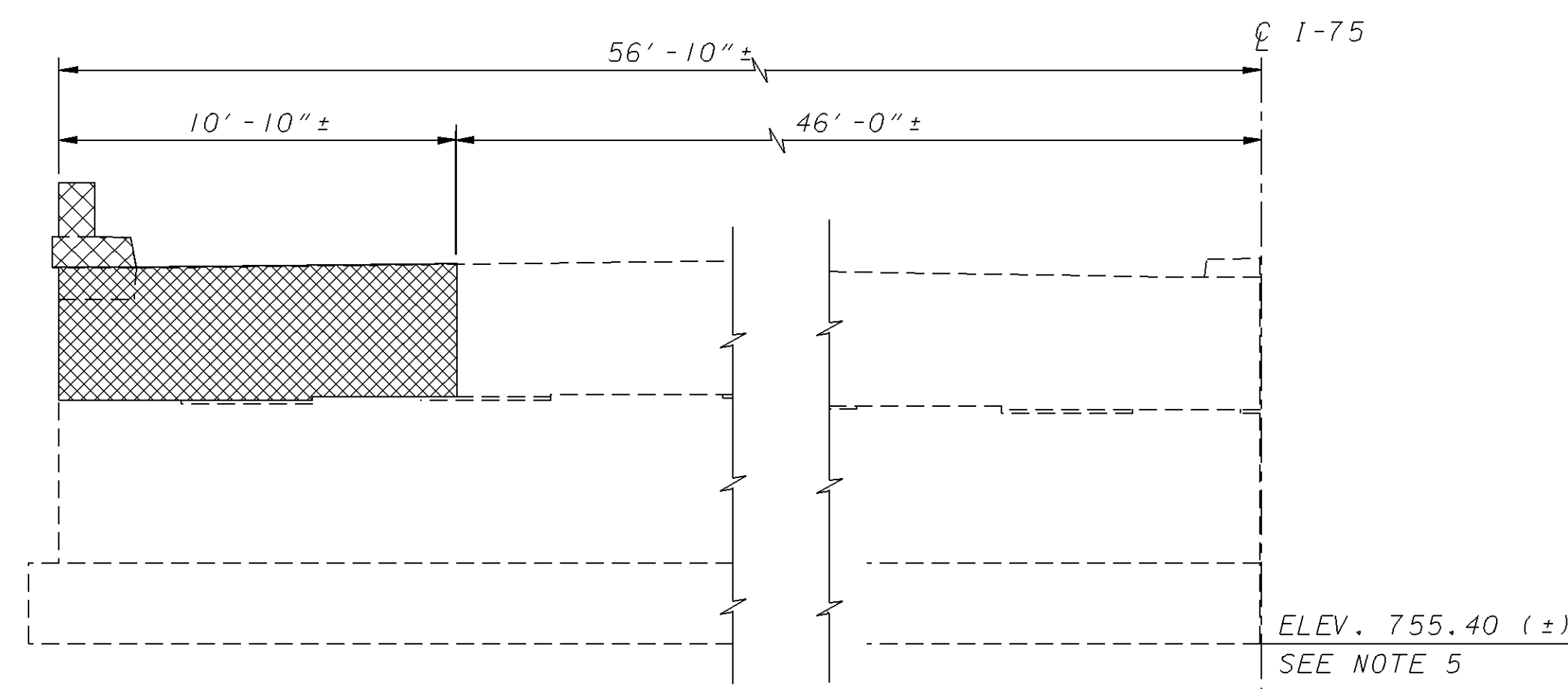


ULTIMATE CONDITION

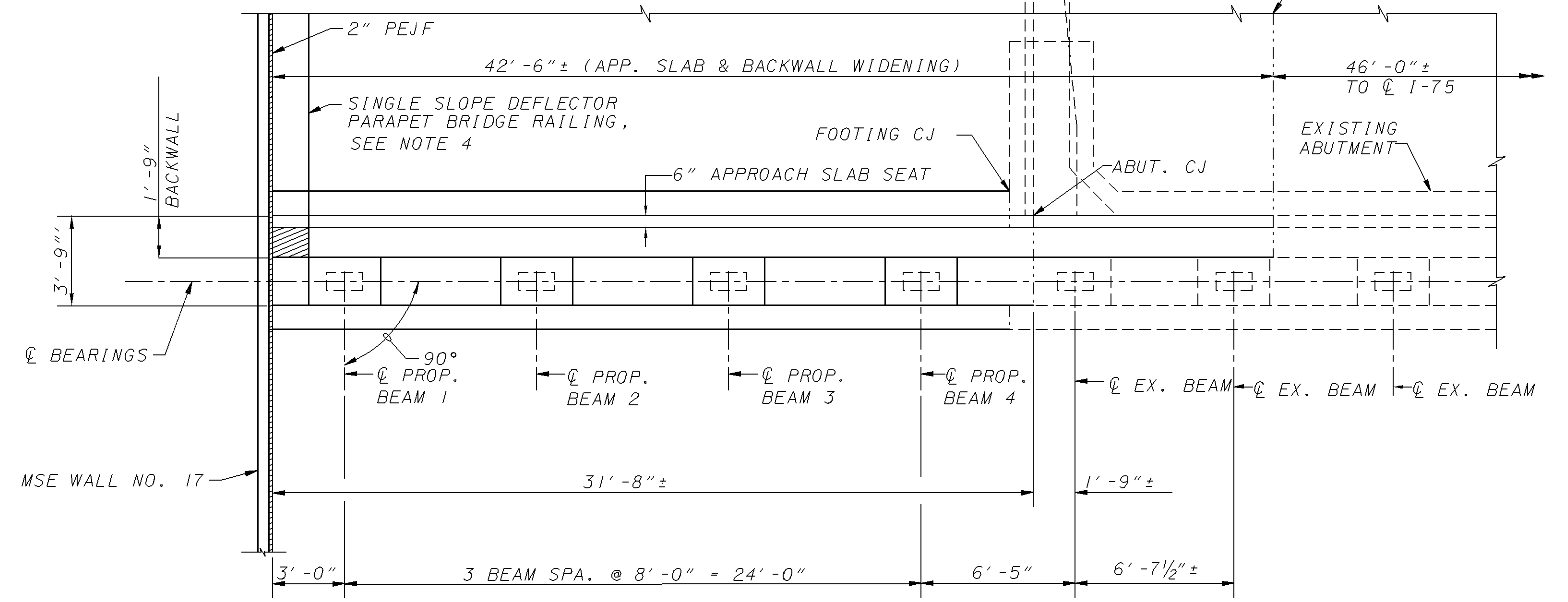
DESIGN AGENCY COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TELEPHONE 228-3500	DATE 06/06	REVIEWED TH	DRAWN SKT	DESIGNED SKT	STRUCTURE FILE NUMBER 5708613
STAGE CONSTRUCTION DETAILS - II					
BRIDGE NO. MOT-75-1462 I-75 MAINLINE OVER LEO STREET					
MOT-75-13.11 PID 75927					
6 / 20					
1759 1811					



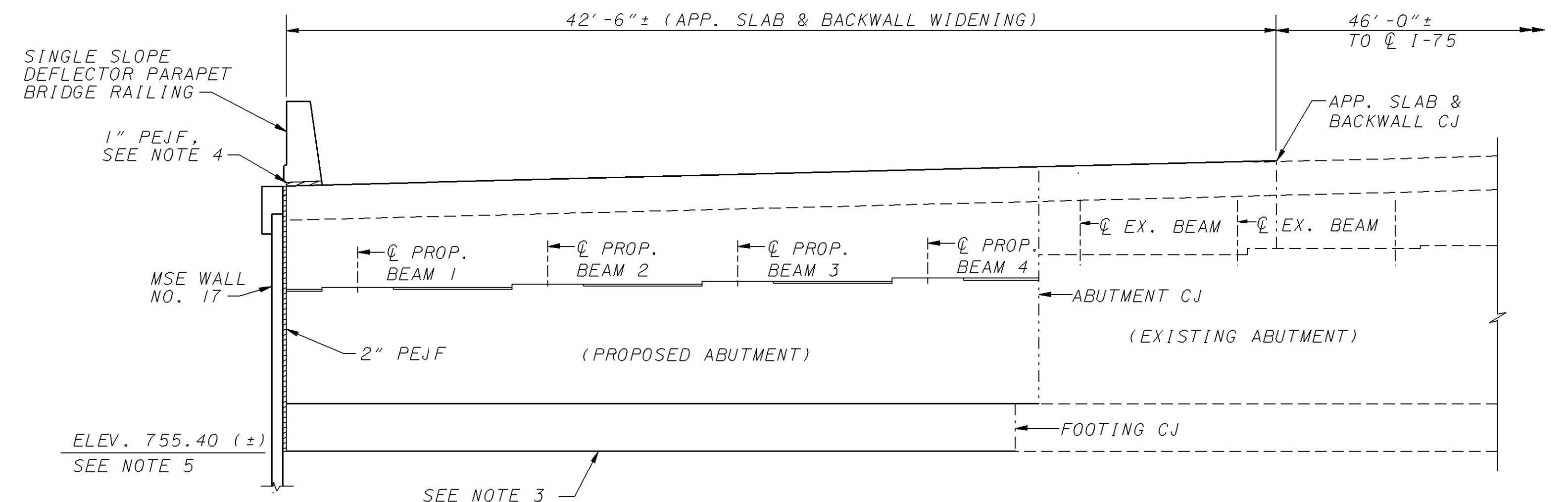
ABUTMENT REMOVAL PLAN - SOUTHBOUND
(EXISTING FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)



PARTIAL ABUTMENT ELEVATION - SOUTHBOUND
(EXISTING FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)



PLAN
(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)



ELEVATION
(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)

NOTES:

1. REMOVE THIS PORTION OF THE EXISTING BACKWALL TO THE TOP OF BEAM SEAT.
2. REMOVE EXISTING WINGWALLS TO 1'-0" MINIMUM BELOW THE BOTTOM OF THE PROPOSED WIDENED APPROACH SLAB.
3. PROPOSED PILES NOT SHOWN IN ABUTMENT ELEVATION VIEW.
4. CONSTRUCT SINGLE SLOPE DEFLECTOR PARAPET ON WIDENED APPROACH SLAB ACCORDING TO AS PER PLAN APPROACH SLAB DETAILS. EXTEND SINGLE SLOPE DEFLECTOR PARAPET TO FRONT FACE OF BACKWALL. ISOLATE PARAPET FROM BACKWALL WITH 1" P.E.J.F. AT BASE OF PARAPET.
5. THE BOTTOM OF FOOTING ELEVATION OF REAR ABUTMENT IS 755.34±.

LEGEND

- STAGE 1 REMOVAL - REMOVED TO EXISTING BEAM SEATS
- STAGE 1 REMOVAL - REMOVED TO 1'-0" MINIMUM BELOW THE BOTTOM OF THE PROPOSED WIDENED APPROACH SLAB.
- PEJF

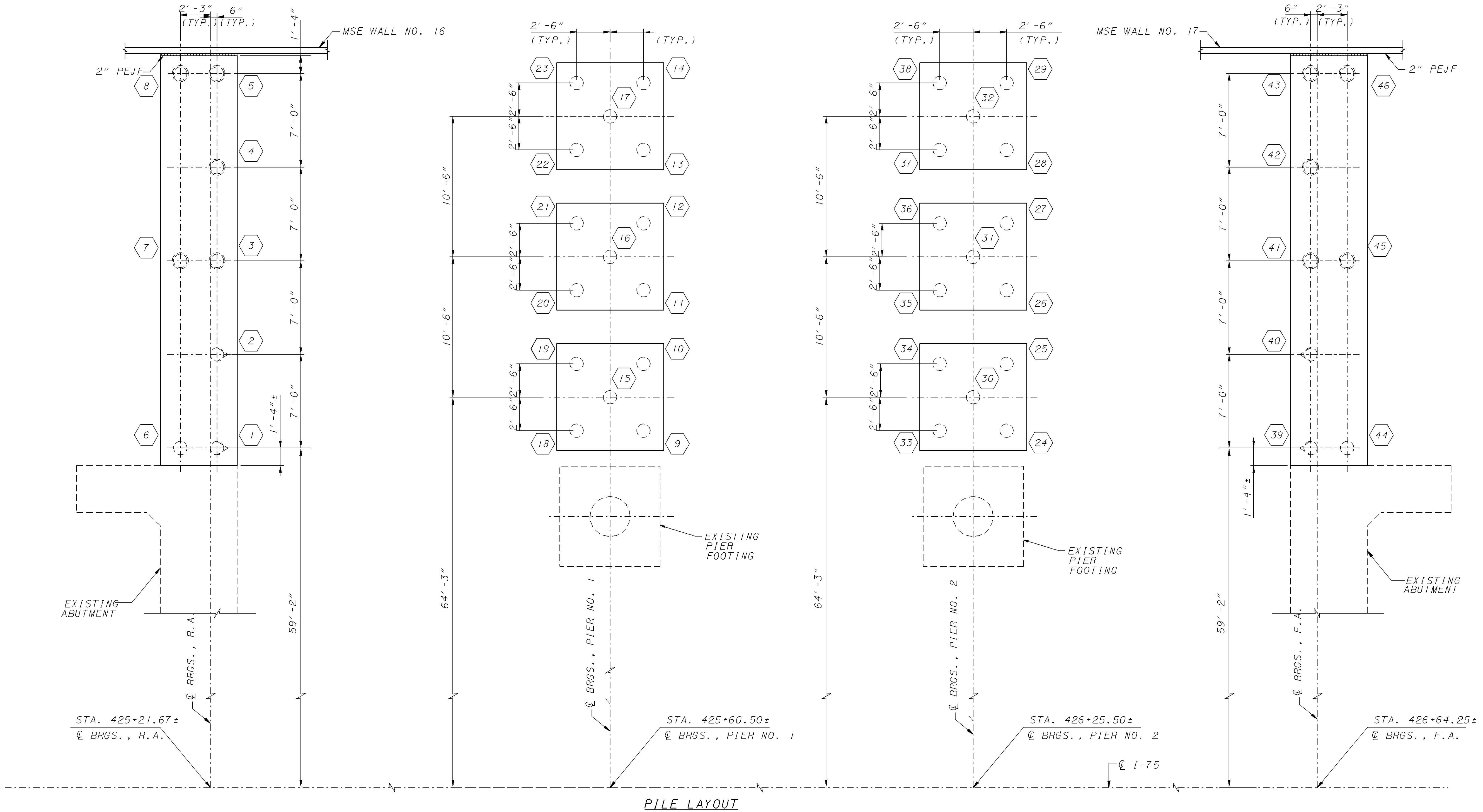
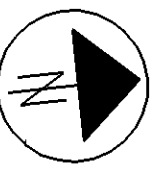
DESIGN AGENCY: COLUMBUS ENGINEERING CONSULTANTS, INC.
 840 MICHIGAN AVENUE, COLUMBUS, OH 43215
 TEL: 614/228-3500

DESIGNED	JJ	CHECKED	PFJ
DRAWN	CJC	REVISED	
REVIEWED	TH	STRUCTURE FILE NUMBER	5708613
DATE	06/06		

STAGE CONSTRUCTION DETAILS - 111
 BRIDGE NO. MOT-75-1462
 I-75 MAINLINE OVER LEO STREET

MOT-75-13.11
 PID 75927

7 / 20
 1760
 1811



PILE LAYOUT

ABUTMENT PILING TABLE		
PILE NO.	PILE SIZE	ESTIMATED LENGTH
1-8	12" DIA. RCP	25 FEET
39-46	12" DIA. RCP	35 FEET

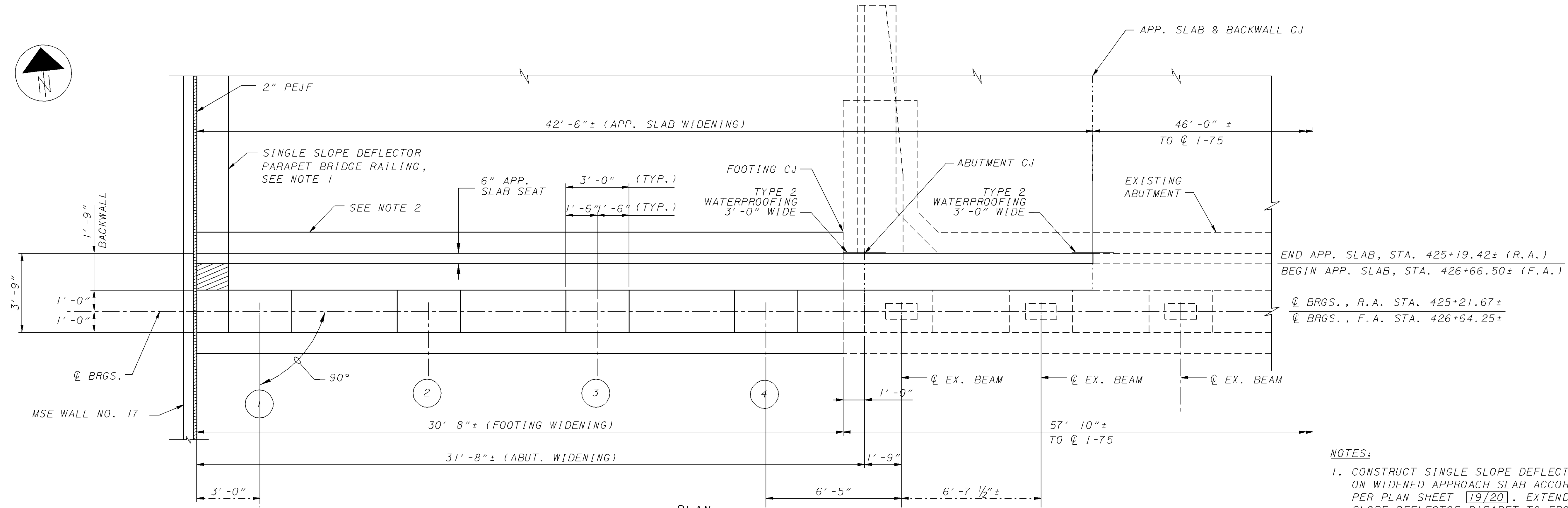
NOTES:

- PILE NOS. 1, 2 & 6 FOR THE REAR ABUTMENT, AND PILE NOS. 39, 40 & 44 FOR THE FORWARD ABUTMENT ARE TO BE PRE-BORED THROUGH THE NEW EMBANKMENT TO ELEVATION 746.0. PILE NOS. 3, 4, 5, 7, 8, 41, 42, 43, 45, 46 ARE TO BE DRIVEN THROUGH SLEEVES. PLACE BENTONITE CONCRETE SLURRY IN THE VOID BETWEEN THE PILE AND THE SLEEVE.
- THE SLEEVE AND BENTONITE SLURRY FOR THE PILES IS INCLUDED WITH THE MSE WALLS FOR PAYMENT.

PIER PILING TABLE		
PILE NO.	PILE SIZE	ESTIMATED LENGTH
9-23	12" DIA. RCP	15 FEET
24-38	12" DIA. RCP	15 FEET

PILE SYMBOL:

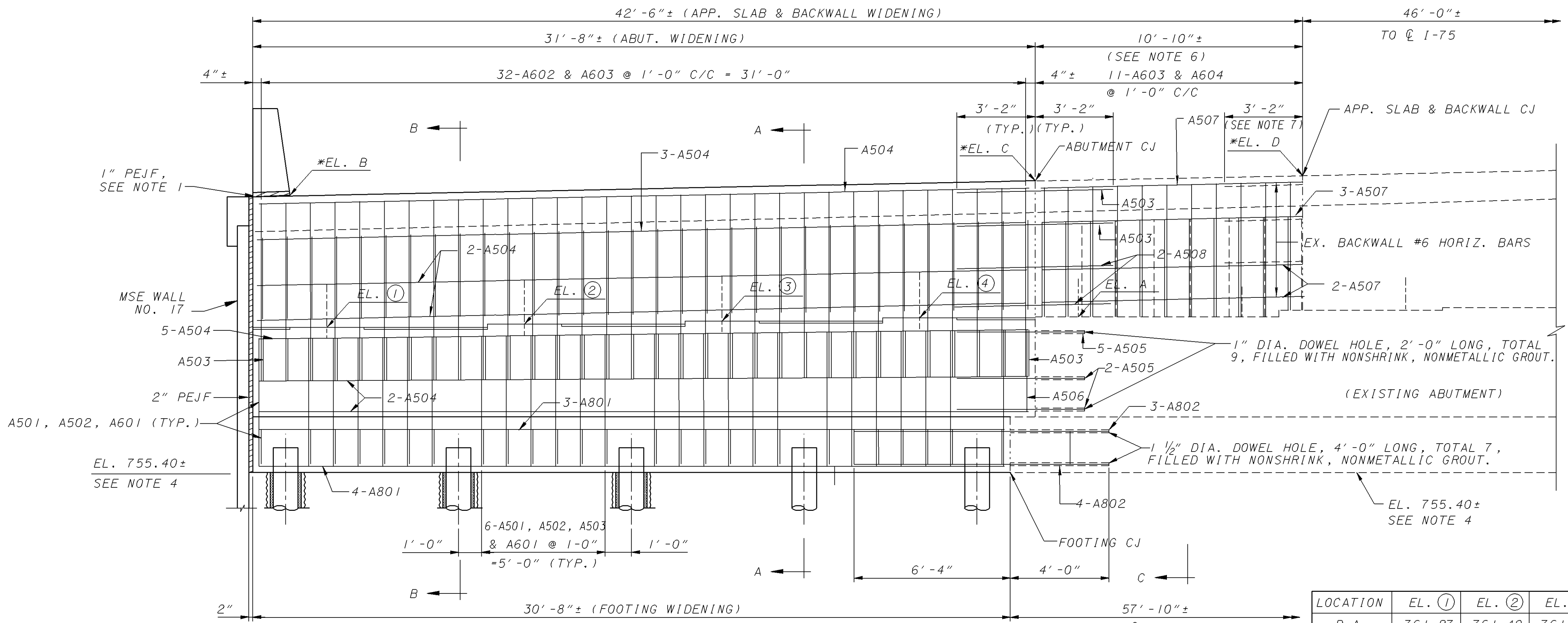
- 12" DIA. CAST-IN-PLACE R.C. PILES VERTICAL PILES
- 12" DIA. CAST-IN-PLACE R.C. PILES VERTICAL PILES WITH PILE SLEEVES
- 12" DIA. CAST-IN-PLACE R.C. PILES PILES BATTERED AT 1H:4V
- PILE NUMBER



PLAN
(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)

END APP. SLAB, STA. 425+19.42± (R.A.)
 BEGIN APP. SLAB, STA. 426+66.50± (F.A.)
 C/BRGS., R.A. STA. 425+21.67±
 C/BRGS., F.A. STA. 426+64.25±

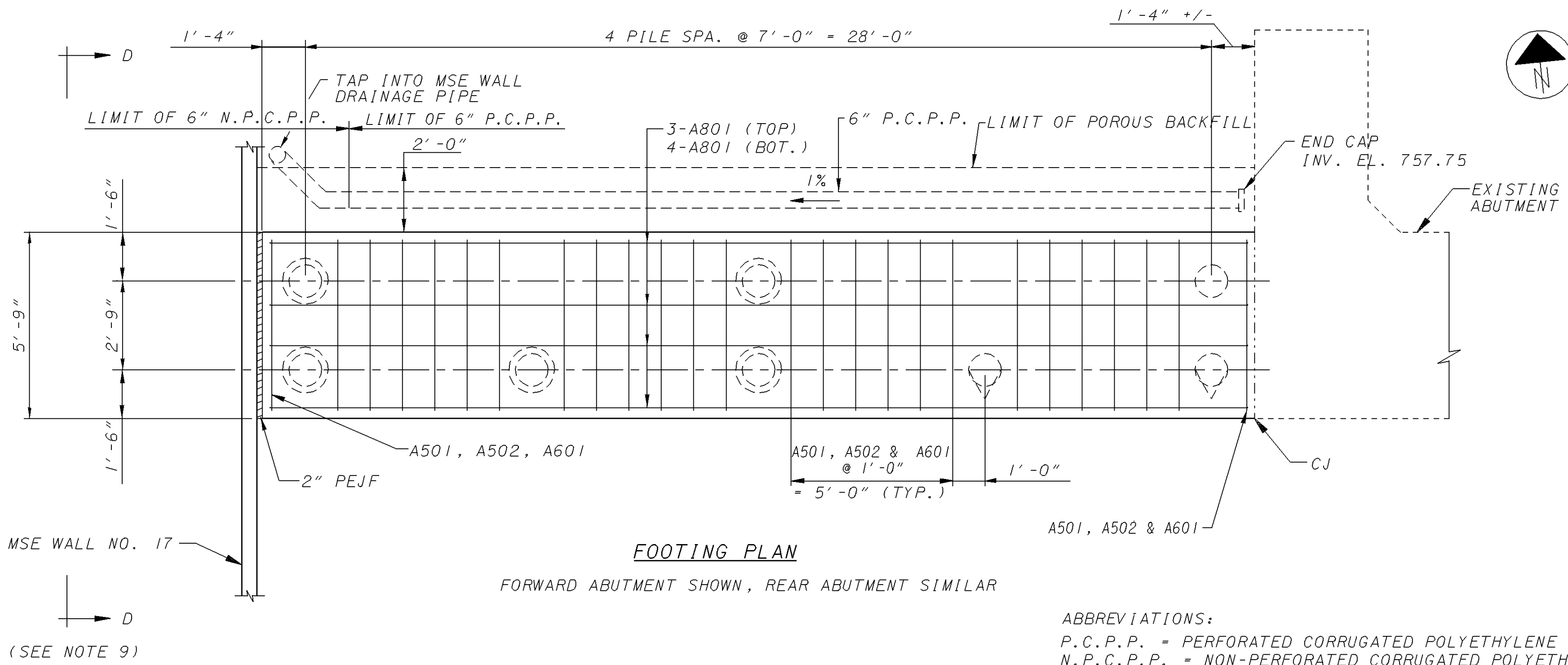
- NOTES:**
- CONSTRUCT SINGLE SLOPE DEFLECTOR PARAPET ON WIDENED APPROACH SLAB ACCORDING TO AS PER PLAN SHEET [19/20]. EXTEND SINGLE SLOPE DEFLECTOR PARAPET TO FRONT FACE OF BACKWALL. ISOLATE PARAPET FROM BACKWALL WITH 1" PEJF AT BASE OF PARAPET.
 - SEE SHEET [10/20] FOR PILE DETAILS, POROUS BACKFILL AND DRAINAGE PIPE DETAILS.
 - SEE SHEET [10/20] FOR SECTIONS A-A, B-B & C-C.
 - THE BOTTOM OF FOOTING ELEVATION OF THE REAR ABUTMENT IS EL. 755.34±.
 - BEAM-SEAT REINFORCING, SETTING ANCHORS: ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF BEARING ANCHORS. SEE SHEET [14A/20] FOR ABUTMENT ANCHOR BAR DETAILS.
 - REMOVE THIS PORTION OF EXISTING BACKWALL TO THE BEAM SEAT, AND PRESERVE ALL EXISTING VERTICAL BARS AND 3'-2" OF ALL EXISTING HORIZONTAL BARS.
 - MINIMUM BAR LAPS:
 NO. 5 BARS 3'-2"
 NO. 6 BARS 3'-10"
 NO. 8 BARS 6'-4"
 NO. 9 BARS 8'-1"
 - THE SLEEVE AND BENTONITE SLURRY FOR THE PILES IS INCLUDED WITH THE MSE WALLS FOR PAYMENT.



ELEVATION
(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)

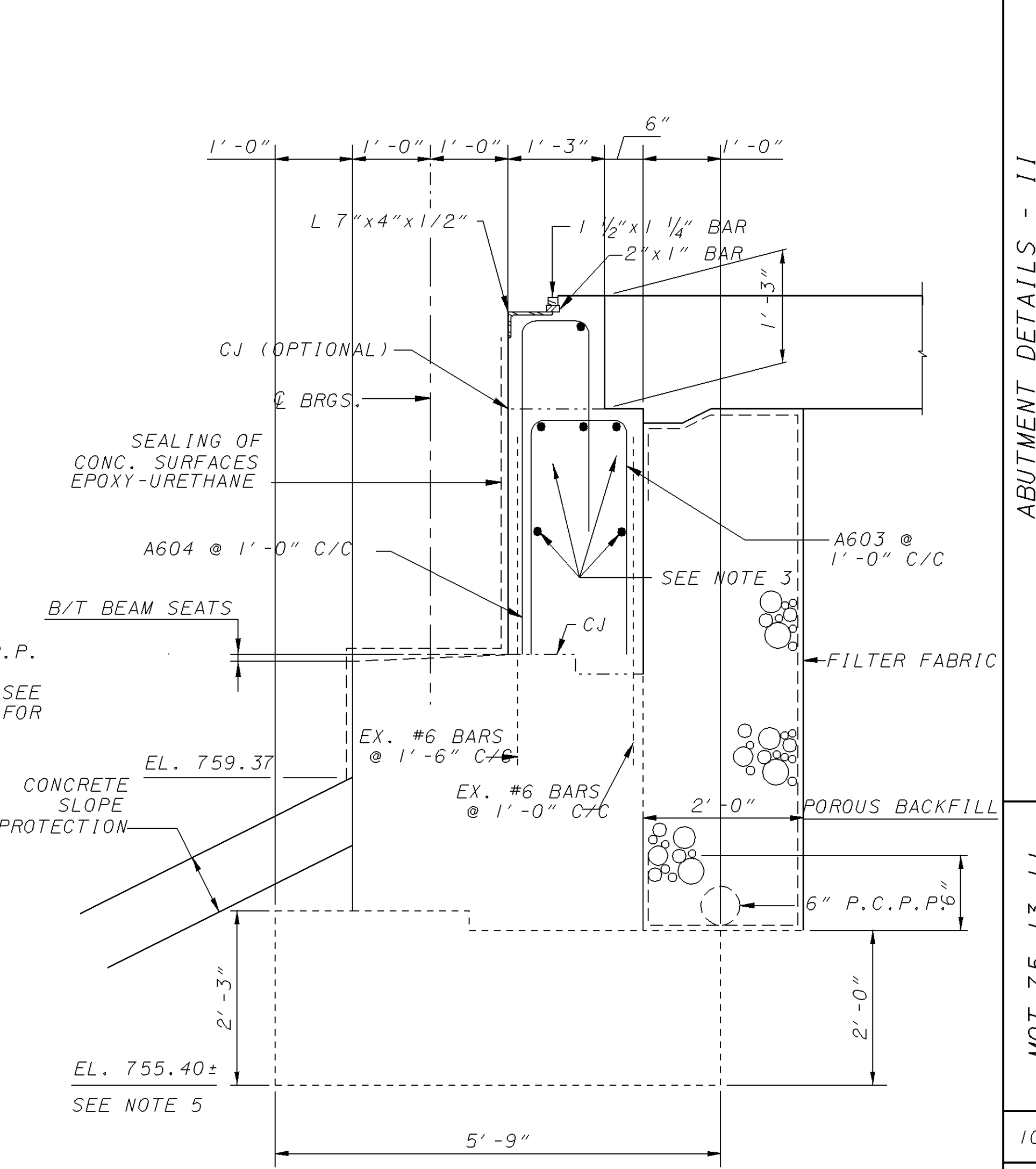
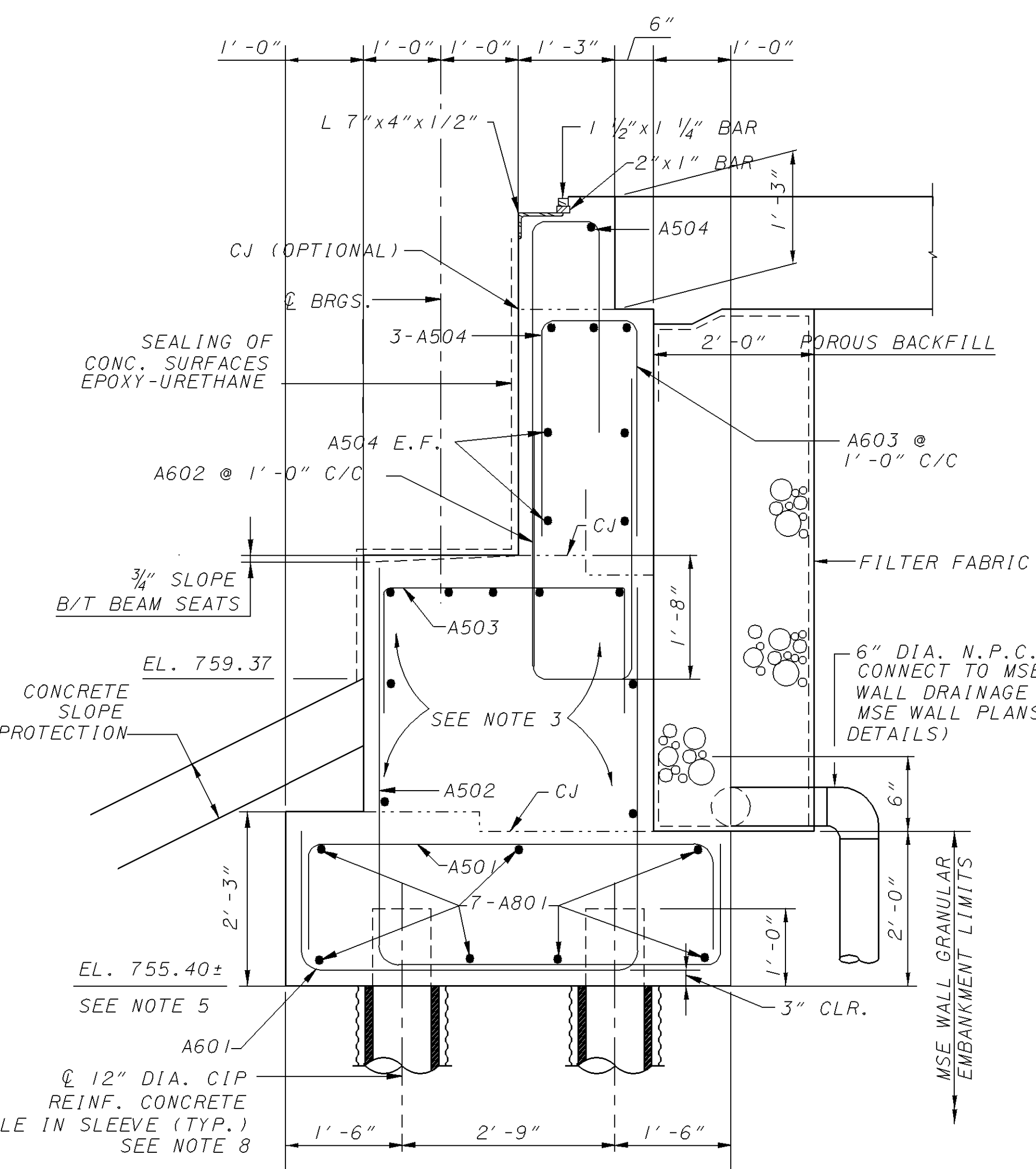
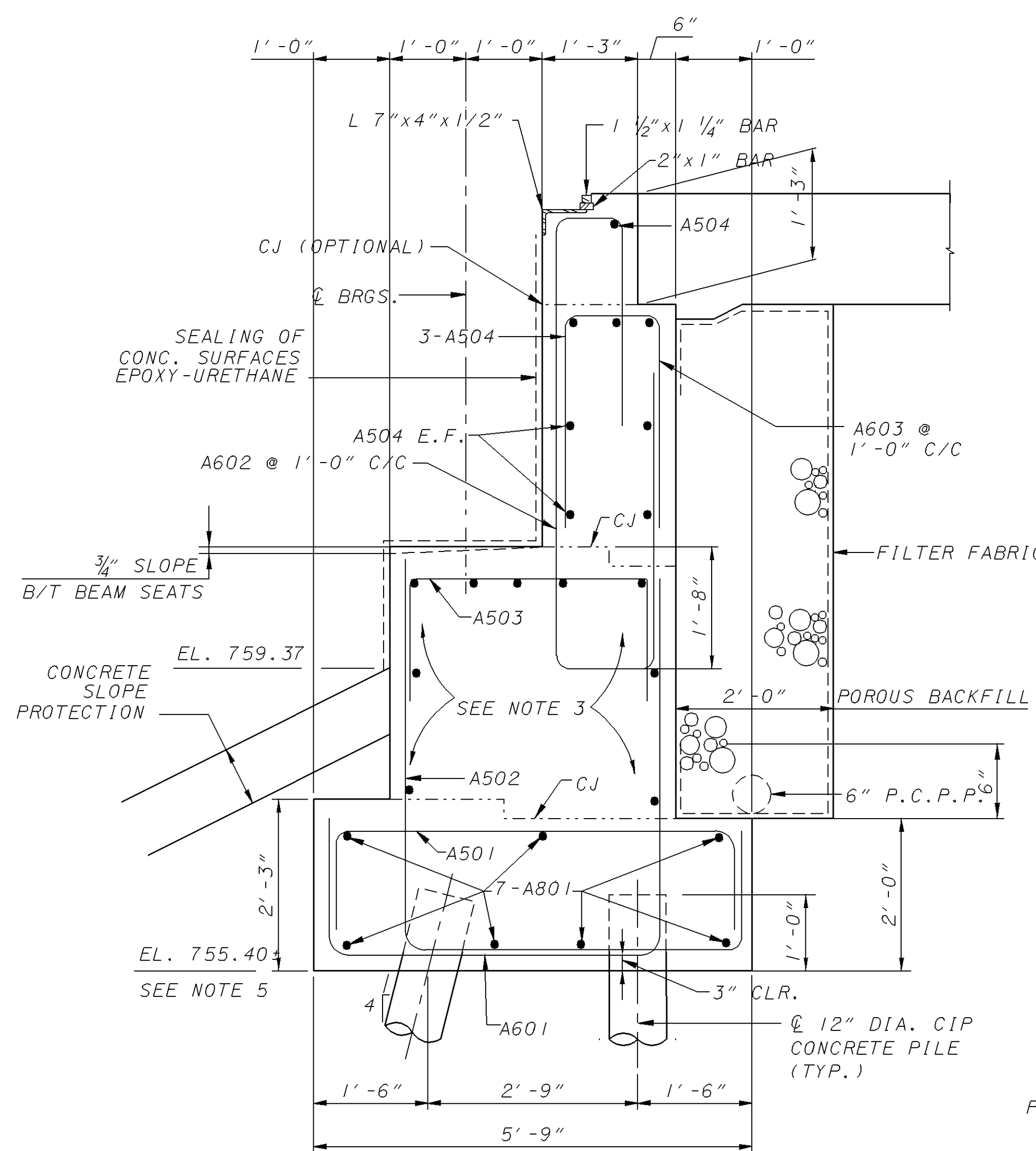
LOCATION	EL. ①	EL. ②	EL. ③	EL. ④	EL. A	*EL. B	*EL. C	*EL. D
R.A.	761.27	761.40	761.52	761.65	761.76	765.07	765.62	765.66
F.A.	761.42	761.55	761.68	761.81	761.92	765.23	765.74	765.81

* GIVEN AT BRIDGE LIMITS



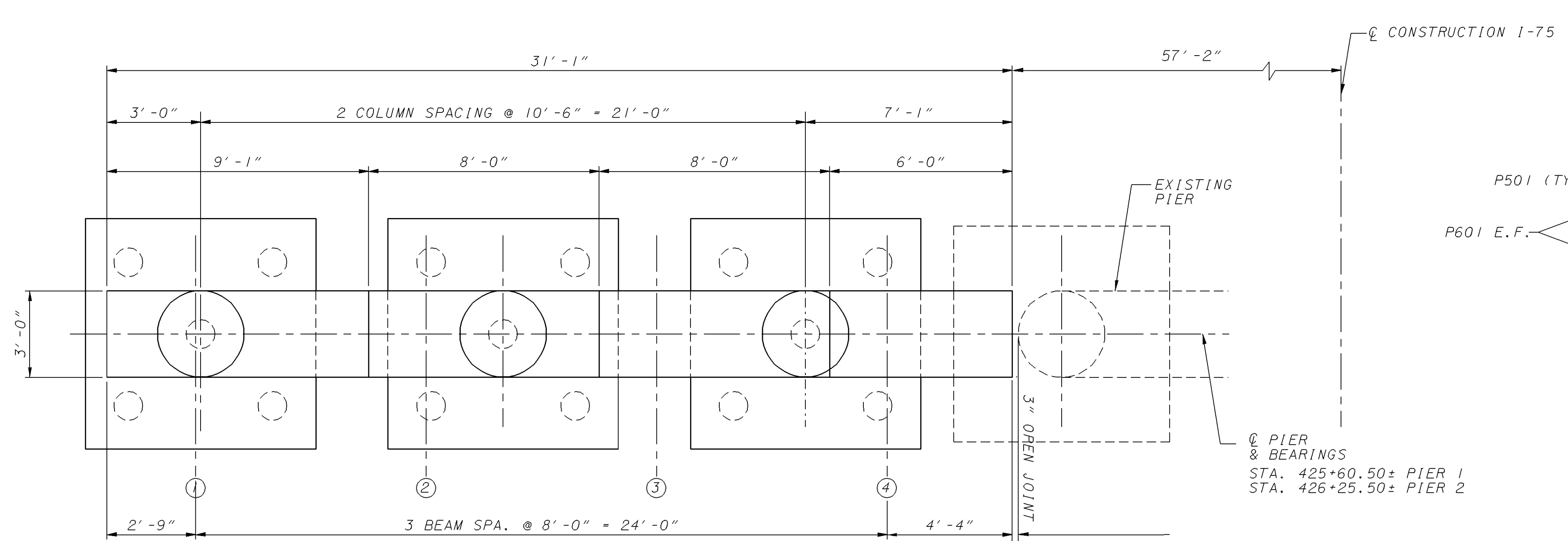
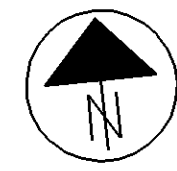
ABBREVIATIONS:
P.C.P.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE
N.P.C.P.P. = NON-PERFORATED CORRUGATED POLYETHYLENE PIPE

- NOTES**
1. POROUS BACKFILL: POROUS BACKFILL WITH FILTER FABRIC, 2'-0" SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1'-0" BELOW THE EMBANKMENT SURFACE, AND Laterally TO THE ENDS OF THE ABUTMENT.
 2. FOR ADDITIONAL EXPANSION JOINT DETAILS, SEE SHEETS 18/20 & 18A/20.
 3. ALL BARS NORMAL TO THE SECTION ABOVE THE PROPOSED FOOTING, ARE A-504 BARS. ALL BARS NORMAL TO THE SECTION ABOVE THE EXISTING BRIDGE SEAT, ARE A507 BARS.
 4. MINIMUM BAR LAPS:
NO. 5 BARS 3'-2"
NO. 6 BARS 3'-10"
NO. 8 BARS 6'-4"
NO. 9 BARS 8'-1"
 5. THE BOTTOM OF FOOTING ELEVATION OF REAR ABUTMENT IS EL. 755.34±. THE TOP OF THE CONCRETE SLOPE PROTECTION FOR REAR ABUTMENT IS EL. 759.58±.
 6. BACKWALL CONCRETE: IN ADDITION TO 511.10, DO NOT PLACE BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.
 7. THE SLEEVE AND BENTONITE SLURRY FOR THE PILES IS INCLUDED WITH THE MSE WALLS FOR PAYMENT.
 8. BRIDGE SEAT REINFORCING, SETTING ANCHORS: ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF BEARING ANCHORS. SEE SHEET 14A/20 FOR ABUTMENT ANCHOR BAR DETAILS.
 9. FOR VIEW D-D, SEE SHEET 16/20.



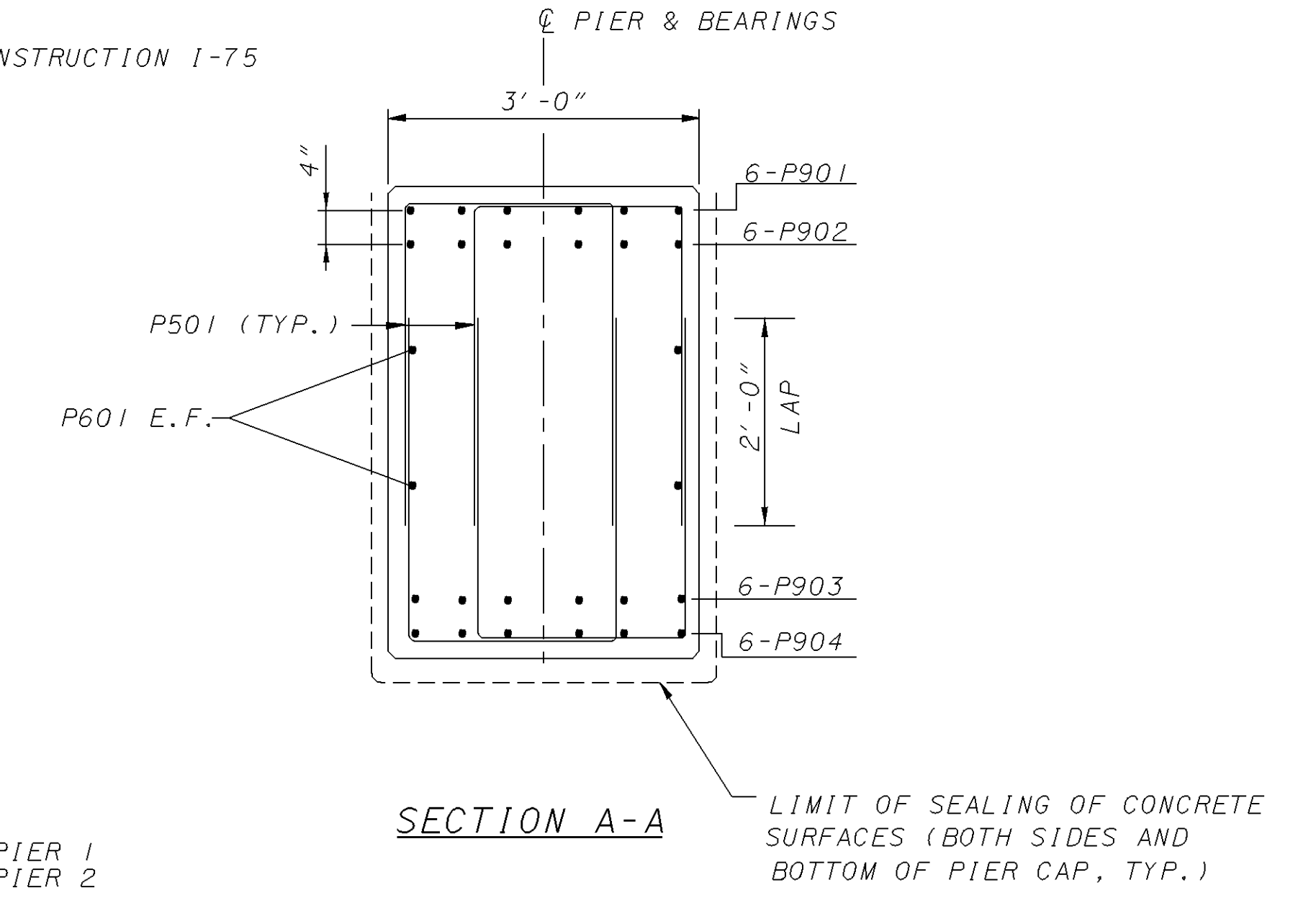
SECTION A-A FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR
SECTION B-B FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR
SECTION C-C FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR

DESIGNED BY J.J.	CHECKED BY P.F.J.	DRAWN BY C.E.C.	REVISED BY	DATE 06/06	DESIGN AGENCY COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/228-3500
STRUCTURE FILE NUMBER 5708613	TH				
ABUTMENT DETAILS - 11 BRIDGE NO. MOT-75-1462 I-75 MAINLINE OVER LEO STREET					
MOT-75-13.11 PID 75927					
10/20					
1763 1811					



PIER PLAN

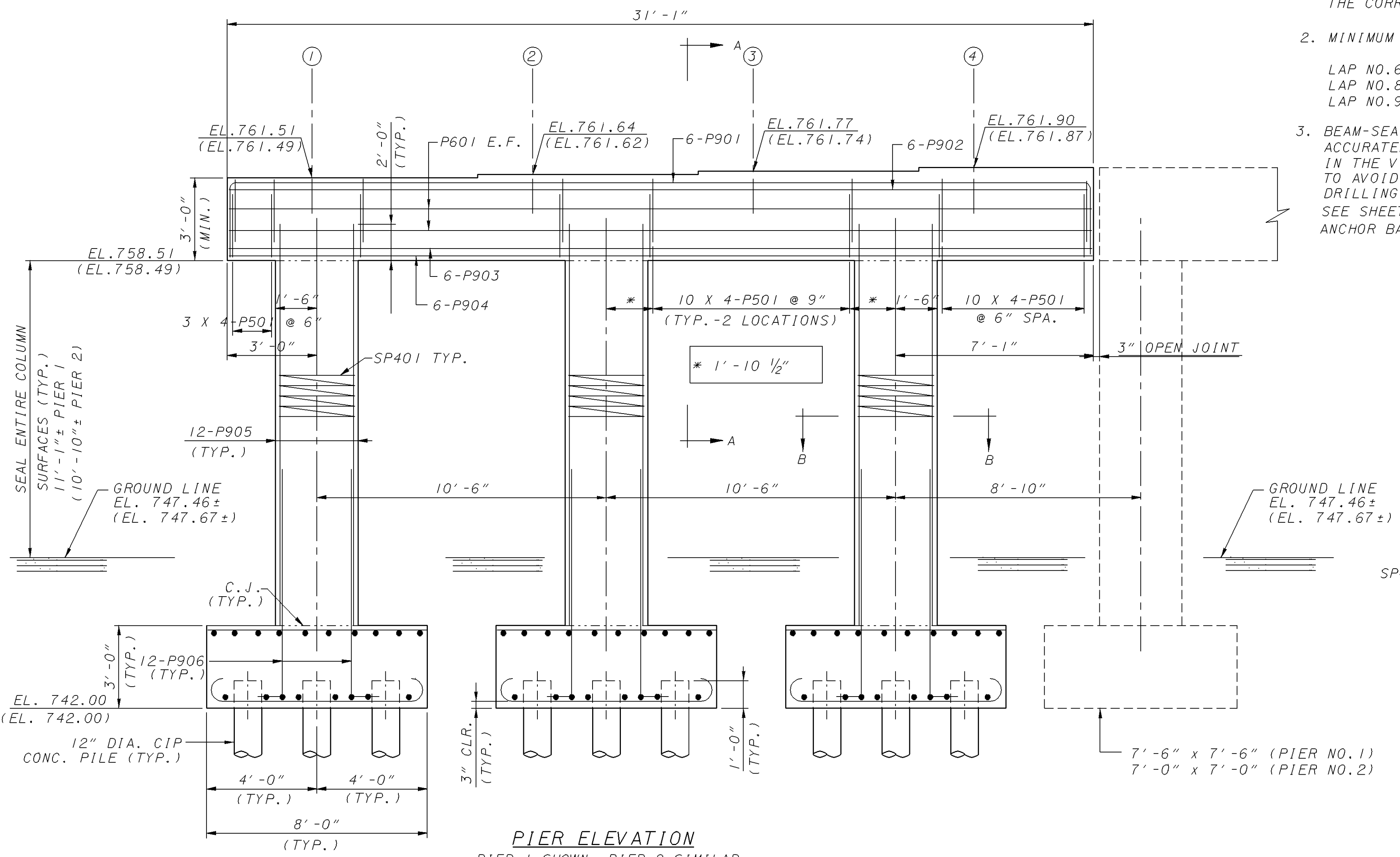
PIER 1 SHOWN, PIER 2 SIMILAR



SECTION A-A

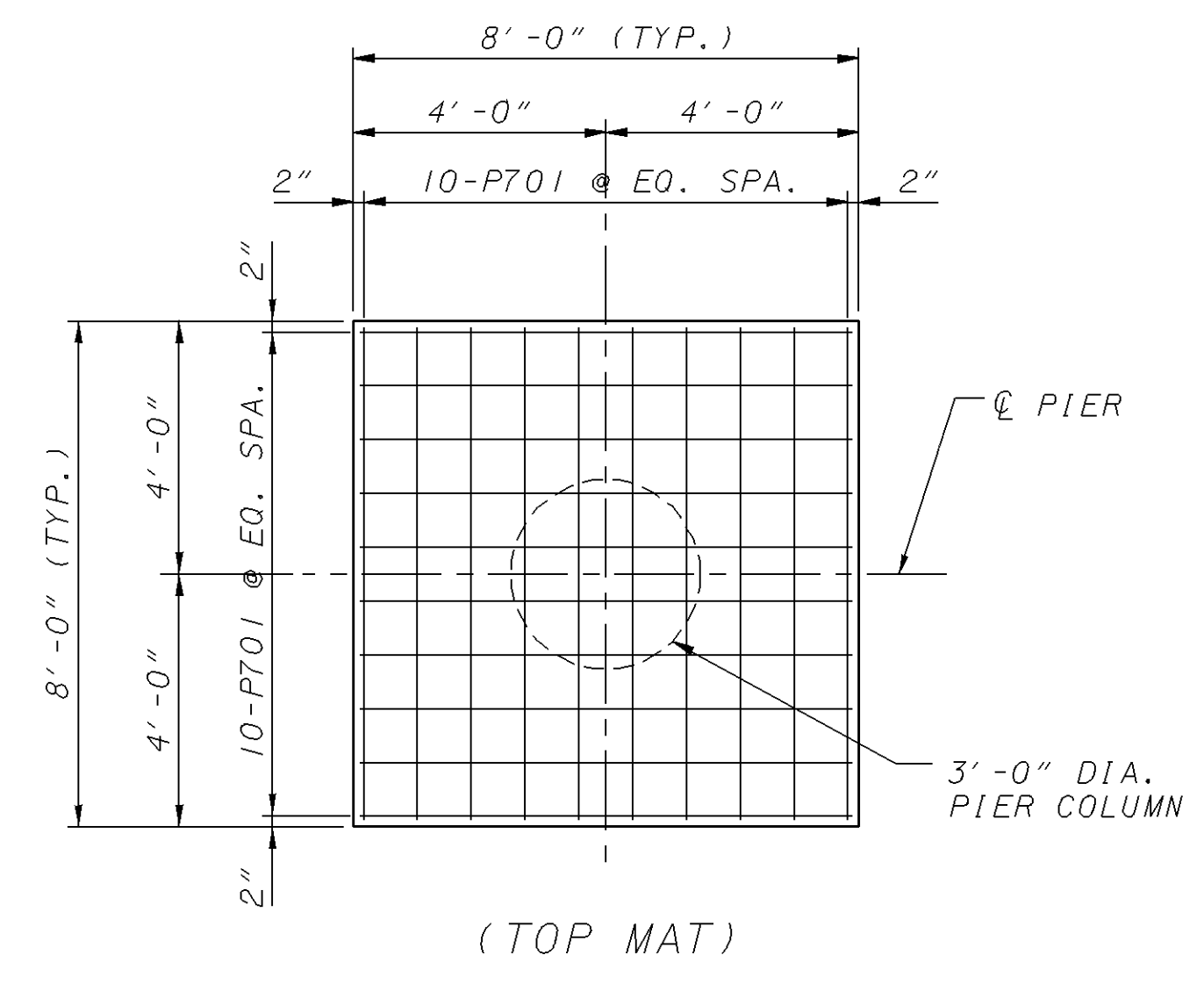
***NOTES**

1. THE ELEVATION IN () IS THE ELEVATION OF THE CORRESPONDING LOCATION AT PIER 2.
2. MINIMUM BAR LAPS:
LAP NO.6 BARS 3'-10".
LAP NO.8 BARS 6'-4".
LAP NO.9 BARS 8'-1".
3. BEAM-SEAT REINFORCING, SETTING ANCHORS: ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF THE BEARING ANCHOR. SEE SHEET 14A/20 FOR ABUTMENT ANCHOR BAR DETAILS.

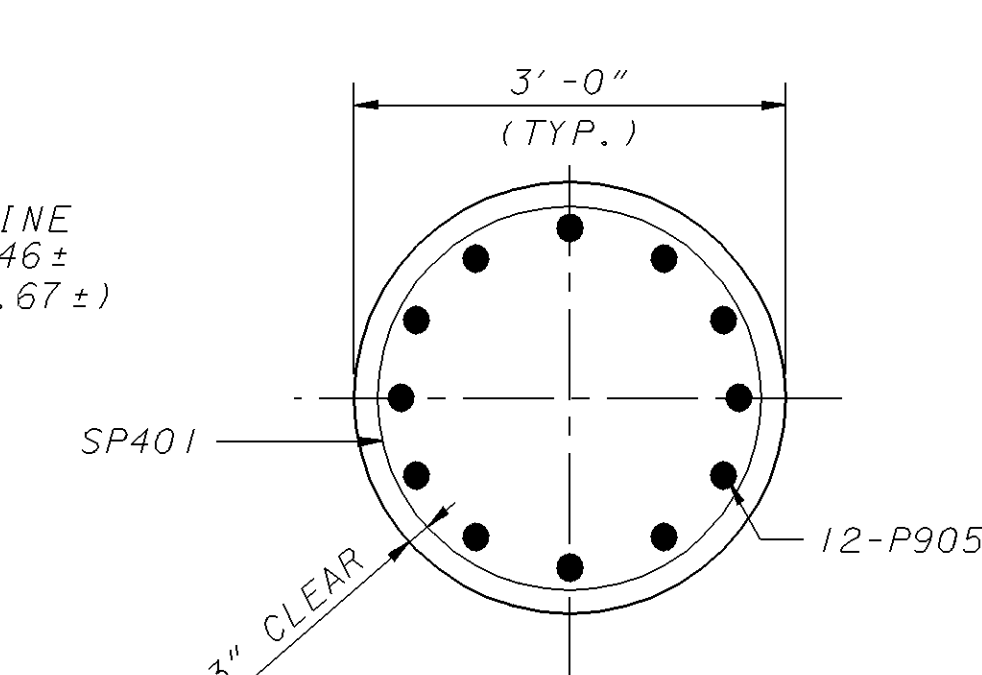


PIER ELEVATION

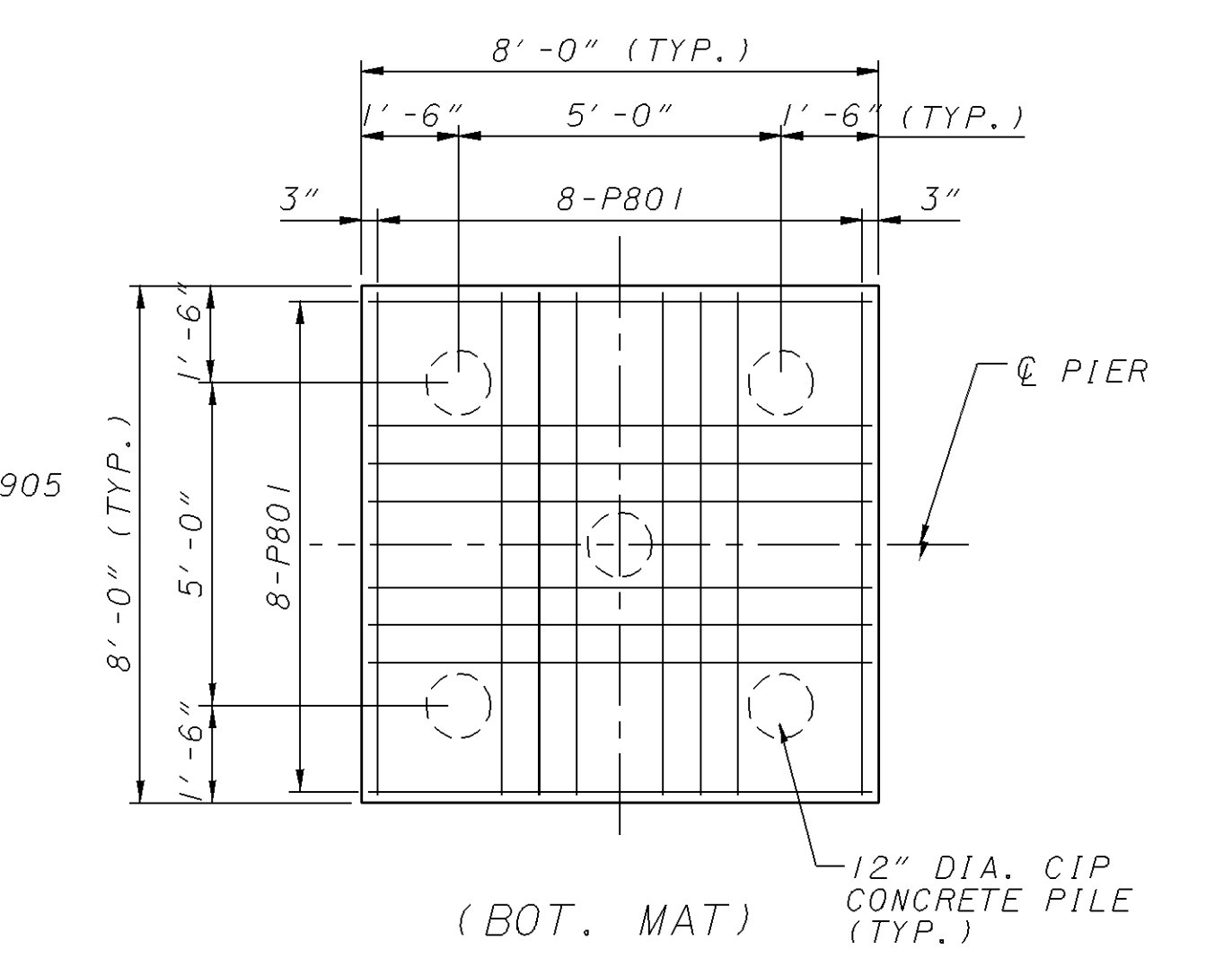
PIER 1 SHOWN, PIER 2 SIMILAR



(TOP MAT)



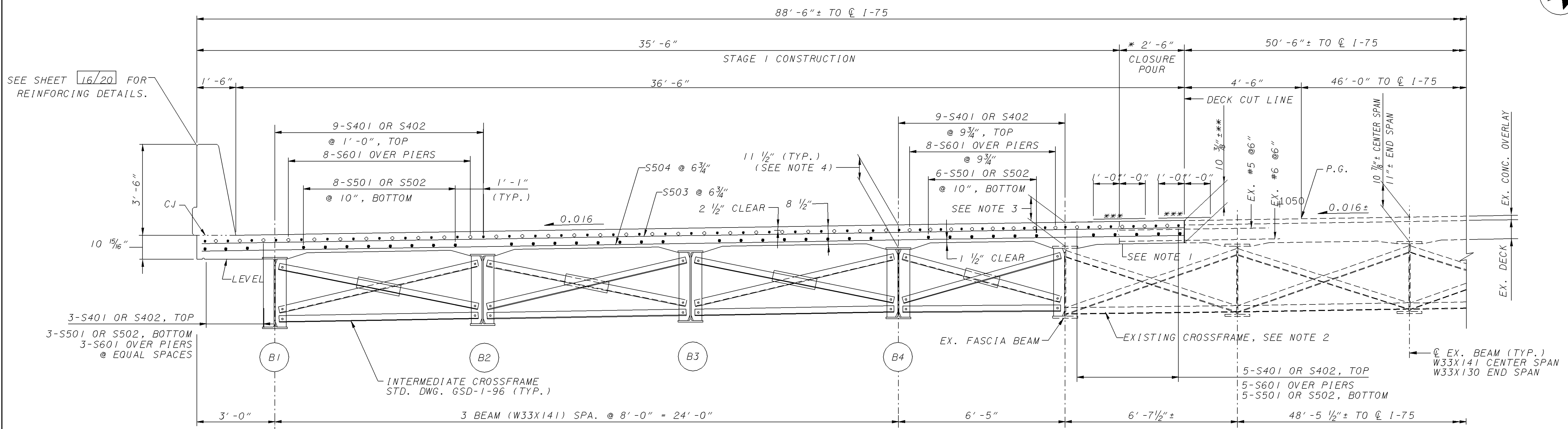
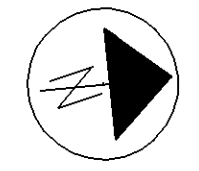
SECTION B-B



(BOT. MAT)

FOOTING REINFORCING DETAILS

DESIGNED JJ	CHECKED PFJ	DRAWN CEC	REVISED	DATE 06/06 TH	STRUCTURE FILE NUMBER 5708613	DESIGN AGENCY COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/228-3500
PIER DETAILS BRIDGE NO. MOT-75-1462 I-75 MAINLINE OVER LEO STREET						MOT-75-13.11 PID 75927
11/20						1764 1811



TRANSVERSE SECTION

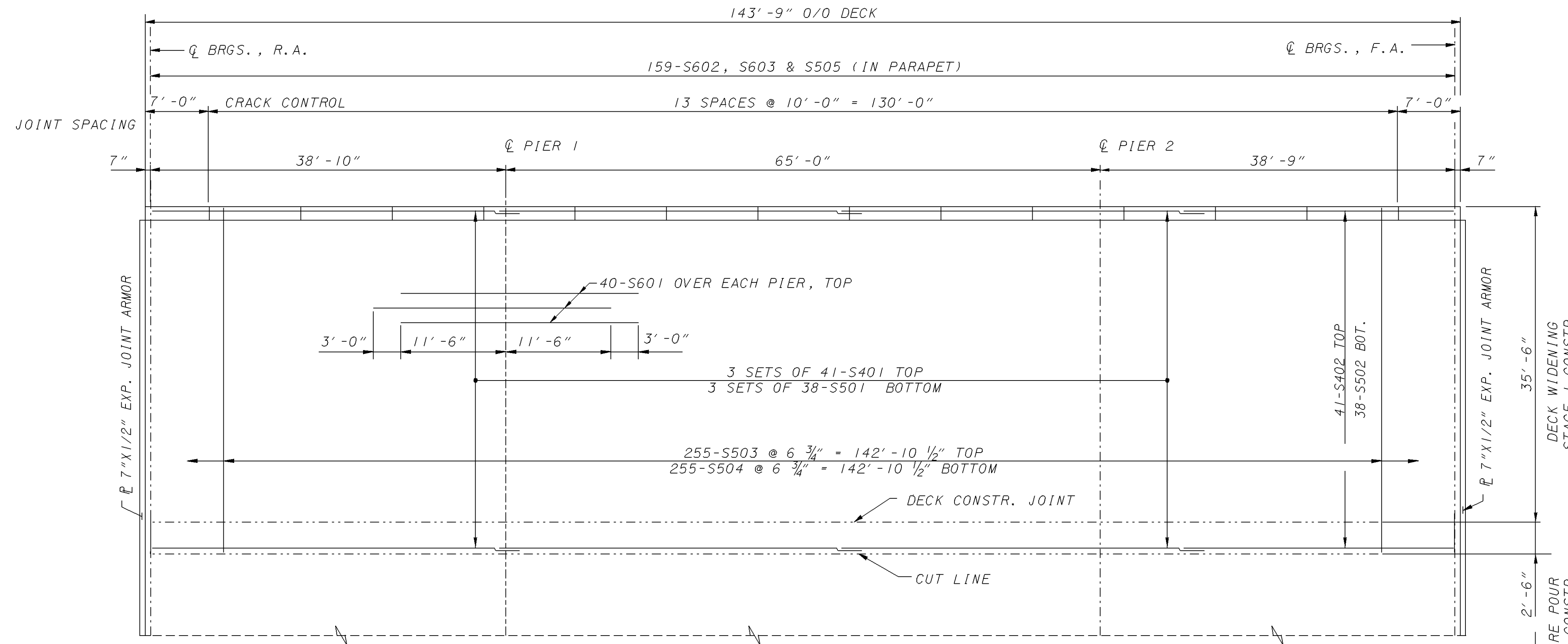
LEGEND:

(B1) BEAM NUMBER

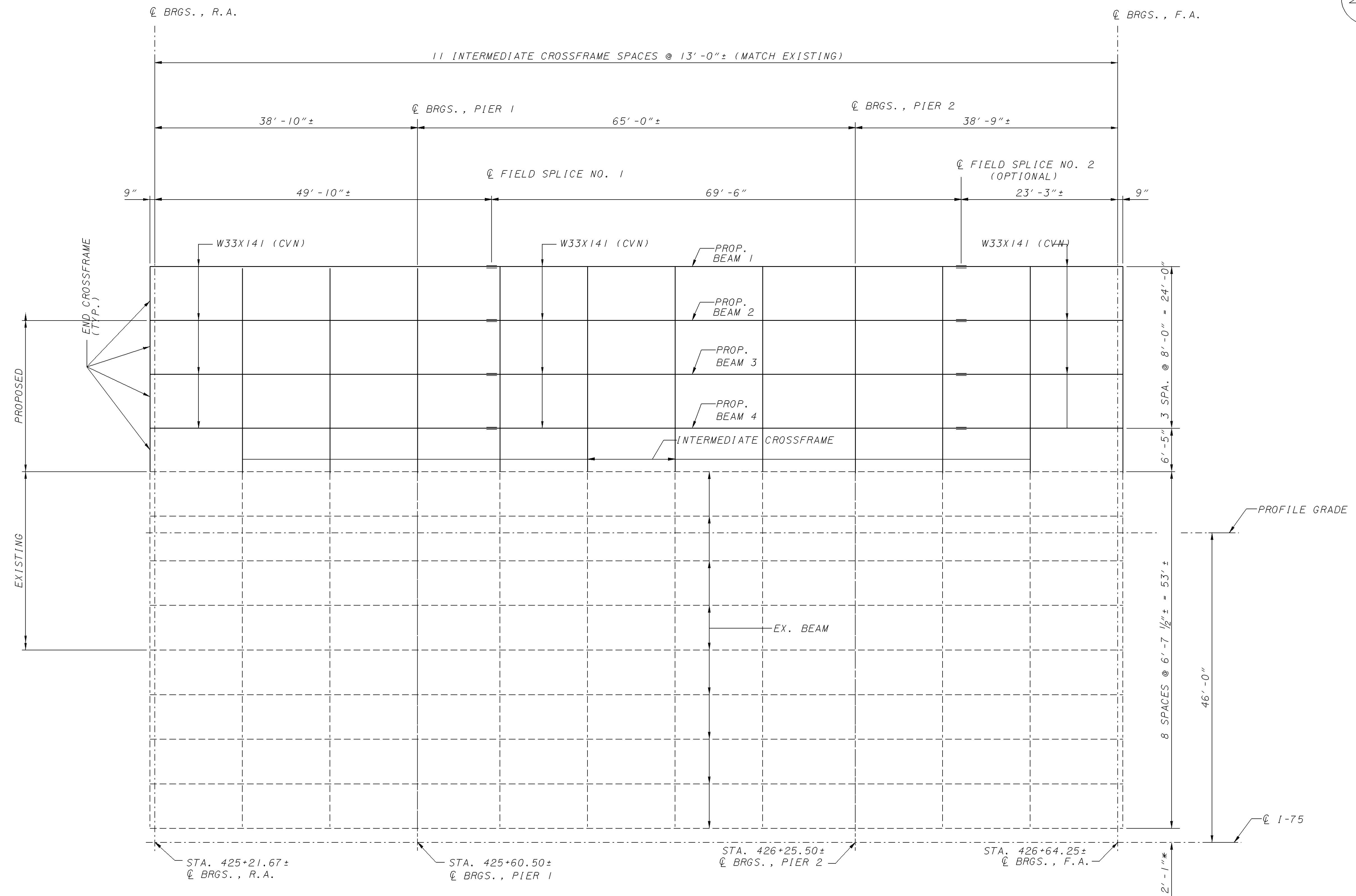
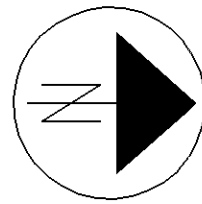
* STAGE 1A CONSTRUCTION
** MATCH EXIST. DECK THICKNESS IN THIS BAY.
*** SEAL JOINTS WITH HMMW RESIN.

NOTES:

- 2'-6" OF THE EXISTING TRANSVERSE BARS SHALL BE SALVAGED. THE PROPOSED TRANSVERSE BARS WILL BE IN NON-CONTACT LAPS WITH THE EXISTING BARS. THE DECK CUT-LINE SIDE SHALL BE A ROUGHENED JOINT. THE OTHER SIDE OF THE CLOSURE POUR SHALL BE A KEYED JOINT.
- RELEASE EXISTING CROSSFRAMES IN EXTERIOR BAY OF THE EXISTING SOUTHBOUND BRIDGE BEFORE THE STAGE 1 POUR. RECONNECT THESE EXISTING CROSSFRAMES AFTER THE CLOSURE POUR.
- THE DECK THICKNESS, MEASURED TO THE TOP OF THE EXISTING BEAM, SHOULD BE 10 7/8" ± AT CENTER SPAN AND 11" ± AT END SPAN.
- THE DECK THICKNESS FOR THE WIDENED DECK IS SHOWN TO THE BOTTOM OF THE BEAM FLANGE.
- DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 3 INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE OF 9 INCHES. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE IS ± 3 INCHES. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.
- MINIMUM LAP LENGTHS:
LAP NO. 4 BARS 2'-7"
LAP NO. 5 BARS 3'-2"
LAP NO. 6 BARS 3'-10"
- FOR PARAPET REINFORCING, SEE 16/20.



DECK REINFORCING PLAN



STEEL FRAMING PLAN (SOUTHBOUND)

NOTES

- FOR DETAILS TO UNDERBRIDGE LIGHTING, SEE LIGHT PLANS SHEETS (230/1811).
- SEE 4720 FOR ADDITIONAL NOTES.

DESIGN AGENCY:
COLUMBUS ENGINEERING
CONSULTANTS, INC.
840 MICHIGAN AVENUE, COLUMBUS, OH 43215
TEL: 614/228-3500

DATE: 06/06
REVIEWED: TH
STRUCTURE FILE NUMBER: 5708613

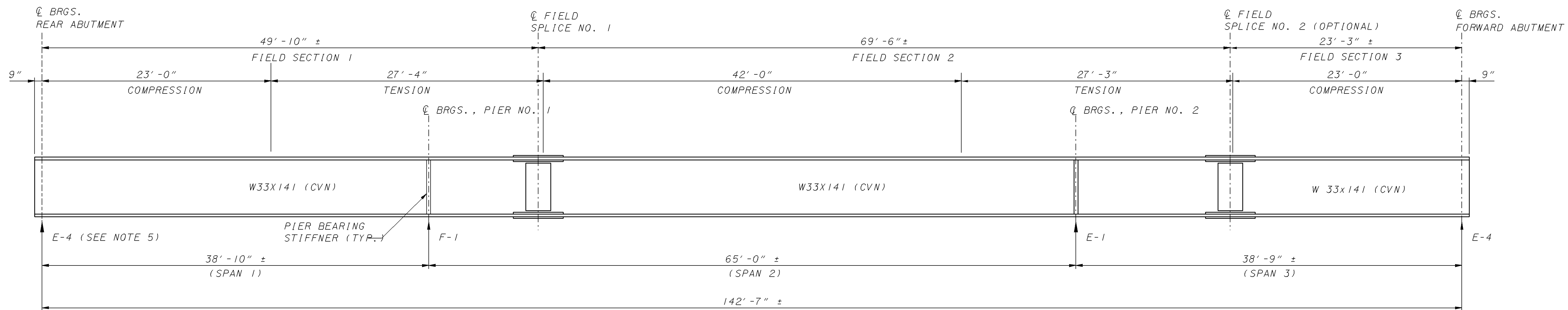
DESIGNED: JJ
CHECKED: PFJ

FRAMING PLAN
BRIDGE NO. MOT-75-1462
I-75 MAINLINE OVER LEO STREET

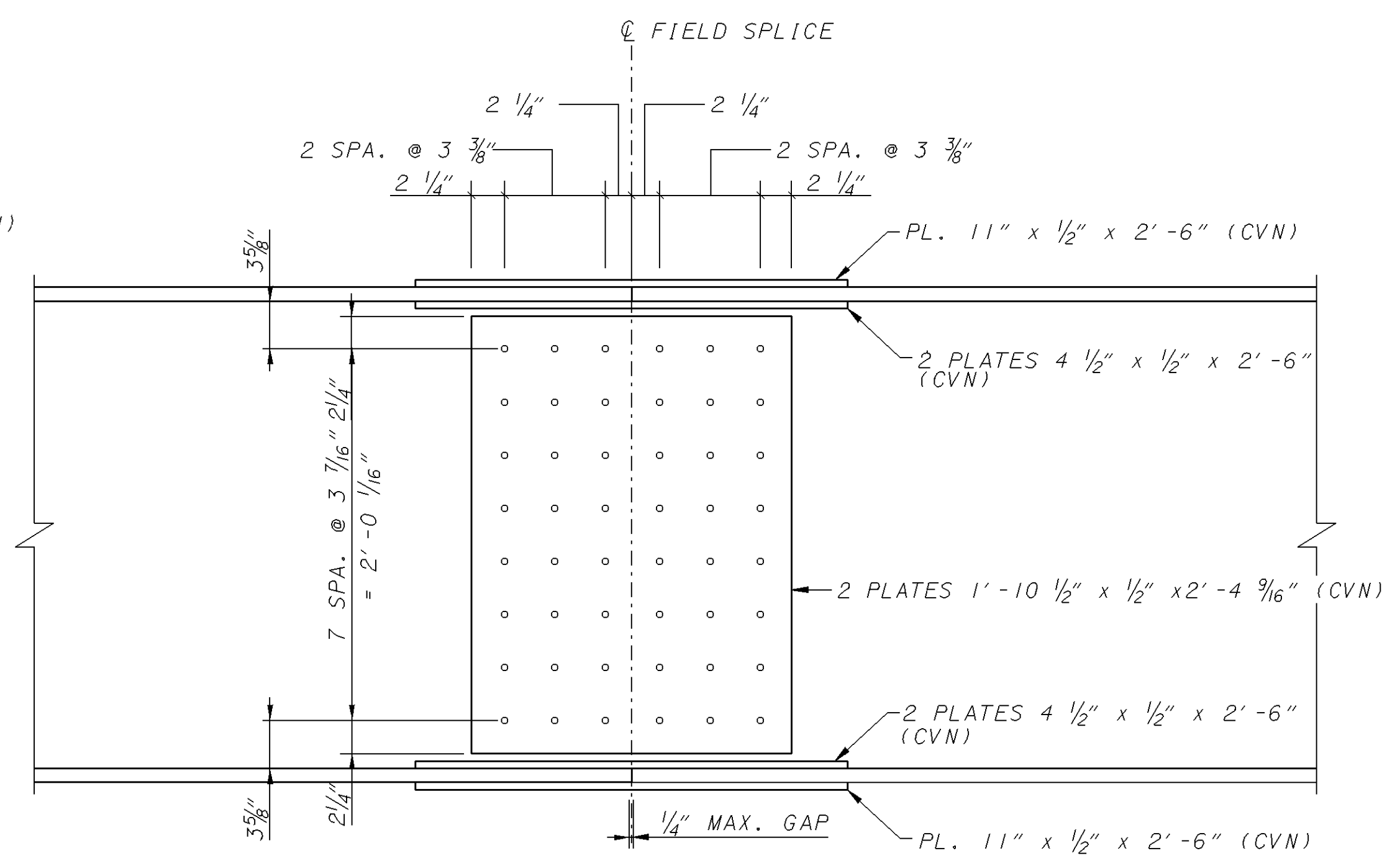
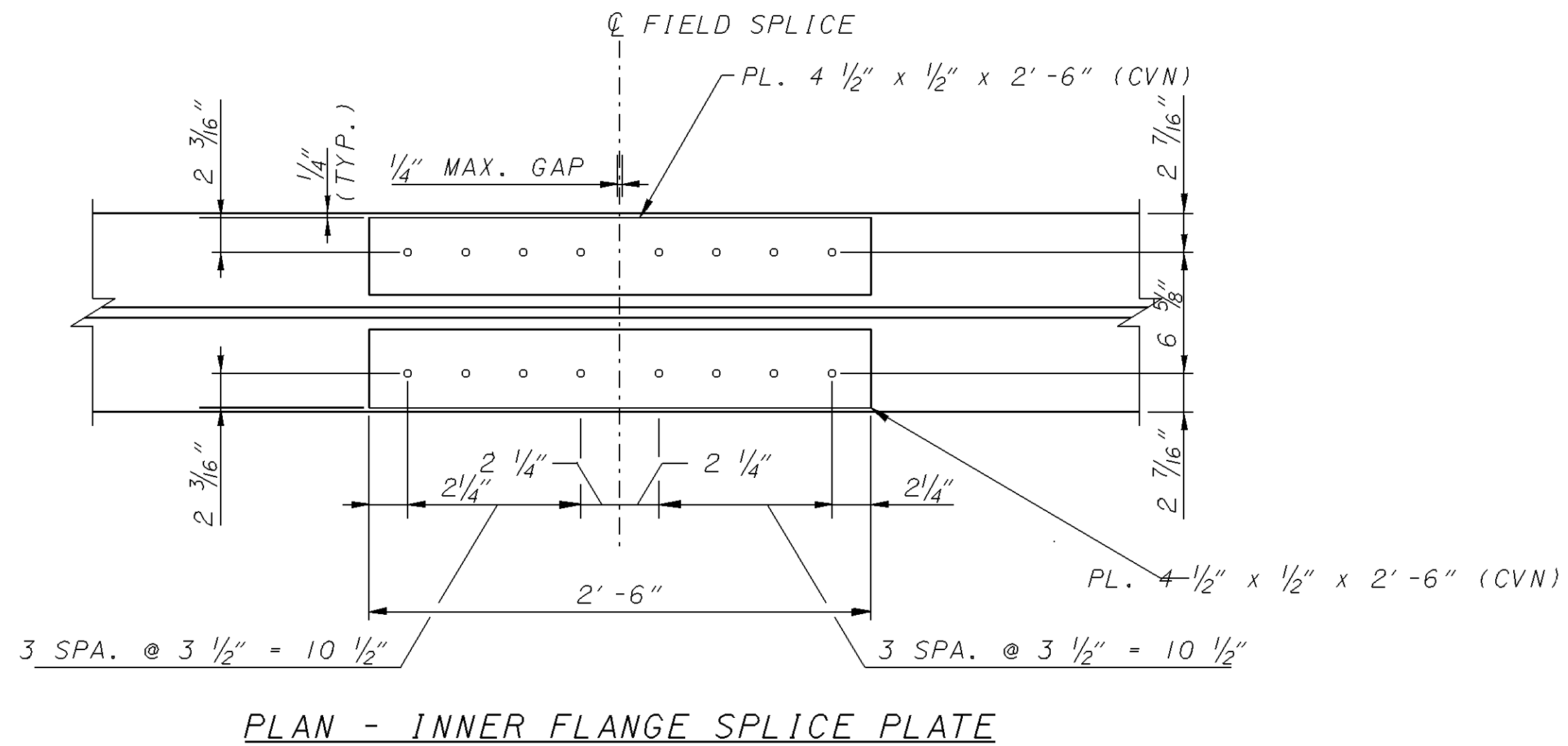
MOT-75-13.11
PID 75927

13/20

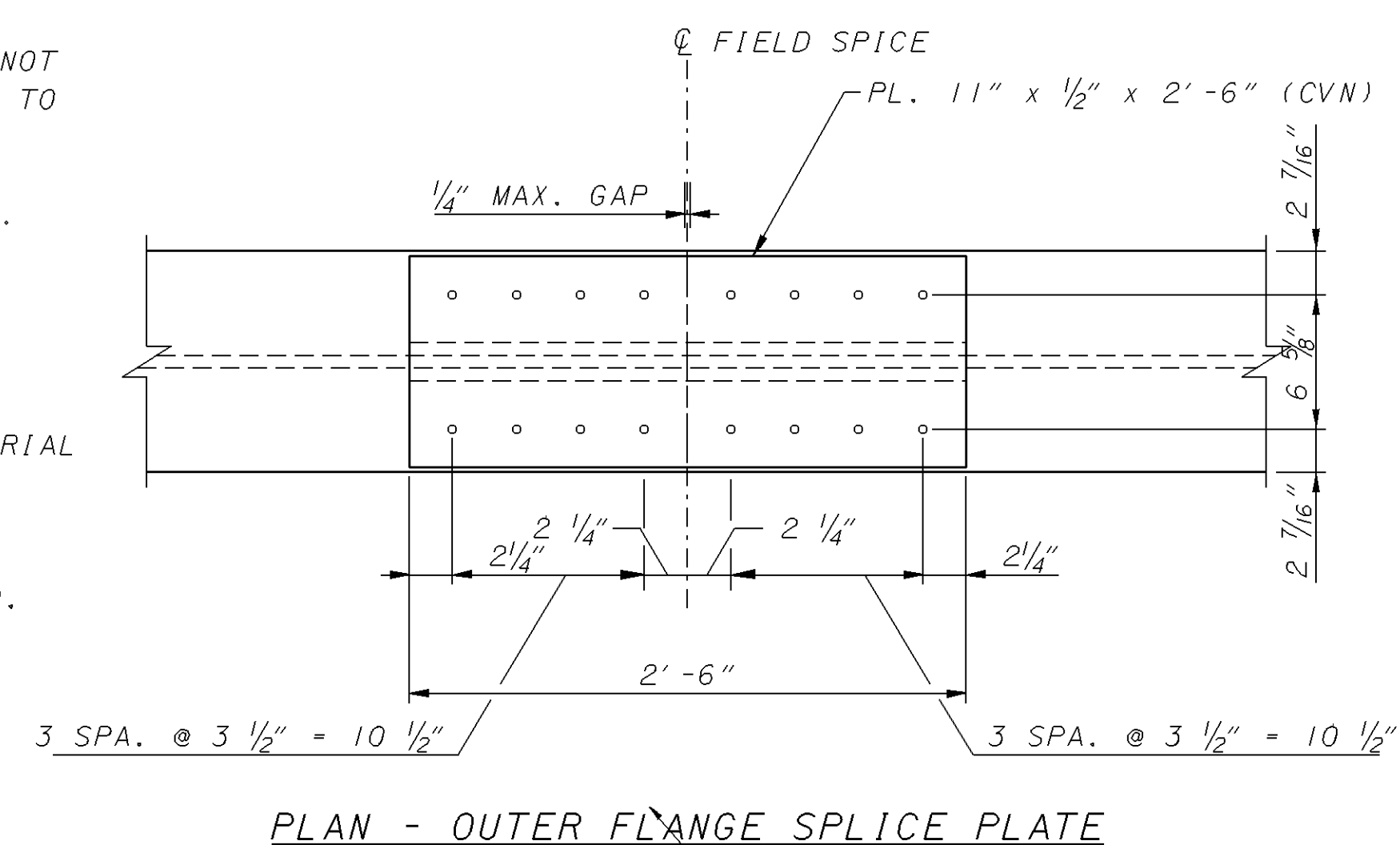
1766
1811



TYPICAL BEAM ELEVATION
(SEE NOTE 7)



TYPICAL FIELD SPLICE DETAILS
SPLICES NO. 1 AND NO. 2

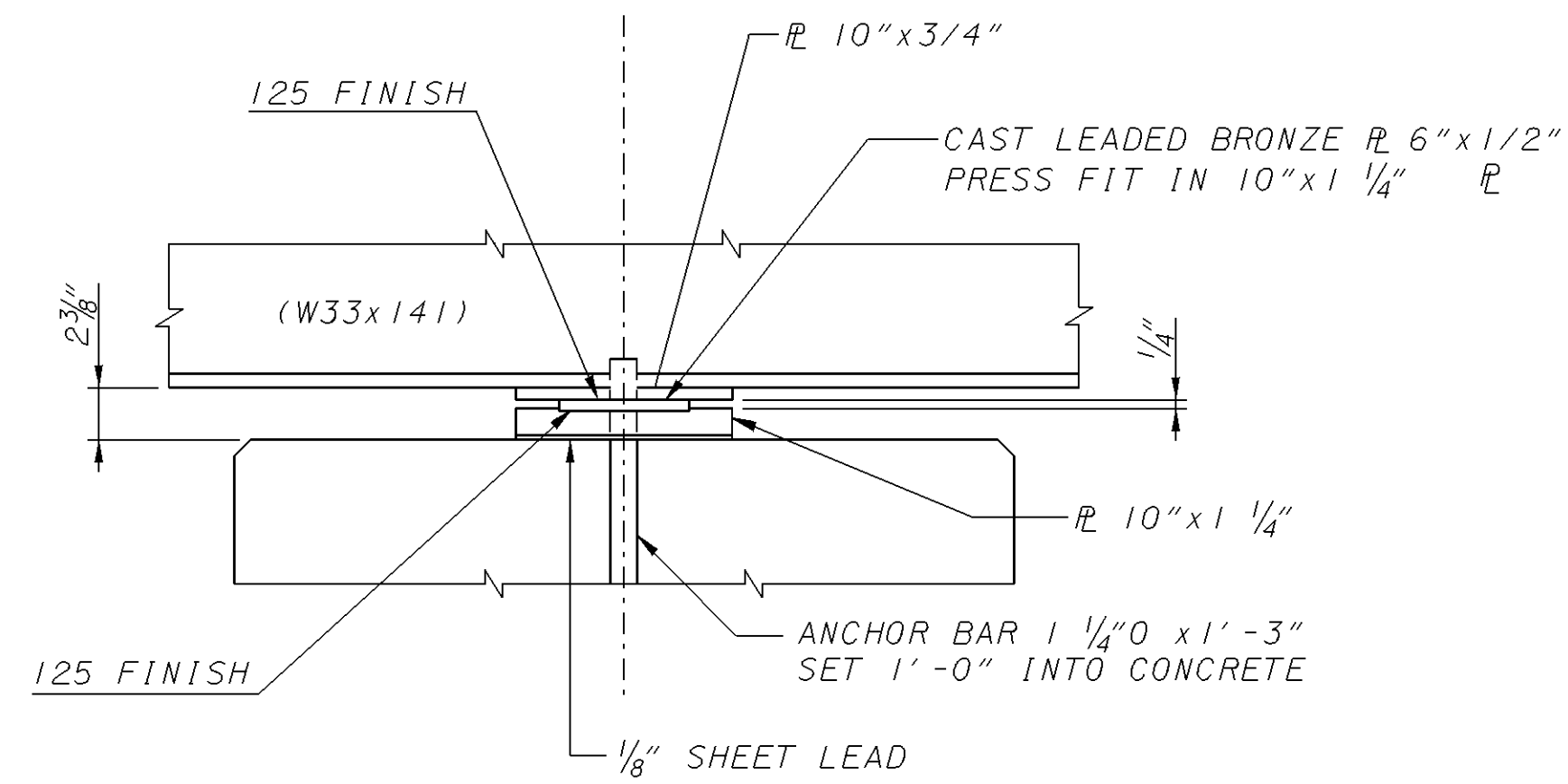


PLAN - OUTER FLANGE SPLICE PLATE

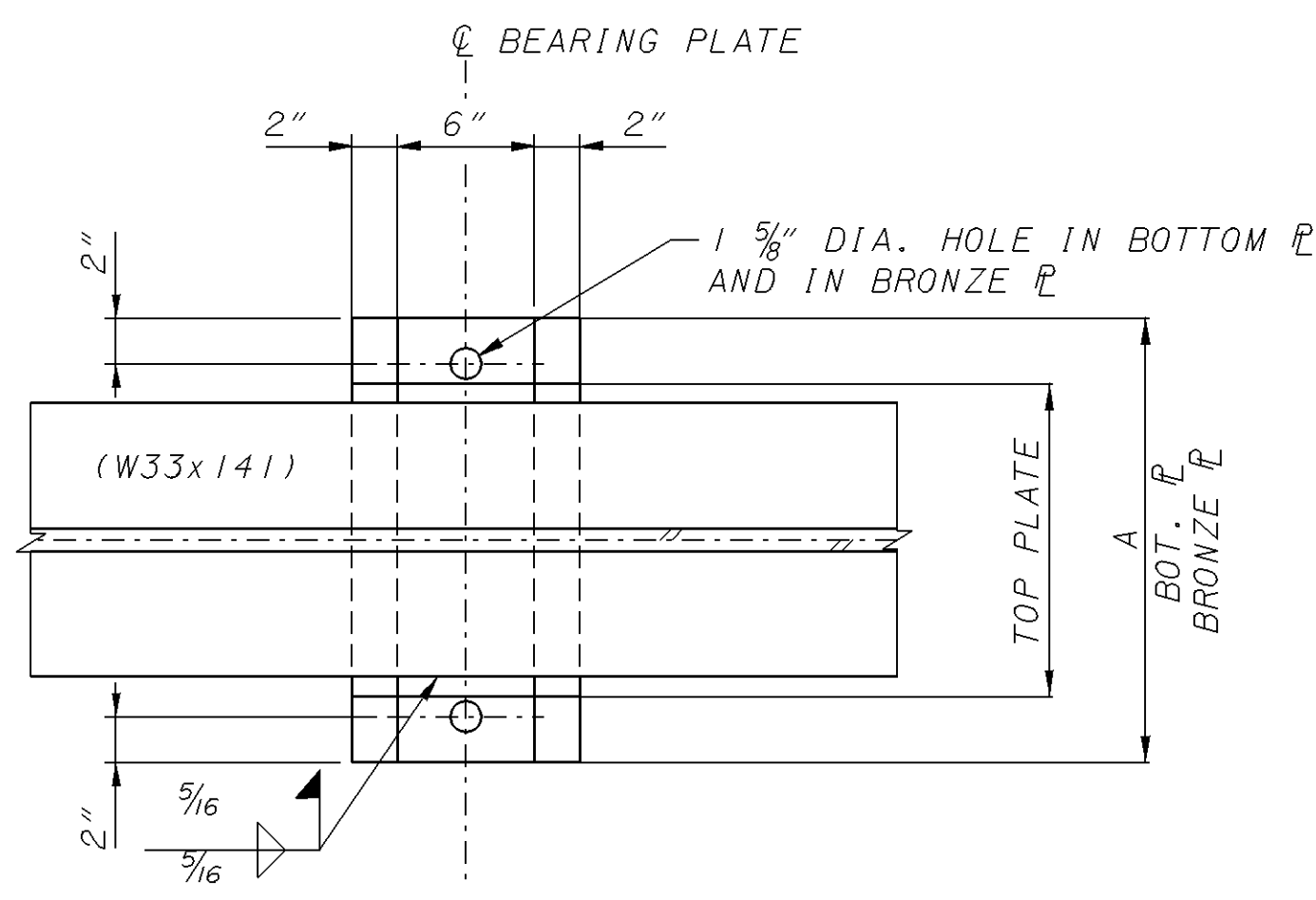
NOTES:

1. WELDED ATTACHMENT:
WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FLANGES DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE NOT CLOSER THAN 1" FROM EDGE OF THE FLANGE, BE NOT MORE THAN 2" LONG AND BE NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO.
2. ALL FASTENERS IN FIELD SPLICES SHALL BE 1 1/8" DIA. ASTM A-325 GALVANIZED HIGH STRENGTH BOLTS.
3. CHARPY V-NOTCH TOUGHNESS REQUIREMENT:
WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), THE MATERIAL SHALL MEET MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.
4. ALL STRUCTURAL STEEL SHALL BE PAINTED A709 GRADE 50.
5. SEE SHEET 14A/20 FOR BEARING PLATE DETAILS.
6. SEE SHEET 15/20 FOR CAMBER DIAGRAM.

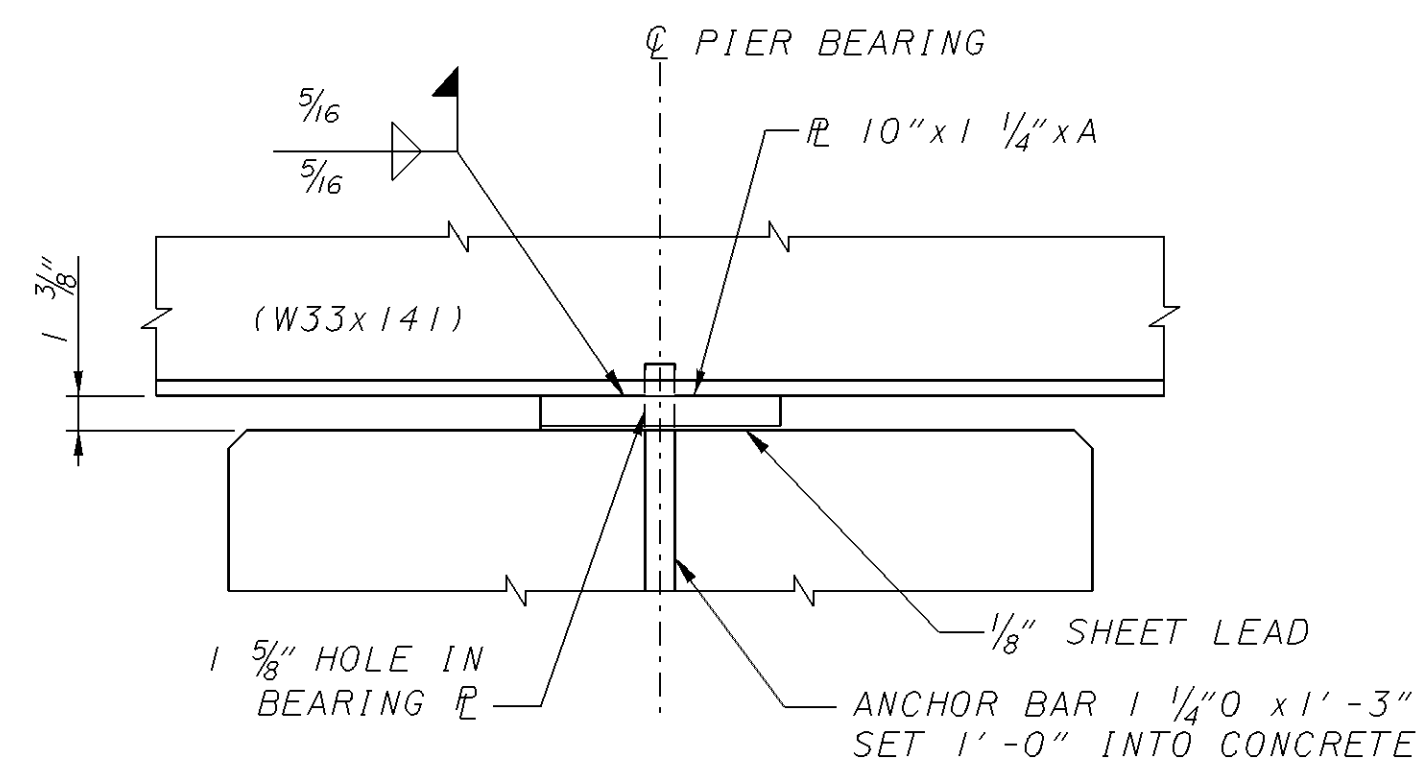
DESIGN AGENCY COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/228-3500	DATE 06/06	REVIEWED TH	DRAWN CEC	DESIGNED JJ	STRUCTURE FILE NUMBER 5708613	CHECKED PFJ	REVISER
BEAM ELEVATION & SPLICE DETAILS BRIDGE NO. MOT-75-1462 I-75 MAINLINE OVER LEO STREET							
MOT-75-13.11 PID 75927							
14/20							
1767 1811							



(ELEVATION PLATE E-1)



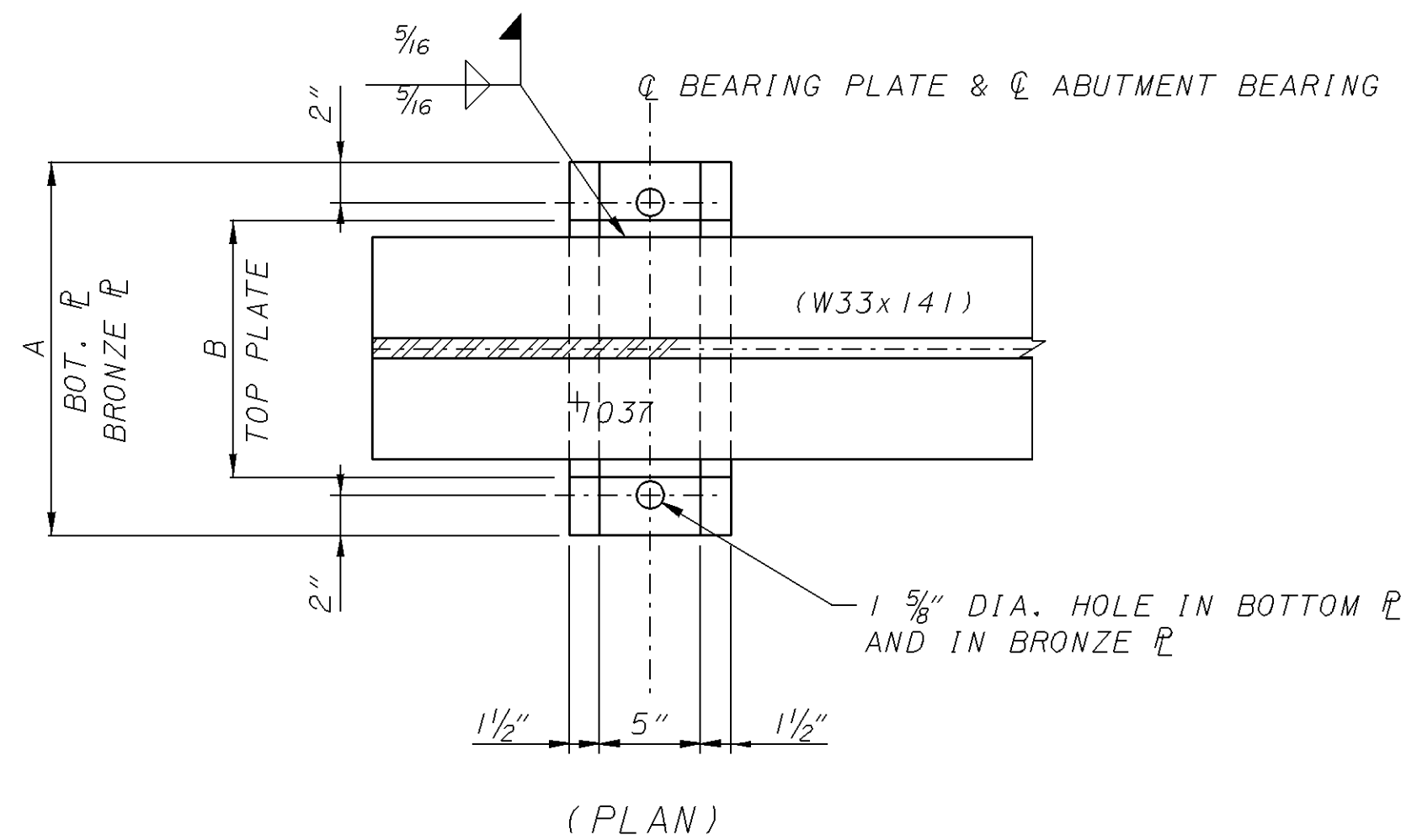
(PLAN PLATE E-1)



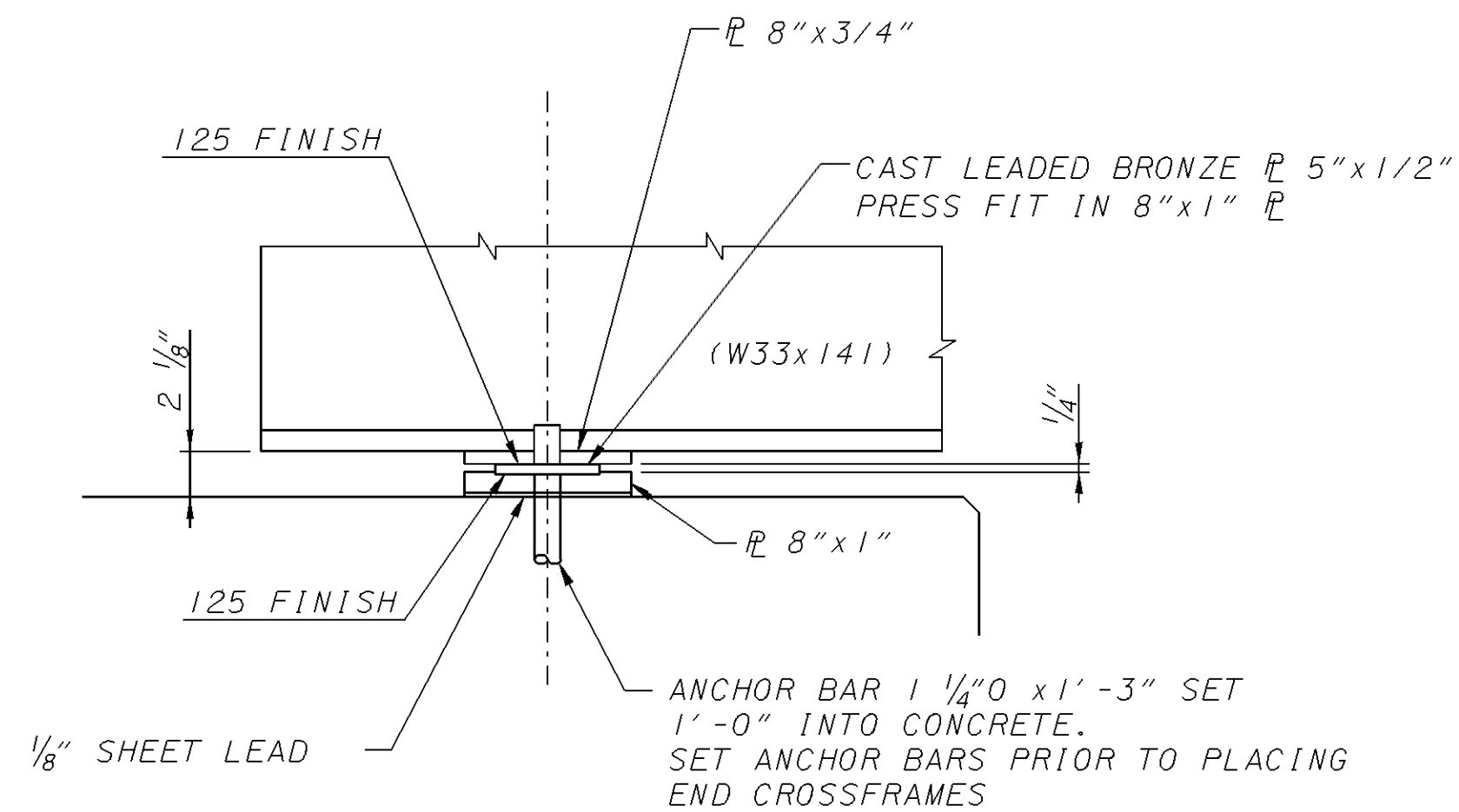
(ELEVATION PLATE F-1)

PIER BEARING PLATES E-1 & F-1

PIER. BEARING PLATES		
TYPE	DIMENSIONS	
	A (IN.)	B (IN.)
E-1	20"	14 1/4"
F-1	19 1/2"	
ABUT. BEARING PLATES		
E-4	18 1/2"	12 3/4"

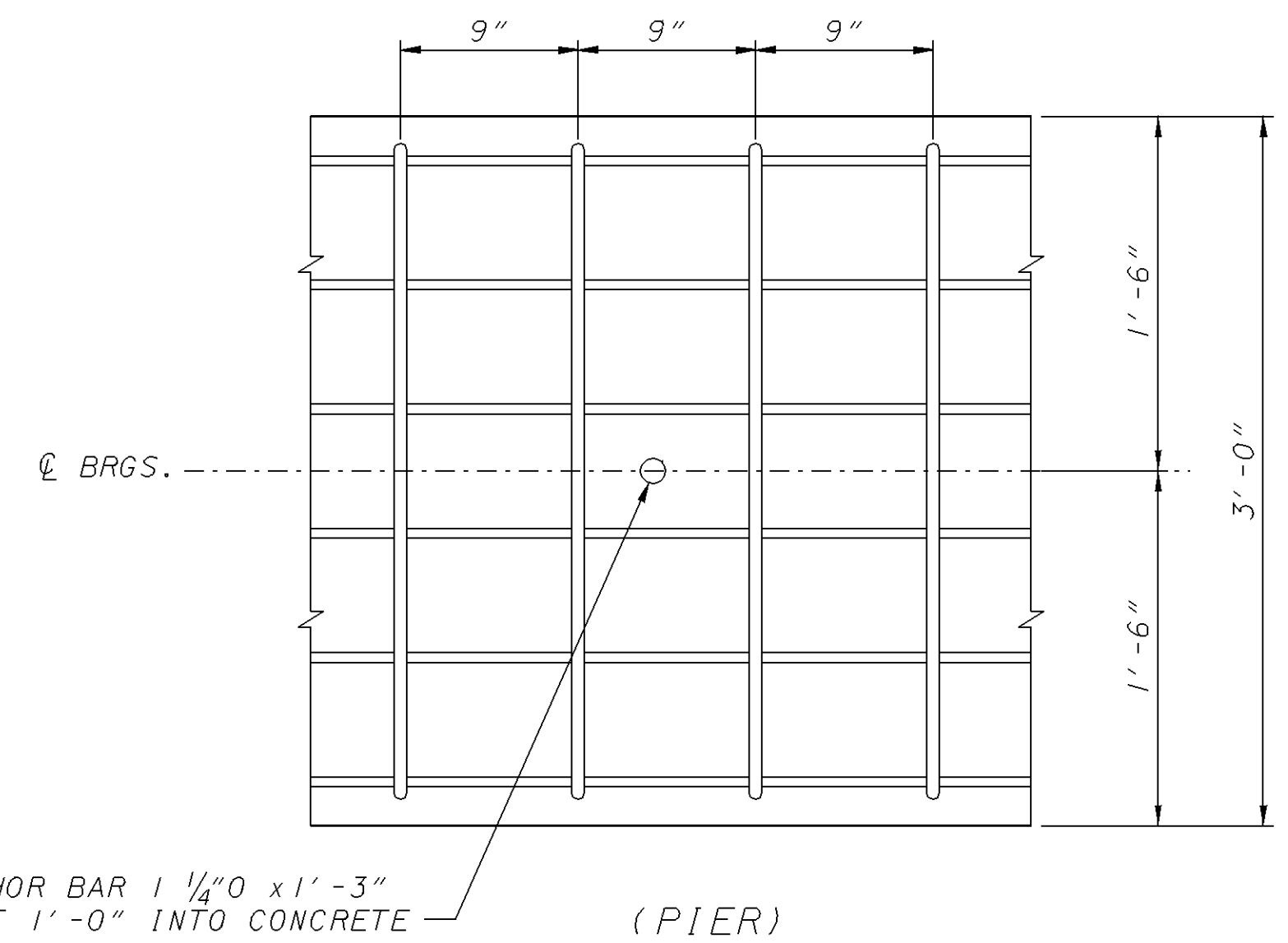
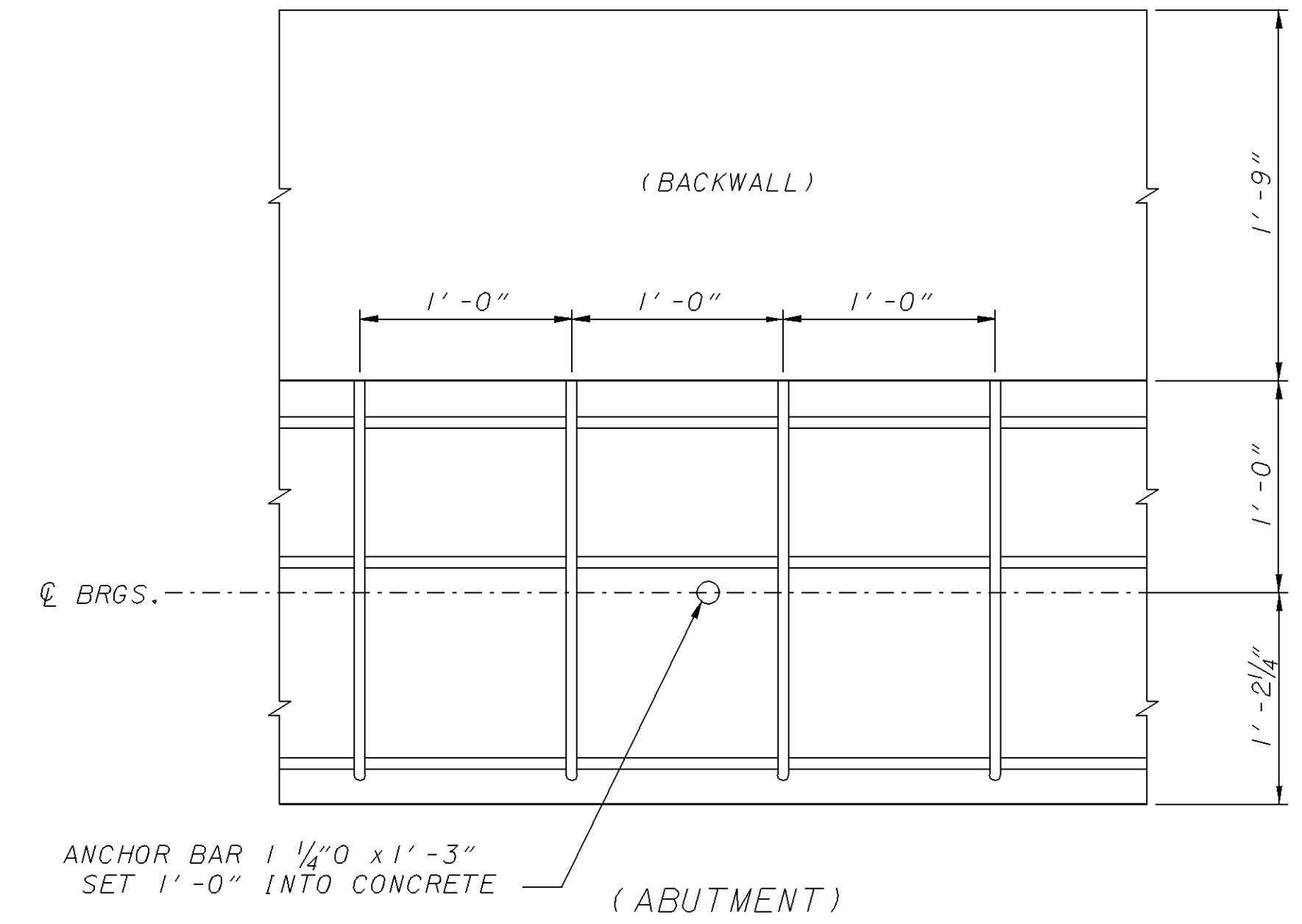


(PLAN)



(ELEVATION)

ABUTMENT BEARING PLATES E-4

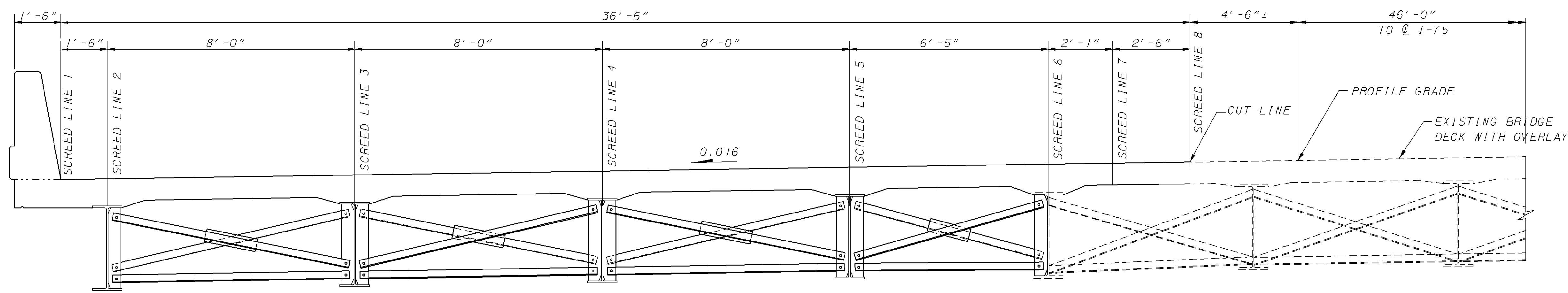


ANCHOR BAR SETTING DETAILS

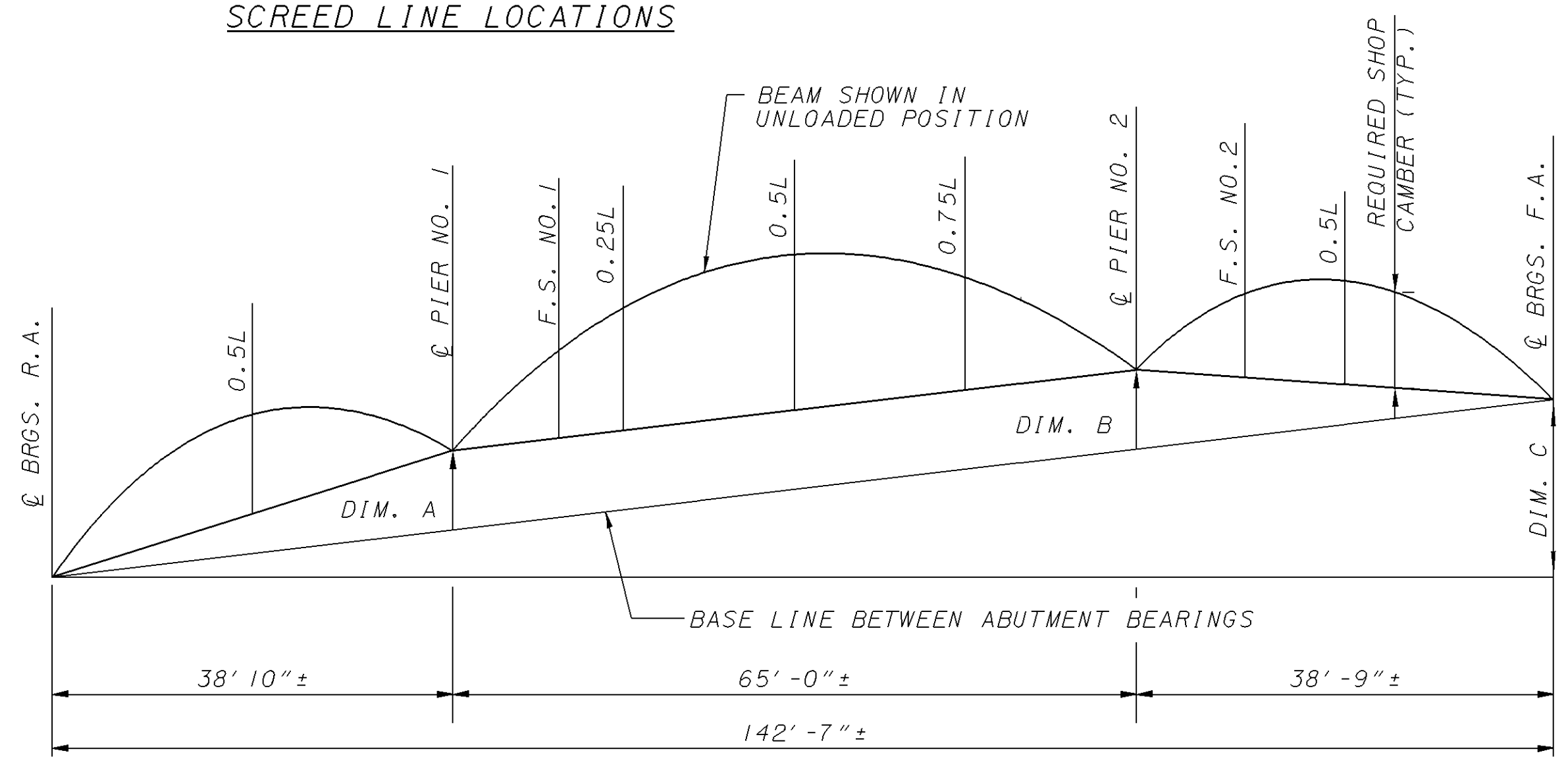
NOTES:

- 1 THE STEEL FOR THE FIXED (F-1) AND EXPANSION (E-1 AND E-4) BEARING PLATES SHALL BE ASTM A709 GRADE 50. ALL EXPOSED SURFACES OF THE BEARING ASSEMBLY SHALL BE PAINTED AND PAID UNDER ITEM 885.
- 2 THE ANCHOR BARS SHALL ALSO BE INCLUDED WITH ITEM 516 FOR PAYMENT.
- 3 THE REBAR IN BEAM SEATS AT ABUTMENTS AND PIERS SHALL BE PLACED TO CLEAR THE ANCHOR BARS.

SCREED ELEVATIONS TABLE (SOUTHBOUND)										
SPAN NO.	LOCATION	STATION	SCREED LINE 1	SCREED LINE 2	SCREED LINE 3	SCREED LINE 4	SCREED LINE 5	SCREED LINE 6	SCREED LINE 7	SCREED LINE 8
SPAN NO. 1	0.00 L	425+21.67	765.07	765.10	765.23	765.35	765.48	765.58	765.62	765.66
	0.50 L	425+41.09	765.16	765.19	765.32	765.44	765.57	765.68	765.71	765.75
SPAN NO. 2	0.00 L	425+60.50	765.25	765.27	765.40	765.53	765.66	765.76	765.79	765.83
	0.17 L	425+71.55	765.30	765.32	765.45	765.58	765.71	765.81	765.84	765.88
	0.25 L	425+76.75	765.31	765.34	765.47	765.59	765.72	765.82	765.86	765.90
	0.50 L	425+93.00	765.31	765.34	765.47	765.59	765.72	765.82	765.86	765.90
	0.75 L	426+08.88	765.31	765.34	765.47	765.59	765.72	765.82	765.86	765.90
SPAN NO. 3	0.00 L	426+25.50	765.31	765.34	765.47	765.59	765.72	765.82	765.86	765.90
	0.40 L	426+41.00	765.28	765.30	765.43	765.56	765.68	765.79	765.82	765.86
	0.50 L	426+44.88	765.26	765.29	765.42	765.54	765.67	765.77	765.81	765.85
	1.00 L	426+64.25	765.23	765.25	765.38	765.51	765.64	765.74	765.77	765.81



SCREED LINE LOCATIONS



CAMBER & BLOCKING DIAGRAM

NOTES:

- FOR FRAMING PLAN, SEE SHEET 13/20
- SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

DEFLECTION AND CAMBER TABLE							
BEAMS B1 TO B4 (SOUTHBOUND)	SPAN 1		SPAN 2			SPAN 3	
	0.50L	F.S. 1	0.25L	0.50L	0.75L	F.S. 2	0.50L
DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/16"	1/16"	1/8"	1/16"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	1/16"	3/16"	3/8"	9/16"	3/8"	-1/16"	1/16"
ADJUSTMENT DUE TO VERTICAL CURVE	1"	1/4"	1/4"	1/4"	1/4"	1/4"	1/8"
TOTAL CAMBER	1 1/16"	1/16"	1/16"	13/16"	5/8"	3/16"	3/8"

ABBREVIATIONS:
L = SPAN LENGTH
F.S. = FIELD SPLICE

BLOCKING DIMENSION			
BEAM NO.	DIM. A	DIM. B	DIM. C
1 THRU 4	1 15/16"	1 9/16"	2 3/16"

DESIGN AGENCY:
COLUMBUS ENGINEERING CONSULTANTS, INC.
840 MICHIGAN AVENUE, COLUMBUS, OH 43215
TEL: 614/223-3500

REVIEWED
TH
DATE
06/06
STRUCTURE FILE NUMBER
5708613

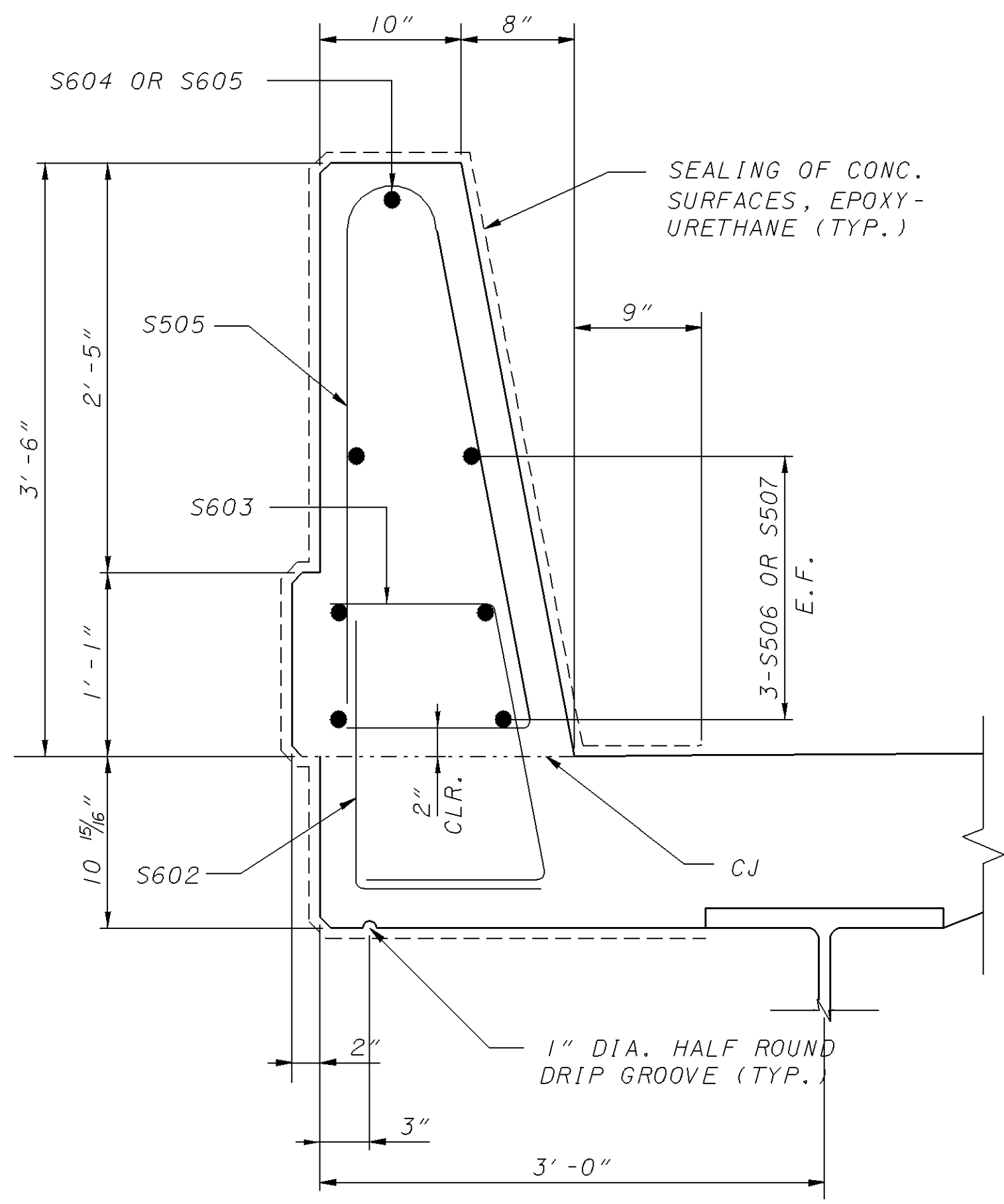
DESIGNED
JJ
CHECKED
PFJ

BEAM CAMBER & SCREED ELEVATIONS
BRIDGE NO. MOT-75-1462
I-75 MAINLINE OVER LEO STREET

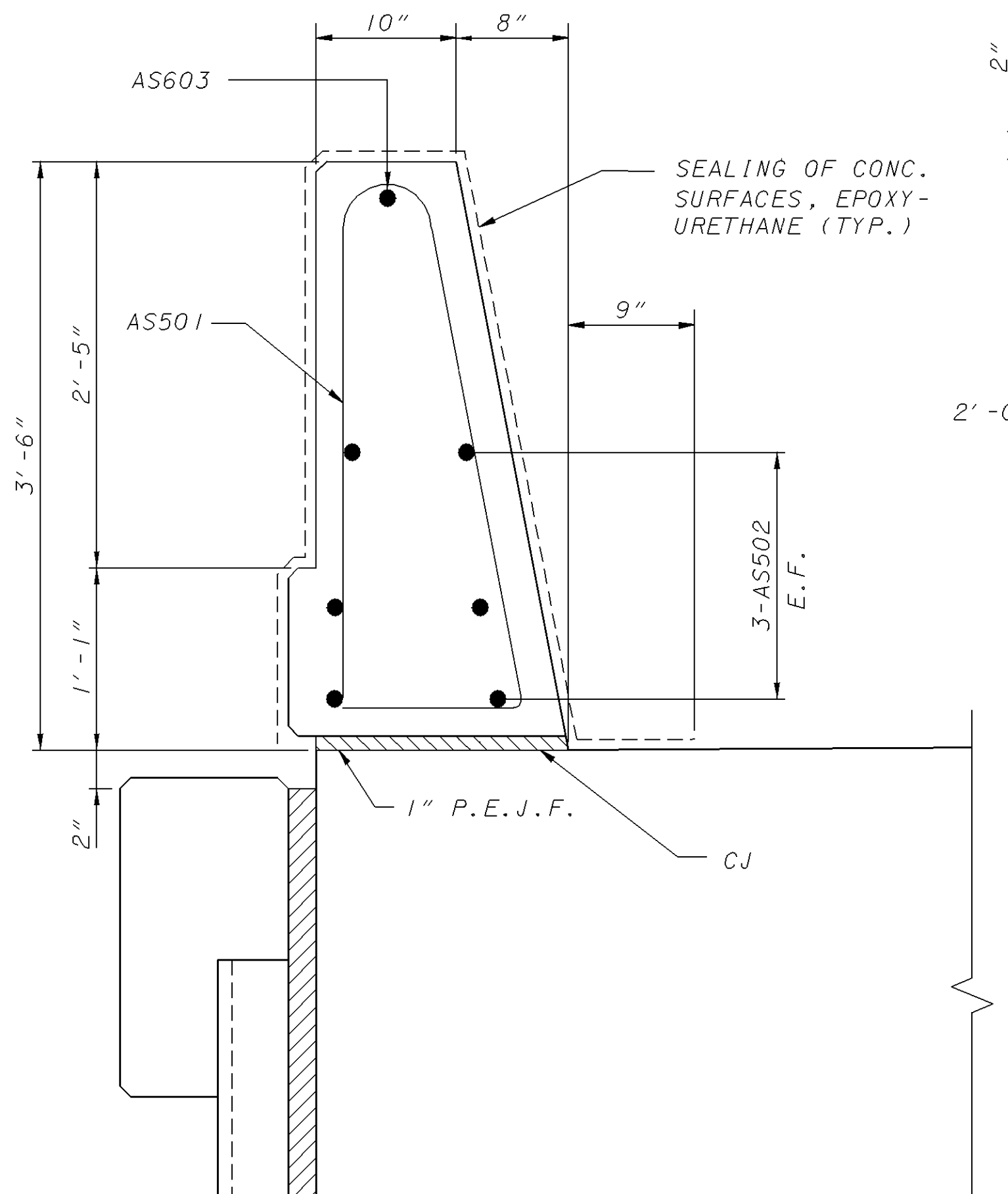
MOT-75-13.11
PID 75927

15/20

1769
1811

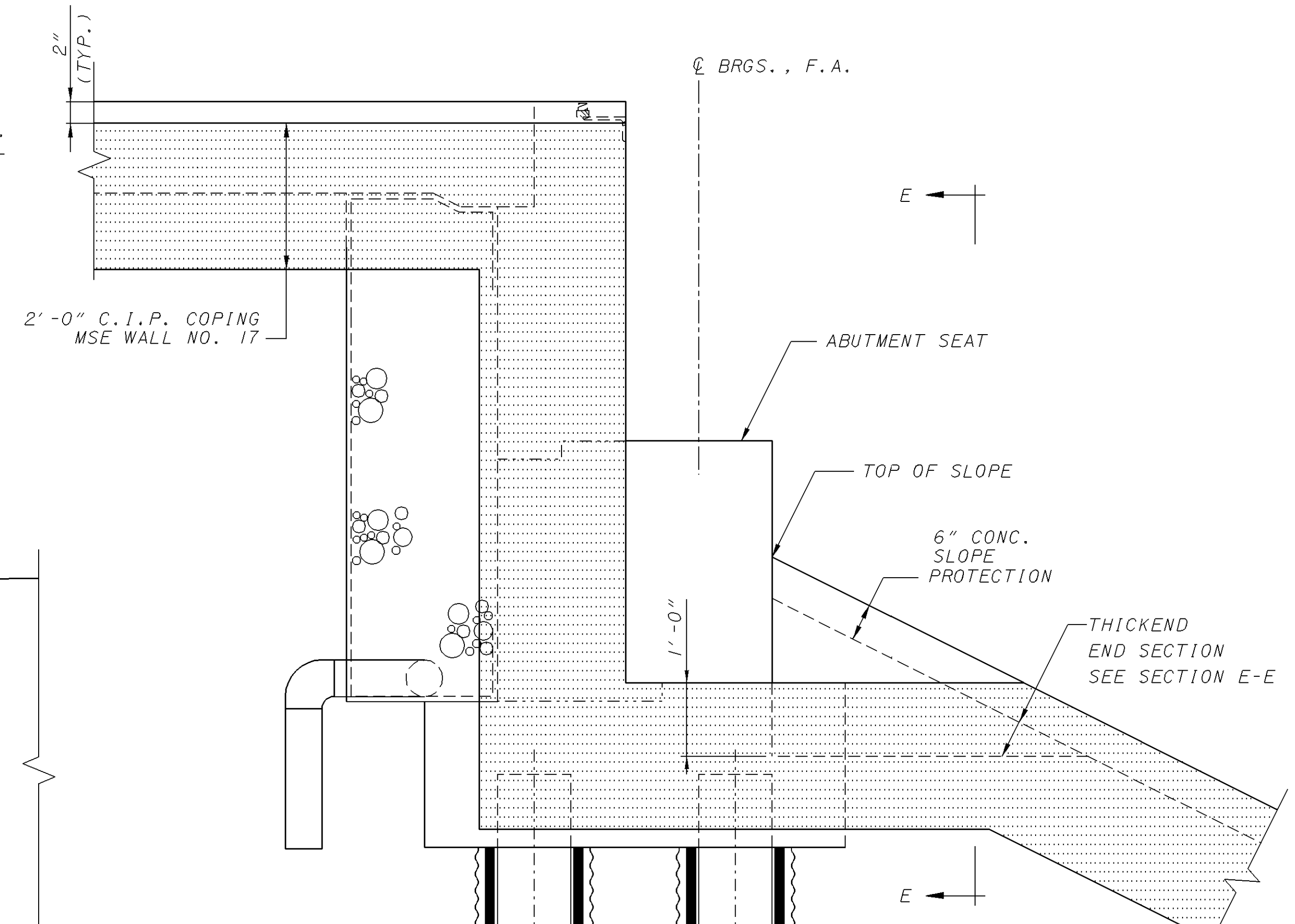


PARAPET REINFORCING & SEALING LIMITS



SECTION X-X

(PARAPET REINFORCING ABOVE BACKWALLS, SEE NOTE 4.)



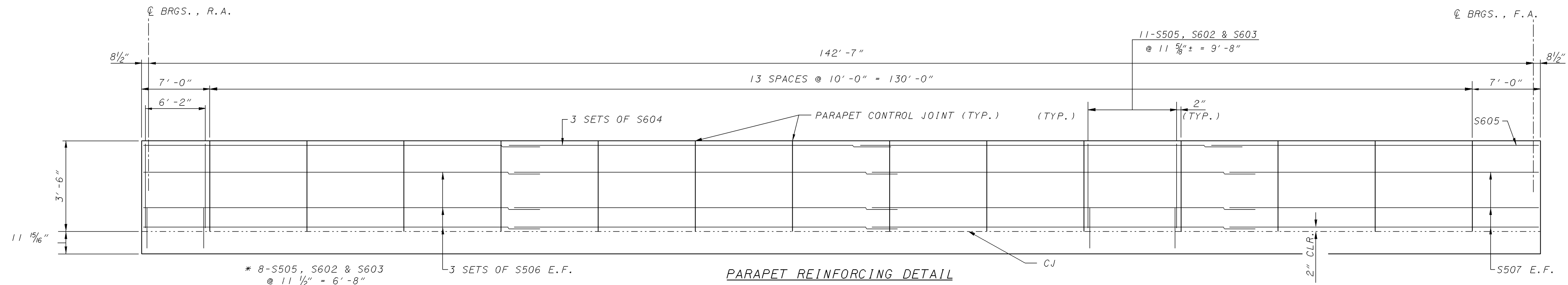
VIEW D-D

(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)

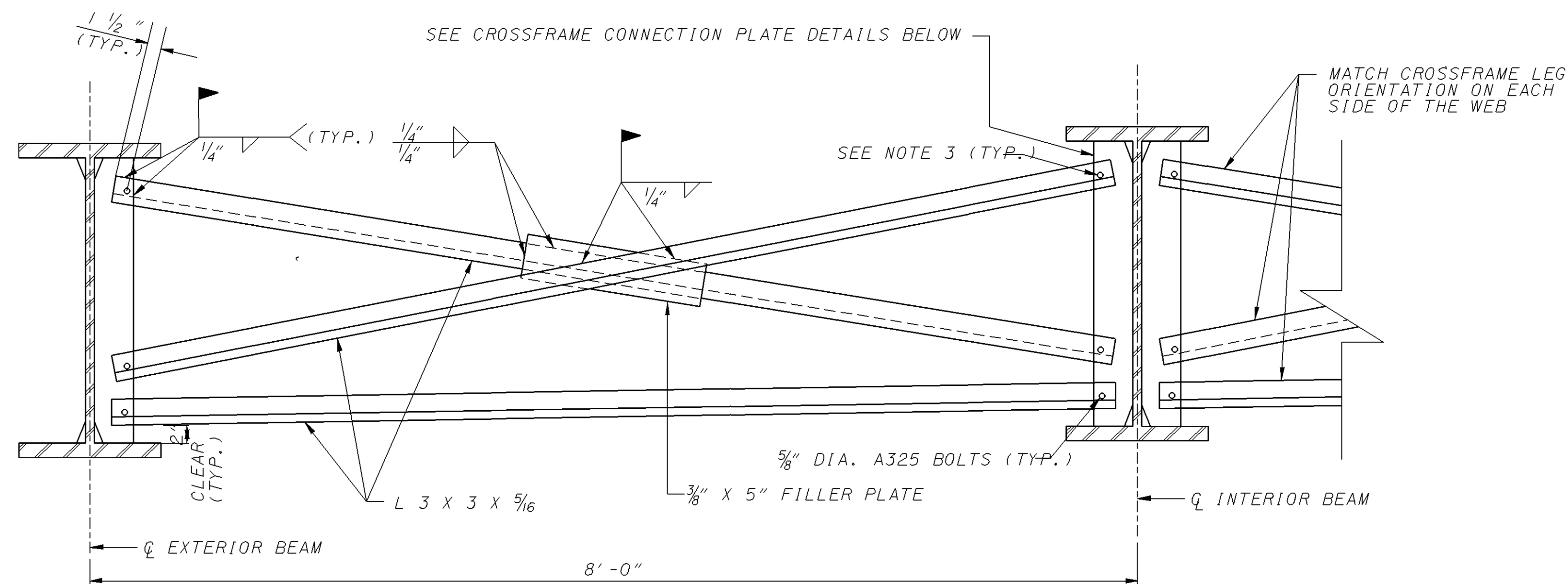
NOTES

1. AS SOON AS A CONCRETE SAW CAN BE OPERATED WITHOUT DAMAGING THE FRESHLY PLACED CONCRETE, SAWCUT 1/4" DEEP CONTROL JOINTS INTO THE PERIMETER OF THE CONCRETE PARAPET STARTING AND ENDING AT THE ELEVATION OF THE CONCRETE DECK. PLACE THE SAWCUTS AT A MINIMUM OF 6 FEET AND A MAXIMUM OF 10 FEET CENTERS. USE AN EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF 1/4". SEAL THE PERIMETER OF THE DEFLECTION CONTROL JOINT TO A MINIMUM DEPTH OF 1 INCH WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM 1/2" OF THE INSIDE AND OUTSIDE FACE UNSEALED TO ALLOW WATER TO ESCAPE.

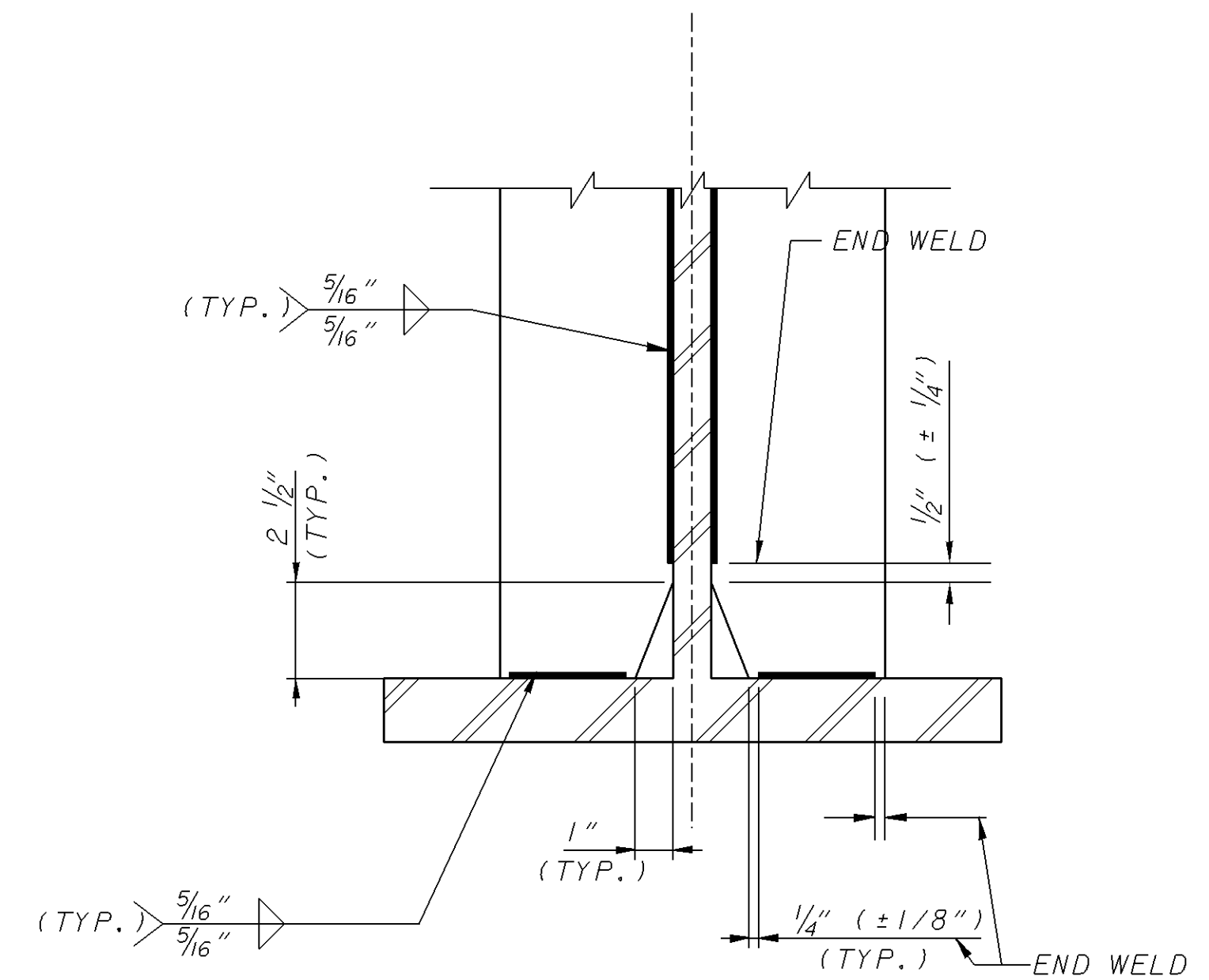
2. MINIMUM LAP LENGTHS:
NO.4 BARS 2'-7".
NO.5 BARS 3'-2".
NO.6 BARS 3'-10".
3. SEE SBR-1-99 FOR ADDITIONAL PARAPET DETAILS.
4. FOR LOCATION OF SECTION X-X, SEE 19/20.
5. FOR LOCATION OF VIEW D-D, SEE 10/20.
6. FOR SECTION E-E, SEE 17/20.



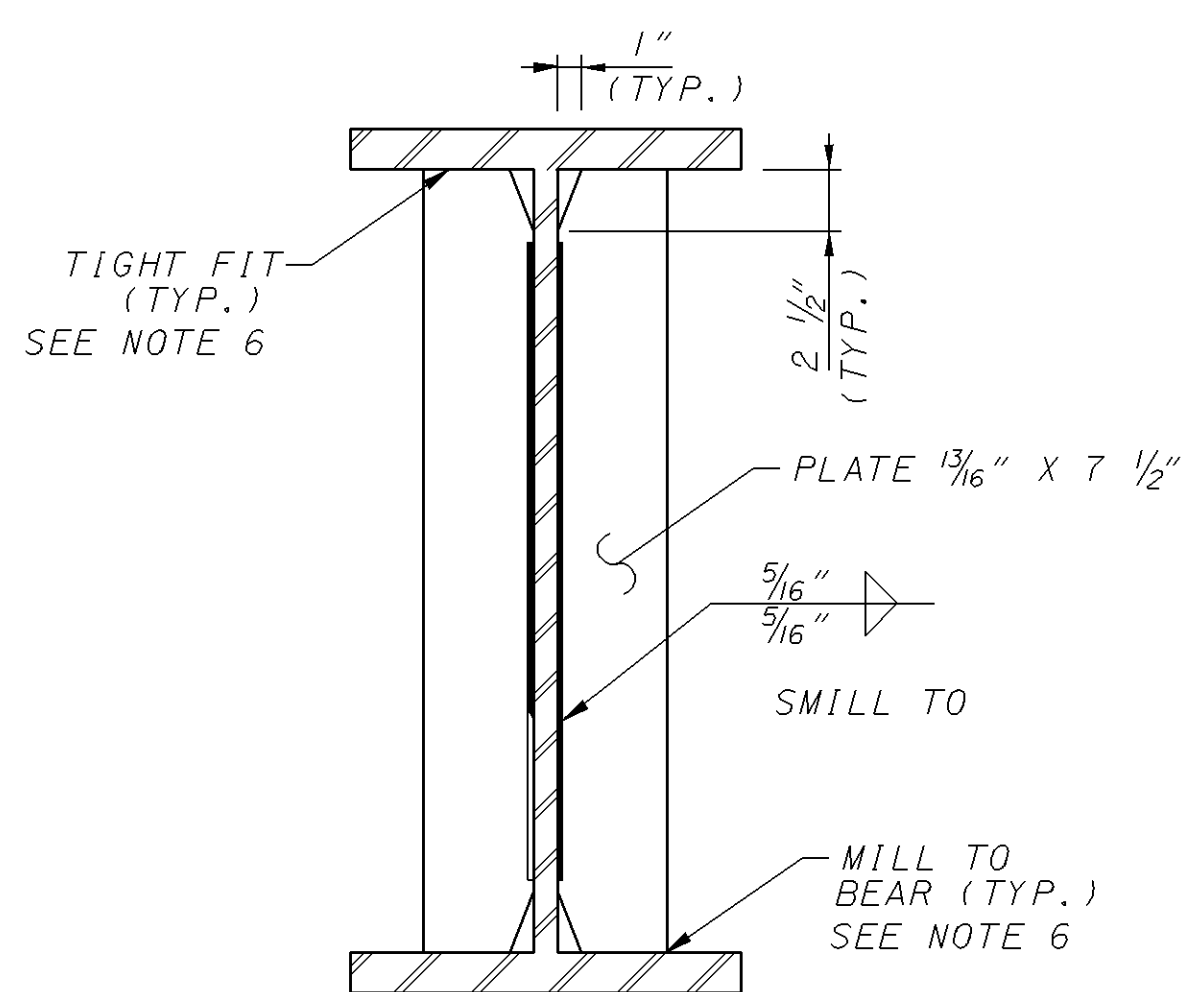
PARAPET REINFORCING DETAIL



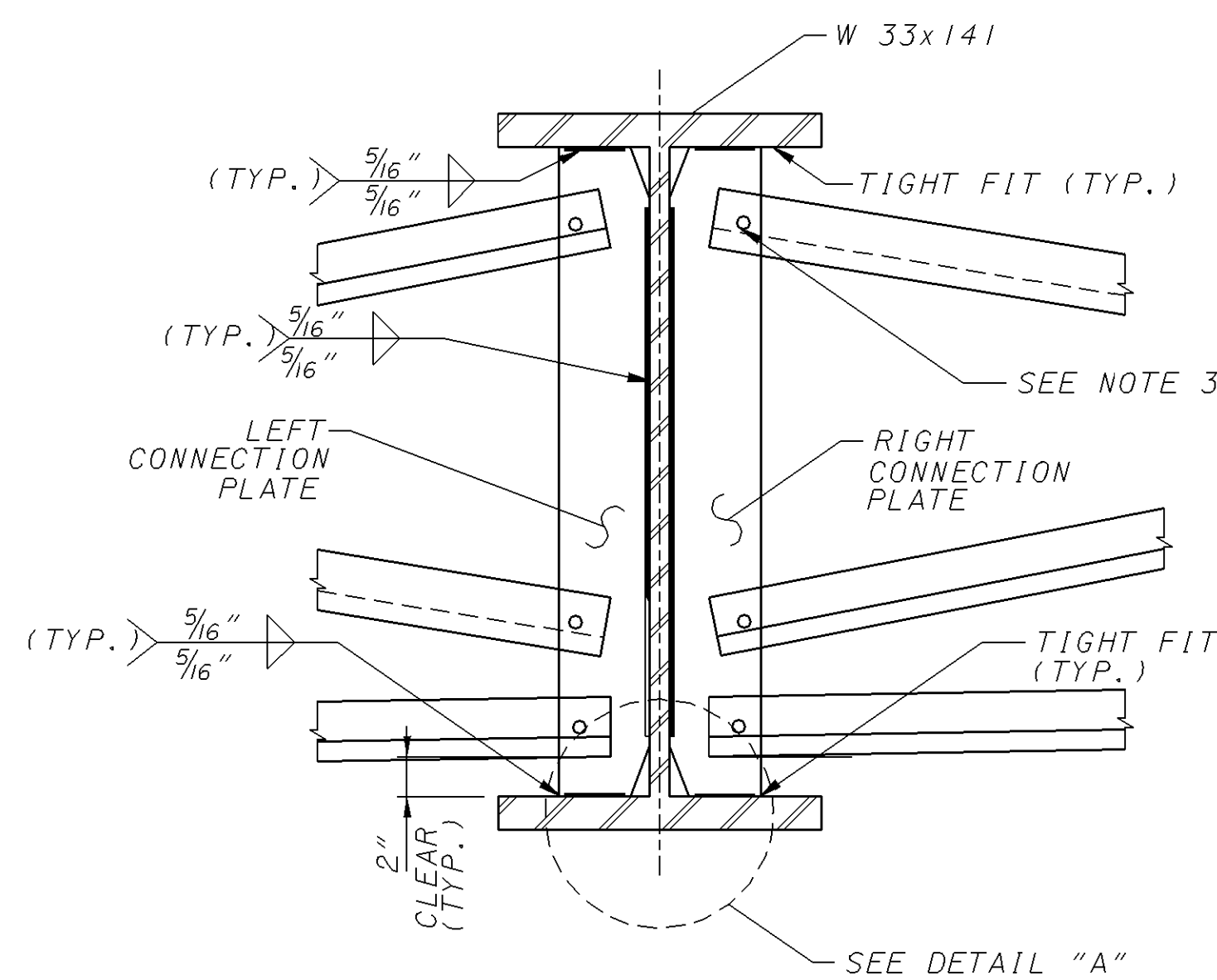
INTERMEDIATE WELDED CROSSFRAME DETAIL (TYPE 3)



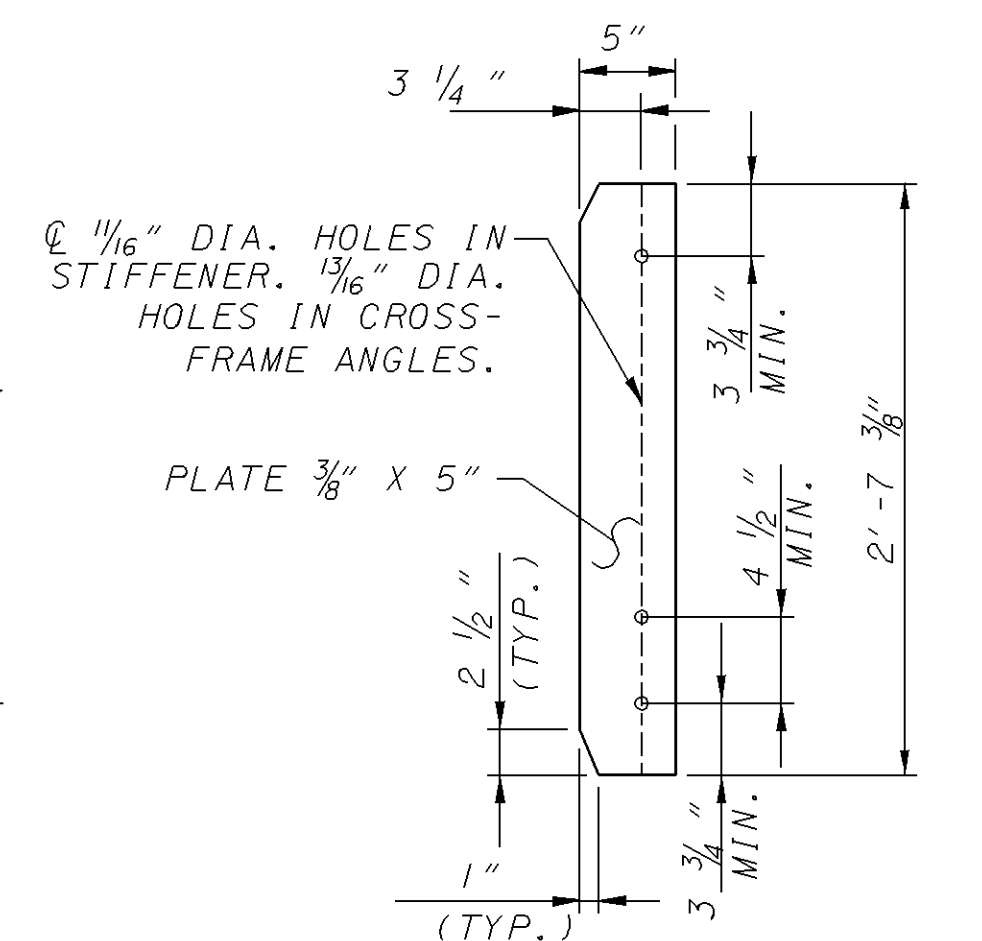
DETAIL A
(TYPICAL WELD TERMINATION AT
CROSSFRAME CONNECTION PLATES.)



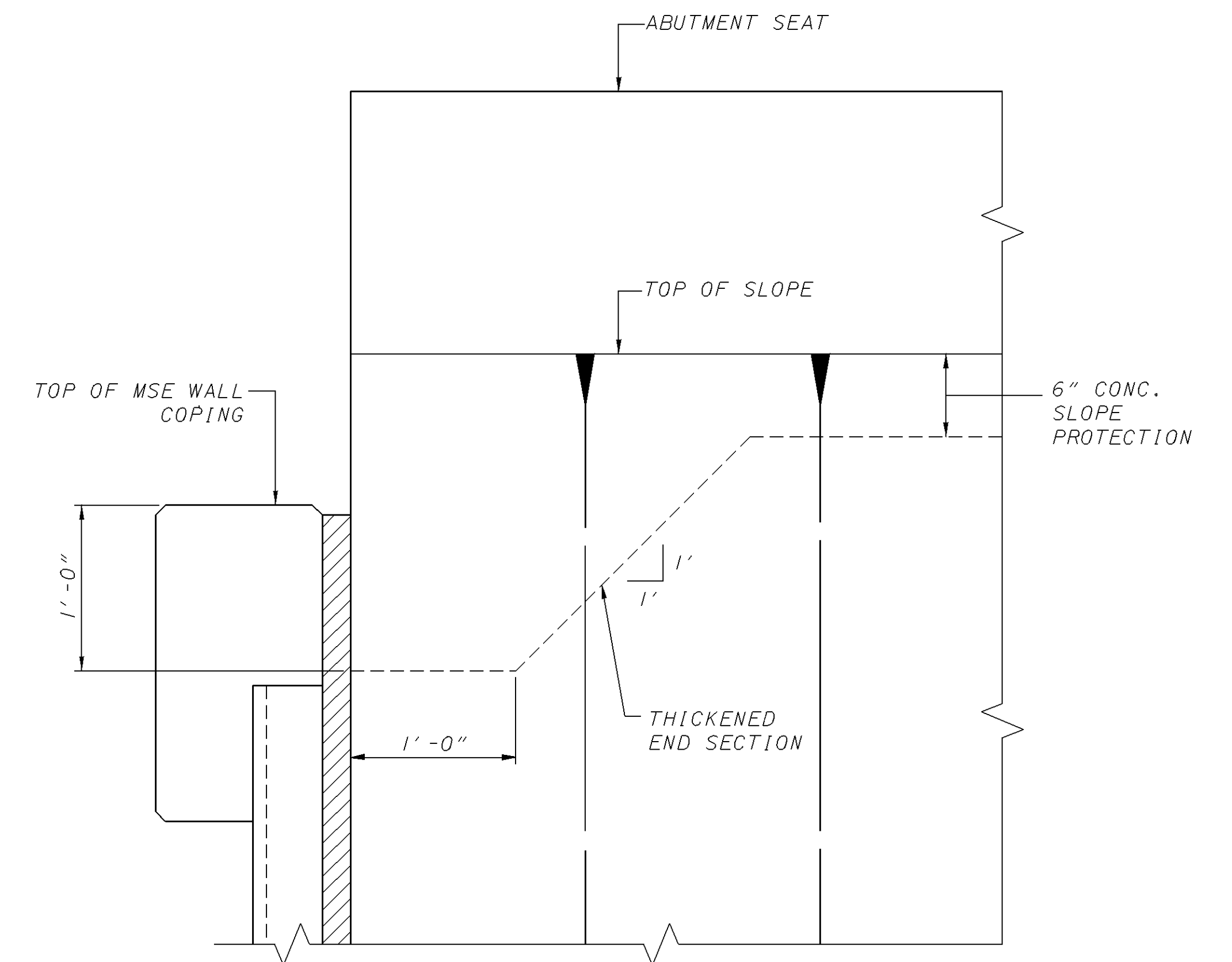
PIER BEARING STIFFENER



CROSSFRAME CONNECTION PLATE



CONNECTION PLATE DETAIL
(RIGHT CONNECTION PLATE SHOWN,
LEFT CONNECTION PLATE SIMILAR)

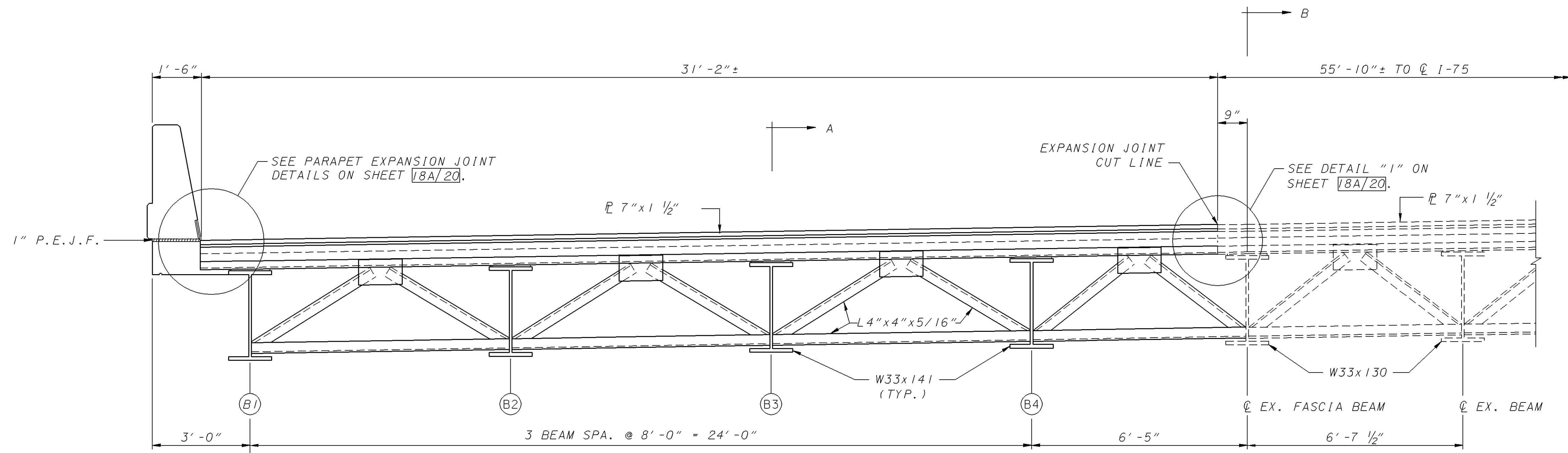


SECTION E-E

NOTES:

- FOR STRUCTURAL STEEL NOTES, SEE 14 20 .
- IN LIEU OF THE TYPE 3 CROSSFRAME DETAIL SHOWN, THE CONTRACTOR HAS THE OPTION OF USING THE TYPE 4 DETAIL AS SHOWN IN STD. DWG. GSD-1-96.
- ERECTOR BOLTS IN WELDED CROSSFRAMES SHALL BE 5/8" DIAMETER A325 TYPE I HIGH STRENGTH BOLTS, GALVANIZED.
- CLIP OUTSIDE CONNECTION PLATE CORNERS AT 45 DEGREES WHEN THE CONNECTION PLATE WIDTH IS GREATER THAN ONE-HALF THE FLANGE WIDTH.
- FOR ADDITIONAL CROSSFRAME AND BEARING STIFFENER NOTES, SEE STD. DWG. GSD-1-96.
- AT LOCATIONS WHERE CROSSFRAMES ATTACH TO BEARING STIFFENERS, WELDING OF STIFFENER TO FLANGE IN ADDITION TO THE FIT CONDITIONS IS REQUIRED.
- FOR LOCATION OF SECTION E-E, SEE SHEET 16/20 .

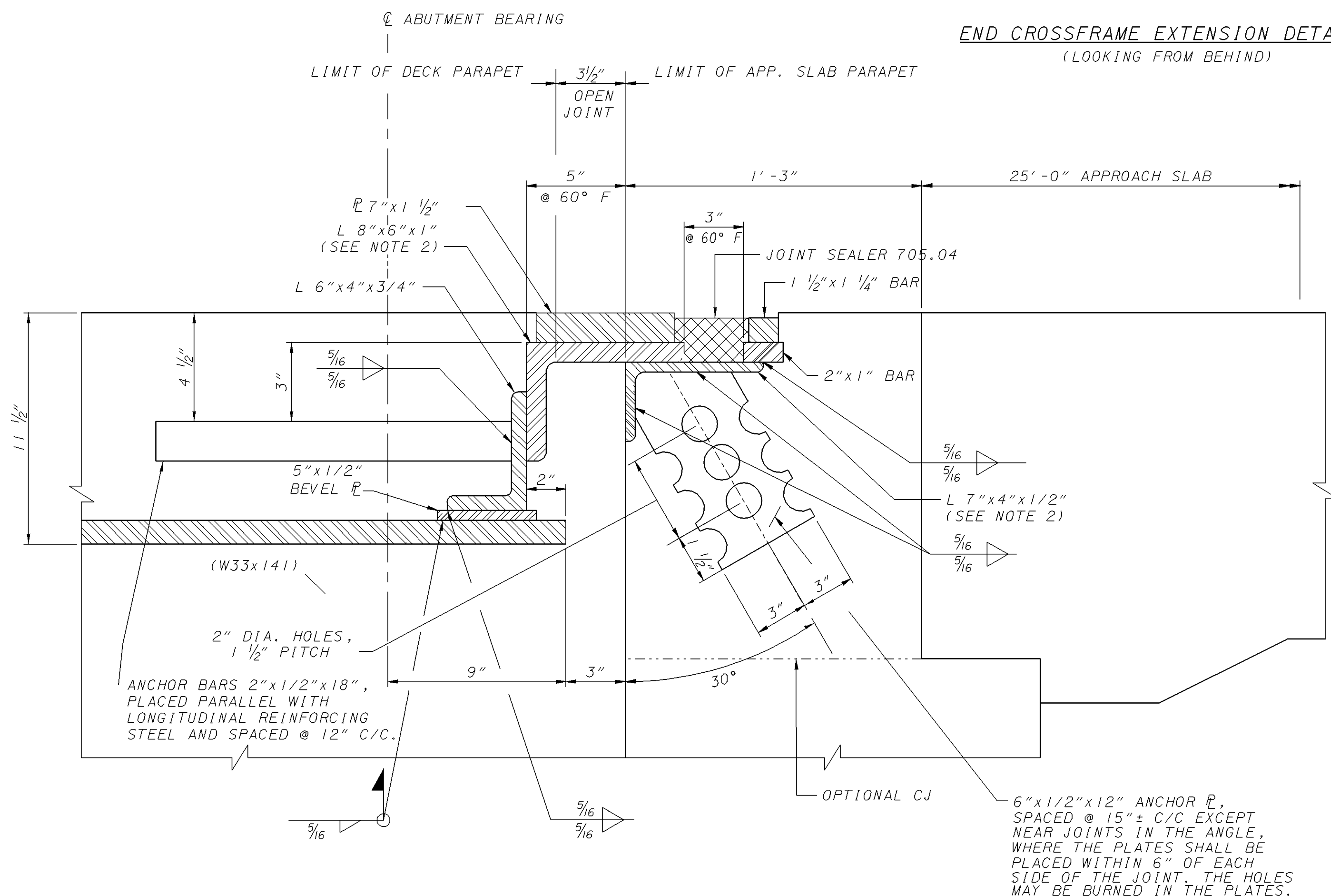
DESIGNED J J	CHECKED P F J	DRAWN C E C	REVISED	REVIEWED T H	DATE 06/06	DESIGN AGENCY COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/428-3500
INTERMEDIATE CROSSFRAME DETAILS BRIDGE NO. MOT-75-1462 I-75 MAINLINE OVER LEO STREET						
MOT-75-13.11 PID 75927						
17/20						
1771 1811						



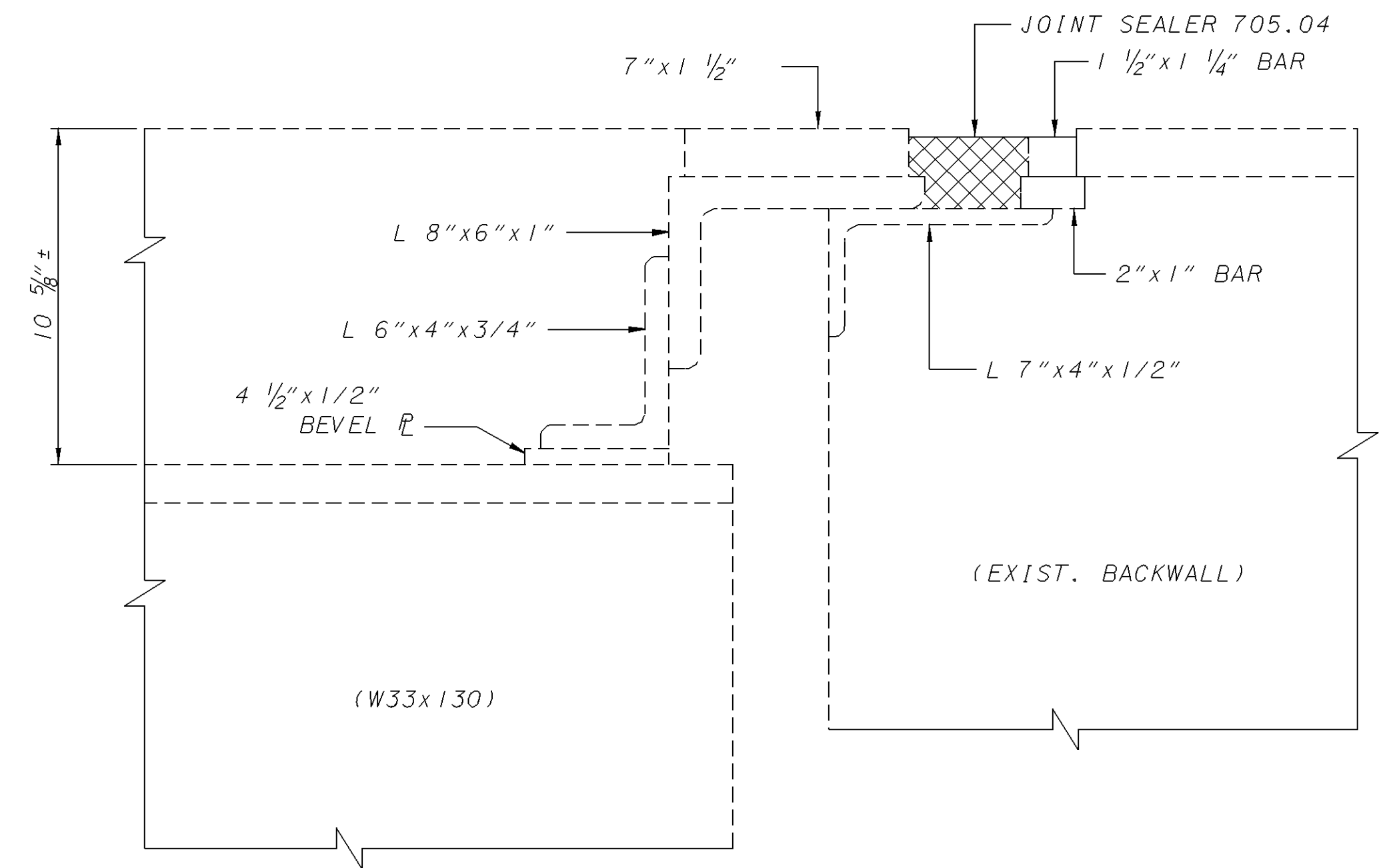
END CROSSFRAME EXTENSION DETAILS
(LOOKING FROM BEHIND)

NOTES

1. THE EXPANSION JOINT CUT LINE AND THE DECK CUT LINE ARE NOT AT THE SAME LOCATION. SEE LOCATION OF DECK CUT LINE ON SHEET 12/20.
2. PROVIDE VENTING HOLES AT 9" MAX. IN THE ARMOR STEEL L 8"x6"x1" AND L 7"x4"x1/2".
3. THE STEEL FOR THE EXTENDED PORTION OF THE EXPANSION JOINTS SHALL BE ASTM A709, GRADE 50, PAINTED, AND IS TO BE INCLUDED WITH STRUCTURAL STEEL MEMBERS, LEVEL 3 FOR PAYMENT. THE FINISH AND COATING SHALL CONFORM TO ODOT CMS 513.12 AND 513.27.
4. THE TEMPORARY SUPPORT AND CONSTRUCTION SEQUENCE OF THE PROPOSED EXPANSION JOINTS SHALL BE PROPOSED BY THE CONTRACTOR IN THE FORM OF SHOP DRAWINGS FOR THE ENGINEER'S REVIEW AND APPROVAL.

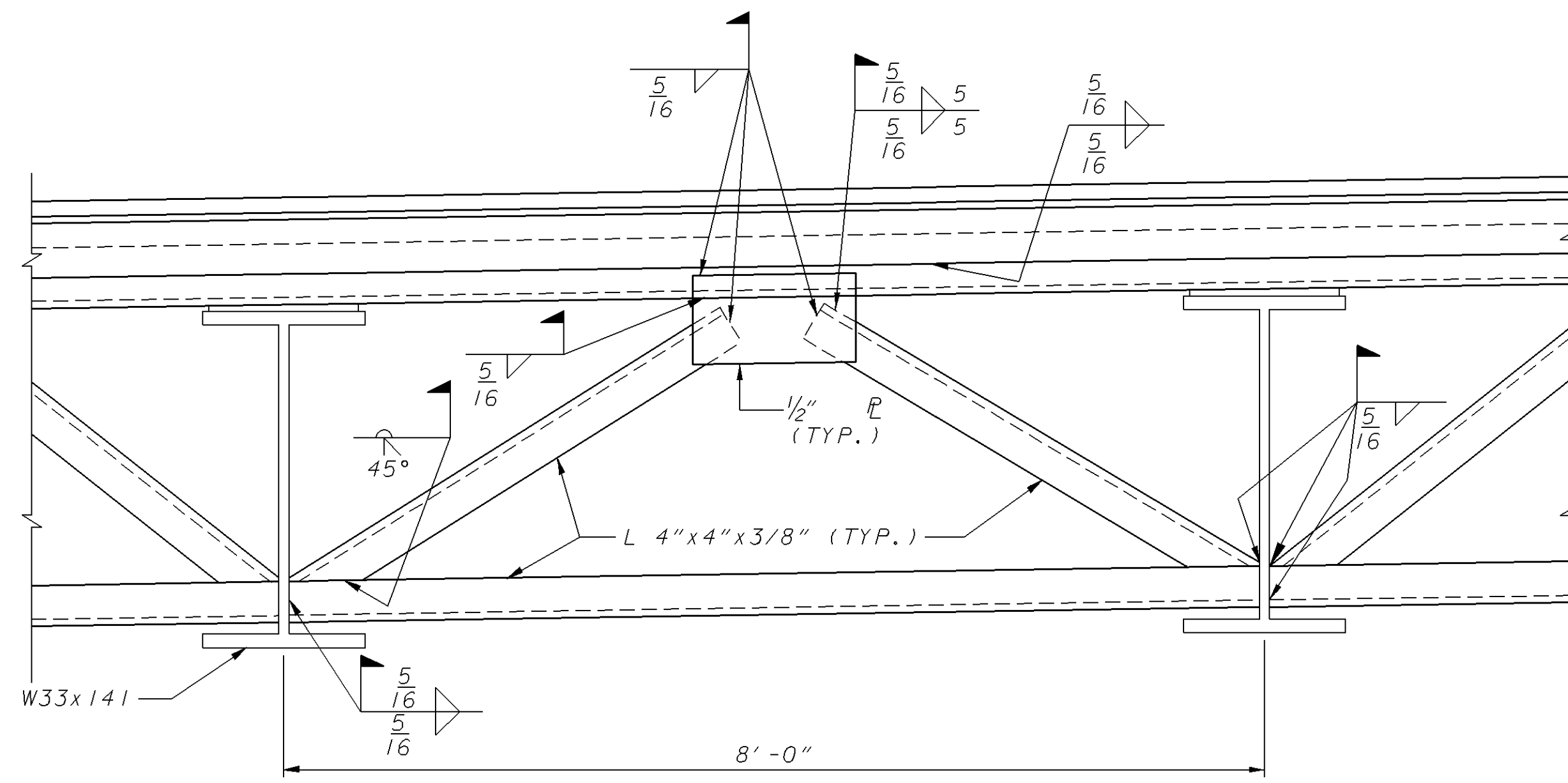


PROPOSED EXPANSION JOINT DETAILS
SECTION A-A

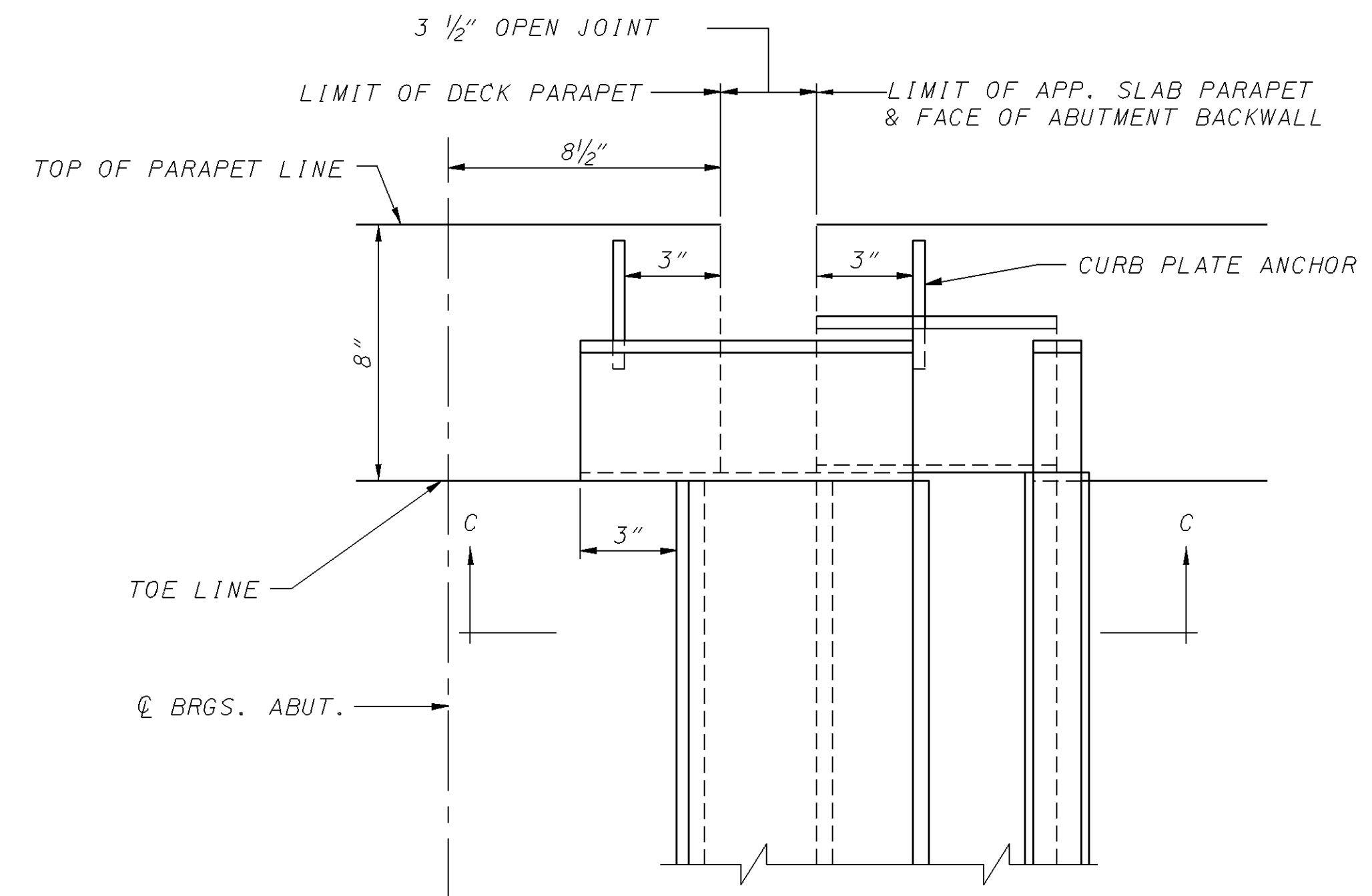


EXISTING EXPANSION JOINT DETAILS
SECTION B-B

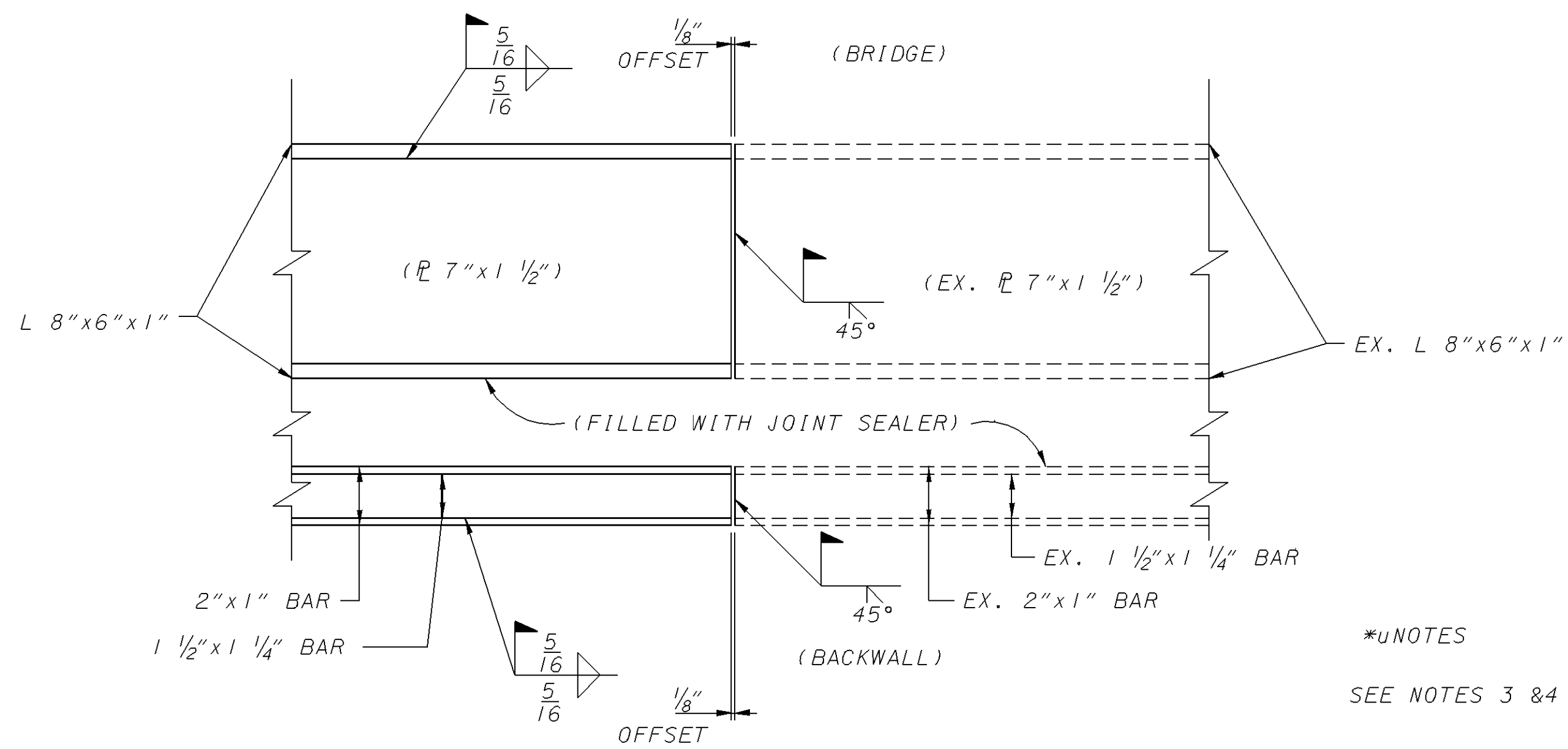
DESIGNED JJ	DRAWN CEC	REVIEWED TH	DATE 06/06	DESIGN AGENCY COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/228-3500
CHECKED PFJ	REVISED	STRUCTURE FILE NUMBER 5708613		
END CROSSFRAME & EXPANSION JOINT DETAILS - I				
BRIDGE NO. MOT-75-1462 I-75 MAINLINE OVER LEO STREET				
MOT-75-13.11 PID 75927				
18/20				
1772 1811				



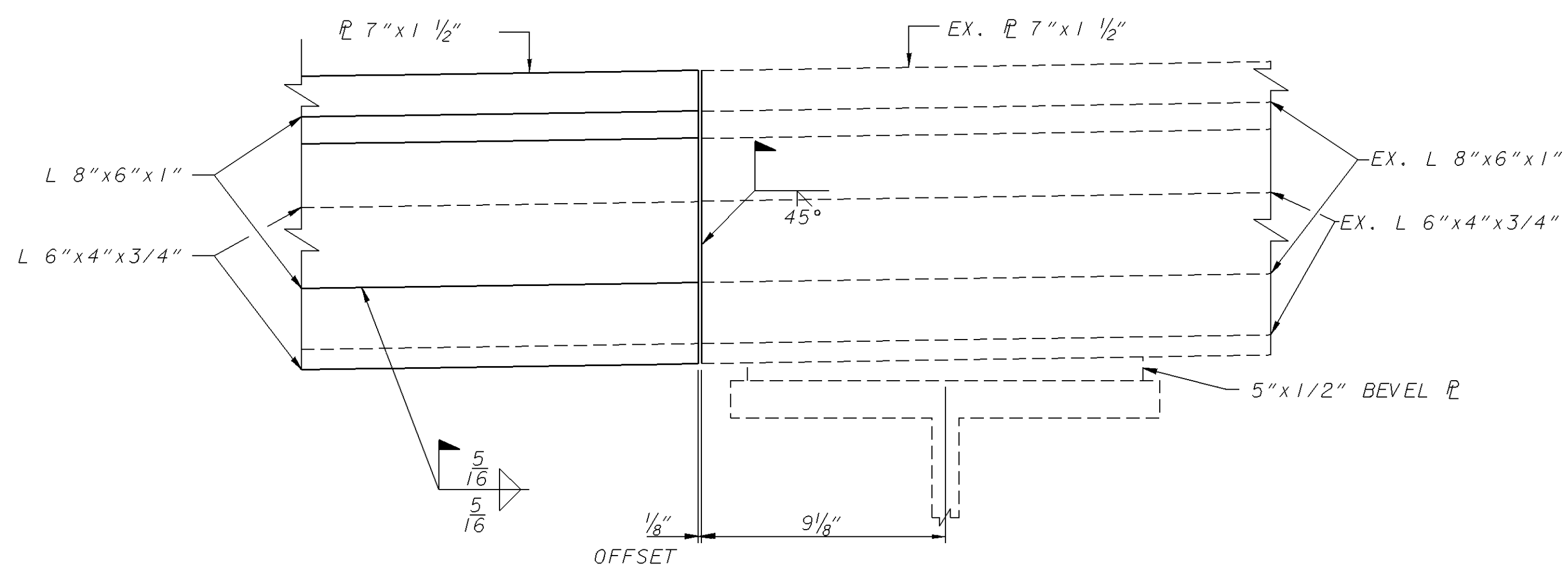
END CROSSFRAME WELDING DETAIL
(LOOKING FROM BEHIND)



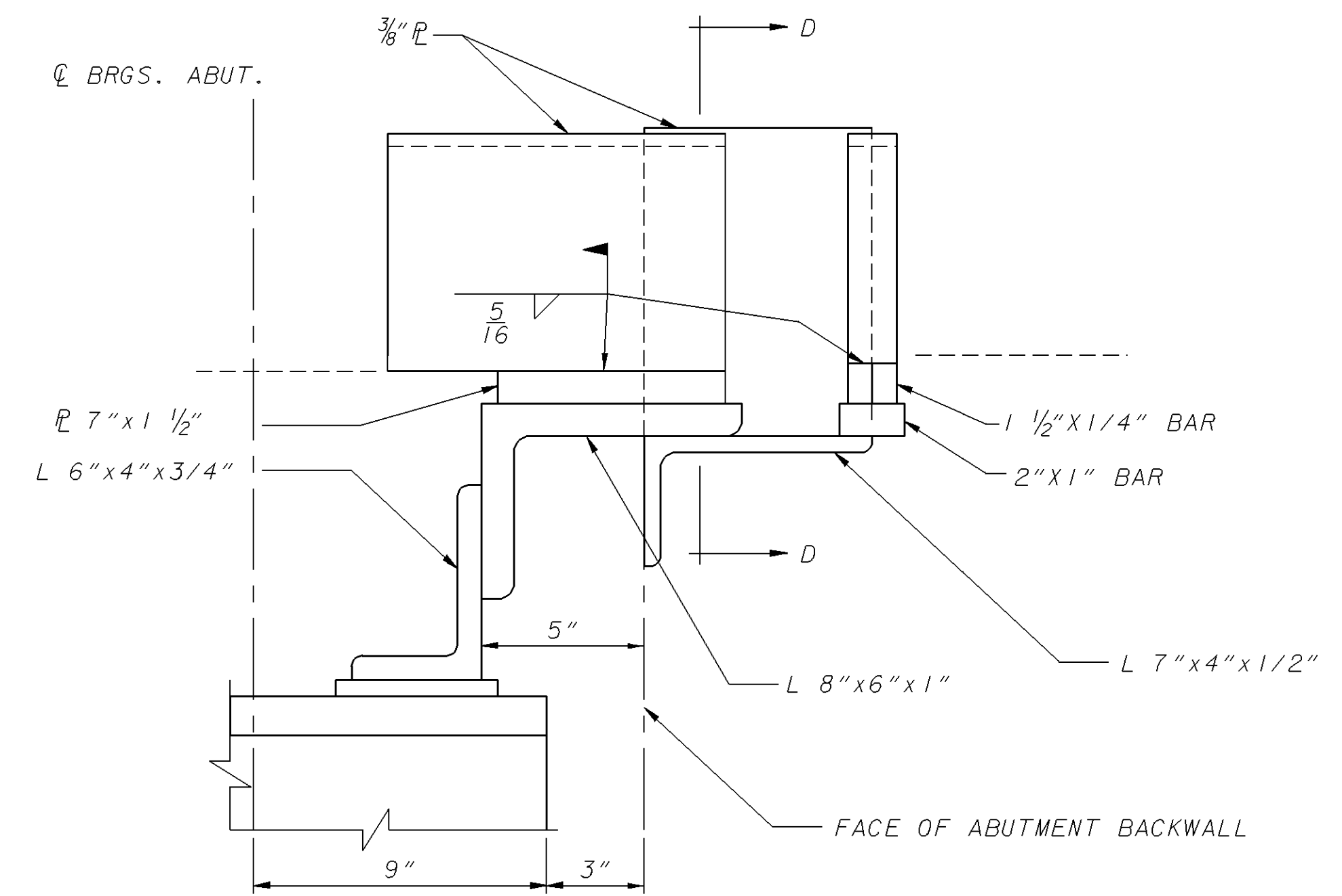
PARAPET EXPANSION JOINT (PLAN VIEW)



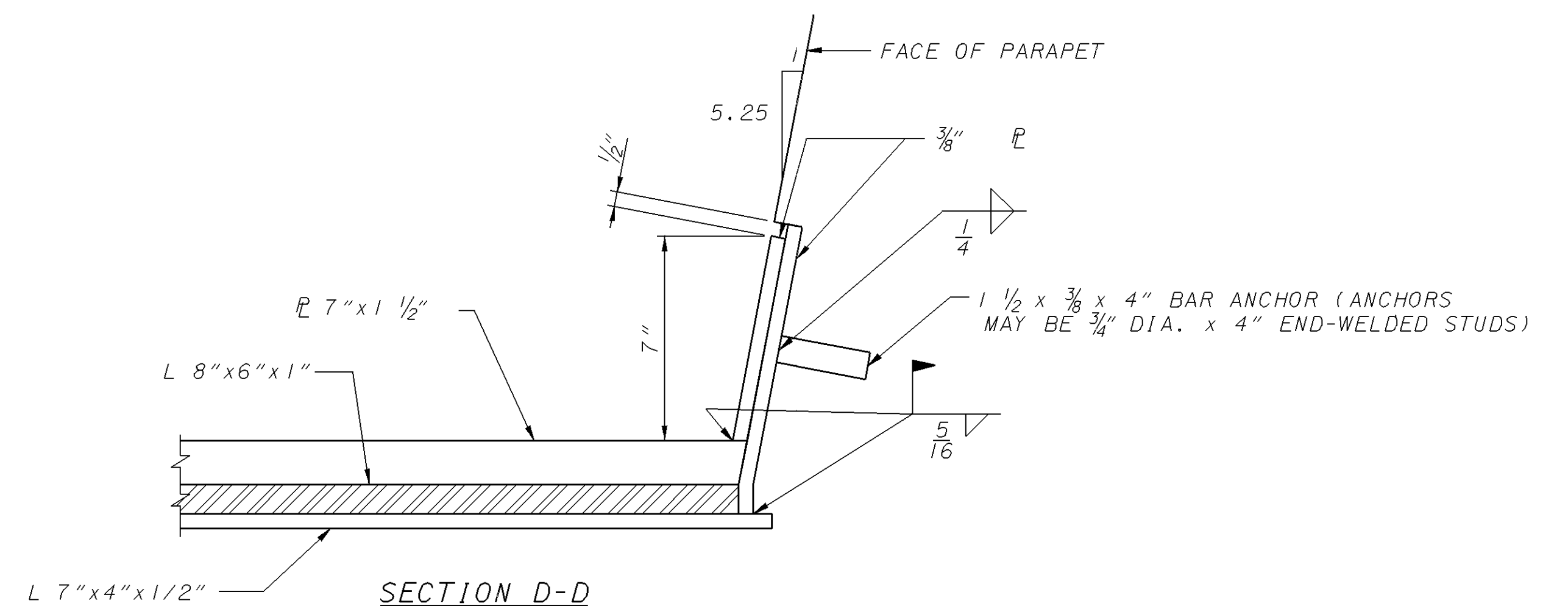
DETAIL "1" - TOP VIEW



DETAIL "1" - ELEVATION VIEW



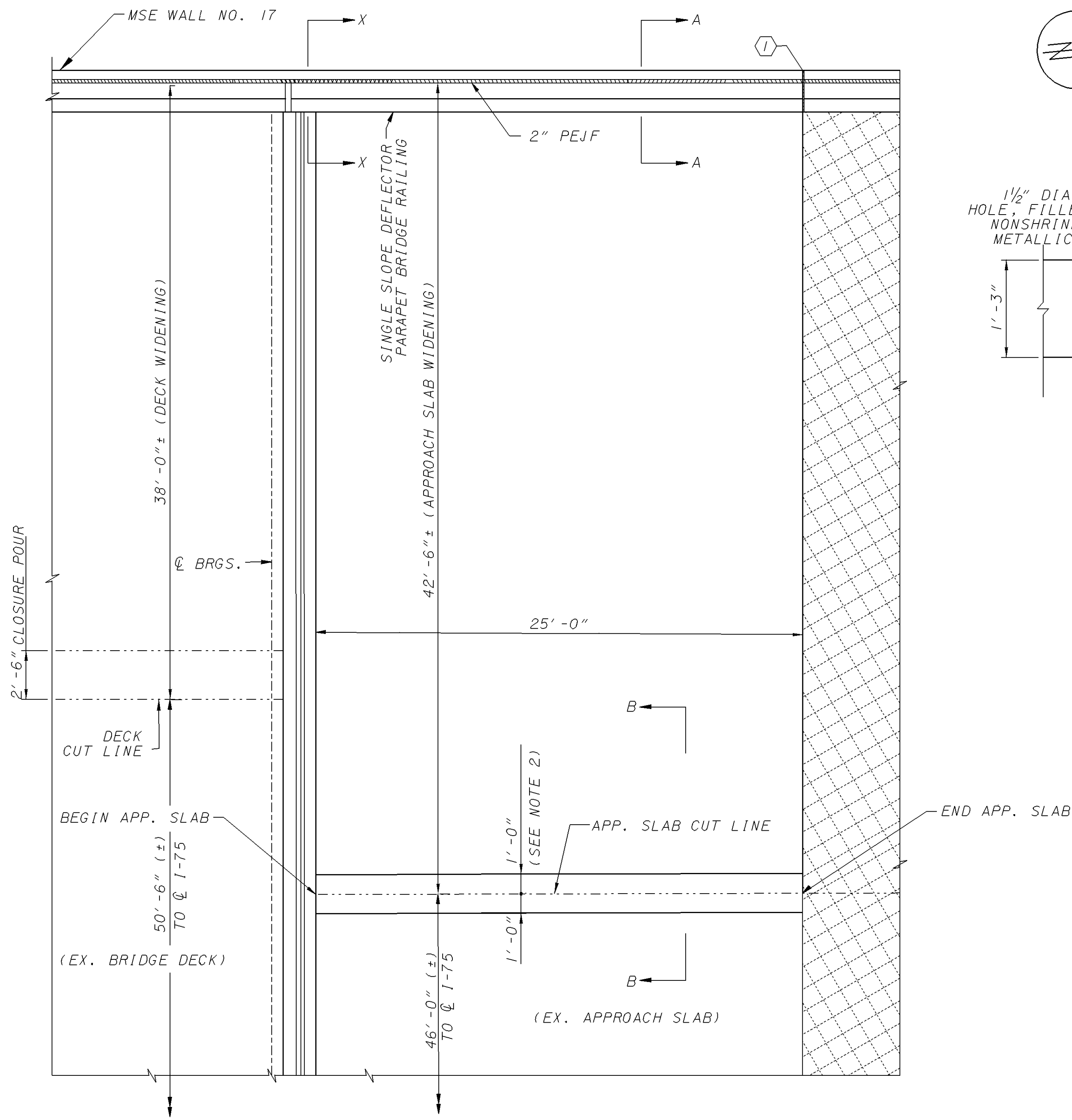
SECTION C-C



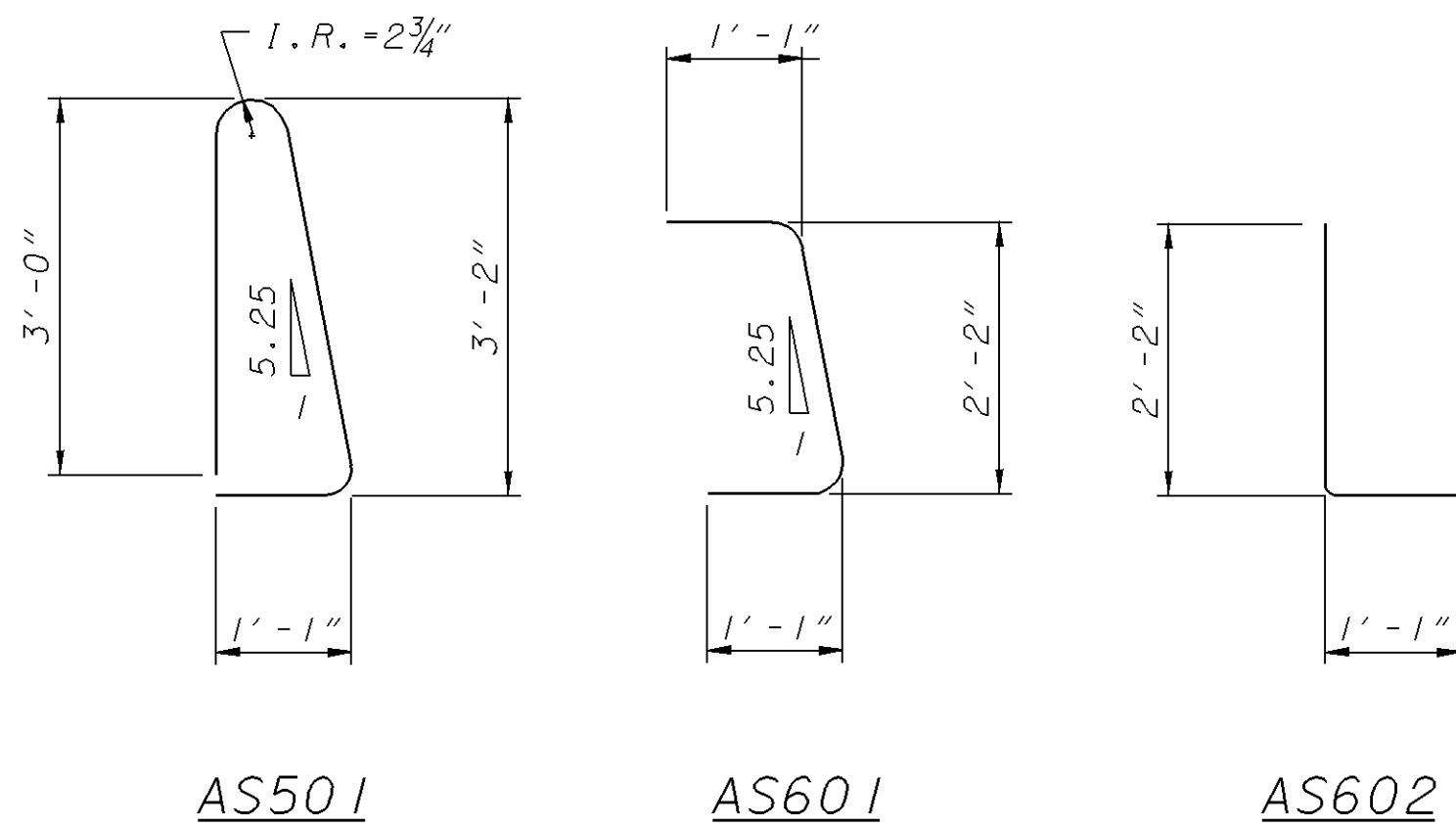
SECTION D-D

*UNOTES
SEE NOTES 3 & 4 ON SHEET 18/20

DESIGN AGENCY COLUMBUS ENGINEERING & CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/228-3500	DATE 06/06	DESIGNED JJ	DRAWN CEC	REVIEWED TH	STRUCTURE FILE NUMBER 5708613
END CROSSFRAME & EXPANSION JOINT DETAILS - II					
BRIDGE NO. MOT-75-1462					
I-75 MAINLINE OVER LEO STREET					
MOT-75-13.11					
PID 75927					
18A/20					
1773					
1811					



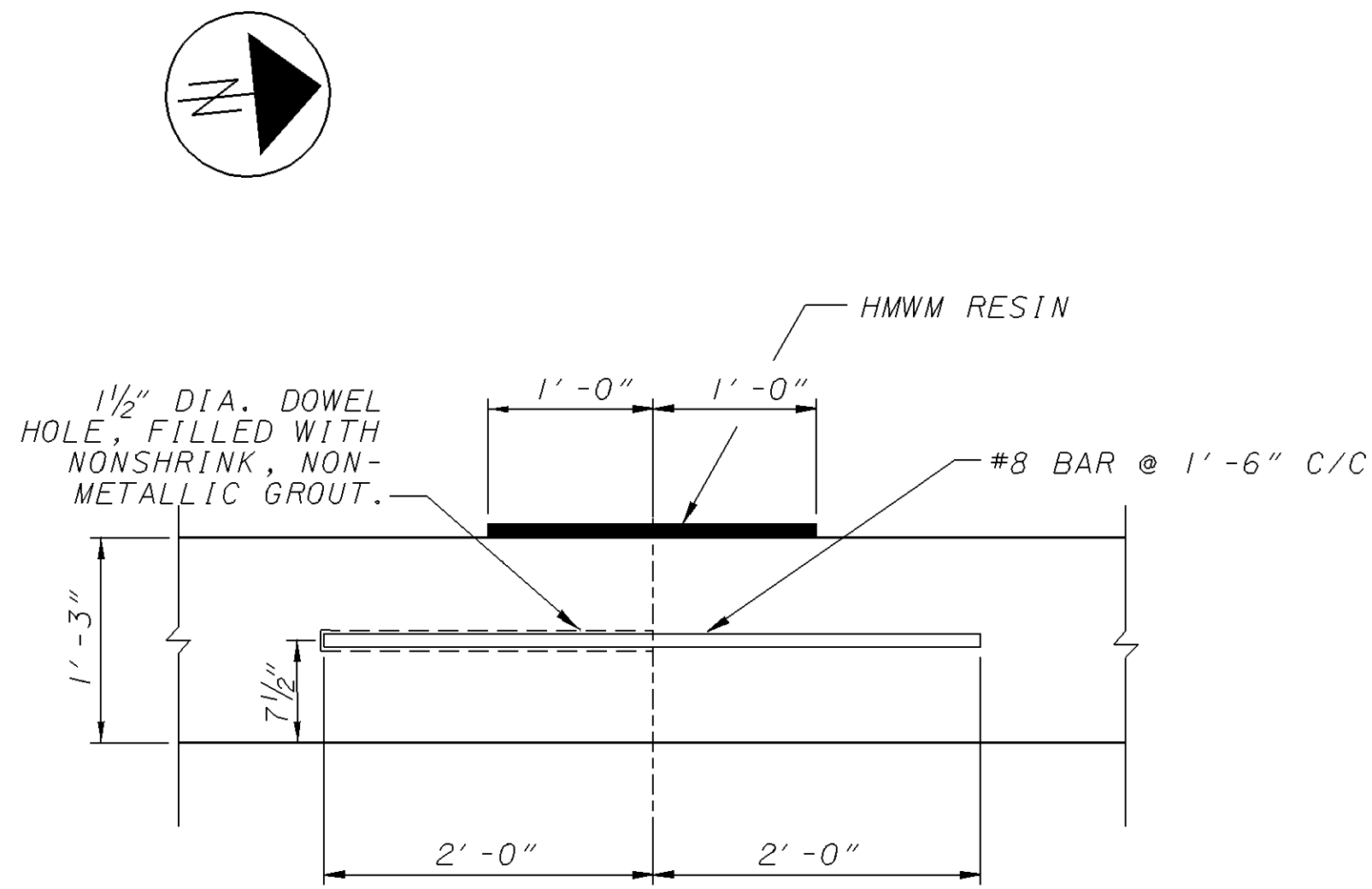
PLAN
(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)



AS501

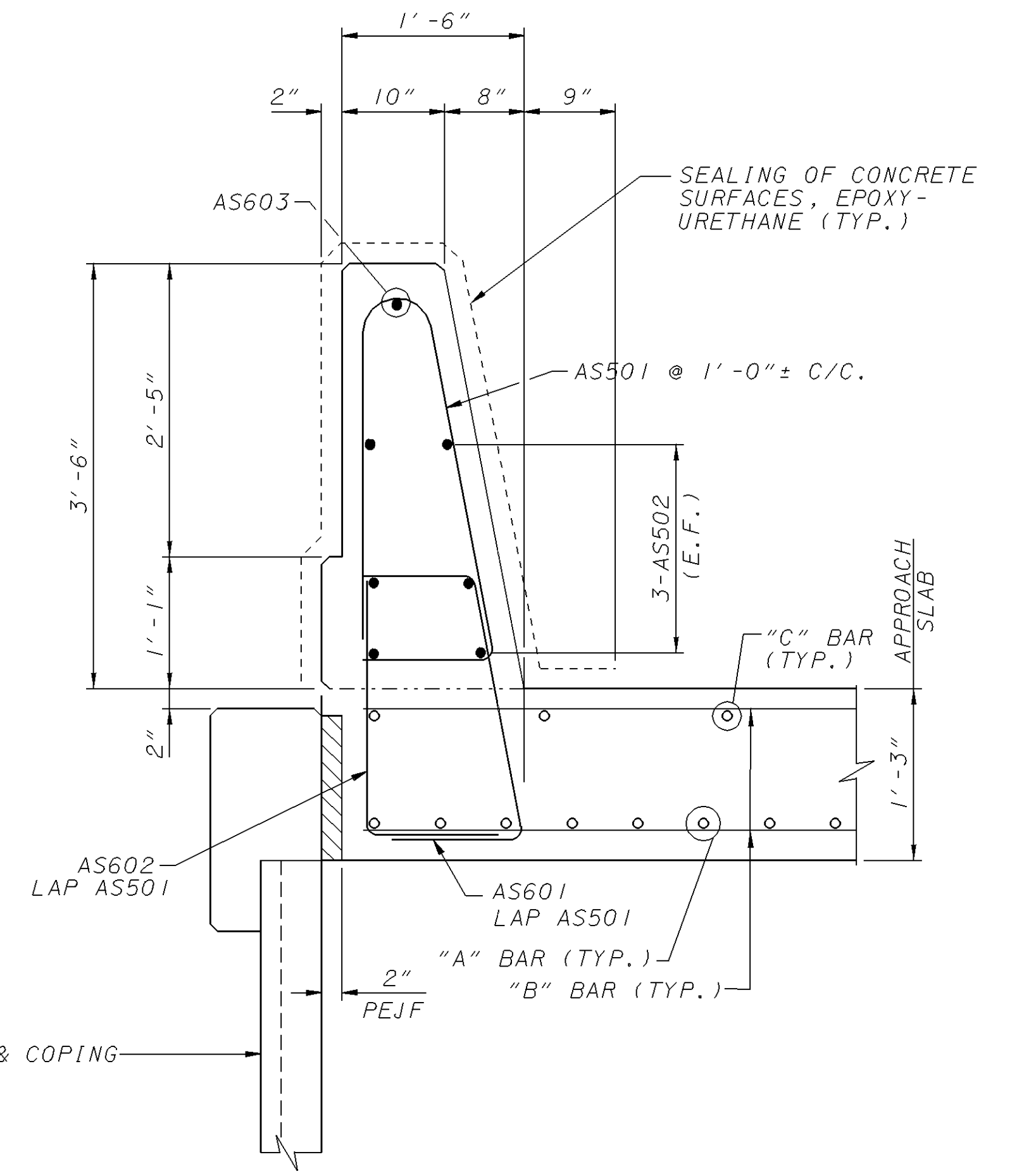
AS601

AS602



SECTION B-B

LEGEND:



SECTION A-A

NOTES

- REINFORCEMENT SHOWN IS IN ADDITION TO STANDARD APPROACH SLAB REINFORCEMENT. FOR STANDARD APPROACH SLAB DETAILS, SEE STANDARD DRAWING AS-1-81.
- THE FOLLOWING SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 898, REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN:
 - SS 898 QA/QC CONCRETE, CLASS QSC2 IN APPROACH SLABS AND OUTSIDE PARAPETS.
 - ALL ASSOCIATED REINFORCING STEEL
 - PREFORMED JOINT FILLERS AND JOINT SEALERS AS NOTED ON PLANS
 - SEALING OF CONSTRUCTION JOINTS WITH HMWM RESIN.
 - SEALING OF CONCRETE SURFACES, EPOXY-URETHANE.
 - SAWCUTTING AND PARTIAL REMOVAL OF EXISTING APPROACH SLABS.
- FOR SECTION X-X, SEE 16/20.

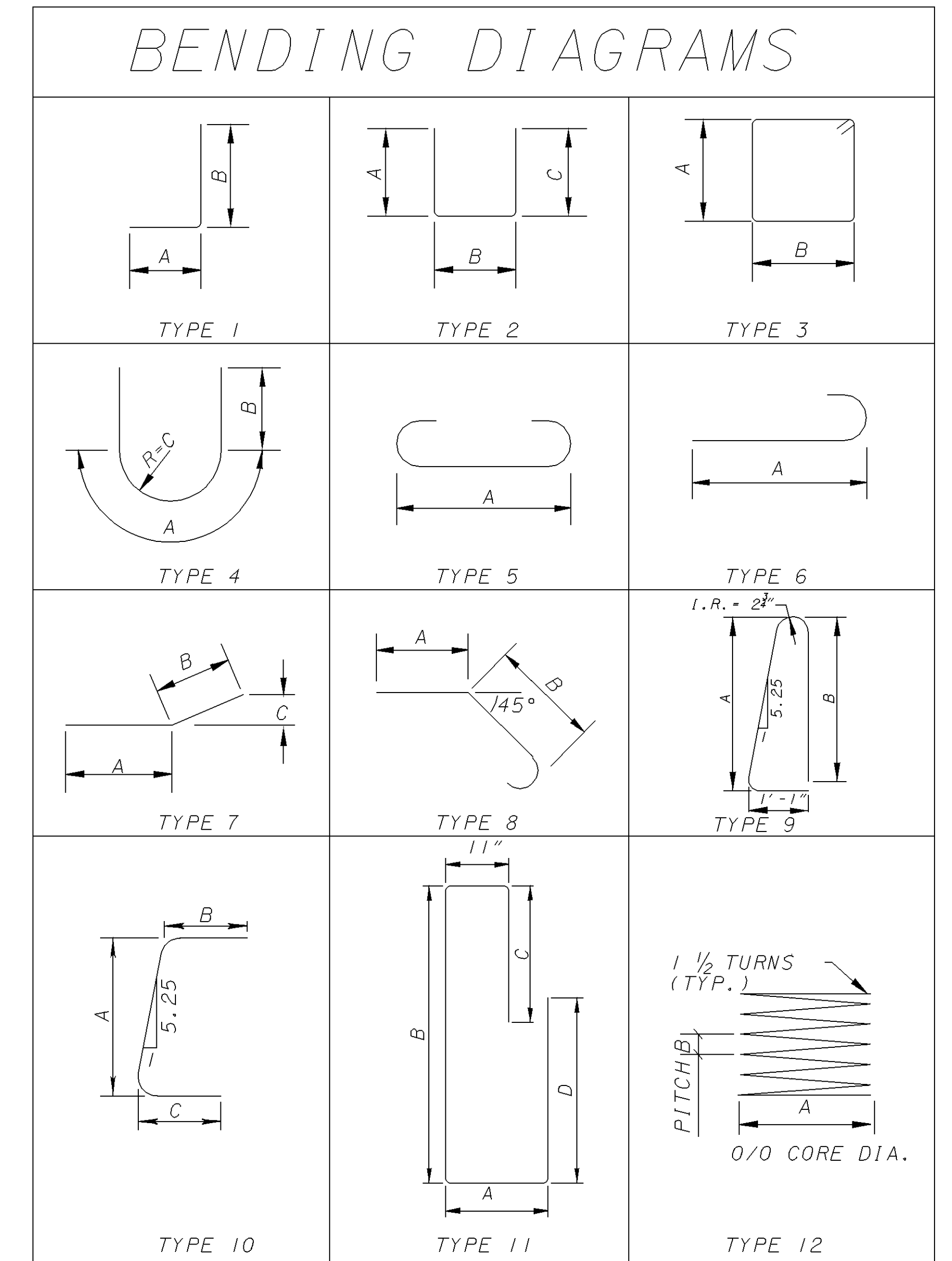
APPROACH SLAB OUTSIDE PARAPET REINFORCING BAR LIST			
MARK	QUANTITY	LENGTH	TYPE
AS501	50	7' - 5"	BENT
AS502	12	24' - 8"	STR.
AS601	50	4' - 2"	BENT
AS602	50	3' - 1"	BENT
AS603	2	24' - 8"	STR.

NOTE: REINFORCING BAR QUANTITIES ARE TOTAL FOR TWO OUTSIDE PARAPETS

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
REAR ABUTMENT									
A511	22	5'-2"	119	2	1'-0"	5'-5"	1'-0"		
A512	22	14'-5"	331	2	5'-8"	3'-7"	5'-5"		
A513	22	6'-0"	138	2	1'-4"	3'-7"	1'-4"		
A514	16	30'-6"	510	STR					
A515	9	5'-2"	50	STR					
A516	1	10'-7"	11	2	3'-9"	3'-7"	3'-6"		
A517	7	13'-11"	102	STR					
REAR ABUTMENT SUB-TOTAL = 3,365 LBS.									
FORWARD ABUTMENT									
B511	22	5'-2"	119	2	1'-0"	5'-5"	1'-0"		
B512	22	14'-5"	331	2	5'-8"	3'-7"	5'-5"		
B513	22	6'-0"	138	2	1'-4"	3'-7"	1'-4"		
B514	16	30'-6"	510	STR					
B515	9	5'-2"	50	STR					
B516	1	10'-11"	11	2	3'-11"	3'-7"	3'-8"		
B517	7	13'-11"	102	STR					
FORWARD ABUTMENT SUB-TOTAL = 3,365 LBS.									
PIER NO. 1									
SP401	3	13'-5"	1137	12	2'-6"	4 1/2"			
P501	132	6'-11"	952	2	2'-2"	2'-10"	2'-2"		
P601	4	30'-11"	186	STR					
P701	60	7'-10"	961	STR					
P801	48	8'-11"	1143	5	7'-10"				
P901	6	35'-8"	728	STR					
P902	6	30'-11"	631	STR					
P903	6	30'-11"	631	STR					
P904	6	30'-11"	631	STR					
P905	36	15'-6"	1897	STR					
P906	36	11'-10"	1448	1	1'-0"	11'-1"			
PIER NO. 1 SUB-TOTAL = 10,348 LBS.									

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
PIER NO. 2									
SP451	3	13'-5"	1137	12	2'-6"	4 1/2"			
P551	132	6'-11"	952	2	2'-2"	2'-10"	2'-2"		
P651	4	30'-11"	186	STR					
P751	60	7'-10"	961	STR					
P851	48	8'-11"	1143	5	7'-10"				
P951	36	11'-10"	1448	1	1'-0"	11'-1"			
P952	6	30'-11"	631	STR					
P953	6	35'-8"	728	2	2'-9"	30'-9"	2'-9"		
P954	6	30'-11"	631	STR					
P955	6	30'-11"	631	STR					
P956	36	15'-6"	1897	STR					
PIER NO. 2 SUB-TOTAL = 10,348 LBS.									
SUPERSTRUCTURE									
S401	123	40'-0"	3287	STR					
S402	41	27'-3"	748	STR					
S501	120	40'-4"	5048	STR					
S502	40	27'-7"	1151	STR					
S503	255	35'-4"	9397	STR					
S504	255	35'-4"	9397	STR					
S505	159	7'-5"	1230	16	3'-2"	3'-0"			
S506	18	40'-0"	751	STR					
S507	6	27'-3"	171	STR					
S601	80	26'-0"	3124	STR					
S602	159	2'-5"	577	1	1'-1"	1'-6"			
S603	159	3'-4"	796	15	1'-6"	1'-1"	1'-1"		
S604	3	40'-9"	183	STR					
S605	1	29'-0"	44	STR					
SUPERSTRUCTURE SUB-TOTAL = 35,904 LBS.									
TOTAL = 63,330 LBS.									



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
3. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
4. S.O. DENOTES SERIES OF.
5. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
6. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.

DESIGN AGENCY: COLUMBUS ENGINEERING CONSULTANTS, INC. 840 MICHIGAN AVENUE, COLUMBUS, OH 43215 TEL: 614/228-3500

DATE: 06/06
 REVIEWED TH: 5708613
 STRUCTURE FILE NUMBER:

DRAWN: CEC
 CHECKED: JJ
 REVISED:

REINFORCING STEEL LIST
 BRIDGE NO. MOT-75-1462
 I-75 MAINLINE OVER LEO STREET

MOT-75-13.11
 PID 75927

1775
1811