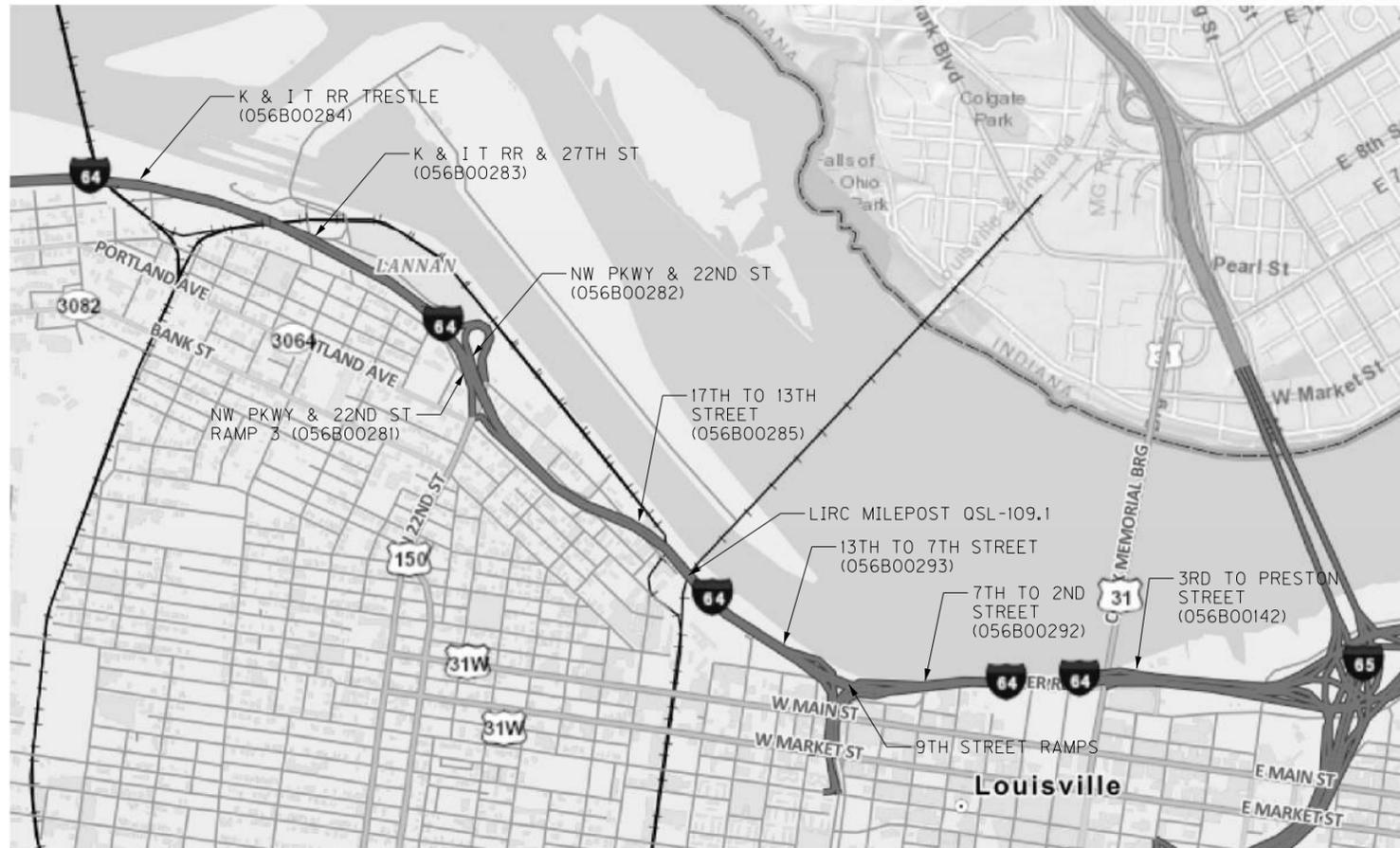


TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

JEFFERSON COUNTY

I-64 RIVERSIDE EXPRESSWAY K & I T RR TO PRESTON STREET & 9TH STREET RAMPS MISCELLANEOUS REPAIRS



SPECIFICATIONS	
2019 Standard Specifications for Road and Bridge Construction including supplemental specifications.	
2020 AASHTO LRFD Bridge Design Specifications.	
2017 AASHTO LRFD Bridge Construction Specifications.	
REVISION	DATE
DATE: OCTOBER 2025	CHECKED BY: D BARON
DESIGNED BY: M BARON	DETAILED BY: MJ DWYER
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS <small>COUNTY</small> JEFFERSON	
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET
TITLE SHEET	
ITEM NUMBER 5-10016	PREPARED BY Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM
	SHEET NO. S1 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARY.JO.DWYER\BBAKERINTL.COM
 LETTING DATE:
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 001
 MicroStation v10.17.01.58

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\BBAKERINTL.COM\DRAWING\2023\12\17\01\58\ESTIMATE\STRUCTURES_ESTIMATE_OF_QUANTITIES.DWG
 USER: MaryJo.Dwyer DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 001
 MicroStation v10.17.01.58

STRUCTURES ESTIMATE OF QUANTITIES

BID ITEM CODE	08435	08435	08435	21679EN	21679EN	21969NN	22146EN	23055N	23171EC	23171EC	23171EC	23279EC	23386EC	23386EC	23744EC	24879EC	24879EC	24879EC	24879EC
BID ITEM	JACK AND SUPPORT - END BENT 101W AT GIRDER E	JACK AND SUPPORT - PIER R3 AT GIRDERS RA AND RB	JACK AND SUPPORT - PIER GIRDER 131E PIN & HANGER AT GIRDERS P AND W	FIBERGLASS DRAIN PIPE - 8 IN	FIBERGLASS DRAIN PIPE - 10 IN	BEARING REPLACEMENT	CONCRETE PATCHING REPAIR	REMOVE - DRAINAGE	CONCRETE REPAIR - END BENT 101W AT GIRDER E	CONCRETE REPAIR - PIER R3 AT GIRDER RB	CONCRETE REPAIR - PIER 34W AT GIRDER G3	RETROFIT - PIN AND HANGER	JOINT SEAL REPLACEMENT - TRANSVERSE	JOINT SEAL REPLACEMENT - LONGITUDINAL	EPOXY INJECTION CRACK REPAIR	STEEL REPAIR - PIER GIRDER 110	STEEL REPAIR - SPAN 127E	STEEL REPAIR - TYPE A	STEEL REPAIR - TYPE B
UNIT	LS	LS	LS	LF	LF	EACH	SQFT	LS	LS	LS	LS	EACH	LF	LF	LF	EACH	EACH	EACH	EACH
K & IT RR TRESTLE (056B00284)				2,106				1					799						
K & IT RR & 27TH ST (056B00283)				715				1					444	182					
NW PKWY & 22ND ST (056B00281 & 056B00282)		1		288			37	1		1			1017						
17TH TO 13TH ST (056B00285)				1,815		1	230	1					642	2110					
13TH TO 7TH ST (056B00293)				2,561	74		366	1		1			908	1572					
7TH TO 2ND ST (056B00292)							40						801	2653					
3RD TO PRESTON ST (056B00142)	1		1	6			250	1	1			2	1287	1266	2	1	1	11	1
9TH STREET RAMP 1 (056B00300)							195												
9TH STREET RAMP 2 (056B00301)							65												
9TH STREET RAMP 2A (056B00299)							15												
9TH STREET RAMP 3 (056B00302)							15												
9TH STREET RAMP 4 (056B00298)							125												
TOTALS	1	1	1	7,491	74	1	1338	1	1	1	1	2	5898	7783	2	1	1	11	1

① ESTIMATED CONCRETE PATCHING REPAIR
 NW PKWY & 22ND ST (056B00281 & 056B00282) COLUMNS 10 SQFT
 NW PKWY & 22ND ST (056B00281 & 056B00282) PIER R3 27 SQFT
 17TH TO 13TH ST (056B00285) COLUMNS 230 SQFT
 13TH TO 7TH ST (056B00293) COLUMNS 366 SQFT
 7TH TO 2ND ST (056B00292) COLUMNS 40 SQFT
 3RD TO PRESTON ST (056B00142) COLUMNS 240 SQFT
 3RD TO PRESTON ST (056B00142) EB 101W 10 SQFT
 9TH STREET RAMP 1 (056B00300) COLUMNS 195 SQFT
 9TH STREET RAMP 2 (056B00301) COLUMNS 65 SQFT
 9TH STREET RAMP 2A (056B00299) COLUMNS 15 SQFT
 9TH STREET RAMP 3 (056B00302) COLUMNS 15 SQFT
 9TH STREET RAMP 4 (056B00298) COLUMNS 125 SQFT

② "JOINT SEAL REPLACEMENT - TRANSVERSE" ESTIMATED BID QUANTITY IS THE SUM TOTAL ESTIMATED LENGTH OF 4 INCH, 5 INCH AND 6 INCH STRIP SEALS AND COMPRESSION SEALS AS SPECIFIED ON THE PLANS. FOR THE SUB-TOTAL OF EACH SEAL SIZE PER UNIT, SEE SHEETS NO. S37 AND S38.

① **STEEL REPAIR - PIER GIRDER 110**
 THIS WORK CONSISTS OF REPAIRING SECTION LOSS AT TOP OF WEB FOR PIER GIRDER 110. THE UNIT PRICE FOR THIS WORK SHALL BE FULL PAYMENT FOR OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, ACCESS AND INCIDENTALS TO COMPLETE THE WORK. THE ESTIMATED WEIGHT OF STRUCTURAL STEEL FOR THIS REPAIR IS 450 LBS.

② **STEEL REPAIR - SPAN 127E**
 THIS WORK CONSISTS OF REPAIRING SECTION LOSS AT TOP OF WEB FOR PIER GIRDER 127E. THE UNIT PRICE FOR THIS WORK SHALL BE FULL PAYMENT FOR OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, ACCESS AND INCIDENTALS TO COMPLETE THE WORK. THE ESTIMATED WEIGHT OF STRUCTURAL STEEL FOR THIS REPAIR IS 30 LBS.

STEEL REPAIR - TYPE A
 THIS WORK CONSISTS OF REPAIRING SECTION LOSS AT BOTTOM OF WEB AND BOTTOM FLANGE FOR VARIOUS GIRDERS. SEE PLAN SHEET NOS. S27-S29, S31 AND S32 FOR LOCATIONS. THE UNIT PRICE FOR THIS WORK SHALL BE FULL PAYMENT FOR OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, ACCESS AND INCIDENTALS TO COMPLETE THE WORK. THE ESTIMATED WEIGHT OF STRUCTURAL STEEL FOR EACH OF THESE REPAIRS IS 150 LBS.

STEEL REPAIR - TYPE B
 THIS WORK CONSISTS OF REPAIRING SECTION LOSS AT BOTTOM OF WEB AND BOTTOM FLANGE FOR GIRDER A IN SPAN 130W. THE UNIT PRICE FOR THIS WORK SHALL BE FULL PAYMENT FOR OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, ACCESS AND INCIDENTALS TO COMPLETE THE WORK. THE ESTIMATED WEIGHT OF STRUCTURAL STEEL FOR THIS REPAIR IS 350 LBS.

SPECIAL NOTES
FOR CONTRACT COMPLETION DATE AND LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACT
FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS
FOR PORTABLE CHANGEABLE MESSAGE SIGNS
FOR CONCRETE COATING
FOR EPOXY INJECTION CRACK REPAIR
FOR PIN & HANGER ASSEMBLY REPAIR
FOR JACKING AND SUPPORTING BRIDGE SPAN
FOR JOINT SEAL REPLACEMENT - LONGITUDINAL
FOR CONCRETE PATCHING REPAIR
FOR PAINTING STRUCTURAL STEEL REPAIRS
FOR RAILROAD COORDINATION
FOR PREVENTATIVE MAINTENANCE

ITEM NUMBER
5-10016

SHEET INDEX

SI	TITLE SHEET
S2-S4	QUANTITIES
S5-S7	GENERAL NOTES
S8-S19	LAYOUT SHEETS
S20-S21	END BENT 101W RETROFIT
S22-S23	PIER R3 RETROFIT
S24	PIER COLUMN CONCRETE REPAIR
S25	PIER 7 BRG PAD REPLACEMENT
S26	PIER GIRDER 110 RETROFIT
S27	GIRDER RETROFIT SPAN 115
S28	GIRDER RETROFIT SPAN 118
S29	GIRDER RETROFIT SPAN 123W
S30	GIRDER RETROFIT SPAN 127E
S31	GIRDER RETROFIT SPAN 127W
S32	GIRDER RETROFIT SPAN 129W-130W
S33-S34	PIER GIRDER 131E PIN & HANGER
S35-S36	PIER 34WB DECK RETROFIT
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S39	COMPRESSION SEAL RETROFIT
S40	LONGITUDINAL JOINT RETROFIT
S41-S83	FATIGUE RETROFIT LAYOUTS
S84	CRACK RETROFIT SUMMARY
S85-S90	FATIGUE CRACK RETROFITS
S91	REPLACE BOLTS
D1-D7	284 DRAINAGE LAYOUTS
D8-D11	284 DRAINAGE DETAILS
D12-D13	283 DRAINAGE LAYOUTS
D14-D17	283 DRAINAGE DETAILS
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D22-D27	285 DRAINAGE LAYOUTS
D28-D32	285 DRAINAGE DETAILS
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D51	DRAIN PIPE SUPPORT BRACKET
RI-R2	MAINTENANCE OF TRAFFIC

STANDARD DRAWINGS

RBE-100-11	CRASH CUSHION TYPE VI-BT
RBM-020-09	DELINEATORS FOR CONCRETE BARRIERS
RBM-115-10	CONCRETE BARRIER TYPE 9T (TEMPORARY)
RBM-120-02	BOX BEAM STIFFENING PT TEMPORARY CONCRETE BARRIER
RDI-025-06	PIPE BEDDING TRENCH CONDITION
RDX-210-03	TEMPORARY SILT FENCE
RDX-220-05	SILT TRAP TYPE A
TTC-100-05	LANE CLOSURE TWO-LANE HIGHWAY
TTC-115-04	LANE CLOSURE MULTI-LANE HIGHWAY CASE 1
TTC-125-04	DOUBLE LANE CLOSURE
TTC-135-03	SHOULDER CLOSURE

REVISION	DATE
DATE: AUGUST 2025	CHECKED BY
DESIGNED BY: D BARON	MJ DWYER
DETAILED BY: MJ DWYER	D BARON

**Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS**

COUNTY
JEFFERSON

ROUTE **I-64** CROSSING **K & I TT RR TO PRESTON STREET**

QUANTITIES - 1

PREPARED BY

Michael Baker International
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Phone: (502) 339-3557
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SHEET NO.
S2
DRAWING NO.
28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM\DRAWING\28870\28870.DWG
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 001
 MicroStation v10.17.01.58

STRUCTURES ESTIMATE OF QUANTITIES

BID ITEM CODE	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24879EC	24981EC	24983EC	26232EC
BID ITEM	STEEL REPAIR - TYPE BB	STEEL REPAIR - TYPE BSI	STEEL REPAIR - TYPE BS2	STEEL REPAIR - TYPE CB	STEEL REPAIR - TYPE CC	STEEL REPAIR - TYPE CF	STEEL REPAIR - TYPE CS	STEEL REPAIR - TYPE CX1	STEEL REPAIR - TYPE CX2	STEEL REPAIR - TYPE FB	STEEL REPAIR - TYPE FP	STEEL REPAIR - TYPE FS	STEEL REPAIR - TYPE FT	STEEL REPAIR - TYPE GC	STEEL REPAIR - TYPE GF	STEEL REPAIR - TYPE GP	STEEL REPAIR - TYPE MBI	STEEL REPAIR - TYPE MB2	STEEL REPAIR - LATERAL BRACING	BRIDGE CLEANING	BEARING LUBRICATION	CONCRETE COATING	
UNIT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LS	EACH	SOFT	
K & IT RR TRESTLE (056B00284)																							
K & IT RR & 27TH ST (056B00283)																							
NW PKWY & 22ND ST (056B00281 & 056B00282)																							152
17TH TO 13TH ST (056B00285)										2	2	2	3	3	2	7							
13TH TO 7TH ST (056B00293)				1	3		16	1		8		4	1	8		7	1						
7TH TO 2ND ST (056B00292)	3	1	17		1		13												2				
3RD TO PRESTON ST (056B00142)				4		1	9	1	1								37	1		1	7	677	
9TH STREET RAMP 1 (056B00300)																							
9TH STREET RAMP 2 (056B00301)																							
9TH STREET RAMP 2A (056B00299)																							
9TH STREET RAMP 3 (056B00302)																							
9TH STREET RAMP 4 (056B00298)																							
TOTALS	3	1	17	5	4	1	38	2	1	10	2	6	4	11	2	14	38	1	2	1	7	829	

STEEL REPAIR - FATIGUE CRACK RETROFITS

THIS WORK CONSISTS OF REPAIRS AS SPECIFIED IN THE DETAIL DRAWINGS. THE COST OF ALL LABOR, MATERIALS, TOOLS, ACCESS AND INCIDENTALS SHALL BE INCLUDED IN THE APPROPRIATE BID ITEM.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	MJ DWYER	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
JEFFERSON		
ROUTE	CROSSING	
I-64	K & I TT RR TO PRESTON STREET	
QUANTITIES - 2		
PREPARED BY		SHEET NO.
Michael Baker		S3
INTERNATIONAL		DRAWING NO.
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		28870

ITEM NUMBER
5-10016

ROADWAY & MAINTENANCE OF TRAFFIC ESTIMATE OF QUANTITIES

BID ITEM CODE	01984	02014	02483	02562	02603	02607	02650	02654	02671	02701	02703	02705	02706	02708	02775	03171	08014	08901	20411ED	24665EX	26136EC	26137EC	26138EC
BID ITEM	DELINEATOR FOR BARRIER - WHITE	BARRICADE - TYPE III	CHANNEL LINING CLASS II	TEMPORARY SIGNS	FABRIC-GEOTEXTILE CLASS 2	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	MAINTAIN & CONTROL TRAFFIC	TRUCK MOUNTED ATTENUATOR	PORTABLE CHANGEABLE MESSAGE SIGN	TEMP SILT FENCE	SILT TRAP TYPE A	SILT TRAP TYPE C	CLEAN SILT TRAP TYPE A	CLEAN SILT TRAP TYPE C	ARROW PANEL	CONCRETE BARRIER WALL TYPE 9T	REINF CONC SLOPE WALL - 4 IN	CRASH CUSHION TY VI CLASS BT TL2	LAW ENFORCEMENT OFFICER	RAILROAD COORDINATION	PORTABLE QUEUE WARNING ALERT SYSTEM	QUEUE WARNING POMS	QUEUE WARNING PORTABLE RADAR SENSORS
UNIT	EACH	EACH	TON	SQFT	SOYD	SOYD	LS	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH	LF	SOYD	EACH	HOUR	LS	MONTH	MONTH	MONTH
OVERALL		8		1970				2	8						5				1370		15	15	15
K & IT RR TRESTLE (056B00284)			5		181	291	1			900	2		2				63			1			
K & IT RR & 27TH ST (056B00283)			1		46	122	1			700	2		2				27			1			
NW PKWY & 22ND ST (056B00281 & 056B00282)							1			500		2		2									
17TH TO 13TH ST (056B00285)			6		294		1													1			
13TH TO 7TH ST (056B00293)			8		375		1																
7TH TO 2ND ST (056B00292)							1																
3RD TO PRESTON ST (056B00142)	14						1									280		1					
9TH STREET RAMP 1 (056B00300)																							
9TH STREET RAMP 2 (056B00301)																							
9TH STREET RAMP 2A (056B00299)																							
9TH STREET RAMP 3 (056B00302)																							
9TH STREET RAMP 4 (056B00298)																							
TOTALS	14	8	20	1970	896	413	1	2	8	2100	4	2	4	2	5	280	90	1	1370	1	15	15	15

PERMANENT SEEDING AND EROSION CONTROL

PLACE TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 213.03.05 AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION OF THE NEW DRAINAGE SYSTEM.

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 001
 MicroStation v10.17.01.58

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: N ALLEN	P OSBORNE	
DETAILED BY: MJ DWYER	P OSBORNE	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
QUANTITIES - 3		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	S4
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: April 6, 2021
 E-SHEET NAME: S23464 006
 MicroStation v10.17.01.58

DRAINAGE SYSTEM FIELD TESTING

PRIOR TO THE ACCEPTANCE OF THE STRUCTURE BY THE DEPARTMENT, THE DRAINAGE SYSTEM SHALL BE FLUSHED OUT AND TESTED BY THE CONTRACTOR, TO ENSURE THAT IT IS UNOBSTRUCTED AND DOES NOT LEAK. THIS SHALL BE ACCOMPLISHED BY TEMPORARILY PLUGGING THE FREE ENDS OF THE SYSTEM AND FILLING WITH WATER UNDER SYSTEM HEAD PRESSURE. ANY OBSTRUCTION IN THE DRAINAGE SYSTEM PREVENTING THE FREE FLOW OF DRAINAGE SHALL BE REMOVED TO THE COMPLETE SATISFACTION OF THE ENGINEER. CONTRACTOR SHALL CONSIDER THE USE OF PIPE THREAD SEALANT FOR ALL THREADED CONNECTIONS PRIOR TO TEST.

INCLUDE THE COST OF ALL LABOR, EQUIPMENT AND INCIDENTALS TO COMPLETE THE DRAINAGE SYSTEM FIELD TESTING IN THE BID ITEM FOR THE APPROPRIATE FIBERGLASS DRAIN PIPE SIZE OF THE WORK INVOLVED.

STRUCTURAL STEEL

THIS WORK CONSISTS OF REPAIRS TO SPAN 127E, SPAN 127W, SPAN 130W AND PIER GIRDER I10 WEB PLATES AS SPECIFIED IN THE DETAIL DRAWINGS. PERFORM CLEANING AND PAINTING IN ACCORDANCE WITH THIS NOTE, 607.03.23 OF THE STANDARD SPECIFICATIONS AND SPECIAL NOTE FOR PAINTING STRUCTURAL STEEL REPAIRS.

FIELD VERIFY ALL DIMENSIONS FOR REPAIR LOCATION BOLT PATTERNS BEFORE ORDERING MATERIALS. NEW MATERIAL THAT IS UNSUITABLE BECAUSE OF VARIATIONS IN THE EXISTING STRUCTURE SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.

CLEAN STEEL SURFACES OF THE BRIDGE OF ALL DIRT, RUST AND FOREIGN MATTER IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. STEEL WITHIN 6 INCHES OF THE WORK LIMITS OF THE RETROFIT LOCATION SHALL BE CLEANED AND PAINTED AS DIRECTED BY THE ENGINEER.

ALL CONNECTION INTERFACE FAYING SURFACES TO RECEIVE AN APPROVED INORGANIC ZINC RICH PRIME COAT MEETING AASHTO CLASS B REQUIREMENTS FOR SLIP COEFFICIENT ON BLAST CLEANED STEEL.

SHOP DRILL BOLT HOLES IN THE NEW STEEL. MATCH DRILL HOLES IN FIELD.

REMOVE ALL CHIPS, BURRS AND FOREIGN MATERIALS RESULTING FROM DRILLING OR CORROSION FROM THE SURFACES TO BE JOINED BEFORE MEMBERS ARE BOLTED. DO NOT DISTORT OR ENLARGE THE HOLES OF THE PARTS DURING ASSEMBLY.

NEW STRUCTURAL STEEL SHALL RECEIVE A SHOP APPLIED APPROVED INORGANIC ZINC RICH PRIME COAT.

ALL STRUCTURAL BOLTS SHALL CONFORM TO ASTM F3125 GRADE A325 TYPE 1 GALVANIZED BOLTS. ALL HOLES ARE 13/16 INCH DIAMETER FOR 3/4 INCH DIA. BOLTS.

INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, CLEANING, PAINTING AND INCIDENTALS TO COMPLETE THE WORK IN THE LUMP SUM BID FOR APPLICABLE STEEL REPAIR WORK ITEM.

CLEAN DRAINS AT BRIDGES B282, B283, B284, B285, B293

THIS ITEM OF WORK CONSISTS OF COMPLETELY CLEANING ALL DEBRIS, INCLUDING SOIL DEPOSITS, VEGETATION, AND TRASH, FROM ALL EXISTING DECK DRAINS. THE DEBRIS MAY BE FLUSHED THROUGH THE EXISTING DRAINAGE SYSTEM; HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR UNCLOGGING ANY PART OF THE EXISTING SYSTEM TO COMPLETE DISPOSAL IN THIS MANNER. THE ENGINEER MAY DIRECT THE CONTRACTOR TO REMOVE THE DRAIN GRATING IF COMPLETE CLEANING CANNOT BE ACHIEVED BY FLUSHING. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ANY DEBRIS THAT FALLS ON THE BRIDGE DECK AND/OR THE GROUND BELOW DURING CLEANING OPERATIONS. CLEANING SHALL BE DONE BEFORE INSTALLING THE NEW DRAINAGE SYSTEM THAT SERVES THE DRAINS BEING CLEANED. ALL LABOR, EQUIPMENT, GRATE REMOVAL, DEBRIS DISPOSAL, TOOLS AND INCIDENTALS TO COMPLETE THE WORK TO BE INCLUDED IN THE BID ITEM "REMOVE-DRAINAGE".

BRIDGE CLEANING AT BRIDGES B142, B292, B298, B299, B300, B301, B302

THIS ITEM OF WORK IS TO REMOVE DEBRIS, CLEAN DECK DRAINS AND REMOVE VEGETATION IN ACCORDANCE WITH SPECIAL NOTE FOR PREVENTATIVE MAINTENANCE. ALL LABOR, EQUIPMENT, DEBRIS REMOVAL, DECK DRAIN CLEANING, AND INCIDENTALS TO COMPLETE THE WORK TO BE INCLUDED IN THE BID ITEM "BRIDGE CLEANING".

DECK DRAINAGE SYSTEM REMOVAL AT BRIDGES B282, B283, B284, B285, B293

REMOVE AND PROPERLY DISPOSE OF EXISTING UNDERDECK COLLECTION AND DISCHARGE SYSTEMS, INCLUDING, BUT NOT LIMITED TO, PIPES, TROUGHS, DOWNSPOUTS AND MISCELLANEOUS COMPONENTS AND ATTACHMENTS ASSOCIATED WITH THE DRAINAGE SYSTEM.

ALL STEEL THAT IS REMOVED AND NOT REUSED IN THE COMPLETED STRUCTURE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE BRIDGE SITE.

EXISTING DRAINAGE COMPONENTS TO BE INCORPORATED WITH THE NEW DRAINAGE SYSTEM SHALL BE APPROVED BY THE ENGINEER.

ALL REMOVED WELDED CONNECTIONS TO BE GROUND SMOOTH.

ALL LABOR, EQUIPMENT AND INCIDENTALS TO REMOVE THE DRAINAGE SYSTEM IS INCLUDED IN THE BID ITEM "REMOVE - DRAINAGE".

FIBERGLASS DRAIN PIPE

FIBERGLASS PIPE AND FITTINGS SHALL BE REINFORCED THERMOSETTING RESIN PIPE (RTRP) SYSTEMS MEETING THE REQUIREMENTS OF ASTM D2996 WITH AT LEAST 30,000 PSI SHORT TIME RUPTURE STRENGTH HOOPS TENSILE STRESS, AND THE ACCELERATED UV WEATHERING PERFORMANCE REQUIREMENTS OF ASTM G154.

ADHESIVE BONDED SOCKET JOINTS ARE ACCEPTABLE FOR ALL CONNECTIONS OF FIBERGLASS PIPES AND FITTINGS. USE THE SAME TYPE OF RESIN FOR ALL PIPE, FITTINGS AND ADHESIVE. PROVIDE ALL FIBERGLASS PIPE, FITTINGS AND BONDING ADHESIVES FROM SAME MANUFACTURER.

PIGMENT ALL FIBERGLASS PIPE AND FITTINGS TO MATCH THE COLOR OF THE EXISTING STRUCTURAL STEEL UNLESS OTHERWISE SPECIFIED. PAINT, GEL-COAT OR ANY OTHER EXTERIOR COATING WILL NOT BE ACCEPTED FOR THE COLORING OF NEW PIPE AND FITTINGS.

RIGID CONNECTIONS BETWEEN PIPING SYSTEMS AND ROADWAY DRAIN SCUPPERS WILL NOT BE ACCEPTED. MAKE THE DECK OUTLET CONNECTION WITH A FREE FLOATING COLLECTOR ASSEMBLY SIZED 4 INCHES LARGER THAN THE OUTLET PIPE. INCLUDE AN OVERSIZED FIBERGLASS SPLASH GUARD AT EACH COLLECTOR UNIT ASSEMBLY.

SUPPORT RUNS OF PIPE AT SPACING NO GREATER THAN THE LESSER OF THOSE RECOMMENDED BY THE MANUFACTURER OF THE PIPE OR 20 FT. MAXIMUM. DRAINAGE UNDER DECK RUNS OF PIPE SHALL BE SUPPORTED BY STIFFENER PIPE HANGERS COMPRISED OF PIPE SUPPORT HARDWARE ATTACHED TO A BRACKET BOLTED TO THE GIRDER STIFFENER, SEE SHEET NO. D51 FOR DETAILS. SUBMIT PROPOSED DETAILS OF ANY PIPE SUPPORT HARDWARE OR ATTACHMENT TO THE EXISTING STEEL THAT DIFFERS FROM THOSE SPECIFIED FOR REVIEW TO THE ENGINEER PRIOR TO FABRICATION.

AVOID SUPPORTS THAT HAVE POINT CONTACT OR NARROW SUPPORTING AREAS. STANDARD SLING, CLAMP, OR CLEVIS HANGERS AS TYPICALLY USED FOR STEEL PIPE APPLICATIONS MAY BE USED. STRAP WIDTH TO BE 1 1/2 INCH. HANGER THICKNESS TO BE 3/16 INCH.

PROVIDE SUPPORTS THAT HAVE 120 DEGREES OF CONTACT WITH THE PIPE. IF SUPPORT WOULD BE LESS THAN 120 DEGREES OF CONTACT, INSTALL AND BOND A SPLIT FIBERGLASS PIPE PROTECTIVE SLEEVE TO THE PIPE. SPLIT SLEEVE LENGTH SHALL EQUAL PIPE DIAMETER.

ALL CLEANOUTS MUST BE CONVENIENTLY ARRANGED AND EASILY ACCESSIBLE SO THE MAINTENANCE CREW CAN GET TO THEM TO REMOVE OBSTRUCTIONS.

HANDLE AND INSTALL ALL FIBERGLASS PIPE AND FITTINGS ACCORDING TO THE GUIDELINES AND PROCEDURES RECOMMENDED IN THE PRINTED LITERATURE OF THE MANUFACTURER.

INSTALL PIPE TO THE MINIMUM SLOPE SHOWN IN THE PLANS. THE SLOPE MAY BE ADJUSTED WHERE NECESSARY TO ADAPT TO THE EXISTING STRUCTURE, BUT MAY NOT BE LESS THAN THE MINIMUM SLOPE DESIGNATED IN THE PLANS.

WELDED CONNECTIONS WILL NOT BE ALLOWED.

PIPE HANGERS SUSPENDED FROM THE CONCRETE DECK WILL NOT BE ALLOWED.

FASTEN OFFSET PIPE CLAMPS TO CONCRETE COLUMNS AND/OR PIER CAPS USING 3/4" DIA. CONCRETE ANCHORS. EMBED AND INSTALL ANCHORS IN ACCORDANCE WITH THE PROCEDURES RECOMMENDED BY THE MANUFACTURER. GALVANIZE BENT PLATES, PIPE CLAMPS, AND ASSOCIATED FASTENER HARDWARE AFTER FABRICATION. USE LOCTITE THREADLOCKER BLUE 242 OR APPROVED EQUAL ON THE DRAINAGE PIPE SUPPORT HANGERS TO PREVENT THE NUTS FROM LOOSENING DUE TO VIBRATION, AS DIRECTED BY THE ENGINEER.

SUBMIT MANUFACTURER'S SPECIFICATIONS AND/OR CATALOG DATA LISTING FOR PIPE, FITTINGS, AND ALL OTHER COMPONENTS OF THE SYSTEM.

SUBMIT MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF ALL PIPE, FITTINGS, AND ATTACHMENT HARDWARE UTILIZED.

CERTIFY THE ADHESIVE FORMULATION TO BE PROVEN SUITABLE FOR THE INTENDED APPLICATION.

THE DRAINAGE PIPE LAYOUT DETAILS AS SHOWN IN THE PLANS ARE TYPICAL OF DETAILS NECESSARY TO COMPLETE THE CONSTRUCTION OF THE DRAINAGE SYSTEM TO COLLECT AND DISPOSE OF WATER FROM DRAIN INLETS ON THE BRIDGE STRUCTURES. SUBMIT DETAILED SHOP DRAWINGS OF THE DRAINAGE SYSTEM FOR REVIEW BY THE ENGINEER IF DIFFERENT FROM DETAILS IN THE PLANS.

PAYMENT FOR THE COMPLETED AND ACCEPTED QUANTITY FOR FIBERGLASS DRAIN PIPE INSTALLED IN THE COMPLETED STRUCTURE WILL BE CONSIDERED AS FULL COMPENSATION FOR ALL WORK REQUIRED TO INSTALL FIBERGLASS PIPE, FITTINGS, JOINTS, PIPE SUPPORTS, ASSOCIATED HARDWARE, AND INCIDENTALS FOR THE APPROPRIATE PIPE SIZE. MEASUREMENT OF QUANTITIES SHALL BE THROUGH THE FITTINGS AND PAID PER LINEAR FOOT.

CLEAN UNDERGROUND PIPING

WHERE UNDERGROUND PIPING EXISTS FOR BRIDGES #142, #281 AND #282, #283 AND #284, COMPLETELY CLEAN ALL DEBRIS, ETC. FROM THE NEW PIPE COUPLING TO THE NEAREST MANHOLE OR PIPE TEE. THE CONTRACTOR SHALL PRESUME THE LENGTH OF PIPE TO BE CLEANED IS ROUGHLY 100 FEET FOR BRIDGES #281 AND #282, 50 FEET FOR BRIDGE #142 AND #283, AND 500 FEET FOR BRIDGE #284. ALL LABOR, EQUIPMENT, ETC. TO COMPLETE THE WORK TO BE INCLUDED IN THE BID ITEM "REMOVE-DRAINAGE".

NEOPRENE EXPANSION JOINT SEAL REPLACEMENT

THIS WORK SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF THE EXISTING STRIP SEAL GLAND ACCORDING TO THE DETAILS AND AT THE LOCATIONS SHOWN ON THE PLANS. THE NEOPRENE SEAL SHALL BE COMPATIBLE WITH THE EXISTING STRIP SEAL RAIL. NEOPRENE JOINT SEAL AND INSTALLATION SHALL CONFORM TO SECTION 609.03.04(E) OF THE STANDARD SPECIFICATIONS, EXCEPT SHOP DRAWINGS ARE NOT REQUIRED.

PAYMENT FOR "JOINT SEAL REPLACEMENT - TRANSVERSE" SHALL BE UNDER SECTION 609.05 AND BE CONSIDER AS FULL COMPENSATION FOR THE COMPLETED AND ACCEPTED QUANTITIES FOR ALL WORK REQUIRED.

CONTRACTOR'S SUBMITTALS

WHERE REQUIRED BY THE PLANS AND SPECIFICATIONS, SUBMIT DESCRIPTIVE INFORMATION THAT WILL ENABLE THE ENGINEER TO DETERMINE WHETHER PROPOSED MATERIALS, EQUIPMENT, AND WORK METHODS ARE IN GENERAL CONFORMANCE WITH THE PLANS.

SUBMIT SEQUENCES, TECHNIQUES AND PROCEDURES OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, MATERIALS, TEMPORARY STRUCTURES, TOOLS, CONSTRUCTION EQUIPMENT, AND ALL INCIDENTAL OR TEMPORARY DEVICES REQUIRED TO ACCOMPLISH THE RESULT INTENDED BY THIS CONTRACT.

RESIDUAL LEAD PAINT

RESIDUAL LEAD PAINT MAY STILL BE ON THE BRIDGES. THE CONTRACTOR IS ADVISED TO TAKE ALL NECESSARY PROTECTIVE MEASURES INCLUDING WORKER SAFETY AND ENVIRONMENTAL REGULATIONS WHEN PERFORMING SURFACE PREPARATION AND OTHER WORK. THE DEPARTMENT WILL NOT CONSIDER ANY CLAIMS BASED ON RESIDUAL LEAD PAINT.

BEARING PAD REPLACEMENT

THIS WORK SHALL CONSIST OF REMOVAL AND REPLACEMENT IN KIND OF THE ELASTOMERIC BEARING PAD AT THE PIER 7 CATCHER COLUMN IN ACCORDANCE WITH THE PLANS.

ALL CLEANING, PAINTING, MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "BEARING REPLACEMENT".

PIN & HANGER RETROFIT

REMOVE AND REPLACE THE PIN & HANGER ASSEMBLY AT PIER GIRDER 131E IN ACCORDANCE WITH THE PLANS AND SPECIAL NOTE FOR PIN & HANGER ASSEMBLY REPAIR. PROVIDE JACKING AND TEMPORARY SUPPORT FOR GIRDERS P & W IN ACCORDANCE WITH THE PLANS AND SPECIAL NOTE FOR JACKING AND SUPPORTING BRIDGE SPAN.

PRIOR TO BEGINNING ANY FIELD WORK, A STEP-BY-STEP PROCEDURE FOR SUPPORTING THE GIRDERS AND REPLACING THE LINK PLATES AND PINS SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE ENGINEER'S APPROVAL.

THE BID ITEM "PIN AND HANGER RETROFIT" SHALL BE MEASURED FOR PAYMENT AS A SINGLE UNIT FOR EACH SET OF LINK PLATES AND PINS REPLACED AND ACCEPTED BY THE ENGINEER. THE UNIT PRICE PER EACH (EA) FOR ITEM "PIN AND HANGER RETROFIT" SHALL BE FULL COMPENSATION FOR ALL CLEANING, PAINTING, LABOR, EQUIPMENT, TOOLS, MATERIALS, ACCESS, AND ANY INCIDENTALS NECESSARY TO COMPLETE THE WORK.

RAILROAD COORDINATION

THE CONTRACTOR SHALL COORDINATE THE DRAINAGE SYSTEM WORK OVER AND ADJACENT TO THE RAILROAD TRACKS IN ACCORDANCE WITH SPECIAL NOTE FOR RAILROAD COORDINATION PRIOR TO STARTING THE WORK.

REVISION		DATE	
DATE: AUGUST 2025	CHECKED BY		
DESIGNED BY: MJ DWYER	D BARON		
DETAILED BY: MJ DWYER	D BARON		
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS			
COUNTY JEFFERSON			
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET		
GENERAL NOTES - 2			
PREPARED BY			SHEET NO.
Michael Baker INTERNATIONAL			56
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM			DRAWING NO. 28870

ITEM NUMBER
5-10016

FILE NAME: C:\USERS\MARY.JO.DWYER\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: April 6, 2021
 E-SHEET NAME: S23464 006
 MicroStation v10.17.01.58

LIRC RAILROAD COORDINATION

THERE CAN BE NO TEMPORARY REDUCTION IN VERTICAL CLEARANCE.

IF CRANES ARE TO BE USED: SUBMIT A DETAILED PROCEDURE FOR DEMOLITION OF EXISTING STRUCTURES OVER OR ADJACENT TO LIRC TRACKS OR RIGHT-OF-WAY. THE PROCEDURE SHALL CLEARLY INDICATE THE CAPACITY OF THE CRANES, LOCATION OF CRANES WITH RESPECT TO THE TRACKS, AND CALCULATED LIFTING LOADS.

DURING ANY DEMOLITION, A PROTECTION SHIELD SHALL BE ERECTED FROM THE UNDERSIDE OF THE BRIDGE OVER THE TRACK AREA TO CATCH FALLING DEBRIS.

A BALLAST PROTECTION SYSTEM CONSISTING OF GEOFABRIC OR CANVAS SHALL BE PLACED OVER THE TRACK STRUCTURE TO KEEP THE BALLAST CLEAN.

THE CONTRACTOR SHALL SUBMIT DETAILED PLANS, WITH SUPPORTING CALCULATIONS, OF THE PROTECTION SHIELD AND BALLAST PROTECTION SYSTEMS FOR APPROVAL PRIOR TO THE START OF DEMOLITION.

LIRC SAFETY NOTES

ALL WORK IN THE FRA RED ZONE (WITHIN 4 FEET FROM OUTSIDE OF THE RAIL ON EACH SIDE OF THE TRACK) WILL BE ALLOWED ONLY WITH A LIRC, FRA QUALIFIED FLAGMAN OR WATCHMAN AS SPECIFIED BY THE LOCAL ENGINEERING REPRESENTATIVE.

ALL WORK BEYOND 4 FEET FROM THE OUTSIDE RAILS AND WITHIN 25 FEET MUST BE DONE UNDER THE SUPERVISION OF A QUALIFIED INSPECTOR OF LIRC FLAGMAN.

CERTAIN TYPES OF WORK DONE BEYOND 25 FEET FROM THE OUTSIDE OF THE RAILS, AND WITH EQUIPMENT THAT WILL NOT REACH BEYOND THIS POINT, MAY BE DONE WITHOUT FLAGGING PROTECTION OR A WATCHMAN. THIS MUST BE APPROVED BY THE LOCAL ENGINEERING REPRESENTATIVE. THE AREA MUST BE PROTECTED BY A CONSTRUCTION FENCE, AND THE WORK MUST BE STATIONARY.

ALL WORKERS WILL REMAIN OFF THE TRACKS. IF NECESSARY TO PERFORM THE WORK ON TRACK, PROTECTION WILL BE PROVIDED AS STATED ABOVE.

ALL WORKERS MUST COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THOSE OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND FEDERAL RAILROAD ADMINISTRATION (FRA).

AT LEAST THIRTY (30) DAYS ADVANCED NOTIFICATION MUST BE GIVEN TO THE RAILROAD REPRESENTATIVE, TO SCHEDULE A RAILROAD FLAGMAN.

THE CONTRACTOR MAY NOT USE LIRC RIGHT-OF-WAY, FOR STORAGE OF MATERIALS OR EQUIPMENT, WITHOUT PRIOR WRITTEN APPROVAL FROM LIRC.

THE CONTRACTOR SHALL CONDUCT ITS WORK AT ALL TIMES IN A MANNER WHICH WILL PROTECT LIRC'S PROPERTY AND TRACK FACILITIES FROM DAMAGE AND WITHOUT INTERRUPTION TO TRAIN OPERATIONS.

PRIOR TO THE INSTALLATION OF ANY SIGNAGE WITHIN LIRC RIGHT-OF-WAY, CONTRACTORS MUST CONTACT THE RAILROAD'S REPRESENTATIVE FOR LOCATION OF ALL UNDERGROUND SIGNAL UTILITIES.

ANY VIOLATION OF ANY LIRC RULES, REGULATIONS, OR POLICIES MAY RESULT IN REMOVAL OF CONTRACTOR PERSONNEL FROM THE RIGHT-OF-WAY.

NO CRANE OR BOOM EQUIPMENT SHALL BE ALLOWED TO SET UP TO WORK OR PARK WITHIN BOOM DISTANCE PLUS 15 FEET OF THE CENTERLINE OF TRACK WITHOUT SPECIFIC PERMISSION FROM THE RAILROAD. NO CRANE OR BOOM EQUIPMENT SHALL BE ALLOWED TO FOUL TRACK, WORK WITHIN THE FOUL ZONE, OR LIFT A LOAD OVER THE TRACK WITHOUT FLAGGING PROTECTION AND PERMISSION FOR TRACK TIME FROM THE RAILROAD.

LIRC SAFETY NOTES (CONT.)

ALL WORKMEN AND MACHINE OPERATORS SHALL STAY WITH THEIR MACHINES WHEN CRANE OR BOOM EQUIPMENT IS POINTED TOWARD THE TRACK. ALL CRANES AND BOOM EQUIPMENT SHALL STOP WORK AND CLEAR TRACK WHILE TRAIN IS PASSING. SWINGING LOADS SHALL BE SECURED TO PREVENT MOVEMENT WHILE TRAIN IS PASSING AND NO LOADS SHALL BE SUSPENDED ABOVE A MOVING TRAIN. ALL CRANES AND BOOM EQUIPMENT SHALL BE TURNED AWAY FROM THE TRACK AFTER EACH WORKDAY OR WHENEVER UNATTENDED BY AN OPERATOR.

ALL WORK MUST BE STOPPED WHILE TRAINS ARE PASSING WITHIN THE WORK ZONE.

"ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE FIVE (5) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF RAILROAD SIGNAL REPRESENTATIVE.

ALL SOILS EXCAVATED WITHIN LIRC'S RAILROAD RIGHT-OF-WAY SHALL REMAIN ON LIRC'S RIGHT-OF-WAY. TESTING OF SOILS ON LIRC ROW IS PROHIBITED WITHOUT PRIOR WRITTEN LIRC AUTHORIZATION. ANY SOILS EXCAVATED ON LIRC ROW CAN BE REUSED ON THE ROW PROVIDED PLACING SOILD ALONG LIRC ROW POSES NO ADVERSE IMPACTS TO THE EXISTING TERRAIN, DRAINAGE, OR ENVIRONMENT. SHOULD SOIL NEED TO BE REMOVED FROM LIRC ROW, THE LIRC ENVIRONMENTAL DEPARTMENT WILL SAMPLE THE SOIL FOR DISPOSITION. SOIL STAGED ON LIRC MUST FOLLOW LIRC PROTOCOL AND BE PROPERLY STORED AND/OR PROTECTED FROM THE ELEMENTS AND POTENTIAL EXPOSURE.

THE CONTRACTOR SHALL NOTIFY AND COORDINATE THEIR WORK WITH THE FOLLOWING LIRC REPRESENTATIVE:

CROUCH ENGINEERING, INC.
 5115 MARYLAND WAY, SUITE 225
 BRENTWOOD, TN 37027
 ATTN: MR SCOTT VICK, P.E.
 PHONE: 615-791-0630
 EMAIL: SVICK@CROUCHENGINEERING.COM

NORFOLK SOUTHERN NOTES

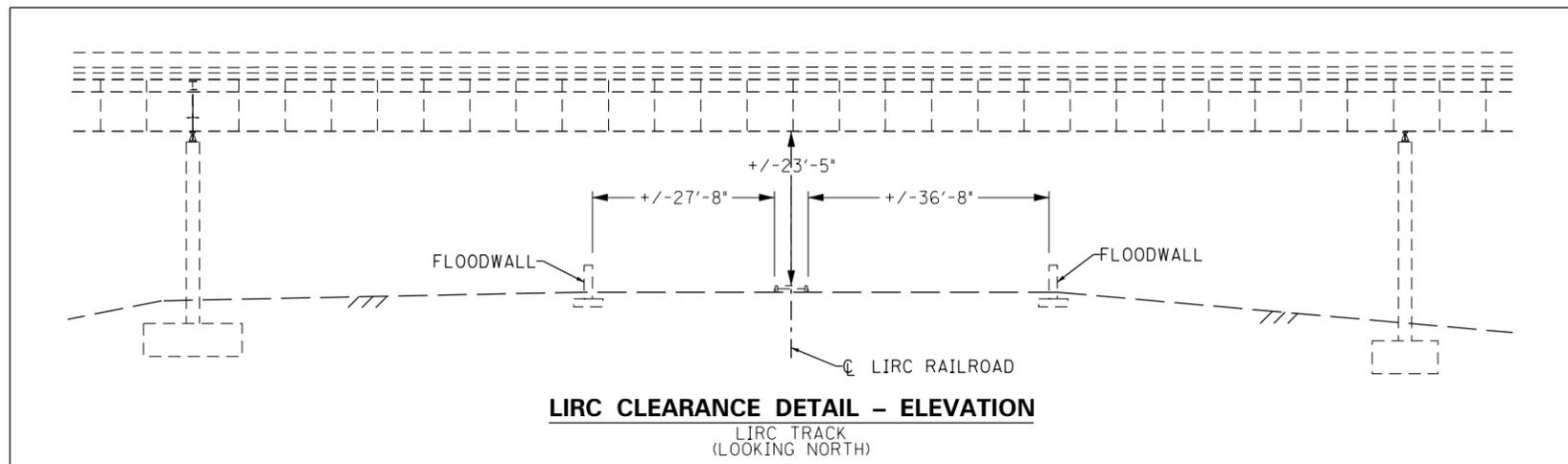
ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "PUBLIC PROJECT MANUAL(NSPPM)."

PRIOR TO COMMENCING WORK, THE CONTRACTOR MUST REQUEST FROM THE RAILROAD AND FOLLOW THE LATEST VERSION OF THE "SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS."

"ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE SEVEN (7) DAYS IN ADVANCE OF WORK AT THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.

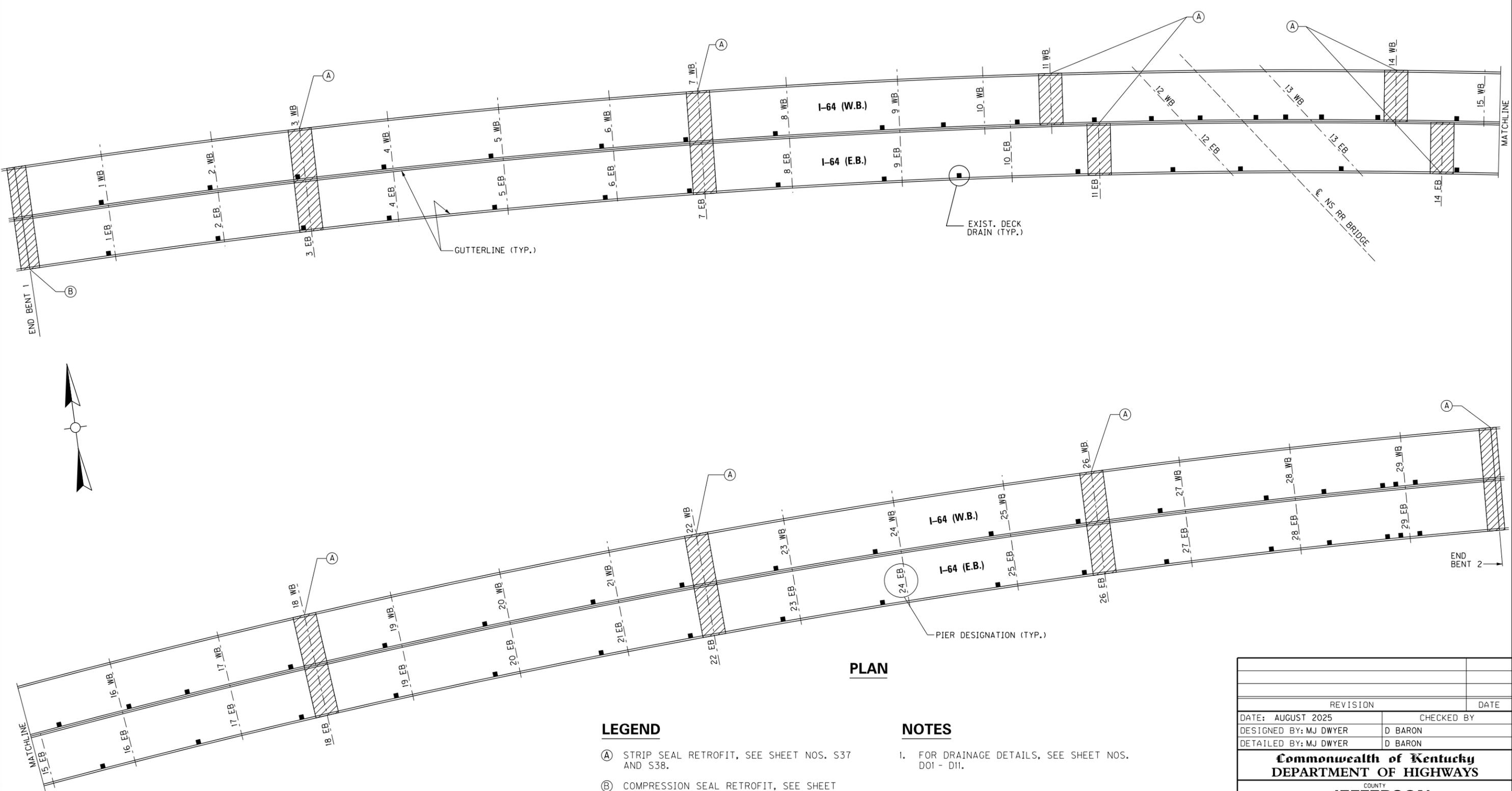
NORFOLK SOUTHERN WILL BE PROVIDED AS-BUILT DRAWINGS OF THE BRIDGES SHOWING THE ACTUAL CLEARANCES (OF NEW DRAINAGE PIPES WITHIN RAILROAD CLEARANCE ENVELOPE; SEE NSPPM) AS CONSTRUCTED. DEPTH, SIZE, AND LOCATION OF ALL FOUNDATION COMPONENTS SHALL BE SHOWN ON THE DRAWINGS.

AT VARIOUS LOCATIONS ON NS RIGHT-OF-WAY THE PROPOSED PROJECT WILL NOT CHANGE THE QUANTITY AND/OR CHARACTER OF FLOW TO NS; NO INCREASED IMPACTS TO NS DRAINAGE WILL OCCUR.



REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
GENERAL NOTES - 3		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S7 DRAWING NO. 28870

MicroStation v10.17.01.58 E-SHEET NAME: S23464 006 USER: Mar'yo.Dwyer DATE PLOTTED: April 4, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



PLAN

LEGEND

- (A) STRIP SEAL RETROFIT, SEE SHEET NOS. S37 AND S38.
- (B) COMPRESSION SEAL RETROFIT, SEE SHEET NO. S39.

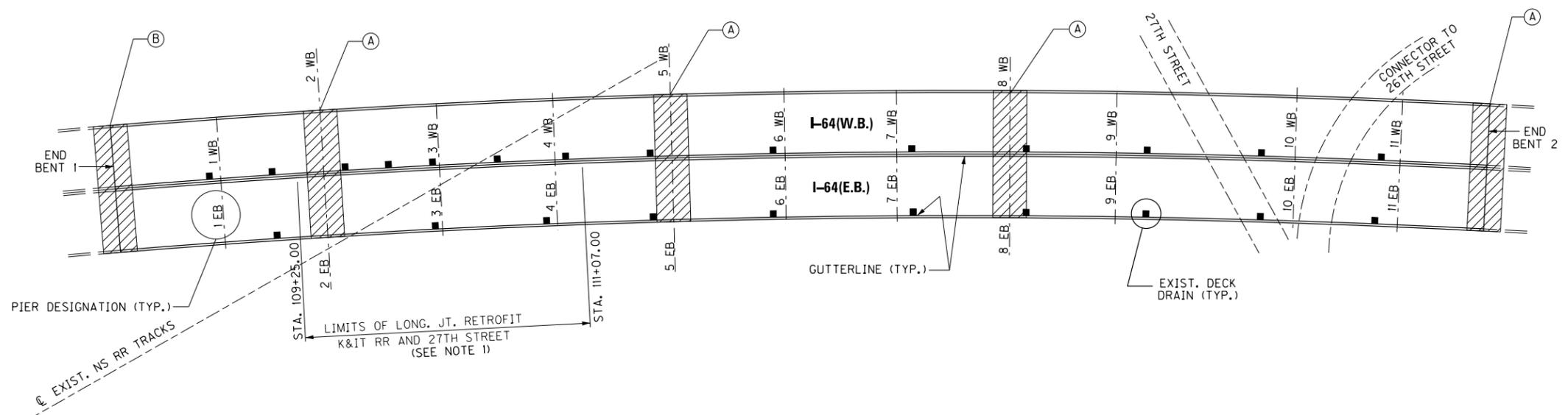
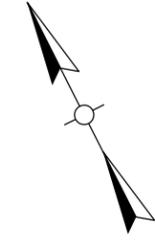
NOTES

1. FOR DRAINAGE DETAILS, SEE SHEET NOS. D01 - D11.

BRIDGE - B284

ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
LAYOUT - NS RR TRESTLE		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S8	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	



PLAN

LEGEND

- Ⓐ STRIP SEAL RETROFIT, SEE SHEET NOS. S37 AND S38.
- Ⓑ COMPRESSION SEAL RETROFIT, SEE SHEET NO. S39.

NOTES

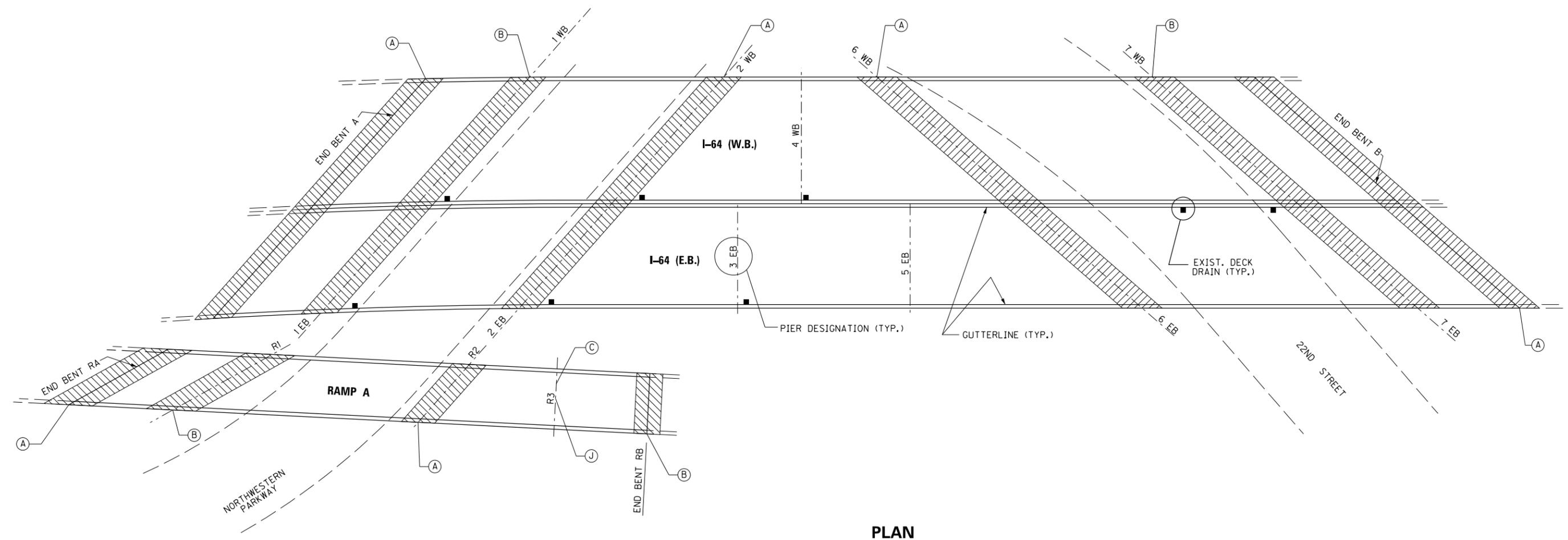
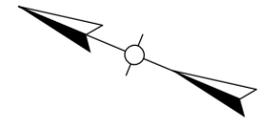
1. FOR LONGITUDINAL JOINT RETROFIT DETAILS, SEE SHEET NO. S40.
2. FOR DRAINAGE DETAILS, SEE SHEET NOS. D12 - D17.

BRIDGE - B283

ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
LAYOUT - NS RR & 27TH ST		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S9 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 006
 MicroStation v10.17.01.58



PLAN

LEGEND

- (A) STRIP SEAL RETROFIT, SEE SHEET NOS. S37 AND S38.
- (B) COMPRESSION SEAL RETROFIT, SEE SHEET NO. S39.
- (C) PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24.
PIER R3, EAST COLUMN
- (J) PIER R3 RETROFIT, SEE SHEET NOS. S22-S23.

NOTES

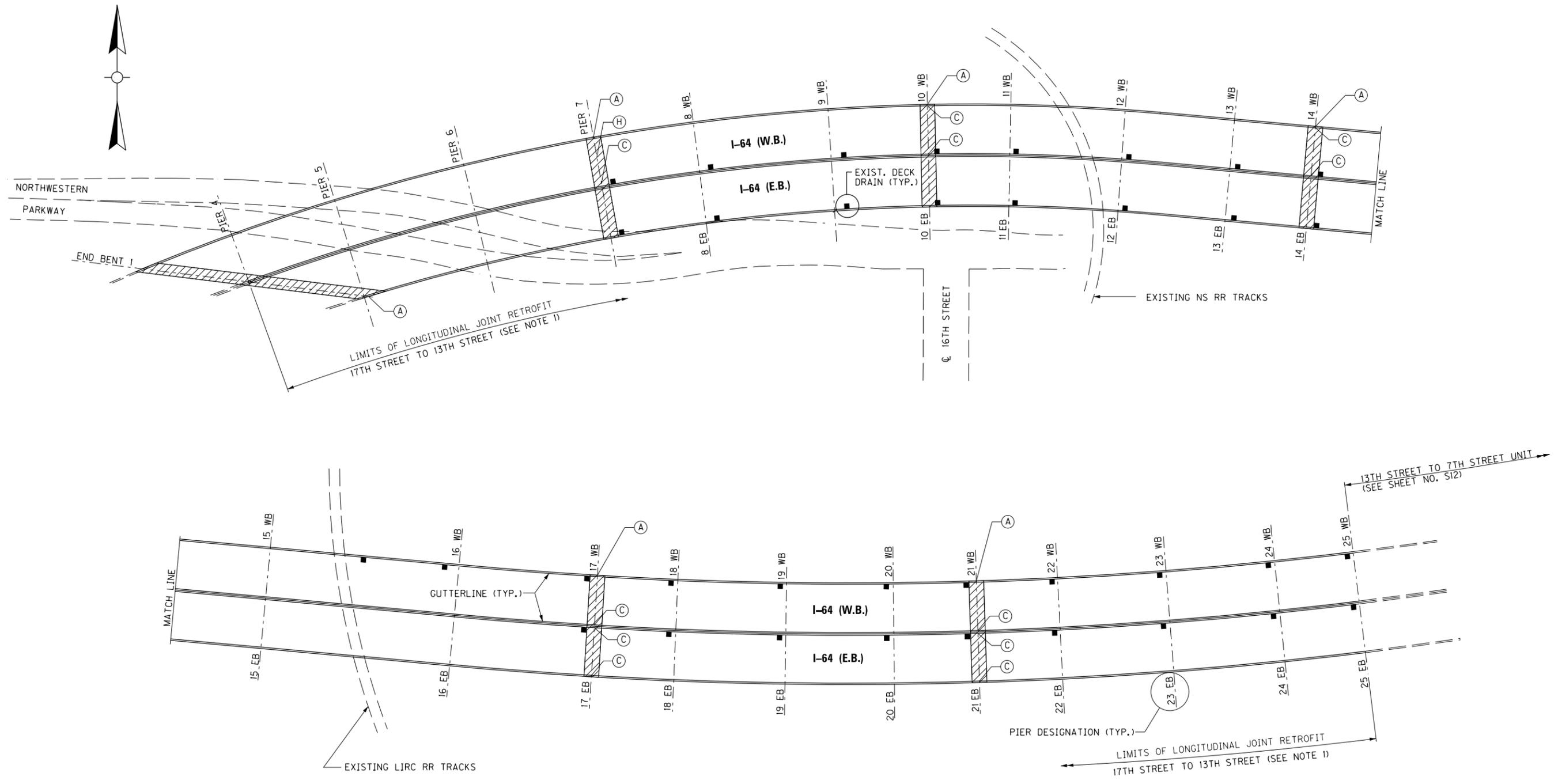
- 1. FOR DRAINAGE DETAILS, SEE SHEET NOS. D18 - D21.

**RAMP A BRIDGE - B281
 MAINLINE BRIDGE - B282**

ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
LAYOUT - NW PKWY & 22ND ST		
PREPARED BY		SHEET NO.
Michael Baker INTERNATIONAL		S10
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: April 4, 2023
 E-SHEET NAME: S23464 006
 MicroStation v10.17.01.58



PLAN

LEGEND

- (A) STRIP SEAL RETROFIT, SEE SHEET NOS. S37 AND S38.
- (C) PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24.
 PIER 7, MIDDLE COLUMN
 PIER 10W, NORTH & SOUTH COLUMN
 PIER 14W, NORTH & SOUTH COLUMN
 PIER 17E, NORTH & SOUTH COLUMN
 PIER 17W, SOUTH COLUMN
 PIER 21E, NORTH & SOUTH COLUMN
 PIER 21W, SOUTH COLUMN
- (H) ELASTOMERIC BEARING PAD REPLACEMENT AT PIN AND HANGER SUPPORT COLUMN, SEE SHEET NO. S25.

NOTES

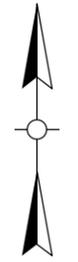
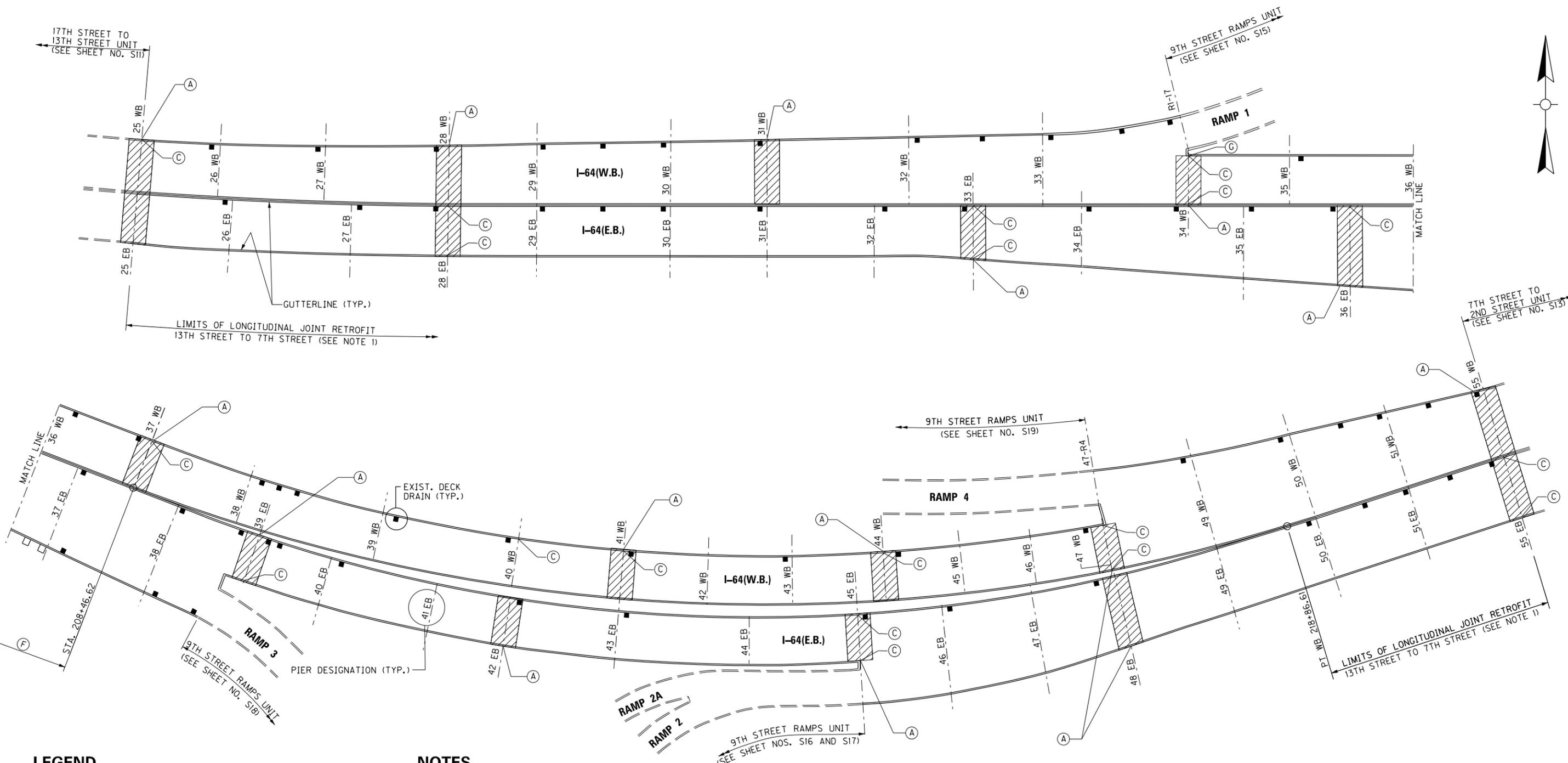
1. FOR LONGITUDINAL JOINT RETROFIT DETAILS, SEE SHEET NO. S40.
2. FOR DRAINAGE DETAILS, SEE SHEET NOS. D22 - D32.
3. FOR FATIGUE RETROFITS, SEE SHEET NOS. S41 - S47.

BRIDGE - B285

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
LAYOUT - 17TH TO 13TH STREET		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S11 DRAWING NO. 28870

FILE NAME: C:\USERS\MARYUO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYUO.DWYER\MBBAKERINTL.COM
 USER: MaryUo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 006
 MicroStation v10.17.01.58



PLAN

LEGEND

- (A) STRIP SEAL RETROFIT, SEE SHEET NOS. S37 AND S38.
- (B) LIMITS OF LONGITUDINAL JOINT RETROFIT, 13TH STREET TO 7TH STREET (SEE NOTE 1).
- (C) PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24.
 PIER 25W, NORTH COLUMN
 PIER 28E, NORTH & SOUTH COLUMN
 PIER 33E, NORTH & SOUTH COLUMN
 PIER 34W, NORTH & SOUTH COLUMN
 PIER 36E, NORTH COLUMN
 PIER 37W, NORTH COLUMN
 PIER 39E, SOUTH COLUMN
 PIER 40W, NORTH COLUMN
 PIER 41W, NORTH CATCHER COLUMN
 PIER 44W, NORTH COLUMN
 PIER 45E, NORTH & NORTHERN MIDDLE COLUMN
 PIER 47W, SOUTHERN MIDDLE & SOUTH COLUMN
 PIER 55E, NORTH & SOUTH COLUMN

NOTES

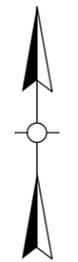
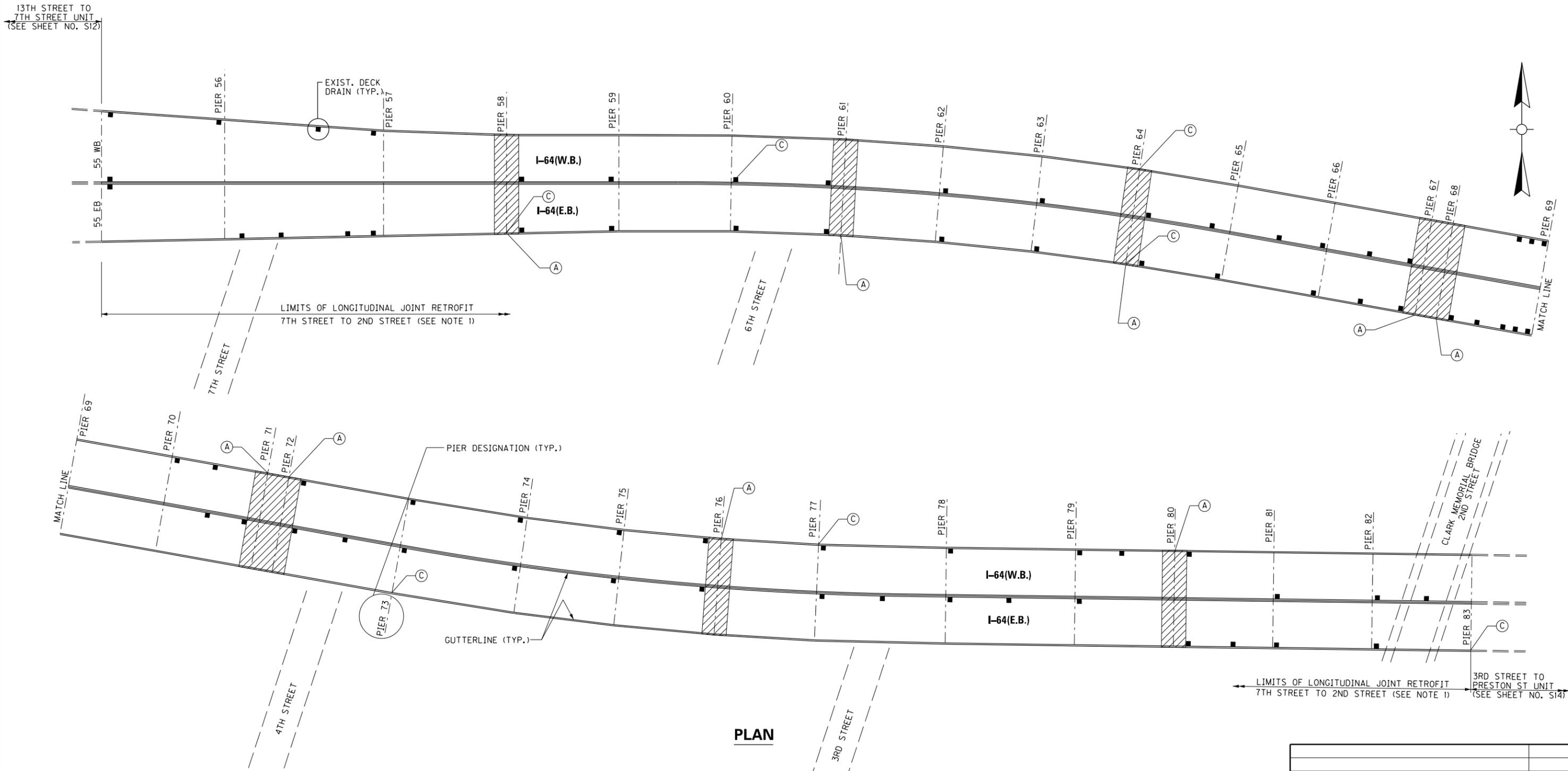
1. FOR LONGITUDINAL JOINT RETROFIT DETAILS, SEE SHEET NO. S40.
2. FOR DRAINAGE DETAILS, SEE SHEET NOS. D33 - D50.
3. FOR FATIGUE RETROFITS, SEE SHEET NOS. S48 - S58.

BRIDGE - B293

ITEM NUMBER	5-10016
-------------	---------

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
LAYOUT - 13TH TO 7TH STREET		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S12 DRAWING NO. 28870

FILE NAME: C:\USERS\MARYUO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYUO.DWYER\MBAKERINTL.COM
 USER: MaryUo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 006
 MicroStation v10.17.01.58



LEGEND

- (A) STRIP SEAL RETROFIT, SEE SHEET NOS. S37 AND S38.
- (C) PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24
 PIER 58, SOUTH COLUMN
 PIER 60, MIDDLE COLUMN
 PIER 64, NORTH & SOUTH COLUMN
 PIER 73, SOUTH COLUMN
 PIER 77, NORTH COLUMN
 PIER 83, SOUTH COLUMN

NOTES

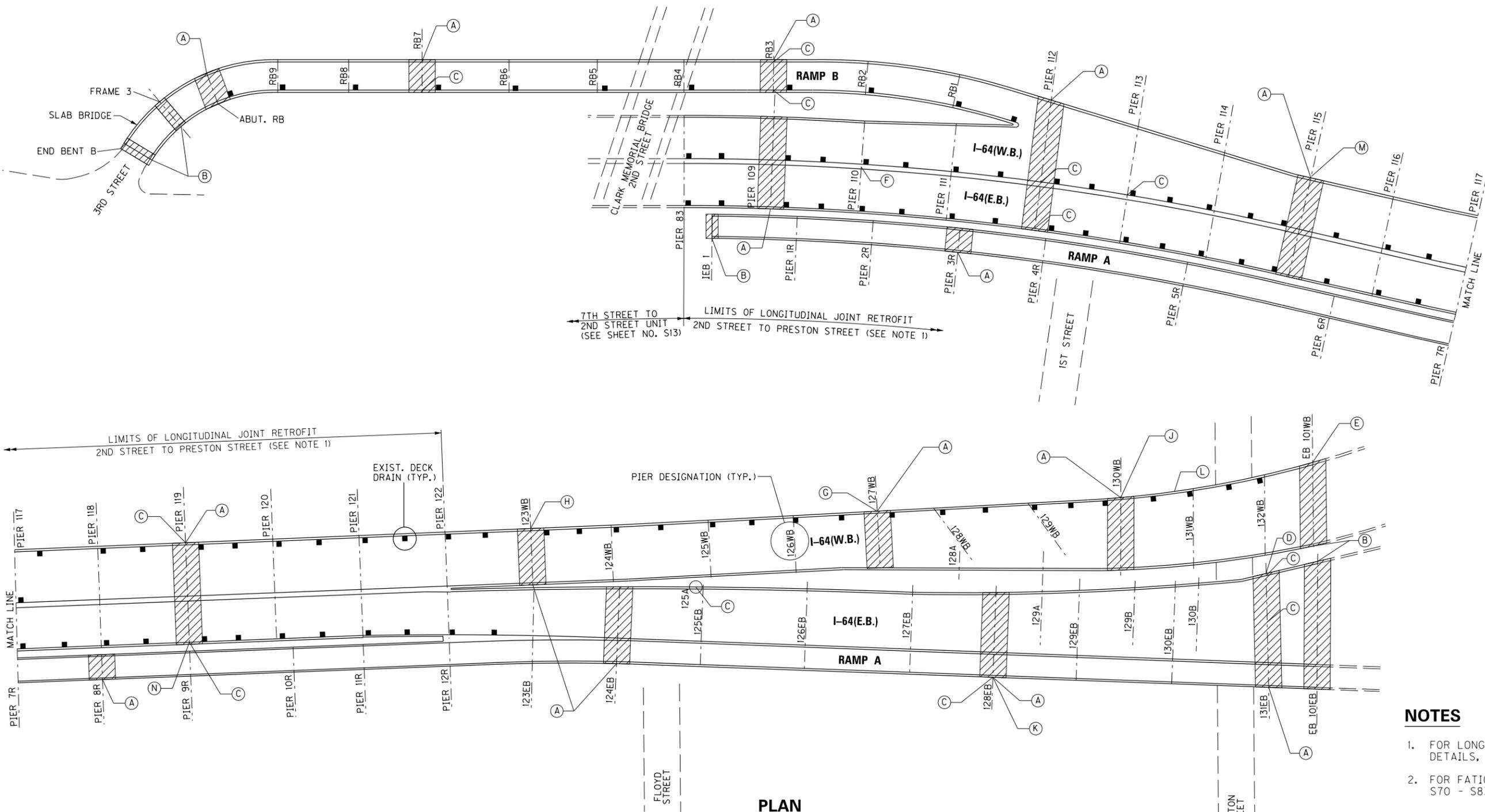
1. FOR LONGITUDINAL JOINT RETROFIT DETAILS, SEE SHEET NO. S40.
2. FOR FATIGUE RETROFITS, SEE SHEET NOS. S59 - S69.

BRIDGE - B292

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
LAYOUT - 7TH TO 2ND STREET		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S13	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

FILE NAME: C:\USERS\MARYJO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 006
 MicroStation v10.17.01.58



- LEGEND**
- (A) STRIP SEAL GLAND RETROFIT, SEE SHEET NOS. S37 AND S38.
 - (B) COMPRESSION SEAL RETROFIT, SEE SHEET NO. S39.
 - (C) PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24
 PIER RB3, NORTH & SOUTH COLUMN
 PIER RB7, SOUTH COLUMN
 PIER 112, MIDDLE & SOUTH COLUMN
 PIER 113, MIDDLE COLUMN
 PIER 119, NORTH & SOUTH COLUMN
 PIER 125A COLUMN
 PIER 128E, SOUTH COLUMN
 PIER 131E, NORTH & SOUTH MIDDLE COLUMN
 - (D) PIER 131E PIN AND HANGER REHABILITATION, GIRDER P, SEE SHEET NO. S33
 GIRDER W, SEE SHEET NO. S34
 - (E) END BENT 101W REHABILITATION, SEE SHEET NOS. S20-S21.
 - (F) PIER GIRDER 110 RETROFIT, SEE SHEET NO. S26.
 - (G) STEEL REPAIRS AT GIRDERS B, C, D AND F, SPAN 127W, SEE SHEET NO. S31.
 - (H) STEEL REPAIRS AT GIRDERS C, D AND E, SPAN 123W, SEE SHEET NO. S29.
 - (J) STEEL REPAIRS AT GIRDERS B AND D, SPAN 129W, SEE SHEET NO. S32.
 - (K) STEEL REPAIR AT CROSS GIRDER 128E, SEE SHEET NO. S30.
 - (L) STEEL REPAIR NEAR CROSS GIRDER 131W, SPAN 130W, SEE SHEET NO. S32.
 - (M) STEEL REPAIR AT GIRDER B, SPAN 115, SEE SHEET NO. S27.
 - (N) STEEL REPAIR AT GIRDER H, SPAN 118, SEE SHEET NO. S28.

PLAN

NOTES

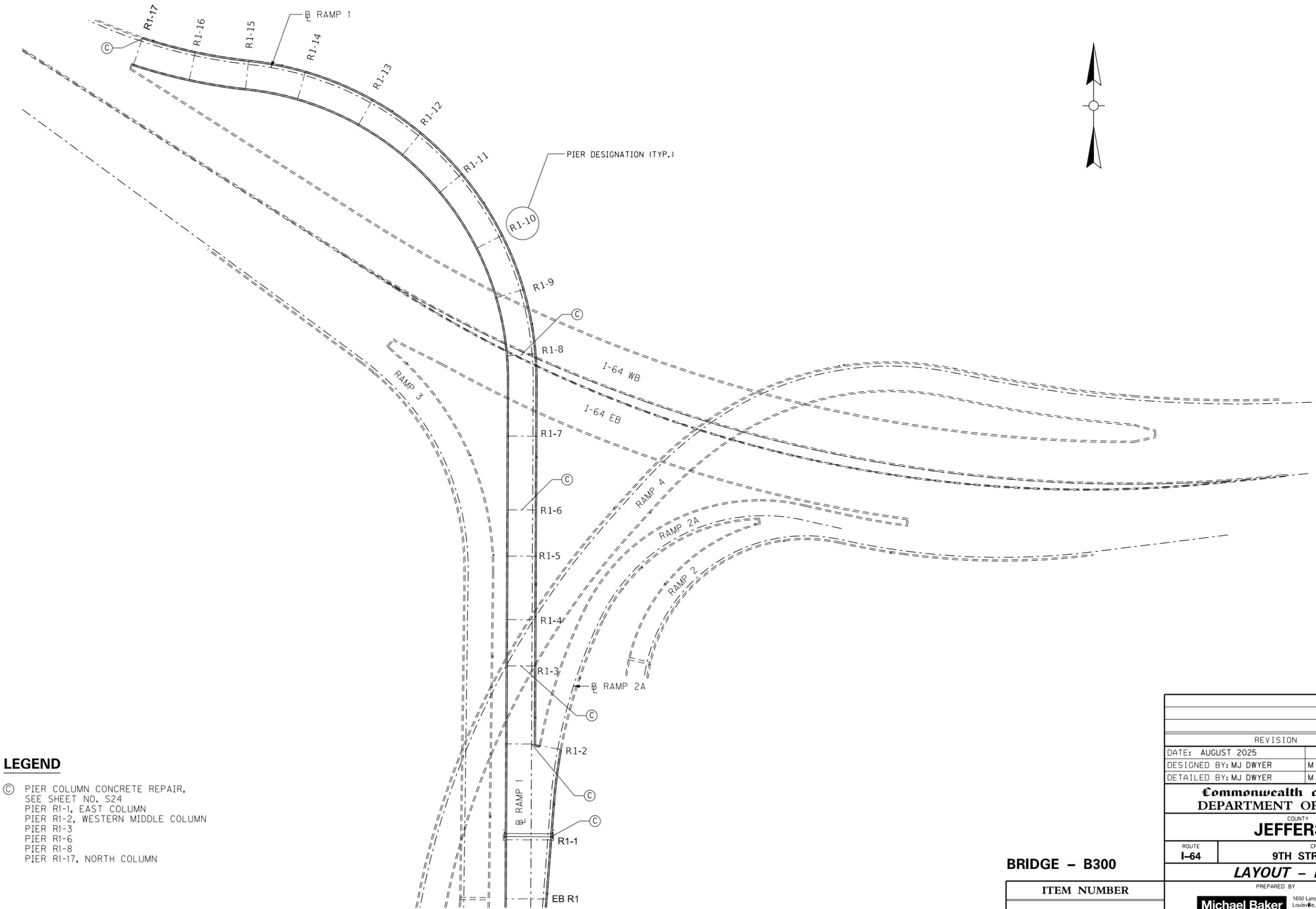
1. FOR LONGITUDINAL JOINT RETROFIT DETAILS, SEE SHEET NO. S40.
2. FOR FATIGUE RETROFITS, SEE SHEET NOS. S70 - S83.

BRIDGE - B142

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
LAYOUT - 3RD TO PRESTON ST		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S14 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: May 16, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



LEGEND

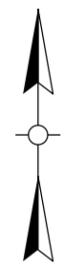
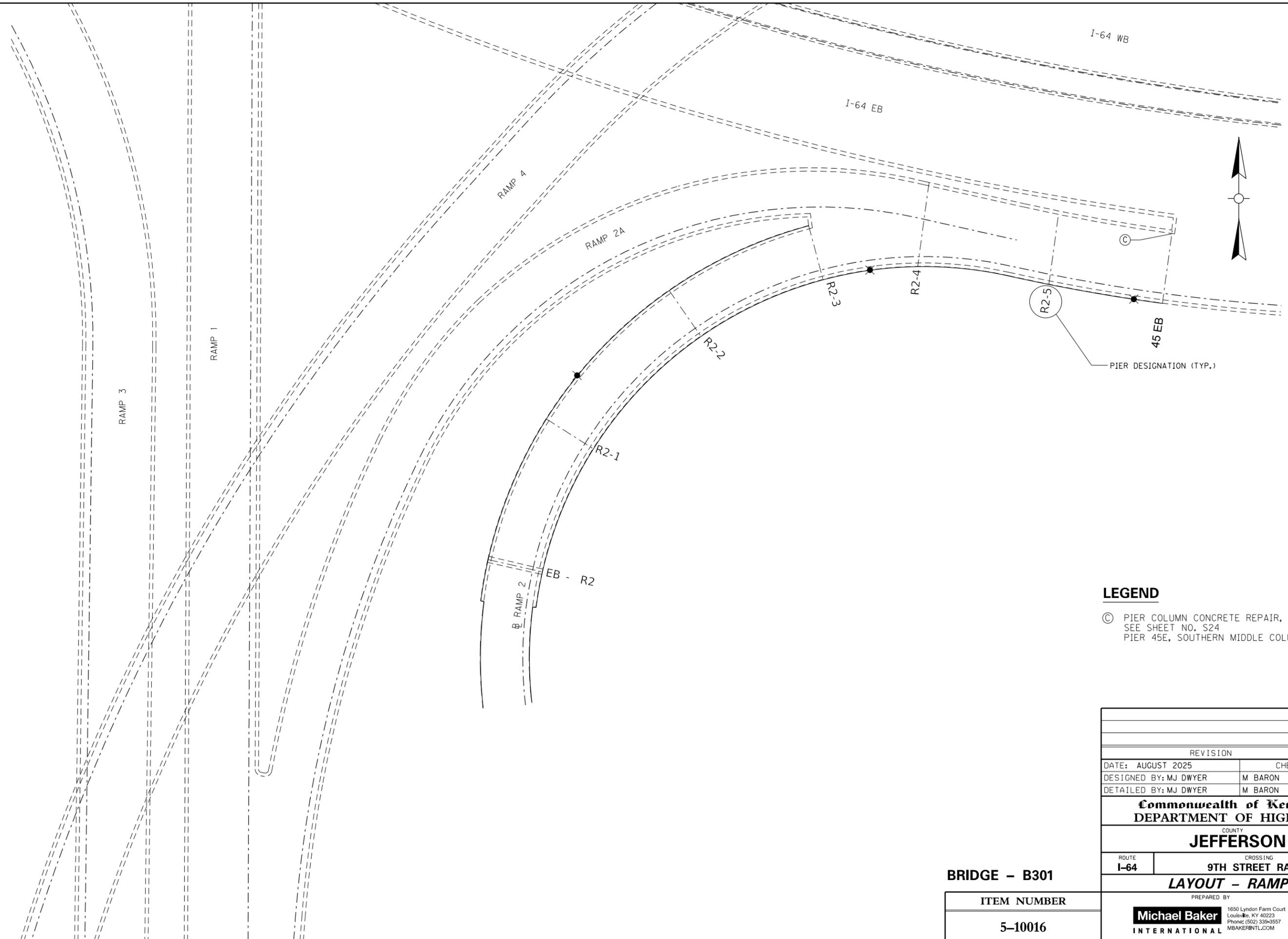
- Ⓢ PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24
- PIER R1-1, EAST COLUMN
- PIER R1-2, WESTERN MIDDLE COLUMN
- PIER R1-3
- PIER R1-6
- PIER R1-8
- PIER R1-17, NORTH COLUMN

BRIDGE - B300

ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING 9TH STREET RAMPS	
LAYOUT - RAMP 1		
PREPARED BY	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S15
Michael Baker INTERNATIONAL		DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: May 16, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



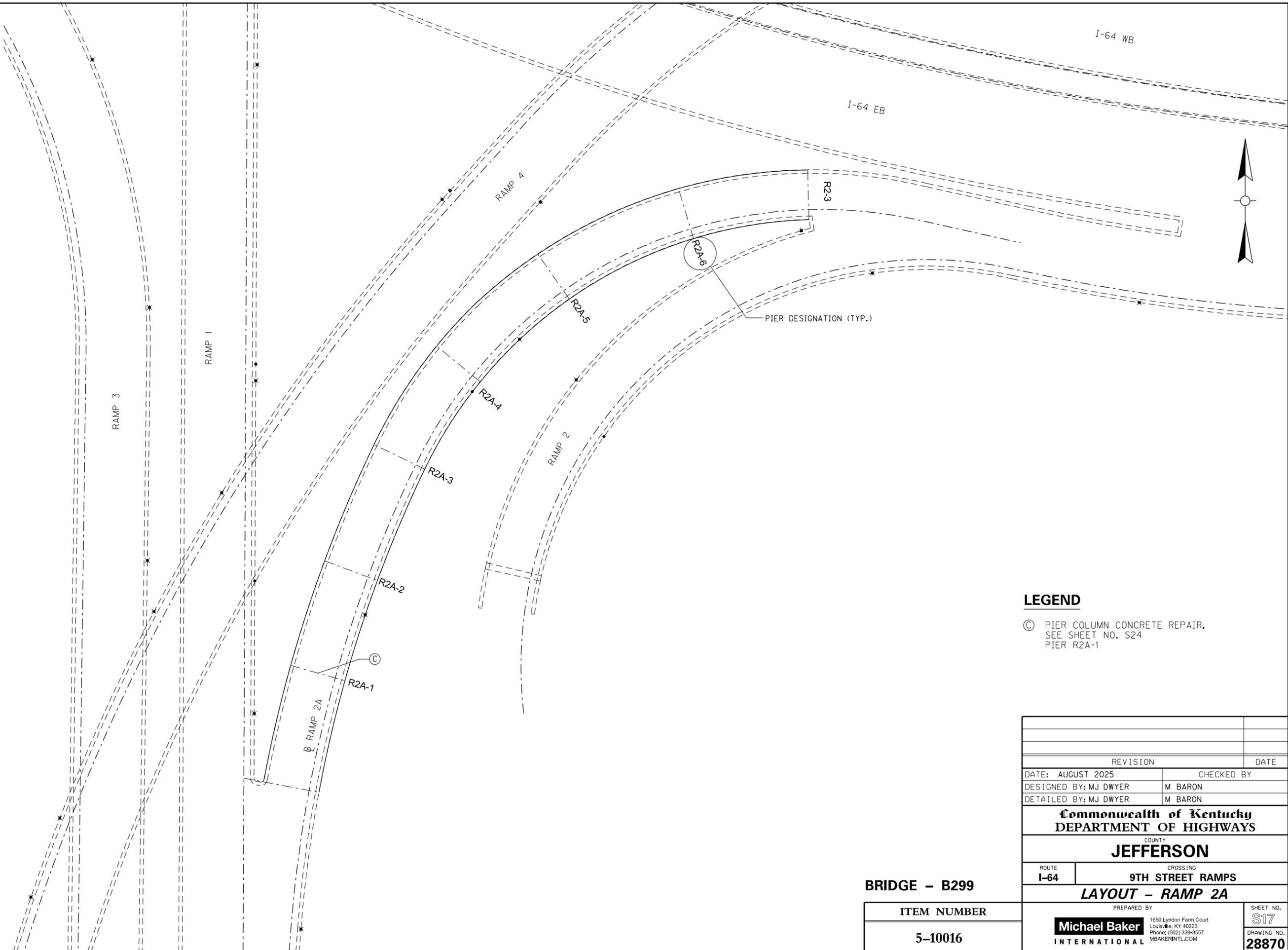
LEGEND
 © PIER COLUMN CONCRETE REPAIR,
 SEE SHEET NO. S24
 PIER 45E, SOUTHERN MIDDLE COLUMN

BRIDGE - B301

ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING 9TH STREET RAMPS	
LAYOUT - RAMP 2		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S16 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: May 16, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



LEGEND

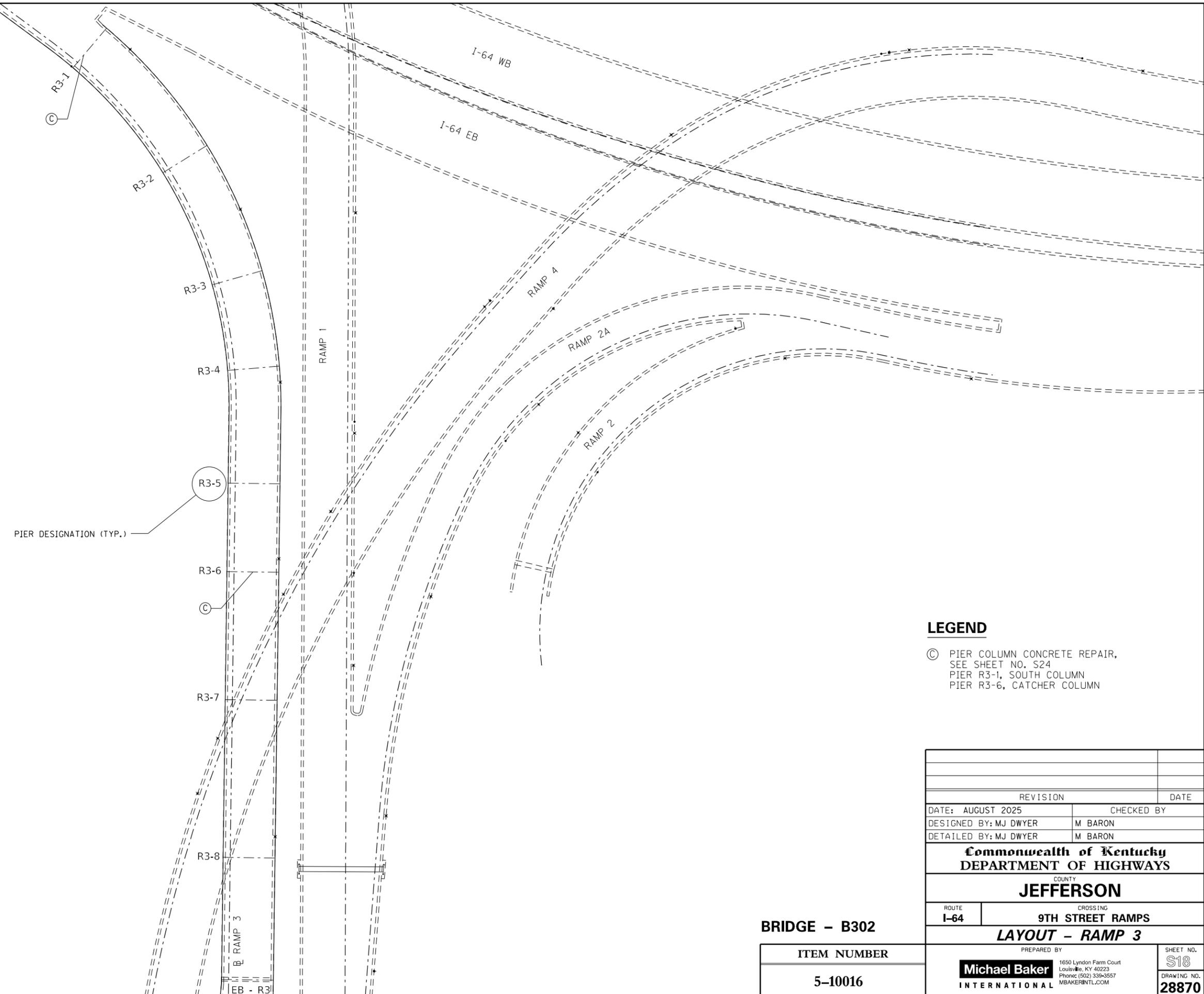
- © PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24 PIER R2A-1

BRIDGE - B299

ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING 9TH STREET RAMPS	
LAYOUT - RAMP 2A		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. S17 DRAWING NO. 28870
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: Mary Jo Dwyer
 DATE PLOTTED: May 16, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



LEGEND
 © PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24
 PIER R3-1, SOUTH COLUMN
 PIER R3-6, CATCHER COLUMN

REVISION		DATE

DATE: AUGUST 2025	CHECKED BY
DESIGNED BY: MJ DWYER	M BARON
DETAILED BY: MJ DWYER	M BARON

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY
JEFFERSON

ROUTE **I-64** CROSSING **9TH STREET RAMPS**

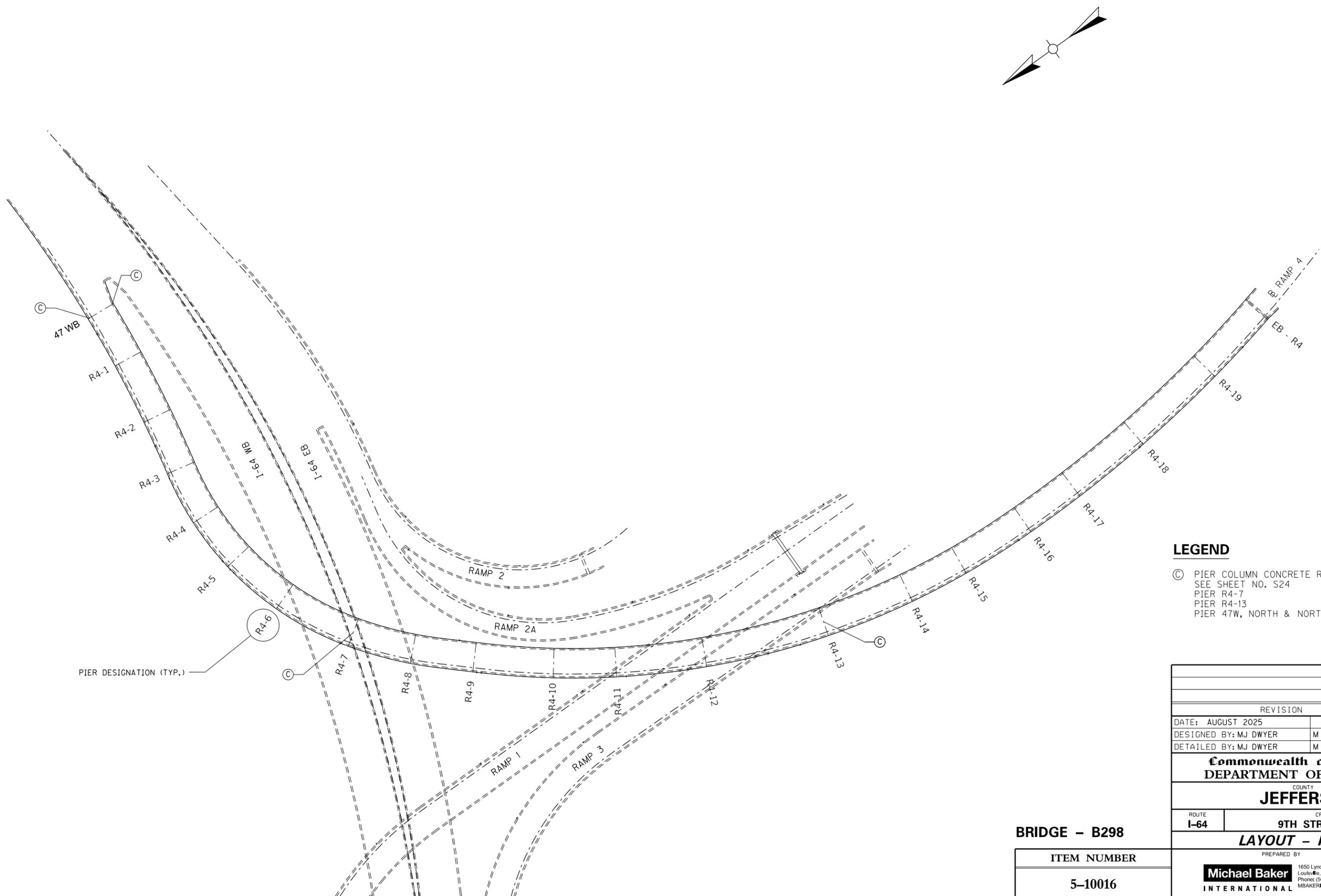
LAYOUT - RAMP 3

BRIDGE - B302

ITEM NUMBER
5-10016

PREPARED BY	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S18
Michael Baker INTERNATIONAL		DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: May 16, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



LEGEND

Ⓢ PIER COLUMN CONCRETE REPAIR, SEE SHEET NO. S24
 PIER R4-7
 PIER R4-13
 PIER 47W, NORTH & NORTHERN MIDDLE COLUMN

REVISION	DATE

DATE: AUGUST 2025	CHECKED BY
DESIGNED BY: MJ DWYER	M BARON
DETAILED BY: MJ DWYER	M BARON

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
JEFFERSON

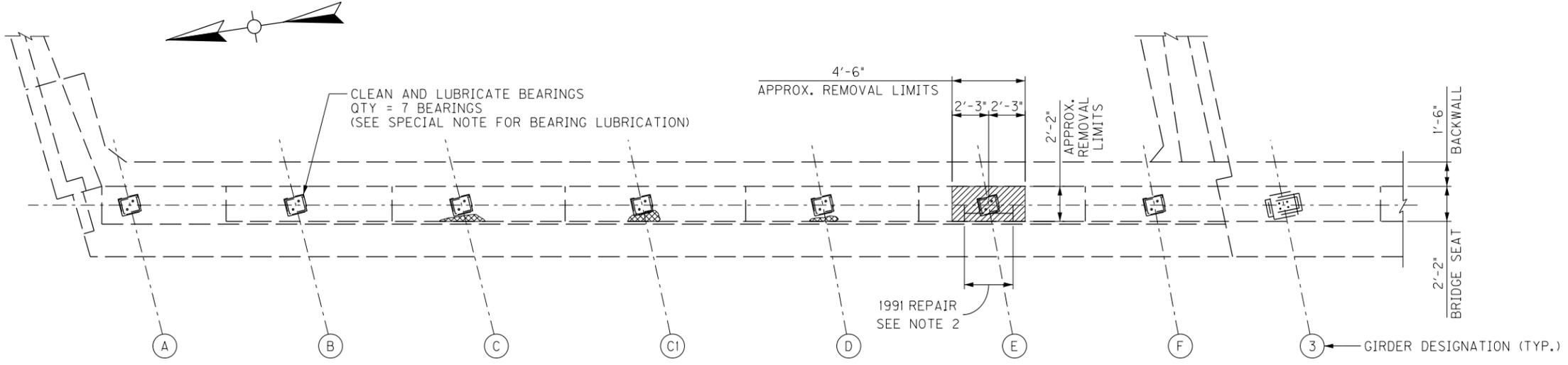
ROUTE I-64	CROSSING 9TH STREET RAMPS
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LAYOUT - RAMP 4

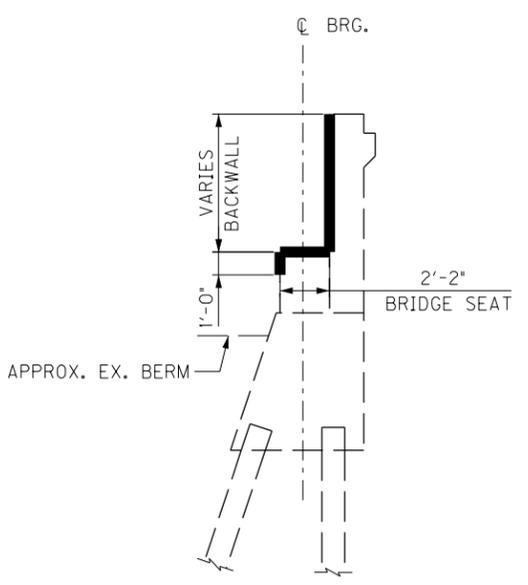
BRIDGE - B298
ITEM NUMBER
5-10016

PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 338-3557 MBAKERINTL.COM	SHEET NO. S19 DRAWING NO. 28870
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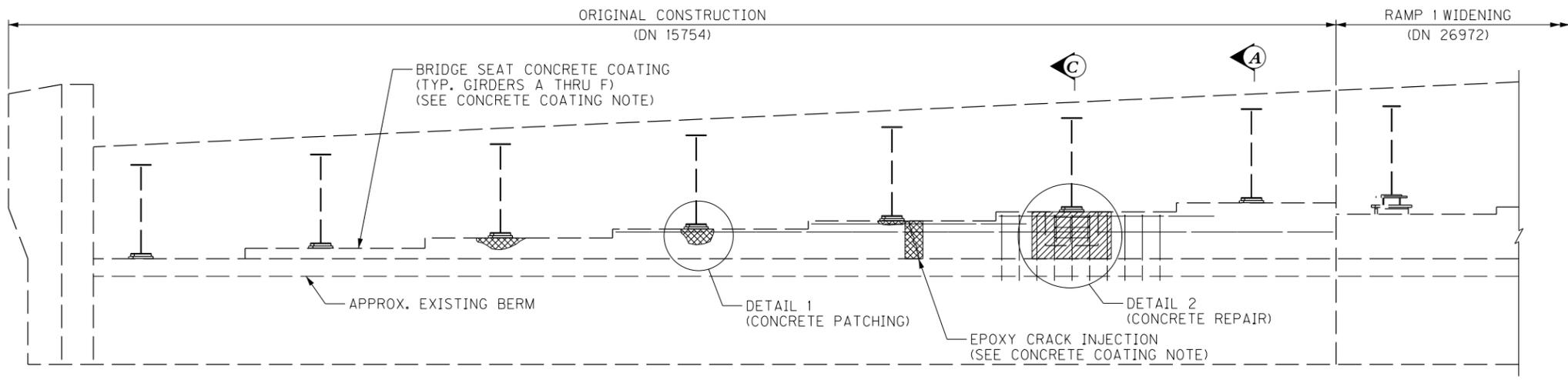
FILE NAME: C:\USERS\MARY.UO.DWYER\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.UO.DWYER\MBAKERINTL.COM
 USER: Mary.Uo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PLAN
GIRDERS NOT SHOWN FOR CLARITY



SECTION A-A
SHOWING CONCRETE COATING LIMITS



ELEVATION

NOTES

- FOR DETAIL 2 AND SECTION C-C, SEE SHEET NO. S21.
- 1991 CONCRETE REPAIR (DN 22413) WAS PERFORMED AT GIRDER E. AN APPROX. 6" MIN. x 23" x 3'-0" WEDGE SHAPED AREA WAS PATCHED.

LEGEND

- [Cross-hatched box] APPROX. CONCRETE SPALL OR CRACK LIMITS
- [Diagonal hatched box] GIRDER E CONCRETE REMOVAL LIMITS

END BENT 101W REPAIRS

THIS WORK CONSISTS OF CONCRETE PATCHING, AND REMOVING, REPLACING CONCRETE PORTIONS OF THE BRIDGE SEAT AS SHOWN ON THE PLANS. THE WORK INCLUDES CLEANING AND LUBRICATING THE EXISTING STEEL BEARINGS AND GIRDER ENDS, CLEANING AND COATING THE CONCRETE BRIDGE SEAT, AND REPLACING ANCHOR BOLTS AT GIRDER E.

CONCRETE COATING

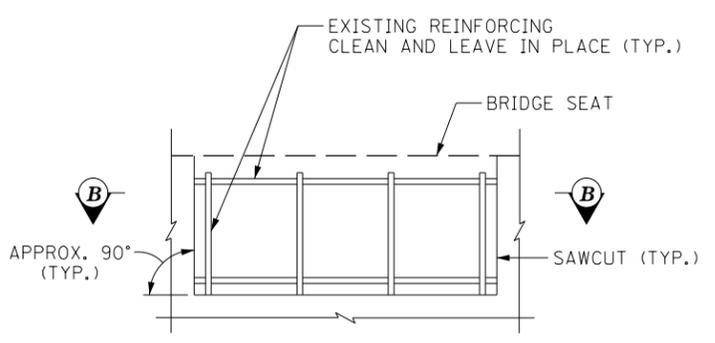
THIS WORK CONSISTS OF APPLICABLE REPAIRS AND SURFACE PREPARATION TO APPLY CONCRETE COATING TO THE CONCRETE BRIDGE SEAT HORIZONTAL AND VERTICAL SURFACES. REPAIR THE AREAS OF DETERIORATED CONCRETE AND CRACKS SHOWN AND/OR THOSE DIRECTED BY THE ENGINEER. PERFORM THIS WORK IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE COATING.

CONCRETE COATING APPLIED TO THE FRONT FACE OF THE ABUTMENT BACKWALL, TOPS AND FACES OF THE BRIDGE SEAT FOR THE ENTIRE LENGTH OF THE ORIGINAL ABUTMENT WITHIN THE LIMITS SHOWN.

PAYMENT FOR THIS WORK IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE COATING.

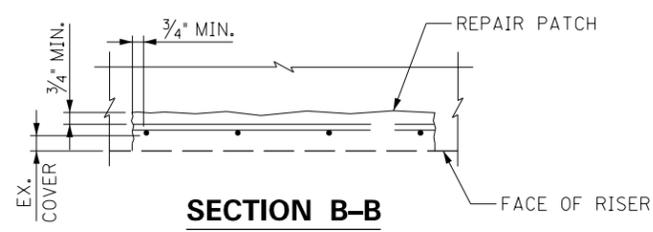
EB 101W GIRDER E LOAD TABLE

DL DEAD LOAD (KIP)	LL+I LIVE LOAD (KIP)	1.25 DL + 1.35 LL+I (KIP)	MIN. JACK CAPACITY (TONS)
50	170	292	300



DETAIL 1 - CONCRETE PATCHING

LOOKING AT BRIDGE SEAT VERTICAL FACE

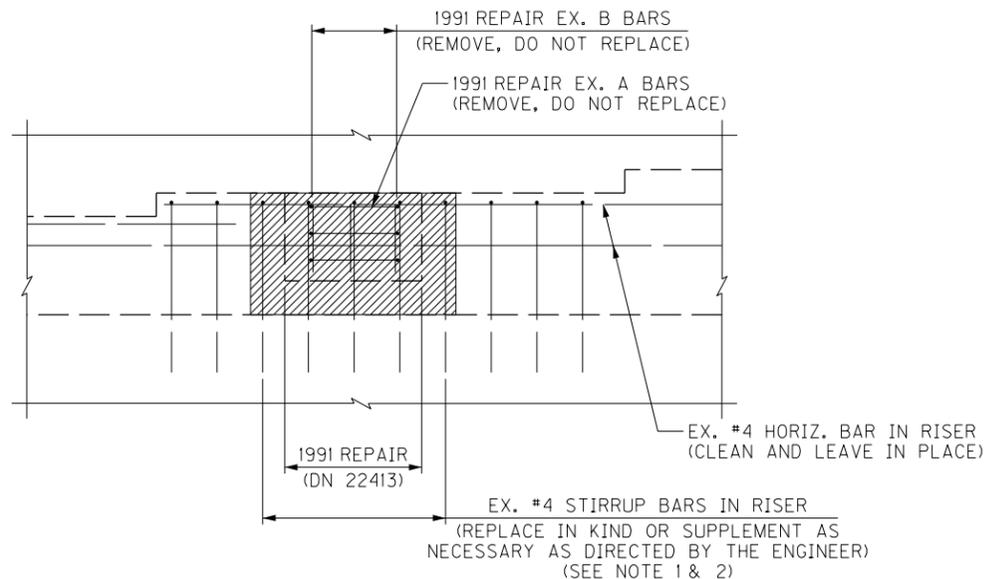


SECTION B-B

BRIDGE - B142

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T T RR TO PRESTON STREET	
END BENT 101W RETROFIT - 1		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S20 DRAWING NO. 28870



DETAIL 2 - CONCRETE REPAIR

GIRDER, BEARING AND BERM NOT SHOWN FOR CLARITY

CONCRETE REPAIRS AT GIRDER E

THIS WORK CONSISTS OF REMOVING, REPLACING THE DETERIORATED CONCRETE CONDITIONS SUPPORTING THE GIRDER, AND REMOVING, REPLACING THE BEARING ANCHOR BOLTS; AND REQUIRES REMOVING DEAD LOAD AND LIVE LOAD FROM THE BEARING TO PERFORM THE REPAIR OPERATIONS.

PERFORM THIS WORK IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE PATCHING REPAIR, AND WITH SPECIAL NOTE FOR JACKING AND SUPPORTING BRIDGE SPAN (SEE NOTE 3). CLASS AA CONCRETE SHALL BE USED FOR REPAIR AT GIRDER E.

DETERIORATION UNDER THE BEARING IS EXTENSIVE, WITH POSSIBLE LOSS OF SUPPORT AND/OR SETTLEMENT. PROVIDE JACKING AND/OR SUPPORT AS NECESSARY TO SET AND HOLD GIRDER E AT THE EXISTING BEARING SEAT ELEVATION WHILE CONCRETE REPAIRS ARE COMPLETED.

THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE DESIGN OF THE LIFTING AND SUPPORTING PROCEDURES NECESSARY FOR SAFE AND PROPER EXECUTION OF THE WORK. PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND INCIDENTALS NECESSARY TO JACK, BLOCK, AND SUPPORT THE GIRDER TO COMPLETE THE CONCRETE WORK. LEAVE THE GIRDER SUPPORT IN PLACE UNTIL THE CONCRETE IS PROPERLY CURED.

SUBMIT A WRITTEN PROCEDURE TO REMOVE THE CONCRETE PRIOR TO STARTING WORK. PAY PARTICULAR ATTENTION TO CONCRETE REMOVAL BELOW THE MASONRY PLATE AS WELL AS REMOVING, REPLACING THE ANCHOR BOLTS. CARE MUST BE TAKEN NOT TO DAMAGE THE STEEL BEARING AND ITS WELD CONNECTION TO THE GIRDER BOTTOM FLANGE.

REMOVE UNSOUND CONCRETE FROM THE DAMAGE AREA OF THE BRIDGE SEATS, EXTENDING THE LIMITS OF THE DAMAGED AREA UNTIL SOLID CONCRETE IS ENCOUNTERED. ENSURE, IN THE PRESENCE OF THE ENGINEER, THAT ALL CONCRETE SURROUNDING THE REMOVAL LIMITS IS SOUND. BASED ON RESULTS OF HAMMER SOUNDINGS, THE REMOVABLE LIMITS MAY BE INCREASED AS DETERMINED BY THE ENGINEER.

PROVIDE A 1-INCH DEEP SAW CUT AROUND THE PERIMETER OF THE DAMAGED AREA TO SQUARE UP THE REMOVAL AREA AND ELIMINATE FEATHERED EDGES. UNDERCUT THE EDGE OF DEEP REMOVALS TO HELP RETAIN THE NEW CONCRETE.

CLEAN STEEL REINFORCEMENT WITH MECHANICAL WIRE-BRUSHING OR BY SANDBLASTING TO REMOVE SCALE, RUST, GREASE, OIL AND OTHER MATERIAL THAT WOULD PREVENT ADHESION OF THE CONCRETE. CHECK THE CONCRETE AFTER CLEANING TO ENSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE AND ENSURE THAT ADDITIONAL DELAMINATION IS NOT PRESENT.

CUT AND REMOVE CORRODED REINFORCING STEEL THAT HAS LOST MORE THAN 20 PERCENT OF THEIR DIAMETER. REPLACE DAMAGED REINFORCING STEEL WITH NEW BARS OF THE SAME DIAMETER BY MECHANICAL SPLICE TO THE EXISTING STEEL.

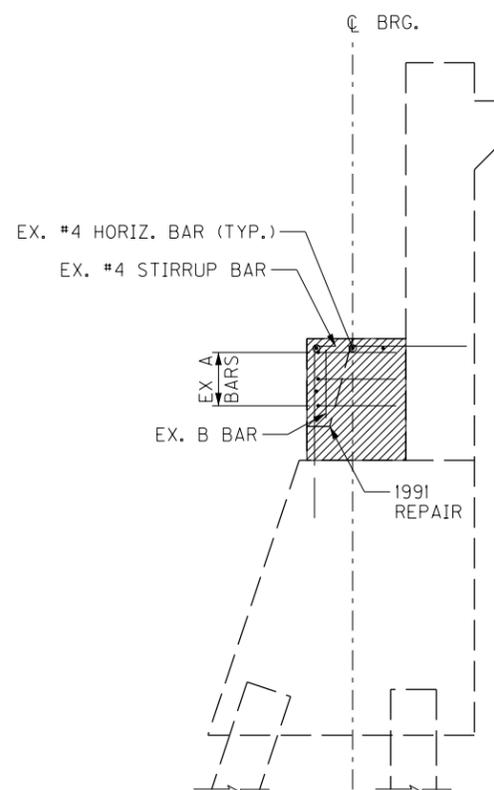
NEW STEEL REINFORCEMENT AT GIRDER E WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE REPAIR - END BENT 101W AT GIRDER E".

REMOVE THE EXISTING ANCHOR BOLTS. INSTALL NEW GALVANIZED ANCHOR BOLTS OF THE SAME SIZE AND SHAPE. CLEAN AND RESET THE BEARING AS NECESSARY PRIOR TO PLACING THE NEW CONCRETE. WHEN APPLICABLE, INSTALL NEW ANCHOR BOLTS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS FOR ADHESIVE ANCHORS.

PAYMENT FOR TEMPORARY SUPPORT SHALL BE IN ACCORDANCE WITH THE SPECIAL NOTE APPLICABLE TO THIS WORK.

ANCHOR BOLT REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO PAY ITEM "CONCRETE REPAIR - END BENT 101W AT GIRDER E".

PAYMENT FOR "CONCRETE REPAIR - END BENT 101W AT GIRDER E" SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS TO COMPLETE THE WORK.



SECTION C-C

GIRDER, BEARING AND BERM NOT SHOWN FOR CLARITY

NOTES

- FOR CONCRETE REPAIR AT GIRDER E ORIGINAL REINFORCING STEEL, SEE DN 15754 SHEETS 41 AND 42.
- MECHANICAL SPLICE DAMAGED STIRRUP BARS TO EXISTING BARS OR DOWEL NEW STIRRUP BARS INTO EXISTING BACKWALL AND EXISTING PILE CAP.
- DESIGN OF THE TEMPORARY SUPPORT SHALL BE BASED ON 95 KIPS VERTICAL GIRDER LOAD.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	

**Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS**

COUNTY
JEFFERSON

ROUTE **I-64** CROSSING **K & I T T RR TO PRESTON STREET**

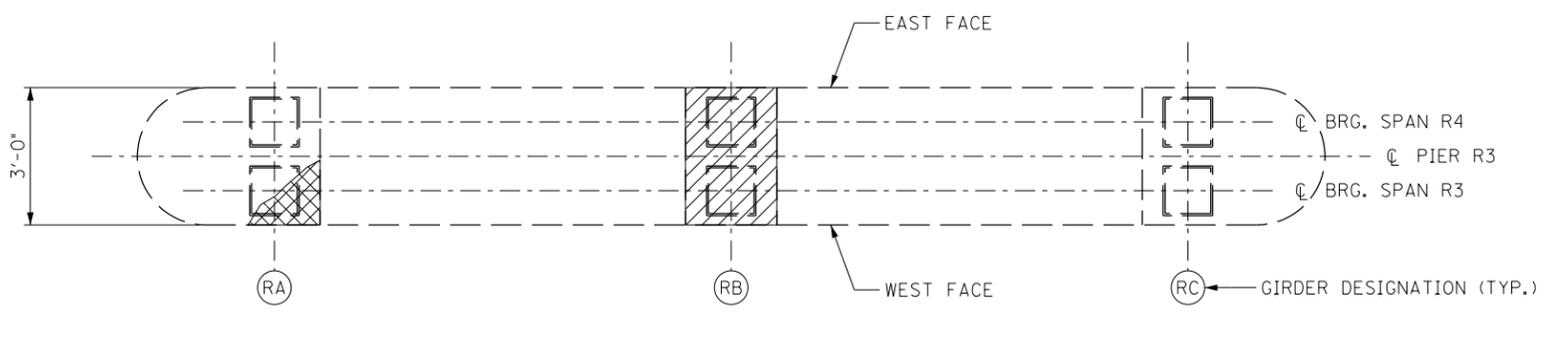
END BENT 101W RETROFIT - 2

BRIDGE - B142

ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S21 DRAWING NO. 28870

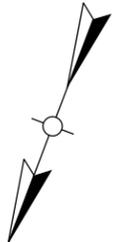
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58

FILE NAME: C:\USERS\MARY.UO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.UO.DWYER\MBAKERINTL.COM DATE PLOTTED: November 29, 2023
 USER: Mary.Uo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



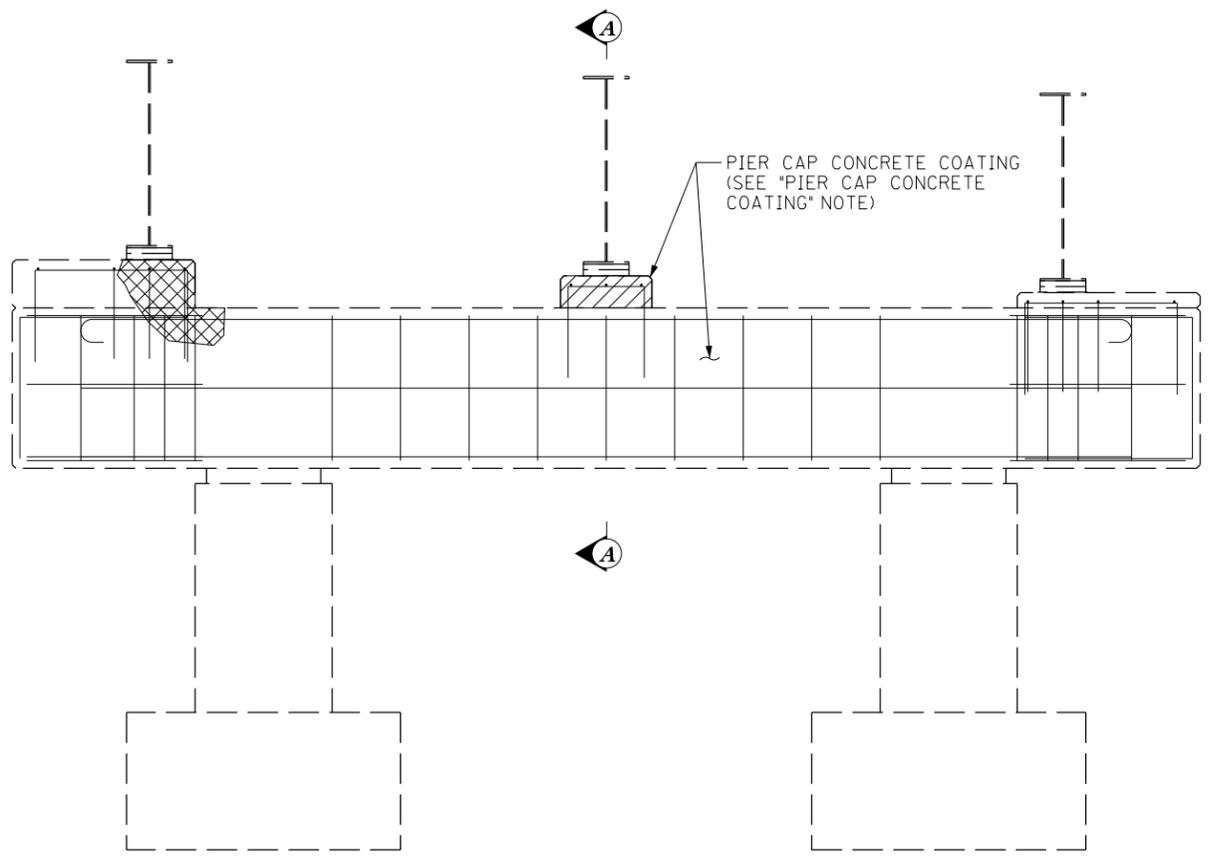
PLAN

GIRDERS NOT SHOWN FOR CLARITY



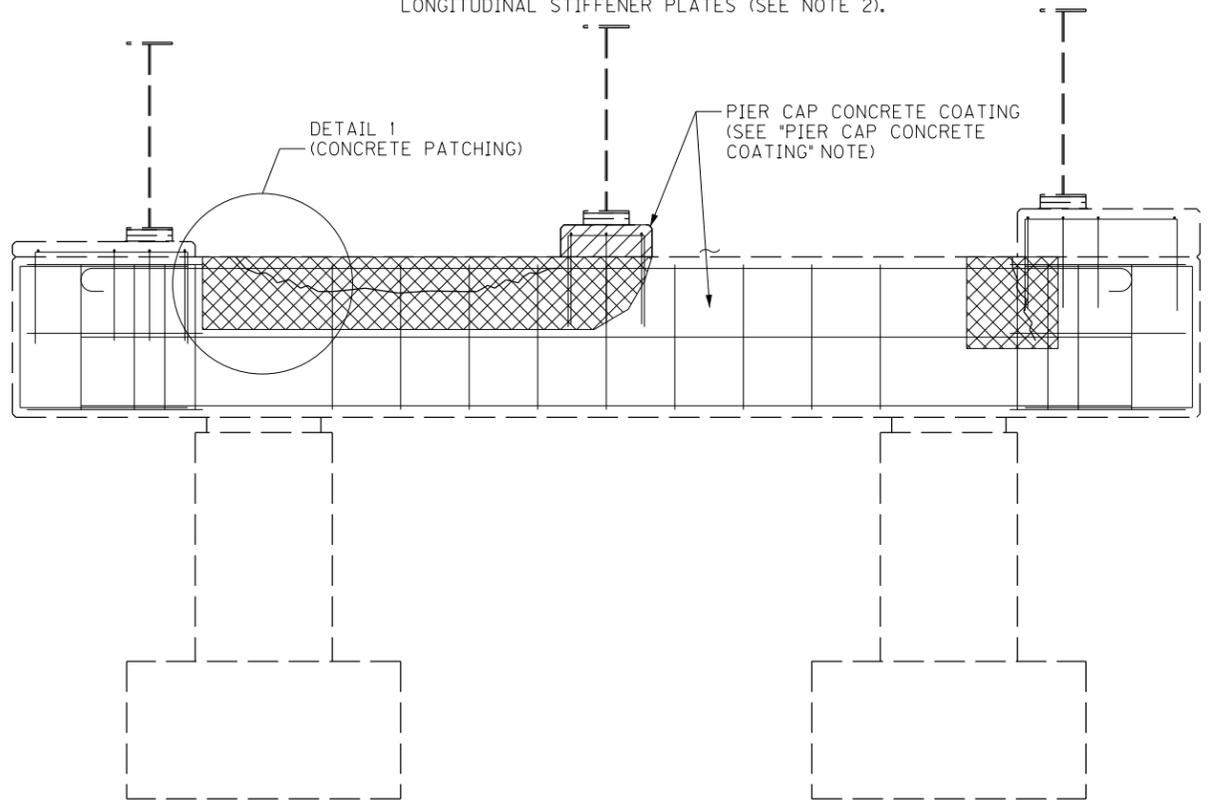
JACKING NOTES

1. RAMP A WILL BE CLOSED DURING A FULL WEEKEND CLOSURE TO PLACE THE NEW CONCRETE AT GIRDERS RA AND RB. AHEAD OF THE WEEKEND CLOSURE, THE CONTRACTOR MAY INSTALL THE TEMPORARY SUPPORT TO CONDUCT DEMOLITION AND PREPARATION ACTIVITIES PRIOR TO PLACING CONCRETE, AS APPROVED BY THE ENGINEER.
2. SHIFT TRAFFIC ON RAMP A ABOVE GIRDER RA AND RB BEARINGS TO THE OPPOSITE HALF OF THE BRIDGE DECK. THIS TRAFFIC SHIFT WILL ALLOW WORK ON GIRDER RA BEARINGS TO BE PERFORMED UNDER DEAD LOAD ONLY. WORK ON GIRDER RB BEARINGS MUST BE PERFORMED UNDER TRAFFIC LIVE LOADS.
3. DESIGN OF GIRDER RA TEMPORARY SUPPORT UNDER DEAD LOAD (REQUIRING A TRAFFIC SHIFT) SHALL BE BASED ON 40 KIPS EACH BEARING VERTICAL LOAD.
4. DESIGN OF GIRDER RB TEMPORARY SUPPORT UNDER DEAD LOAD (REQUIRING A FULL RAMP CLOSURE) SHALL BE BASED ON 45 KIPS EACH BEARING VERTICAL LOAD.
5. DESIGN OF GIRDER RB TEMPORARY SUPPORT UNDER DEAD AND LIVE LOADS (REQUIRING A TRAFFIC SHIFT) SHALL BE BASED ON 100 KIPS EACH BEARING VERTICAL LOAD.
6. NEW JACKING STIFFENERS, IF REQUIRED, SHALL BE STEEL ANGLES BOLTED TO BOTH SIDES OF THE GIRDER WEB. APPLICABLE EXISTING TRANSVERSE WEB STIFFENERS MAY BE USED AS JACKING STIFFENERS.
7. MODIFY GIRDER RA SINGLE SIDED STIFFENERS USING STEEL ANGLES BOLTED TO THE OUTSIDE FACE OF THE WEB. PROVIDE TIGHT FIT WHERE ANGLE INTERSECTS FLANGE PLATES AND LONGITUDINAL STIFFENER PLATES (SEE NOTE 2).



ELEVATION

LOOKING AT WEST FACE



ELEVATION

LOOKING AT EAST FACE

NOTES

1. FOR DETAIL 1 AND SECTION A-A, SEE SHEET NO. S23.
2. FOR RAMP A GIRDER DETAILS, SEE DN 17123.
3. CONCRETE REPAIR AT GIRDER RB PEDESTAL, CONCRETE PATCHING AT REMAINING LOCATIONS, U.N.O.

PIER R3 REPAIRS

THIS WORK CONSISTS OF CONCRETE PATCHING, AND REMOVING, REPLACING CONCRETE PORTIONS OF THE BRIDGE SEAT AND PIER CAP AS SHOWN ON THE PLANS. THE WORK INCLUDES CLEANING THE EXISTING STEEL BEARINGS, AND CLEANING AND COATING THE CONCRETE PIER CAP.

PIER CAP CONCRETE COATING

THIS WORK CONSISTS OF APPLICABLE REPAIRS AND SURFACE PREPARATION TO APPLY CONCRETE COATING TO THE CONCRETE PIER CAP HORIZONTAL AND VERTICAL SURFACES. REPAIR THE AREAS OF DETERIORATED CONCRETE AND CRACKS SHOWN AND/OR THOSE DIRECTED BY THE ENGINEER. PERFORM THIS WORK IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE COATING.

CONCRETE COATING APPLIED TO THE TOPS AND FACES OF THE PEDESTALS AND PIER CAPS FOR THE ENTIRE LENGTH OF THE PIER AT THE LIMITS SHOWN.

PAYMENT FOR THIS WORK IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE COATING.

LEGEND

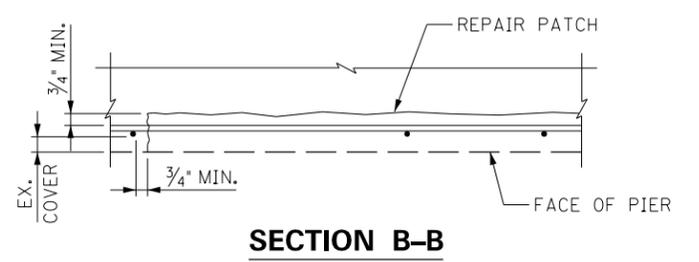
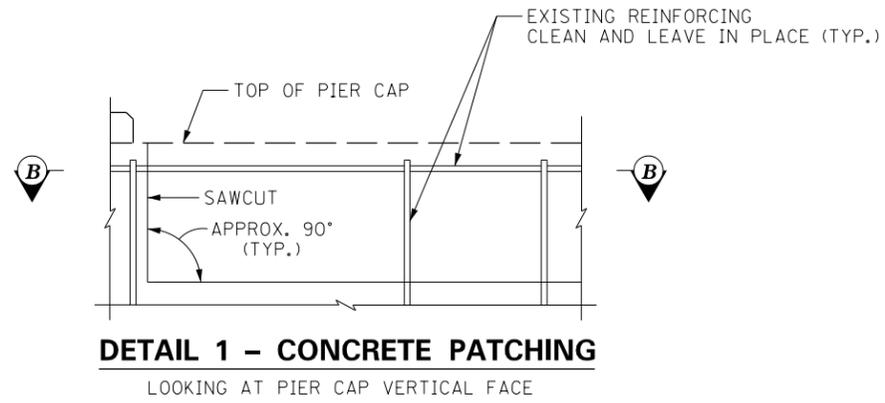
- [Cross-hatched box] APPROX. CONCRETE SPALL OR CRACK LIMITS
- [Diagonal hatched box] GIRDER RB CONCRETE REMOVAL LIMITS

BRIDGE - B281

ITEM NUMBER	5-10016
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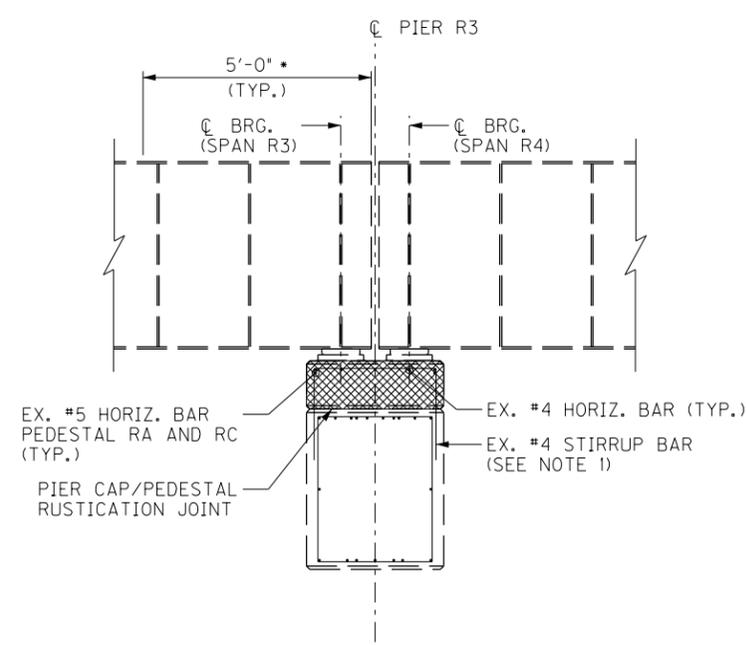
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DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
PIER R3 RETROFIT - 1		
PREPARED BY		SHEET NO.
Michael Baker International		S22
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58

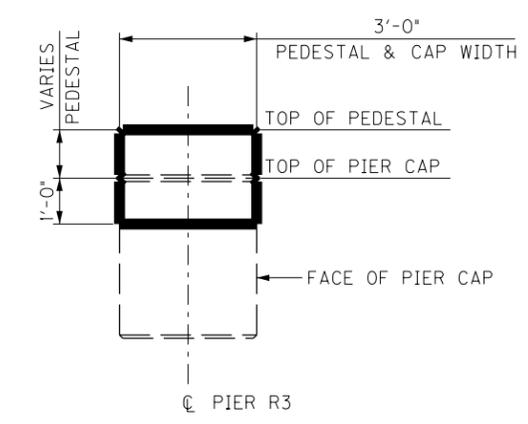


DETAIL 1 - CONCRETE PATCHING
LOOKING AT PIER CAP VERTICAL FACE

SECTION B-B



SECTION A-A
CONCRETE REPAIR



PIER CAP SECTION

SHOWING CONCRETE COATING LIMITS FOR PEDESTALS AND CAPS



GIRDER RA PEDESTAL AT PIER R3



GIRDER RB PEDESTAL AT PIER R3

CONCRETE REPAIRS AT GIRDERS RA AND RB

THIS WORK CONSISTS OF REMOVING AND REPLACING THE DETERIORATED CONCRETE CONDITIONS SUPPORTING THE GIRDER; AND REQUIRES REMOVING DEAD LOAD AND LIVE LOAD FROM THE BEARING TO PERFORM THE REPAIR OPERATIONS.

PERFORM THIS WORK IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE PATCHING REPAIR, AND WITH SPECIAL NOTE FOR JACKING AND SUPPORTING BRIDGE SPAN (SEE JACKING NOTES ON SHEET NO. S20A). CLASS AA CONCRETE SHALL BE USED FOR REPAIR AT GIRDERS RA AND RB.

DETERIORATION UNDER THE BEARING IS EXTENSIVE, WITH POSSIBLE LOSS OF SUPPORT AND/OR SETTLEMENT. PROVIDE JACKING AND/OR SUPPORT AS NECESSARY TO SET AND HOLD GIRDERS RA AND RB AT THE EXISTING BEARING SEAT ELEVATION WHILE CONCRETE REPAIRS ARE COMPLETED.

THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE DESIGN OF THE LIFTING AND SUPPORTING PROCEDURES NECESSARY FOR SAFE AND PROPER EXECUTION OF THE WORK. PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND INCIDENTALS NECESSARY TO JACK, BLOCK, AND SUPPORT THE GIRDER TO COMPLETE THE CONCRETE WORK. LEAVE THE GIRDER SUPPORT IN PLACE UNTIL THE CONCRETE IS PROPERLY CURED.

SUBMIT A WRITTEN PROCEDURE TO REMOVE THE CONCRETE PRIOR TO STARTING WORK. PAY PARTICULAR ATTENTION TO CONCRETE REMOVAL BELOW THE MASONRY PLATE. CARE MUST BE TAKEN NOT TO DAMAGE THE ANCHOR BOLTS, STEEL BEARING AND ITS WELD CONNECTION TO THE GIRDER BOTTOM FLANGE.

REMOVE UNSOUND CONCRETE FROM THE DAMAGE AREA OF THE BRIDGE SEATS, EXTENDING THE LIMITS OF THE DAMAGED AREA UNTIL SOLID CONCRETE IS ENCOUNTERED. ENSURE, IN THE PRESENCE OF THE ENGINEER, THAT ALL CONCRETE SURROUNDING THE REMOVAL LIMITS IS SOUND. BASED ON RESULTS OF HAMMER SOUNDINGS, THE REMOVABLE LIMITS MAY BE INCREASED AS DETERMINED BY THE ENGINEER.

PROVIDE A 1-INCH DEEP SAW CUT AROUND THE PERIMETER OF THE DAMAGED AREA TO SQUARE UP THE REMOVAL AREA AND ELIMINATE FEATHERED EDGES. UNDERCUT THE EDGE OF DEEP REMOVALS TO HELP RETAIN THE NEW CONCRETE.

CLEAN STEEL REINFORCEMENT WITH MECHANICAL WIRE-BRUSHING OR BY SANDBLASTING TO REMOVE SCALE, RUST, GREASE, OIL AND OTHER MATERIAL THAT WOULD PREVENT ADHESION OF THE CONCRETE. CHECK THE CONCRETE AFTER CLEANING TO ENSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE AND ENSURE THAT ADDITIONAL DELAMINATION IS NOT PRESENT.

CUT AND REMOVE CORRODED REINFORCING STEEL THAT HAS LOST MORE THAN 20 PERCENT OF THEIR DIAMETER. REPLACE DAMAGED REINFORCING STEEL WITH NEW BARS OF THE SAME DIAMETER BY MECHANICAL SPLICE TO THE EXISTING STEEL. AS AN ALTERNATE TO THE MECHANICAL SPLICE, CONTRACTOR MAY CHOOSE TO DRILL AND ANCHOR NEW REINFORCING STEEL USING AN APPROVED ADHESIVE (SEE NOTE 1).

NEW STEEL REINFORCEMENT AT GIRDERS RA AND RB WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE CONSIDERED INCIDENTAL TO "CONCRETE REPAIR - PIER R3 AT GIRDER RB".

EXISTING ANCHOR BOLTS TO REMAIN. IF EXISTING ANCHOR BOLTS ARE DAMAGED DURING THE CONTRACTOR'S OPERATIONS, ANCHOR BOLTS TO BE REPLACED WITH GALVANIZED ANCHOR BOLTS OF THE SAME SIZE AND SHAPE AT NO ADDITIONAL EXPENSE TO THE CABINET.

PAYMENT FOR TEMPORARY SUPPORT SHALL BE IN ACCORDANCE WITH THE SPECIAL NOTE APPLICABLE TO THIS WORK.

PAYMENT FOR "CONCRETE REPAIR - PIER R3 AT GIRDER RB" SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS TO COMPLETE THE WORK.

LEGEND

GIRDER RB CONCRETE REMOVAL LIMITS

NOTES

1. REPLACE IN KIND OR SUPPLEMENT AS NECESSARY AS DIRECTED BY THE ENGINEER. MECHANICAL SPLICE DAMAGED STIRRUP BARS TO EXISTING BARS OR DOWEL NEW STIRRUP BARS INTO EXISTING PIER CAP.
2. FOR EXISTING BEARING AND ANCHOR BOLT DETAILS, SEE DN 17123.
3. FOR PIER CAP/PEDESTAL RUSTICATION JOINT, SEE DN 17123.

BRIDGE - B281

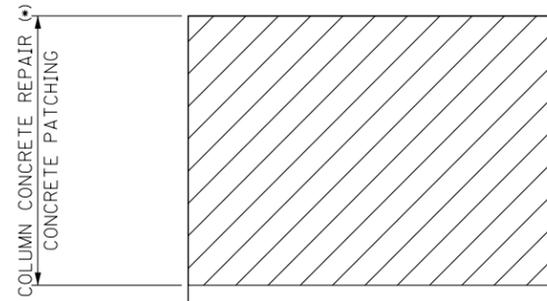
ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
PIER R3 RETROFIT - 2		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. S23 DRAWING NO. 28870

1650 Lyndon Farm Court
Louisville, KY 40223
Phone: (502) 339-3557
MBAKERINTL.COM

LEGEND

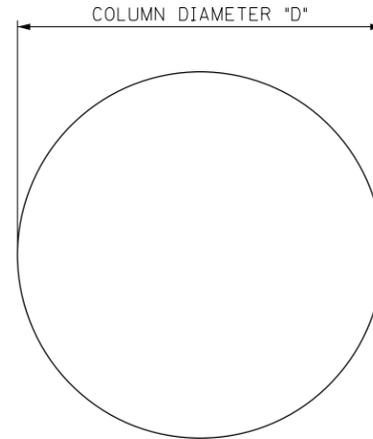
 COLUMN CONCRETE REPAIR



(*) THE CONCRETE DETERIORATION IS USUALLY WITHIN THE TOP 5 FEET OF THE COLUMN, HOWEVER, A FEW COLUMNS HAVE LARGE SCALE SEVERE DETERIORATION. THE CONTRACTOR IS RESPONSIBLE FOR MAKING A SITE VISIT TO BECOME FAMILIAR WITH THE WORK (SEE GENERAL NOTE).

THE ESTIMATED SQUARE FOOTAGE OF CONCRETE PATCHING MAY INCREASE OR DECREASE BASED ON THE COMPLETED AND ACCEPTED QUANTITIES.

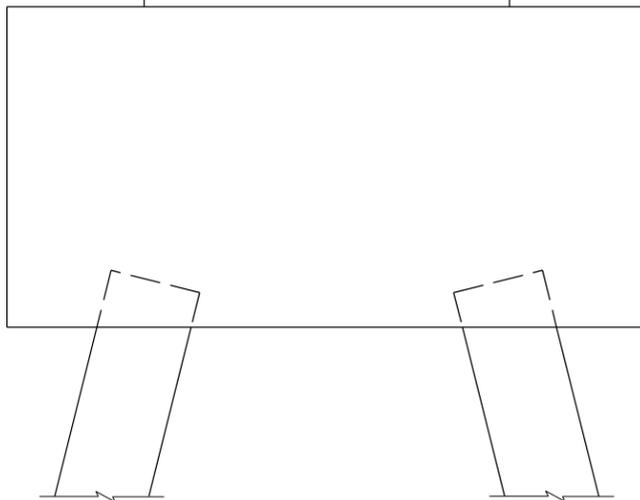
THE CONCRETE PATCHING AREA COVERS REMOVAL AND SURFACE RESTORATION COLUMN CONCRETE REPAIRS.



SECTION A-A

COLUMN CONCRETE REPAIR

1. REPAIR DELAMINATED OR SPALLED AREAS OF COLUMN AS APPLICABLE IN ACCORDANCE WITH SPECIAL NOTE FOR CONCRETE PATCHING REPAIR.
2. COORDINATE THE DOWNSPOUT REMOVAL AND/OR REPLACEMENT WITH THE PIER COLUMN CONCRETE REPAIR WORK.
3. SOUND THE COLUMN AND MARK THE LIMITS OF DELAMINATED AREAS FOR REPAIR WORK IN THE PRESENCE OF THE ENGINEER. SQUARE OFF IRREGULAR SHAPES TO HELP MAKE A MORE DURABLE REPAIR. MAKE 1-INCH SAWCUTS IN THE SOUND CONCRETE ALONG THE PERIMETER OF THE REPAIR AREA. UNDERCUT THE EDGE OF A CUT-OUT AREA IF NECESSARY TO RETAIN THE NEW MATERIAL.
4. DO NOT DAMAGE AREAS OF SOUND CONCRETE OR REINFORCING STEEL. PROTECT EXISTING REINFORCING STEEL ENCOUNTERED DURING CONCRETE REMOVAL. REMOVE RUST AND OTHER HARMFUL MATERIALS FROM ALL CORRODED STEEL EXPOSED. REMOVE AND REPLACE REINFORCING STEEL SHOWING DEEP PITTING OR LOSS OF MORE THAN 20 PERCENT OF CROSS SECTIONAL AREA. MATCH THE SIZE OF THE NEW REINFORCING STEEL BAR TO THE EXISTING STEEL BAR.



COLUMN ELEVATION

3RD TO PRESTON STREET
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
RB3	NORTH	4'-0"	10
RB3	SOUTH	4'-0"	130
RB7	SOUTH	3'-6"	10
112	MIDDLE	4'-6"	5
112	SOUTH	4'-0"	10
113	MIDDLE	4'-6"	10
119	NORTH	4'-0"	10
119	SOUTH	4'-0"	10
125A	-	4'-0"	5
128E	SOUTH	4'-0"	5
131E	NORTH	4'-0"	20
131E	SOUTH MIDDLE	4'-0"	15

17TH TO 13TH STREET
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
7	MIDDLE	4'-6"	10
10W	NORTH	4'-6"	20
10W	SOUTH	4'-6"	25
14W	NORTH	4'-6"	10
14W	SOUTH	4'-6"	20
17E	NORTH	4'-6"	40
17E	SOUTH	4'-6"	20
17W	SOUTH	4'-6"	20
21E	NORTH	4'-6"	15
21E	SOUTH	4'-6"	40
21W	SOUTH	4'-6"	10

9TH STREET RAMP 1
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
RI-1	EAST	3'-6"	20
RI-2	WESTERN MIDDLE	3'-6"	20
RI-3	-	5'-6"	30
RI-6	-	5'-6"	85
RI-8	-	6'-6"	30
RI-17	NORTH	5'-0"	10

13TH TO 7TH STREET
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
25W	NORTH	4'-6"	5
28E	NORTH	4'-6"	50
28E	SOUTH	4'-6"	10
33E	NORTH	4'-0"	20
33E	SOUTH	4'-0"	20
34W	NORTH	5'-0"	40
34W	SOUTH	5'-0"	5
36E	NORTH	4'-0"	10
37W	NORTH	5'-0"	5
39E	SOUTH	5'-0"	6
40W	NORTH	4'-0"	5
41W	NORTH CATCHER	2'-6"	5
44W	NORTH	4'-0"	15
45E	NORTH	5'-0"	5
45E	NORTHERN MIDDLE	5'-0"	70
47W	SOUTHERN MIDDLE	5'-0"	20
47W	SOUTH	5'-0"	5
55E	NORTH	4'-0"	25
55E	SOUTH	4'-0"	45

9TH STREET RAMP 2
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
45E	SOUTHERN MIDDLE	5'-0"	65

9TH STREET RAMP 2A
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
R2A-1	-	5'-6"	15

9TH STREET RAMP 3
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
R3-1	SOUTH	5'-0"	10
R3-6	CATCHER	2' x 6'	5

9TH STREET RAMP 4
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
R4-7	-	6'-6"	50
R4-13	-	6'-6"	30
47W	NORTH	5'-0"	15
47W	NORTHERN MIDDLE	5'-0"	30

7TH TO 2ND STREET
COLUMN RETROFIT

PIER	COLUMN	D	AREA(*) (SQ. FT.)
58	SOUTH	4'-0"	10
60	MIDDLE	4'-6"	5
64	NORTH	4'-0"	5
64	SOUTH	4'-0"	5
73	SOUTH	5'-6"	5
77	NORTH	4'-6"	5
83	SOUTH	4'-0"	5

NW PKWY & 22ND ST
COLUMN RETROFIT

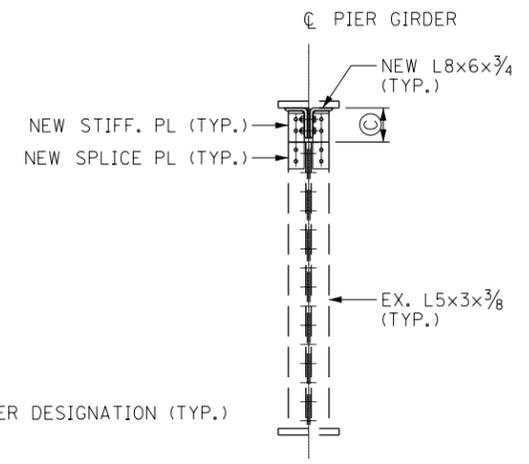
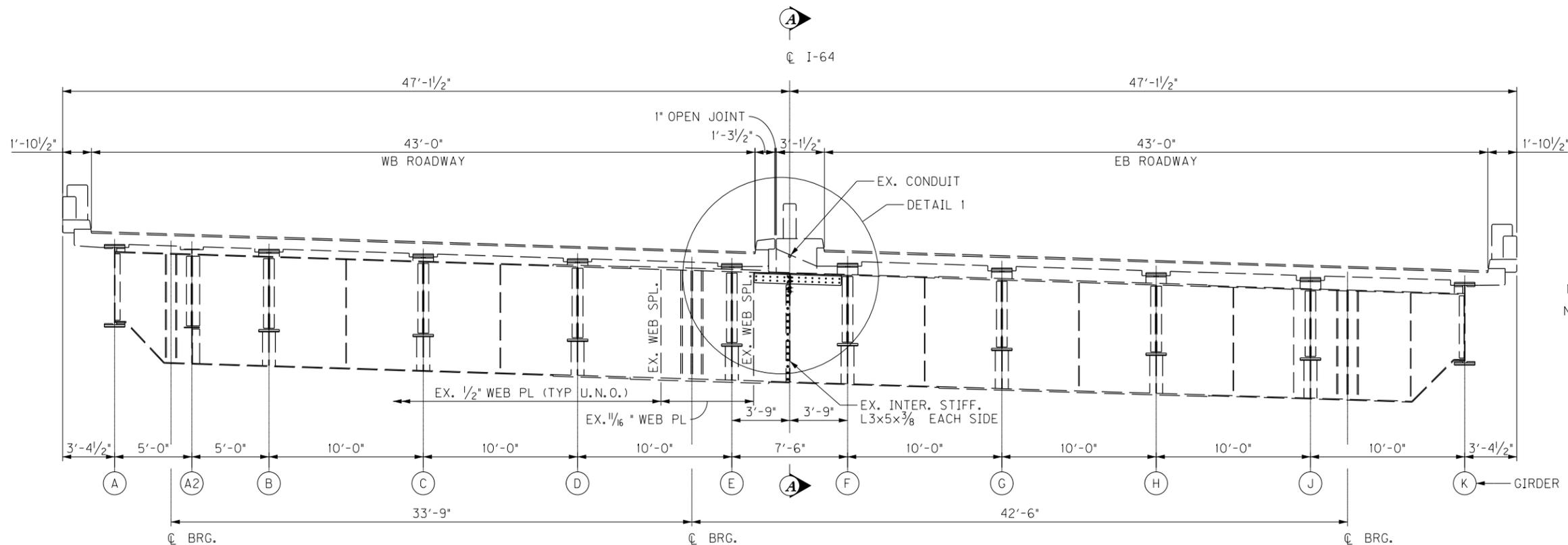
PIER	COLUMN	D	AREA(*) (SQ. FT.)
R3	EAST	3'-0"	10

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	L CLARK	
DETAILED BY: MJ DWYER	L CLARK	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
PIER COLUMN CONCRETE REPAIR		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S24 DRAWING NO. 28870

ITEM NUMBER
5-10016

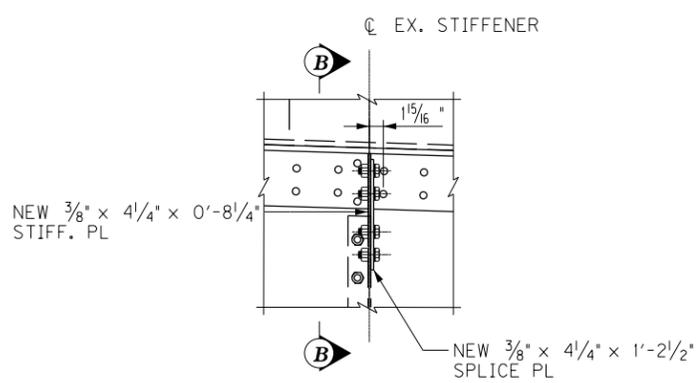
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 USER: MaryJo.Dwyer
 DATE PLOTTED: January 19, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58

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 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
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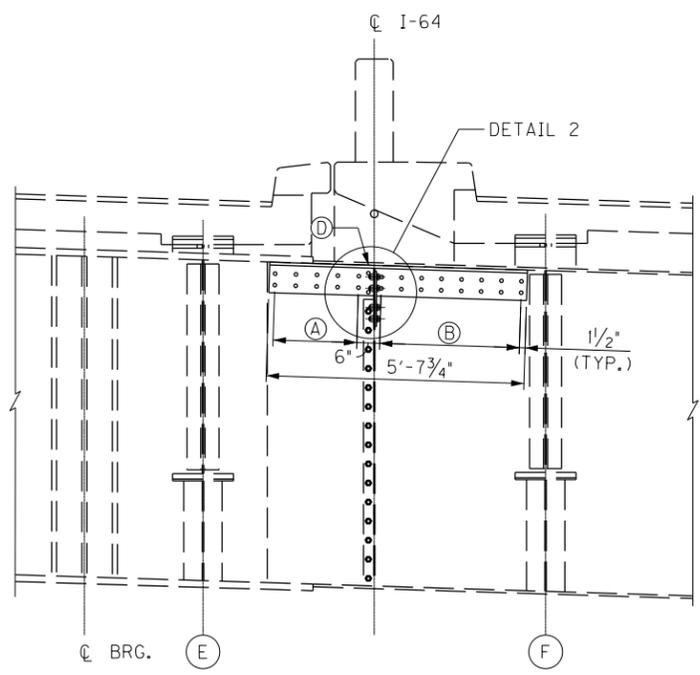


PIER GIRDER ELEVATION

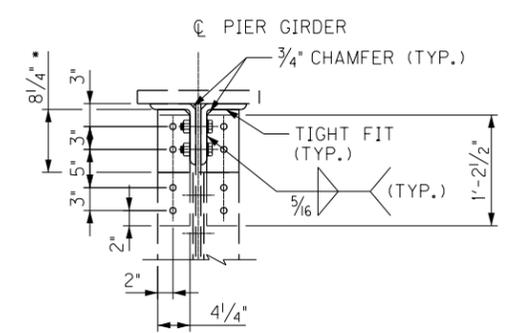
SECTION A-A



DETAIL 2



DETAIL 1



SECTION B-B

MATCH DRILL HOLES IN FIELD USING SPLICE PLATE AS TEMPLATE

LEGEND

- (A) 4 SPA. @ 5 1/2" = 1'-10"
- (B) 7 SPA @ 5 1/4" = 3'-0 3/4"
- (C) REMOVE TOP 9" OF BOLTED INTERMEDIATE STIFFENER. CONFIRM OPEN BOLT HOLES IN THE WEB FROM THE REMOVAL CAN BE COVERED BY THE RETROFIT ANGLES.
- (D) CLEAN AND PRIME EXPOSED AREAS OF THE TOP FLANGE NOT COVERED BY CONCRETE AS DIRECTED BY THE ENGINEER.
- * TRIM TO FIT IN THE FIELD

NOTES

1. FOR GENERAL NOTES, SEE SHEET NOS. S5 - S7.
2. STRUCTURAL STEEL ANGLE MATERIAL SHALL CONFORM TO AASHTO M270 (A709) GRADE 36 AND MEET CHARPY V-NOTCH TOUGHNESS REQUIREMENTS OF 15 FT-LBS AT 40 DEG F.
3. BOLTS SHALL BE 7/8" DIAMETER F3125 GRADE A325 HIGH STRENGTH BOLTS.

PIER GIRDER 110 RETROFIT PROCEDURE

SAWCUT TOP 9" OF EACH INTERMEDIATE STIFFENER ANGLE FOR REMOVAL. ENSURE THE CUTLINE PROFILE OF EACH LEG IS SQUARE AND LEVEL WITH THE OTHER.

REMOVE PAINT AND CORROSION PRODUCT FROM RETROFIT AREA. PRIME AREA OF PIER GIRDER USING APPROVED CLEANING/PRIMING PROCEDURE/PRODUCTS.

PLACE ONE STEEL RETROFIT ANGLE AND CLAMP INTO FINAL POSITION. DRILL ALL 13/16 INCH DIAMETER BOLT HOLES THROUGH VERTICAL ANGLE LEG AND GIRDER WEB PLATE USING RETROFIT ANGLE AS TEMPLATE.

PLACE OPPOSITE ANGLE AND INSTALL BOLTS TO SNUG TIGHT CONDITION. CLEAN ALL CONNECTION SURFACES TO REMOVE DRILL SHAVINGS AND CONTAMINANTS. TIGHTEN ALL INSTALLED BOLTS TO 28,000 LBS.

RESTORE INTERMEDIATE STIFFENER TIGHT FIT CONDITION AS INDICATED.

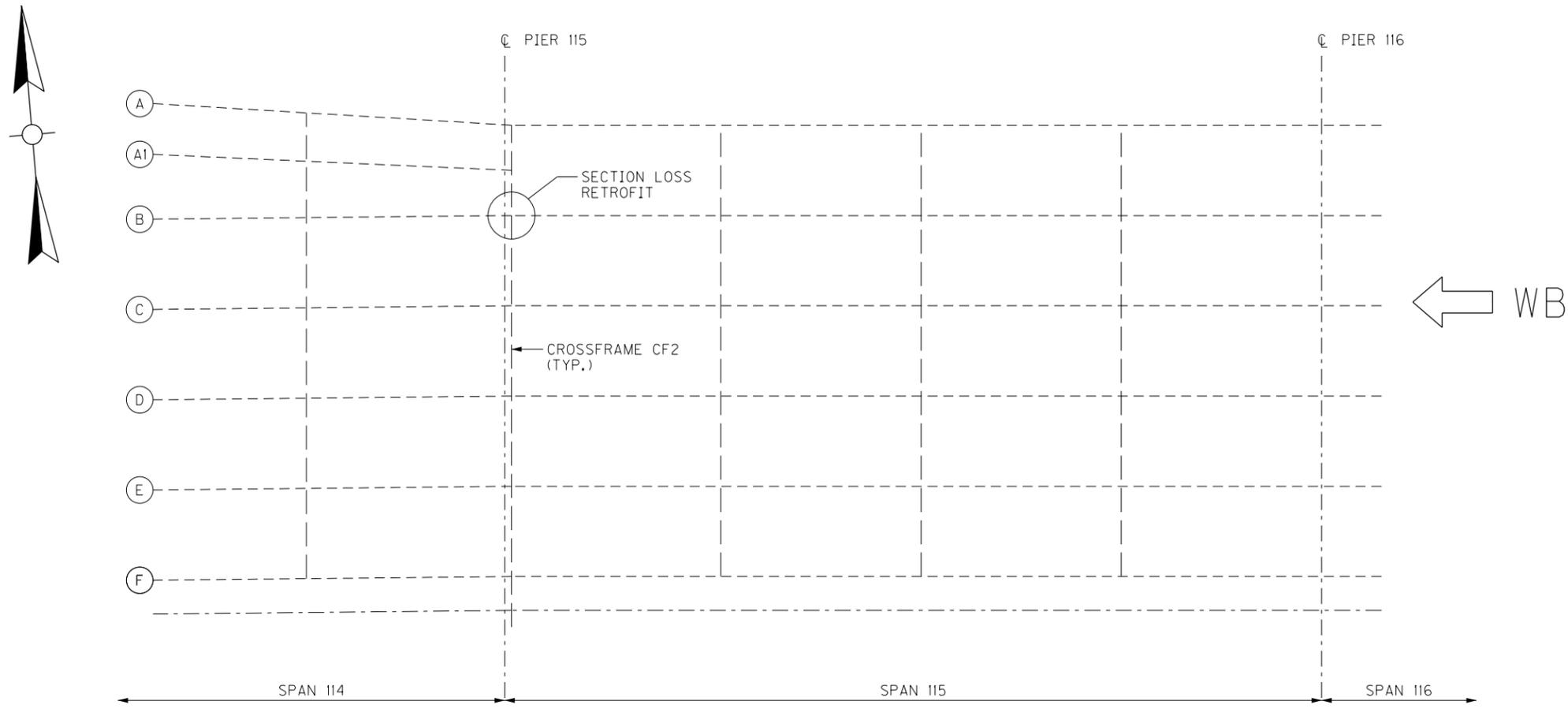
FOR PIER GIRDER 110 ORIGINAL PLANS, SEE DN 15754 SHEET 64.

BRIDGE - B142

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
PIER GIRDER 110 RETROFIT		
PREPARED BY	SHEET NO.	
Michael Baker International	S26	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



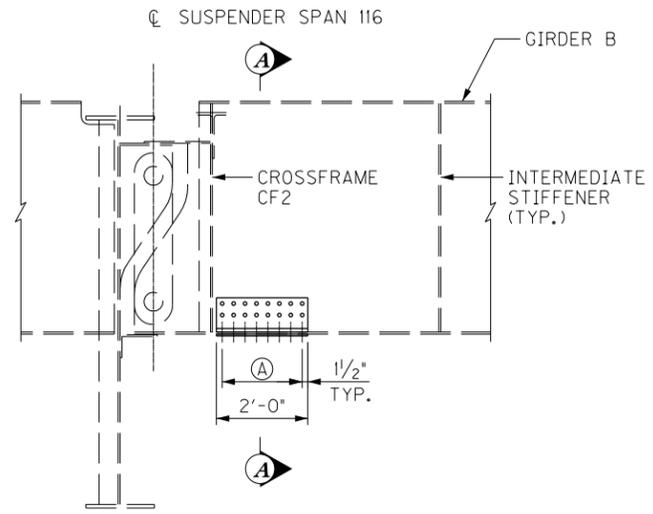
FRAMING PLAN



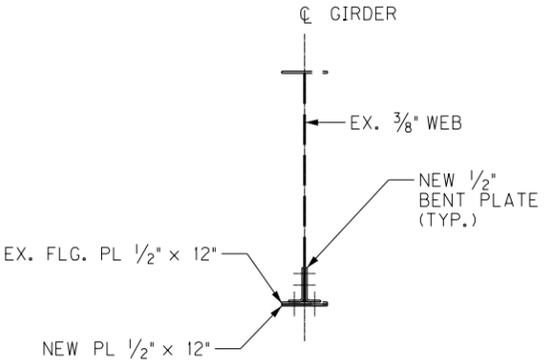
SECTION LOSS - GIRDER B WEB



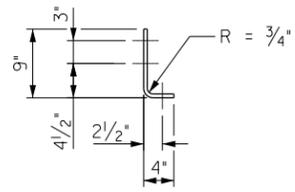
SECTION LOSS - GIRDER B BOTTOM FLANGE



GIRDER ELEVATION
STEEL REPAIR - TYPE A



SECTION A-A



BENT PLATE DETAIL

LEGEND

Ⓐ 7 SPA. @ 3" = 1'-9"

NOTES

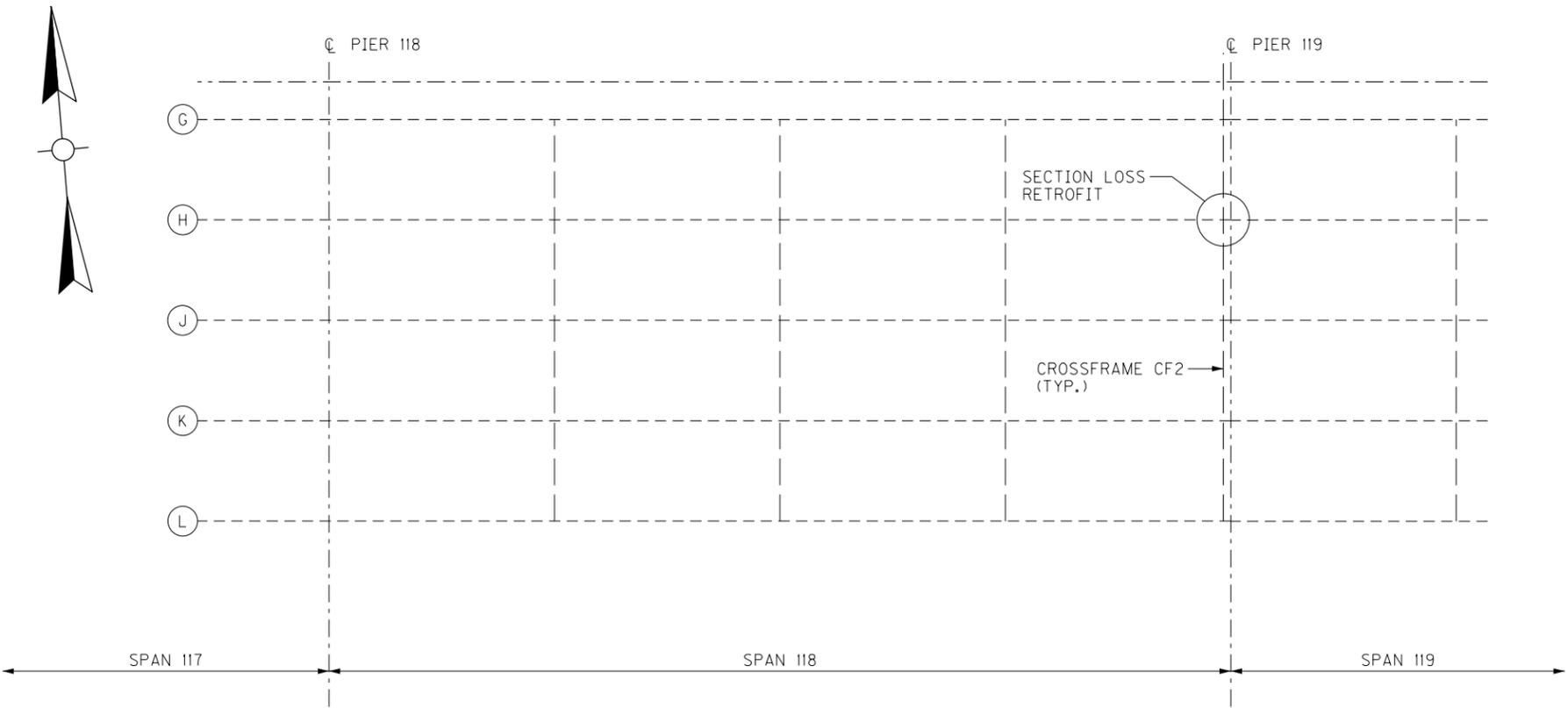
- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- STRUCTURAL STEEL CHANNEL MATERIAL SHALL CONFORM TO AASHTO M270 (A709) GRADE 36 AND MEET CHARPY V-NOTCH TOUGHNESS REQUIREMENTS OF 15 FT-LBS @ 40 DEG F.
- BOLTS SHALL BE 7/8" DIAMETER F3125 GRADE A325 HIGH STRENGTH BOLTS.

BRIDGE - B142

ITEM NUMBER	5-10016
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DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
GIRDER RETROFIT SPAN 115		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. S27 DRAWING NO. 28870

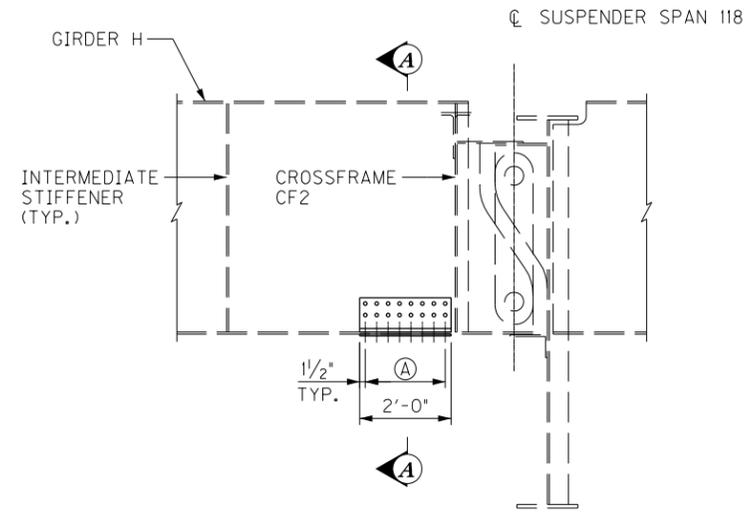
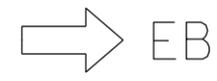
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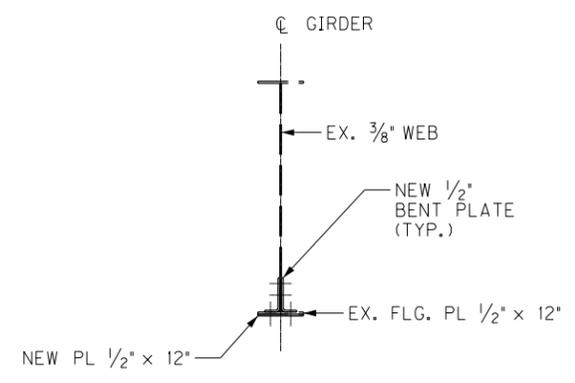
FRAMING PLAN



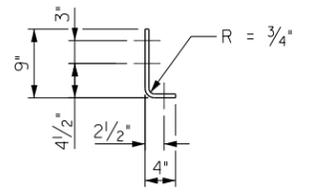
SECTION LOSS - GIRDER H



GIRDER ELEVATION
STEEL REPAIR - TYPE A



SECTION A-A



BENT PLATE DETAIL

LEGEND

(A) 7 SPA. @ 3" = 1'-9"

NOTES

- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- STRUCTURAL STEEL CHANNEL MATERIAL SHALL CONFORM TO AASHTO M270 (A709) GRADE 36 AND MEET CHARPY V-NOTCH TOUGHNESS REQUIREMENTS OF 15 FT-LBS @ 40 DEG F.
- BOLTS SHALL BE 7/8" DIAMETER F3125 GRADE A325 HIGH STRENGTH BOLTS.

REVISION	DATE

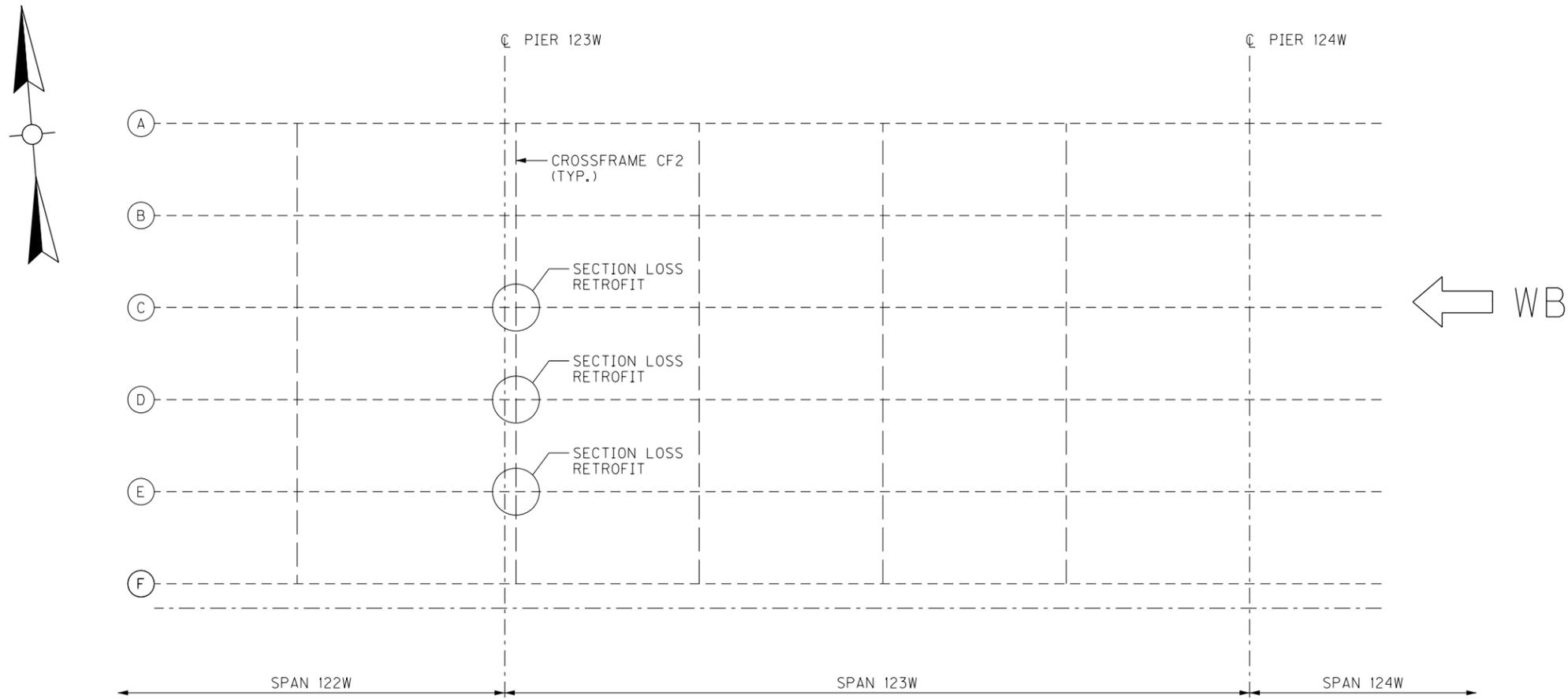
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COUNTY JEFFERSON	
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET
GIRDER RETROFIT SPAN 118	

BRIDGE - B142

ITEM NUMBER
5-10016

PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S28	DRAWING NO. 28870
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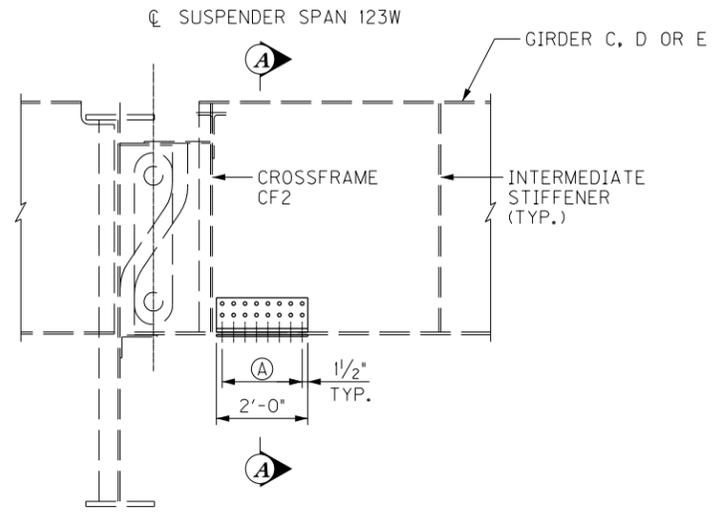
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



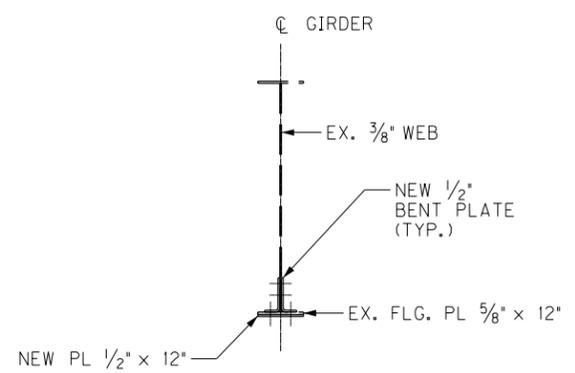
FRAMING PLAN



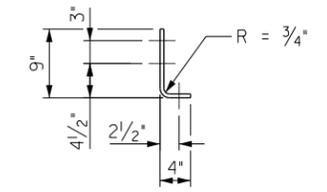
SECTION LOSS - GIRDER D



GIRDER ELEVATION
STEEL REPAIR - TYPE A



SECTION A-A



BENT PLATE DETAIL

LEGEND

Ⓐ 7 SPA. @ 3" = 1'-9"

NOTES

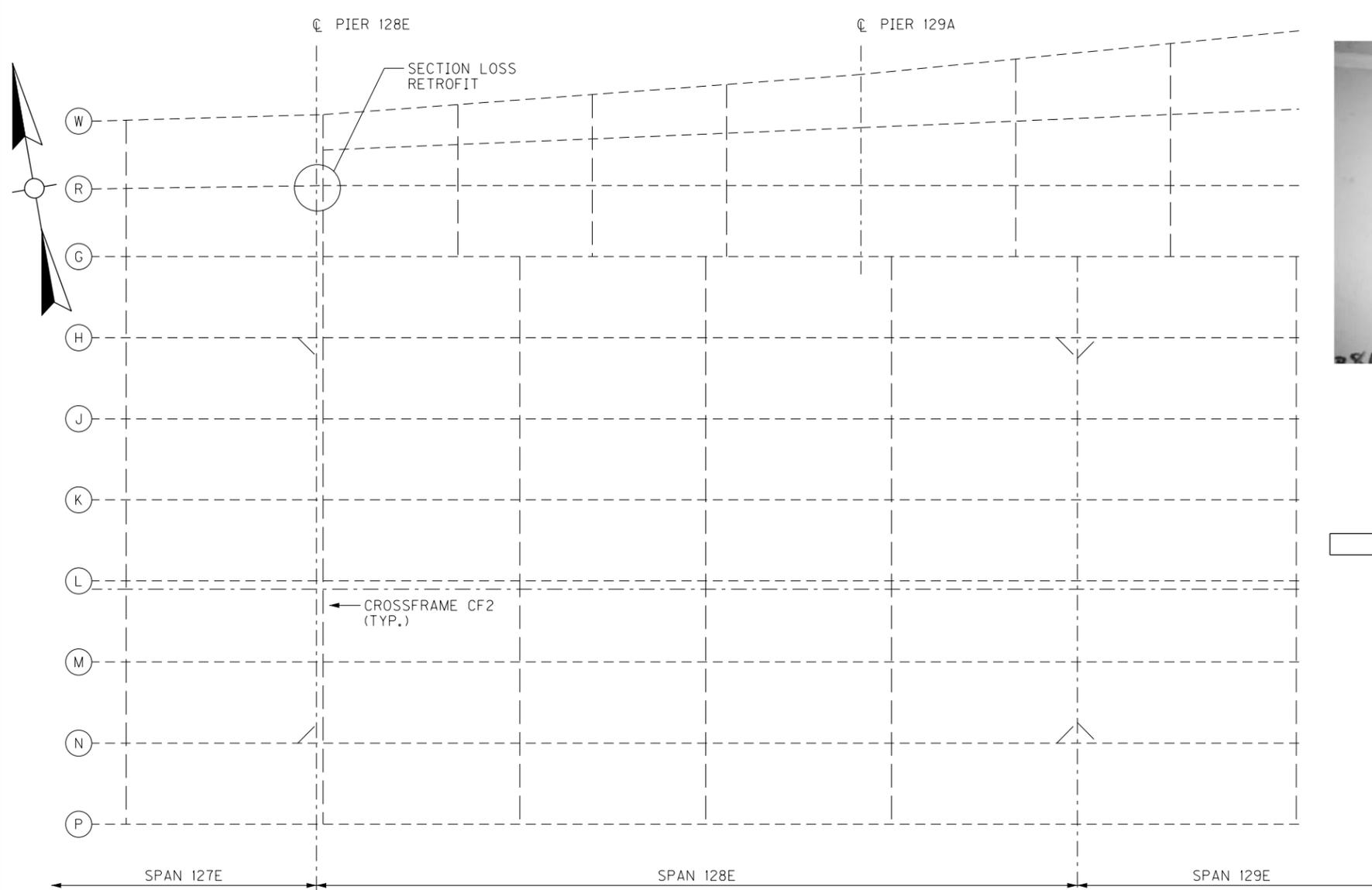
- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- STRUCTURAL STEEL CHANNEL MATERIAL SHALL CONFORM TO AASHTO M270 (A709) GRADE 36 AND MEET CHARPY V-NOTCH TOUGHNESS REQUIREMENTS OF 15 FT-LBS @ 40 DEG F.
- BOLTS SHALL BE 7/8" DIAMETER F3125 GRADE A325 HIGH STRENGTH BOLTS.

BRIDGE - B142

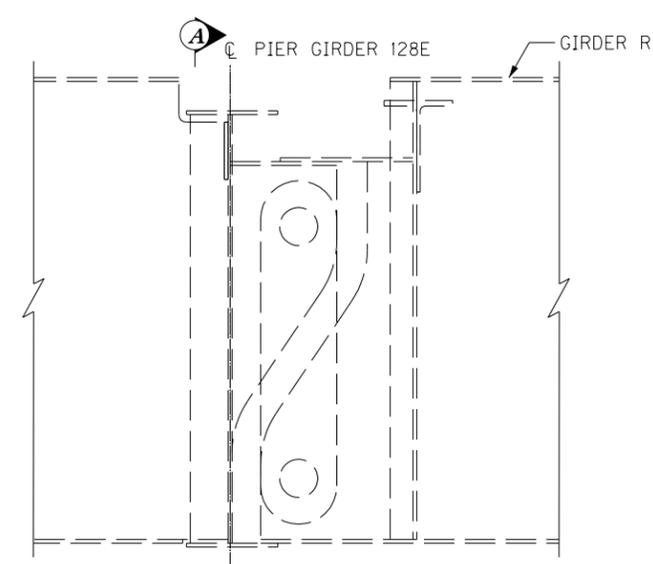
ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T T RR TO PRESTON STREET	
GIRDER RETROFIT SPAN 123W		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. S29 DRAWING NO. 28870

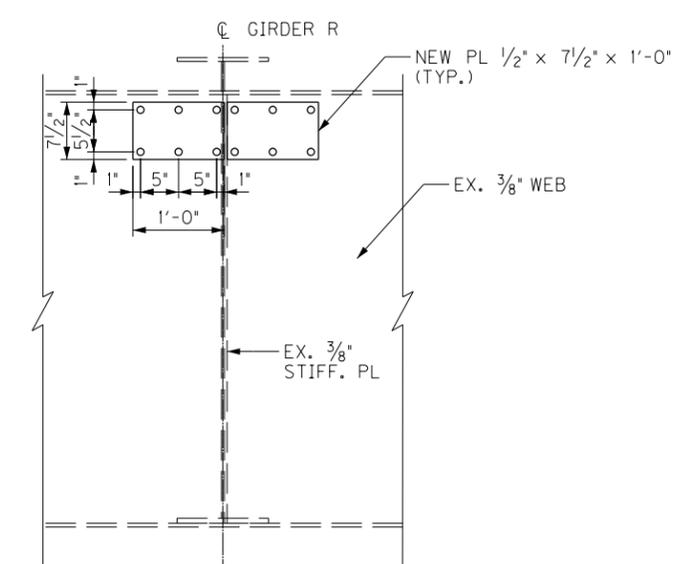
FILE NAME: C:\USERS\MARY.JO.DWYER\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



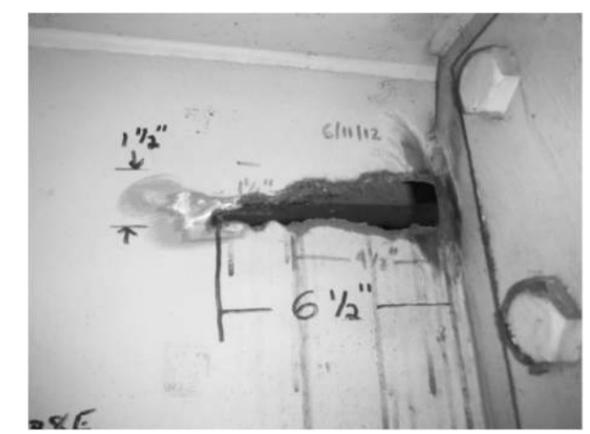
FRAMING PLAN



GIRDER ELEVATION



SECTION A-A



NORTH SIDE



SOUTH SIDE

SECTION LOSS AT PIER GIRDER 128E

NOTES

- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- CENTER THE NEW PLATE VERTICALLY ON THE CENTER OF THE CORROSION HOLE. ENSURE A MINIMUM EDGE DISTANCE OF 1/2" FROM CENTERLINE OF BOLT TO EDGE OF CORROSION HOLE.
- NEW PLATE STRUCTURAL STEEL MATERIAL SHALL CONFORM TO AASHTO M270 (A709) GRADE 36 AND MEET CHARPY V-NOTCH TOUGHNESS REQUIREMENTS OF 15 FT-LBS @ 40 DEG F.
- BOLTS SHALL BE 7/8" DIAMETER F3125 GRADE A325 HIGH STRENGTH BOLTS.

BRIDGE - B142

ITEM NUMBER	5-10016
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REVISION	DATE

DATE: AUGUST 2025	CHECKED BY: J STITH
DESIGNED BY: M BARON	DETAILED BY: MJ DWYER
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY JEFFERSON	
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET
GIRDER RETROFIT SPAN 127E	
PREPARED BY Michael Baker INTERNATIONAL	SHEET NO. S30 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58

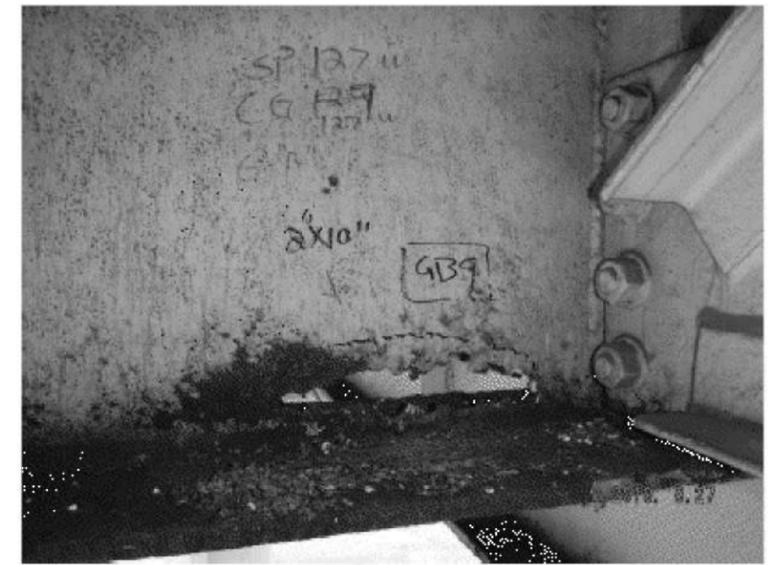
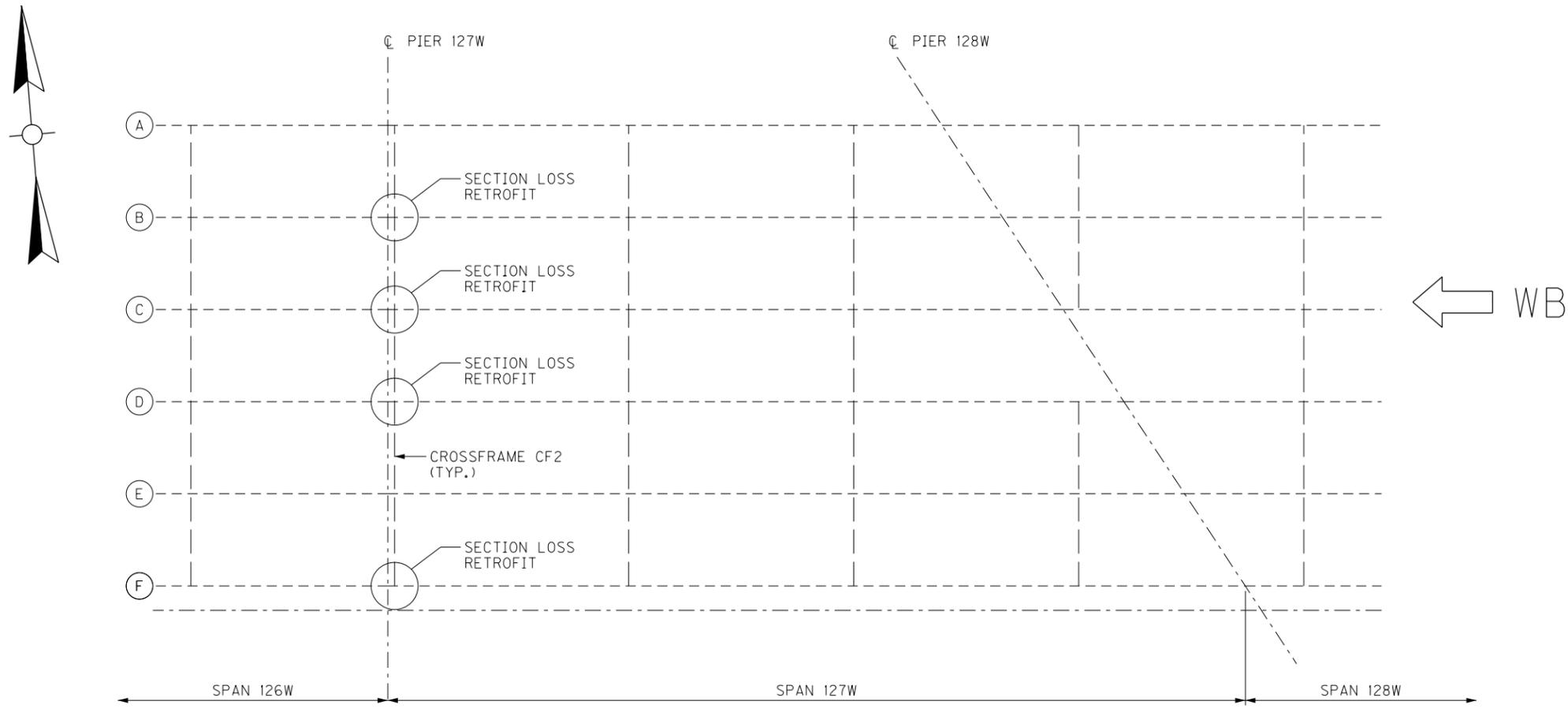


Photo 29 - Span 127W, Girder B, North face at cross-frame 1 - Hole through bottom of web (2" H x 10" L) - GB9

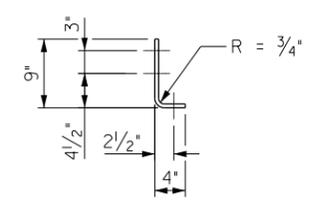
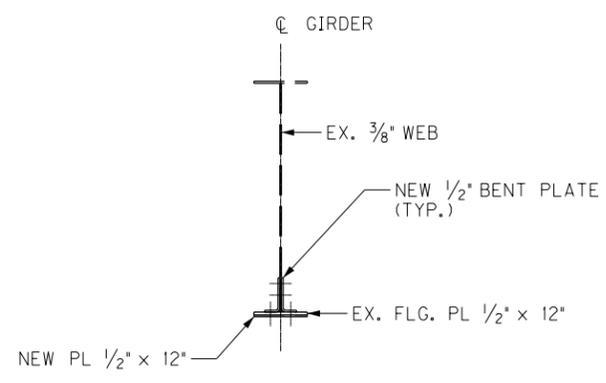
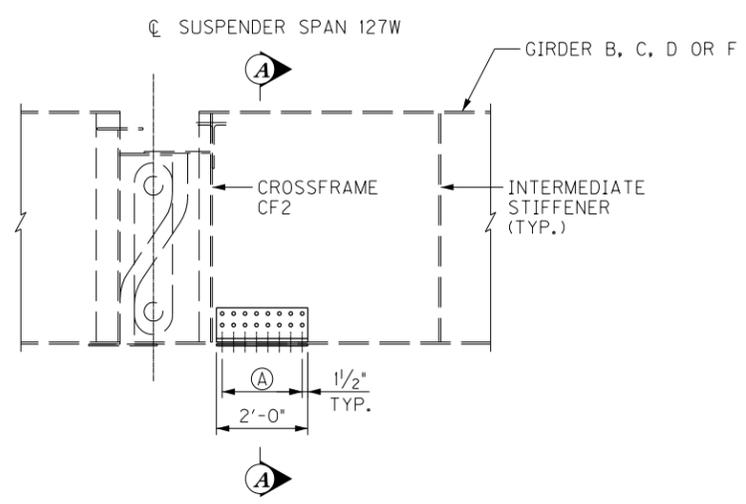
SECTION LOSS - GIRDER B

LEGEND

Ⓐ 7 SPA. @ 3" = 1'-9"

NOTES

- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- STRUCTURAL STEEL CHANNEL MATERIAL SHALL CONFORM TO AASHTO M270 (A709) GRADE 36 AND MEET CHARPY V-NOTCH TOUGHNESS REQUIREMENTS OF 15 FT-LBS @ 40 DEG F.
- BOLTS SHALL BE 7/8" DIAMETER F3125 GRADE A325 HIGH STRENGTH BOLTS.

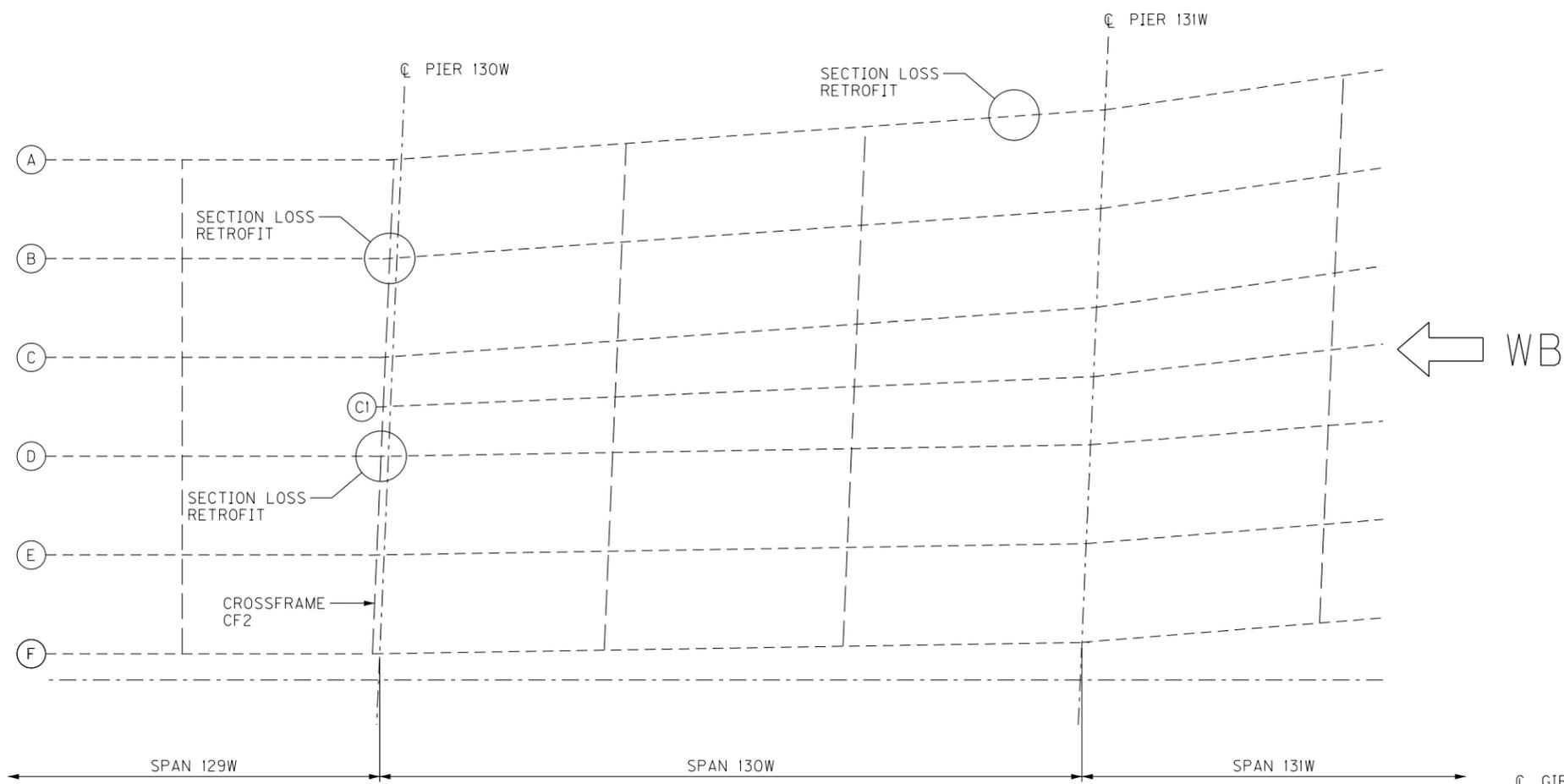
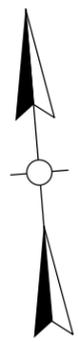


BRIDGE - B142

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T T RR TO PRESTON STREET	
GIRDER RETROFIT SPAN 127W		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S31 DRAWING NO. 28870

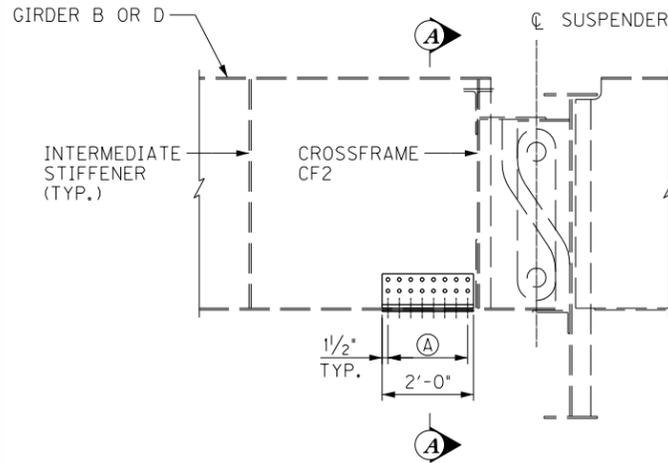
FILE NAME: C:\USERS\MARYUO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYUO.DWYER\MBAKERINTL.COM
 USER: MaryUo.Dwyer
 DATE PLOTTED: January 19, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



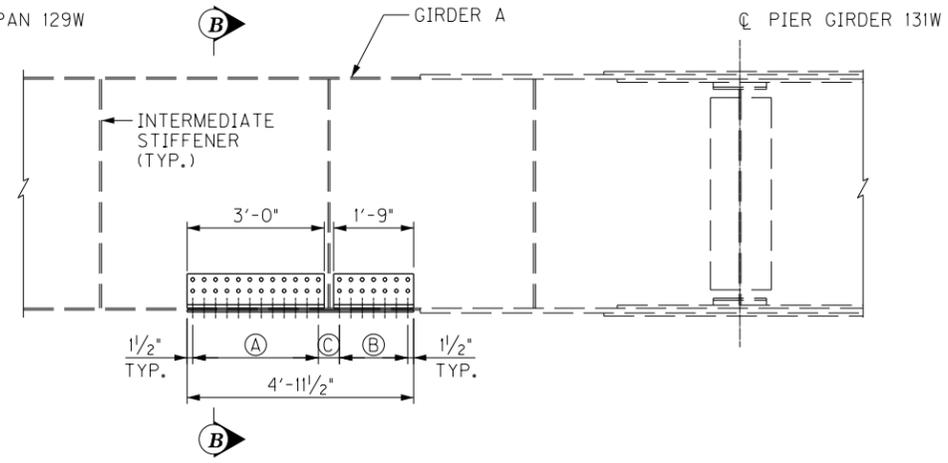
FRAMING PLAN



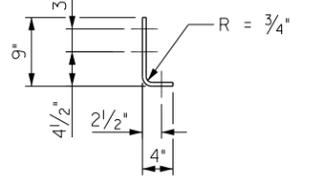
SECTION LOSS - GIRDER A



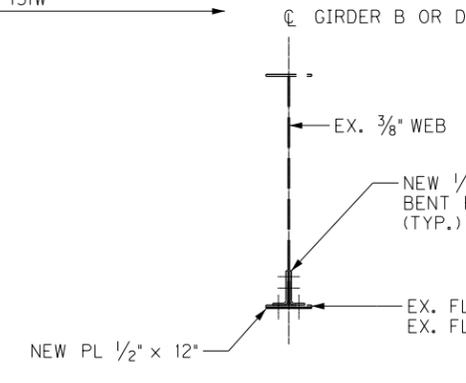
GIRDER B OR D ELEVATION
STEEL REPAIR - TYPE A



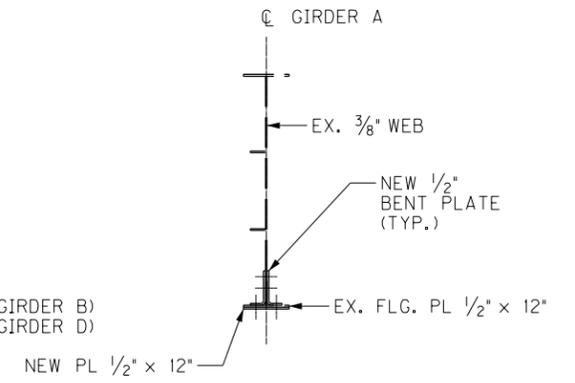
GIRDER A ELEVATION
STEEL REPAIR - TYPE B



BENT PLATE DETAIL



SECTION A-A



SECTION B-B

NOTES

- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- STRUCTURAL STEEL CHANNEL MATERIAL SHALL CONFORM TO AASHTO M270 (A709) GRADE 36 AND MEET CHARPY V-NOTCH TOUGHNESS REQUIREMENTS OF 15 FT-LBS @ 40 DEG F.
- BOLTS SHALL BE 7/8" DIAMETER F3125 GRADE A325 HIGH STRENGTH BOLTS.
- COORDINATE THE UTILITY BRACKET REMOVAL AND REPLACEMENT WITH THE GIRDER A RETROFIT WORK.

LEGEND

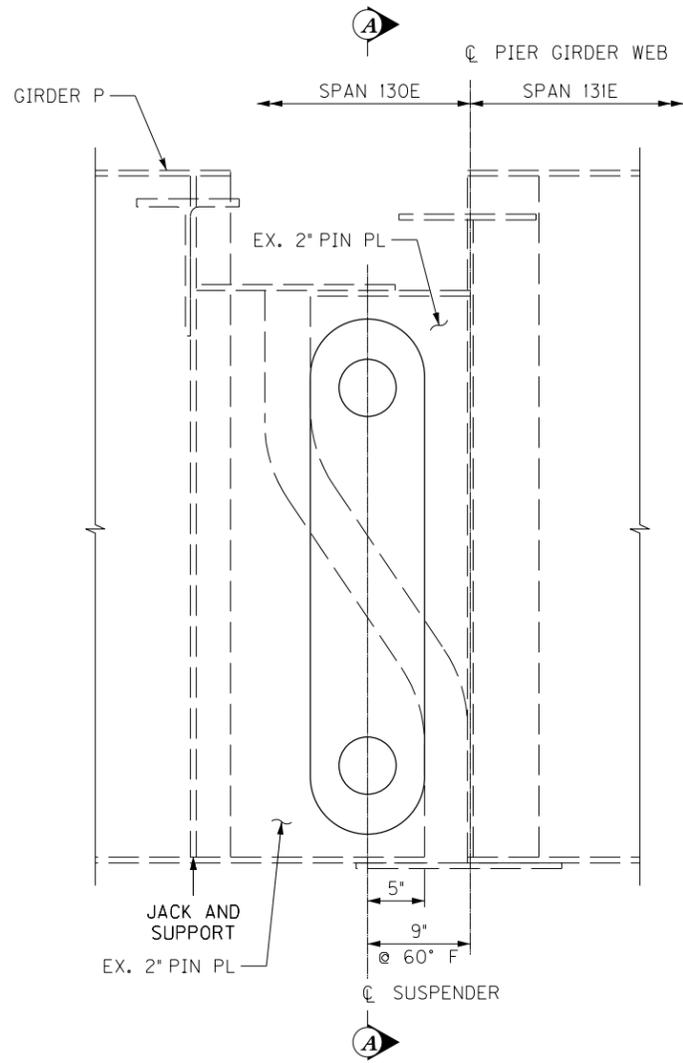
- (A) 11 SPA. @ 3" = 2'-9"
- (B) 6 SPA. @ 3" = 1'-6"
- (C) 5 1/2"

BRIDGE - B142

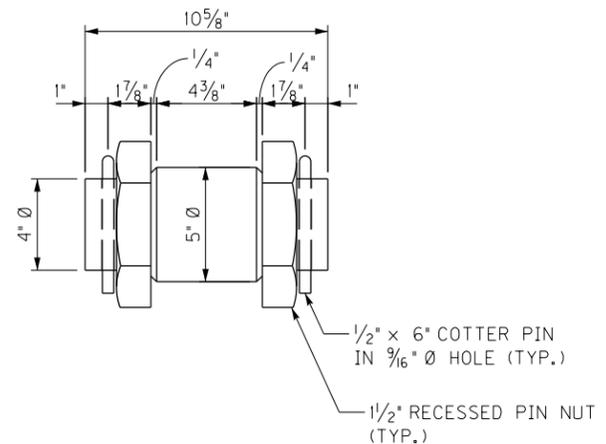
ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T T RR TO PRESTON STREET	
GIRDER RETROFIT SPAN 129W-130W		
PREPARED BY		SHEET NO.
Michael Baker International		S32
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

FILE NAME: C:\USERS\MARYUO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYUO.DWYER\MBAKERINTL.COM\MB-US-PW-03\MARYUO.DWYER\MBAKERINTL.COM
 USER: MaryUo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58

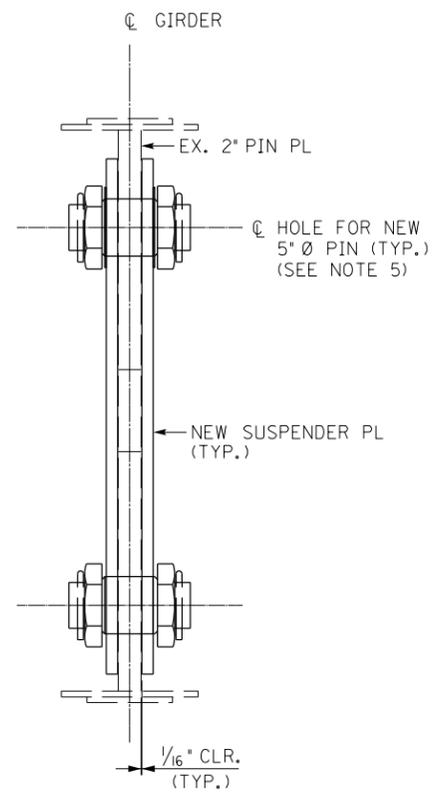


ELEVATION
 PIER GIRDER 131E
 GIRDER P
 (DN 15754)

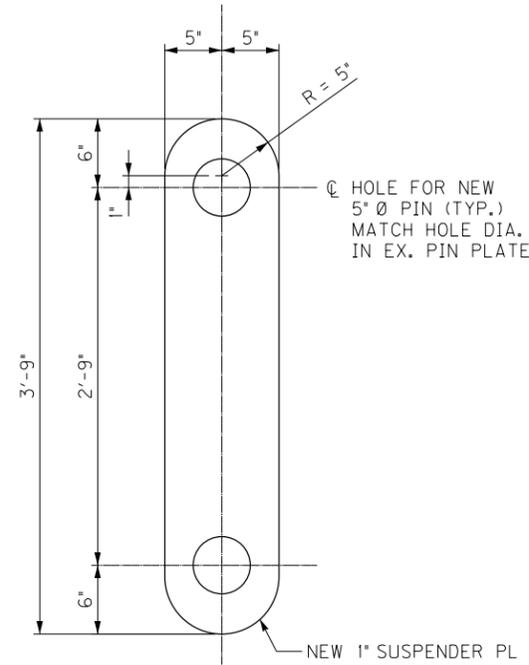


NEW PIN DETAIL

NEW PINS ARE FRACTURE CRITICAL MEMBERS



SECTION A-A



NEW SUSPENDER PL

NEW SUSPENDER PLATES SHALL MEET CHARPY V-NOTCH FRACTURE CRITICAL TOUGHNESS REQUIREMENTS

PG 131E GIRDER P LOAD TABLE			
DL DEAD LOAD (KIP)	LL+I LIVE LOAD (KIP)	1.25 DL + 1.35 LL+I (KIP)	MIN. JACK CAPACITY (TONS)
60	165	298	300

NOTES

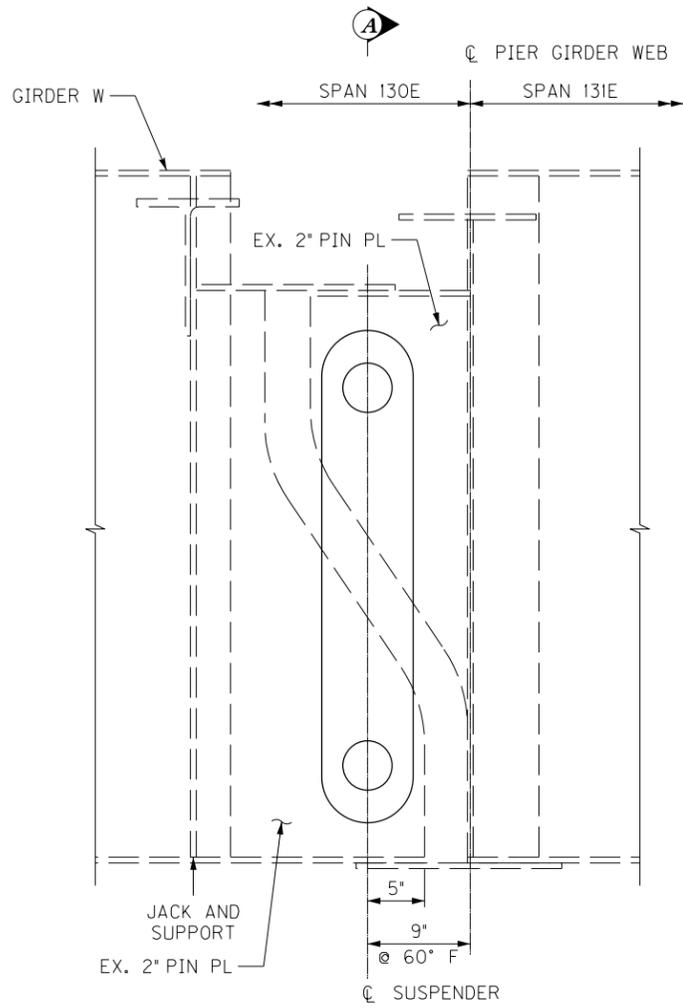
- FOR SUSPENDER LOCATION, SEE SHEET NO. S14.
- FOR SPAN 130E GIRDER P SUSPENDER DETAILS NOT SHOWN, SEE DN 15754 SHEET 99.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM 709 GRADE 36.
- PINS SHALL CONFORM TO ASTM A668 GRADE D.
- FABRICATE PINS IN ACCORDANCE WITH SECTION 607.03.09 OF THE STANDARD SPECIFICATIONS. PINS SHALL NOT BE PAINTED.
- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- ONLY ONE SUSPENDER LOCATION MAY BE WORKED ON AT A TIME.

BRIDGE - B142

ITEM NUMBER
5-10016

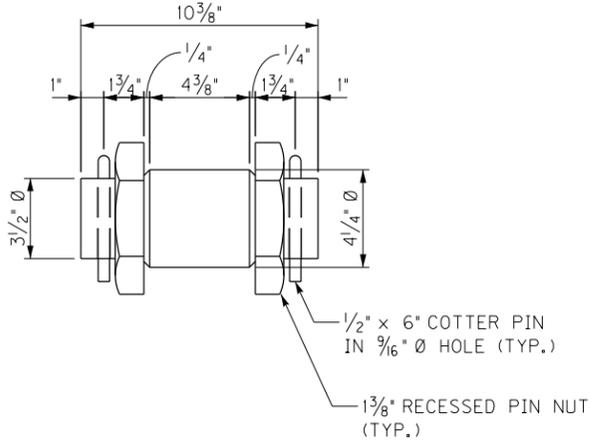
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
PIER GDR 131E PIN & HANGER - 1		
PREPARED BY		SHEET NO.
Michael Baker INTERNATIONAL		S33
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM...
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



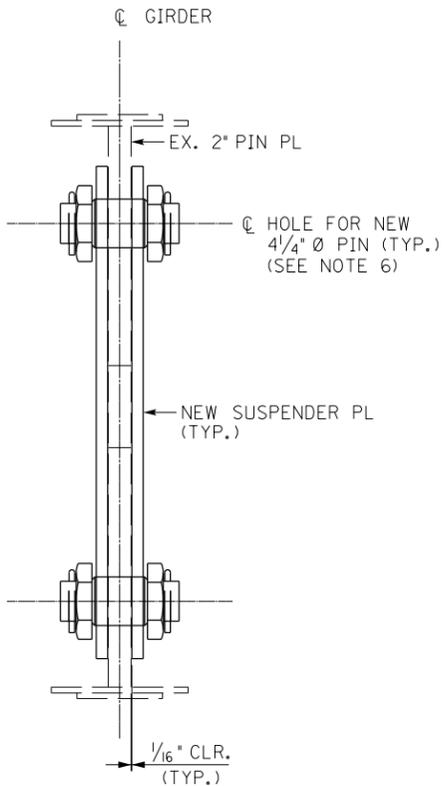
ELEVATION

PIER GIRDER 131E
 GIRDER W
 (DN 19238)

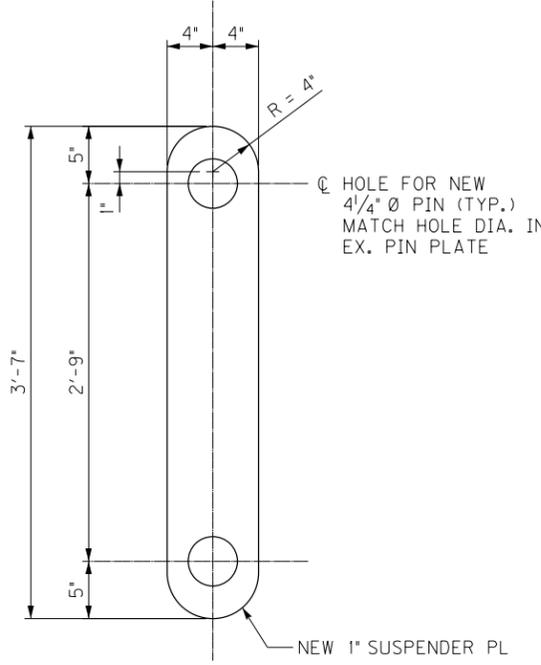


NEW PIN DETAIL

NEW PINS ARE FRACTURE CRITICAL MEMBERS



SECTION A-A



NEW SUSPENDER PL

NEW SUSPENDER PLATES SHALL MEET CHARPY V-NOTCH FRACTURE CRITICAL TOUGHNESS REQUIREMENTS

PG 131E GIRDER W LOAD TABLE			
DL DEAD LOAD (KIP)	LL+I LIVE LOAD (KIP)	1.25 DL + 1.35 LL+I (KIP)	MIN. JACK CAPACITY (TONS)
60	165	298	300

NOTES

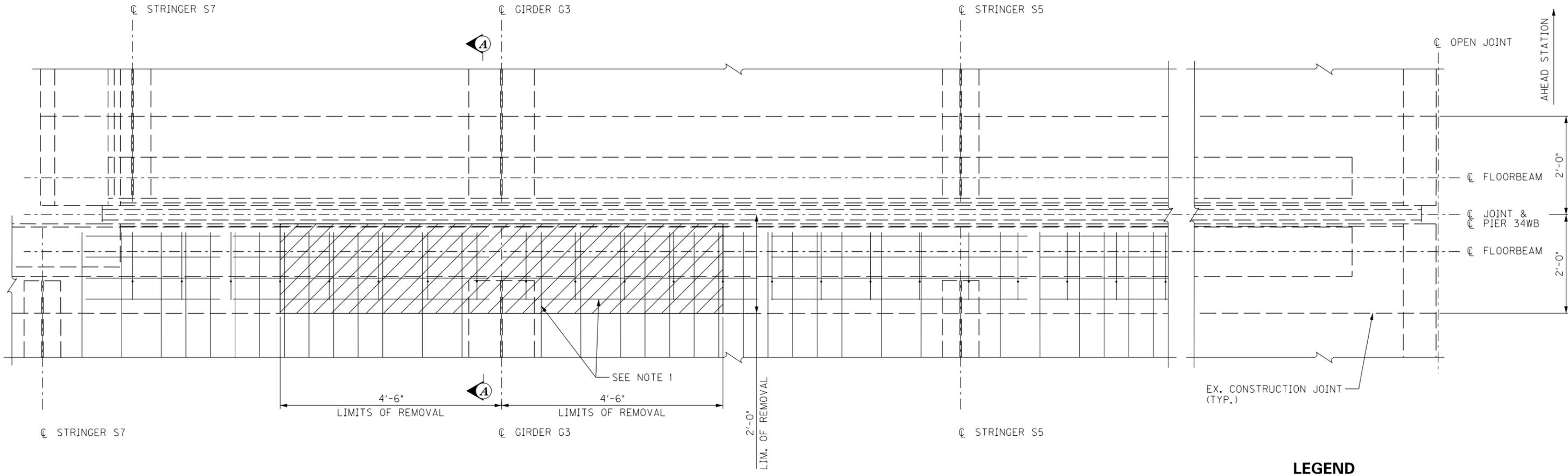
- FOR SUSPENDER LOCATION, SEE SHEET NO. S14.
- FOR SPAN 130E GIRDER W SUSPENDER DETAILS NOT SHOWN, SEE DN 19238 SHEET 19 & 20.
- FOR SPAN 130E & 131E WIDENING, SEE DN 26972 SHEET IS3515 & IS3530.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM 709 GRADE 36.
- PINS SHALL CONFORM TO ASTM A668 GRADE D.
- FABRICATE PINS IN ACCORDANCE WITH SECTION 607.03.09 OF THE STANDARD SPECIFICATIONS. PINS SHALL NOT BE PAINTED.
- FOR GENERAL NOTES, SEE SHEET NOS. S5-S7.
- ONLY ONE SUSPENDER LOCATION MAY BE WORKED ON AT A TIME.

BRIDGE - B142

ITEM NUMBER	5-10016
-------------	---------

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
PIER GDR 131E PIN & HANGER - 2		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. S34 DRAWING NO. 28870

FILE NAME: C:\USERS\MARYJO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



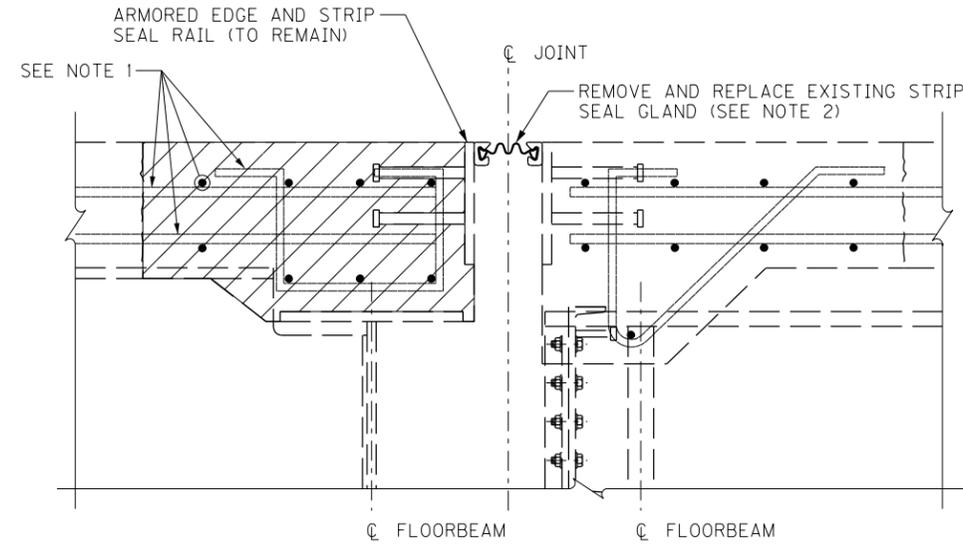
PLAN DECK REMOVAL

LEGEND

REMOVAL LIMITS

NOTES

1. REMOVE CONCRETE WITH A METHOD THAT WILL NOT DAMAGE EXISTING REINFORCEMENT TO REMAIN IN THE STRUCTURE.
2. INCLUDE WORK TO REMOVE AND REPLACE THE EXISTING STRIP SEAL GLAND IN BID ITEM "JOINT SEAL REPLACEMENT - TRANSVERSE".



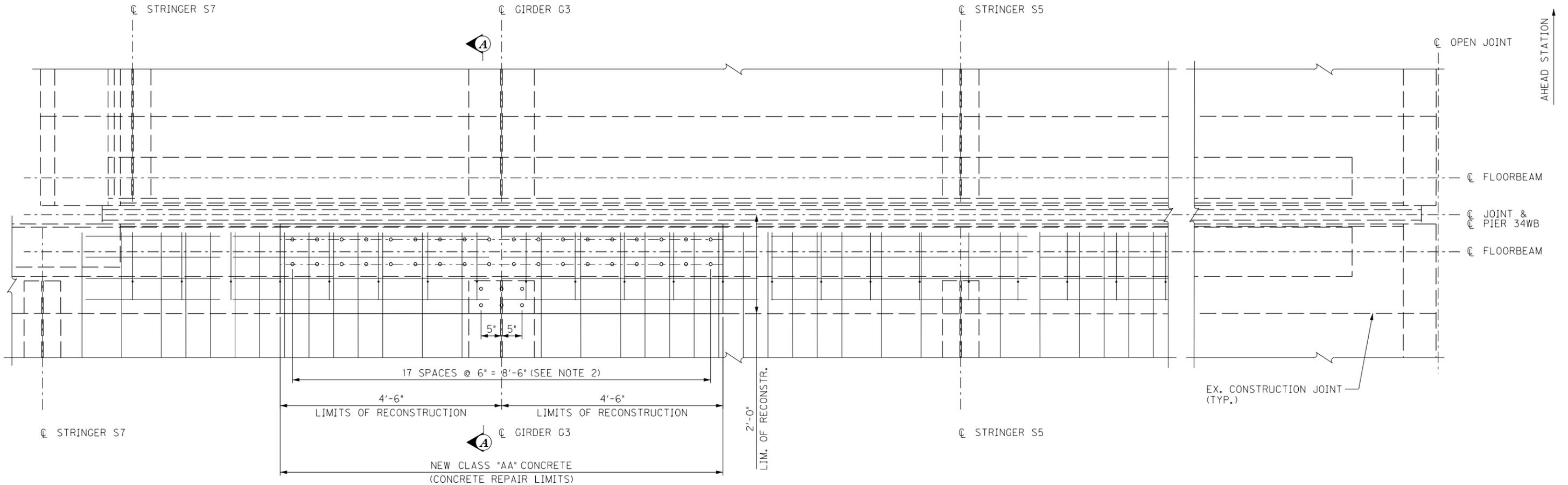
SECTION A-A

BRIDGE - B293

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON ST	
PIER 34WB DECK RETROFIT - 1		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S35 DRAWING NO. 28870

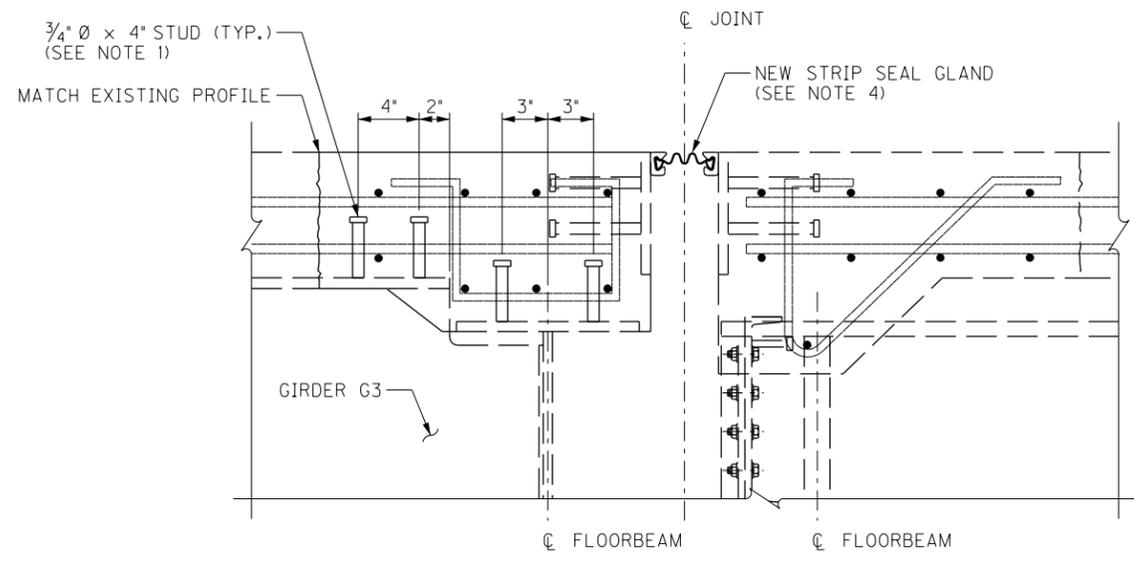
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PLAN DECK RECONSTRUCTION

NOTES

1. PLACE WELDED SHEAR STUD CONNECTORS CONFORMING TO SECTION 813.11 ON CLEANED GIRDER AND FLOORBEAM TOP FLANGES AS SHOWN.
2. LOCATE WELD STUDS TO APPROXIMATELY FIT THE SPACING OF THE EXISTING TOP AND BOTTOM LONGITUDINAL REINFORCING STEEL.
3. ADJUST THE STIRRUPS AND TRANSVERSE REINFORCING STEEL AS NECESSARY TO ACCOMMODATE THE WELD STUD LOCATIONS.
4. INCLUDE WORK TO REMOVE AND REPLACE THE EXISTING STRIP SEAL GLAND IN BID ITEM "JOINT SEAL REPLACEMENT - TRANSVERSE".
5. SHEAR CONNECTORS: PROVIDE THE NECESSARY LENGTH TO PENETRATE AT LEAST 2" ABOVE BOTTOM OF SLAB. STUD LENGTHS SHALL NOT BE LESS THAN 5 1/2". PROVIDE A MINIMUM COVER OF 2 1/2" FROM THE TOP OF THE DECK TO THE TOP OF THE SHEAR CONNECTOR.
6. WELD STUDS IN ACCORDANCE WITH AWS SPECIFICATIONS. A MINIMUM BASE METAL PREHEAT TEMPERATURE IS REQUIRED. PREHEAT SHALL BE CONTROLLED BY THE USE OF TEMPERATURE INDICATING CRAYONS.
7. SHEAR STUD COST IS CONSIDERED INCIDENTAL TO THE UNIT COST FOR "CONCRETE REPAIR - PIER 34W". WELDED STUD WEIGHT APPROXIMATELY 25 LBS.



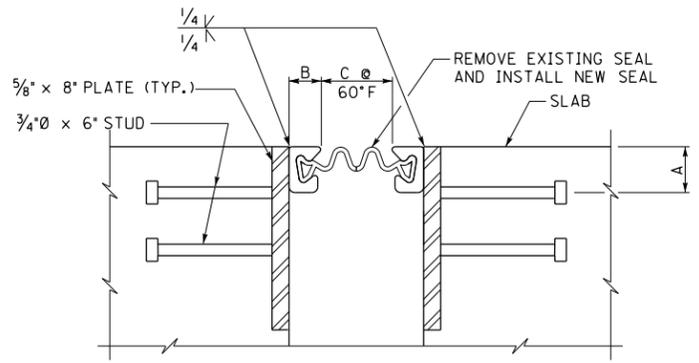
SECTION A-A

BRIDGE - B293

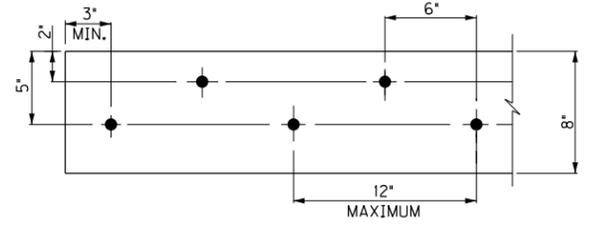
ITEM NUMBER	5-10016
-------------	---------

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: D BARON	M BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON ST	
PIER 34WB DECK RETROFIT - 2		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S36 DRAWING NO. 28870

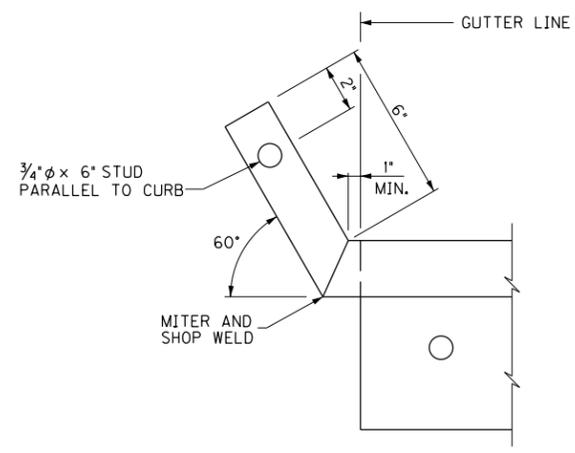
FILE NAME: C:\USERS\MARY.UO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.UO.DWYER\MBAKERINTL.COM
 USER: Mary.Uo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



SECTION THRU JOINT
(EXISTING)



STUD PATTERN
(EXISTING)



UPTURN DETAIL
(EXISTING)

ALTERNATE NEOPRENE EXPANSION DAMS				
MODEL	SUPPLIER	A	B	C
STEEL FLEX TYPE SSA2 WITH A2R-400 SEAL	D.S. BROWN CO.	2"	1 1/4"	2"
STEEL FLEX TYPE SSA2 WITH A2R-XTRA SEAL	D.S. BROWN CO.	2"	1 1/4"	2 1/2"
WABO STRIP SEAL TYPE A EXTRUSION WITH SE-400 SEAL	WATSON BOWMAN ACME CORP.	2"	1 1/4"	2"
WABO STRIP SEAL TYPE A EXTRUSION WITH SE-500 SEAL	WATSON BOWMAN ACME CORP.	2"	1 1/4"	2 1/2"

FOR INFORMATION ONLY

(REPLACE AND INSTALL A NEW SEAL TO MATCH THE EXISTING SEAL REMOVED)

EXISTING STRIP SEALS
DN26144 - INSTALLED 2007

K & IT RR TRESTLE JOINT SETTING

PIER	STRIP SEAL	JOINT OPENING DIMENSION C			INCREMENT PER 10 DEG F RISE OR FALL	JOINT LENGTH (1)	
		MIN	60 DEG F	MAX		WB	EB
3	4"	1/2	2	4 1/4	1/4"	44'-4"	44'-4"
7	4"	1/2	2	4 1/4	1/4"	44'-4"	44'-4"
11	5"	5/8	2 1/2	5 1/6	3/16"	44'-4"	44'-4"
14	4"	7/8	2	3 11/16	3/16"	44'-4"	44'-4"
18	4"	1/2	2	4 1/4	1/4"	44'-4"	44'-4"
22	4"	7/8	2	3 11/16	3/16"	44'-4"	44'-4"
26	4"	1/2	2	4 1/4	1/4"	44'-4"	44'-4"

END BENT	STRIP SEAL	JOINT OPENING DIMENSION C			INCREMENT PER 10 DEG F RISE OR FALL	JOINT LENGTH (2)	
		MIN	60 DEG F	MAX		WB	EB
EB 2	4"	1 1/4	2	3 1/8	1/8"	44'-4"	44'-4"

K & IT RR AND 27TH STREET JOINT SETTING

PIER	STRIP SEAL	JOINT OPENING DIMENSION C			INCREMENT PER 10 DEG F RISE OR FALL	JOINT LENGTH (1)	
		MIN	60 DEG F	MAX		WB	EB
2	4"	1 1/4	2	3 1/8	1/8"	44'-4"	44'-4"
5	4"	7/8	2	3 11/16	3/16"	44'-4"	44'-4"
8	4"	7/8	2	3 11/16	3/16"	44'-4"	44'-4"

END BENT	STRIP SEAL	JOINT OPENING DIMENSION C			INCREMENT PER 10 DEG F RISE OR FALL	JOINT LENGTH (2)	
		MIN	60 DEG F	MAX		WB	EB
2	4"	1 1/4	2	3 1/8	1/8"	44'-4"	44'-4"

NORTHWESTERN PKWY & 22ND STREET JOINT SETTING

PIER	STRIP SEAL	JOINT OPENING DIMENSION C			INCREMENT PER 10 DEG F RISE OR FALL	JOINT LENGTH (1)
		MIN	60 DEG F	MAX		
2-WB	4"	1 1/4	2	3 1/8	1/8"	72'-7 3/4"
2-EB	4"	1 1/4	2	3 1/8	1/8"	59'-10 3/4"
6-WB	4"	1 1/4	2	3 1/8	1/8"	82'-9 13/16"
6-EB	4"	1 1/4	2	3 1/8	1/8"	67'-6 1/8"
R2	4"	1 1/4	2	3 1/8	1/8"	30'-9"

END BENT	STRIP SEAL	JOINT OPENING DIMENSION C			INCREMENT PER 10 DEG F RISE OR FALL	JOINT LENGTH (2)
		MIN	60 DEG F	MAX		
A-WB	4"	1 5/8	2	2 1/6	1/16"	82'-8 5/8"
A-EB	4"	1 5/8	2	2 1/6	1/16"	69'-1 1/8"
B-WB	4"	1 5/8	2	2 1/6	1/16"	82'-9 13/16"
B-EB	4"	1 5/8	2	2 1/6	1/16"	67'-6 1/8"
RA	4"	1 5/8	2	2 1/6	1/16"	45'-3 1/2"

- (1) GUTTER LINE-TO-GUTTER LINE ALONG C/L EXISTING JOINT.
- (2) GUTTER LINE-TO-GUTTER LINE ALONG EXISTING FRONT FACE BACKWALL.
- (3) FABRICATE THE STRIP SEAL TO ACCOMMODATE THE DISTANCE GUTTER LINE-TO-GUTTER LINE ALONG THE TOP OF THE EXISTING CONCRETE SLAB.

GENERAL NOTES

SPECIFICATIONS: ALL REFERENCES TO THE SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

INSTALLATION PROCEDURE: SEAL THE ENDS OF THE JOINT SEAL TO PREVENT THE ENTRANCE OF WATER AND FOREIGN MATERIAL.

MATERIAL SPECIFICATIONS: JOINT SEALING MATERIAL, ONLY, IS IN ACCORDANCE WITH SECTION 807 OF THE STANDARD SPECIFICATIONS.

CLEANING: CLEAN ALL STRUCTURAL STEEL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

SHOP DRAWINGS: CONTRARY TO THE SPECIFICATIONS, NO SHOP PLANS ARE REQUIRED.

JOINT SETTING: TAKE MEASUREMENTS AND TEMPERATURE READINGS BEFORE 8 A.M. WHEN DETERMINING THE INSTALLATION OPENING.

THE SEALING ELEMENT SHALL BE SUPPLIED AND INSTALLED IN ONE CONTINUOUS LENGTH TO FIT THE FINAL DIMENSIONS OF THE JOINT AS IT OCCURS IN THE ROADWAY. NO FIELD SPLICES WILL BE PERMITTED.

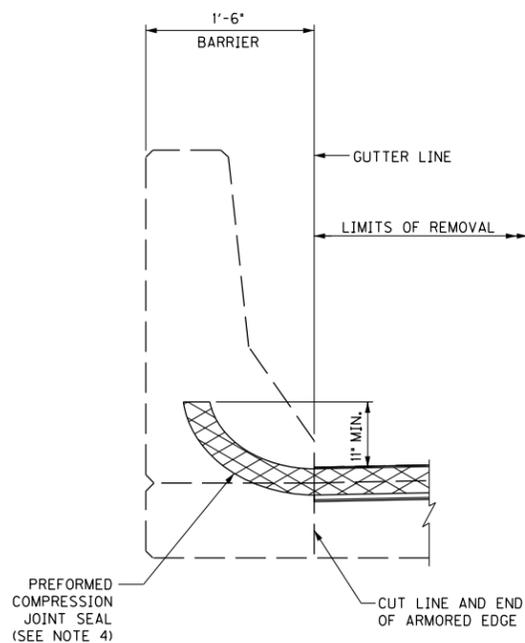
PAYMENT UNDER 'JOINT SEAL REPLACEMENT - TRANSVERSE' WILL BE CONSIDERED FULL COMPENSATION FOR THE COMPLETED AND ACCEPTED QUANTITIES FOR ALL WORK REQUIRED. SEE SHEET NO. S2.

NOTES

1. THE ORIGINAL EXPANSION JOINTS WERE REPLACED WITH STRIP SEAL EXPANSION JOINTS DURING THE RESTORE 64 RECONSTRUCTION WORK (DN 26144). THIS WORK ITEM IS TO REPLACE ALL OF THE EXISTING NEOPRENE STRIP SEAL GLANDS ALONG I-64 WB & I-64 EB. SEE TABLES FOR LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY THE EXISTING NEOPRENE STRIP SEAL GLAND AND REPLACE IN KIND.
3. THE STEEL COMPONENTS (ARMORED EDGE, RESTRAINER BLOCK, CONCRETE STUDS AND UPTURN) ARE TO REMAIN. CONTRACTOR IS TO TAKE CARE NOT TO DAMAGE COMPONENTS. IF A COMPONENT IS DAMAGED, THE CONTRACTOR SHALL REPLACE AT NO ADDITIONAL COST TO THE CABINET AND AT DIRECTION OF THE ENGINEER.

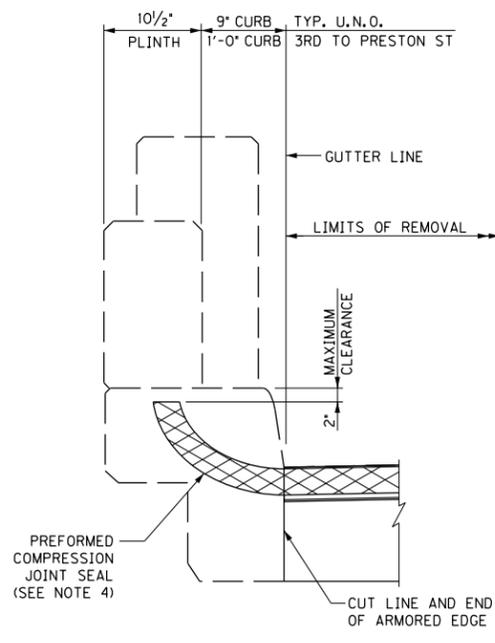
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
STRIP SEAL RETROFIT - 1		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S37 DRAWING NO. 28870

FILE NAME: C:\USERS\MARYUO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYUO.DWYER\MBAKERINTL.COM...
 USER: MaryUo.Dwyer DATE PLOTTED: November 29, 2023
 MicroStation v10.17.01.58 E-SHEET NAME: S23464 020



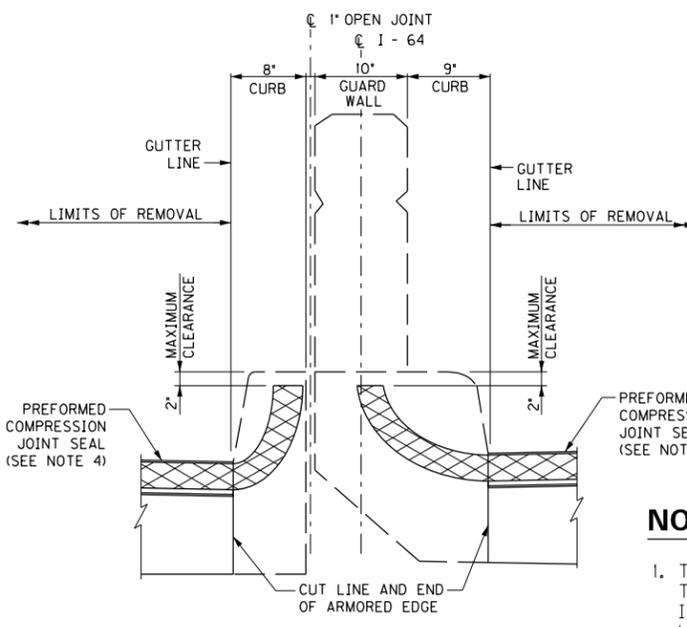
SECTION THROUGH BARRIER

LOOKING AT BRIDGE
EB 101W & EB 101E



SECTION THROUGH FASCIA

LOOKING AT BRIDGE
TYP. U.N.O.

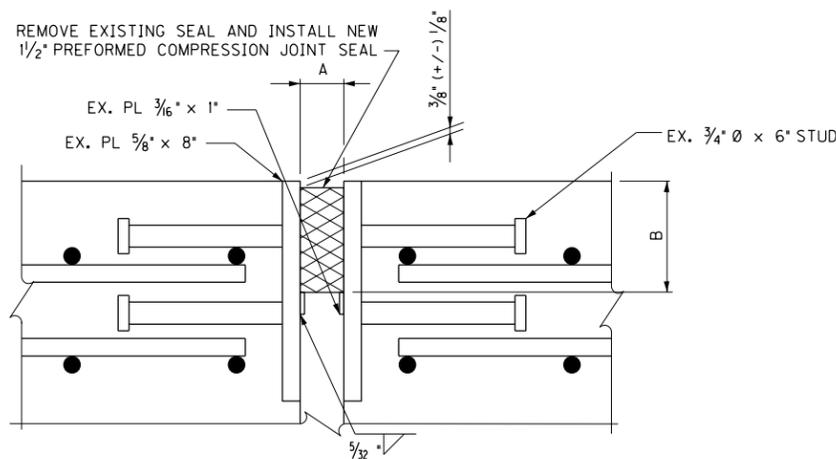


SECTION THROUGH MEDIAN

LOOKING AT BRIDGE
K & IT RR TRESTLE
K & IT RR & 27TH STREET
NORTHWESTERN PKWY & 22ND ST

NOTES

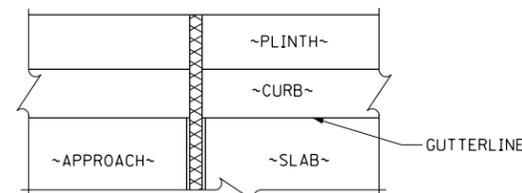
1. THIS WORK ITEM IS TO REPLACE ALL OF THE EXISTING COMPRESSION SEALS ALONG I-64 WB & I-64 EB. SEE TABLES FOR LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY THE EXISTING COMPRESSION SEAL AND REPLACE IN KIND.
3. THE STEEL COMPONENTS (ARMORED EDGE, RESTRAINER BLOCK, CONCRETE STUDS AND UPTURN) ARE TO REMAIN. CONTRACTOR IS TO TAKE CARE NOT TO DAMAGE COMPONENTS. IF A COMPONENT IS DAMAGED, THE CONTRACTOR SHALL REPLACE AT NO ADDITIONAL COST TO THE CABINET AND AT DIRECTION OF THE ENGINEER.
4. NEW SEAL IS TO BE SPLICED TO THE EXISTING SEAL IN THE FIELD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE SPLICE MUST BE WATERTIGHT.
5. PAYMENT UNDER "JOINT SEAL REPLACEMENT - TRANSVERSE" WILL BE CONSIDERED FULL COMPENSATION FOR THE COMPLETED AND ACCEPTED QUANTITIES FOR ALL WORK REQUIRED. SEE SHEET NO. S2.



SECTION THROUGH COMPRESSION SEAL JOINT

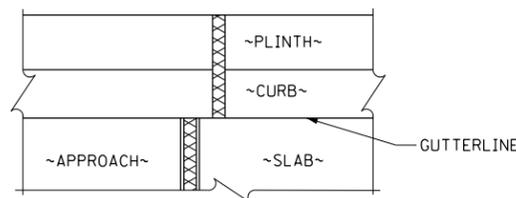
A - MINIMUM JOINT OPENING @ 60°F
 B - MANUFACTURER'S COMPRESSED SEAL HEIGHT 1/4"

JOINT DATA		The joint seal supplied must accommodate the required movement shown. Set Dimension A with temperature change increment and as required by the manufacturer to obtain the required movement.
Dim. A @ 60°F (in)	Movement (in)	
1 1/2	1	
2	1 1/2	
2 1/2	2	TEMPERATURE CHANGE INCREMENT 1/16" PER 10° F.



DETAIL AT FASCIA

K & IT RR TRESTLE
K & IT RR & 27TH STREET
NORTHWESTERN PKWY & 22ND ST
3RD TO PRESTON STREET, EB 101WB & EB 101EB
DETAIL AT MEDIAN SIMILAR



DETAIL AT FASCIA

3RD TO PRESTON STREET
FRAME 3 AND EB B

JOINT SEAL REPLACEMENT - TRANSVERSE

COMPRESSION JOINT SUMMARY	TOTAL
UNIT	LF
K & IT RR TRESTLE (056B00284)	89
K & IT RR & 27TH ST (056B00283)	89
NW PKWY & 22ND ST (056B00282)	355
17TH TO 13TH ST (056B00285)	
13TH TO 7TH ST (056B00293)	
7TH TO 2ND ST (056B00292)	
3RD TO PRESTON ST (056B00142)	306
TOTALS	839

K & IT RR TRESTLE COMPRESSION JOINTS	
END BENT	JOINT LENGTH (1)
1WB	44'-4"
1EB	44'-4"

K & IT RR AND 27TH STREET COMPRESSION JOINTS	
END BENT	JOINT LENGTH (1)
1WB	44'-4"
1EB	44'-4"

NORTHWESTERN PKWY & 22ND ST COMPRESSION JOINTS	
PIER	JOINT LENGTH (1)
1EB	61'-0 5/8"
1WB	73'-8"
7EB	67'-6 7/8"
7WB	82'-9 1/16"
R1	45'-3 1/2"
END BENT	JOINT LENGTH (1)
RB	24'-0"

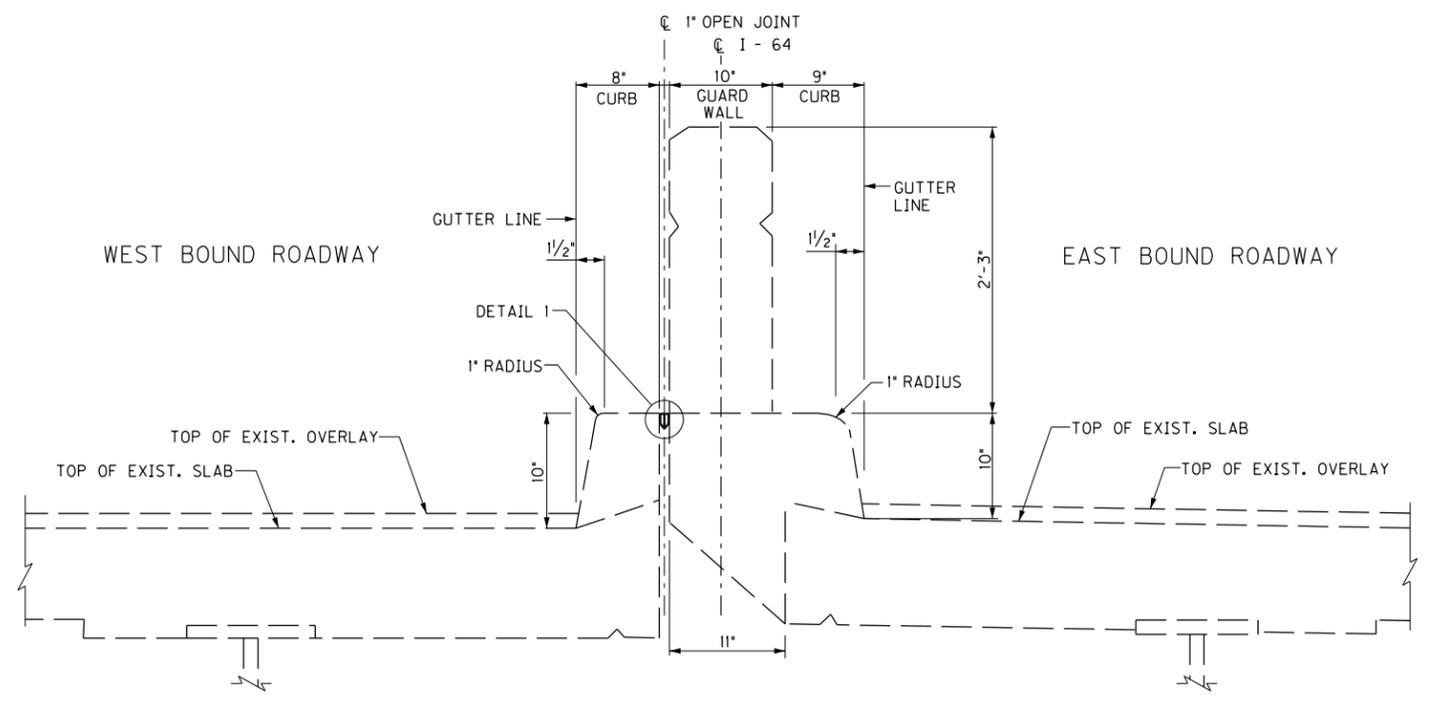
3RD TO PRESTON STREET COMPRESSION JOINTS	
PIER	JOINT LENGTH (1)
FRAME 3	30'-0"
END BENT	JOINT LENGTH
B	30'-0" (1)
I	25'-0" (1)
101WB	86'-8 7/8" (2)
101EB	133'-7 5/8" (2)

- (1) GUTTER LINE-TO-GUTTER LINE DIMENSION ALONG EXISTING JOINT. THE COMPRESSION JOINT SHALL BE FABRICATED TO FIT THE DISTANCE BETWEEN GUTTER LINES AT THE TOP OF THE OVERLAY.
- (2) GUTTER LINE-TO-GUTTER LINE DIMENSION ALONG EXISTING JOINT COMPRISED OF THE ORIGINAL CONSTRUCTION PLUS WIDENINGS.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	D BARON	
DETAILED BY: MJ DWYER	D BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
COMPRESSION SEAL RETROFIT		
PREPARED BY	SHEET NO.	
Michael Baker International	S39	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

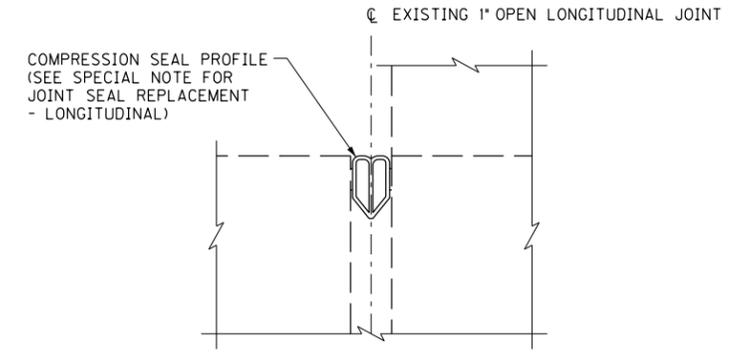
ITEM NUMBER
5-10016

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



EXISTING MEDIAN TYPICAL SECTION

7TH TO 2ND STREET SHOWN
 OTHER BRIDGE SECTIONS SIMILAR



DETAIL 1

I-64 LONGITUDINAL JOINT RETROFIT ESTIMATED WORK LIMITS		
BRIDGE UNIT	JOINT LENGTH	STATION WORK LIMITS
K&I RR & 27TH ST (056B00283)	182 FT	STA 109+25.00 (PIER 2) TO STA 111+07.00 (PIER 4)
17TH TO 13TH ST (056B00285)	2110 FT	STA 173+92.57 (PIER 4) TO STA 195+02.50 (PIER 25)
13TH TO 7TH ST (056B00293)	1345 FT	STA 195+02.50 (PIER 25) TO STA 208+46.62 (END OF 1" JOINT)
	227 FT	P.T. STA 218+86.61 TO STA 221+12.86 BK (PIER 55)
7TH TO 2ND ST (056B00292)	2653 FT	STA 221+12.65 AH (PIER 55) TO STA 247+65.44 (PIER 83)
2ND ST TO PRESTON ST (056B00142) (#)	1266 FT	STA 247+65.44 (PIER 83) TO STA 260+25.85 (PIER 122)

(*)FOR MEDIAN AREA FROM PIER 109 TO PIER 122, SEE DN 19238 SHEETS 55 & 56.

CLEAN ALL DEBRIS, TRASH AND SOIL DEPOSITS IN THE MEDIAN AREA OUTLINED BY THE WB PARAPET AND EB PARAPET. CLEANING SHALL BE DONE BEFORE INSTALLING THE LONGITUDINAL JOINT SEAL.

INCLUDE LABOR, EQUIPMENT, DISPOSAL AND CONSTRUCTION OPERATIONS TO COMPLETE THIS WORK IN THE BID ITEM MOST APPROPRIATE FOR THE WORK INVOLVED.

NOTES

- 1. SEE SHEET NOS. S9 AND S11 - S14 FOR LOCATION OF LONGITUDINAL JOINT RETROFIT.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	D BARON	
DETAILED BY: MJ DWYER	D BARON	

Commonwealth of Kentucky
 DEPARTMENT OF HIGHWAYS

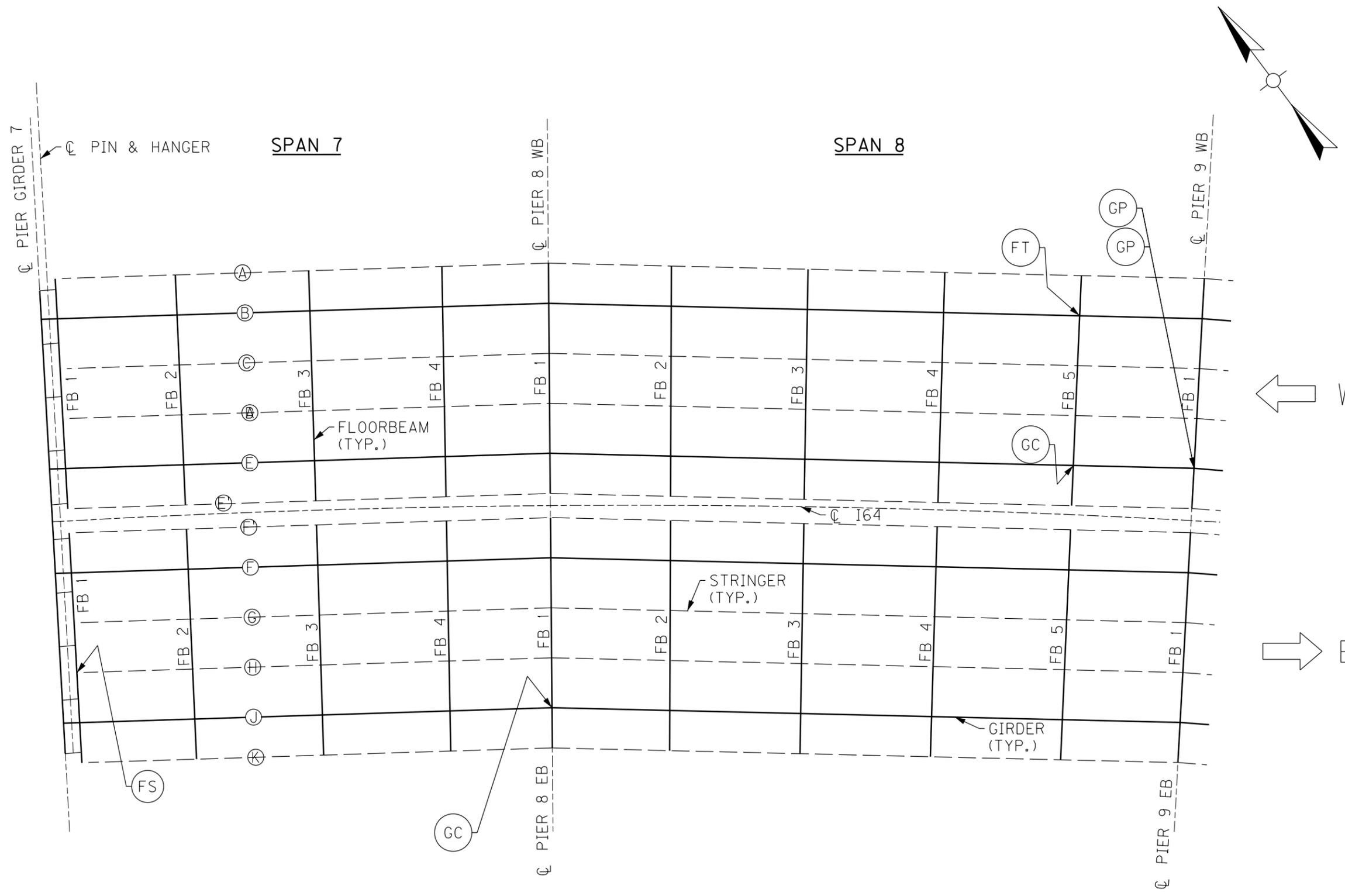
COUNTY
JEFFERSON

ROUTE **I-64** CROSSING **K & I T RR TO PRESTON STREET**

LONGITUDINAL JOINT RETROFIT

ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S40 DRAWING NO. 28870

FILE NAME: C:\USERS\MARYJO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM
 USER: Maryjo.Dwyer DATE PLOTTED: March 30, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

LEGEND

- BB = CRACK IN THE VERTICAL SEAL WELD TO THE BOX GIRDER WEB AT THE BOTTOM FLANGE SPLICE PLATE
- BS1 = CRACK IN THE WELD AT THE BOTTOM OF STIFFENER INSIDE OF BOX GIRDER
- BS2 = CRACK IN THE WELD AT THE TOP OF THE STIFFENER INSIDE OF BOX GIRDER
- CB = CRACK IN CROSS GIRDER WEB AT BOTTOM FLANGE TERMINATION
- CC = CRACK IN BOLT HOLES OF CONNECTION PLATE TO CROSS GIRDER WEB
- CF = CRACK AT BOTTOM FLANGE SPLICE PLATE WELD CONNECTION TO CROSS GIRDER WEB
- CS = CRACK IN TRANSVERSE STIFFENER TO CROSS GIRDER WEB
- CX1 = CRACK AT BOTTOM CONNECTION PLATE TO CROSS GIRDER WEB
- CX2 = CRACK AT BOTTOM CONNECTION PLATE TO CROSS GIRDER WEB
- FB = CRACK IN FLOORBEAM WEB AT BOTTOM FLANGE TERMINATION
- FP = CRACK IN WELD AT BOTTOM FLANGE FLOORBEAM TO FLOORBEAM CONNECTION PLATE
- FS = CRACK AT TOP OF TRANSVERSE STIFFENER TO FLOORBEAM WEB
- FT = CRACK IN FLOORBEAM WEB AT TOP FLANGE TERMINATION
- GC = CRACK AT FLOORBEAM FLANGE CONNECTION PLATE TO GIRDER WEB
- GF = CRACK AT FLOORBEAM TOP FLANGE CONNECTION PLATE TO GIRDER WEB VERTICAL CONNECTION PLATE WELD
- GP = BASE METAL CRACK IN WEB SLOT OF GIRDER WEB AT THE TIE PLATE
- MB1 = MISSING BOLTS IN GUSSET CONNECTION PLATE
- MB2 = MISSING BOLTS IN GIRDER END CONNECTION PLATE TO THE CROSS GIRDER WEB

NOTES

1. FOR FS CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR FT CRACK RETROFIT, SEE SHEET NO. S90.
3. FOR GC CRACK RETROFIT, SEE SHEET NO. S89.
4. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

REVISION		DATE

DATE: AUGUST 2025 CHECKED BY: M BARON
 DESIGNED BY: L CLARK
 DETAILED BY: MJ DWYER

**Commonwealth of Kentucky
 DEPARTMENT OF HIGHWAYS**

COUNTY
JEFFERSON

ROUTE: **I-64** CROSSING: **K & I TT RR TO PRESTON STREET**

FATIGUE RETROFIT LAYOUT - 1

BRIDGE - B285

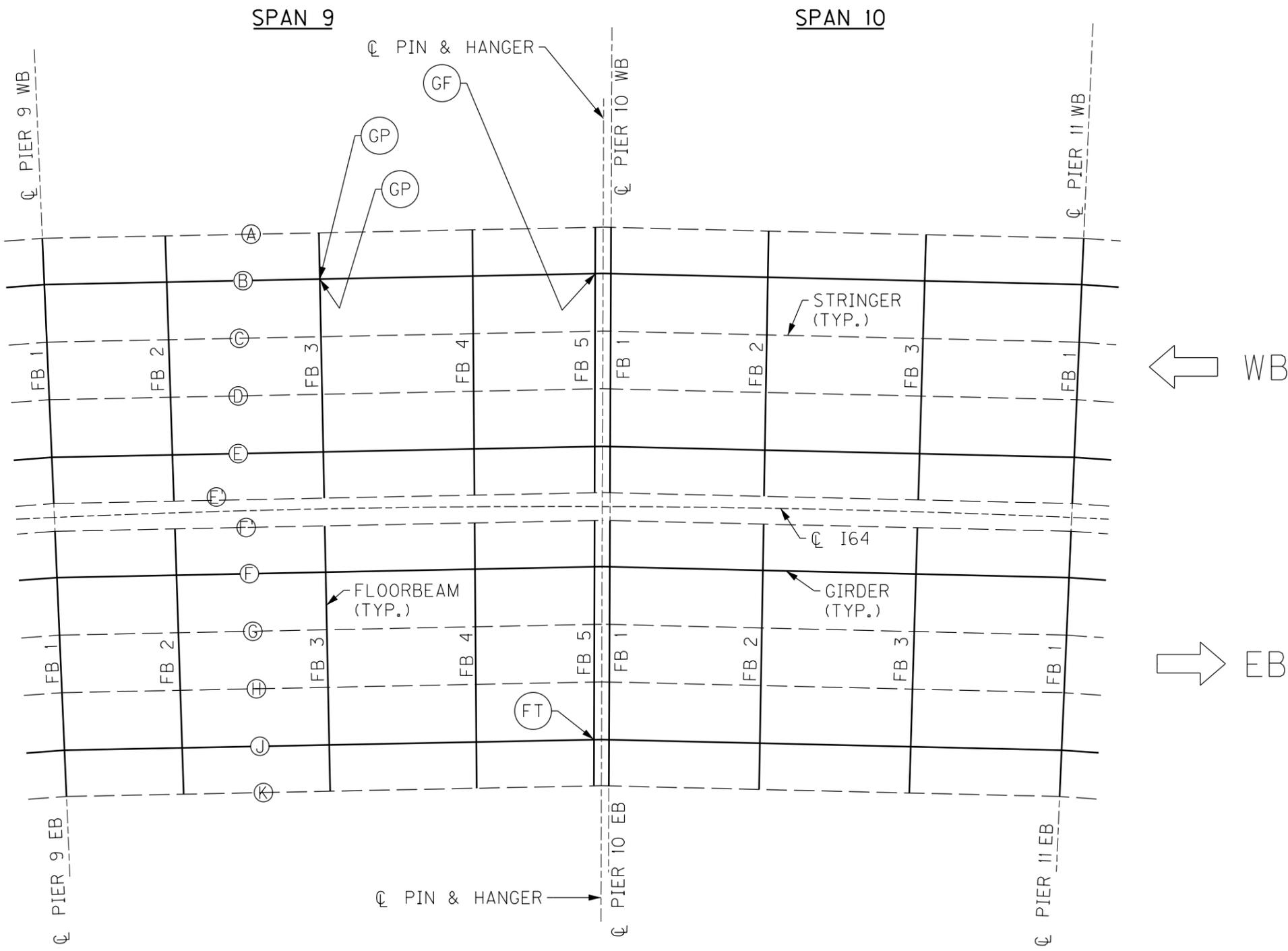
ITEM NUMBER	5-10016
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17TH TO 13TH ST BRIDGE

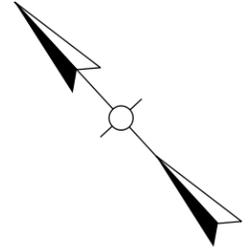
PREPARED BY: **Michael Baker International**
 1650 Lyndon Farm Court
 Louisville, KY 40223
 Phone: (502) 339-3557
 MBACKERINTL.COM

SHEET NO. **S41**
 DRAWING NO. **28870**

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: March 30, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN



← WB

→ EB

17TH TO 13TH ST BRIDGE

BRIDGE - B285

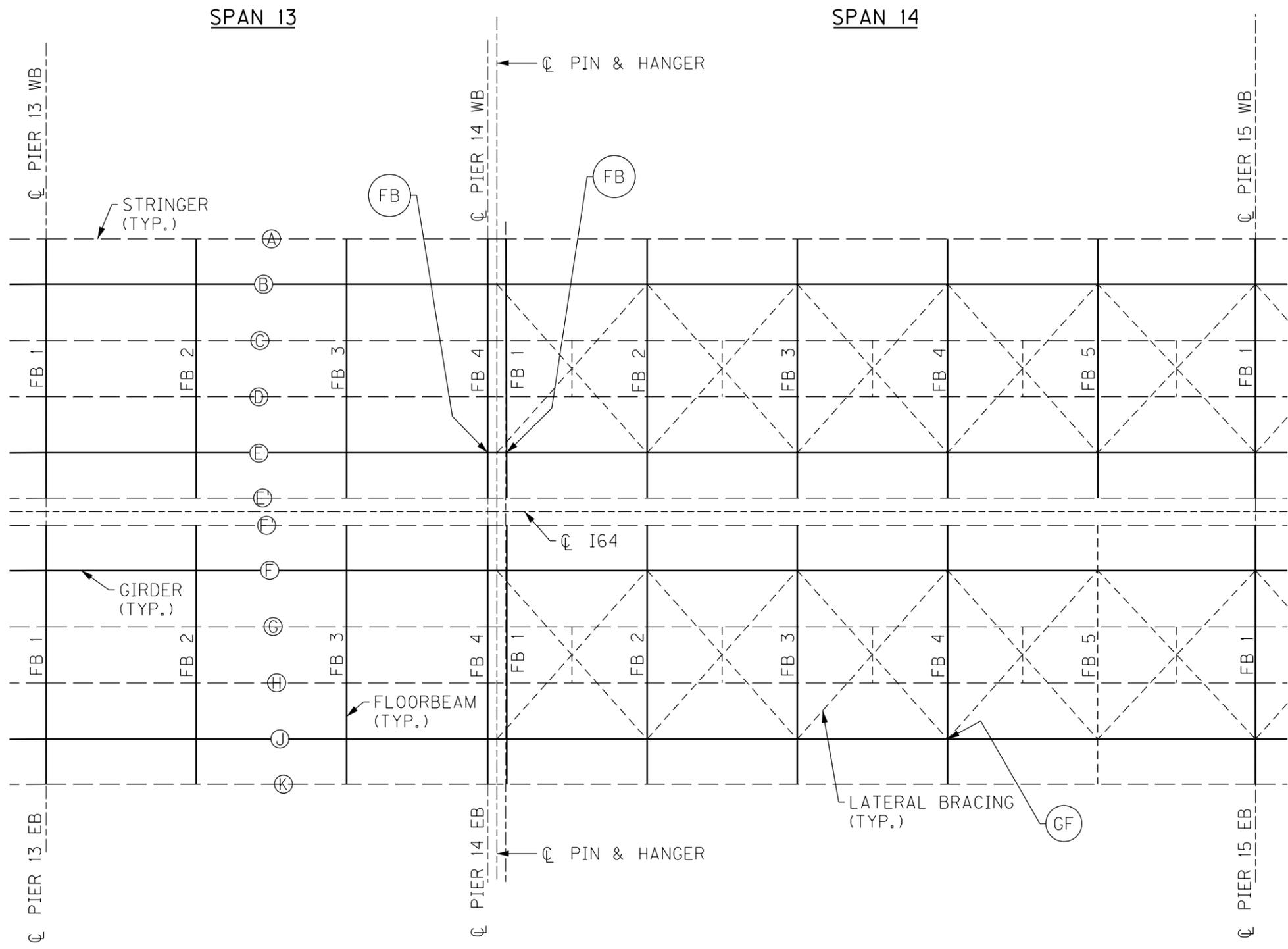
ITEM NUMBER	5-10016
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NOTES

1. FOR FT CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR GF CRACK RETROFIT, SEE SHEET NO. S89.
3. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 2		
PREPARED BY	SHEET NO.	DRAWING NO.
Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S42 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: March 30, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

← WB

→ EB

NOTES

1. FOR FB CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR GF CRACK RETROFIT, SEE SHEET NO. S89.

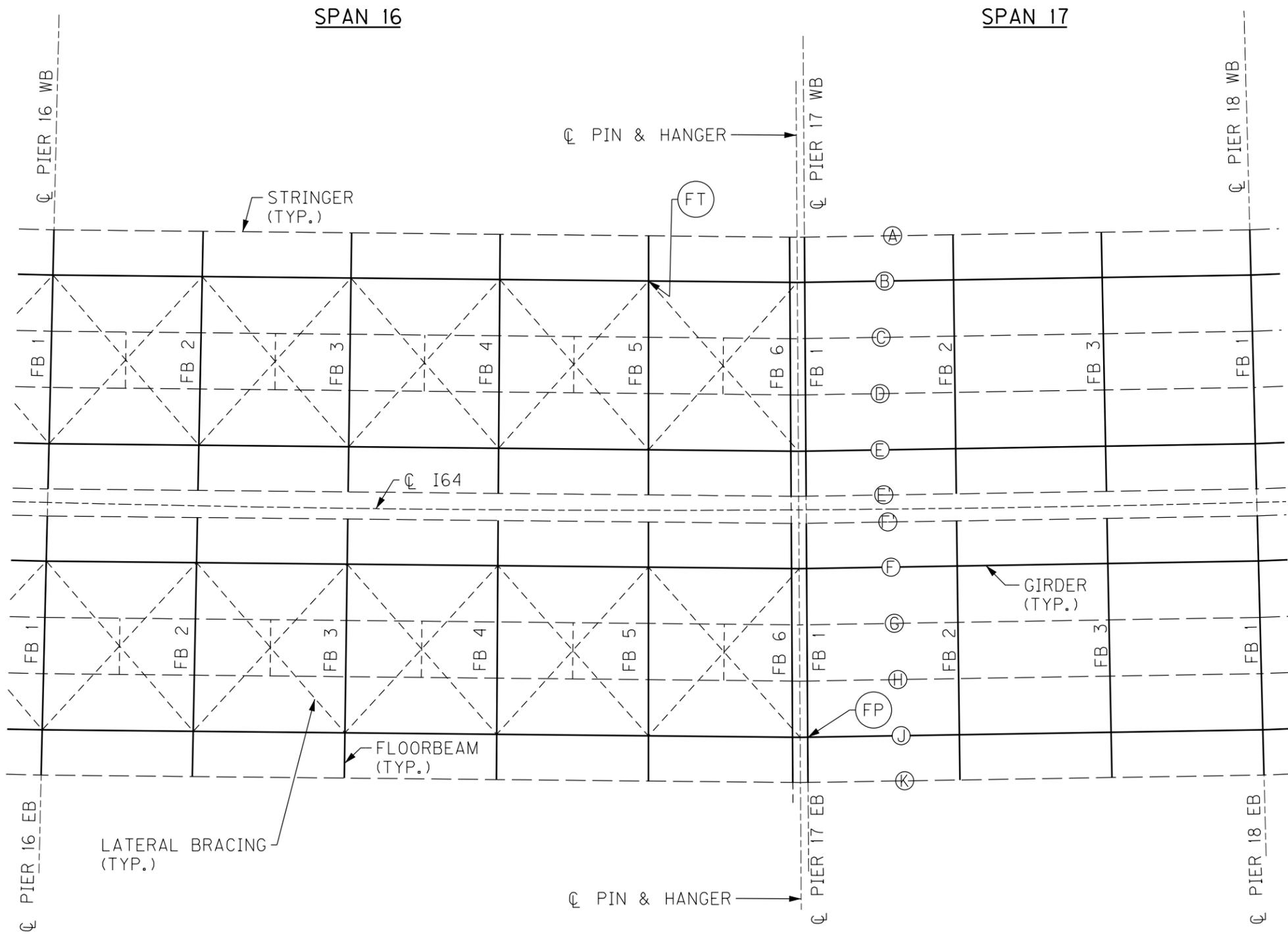
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 3		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S43	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

BRIDGE - B285

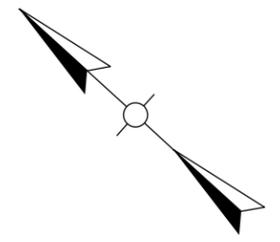
ITEM NUMBER	5-10016
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17TH TO 13TH ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: March 30, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN



NOTES

1. FOR FT CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR FP CRACK RETROFIT, SEE SHEET NO. S90.

REVISION	DATE

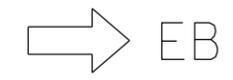
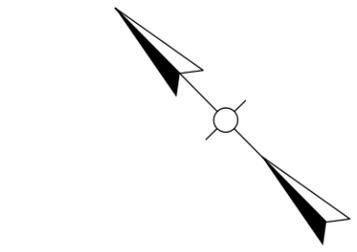
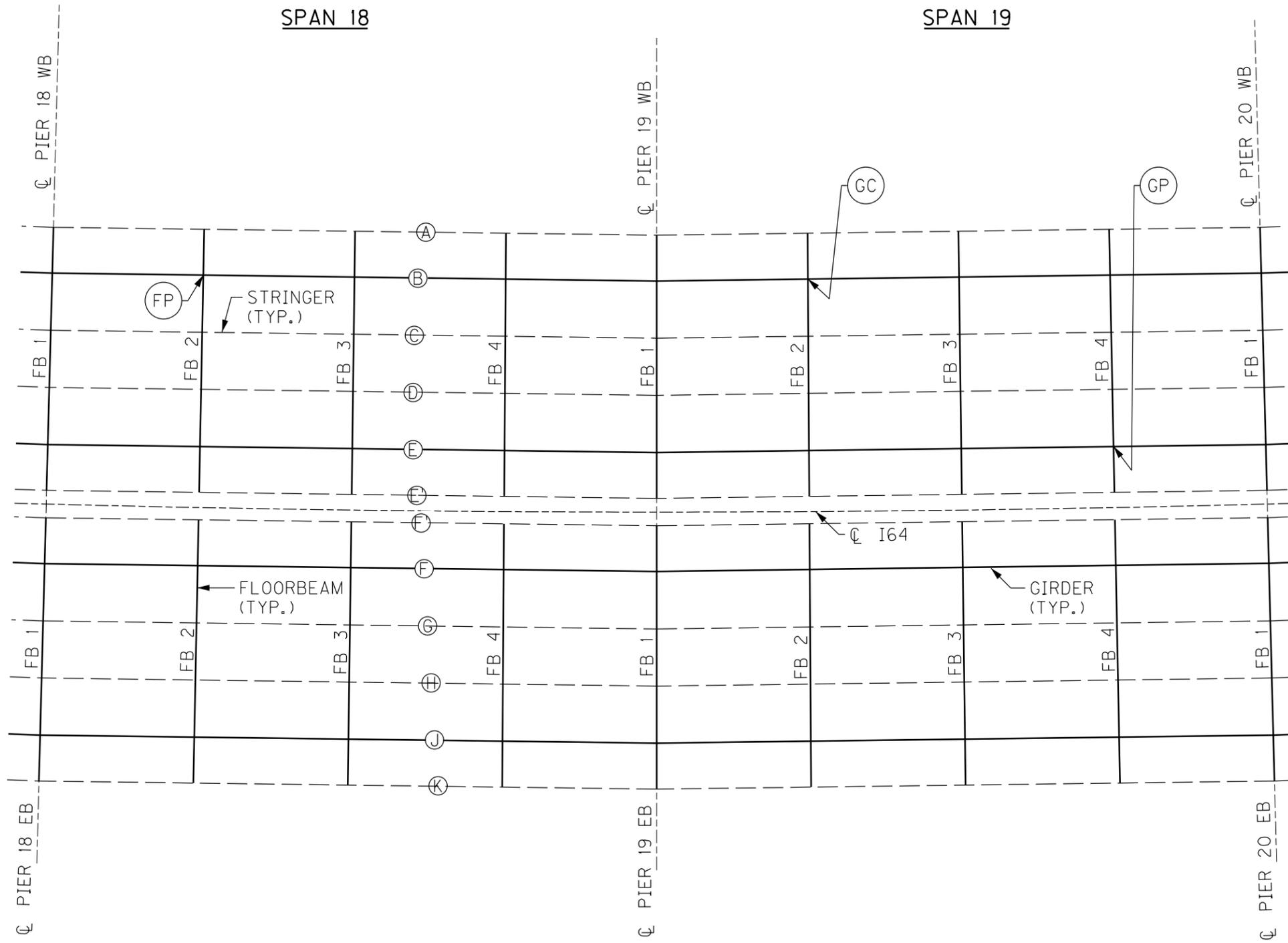
Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY
JEFFERSON
 ROUTE **I-64** CROSSING **K & I TT RR TO PRESTON STREET**
FATIGUE RETROFIT LAYOUT - 4
 PREPARED BY
Michael Baker International
 1650 Lyndon Farm Court
 Louisville, KY 40223
 Phone: (502) 339-3557
 M.BAKERINTL.COM
 SHEET NO.
S44
 DRAWING NO.
28870

BRIDGE - B285

ITEM NUMBER	5-10016
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17TH TO 13TH ST BRIDGE

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: March 30, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

NOTES

1. FOR FP CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR GC CRACK RETROFIT, SEE SHEET NO. S89.
3. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

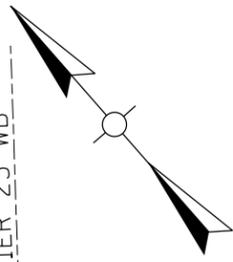
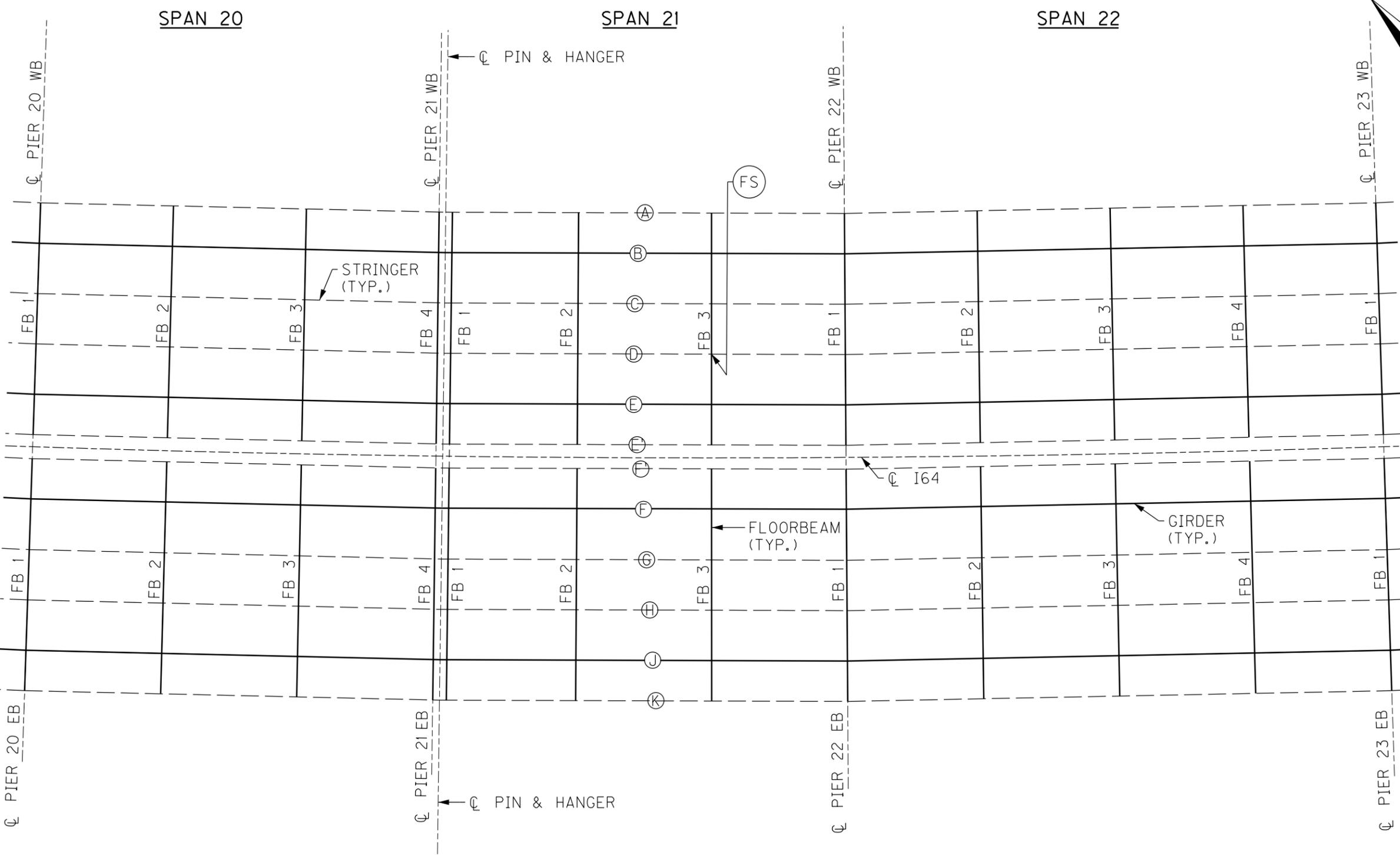
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 5		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S45	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO.	
	28870	

BRIDGE - B285

ITEM NUMBER	5-10016
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17TH TO 13TH ST BRIDGE

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Marvjo.Dwyer DATE PLOTTED: March 30, 2023 FILE NAME: C:\USERS\MARYJO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM



← WB

→ EB

PARTIAL FRAMING PLAN

NOTES

- 1. FOR FS CRACK RETROFIT, SEE SHEET NO. S90.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 6		
PREPARED BY	SHEET NO.	
Michael Baker International	S46	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO.	
	28870	

BRIDGE - B285

ITEM NUMBER	5-10016
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17TH TO 13TH ST BRIDGE

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: March 30, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

17TH TO 13TH ST BRIDGE

BRIDGE - B285

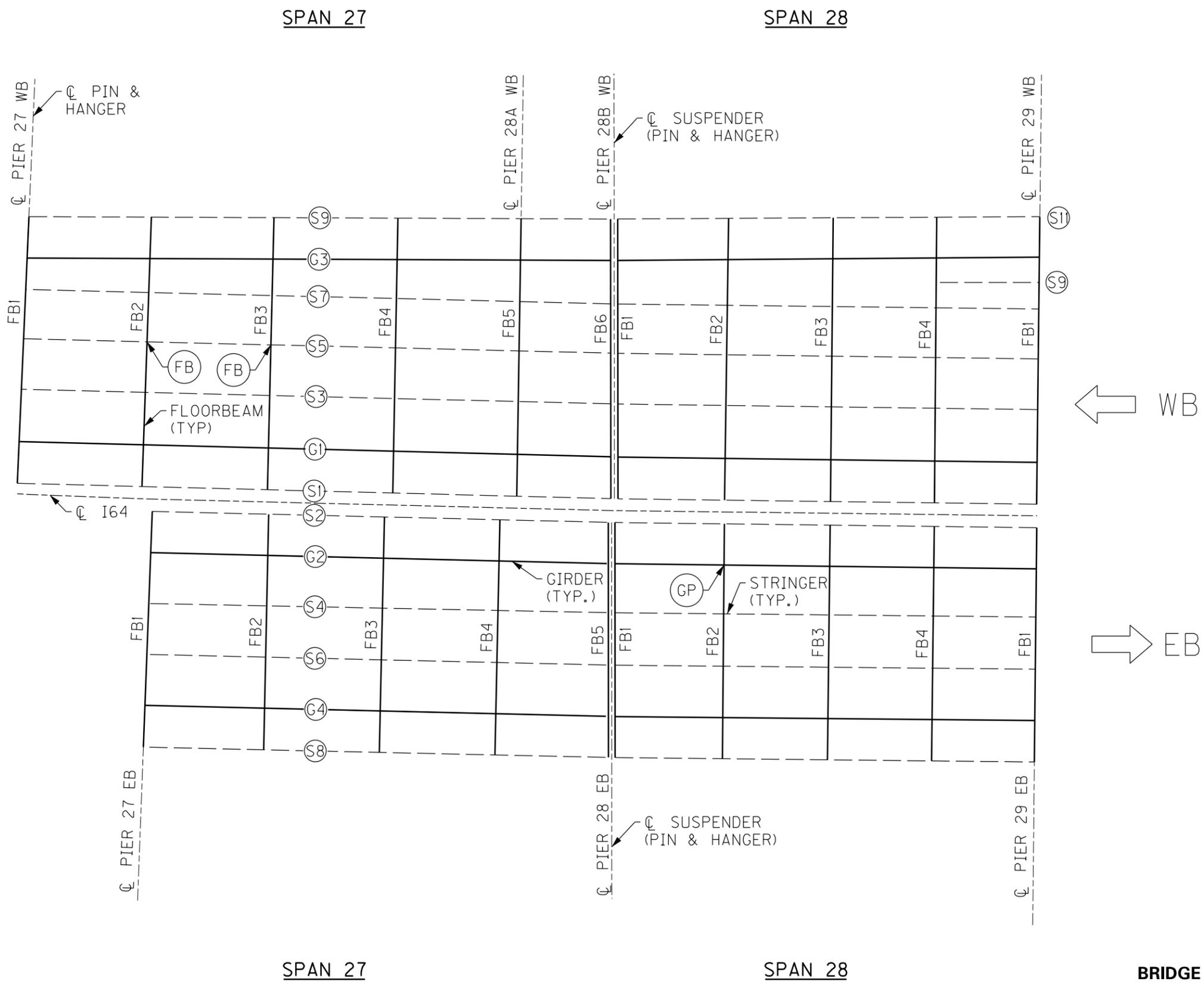
ITEM NUMBER	5-10016
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NOTES

- 1. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 7		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S47 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



- NOTES**
1. FOR FB CRACK RETROFIT, SEE SHEET NO. S90.
 2. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 8		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S48	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO.	
	28870	

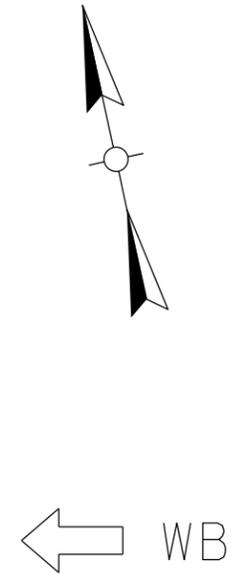
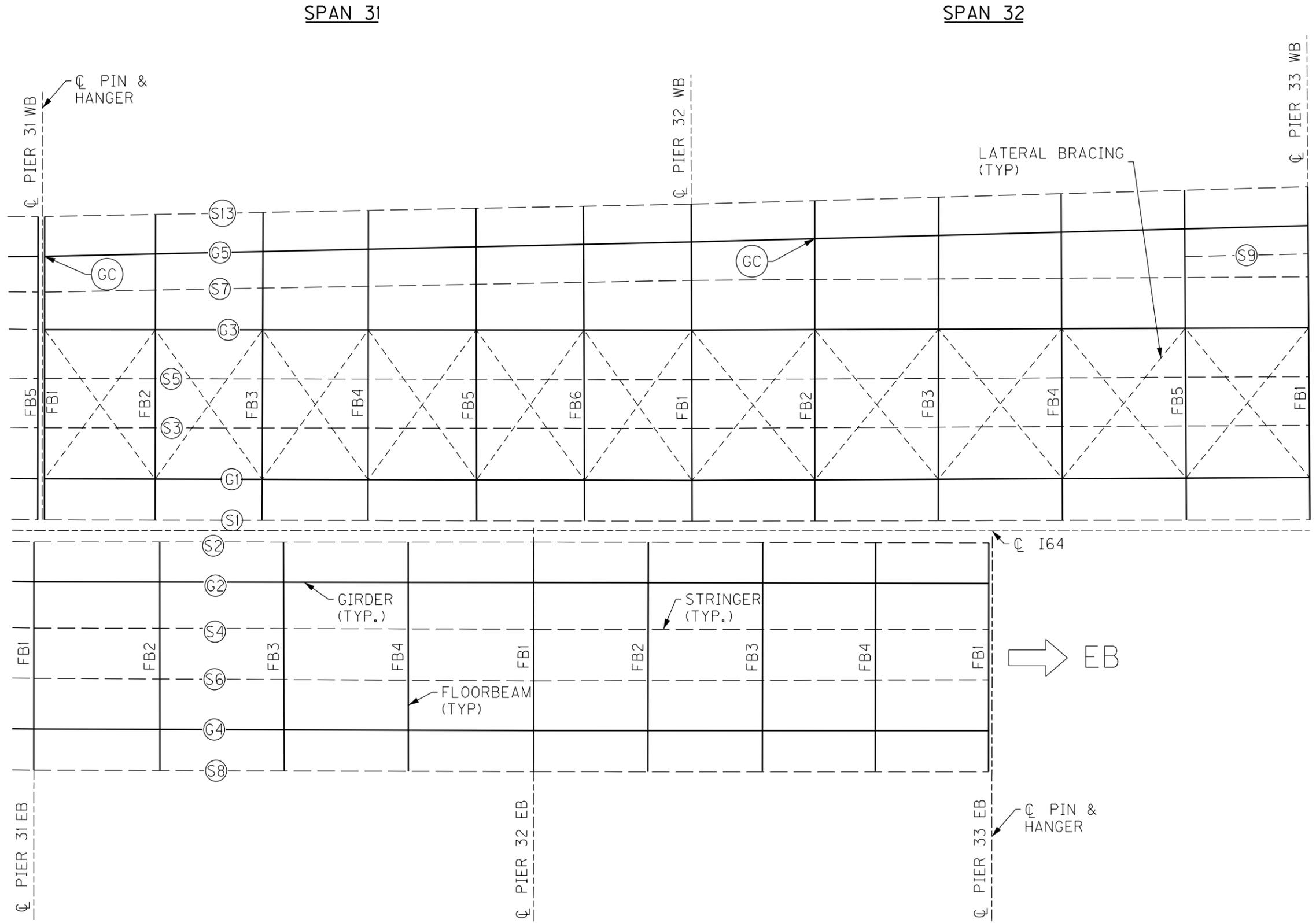
PARTIAL FRAMING PLAN

13TH TO 7TH ST BRIDGE

BRIDGE - B293

ITEM NUMBER
5-10016

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



NOTES

- 1. FOR GC CRACK RETROFIT, SEE SHEET NO. S89.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 9		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S49	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

SPAN 31

SPAN 32

SPAN 31

SPAN 32

PARTIAL FRAMING PLAN

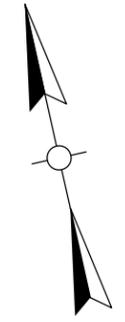
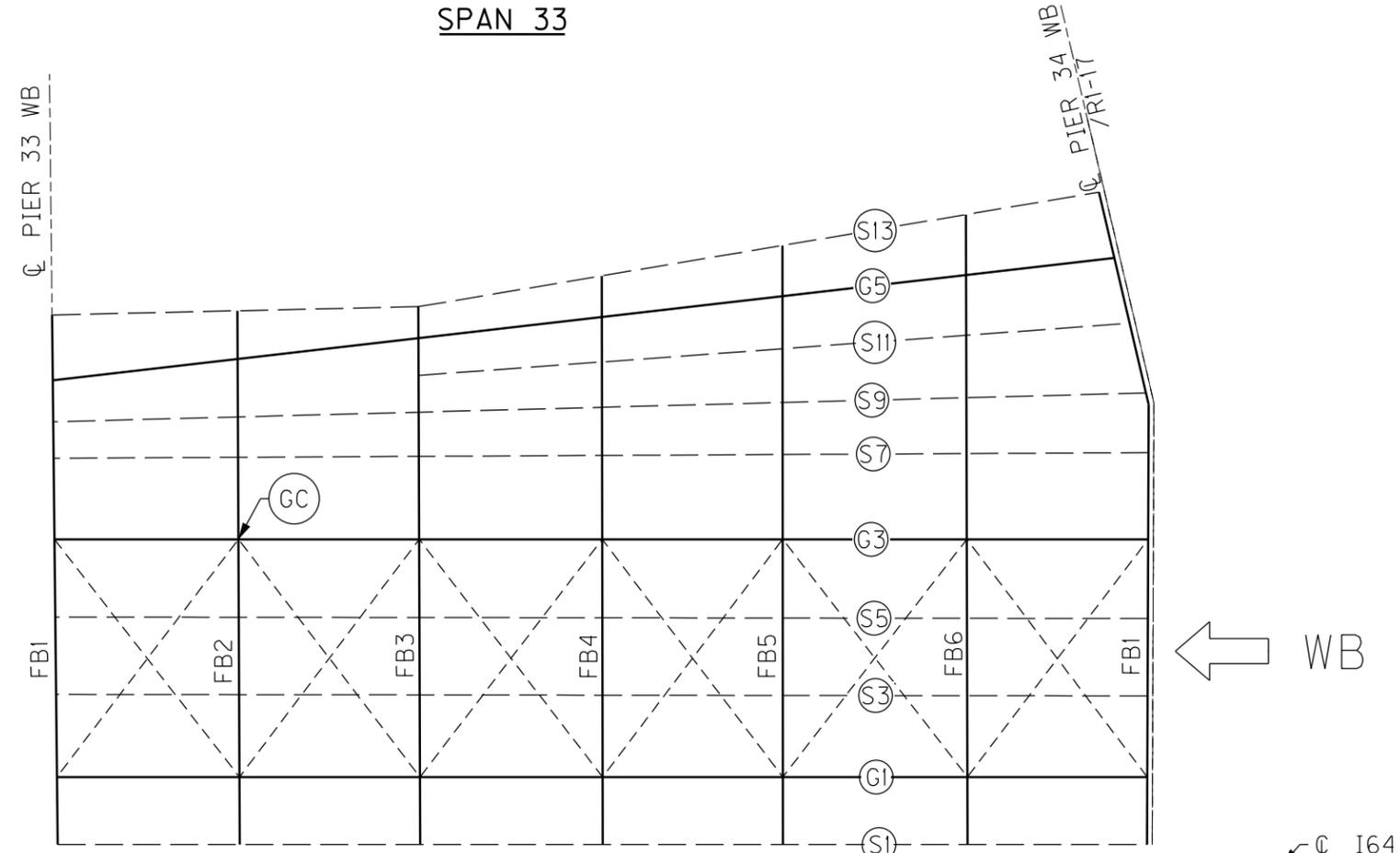
BRIDGE - B293

ITEM NUMBER	5-10016
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13TH TO 7TH ST BRIDGE

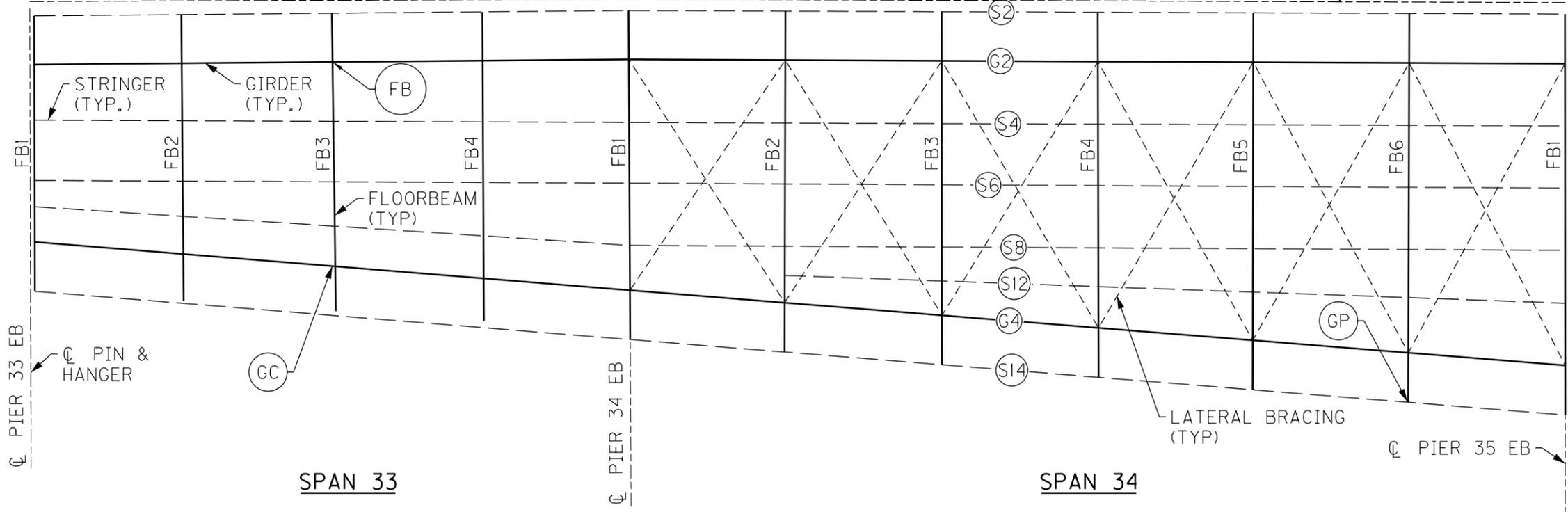
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58

SPAN 33



← WB

← I 64



→ EB

NOTES

1. FOR FB CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR GC CRACK RETROFIT, SEE SHEET NO. S89.
3. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

REVISION	DATE

DATE: AUGUST 2025	CHECKED BY
DESIGNED BY: L CLARK	M BARON
DETAILED BY: MJ DWYER	M BARON
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY JEFFERSON	
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET
FATIGUE RETROFIT LAYOUT - 10	

PARTIAL FRAMING PLAN

BRIDGE - B293

13TH TO 7TH ST BRIDGE

ITEM NUMBER	5-10016
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PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S50 DRAWING NO. 28870
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MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: December 1, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

13TH TO 7TH ST BRIDGE

BRIDGE - B293

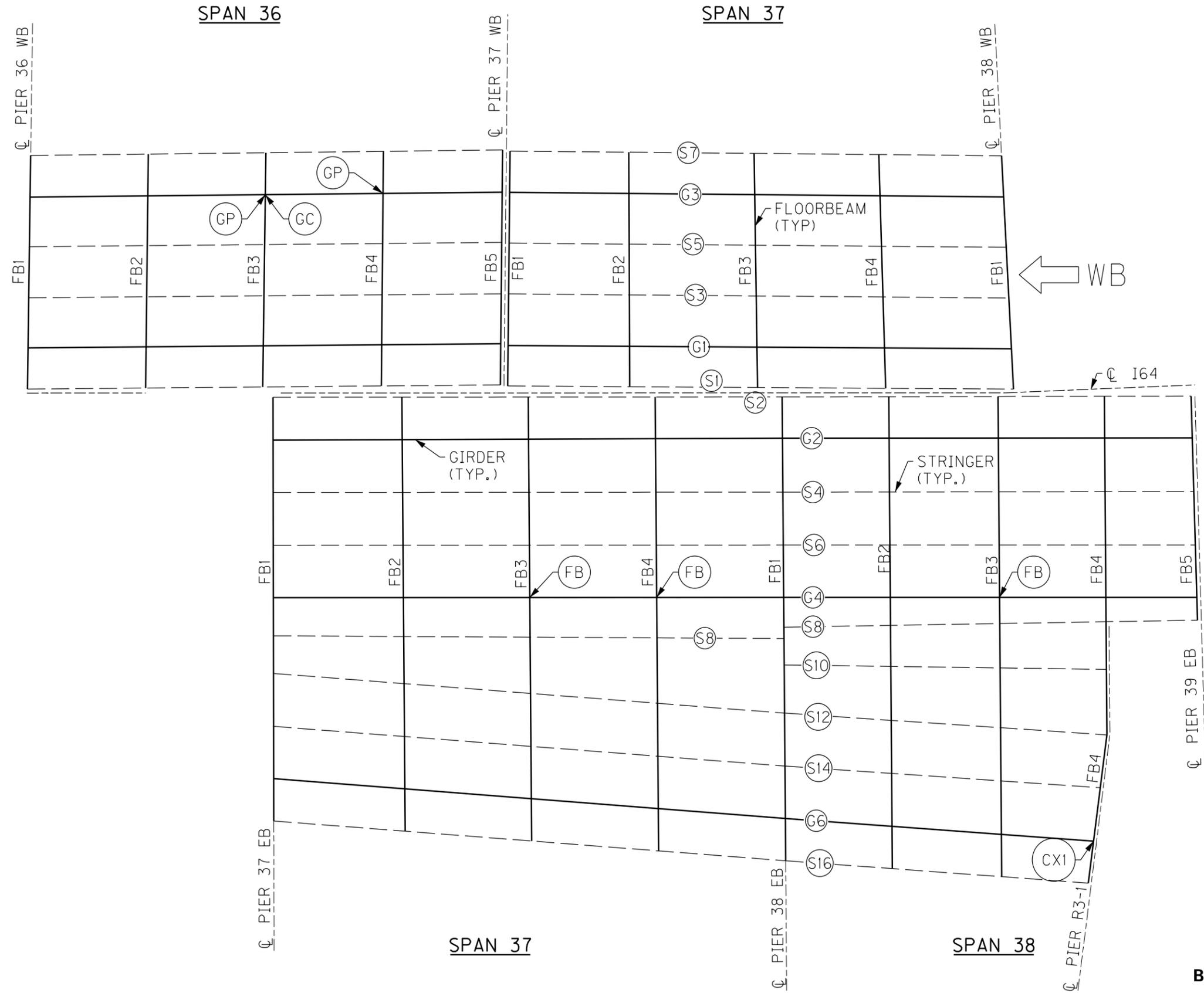
ITEM NUMBER	5-10016
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NOTES

1. FOR FB CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR FS CRACK RETROFIT, SEE SHEET NO. S90.
3. FOR FT CRACK RETROFIT, SEE SHEET NO. S90.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 11		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S51	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mjyio.Dwyer DATE PLOTTED: December 1, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

13TH TO 7TH ST BRIDGE

BRIDGE - B293

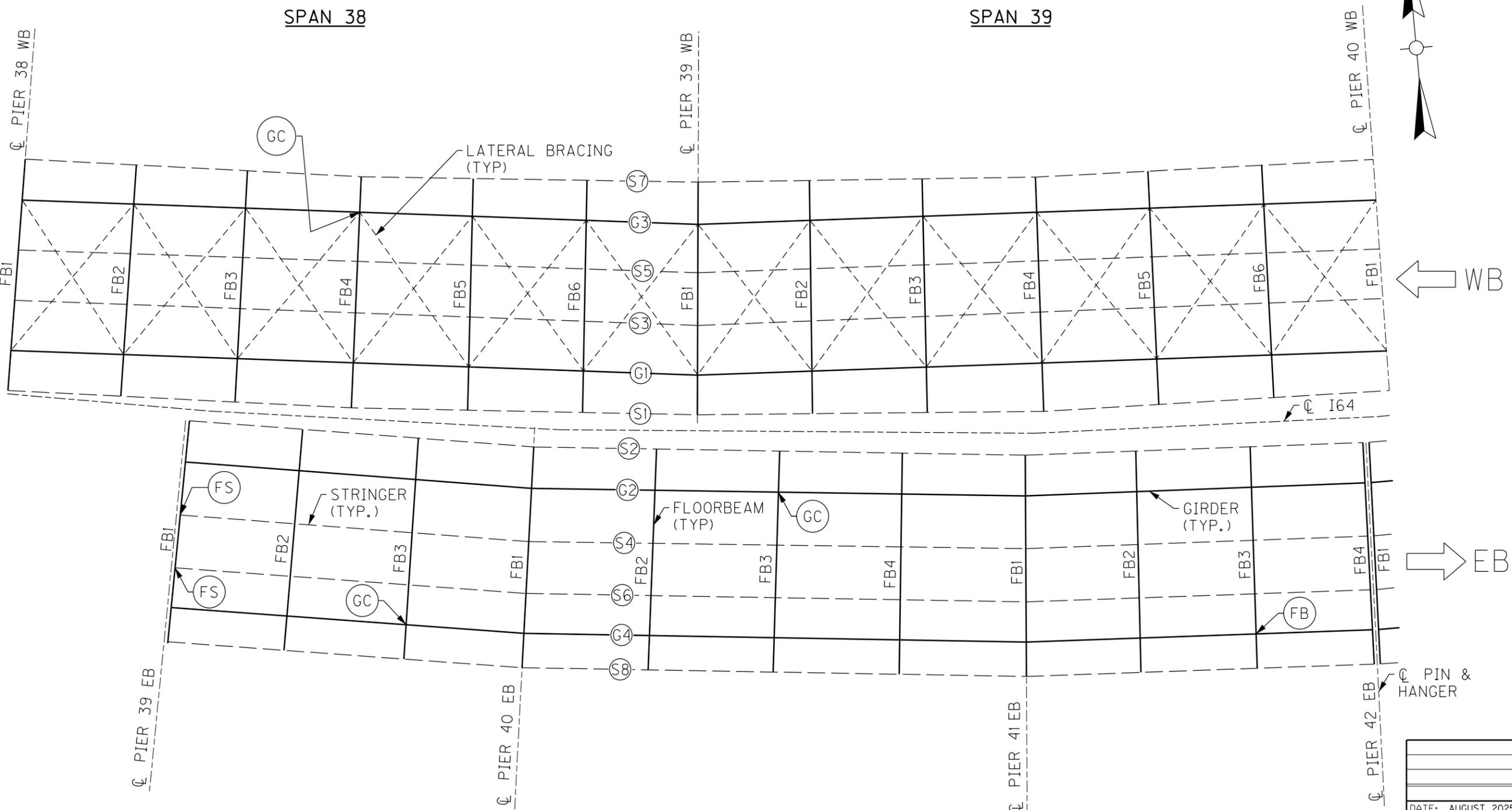
ITEM NUMBER	5-10016
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NOTES

1. FOR CX1 CRACK RETROFIT, SEE SHEET NO. S88.
2. FOR FB CRACK RETROFIT, SEE SHEET NO. S90.
3. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M DWYER	
DETAILED BY: MJ DWYER	M DWYER	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 12		
PREPARED BY	SHEET NO.	
Michael Baker International	S52	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

FILE NAME: C:\USERS\MARY.UO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.UO.DWYER\MBAKERINTL.COM
 USER: Mary.Uo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



- NOTES**
1. FOR FB CRACK RETROFIT, SEE SHEET NO. S90.
 2. FOR FS CRACK RETROFIT, SEE SHEET NO. S90.
 3. FOR GC CRACK RETROFIT, SEE SHEET NO. S89.

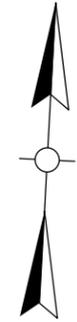
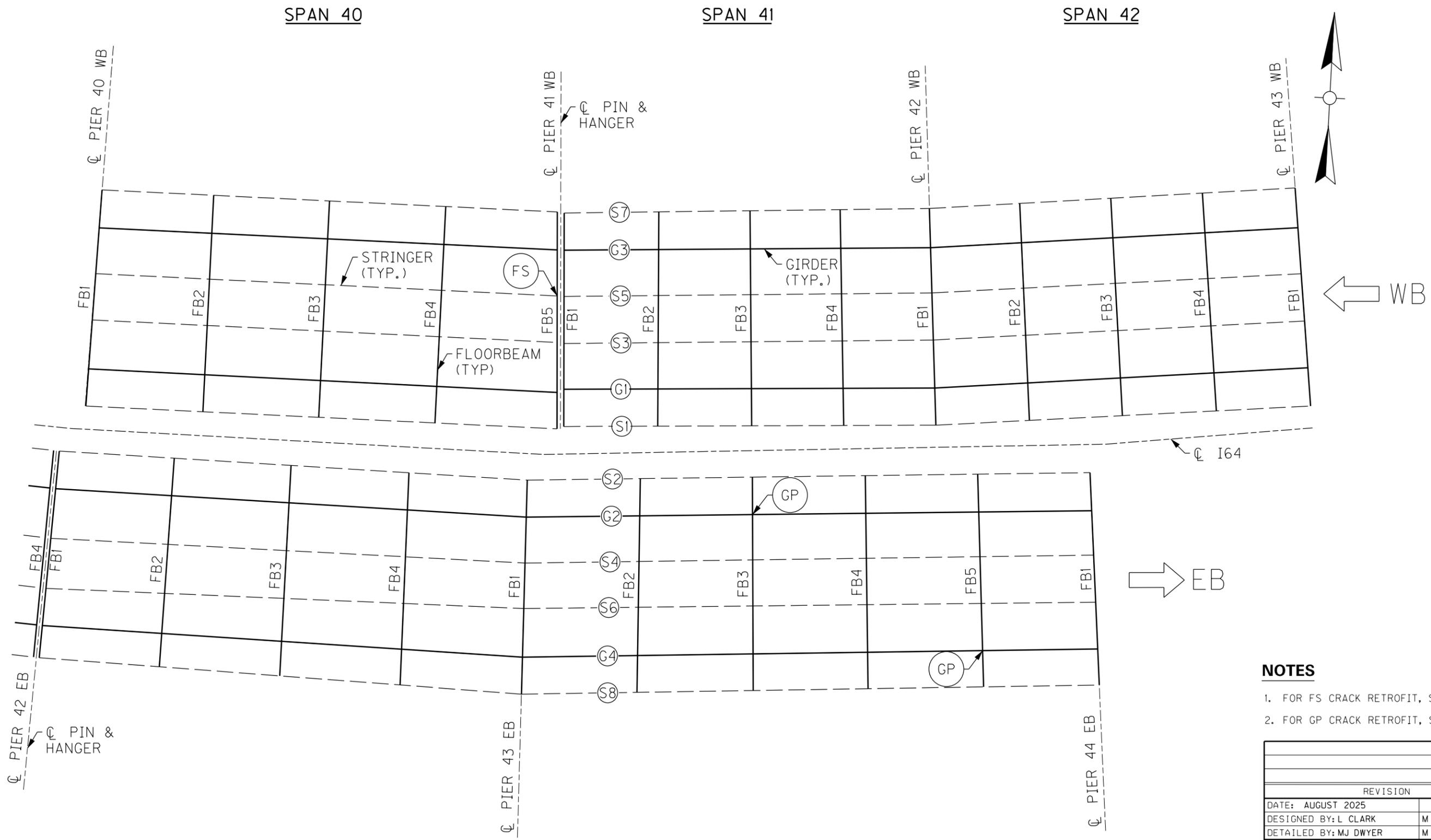
PARTIAL FRAMING PLAN

13TH TO 7TH ST BRIDGE

BRIDGE - B293
ITEM NUMBER
5-10016

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 13		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S53	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: December 1, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



← WB

→ EB

NOTES

1. FOR FS CRACK RETROFIT, SEE SHEET NO. S90.
2. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 14		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	S54	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

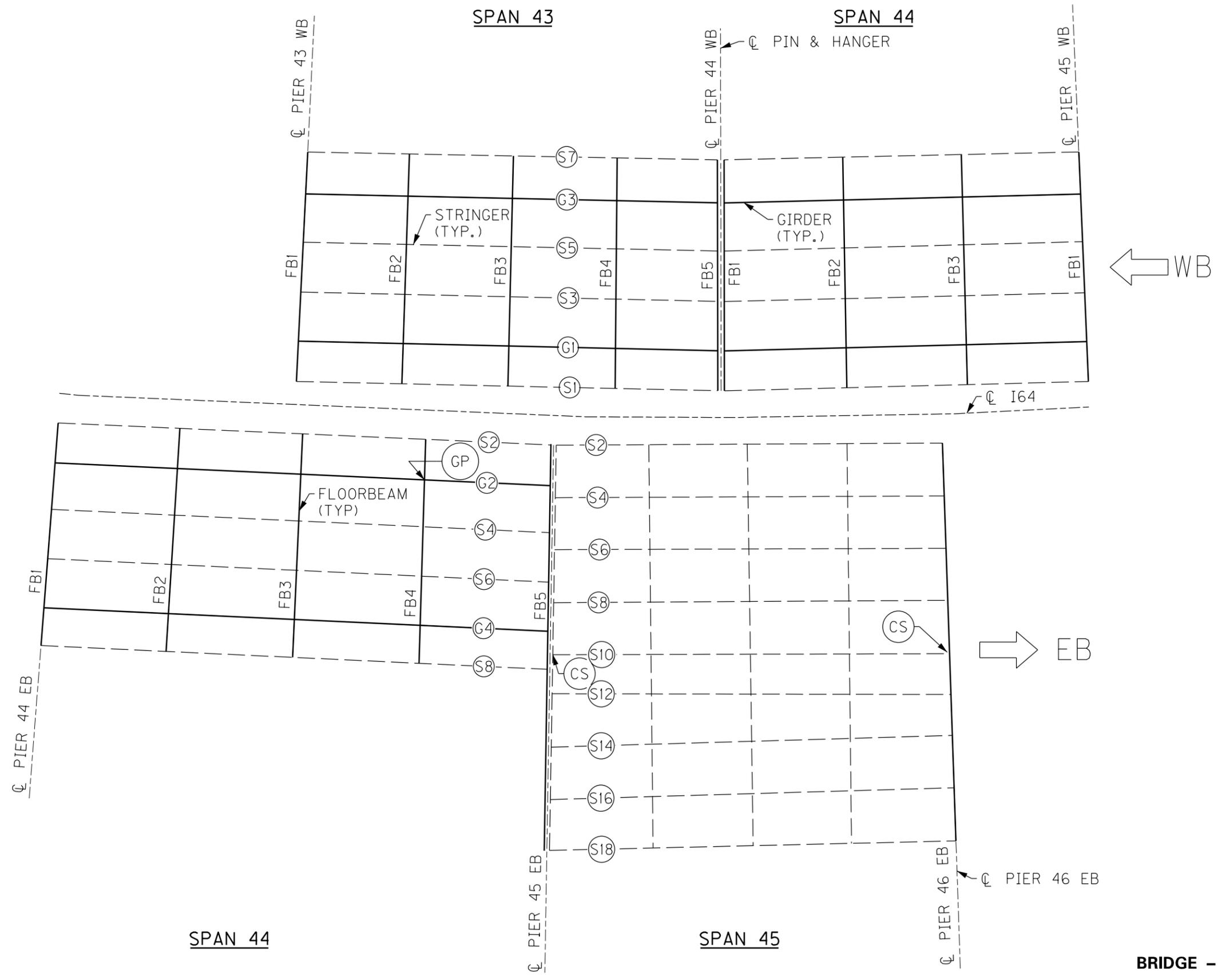
PARTIAL FRAMING PLAN

BRIDGE - B293

13TH TO 7TH ST BRIDGE

ITEM NUMBER	5-10016
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MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: December 1, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

13TH TO 7TH ST BRIDGE

BRIDGE - B293

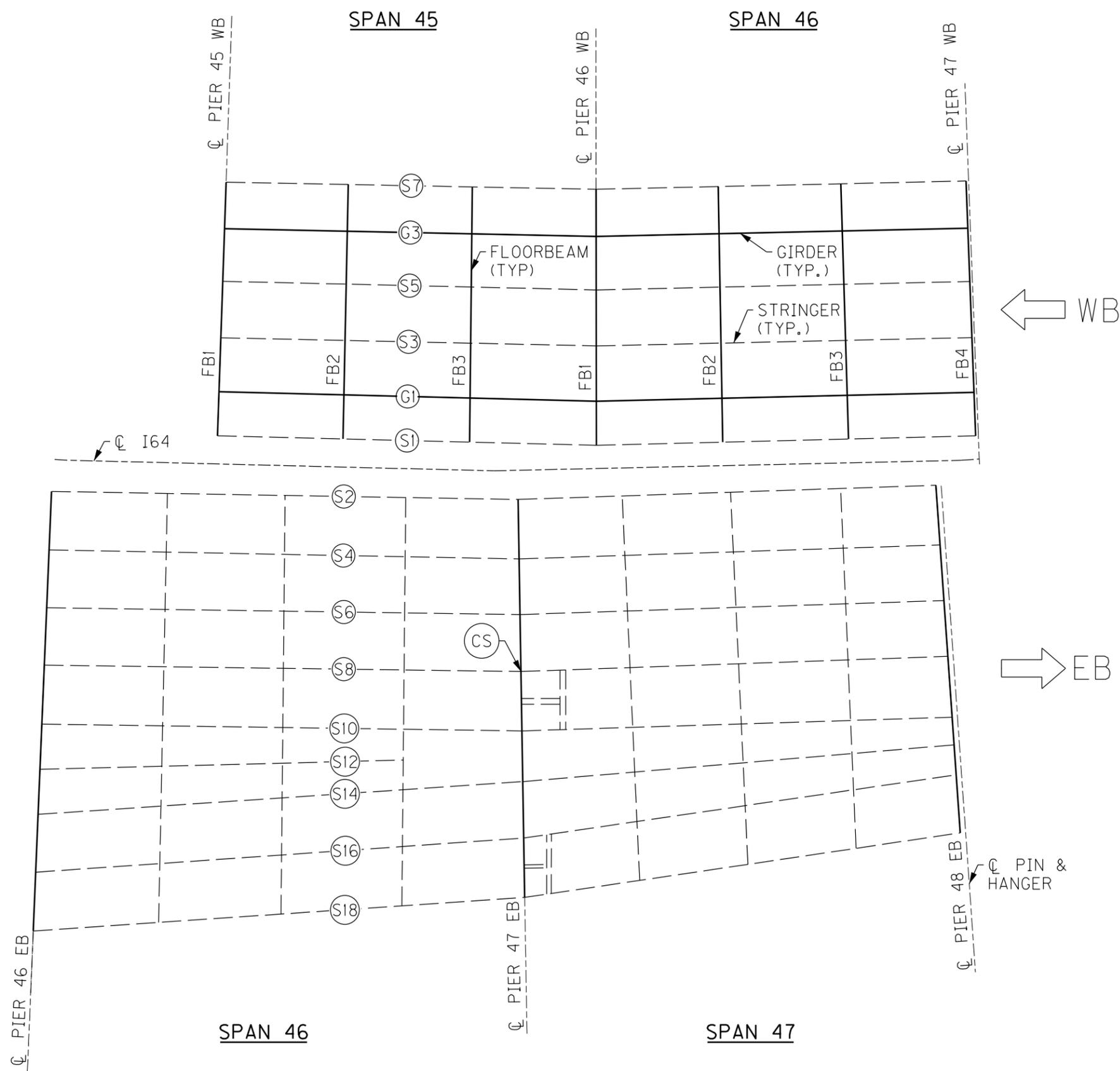
ITEM NUMBER	5-10016
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NOTES

1. FOR GP CRACK RETROFIT, SEE SHEET NO. S89.
2. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 15		
PREPARED BY	SHEET NO.	
Michael Baker International	S55	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870	

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: December 1, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

13TH TO 7TH ST BRIDGE

BRIDGE - B293

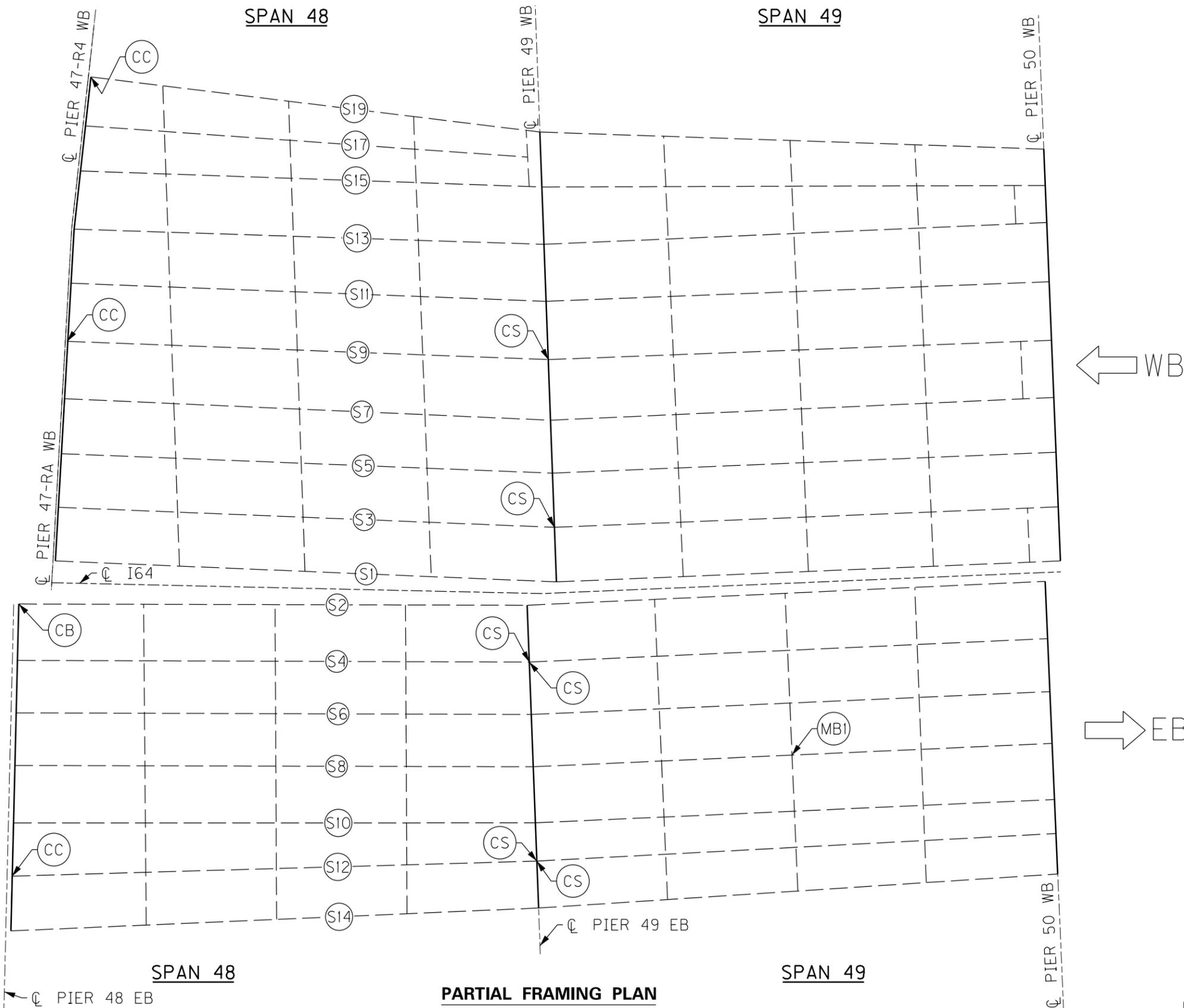
ITEM NUMBER	5-10016
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NOTES

- FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 16		
PREPARED BY	SHEET NO.	DRAWING NO.
Michael Baker INTERNATIONAL	S56	28870
<small>1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM</small>		

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



NOTES

1. FOR CB CRACK RETROFIT, SEE SHEET NO. S87.
2. FOR CC CRACK RETROFIT, SEE SHEET NO. S88.
3. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.
4. FOR MBI MISSING BOLT RETROFIT, SEE SHEET NO. S91.

REVISION		DATE

DATE: AUGUST 2025	CHECKED BY
DESIGNED BY: L CLARK	M BARON
DETAILED BY: MJ DWYER	M BARON

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
JEFFERSON

ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET
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FATIGUE RETROFIT LAYOUT - 17

PREPARED BY Michael Baker International	SHEET NO. S57
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

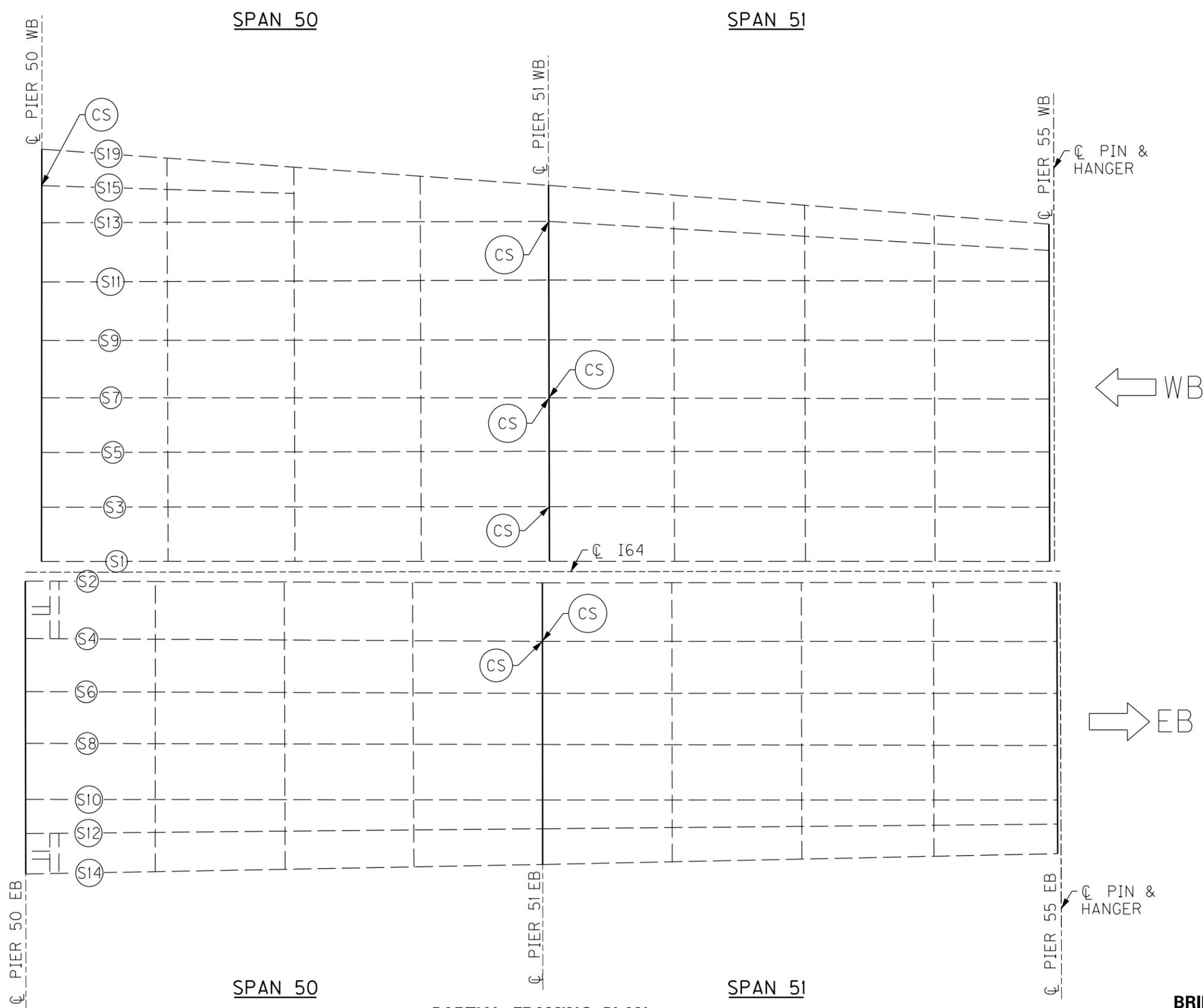
BRIDGE - B293

ITEM NUMBER	5-10016
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13TH TO 7TH ST BRIDGE

PARTIAL FRAMING PLAN

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 1, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



NOTES

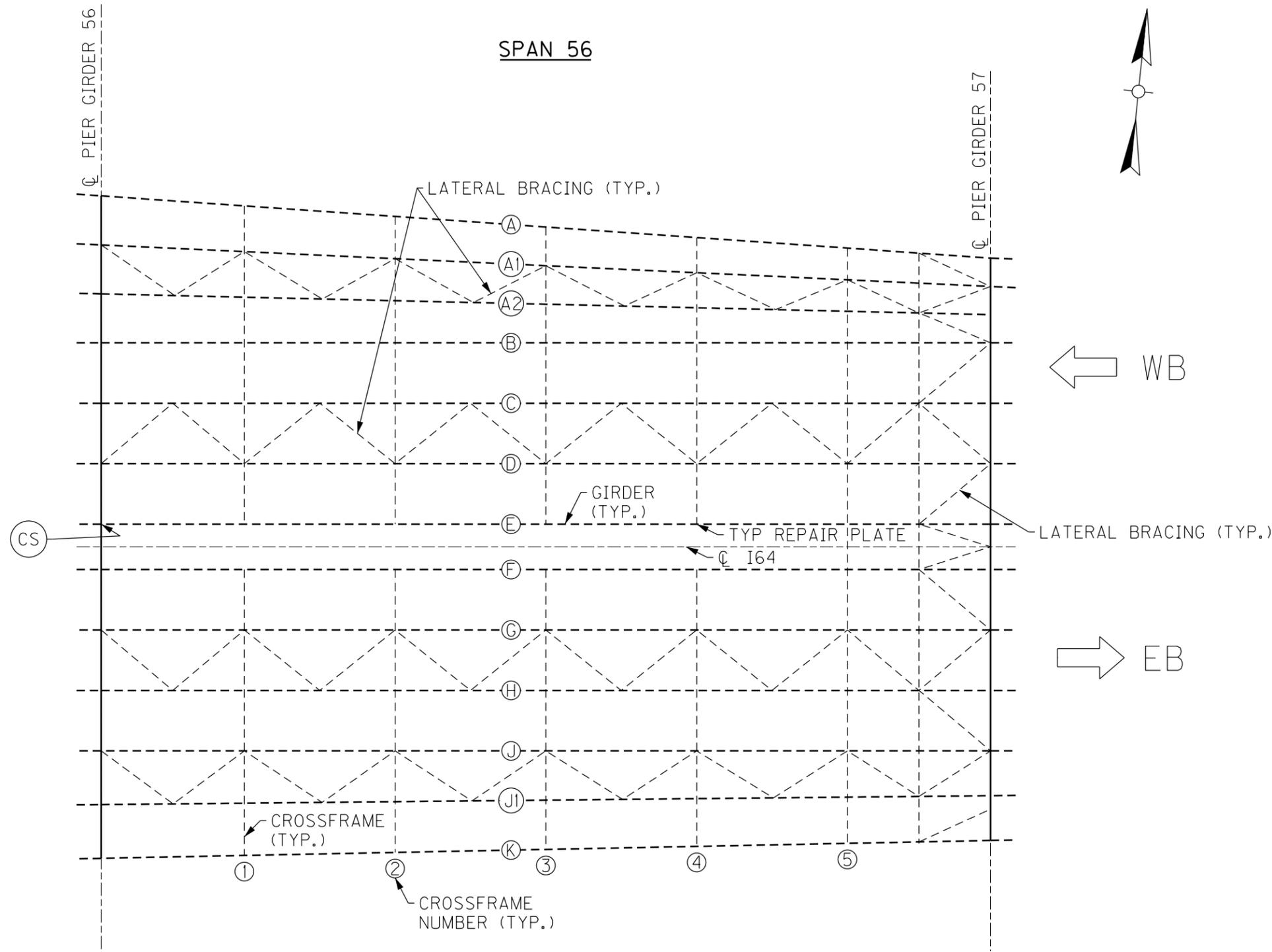
- 1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 18		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	S58
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

BRIDGE - B293

13TH TO 7TH ST BRIDGE

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: MaryJo.Dwyer DATE PLOTTED: December 6, 2023 FATIGUE: I-64 CROSSING: K & I TT RR TO PRESTON STREET PROJECT WISE: WORKINGDIR\MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM\LOCAL\BENTLEY\PROJECT WISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

NOTES
 1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

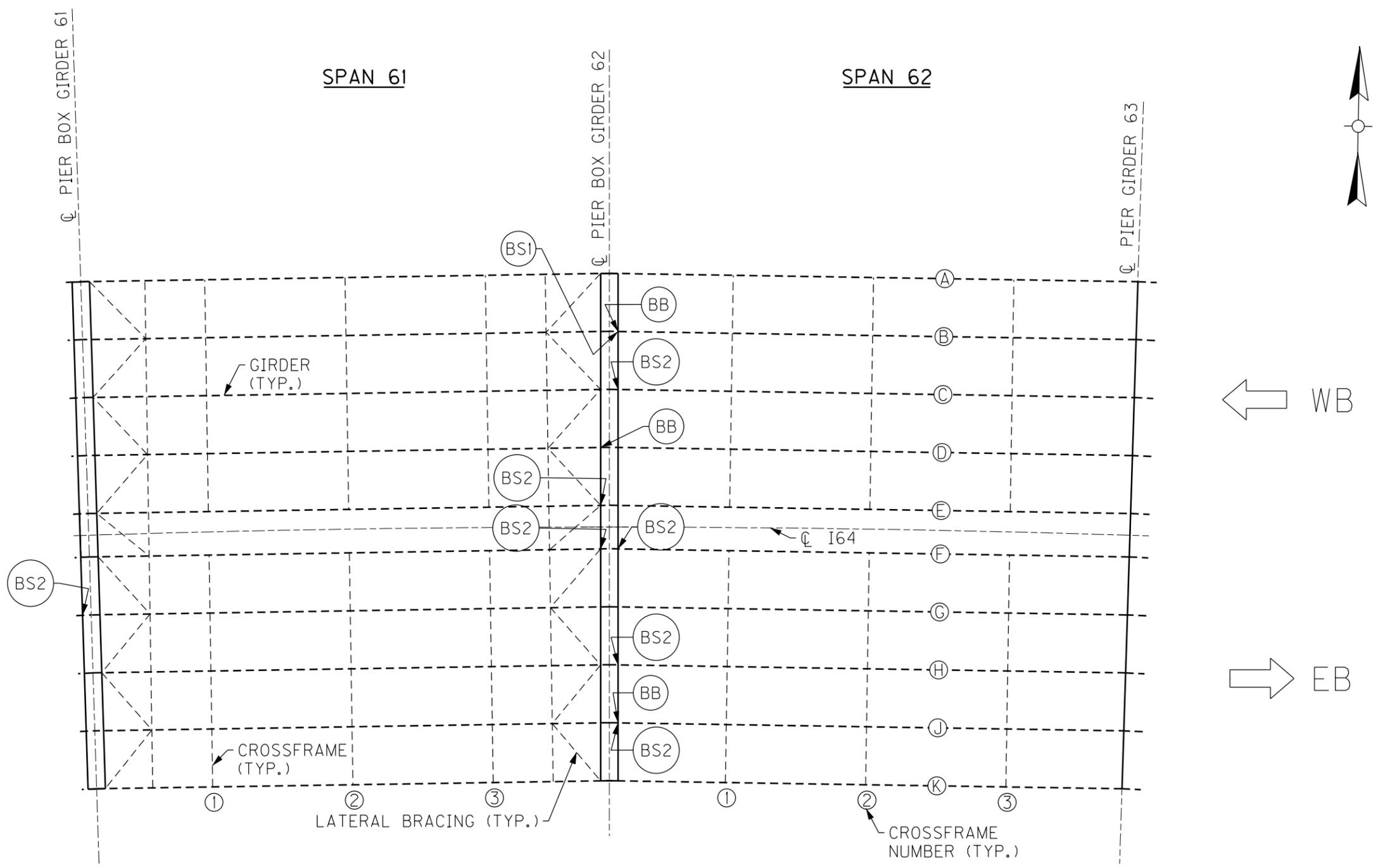
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 19		
PREPARED BY		SHEET NO.
Michael Baker INTERNATIONAL		S59
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

BRIDGE - B292

ITEM NUMBER
5-10016

7TH TO 2ND ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

- NOTES**
- FOR BB CRACK RETROFIT, SEE SHEET NO. S85.
 - FOR BS1 & BS2 CRACK RETROFITS, SEE SHEET NO. S86.

REVISION	DATE

DATE: AUGUST 2025	CHECKED BY
DESIGNED BY: L CLARK	M BARON
DETAILED BY: MJ DWYER	M BARON

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY JEFFERSON	
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET
FATIGUE RETROFIT LAYOUT - 20	

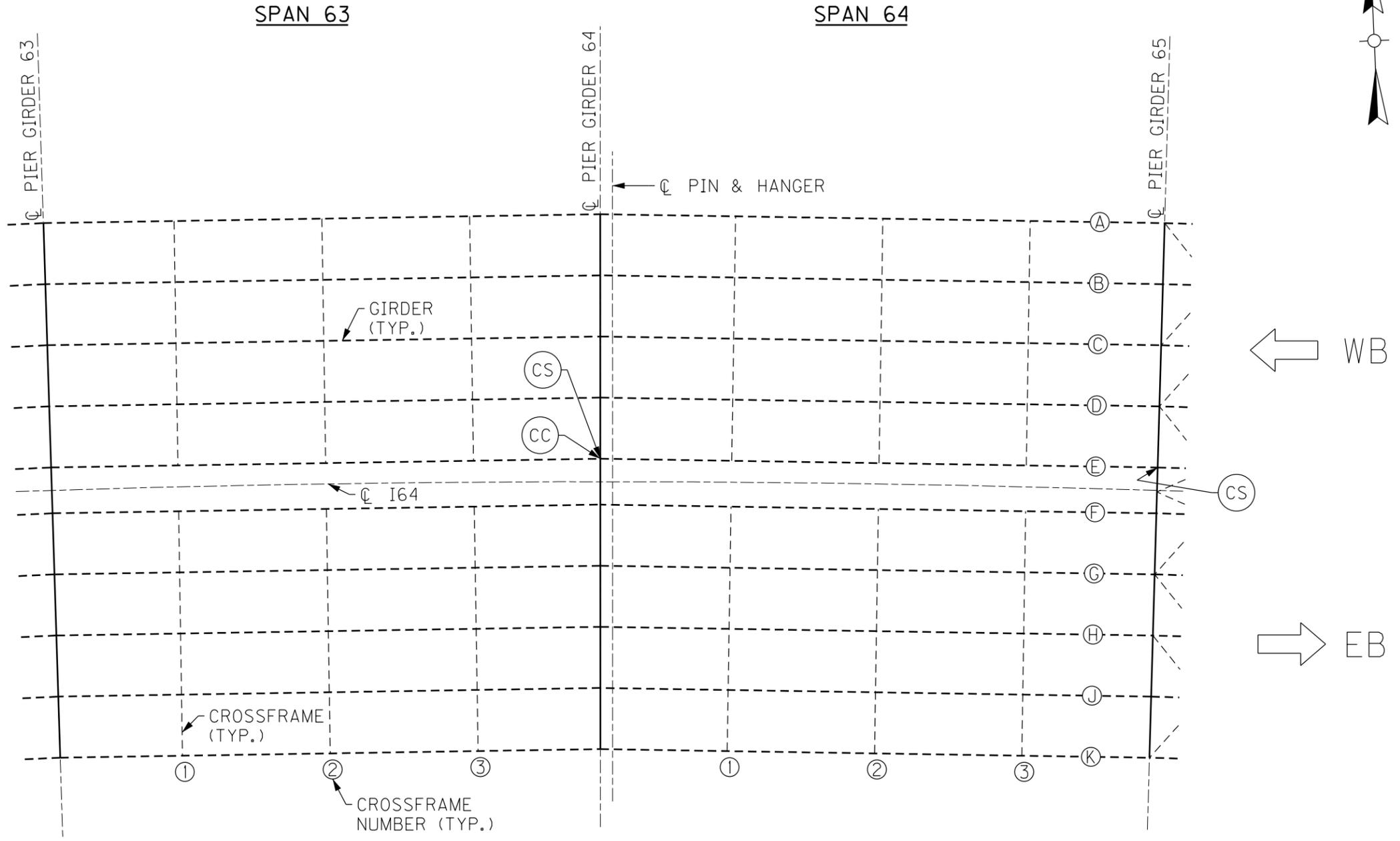
BRIDGE - B292

ITEM NUMBER	5-10016
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7TH TO 2ND ST BRIDGE

PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S60
DRAWING NO. 28870		

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

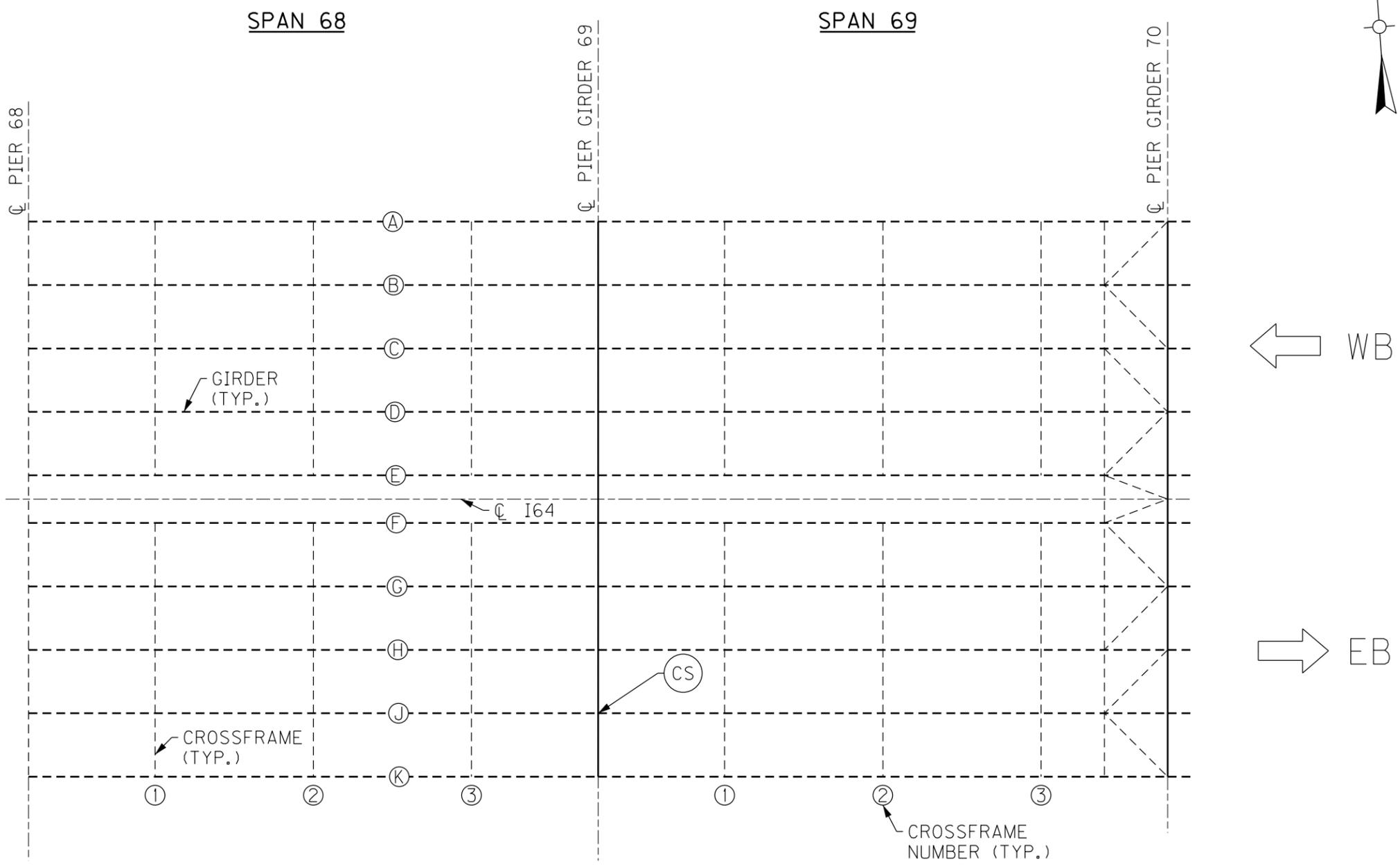
1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.
2. FOR CC CRACK RETROFIT, SEE SHEET NO. S88.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 21		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S61
ITEM NUMBER	DRAWING NO.	
5-10016	28870	

BRIDGE - B292

7TH TO 2ND ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

7TH TO 2ND ST BRIDGE

BRIDGE - B292

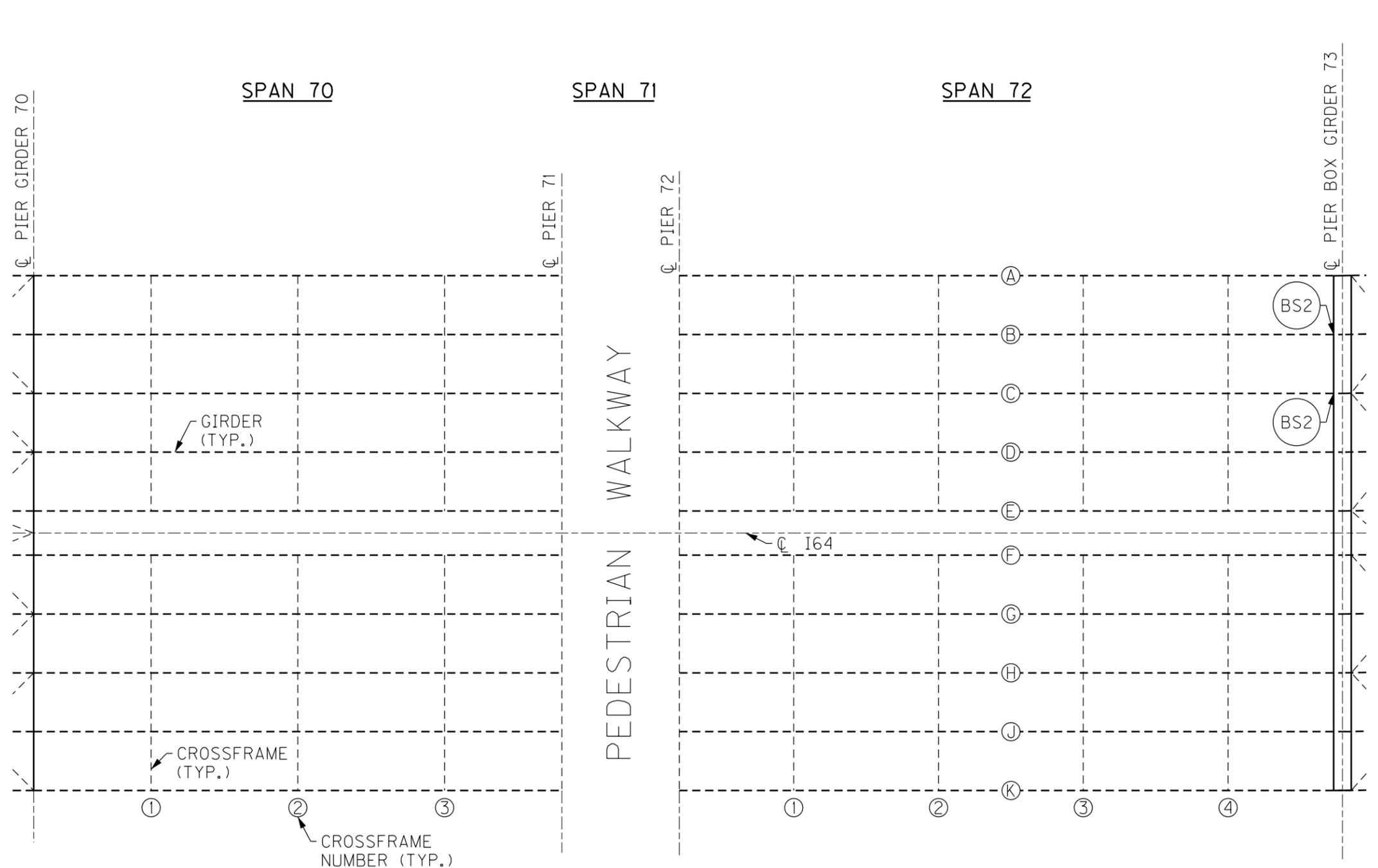
ITEM NUMBER	5-10016
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NOTES

- 1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 23		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S63
	DRAWING NO.	28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- 1. FOR BS2 CRACK RETROFIT, SEE SHEET NO. S86.

REVISION	DATE

DATE: AUGUST 2025
 DESIGNED BY: L CLARK
 CHECKED BY: M BARON
 DETAILED BY: MJ DWYER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY
JEFFERSON

ROUTE **I-64** CROSSING **K & I TT RR TO PRESTON STREET**
FATIGUE RETROFIT LAYOUT - 24

BRIDGE - B292

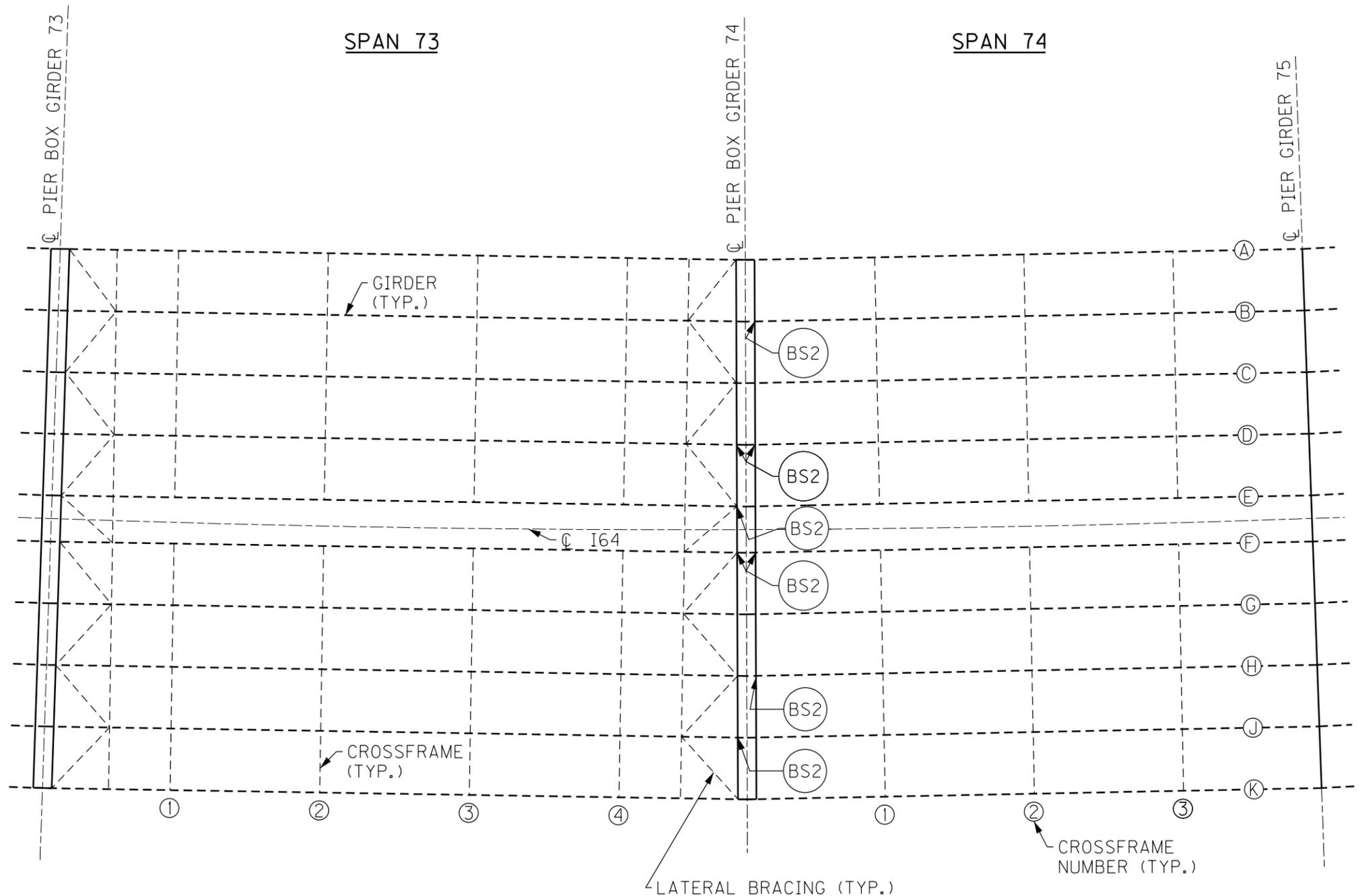
ITEM NUMBER	5-10016
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PREPARED BY
Michael Baker International
 1650 Lyndon Farm Court
 Louisville, KY 40223
 Phone: (502) 339-3557
 MBAKERINTL.COM

SHEET NO.
S64
 DRAWING NO.
28870

7TH TO 2ND ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- FOR BS2 CRACK RETROFIT, SEE SHEET NO. S86.

REVISION	DATE

DATE: AUGUST 2025
 DESIGNED BY: L CLARK
 CHECKED BY: M BARON
 DETAILED BY: MJ DWYER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY: **JEFFERSON**
 ROUTE: **I-64** CROSSING: **K & I TT RR TO PRESTON STREET**

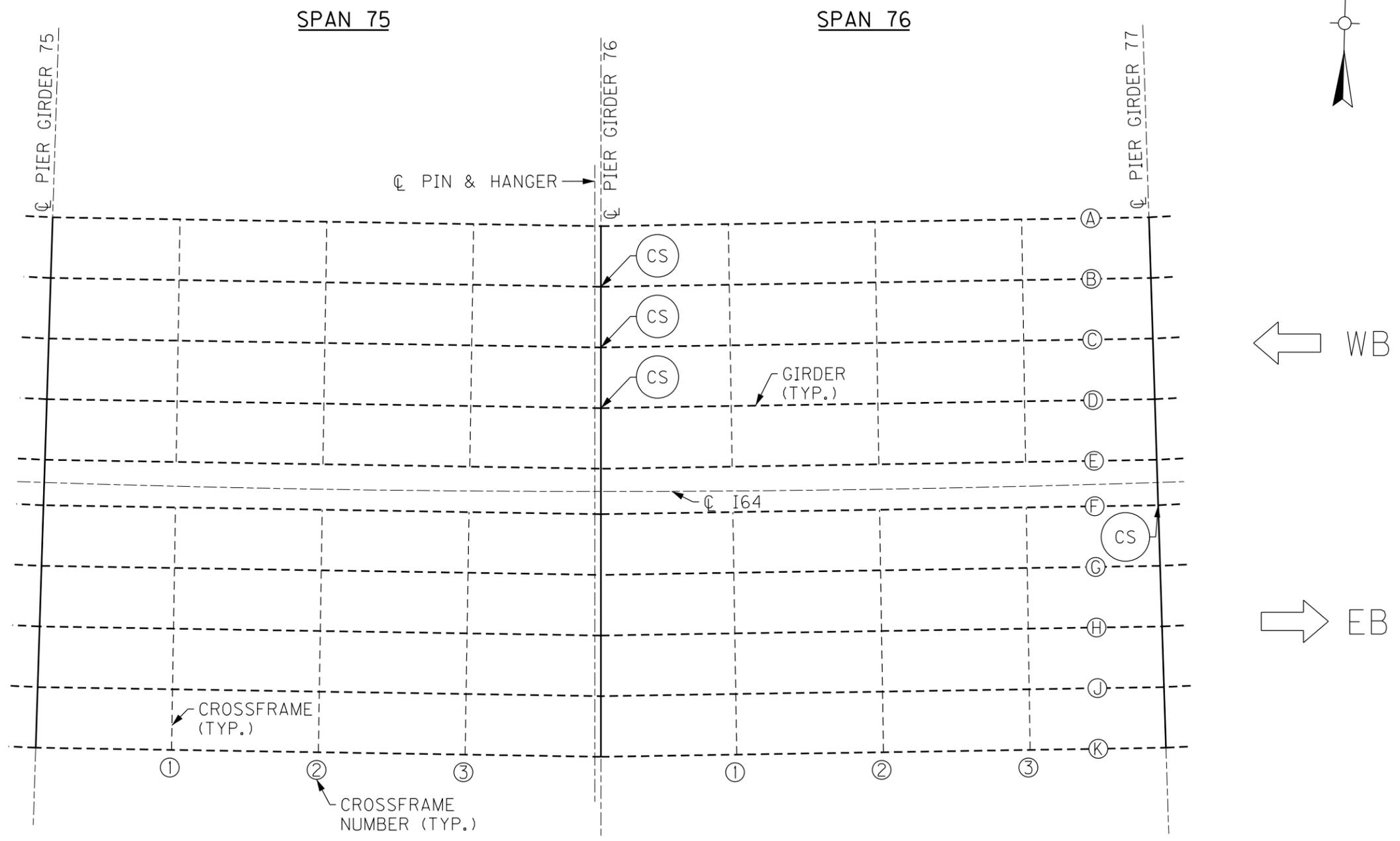
FATIGUE RETROFIT LAYOUT - 25
 PREPARED BY: **Michael Baker International**
 SHEET NO.: **S65**
 DRAWING NO.: **28870**

BRIDGE - B292

ITEM NUMBER	5-10016
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7TH TO 2ND ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- 1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
JEFFERSON

ROUTE **I-64** CROSSING **K & I TT RR TO PRESTON STREET**

FATIGUE RETROFIT LAYOUT - 26

BRIDGE - B292

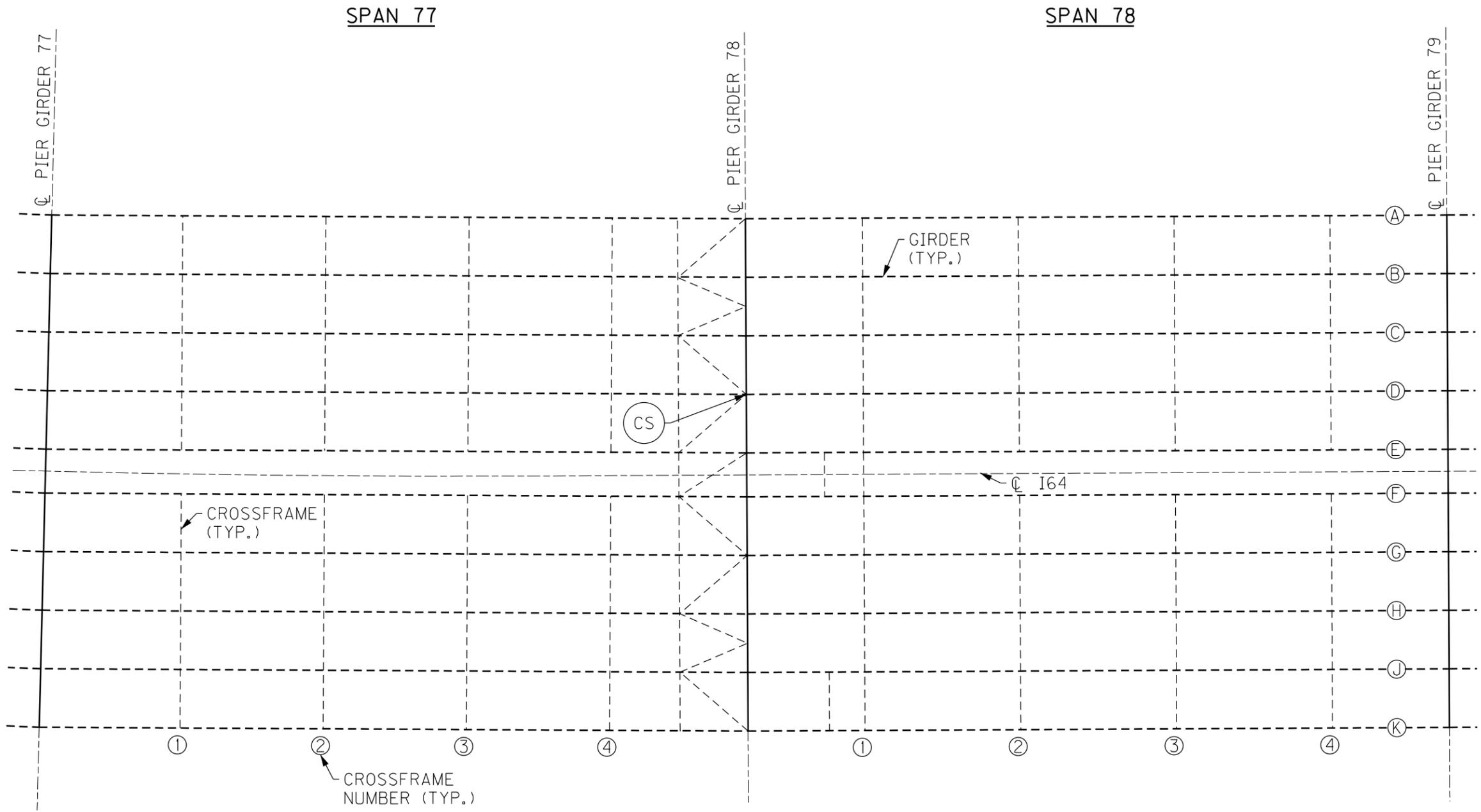
ITEM NUMBER	5-10016
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7TH TO 2ND ST BRIDGE

PREPARED BY
Michael Baker International
 1650 Lyndon Farm Court
 Louisville, KY 40223
 Phone: (502) 339-3557
 M.BAKERINTL.COM

SHEET NO.
S66
 DRAWING NO.
28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



← WB

→ EB

NOTES

- FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

PARTIAL FRAMING PLAN

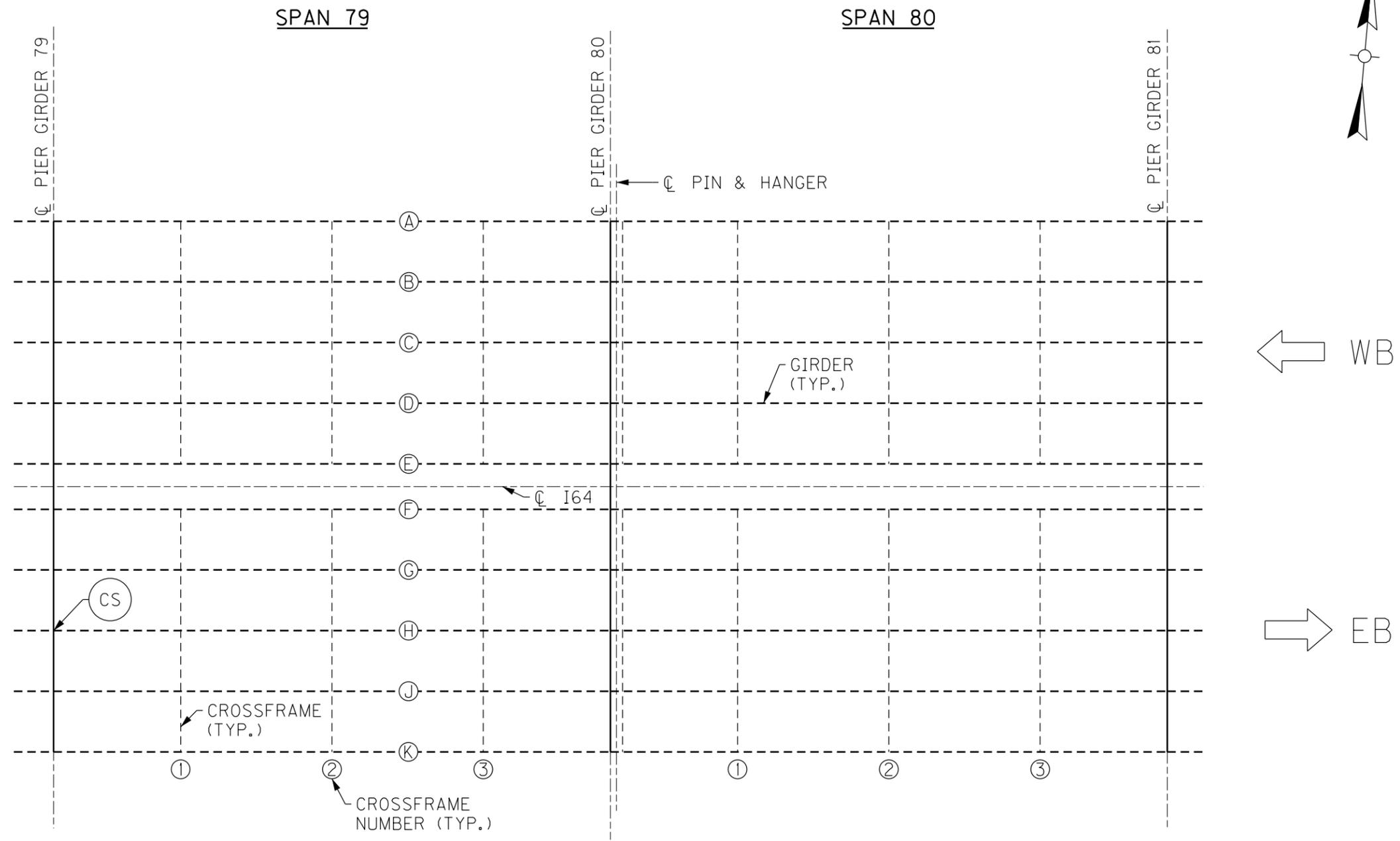
BRIDGE - B292

7TH TO 2ND ST BRIDGE

ITEM NUMBER	5-10016
-------------	---------

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 27		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S67 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- 1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

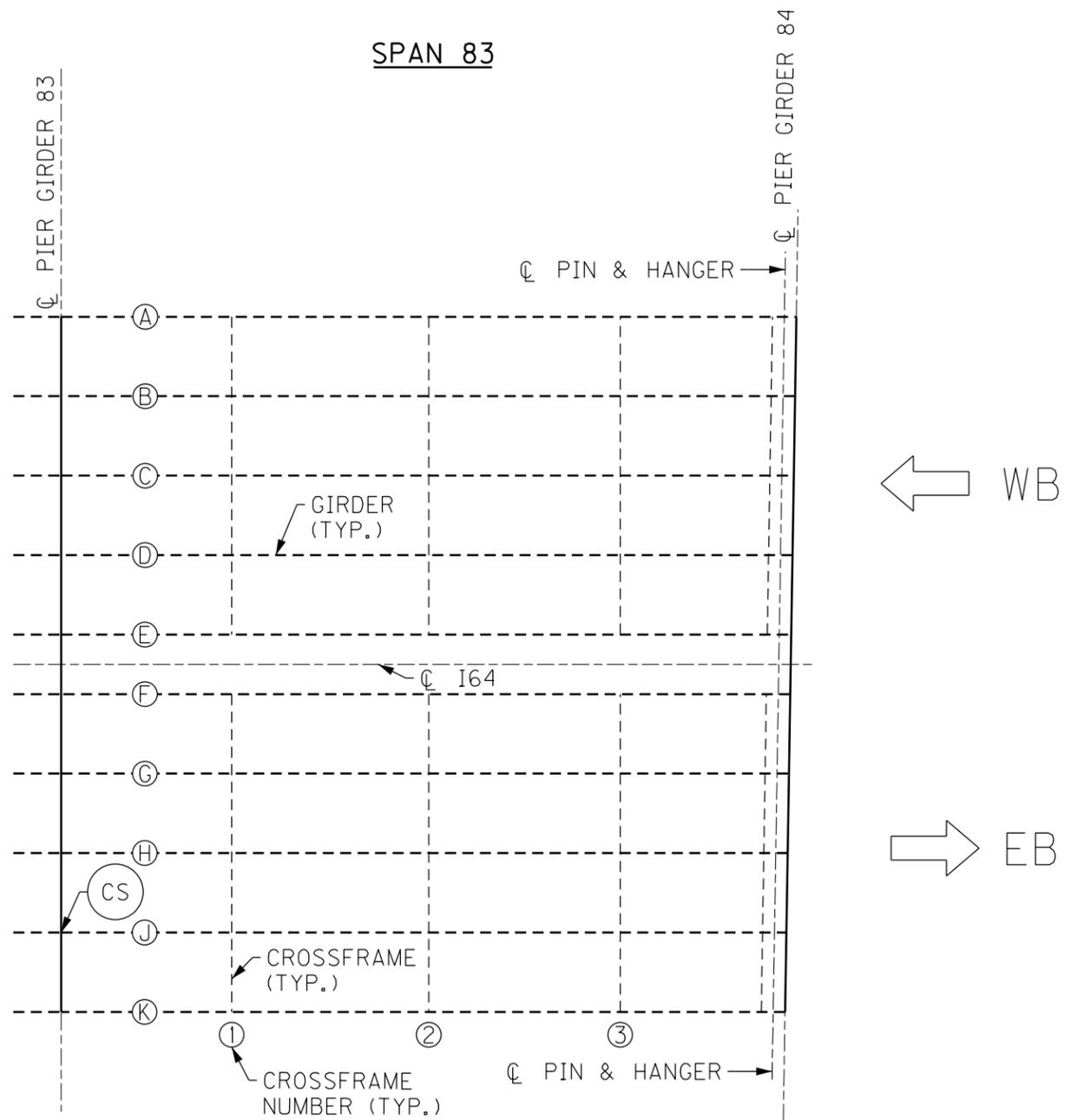
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 28		
PREPARED BY	SHEET NO.	DRAWING NO.
Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S68	28870

BRIDGE - B292

ITEM NUMBER
5-10016

7TH TO 2ND ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

7TH TO 2ND ST BRIDGE

BRIDGE - B292

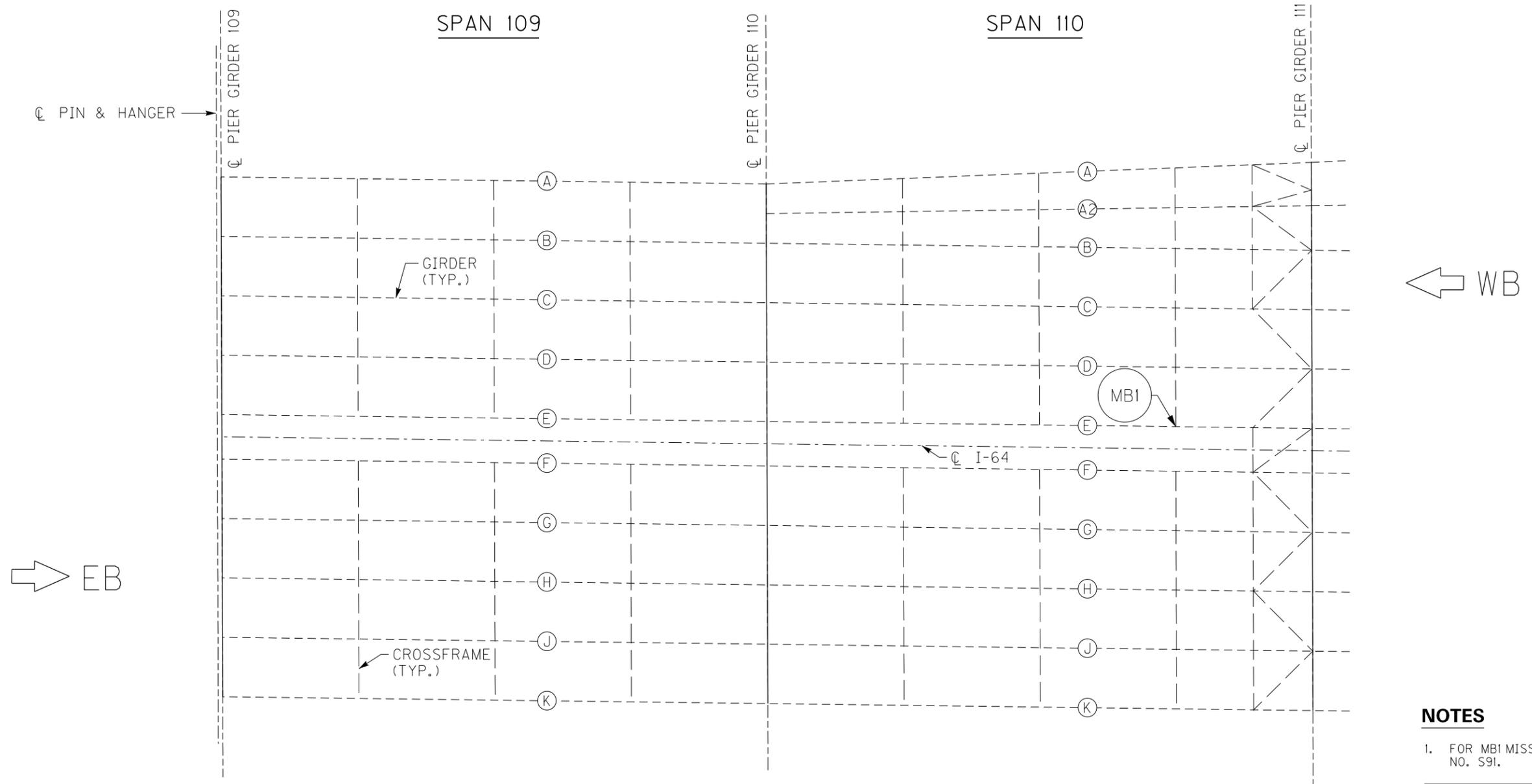
ITEM NUMBER	5-10016
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NOTES

- FOR CS CRACK RETROFIT, SEE SHEET NO. S87.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 29		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S69 DRAWING NO. 28870

FILE NAME: C:\USERS\MARYUO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYUO.DWYER\MBAKERINTL.COM
 USER: MaryUo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- 1. FOR MB1 MISSING BOLT RETROFIT, SEE SHEET NO. S91.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 30		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S70
ITEM NUMBER	DRAWING NO.	
5-10016	28870	

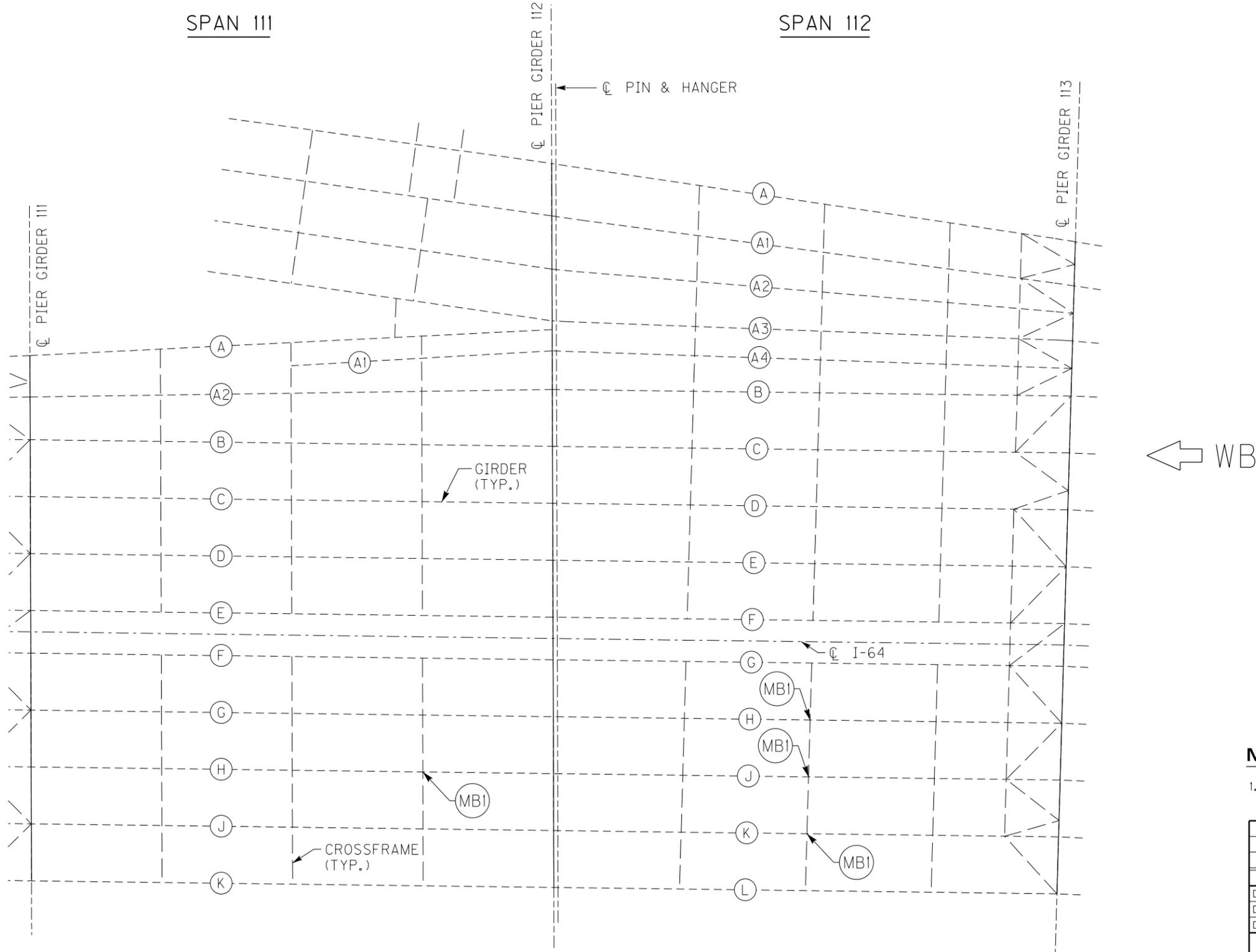
BRIDGE - B142

3RD TO PRESTON ST BRIDGE

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: December 6, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



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PARTIAL FRAMING PLAN

NOTES

- 1. FOR MB1 MISSING BOLT RETROFIT, SEE SHEET NO. S91.

REVISION		DATE

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
JEFFERSON

ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET
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FATIGUE RETROFIT LAYOUT - 31

BRIDGE - B142

ITEM NUMBER	5-10016
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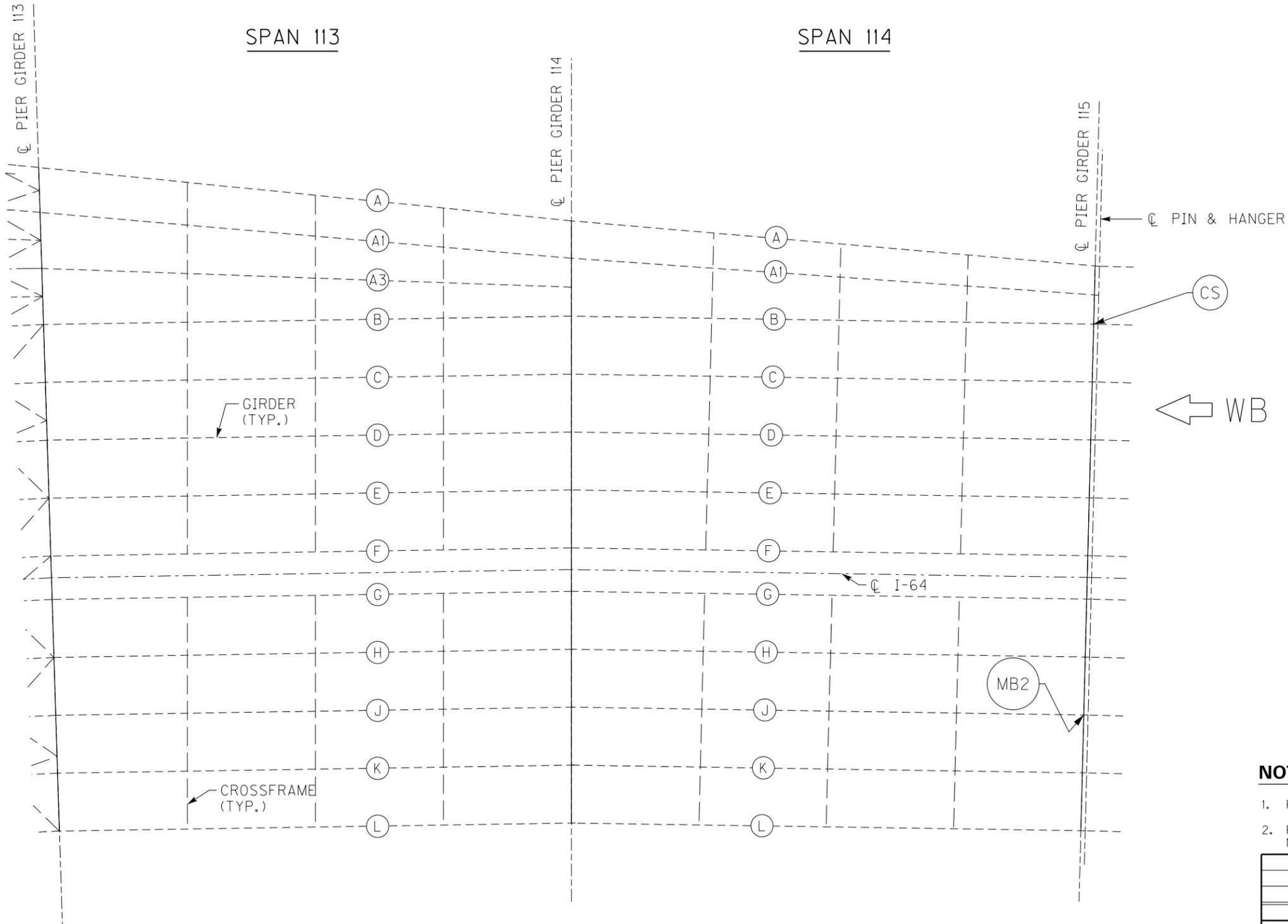
3RD TO PRESTON ST BRIDGE

PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S71
DRAWING NO. 28870		

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'yo.Dwyer DATE PLOTTED: December 6, 2023 FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM



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PARTIAL FRAMING PLAN

NOTES

1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.
2. FOR MB2 MISSING BOLT RETROFIT, SEE SHEET NO. S91.

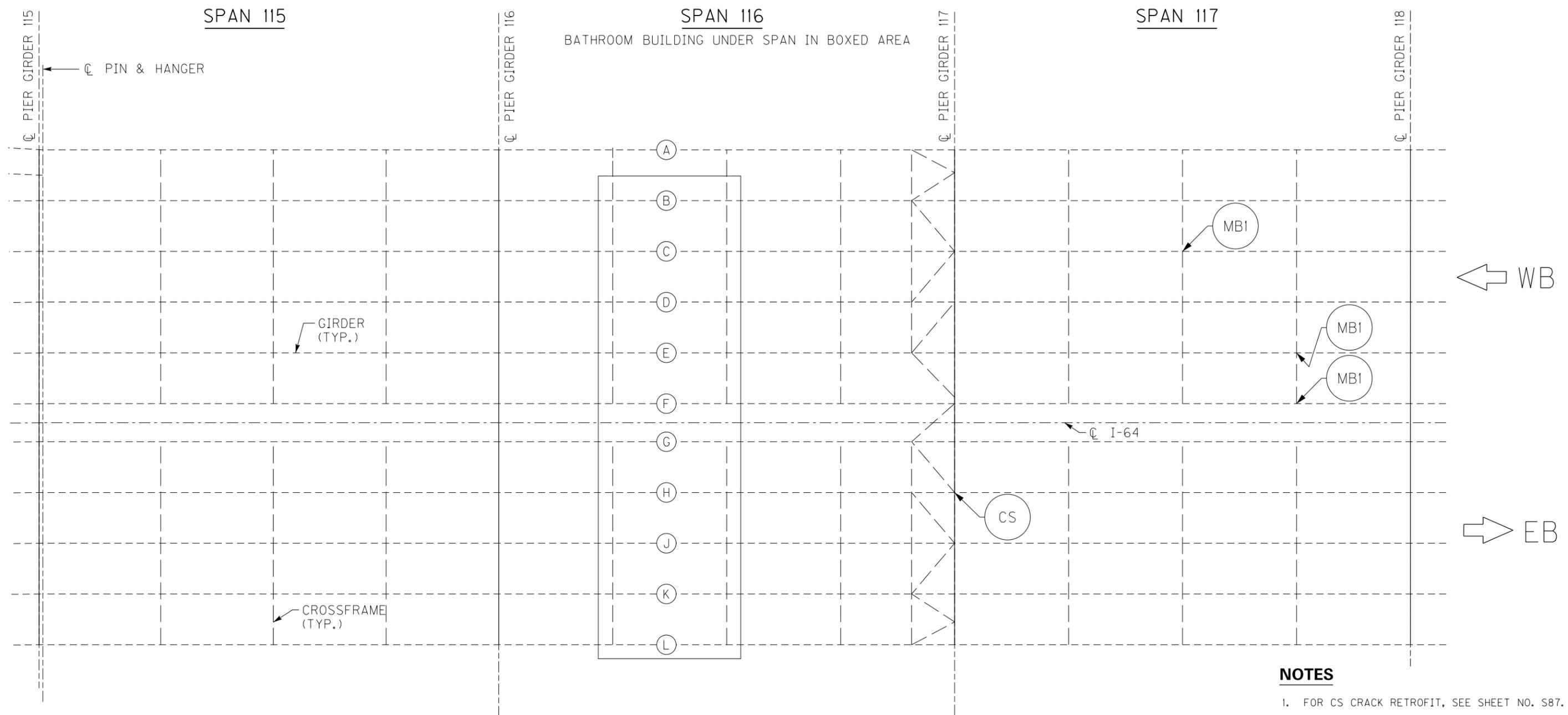
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 32		
PREPARED BY	SHEET NO.	
Michael Baker International	S72	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO.	
	28870	

BRIDGE - B142

ITEM NUMBER
5-10016

3RD TO PRESTON ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.
2. FOR MBI MISSING BOLT RETROFIT, SEE SHEET NO. S91.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 33		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S73
	DRAWING NO.	28870

BRIDGE - B142

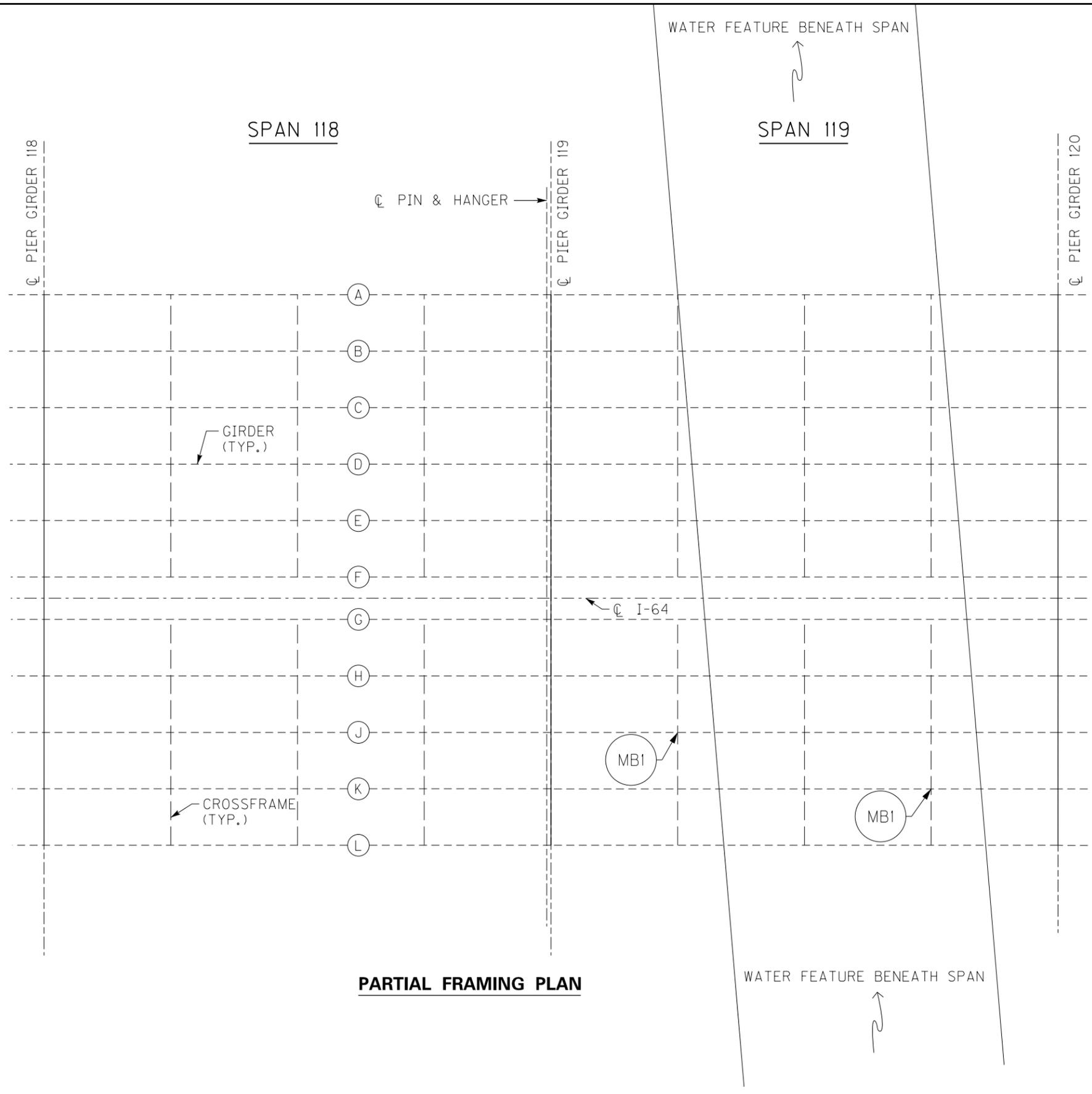
ITEM NUMBER	
	5-10016

3RD TO PRESTON ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



➔ EB



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PARTIAL FRAMING PLAN

BRIDGE - B142

3RD TO PRESTON ST BRIDGE

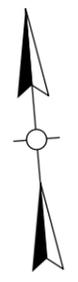
ITEM NUMBER	5-10016
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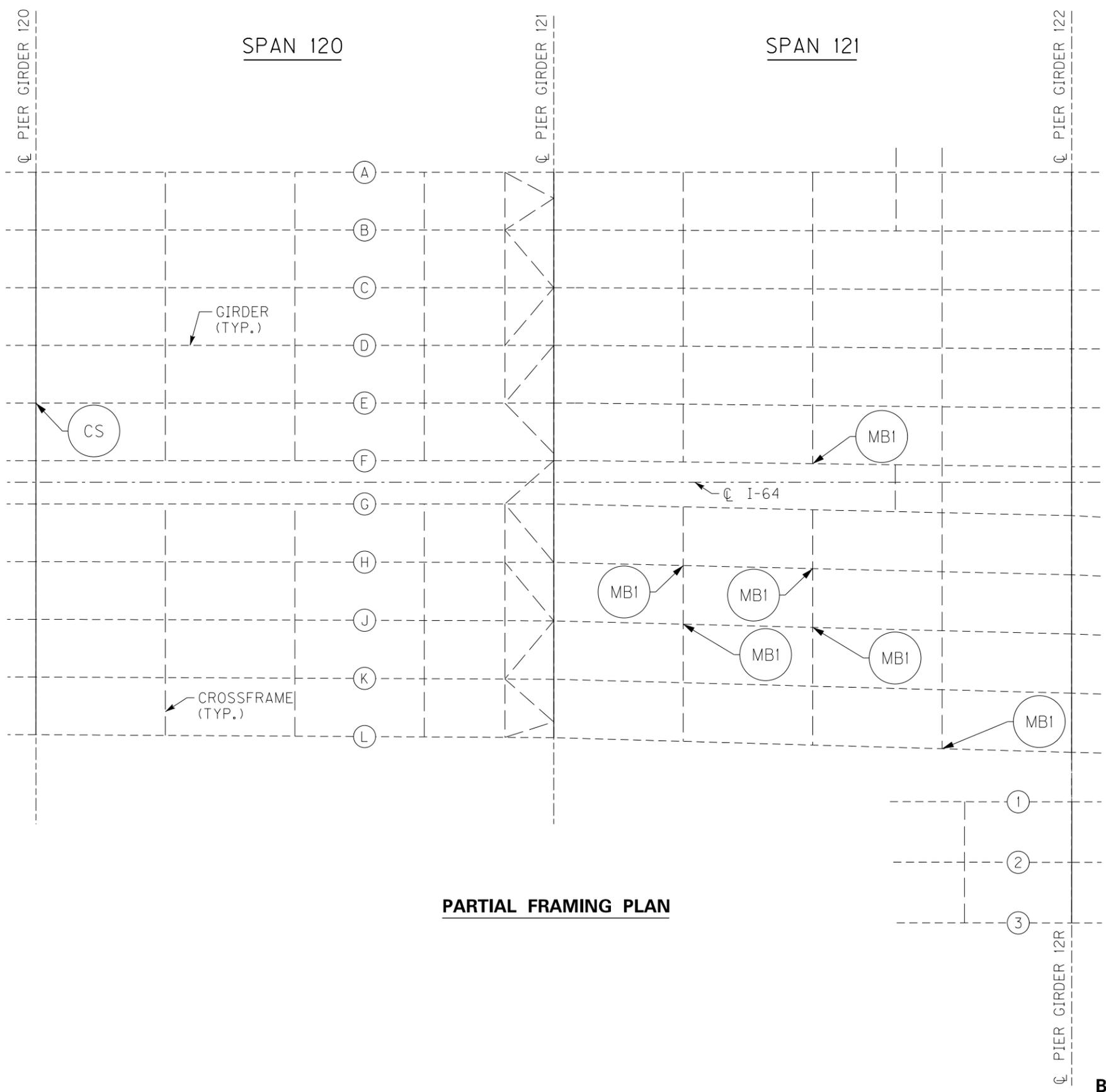
- FOR MBI MISSING BOLT RETROFIT, SEE SHEET NO. S91.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 34		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S74 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



➔ EB



PARTIAL FRAMING PLAN

BRIDGE - B142

3RD TO PRESTON ST BRIDGE

ITEM NUMBER	5-10016
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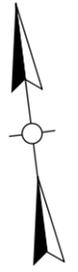
← WB

NOTES

- FOR CS CRACK RETROFIT, SEE SHEET NO. S87.
- FOR MB1 MISSING BOLT RETROFIT, SEE SHEET NO. S91.

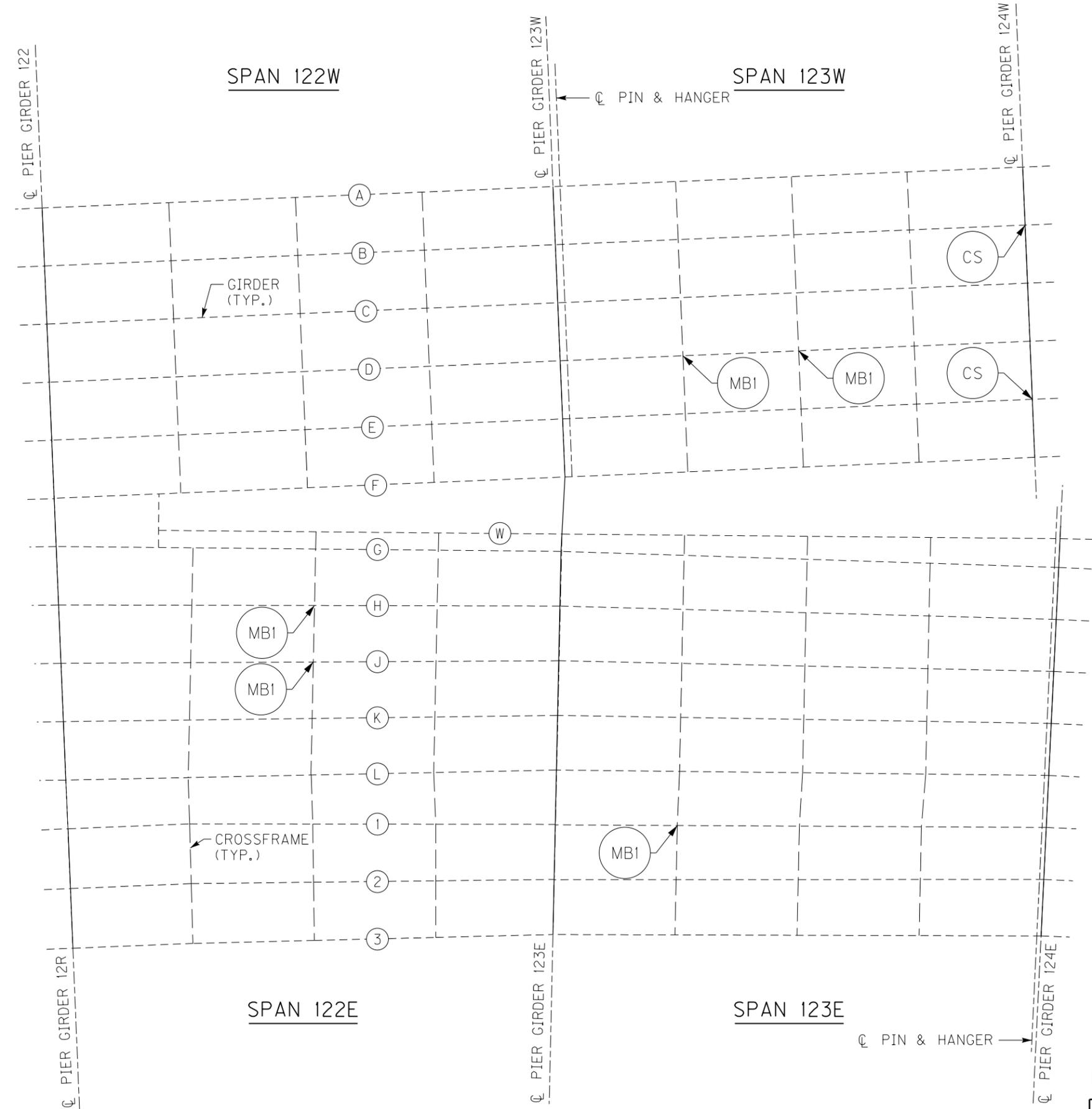
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 35		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S75 DRAWING NO. 28870

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: MaryJo.Dwyer DATE PLOTTED: December 6, 2023 FILE NAME: C:\USERS\MARYJO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM



➔ EB

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PARTIAL FRAMING PLAN

3RD TO PRESTON ST BRIDGE

NOTES

1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.
2. FOR MB1 MISSING BOLT RETROFIT, SEE SHEET NO. S91.

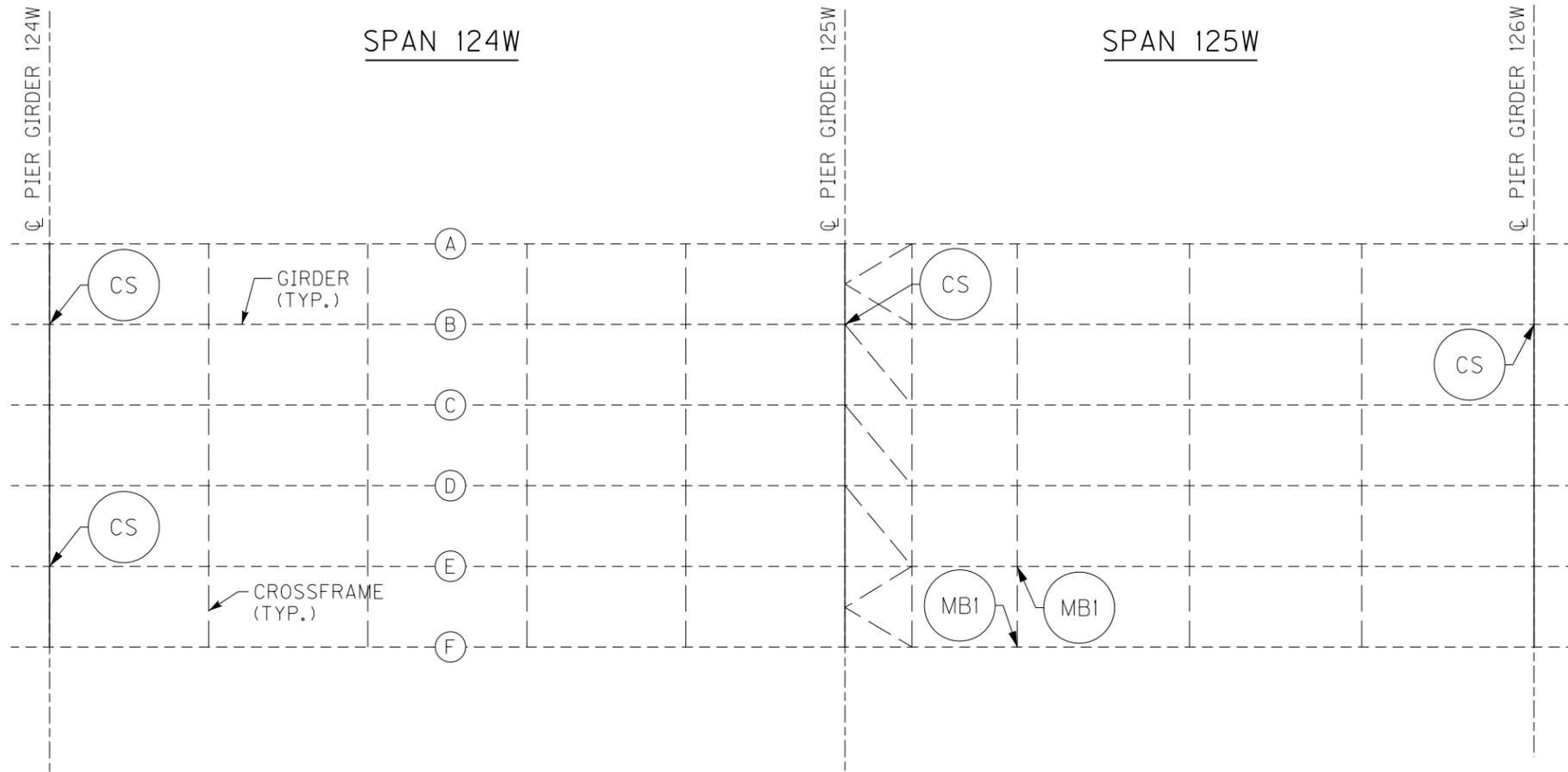
BRIDGE - B142

ITEM NUMBER	5-10016
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REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 36		
PREPARED BY Michael Baker International	SHEET NO. S76	DRAWING NO. 28870

1650 Lyndon Farm Court
Louisville, KY 40223
Phone: (502) 339-3557
MBAKERINTL.COM

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: Mar'ylo.Dwyer DATE PLOTTED: December 6, 2023 FILE NAME: C:\USERS\MARYLO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM\MB-US-PW-03\MARYLO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

3RD TO PRESTON ST BRIDGE

BRIDGE - B142

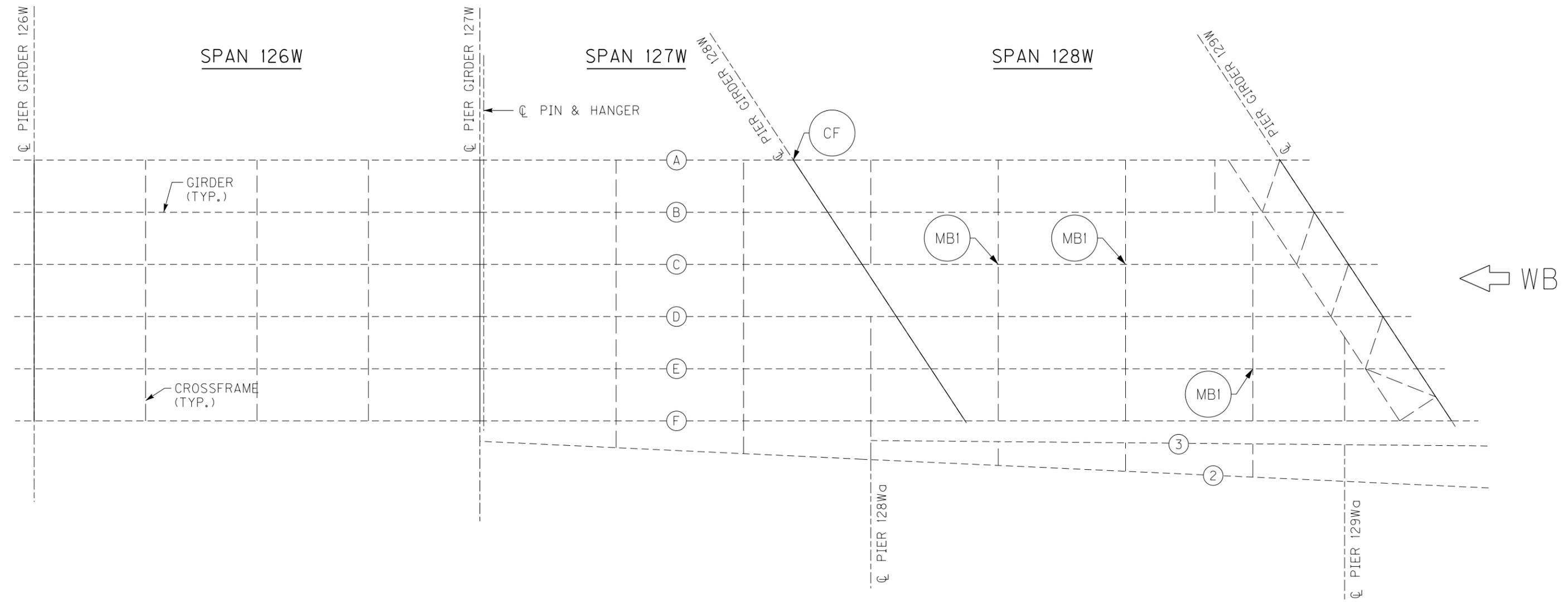
ITEM NUMBER	5-10016
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NOTES

1. FOR CS CRACK RETROFIT, SEE SHEET NO. S87.
2. FOR MB1 MISSING BOLT RETROFIT, SEE SHEET NO. S91.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 37		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S77 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

1. FOR CF CRACK RETROFIT, SEE SHEET NO. S88.
2. FOR MBI MISSING BOLT RETROFIT, SEE SHEET NO. S91.

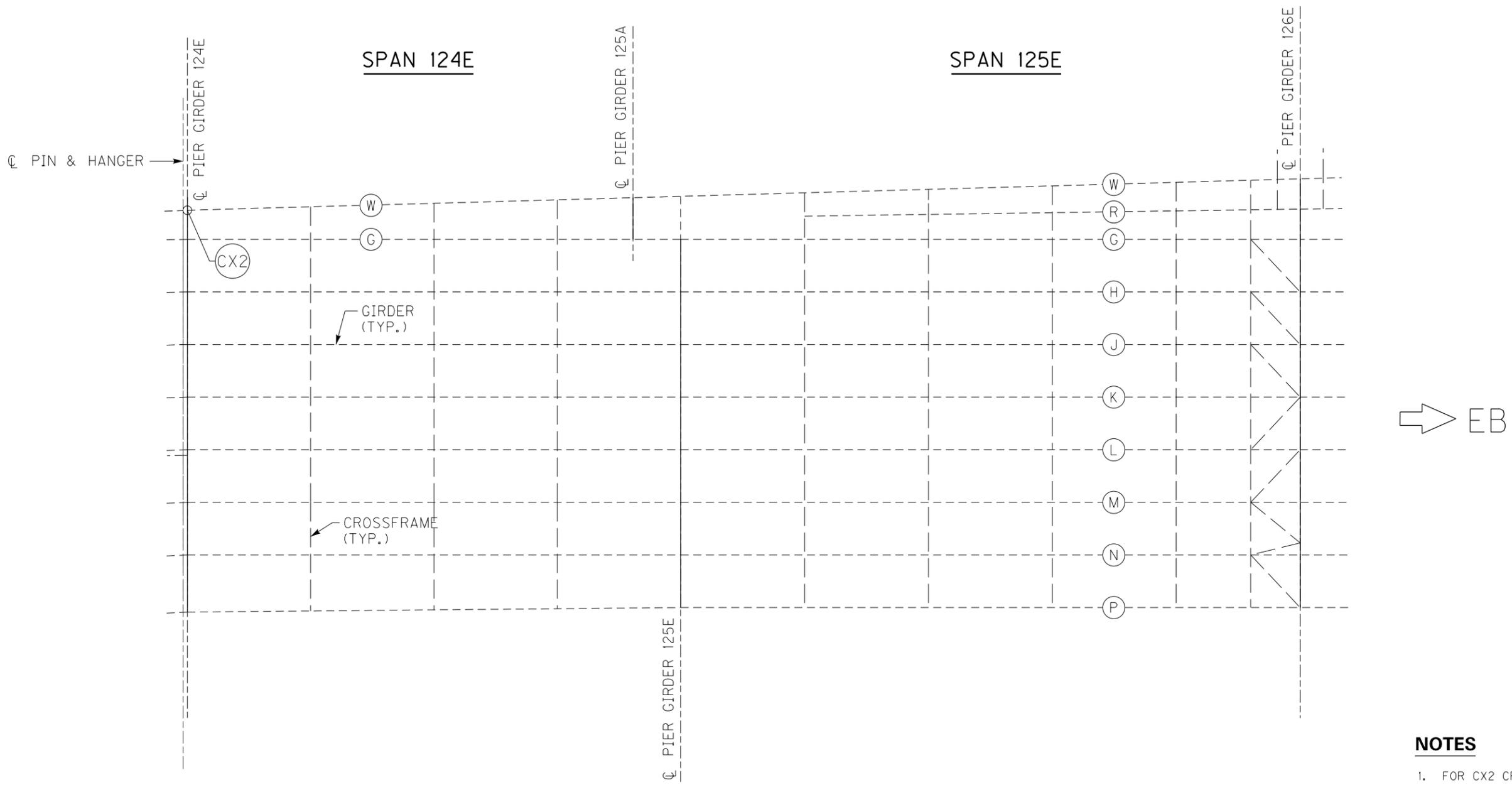
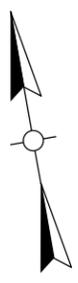
BRIDGE - B142

ITEM NUMBER	5-10016
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3RD TO PRESTON ST BRIDGE

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 38		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S78 DRAWING NO. 28870

MicroStation v10.17.01.58 E-SHEET NAME: S23464 020 USER: MaryJo.Dwyer DATE PLOTTED: December 6, 2023 FILE NAME: C:\USERS\MARYJO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARYJO.DWYER\MBAKERINTL.COM



PARTIAL FRAMING PLAN

NOTES

- 1. FOR CX2 CRACK RETROFIT, SEE SHEET NO. S88.

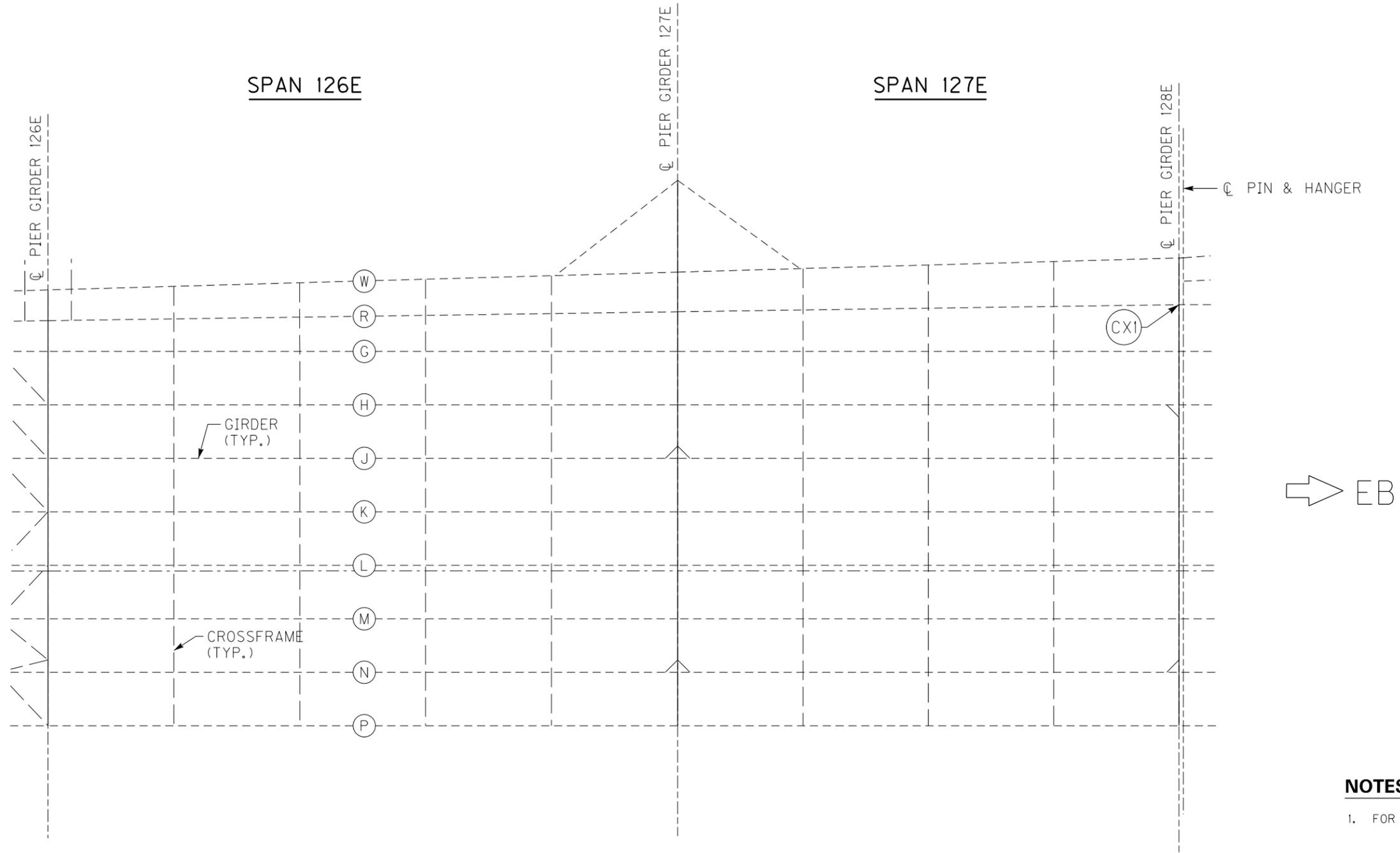
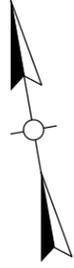
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 39		
PREPARED BY Michael Baker International		SHEET NO. S79
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

BRIDGE - B142

ITEM NUMBER
5-10016

3RD TO PRESTON ST BRIDGE

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- 1. FOR CXI CRACK RETROFIT, SEE SHEET NO. S88.

REVISION		DATE

DATE: AUGUST 2025 CHECKED BY

DESIGNED BY: L CLARK M BARON

DETAILED BY: MJ DWYER M BARON

**Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS**

COUNTY
JEFFERSON

ROUTE **I-64** CROSSING **K & I TT RR TO PRESTON STREET**

FATIGUE RETROFIT LAYOUT - 40

BRIDGE - B142

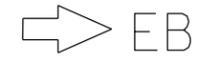
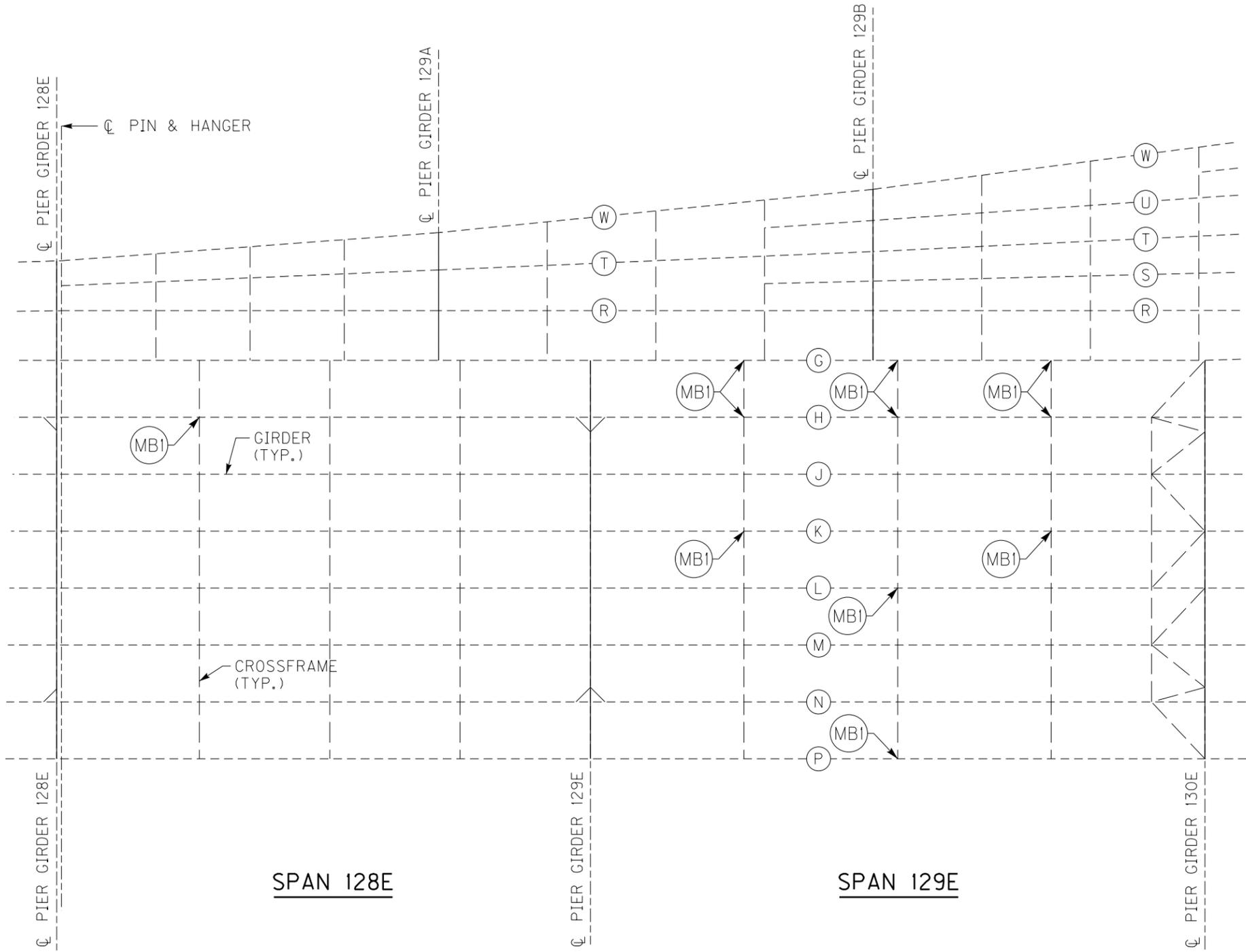
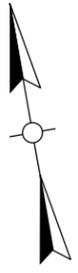
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	S80

3RD TO PRESTON ST BRIDGE

1650 Lyndon Farm Court
Louisville, KY 40223
Phone: (502) 339-3557
MBAKERINTL.COM

DRAWING NO.
28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- 1. FOR MISSING BOLT RETROFIT, SEE SHEET NO. S91.

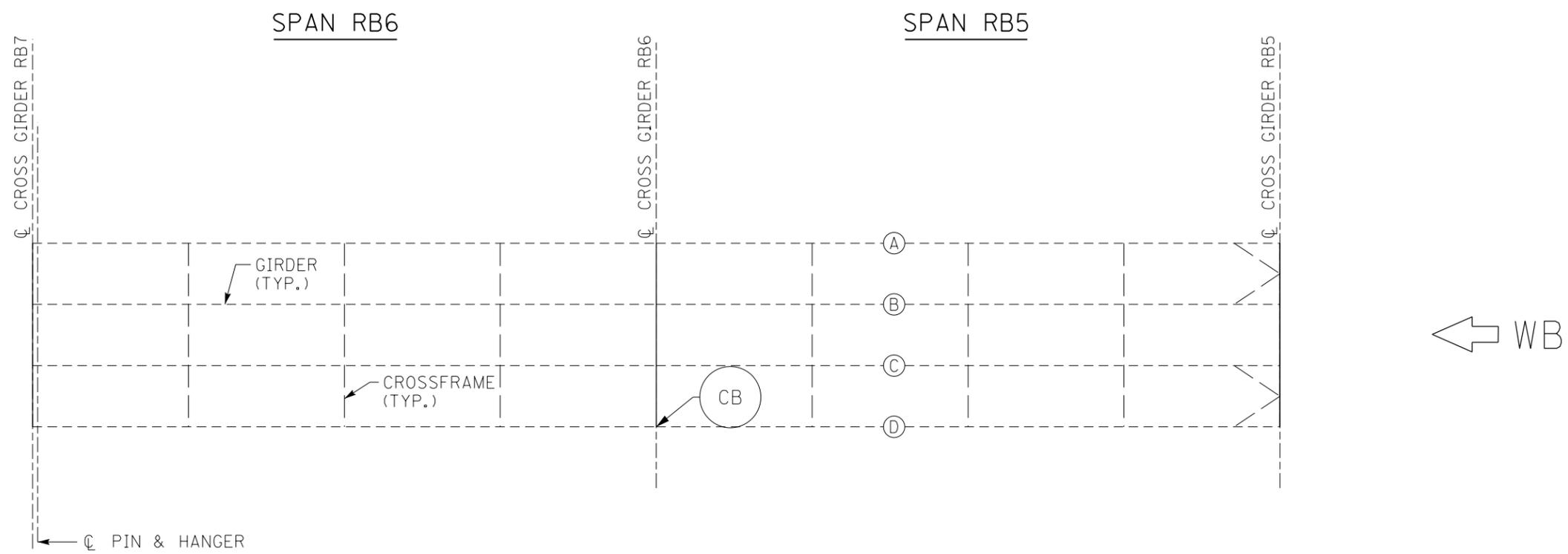
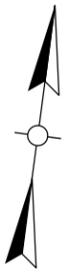
BRIDGE - B142

ITEM NUMBER	5-10016
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3RD TO PRESTON ST BRIDGE

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 41		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S81 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.JO.DWYER@MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

NOTES

- 1. FOR CB CRACK RETROFIT, SEE SHEET NO. S87.

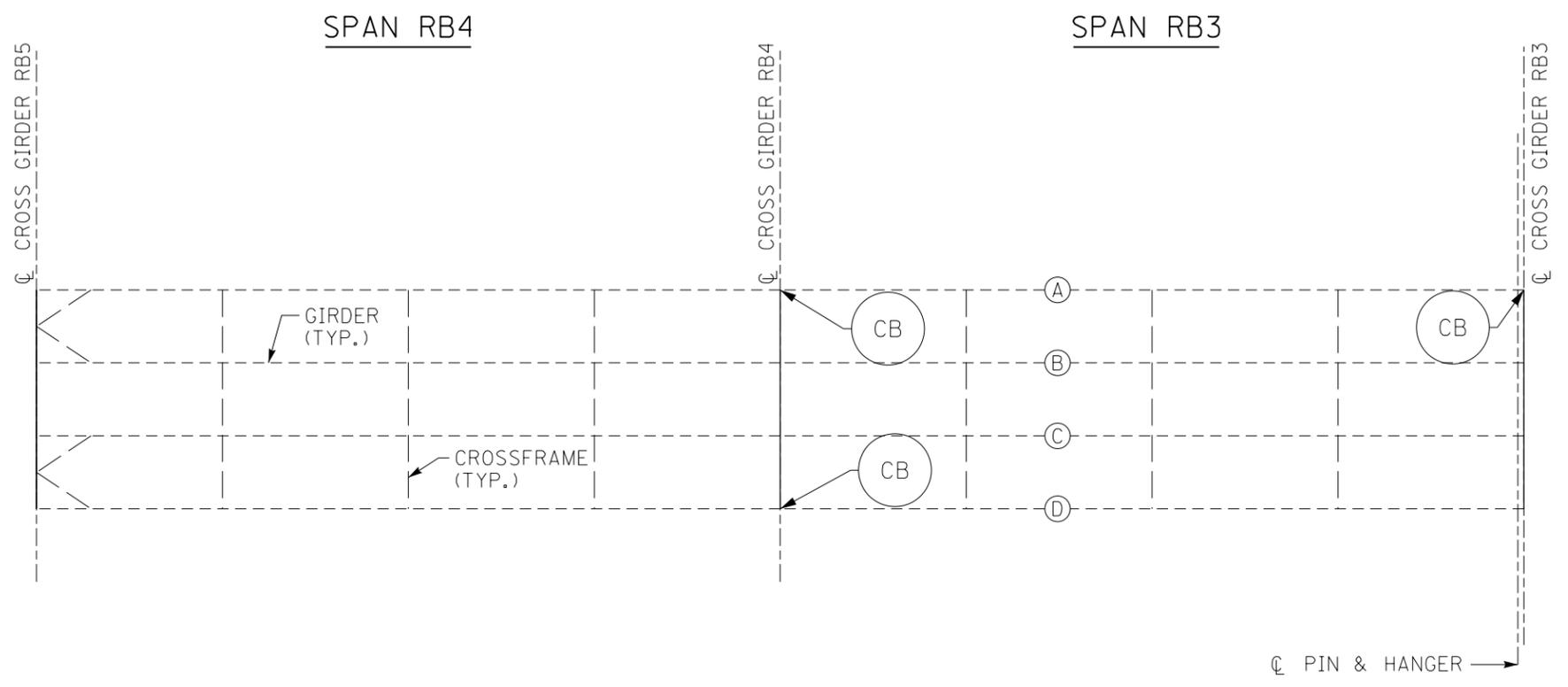
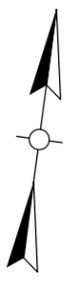
BRIDGE - B142

ITEM NUMBER	5-10016
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3RD TO PRESTON ST BRIDGE

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 42		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S82 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: December 6, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PARTIAL FRAMING PLAN

3RD TO PRESTON ST BRIDGE

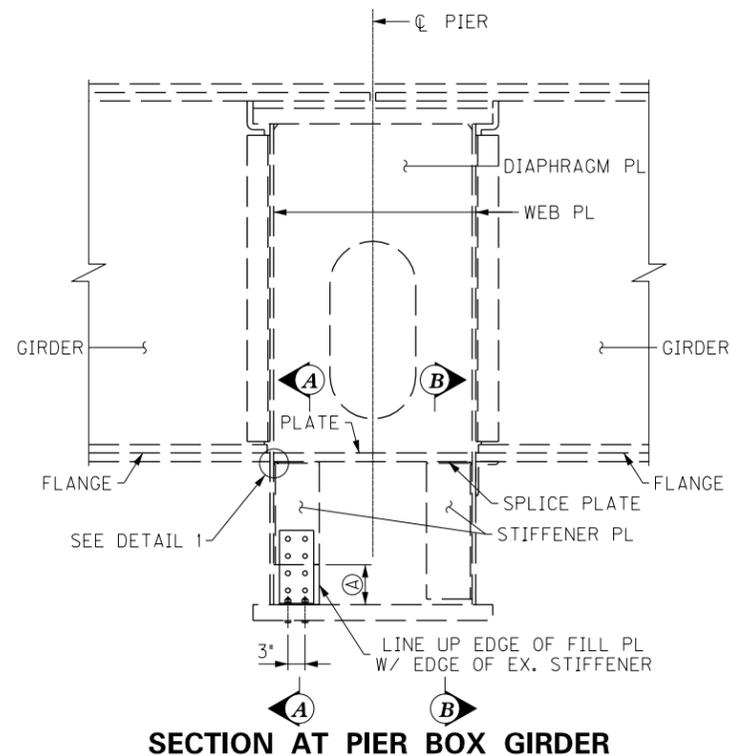
BRIDGE - B142

ITEM NUMBER	5-10016
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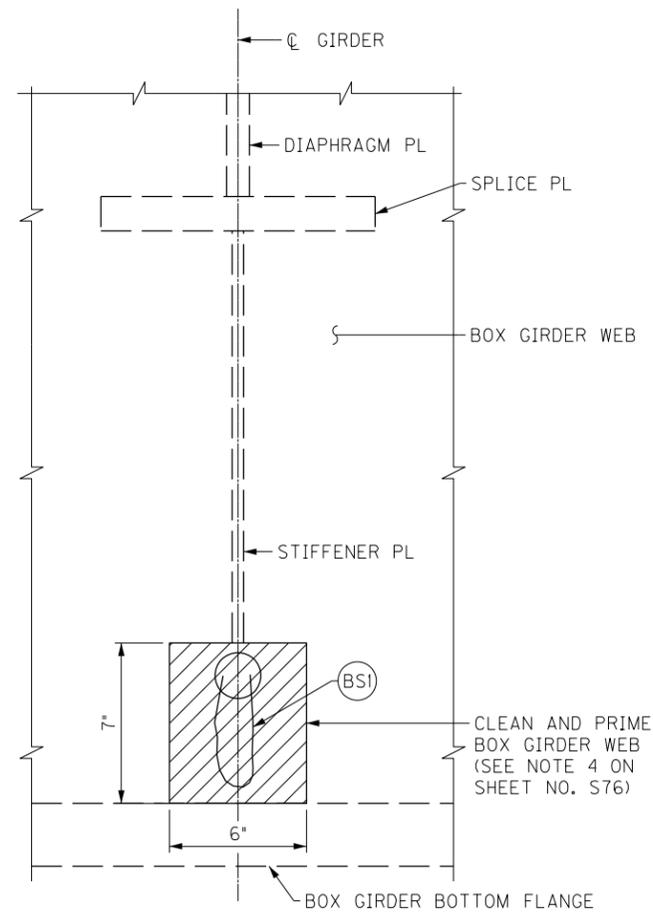
- NOTES**
- FOR CB CRACK RETROFIT, SEE SHEET NO. S87.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: L CLARK	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE RETROFIT LAYOUT - 43		
PREPARED BY Michael Baker International	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. S83 DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



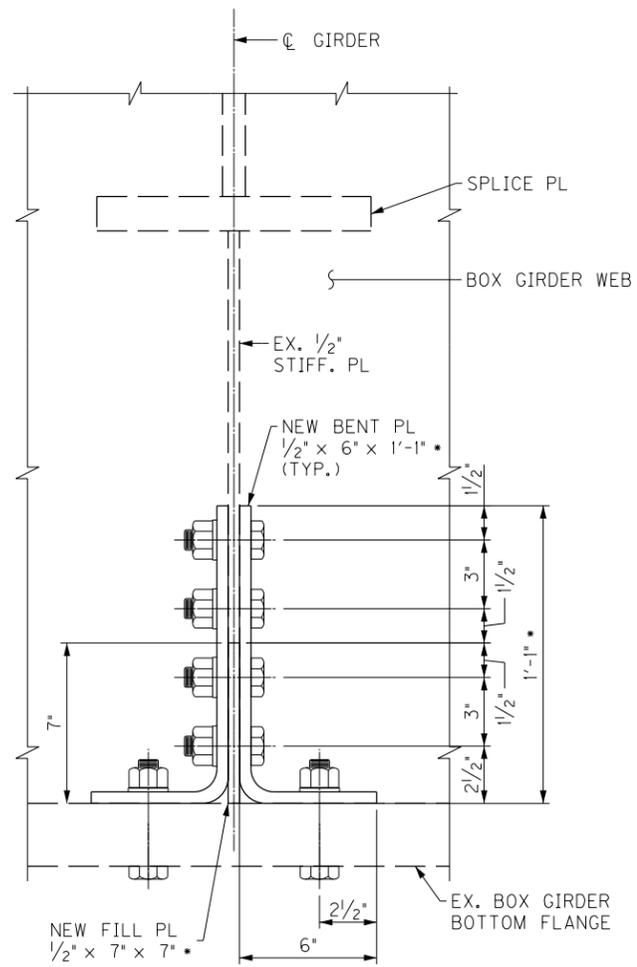
SECTION AT PIER BOX GIRDER



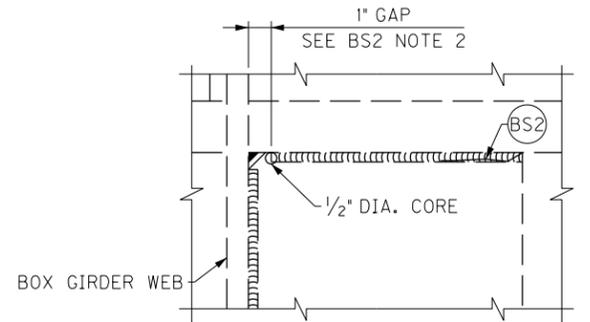
SECTION A-A
SHOWING PREVIOUS BS CRACK RETROFIT



TYPICAL BS2 CRACK



SECTION A-A
TYPICAL BS1 RETROFIT



DETAIL 1
TYPICAL BS2 RETROFIT



EXISTING BS1 CRACK RETROFIT

BS1 CRACK RETROFIT NOTES

- FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
- ENSURE THE CRACK TIP IS LOCATED WITHIN THE CORE HOLE. DRILL 1" DIAMETER HOLE.
- GRIND SMOOTH THE EXISTING SAWCUT EDGE AT BOTTOM OF STIFFENER PLATE BEFORE INSTALLING THE BOLTED RETROFIT.
- POSITION BENT PLATES TO CLEAR THE WELD OF THE BOX GIRDER. MARK THE HOLE CENTERS ON STIFFENER PLATE.
- FIELD DRILL HOLES INTO BOX GIRDER FLANGE AND STIFFENER PLATE FOR RETROFIT.
- FURNISH AND INSTALL GALVANIZED 7/8" DIAMETER F3125 GRADE A325 TYPE 1 HIGH STRENGTH BOLTS, F436 HARDENED WASHERS, AND ASTM A583 NUTS IN ACCORDANCE WITH 607.03.05 OF THE STANDARD SPECIFICATIONS.

BS2 CRACK RETROFIT NOTES

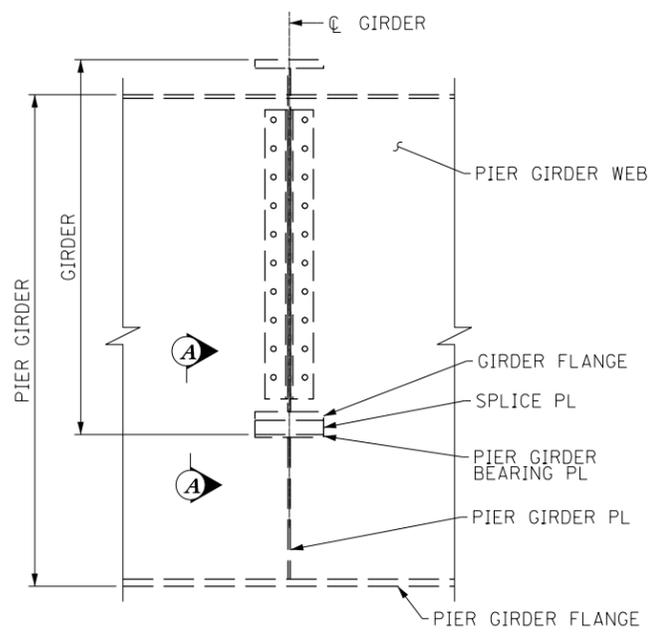
- FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
- INTENT OF DETAIL IS TO INSTALL A GAP AND PREVENT A HORIZONTAL CRACK FROM REACHING THE BOX GIRDER WEB.
- CAREFULLY REMOVE MATERIAL WITH A CARBIDE BURR GRINDER WITHIN THE GAP AREA WITHOUT DISTURBING THE BOX GIRDER WEB PLATE. PLACE A 1/2" DIAMETER HOLE TO FACILITATE INSTALLATION OF THE GAP.

LEGEND

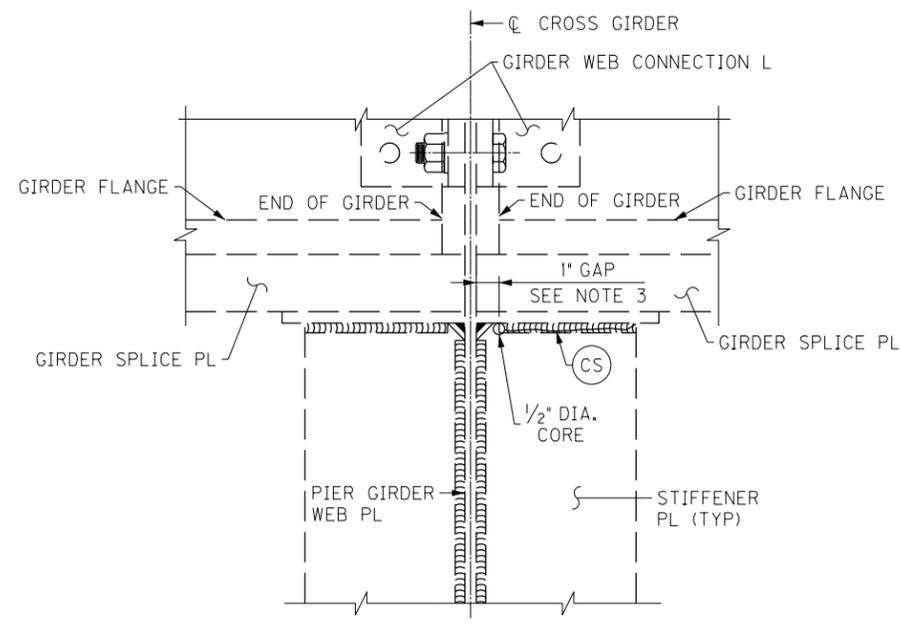
- (A) EX. STIFFENER PL CUT IN PREVIOUS CRACK RETROFIT, ASSUMED DIMENSION 7".
- NEW STIFFENER PL AND NEW BENT PL DIMENSIONS MUST ADJUST IF LENGTH OF STIFFENER REMOVED IS NOT 6". SPACING BETWEEN BOLTS MAY ADJUST, BUT MAINTAIN THE 1/2" EDGE DISTANCE ON NEW STIFFENER PLATE AND NEW BENT PLATE.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	J STITH	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T T RR TO PRESTON STREET	
FATIGUE CRACK RETROFIT - 2		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S86 28870

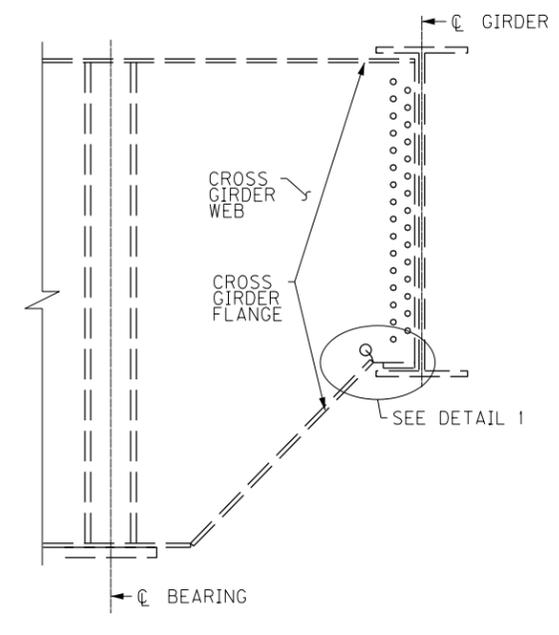
FILE NAME: C:\USERS\MARY.UO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.UO.DWYER\MBAKERINTL.COM
 USER: Mary.Uo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



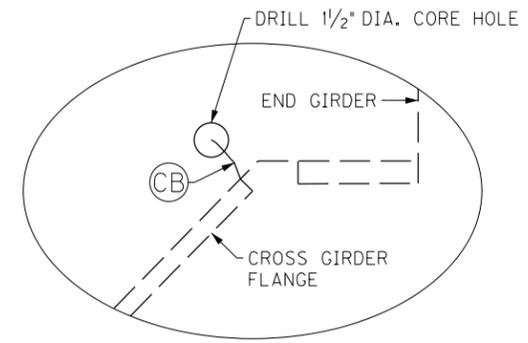
SECTION AT GIRDER
CS CRACK



SECTION A-A
TYPICAL CS CRACK RETROFIT



SECTION AT CROSS GIRDER END
CB CRACK



DETAIL 1
TYPICAL CB CRACK RETROFIT



TYPICAL CS CRACK



TYPICAL CB CRACK

CS CRACK RETROFIT NOTES

- FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
- INTENT OF DETAIL IS TO INSTALL A GAP AND PREVENT A HORIZONTAL CRACK FROM REACHING THE CROSS GIRDER WEB.
- CAREFULLY REMOVE MATERIAL WITH A CARBIDE BURR GRINDER WITHIN THE GAP AREA WITHOUT DISTURBING THE CROSS GIRDER WEB PLATE. GRIND ON BOTH SIDES OF STIFFENER PLATE. PLACE A 1/2" DIAMETER HOLE TO FACILITATE INSTALLATION OF THE GAP.

CB CRACK RETROFIT NOTES

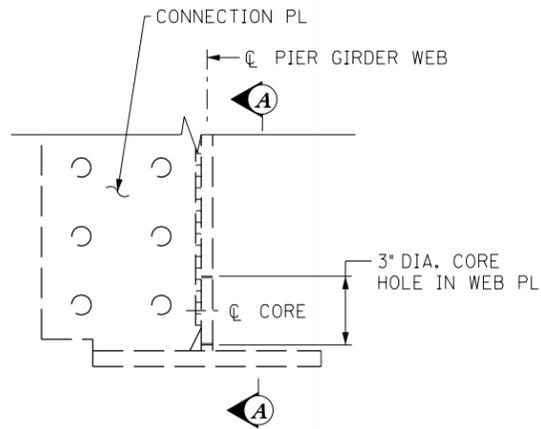
- FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
- ENSURE THE CRACK TIP IS LOCATED WITHIN THE CORE HOLE.
- DRILL 1/2" DIAMETER HOLE.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	J STITH	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE CRACK RETROFIT - 3		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S87 DRAWING NO. 28870

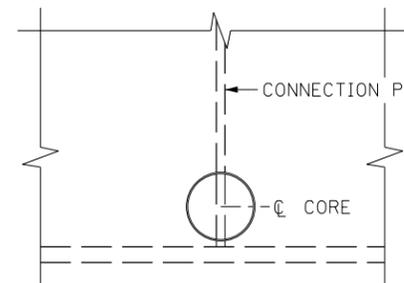
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM DATE PLOTTED: November 29, 2023 USER: MaryJo.Dwyer E-SHEET NAME: S23464 020 MicroStation v10.17.01.58



TYPICAL CC CRACK RETROFIT



CX1 CRACK RETROFIT



SECTION A-A



TYPICAL CF CRACK RETROFIT

STIFFENER PL (BACK FACE OF GIRDER WEB)
DO NOT CORE THROUGH STIFFENER PL



DRILL 2\"/>

CX2 CRACK RETROFIT

PIER GIRDER 124E

CC CRACK RETROFIT NOTES

1. FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
2. ENSURE THE CRACK TIPS ARE LOCATED WITHIN THE CORE HOLES. MARK THE HOLE LOCATIONS.
3. DRILL 1/2\"/>

CF CRACK RETROFIT NOTES

1. FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
2. ENSURE THE CRACK TIPS ARE LOCATED WITHIN THE CORE HOLES. MARK THE HOLE LOCATIONS.
3. DRILL 1/2\"/>

CX1 CRACK RETROFIT NOTES

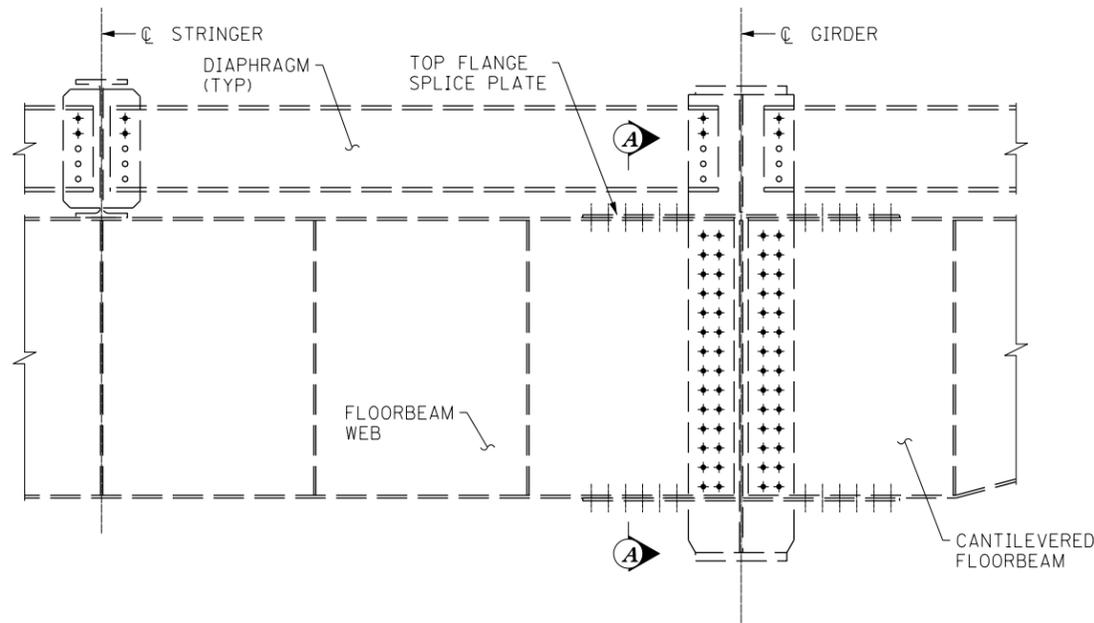
1. FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
2. ENSURE CORE PLACEMENT CAPTURES THE CRACK ON THE NORTH AND SOUTH SIDE OF THE CONNECTION PLATE.
3. CORE THROUGH THE CROSS GIRDER WEB PLATE. LEAVE THE WEB PLUG IN PLACE.
4. ENSURE THE CRACK TIPS ARE LOCATED WITHIN THE CORE HOLE.
5. DRILL 3\"/>

CX2 CRACK RETROFIT NOTES

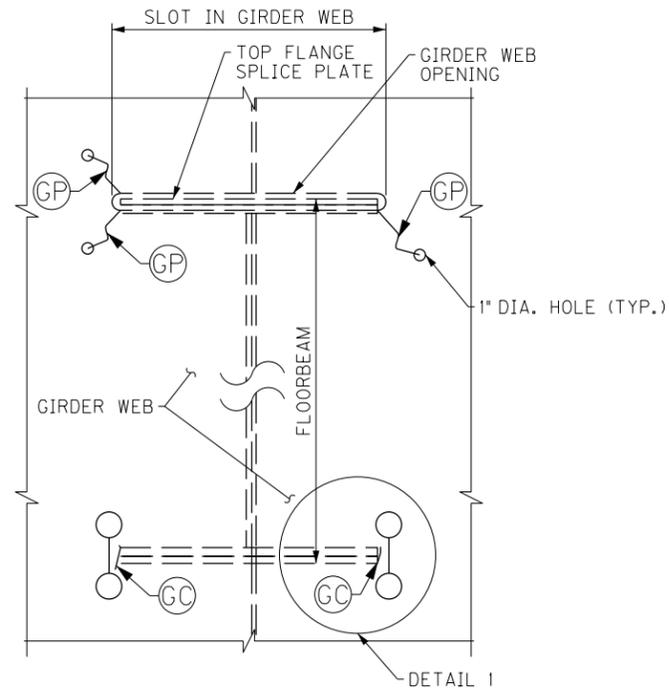
1. FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
2. ENSURE THE CRACK TIPS ARE LOCATED WITHIN THE CORE HOLES. MARK THE HOLE LOCATIONS.
3. DRILL 2\"/>

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	J STITH	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T T RR TO PRESTON STREET	
FATIGUE CRACK RETROFIT - 4		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S88 DRAWING NO. 28870

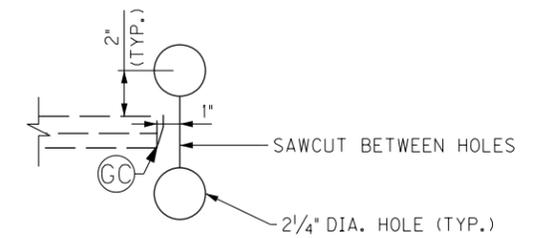
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



GIRDER FLOORBEAM ELEVATION



SECTION A-A



DETAIL 1

GC CRACK RETROFIT NOTES

1. FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
2. MARK LOCATIONS FOR THE 2 1/4\"/>

GF CRACK RETROFIT NOTES

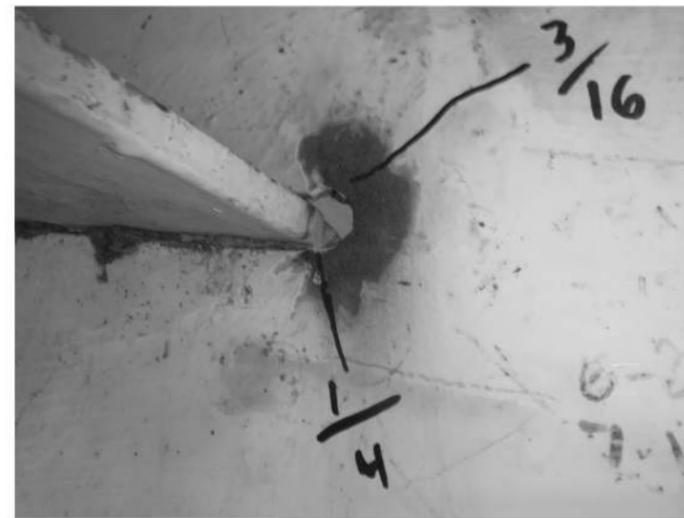
1. FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
2. ENSURE THE CRACK TIP IS LOCATED WITHIN THE CORE HOLE.
3. DRILL 2\"/>

GP CRACK RETROFIT NOTES

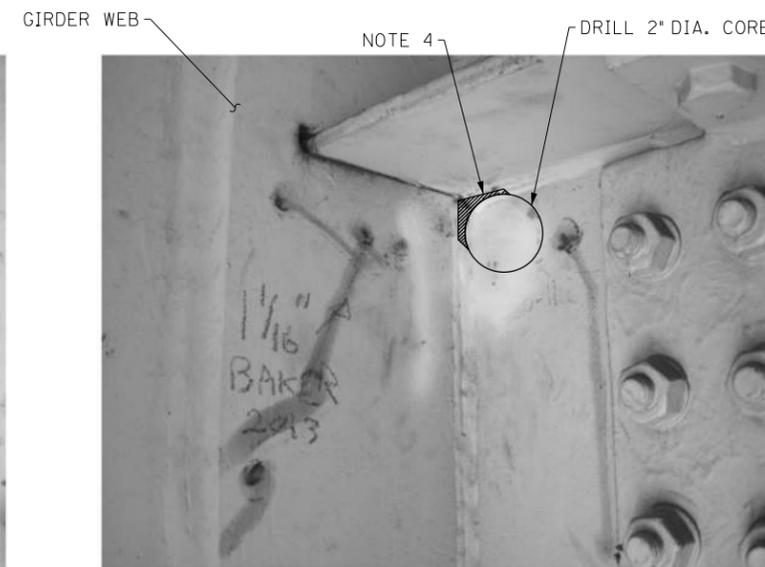
1. FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
2. ENSURE THE CRACK TIP(S) ARE LOCATED WITHIN THE CORE HOLE(S).
3. DRILL 1\"/>



TYPICAL GP CRACK
SHOWING COMPLETED RETROFIT



TYPICAL GP CRACK
SHOWING 2 GP CRACKS



TYPICAL GF CRACK RETROFIT

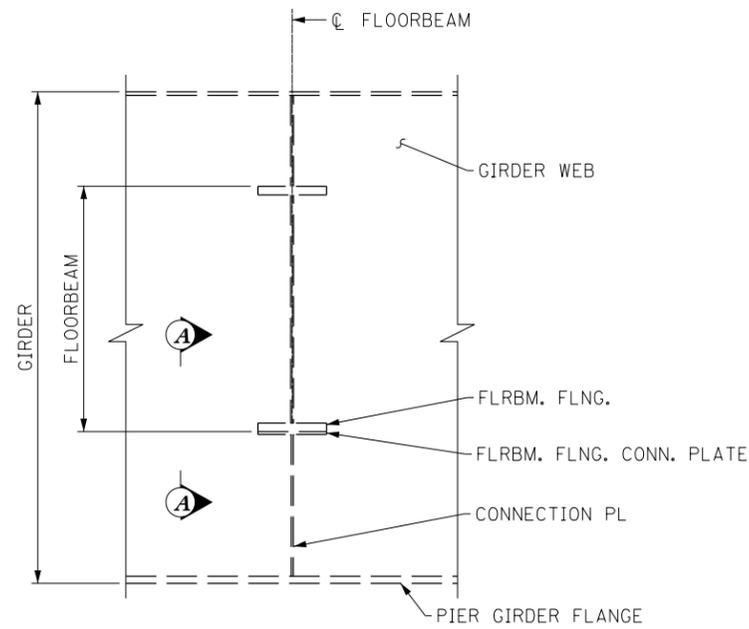
REVISION	DATE

DATE: AUGUST 2025 CHECKED BY: J STITH
 DESIGNED BY: M BARON
 DETAILED BY: MJ DWYER

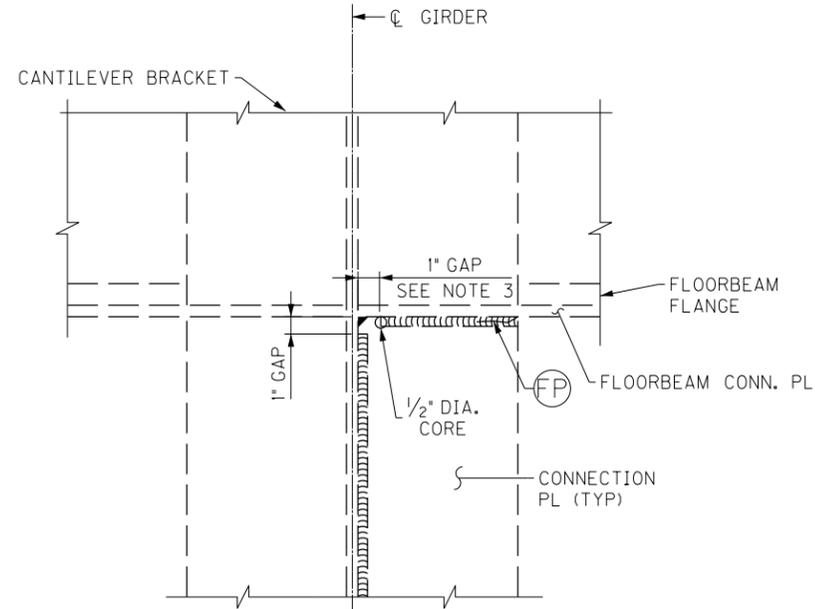
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY JEFFERSON	
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET
FATIGUE CRACK RETROFIT - 5	

ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	S89
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

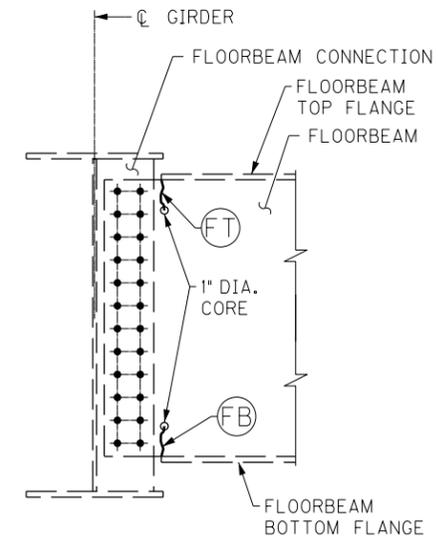
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-BENTLEY.COM_MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



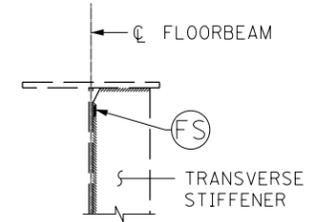
SECTION AT GIRDER
FP CRACK



SECTION A-A
TYPICAL FP CRACK RETROFIT



FLOORBEAM END DETAIL
TYPICAL FB & FT CRACK RETROFIT



STIFFENER DETAIL
STRINGER NOT SHOWN



TYPICAL FP CRACK



TYPICAL FT CRACK



TYPICAL FB CRACK



TYPICAL FS CRACK RETROFIT



COMPLETED FS CRACK RETROFIT

FP CRACK RETROFIT NOTES

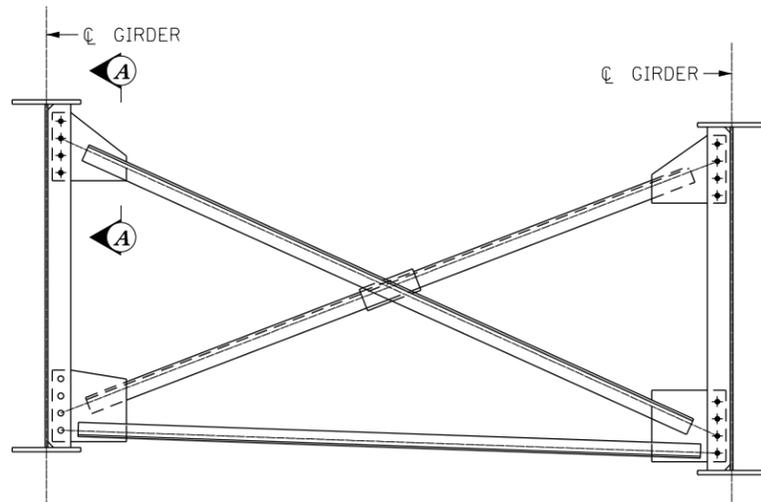
- FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
- INTENT OF DETAIL IS TO INSTALL A GAP AND PREVENT A HORIZONTAL CRACK FROM REACHING THE CROSS GIRDER WEB.
- CAREFULLY REMOVE MATERIAL WITH A CARBIDE BURR GRINDER WITHIN THE GAP AREA WITHOUT DISTURBING THE CROSS GIRDER WEB PLATE. GRIND ON BOTH SIDES OF STIFFENER PLATE. PLACE A 1/2" DIAMETER HOLE TO FACILITATE INSTALLATION OF THE GAP.

FB, FS, FT CRACK RETROFIT NOTES

- FOR GENERAL NOTES FOR CRACK RETROFITS, SEE SHEET NO. S84.
- ENSURE THE CRACK TIP IS LOCATED WITHIN THE CORE HOLE.
- DRILL HOLE(S) PER THE ASSOCIATED DETAIL.

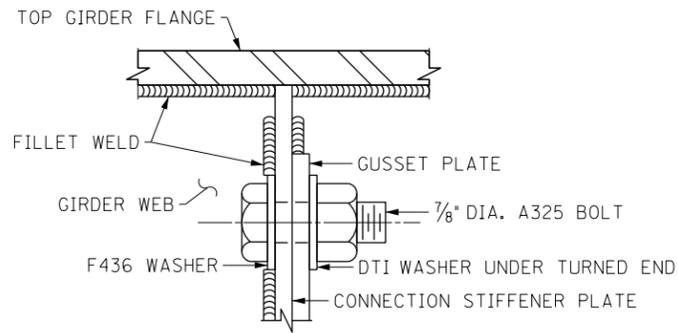
REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	J STITH	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I TT RR TO PRESTON STREET	
FATIGUE CRACK RETROFIT - 6		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	S90
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



CROSSFRAME

TYPE MB1: REPLACE 4 TOP BOLTS AND 4 BOTTOM BOLTS AT THE CROSSFRAME CONNECTION TO THE GIRDER SPECIFIED (SEE NOTE 1)



SECTION A-A

REPLACE MISSING BOLTS AND/OR REMOVE/REPLACE LOOSE BOLTS



**MISSING BOLTS (BOTTOM)
LOOSE BOLTS (TOP)**

EXAMPLE AT SPAN 110 GIRDER E



**BROKEN AND LOOSE BOLTS (BOTTOM)
LOOSE BOLTS (TOP)**

EXAMPLE AT SPAN 123W GIRDER D



LOOSE BOLTS (MB2) IN GIRDER J TO PIER GIRDER 115 CONNECTION

TYPE MB2: REMOVE/REPLACE 8 LOOSE BOLTS AT BOTTOM OF THE GIRDER END CONNECTION TO THE PIER GIRDER

STEEL REPAIR - TYPE MB (INCLUDES TYPE MB1 AND MB2)

- TYPE MB1 WORK CONSISTS OF REMOVING/REPLACING BOLTS IN CROSSFRAME CONNECTIONS TO GIRDERS AS SPECIFIED IN THE PLANS. REPLACE BOLTS ONE BOLT AT A TIME. EACH MB1 LOCATION REPRESENTS THE REPLACEMENT OF ALL BOLTS (4 TOTAL IN THE BOTTOM CONNECTION GUSSET AND 4 TOTAL IN THE UPPER CONNECTION GUSSET) OF A CROSSFRAME. REPLACE ALL BOLTS AT THESE LOCATIONS EVEN IF THEY DO NOT APPEAR LOOSE.
- TYPE MB2 WORK CONSISTS OF REMOVING/REPLACING LOOSE BOLTS AT GIRDER J END CONNECTION TO PIER GIRDER 115. REMOVE/REPLACE THE LOOSE BOLTS ONE BOLT AT A TIME. 8 LOOSE BOLTS WERE NOTED IN THE 2019 INSPECTION.
- CLEAN AND DEGREASE TO RESTORE THE FRICTION SURFACE ON A 4 INCH DIAMETER MINIMUM AREA CONCENTRIC WITH HOLE AT REMOVED BOLT OR AT MISSING BOLT. ENSURE DIRT, CORROSION AND OTHER DEBRIS ARE REMOVED FROM THE AREA. PRIME THE BARE STEEL SURFACES OF THE CONTACT AREA.
- FURNISH AND INSTALL GALVANIZED 7/8 INCH DIAMETER F3125 GRADE A325 TYPE 1 HIGH STRENGTH BOLTS, F436 HARDENED WASHERS, AND ASTM A583 NUTS IN ACCORDANCE WITH 607.03.05 OF THE STANDARD SPECIFICATIONS.
- PAYMENT FOR THE COMPLETED AND ACCEPTED QUANTITY AT EACH LOCATION SPECIFIED WILL BE CONSIDERED AS FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, AND INCIDENTALS FOR ALL WORK REQUIRED, INCLUDING CLEANING AND SURFACE PREPARATION, UNDER THE BID ITEM "STEEL REPAIR - TYPE MB".

NOTES

- FOR MISSING BOLT LOCATIONS, SEE FATIGUE LAYOUT SHEETS NOS. S70 - S78 & S81.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: M BARON	D BARON	
DETAILED BY: MJ DWYER	D BARON	

**Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS**

COUNTY
JEFFERSON

ROUTE CROSSING
I-64 K & I T T RR TO PRESTON STREET

REPLACE BOLTS

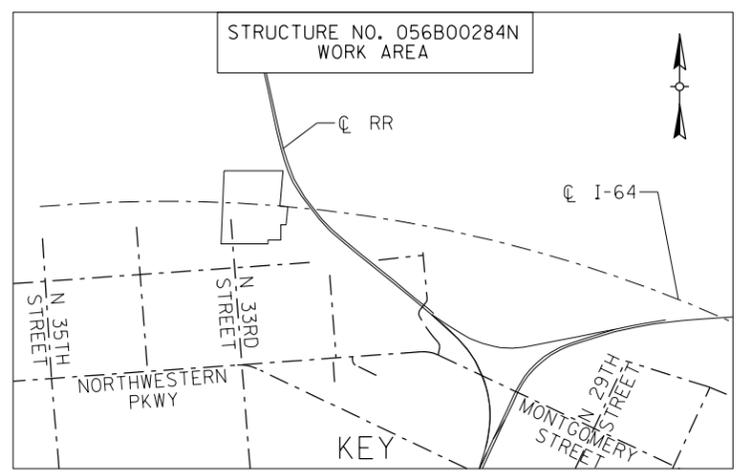
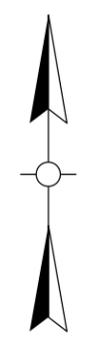
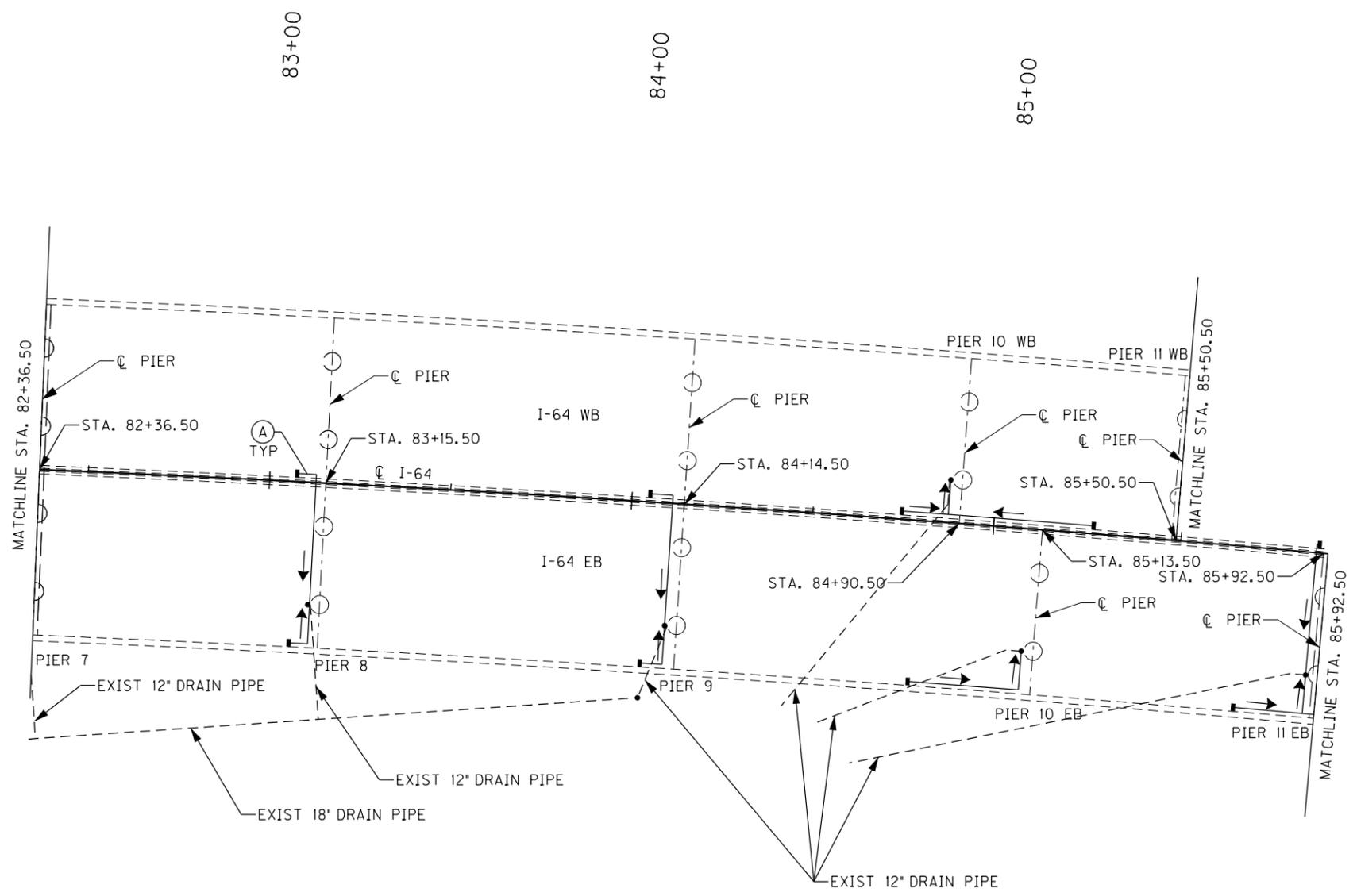
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	S91 DRAWING NO. 28870

FILE NAME:
SHT_284_Layout2.dgn

USER: Nicholas.Allen
DATE PLOTTED:

E-SHEET NAME: S23464 020

OpenRoads Designer v10.13.2.2



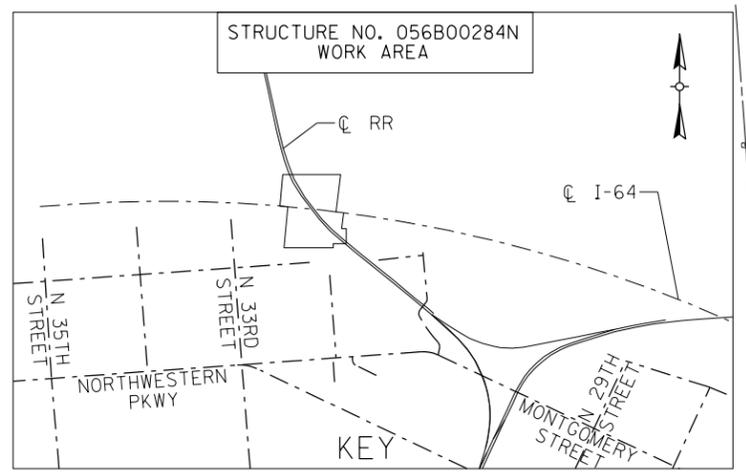
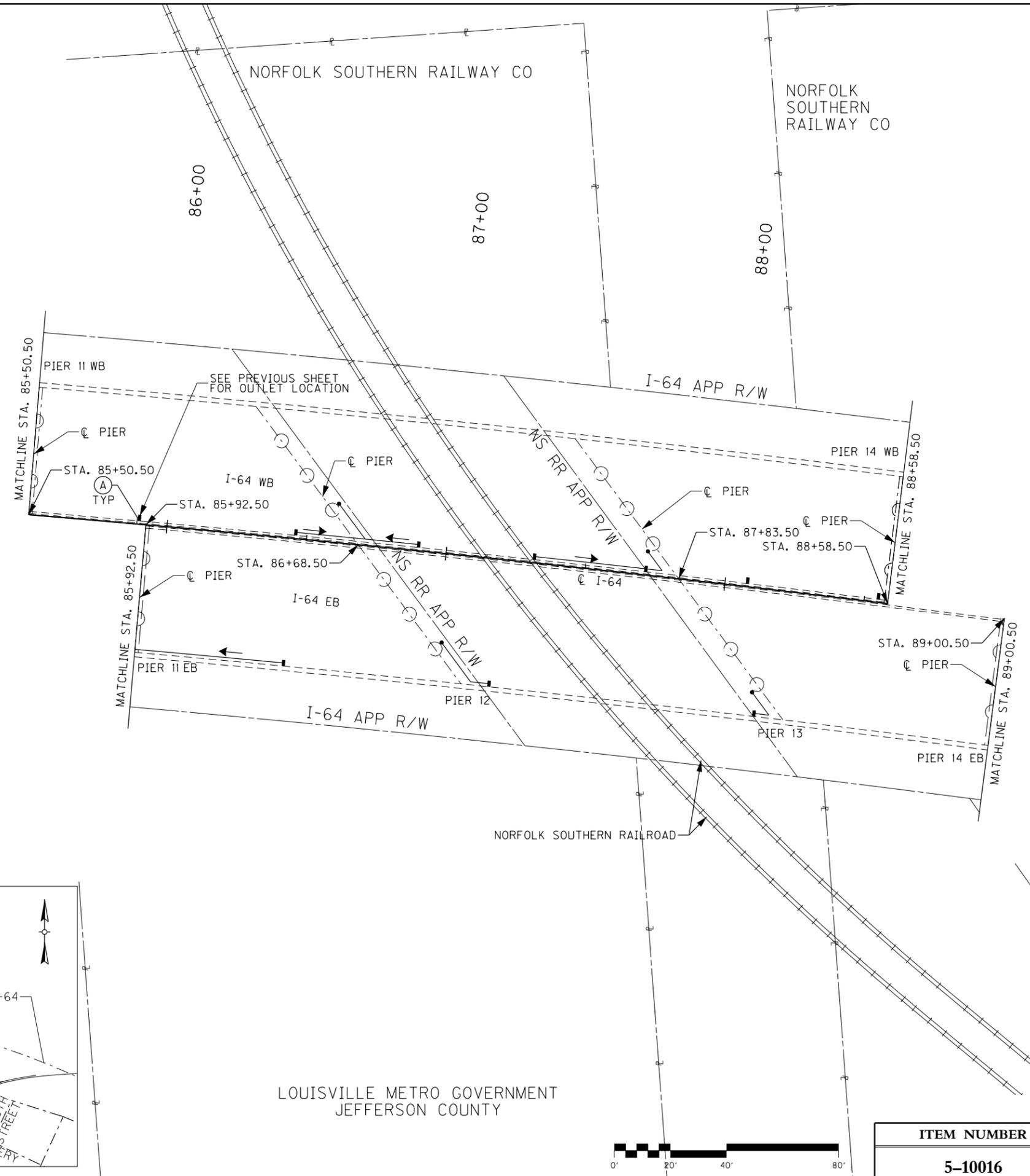
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE LAYOUT - 2		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D02 DRAWING NO. 28870

FILE NAME:
SHT_284_Layout3.dgn

USER: Nicholas.Allen
DATE PLOTTED: September 7, 2005

OpenRoads Designer: v10.16.2.24E-SHEET NAME: S23464_020



LOUISVILLE METRO GOVERNMENT
JEFFERSON COUNTY



ITEM NUMBER
5-10016

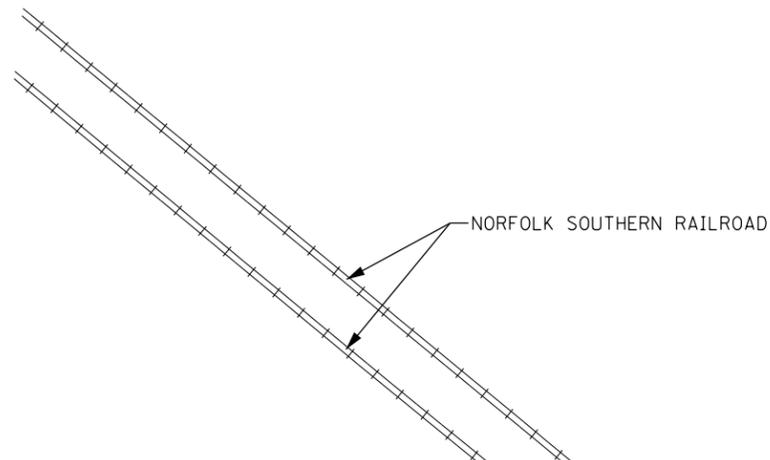
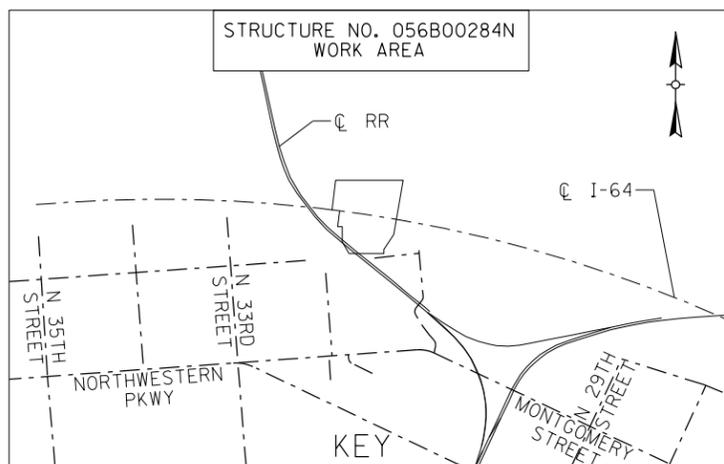
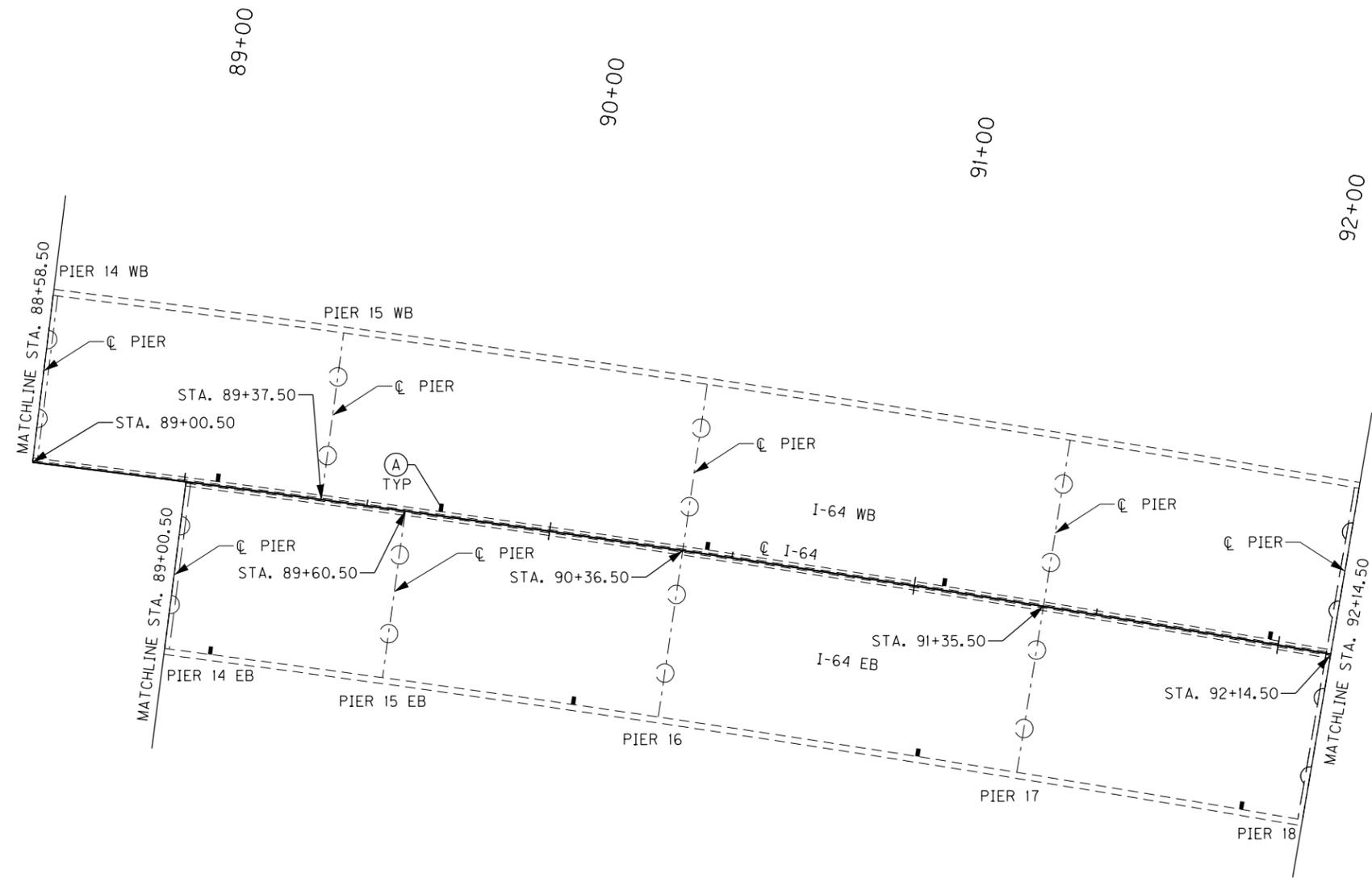
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE LAYOUT - 3		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D03 DRAWING NO. 28870

1650 Lyndon Farm Court
Louisville, KY 40223
Phone: (502) 339-3557
MBAKERINTL.COM

FILE NAME:
SHT_284_Layout4.dgn

USER: Nicholas.Allen
DATE PLOTTED: September 7, 2005

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



ITEM NUMBER
5-10016

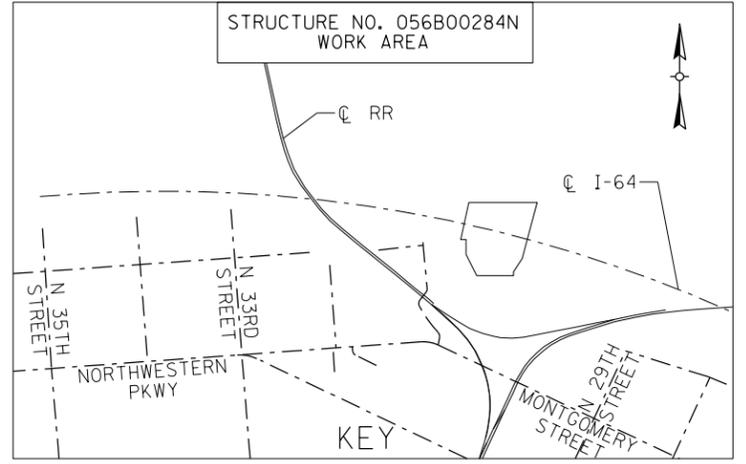
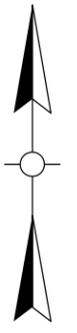
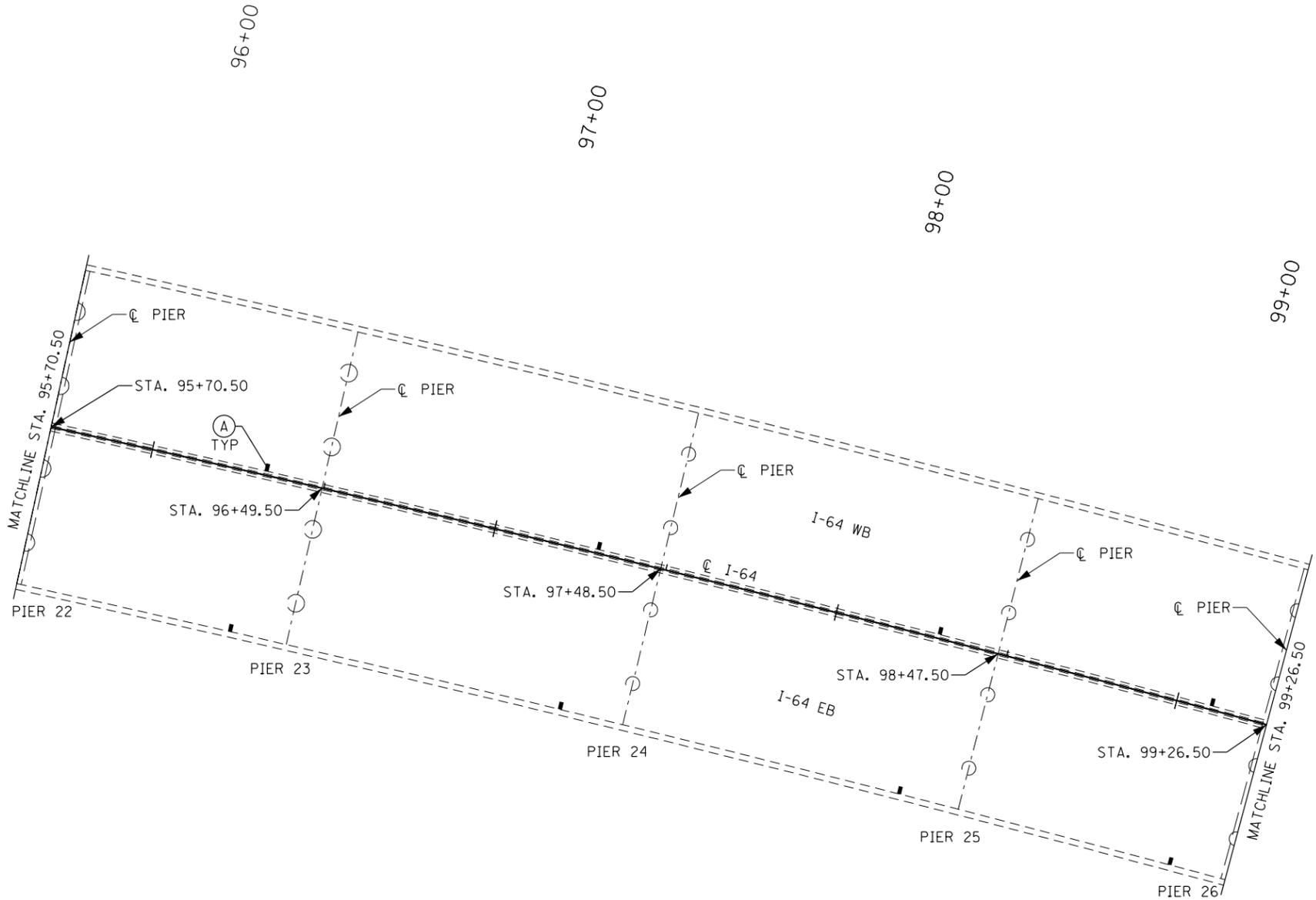
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE LAYOUT - 4		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D04 DRAWING NO. 28870

FILE NAME:
SHT_284_Layout6.dgn

USER: Nicholas.Allen
DATE PLOTTED:

E-SHEET NAME: S23464_020

OpenRoads Designer v10.13.2.2



ITEM NUMBER
5-10016

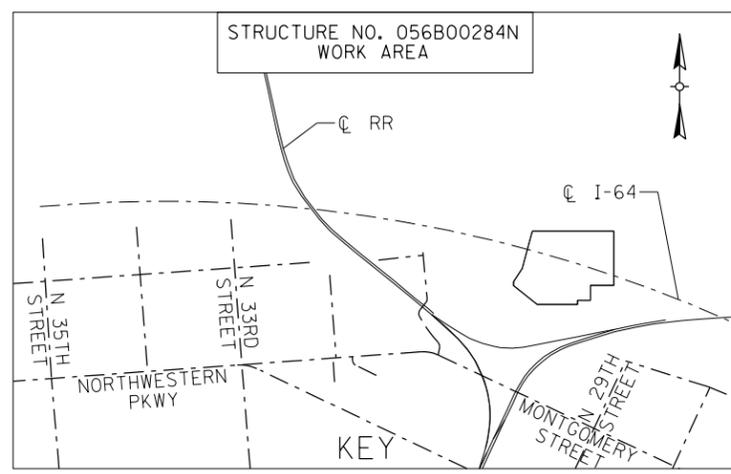
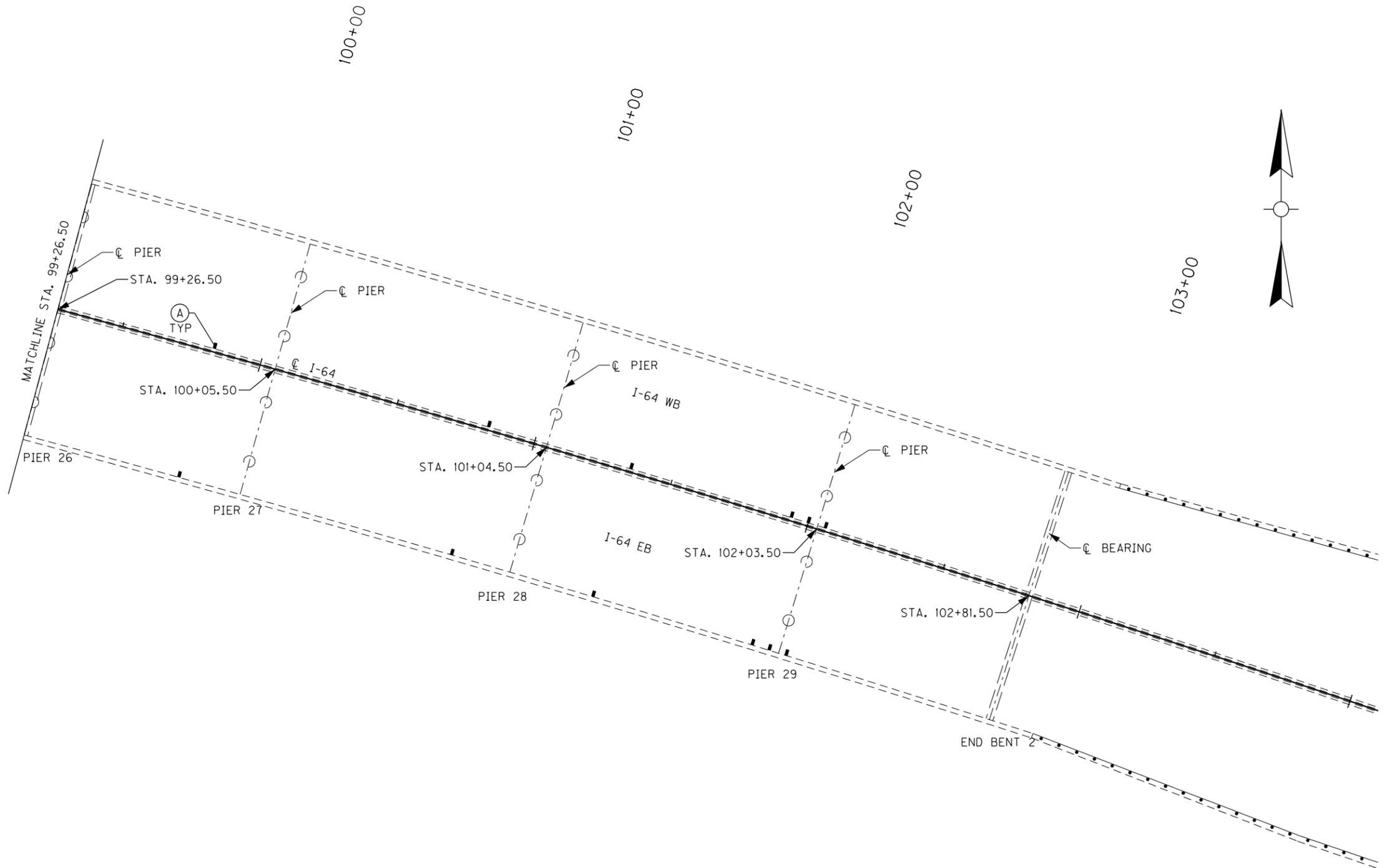
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE LAYOUT - 6		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D06 DRAWING NO. 28870
<small>1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM</small>		

FILE NAME:
SHT_284_Layout7.dgn

USER: Nicholas.Allen
DATE PLOTTED:

E-SHEET NAME: S23464 020

OpenRoads Designer v10.13.2.2



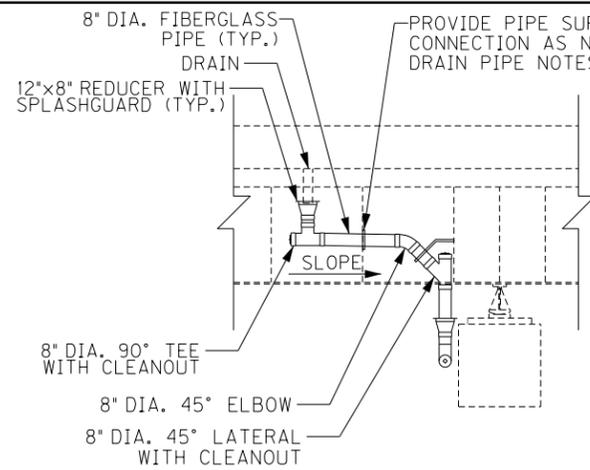
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE LAYOUT - 7		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D07 DRAWING NO. 28870
<small>1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM</small>		

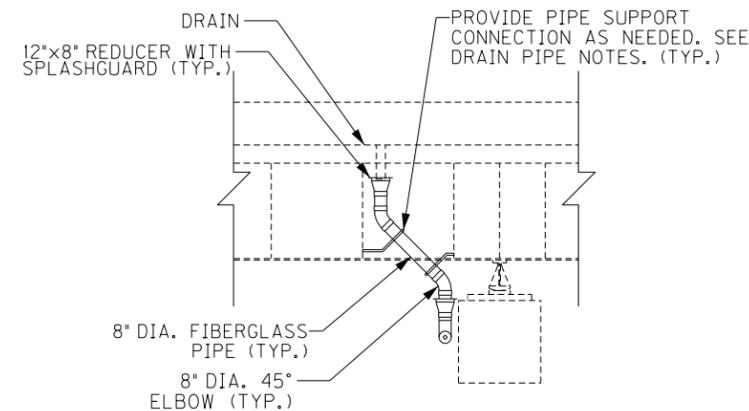
FILE NAME:
DETAILS_284.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

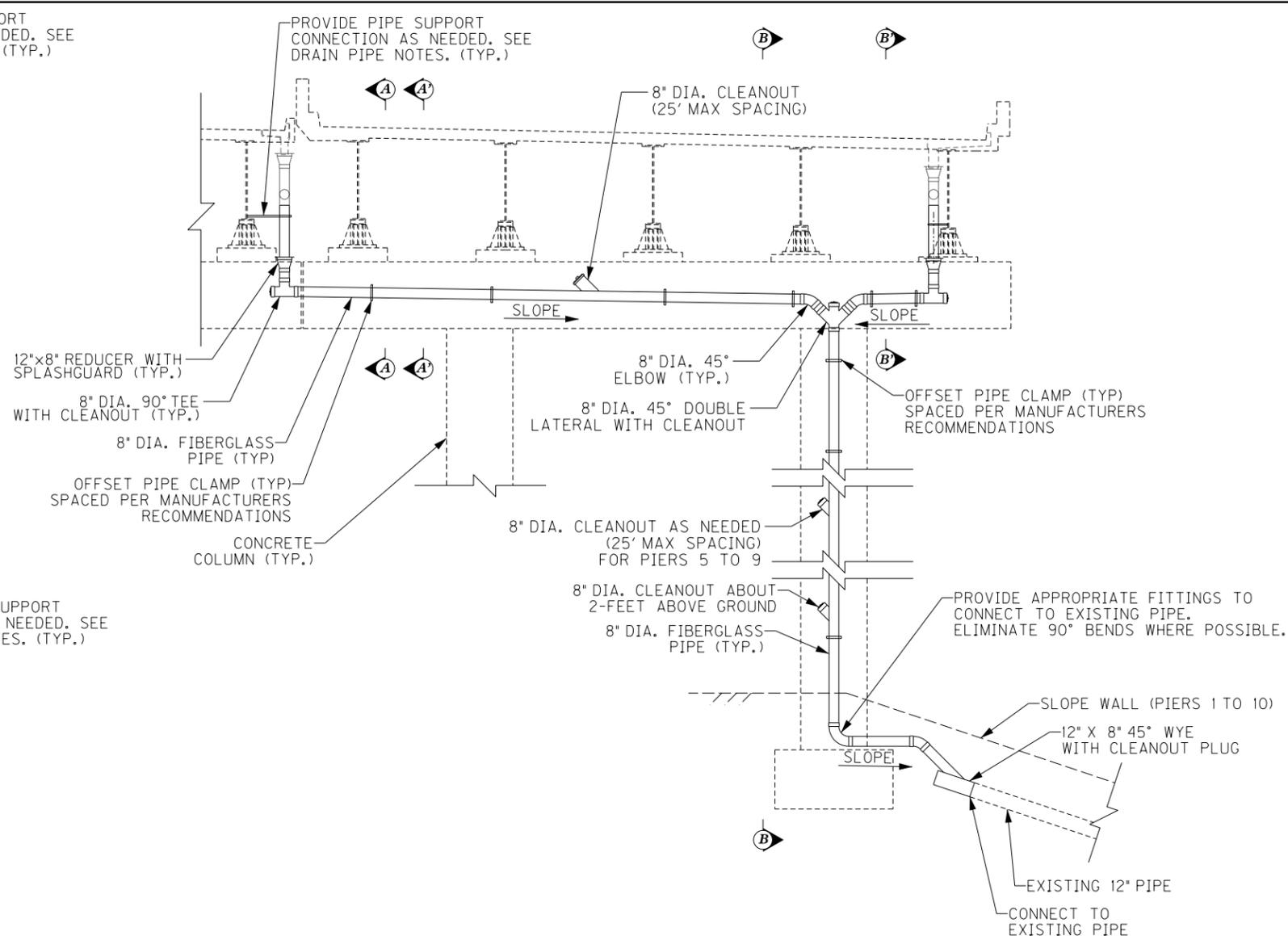
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



SECTION A-A
LONGITUDINAL SECTION
PIER 1 W.B. SHOWN
(LOOKING NORTH)
PIERS 5 TO 9 SIMILAR



SECTION A'-A'
LONGITUDINAL SECTION
PIER 2 W.B. SHOWN
(LOOKING NORTH)
PIERS 3 AND 4 SIMILAR



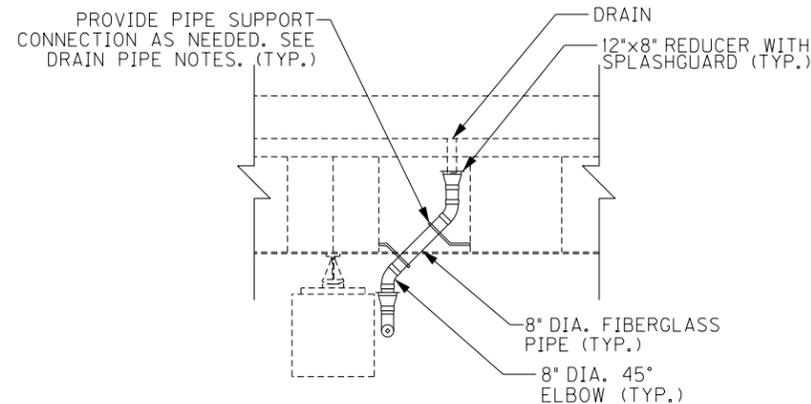
DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 1 SHOWN
(LOOKING EAST)
PIERS 2 TO 9 SIMILAR

NOTE:

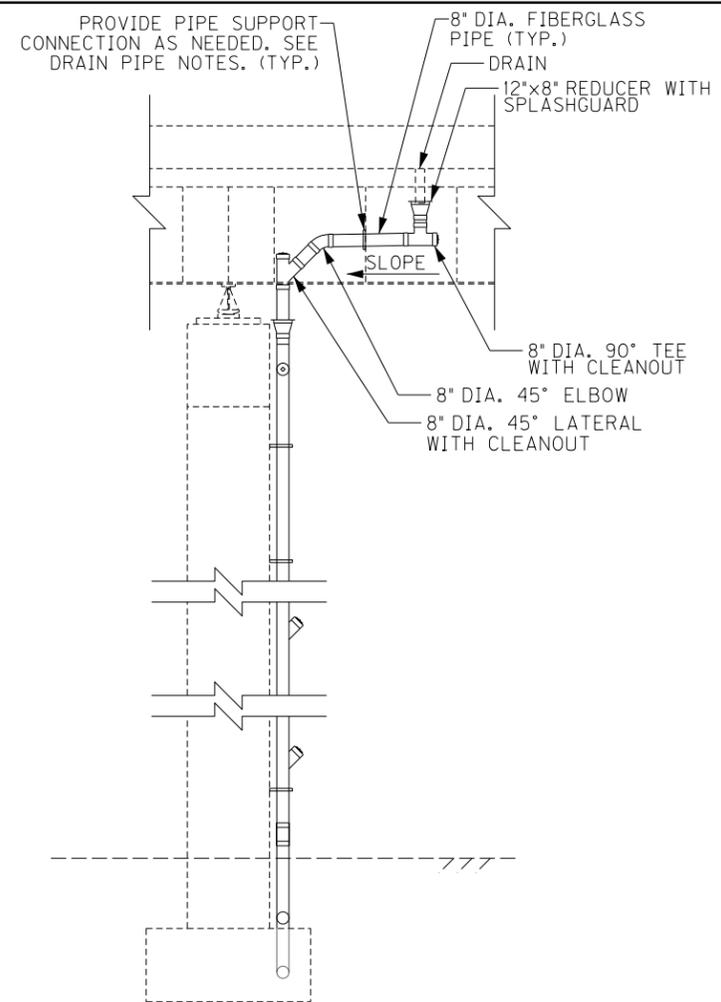
FOR CONNECTION TO EXISTING 12" PIPE, SAWCUT EXISTING CONCRETE SLOPE WALL AND REPLACE. MATCH EXISTING SLOPES. TYPICAL FOR PIERS 1 TO 10.

AT PIER 11 E.B. AND FOR CONNECTION TO THE EXISTING PIPE, SAWCUT EXISTING PAVEMENT AND REPLACE IN LIKE KIND. THE COST IS CONSIDERED INCIDENTAL.

SEE STANDARD DRAWING RDI-025-06 FOR FIBERGLASS PIPE INSTALLATION FROM PIER COLUMN TO EXISTING 12" PIPE. PIPE SHALL BE INSTALLED PER KYTC STANDARD SPECIFICATION SECTION 701 SIMILAR TO THERMOPLASTIC PIPE. COST FOR REMOVING UNDERGROUND PIPING IS CONSIDERED INCIDENTAL.



SECTION B'-B'
LONGITUDINAL SECTION
PIER 2 E.B. SHOWN
(LOOKING SOUTH)
PIERS 3 AND 4 SIMILAR



SECTION B-B
LONGITUDINAL SECTION
PIER 1 E.B. SHOWN
(LOOKING SOUTH)
PIERS 5 TO 9 SIMILAR

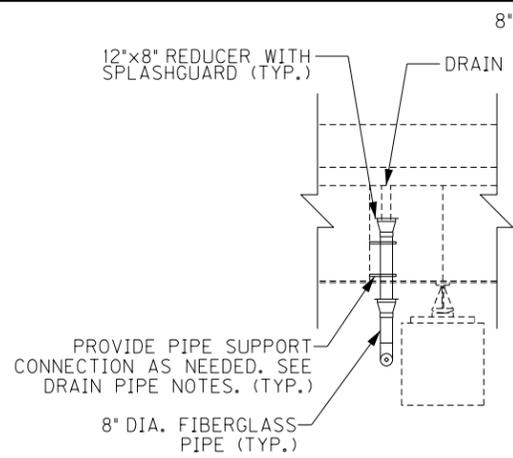
ITEM NUMBER	5-10016
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REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE DETAILS - 1		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D08 DRAWING NO. 28870

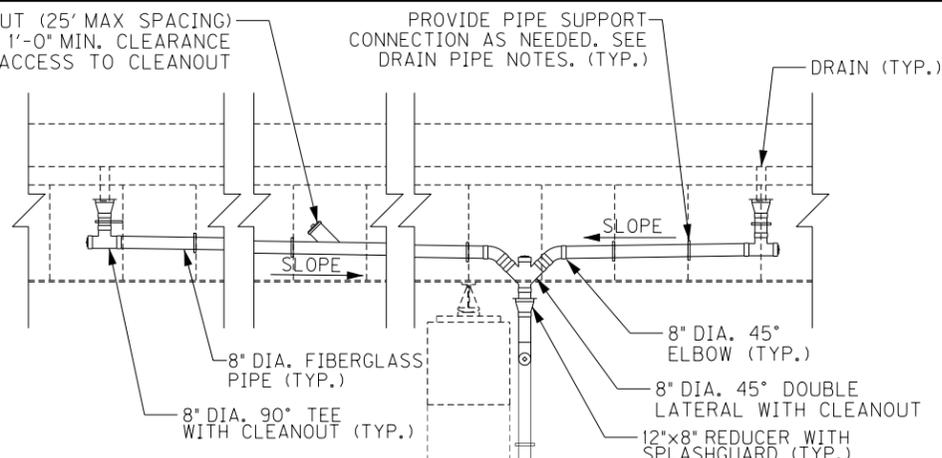
FILE NAME: DETAILS.284.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

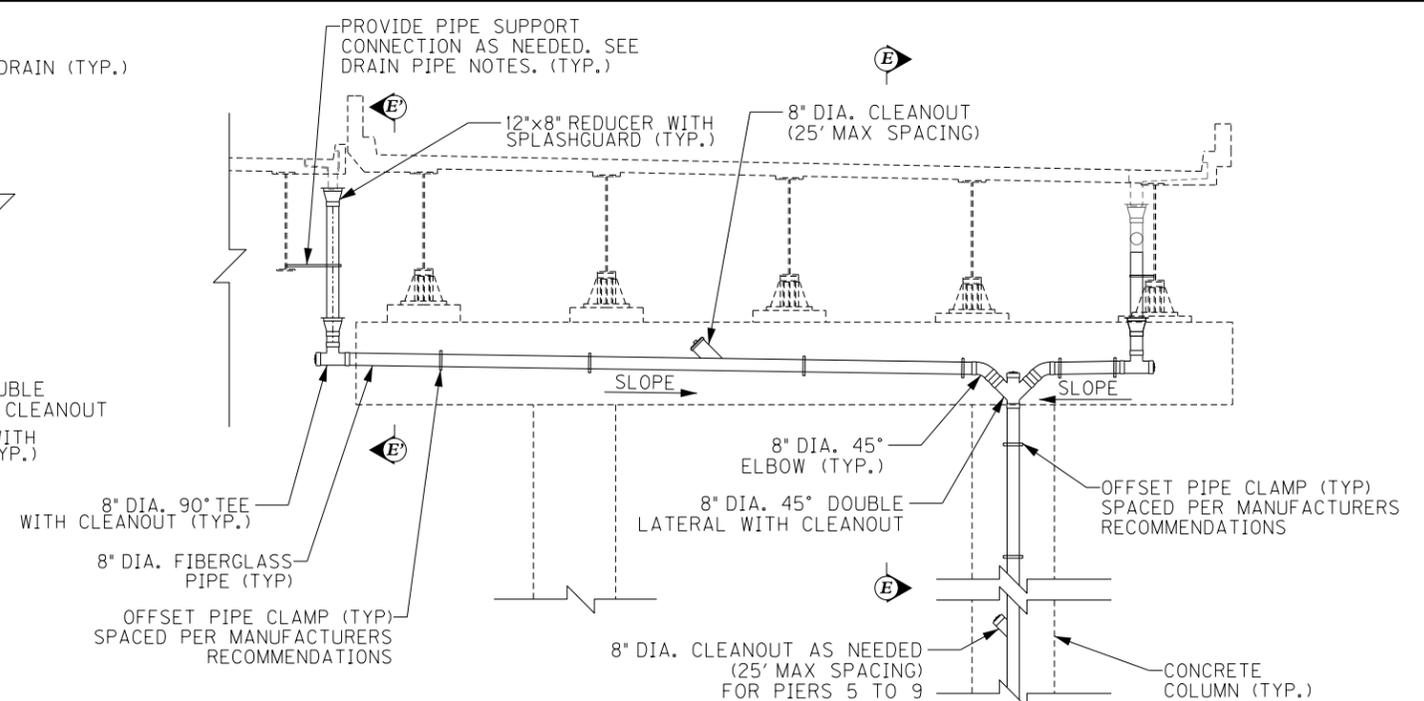
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



SECTION E'-E'
LONGITUDINAL SECTION
PIER 11 E.B. SHOWN
(LOOKING NORTH)

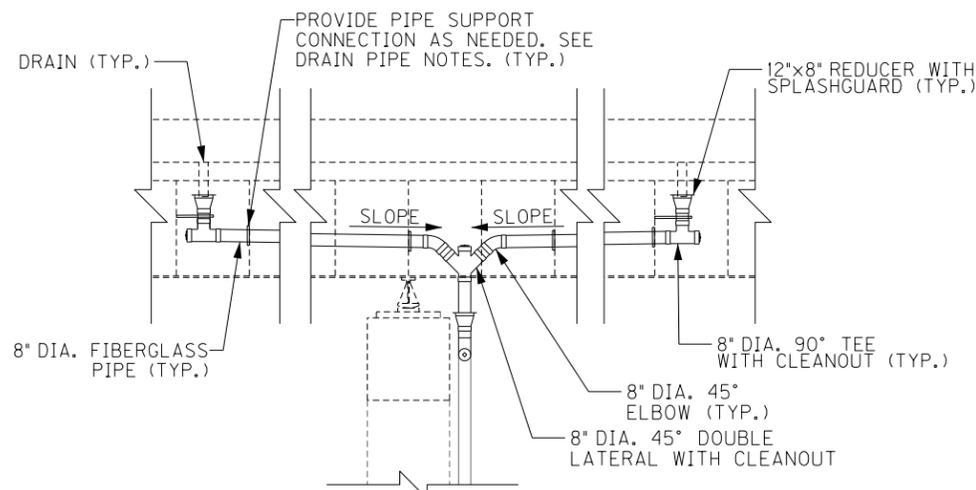


SECTION E-E
LONGITUDINAL SECTION
PIER 11 E.B. SHOWN
(LOOKING SOUTH)

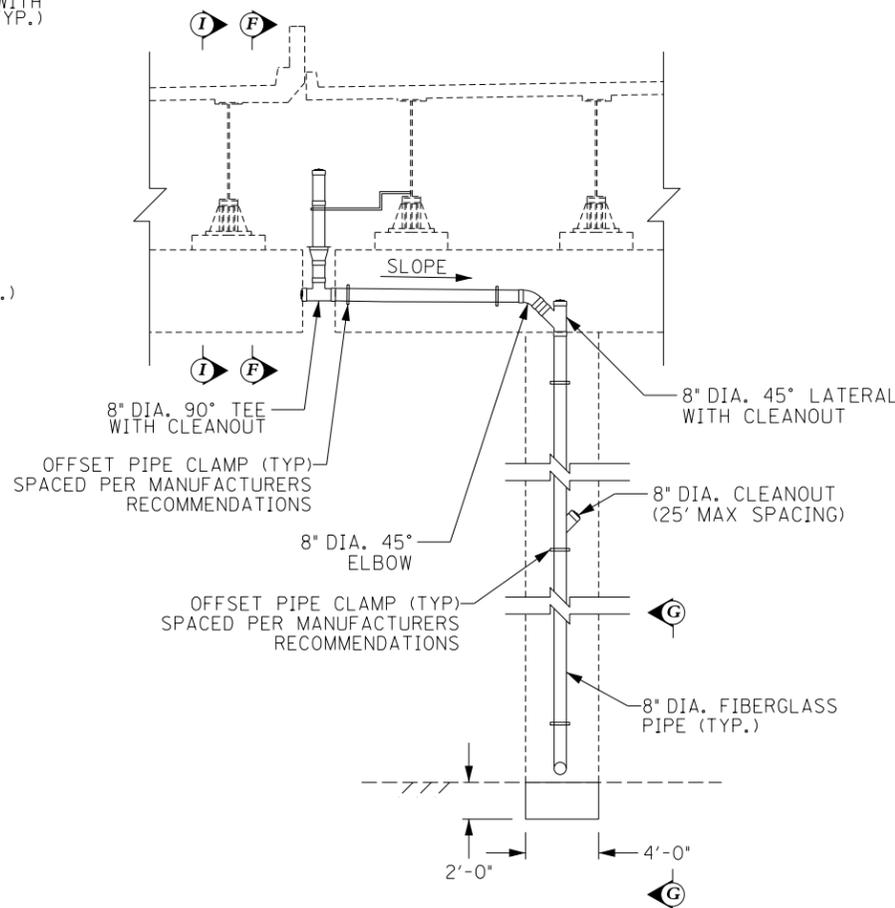


DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 11 E.B. SHOWN
(LOOKING EAST)

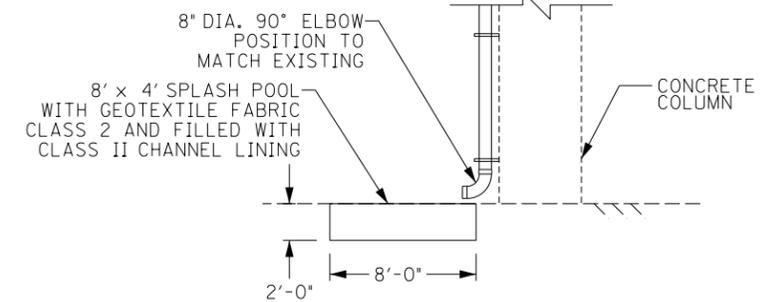


SECTION F-F
LONGITUDINAL SECTION
PIER 12 W.B. SHOWN
(LOOKING NORTH)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 12 W.B. SHOWN
(LOOKING WEST)
PIER 13 W.B. SIMILAR EXCEPT MIRRORED



SECTION G-G

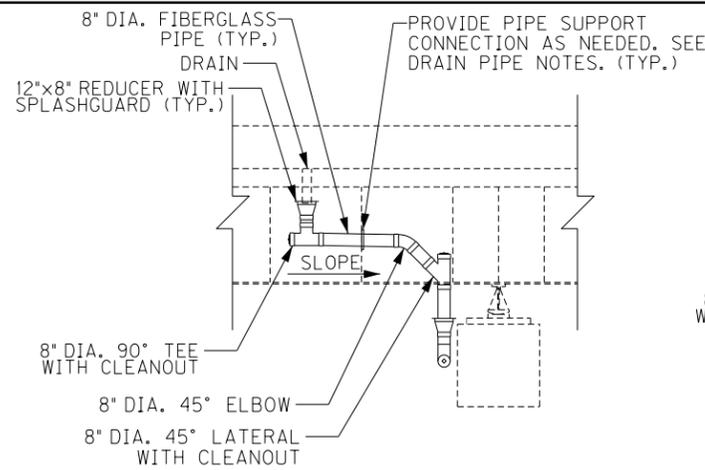
LONGITUDINAL SECTION
PIER 12 W.B. SHOWN
(LOOKING SOUTH)
PIER 13 W.B. SIMILAR

REVISION		DATE
DATE: FEB 2021	CHECKED BY:	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE DETAILS - 3		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D10
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

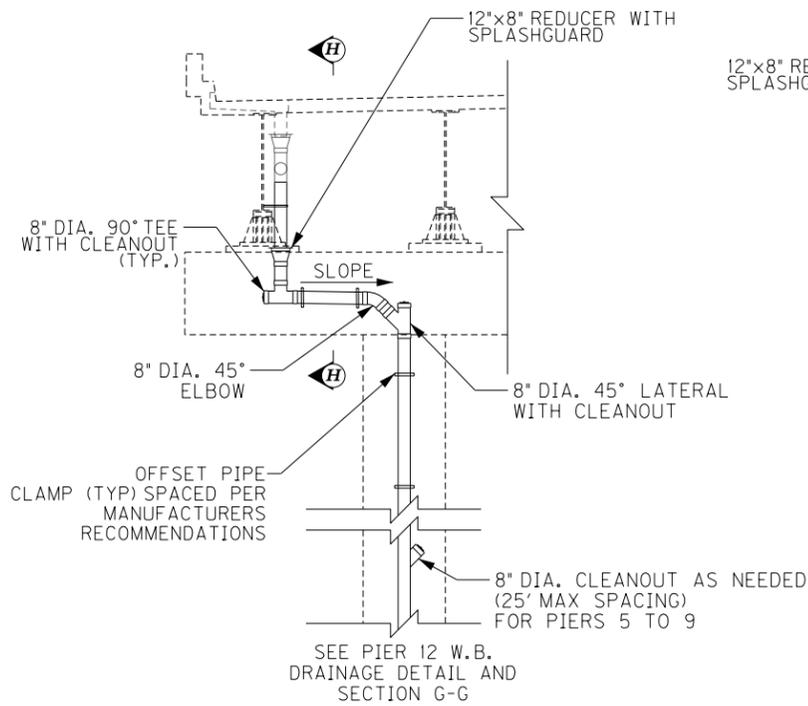
FILE NAME: DETAILS.284.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

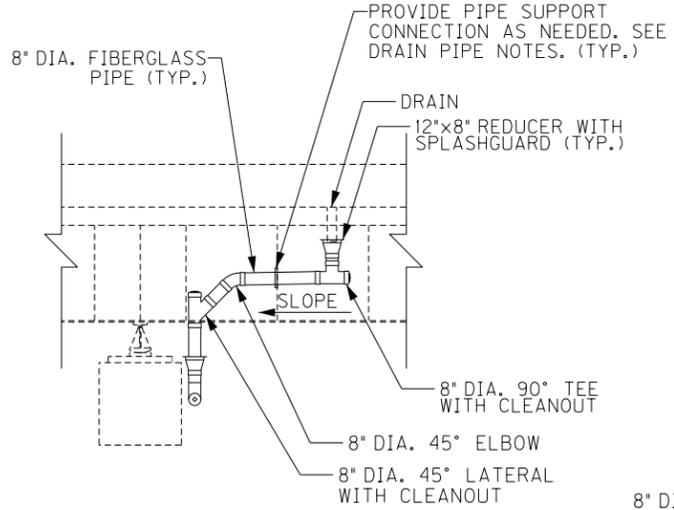
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



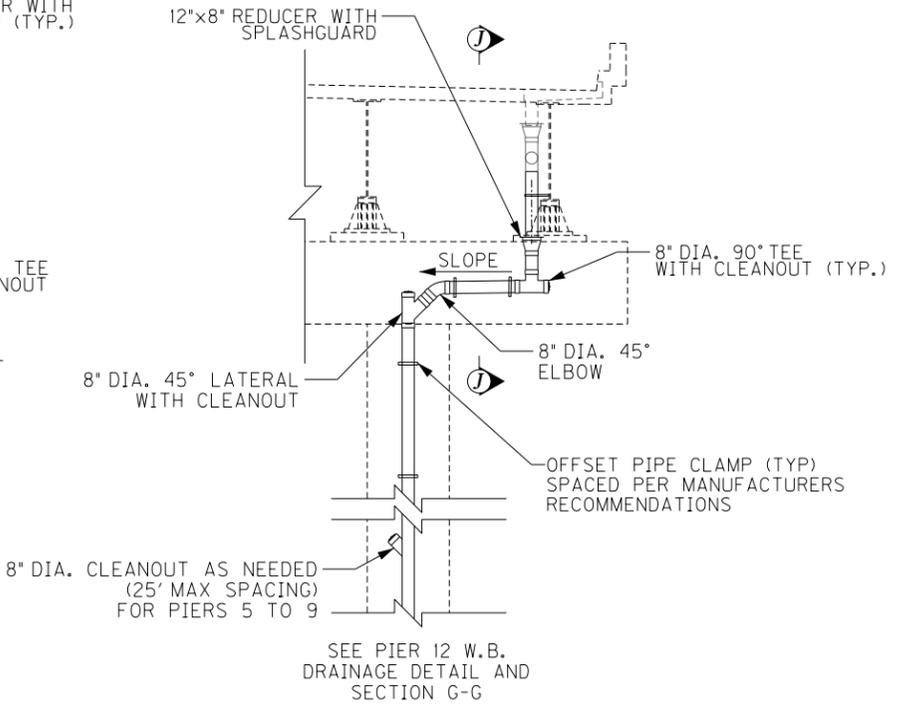
SECTION H-H
LONGITUDINAL SECTION
PIER 12 E.B. SHOWN
(LOOKING SOUTH)



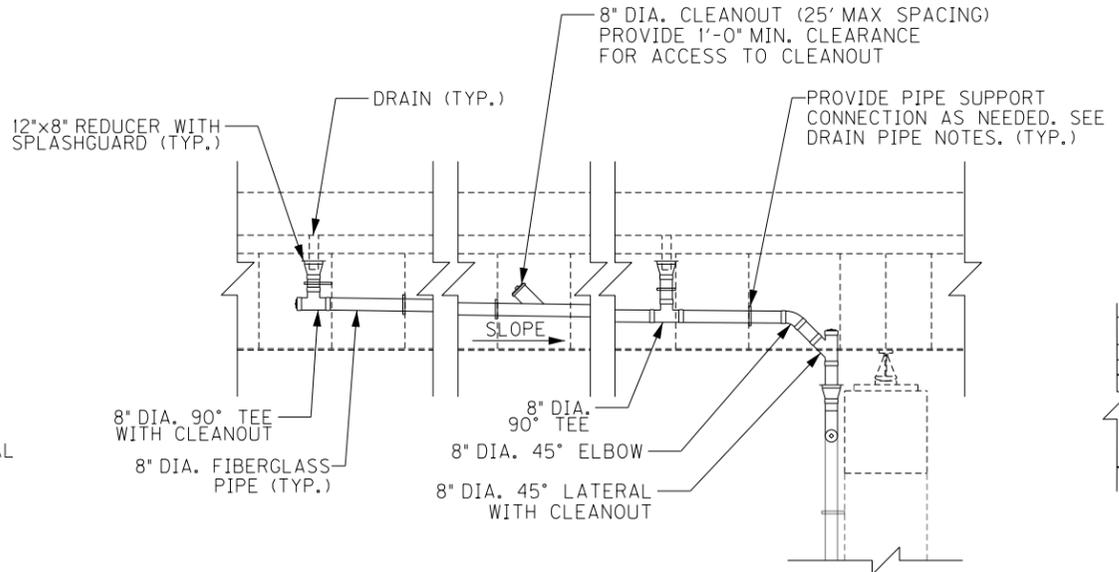
DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 12 E.B. SHOWN
(LOOKING WEST)



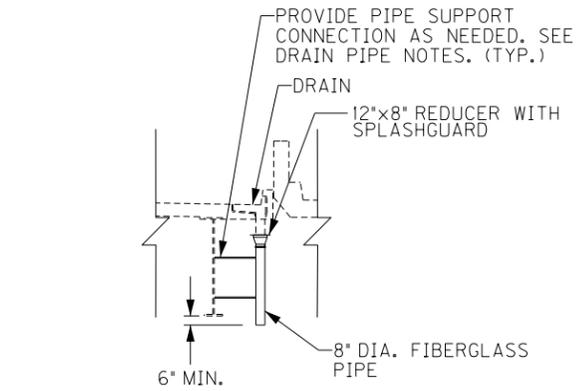
SECTION J-J
LONGITUDINAL SECTION
PIER 13 E.B. SHOWN
(LOOKING SOUTH)



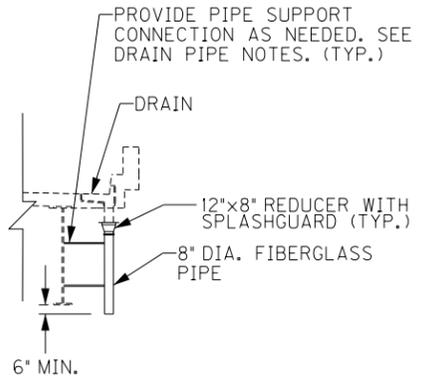
DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 13 E.B. SHOWN
(LOOKING EAST)



SECTION I-I
LONGITUDINAL SECTION
PIER 13 W.B. SHOWN
(LOOKING NORTH)

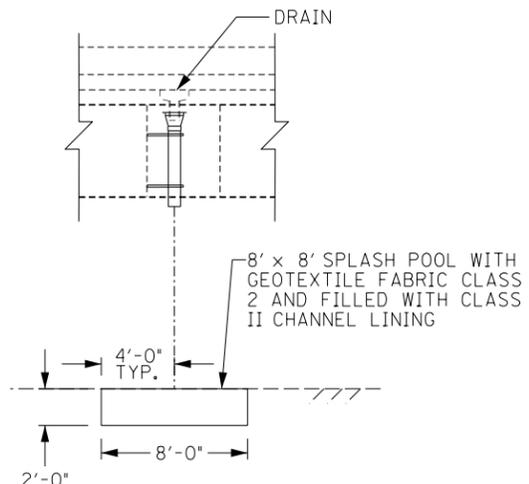


DOWNSPOUT DETAIL - MEDIAN
TRANSVERSE SECTION
(21 LOCATIONS)

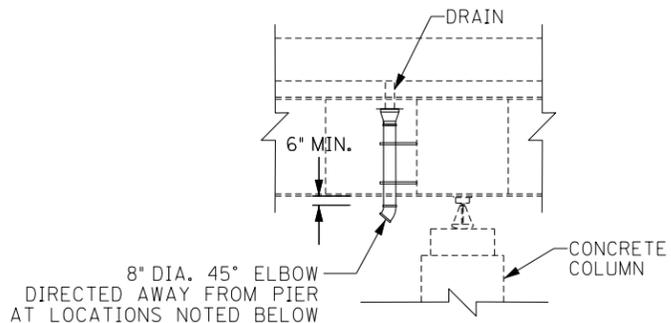


DOWNSPOUT DETAIL - FASCIA
TRANSVERSE SECTION
(18 LOCATIONS)

NOTE:
SIMILAR TO THE DETAIL BELOW,
AT STATION 102+00, PROVIDE 8' WIDE
X 20' LONG SPLASH POOL FOR W.B
AND E.B (2 LOCATIONS)



DOWNSPOUT DETAIL - SPLASH POOL
LONGITUDINAL SECTION
INLET STATIONS 99+83, 100+83 AND 101+34 (W.B AND E.B)
6 LOCATIONS TOTAL



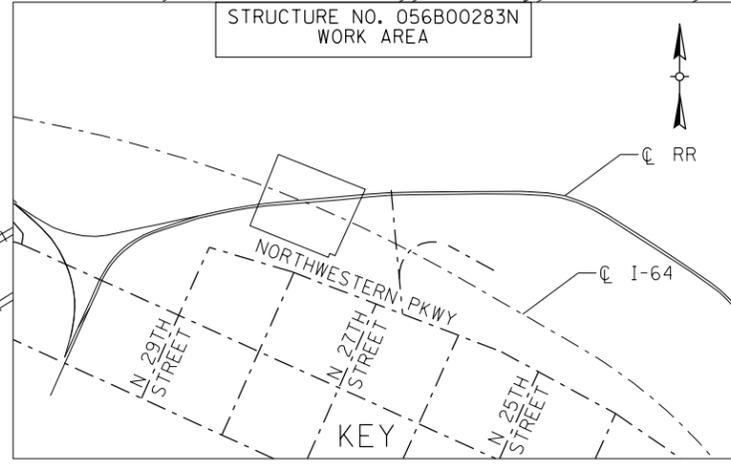
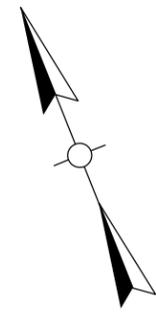
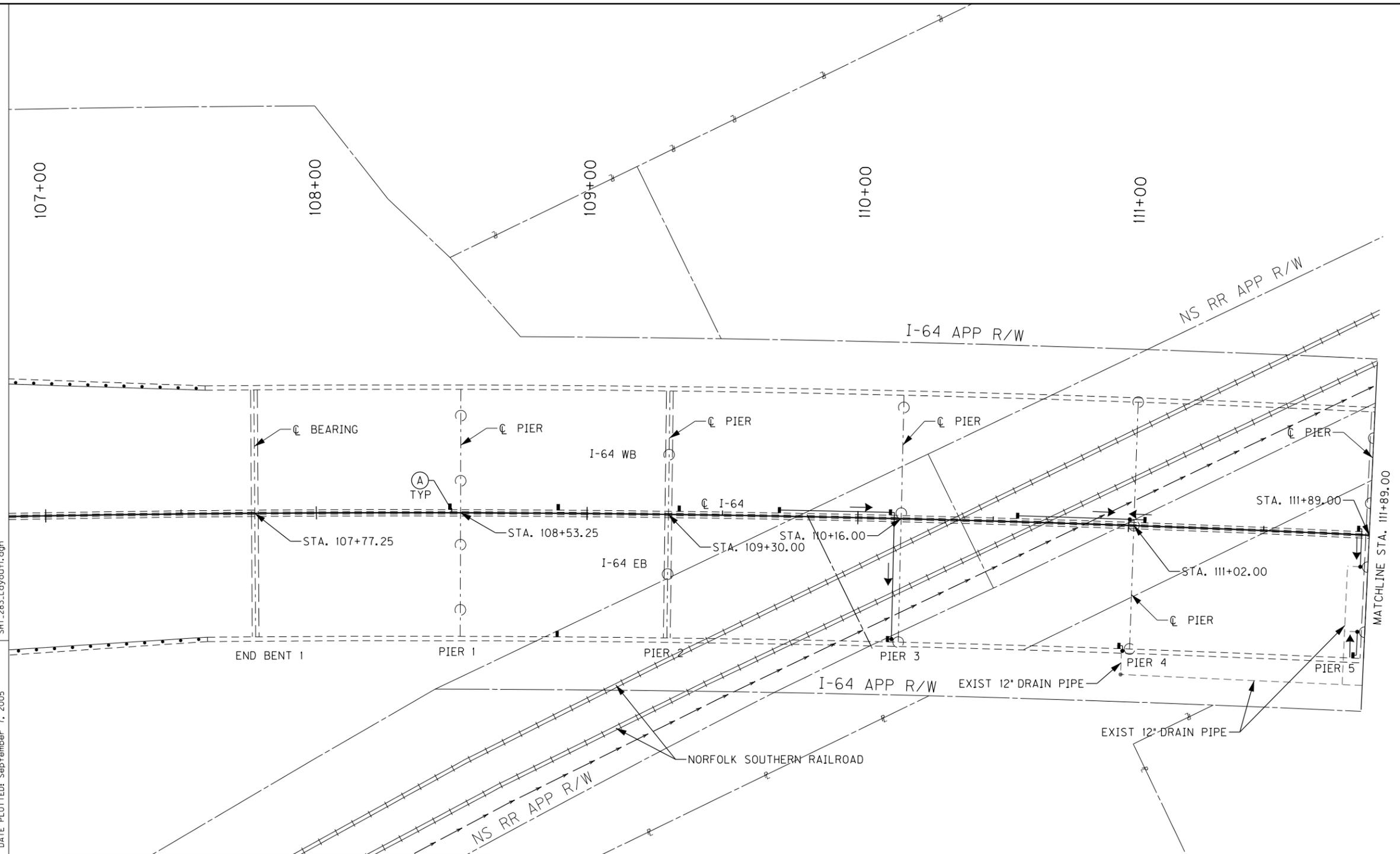
DOWNSPOUT DETAIL - COLUMN
LONGITUDINAL SECTION
PIERS 14, 16 AND 29 W.B. (TWO INLETS AT 29 W.B.)
PIER 29 E.B. (TWO INLETS AT 29 E.B.)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00284N	
284 DRAINAGE DETAILS - 4		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	D11 DRAWING NO. 28870

FILE NAME:
SHT_283_Layout1.dgn

USER: Nicholas.Allen
DATE PLOTTED: September 7, 2005

OpenRoads Designer: v10.16.2.24E-SHEET NAME: S23464 020



LABEL	DIAMETER	MIN. SLOPE	LABEL	DIAMETER	MIN. SLOPE
A	8"	0.60%	P	10"	0.40%
B	8"	0.80%	Q	10"	0.60%
C	8"	1.00%	R	10"	0.80%
D	8"	1.20%	S	10"	1.00%
E	8"	1.40%	T	10"	1.20%
F	8"	1.60%	U	10"	1.40%
H	8"	1.80%	V	10"	1.60%
I	8"	2.00%	W	10"	1.80%

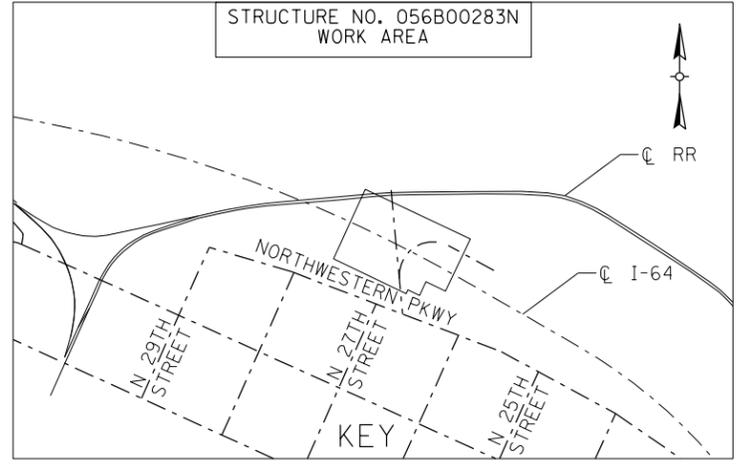
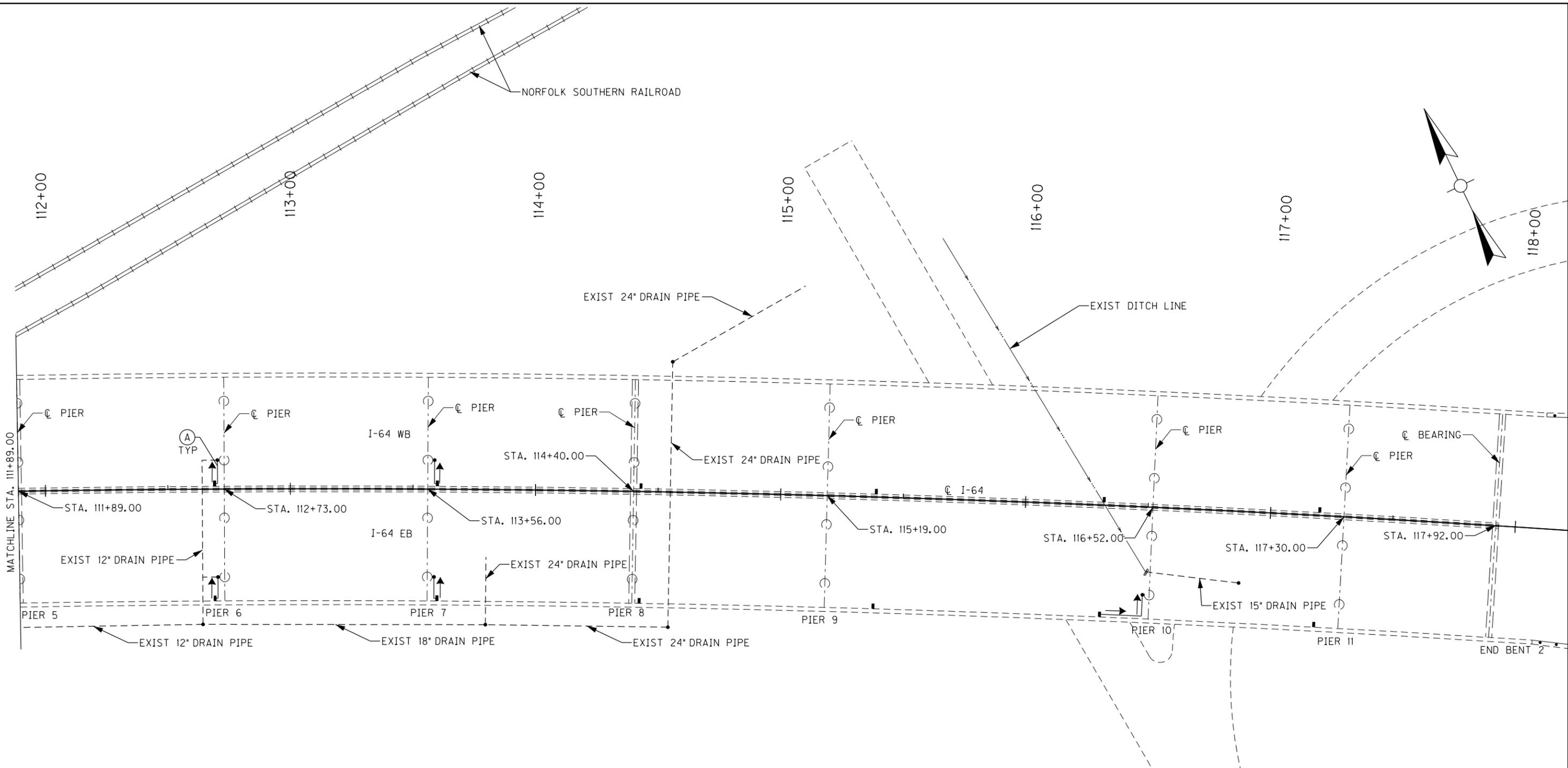


ITEM NUMBER
5-10016

NOTE:
FOR CONNECTION OF BRIDGE DECK DRAINAGE SYSTEM TO EXISTING 12" DRAIN PIPE FOR PIERS 4 TO 6 SEE DRAINAGE DETAIL SHEETS

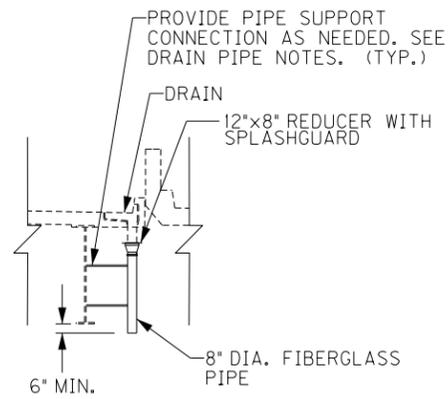
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00283N	
283 DRAINAGE LAYOUT - 1		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D12 DRAWING NO. 28870

FILE NAME: SHT_283_Layout2.dgn
 USER: Nicholas.Allen
 DATE PLOTTED: September 7, 2005
 E-SHEET NAME: S23464 020
 v10.13.2.2
 OpenRoads Designer



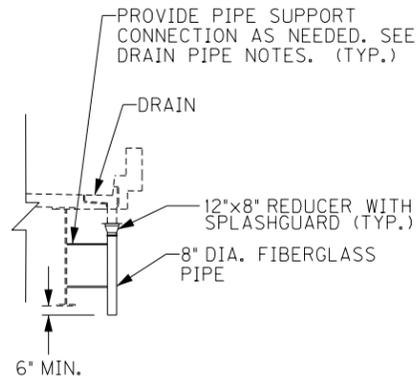
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00283N	
283 DRAINAGE LAYOUT - 2		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D13 DRAWING NO. 28870



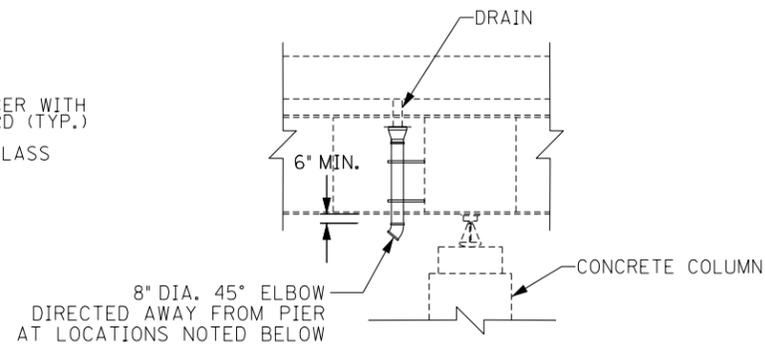
DOWNSPOUT DETAIL – MEDIAN

TRANSVERSE SECTION
(7 LOCATIONS)



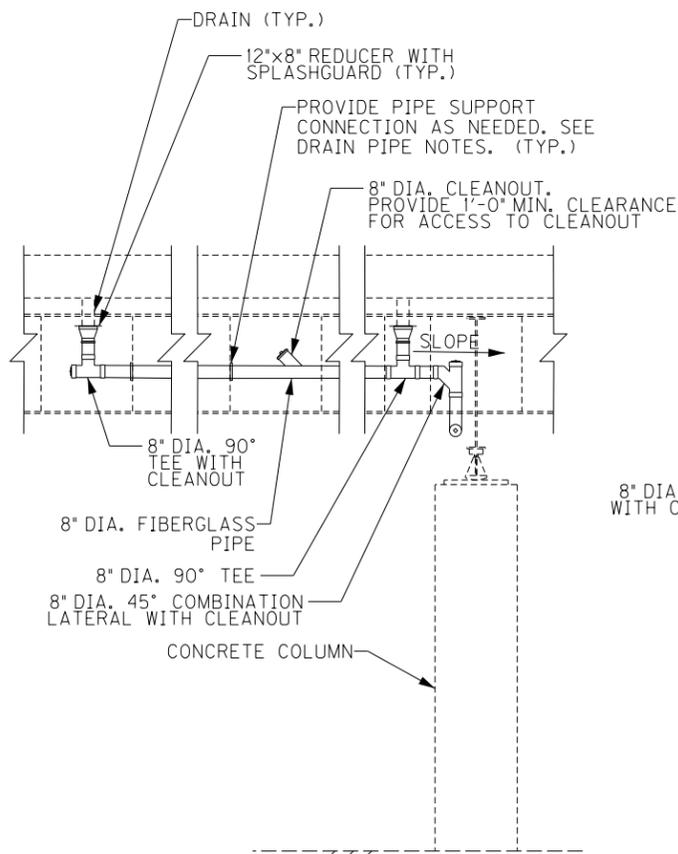
DOWNSPOUT DETAIL – FASCIA

TRANSVERSE SECTION
(4 LOCATIONS)



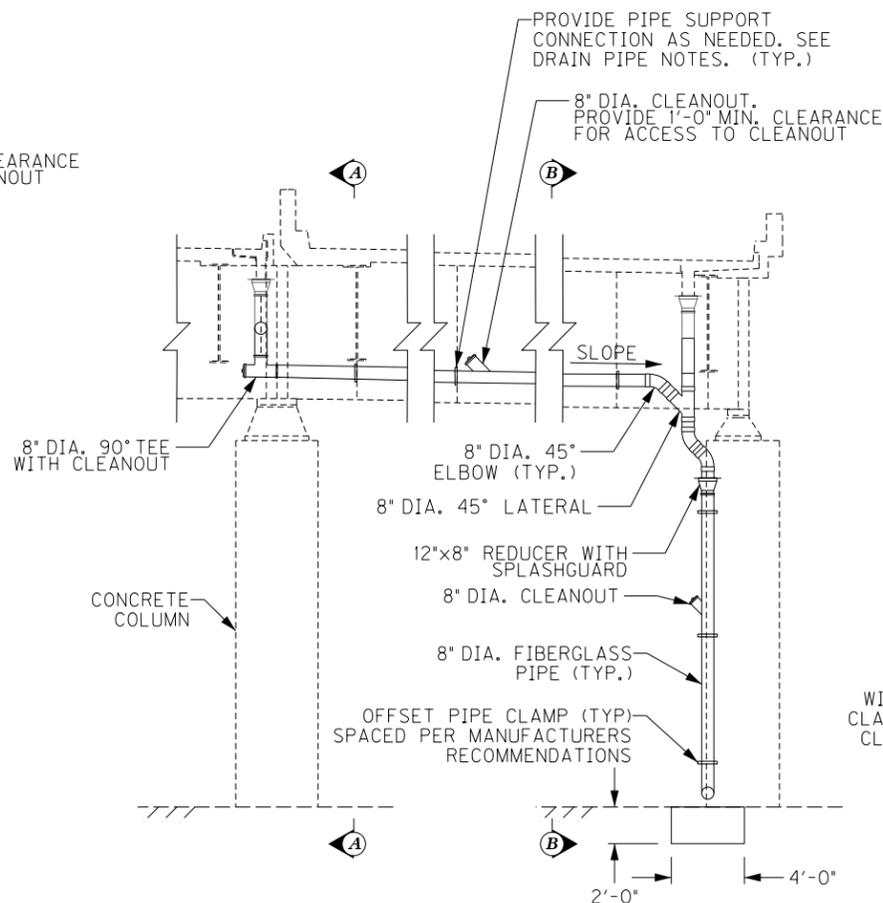
DOWNSPOUT DETAIL – COLUMN

LONGITUDINAL SECTION
PIERS 1, 2 AND 8 (MEDIAN)
PIER 8 (FASCIA)
4 LOCATIONS



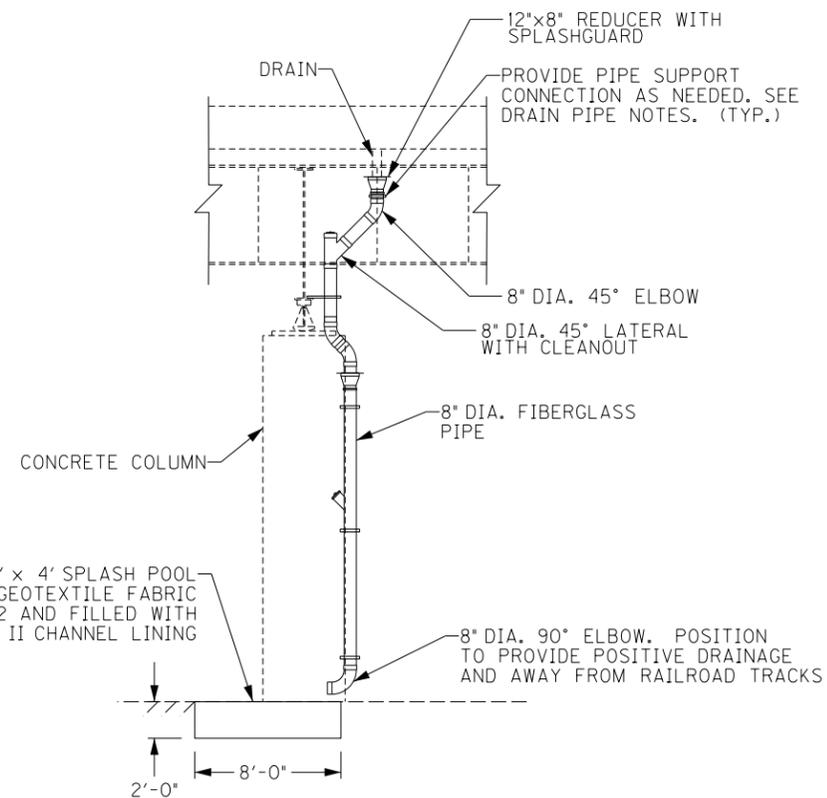
SECTION A-A

LONGITUDINAL SECTION
PIER 3 CENTER COLUMN SHOWN
(LOOKING NORTH)



DRAINAGE DETAIL – ELEVATION

TRANSVERSE SECTION
PIER 3
(LOOKING EAST)



SECTION B-B

LONGITUDINAL SECTION
PIER 3 SOUTH COLUMN SHOWN
(LOOKING SOUTH)

FILE NAME:
DETAILS_283.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

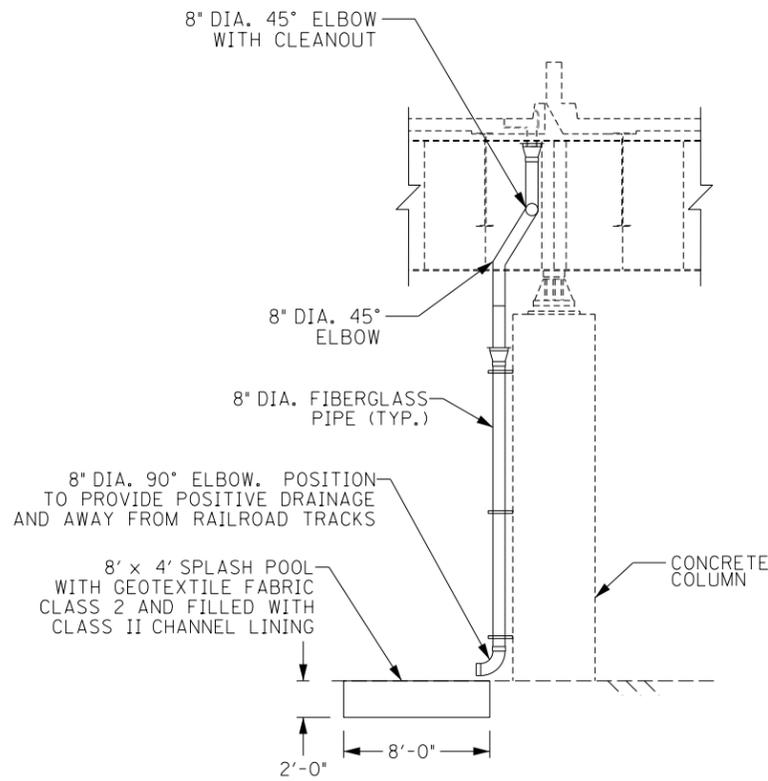
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00283N	
283 DRAINAGE DETAILS – 1		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D14
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

FILE NAME:
DETAILS_283.DGN

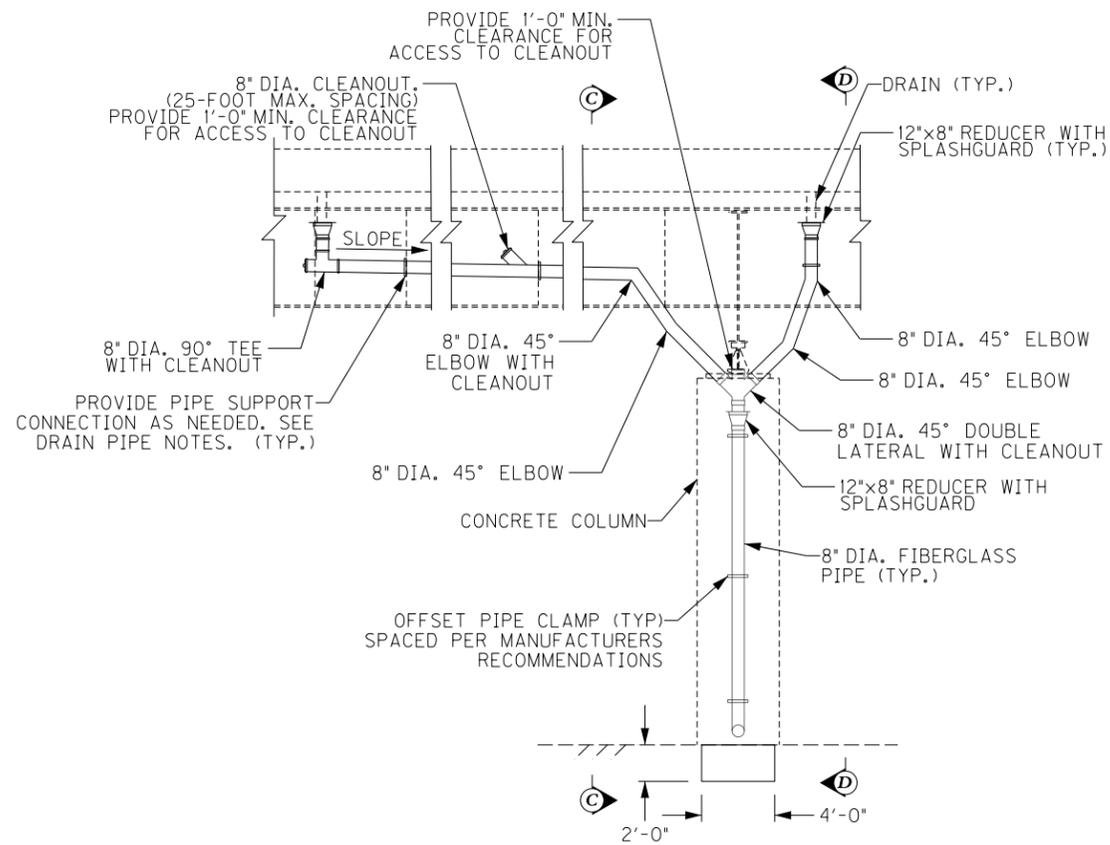
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464_020



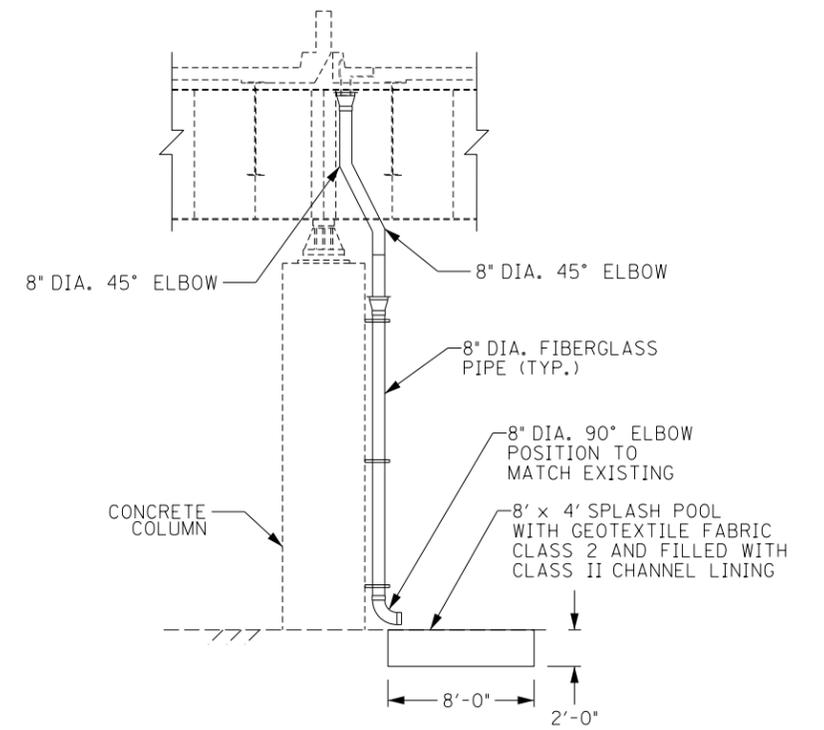
SECTION C-C

TRANSVERSE SECTION
PIER 4 CENTER COLUMN SHOWN
(LOOKING EAST)



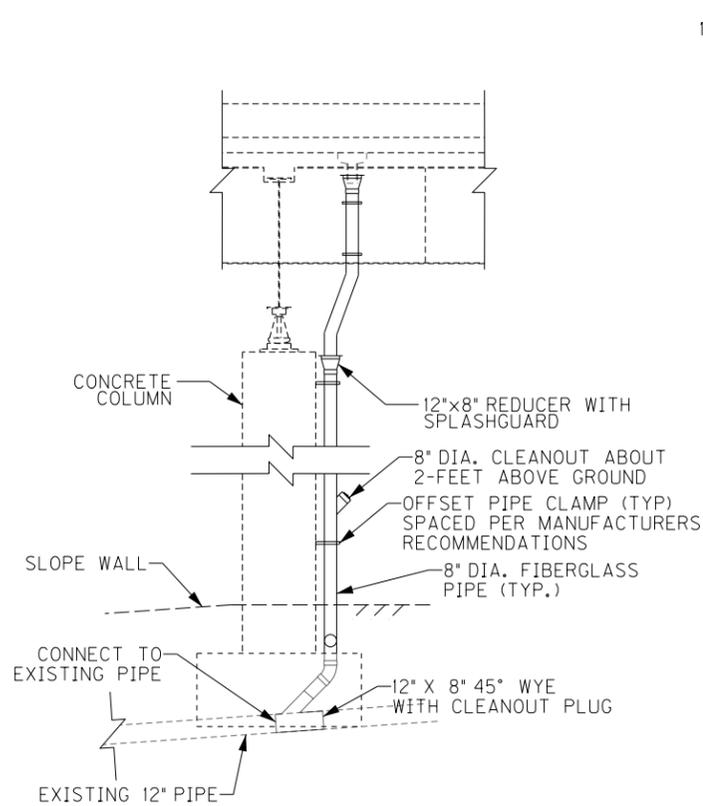
DRAINAGE DETAIL - ELEVATION

LONGITUDINAL SECTION
PIER 4 CENTER COLUMN SHOWN
(LOOKING NORTH)



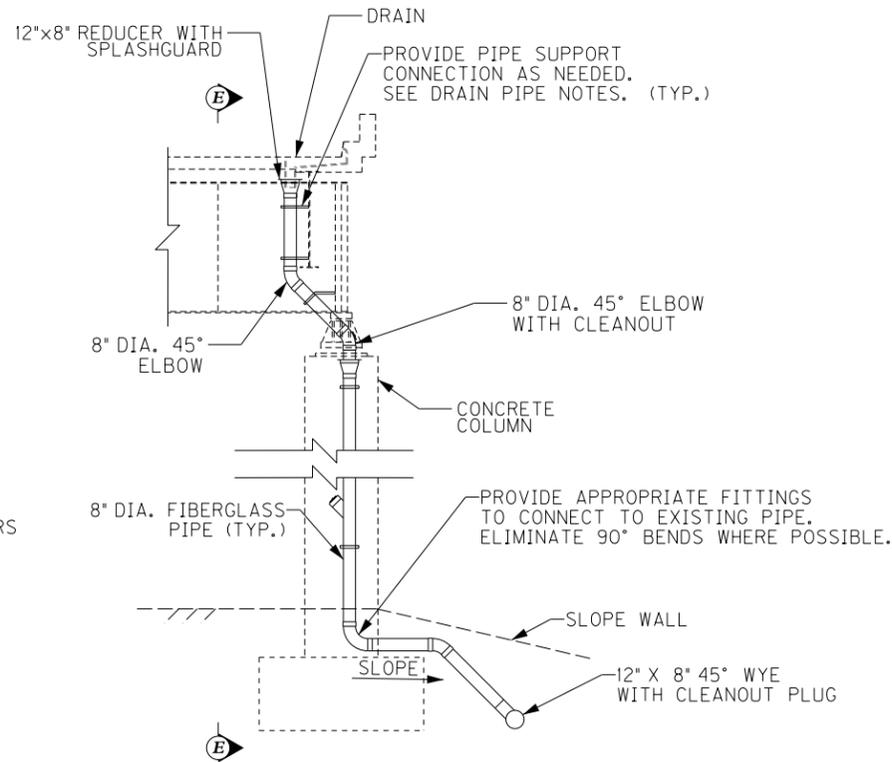
SECTION D-D

TRANSVERSE SECTION
PIER 4 CENTER COLUMN SHOWN
(LOOKING WEST)



SECTION E-E

LONGITUDINAL SECTION
PIER 4 SOUTH COLUMN SHOWN
(LOOKING SOUTH)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 4 SOUTH COLUMN SHOWN
(LOOKING EAST)

NOTE:
FOR CONNECTION TO EXISTING PIPE, SAWCUT EXISTING CONCRETE SLOPE WALL AND REPLACE. MATCH EXISTING SLOPES. (TYP.)
SEE STANDARD DRAWING RDI-025-06 FOR FIBERGLASS PIPE INSTALLATION FROM PIER COLUMN TO EXISTING 12" PIPE. PIPE SHALL BE INSTALLED PER KYTC STANDARD SPECIFICATION SECTION 701 SIMILAR TO THERMOPLASTIC PIPE. COST FOR REMOVING UNDERGROUND PIPING IS CONSIDERED INCIDENTAL.

ITEM NUMBER	5-10016
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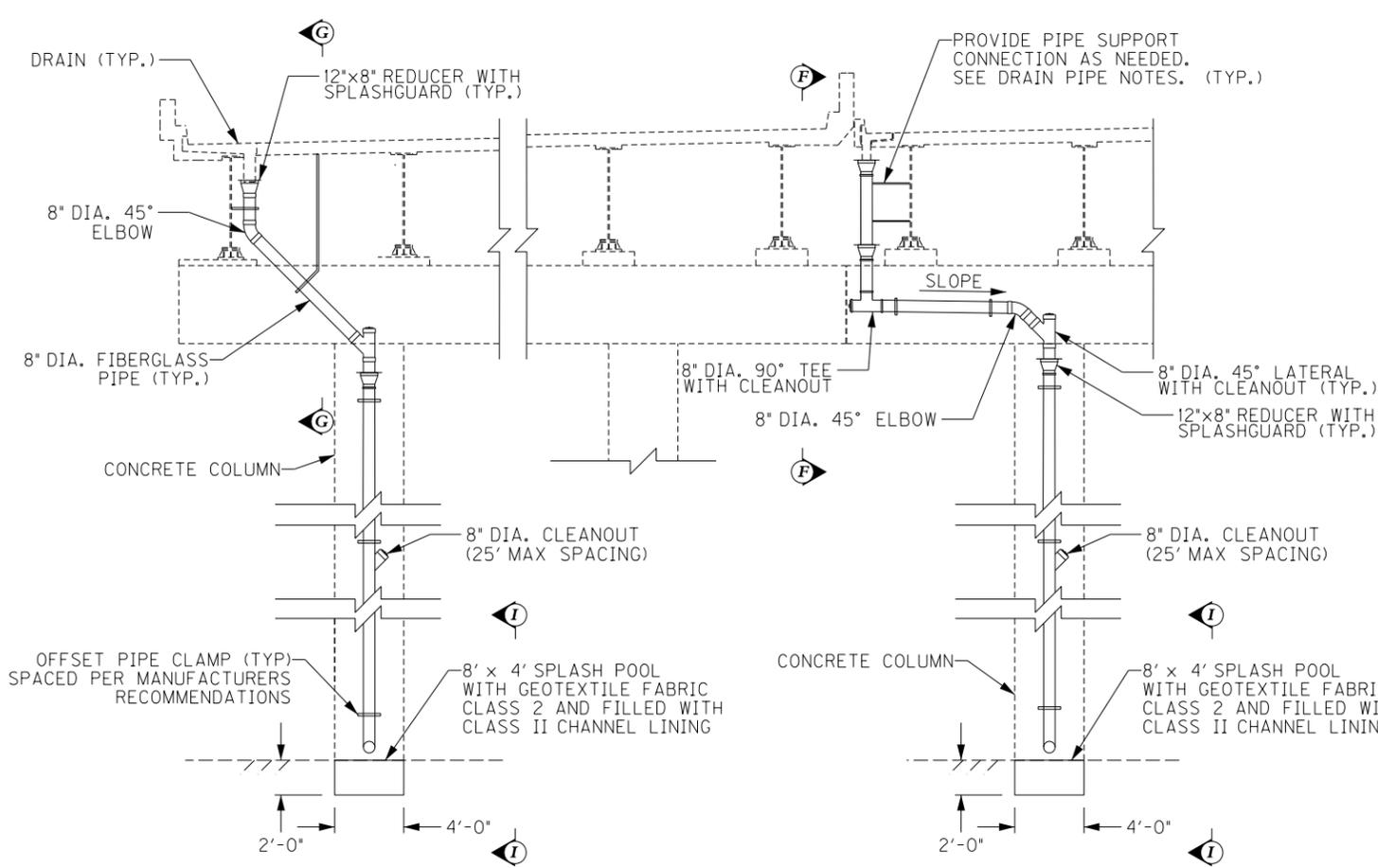
REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00283N	
283 DRAINAGE DETAILS - 2		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D15 DRAWING NO. 28870

FILE NAME:
DETAILS_283.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

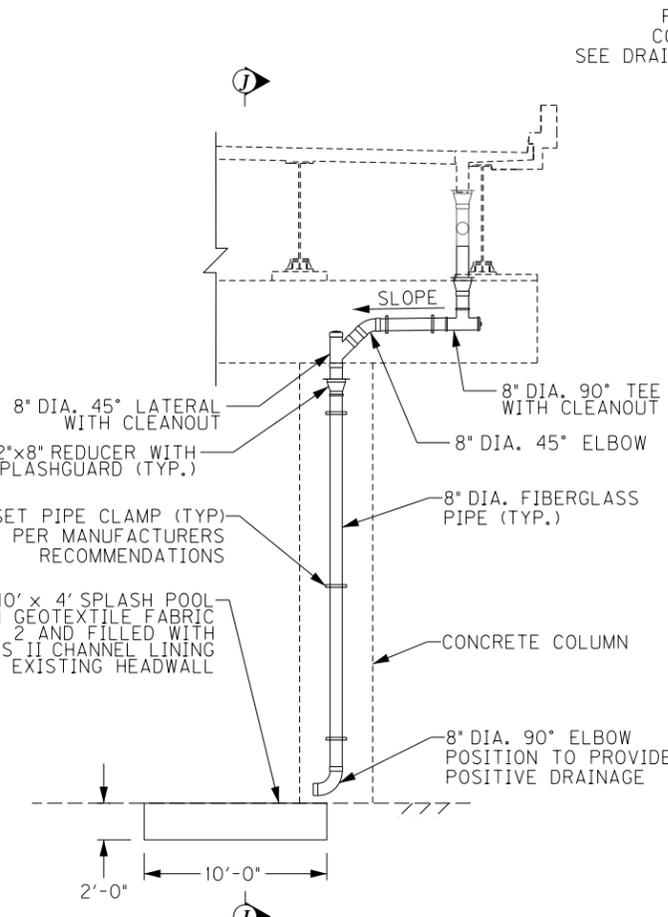
DESIGNER: S23464 020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



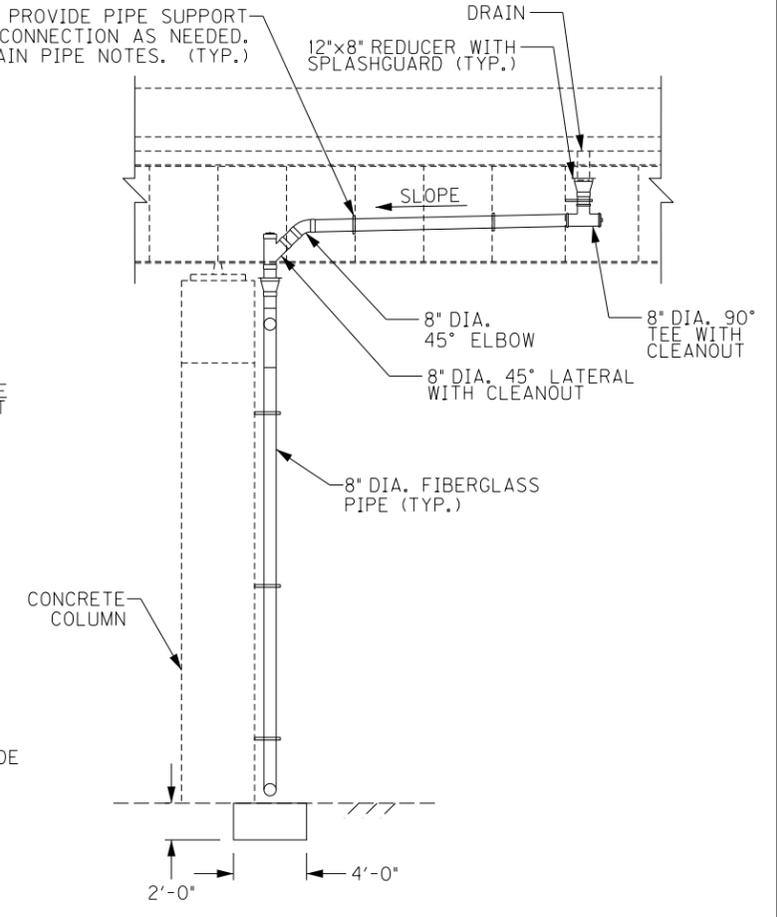
DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 7 E.B. & W.B.
(LOOKING WEST)



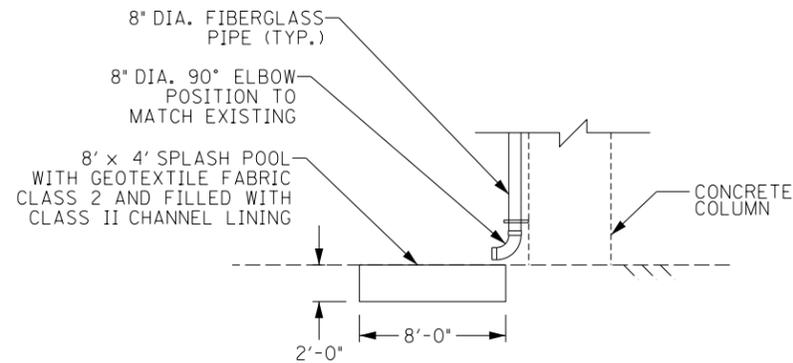
DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 10
(LOOKING EAST)



SECTION J-J

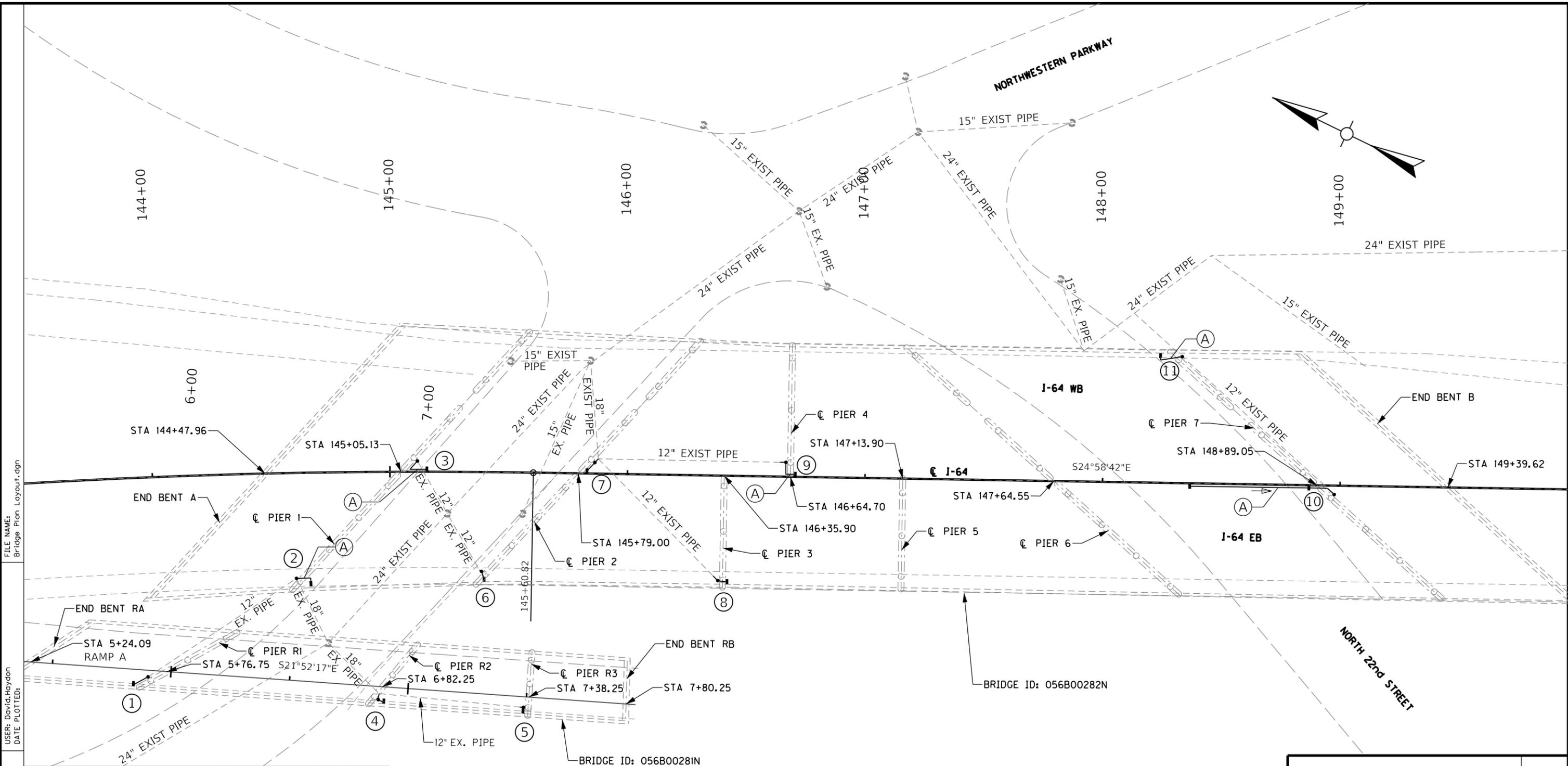
LONGITUDINAL SECTION
PIER 10
(LOOKING SOUTH)



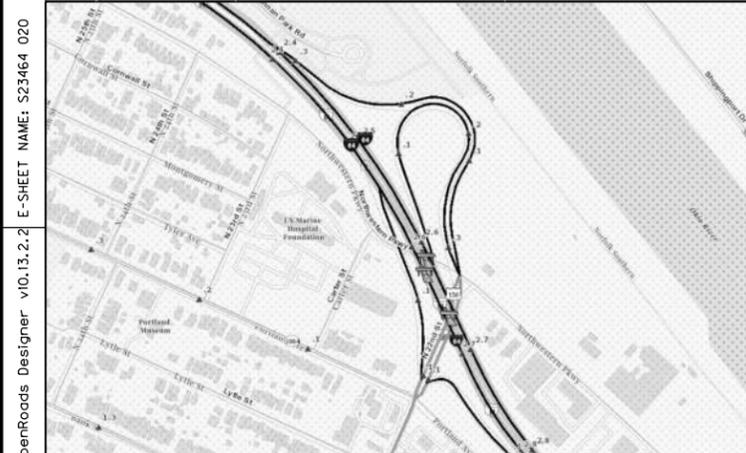
SECTION I-I

LONGITUDINAL SECTION
PIER 7
(LOOKING SOUTH)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00283N	
283 DRAINAGE DETAILS - 4		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	D17 DRAWING NO. 28870



FILE NAME: B1Bridge Plan Layout.dgn
 USER: David.Hoydon
 DATE PLOTTED:



LABEL	DIAMETER	MIN. SLOPE	LABEL	DIAMETER	MIN. SLOPE
A	8"	0.60%	P	10"	0.40%
B	8"	0.80%	Q	10"	0.60%
C	8"	1.00%	R	10"	0.80%
D	8"	1.20%	S	10"	1.00%
E	8"	1.40%	T	10"	1.20%
F	8"	1.60%	U	10"	1.40%
H	8"	1.80%	V	10"	1.60%
I	8"	2.00%	W	10"	1.80%

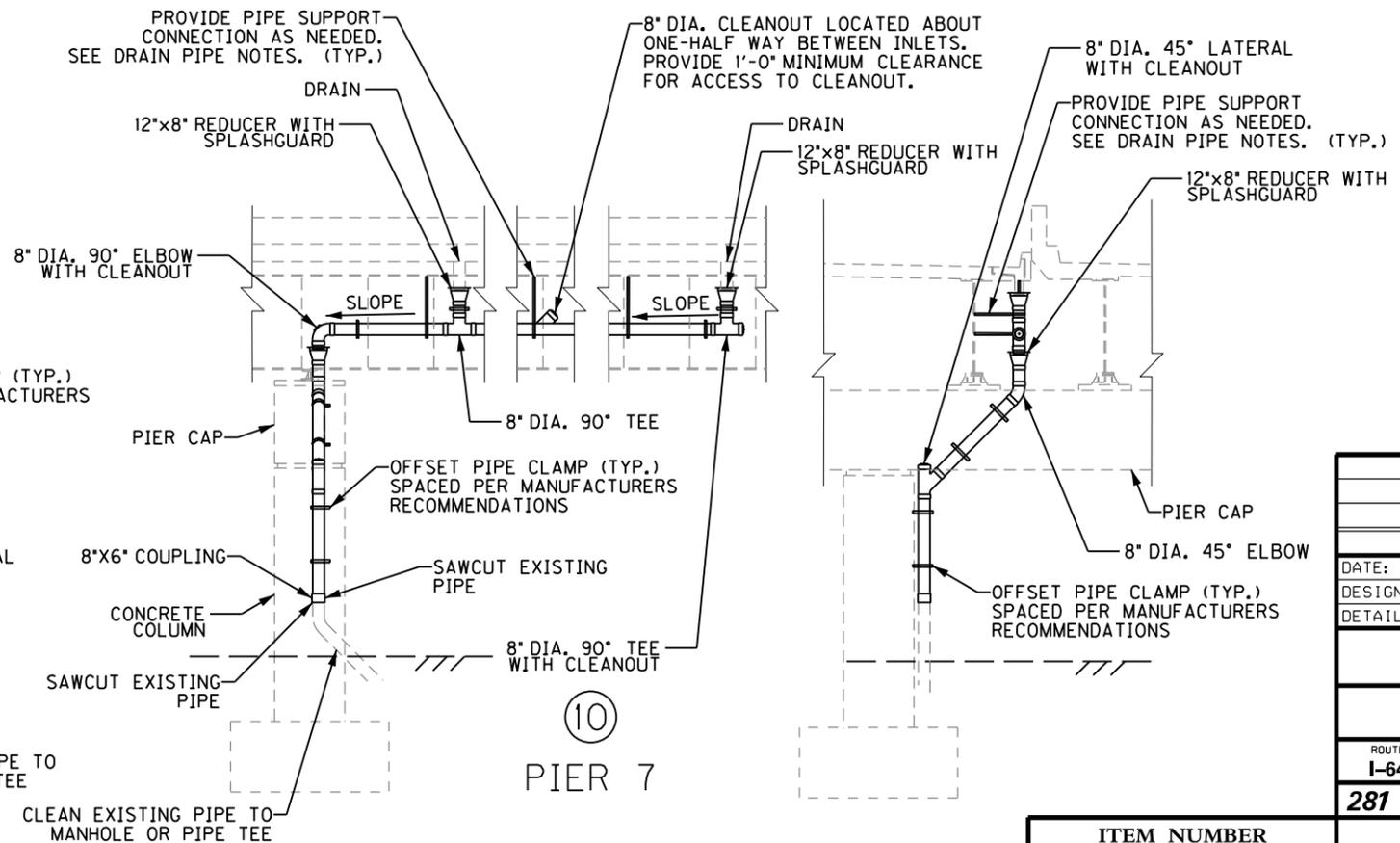
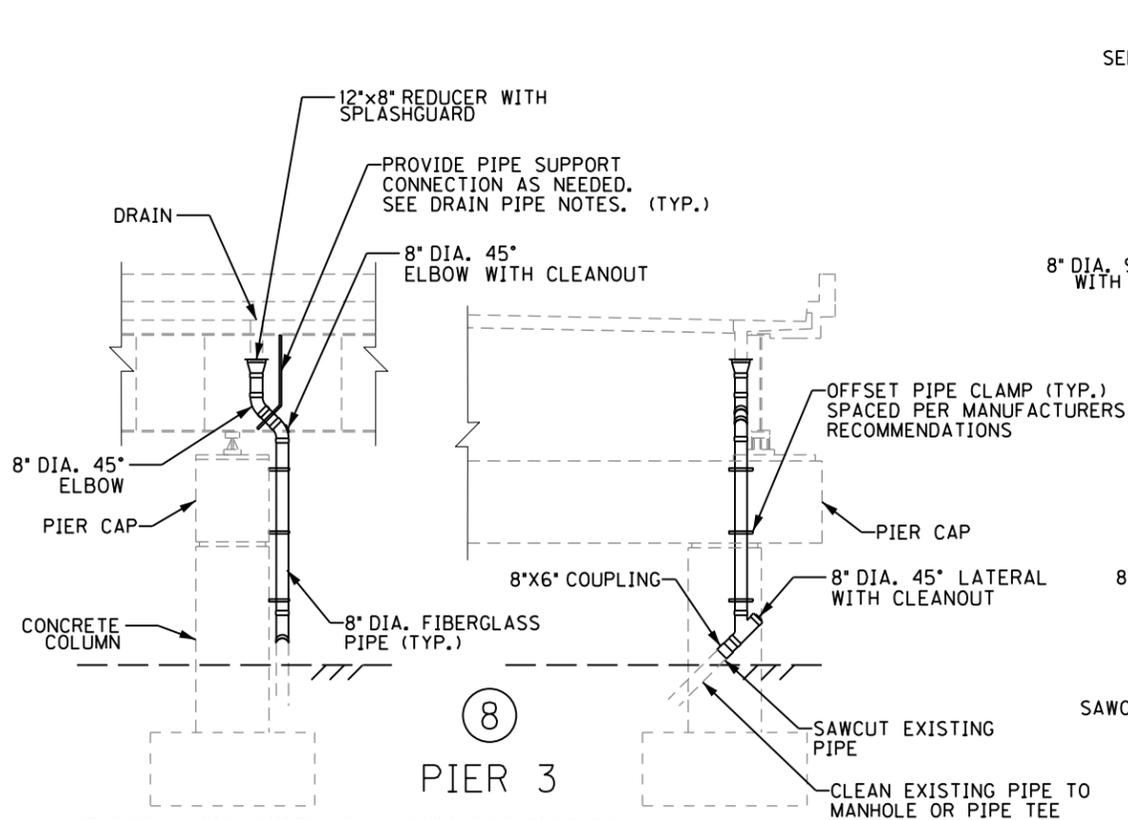
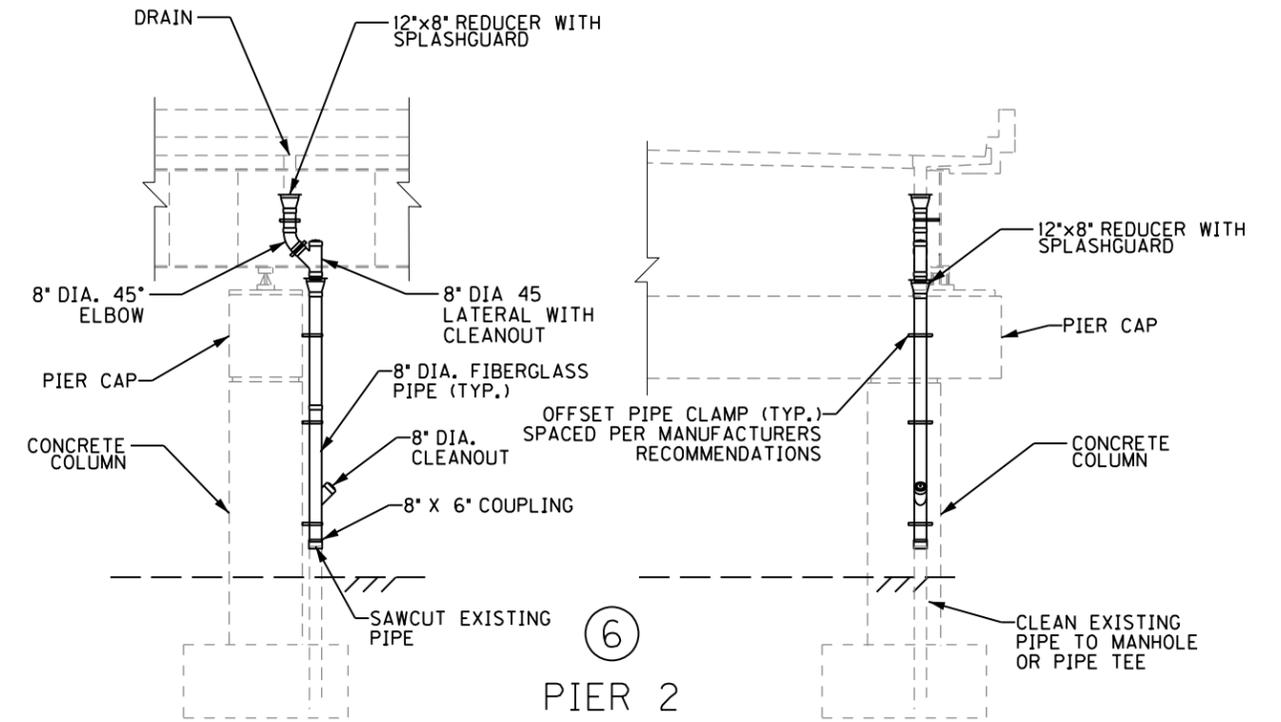
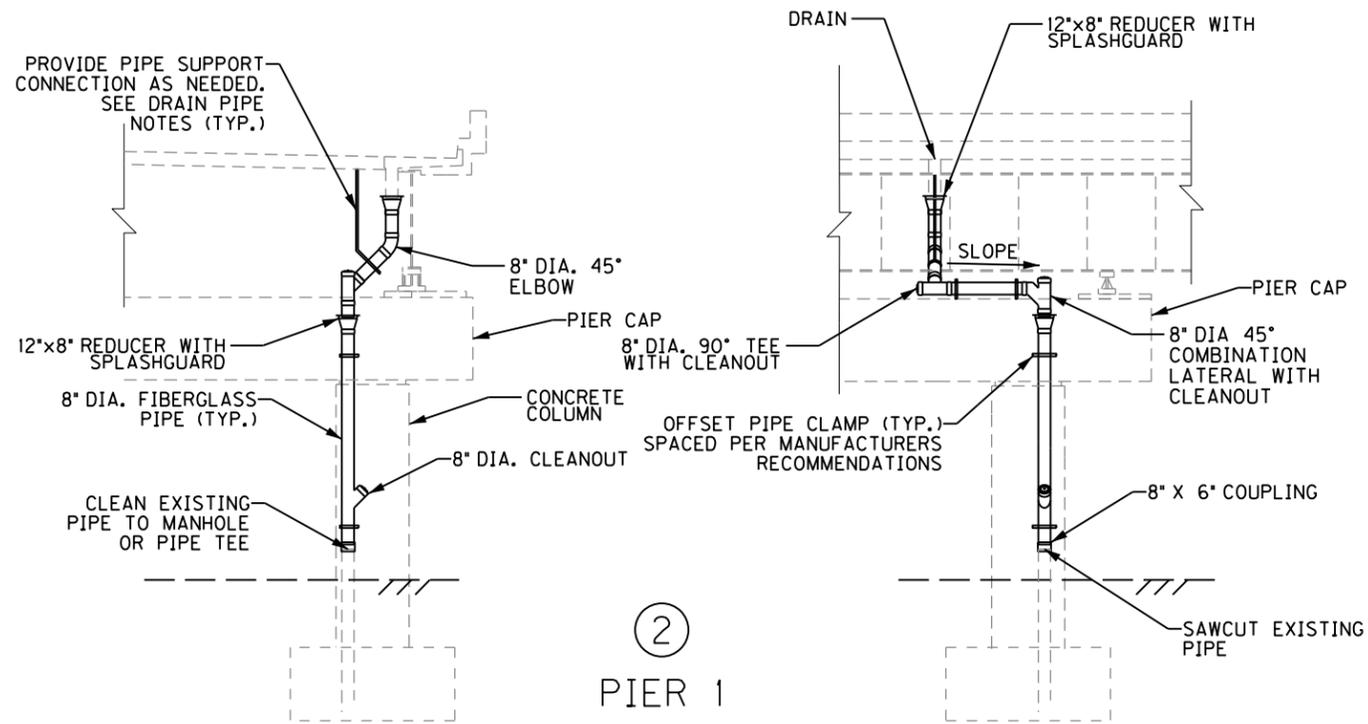


ITEM NUMBER
5-10016

REVISION		DATE
DATE: 1/31/24	CHECKED BY	
DESIGNED BY: DCH	PDO	
DETAILED BY: DCH	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NOS. 056B00281N AND 282N	
281 AND 282 DRAINAGE LAYOUT		
PREPARED BY		SHEET NO.
Michael Baker INTERNATIONAL		D18
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM		DRAWING NO. 28870

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464_020

I-64 EASTBOUND



IF PIPE MANUFACTURER RECOMMENDS PIPE SUPPORT CONNECTION TO SUPERSTRUCTURE BETWEEN DRAIN AND THE SUBSTRUCTURE, CONTRACTOR SHALL PROVIDE ADDITIONAL 12" X 8" REDUCER WITH SPLASHGUARD NEAR THE PIER CAP.

ITEM NUMBER	5-10016
-------------	---------

REVISION		DATE
DATE: 1/31/24	CHECKED BY	
DESIGNED BY: DCH	PDO	
DETAILED BY: DCH	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NOS. 056B00281N AND 282N	
281 AND 282 DRAINAGE DETAILS-1		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D19 DRAWING NO. 28870

FILE NAME: DETAIL-SHEET-EB.DGN

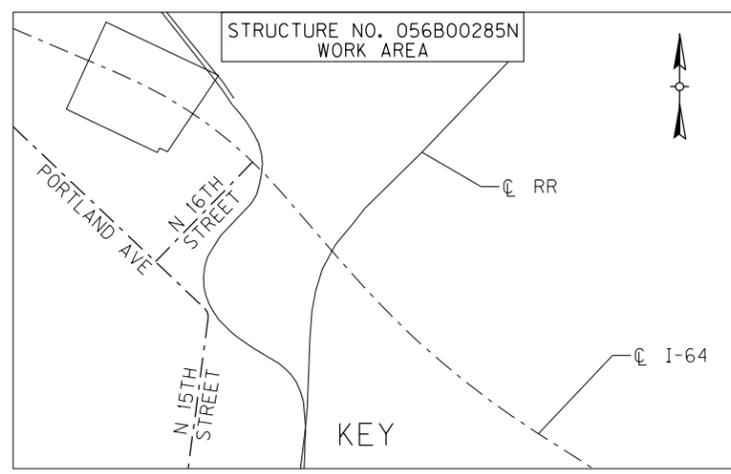
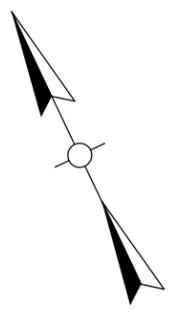
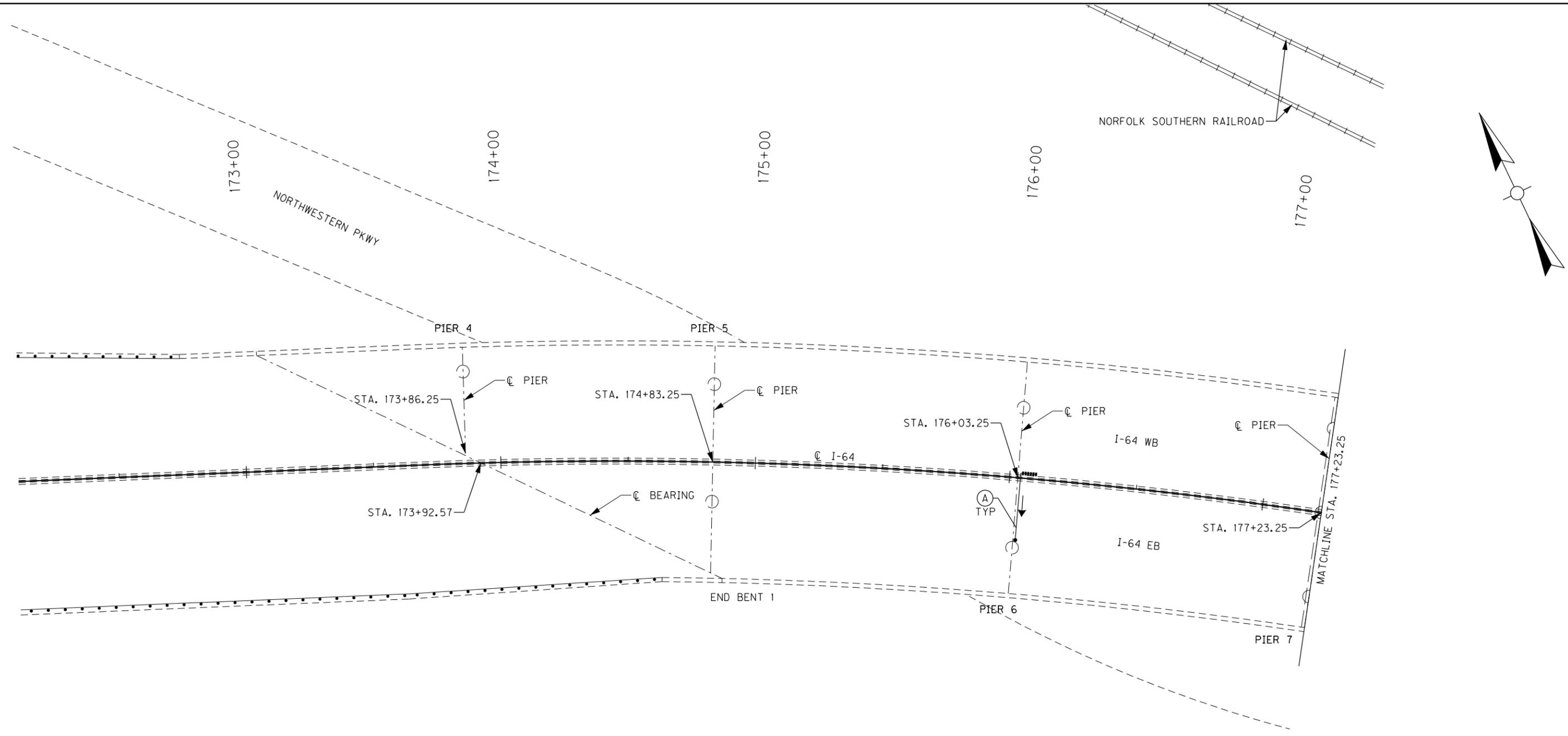
USER: David.Hoydon
DATE PLOTTED: July 16, 2020

penRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020

FILE NAME:
SHT_285_Layout1.dgn

USER: Nicholas.Allen
DATE PLOTTED: September 7, 2005

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



LABEL	DIAMETER	MIN. SLOPE	LABEL	DIAMETER	MIN. SLOPE
A	8"	0.60%	P	10"	0.40%
B	8"	0.80%	Q	10"	0.60%
C	8"	1.00%	R	10"	0.80%
D	8"	1.20%	S	10"	1.00%
E	8"	1.40%	T	10"	1.20%
F	8"	1.60%	U	10"	1.40%
H	8"	1.80%	V	10"	1.60%
I	8"	2.00%	W	10"	1.80%



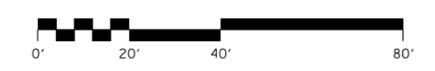
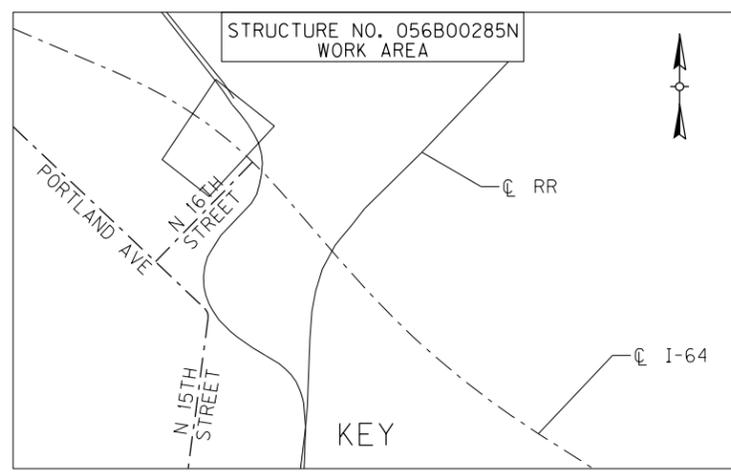
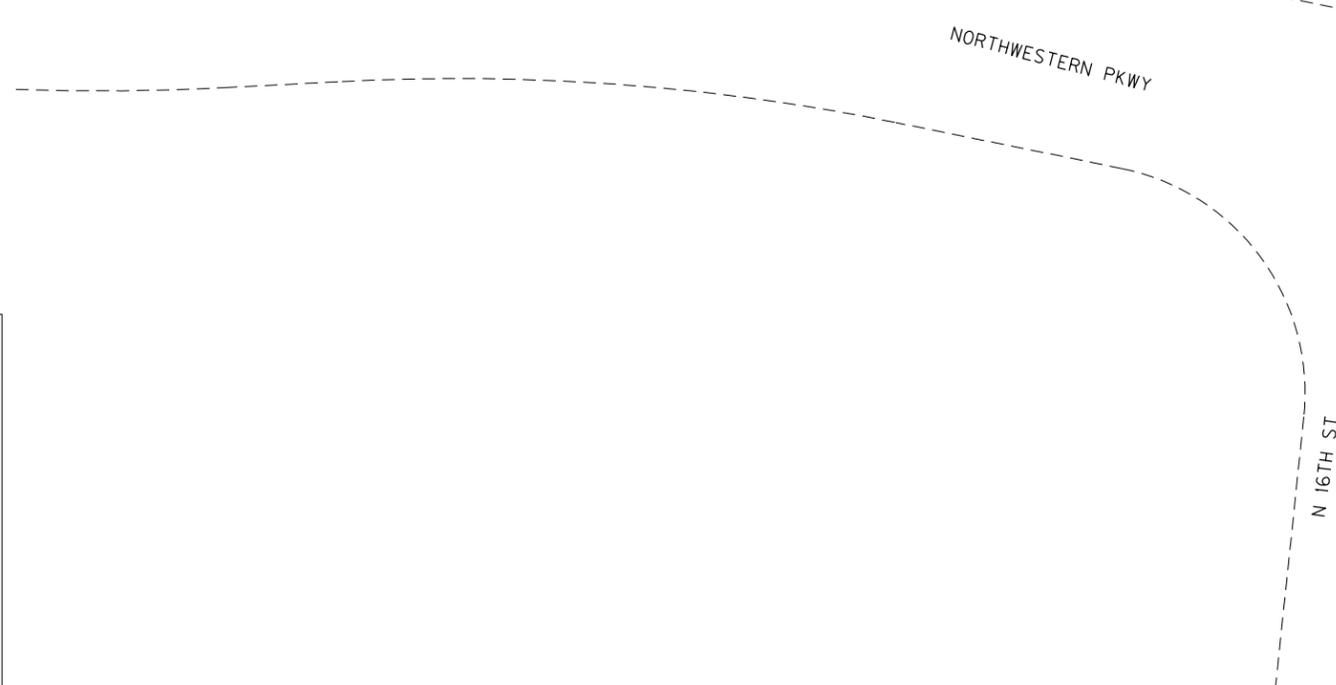
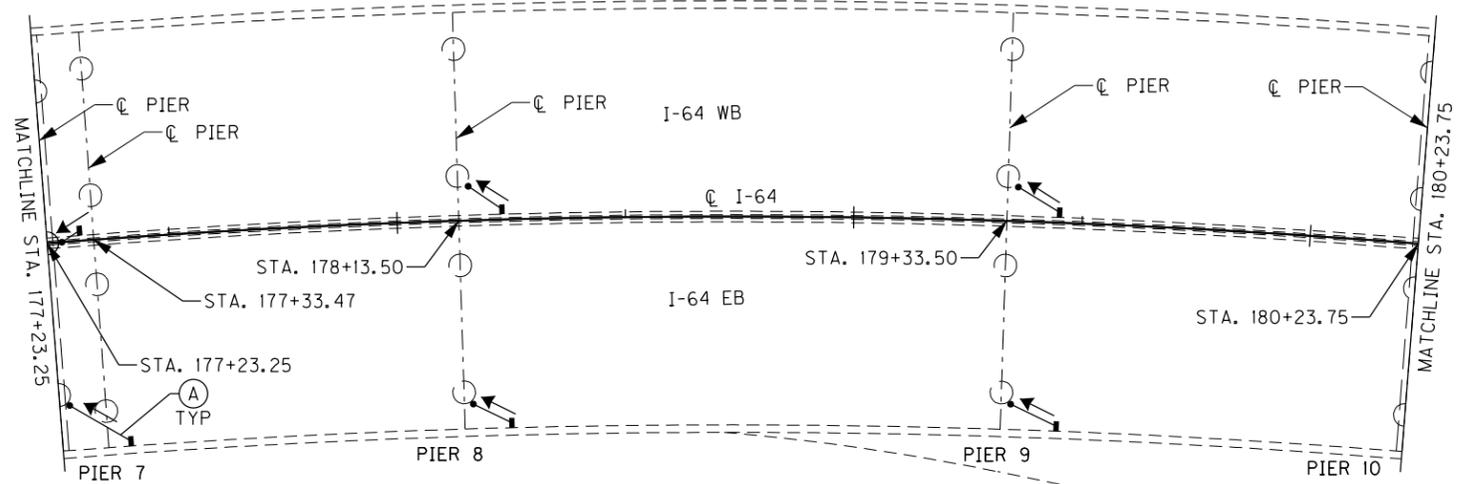
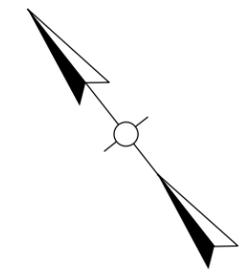
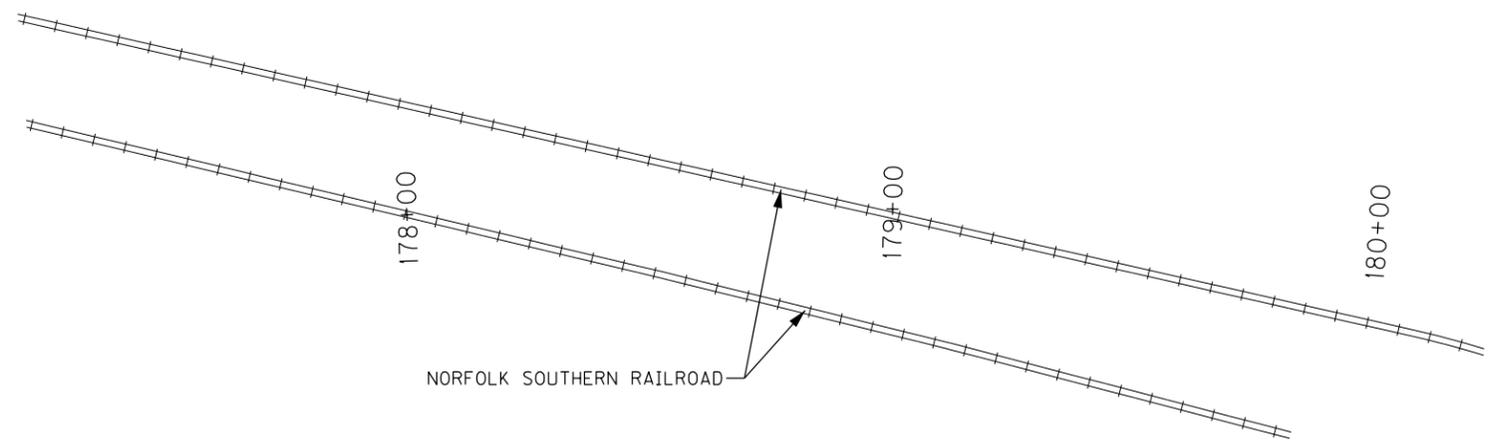
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE LAYOUT - 1		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D22 DRAWING NO. 28870

FILE NAME:
SHT_285_Layout2.dgn

USER: Nicholas.Allen
DATE PLOTTED: September 7, 2005

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



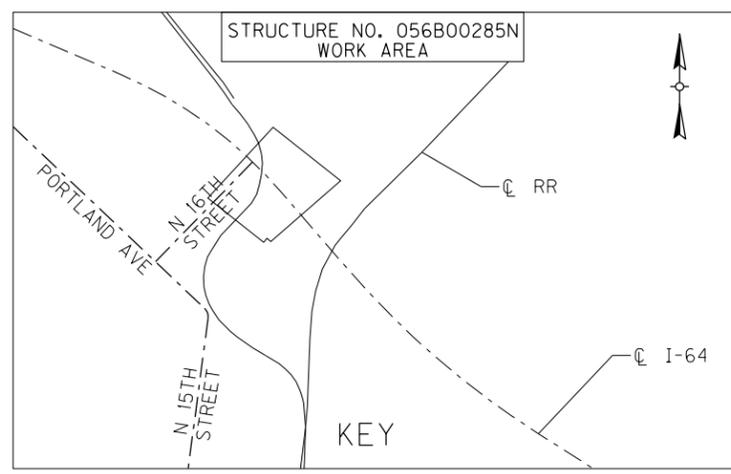
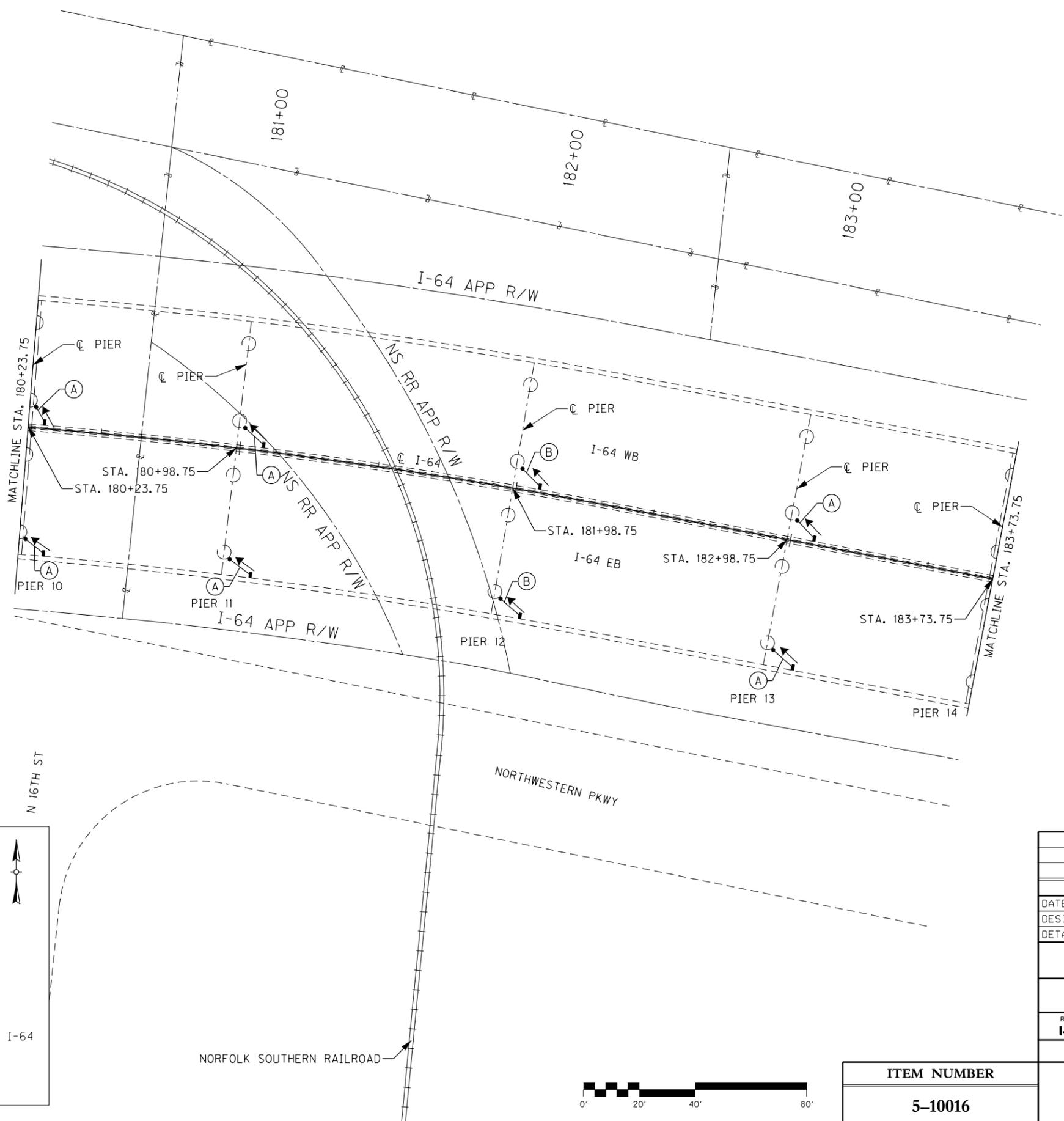
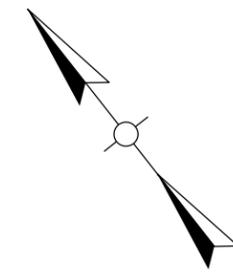
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE LAYOUT - 2		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D23 DRAWING NO. 28870

FILE NAME:
SHT_285_Layout3.dgn

USER: Nicholas.Allen
DATE PLOTTED: September 7, 2005

OpenRoads Designer: v10.16.2.24E-SHEET NAME: S23464 020



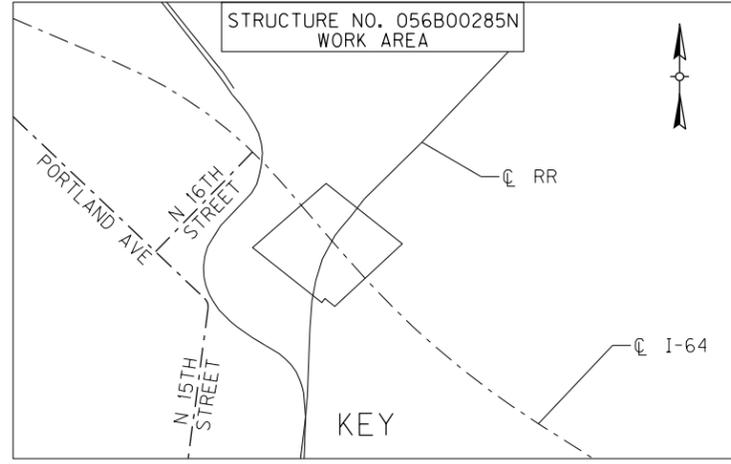
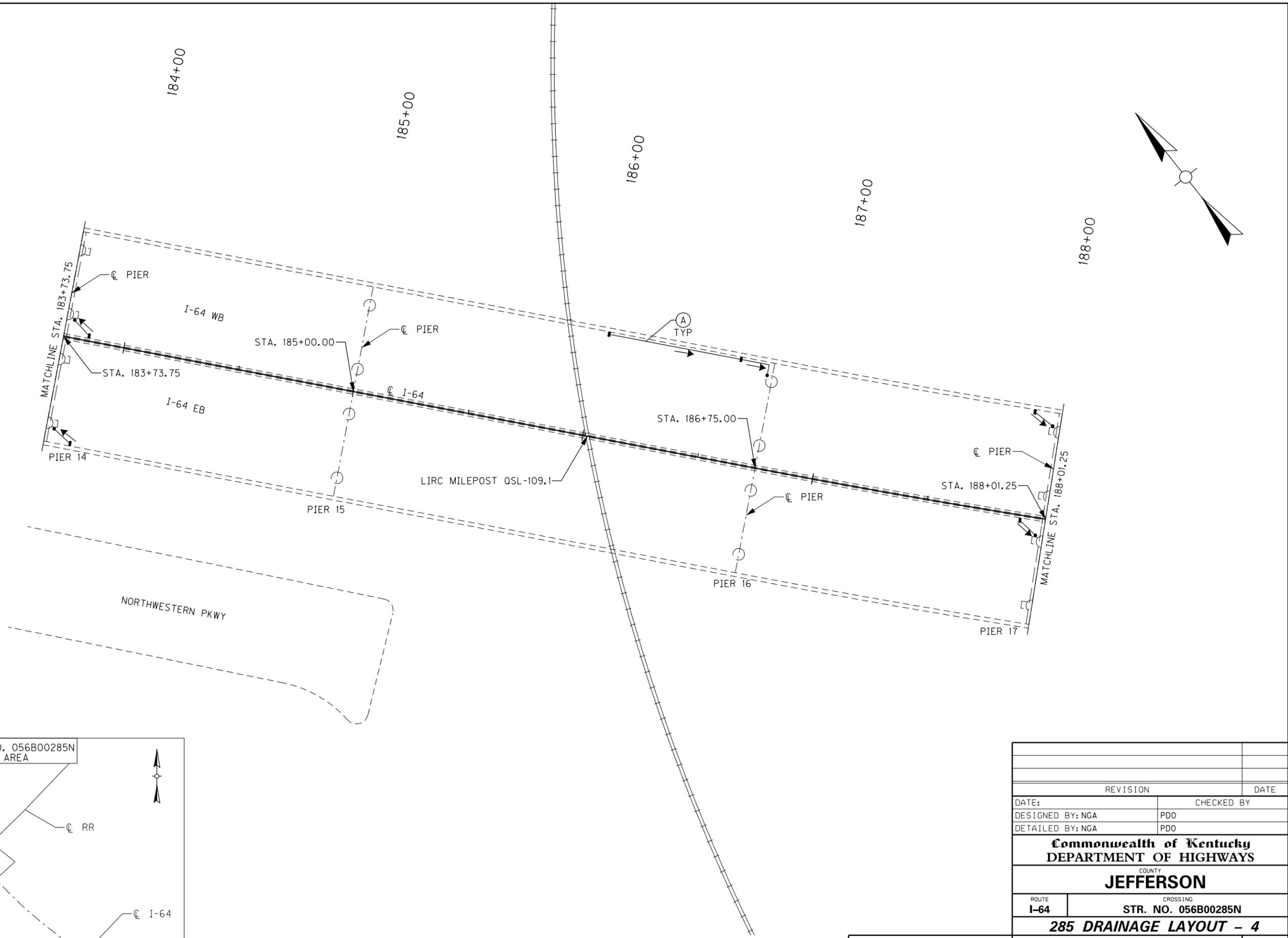
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE LAYOUT - 3		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D24 DRAWING NO. 28870

FILE NAME:
SHT_285_Layout4.dgn

USER: Nicholas.Allen
DATE PLOTTED: September 7, 2005

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



ITEM NUMBER
5-10016

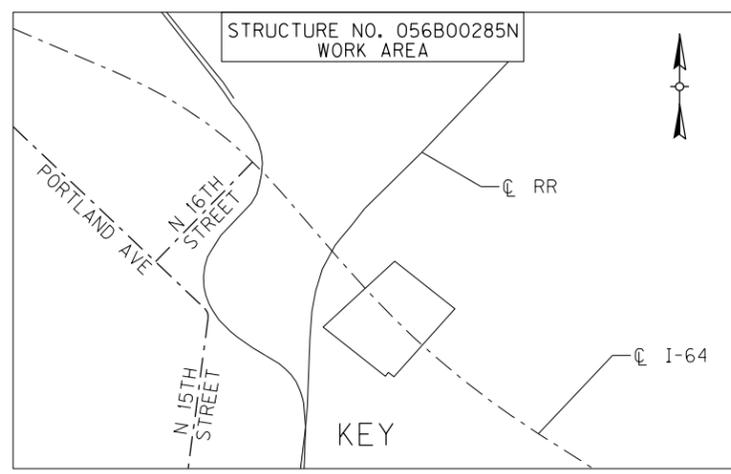
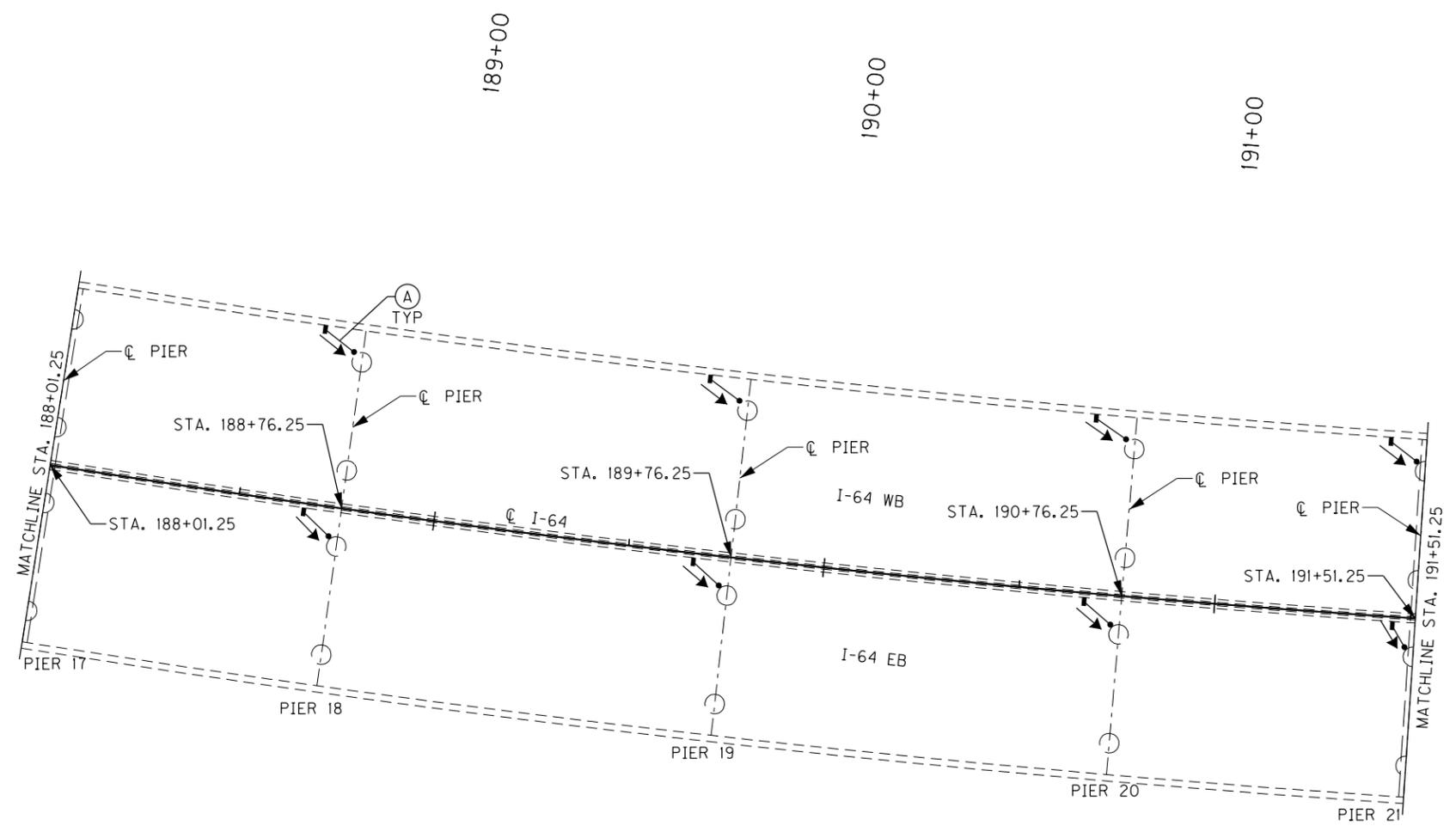
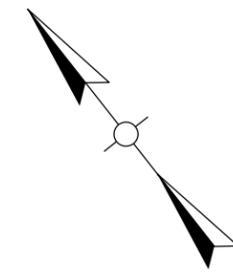
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE LAYOUT - 4		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D25 DRAWING NO. 28870

FILE NAME:
SHT_285_Layout5.dgn

USER: Nicholas.Allen
DATE PLOTTED:

E-SHEET NAME: S23464 020

OpenRoads Designer v10.13.2.2



ITEM NUMBER
5-10016

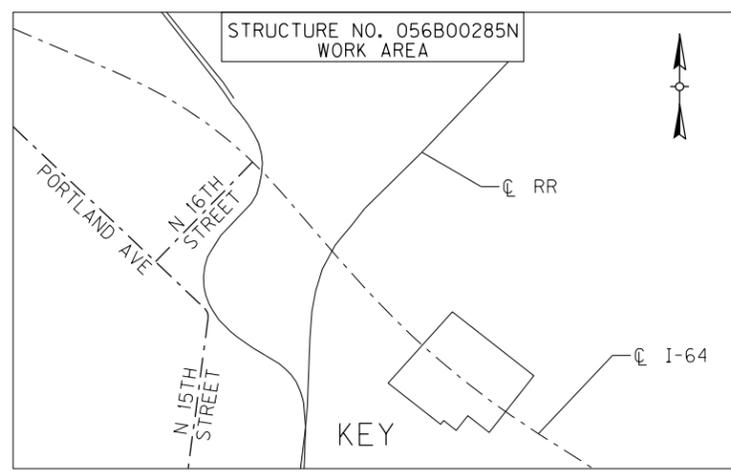
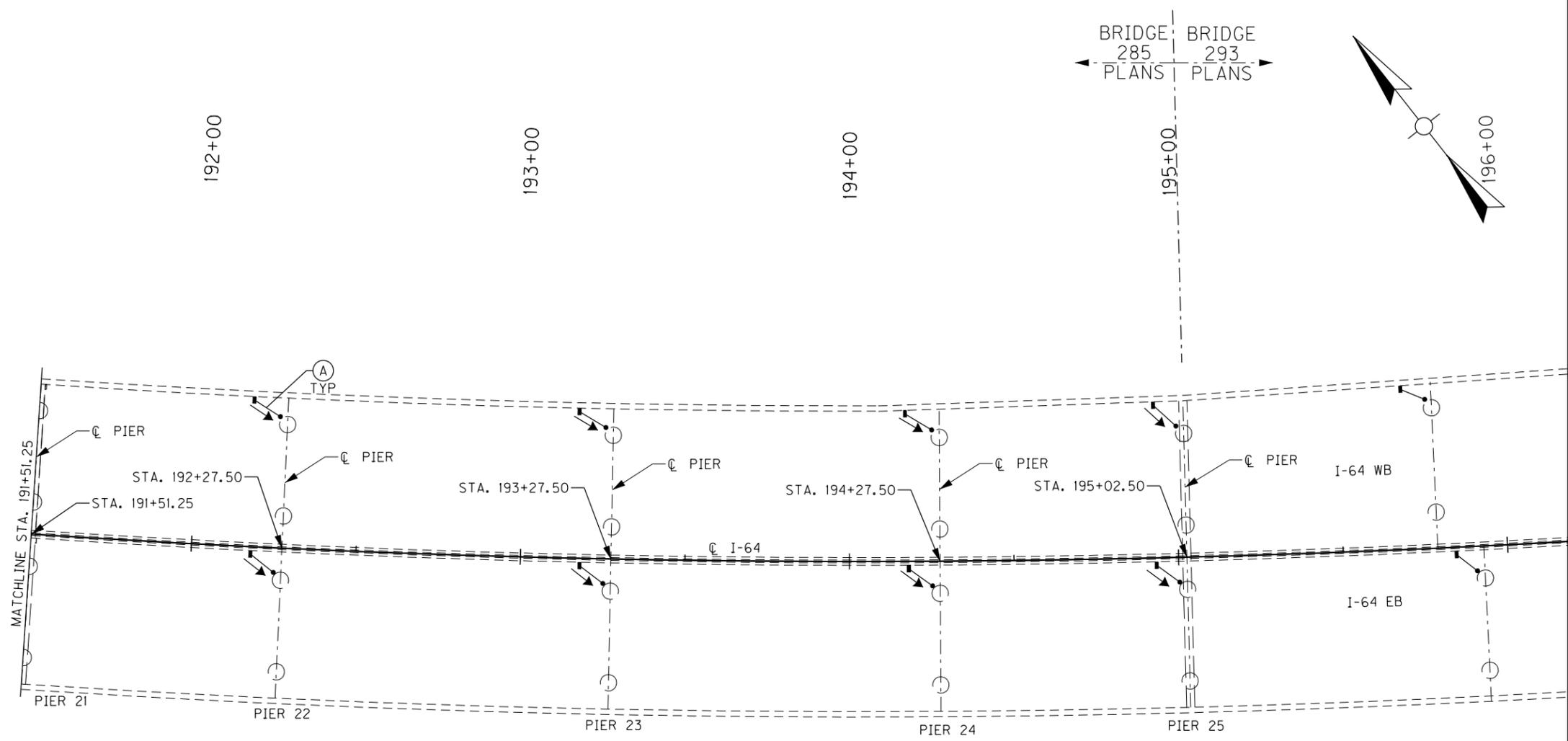
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE LAYOUT - 5		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D26 DRAWING NO. 28870

FILE NAME:
SHT_285_Layout6.dgn

USER: Nicholas.Allen
DATE PLOTTED:

DESIGNER: S23464 020

OpenRoads Designer v10.13.2.2 E-SHEET NAME:



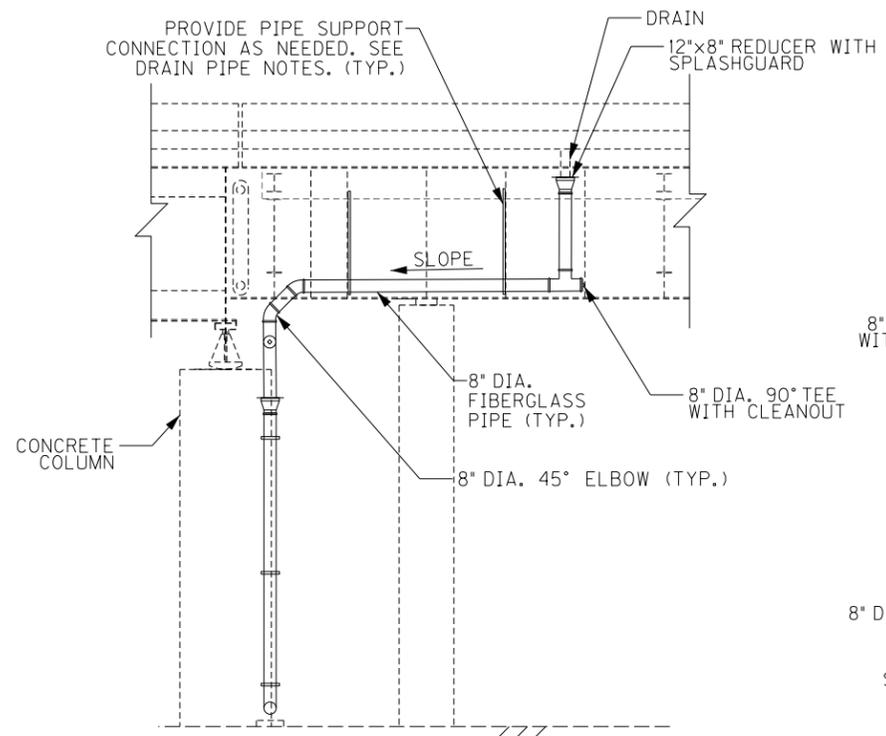
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE LAYOUT - 6		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D27 DRAWING NO. 28870

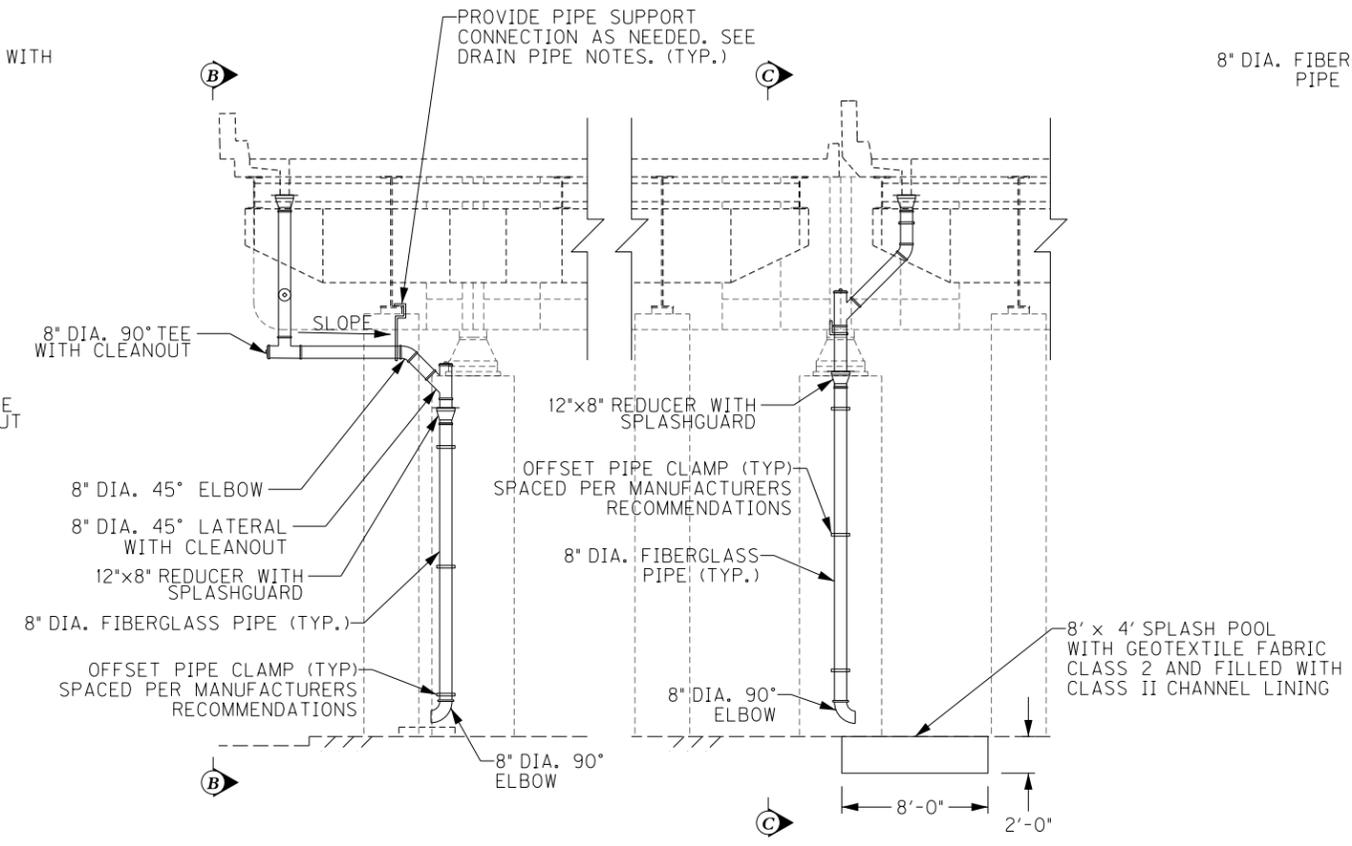
FILE NAME:
DETAILS_285.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

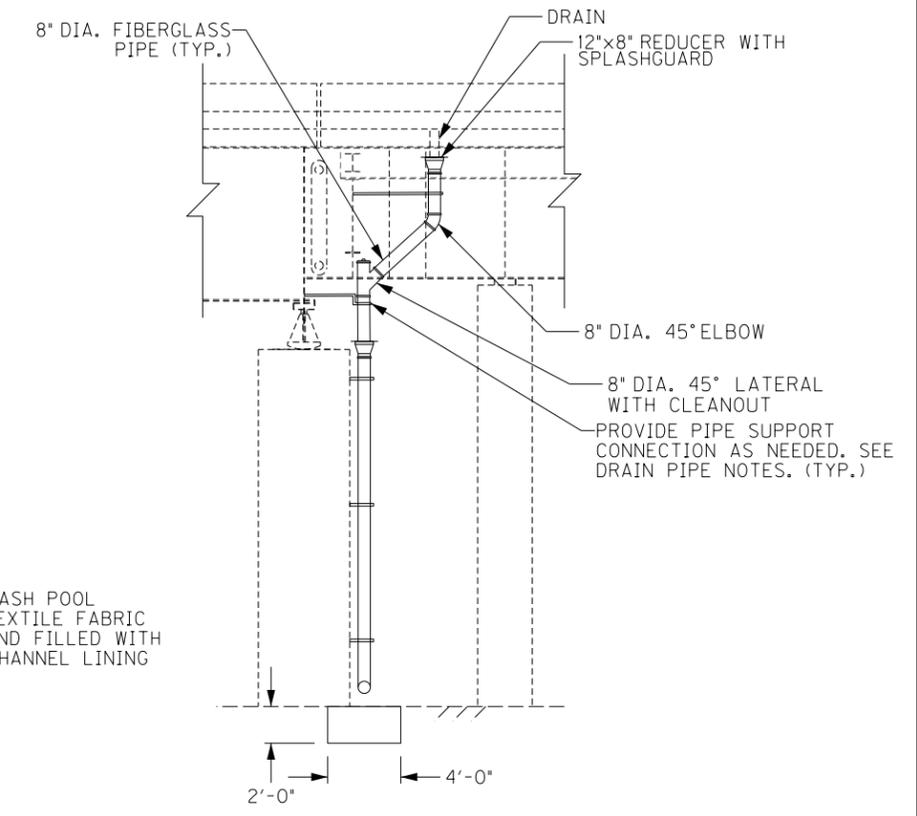
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



SECTION B-B
LONGITUDINAL SECTION
PIER 7 E.B.
(LOOKING NORTH)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 7
(LOOKING WEST)



SECTION C-C
LONGITUDINAL SECTION
PIER 7 W.B.
(LOOKING NORTH)

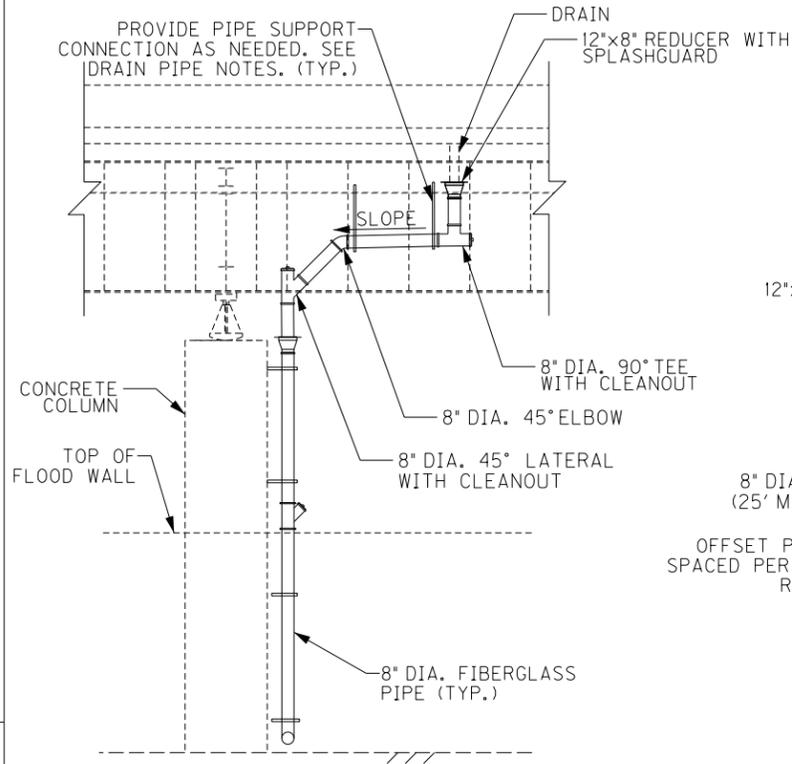
ITEM NUMBER	5-10016
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REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE DETAILS - 2		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	D29	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO.	28870

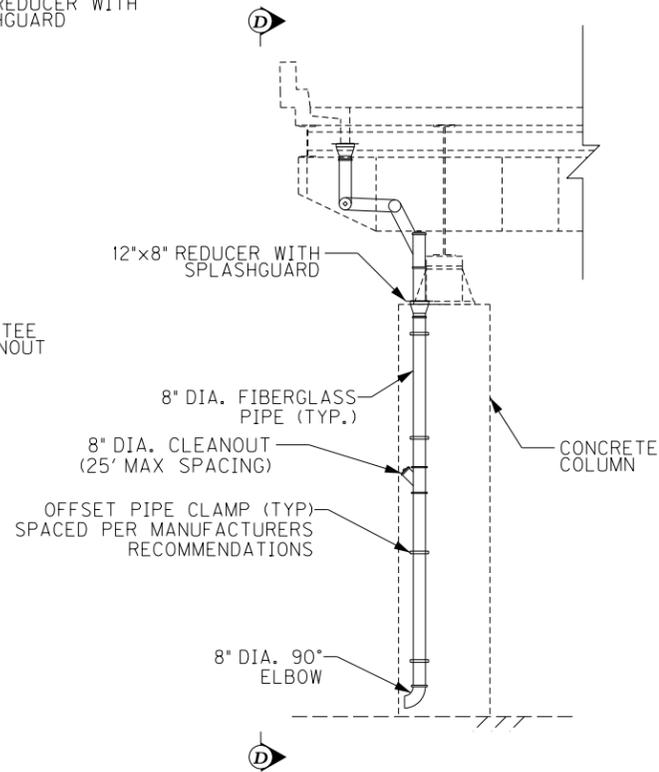
FILE NAME:
DETAILS_285.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

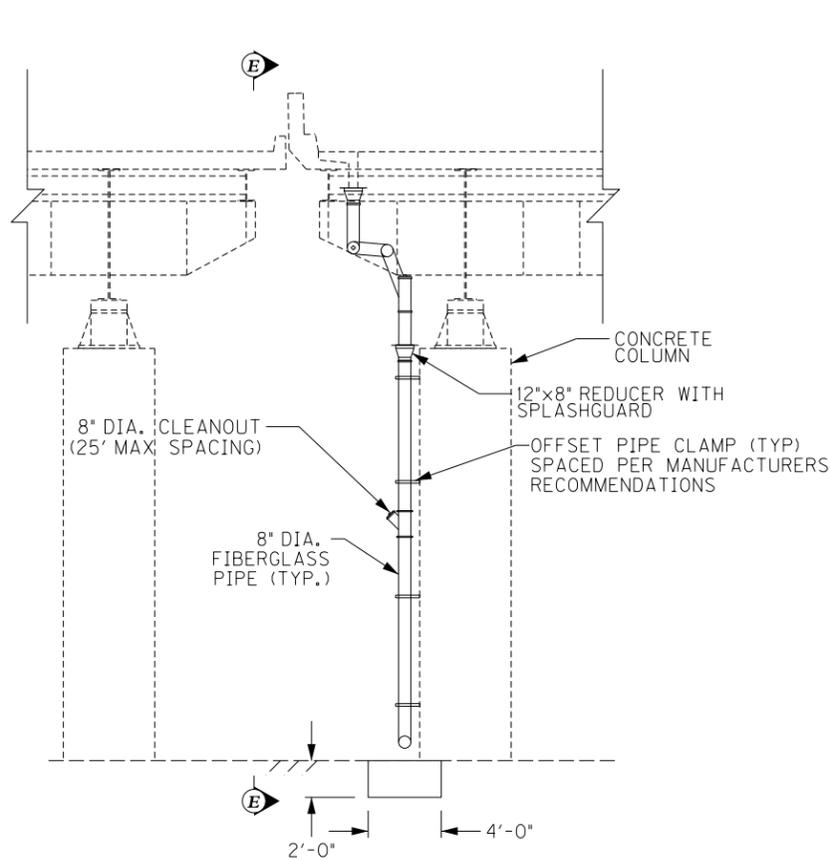
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



SECTION D-D
LONGITUDINAL SECTION
PIER 8 E.B.
(LOOKING NORTH)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 8
(LOOKING WEST)



SECTION E-E
LONGITUDINAL SECTION
PIER 8 W.B.
(LOOKING NORTH)

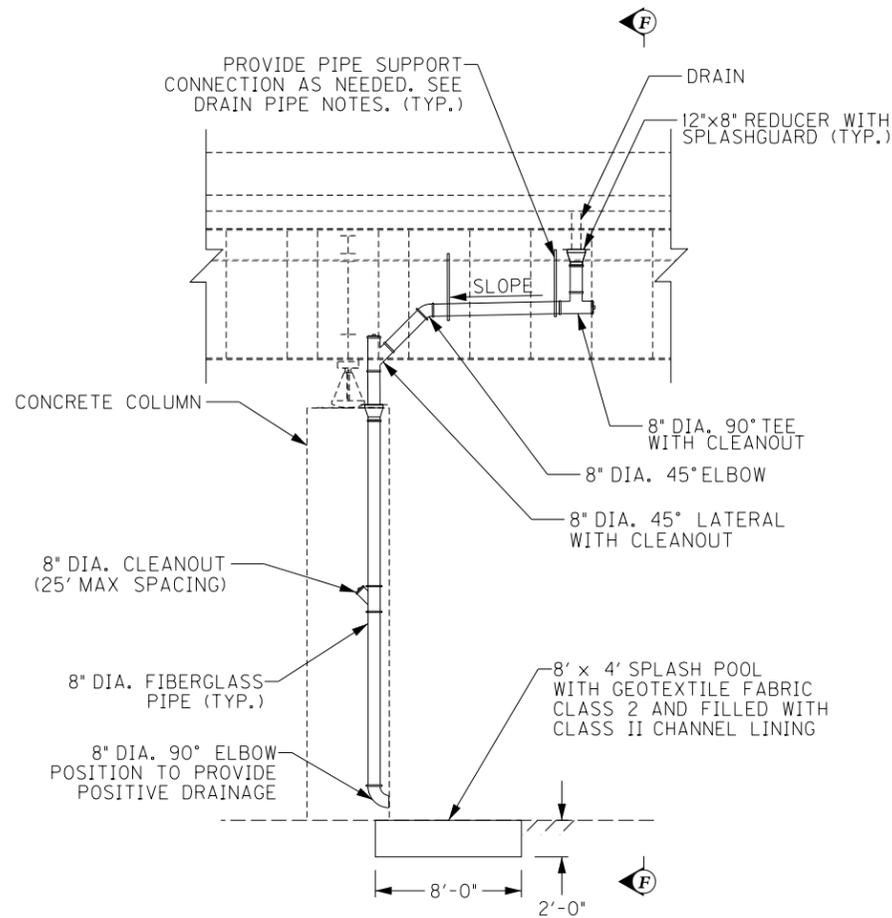
REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE DETAILS - 3		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	D30 DRAWING NO. 28870

FILE NAME:
DETAILS_285.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

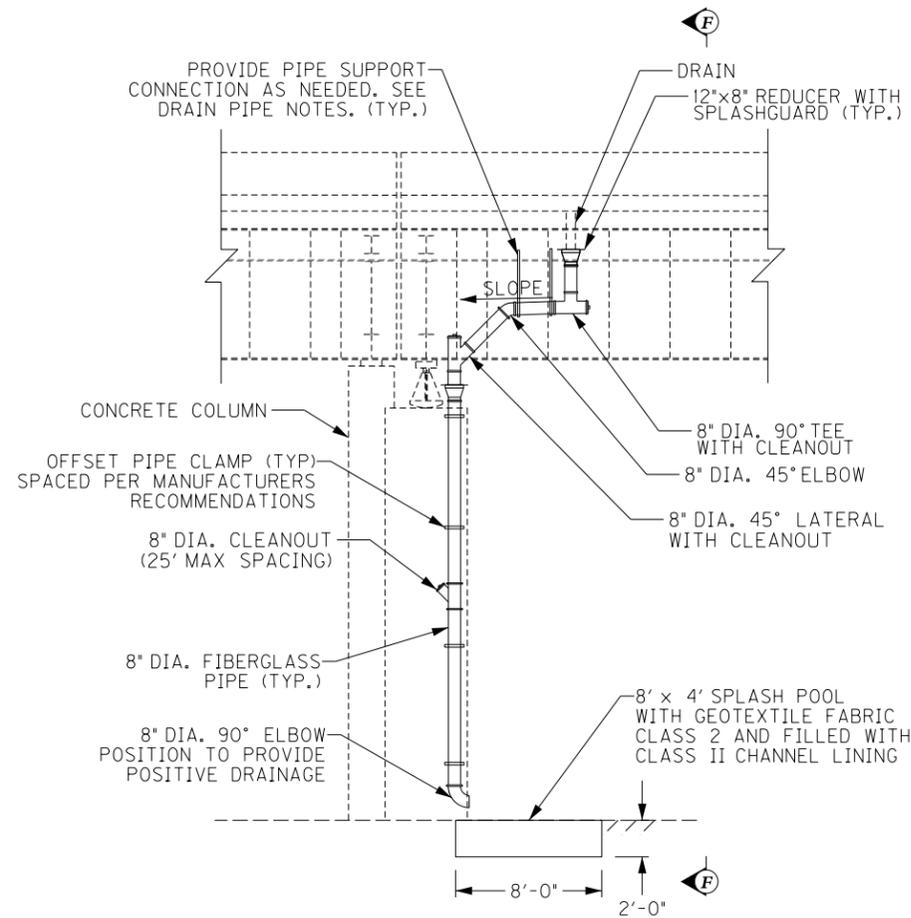
DESIGNER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



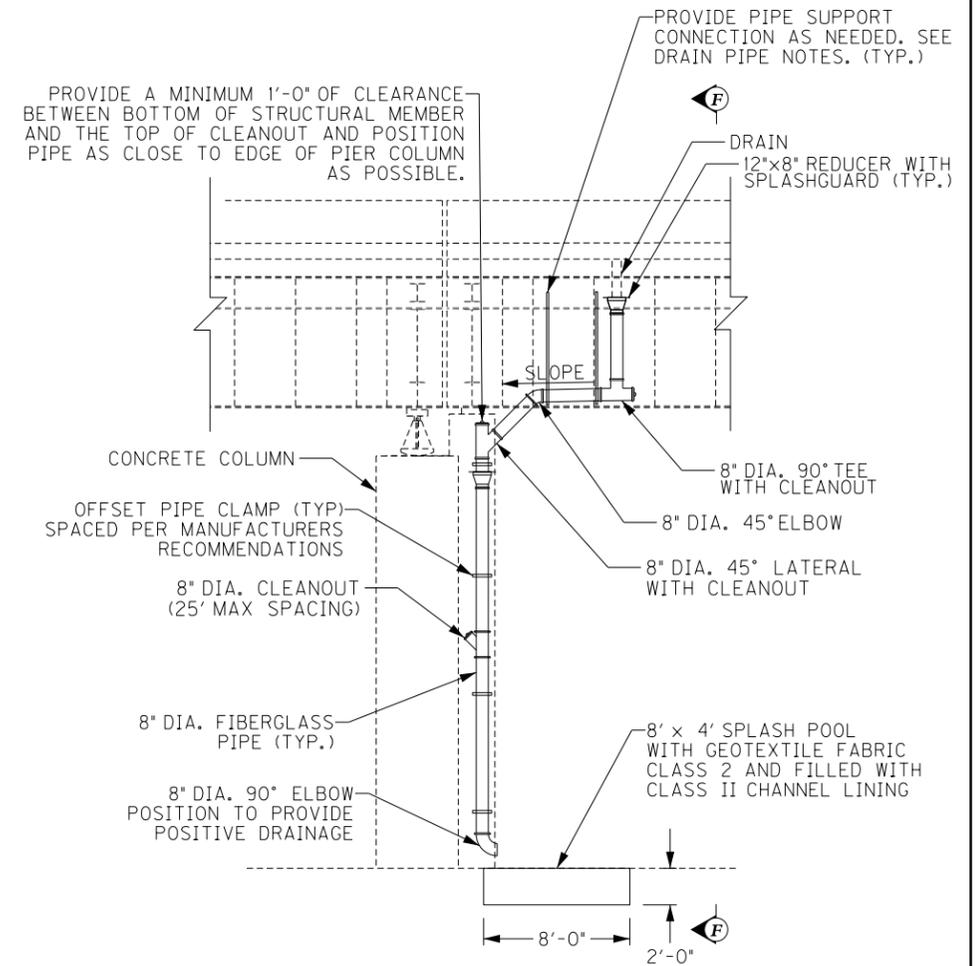
DRAINAGE DETAIL - ELEVATION

LONGITUDINAL SECTION
PIERS 9, 11-13 W.B. & E.B. (LOOKING NORTH)
PIERS 18-20, 22-24 W.B. & E.B. (LOOKING SOUTH)



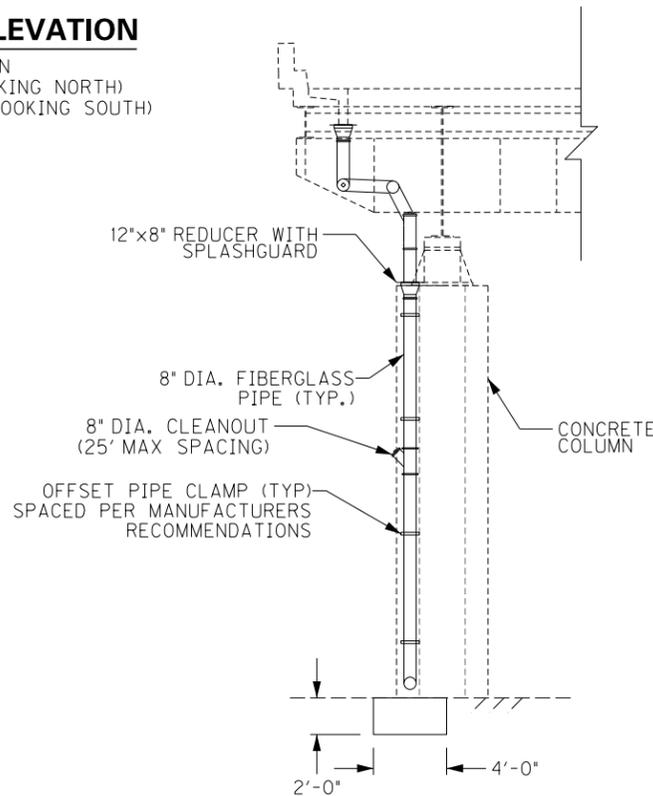
DRAINAGE DETAIL - ELEVATION

LONGITUDINAL SECTION
PIER 10 W.B. & E.B. (LOOKING NORTH)
PIERS 21 & 25 W.B. & E.B. (LOOKING SOUTH)



DRAINAGE DETAIL - ELEVATION

LONGITUDINAL SECTION
PIER 14 W.B. & E.B. (LOOKING NORTH)
PIER 17 W.B. & E.B. (LOOKING SOUTH)



SECTION F-F

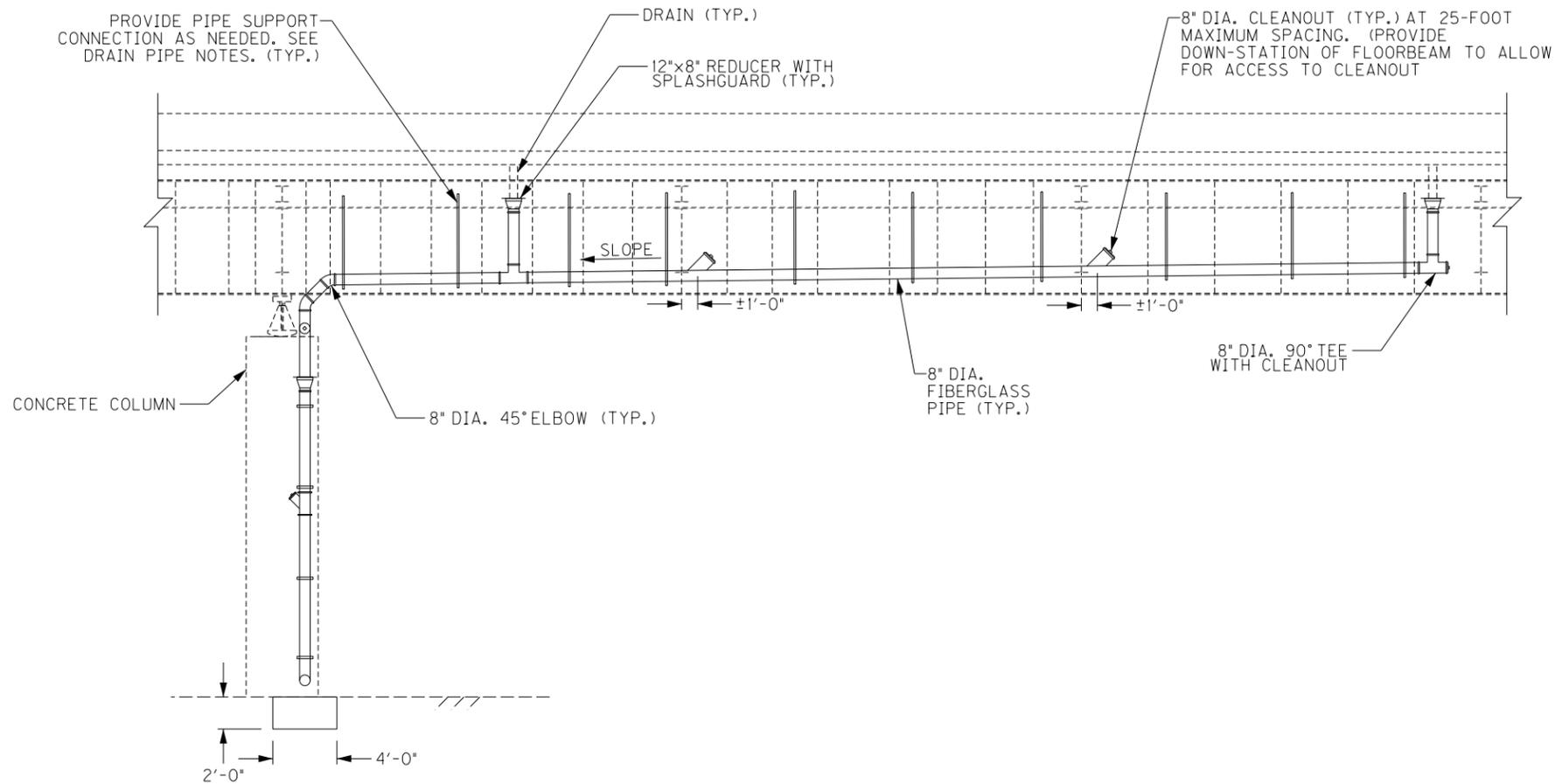
TRANSVERSE SECTION
PIER 9-14 W.B. & E.B. (LOOKING WEST)
PIERS 17-25 W.B. & E.B. (LOOKING EAST)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE DETAILS - 4		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D31
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

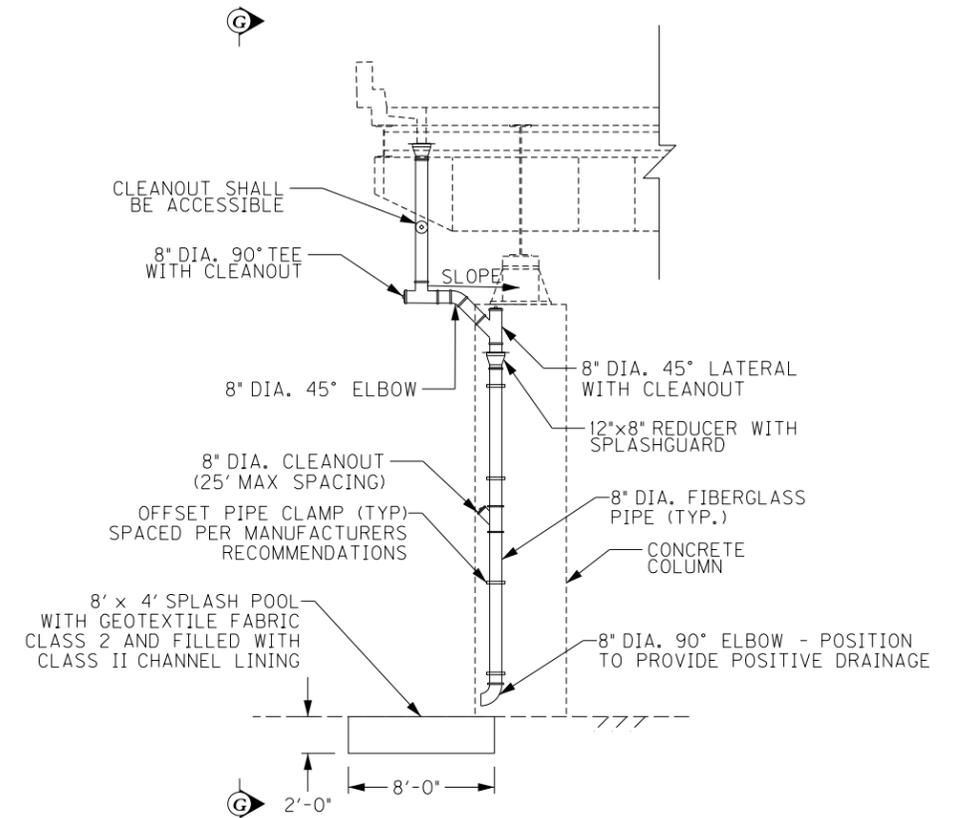
FILE NAME:
DETAILS_285.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020

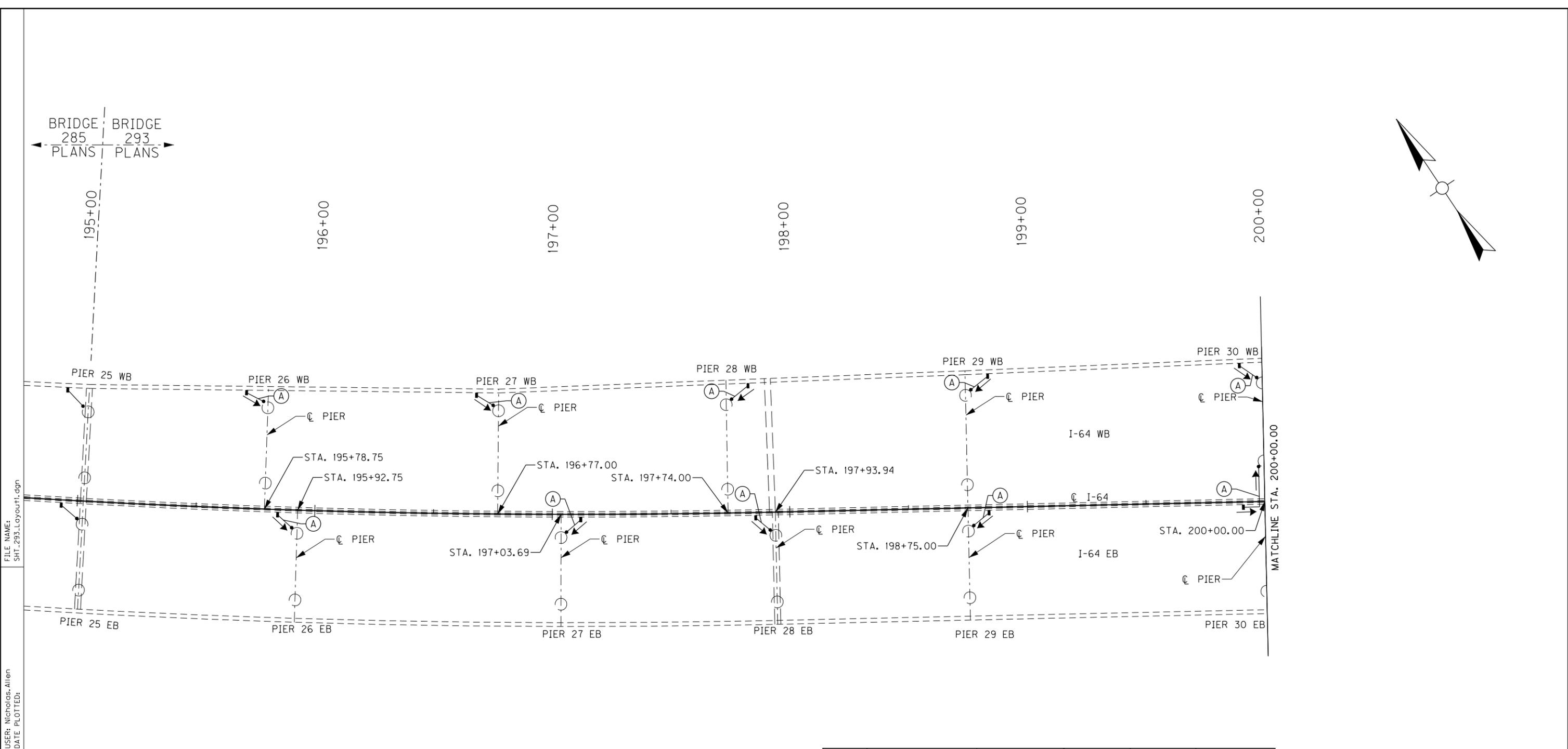


SECTION G-G
LONGITUDINAL SECTION
PIER 16
(LOOKING SOUTH)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 16
(LOOKING EAST)

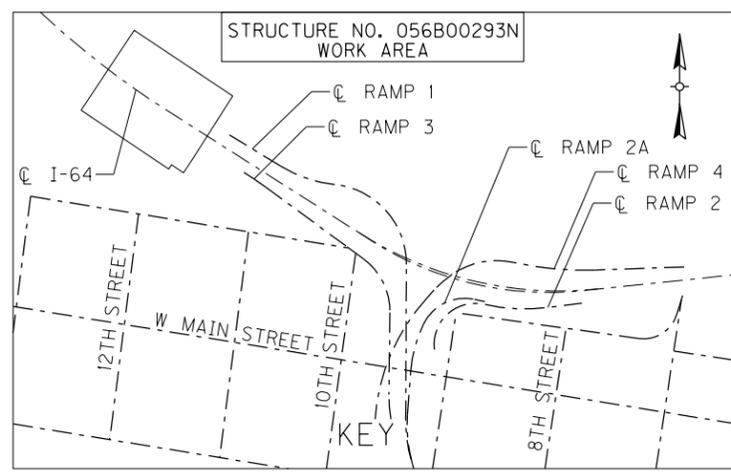
REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: MLO	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00285N	
285 DRAINAGE DETAILS - 5		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	D32 DRAWING NO. 28870



FILE NAME: SHT_293_Layout1.dgn

USER: Nicholas.Allen
DATE PLOTTED:

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464_020



LABEL	DIAMETER	MIN. SLOPE	LABEL	DIAMETER	MIN. SLOPE
A	8"	0.60%	P	10"	0.40%
B	8"	0.80%	Q	10"	0.60%
C	8"	1.00%	R	10"	0.80%
D	8"	1.20%	S	10"	1.00%
E	8"	1.40%	T	10"	1.20%
F	8"	1.60%	U	10"	1.40%
H	8"	1.80%	V	10"	1.60%
I	8"	2.00%	W	10"	1.80%



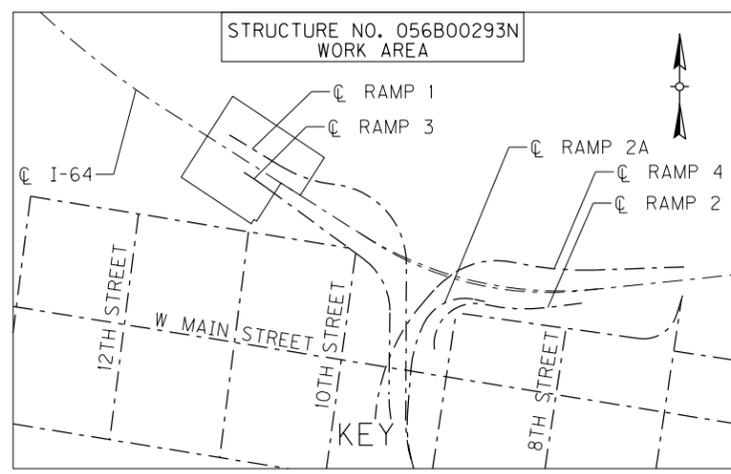
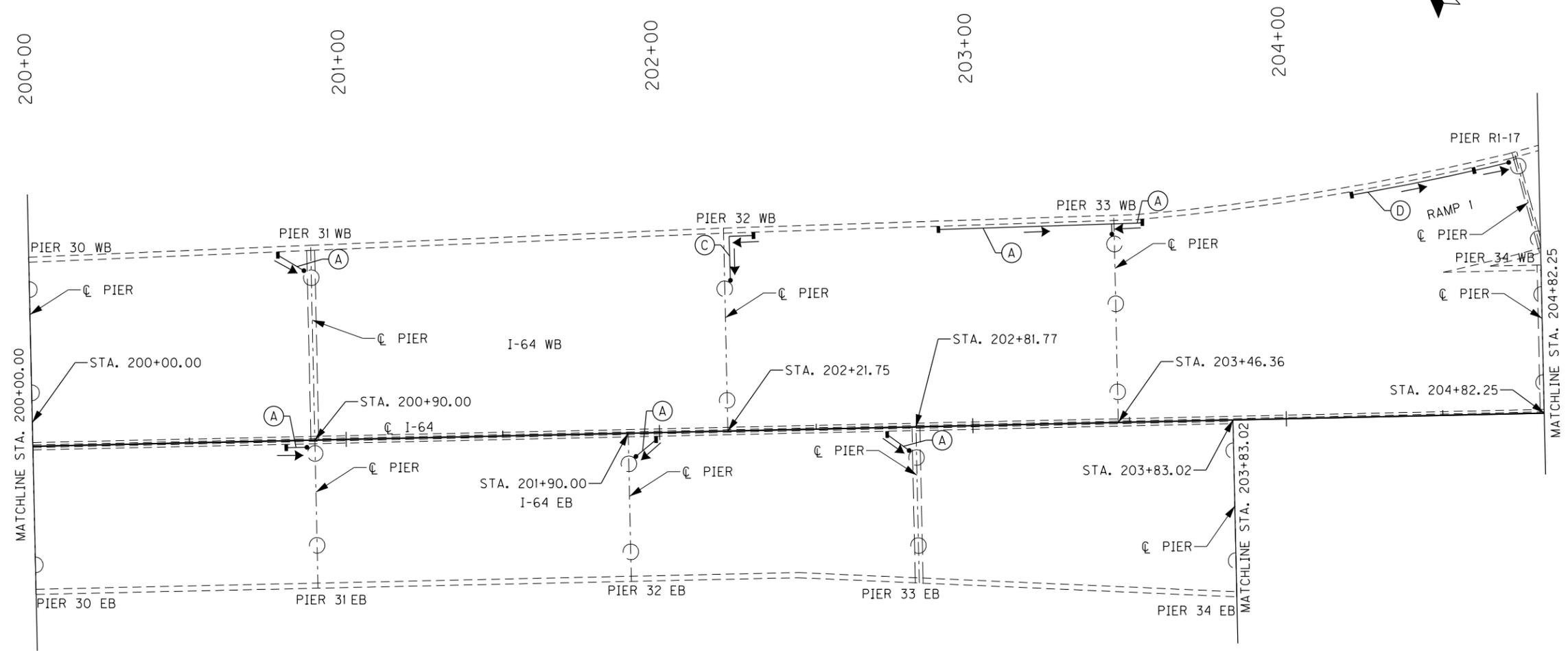
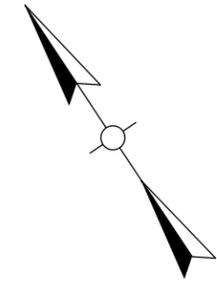
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE LAYOUT - 1		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D33 DRAWING NO. 28870

FILE NAME:
SHT_293_Layout2.dgn

USER: Nicholas.Allen
DATE PLOTTED:

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



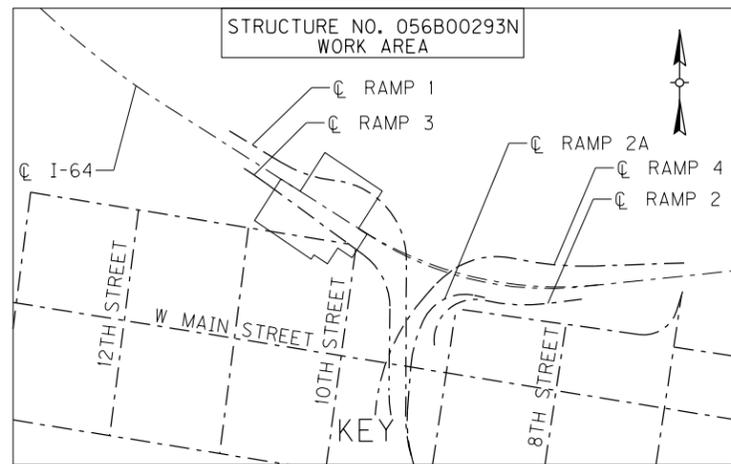
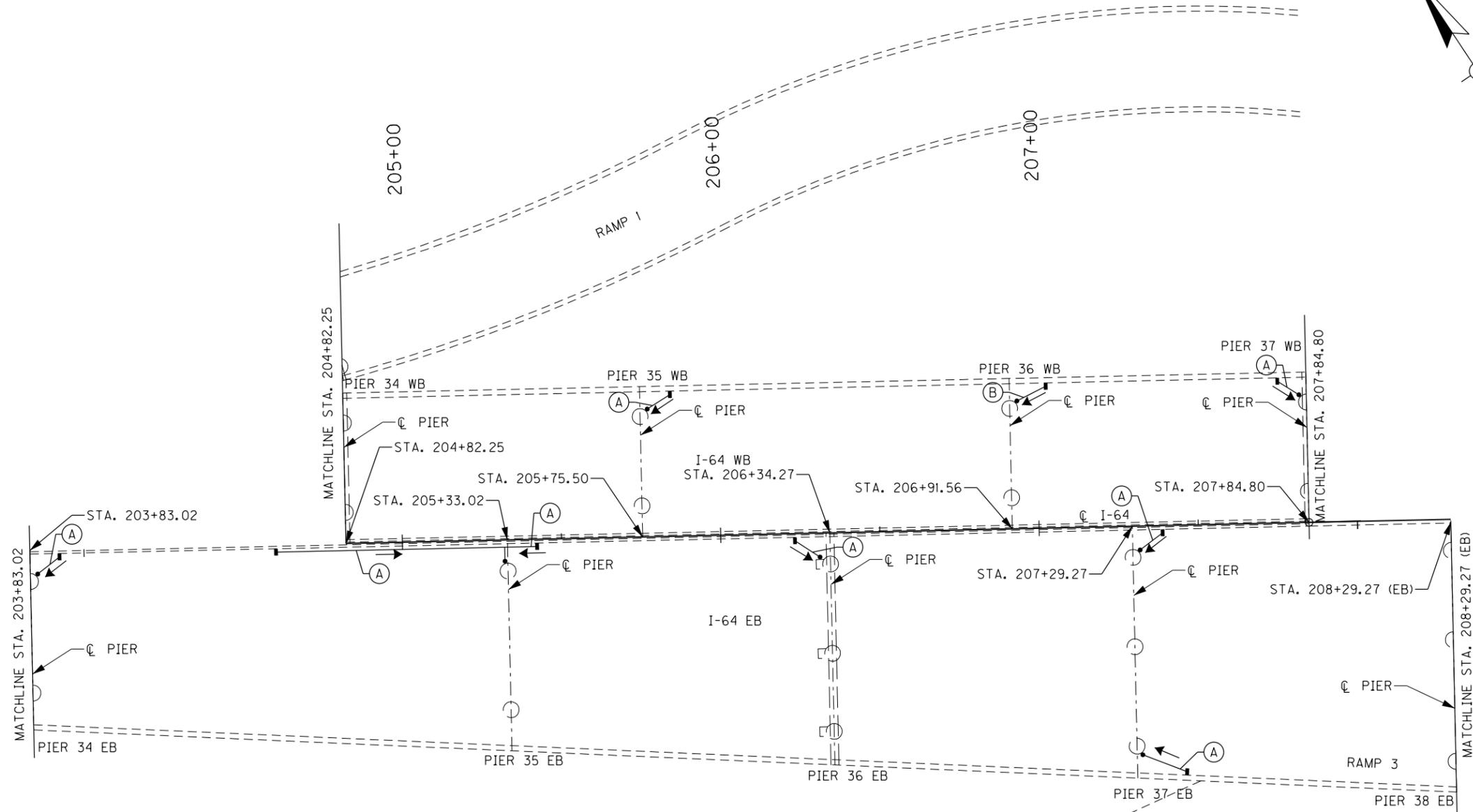
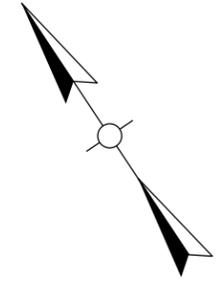
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE LAYOUT - 2		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D34 DRAWING NO. 28870

FILE NAME:
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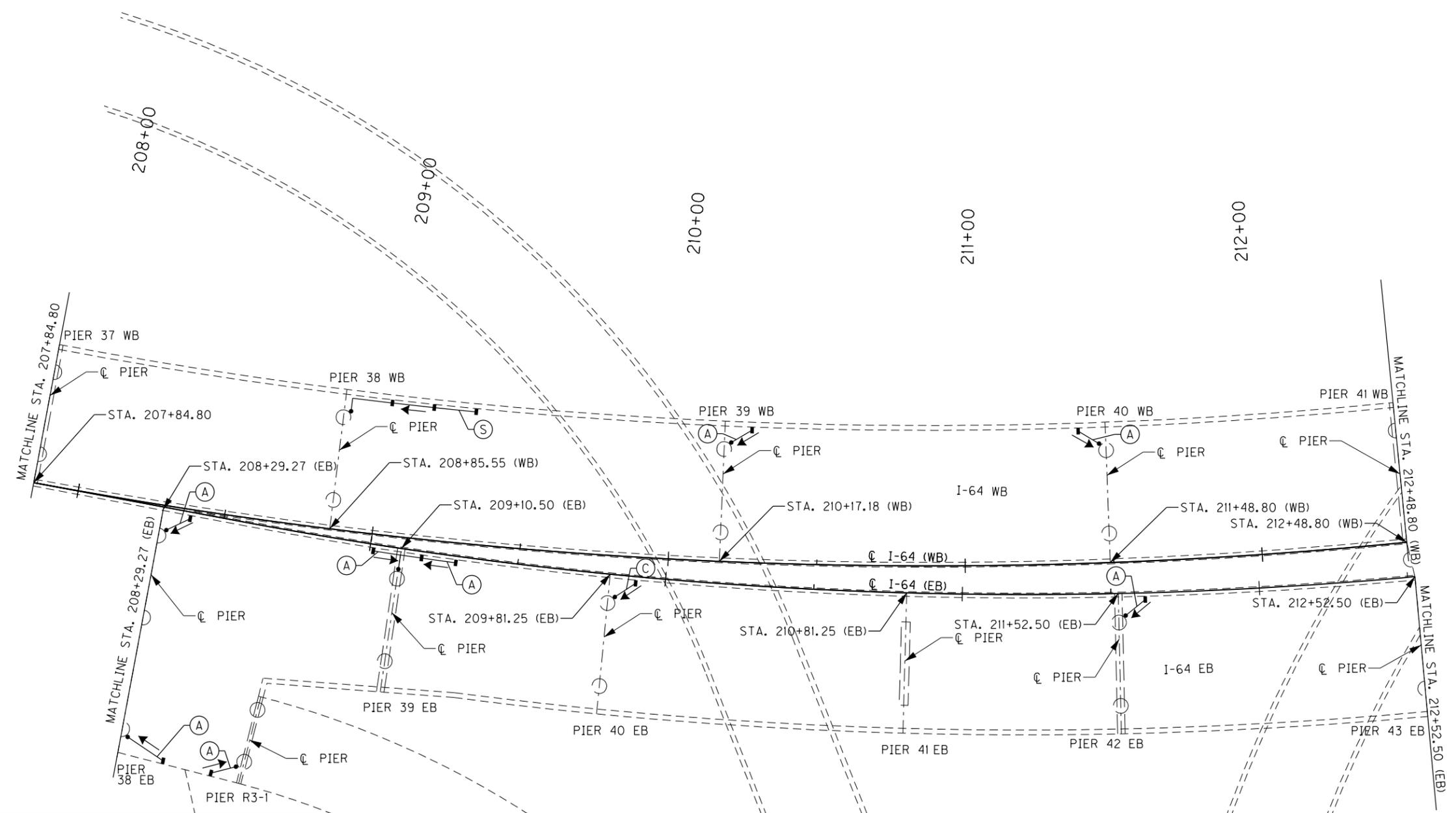
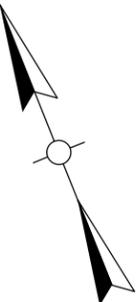
USER: Nicholas.Allen
DATE PLOTTED:

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



ITEM NUMBER
5-10016

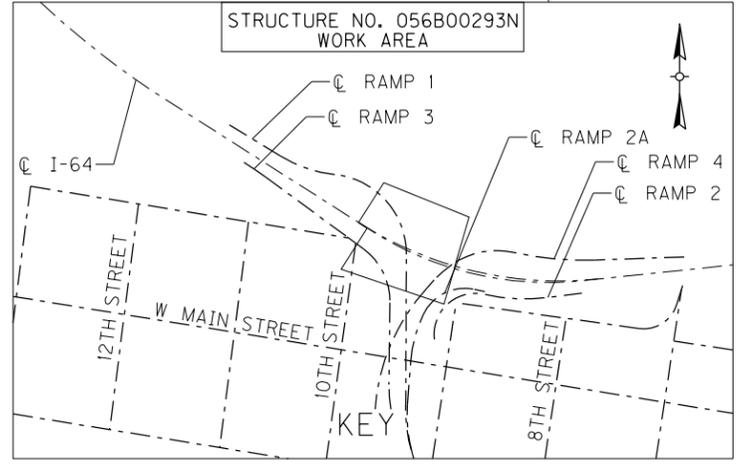
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE LAYOUT - 3		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D35 DRAWING NO. 28870



FILE NAME:
SHT_293_Layout4.dgn

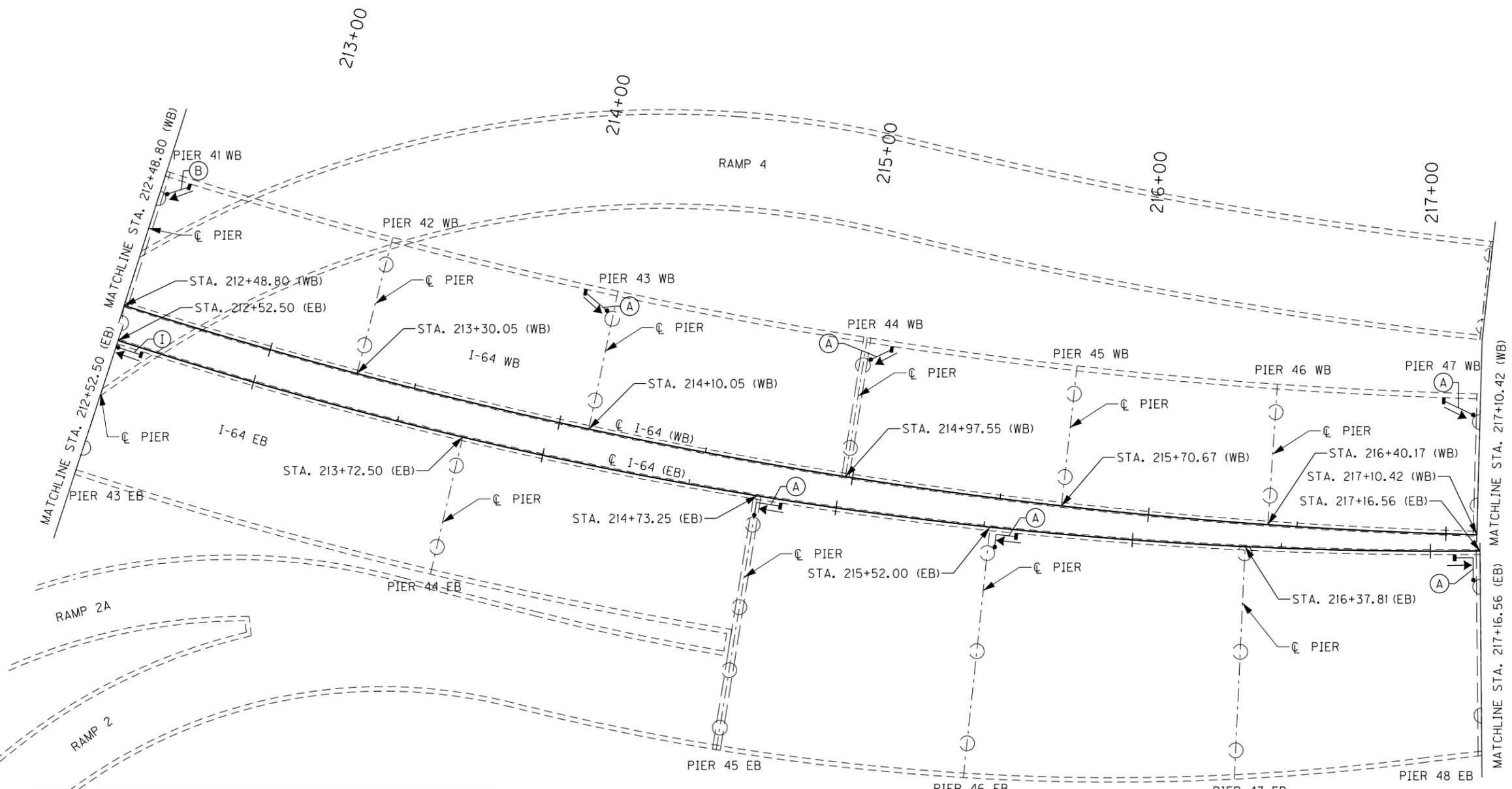
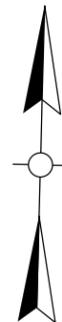
USER: Nicholas.Allen
DATE PLOTTED:

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



ITEM NUMBER
5-10016

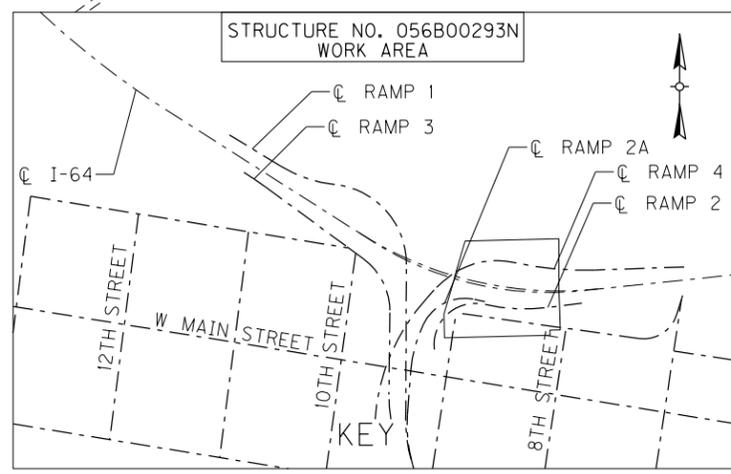
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE LAYOUT - 4		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D36 DRAWING NO. 28870



FILE NAME:
SHT_293_Layout5.dgn

USER: Nicholas.Allen
DATE PLOTTED:

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



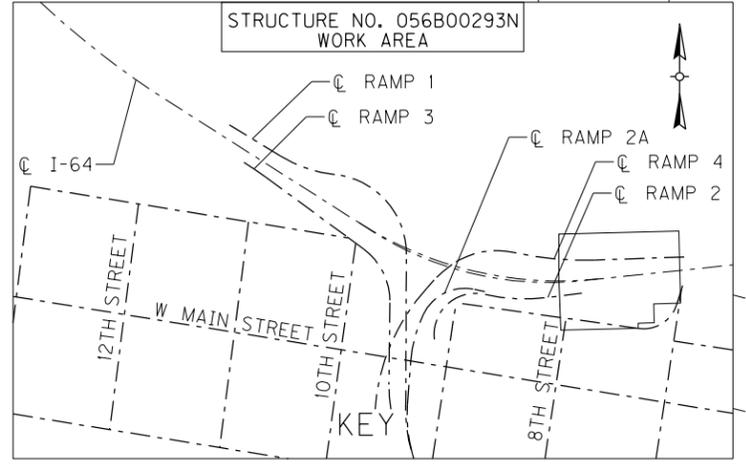
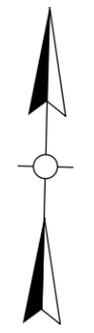
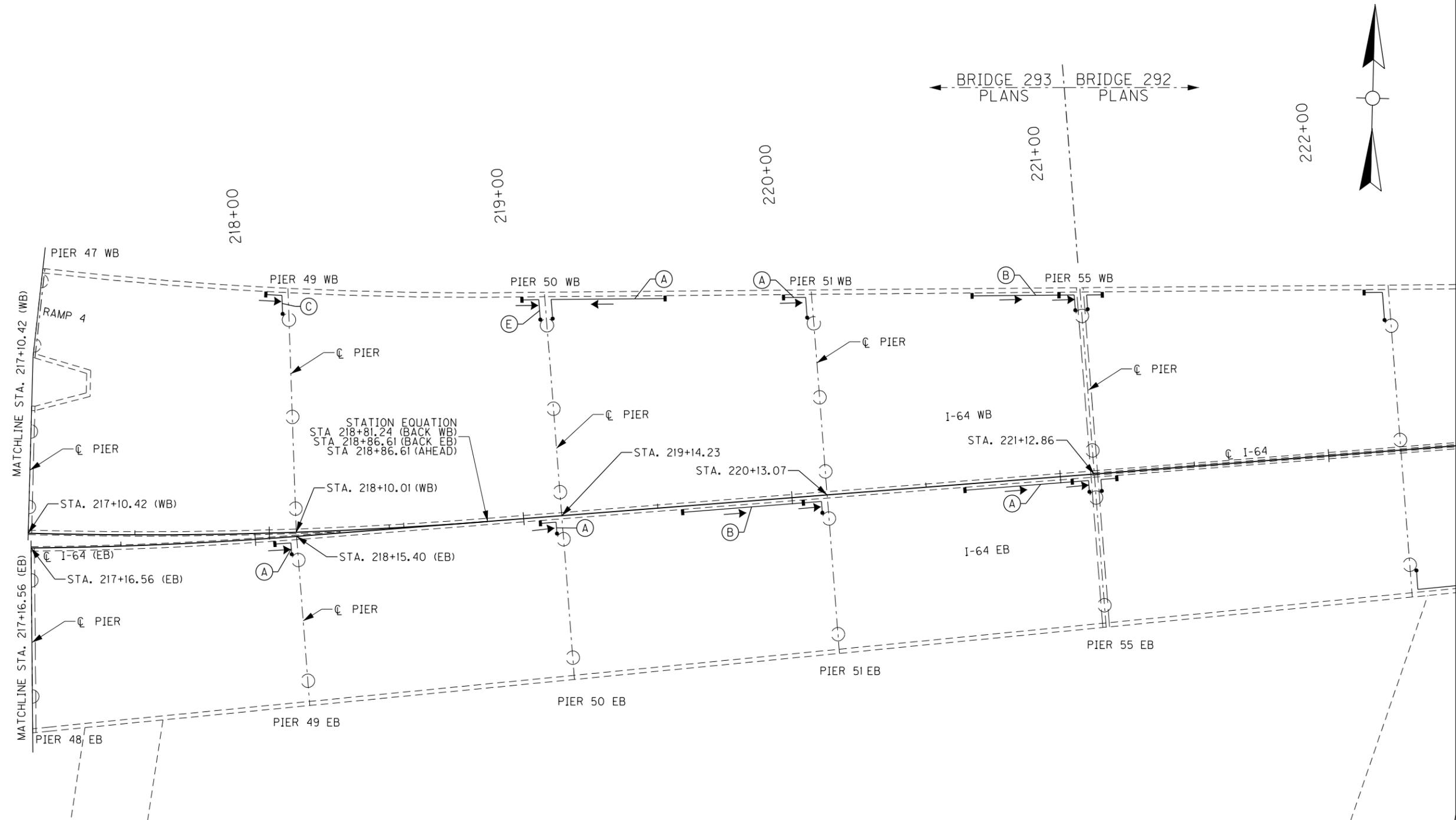
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE LAYOUT - 5		
PREPARED BY Michael Baker INTERNATIONAL		SHEET NO. D37 DRAWING NO. 28870

FILE NAME:
SHT_293_LAYOUT6.dgn

USER: Nicholas.Allen
DATE PLOTTED:

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



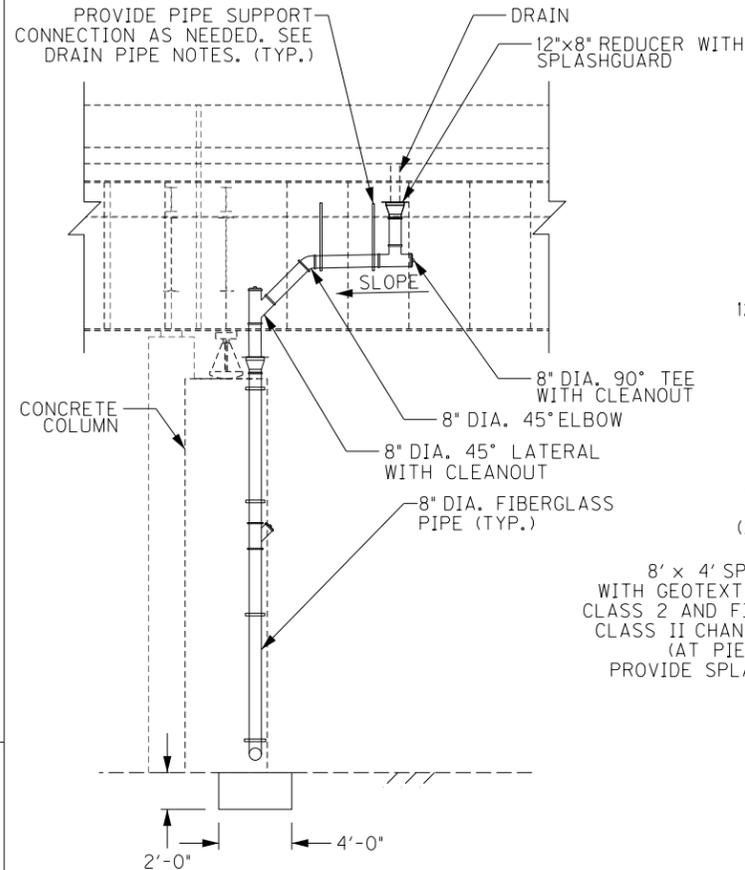
ITEM NUMBER
5-10016

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: NGA	PDO	
DETAILED BY: NGA	PDO	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE LAYOUT - 6		
PREPARED BY Michael Baker INTERNATIONAL	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	SHEET NO. D38 DRAWING NO. 28870

FILE NAME:
DETAILS_293.DGN

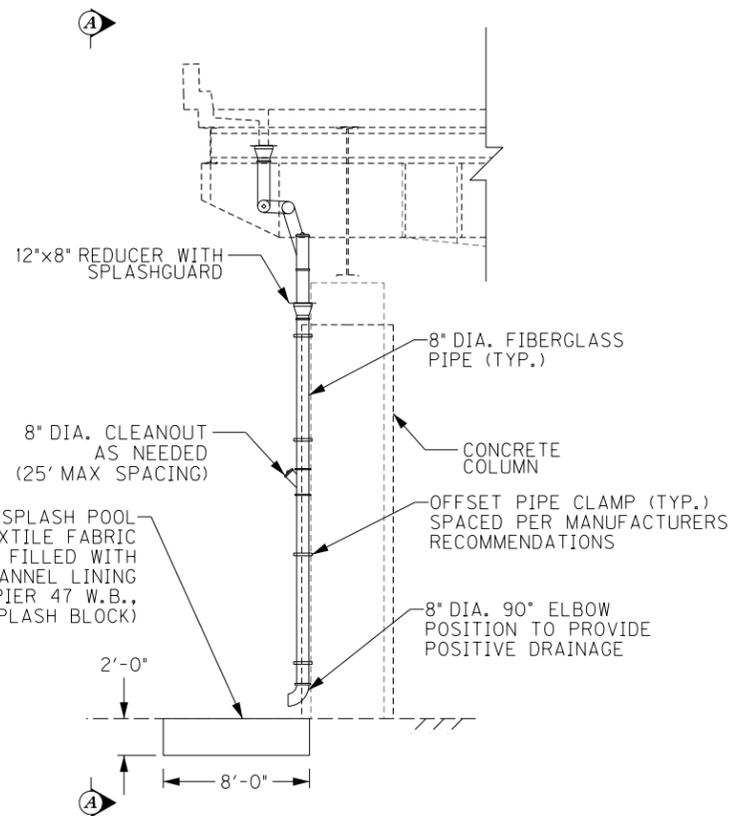
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



SECTION A-A

LONGITUDINAL SECTION
PIERS 26, 27, 30, 31, 40, 43, 47 (W.B.)
PIER 33 (E.B.)
(LOOKING SOUTH)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIERS 26, 27, 30, 31, 40, 43, 47 (W.B.)
PIER 33 (E.B.)
(LOOKING EAST)

NOTE:

AT PIER 47 W.B., AS DIRECTED BY THE ENGINEER, SAWCUT EXISTING PAVEMENT AS NEEDED AND PROVIDE APPROXIMATELY 3' X 3' X 4" DEEP CLASS A CONCRETE SPLASH BLOCK FLUSH WITH TOP OF PAVEMENT. PLACE ON MINIMUM 4 INCHES OF #57 AGGREGATE WITH GEOTEXTILE FABRIC CLASS 2. COST IS CONSIDERED INCIDENTAL.

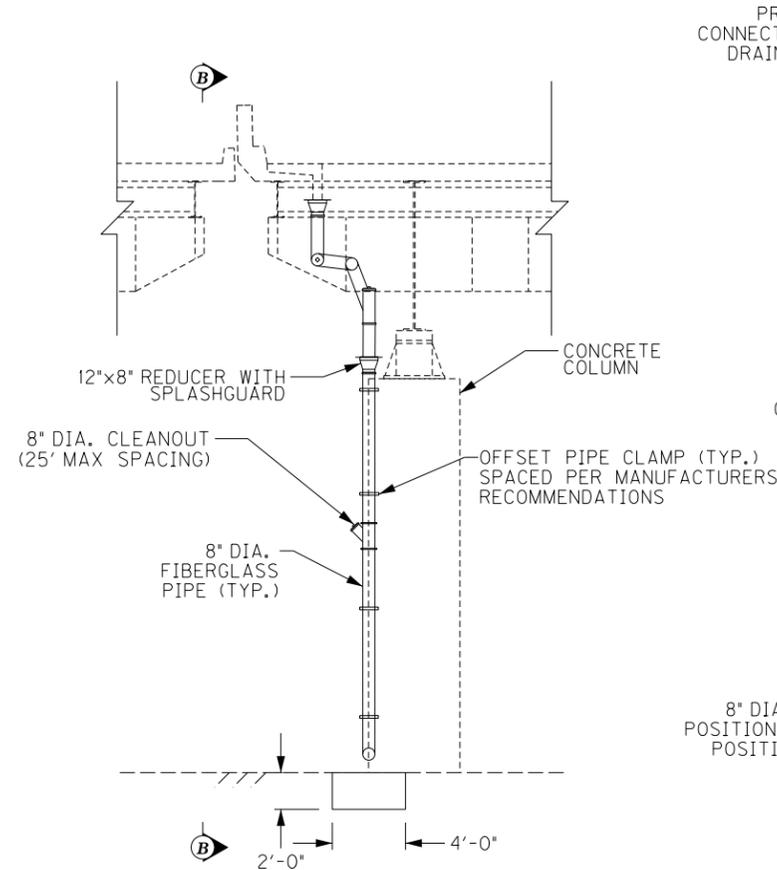
NOTES SPECIFIC TO BRIDGE 293:

REMOVE AND DISCARD EXISTING SPLASH BLOCK WHERE SPLASH POOL IS BEING INSTALLED. THE COST IS CONSIDERED INCIDENTAL.

WHERE NO SPLASH POOL IS PROPOSED, SPLASH BLOCK SHALL REMAIN.

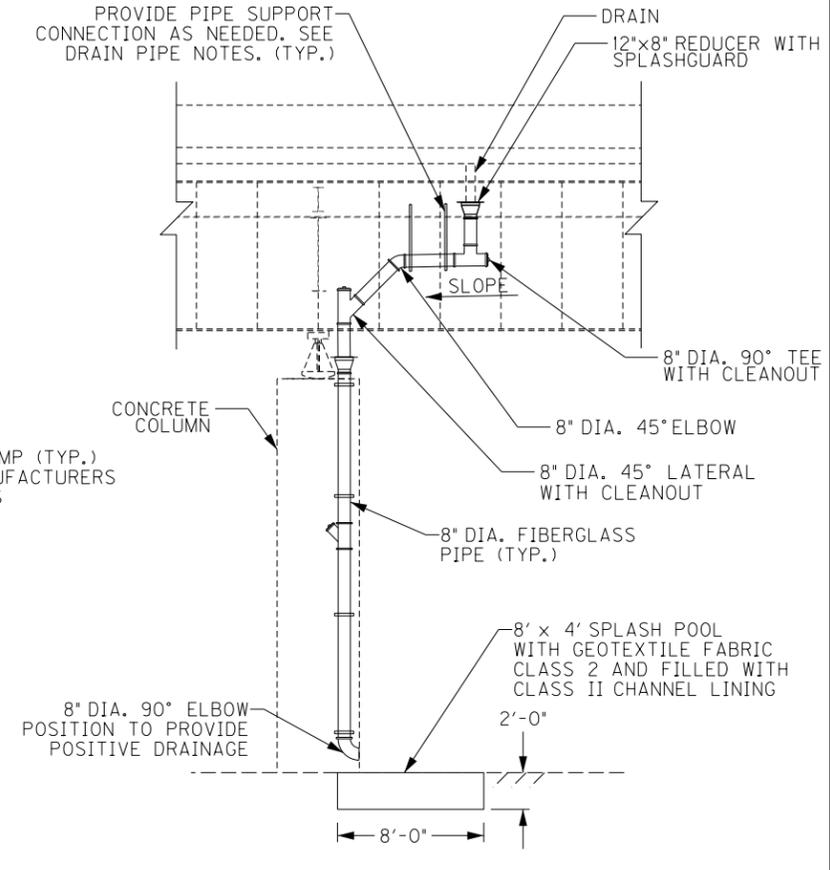
WHERE A PIER MAY FALL WITHIN A CURBED AREA, PLACE SPLASH POOL INSIDE OF EXISTING CURB TO MAXIMUM EXTENTS POSSIBLE. EXISTING CURB TO REMAIN.

WHERE NEW CONCRETE SPLASH BLOCK IS PLACED, PROVIDE 1/4" PREFORMED JOINT FILLER MATERIAL BETWEEN IT AND THE EXISTING BRIDGE COLUMN IN ACCORDANCE WITH SECTION 807 OF THE STANDARD SPECIFICATIONS.



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION - PIER 26 (E.B.)
(LOOKING EAST)



SECTION B-B

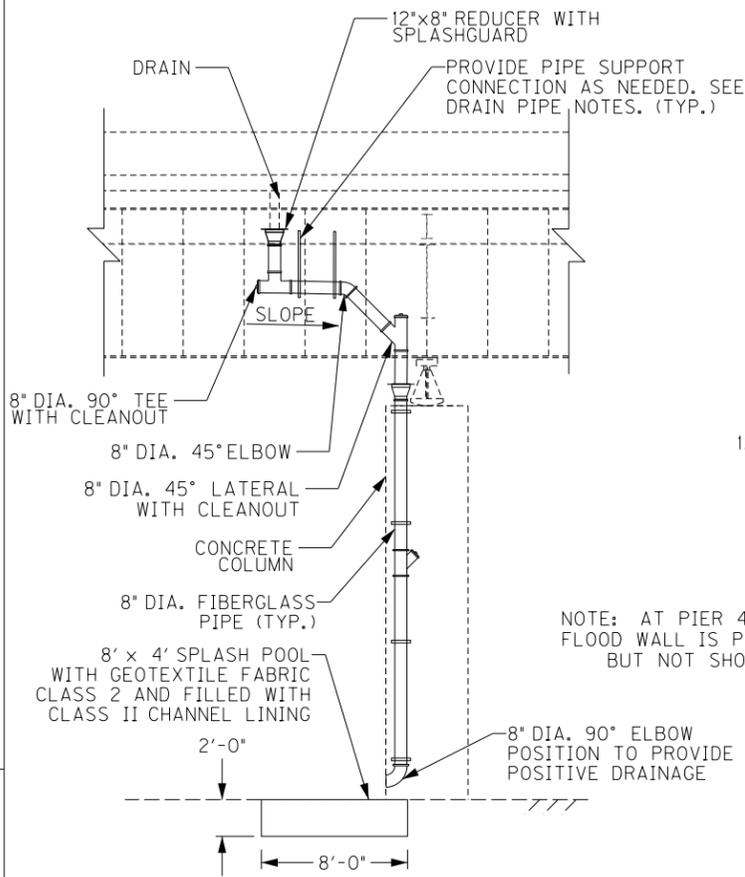
LONGITUDINAL SECTION - PIER 26 (E.B.)
(LOOKING SOUTH)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 1		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D39
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

FILE NAME:
DETAILS.293.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

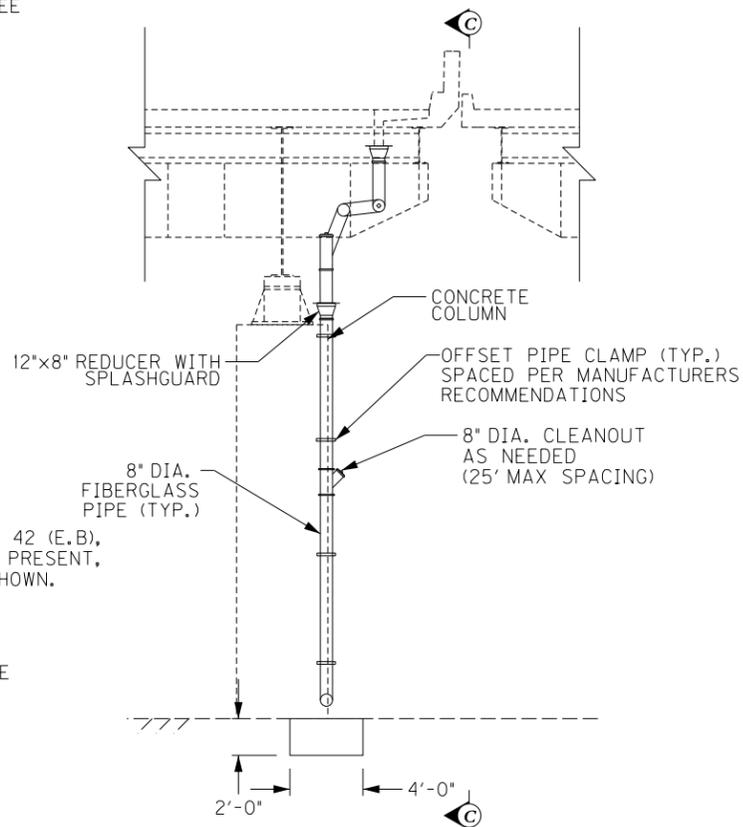
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



SECTION C-C

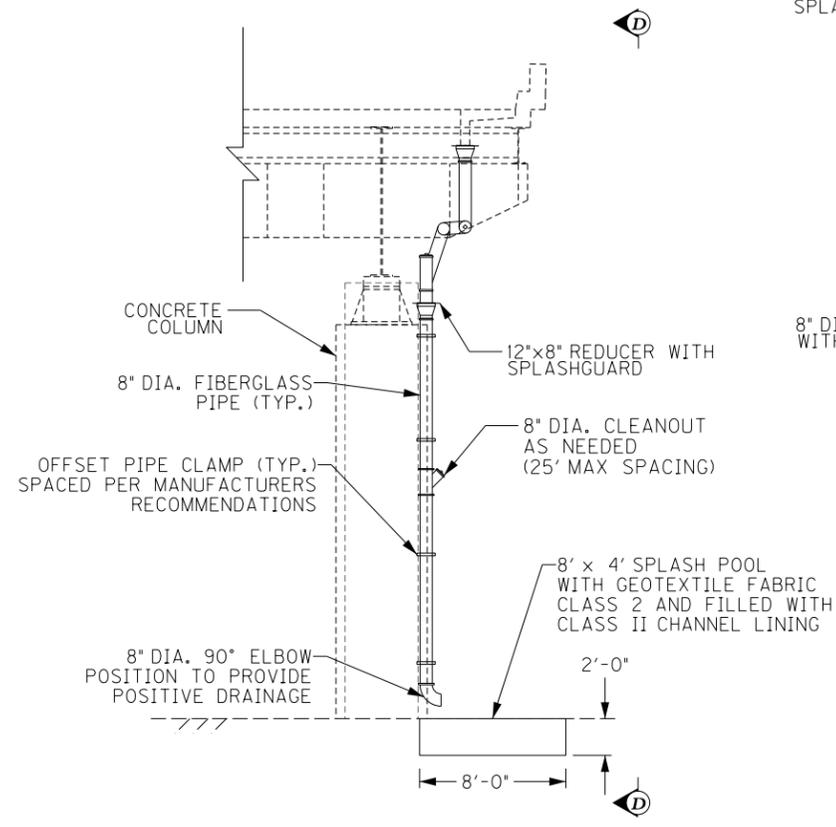
LONGITUDINAL SECTION
PIERS 27, 29, 32, 34, 37, 38, 40, 42 (E.B.)
(LOOKING SOUTH)

NOTE: AT PIER 42 (E.B.),
FLOOD WALL IS PRESENT,
BUT NOT SHOWN.



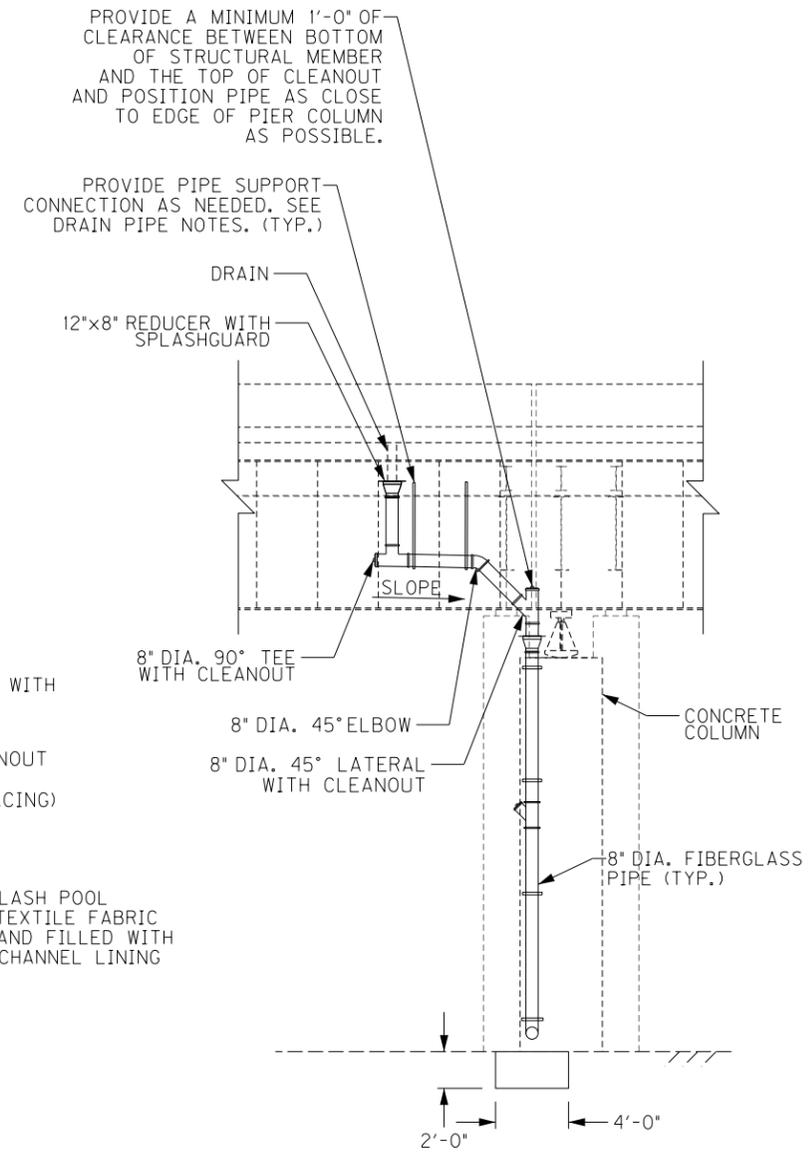
DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIERS 27, 29, 32, 34, 37, 38, 40, 42 (E.B.)
(LOOKING WEST)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIERS 28, 29, 35, 36, 39, 41, 44 (W.B.)
(LOOKING WEST)



SECTION D-D

LONGITUDINAL SECTION
PIERS 28, 29, 35, 36, 39, 41, 44 (W.B.)
(LOOKING SOUTH)

PROVIDE A MINIMUM 1'-0" OF
CLEARANCE BETWEEN BOTTOM
OF STRUCTURAL MEMBER
AND THE TOP OF CLEANOUT
AND POSITION PIPE AS CLOSE
TO EDGE OF PIER COLUMN
AS POSSIBLE.

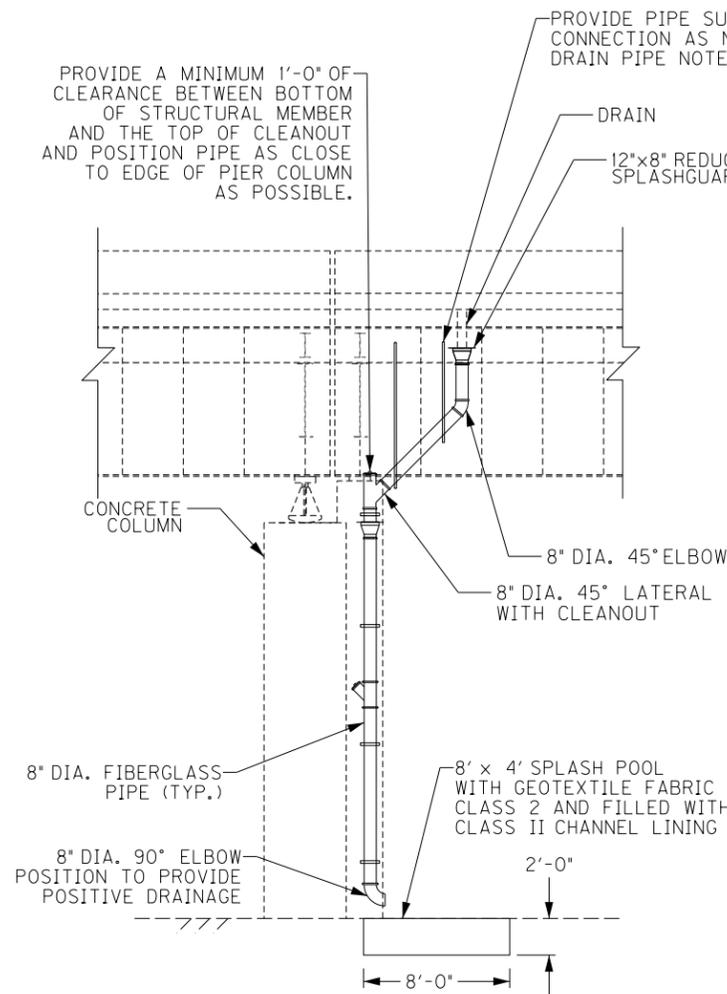
PROVIDE PIPE SUPPORT
CONNECTION AS NEEDED. SEE
DRAIN PIPE NOTES. (TYP.)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 2		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D40
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

FILE NAME: DETAILS_293.DGN

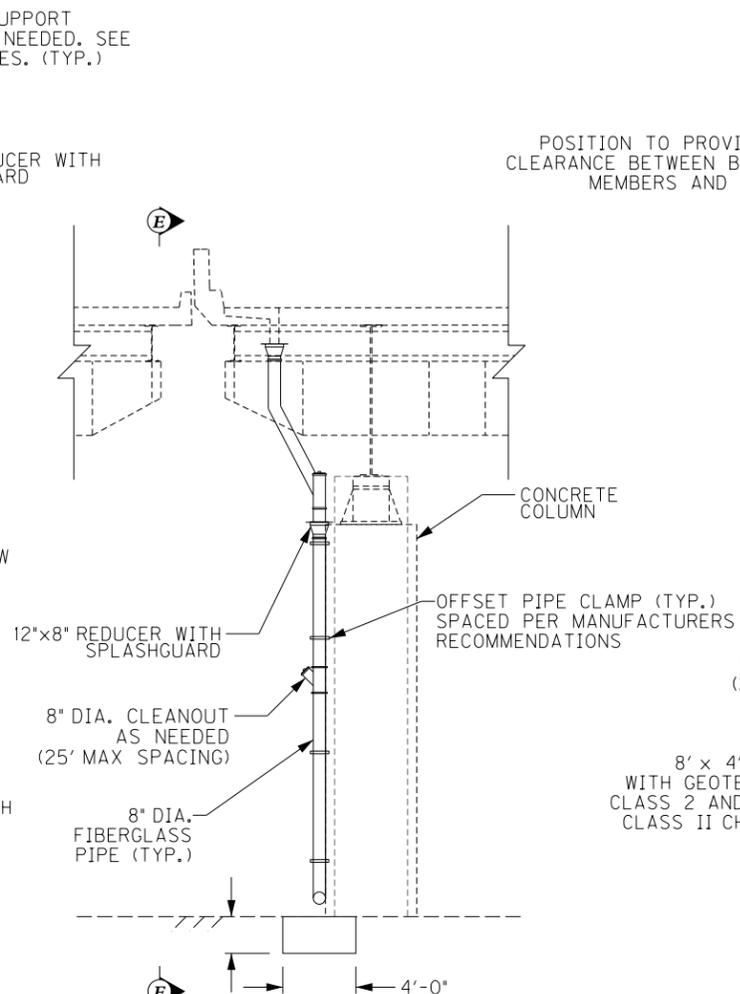
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464_020



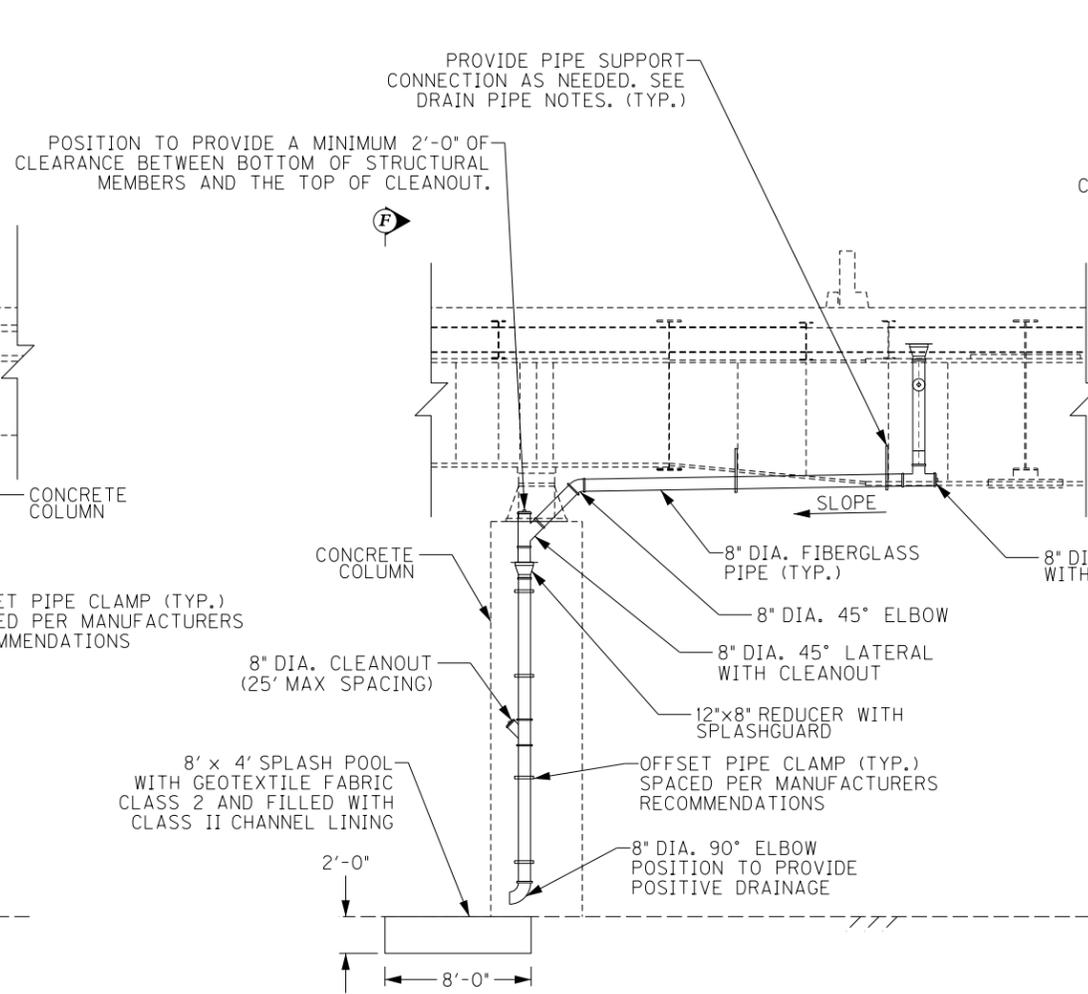
SECTION E-E

LONGITUDINAL SECTION - PIER 28, 36 (E.B.)
(LOOKING SOUTH)



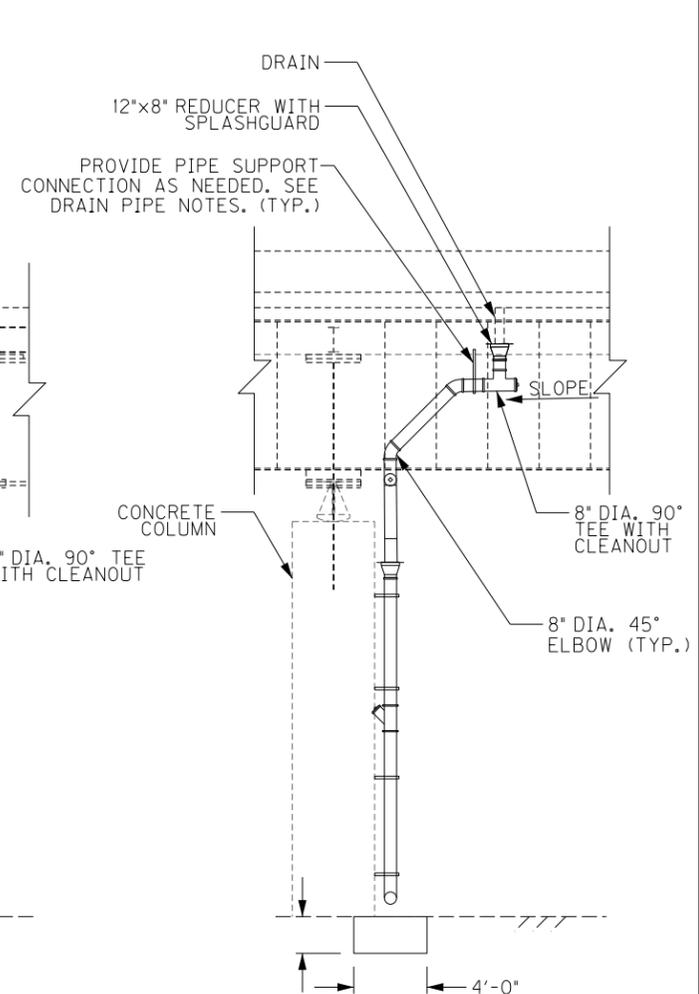
DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION - PIER 28, 36 (E.B.)
(LOOKING EAST)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION - PIER 30 (E.B.)
(LOOKING EAST)



SECTION F-F

LONGITUDINAL SECTION - PIER 30 (E.B.)
(LOOKING SOUTH)

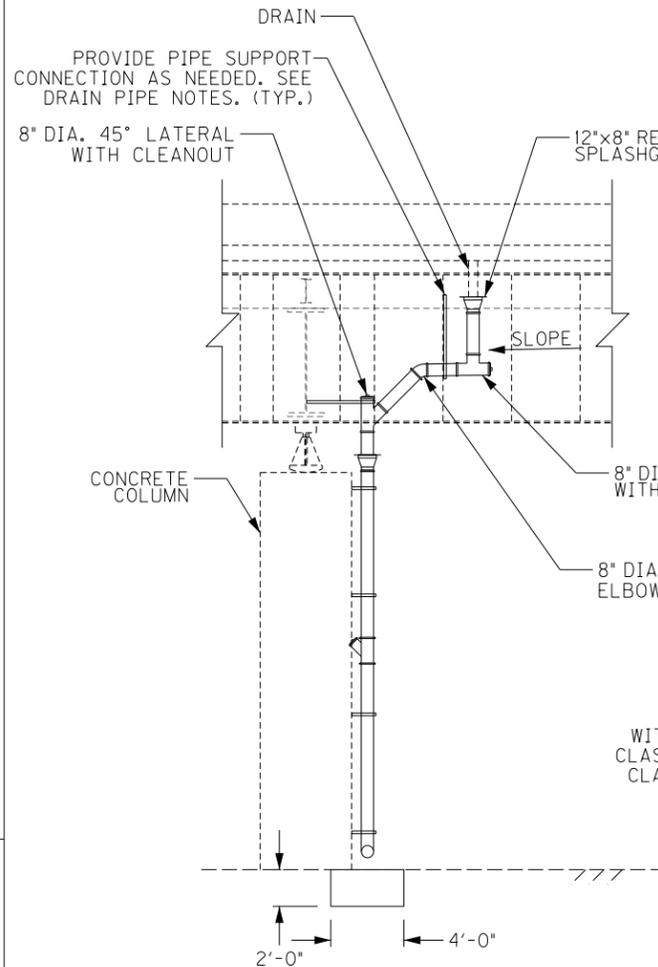
REVISION		DATE
DATE: FEB 2021	DESIGNED BY: PDO	CHECKED BY: DMB
DESIGNED BY: PDO	DATE PLOTTED: July 16, 2020	DETAILED BY: PDO
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 3		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D41
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

ITEM NUMBER
5-10016

FILE NAME:
DETAILS_293.DGN

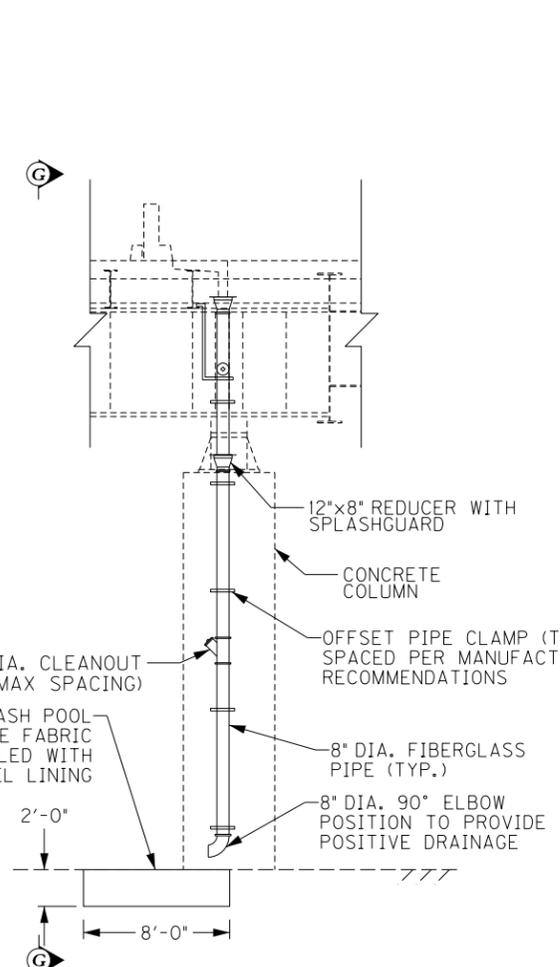
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



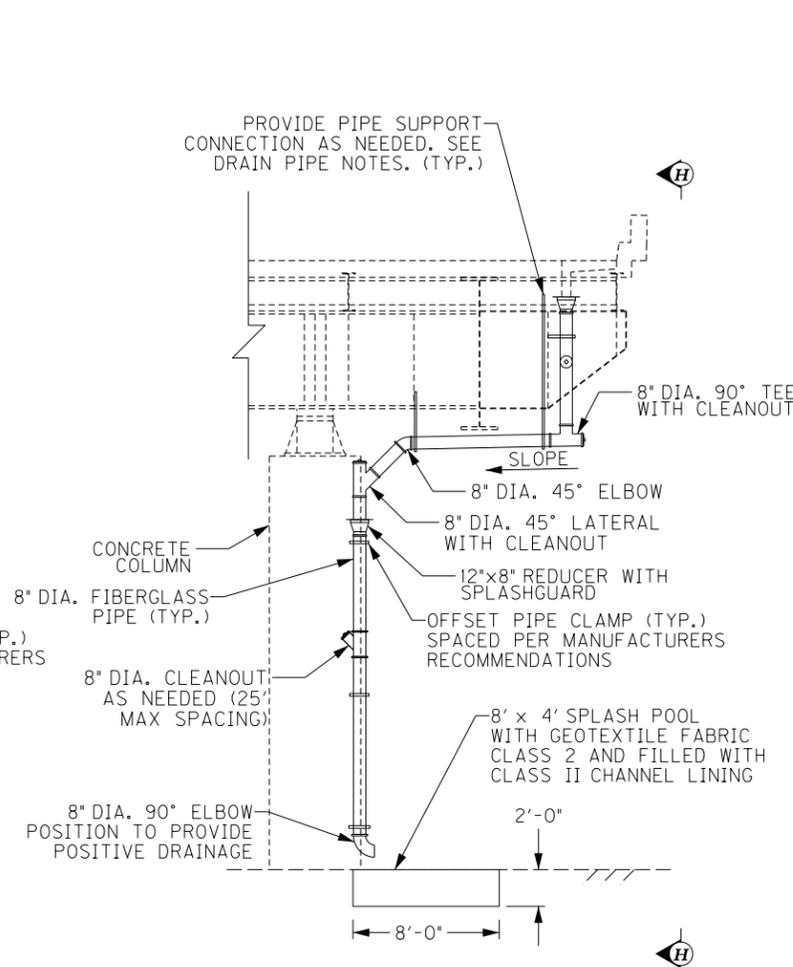
SECTION G-G

LONGITUDINAL SECTION - PIER 31 (E.B.)
(LOOKING SOUTH)



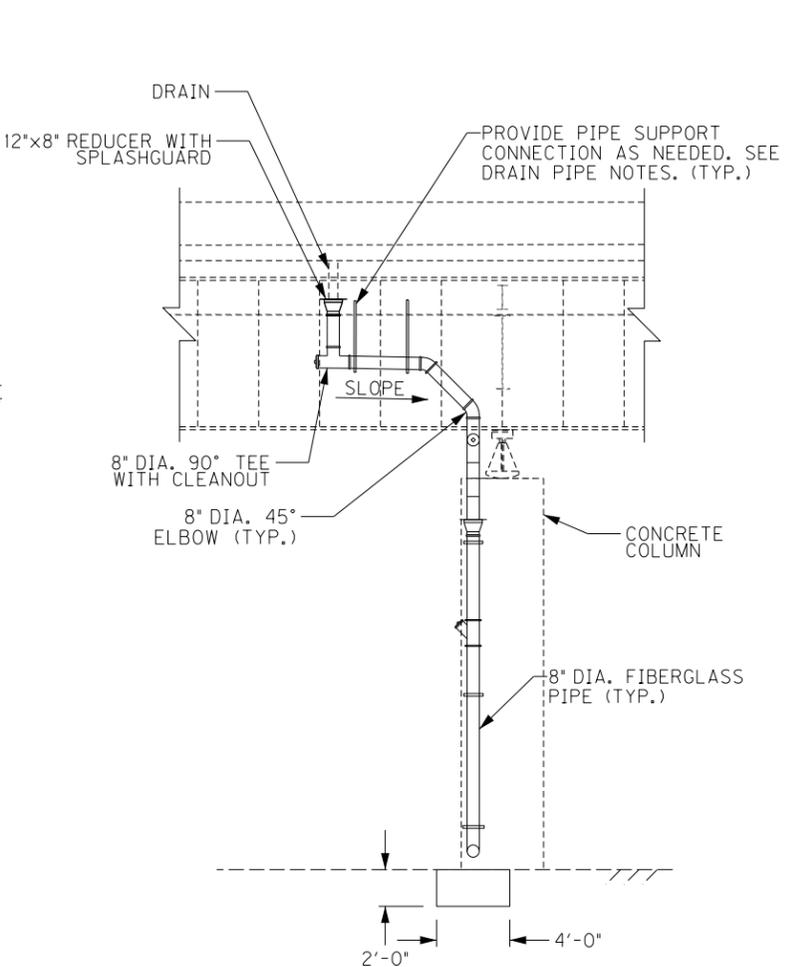
DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION - PIER 31 (E.B.)
(LOOKING EAST)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION - PIER 32 (W.B.)
(LOOKING WEST)



SECTION H-H

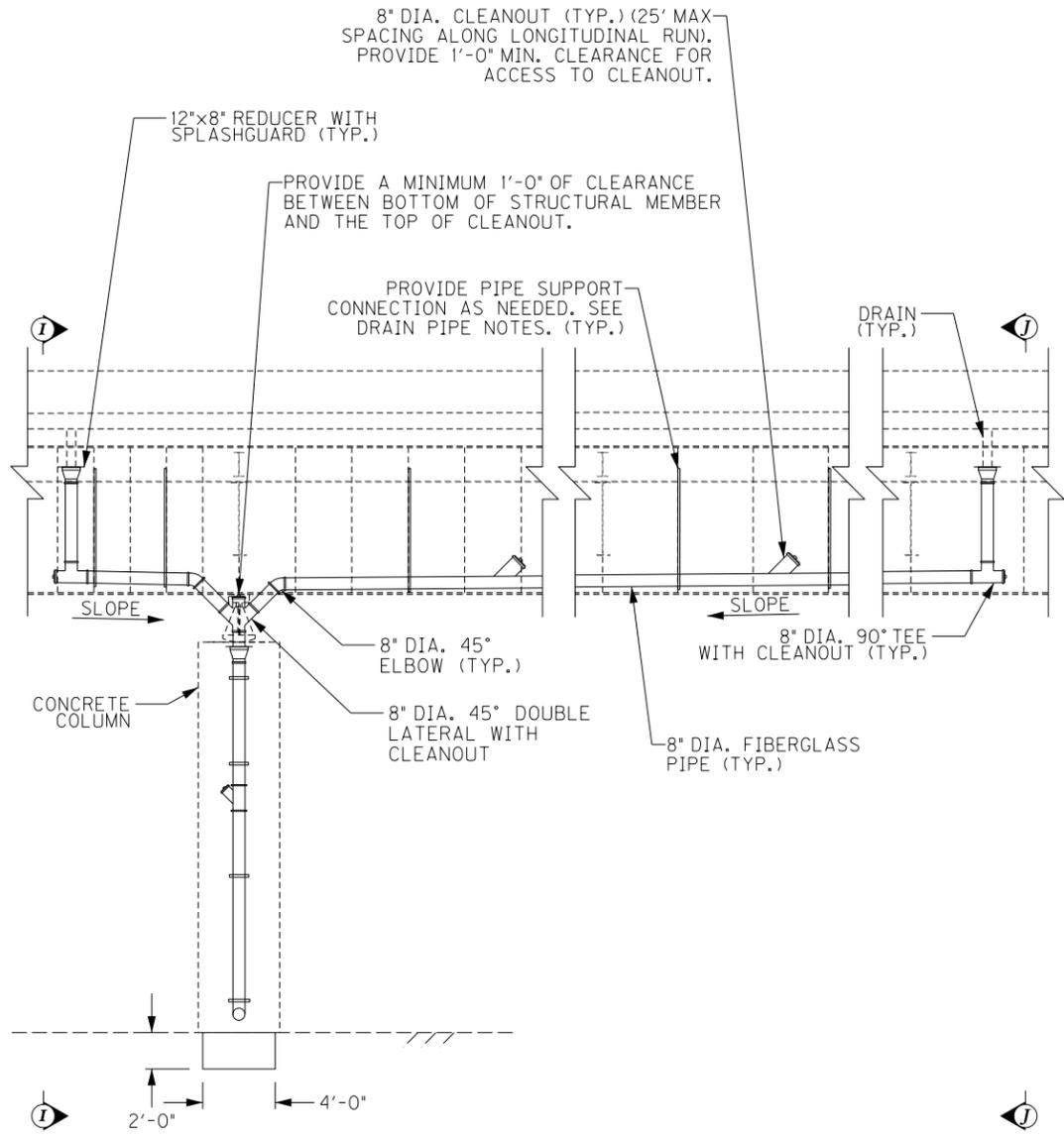
LONGITUDINAL SECTION - PIER 32 (W.B.)
(LOOKING SOUTH)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 4		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	D42 DRAWING NO. 28870

FILE NAME:
DETAILS_293.DGN

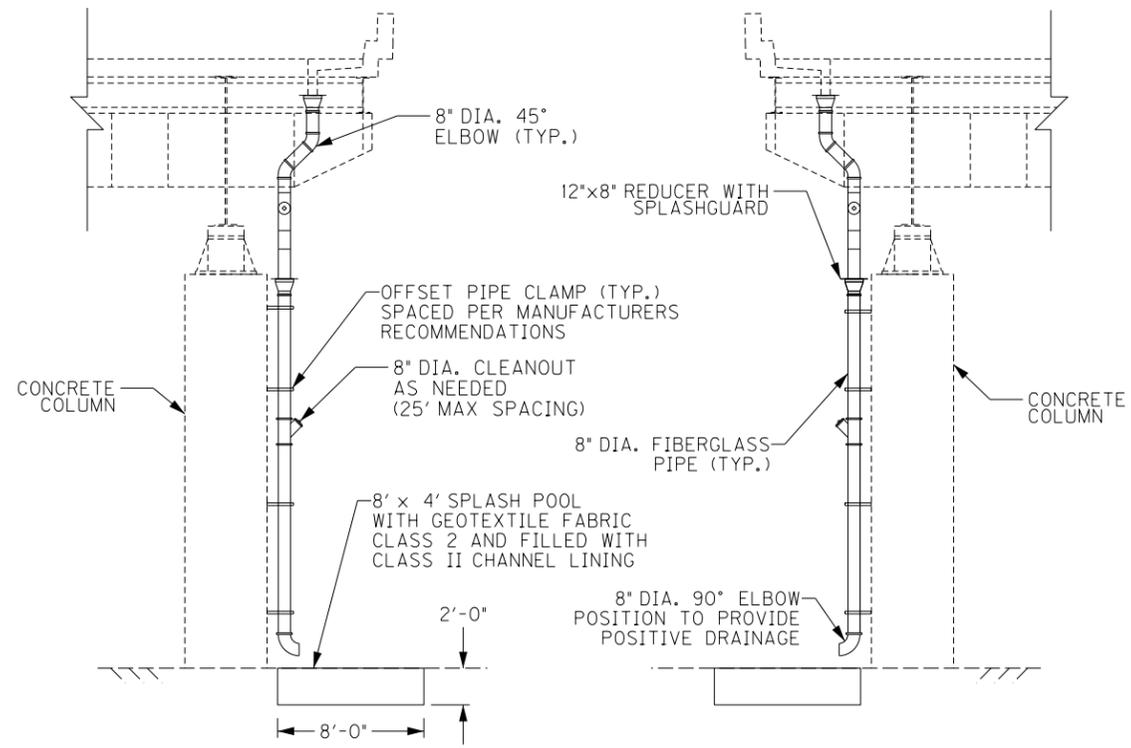
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464_020



DRAINAGE DETAIL - ELEVATION

LONGITUDINAL SECTION
PIER 33 (W.B.)
PIER 35 (E.B.)
(LOOKING SOUTH)

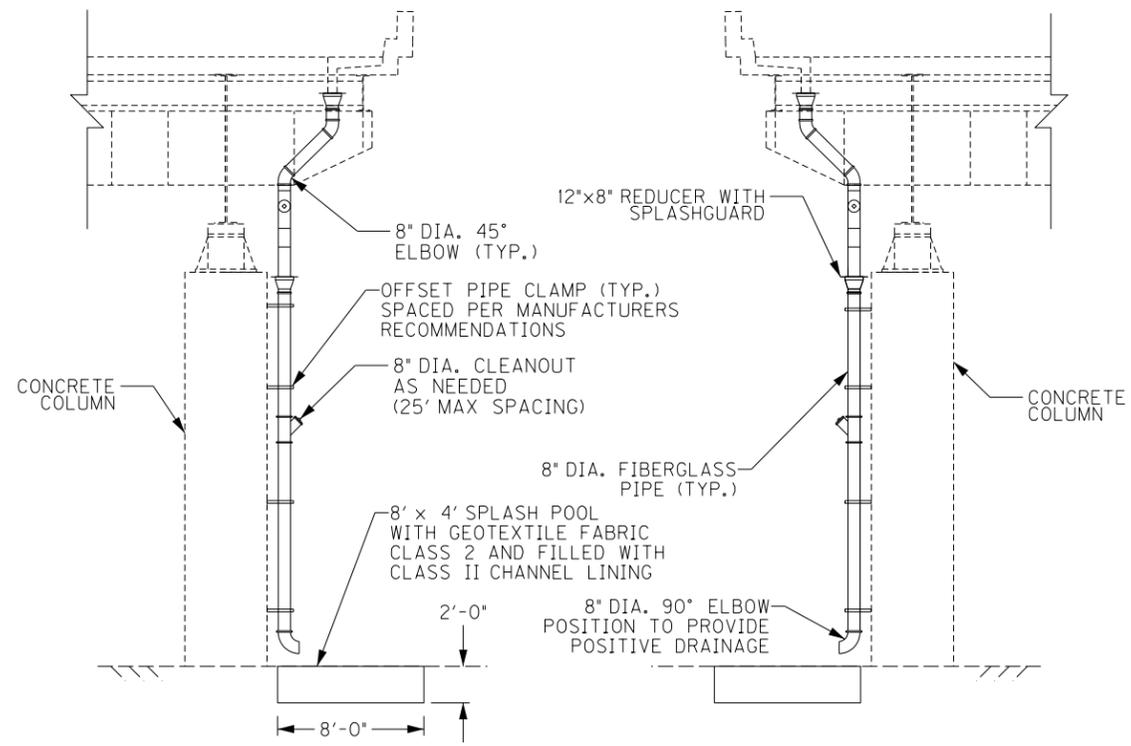


SECTION I-I

TRANSVERSE SECTION
PIER 33 (W.B.)
(LOOKING WEST)

SECTION J-J

TRANSVERSE SECTION
PIER 33 (W.B.)
(LOOKING EAST)



SECTION I-I

TRANSVERSE SECTION
PIER 35 (E.B.)
(LOOKING WEST)

SECTION J-J

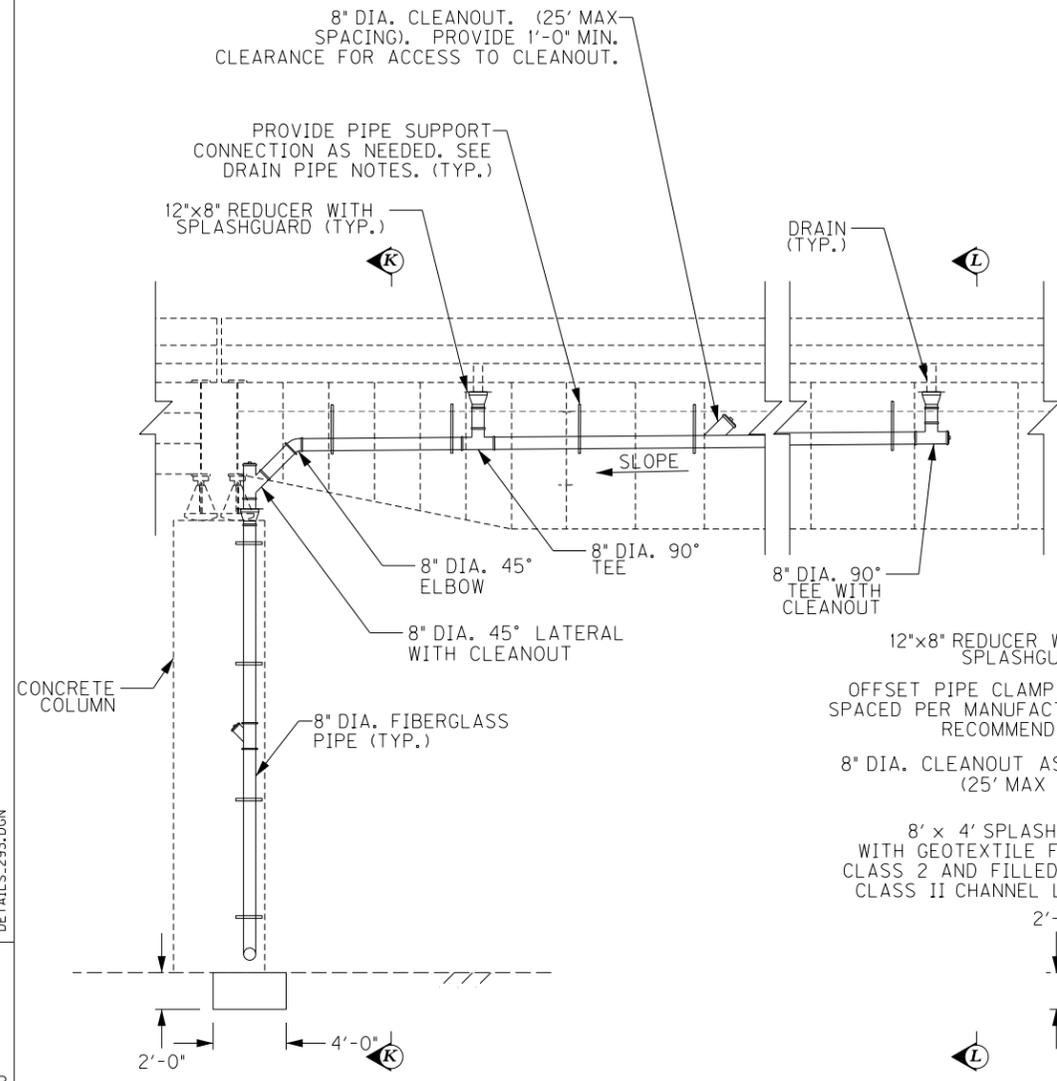
TRANSVERSE SECTION
PIER 35 (E.B.)
(LOOKING EAST)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 5		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	D43 DRAWING NO. 28870

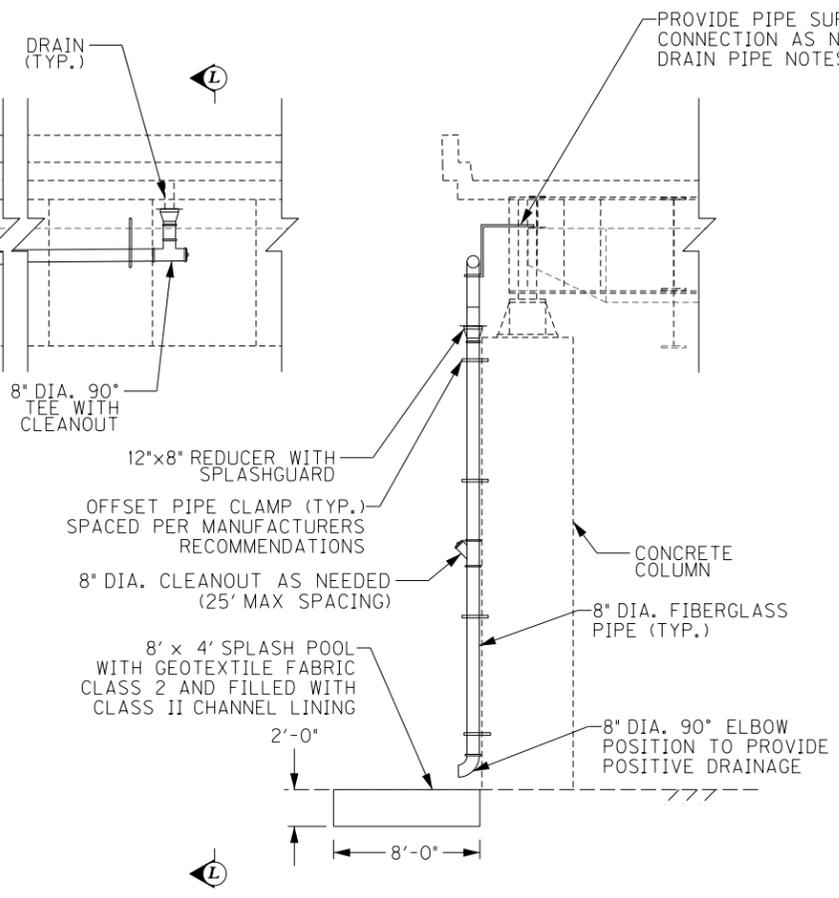
FILE NAME:
DETAILS.293.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

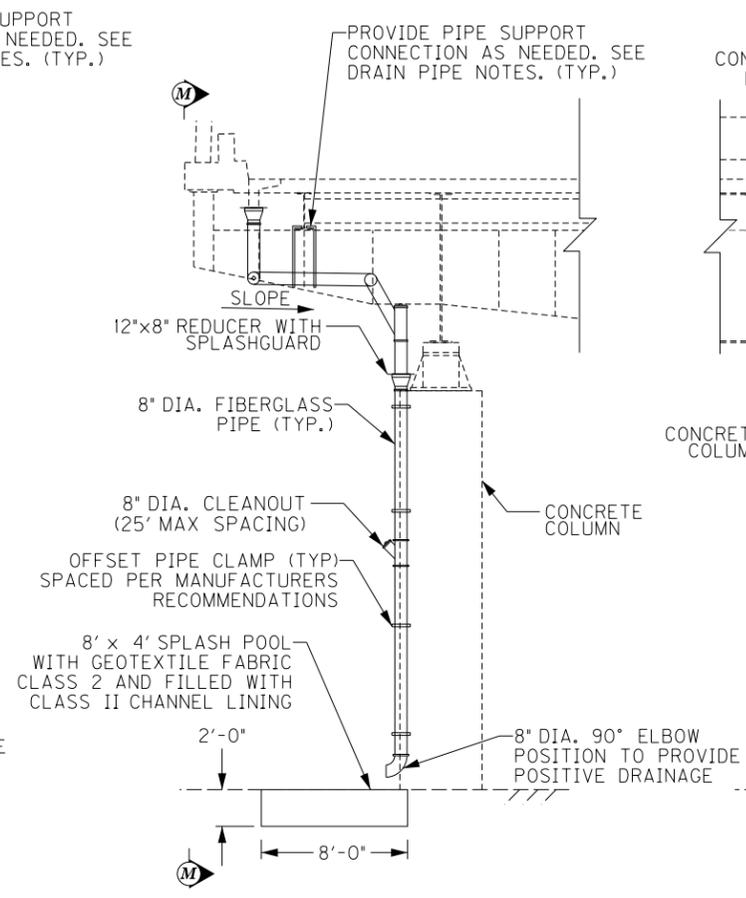
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



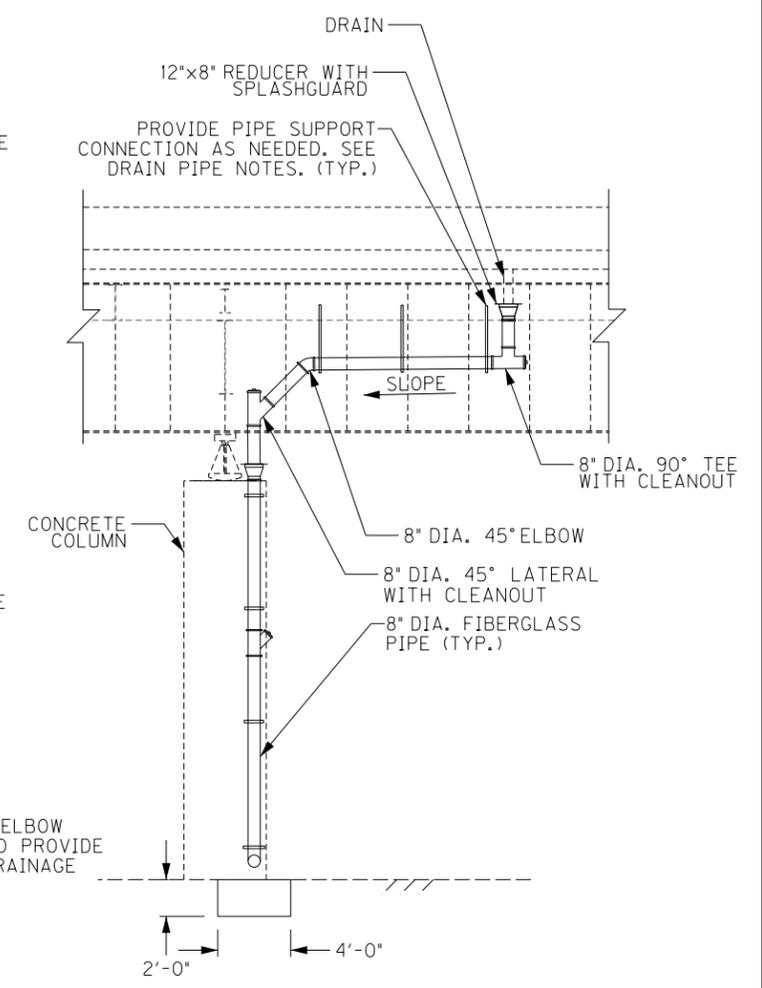
DRAINAGE DETAIL - ELEVATION
LONGITUDINAL SECTION - PIER RI-17 (W.B.)
(LOOKING SOUTH)



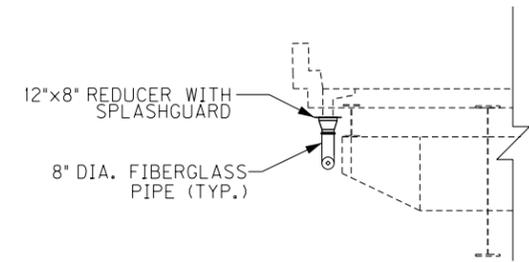
SECTION K-K
TRANSVERSE SECTION - PIER RI-17 (W.B.)
(LOOKING EAST)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIERS 37 & 38 @ RAMP 3 (E.B.)
(LOOKING WEST)



SECTION M-M
LONGITUDINAL SECTION
PIERS 37 & 38 @ RAMP 3 (E.B.)
(LOOKING NORTH)



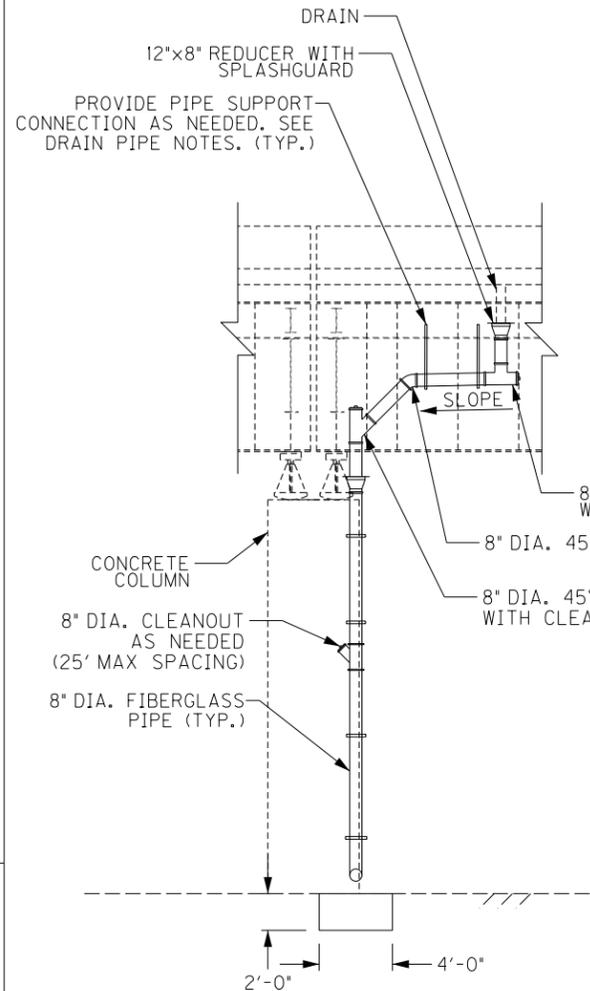
SECTION L-L
TRANSVERSE SECTION - PIER RI-17 (W.B.)
(LOOKING EAST)

REVISION		DATE
DATE: FEB 2021	CHECKED BY:	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 6		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D44
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

FILE NAME:
DETAILS_293.DGN

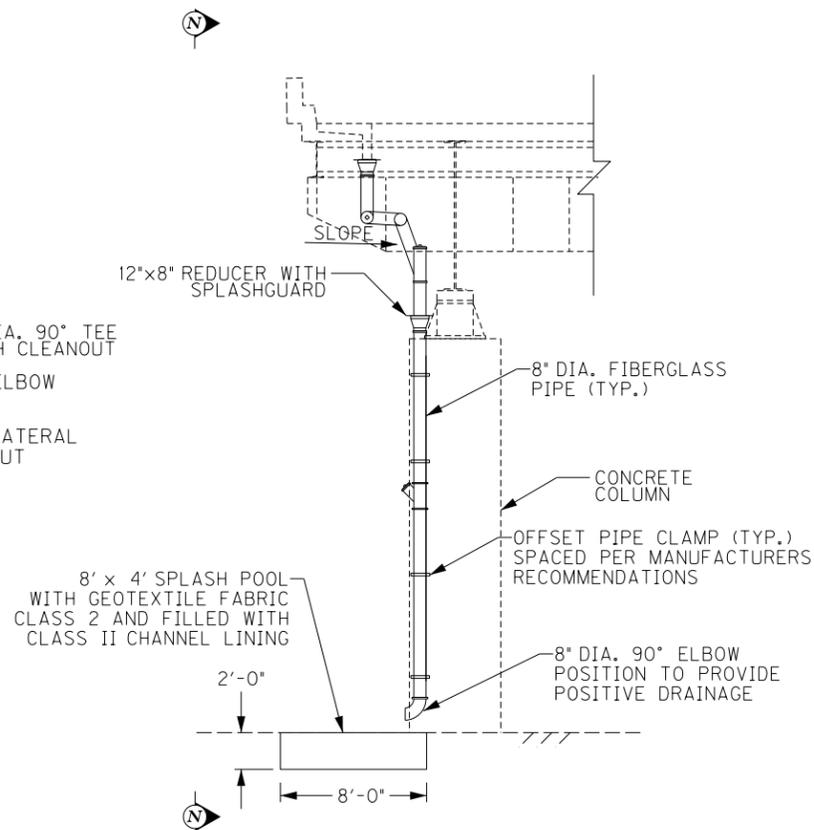
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464_020



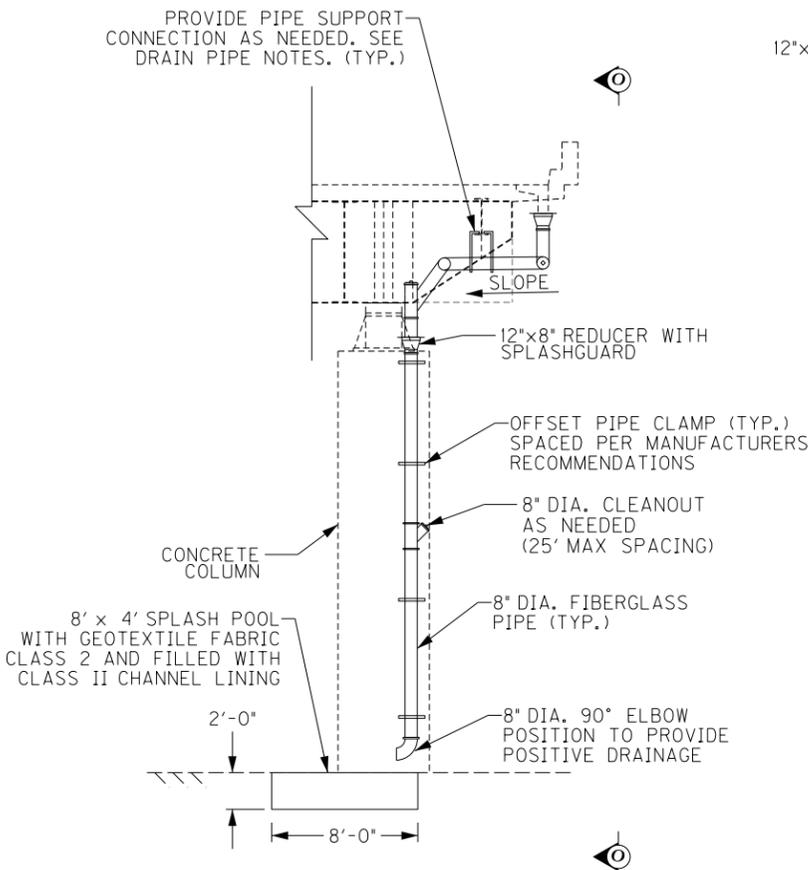
SECTION N-N

LONGITUDINAL SECTION
PIER 37 (W.B.)
(LOOKING SOUTH)



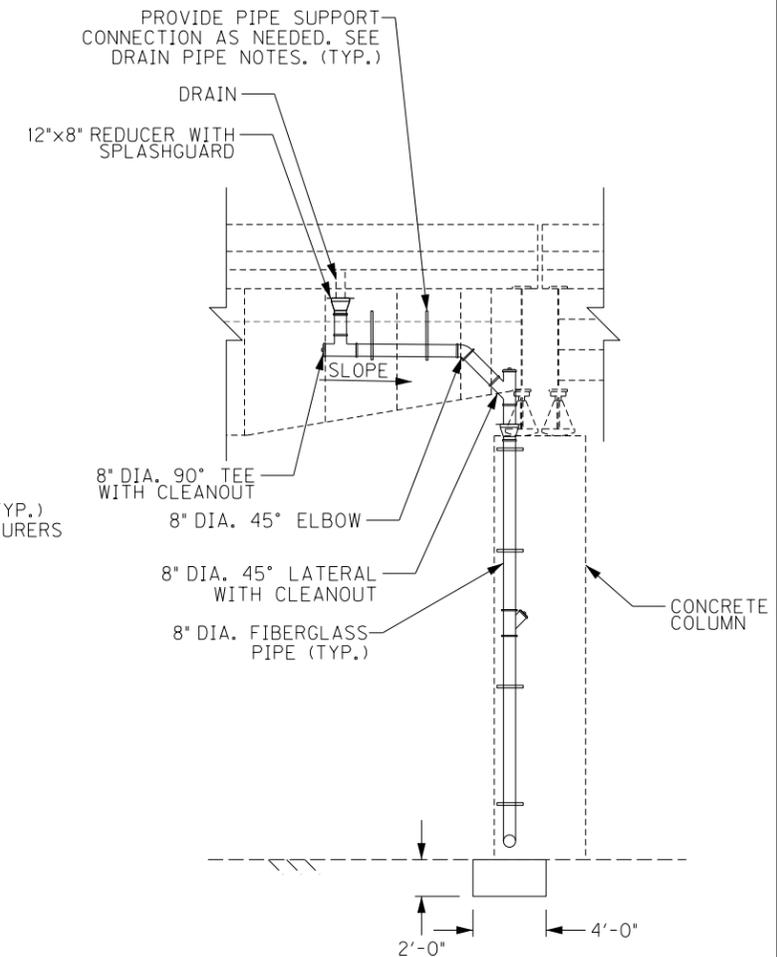
DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 37 (W.B.)
(LOOKING EAST)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION - PIER R3-1 (E.B.)
(LOOKING EAST)



SECTION O-O

LONGITUDINAL SECTION - PIER R3-1 (E.B.)
(LOOKING NORTH)

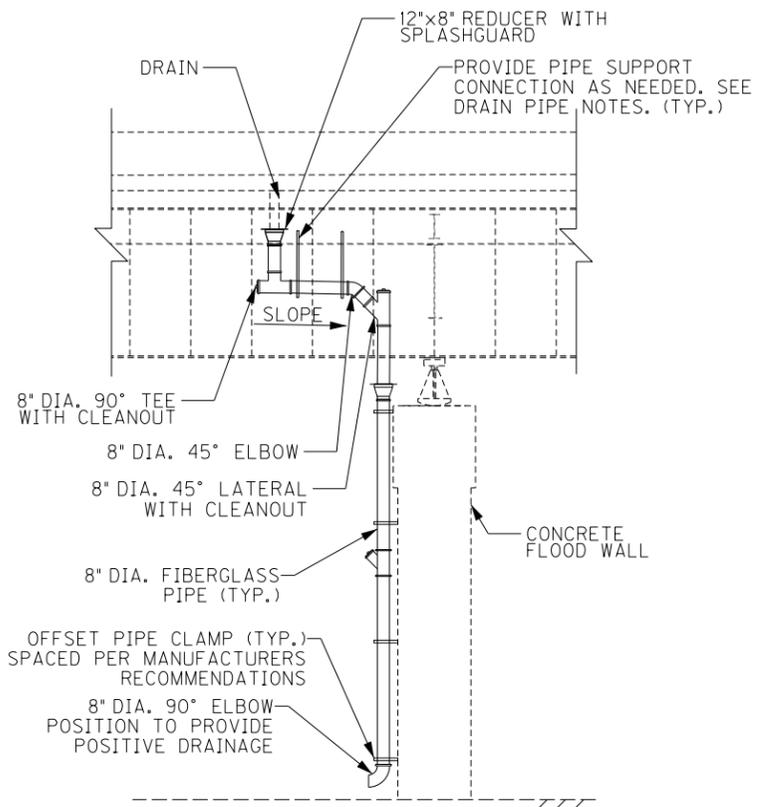
REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 7		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D45
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

ITEM NUMBER
5-10016

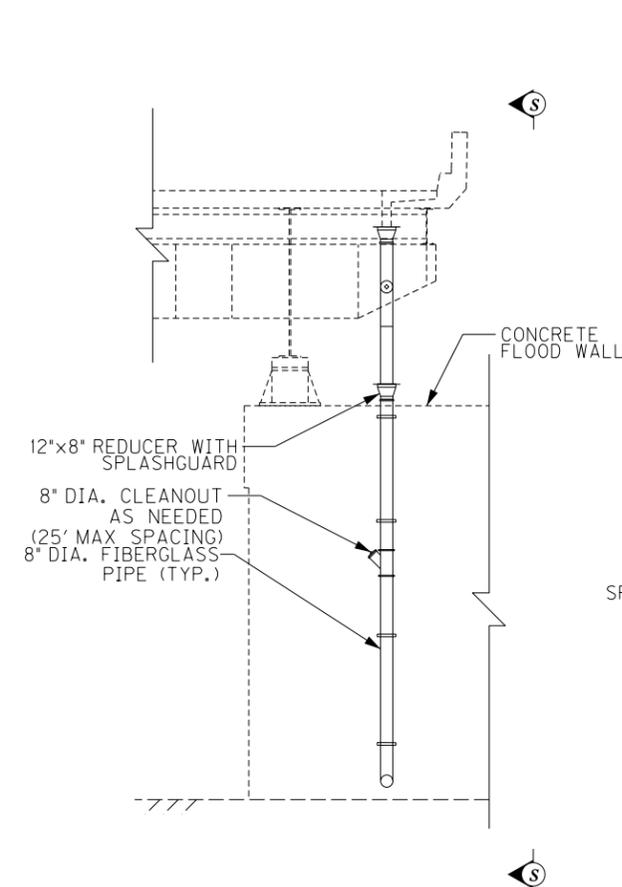
FILE NAME: DETAILS_293.DGN

USER: Nicholas.Alien
DATE PLOTTED: July 16, 2020

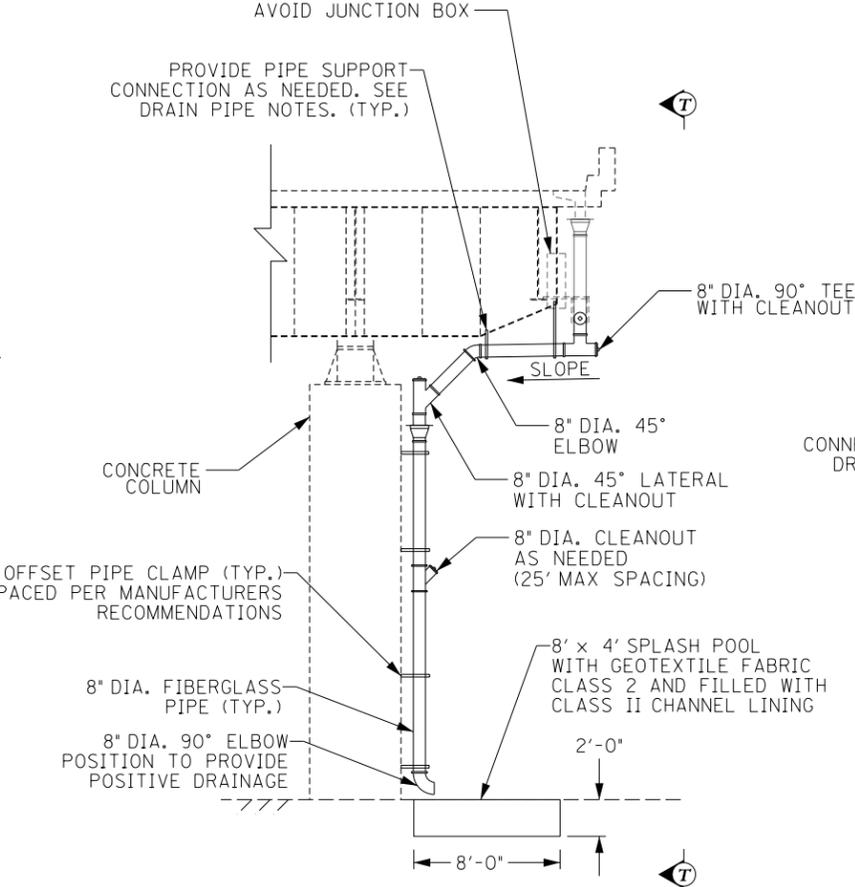
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



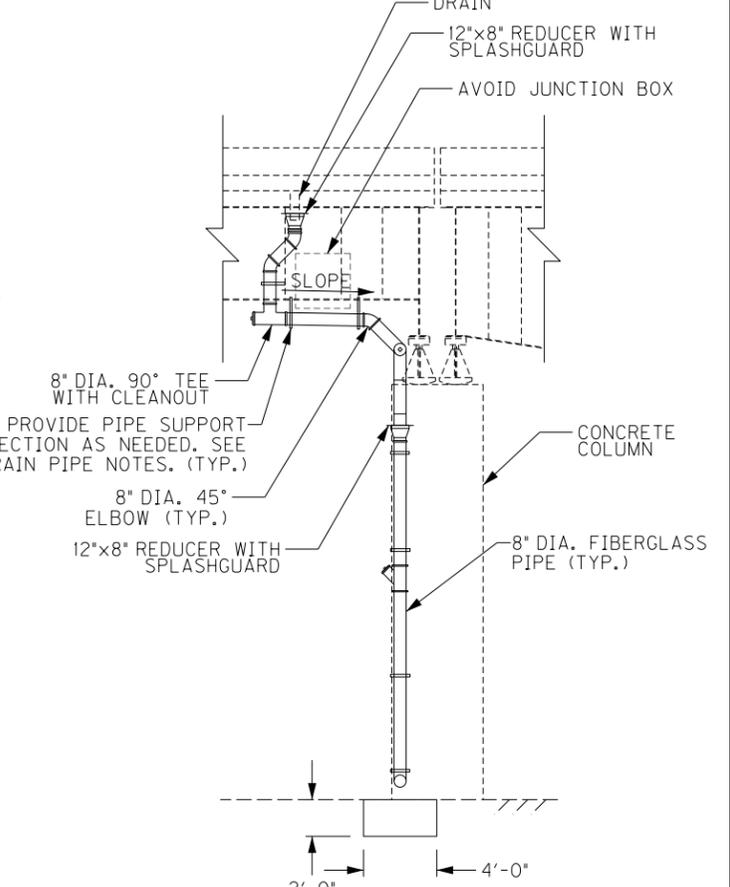
SECTION S-S
LONGITUDINAL SECTION
PIER 43 (E.B.)
(LOOKING SOUTH)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 43 (E.B.)
(LOOKING WEST)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 45 (E.B.)
(LOOKING WEST)



SECTION T-T
LONGITUDINAL SECTION
PIER 45 (E.B.)
(LOOKING SOUTH)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 9		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D47
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

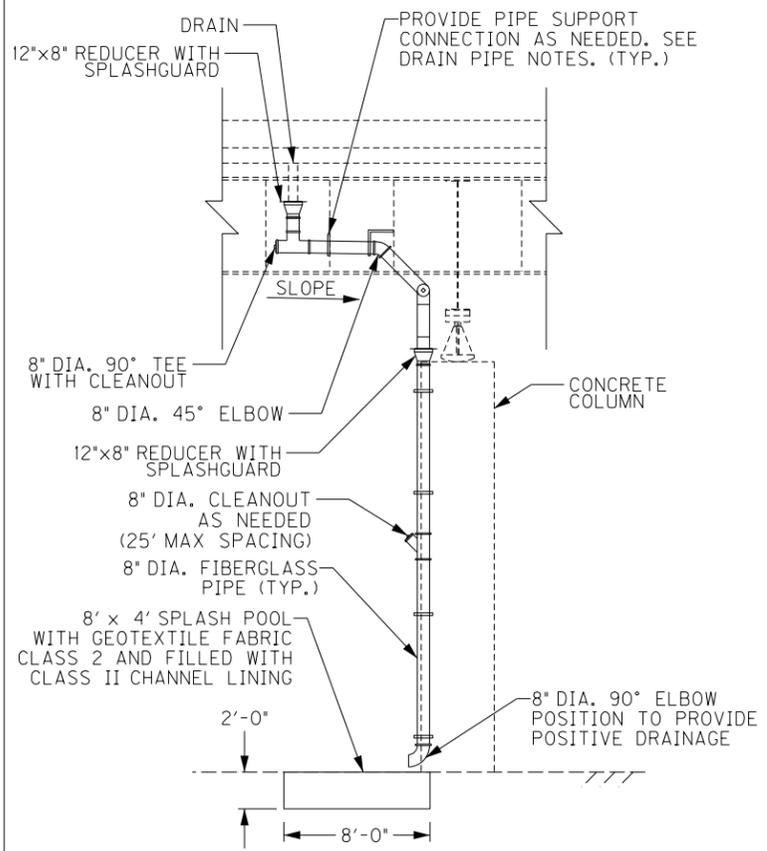
ITEM NUMBER
5-10016

FILE NAME:
DETAILS.293.DGN

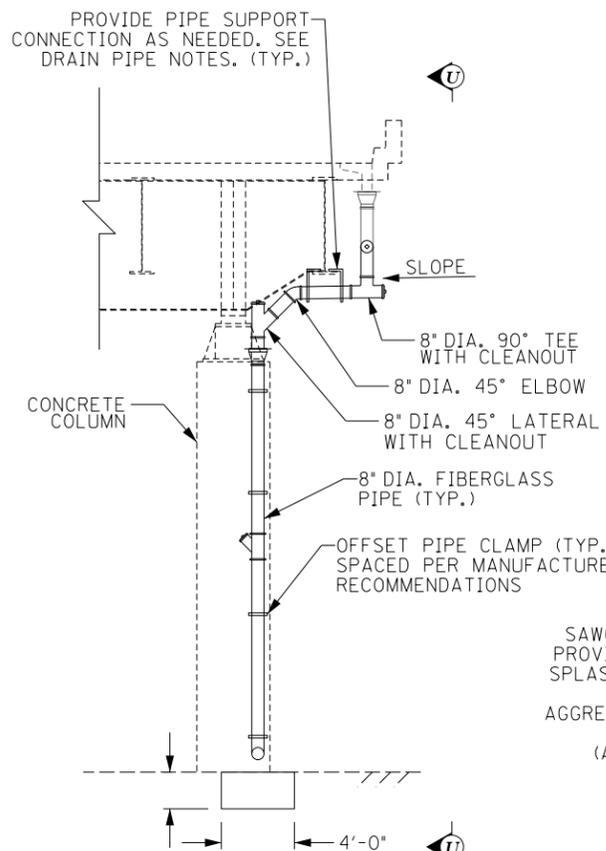
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

PROJECT NAME: S23464 020

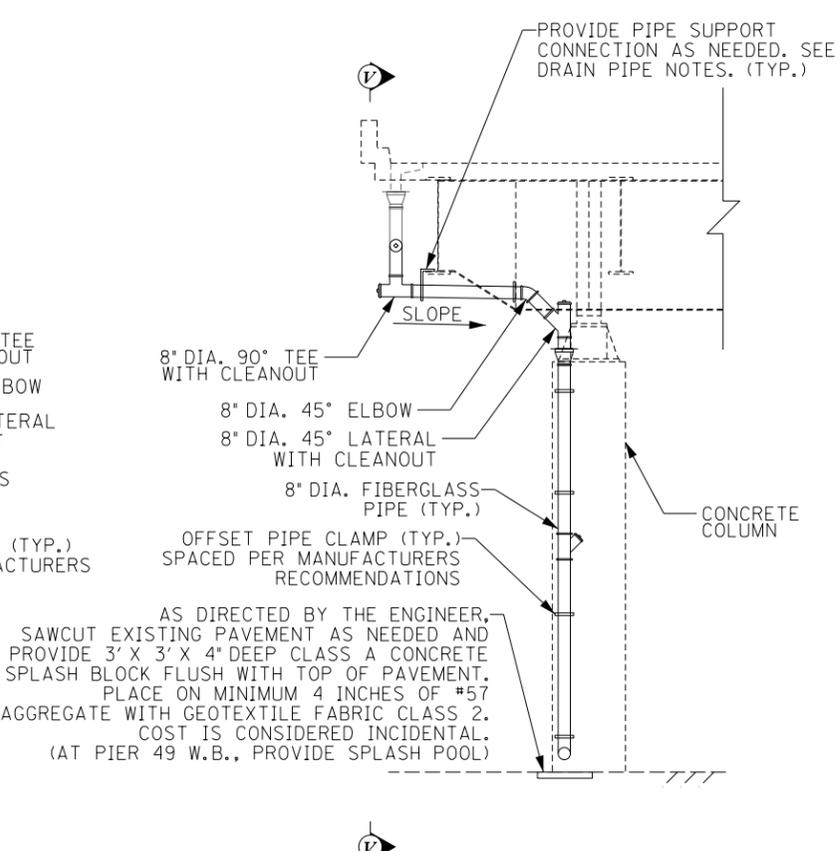
DESIGNER: v10.13.2.2 E-SHEET



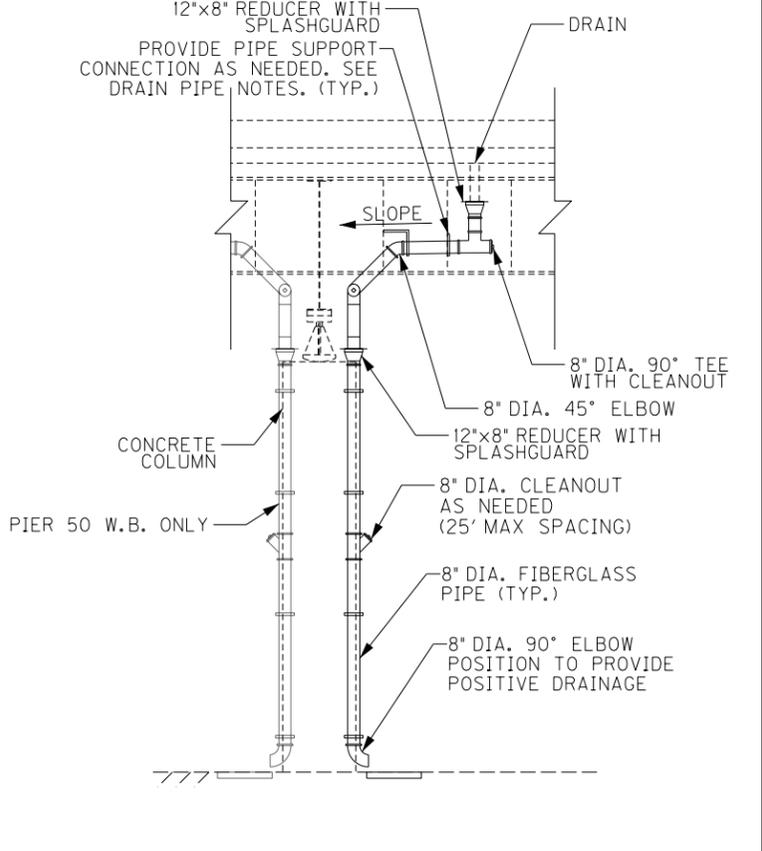
SECTION U-U
LONGITUDINAL SECTION
PIER 46 (E.B.)
(LOOKING SOUTH)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 46 (E.B.)
(LOOKING WEST)

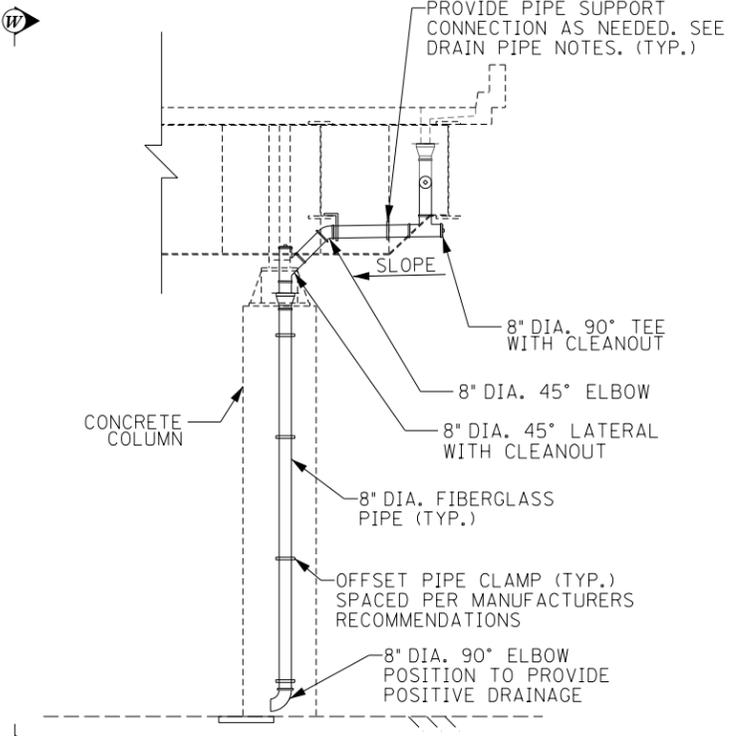


DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIERS 48, 49, 50 (E.B.)
PIERS 49, 50 (W.B.)
(LOOKING EAST)

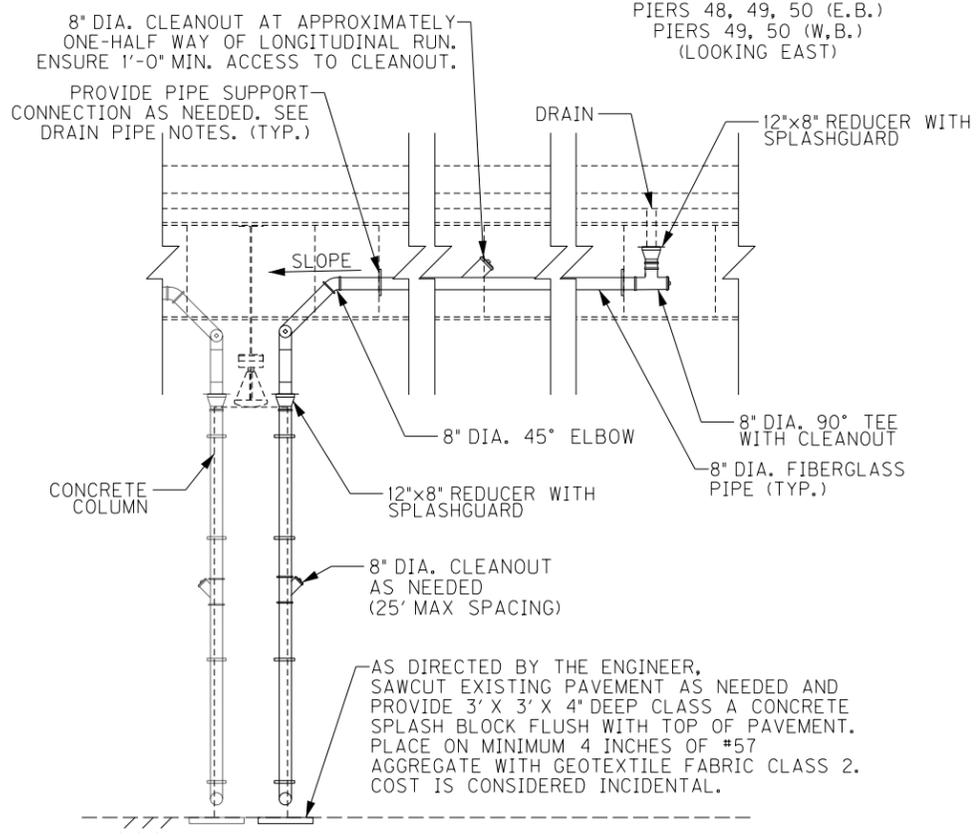


SECTION V-V
LONGITUDINAL SECTION
PIERS 48, 49, 50 (E.B.)
PIERS 49, 50 (W.B.)
(LOOKING SOUTH)

NOTE:
AT PIER 49 W.B., PROVIDE 8' X 4' X 2' DEEP SPLASH POOL WITH GEOTEXTILE FABRIC CLASS 2 AND FILLED WITH CLASS II CHANNEL LINING



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 50 (W.B.)
(LOOKING WEST)



SECTION W-W
LONGITUDINAL SECTION
PIER 50 (W.B.)
(LOOKING NORTH)

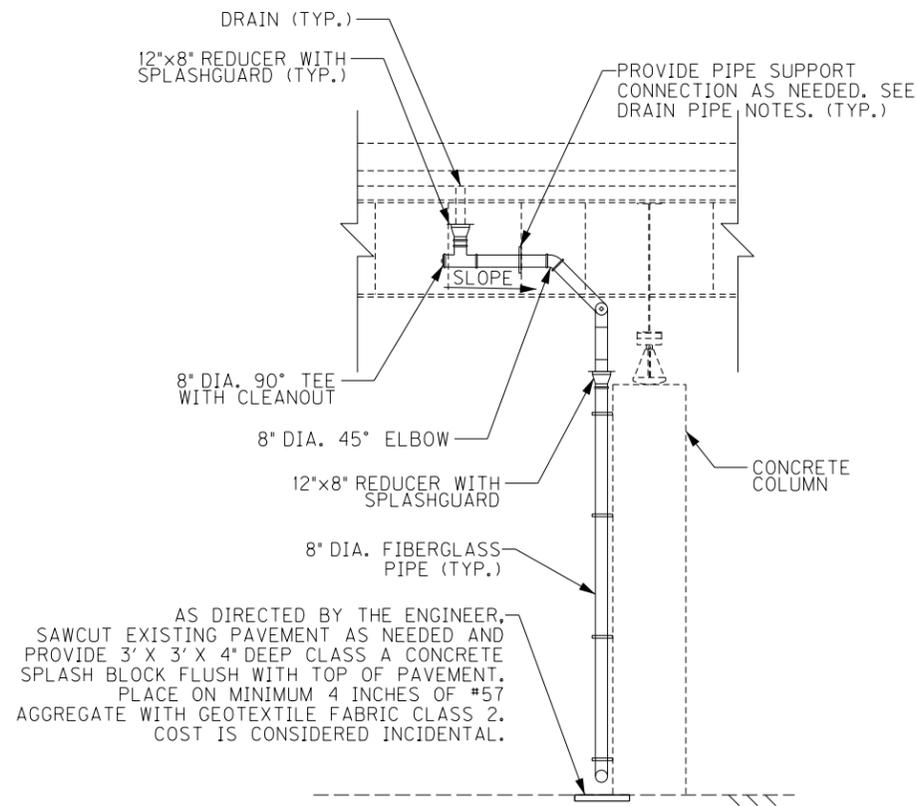
ITEM NUMBER	5-10016
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REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 10		
PREPARED BY	SHEET NO.	
Michael Baker INTERNATIONAL	D48	
1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO.	28870

FILE NAME:
DETAILS_293.DGN

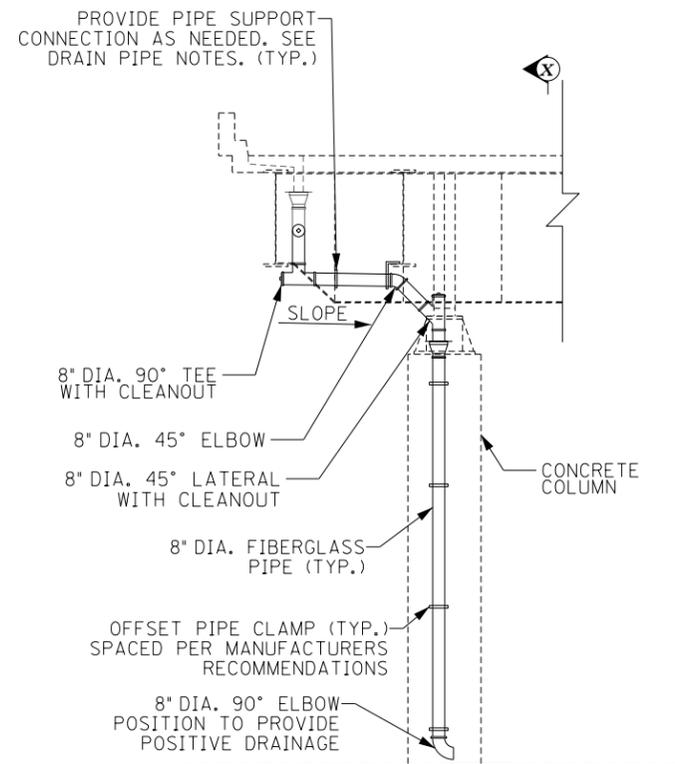
USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464 020



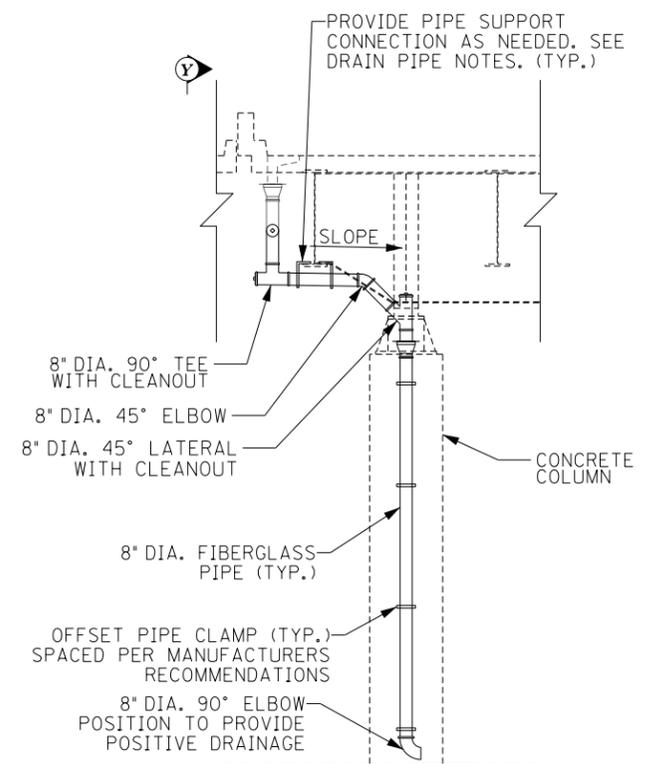
SECTION X-X

LONGITUDINAL SECTION
PIER 51 (W.B.)
(LOOKING NORTH)



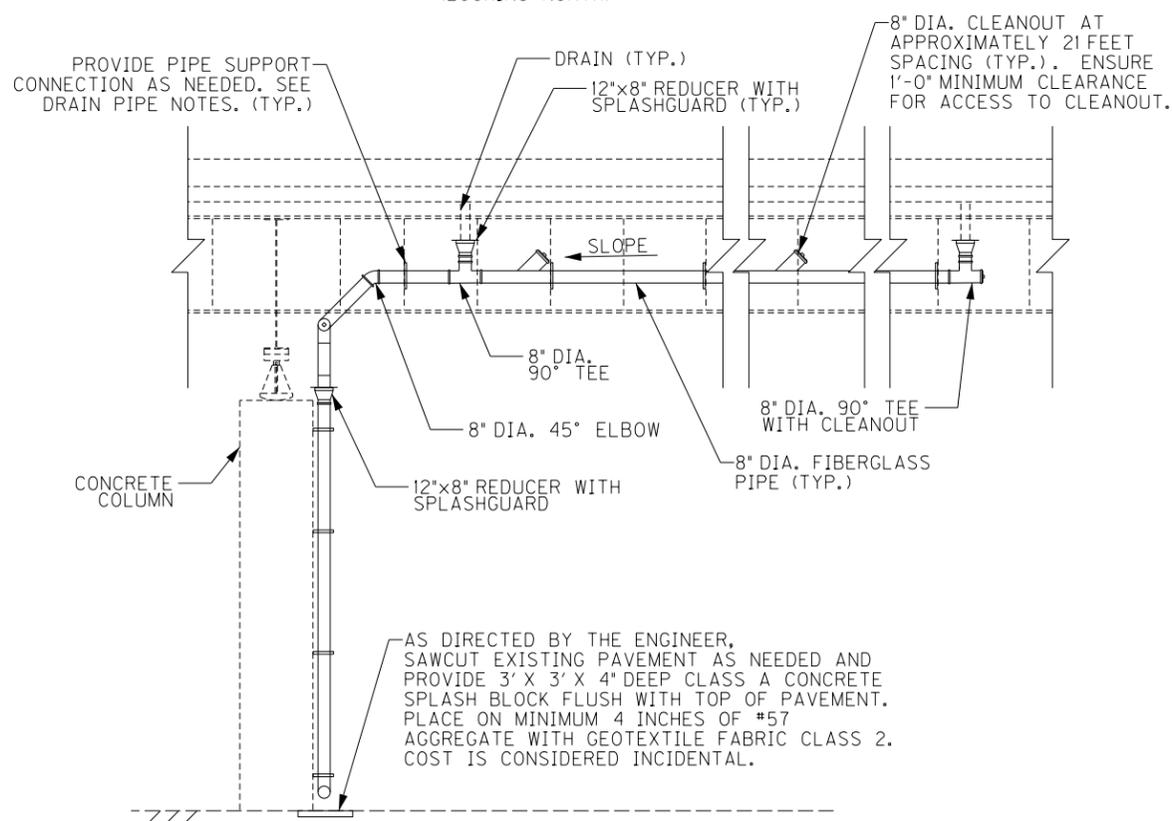
DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 51 (W.B.)
(LOOKING EAST)



DRAINAGE DETAIL - ELEVATION

TRANSVERSE SECTION
PIER 51 (E.B.)
(LOOKING EAST)



SECTION Y-Y

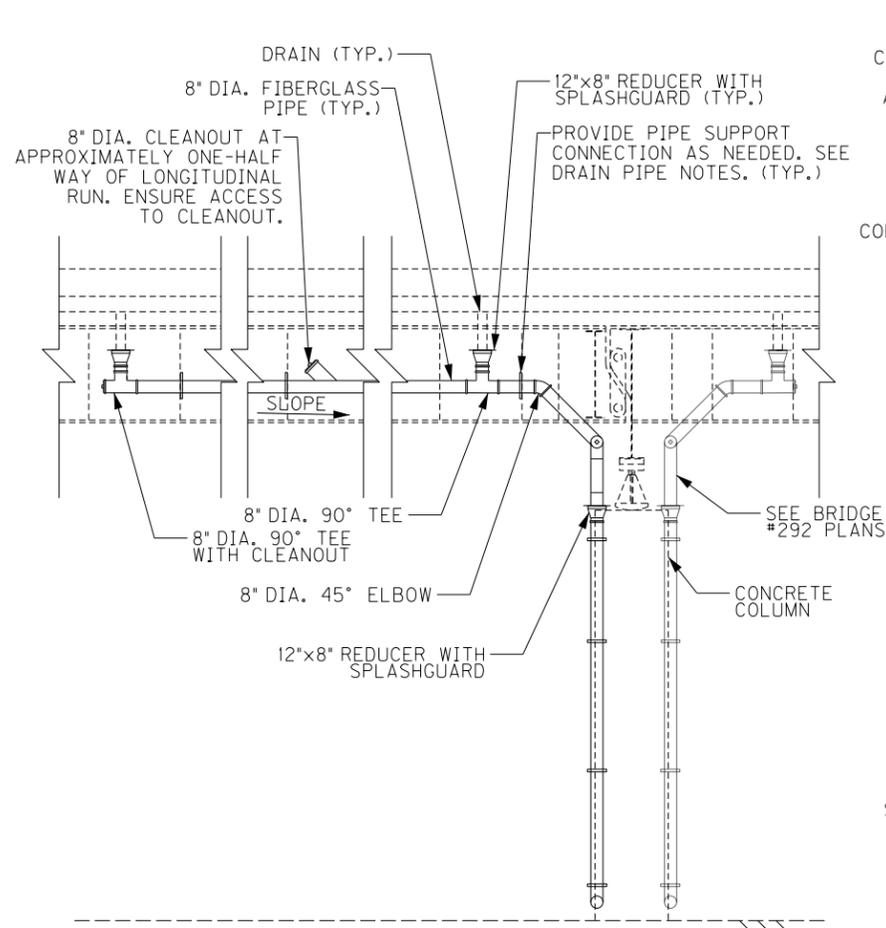
LONGITUDINAL SECTION
PIER 51 (E.B.)
(LOOKING SOUTH)

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 11		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D49
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

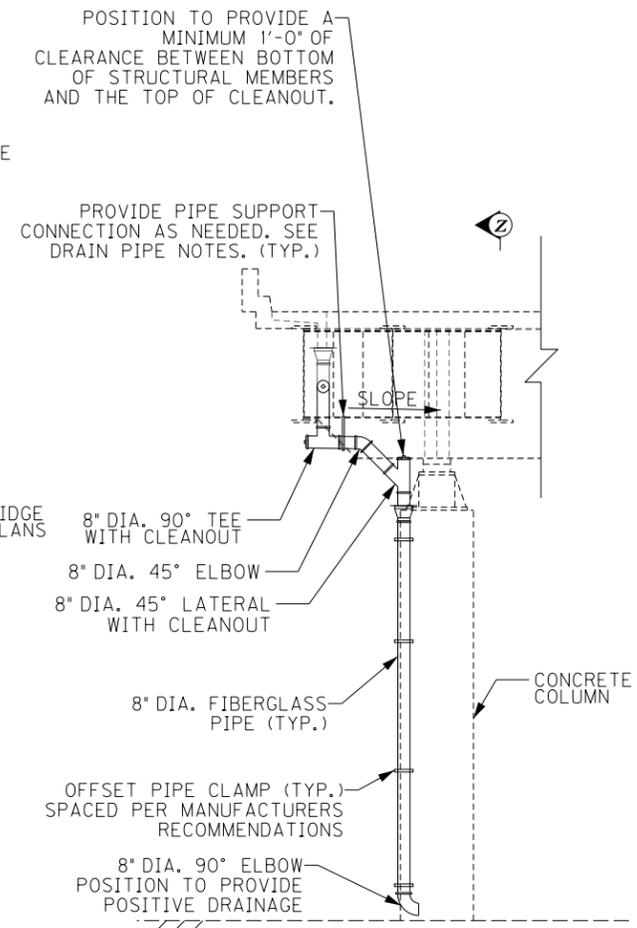
FILE NAME:
DETAILS.293.DGN

USER: Nicholas.Allen
DATE PLOTTED: July 16, 2020

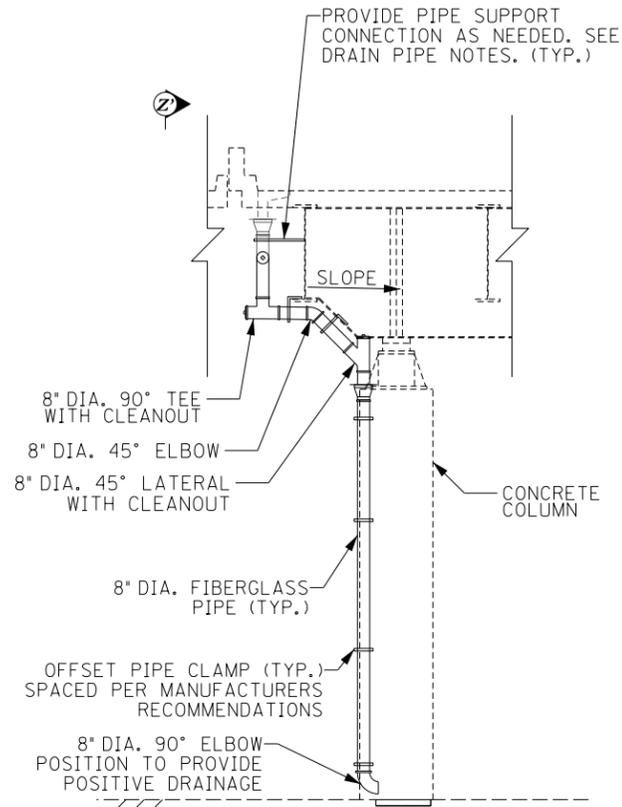
OpenRoads Designer v10.13.2.2 E-SHEET NAME: S23464_020



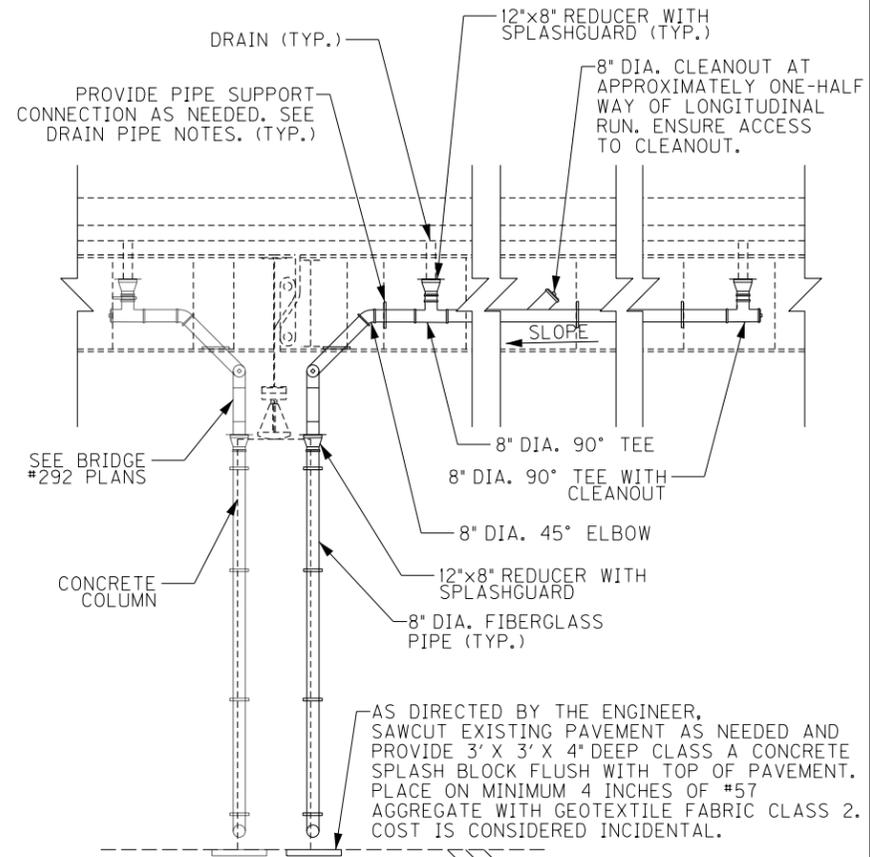
SECTION Z-Z
LONGITUDINAL SECTION
PIER 55 (W.B.)
(LOOKING NORTH)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 55 (W.B.)
(LOOKING EAST)



DRAINAGE DETAIL - ELEVATION
TRANSVERSE SECTION
PIER 55 (E.B.)
(LOOKING EAST)

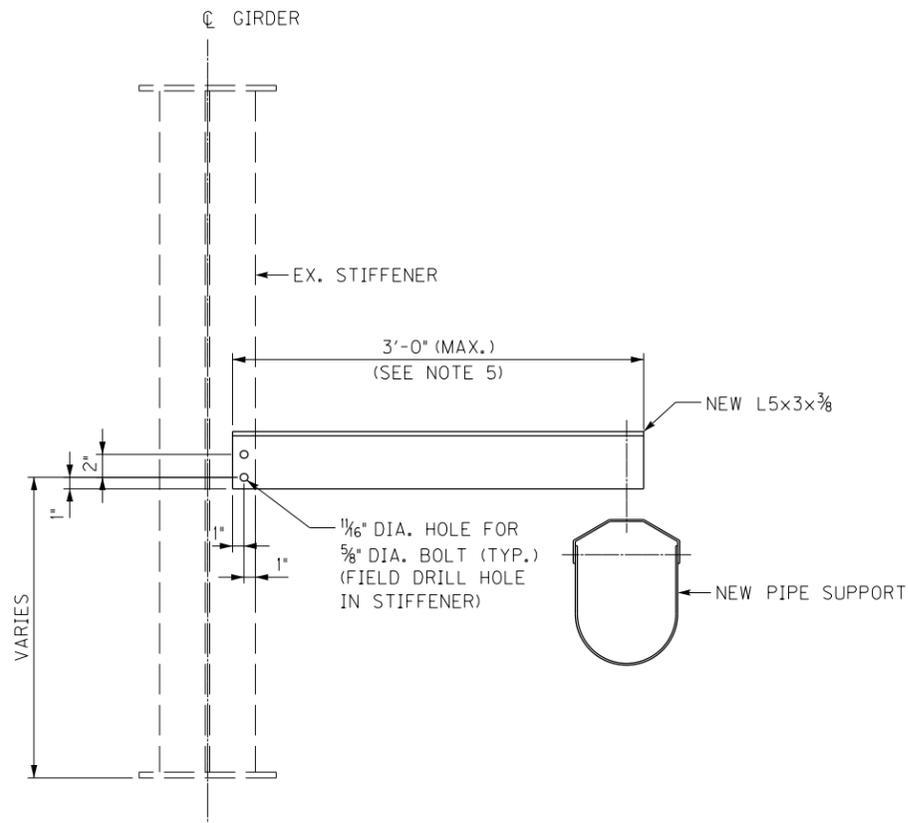


SECTION Z'-Z'
LONGITUDINAL SECTION
PIER 55 (E.B.)
(LOOKING SOUTH)

AS DIRECTED BY THE ENGINEER, SAWCUT EXISTING PAVEMENT AS NEEDED AND PROVIDE 3' X 3' X 4" DEEP CLASS A CONCRETE SPLASH BLOCK FLUSH WITH TOP OF PAVEMENT. PLACE ON MINIMUM 4 INCHES OF #57 AGGREGATE WITH GEOTEXTILE FABRIC CLASS 2. COST IS CONSIDERED INCIDENTAL.

REVISION		DATE
DATE: FEB 2021	CHECKED BY	
DESIGNED BY: PDO	DMB	
DETAILED BY: PDO	DMB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING STR. NO. 056B00293N	
293 DRAINAGE DETAILS - 12		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker INTERNATIONAL	D50
	1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DRAWING NO. 28870

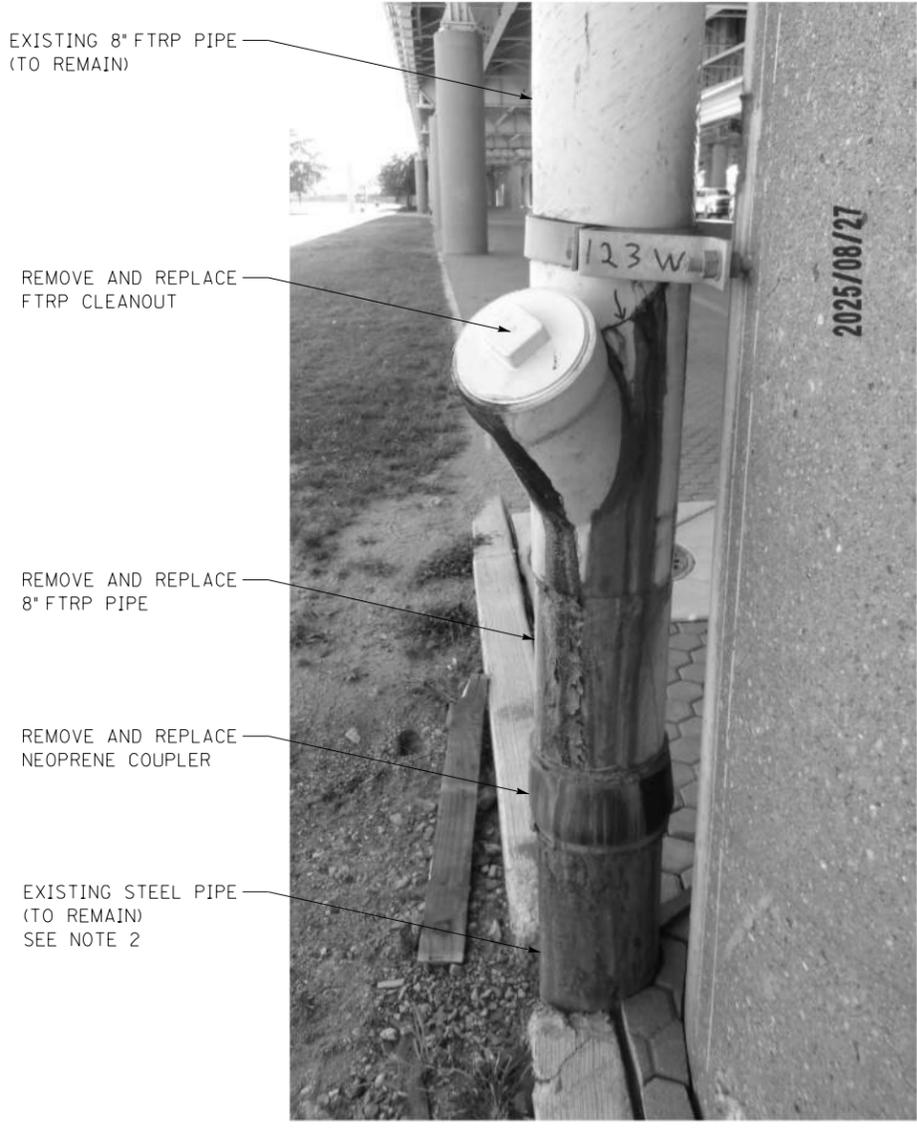
FILE NAME: C:\USERS\MARY.JO.DWYER\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WORKINGDIR\MB-US-PW-03\MARY.JO.DWYER\MBAKERINTL.COM
 USER: MaryJo.Dwyer
 DATE PLOTTED: November 29, 2023
 E-SHEET NAME: S23464 020
 MicroStation v10.17.01.58



PROPOSED PIPE SUPPORT BRACKET

NOTES

1. FOR FIBERGLASS DRAIN PIPE SUPPORT BRACKET LOCATIONS, SEE DRAINAGE DETAIL SHEETS.
2. STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 (ASTM A709), GRADE 36. CONTRACTOR HAS THE OPTION TO REPLACE ASTM A709 GRADE 36 STEEL WITH ASTM GRADE 50 AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. BOLTS SHALL BE 5/8" DIAMETER GALVANIZED F3125 GRADE A325 HIGH STRENGTH BOLTS.
4. FOR ADDITIONAL FIBERGLASS DRAIN PIPE NOTES, SEE GENERAL NOTE SHEET NO. S6.
5. ANGLE MAY BE CUT SHORTER AS NEEDED.
6. USE LOCTITE THREADLOCKER BLUE 242 OR APPROVED EQUAL ON THE DRAINAGE SUPPORT HANGERS TO PREVENT THE NUTS FROM LOOSENING DUE TO VIBRATION, AS DIRECTED BY THE ENGINEER.



DRAIN PIPE REPAIR AT PIER 123W

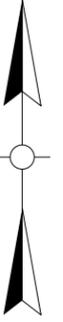
PRESTON TO 2ND STREET (B142)

NOTES FOR DRAIN PIPE REPAIR

1. SEE SHEET NO. S14 FOR B142 LAYOUT.
2. SEE SHEET NO. S6 FOR "CLEAN UNDERGROUND PIPING" NOTE.

REVISION		DATE
DATE: AUGUST 2025	CHECKED BY	
DESIGNED BY: MJ DWYER	M BARON	
DETAILED BY: MJ DWYER	M BARON	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-64	CROSSING K & I T RR TO PRESTON STREET	
DRAIN PIPE SUPPORT BRACKET		
ITEM NUMBER	PREPARED BY	SHEET NO.
5-10016	Michael Baker International 1650 Lyndon Farm Court Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	D51 DRAWING NO. 28870

COUNTY OF	ITEM NO.	SHEET NO.
JEFFERSON	5-10016	R1



INSTALL 500' FROM
LAST CHANNELIZING DEVICE (TYP)

⑤
⑤

I-64 WB
I-64 EB

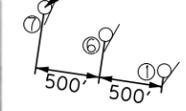
CHANNELIZING DEVICE AT 20' SPACING

200' WORK SPACE
PRECEDED BY 100' BUFFER SPACE

CHANNELIZING DEVICE AT 40' SPACING

BEGIN 80' TAPER

INSTALL 500' FROM
FIRST CHANNELIZING DEVICE

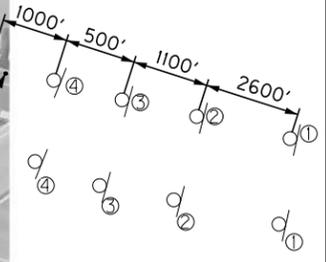


PIER 34W

ARROW PANEL

BEGIN 660' MERGING TAPER

BEGIN 110' SHOULDER TAPER



FILE NAME: SHT_MOT_LAYOUT2.DGN

USER: Nicholas Allen
DATE PLOTTED:

E-SHEET NAME:

OpenRoads Designer v10.13.2.2

① W20-1 (48 x 48)	② W20-5R (48 x 48)	③ W20-5R (48 x 48)	④ W4-2R (48 x 48)	⑤ G20-2 (48 x 24)	⑥ W21-5bL (48 x 48)	⑦ W21-5aL (48 x 48)



SCALE: 1" = 50'

BRIDGE 293
MAINTENANCE OF TRAFFIC
PIER 34W LANE CLOSURE

