



Matthew G. Bevin
Governor

**COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET**
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

March 18, 2019

CALL NO. 204
CONTRACT ID NO. 195066
ADDENDUM # 2

Subject: ALLEN-TODD-WARREN COUNTIES, 121GR19D066-STP
Letting March 22, 2019

- (1) Revised - Special Notes for Concrete Coating - Pages 59-61 of 266
- (2) Revised - Special Notes for Contract Completion Date and Liquidated Damages - Page 102 of 266
- (3) Revised - Material Summary - Pages 214-218 of 266
- (4) Revised - Proposal Bid Items - Pages 263-266 of 266
- (5) Revised - Plan Sheets - S1, S2, S3, S5, S7, and S8

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in cursive script that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:mr
Enclosures



An Equal Opportunity Employer M/F/D

SPECIAL NOTE FOR CONCRETE COATING

03-10011.00 Allen 002B00021N

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
5. Apply Ordinary Surface Finish
6. Prepare the surfaces to receive coating.
7. Apply concrete coating.
8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

<u><i>Manufacturer</i></u>	<u><i>Prime Coat</i></u>	<u><i>Finish Coat</i></u>
Sherwin Williams	Macropoxy 646	Acrolon 218 HS
PPG	Amerlock 2	Devoe Devflex HP
Carboline	Carboguard 890	Carbothane 133 HB
Tnemec	Elastogrip 151	Envirocrete 156

The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal. The finish coat shall be gray and will meet the following values:

	<u>L*</u>	<u>a*</u>	<u>b*</u>
Gray	74.94	-1.54	3.92

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

III. CONSTRUCTION

A. Perform Concrete Repairs. Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair if included in the contract documents.

B. Apply Ordinary Surface Finish. Areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.

C. Areas to Receive Concrete Coating:

1. Every exposed surface above a point 6" below ground or fill line of abutments, wing walls, end bent and pier caps, pedestals, back walls, columns, and exposed footings.
2. All exposed surfaces of concrete barrier walls, parapets, curbs, and plinths. Do not apply to the riding surface of the concrete deck.
3. The underneath surfaces of slab overhangs outside of exterior girders and to the exterior side and bottom of exterior concrete girders, beams, and box beams.

D. Prepare Concrete Surfaces for Repair. All areas specified shall be pressure washed. Equip the pressure washers with calibrated gages and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure of up 3,500 to 4,500 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum of 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Division of Construction approval. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Perform all pressure washing at temperatures above 40 degrees Fahrenheit.

E. Apply Concrete Coating. All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry a minimum of 24 hours before any coating is applied. The coating must be applied with 72 hours of pressure washing. The coating must be applied to a clean and dry surface.

All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted.

The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. Test samples shall be taken at the Contractor’s paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint. It is the Contractor’s responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process. Perform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity as lump sum. The Department will not measure preparation of the site for the Engineer’s access or removal and reapplication of coatings that do not satisfy the Engineer’s approval for payment and will consider them incidental to “Concrete Coating”.

V. PAYMENT.

The Department will make payment for the completed and accepted quantities of concrete coating under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24982EC	Concrete Coating	Lump Sum

The plans may show an estimate quantity in square feet. The Department will consider payment as full compensation for all work required as described in this note.

SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS

03-10011.00 Allen 002B00021N

I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted 60 calendar days once the bridge is closed to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the bridge to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications. Guardrail shall be installed to the satisfaction of the Engineer prior to reopening the bridge to traffic unless prior approval is obtained from the engineer for use of temporary railing.

The Engineer will begin charging calendar days for a structure on the day the Contractor closes the structure to traffic, regardless of holidays or seasonal weather limitations.

II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days or the specified completion date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Any approval of cold weather plans or allowance of construction operations to occur outside Section 606 and/or Section 601 does not alleviate the 60 day maximum bridge closure. In the event the closure lasts longer than 60 calendar days as specified, liquidated damages will apply to all excess days regardless of weather limitations.

MATERIAL SUMMARY

CONTRACT ID: 195066

121GR19D066-STP

BR00205851964

KY 585 ADDRESS DEFICIENCIES OF KY 585 BRIDGE OVER MIDDLE FORK DRAKES CREEK (002B00021N), FROM MP 8.326 TO MP 8.354 BRIDGE SUPERSTRUCTURE REHAB, A DISTANCE OF .03 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0120	03304	BRIDGE OVERLAY APPROACH PAVEMENT	133.00	SQYD
0125	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH
0130	02223	GRANULAR EMBANKMENT	28.00	CUYD
0135	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0140	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0145	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
0150	08003	FOUNDATION PREPARATION	1.00	LS
0155	21415ND	EROSION CONTROL	1.00	LS
0160	21741NC	MAINTAIN & CONTROL TRAFFIC	1.00	EACH
0165	02731	REMOVE STRUCTURE	1.00	LS
0170	03299	ARMORED EDGE FOR CONCRETE - (REVISED: 3-18-19)	42.33	LF
0175	08104	CONCRETE-CLASS AA - (REVISED: 3-18-19)	135.00	CUYD
0180	08151	STEEL REINFORCEMENT-EPOXY COATED - (REVISED: 3-18-19)	29,272.00	LB
0185	08633	PRECAST PC I BEAM TYPE 3	626.00	LF
0190	22146EN	CONCRETE PATCHING REPAIR	108.00	SQFT
0195	23744EC	EPOXY INJECTION CRACK REPAIR	60.00	LF
0200	24982EC	CONCRETE COATING - Approx. 5800 SF	1.00	LS
0205	02569	DEMOBILIZATION	1.00	LS
0210	01890	ISLAND HEADER CURB TYPE 1 - (ADDED: 3-18-19)	100.00	LF
0215	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A - (ADDED: 3-18-19)	4.00	EACH
0220	21532ED	RAIL SYSTEM TYPE III - (ADDED: 3-18-19)	318.00	LF

MATERIAL SUMMARY

CONTRACT ID: 195066

121GR19D066-STP

BR00234991963

KY 3499 ADDRESS DEFICIENCIES OF KY-3499 BRIDGE OVER BAYS FORK (002B00004N), FROM MP 1.412 TO MP 1.422 BRIDGE SUPERSTRUCTURE REHAB, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	03304	BRIDGE OVERLAY APPROACH PAVEMENT - (REVISED: 3-8-19)	105.00	SQYD
0010	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0015	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0020	08003	FOUNDATION PREPARATION	1.00	LS
0025	21415ND	EROSION CONTROL	1.00	LS
0030	21741NC	MAINTAIN & CONTROL TRAFFIC	1.00	EACH
0035	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0040	02223	GRANULAR EMBANKMENT	28.00	CUYD
0045	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0055	08104	CONCRETE-CLASS AA	40.50	CUYD
0060	08151	STEEL REINFORCEMENT-EPOXY COATED	6,183.00	LB
0065	08100	CONCRETE-CLASS A	3.70	CUYD
0070	08670	PRECAST PC BOX BEAM SB27	156.00	LF
0075	03299	ARMORED EDGE FOR CONCRETE	44.00	LF
0080	24982EC	CONCRETE COATING - Approx. 5800 SF	1.00	LS
0085	02731	REMOVE STRUCTURE	1.00	LS
0090	08801	GUARDRAIL-STEEL W BEAM-S FACE BR	106.00	LF
0095	02231	STRUCTURE GRANULAR BACKFILL	10.00	CUYD
0100	08019	CYCLOPEAN STONE RIP RAP	48.00	TON
0105	23744EC	EPOXY INJECTION CRACK REPAIR	30.00	LF
0110	22146EN	CONCRETE PATCHING REPAIR	20.00	SQFT
0115	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 195066

121GR19D066-STP

BR11012331966

ROGER Q MILL ROAD (1233) ADDRESS DEFICIENCIES OF ROGER Q MILL ROAD BRIDGE OVER RED RIVER W FORK BRANCH (110C00061N), FROM MP .028 TO MP .032 BRIDGE REPLACEMENT, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0360	03304	BRIDGE OVERLAY APPROACH PAVEMENT	167.00	SQYD
0365	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	4.00	EACH
0370	02223	GRANULAR EMBANKMENT	28.00	CUYD
0375	02351	GUARDRAIL-STEEL W BEAM-S FACE	125.00	LF
0380	02360	GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH
0385	02371	GUARDRAIL END TREATMENT TYPE 7	1.00	EACH
0390	02399	EXTRA LENGTH GUARDRAIL POST	6.00	EACH
0395	02545	CLEARING AND GRUBBING - Less than 1 acre	1.00	LS
0400	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0405	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0410	02726	STAKING	1.00	LS
0415	02731	REMOVE STRUCTURE	1.00	LS
0420	21415ND	EROSION CONTROL	1.00	LS
0425	03299	ARMORED EDGE FOR CONCRETE	46.00	LF
0430	08002	STRUCTURE EXCAV-SOLID ROCK	46.00	CUYD
0435	08003	FOUNDATION PREPARATION	1.00	LS
0440	08019	CYCLOPEAN STONE RIP RAP	75.00	TON
0445	08100	CONCRETE-CLASS A	91.00	CUYD
0450	08104	CONCRETE-CLASS AA	32.00	CUYD
0455	08151	STEEL REINFORCEMENT-EPOXY COATED	18,500.00	LB
0460	24896ED	RAIL SYSTEM TYPE T631	52.00	LF
0465	24982EC	CONCRETE COATING - Approx. 590 SF	1.00	LS
0470	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 195066

121GR19D066-STP

BR11013331965

RATTLESNAKE ROAD (1333) ADDRESS DEFICIENCIES OF RATTLESNAKE ROAD BRIDGE OVER BUCK FORK (110C00059N), FROM MP 1.471 TO MP 1.475 BRIDGE REPLACEMENT, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0225	03304	BRIDGE OVERLAY APPROACH PAVEMENT	135.00	SQYD
0230	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	14.00	EACH
0235	02223	GRANULAR EMBANKMENT	30.00	CUYD
0240	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0245	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0250	02371	GUARDRAIL END TREATMENT TYPE 7	3.00	EACH
0255	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0260	02545	CLEARING AND GRUBBING - Less than 1 acre	1.00	LS
0265	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0270	02651	DIVERSIONS (BY-PASS DETOURS)	1.00	LS
0275	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0280	02726	STAKING	1.00	LS
0285	02731	REMOVE STRUCTURE	1.00	LS
0290	21415ND	EROSION CONTROL	1.00	LS
0295	03299	ARMORED EDGE FOR CONCRETE	32.00	LF
0300	08003	FOUNDATION PREPARATION	1.00	LS
0305	08019	CYCLOPEAN STONE RIP RAP	65.00	TON
0310	08033	TEST PILES	36.00	LF
0315	08046	PILES-STEEL HP12X53	52.00	LF
0320	08094	PILE POINTS-12 IN	6.00	EACH
0325	08100	CONCRETE-CLASS A	15.50	CUYD
0330	08104	CONCRETE-CLASS AA	12.60	CUYD
0335	08151	STEEL REINFORCEMENT-EPOXY COATED	3,250.00	LB
0340	08661	PRECAST PC BOX BEAM CB12-48	134.00	LF
0345	08801	GUARDRAIL-STEEL W BEAM-S FACE BR	68.00	LF
0350	24982EC	CONCRETE COATING - Approximately 622 SF	1.00	LS
0355	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 195066

121GR19D066-STP

BR11426321967

KY 2632 ADDRESS DEFICIENCIES OF HAMMET HILL ROAD BRIDGE OVER SALT LICK CREEK (114B00071N), FROM MP 4.96 TO MP 4.966 BRIDGE REPLACEMENT, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0475	03304	BRIDGE OVERLAY APPROACH PAVEMENT	170.00	SQYD
0480	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	12.00	EACH
0485	02223	GRANULAR EMBANKMENT	28.00	CUYD
0490	02351	GUARDRAIL-STEEL W BEAM-S FACE	100.00	LF
0495	02381	REMOVE GUARDRAIL	262.00	LF
0500	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0505	02545	CLEARING AND GRUBBING - Less than 1 acre	1.00	LS
0510	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0515	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0520	02726	STAKING	1.00	LS
0525	02731	REMOVE STRUCTURE	1.00	LS
0530	21415ND	EROSION CONTROL	1.00	LS
0535	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0540	03299	ARMORED EDGE FOR CONCRETE	49.70	LF
0545	08002	STRUCTURE EXCAV-SOLID ROCK	166.70	CUYD
0550	08003	FOUNDATION PREPARATION	1.00	LS
0555	08019	CYCLOPEAN STONE RIP RAP	130.00	TON
0560	08100	CONCRETE-CLASS A	175.60	CUYD
0565	08104	CONCRETE-CLASS AA	12.10	CUYD
0570	08150	STEEL REINFORCEMENT	18,466.00	LB
0575	08151	STEEL REINFORCEMENT-EPOXY COATED	1,547.00	LB
0580	08661	PRECAST PC BOX BEAM CB12-48	183.00	LF
0585	08801	GUARDRAIL-STEEL W BEAM-S FACE BR	61.00	LF
0590	24982EC	CONCRETE COATING - Approximately 883 SF	1.00	LS
0595	02569	DEMOBILIZATION	1.00	LS

PROPOSAL BID ITEMS

195066

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Report Date 3/18/19

Section: 0001 - BRIDGE - 002B00021N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0005	01890		ISLAND HEADER CURB TYPE 1 (ADDED: 3-18-19)	100.00	LF		\$	
0010	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH		\$	
0020	02223		GRANULAR EMBANKMENT	28.00	CUYD		\$	
0030	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0035	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A (ADDED: 3-18-19)	4.00	EACH		\$	
0040	02399		EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0050	02671		PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH		\$	
0060	02731		REMOVE STRUCTURE	1.00	LS		\$	
0070	03299		ARMORED EDGE FOR CONCRETE (REVISED: 3-18-19)	42.33	LF		\$	
0080	03304		BRIDGE OVERLAY APPROACH PAVEMENT	133.00	SQYD		\$	
0090	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0100	08104		CONCRETE-CLASS AA (REVISED: 3-18-19)	135.00	CUYD		\$	
0120	08151		STEEL REINFORCEMENT-EPOXY COATED (REVISED: 3-18-19)	29,272.00	LB		\$	
0130	08633		PRECAST PC I BEAM TYPE 3	626.00	LF		\$	
0150	21415ND		EROSION CONTROL	1.00	LS		\$	
0155	21532ED		RAIL SYSTEM TYPE III (ADDED: 3-18-19)	318.00	LF		\$	
0160	21741NC		MAINTAIN & CONTROL TRAFFIC	1.00	EACH		\$	
0170	22146EN		CONCRETE PATCHING REPAIR	108.00	SQFT		\$	
0180	23744EC		EPOXY INJECTION CRACK REPAIR	60.00	LF		\$	
0190	24982EC		CONCRETE COATING Approx. 5800 SF	1.00	LS		\$	

Section: 0002 - BRIDGE - 002B00004N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0200	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH		\$	
0210	02223		GRANULAR EMBANKMENT	28.00	CUYD		\$	
0220	02231		STRUCTURE GRANULAR BACKFILL	10.00	CUYD		\$	
0230	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0240	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		\$	
0250	02399		EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0260	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0270	02731		REMOVE STRUCTURE	1.00	LS		\$	
0280	03299		ARMORED EDGE FOR CONCRETE	44.00	LF		\$	
0290	03304		BRIDGE OVERLAY APPROACH PAVEMENT (REVISED: 3-8-19)	105.00	SQYD		\$	
0300	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0310	08019		CYCLOPEAN STONE RIP RAP	48.00	TON		\$	
0320	08100		CONCRETE-CLASS A	3.70	CUYD		\$	
0330	08104		CONCRETE-CLASS AA	40.50	CUYD		\$	

PROPOSAL BID ITEMS

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Report Date 3/18/19

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0340	08151		STEEL REINFORCEMENT-EPOXY COATED	6,183.00	LB		\$	
0350	08670		PRECAST PC BOX BEAM SB27	156.00	LF		\$	
0360	08801		GUARDRAIL-STEEL W BEAM-S FACE BR	106.00	LF		\$	
0370	21415ND		EROSION CONTROL	1.00	LS		\$	
0380	21741NC		MAINTAIN & CONTROL TRAFFIC	1.00	EACH		\$	
0390	22146EN		CONCRETE PATCHING REPAIR	20.00	SQFT		\$	
0400	23744EC		EPOXY INJECTION CRACK REPAIR	30.00	LF		\$	
0410	24982EC		CONCRETE COATING Approx. 5800 SF	1.00	LS		\$	

Section: 0003 - BRIDGE - 110C00061N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0420	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	4.00	EACH		\$	
0430	02223		GRANULAR EMBANKMENT	28.00	CUYD		\$	
0440	02351		GUARDRAIL-STEEL W BEAM-S FACE	125.00	LF		\$	
0450	02360		GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH		\$	
0460	02371		GUARDRAIL END TREATMENT TYPE 7	1.00	EACH		\$	
0470	02399		EXTRA LENGTH GUARDRAIL POST	6.00	EACH		\$	
0480	02545		CLEARING AND GRUBBING Less than 1 acre	1.00	LS		\$	
0490	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0500	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0510	02726		STAKING	1.00	LS		\$	
0520	02731		REMOVE STRUCTURE	1.00	LS		\$	
0530	03299		ARMORED EDGE FOR CONCRETE	46.00	LF		\$	
0540	03304		BRIDGE OVERLAY APPROACH PAVEMENT	167.00	SQYD		\$	
0550	08002		STRUCTURE EXCAV-SOLID ROCK	46.00	CUYD		\$	
0560	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0570	08019		CYCLOPEAN STONE RIP RAP	75.00	TON		\$	
0580	08100		CONCRETE-CLASS A	91.00	CUYD		\$	
0590	08104		CONCRETE-CLASS AA	32.00	CUYD		\$	
0600	08151		STEEL REINFORCEMENT-EPOXY COATED	18,500.00	LB		\$	
0610	21415ND		EROSION CONTROL	1.00	LS		\$	
0620	24896ED		RAIL SYSTEM TYPE T631	52.00	LF		\$	
0630	24982EC		CONCRETE COATING Approx. 590 SF	1.00	LS		\$	

Section: 0004 - BRIDGE - 110C00059N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0640	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	14.00	EACH		\$	
0650	02223		GRANULAR EMBANKMENT	30.00	CUYD		\$	
0660	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0670	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		\$	
0680	02371		GUARDRAIL END TREATMENT TYPE 7	3.00	EACH		\$	

PROPOSAL BID ITEMS

195066

Page 3 of 4

Report Date 3/18/19

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0690	02399		EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0700	02545		CLEARING AND GRUBBING Less than 1 acre	1.00	LS		\$	
0710	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0720	02651		DIVERSIONS (BY-PASS DETOURS)	1.00	LS		\$	
0730	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0740	02726		STAKING	1.00	LS		\$	
0750	02731		REMOVE STRUCTURE	1.00	LS		\$	
0760	03299		ARMORED EDGE FOR CONCRETE	32.00	LF		\$	
0770	03304		BRIDGE OVERLAY APPROACH PAVEMENT	135.00	SQYD		\$	
0780	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0790	08019		CYCLOPEAN STONE RIP RAP	65.00	TON		\$	
0800	08033		TEST PILES	36.00	LF		\$	
0810	08046		PILES-STEEL HP12X53	52.00	LF		\$	
0820	08094		PILE POINTS-12 IN	6.00	EACH		\$	
0830	08100		CONCRETE-CLASS A	15.50	CUYD		\$	
0840	08104		CONCRETE-CLASS AA	12.60	CUYD		\$	
0850	08151		STEEL REINFORCEMENT-EPOXY COATED	3,250.00	LB		\$	
0860	08661		PRECAST PC BOX BEAM CB12-48	134.00	LF		\$	
0870	08801		GUARDRAIL-STEEL W BEAM-S FACE BR	68.00	LF		\$	
0880	21415ND		EROSION CONTROL	1.00	LS		\$	
0890	24982EC		CONCRETE COATING Approximately 622 SF	1.00	LS		\$	

Section: 0005 - BRIDGE - 114B00071N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0900	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	12.00	EACH		\$	
0910	02223		GRANULAR EMBANKMENT	28.00	CUYD		\$	
0920	02351		GUARDRAIL-STEEL W BEAM-S FACE	100.00	LF		\$	
0930	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0940	02381		REMOVE GUARDRAIL	262.00	LF		\$	
0950	02399		EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0960	02545		CLEARING AND GRUBBING Less than 1 acre	1.00	LS		\$	
0970	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0980	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0990	02726		STAKING	1.00	LS		\$	
1000	02731		REMOVE STRUCTURE	1.00	LS		\$	
1010	03299		ARMORED EDGE FOR CONCRETE	49.70	LF		\$	
1020	03304		BRIDGE OVERLAY APPROACH PAVEMENT	170.00	SQYD		\$	
1030	08002		STRUCTURE EXCAV-SOLID ROCK	166.70	CUYD		\$	
1040	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1050	08019		CYCLOPEAN STONE RIP RAP	130.00	TON		\$	
1060	08100		CONCRETE-CLASS A	175.60	CUYD		\$	
1070	08104		CONCRETE-CLASS AA	12.10	CUYD		\$	
1080	08150		STEEL REINFORCEMENT	18,466.00	LB		\$	
1090	08151		STEEL REINFORCEMENT-EPOXY COATED	1,547.00	LB		\$	

PROPOSAL BID ITEMS

195066

Page 4 of 4

Report Date 3/18/19

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1100	08661		PRECAST PC BOX BEAM CB12-48	183.00	LF		\$	
1110	08801		GUARDRAIL-STEEL W BEAM-S FACE BR	61.00	LF		\$	
1120	21415ND		EROSION CONTROL	1.00	LS		\$	
1130	24982EC		CONCRETE COATING Approximately 883 SF	1.00	LS		\$	

Section: 0006 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1140	02569		DEMOBILIZATION	1.00	LS		\$	

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS BRIDGE REHABILITATION PLANS

INDEX OF SHEETS

Sheet No.	Description
S1	TITLE AND LOCATION MAP
S2	GENERAL NOTES
S3	TYPICAL SECTION
S4	PHASING
S5	PLAN AND ELEVATION
S6	PCIB TYPE 3
S7	ABUTMENT DETAILS
S8	PIER DETAILS
S9	INTERMEDIATE DIAPHRAGM DETAILS

SPECIAL NOTES

For Concrete Patching Repair
For Concrete Coating
For Traffic Control on Bridge Repair Contracts
For Bridge Overlay Approach Pavement
For Epoxy Injection Crack Repair
For Contract Completion Date and Liquidated Damages
In Bridge Repair Contracts
For Erosion Prevention and Sediment Control
For Over the Side Drainage

ACTIVE SEPIAS

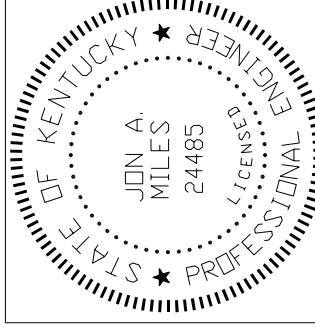
024	Typical Guardrail Installations
027	Steel Beam Guardrail "W" Beam
028	Steel Guardrail Posts
032	Delimiters for Guardrail
033	Guardrail System Transition
035	Railing System Type II Guardrail Treatment

STANDARD DRAWINGS

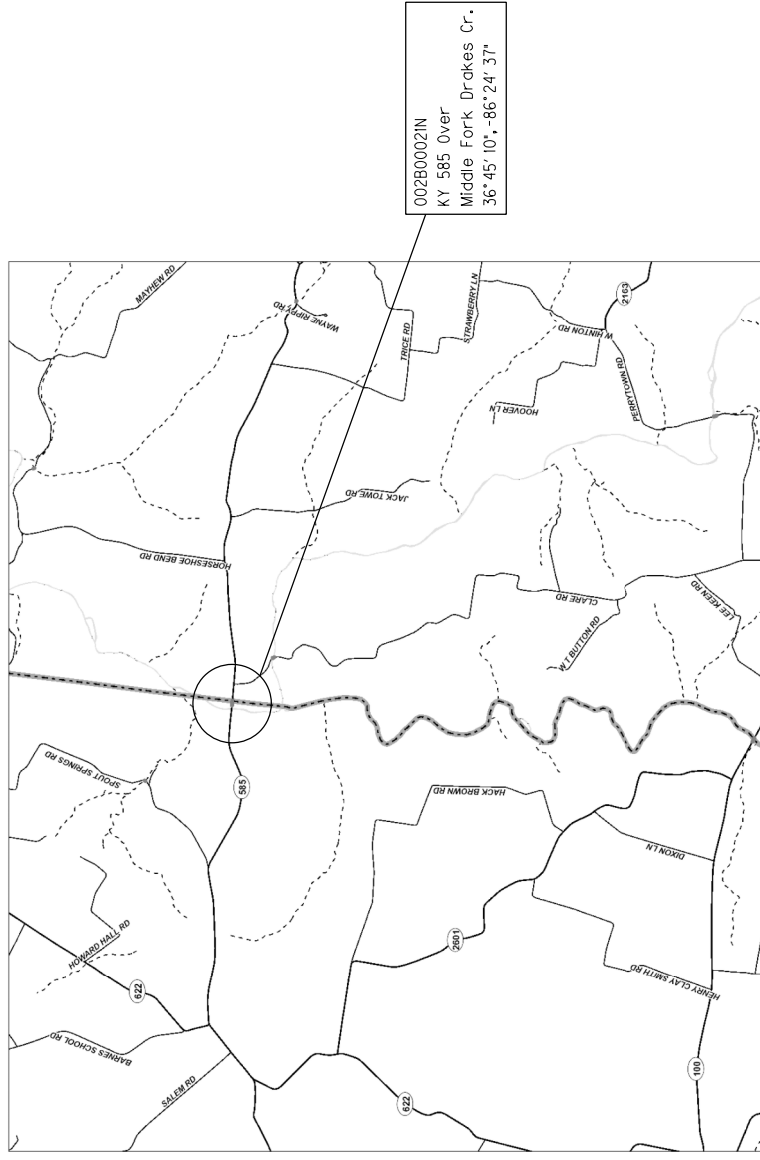
BBP-001-12	Elastomeric Bearing Pads for Prestressed Beams
BBP-002-04	Bearing Details
BGX-006-10	Stencils for Structures
BJE-001-13	Neoprene Expansion Dams and Armored Edges

SPECIFICATIONS

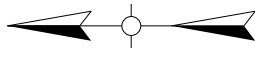
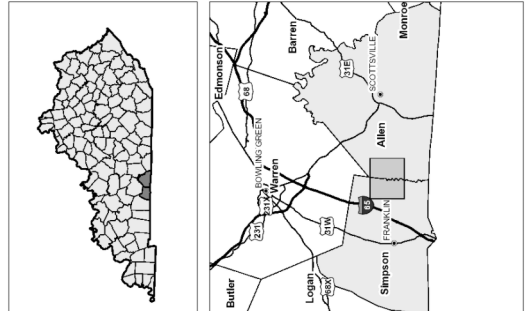
2012 Standard Specifications for Road and Bridge Construction.
AASHTO LRFD Bridge Construction Specifications with Current Interims.



BRIDGE NUMBER	002B00021N
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LOCATION MAP



002B00021N
KY 585 Over
Middle Fork Drakes Cr.
36° 45' 10" - 86° 24' 37"

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS BRIDGE REHABILITATION PLANS

INDEX OF SHEETS

Sheet No.	Description
S1	TITLE AND LOCATION MAP
S2	GENERAL NOTES
S3	TYPICAL SECTION
S4	(NOT USED)
S5	PLAN AND ELEVATION
S6	PCIB TYPE 3
S7	ABUTMENT DETAILS
S8	PIER DETAILS
S9	INTERMEDIATE DIAPHRAGM DETAILS

SPECIAL NOTES

- For Concrete Patching Repair For Concrete Coating
- For Traffic Control on Bridge Repair Contracts For Bridge Overlay Approach Pavement
- For Epoxy Injection Crack Repair
- For Contract Completion Date and Liquidated Damages in Bridge Repair Contracts
- For Erosion Prevention and Sediment Control

ACTIVE SEPIAS

- 013 Guardrail Connector to Bridge End Type A and A-1 Components
- 015 Guardrail Connector to Bridge End Type A
- 024 Typical Guardrail Installations
- 027 Steel Beam Guardrail "W" Beam
- 028 Steel Guardrail Posts
- 032 Belmeaters for Guardrail
- 033 Guardrail System Transition

STANDARD DRAWINGS

- BBP-001-12 Elastomeric Bearing Pads for Prestressed Beams
- BBP-002-04 Bearing Details
- BGX-006-10 Stencils for Structures
- BGX-015 Bridge Drains
- BHS-008-02 Rail System Type 3
- BJE-001-13 Neoprene Expansion Dams and Armored Edges

SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction.
AASHTO LRFD Bridge Construction Specifications with Current Interims.

STATE OF KENTUCKY
★ JUN A. MILES 24485 ★
PROFESSIONAL ENGINEER
LICENSED

BRIDGE NUMBER
002B00021N

Revised Notes for M0T 3/6/19

DATE: 1/18/19 REVISION CHECKED BY DATE
DESIGNED BY: J. MILES S. WEBER
DETAILED BY: C. QUINN J. MILES

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

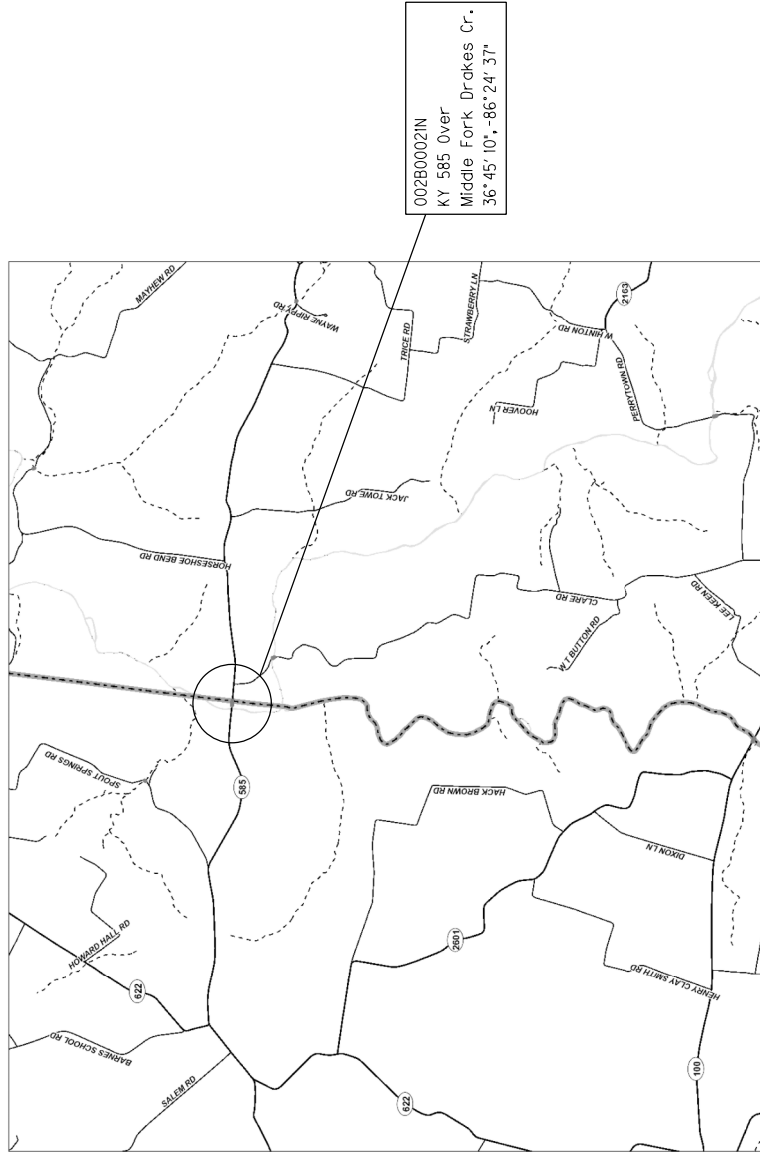
COUNTY
ALLEN

ROUTE **KY 585** CROSSING
MIDDLE FORK DRAKES CREEK

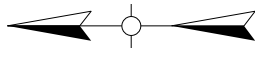
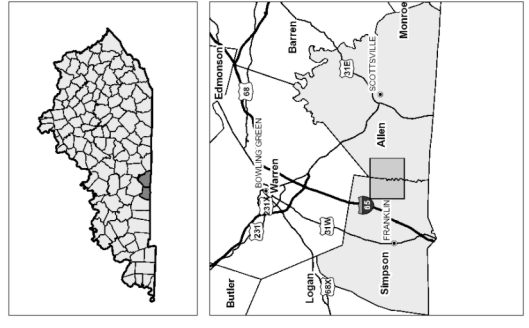
TITLE AND LOCATION MAP

PREPARED BY

SHEET NO. **S1**
DRAWING NO. **27882**



LOCATION MAP



A. GENERAL NOTES

SPECIFICATIONS: References to the Specifications are to the 2012 Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction including any current supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Construction Specifications, with Interims.

DESIGN LOAD: This superstructure is designed for KY-HL93 Live Load. The KY-HL93 live load is arrived at by increasing the standard HL93 load as specified in the AASHTO Specifications by 25%. All members are designed by the LRFD method as specified in the current AASHTO Specifications.

FUTURE WEARING SURFACE: The design includes an allowance for 15 psf for a future wearing surface.

ON-SITE INSPECTION: Each Contractor submitting a bid for this work shall make a thorough inspection of the project site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that work can expeditiously performed after a Contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. All claims resulting from the site conditions will not be honored by the Department of Highways.

VERIFYING FIELD CONDITIONS: Dimensions shown on these Plans are taken from Existing Plans. The Plan dimensions and details relative to the existing structure are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work. In addition, the overrun and underrun formulas may be applied to appropriate repairs provided that the requirement of Article 104.02.02 of the Standard Specifications is satisfied.

PLANS OF EXISTING STRUCTURE: As an aid to the Contractor, the plans of the existing structure are available from the Division of Maintenance, upon request. The completeness of these drawings is not guaranteed and no responsibility is assumed for their accuracy. Plans of the existing structure are DWG # 9740.

CONSTRUCTION LOAD: The Contractor shall abide by the posted bridge limits. Storage of material on the bridge is prohibited.

CONSTRUCTION IDENTIFICATION: The names of the Prime Contractor and the Sub-Contractor shall be imprinted in the concrete with 1" letters at a location designated by the Engineer. The Contractor shall furnish all plans, equipment, and labor necessary to do the work for which no direct payment will be made.

UTILITIES: Before beginning work, locate all existing utilities. Consider location of utilities shown on the drawings to be approximate only and for informational purposes only. The Department does not warrant the locations and assumes no responsibility for the accuracy or completeness. The Contractor must make his own determination. Except as shown on the Plans, work around and do not disturb existing utilities.

DAMAGE OUTSIDE CONSTRUCTION LIMITS: Any area that is disturbed outside of the limits of the construction during the life of the project shall be repaired by the Contractor at his expense, should any damage result from the Contractor's actions.

DAMAGE TO THE STRUCTURE: The Contractor shall bear full responsibility and expense for repair of any and all damage to the structure, should such damage result from the Contractor's actions. The Contractor is completely responsible for the stability of the structure from the time of mobilization until after the bridge has been reopened to normal traffic following completion of all work required in the Contract. After completion of all operations, the structure and site shall be left in a condition that is in accordance with Section 105.12 of the Specifications.

REMOVE STRUCTURE: This pay item for 'Remove Structure' shall consist of the removal of the superstructure (reinforced concrete deck, railing, beams and reinforced concrete diaphragms), and partial removal of the abutments as shown in the Plans. Portions of the existing abutments shall remain in place to be reused in the rehabilitated structure. Care shall be exercised not to damage areas of remaining concrete or reinforcing steel during concrete removal operations.

Remove concrete by means of approved pneumatic hammers employing pointed and blunt chisel tools. Hydraulic ho-ram type hammers will not be permitted. The weight of the hammer shall not be more than 35 pounds for removal within 18 inches of portions to be preserved. Outside the 18 inch limit, the Contractor may use hammers not exceeding 90 pounds upon the approval of the Engineer. Do not place pneumatic hammers in direct contact with reinforcing steel that is to be retained. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 1 inch to prevent feather edging unless otherwise approved by the Engineer. After all concrete has been removed, the repair surface shall be prepared by abrasive blast cleaning. Abrasive blast cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete. The Contractor shall dispose all removed material off state right of way in an approved site.

SUPERSTRUCTURE SLAB: The superstructure slab shall be poured continuously from out to out before the concrete is allowed to set.

STAKING: In addition to the requirements spelled out in Section 201 of the Standard Specifications, the Contractor is required to set the profile grade, determine the bridge seat elevations, and set top of deck elevations for determining X-dimensions. The proposed profile grade shall nearly match existing. All payment for this work is incidental to the contract.

DISPOSAL OF MATERIALS: All materials and debris removed from or beneath the bridge shall become the property of the Contractor and shall be removed from the right-of-way.

COMPLETION OF THE STRUCTURE: The Contractor is required to complete the structure in accordance with the Plans and Specifications. Material, labor, or construction operations, not otherwise specified, are to be included in the bid item most appropriate for the work involved and otherwise considered incidental to the Contract. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of the existing structure, phase construction, incidental materials, labor, or anything else required to complete the Contract.

B. MATERIAL NOTES

MATERIALS FOR DESIGN SPECIFICATIONS:

For Class A Concrete: F'C = 3,500 psi

For Class AA Concrete: F'C = 4,000 psi

For Steel Reinforcement: F_y = 60,000 psi

The Specifications, Current Edition, as designated below shall govern the following materials furnished:

Material Specification

Premolded Cork Filler AASHTO M153

Grout

Deformed and Plain Billet-Steel for Concrete Reinforcement, Grade 60 AASHTO M-31

CONCRETE: Class "AA" Concrete is to be used throughout the superstructure. Class "A" Concrete is to be used on the substructure.

REINFORCEMENT: Spacing of bars is from center to center of bars. Clear distance to face of concrete is 2" unless otherwise noted.

EXISTING STEEL REINFORCEMENT: The cost of cutting, bending, and cleaning existing steel reinforcement shall be incidental to the repair item being completed.

BEVELED EDGES: Bevel all exposed edges 3/4", unless otherwise noted.

C. JOINT WATERPROOFING AT ABUTMENTS

The joint between the abutment seats and superstructure and between the abutment wings and superstructure shall be waterproofed as detailed on these Plans.

Mastic Tape used to seal joints shall meet the requirements of ASTM C-877 Type I, II, or III. The joint is to be covered with 12-inch wide mastic tape. Prior to application, the joint surface shall be clean and free of dirt, debris, or deleterious material. Primer, if required by the tape manufacturer, shall be applied for a minimum width of nine inches on each side of the joint.

Mastic Tape shall be either:

EZ-WRAP RUBBER by PRESS-SEAL GASKET CORPORATION,

SEAL WRAP by MAR MAC MANUFACTURING CO. INC.,

CADILLOC by UP RUBBER CO. INC. or an approved equivalent.

Mastic Tape shall cover the joint continuously unless otherwise shown in the Plans. Mastic Tape shall be spliced by lapping a minimum of six inches and in accordance with the manufacturer's recommendations with the overlap running downhill.

The cost of this work, including all materials, labor, equipment, tools and incidentals necessary for furnishing and installing Mastic Tape shall be considered incidental to the unit price bid for Class "AA" Concrete and no separate measurement or payment shall be made.

CONCRETE COATING: Concrete Coating is estimated at 5800 SF. It is the responsibility of the contractor to verify this estimate and bid appropriately. No payment adjustments will be made if the actual quantity is different than this estimate.

SLOPE PROTECTION: Slope protection shall be dry cyclopean stone slope protection in accordance with the Plans and Specifications. Geotextile Fabric Type 1 shall be placed between the embankment and the slope protection in accordance with the Standard Specification 214 and 843. Payment for Geotextile Fabric Type 1 shall be incidental to the unit bid price for Dry Cyclopean Stone Rip Rap.



SHOP DRAWINGS: Fabricators shall submit all required shop plans, by e-mail, to the design consultant for review. These submissions shall depict the shop plans, in .pdf format, as either 11" x 17" or 22" x 36" sheets. Designers will make review comments on these electronic submissions as needed and return them to the fabricator. Upon reconciliation of the designer's comments, files shall be returned to the designer. Each sheet will be electronically stamped by the designer and plans will be forwarded to the Construction Management Team for distribution. Only plans submitted directly to the Construction Management Team will be distributed, and only plans electronically stamped 'Distributed by Construction Management Team' are to be used for fabrication. While this process does not require the submission of paper copies, Construction Management Team reserves the right to require such copies on a case by case basis.

When any changes in the design plans are proposed by the fabricator or supplier, the shop drawings reflecting these changes shall be submitted to the consultant through the contractor.

STAY-IN-PLACE METAL FORMS: The use of stay-in-place metal formwork for the bridge deck is permitted provided the corrugations are filled with styrofoam.

ELASTOMERIC BEARING PADS: Elastomeric Bearing Pads shall conform to the AASHTO Standard Specifications for Highway Bridges, Division II, Section 18.

Bearings shall be Low Temperature Grade 3 with a shear modulus between 95 psi and 130 psi and shall be subjected to the load testing requirements corresponding to Design Method B. The cost of bearing pads is to be included in the unit price per linear foot for Precast Beams.

ROUTE	CRSSING	
KY 585	MIDDLE FORK DRAKES CREEK	
GENERAL NOTES		
PREPARED BY		
		
SHEET NO.		S2
DRAWING NO.		27882

BRIDGE NUMBER	002B00021N
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A. GENERAL NOTES

SPECIFICATIONS: References to the Specifications are to the 2012 Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction including any current supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Construction Specifications, with Interims.

DESIGN LOAD: This superstructure is designed for KY-HL93 Live Load. The KY-HL93 live load is arrived at by increasing the standard HL93 load as specified in the AASHTO Specifications by 25%. All members are designed by the LRFD method as specified in the current AASHTO Specifications.

FUTURE WEARING SURFACE: The design includes an allowance for 15 psf for a future wearing surface.

ON-SITE INSPECTION: Each Contractor submitting a bid for this work shall make a thorough inspection of the project site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that work can expeditiously performed after a Contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. All claims resulting from the site conditions will not be honored by the Department of Highways.

VERIFYING FIELD CONDITIONS: Dimensions shown on these Plans are taken from Existing Plans. The Plan dimensions and details relative to the existing structure are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work. In addition, the overrun and underrun formulas may be applied to appropriate repairs provided that the requirement of Article 104.02.02 of the Standard Specifications is satisfied.

PLANS OF EXISTING STRUCTURE: As an aid to the Contractor, the plans of the existing structure are available from the Division of Maintenance, upon request. The completeness of these drawings is not guaranteed and no responsibility is assumed for their accuracy. Plans of the existing structure are DWG # 9740.

CONSTRUCTION LOAD: The Contractor shall abide by the posted bridge limits. Storage of material on the bridge is prohibited.

CONSTRUCTION IDENTIFICATION: The names of the Prime Contractor and the Sub-Contractor shall be imprinted in the concrete with 1" letters at a location designated by the Engineer. The Contractor shall furnish all plans, equipment, and labor necessary to do the work for which no direct payment will be made.

UTILITIES: Before beginning work, locate all existing utilities. Consider location of utilities shown on the drawings to be approximate only and for informational purposes only. The Department does not warrant the locations and assumes no responsibility for the accuracy or completeness. The Contractor must make his own determination. Except as shown on the Plans, work around and do not disturb existing utilities.

DAMAGE OUTSIDE CONSTRUCTION LIMITS: Any area that is disturbed outside of the limits of the construction during the life of the project shall be repaired by the Contractor at his expense, should any damage result from the Contractor's actions.

DAMAGE TO THE STRUCTURE: The Contractor shall bear full responsibility and expense for repair of any and all damage to the structure, should such damage result from the Contractor's actions. The Contractor is completely responsible for the stability of the structure from the time of mobilization until after the bridge has been reopened to normal traffic following completion of all work required in the Contract. After completion of all operations, the structure and site shall be left in a condition that is in accordance with Section 105.12 of the Specifications.

REMOVE STRUCTURE: This pay item for 'Remove Structure' shall consist of the removal of the superstructure (reinforced concrete deck, railing, beams and reinforced concrete diaphragms), and partial removal of the abutments as shown in the Plans. Portions of the existing abutments shall remain in place to be reused in the rehabilitated structure. Care shall be exercised not to damage areas of remaining concrete or reinforcing steel during concrete removal operations.

Remove concrete by means of approved pneumatic hammers employing pointed and blunt chisel tools. Hydraulic ho-ram type hammers will not be permitted. The weight of the hammer shall not be more than 35 pounds for removal within 18 inches of portions to be preserved. Outside the 18 inch limit, the Contractor may use hammers not exceeding 90 pounds upon the approval of the Engineer. Do not place pneumatic hammers in direct contact with reinforcing steel that is to be retained. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 1 inch to prevent feather edging unless otherwise approved by the Engineer. After all concrete has been removed, the repair surface shall be prepared by abrasive blast cleaning. Abrasive blast cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete. The Contractor shall dispose all removed material off state right of way in an approved site.

SUPERSTRUCTURE SLAB: The superstructure slab shall be poured continuously from out to out before the concrete is allowed to set.

STAKING: In addition to the requirements spelled out in Section 201 of the Standard Specifications, the Contractor is required to set the profile grade, determine the bridge seat elevations, and set top of deck elevations for determining X-dimensions. The proposed profile grade shall nearly match existing. All payment for this work is incidental to the contract.

DISPOSAL OF MATERIALS: All materials and debris removed from or beneath the bridge shall become the property of the Contractor and shall be removed from the right-of-way.

COMPLETION OF THE STRUCTURE: The Contractor is required to complete the structure in accordance with the Plans and Specifications. Material, labor, or construction operations, not otherwise specified, are to be included in the bid item most appropriate for the work involved and otherwise considered incidental to the Contract. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of the existing structure, phase construction, incidental materials, labor, or anything else required to complete the Contract.

B. MATERIAL NOTES

MATERIALS FOR DESIGN SPECIFICATIONS:

For Class A Concrete: FC = 3,500 psi
 For Class AA Concrete: FC = 4,000 psi
 For Steel Reinforcement: FY = 60,000 psi

The Specifications, Current Edition, as designated below shall govern the following materials furnished:

Material Specification

Premolded Cork Filler AASHTO M153

Grout

Deformed and Plain Billet-Steel for Concrete Reinforcement, Grade 60 AASHTO M-31

CONCRETE: Class "AA" Concrete is to be used throughout the superstructure. Class "A" Concrete is to be used on the substructure.

REINFORCEMENT: Spacing of bars is to be as shown on the Plans. All bars shall be placed at least 2" distance to face of concrete is 2" unless otherwise noted. All reinforcing bars are to be epoxy coated.

EXISTING STEEL REINFORCEMENT: The cost of cutting, bending, and cleaning existing steel reinforcement shall be incidental to the repair item being completed.

BEVELED EDGES: Bevel all exposed edges $\frac{3}{4}$ ", unless otherwise noted.

C. JOINT WATERPROOFING AT ABUTMENTS

The joint between the abutment seats and superstructure and between the abutment wings and superstructure shall be waterproofed as detailed on these Plans.

Mastic Tape used to seal joints shall meet the requirements of ASTM C-877 Type I, II, or III. The joint is to be covered with 12-inch wide mastic tape. Prior to application, the joint surface shall be clean and free of dirt, debris, or deleterious material. Primer, if required by the tape manufacturer, shall be applied for a minimum width of nine inches on each side of the joint.

Mastic Tape shall be either:

EZ-WRAP RUBBER by PRESS-SEAL GASKET CORPORATION,
 SEAL WRAP by MAR MAC MANUFACTURING CO. INC.,
 CADILLOC by UP RUBBER CO. INC. or an approved equivalent.

Mastic Tape shall cover the joint continuously unless otherwise shown in the Plans. Mastic Tape shall be spliced by lapping a minimum of six inches and in accordance with the manufacturer's recommendations with the overlap running downhill.

The cost of this work, including all materials, labor, equipment, tools and incidentals necessary for furnishing and installing Mastic Tape shall be considered incidental to the unit price bid for Class "AA" Concrete and no separate measurement or payment shall be made.

CONCRETE COATING: Concrete Coating is estimated at 7200 SF. It is the responsibility of the contractor to verify this estimate and bid appropriately. No payment adjustments will be made if the actual quantity is different than this estimate.


SLOPE PROTECTION: Slope protection shall be dry cyclopean stone slope protection in accordance with the Plans and Specifications. Geotextile Fabric Type 1 shall be placed between the embankment and the slope protection in accordance with the Standard Specification 214 and 843. Payment for Geotextile Fabric Type 1 shall be incidental to the unit bid price for Dry Cyclopean Stone Rip Rap.

SHOP DRAWINGS: Fabricators shall submit all required shop plans, by e-mail, to the design consultant for review. These submissions shall depict the shop plans, in .pdf format, as either 11" x 17" or 22" x 36" sheets. Designers will make review comments on these electronic submissions as needed and return them to the fabricator. Upon reconciliation of the designer's comments, files shall be returned to the designer. Each sheet will be electronically stamped by the designer and plans will be forwarded to the Construction Management Team for distribution. Only plans submitted directly to the Construction Management Team will be distributed, and only plans electronically stamped 'Distributed by Construction Management Team' are to be used for fabrication. While this process does not require the submission of paper copies, Construction Management Team reserves the right to require such copies on a case by case basis. When any changes in the design plans are proposed by the fabricator or supplier, the shop drawings reflecting these changes shall be submitted to the consultant through the contractor.

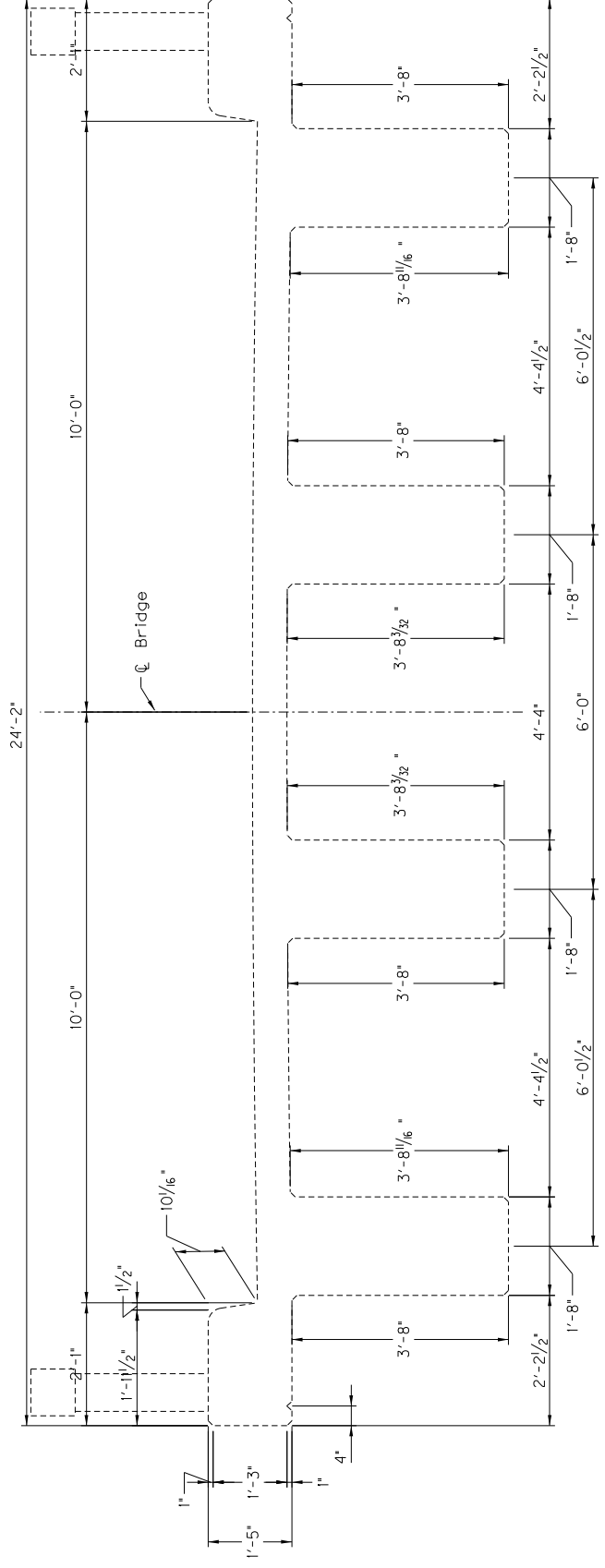
STAY-IN-PLACE METAL FORMS: The use of stay-in-place metal formwork for the bridge deck is permitted provided the corrugations are filled with styrofoam.

ELASTOMERIC BEARING PADS: Elastomeric Bearing Pads shall conform to the AASHTO Standard Specifications for Highway Bridges, Division II, Section 18.

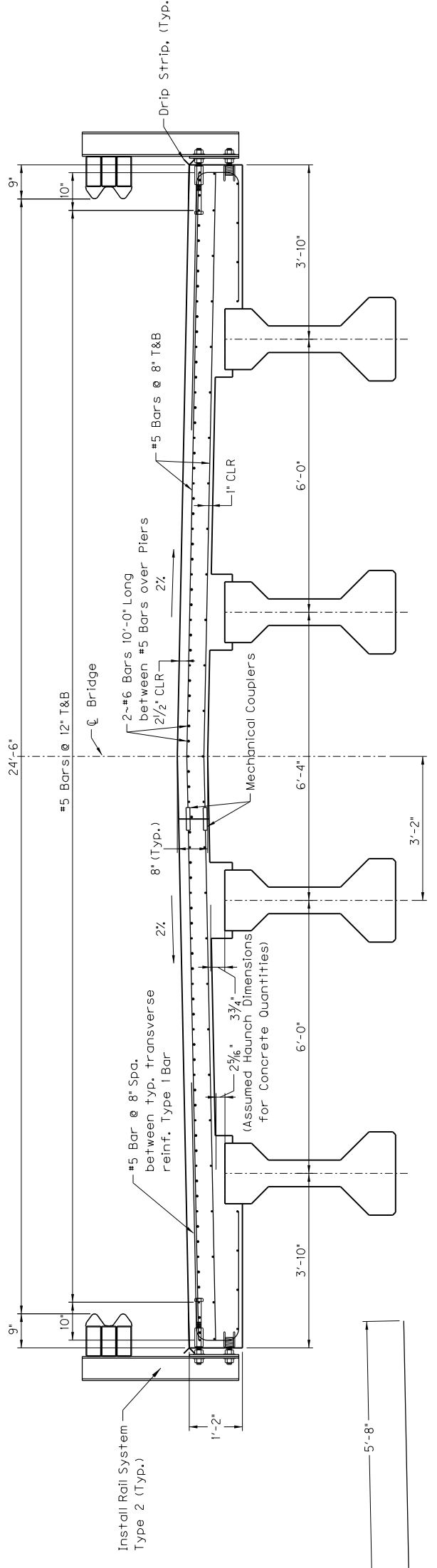
Bearings shall be Low Temperature Grade 3 with a shear modulus between 95 psi and 130 psi and shall be subjected to the load testing requirements corresponding to Design Method B. The cost of bearing pads is to be included in the unit price per linear foot for Precast Beams.

Clarify Epoxy Coated Reinforcing		3/6/19
REVISION	CHECKED BY	DATE
DATE: 1/18/19	S. WEBER	
DESIGNED BY: J. MILES	J. MILES	
DETAILED BY: C. QUINN	J. MILES	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY ALLEN		
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK	
GENERAL NOTES		
PREPARED BY 		
SHEET NO. S2		DRAWING NO. 27882

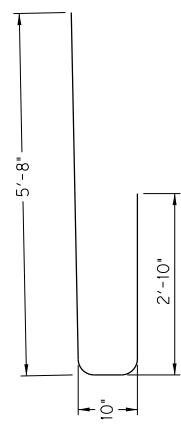
BRIDGE NUMBER
002B00021N



EX. TYPICAL SECTION



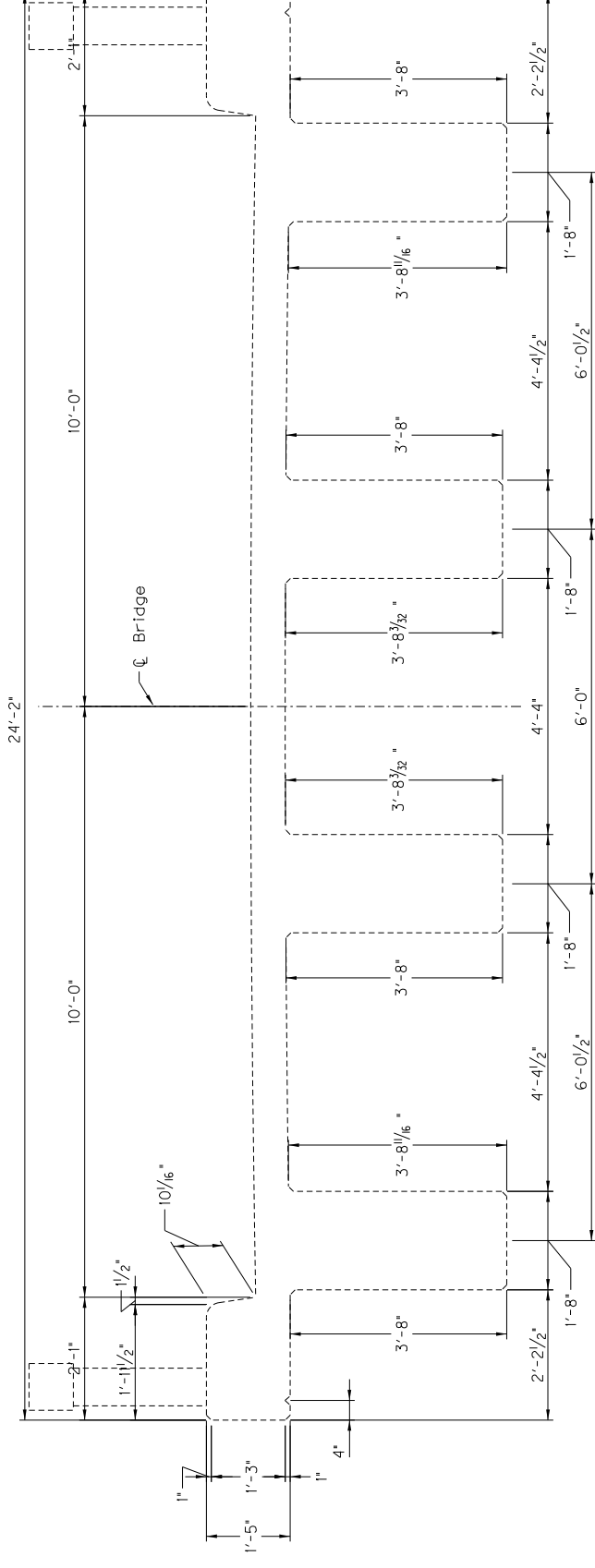
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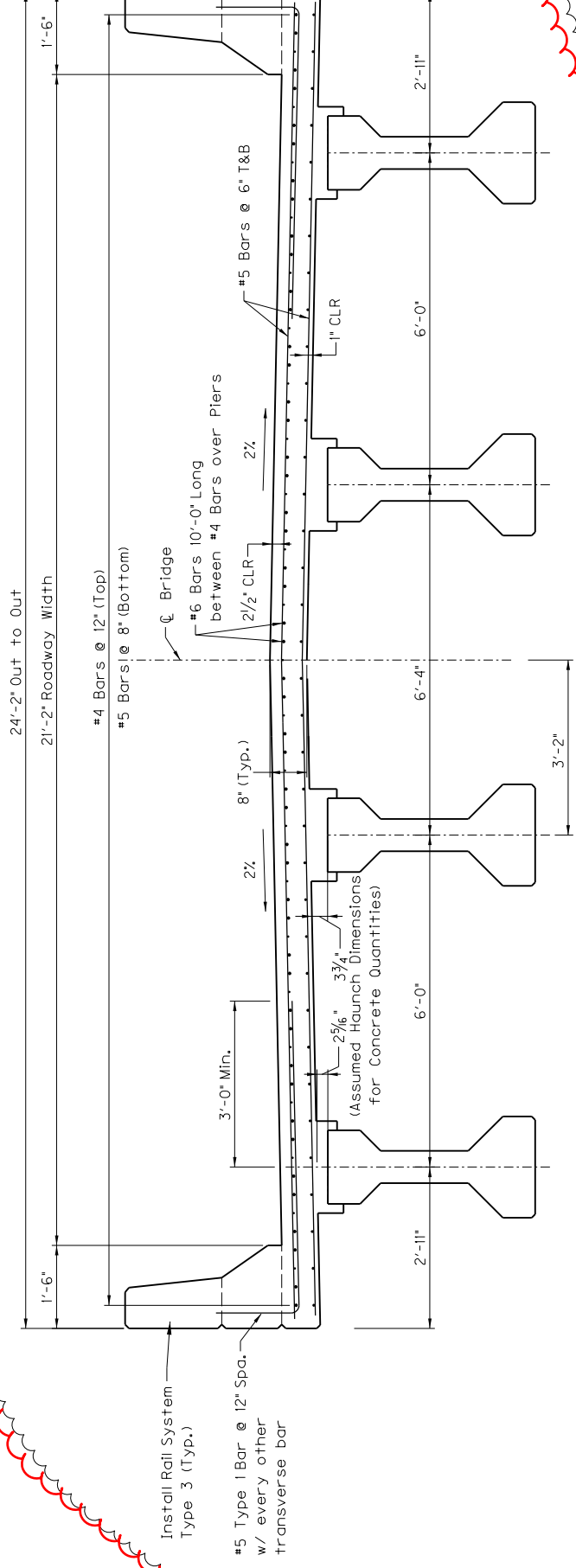
TYPE 1 BAR

REVISION	DATE
DESIGNED BY: J. MILES	CHECKED BY: S. WEBER
DATE: 1/18/19	
DETAILED BY: C. QUINN	J. MILES
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY ALLEN	
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK
TYPICAL SECTION	
PREPARED BY	
SHEET NO.	DRAWING NO.
33	27882

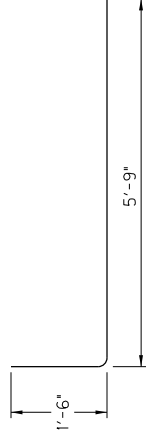
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EX. TYPICAL SECTION



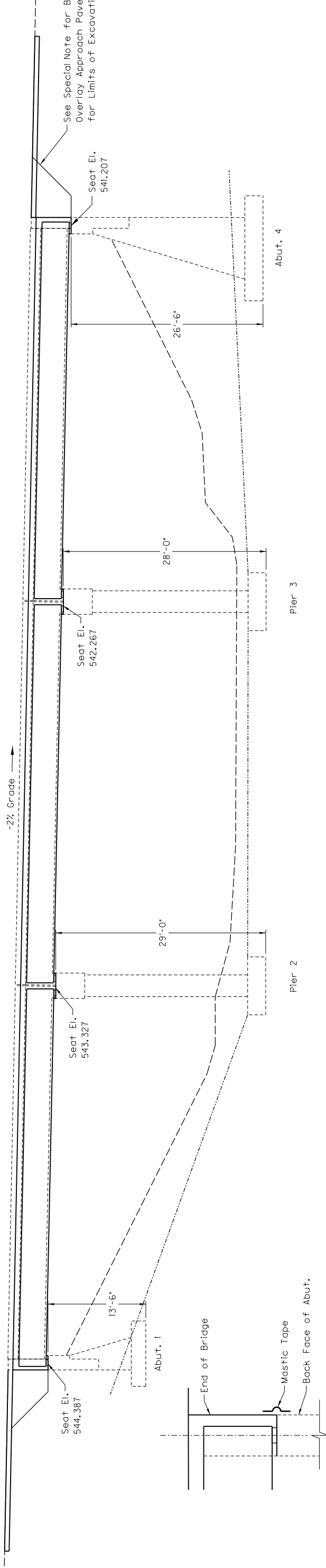
PR. TYPICAL SECTION



TYPE 1 BAR

Revised Details for MOT	3/6/19	DATE
REVISION		CHECKED BY
DATE: 1/18/19	S. WEBER	DESIGNED BY: J. MILES
DETAILED BY: C. QUINN	J. MILES	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS <small>COUNTY</small> ALLEN		
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK	
TYPICAL SECTION		
PREPARED BY		
SHEET NO.	27882	DRAWING NO.

BRIDGE NUMBER	002B00021N
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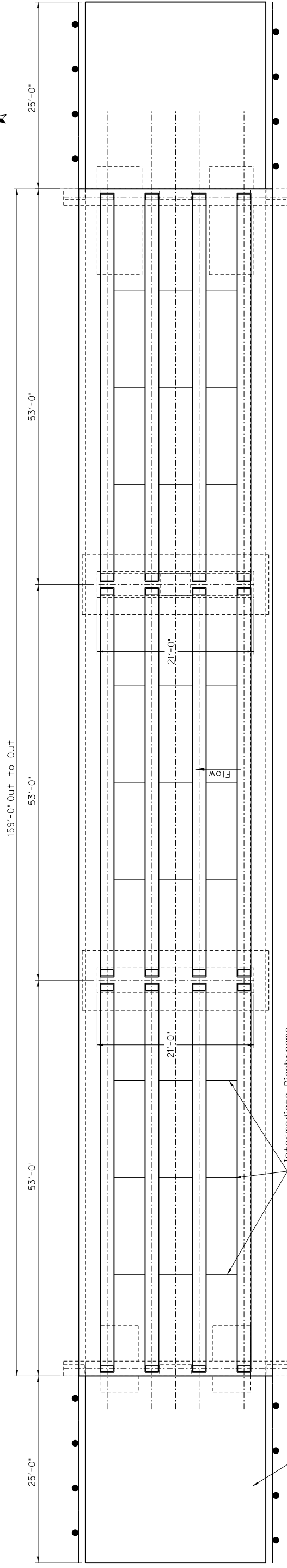
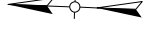


ELEVATION

JOINT WATERPROOFING

DETAIL

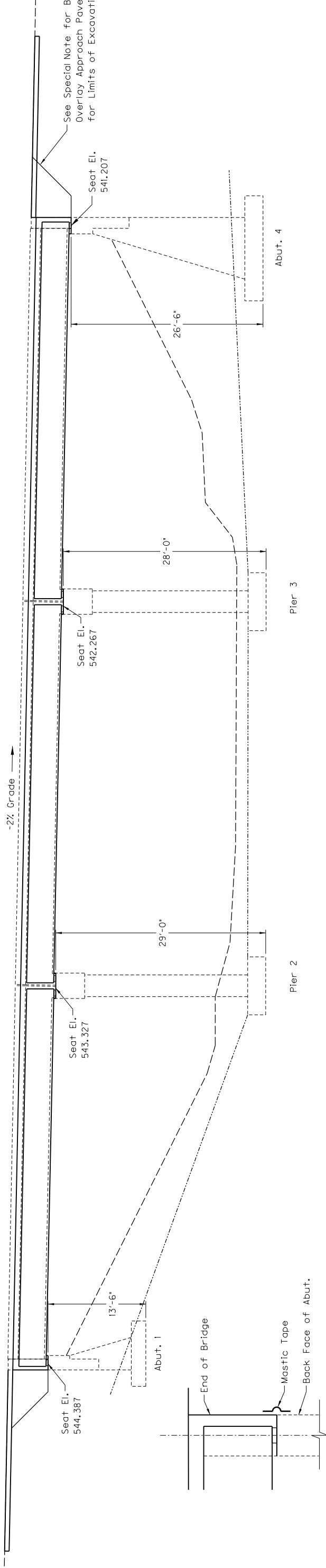
Note: Contractor shall provide 12" wide mastic tape to water-proof the joint between beam ends and abutment. Tape shall be looped as shown at expansion ends of bridge to prevent damage to tape.



PLAN

REVISION	DATE
DATE: 1/18/19	CHECKED BY: S. WEBER
DESIGNED BY: J. MILES	DETAILED BY: C. QUINN
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS <small>COUNTY</small> ALLEN	
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK
PLAN AND ELEVATION <small>PREPARED BY</small> 	
<small>SHEET NO.</small> 55 <small>DRAWING NO.</small> 27882	

BRIDGE NUMBER	002B00021N
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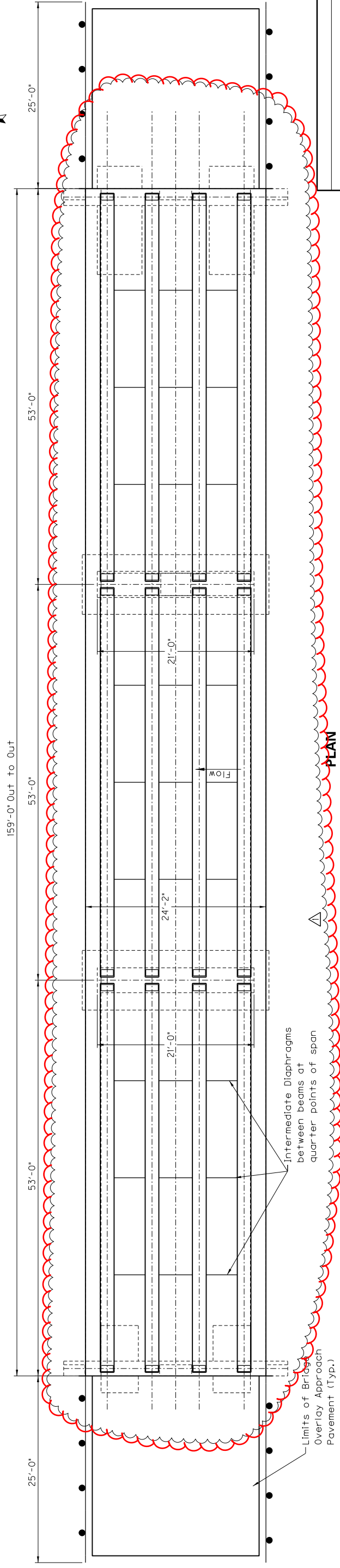
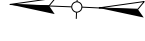


ELEVATION

JOINT WATERPROOFING

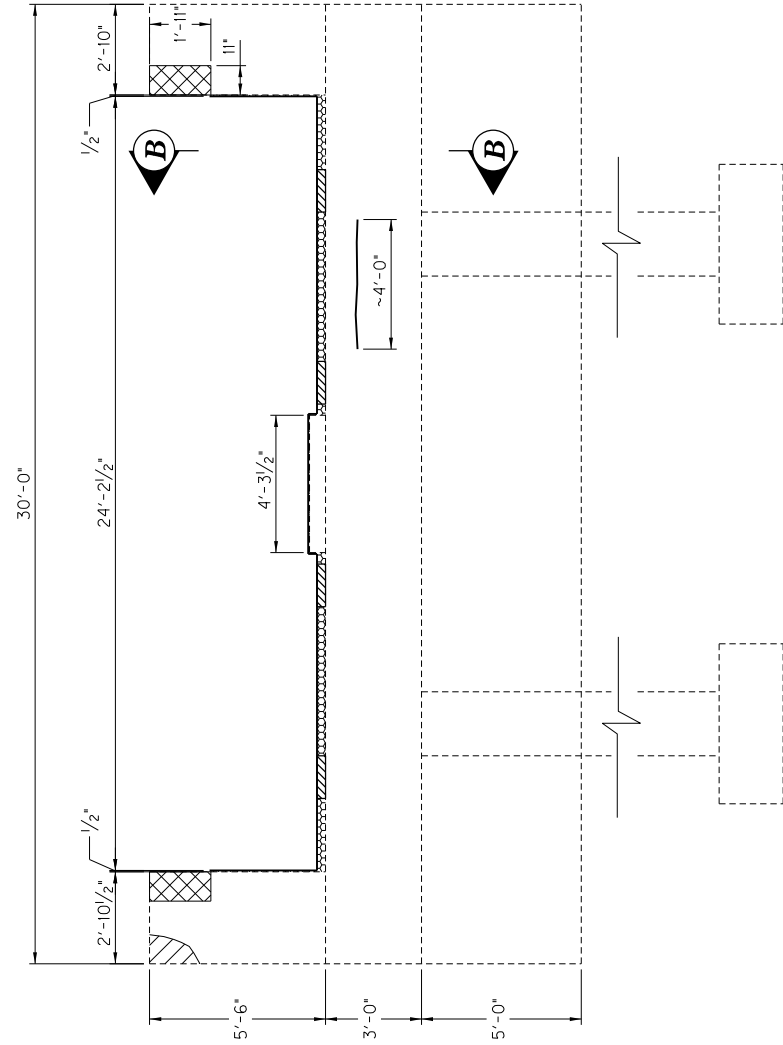
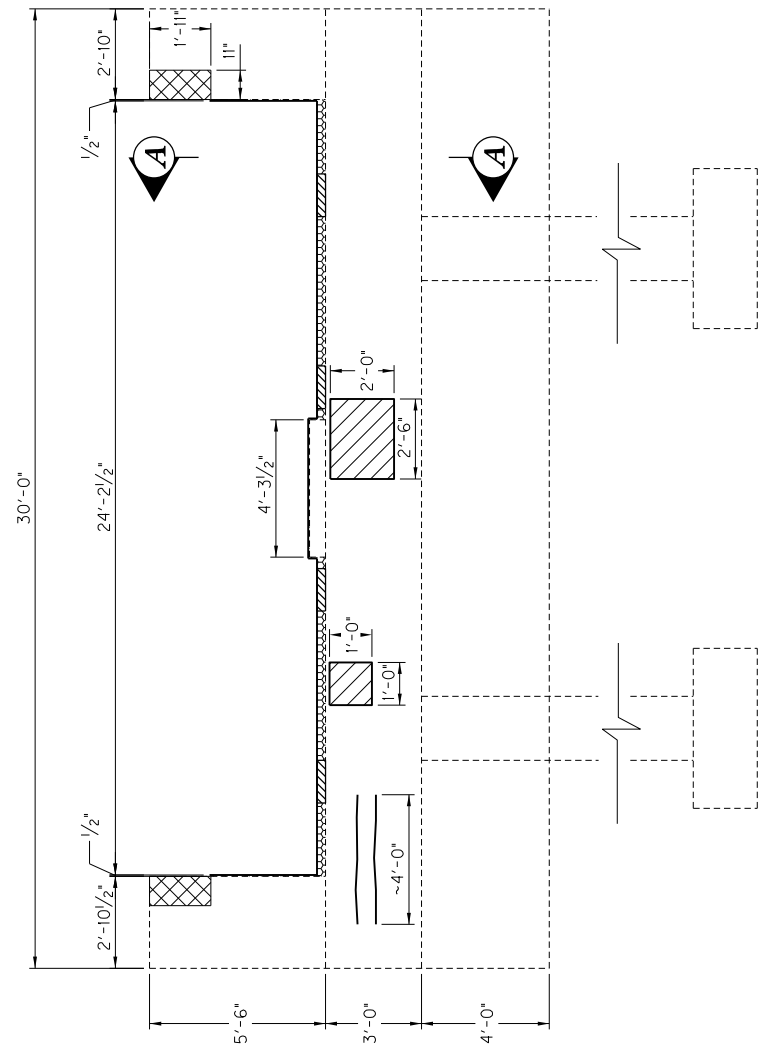
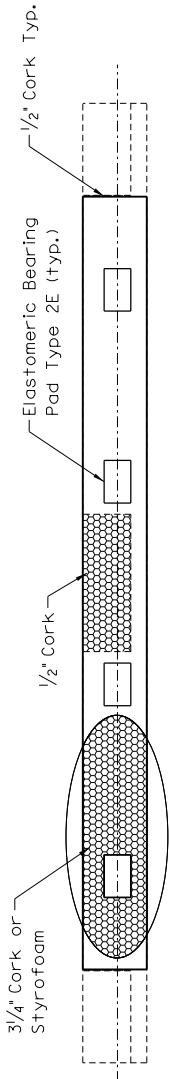
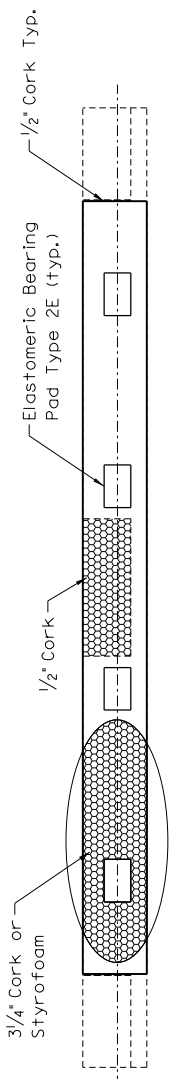
DETAIL

Note: Contractor shall provide 12" wide mastic tape to water-proof the joint between beam ends and abutment. Tape shall be looped as shown at expansion ends of bridge to prevent damage to tape.



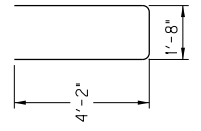
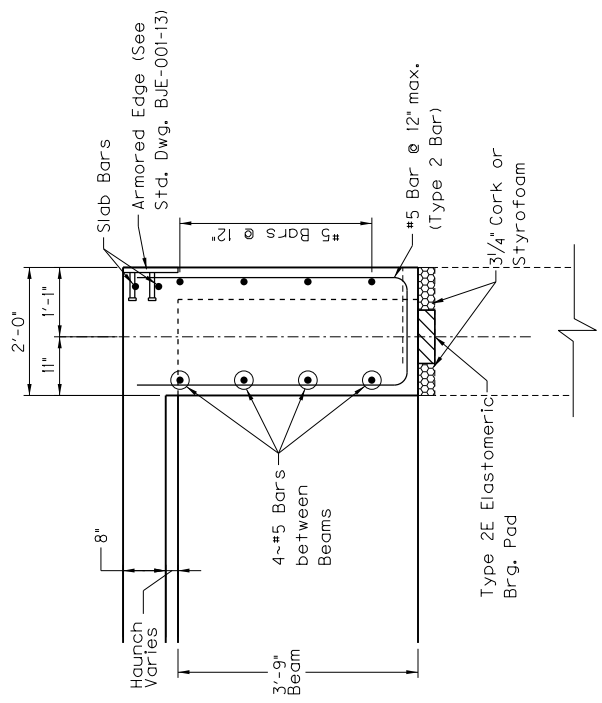
PLAN

Revised Details for M0T	DATE	3/6/19
REVISION	CHECKED BY	S. WEBER
DATE: 1/18/19	DESIGNED BY: J. MILES	DETAILED BY: C. QUINN
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS <small>COUNTY</small> ALLEN		
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK	BRIDGE NUMBER 002B00021N
PLAN AND ELEVATION PREPARED BY		
SHEET NO. 55 DRAWING NO. 27882		



Legend

- Limits of Structure Removal
- Limits of Concrete Patching Repair
- Approximate Limits of Epoxy Injection Repair



Section A-A

Type 2 Bar

BRIDGE NUMBER
002B00021N

ROUTE
KY 585

CROSSING
MIDDLE FORK DRAKES CREEK

ABUTMENT DETAILS

PREPARED BY

DESIGNED BY: J. MILES
CHECKED BY: S. WEBER

DATE: 1/18/19

REVISION

DATE

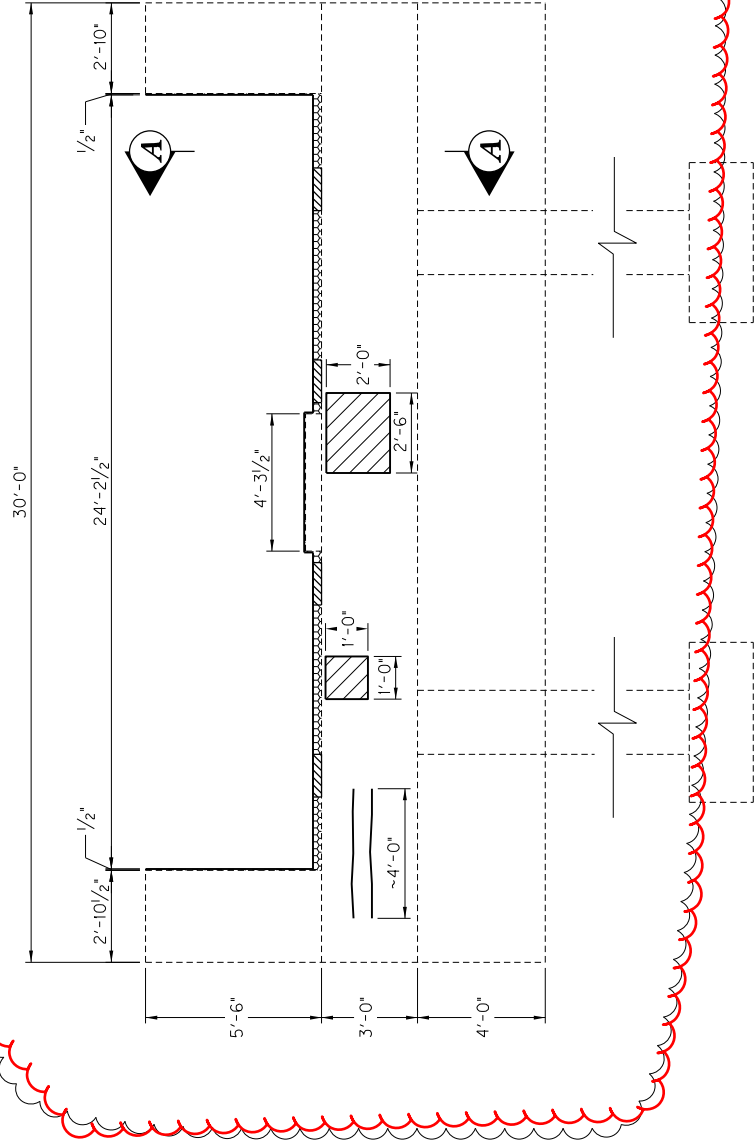
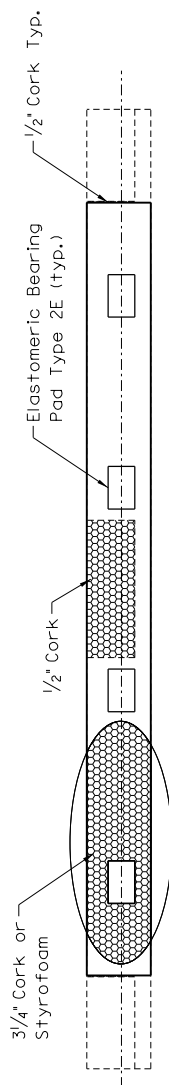
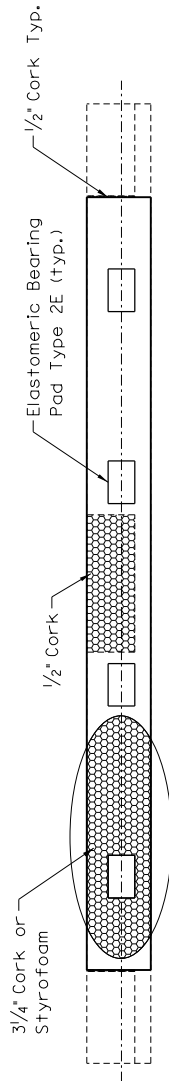
DETAILED BY: C. QUINN
J. MILES

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

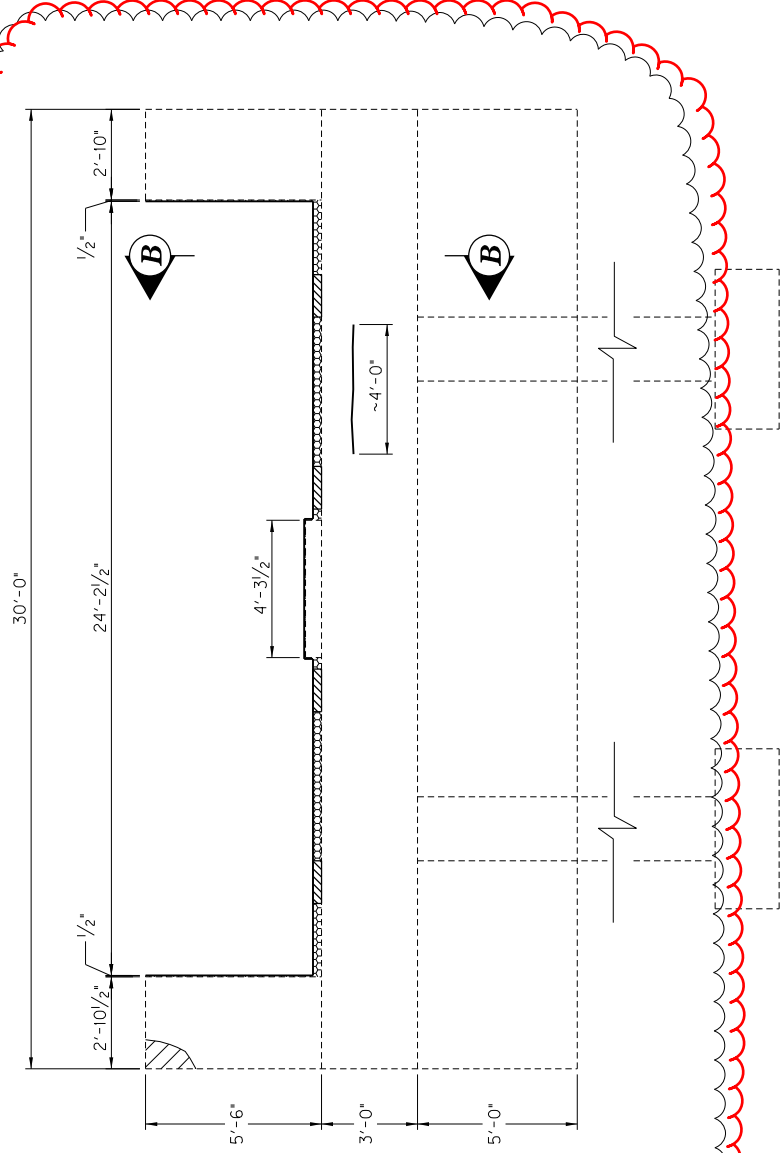
COUNTY
ALLEN

SHEET NO.
S7

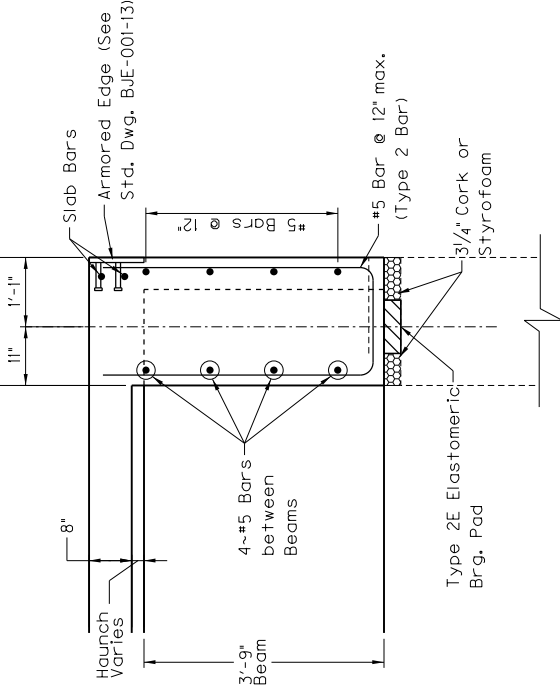
DRAWING NO.
27882



Abutment 1
(Looking Back)

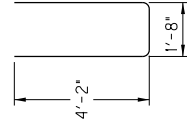


Abutment 4
(Looking Ahead)

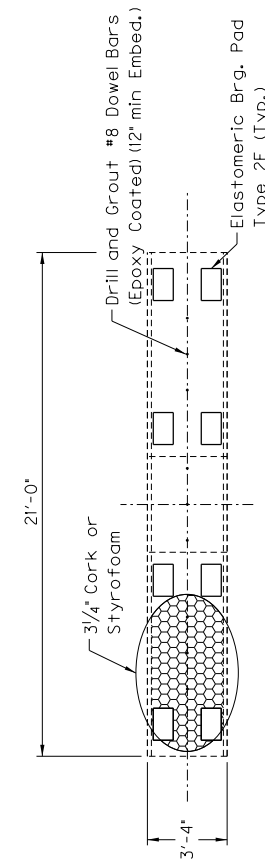


Legend

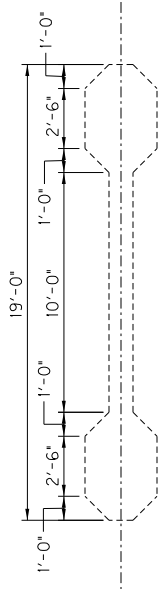
- Limits of Concrete Patching Repair
- Approximate Limits of Epoxy Injection Repair



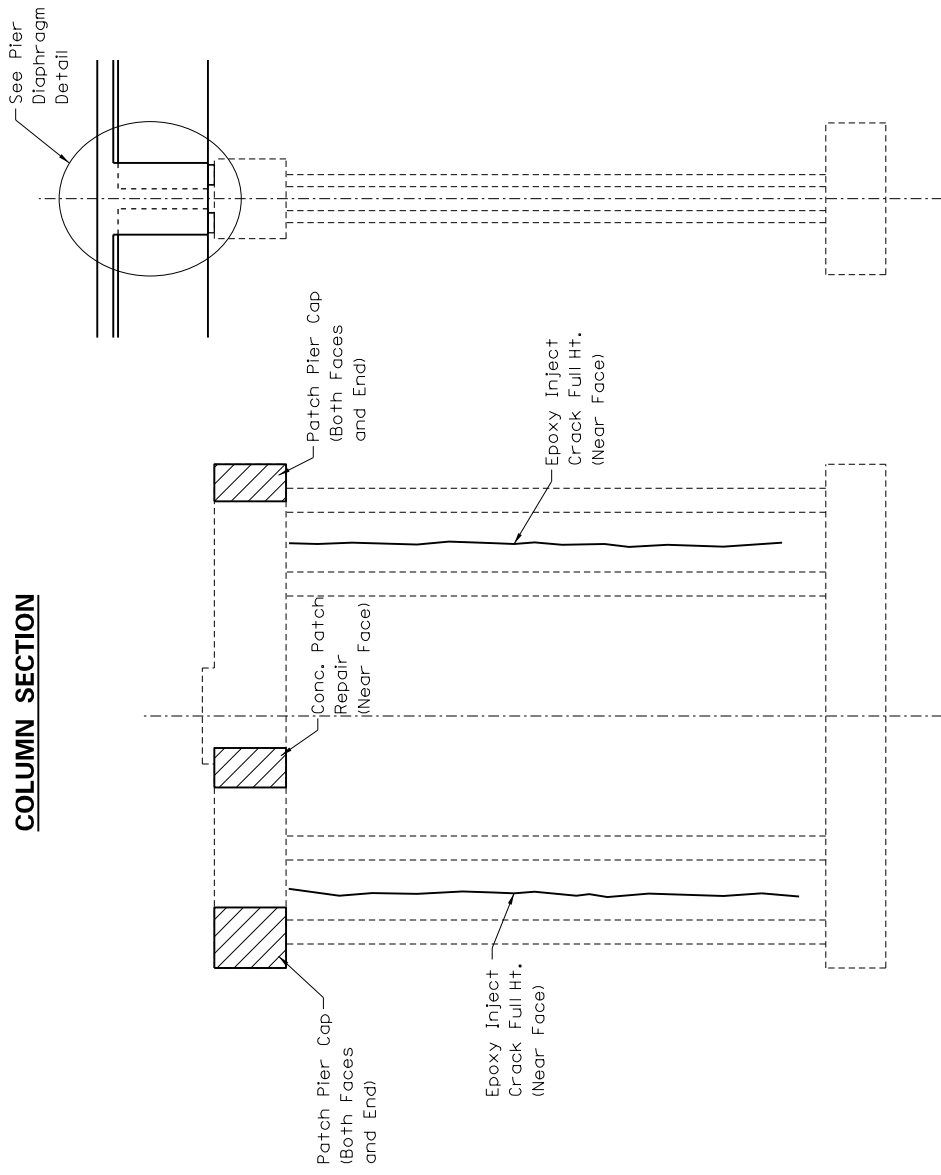
Revise Details for MOT	REVISION	CHECKED BY	DATE
			3/6/19
DATE: 1/18/19	DESIGNED BY: J. MILES	S. WEBER	
	DETAILED BY: C. QUINN	J. MILES	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS <small>COUNTY</small> ALLEN			
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK	ABUTMENT DETAILS	
PREPARED BY		SHEET NO. S7	
BRIDGE NUMBER 002B00021N		DRAWING NO. 27882	



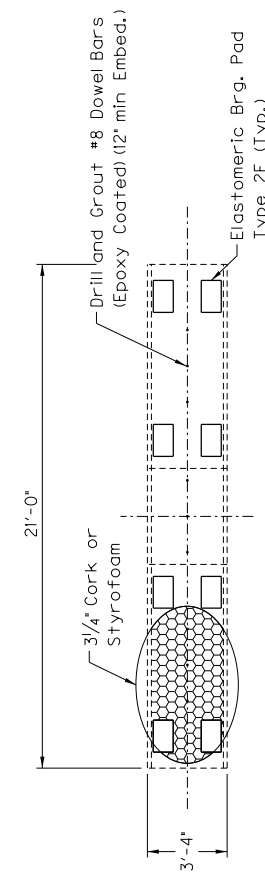
PIER CAP PLAN



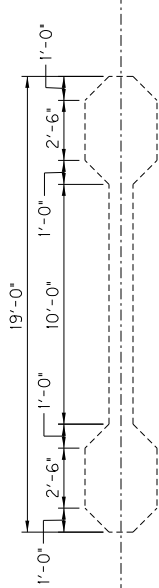
COLUMN SECTION



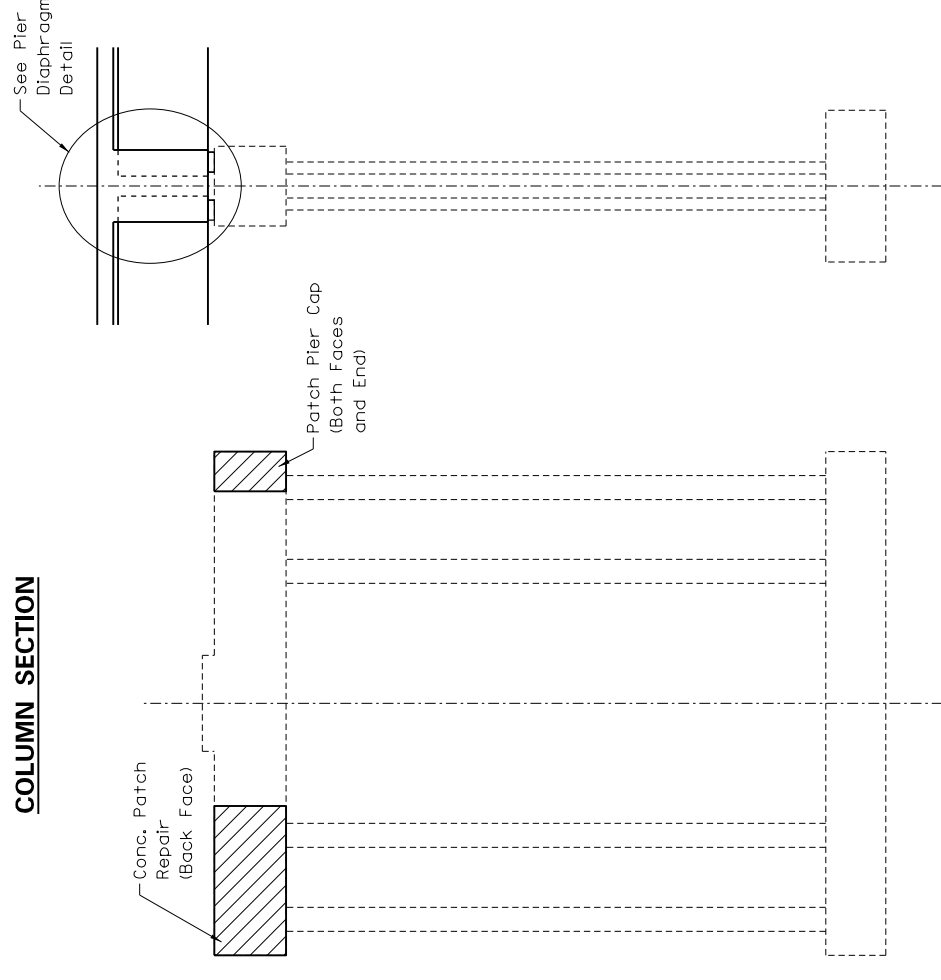
PIER 2 ELEVATION
(Looking Ahead)



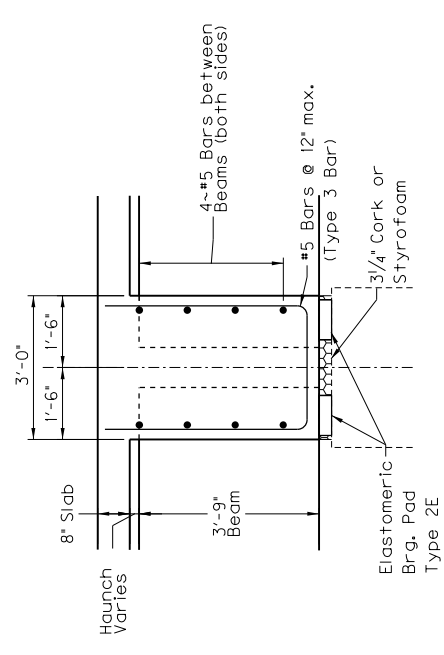
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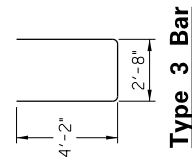
COLUMN SECTION



PIER 3 ELEVATION
(Looking Ahead)

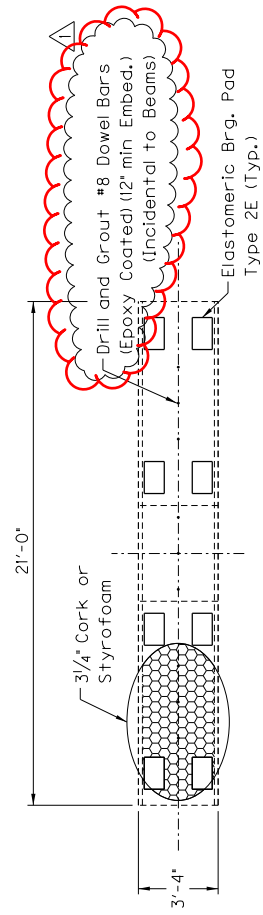


PIER DIAPHRAGM

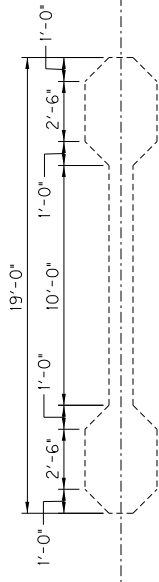


Type 3 Bar

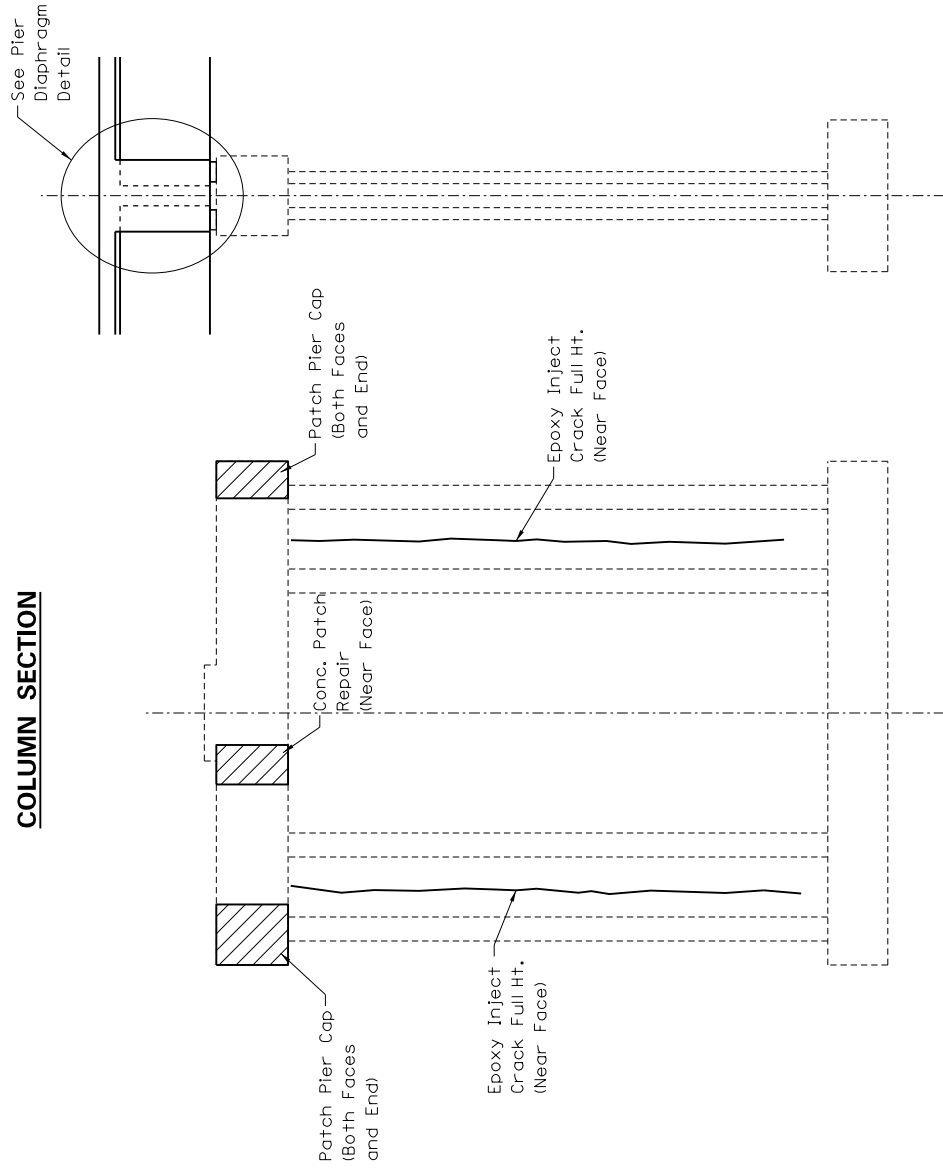
REVISION	DATE
DESIGNED BY: J. MILES	CHECKED BY: S. WEBER
DETAILED BY: C. QUINN	J. MILES
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS <small>COUNTY</small> ALLEN	
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK
PIER DETAILS	
BRIDGE NUMBER 002B00021N	PREPARED BY: SHEET NO. DRAWING NO. 27882



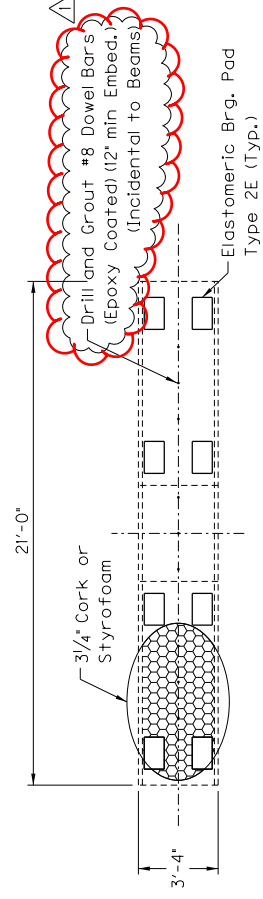
PIER CAP PLAN



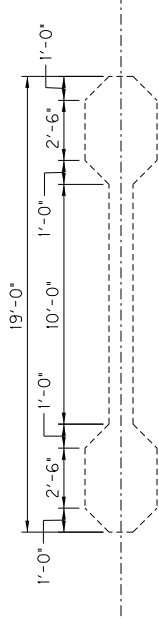
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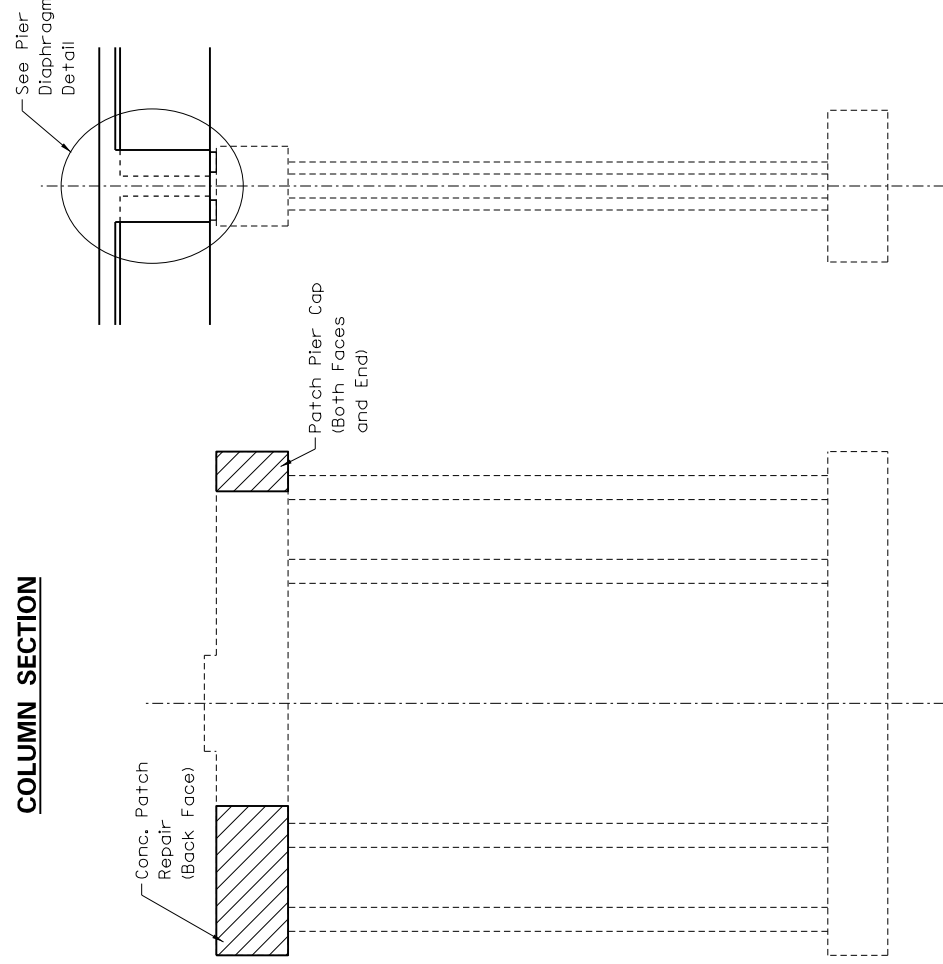
PIER 2 ELEVATION
(Looking Ahead)



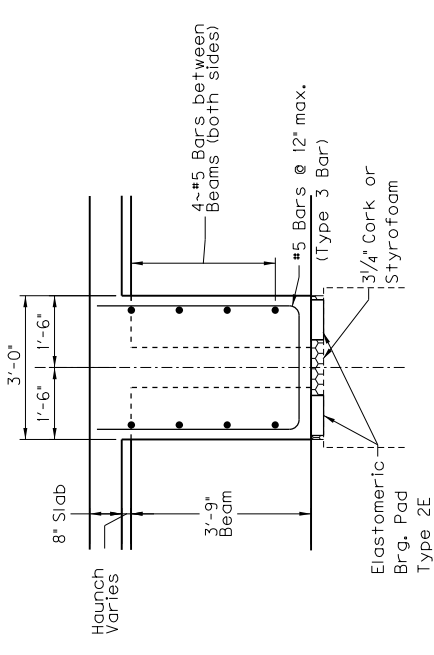
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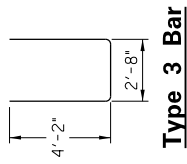
COLUMN SECTION



PIER 3 ELEVATION
(Looking Ahead)



PIER DIAPHRAGM



Type 3 Bar

Clarify Payment for Dowel Bars	3/6/19
REVISION	DATE
DATE: 1/18/19	CHECKED BY
DESIGNED BY: J. MILES	S. WEBER
DETAILED BY: C. QUINN	J. MILES
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY ALLEN	
ROUTE KY 585	CROSSING MIDDLE FORK DRAKES CREEK
PIER DETAILS	
PREPARED BY	SHEET NO.
	27882