

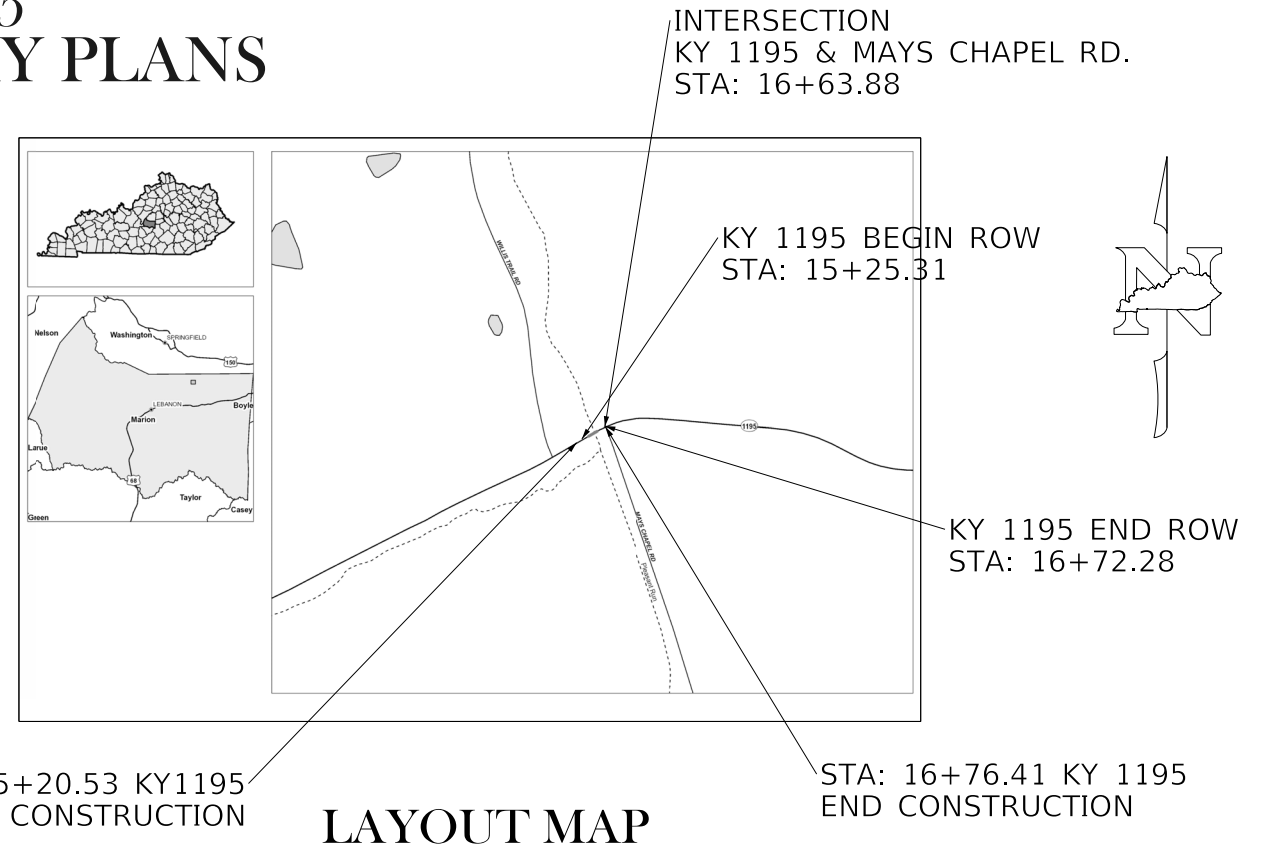
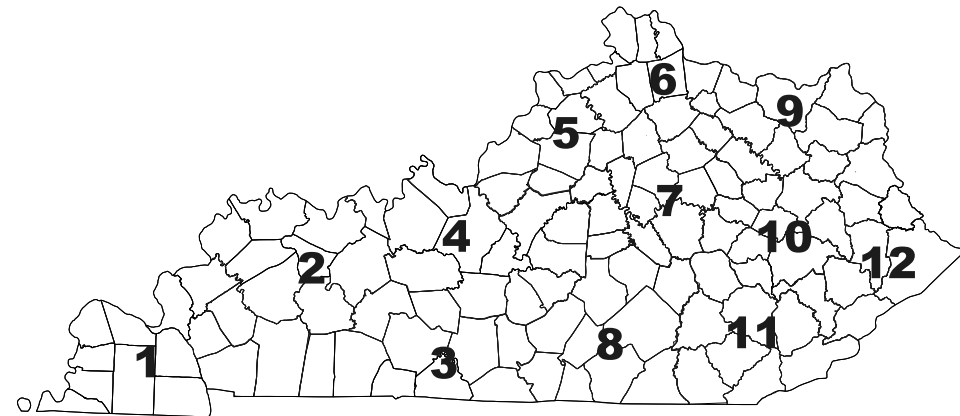
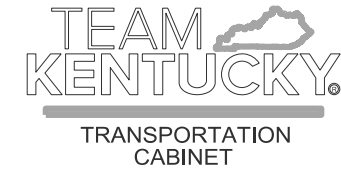


COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

PLANS OF PROPOSED PROJECT

MARION County KY 1195 RIGHT OF WAY PLANS



STA: 15+20.53 KY1195
BEGIN CONSTRUCTION

LAYOUT MAP

STA: 16+76.41 KY 1195
END CONSTRUCTION

DESIGN CRITERIA

CLASS OF HIGHWAY RURAL MINOR COLLECTOR
 TYPE OF TERRAIN ROLLING
 DESIGN SPEED 55 MPH
 REQUIRED NPSD 495'
 REQUIRED PSD _____
 LEVEL OF SERVICE C
 ADT PRESENT (2020) 329
 ADT FUTURE (2040) 329
 DHV X
 D % _____
 T % 0

GEOGRAPHIC COORDINATES

LATITUDE 37 DEGREES 37 MINUTES 02 SECONDS NORTH
 LONGITUDE 85 DEGREES 09 MINUTES 40 SECONDS WEST

DESIGNED

% RESTRICTED SD _____
 LEVEL OF SERVICE _____
 MAX. DISTANCE W/O PASSING _____

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
R1	LAYOUT SHEET
R2	TYPICAL SECTION
R3	SUMMARY OF QUANTITIES
R4	GENERAL NOTES
R5 - R7	PLAN AND PROFILE SHEETS
R8	DETOUR SHEET
R9 - R10	ROW SUMMARY SHEETS
R11	STRIP MAP
S1 - S8	STRUCTURE PLANS

STANDARD DRAWINGS

- RBB-001-009
- RBI-002-007
- RBR-001-013
- RBR-035-012
- RBR-055-001
- RDX-210-003

THE CONTROL OF ACCESS ON THIS
PROJECT SHALL BE BY PERMIT

THIS PROJECT IS OFF THE NH SYSTEM

LENGTH	ADDDED FOR EQUALITIES	DEDUCTED	NOT INCLUDED	LENGTH	ADDDED FOR EQUALITIES	DEDUCTED	NOT INCLUDED	LENGTH	ADDDED FOR EQUALITIES	DEDUCTED	NOT INCLUDED	LENGTH	ADDDED FOR EQUALITIES	DEDUCTED	NOT INCLUDED
155.88'															

PROJECT NUMBER: FE02 078 625B00053N

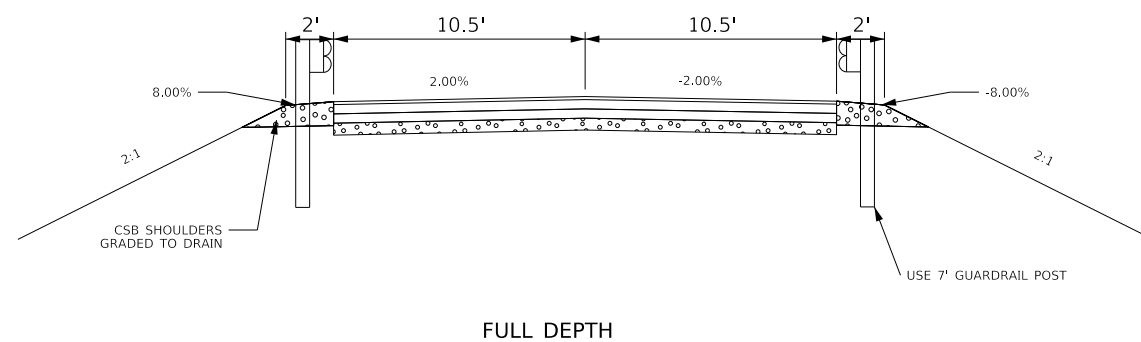
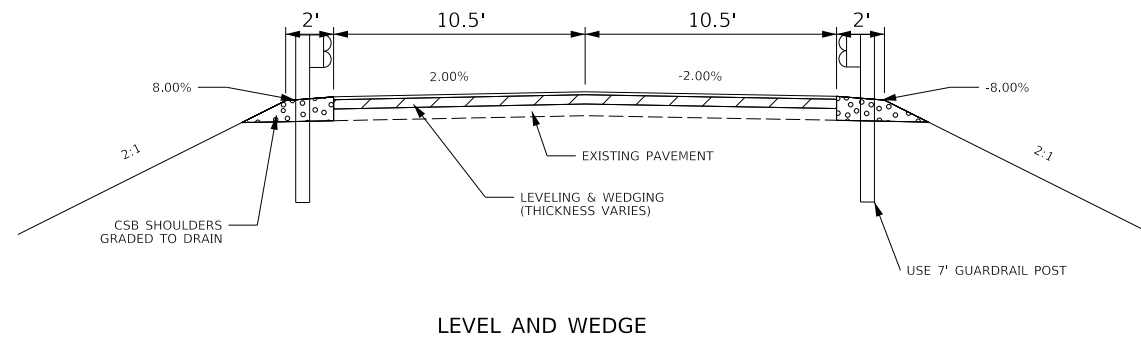
PROJECT DESCRIPTION: KY1195 BRIDGE REPLACEMENT

RECOMMENDED BY: _____ PROJECT MANAGER _____ DATE: _____
 PLAN APPROVED BY: _____ STATE HIGHWAY ENGINEER _____ DATE: _____

LETTING DATE:	1/1/2020
ITEM NO.	4-40000
COUNTY OF	MARION
SHEET NO.	R001

TYPICAL SECTIONS

KY 1195 GUARDRAIL SECTION TRAVEL LANES

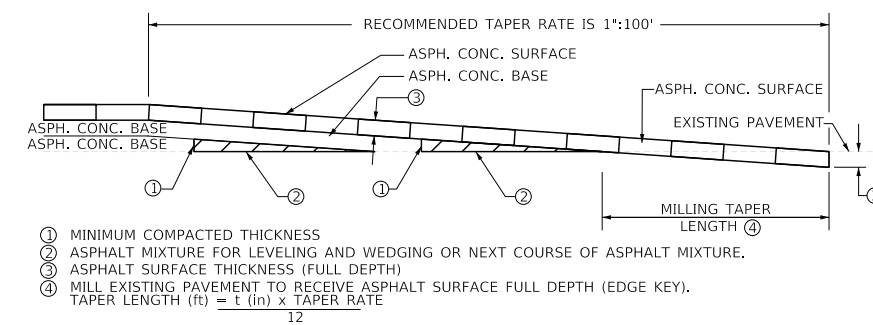


KY 1195 LEVEL AND WEDGE
 1.5" COMPACTED DEPTH CL2 ASPH SURF 0.38D PG64-22
 LEVELING & WEDGING PG64-22

KY 1195 FULL DEPTH
 1.5" COMPACTED DEPTH CL2 ASPH SURF 0.38D PG64-22
 4" COMPACTED DEPTH CL2 ASPH BASE 1.00D PG64-22
 4" COMPACTED DEPTH CL2 ASPH BASE 1.00D PG64-22
 6" CRUSHED STONE BASE

EXPOSED CSB SHOULDERS
 Asphalt Seal required 2 feet down the ditch or fill slope.
 Two applications of the following:

103 ASPHALT SEAL COAT	2.40 LB/SQ YD
100 ASPHALT SEAL AGGREGATE	20 LB/SQ YD



FOR A TAPER RATE OF 1:1200
 TAPER LENGTH = 125 FEET WHEN t = 1.25 inches
 TAPER LENGTH = 150 FEET WHEN t = 1.50 inches

TAPERING OF OVERLAYS ON HIGH SPEED FACILITIES (≥45 MPH)

ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	EACH	6
02014	BARRICADE-TYPE III	EACH	6
02351	GUARDRAIL-STEEL W BEAM-S FACE	LF	100
02391	GUARDRAIL END TREATMENT TYPE 4A	EACH	4
02562	TEMPORARY SIGNS	SQFT	169
02569	DEMOBILIZATION	LS	1
02585	EDGE KEY	LF	72
02650	MAINTAIN AND CONTROL TRAFFIC	LS	1
02731	REMOVE STRUTURE ^⑤	LS	1
06514	PAVE STRIPING-PERM PAINT-4 IN	LF	312
20191	OBJECT MARKER TY 3	EACH	4

NOTES

- ① ESTIMATED AT 110 LBS. PER SQ. YD. PER IN OF DEPTH
- ② ESTIMATED AT 115 LBS. PER SQ. YD. PER IN OF DEPTH
- ③ ESTIMATED AT 2.40 LBS. PER SQ. YD. -2X APPLICATIONS
- ④ ESTIMATED AT 20 LBS. PER SQ. YD. -2X APPLICATIONS
- ⑤ REMOVE EX. KY 1195 BRIDGE OVER PLESANT RUN CREEK

ITEM CODE	ITEM	UNIT	APPROACHES	TOTAL PROJECT
00301	CL2 ASPH SURF 0.38D PG64-22 ^①	TON	30	30
00109	LEVELING & WEDGING PG64-22 ^①	TON	15	15
00212	CL2 ASPH BASE 1.00D PG64-22 ^①	TON	100	100
00003	CRUSHED STONE BASE ^②	TON	140	140
00100	ASPHALT SEAL AGGREGATE ^④	TON	2.75	2.75
00103	ASPHALT SEAL COAT ^③	TON	0.4	0.4
00356	ASPHALT MATERIAL FOR TACK	TON	2.32	2.32

GENERAL NOTES

BEFORE YOU DIG

CALL 1-800-752-6007 TOLL FREE WITH A MINIMUM OF TWO AND NO MORE THAN TEN BUSINESS DAYS PRIOR TO EXCAVATION FOR INFORMATION ON THE LOCATION OF EXISTING UNDER-GROUND UTILITIES WHICH SUBSCRIBE TO THE BEFORE-U-DIG (BUD) SERVICE. COORDINATE EXCAVATION WITH ALL UTILITIES OWNERS, INCLUDING THOSE WHO DO NOT SUBSCRIBE TO BUD.

DEPARTMENT OF THE ARMY PERMIT AND WATER QUALITY CERTIFICATION APPROVALS

A DEPARTMENT OF THE ARMY (DA) PERMIT, WHICH MAY REQUIRE APPROVAL OF A STATE WATER QUALITY CERTIFICATION FROM THE KENTUCKY DIVISION OF WATER, REGULATES THIS PROJECT AT ONE OR MORE LOCATIONS. PERFORM ALL APPLICABLE WORK IN COMPLIANCE WITH THE CONDITIONS STATED IN THE DA PERMIT AND THE APPROVED WATER QUALITY CERTIFICATION. POST A COPY OF THE DA PERMIT AND WATER QUALITY CERTIFICATION IN A CONSPICUOUS PLACE AT THE PROJECT SITE. IF A DA PERMIT OR WATER QUALITY CERTIFICATION APPROVAL IS PENDING, DO NOT WORK IN OR DISTURB THE DESIGNATED AREA(S) UNTIL OBTAINING THE APPROPRIATE APPROVAL(S). REFER TO NOTICE(S) CONTAINED IN THE CONTRACT BID PROPOSAL FOR DESIGNATED AREA(S) WHERE WORK IS PROHIBITED BY THE ABSENCE OF APPROVAL.

CLEARING AND GRUBBING

CONTRARY TO SECTION 202 OF THE STANDARD SPECIFICATIONS, NO DIRECT PAYMENT WILL BE ALLOWED FOR CLEARING AND GRUBBING ON THIS PROJECT.

COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED ON THIS PROJECT BY OPTION "B" ACCORDING TO SUBSECTIONS 402.03.02 AND 403.03.10 OF THE STANDARD SPECIFICATIONS.

STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-4610

EDGE KEY

THIS WORK INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED ELSEWHERE IN THE PLANS SO THAT THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE. THE CONTRACT UNIT PRICE BID PER LINEAR FOOT FOR "EDGE KEY" INCLUDES ALL NECESSARY MATERIALS, LABOR, AND EQUIPMENT TO PERFORM THE NECESSARY WORK AND DISPOSE OF THE REMOVED ASPHALT MATERIAL

MAINTANCE OF TRAFFIC

A DETOUR IS TO BE UTILIZED WITH THE CLOSING OF KY 1195 FOR THIS PROJECT. EXCEPT FOR THE BID ITEM "BARRICADE-TYPE III", ALL WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC WILL BE INCIDENTAL TO THE LUMP SUM BID PRICE TO "MAINTAIN AND CONTROL TRAFFIC" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION UNLESS OTHERWISE NOTED IN THESE PLANS.

STRUCTURAL GRANULAR BACKFILL

MATERIALS FOR STRUCTURAL GRANULAR BACKFILL WILL BE IN ACCORDANCE WITH SECTION 805 OF THE SPECIFICATIONS

FOUNDATION PREPERATION

FOUNDATION EXCAVATIONS SHOULD BE PROPERLY BRACED/SHORED TO PROVIDE ADEQUATE SAFETY TO PERSONS WORKING IN OR AROUND EXCAVATIONS. BRACING SHOULD BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL GUIDLINES.

TEMPORARY SHORING, SHEETING, COFFERDAMS, AND/OR DEWATERING METHODS MAY BE REQUIRED TO FACILITATE FOUNDATION CONSTRUCTION. IT SHOULD BE ANTICIPATED THAT GROUNDWATER WILL BE ENCOUNTERED AT FOUNDATION LOCATIONS WITHIN THE FLOOD PLAIN.

TEMPORARY SHORING, BRACING, SHEETING, COFFERDAMS, AND DEWATERING SHALL BE INCLUDED IN THE LUMP SUM BID FOR FOUNDATION PREPARATION.

STRUCTURAL GRANULAR BACKFILL SHALL BE INCLUDED IN THE LUMP SUM BID ITEM FOR FOUNDATION PREPARATION.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



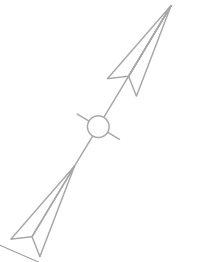
DRAWING TITLE: GENERAL NOTES

ITEM NO. 4-40000 COUNTY OF MARION
SHEET NO. R004

Corporate Limits	-----		Main Water Marker	OWLM	Crash Cushion TY 9		Point (Misc)	—	Telephone Pedestal	
County Line	-----		Main Water Greater Than 12 Marker	OWLMG12	Cross Notch	ONOTCH	Pole	○	Telephone Pole	
Easement	-----	-----	Sewer Sanitary Marker	OSSM	Curb Box Inlet		Pole (Light)		Temporary Benchmark	
Fence COA	-----XX-----	-----XX-----	Sewer Sanitary Force Main Marker	OSANFMM	Curb Notch	ONOTCH	Post	oPOST	Traffic Light	
Mineral Parcel	-----	-----	Sewer Storm Marker	OSTMM	Combination Pole		Power Pole		Traffic Signal Control Box	
Property Line	-----R-----		Multi Utility Bank Marker	OMUBM	Delineator Post	oDP	Quarry		Traffic Signal Junction Box	
Right of Way Line	-----	-----	Oil Line Marker	OOLM	Drop Box		Random (Ground Shot)	+	Traffic Signal Pole	
All Overhead Utility Lines	----- -----	----- -----	Steam Line Marker	OSLM	Existing Spring		Railroad Mile Marker	oRRMM	Traverse Point	oTRAV
Cable Underground Electric With Quality Levels	--- E (A) --- OE(A) --- E (B) --- --- E (CD) --- --- E (PA) ---	-----E-----	Cable Guardrail		Electric Manhole		Railroad Spike	oRRS	Tree	
Duct Underground Electric With Quality Levels	=== E (A) === OE(DA) === E (B) === === E (CD) === === E (PA) ===	=====E=====	Ditch		Electric Meter	oEM	Right of Way Marker	o	TV Junction Box	
Cable Underground Fiber With Quality Levels	--- FO (A) --- OF(A) --- FO (B) --- --- FO (CD) --- --- FO (PA) ---	-----FO-----	Edge of Water		Electric Pedestal		RR Traffic Signal Pole		Utility Pole	○
Cable Underground Telephone With Quality Levels	--- T (A) --- OT(A) --- T (B) --- --- T (CD) --- --- T (PA) ---	-----T-----	Fence Hedge		Electric Pole		RW Parcel		Underground Storage Tank	
Duct Underground Telephone With Quality Levels	=== T (A) === OT(DA) === T (B) === === T (CD) === === T (PA) ===	=====T=====	Fence		Fire Hydrant	o	Sanitary Cleanout	oSANCO	Utility Test Hole	oTH
Cable Underground TV With Quality Levels	--- TV (A) --- OT(VA) --- TV (B) --- --- TV (CD) --- --- TV (PA) ---	-----TV-----	Flow Line/Thalweg/Int. Stream or Ditch		Flag Pole	oFP	Sanitary Manhole		Water Line Marker	oWLM
Main Gas With Quality Levels	--- GM (A) --- OGM(A) --- GM (B) --- --- GM (CD) --- --- GM (PA) ---	-----GM-----	Guardrail		Force Main Sewer Valve	o	Satellite Dish	oSD	Water Meter	oWM
Main Water With Quality Levels	--- WM (A) --- OWM(A) --- WM (B) --- --- WM (CD) --- --- WM (PA) ---	-----WM-----	Railroad		Fuel Tank Inlet	oFTI	Septic Tank Cleanout	oSTC	Water Spigot	oWS
Main Water Greater Than 12 With Quality Levels	--- WM >12 (A) --- OWM>12(A) --- WM >12 (B) --- --- WM >12 (CD) --- --- WM >12 (PA) ---	-----WM >12-----	Shrub Line		Fuel Tank Vent	oFTV	Service Pole	oSP	Water Valve	oWV oWV
Sewer Sanitary With Quality Levels	--- SAN (A) --- OSAN(A) --- SAN (B) --- --- SAN (CD) --- --- SAN (PA) ---	-----SAN-----	Sink Hole		Gas Meter	oGM	Sewer Air Release Valve	oSARV	Water Well	oWW
Sewer Sanitary Force Main With Quality Levels	--- SAN FM (A) --- OSAN FM(A) --- SAN FM (B) --- --- SAN FM (CD) --- --- SAN FM (PA) ---	-----SAN FM-----	Tree Line		Gas Monitoring Well	oGMW	Shrub		Yard Light	oYL
Sewer Storm With Quality Levels	--- STORM (A) --- OSTORM(A) --- STORM (B) --- --- STORM (CD) --- --- STORM (PA) ---	-----STORM-----	Wall (WSM or DSM)		Gas Valve	oGV oGV	Sign	oSIGN	Yard Sprinkler	oYS
Multi Utility Bank Quality Levels	--- MUB (A) --- OMUB(A) --- MUB (B) --- --- MUB (CD) --- --- MUB (PA) ---	-----MUB-----	Blue Line Stream		Gas Vent	oGVE	Sign Post (Single)		Yard Sprinkler Water Valve	oSWV
Oil Line Quality Levels	--- OIL (A) --- OOIL(A) --- OIL (B) --- --- OIL (CD) --- --- OIL (PA) ---	-----OIL-----	Lakes and Ponds		Gas Well	oGW	Sign with 2 posts			
Steam Line Quality Levels	--- STM (A) --- OSTM(A) --- STM (B) --- --- STM (CD) --- --- STM (PA) ---	-----STM-----	Regulated Floodway		Guidewires & Anchors		Sign group (4)			
Cable Underground Electric Marker	oCUGEM		RDZ Line		Headstone		Station Stamp			
Duct Underground Electric Marker	oDUGEM		ADA Ramp		Interstate Shield		Storm Manhole			
Cable Underground Fiber Marker	oCUGFM		Anchor Pole	o	Iron Pin	oIP	Stub Power			
Cable Underground Telephone Marker	oCUGTM		Benchmark		Light Pole		Stub Telephone			
Duct Underground Telephone Marker	oDUGTM		Bike Lane Symbol		Low Wire	+	Survey Cross Notch	oCN		
Cable Underground TV Marker	oCUGTMV		Bollard	oBOLLARD	Mag Nail	oMAG	Survey Curb Notch	ONOTCH		
Main Gas Marker	oGLM		Centerline	+	Mailbox		Survey Nail	oMAG		
			Centerline Stationing	o	Manhole		Survey Spike	oRRS		
			Control Monument		Mile Marker Post	oMP	Survey Stone Marker	oSTONE		
			Control Point		Mineral Parcel		Swamp			
			Core Hole	oCORE	Misc Location Point	o	Telephone Booth			
			Crash Cushion TY 6 D		Monitoring Well	oMW	Telephone Junction Box			
			Crash Cushion TY 6 A		Parking Meter	oPM	Telephone Line Overhead	o		
			Crash Cushion TY 9A		Pedestrian Signal		Telephone Manhole			
					Plns/Pipes	oIP				
					PK Nail	oPK				

Utility Owners

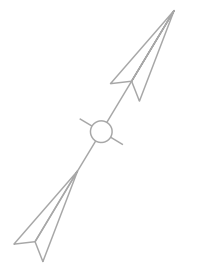
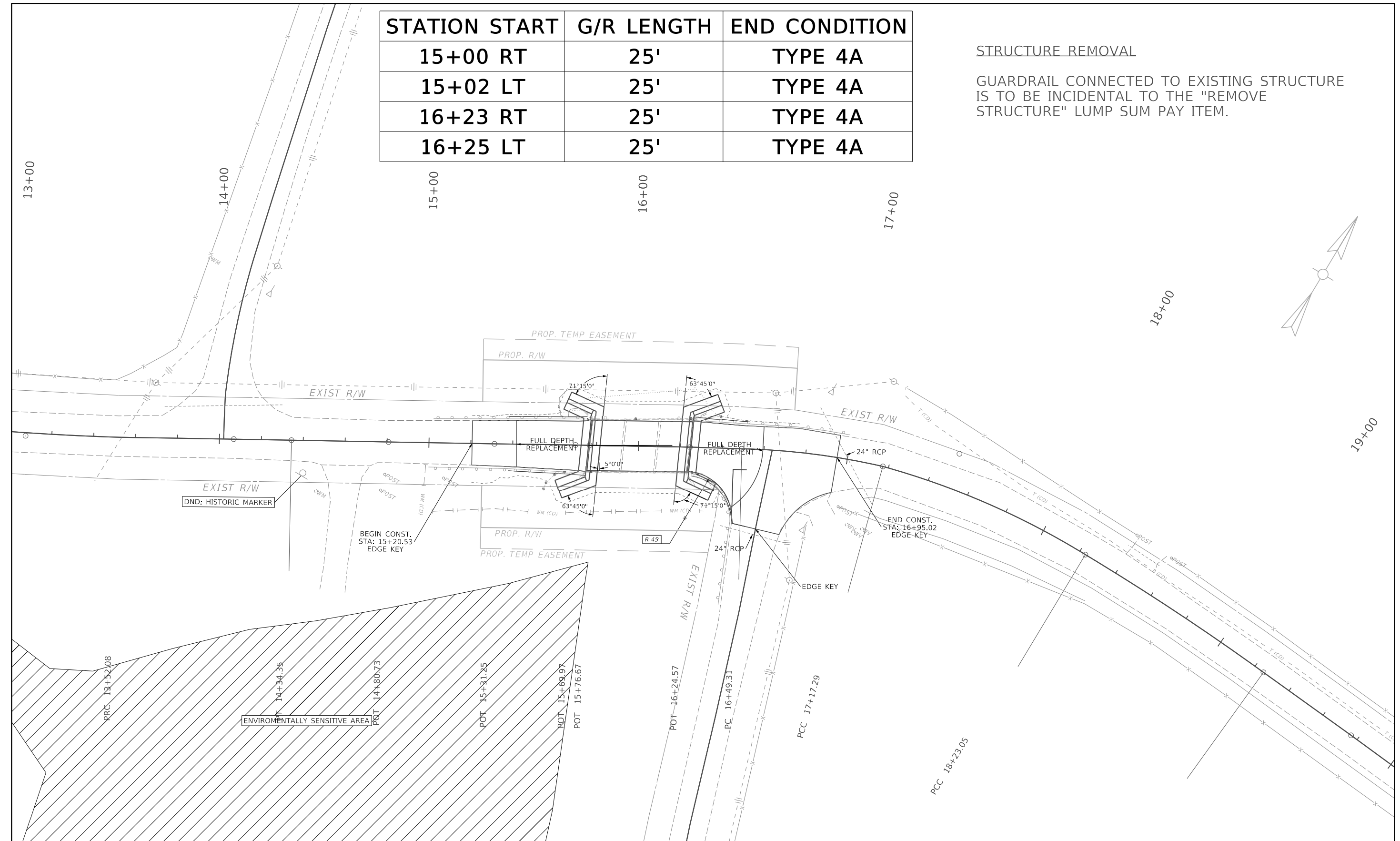
Utility #1



STATION START	G/R LENGTH	END CONDITION
15+00 RT	25'	TYPE 4A
15+02 LT	25'	TYPE 4A
16+23 RT	25'	TYPE 4A
16+25 LT	25'	TYPE 4A

STRUCTURE REMOVAL

GUARDRAIL CONNECTED TO EXISTING STRUCTURE IS TO BE INCIDENTAL TO THE "REMOVE STRUCTURE" LUMP SUM PAY ITEM.



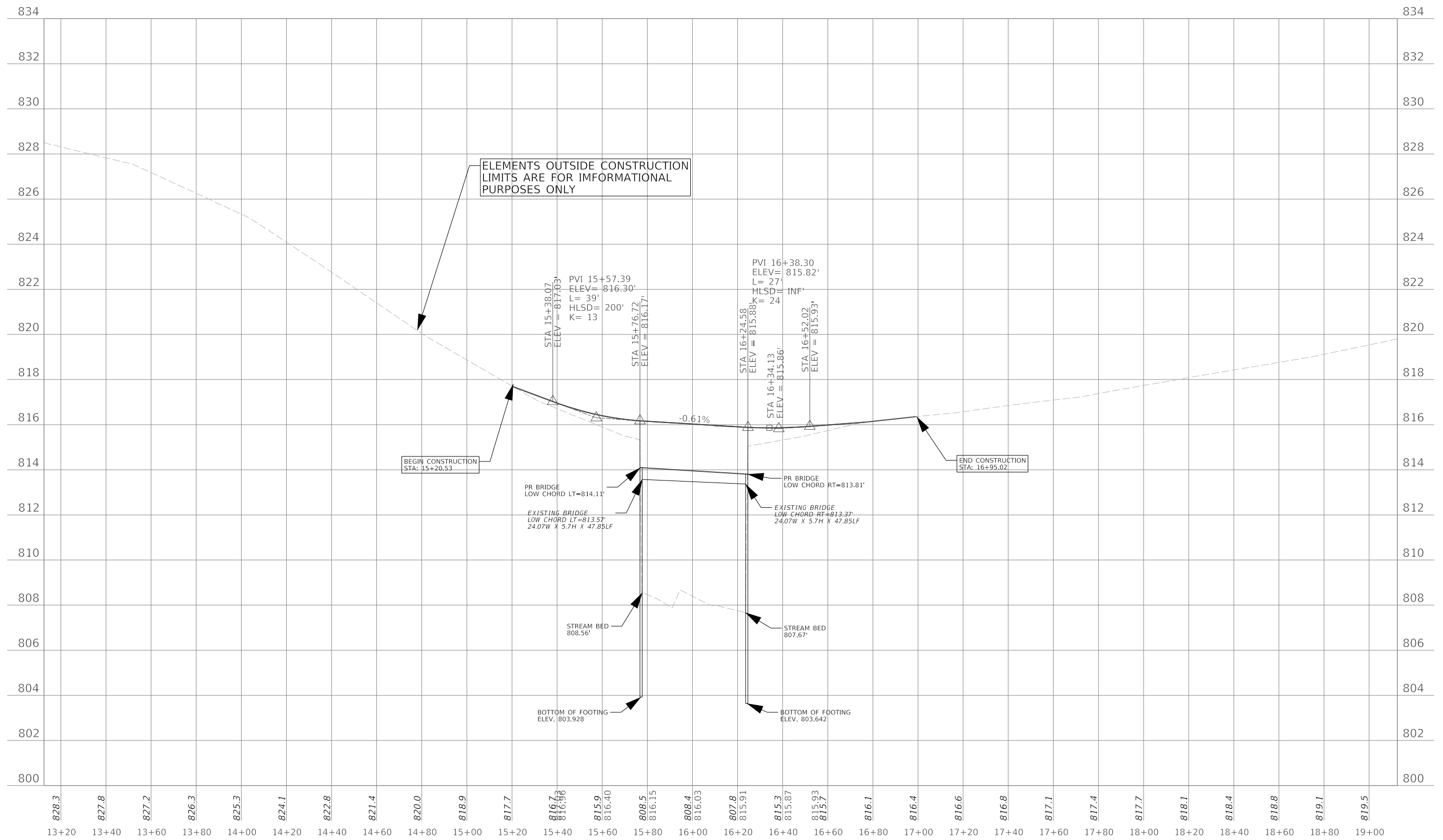
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

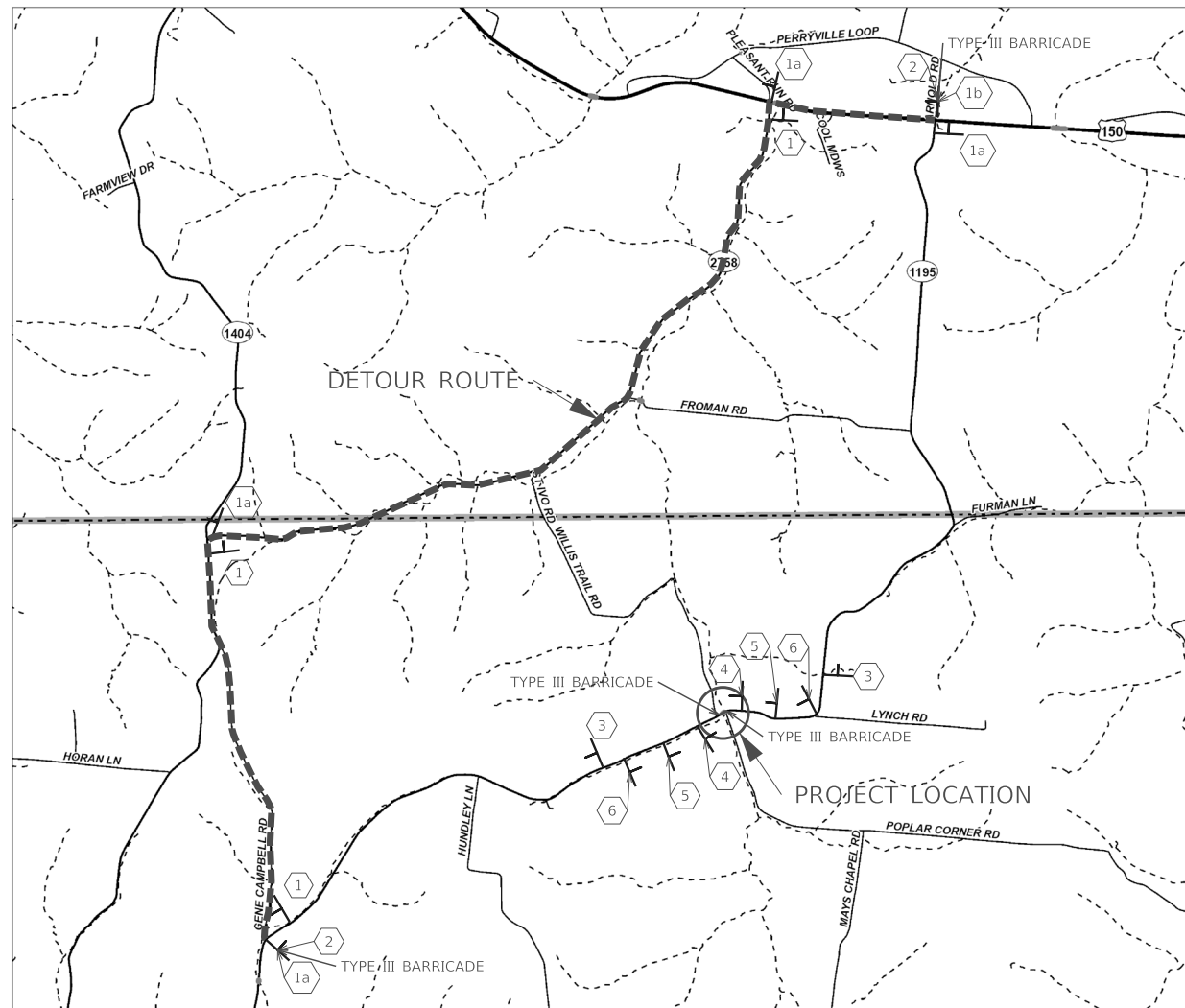
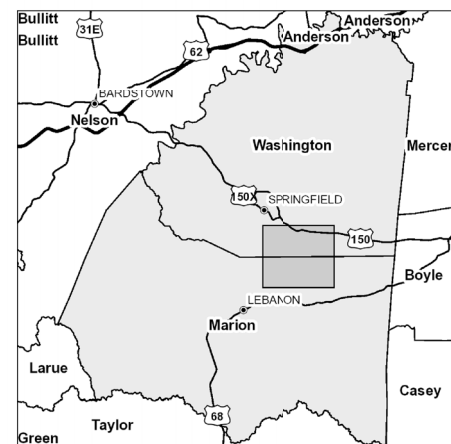
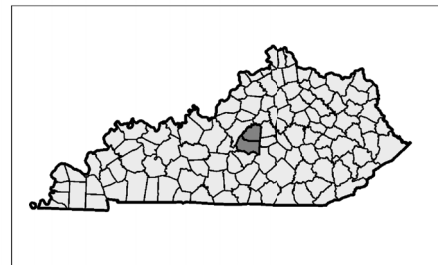
DRAWING TITLE: GUARDRAIL SUMMARY

HORIZONTAL SCALE
SCALE: 1" = 20'

STA 15+20.53 TO 16+76.41

ITEM NO. 4-40000 COUNTY OF MARION
SHEET NO. R007





Sign Chart	Dimensions	No. of Occurance	Total Sq. Ft.
1		3	15
1a		4	20
1b		1	2
		1	2
2		2	25
3		2	9
4		2	32
5		2	32
6		2	32
Total Sq. Ft. =			169

GENERAL NOTES

1. TRAFFIC SHALL BE MAINTAINED AND SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE STANDARD DRAWINGS, CURRENT EDITIONS.

2. EXCEPT FOR THE BID ITEM "BARRICADE-TYPE III", ALL ITEMS OF WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC WILL BE PAID AT THE LUMP SUM BID PRICE TO "MAINTAIN AND CONTROL TRAFFIC" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION UNLESS OTHERWISE PROVIDED FOR IN THESE NOTES.

3. THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) LOCAL PERSON ON CALL AT ALL TIMES FOR A CONTINUOUS MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES IN USE ON THE PROJECT.

4. ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.

5. A SIGNED DETOUR WILL BE PROVIDED FOR THIS PROJECT. KY 1195 WILL BE CLOSED TO THRU TRAFFIC DURING CONSTRUCTION OF THE PROPOSED PROJECT.

6. REASONABLE MEANS OF INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL PROPERTIES WITHIN THE PROJECT LIMITS. ACCESS TO FIRE HYDRANTS SHALL BE MAINTAINED AT ALL TIMES.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: DETOUR MAP

ITEM NO. 4-40000 COUNTY OF MARION
SHEET NO. R009

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 with current Supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Design Specs, with interims.

DESIGN LOAD: This bridge is designed for a KYHL-93 live load. The KYHL-93 live load is arrived at by increasing the standard HL-93 truck and lane loads as specified in the AASHTO Specifications by 25%.

FUTURE WEARING SURFACE: This Structure is designed for a 15 PSF future wearing surface load.

DESIGN STRESSES: Concrete Class "A" ~ f'c = 3500 psi
 Concrete Class "AA" ~ f'c = 4000 psi
 Steel Reinforcement ~ Fy = 60,000 psi

REINFORCEMENT: Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Spacing of bars is from center to center of bars. Clear distance to face of concrete is 2", unless otherwise noted. Any reinforcing bars designated by suffix (e) in the plans shall be epoxy coated in accordance with section 811.10 of the Standard Specifications. Any reinforcing bars designated by suffix (s) in a bill of reinforcement shall be considered a stirrup for purposes of bend diameters.

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

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 to the work involved. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of existing structures, phase construction, incidental materials, labor or anything else required to complete the structure.

SHOP DRAWINGS: Submit shop drawings that are required by the plans and specifications directly to the Division of Structural Design. If any changes in the design plans are proposed by a fabricator or supplier, submit those changes to the Department through the Contractor.

FOUNDATION DATA: See Foundation Layout Sheet.

DIMENSIONS: Dimensions are for a normal temperature of 60 degrees Fahrenheit. Layout dimensions are horizontal dimensions.

MASONRY COATING: Contrary to the Specifications, do not apply Masonry Coating. Apply Concrete Sealing in place of Masonry Coating as noted in CONCRETE SEALER note.

CONCRETE SEALER: All areas detailed in the specifications as requiring masonry coating shall be sealed in accordance with the special note for concrete sealing. The superstructure deck shall also be sealed as shown herein these plans. Concrete surfaces (except the deck) shall receive the ordinary surface finish as described in section 601.03.18(A) prior to being sealed.

CORK: The cost for cork under the superstructure and is incidental to the unit price for Class "AA" Concrete.

VERIFYING FIELD CONDITIONS: The contractor shall verify all dimensions before ordering material. New material that is unsuitable because of variations in the field conditions shall be replaced at Contractors expense.

SPREAD FOOTING: This Bridge did not have any drilling performed because rock was noted in the creek.

Based on a review of the existing subsurface conditions and anticipated structural loads, it is recommended that rock bearing foundation system consisting of spread footings be used for all bridge substructure elements. A presumptive bearing resistance of 12 ksf on unweathered bedrock is being recommended.

Excavation for footings at the structure locations should be level and free of loose, water softened material, etc. Additional rock excavation to achieve suitable bearing conditions may be required depending upon topography and bedrock weathering conditions.

Solid rock excavation will be required for installation of the substructure's spread footings. The contractor shall take care during blasting and other excavation methods to avoid over-breakage and damage to the bedrock beneath the footings.

Footing excavations in bedrock shall be cut neatly so that no forming or backfilling is necessary in the construction of the portions of the footings located in rock. Concrete shall be placed directly against the cut rock faces. Mass concrete should be placed in the excavation from the top of the footing to the bedrock surface where the footing does not extend to the bedrock surface.

Bearing elevation of footings may be adjusted at the discretion of the Engineer if competent, unweathered bedrock is found at a higher elevation than specified for the respective substructure element. The top of new spread footings should be fully embedded into unweathered bedrock. At a minimum, two-foot embedment into competent bedrock shall be maintained.

Prior to placement of any concrete or reinforcing steel in a foundation excavation, the excavation bottom should be clean and all soft, wet, or loose materials should be removed. In no case should concrete be placed upon compressible or water-softened materials. Any clay seams or suspect weak materials at or near the bearing elevation will need to be undercut and replaced with mass concrete.

The bedrock at this location is highly susceptible to weathering and softening in the presence of water. Water must be kept out of the footing excavations. The footing steel and concrete should be placed the same day as or as soon as practical after the footing excavation is made. If the bedrock becomes softened at bearing elevation, the softened material should be undercut to unweathered material prior to placing the concrete.

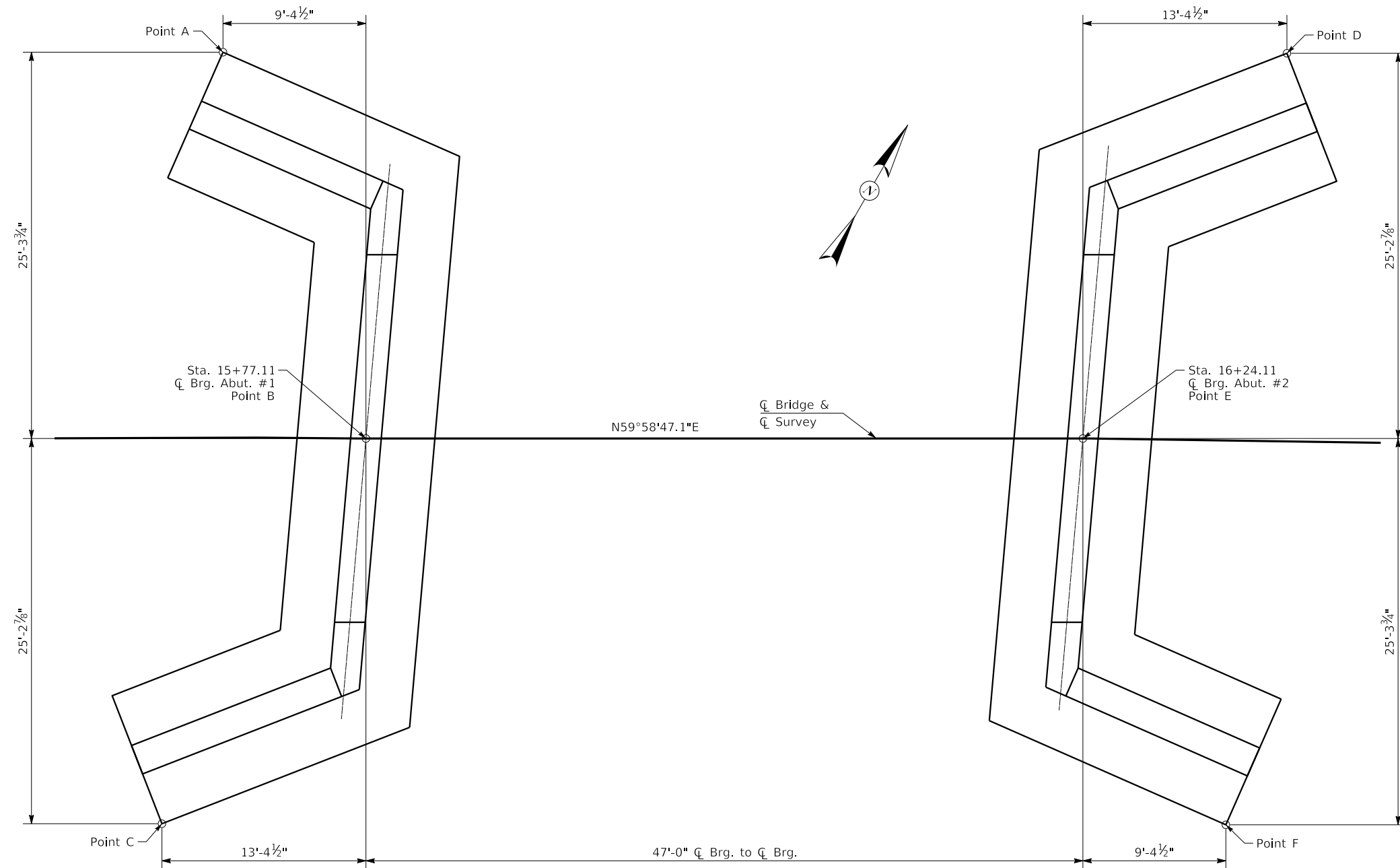
Sheeting, shoring, cofferdams and/or dewatering methods may be required for construction of the substructures. Include all costs in the lump sum bid for Foundation Preparation.

Removal of existing spread footings will be required in the excavation for proposed spread footings. The existing footings shall be removed and the base of the new spread footings must be at or below the base of the existing footings. (Note: Minimum 2.0 feet of embedment must still be maintained.)

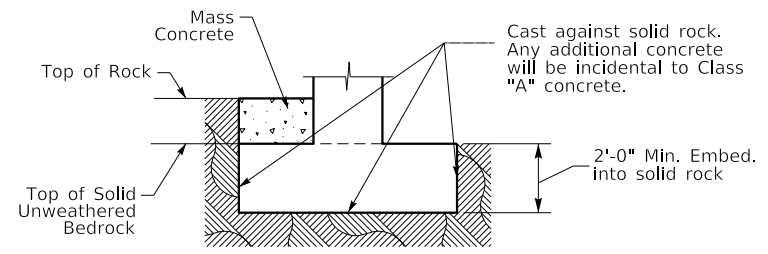
SUPERSTRUCTURE SLAB: The superstructure slab shall be poured continuously from end to end of slab before allowing concrete to set.

The following abbreviations may have been used in the preparation of these plans:

bet.	Between
b.f.	Back Face
BOF	Bottom of Footing
BOS	Bottom of Slab
bot.	Bottom
Brg.	Bearing
C to C	Center to Center
c.e.	Current Edition
C.Y.	Cubic Yard
Chd.	Chord
CL	Center Line
Clr.	Clear
Conc.	Concrete
Cu.	Cubic
Dwg.	Drawing
e.f.	Each Face
El.	Elevation
eq.	Equal
Est.	Estimate
Ext.	Exterior
F to F	Face to Face
f.f.	Front Face
f.s.	Far Side
fr.	Front
ft.	Feet
I.D.	Inside Diameter
in.	Inch
Int.	Interior
L	Left
LBS	Low Bridge Seat
LBS.	Pounds
M	Meter
MPH	Miles per Hour
n.s.	Near Side
O.D.	Outside Diameter
Opp.	Opposite
PC	Point of Curve
Perp.	Perpendicular
PI	Point of Intersection
PPC	Precast Prestressed Concrete
PPCDU	Precast Prestressed Concrete Deck Unit
PSI	Pounds per Square Inch
PT	Point of Tangent
R	Radius
R	Right
RCBC	Reinforced Concrete Box Culvert
RCDG	Reinforced Concrete Deck Girder
Req'd.	Required
RR	Railroad
Shld	Shoulder
spa.	Spaces
Sta.	Station
Std.	Standard
Str.	Straight
Tan	Tangent
Thru	Through
TOF	Top of Footing
TOS	Top of Slab
Tot.	Total
Typ.	Typical
Vert.	Vertical
W. P.	Working Point
Yd.	Yard



FOUNDATION LAYOUT



Note: Contractor shall pour mass concrete (Class B) on top of footing between top of footing and top of rock to prevent scour. All costs incidental to Foundation Preparation.

Spread Footing Record Abutment #1		
Point	Plan Footing Elevation	As-Built Footing Elevation
A	803.928	
B	803.928	
C	803.928	

Footing is designed for a maximum pressure of 8 KSF.
The allowable bearing capacity is 12 KSF.

The Project Resident Engineer is to record the "As-Built Footing Elevation" taken at the bottom of footing and submit one copy of this sheet to:

Kentucky Transportation Cabinet
Director, Division of Structural Design
3rd Floor East
200 Mero Street
Frankfort, KY 40622

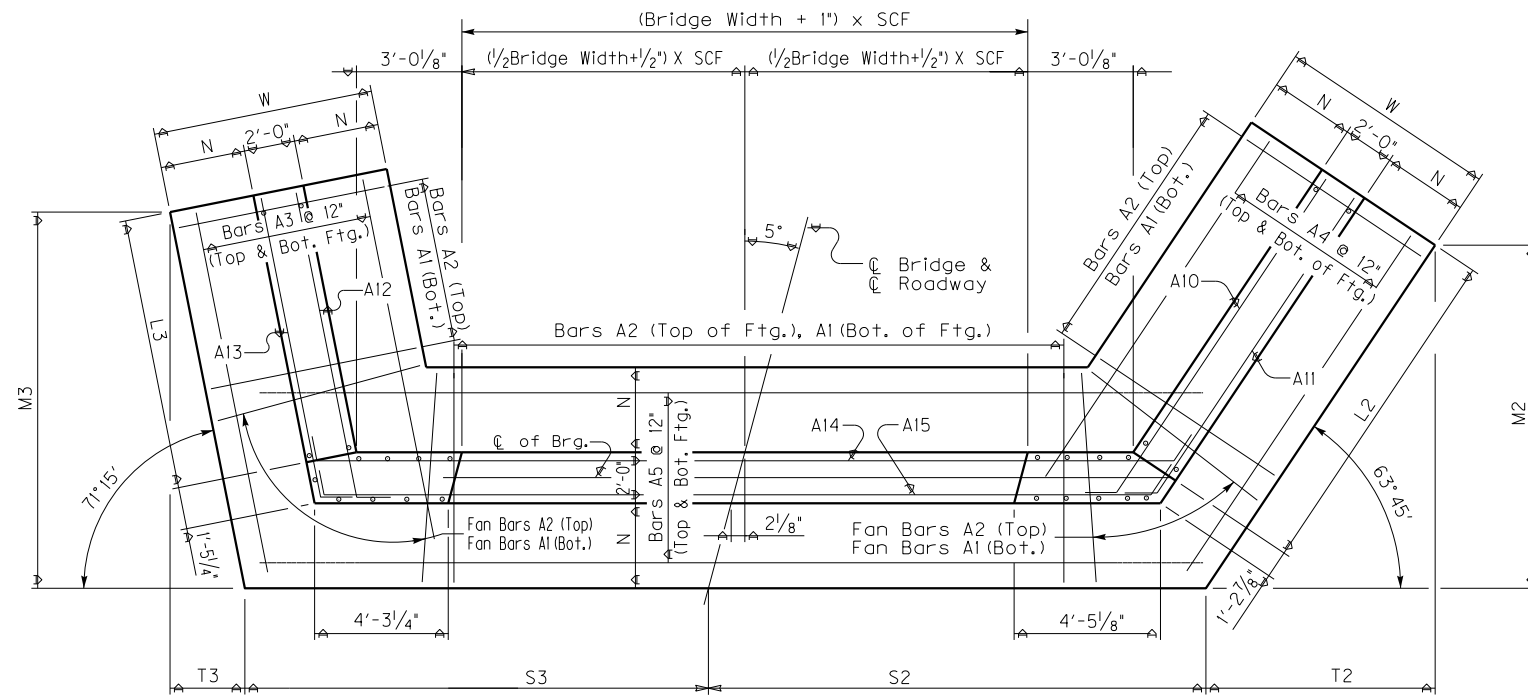
If the spread footing foundation is stepped due to unsuitable material found at the given elevation, record the location and elevation of the step as well.

Spread Footing Record Abutment #2		
Point	Plan Footing Elevation	As-Built Footing Elevation
D	803.642	
E	803.642	
F	803.642	

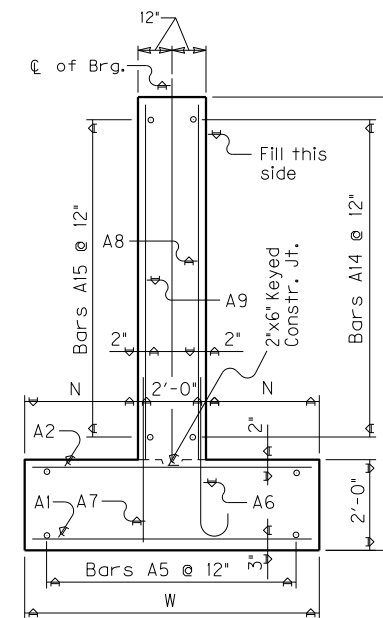
Footing is designed for a maximum pressure of 8 KSF.
The allowable bearing capacity is 12 KSF.

5° SKEW VARIABLE BRIDGE WIDTH 2:1 FILL SLOPES WINGS SKEWED 25% FROM ROADWAY TO BREASTWALL

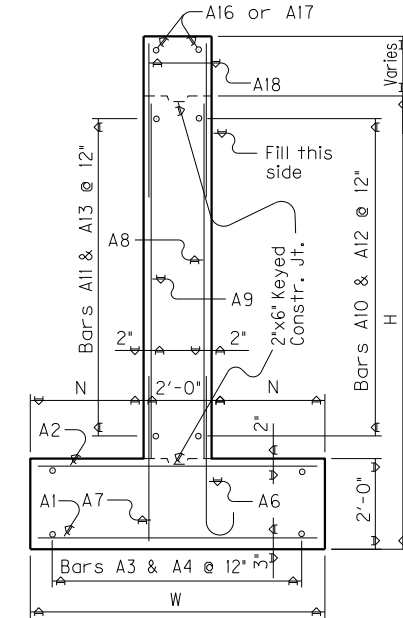
ABUTMENT SKEW CORRECTION FACTOR (SCF) = 1.004



(Left Skew as shown; right skew opp. hand) **PLAN**



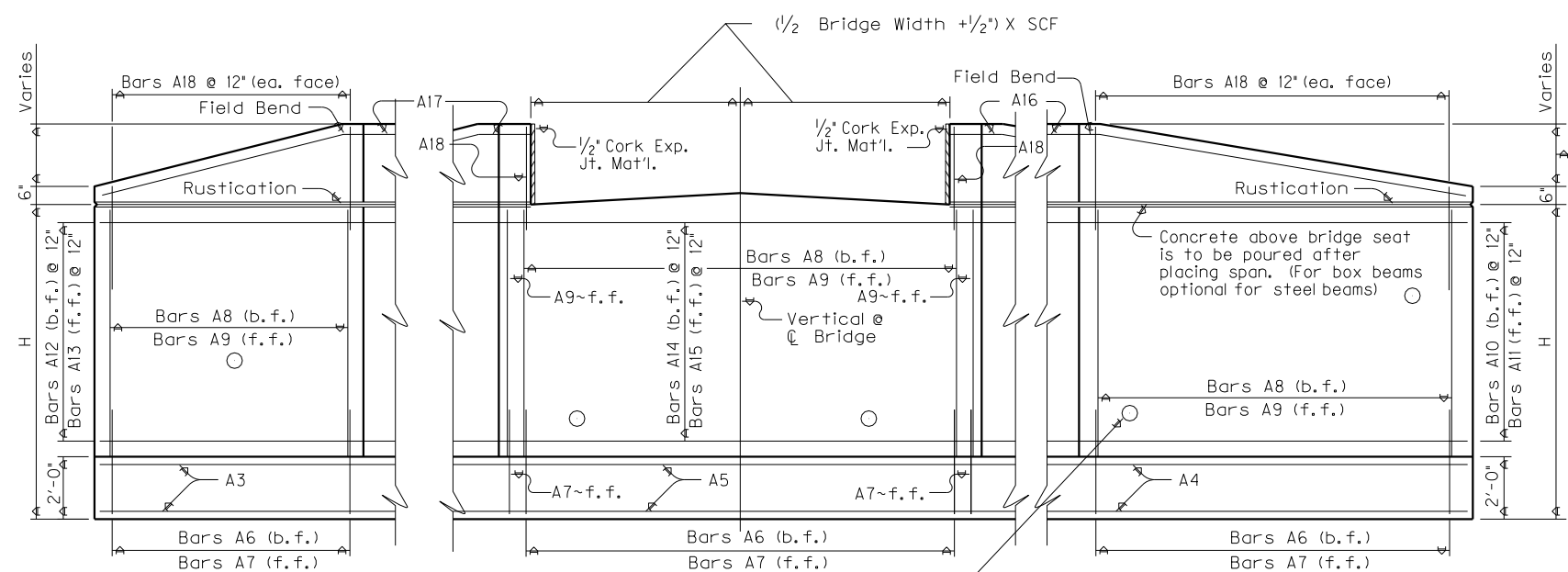
WALL SECTION



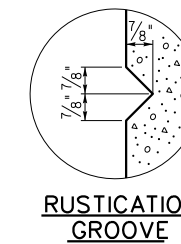
WING SECTION

H = Low Bridge Seat. Slope seat for side by side box beams. Step cap as necessary for rolled steel beam superstructures to achieve a 2% cross slope on deck.

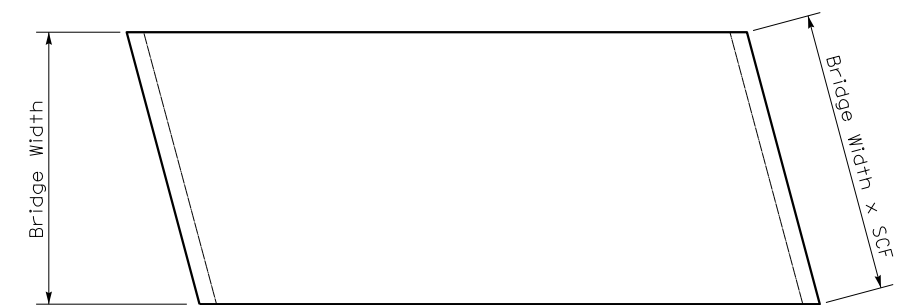
Note: Trim A16 & A17 bars if necessary



ELEVATION



RUSTICATION GROOVE

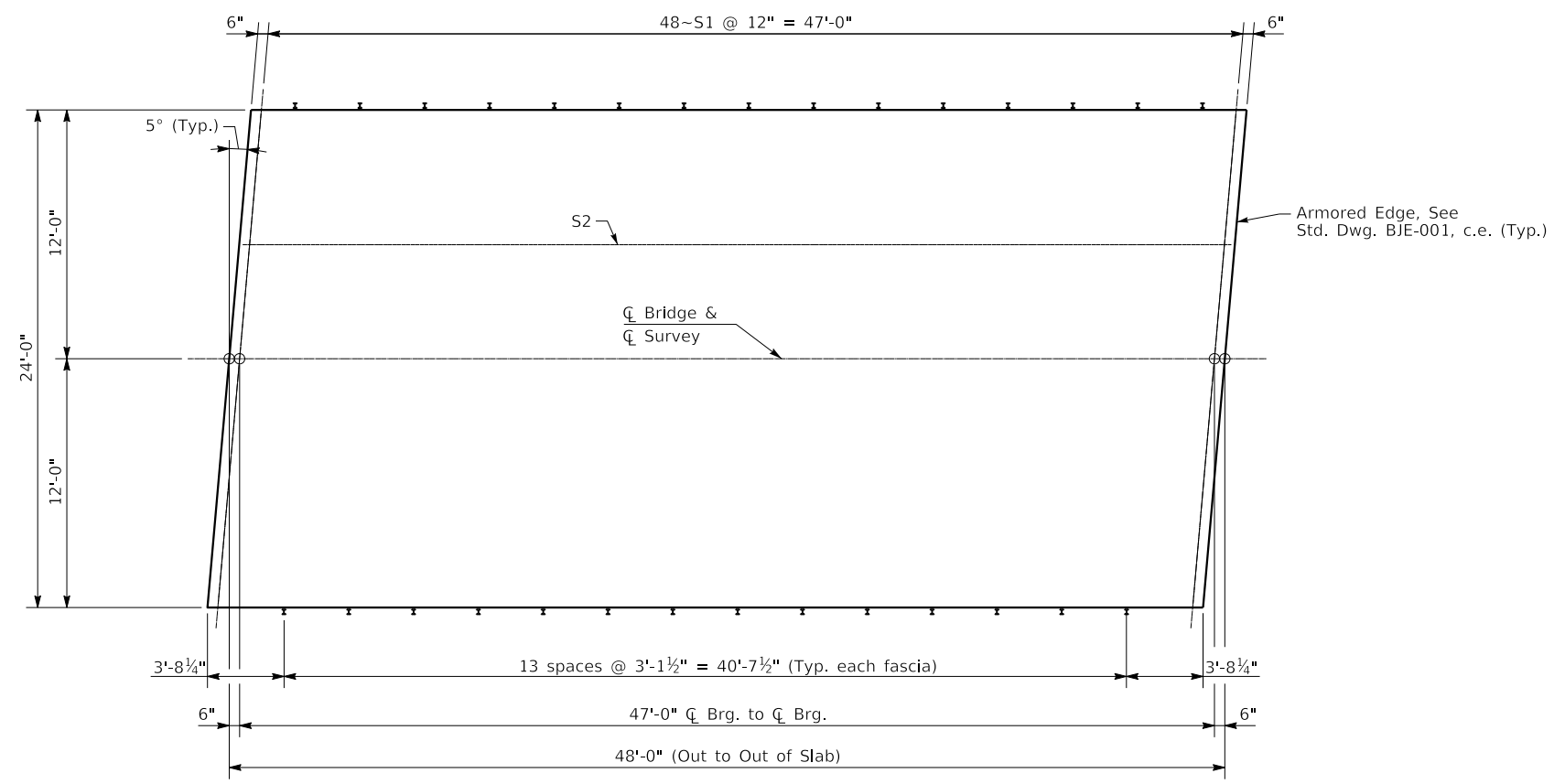


PLAN OF SUPERSTRUCTURE SLAB

Place 4\" weep hole drains at 8'-0\" centers at such elevation as to afford best drainage of backfill, in accordance with the Standard Specifications.

ABUTMENT DETAILS	ROUTE	ITEM NO.	COUNTY OF
	KY 1195	4-40000.00	MARION
CROSSING Pleasant Creek Run	SHEET NO.	DRAWING NUMBER	
	S5	28693	

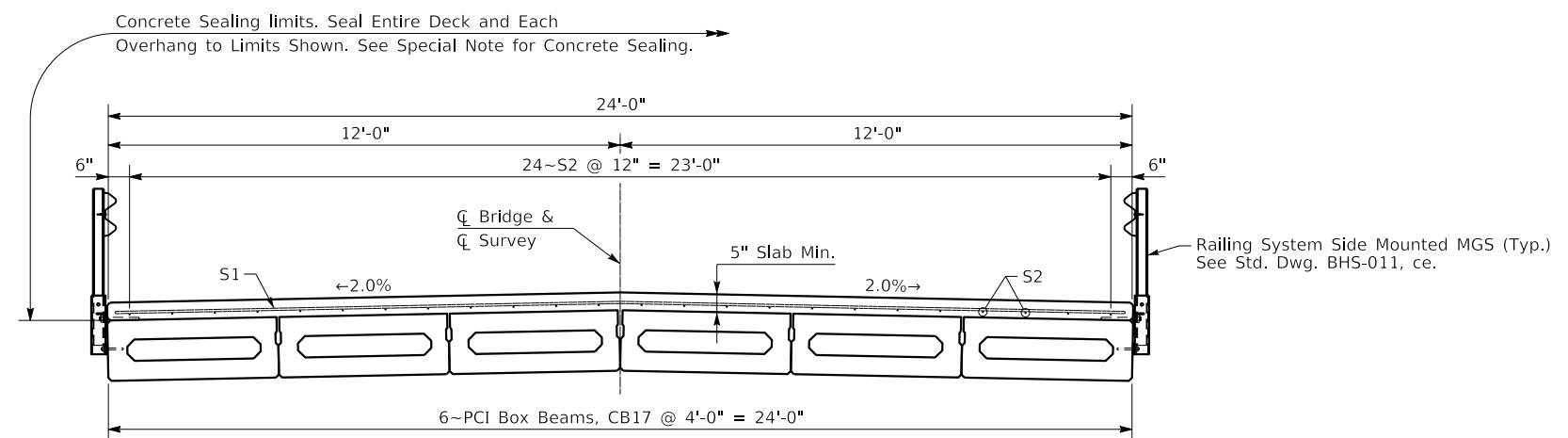
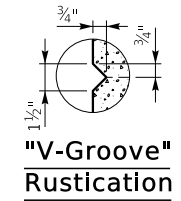
BILL OF REINFORCEMENT					
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION
S1e	Str.	48	5	23'-9"	Slab
S2e	Str.	24	5	47'-8"	Slab



PLAN OF SLAB

NOTE: Contrary to the Standard Drawings (5" slab thickness), the construction elevations will cause the slab to be approximately 6.4" thick at the ends and go to approximately 5" thick at the center of the bridge. This is how the quantities of Class AA Concrete were calculated. There should not be any additional concrete due to the max and min. allowable slab depths shown on the construction elevations.

NOTE: Guardrail inserts in beam will need to be varied vertically to maintain proper clearance to top of slab.



TYPICAL SECTION

