

# Index Of Sheets

SEE SHEET NO. 1A



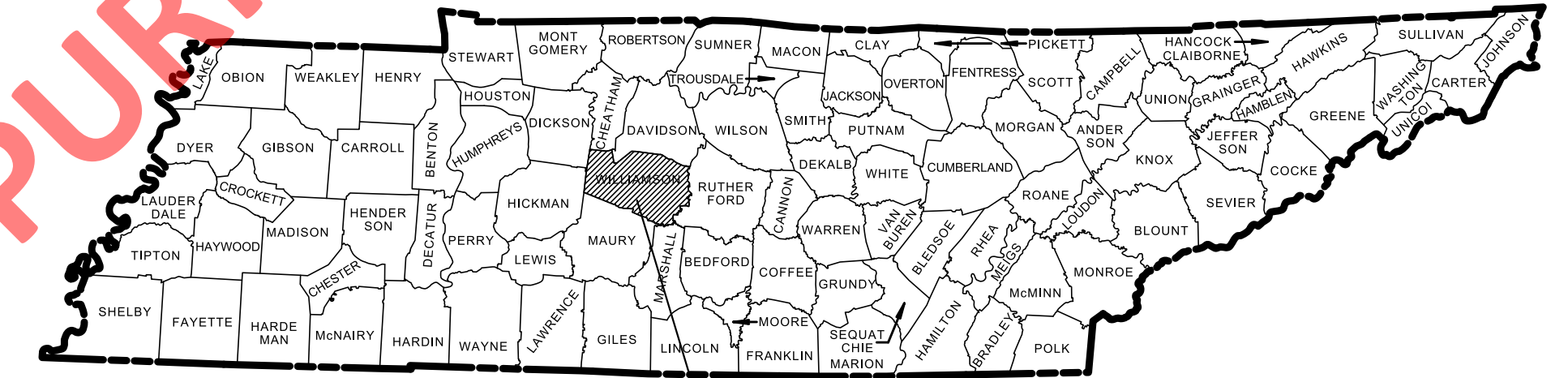
## CITY OF FRANKLIN, TENNESSEE WILLIAMSON COUNTY

HARLINSDALE FARM MULTI-USE PATH BEGINNING AT THE CHESTNUT BEND SUBDIVISION FROM THE HARPEATH RIVER TO RUBY F. LYNCH TRAILHEAD IN FRANKLIN

### CONSTRUCTION

CITY OF FRANKLIN	YEAR	SHEET NO.
	2022	1
FED. AID PROJ. NO.	TAP-9305(32)	
STATE PROJ. NO.	94LPLM-F3-104	

LOCALLY MANAGED AND LOCALLY LET



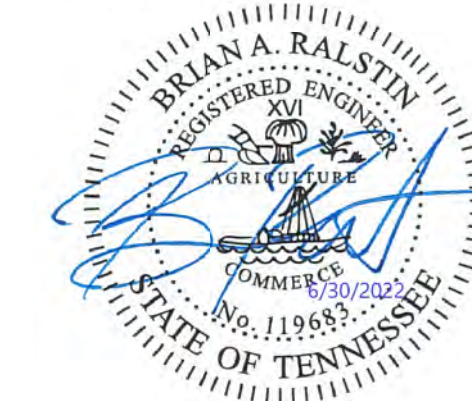
PROJECT LOCATION



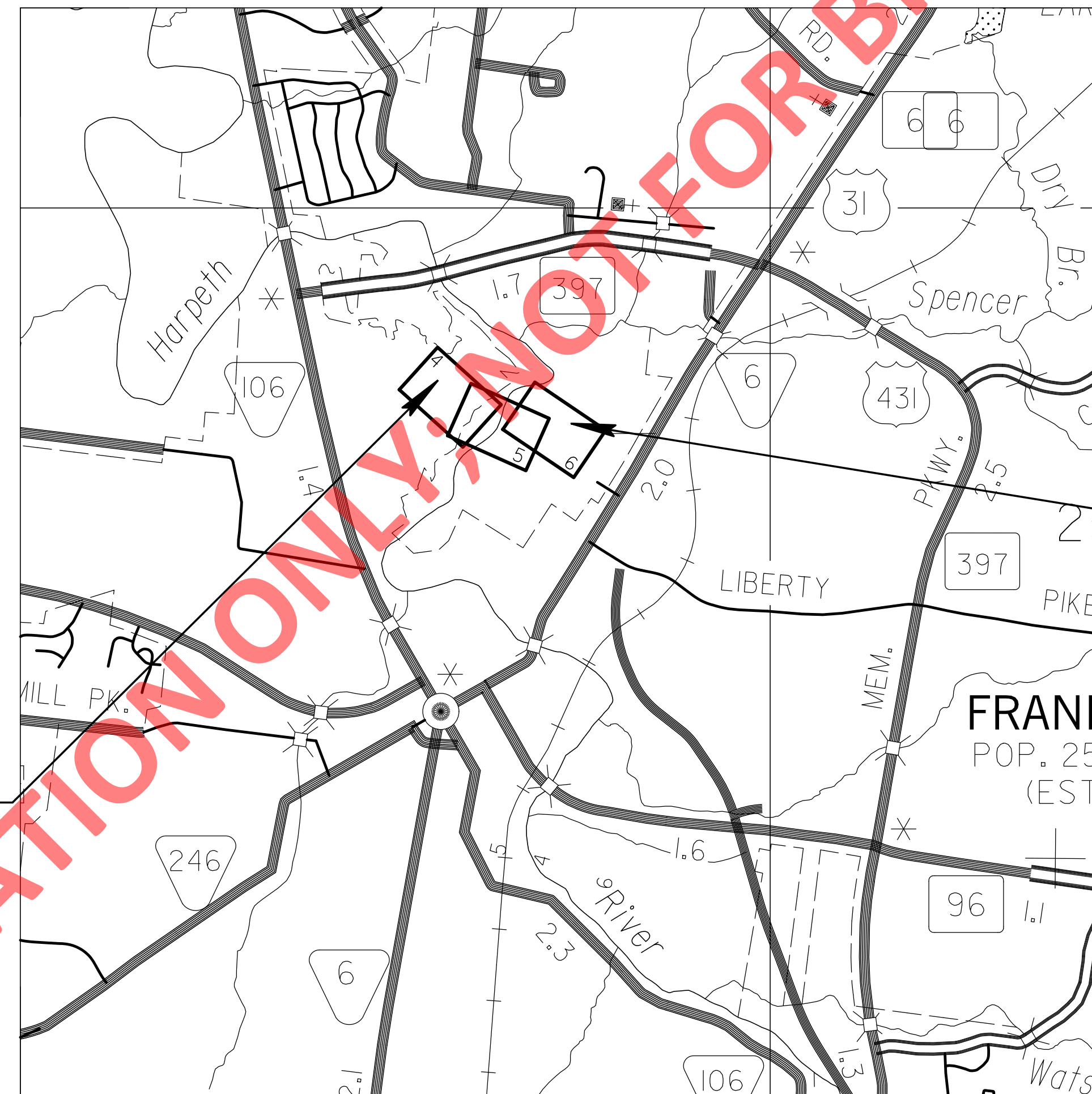
574 Franklin Road, Suite 300  
Franklin, TN 37069  
PHONE: 615.370.6079  
www.benesch.com

NO EXCLUSIONS
NO EXCEPTIONS
NO R.O.W. ACQUISITION

TAP-9305(32)  
END PROJECT NO: 94LPLM-F3-104 R.O.W. & CONST.  
COFIU STA. 105+74.95  
N 585412.3534  
E 1712852.5755



SURVEY	TRAFFIC DATA
SURVEY 01-16-20	
SURVEY UPDATE 02-11-20	ADT (20XX) N/A
SURVEY UPDATE 05-08-20	ADT (20XX) N/A
	DHV (20XX) N/A
	D N/A
	T (ADT) N/A
	T (DHV) N/A
	V 18 MPH



R.O.W. LENGTH	0.000 MILES
ROADWAY LENGTH	0.620 MILES
BRIDGE LENGTH	0.042 MILES
BOX BRIDGE LENGTH	0.005 MILES
PROJECT LENGTH	0.667 MILES

COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

APPROVED:

PAUL HOLZEN, P.E. DATE  
DIRECTOR / CITY ENGINEER

TAP-9305(32)  
BEGIN PROJECT NO: 94LPLM-F3-104 R.O.W. & CONST.  
COFHP STA. 11+35.00  
N 586199.6667  
E 1710388.2351

#### SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE CITY OF FRANKLIN IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT

CITY OF FRANKLIN ENGINEERING DEPARTMENT  
PAUL HOLZEN, P.E.  
DIRECTOR OF ENGINEERING

DESIGNED BY ALFRED BENESCH & COMPANY

DESIGNER BRIAN RALSTIN, PE

TDOT PIN 126630.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	1A

# ROADWAY INDEX

# STANDARD ROADWAY DRAWINGS

SHEET NAME	SHEET NO.
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
ESTIMATED ROADWAY AND SLAB BRIDGE QUANTITIES .....	2A
TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B, 2B1
GENERAL NOTES .....	2C
SPECIAL NOTES .....	2D
ENVIRONMENTAL NOTES .....	2E
TABULATED QUANTITIES .....	2F
OVERALL SITE PLAN .....	2G
LANDSCAPE AND HARDSCAPE ENLARGEMENTS .....	2G1
BRIDGE LAYOUT ENLARGEMENTS .....	2G2
HARDSCAPE DETAILS .....	2G3
LANDSCAPE DETAILS & NOTES .....	2G4
SLAB BRIDGE LAYOUT .....	2H
SLAB BRIDGE TYPICAL SECTION .....	2H1
SLAB REINFORCEMENT .....	2H2
WINGWALL DETAILS .....	2H3
SLAB BRIDGE DETAILS .....	2H4
DETAIL SHEET .....	2J
RIGHT-OF-WAY NOTES, UTILITY NOTES AND UTILITY OWNERS .....	3
PROPERTY MAP AND RIGHT-OF-WAY ACQUISITION TABLE .....	3A
PRESENT LAYOUTS .....	4 – 6
PROPOSED LAYOUTS .....	4A – 6A
PROPOSED PROFILES .....	4B – 6B
PROFILE OF INNER URBAN .....	7
PROFILE OF NEIGHBORHOOD CONNECTOR .....	8
PROFILE OF HIGH-FLOW BYPASS .....	9
DRAINAGE MAP .....	10
CULVERT CROSS-SECTIONS .....	11
EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) NOTES .....	12
EPSC, LEGEND, QUANTITIES & OUTFALL TABLE .....	13
EROSION PREVENTION AND SEDIMENT CONTROL PLANS .....	14-22
CROSS SECTION SHEETS .....	23 – 45
CROSS SECTION SHEETS (INNER URBAN) .....	46 – 49
CROSS SECTION SHEETS (NEIGHBORHOOD CONNECTOR) .....	50 – 53
CROSS SECTION SHEETS (HIGH-FLOW BYPASS) .....	54 – 60
TRAFFIC CONTROL PLANS .....	T1 – T2
LIGHTING GENERAL NOTES .....	L1
LIGHTING SUMMARY OF QUANTITIES .....	L2
LIGHTING SCHEDULES .....	L3
LIGHTING LAYOUT .....	L4
LIGHTING DETAIL .....	L5
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) .....	S-1 - S-9
BRIDGE PLANS .....	B1 – B22

NOTE: THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT USED IN NUMBERING OF SHEETS.

### STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS AND LEGENDS

DWG.	REV.	DESCRIPTION
RD-TP-1	09-26-16	STANDARD ROADWAY DRAWINGS TITLE SHEET
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD-L-2	02-20-20	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	02-20-20	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	02-20-20	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-5	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL

### ROADWAY DESIGN STANDARDS

RD11-S-11		DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD11-S-11A		ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION

### PIPE CULVERTS AND ENDWALLS

D-PB-1	03-04-21	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION
D-PE-18A	06-28-19	18" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES)
D-PE-18B	06-28-19	18" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES)
D-PE-4	06-28-19	STRAIGHT CONCRETE ENDWALL
D-PEW-1		PROTECTED ENDWALLS FOR ROUND & OVAL PIPES (PIPE SIZES 18" TO 72", ALL SKEWS, 2:1 & 3:1 SLOPES)
D-PEW-2		PROTECTED ENDWALLS FOR ROUND PIPES DETAILS & QUANTITIES (PIPE SIZES 18" TO 72", ALL SKEWS, 2:1 & 3:1 SLOPES)

### CATCHBASINS AND MANHOLES

D-MH-2	02-20-20	STANDARD MASONRY & PRECAST NO. 3 MANHOLE
D-MH-3	02-20-20	TYPICAL DESIGN OF LIDS FOR NO. 3 MANHOLE

### ROADWAY, PAVEMENT APPURTENANCES, AND FENCES

S-F-1	06-28-19	HIGH VISIBILITY FENCE
-------	----------	-----------------------

### MULTIMODAL

MM-TS-1	06-15-21	BIKE ACCOMMODATION DESIGN GUIDANCE
MM-TS-2	06-15-21	LATERAL OFFSETS FOR SIDEWALK AND SHARED USE PATH
MM-TS-3	01-28-22	SEPARATED SHARED USE PATH TYPICAL SECTIONS

### DWG. REV. DESCRIPTION

#### DESIGN - TRAFFIC CONTROL

T-WZ-55	10-29-21	SIDEWALK TRAFFIC CONTROL
---------	----------	--------------------------

#### EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3C	06-28-19	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-27	08-01-12	TEMPORARY SLOPE DRAIN AND BERM
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-6	11-30-20	ROCK CHECK DAM
EC-STR-6A	05-06-16	ENHANCED ROCK CHECK DAM
EC-STR-11	03-16-17	CULVERT PROTECTION TYPE 1
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD

#### BRIDGE APPURTENANCES ENGLISH (NEW STRUCTURES)

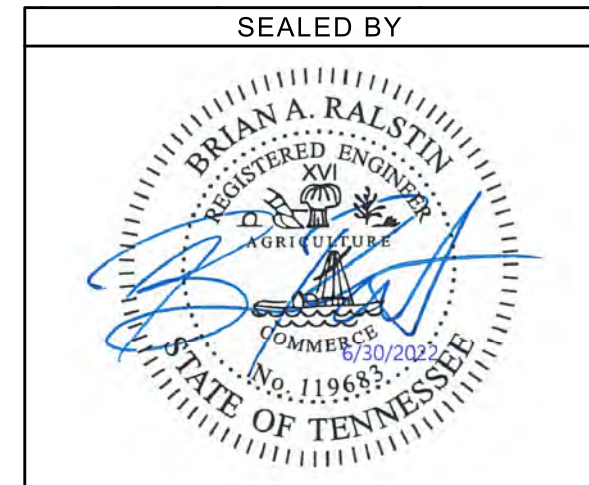
STD-10-1	03-01-22	MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS
----------	----------	---

#### BRIDGE APPURTENANCES ENGLISH (LRFD BOX CULVERTS)

STD-17-15		WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS
-----------	--	---

FOR INFORMATION ONLY - NOT FOR BIDDING PURPOSES

6/30/2022 11:25:02 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\001A\_Index.sht



**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**ROADWAY INDEX  
AND  
STANDARD  
ROADWAY  
DRAWINGS**

9/1/2022 3:18:31 PM  
 Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\002A\_Estimated Qty.sht

**ESTIMATED ROADWAY QUANTITIES**

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
(2) 202-01.50	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	EACH	2
(9)(24) 203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	22058
203-04	PLACING AND SPREADING TOPSOIL	C.Y.	1351
(1)(3)(9)(26) 203-50	CONSTRUCTION OF HAUL ROAD	L.S.	1
(1)(3)(9) 209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	55
(1)(3)(9) 209-05	SEDIMENT REMOVAL	C.Y.	255
(1)(3)(9)(20) 209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	5940
(1)(3)(9) 209-08.07	ROCK CHECK DAM	EACH	25
(1)(3)(9) 209-08.08	ENHANCED ROCK CHECK DAM	EACH	27
(1)(3)(9)(10) 209-09.03	SEDIMENT FILTER BAG (15'X15')	EACH	3
(1)(3)(9) 209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	3
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1855
(1)(3)(9)(11) 303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	40
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	235
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	2
402-02	AGGREGATE FOR COVER MATERIAL	TON	7
403-02.01	TRACKLESS TACK COAT	TON	1
411-01.11	ACS MIX(PG64-22) GRADING E ROADWAY	TON	111
(1)(3)(27)(28) 411-01.11A	ACS MIX(PG64-22) GRADING E ROADWAY (WEST TN MIX)	TON	100
(1)(3)(27) 415-01.02	COLD PLANING BITUMINOUS PAVEMENT	SY	1550
(5) 607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	34
(5) 607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	34
(5) 607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L.F.	200
611-01.02	MANHOLES, > 4' - 8' DEPTH	EACH	3
(22) 611-01.21	REWORK MANHOLE	EACH	1
611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	10
611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	422
701-01.01	CONCRETE SIDEWALK (4 ")	S.F.	22433
(6)(25) 701-01.02	CONCRETE SIDEWALK (6 ")	S.F.	14449
(1)(3)(9) 707-08.11	HIGH VISIBILITY CONSTRUCTION FENCE	L.F.	8086
(1)(3)(9)(13) 709-05.05	MACHINED RIP RAP (CLASS A-3)	TON	80
(1)(3)(9)(14) 709-05.06	MACHINED RIP RAP (CLASS A-1)	TON	79
(1)(3)(15) 709-05.08	MACHINED RIP RAP (CLASS B)	TON	436
712-01	TRAFFIC CONTROL	L.S.	1
712-06	SIGNS (CONSTRUCTION)	S.F.	14
712-07.02	TEMPORARY BARRICADE (TYPE II)	L.F.	84
(18)(25) 713-16.20	SIGNS (TRAIL MILE MARKERS)	EA	1
(18)(25) 713-16.21	SIGNS (TRAIL SIGNAGE)	EA	1
(19)(25) 713-16.22	SIGNS (BRIDGE LETTERS)	EA	24
714-03.03	DIRECT BURIAL CONDUIT (1" PVC, SCH 40)	L.F.	273
714-03.04	DIRECT BURIAL CONDUIT (3/4" PVC, SCH 40)	EA	232
714-05.05	PULL BOXES (LARGE)	EA	3
(29) 717-01	MOBILIZATION	L.S.	1
725-20.52	CABLE (1/C #12 AWG.)	L.F.	2560
725-20.53	CABLE (1/C #10 AWG.)	L.F.	1580
(21) 730-05.01	ELECTRICAL SERVICE CONNECTION	EA	1
(1)(3)(9)(12) 740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	894
(1)(3)(9) 740-11.05	TEMPORARY SEDIMENT TUBE (24 INCH)	L.F.	2200
(23)(25) 795-51.01	BOLLARD	EA	6
(21)(25) 798-07.02	PEDESTAL CABINET	EA	1
(1)(3)(7)(9) 801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	200
(4)(9) 801-03	WATER (SEEDING & SODDING)	M.G.	169
(16)(25) 802-01.10	TREES (PISTACIA CHINENSIS 3" CAL. B&B)	EACH	2
(17)(25) 802-07.01	FLOWER (COREOPSIS LANCEOLATA 'EARLY SUNRISE')	EACH	93
(17)(25) 802-07.02	FLOWER (GAILLARDIA X GRANDIFLORA)	EACH	93
(17)(25) 802-07.03	FLOWER (GERANIUM X 'BROOKSIDE')	EACH	42
(17)(25) 802-07.04	FLOWER (LEUCANTHEMUM X SUPERBUM 'BECKY')	EACH	42
(17)(25) 802-07.05	FLOWER (RUDBECKIA HIRTA 'CHEROKEE SUNSET')	EACH	93
(7)(8) 803-01	SODDING (NEW SOD)	S.Y.	15207

**SLAB BRIDGE QUANTITIES**

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(1) 303-01.02	GRANULAR BACKFILL (BRIDGES)	TON	553
604-02.03	EPOXY COATED REINFORCING STEEL	LB.	5960
604-03.01	CLASS A CONCRETE (BRIDGES)	C.Y.	110
604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	LB.	11320
(2) 710-09.01	6" PERFORATED PIPE WITH VERTICAL DRAIN SYSTEM	L.F.	142
710-09.02	6" PIPE UNDERDRAIN	L.F.	40

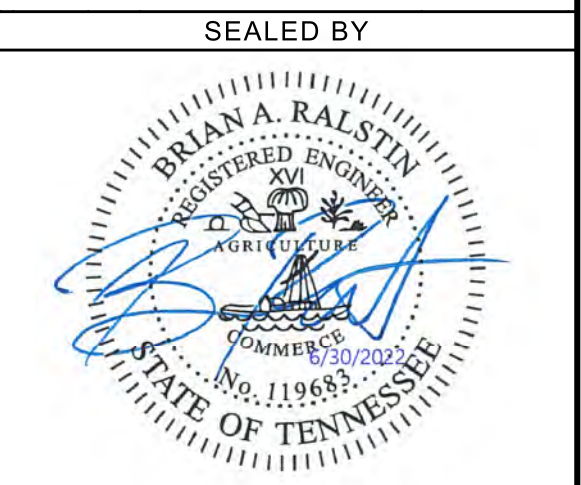
**SLAB BRIDGE FOOTNOTES**

(1)	GRANULAR BACKFILL SHALL BE CLASS "A" GRADING "D" MATERIAL. SEE STANDARD DRAWING NO. STD-10-1
(2)	COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN THE UNIT PRICE BID FOR PERFORATED PIPE.

**ROADWAY QUANTITY FOOTNOTES**

(1)	ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
(2)	PAY ITEM TO INCLUDE COSTS FOR ALL ASPECTS OF REMOVAL OF HEADWALL AT COFHP STA. 37+90.28 OFF 24.70' RT. AND MANHOLE LOCATED AT COFHP STA. 38+34.16 OFF. 58.97' RT.
(3)	QUANTITY MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.
(4)	PAY ITEM INCLUDES 16 M.G. FOR TEMP. SEEDING NECESSARY FOR EPSC.
(5)	THE BEDDING AND BACKFILL MATERIAL SHALL BE INCLUDED IN THE COST OF THE PROPOSED PIPE CULVERT REGARDLESS OF LOCATION.
(6)	PAY ITEM TO INCLUDE ALL INCIDENTALS. THIS SHALL INCLUDE THE COST OF THE STAMP PATTERN, COLOR ELEMENTS, LIQUID RELEASE AGENT, AND ALL COMPONENTS NECESSARY TO COMPLETE THE STAMPED CONCRETE AS SHOWN ON SHEET 2G3
(7)	THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING SATISFACTORY STAND OF GRASS TO ACHIEVE TDEC PERMIT REQUIREMENTS. PRICE SHALL INCLUDE ALL MATERIAL AND LABOR NECESSARY FOR CONSTRUCTION AND MAINTENANCE TO INCLUDE PREPARATION OF TOPSOIL, SEEDING, MULCH/STRAW, WATER, ETC. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUPPLEMENTAL REPAIR SEEDING.
(8)	SOD SHALL CONSIST OF ROLLS OF VIGOROUS GROWING DENSE PERENNIAL GRASS TURF. THE MINIMUM THICKNESS FOR GRASS SOD IS TWO INCHES. LAY THE SOD WITHIN 48 HOURS OF HARVEST.
(9)	SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
(10)	PAY ITEM INCLUDES ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF SEDIMENT FILTER BAGS.
(11)	PAY ITEM INCLUDES 27 TON FOR SEDIMENT FILTER BAG (15'X15') AND 13 TON FOR CULVERT PROTECTION TYPE 1.
(12)	PAY ITEM INCLUDES 94 S.Y. FOR SEDIMENT FILTER BAG (15'X15'), 162 S.Y. FOR CULVERT PROTECTION TYPE 1, 140 S.Y. FOR TEMPORARY CONSTRUCTION EXITS, 467 S.Y. FOR SPECIAL DITCH (COFHP STA. 24+30.00 TO STA. 25+89.40) AND 31 S.Y. FOR CULVERT OUTLETS LOCATED AT COFHP STA. 33+90.00 OFF. 16.43 LT. COFHP STA. 36+41.49 OFF. 85.98 LT. AND COFIU 102+50.00 OFF. 30.55 LT.
(13)	PAY ITEM FOR TEMPORARY CONSTRUCTION EXITS.
(14)	PAY ITEM INCLUDES 10 TON FOR TEMPORARY SLOPE DRAIN AND 69 TON FOR CULVERT PROTECTION TYPE 1.
(15)	PAY ITEM INCLUDES 409 TON FOR SPECIAL DITCH (COFHP STA. 24+30.00 TO STA. 25+89.40) AND 27 TON FOR CULVERT OUTLETS LOCATED AT COFHP STA. 33+90.00 OFF. 16.43 LT. COFHP STA. 36+41.48 OFF. 85.98 LT. AND COFIU 102+50.00 OFF. 30.55 LT.
(16)	PAY ITEM TO INCLUDE ALL INCIDENTALS NEEDED FOR INSTALLATION INCLUDING 4 INCH OF MULCH. SEE NOTES ON SHEET 2G4 FOR MORE DETAILS REGARDING INSTALLATION.
(17)	PAY ITEM TO INCLUDE ALL INCIDENTALS NEEDED FOR INSTALLATION INCLUDING 1 INCH OF MULCH PER LOCATION. SEE NOTES ON SHEET 2G4 FOR MORE DETAILS REGARDING INSTALLATION.
(18)	PAY ITEM TO INCLUDE ALL INCIDENTALS NEEDED FOR INSTALLATION INCLUDING SIGN, POST AND FOOTING. SEE NOTES ON SHEET 2G3 FOR MORE DETAILS REGARDING INSTALLATION.
(19)	PAY ITEM TO INCLUDE ALL INCIDENTALS NEEDED FOR INSTALLATION INCLUDING MOUNTING HARDWARE FOR LETTERS AND ALL NECESSARY ITEMS FOR THE INSTALLATION OF BIRD BARRIERS. SEE NOTES ON SHEET 2G3 FOR MORE DETAILS REGARDING INSTALLATION.
(20)	PAY ITEM INCLUDES 300 LF FOR SEDIMENT FILTER BAG (15'X15')
(21)	THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE CONTROL CENTER(S). THESE CHARGES SHALL BE INCLUDED IN THE BID FOR THIS ITEM. INCLUDES THE COST OF THE CONCRETE PAD(S), 100 AMP DISCONNECT, METER, AND THE STEEL CONDUIT RISER ASSEMBLY. ALSO, INCLUDES THE COST TO FURNISH AND INSTALL TRANSFORMER AS REQUIRED, AND ALL APPURTENANCES REQUIRED FOR THE COMPLETE INSTALLATION.
(22)	PAYMENT FOR THIS WORK SHALL BE CONSIDERED AS FULL COMPENSATION FOR THIS ITEM, INCLUDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE ITEM IN ACCORDANCE WITH THE BIDDING DOCUMENTS. (COFIU STA. 101+76 OFF. -16.30')
(23)	PAY ITEM TO INCLUDE ALL INCIDENTALS NEEDED FOR INSTALLATION INCLUDING BOLLARD AND FOOTING. BOLLARD SHALL INCLUDE RETROREFLECTIVE STRIPING (MIN. TWO STRIPES). STRIPE LOCATION AND COLOR SHALL BE VERIFIED WITH CITY OF FRANKLIN AND ENGINEER. SEE NOTES ON SHEET 2G3 FOR MORE DETAILS REGARDING INSTALLATION.
(24)	PAY ITEM INCLUDES 625 CY FOR TEMPORARY BERM. PAY ITEM INCLUDES ALL EXCAVATION AND FILL PLACEMENT INCLUDING HAULING WITHIN THE PROJECT LIMITS. NO ADDITIONAL PAYMENT WILL BE MADE FOR HAULING MATERIAL FROM EITHER SIDE OF THE PROJECT AROUND THE HARPEATH RIVER. SEE TABULATED QUANTITIES SHEET 2F FOR SPECIFICS REGARDING CUT/FILL ON EACH SIDE OF THE RIVER.
(25)	AESTHETIC, COLOR, AND STYLE CHOICES CAN BE MODIFIED. FINAL SELECTIONS WILL BE MADE BY THE CITY OF FRANKLIN DURING THE PRODUCT/SOP DRAWING SUBMITTAL AND REVIEW PROCESS.
(26)	PAY ITEM SHALL INCLUDE ALL INCIDENTALS NEEDED FOR INSTALLATION AND REMOVAL OF HAUL ROAD MATERIALS INCLUDING GEOTEXTILE (TYPE IV), MACHINED RIP-RAP (CLASS A-1), MINERAL AGGREGATE (SIZE 57) AND TEMPORARY DRAINAGE PIPE IF APPLICABLE. THE MINERAL AGGREGATE (SIZE 57) INCLUDES AN ADDITIONAL 10% FOR MAINTENANCE.
(27)	PAY ITEM FOR AS NEEDED REPAIRS TO EXISTING ASPHALT SURFACE OF THE NORTH ENTRANCE ROAD TO THE PARK AT HARLINSDALE FARM.
(28)	AGGREGATE MIX USED SHALL BE PRIMARILY BROWN IN COLOR (I.E. RIVER GRAVEL) USED IN ACCORDANCE WITH TDOT SPECIFICATION.
(29)	PAY ITEM INCLUDES COSTS TO PERFORM THE WORK REQUIRED BY CITY OF FRANKLIN SPECIAL PROVISION SP100RD-SPECIAL PROVISION RECORDING UTILITY RECORD DRAWINGS.

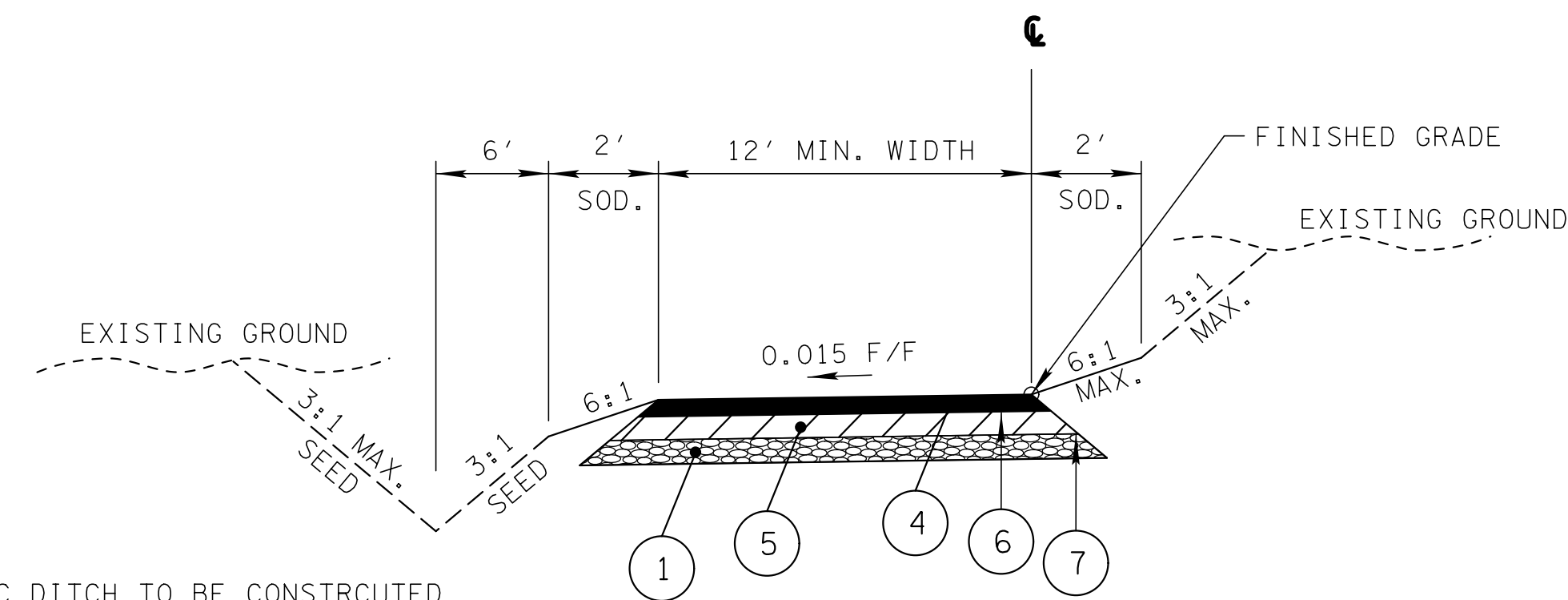
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	2A



**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

**ESTIMATED ROADWAY  
 AND SLAB BRIDGE  
 QUANTITIES**

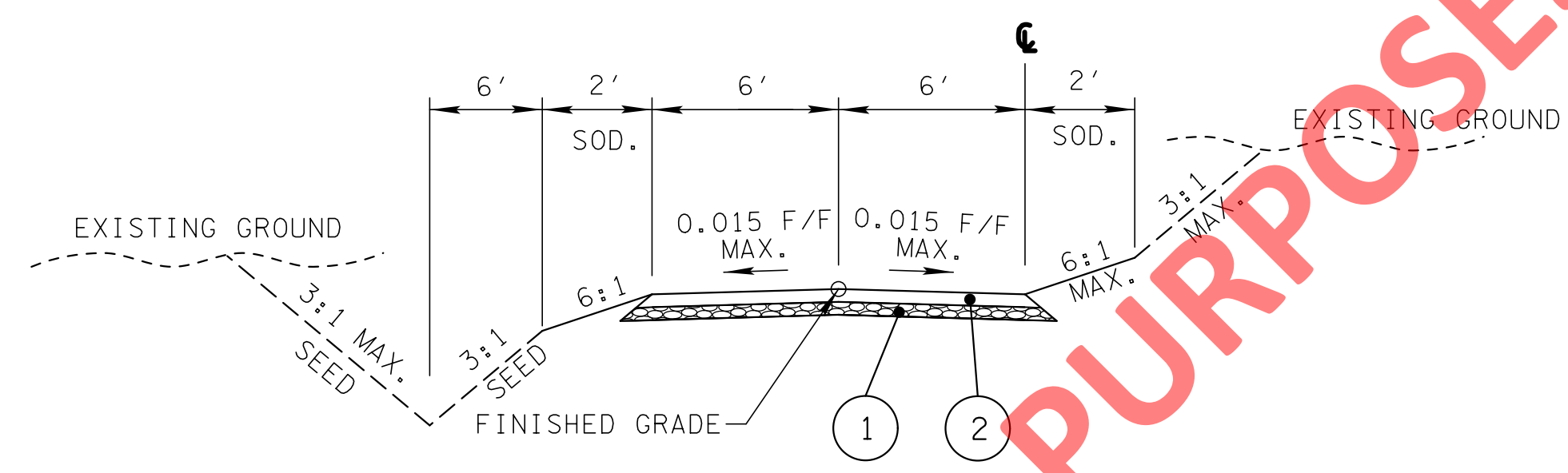
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2B
CONST.	2022	TAP-9305(32)	2B



NOTE: SPC DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

**TYPICAL SECTION**

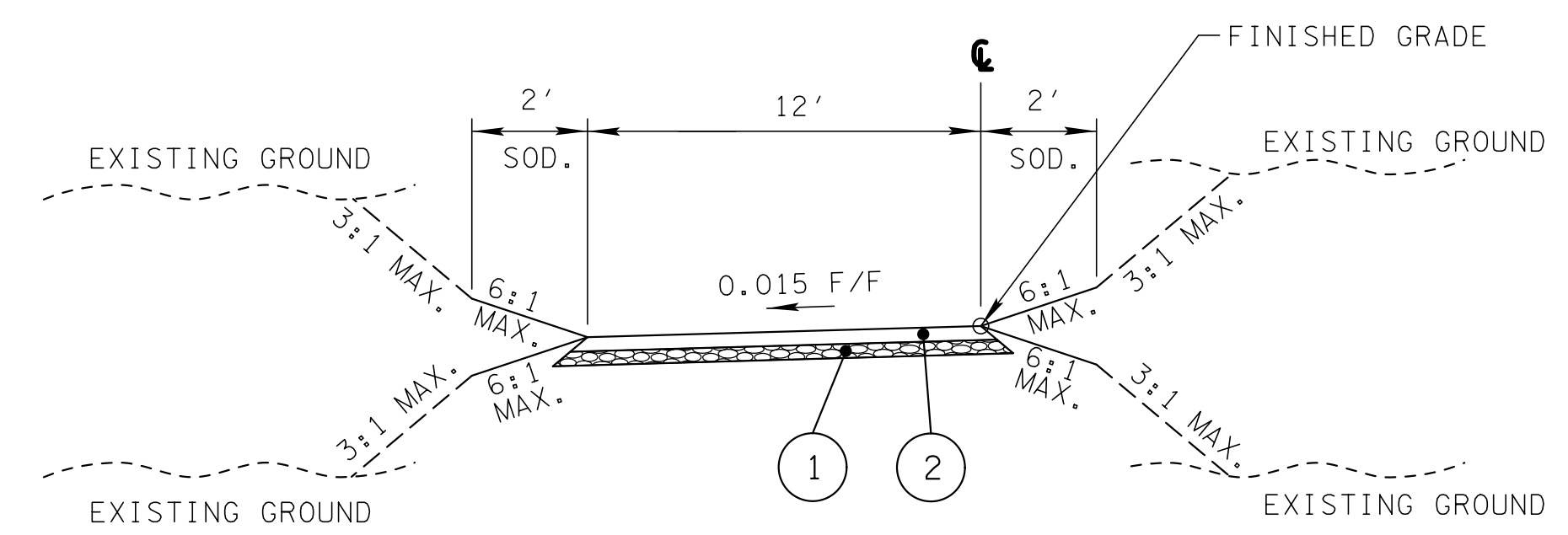
(BASED ON STD. DWG. MM-TS-3)  
 HARLINSDALE MULTI-USE PATH (STANDARD ASPHALT)  
 COFHP STA. 11+35.00 TO STA. 21+73.87



NOTE: SPC DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

**TYPICAL SECTION**

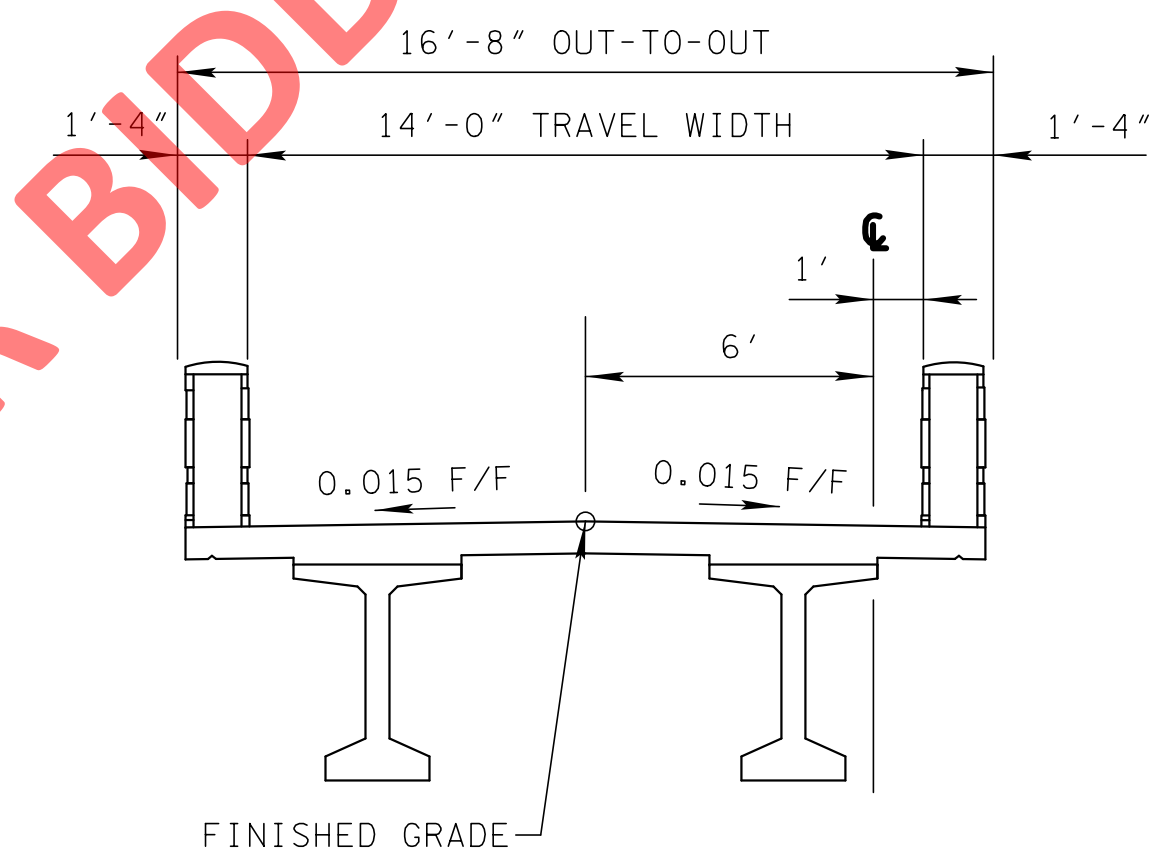
(BASED ON STD. DWG. MM-TS-3)  
 HARLINSDALE MULTI-USE PATH (STANDARD 4" CONCRETE)  
 COFHP STA. 24+80.00 TO STA. 25+30.00 (BEGIN BRIDGE)  
 COFHP STA. 27+50.00 (END BRIDGE) TO STA. 28+00.00



NOTE: SPC DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

**TYPICAL SECTION**

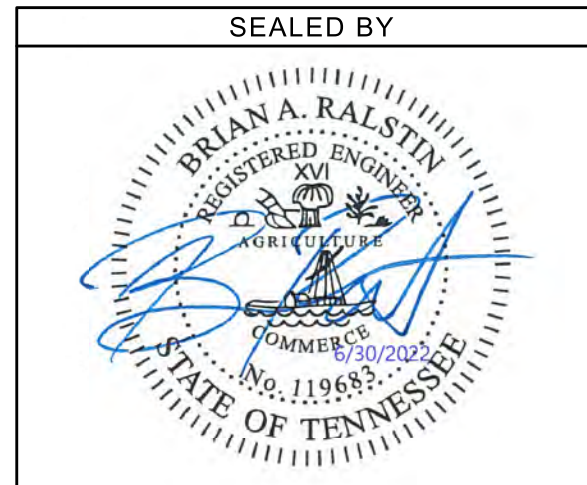
(BASED ON STD. DWG. MM-TS-3)  
 HARLINSDALE MULTI-USE PATH (STANDARD 4" CONCRETE)  
 COFHP STA. 21+73.87 TO STA. 24+80.00  
 COFHP STA. 28+00.00 TO STA. 38+83.73



**BRIDGE TYPICAL SECTION**

(BASED ON STD. DWG. MM-TS-3)  
 COFHP STA. 25+30.00 TO COFHP STA. 27+50.00

PROPOSED PAVEMENT SCHEDULE	
<b>① MINERAL AGGREGATE BASE COURSE AT 6 IN. THICK</b> ITEM NO. 303-01 MINERAL AGGREGATE TYPE A BASE, GRADING "D"	<b>⑤ BITUMINOUS BASE COURSE AT 3 IN, THICK (APPROX. 339 LBS /SY)</b> ITEM NO. 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"
<b>② CONCRETE SIDEWALK (4" THICK)</b> ITEM NO. 701-01.01 CONCRETE SIDEWALK (4")	<b>⑥ TACK COAT</b> ITEM NO. 403-02.01 TRACKLESS TACK COAT (TC) (SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD)
<b>③ CONCRETE SIDEWALK (6" THICK)</b> ITEM NO. 701-01.02 CONCRETE SIDEWALK (6")	<b>⑦ PRIME COAT</b> ITEM NO. 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) (APPROX. 0.30 - 0.35 GAL. SY.) ITEM NO. 402-02 AGGREGATE FOR COVER MATERIAL (PC) (APPROX. 8 - 12 LBS./SY.)
<b>④ ASPHALTIC CONCRETE SURFACE AT 1.50 IN. THICK (APPROX. 154.5 LBS /SY)</b> ITEM NO. 411-01.11 ACS MIX (PG64-22) GRADING "E" ROADWAY	

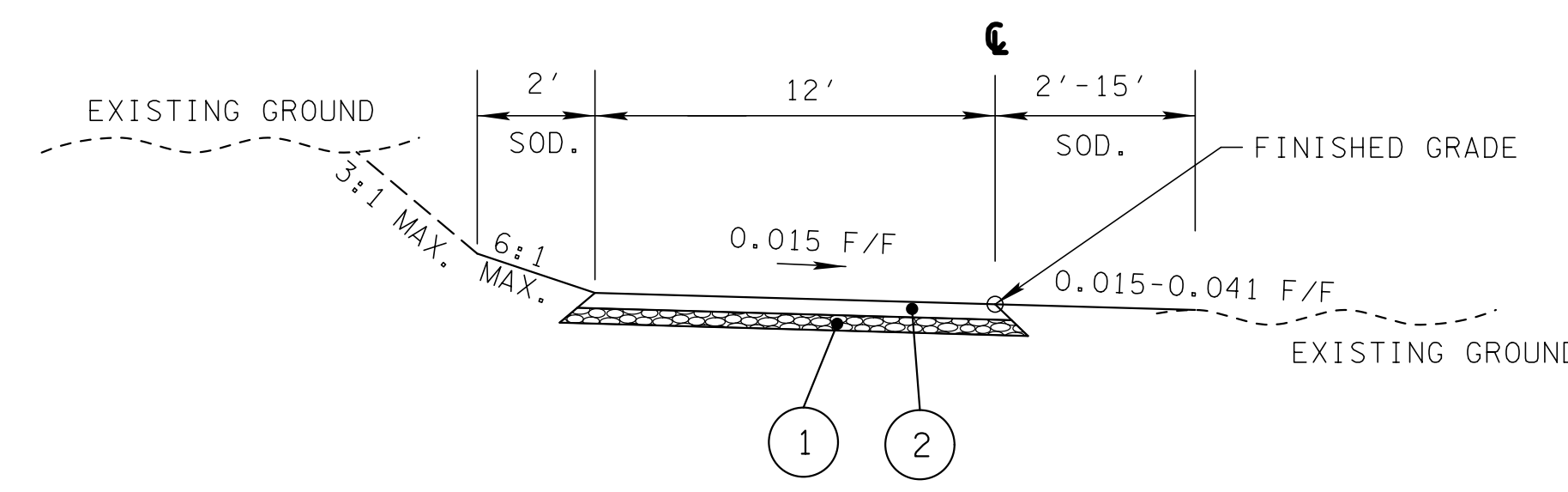


**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

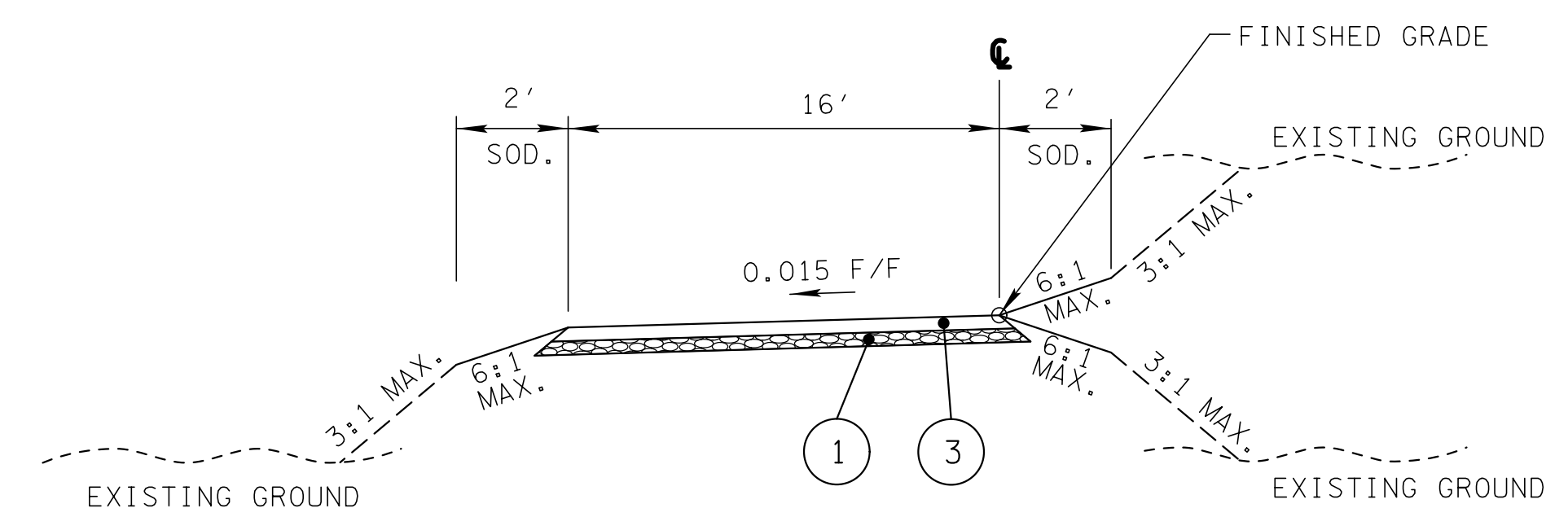
**TYPICAL SECTIONS  
 AND  
 PAVEMENT  
 SCHEDULE**

9/1/2022 12:07:14 PM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\002B\_Typical Section.sht

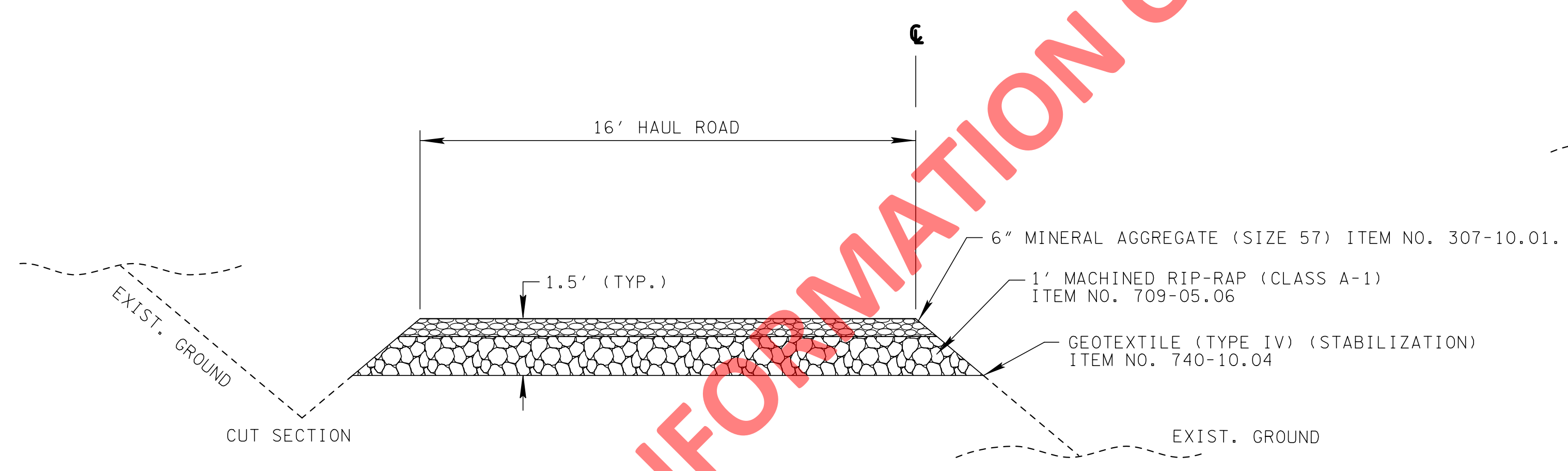
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2B1
CONST.	2022	TAP-9305(32)	2B1



**TYPICAL SECTION**  
 (BASED ON STD. DWG. MM-TS-3)  
 HARLINSDALE MULTI-USE PATH (STANDARD 4" CONCRETE)  
 NCONN STA. 500+80.00 TO STA. 503+50.00

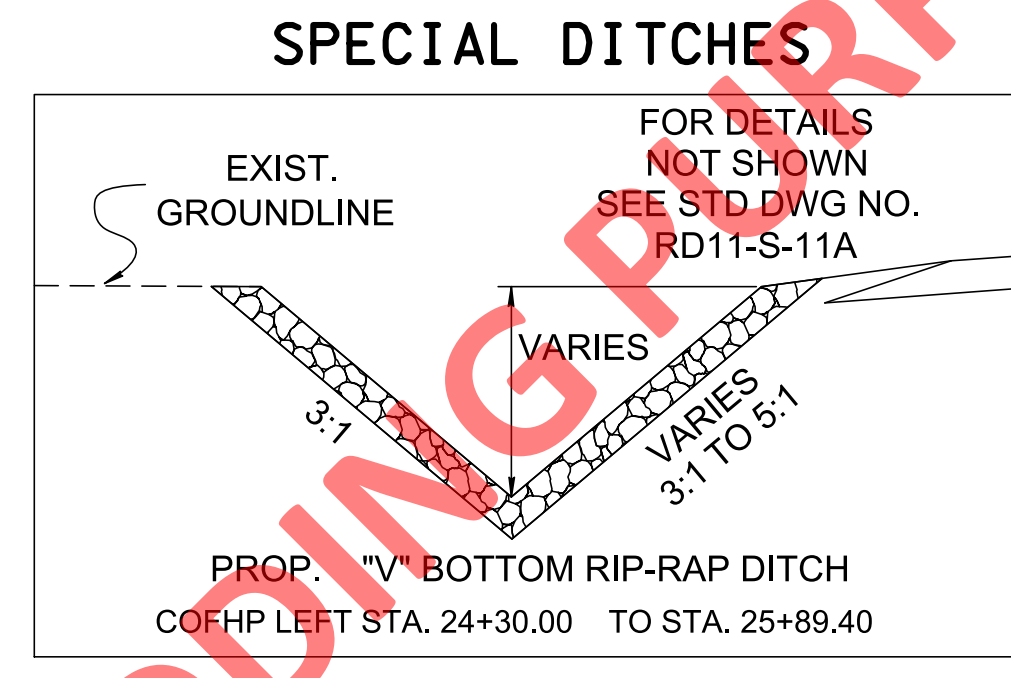


**TYPICAL SECTION**  
 (BASED ON STD. DWG. MM-TS-3)  
 HARLINSDALE MULTI-USE PATH (REINFORCED 6" CONCRETE)  
 COFIU STA. 100+75.00 TO STA. 103+63.48  
 COFIU STA. 104+79.25 TO STA. 105+74.95

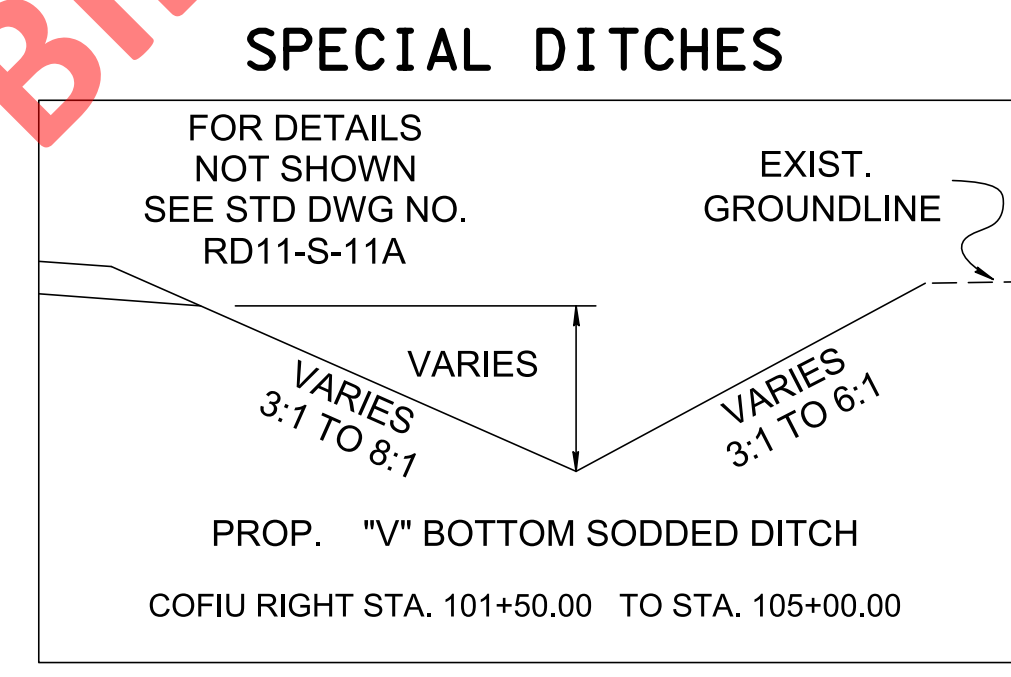


**HAUL ROAD TYPICAL SECTION**  
 FROM COFHP STA. 22+20.00 TO STA. 25+30.00  
 FROM COFHP STA. 27+50.00 TO STA. 38+83.73

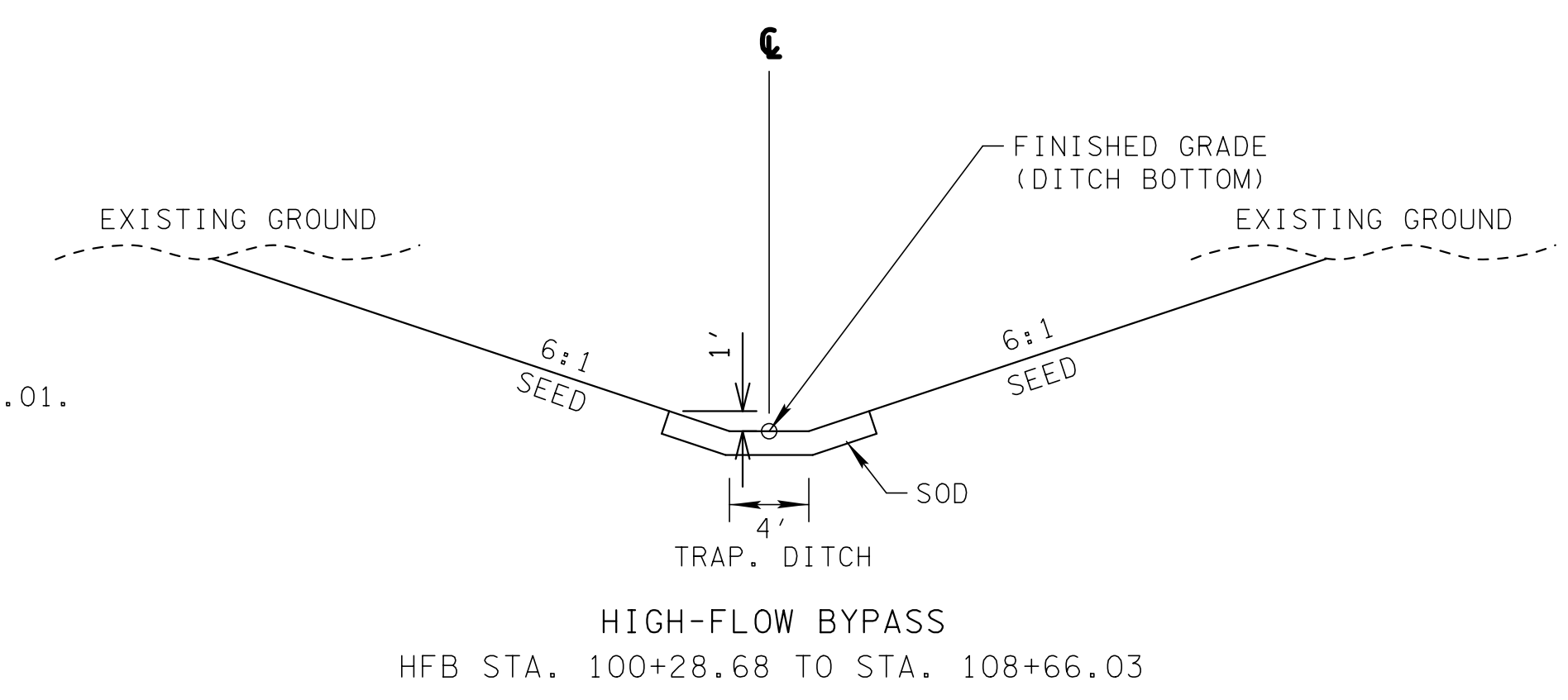
- NOTE:
- HAUL ROAD LIMITS SHALL REMAIN WITHIN DISTURBED AREA (SLOPE LINES) AND FOLLOW COFHP ALIGNMENT.
  - ALL LABOR AND MATERIALS FOR THE INSTALLATION AND REMOVAL OF THE HAUL ROAD SHALL BE PAID FOR UNDER PAY ITEM 203-50 CONSTRUCTION OF HAUL ROAD.



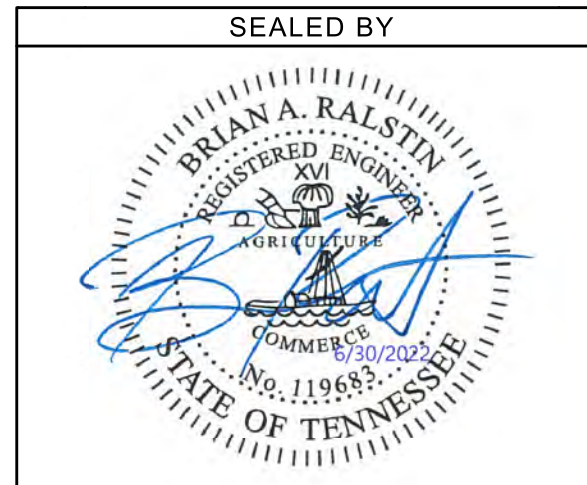
**SPECIAL DITCHES**



**SPECIAL DITCHES**



**HIGH-FLOW BYPASS**  
 HFB STA. 100+28.68 TO STA. 108+66.03



**CITY OF FRANKLIN**  
**ENGINEERING DEPARTMENT**



**TYPICAL SECTIONS**

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	2C

# GENERAL NOTES

## GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- (3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WITHOUT APPROVAL BY FEMA. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

## SEEDING AND SODDING

- (1) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

## DRAINAGE

- (1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (2) EXCAVATION FOR STORM SEWERS, PIPE CULVERTS, AND MINOR STRUCTURES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE
- (3) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (4) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).
- (5) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION WILL NOT RESULT IN AN INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT THAT WILL BE MADE DUE TO SUCH CHANGE.
- (6) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

## MISCELLANEOUS

- (1) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

## CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- (3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

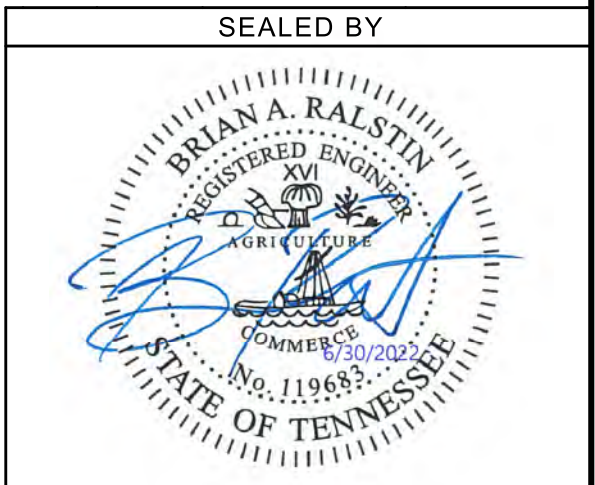
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (5) USE OF BARRICADES, PORTABLE BARRIER RAILS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (8) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED, AND FLEXIBLE DRUMS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.
- (9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING CONSTRUCTION SIGNS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM NO. 712-06, SIGNS (CONSTRUCTION), S.F.

## LIGHTING

- (1) INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTIONS 714 AND 917 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JANUARY 1, 2021 AND WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRIC CODE, NFPA 70.
- (2) ALL WIRING SHALL BE CONCEALED UNDERGROUND IN ¾-INCH OR 1-INCH SCHEDULE 40 PVC RIGID CONDUIT.
- (3) THE GROUND WIRE SHALL BE RUN INSIDE CONDUIT WITHIN STRUCTURES, SHALL BE COLORED GREEN AND HAVE THW INSULATION.
- (5) ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED IN 714 ITEMS WHETHER SPECIFICALLY NOTED OR NOT.

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:49:49 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\02C\_General\_Notes.sht



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

GENERAL  
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	2D

## SPECIAL NOTES

### GRADING

- (1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.
- (2) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.
- (4) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
- (5) EARTHWORK IS PAID FOR UNDER ITEM NO. 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED). NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

### HAUL ROAD

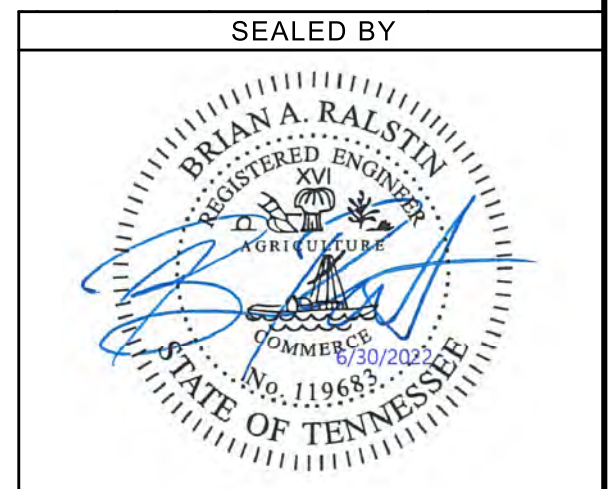
- (1) THE HAUL ROAD FOR THE PROJECT WILL FOLLOW THE ALIGNMENT OF THE PROPOSED PATH WITHIN THE PARK AT HARLINDALE FARM. ON THE WEST SIDE OF THE HARPETH RIVER THE CONTRACTOR SHALL FOLLOW THE EXISTING ACCESS ROADS WITHIN THE WATER TREATMENT FACILITY OFF OF CLAUDE YATES ROAD TO ACCESS THE PROJECT SITE. CONTRACTOR SHALL COORDINATE WITH CITY OF FRANKLIN ON ANY MOBILIZATION ROUTES OUTSIDE OF THE PROJECT LIMITS.

### MULTIMODAL

- (1) DURING CONSTRUCTION, IF THE CONSTRUCTION SUPERVISOR IDENTIFIES CURB RAMP LOCATIONS WITHIN THE PROJECT LIMITS WHERE THE TDOT ROADWAY STANDARDS CANNOT BE USED DUE TO SITE LIMITATIONS, A SKETCH OR PICTURE, SHOWING EXISTING CONDITIONS AS WELL AS PROPOSED MODIFICATIONS SHOULD BE SUBMITTED TO THE TDOT ADA OFFICE VIA EMAIL AT TDOT.ADA@TN.GOV THREE WEEKS PRIOR TO THE BEGINNING OF CURB RAMP CONSTRUCTION. THE OFFICE WILL REVIEW AND EVALUATE THE LOCATIONS TO DEVELOP PROPER CURB RAMP DESIGN THAT WILL MEET REGULATIONS.

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

9/1/2022 12:07:18 PM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\002D\_Special Notes.sht



**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**SPECIAL  
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2E
CONST.	2022	TAP-9305(32)	2E

# ENVIRONMENTAL NOTES

## SUBSECTION 1 – ENVIRONMENTAL GENERAL NOTES

### ENVIRONMENTAL GENERAL NOTES

#### NATURAL RESOURCES

- (1) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT NATURAL RESOURCES AND WATER QUALITY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG NATURAL RESOURCES IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS, WETLANDS OR OTHER NATURAL FEATURES IN ACCORDANCE WITH TDOT STANDARDS. EPSC MEASURES SHALL BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.
- (2) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
- (3) INSTREAM EPSC DEVICES REQUIRE A REVIEW BY CITY OF FRANKLIN PROJECT MANAGER DAVID HODNETT TO DETERMINE IF WATER QUALITY PERMITS SHOULD BE OBTAINED.
- (4) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.
- (5) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING.
- (6) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CULVERT CROSSINGS SHALL BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES SHALL BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK SHALL BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS SHALL BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO PREEXISTING ELEVATIONS. ALL TEMPORARY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (E.G. BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.
- (7) HEAVY EQUIPMENT WORKING IN WETLANDS WITH PERMITTED TEMPORARY IMPACTS SHALL BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE AND COMPACTION UNLESS SPECIFICALLY ADDRESSED IN THE CONSTRUCTION PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT SHALL BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.
- (8) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.
- (9) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR PROJECT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE CITY OF FRANKLIN PROJECT MANAGER IMMEDIATELY.

#### SPECIES

- (10) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA.
- (11) SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG AND ADULTS) BE PRESENT, THE CONTRACTOR SHALL CONTACT THE LOCAL U.S. FISH & WILDLIFE SERVICE OFFICE TO DETERMINE IF SEASONAL RESTRICTIONS WILL BE NECESSARY. GENERALLY, BIRDS, NESTS, AND EGGS MAY NOT BE DISTURBED BETWEEN APRIL 15 AND JULY 31. FROM AUGUST 1 TO APRIL 14, NESTS CAN BE REMOVED OR DESTROYED SO LONG AS BIRDS OR EGGS ARE NOT PRESENT, AND MEASURES IMPLEMENTED TO PREVENT FUTURE NEST BUILDING AT THE SITE (I.E., CLOSING OFF AREA USING NETTING).

- (12) IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREAST HEIGHT (DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE ENGINEER SHALL CONTACT THE LOCAL U.S. FISH & WILDLIFE SERVICE OFFICE IMMEDIATELY.

#### PERMITS, PLANS & RECORDS

- (13) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE ENGINEER PRIOR TO THE USE OF THE PERMITTED AREA(S).
- (14) ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CITY OF FRANKLIN PROJECT MANAGER SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- (15) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE CITY OF FRANKLIN PROJECT MANAGER SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ENGINEER SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (16) THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE CITY OF FRANKLIN PROJECT MANAGER TO COMMENCE PERMIT RENEWAL PROCESS.
- (17) ALL WATER QUALITY PERMITS SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BRIEF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

#### SUPPORT ACTIVITIES

- (18) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE CITY OF FRANKLIN PROJECT MANAGER TO COMMENCE PERMIT RENEWAL PROCESS.

#### ENVIRONMENTAL

- (20) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

## SUBSECTION 2 – ENVIRONMENTAL SPECIAL NOTES

### ENVIRONMENTAL SPECIAL NOTES

#### ENVIRONMENTAL

- (1) THE CITY OF FRANKLIN PROJECT MANAGER SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

#### ECOLOGY

- (2) THE CITY OF FRANKLIN PROJECT MANAGER OR A DESIGNEE SHALL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING WHEN THE CITY OF FRANKLIN OR A DESIGNATED CONSULTANT WILL NEED TO BE ONSITE FOR WORK BEING DONE WHICH COULD AFFECT WATERS OF THE STATE/U.S. OR SPECIES.

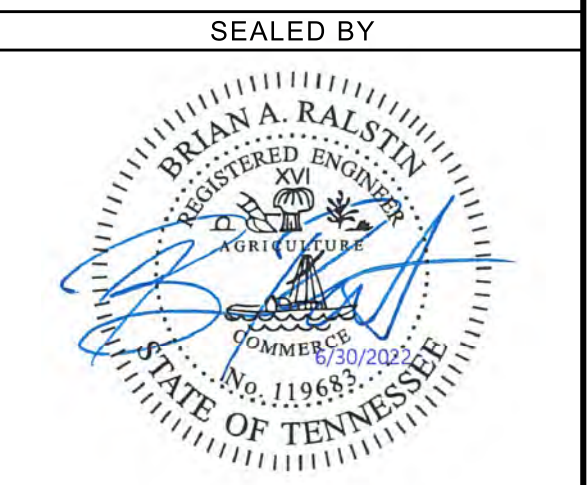
- (3) THE CITY OF FRANKLIN PROJECT MANAGER OR A DESIGNEE SHALL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED WORK. THIS WILL PROVIDE THE OPPORTUNITY TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS THAT MUST BE FOLLOWED.

- (4) ALL PROJECTS WITH LEGALLY PROTECTED SPECIES OR CRITICAL HABITAT IDENTIFIED SHALL HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER WATERS OF THE STATE/U.S.

#### SCOPE OF WORK

- (5) THE GRADING, DRAINING AND CONSTRUCTION OF MULTI-USE PATH WITHIN THE PROJECT LIMITS.
- (6) CONSTRUCTION OF A NEW BRIDGE OVER THE HARPETH RIVER.
- (7) THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

FOR INFORMATIONAL PURPOSES ONLY



HISTORIC  
FRANKLIN  
TENNESSEE

CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

ENVIRONMENTAL  
NOTES



9/1/2022 12:07:24 PM  
 Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\002F\_Tab Qty.sht

STORM DRAINAGE ENDWALLS									
SHEET NO.	LOCATION	STATION	OFFSET (FT.)	DRAINAGE CODE	STRUCTURE TYPE	STANDARD DRAWING	CLASS A CONC. 611-07.01 (C.Y.)	REINF. STEEL 611-07.02 (LB.)	MACHINED RIP-RAP CLASS B 709-05.08 (TON)
6A	COFHP	33+90.00	4.83	1	EW	D-PE-4	1.0	45	
6A	COFHP	33+90.00	-16.43	2	EW	D-PE-4	1.0	45	4
6A	COFHP	36+41.48	-85.98	9	EW	D-PEW-1, D-PEW-2	3.89	147	7
6A	COFHP	37+60.00	17.66	7	EW	D-PE-4	1.0	45	
6A	COFIU	102+50.00	3.45	10	EW	D-PE-4	1.5	70	
6A	COFIU	102+50.00	-30.55	11	EW	D-PE-4	1.5	70	16
<b>TOTALS</b>							<b>9.89</b>	<b>422</b>	<b>27</b>

STORM DRAINAGE PIPES											
SHEET NO.	FROM		TO		% GRADE	REINFORCED CONC. PIPE - CLASS III					
	CODE	OUTLET ELEV.	CODE	INLET ELEV.		15"	18"	24"	30"	36"	42"
6A	1	622.30	2	622.16	0.64		22				
6A	4	622.75	6	622.17	0.86					68	
6A	7	623.00	6	622.50	4.17		12				
6A	6	621.05	8	620.05	1.02					98	
6A	8	619.85	9	619.50	1.01					35	
6A	10	626.20	11	626.00	0.59			34			
<b>TOTALS</b>						<b>0</b>	<b>34</b>	<b>34</b>	<b>0</b>	<b>200</b>	<b>0</b>

MANHOLES AND JUNCTION BOXES														
SHEET NO.	LOCATION	STATION	OFFSET (FT.)	DRAINAGE CODE	GRATE/TOP ELEV.	STRUCTURE TYPE	INSIDE DIMENSIONS	DEPTH (FT.)	STANDARD DRAWING	PAY ITEMS				
										TYPE 3 611-01-01 0' - 4'	TYPE 3 611-01-02 4' - 8'	TYPE 3 611-01-03 8' - 12'	JUNCTION BOX TYPE 2 611-02.11	JUNCTION BOX TYPE 3 611-02.12
6A	COFHP	38+34.16	-58.97	4	628.79	MH#3	6' DIA	6.04	D-MH-2		1			
6A	COFHP	37+74.50	15.50	6	628.00	MH#3	6' DIA	6.95	D-MH-2		1			
6A	COFHP	36+95.47	-61.93	8	625.00	MH#3	6' DIA	5.15	D-MH-2		1			
<b>TOTALS</b>										<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>

SLAB BRIDGE TABULATION																
STATION	LOCATION	TYPE			NO. BARRELS	WIDTH	HEIGHT	LENGTH	DRAINAGE AREA SQ. MI.	STANDARD DRAWING NO.	GRANULAR BACKFILL TON	EPOXY STEEL BAR REINF. 604-02.03 LB.	CLASS "A" CONC. 604-03.01 CU. YD.	STEEL BAR REINF. 604-03.02 LB.	6" PERF. PIPE DRAIN SYSTEM 710-09.01 L.F.	6" PIPE UNDERDRAIN 710-09.02 L.F.
		BOX	SLAB	SKEW												
28+86.30	COFHP	X		64°	1	32.58'	6'	28.61'	190.0	N/A	553	5960.00	110	11320	142	40
<b>TOTALS</b>											<b>553</b>	<b>5960</b>	<b>110</b>	<b>11320</b>	<b>142</b>	<b>40</b>

▲ ALL COST OF CULVERT EXCAVATION WILL BE INCLUDED IN THE COST OF OTHER ITEMS.  
 ▲ SEE SLAB BRIDGE DETAILS ON SHEETS 2H-2H4.

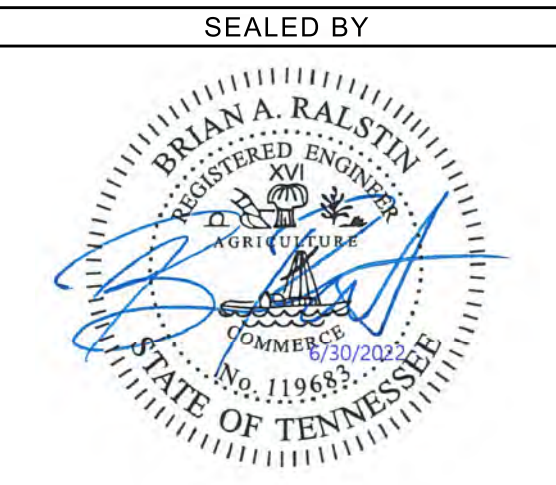
PAVEMENT QUANTITIES										
LOCATION	PAY ITEMS									
	303-01 (TON)	307-01.08 (TON)	307-02.01 (TON)	307-02.08 (TON)	402-01 (TON)	402-02 (TON)	403-02.01 (TON)	411-01.11 (S.Y.)	710-02 (L.F.)	
COFHP	1171.42	234.55			1.98	6.92	0.45	110.01		
NCONN	140.07									
COFIU	543.18									
<b>TOTALS</b>	<b>1854.67</b>	<b>234.55</b>	<b>0.00</b>	<b>0.00</b>	<b>1.98</b>	<b>6.92</b>	<b>0.45</b>	<b>110.01</b>	<b>0.00</b>	

ESTIMATED GRADING QUANTITIES						
DESCRIPTION	UNADJUSTED VOLUMES (CY)		ADJUSTED VOLUMES (CY)		BALANCE SUMMARY	
	EXC.	EMB.	EXC.	EMB.	SHRINK = 20 %	SWELL = 15 %
MAINLINE (COFHP) STA 11+35.00 TO 25+30.00	9767		8140			
MAINLINE (COFHP) STA 27+50.00 TO 38+83.73	780	1438	650			
SIDE PATH (COFIU)	418	194	349		EXC.	EMB.
SIDE PATH (NCONN)	128		107			
INDEPENDENT DITCHES (HIGH-FLOW BYPASS)	7359		6133		15377	VS. -2983
OTHER						
PAVEMENT						
TOPSOIL (EMB.)					AVAILABLE =	12394
TOPSOIL (EXC.)	3606		3005			
TOPSOIL (TO REPLACE STRIPPED TOPSOIL)		1351			WASTE MATERIAL =	14873
<b>ROCK (C.Y.)</b>	<b>TOTALS (C.Y.)</b>					
EXC.	EMB.	EXC. (UNCL.)	EMB. (UNCL.)	EXC. (COMMON)	EXC. (AVAIL.)	EXC. (ADJ.)
22058	2983	18452	15377	15377		

SPECIAL DITCHES							
ALIGNMENT	STATION		SLOPE			DETAIL NO.	TYPE
	FROM	TO	FORE (H/V)	BOTTOM WIDTH (FT.)	BACK (H/V)		
COFHP	24+30.00	25+89.40	3:1-5:1	V-DITCH	3:1	RD11-S-11A	"V" BOTTOM RIP-RAP DTICH
COFIU	101+50.00	102+50.00	3:1	V-DITCH	3:1	RD11-S-11A	"V" BOTTOM SODDED DTICH
COFIU	102+50.00	105+00.00	3:1-8:1	V-DITCH	3:1-6:1	RD11-S-11A	"V" BOTTOM SODDED DTICH

REMOVAL OF STRUCTURES				
SHEET NO.	STATION	LOCATION	DESCRIPTION	REMARKS
6	37+90.28	COFHP	24.70' RT.	ENDWALL
6	38+34.16	COFHP	58.97' RT.	MANHOLE

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2F
CONST.	2022	TAP-9305(32)	2F



CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT  
 TABULATED QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2022	TAP-9305(32)	2G
CONST.	2022	TAP-9305(32)	2G

**KV+D**  
**KISER VOGGIN DESIGN**  
 5005 Meridian Blvd., Ste 100 Franklin, TN 37067  
 615.708.0567



SEALED BY  
  
 06.30.2022

COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

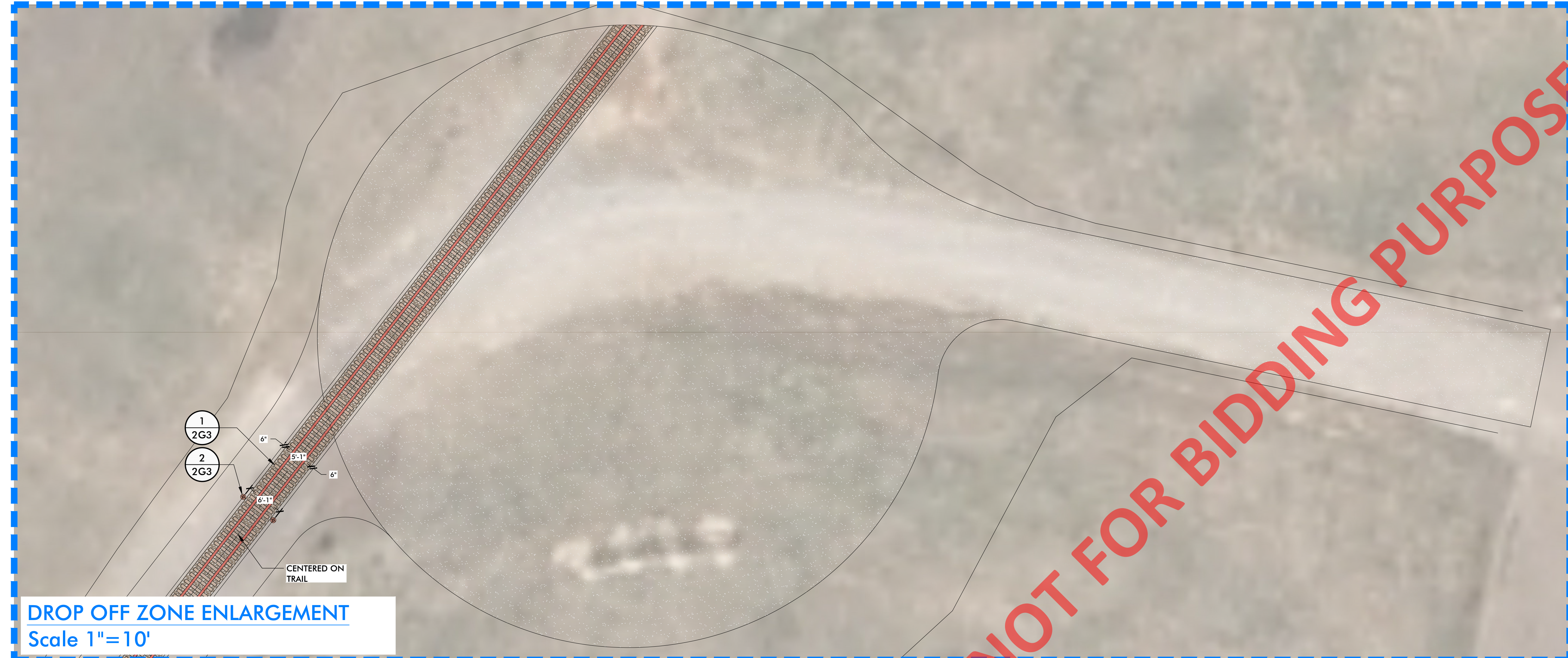


CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

**OVERALL  
 SITE PLAN**

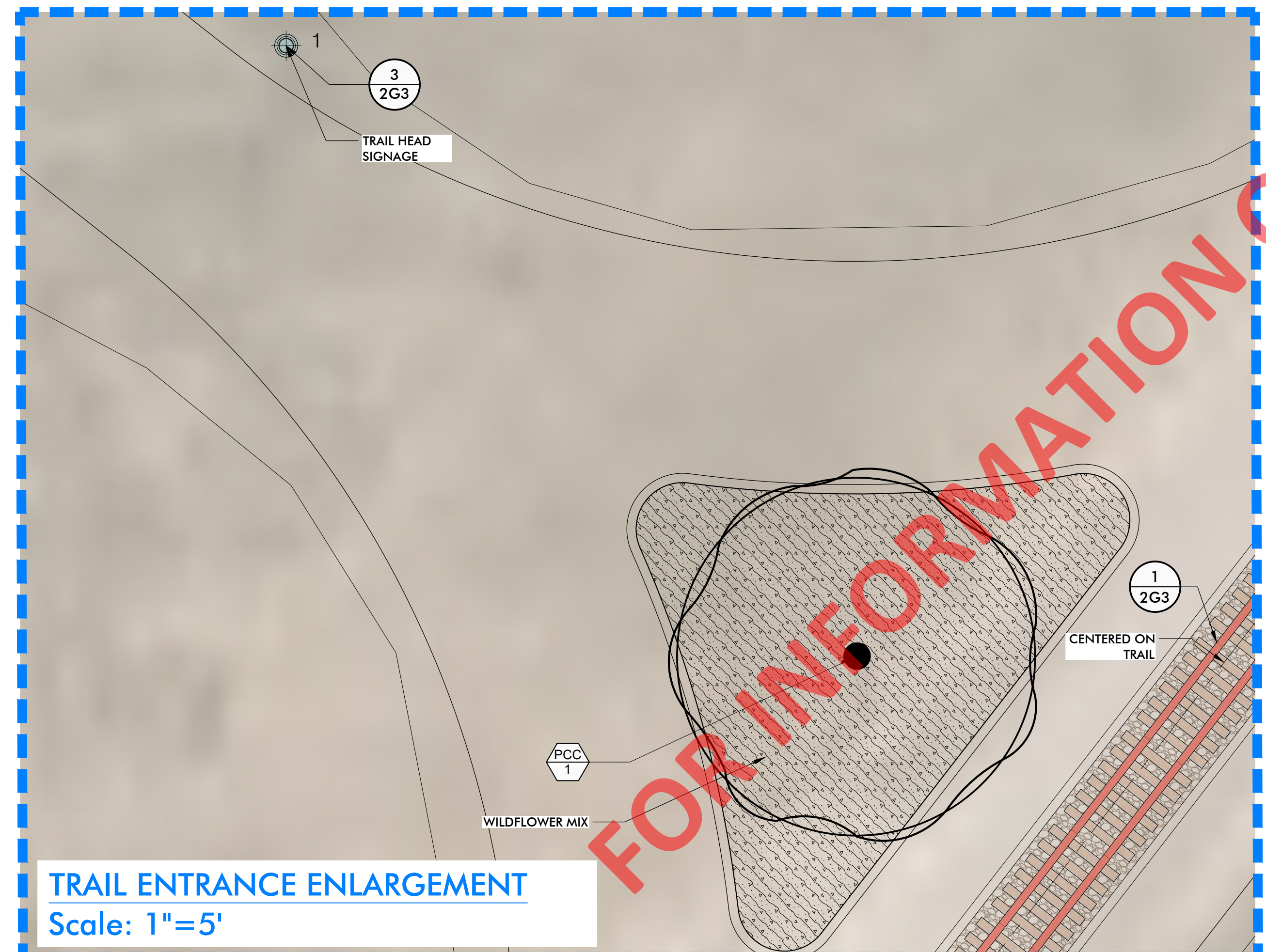
TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2022	TAP-9305(32)	2G1
CONST.	2022	TAP-9305(32)	2G1

**KV+D**  
**KISER VOGGIN DESIGN**  
 5005 Meridian Blvd., Ste 100 Franklin, TN 37067  
 615.708.0567



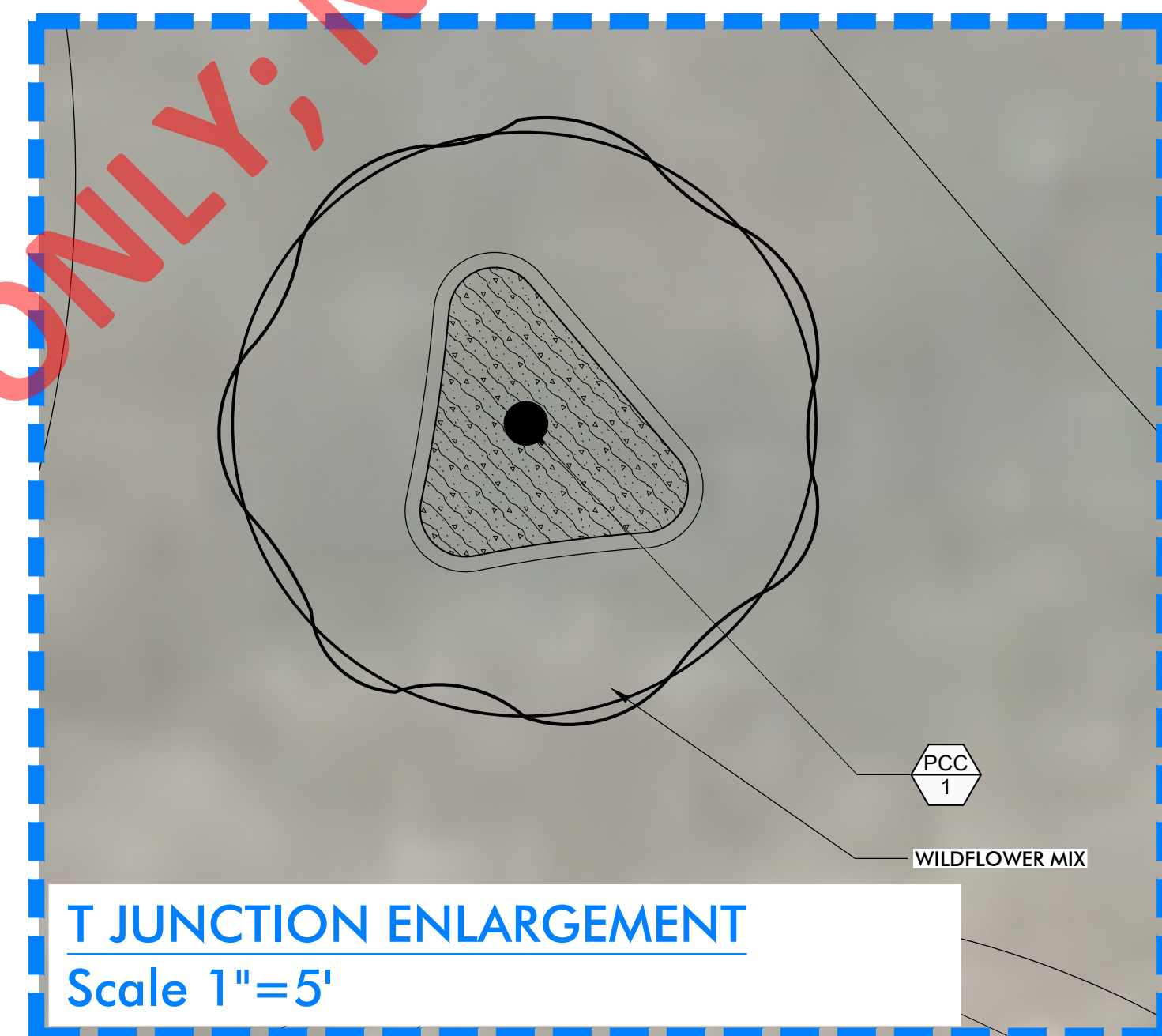
**DROP OFF ZONE ENLARGEMENT**

Scale 1"=10'



**TRAIL ENTRANCE ENLARGEMENT**

Scale: 1"=5'



**T JUNCTION ENLARGEMENT**

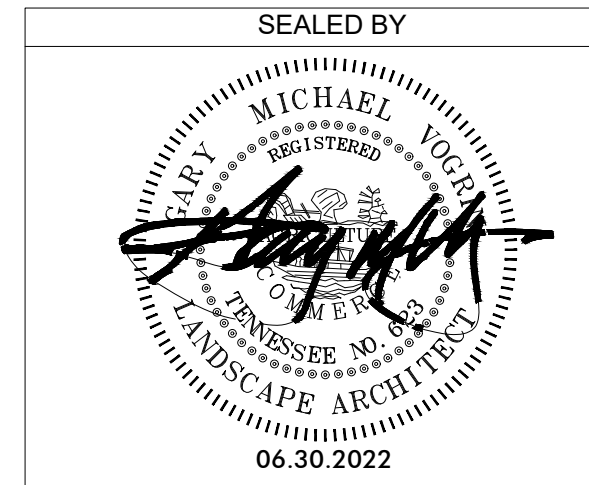
Scale 1"=5'

NORTHING AND EASTING SCHEDULE			
POINT	DESCRIPTION	NORTHING	EASTING
1	TRAIL HEAD SIGNAGE	N 585259.09	E 1712462.96
2	0.25 MILE MARKER	N 585366.60	E 1711434.28

19029 PLANT SCHEDULE									
ABBR.	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	CALIPER	HEIGHT	SPREAD	SPACING	
<b>TREES</b>									
PCC	2	<i>Platanus chinensis</i>	Chinese Pistache	B&B	3" CAL	12' HT	6' SPR	SEE PLAN	
<b>WILDFLOWER MIX @ ENTRANCE</b>									
	81	<i>Coveopsis lanceolata 'Early Sunrise'</i>	Early Sunrise Lanceleaf Tickseed	Plug				Evenly spaced, Field locate	
	81	<i>Gaillardia x grandiflora</i>	Blanketflower	Plug				Evenly spaced, Field locate	
	36	<i>Geranium x 'Brookside'</i>	Brookside Cranesbill	Plug				Evenly spaced, Field locate	
	36	<i>Leucanthemum x superbum 'Becky'</i>	Becky Shasta Daisy	Plug				Evenly spaced, Field locate	
	81	<i>Rudbeckia hirta 'Cherokee Sunset'</i>	Cherokee Sunset Black-eyed Susan	Plug				Evenly spaced, Field locate	
<b>WILDFLOWER MIX @ T JUNCTION</b>									
	12	<i>Coveopsis lanceolata 'Early Sunrise'</i>	Lanceleaf Tickseed	Plug				Evenly spaced, Field locate	
	12	<i>Gaillardia x grandiflora</i>	Blanketflower	Plug				Evenly spaced, Field locate	
	6	<i>Geranium x 'Brookside'</i>	Brookside Cranesbill	Plug				Evenly spaced, Field locate	
	6	<i>Leucanthemum x superbum 'Becky'</i>	Becky Shasta Daisy	Plug				Evenly spaced, Field locate	
	12	<i>Rudbeckia hirta 'Cherokee Sunset'</i>	Cherokee Sunset Black-eyed Susan	Plug				Evenly spaced, Field locate	

**Key Legend:**  
 Cont= Container; B&B = Balled and Burlapped; Cal=Caliper (diameter of the tree trunk); H= Height of foliage; Spr= Spread (diameter of plant foliage); Spacing: Refers to how far apart to plant (from center to center of plants) when in massings. Otherwise, if plant stands alone, use scale on drawing to measure how far away to plant in relation to other plants.  
 Full: Plants shall have dense growth in height and width. ST: Single Trunk; MT: Multi-Trunk (3 Stems)  
 2nd Yr: Growth: A plant that has been growing for 2 years before install

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

**CITY OF FRANKLIN**  
**ENGINEERING DEPARTMENT**

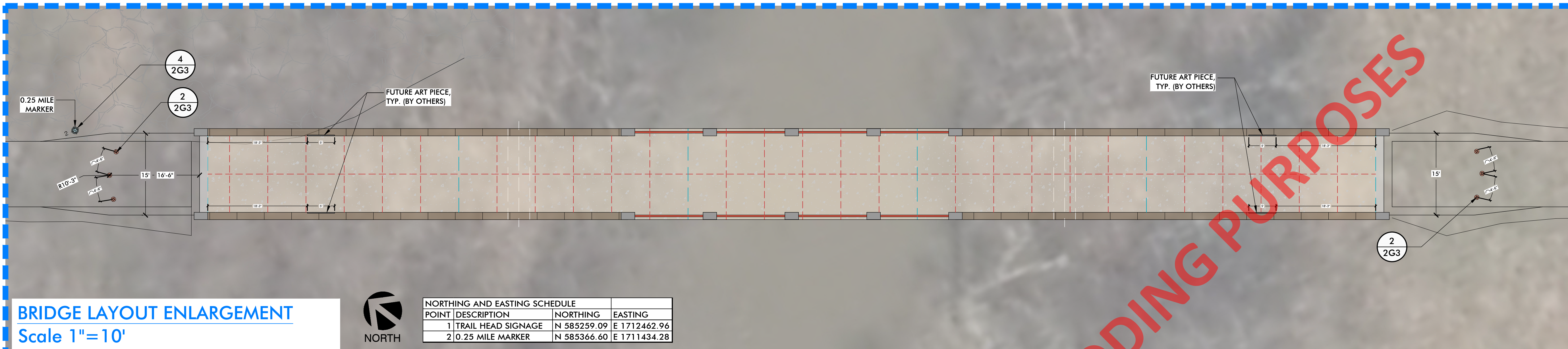


**LANDSCAPE & HARDSCAPE ENLARGEMENTS**



TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2022	TAP-9305(32)	2G2
CONST.	2022	TAP-9305(32)	2G2

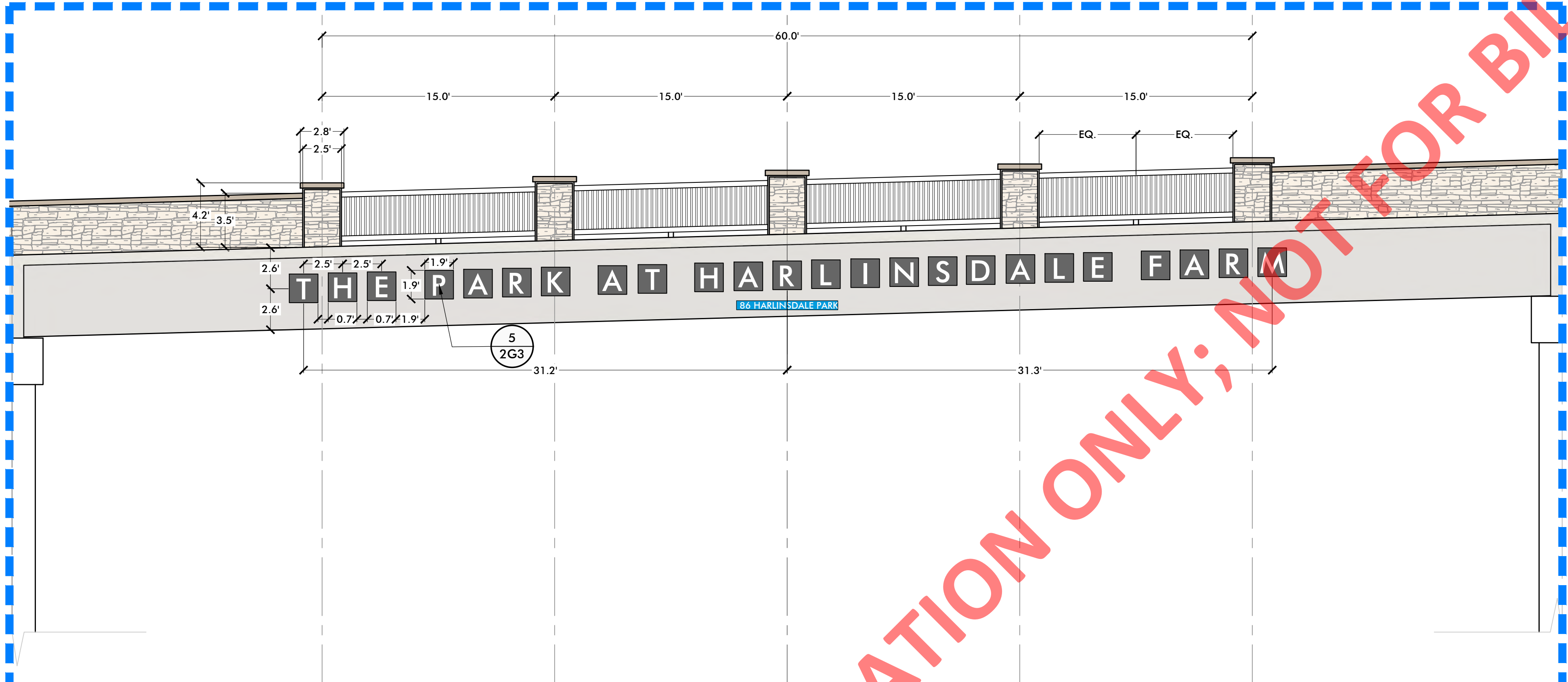
**KV+D**  
**KISER VOGRIN DESIGN**  
 5005 Meridian Blvd., Ste 100 Franklin, TN 37067  
 615.708.0567



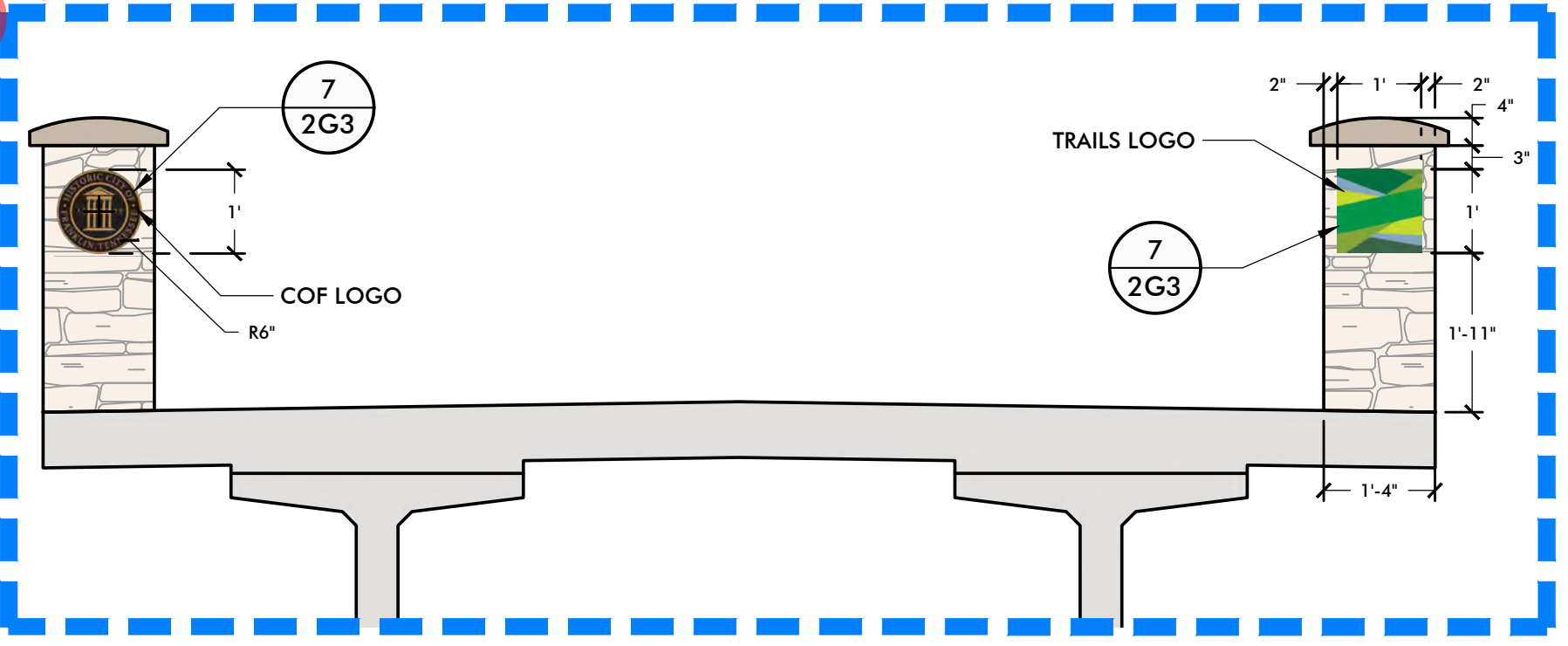
**BRIDGE LAYOUT ENLARGEMENT**  
 Scale 1"=10'



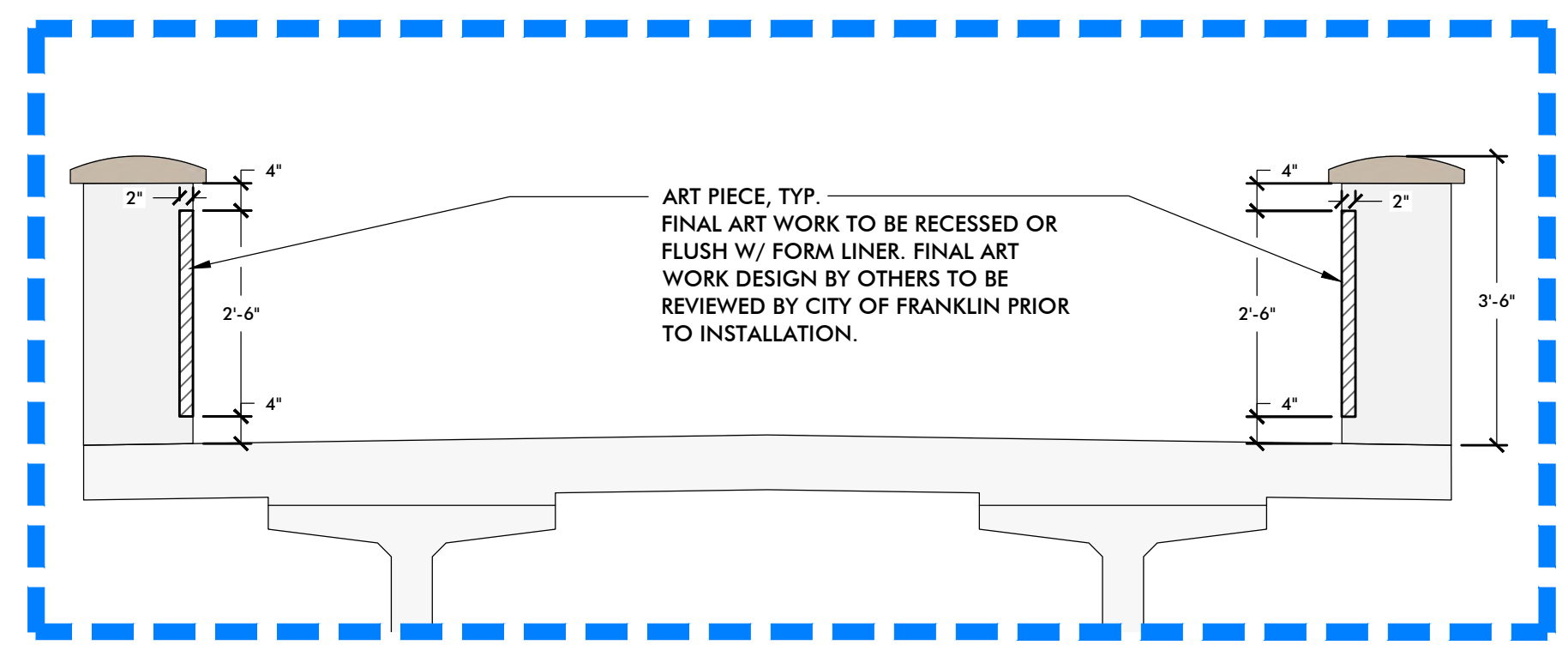
NORTHING AND EASTING SCHEDULE			
POINT	DESCRIPTION	NORTHING	EASTING
1	TRAIL HEAD SIGNAGE	N 585259.09	E 1712462.96
2	0.25 MILE MARKER	N 585366.60	E 1711434.28



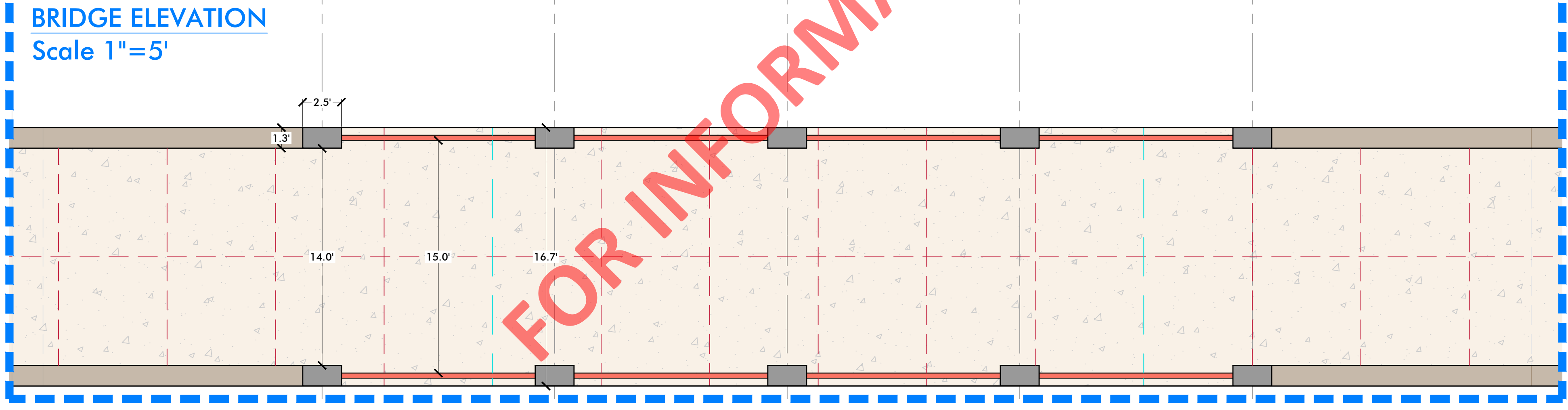
**BRIDGE ELEVATION**  
 Scale 1"=5'



**BRIDGE SECTION**  
 Scale 1"=2'



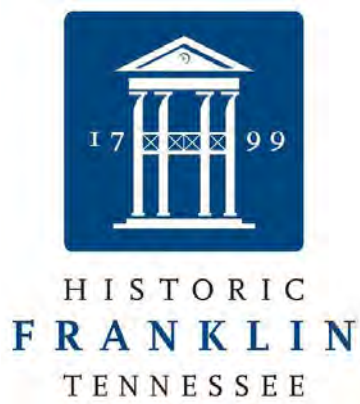
**BRIDGE ART PIECE SECTION**  
 Scale 1"=2'



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

SEALED BY  
  
 06.30.2022

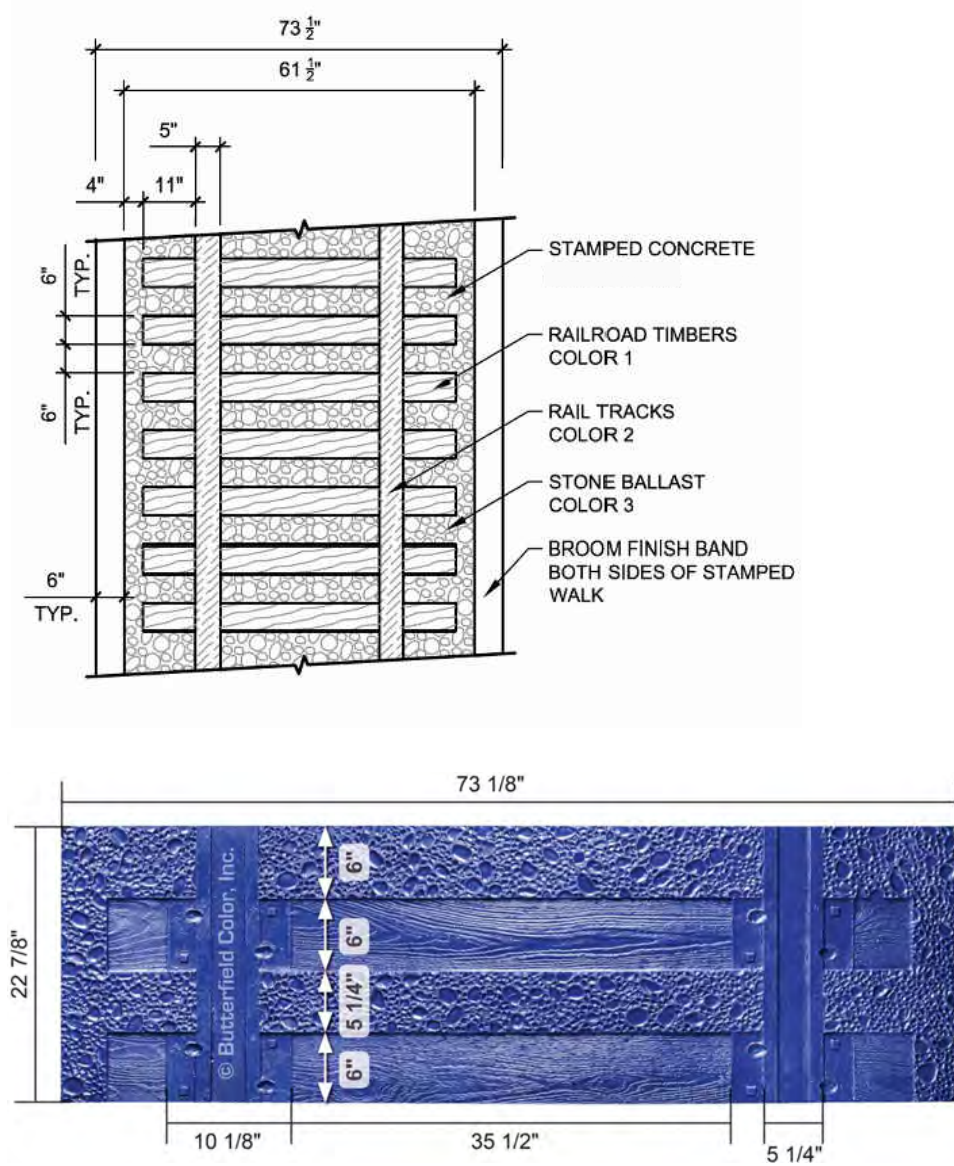
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



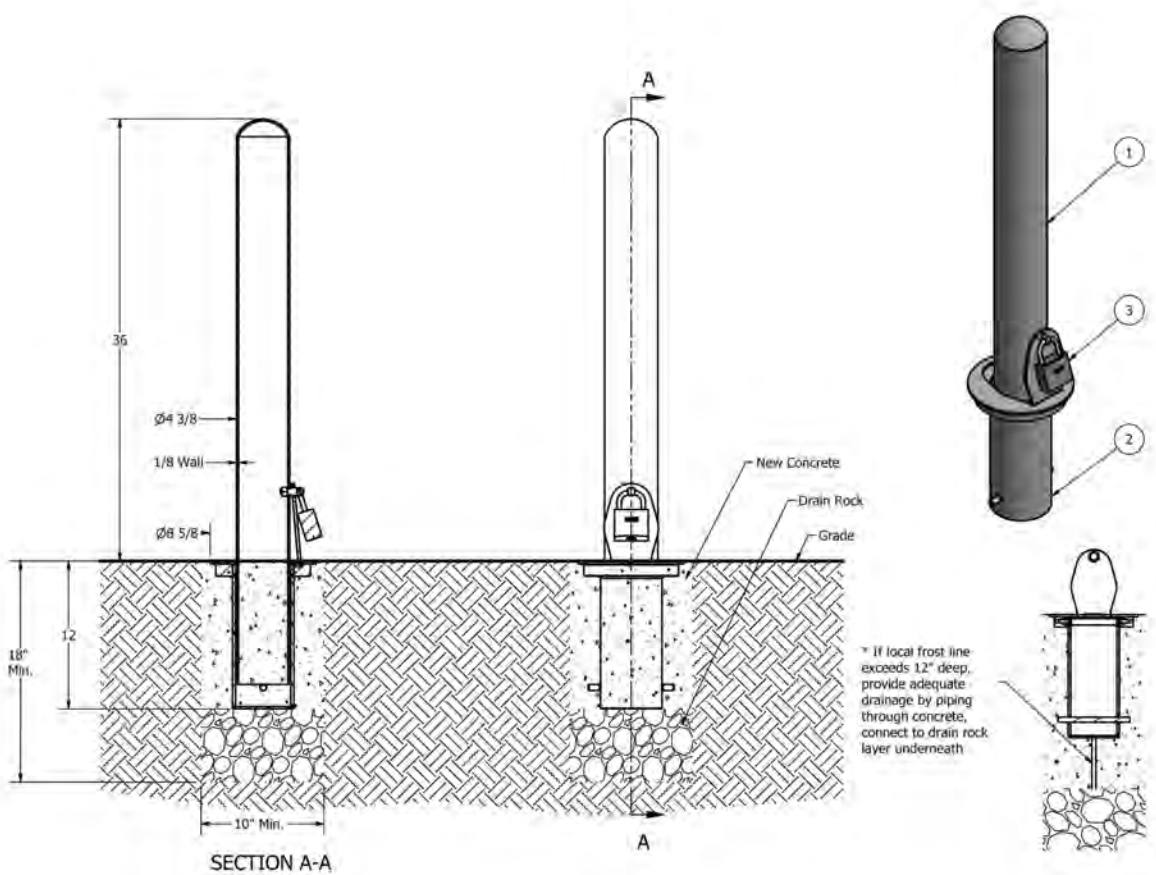
**CITY OF FRANKLIN**  
 ENGINEERING DEPARTMENT

**BRIDGE LAYOUT ENLARGEMENTS**

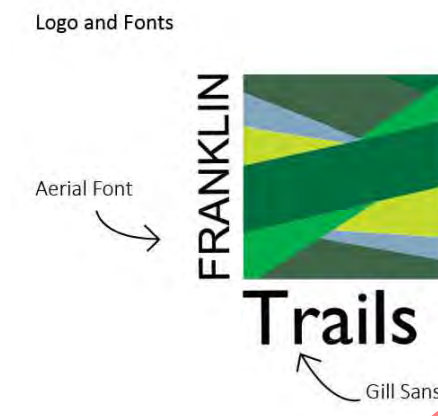
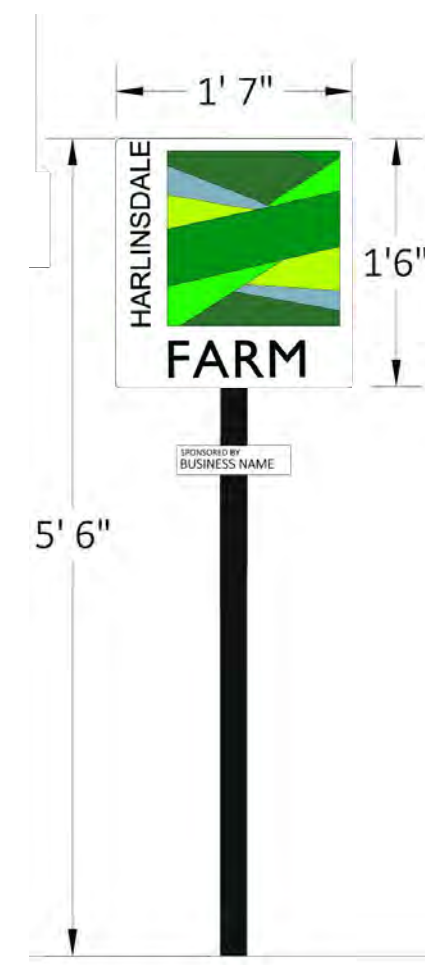
TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2022	TAP-9305(32)	2G3
CONST.	2022	TAP-9305(32)	2G3



CONTRACTOR TO PROVIDE SAMPLE MOCKUP ON SITE FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT/CITY OF FRANKLIN PRIOR TO FULL INSTALLATION.



- CONTRACTOR TO PROVIDE SAMPLE MOCKUP ON SITE FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT/CITY OF FRANKLIN PRIOR TO FULL INSTALLATION.
- CONTRACTOR TO FLAG LOCATION IN FIELD FOR REVIEW AND APPROVAL PRIOR TO INSTALL.
- BOLLARD SHALL INCLUDE RETROREFLECTIVE STRIPING (MINIMUM OF TWO STRIPES). STRIPE LOCATION AND COLOR SHALL BE VERIFIED WITH CITY OF FRANKLIN AND ENGINEER.



- Color Specifications
- C=28 M=0 Y=100 K=0
  - C=85 M=0 Y=100 K=0
  - C=100 M=0 Y=850 K=42
  - C=51 M=8 Y=0 K=24
  - C=75 M=30 Y=75 K=28

- NOTE:
- CONTRACTOR TO PREPARE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY CITY OF FRANKLIN AND LANDSCAPE ARCHITECT PRIOR TO FINAL INSTALLATION.
  - CONTRACTOR TO FLAG LOCATION IN FIELD FOR REVIEW AND APPROVAL PRIOR TO INSTALL.

1 NICKEL PLATE RAIL SPUR STAMPED CONCRETE N.T.S.

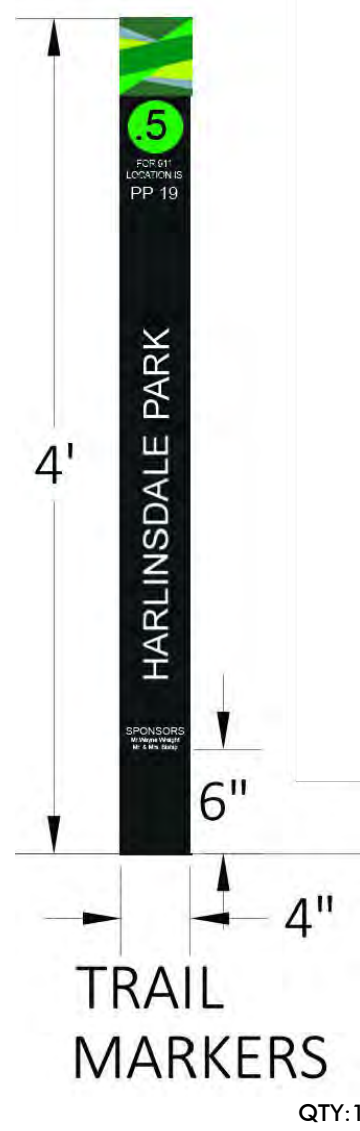
2 BOLLARD POST N.T.S.

3 TRAIL SIGNAGE N.T.S.

ELEVATION/PLAN

SECTION/ELEVATION

ELEVATION

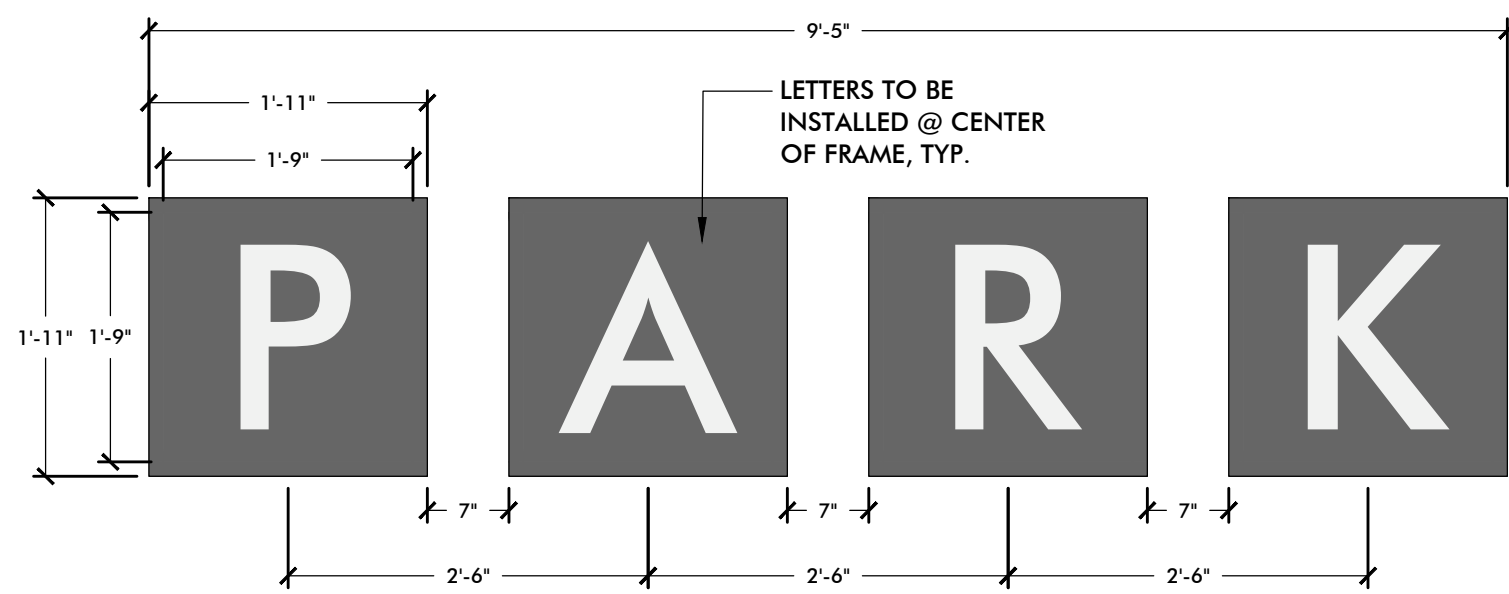


- Walking/Jogging
- Mountain Biking
- Equestrian
- Blueway

- NOTE:
- CONTRACTOR TO PREPARE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY CITY OF FRANKLIN AND LANDSCAPE ARCHITECT PRIOR TO FINAL INSTALLATION.
  - CONTRACTOR TO FLAG LOCATION IN FIELD FOR REVIEW AND APPROVAL PRIOR TO INSTALL.

4 MILE MARKER N.T.S.

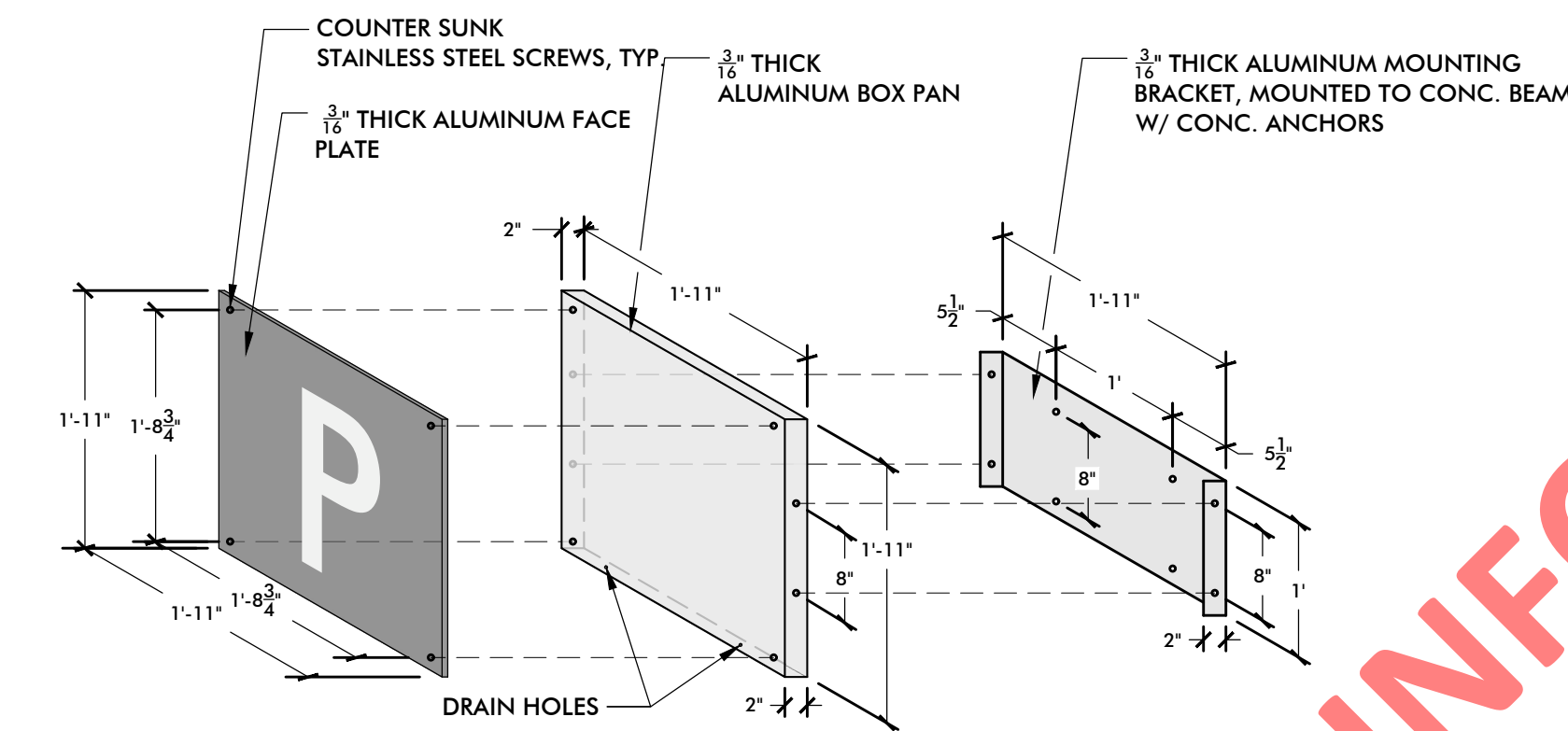
5 BRIDGE LETTER DETAIL LAYOUT & BIRD BARRIER 3/4" = 1'-0"



- NOTES:
- LETTERS TO BE INSTALLED ON FACE OF BRIDGE AS SPECIFIED BY CIVIL STRUCTURAL CONSULTANT.
  - BRIDGE BRANDING TO BE INSTALLED AT CENTER OF BRIDGE; REFER TO ELEVATION DRAWING.
  - LETTERS ARE WHITE IN COLOR-FUTURA FONT ON POWDER COATED BLACK BACKGROUND AND FINISHED WITH CLEAR POWDER COAT.
  - TEXT HEIGHT @ 1'-4" CENTERED TO FACE PLATE.
  - CONTRACTOR TO PROVIDE SAMPLES OF DIFFERENT FINISHES FOR REVIEW AND APPROVAL. (GLOSS, SEMI-GLOSS & MATTE)



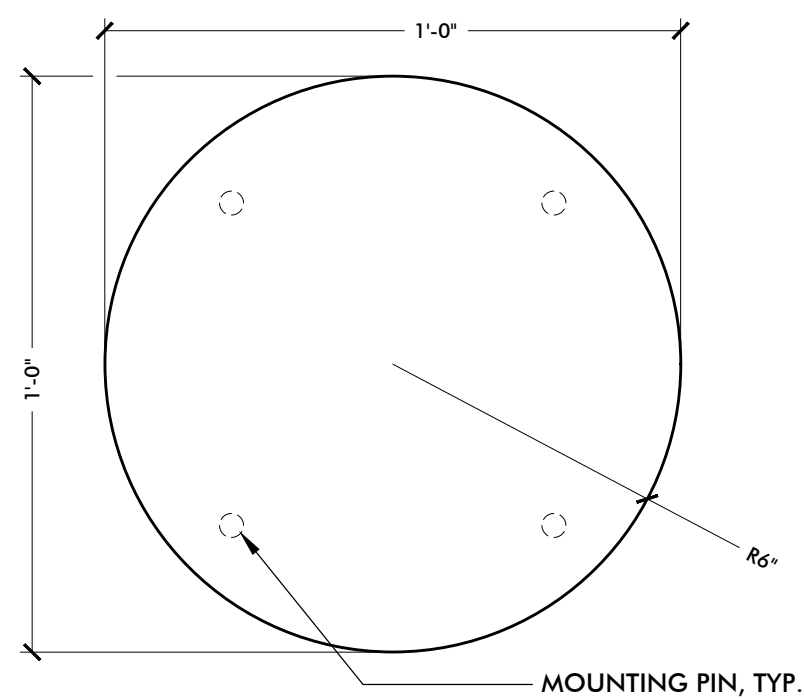
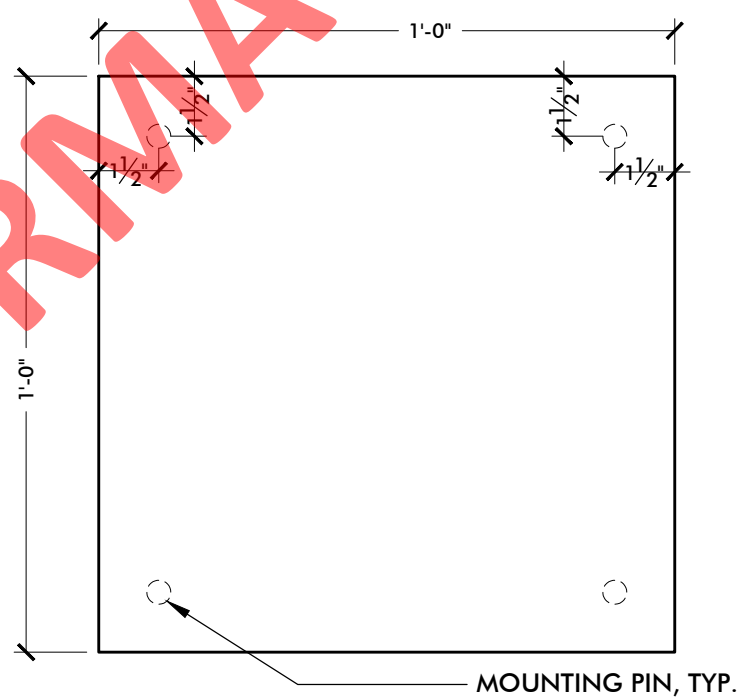
- NOTES:
- BIRD BARRIER SHALL BE MOUNTED ABOVE INSTALLED LETTERS TO PREVENT BIRD ROOST OR NEST CREATION AND TO PREVENT DAMAGE FROM DROPPINGS AND NESTING MATERIALS.
  - BIRD BARRIER SHALL BE GRAY IN COLOR AND INCLUDE ALL COMPONENTS (I.E. MOUNTING SYSTEM, CLOSED END CAPS, ETC.)
  - BIRD BARRIER SHALL BE MADE FROM UV STABILIZED POLYCARBONATE AND CAN BE CUT TO FIT THE SPECIFIC LOCATION.
  - BIRD BARRIER SHALL BE ATTACHED TO THE BRIDGE GIRDER WITH SCREWS. ADHESIVE IS NOT AN ACCEPTABLE MOUNTING MATERIAL.
  - FABRICATOR TO PROVIDE MOCK UPS FOR PREVIEW AND APPROVAL BY CITY OF FRANKLIN AND LANDSCAPE ARCHITECT.



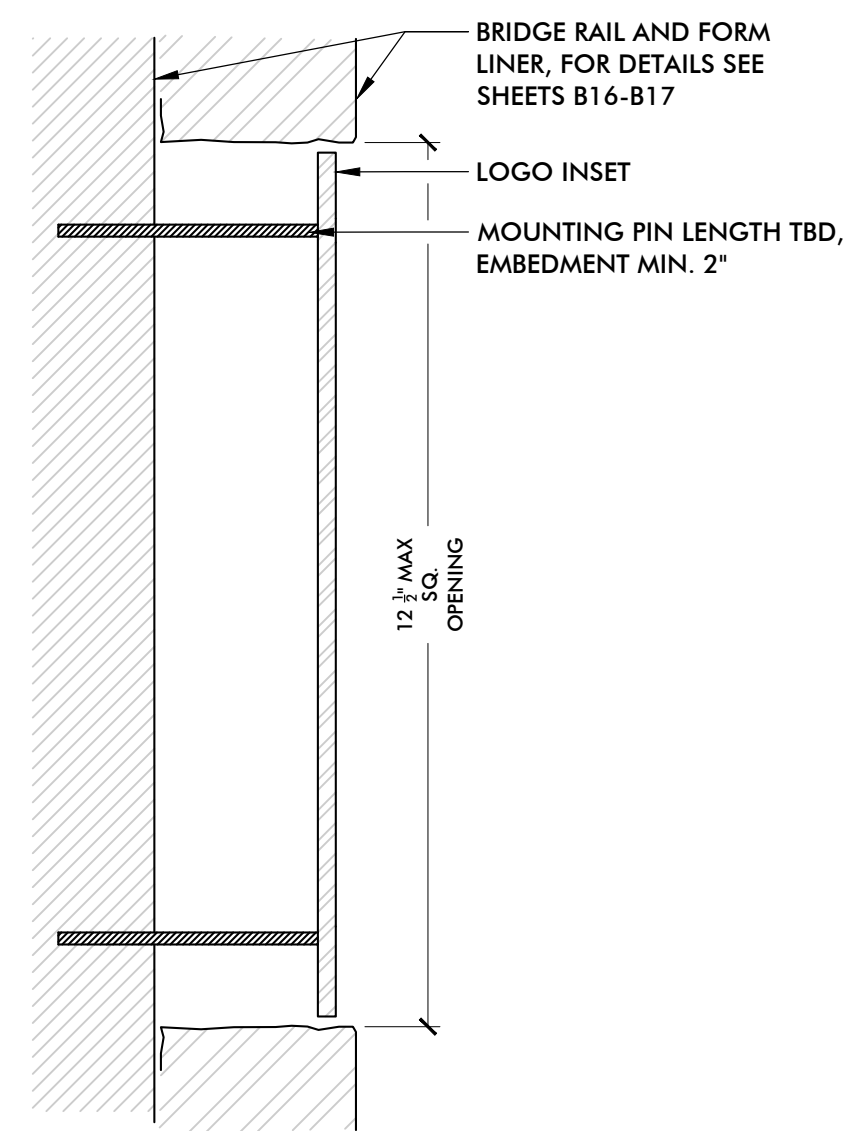
- NOTES:
- ALUMINUM FACE PLATE POWDER COATED IN BLACK AND FINISHED WITH A CLEAR POWDER COAT PRIOR TO MOUNTING TO FACE OF BEAM.
  - FABRICATOR TO PROVIDE MOCK UPS FOR PREVIEW AND APPROVAL.
  - TEXT HEIGHT: 1'-4" CENTERED TO FACE PLATE.
  - BOX PAN & MOUNTING BRACKET TO BE FINISHED WITH BLACK POWDER COAT.
  - CONTRACTOR TO PROVIDE SAMPLES OF DIFFERENT FINISHES FOR REVIEW AND APPROVAL. (GLOSS, SEMI-GLOSS & MATTE).
  - FABRICATOR TO PROVIDE SHOP DRAWINGS FOR REVIEW & APPROVAL BY CITY OF FRANKLIN & LANDSCAPE ARCHITECT.

6 LETTER FIXTURE DETAIL 3/4" = 1'-0"

7 LOGO INSET DETAIL N.T.S.



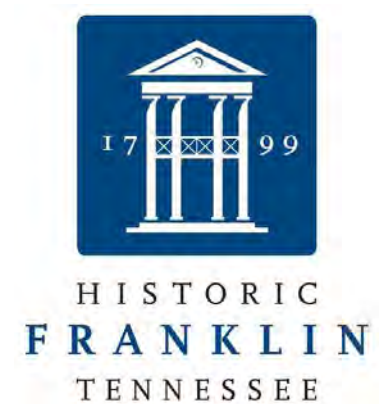
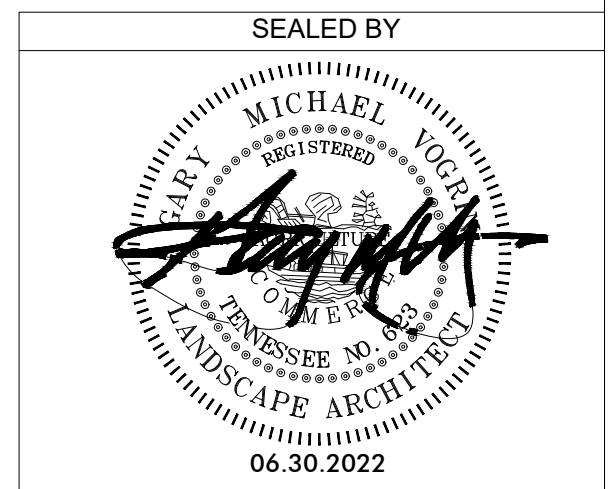
- NOTE:
- LOGO FABRICATOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY CITY OF FRANKLIN & LANDSCAPE ARCHITECT PRIOR TO FABRICATION.



SECTION/ELEVATION

SECTION/ELEVATION/PLAN

N.T.S.

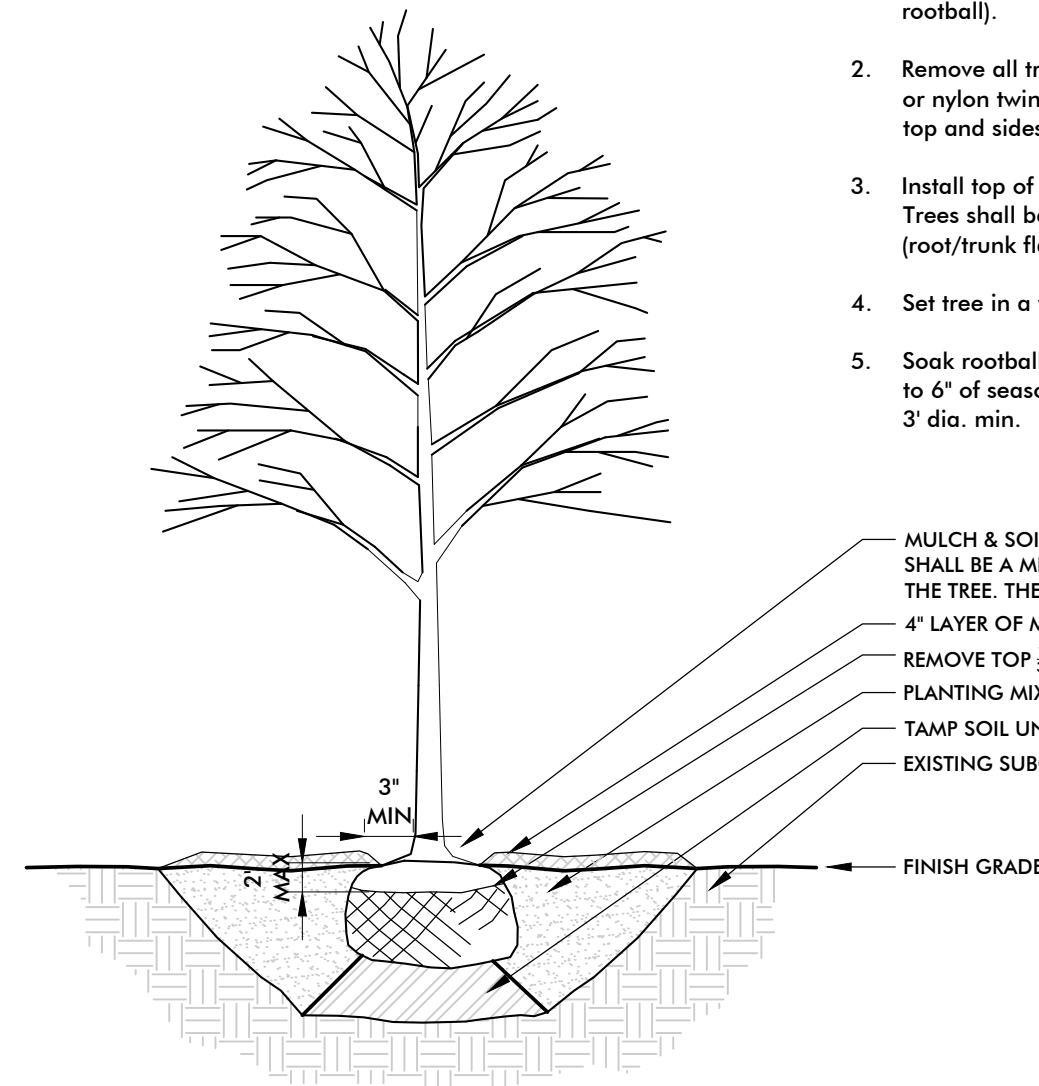


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

HARDSCAPE  
DETAILS

**GENERAL NOTES:**

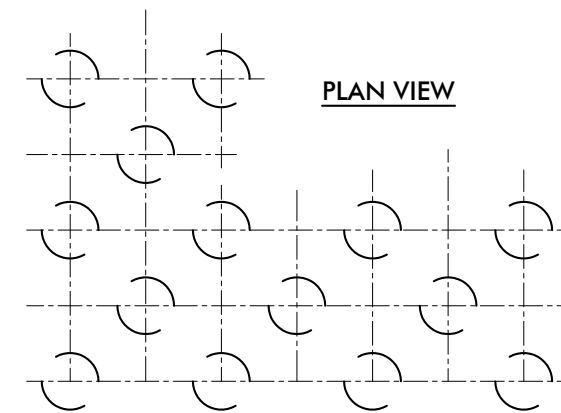
- All trees are to be nursery grown, balled and burlaped (B&B). Minimum tree size is per schedule (measured 6' above rootball).
- Remove all treated or plastic-coated burlap, strapping, wire or nylon twine from rootball. After setting in hole, cut away top and sides of wire basket, if any.
- Install top of plant ball even with or 1" above existing grade. Trees shall be set that the top of the main order roots (root/trunk flare) shall be no lower than 2" into the soil.
- Set tree in a vertical position prior to staking.
- Soak rootball and pit immediately after installation. Place 4" to 6" of seasoned mulch or pine needles around base of tree, 3' dia. min.



**1 SINGLE TRUNK TREE PLANTING**

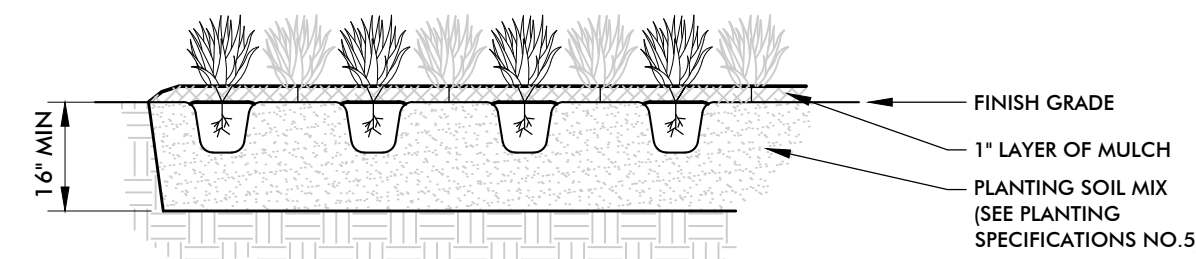
3/4" = 1'-0"

P-19029-06



**GENERAL NOTES:**

- LAYOUT PLANTS IN PREPARED BED AS SHOWN.
- SPACING AS SPECIFIED, PER SCHEDULE IN STAGGERED ROWS.



**2 PERENNIAL PLANTING**

3/4" = 1'-0"

P-19029-61

**LANDSCAPE NOTES:**

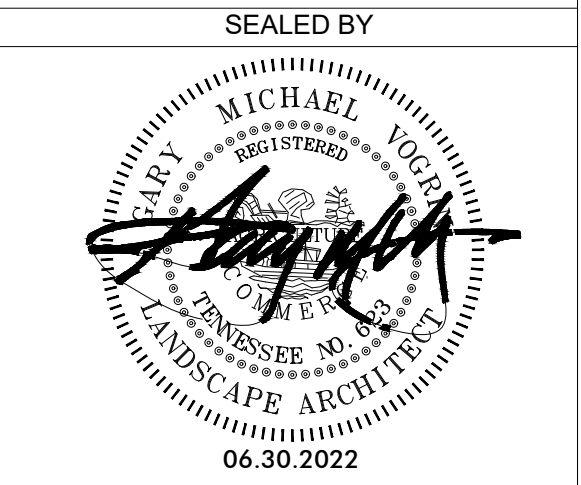
- ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES SHALL BE REPLACED WITHIN ONE YEAR OR BY THE NEXT GROWING SEASON, WHICH EVER COMES FIRST. OTHER DEFECTIVE LANDSCAPE MATERIAL SHALL BE REPLACED WITHIN THREE MONTHS.
- ALL TREES SHALL MEET FRANKLIN'S MINIMUM SIZE AND QUALITY STANDARD. ALL PLANTS SHALL BE HEALTHY, VIGOROUS MATERIAL, FREE OF PEST AND DISEASE. ALL ROOTBALLS, CONTAINERS AND HEIGHT TO WIDTH RATIOS SHALL CONFORM TO THE SIZE STANDARDS SET FORTH IN THE AMERICAN STANDARDS FOR NURSERY STOCK, CURRENT EDITION.
- ALL REQUIRED TREES AND SHRUBS SHALL MEET THE MINIMUM SIZE AND QUANTITY AS LISTED IN THE PLANT SCHEDULE.
- PLANT MATERIAL SHALL NOT OBSCURE TRAFFIC OR PARKING SIGNS/SIGNALS OR VEHICULAR SIGHT LINES.
- TREE TOPPING IS NOT PERMITTED.
- EXISTING TREES ACCEPTED IN PARTIAL COMPLIANCE OF THE LANDSCAPE REQUIREMENTS FOR THIS SITE SHALL BE ACCESSIBLE AND FLAGGED PRIOR TO ALL LANDSCAPE INSPECTIONS.
- TOP SOIL USED IN ALL LANDSCAPE AREAS SHALL BE SCREENED PRIOR TO DEPOSITION IN PLANTING AREAS AND ISLANDS.

**PLANTING SPECIFICATIONS:**

- PLANTING BEDS MUST HAVE A MINIMUM SOIL DEPTH OF 12".
- A PERCOLATION TEST SHALL BE PERFORMED IN EACH PLANTING AREA. DIG A HOLE 12 INCHES DEEP AND FILL COMPLETELY WITH WATER. NOTE THE TIME OF DAY THAT THE HOLE WAS FILLED. WAIT 24 HOURS AND THEN CHECK THE WATER LEVEL IN THE HOLE. IF WATER IS STILL PRESENT IN THE HOLE, CONTACT LANDSCAPE ARCHITECT AS DRAINAGE FOR THIS AREA MAY NEED TO BE PROVIDED.
- A SOIL TEST IS TO BE PERFORMED IN ORDER TO DETERMINE WHAT CHEMICALS/FERTILIZERS MAY NEED TO BE ADDED TO ENSURE SUCCESSFUL PLANT GROWTH.
- IF THERE IS ANY QUESTION AS TO THE CHEMICAL SUITABILITY OF WATER TO BE USED FOR IRRIGATION PURPOSES, IT IS RECOMMENDED THAT A WATER QUALITY CHEMICAL ANALYSIS BE PERFORMED.
- ROTTOTILL EXISTING SOIL TO A DEPTH OF 6" PRIOR TO ANY TOPSOIL PLACEMENT. PLACE 3" DEPTH OF 3-WAY PLANTING SOIL MIX (1/3 TOPSOIL, 1/3 PEAT, 1/3 SAND) IN ALL PLANT AND GROUNDCOVER BED AREAS. ROTOTILL SOIL MIX INTO THE EXISTING SOIL. REMOVE ROCKS OVER 1" DIAMETER. \*PLANTING BED AREAS WITH EXISTING PLANT MATERIAL TO REMAIN SHALL NOT BE ROTOTILLED WITHIN THE TREE PROTECTION ZONE.
- LOCATIONS OF ALL BEDS AND TREES TO BE STAKED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
- PROVIDE PLANT MATERIAL THAT COMPLIES WITH THE RECOMMENDATIONS AND REQUIREMENT OF ANSI Z60.1 "AMERICAN STANDARDS FOR NURSERY STOCK."
- TREES ARE TO BE FULL HEADED, SYMMETRICAL AND MATCHING IN SIZE.
- STAGING SYSTEMS/LOCATIONS SHOULD BE PREPARED IN ADVANCE TO HOLD TREES ABOVE GROUND FOR OPTIMUM TREE HEALTH PRIOR TO PLANTING.
- PRIOR TO UNLOADING PLANT MATERIAL, PROPER MOISTURE SHOULD BE MAINTAINED IN ROOT BALLS. TRUCKS SHOULD BE STAGED IN THE SHADE PRIOR TO UNLOADING.
- USE A STRAP OR CHAIN CRADLE (ADEQUATE FOR WEIGHT AND SIZE OF ROOT BALL) ATTACHED TO THE ROOT BALL TO UNLOAD AND MOVE TREES.
- IMMEDIATELY AFTER UNLOADING (NO MORE THAN ONE HOUR AFTER UNLOADING), STAND UP TREES TO REDUCE THE RISK OF SUN SCALD.
- BEFORE PLANTING, REMOVE ANY PLASTIC WRAP, CARDBOARD PACKAGING, THE TOP PORTION OF THE WIRE BASKET DOWN TO AND INCLUDING THE FIRST HORIZONTAL RING, AND THE BURLAP FROM THE TOP PORTION OF THE ROOT BALL.
- DURING COLD WEATHER PERIODS, ROOT BALLS MUST BE PROTECTED FROM FREEZING TEMPERATURES.
- DETERMINE LOCATION OF ALL ABOVE AND UNDERGROUND UTILITIES AND EXISTING IRRIGATION SYSTEMS. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR IRRIGATION SYSTEMS. CONTACT LANDSCAPE ARCHITECT IF ANY UTILITIES INTERFERE WITH PLANTING LOCATIONS PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR TO NOTIFY OWNER'S REPRESENTATIVE UPON COMPLETION OF WORK FOR FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND MAINTAINING PLANTS UNTIL FINAL ACCEPTANCE.
- QUANTITIES INDICATED ON THE PLANT SCHEDULE MAY VARY FROM QUANTITIES ACTUALLY REQUIRED TO DEFINE THE SPACE SHOWN. THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE HIS/HER OWN QUANTITY CALCULATIONS AND INSURE THAT THE REQUIRED QUANTITY OF REQUIRED MATERIAL WILL BE INSTALLED AS SHOWN ON PLAN AT REQUIRED SPACING AND OTHER SPECIFICATIONS RELATED TO THAT PARTICULAR MATERIAL.
- IF ANY DISCREPANCIES ARE FOUND IN PLANS OR ON SITE, MAKE THIS INFORMATION KNOWN TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF ANY WORK.
- CONTRACTOR GUARANTEES, UPON SUBMITTING A PROPOSAL FOR THIS WORK, THAT 100% OF ALL PLANT MATERIALS HAVE BEEN LOCATED AND CAN BE PURCHASED AND INSTALLED. NOTIFY OWNER'S REPRESENTATIVE FOR A PRE-INSTALLATION INSPECTION FOR SPECIFICATION COMPLIANCE.
- PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANT BEDS IMMEDIATELY PRIOR TO PLACEMENT OF MULCH.
- REMOVE ALL WEEDS AND OTHER UNDESIRABLE MATERIALS IN PLANT BEDS. CHEMICAL AND MECHANICAL METHODS SHALL BE EMPLOYED.
- CONTRACTOR SHALL PROVIDE OWNER WITH COMPLETE WRITTEN INSTRUCTIONS FOR MAINTENANCE OF ALL SPECIFIED PLANT MATERIALS.
- SOD/SEED ALL DISTURBED AREAS AS INDICATED ON LANDSCAPE PLANS.
- GROUPS OF SHRUBS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINES. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS. TREES LOCATED WITHIN FOUR FEET OF SHRUB BEDS SHALL SHARE SAME MULCH BED.
- MULCH IS TO BE PINE STRAW FOR TREES AND SHRUBS. FINE BARK MULCH IS TO BE USED FOR PERENNIAL BEDS. THE AREA OVER THE ROOT BALLS OF TREES SHALL BE MULCHED NO DEEPER THAN 1.5" TO 2". KEEP ALL MULCH AWAY FROM THE TRUNK FLARE TO PREVENT INSECTS AND DISEASE OF THE BARK TISSUE.

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2022	TAP-9305(32)	2G4
CONST.	2022	TAP-9305(32)	2G4

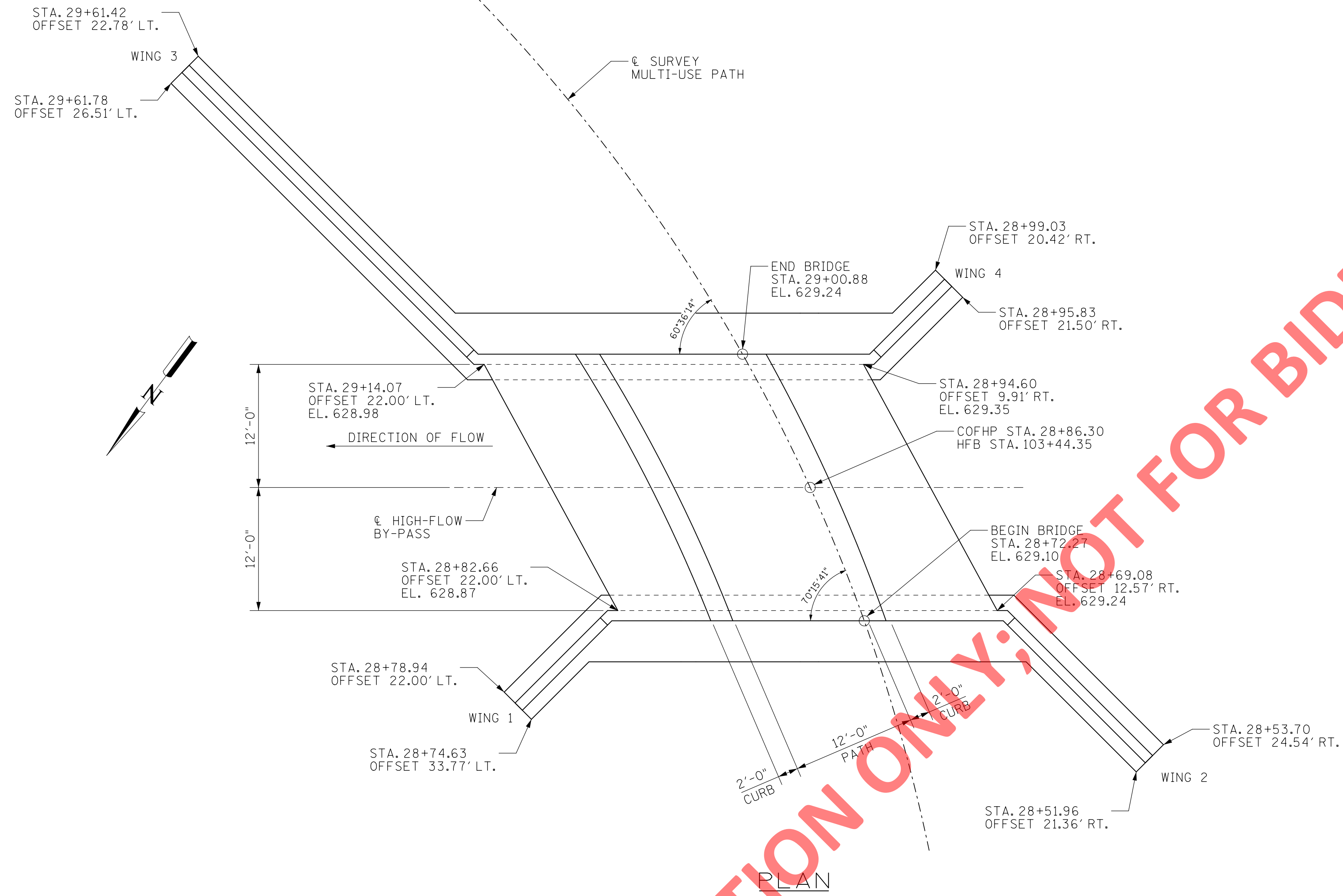


**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

**LANDSCAPE  
 DETAILS &  
 NOTES**

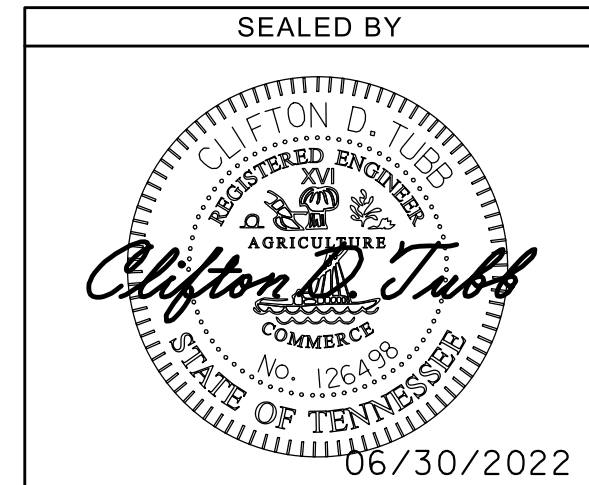
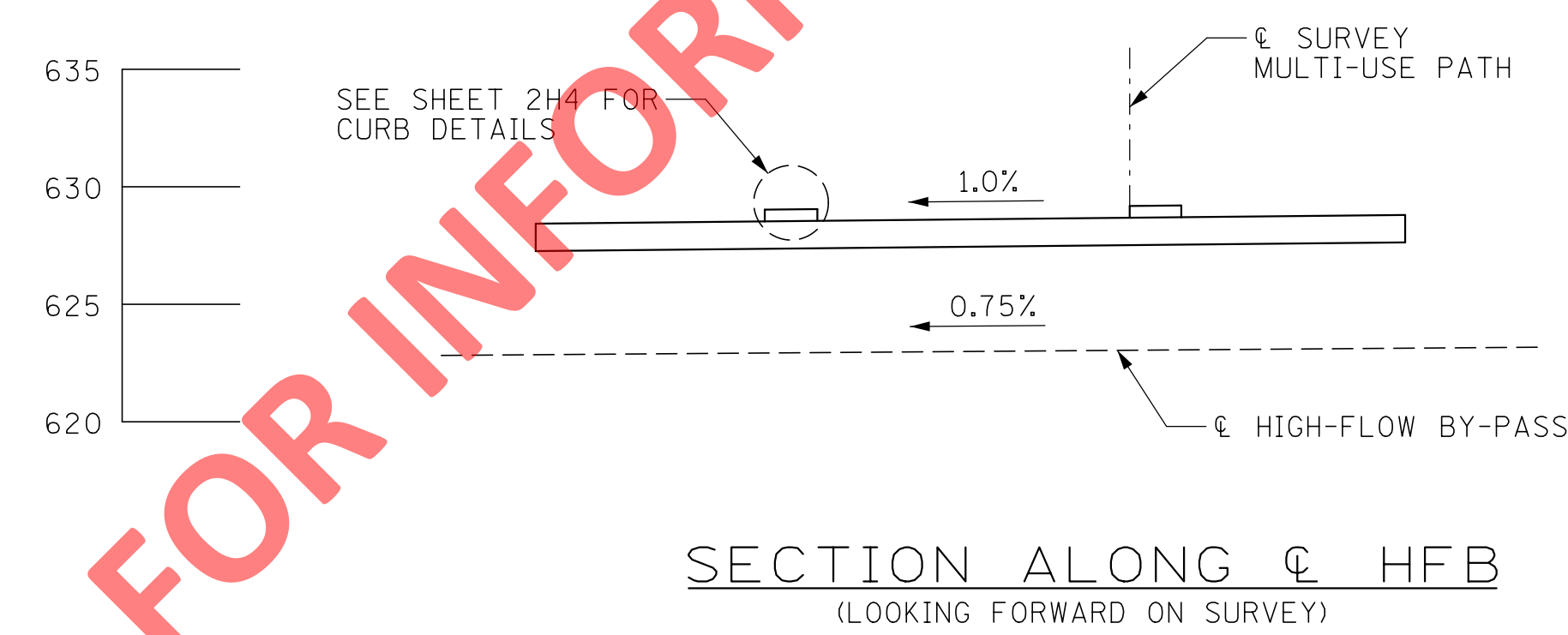
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2H
CONST.	2022	TAP-9305(32)	2H

NOTE: FOR WING DETAILS, SEE TDOT STANDARD BOX CULVERT DRAWINGS.



LIST OF STANDARD DRAWINGS	DWG. NO.	LAST REV. DATE
TERMINOLOGY	STD-17-2	
GENERAL NOTES	STD-17-3	
TYPICAL SECTION AND DETAILS	STD-17-5	
TYPICAL ELEVATION	STD-17-6	
CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG.	STD-17-7	
INTERIOR WALL AND END TREATMENTS	STD-17-9	
TYPICAL WINGWALL DETAILS AND NOTES	STD-17-10	
WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS	STD-17-15	
WINGWALL DESIGN SECTION	STD-17-16	

- NOTES:**
- CONSTRUCTION SPECIFICATIONS: TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021 EDITION).
  - DESIGN SPECIFICATIONS: 9<sup>TH</sup> EDITION (2020) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
  - CONCRETE: TO BE CLASS A (CAST-IN-PLACE) F'C = 3000 PSI EXCEPT AS NOTED OTHERWISE.



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



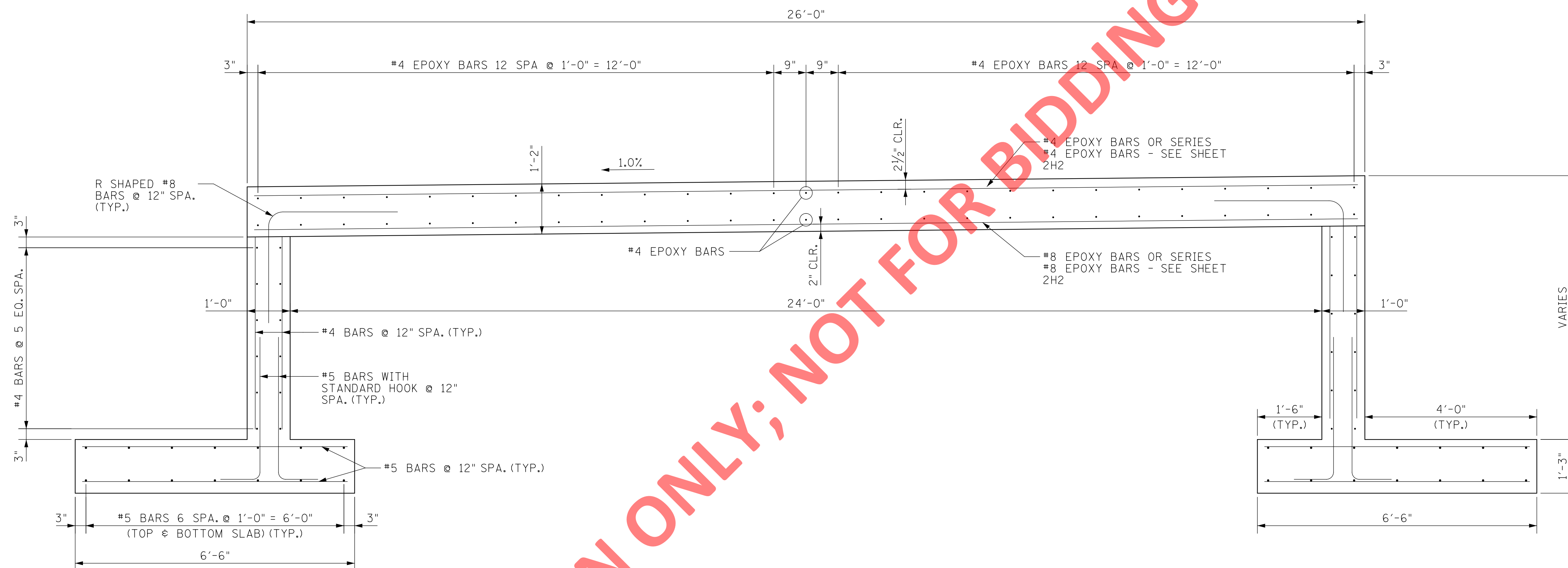
CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

SLAB BRIDGE  
LAYOUT

6/30/2022 10:50:18 AM Y:\Nashville\16020000S\16020001\001\Eng\_Docs\Structures\16020001\_Harlinsdale\_Slab Bridge Culvert Layout.dgn

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2H1
CONST.	2022	TAP-9305(32)	2H1



SLAB BRIDGE CROSS SECTION  
(90° FROM C OF HFB)

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:50:20 AM  
Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Structures\16020001\_Harlinsdale\_Slab Bridge Culvert Cross Section.dgn

SEALED BY

06/30/2022

COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

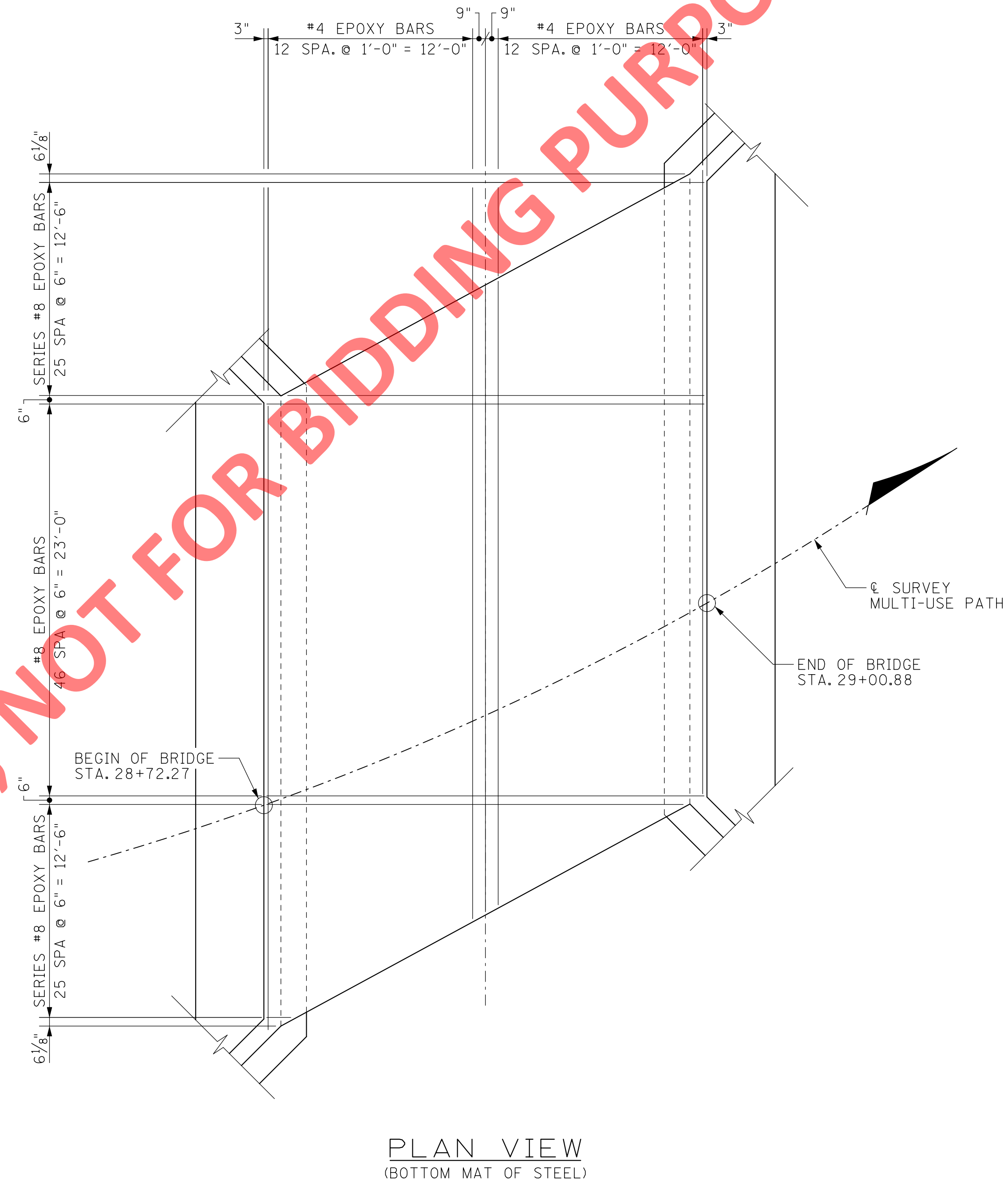
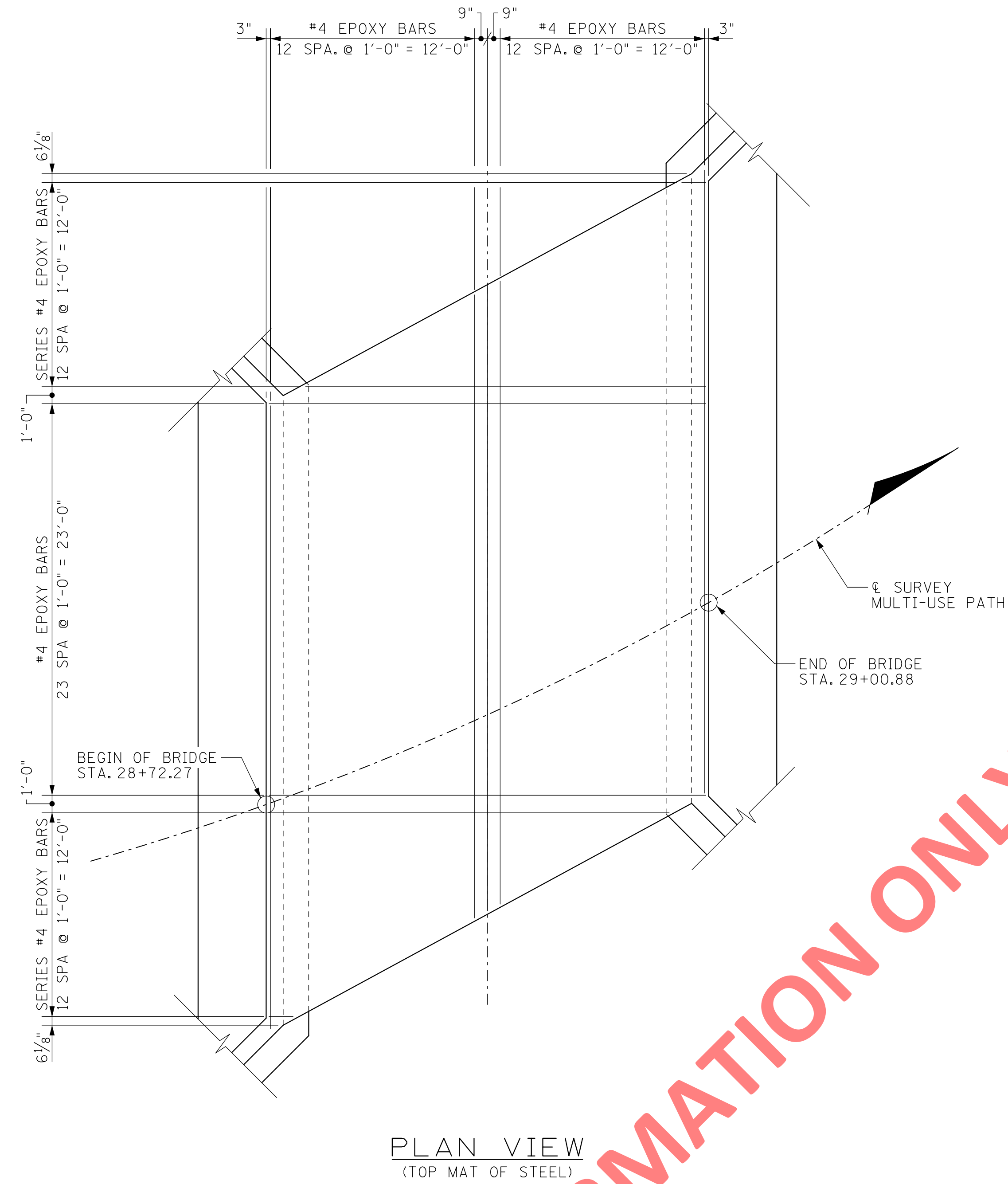


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

SLAB BRIDGE  
TYPICAL  
SECTION

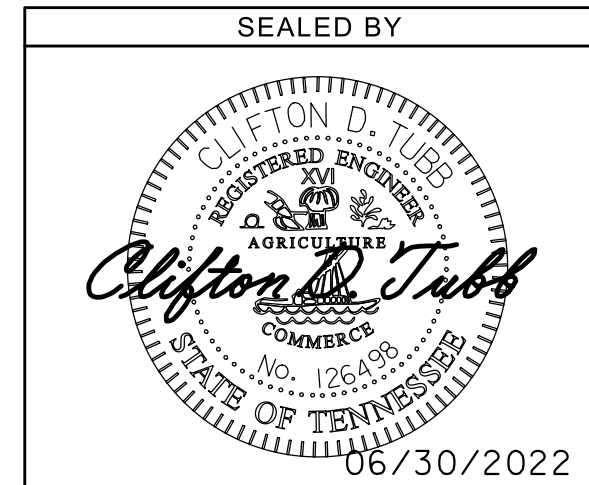


TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2H2
CONST.	2022	TAP-9305(32)	2H2



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:50:21 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Structures\16020001\_Harlinsdale\_Slab Bridge Reinforcement Layout.dgn



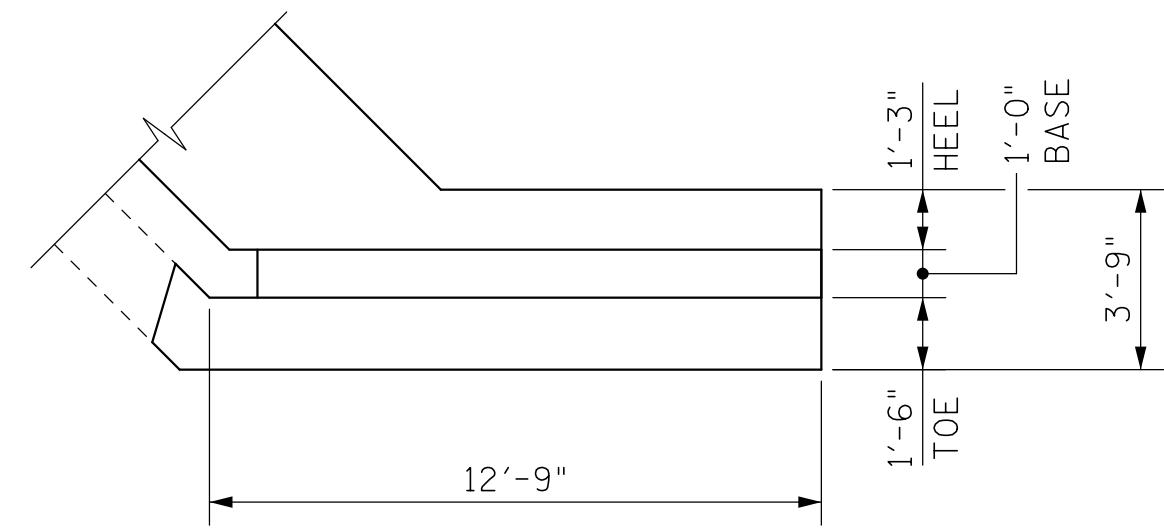
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



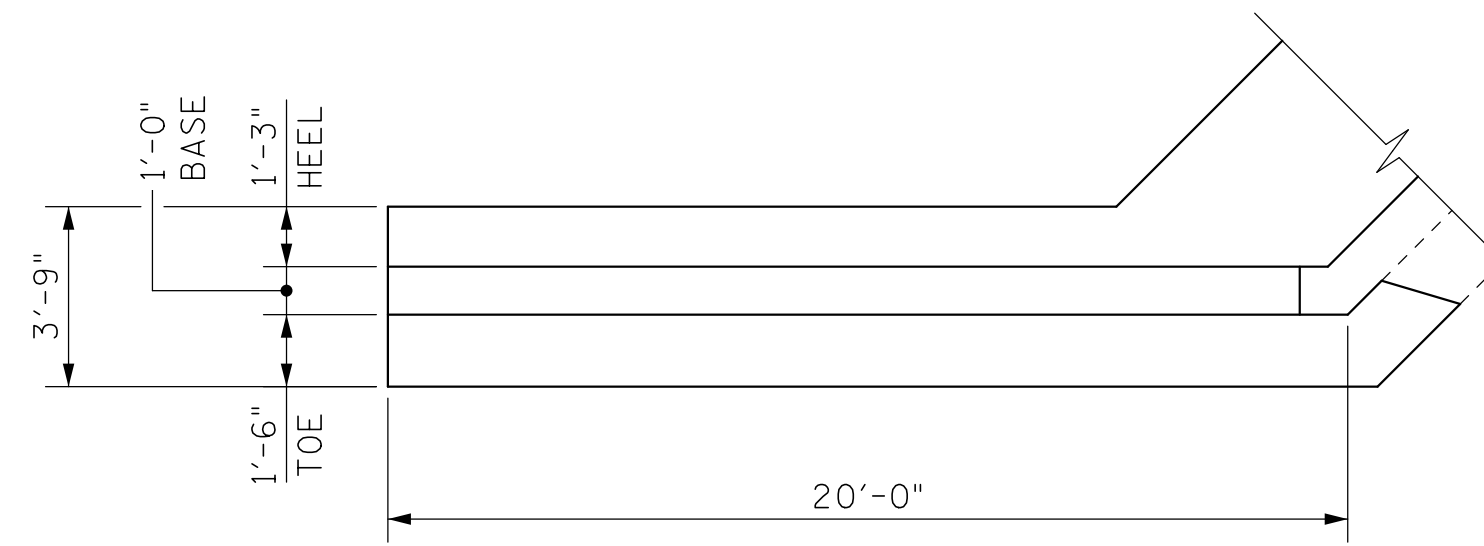
**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**SLAB  
REINFORCEMENT**

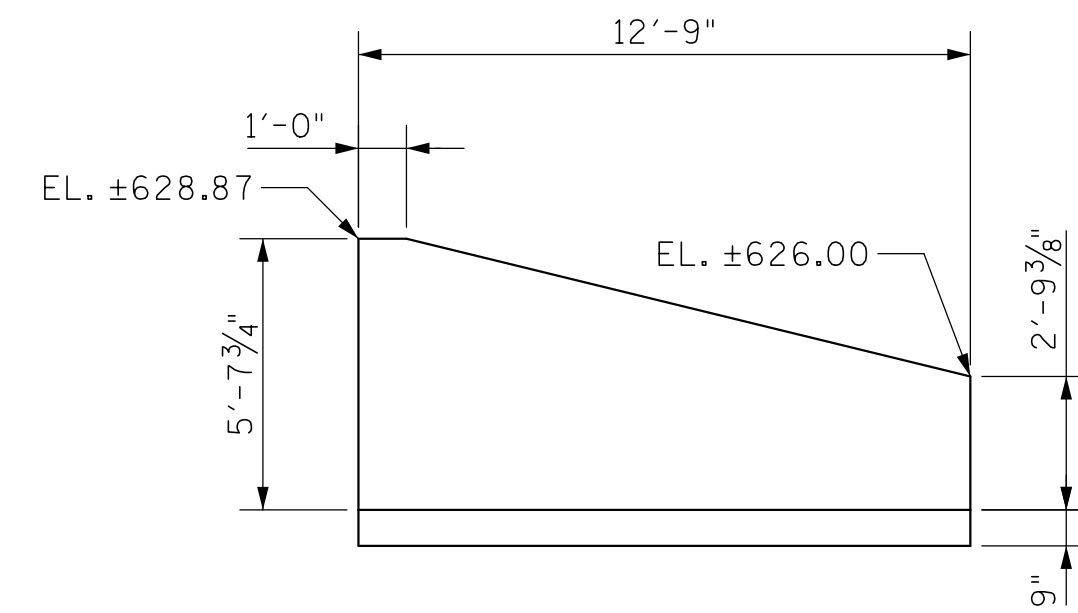
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2H3
CONST.	2022	TAP-9305(32)	2H3



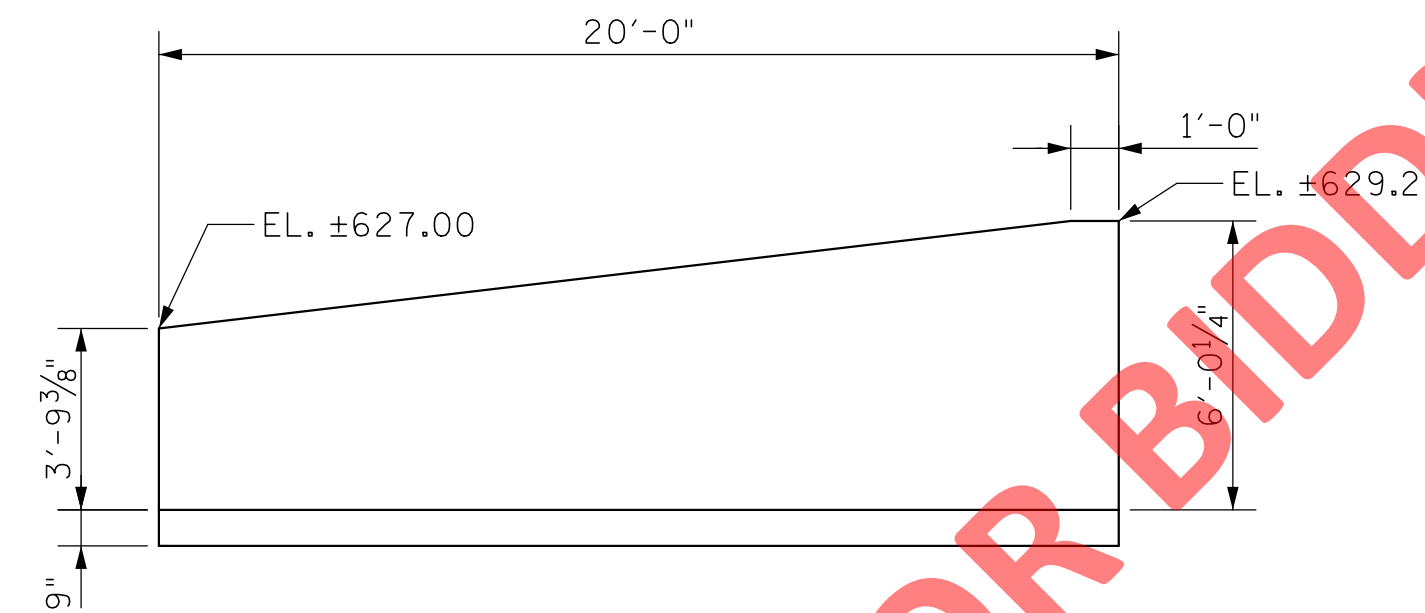
WING 1 PLAN



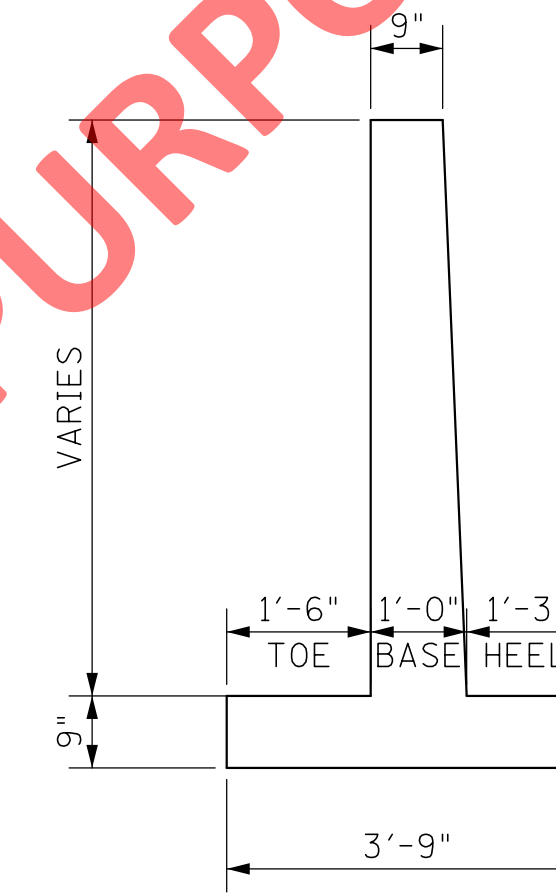
WING 2 PLAN



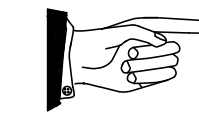
WING 1 ELEVATION



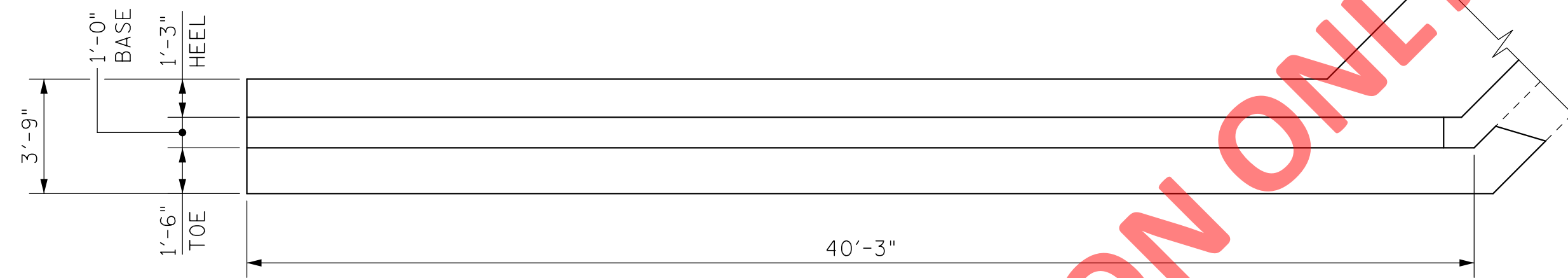
WING 2 ELEVATION



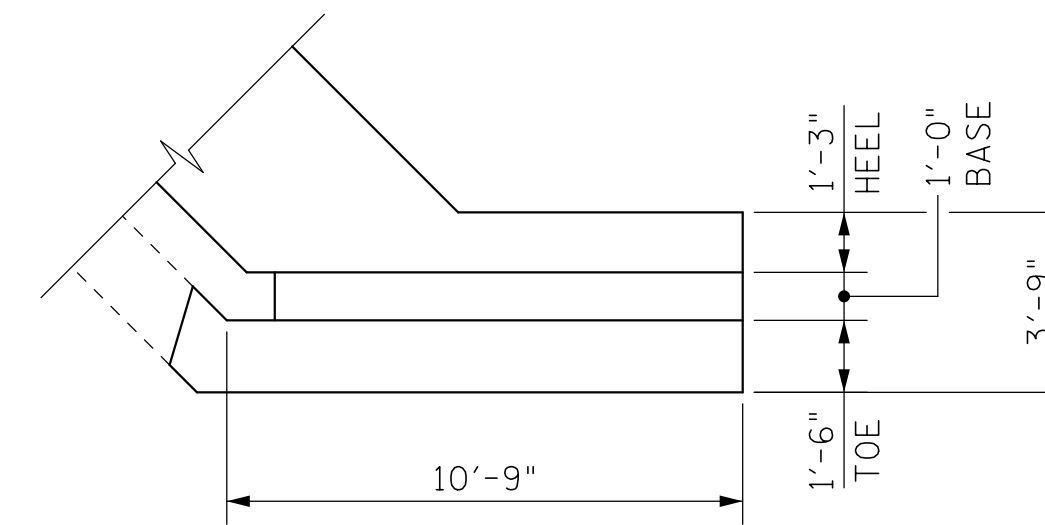
TYPICAL SECTION



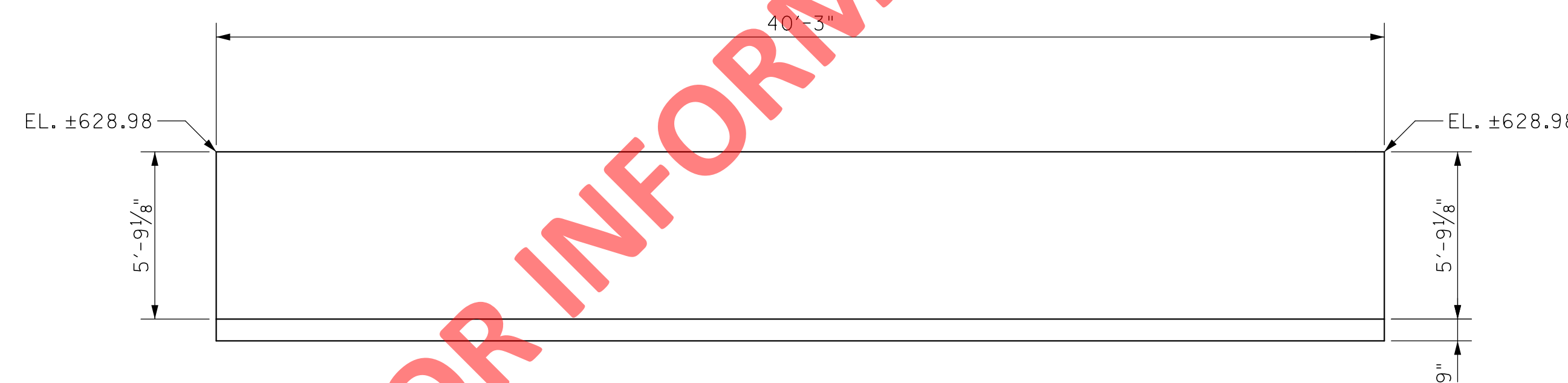
NOTE: REFER TO TDOT STD. DWG. STD-17-15 DESIGN SECTIONS 1 & 2 FOR WINGWALL DETAILS AND DESIGN INFO.



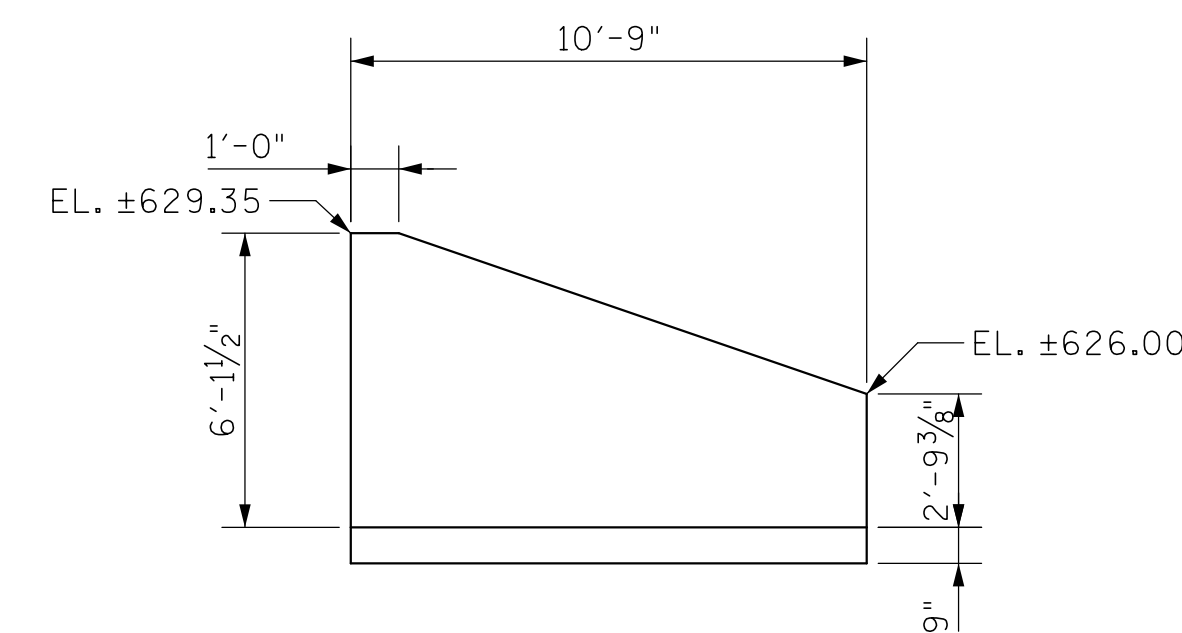
WING 3 PLAN



WING 4 PLAN



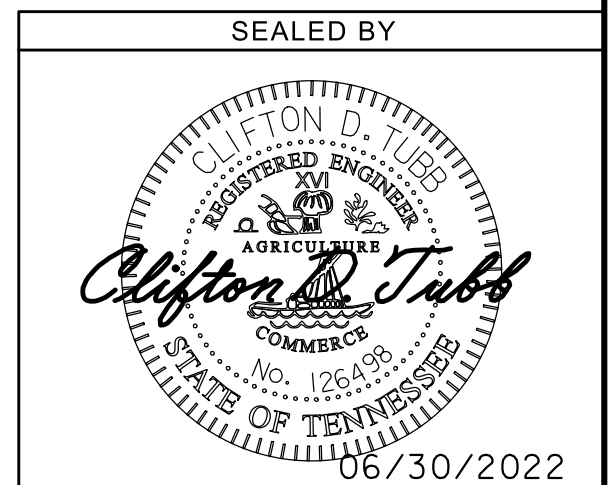
WING 3 ELEVATION



WING 4 ELEVATION

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:50:22 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Structures\16020001\_Harlinsdale\_Slab Bridge Culvert Wings.dgn



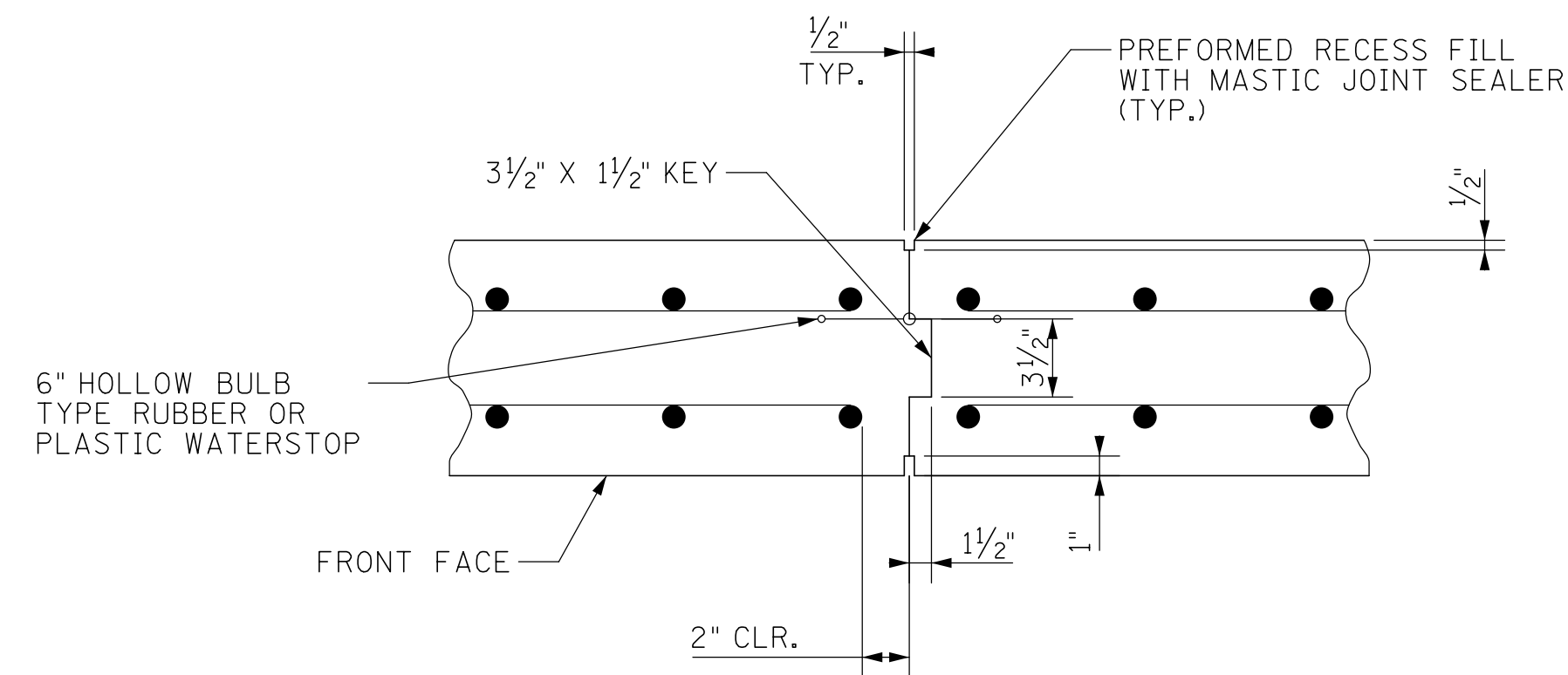
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



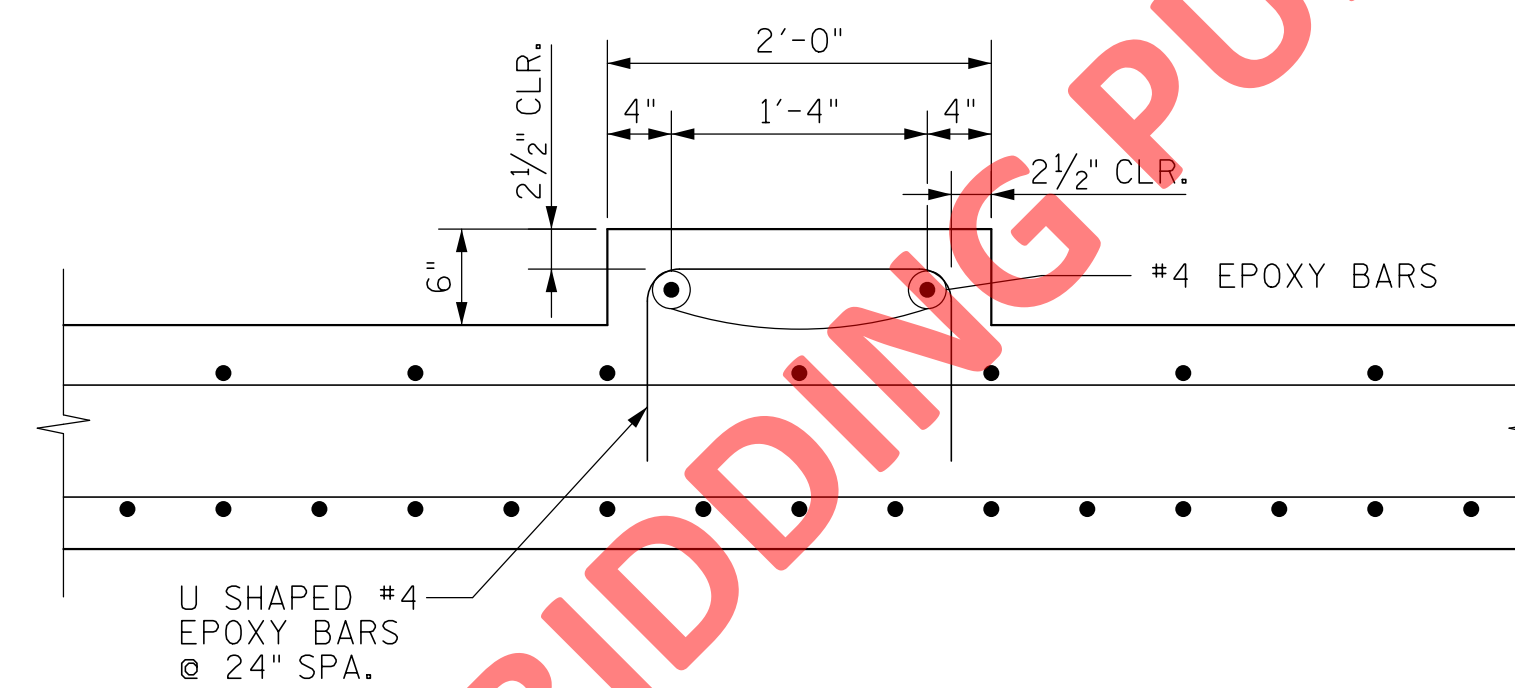
CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

WINGWALL  
DETAILS

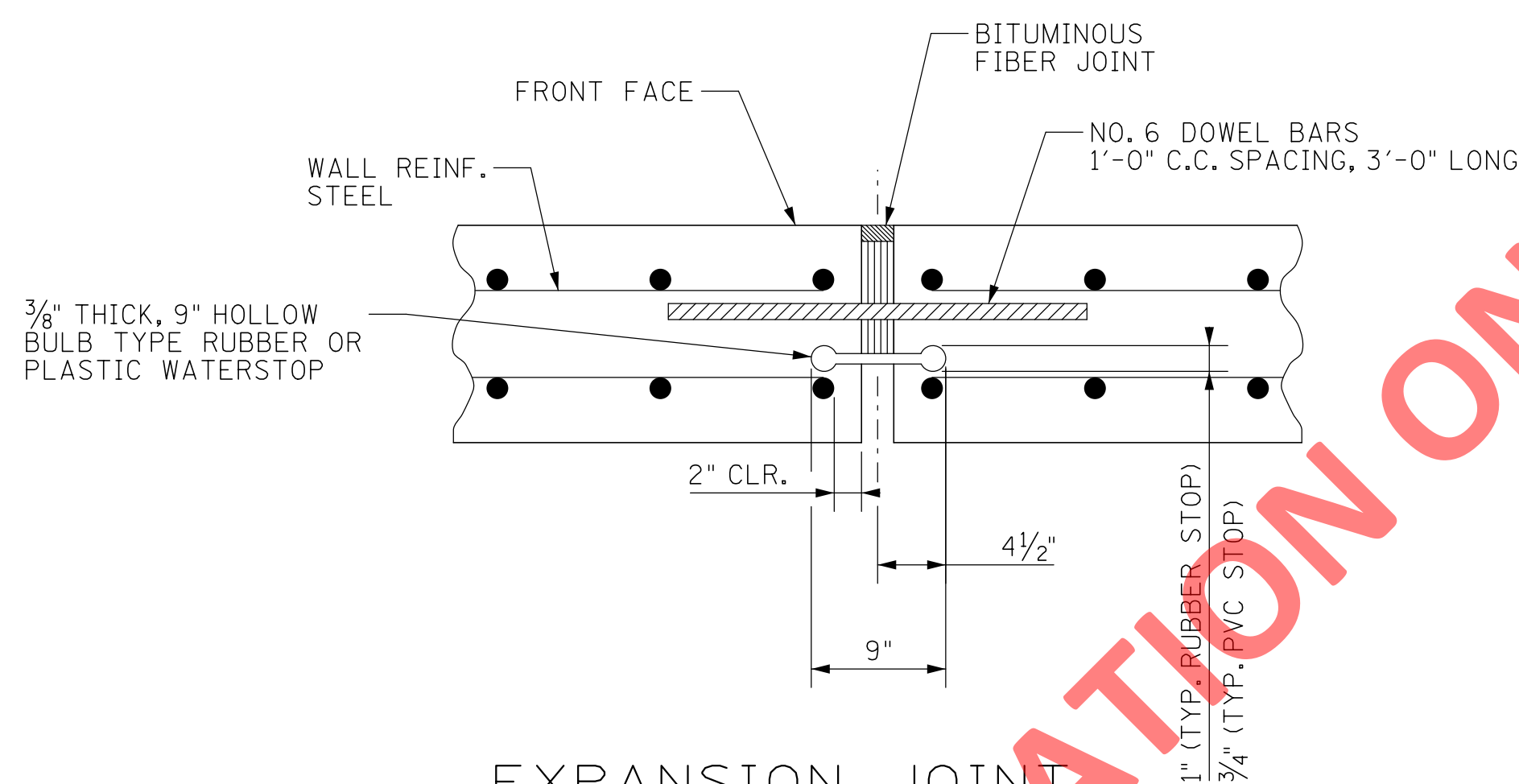
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	2H4
CONST.	2022	TAP-9305(32)	2H4



CONTRACTION JOINT  
(NOT TO SCALE)



TYPICAL CURB DETAIL



EXPANSION JOINT  
(NOT TO SCALE)

WALL JOINT NOTES:

EXPANSION JOINTS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED 90 FEET. THE EXPANSION JOINTS SHALL BE USED IN THE WALL ONLY AND NOT CARRIED THROUGH THE FOOTING. NO WALL REINFORCEMENT SHALL PASS THROUGH THE JOINT. ONE END OF THE DOWELS SHALL BE WRAPPED IN A LAYER OF TARPAPER WITH A TARPAPER CAP OVER THE END.

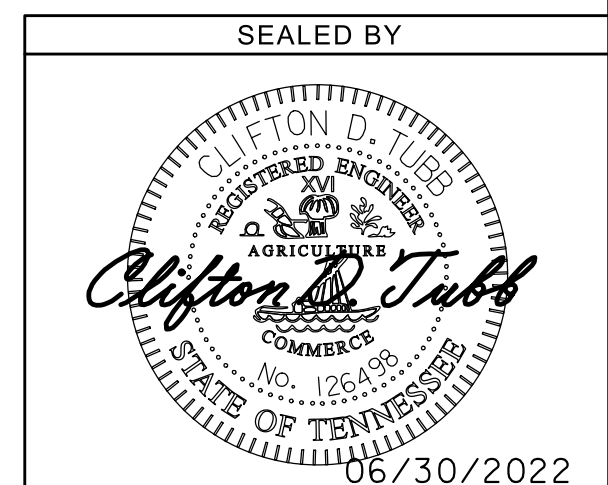
CONTRACTION JOINTS SHALL EXIST IN THE RETAINING WALL AND SHALL BE SPACED AT A MAXIMUM OF 30 FEET APART. THE CONTRACTION JOINTS CLOSEST TO THE ENDS OF THE WALLS SHALL OCCUR NO FURTHER THAN 30 FEET FROM THE END OF THE WALL.

JOINT MATERIAL SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION NUMBERS 904 AND 905

FOOTING AND FOOTING REINFORCEMENT SHALL BE CONTINUOUS UNLESS OTHERWISE NOTED.

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:50:29 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Structures\IGN\16020001\_Harlinsdale\_Slab Bridge Culvert Details.dgn



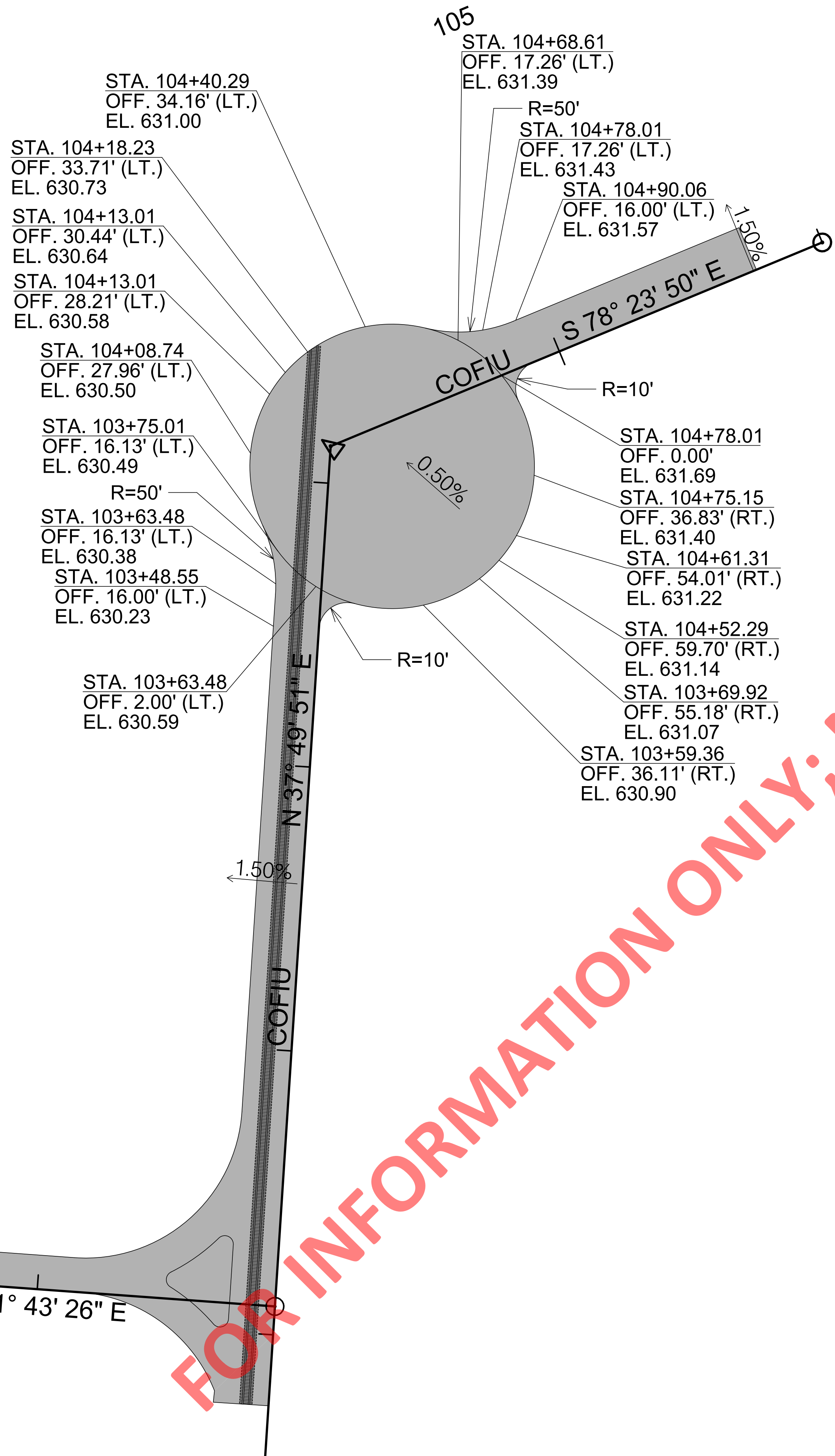
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

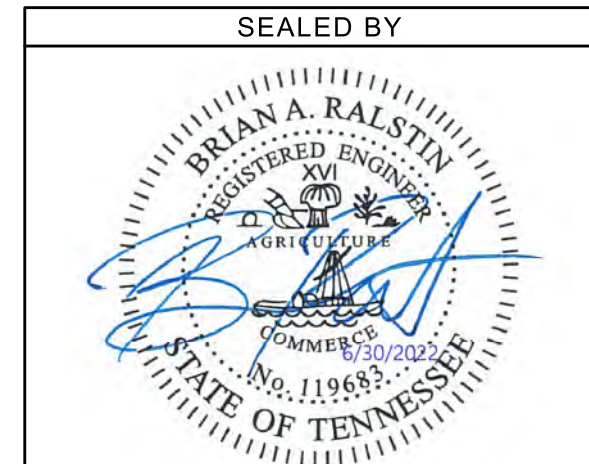
SLAB BRIDGE  
DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	2J



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:50:37 AM  
 Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\002J\_Detail\Sheet.sht



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

DETAIL SHEET

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	3
CONST.	2022	TAP-9305(32)	3

**RIGHT-OF-WAY**

- (1) IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT BE REMOVED THERE FROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, CITY OF FRANKLIN RIGHT-OF-WAY REPRESENTATIVE TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.
- (2) ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY, STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.
- (3) EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.
- (4) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.
- (5) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.
- (6) ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.
- (7) NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.
- (8) ON NON-STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.

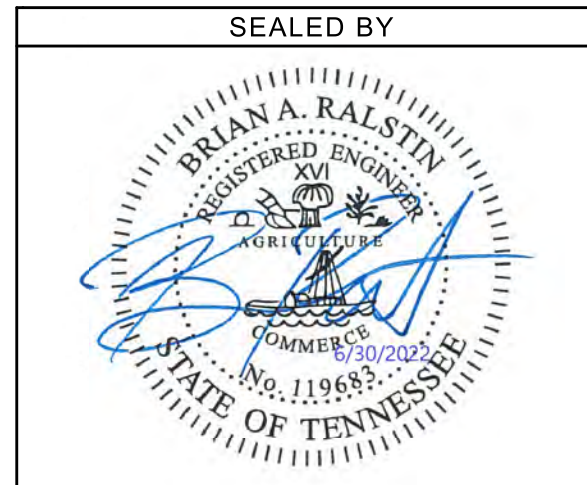
**UTILITY**

- (1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) OR NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- (2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- (3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- (5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106 NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC AT 1-800-351-1111 WILL BE REQUIRED.

UTILITY OWNERS

MIDDLE TN ELECTRIC MEMBERSHIP CORP. 2156 EDWARD CURD LANE FRANKLIN, TN 37064 ATTN: DERRICK LYNCH PH (615) 595-4669 EMAIL: DERRICK.LYNCH@MTEMC.COM	CITY OF FRANKLIN - WATER MANAGEMENT DEPARTMENT 124 LUMBER DRIVE FRANKLIN, TN 37064 ATTN: MICHELLE HATCHER PH (615) 794-4554 EMAIL: MICHELLE.HATCHER@FRANKLINTN.GOV
ATMOS ENERGY - GAS 810 CRESCENT CENTRE DRIVE SUITE 600 FRANKLIN, TN 37067 ATTN: RYAN BATES PH (615) 771-8311 EMAIL: RYAN.BATES@ATMOSENERGY.COM	AT&T - OUTSIDE PLAN ENGINEERING 333 COMMERCE STREET NASHVILLE, TN 37201 ATTN: LEE KORNEGAY PH (615) 214-7318 EMAIL: KK4096@ATT.COM
COMCAST CABLE COMMUNICATIONS 660 MAINSTREAM DRIVE NASHVILLE, TN 37228 ATTN: RUSTY HOLLOWAY PH (615) 244-7462 EXT. 1115471 EMAIL: RUSSELL.HOLLOWAY@CABLE.COMCAST.COM	CITY OF FRANKLIN FIBER OPTICS 109 3RD AVE SOUTH FRANKLIN, TN 37064 ATTN: MIKE PROCTOR PH (615) 289-1036 EMAIL: MIKEP@FRANKLINTN.GOV

FOR INFORMATION ONLY - NOT FOR BIDDING PURPOSES



**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

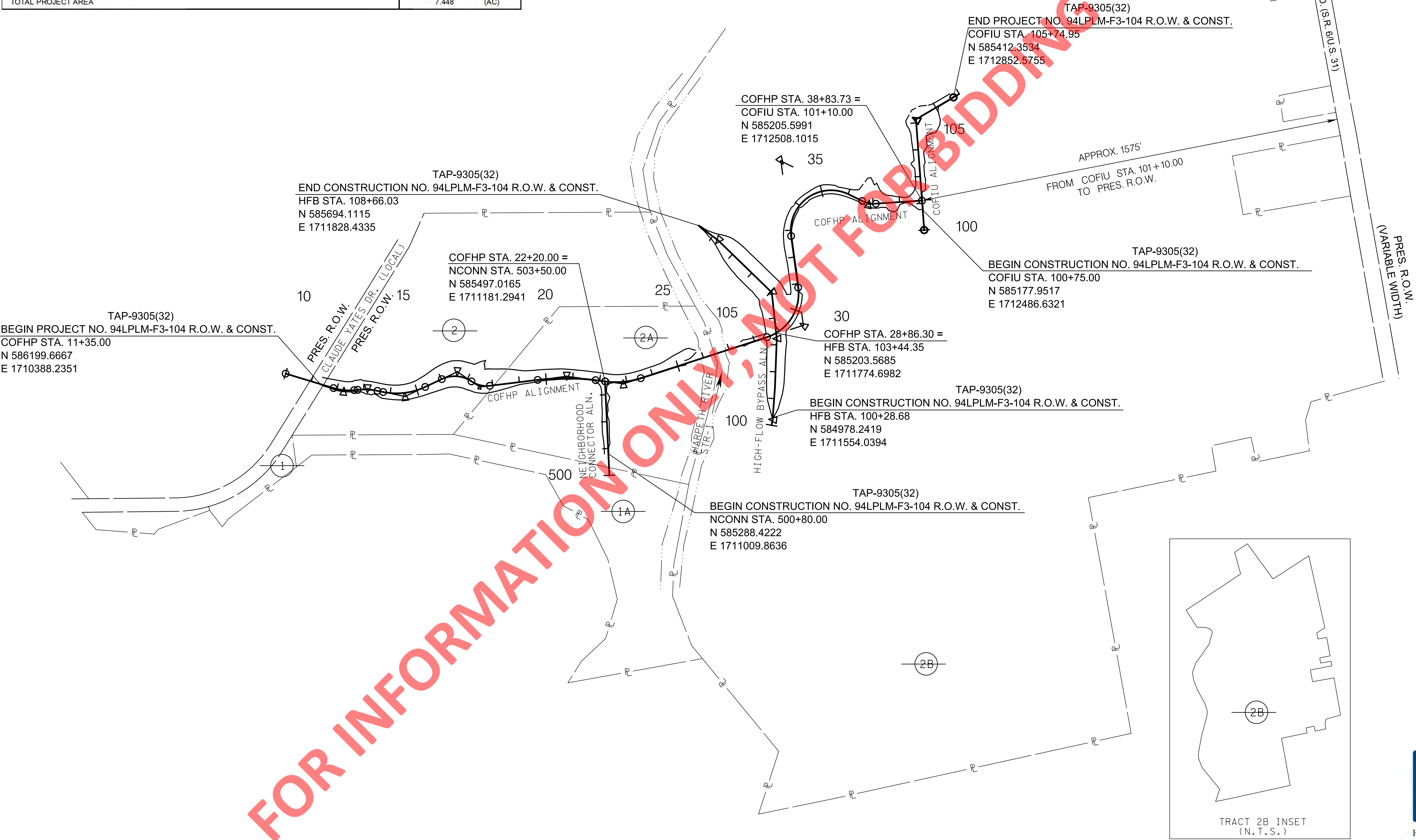
**RIGHT-OF-WAY  
NOTES,  
UTILITY NOTES  
AND  
UTILITY OWNERS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	3A
CONST.	2022	TAP-9305(32)	3A

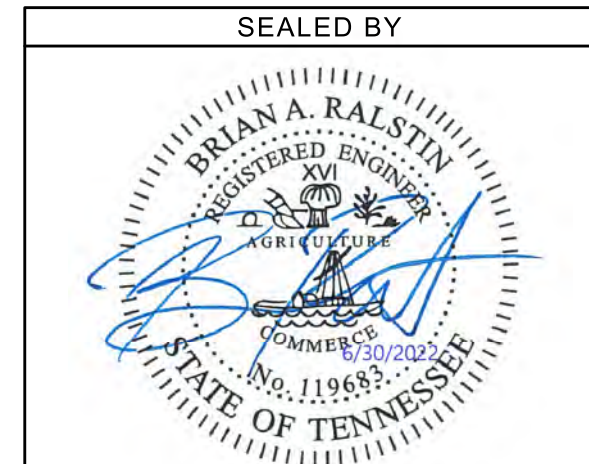
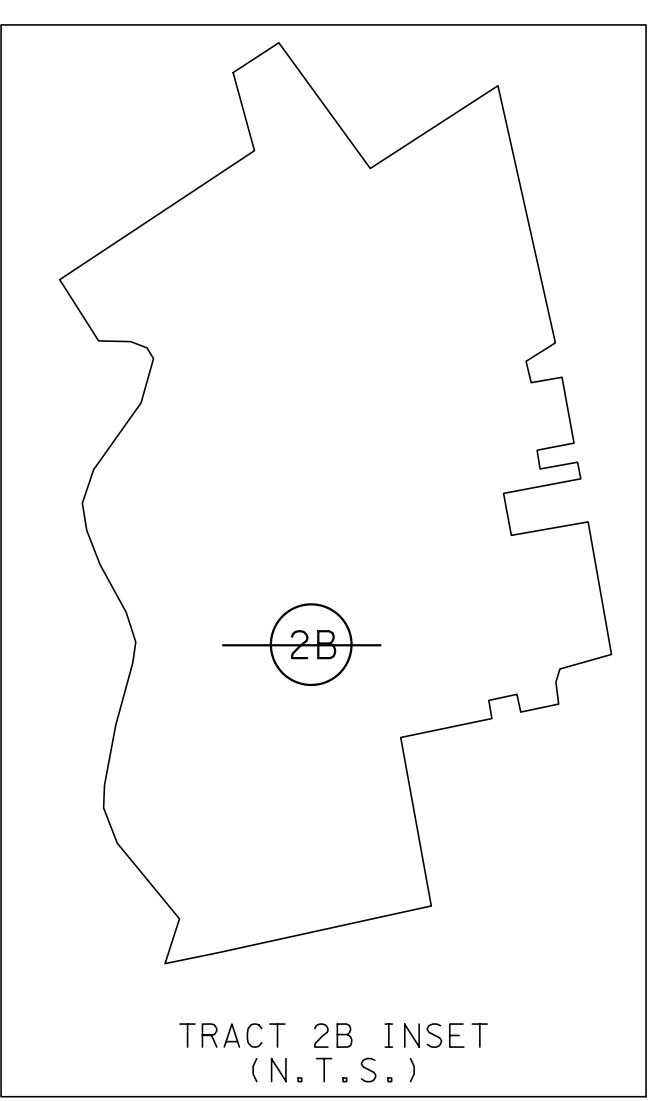
R.O.W. ACQUISITION TABLE																	
TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA (ACRES)			AREA TO BE ACQUIRED (ACRES)			AREA REMAINING (ACRES)		EASEMENT (ACRES)			
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERMANENT	SLOPE	CONSTRUCTION	AIR RIGHTS
				BOOK	PAGE												
1	CHESTNUT BEND HOA	63F	1-00	4282	522			0.544		0.544							
1A	CHESTNUT BEND HOA	63F	1-00	31	92			7.437		7.437							
2	CITY OF FRANKLIN	63	20-02	924	980	15.107		15.107		15.107							
2A	CITY OF FRANKLIN	63	20-02	446	141	10.244		10.244		10.244							
2B	CITY OF FRANKLIN	63	31-00	3990	101	190.955		190.955		190.955							
ACQUISITION TOTALS (ACRES)																	

NOTE: NO RIGHT-OF-WAY ACQUISITION IS REQUIRED FOR THIS PROJECT. ALL WORK WILL BE COMPLETED WITHIN THE PARK AT HARLINDALE FARM WHICH IS ON PROPERTY OWNED BY THE CITY OF FRANKLIN.

DISTURBED AREA		
AREA BETWEEN SLOPE LINES	4.586	(AC)
AREA OUTSIDE SLOPE LINES (15' WIDTH)	2.862	(AC)
TOTAL DISTURBED AREA	7.448	(AC)
TOTAL PROJECT AREA	7.448	(AC)



FOR INFORMATION ONLY - NOT FOR BIDDING PURPOSES



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



**CITY OF FRANKLIN**  
ENGINEERING DEPARTMENT

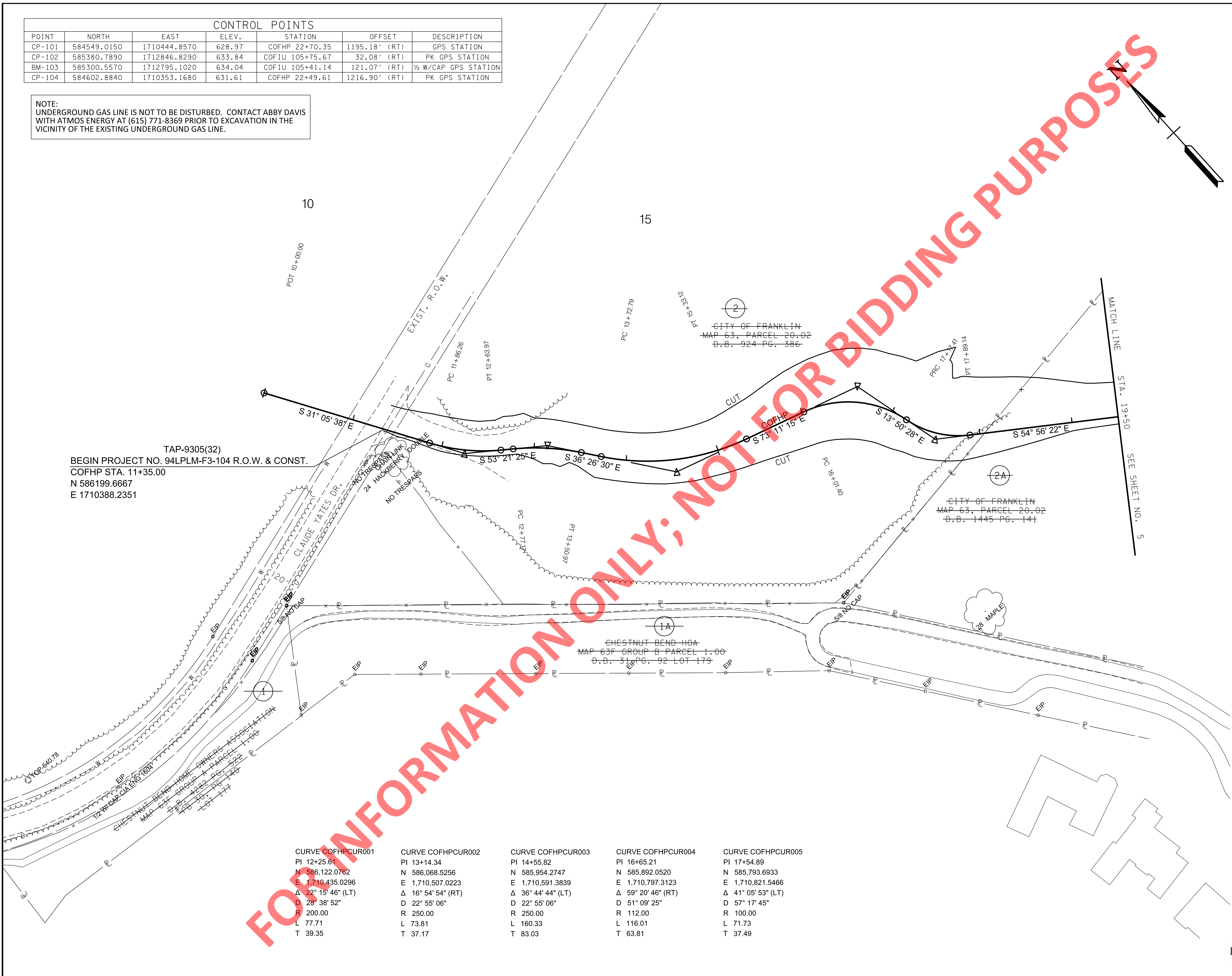
**PROPERTY MAP**  
**AND R.O.W.**  
**ACQUISITION TABLE**

SCALE: 1"=200'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	4
CONST.	2022	TAP-9305(32)	4

CONTROL POINTS						
POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
CP-101	584549.0150	1710444.8570	628.97	COFHP 22+70.35	1195.18' (RT)	GPS STATION
CP-102	585380.7890	1712846.8290	633.84	COFIU 105+75.67	32.08' (RT)	PK GPS STATION
BM-103	585300.5570	1712795.1020	634.04	COFIU 105+41.14	121.07' (RT)	1/2 W/CAP GPS STATION
CP-104	584602.8840	1710353.1680	631.61	COFHP 22+49.61	1216.90' (RT)	PK GPS STATION

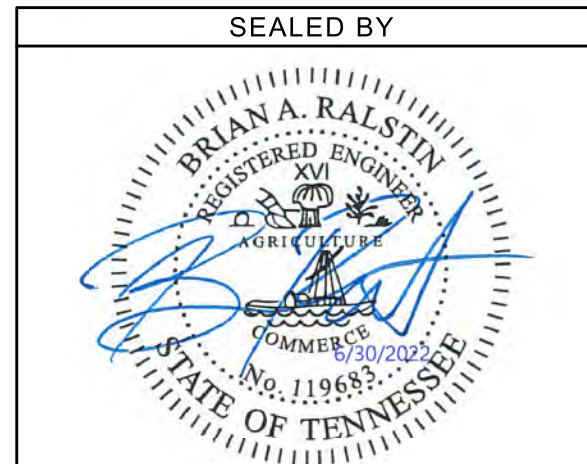
NOTE:  
UNDERGROUND GAS LINE IS NOT TO BE DISTURBED. CONTACT ABBY DAVIS WITH ATMOS ENERGY AT (615) 771-8369 PRIOR TO EXCAVATION IN THE VICINITY OF THE EXISTING UNDERGROUND GAS LINE.



TAP-9305(32)  
BEGIN PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
COFHP STA. 11+35.00  
N 586199.6667  
E 1710388.2351

CURVE COFHPCUR001	CURVE COFHPCUR002	CURVE COFHPCUR003	CURVE COFHPCUR004	CURVE COFHPCUR005
PI 12+25.61	PI 13+14.34	PI 14+55.82	PI 16+65.21	PI 17+54.89
N 586,122.0762	N 586,068.5256	N 585,954.2747	N 585,892.0520	N 585,793.6933
E 1,710,435.0296	E 1,710,507.0223	E 1,710,591.3839	E 1,710,797.3123	E 1,710,821.5466
Δ 22° 15' 46" (LT)	Δ 16° 54' 54" (RT)	Δ 36° 44' 44" (LT)	Δ 59° 20' 46" (RT)	Δ 41° 05' 53" (LT)
D 28° 38' 52"	D 22° 55' 06"	D 22° 55' 06"	D 51° 09' 25"	D 57° 17' 45"
R 200.00	R 250.00	R 250.00	R 112.00	R 100.00
L 77.71	L 73.81	L 160.33	L 116.01	L 71.73
T 39.35	T 37.17	T 83.03	T 63.81	T 37.49

6/30/2022 10:50:53 AM  
Y:\Nashville\160200005\16020001\001\Eng\_Docs\Roadway\004\_Present Sheet\_01.sht



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



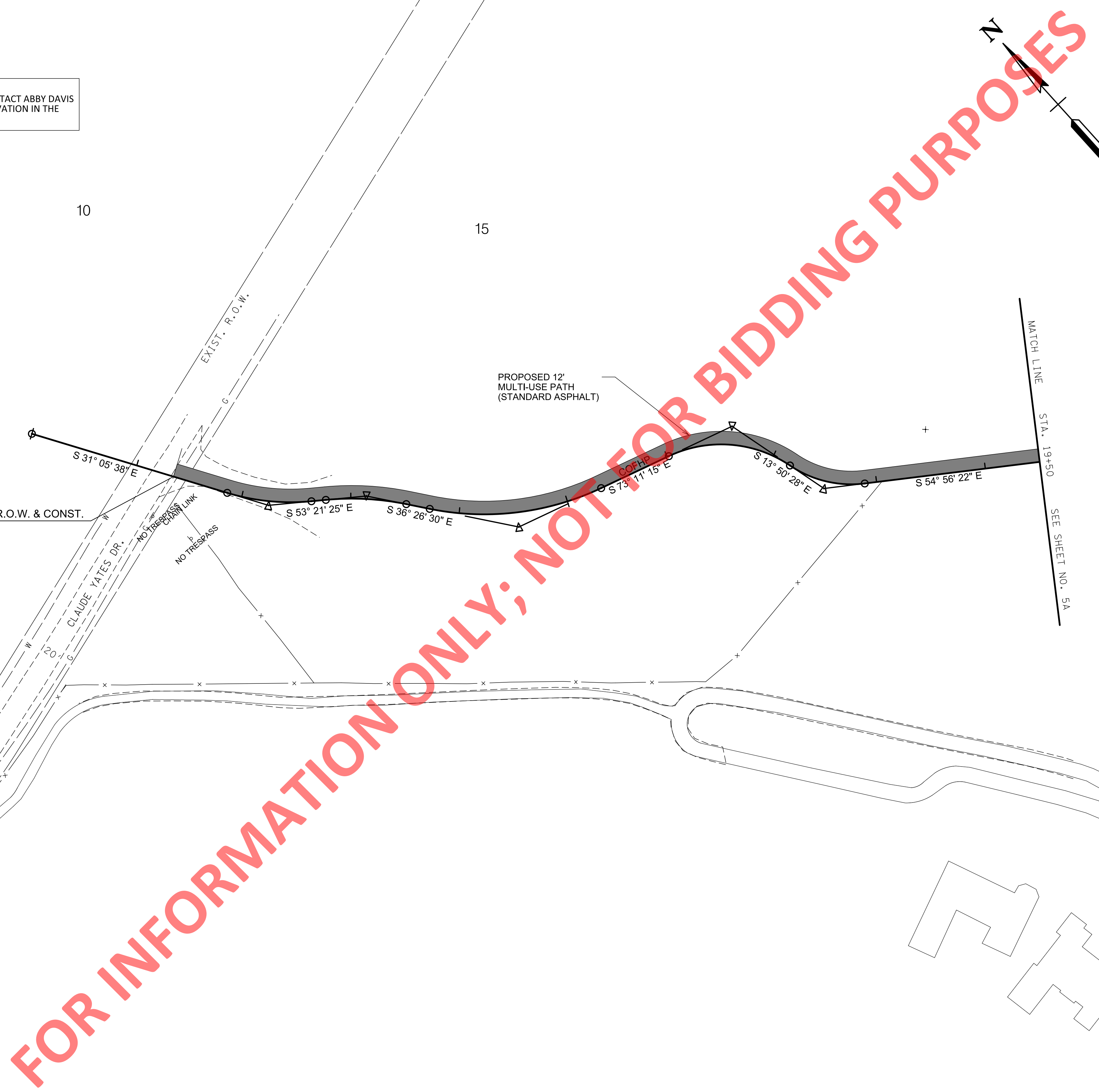
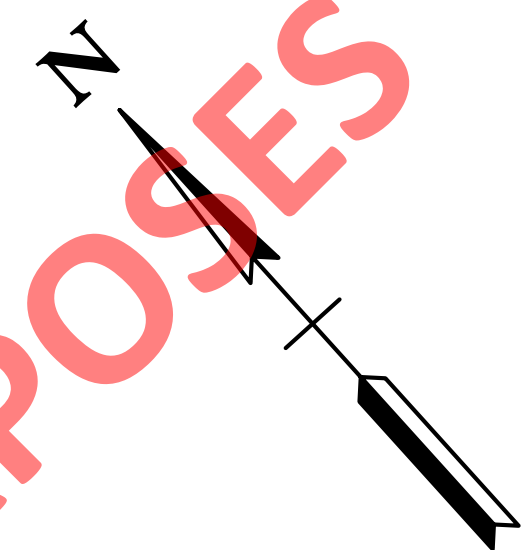
CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

PRESENT  
LAYOUT

STA.10+00 TO STA.19+50  
SCALE: 1"= 50'

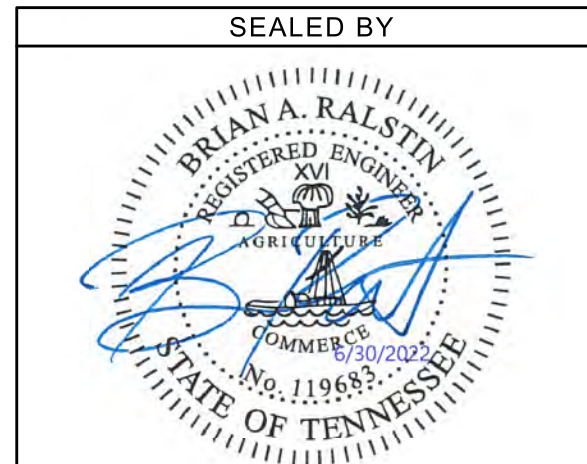
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	4A
CONST.	2022	TAP-9305(32)	4A

NOTE:  
UNDERGROUND GAS LINE IS NOT TO BE DISTURBED. CONTACT ABBY DAVIS  
WITH ATMOS ENERGY AT (615) 771-8369 PRIOR TO EXCAVATION IN THE  
VICINITY OF THE EXISTING UNDERGROUND GAS LINE.



TAP-9305(32)  
BEGIN PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
COFHP STA. 11+35.00  
N 586199.6667  
E 1710388.2351

6/30/2022 10:50:55 AM  
Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\004A\_Proposed Sheet\_01.sht



COORDINATES VALUES ARE NAD 83(2011),  
ARE DATUM ADJUSTED BY THE FACTOR  
OF 1.00000 (NO DATUM ADJUSTMENT),  
AND BASED ON AN NGS OPUS SOLUTION.  
ALL ELEVATIONS ARE REFERENCED TO  
THE NAVD 1988 (GEOID 12B).



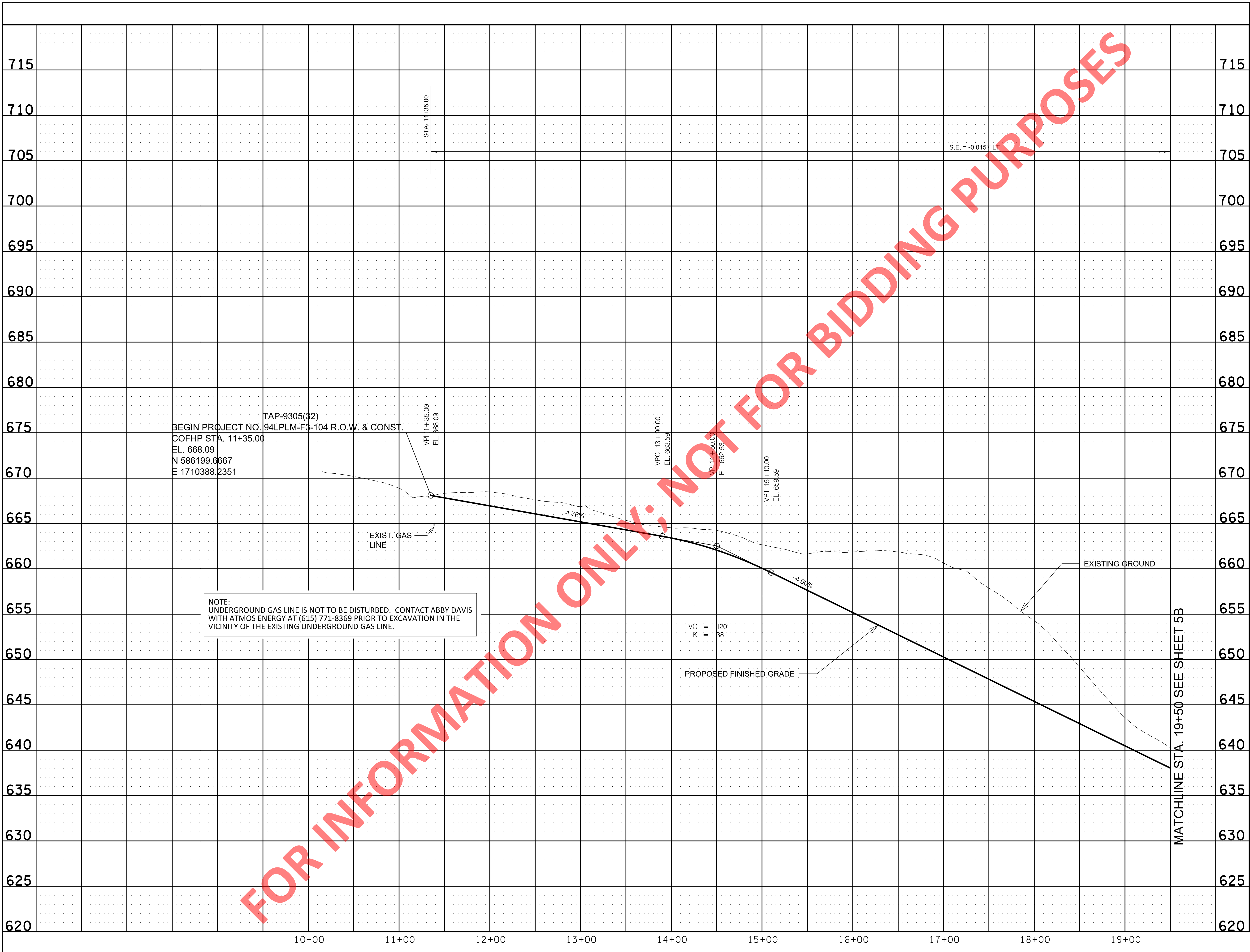
**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**PROPOSED  
LAYOUT**

STA.10+00 TO STA.19+50  
SCALE: 1"= 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	4B
CONST.	2022	TAP-9305(32)	4B



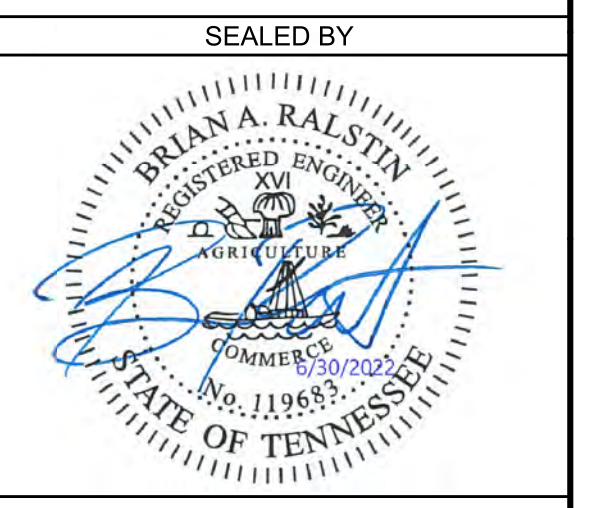
BEGIN PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFHP STA. 11+35.00  
 EL. 668.09  
 N 586199.6667  
 E 1710388.2351

NOTE:  
 UNDERGROUND GAS LINE IS NOT TO BE DISTURBED. CONTACT ABBY DAVIS  
 WITH ATMOS ENERGY AT (615) 771-8369 PRIOR TO EXCAVATION IN THE  
 VICINITY OF THE EXISTING UNDERGROUND GAS LINE.

VC = 120'  
 K = 38

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:50:58 AM  
 Y:\Nashville\16020000\16020001\00\Eng\_Roadway\004B\_Profile Sheet\_01.sht



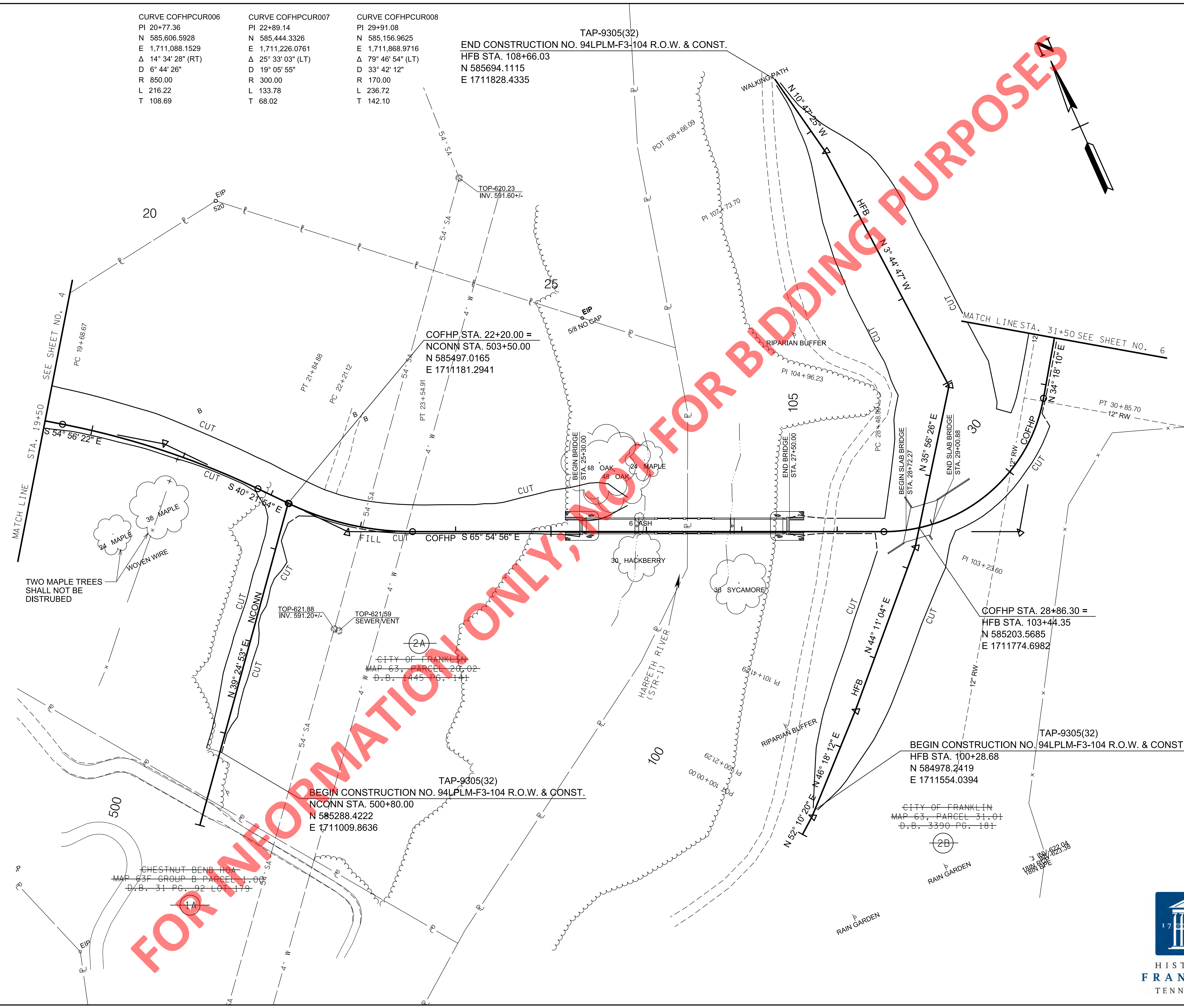
**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

**PROPOSED  
 PROFILE**  
 STA. 10+00 TO STA. 19+50  
 SCALE: 1" = 50' HORIZ.  
 1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	5
CONST.	2022	TAP-9305(32)	5

CURVE COFHPCUR006	CURVE COFHPCUR007	CURVE COFHPCUR008
PI 20+77.36	PI 22+89.14	PI 29+91.08
N 585,606.5928	N 585,444.3326	N 585,156.9625
E 1,711,088.1529	E 1,711,226.0761	E 1,711,868.9716
Δ 14° 34' 28" (RT)	Δ 25° 33' 03" (LT)	Δ 79° 46' 54" (LT)
D 6° 44' 26"	D 19° 05' 55"	D 33° 42' 12"
R 850.00	R 300.00	R 170.00
L 216.22	L 133.78	L 236.72
T 108.69	T 68.02	T 142.10

TAP-9305(32)  
 END CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 HFB STA. 108+66.03  
 N 585694.1115  
 E 1711828.4335



TWO MAPLE TREES SHALL NOT BE DISTURBED

CITY OF FRANKLIN  
 MAP 63, PARCEL 20.02  
 D.B. 1445 PG. 144

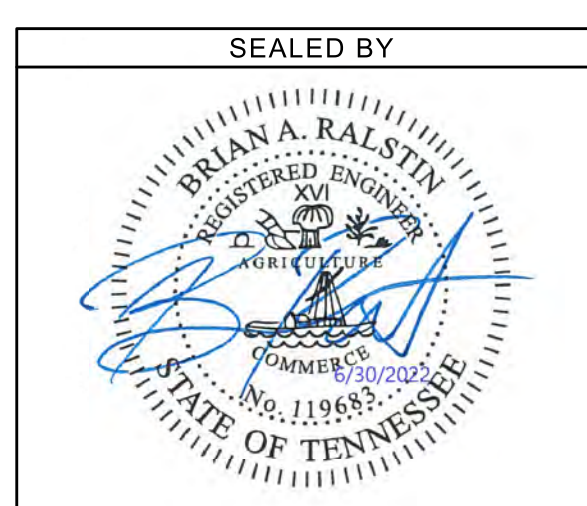
TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 NCONN STA. 500+80.00  
 N 585288.4222  
 E 1711009.8636

TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 HFB STA. 100+28.68  
 N 584978.2419  
 E 1711554.0394

CITY OF FRANKLIN  
 MAP 63, PARCEL 31.01  
 D.B. 3390 PG. 181

COFHP STA. 28+86.30 =  
 HFB STA. 103+44.35  
 N 585203.5685  
 E 1711774.6982

CHESTNUT BEND HOA  
 MAP 63F GROUP B PARCEL 1.09  
 D.B. 31 PG. 92 L6 1179



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT



PRESENT LAYOUT  
 STA.19+50 TO STA.31+50  
 SCALE: 1"= 50'

6/30/2022 10:51:04 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\005\_Present Sheet\_02.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	5A
CONST.	2022	TAP-9305(32)	5A

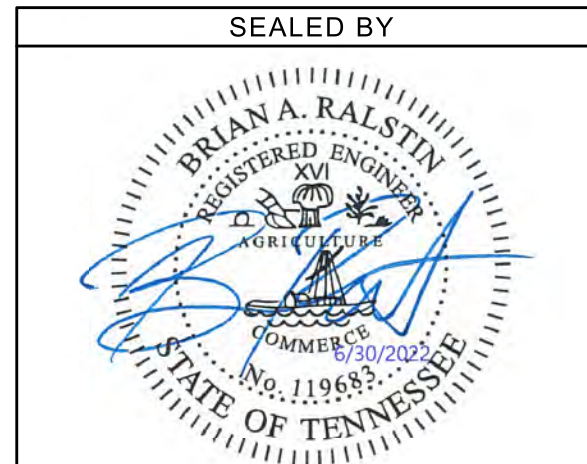
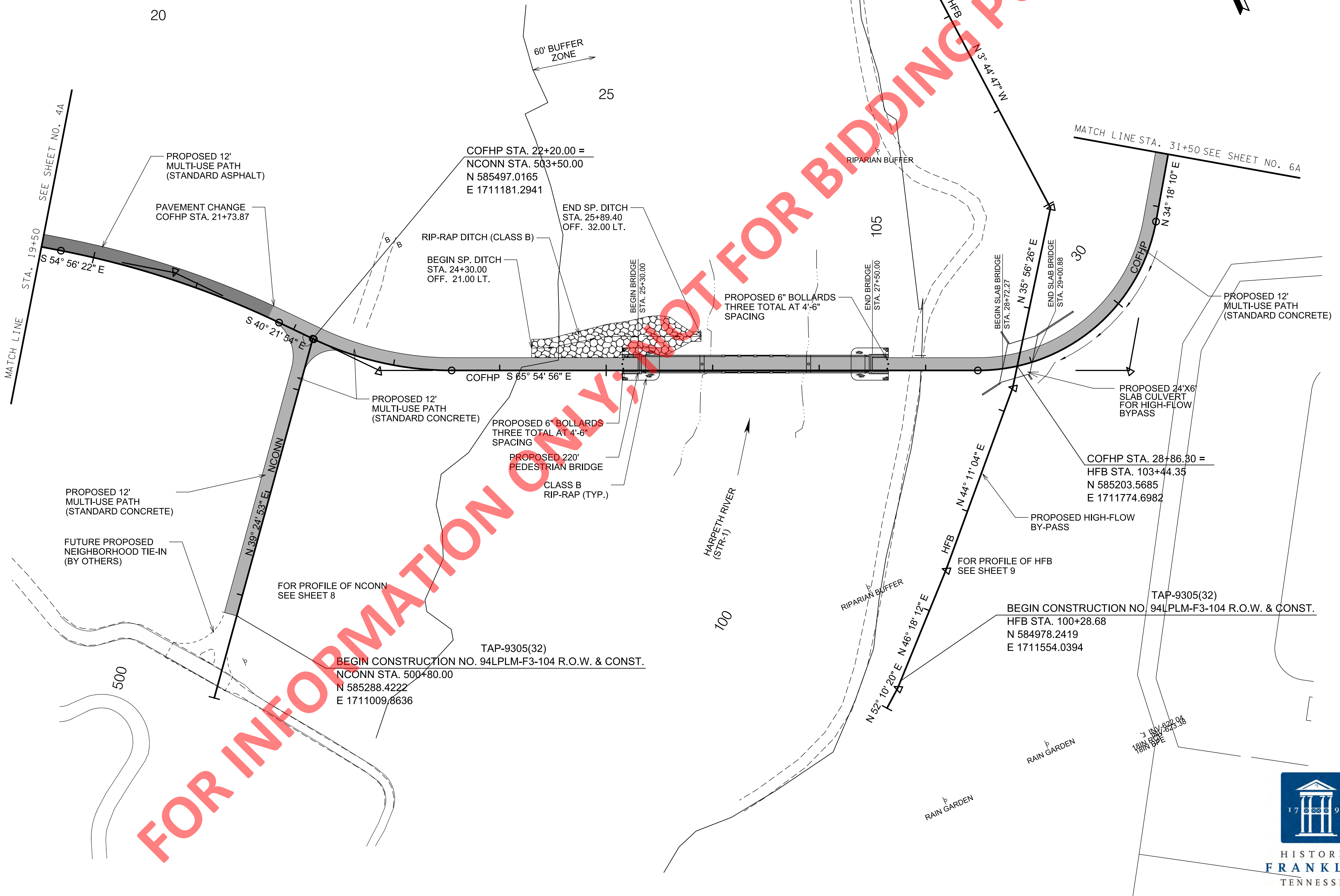
TAP-9305(32)  
 END CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 HFB STA. 108+66.03  
 N 585694.1115  
 E 1711828.4335

TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 NCONN STA. 500+80.00  
 N 585288.4222  
 E 1711009.6636

TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 HFB STA. 100+28.68  
 N 584978.2419  
 E 1711554.0394

COFHP STA. 28+86.30 =  
 HFB STA. 103+44.35  
 N 585203.5685  
 E 1711774.6982

COFHP STA. 22+20.00 =  
 NCONN STA. 503+50.00  
 N 585497.0165  
 E 1711181.2941



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

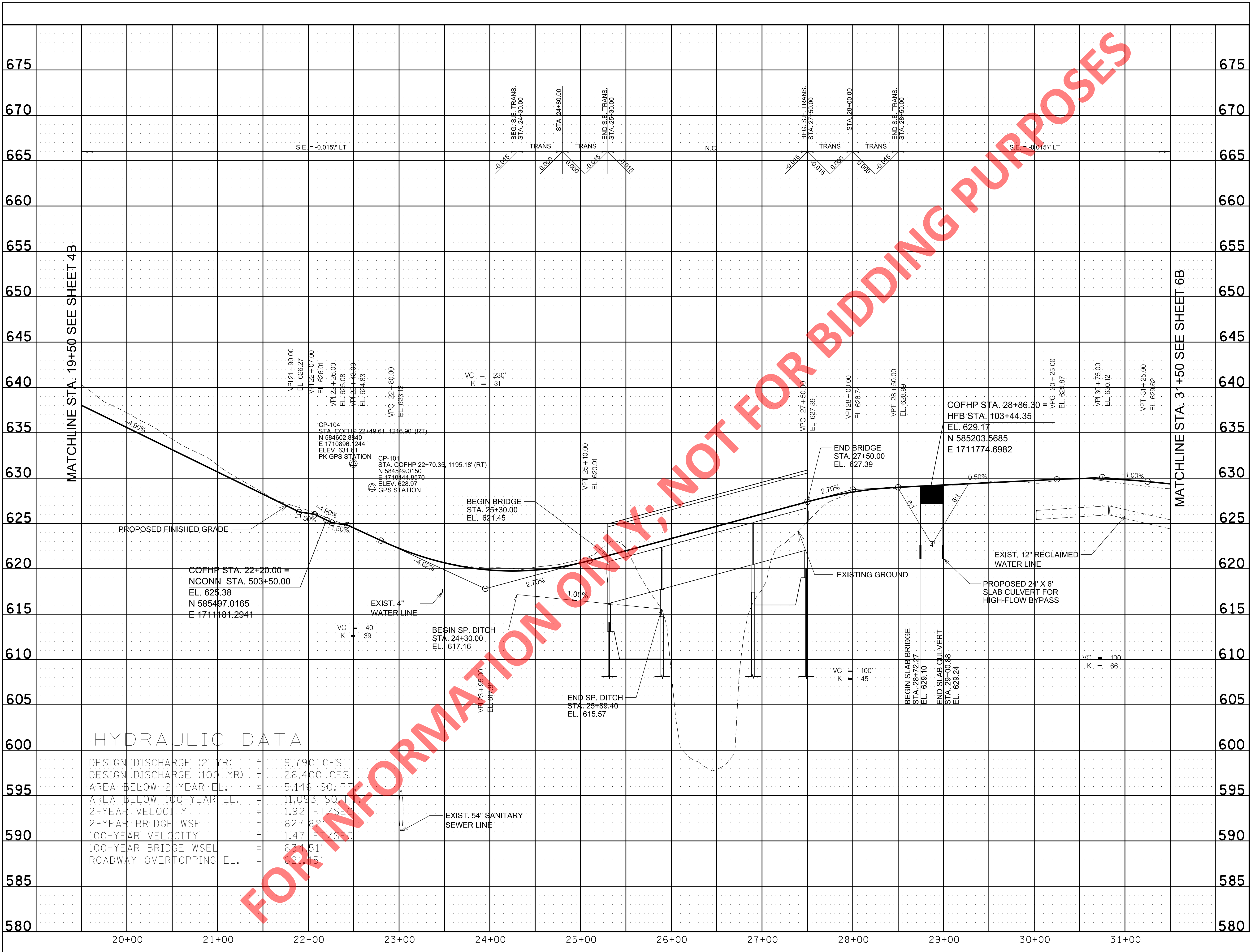
CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT



PROPOSED LAYOUT  
 STA.19+50 TO STA.31+50  
 SCALE: 1"= 50'

6/30/2022 10:51:07 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\005A\_Proposed Sheet\_02.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	5B
CONST.	2022	TAP-9305(32)	5B

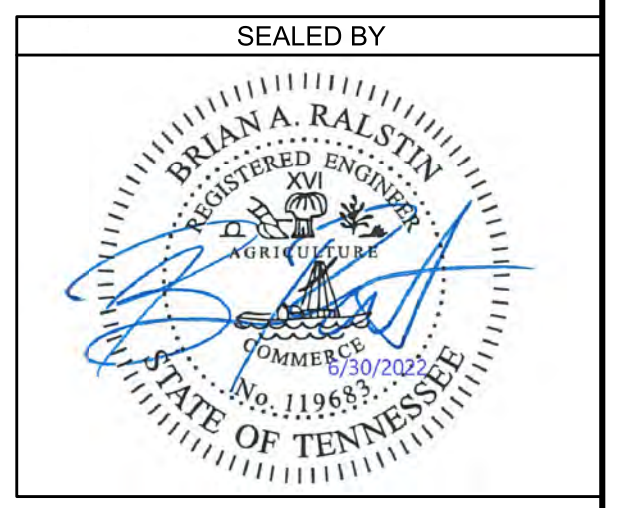


**HYDRAULIC DATA**

DESIGN DISCHARGE (2 YR)	=	9,790 CFS
DESIGN DISCHARGE (100 YR)	=	26,400 CFS
AREA BELOW 2-YEAR EL.	=	5,146 SQ. FT.
AREA BELOW 100-YEAR EL.	=	11,093 SQ. FT.
2-YEAR VELOCITY	=	1.92 FT/SEC
2-YEAR BRIDGE WSEL	=	627.82'
100-YEAR VELOCITY	=	1.47 FT/SEC
100-YEAR BRIDGE WSEL	=	634.51'
ROADWAY OVERTOPPING EL.	=	621.45'

6/30/2022 10:51:10 AM Y:\Nashville\16020000\01\Eng\_Docs\Roadway\005B\_Profile Sheet\_02.sht

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES



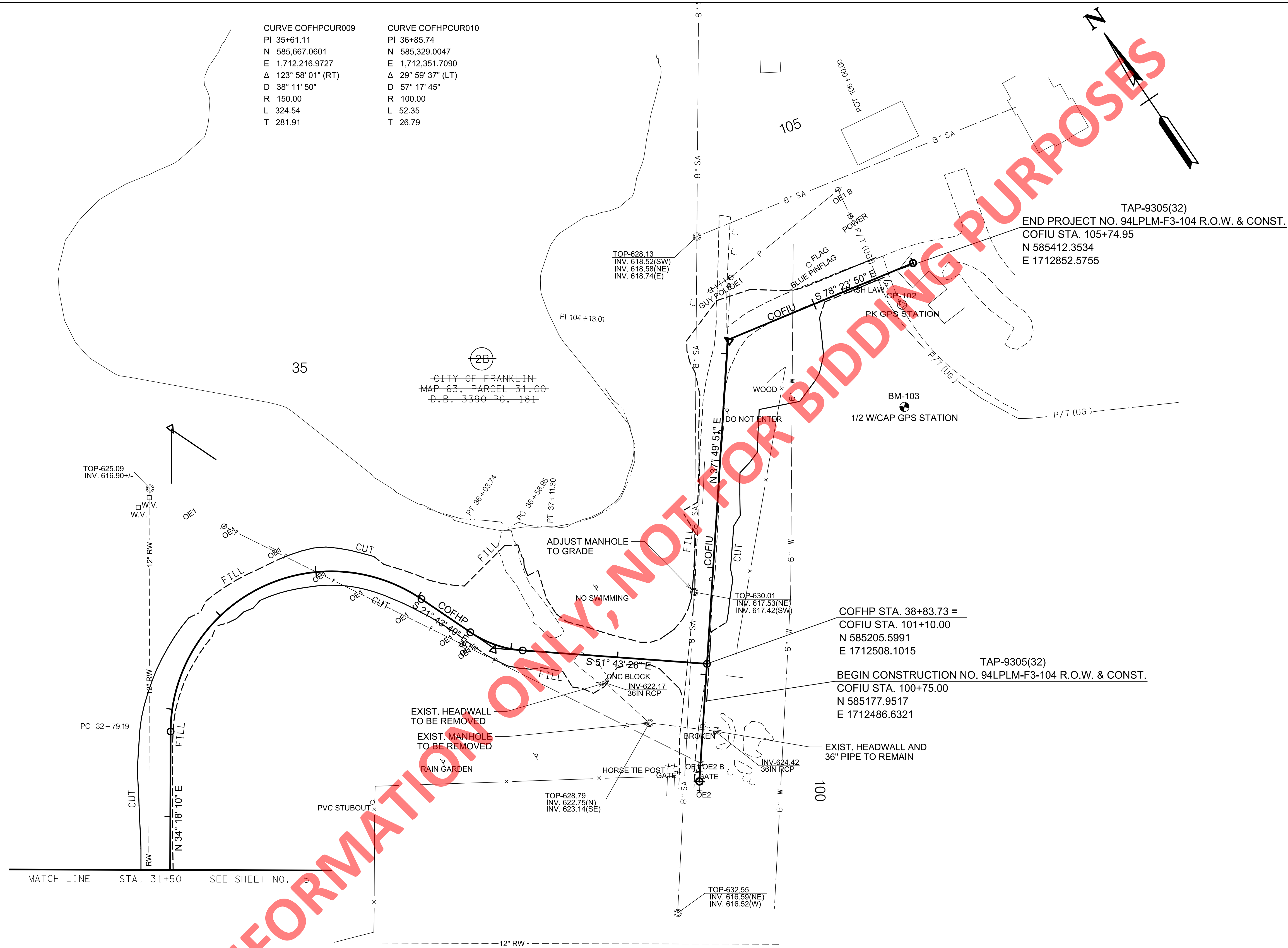
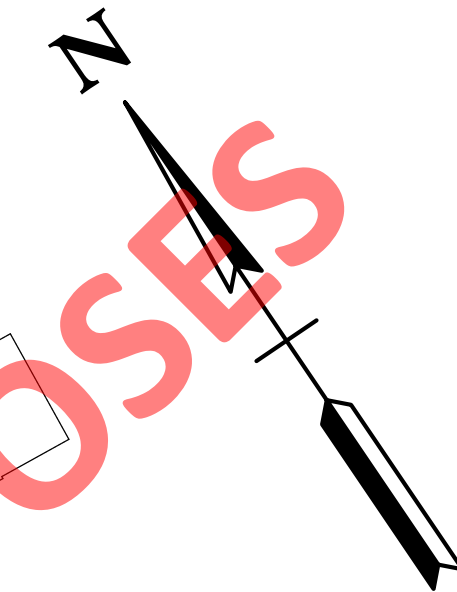
**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**PROPOSED  
PROFILE**  
STA. 19+50 TO STA. 31+50  
SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	6
CONST.	2022	TAP-9305(32)	6

CURVE COFHPCUR009  
 PI 35+61.11  
 N 585,667.0601  
 E 1,712,216.9727  
 Δ 123° 58' 01" (RT)  
 D 38° 11' 50"  
 R 150.00  
 L 324.54  
 T 281.91

CURVE COFHPCUR010  
 PI 36+85.74  
 N 585,329.0047  
 E 1,712,351.7090  
 Δ 29° 59' 37" (LT)  
 D 57° 17' 45"  
 R 100.00  
 L 52.35  
 T 26.79



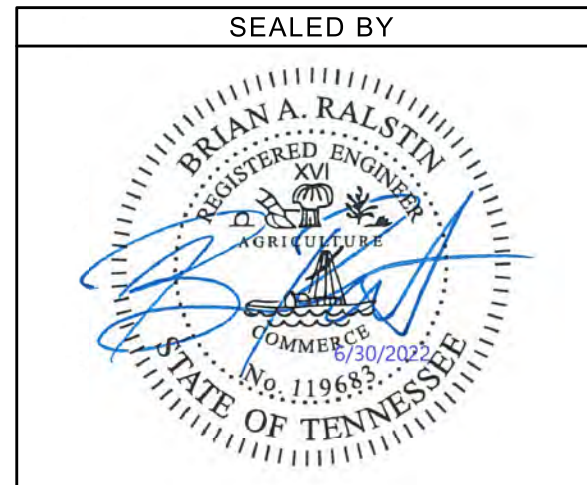
TAP-9305(32)  
 END PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 105+74.95  
 N 585412.3534  
 E 1712852.5755

TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 100+75.00  
 N 585177.9517  
 E 1712486.6321

COFHP STA. 38+83.73 =  
 COFIU STA. 101+10.00  
 N 585205.5991  
 E 1712508.1015

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:51:16 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\06\_Present Sheet\_03.sht



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

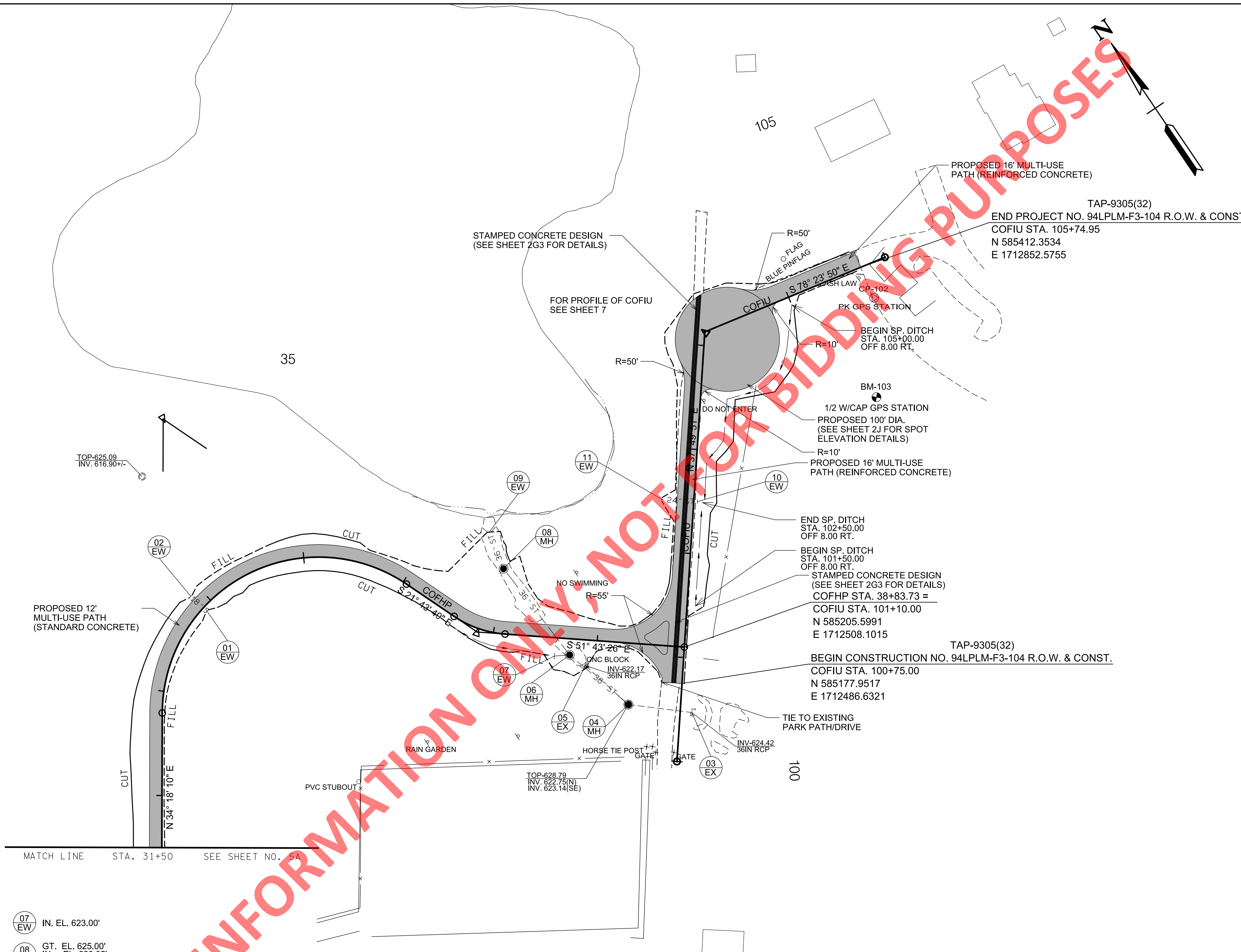


CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

PRESENT  
 LAYOUT

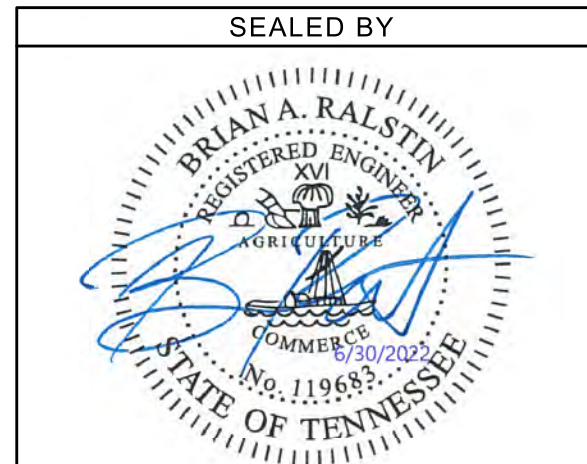
COFHP STA. 31+50.00 TO  
 COFIU STA. 105+74.95  
 SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	6A
CONST.	2022	TAP-9305(32)	6A



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

- 01 EW IN. EL. 622.30'
- 02 EW IN. EL. 622.16'
- 03 EX IN. EL. 624.42'
- 04 MH GT. EL. 628.79'  
IN. EL. 623.14'  
OUT EL. 622.75'
- 05 EX IN. EL. 622.17'
- 06 MH GT. EL. 628.00'  
IN. EL. 622.17'  
OUT EL. 621.05'
- 07 EW IN. EL. 623.00'
- 08 MH GT. EL. 625.00'  
IN. EL. 620.05'  
OUT EL. 619.85'
- 09 EW IN. EL. 619.50'
- 10 EW IN. EL. 626.25'
- 11 EW IN. EL. 626.09'



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

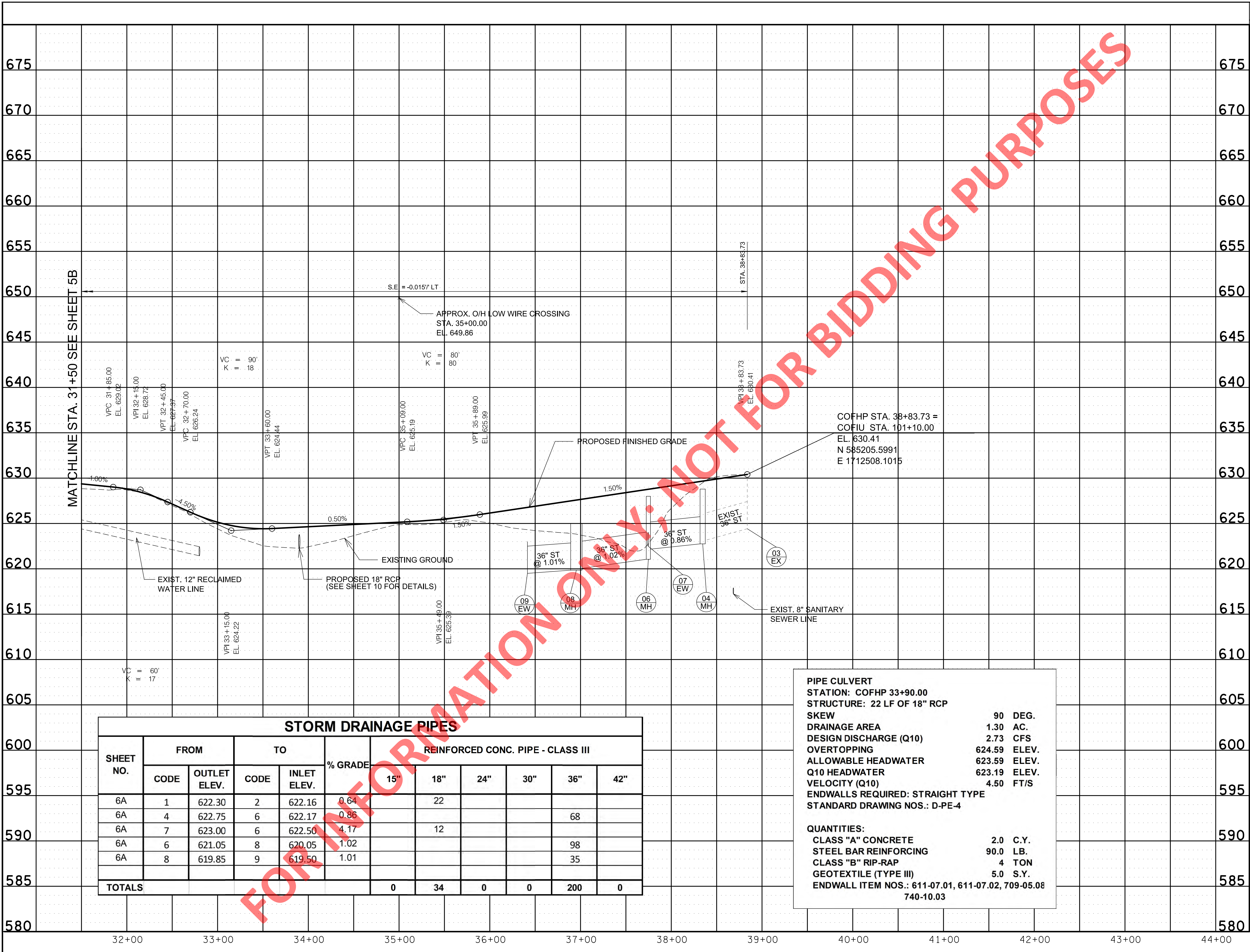
CITY OF FRANKLIN  
ENGINEERING DEPARTMENT



**PROPOSED LAYOUT**  
COFHP STA. 31+50.00 TO  
COFIU STA. 105+74.95  
SCALE: 1" = 50'

6/30/2022 10:51:18 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\006A\_Proposed Sheet\_03.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	6B
CONST.	2022	TAP-9305(32)	6B

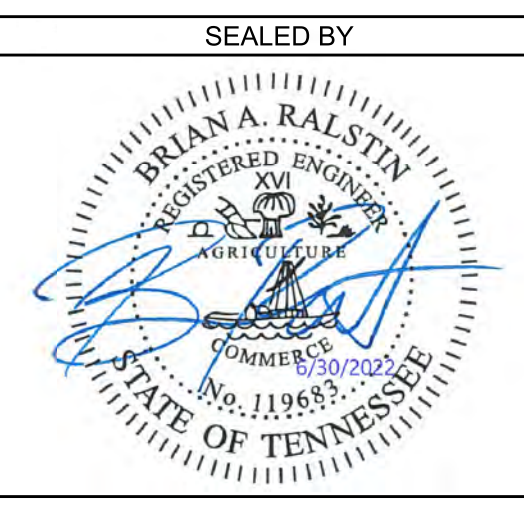


MATCHLINE STA. 31+50 SEE SHEET 5B

STORM DRAINAGE PIPES											
SHEET NO.	FROM		TO		% GRADE	REINFORCED CONC. PIPE - CLASS III					
	CODE	OUTLET ELEV.	CODE	INLET ELEV.		15"	18"	24"	30"	36"	42"
6A	1	622.30	2	622.16	0.64		22				
6A	4	622.75	6	622.17	0.86					68	
6A	7	623.00	6	622.50	4.17		12				
6A	6	621.05	8	620.05	1.02					98	
6A	8	619.85	9	619.50	1.01					35	
<b>TOTALS</b>						<b>0</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>200</b>	<b>0</b>

**PIPE CULVERT**  
 STATION: COFHP 33+90.00  
 STRUCTURE: 22 LF OF 18" RCP  
 SKEW 90 DEG.  
 DRAINAGE AREA 1.30 AC.  
 DESIGN DISCHARGE (Q10) 2.73 CFS  
 OVERTOPPING 624.59 ELEV.  
 ALLOWABLE HEADWATER 623.59 ELEV.  
 Q10 HEADWATER 623.19 ELEV.  
 VELOCITY (Q10) 4.50 FT/S  
 ENDWALLS REQUIRED: STRAIGHT TYPE  
 STANDARD DRAWING NOS.: D-PE-4

**QUANTITIES:**  
 CLASS "A" CONCRETE 2.0 C.Y.  
 STEEL BAR REINFORCING 90.0 LB.  
 CLASS "B" RIP-RAP 4 TON  
 GEOTEXTILE (TYPE III) 5.0 S.Y.  
 ENDWALL ITEM NOS.: 611-07.01, 611-07.02, 709-05.08  
 740-10.03

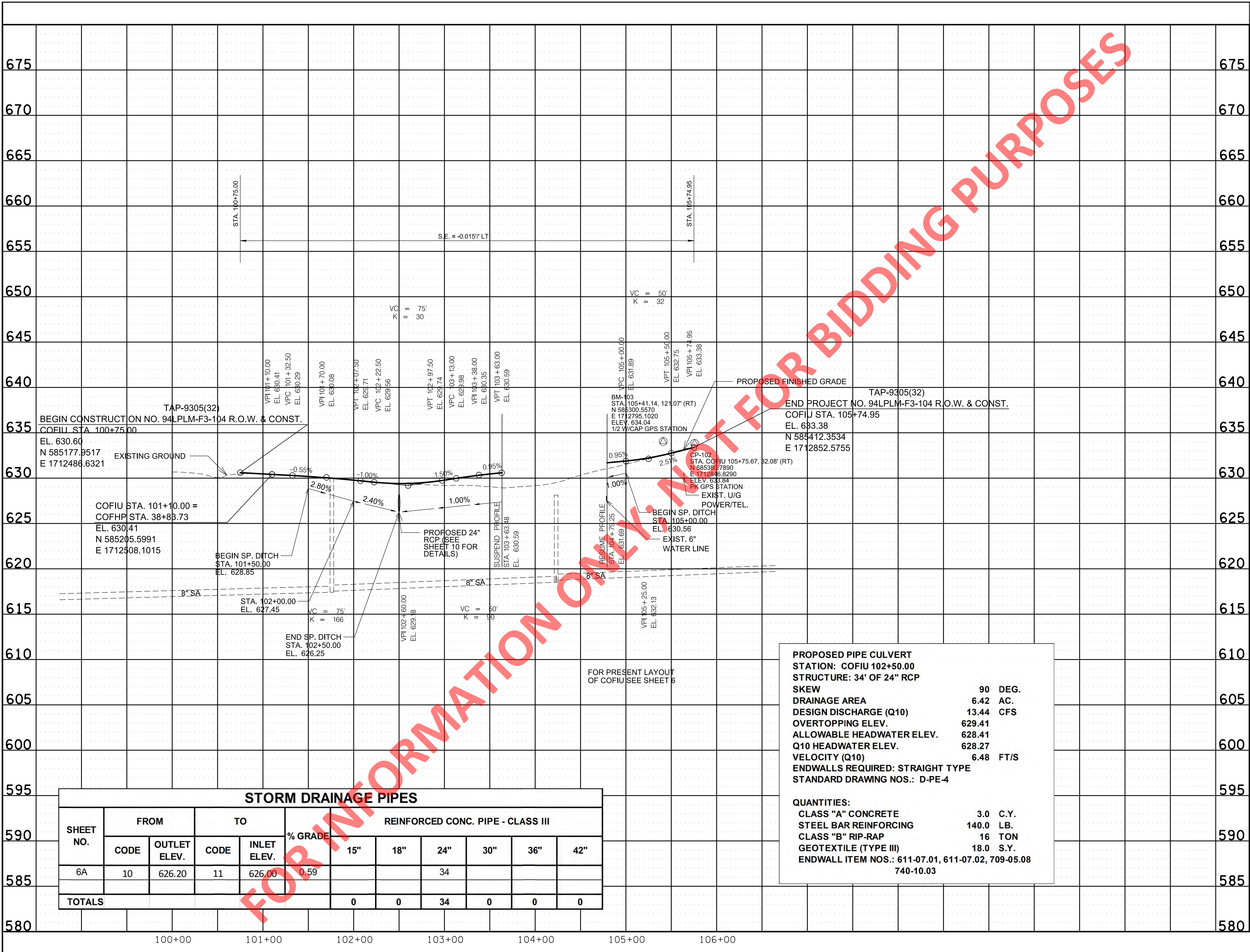


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

**PROPOSED PROFILE**  
 STA.31+50 TO STA.38+83.73  
 SCALE: 1"= 50' HORIZ.  
 1"= 5' VERT.

6/30/2022 10:51:22 AM Y:\Nashville\16020000\SV\16020001\00\Eng\_Docs\Roadway\006B\_Profile Sheet\_03.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	7
CONST.	2022	TAP-9305(32)	7



FOR INFORMATION ONLY NOT FOR BIDDING PURPOSES

STORM DRAINAGE PIPES											
SHEET NO.	FROM		TO		% GRADE	REINFORCED CONC. PIPE - CLASS III					
	CODE	OUTLET ELEV.	CODE	INLET ELEV.		15"	18"	24"	30"	36"	42"
6A	10	626.20	11	626.00	0.59			34			
<b>TOTALS</b>						<b>0</b>	<b>0</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>

**PROPOSED PIPE CULVERT**  
 STATION: COFIU 102+50.00  
 STRUCTURE: 34' OF 24" RCP

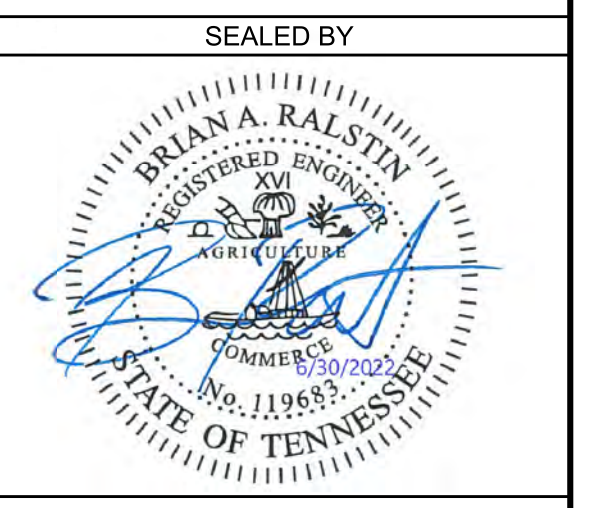
SKEW	90 DEG.
DRAINAGE AREA	6.42 AC.
DESIGN DISCHARGE (Q10)	13.44 CFS
OVERTOPPING ELEV.	629.41
ALLOWABLE HEADWATER ELEV.	628.41
Q10 HEADWATER ELEV.	628.27
VELOCITY (Q10)	6.48 FT/S

ENDWALLS REQUIRED: STRAIGHT TYPE  
 STANDARD DRAWING NOS.: D-PE-4

**QUANTITIES:**

CLASS "A" CONCRETE	3.0 C.Y.
STEEL BAR REINFORCING	140.0 LB.
CLASS "B" RIP-RAP	16 TON
GEOTEXTILE (TYPE III)	18.0 S.Y.

ENDWALL ITEM NOS.: 611-07.01, 611-07.02, 709-05.08  
 740-10.03



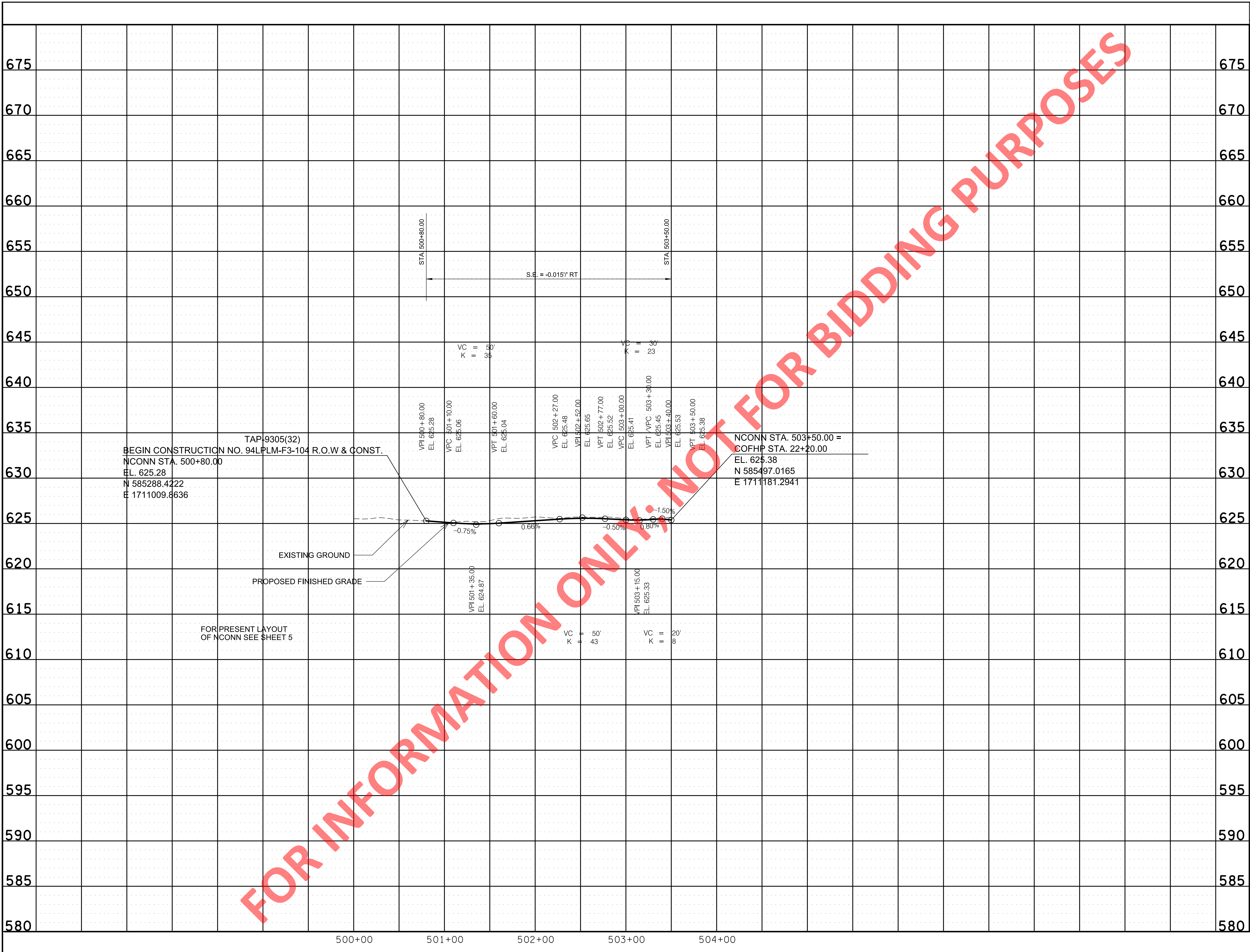
CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

**PROPOSED PROFILE**  
 INNER URBAN  
 STA. 100+75.00 TO STA. 105+74.95  
 SCALE: 1" = 50' HORIZ.  
 1" = 5' VERT.

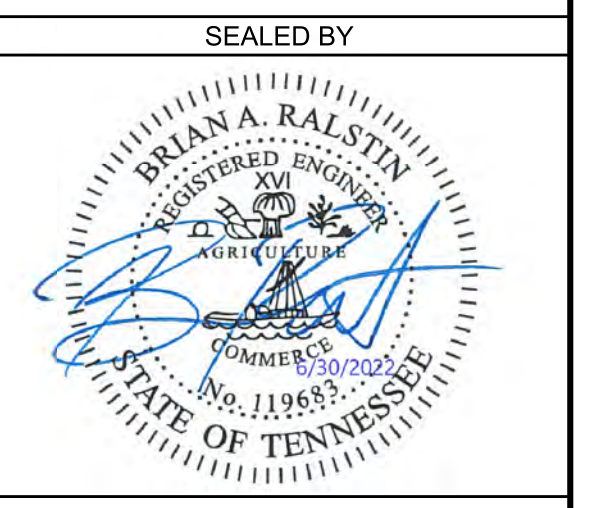
6/30/2022 10:51:25 AM Y:\Nashville\16020000\16020001\00\Eng\_Roadway\07\_Profile Sheet\_InnerUrban.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	8
CONST.	2022	TAP-9305(32)	8



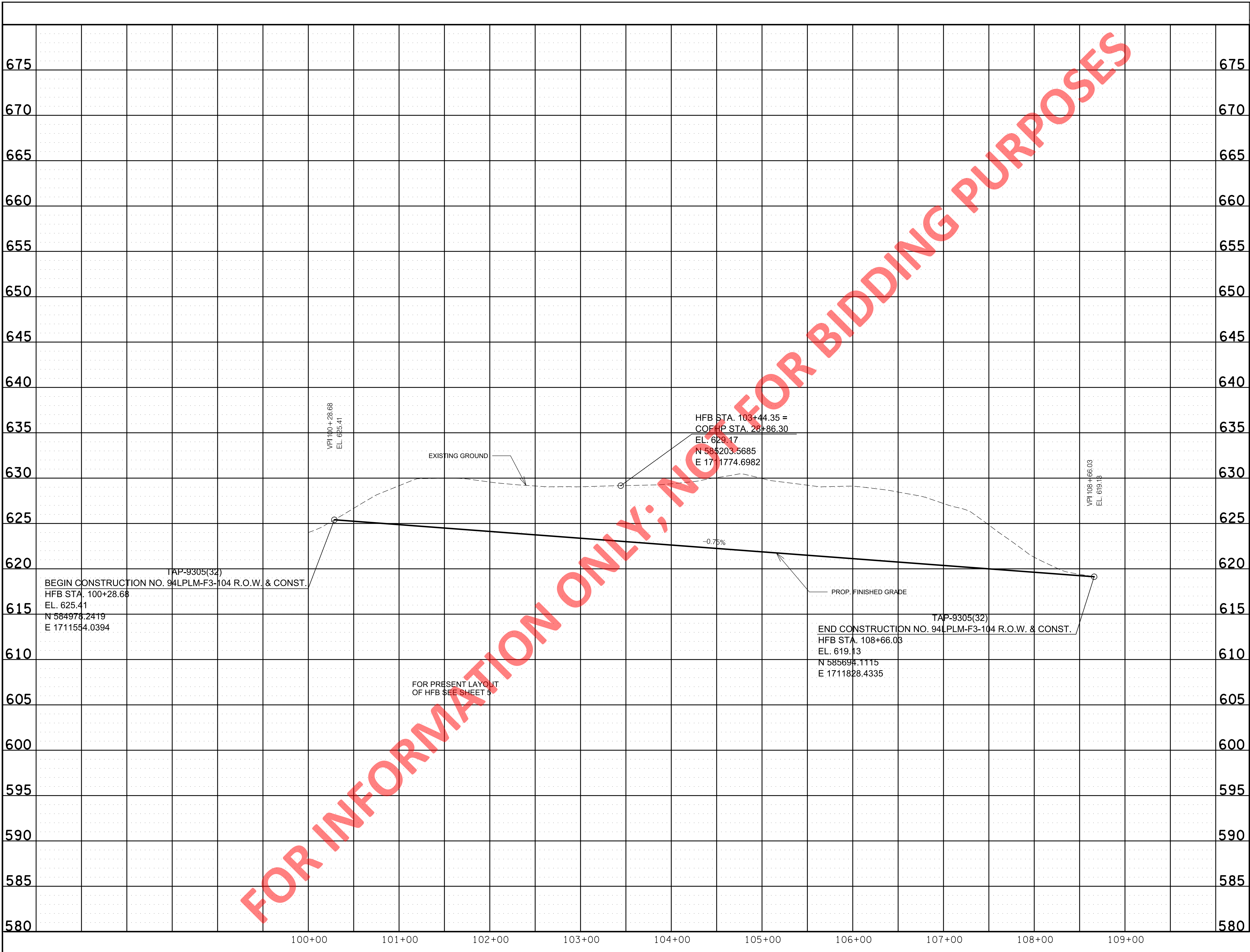
6/30/2022 10:51:27 AM  
 Y:\Nashville\16020000\16020001\00\Eng\_Roadway\08\_Profile Sheet\_NCONN.sht



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

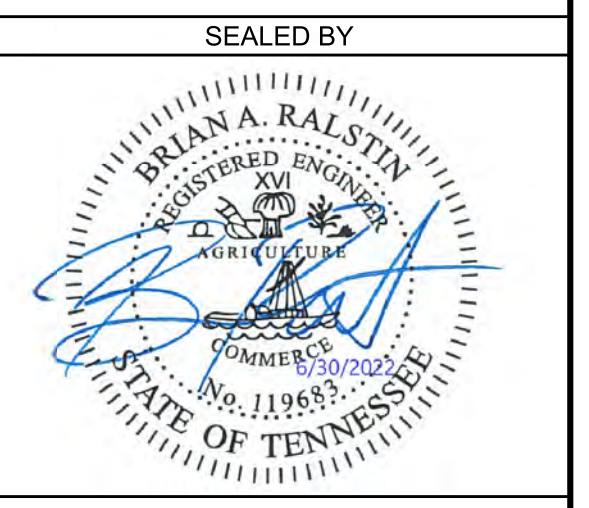
**PROPOSED  
PROFILE**  
 NEIGHBORHOOD CON.  
 STA. 500+80.00 TO STA. 503+50.00  
 SCALE: 1" = 50' HORIZ.  
 1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	9
CONST.	2022	TAP-9305(32)	9



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:51:29 AM  
Y:\Nashville\16020000\16020001\00\Eng\_Roadway\09\_Profile Sheet\_Bypass.sht



**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**PROPOSED  
PROFILE**

HIGH-FLOW BYPASS  
STA. 100+28.68 TO STA. 108+66.03

SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	10
CONST.	2022	TAP-9305(32)	10

NOTE:  
HYDRAULIC DATA IS NOT PROVIDED FOR THE PROPOSED SLAB BRIDGE (24'X6') SHOWN AT COFHP STA. 28+86.30. DUE TO THE FACT THAT STR-1 OVERTOPS ITS BANKS IN A <2 YEAR DESIGN STORM, THE PROPOSED SLAB BRIDGE WAS MODELED IN CONJUNCTION WITH THE PEDESTRIAN BRIDGE ON STR-1.

**AREA 3 - DRAINAGE DATA FOR 18" PIPE**  
STATION: COFHP STA. 37+60.00  
EXISTING STRUCTURE: N/A  
PROPOSED STRUCTURE: 12 LF of 18" RCP CLASS III

INLET ELEVATION	623.00
OUTLET ELEVATION	622.50
SKEW	NA
FLOW	LEFT TO RIGHT
DRAINAGE AREA	0.50 AC.
TERRAIN	FLAT
IMPERVIOUS AREA	5.0 %
DISCHARGE (Q10)	2.73 CFS
DISCHARGE (Q50)	3.27 CFS
VELOCITY (Q10)	8.34 FT/S
VELOCITY (Q50)	8.82 FT/S

**AREA 5 - DRAINAGE DATA FOR 24" PIPE**  
STATION: COFIU STA. 102+50.00  
EXISTING STRUCTURE: N/A  
PROPOSED STRUCTURE: 34 LF of 24" RCP CLASS III

INLET ELEVATION	626.20
OUTLET ELEVATION	626.00
SKEW	90 DEG.
FLOW	RIGHT TO LEFT
DRAINAGE AREA	6.42 AC.
TERRAIN	FLAT
IMPERVIOUS AREA	1.0 %
DISCHARGE (Q10)	13.44 CFS
DISCHARGE (Q50)	16.17 CFS
VELOCITY (Q10)	6.48 FT/S
VELOCITY (Q50)	6.73 FT/S

**AREA 4 - DRAINAGE DATA FOR 36" PIPE**  
STATION: COFHP STA. 38+83.73  
EXISTING STRUCTURE: 36" RCP

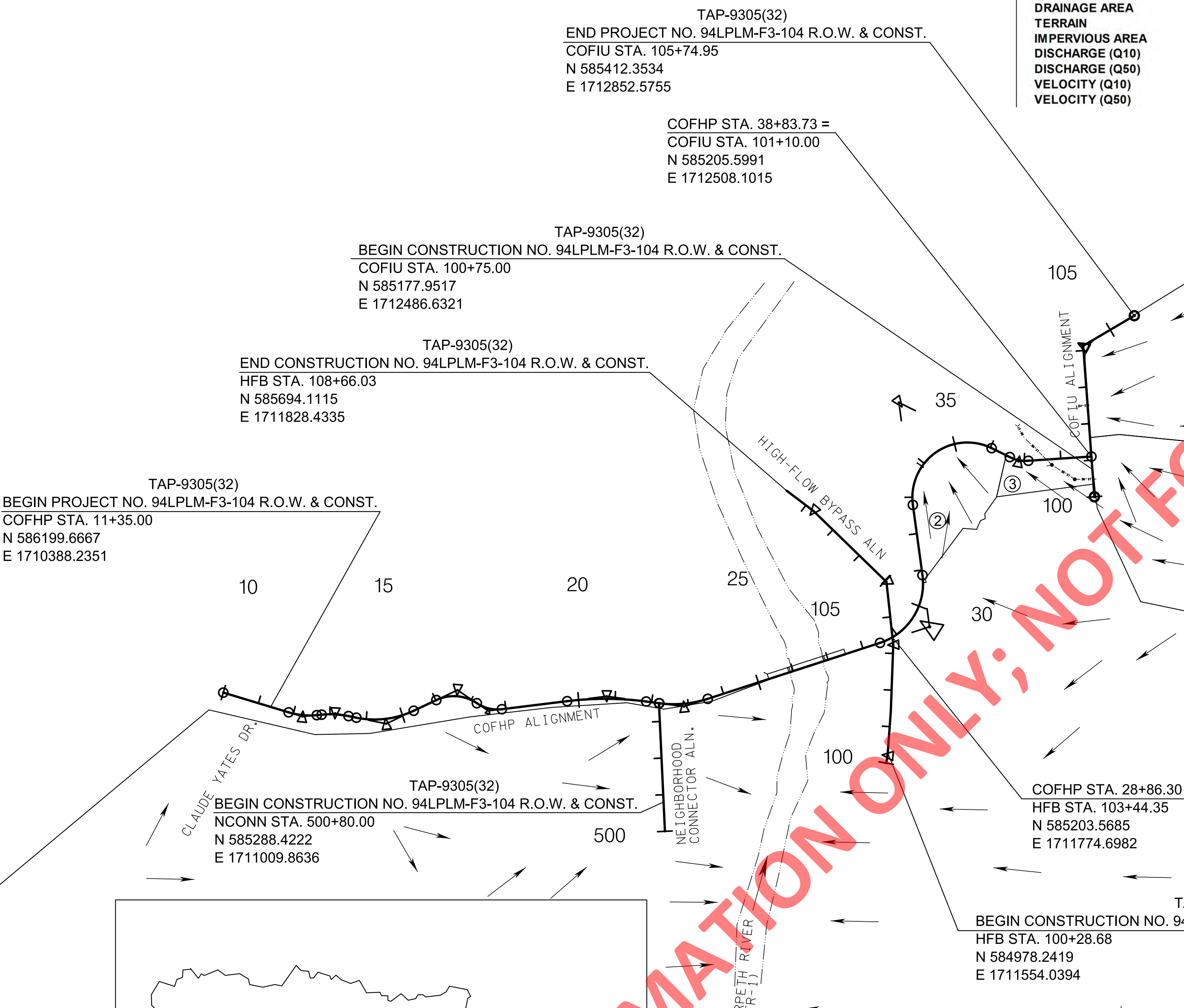
INLET ELEVATION	624.42
OUTLET ELEVATION	622.17
SKEW	90 DEG.
FLOW	RIGHT TO LEFT
DRAINAGE AREA	30.06 AC.
TERRAIN	FLAT
IMPERVIOUS AREA	1.0 %
DISCHARGE (Q10)	38.57 CFS
DISCHARGE (Q50)	46.53 CFS
VELOCITY (Q10)	11.74 FT/S
VELOCITY (Q50)	12.30 FT/S

**AREA 1 - DRAINAGE DATA FOR PEDESTRIAN BRIDGE**  
STATION: COFHP STA. 26+35.00  
EXISTING STRUCTURE: N/A  
PROPOSED STRUCTURE: 3-SPAN GIRDER BRIDGE

INLET ELEVATION	N/A
OUTLET ELEVATION	N/A
SKEW	90 DEG.
FLOW	RIGHT TO LEFT
DRAINAGE AREA	190 SQ. MI.
TERRAIN	FLAT
IMPERVIOUS AREA	10.0 %
DISCHARGE (Q 2)	9790 CFS
DISCHARGE (Q100)	26400 CFS
VELOCITY (Q 2)	1.92 FT/S
VELOCITY (Q100)	1.47 FT/S

**AREA 2 - DRAINAGE DATA FOR 18" PIPE**  
STATION: COFHP STA. 33+90.00  
EXISTING STRUCTURE: N/A  
PROPOSED STRUCTURE: 22 LF of 18" RCP CLASS III

INLET ELEVATION	622.30
OUTLET ELEVATION	622.16
SKEW	90 DEG.
FLOW	RIGHT TO LEFT
DRAINAGE AREA	1.30 AC.
TERRAIN	FLAT
IMPERVIOUS AREA	1.0 %
DISCHARGE (Q10)	2.73 CFS
DISCHARGE (Q50)	3.32 CFS
VELOCITY (Q10)	4.50 FT/S
VELOCITY (Q50)	4.74 FT/S



TAP-9305(32)  
BEGIN PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
COFHP STA. 11+35.00  
N 586199.6667  
E 1710388.2351

TAP-9305(32)  
END CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
HFB STA. 108+66.03  
N 585694.1115  
E 1711828.4335

TAP-9305(32)  
BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
COFIU STA. 100+75.00  
N 585177.9517  
E 1712486.6321

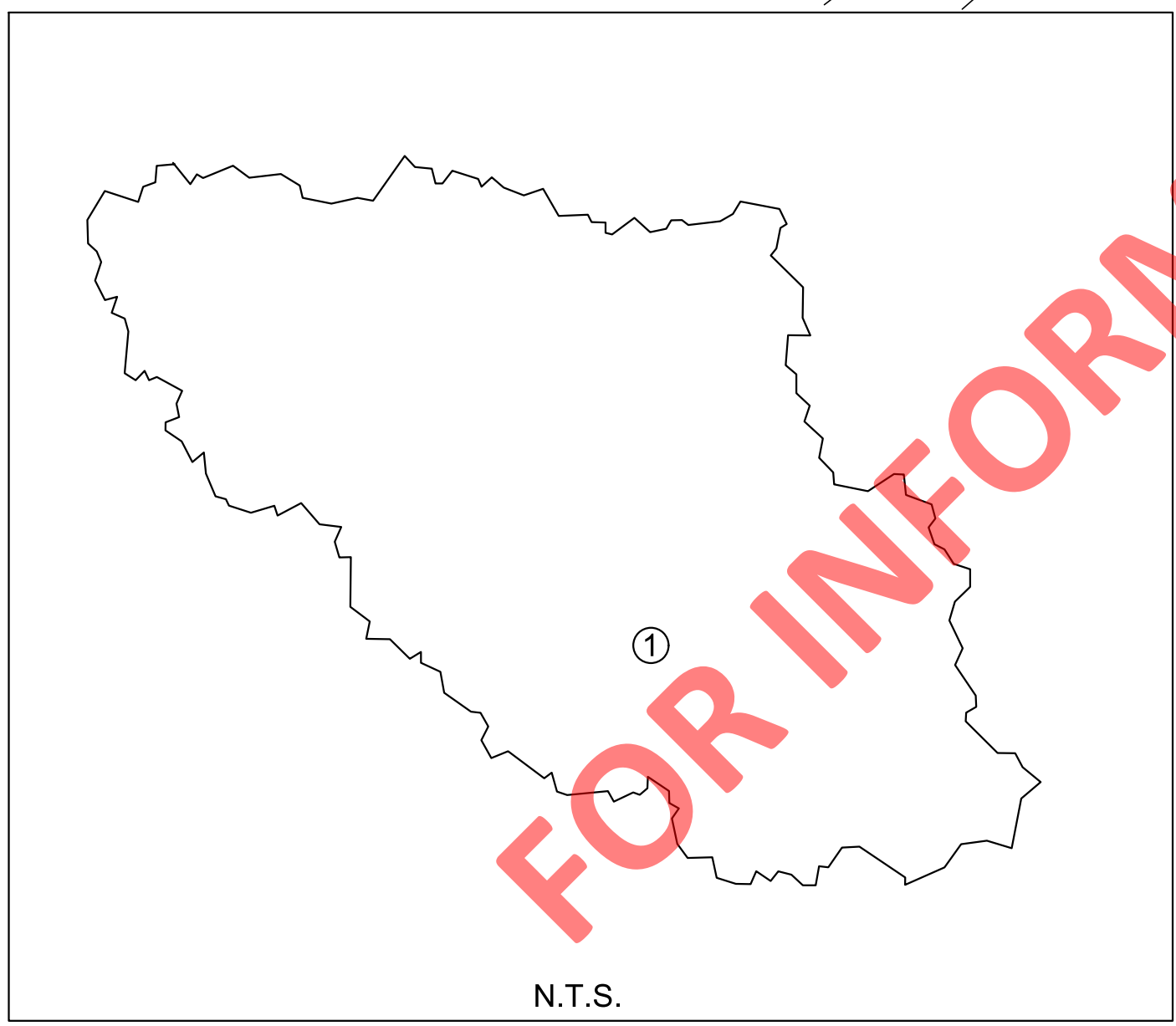
COFHP STA. 38+83.73 =  
COFIU STA. 101+10.00  
N 585205.5991  
E 1712508.1015

TAP-9305(32)  
END PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
COFIU STA. 105+74.95  
N 585412.3534  
E 1712852.5755

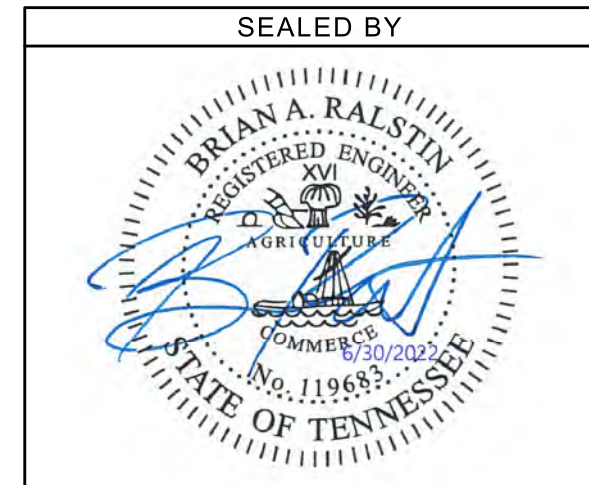
COFHP STA. 28+86.30 =  
HFB STA. 103+44.35  
N 585203.5685  
E 1711774.6982

TAP-9305(32)  
BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
HFB STA. 100+28.68  
N 584978.2419  
E 1711554.0394

TAP-9305(32)  
BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
NCONN STA. 500+80.00  
N 585288.4222  
E 1711009.8636



6/30/2022 10:51:32 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\010\_Drainage Map 200scale.sht



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

DRAINAGE  
MAP

SCALE: 1"=200'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	11
CONST.	2022	TAP-9305(32)	11

**PIPE CULVERT**  
 STATION: COFHP 33+90.00  
 STRUCTURE: 22 LF OF 18" RCP  
 SKEW 90 DEG.  
 DRAINAGE AREA 1.30 AC.  
 DESIGN DISCHARGE (Q10) 2.73 CFS  
 OVERTOPPING 624.59 ELEV.  
 ALLOWABLE HEADWATER 623.59 ELEV.  
 Q10 HEADWATER 623.19 ELEV.  
 VELOCITY (Q10) 4.50 FT/S  
 ENDWALLS REQUIRED: STRAIGHT TYPE  
 STANDARD DRAWING NOS.: D-PE-4

QUANTITIES:  
 CLASS "A" CONCRETE 2.0 C.Y.  
 STEEL BAR REINFORCING 90.0 LB.  
 CLASS "B" RIP-RAP 4 TON  
 GEOTEXTILE (TYPE III) 5.0 S.Y.  
 ENDWALL ITEM NOS.: 611-07.01, 611-07.02, 709-05.08  
 740-10.03

**PROPOSED PIPE CULVERT**  
 STATION: COFIU 102+50.00  
 STRUCTURE: 34' OF 24" RCP  
 SKEW 90 DEG.  
 DRAINAGE AREA 6.42 AC.  
 DESIGN DISCHARGE (Q10) 13.44 CFS  
 OVERTOPPING ELEV. 629.41  
 ALLOWABLE HEADWATER ELEV. 628.41  
 Q10 HEADWATER ELEV. 628.27  
 VELOCITY (Q10) 6.48 FT/S  
 ENDWALLS REQUIRED: STRAIGHT TYPE  
 STANDARD DRAWING NOS.: D-PE-4

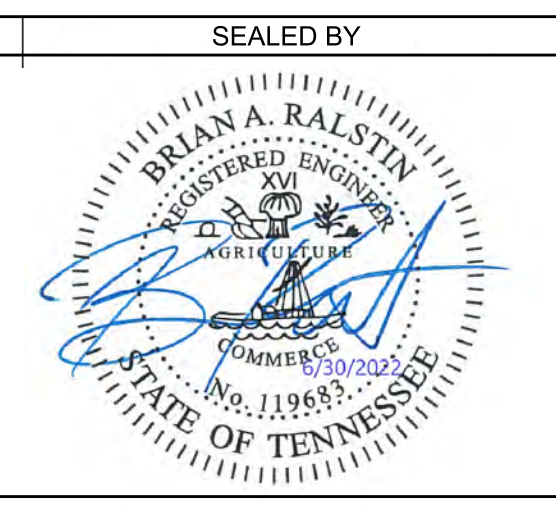
QUANTITIES:  
 CLASS "A" CONCRETE 3.0 C.Y.  
 STEEL BAR REINFORCING 140.0 LB.  
 CLASS "B" RIP-RAP 16 TON  
 GEOTEXTILE (TYPE III) 18.0 S.Y.  
 ENDWALL ITEM NOS.: 611-07.01, 611-07.02, 709-05.08  
 740-10.03

**CULVERT CROSS SECTION**  
 COFHP STA. 33+90.00

**CULVERT CROSS SECTION**  
 COFIU STA. 102+50.00

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:51:40 AM Y:\Nashville\16020000\16020001\_00\Eng\_Docs\Roadway\011\_Culvert\_XS.sht



**CITY OF FRANKLIN**  
 ENGINEERING DEPARTMENT

**CULVERT**  
**CROSS-SECTIONS**

SCALE: 1"= 10' HORIZ.  
 1"= 10' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	12
CONST.	2022	TAP-9305(32)	12

# ENVIRONMENTAL NOTES

## SUBSECTION 3 – EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

### EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

#### INSPECTION, MAINTENANCE & REPAIR

- (11) REFER TO THE STORM WATER POLLUTION AND PREVENTION PLAN SHEET SERIES (S-1) FOR SWPPP, PERMITS, AND RECORDS NOTES.

#### GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

- (29) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.
- (30) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.
- (31) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- (32) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.
- (33) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.
- (34) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.
- (35) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.
- (36) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.
- (37) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.
- (38) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.

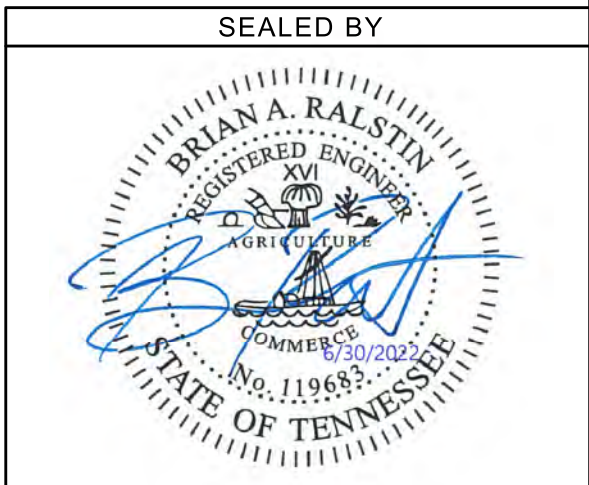
- (39) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.
- (40) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

#### STREAMS, WETLANDS & BUFFER ZONES

- (54) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., PIER FOOTING, RIP-RAP PLACEMENT, CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS (EC-STR-31) AND TEMPORARY DIVERSION CULVERTS (EC STR-32) FOR SINGLE BARREL CULVERT CONSTRUCTION.

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:51:43 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\012\_EPSC Notes.sht



**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**EROSION  
PREVENTION &  
SEDIMENT CONTROL  
(EPSC) NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	13
CONST.	2022	TAP-9305(32)	13

### EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(1)(5)	203-01 ROAD & DRAINAGE EXC (UNCLASSIFIED)	C.Y.	625
(1)	209-02.07 18" TEMPORARY SLOPE DRAIN	L.F.	55
(1)	209-05 SEDIMENT REMOVAL	C.Y.	255
(1)(4)	209-08.02 TEMPORARY SILT FENCE (WITH BACKING)	L.F.	5940
(1)	209-08.07 ROCK CHECK DAM	EACH	25
(1)	209-08.08 ENHANCED ROCK CHECK DAM	EACH	27
(1)	209-09.03 SEDIMENT FILTER BAG (15'X15')	EACH	3
(1)	209-40.33 CATCH BASIN PROTECTION (TYPE D)	EACH	3
(1)(2)	303-10.01 MINERAL AGGREGATE (SIZE 57)	TON	40
(1)	707-08.11 HIGH VISIBILITY CONSTRUCTION FENCE	L.F.	8086
(1)(6)	709-05.05 MACHINED RIPRAP (CLASS A-3)	TON	80
(1)(3)	709-05.06 MACHINED RIPRAP (CLASS A-1)	TON	79
(1)(7)	740-10.03 GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	396
(1)	740-11.05 TEMPORARY SEDIMENT TUBE (24 INCH)	L.F.	2200
(1)	801-01.07 TEMPORARY SEEDING (WITH MULCH)	UNIT	200
(1)	801-03 WATER (SEEDING & SODDING)	M.G.	16

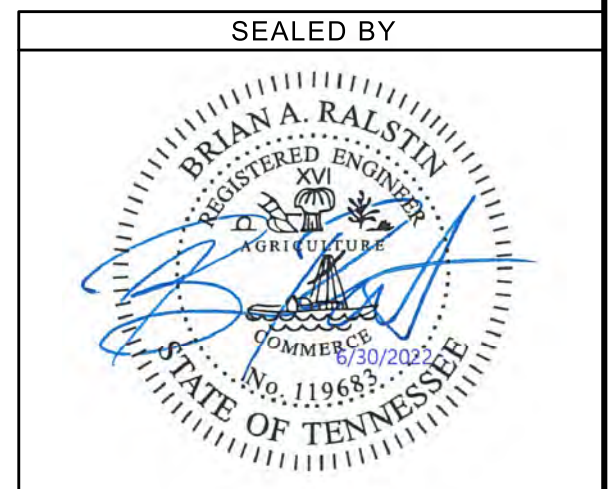
#### EPSC FOOTNOTES:

(1)	SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATION FOR MAINTENANCE REPLACEMENT. ALL ITEMS ARE TO BE USED AS DIRECTED BY THE ENGINEER.
(2)	INCLUDES 13 TON FOR CULVERT PROTECTION TYPE I AND 27 TON FOR SEDIMENT FILTER BAG (15'x15')
(3)	INCLUDES 69 TON FOR CULVERT PROTECTION TYPE I AND 10 TON FOR TEMPORARY SLOPE DRAIN.
(4)	INCLUDES 300 L.F. FOR SEDIMENT FILTER BAG (15'x15')
(5)	INCLUDES 625 C.Y. TO BE USED FOR TEMPORARY BERM
(6)	INCLUDES 80 TON TO BE USED FOR TEMPORARY CONSTRUCTION EXIT
(7)	INCLUDES 162 S.Y FOR CULVERT PROTECTION TYPE I, 94 S.Y. FOR SEDIMENT FILTER BAG (15'x15') AND 140 S.Y. FOR TEMPORARY CONSTRUCTION EXT.

OUTFALL LABEL	SUB-OUTFALL (e.g. A, B, C)	STAGE 1			STAGE 2			STAGE 3			SEDIMENT BASIN OR EQUIVILANT MEASURE(S) (YES, NO OR N/A)	RECEIVING NATURAL RESOURCE NAME OR LABEL
		STATION LT OR RT	SLOPE WITHIN ROW (%)	DRAINAGE AREA (AC)	STATION LT OR RT	SLOPE WITHIN ROW (%)	DRAINAGE AREA (AC)	STATION LT OR RT	SLOPE WITHIN ROW (%)	DRAINAGE AREA (AC)		
OUTFALL 1		NCONN 500+65, RT	3.6%	0.12	NCONN 500+65, RT	3.6%	0.12				N/A	STR-1
OUTFALL 2		NCONN 502+79, RT	3.3%	0.36	NCONN 502+79, RT	3.3%	0.36				N/A	STR-1
OUTFALL 3		COFHP 25+95, LT	4.9%	2.52	COFHP 25+95, LT	4.9%	2.52	COFHP 25+95, LT	4.9%	4.82	N/A	STR-1
OUTFALL 4		COFHP 27+45, LT	4.6%	0.05	COFHP 27+45, LT	4.6%	0.05				N/A	STR-1
OUTFALL 5		COFHP 27+45, RT	4.6%	0.05	COFHP 27+45, RT	4.6%	0.05				N/A	STR-1
OUTFALL 6		HFB 108+65, CL	2.8%	1.48	HFB 108+65, CL	0.8%	1.48	HFB 108+65, CL	0.8%	1.48	N/A	STR-1
OUTFALL 7		COFHP 33+83, LT	4.5%	0.36	COFHP 33+83, LT	4.5%	0.36	COFHP 33+83, LT	4.5%	0.36	N/A	STR-1
OUTFALL 8		COFHP 36+93, LT	1.6%	0.27	COFHP 36+36, LT	1.6%	0.13	COFHP 36+36, LT	1.6%	0.13	N/A	STR-1
OUTFALL 8	A				COFHP 33+90, RT	1.4%	1.30	COFHP 33+90, RT	1.4%	1.30	N/A	STR-1
OUTFALL 9		COFHP 36+35, LT	3.5%	0.27	COFHP 36+35, LT	6.7%	0.17				N/A	STR-1
OUTFALL 9	A				COFHP 37+58, RT	1.3%	0.50				N/A	STR-1
OUTFALL 9	B				COFHP 36+95, LT	1.0%	0.01				N/A	STR-1
OUTFALL 9	C				COFHP 37+75, RT	1.0%	0.01				N/A	STR-1
OUTFALL 9	D				COFHP 38+34, RT	1.0%	0.01				N/A	STR-1
OUTFALL 10		COFHP 37+15, LT	5.9%	0.69	COFHP 37+15, LT	5.9%	0.48				N/A	STR-1
OUTFALL 10	A				COFIU 102+55, LT	1.7%	0.21				N/A	STR-1
OUTFALL 11		COFIU 100+65, RT	4.0%	0.70	COFIU 100+65, RT	4.0%	0.26	COFIU 100+65, RT	4.0%	1.00	N/A	STR-1
OUTFALL 11	A				COFIU 102+50, RT	2.8%	0.44	COFIU 102+50, RT	2.8%	1.18	N/A	STR-1
OUTFALL 12		COFIU 104+13, LT	3.0%	0.22	COFIU 104+13, LT	3.0%	0.22	COFIU 104+13, LT	3.0%	0.22	N/A	STR-1

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

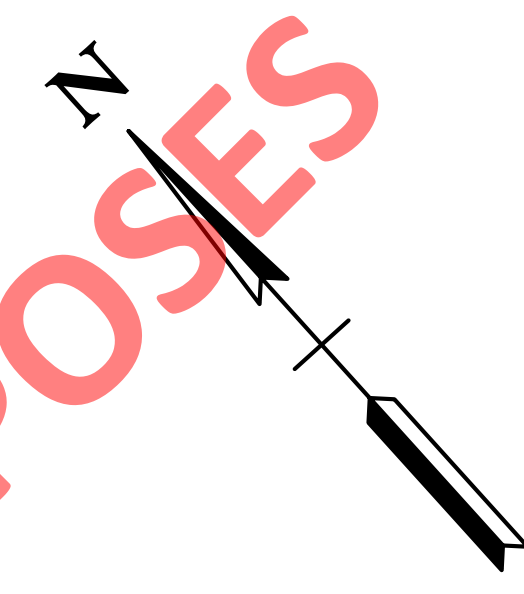
EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
	SEDIMENT FILTER BAG	EC-STR-2
	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6A
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY BERM	EC-STR-27
	TEMPORARY SLOPE DRAIN	EC-STR-27
	24 INCH SEDIMENT TUBE	EC-STR-37
	HIGH VISIBILITY FENCE	S-F-1



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

EPSC LEGEND,  
QUANTITIES &  
OUTFALL TABLE

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	14
CONST.	2022	TAP-9305(32)	14



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

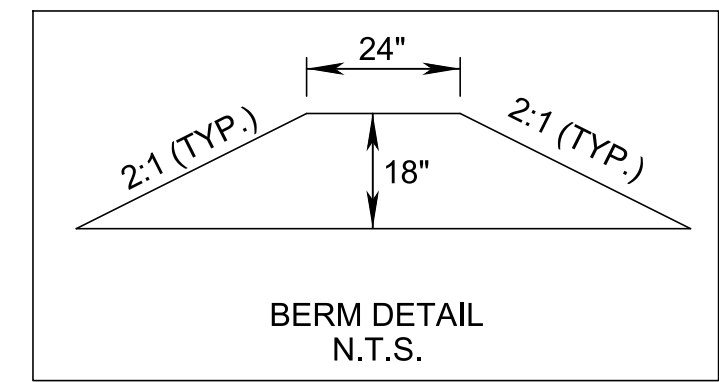
TAP-9305(32)  
 BEGIN PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFHP STA. 11+35.00  
 N 586199.6667  
 E 1710388.2351

1.5' TEMP. BERM

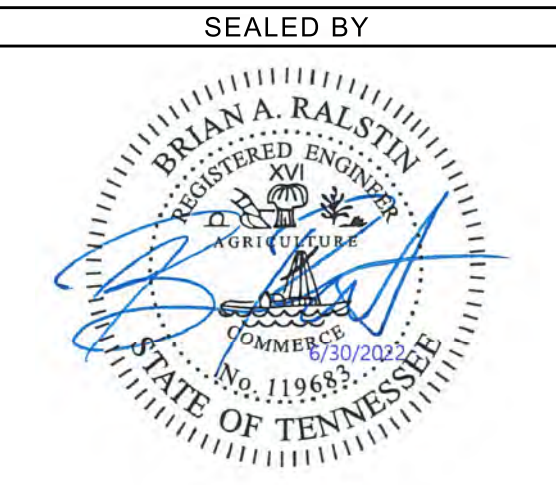
MATCH LINE  
 STA. 19+50  
 SEE SHEET NO. 15

6/30/2022 10:52:02 AM  
 Y:\Nashville\16020000S\16020001\001\Eng\_Docs\Roadway\014\_Ph 1 Sheet\_01.sht

CONTOUR LEGEND	
	660 EXISTING CONTOURS
	660 PROPOSED CONTOURS



STAGE I



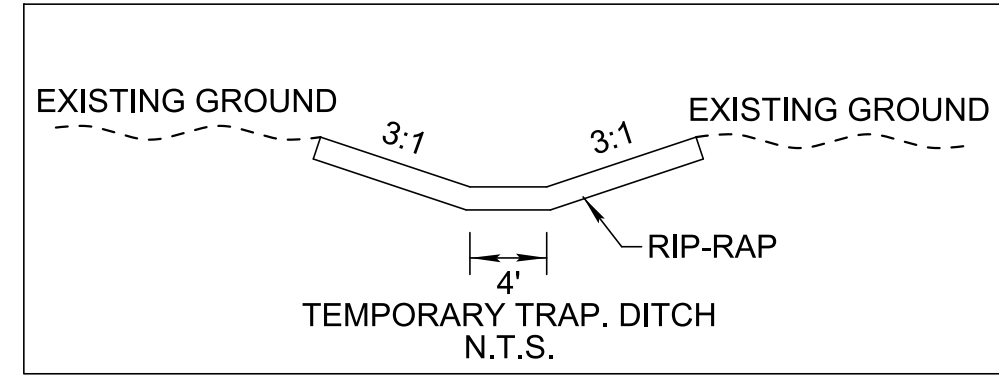
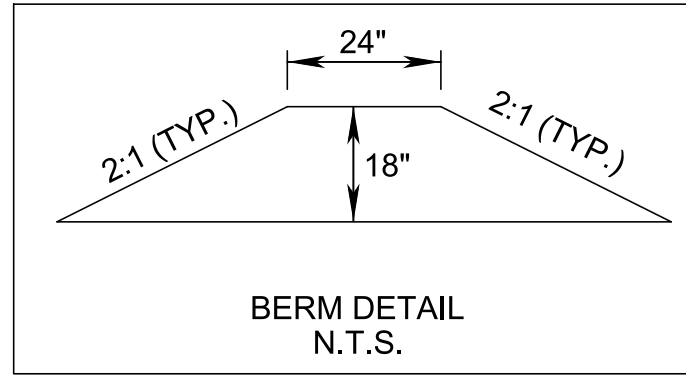
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

EPSC  
LAYOUT

STA. 10+00 TO STA. 19+50  
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	15
CONST.	2022	TAP-9305(32)	15



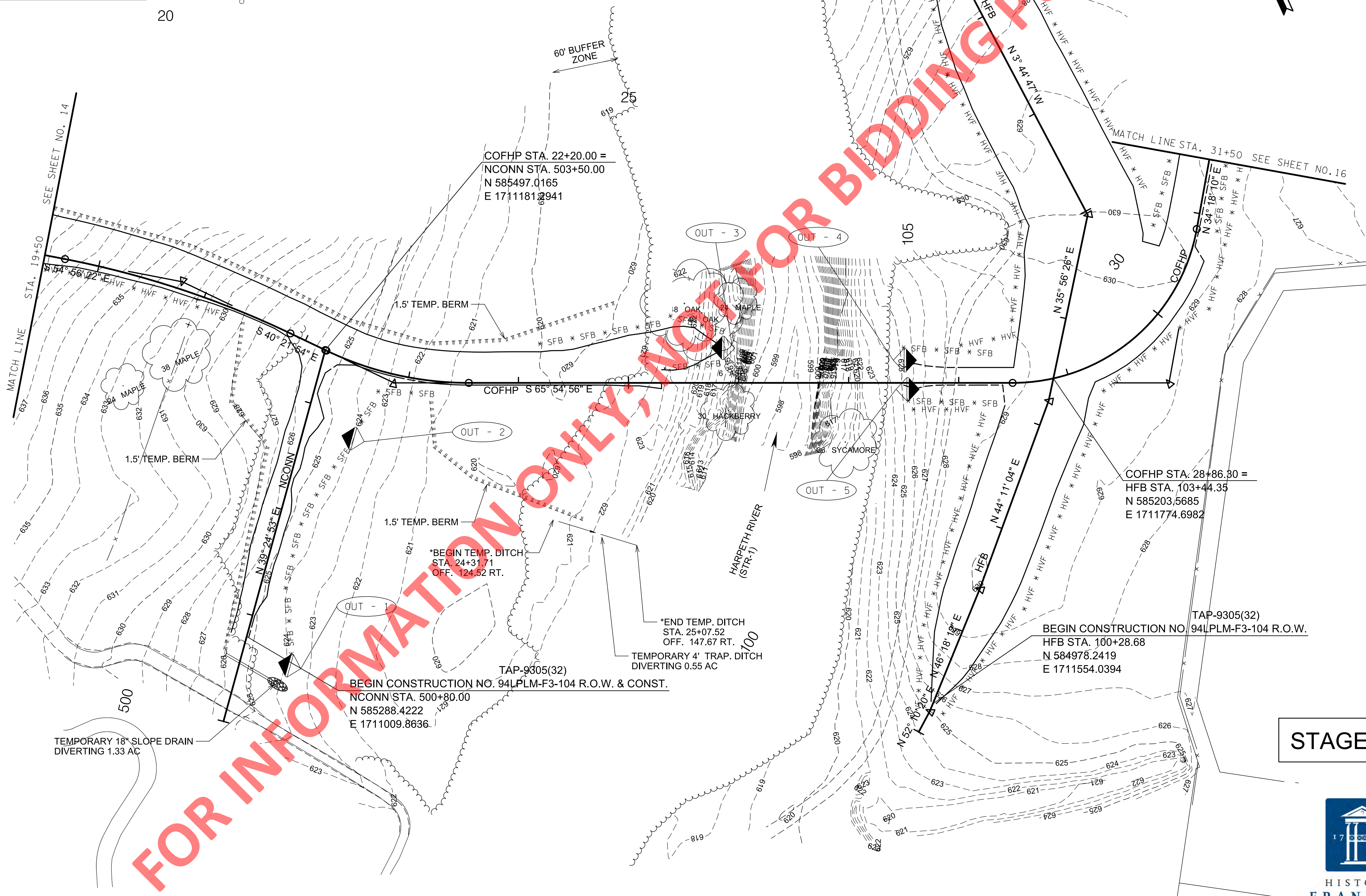
TAP-9305(32)  
 END CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 HFB STA. 108+66.03  
 N 585694.1115  
 E 1711828.4335

HIGH-FLOW BYPASS TO BE GRADED AND STABILIZED FROM STA. 100+28.68 TO STA. 107+75.00. UTILIZING DEWATERING PUMP AND SEDIMENT FILTER BAG TO MAINTAIN A DRY WORK AREA. THE REMAINDER OF THE HIGH-FLOW BYPASS OUTLET TO BE CONSTRUCTED IN THE DRY.

\*NOTE: TEMPORARY TRAPEZOIDAL DITCH TO BE BUILT AND STABILIZED BEFORE ANY OTHER EPSC MEASURES ARE IMPLEMENTED.

CONTOUR LEGEND

---	EXISTING CONTOURS
—	PROPOSED CONTOURS

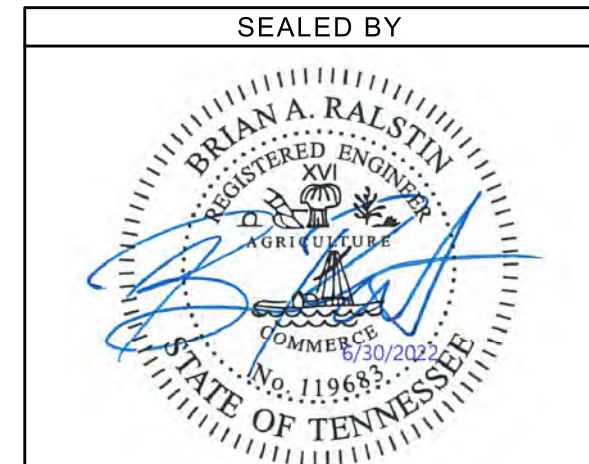


20

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:52:05 AM Y:\Nashville\16020000S\16020001\001Eng\_Docs\Roadway\015\_Ph 1 Sheet\_02.sht

STAGE I



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

EPSC  
 LAYOUT

STA.19+50 TO STA.31+50  
 SCALE: 1"= 50'



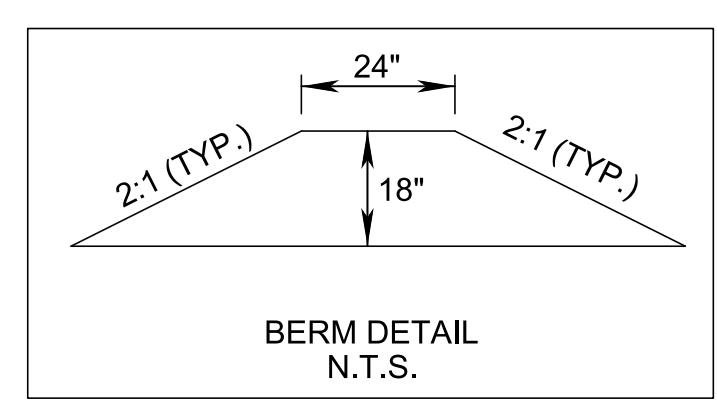
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	16
CONST.	2022	TAP-9305(32)	16

TAP-9305(32)  
 END PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 105+74.95  
 N 585412.3534  
 E 1712852.5755

COFHP STA. 38+83.73 =  
 COFIU STA. 101+10.00  
 N 585205.5991  
 E 1712508.1015

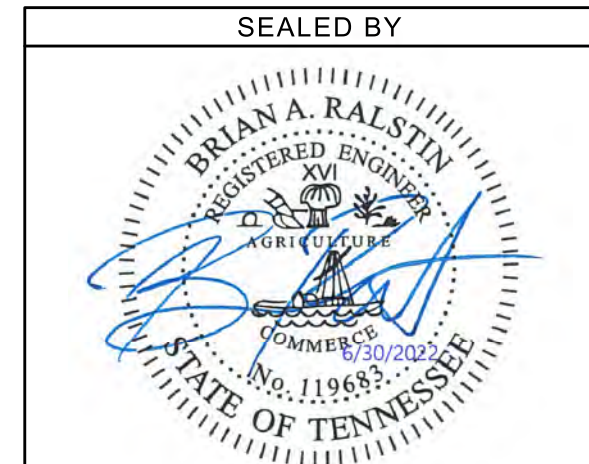
TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 100+75.00  
 N 585177.9517  
 E 1712486.6321

1.47 AC DIVERTED TO  
 EXIST. 36" PIPE



CONTOUR LEGEND	
--- 660 ---	EXISTING CONTOURS
— 660 —	PROPOSED CONTOURS

STAGE I



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

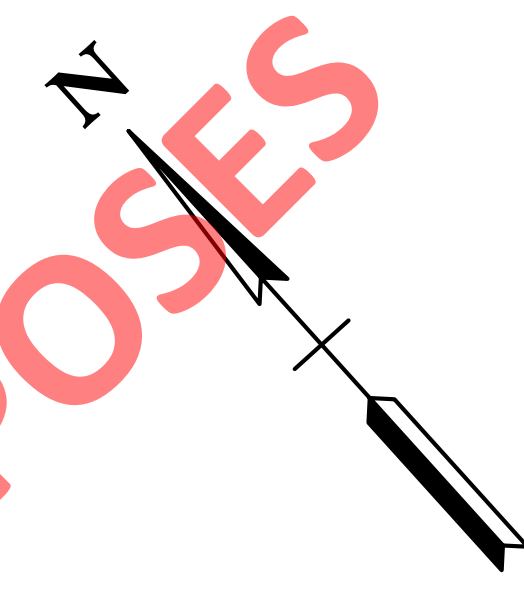


EPSC  
 LAYOUT  
 COFHP STA. 31+50.00 TO  
 COFIU STA. 105+74.95  
 SCALE: 1"= 50'

FOR INFORMATION ONLY! NOT FOR BIDDING PURPOSES

6/30/2022 10:52:08 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\016\_Ph 1 Sheet\_03.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	17
CONST.	2022	TAP-9305(32)	17

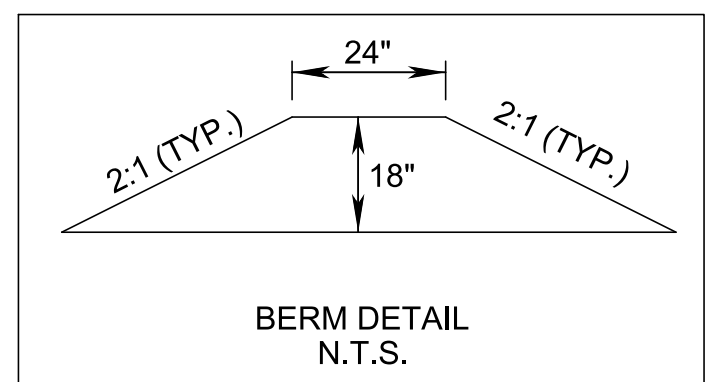


TAP-9305(32)  
 BEGIN PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFHP STA. 11+35.00  
 N 586199.6667  
 E 1710388.2351

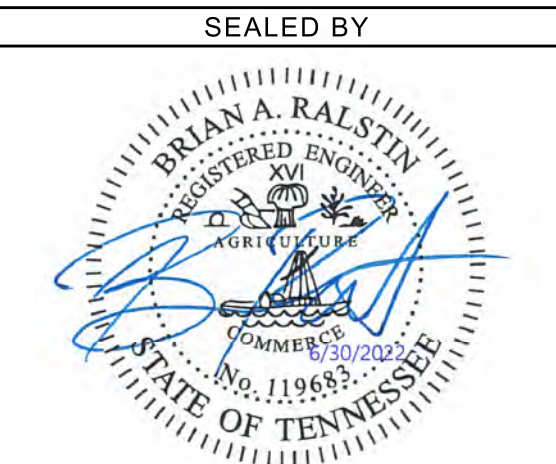
FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:52:11 AM  
 Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\017\_Ph 2 Sheet\_01.sht

CONTOUR LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS



**STAGE II**



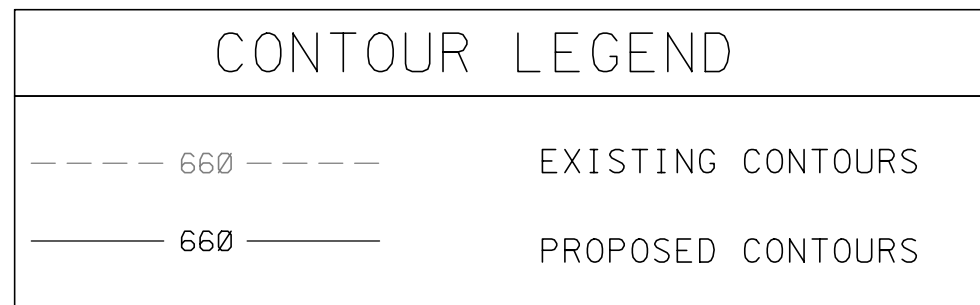
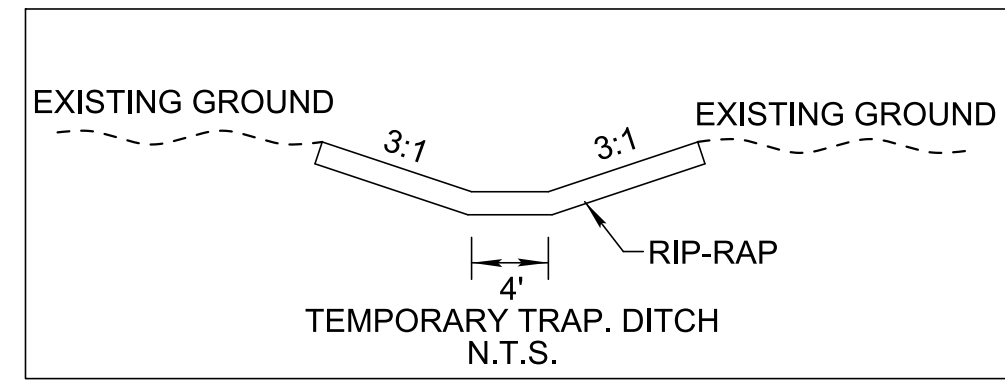
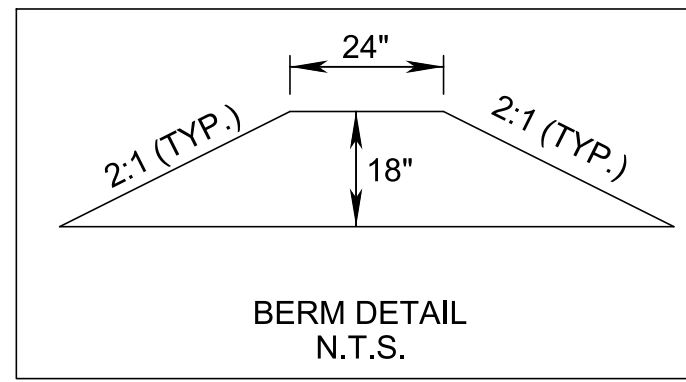
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

**EPSC  
 LAYOUT**  
 STA.10+00 TO STA.19+50  
 SCALE: 1"= 50'

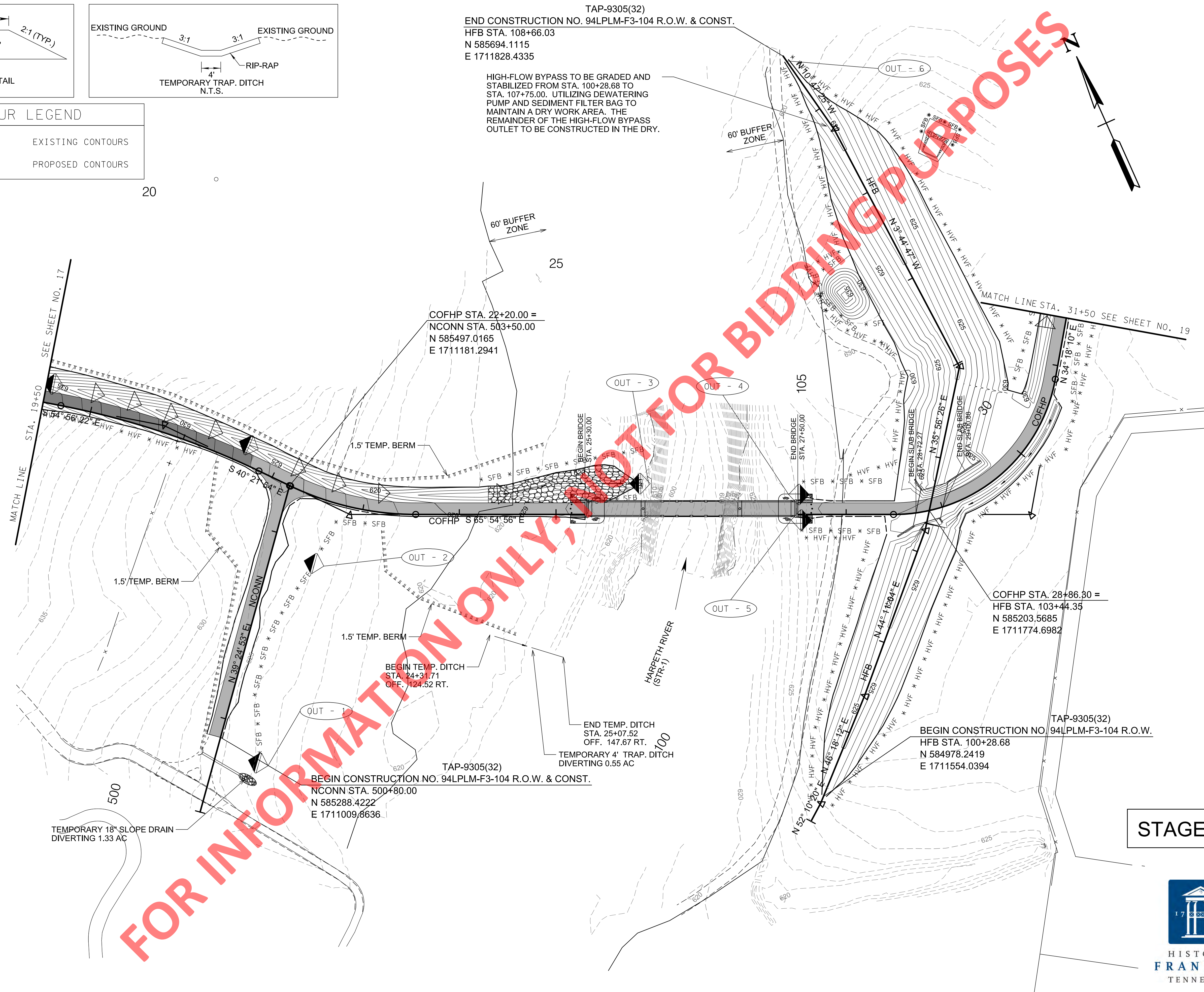
MATCH LINE  
 STA. 19+50  
 SEE SHEET NO. 18

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	18
CONST.	2022	TAP-9305(32)	18



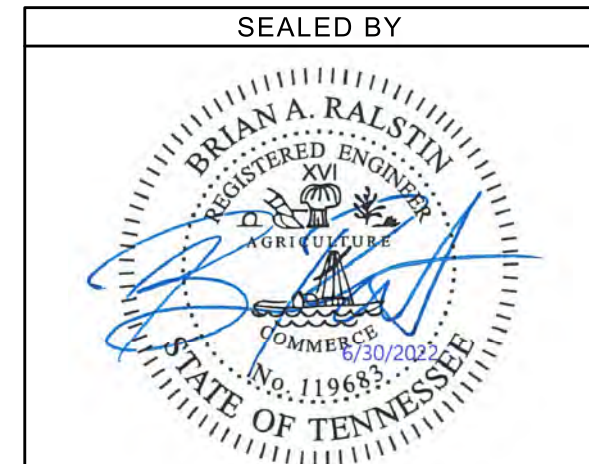
TAP-9305(32)  
END CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
HFB STA. 108+66.03  
N 585694.1115  
E 1711828.4335

HIGH-FLOW BYPASS TO BE GRADED AND STABILIZED FROM STA. 100+28.68 TO STA. 107+75.00. UTILIZING DEWATERING PUMP AND SEDIMENT FILTER BAG TO MAINTAIN A DRY WORK AREA. THE REMAINDER OF THE HIGH-FLOW BYPASS OUTLET TO BE CONSTRUCTED IN THE DRY.



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

STAGE II



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

EPSC  
LAYOUT

STA.19+50 TO STA.31+50  
SCALE: 1"= 50'

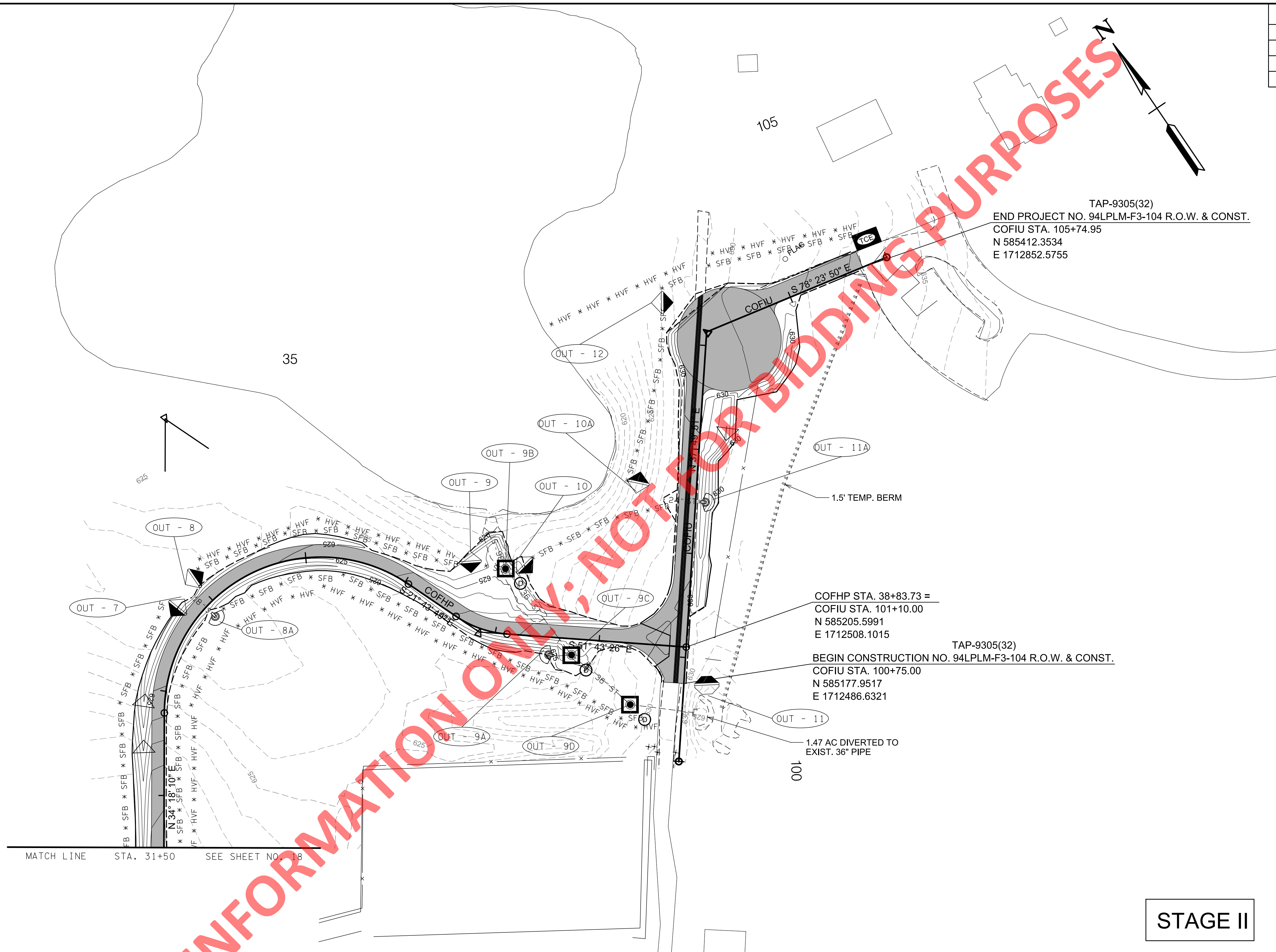
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	19
CONST.	2022	TAP-9305(32)	19

TAP-9305(32)  
 END PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 105+74.95  
 N 585412.3534  
 E 1712852.5755

COFHP STA. 38+83.73 =  
 COFIU STA. 101+10.00  
 N 585205.5991  
 E 1712508.1015

TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 100+75.00  
 N 585177.9517  
 E 1712486.6321

1.47 AC DIVERTED TO  
 EXIST. 36" PIPE

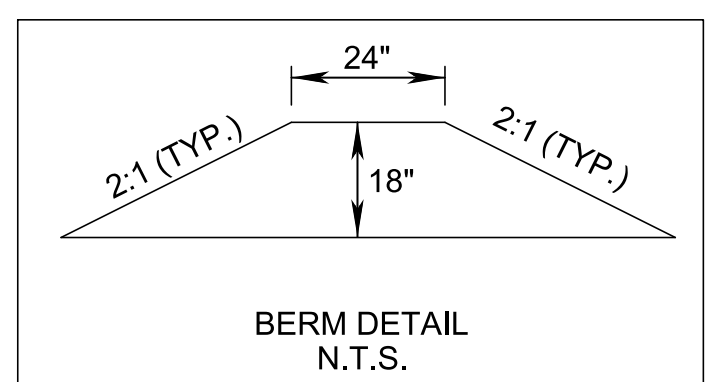


FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

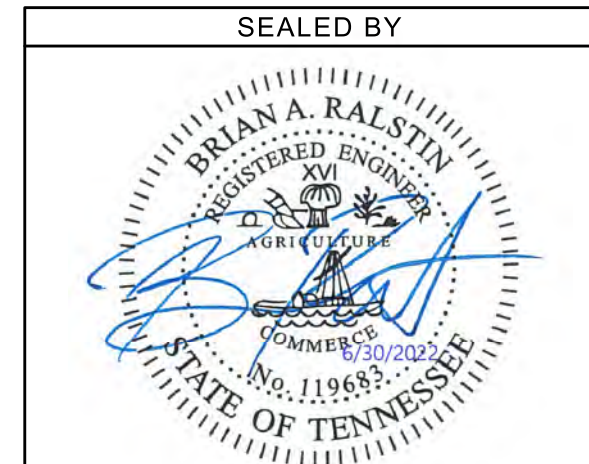
MATCH LINE STA. 31+50 SEE SHEET NO. 18

--- 660 ---	EXISTING CONTOURS
— 660 —	PROPOSED CONTOURS

NOTE:  
 TYPE D CATCH BASIN PROTECTION  
 TO BE USED UNTIL MANHOLE  
 STRUCTURES ARE FULLY COMPLETE WITH LID



STAGE II



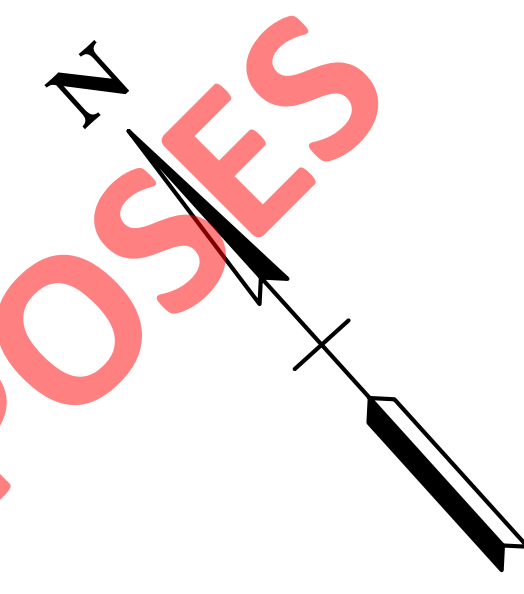
COORDINATES VALUES ARE NAD 83(2011),  
 ARE DATUM ADJUSTED BY THE FACTOR  
 OF 1.00000 (NO DATUM ADJUSTMENT),  
 AND BASED ON AN NGS OPUS SOLUTION.  
 ALL ELEVATIONS ARE REFERENCED TO  
 THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

EPSC  
 LAYOUT  
 COFHP STA. 31+50.00 TO  
 COFIU STA. 105+74.95  
 SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	20
CONST.	2022	TAP-9305(32)	20



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

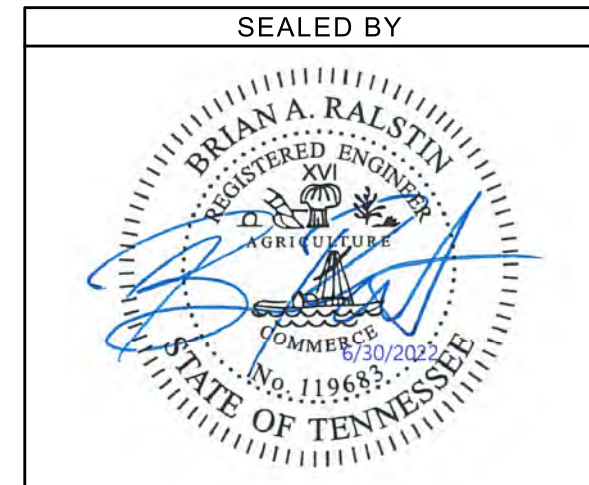
TAP-9305(32)  
 BEGIN PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFHP STA. 11+35.00  
 N 586199.6667  
 E 1710388.2351

CLAUDE YATES DR.

MATCH LINE  
 STA. 19+50  
 SEE SHEET NO. 21

CONTOUR LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS

**STAGE III**



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

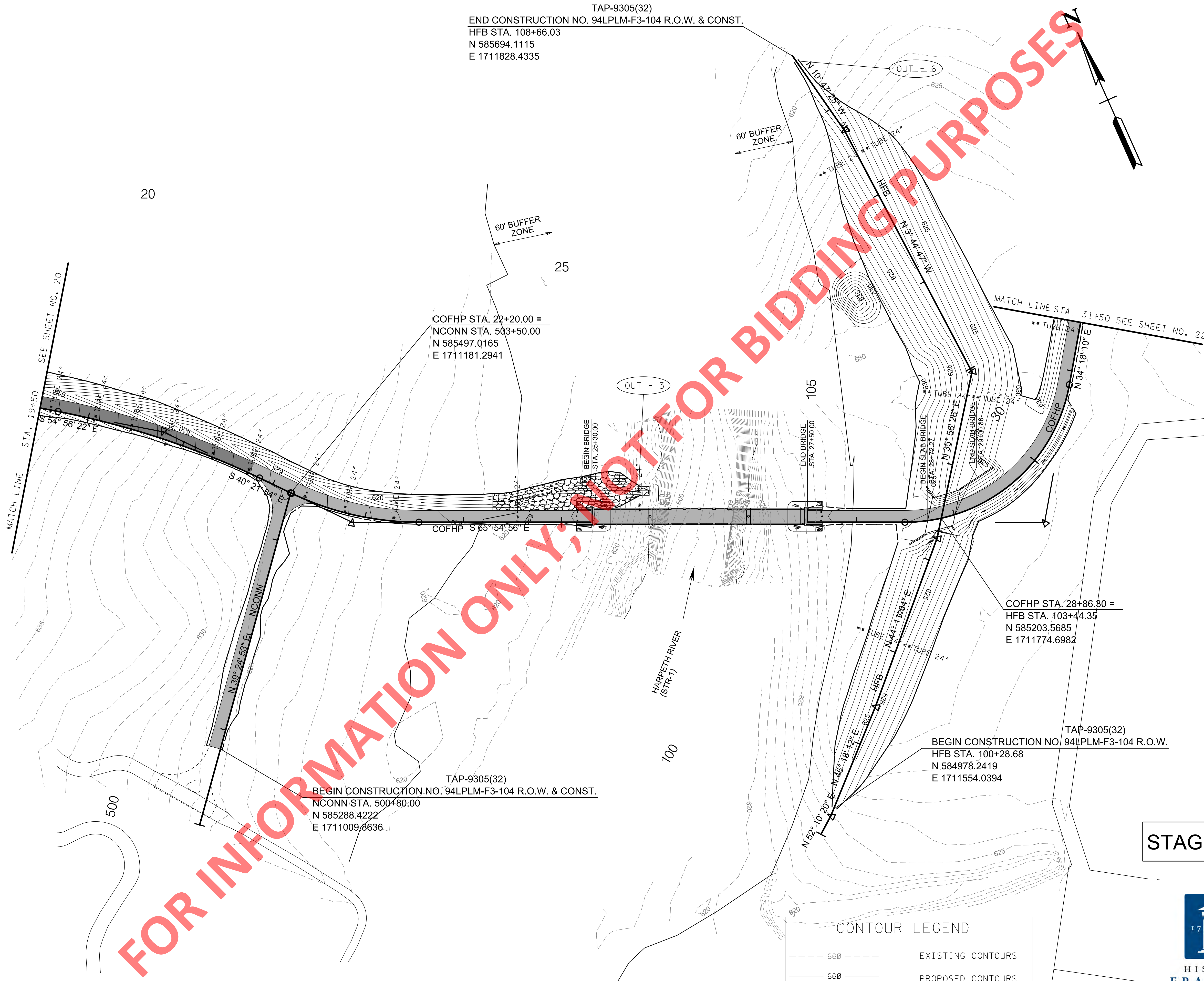
**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

**EPSC  
 LAYOUT**  
 STA.10+00 TO STA.19+50  
 SCALE: 1"= 50'

6/30/2022 10:52:20 AM  
 Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\020\_Ph 3 Sheet\_01.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	21
CONST.	2022	TAP-9305(32)	21

TAP-9305(32)  
 END CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 HFB STA. 108+66.03  
 N 585694.1115  
 E 1711828.4335



20

25

105

100

500

COFHP STA. 22+20.00 =  
 NCONN STA. 503+50.00  
 N 585497.0165  
 E 1711181.2941

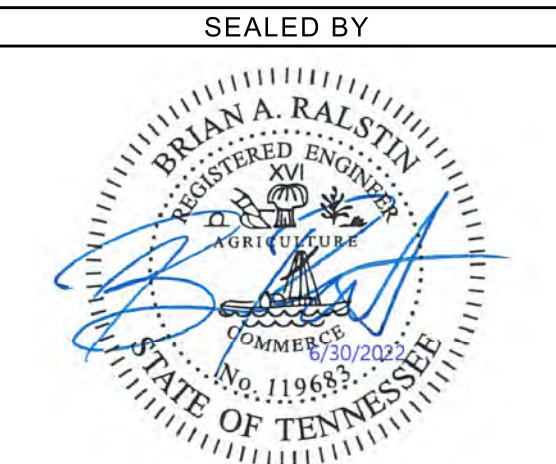
TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 NCONN STA. 500+80.00  
 N 585288.4222  
 E 1711009.8636

COFHP STA. 28+86.30 =  
 HFB STA. 103+44.35  
 N 585203.5685  
 E 1711774.6982

TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W.  
 HFB STA. 100+28.68  
 N 584978.2419  
 E 1711554.0394

CONTOUR LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS

STAGE III



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

EPSC  
 LAYOUT  
 STA.19+50 TO STA.31+50  
 SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	22
CONST.	2022	TAP-9305(32)	22

TAP-9305(32)  
 END PROJECT NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 105+74.95  
 N 585412.3534  
 E 1712852.5755

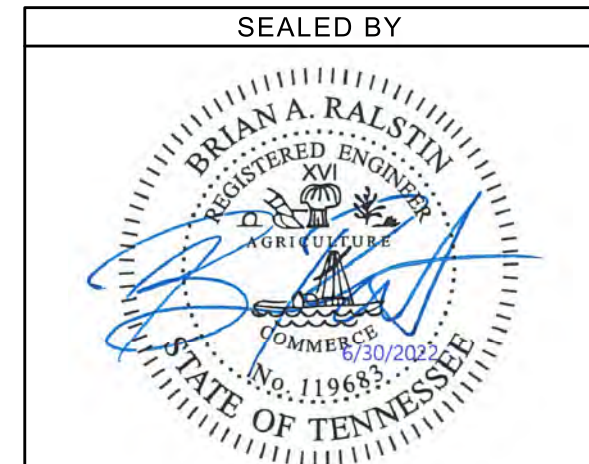
COFHP STA. 38+83.73 =  
 COFIU STA. 101+10.00  
 N 585205.5991  
 E 1712508.1015

TAP-9305(32)  
 BEGIN CONSTRUCTION NO. 94LPLM-F3-104 R.O.W. & CONST.  
 COFIU STA. 100+75.00  
 N 585177.9517  
 E 1712486.6321

MATCH LINE STA. 31+50 SEE SHEET NO. 21

CONTOUR LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS

STAGE III



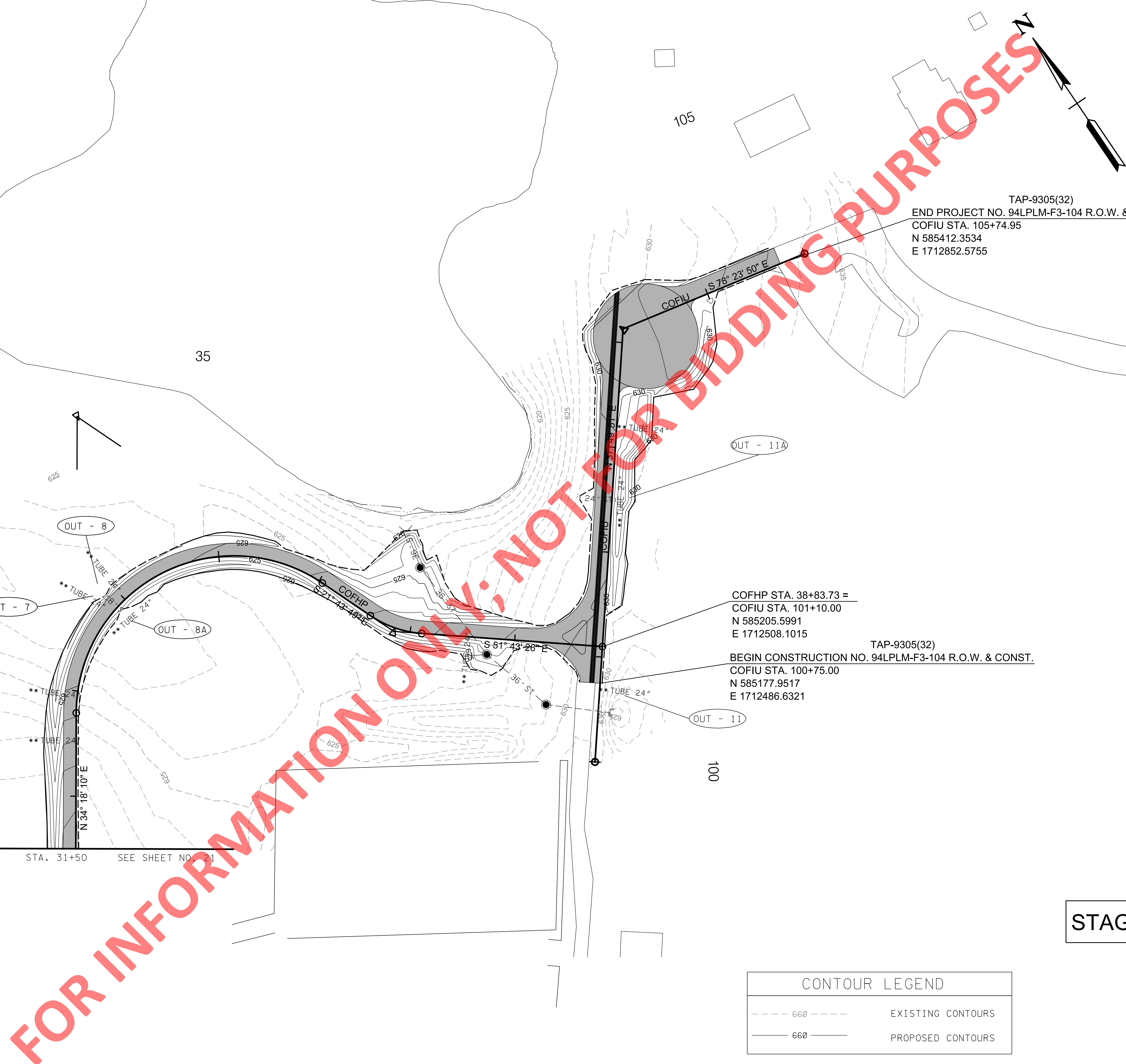
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



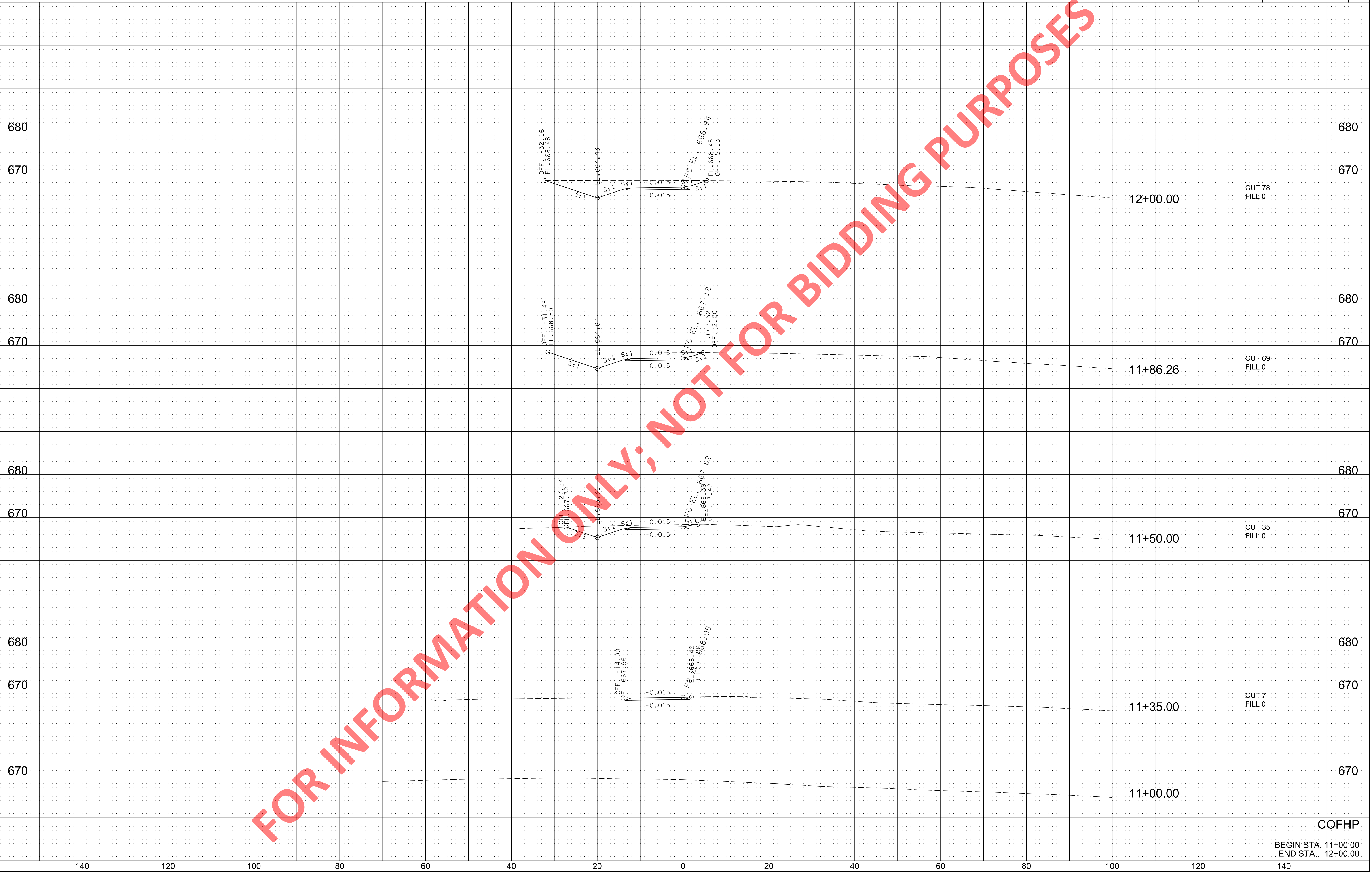
CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

EPSC  
 LAYOUT  
 COFHP STA. 31+50.00 TO  
 COFIU STA. 105+74.95  
 SCALE: 1"= 50'

6/30/2022 10:52:25 AM  
 Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\022\_Ph 3 Sheet\_03.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	23
CONST.	2022	TAP-9305(32)	23

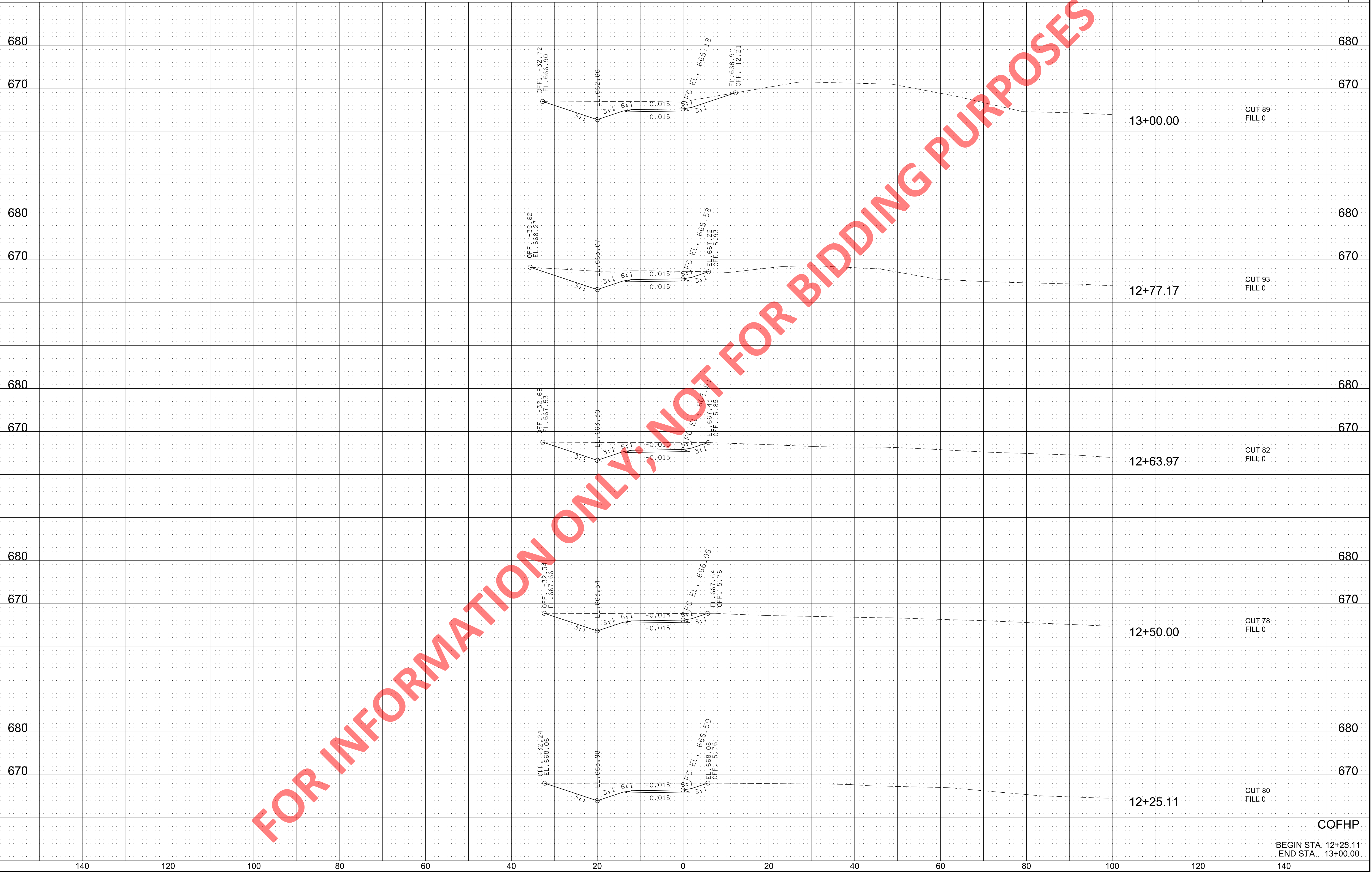


6/30/2022 10:52:29 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 11+00.00  
 END STA. 12+00.00



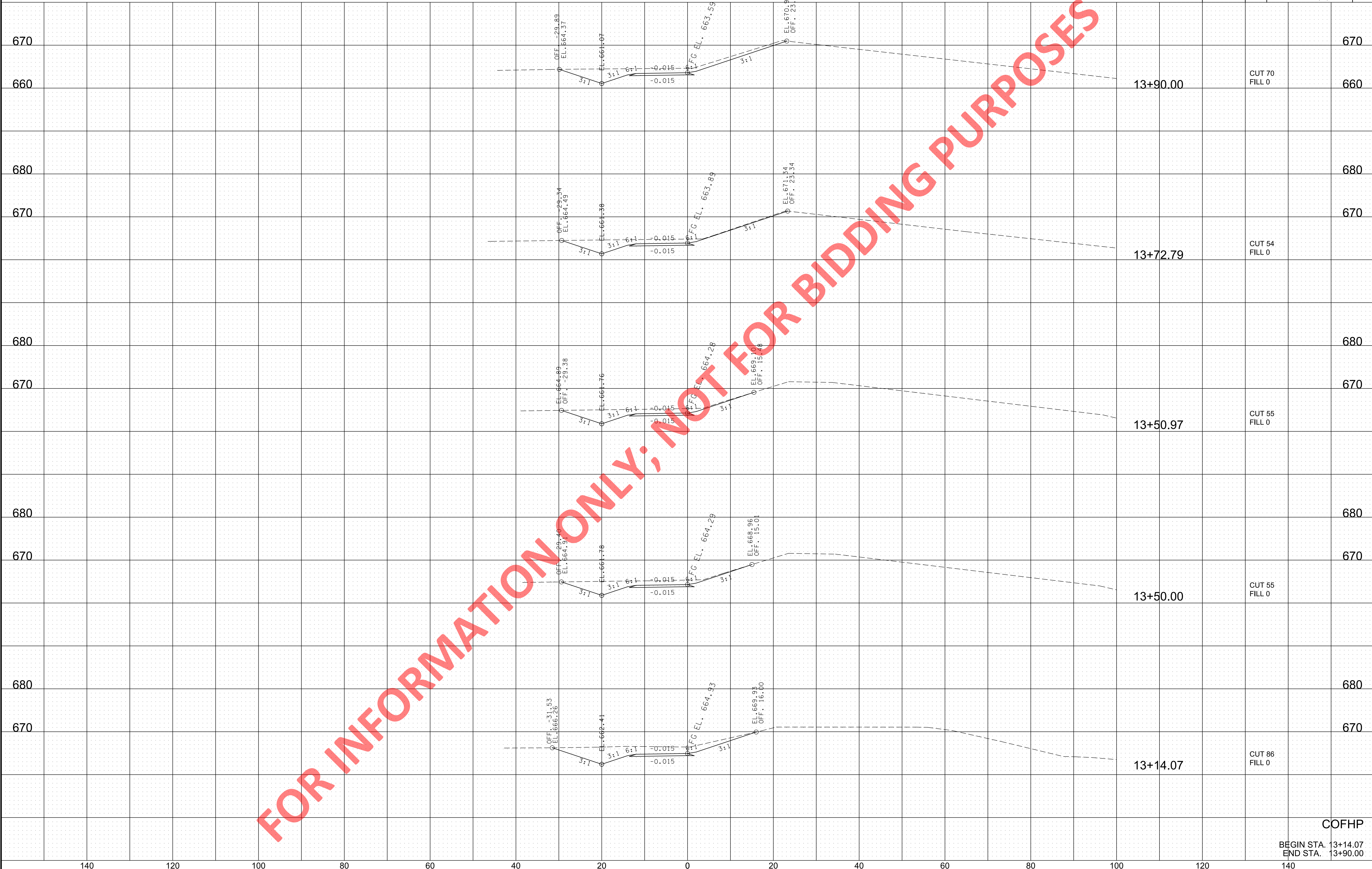
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	24
CONST.	2022	TAP-9305(32)	24



6/30/2022 10:52:31 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 12+25.11  
 END STA. 13+00.00

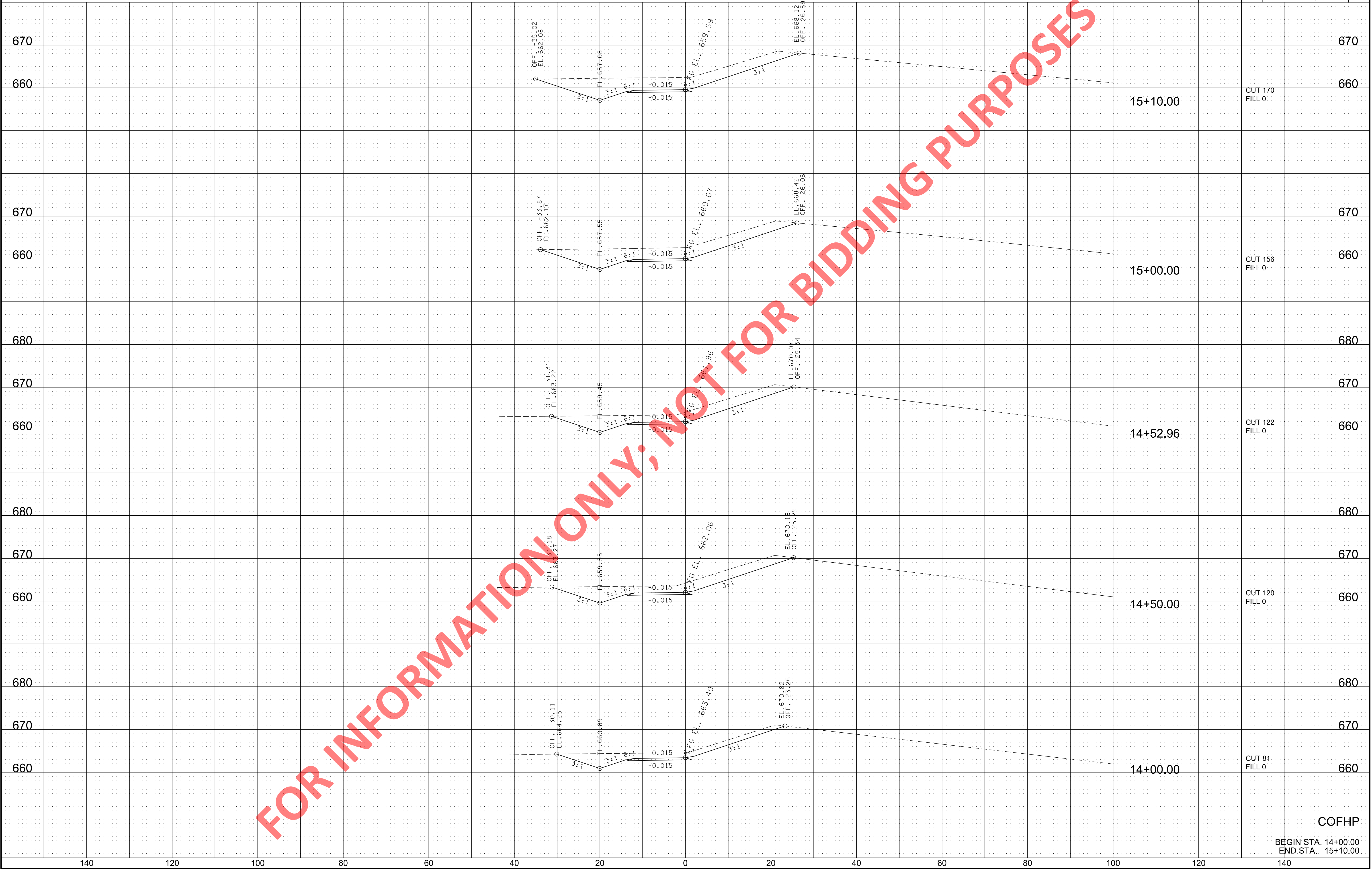
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	25
CONST.	2022	TAP-9305(32)	25



6/30/2022 10:52:32 AM  
 Y:\Nashville\16020000S\16020001\01Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 13+14.07  
 END STA. 13+90.00

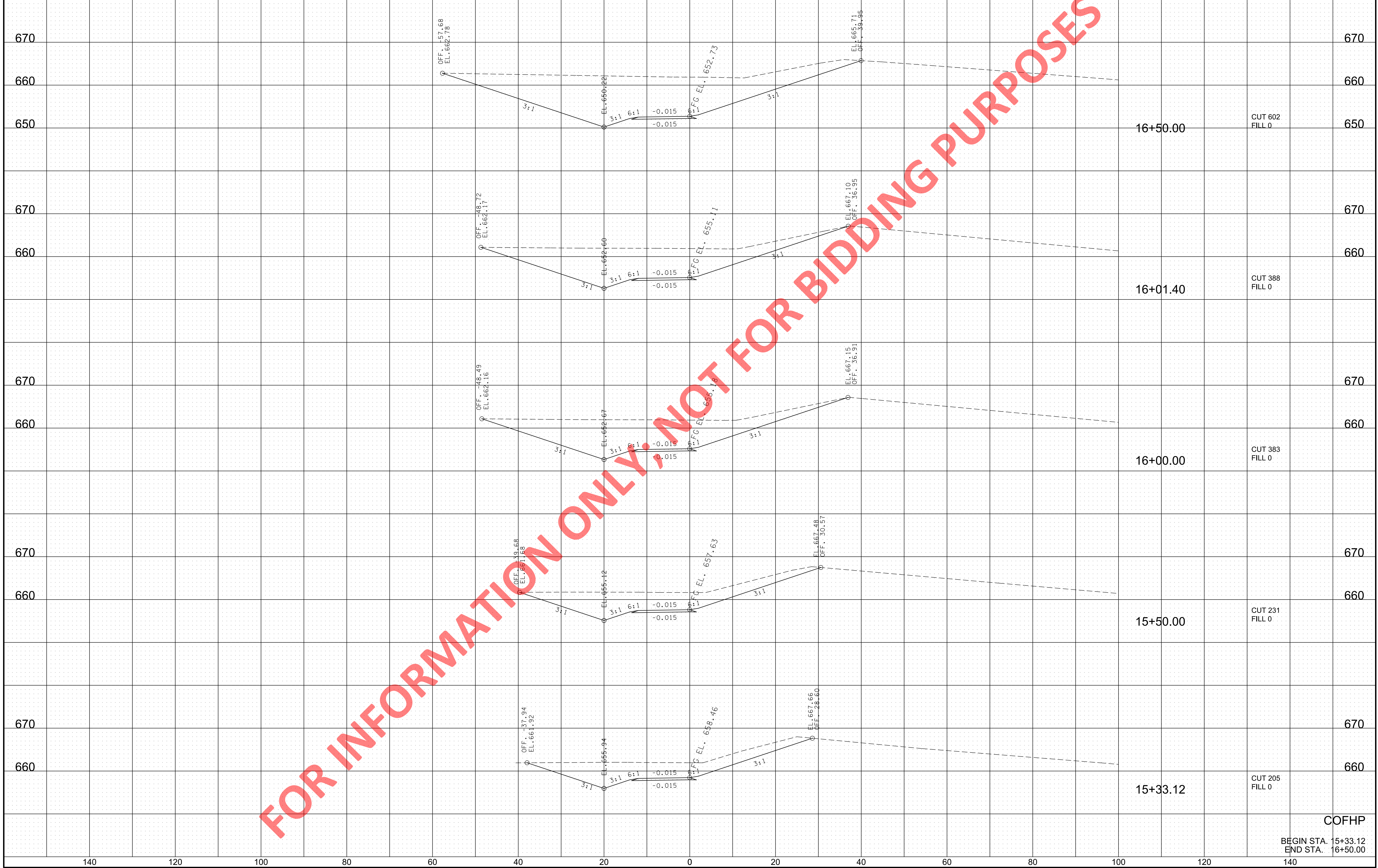
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	26
R.O.W.	2022	TAP-9305(32)	26



6/30/2022 10:52:34 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 14+00.00  
 END STA. 15+10.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	27
CONST.	2022	TAP-9305(32)	27

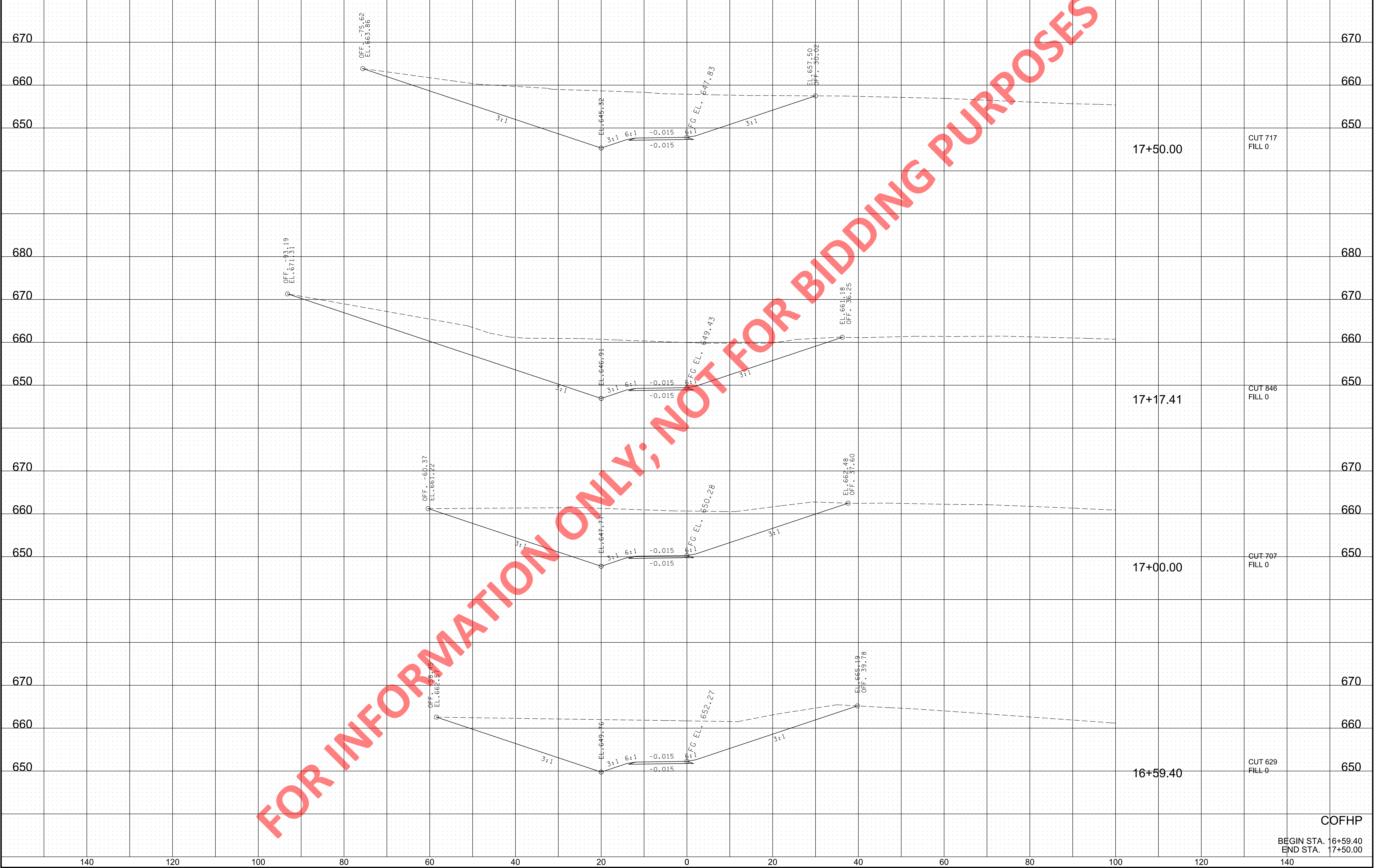


FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:52:36 AM  
Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

COFHP  
BEGIN STA. 15+33.12  
END STA. 16+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	28
CONST.	2022	TAP-9305(32)	28

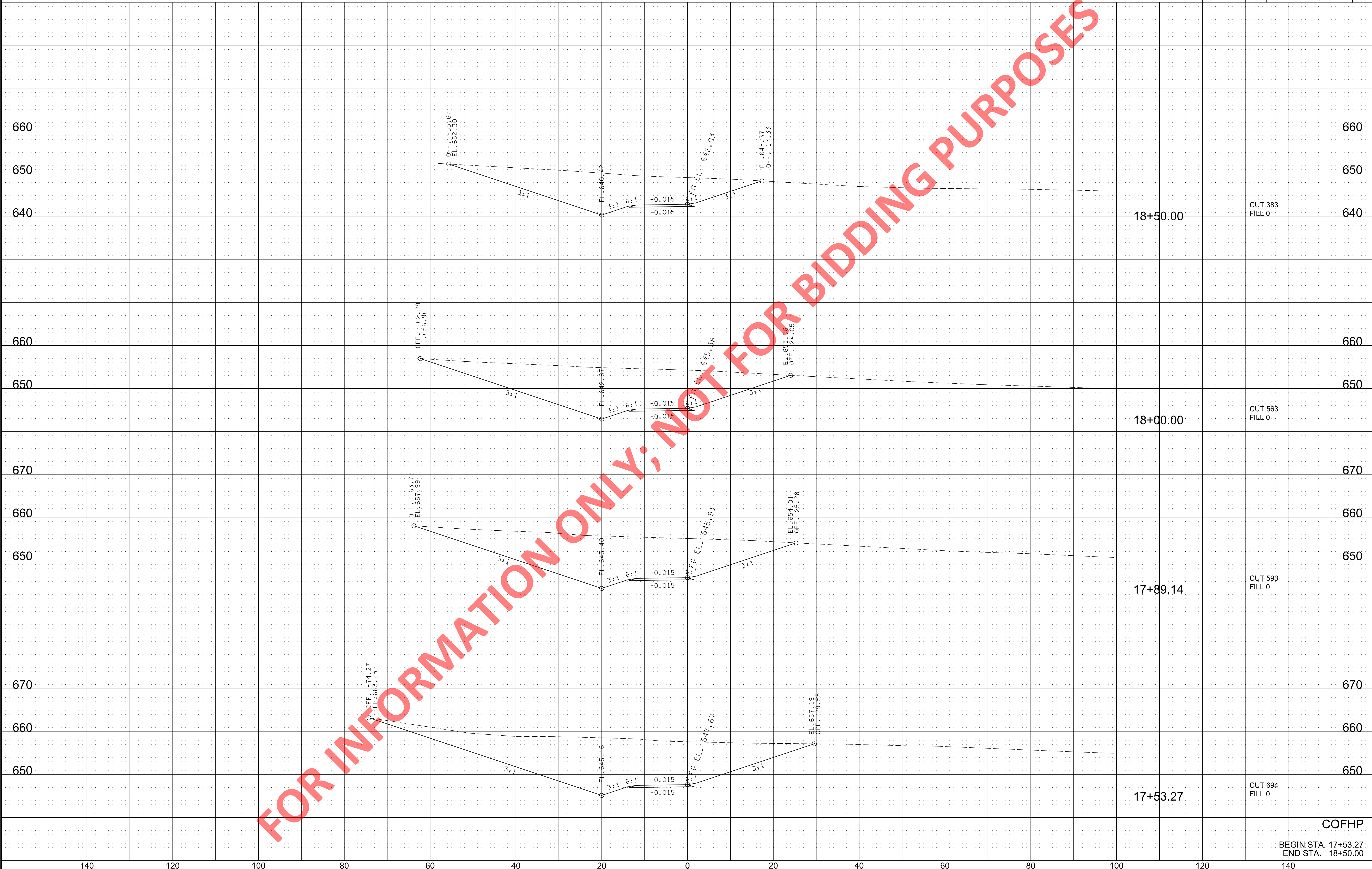


FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:52:37 AM  
Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

COFHP  
BEGIN STA. 16+59.40  
END STA. 17+50.00

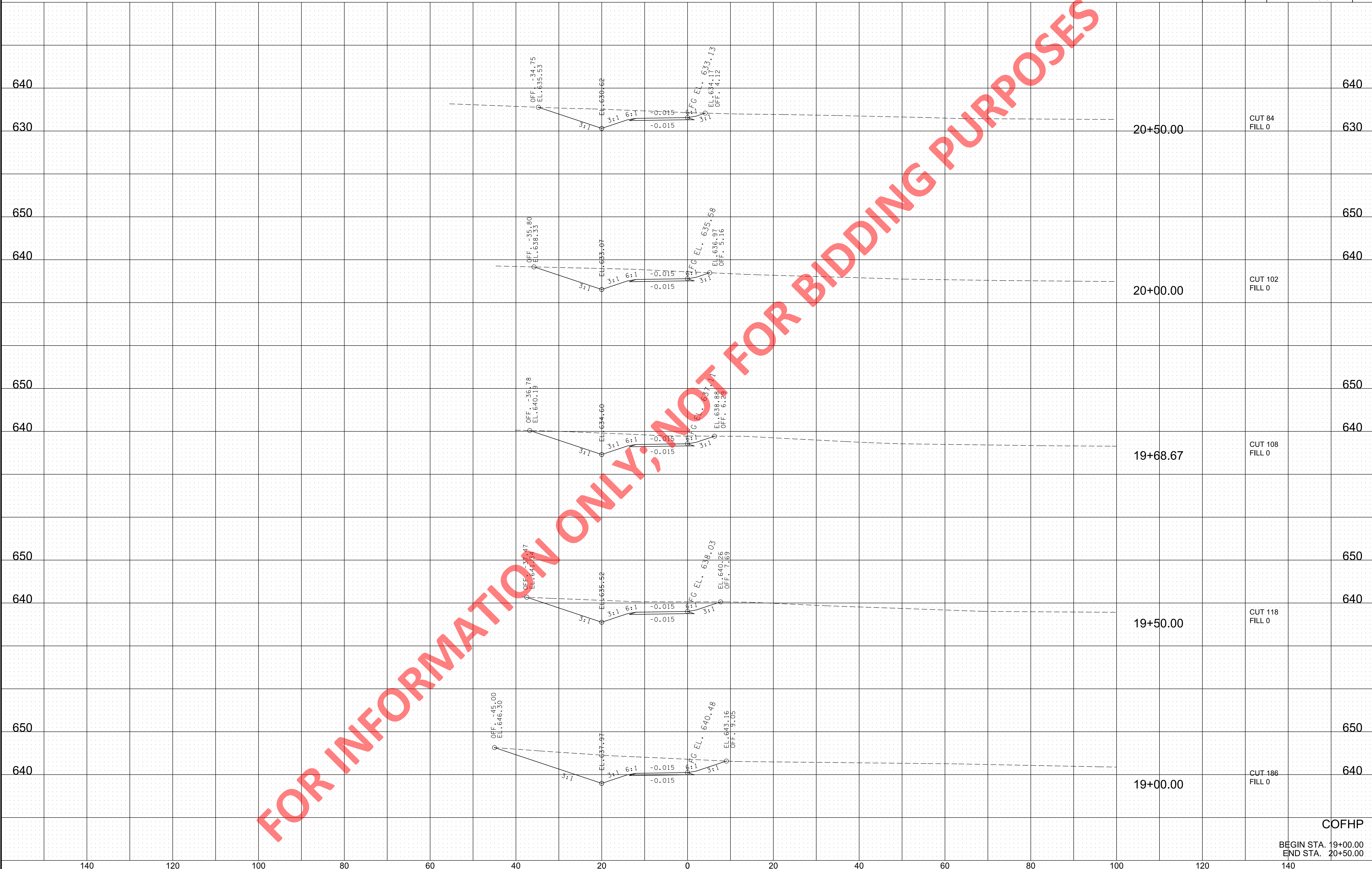
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	29
CONST.	2022	TAP-9305(32)	29



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:52:39 AM  
 Y:\Nashville\160200005\16020001\001\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

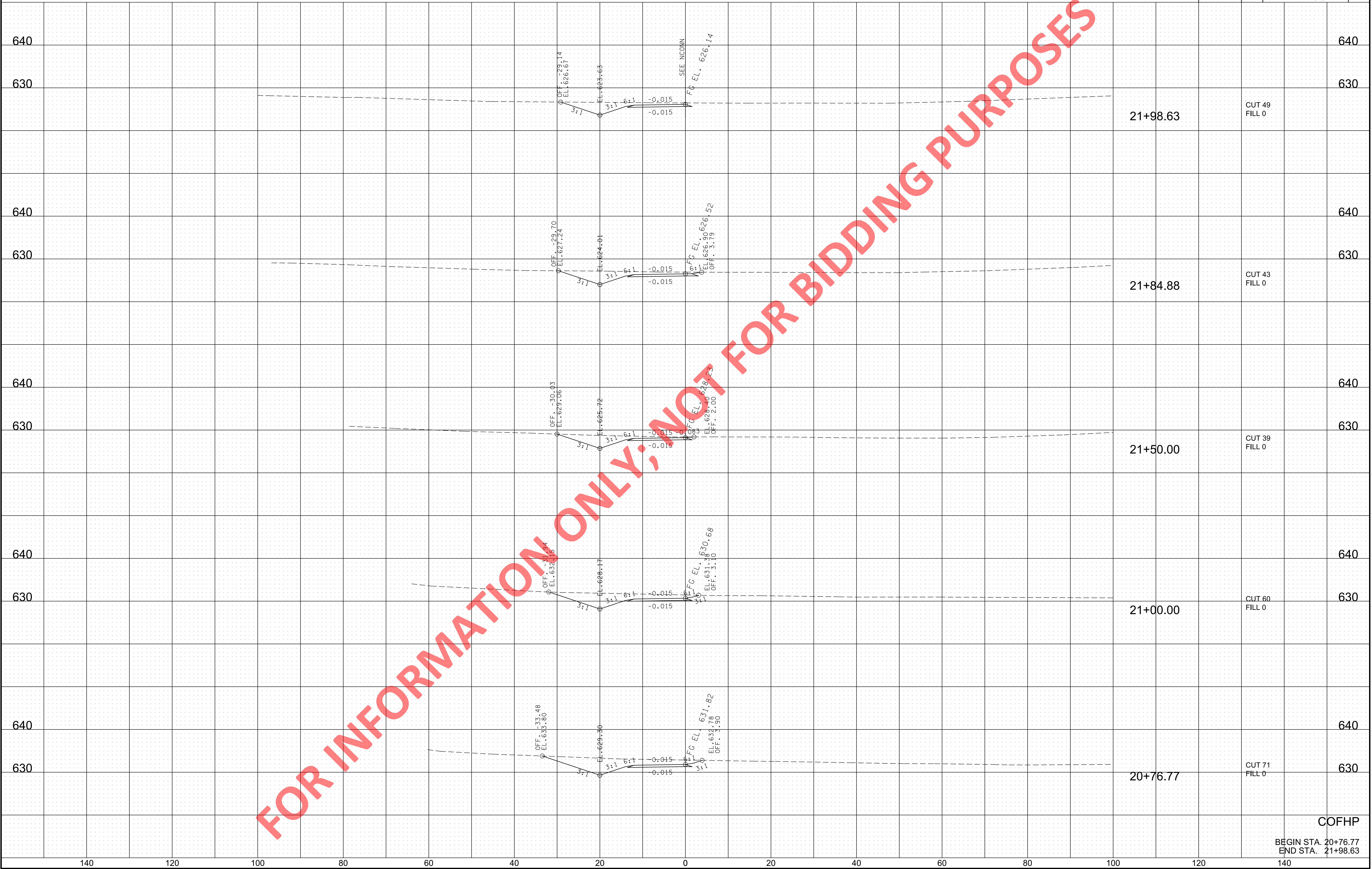
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	30
CONST.	2022	TAP-9305(32)	30



6/30/2022 10:52:41 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 19+00.00  
 END STA. 20+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	31
CONST.	2022	TAP-9305(32)	31



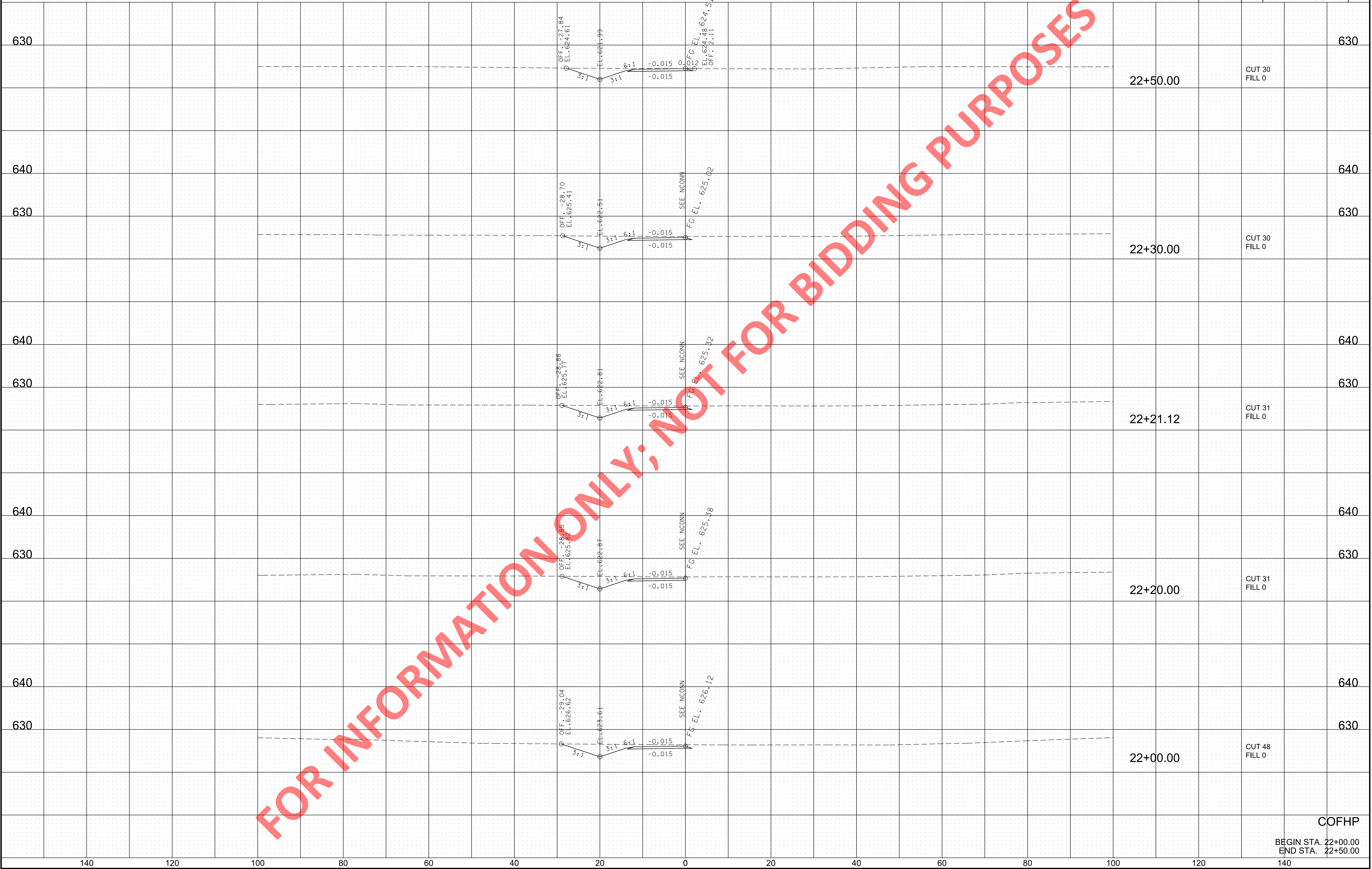
FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:52:42 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 20+76.77  
 END STA. 21+98.63



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	32
CONST.	2022	TAP-9305(32)	32



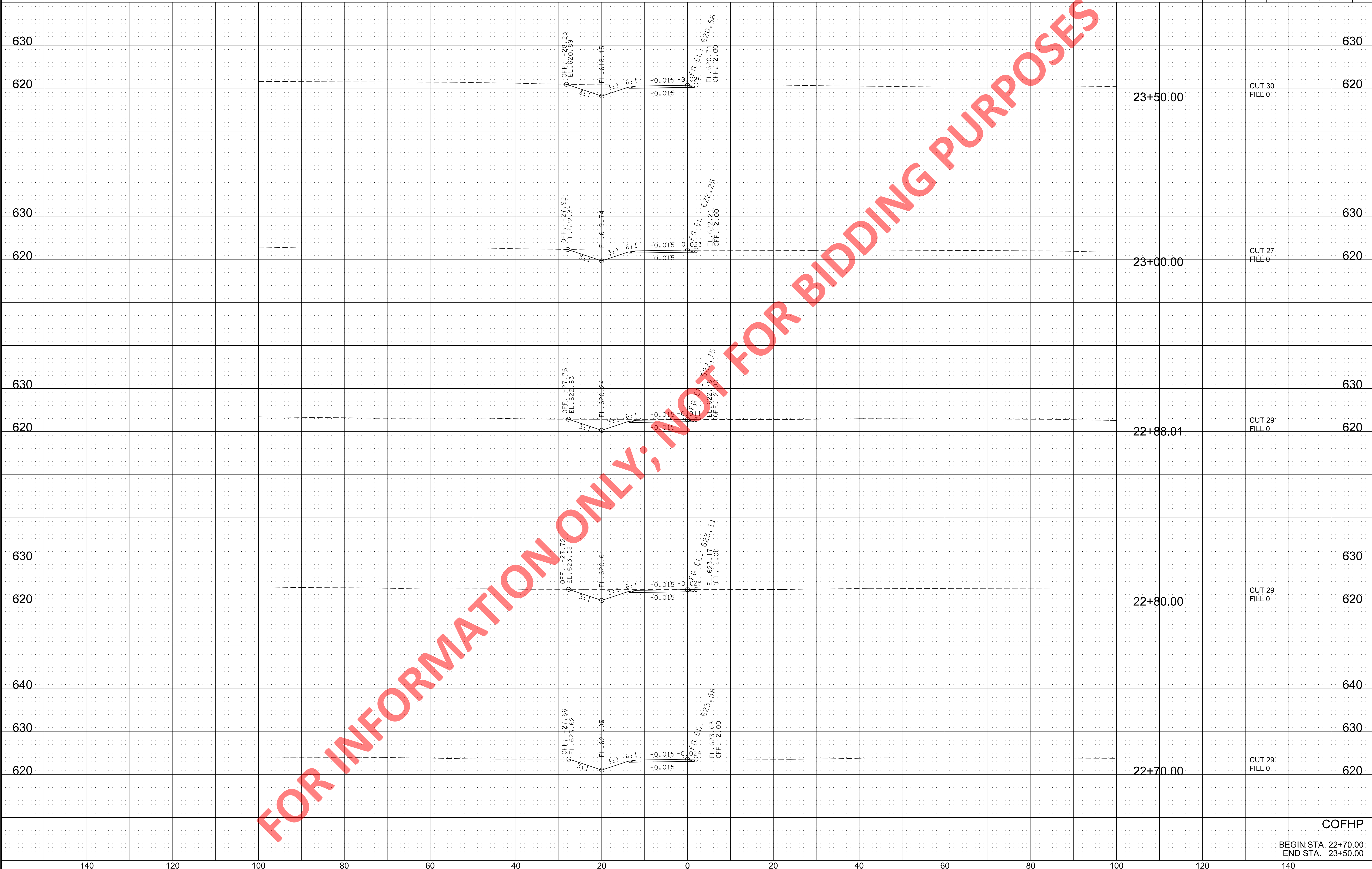
6/30/2022 10:52:44 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

COFHP

BEGIN STA. 22+00.00  
 END STA. 22+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	33
CONST.	2022	TAP-9305(32)	33

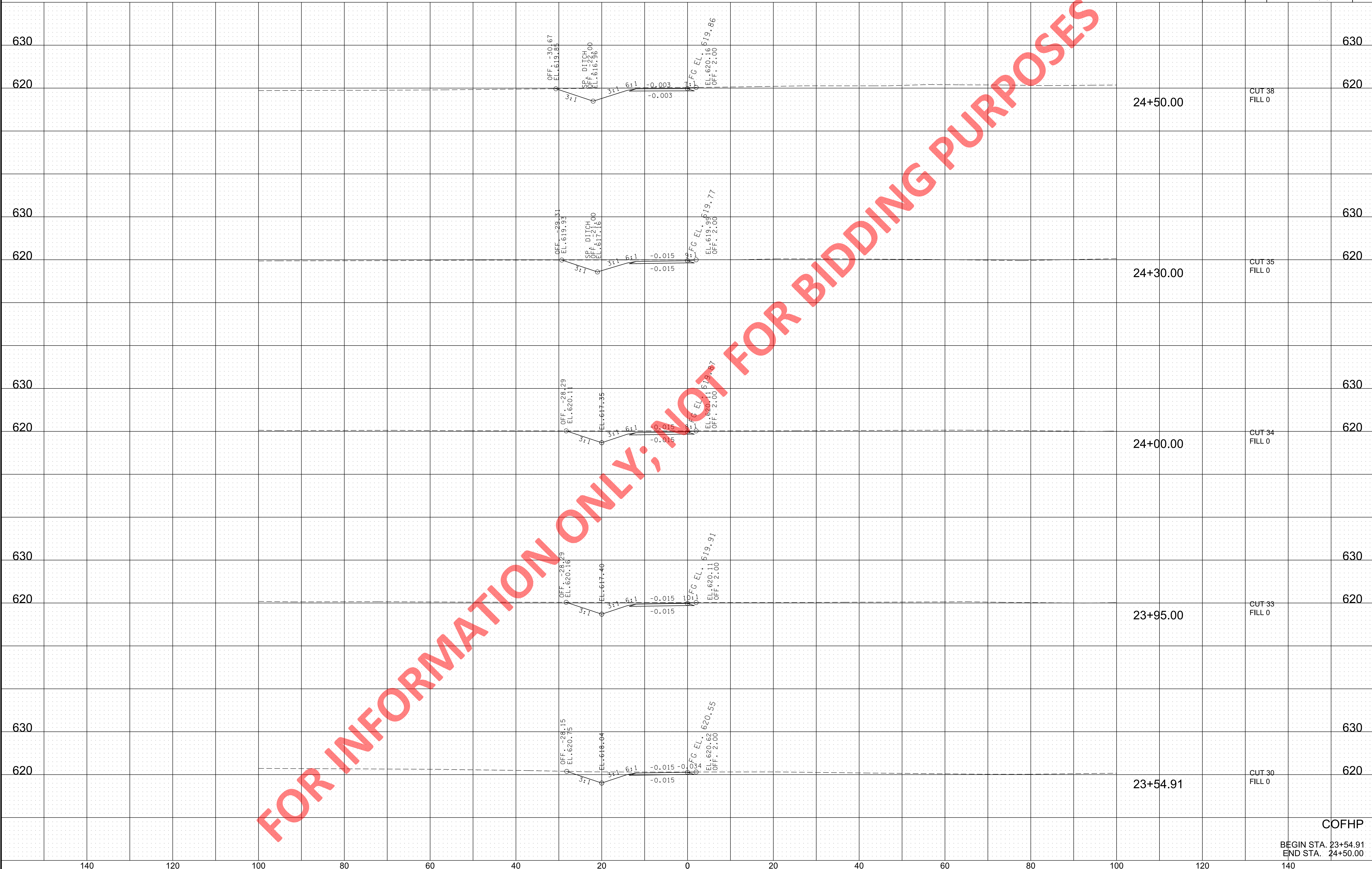


6/30/2022 10:52:45 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

COFHP  
 BEGIN STA. 22+70.00  
 END STA. 23+50.00

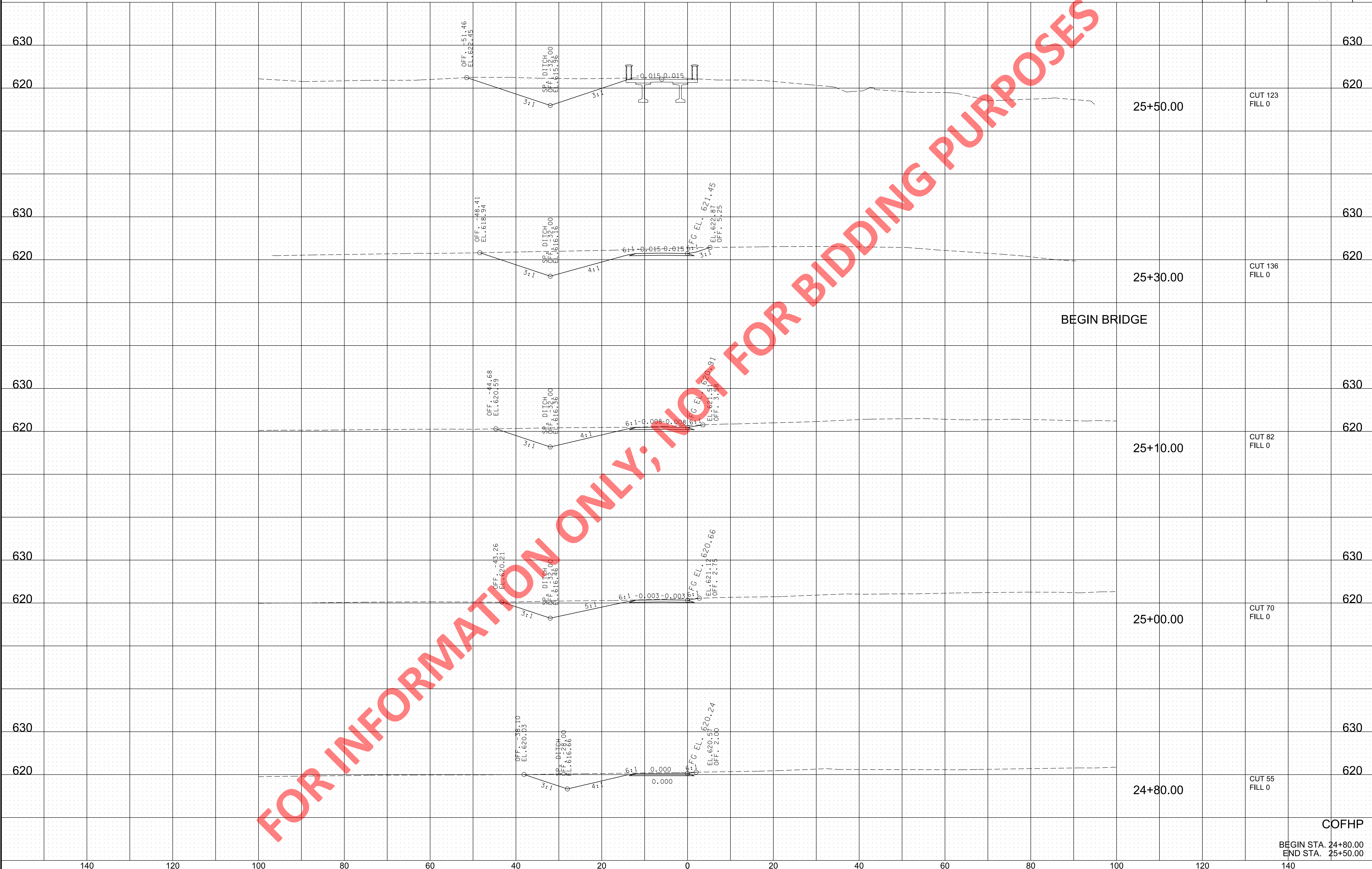
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	34
CONST.	2022	TAP-9305(32)	34



6/30/2022 10:52:47 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 23+54.91  
 END STA. 24+50.00

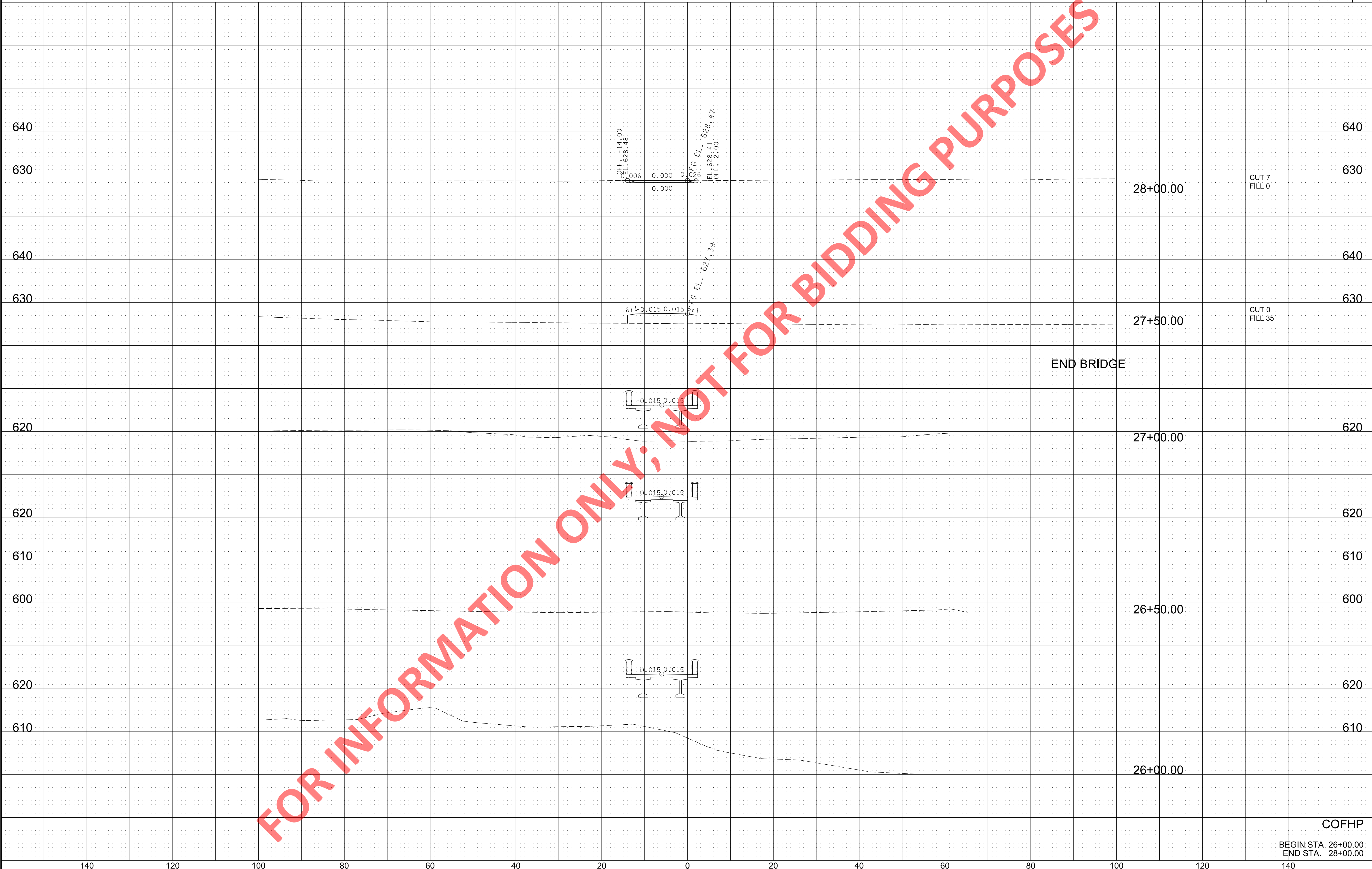
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	35
CONST.	2022	TAP-9305(32)	35



6/30/2022 10:52:49 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 24+80.00  
 END STA. 25+50.00

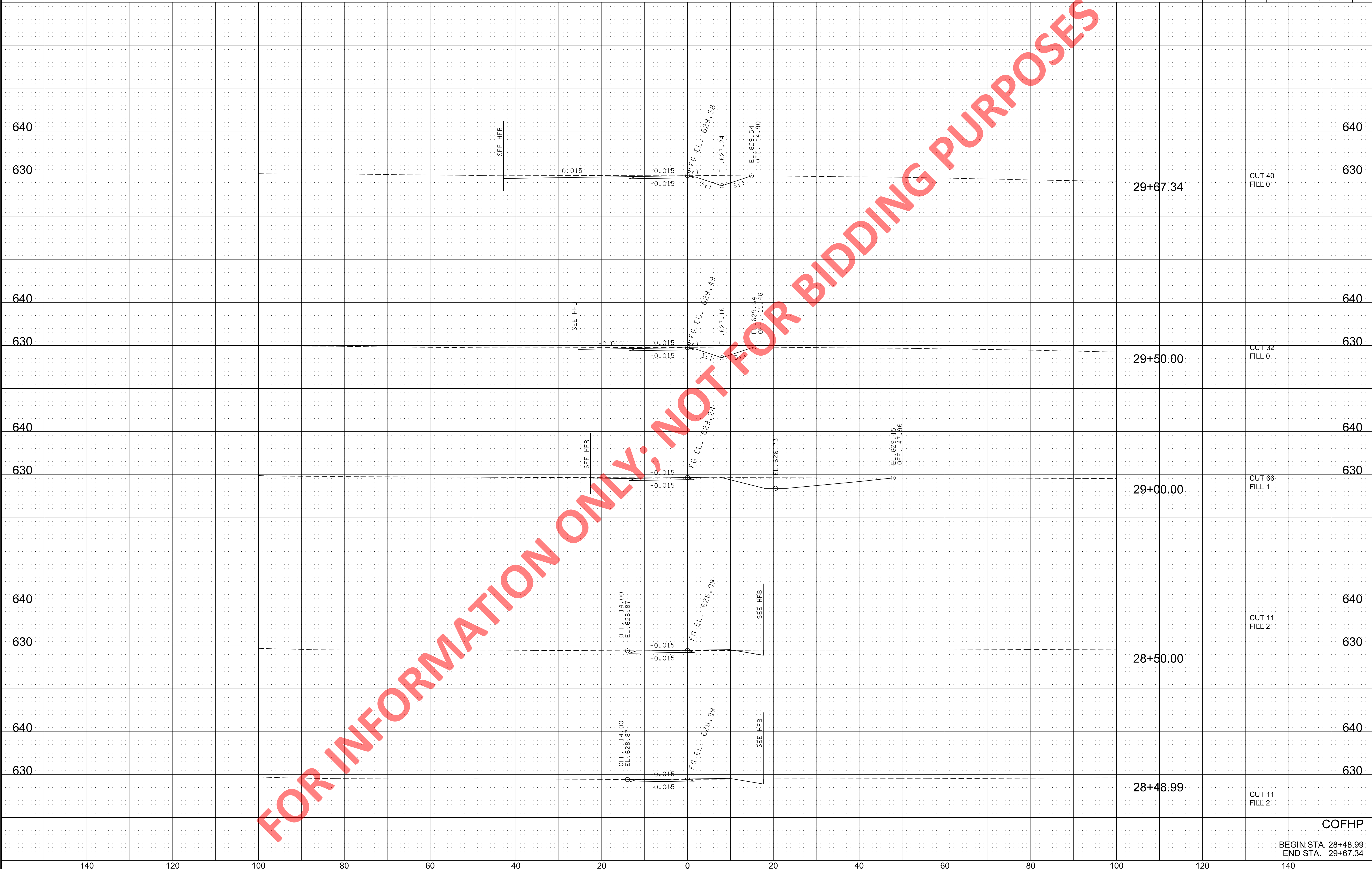
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	36
CONST.	2022	TAP-9305(32)	36



Elevation	Station	Description	Elevation
640			640
630	28+00.00	CUT 7 FILL 0	630
640			640
630	27+50.00	CUT 0 FILL 35	630
		END BRIDGE	
620	27+00.00		620
620			620
610			610
600	26+50.00		600
620			620
610	26+00.00		610
		COFHP	
		BEGIN STA. 26+00.00	
		END STA. 28+00.00	

6/30/2022 10:52:50 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

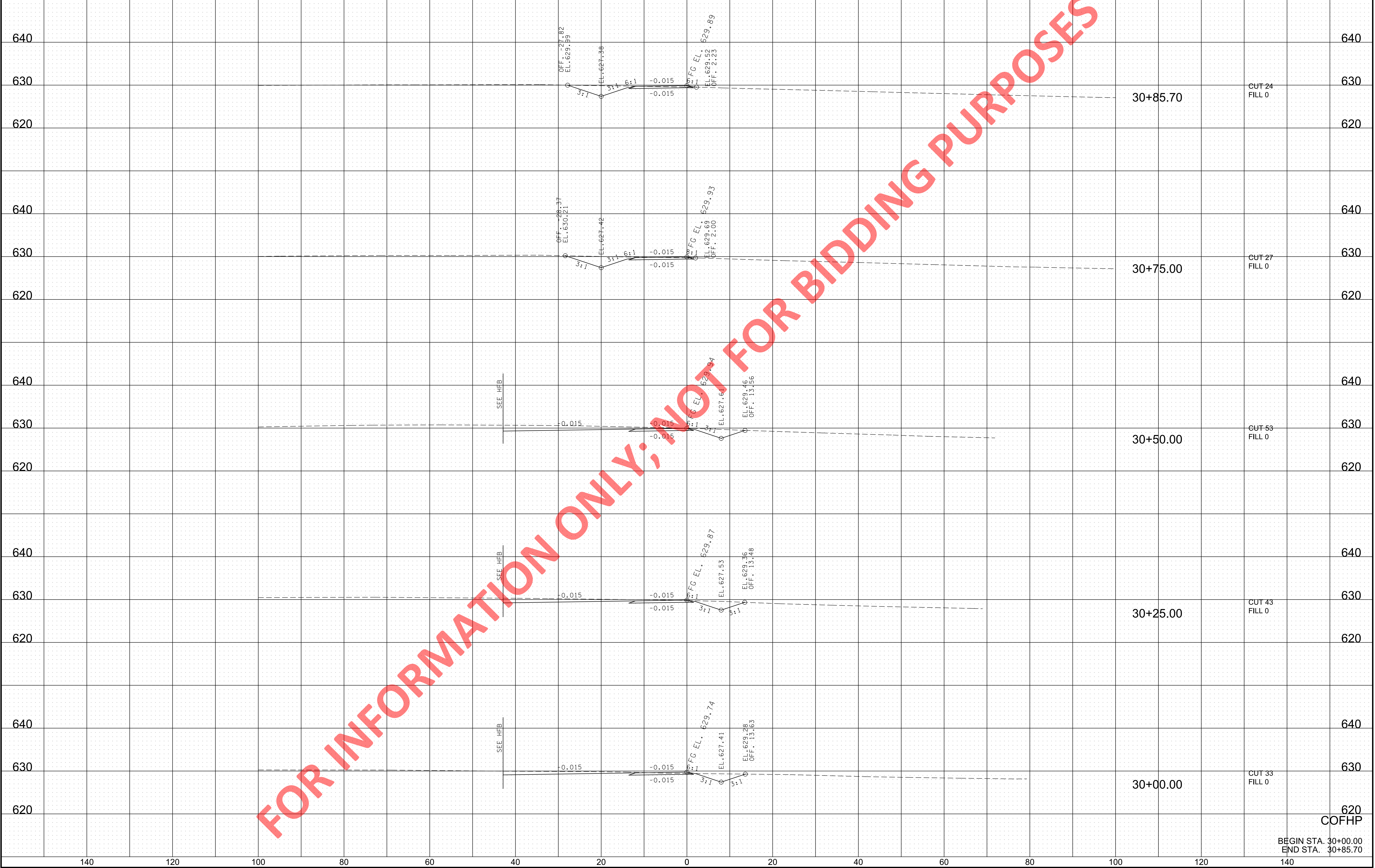
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	37
CONST.	2022	TAP-9305(32)	37



6/30/2022 10:52:52 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 28+48.99  
 END STA. 29+67.34

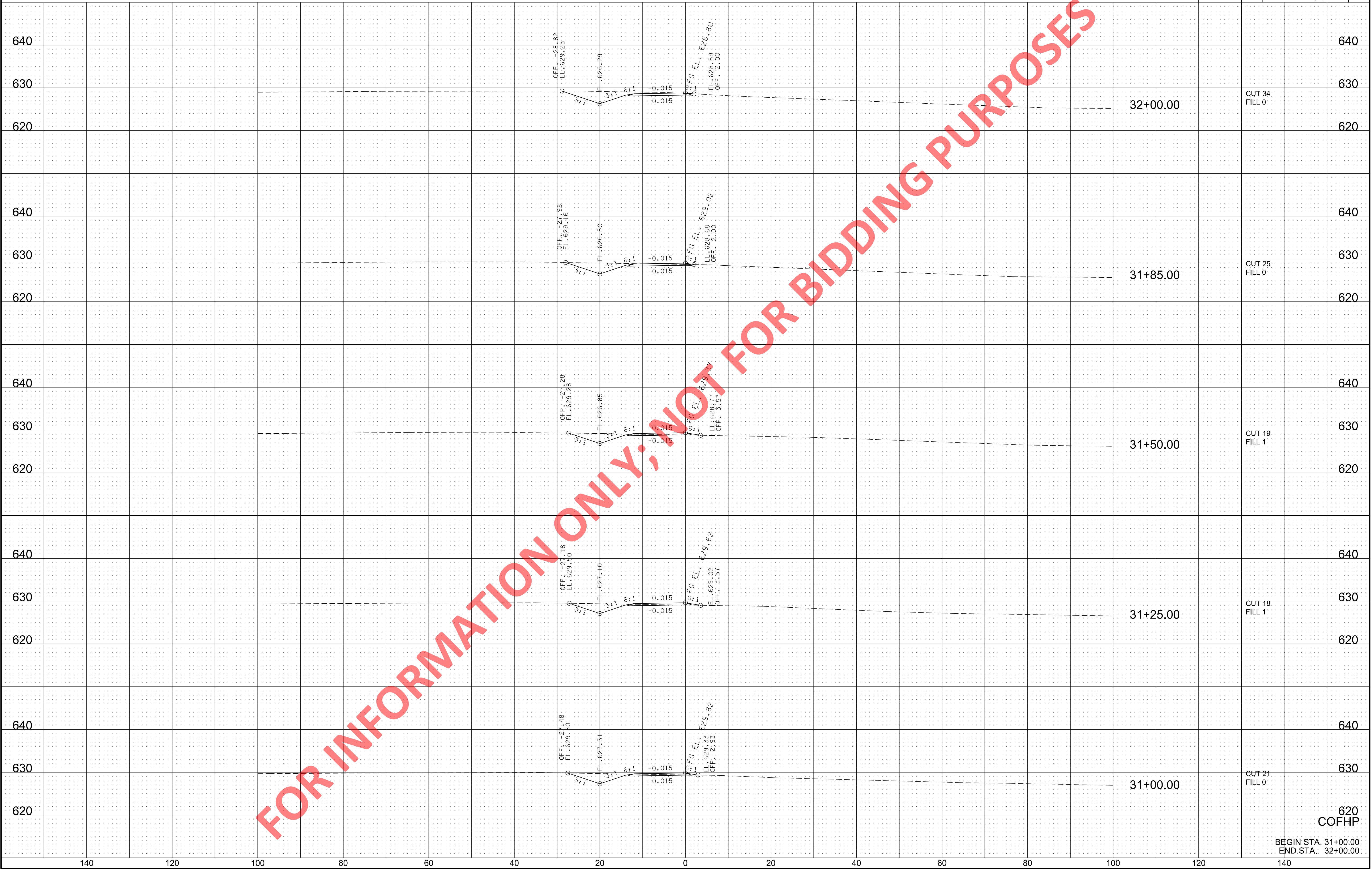
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	38
CONST.	2022	TAP-9305(32)	38



6/30/2022 10:52:54 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

BEGIN STA. 30+00.00  
 END STA. 30+85.70

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	39
CONST.	2022	TAP-9305(32)	39

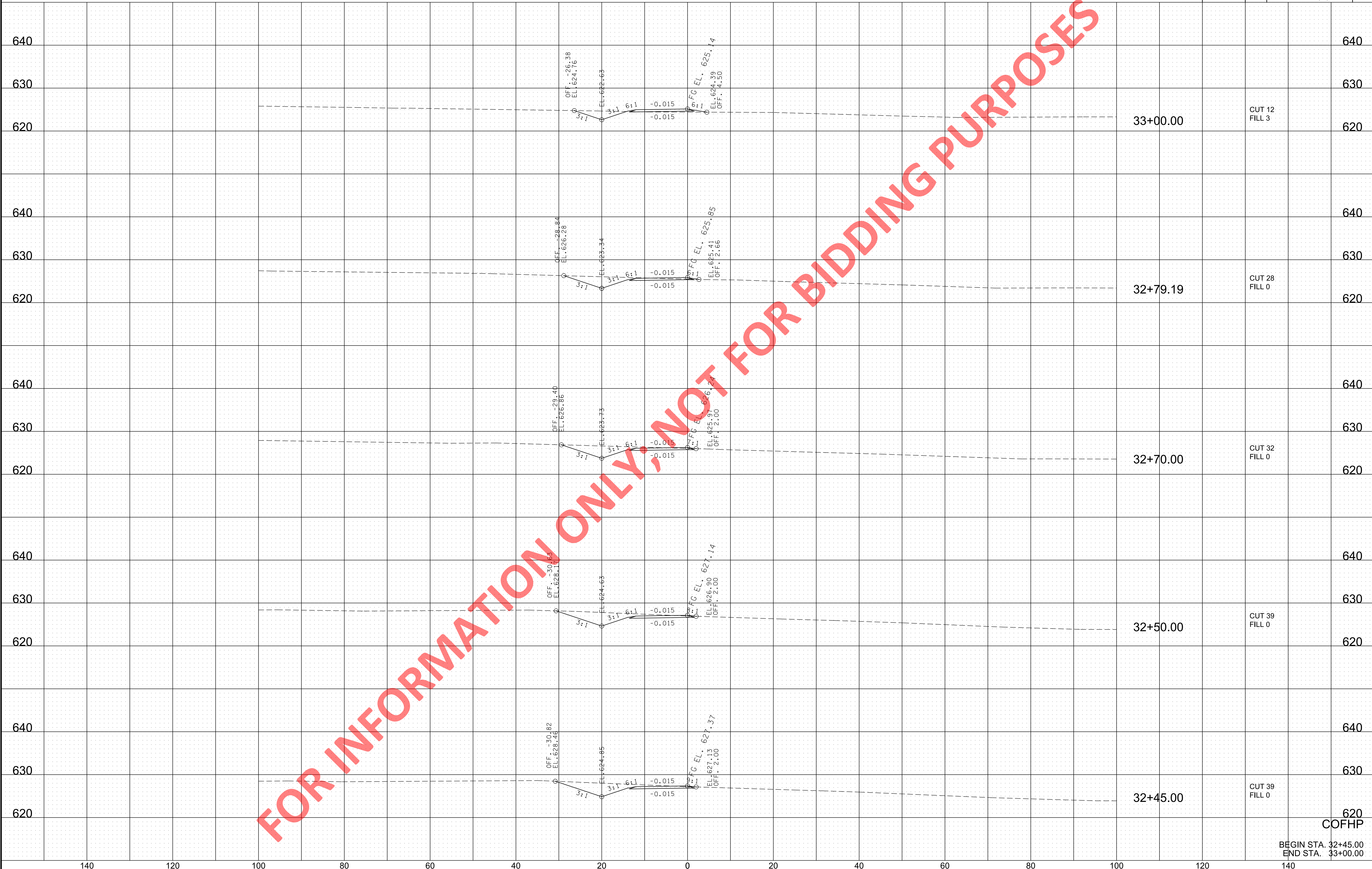


6/30/2022 10:52:56 AM  
 Y:\Nashville\16020005\16020001\001\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

BEGIN STA. 31+00.00  
 END STA. 32+00.00



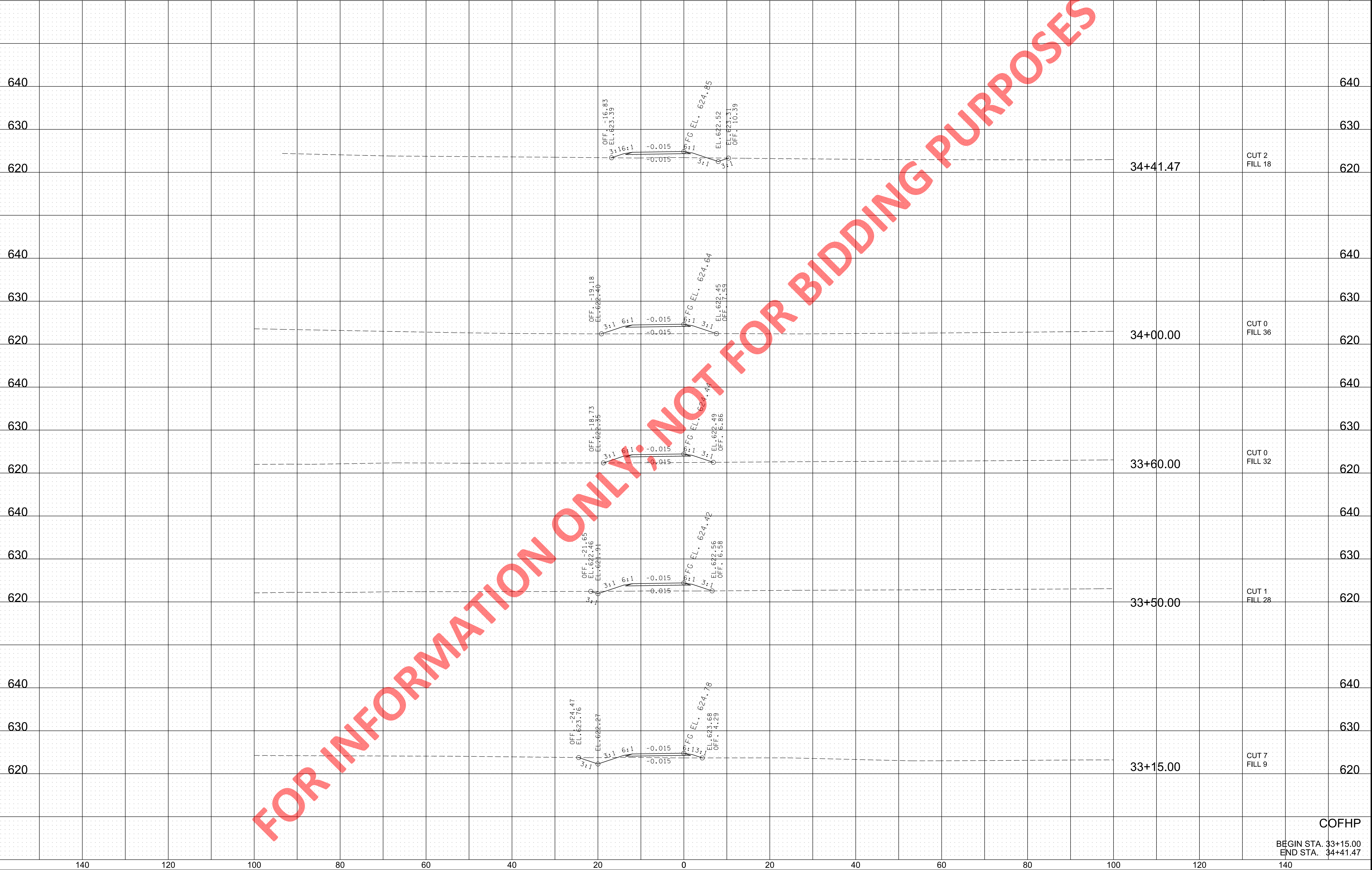
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	40
CONST.	2022	TAP-9305(32)	40



6/30/2022 10:52:58 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

BEGIN STA. 32+45.00  
 END STA. 33+00.00

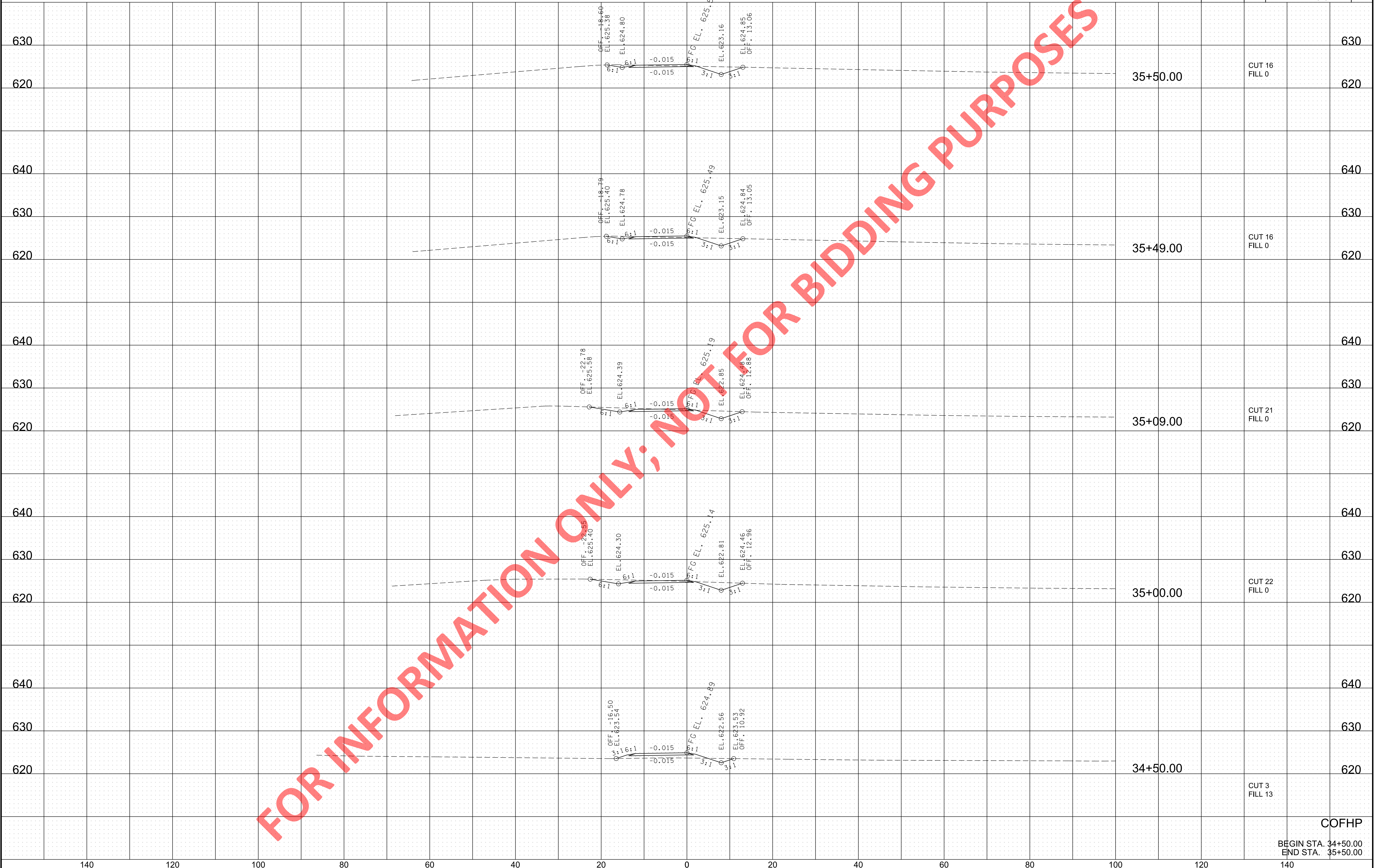
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	41
CONST.	2022	TAP-9305(32)	41



6/30/2022 10:52:59 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\03\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 33+15.00  
 END STA. 34+41.47

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	42
CONST.	2022	TAP-9305(32)	42

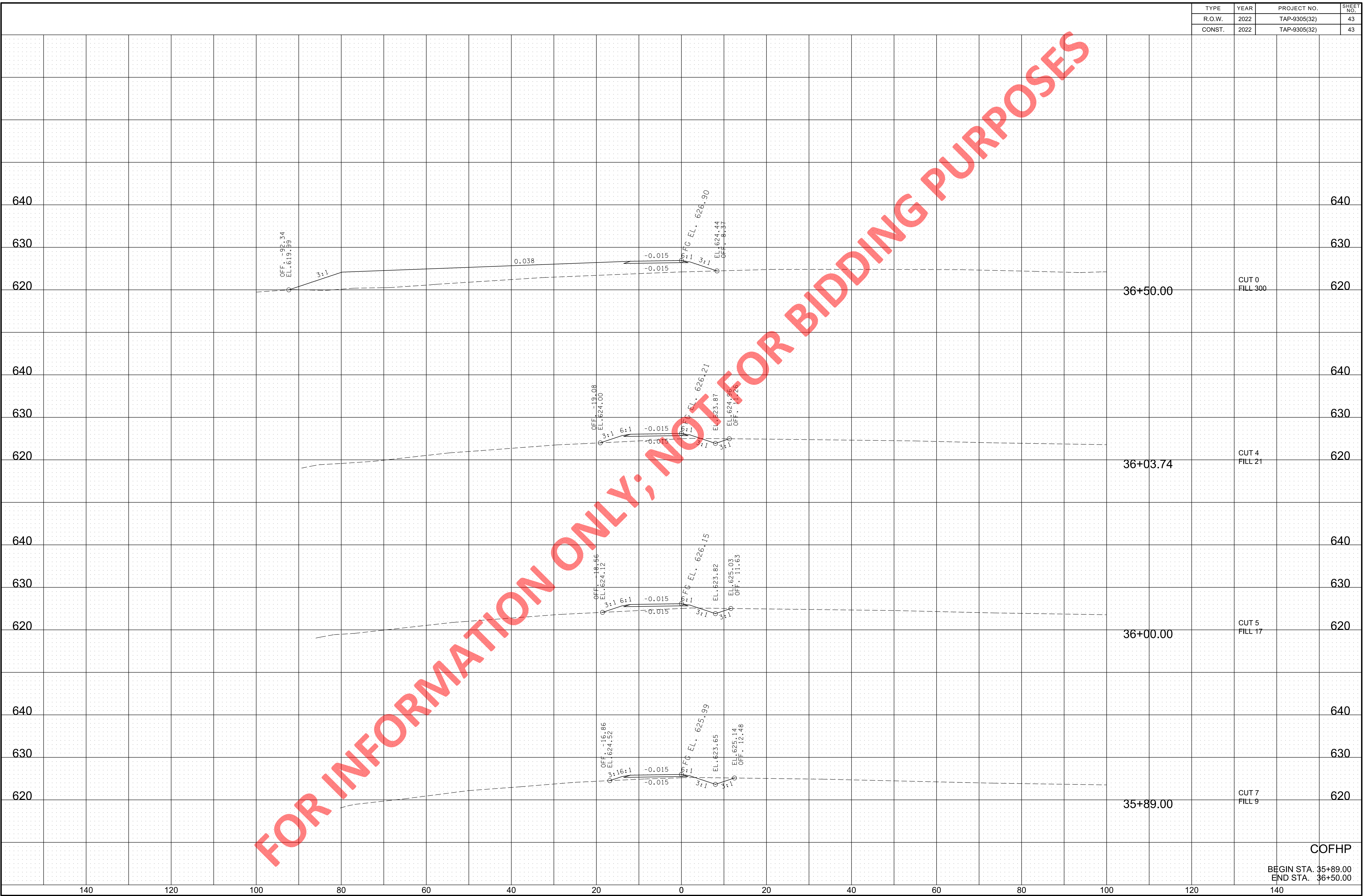


6/30/2022 10:53:01 AM  
 Y:\Nashville\16020000s\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

COFHP  
 BEGIN STA. 34+50.00  
 END STA. 35+50.00

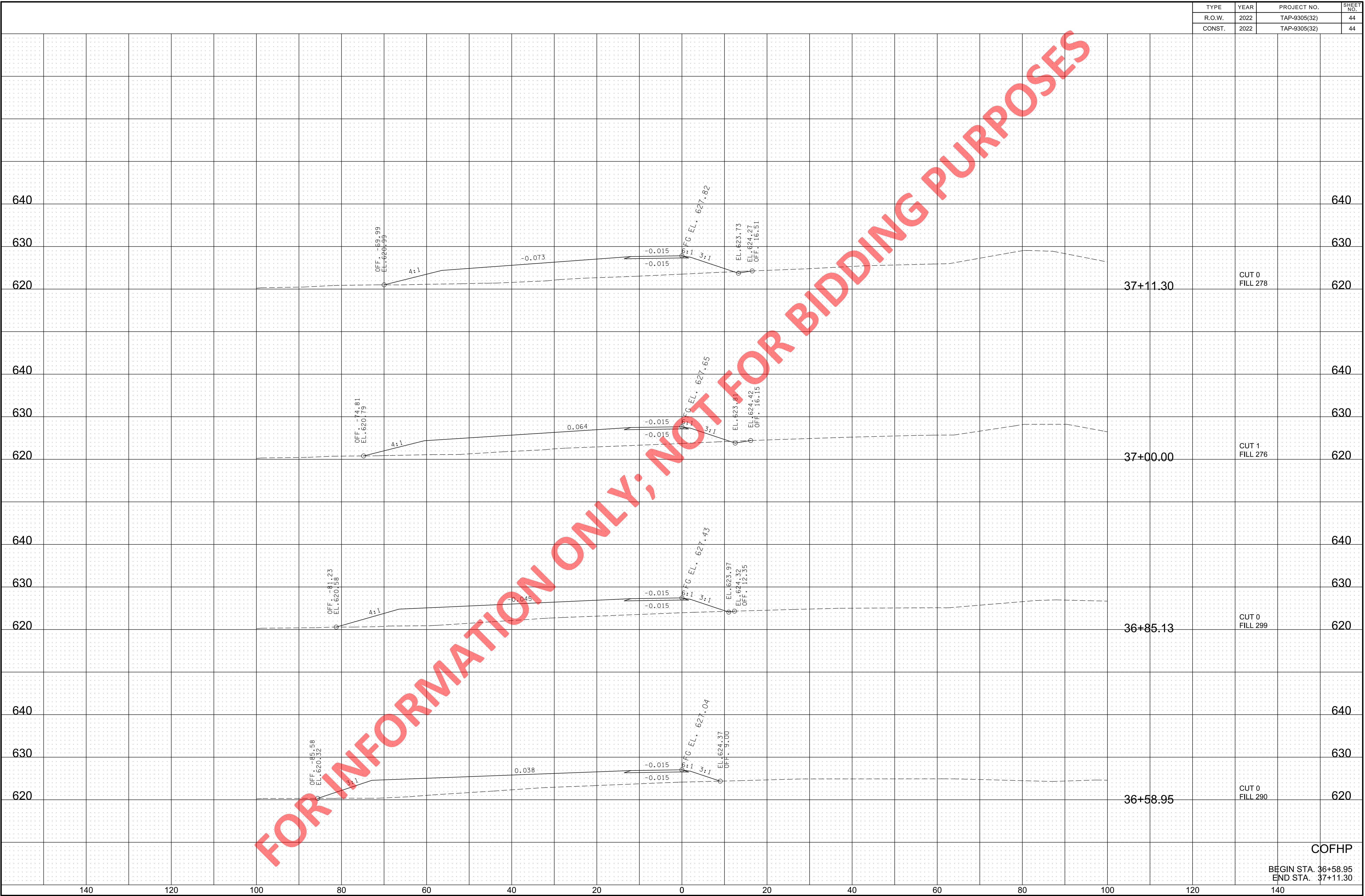
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	43
CONST.	2022	TAP-9305(32)	43



6/30/2022 10:53:03 AM  
 Y:\Nashville\160200005\16020001\001Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 35+89.00  
 END STA. 36+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	44
CONST.	2022	TAP-9305(32)	44



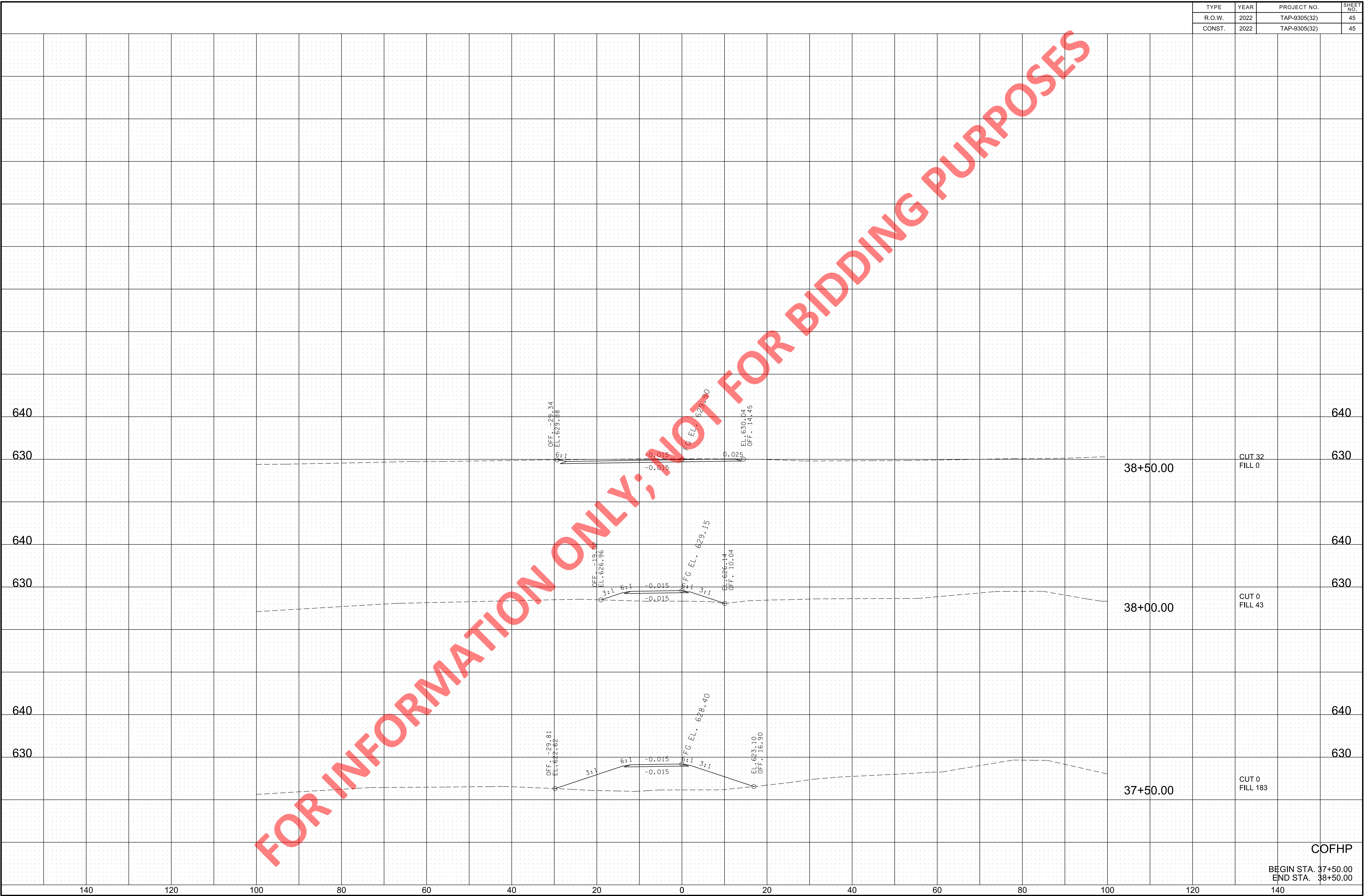
6/30/2022 10:53:05 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

COFHP  
 BEGIN STA. 36+58.95  
 END STA. 37+11.30

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	45
CONST.	2022	TAP-9305(32)	45

6/30/2022 10:53:06 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\030\_Cross Sections Sheets.sht

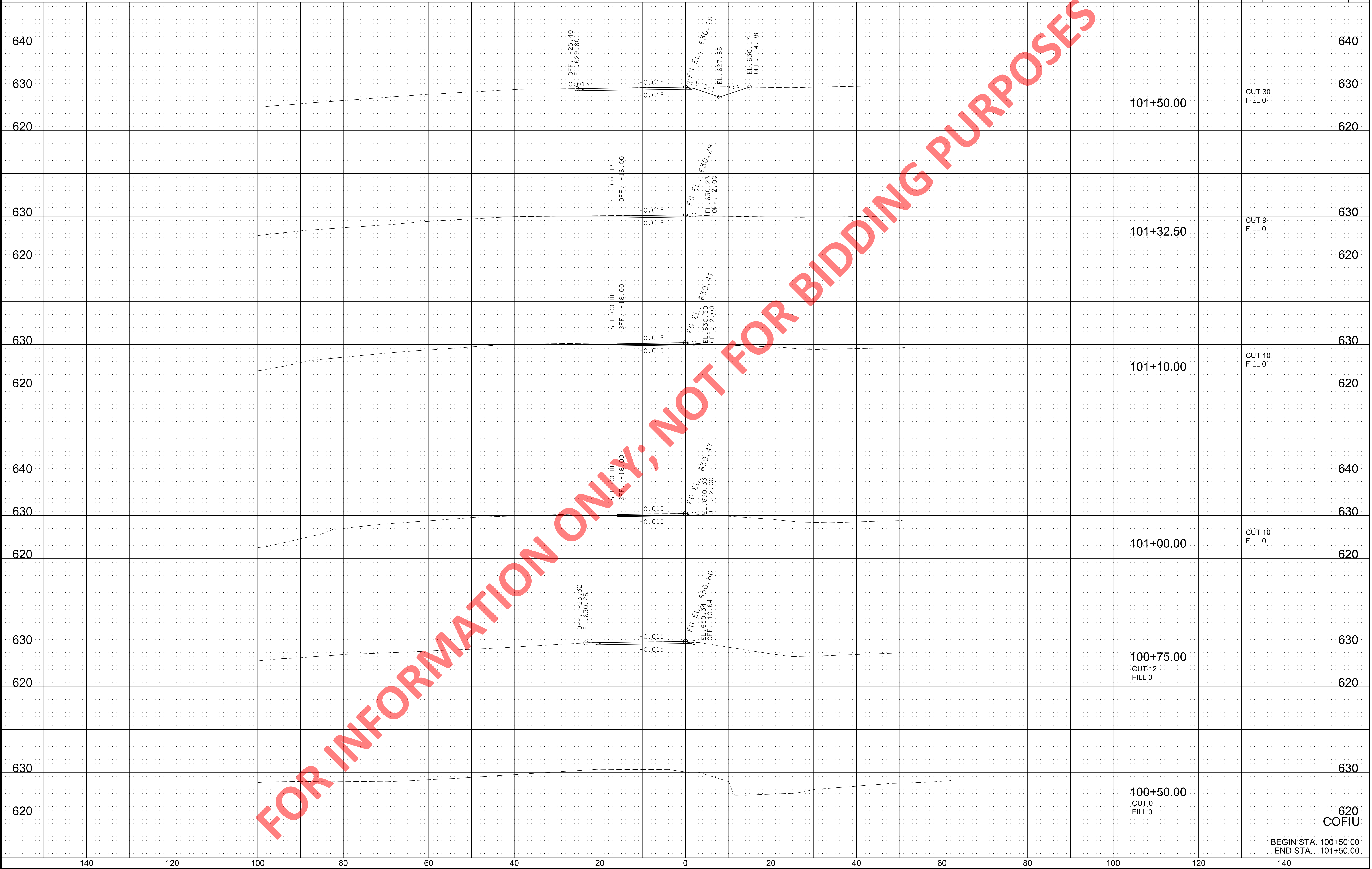
FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES



COFHP

BEGIN STA. 37+50.00  
 END STA. 38+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	46
CONST.	2022	TAP-9305(32)	46

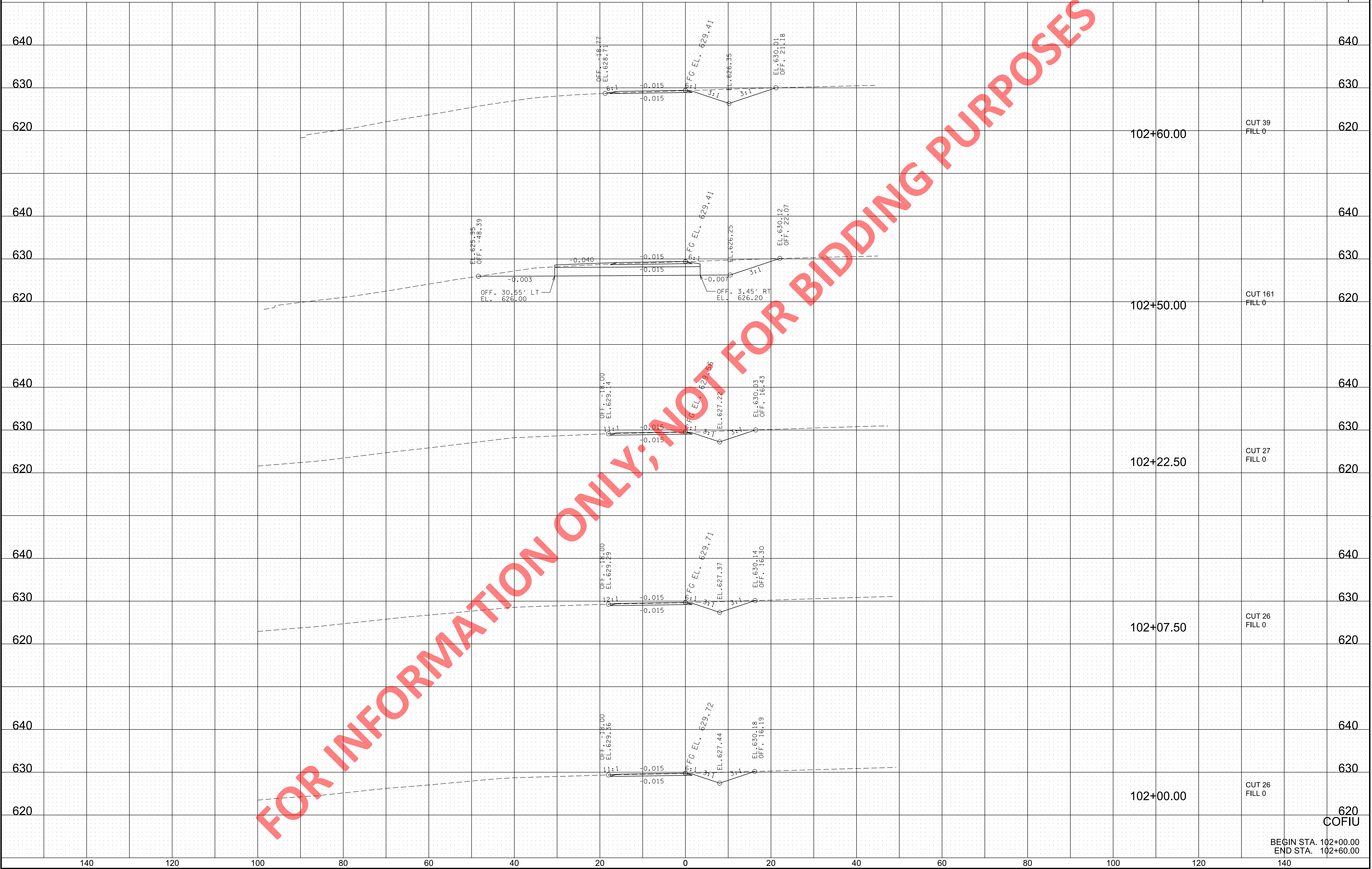


FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:53:10 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\031\_Cross Sections Sheets COFIU.sht

BEGIN STA. 100+50.00  
END STA. 101+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	47
CONST.	2022	TAP-9305(32)	47

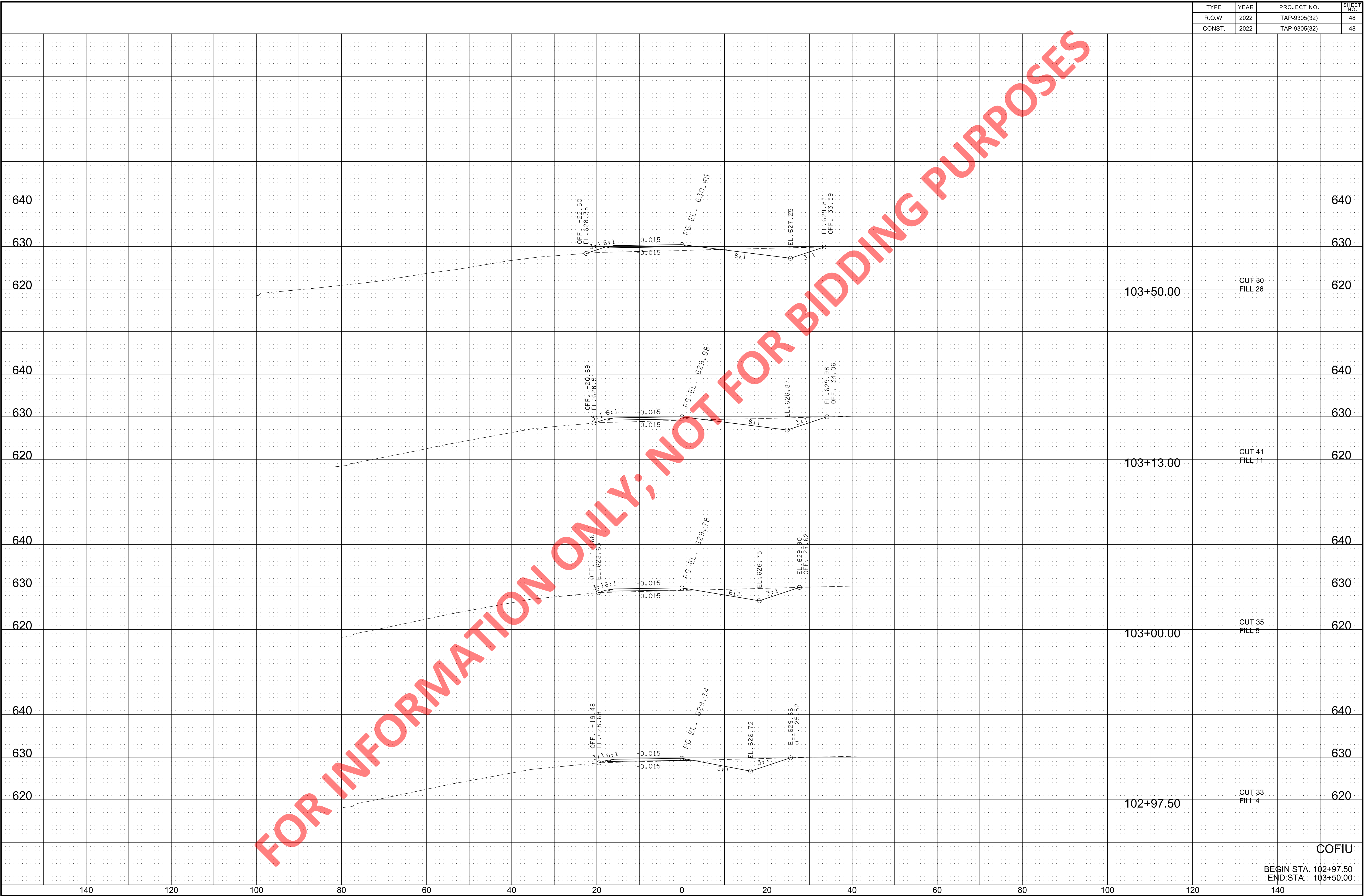


6/30/2022 10:53:10 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\031\_Cross Sections Sheets COFIU.sht

BEGIN STA. 102+00.00  
 END STA. 102+60.00



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	48
CONST.	2022	TAP-9305(32)	48



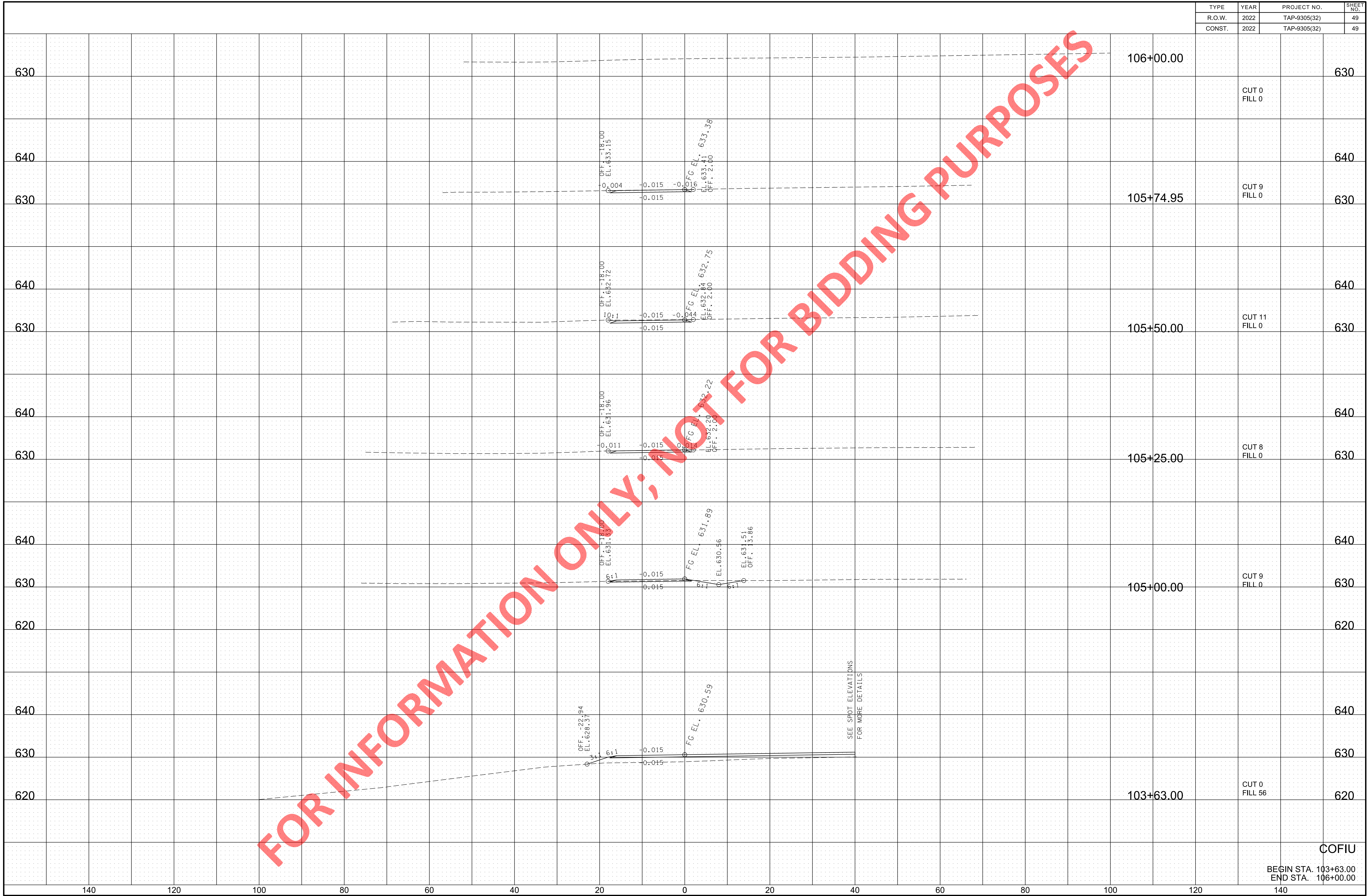
FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:53:11 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\031\_Cross Sections Sheets COFIU.sht

COFIU  
 BEGIN STA. 102+97.50  
 END STA. 103+50.00

6/30/2022 10:53:12 AM  
Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\031\_Cross Sections Sheets COFIU.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	49
CONST.	2022	TAP-9305(32)	49

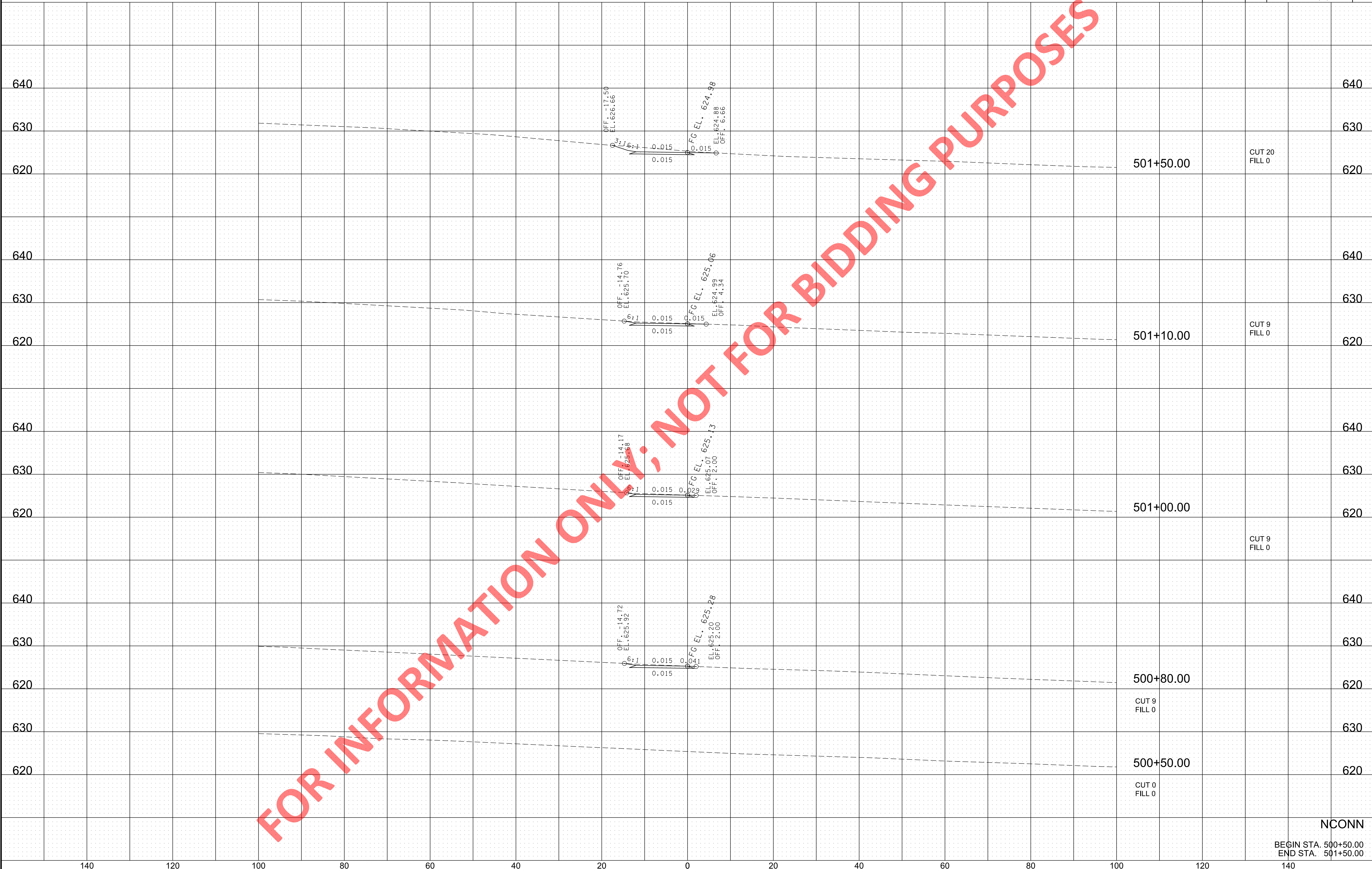


STATION	CUT	FILL
106+00.00	0	0
105+74.95	9	0
105+50.00	11	0
105+25.00	8	0
105+00.00	9	0
103+63.00	0	56

COFIU

BEGIN STA. 103+63.00  
END STA. 106+00.00

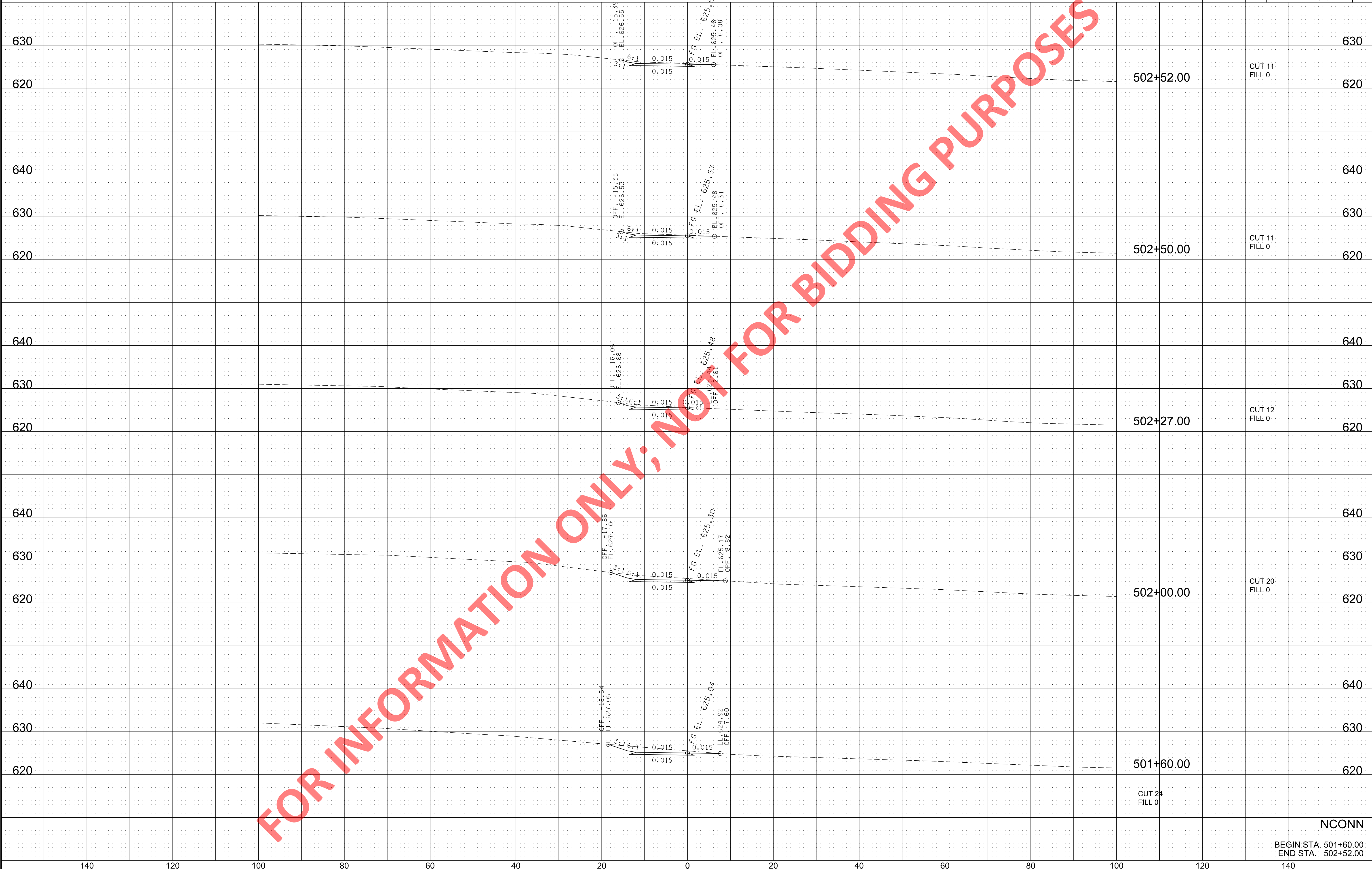
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	50
CONST.	2022	TAP-9305(32)	50



6/30/2022 10:53:14 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\043\_Cross Sections Sheets NCONN.sht

NCONN  
 BEGIN STA. 500+50.00  
 END STA. 501+50.00

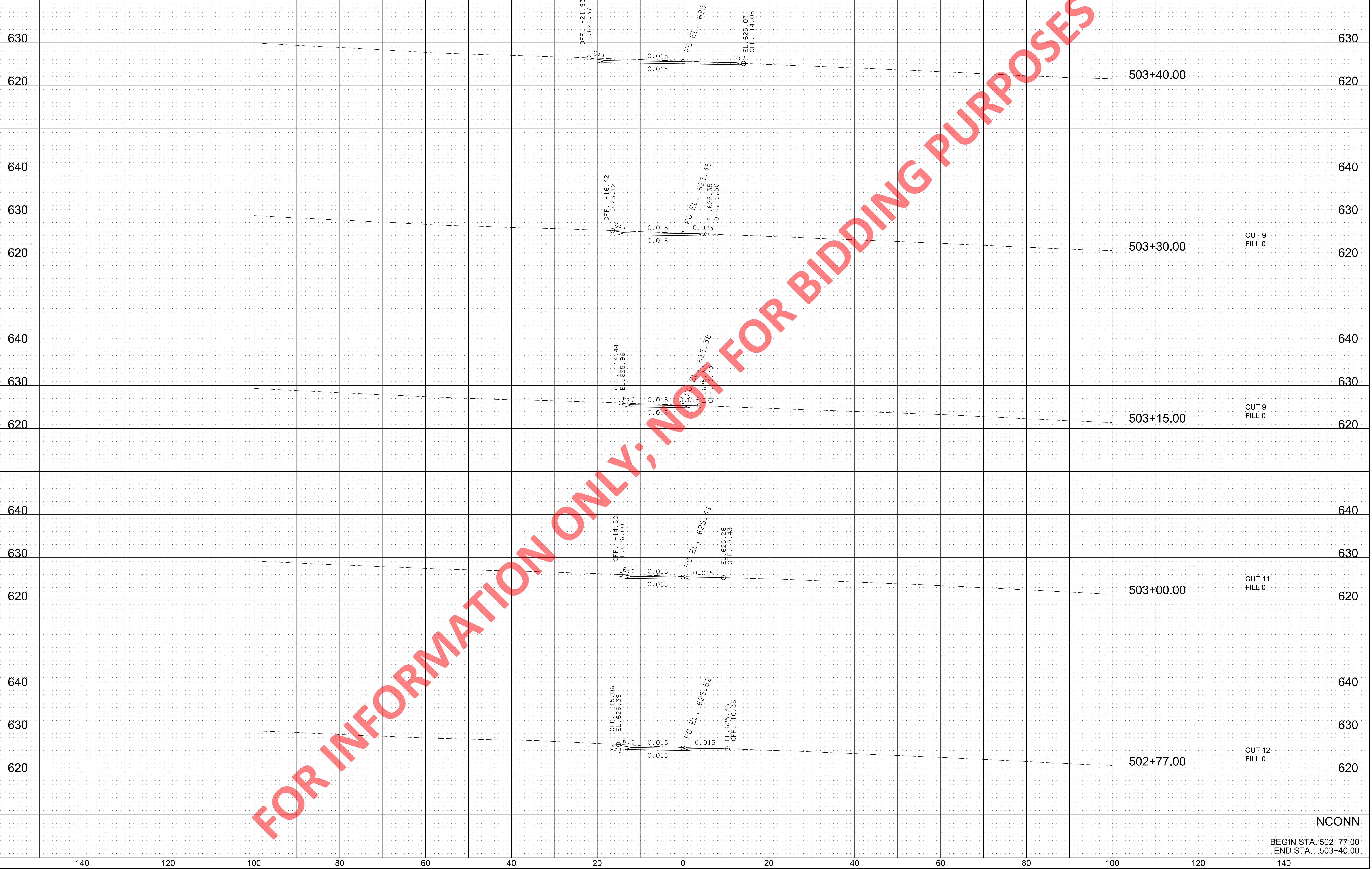
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	51
CONST.	2022	TAP-9305(32)	51



6/30/2022 10:53:15 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\043\_Cross Sections Sheets NCONN.sht

NCONN  
 BEGIN STA. 501+60.00  
 END STA. 502+52.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	52
CONST.	2022	TAP-9305(32)	52



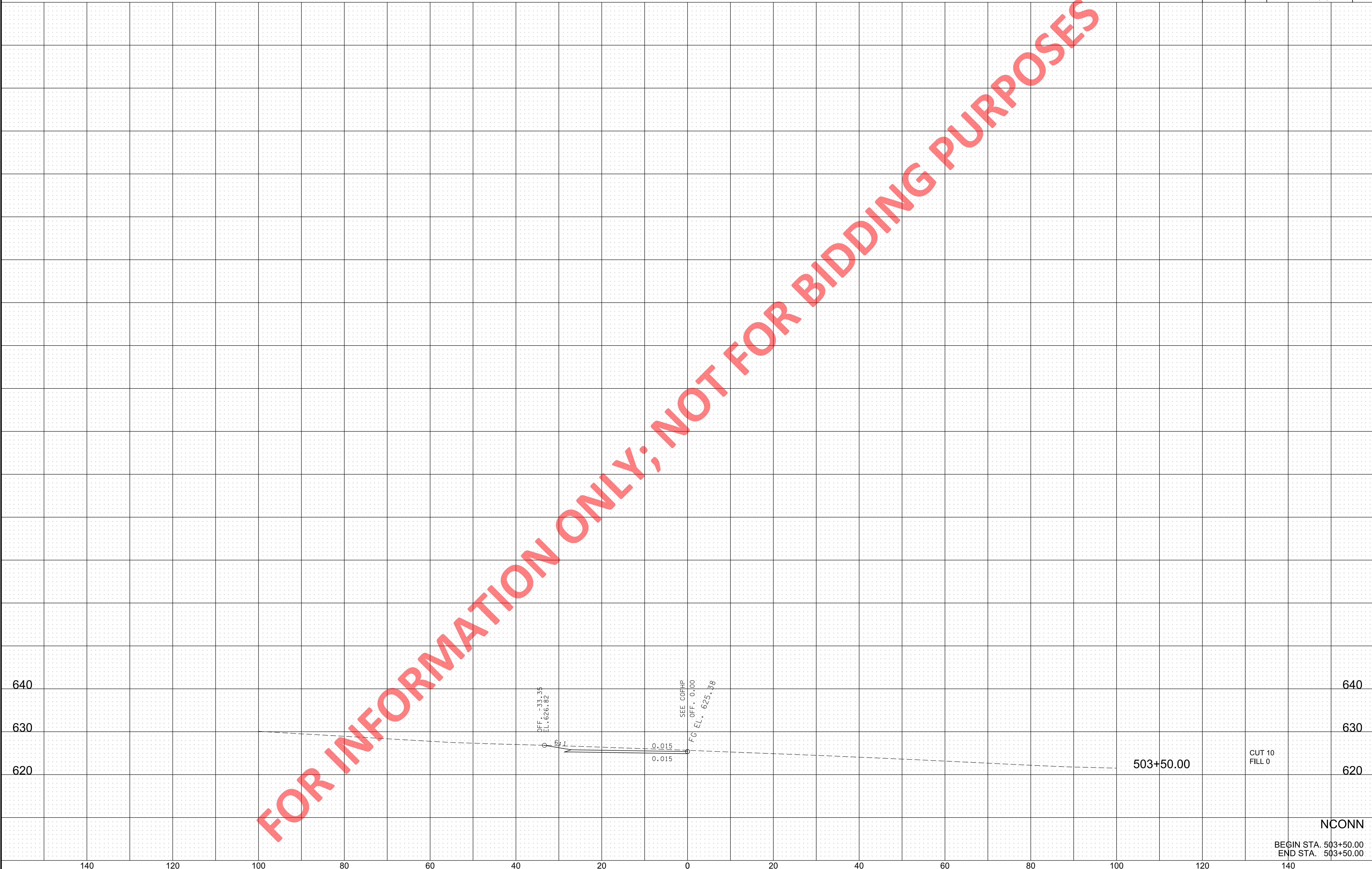
6/30/2022 10:53:16 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\043\_Cross Sections Sheets NCONN.sht

NCONN  
 BEGIN STA. 502+77.00  
 END STA. 503+40.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	53
CONST.	2022	TAP-9305(32)	53

6/30/2022 10:53:16 AM  
 Y:\Nashville\16020000s\16020001.00\Eng\_Docs\Roadway\043\_Cross Sections Sheets NCONN.sht

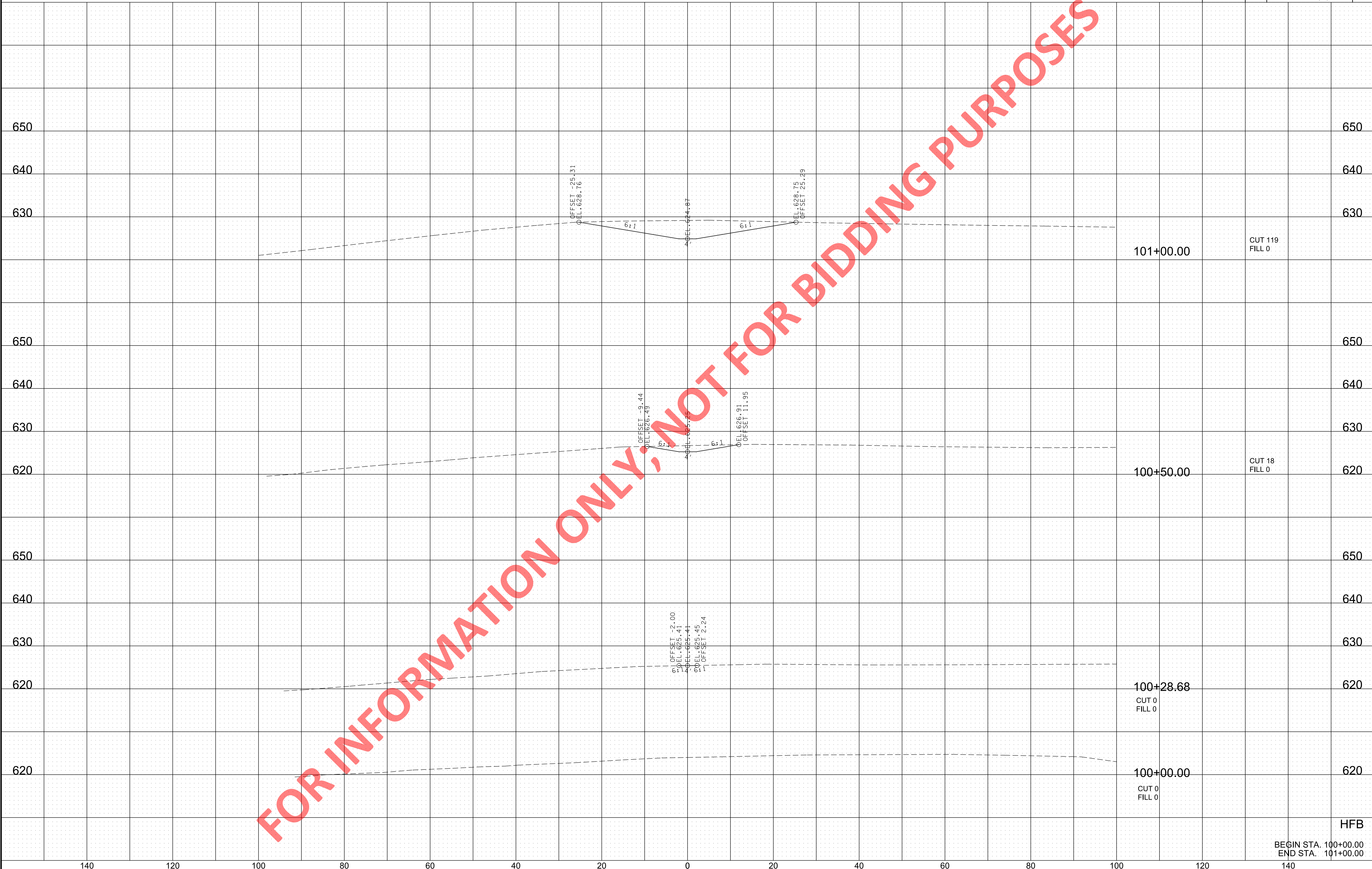
**FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES**



140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

NCONN  
 BEGIN STA. 503+50.00  
 END STA. 503+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	54
CONST.	2022	TAP-9305(32)	54

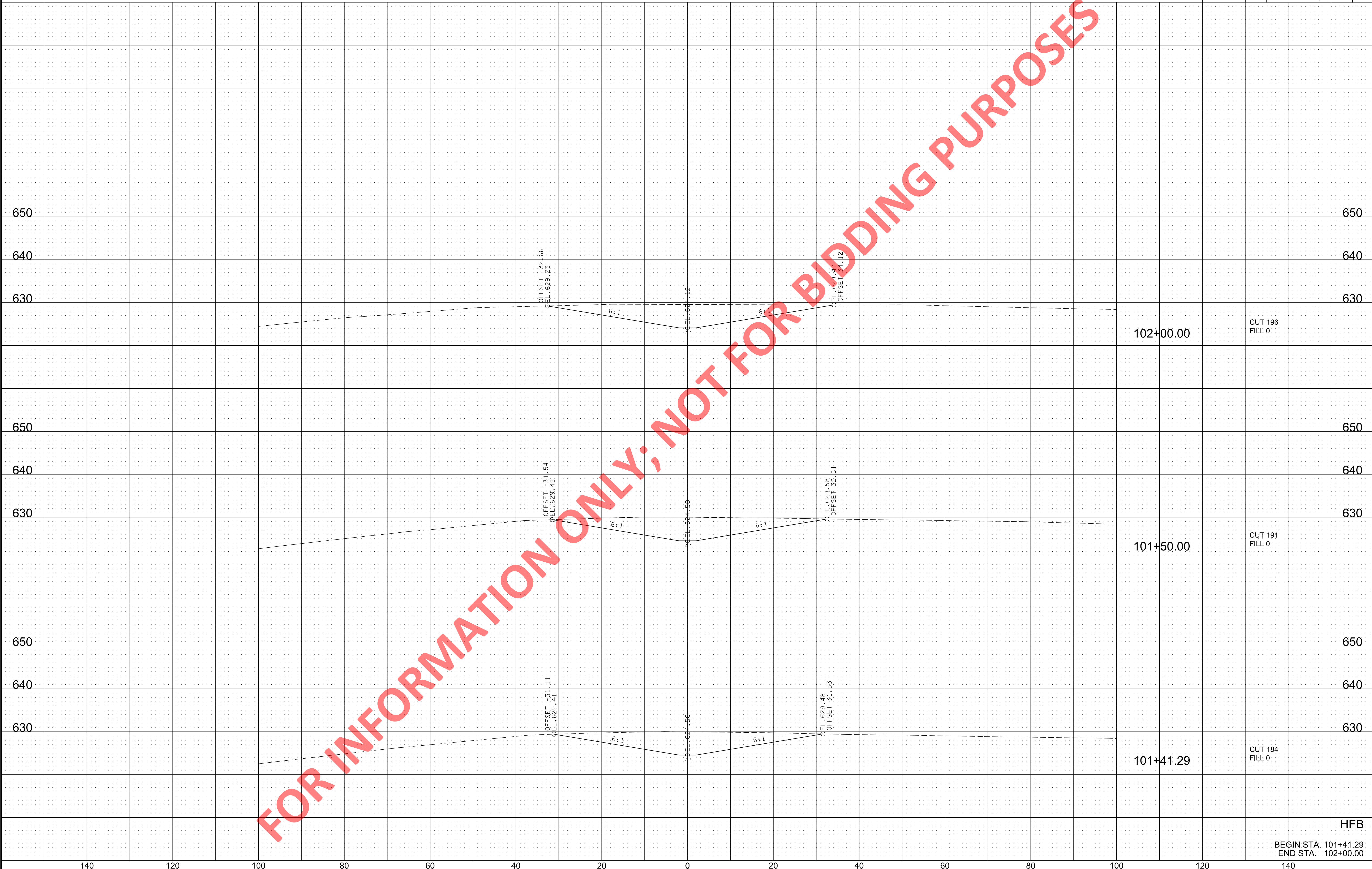


6/30/2022 10:53:19 AM  
 Y:\Nashville\16020000s\16020001.00\Eng\_Docs\Roadway\045\_Cross Sections Sheets HFBP.sht

BEGIN STA. 100+00.00  
 END STA. 101+00.00

HFB

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	55
CONST.	2022	TAP-9305(32)	55

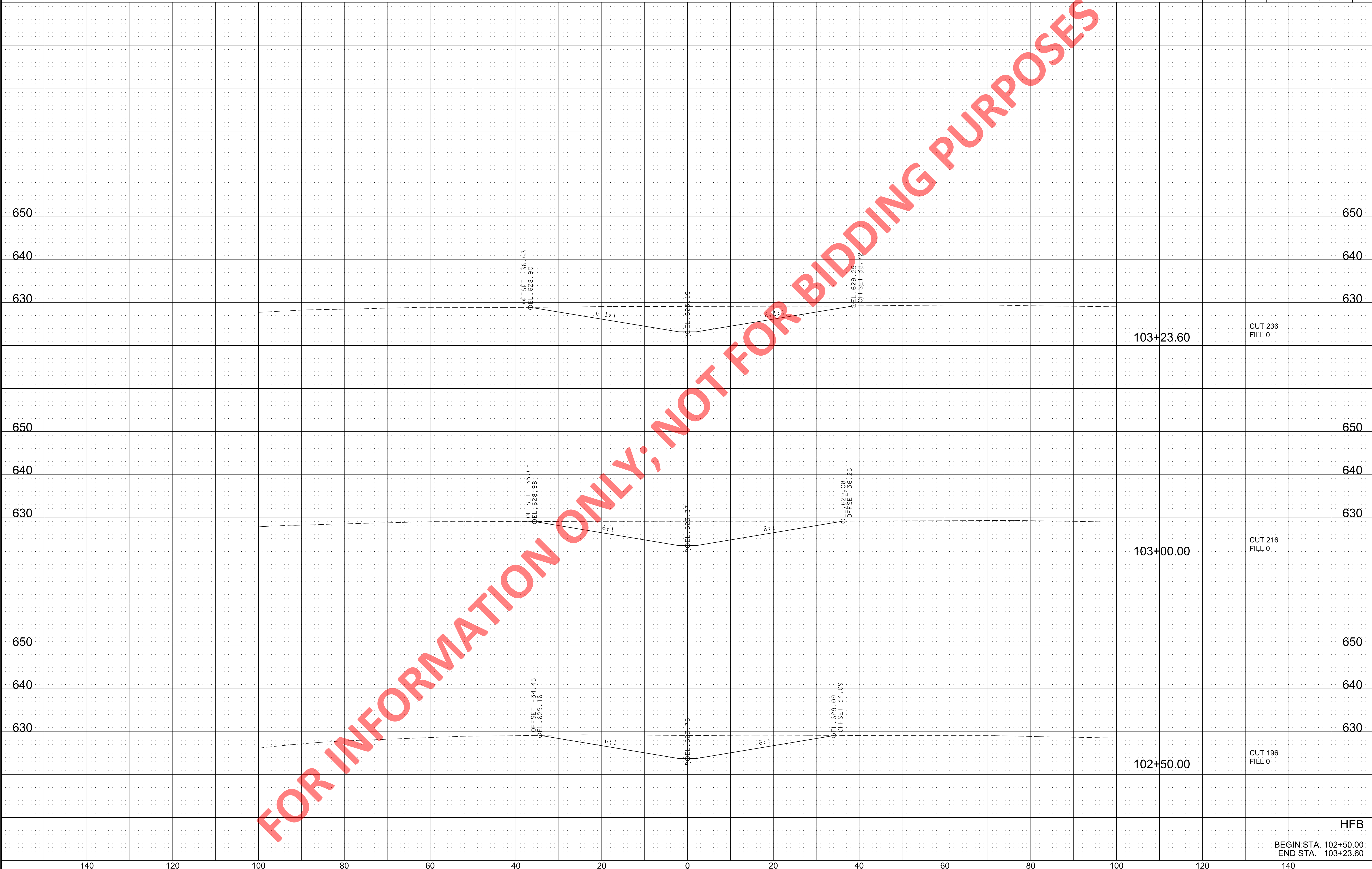


6/30/2022 10:53:20 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\045\_Cross Sections Sheets HFBP.sht

HFB  
 BEGIN STA. 101+41.29  
 END STA. 102+00.00



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	56
CONST.	2022	TAP-9305(32)	56



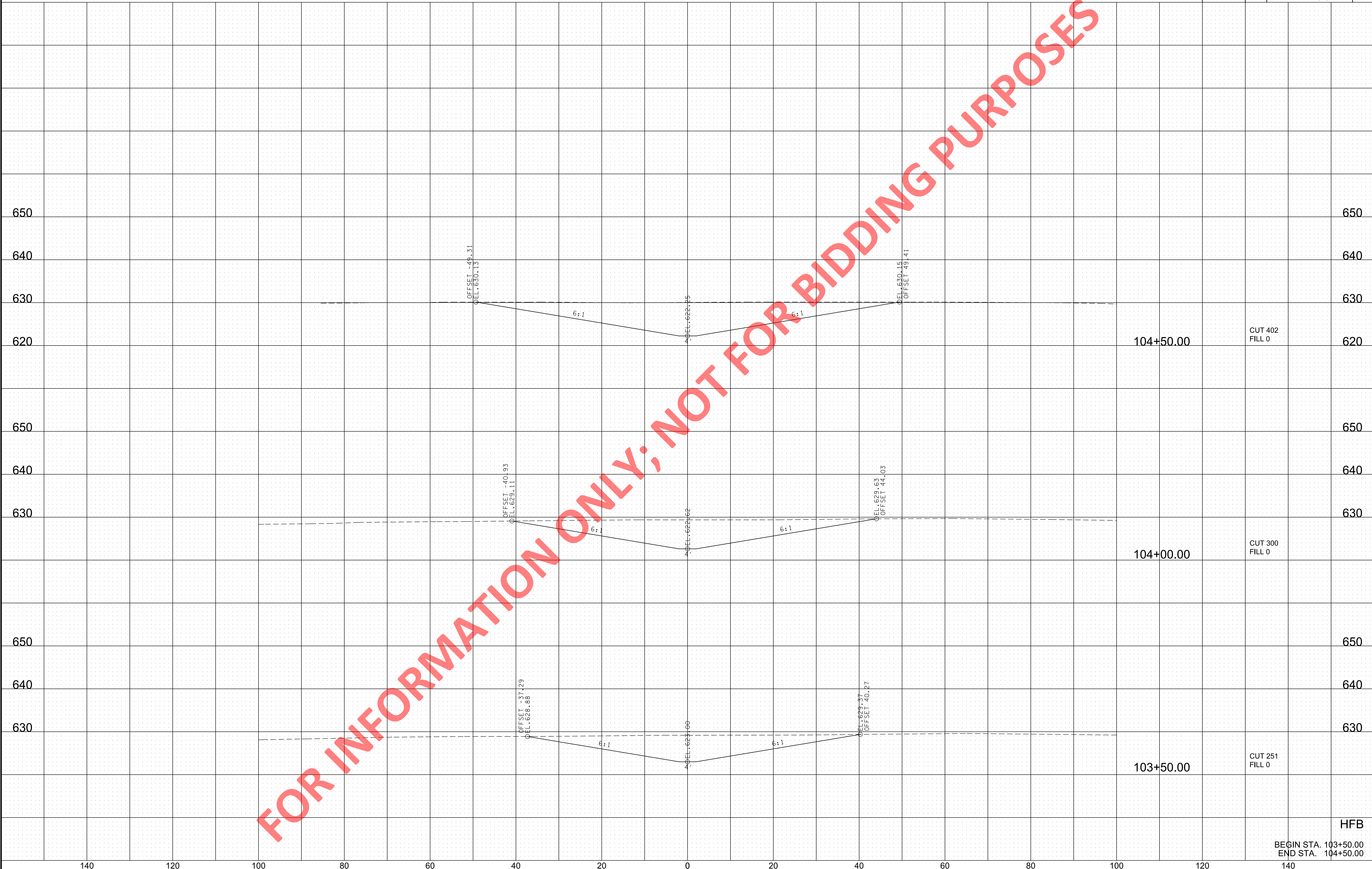
FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:53:20 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\045\_Cross Sections Sheets HFBP.sht

BEGIN STA. 102+50.00  
END STA. 103+23.60

HFB

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	57
CONST.	2022	TAP-9305(32)	57



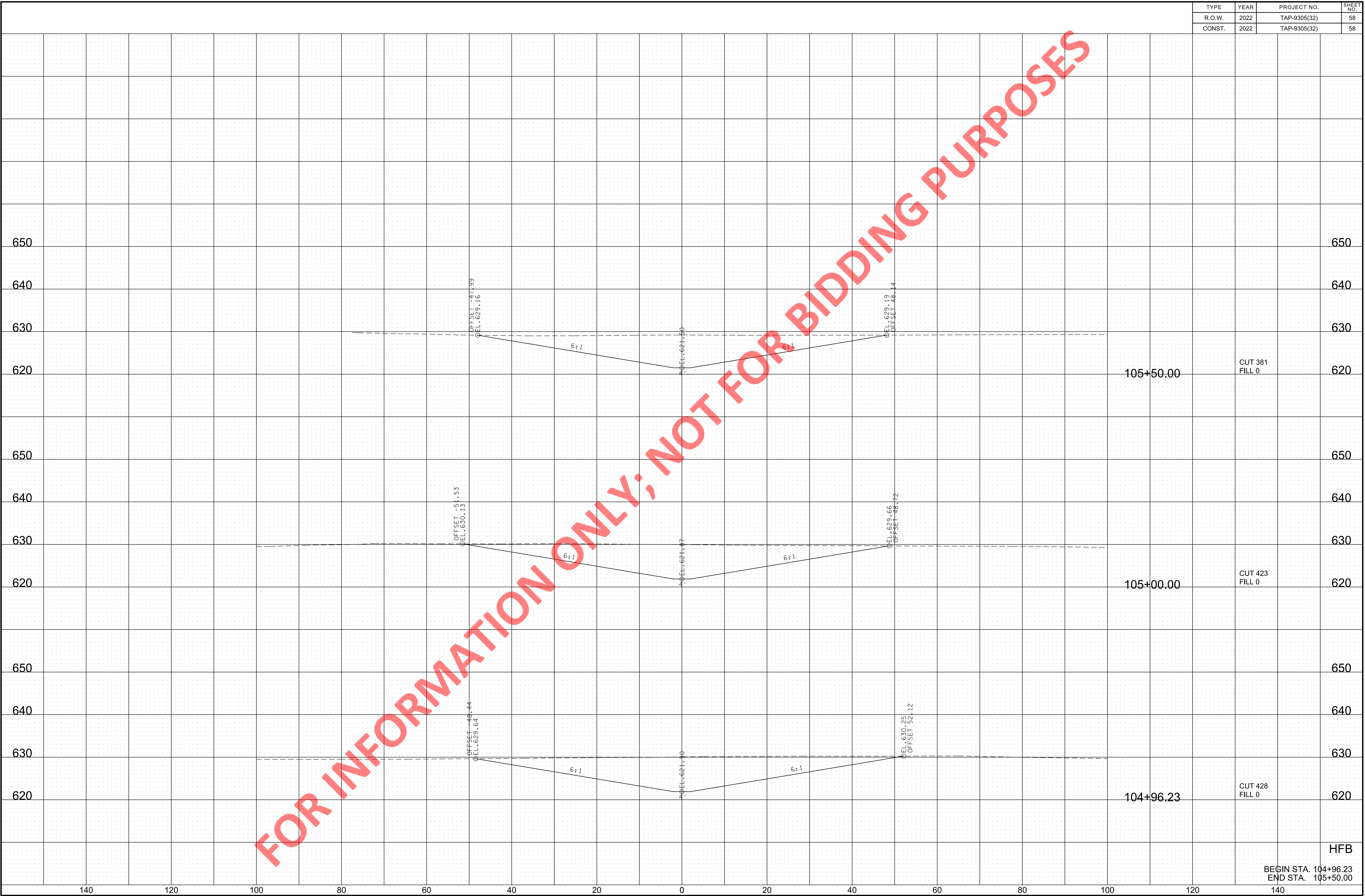
FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:53:21 AM Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\045\_Cross Sections Sheets HFBP.sht

HFB  
 BEGIN STA. 103+50.00  
 END STA. 104+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	58
CONST.	2022	TAP-9305(32)	58

6/30/2022 10:53:22 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\045\_Cross Sections Sheets HFBB.sht

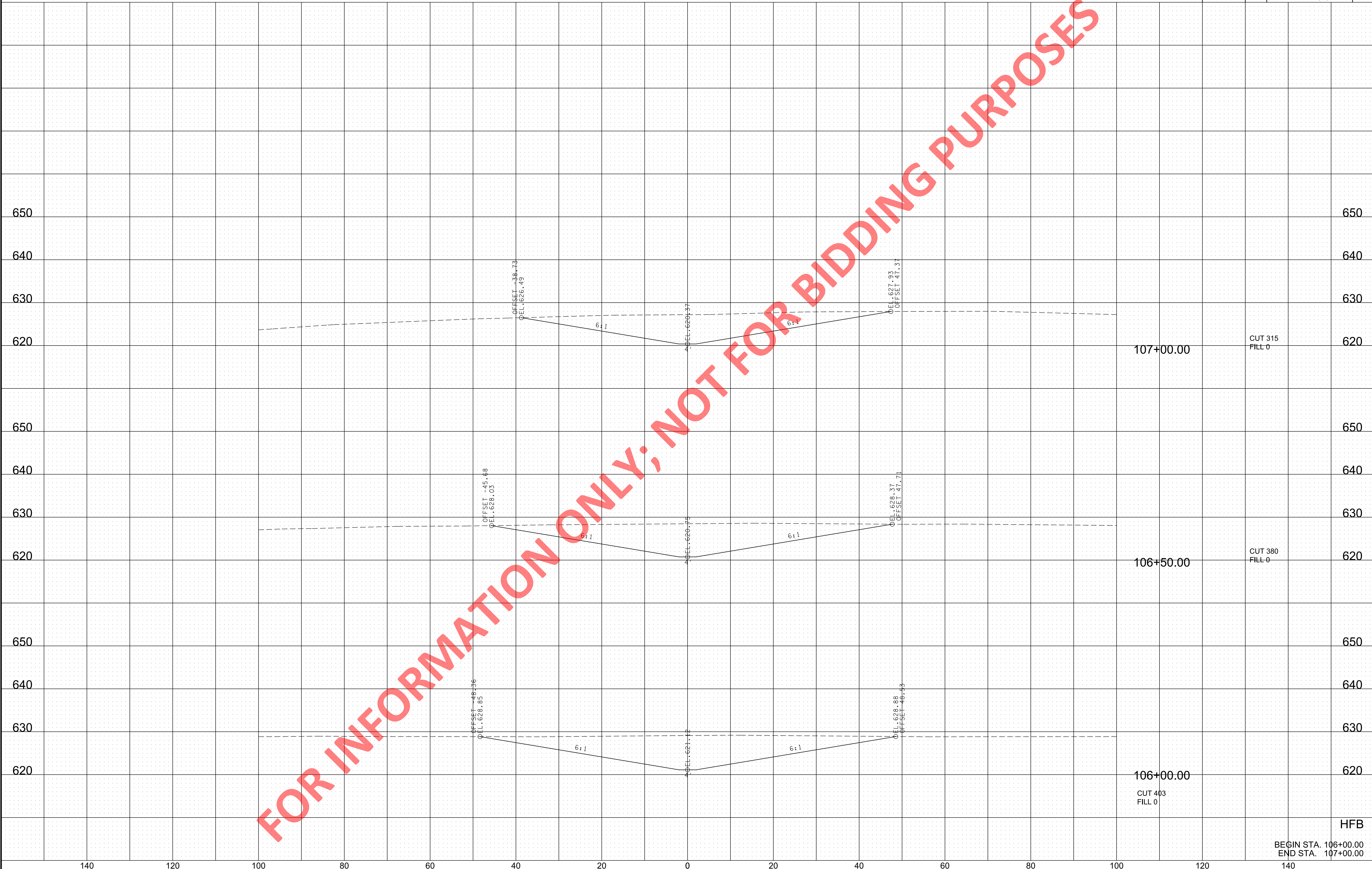


FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

BEGIN STA. 104+96.23  
 END STA. 105+50.00

HFB

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	59
CONST.	2022	TAP-9305(32)	59

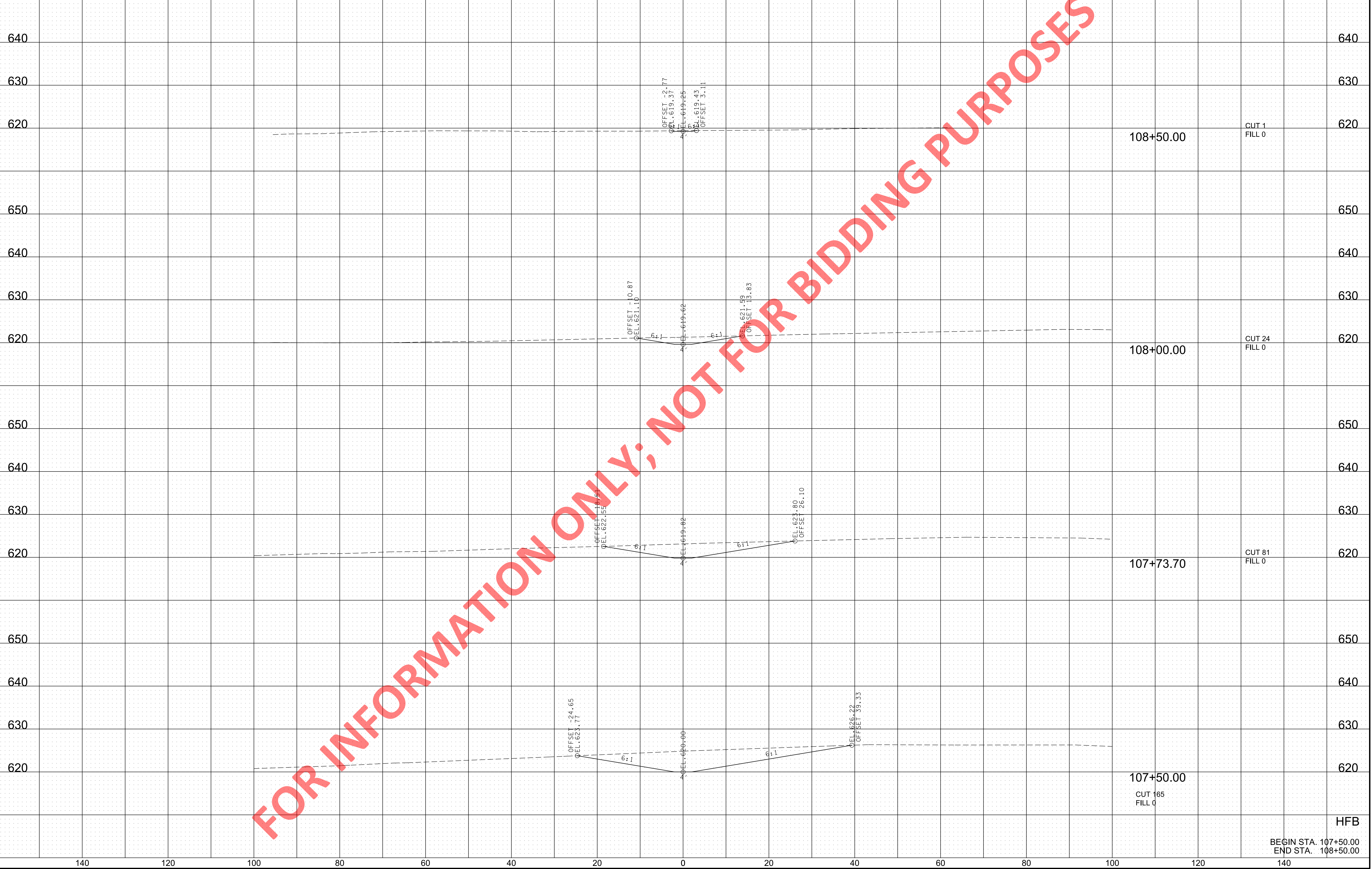


FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:53:23 AM  
Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\045\_Cross Sections Sheets HFBP.sht

HFB  
BEGIN STA. 106+00.00  
END STA. 107+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	60
CONST.	2022	TAP-9305(32)	60



6/30/2022 10:53:23 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\045\_Cross Sections Sheets HFBP.sht

BEGIN STA. 107+50.00  
 END STA. 108+50.00

HFB

# PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	T1
CONST.	2022	TAP-9305(32)	T1

## A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 1.75 INCHES:
  - a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
  - b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
  - c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
  - d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.
2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 1.75 INCHES AND NOT EXCEEDING 6 INCHES, TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.
  - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
    - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
    - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
  - b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
  - c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE REGIONAL TRAFFIC ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

## 3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

- a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
  - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
  - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

- b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.
- c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.
- d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

## 4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

## B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.
  - a. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:
  - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
    - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
    - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:
  - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
    - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
    - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
  - b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

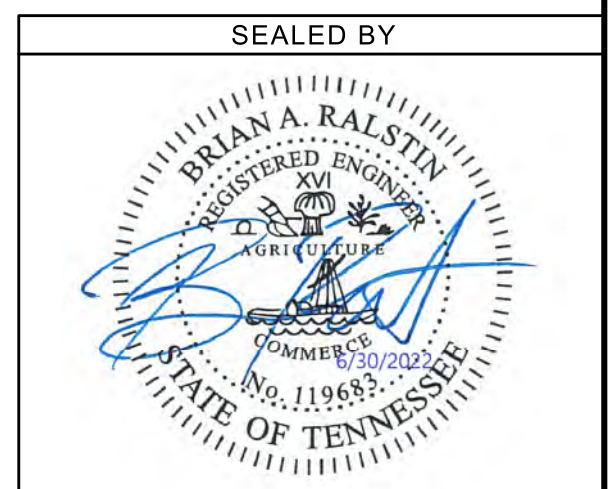
THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

## C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

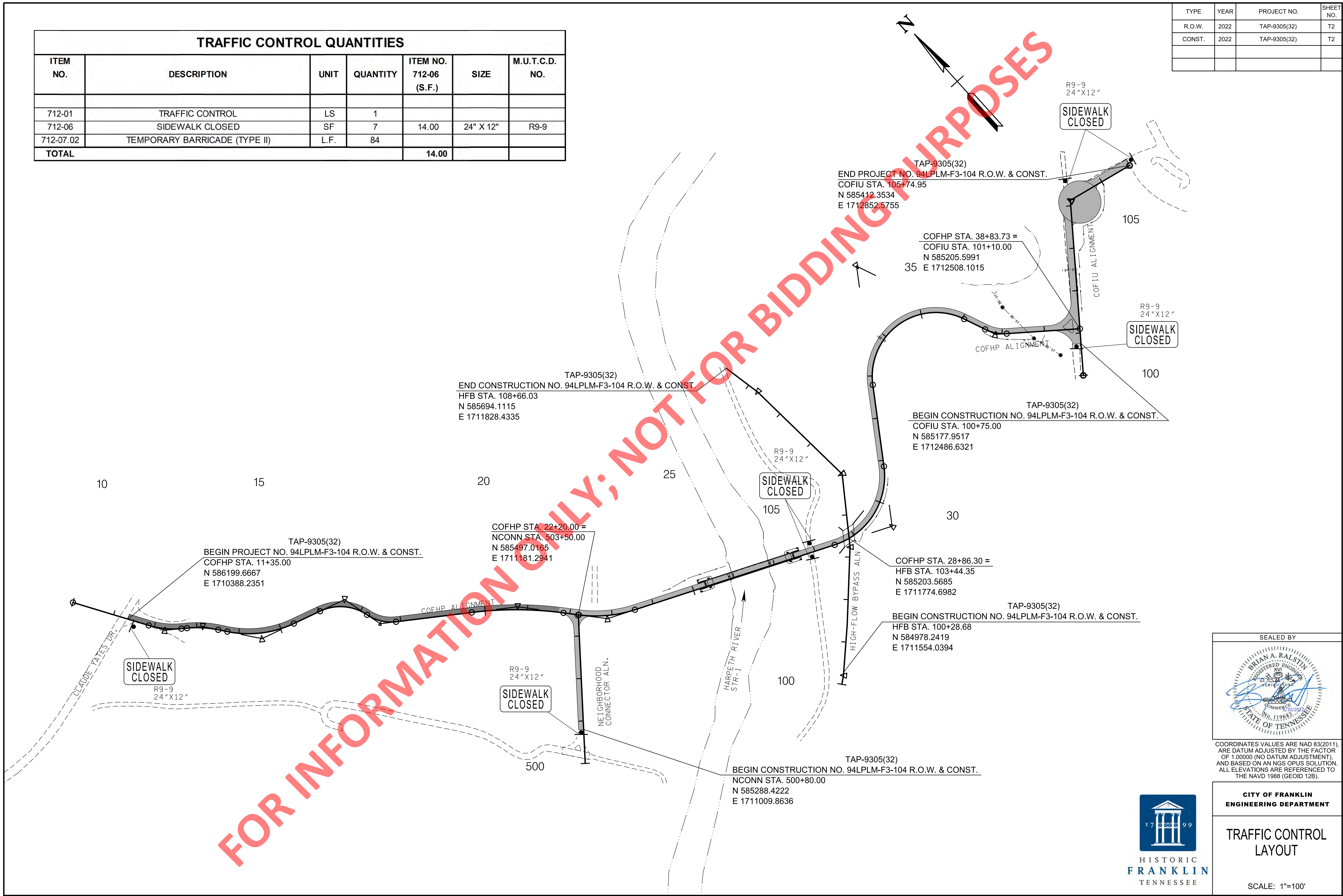


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

PAVEMENT EDGE  
DROP-OFF NOTES  
FOR  
TRAFFIC CONTROL

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	T2
CONST.	2022	TAP-9305(32)	T2

TRAFFIC CONTROL QUANTITIES						
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	ITEM NO. 712-06 (S.F.)	SIZE	M.U.T.C.D. NO.
712-01	TRAFFIC CONTROL	LS	1			
712-06	SIDEWALK CLOSED	SF	7	14.00	24" X 12"	R9-9
712-07.02	TEMPORARY BARRICADE (TYPE II)	L.F.	84			
<b>TOTAL</b>				<b>14.00</b>		



6/30/2022 10:53:40 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\050\_T2 MOT Layout.sht

# GENERAL NOTES

## MISCELLANEOUS

- (1) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

## LIGHTING

- (1) INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTIONS 714 AND 917 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JANUARY 1, 2021 AND WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRIC CODE, NFPA 70.
- (2) ALL WIRING SHALL BE CONCEALED UNDERGROUND IN 1-INCH SCHEDULE 40 PVC RIGID CONDUIT AND EMBEDDED WITHIN THE BRIDGE STRUCTURE WITH 3/4-INCH SCHEDULE 40 PVC RIGID CONDUIT.
- (3) THE GROUND WIRE SHALL BE RUN INSIDE CONDUIT WITHIN STRUCTURES, SHALL BE COLORED GREEN AND HAVE THW INSULATION.
- (4) ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED IN 714 ITEMS WHETHER SPECIFICALLY NOTED OR NOT.
- (5) THE CONTRACTOR SHALL FURNISH TO THE OWNER, AN AS-BUILT PLAN SHOWING ALL COMPONENTS OF THE ELECTRICAL DISTRIBUTION AND LIGHTING SYSTEM PRIOR TO FINAL ACCEPTANCE.
- (6) THE CONTRACTOR SHALL FURNISH AND INSTALL ALL PULL BOXES AS REQUIRED BY OWNER FOR THE DISTRIBUTION AND LIGHTING CIRCUITS. THE DRAWINGS SHOW PROPOSED LOCATIONS, AND ADDITIONAL PULL BOXES MAY BE REQUIRED BY OWNER.
- (7) SMALL AND LARGE PULL BOXES SHALL HAVE "COF STREET LIGHTING" CAST INTO THE TOP AND SHALL MEET ALL REQUIREMENTS SHOWN IN CITY OF FRANKLIN STANDARD DRAWINGS.
- (8) THE CONTRACTOR SHALL OBTAIN AN ELECTRICAL PERMIT AT NO COST TO THE CITY.

## SPECIAL NOTES

- (1) IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING THIS PROJECT.
- (2) PRIOR TO INSTALLATION OF NEW CABLE DUCT, CONDUITS, JUNCTION BOXES AND LIGHT STANDARDS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING CONDUITS, CABLES, AND UNDERGROUND UTILITIES.
- (3) ALL NEW UNIT DUCT, CONDUIT, PULL BOXES AND OTHER EQUIPMENTS ARE ILLUSTRATED DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET WITH APPROVAL OF THE ENGINEER. THE CONTRACTOR'S PROPOSED WORK SHALL NOT CONFLICT WITH EXISTING UTILITIES.
- (4) CONTRACTOR TO MAKE SURE THAT THE IP RATING IS MAINTAINED AT THE TIME OF LUMINAIRE INSTALLATION.
- (5) ALL SPLICES SHALL BE WATERTIGHT.
- (6) ALL JUNCTION BOXES SHALL BE FILLED WITH APPROVED POTTING COMPOUND AND ALL CONDUIT ENTRIES INTO JUNCTION BOX SHALL USE THREAD SEALANT COMPOUND.
- (7) ELECTRICAL MATERIALS SHALL BE NEW AND APPROVED BY THE FOLLOWING ORGANIZATIONS:
  - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
  - INSTITUTE OF ELECTRICAL AND ELECTRICS ENGINEERS
  - ILLUMINATING ENGINEERING SOCIETY
  - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
  - U.S. DEPARTMENT OF TRANSPORTATION
  - UNDERWRITERS LABORATORIES
  - AMERICAN NATIONAL STANDARDS INSTITUTE
  - INSULATED CABLE ENGINEERS ASSOCIATION
- (8) NO MATERIAL OR EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE PRIOR TO SHOP DRAWING REVIEW AND APPROVAL BY THE ENGINEER. ANY MATERIAL OR EQUIPMENT DELIVERED TO THE JOB SITE VIOLATING THAT PROCEDURE SHALL BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.

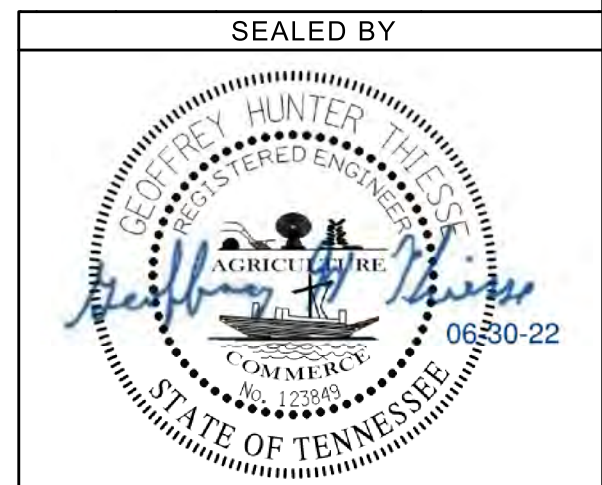
- (9) ELECTRICAL WORK SHALL CONFORM WITH NATIONAL CODES INCLUDING THE NATIONAL ELECTRIC CODE AND NATIONAL ELECTRIC SAFETY CODE, STATE, AND LOCAL CODES.
- (10) DURING INSTALLATION OF ANY CABLE, THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE CONDUCTORS, INSULATION, OR OUTER COVERING. THE LENGTH OF CABLE INSTALLED SHALL NOT CAUSE EXCESSIVE STRESS ON THE CONDUCTORS OR ANY PART OF THE CABLE. AN INSERT LUBRICANT SHALL BE USED IN PLACING CABLE IN CONDUIT.
- (11) CONDUIT BENDS SHALL NOT EXCEED A 24" RADIUS.
- (12) SOME UTILITIES MAY REQUIRE LOCATION BY HAND DIGGING PRIOR TO PROPOSED CONDUIT INSTALLATION.
- (13) FOR THE INSTALLATION OF CONDUITS AND CABLES, TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED, OR IMMEDIATELY AFTER ANY INSPECTION. ANY TEMPORARY SPOIL OF EXCAVATED EARTH SHALL BE LOCATED WITHIN THE PROJECT'S EROSION PREVENTION AND SEDIMENT CONTROL MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED
- (14) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (15) PRIOR TO SUBMITTING THE BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED AROUND UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATION AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM.
- (16) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.
- (17) THE CONTRACTOR SHALL CONTACT DERRICK LYNCH (615-494-1573) WITH MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION (MTE) TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE CONTROL CENTER(S). THESE CHARGES SHALL BE INCLUDED IN THE BID FOR THIS ITEM. INCLUDES THE COST OF THE CONCRETE PAD(S), 100 AMP DISCONNECT, METER, AND THE STEEL CONDUIT RISER ASSEMBLY. ALSO, INCLUDES THE COST TO FURNISH AND INSTALL ALL APPURTENANCES REQUIRED FOR THE COMPLETE INSTALLATION.

# STANDARD ROADWAY AND TRAFFIC OPERATIONS DRAWINGS

DWG.	REV.	DESCRIPTION
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD-L-2	02-20-20	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	02-20-20	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	02-20-20	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
T-L-3	04-15-96	STANDARD LIGHTING DETAILS PULL BOXES
T-L-4	05-25-11	STANDARD LIGHTING DETAILS CONDUIT, CABLE INSTALLATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	L1

6/30/2022 10:53:42 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\052\_L1\_LightingGenNotes.sht



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

LIGHTING  
GENERAL  
NOTES



TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	L2

**LIGHTING QUANTITIES**

ITEM NO.	Description	Unit	Qty
714-03.03	DIRECT BURIAL CONDUIT (1" PVC, SCH 40)	L.F.	273
714-03.04	DIRECT BURIAL CONDUIT (3/4" PVC, SCH 40)	L.F.	232
(1) 714-05.05	PULL BOXES (LARGE)	EACH	3
725-20.52	CABLE (1/C #12 AWG.)	L.F.	2560
725-20.53	CABLE (1/C #10 AWG.)	L.F.	1580
(2) 730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
(2) 798-07.02	PEDESTAL CABINET	EACH	1

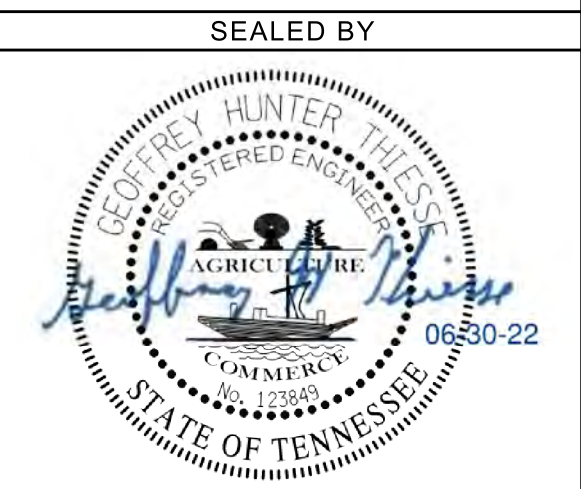
**LIGHTING FOOTNOTES**

(1) SEE CITY OF FRANKLIN DETAIL L-9.

THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE CONTROL CENTER(S). THESE CHARGES SHALL BE INCLUDED IN THE BID FOR THIS ITEM. INCLUDES THE COST OF THE CONCRETE PAD(S), 100 AMP DISCONNECT, METER, AND THE STEEL CONDUIT RISER ASSEMBLY. ALSO, INCLUDES THE COST TO FURNISH AND INSTALL TRANSFORMER AS REQUIRED, AND ALL APPURTENANCES REQUIRED FOR THE COMPLETE INSTALLATION.

**FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES**

6/30/2022 10:53:50 AM  
 Y:\Nashville\160200005\16020001.00\Eng\_Docs\Roadway\053\_L2\_LightingSummaryofQuantities.sht



**CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT**

**LIGHTING  
 SUMMARY  
 OF QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	L3

**WIRING AND CONDUIT SCHEDULE**

RUN NO.	FROM	LOCATION	TO	LOCATION	DIRECT BURIAL CONDUIT LENGTH (FT.)	CONDUIT LENGTH EMBEDDED IN STRUCTURE (3/4"), PVC (FT.)	CABLE LENGTH (FT.)	LOAD CENTER NO.	CIRCUIT NO.	NO. OF CONDUIT	NO. AND SIZE OF WIRE	REMARKS
3	Luminaire Junction Box (JBL16)	Embedded on the pedestrain rail	Luminaire Junction Box (JBL30)	Embedded on the pedestrain rail		270	280	A	A-2	1**	2@ #12AWG & 1@ #12 AWG	
3	JB2	Embedded on the bridge (North east side)	Luminaire Junction Box (JBL16)	Embedded on the pedestrain rail		15	15	A	A-2	1**	2@ #12AWG & 1@ #12 AWG	
2	Luminaire Junction Box (JBL1)	Embedded on the pedestrain rail	Luminaire Junction Box (JBL15)	Embedded on the pedestrain rail		270	280	A	A-1	1**	2@ #12AWG & 1@ #12 AWG	
2	JB1	Embedded on the bridge (North east side)	Luminaire Junction Box (JBL1)	Embedded on the pedestrain rail		15	15	A	A-1	1**	2@ #12AWG & 1@ #12 AWG	
1	Meter Pedestal	Near Overhead Transformer	JB2	Embedded on the bridge (North east side)	145		410	A	A-2	1*	2@ #10AWG & 1@ #12 AWG	
1	Meter Pedestal	Near Overhead Transformer	JB1	Embedded on the bridge (North east side)	360		380	A	A-1	1*	2@ #10AWG & 1@ #12 AWG	

**NOTES**

JB1	JUNCTION BOX-1 EMBEDDED ON STRUCTURE(6.5"X6.5"X4.75")
JB2	JUNCTION BOX-2 EMBEDDED ON STRUCTURE(6.5"X6.5"X4.75")
JBL1	JUNCTION BOX FOR LUMINIARE "L1" (6.5"X6.5"X4.75")
JBL16	JUNCTION BOX FOR LUMINIARE "L16" (6.5"X6.5"X4.75")
(*)	THE CONDUIT SHALL BE (1) 1" PVC (SCHEDULE 40)
(**)	CONDUIT SHALL BE 3/4" CONDUIT EMBEDDED IN STRUCTURE

**LIGHT POLE SCHEDULE**

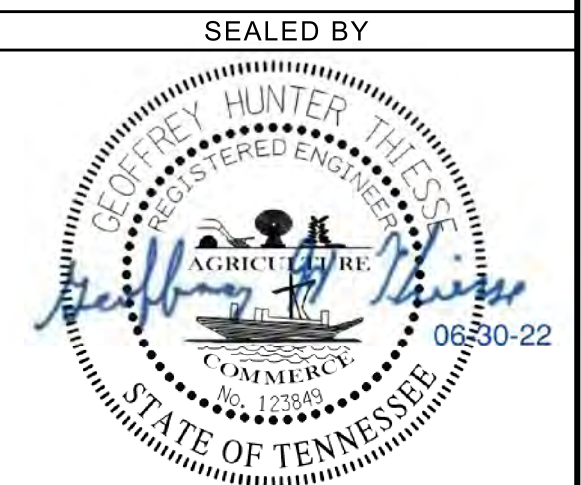
LIGHT NO.	SHEET NO.	VOLTAGE	WATTAGE	NO. OF LAMPS	LOAD CENTER NO.	CIRCUIT NO.	BASELINE	STATION	OFFSET	SIDE	NOTES
L1	L4	120V	14.2W	1	A	A-1	COFHP	27+45	13	LT	
L2	L4	120V	14.2W	1	A	A-1	COFHP	27+30	13	LT	
L3	L4	120V	14.2W	1	A	A-1	COFHP	27+15	13	LT	
L4	L4	120V	14.2W	1	A	A-1	COFHP	27+00	13	LT	
L5	L4	120V	14.2W	1	A	A-1	COFHP	26+85	13	LT	
L6	L4	120V	14.2W	1	A	A-1	COFHP	26+70	13	LT	
L7	L4	120V	14.2W	1	A	A-1	COFHP	26+55	13	LT	
L8	L4	120V	14.2W	1	A	A-1	COFHP	26+40	13	LT	
L9	L4	120V	14.2W	1	A	A-1	COFHP	26+25	13	LT	
L10	L4	120V	14.2W	1	A	A-1	COFHP	26+10	13	LT	
L11	L4	120V	14.2W	1	A	A-1	COFHP	25+95	13	LT	
L12	L4	120V	14.2W	1	A	A-1	COFHP	25+80	13	LT	
L13	L4	120V	14.2W	1	A	A-1	COFHP	25+65	13	LT	
L14	L4	120V	14.2W	1	A	A-1	COFHP	25+50	13	LT	
L15	L4	120V	14.2W	1	A	A-1	COFHP	25+35	13	LT	
L16	L4	120V	14.2W	1	A	A-2	COFHP	27+45	1	RT	
L17	L4	120V	14.2W	1	A	A-2	COFHP	27+30	1	RT	
L18	L4	120V	14.2W	1	A	A-2	COFHP	27+15	1	RT	
L19	L4	120V	14.2W	1	A	A-2	COFHP	27+00	1	RT	
L20	L4	120V	14.2W	1	A	A-2	COFHP	26+85	1	RT	
L21	L4	120V	14.2W	1	A	A-2	COFHP	26+70	1	RT	
L22	L4	120V	14.2W	1	A	A-2	COFHP	26+55	1	RT	
L23	L4	120V	14.2W	1	A	A-2	COFHP	26+40	1	RT	
L24	L4	120V	14.2W	1	A	A-2	COFHP	26+25	1	RT	
L25	L4	120V	14.2W	1	A	A-2	COFHP	26+10	1	RT	
L26	L4	120V	14.2W	1	A	A-2	COFHP	25+95	1	RT	
L27	L4	120V	14.2W	1	A	A-2	COFHP	25+80	1	RT	
L28	L4	120V	14.2W	1	A	A-2	COFHP	25+65	1	RT	
L29	L4	120V	14.2W	1	A	A-2	COFHP	25+50	1	RT	
L30	L4	120V	14.2W	1	A	A-2	COFHP	25+35	1	RT	

**METER PEDESTAL "A" LOAD REQUIREMENTS**

CIRCUIT NUMBER	LINE WATTS	AMP LOAD	VOLT DROP	CIRCUIT BRKR SIZE	LIGHTING CONTACTOR SIZE
A-1	213	1.8	1.89%	15A	15A
A-2	213	1.8	1.89%	15A	15A
SPARE				SPARE	SPARE
SPARE				SPARE	SPARE
SPARE				SPARE	SPARE
SPARE				SPARE	SPARE
TOTAL	426	3.6	MAIN: 100A		

**STREET AND SITE LIGHTING DATA**

Development Standard	City Of Franklin Lighting Standards/ RP-8-14
Land Use	City Of Franklin
Zoning District	CI: Civic and Institutional District
Height Of Proposed/ Existing Building	N/A
Pole Height	N/A
Pole / Fixture Color	White
Color Of Light (K)	4100K CCT
Luminaire Wattage	14.2W
Luminaire Volt-Amps	120V/ 0.12A
Luminaire Lumens	380
Luminaire Light Loss Factor ( LLF)	0.85







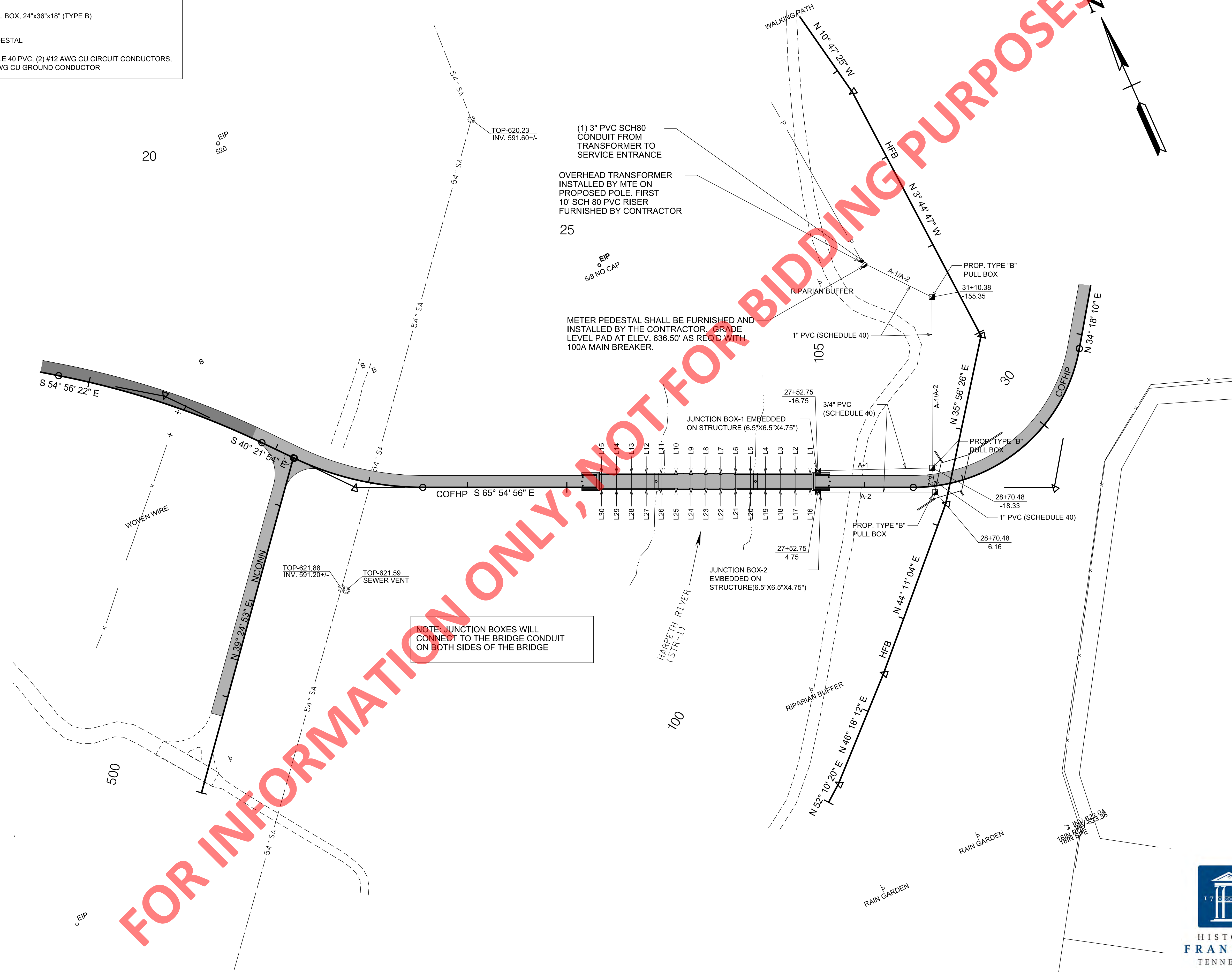
**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

**LIGHTING  
SCHEDULES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	L4

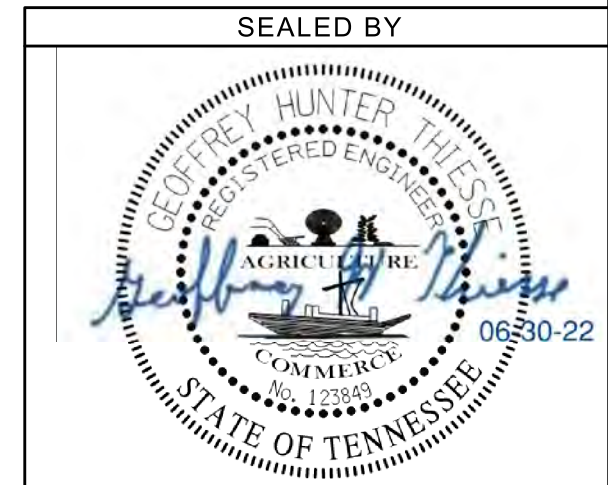
**LEGEND**

-  JUNCTION BOX, 6"x6"x4" (EMBEDDED ON STRUCTURE)
-  LARGE PULL BOX, 24"x36"x18" (TYPE B)
-  METER PEDESTAL
-  1" SCHEDULE 40 PVC, (2) #12 AWG CU CIRCUIT CONDUCTORS, (1) #12 AWG CU GROUND CONDUCTOR



FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 10:54:07 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\055\_L4 LightingLayout.sht

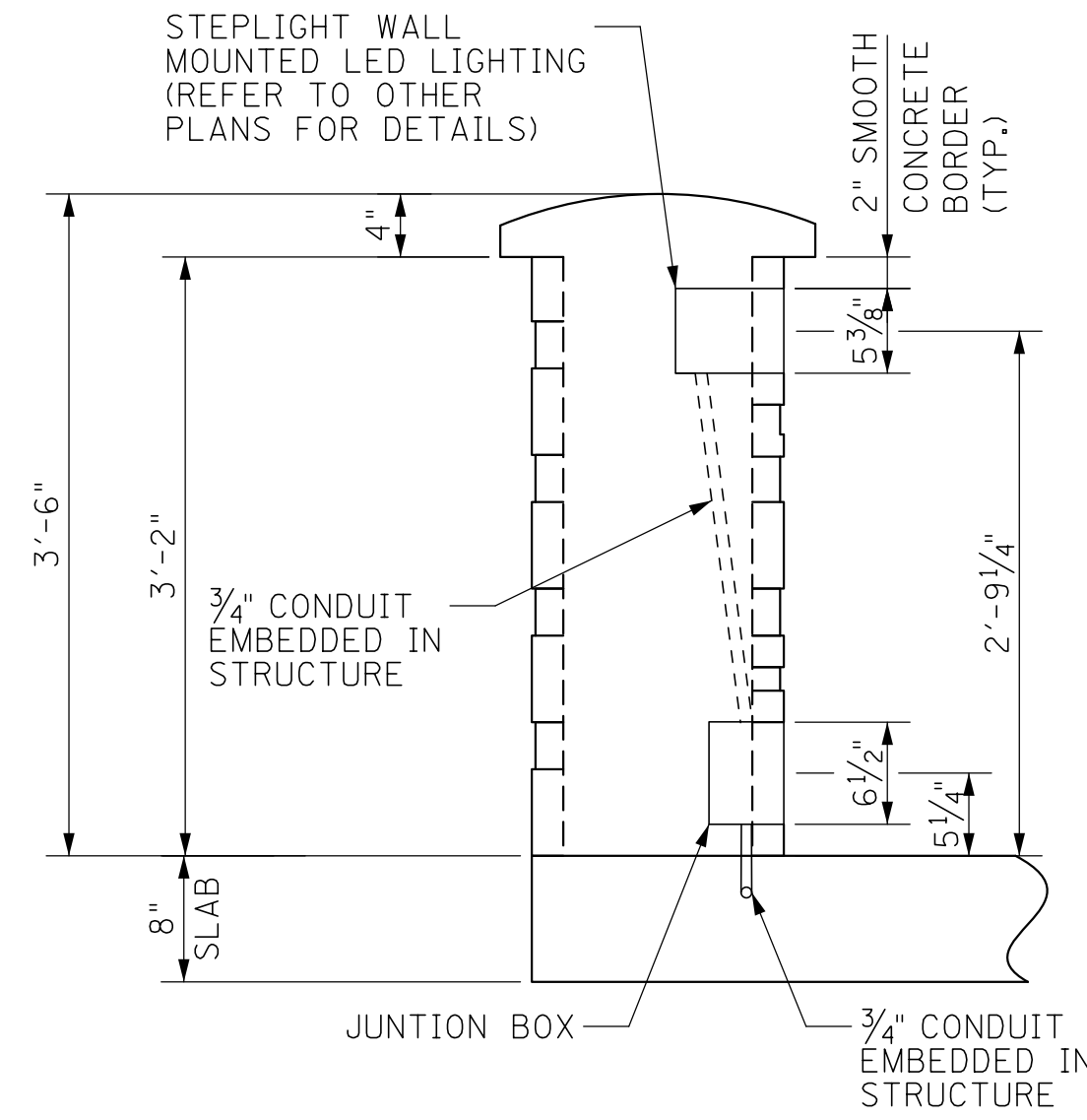


**CITY OF FRANKLIN  
ENGINEERING DEPARTMENT**

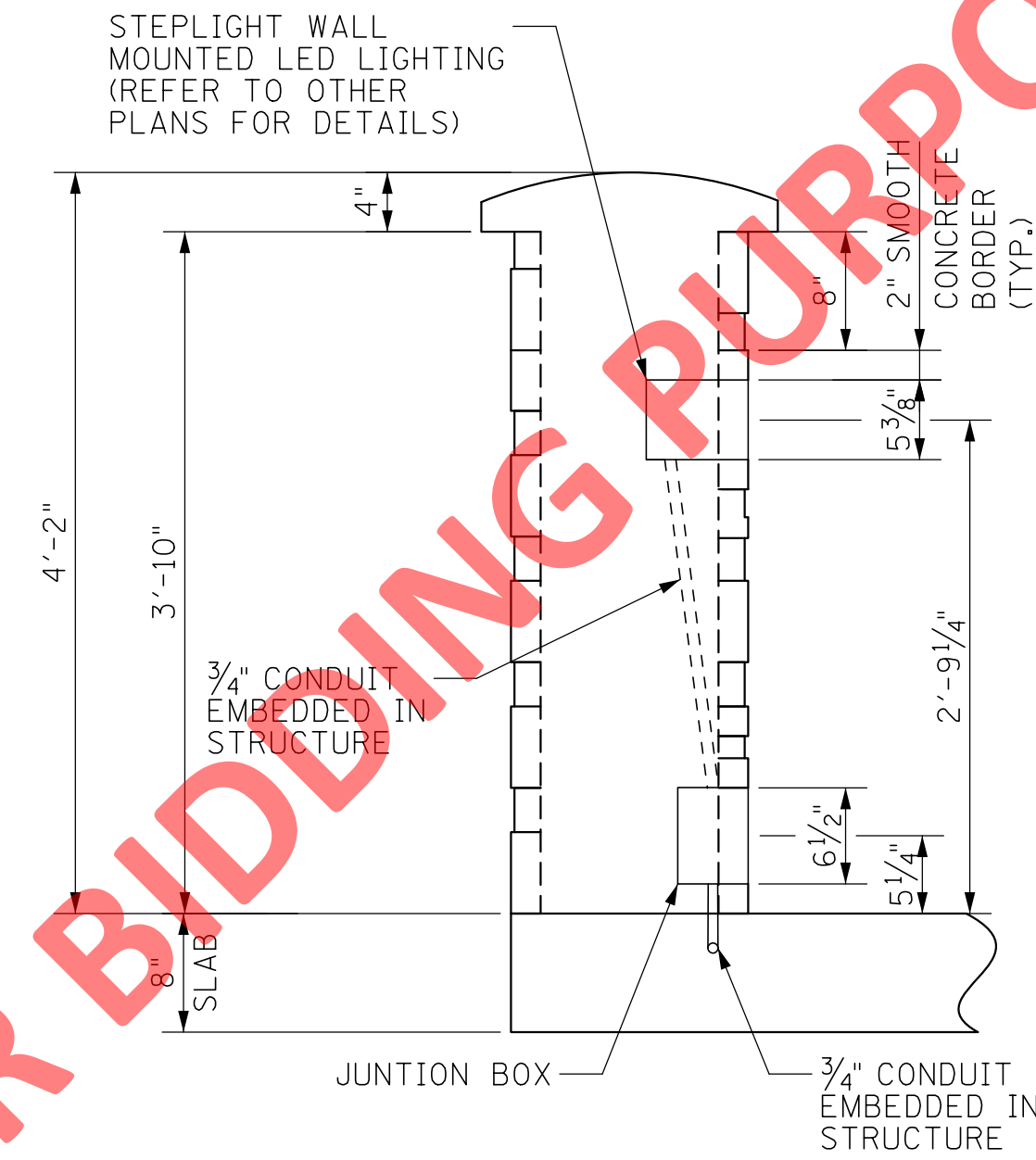
**LIGHTING LAYOUT**

STA.19+50 TO STA.31+50  
SCALE: 1"= 50'

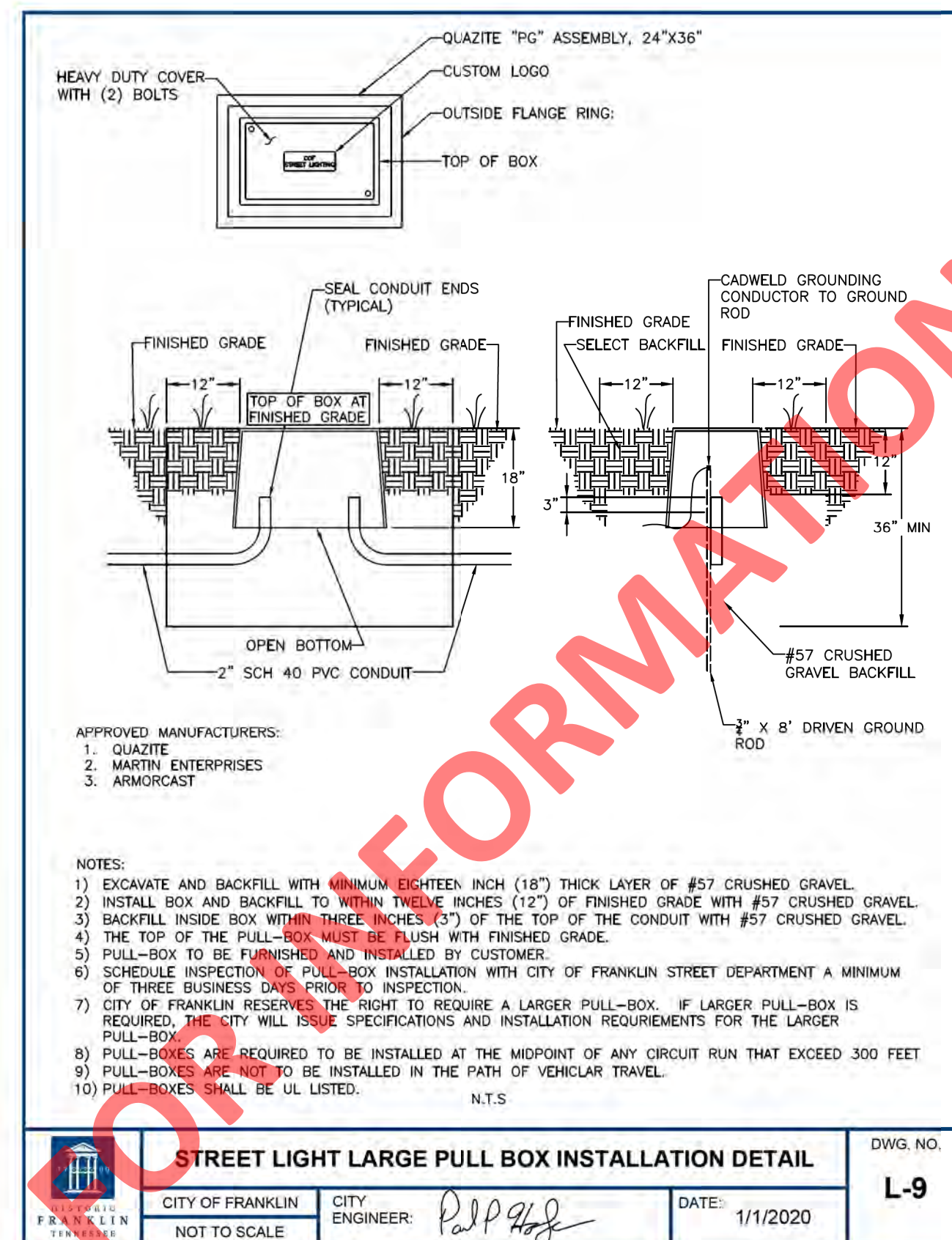
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	L5



RAIL DETAIL



COLUMN DETAIL



STREET LIGHT LARGE PULL BOX INSTALLATION DETAIL

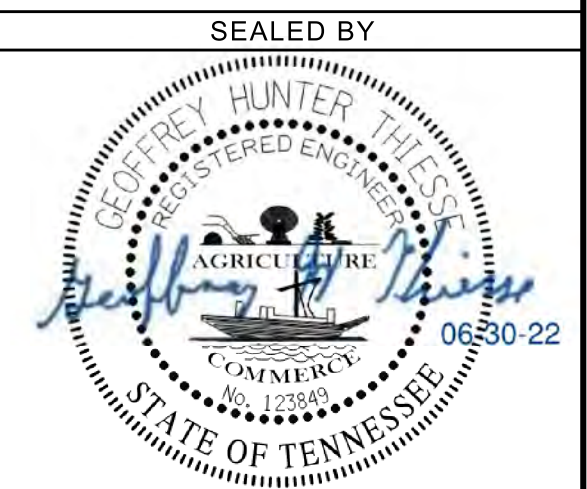
CITY OF FRANKLIN	CITY ENGINEER: <i>PSP</i>	DATE: 1/1/2020
NOT TO SCALE		

DWG. NO.

L-9

6/30/2022 10:54:09 AM Y:\Nashville\16020000S\16020001.00\Eng\_Docs\Roadway\056\_L5\_LightingDetailSheet.sht

INFORMATION ONLY; NOT FOR BIDDING PURPOSES



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

LIGHTING  
DETAIL

**SWPPP INDEX OF SHEETS**

DESCRIPTION	SHT.
1. SWPPP REQUIREMENTS (3.0).....	1
2. SITE DESCRIPTION (3.5.1).....	1
3. ORDER OF CONSTRUCTION ACTIVITIES (3.5.1.b, 3.5.2.a).....	1
4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION.....	1
5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (3.5.3).....	2
6. FLOCCULANTS (3.5.3.1.b).....	3
7. UTILITY RELOCATION.....	3
8. MAINTENANCE AND INSPECTION.....	4
9. SITE ASSESSMENTS (3.1.2).....	4
10. STORMWATER MANAGEMENT (3.5.4).....	4
11. NON-STORMWATER DISCHARGES (3.5.9).....	5
12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 5.1).....	5
13. RECORD-KEEPING.....	6
14. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (7.7.5).....	7
15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6).....	7
16. ENVIRONMENTAL PERMITS (9.0).....	7
17. OUTFALL TABLE (3.5.1.d, 5.4.1.g).....	8

NOTE: CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CGP.

**1. SWPPP REQUIREMENTS (3.0)**

1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS (3.1.1)?

- YES (CHECK ALL THAT APPLY BELOW) OR  NO
- CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
  - A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
  - HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (E.G. SEDIMENT BASINS) (3.1.1)? YES  NO

IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT?  YES  NO

1.3. DO THE PROJECT STORMWATER OUTFALLS DIRECTLY DISCHARGE INTO THE FOLLOWING (5.4.1)?  YES (CHECK ALL THAT APPLY BELOW)  NO

- WATERS WITH UNAVAILABLE PARAMETERS (303d FOR SILTATION OR HABITAT ALTERATION)
- EXCEPTIONAL TENNESSEE WATERS

IF YES TO SECTION 1.3, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS (5.4.1.b)?

- YES (CHECK ALL THAT APPLY BELOW)  NO
- CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
  - A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
  - HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

**2. SITE DESCRIPTION (3.5.1)**

2.1. PROJECT LIMITS (3.5.1.h): REFER TO TITLE SHEET

2.2. PROJECT DESCRIPTION (3.5.1.a):

TITLE: HARLINDALE FARM MULTI-USE PATH BEGINNING AT THE RUBY F. LYNCH TRAILHEAD AND TERMINATING ON THE WEST SIDE OF THE HARPETH RIVER NEAR CHESTNUT BEND SUBDIVISION  
 COUNTY: WILLIAMSON  
 PIN: 126630.00

2.3. SITE MAP(S) (2.6.2.): REFER TO TITLE SHEET

2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1.d): REFER TO EXISTING CONTOURS SHEET(S) 13-15, DRAINAGE MAP SHEET(S) 10, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.3.

2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):

- CLEARING AND GRUBBING

- EXCAVATION
- CUTTING AND FILLING
- FINAL GRADING AND SHAPING
- UTILITIES
- OTHER (DESCRIBE): \_\_\_\_\_

2.6. TOTAL PROJECT AREA (3.5.1.c): 7.448 ACRES

2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 7.448 ACRES

2.8. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.

2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK?  YES  NO  
 IF YES, LIST THE CORRESPONDING PLAN SHEET: \_\_\_\_\_

2.10. WAS ROW FINALIZED PRIOR TO FEBRUARY 1, 2010 (4.1.2.2)?

- YES \_\_\_\_\_ (DATE)  NO

**IF ROW WAS FINALIZED PRIOR TO FEBRUARY 1, 2010, THIS PROJECT IS CONSIDERED A PRE-APPROVED SITE (4.1.2.2)**

2.11. SOIL PROPERTIES (3.5.1.f) (4.1.1).

SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

SOIL PROPERTIES			
PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)
ARMOUR SILT LOAM, 2 TO 5 PERCENT SLOPES	B	21.8%	0.43
ARMOUR SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED	B	1.7%	0.37
ARMOUR SILT LOAM, 5 TO 12 PERCENT SLOPES, ERODED	B	21.6%	0.43
ARMOUR SILTY CLAY LOAM, 5 TO 12 PERCENT SLOPES, SEVERELY ERODED	B	1.6%	0.32
HUNTINGTON SILT LOAM, PHOSPHATIC	B	30.0%	0.37
MAURY SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED	A	9.5%	0.32
MAURY SILT LOAM, 5 TO 12 PERCENT SLOPES, ERODED	A	9.8%	0.32
MAURY SILTY CLAY LOAM, 5 TO 12 PERCENT SLOPES, SEVERELY ERODED	A	2.1%	0.32

2.12. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS?  YES  NO

2.12.1. IF YES TO SECTION 2.13, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT?  YES  NO; AND

2.12.2. IF YES TO SECTION 2.12.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT?  YES  NO  N/A (TDOT SP107L WILL BE APPLIED.)

2.13. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (3.5.1.g).

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	0.27	4%	-	0.90
PERVIOUS	7.18	96%	-	0.30
WEIGHTED CURVE NUMBER OR C-FACTOR =				0.32

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	1.13	15%	-	0.90
PERVIOUS	6.32	85%	-	0.30
WEIGHTED CURVE NUMBER OR C-FACTOR =				0.39

**3. ORDER OF CONSTRUCTION ACTIVITIES (3.5.1.b, 3.5.2.a)**

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO: MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE ORDER OF CONSTRUCTION ACTIVITIES AND THE BASIC EPSC DEVICES DEPICTED ON THE EPSC PLAN CONTAINED WITHIN THE APPROVED SWPPP.

- 3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS N/A)
- 3.2. INSTALL STABILIZED CONSTRUCTION EXITS.
- 3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.
- 3.4. INSTALL INITIAL EPSC MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.
- 3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 14 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.)
- 3.6. REMOVE AND STORE TOPSOIL.
- 3.7. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
- 3.8. INSTALL UTILITIES, STORM SEWERS, CULVERTS AND BRIDGE STRUCTURES.
- 3.9. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.
- 3.10. PERFORM FINAL GRADING AND INSTALL BASE STONE.
- 3.11. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.
- 3.12. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.
- 3.13. COMPLETE FINAL STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)
- 3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.
- 3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

**4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION**

4.1. STREAM INFORMATION (3.5.1.j, 3.5.1.k)

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS?  YES  NO

IF YES, THE IMPACT(S) HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

4.1.2. HAVE ANY OF THE RECEIVING STATE WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):

- 303d WITH UNAVAILABLE PARAMETERS FOR SILTATION
- 303d WITH UNAVAILABLE PARAMETERS FOR HABITAT ALTERATION
- EXCEPTIONAL TENNESSEE WATERS (ETW)



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

**STORMWATER  
POLLUTION  
PREVENTION  
PLAN**

4.1.3. RECEIVING WATERS OF THE STATE (3.5.1.k).

RECEIVING WATERS OF THE STATE INFORMATION					
STATE WATER LABEL FROM EBR	NAME OF RECEIVING STATE WATER	303d WITH UNAVAILABLE PARAMETERS FOR SILTATION OR HABITAT ALTERATION (YES OR NO)	ETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)
STR-1	HARPETH RIVER	YES	NO	YES	YES

4.1.4. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE? (4.1.2, 5.4.2)  
 YES  NO

**BUFFER ZONE REQUIREMENTS ARE NOT REQUIRED FOR PRE-APPROVED SITES (4.1.2.2.)**

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 13-21.

IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER.

60-FEET FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET).

A 60 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET).

A 30 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR STATE WATERS DUE TO A TDEC ARAP? (9.0)  
 YES  NO

4.1.6. ARE THERE WATER QUALITY RIPARIAN BUFFER ZONE EXEMPTIONS? (4.1.2.1)  YES  NO  
 IF YES, EXISTING CONDITIONS DESCRIPTION: \_\_\_\_\_

4.1.7. EVERY ATTEMPT SHOULD BE MADE FOR CONSTRUCTION ACTIVITIES TO NOT TAKE PLACE WITHIN THE WATER QUALITY RIPARIAN BUFFER ZONE AND FOR EXISTING FORESTED AREAS TO BE PRESERVED. (5.4.2.)

4.1.8. BECAUSE OF HEAVY SEDIMENT LOAD ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, WATER QUALITY RIPARIAN BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE WATER QUALITY RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA.

4.1.9. WHERE IT IS NOT PRACTICABLE TO MAINTAIN A FULL WATER QUALITY RIPARIAN BUFFER, BEST MANAGEMENT PRACTICES (BMPs) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MUST BE USED. A JUSTIFICATION FOR USE AND

DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CGP. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. RECEIVING WATERS OF THE UNITED STATES (WOTUS) (EPHEMERAL)

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WOTUS (EPHEMERAL)?  YES  NO

RECEIVING WOTUS (EPHEMERAL) INFORMATION		
TDOT WOTUS LABEL	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN 15-FT OF THE PROJECT LIMITS (YES OR NO)

4.2.1. ARE WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WOTUS (4.1.2)?  YES  NO

IF YES, A 15 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING EPHEMERAL STREAM IDENTIFIED AS A WOTUS (EPHEMERAL) BY THE U.S. ARMY CORPS OF ENGINEERS (USACE) OR THE ENVIRONMENTAL PROTECTION AGENCY SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE.  
 IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) \_\_\_\_\_

4.2.2. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR WOTUS (EPHEMERAL) DUE TO A USACE PERMIT?  
 YES  NO

4.3. OUTFALL INFORMATION

4.3.1. OUTFALL TABLE (3.5.1.e). SEE SWPPP SHEET S-8 thru S-9 FOR OUTFALL INFORMATION.

4.3.2. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.h)?  YES  NO

4.3.3. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (2.6.2)?  YES  NO

4.3.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA?  
 YES  NO  N/A

4.3.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)?  YES  NO  N/A

4.3.6. A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. (3.5.3.3)

OR

OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. (5.4.1.g).

IN BOTH INSTANCES, THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

4.4. WETLAND INFORMATION

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS?  YES  NO

IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND IN THE WATER QUALITY PERMITS.

WETLAND INFORMATION				
TDOT WETLAND LABEL	FROM STATION LT OR RT	TO STATION LT OR RT	TEMPORARY IMPACTS (AC)	PERMANENT IMPACTS (AC)

4.5. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)

4.5.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION AND HABITAT ALTERATION?  
 YES  NO

4.5.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)?  
 YES  NO

4.5.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION?  
 YES  NO

4.5.4. IF YES, HAS A SUMMARY OF THE CONSULTATION LETTER BEEN SUBMITTED/RECEIVED?  
 YES  NO

4.6. ECOLOGY INFORMATION (3.5.5.e)

DOES THE ENVIRONMENTAL BOUNDARIES REPORT SPECIFY SPECIAL NOTES TO BE ADDED TO THE PLAN SHEETS?  
 YES  NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) N/A.

4.7. ENVIRONMENTAL COMMITMENTS

ARE THERE ANY NOTES ON THE ENVIRONMENTAL COMMITMENT SHEET?  
 YES  NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) \_\_\_\_\_

5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (3.5.3)

5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION (4.1.1).

5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS, STREAM CHANNELS, AND STREAM BANKS. (4.1.1)

5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED PER THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA (3.5.3.3)?  
 YES  NO

5.4. THE CONTROL MEASURES HAVE, AT A MINIMUM, BEEN DESIGNED FOR THE 5-YEAR, 24 HOUR STORM EVENT (3.5.3.3, 5.4.1.a).

5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS (3.5.1.h)?  YES  NO

5.6. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

5.7. UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES OR ROW/ EASEMENT LINE, WHICHEVER IS LESSER.

5.8. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION,



TYPE	YEAR	PROJECT NO.	SHEET NO.
			S-3

- INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- 5.9. HAVE STAGED EPSC PLANS BEEN PREPARED FOR THE PROJECT (3.5.2)?  
YES  NO  (IF YES, CHECK ONE BELOW)
- 5.9.1.  PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)
- 5.9.2.  PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE STAGES OF EPSC PLANS)
- 5.10. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. HAVE STEEP SLOPES BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE (3.5.3.2) (10. "STEEP SLOPE")?  YES  NO  N/A
- 5.11. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE AQUATIC RESOURCE ALTERATION (ARAP) PERMIT OR SECTION 401 CERTIFICATION (3.5.1.j). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEET S-7. ALL PERMITS WILL BE MAINTAINED ON SITE WITHIN THE "DOCUMENTATION AND PERMITS" BINDER.
- 5.12. THE EPSC CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEET 12 HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES (3.5.3.1.b).
- 5.13. EPSC MEASURES SHALL BE INSTALLED PER TDOT STANDARDS (i.e. STANDARD DRAWINGS) AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.
- 5.14. EPSC MEASURES WILL NOT BE INSTALLED WITHIN A STREAM WITHOUT FIRST OBTAINING APPROVAL FROM THE PERMITS SECTION.
- 5.15. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.
- 5.16. EPSC MEASURES LOCATED IN WOTUS (EPHEMERAL STREAMS) MUST BE CONSIDERED TEMPORARY AND SHALL BE REMOVED AT THE END OF CONSTRUCTION.
- 5.17. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED TO A LEVEL SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT. SEDIMENT THAT MIGRATES INTO WATERS OF THE STATE/US SHALL NOT BE REMOVED WITHOUT GUIDANCE FROM ENVIRONMENTAL PERSONNEL.
- 5.18. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- 5.19. THE QUANTITIES REQUIRED FOR STABILIZED CONSTRUCTION EXITS PER TDOT STANDARDS HAVE BEEN SPECIFIED ON SHEET 12 (3.5.3.1.n).
- 5.20. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS. (4.1.4).
- 5.21. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT.
- 5.22. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE, WELL- VEGETATED AND/OR LINED

CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. (4.1.7).

- 5.23. THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.
- 5.24. WATER DISCHARGED FROM DEWATERING ACTIVITIES SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD WITHIN SETTLING BASINS UNTIL IT IS AT LEAST AS CLEAR AS THE RECEIVING WATERS.
- 5.25. DEWATERING STRUCTURES, SEDIMENT FILTER BAGS, SEDIMENT BASINS AND TRAPS SHALL NOT BE LOCATED CLOSER THAN 30 FEET (60 FEET DESIRABLE VEGETATIVE BUFFER) FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS AND 15 FEET (30 FEET DESIRABLE VEGETATIVE BUFFER) FOR ALL OTHER FEATURES FROM THE TOP BANK OF A STREAM, WOTUS (EPHEMERAL), WETLAND OR OTHER NATURAL RESOURCE AND SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED.
- 5.26. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 14 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED (3.5.3.1.h).
- 5.27. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 14 DAYS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE (3.5.3.2).
- 5.28. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE
- 5.29. DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
- 5.30. A SOIL ANALYSIS SHALL BE PERFORMED PRIOR TO THE APPLICATION OF FERTILIZERS TO ANY PORTION OF THE STE. SOILS SHOULD BE ANALYZED FOR pH, BUFFER VALUE, PHOSPHOROUS, POTASSIUM, CALCIUM AND MAGNESIUM. SOIL SAMPLES SHOULD BE REPRESENTATIVE OF THE AREA FOR WHICH FERTILIZER WILL BE APPLIED. SAMPLE TYPE SHOULD BE COLLECTED AND ANALYZED IN ACCORDANCE WITH THE UT EXTENSION "SOIL TESTING" BROCHURE PB1061. (4.1.5.)
- 5.31. FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED FROM THE ANALYSES. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.
- 5.32. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. (3.5.3.2).

#### 6. FLOCCULANTS (3.5.3.1.b)

IS ADDITIONAL PHYSICAL OR CHEMICAL TREATMENT OF STORMWATER RUNOFF NECESSARY (5.4.1.a)?  YES  NO

IF YES, THE FOLLOWING NOTES APPLY:

- 6.1. POLYACRYLAMIDES (PAM) SHALL BE OF THE ANIONIC OR NEUTRALLY CHARGED TYPE ONLY. PAM REQUIREMENTS ARE AS FOLLOWS:
- 6.1.1. CATIONIC PAM IS NOT ALLOWED BECAUSE OF ITS TOXICITY TO FISH AND AQUATIC LIFE.
- 6.1.2. ANIONIC AND NEUTRALLY CHARGED PAM SHALL MEET THE EPA AND FDA ACRYLAMIDE MONOMER LIMITS OF EQUAL TO OR LESS THAN 0.05% BY WEIGHT ACRYLAMIDE MONOMER.
- 6.1.3. ANIONIC AND NEUTRALLY CHARGED PAM SHALL HAVE A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLES.
- 6.1.4. PAM MIXTURES SHALL BE NON-COMBUSTIBLE.
- 6.1.5. PAM SHALL CONTAIN ONLY MANUFACTURER-RECOMMENDED ADDITIVES.

- 6.2. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE RESEARCHED, APPLIED IN ACCORDANCE WITH MANUFACTURE'S GUIDELINES AND FULLY DESCRIBED ON THE EPSC PLANS (3.5.3.1.b).
- 6.3. FLOCCULANTS SHALL BE HANDLED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET (MSDS) REQUIREMENTS AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIED USE CONFORMING TO ALL FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS.
- 6.4. ALL VENDORS AND SUPPLIERS OF FLOCCULANTS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT FOR BOTH ACUTE AND CHRONIC TOXICITY TESTS WHICH VERIFIES THAT THE FLOCCULANT EXHIBITS ACCEPTABLE TOXICITY PARAMETERS WHICH MEET OR EXCEED THE EPA REQUIREMENTS FOR THE STATE AND FEDERAL WATER QUALITY STANDARDS. WHOLE EFFLUENT TESTING DOES NOT MEET THIS REQUIREMENT AS PRIMARY REACTIONS HAVE OCCURRED AND TOXIC POTENTIALS HAVE BEEN REDUCED.
- 6.5. DO NOT APPLY FLOCCULANTS DIRECTLY TO, OR WITHIN 60 FEET, OF ANY STREAMS, WETLANDS, OR OTHER NATURAL WATER RESOURCE LOCATED ON OR ADJACENT TO THE CONSTRUCTION SITE. DO NOT APPLY FLOCCULANTS DIRECTLY INTO WATERS CONTAINED WITHIN SEDIMENT PONDS OR TO SLOPES THAT PRODUCE RUNOFF DIRECTLY INTO A STREAM, WETLAND, OR OTHER NATURAL WATER RESOURCE. DO NOT APPLY FLOCCULANTS IMMEDIATELY AT A STORMWATER OUTFALL WHERE RUNOFF LEAVES THE PROJECT LIMITS.
- 6.6. BEFORE FLOCCULANTS CAN BE USED ON A CONSTRUCTION PROJECT, SITE-SPECIFIC SOIL SAMPLES MUST BE OBTAINED AND TESTED BY THE MANUFACTURER OR THEIR REPRESENTATIVE, TO IDENTIFY THE OPTIMUM FLOCCULANT TYPE AND APPLICATION RATE. SINCE FLOCCULANT EFFICACY IS HIGHLY DEPENDENT ON SOIL TYPE, SOIL SAMPLES WILL NEED TO BE OBTAINED FROM EACH SOIL HORIZON THAT WILL BE ACCESSED DURING EXCAVATION. FLOCCULANTS SHOULD BE APPLIED ON A CONSTRUCTION SITE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED APPLICATION OR DOSAGE RATE. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA. DO NOT APPLY EMULSION FORMS OF FLOCCULANTS DIRECTLY TO STORMWATER RUNOFF OR TO STREAMS, WETLANDS, OR OTHER WATER RESOURCES DUE TO SURFACTANT TOXICITY.
- 6.7. FLOCCULANT POWDER MAY BE APPLIED BY A HAND SPREADER OR A MECHANICAL SPREADER. IF APPROVED BY THE MANUFACTURER, FLOCCULANT MAY BE MIXED WITH DRY SILICA SAND, FERTILIZER, SEED, OR OTHER SOIL AMENDMENTS TO AID IN SPREADING. FLOCCULANTS MAY ALSO BE APPLIED WITH A WATER TRUCK OR AS PART OF HYDRO-SEEDING. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA.
- 6.8. MANUFACTURER'S GUIDANCE SHOULD BE FOLLOWED FOR BLOCK, LOG AND SOCK SPACING CONFIGURATIONS. BEFORE FLOCCULANTS CAN BE USED ON A CONSTRUCTION PROJECT, SITE-SPECIFIC SOIL SAMPLES MUST BE OBTAINED AND TESTED BY THE MANUFACTURER OR THEIR REPRESENTATIVE, TO IDENTIFY THE OPTIMUM FLOCCULANT TYPE AND APPLICATION RATE. SINCE FLOCCULANT EFFICACY IS HIGHLY DEPENDENT ON SOIL TYPE, SOIL SAMPLES WILL NEED TO BE OBTAINED FROM EACH SOIL HORIZON THAT WILL BE ACCESSED DURING EXCAVATION. FLOCCULANTS SHOULD BE APPLIED ON A CONSTRUCTION SITE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED APPLICATION OR DOSAGE RATE.

#### 7. UTILITY RELOCATION

ARE UTILITIES INCLUDED IN THE CONTRACT?  YES  NO

IF YES, THE FOLLOWING APPLY:

- 7.1. STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.
- 7.2. SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADE SIDE OF STOCKPILED SOIL. ANY TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS, REMOVED AND STABILIZED BY THE END OF THE WORK DAY.
- 7.3. UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.
- 7.4. IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

**STORMWATER  
POLLUTION  
PREVENTION  
PLAN**

TYPE	YEAR	PROJECT NO.	SHEET NO.
			S-4

CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE EPSC MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME, SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.

- 7.5. FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN FOURTEEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN PROPOSED EPSC MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL THE TRENCH IS BACKFILLED.
- 7.6. IN REGARDS TO EPSC, TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.
- 7.7. TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE PROJECT ENGINEER.
- 7.8. FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE CITY RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.
- 7.9. THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE CITY'S RESPONSIBLE PARTY.
- 7.10. THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE ENGINEER BEFORE COMMENCING WORK.
- 7.11. FOR UTILITY CROSSINGS THAT UTILIZE HORIZONTAL DIRECTIONAL DRILLING THE FOLLOWING SHALL APPLY:
  - 7.11.1. THE ENTRY AND EXIT POINTS SHALL BE AT LEAST 50 FEET FROM THE STREAM BANK OR WETLAND BOUNDARY.
  - 7.11.2. THE DEPTH OF BORE BELOW THE STREAMBED IS SUFFICIENT TO PREVENT RELEASE OF DRILLING FLUID, BASED ON THE PARENT MATERIAL.
  - 7.11.3. A SITE-SPECIFIC CONTINGENCY AND CONTAINMENT PLAN FOR INADVERTENT RELEASE OF DRILLING FLUID SHALL BE ESTABLISHED PRIOR TO COMMENCEMENT OF WORK. THIS PLAN SHALL BE SUBMITTED TO THE PROJECT ENGINEER AND THE CITY'S ENVIRONMENTAL GROUP PERMITS AND/OR COMPLIANCE AND FIELD SERVICES OFFICE FOR REVIEW AND APPROVAL.

**8. MAINTENANCE AND INSPECTION (3.5.8)**

- 8.1. INSPECTION PRACTICES (3.5.8)
  - 8.1.1. PROJECT EPSC INSPECTORS AND ENGINEERS (INCLUDING CITY STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE, AND/OR REPAIR OF EPSC MEASURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS (3.5.8.1.):
    - 8.1.1.1. SUCCESSFULLY COMPLETED THE TDOT EPSC INSPECTIONS TRAINING AND ANY RECERTIFICATION COURSE AS REQUIRED.
    - 8.1.1.2. SUCCESSFULLY COMPLETED THE TDEC "LEVEL I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.
    - 8.1.1.3. BE A CURRENT TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT.
    - 8.1.1.4. BE A CURRENT CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).
    - 8.1.1.5. SUCCESSFULLY COMPLETED TDEC "LEVEL II - DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT

CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSE AS REQUIRED.

- 8.1.2. THE CONSTRUCTION ENGINEER (OR THEIR DULY AUTHORIZED REPRESENTATIVE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONSTRUCTION ENGINEER OR THEIR DULY AUTHORIZED REPRESENTATIVE SHALL COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.
- 8.1.3. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN THE SWPPP AND IN THE FIELD BEFORE LAND DISTURBANCE ACTIVITIES BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED (10 "INSPECTOR") (3.5.1.o).
- 8.1.4. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT FORM AND THE TDEC CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (TWICE-WEEKLY INSPECTIONS) FORM.
- 8.1.5. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING STATE WATERS, WOTUS (EPHEMERAL), WETLANDS, OTHER NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
- 8.1.6. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART (3.5.8.2.a). A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE INSPECTIONS OF TDOT EPSC, NPDES AND WATER QUALITY PERMIT REQUIREMENTS SHALL BE PERFORMED PER THE CITY'S ENVIRONMENTAL GROUP COMPLIANCE AND FIELD SERVICES OFFICE.
- 8.1.7. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH WHERE SITES OR PORTIONS OF SITES HAVE BEEN TEMPORARILY STABILIZED UNTIL CONSTRUCTION ACTIVITIES RESUME WITH WRITTEN NOTIFICATION BY THE CITY ENGINEER TO TDEC NASHVILLE CENTRAL OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION (3.5.8.2.a).
- 8.1.8. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED (3.5.8.2.b).
- 8.1.9. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "INSPECTOR").
- 8.1.10. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 7 DAYS OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 14 DAYS OF THE INSPECTION (3.5.8.2.e AND 3.5.8.2.f).
- 8.1.11. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER. REPORTS WILL BE SUBMITTED TO THE PROJECT ENGINEER PER THE CONTRACT.
- 8.1.12. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET FINAL STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.
- 8.1.13. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES (3.5.8.2.h).

**8.2. DULY AUTHORIZED REPRESENTATIVE (7.7.3)**

THE PROJECT ENGINEER MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT ENGINEER AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST COMPLETE AND SIGN THE EPSC DELEGATION OF AUTHORITY.

**8.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)**

- 8.3.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER AND IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)
- 8.3.2. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 8.3.3. UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE, MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE 24-HOUR TIMEFRAME, WRITTEN DOCUMENTATION PROVIDED BY THE CONTRACTOR SHALL BE PLACED IN THE FIELD DIARY AND EPSC INSPECTION REPORT. AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION. (3.5.8.2.e).
- 8.3.4. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES (SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, OTHER CONTROLS, ETC.) WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). (3.5.3.1.e).
- 8.3.5. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.
- 8.3.6. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (1/2) THE HEIGHT OF THE DAM.
- 8.3.7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOES NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATERS OF THE STATE/U.S.
- 8.3.8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED (3.5.3.1.f).
- 8.3.9. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

**9. SITE ASSESSMENTS (3.1.2)**

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE PERFORMED PER THE CITY'S ENVIRONMENTAL GROUP COMPLIANCE AND FIELD SERVICES OFFICE GUIDELINES.

**10. STORMWATER MANAGEMENT (3.5.4)**

- 10.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE DEPICTED ON THE PLANS AND NOTED AS PERMANENT.
- 10.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.4): RIPRAP OUTLET PROTECTION



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

**STORMWATER  
POLLUTION  
PREVENTION  
PLAN**



TYPE	YEAR	PROJECT NO.	SHEET NO.
			S-5

10.3. OTHER ITEMS NEEDING CONTROL (3.5.5)

CONSTRUCTION MATERIALS: THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
- CONCRETE WASHOUT
- PIPE CULVERTS (I.E. CONCRETE, CORRUGATED METAL, HDPE, ETC.)
- MINERAL AGGREGATES, ASPHALT
- EARTH
- LIQUID TRAFFIC STRIPING MATERIALS, PAINT
- ROCK
- CURING COMPOUND
- EXPLOSIVES
- OTHER \_\_\_\_\_

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

10.4. WASTE MATERIALS (3.5.5.b)

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE CONSTRUCTION CONTRACT AND FEDERAL AND STATE REGULATIONS. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

10.5. HAZARDOUS WASTE (3.5.5.c) (7.9)

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S ON-SITE REPRESENTATIVE WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

10.6. SANITARY WASTE (3.5.5.b)

PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

10.7. OTHER MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- FERTILIZERS AND LIME
- PESTICIDES AND/OR HERBICIDES
- DIESEL AND GASOLINE
- MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

11. NON-STORMWATER DISCHARGES (3.5.9)

11.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE CONSTRUCTION OF THIS PROJECT (CHECK ALL THAT APPLY):

- DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER.
- WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE.
- WATER USED TO CONTROL DUST. (3.5.3.1.n)
- POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE.
- UNCONTAMINATED GROUNDWATER OR SPRING WATER.
- FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS.
- OTHER: \_\_\_\_\_

11.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.

11.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.

11.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

11.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.i)?

- YES  NO

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER: \_\_\_\_\_

12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 5.1)

12.1. SPILL PREVENTION (3.5.5.c)

12.1.1. CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ON-SITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE TANKS WITH AGGREGATE STORAGE CAPACITY IN EXCESS OF 1,320 GALLONS SHALL HAVE SECONDARY CONTAINMENT.

12.1.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY TDOT SPECIAL PROVISION 107FP (REGARDING WATER QUALITY AND STORM WATER PERMITS) AND THE LAW.

12.1.3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ON-SITE AND A COPY PROVIDED TO THE CONSTRUCTION ENGINEER.

12.2. MATERIAL MANAGEMENT

12.2.1. HOUSEKEEPING

ONLY NEEDED PRODUCTS WILL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

12.2.2. HAZARDOUS MATERIALS

PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RE-SEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL pH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE

PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

12.3. PRODUCT SPECIFIC PRACTICES

12.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

12.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY THE SOIL ANALYSIS. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

12.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF PER THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

12.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

12.4. SPILL MANAGEMENT

IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY:

12.4.1. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

12.4.2. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. AS APPROPRIATE, EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BOOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEAN UP PURPOSES.

12.4.3. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

12.4.4. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

12.4.5. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.

12.4.6. IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.

12.4.7. IF A SPILL OCCURS THE CONTRACTOR'S SITE SUPERINTENDENT SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE CONSTRUCTION ENGINEER AND/OR PROJECT ENGINEER. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

**STORMWATER  
POLLUTION  
PREVENTION  
PLAN**

12.4.8. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT SHALL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

12.5. SPILL NOTIFICATION (5.1)

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO, OR MORE THAN A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:

12.5.1. THE PROJECT ENGINEER IS RESPONSIBLE FOR NOTIFYING THE REGIONAL PROJECT DEVELOPMENT OFFICE (E.G. TRANSPORTATION ENVIRONMENTAL STUDIES SPECIALIST) AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.

12.5.2. THE CITY WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.

12.5.3. IN ADDITION TO ANY FOLLOW UP NOTIFICATIONS REQUIRED BY FEDERAL LAW, A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE.

12.5.4. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

13. RECORD-KEEPING

13.1. REQUIRED RECORDS

THE CITY OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (3.5.3.1.m) (4.1.5.) (6.2.1):

13.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.

13.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE.

13.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

13.1.4. RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES.

13.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS.

13.1.6. COPY OF SITE EPSC INSPECTOR'S CERTIFICATION AND/OR LICENSING

13.1.7. COPY OF REQUIRED SOIL ANALYSIS

13.1.8. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS.

13.2. RAINFALL MONITORING PLAN (3.5.3.1.o):

13.2.1. EQUIPMENT

AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.

13.2.2. LOCATION

THE RAIN GAUGE WILL BE LOCATED AT OR ALONG THE PROJECT SITE, AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC.). AT LEAST ONE RAIN GAUGE PER LINEAR MILE IS REQUIRED ALONG (AS MEASURED ALONG THE CENTERLINE OF THE PRIMARY

ALIGNMENT) THE PROJECT WHERE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING IS ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED.

13.2.3. METHODS

RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

13.2.4. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

13.2.5. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDE DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON THE TDOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.

13.2.6. IF THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.

13.2.7. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL, WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

13.3. KEEPING PLANS CURRENT (3.4)

13.3.1. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

13.3.2. THE STAGES DEPICTED WITHIN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE STAGES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS MUST BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

13.3.3. THE EPSC INSPECTOR OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

13.3.3.1. WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT WOULD BE EXPECTED TO HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE SWPPP;

13.3.3.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES

OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;

13.3.3.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

13.3.3.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

13.3.3.5. WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS.

13.3.3.6. ALL SWPPP REVISION(S) SHALL BE RECORDED WITHIN 7 DAYS BY THE PROJECT EPSC INSPECTOR.

13.3.3.7. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER COORDINATION.

13.4. MAKING PLANS ACCESSIBLE

13.4.1. THE CITY WILL RETAIN A COPY OF THIS SWPPP (INCLUDING A COPY OF THE "DOCUMENTATION AND PERMITS" BINDER AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO TDEC AND THE PUBLIC) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF FINAL STABILIZATION. THE CITY WILL HAVE A COPY OF THE SWPPP AVAILABLE AT THE LOCATION WHERE WORK IS OCCURRING ON-SITE FOR THE USE OF OPERATORS AND THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE SWPPP WHENEVER THEY ARE ON THE CONSTRUCTION SITE (6.2).

13.4.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA, THE CITY OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (3.3.3) (6.2.1):

13.4.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

13.4.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

13.4.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

13.4.2.4. THE LOCATION OF THE SWPPP.

13.4.3. ALL INFORMATION DESCRIBED IN SECTION 13.4.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

13.5. NOTICE OF TERMINATION (8.0)

13.5.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, THE CITY ENGINEER WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.

13.5.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE

13.5.2.1. ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN FINALLY STABILIZED; AND

13.5.2.2. ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES



- THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND
- 13.5.2.3. ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND
  - 13.5.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND
  - 13.5.2.5. THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND
  - 13.5.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND
  - 13.5.2.7. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

13.6. RETENTION OF RECORDS (6.2)

TDOT WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE NOT WAS FILED.

14. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (7.7.5)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED BY ME, OR UNDER MY DIRECTION OR SUPERVISION. THE SUBMITTED INFORMATION IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT, AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

Paul P. Holzer  
 AUTHORIZED PERSONNEL SIGNATURE (3.3.1)

Paul P. Holzer  
 PRINTED NAME

Director of Engineering  
 TITLE

3/2/2022  
 DATE

15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE REVIEWED THIS DOCUMENT, ANY ATTACHMENTS, AND THE SWPPP REFERENCED ABOVE. BASED ON MY INQUIRY OF THE CONSTRUCTION SITE OWNER/DEVELOPER IDENTIFIED ABOVE AND/OR MY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOR ASSEMBLING THIS NOI AND SWPPP, I BELIEVE THE INFORMATION SUBMITTED IS ACCURATE. I AM AWARE THAT THIS NOI, IF APPROVED, MAKES THE ABOVE-DESCRIBED CONSTRUCTION ACTIVITY SUBJECT TO NPDES PERMIT NUMBER TNR100000, AND THAT CERTAIN OF MY ACTIVITIES ONSITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

\_\_\_\_\_  
 AUTHORIZED OPERATOR (CONTRACTOR) SIGNATURE (3.3.1)

\_\_\_\_\_  
 PRINTED NAME

\_\_\_\_\_  
 TITLE

\_\_\_\_\_  
 DATE

16. ENVIRONMENTAL PERMITS (9.0)

LIST ALL ENVIRONMENTAL PERMITS AND EXPIRATION DATES FOR PROJECT (TO BE COMPLETED AT THE ENVIRONMENTAL PRECONSTRUCTION MEETING BY TDOT CONSTRUCTION OR THEIR DULY AUTHORIZED REPRESENTATIVE):

ENVIRONMENTAL PERMITS			
PERMIT	YES OR NO	PERMIT OR TRACKING NO.	EXPIRATION DATE*
TDEC ARAP	YES	TBD	
CORPS OF ENGINEERS (USACE)	YES	NWP-14 (non-PCN)	3/14/2026
TVA 26A	NO		
TDEC CGP	YES	TBD	
OTHER: FEMA CLOMR	YES	20-04-4889R	N/A

\*THE TDOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.



17. OUTFALL TABLE (3.5.1.d, 5.4.1.g)

EPSC STAGE	OUTFALL LABEL	SUB OUT-FALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 DRAINAGE AREA (AC)	STAGE 2 DRAINAGE AREA (AC)	STAGE 3 DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING RESOURCE (DOT EBR LABEL) OR OTHER	COMMENTS
1	1	-	NCONN 500+65, RT	3.6	0.12			N/A	HARPETH RIVER (STR-1)	
1	2	-	NCONN 502+79, RT	3.3	0.36			N/A	HARPETH RIVER (STR-1)	
1	3	-	COFHP 25+95, LT	4.9	2.52			N/A	HARPETH RIVER (STR-1)	
1	4	-	COFHP 27+45, LT	4.6	0.05			N/A	HARPETH RIVER (STR-1)	
1	5	-	COFHP 27+45, RT	4.6	0.05			N/A	HARPETH RIVER (STR-1)	
1	6	-	HFB 108+65, CL	2.8	1.48			N/A	HARPETH RIVER (STR-1)	
1	7	-	COFHP 33+83, LT	4.5	0.36			N/A	HARPETH RIVER (STR-1)	
1	8	-	COFHP 36+93, LT	1.6	0.27			N/A	HARPETH RIVER (STR-1)	
1	9	-	COFHP 36+35, LT	3.5	0.27			N/A	HARPETH RIVER (STR-1)	
1	10	-	COFHP 37+15, LT	5.9	0.69			N/A	HARPETH RIVER (STR-1)	
1	11	-	COFIU 100+65, RT	4.0	0.70			N/A	HARPETH RIVER (STR-1)	
1	12	-	COFIU 104+13, LT	3.0	0.22			N/A	HARPETH RIVER (STR-1)	
2	1	-	NCONN 500+65, RT	3.6		0.12		N/A	HARPETH RIVER (STR-1)	
2	2	-	NCONN 502+79, RT	3.3		0.36		N/A	HARPETH RIVER (STR-1)	
2	3	-	COFHP 25+95, LT	4.9		2.52		N/A	HARPETH RIVER (STR-1)	
2	4	-	COFHP 27+45, LT	4.6		0.05		N/A	HARPETH RIVER (STR-1)	
2	5	-	COFHP 27+45, RT	4.6		0.05		N/A	HARPETH RIVER (STR-1)	
2	6	-	HFB 108+65, CL	0.8		1.48		N/A	HARPETH RIVER (STR-1)	
2	7	-	COFHP 33+83, LT	4.5		0.36		N/A	HARPETH RIVER (STR-1)	
2	8	-	COFHP 36+36, LT	1.6		0.13		N/A	HARPETH RIVER (STR-1)	
2	8	A	COFHP 33+90, RT	1.4		1.30		N/A	HARPETH RIVER (STR-1)	
2	9	-	COFHP 36+35, LT	6.7		0.17		N/A	HARPETH RIVER (STR-1)	
2	9	A	COFHP 37+58, RT	1.3		0.50		N/A	HARPETH RIVER (STR-1)	
2	9	B	COFHP 36+95, LT	1.0		0.01		N/A	HARPETH RIVER (STR-1)	
2	9	C	COFHP 37+75, RT	1.0		0.01		N/A	HARPETH RIVER (STR-1)	
2	9	D	COFHP 38+34, RT	1.0		0.01		N/A	HARPETH RIVER (STR-1)	
2	10	-	COFHP 37+15, LT	5.9		0.48		N/A	HARPETH RIVER (STR-1)	
2	10	A	COFIU 102+55, LT	1.7		0.21		N/A	HARPETH RIVER (STR-1)	
2	11	-	COFIU 100+65, RT	4.0		0.26		N/A	HARPETH RIVER (STR-1)	
2	11	A	COFIU 102+50, RT	2.8		0.44		N/A	HARPETH RIVER (STR-1)	
2	12	-	COFIU 104+13, LT	3.0		0.22		N/A	HARPETH RIVER (STR-1)	
3	3	-	COFHP 25+95, LT	4.9			4.82	N/A	HARPETH RIVER (STR-1)	
3	6	-	HFB 108+65, CL	0.8			1.48	N/A	HARPETH RIVER (STR-1)	
3	7	-	COFHP 33+83, LT	4.5			0.36	N/A	HARPETH RIVER (STR-1)	
3	8	-	COFHP 36+36, LT	1.6			0.13	N/A	HARPETH RIVER (STR-1)	



HISTORIC  
FRANKLIN  
TENNESSEE

CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

**STORMWATER  
POLLUTION  
PREVENTION  
PLAN**

EPSC STAGE	OUTFALL LABEL	SUB OUT-FALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 DRAINAGE AREA (AC)	STAGE 2 DRAINAGE AREA (AC)	STAGE 3 DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING RESOURCE (TDOT EBR LABEL) OR OTHER	COMMENTS
3	8	A	COFHP 33+90, RT	1.4			1.30	N/A	HARPETH RIVER (STR-1)	
3	11	-	COFIU 100+65, RT	4.0			1.00	N/A	HARPETH RIVER (STR-1)	
3	11	A	COFIU 102+50, RT	2.8			1.18	N/A	HARPETH RIVER (STR-1)	
3	12	-	COFIU 104+13, LT	3.0			0.22	N/A	HARPETH RIVER (STR-1)	

ALL UNUSED FIELDS WITHIN THE OUTFALL TABLE ARE TO BE SHADED, HATCHED, OR REMOVED TO INDICATE THEIR NON-USAGE.

INFORMATION ONLY; NOT FOR BIDDING



HISTORIC  
FRANKLIN  
TENNESSEE

CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

**STORMWATER  
POLLUTION  
PREVENTION  
PLAN**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B1
CONST.	2022	TAP-9305(32)	B1

LIST OF DRAWINGS DWG. NO. LAST REV. DATE

LAYOUT OF BRIDGE	B1
GENERAL NOTES AND ESTIMATED QUANTITIES	B2
FOUNDATION DATA	B3
SUPERSTRUCTURE	B4
SUPERSTRUCTURE DETAILS	B5
SUPERSTRUCTURE DETAILS	B6
FRAMING PLAN	B7
PRESTRESSED BULB-TEE DETAILS SPANS 1 & 3	B8
PRESTRESSED BULB-TEE DETAILS SPAN 2	B9
ABUTMENT	B10
ABUTMENT 1 DETAILS	B11
ABUTMENT 2	B12
ABUTMENT 2 DETAILS	B13
PIERS 1 & 2	B14
PIER DETAILS	B15
BRIDGE RAIL DETAILS	B16
BRIDGE RAIL DETAILS	B17
BRIDGE RAIL DETAILS	B18
BRIDGE SIGN DETAILS	B19
BRIDGE SIGN DETAILS	B20
FINAL FOUNDATION DATA	B21
BILL OF STEEL	B22

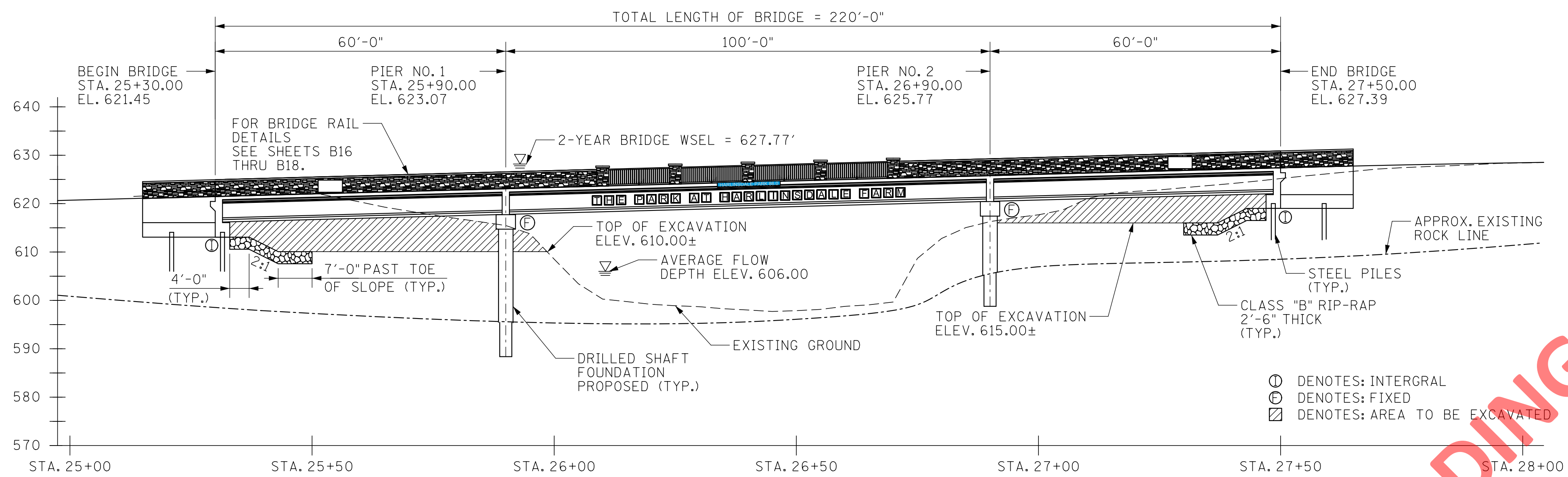
LIST OF DRAWINGS DWG. NO. LAST REV. DATE

STD. PRECAST PRESTRESSED BRIDGE DECK	STD-4-1	04-08-05
PANELS GENERAL DETAILS		
STD. PRECAST PRESTRESSED BRIDGE DECK	STD-4-2	04-08-05
PANELS DESIGN CRITERIA		
STD. PRECAST PRESTRESSED BRIDGE DECK	STD-4-3	03-02-02
PANELS GENERAL DETAILS		
STD. PRECAST PRESTRESSED BRIDGE DECK	STD-4-4	06-10-96
PANELS CONSTRUCTION DETAILS		
STANDARD PILE DETAILS	STD-5-1	10-25-93
STANDARD PILE DETAILS	STD-5-2	05-01-14
STANDARD SEISMIC DETAILS	STD-6-1	11-01-10
STD. REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	03-01-22
STANDARD DETAILS AND INTERMEDIATE DIAPHRAGM DETAILS FOR BULB-TEE BEAMS	STD-14-1	04-15-20

LIST OF SPECIAL PROVISIONS DWG. NO. LAST REV. DATE

DRILLED SHAFT SPECIFICATIONS	625	09-01-21
------------------------------	-----	----------

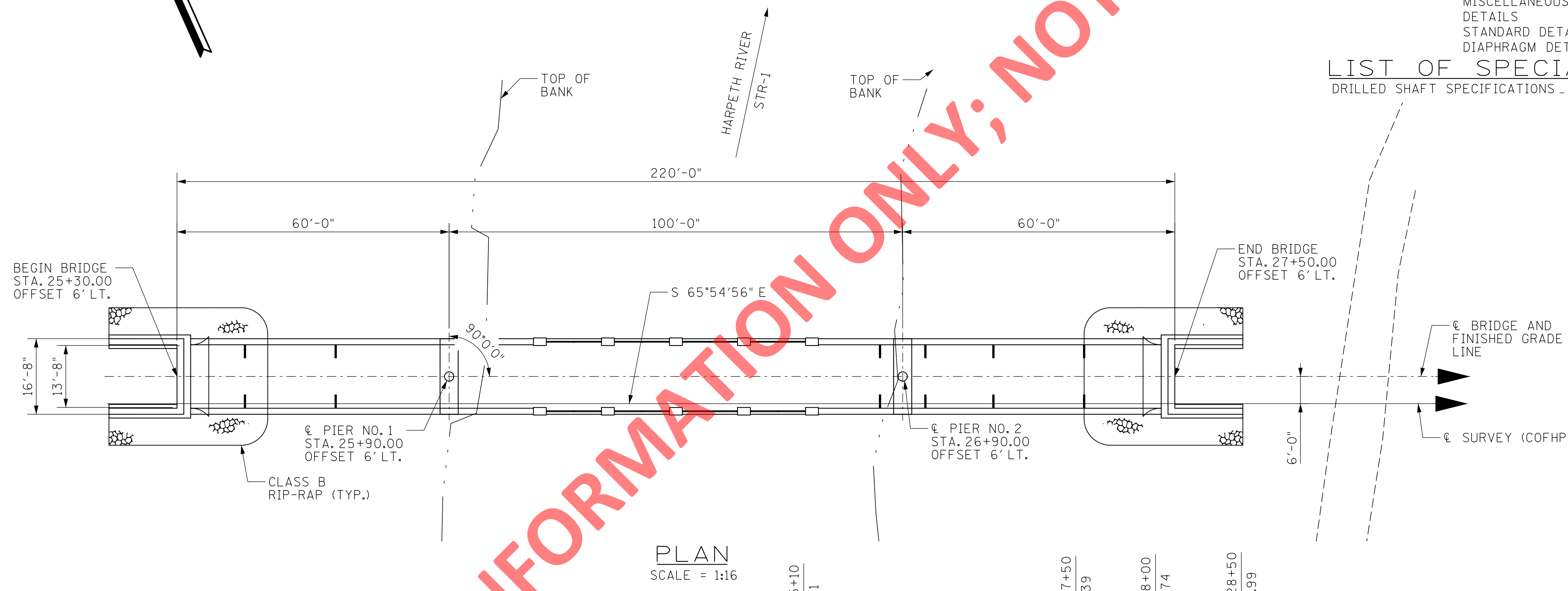
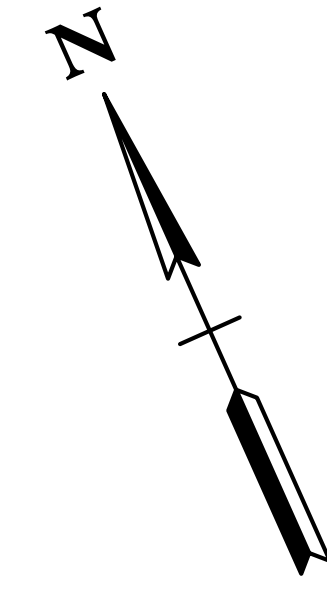
BRIDGE DECK DRAIN LOCATIONS	
SCUPPER LOCATIONS	
25+45.00 LR. AND RT.	
25+65.00 LR. AND RT.	
26+85.00 LR. AND RT.	
26+95.00 LR. AND RT.	
27+10.00 LR. AND RT.	
27+30.00 LR. AND RT.	



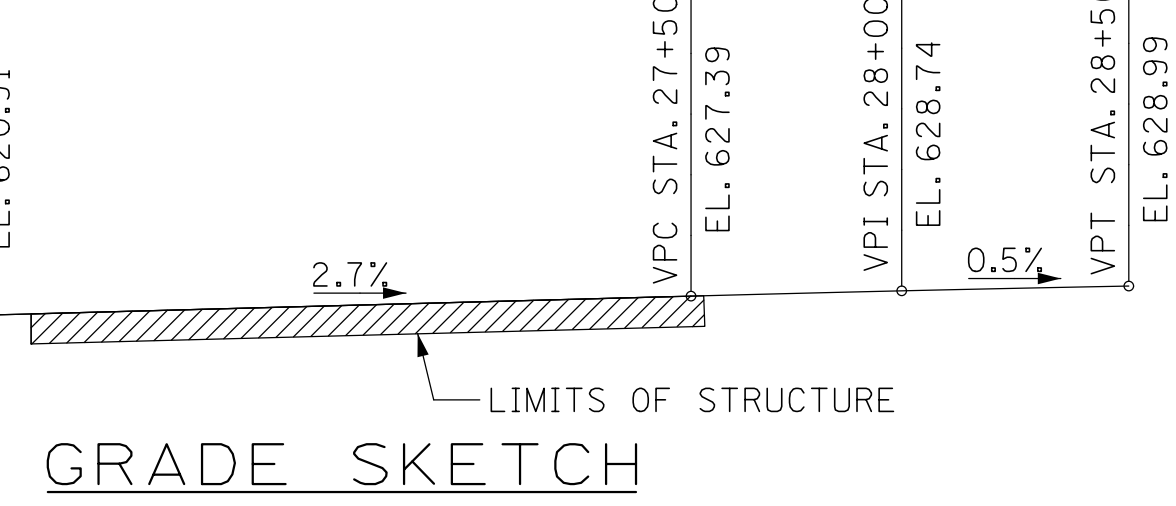
ELEVATION SCALE = 1:16

HYDRAULIC DATA

DESIGN DISCHARGE (2 YR)	=	9,790 CFS
DESIGN DISCHARGE (100 YR)	=	26,400 CFS
AREA BELOW 2-YEAR EL.	=	2,386.69 SQ. FT.
AREA BELOW 100-YEAR EL.	=	3,830.96 SQ. FT.
2-YEAR VELOCITY	=	1.86 FT/SEC
2-YEAR BRIDGE WSEL	=	627.77'
100-YEAR VELOCITY	=	1.36 FT/SEC
100-YEAR BRIDGE WSEL	=	634.51'
ROADWAY OVERTOPPING EL.	=	621.45'



PLAN SCALE = 1:16

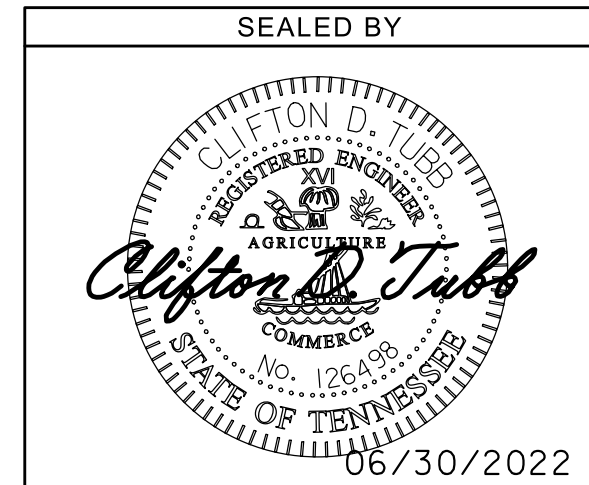


GRADE SKETCH

NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITION ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERT, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION

NOTE: THE FINISHED GRADE LINE OCCURS ALONG THE CENTERLINE OF BRIDGE (6'-0" OFFSET LEFT OF THE CENTERLINE OF SURVEY)

COFHP OVER HARPETH RIVER STA. 26+40.00



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

CITY OF FRANKLIN ENGINEERING DEPARTMENT

LAYOUT OF BRIDGE

**GENERAL NOTES**

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (JANUARY 1, 2021 EDITION).

DESIGN SPECIFICATIONS: 8TH EDITION (2017) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2ND EDITION (2009) LRFD PEDESTRIAN BRIDGE DESIGN SPECIFICATION WITH INTERMS, AND THE 2ND EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.

LOADING: H-10 LIVE LOADING & PEDESTRIAN LOADING; SEISMIC CATEGORY SITE CLASS "C" WITH  $A_s = 0.106, S_{D5} = 0.255, S_{D1} = 0.134$  (1000 YEAR RETURN PERIOD)

CONCRETE: TO BE CLASS "A" (CAST IN PLACE) F'c = 3000 PSI EXCEPT AS NOTED OTHERWISE.

CONCRETE FOR BENTS TO BE CLASS "A" F'c = 4000 PSI.

BRIDGE DECKS: CLASS "D" CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.

BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD 1 IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.

BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS MAY BE REMAIN-IN-PLACE STEEL. FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO MAIN STRUCTURAL MEMBERS OR REINFORCING STEEL. TEMPORARY ERECTION DIAPHRAGMS MUST BE USED AT THE ENDS OF PRECAST CONCRETE GIRDERS WHERE END DIAPHRAGMS, SUPPORT DIAPHRAGMS, OR ABUTMENT ENDWALLS ARE TO BE POURED CONCURRENTLY WITH THE DECK AND SHALL BE PROVIDED ELSEWHERE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS TO PREVENT GIRDER ROTATION. SEE STANDARD DRAWINGS STD-4-1 THRU 4, STD-14-1, AND ARTICLE 604.05 OF THE STANDARD SPECIFICATIONS.

REINFORCING STEEL: SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTION 604 AND 907 OF THE STANDARD SPECIFICATIONS.

FOUNDATION PREPARATION: SEE SECTION 204 OF THE STANDARD SPECIFICATIONS. IF IT IS DETERMINED THAT COFFERDAMS ARE REQUIRED, THEY SHALL BE IN ACCORDANCE WITH SECTION 204.09 OF THE STANDARD SPECIFICATIONS.

ABUTMENTS ON FILL: THE FILLS AT THE ENDS OF THE BRIDGE SHALL BE IN PLACE AND THOROUGHLY COMPACTED BEFORE ANY ABUTMENT PILES ARE DRIVEN.

END-BEARING STEEL PILES: TO BE HP10X42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 77 TONS FOR THE ABUTMENTS. ALL PILES SHALL BE ASTM A709 GRADE 50 STEEL.

PILE TIPS: PILES SHALL BE EQUIPPED WITH CAST STEEL POINTS. ALSO, SEE STANDARD DRAWING STD-5-1 FOR ADDITIONAL NOTES.

DRILLED SHAFTS: SEE SPECIAL PROVISION 625 REGARDING DRILLED SHAFT SPECIFICATIONS.

SLAB OVERHANGS SUPPORTED BY BULB-TEE BEAMS: IT IS RECOMMENDED THAT SPACING OF OVERHANG BRACKETS FOR BULB-TEE BEAMS NOT EXCEED 2'-0" CENTER TO CENTER.

SHOP DRAWINGS: SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS.

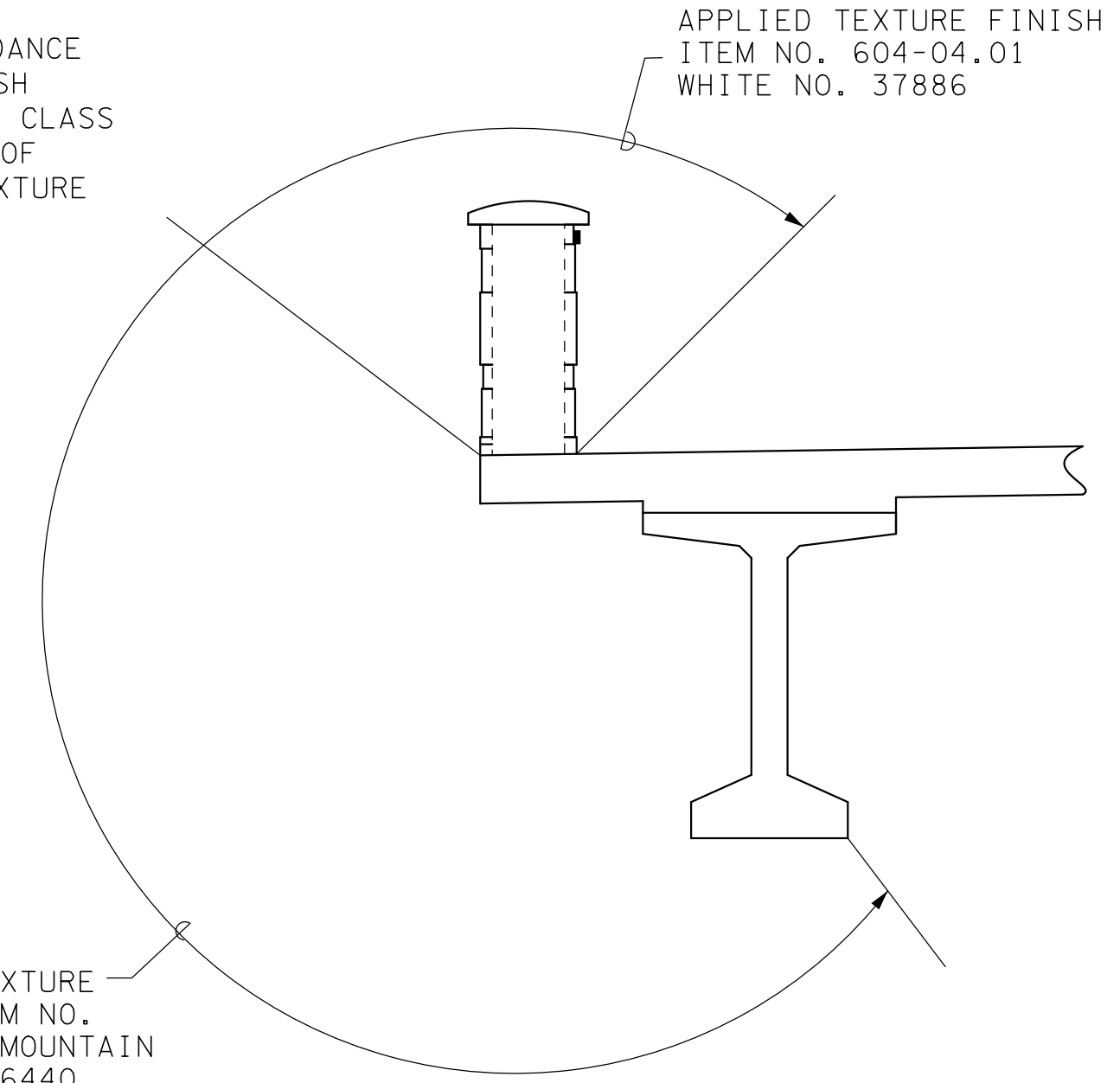
BRIDGE RAIL SYSTEM: BUILD BRIDGE RAILINGS ACCORDING TO SHEETS B16 THROUGH B18. THE RAILING SHALL BE FORMED AND CAST PLUMB, NOT PERPENDICULAR TO THE SLAB. THE DIMENSIONS AT THE TRAFFIC FACE SHALL BE KEPT CONSTANT, WITH VARIATION DUE TO CROSS-SLOPE ACCOMMODATED AT THE REAR FACE.

RIP-RAP: MACHINED RIP-RAP SHALL BE CLASS "B" IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO 709-05.08

VALUE ENGINEERING ALTERNATE BRIDGE DESIGN CRITERIA: ALTERNATE BRIDGE DESIGN PROPOSALS MAY NOT DIMINISH THE FUNCTIONAL OR STRUCTURAL EQUIVALENCY OF THE BRIDGE AND MUST MEET OR EXCEED THE CAPACITIES OF THE CONTRACT PLANS STRUCTURE AT ALL LIMIT STATES IN AASHTO TABLE 3.4.1-1. ADDITIONALLY, THE WATERWAY OPENING AND FLOOD CLEARANCES MAY NOT BE REDUCED. FOR GRADE SEPARATIONS, THE HORIZONTAL CLEARANCES MAY NOT BE REDUCED, NOR MAY THE VERTICAL CLEARANCES BE LESS THAN THE MINIMUM ACCEPTABLE FOR THE TYPE FACILITY CROSSED.

FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.21 OF THE STANDARD SPECIFICATIONS. A CLASS I FINISH FOLLOWED BY AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS II FINISH. NO TEXTURE FINISH SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT THE BRIDGE SITE. THE APPLIED TEXTURE FINISH SHALL BE MEASURED AND PAID FOR UNDER ITEM NO. 604-04.01

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B2
CONST.	2022	TAP-9305(32)	B2



**APPLIED TEXTURE FINISH SKETCH**

NOTE: IN ADDITION TO THE SURFACES SHOWN IN THE APPLIED TEXTURE FINISH SKETCH, ALL EXPOSED SURFACES OF THE WINGWALLS, ABUTMENT BEAMS, PIERS, AND EXTERIOR PORTIONS OF THE ENDWALLS SHALL RECEIVE AN APPLIED TEXTURE FINISH, (GRAY AMS-STD-595A, COLOR NO. 36440).

**ESTIMATED BRIDGE QUANTITIES**

ITEM NO.	DESCRIPTION	UNIT	TOTAL	SUPERSTRUCTURE	ABUT. NO. 1	PIER 1	PIER 2	ABUT. NO. 2
(1)	204-02.01 DRY EXCAVATION (BRIDGES)	C.Y.	2,296		1,664			632
(17)	204-04.01 ROCK EXCAVATION (BRIDGES)	C.Y.	8			2	6	
	204-05.01 CORE DRILLING AND SAMPLING	L.F.	54			22	32	
(4)	303-01.02 GRANULAR BACKFILL (BRIDGES)	TON	288		144			144
	604-02.03 EPOXY COATED REINFORCING STEEL	LB.	35,886	33,430	1,228			1,228
(6)	604-03.01 CLASS A CONCRETE (BRIDGES)	C.Y.	82		31	10	9	32
	604-03.02 STEEL BAR REINFORCEMENT (BRIDGES)	LB.	11,514	349	3,467	2,228	1,976	3,494
	604-03.09 CLASS D CONCRETE (BRIDGE DECK)	C.Y.	110	106	2			2
(19)	604-04.01 APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	1,160	979	58	33	31	59
(9)(19)	604-04.10 GRAFFITI PROTECTION SYSTEM (ALL VISIBLE SURFACES)	S.Y.	1,160	979	58	33	31	59
	606-02.03 STEEL PILES (10 INCH)	L.F.	133		76			57
(7)	606-02.06 PILE TIPS (STEEL PILES, 10 INCH)	EACH	10		5			5
(2)(8)	615-01.10 PRESTRESSED CONCRETE BULB TEE BEAM (6" WEB(BT-54)	L.F.	429					
(18)(19)	620-03.12 CONCRETE PARAPET (PEDESTRIAN RAIL)	L.F.	500					
(12)	625-02.01 DRILLED SHAFT-SOIL (4'-0")	V.F.	24			15	9	
(12)	625-02.13 DRILLED SHAFT-ROCK (3'-6")	V.F.	34			12	22	
(13)	625-02.25 DRILLED SHAFT CASING-PERMANENT (4'-0" INSIDE DIA. STEEL)	V.F.	24			15	9	
(11)(15)	625-02.40 DRILLED SHAFT CONCRETE	C.Y.	24			12	12	
	625-02.44 DRILLED SHAFT REINFORCING STEEL	LB.	7,437			3,413	4,024	
(14)	625-02.46 SONIC LOGGING TESTING	EACH	2			1	1	
(10)	709-05.08 MACHINED RIP-RAP (CLASS B)	TON	240		120			120
(3)	710-09.01 6" PERFORATED PIPE WITH VERTICAL DRAIN SYSTEM	L.F.	78		39			39
	710-09.02 6" PIPE UNDERDRAIN	L.F.	40		20			20
(20)	713-16.22 SIGNS (HARLINSDALE PARK 86.0)	EACH	1					
(16)(19)	714-01.01 STRUCTURAL LIGHTING (BRIDGE NO.)	LS	1					

**FOOTNOTES**

- (1) NOTE: EXCAVATION BASED ON FINAL PROFILE.
- (2) NOTE: COST OF ELASTOMERIC PADS AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PRESTRESSED BEAM.
- (3) NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN THE UNIT PRICE BID FOR PERFORATED PIPE.
- (4) NOTE: GRANULAR BACKFILL SHALL BE CLASS "A" GRADING "D" MATERIAL. SEE STANDARD DRAWING NO. STD-10-1.
- (5) NOTE: THE COST OF BITUMINOUS-FIBERBOARD AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS.
- (6) NOTE: THE COST OF ALL MATERIALS AND LABOR NECESSARY FOR THE INSTALLATION OF 12 ANCHOR BOLT ASSEMBLIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "A" CONCRETE (BRIDGES), ITEM NO. 604-03.01.
- (7) NOTE: THE UNIT PRICE BID FOR CAST STEEL POINTS SHALL INCLUDE FURNISHING AND INSTALLATION TO THE PILES.
- (8) NOTE: INTERMEDIATE DIAPHRAGMS SHALL BE PAID FOR IN ACCORDANCE WITH STANDARD DRAWING STD-14-1.
- (9) NOTE: COST OF GRAFFITI PROTECTION SYSTEM TO INCLUDE ANTI-GRAFFITI COATING APPLIED TO ALL VISIBLE SURFACES OF THE STRUCTURE. GRAFFITI PROTECTION SYSTEM SHALL CONSIST OF SHERWIN WILLIAMS ANTI-GRAFFITI COATING B97C00150 OR AN APPROVED EQUIVALENT SUBMITTED TO AND APPROVED BY THE CITY OF FRANKLIN ENGINEERING DEPARTMENT.
- (10) NOTE: INCLUDES COST OF ALL LABOR AND MATERIALS ASSOCIATED WITH THE INSTALLATION CLASS "B" RIP-RAP ON THE SLOPES AT ABUTMENTS UNDER THE BRIDGE ABUTMENTS AS SHOWN ON SHEET B1.
- (11) NOTE: DRILLED SHAFT CONCRETE INCLUDES ALL COST FOR MATERIALS, CONCRETE PLACEMENT, AND INSTALLATION OF STEEL PILES FOR SONIC LOGGING TESTING IN ACCORDANCE WITH TDOT SPECIAL PROVISIONS 625. SONIC LOGGING TESTING TO BE PERFORMED AT EACH SHAFT LOCATION.
- (12) NOTE: THE COST OF THE FOLLOWING ITEMS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NOS. 625-02.01 AND 625-02.13:
  - 1. DRILLING THE SHAFT
  - 2. CLEANING AND INSPECTING THE SHAFT
  - 3. INSTALLATION OF ALL CASING.
  - 4. INSTALLATION OF 1.5" DIAMETER PIPES IN SHAFTS FOR CSL TESTING.
  - (4) CSL TUBES ARE REQUIRED PER SHAFT AT PIERS 1 AND 2.
- (13) NOTE: THE CONTRACTOR SHALL USE PERMANENT CASING, STRUCTURAL CAPACITY OF CASING IS NOT INCORPORATED INTO DESIGN.
- (14) THE CSL TESTING FIRM MUST BE PRESENT FOR ALL SHAFT POURS. CSL TESTING WITH THE ADDITION OF 3D TOMOGRAPHY SHALL BE PERFORMED ON ALL SHAFTS. THE CSL TESTING FIRM MUST BE PRESENT FOR ALL SHAFT POURS.
- (15) DRILLED SHAFT CONCRETE SHALL BE CLASS "SH-SCC".
- (16) NOTE: LUMP SUM FOR STRUCTURAL LIGHTING INCLUDES COST OF ALL LABOR AND MATERIALS FOR THE INSTALLATION. SEE SHEETS L1-L5, SHEET B18, SPECIAL PROVISION REGARDING JUNCTION BOX, CAST BRONZE, EMBEDDED IN STRUCTURE, AND SPECIAL PROVISION REGARDING LED LUMINAIRES, 15 WATT.
- (17) NOTE: SEE ARTICLE 625.31 OF THE SPECIAL PROVISION. THE INTENT IS FOR THE CORE DRILLING AND SAMPLING TO BE PERFORMED PRIOR TO SHAFT DRILLING. SUBJECT TO THE APPROVAL FROM THE GEOTECHNICAL ENGINEER, THESE CORES ARE TO BE USED TO PRE-DETERMINE ACCEPTABLE SHAFT TIP ELEVATIONS SHOWN ON THE PLANS. CORES SHALL EXTEND 10 FT. BELOW ESTIMATED TIP ELEVATIONS SHOWN ON THE PLANS. 1 CORE IS REQUIRED PER SHAFT.
- (18) COST OF LOGOS (TRAIL LOGO AND CITY OF FRANKLIN LOGO) ON BRIDGE RAILING TO BE INCLUDED IN THE COST OF THE CONCRETE PARAPET, ITEM NO. 620-03.12.
- (19) AESTHETIC, COLOR, AND STYLE CHOICES CAN BE MODIFIED. FINAL SELECTIONS WILL BE MADE BY THE CITY OF FRANKLIN DURING THE PRODUCT/SHOP DRAWING SUBMITTAL AND REVIEW PROCESS.
- (20) INCLUDES COST OF ALL LABOR AND MATERIALS ASSOCIATED WITH THE INSTALLATION OF SIGNS AS SHOWN ON SHEET B20. RIVER MILE MARKER SIGNS (HARLINSDALE PARK 86.0) SHALL BE MANUFACTURED AND PAID FOR BY THE CITY OF FRANKLIN. COST OF LABOR AND INSTALLATION FOR RIVER MILE MARKER SIGNS TO BE PAID FOR UNDER ITEM NO. 713-16.22.

6/30/2022 10:59:47 AM \nashville\str.benesch\local\Benesch\_Projects\Nashville\16020000S\16020001\00\Eng\Structures\DG\16020001\_Harlinsdale\_General Notes.dgn

SEALED BY

06/30/2022

COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

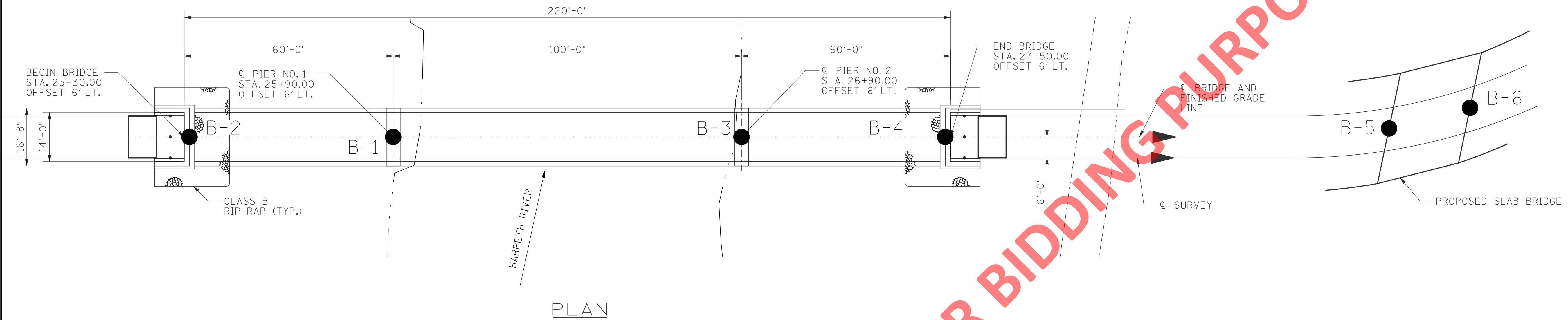


HISTORIC FRANKLIN TENNESSEE

CITY OF FRANKLIN ENGINEERING DEPARTMENT

GENERAL NOTES AND ESTIMATED QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B3
CONST.	2022	TAP-9305(32)	B3



PLAN

B-1					B-2					B-3					B-4							
ELEVATION	Stratum Depth (Ft)	Sample Type <sup>1</sup>	Sample Depth (FT) From To	Material Description	Elevation	Stratum Depth (Ft)	Sample Type <sup>*</sup>	Sample Depth (FT)	Material Description	ELEVATION	Stratum Depth (Ft)	Sample Type <sup>1</sup>	Sample Depth (FT) From To	Material Description	Elevation	Stratum Depth (Ft)	Sample Type <sup>*</sup>	Sample Depth (FT)	Material Description			
615.4	0.0	Auger		Clay: silty, brown, moist	622.0	0.0	1	3.5-5.0	Clay: silty, brown, firm to stiff, moist	617.0	0.0	Auger		Clay: silty, brown, moist	625.6	0.0			Clay: sandy, brown with weathered limestone pieces			
596.4	19.0	Auger		Clay: silty, brown, moist with limestone rock fragments			1	8.5-10.0			610.0	7.0			Weathered limestone layers			1		3.5-5.0		
595.4	20.0	Auger		Auger Refusal: begin coring	605.5	17.0	1	13.5-15.0			606.5	10.5	Auger		Auger Refusal: begin coring					1	8.5-10.0	
		NQ Rock Coring	20.0 25.0	LIMESTONE, tan and gray, medium bedded, dense-fine-grained, hard with vertical fracture and horizontal discontinuities			1	18.5-20.0	Clay: silty, brown with phosphate nodules, soft, very moist			NQ Rock Coring	10.5 15.7	Weathered brown limestone, soft					1	13.5-15.0		
590.4	25.0	NQ Rock Coring	25.0 30.0	LIMESTONE, gray, medium bedded, dense-fine-grained, hard	599.0	23.5	1	23.5-23.8	Clay: brown with limestone rock pieces	601.3	11.5			LIMESTONE, brown and gray, medium bedded, dense-fine-grained, hard	608.4	17.2					Auger Refusal at 17.2 ft Boring Terminated	
		NQ Rock Coring	30.0 35.0	Boring Terminated at 40.0 feet.	598.7	23.8	1		Auger Refusal at 23.8 ft Boring Terminated		15.7	NQ Rock Coring	15.7 20.7	LIMESTONE, gray, medium horizontal bedded, dense-fine-grained, hard with some thin weathered horizontal seams								
575.4	40.0	NQ Rock Coring	35.0 40.0								596.3		NQ Rock Coring	20.7 25.7								
											591.3	25.7	NQ Rock Coring	25.7 30.7	LIMESTONE, gray, medium horizontal bedded, dense-fine-grained, hard							Boring Terminated at 35.7 feet.
										581.3	35.7	NQ Rock Coring	30.7 35.7									
B-5					B-6																	
Elevation	Stratum Depth (Ft)	Sample Type <sup>*</sup>	Sample Depth (FT)	Material Description	Elevation	Stratum Depth (Ft)	Sample Type <sup>*</sup>	Sample Depth (FT)	Material Description													
629.2	0.0	1	3.5-5.0	Clay: silty brown	629.1	0.0	1	3.5-5.0	Clay: silty, brown, with trace fine sand													
621.7	7.5				616.6	12.5																
616.7	12.5	1	8.5-10.0	Clay: mottled tan and brown, silty with trace fine sand			1	8.5-10.0														
611.0	18.2	1	13.5-15.0	Sand: brown, silty transitions to plastic Clay			1	13.5-15.0	Clay: mottled tan and brown, silty													
				Auger Refusal at 18.2 ft Boring Terminated	610.4	18.7	1	18.5-18.7	Auger Refusal at 18.7 ft Boring Terminated													

6/30/2022 11:00:05 AM \\nashvillestr.benesch.local\Benesch\_Projects\Nashville\16020000S\16020001.00\Eng\_Structures\DGN\16020001\_Harlinsdale\_Boring\_Locations.dgn

SEALED BY

06/30/2022

COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

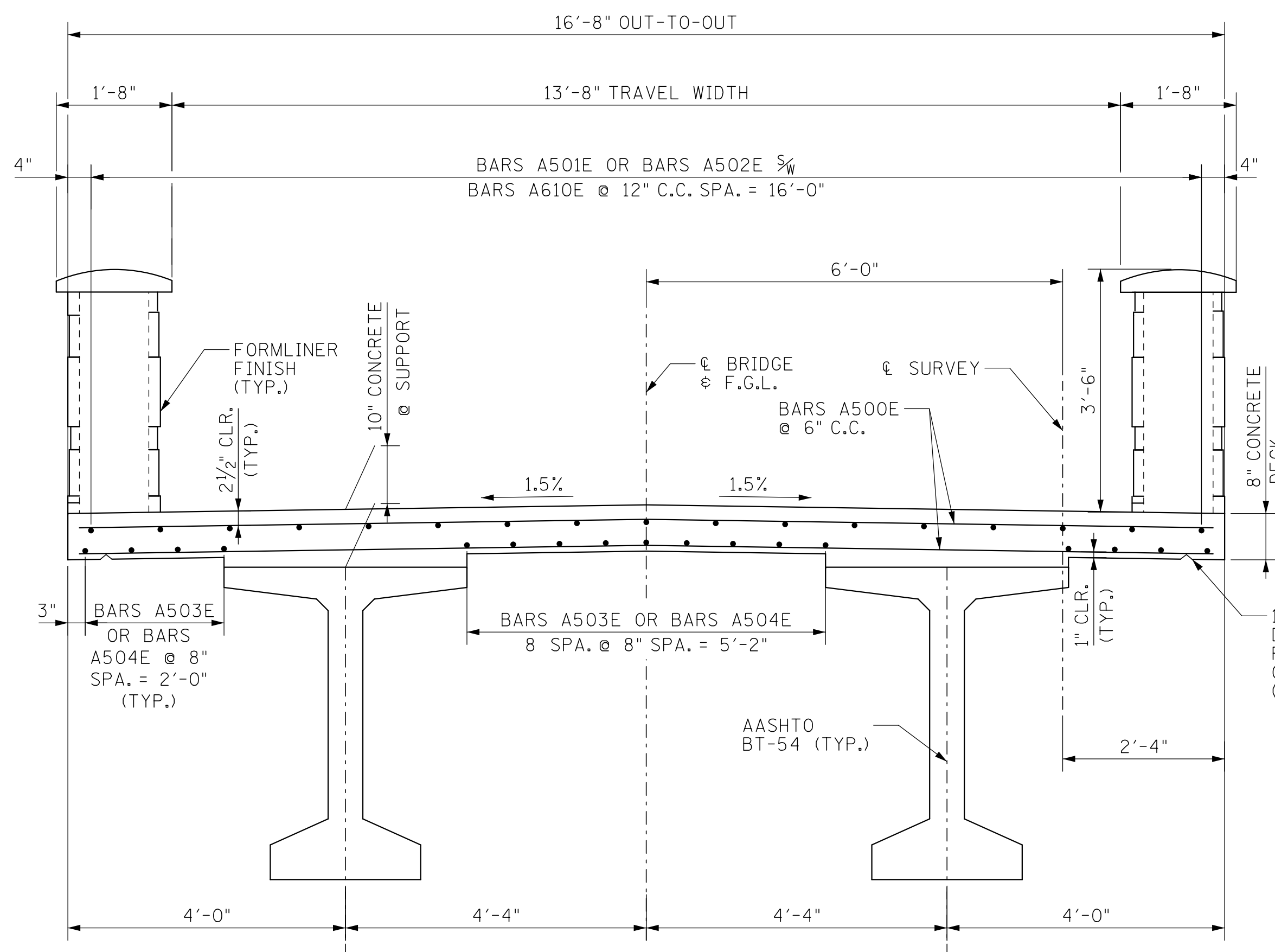


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

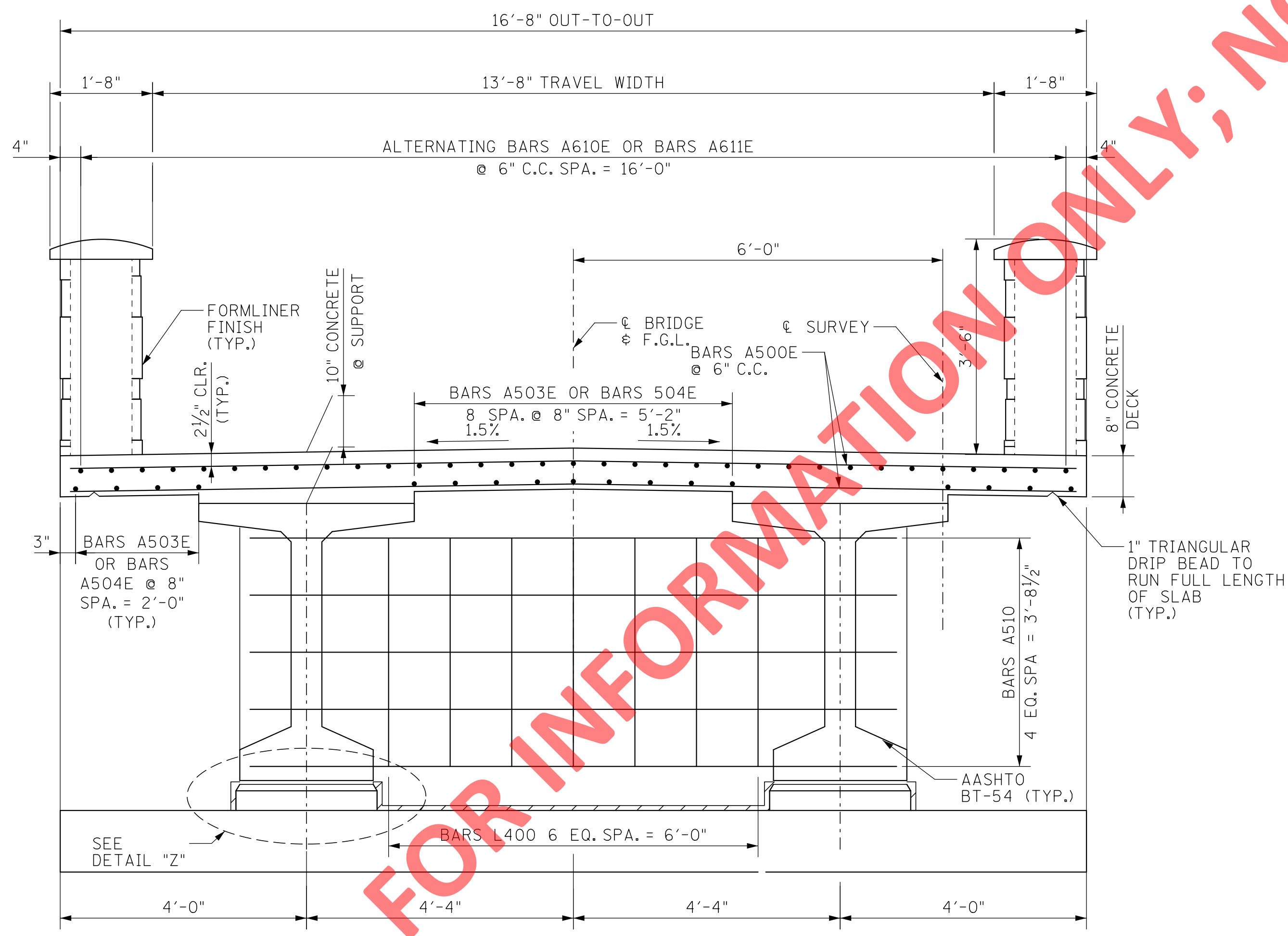
FOUNDATION DATA



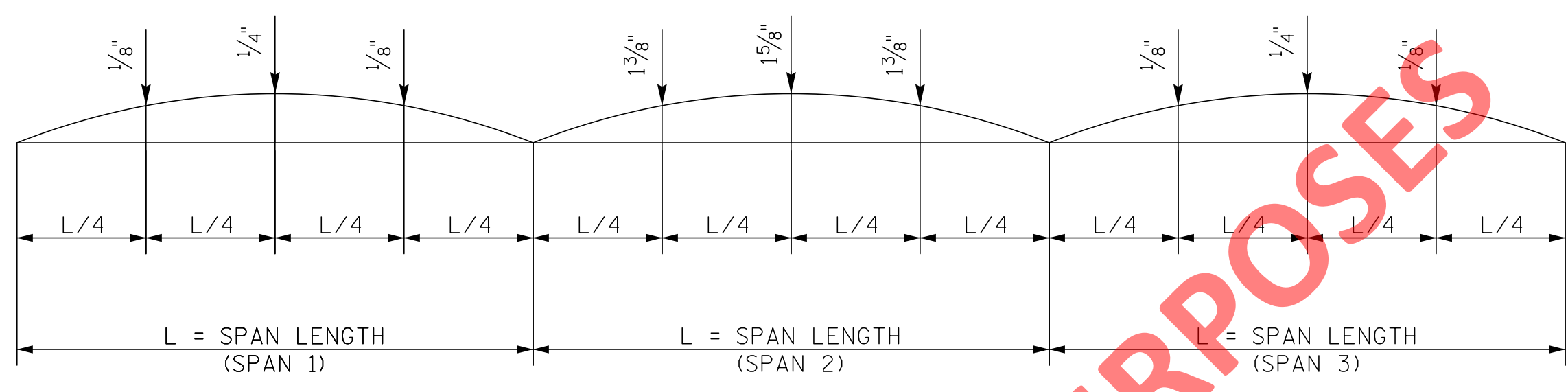
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B4
CONST.	2022	TAP-9305(32)	B4



TYPICAL CROSS-SECTION @ MID-SPAN  
(LOOKING FORWARD ON SURVEY)

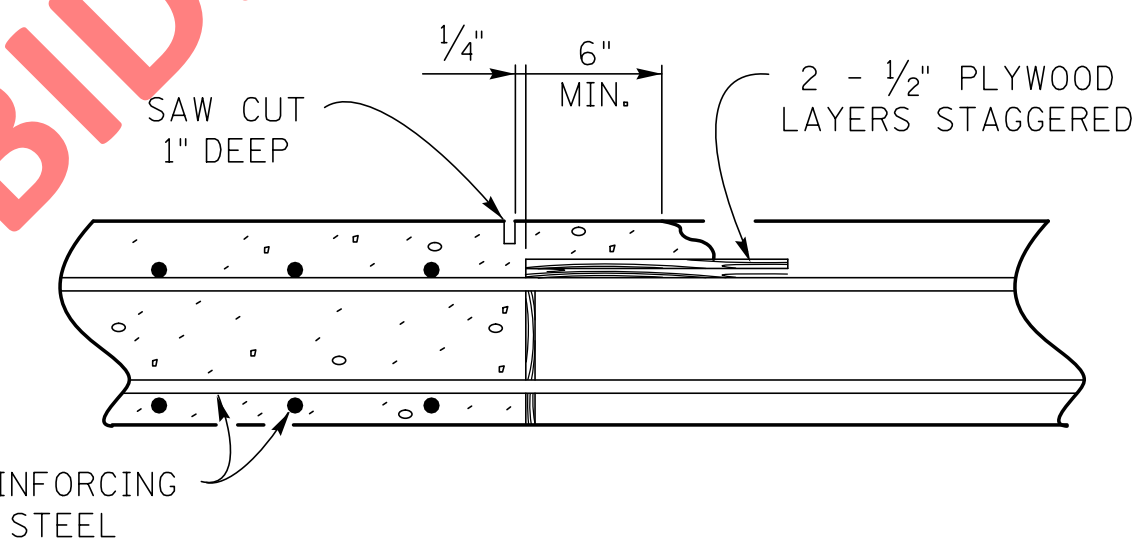


TYPICAL CROSS-SECTION @ PIERS  
(LOOKING FORWARD ON SURVEY)



DEAD LOAD CORRECTION CURVE

DEAD LOAD CORRECTION CURVE: THIS CURVE IS FOR DEAD LOAD SLAB AND ALL DEAD LOADS THAT ARE APPLIED AFTER SLAB IS IN PLACE AND SHOULD BE CORRECTED TO COMPENSATE FOR THE EFFECTS DUE TO VERTICAL CURVE. IF PRESTRESSED DECK PANELS ARE USED AND THE BEAMS ARE PROFILED AFTER PANELS ARE IN PLACE, REDUCE THE DEAD LOAD CORRECTION VALUES SHOWN BY 25%.

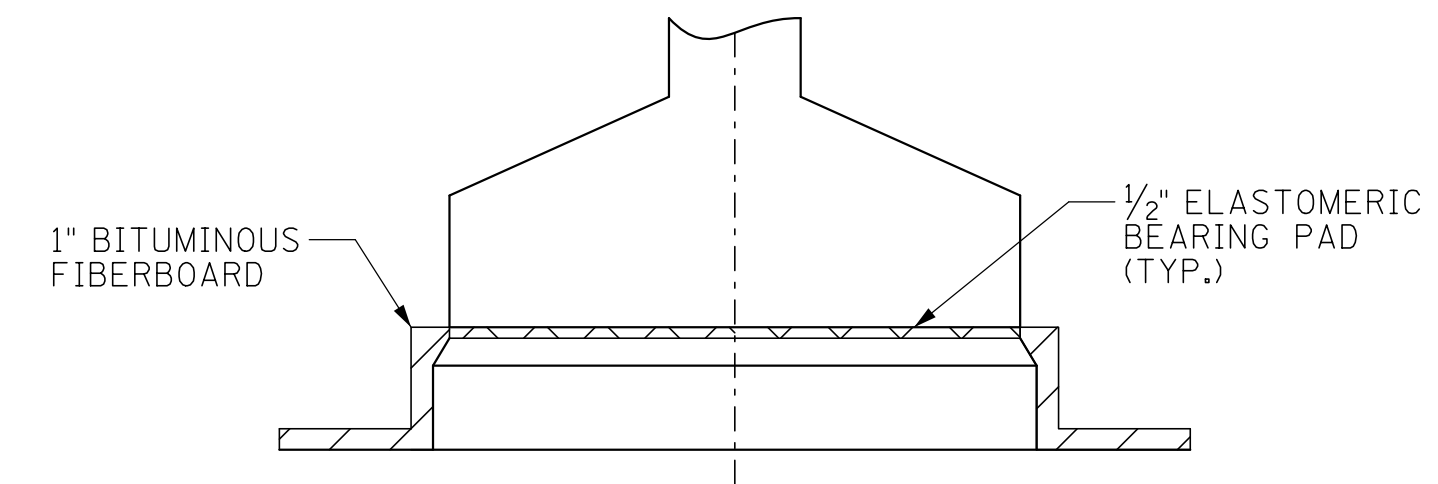


SLAB CONSTRUCTION JOINT DETAIL

DECK CONCRETE SEQUENCE: SLAB CONSTRUCTION JOINTS MAY BE LOCATED AT THE CONTRACTOR'S OPTION SUBJECT TO THE FOLLOWING:

- 1) NO CONSTRUCTION JOINT MAY BE LOCATED CLOSER THAN 10 FEET OR FURTHER THAN 15 FEET FROM AN INTERIOR SUPPORT.
- 2) THE SLAB IN THE MIDDLE SECTION OF BOTH ADJACENT SPANS MUST BE POURED TO WITHIN AT LEAST 15 FEET OF THE SUPPORTS EITHER PRIOR TO OR CONCURRENTLY WITH THE SLAB OVER AN INTERIOR SUPPORT.

ALL SLAB CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE SLAB CONSTRUCTION JOINT DETAIL SHOWN ABOVE.



DETAIL "Z"

ESTIMATED QUANTITIES

CLASS "D" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCEMENT LB.
106	33,430	349

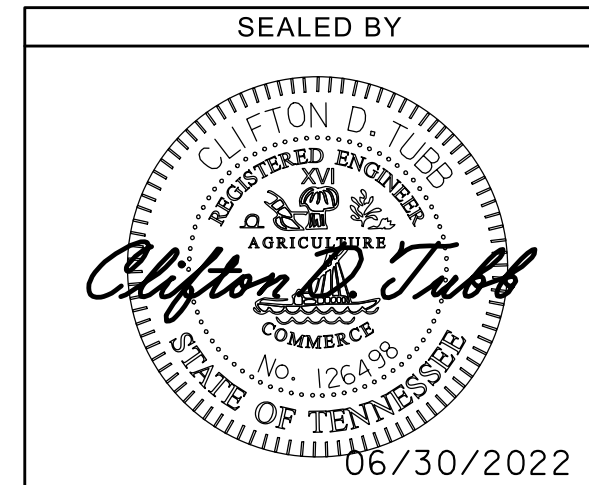
NOTE: NO PORTION OF THE PARAPETS SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.

NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED.

NOTE: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE BEAMS TO PREVENT DAMAGE DUE TO TWISTING OR OVERTURNING DURING ALL PHASES OF CONSTRUCTION. IT IS STRONGLY RECOMMENDED THAT THE TEMPORARY ERECTION DIAPHRAGMS BE INSTALLED AND THE PERMANENT INTERMEDIATE DIAPHRAGMS BE INSTALLED PRIOR TO PLACING AND LOADS ON THE BEAMS. HOWEVER, TEMPORARY ERECTION DIAPHRAGMS AND PERMANENT INTERMEDIATE DIAPHRAGMS MUST BE IN PLACE IN THE SPAN AT THE TIME THE SLAB IS POURED.

NOTE: THE SUPPORT DIAPHRAGMS AT THE BENTS SHALL BE FORMED AND THE BOTTOM 15 INCHES POURED AS SOON AS POSSIBLE AFTER THE BEAMS HAVE BEEN SET. THE REMAINDER OF THE DIAPHRAGMS SHALL BE POURED CONCURRENTLY WITH THE DECK SLAB. THE BEAMS SHALL ATTAIN AN AGE OF AT LEAST 90 DAYS PRIOR TO POURING THE REMAINDER OF THE SUPPORT DIAPHRAGMS AND DECK SLAB. ALL DIAPHRAGM CONCRETE SHALL BE INCLUDED IN THE QUANTITY FOR CLASS D CONCRETE.

6/30/2022 11:00:56 AM \\nashvillestr.benesch.local\Benesch\_P\Projects\Nashville\16020000S\16020001\Eng\_Docs\Structures\DGN\16020001\_Harlinsdale\_Typical Section.dgn



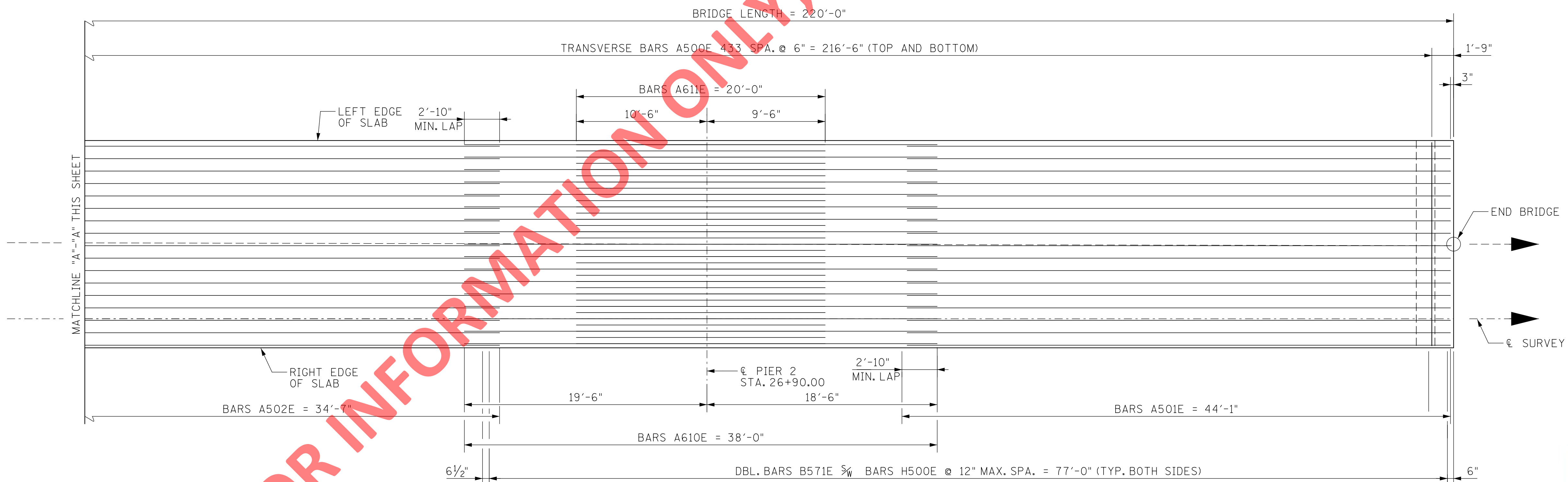
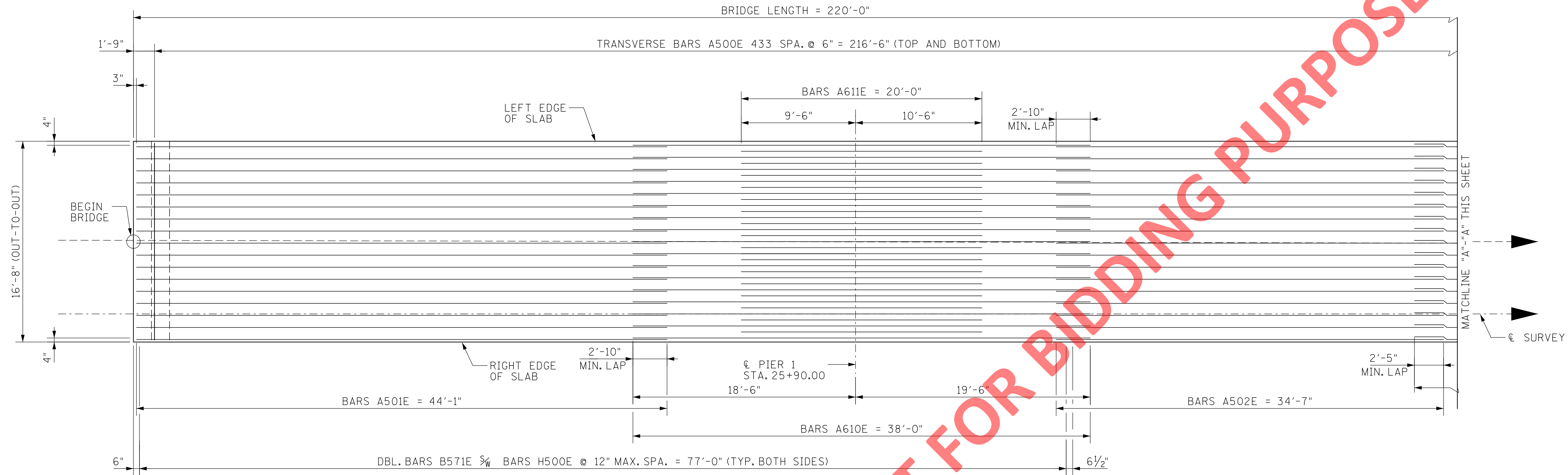
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

SUPERSTRUCTURE

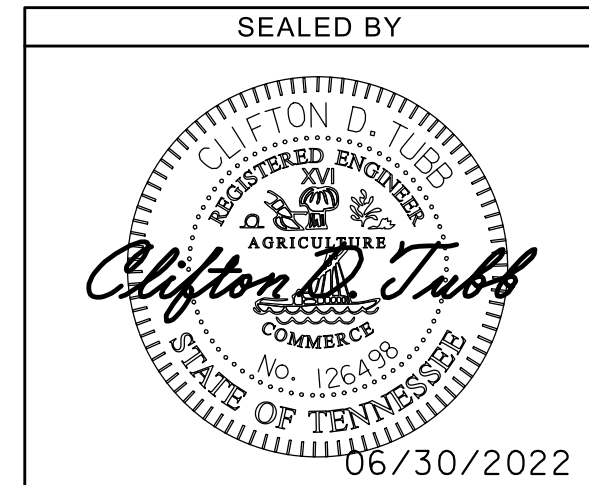
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B5
CONST.	2022	TAP-9305(32)	B5



**SLAB PLAN**  
(SHOWING TOP LONGITUDINAL BARS AND TOP AND BOTTOM TRANSVERSE REINFORCEMENT)

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 11:01:05 AM \\nashvillestr.benesch.local\Benesch\_Projects\Nashville\16020000S\16020001\Eng\_Docs\Structures\16020001\_Harlinsdale\_Superstructure\_Details.dgn



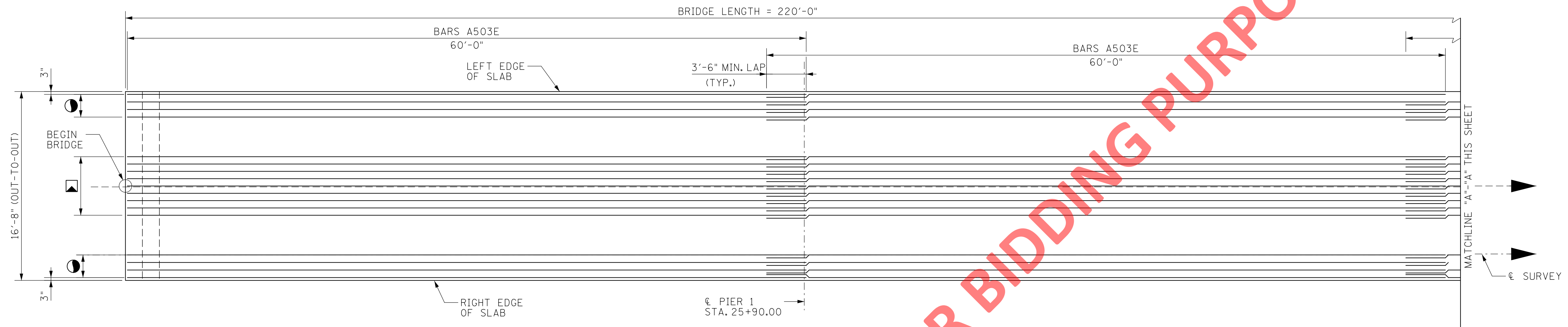
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



**CITY OF FRANKLIN**  
**ENGINEERING DEPARTMENT**

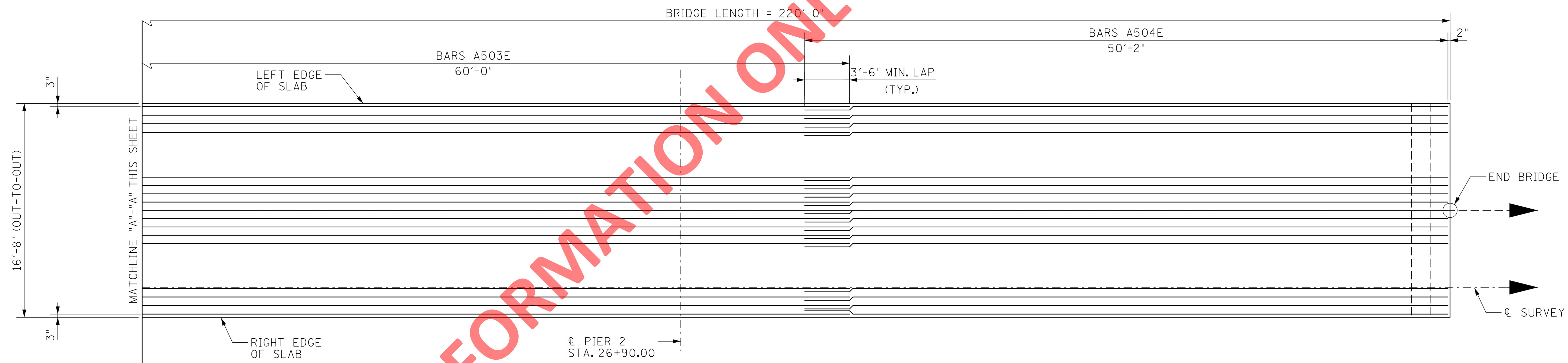
**SUPERSTRUCTURE**  
**DETAILS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B6
CONST.	2022	TAP-9305(32)	B6



○ DENOTES BARS A503E  $\frac{5}{8}$ " BARS A503E  $\frac{5}{8}$ " BARS A503E  $\frac{5}{8}$ "  
BARS A504E 3 SPA @ 8" MAX. SPA. = 2'-0" (TYP. @ OVERHANG)

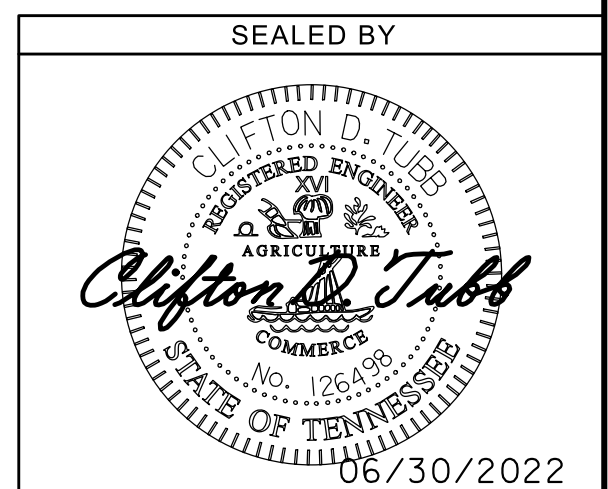
◻ DENOTES BARS A503E  $\frac{5}{8}$ " BARS A503E  $\frac{5}{8}$ " BARS A503E  $\frac{5}{8}$ "  
BARS A504E 8 SPA @ 8" MAX. SPA = 5'-2" (TYP.)



SLAB PLAN  
(SHOWING BOTTOM OF SLAB LONGITUDINAL BARS)

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 11:01:15 AM  
\\nashvillestr.benesch.local\Benesch\_P\Projects\Nashville\16020000S\16020001\16020001\Eng\_Docs\Structures\DGN\16020001\_Harlinsdale\_Superstructure Details 2.dgn



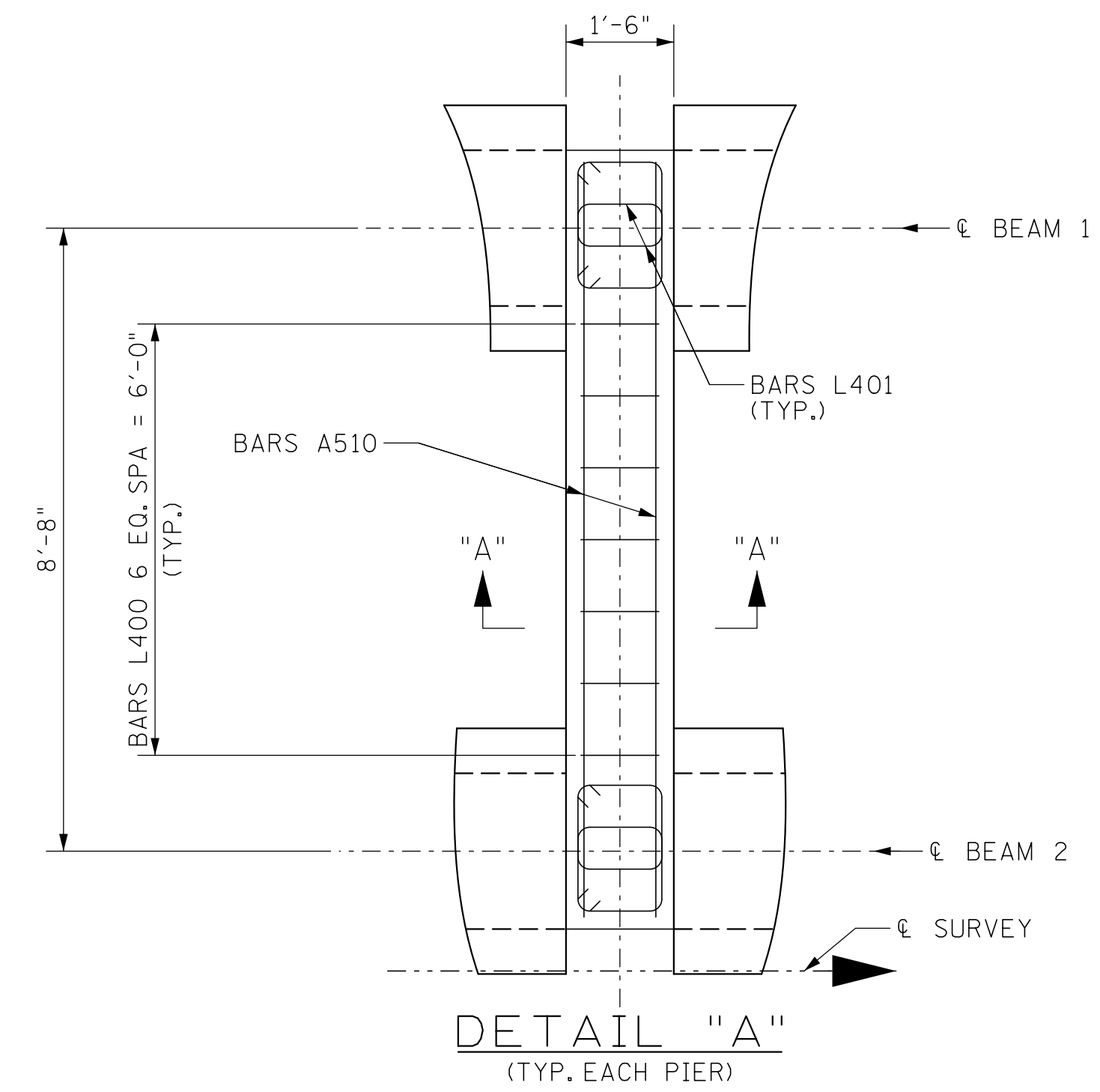
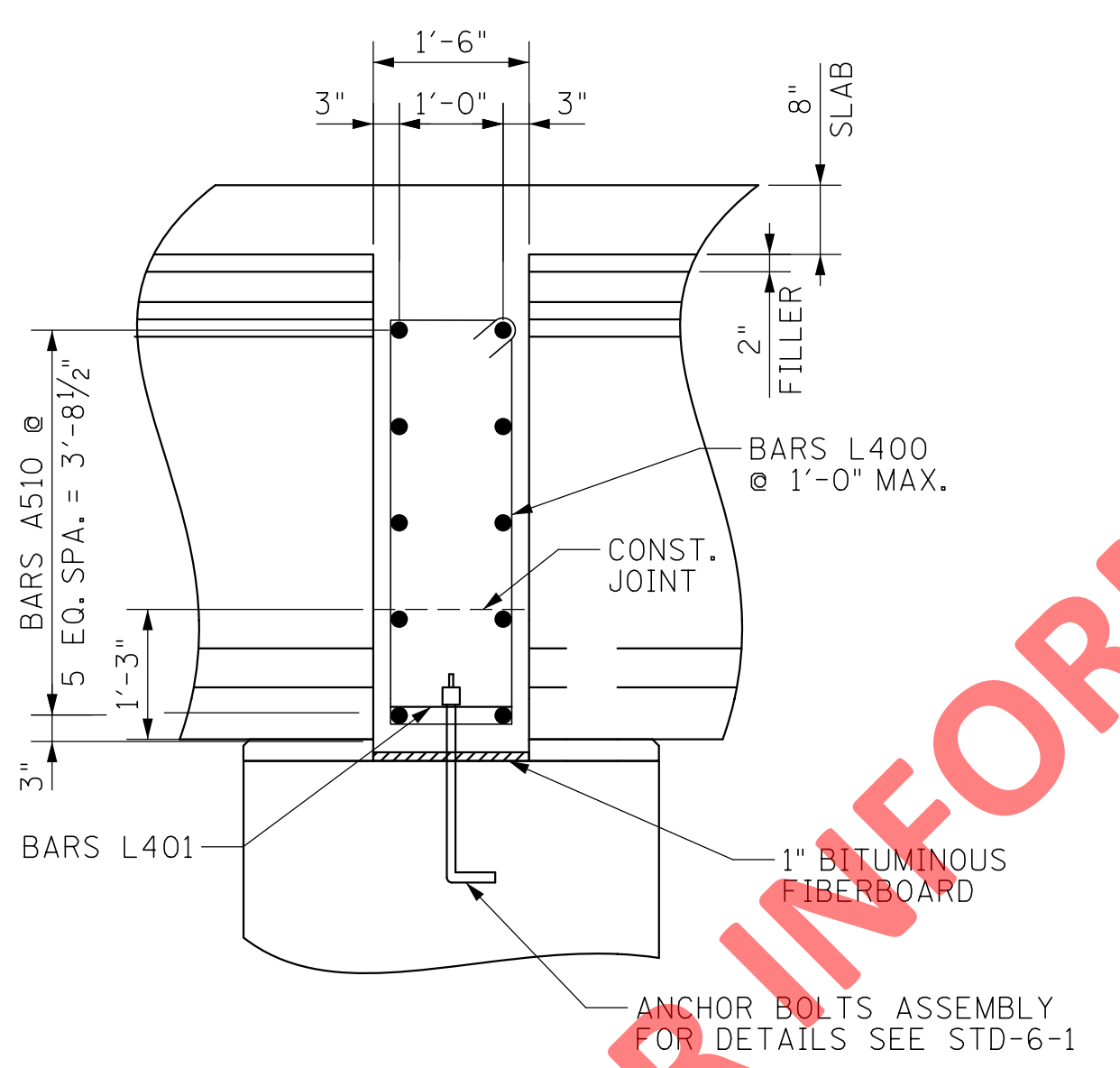
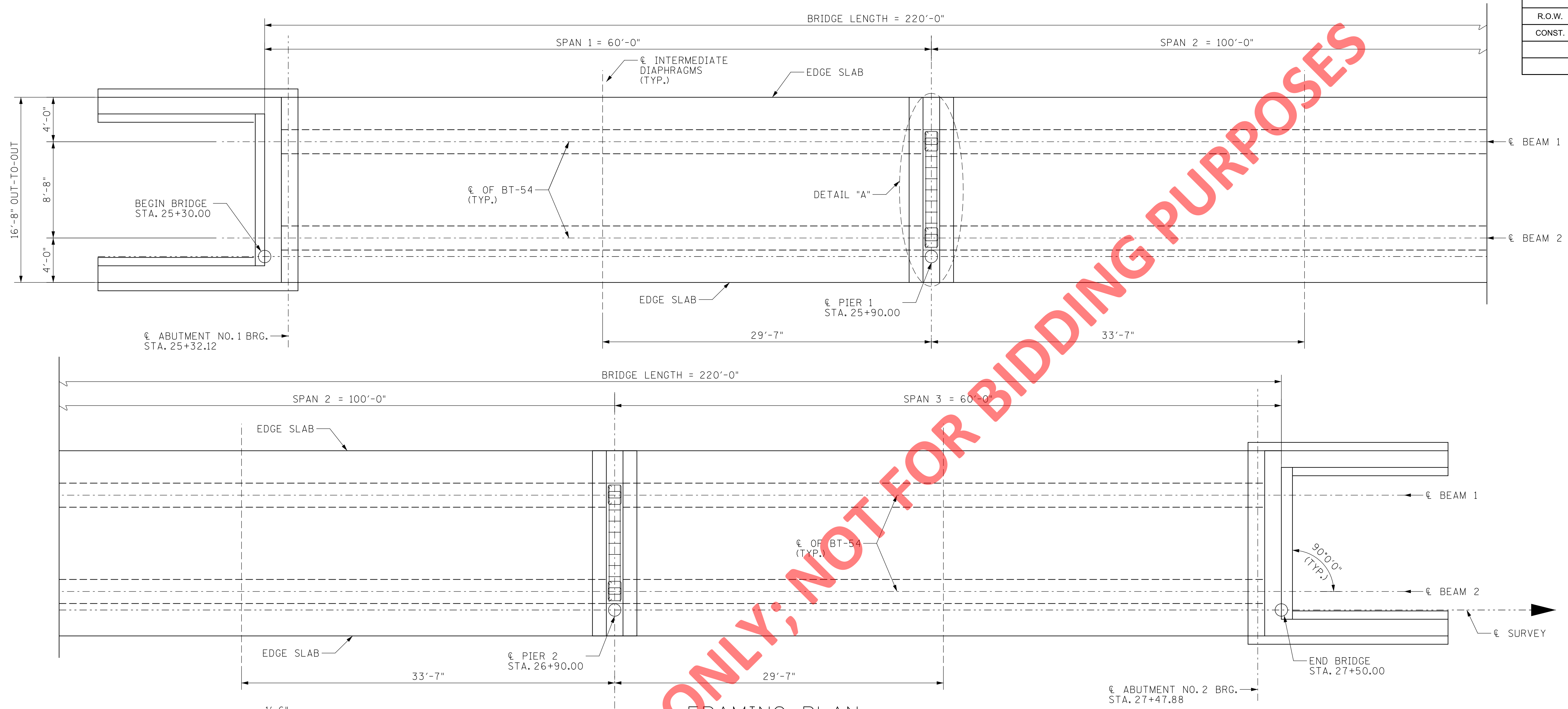
COORDINATE VALUES ARE NAD 83(2011),  
ARE DATUM ADJUSTED BY THE FACTOR  
OF 1.00000 (NO DATUM ADJUSTMENT),  
AND BASED ON AN NGS OPUS SOLUTION.  
ALL ELEVATIONS ARE REFERENCED TO  
THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

SUPERSTRUCTURE  
DETAILS

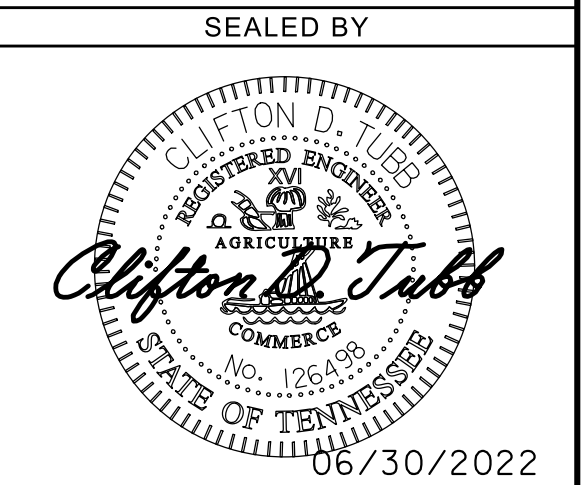
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B7
CONST.	2022	TAP-9305(32)	B7



NOTE: ANCHOR BOLTS AT BENTS; ANCHOR BOLT ASSEMBLIES AT BENTS SHALL BE IN ACCORDANCE WITH STANDARD DRAWINGS STD-6-1.

6/30/2022 11:01:24 AM \\nashville\str.benesch.local\Benesch\Projects\Nashville\16020000S\16020001\Eng\Docs\Structures\DGN\16020001\_Harlinsdale\_Framing Plan.dgn

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES



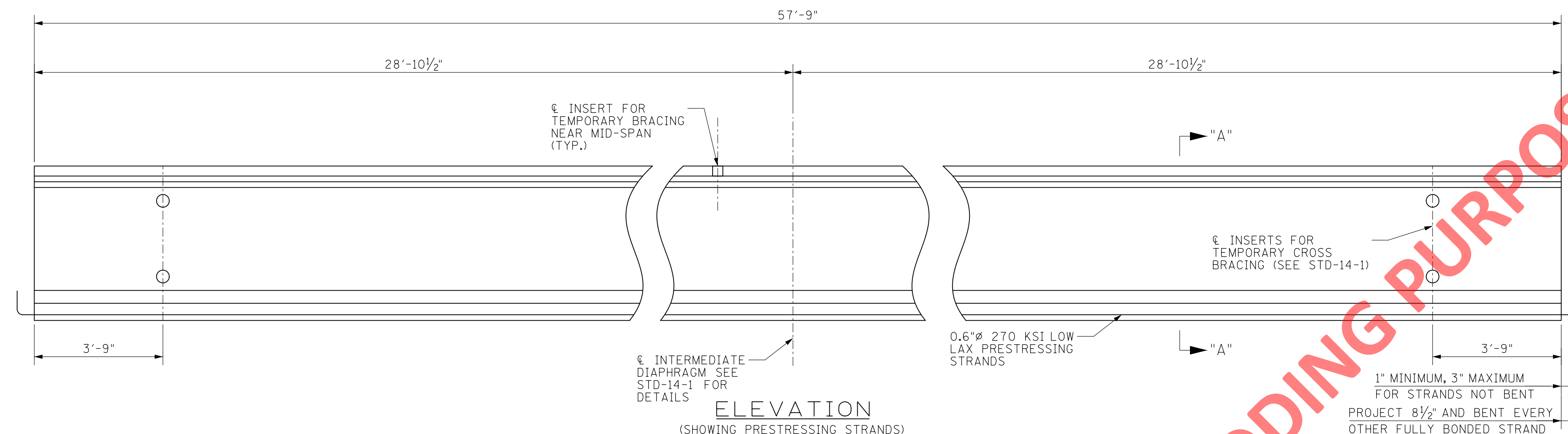
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



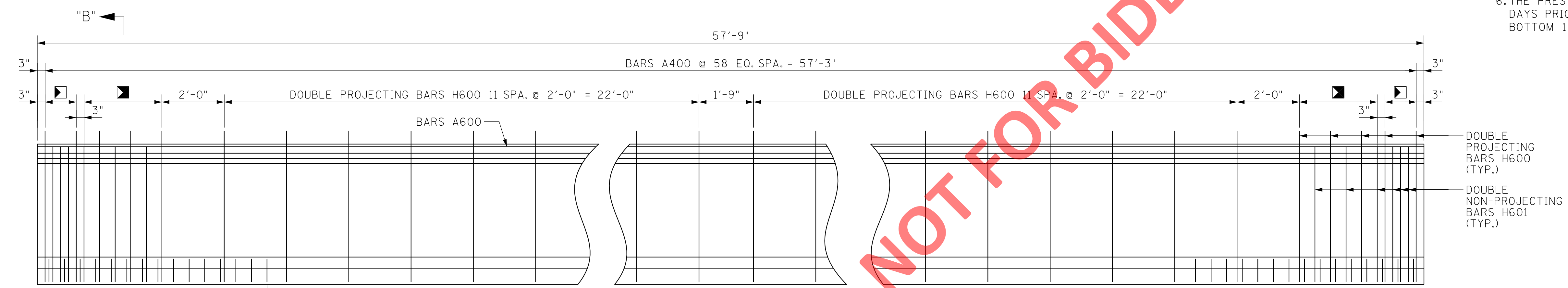
CITY OF FRANKLIN ENGINEERING DEPARTMENT

FRAMING PLAN

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B8
CONST.	2022	TAP-9305(32)	B8



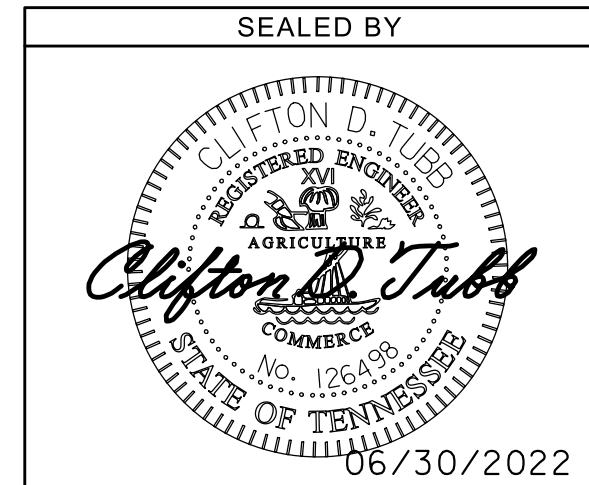
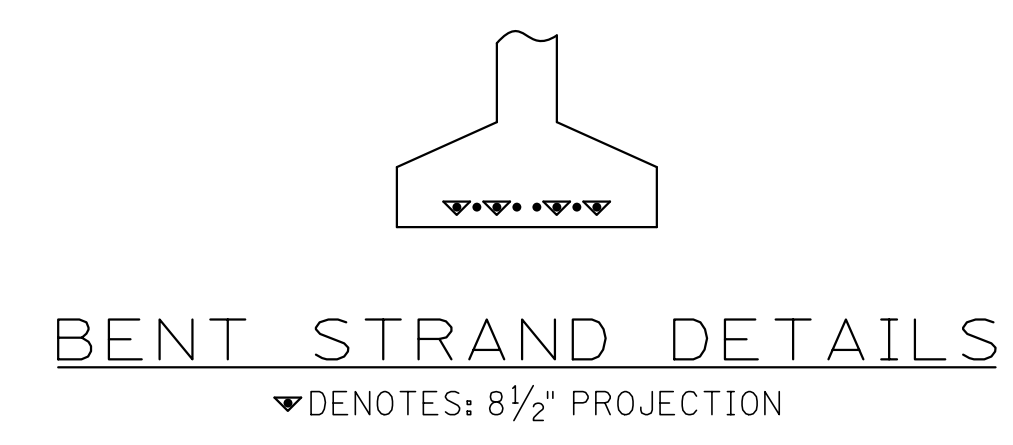
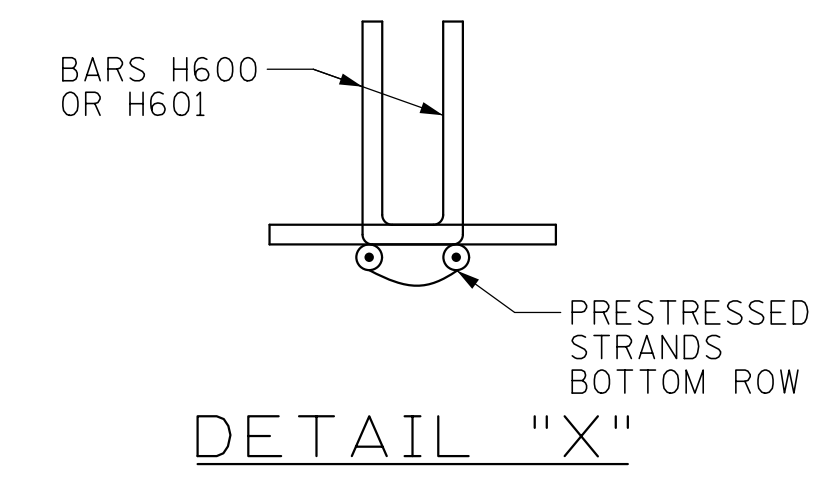
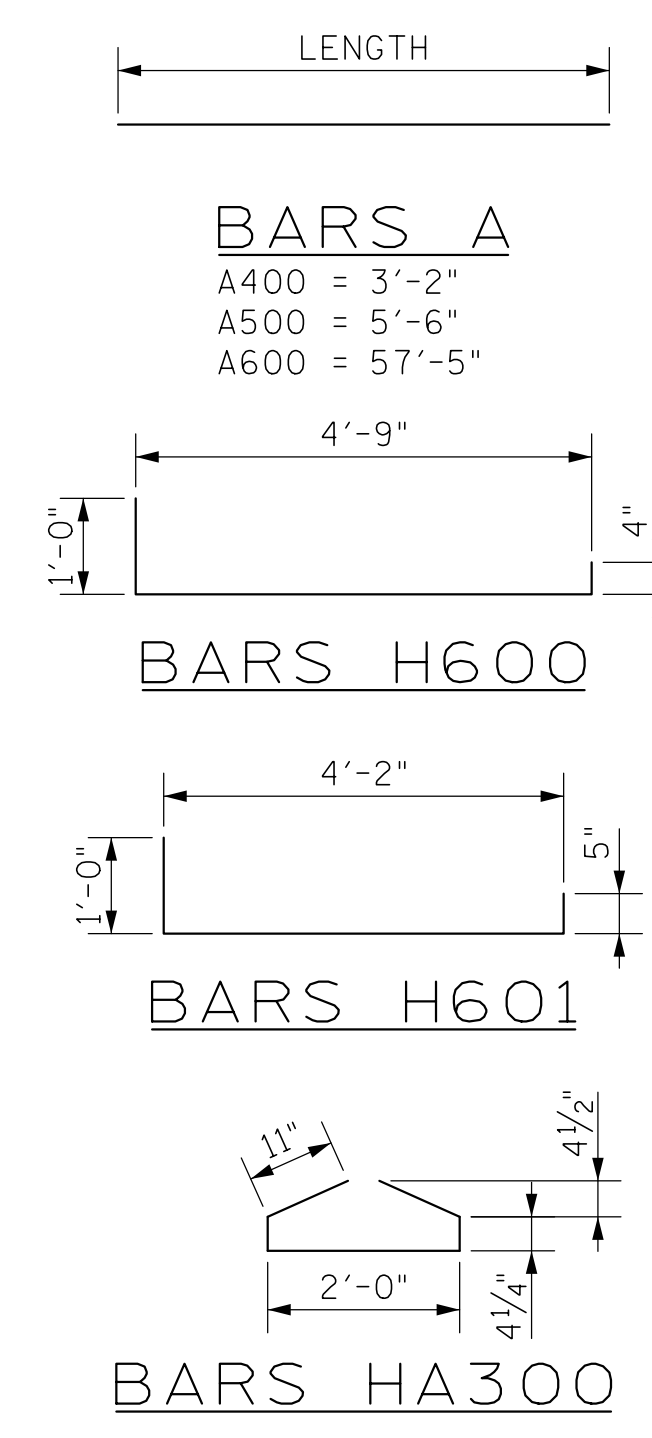
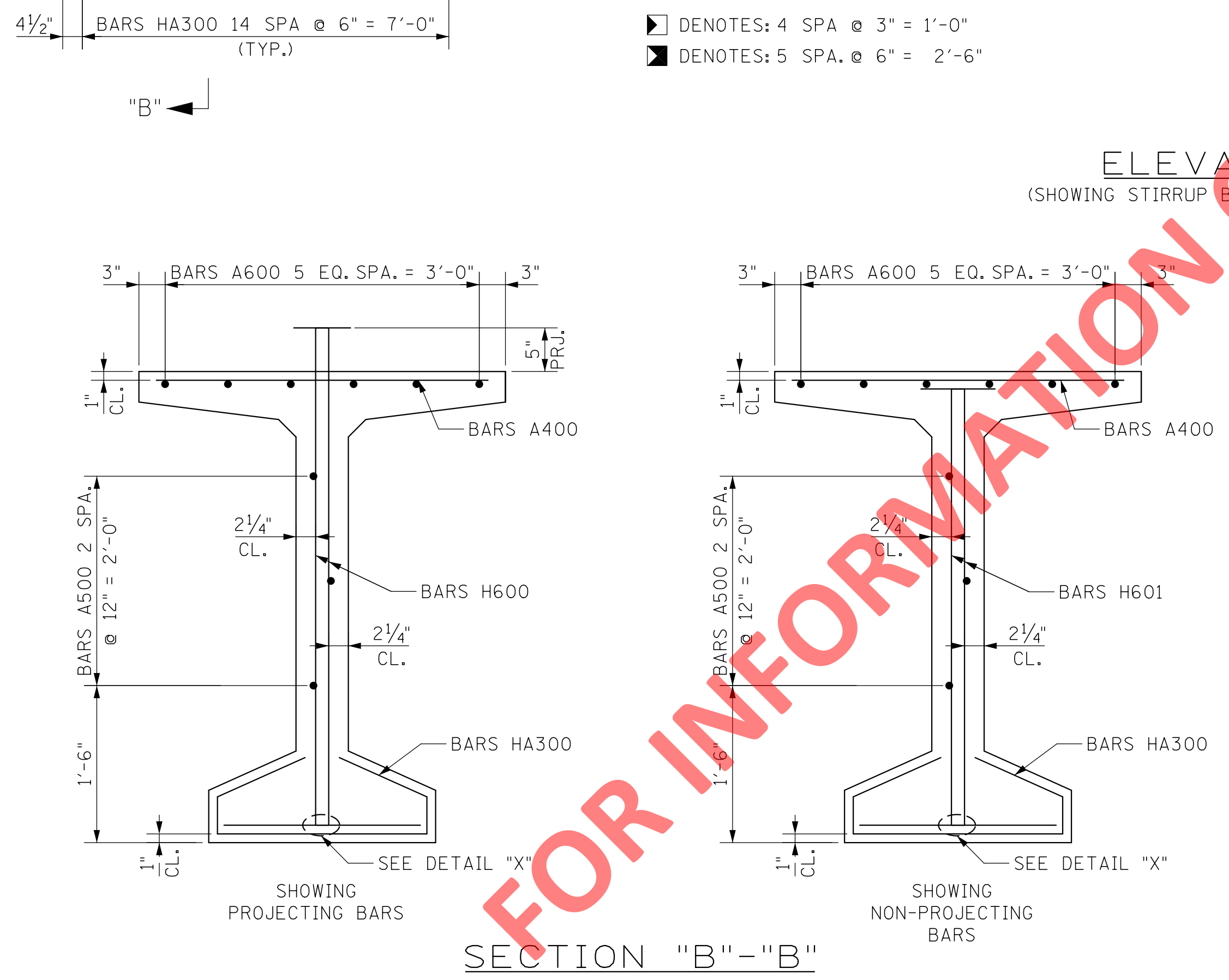
- NOTES:**
- SEE STD-14-1 FOR BULB-TEE STANDARD DETAILS AND NOTES.
  - ALL BEAMS ARE BT-54.
  - THE CONCRETE FOR THIS CONSTRUCTION SHALL BE SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NO LESS THAN 8,000 PSI AT THE AGE OF 28 DAYS AND STRESS TRANSFER SHALL NOT BE MADE TO THE BRIDGE MEMBER UNTIL THE TEST SPECIMENS INDICATE THAT THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 6,000 PSI. SEE GENERAL NOTES FOR CONCRETE FINISHING NOTE.
  - ALL PRESTRESSING STRANDS SHALL BE 0.6" DIAM. ASTM GRADE 270K, 7 WIRE UNCOATED LOW RELAXATION PRESTRESSING STRANDS (AS = 0.217 IN<sup>2</sup>).
  - AN INITIAL FORCE OF 43,900 LBS SHALL BE APPLIED TO EACH STRAND IN ALL BEAMS.
  - THE PRESTRESSED BEAMS SHALL ATTAIN AN AGE OF AT LEAST 90 DAYS PRIOR TO POURING THE SUPPORT DIAPHRAGMS (EXCLUDING BOTTOM 15 INCHES) AND DECK SLAB.



**PRESTRESSED BEAM DESIGN DATA - PER BEAM**

LIVE LOAD DISTRIBUTION FACTOR FOR MOMENT = 0.88 LANES  
 LIVE LOAD DISTRIBUTION FACTOR FOR SHEAR = 0.88 LANES  
 COMPOSITE DEAD LOAD: DC = 700 LB/FT  
 COMPOSITE DEAD LOAD: DW = 0 LB/FT  
 COMPOSITE SLAB DESIGN STRENGTH F'C = 3000 PSI  
 NOTE: DOWNWARD DEFLECTION UNDER TOTAL DL IS NOT ALLOWED

ESTIMATED QUANTITIES			
NO. BEAMS REQ'D	PRESTRESSING STRANDS (LOW LAX) LBS.	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.
4	450	10	1,600



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

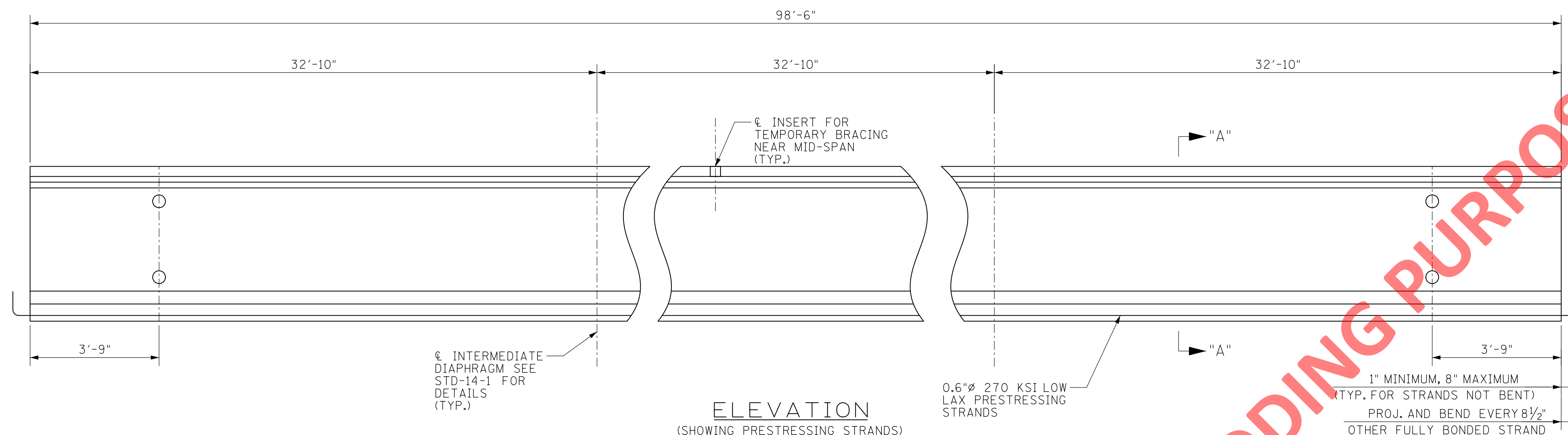


**CITY OF FRANKLIN ENGINEERING DEPARTMENT**

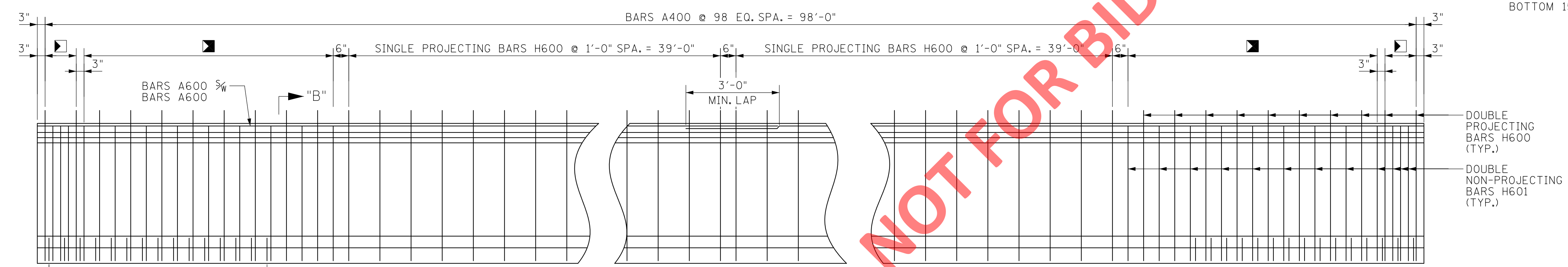
**PRESTRESSED BULB-TEE DETAILS SPANS 1 & 3**

6/30/2022 11:01:32 AM \\nashville\estr.benesch.local\Benesch\_P\Projects\Nashville\16020000S\16020001\Eng\Structures\DG\16020001\_Harlinsdale\_Prestressed Beams\_Span 1 and 3.dgn

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B9
CONST.	2022	TAP-9305(32)	B9



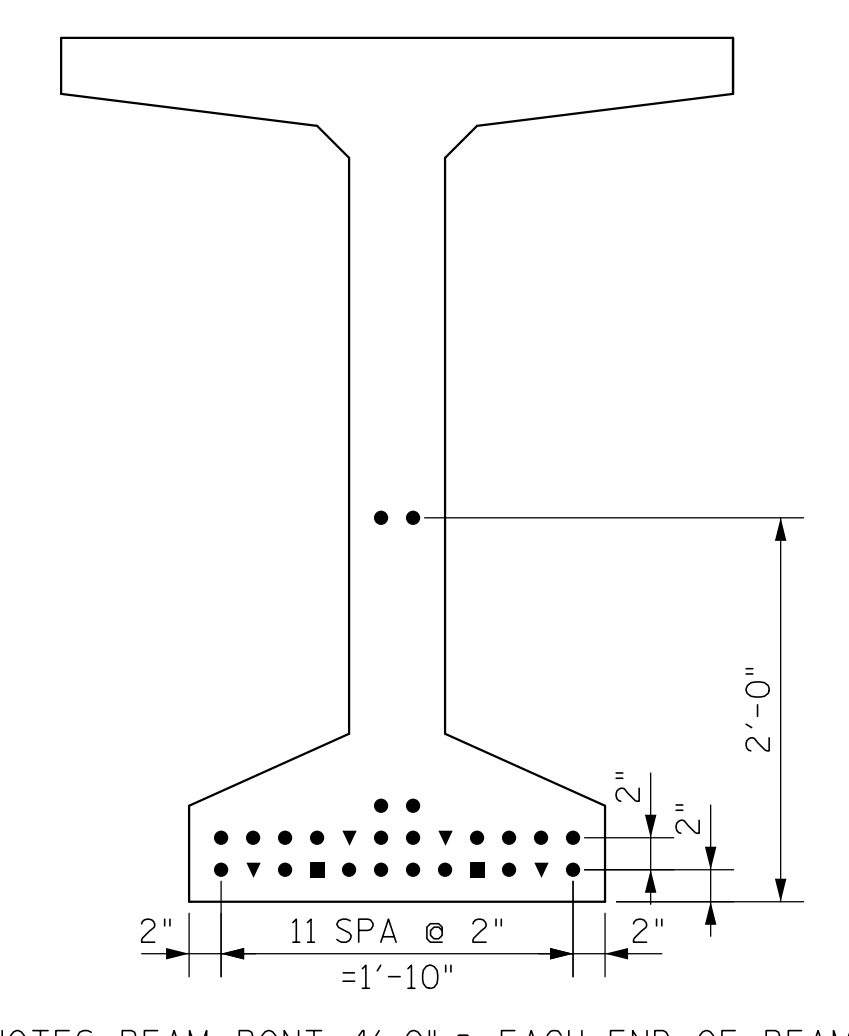
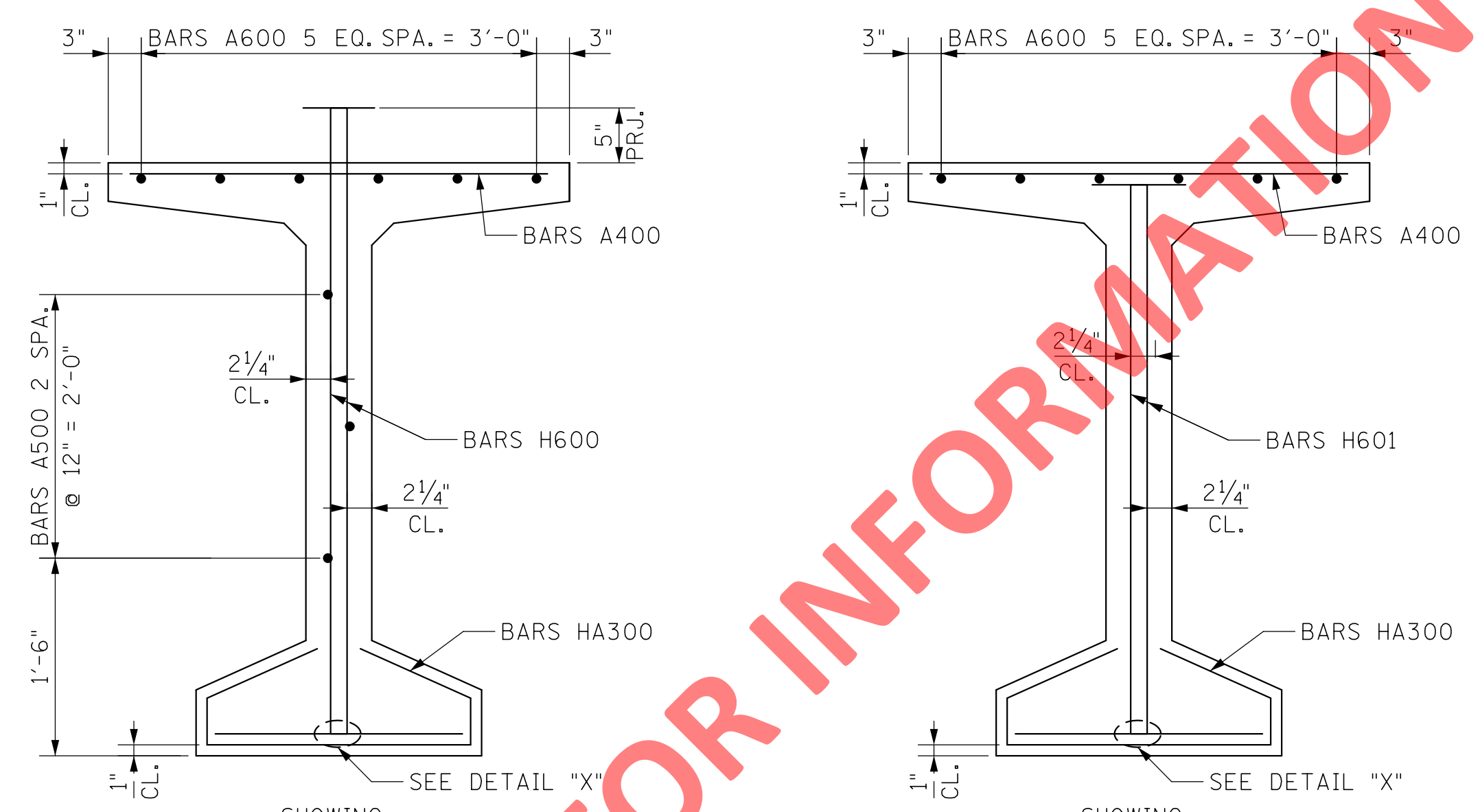
- NOTES:**
- SEE STD-14-1 FOR BULB-TEE STANDARD DETAILS AND NOTES.
  - ALL BEAMS ARE BT-54.
  - THE CONCRETE FOR THIS CONSTRUCTION SHALL BE SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NO LESS THAN 8,000 PSI AT THE AGE OF 28 DAYS AND STRESS TRANSFER SHALL NOT BE MADE TO THE BRIDGE MEMBER UNTIL THE TEST SPECIMENS INDICATE THAT THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 6,000 PSI. SEE GENERAL NOTES FOR CONCRETE FINISHING NOTE.
  - ALL PRESTRESSING STRANDS SHALL BE 0.6" DIAM. ASTM GRADE 270K, 7 WIRE UNCOATED LOW RELAXATION PRESTRESSING STRANDS (AS = 0.217 IN<sup>2</sup>).
  - AN INITIAL FORCE OF 43,900 LBS SHALL BE APPLIED TO EACH STRAND IN ALL BEAMS.
  - THE PRESTRESSED BEAMS SHALL ATTAIN AN AGE OF AT LEAST 90 DAYS PRIOR TO POURING THE SUPPORT DIAPHRAGMS (EXCLUDING BOTTOM 15 INCHES) AND DECK SLAB.



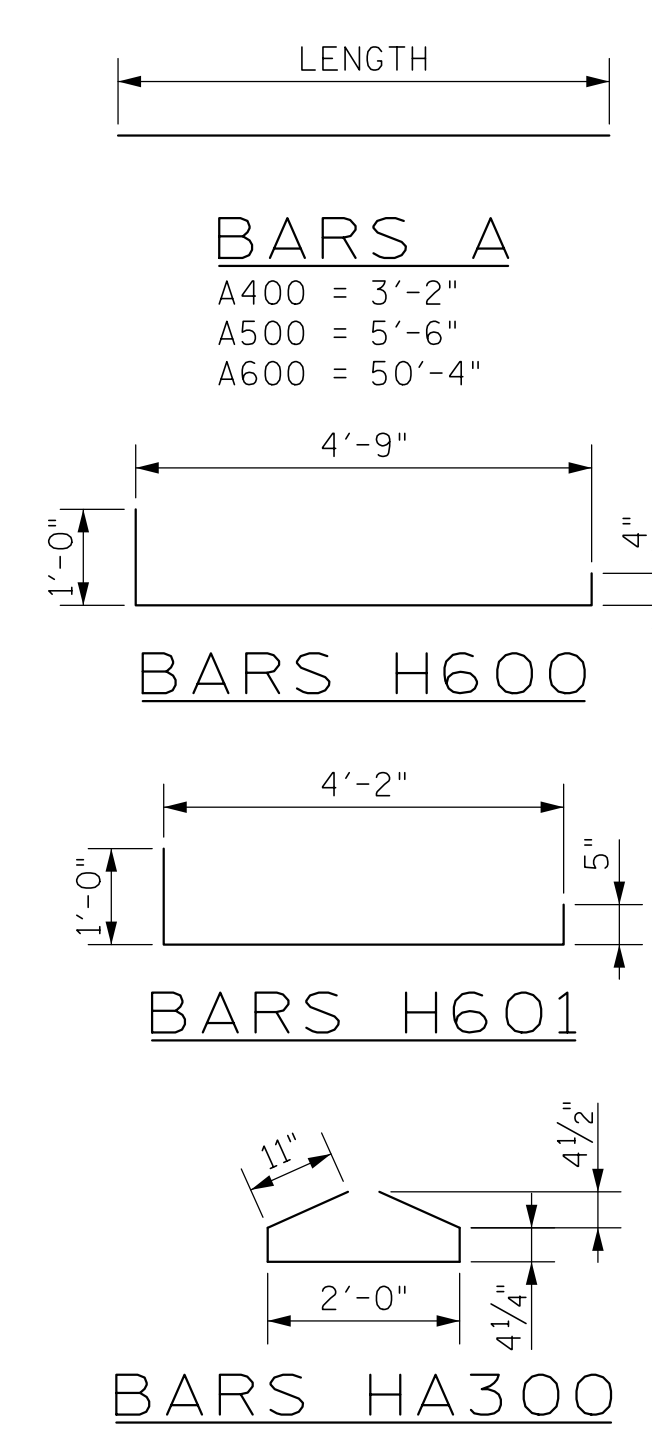
**PRESTRESSED BEAM DESIGN DATA - PER BEAM**

LIVE LOAD DISTRIBUTION FACTOR FOR MOMENT = 0.88 LANES  
 LIVE LOAD DISTRIBUTION FACTOR FOR SHEAR = 0.88 LANES  
 COMPOSITE DEAD LOAD; DC = 700 LB/FT  
 COMPOSITE DEAD LOAD; DW = 0 LB/FT  
 COMPOSITE SLAB DESIGN STRENGTH F'C = 3000 PSI  
 NOTE: DOWNWARD DEFLECTION UNDER TOTAL DL IS NOT ALLOWED

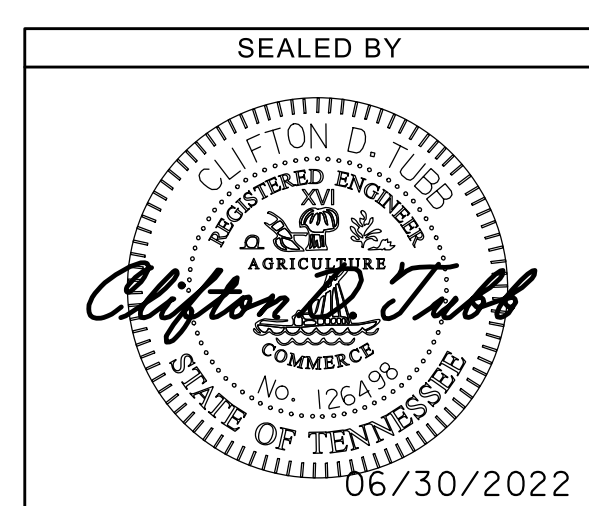
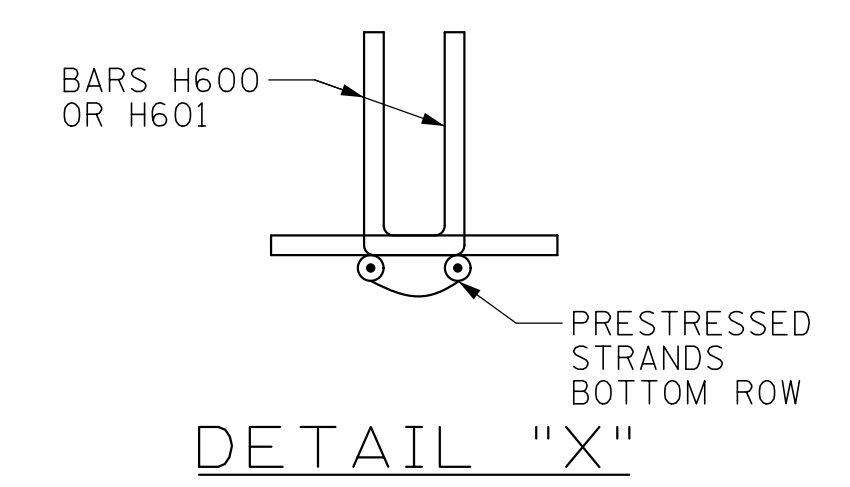
- ◼ DENOTES: 4 SPA @ 3" = 1'-0"
- ◼ DENOTES: 16 SPA @ 6" = 8'-0"



- ▼ DENOTES: BEAM BONT 4'-0" @ EACH END OF BEAM
- DENOTES: BEAM BONT 8'-0" @ EACH END OF BEAM



ESTIMATED QUANTITIES			
NO. BEAMS REQ'D	PRESTRESSING STRANDS (LOW LAX) LBS.	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.
2	2,100	17	2,900



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



**CITY OF FRANKLIN ENGINEERING DEPARTMENT**

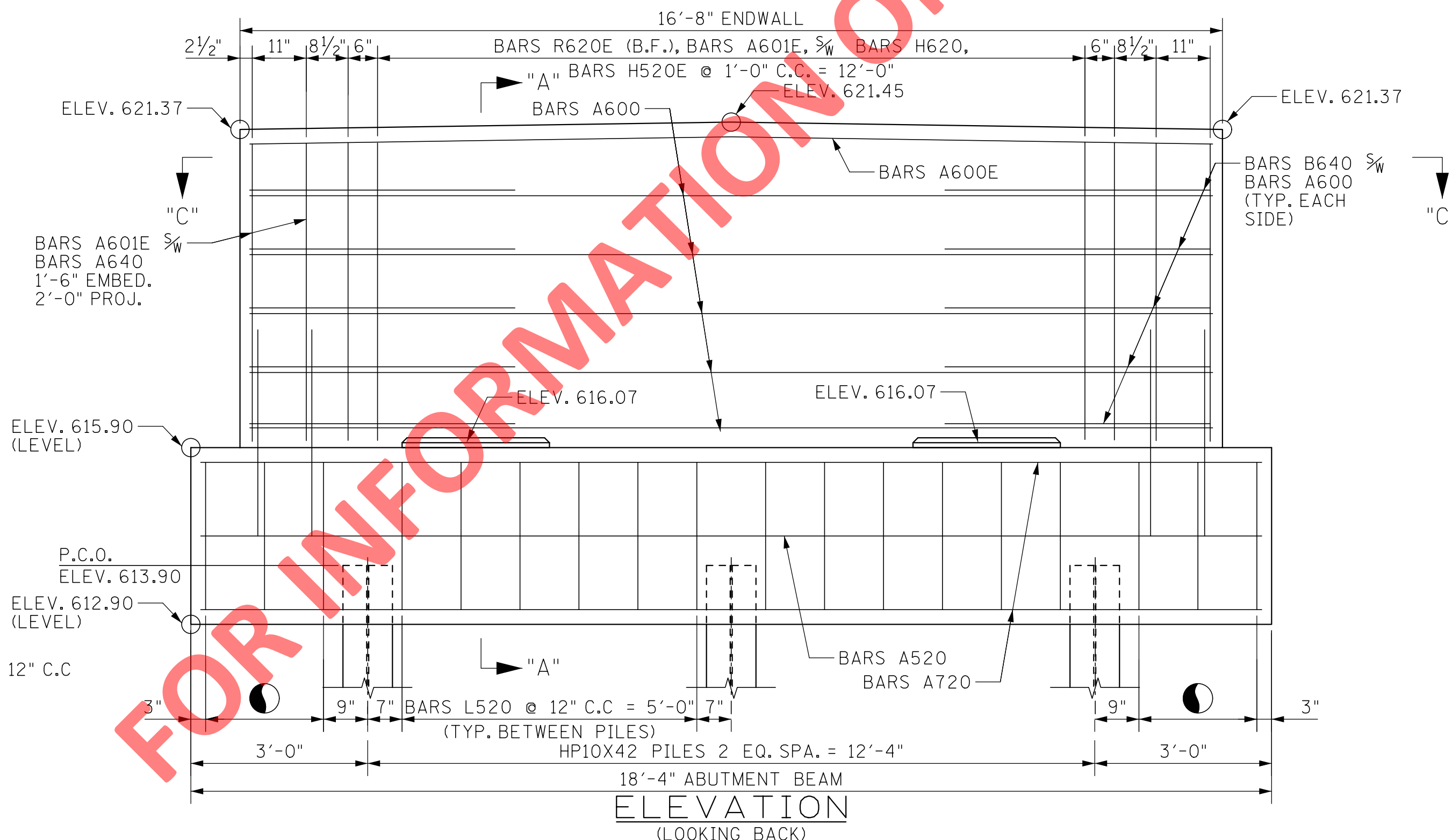
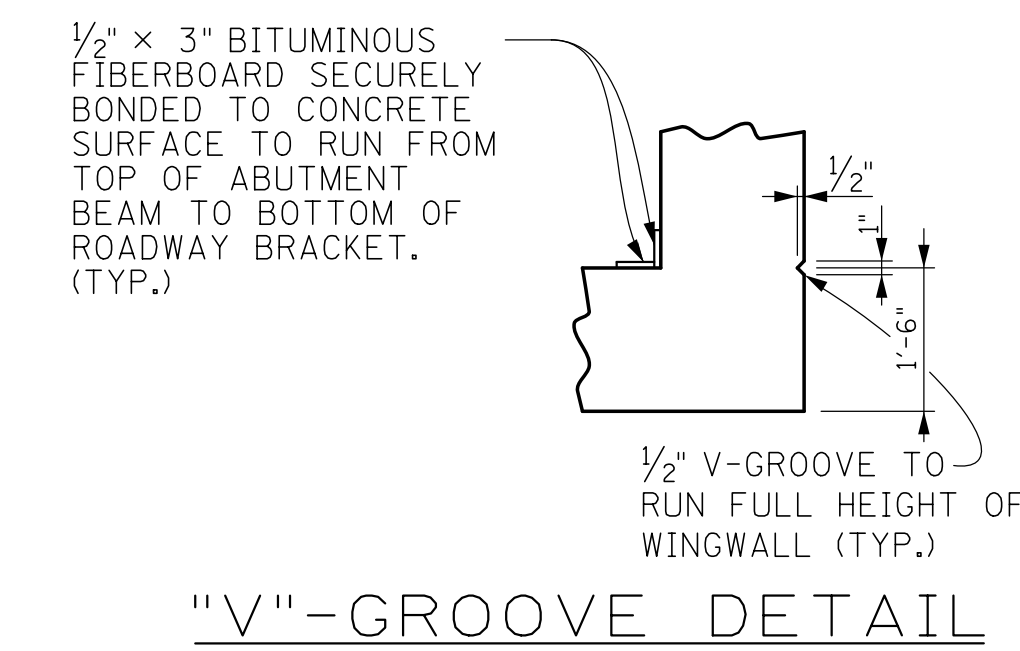
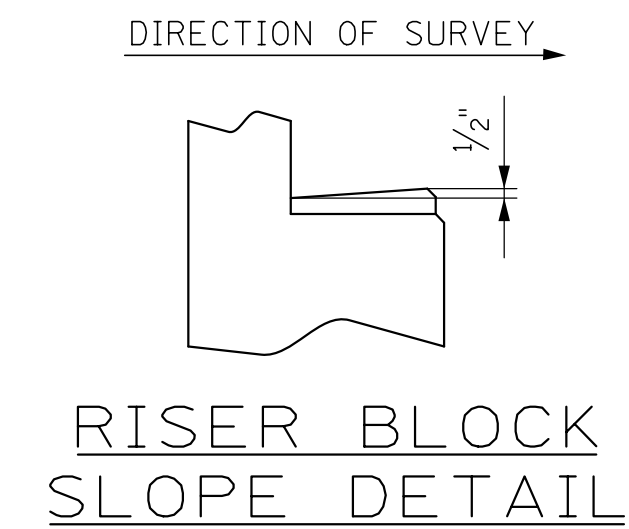
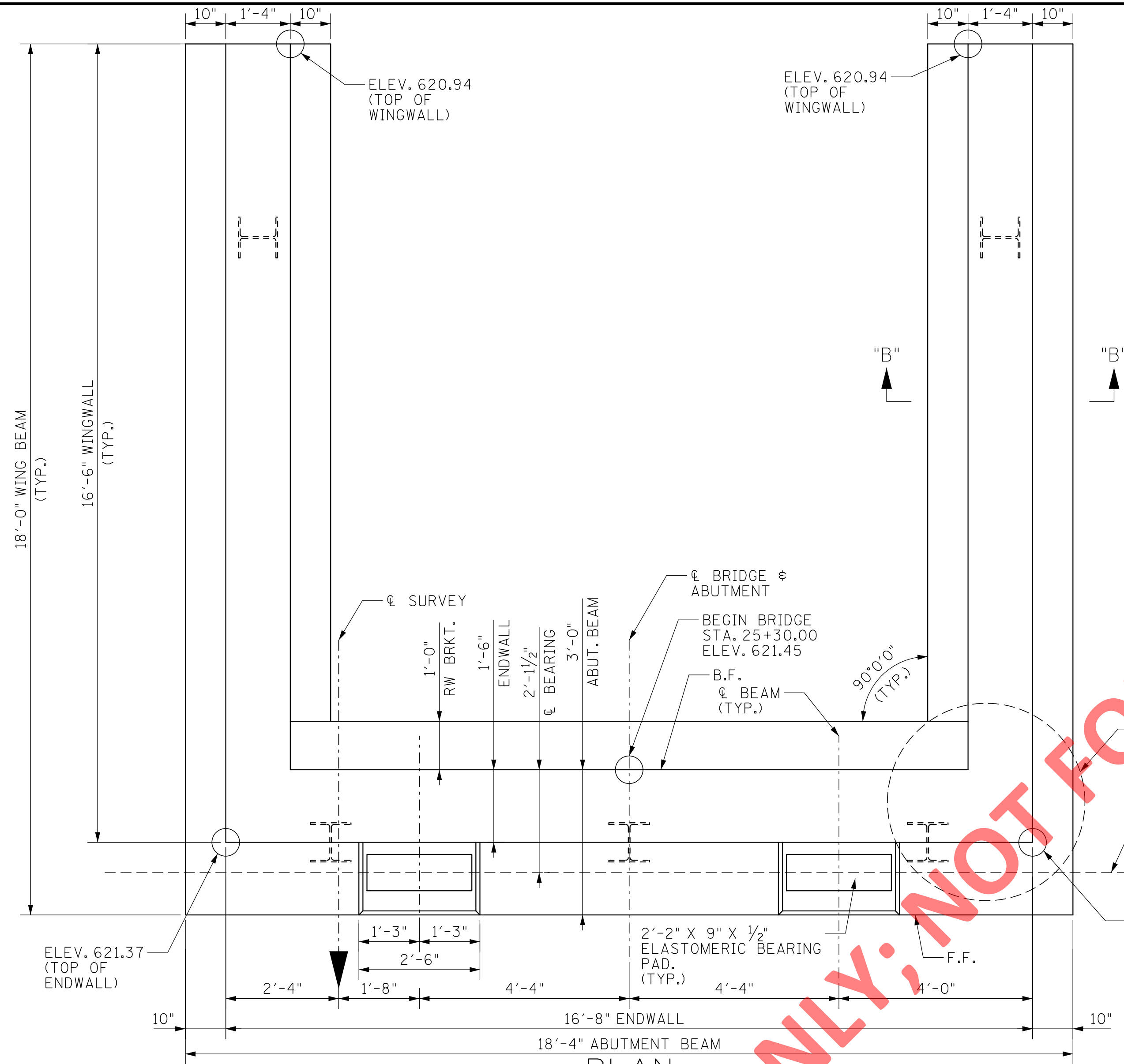
**PRESTRESSED BULB-TEE DETAILS SPAN 2**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B10
CONST.	2022	TAP-9305(32)	B10

**NOTES:**

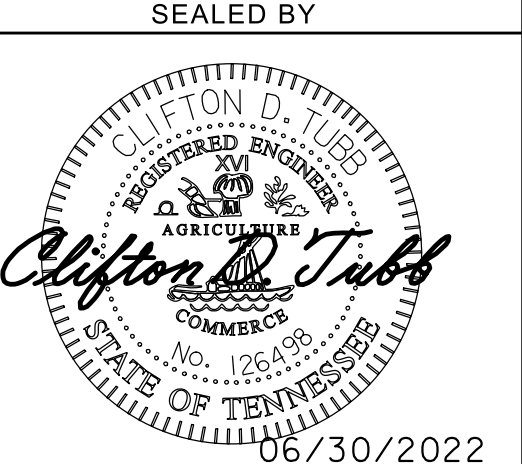
- RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH ABUTMENT BEAM.
- RISER BLOCK BEARING SURFACE TO CONFORM TO BOTTOM OF BEAM GRADE.
- ELASTOMERIC PADS SHALL BE IN PLACE A MINIMUM OF ONE DAY BEFORE BEING DISTURBED BY SETTING BEAMS ON CONCRETE. PLACE RUBBER BONDING CEMENT IN SUCH A WAY THAT VISIBLE CONCRETE SURFACES WILL NOT BE STAINED.
- WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOSTS AND PARAPETS. FOR DETAILS OF WINGPOSTS AND BRIDGE RAIL SEE SHEETS B16 THRU B18.
- WINGBEAM PILES SHALL BE DRIVEN TO THE PLANS TIP ELEVATION OR REFUSAL. SEISMIC ATTACHMENT IS NOT REQUIRED FOR WINGBEAM PILES.
- NOT LESS THAN HALF OF THE SLAB IN THE END SPANS SHALL BE POURED PRIOR TO, OR CONCURRENTLY WITH, PLACEMENT OF ANY PART OF THE ABUTMENT ENDWALLS. AT LEAST THE TOP 12 INCHES OF THE ENDWALLS SHALL BE POURED CONCURRENTLY WITH THE END OF SLAB.
- COST OF BRIDGE RAIL AND POST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE BRIDGE RAIL SYSTEM.

ELEVATION "A"-A"



● DENOTES: BARS L520 @ 12" C.C. SPA. = 2'-0"

ESTIMATED QUANTITIES		
CLASS "A" CONCRETE	EPOXY COATED REINFORCING STEEL LB.	STEEL BAR REINFORCEMENT LB.
C.Y.	LB.	LB.
31	1,228	3,467



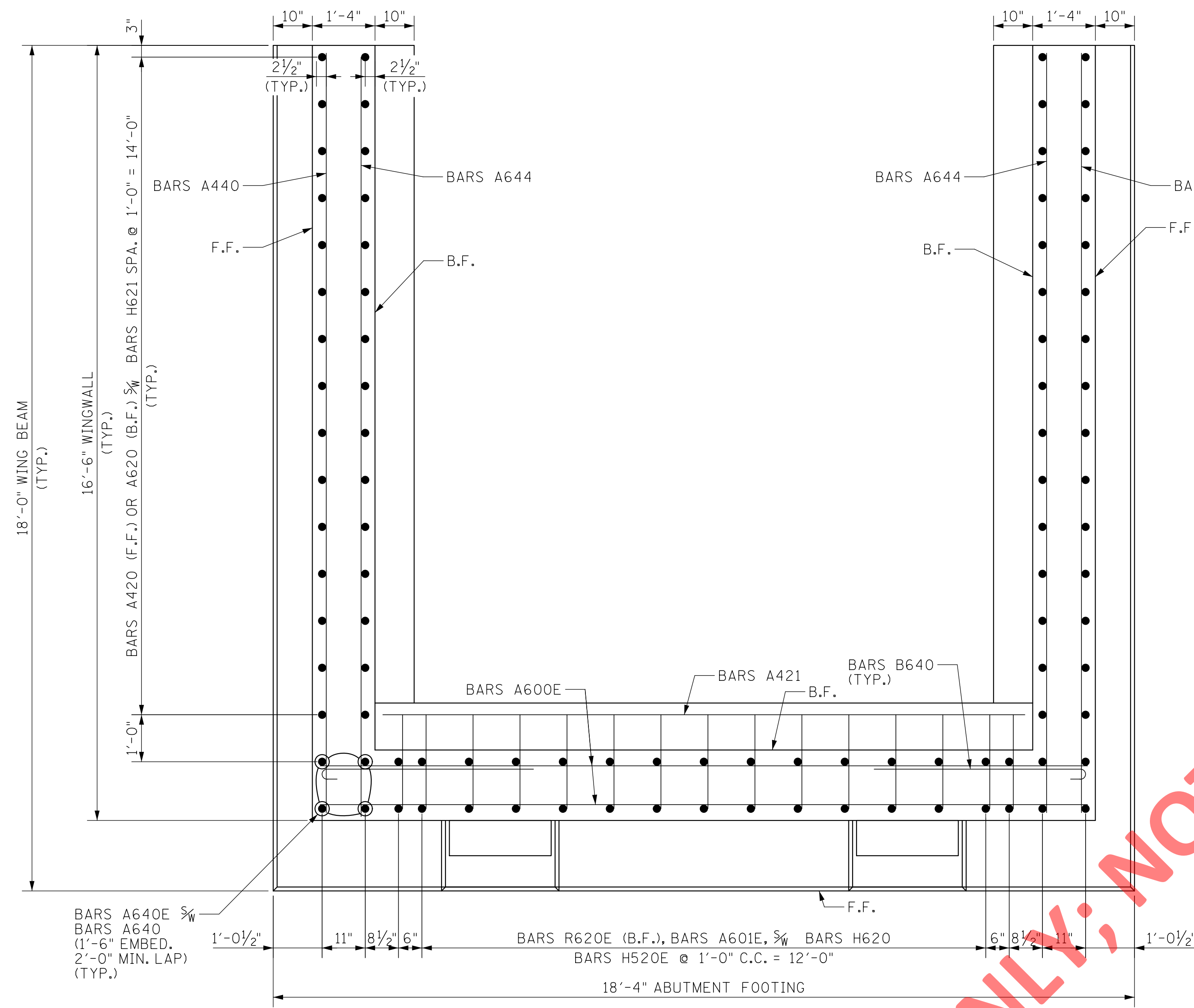
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

CITY OF FRANKLIN ENGINEERING DEPARTMENT

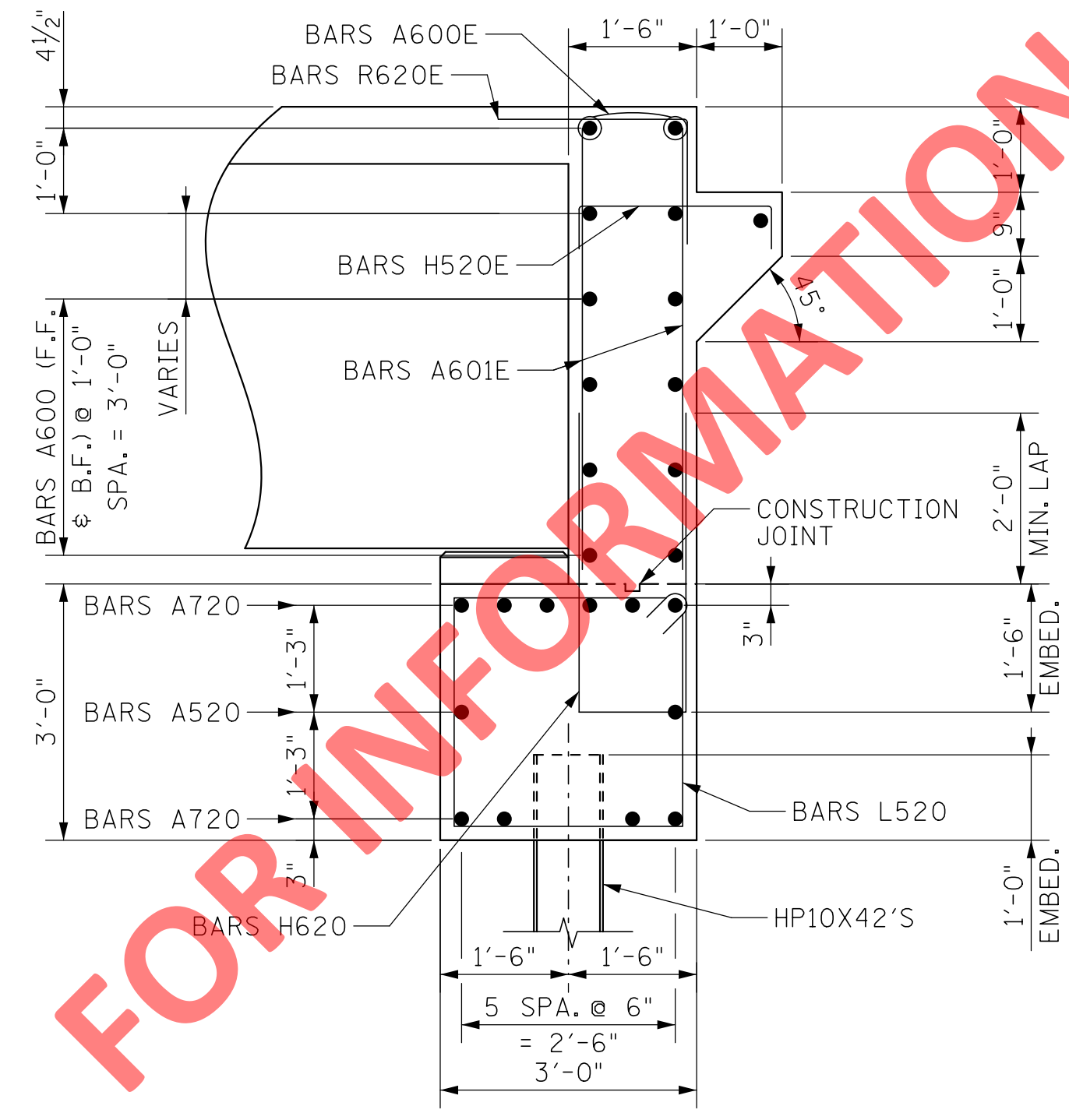
ABUTMENT 1

6/30/2022 11:02:01 AM \\nashvillestr.benesch.local\Benesch\_Projects\Nashville\16020000S\16020001\Eng\_Docs\Structures\16020001\_Harlinsdale\_Abutment\_1\_Details.dgn

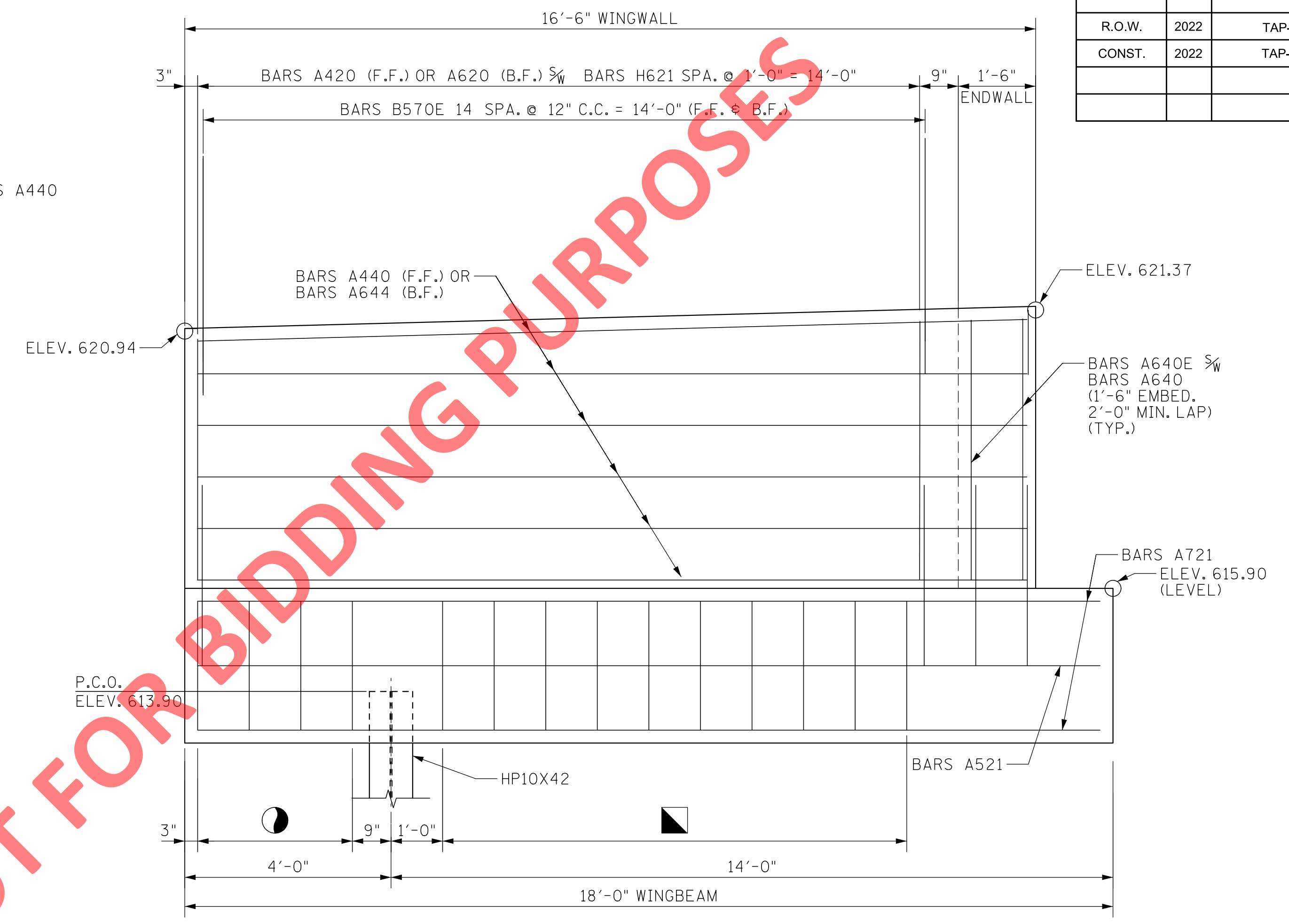
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B11
CONST.	2022	TAP-9305(32)	B11



SECTION "C"- "C"

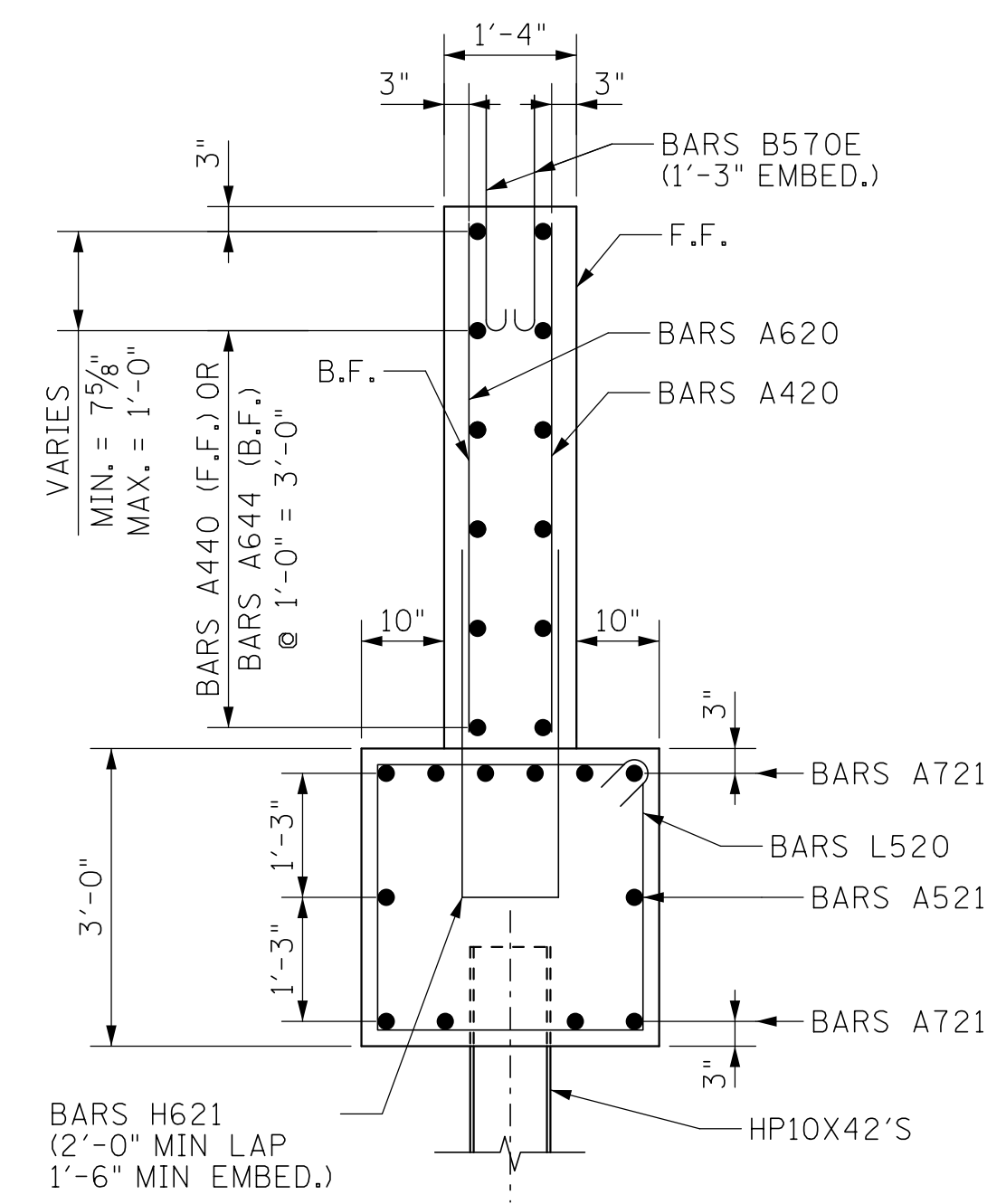


SECTION "A"- "A"

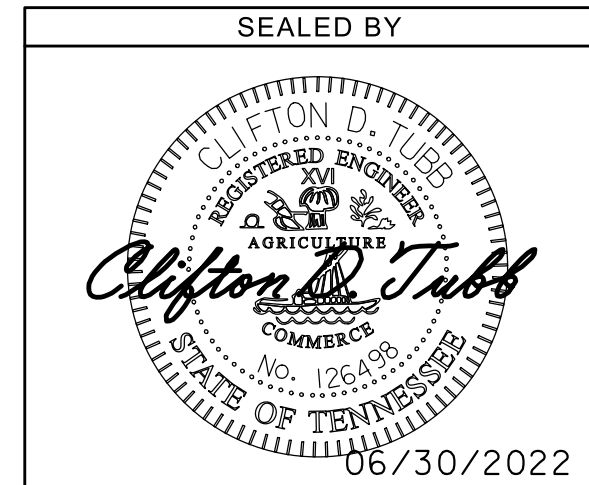


ELEVATION "A"- "A"

- DENOTES: BARS L520 @ 12" C.C SPA. = 3'-0"
- DENOTES: BARS L520 @ 12" C.C SPA. = 9'-0"



SECTION "B"- "B"



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

ABUTMENT 1  
DETAILS

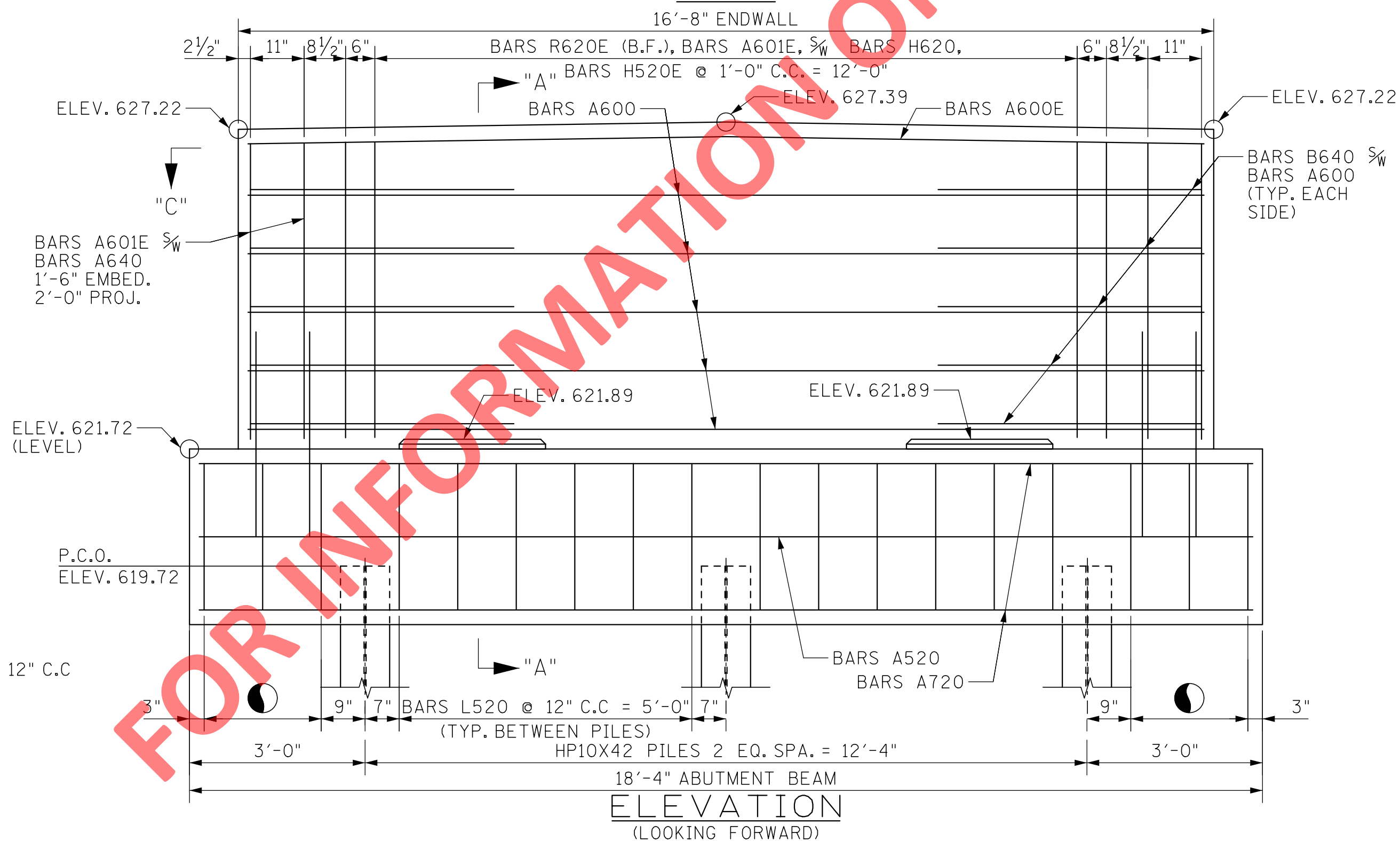
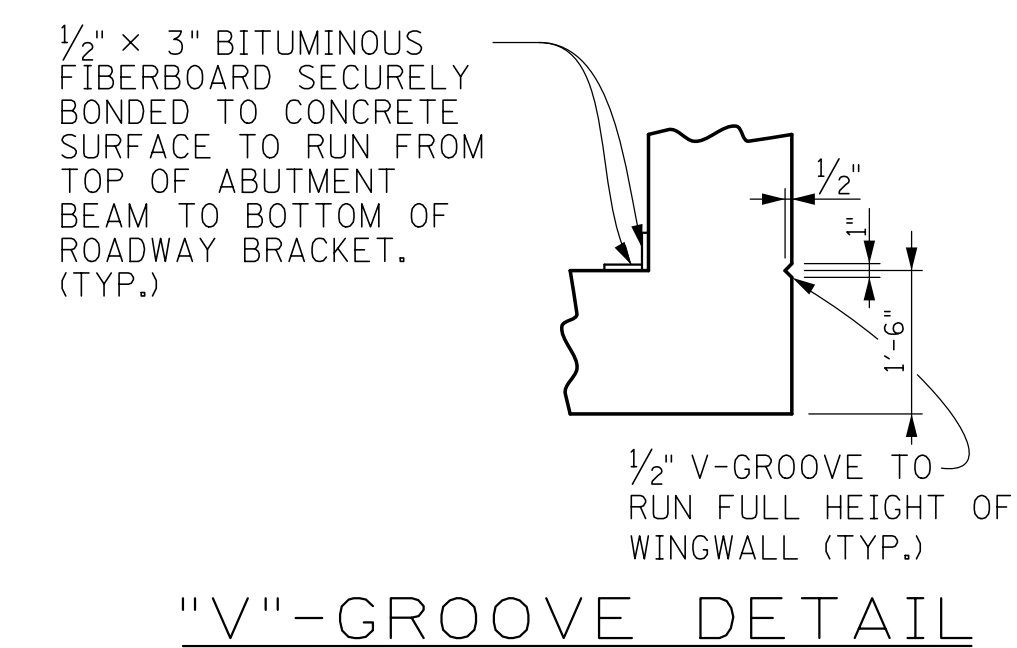
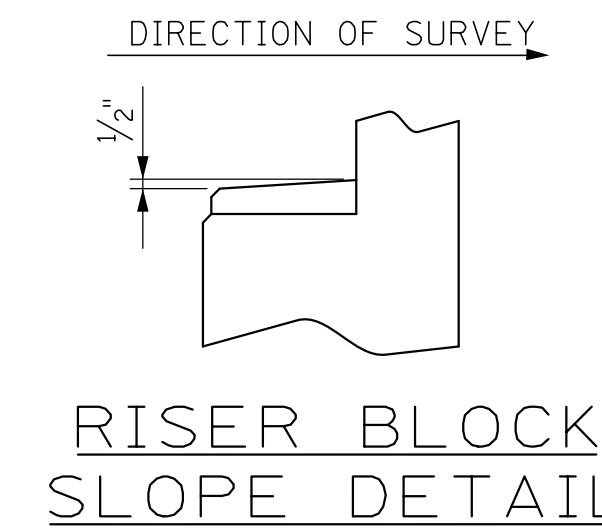
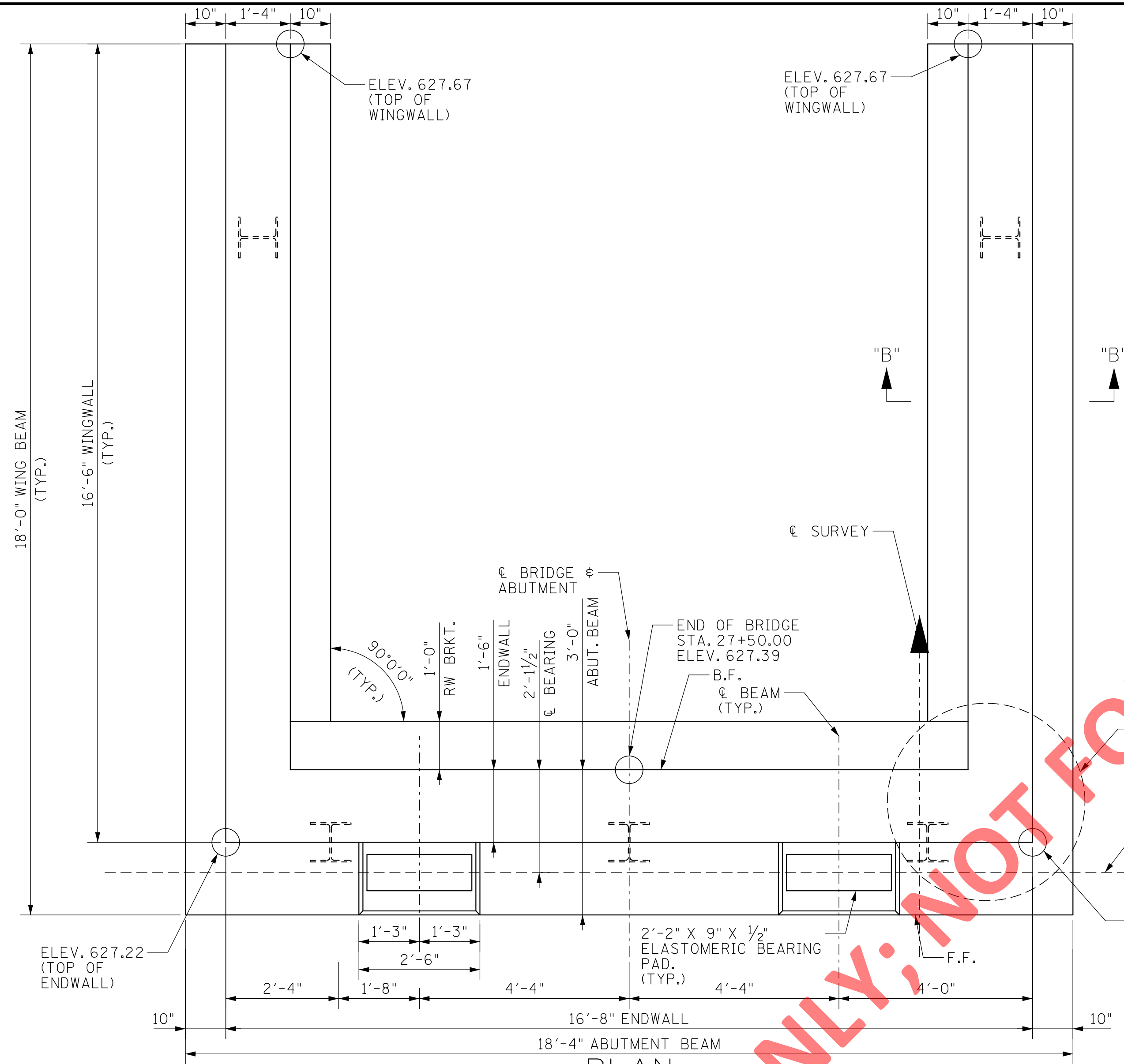


TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B12
CONST.	2022	TAP-9305(32)	B12

**NOTES:**

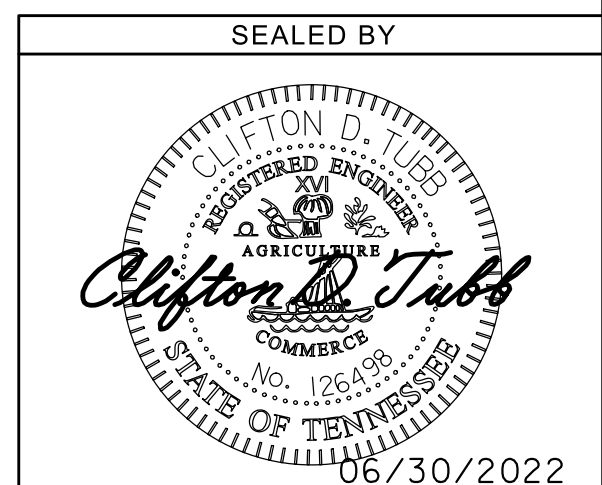
- RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH ABUTMENT BEAM.
- RISER BLOCK BEARING SURFACE TO CONFORM TO BOTTOM OF BEAM GRADE.
- ELASTOMERIC PADS SHALL BE IN PLACE A MINIMUM OF ONE DAY BEFORE BEING DISTURBED BY SETTING BEAMS ON CONCRETE. PLACE RUBBER BONDING CEMENT IN SUCH A WAY THAT VISIBLE CONCRETE SURFACES WILL NOT BE STAINED.
- WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOSTS AND PARAPETS. FOR DETAILS OF WINGPOSTS AND BRIDGE RAIL SEE SHEETS B16 THRU B18.
- WINGBEAM PILES SHALL BE DRIVEN TO THE PLANS TIP ELEVATION OR REFUSAL. SEISMIC ATTACHMENT IS NOT REQUIRED FOR WINGBEAM PILES.
- NOT LESS THAN HALF OF THE SLAB IN THE END SPANS SHALL BE POURED PRIOR TO, OR CONCURRENTLY WITH, PLACEMENT OF ANY PART OF THE ABUTMENT ENDWALLS. AT LEAST THE TOP 12 INCHES OF THE ENDWALLS SHALL BE POURED CONCURRENTLY WITH THE END OF SLAB.
- COST OF BRIDGE RAIL AND POST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE BRIDGE RAIL SYSTEM.

ELEVATION "A"-A"



● DENOTES: BARS L520 @ 12" C.C. SPA. = 2'-0"

ESTIMATED QUANTITIES		
CLASS "A" CONCRETE	EPOXY COATED REINFORCING STEEL LB.	STEEL BAR REINFORCEMENT LB.
C.Y.		
32	1,228	3,494

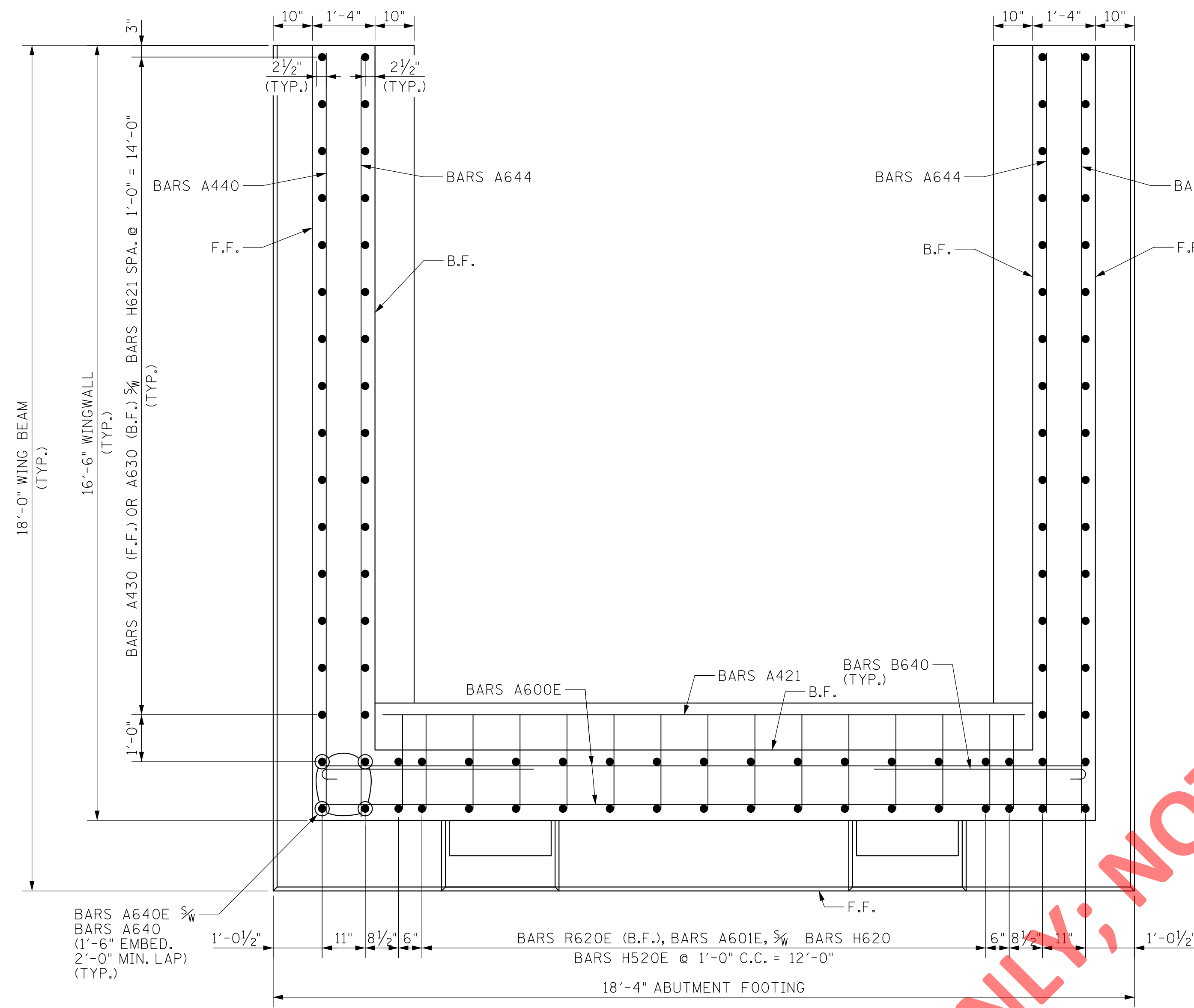


COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

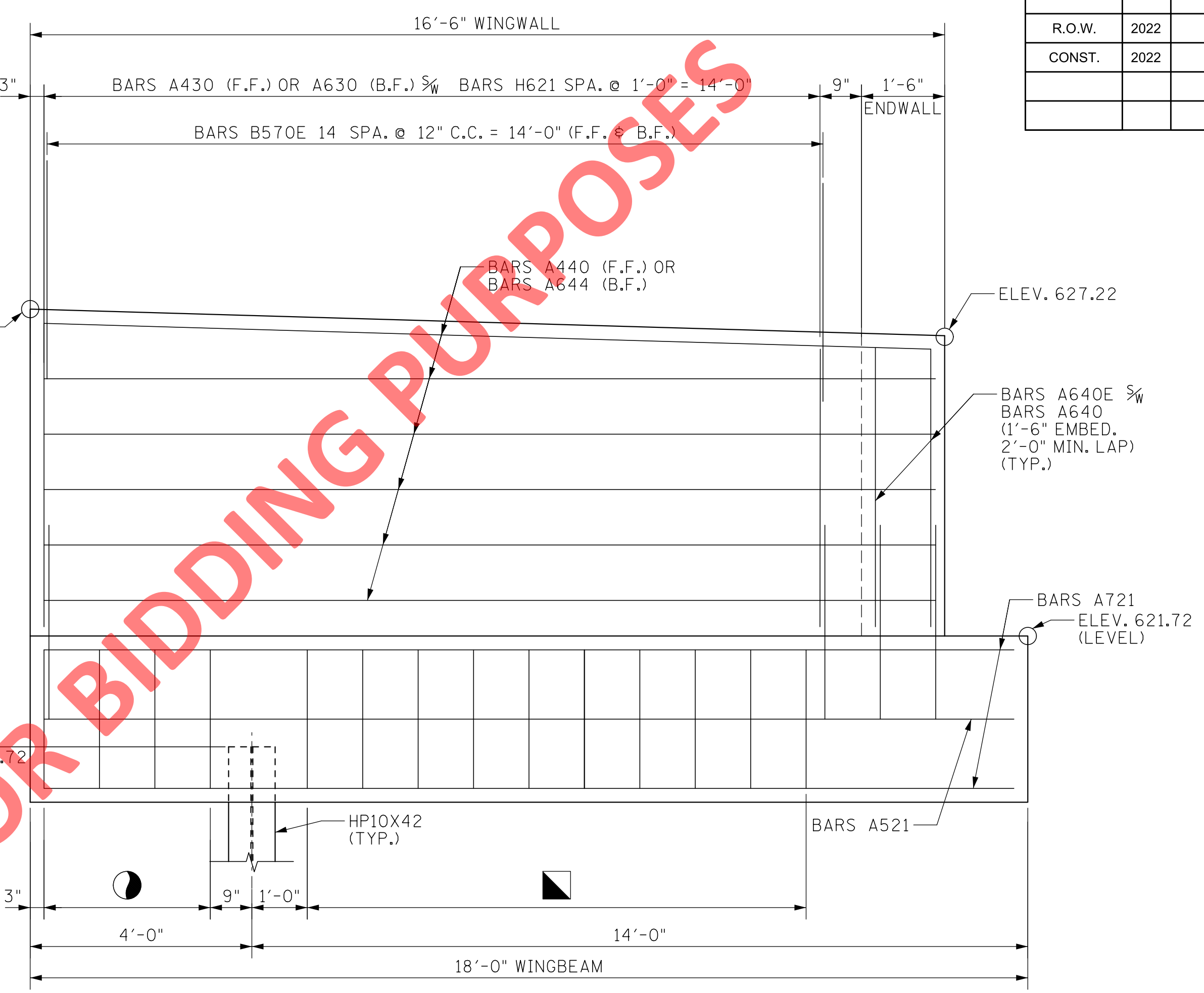
CITY OF FRANKLIN ENGINEERING DEPARTMENT

ABUTMENT 2

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B13
CONST.	2022	TAP-9305(32)	B13

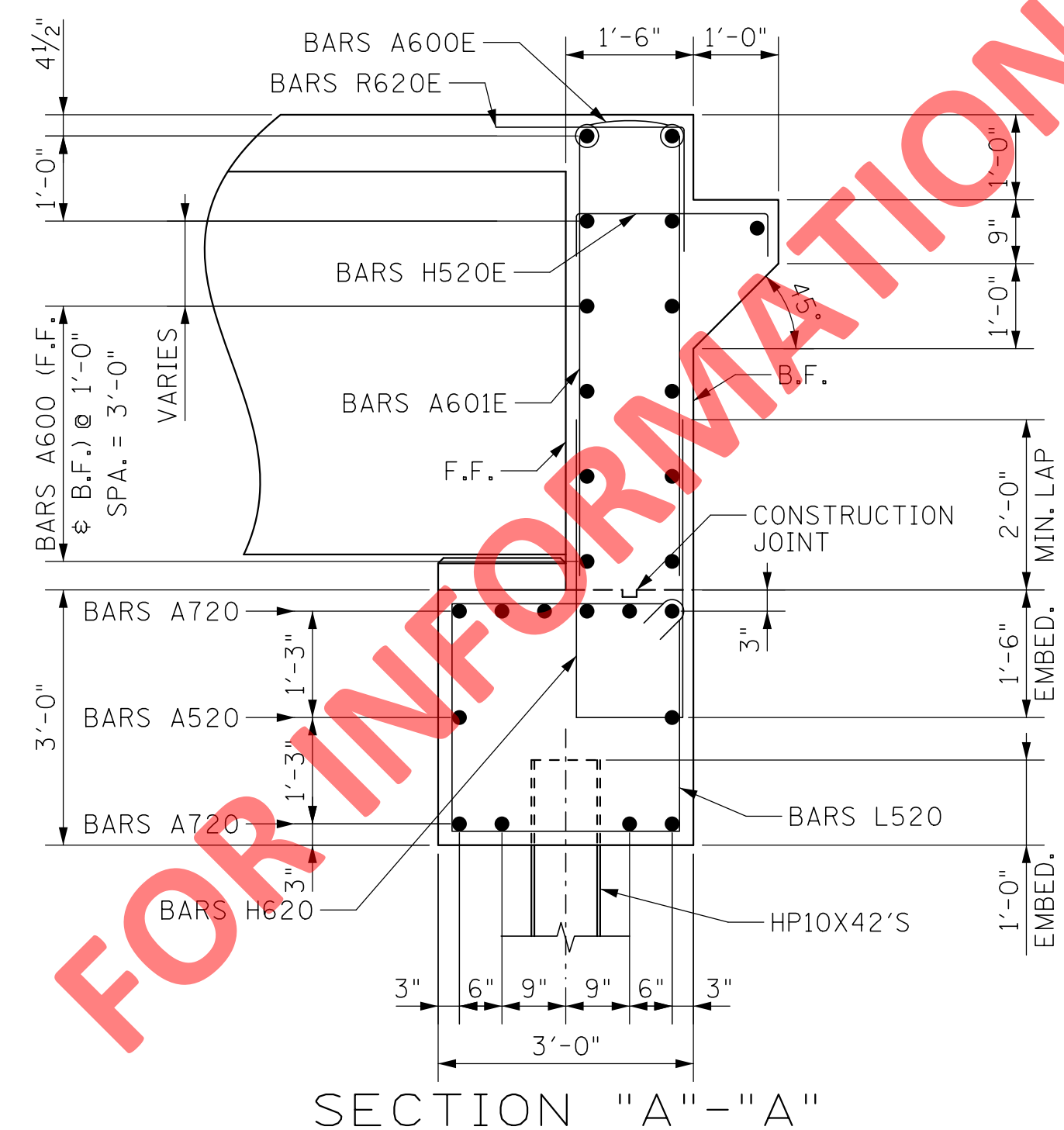


SECTION "C"- "C"

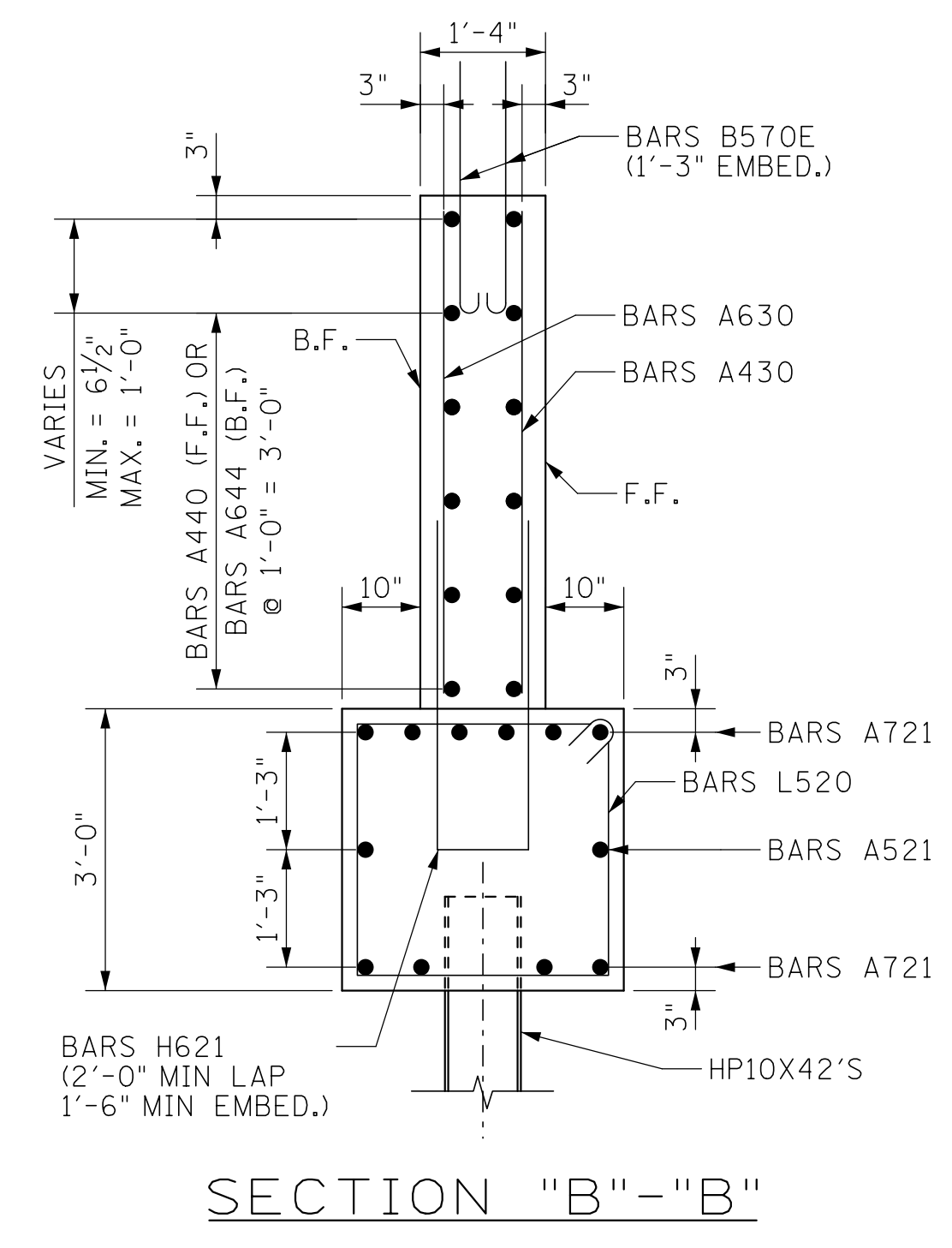


ELEVATION "A"- "A"

- DENOTES: BARS L520 @ 12" C.C SPA. = 3'-0"
- DENOTES: BARS L520 @ 12" C.C SPA. = 9'-0"



SECTION "A"- "A"



SECTION "B"- "B"

SEALED BY

COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

ABUTMENT 2  
DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B14
CONST.	2022	TAP-9305(32)	B14

### TABLE OF STATIONS AND ELEVATIONS

PIER NO.	STATIONS	ELEVATIONS			
		"A"	"B"	"C"	"D"
PIER NO. 1	25+90.00	617.63	617.63	617.46	613.46
PIER NO. 2	26+90.00	620.33	620.33	620.16	616.16

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING 1 1/2" DIAM. GRADE 55, ANCHOR BOLTS. SEE STANDARD DRAWING STD-6-1, AMEND AS NEEDED TO ACCOMMODATE THE 1 1/2" DIAM BOLTS. BOLTS PROJECTION 11"

NOTE: RISER BLOCK TO BE POURED MONOLITHICALLY WITH CAP BEAM.

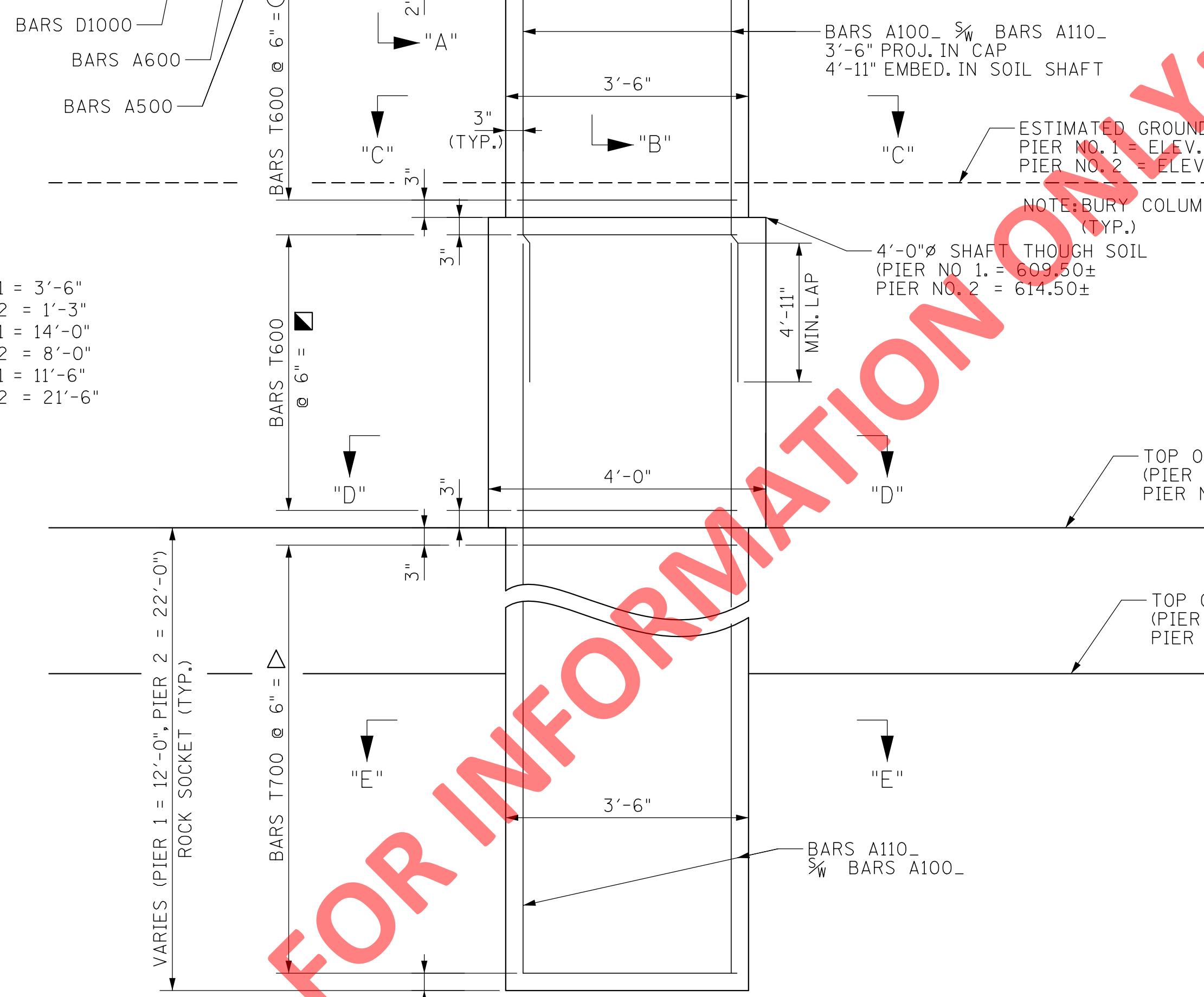
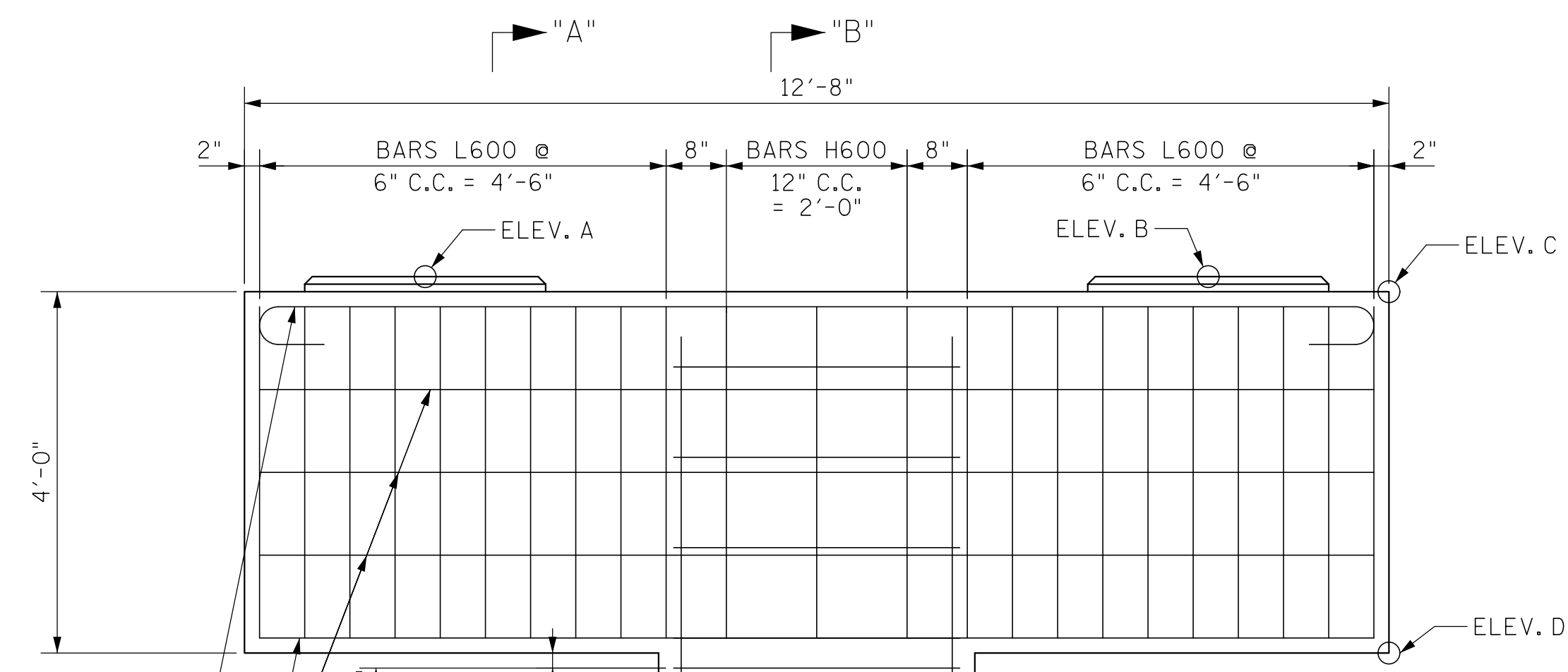
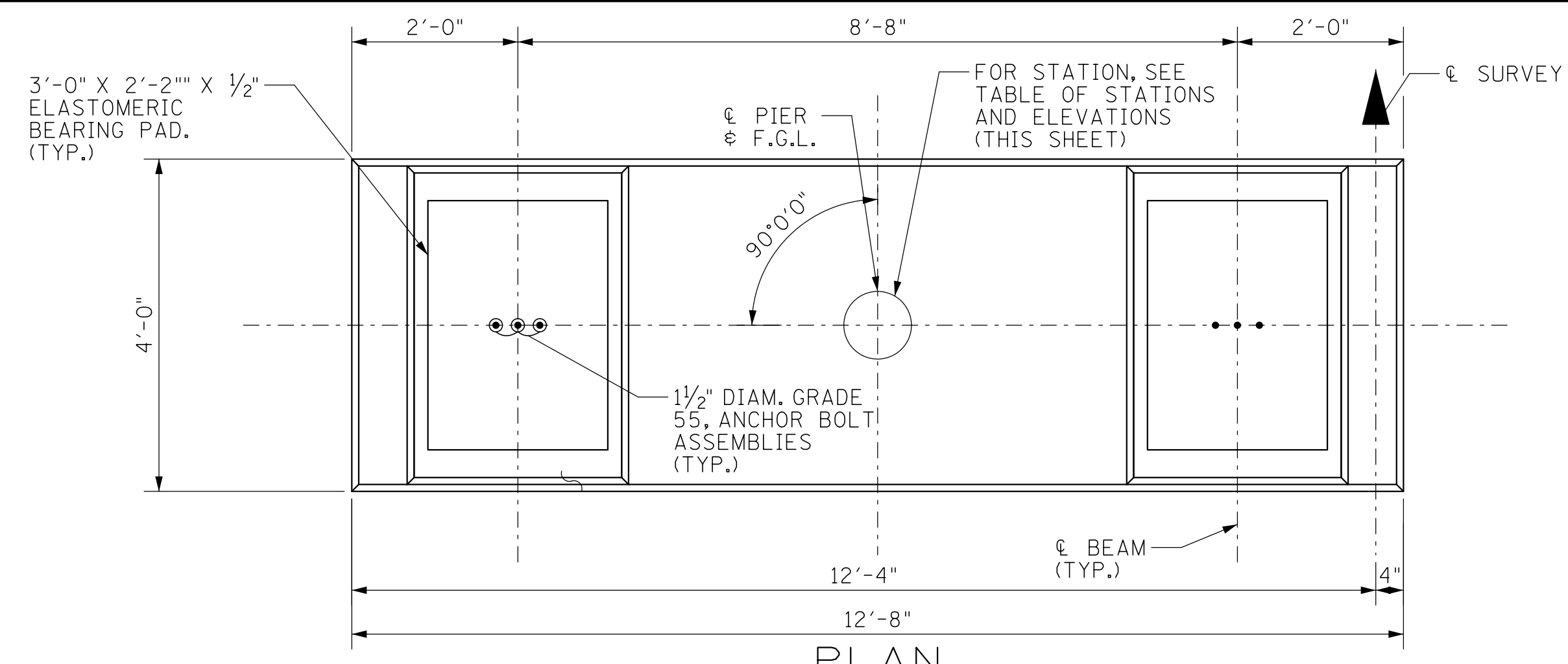
NOTE: ELASTOMERIC PADS SHALL BE IN PLACE A MINIMUM OF ONE DAY BEFORE BEING DISTURBED BY SETTING BEAMS. PLACE RUBBER BINDING CEMENT IN SUCH A WAY THAT VISIBLE CONCRETE SURFACES WILL NOT BE STAINED.

NOTE: RISER BLOCK BEARING SURFACE TO CONFORM TO BOTTOM OF BEAM GRADE.

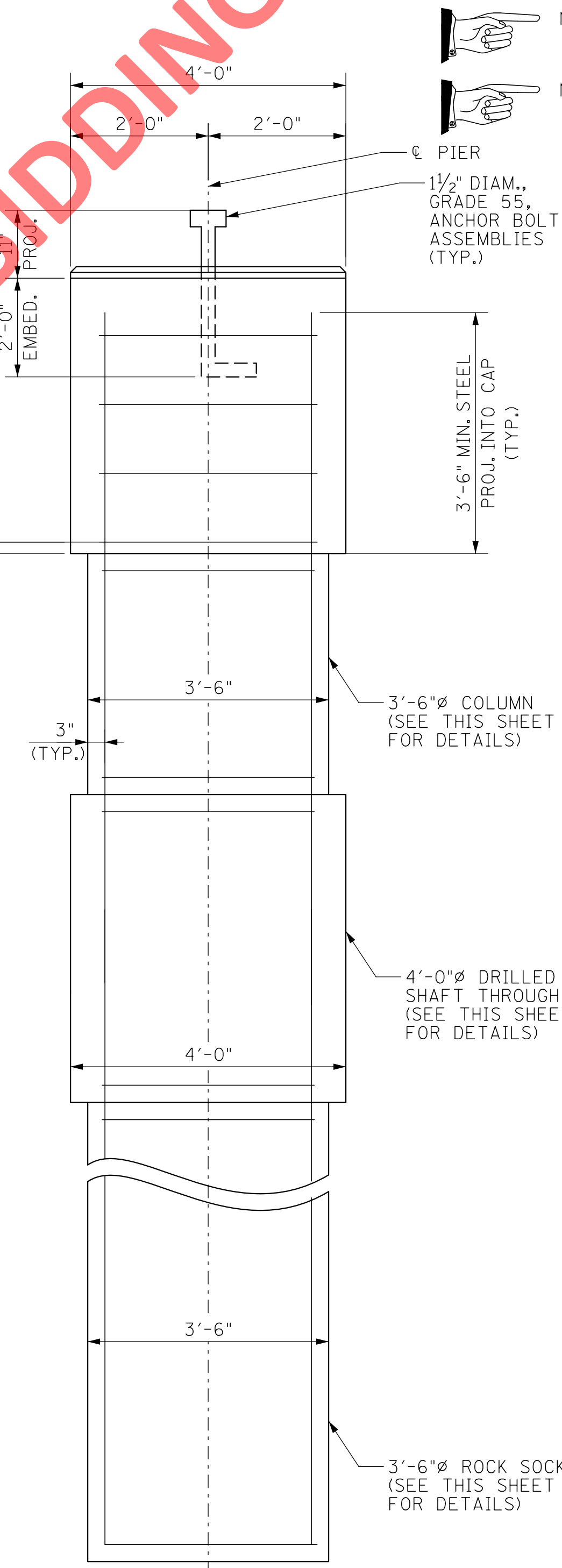
NOTE: COLUMN STEEL TO EXTEND 3 FEET 6 INCHES INTO PIER CAP.

NOTE: PIERS SHALL HAVE A MINIMUM CONCRETE STRENGTH OF 4,000 PSI

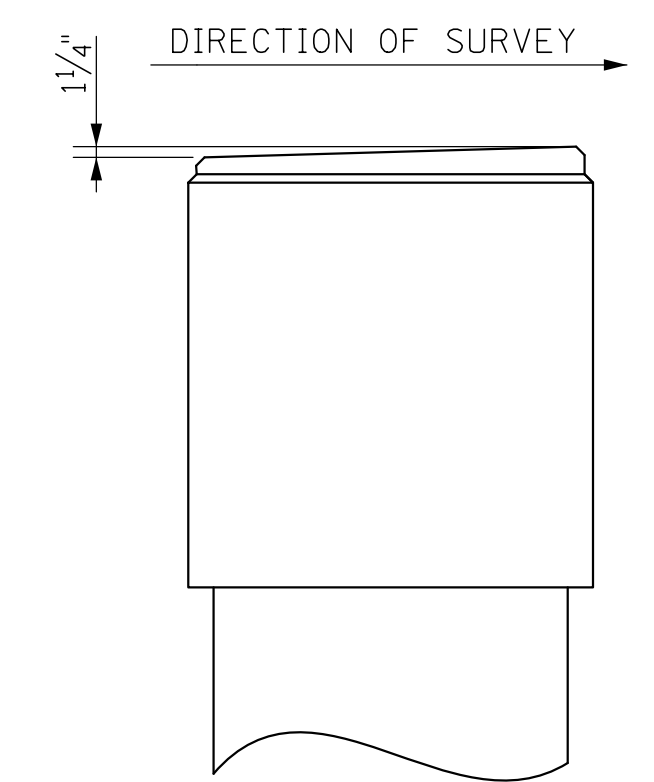
NOTE: ROCK SOCKETS SHALL HAVE A MINIMUM CONCRETE STRENGTH OF 5,000 PSI



ELEVATION  
(LOOKING FORWARD ON SURVEY)



END ELEVATION

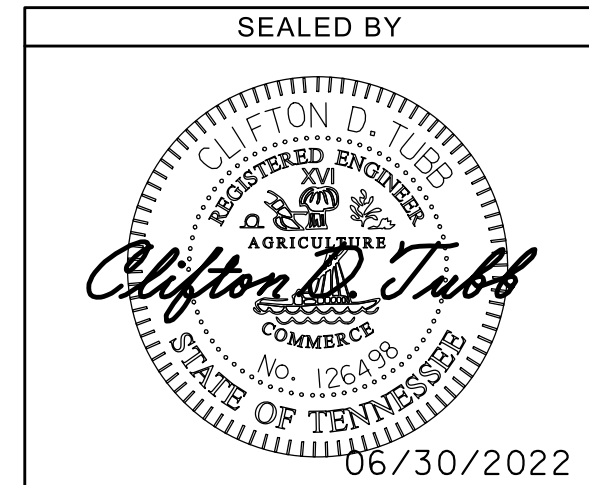


RISER BLOCK  
SLOPE DETAIL

- DENOTES: PIER NO. 1 = 3'-6"  
PIER NO. 2 = 1'-3"
- DENOTES: PIER NO. 1 = 14'-0"  
PIER NO. 2 = 8'-0"
- △ DENOTES: PIER NO. 1 = 11'-6"  
PIER NO. 2 = 21'-6"

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 11:02:30 AM \\nashvillestr.benesch.local\Benesch\_P\Projects\Nashville\16020000S\16020001\16020001\_001\Eng\_Docs\Structures\DGN\16020001\_Pier 1 & 2.dgn

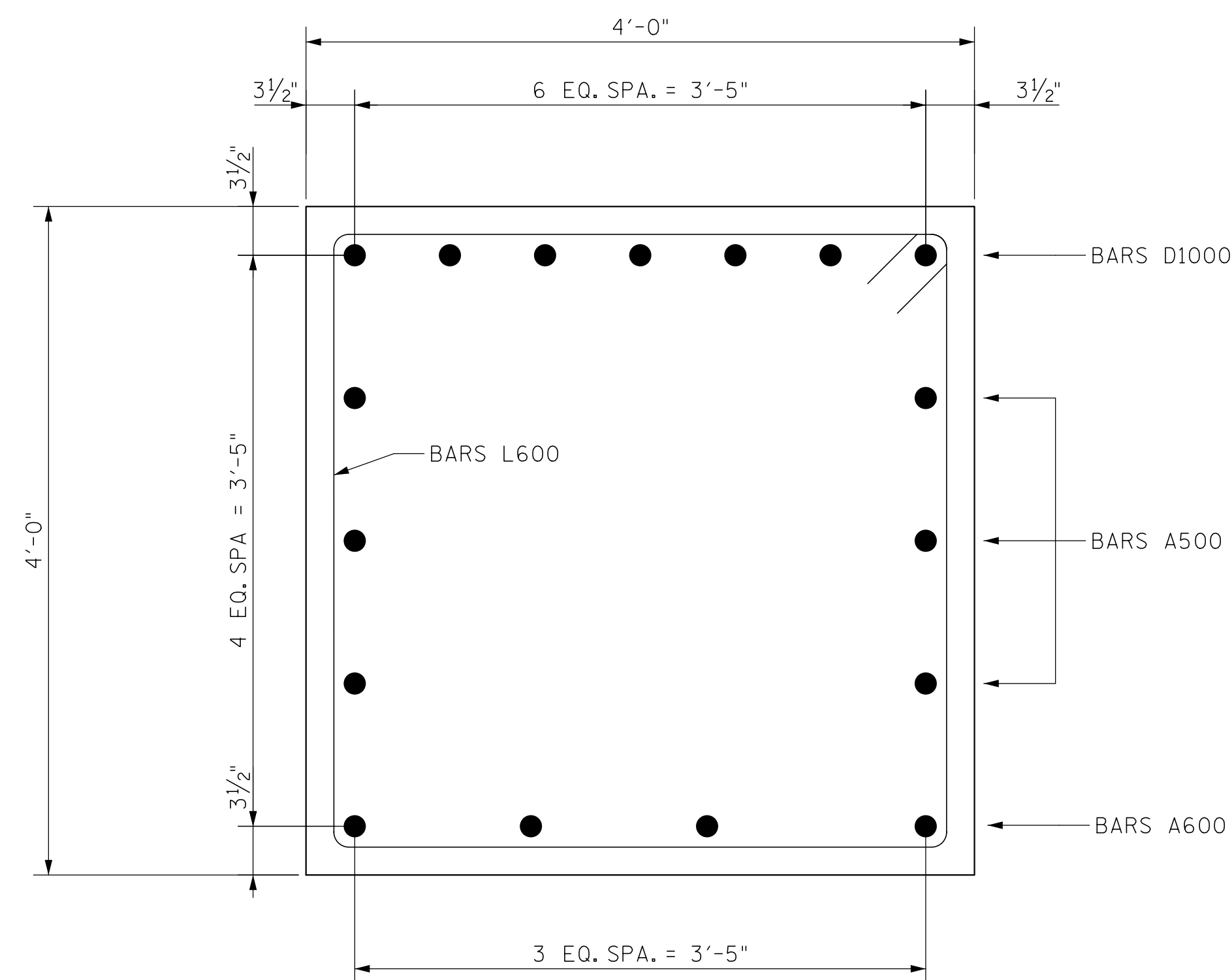


COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

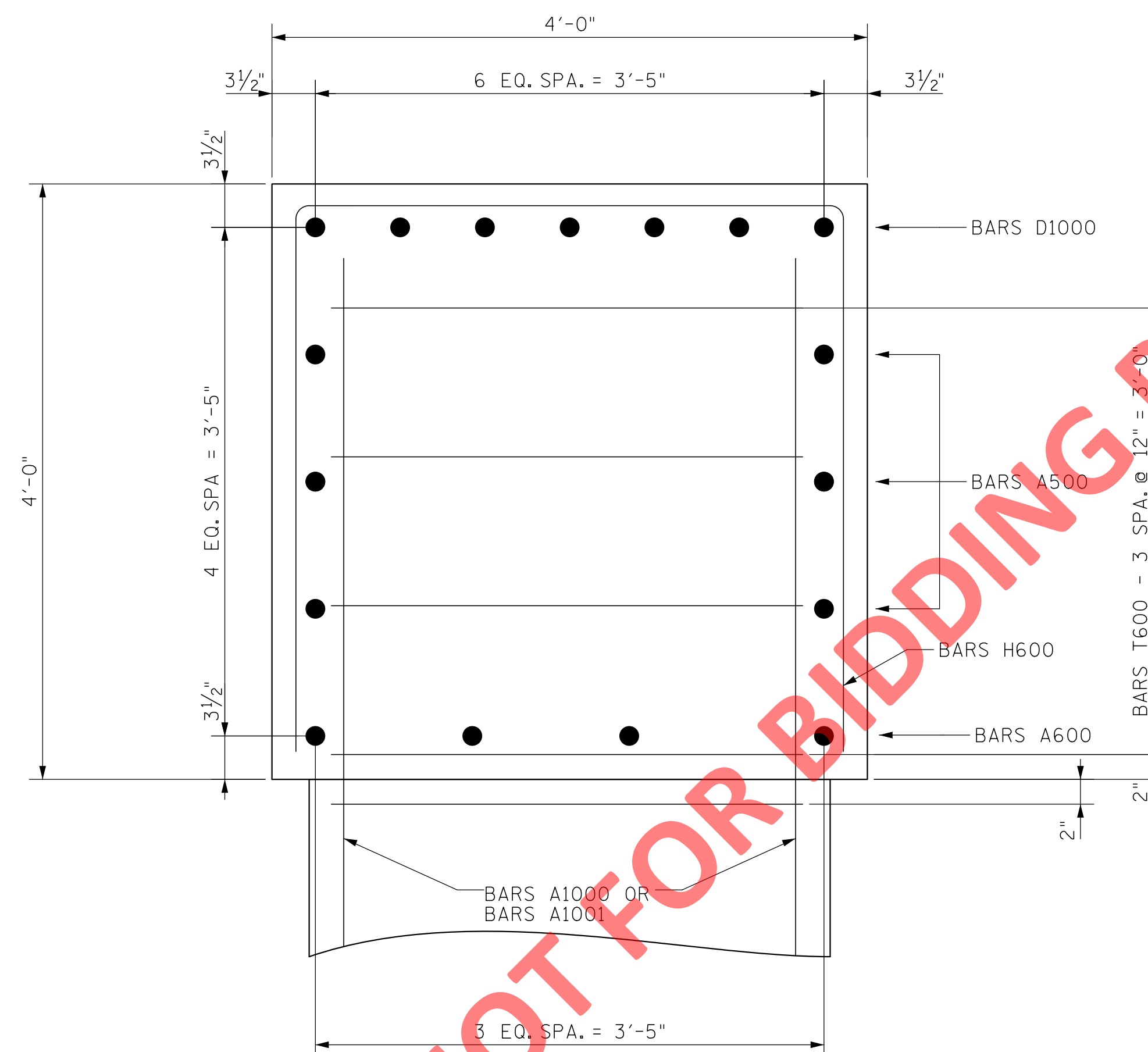
CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

PIERS 1 & 2

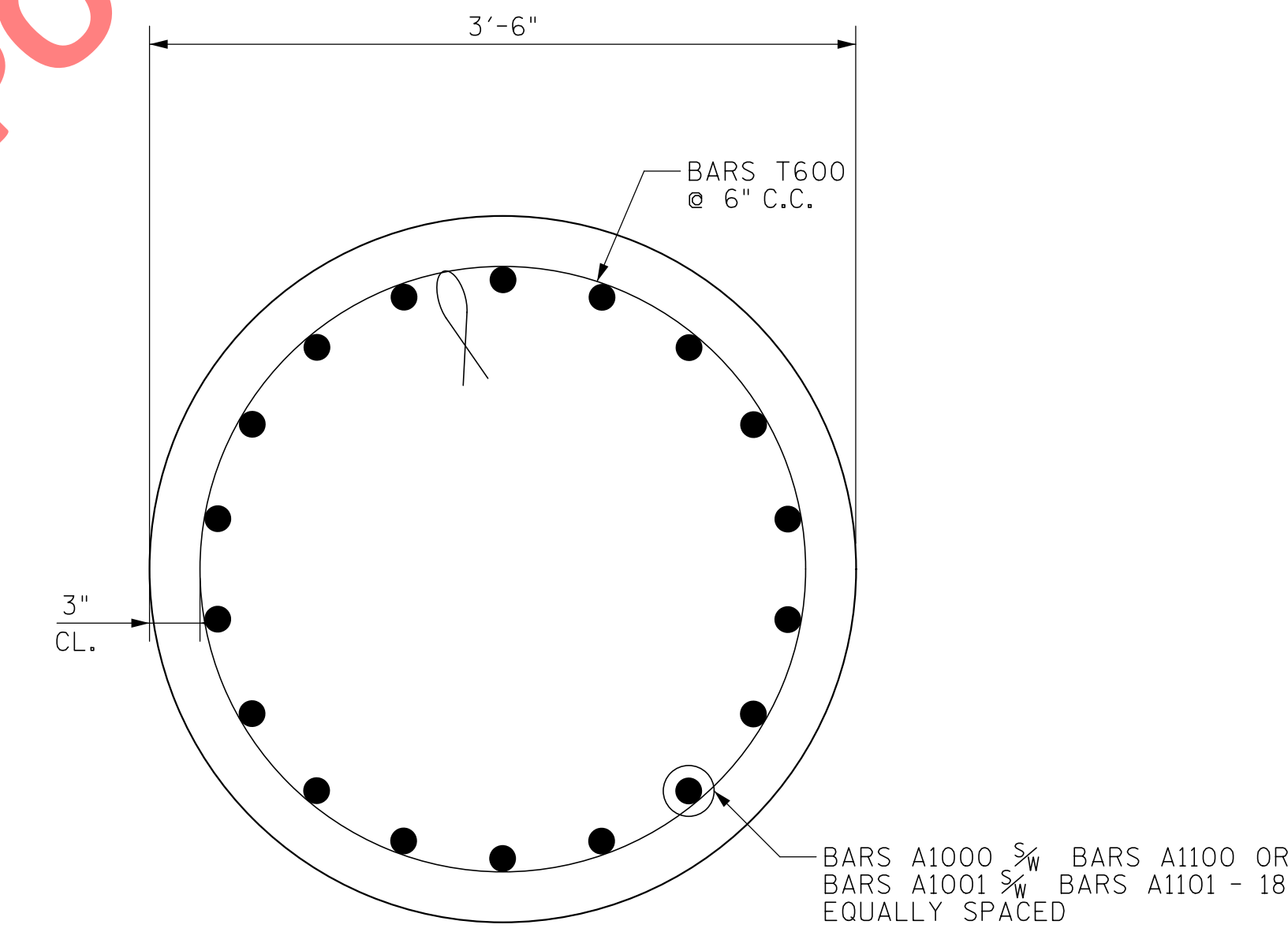
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B15
CONST.	2022	TAP-9305(32)	B15



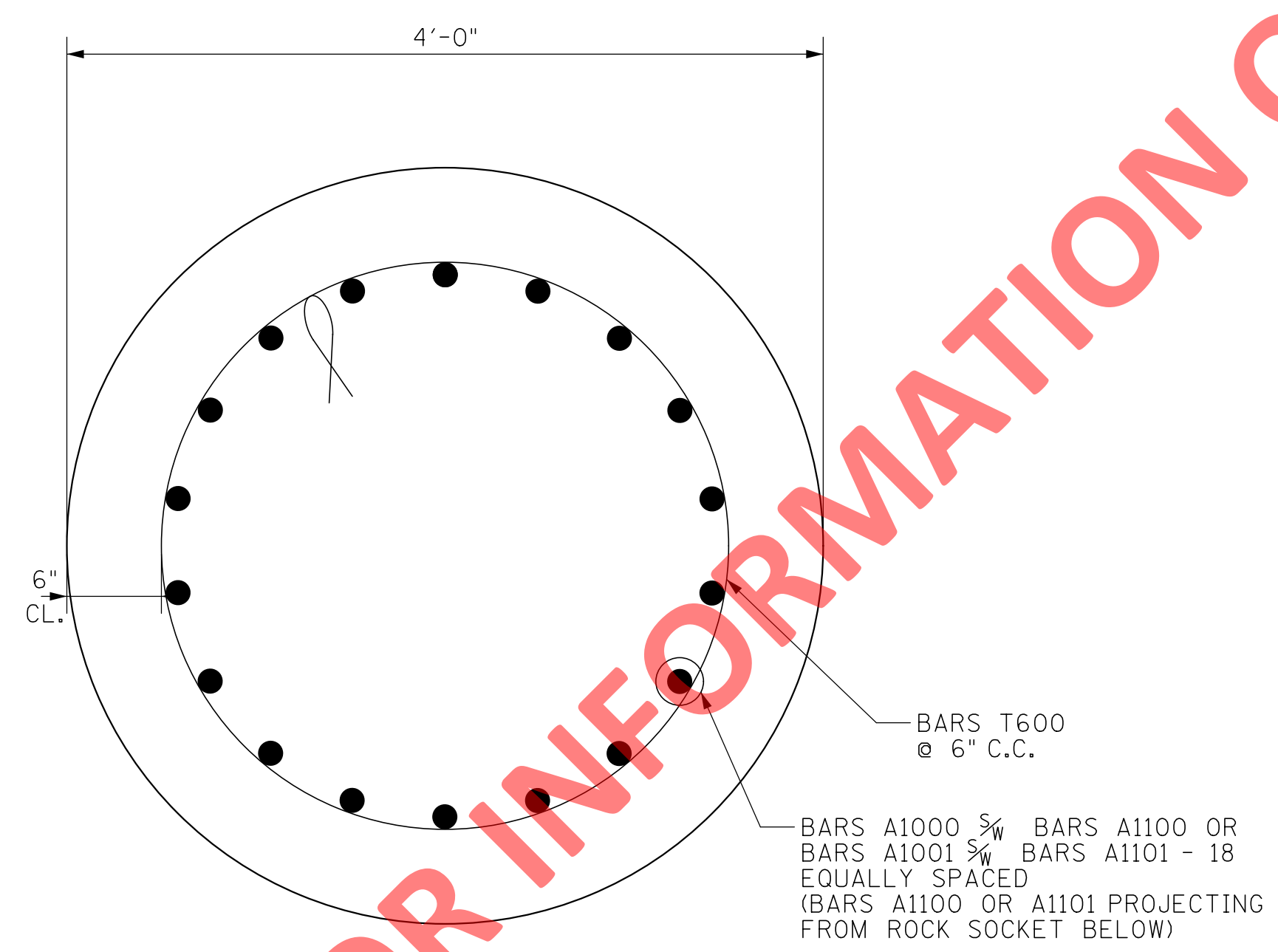
SECTION "A"-"A"



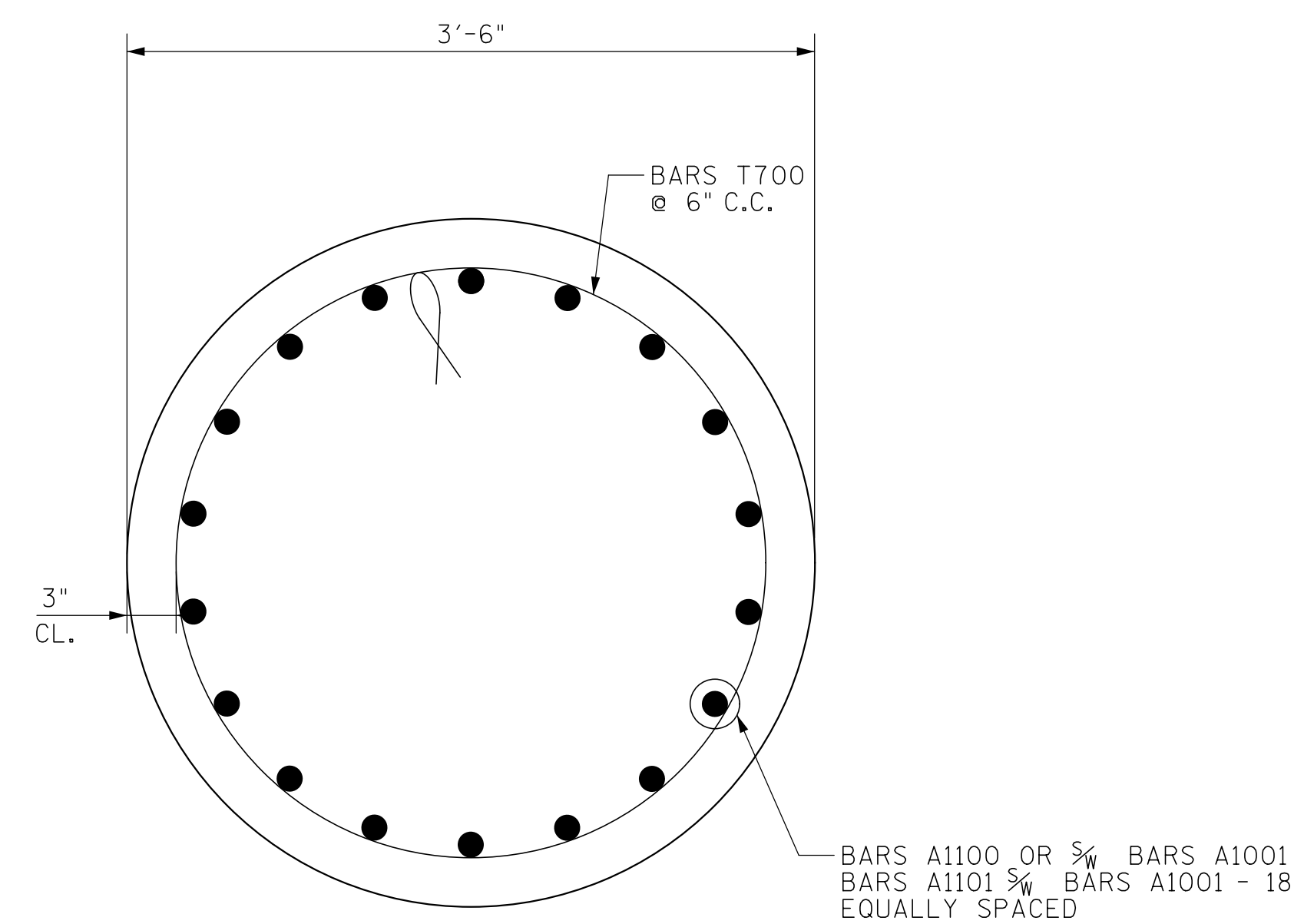
SECTION "B"-"B"



SECTION "C"-"C"



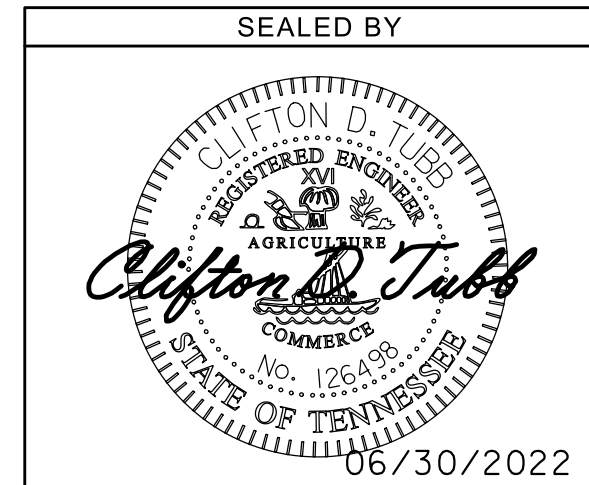
SECTION "D"-"D"



SECTION "E"-"E"

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 11:02:37 AM \\nashvillestr.benesch.local\Benesch\_Projects\Nashville\16020000S\16020001\Eng\_Docs\Structures\16020001\_Harlinsdale\_Pier 1 & 2 Details.dgn



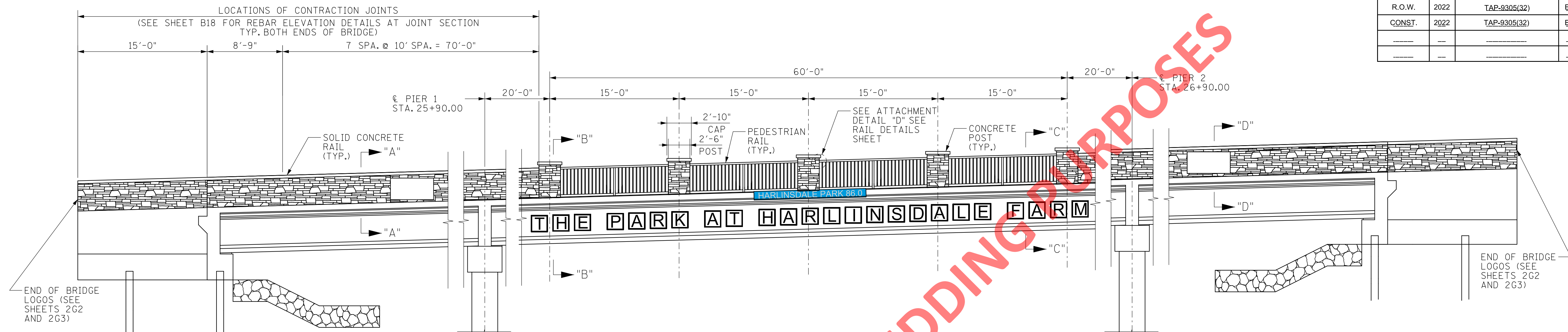
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



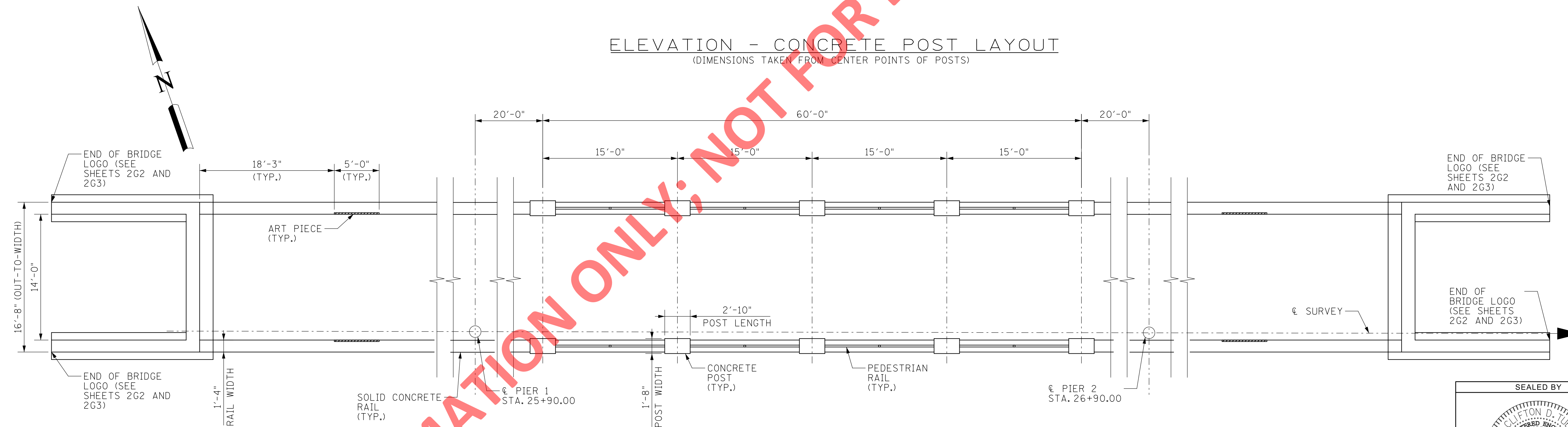
CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

PIER DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B16
CONST.	2022	TAP-9305(32)	B16
---	---	---	---
---	---	---	---



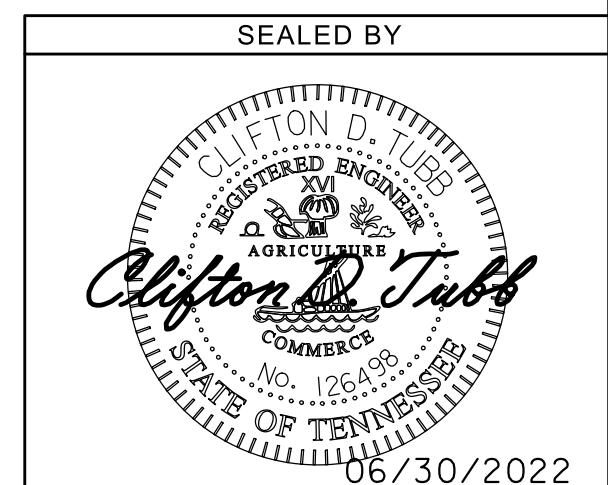
ELEVATION - CONCRETE POST LAYOUT  
(DIMENSIONS TAKEN FROM CENTER POINTS OF POSTS)



PLAN - CONCRETE POST LAYOUT  
(DIMENSIONS TAKEN FROM CENTER POINTS OF POSTS)

NOTES:

- SEE SHEETS B17 AND B18 FOR DETAILS OF PARAPET.
- A 4'-0" SAMPLE SECTION OF PARAPET AND SAMPLE CONCRETE POST SHALL BE BUILT FOR APPROVAL BY THE ENGINEER.
- COST OF CONDUITS AND PULL BOXES TO BE INCLUDED IN THE COST OF THE STRUCTURAL LIGHTING, ITEM NO. 714-01.01
- COST OF LOGOS (TRAILS LOGO AND CITY OF FRANKLIN LOGO) ON BRIDGE RAILING TO BE INCLUDED IN THE COST OF THE CONCRETE PARAPET, ITEM NO. 620-03.12.
- EACH FACE OF THE CONCRETE BARRIER RAIL AND CONCRETE POSTS TO BE FORMED WITH AN APPROVED FORM LINER SIMILAR TO CUSTOM ROCK PATTERN #1208, DRYSTACK.
- STRUCTURAL FENCING RAIL TO BE POWDERED COATED BLACK.
- STRUCTURAL FENCING RAIL SHALL CONFORM TO ASTM A500 GRADE B.



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

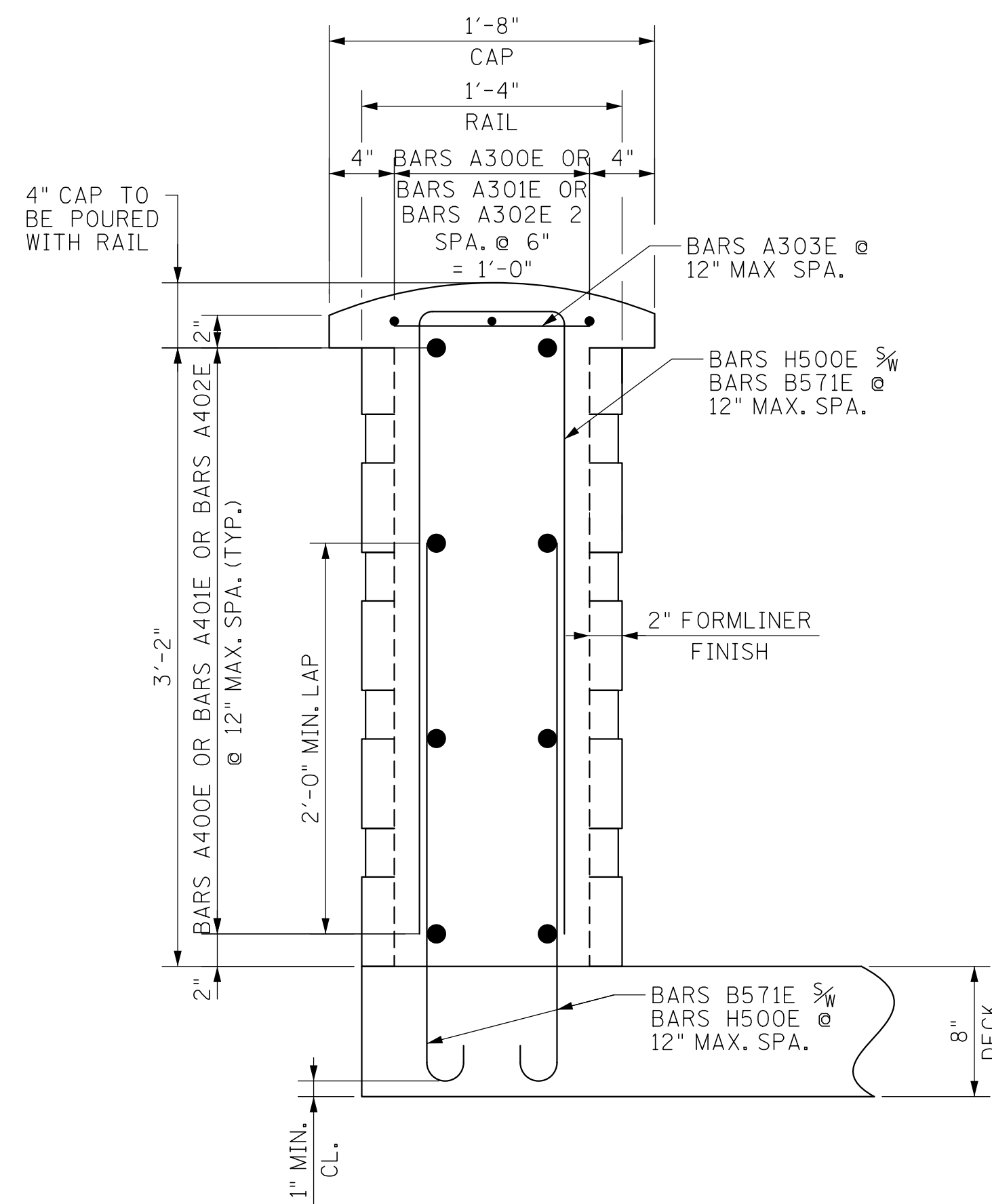


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

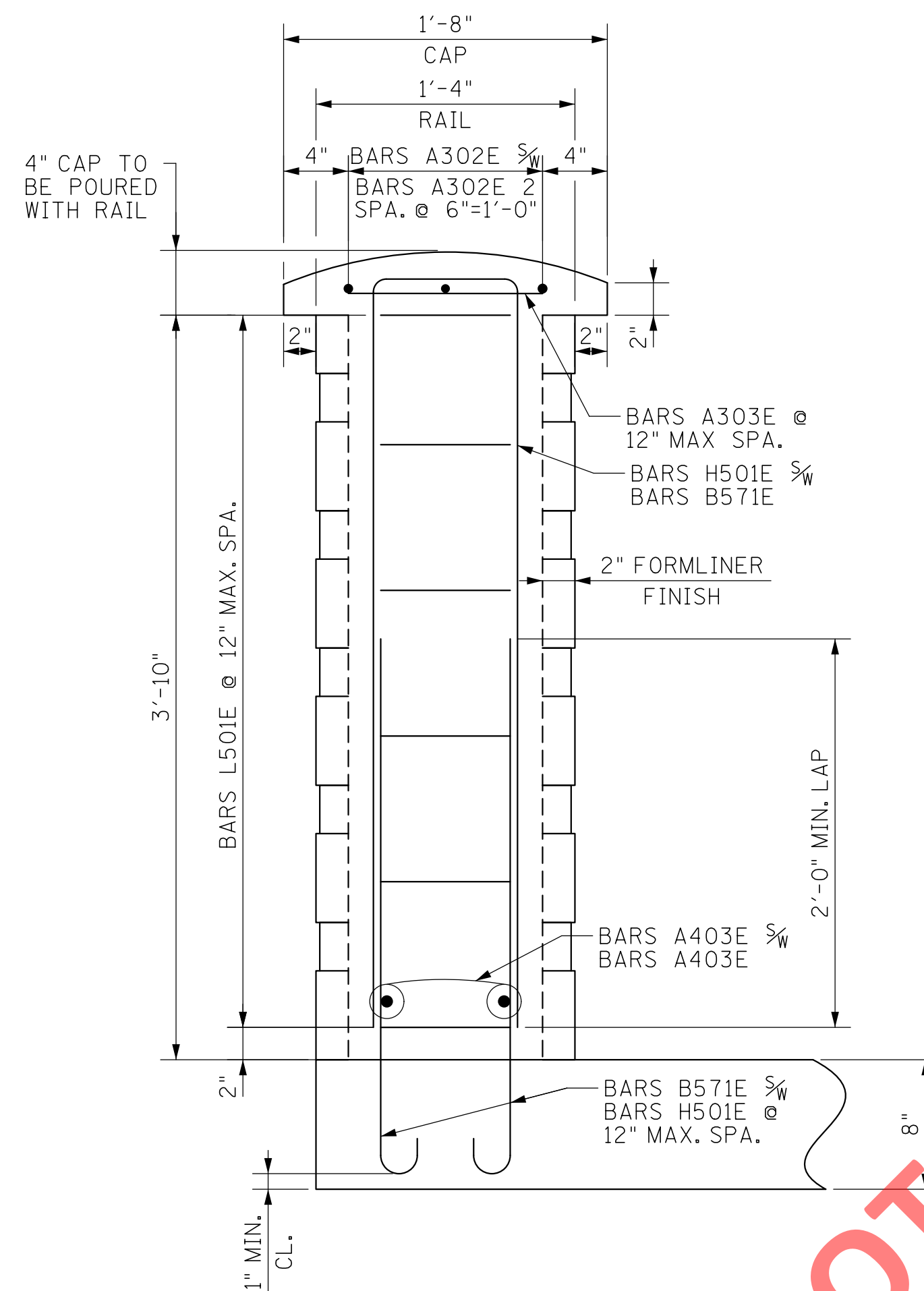
BRIDGE RAIL  
DETAILS

6/30/2022 11:11:21 AM \\nashvillestr.benesch.local\benesch\16020000S\16020001\00\Eng\_Structures\IDGN\16020001\_Harlinsdale\_Rail Elevation.dgn

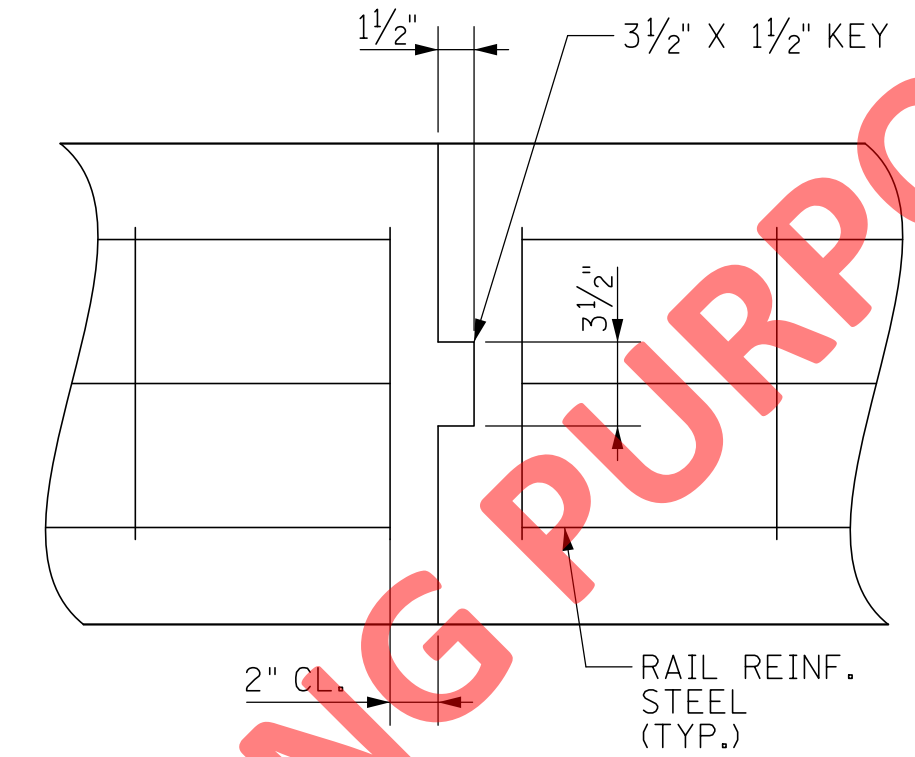
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B17
CONST.	2022	TAP-9305(32)	B17



SECTION "A"-"A"



SECTION "B"-"B"



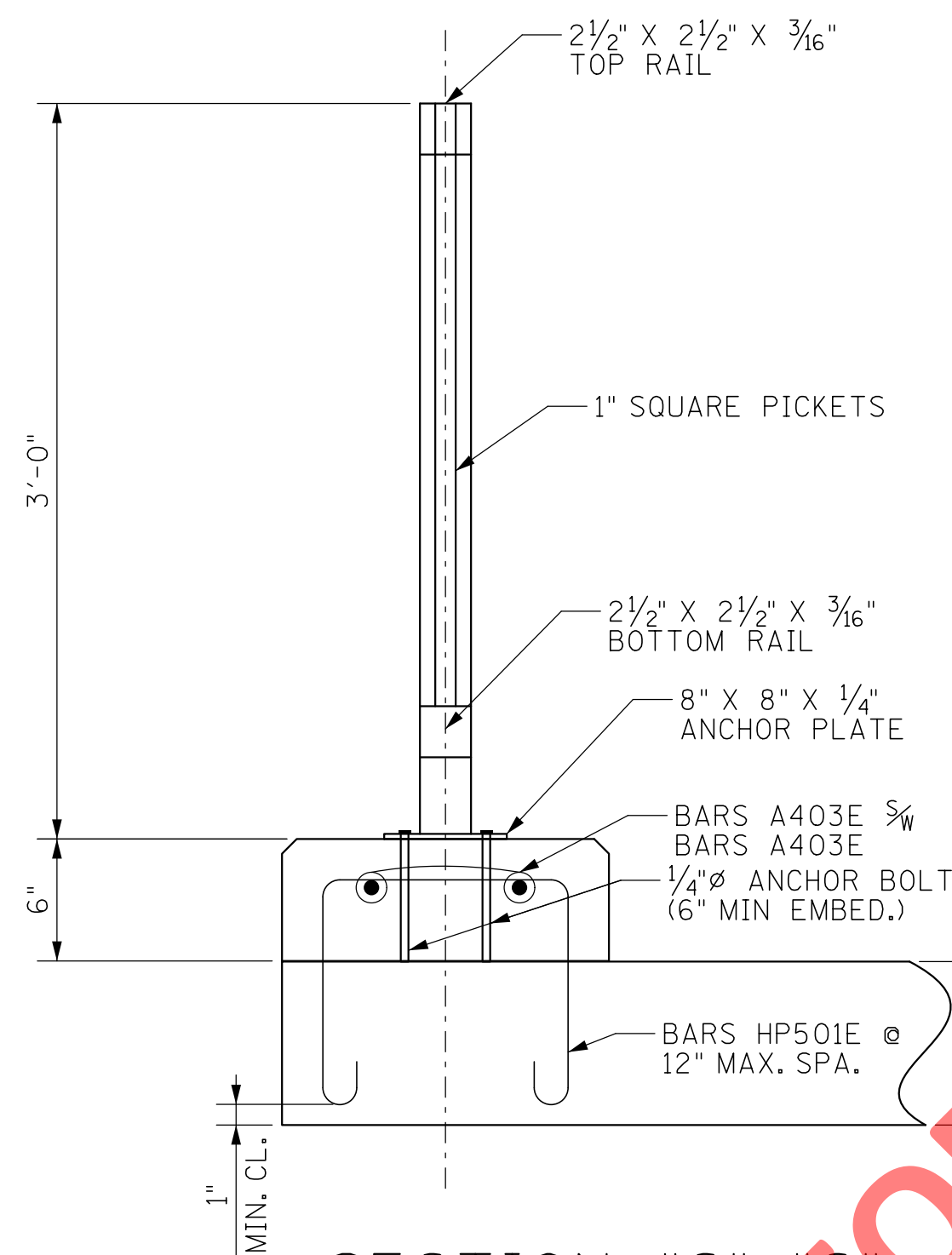
CONTRACTION JOINT - SOLID CONCRETE RAIL

SOLID BRIDGE RAIL JOINTS NOTES:

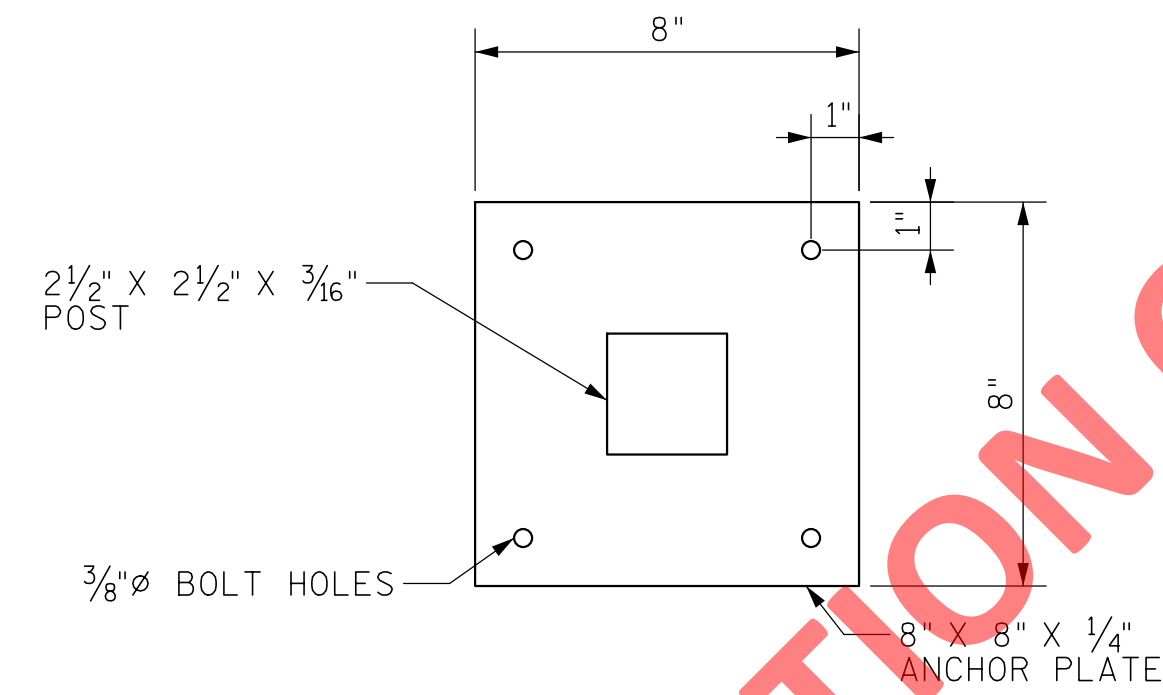
1. CONTRACTION JOINTS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED 10 FEET. THE JOINTS SHALL BE USED IN THE RAIL ONLY AND NOT CARRIED THROUGH THE BRIDGE DECK. NO RAIL REINFORCEMENT SHALL PASS THROUGH THE JOINT.
2. JOINT SHALL EXTEND FULL HEIGHT OF RAIL.

NOTE: CAP TO BE POURED CONCURRENTLY WITH RAIL AND HAVE A SMOOTH FINISH.

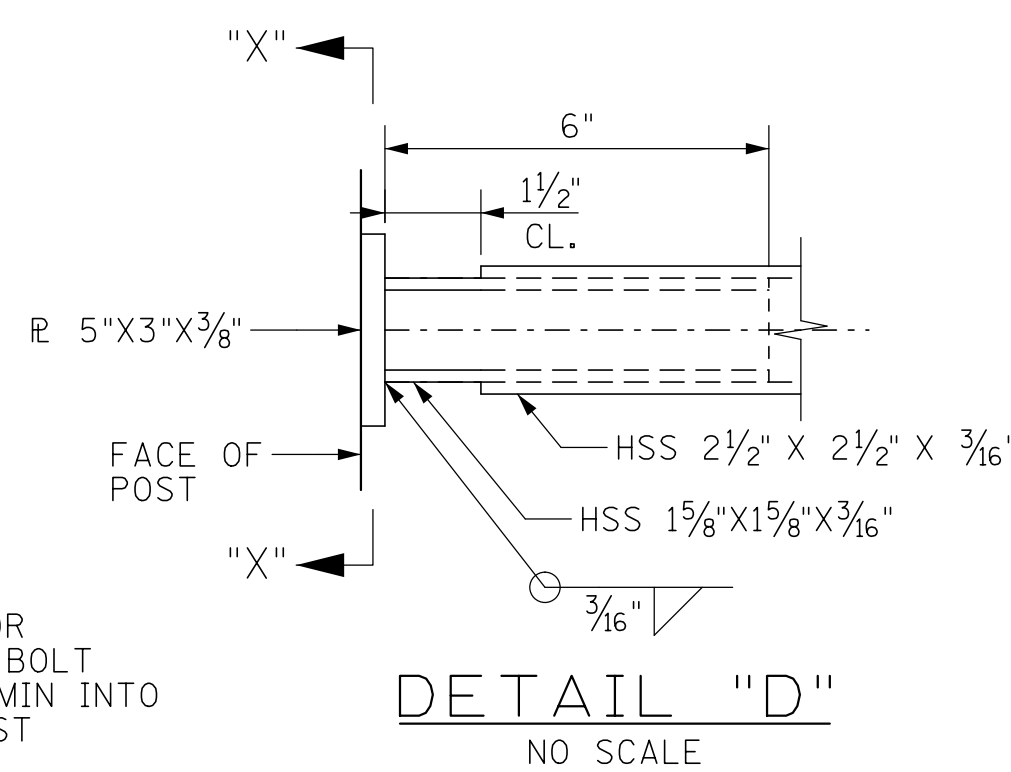
NOTE: CONTRACTOR SHALL ADJUST ANY REINFORCEMENT THAT CONFLICTS WITH CONTRACTION JOINT AND BRIDGE LIGHTING.



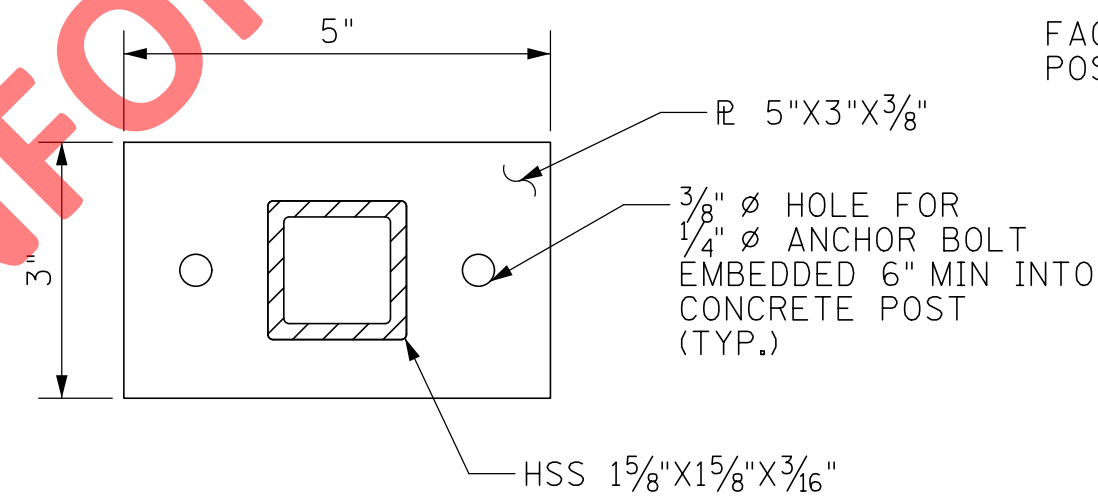
SECTION "C"-"C"



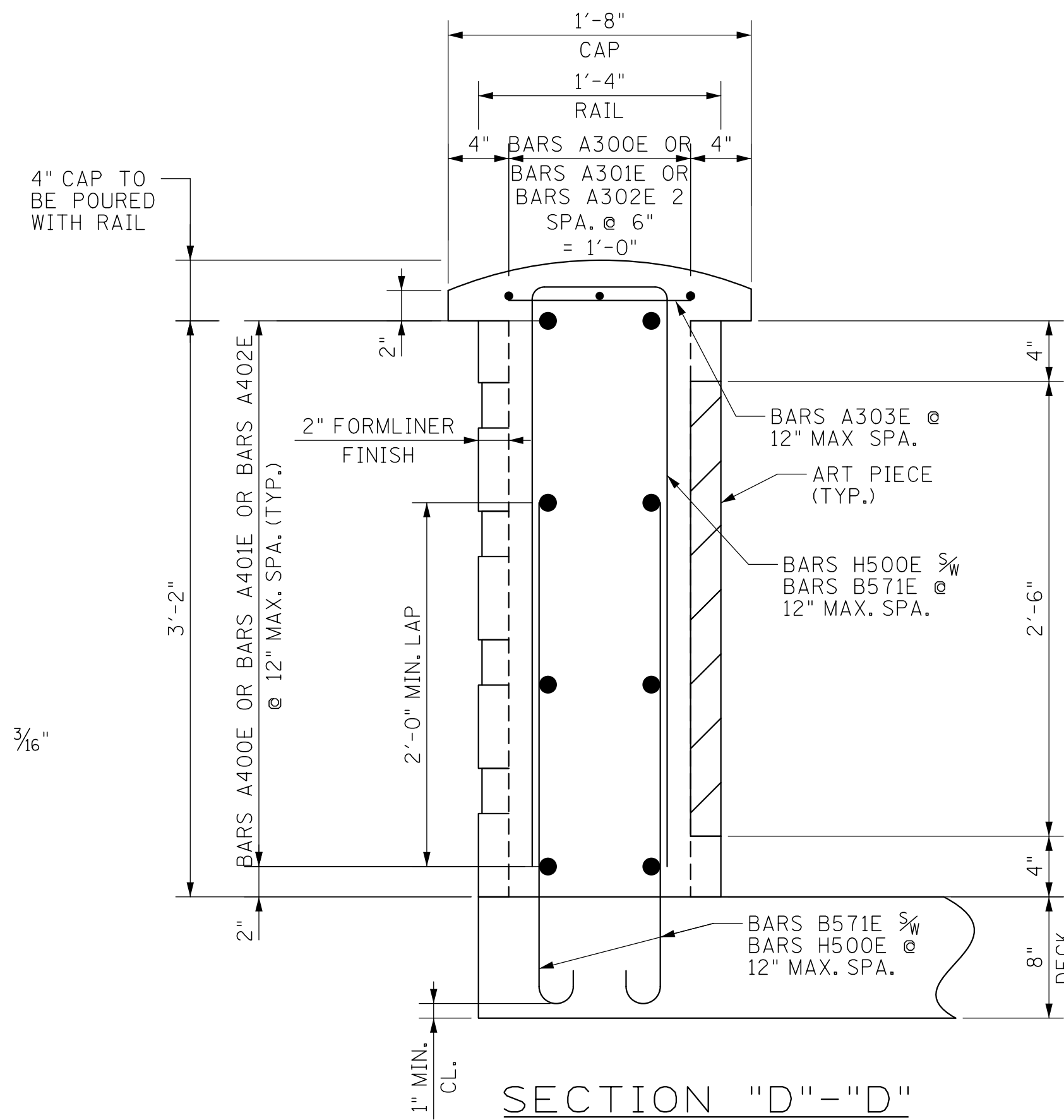
ANCHOR PLATE DETAIL



DETAIL "D"  
NO SCALE



SECTION "X"-"X"  
NO SCALE

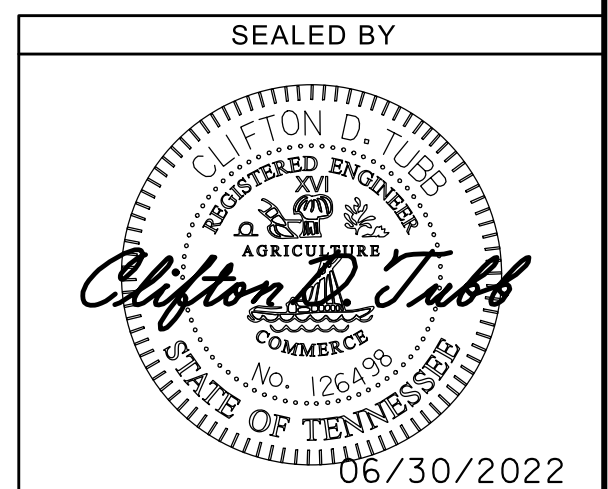


SECTION "D"-"D"

NOTE: CONTRACTOR SHALL AVOID CONFLICTS WITH CONDUITS AND VERTICAL STEEL POST ANCHORS OF THE PEDESTRIAN RAIL

6/30/2022 11:03:40 AM \\nashvillestr.benesch.local\Benesch\_P\Projects\Nashville\1602000S\16020001\16020001\_001\Eng\_Docs\Structures\DG\16020001\_Harlinsdale\_Rail\_Sections.dgn

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES



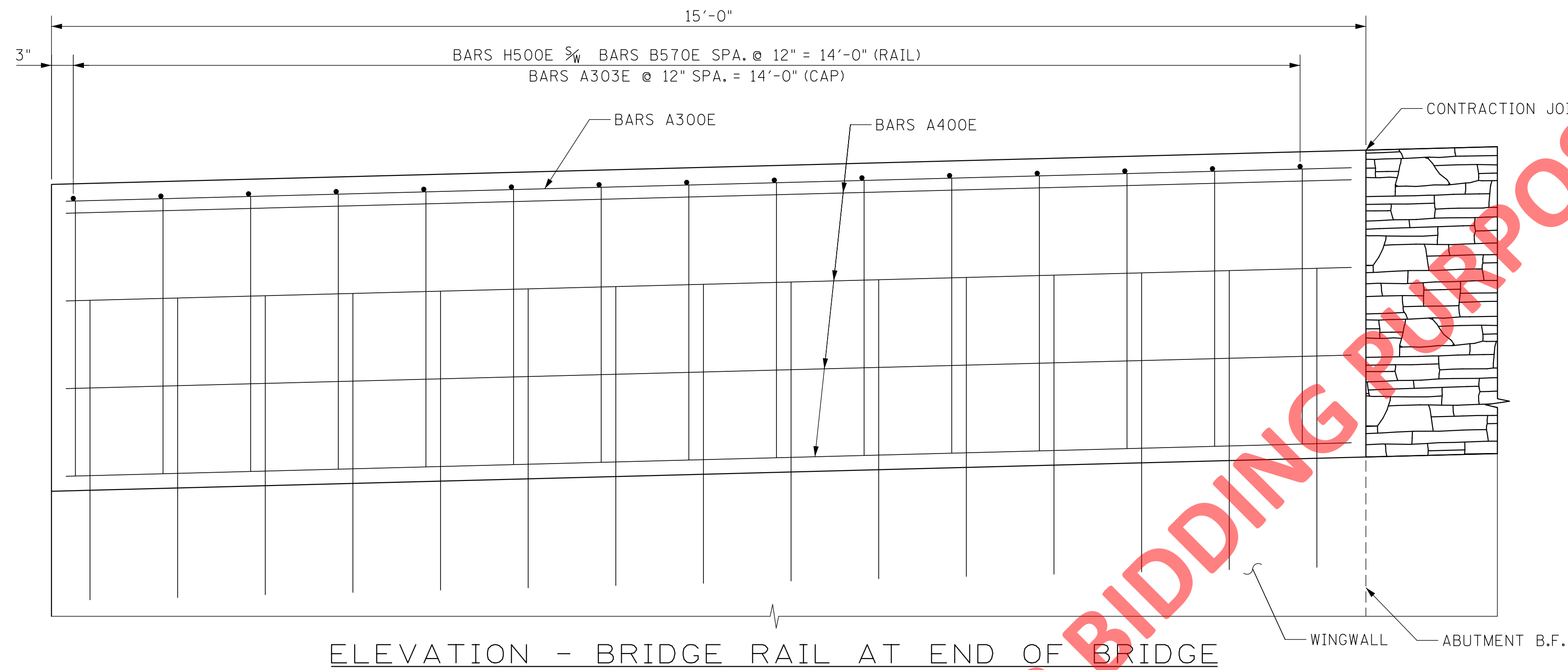
COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



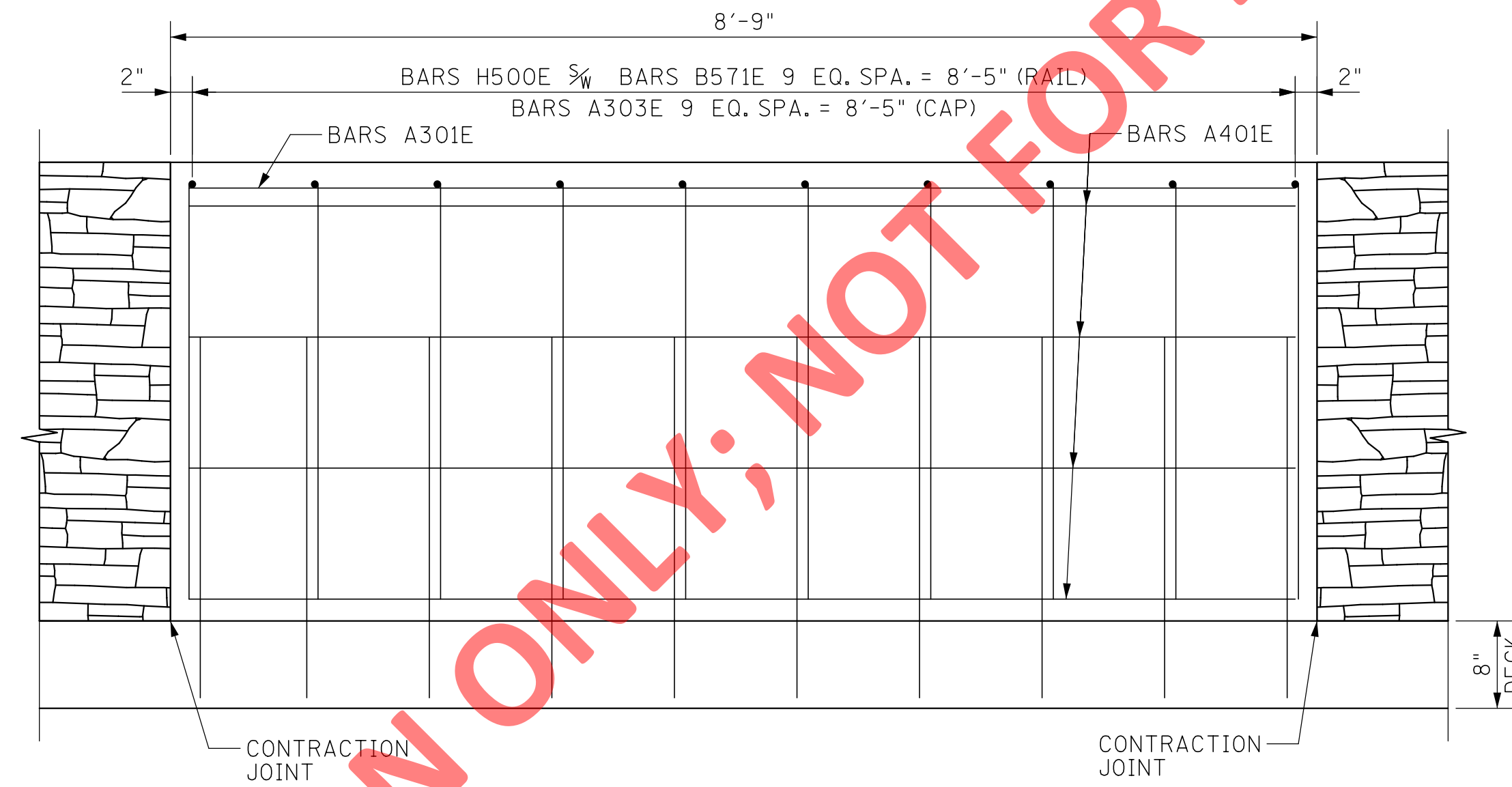
CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

BRIDGE RAIL  
DETAILS

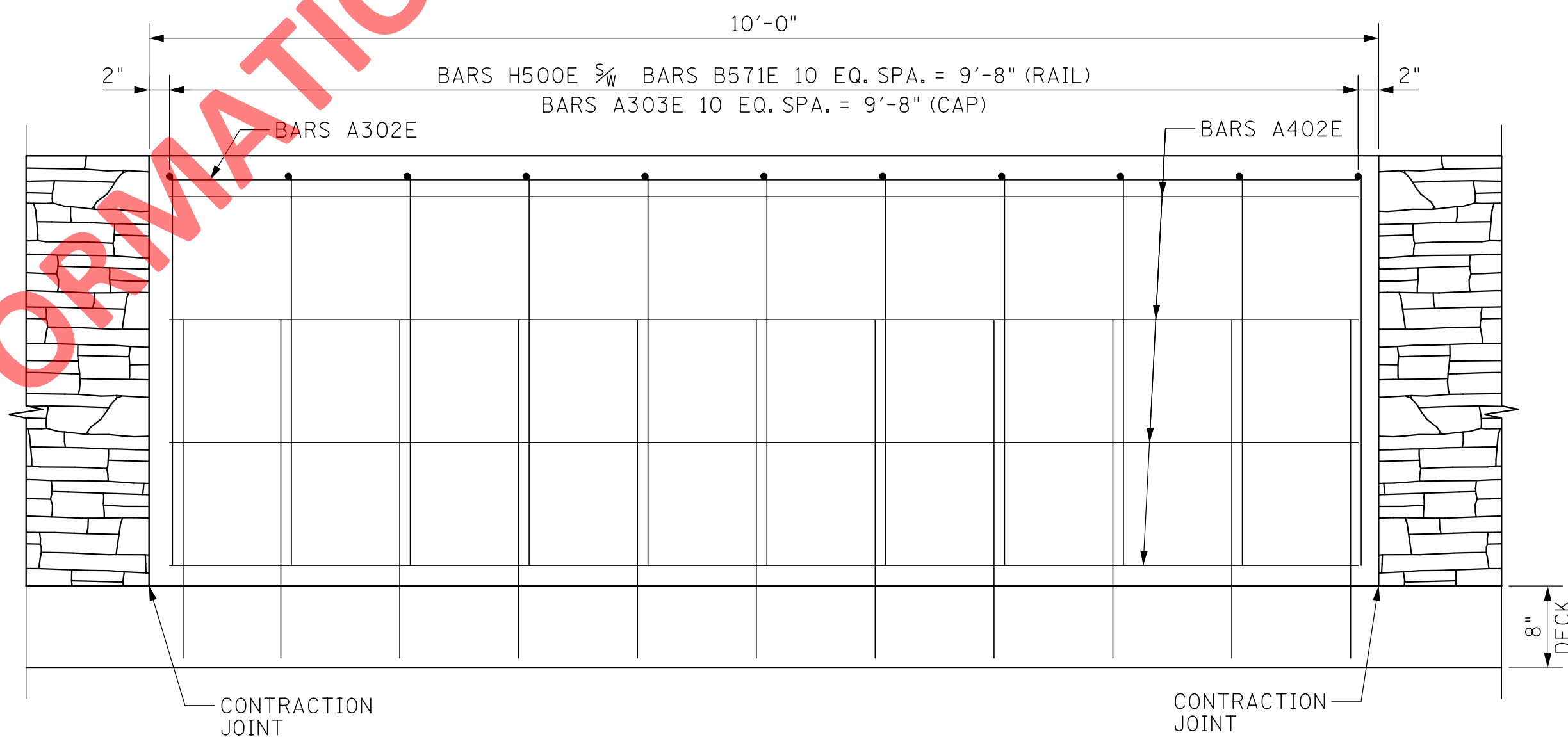
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	B18



ELEVATION - BRIDGE RAIL AT END OF BRIDGE



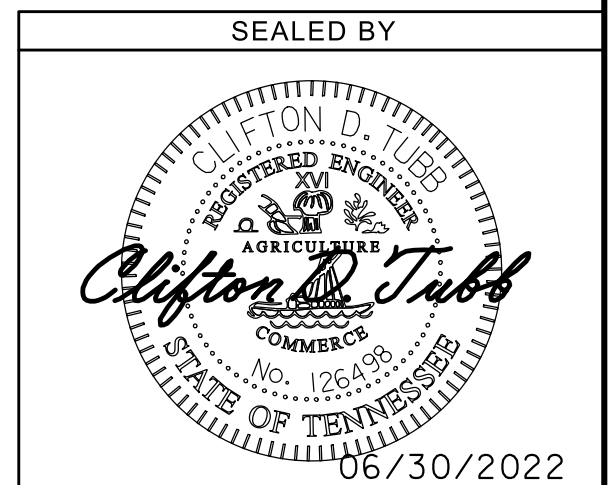
ELEVATION - BRIDGE RAIL AT 8'-9" JOINT SECTION



ELEVATION - BRIDGE RAIL AT 10'-0" JOINT SECTION

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 11:03:50 AM \\nashville\str.benesch.local\benesch\16020001\00\Eng\_Docs\Structures\16020001\00\Eng\_Docs\Structures\16020001\_Harlinsdale\_Rail\_Sections 2a.dgn



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

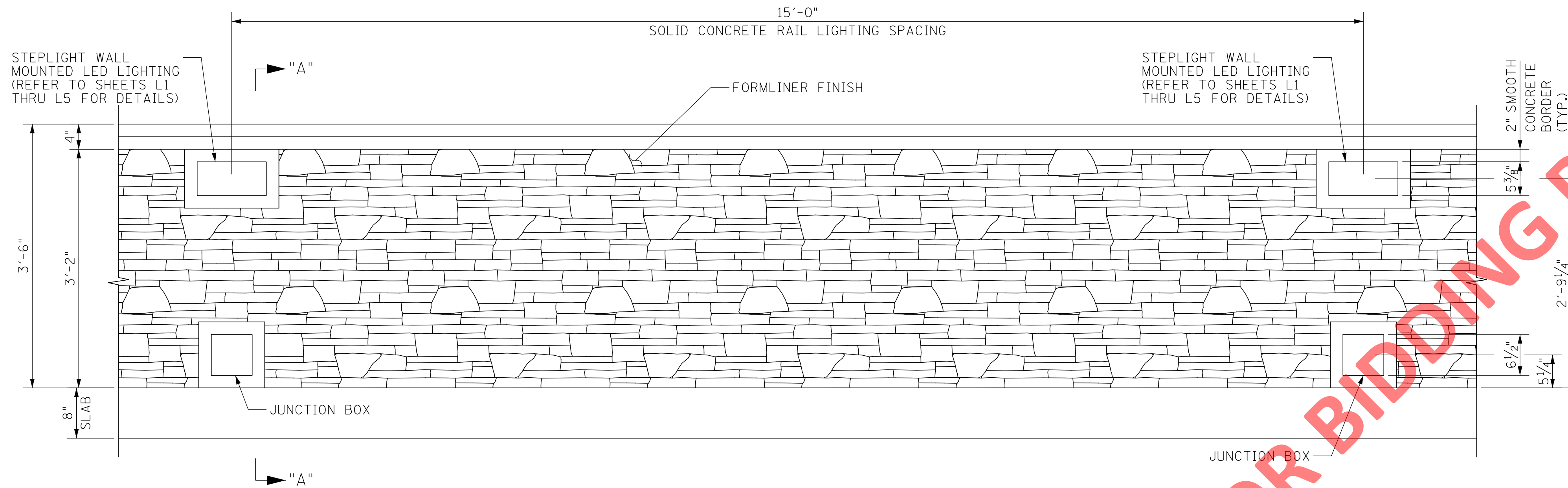


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

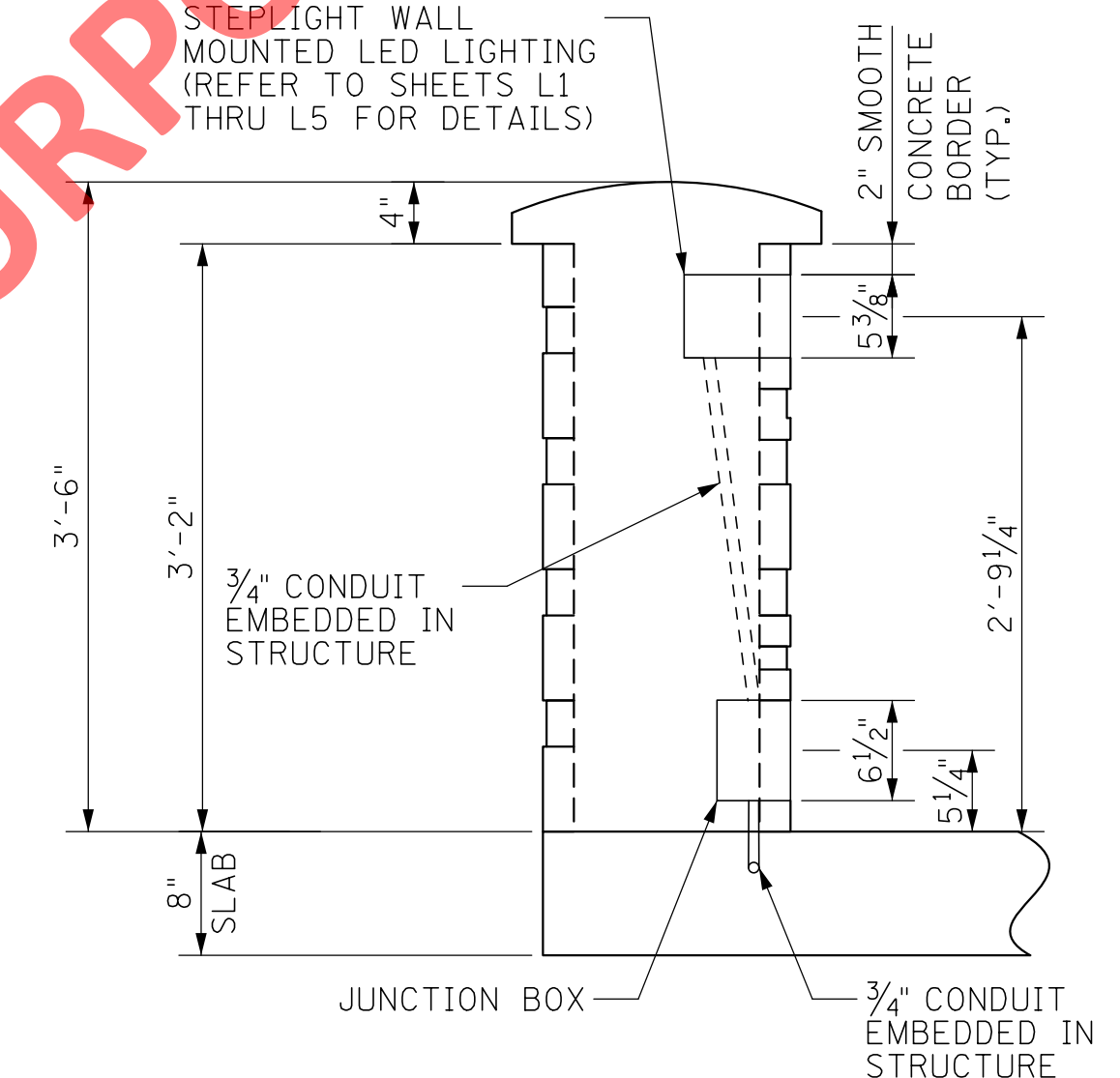
BRIDGE RAIL  
DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2022	TAP-9305(32)	B19

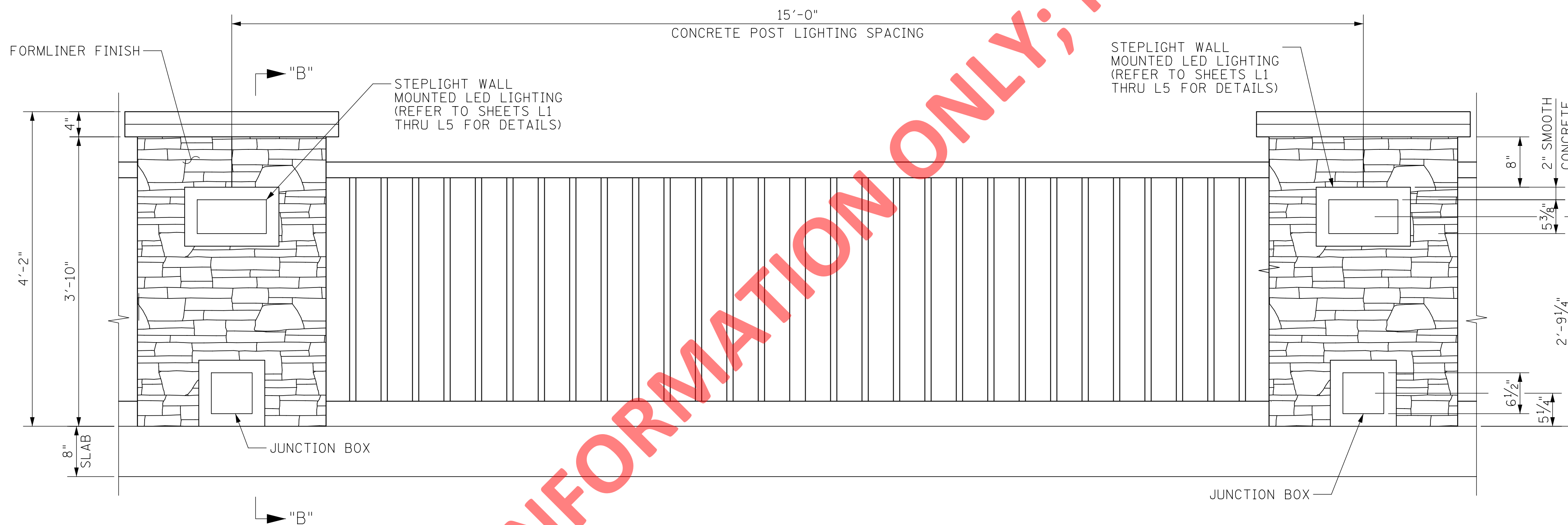
NOTE: CONTRACTOR SHALL ADJUST ANY REINFORCEMENT THAT CONFLICTS WITH BRIDGE LIGHTING.  
NOTE: SEE SHEETS L1-L5 FOR OTHER DETAILS.



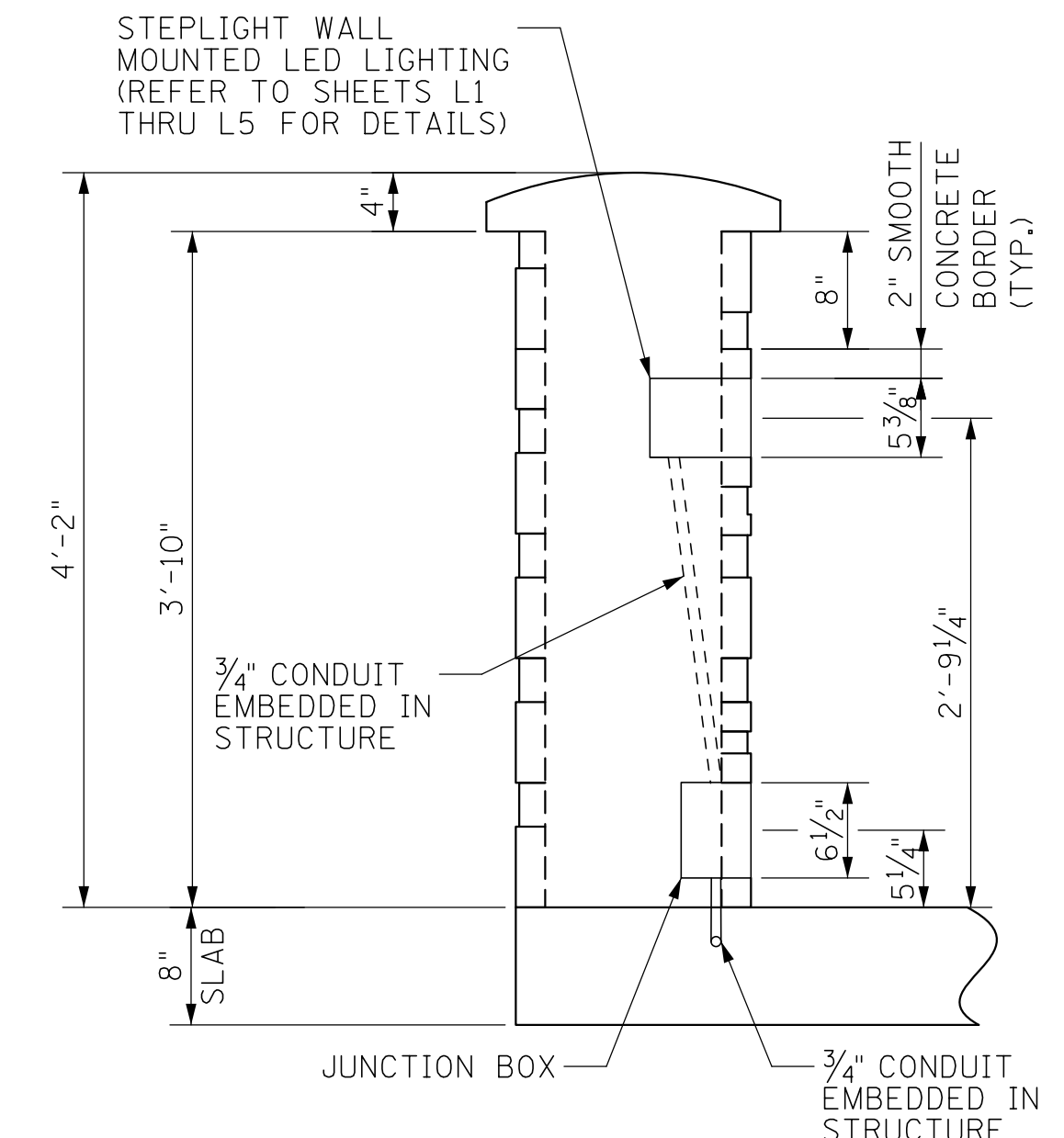
ELEVATION VIEW - SOLID CONCRETE RAIL



SECTION "A" - "A"  
(REINFORCEMENT NOT SHOWN FOR CLARITY)



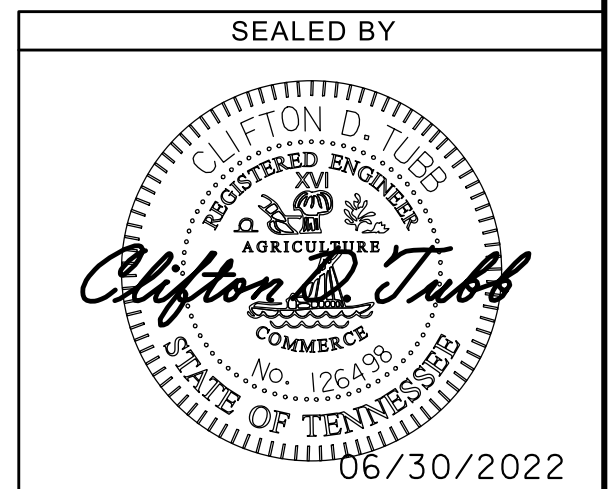
ELEVATION VIEW - CONCRETE POST



SECTION "B" - "B"  
(REINFORCEMENT NOT SHOWN FOR CLARITY)

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

6/30/2022 11:03:52 AM \\mashvillestr2.benesch.local\Benesch\_Projects\Nashville\16020000S\16020001\001\Eng\_Docs\Structures\16020001\_Harlinsdale\_Rail\_Sections 2.dgn



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).

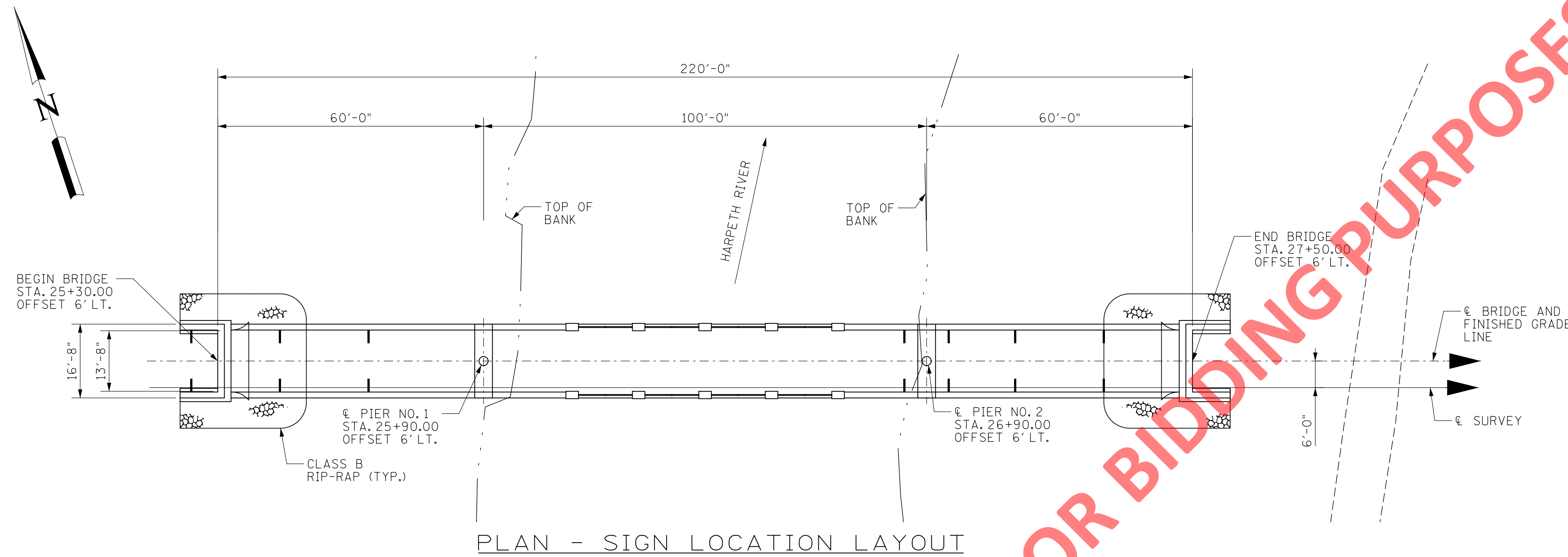


CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

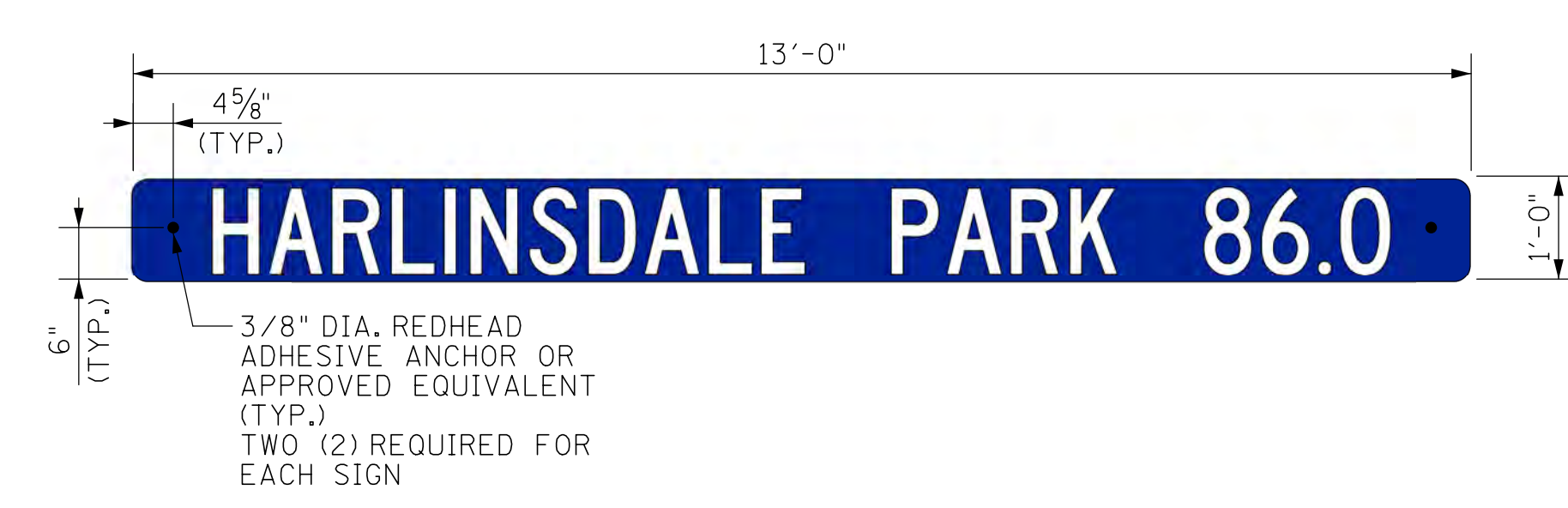
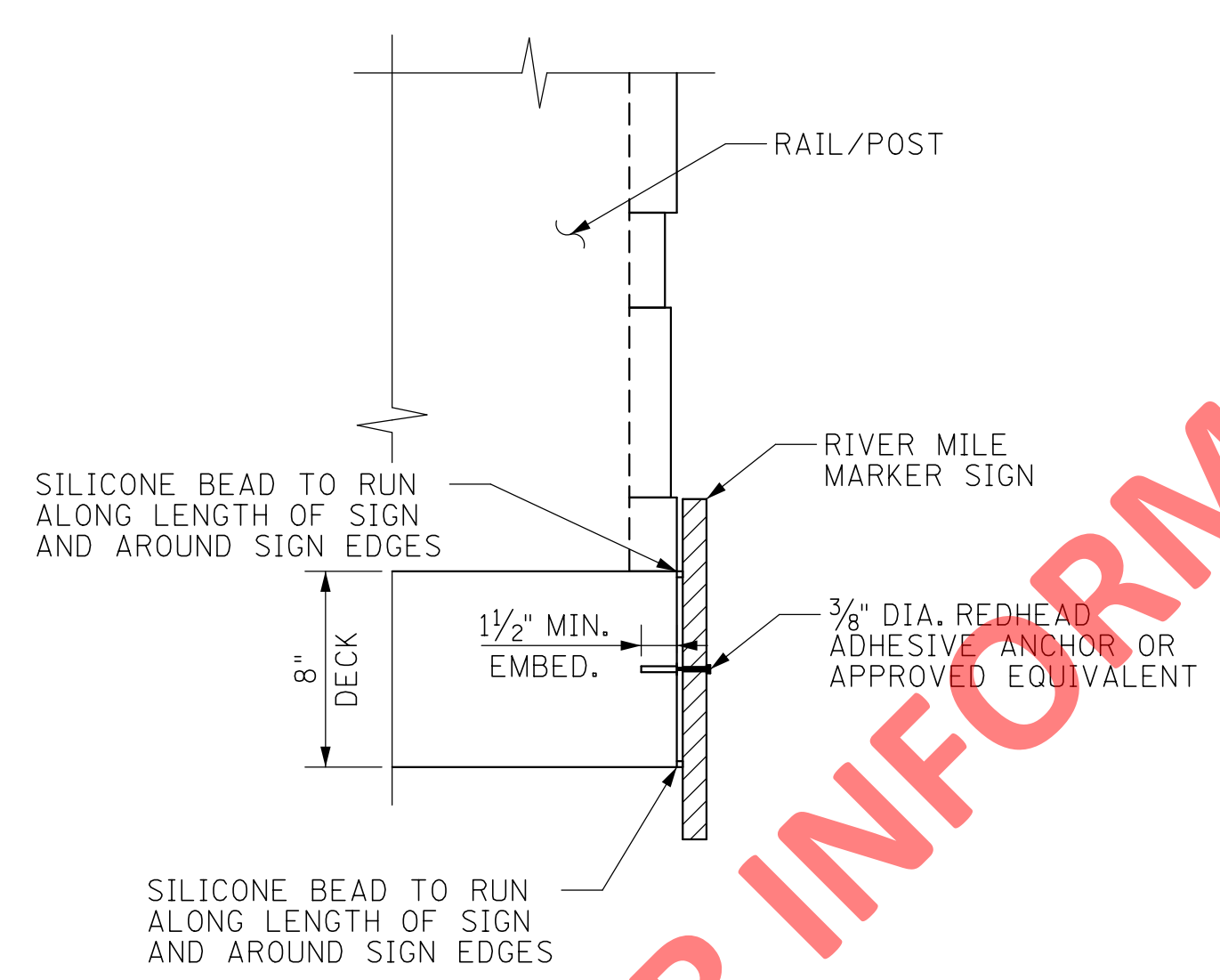
BRIDGE RAIL  
DETAILS



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B18
CONST.	2022	TAP-9305(32)	B20

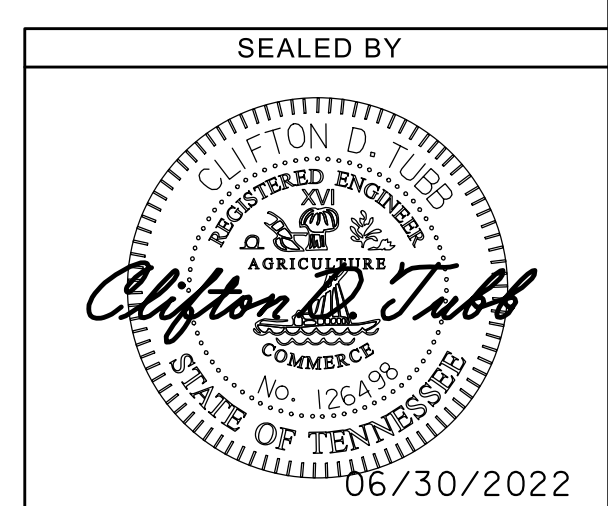


- NOTES:
- RIVER MILE MARKER SIGN (ITEM NO. 713-16.22) SHALL CONSIST OF LETTERS 12" IN HEIGHT WITH WHITE REFLECTIVE LETTERING ON BLUE REFLECTIVE BACKGROUND.
  - RIVER MILE MARKER SIGN (ITEM NO. 713-16.22) SHALL BE MOUNTED ON SIDE OF CONCRETE DECK UPSTREAM OF BRIDGE, LOCATED CENTERED OVER HARPETH RIVER.
  - COST OF ALL MATERIALS AND LABOR ASSOCIATED WITH INSTALLATION OF SIGNS SHALL BE PAID FOR UNDER ITEM NOS. 713-16.22.
  - RIVER MILE MARKER SIGNS (HARLINSDALE PARK 86.0) SHALL BE MANUFACTURED AND PAID FOR BY THE CITY OF FRANKLIN. COST OF LABOR AND INSTALLATION FOR RIVER MILE MARKER SIGNS TO BE PAID FOR UNDER ITEM NO. 713-16.22.



RIVER MILE MARKER SIGN  
 ITEM NO. 713-16.22  
 (TO BE MOUNTED ON CONCRETE DECK AT UPSTREAM SIDE OF BRIDGE CENTERED OVER HARPETH RIVER) (1 SIGN TOTAL REQUIRED)

ITEM NO. 713-16.22 SIGNS (HARLINSDALE PARK 86.0) EACH
1



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
 ENGINEERING DEPARTMENT

BRIDGE SIGN  
 DETAILS

6/30/2022 11:04:14 AM \\nashvillestr.benesch.local\Benesch\Projects\Nashville\16020000S\16020001\16020001\Eng\_Docs\Structures\16020001\_Harlinsdale\_Marker\_Sign.dgn

FOR INFORMATION ONLY; NOT FOR BIDDING PURPOSES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B19
CONST.	2022	TAP-9305(32)	B21



FOUNDATION PLAN

NOTE TO THE CONTRACTOR AND CONSTRUCTION OFFICE:  
 THE BLANKS ON THIS SHEET ARE TO BE FILLED ON BY THE CONSTRUCTION OFFICE AND/OR FIELD ENGINEER, GIVING AS BUILT CONDITIONS. AFTER COMPLETION OF STRUCTURES, IT IS TO BE SENT TO THE OWNER TO BECOME PART OF THE FINAL BRIDGE DOCUMENTS.

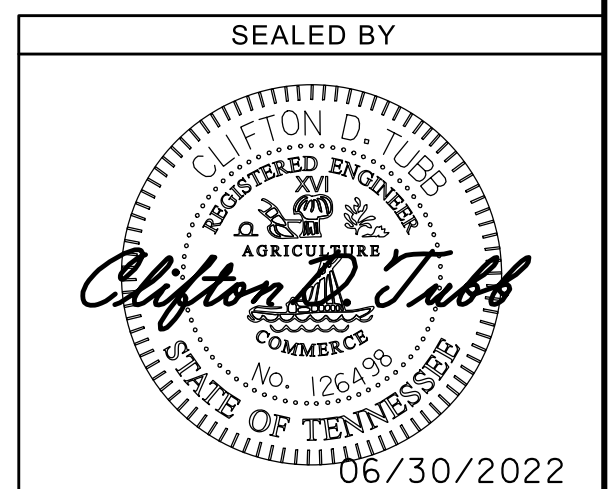
		A
PIER NO. 1	TOP OF ROCK SOCKET	
	TIP ELEVATION	
PIER NO. 2	TOP OF ROCK SOCKET	
	TIP ELEVATION	

ABUTMENT NO. 1 PILE DATA					
	1	2	3	4	5
PILE CUT-OFF ELEVATION					
PILE TIP ELEVATION					
IN PLACE PILE LENGTH					

ABUTMENT NO. 2 PILE DATA					
	6	7	8	9	10
PILE CUT-OFF ELEVATION					
PILE TIP ELEVATION					
IN PLACE PILE LENGTH					

FOR INFORMATION ONLY - NOT FOR BIDDING PURPOSES

6/30/2022 11:04:32 AM \\nashville\estr.benesch.local\Benesch\Projects\Nashville\16020000S\16020001\16020001\Eng\_Docs\Structures\DGN\16020001\_Harlinsdale\_Final Foundation Data.dgn



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



CITY OF FRANKLIN  
ENGINEERING DEPARTMENT

FINAL  
FOUNDATION  
DATA

6/30/2022 11:04:45 AM \\nashvillestr.benesch.local\Benesch\_Projects\Nashville\16020000S\16020001.001\Eng\_Docs\Structures\DG\16020001\_Harlinsdate\_BOS.dgn

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	TAP-9305(32)	B20
CONST.	2022	TAP-9305(32)	B22

### ABUTMENT 1 - NON-EPOXY

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A420	WINGWALL	4	30	4'-8"				4'-8"
A421	ROADWAY BRACKET	4	1	13'-8"				13'-8"
A440	WINGWALL	4	12	16'-0"				16'-0"
A520	ABUTMENT BEAM	5	2	17'-10"				17'-10"
A521	WING BEAM	5	4	17'-6"				17'-6"
A600	BACKWALL	6	10	16'-4"				16'-4"
A620	WINGWALL	6	30	4'-8"				4'-8"
A640	BACKWALL	6	8	3'-9"				3'-9"
A644	WINGWALL	6	12	16'-0"				16'-0"
A720	ABUTMENT BEAM	7	10	17'-10"				17'-10"
A721	WING BEAM	7	20	17'-6"				17'-6"
B640	BACKWALL	6	10	5'-0"				5'-8"
H620	BACKWALL	6	15	1'-2"	3'-9"			8'-8"
H621	WINGWALL	6	30	1'-0"	4'-2"			9'-4"
L520	ABUT/WING BEAM	5	46	2'-8"	2'-8"			11'-7"

### ABUTMENT 2 - NON-EPOXY

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A421	ROADWAY BRACKET	4	1	13'-8"				13'-8"
A430	WINGWALL	4	30	5'-1"				5'-1"
A440	WINGWALL	4	12	16'-0"				16'-0"
A520	ABUTMENT BEAM	5	2	17'-10"				17'-10"
A521	WING BEAM	5	4	17'-6"				17'-6"
A600	BACKWALL	6	10	16'-4"				16'-4"
A630	WINGWALL	6	30	5'-1"				5'-1"
A640	BACKWALL	6	8	3'-9"				3'-9"
A644	WINGWALL	6	12	16'-0"				16'-0"
A720	ABUTMENT BEAM	7	10	17'-10"				17'-10"
A721	WING BEAM	7	20	17'-6"				17'-6"
B640	BACKWALL	6	10	5'-0"				5'-8"
H620	BACKWALL	6	15	1'-2"	3'-9"			8'-8"
H621	WINGWALL	6	30	1'-0"	4'-2"			9'-4"
L520	ABUT/WING BEAM	5	46	2'-8"	2'-8"			11'-7"

### ABUTMENT NO. 1 EPOXY COATED

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A300E	PEDESTRIAN RAIL	3	6	14'-8"				14'-8"
A303E	PEDESTRIAN RAIL	3	30	1'-0"				1'-0"
A400E	PEDESTRIAN RAIL	4	16	14'-8"				14'-8"
A600E	BACKWALL	6	2	16'-4"				16'-4"
A601E	BACKWALL	6	38	5'-1"				5'-1"
B570E	WINGWALL/RAIL	5	60	4'-7"				5'-3"
H500E	PEDESTRIAN RAIL	5	30	0'-8"	3'-2"			7'-0"
H520E	BACKWALL	5	15	6"	2'-2"			3'-2"
R620E	BACKWALL	6	15	2'-0"	2'-0"			4'-0"

### ABUTMENT NO. 2 EPOXY COATED

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A300E	PEDESTRIAN RAIL	3	6	14'-8"				14'-8"
A303E	PEDESTRIAN RAIL	3	30	1'-0"				1'-0"
A400E	PEDESTRIAN RAIL	4	16	14'-8"				14'-8"
A600E	BACKWALL	6	2	16'-4"				16'-4"
A601E	BACKWALL	6	38	5'-1"				5'-1"
B570E	WINGWALL/RAIL	5	60	4'-7"				5'-3"
H500E	PEDESTRIAN RAIL	5	30	0'-8"	3'-2"			7'-0"
H520E	BACKWALL	5	15	6"	2'-2"			3'-2"
R620E	BACKWALL	6	15	2'-0"	2'-0"			4'-0"

### PIER 1 - NON-EPOXY

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A500	CAP	5	6	12'-4"				12'-4"
A600	CAP	6	4	12'-4"				12'-4"
A1000	COLUMN/DRILLED SHAFT	10	18	12'-7"				12'-7"
A1100	DRILLED SHAFT/ROCK SOCKET	11	18	26'-0"				26'-0"
D1000	CAP	10	7	12'-4"				15'-5"
H600	CAP	6	3	3'-8"	3'-8"			11'-0"
L600	CAP	6	20	3'-8"	3'-8"			14'-8"
T600	COLUMN/DRILLED SHAFT	6	37	3'-0"				10'-6"
T700	ROCK SOCKET	7	24	3'-0"				10'-6"

### PIER 2 - NON-EPOXY

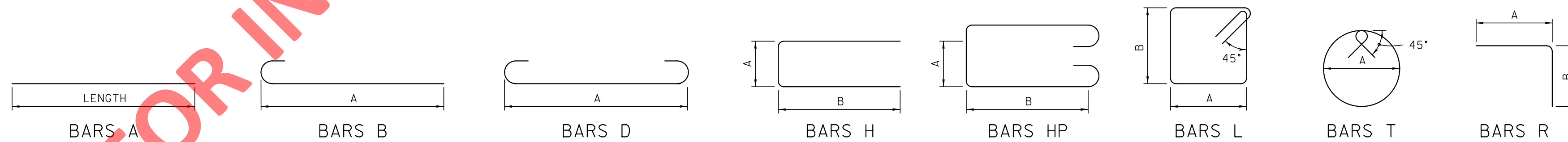
BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A500	CAP	5	6	12'-4"				12'-4"
A600	CAP	6	4	12'-4"				12'-4"
A1001	COLUMN/DRILLED SHAFT	10	18	10'-3"				10'-3"
A1101	DRILLED SHAFT/ROCK SOCKET	11	18	30'-0"				30'-0"
D1000	CAP	10	7	12'-4"				15'-5"
H600	CAP	6	3	3'-8"	3'-8"			11'-0"
L600	CAP	6	20	3'-8"	3'-8"			14'-8"
T600	COLUMN/DRILLED SHAFT	6	21	3'-0"				10'-6"
T700	ROCK SOCKET	7	44	3'-0"				10'-6"

### SUPERSTRUCTURE - EPOXY COATED

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A301E	PEDESTRIAN RAIL	3	12	8'-5"				8'-5"
A302E	PEDESTRIAN RAIL	3	84	9'-8"				9'-8"
A303E	PEDESTRIAN RAIL	3	388	1'-0"				1'-0"
A401E	PEDESTRIAN RAIL	4	32	8'-5"				8'-5"
A402E	PEDESTRIAN RAIL	4	224	9'-8"				9'-8"
A403E	PEDESTRIAN RAIL	4	8	32'-6"				32'-6"
A500E	SLAB	5	868	16'-2"				16'-2"
A501E	SLAB	5	34	44'-1"				44'-1"
A502E	SLAB	5	34	34'-7"				34'-7"
A503E	SLAB	5	51	60'-0"				60'-0"
A504E	SLAB	5	17	50'-2"				50'-2"
A610E	SLAB	6	34	38'-0"				38'-0"
A611E	SLAB	6	32	20'-0"				20'-0"
B571E	PEDESTRIAN RAIL	5	776	2'-9"				3'-4"
H500E	PEDESTRIAN RAIL	5	388	0'-8"	3'-2"			7'-0"
H501E	PEDESTRIAN RAIL	5	40	0'-8"	3'-10"			8'-4"
HP501E	PEDESTRIAN RAIL	5	112	0'-11"	1'-0"			4'-0"
L501E	PEDESTRIAN RAIL	5	60	0'-8"	1'-10"			6'-2"

### SUPERSTRUCTURE - NON-EPOXY COATED

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS				TOTAL LENGTH
				A	B	C	D	
A510	DIAPHRAGM	5	20	10'-6"				10'-6"
L400	DIAPHRAGM	4	14	1'-2"	3'-10"			10'-9"
L401	DIAPHRAGM	4	8	1'-2"	1'-2"			5'-5"



SEALED BY



COORDINATES VALUES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 (NO DATUM ADJUSTMENT), AND BASED ON AN NGS OPUS SOLUTION. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 (GEOID 12B).



HISTORIC FRANKLIN TENNESSEE

CITY OF FRANKLIN ENGINEERING DEPARTMENT

BILL OF STEEL