

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 679	16-00131-00-BR	EDGAR	23	1
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 91542		

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	TYPICAL CROSS SECTIONS
4.	PLAN AND PROFILE
5.	SHOULDER AND GUARDRAIL LAYOUT
6-9.	CULVERT PLANS
10.	BORINGS
11-23.	STATION CROSS SECTIONS

HIGHWAY STANDARDS:

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
630301-07	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
701901-06	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

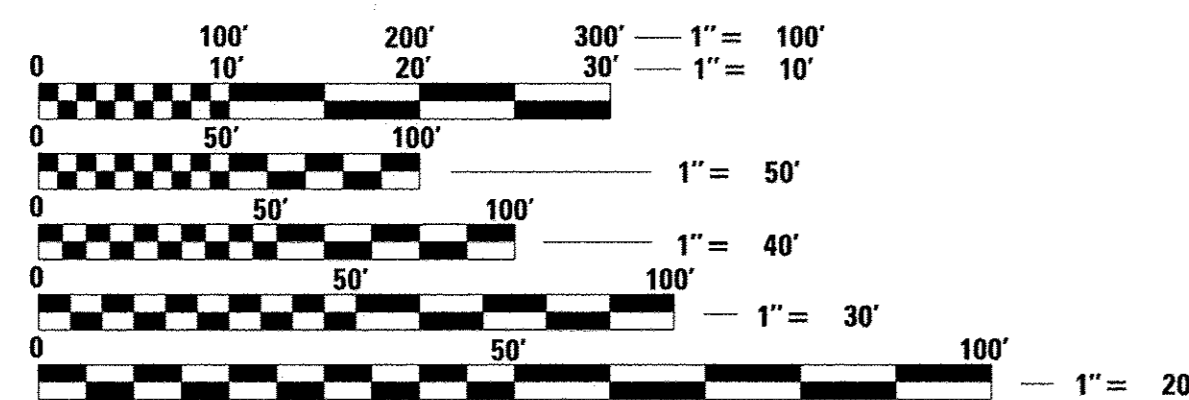
UTILITIES

AMEREN ILLINOIS
711 S. 9TH STREET
P.O. BOX 966
MATTOON, IL 61938

FRONTIER COMMUNICATIONS
1205 S. CENTRAL AVENUE
PARIS, IL 61944

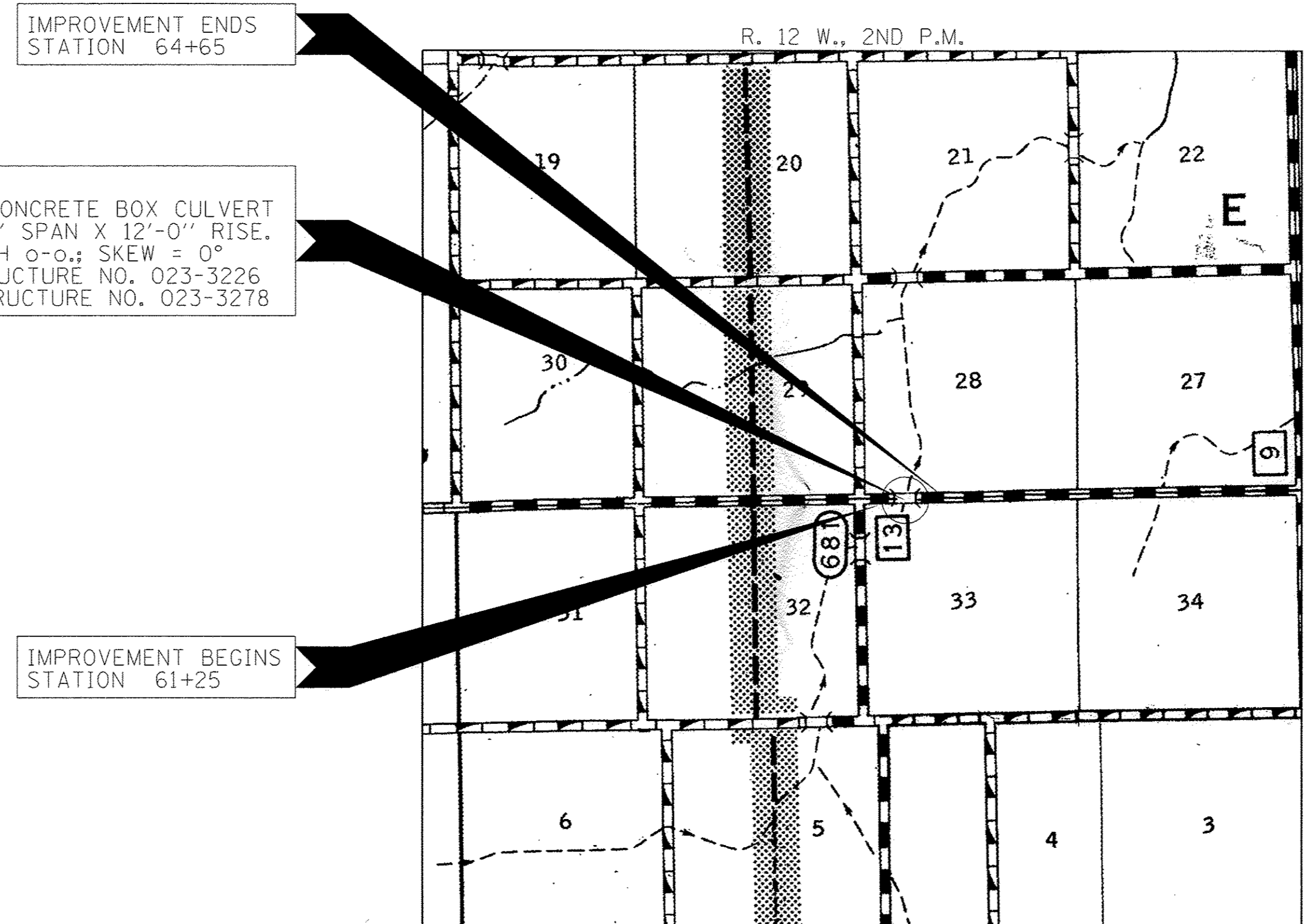
PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM – BRIDGE

PROJECT BROS-0679(112)
SECTION 16-00131-00-BR
EDGAR COUNTY
F.A.S. 679 / C.H. 8 / HORACE BROCTON ROAD
PROPOSED STRUCTURE NO. 023-3278
C-95-308-16



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR (RURAL)
DESIGN SPEED: 40 MPH
DESIGN TRAFFIC: 250 ADT (2016)



LOCATION MAP

APPROXIMATE SCALE: 0 1/2 MILE
NET LENGTH OF SECTION = 340 FEET = 0.064 MILES



WARNING

CALL 811 BEFORE YOU DIG
DIG NO: X000470938

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED 10/11 2016
Alan Dan
COUNTY ENGINEER

PASSED November 15 2016
B. K. [Signature]
DISTRICT FIVE ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review November 15 2016
[Signature]
REGION THREE ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 10/07/2016

EXPIRES: 11/30/2017

HAMPTON, LENZINI AND RENWICK, INC.
CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS

HLR
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
217.546.3400 www.hlrengeering.com

184.000959
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

PROJECT NUMBER: 16.0040.130 DATE: 10/07/16

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	UNIT	TOTAL
			CONSTRUCTION TYPE CODE 0011
20200100	EARTH EXCAVATION	CU YD	150
20400800	FURNISHED EXCAVATION	CU YD	445
20700110	POROUS GRANULAR EMBANKMENT	TON	845
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	18
35101400	AGGREGATE BASE COURSE, TYPE B	TON	71
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	146
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	85
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	46
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	146
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	133
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	356
48101200	AGGREGATE SHOULDERS, TYPE B	TON	132
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	158
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	2
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	37,120
50901050	STEEL RAILING, TYPE SM	FOOT	59
51500100	NAME PLATES	EACH	1
54003000	CONCRETE BOX CULVERTS	CU YD	210.7
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	304
542D0241	PIPE CULVERTS, CLASS D, TYPE 1 36"	FOOT	150
542D0247	PIPE CULVERTS, CLASS D, TYPE 1 42"	FOOT	154
5421D042	PIPE CULVERTS, CLASS D, TYPE 1 42" (TEMPORARY)	FOOT	100
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
67100100	MOBILIZATION	LSUM	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	LSUM	1
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X2090210	POROUS GRANULAR BACKFILL, SPECIAL	CU YD	35
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.25
X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	240
SEE SPECIAL PROVISIONS			

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED, APRIL 1, 2016," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- ALL CLEARING AND GRUBBING, AND REMOVAL OF THE EXISTING WEIR STRUCTURE SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL OF THE EXISTING HMA SURFACE WILL BE PAID FOR AS EARTH EXCAVATION. ALL BITUMINOUS MATERIAL SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR IN A METHOD APPROVED BY THE ENGINEER. PROPOSED DISPOSAL OF BITUMINOUS MATERIAL SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE LOCATION OF EXISTING GAS MAINS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL COMPANIES AND BY FIELD INSPECTION.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED OR COVERED. CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT-OF-WAY AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITY = SEEDING CLASS 2 (SPECIAL) = 0.25 ACRES
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES.

AGGREGATE BASE COURSE, TYPE B	1.80 TON/CU YD
AGGREGATE SHOULDERS, TYPE B	1.80 TON/CU YD
STONE RIPRAP, CLASS A4	1.75 TON/CU YD
HOT MIX ASPHALT	112 LB/INSQ YD
BITUMINOUS MATERIALS (PRIME COAT)	0.25 LB/SQ FT
BITUMINOUS MATERIALS (TACK COAT):	
ON EXISTING HMA SURFACE	0.05 LB/SQ FT
FOG COAT BETWEEN HMA LIFTS	0.025 LB/SQ FT

ROADWAY SCHEDULE

LOCATION	AGGREGATE BASE COURSE	AGGREGATE SURF COURSE	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)*	HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT	HOT-MIX ASPHALT SURFACE COURSE MIX "C", N 70	CLASS D PATCH TYPE IV 8 INCH	AGGREGATE SHOULDERS TYB
	TYB	TYB	(PRIME COAT)	(TACK COAT)*	BUTT JOINT	MIX "C", N 70	8 INCH	TYB
	35101400 TON	40200800 TON	4060075 POUND	40600290 POUND	40600982 SQ YD	40603315 TON	44201747 CU YD	48101200 TON
FAS 679 / CH 8								
STA 61+25 TO STA 62+45				20	73	29		46
STA 62+45 TO STA 63+45	71		85	6		75	356	47
STA 63+45 TO STA 64+65				20	73	29		39
F.E. RT. STA 61+55		37						
F.E. LT. STA 61+55		36						
F.E. RT. STA 64+35		37						
F.E. LT. STA 64+35		36						
TOTAL	71	146	85	46	146	133	356	132
USE	71	146	85	46	146	133	356	132

* ASSUMED 2 LIFTS OF HMA SURFACE COURSE

EARTHWORK SUMMARY

LOCATION	EARTH EXCAVATION	MISCELLANEOUS EXCAVATION	SHRINKAGE FACTOR	% USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT REQUIRED	EARTHWORK BALANCE WASTE (+) / SHORTAGE (-)
	CU YD	CU YD			CU YD	CU YD	CU YD
FAS 679 / CH 8							
STA 61+25 TO STA 62+45	6		25.00%	100.00%	5	338	-333
STA 62+45 TO STA 63+45	138		25.00%	100.00%	104	41	63
STA 63+45 TO STA 63+65	4		25.00%	100.00%	3	427	-424
EXCAVATION FOR P.G.E		420	25.00%	70.00%	221	0	221
EXCAVATION FOR BACKFILL		55	25.00%	70.00%	29	0	29
TOTAL	148	475			362	806	-444
USE	150						-445

FURNISHED EXCAVATION 445 CU.YD.

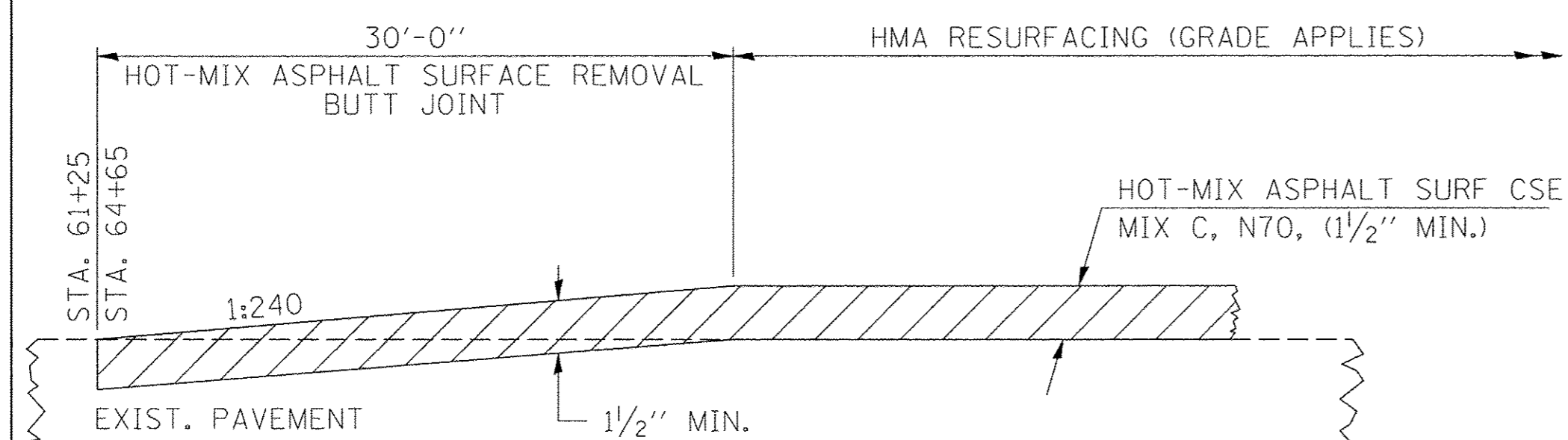
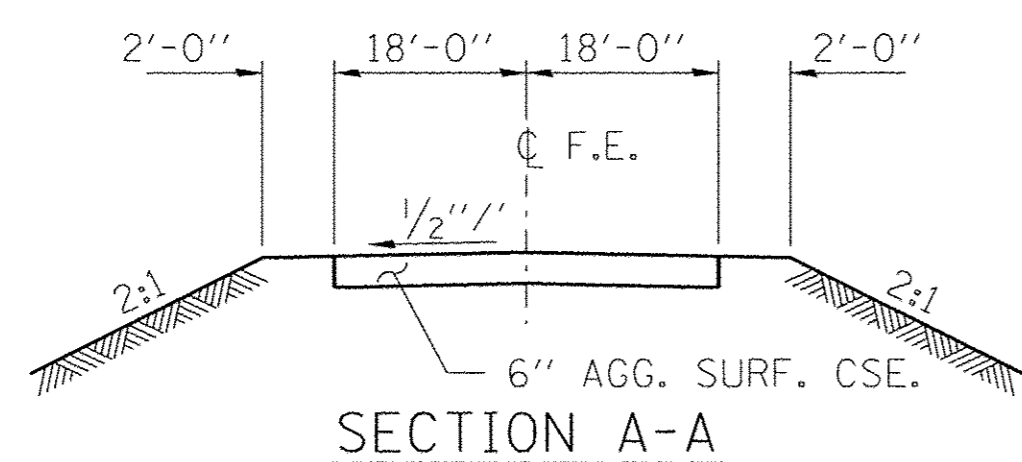
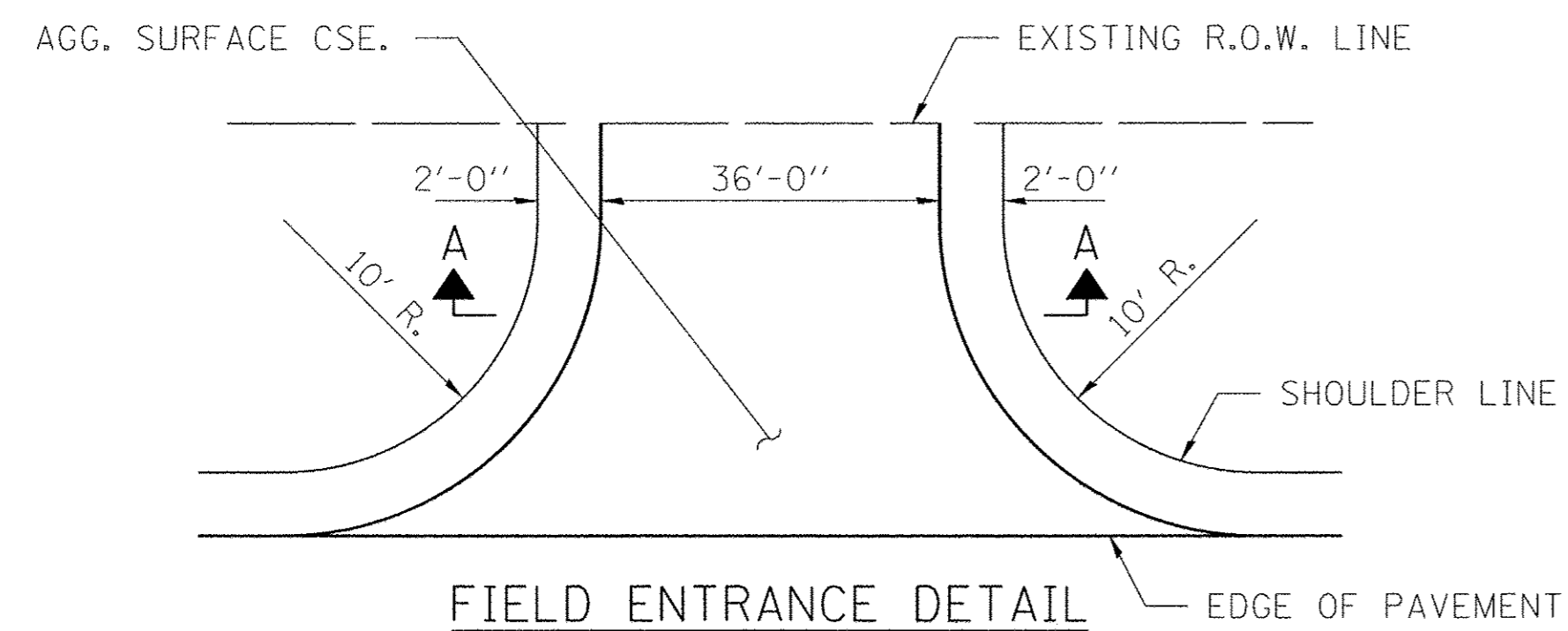
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ILR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184-000959	PLOT DATE = 10/7/2016	CHECKED - S.W.M.	REVISED -
		DATE - 10/07/16	REVISED -

**STATE OF ILLINOIS
EDGAR COUNTY HIGHWAY DEPARTMENT**

SUMMARY OF QUANTITIES AND GENERAL NOTES

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
679	16-00131-00-BR	EDGAR	23	2
HORACE BROXTON ROAD		CONTRACT NO. 91542		
[ILLINOIS] FED. AID PROJECT BROS-0679(112)				

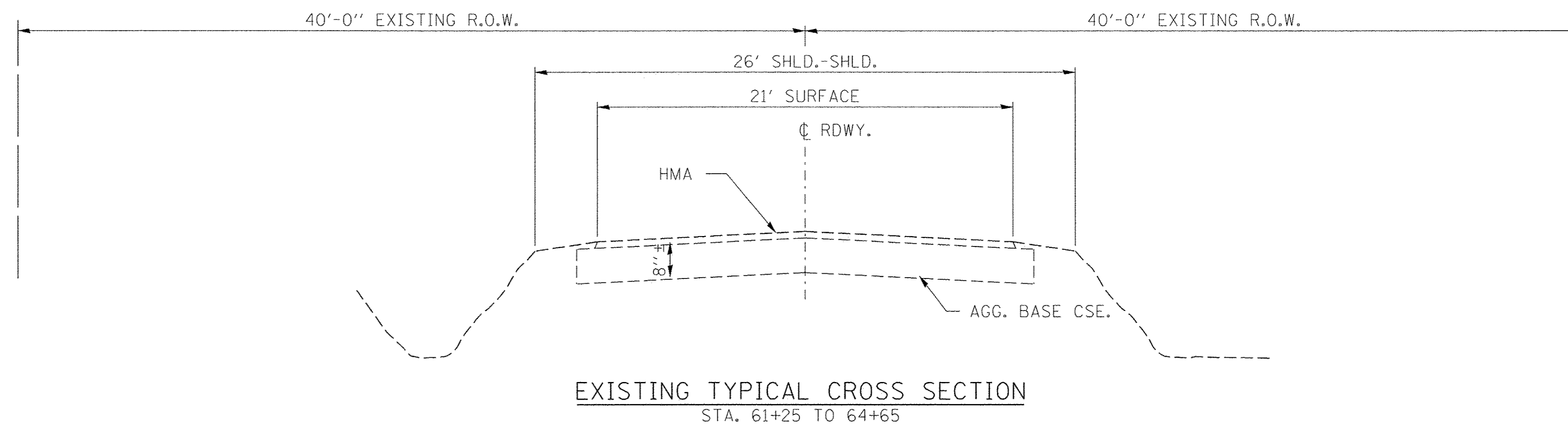


BUTT JOINT DETAIL

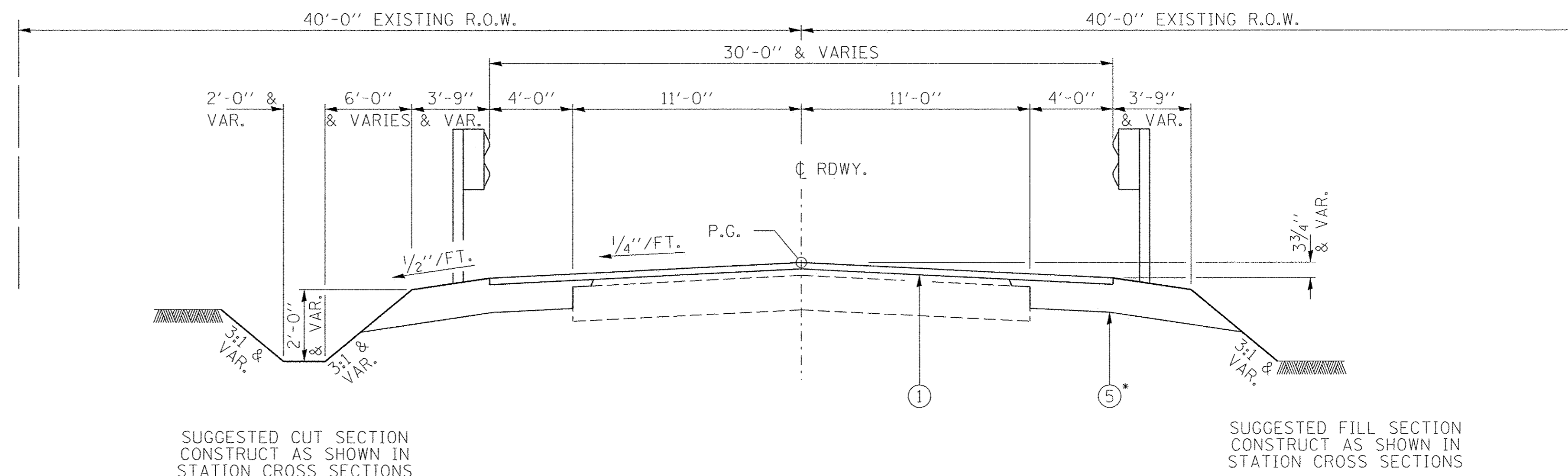
MIXTURE REQUIREMENTS	
LOCATION(S):	FAS 679 / CH 8 / HORACE BROCTON ROAD
MIXTURE USE(S):	HMA SURF. CSE, MIX "C", N70
PG:	P6-64-22
DESIGN AIR VOIDS:	4% @ Ndes 50
MIXTURE COMPOSITION:	IL 9.5
(GRADATION MIXTURE):	
FRICTION AGGREGATE:	MIXTURE C
MIXTURE WEIGHTS:	112 LBS / SY / INCH THICKNESS
QUALITY CONTROL PROGRAM:	QC/QA

LEGEND

- ① HOT-MIX ASPHALT SURFACE COURSE, N70 (1 1/2")
- ② HOT-MIX ASPHALT SURFACE COURSE, N70 (4")
- ③ CLASS D PATCHES, TYPE IV (8")
- ④ AGGREGATE BASE COURSE (4")
- ⑤ AGGREGATE SHOULDERS (8")

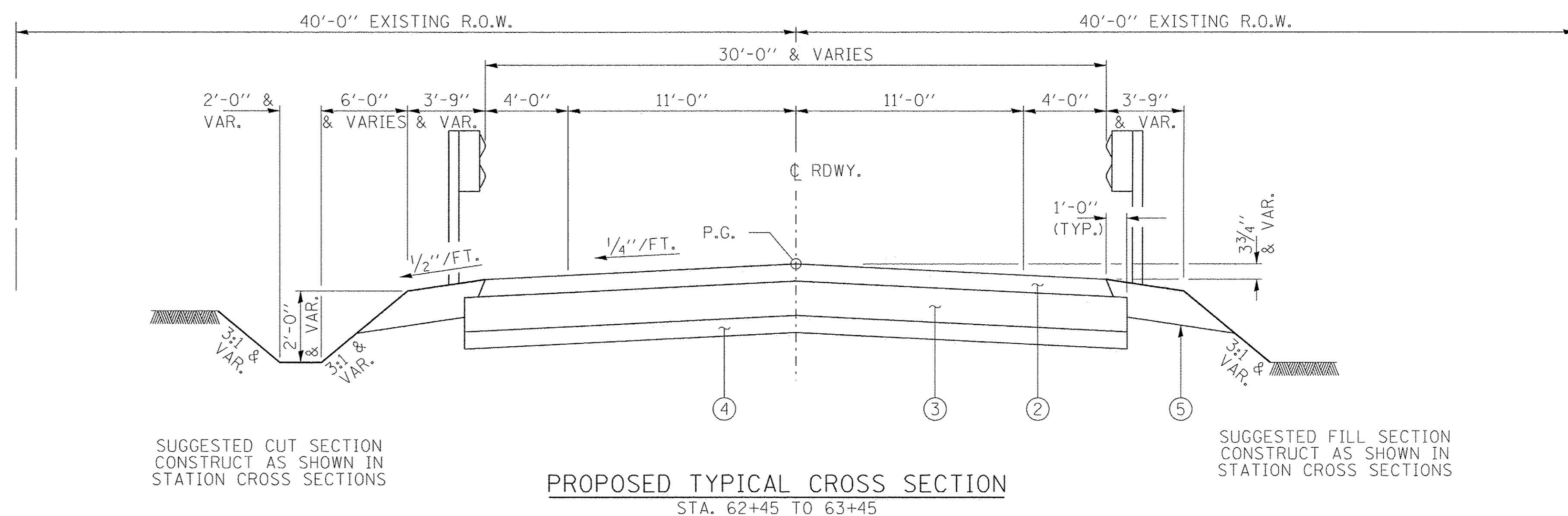


EXISTING TYPICAL CROSS SECTION
STA. 61+25 TO 64+65



PROPOSED TYPICAL CROSS SECTION

STA. 61+25 TO 62+45 &
STA. 63+45 TO 64+65
*HMA ALONG GUARDRAIL =
STA. 61+86.3 TO 62+45 &
STA. 63+45 TO 64+03.7



PROPOSED TYPICAL CROSS SECTION

STA. 62+45 TO 63+45

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	PLOT DATE = 10/7/2016	CHECKED - S.W.M.	REVISED -
		DATE - 10/07/16	REVISED -

STATE OF ILLINOIS
EDGAR COUNTY HIGHWAY DEPARTMENT

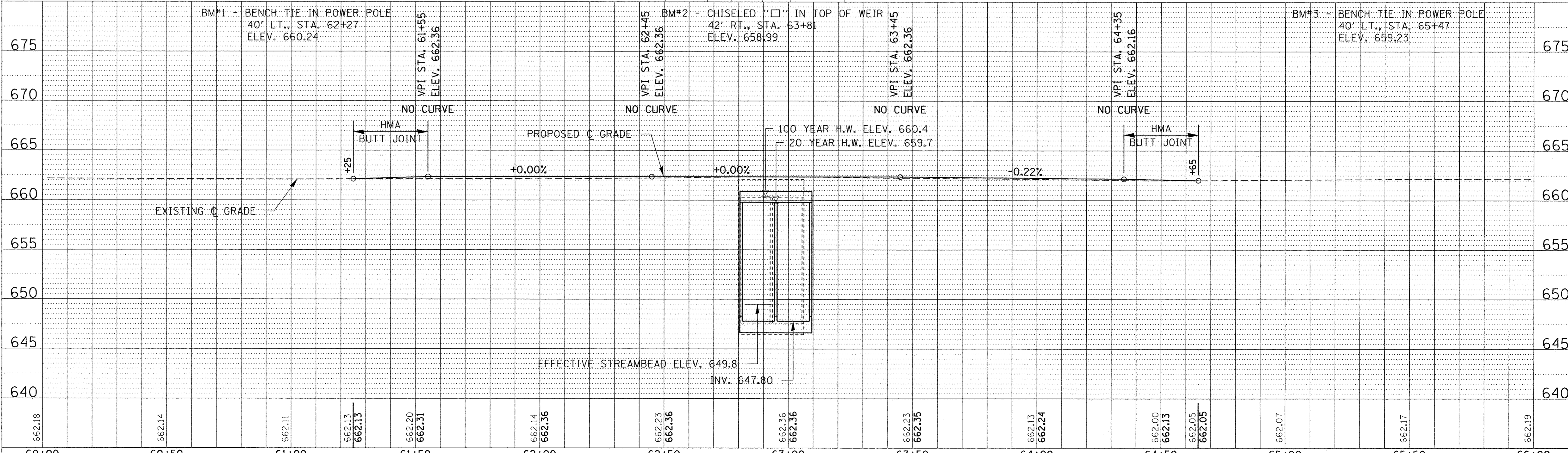
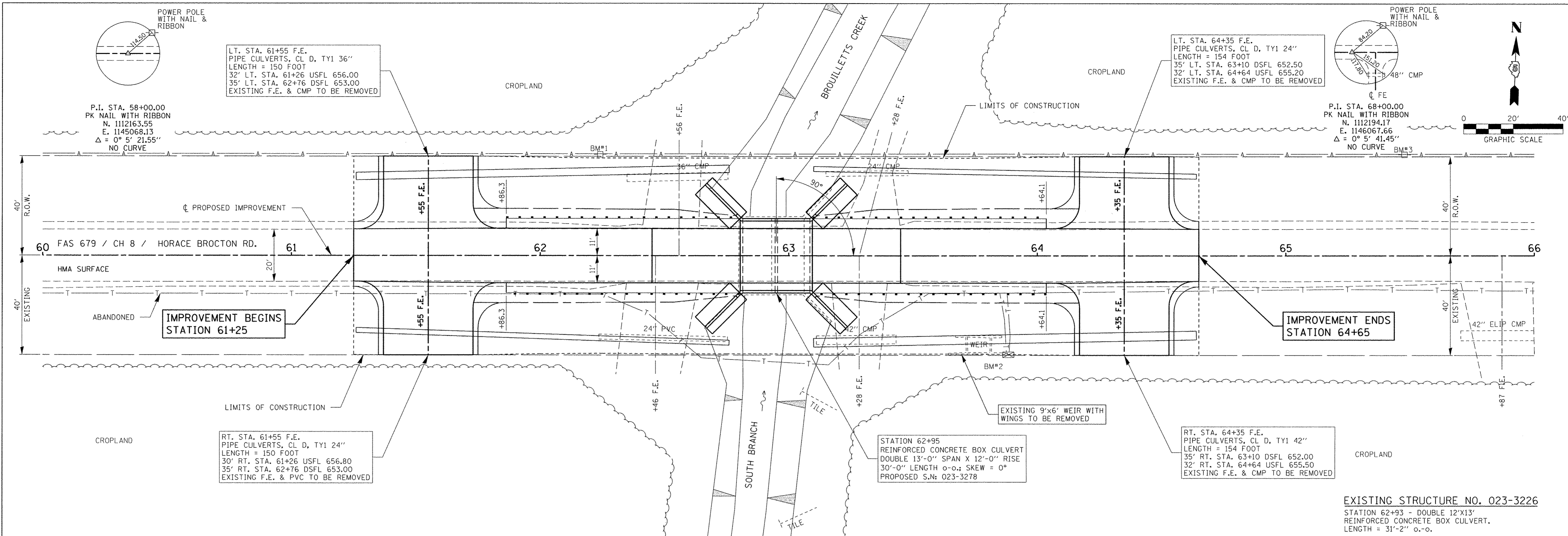
TYPICAL CROSS SECTIONS

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

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679	16-00131-00-BR	EDGAR	23	3
HORACE BROCTON ROAD			CONTRACT NO. 91542	
ILLINOIS FED. AID PROJECT BR05-0679(112)				

DATE	
BY	
SURVEYED	
ALIGNED	
CHECKED	
FILE NAME	
NO.	
NOTE BOOK	
NO.	
NO.	
NO.	

DATE	
BY	
SURVEYED	
GRADES CHECKED	
NO.	
NO.	
NO.	
NO.	
NO.	



662.18	662.14	662.11	662.13	662.20	662.31	662.14	662.36	662.23	662.36	662.36	662.36	662.23	662.35	662.13	662.24	662.00	662.13	662.05	662.05	662.07	662.17	662.19
60+00	60+50	61+00	61+50	62+00	62+50	63+00	63+50	64+00	64+50	65+00	65+50	66+00										

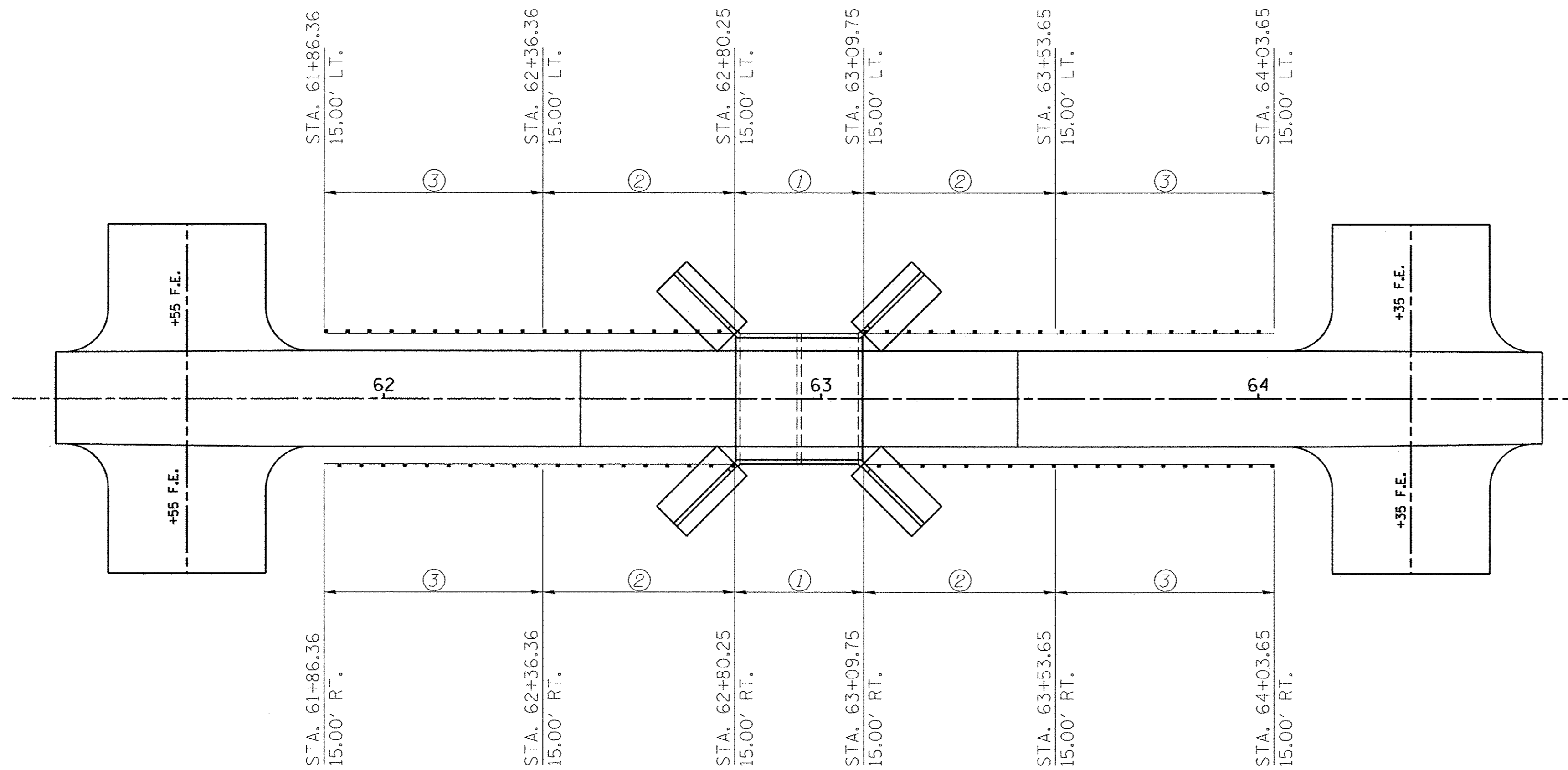
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 CHECKED - S.W.M.
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REVISOR -
 REVISION -
 REVISION -
 REVISION -

STATE OF ILLINOIS
EDGAR COUNTY HIGHWAY DEPARTMENT

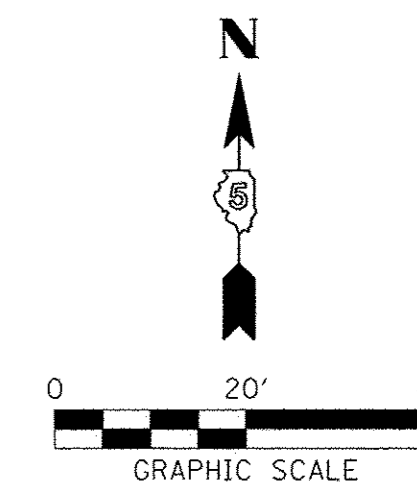
PLAN & PROFILE
 SCALE: 20H:5V
 SHEET NO. 1 OF 1 SHEETS
 STA. 60+00.00 TO STA. 66+00.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
679	16-00131-00-BR	EDGAR	23	4
HORACE BROCTON ROAD			CONTRACT NO. 91542	
ILLINOIS FED. AID PROJECT BR05-0679(112)				

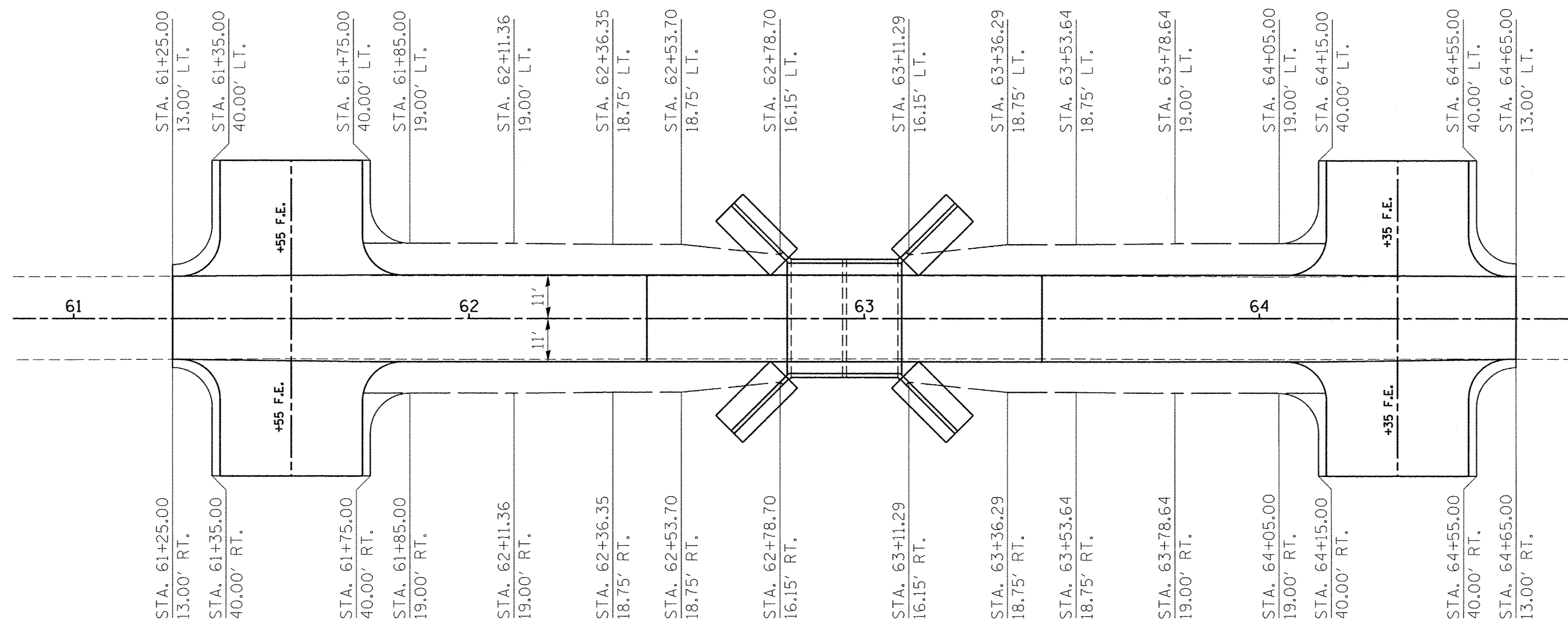


GUARDRAIL LAYOUT

- ① STEEL RAILING, TYPE S-M
- ② TBT TY 6A
- ③ TBT TY 1 SPL TAN



NOTE: CONTRACTOR MAY DELETE THE SPACER AT THE FIRST POST ADJACENT TO THE CULVERT TO ALLOW DRIVING INSIDE OF WINGWALL.



SHOULDER LAYOUT

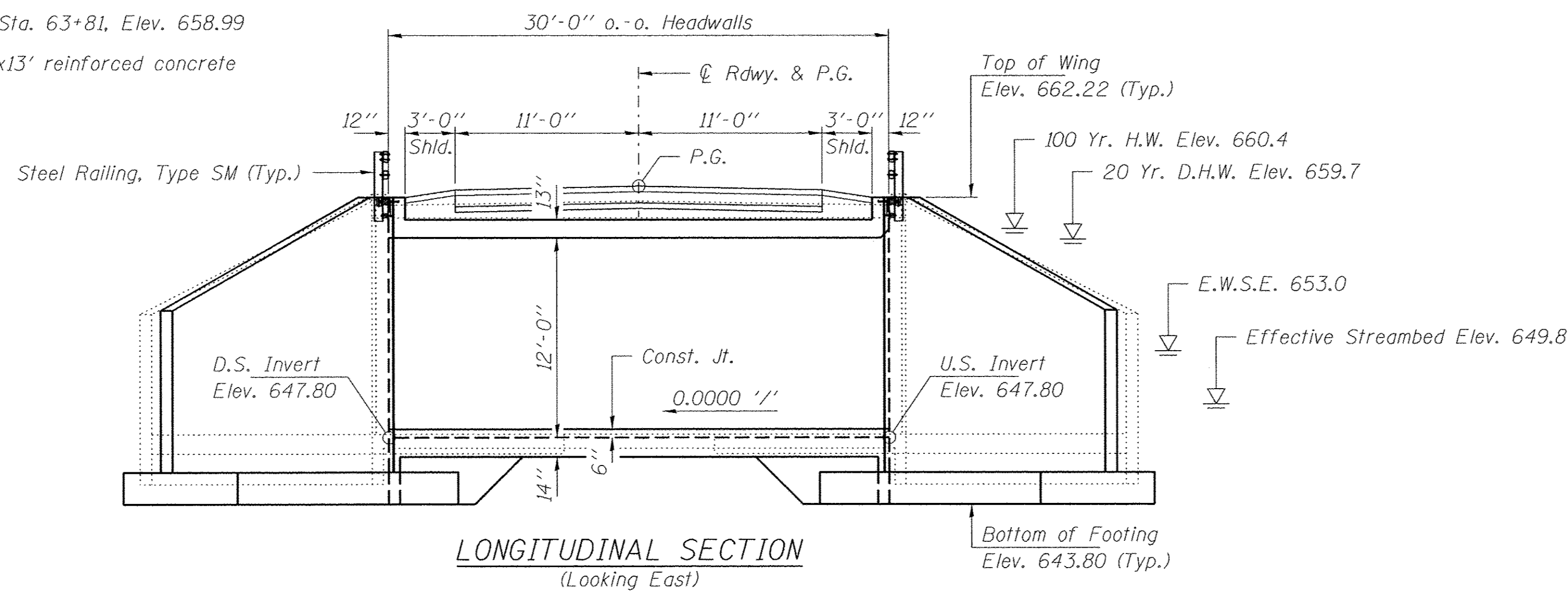
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HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = #SCALE#	DRAWN - R.D.H.	REVISED -			679	16-00131-00-BR	EDGAR	23	5	
PLOT DATE = 10/7/2016	CHECKED - S.W.M.	DATE - 10/07/16	REVISED -			CONTRACT NO. 91542		ILLINOIS FED. AID PROJECT BR05-0679012			
						SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		

BENCHMARK: Chiseled "□" in top of weir. 42' Rt., Sta. 63+81, Elev. 658.99

EXISTING STRUCTURE: SN 023-3226 is a double 12'x13' reinforced concrete box culvert. Length = 31'-2" o.-o.

Structure will be closed to traffic during construction.

No salvage.



GENERAL NOTES

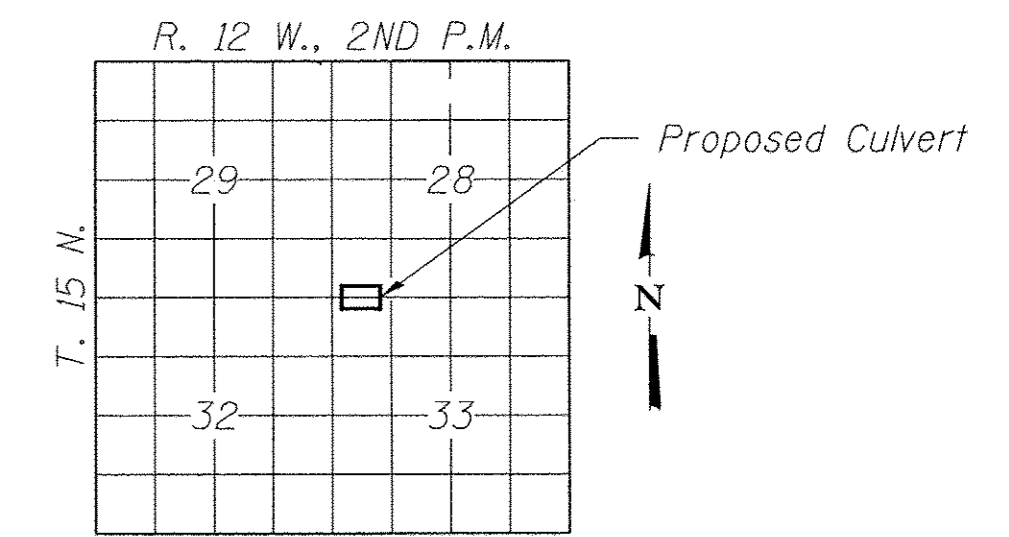
Reinforcement bars designated (E) shall be epoxy coated. Precast alternate not allowed. Cofferdams shall be used for dewatering and to keep all construction for the proposed structure within the existing right-of-way. All excavation included in cost of the cofferdam. No additional payments will be allowed.

INDEX OF STRUCTURE SHEETS

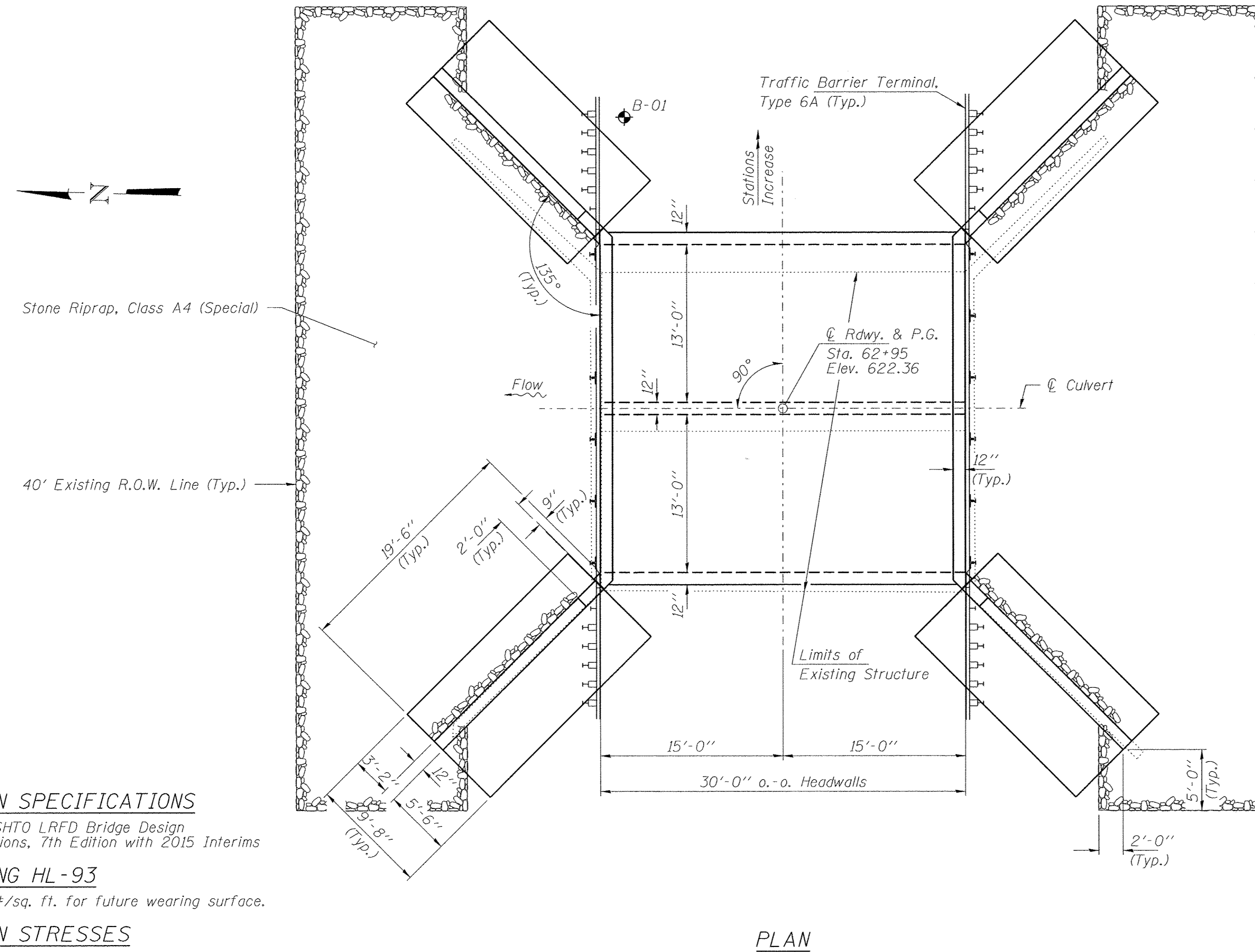
1. General Plan
- 2-3. Culvert Details
4. Steel Railing, Type SM
5. Boring

S. FORK BROUILLETTS CREEK
BUILT 2011 BY
EDGAR COUNTY
SEC. 16-00131-00-BR
C.H. 8 / F.A.S. 679
STR. NO. 023-3278
LOADING HL-93

NAME PLATE
See Std. 515001



LOCATION SKETCH



WATERWAY INFORMATION

Drainage Area = 10.7 Sq. Mi.		Existing Overtopping Elev. 662.0 @ Sta. 64+50		Proposed Overtopping Elev. 662.0 @ Sta. 64+50					
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater El.			
	10	1020	228	246	659.28	0.31	0.22	659.59	659.50
Design	20	1280	238	258	659.72	0.59	0.47	660.31	660.19
Base	100	1900	253	260	660.35	1.29	1.18	661.64	661.53
Exist. Overtop	500	2540	265		660.85	1.44		662.29	660.85
Prop. Overtop	500	2540		260	660.85		1.50	660.85	662.35
Max. Calc.	500	2540	265	260	660.83	1.44	1.50	662.27	662.33

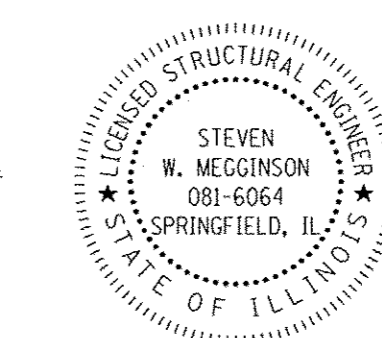
10 Year Velocity through Existing Bridge = 4.5 fps 10 Year Velocity through Proposed Bridge = 4.1 fps

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Ton	845
Aggregate Subgrade Improvement	Cu. Yd.	18
Removal of Existing Structures	Each	1
Cofferdam (Type 2) (Location-1)	Each	2
Reinforcement Bars, Epoxy Coated	Pound	37,120
Steel Railing, Type SM	Foot	59
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	210.7
Porous Granular Backfill, Special	Cu. Yd.	35
Stone Riprap, Class A4 (Special)	Ton	240

I certify that to the best of my knowledge, information and belief, this culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications."

Steven W. Megginson 10/07/2016
ILLINOIS STRUCTURAL ENGINEER NO. 081-6064



GENERAL PLAN
F.A.S. 679 / C.H. 8
SECTION 16-00131-00-BR
EDGAR COUNTY
STATION 62+95
STRUCTURE NO. 023-3278

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 Interims

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

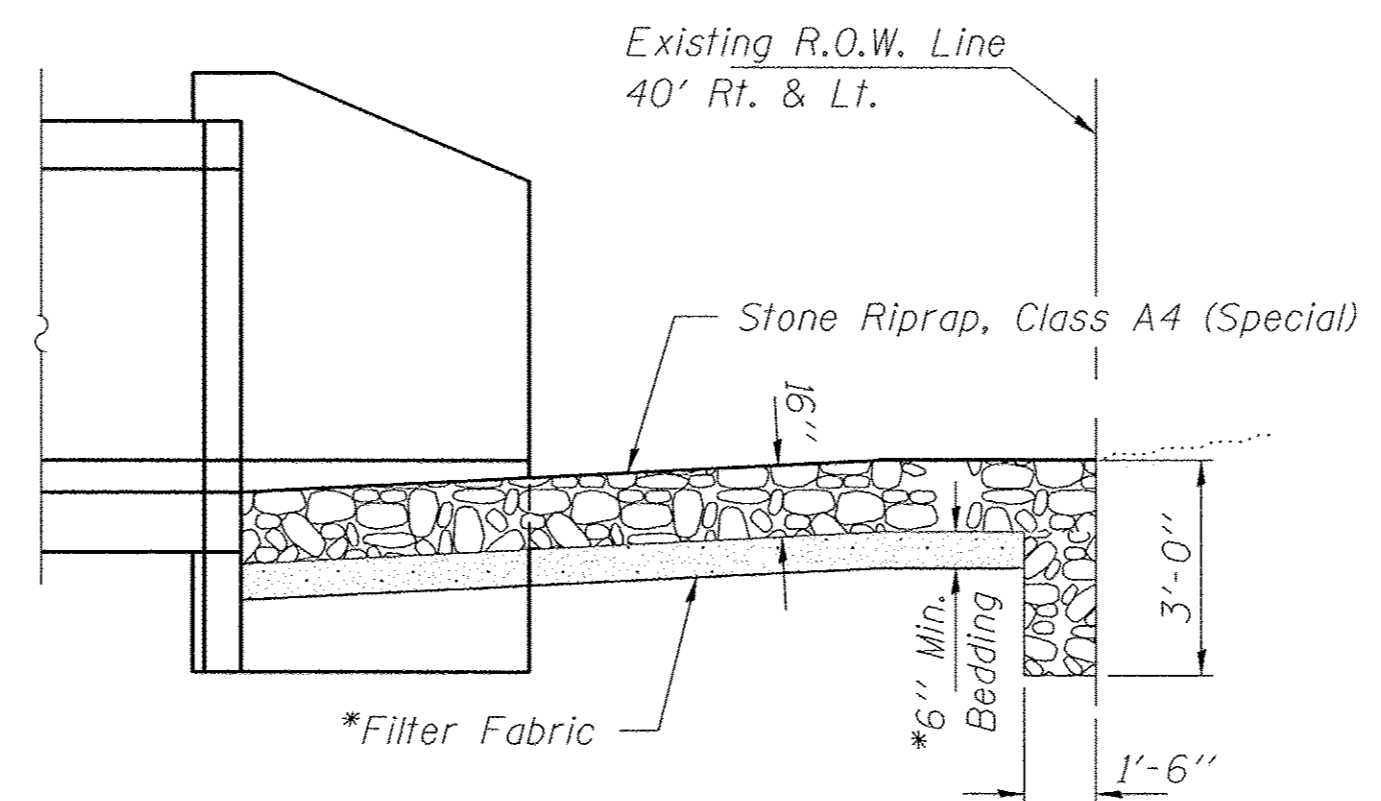
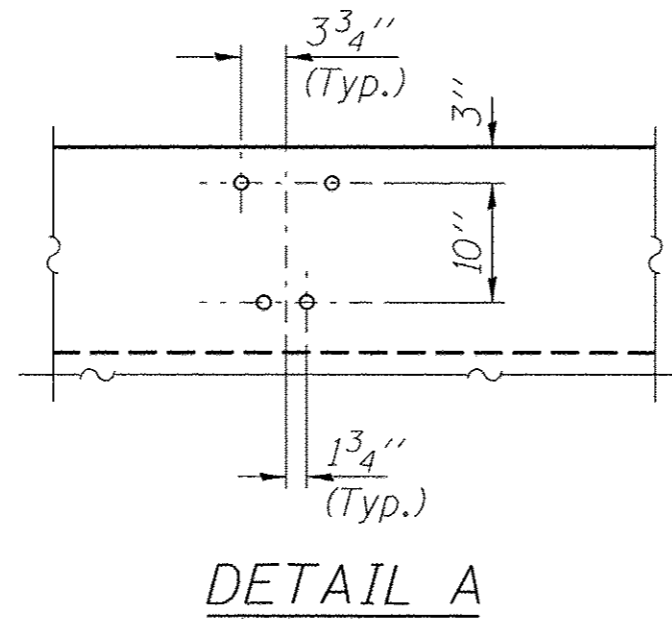
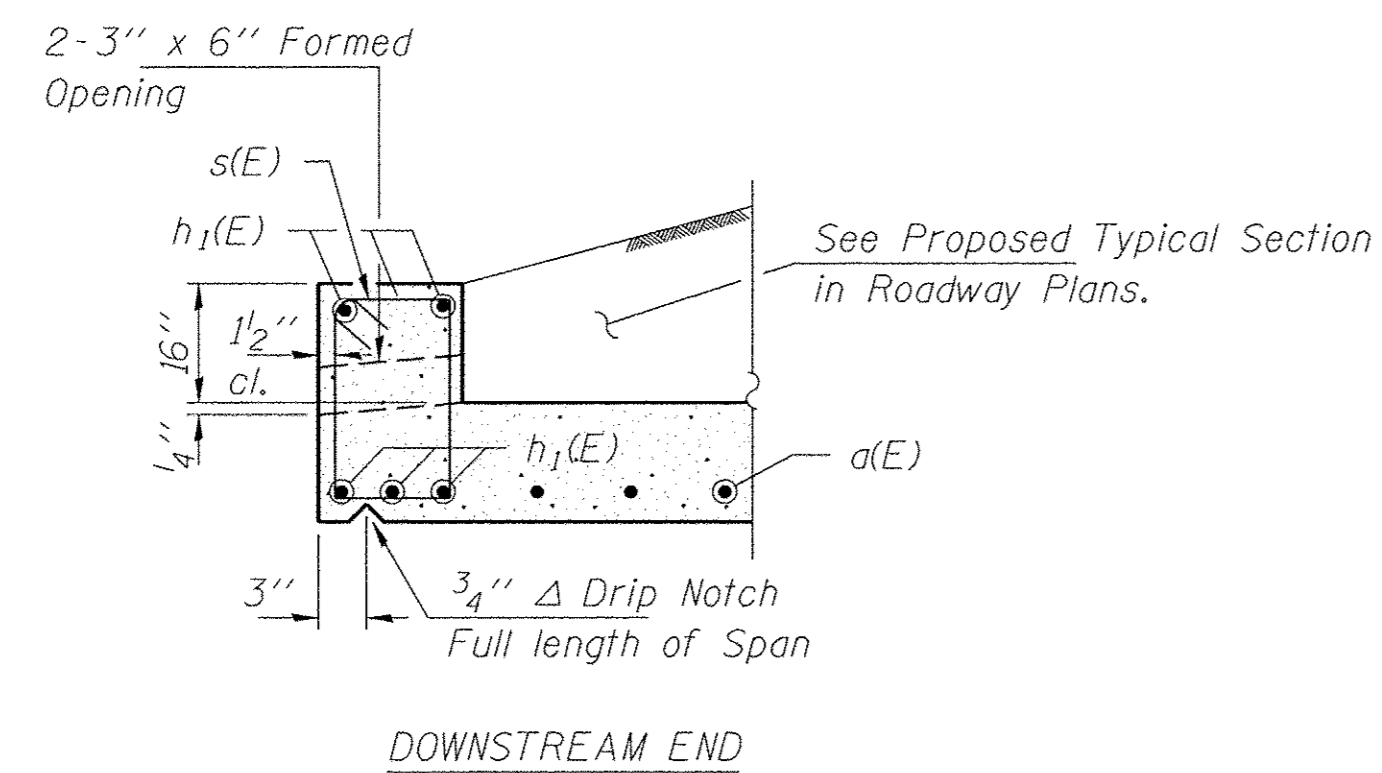
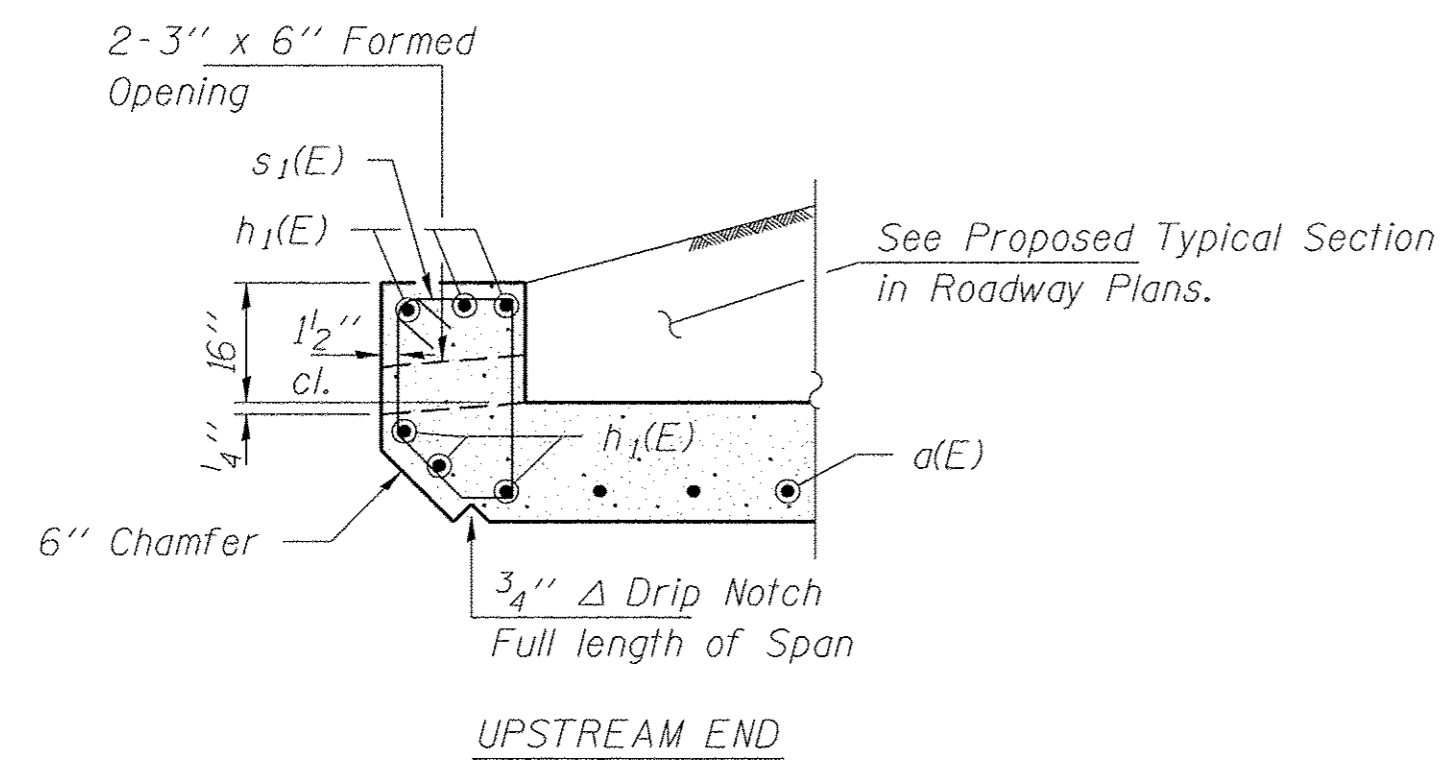
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		CHECKED - L.A.P.	REVISED -

STATE OF ILLINOIS
EDGAR COUNTY HIGHWAY DEPARTMENT

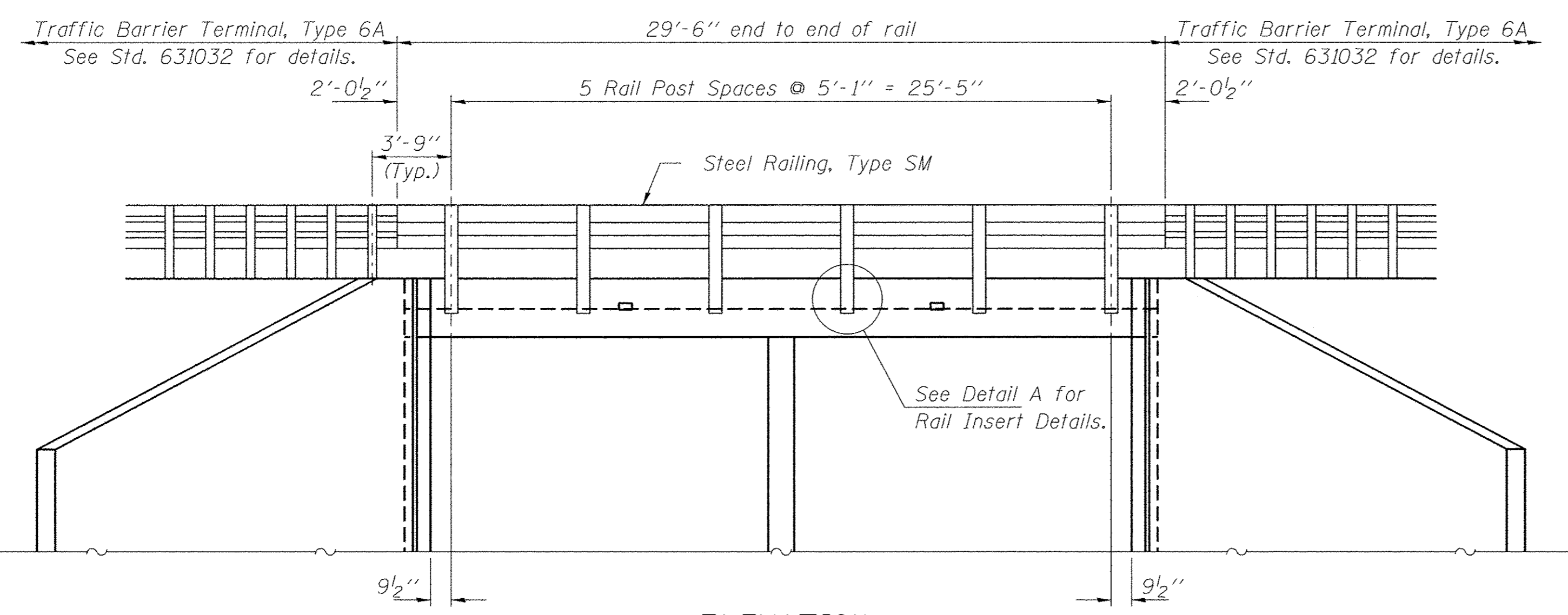
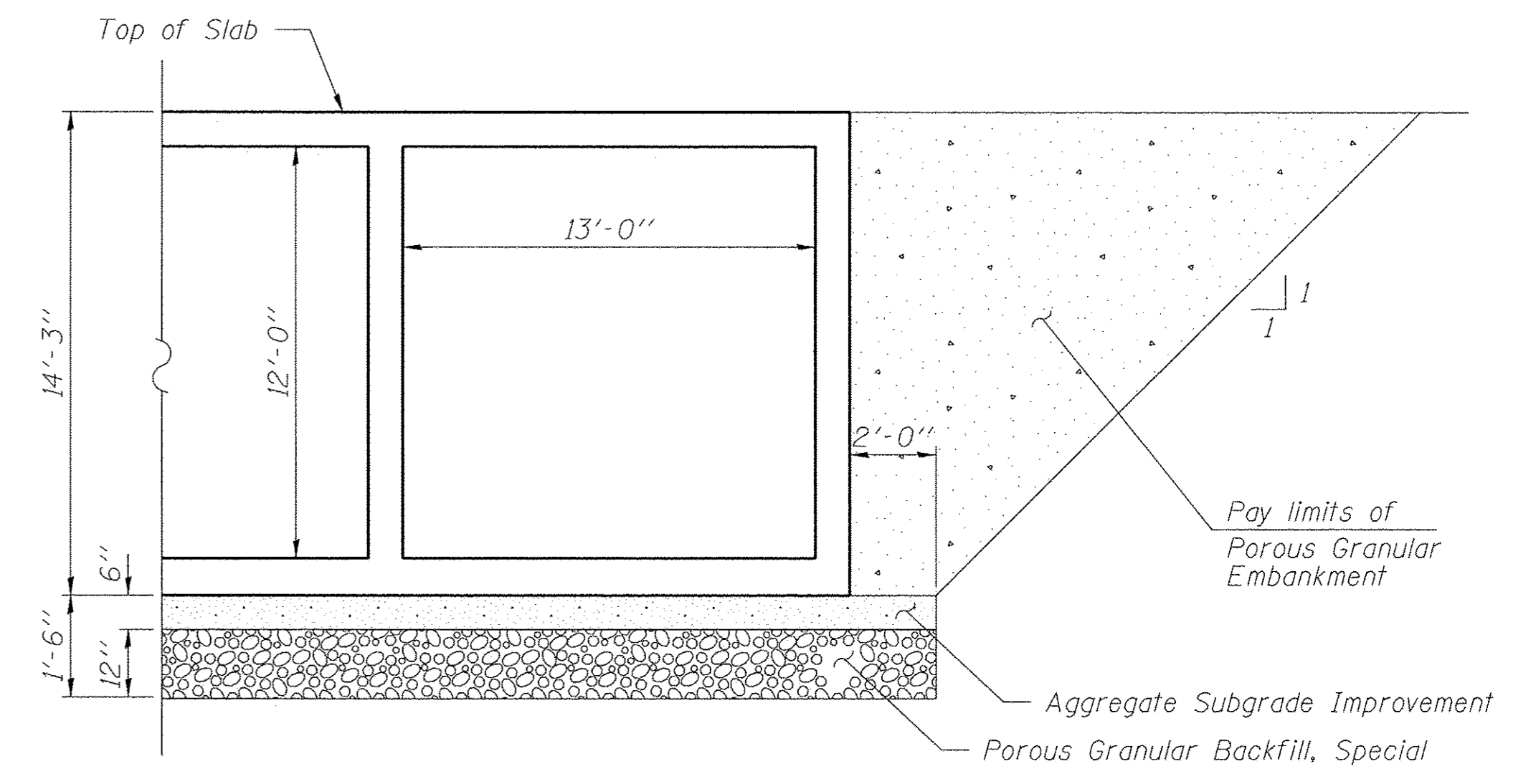
GENERAL PLAN
STRUCTURE NO. 023-3278

SHEET NO. 1 OF 5 SHEETS

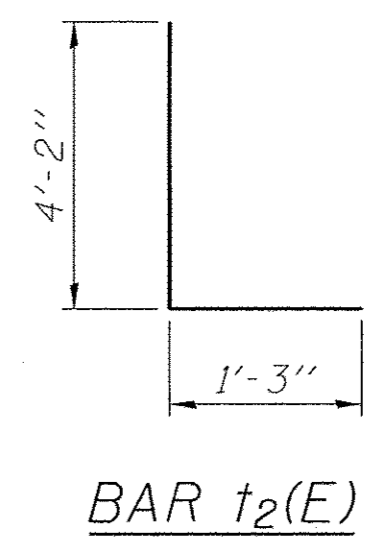
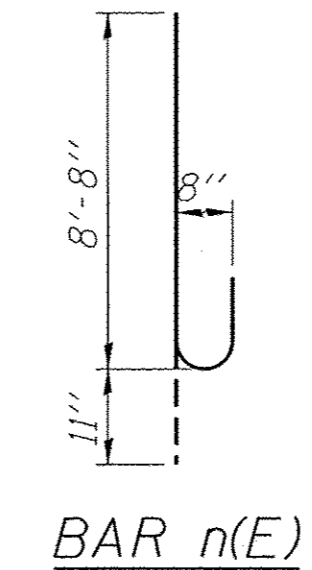
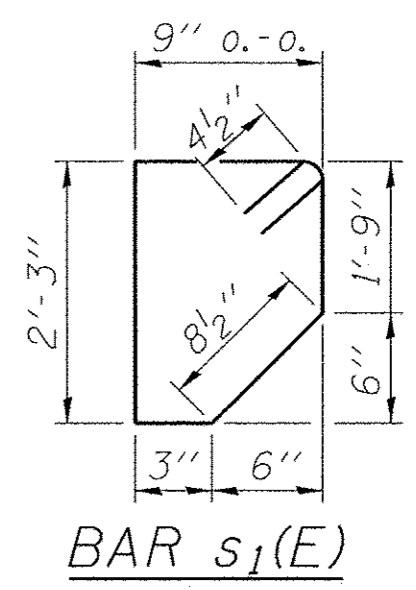
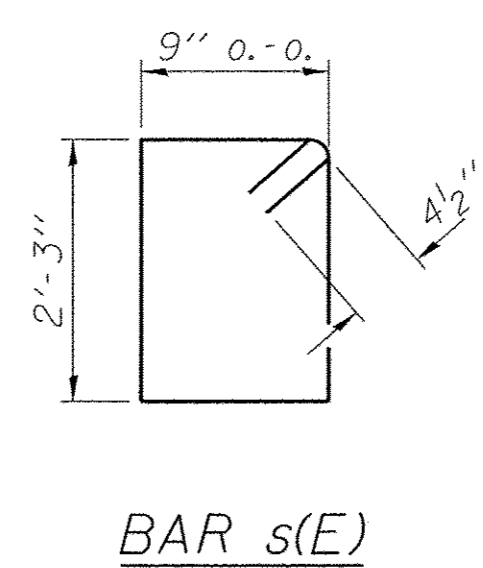
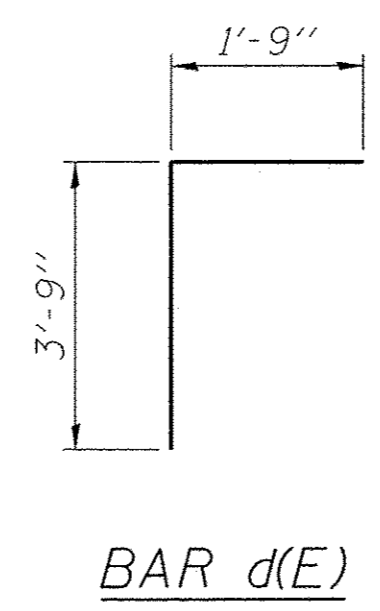
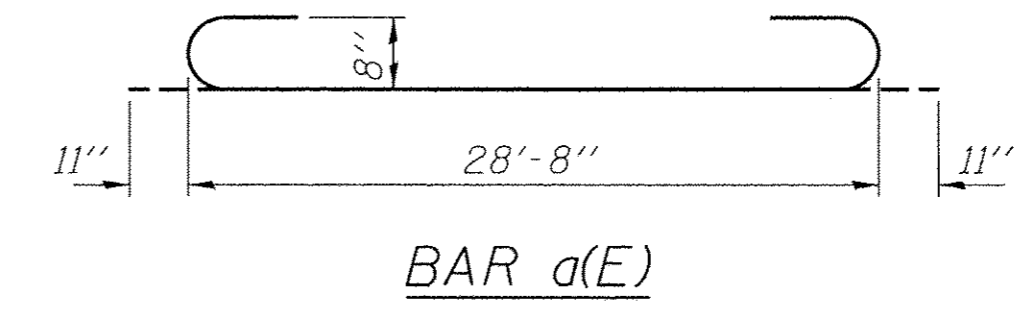
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679	16-00131-00-BR	EDGAR	23	6
HORACE BROXTON ROAD			CONTRACT NO. 91542	
ILLINOIS FED. AID PROJECT 605-0679(12)				



*Note:
Pay Items will not be paid for separately,
but will be included in the cost of Stone Riprap,
Class A4 (Special).



ELEVATION
Showing Rail Post Spaces
See sheet 4 of 5 for Railing Details.



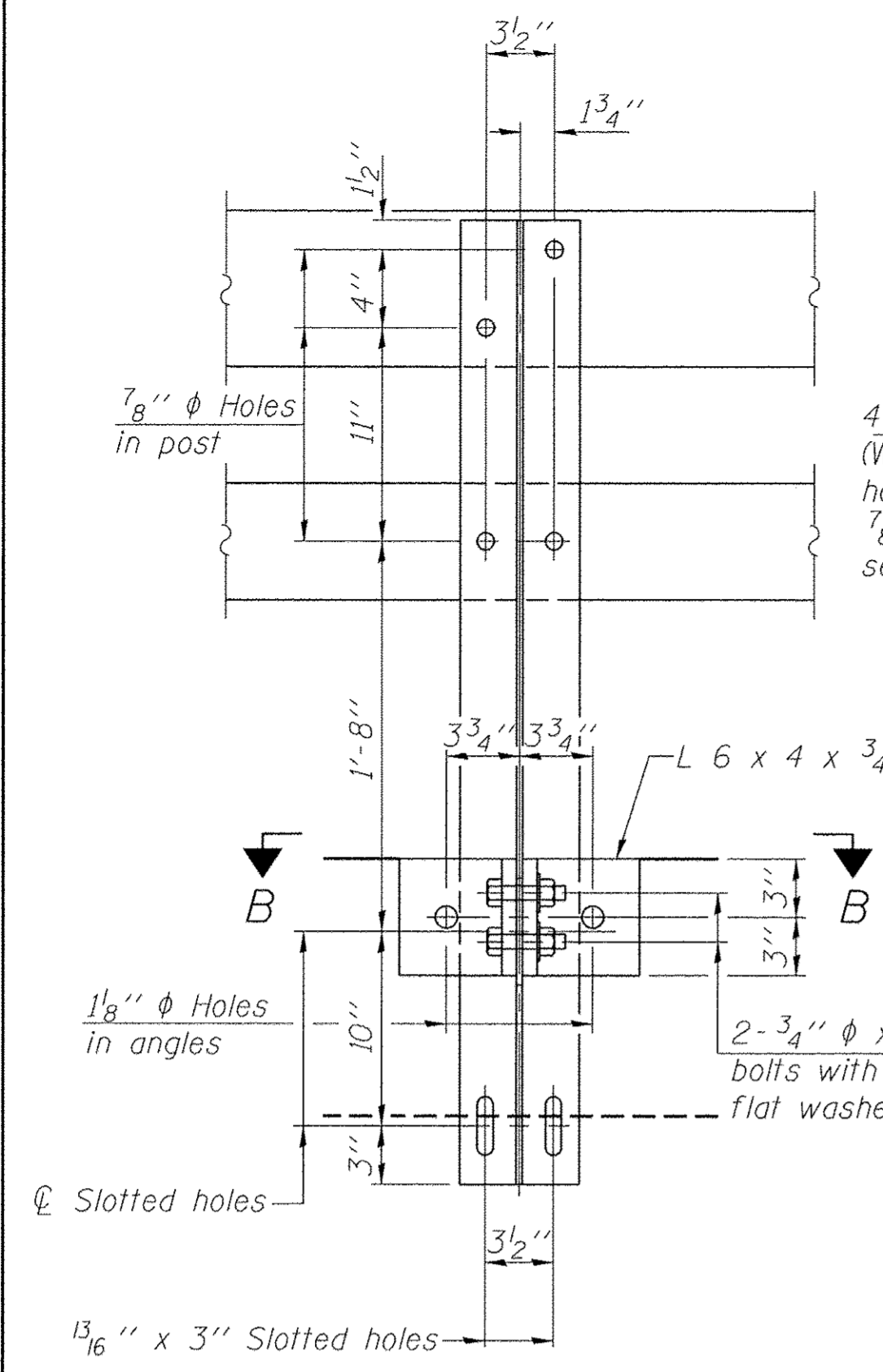
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	PLOT DATE = 10/7/2016	DRAWN - D.A.B.	REVISED -
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STATE OF ILLINOIS
EDGAR COUNTY HIGHWAY DEPARTMENT

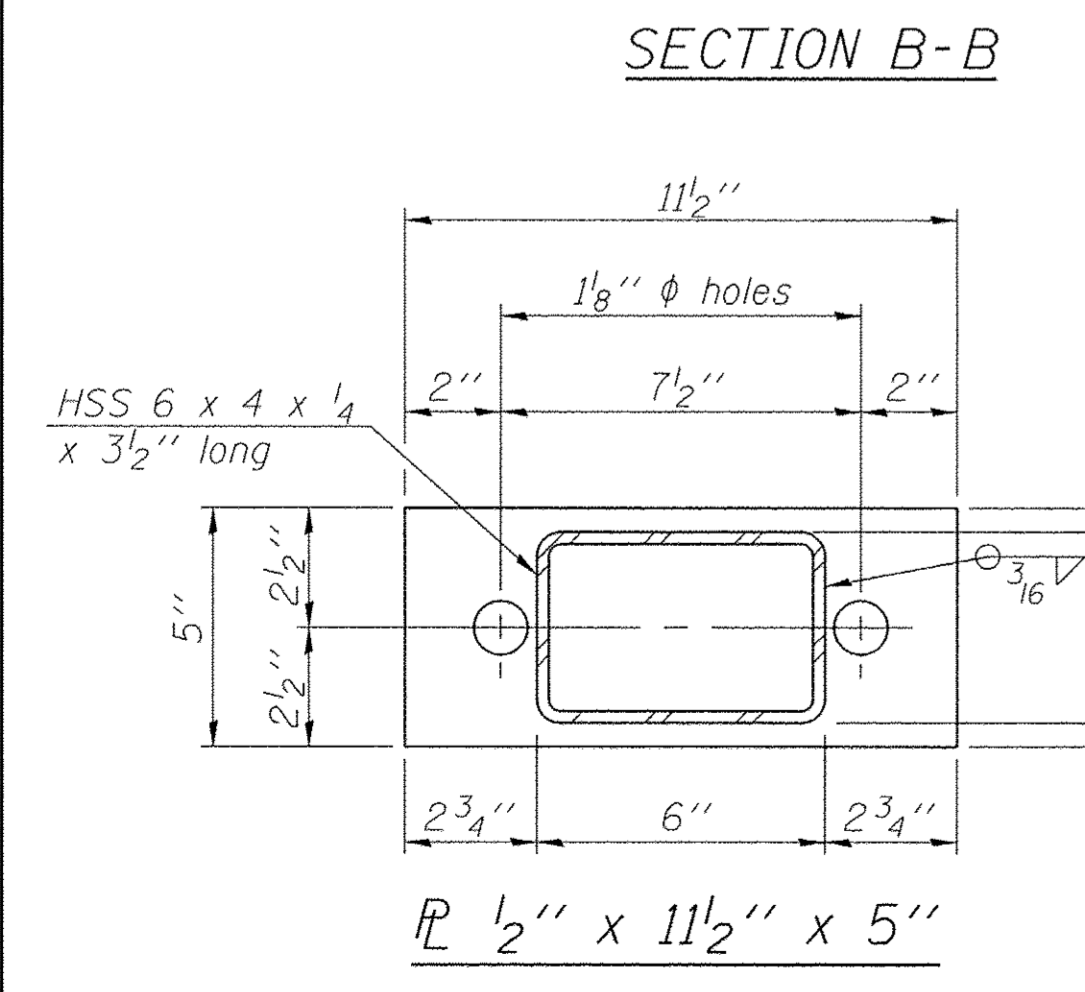
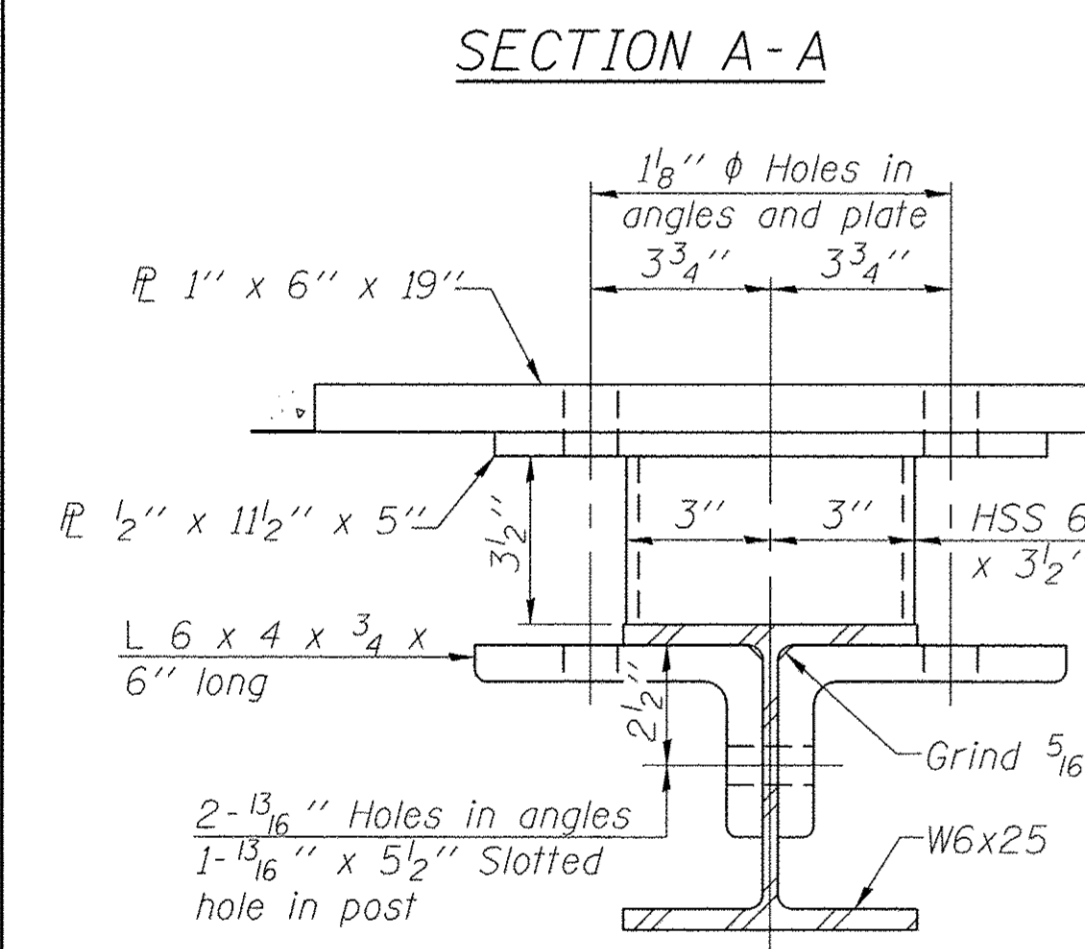
CULVERT PLAN
STRUCTURE NO. 023-3278

SHEET NO. 3 OF 5 SHEETS

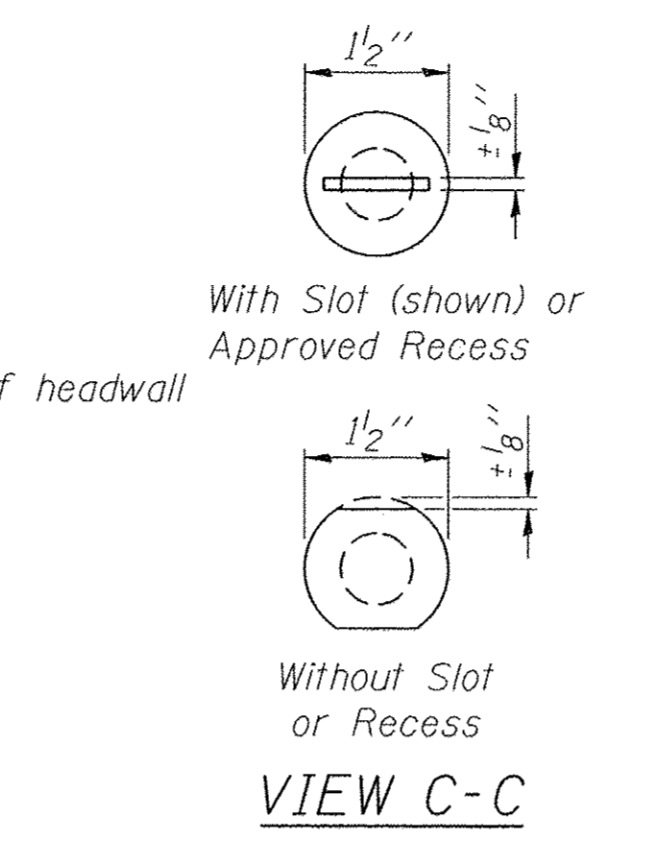
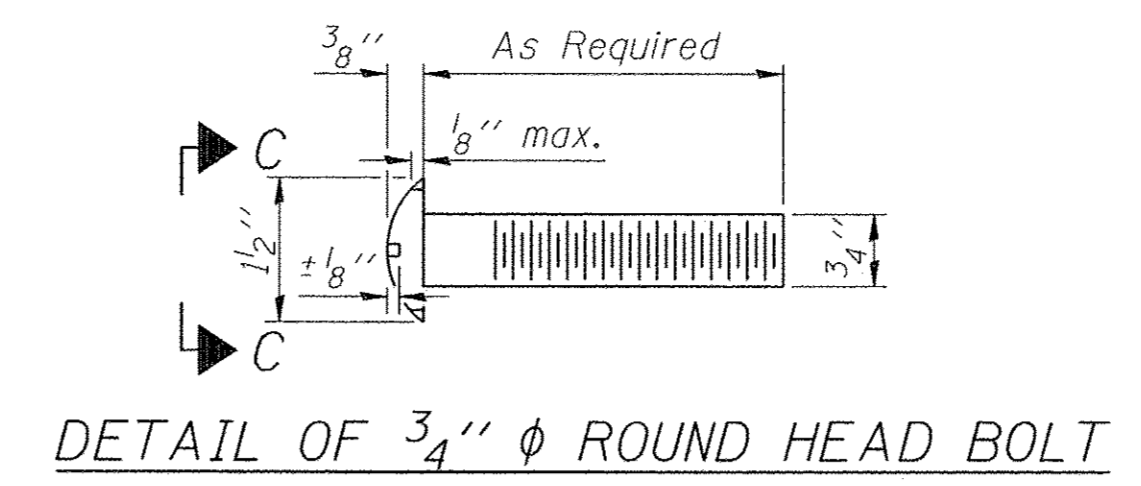
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HORACE BROCTON ROAD		CONTRACT NO. 91542		
ILLINOIS FED. AID PROJECT BROS-0679(112)				



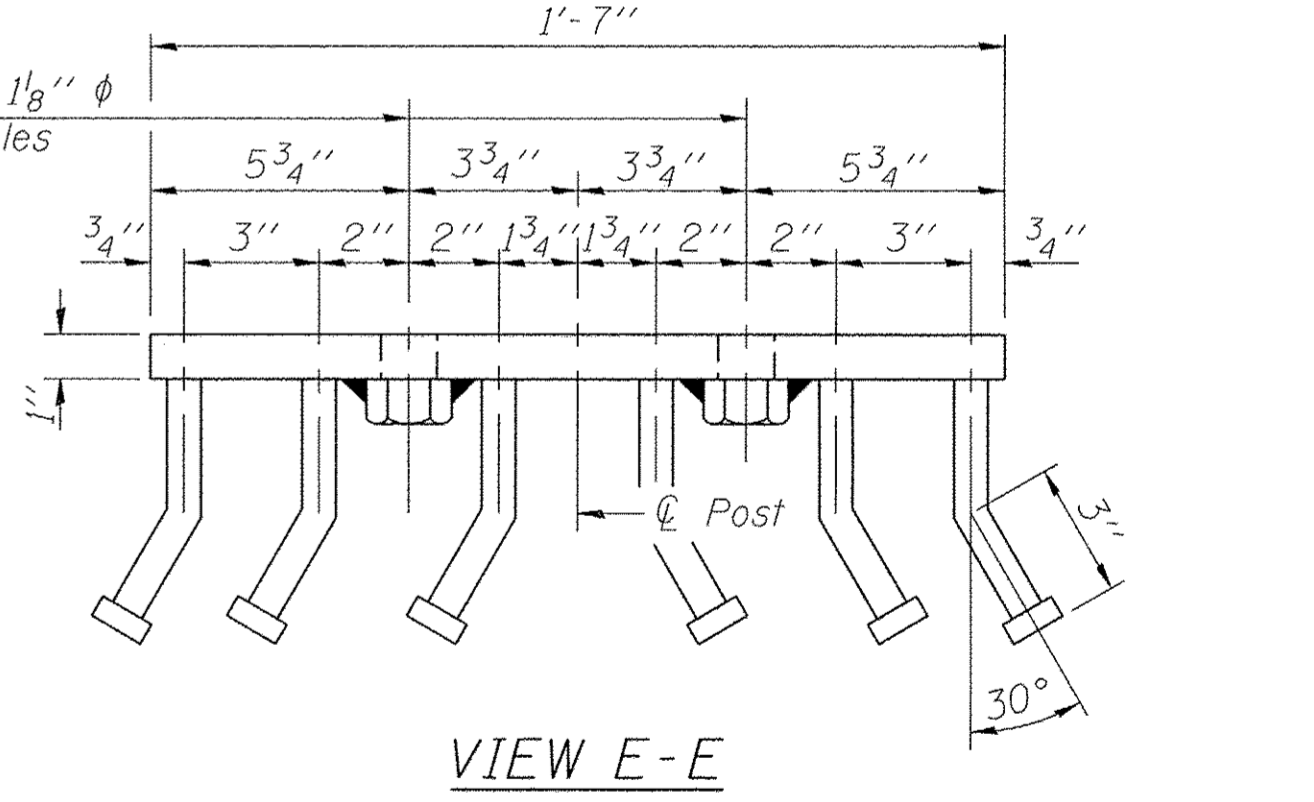
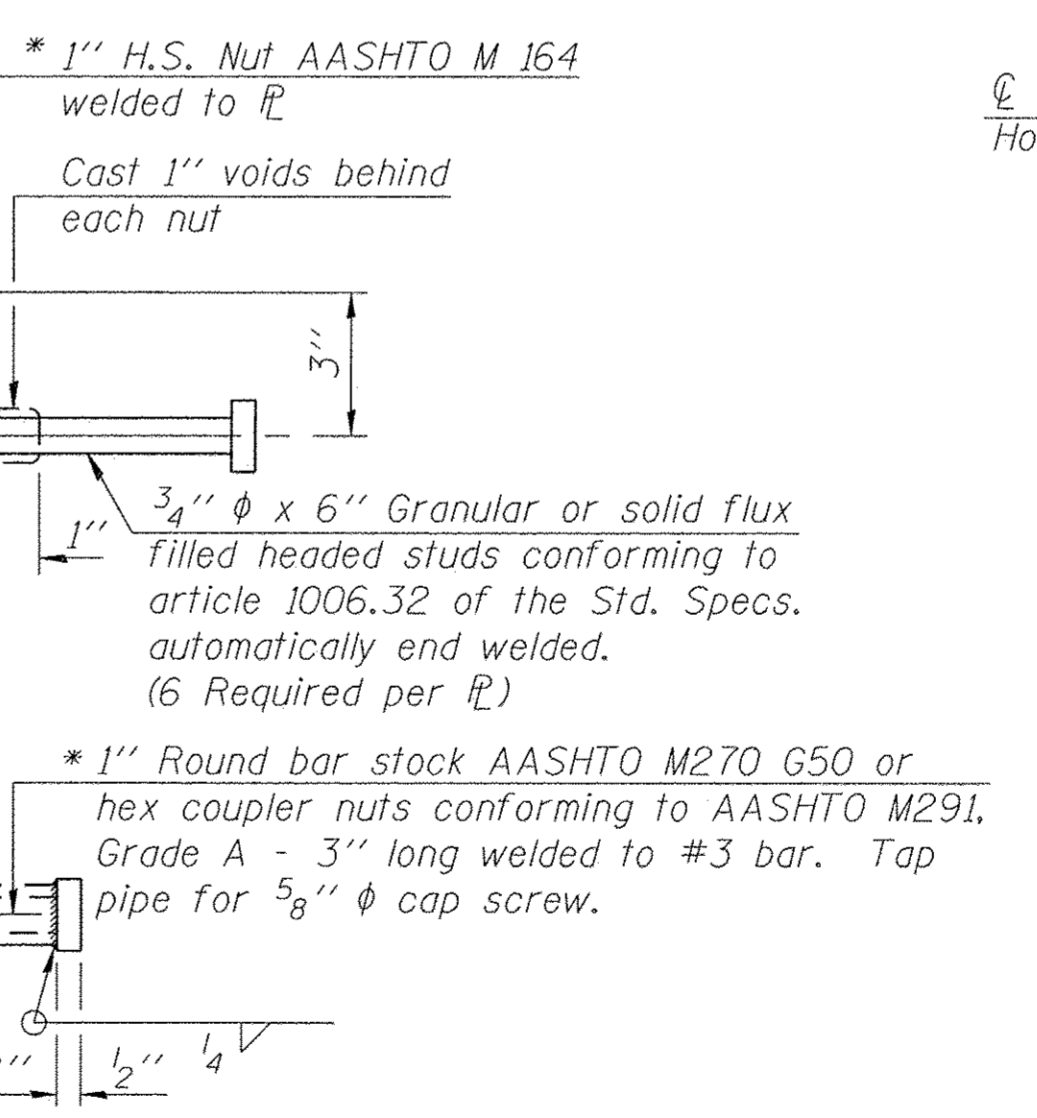
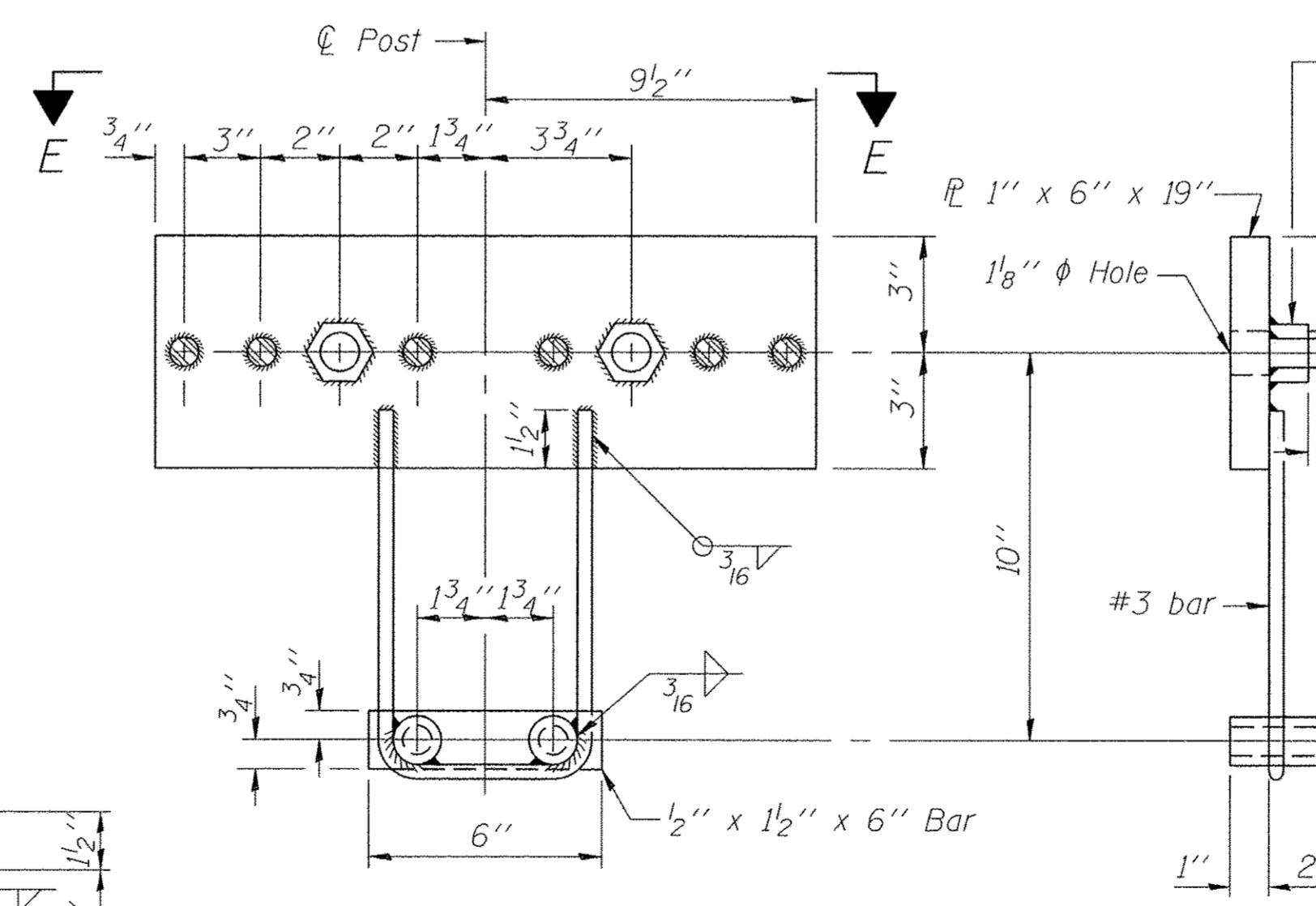
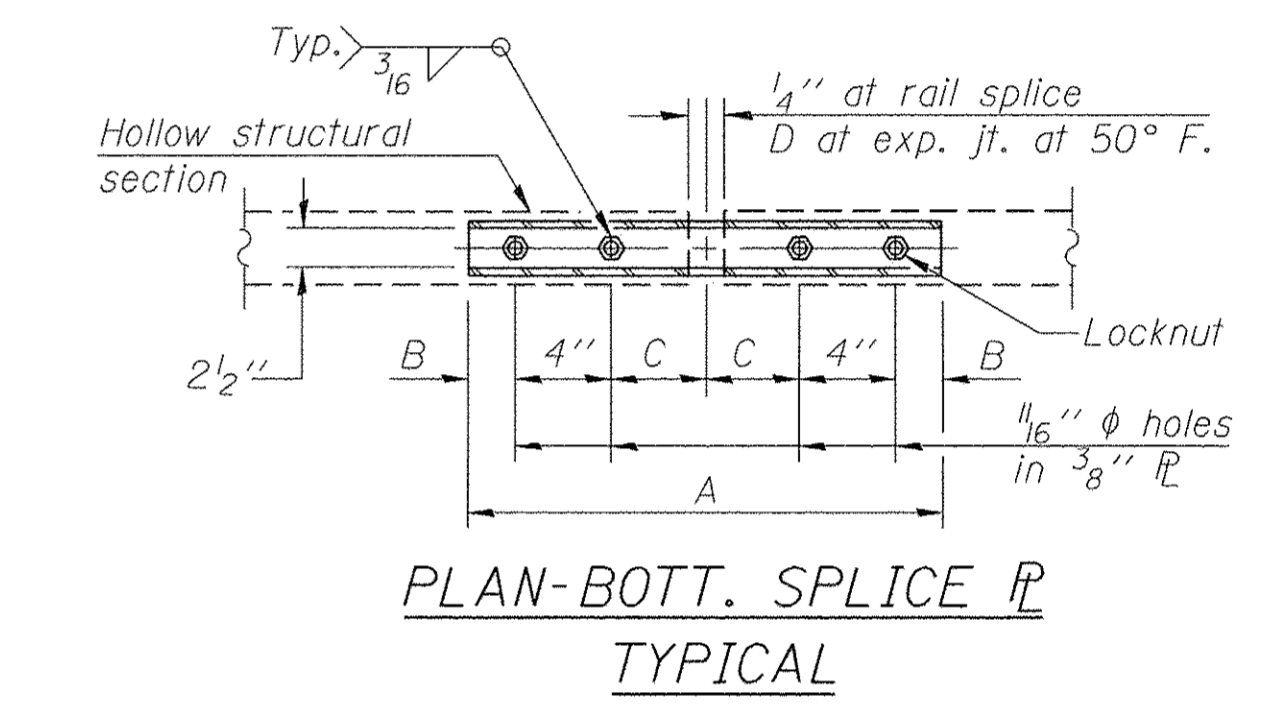
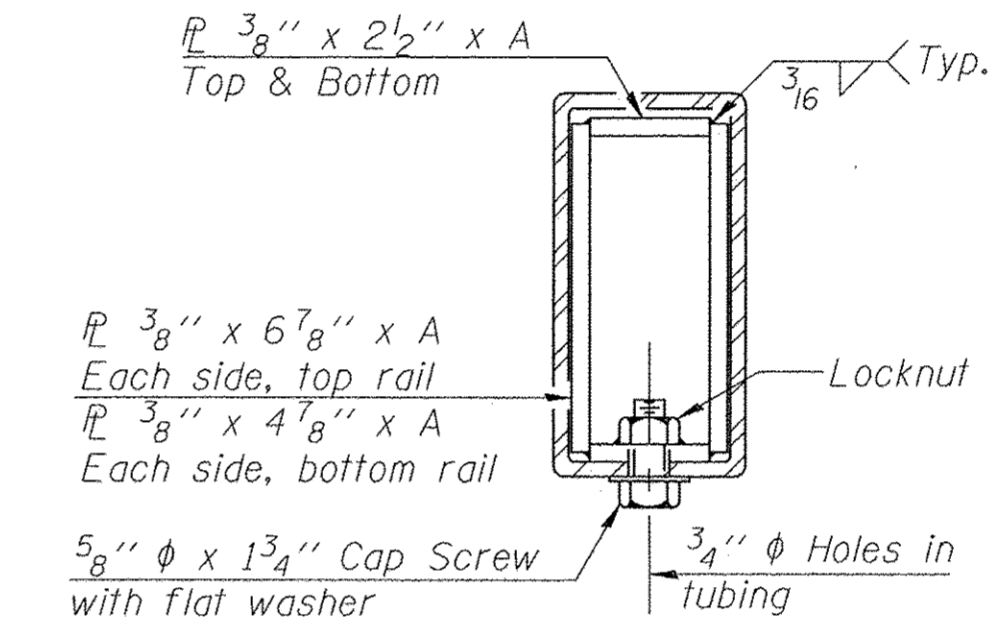
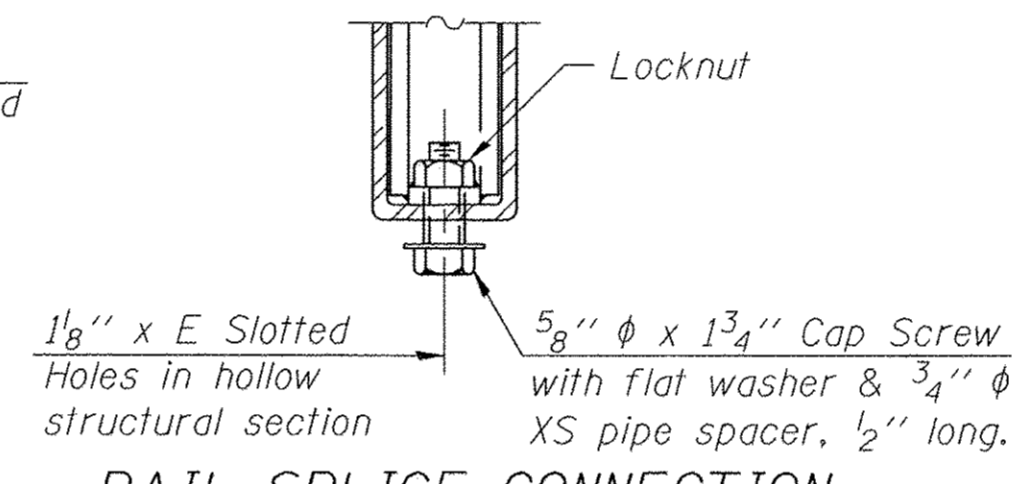
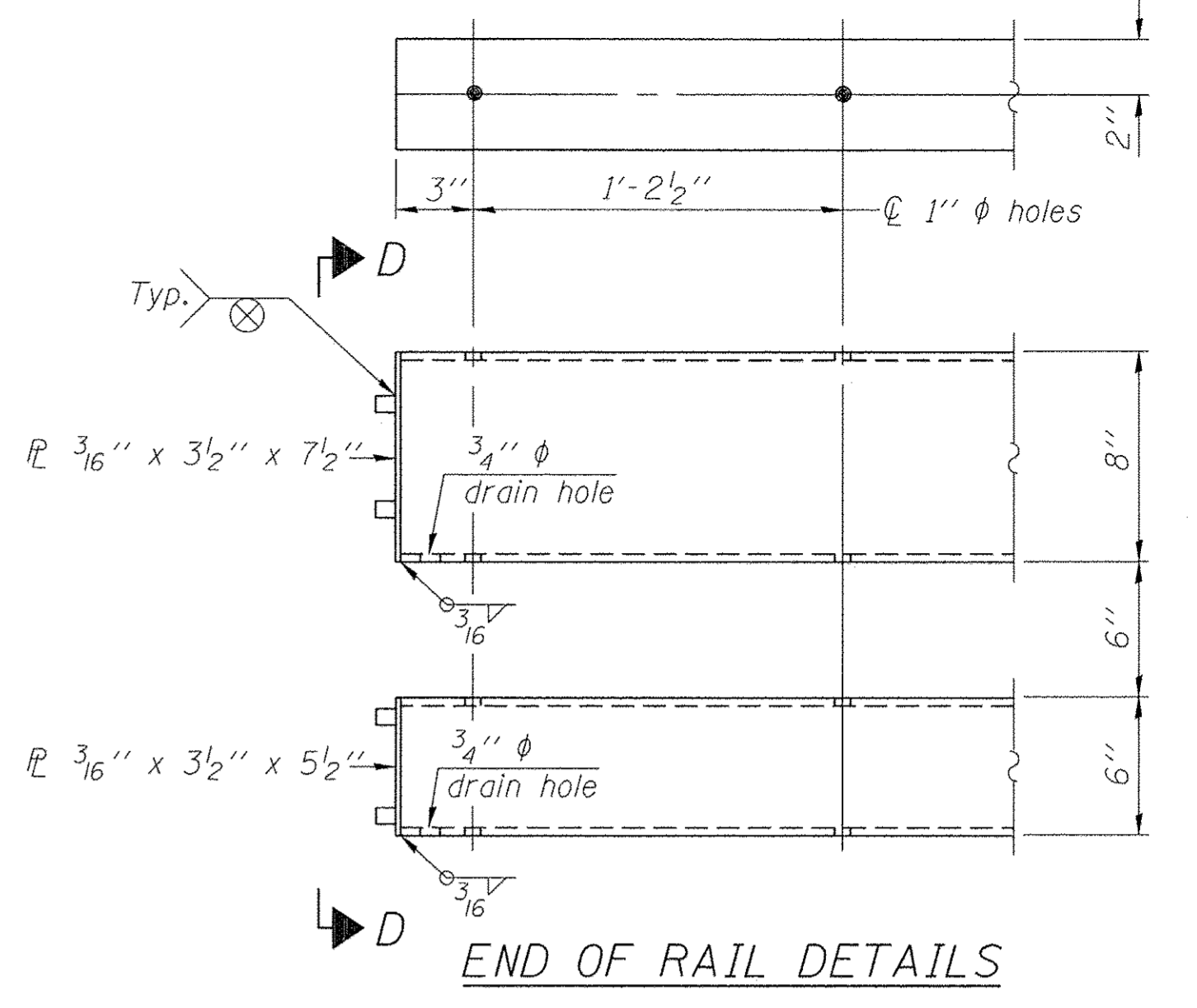
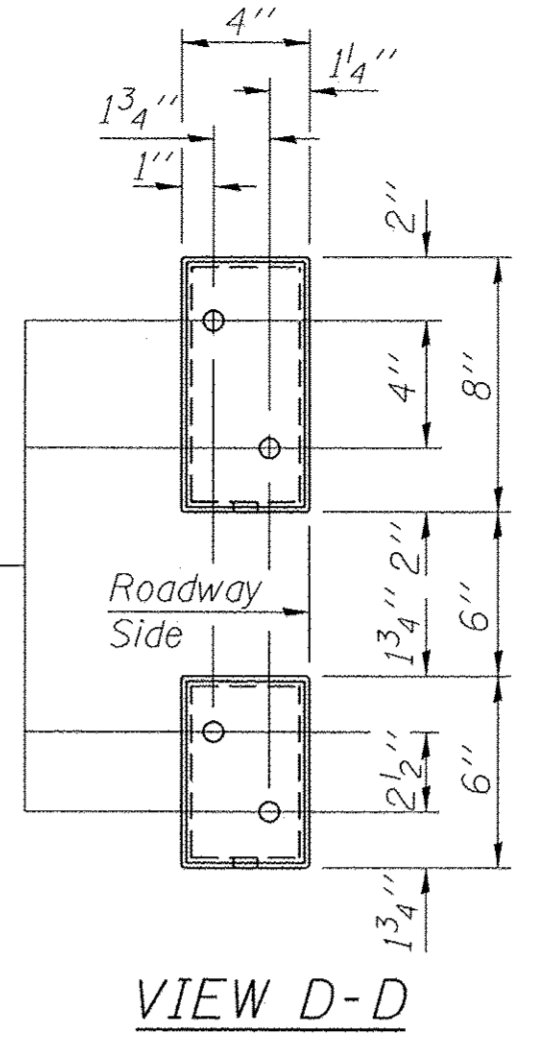
4-3/4" φ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" φ holes in hollow structural section may be drilled in the field.



Reinforcement bars in the top of the headwall may be placed with a 1/2" minimum clearance in the area of the rail post anchor devices. The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



4-5/8" reduced base welded studs. Provide 4-5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.



Notes:
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
 All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
 ** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	59

(6'-3" Maximum Post Spacing) (1/4" minimum to 3/8" maximum HMA thickness)

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

T = Total movement at expansion joint as shown on the design plans.



BORING NO. B-01
PAGE 1 OF 1

CLIENT Hampton Lenzini & Renwick PROJECT NAME FAS Route 679 Section 16-001313-00-BR
 PROJECT NUMBER 16-G0239 PROJECT LOCATION Edgar County, Illinois
 DATE COMPLETED 2/19/16 LOGGED BY DS/RR DRILLING METHOD 3.25 in. I.D. HSA

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RCD)	BLOW COUNTS (N VALUE)	POCKET PEN. (Cp) (tsf)	UNC. STRENGTH (Qu) (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ORGANIC CONTENT (%)	ATTERBERG LIMITS			
												LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0			0-3" GRAVEL FILL												
99.5			Dark Brown SILTY CLAY trace sand and gravel very stiff, moist (658.7)	SS 1	72	4-4-4 (8)	3.0		15.4						
96.3			Brown SILTY CLAY trace sand and gravel stiff, moist (653.7)	SS 2	83	3-3-4 (7)	1.75	1.6	13.6						
91.3			Brown mottled Gray SILTY CLAY trace sand and gravel medium stiff, very moist (649.2)	SS 3	89	3-5-6 (11)	1.5	1.3	13.1						
85.8			Gray SILT medium dense, moist (647.2)	SS 4	56	3-4-6 (10)	1.0	0.8	25.9						
83.8			Gray SILTY CLAY little sand, trace gravel very stiff, moist (645.2)	SS 5	89	2-1-2 (3)	0.75		20.5						
81.3			Gray SILTY CLAY trace sand, with gravel hard, moist (633.7)	SS 6	72	2-2-5 (7)	2.75	2.6	7.4						
				SS 7	67	5-5-19 (24)	3.75	3.4	8.8						
				SS 8	83	9-12-15 (27)	4.5	6.6	7.4						
				SS 9	83	9-14-18 (32)	4.5	10.0	8.8						
				SS 10	100	10-20-16 (36)	4.5		8.2						
				SS 11	89	10-12-15 (27)	4.5	7.5	9.2						
				SS 12	100	8-12-16 (28)	4.5	5.2	8.8						

Bottom of borehole at 30.0 feet.

COMPLETION DEPTH 30 ft GROUND ELEVATION 99.75 ft
 CAVE DEPTH 6 ft BACKFILL Soil Cuttings
 GROUND WATER LEVELS:
 AT TIME OF DRILLING ---
 AT END OF DRILLING ---
 AFTER DRILLING ---

NOTES
 Boring located 24 ft east and 13 ft north of the centerline at the center of the bridge. Temporary benchmark (Elevation = 100.0') assigned to the centerline at the center of the bridge. (662.4)

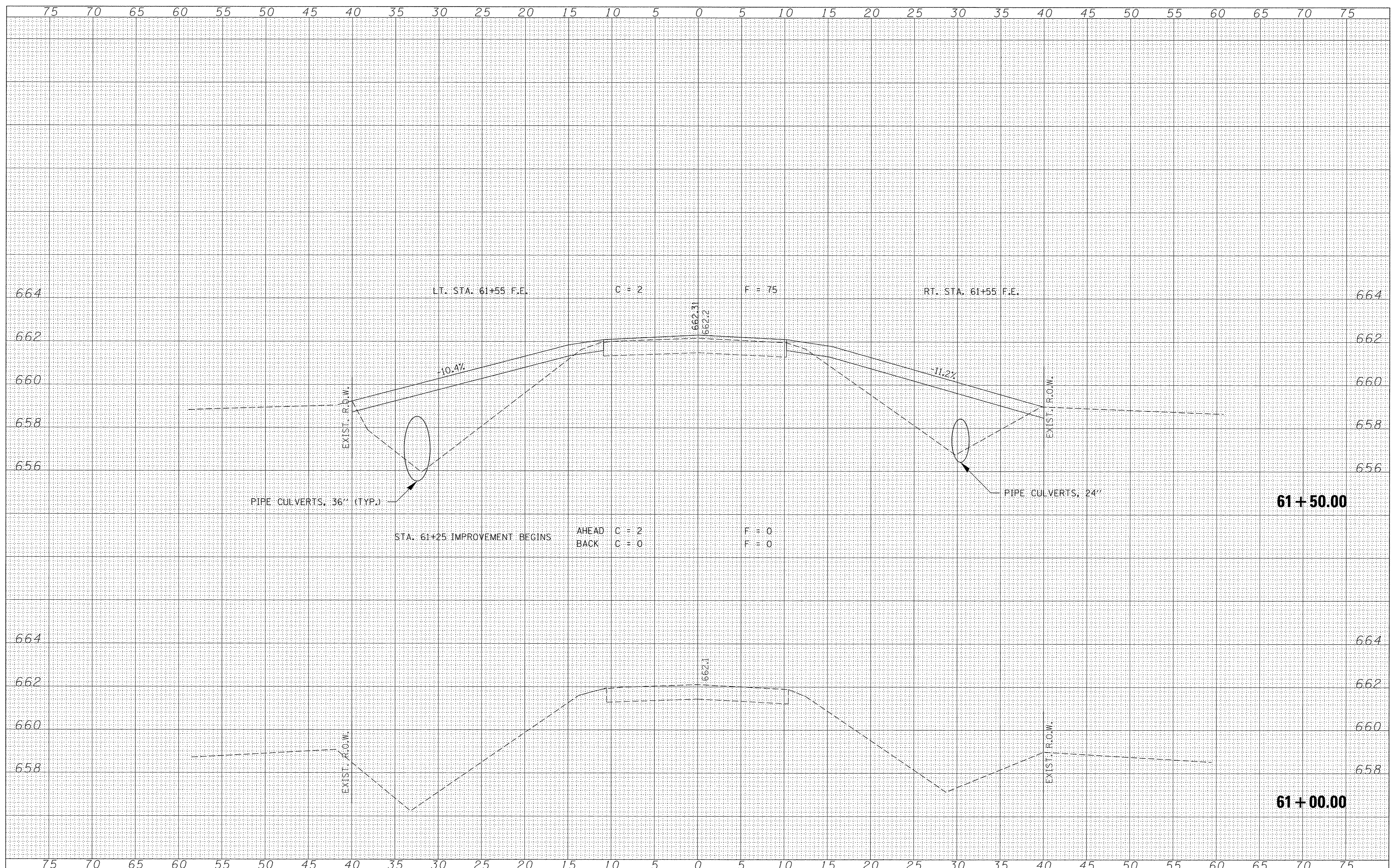
Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

9370 W. Laraway Rd, Suite D Frankfort, Illinois 60423 Phone 815-806-9986 Fax 815-464-8691

BORING B-01

DATE	
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AREAS CHECKED	

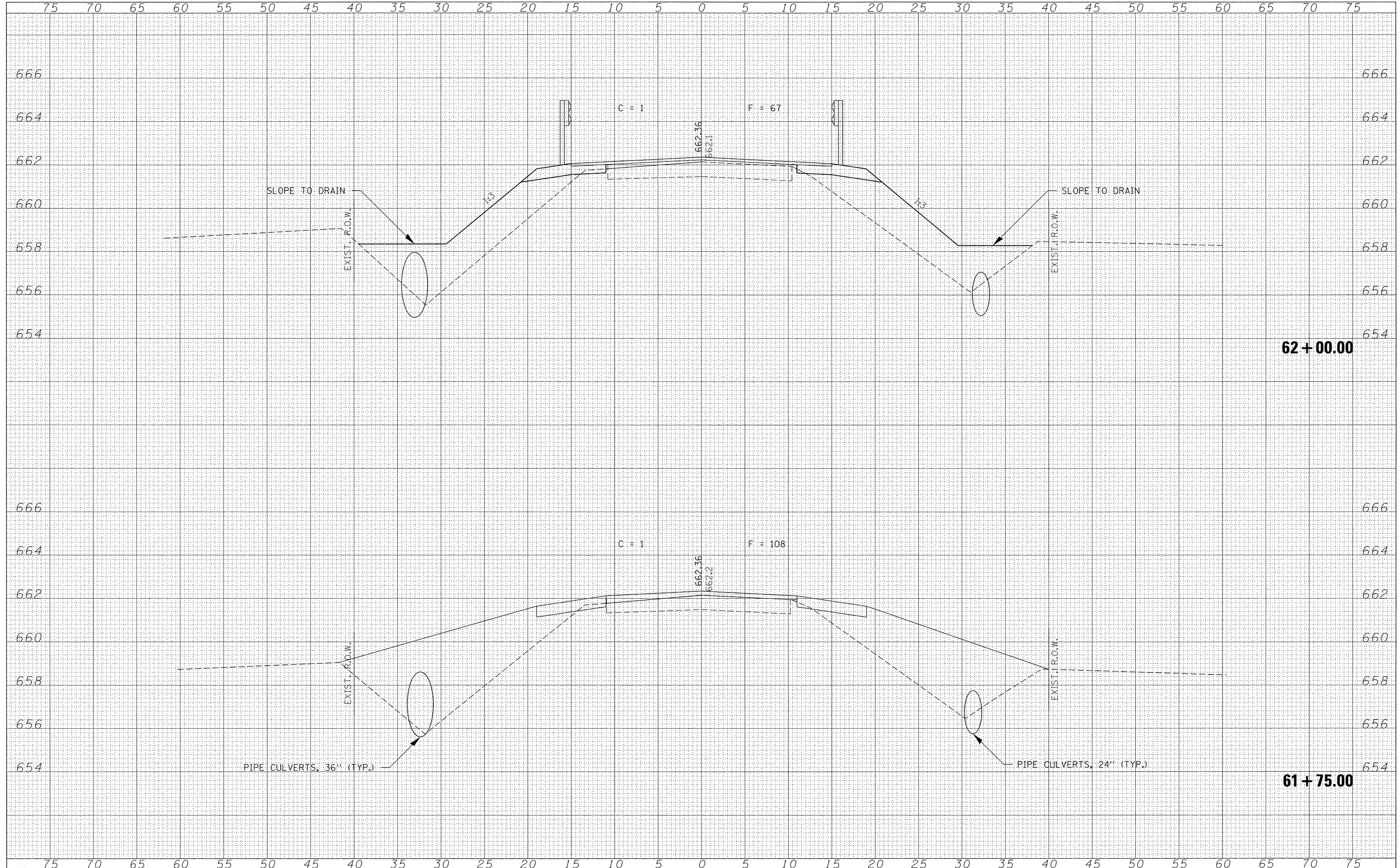
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DRAWN - L.G.C. CHECKED - S.W.M. DATE - 09/20/16				SCALE: 5H:2V SHEET NO. 1 OF 13 SHEETS STA. 61+00.00 TO STA. 61+50.00					679 16-00131-00-BR HORACE BROCTON ROAD EDGAR CONTRACT NO. 91542 ILLINOIS FED. AID PROJECT BROS-0679(112)	

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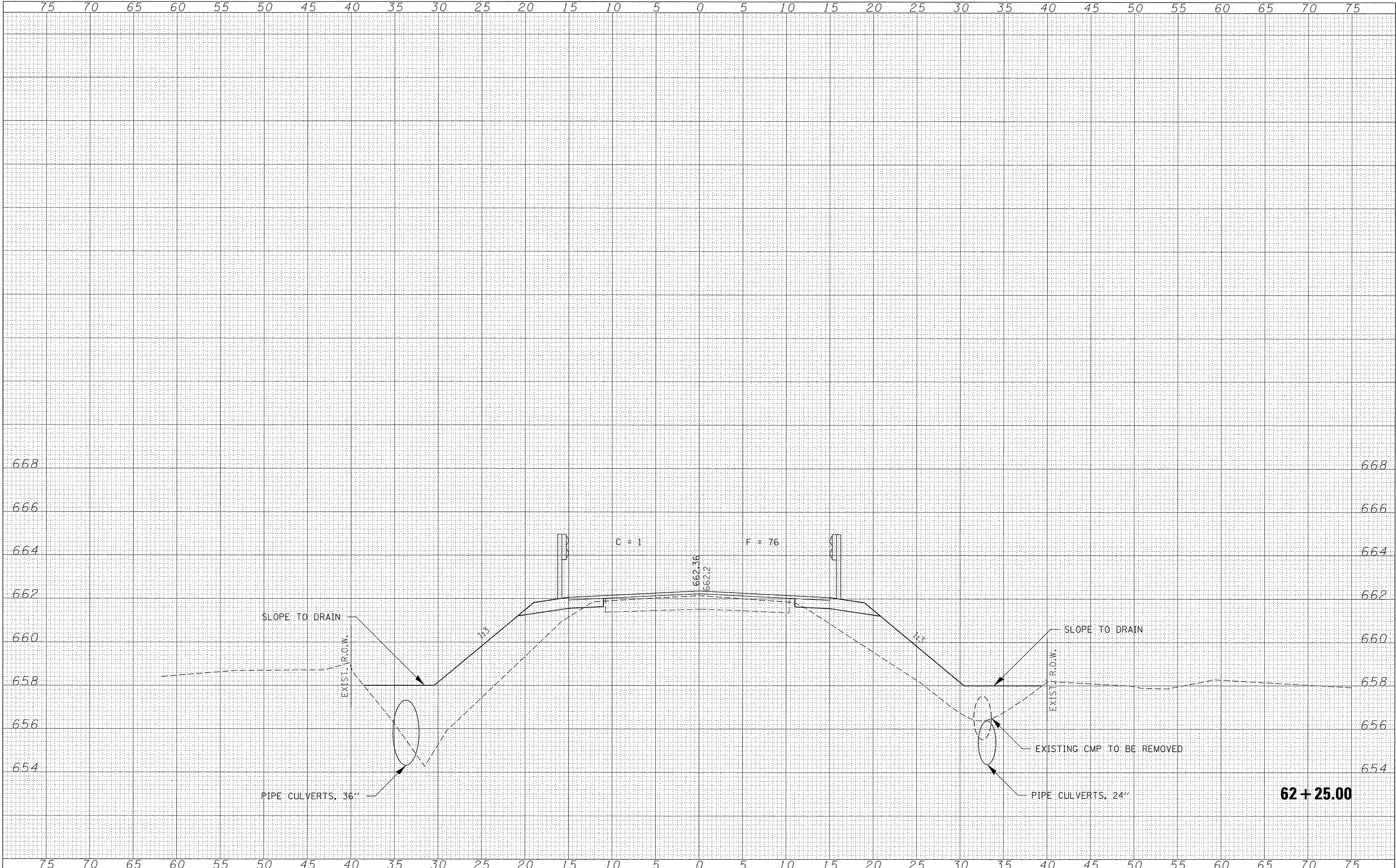
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	PLOT DATE = 10/7/2016	DATE - 09/20/16	REVISED -					[ILLINOIS] FED. AID PROJECT BR05-0679(112)				

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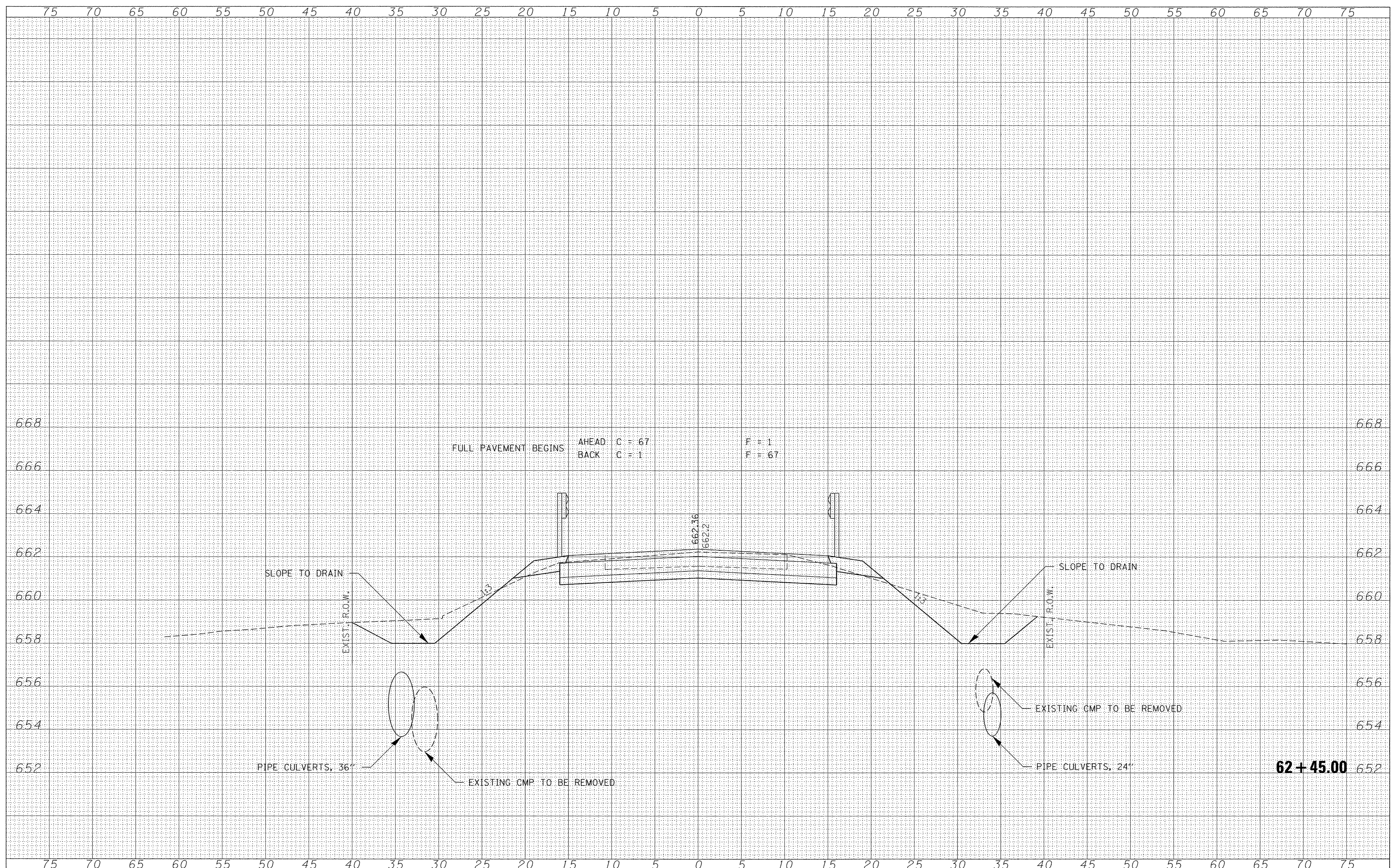
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		DATE - 09/20/16	REVISED -						[ILLINOIS] FED. AID PROJECT BR05-0679(112)				

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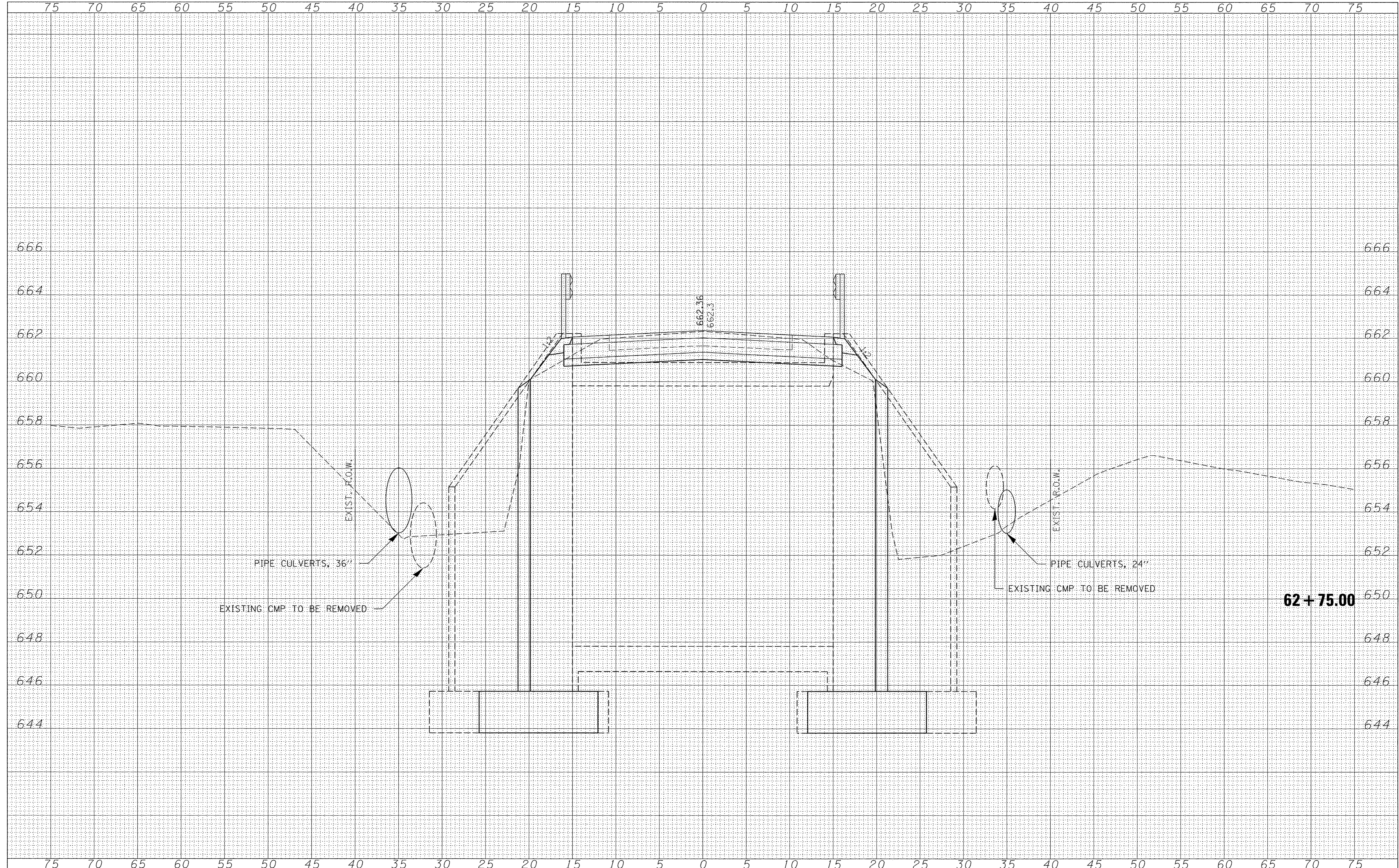
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STATE OF ILLINOIS EDGAR COUNTY HIGHWAY DEPARTMENT				STATION CROSS SECTIONS				
[ILLINOIS] FED. AID PROJECT BR05-0679(112)								

FINAL SURVEY	BY	DATE
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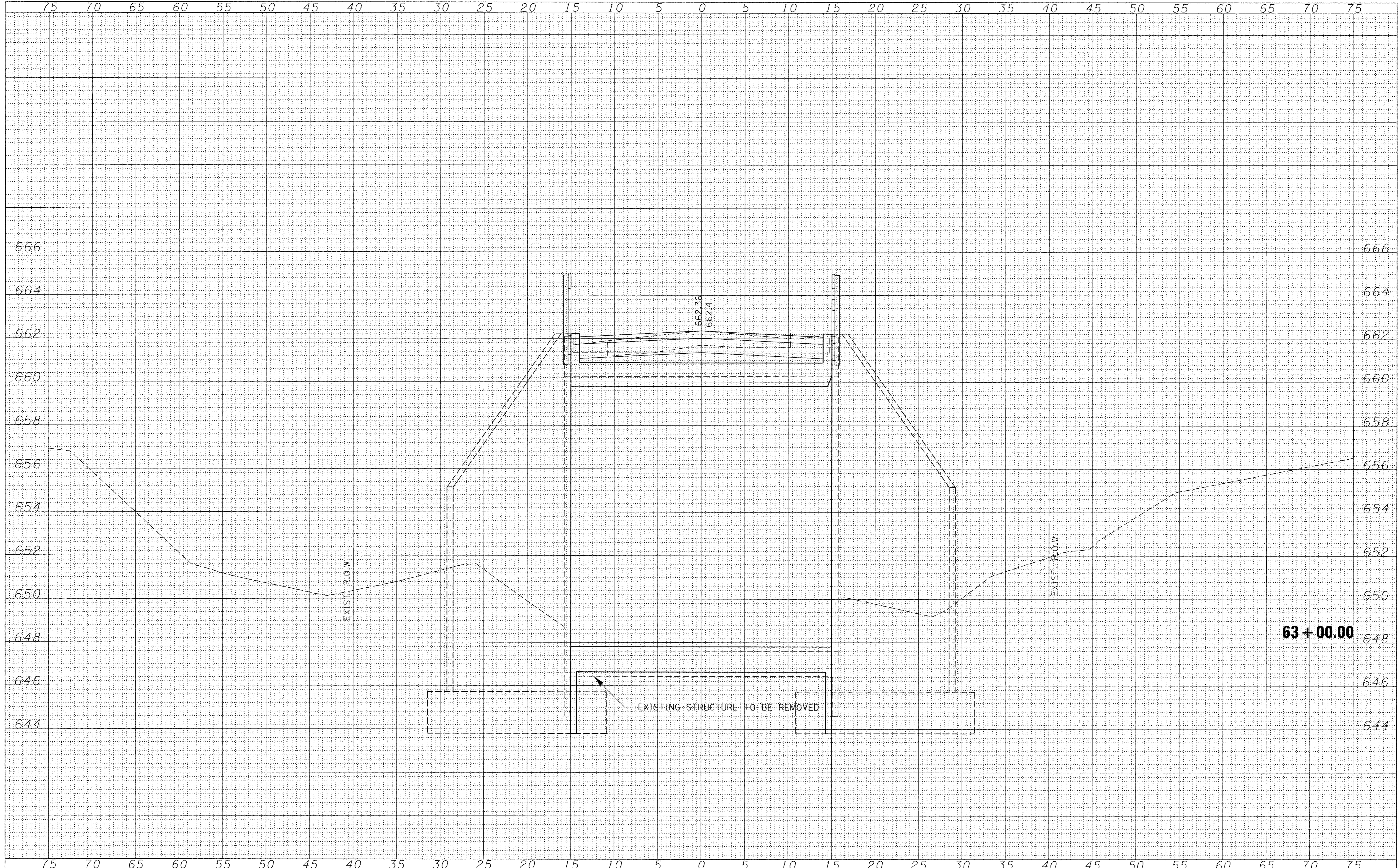


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		DATE - 09/20/16	REVISED -		[ILLINOIS] FED. AID PROJECT BR05-0679112)								

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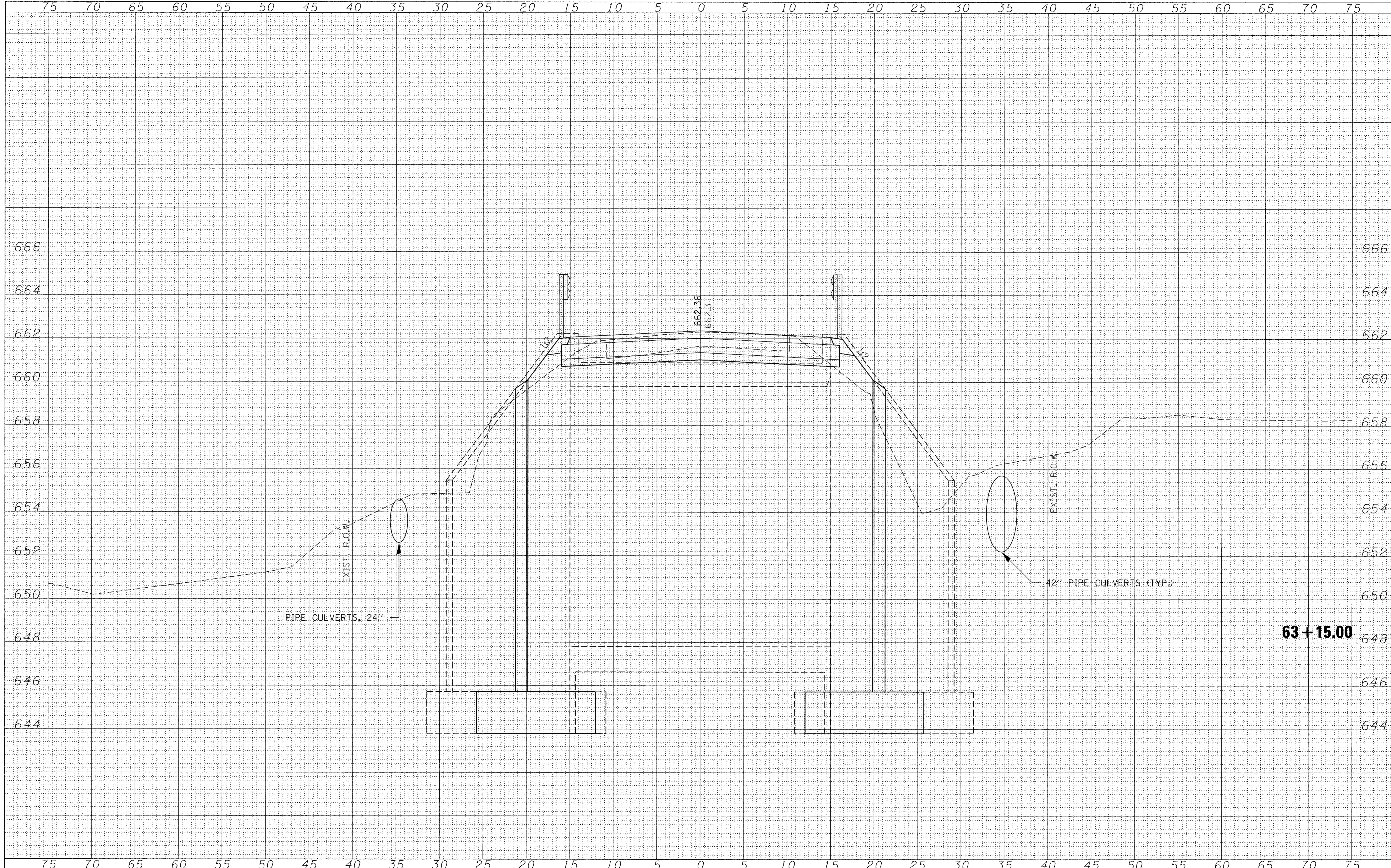
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PLOT SCALE = \$SCALE\$ PLOT DATE = 10/7/2016				CHECKED - S.W.M. DATE - 09/20/16		679 16-00131-00-BR HORACE BROCTON ROAD		23 16 CONTRACT NO. 91542		
				SCALE: 5H:2V		SHEET NO. 6 OF 13 SHEETS		STA. 63+00.00 TO STA. 63+00.00		
						ILLINOIS FED. AID PROJECT BROS-0679(112)				

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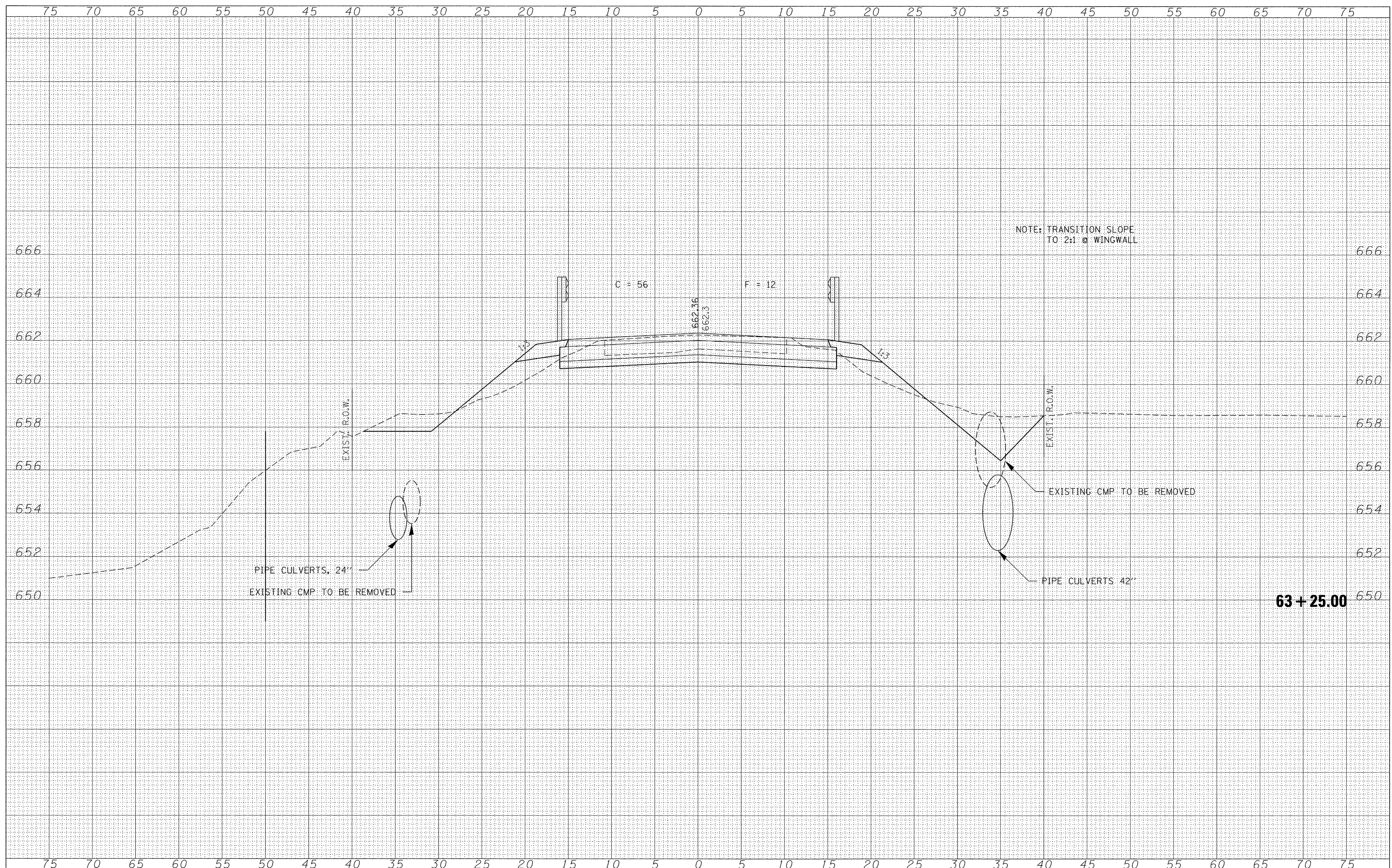
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HAMPTON, LENZINI AND RENWICK, INC. 3005 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = \$SCALE\$	DRAWN - L.G.C.	REVISED -		SCALE: 5H:2V	SHEET NO. 7 OF 13 SHEETS	STA. 63+25.00 TO STA. 63+25.00	679	16-00131-00-BR	EDGAR	23	17	
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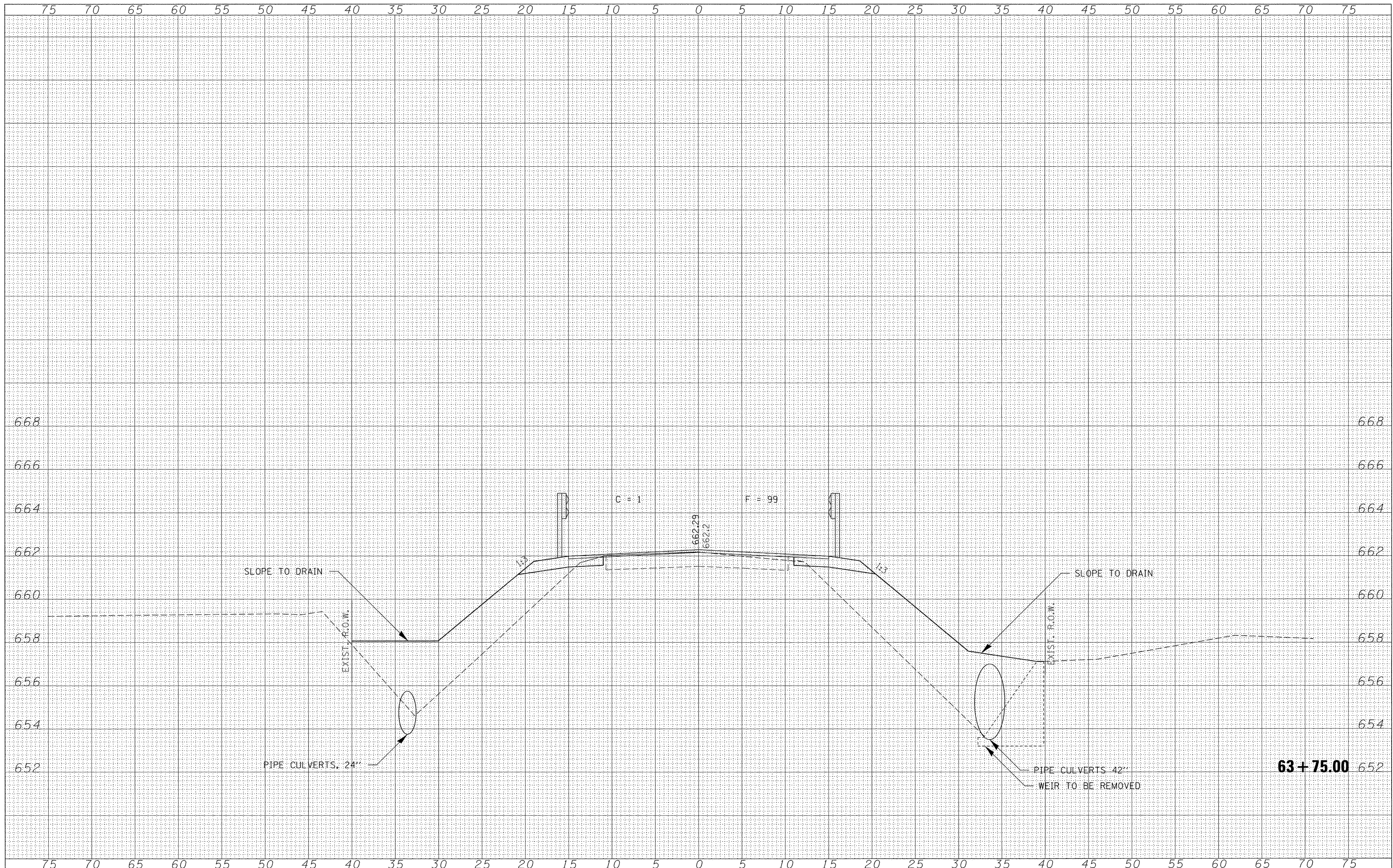
NOTE: TRANSITION SLOPE TO 2:1 @ WINGWALL

63+25.00

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NOTE BOOK		
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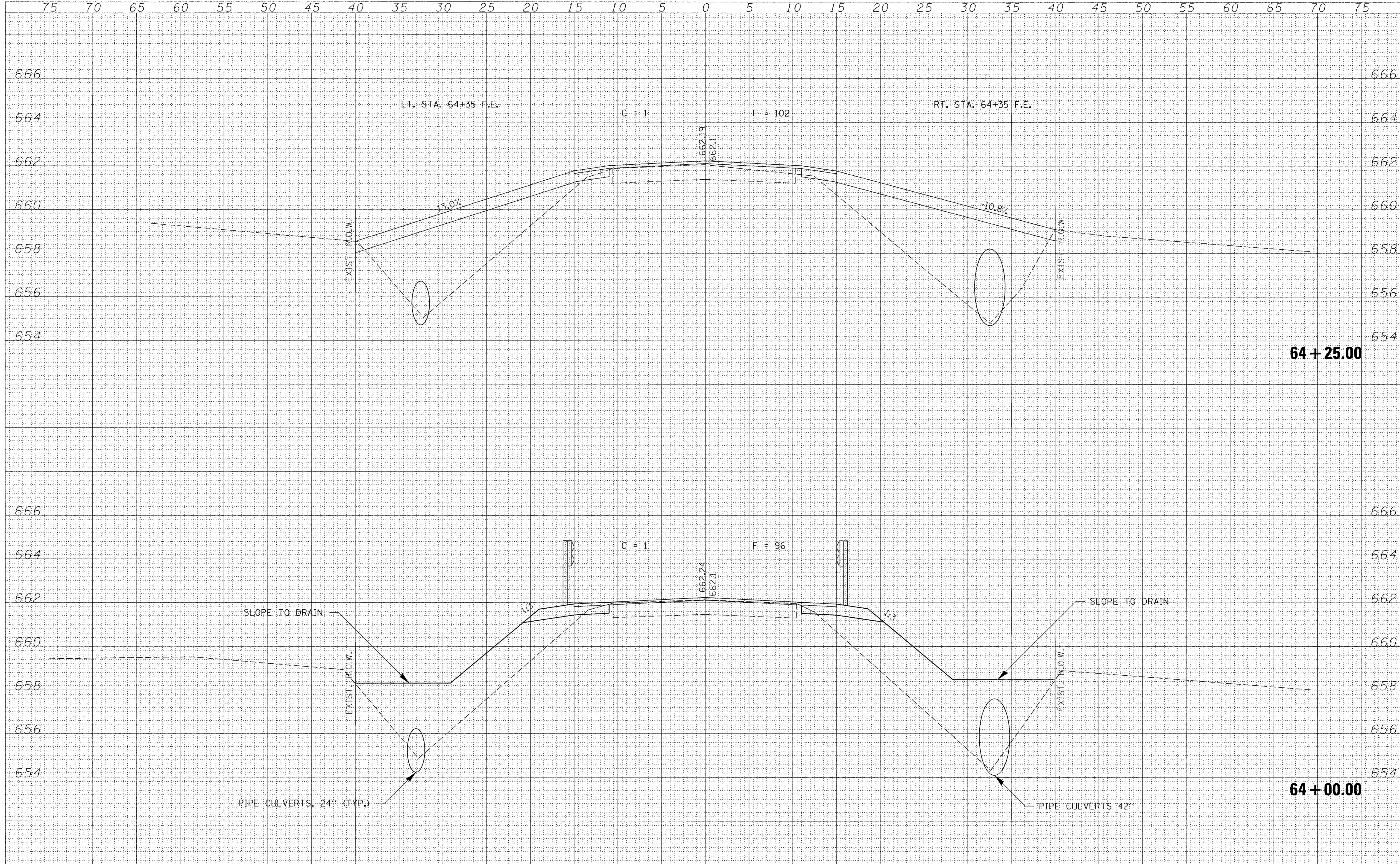
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FINAL SURVEY	DATE
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NO.	

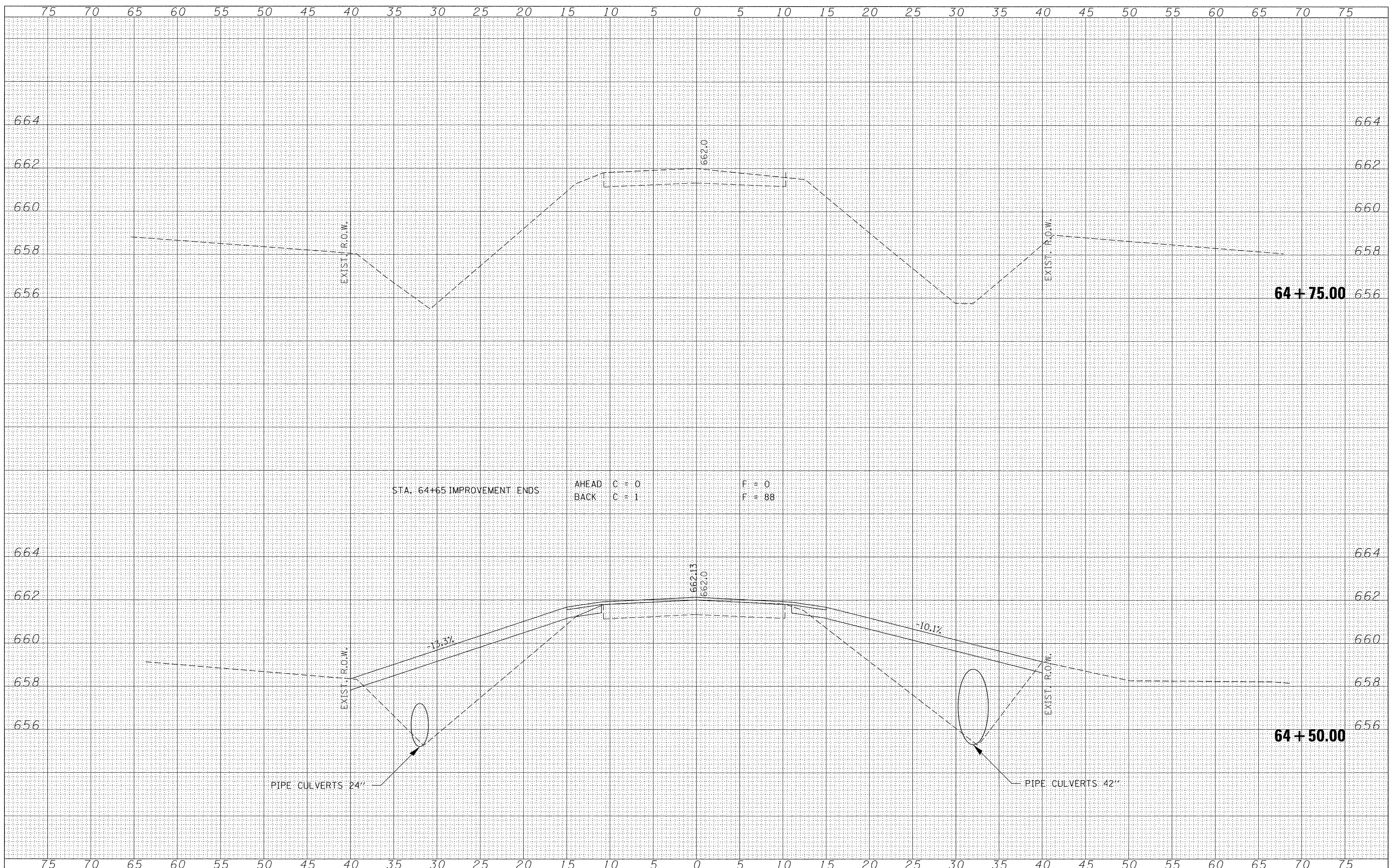
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DESIGNED	BY
PLOTTED	
TEMPLATE	
AREAS	
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FILE NAME = 160040-aht-xssh.tdgn	USER NAME = #USER#	DESIGNED - L.A.P.	REVISED -	STATE OF ILLINOIS EDGAR COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS				F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3005 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = \$SCALE#	DRAWN - L.G.C.	REVISED -		679	16-00131-00-BR	EDGAR	23	21				
ILR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 10/7/2016	CHECKED - S.W.M.	REVISED -		HORACE BROCTON ROAD				CONTRACT NO. 91542				
	DATE - 09/20/16	DATE -	REVISED -		SCALE: 5H:2V	SHEET NO. 11 OF 13 SHEETS	STA. 65+00.00 TO STA. 65+00.00	[ILLINOIS] FED. AID PROJECT BROS-0679(112)					

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



STA. 64+65 IMPROVEMENT ENDS
 AHEAD C = 0 F = 0
 BACK C = 1 F = 88

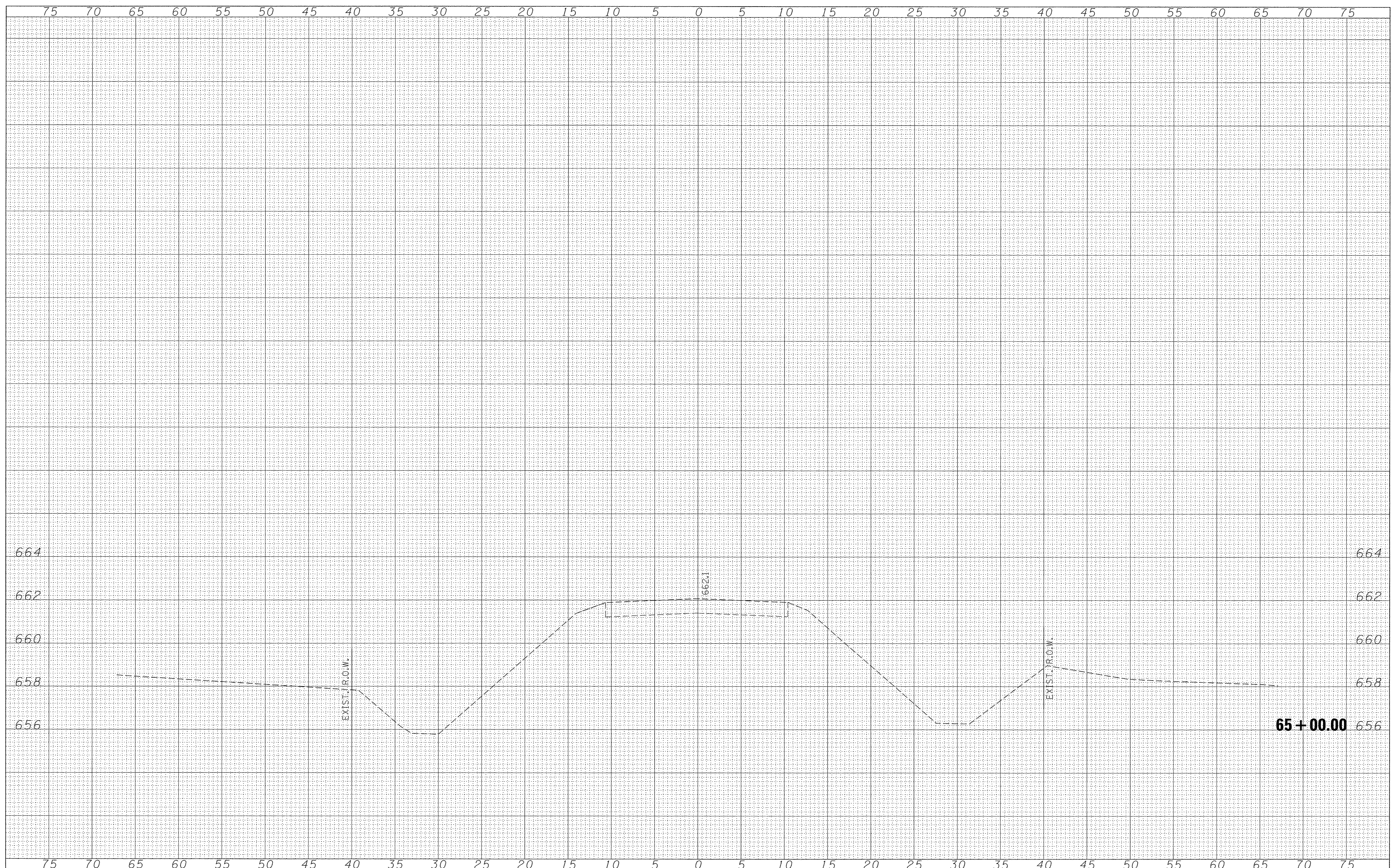
PIPE CULVERTS 24"

PIPE CULVERTS 42"

FILE NAME = 160040-sht-xssht.dgn	USER NAME = \$USER\$	DESIGNED - L.A.P.	REVISED -	STATE OF ILLINOIS EDGAR COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS			F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3805 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - L.G.C.	REVISED -		SCALE: 5H:2V	SHEET NO. 12 OF 13 SHEETS	STA. 65+00.00 TO STA. 65+00.00	679	16-00131-00-BR	EDGAR	23	22
HLR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184-009959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -					HORACE BROCTON ROAD		CONTRACT NO. 91542		
	PLOT DATE = 10/7/2016	DATE - 09/20/16	REVISED -					ILLINOIS FED. AID PROJECT BR05-0679(12)				

FINAL SURVEY	DATE
NO. _____	BY _____
NOTE BOOK	
NO. _____	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
NO. _____	BY _____
NOTE BOOK	
NO. _____	
AREAS CHECKED	



FILE NAME = 160040-sht-xsh.t.dgn	USER NAME = #USER#	DESIGNED - L.A.P.	REVISED -	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3005 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - L.G.C.	REVISED -	679	16-00131-00-BR	EDGAR	23	23
HLR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = #SCALE#	CHECKED - S.W.M.	REVISED -	HORACE BROCTON ROAD		CONTRACT NO. 91542		
	PLOT DATE = 10/7/2016	DATE - 09/20/16	REVISED -	SCALE: 5H:2V		SHEET NO. 13 OF 13 SHEETS		
STATE OF ILLINOIS EDGAR COUNTY HIGHWAY DEPARTMENT				STATION CROSS SECTIONS		STA. 65+00.00 TO STA. 65+00.00		
				[ILLINOIS] FED. AID PROJECT BR05-0679(112)				