

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
855	9Z(B-1)	HAMILTON	19	1
		ILLINOIS	CONTRACT NO. 78470	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

FAP ROUTE 855 (IL 14)  
SECTION 9Z(B-1)  
PROJECT STP-7880(112)  
STRUCTURE REPLACEMENT  
HAMILTON COUNTY

C-99-038-15

**TRAFFIC DATA**

2015 ADT=5350 WITH 7.5% TRUCKS

**TOWNSHIP:**  
MCLEANSBORO

EXISTING SN 033-0005  
@ STATION 41+82.16  
26'-3 3/4" BK TO BK ABUTS, 30° SKEW  
44'-0" CLEAR WIDTH  
55'-6" OUT TO OUT

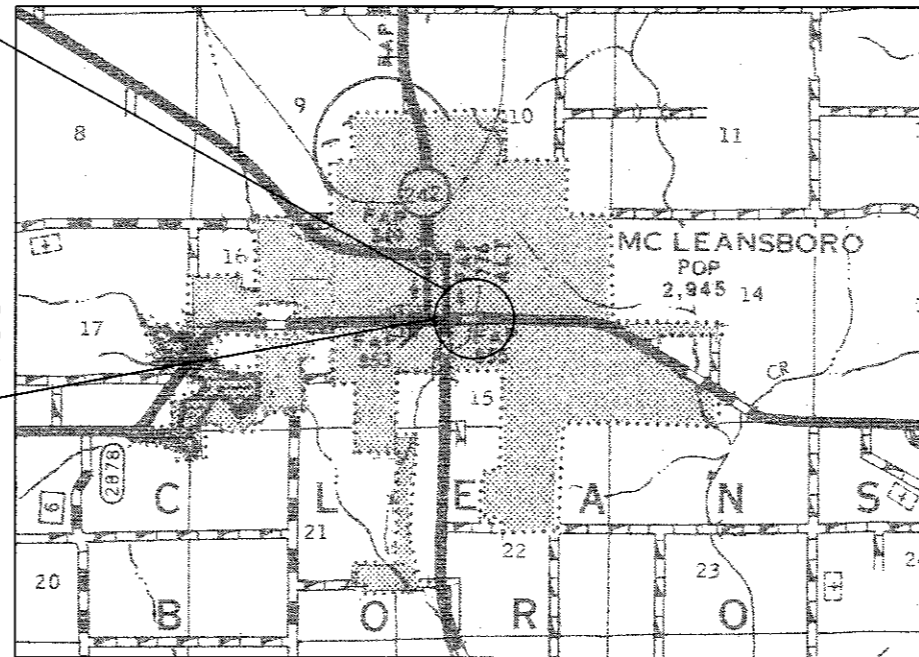
PROPOSED SN 033-2012  
@ STATION 41+82.16  
PRECAST BOX WITH PRECAST WINGWALLS  
DOUBLE BARREL BOX 12'X4', 30° SKEW  
69'-8" OUT TO OUT  
44'-0" CLEAR WIDTH

DESIGN DESIGNATION: N/A  
COORDINATE SYSTEM: ILLINOIS COORDINATE SYSTEM, EAST ZONE  
POSTED SPEED: 30 MPH

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

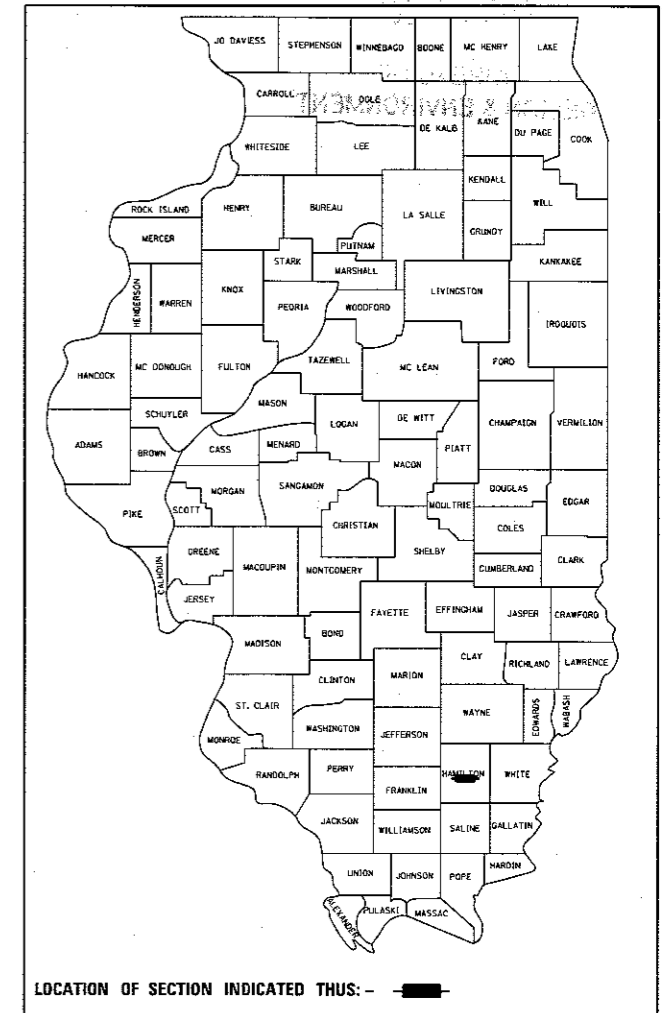
PROJECT ENGINEER DAVID PICHE (618)351-5227  
PROJECT DESIGNER JOHN DAHMER

CONTRACT NO. 78470



GROSS LENGTH = 100.0 FT. = 0.0189 MILE  
NET LENGTH = 100.0 FT. = 0.0189 MILE

D-99-030-15



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 11 2017  
Jeffrey S. Keenan  
REGION FIVE ENGINEER  
Oct 13 2017  
Matthew M. Todd P.E.  
ENGINEER OF DESIGN AND ENVIRONMENT  
Oct 13 2017  
David Piche  
DIRECTOR OF PROGRAM DEVELOPMENT

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OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, GENERAL NOTES, STANDARDS, SIGNATURES
3-5	SUMMARY OF QUANTITIES
6	SCHEDULES OF QUANTITIES
7	TYPICAL SECTIONS
8	LIMITS OF PGE & ELEVATION OF PRECAST MODULAR WINGWALL
9	PLAN AND PROFILE SHEET
10-13	CROSS SECTIONS
14	RIGHT OF WAY PLAN
15	STRUCTURE GENERAL PLAN & ELEVATION
16-18	DETAIL FOR EXCAVATION, SIDEWALK OVER THE CULVERT, BICYCLE RAILING, DETAIL OF TOE WALL, MEMBRANE WATERPROOFING
19	SOIL BORINGS

**STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
420001-09	PAVEMENT JOINTS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
602401-04	MANHOLE TYPE A
604066-02	FRAME AND LID TYPE 15
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
B. L. R. 22-7	TYPICAL SPECIFICATIONS FOR TRAFFIC CONTROL DEVICES FOR CONSTRUCTION BY STATE LOCAL AGENCIES

**GENERAL NOTES**

FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL AGGREGATE  
2.05 TONS/CU. YD.  
RIPRAP  
1.50 TONS/CU. YD.

CONNECTION OF NEW OR EXISTING STORM SEWER TO NEW OR EXISTING INLETS OR MANHOLES SHALL BE MADE IN A MANNER WHICH RESULTS IN A NEAT AND WATERTIGHT JOINT. WHEN PLACED THROUGH THE WALL OF AN INLET OR MANHOLE, STORM SEWER PIPE SHALL BE PLACED OR CUT FLUSH WITH THE FACE OF THE WALL AND DRESSED WITH MOTAR TO PROVIDE A SMOOTH ROUNDED OR BEVELED EDGE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES OF THE STORM SEWERS OR STRUCTURES INVOLVED.

THERE ARE NO AVAILABLE WASTE SITES ON THE EXISTING RIGHT OF WAY WITHIN THE PROJECT LIMITS. DISPOSAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.3 OF THE STANDARD SPECIFICATIONS.

ROCK EXCAVATION QUANTITIES ARE BASED ON A T-TYPE WINGWALL CONFIGURATION. IT IS SUBJECT TO CHANGE DEPENDING ON THE TYPE OF PRECAST MODULAR WINGWALL AND SHALL BE ADJUSTED ACCORDINGLY BY THE RESIDENT ENGINEER.

A CALCIUM CHLORIDE ACCELERATOR WILL BE ALLOWED IN THE PCC PAVEMENT 10". THE CONCRETE SHALL BE CLASS PP-1 OR PP-2 PER ARTICLE 1020 OF THE STANDARD SPECIFICATIONS.

PAVEMENT WELDED WIRE REINFORCEMENT SHALL BE USED IN THE PCC SHOULDERS 10".

THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION ON THE FINAL SURFACE OF THE PCC PAVEMENT 10".

THE 18" SANITARY SEWER LINE THAT CROSSES UNDER IL 14 NEAR THE WEST PROJECT LIMITS IS TO BE AVOIDED AND/OR PROTECTED DURING THE CONSTRUCTION OF THIS PROJECT.

COMMITMENTS: CONTACT THE FOLLOWING ENTITIES AT LEAST 21 DAYS PRIOR TO THE INITIATION OF THE ROAD CLOSURE:

MCLEANSBORO CITY POLICE CHIEF DAVID FILKINS  
PHONE NUMBER: 618-643-4357

HAMILTON COUNTY SHERIFF'S OFFICE  
PHONE NUMBER: 618-643-2511  
E-MAIL: DKYORK@HAMILTONCO.US

Prepared By:	<i>[Signature]</i> DISTRICT STUDIES & PLANS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT LAND ACQUISITION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT OPERATIONS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT PROJECT IMPLEMENTATION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT CONSTRUCTION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT MATERIALS ENGINEER

FILE NAME =	USER NAME = deterdjngj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, GENERAL NOTES, STANDARDS, AND SIGNATURES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
p:\11884EBIDINTEG\Illinois.gov\PI\DOT\Documents\DOT Offices\District 9\Projects\78478\BANK\CA\Sheets\78478-sho-pln-prf.dwg	PROJECT = 78478	CHECKED -	REVISED -			855	9Z(B-1)	HAMILTON	19	2	
PLOT SCALE = 200.0001' / 1"		DATE -	REVISED -			CONTRACT NO. 78470					
PLOT DATE = 8/10/2017						ILLINOIS FED. AID PROJECT					
002 Sta. 40+00 - 46+00				SHEET OF SHEETS STA. TO STA.							

## SUMMARY OF QUANTITIES

COUNTY:	Hamilton
ROUTE:	FAP 855
FUNDING:	80/20 FED/STATE ✓
LOCATION:	RURAL

CODE NUMBER	ITEM DESCRIPTION	UNIT	ROADWAY
			0011 ✓
20200100	EARTH EXCAVATION	CU YD	250
20200200	ROCK EXCAVATION	CU YD	74
20300100	CHANNEL EXCAVATION	CU YD	107
20700220	POROUS GRANULAR EMBANKMENT	CU YD	217
20800150	TRENCH BACKFILL	CU YD	7.0
28100107	STONE RIPRAP, CLASS A4	SQ YD	133
28200200	FILTER FABRIC	SQ YD	145
42000060	WELDED WIRE REINFORCEMENT	SQ YD	401
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	234
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	650
44000100	PAVEMENT REMOVAL	SQ YD	222
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	130
44000600	SIDEWALK REMOVAL	SQ FT	550
44004250	PAVED SHOULDER REMOVAL	SQ YD	123

14

FILE NAME =	USER NAME = detardnggj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 2.0000' / in.	CHECKED -	REVISED -	REVISED -		CONTRACT NO. 78470								
PLOT DATE = 8/24/2017	DATE -	REVISED -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		





SIDEWALK SCHEDULE

STATION	TO	STATION	RIGHT/LEFT	SIDEWALK WIDTH	PORTLAND CEMENT CONCRETE SIDEWALK, 4"
				FOOT	SQUARE FOOT
41+30.0	TO	41+36.0	RIGHT	4	24
41+36.0	TO	41+36.5	RIGHT	5.5	2.75
41+36.5	TO	41+49.5	RIGHT	6.5	89.83
41+80.6	TO	41+92.9	RIGHT	6.5	77.42
41+92.9	TO	41+93.4	RIGHT	5.5	2.5
41+93.4	TO	42+30.0	RIGHT	4	145.5
41+41.4	TO	41+46.0	LEFT	6	30
41+46.0	TO	41+70.8	LEFT	4	99.2
41+70.8	TO	41+71.3	LEFT	5.5	4.16
41+71.3	TO	41+83.3	LEFT	6.5	82.72
42+15.0	TO	42+21.9	LEFT	6.5	47.68
42+21.9	TO	42+29.0	LEFT	5.5	43.49
				TOTAL	649.25

BICYCLE RAIL

STATION	TO	STATION	RIGHT/LEFT	LENGTH
				FOOT
41+36	TO	41+93	RIGHT	57
41+71	TO	42+29	LEFT	58
			TOTAL	115

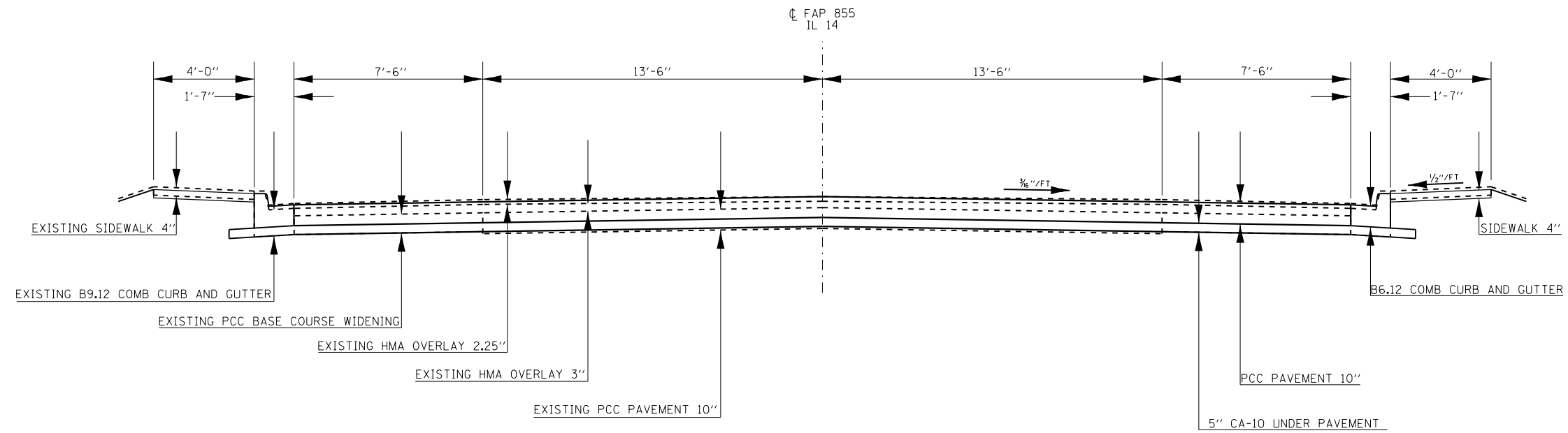
COMBINATION CURB AND GUTTER SCHEDULE

STATION	TO	STATION	RIGHT/LEFT	LENGTH
				FOOT
41+30	TO	42+30	RIGHT	100
41+46	TO	42+30	LEFT	84
			TOTAL	184

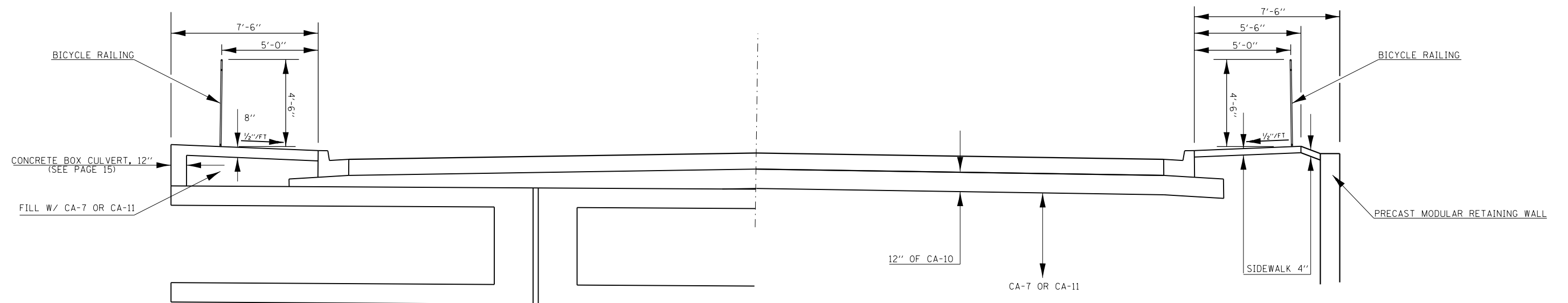
INLET AND STORM SEWER SCHEDULE

STATION TO STATION	RIGHT/LEFT	PIPE CULVERTS, CLASS A, TYPE 2, 18"	CATCH BASINS, TY A, 4' DIA. TY 15 FRAME & LID	INVERT ELEVATIONS		TRENCH BACKFILL	PIPE CULVERT REMOVAL
		FOOT	EACH	INLET	OUTLET	CU YD	FOOT
41+48 TO 41+54	RIGHT	6	1	429.60	429.40		8
41+53 TO 41+83	LEFT	30	1	430.20	429.80	7.0	32
41+83 TO 41+99	RIGHT	12	1	429.60	429.40		18
42+10 TO 42+16	LEFT	6	1	430.00	429.80		8

NOTE: THE ITEM PIPE CULVERT REMOVAL ALSO INCLUDES THE REMOVAL OF THE EXISTING INLET



TYPICAL SECTION OUTSIDE THE BOX CULVERT AND THE WINGWALLS



TYPICAL SECTION OVER CULVERT

TYPICAL SECTION AT WINGS

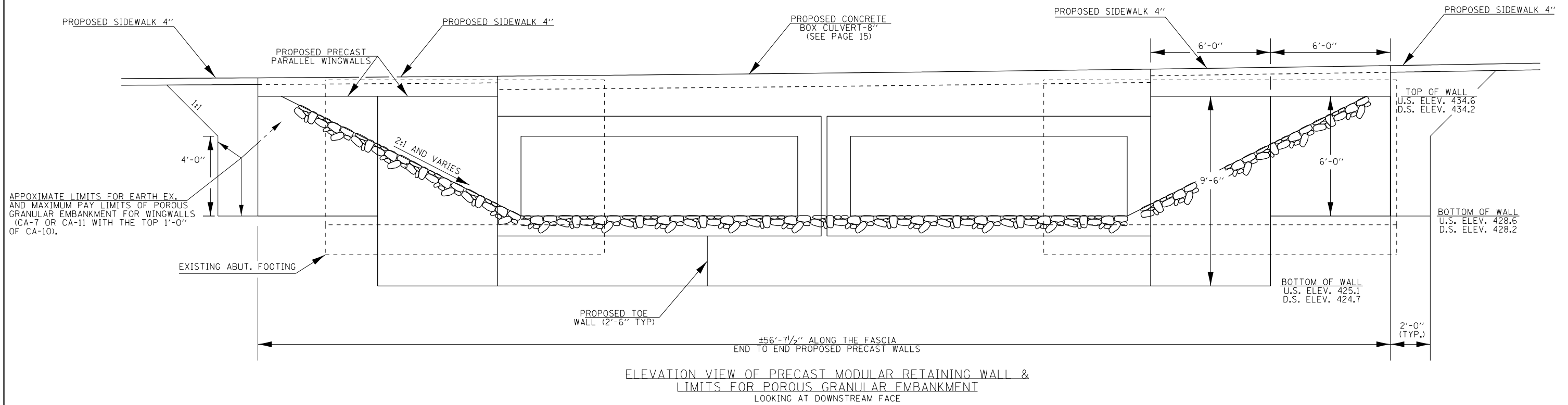
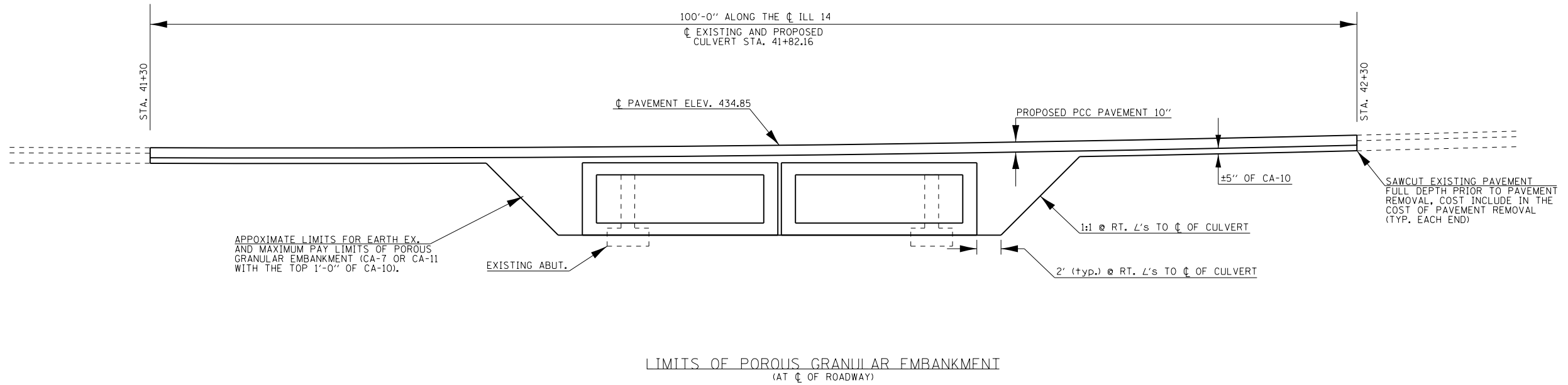
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	PLOT DATE = 8/23/2017	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
855	9Z(B-1)	HAMILTON	19	7
CONTRACT NO. 78470				
ILLINOIS FED. AID PROJECT				

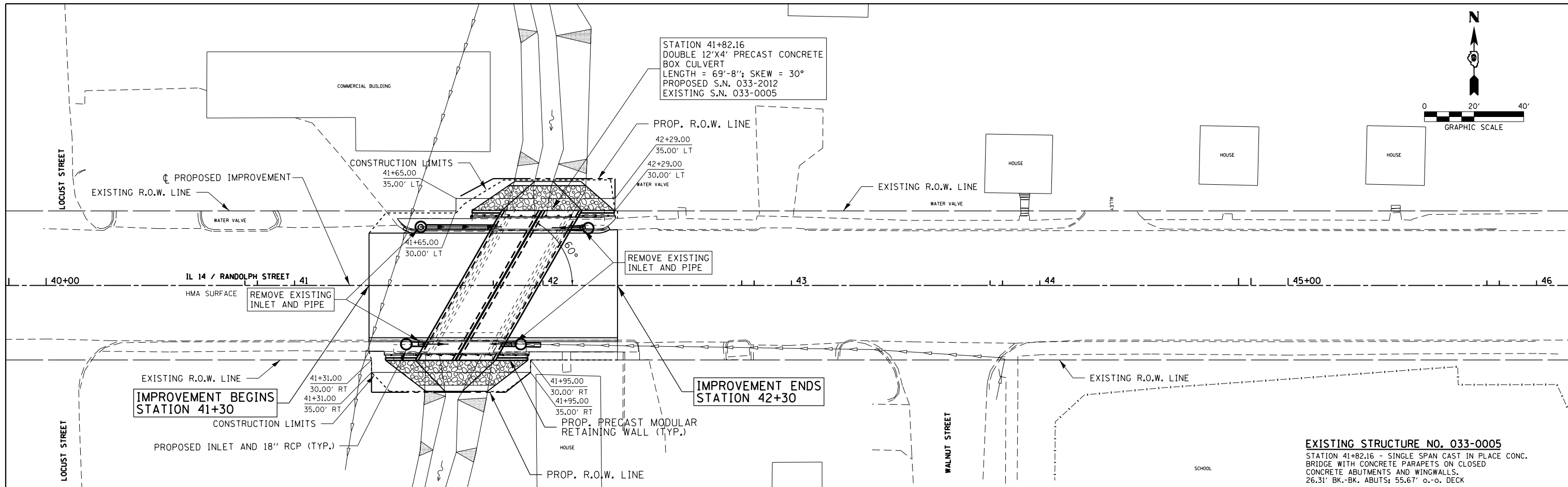


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001	PLOT SCALE = 10.0000' / in.	DATE -	REVISED -		CONTRACT NO. 78470								
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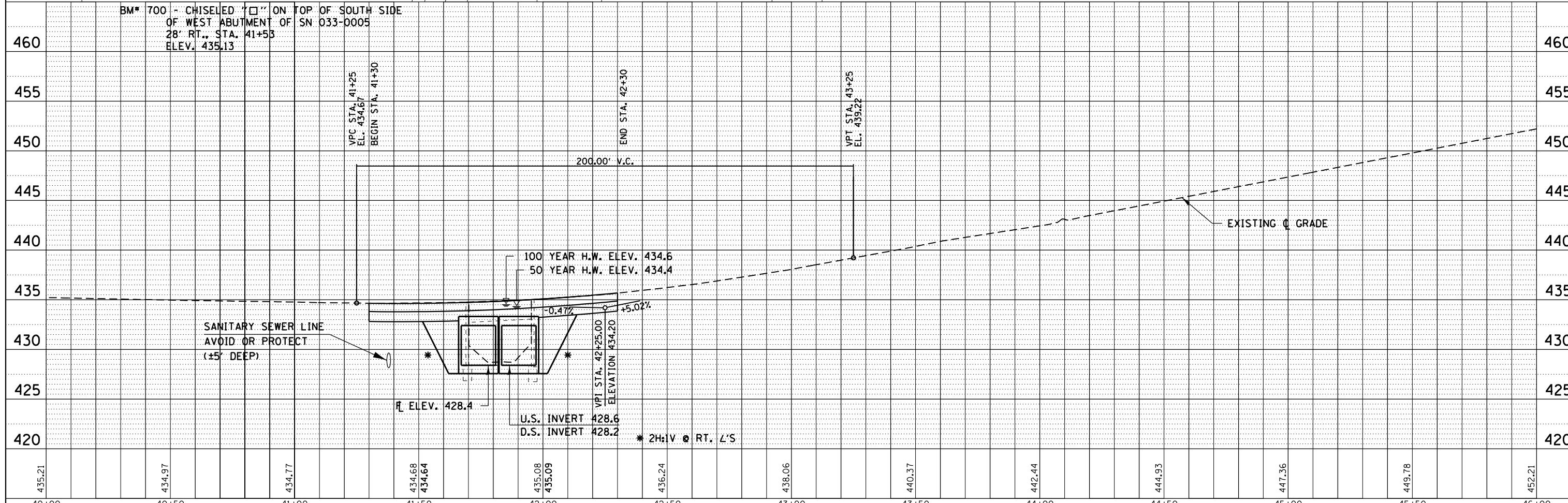


PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO.		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES		
	CHECKED		
	STRUCTURE		
	NOTATIONS		
	NO.		
	NO.		



**EXISTING STRUCTURE NO. 033-0005**  
 STATION 41+82.16 - SINGLE SPAN CAST IN PLACE CONC.  
 BRIDGE WITH CONCRETE PARAPETS ON CLOSED  
 CONCRETE ABUTMENTS AND WINGWALLS.  
 26.31' BK.-BK. ABUTS; 55.67' o.-o. DECK



435.21	434.97	434.77	434.68	434.64	435.08	435.09	436.24	438.06	440.37	442.44	444.93	447.36	449.78	452.21
40+00	40+50	41+00	41+50	42+00	42+50	43+00	43+50	44+00	44+50	45+00	45+50	46+00		

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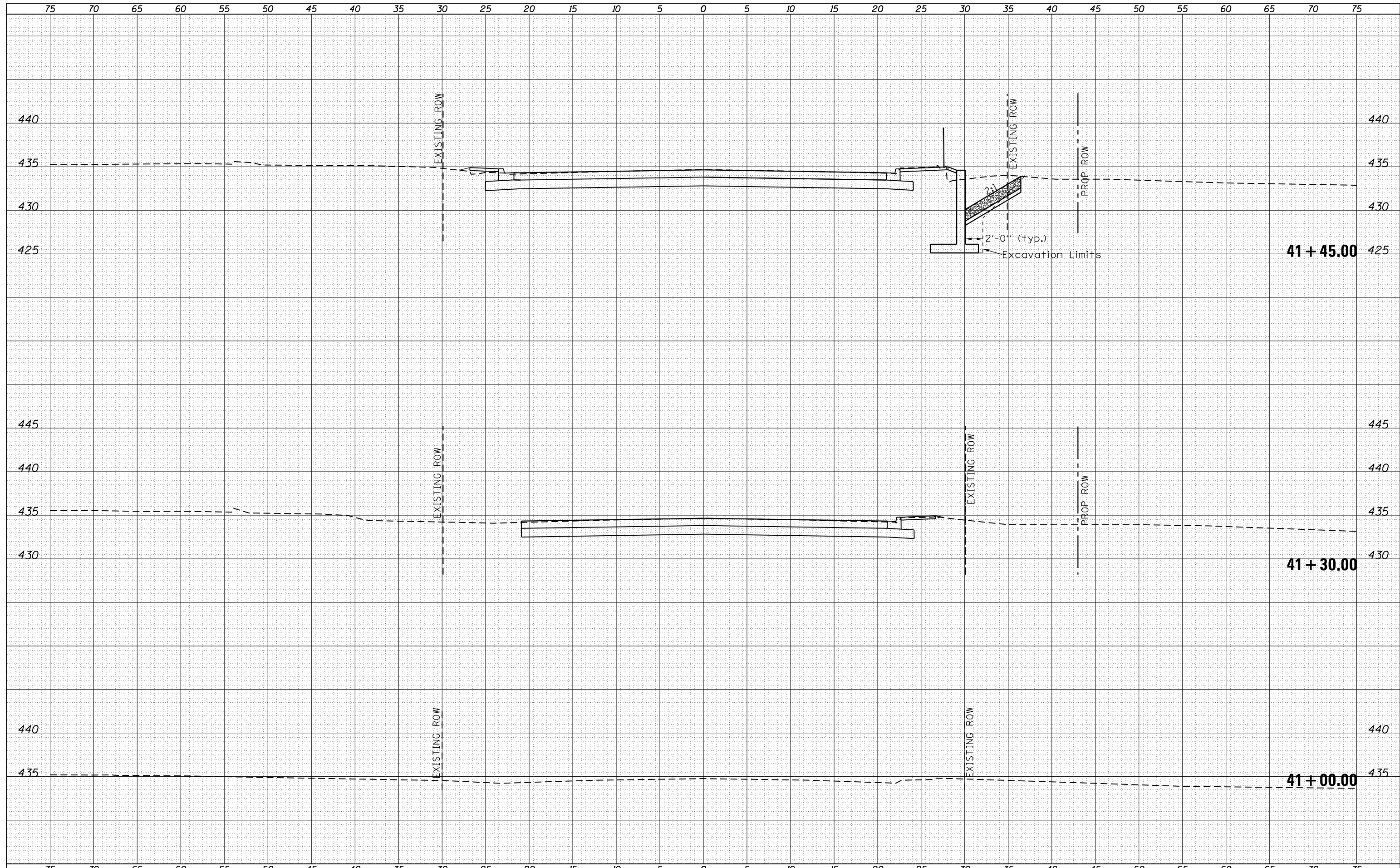
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE**  
 SCALE: H20:V5  
 SHEET NO. 007 OF 008  
 STA. 40+00 TO STA. 46+00

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
855	92(B-1)	HAMILTON	19	9
CONTRACT NO. 78470				
ILLINOIS FED. AID PROJECT				

DATE	
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NOTE BOOK	
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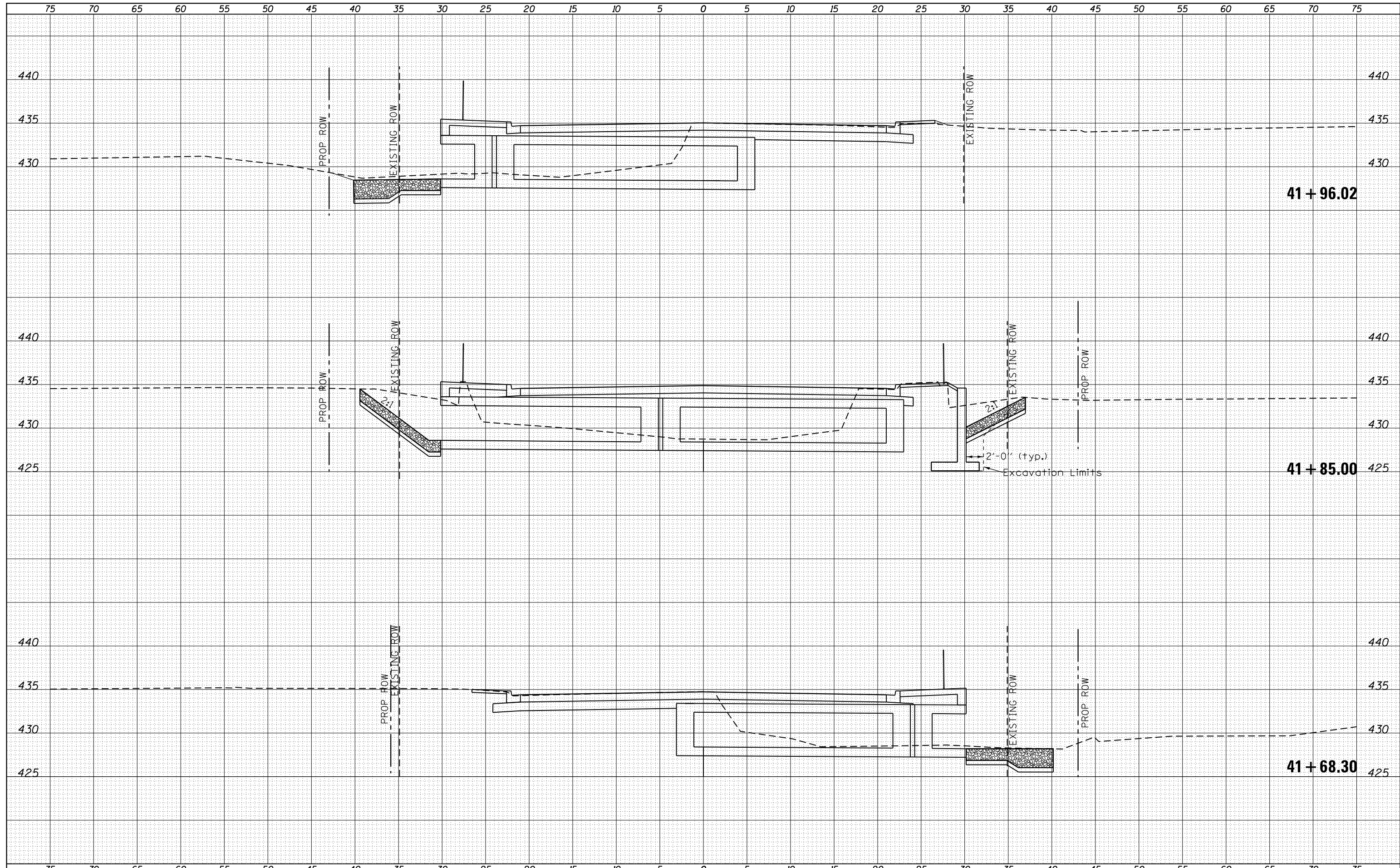
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p:\1\084EBIDINTEG\Illinois.gov\PIDOT\Documents\IDOT Offices\District 9\Projects\78470\CADD\Drawings\sheet\78470-shtj-xsec.dgn	DRAWN	REVISED -	REVISED -			855	92(B-1)	HAMILTON	19	10
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PLOT DATE = 8/23/2017	DATE -	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT				

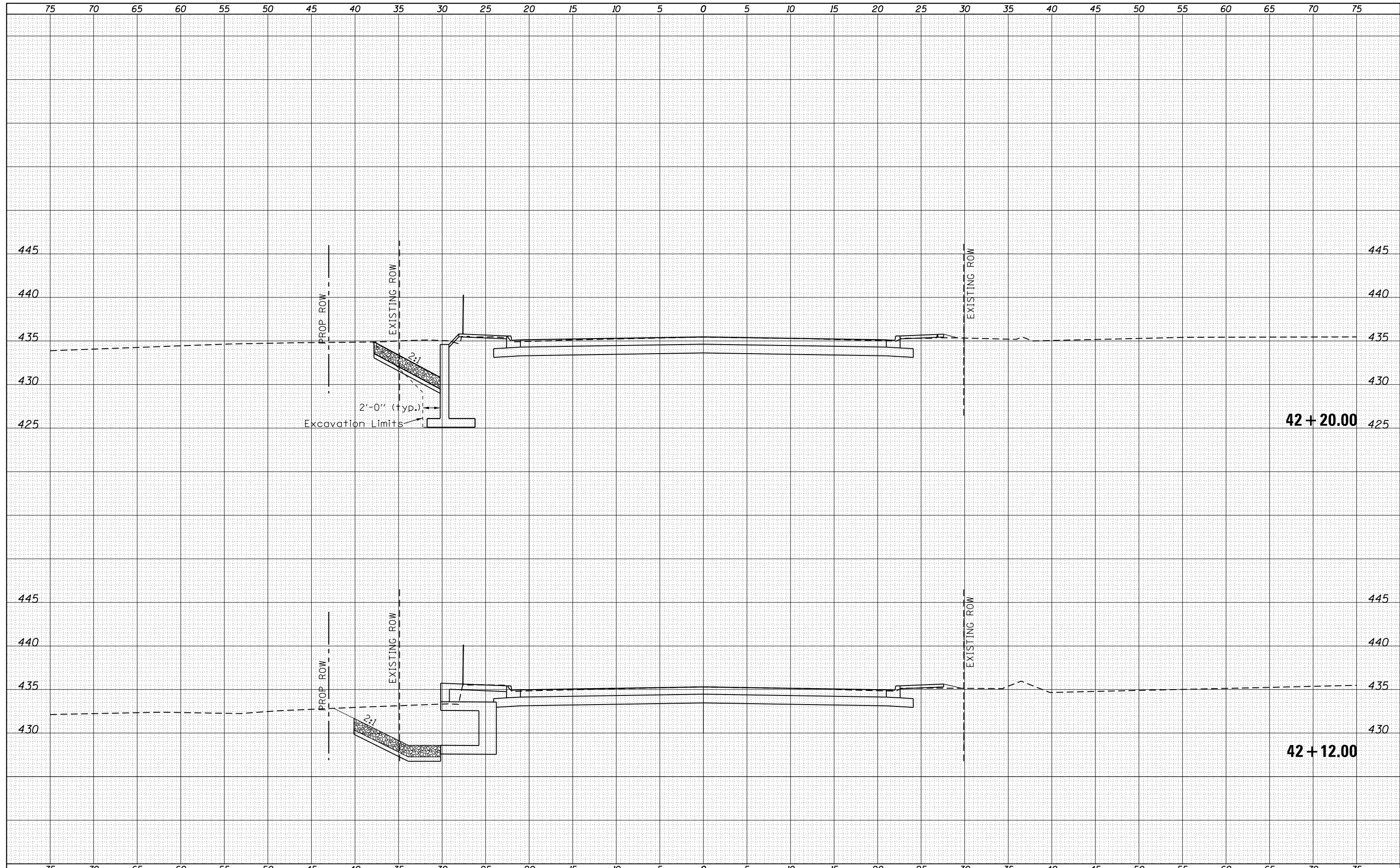
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NO.	TEMPLATE
	AREAS
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DATE	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
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DATE	
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NOTE BOOK	PLOTTED
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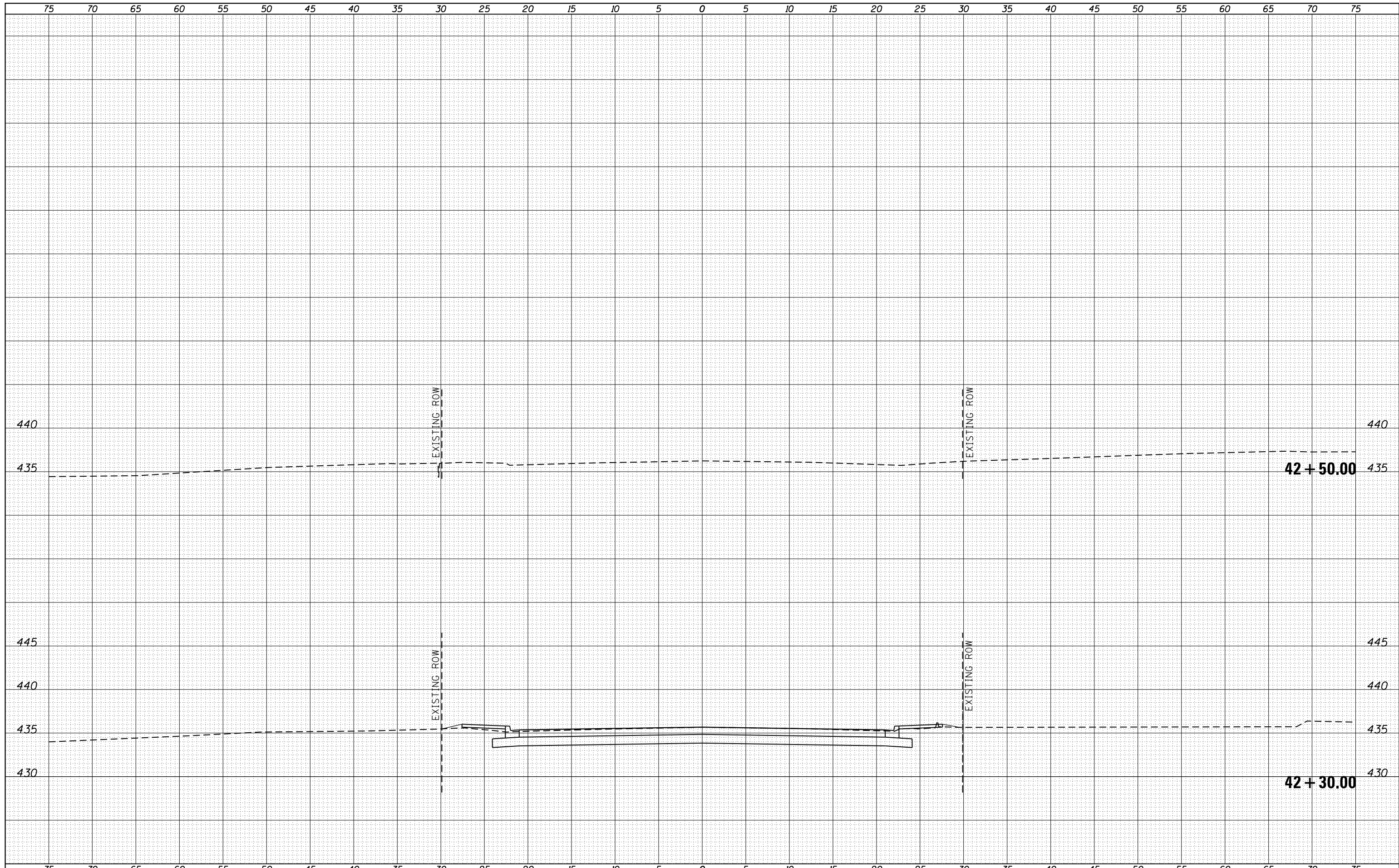
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NOTE BOOK	PLOTTED
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	AREAS
	CHECKED



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		CHECKED -	REVISIED -			CONTRACT NO. 78470					
		DATE -	REVISIED -			ILLINOIS FED. AID PROJECT					

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	AREAS CHECKED

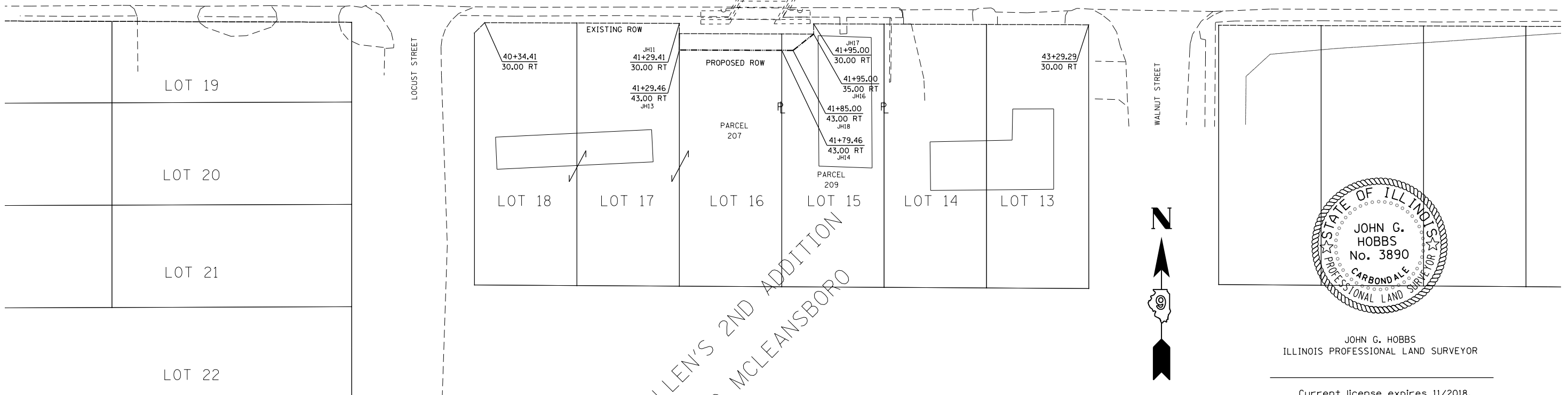
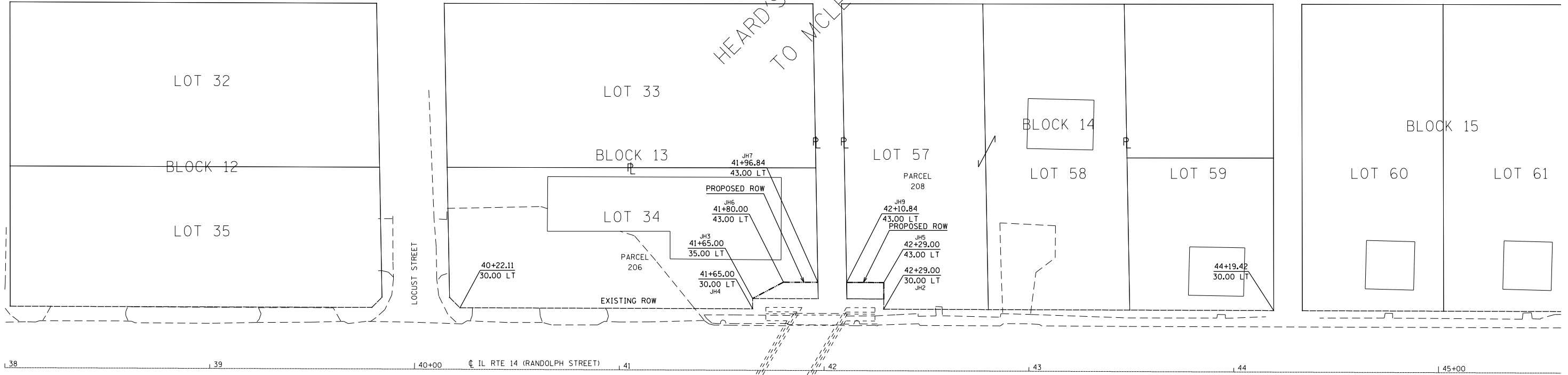
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



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	PLOT SCALE = 10.0000' / in.	DATE -	REVISED -		CONTRACT NO. 78470			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 8/23/2017				SCALE:	SHEET	OF	SHEETS	STA. 42+30.00	TO	STA. 42+50.00	

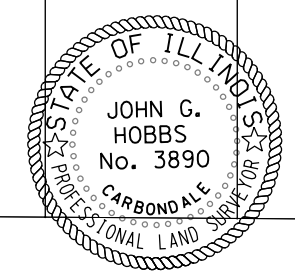
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JH4	518180.24	926801.92
JH5	518193.02	926865.97
JH6	518193.19	926816.97
JH7	518193.13	926833.81
JH9	518193.08	926847.81
JH11	518120.36	926766.13
JH13	518107.36	926766.13
JH14	518107.19	926816.13
JH16	518115.13	926831.70
JH17	518120.13	926831.71
JH18	518107.17	926821.67

PARCEL	PROPERTY OWNER	PURPOSE	ACREAGE
206	DAVID LEE & DIANNE ROBERSON	ROW	0.005±
207	DON S. BURKE & ANN M. BURKE TRUST	ROW	0.009±
208	KATRINA S. & E. DEAN ROBERSON	ROW	0.003±
209	DANIEL D. BISHOP	ROW	0.002±



HEARD'S 3RD ADDITION  
TO MCLEANSBORO

ALLEN'S 2ND ADDITION  
TO MCLEANSBORO



JOHN G. HOBBS  
ILLINOIS PROFESSIONAL LAND SURVEYOR

Current license expires 11/2018.

This professional service conforms to the current Illinois minimum standards for a boundary survey.

MODEL: Default  
FILE: \\mcleansboro\GIS\Projects\178470\CADDData\CAD\blocks\78470-shif-row.dgn

USER NAME = detersingj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/23/2017	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY PLAN  
SN 033-0005

SCALE: 1" = 50' SHEET 1 OF 1 SHEETS STA. 38+00 TO STA. 45+00

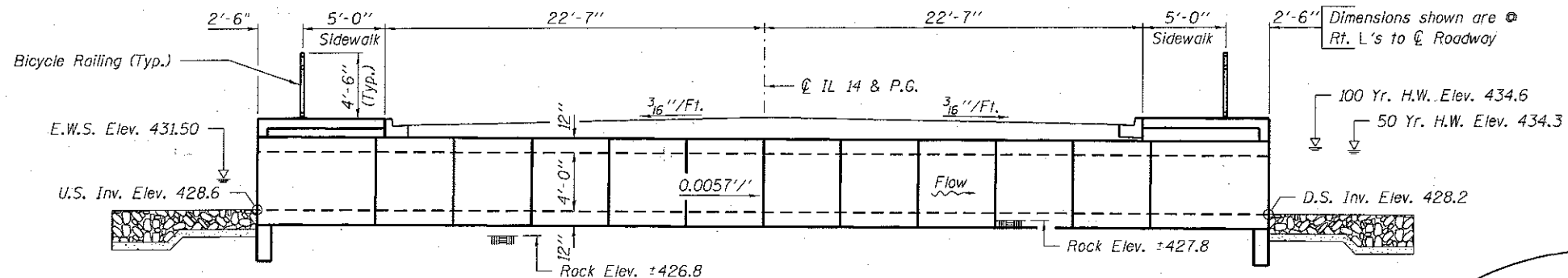
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
855	92(B-1)	HAMILTON	19	14
CONTRACT NO. 78470				
R-99-005-15	ILLINOIS	FED. AID PROJECT		



BENCHMARK: Chiseled "□" on top of south side of west abut. 28' Rt., Sta. 41+43, Elev. 435.13

EXISTING STRUCTURE: SN. 033-0005 was originally built in 1923 under SBI Route 14, Section 9. It was widened in 1960 under SBI Route 14, Section 9Z(WRS). The bridge is a one span reinforced concrete slab 26'-3 3/4" bk.-bk. abuts. and 55'-8" o.-o. deck built on a 30° skew. Structure will be removed and replaced using road closure.

No Salvage



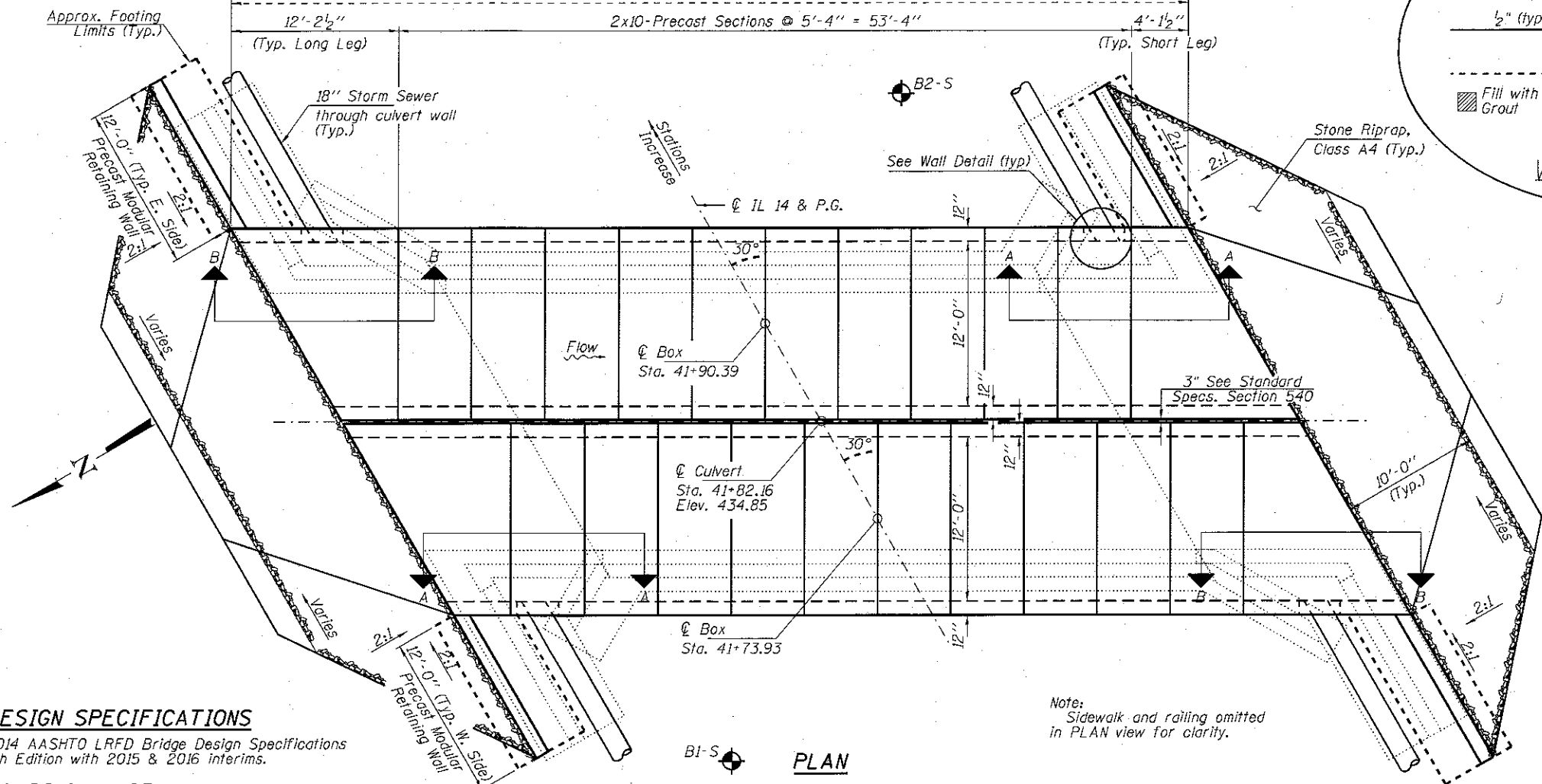
**ELEVATION**

Dimensions at Rt. L's to C Roadway

69'-8" o.-o.

2x10-Precast Sections @ 5'-4" = 53'-4"

Approx. Footing Limits (Typ.)



**PLAN**

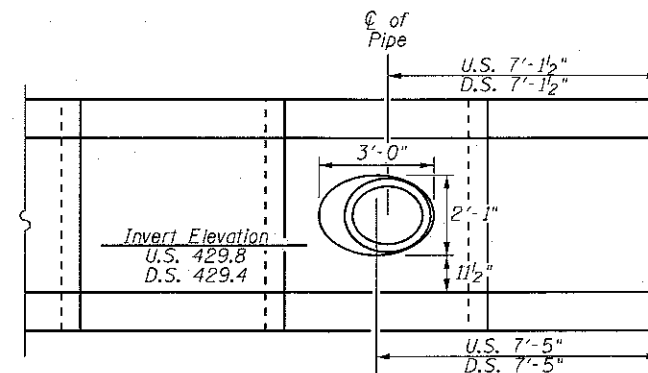
**WATERWAY INFORMATION**

Drainage Area = 0.56 Sq. Mi. Existing Low Grade Elev. 435.1 @ Sta. 41+70  
Proposed Low Grade Elev. 435.1 @ Sta. 41+70

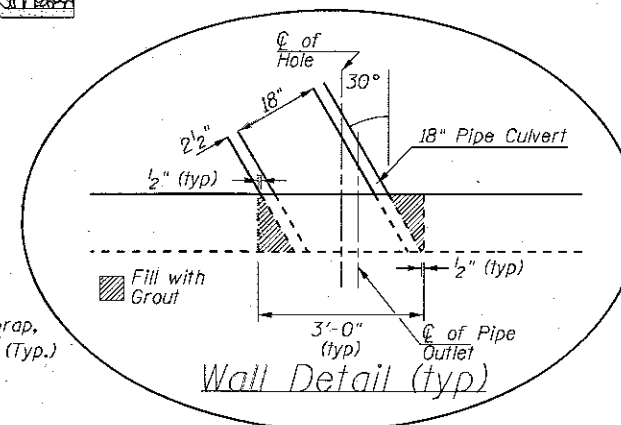
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	425	70	96	433.54	0.24	0.00	433.78	433.54	
Base	50	719	70	96	434.40	0.97	0.59	435.37	434.99	
Exist. Overtop	100	854	70	96	434.60	0.99	0.90	435.59	435.50	
Prop. Overtop	50	719	70	96	434.40	0.97		435.37		
Prop. Overtop	100	854		96	434.60		0.90		435.50	

**DESIGN SCOUR ELEVATION TABLE**

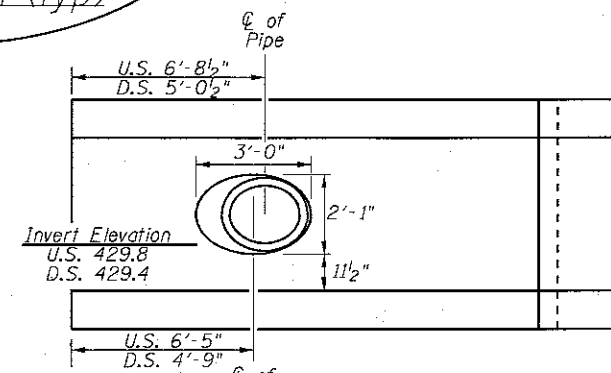
Design Scour Elevation (ft.)	Downstream		Upstream
		427.2	427.6



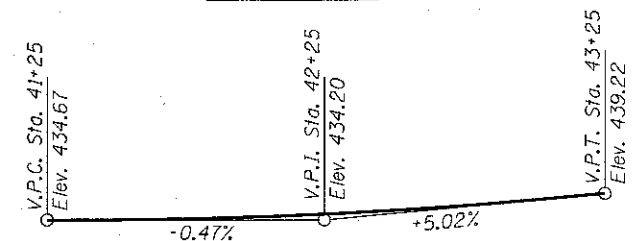
View A-A



Wall Detail (typ)



View B-B



PROFILE GRADE (along C roadway)

**DESIGN SPECIFICATIONS**

2014 AASHTO LRFD Bridge Design Specifications 7th Edition with 2015 & 2016 Interims.

**LOADING HL-93**

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

**DESIGN STRESSES**

**FIELD UNITS**

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

**PRECAST UNITS (ASTM C1577)**

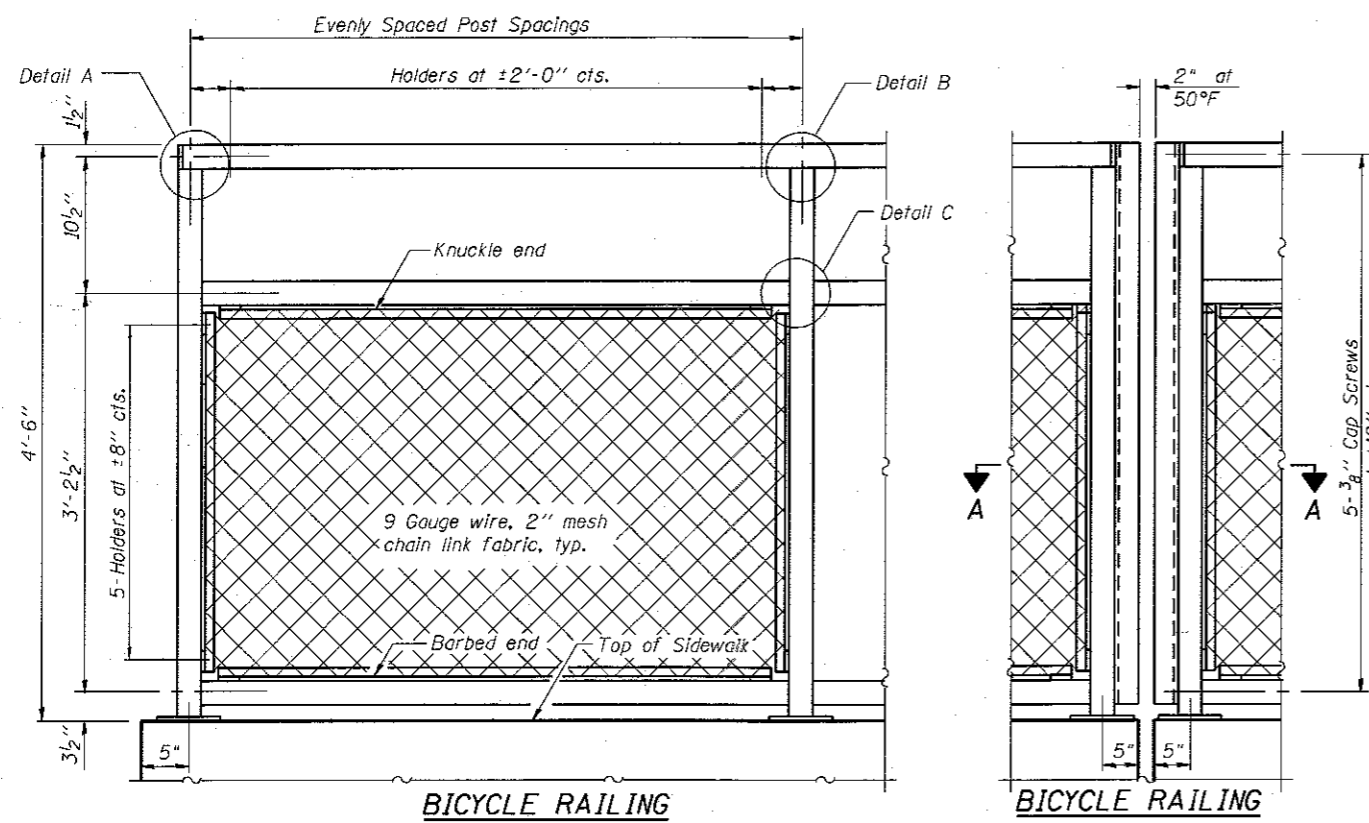
f'c = 5,000 psi  
fy = 65,000 psi (Welded Wire Fabric)

**GENERAL PLAN**  
**IL ROUTE 14**  
**OVER STREAM**  
**FAP ROUTE 855 - SECTION (9Z) B-1**  
**HAMILTON COUNTY**  
**STATION 41+82.16**  
**STRUCTURE NUMBER 033-2012**

FILE NAME = 0FILE8	USER NAME =	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL PLAN</b> <b>STRUCTURE NO. 033-2012</b> SHEET NO. 1 OF 1 SHEETS	FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -	REVISED -			855	(9Z) B-1	HAMILTON	19	15
PLOT SCALE =		DRAWN -	REVISED -			IL 14 OVER UNNAMED STREAM		CONTRACT NO. 78470		
PLOT DATE = 9/22/2017		CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT				

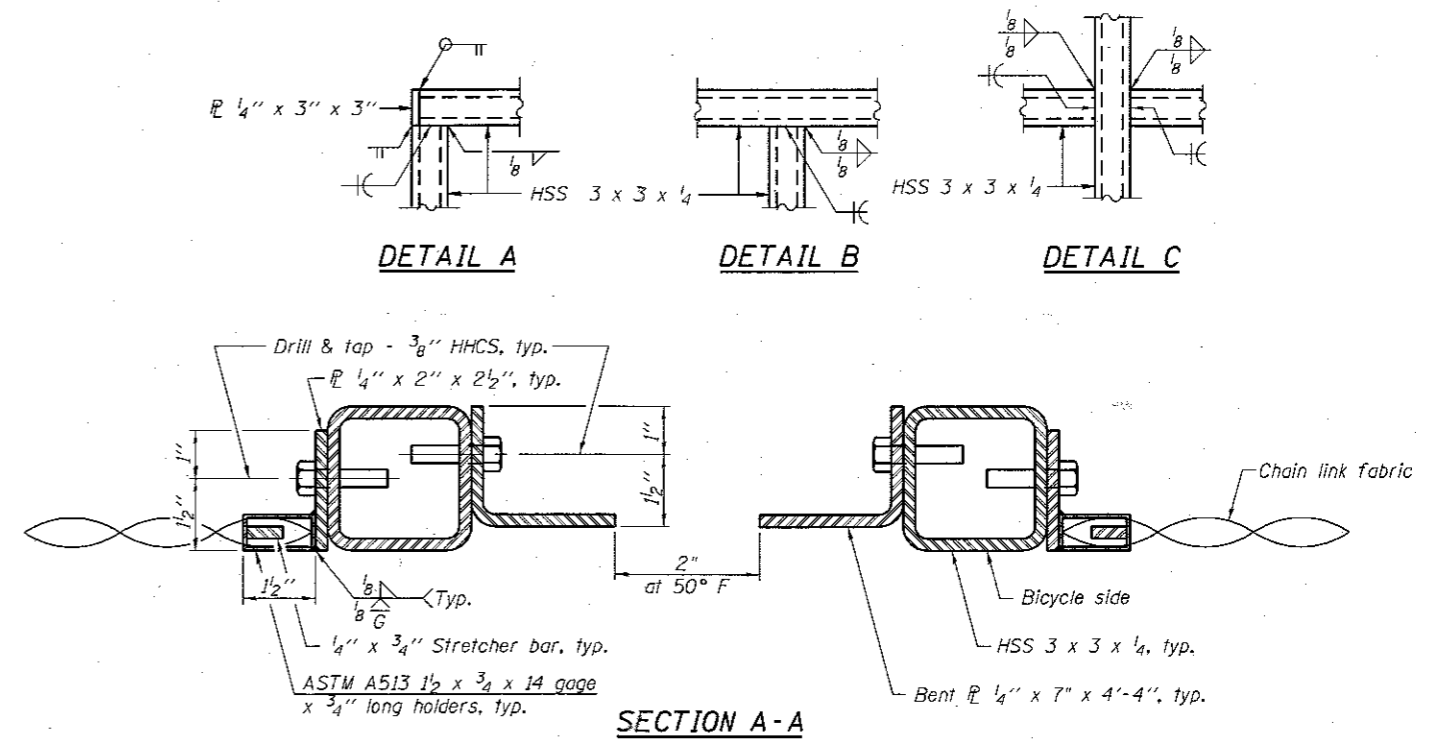




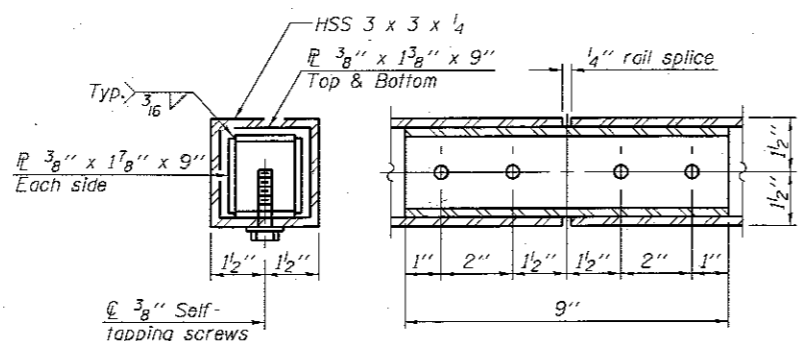


**BICYCLE RAILING**

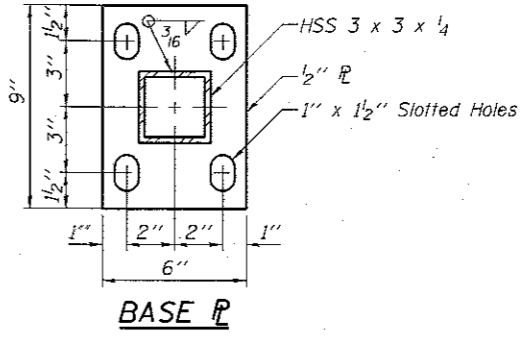
**BICYCLE RAILING**



**SECTION A-A**



**RAIL SPLICE**



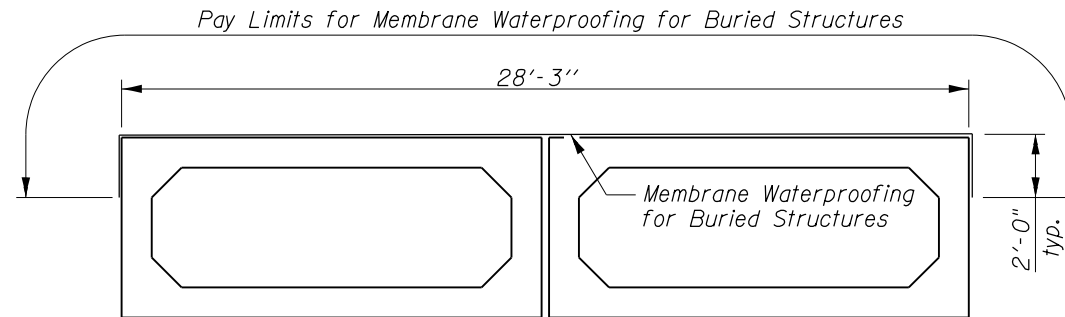
**BASE PL**

**NOTES**

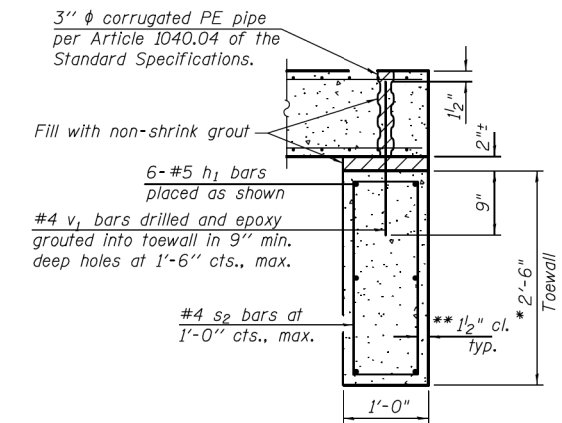
- All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
- The Contractor shall drill and epoxy 1/2" diameter anchor rods for post bases according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications. Min. embedment shall be 4 1/2".

**BILL OF MATERIAL**

Item	Unit	Quantity
Bicycle Railing	Foot	115



MEMBRANE WATERPROOFING  
FOR BURIED STRUCTURES



SECTION D-D

TOEWALL CONSTRUCTION SEQUENCE

1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

\* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

\*\* If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
s (E)	64	#4	6'-6"	□
v (E)	42	#4	1'-9 1/2"	I
h (E)	12	#5	32'-4 1/2"	—
Concrete Box Culvert			Cu. Yd.	6.1
Reinforcement Bars, Epoxy Coated			Pound	735

For the Cast in Place Option

ILLINOIS DEPARTMENT OF TRANSPORTATION  
District Nine Materials

Bridge Foundation  
Boring Log  
Sheet 1 of 1

Route: FAP 855 (IL 14) Over Stream Structure Number: 033-0005 Date: 10/8/2013  
Section 9BY-1 Bored By: R Moberly  
County: Hamilton Location: 0.2 mi E IL 142 Checked By: R Graeff

Boring No	DEPTH	BLOW	Qu	W%	Surf Wat Elev:	DEPTH	BLOW	Qu	W%
1-S					428.1				
Station 41+64					Ground Water Elevation				
Offset 18' Lt CL					when Drilling				
Ground Surface 434.3 Ft					At Completion				
					At:				
					Hrs:				
4.5" Asphalt over 10" Concrete		Cored							
432.8									
Medium to stiff, very moist, grey mottled brown, Silty Clay Loam A-6		WH			Bottom of hole = 23.3 feet				
		1	1.0B	22	No free water observed				
		2							
429.8					Elevation referenced to BM at SW corner; Elev. = 435.1 feet	30.0			
Stiff, moist, grey mottled brown, Silt Loam A-4	5.0	3			Borehole advanced with hollow stem auger (8" O.D., 3.25" I.D.)				
		7	1.5S	19					
		6			To convert "N" values to "N60" multiply by 1.25				
426.8		20							
Hard, dry, grey and brown, Silt Stone with Sandstone layers		100/6"							
425.8									
Cored 8.3 to 13.3 feet									
85% Recovery; 14% RQD	10.0					35.0			
Very Dense, dry, brown and grey, Sandstone with clay layers									
420.8									
Cored 13.3 to 18.3 feet									
88% Recovery; 17.5% RQD	15.0					40.0			
Very dense, dry, grey and brown, Sandstone with clay layers									
415.8									
Cored 18.3 to 23.3 feet									
97% Recovery; 60% RQD	20.0					45.0			
Very dense, dry, grey, Sandstone									
410.8									
Bottom of hole = 23.3 feet									
	25.0					50.0			

N-Std Pentr Test: 2" OD Sampler, 140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

ILLINOIS DEPARTMENT OF TRANSPORTATION  
District Nine Materials

Bridge Foundation  
Boring Log  
Sheet 1 of 1

Route: FAP 855 (IL 14) Over Stream Structure Number: 033-0005 Date: 10/9/2013  
Section 9BY-1 Bored By: R Moberly  
County: Hamilton Location: 0.2 mi E IL 142 Checked By: R Graeff

Boring No	DEPTH	BLOW	Qu	W%	Surf Wat Elev:	DEPTH	BLOW	Qu	W%
2-S					428.1				
Station 42+00					Ground Water Elevation				
Offset 17' Rt CL					when Drilling				
Ground Surface 434.8 Ft					At Completion				
					At:				
					Hrs:				
5.5" Asphalt over 10" Concrete		Cored							
433.3									
Soft, very moist, brown, Silty Clay Loam A-6		WH			Bottom of hole = 23.4 feet				
		WH	0.3B	26	No free water observed				
		WH							
430.3					Elevation referenced to BM at SW corner; Elev. = 435.1 feet	30.0			
Very soft, wet, grey, Silty Clay Loam A-4 (Utility backfill?)	5.0	WH			Borehole advanced with hollow stem auger (8" O.D., 3.25" I.D.)				
		WH	0.1B	23					
		WH			To convert "N" values to "N60" multiply by 1.25				
427.8									
Hard, dry, brown, weathered Siltstone and Sandstone		2							
426.8		27							
		60							
Cored 8.4 to 13.4 feet									
53% Recovery; 0% RQD	10.0					35.0			
Very dense, dry, brown and grey, Sandstone with clay layers									
421.3									
Cored 13.4 to 18.4 feet									
100% Recovery; 72% RQD	15.0					40.0			
Very dense, dry, brown and grey, Sandstone with thin clay seams									
416.3									
Cored 18.4 to 23.4 feet									
93% Recovery; 19% RQD	20.0					45.0			
Very dense, dry, grey, Sandstone with clay layers									
411.3									
Bottom of hole = 23.4 feet									
	25.0					50.0			

N-Std Pentr Test: 2" OD Sampler, 140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)