

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 259	20-18113-00-BR	WAYNE	18	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 95923	

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	TYPICAL CROSS SECTIONS
4.	PLAN AND PROFILE
5-9.	CULVERT PLANS
10-18.	STATION CROSS SECTIONS

HIGHWAY STANDARDS

515001-04	NAME PLATE FOR BRIDGES
701901-08	TRAFFIC CONTROL DEVICES
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM
OFF SYSTEM BRIDGE

PROJECT NHWH(008)
SECTION 20-18113-00-BR
ORCHARD ROAD DISTRICT
WAYNE COUNTY
T.R. 259 / 1550N
PROPOSED STRUCTURE NO. 096-3477
C-97-074-22



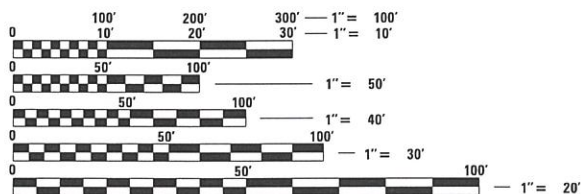
LOCATION OF SECTION INDICATED THUS: -

UTILITIES

AT&T CORP.
2500 COLT ROAD
SPRINGFIELD, IL 62707

WESTERN WAYNE WATER DISTRICT
102 S. MAIN
WAYNE CITY, IL 62895

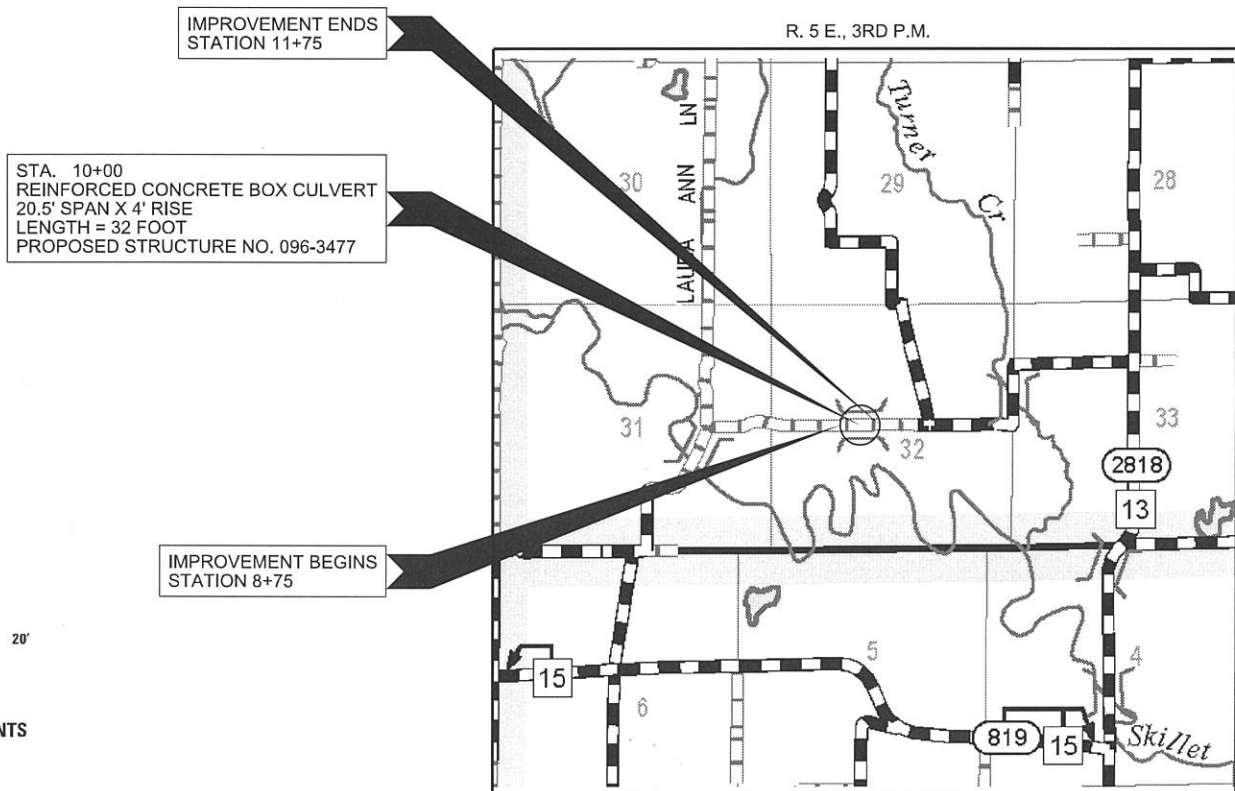
WABASH COMMUNICATIONS CO-OP
PO BOX 299
LOUISVILLE, IL 62858



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: LOCAL ROAD (0-250 ADT)
DESIGN SPEED: 30 MPH
DESIGN TRAFFIC: 50 ADT

CONTRACT NO. 95923



IMPROVEMENT ENDS STATION 11+75

STA. 10+00
REINFORCED CONCRETE BOX CULVERT
20.5' SPAN X 4' RISE
LENGTH = 32 FOOT
PROPOSED STRUCTURE NO. 096-3477

IMPROVEMENT BEGINS STATION 8+75

LOCATION MAP

APPROXIMATE SCALE: 0 1/2 MILE
NET LENGTH OF SECTION = 300 FEET = 0.057 MILES



ILLINOIS DEPARTMENT OF TRANSPORTATION

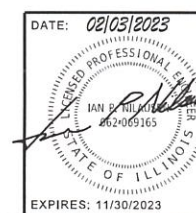
APPROVED *Aug. 16, 2023*
D. Seidel
COUNTY ENGINEER

APPROVED *8-3-2023*
Kevin Hornmalt
TOWNSHIP COMMISSIONER

PASSED *Aug. 17, 2023*
Brett Walker
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review
Aug. 17, 2023
Jeff P. Myerson
REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DATE: 02/03/2023

HAMPTON, LENZINI AND RENWICK, INC.
CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
217.546.3400 www.hlrengineering.com

184.000959
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

EXPIRES: 11/30/2023 PROJECT NUMBER: 20.0659.130 DATE: 02/03/2023

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	CONSTRUCTION TYPE CODE 0010			
		UNIT	TOTAL	CULVERT	ROADWAY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	6	0	6
20200100	EARTH EXCAVATION	CU YD	370	0	370
20700110	POROUS GRANULAR EMBANKMENT	TON	192	192	0
20900110	POROUS GRANULAR BACKFILL	CU YD	31	31	0
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	115	115	0
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	220	0	220
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1	0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	20,230	20,230	0
51500100	NAME PLATES	EACH	1	1	0
54003000	CONCRETE BOX CULVERTS	CU YD	81.5	81.5	0
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	79	79	0
67100100	MOBILIZATION	L SUM	1	0	0
X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	79	79	0
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.2	0	0.2

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2022", THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- ALL CLEARING AND GRUBBING, FENCE REMOVAL, STUMP REMOVAL, AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL AND DISPOSAL OF EXISTING AGGREGATE PAVEMENT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE LOCATION OF EXISTING DRAINAGE STRUCTURES, TELEPHONE LINES, ELECTRIC LINES, WATER SERVICE LINES, GAS MAINS, AND OTHER UTILITY FACILITIES AS SHOWN ON THE PLANS ARE BASED ON FIELD INVESTIGATIONS 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 UTILITY COMPANIES AND BY FIELD INSPECTION.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES
 AGGREGATE SURFACE COURSE: 2.05 TON/CU.YD.
 STONE RIPRAP 1.75 TON/CU.YD.
 POROUS GRANULAR EMBANKMENT 2.0 TON/CU.YD.
- THE AREA TO BE SEEDED SHALL CONSIST OF ALL EARTH SURFACES WITHIN THE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. ESTIMATED QUANTITY: SEEDING, CLASS 2(SPECIAL) = 0.2 ACRES
- COMMITMENTS: NONE

EARTHWORK SUMMARY

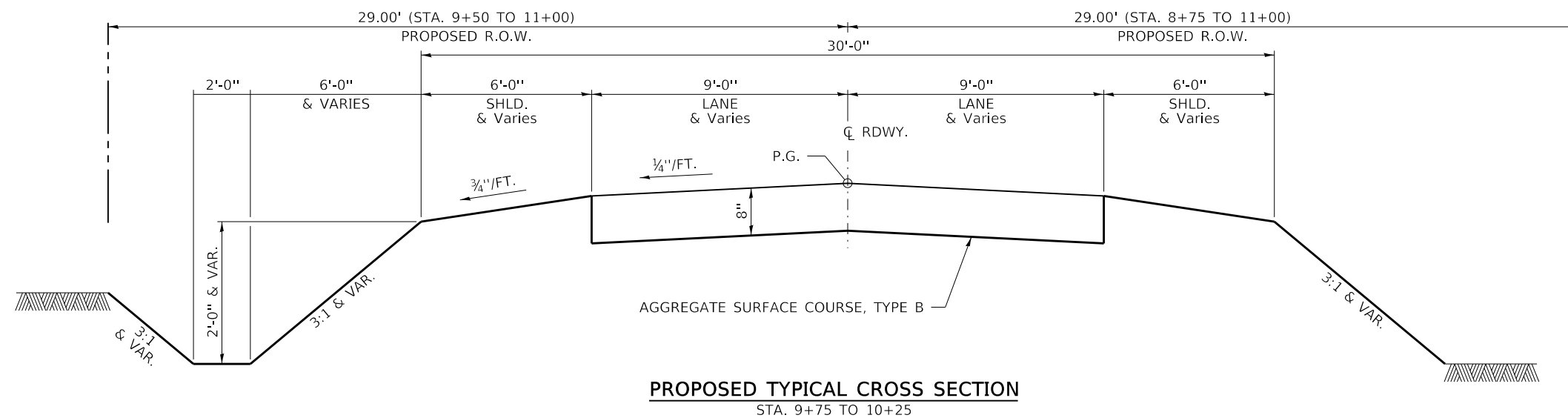
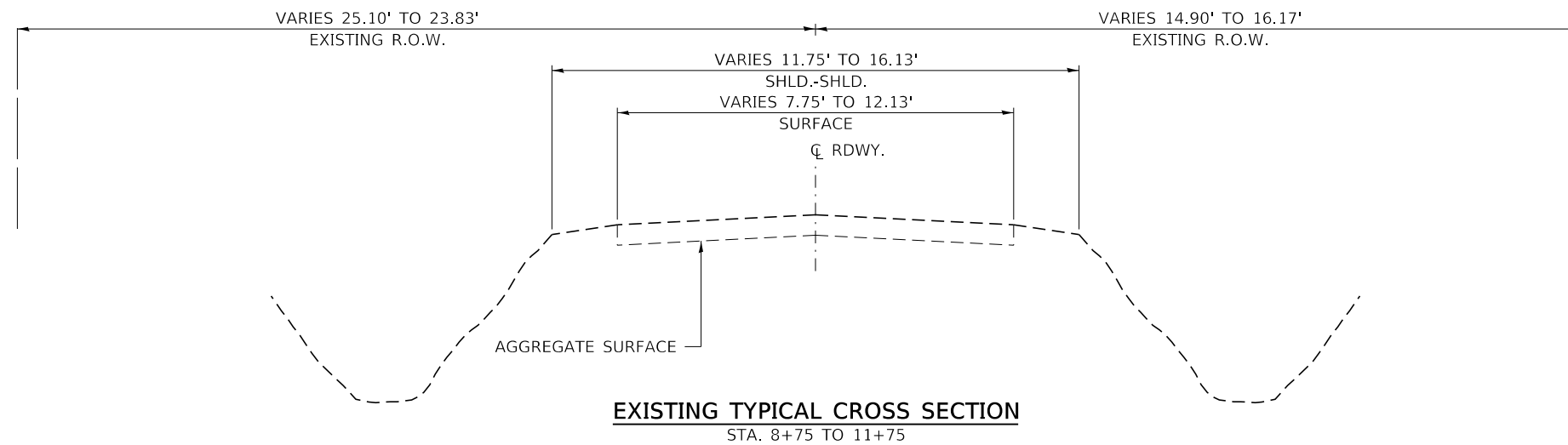
LOCATION	EARTH EXCAVATION	* MISC. EXCAVATION	SHRINKAGE FACTOR	% USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE(25%)	EMBANKMENT REQUIRED	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CUBIC YARD	CUBIC YARD			CUBIC YARD	CUBIC YARD	CUBIC YARD
TR 259							
STA. 8+75 TO STA. 9+89.08	167		25.00%	100.00%	125	0	125
STA. 9+89.08 TO STA. 10+10.92		79	25.00%	50.00%	30		30
STA. 10+10.92 TO STA. 11+75	201		25.00%	100.00%	151	9	142
EXCAVATION FROM PGE AND PGB		229	25.00%	50.00%	86		86
TOTAL	368	308			392	9	383
USE	370						385

TREE REMOVAL SCHEDULE

LOCATION		TREE REMOVAL (6 TO 15 UNITS DIAMETER) 20100110
STATION	OFFSET	UNIT
10+27	28 LT.	6
TOTAL		6

ROADWAY SCHEDULE

LOCATION	AGGREGATE SURFACE COURSE TYPE B
TR 259	TON
STA. 8+75 TO STA. 11+75 (8")	220
TOTAL	220



SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

TRANSITION FROM THE PROPOSED SURFACE AND ROADWAY TO THE EXISTING
ROADWAY SHALL BE CONSTRUCTED FROM STA. 8+75 TO 9+75 AND FROM STA. 10+25 TO 11+75

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

FILE NAME = 200659-shi-typsections.dgn	USER NAME = tmmk	DESIGNED - I.P.N.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALES	DRAWN - T.D.S.	REVISED -
	PLOT DATE = 2/24/2023	CHECKED - S.W.M.	REVISED -
		DATE - 02/24/2023	REVISED -

STATE OF ILLINOIS
WAYNE COUNTY HIGHWAY DEPARTMENT

TYPICAL CROSS SECTIONS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA. 8+75.00 TO STA. 11+75.00	

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
259	20-18113-00-BR	WAYNE	18	3
ORCHARD ROAD DISTRICT		CONTRACT NO. 95923		
ILLINOIS		FED. AID PROJECT		

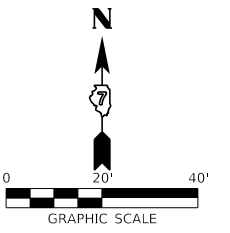
DAVID A. SACHS AND DEBRA J. SACHS
NW¼, SEC 32, T. 1 N., R. 5 E., 3RD P.M.

CARL BRADDOCK AND ELSIE BRADDOCK
SE¼, SEC 32, T. 1 N., R. 5 E., 3RD P.M.

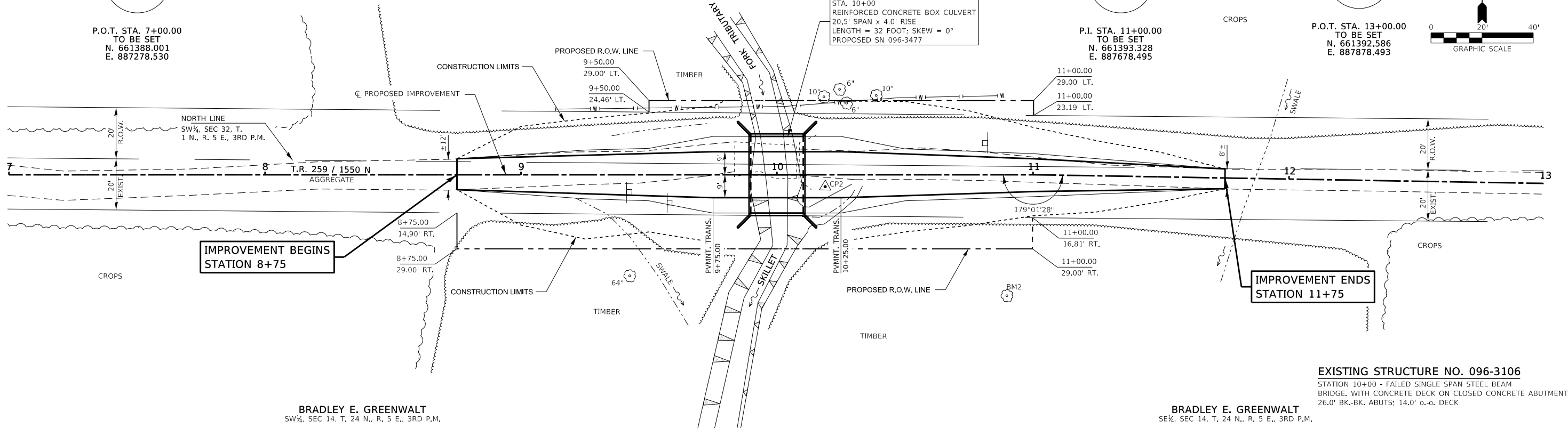
P.O.T. STA. 7+00.00
TO BE SET
N. 661388.001
E. 887278.530

P.I. STA. 11+00.00
TO BE SET
N. 661393.328
E. 887678.495

P.O.T. STA. 13+00.00
TO BE SET
N. 661392.586
E. 887678.493



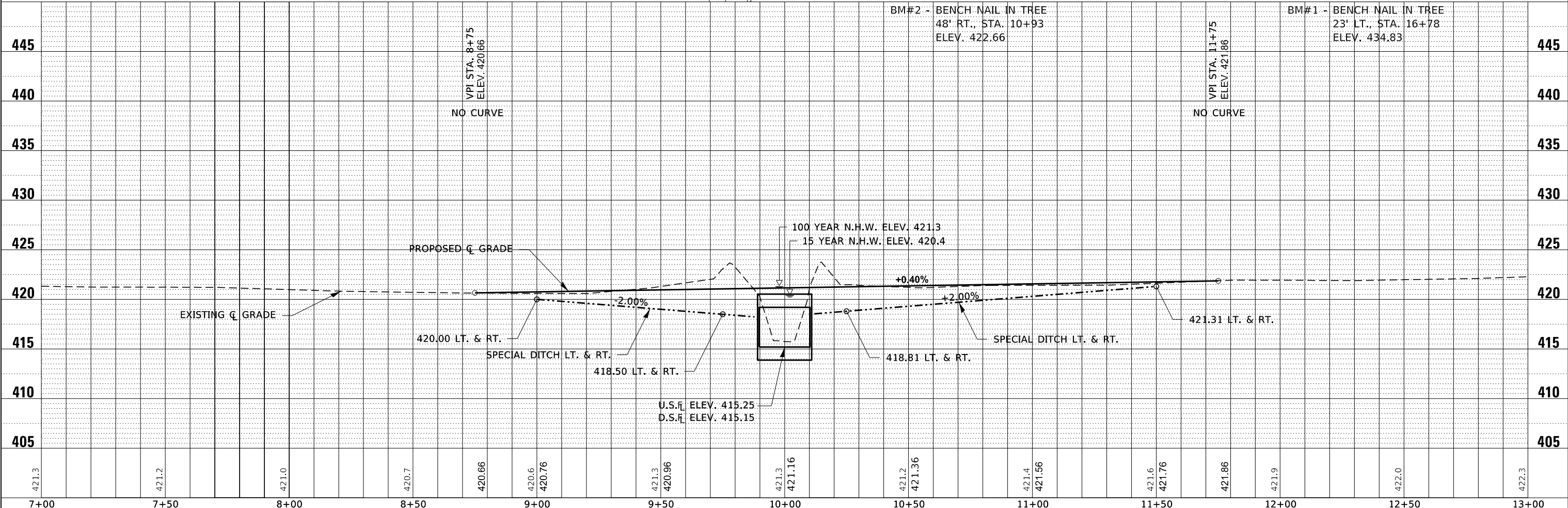
DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	



BRADLEY E. GREENWALT
SW¼, SEC 14, T. 24 N., R. 5 E., 3RD P.M.

BRADLEY E. GREENWALT
SE¼, SEC 14, T. 24 N., R. 5 E., 3RD P.M.

DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	



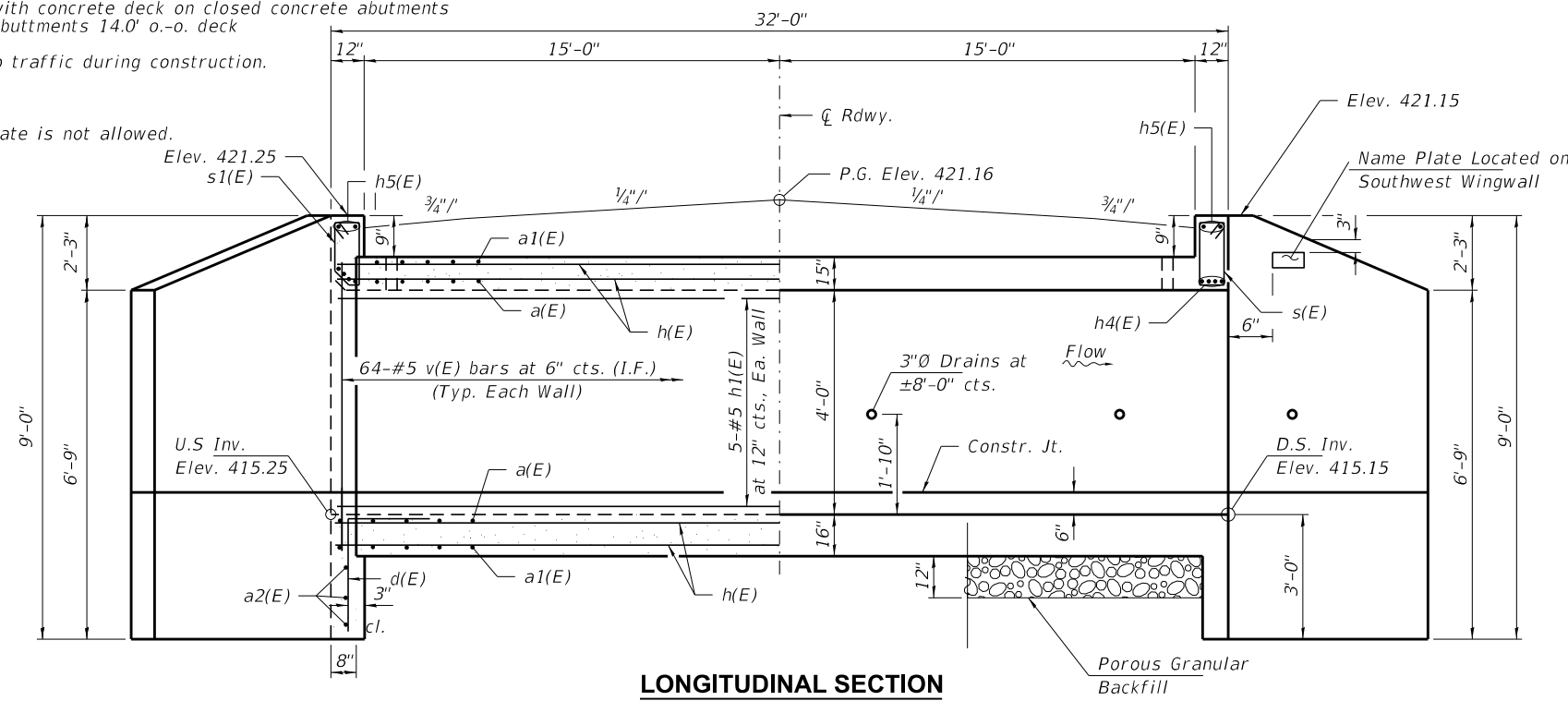
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HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	DESIGNED - S.A.A. DRAWN - B.A.M. CHECKED - I.P.N. DATE - 02/24/2023	REVISIONS - REVISIONS - REVISIONS - REVISIONS -	SCALE: 20H:5V	259	20-18113-00-BR	WAYNE	18	4
STATE OF ILLINOIS WAYNE COUNTY HIGHWAY DEPARTMENT				PLAN & PROFILE T.R. 259 / 1550 N		ORCHARD ROAD DISTRICT		CONTRACT NO. 95923
PLOT SCALE = \$SCALE\$				SCALE: 20H:5V		SHEET NO. 1 OF 1 SHEETS		STA. 7+00.00 TO STA. 13+00.00
PLOT DATE = 2/24/2023				ILLINOIS FED. AID PROJECT				

EXISTING STRUCTURE NO. 096-3106: Sta. 10+00 - Single span (failed)
 Steel Bridge with concrete deck on closed concrete abutments
 26.0' Bk.-Bk. Abutments 14.0' o.-o. deck

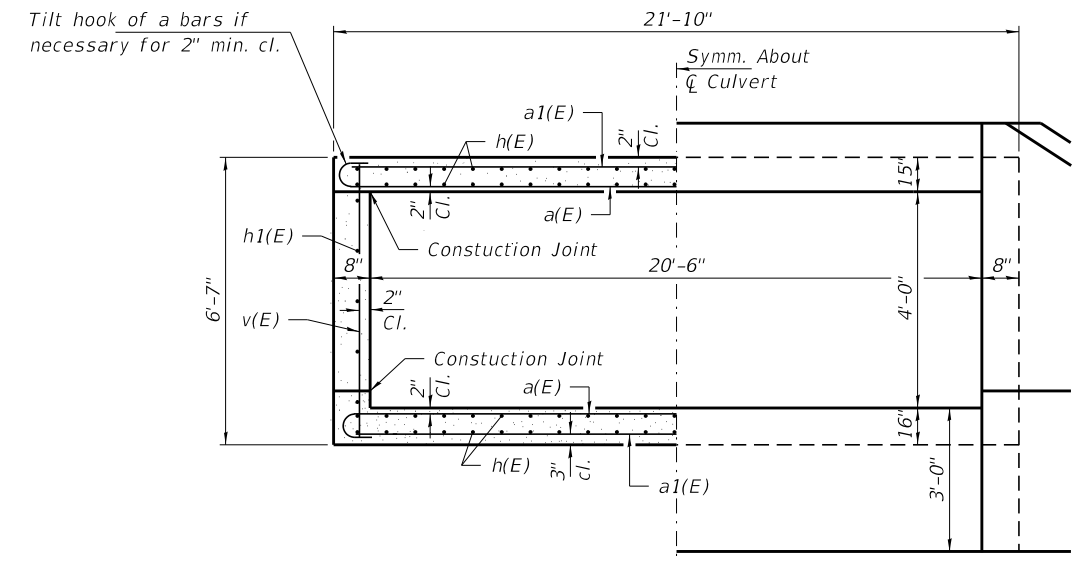
Road closed to traffic during construction.

No Salvage.

Precast alternate is not allowed.



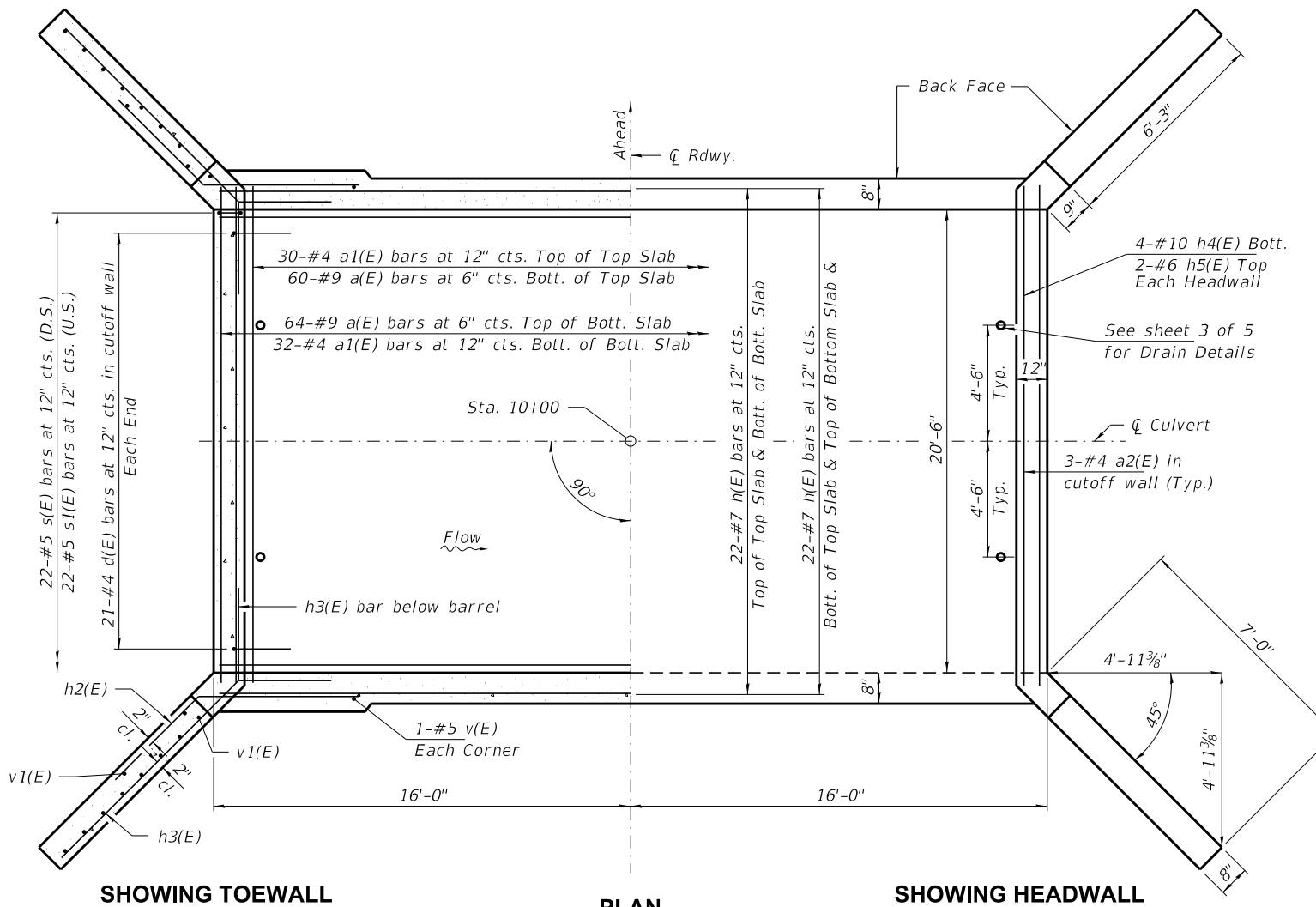
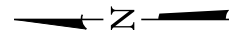
LONGITUDINAL SECTION



HALF END ELEVATION
Showing Outlines

NOTES

- Exposed edges shall be beveled 3/4".
- For backfilling and embankment, see Standard Specifications, except that Porous Granular Embankment shall be placed as shown in backfill detail for the full length of the culvert.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60. See Special Provisions.
- It shall be the responsibility of the Contractor to divert flow and dewater the excavation during construction in order to keep construction areas free of water. The method of water diversion shall subject to the approval of the Engineer and shall be included in the cost of Concrete Box Culverts.
- All construction joints shall be bonded.
- All bars shall be epoxy coated.
- A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.



SHOWING TOEWALL

PLAN

SHOWING HEADWALL

INDEX OF STRUCTURE SHEETS

- 1-3. Culvert Details
- 4-5. Borings

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	124	#9	24'-0"	U
a1(E)	62	#4	21'-6"	—
a2(E)	6	#4	21'-6"	—
d(E)	42	#4	4'-5"	L
h(E)	88	#7	31'-8"	—
h1(E)	10	#5	31'-8"	—
h2(E)	40	#4	8'-0"	—
h3(E)	80	#4	10'-1"	—
h4(E)	8	#10	21'-6"	—
h5(E)	4	#6	21'-6"	—
s(E)	22	#5	5'-11"	□
s1(E)	22	#5	5'-9"	□
v(E)	132	#5	6'-3"	—
v1(E)	40	#4	8'-8"	—
Porous Granular Embankment			Ton	192
Porous Gran. Backfill			Cu. Yd.	31
Stone Dumped Riprap, Class A4			Ton	115
Removal of Existing Structures			Each	1
Reinf. Bars, Epoxy Coated			Pound	20,230
Name Plates			Each	1
Concrete Box Culverts			Cu. Yd.	81.5
Geocomposite Wall Drain			Sq. Yd.	79
Membrane Waterproofing System for Buried Struct.			Sq. Yd.	79

MIN. BAR LAP

#5 = 2'-7"

DESIGN STRESSES

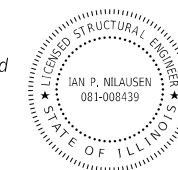
f'c = 3,500 psi
 fy = 60,000 psi (Reinf.)

LOADING HL-93

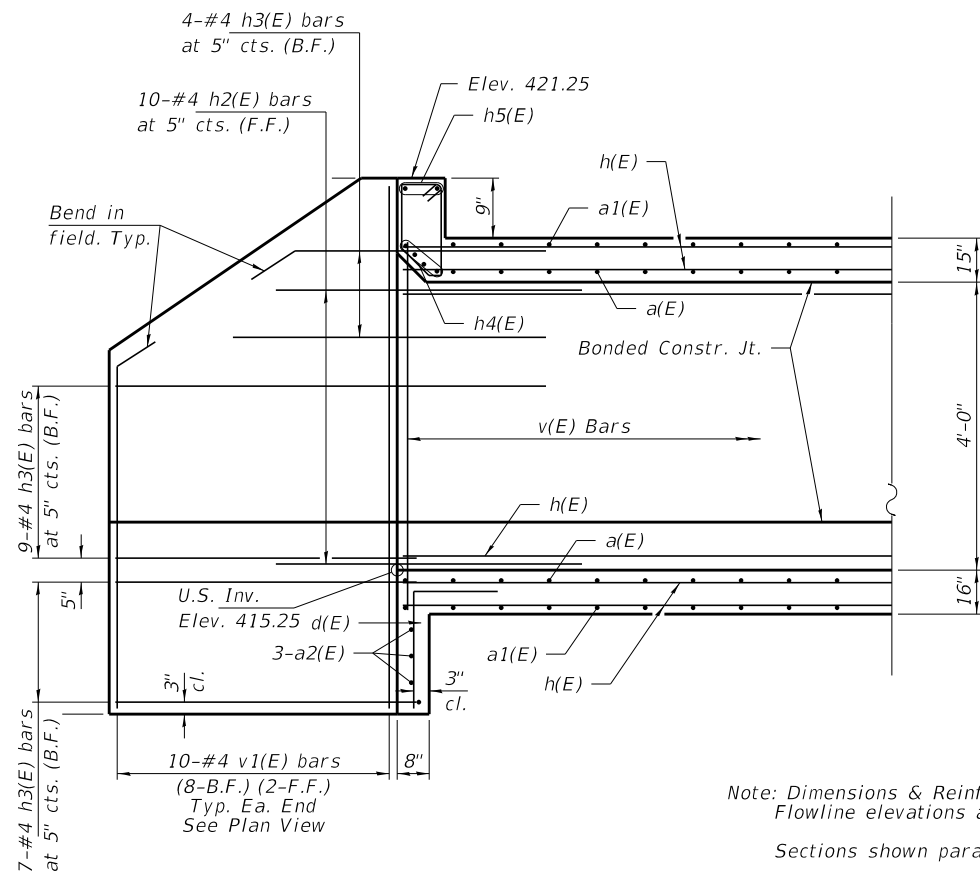
Design Specifications: 2020 AASHTO LRFD
 Bridge Design Specifications, 9th Edition
 with all interims.

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."

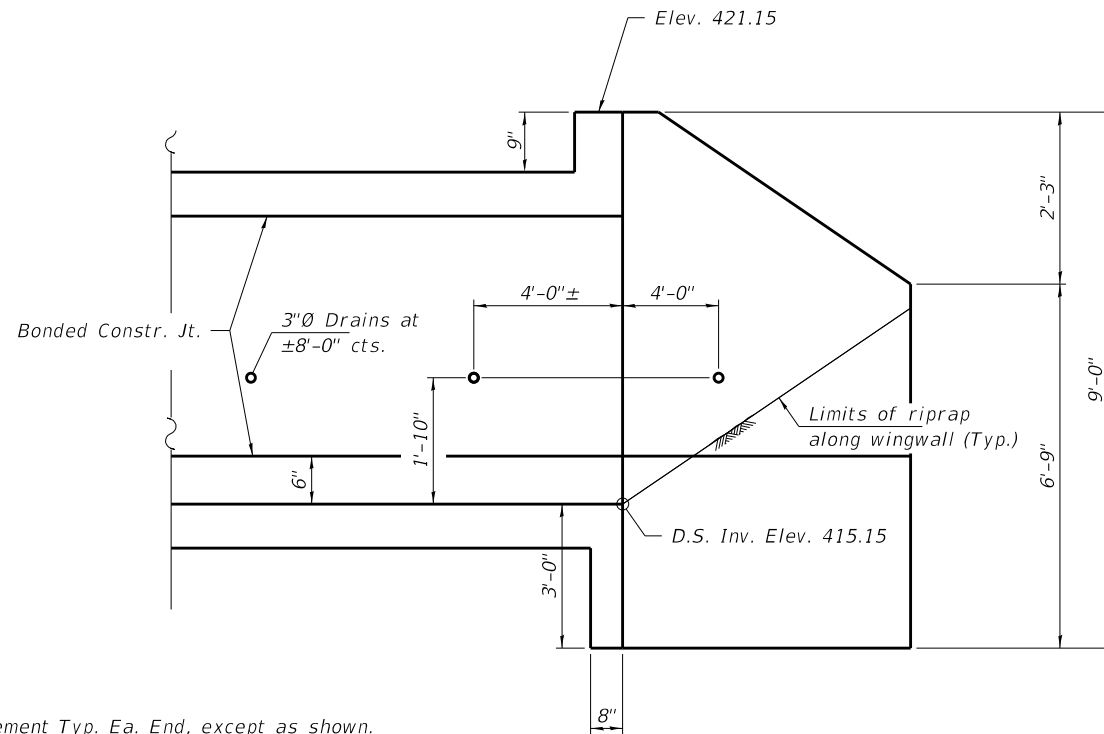
Jan P. Nilausen 02/03/2023
 ILLINOIS STRUCTURAL NO. 081-008439 Expires 11-30-2024



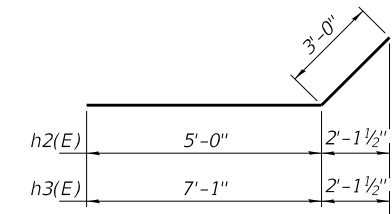
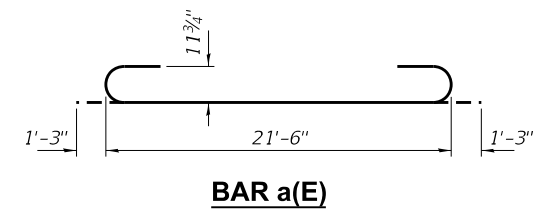
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HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -			259	20-18113-00-BR	WAYNE	18	5
PLOT DATE = 2/24/2023	DRAWN - T.D.S.	CHECKED - I.P.N.	REVISED -			ORCHARD ROAD DISTRICT		CONTRACT NO. 95923		ILLINOIS FED. AID PROJECT
						SHEET NO. 1 OF 5 SHEETS				



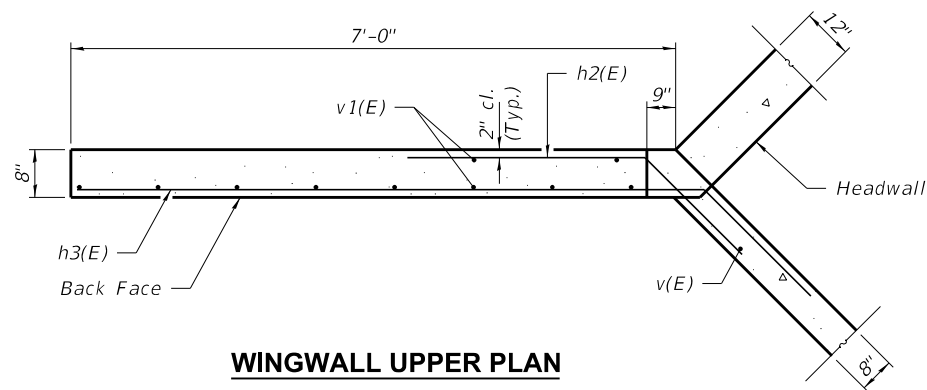
WINGWALL ELEVATION - SHOWING REINFORCEMENT



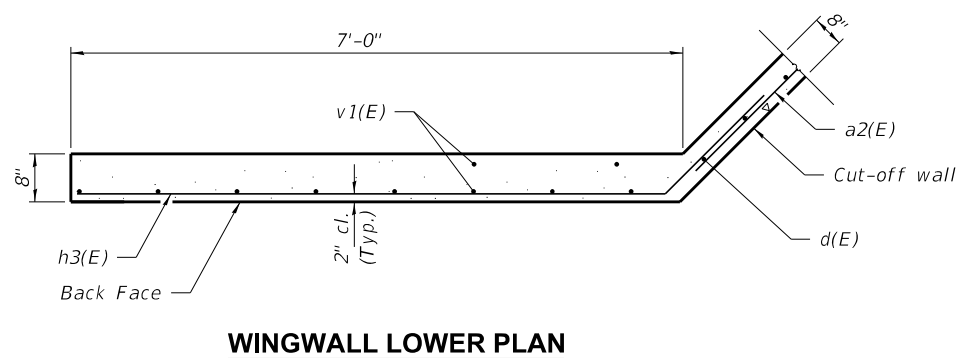
WINGWALL ELEVATION



BARS h2(E) & h3(E)



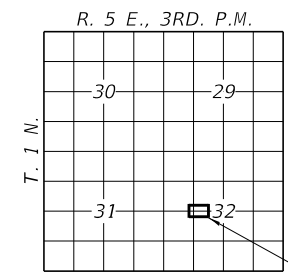
WINGWALL UPPER PLAN



WINGWALL LOWER PLAN

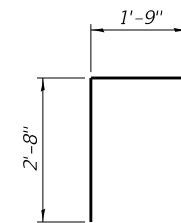
SKILLET FORK
BUILT 202 BY
WAYNE COUNTY
SEC. 20-18113-00-BR
ORCHARD ROAD DISTRICT
STR. NO. 096-3477
LOADING HL-93

NAME PLATE
See Std. 515001

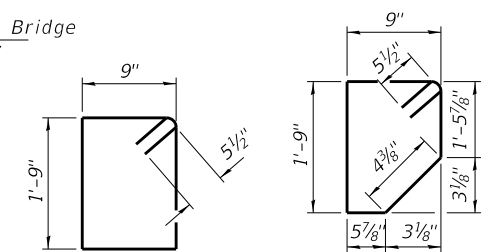


LOCATION SKETCH

Proposed Bridge
096-3477



BAR d(E)



BAR s(E)

BAR s1(E)

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Ten-Year	10	194	60	82	420.0	0.1	0.0	420.1	420.0
Design	15	230	60	82	420.4	0.2	0.1	420.6	420.5
Base	100	392	60	82	421.3	0.3	0.0	421.6	421.3
Scour Check	200	460	60	82	421.6	0.3	0.0	421.9	421.6
Max Calc	500	557	60	82	421.9	0.2	0.0	422.1	422.9

Drainage Area = 0.2 Sq. Mi. Existing Low Grade Elev. 420.6 at Sta. 9+00 Proposed Low Grade Elev. 420.7 at Sta. 9+00

NOTES

1. For Bill of Material and reinforcement bars summary see sheet 1 of 5.
2. B.F. denotes Back Face and F.F. denotes Front Face.

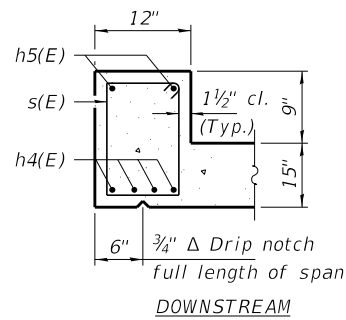
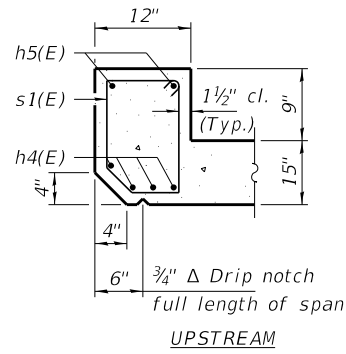
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HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E./S.E. CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -
PLOT DATE = 2/24/2023		DRAWN - T.D.S.	REVISED -
		CHECKED - I.P.N.	REVISED -

STATE OF ILLINOIS
WAYNE COUNTY HIGHWAY DEPARTMENT

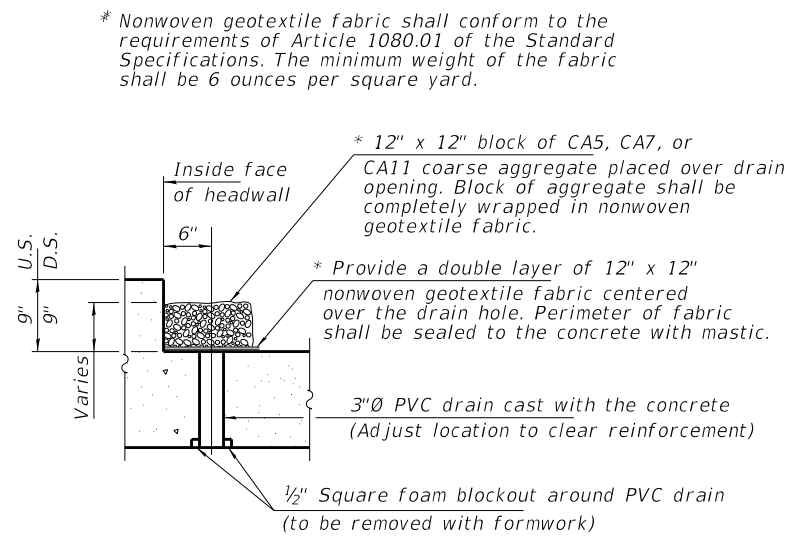
CULVERT DETAILS
STRUCTURE NO. 096-3477

SHEET NO. 2 OF 5 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
259	20-18113-00-BR	WAYNE	18	6
ORCHARD ROAD DISTRICT		CONTRACT NO. 95923		
ILLINOIS FED. AID PROJECT				



SECTION THRU HEADWALL

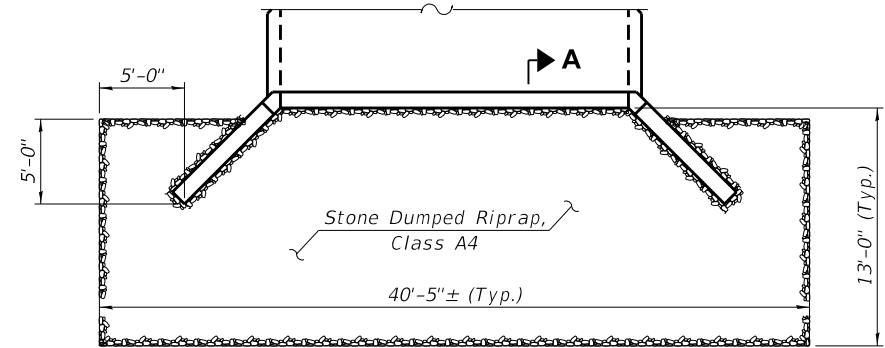


DRAIN DETAIL

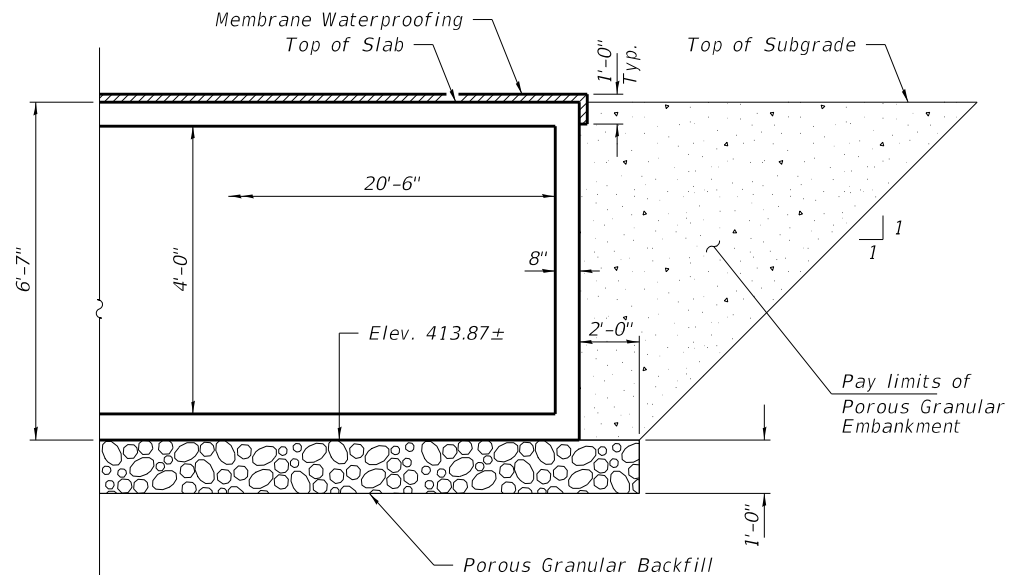
(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for Concrete Box Culverts.)

Drains shall be installed in each span near head walls. See Plan view

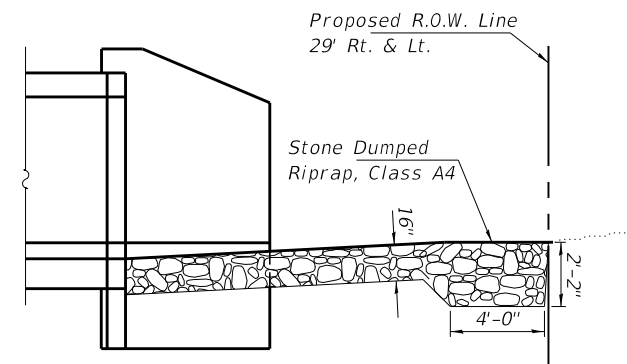
Membrane waterproofing shall be omitted for the fabric, drain and aggregate block.



RIPRAP LAYOUT



BACKFILL DETAIL



SECTION A-A

FILE NAME = 200659-shi-culvert.dgn	USER NAME = ilmk	DESIGNED - I.P.N.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E./S.E. CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -
PLOT DATE = 2/24/2023		DRAWN - T.D.S.	REVISED -
		CHECKED - I.P.N.	REVISED -

STATE OF ILLINOIS
WAYNE COUNTY HIGHWAY DEPARTMENT

CULVERT DETAILS
STRUCTURE NO. 096-3477

SHEET NO. 3 OF 5 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
259	20-18113-00-BR	WAYNE	18	7
ORCHARD ROAD DISTRICT		CONTRACT NO. 95923		

ILLINOIS FED. AID PROJECT

NOBLE		BORING No. B-1		water level reading						
ENGINEERING CONSULTANTS		County: Wayne, IL	Sheet No. 1 of 3	1st encounter: 7.5'						
Client: HLR		Weather: Sunny	Temperature: 30's	water level reading						
Driller: Noble Engineering Consultants		Date Start: 1-13-21	Surface Elevation: ~100** 421.6	At Completion 24'						
Location: Str. #096-3106 Orchard Twp.		Date Finished: 1-13-21	Driller: Tony Schocker	Backfill: Soil						
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	cuttings Elev.**
1										99 420.6
2	SS-1	1.0'-2.5'	5	5-3-2	20	-	0.0'-2.0' Silt, Clay, Sand, Etc. FILL	28.1	FILL	98
3										97
4	SS-2	3.5'-5.0'	4	1-2-2	70	0.9	2.0'-23.0' SILTY CLAY, trace to some sand, trace gravel, wet sand seam at 7.5', medium stiff to stiff, brown to brown mottled gray	21.2	CL	96
5										95
6	SS-3	6.0'-7.5'	5	2-3-2	100	0.9		24.9	CL	94
7										93
8										92
9	SS-4	8.5'-10.0'	4	2-2-2	100	0.8		23.1	CL	91
10										90 411.6
11										89
12										88
13										87
14	SS-5	13.5'-15.0'	7	2-3-4	100	1.0		23.9	CL	86
15										85
16										84
17										83
18										82
19	SS-6	18.5'-20.0'	8	3-3-5	100	1.2		22.8	CL	81
20										80 401.6
21										79
22										78
23										77
24	SS-7	23.5'-25.0'	4	1-2-2	100	0.7	23.0'-27.8' CLAY, trace sand, trace gravel, medium stiff, gray	23.1	CH	76
25										75
26										74
27										73
28										72
29										71
30	SS-8	28.5'-30.0'	24	7-10-14	100	-	27.8'-65.0' SILTY FINE SAND, trace gravel, medium gravel seam at 33', occ. clay seams, medium dense to dense, saturated, gray	21.4	SM	70 391.6
Drilling Method: HSA (2-1/4" id)		comments		* Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 78.1'										
Drill Rig: Mobile B-47				** ground surface elevation is based upon top of east abutment elevation estimate of 100 and is not surveyed.						
Sampling: split-spoon (SS)										421.6

NOBLE		BORING No. B-1		water level reading						
ENGINEERING CONSULTANTS		County: Wayne, IL	Sheet No. 2 of 3	1st encounter: 7.5'						
Client: HLR		Weather: Sunny	Temperature: 30's	water level reading						
Driller: Noble Engineering Consultants		Date Started: 1-13-21	Surface Elevation: ~100** 421.6	At completion 24'						
Location: Str. # 096-3106 Orchard Twp.		Date Finished: 1-13-21	Driller: Tony Schocker	Backfill Soil cuttings						
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
31										69 390.6
32										68
33										67
34	SS-9	33.5'-35.0'	32	7-14-18	100	-		17.4	SM	66
35										65
36										64
37										63
38										62
39	SS-10	38.5'-40.0'	37	11-18-19	100	-	27.8'-65.0' SILTY FINE SAND, trace gravel, medium gravel seam at 33', occ. clay seams, medium dense to dense, saturated, gray	22.0	SM	61
40										60 381.6
41										59
42										58
43										57
44	SS-11	43.5'-45.0'	30	12-14-16	100	-		17.1	SM	56
45										55
46										54
47										53
48										52
49	SS-12	48.5'-50.0'	33	38-14-19	100	-		19.9	SM	51
50										50 371.6
51										49
52										48
53										47
54	SS-13	53.5'-55.0'	32	11-17-15	100	-		21.4	SM	46
55										45
56										44
57										43
58										42
59										41
60	SS-14	58.5'-60.0'	36	14-17-19	100	-		20.6	SM	40 361.6
Drilling Method: HSA (2-1/4" id)		comments		* Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 78.1'										
Drill Rig: Mobile B-47				** ground surface elevation is based upon top of east abutment elevation estimate of 100 and is not surveyed.						
Sampling: split-spoon (SS)										421.6

NOBLE		BORING No. B-1		water level reading						
ENGINEERING CONSULTANTS		County: Wayne, IL	Sheet No. 3 of 3	1st encounter: 7.5'						
Client: HLR		Weather: Sunny	Temperature: 30's	water level reading						
Driller: Noble Engineering Consultants		Date Started: 1-13-21	Surface Elevation: ~100** 421.6	At completion 24'						
Location: Str. # 096-3106 Orchard Twp.		Date Finished: 1-13-21	Driller: Tony Schocker	Backfill Soil cuttings						
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
61										39 360.6
62										38
63										37
64	SS-15	63.5'-65.0'	29	11-14-15	100	-	27.8'-65.0' SILTY FINE SAND, trace gravel, medium gravel seam at 33', occ. clay seams, medium dense to dense, saturated, gray	19.4	SM	36
65										35
66										34
67										33
68										32
69	SS-16	68.5'-70.0'	17	8-8-9	100	1.0	65.0'-72.4' SILTY CLAY, trace to some sand, trace gravel, stiff, gray	23.7	CL	31
70										30 351.6
71										29
72										28
73										27
74	SS-17	73.5'-75.0'	100+	68-100/5'	60	-	72.4'-78.1' WEATHERED SHALE, gray			26
75										25
76										24
77										23
78										22
79										21
80										20 341.6
81										
82										
83										
84										
85										
86										
87										
88										
89										
90										
Drilling Method: HSA (2-1/4" id)		comments		* Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 78.1'										
Drill Rig: Mobile B-47				** ground surface elevation is based upon top of east abutment elevation estimate of 100 and is not surveyed.						
Sampling: split-spoon (SS)										421.6

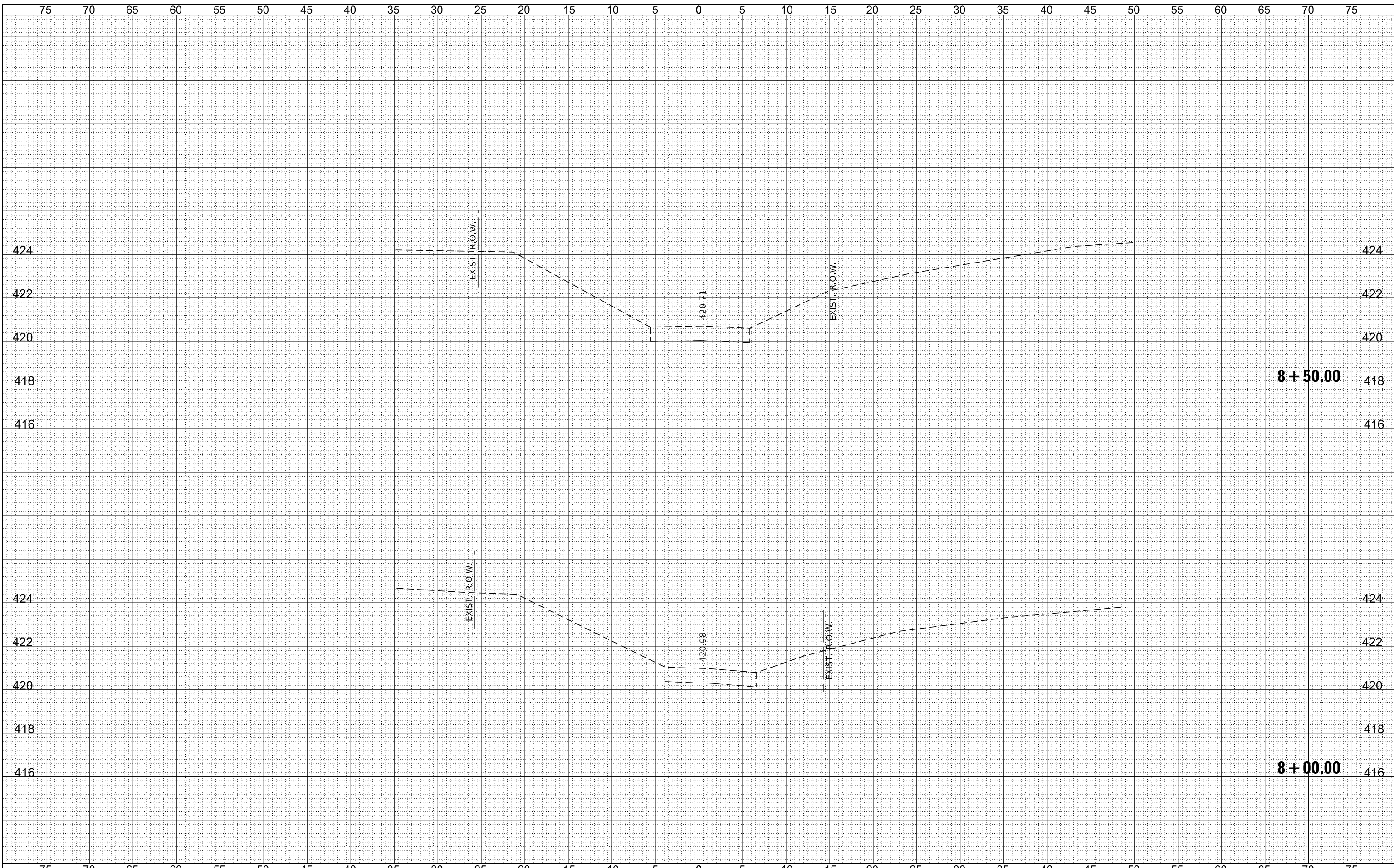
BORING 1

NOBLE		BORING No. B-2		water level reading						
ENGINEERING CONSULTANTS		County: Wayne, IL	Sheet No. 1 of 3	1st encounter: 24'						
Client: HLR		Weather: Sunny	Temperature: 30's	water level reading						
Driller: Noble Engineering Consultants		Date Start: 1-13-21	Surface Elevation: ~100** 421.6	At completion Dry cave						
Location: Str. #096-3106 Orchard Twp.		Date Finished: 1-13-21	Driller: Tony Schocker	Backfill: Soil						
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	cuttings Elev.**
1										99 420.6
2	SS-1	1.0'-2.5'	3	3-1-2	20	-	0.0'-2.5' Silt, Clay, Sand, Etc. FILL	13.1	FILL	98
3										97
4	SS-2	3.5'-5.0'	7	3-3-4	100	0.9	2.5'-19.1' SILTY CLAY, trace to some sand, trace gravel, wet sand seam at 7.5', medium stiff to stiff, brown to brown mottled gray	19.8	CL	96
5										95
6	SS-3	6.0'-7.5'	7	2-3-4	100	1.0		23.6	CL	94
7										93
8										92
9	SS-4	8.5'-10.0'	7	2-3-4	100	1.0		19.1	CL	91
10										90 411.6
11										89
12										88
13										87
14	SS-5	13.5'-15.0'	10	2-4-6	100	1.3		20.5	CL	86
15										85
16										84
17										83
18										82
19	SS-6	18.5'-20.0'	5	2-2-3	100	0.8	19.1'-24.0' CLAY, trace sand, trace gravel, medium stiff, gray	23.9	CH	81
20										80 401.6
21										79
22										78
23										77
24	SS-7	23.5'-25.0'	12	2-6-6	100	-	24.0'-31.2' SILTY FINE SAND, trace gravel, medium dense, saturated gray	23.1	SM	76
25										75
26										74
27										73
28										72
29										71
30	SS-8	28.5'-30.0'	17	7-8-9	100	-		15.4	SM	70 391.6
Drilling Method: HSA (2-1/4" id)		comments		* Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 79.9'				** ground surface elevation is based upon top of west abutment elevation estimate of 100 and is not surveyed.						
Drill Rig: Mobile B-47				*** rock in shoe 421.6						
Sampling: split-spoon (SS)				421.6						

NOBLE		BORING No. B-2		water level reading						
ENGINEERING CONSULTANTS		County: Wayne, IL	Sheet No. 2 of 3	1st encounter: 24'						
Client: HLR		Weather: Sunny	Temperature: 30's	water level reading						
Driller: Noble Engineering Consultants		Date Started: 1-13-21	Surface Elevation: ~100** 421.6	At completion Dry cave						
Location: Str. # 096-3106 Orchard Twp.		Date Finished: 1-13-21	Driller: Tony Schocker	Backfill: Soil cuttings						
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
31										69 390.6
32							24.0'-31.2' SILTY FINE SAND, trace gravel, medium dense, saturated gray			68
33										67
34	SS-9	33.5'-35.0'	15	5-6-8	100	1.4		19.4	CL	66
35										65
36										64
37										63
38										62
39	SS-10	38.5'-40.0'	14	6-7-7	100	1.4	31.2'-40.9' CLAY, trace to some sand, trace gravel, occ. wet sand seams, stiff, gray	20.3	CL	61
40										60 381.6
41										59
42										58
43										57
44	SS-11	43.5'-45.0'	34	12-16-18	100	-	40.9'-67.1' SILTY FINE SAND, trace gravel, occ. gravel seams, dense, saturated, gray	14.7	SM	56
45										55
46										54
47										53
48										52
49	SS-12	48.5'-50.0'	38	15-19-19	100	-		17.4	SM	51
50										50 371.6
51										49
52										48
53										47
54	SS-13	53.5'-55.0'	39	14-15-24***	100	-		11.5	SM	46
55										45
56										44
57										43
58										42
59										41
60	SS-14	58.5'-60.0'	33	8-14-19	100	-		14.9	SM	40 361.6
Drilling Method: HSA (2-1/4" id)		comments		* Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 79.9'				** ground surface elevation is based upon top of west abutment elevation estimate of 100 and is not surveyed.						
Drill Rig: Mobile B-47				*** rock in shoe 421.6						
Sampling: split-spoon (SS)				421.6						

NOBLE		BORING No. B-2		water level reading						
ENGINEERING CONSULTANTS		County: Wayne, IL	Sheet No. 3 of 3	1st encounter: 24'						
Client: HLR		Weather: Sunny	Temperature: 30's	water level reading						
Driller: Noble Engineering Consultants		Date Started: 1-13-21	Surface Elevation: ~100** 421.6	At completion Dry cave						
Location: Str. # 096-3106 Orchard Twp.		Date Finished: 1-13-21	Driller: Tony Schocker	Backfill: Soil cuttings						
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
61										39 360.6
62										38
63										37
64	SS-15	63.5'-65.0'	34	14-16-18	100	-	40.9'-67.1' SILTY FINE SAND, trace gravel, occ. gravel seams, dense, saturated, gray	18.9	SM	36
65										35
66										34
67										33
68										32
69	SS-16	68.5'-70.0'	16	5-8-8	100	1.1	67.1'-72.5' SILTY CLAY, trace to some sand, trace gravel, stiff, gray	22.5	CL	31
70										30 351.6
71										29
72										28
73										27
74	SS-17	73.5'-75.0'	100+	87-100/6'	80	-	72.5'-79.9' WEATHERED SHALE, gray			26
75										25
76										24
77										23
78										22
79	SS-18	78.5'-80.0'	100+	100/5"	60	-				21
80										20 341.6
81										
82										
83										
84										
85										
86										
87										
88										
89										
90										
Drilling Method: HSA (2-1/4" id)		comments		* Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 79.9'				** ground surface elevation is based upon top of east abutment elevation estimate of 100 and is not surveyed.						
Drill Rig: Mobile B-47				421.6						
Sampling: split-spoon (SS)				421.6						

BORING 2



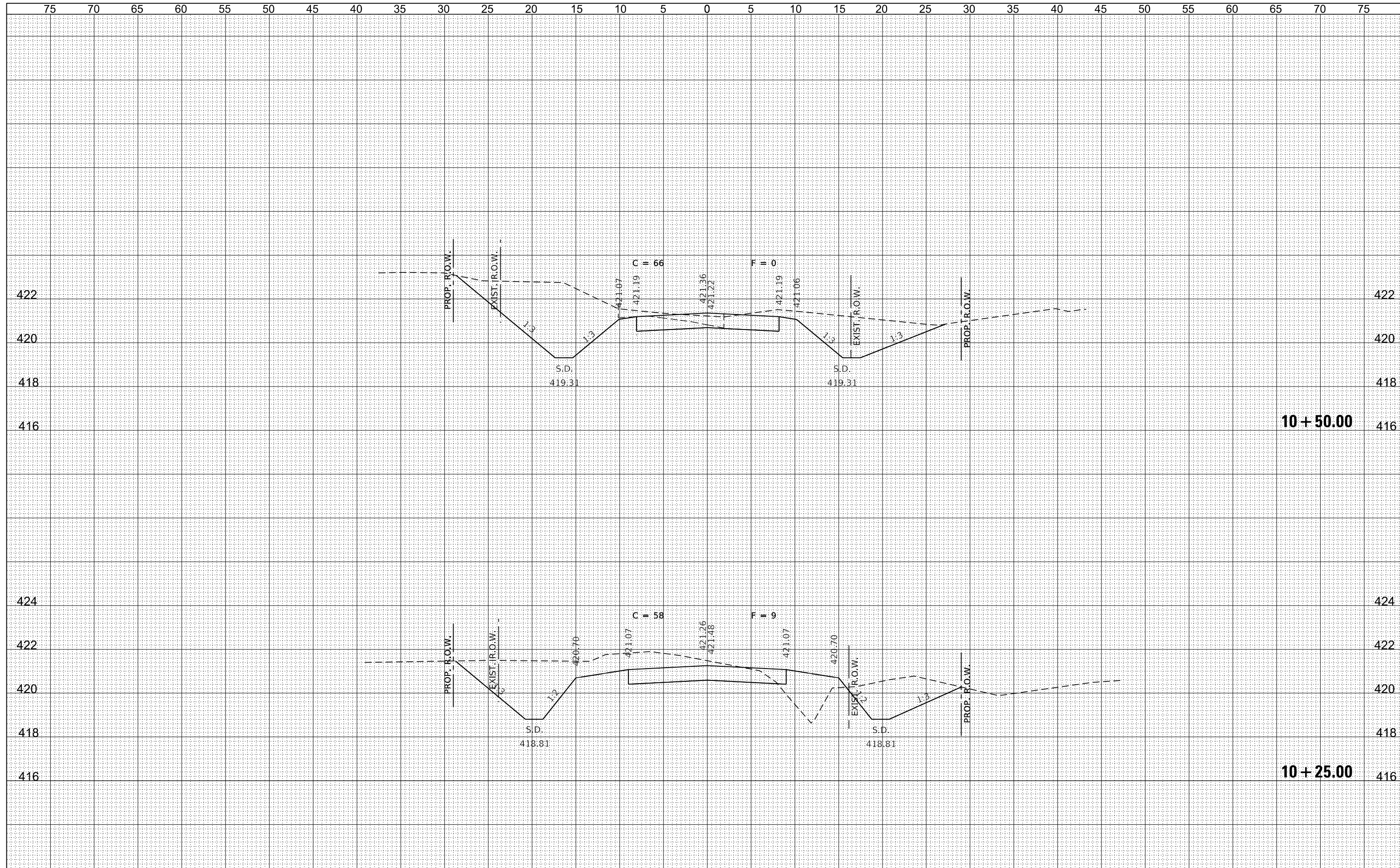
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NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

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

FILE NAME = 200659-shl-xssheets.dgn	USER NAME = tmk	DESIGNED - S.A.A.	REVISED -	STATE OF ILLINOIS WAYNE COUNTY HIGHWAY DEPARTMENT				STATION CROSS SECTIONS				T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.	DRAWN - B.A.M.	REVISED -	259									20-18113-00-BR	WAYNE	18	10	
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E. CORP. 184-009958	CHECKED - L.P.N.	REVISED -	ORCHARD ROAD DISTRICT									CONTRACT NO. 95923				
PLOT SCALE = \$SCALES	DATE - 02/24/2023	REVISED -	SCALE: 5H:2V	SHEET NO. 1 OF 9 SHEETS	STA. 8+00.00	TO STA. 8+50.00	ILLINOIS FED. AID PROJECT									

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

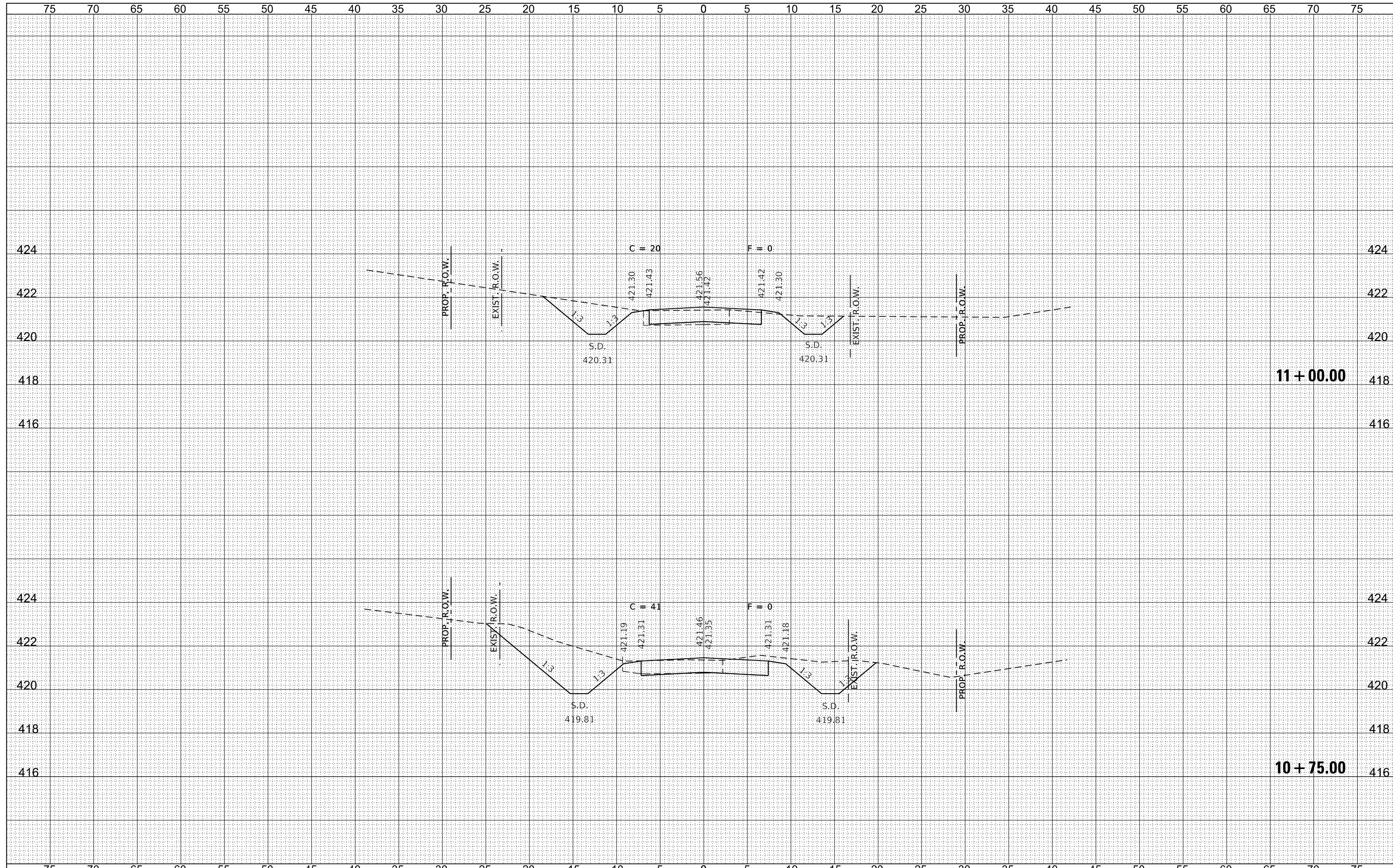
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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED



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HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORP. 184.000958	PLOT SCALE = \$SCALES	DRAWN - B.A.M.	REVISED -		259	20-18113-00-BR	WAYNE	18	14			
PLOT DATE = 2/24/2023	DATE - 02/24/2023	CHECKED - I.P.N.	REVISED -		OCHARD ROAD DISTRICT			CONTRACT NO. 95923				
		DATE - 02/24/2023	REVISED -		SCALE: 5H:2V	SHEET NO. 5 OF 9 SHEETS	STA. 10+25.00 TO STA. 10+50.00	ILLINOIS FED. AID PROJECT				

BY	DATE

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



FILE NAME = 200659-ohi-ssheets.dgn
 USER NAME = tmmk
 DESIGNED - S.A.A.
 DRAWN - B.A.M.
 CHECKED - L.P.N.
 DATE - 02/24/2023
 PLOT SCALE = \$SCALES
 PLOT DATE = 2/24/2023

DESIGNED - S.A.A.
 DRAWN - B.A.M.
 CHECKED - L.P.N.
 DATE - 02/24/2023
 REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 WAYNE COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V
 SHEET NO. 6 OF 9 SHEETS
 STA. 10+75.00 TO STA. 11+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
259	20-18113-00-BR	WAYNE	18	15
ORCHARD ROAD DISTRICT			CONTRACT NO. 95923	
ILLINOIS FED. AID PROJECT				

