

DEPARTMENT OF TRANSPORTATION

PROPOSED

HIGHWAY PLANS

F.A.P ROUTE 778 (IL 34) SECTION 4CR-1

PROJECT STP-L2IE(882) **BOX CULVERT REPLACEMENT**

HARDIN COUNTY

C-99-071-18

GALLATIN

4CR-1 HARDIN 12 CONTRACT NO. 78652

D-99-041-18





STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION REGION FIVE ENGINEER

> PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3 - 5

TRAFFIC DATA

FOR INDEX OF SHEETS, SEE SHEET NO. 2

SN 035-7022 (E) 2017 ADT = 1700 WITH 28% TRUCKS SPEED LIMIT: 55 MPH

TOWNSHIP

HARROD

DESIGN DESIGNATION : N/A

COORDINATE SYSTEM: EAST ZONE

POSTED SPEED: 55 MPH

0

0

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER: DAVID PICHE PROJECT DESIGNER: DAVID WILSON REPLACEMENT LOCATION SN 035-7022 (E) SN 035-7031 (P) IL 34 OVER DITCH

SALINE

COUNTY

GROSS LENGTH = 30 FT. NET LENGTH = 30 FT.

CONTRACT NO. 78652

GENERAL NOTES

- 1) AT ALL LOCATIONS WHERE EXISTING HOT-MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT-MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.
- 2) A CALCIUM CHLORIDE ACCELERATOR WILL BE ALLOWED ONLY FOR THE PCC PAVEMENT, 10".
- 3) REMOVAL OF EXISTING AGGREGATE SHOULDERS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- 4) 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 WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.

COMMITMENTS

NO COMMITMENTS AS OF 05/10/2019

STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-09	PAVEMENT JOINTS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 24, 2W, 15" TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS \geq 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

INDEX OF SHEETS

1	COVER SHEET
2	GENERAL NOTES, COMMITMENTS, INDEX OF SHEETS, STANDARDS, AND SIGNATURE SHEET
3-5	SUMMARY OF QUANTITIES
6	SCHEDULES
7	GENERAL PLAN SN 035-7031 (P)
8	DETAIL AND FINAL SECTION SN 035-7031 (P)
9	LIMITS OF POROUS GRANULAR EMBANKMENT AND SECTION WITHIN PAVEMENT REMOVAL SN 035-7031 (P)
10-11	CAST IN PLACE APRON END SECTION DETAILS SN 035 7031 (P)
12	DISTRICT STANDARDS

Prepared By: /

TRICT STUDIES & PLANS ENGINEER

Examined By:

ISTRICT LAND ACQUISITION ENGINEE

Examined By:

DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By:

STRICT OPERATIONS ENGINEER

Examined By:

DISTRICT PROJECT IMPLEMENTATION ENGINEE

Examined By:

DISTRICE CONSTRUCTION ENGINEER

Examined By:

DISTRICT MATERIALS ENGINEER

	USER NAME = WILSONDA	DESIGNED	REVISED -
1		DRAWN	REVISED -
	PLOT SCALE = 100.0000 1 / in.	CHECKED	REVISED
	PLOT DATE = 4/24/2019	DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS,
STANDARDS, AND SIGNATURE SHEET

SHEET ___ OF ___ SHEETS STA. ______

 FA.P. RTE.
 SECTION
 COUNTY SHEETS NO.
 TOTAL SHEETS NO.

 778
 4CR-1
 HARDIN 12
 2

 CONTRACT NO. 78652

SUMMARY OF QUANTITIES

	•		TOOTE.	12 37
			FUNDING:	80% FED / 20% STATE
			LOCATION:	RURAL
CODE	TTELL DECOMPTON		TOTAL	ROADWAY
NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	0004
		<u> </u>		
20200100	EARTH EXCAVATION	CU YD	201	201
20700220	POROUS GRANULAR EMBANKMENT	CU YD	118	118
25000200	SEEDING, CLASS 2	ACRE	0.25	0.25
35000400	AUTROCEAL FERTULTER AUTRICALT	POUND	23	23
25000400	NITROGEN FERTILIZER NUTRIENT	POUND		23
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	23	23
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	23	23
25000700	AGRICULTURAL GROUND LIMESTONE	TON	0.50	0.50
25100630	EROSION CONTROL BLANKET	SQ YD	72	72
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	25	25
28000400	PERIMETER EROSION BARRIER	FOOT	205	205
		60.40		
28100107	STONE RIPRAP, CLASS A4	SQ YD	48	48
28200200	FILTER FABRIC	SQ YD	48	48

USER NAME = WILSONDA	DESIGNED -	REVISED -
	DRAWN +	REVISED -
PLOT SCALE = 100.0000 1/ in	CHECKED -	REVISED
PLOT DATE = 4/24/2019	DATE -	REVISED -

	SUMMARY	OF QUA	ANTITIES	
EET	OF	SHEETS	STA	TO STA

COUNTY:

ROUTE:

Hardin CO

IL 34

P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8	4CR-1	HARDIN	12	3
		CONTRACT	NO. 78	3652
	HILIMORE LEED, AT	D DROJECT		

SUMMARY OF QUANTITIES - CONT

	· · · · · · · · · · · · · · · · · · ·		1,0016.	
			FUNDING:	80% FED / 20% STATE
			LOCATION:	RURAL
CODE	ITEM DESCRIPTION	UNIT	TOTAL	ROADWAY
NUMBER	TIEM DESCRIPTION	ONLI	QUANTITY	0004
42000060	WELDED WIRE REINFORCEMENT	SQ YD	80	80
				-
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	80	80
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	18	18
44000100	PAVEMENT REMOVAL	SQ YD	98	98
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	15	15
50102400	CONCRETE REMOVAL	CU YD	32	32
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2
54010504	PRECAST CONCRETE BOX CULVERTS 5' X 4'	FOOT	49	49
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	53	53
67100100	MOBILIZATION	L SUM	1	1
07100100	PIODILIZATION	L 30/4	*	u.es
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	3	3
4				
	1			

USER NAME - WILSONDA	DESIGNED -	REVISED
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	REVISED
PLOT DATE = 4/24/2019	DATE -	REVISED -

	-					F.A.P. RTE	SECTION
	20	MMARY	OF QUA	ANTITIES		778	4CR-1
_	,	4.00		7000	45-4-56-7	1	
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED.

Hardin CO

IL 34

COUNTY:

ROUTE:

SUMMARY OF QUANTITIES - CONT

ITEM DESCRIPTION

	ROUTE:	IL 34
	FUNDING:	80% FED / 20% STATE
	LOCATION:	RURAL
UNIT	TOTAL	ROADWAY
ONIT	QUANTITY	0004
CAL DA	34	34
FOOT	70	70
SQ YD	53	53
L SUM	1	1
		The state of the s

Hardin CO

COUNTY:

* SPECIALTY ITEM

CODE

NUMBER

70107025

78001110

X0900064

X7011800

CHANGEABLE MESSAGE SIGN

PAINT PAVEMENT MARKING - LINE 4"

MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES

TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21

 USER NAME
 = WILSONDA
 DESIGNED
 REVISED

 DRAWN
 REVISED

 PLOT SCALE
 = 100.0000 ' / in.
 CHECKED
 REVISED

 PLOT DATE
 = 5/6/2019
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

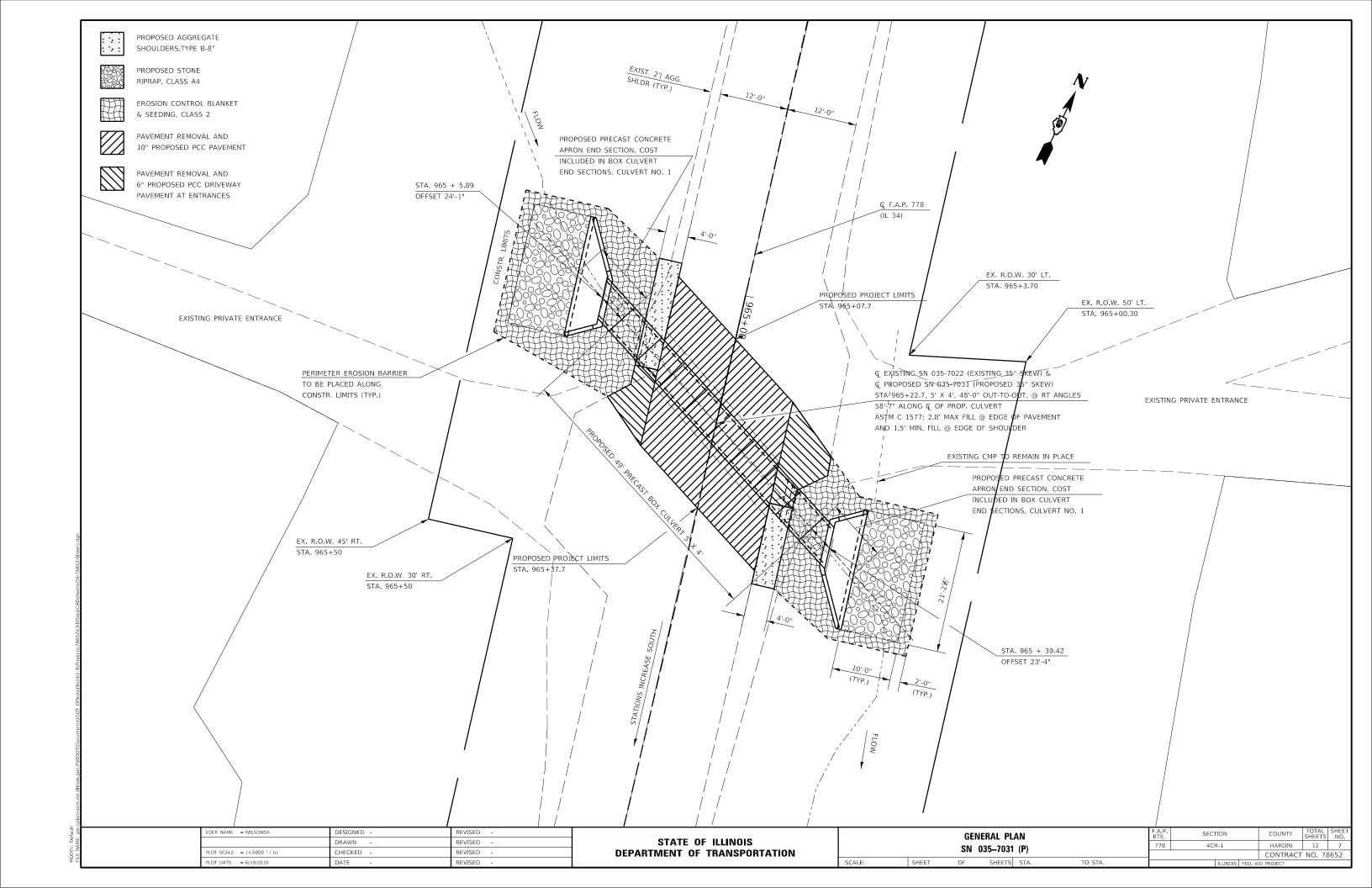
	PAVING SCHEDULE									
STATION		DEMOV		PAVEMENT REMOVAL	PORTLAND CEMENT CONCRETE PAVEMENT, 10"	WELDED WIRE REINF.	AGGREGATE SHOULDERS, TYPE B - 8"	PCC DRIVEWAY PAVEMENT, 6"		
			S	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD		
965 + 07.7	LT	то	965 + 37.7	LT		40	40	40	8	
965 + 07.7	RT	то	965 + 37.7	RT		40	40	40	6	
965 + 15.9	LT	ТО	965 + 29.4	LT		7				7
965 + 16.2	RT	то	965 + 34.1	RT		11				11
	Т	OTAL	S			98	80	80	14	18

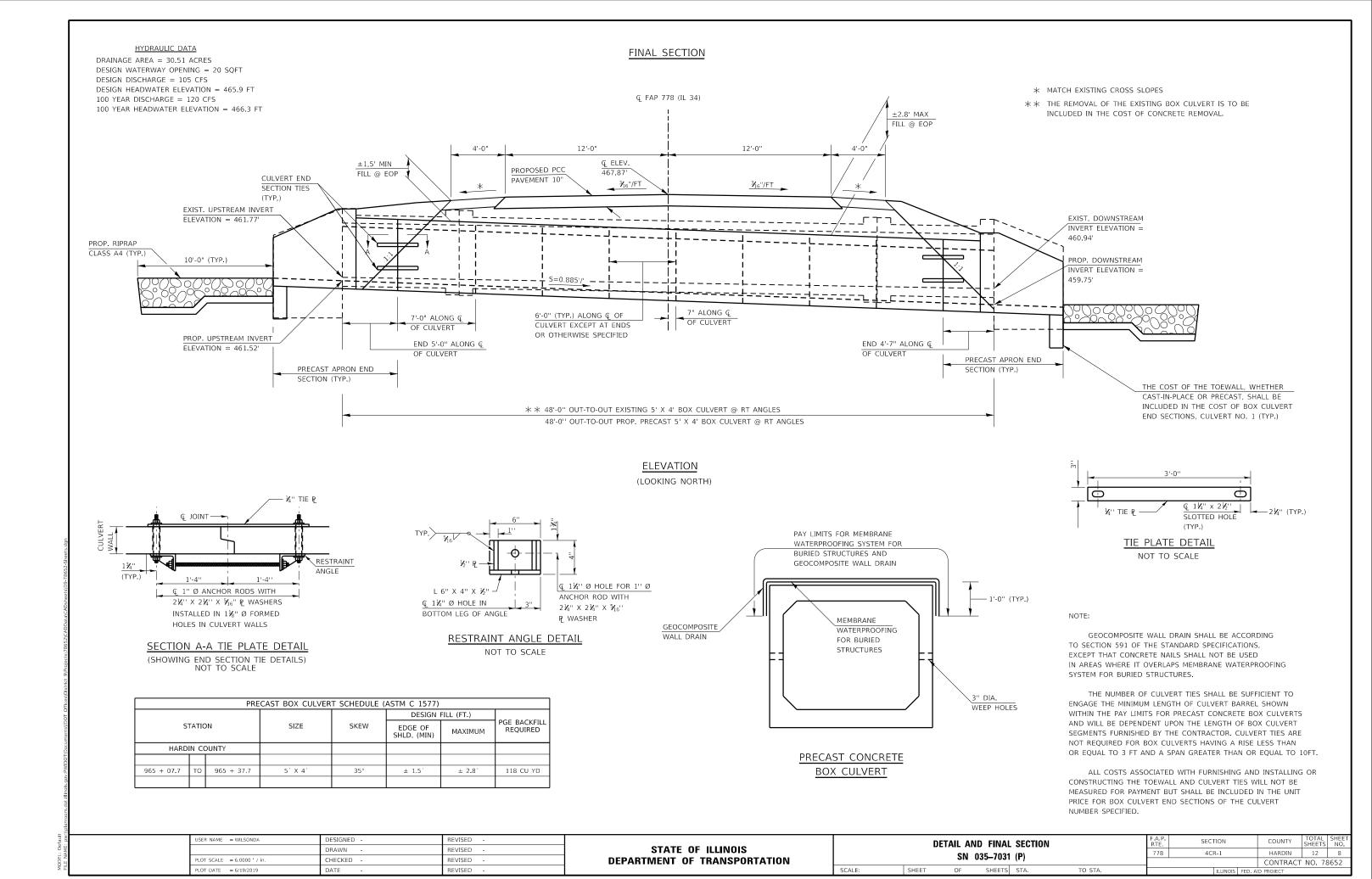
				P	AVEMENT MARKING SCH	EDULE			
STATION						PAINT PAVEMENT MARKING - LINE 4"			
					NOTES	SOLID WHITE	YELLOW SKIP DASH		
				FOOT		FOOT			
965 + 07.7	RT	то	965 + 37.7	RT	8	30			
965 + 07.7		то	965 + 37.7		ALONG CENTERLINE		10		
965 + 07.7	LT	то	965 + 37.7	LT		30			
SUBTOTAL				60	10				
TOTAL					}	70			

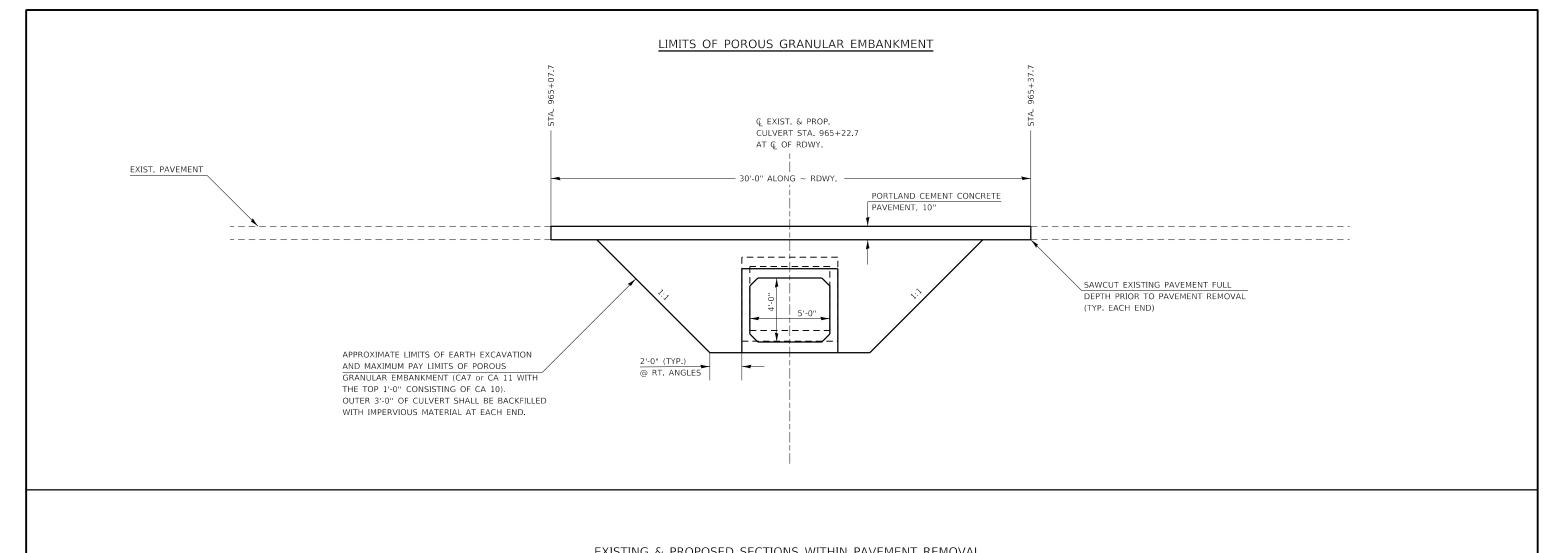
	USER NAME - WILSONDA	DESIGNED	REVISED -
ļ		DRAWN -	REVISED
	PLOT SCALE = 100.0000 / in	CHECKED -	REVISED -
	PLOT DATE = 4/24/2019	DATE -	REVISED -

SCALE

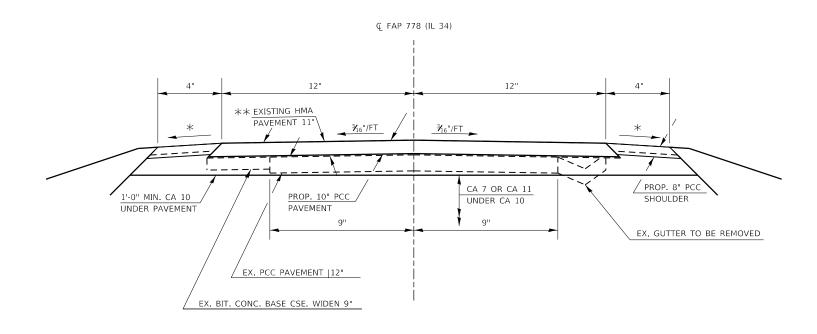
		F.A.P. RTE.	SECTION	COUNTY TOTAL SHEET SHEET NO.		
SCHEDULES		778	4CR-I HARDIN		12	6
		T NO. 78	3652			
SHEET OF SHEETS STA.	TO STA	ILLINOIS FED. AID PROJECT				







EXISTING & PROPOSED SECTIONS WITHIN PAVEMENT REMOVAL



* MATCH EXISTING CROSS SLOPES

** THE COST TO REMOVE THE EXISTING 29'-4" x 8'-2" x 8" REINFORCED STRUCTURAL SLAB OVER THE BOX IS INCLUDED IN PAVEMENT REMOVAL.

REMOVAL OF GUTTER IS INCLUDED IN PAVEMENT REMOVAL

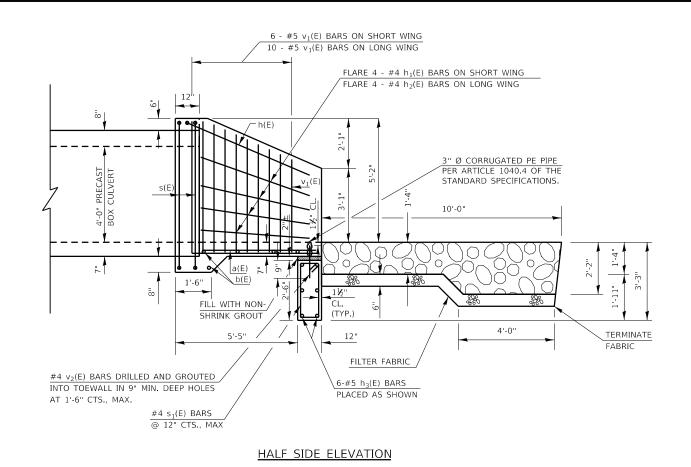
USER NAME = WILSONDA	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 6.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 6/19/2019	DATE -	REVISED -	ı

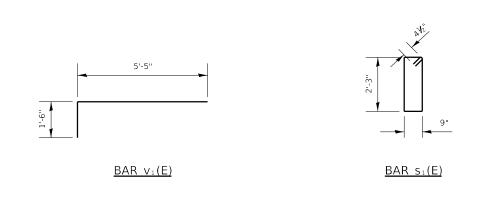
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

LIMITS OF POROUS GRANULAR EMBANKMENT AND SECTION WITHIN PAVEMENT REMOVAL SN 035-7031 (F					
	SHEET	OF	SHEETS	STA.	TO STA.

SCALE:

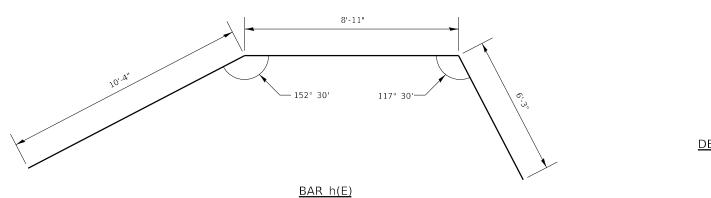
SECTION 4CR-1 HARDIN 12 9 CONTRACT NO. 78652





FOR INFORMATION ONLY

AS NEEDED FOR THE FABRICATION OF THE PRECAST APRON END SECTION



DESIGN STRESSES

fy = 60,000 PSI

fc' = 3,500 PSI

WORK THIS SHEET WITH SHEET 11 OF 12

BILL OF MATERIAL - 2 APRONS

7'-11"

BAR s(E)

BAR	NO.	SIZE	LENGTH	SHAPE	
a(E)	28	#4	4'-9''		
b(E)	10	#4	20'-10''		
h(E)	2	#4	25'-6"		
h ₁ (E)	8	#4	6'-3"		
h ₂ (E)	8	#4	10'-4''		
h₃(E)	6	#5	20'-10"		
s(E)	4	#4	28'-9"		
s ₁ (E)	42	#4	6'-9"		
∨ ₁ (E)	32	32 #5			
v ₂ (E)	28	#4	1'-5"		
CONCRETE BOX CULVERTS			CU. YD.	12.9	
REINFORCEMENT BARS, EPOXY COATED			POUND	1010	

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

* CUT OR BEND TO FIT

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706.

EXPOSED EDGES SHALL BE BEVELED ¾"

CAST-IN-PLACE

APRON END SECTION DETAILS

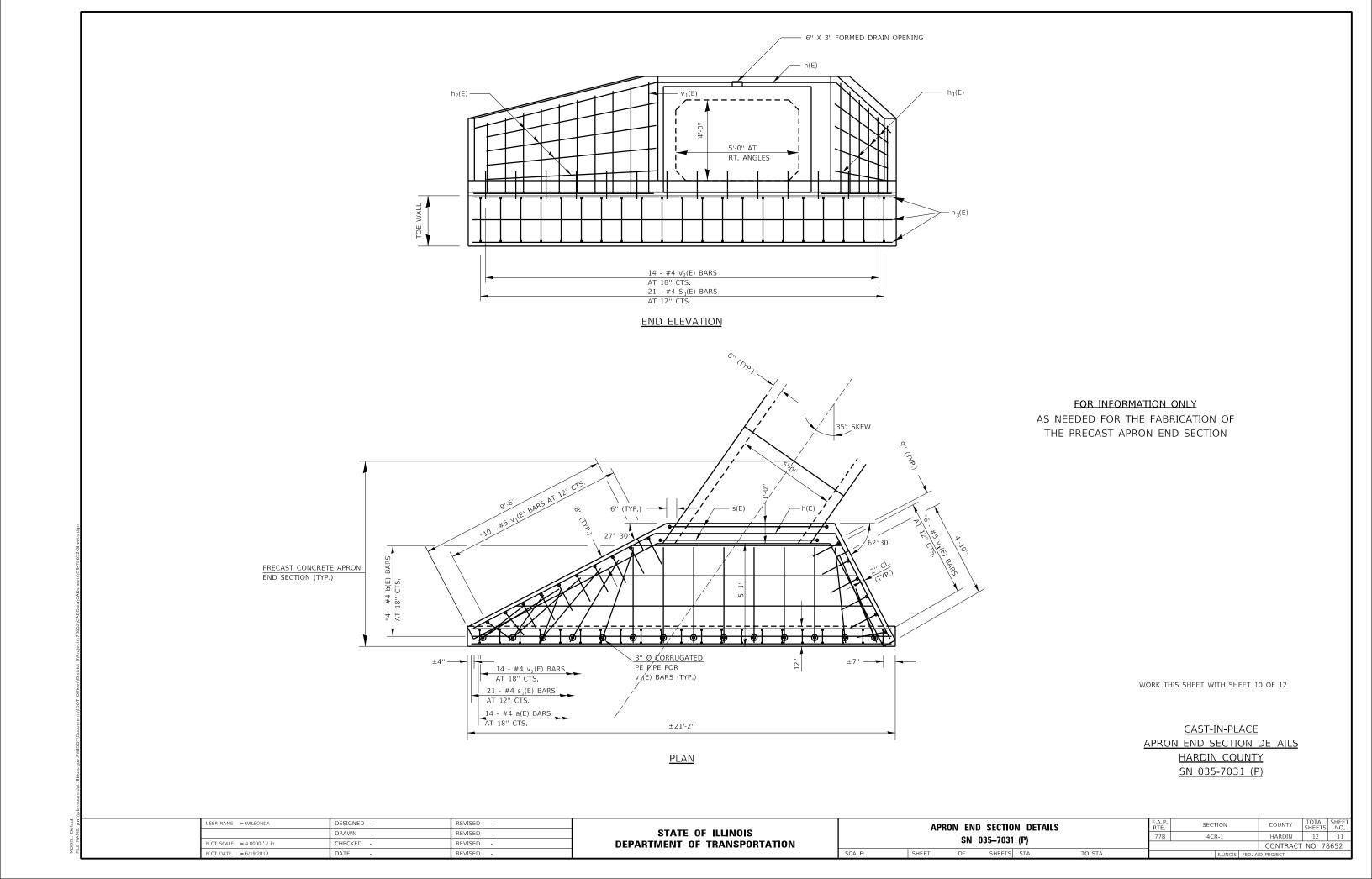
HARDIN COUNTY

SN 035-7031 (P)

SECTION 4CR-1

HARDIN 12 10 CONTRACT NO. 78652

USER NAME = WILSONDA	DESIGNED -	REVISED -		APRON END SECTION DETAILS					RTE
DRAWN -		REVISED -	STATE OF ILLINOIS						778
PLOT SCALE = 4.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	SN 035-7031					
PLOT DATE = 6/19/2019	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.	



SEEDING & MULCHING 10 FT. MIN CONST LIMITS (TYP) INDICATES LIMITS OF SEEDING & MULCHING **GENERAL NOTES** IN GENERAL, ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION OPERATIONS SHALL BE SEEDED AND MULCHED UPON COMPLETION OF ALL GRADING OPERATIONS. ON DETOUR ROADS, SLOPES SHALL BE SEEDED IMMEDIATELY UPON COMPLETION OF ANY GIVEN STAGE GRADING. TEMPORARY SEEDING SHALL BE CLASS 7. FERTILIZER NUTRIENTS SHALL BE APPLIED TO ALL SEEDED AREAS. LIMESTONE SHALL BE APPLIED TO ALL AREAS OF FINAL SEEDING. THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR ROAD AND BRIDGE CONSTRUCTION. REVISIONS REDRAWN 2-15-89 REVISED 8-15-99 REVISED 5-27-08 REVISED 5-16-13 SECTIONS 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS SPECIFIED HEREIN OR AS NOTED IN THE SPECIAL PROVISIONS. 24' (7.2 m) PCC PAVEMENT OVER BOX CULVERT 3 (75) CL., WEN T & 8 (200) 3/2 (90) CL., WEN T > 8 (200) SECTION A-A STYPICAL TELEFORMERS TRANSVERSE CONSTRUCTION JOINT OF REEDED PER STANDARD SPECIFICATIONS TRANSVERSE CONTRACTION JOINTS AT ENDS OF PATCH AND MAXIMUM 40" SPACING

ALL DIMENSIONS ARE IN INCHES MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS
| DRAWN | 11-9-17 |
| REVISED | 7-23-18 |

STD. 9-25

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TOTAL SHEET SHEETS NO. SECTION COUNTY **DISTRICT STANDARDS** 4CR-1 HARDIN 12 12 CONTRACT NO. 78652 OF __ SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT

A+J

PLAN

SHEET __

JSER NAME - WILSONDA

PLOT SCALE = 100.0000 ' / in

DESIGNED

CHECKED

DRAWN

DATE

REVISED

REVISED

REVISED