

FOR INDEX OF SHEETS SEE SHEET NO. 3
 FOR SUMMARY OF QUANTITIES SEE SHEET NOS. 4-8
 DESIGN DESIGNATION: N/A
 COORDINATE SYSTEM: ILLINOIS COORDINATE SYSTEM,
 EAST ZONE

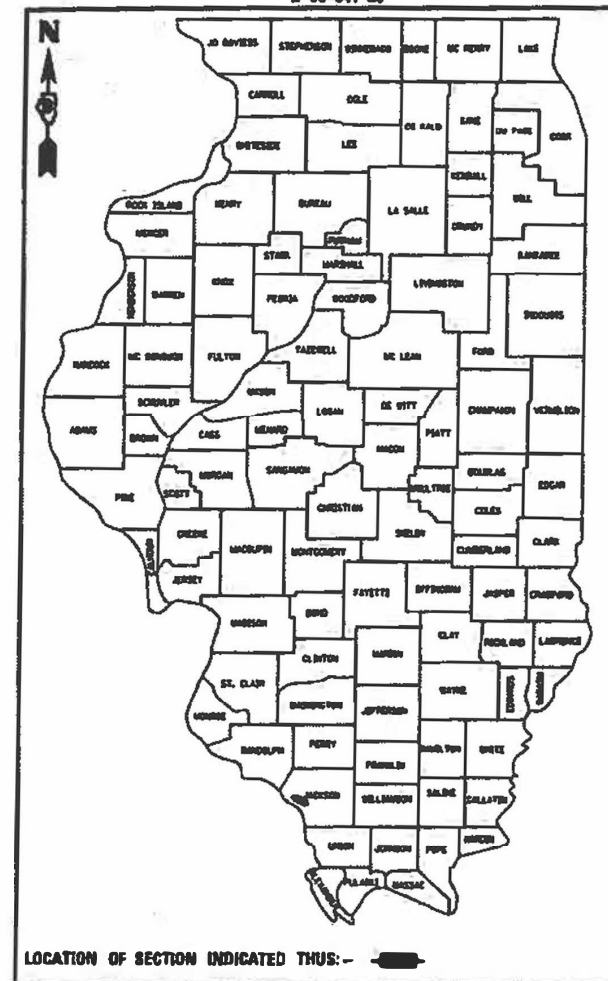
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 312 (IL 3)
 SECTION 123B-5;123B-6;123B-7
 PROJECT NHPP-HPXS(165)
 BOX CULVERT REPLACEMENTS
 JACKSON COUNTY
 C-99-063-20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5, 123B-6, 123B-7	JACKSON	101*	1
		ILLINOIS	CONTRACT NO. 78790	

* 101 + 1 = 102 TOTAL SHEETS

D-99-041-20



TRAFFIC DATA

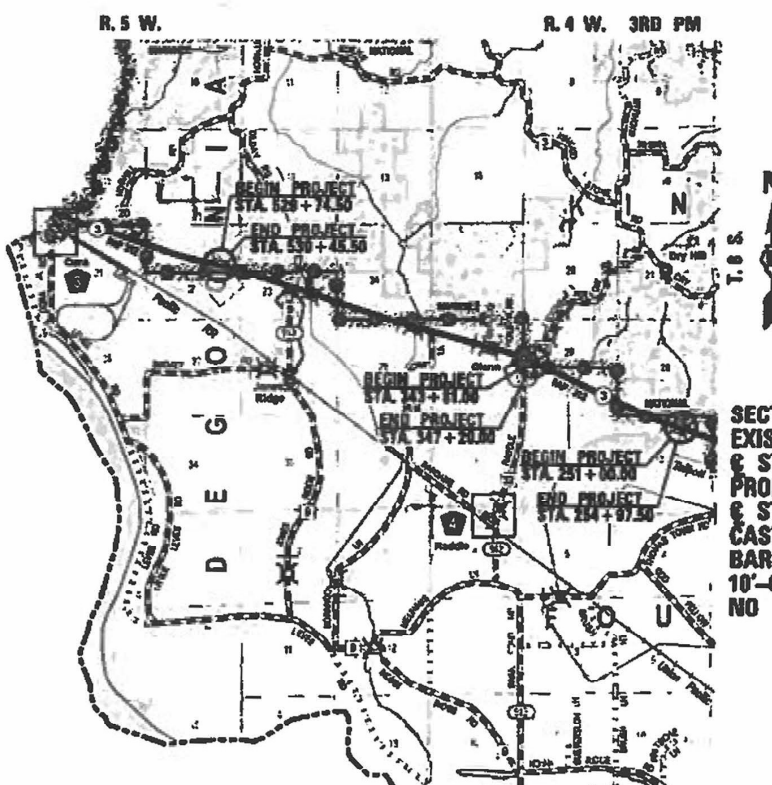
IL ROUTE 3
 EXISTING ADT = 2,300 (2017)
 %SU = 80 (3.48%)
 %MU = 300 (13.04%)
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL
 POSTED SPEED: 65 MPH

TOWNSHIP
 DEGOGNIA & KINKAID

SECTION 123B-5
 EXISTING SN 039-2013
 & STRUCTURE STA. 530+10
 PROPOSED SN 039-7126
 & STRUCTURE STA. 530+10
 PRECAST SINGLE BARREL
 BOX CULVERT
 17'-0" W X 6'-0" H X 60'-0"
 WITH CAST IN PLACE
 END SECTIONS
 30 DEGREE SKEW RT. FWD.

SECTION 123B-6
 EXISTING SN 039-2014
 & STRUCTURE STA. 345+42
 PROPOSED SN 039-2034
 & STRUCTURE STA. 345+42
 CAST IN PLACE DOUBLE
 BARREL BOX CULVERT
 9'-0" W X 8'-0" H X 47'-5 1/2"
 25 DEGREE SKEW RT. FWD.

SECTION 123B-7
 EXISTING SN 039-2015
 & STRUCTURE STA. 252+70
 PROPOSED SN 039-2035
 & STRUCTURE STA. 252+70
 CAST IN PLACE DOUBLE
 BARREL BOX CULVERT
 10'-0" W X 10'-0" H X 43'-0"
 NO SKEW



LOCATION MAP
 (NOT TO SCALE)

GROSS LENGTH = 71.00 FT. = 0.013 MILE (SECTION 123B-5)
 GROSS LENGTH = 304.00 FT. = 0.058 MILE (SECTION 123B-6)
 GROSS LENGTH = 397.50 FT. = 0.075 MILE (SECTION 123B-7)
 NET LENGTH = 772.50 FT. = 0.146 MILE (ALL THREE SECTIONS)

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

PROJECT ENGINEER: EHREN KIRBY

CONTRACT NO. 78790



Veenstra & Kimm, Inc.
 Springfield, IL. Phone: (217)544-8033
 IL Design Firm No. 184-001939



3/13/23
 Christopher P. Hollman
 EXPIRATION: 11/30/2023

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUBMITTED March 15 20 23
Ken H. Bran
 REGION FIVE ENGINEER

May 12, 2023 [Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

May 12, 2023 [Signature]
 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

MODEL AND/OR DRAWING
FILE NAME: SE1614



Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5; 123B-6; 123B-7	JACKSON	101	2
ILLINOIS FED. AID PROJ. CONTRACT NO. 78790				

PREPARED BY: Charles Stein
DISTRICT STUDIES AND PLANS ENGINEER

EXAMINED BY: Nancy Hill
DISTRICT LAND ACQUISITION ENGINEER

EXAMINED BY: Carm Nelson
DISTRICT PROGRAM DEVELOPMENT ENGINEER

EXAMINED BY: [Signature]
DISTRICT OPERATIONS ENGINEER

EXAMINED BY: Doris J. [Signature]
DISTRICT PROJECT IMPLEMENTATION ENGINEER

EXAMINED BY: Doris J. [Signature]
DISTRICT CONSTRUCTION ENGINEER

EXAMINED BY: Ann Hays
DISTRICT MATERIALS ENGINEER

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86-94	CROSS SECTIONS
95-97	CROSS SECTIONS (PRIVATE ENTRANCE)
98-101	DISTRICT 9 STANDARDS, SEEDING AND MULCH, STEP CONSTRUCTION ON EXISTING FILL, TEMPORARY DITCH CHECKS 24' PCC PAVEMENT

GENERAL NOTES

- 1.) THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHALL BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
- 2.) TO RETAIN THE TEMPORARY CONCRETE BARRIER FOR STAGE II TRAFFIC, THE CONTRACTOR SHALL HAVE THE OPTION OF USING EITHER 2 (#5) BAR SPLICER OR 2 CAST-IN-PLACE INSERTS AT 6" CENTERS AT THE MID-DEPTH OF THE PCC PAVEMENT. THE BAR SPLICERS OR INSERTS SHALL HAVE A MINIMUM PROOF LOAD OF 5,000 POUNDS. ALONG THE ANCHORING DEVICES, THE CONTRACTOR SHALL PROVIDE ONE STEEL RETAINING PLATE AND 1/2" DIAMETER BOLT AND WASHERS EVERY 6 FEET AS SHOWN ON DETAIL II ON STANDARD R-27 FROM STA. 345+07 TO STA. 345+76 (SECTION 123B-6) AND STA. 252+41.5 TO STA. 252+98.5 (SECTION 123B-7) FOR STAGE II TRAFFIC. THIS WORK SHALL BE INCLUDED IN THE COST OF TEMPORARY CONCRETE BARRIER. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED.
- 3.) THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT AND THE SHOULDER SLOPES SHALL NOT EXCEED 10%. THE SHOULDER ON THE OUTSIDE OF THE SUPERELEVATED CURVES SHALL BE FLATTENED ACCORDINGLY.
- 4.) AT LOCATIONS WHERE THE PROPOSED HOT-MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT-MIX OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THE JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.

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

ALL AGGREGATE MATERIAL	2.05 TON/CU. YD.
ALL HOT-MIX ASPHALT	2.016 TON/CU. YD.
RIPRAP	1.5 TON/CU. YD.

COMMITMENTS

- 1.) TREES EQUAL TO OR GREATER THAN 3 INCHES IN DIAMETER SHALL NOT BE REMOVED BETWEEN APRIL 1 AND SEPTEMBER 30 OF ANY GIVEN YEAR.
- 2.) SN 039-2035 - A DRAINAGE DITCH IS TO BE CONSTRUCTED ALONG THE WEST SIDE OF MATTHEW KORANDO'S DRIVEWAY WITHIN THE LIMITS OF THE RELOCATION OF HIS DRIVEWAY FOR THE PURPOSE OF PREVENTING RUNOFF FROM HIS FIELD FROM CROSSING HIS DRIVEWAY. THE DITCH SHALL BE AS DEPICTED WITHIN THE CONTRACT PLANS.

HMA MIXTURE REQUIREMENTS

LOCATIONS	HMA SHOULDERS 8", 10" (LOWER LIFT)	HMA SHOULDERS 8", 10" (TOP LIFT)
MIXTURE USES:	HMA BINDER COURSE, IL-19.0, N70	HMA SURFACE COURSE, MIX D, N70
AB/PG	PG64-22	PG64-22
DESIGN AIR VOIDS	4.0%, 70 GYRATION DESIGN	4.0%, 70 GYRATION DESIGN
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL-19.0mm	IL-9.5mm
FRICTION AGGREGATE	NONE	MIX D
MIXTURE WEIGHT	112 LBS./SQ. YD./INCH	112 LBS./SQ. YD./INCH
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA
SUBLOT SIZE	3000	3000
MATERIAL TRANSFER DEVICE	NO	NO

LIFT REQUIREMENTS

8 INCH SHOULDERS:	10 INCH SHOULDERS:
1 1/2" SURFACE COURSE	2" SURFACE COURSE
2 1/2" BINDER COURSE	4" BINDER COURSE
4" BINDER COURSE	4" BINDER COURSE

STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-10	PAVEMENT JOINTS
420701-03	PAVEMENT WELDED WIRE FABRIC
515001-04	NAME PLATE FOR BRIDGES
542401-04	METAL FLARED END SECTIONS FOR PIPE CULVERTS
630001-12	STEEL PLATE BEAM GUARDRAIL
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINAL
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24' (600mm) FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720006-04	SIGN PANEL ERECTION DETAILS
725001-01	OBJECT AND TERMINAL MARKERS
728001-01	TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
001006	DECIMAL OF AN INCH AND OF A FOOT
420101-07	24' JOINTED PCC PAVEMENT
631066	TRAFFIC BARRIER TERMINAL, TYPE 14
701326	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH

REV. - MS

MODEL, SHEET NAMES
FILE NAME, SHEETS



USER NAME = \$USERS	DESIGNED - _____	REVISED - _____	
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES, COMMITMENTS & PROJECT SPECIFIC NOTES

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5; 123B-6; 123B-7	JACKSON	101	3
				CONTRACT NO. 78790
ILLINOIS FED. AID PROJECT				

JACKSON
 FAP 312 (IL 3)
 80% FED 20% STATE
 RURAL

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				BOX CULVERT 0010	BOX CULVERT 0010	BOX CULVERT 0010
				SN 039-7126	SN 039-2034	SN 039-2035
20200100	EARTH EXCAVATION	CU YD	750	19	119	612
20400800	FURNISHED EXCAVATION	CU YD	364	60	9	295
20700220	POROUS GRANULAR EMBANKMENT	CU YD	1311	472	414	425
25000210	SEEDING, CLASS 2A	ACRE	1.50	0.10	0.50	0.90
25000350	SEEDING, CLASS 7	ACRE	1.50	0.10	0.50	0.90
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	135	9	45	81
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	135	9	45	81
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	135	9	45	81
25000700	AGRICULTURAL GROUND LIMESTONE	TON	3.0	0.20	1.00	1.80
25100115	MULCH, METHOD 2	ACRE	1.50	0.10	0.50	0.90
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	175	25	50	100
28000400	PERIMETER EROSION BARRIER	FOOT	1315		508	807
28100207	STONE RIPRAP, CLASS A4	TON	32			32
28100209	STONE RIPRAP, CLASS A5	TON	730	131	304	295



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: _____ SHEET NO. 1 OF 5 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5, 123B-6, 123B-7	JACKSON	101	4
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

JACKSON
 FAP 312 (IL 3)
 80% FED 20% STATE
 RURAL

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BOX CULVERT	BOX CULVERT	BOX CULVERT
				0010	0010	0010
				SN 039-7126	SN 039-2034	SN 039-2035
28200200	FILTER FABRIC	SQ YD	687	113	295	279
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	239			239
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	752	30	322	400
42000060	WELDED WIRE REINFORCEMENT	SQ YD	555	190	200	165
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	555	190	200	165
42001300	PROTECTIVE COAT	SQ YD	35		18	17
44000100	PAVEMENT REMOVAL	SQ YD	555	190	200	165
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	4	4		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	64	64		
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	1578		712	866
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1		
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1		1	
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1			1
50105220	PIPE CULVERT REMOVAL	FOOT	92			92



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: _____ SHEET NO. 2 OF 5 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5, 123B-6, 123B-7	JACKSON	101	5
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

JACKSON
 FAP 312 (IL 3)
 80% FED 20% STATE
 RURAL
 CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				BOX CULVERT 0010	BOX CULVERT 0010	BOX CULVERT 0010
				SN 039-7126	SN 039-2034	SN 039-2035
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	1115	554	326	235
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	72700		29390	43310
50800515	BAR SPLICERS	EACH	269		111	158
50900207	STEEL RAILING, TYPE C0-10	FOOT	93		48	45
51500100	NAME PLATES	EACH	3	1	1	1
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	1238		590	648
52200600	GEOTEXTILE RETAINING WALL	SQ FT	846	846		
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2		
54003000	CONCRETE BOX CULVERTS	CU YD	356.5		155.0	201.5
542C0215	PIPE CULVERTS, CLASS C, TYPE 1 10"	FOOT	40			40
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	64			64
542D0235	PIPE CULVERTS, CLASS D, TYPE 1 30"	FOOT	104			104
54262724	METAL FLARED END SECTIONS 24"	EACH	2			2
54262730	METAL FLARED END SECTIONS 30"	EACH	2			2
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	473	224	122	127
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200		100	100

* SPECIALTY ITEM

REV. - MS



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: _____ SHEET NO. 3 OF 5 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5, 123B-6, 123B-7	JACKSON	101	6
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

JACKSON
 FAP 312 (IL 3)
 80% FED 20% STATE
 RURAL
 CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				BOX CULVERT 0010	BOX CULVERT 0010	BOX CULVERT 0010
				SN 039-7126	SN 039-2034	SN 039-2035
63100119	TRAFFIC BARRIER TERMINAL, TYPE 14	EACH	8		4	4
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	8		4	4
63200310	GUARDRAIL REMOVAL	FOOT	842	207	432	203
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	13	9		4
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9	3	3	3
67100100	MOBILIZATION	L SUM	1	0.33	0.33	0.34
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	3	1	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.33	0.33	0.34
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	0.33	0.33	0.34
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	30	10	10	10
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	3	1	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	18	6	6	6
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	420	240	90	90
70400100	TEMPORARY CONCRETE BARRIER	FOOT	837.5	312.5	312.5	212.5
70400125	PINNING TEMPORARY CONCRETE BARRIER	EACH	132	48	42	42
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	525	0	312.5	212.5

* SPECIALTY ITEM

* *

JACKSON
 FAP 312 (IL 3)
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CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				BOX CULVERT 0010	BOX CULVERT 0010	BOX CULVERT 0010
				SN 039-7126	SN 039-2034	SN 039-2035
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	8	4	2	2
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4		2	2
72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	6	2	2	2
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8		4	4
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3508	880	1387	1241
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	1073	241	440	392
* 86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	3	1	1	1
* X7240502	RELOCATE SIGN, SPECIAL	EACH	3			3
X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	473	224	122	127
X1200140	PRECAST CONCRETE BOX CULVERT (SPECIAL)	FOOT	60	60		
X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1		
Z0016702	DETOUR SIGNING	L SUM	1	1		
* Z0054517	ROCK FILL - FOUNDATION	TON	2133	1136	515	482
Ø Z0076600	TRAINEES	HOUR	500	500		
Z0073400	TEMPORARY SUPPORT SYSTEM	EACH	2		2	
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500		

* SPECIALTY ITEM

Ø 0042

REV. - MS



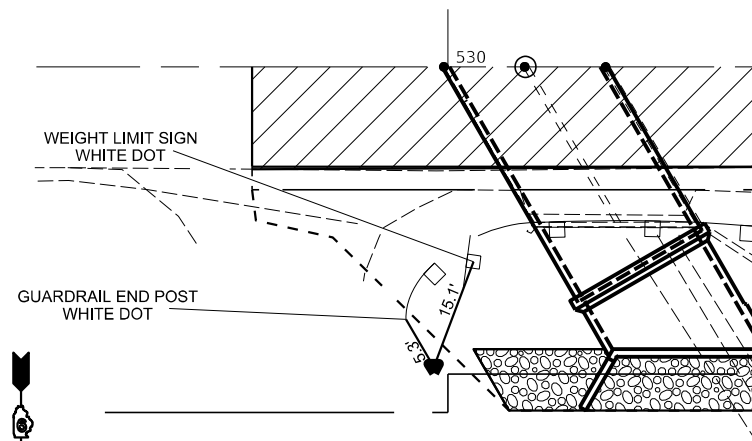
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STATE OF ILLINOIS
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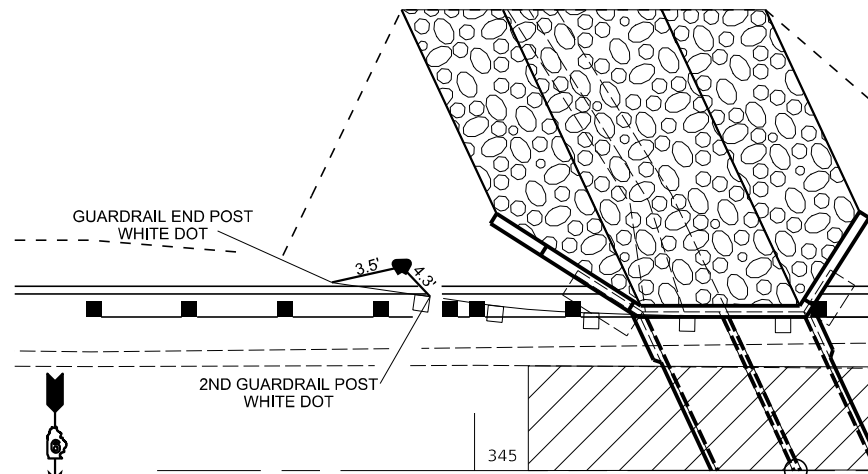
SUMMARY OF QUANTITIES

SCALE: _____ SHEET NO. 5 OF 5 SHEETS STA. _____ TO STA. _____

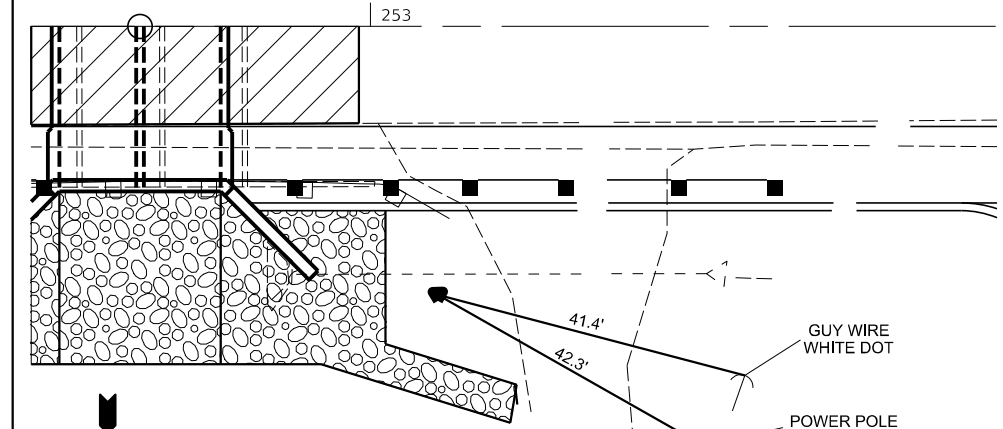
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CONTRACT NO. 78790			ILLINOIS FED. AID PROJECT	



WP VEC1 2013
 IRON PIN W/
 YELLOW IDOT CAP
 38.8' RT STA. 529+99.8
 N 419996.348
 E 2448779.596
 EL. 373.315



WP VEC1 2014
 IRON PIN W/
 YELLOW IDOT CAP
 26.6' LT STA. 344+90.5
 N 414231.195
 E 2466349.409
 EL. 384.819

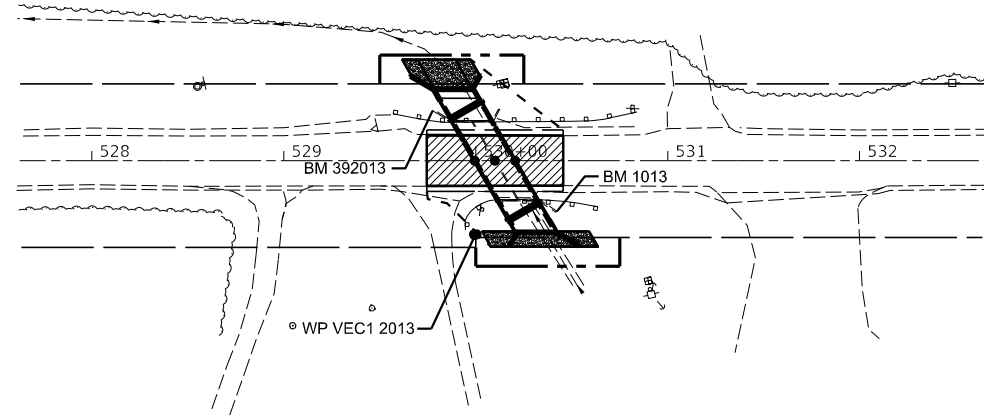


WP 3920151
 IRON PIN W/
 YELLOW IDOT CAP
 34.9' RT STA. 253+08.8
 N 410406.277
 E 2474672.697
 EL. 369.901



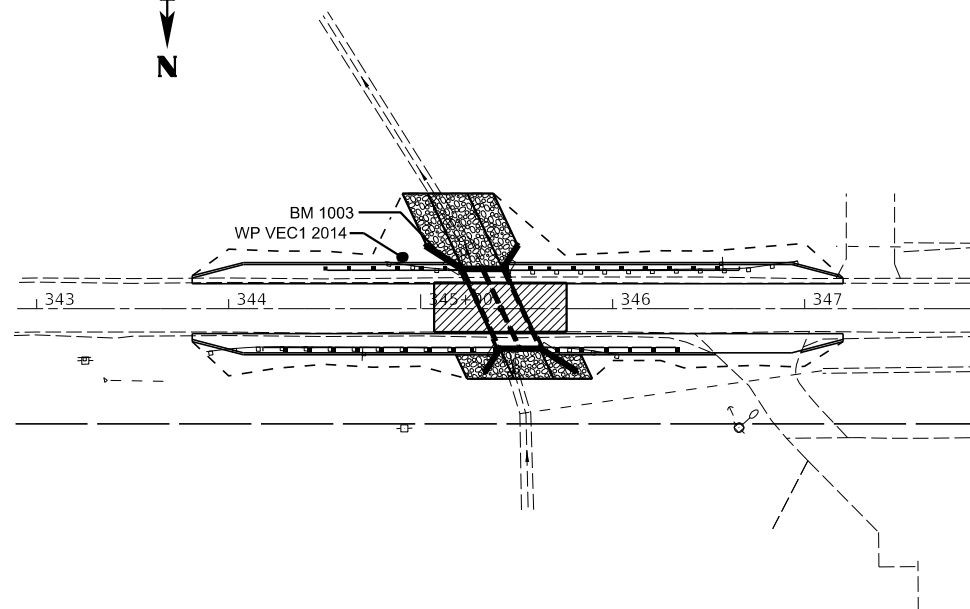
BM 392013 "I" CUT ON THE SOUTHEAST
 HEADWALL OF S.N. 039-2013
 EL. 371.994

BM 1013 "I" CUT ON THE NORTHWEST
 HEADWALL OF S.N. 039-2013
 EL. 372.111



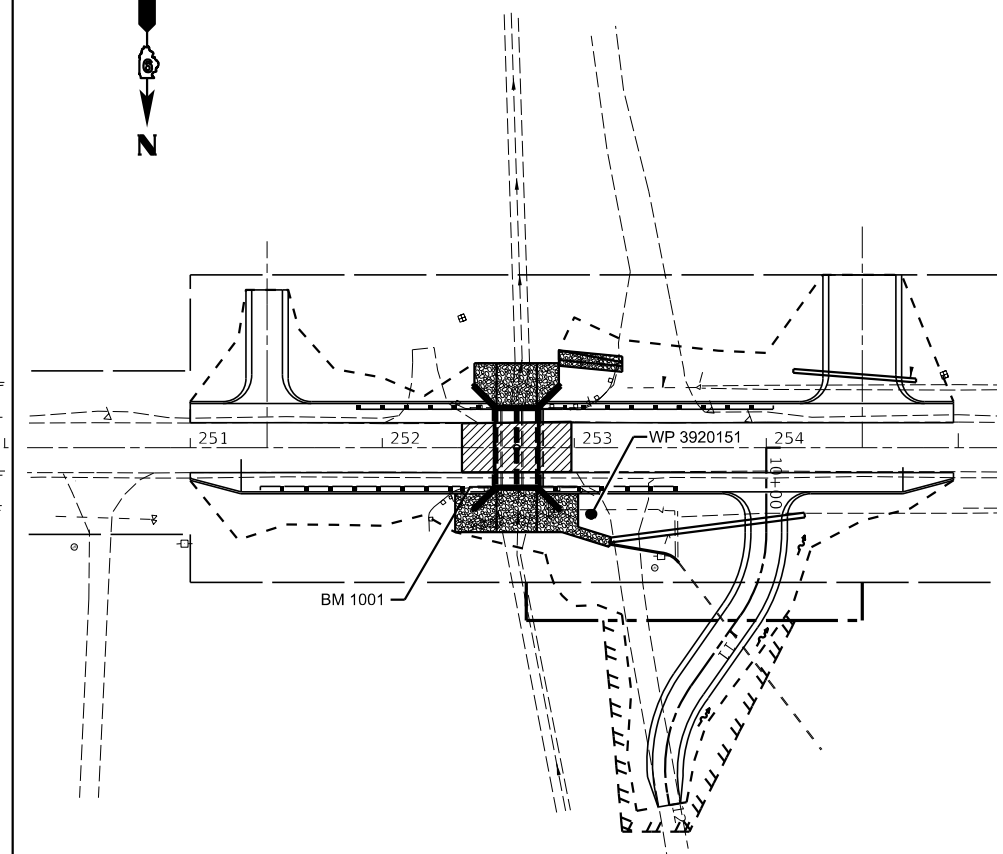
SECTION 123B-5
 SN 039-2013

BM 1003 "I" CUT ON THE SOUTHEAST
 HEADWALL OF S.N. 039-2014
 EL. 384.852

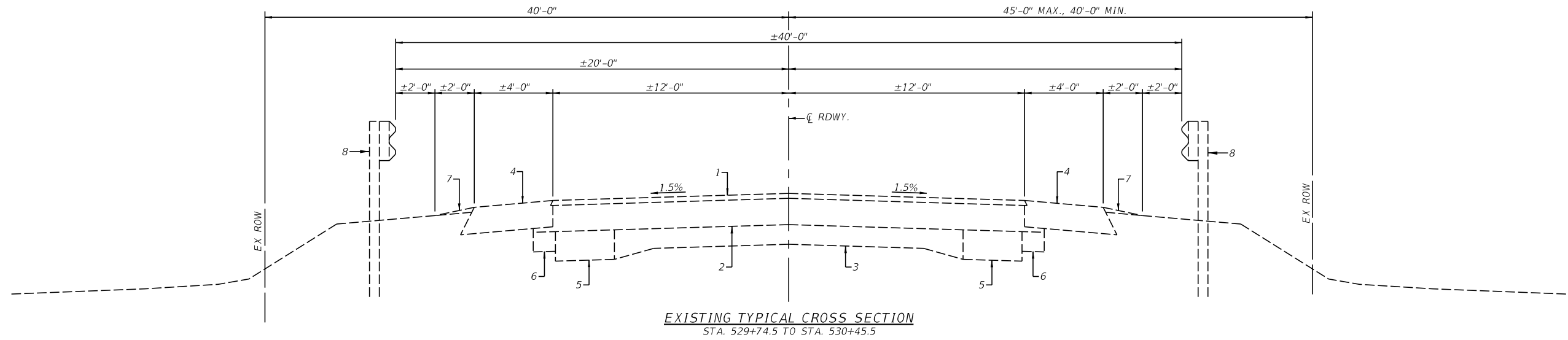


SECTION 123B-6
 SN 039-2014

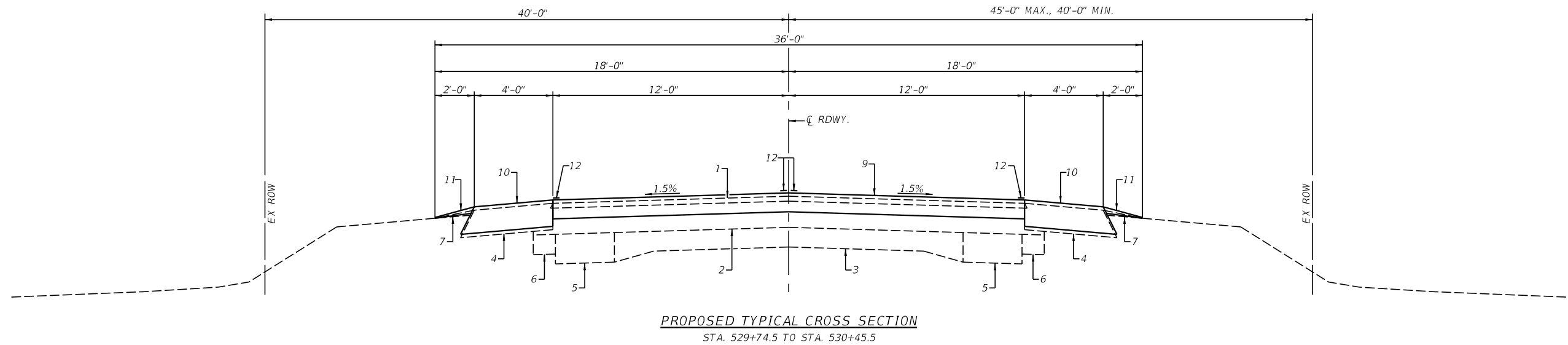
BM 1001 "I" CUT ON THE NORTHEAST
 HEADWALL OF S.N. 039-2015
 EL. 371.801



SECTION 123B-7
 SN 039-2015



EXISTING TYPICAL CROSS SECTION
STA. 529+74.5 TO STA. 530+45.5



PROPOSED TYPICAL CROSS SECTION
STA. 529+74.5 TO STA. 530+45.5

PAVEMENT LEGEND

- 1 - EX HMA SURF CSE ±1½"
- 2 - EX BIT. CONC. PAVEMENT
- 3 - EX HMA SURFACED CONCRETE PAVEMENT
- 4 - EX HMA SHOULDER 8"
- 5 - EX PCC BASE COURSE WIDENING
- 6 - EX BIT. SHOULDER
- 7 - EX AGGREGATE WEDGE
- 8 - EX GUARDRAIL
- 9 - PR PCC PAVEMENT 10" MIN.
- 10 - PR HMA SHOULDER 8"
- 11 - PR AGGREGATE WEDGE
- 12 - PR PAVEMENT MARKING - LINE 4"

USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	10
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

EARTHWORK								
LOCATION	EARTH EXCAVATION	ADJUSTED SHRINKAGE FACTOR	EARTH EXCAVATION (ADJUSTED)	EMBANKMENT	EARTHWORK BALANCE		FURNISHED EXCAVATION	REMARKS
					EXCAVATION REQUIRED TO COMPLETE	EXCESS EXCAVATION		
	CU. YD.	%	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	
STA. 529+74.5 TO STA. 530+45.5	19	25	14	74	0	0	60	
TOTAL	19		14	74	0	0	60	

PORTLAND CEMENT CONCRETE SCHEDULE		
LOCATION	PORTLAND CEMENT CONCRETE PAVEMENT 10"	WELDED WIRE REINFORCEMENT
	SQ. YD.	SQ. YD.
STA. 529+74.5 TO STA. 530+45.5	190	190
TOTAL	190	190

PERMANENT SEEDING						
LOCATION	SEEDING CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH METHOD 2
	ACRE	POUND	POUND	POUND	TON	ACRE
STA. 529+87.6 TO STA. 530+81.3 RT.	0.06	5	5	5	0.12	0.06
STA. 529+36.0 TO STA. 530+45.5 LT.	0.04	4	4	4	0.08	0.04
TOTAL	0.10	9	9	9	0.20	0.10

HOT-MIX ASPHALT SHOULDERS 8" & BITUMINOUS MATERIALS (TACK COAT)		
LOCATION	HOT-MIX ASPHALT SHOULDERS 8"	BITUMINOUS MAT'L'S. TACK COAT*
	SQ. YD.	POUND
STA. 529+74.5 TO STA. 530+45.5 LT.	32	15
STA. 529+74.5 TO STA. 530+45.5 RT.	32	15
TOTAL	64	30

* ASSUMED 2 APPLICATIONS

TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS		
LOCATION	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	TEMPORARY CONCRETE BARRIER
	EACH	FOOT
STA. 529+02.3 TO STA. 529+34.9 RT.	1	
STA. 529+34.9 TO STA. 530+97.6 RT.		162.5
STA. 530+97.6 TO STA. 531+30.2 RT.	1	
STA. 528+89.8 TO STA. 529+22.4 LT.	1	
STA. 529+22.4 TO STA. 530+72.5 LT.		150
STA. 530+72.5 TO STA. 531+05.1 LT.	1	
TOTAL	4	312.5

PAVEMENT REMOVAL	
LOCATION	PAVEMENT REMOVAL
	SQ. YD.
STA. 529+74.5 TO STA. 530+45.5	190
TOTAL	190

TEMPORARY RUMBLE STRIPS	
LOCATION	TEMPORARY RUMBLE STRIPS
	EACH
STA. 510+62.8 RT.	1
STA. 515+62.8 RT.	1
STA. 520+62.8 RT.	1
STA. 539+57.2 LT.	1
STA. 544+57.2 LT.	1
STA. 549+57.2 LT.	1
TOTAL	6

PAVEMENT MARKING REMOVAL - GRINDING	
LOCATION	PAVEMENT MARKING REMOVAL - GRINDING
	SQ. FT.
EXISTING PAVEMENT MARKING REMOVAL (OMIT PAVEMENT REMOVAL AREA)	
STA. 528+22.8 TO STA. 531+97.2 LT.	102
STA. 527+62.8 TO STA. 532+57.2 CENTERLINE SKIP DASH	37
STA. 528+22.8 TO STA. 531+97.2 RT.	102
TOTAL	241

AGGREGATE SHOULDER SCHEDULE	
LOCATION	AGGREGATE WEDGE SHOULDERS, TYPE B
	TON
STA. 529+74.5 TO STA. 530+45.5 RT.	2
TOTAL	4

TEMPORARY BRIDGE TRAFFIC SIGNALS	
LOCATION	TEMPORARY BRIDGE TRAFFIC SIGNALS
	EACH
STA. 528+12.7 18.1' RT.	0.2
STA. 528+37.8 19.0' LT.	0.2
STA. 528+92.0 23.3' LT.	0.2
STA. 532+07.2 19.0' LT	0.2
STA. 532+07.2 19.6' RT	0.2
TOTAL	1.00

GUARDRAIL REMOVAL	
LOCATION	GUARDRAIL REMOVAL
	FOOT
STA. 529+94.7 TO STA. 530+63.6 RT	79
STA. 529+57.1 TO STA. 530+84.1 LT	128
TOTAL	207

CHANGEABLE MESSAGE SIGN	
LOCATION	CHANGEABLE MESSAGE SIGN
	CAL. DAY
MESSAGE BOARD NORTHWEST OF IL 3 AND IL 150 INTERSECTION IN CHESTER	60
MESSAGE BOARD SOUTH OF IL 4 AND IL 150 INTERSECTION EAST OF PERCY	60
MESSAGE BOARD SOUTHWEST OF AVA AT IL 4 AND IL 151 INTERSECTION	60
MESSAGE BOARD SOUTHEAST OF IL 3 AND IL 151 INTERSECTION	60
TOTAL	240

REMOVE SIGN PANEL ASSEMBLY - TYPE B	
LOCATION	REMOVE SIGN PANEL ASSEMBLY
	EACH
STA. 530+81.7' 25' RT (BRIDGE WEIGHT LIMIT)	1
STA. 530+02.5' 28' LT (BRIDGE WEIGHT LIMIT)	1
TOTAL	2

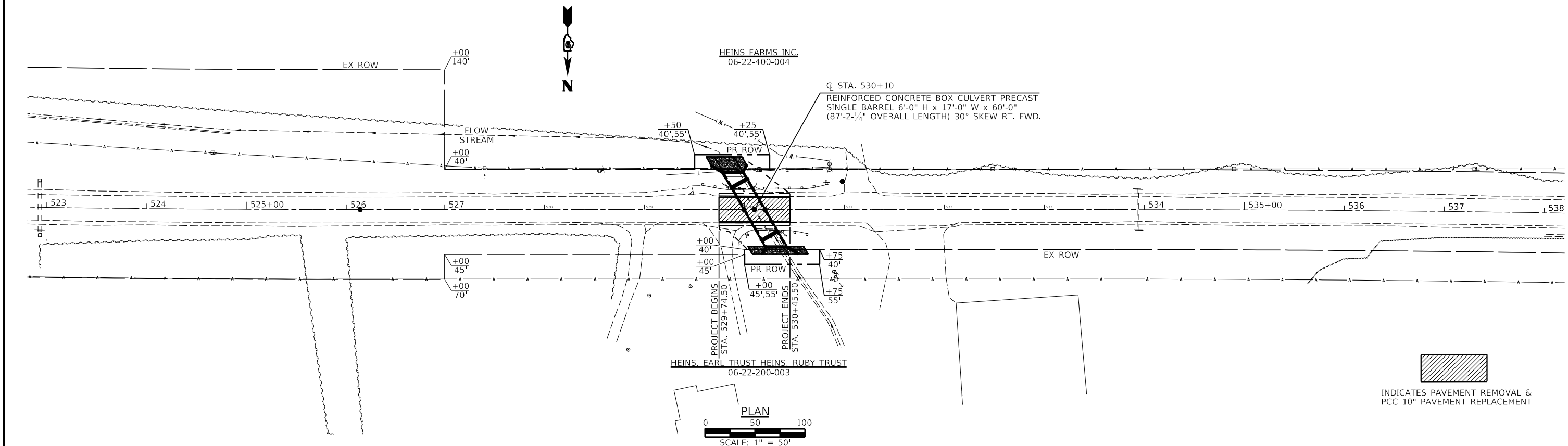
TEMPORARY EROSION CONTROL ITEMS		
LOCATION	SEEDING, CLASS 7	TEMPORARY EROSION CONTROL SEEDING
	ACRE	POUND
STA. 529+87.6 TO STA. 530+81.3 RT.	0.06	6
STA. 529+36.0 TO STA. 530+45.5 LT.	0.04	4
TOTAL	0.10	10

PAINT PAVEMENT MARKING SCHEDULE		
LOCATION	PAINT PAVEMENT MARKING - LINE 4"	
	30' SKIP 10' DASH (YELLOW)	EDGE LINE (WHITE)
	FOOT	FOOT
STA. 528+22.8 TO STA. 531+97.2 RT.		375
STA. 527+62.8 TO STA. 532+57.2 CL.	130	
STA. 528+22.8 TO STA. 531+97.2 LT.		375
SUBTOTAL	130	750
TOTAL		880

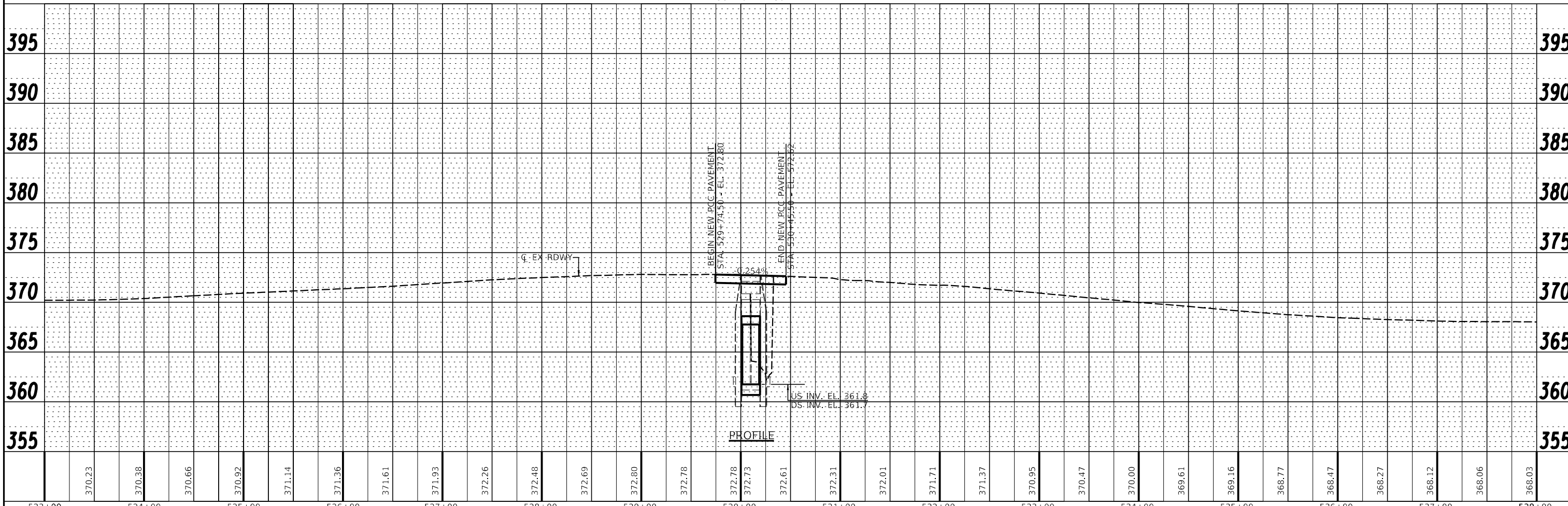
SECTION 22 T. 8 S., R. 5 W., 3rd PM

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	ALIGNED		
	FILED		
NOTE BOOK NO.	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	GRADES		
	STRUCTURE		
NOTE BOOK NO.	NOTATIONS CHFD		



INDICATES PAVEMENT REMOVAL & PCC 10" PAVEMENT REPLACEMENT



523+00	370.23	524+00	370.38	525+00	370.66	526+00	370.92	527+00	371.14	528+00	371.36	529+00	371.61	530+00	371.93	531+00	372.26	532+00	372.48	533+00	372.69	534+00	372.80	535+00	372.78	536+00	372.78	537+00	372.73	538+00	372.61	372.31	372.01	371.71	371.37	370.95	370.47	370.00	369.61	369.16	368.77	368.47	368.27	368.12	368.06	368.03
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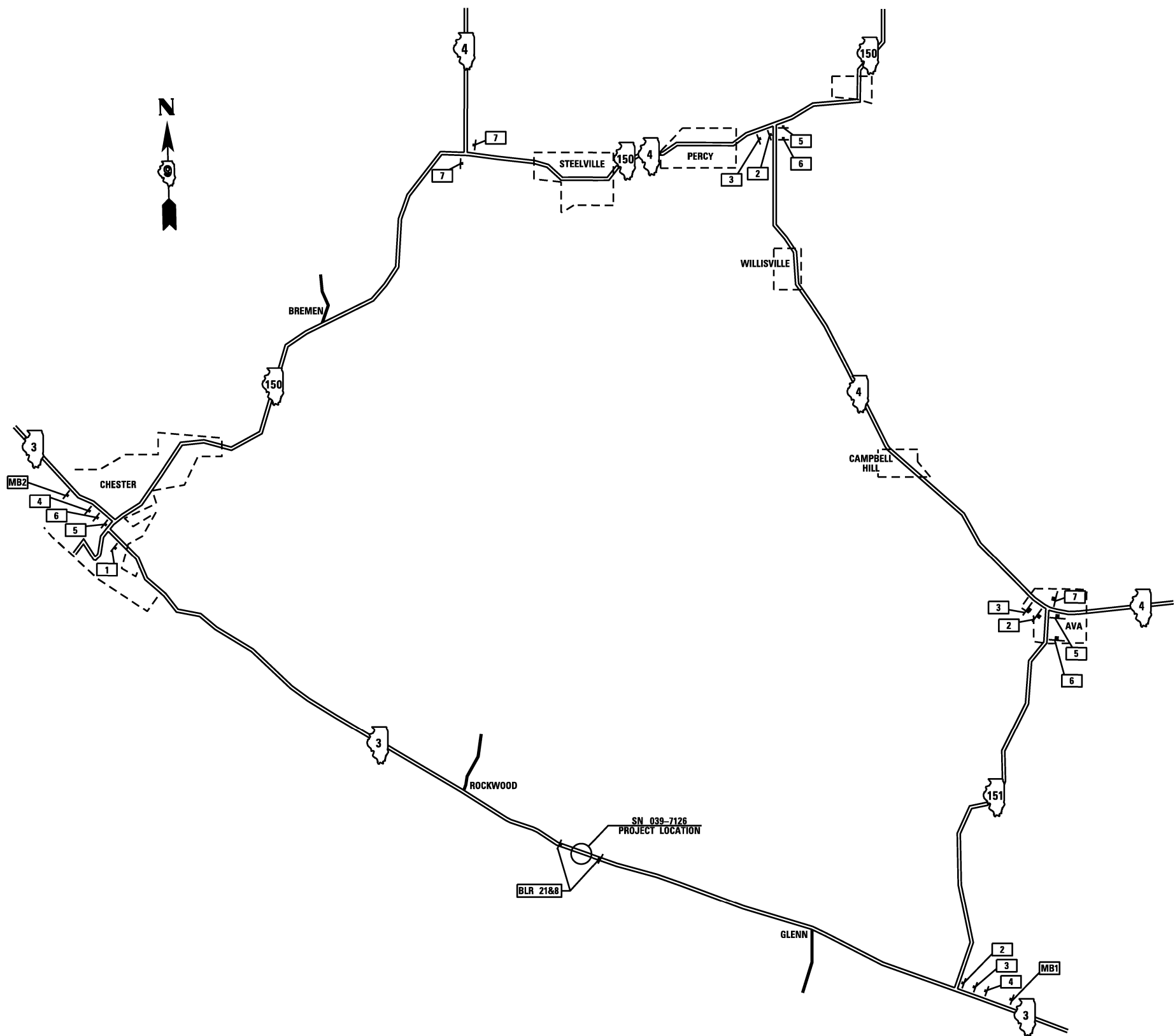
VK
VEENSTRA & KIMM INC.
Springfield, IL Phone: (217)544-8033

USER NAME : *USER*	DESIGNED -	REVISED -
PLOT SCALE : *SCALE*	CHECKED -	REVISED -
PLOT DATE : *DATE*	DRAWN -	REVISED -
	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE SN 039-7126
SCALE: 1" = 50'
SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	12
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**ROAD CLOSED
11 MILES AHEAD
LOCAL TRAFFIC ONLY**

①

**DETOUR
3**
→

②

**DETOUR
3**
↘

③

**DETOUR
AHEAD**

④

**DETOUR
3**
←

⑤

**DETOUR
3**
↙

⑥

**DETOUR
3**
↑

⑦

**BARRICADE
AHEAD**

⑧

- NOTES:
1. THE POSTS SHALL BE PLACED 12 FEET FROM THE EDGE OF PAVEMENT AS DIRECTED BY THE ENGINEER.
 2. SIGNS SHALL BE REMOVED ON COMPLETION OF THE CONTRACT AT THE DIRECTION OF THE ENGINEER. THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 724 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED WITH THE PAY ITEMS INVOLVED. THE SIGNS AND POSTS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
 3. EXACT SIGN PLACEMENT WILL BE DETERMINED BY THE ENGINEER.
 4. THE DISTRICT 9 OPERATIONS ENGINEER SHALL BE CONTACTED 10 DAYS PRIOR TO THE ERECTION OF SIGNS.
 5. ALL SIGNS SHALL CONFORM TO THE MUTCD AND SECTION 1106 OF THE STANDARD SPECIFICATIONS

**IL 3 CLOSED 7 MILES
LOCAL TRAFFIC ONLY
FOLLOW MARKED DETOUR**

MB 1

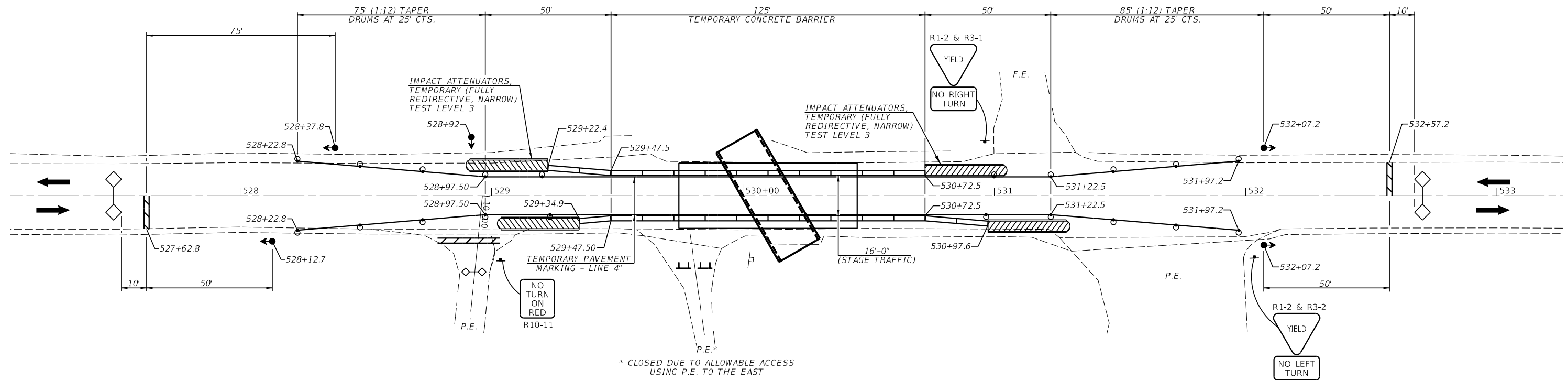
**IL 3 CLOSED 11 MILES
LOCAL TRAFFIC ONLY
FOLLOW MARKED DETOUR**

MB 2

USER NAME =	DESIGNED -	REVISED -
CHECKED -	REVISED -	
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

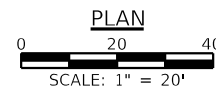
GENERAL NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN ACCORDING TO "TRAFFIC CONTROL & PROTECTION, STANDARD 701321.
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
4. ADDITIONAL SIGNAGE FOR ENTRANCES AND ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321.
5. THE DIMENSION SHOWN ON THE WIDTH RESTRICTION SIGN (W12-110210)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-1103) SHOWN ON THE STAGE PLAN SHEET FOR THIS STRUCTURE SHALL BE 14'-0" FOR STAGE CONSTRUCTION.
6. SEE STD 701321 FOR COMPLETION OF STAGE CONSTRUCTION SIGNING AND ADVANCE DETECTOR LOOP PLACEMENT NOT SHOWN.
7. THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHALL APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.
8. THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS, EDGE LINE PAVEMENT MARKING SHALL BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
9. ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC AND THE TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED OFF OR COVERED.
10. ALL TRAFFIC SIGNALS SHOWN ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
11. TEMPORARY BRIDGE TRAFFIC SIGNALS SHALL BE A 3-PHASE SIGNAL, WITH ACTUATION FOR THE ENTRANCES AT STA. 528+92, AND AT EACH END STA. 528+12.7 & 532+07.2.
12. THE ADDITIONAL DETECTOR LOOPS AT THE ENTRANCE ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
13. TEMPORARY PAVEMENT MARKING SHOWN ON THE DETAIL, THE COST OF THE TEMPORARY PAVEMENT MARKING AND ITS REMOVAL WILL BE INCLUDED IN THE COST OF STANDARD 701321.



STAGE CONSTRUCTION

* CLOSED DUE TO ALLOWABLE ACCESS USING P.E. TO THE EAST



LEGEND

- ////// REMOVAL ITEMS
- ⊠ SIGN
- ⌈ TYPE III BARRICADE
- ⊙ DRUM WITH STEADY BURNING LIGHT
- ⊚ BARRICADE WITH STEADY BURNING LIGHT
- ⬅ TRAFFIC SIGNAL
- ◻◻ INDUCTION LOOP DETECTOR
- ▬ DOUBLE VERTICAL PANEL
- ◊ TYPE C BIDIRECTIONAL REFLECTOR
- ▬▬▬ TEMPORARY CONCRETE BARRIER
- ▨▨▨ IMPACT ATTENUATOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS

VK VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

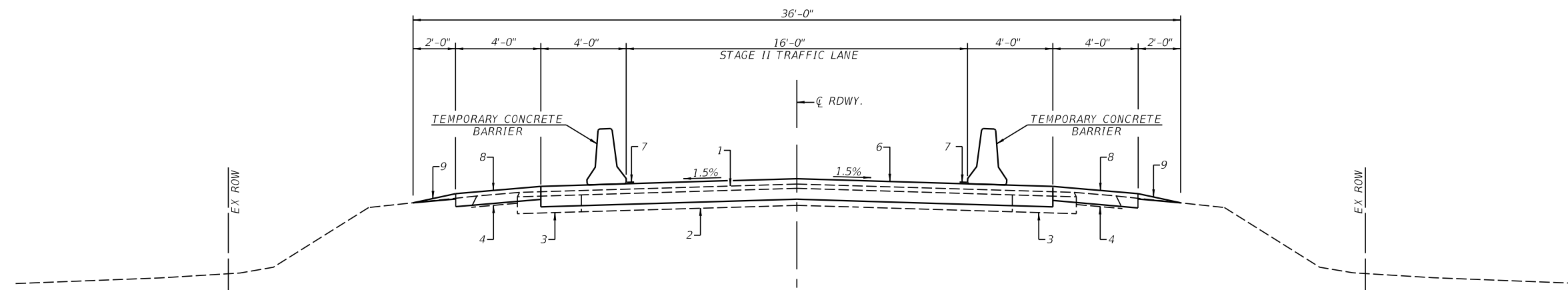
USER NAME =	DESIGNED -	REVISED -
CHECKED -	REVISIED -	
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE CONSTRUCTION PLAN

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	13
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



STAGE CONSTRUCTION TYPICAL SECTION

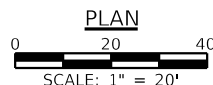
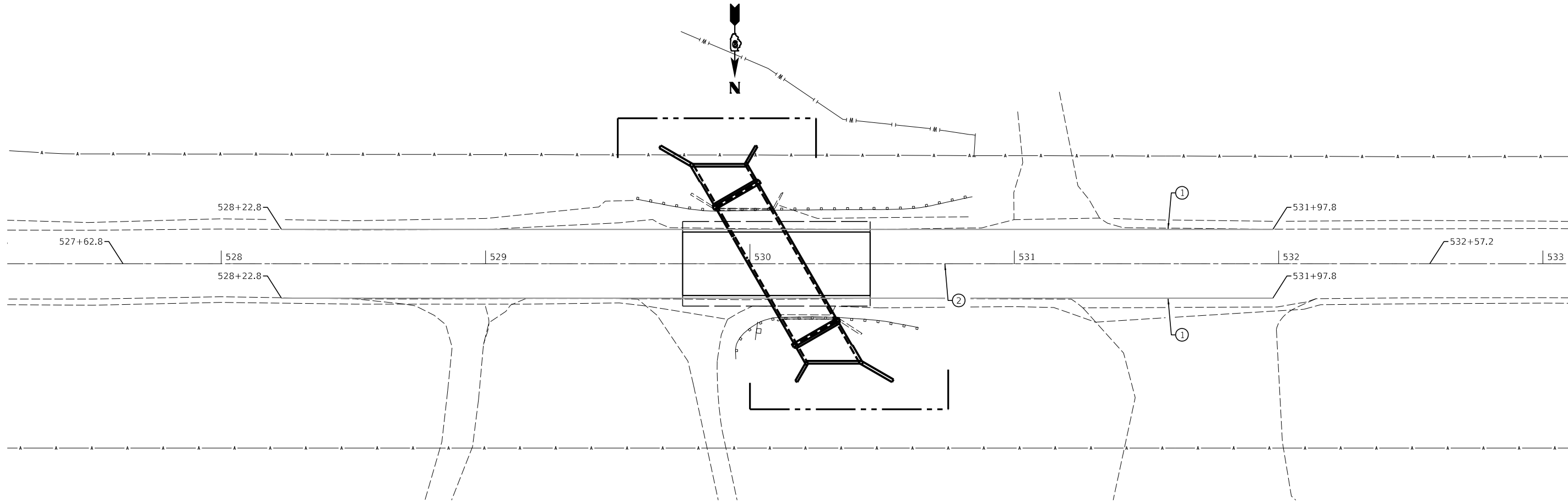
PAVEMENT LEGEND

- 1 - EX HMA SURF CSE ±2½"
- 2 - EX PCC PAVEMENT ±9½"
- 3 - EX HMA BSE CSE WIDENING
- 4 - EX AGG SHOULDER
- 5 - EX GUARDRAIL
- 6 - PR PCC PAVEMENT 10" MIN.
- 7 - PR TEMPORARY PAVEMENT MARKING - LINE 4"
- 8 - PR HOT MIX ASPHALT SHOULDERS 8"
- 9 - PR AGGREGATE WEDGE SHOULDERS, TYPE B

USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	14
CONTRACT NO. 78790				
<small>ILLINOIS FED. AID PROJECT</small>				

LEGEND	
①	- PAINT PAVEMENT MARKING - LINE 4" (WHITE)
②	- PAINT PAVEMENT MARKING - LINE 4" (YELLOW SKIP DASH)



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

USER NAME =	DESIGNED -	REVISED -
CHECKED -	REVISIED -	
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

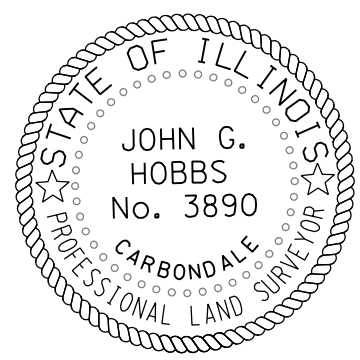
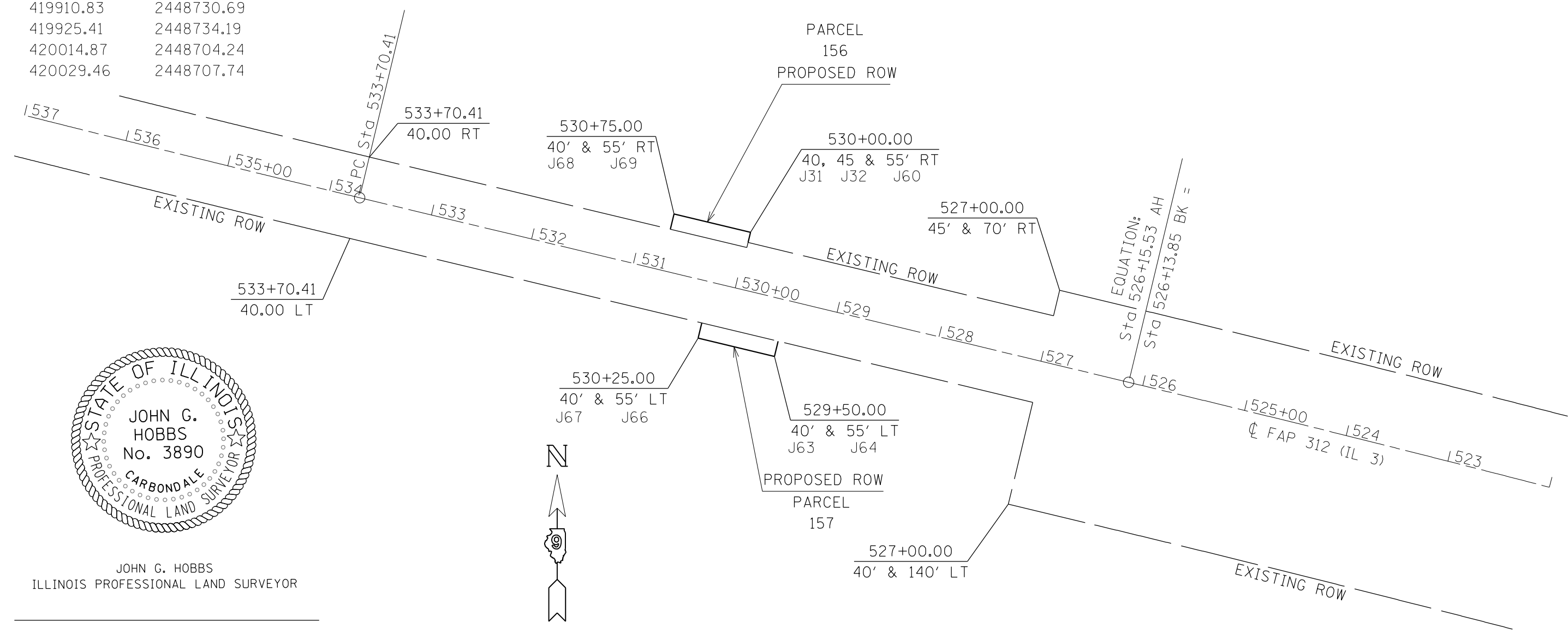
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	15
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

ALIGNMENT INFO			
FAP 312 (IL 3)			
POINT#	STATION	NORTHING	EASTING
P.C.1	501+73.85	419175.16	2451479.85
P.T.1	526+13.85	419868.73	2449141.68
STAEQU2	526+15.53	419868.73	2449141.68
P.C.4	533+70.41	420044.93	2448407.66
P.T.4	565+20.41	420946.94	2445391.22

PARCEL#	PROPERTY OWNER	PURPOSE	ACREAGE
156	CARL & RUBY HEINS	ROW	0.026 ACRES±
157	HEINS FARMS, INC.	ROW	0.026 ACRES±

COORDINATE DATA		
PT#	NORTHING	EASTING
J31	419997.37	2448777.17
J32	420002.23	2448778.34
J60	420011.95	2448780.67
J63	419907.91	2448807.12
J64	419893.32	2448803.62
J66	419910.83	2448730.69
J67	419925.41	2448734.19
J68	420014.87	2448704.24
J69	420029.46	2448707.74

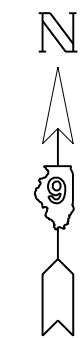
NE QUARTER
SECTION 22
T. 8 S., R. 5 W., 3RD P.M.



JOHN G. HOBBS
ILLINOIS PROFESSIONAL LAND SURVEYOR

Current license expires 11/2022.

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



SCALE



COORDINATES BASED ON WGS 84
97 ADJUSTMENT, ILLINOIS WEST ZONE

MODEL: Default FILE: M:\Map_E_Producer\sw\heintz.com\PHWDOT\Documents\DOT Offices\Dr\refr_@Projects\78790\CADDData\CAD\heins\039-2013-FAP-312-ROW.dgn

USER NAME = EhrenKirby	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/24/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

RIGHT OF WAY SHEET
SN 039-2013 FAP 312(IL 3)

SCALE: 1" = 100' SHEET 2 OF 2 SHEETS STA. 523+00.00 TO STA. 537+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5; B-6; B-7	JACKSON	101	16
CONTRACT NO. 78790				
R-99-014-20 ILLINOIS FED. AID PROJECT				

B.M. 1013 Chiseled "□" on top of Northwest corner of concrete headwall of Structure No. 039-2013. Elev. 372.111

Existing Structure: S.N. 039-2013 originally built under SBI Route 150 under Section 123 in 1933. The structure is a double barrel reinforced concrete box culvert (8'-8"W x 8'-6"H) 41'-8" out-to-out of headwalls, 48'-1 7/8" along centerline of culvert. 30° skew Rt. Fwd.

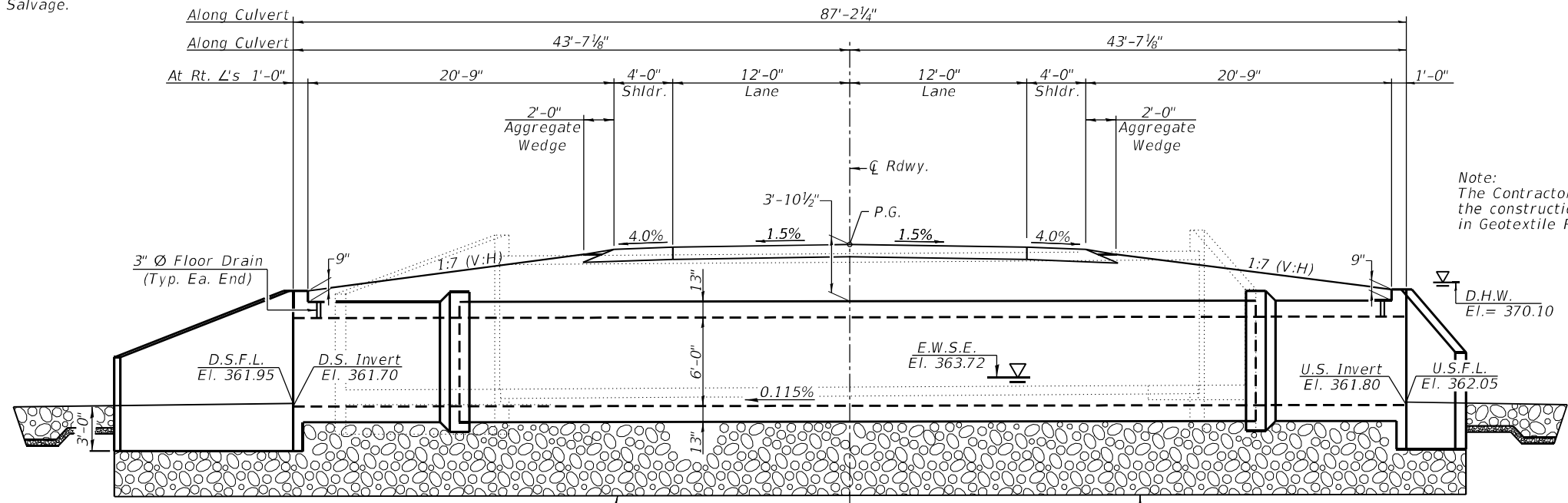
Traffic Control: Weekend road closure will be used to remove existing structure and to install the precast section of the culvert.

Precast End Sections are allowed.

No Salvage.

INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
5. Box Culvert Details - 1
6. Box Culvert Details - 2
7. Box Culvert Details - 3
8. Box Culvert Details - 4
9. Box Culvert Details - 5
10. Soil Boring Logs
11. Existing Structure Plans - 1
12. Existing Structure Plans - 2



LONGITUDINAL SECTION

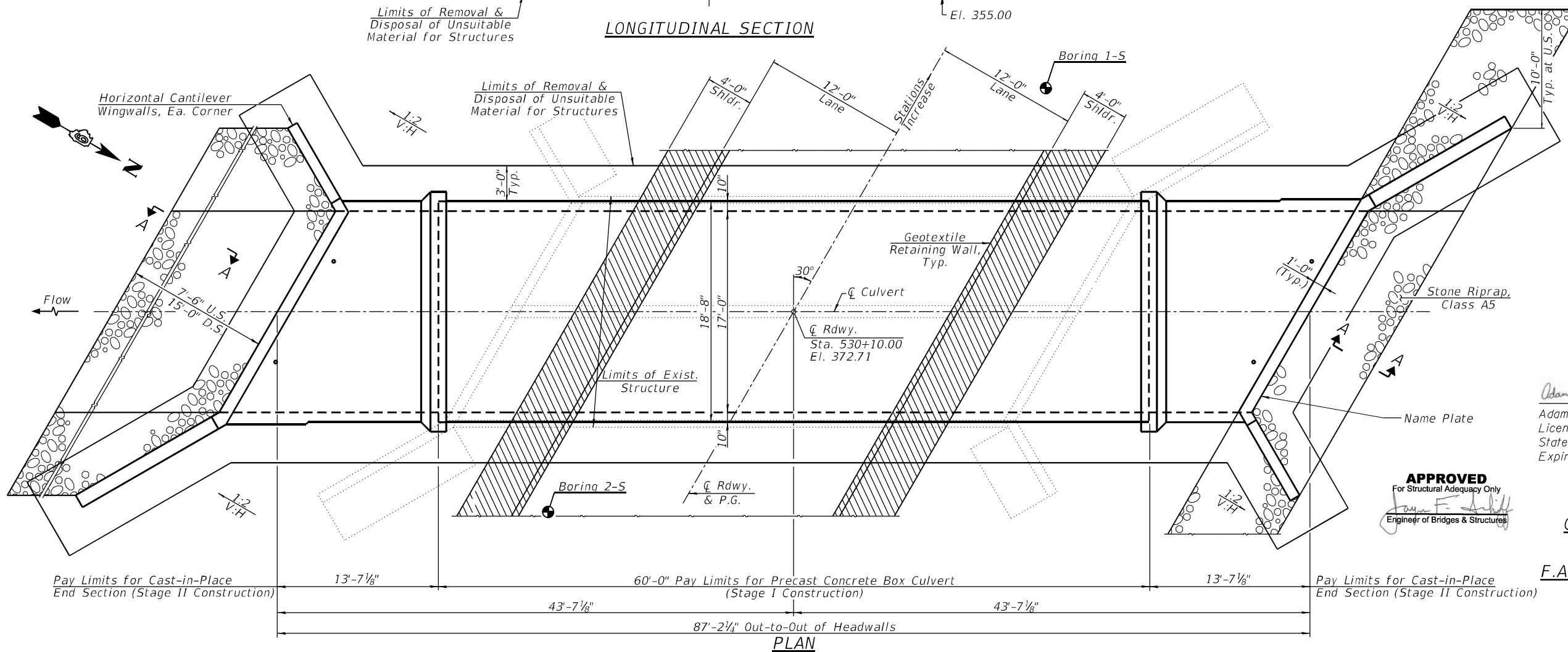
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

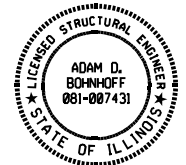
DESIGN STRESSES
PRECAST UNITS

$f'_c = 5,000$ psi
 $f_y = 65,000$ psi (Welded Wire Fabric)

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)



PLAN



Adam Bohnhoff
Adam D. Bohnhoff
Licensed Structural Engineer
State of Illinois No. 081-007431
Expires 11-30-2024
Date 03/13/2023

APPROVED
For Structural Adequacy Only
Jay F. Schell
Engineer of Bridges & Structures

GENERAL PLAN & ELEVATION
IL. ROUTE 3 OVER STREAM
F.A.P. RTE 312 - SECTION 123B-5
JACKSON COUNTY
STATION 530+10.00
STRUCTURE NO. 039-7126



USER NAME =	DESIGNED - JAG	REVISED -
PLOT SCALE =	CHECKED - ADB	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 039-7126
SHEET NO. 1 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	17
CONTRACT NO. 78790				

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The design fill height for this box is 3.9 ft. The precast box culvert sections shall conform to the requirements of ASTM C1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specifications. A cubical 2' x 2' x 2' min. deposit of CA 5, CA 7, or CA 11 wrapped in a fabric envelope shall be placed over the drain holes in accordance with Article 502.10 of the Standard Specifications.

The limits and quantities of Removal and Disposal of Unsuitable Materials for Structures and replacement with Rock Fill - Foundation are based on the soil boring data and may be modified by the District Geotechnical Engineer and/or the Field Engineer for variable subsurface conditions actually encountered in the field.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	472
Stone Riprap, Class A5	Ton	131
Filter Fabric	Sq. Yd.	113
Removal of Existing Structures No. 1	Each	1
Removal and Disposal of Unsuitable Materials for Structures	Cu. Yd.	554
Name Plates	Each	1
Geotextile Retaining Wall	Sq. Ft.	846
Box Culvert End Sections, Culvert No. 1	Each	2
Precast Concrete Box Culvert (Special)	Foot	60
Geocomposite Wall Drain	Sq. Yd.	224
Membrane Waterproofing System for Buried Structures	Sq. Yd.	224
Rock Fill - Foundation	Ton	1,136
Concrete Box Culverts	Cu. Yd.	79.0
Reinforcement Bars, Epoxy Coated	Pound	19,740

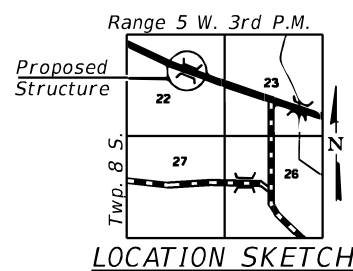
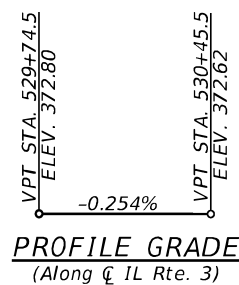
* Reinforcement Bars, Epoxy Coated

* For information only. Quantities included with Box Culvert End Sections, Culvert No. 1

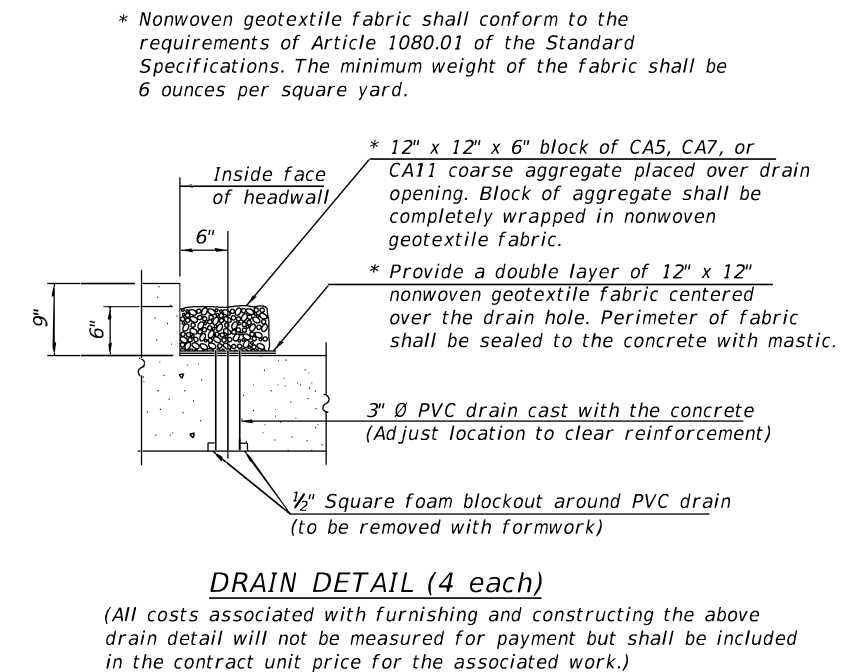
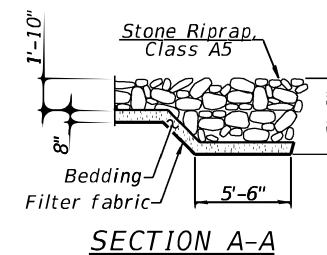
WATERWAY INFORMATION

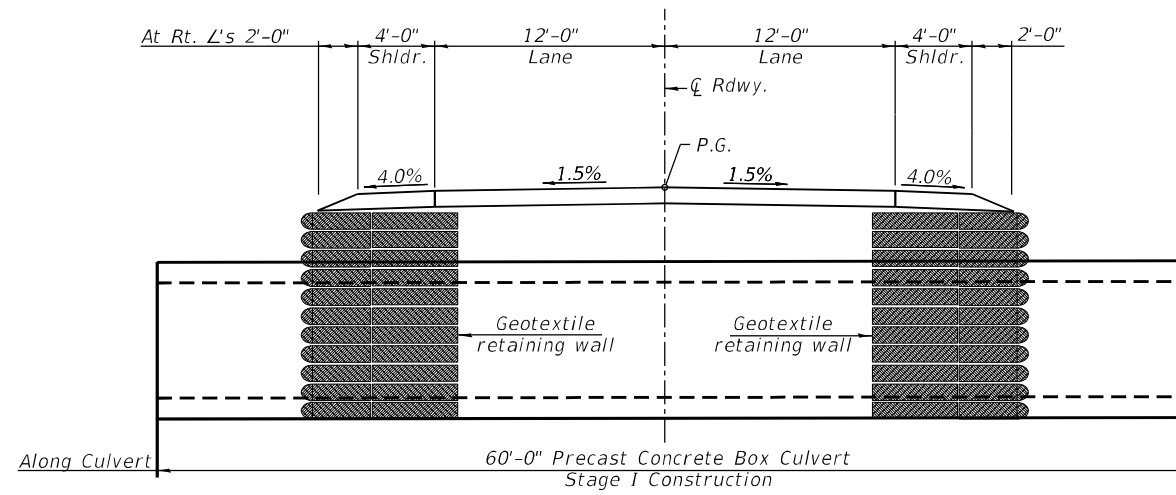
Drainage Area = 0.9 Sq. Mi.		Exist. Overtopping Elev. = 372.15 @ Sta. 531+25 Prop. Overtopping Elev. = 372.15 @ Sta. 531+25							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	730	125	98	369.6	2.1	1.9	371.7	371.5
Design	50	1260	134	98	370.1	2.4	2.4	372.5	372.5
Base	100	1520	138	98	370.3	2.2	2.2	372.5	372.5
Max. Calc.	50	1260	134	98	370.1	2.4	2.4	372.5	372.5

10 Yr. Outlet Velocity through Exist. Structure = 5.8 ft/s
10 Yr. Outlet Velocity through Prop. Structure = 7.4 ft/s

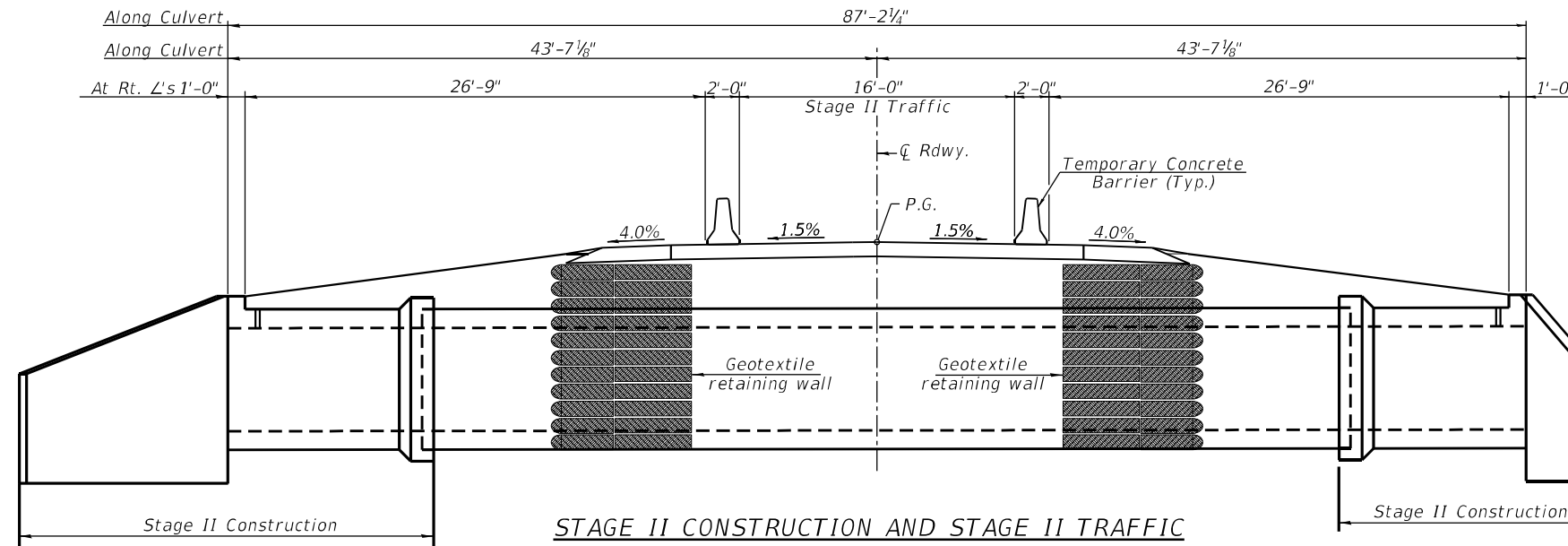


STATION 530+10.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 312 SEC. 123B-5
LOADING HL-93
STR. NO. 039-7126
NAME PLATE
(Std. 515001)

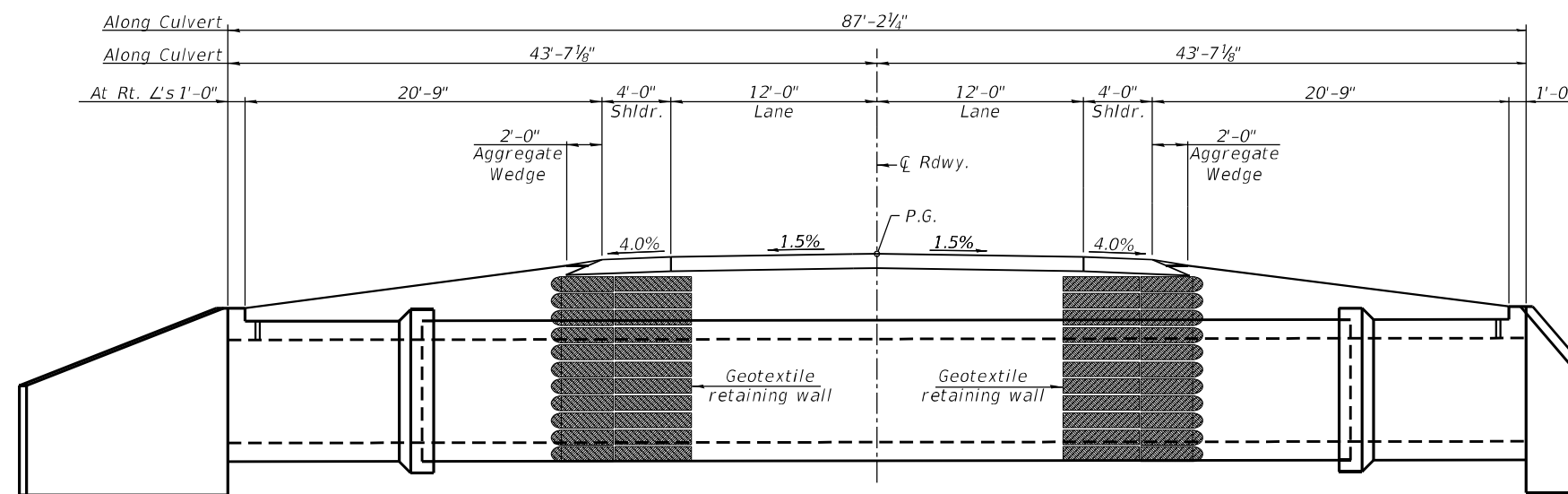




STAGE I CONSTRUCTION



STAGE II CONSTRUCTION AND STAGE II TRAFFIC



PROPOSED CROSS SECTION



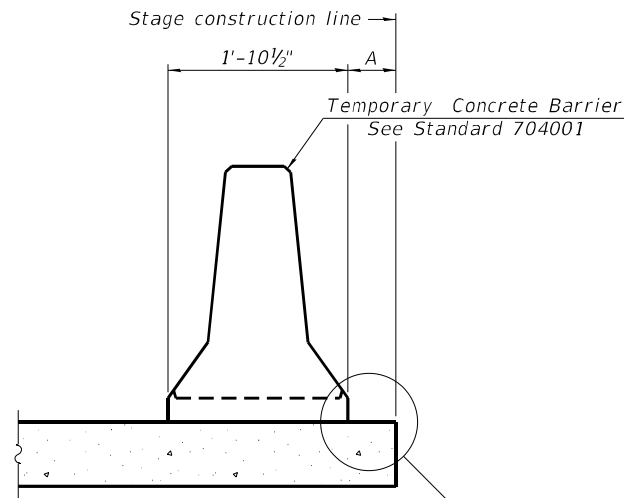
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 039-7126**

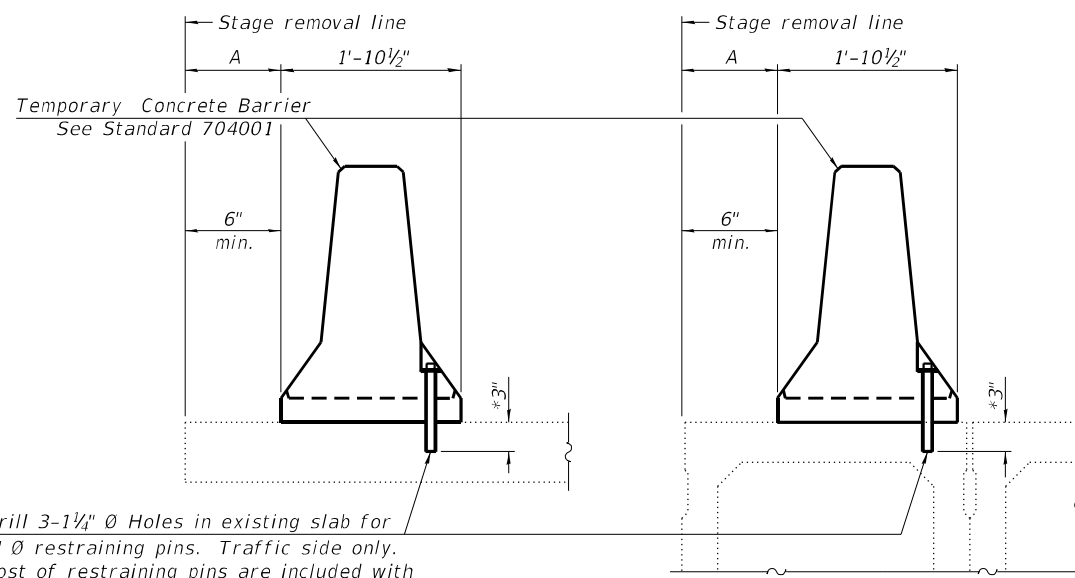
SHEET NO. 3 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	19
CONTRACT NO. 78790				
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When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



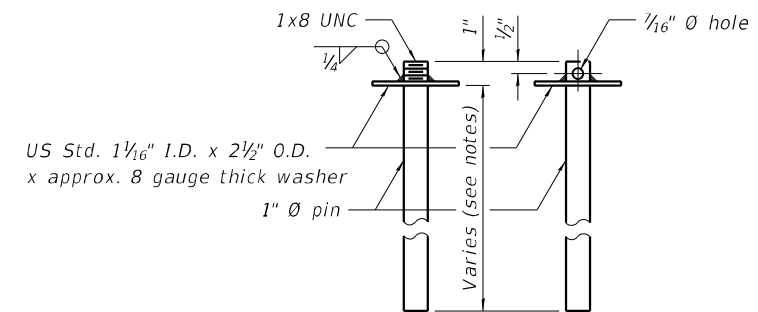
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

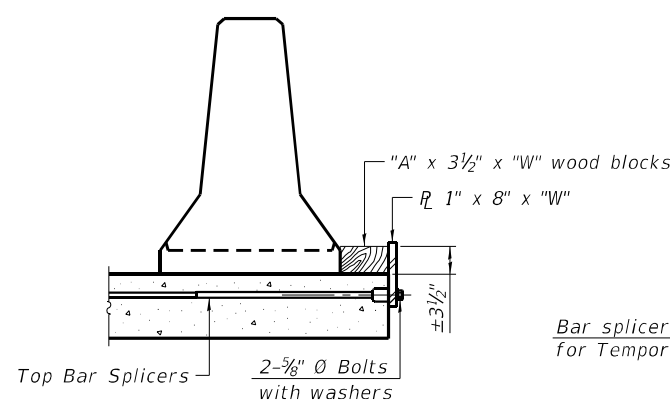
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

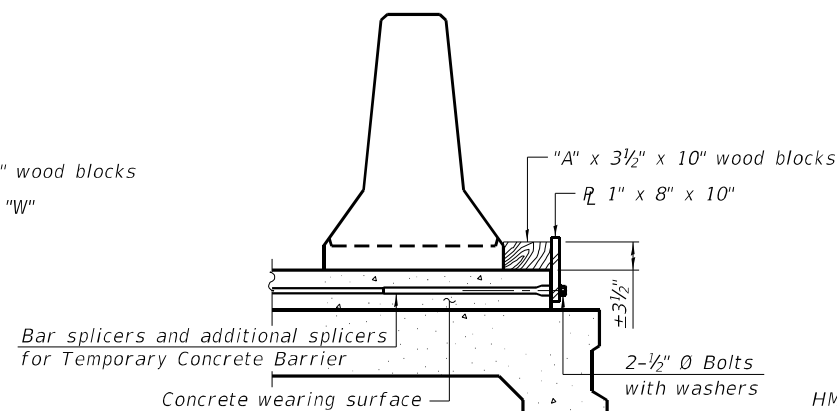
SECTIONS THRU SLAB OR DECK BEAM



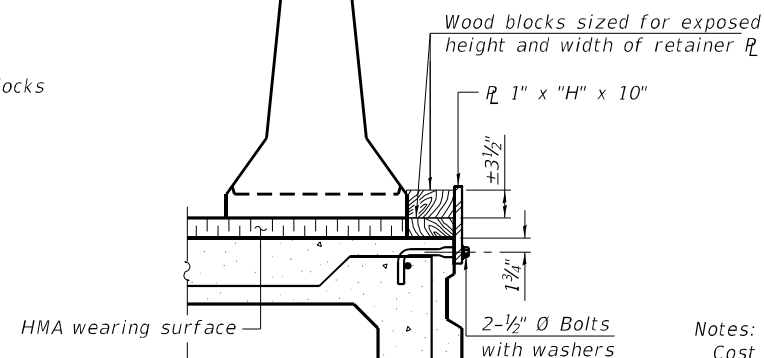
RESTRAINING PIN



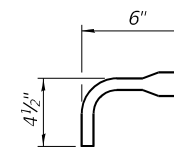
DETAIL I



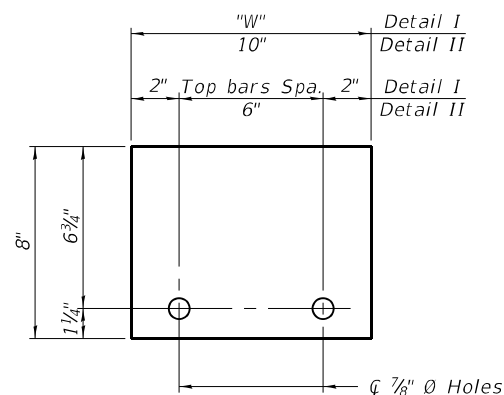
DETAIL II



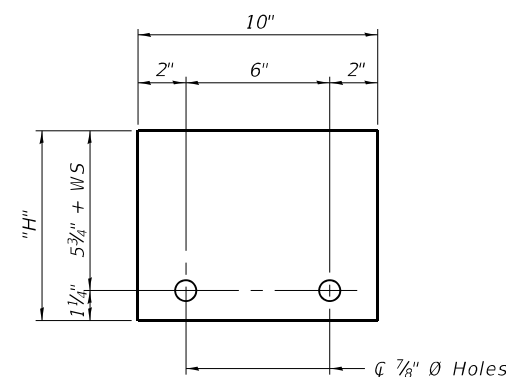
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W" (Detail I and II)



STEEL RETAINER R 1" x "H" x 10" (Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{c} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021



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DEPARTMENT OF TRANSPORTATION

TEMP. CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 039-7126

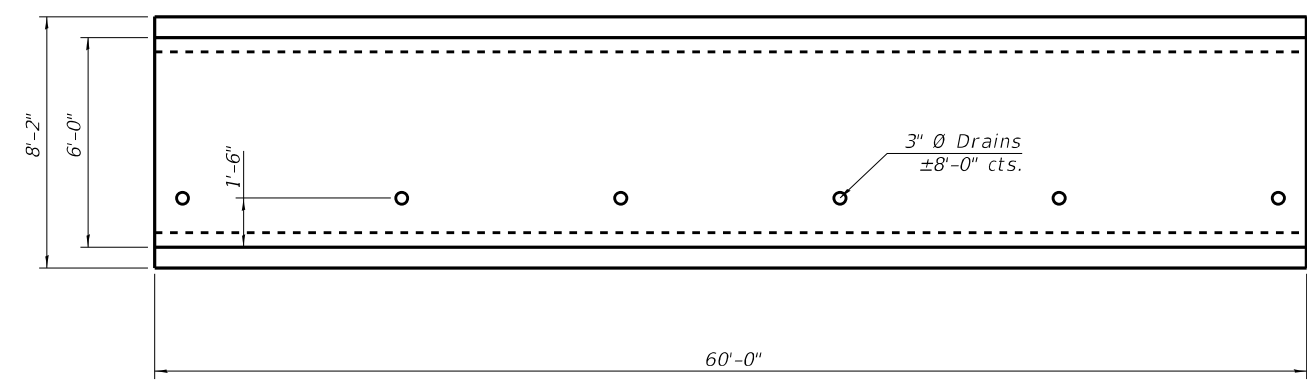
SHEET NO. 4 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	20
CONTRACT NO. 78790				

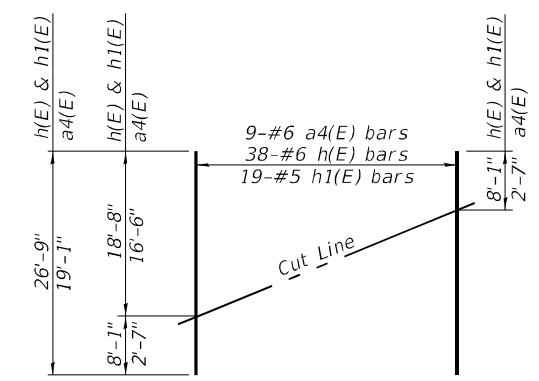
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CIP END SECTIONS
BILL OF MATERIAL
 (For Information Only - 2 Total)

Bar	No.	Size	Length	Shape
a(E)	2	#4	21'-4"	
a1(E)	60	#9	20'-10"	
a2(E)	36	#6	18'-4"	
a3(E)	30	#9	22'-2"	
a4(E)	18	#6	19'-1"	
d(E)	38	#4	4'-5"	
h(E)	76	#6	26'-9"	
h1(E)	114	#5	26'-9"	
h2(E)	14	#5	18'-8"	
h3(E)	14	#5	9'-0"	
h4(E)	6	#10	21'-4"	
h5(E)	8	#6	21'-4"	
h6(E)	22	#7	8'-0"	
h7(E)	32	#7	8'-0"	
h8(E)	22	#7	11'-9"	
h9(E)	32	#7	17'-9"	
s(E)	20	#4	5'-5"	
s1(E)	20	#4	5'-3"	
v(E)	52	#5	7'-10"	
v1(E)	20	#4	10'-6"	
x(E)	124	#4	7'-6"	
x1(E)	12	#4	19'-8"	
x2(E)	12	#4	9'-2"	
Concrete Box Culverts			Cu. Yd.	79.0
Reinforcement Bars, Epoxy Coated			Pound	19,740

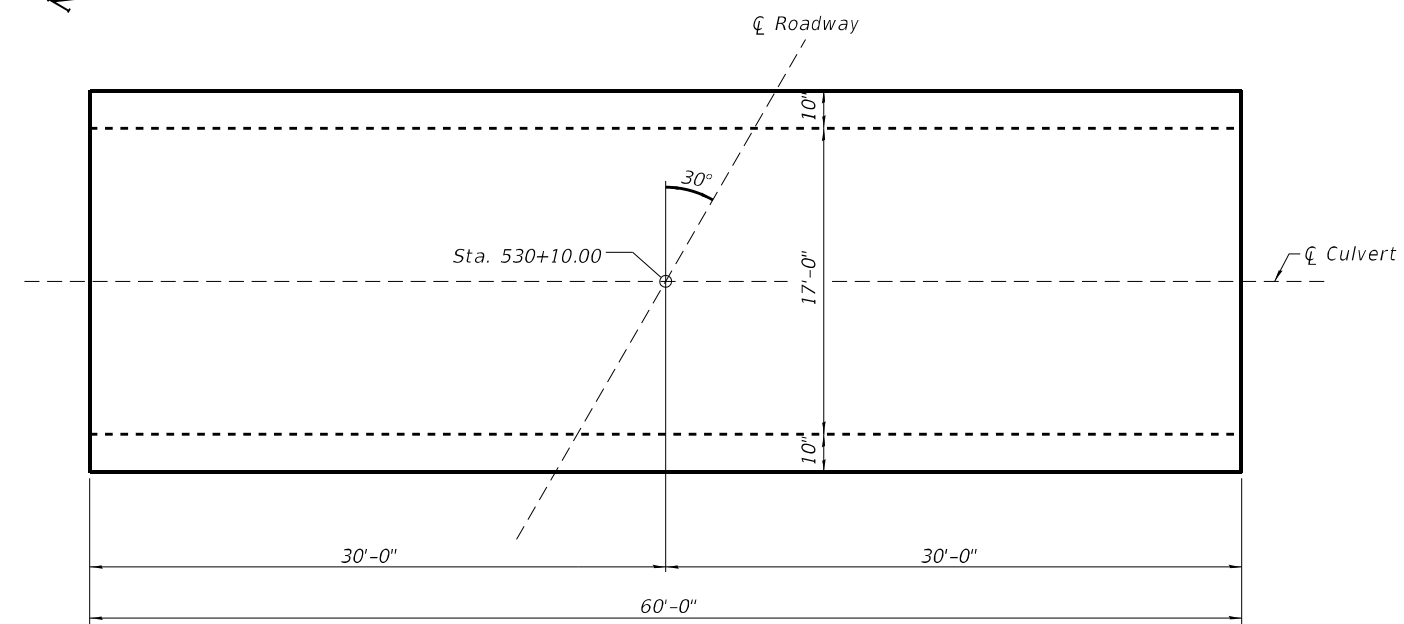


PRECAST LONGITUDINAL SECTION

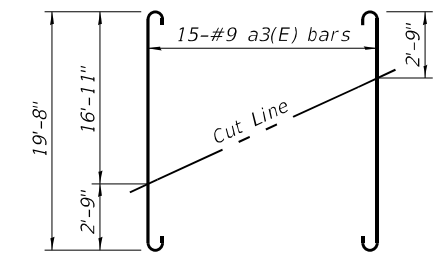


FIELD CUTTING DIAGRAM

Order a4(E), h(E) & h1(E) bars full length. Cut as shown and use remainder of bars in opposite face.

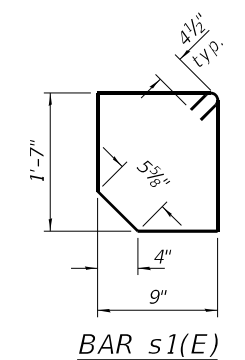
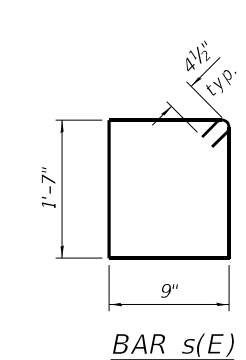
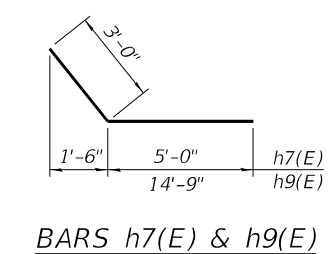
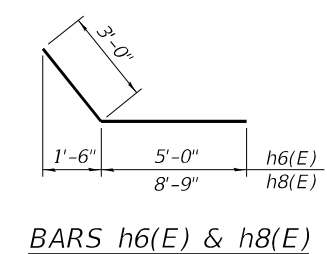
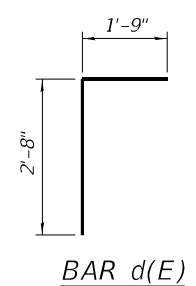
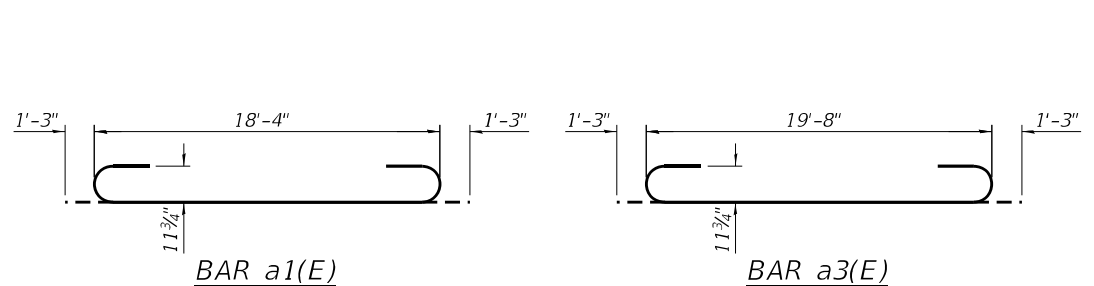


PRECAST PLAN



FIELD CUTTING DIAGRAM

Order a3(E) bars full length. Cut as shown and use remainder of bars in opposite face.



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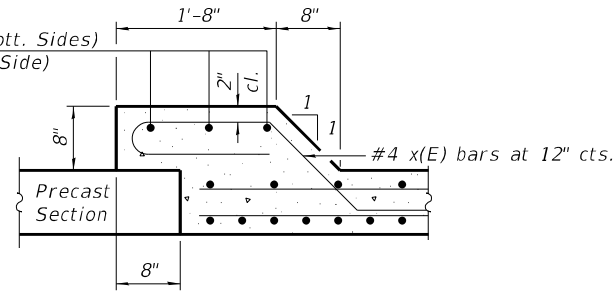
STATE OF ILLINOIS
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BOX CULVERT DETAILS - 1
STRUCTURE NO. 039-7126

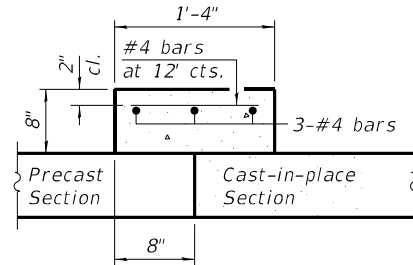
SHEET NO. 5 OF 12 SHEETS

F.A.P. RTE. 312	SECTION 123B-5	COUNTY JACKSON	TOTAL SHEETS 101	SHEET NO. 21
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

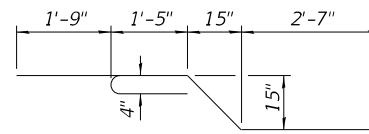
3-#4 x1(E) bars, evenly spaced (Top and Bott. Sides)
 3-#4 x2(E) bars, evenly spaced (Each Wall Side)



SECTION THRU CONNECTION COLLAR

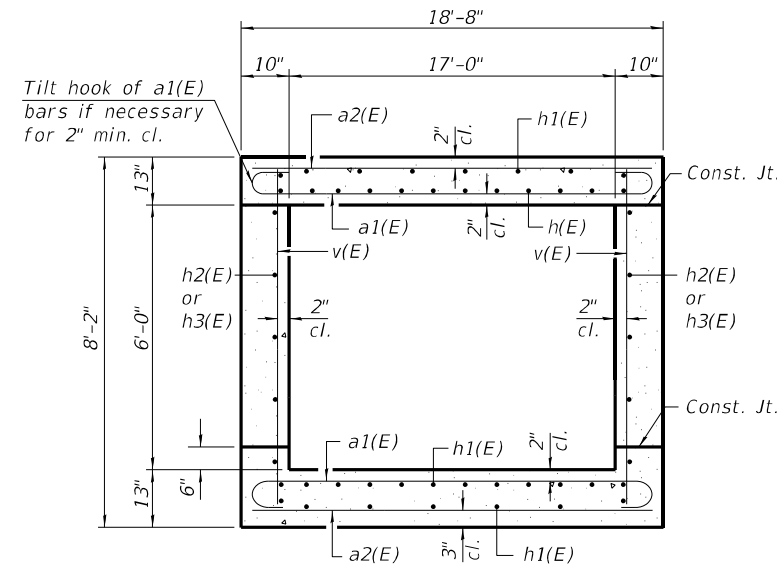


ALTERNATE SECTION THRU CONNECTION COLLAR



BAR x(E)

(21 bars - Top Side, Each End Section)
 (21 bars - Bottom Side, Each End Section)
 (10 bars - Each Wall, Each End Section)



SECTION THRU CIP END SECTIONS

PRECAST GENERAL NOTES

1. Precast Concrete Culverts, 17'x6' (Special) shall conform to the requirements of Article 540.06 of the Standard Specifications, the applicable requirements of AASHTO M 259 and ASTM C1577-17.

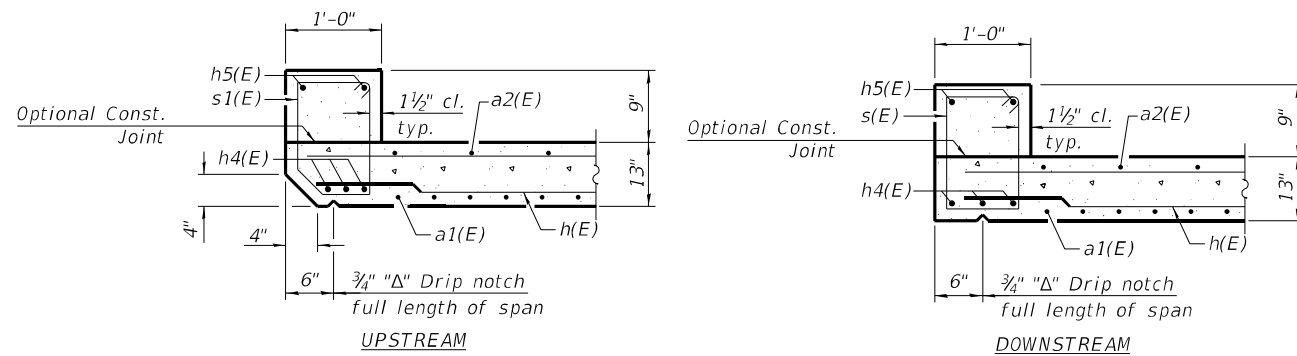
The minimum precast concrete strength shall be 5,000 psi.

Lifting holes shall be filled with concrete plugs and mastic after the box sections are in place.

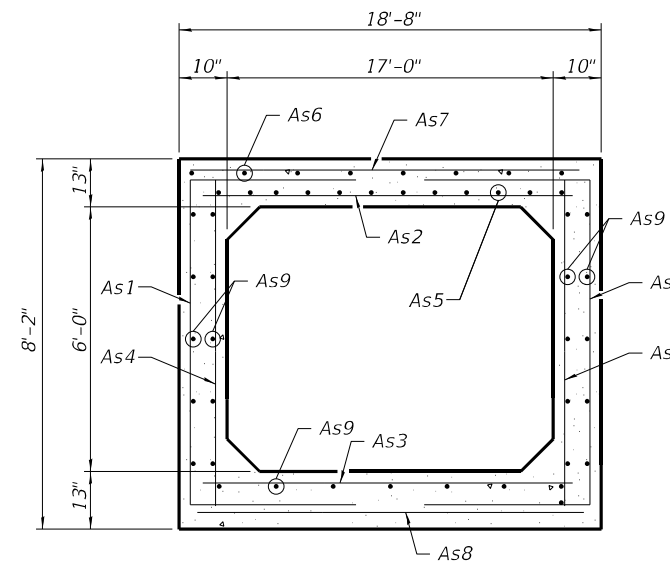
The design fill height is 3.9 feet.

2. Contractor shall maintain streamflow in accordance with the Standard Specifications Article 502.
3. Cover from the face of precast concrete reinforcement bars shall be 2" for the top of the top slab, and 1" for all other surfaces.

4. The reinforcement bar areas shown on this plan sheet are based on welded wire reinforcement (WWR). The Contractor may use steel reinforcement bars in lieu of WWR. Reinforcement bars shall be limited to the sizes of #3 through #5 bars, and have a maximum spacing of the lesser of 8" or the member thickness. The reinforcement areas shown on this plan sheet shall be increased to account for the difference in steel yield strength in accordance with ASTM C1577, Section 12.6.



SECTION THRU HEADWALL



PRECAST BARREL REINFORCEMENT

(Reinforcement shall be Epoxy Coated)

Minimum Reinforcement

As1	0.75 in ² /ft.
As2	0.93 in ² /ft.
As3	0.95 in ² /ft.
As4	0.33 in ² /ft.
As5	0.52 in ² /ft.
As6	0.14 in ² /ft.
As7	0.33 in ² /ft.
As8	0.33 in ² /ft.
As9	0.52 in ² /ft.



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BOX CULVERT DETAILS - 2
 STRUCTURE NO. 039-7126

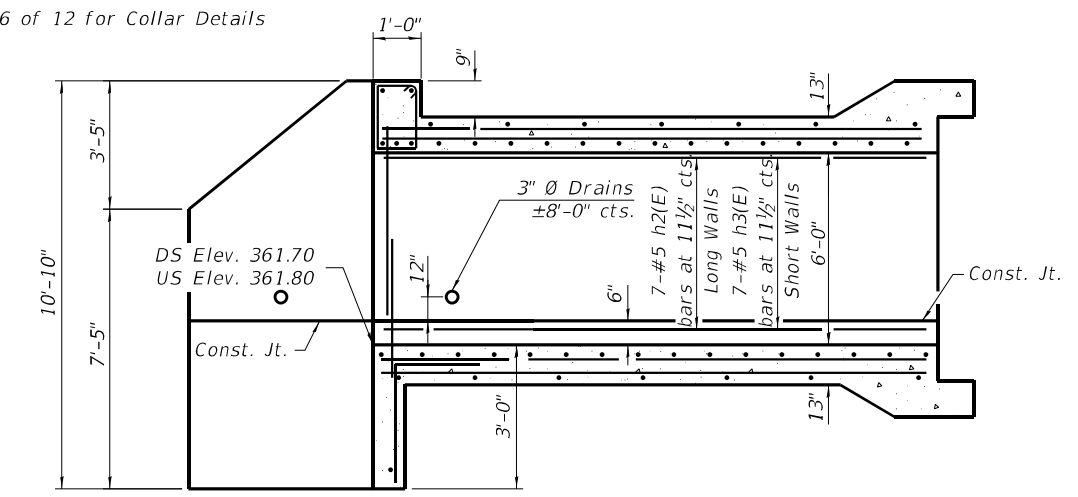
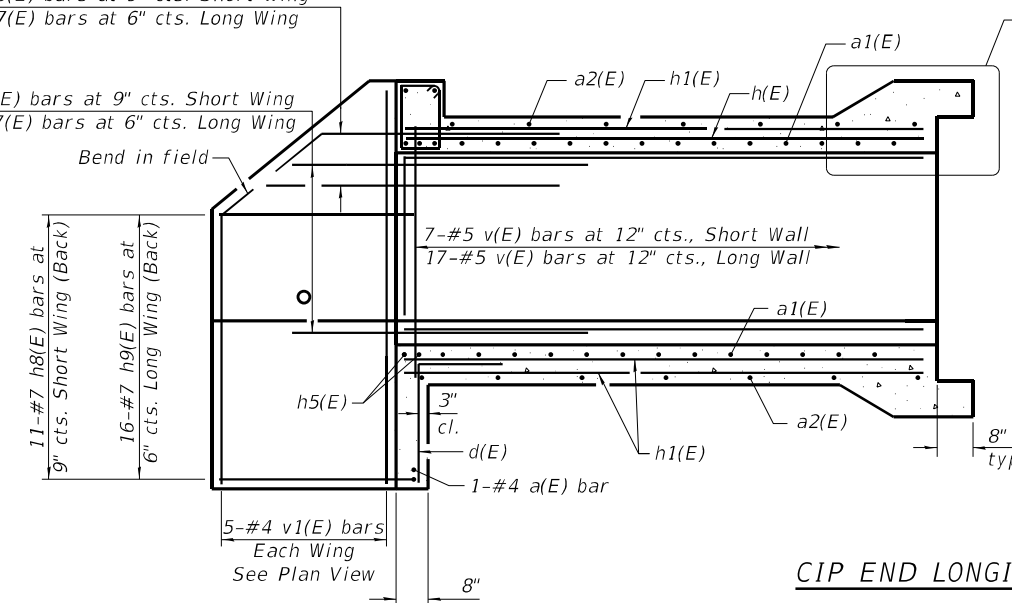
SHEET NO. 6 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	22
CONTRACT NO. 78790				

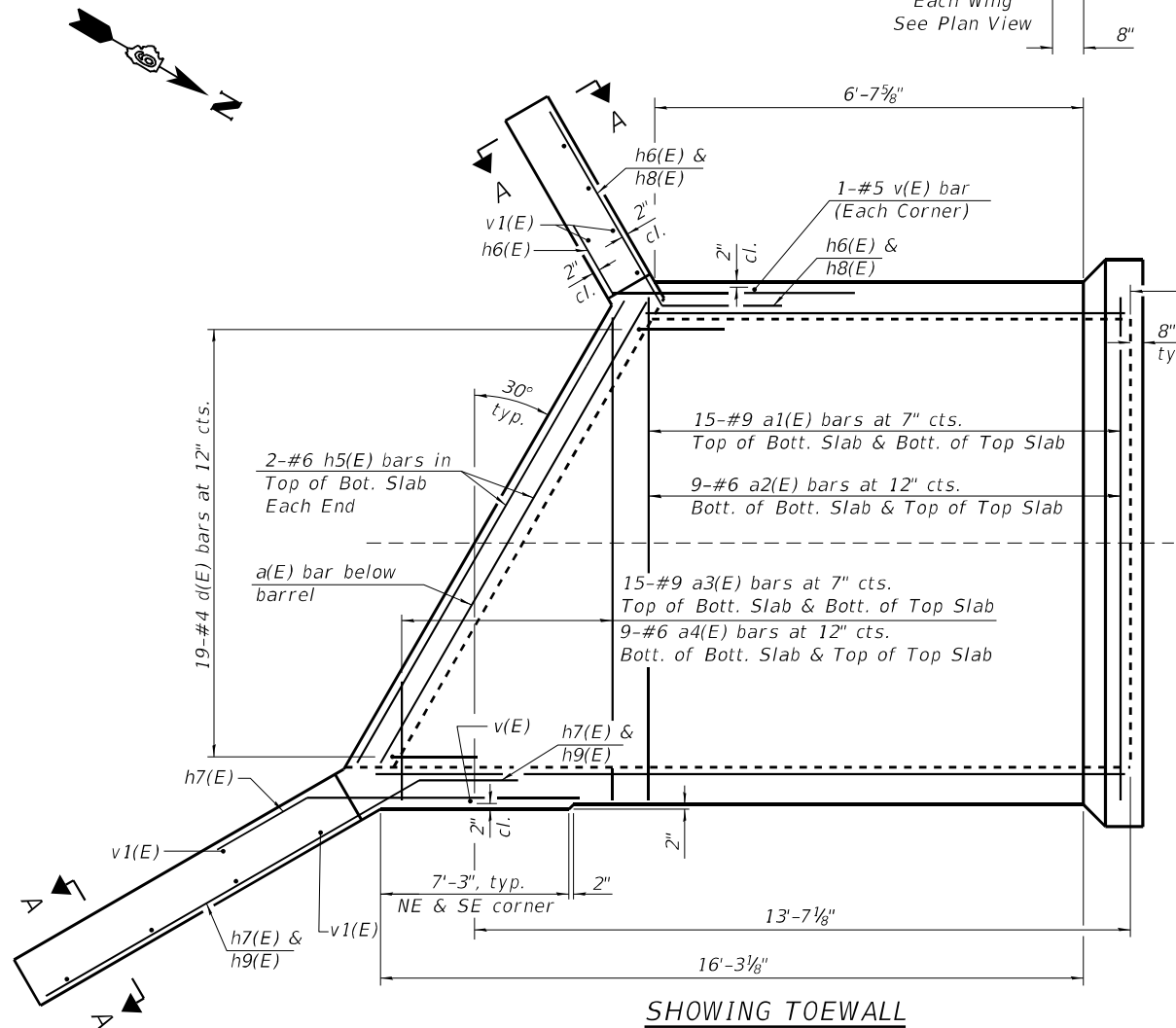
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(Back)
 4-#7 h6(E) bars at 9" cts. Short Wing
 5-#7 h7(E) bars at 6" cts. Long Wing

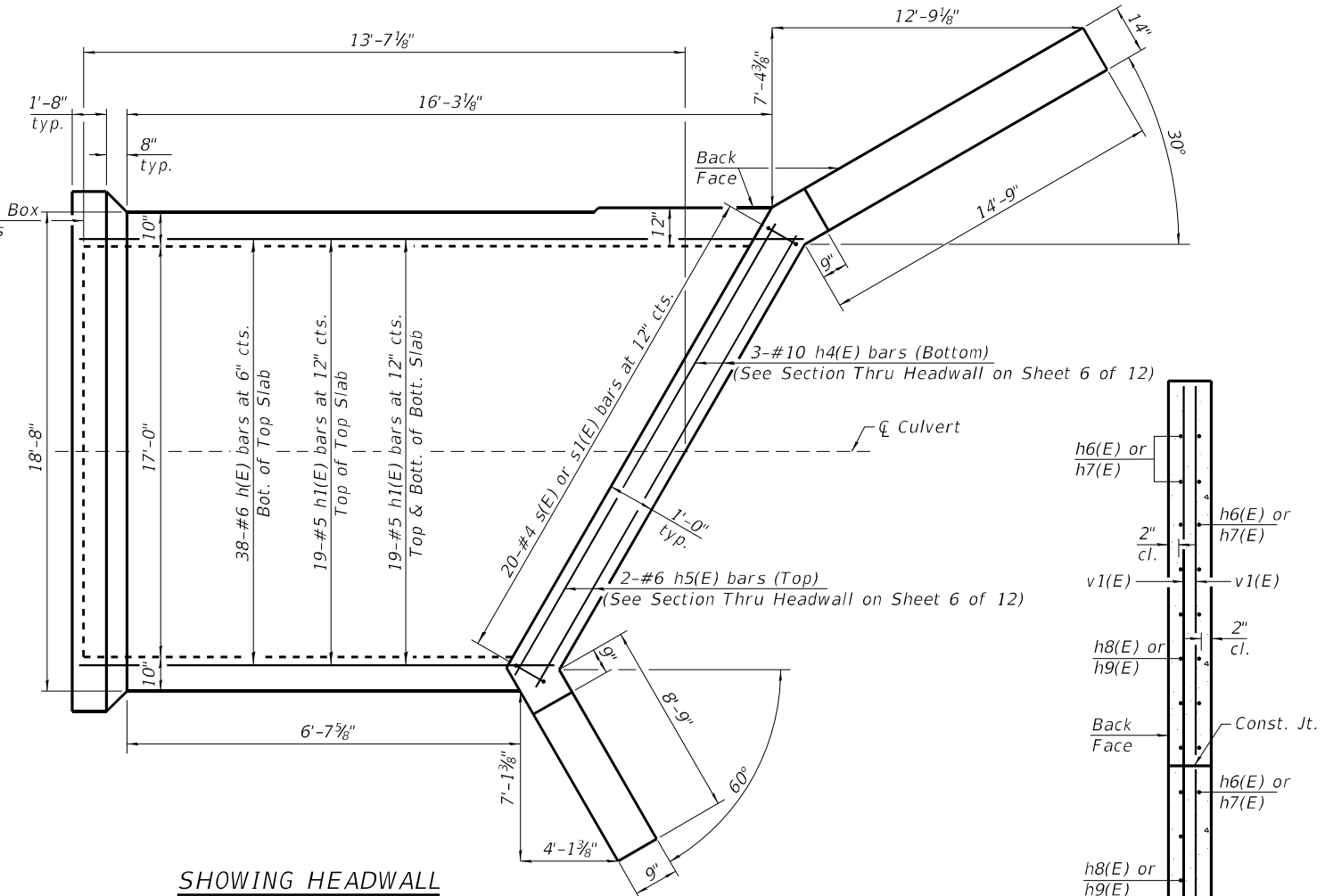
(Front)
 7-#7 h6(E) bars at 9" cts. Short Wing
 11-#7 h7(E) bars at 6" cts. Long Wing



CIP END LONGITUDINAL SECTION



CIP END SECTION PLAN



SECTION A-A

Note:
 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.



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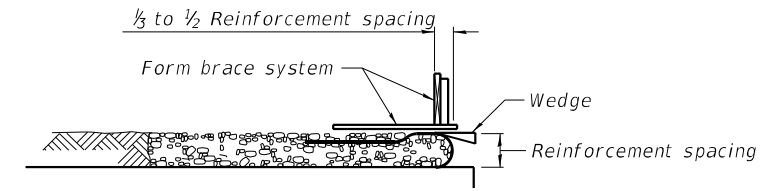
STATE OF ILLINOIS
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BOX CULVERT DETAILS - 3
 STRUCTURE NO. 039-7126

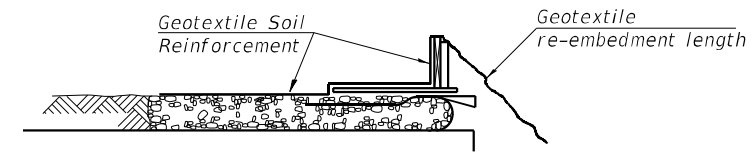
SHEET NO. 7 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	23
CONTRACT NO. 78790				

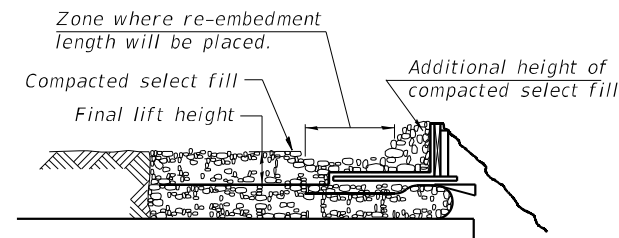
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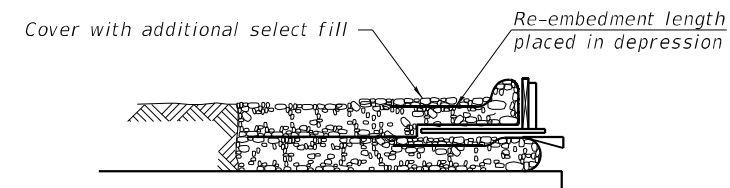
1. Place form brace system on completed reinforcement level; back from the finished fabric face a distance of $\frac{1}{3}$ to $\frac{1}{2}$ the geotextile reinforcement spacing.



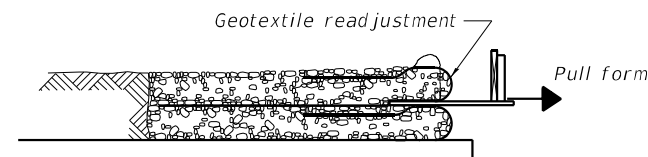
2. Position fabric so that the required geotextile re-embedment length extends over the top of the form brace and the design reinforcement width is placed with no slack against the previous level.



3. Compact select fill material in lifts to final lift height, create ($\pm 3"$) depression in zone where re-embedment length will be located and place additional height of compacted select fill against form brace.



4. Fold geotextile re-embedment length back over form brace into zone where depression was made in select fill and place additional select fill ($\pm 3"$) to embed geotextile and bring to final lift height.



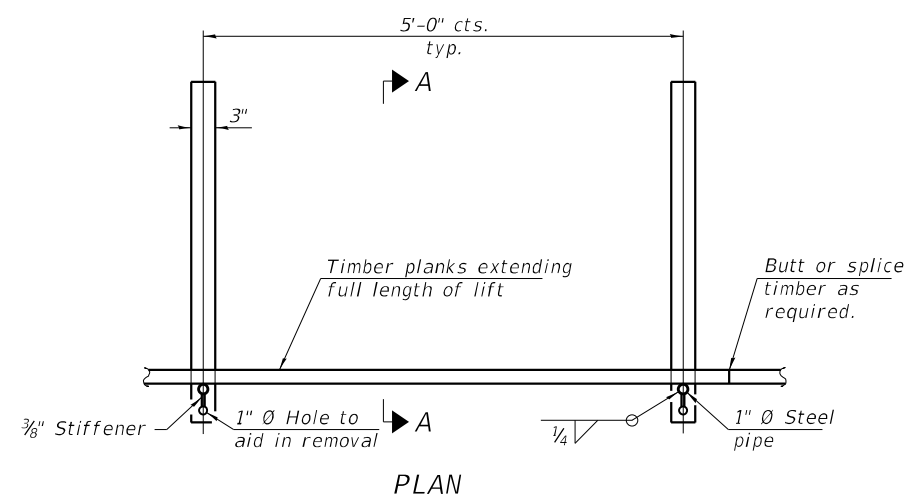
5. Pull form brace outward allowing geotextile face to slightly readjust to form tight round face level with plan reinforcement spacing.

GEOTEXTILE WALL CONSTRUCTION SEQUENCE

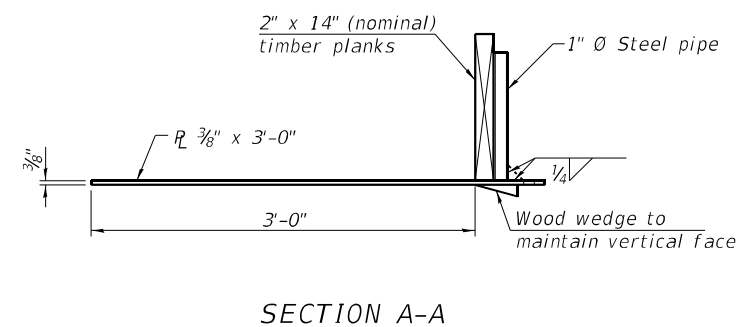
Notes:

The geotextile soil reinforcement shall have a minimum allowable tensile strength ($T_{min.}$) of 50 lb./in. as determined by the procedure described in the Standard Specifications for Road and Bridge Construction.

The computations supporting the determination of ($T_{min.}$) shall be submitted to the engineer for approval.



GEOTEXTILE FORM BRACE DETAIL



SECTION A-A

Note:
This is a suggested detail, the Contractor is responsible for the design of the form brace system to be used.



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PLOT DATE =	DRAWN - JAG	REVISED -
	CHECKED - ADB	REVISED -

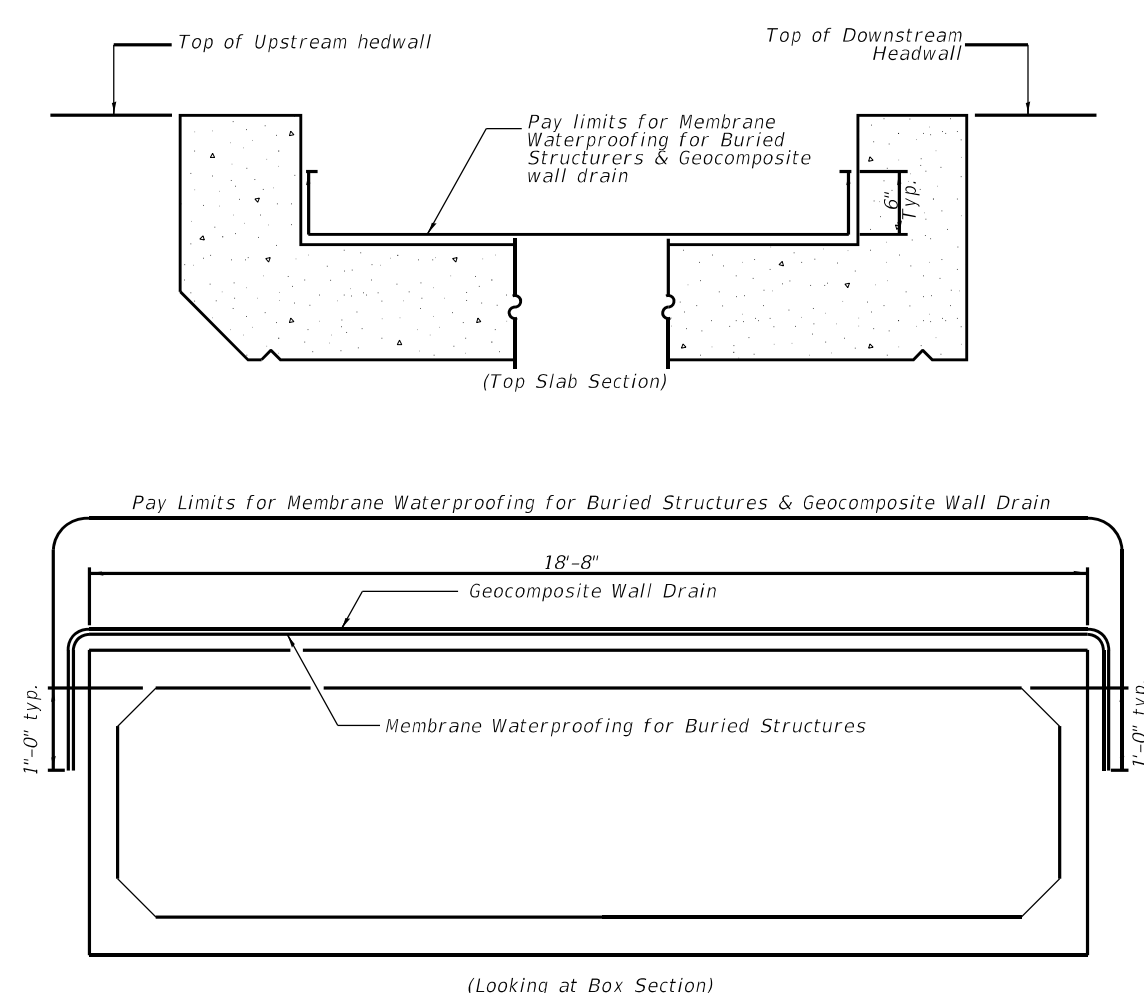
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

**BOX CULVERT DETAILS - 4
STRUCTURE NO. 039-7126**

SHEET NO. 8 OF 12 SHEETS

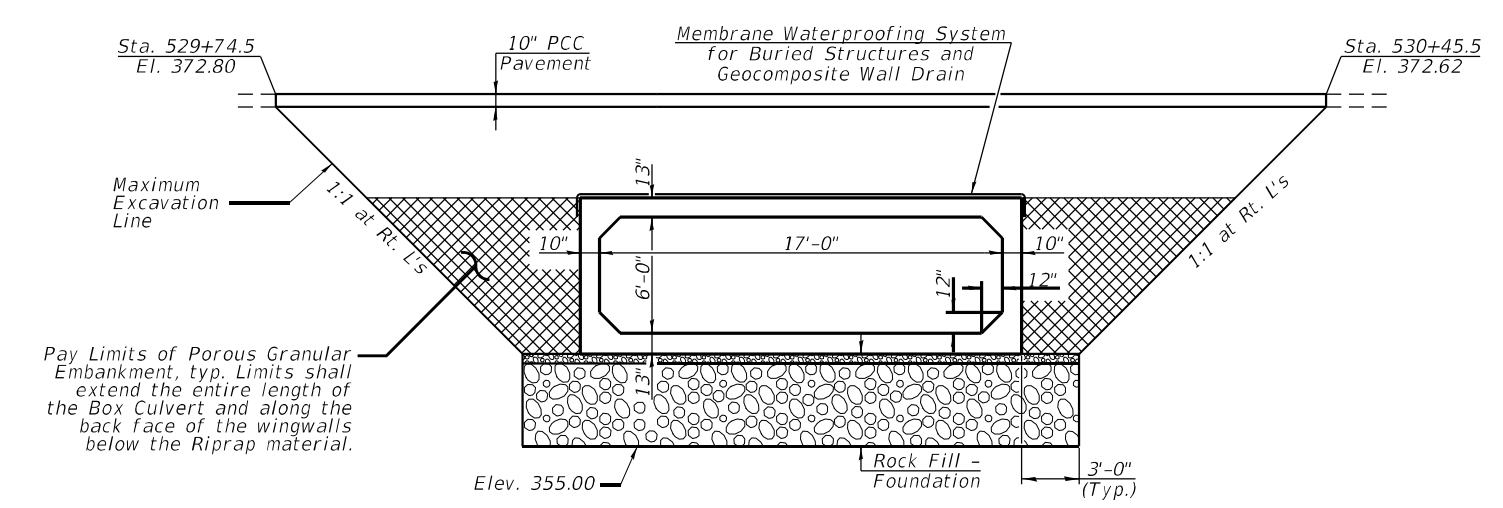
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	24
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT



**MEMBRANE WATERPROOFING
FOR BURIED STRUCTURES**

Note: Membrane Waterproofing for Culvert shall cover top of the top slab, top one foot of side walls (below top slab joint), and 6 inches up inside face of headwalls.



SECTION THRU BARREL

(All horizontal dimensions are shown at Right Angles)
(Existing bridge foundation within the limits of the proposed construction to be removed.)

Note:
The Rock Fill shall be capped according to the Rock Fill - Foundation Special Provision.
The cost of the capping material shall be included in the pay item for Rock Fill - Foundation.



SOIL BORING LOG

ROUTE IL 3 DESCRIPTION Box Culvert over stream LOGGED BY Lee Estel
 SECTION 123B-5 LOCATION 1.8 mi. E of Randolph County line, SEC. 22, TWP. 8S, RNG. 5W, 3 PM
 COUNTY Jackson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.	Station	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev.	Stream Bed Elev.	D E P T H	B L O W S	U C S Qu	M O I S T
		(ft)	(tsf)	(%)		ft	ft	(ft)	(tsf)	(%)	
039-2013	530+10										
BORING NO. 1-S	Station 530+37										
	Offset 9.0ft RT										
	Ground Surface Elev. 372.9										
	Cored Pavement, 2.5" HMA over 9.5" PCC	371.90									
	Stiff Brown, Moist SILTY CLAY		2								
			5	1.8	17						
			5	B							
		368.40									
	M. Stiff Brown, Moist SILT		1								
			3	0.9	21						
			4	B							
			1								
			2	0.8	21						
			4	B							
		363.40									
	Soft Brown, Moist SILT		1								
			2	0.4	21						
			1	B							
		360.90									
	M. Stiff Brown, Moist SILT		WOH								
			WOH	0.7	28						
			WOH	B							
			WOH								
			WOH	0.5	28						
			WOH	B							
			WOH								
			WOH	0.7	26						
			WOH	B							
		353.40									
	V. Soft Brown, Moist SILT		WOH								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrator, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\MATERIALS\GEOTECHNICAL\UNIT\GINT\PROJECTS\PROJECTS\FILE\JACKSON\STRUCTURES\039-2013 IL 3 OVER STREAM\039-2013 IL 3 OVER STREAM.DWG Date Printed: 4/21/20



SOIL BORING LOG

ROUTE IL 3 DESCRIPTION Box Culvert over stream LOGGED BY Lee Estel
 SECTION 123B-5 LOCATION 1.8 mi. E of Randolph County line, SEC. 22, TWP. 8S, RNG. 5W, 3 PM
 COUNTY Jackson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.	Station	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev.	Stream Bed Elev.	D E P T H	B L O W S	U C S Qu	M O I S T
		(ft)	(tsf)	(%)		ft	ft	(ft)	(tsf)	(%)	
039-2013	530+10										
BORING NO. 2-S	Station 529+85										
	Offset 9.5ft LT										
	Ground Surface Elev. 373.0										
	Cored Pavement, 2.5" HMA over 9.5" PCC	372.00									
	V. Stiff Brown, Moist SILTY CLAY		1								
			3	2.5	26						
			4	B							
			1								
	(Stiff)		3	1.2	20						
			4	B							
		366.00									
	Stiff Brown, Moist SILT		1								
			3	1.1	21						
			4	B							
		363.50									
	M. Stiff Brown, Moist SILT		1								
			2	0.5	23						
			2	B							
			WOH								
			2	0.8	29						
			2	B							
		358.50									
	V. Soft Brown, Moist SILT		WOH								
			WOH	0.2	28						
			WOH	P							
			WOH								
			WOH	0.2	28						
			WOH	P							
		353.50									
	M. Stiff Brown, Moist SILT		WOH								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrator, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\MATERIALS\GEOTECHNICAL\UNIT\GINT\PROJECTS\PROJECTS\FILE\JACKSON\STRUCTURES\039-2013 IL 3 OVER STREAM\039-2013 IL 3 OVER STREAM.DWG Date Printed: 4/21/20



USER NAME =	DESIGNED - JAG	REVISED -
CHECKED - ADB	REVISOR -	
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-7126

SHEET NO. 10 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	26
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 STATE BOND ISSUE HIGHWAY**

BOND ISSUE ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
150	C-123	JACKSON	93	1
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 194				

INDEX OF SHEETS

Sheet No. 1 Title Page.
 2X Standard 1463.
 2 Standard 1365, 1358.
 3 Standard 1357, 1354.
 4 Schedule of Culverts & Gutter.
 4 Special Cross Section for 1359 (for Class C Excavation).
 5 Plan & Profile Station 94+30 to Sta. 105+00.

6	105+00	135+00
7	135+00	165+00
8	165+00	195+00
9	195+00	225+00
10	225+00	255+00
11	255+00	285+00
12	285+00	315+00
13	315+00	345+00
14	345+00	375+00
15	375+00	405+00
16	405+00	435+00
17	435+00	465+00
18	465+00	495+00
19	495+00	525+00
20	525+00	555+00
21	555+00	585+00
22	585+00	615+00

23 to 68 (incl) Cross Sections.
 69 Standard Culvert Design 1204-A, 1204-B.
 69 Special Culvert Design Sta. 94+30 to 105+00.

70	103+05, 115+05, 120+10, 125+10
71	137+43, 151+41, 156+07, 163+19
72	170+65, 179+90, 215+10, 221+27
73	227+25, 234+19, 237+69, 240+02
74	241+69, 247+66, 252+73, 278+94
75	282+47, 286+07, 290+10, 295+79
76	317+17, 328+48, 335+17, 340+00
77	351+25, 360+25, 369+05, 379+37
78	383+07, 392+45, 401+00, 405+06
79	424+22, 433+17, 438+00, 446+00
80	450+02, 457+54, 474+15, 485+29
81	489+27, 498+34, 500+53, 504+73
82	508+37, 513+66, 523+00, 533+84
83	539+89, 550+45, 557+85, 572+62
84	573+06, 582+09, 594+43, 602+50
85	607+00

85 Special Bridge Sta. 194+09 Sheet 1 of 2, & Sheet 2 of 2.
 86 - 345+42 - 1 of 1.
 87 - 370+74 - 1 of 1.
 88 - 413+60 - 1 of 3.
 89 - 413+60 - 2 of 3.
 90 - 413+60 - 3 of 3.
 91 - 530+10 - 1 of 1.
 92 Standard 1162, 1203.
 93 Standard 1470, 1471.

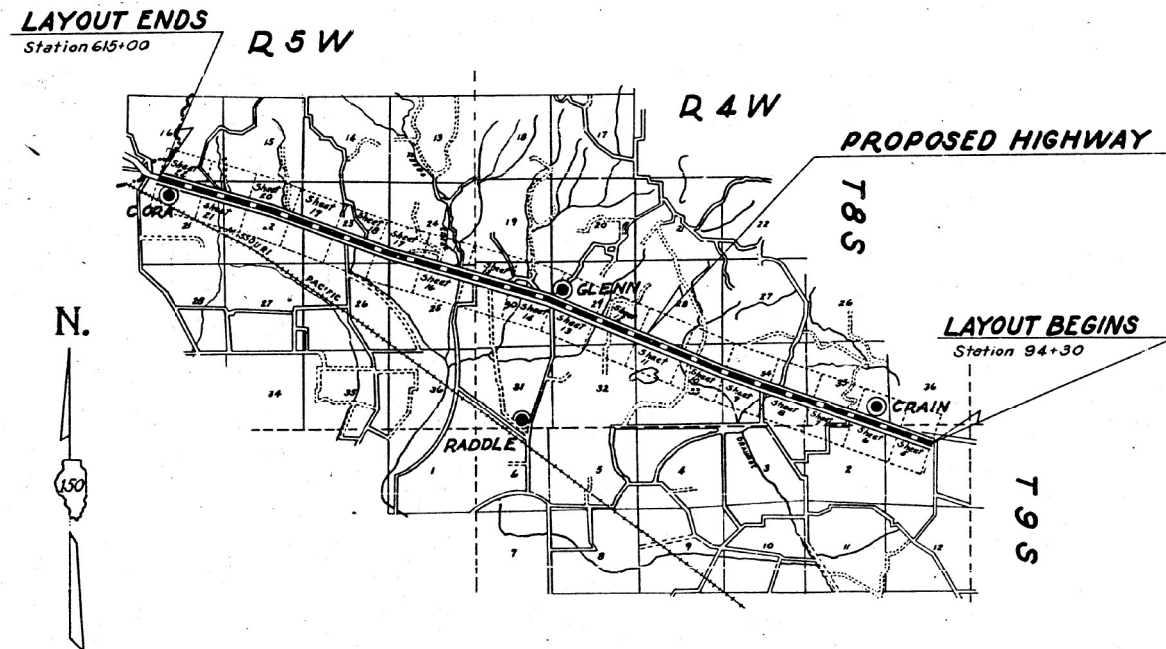
039-2013

F.A. PROJECT 194-C
ROUTE 150 SECTION 123 JACKSON COUNTY

FROM A POINT NEAR THE S.E. CORNER OF THE N.E. 1/4 NW 1/4 OF SEC. 1, T. 9 S., R. 4 W. OF THE 3 RD. P.M.
 TO A POINT NEAR THE S.W. CORNER OF THE S.E. 1/4 SW 1/4 OF SEC. 16 T. 8 S. R. 5 W. OF THE 3 RD. P.M.

SCALES

PLAN	1 INCH	100 FT.
PROFILE, HOR.	1 INCH	100 FT.
PROFILE, VERT.	1 INCH	10 FT.
CROSS-SECTIONS	1 INCH	6 FT.



LAYOUT
 Approximate Scale 1 Inch = 1 Mile
 Net Length of Layout 52070 Feet = 9.8617 Mile

STATE LINE	—————	RETAINING WALL	—————
COUNTY LINE	—————	BASE OR SURVEY LINE	—————
CITY, VILLAGE OR TOWN	—————	LEVEE	—————
TOWNSHIP LINE	—————	CULVERT	—————
SECTION LINE	—————	STORM SEWER	—————
GRANT LINE	—————	TILE DRAIN	—————
SECTION CORNER	⊙	DROP INLET	—————
FENCE LINE	—————	TROLLEY POLE	—————
UNFENCED PROPERTY	—————	POWER POLE	—————
RIGHT OF WAY LINE	—————	TELEPHONE OR TELEGRAPH POLE	—————
GUARD RAIL	—————	MARSH	—————
STEAM RAILROAD	—————	HEDGE	—————
ELECTRIC RAILROAD	—————		

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS

SUBMITTED February 4, 1932
 G.A. Somerville PROJECT ENGINEER

EXAMINED April 6, 1932
 C.D. Duffner ROAD ENGINEER

PASSED April 6, 1932

APPROVED April 6, 1932
 [Signature] CHIEF ENGINEER, Bureau of Public Roads

APPROVED April 6, 1932
 [Signature] ACTING SUPERINTENDENT OF HIGHWAYS

RECOMMENDED FOR APPROVAL

[Signature] DISTRICT ENGINEER, Bureau of Public Roads

RECOMMENDED FOR APPROVAL

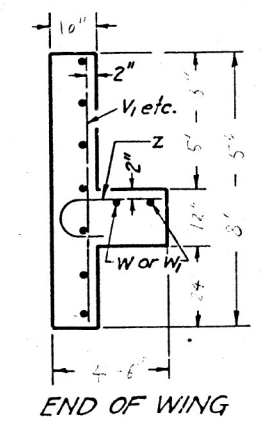
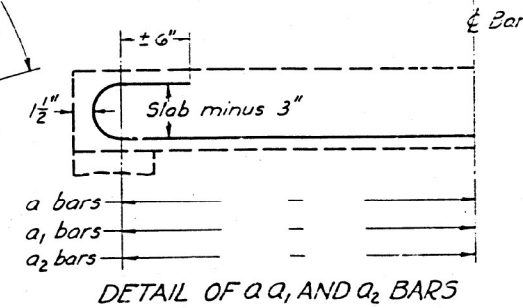
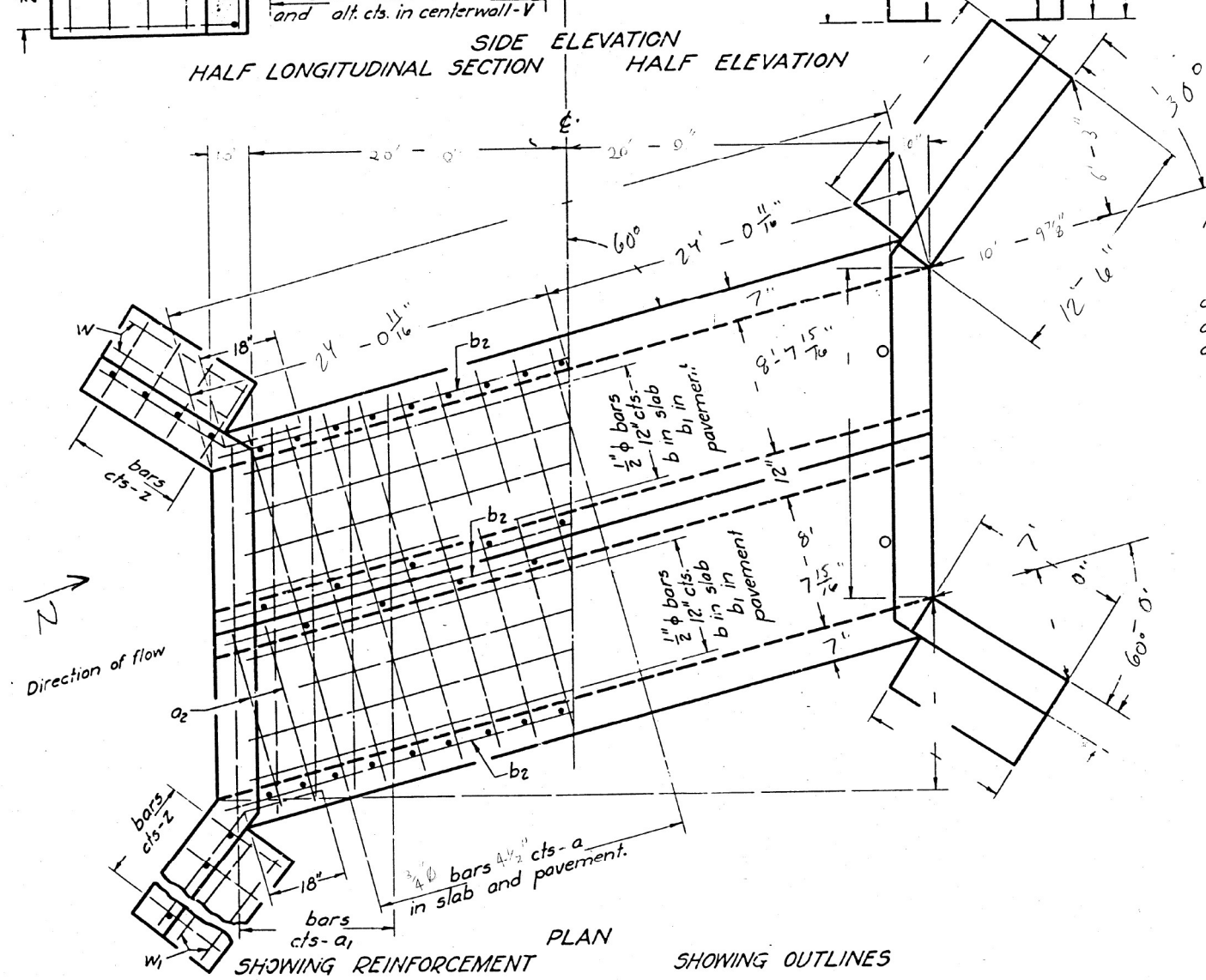
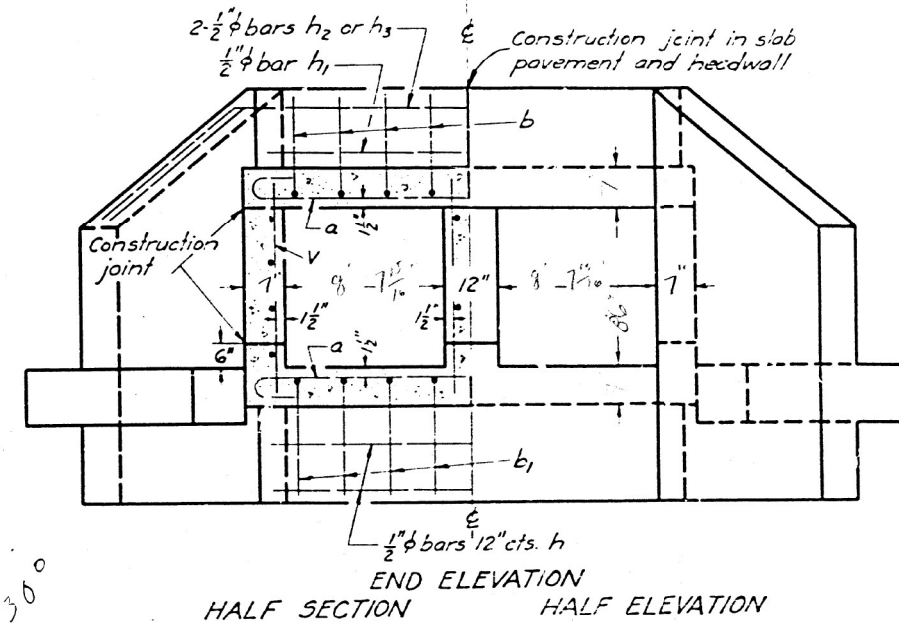
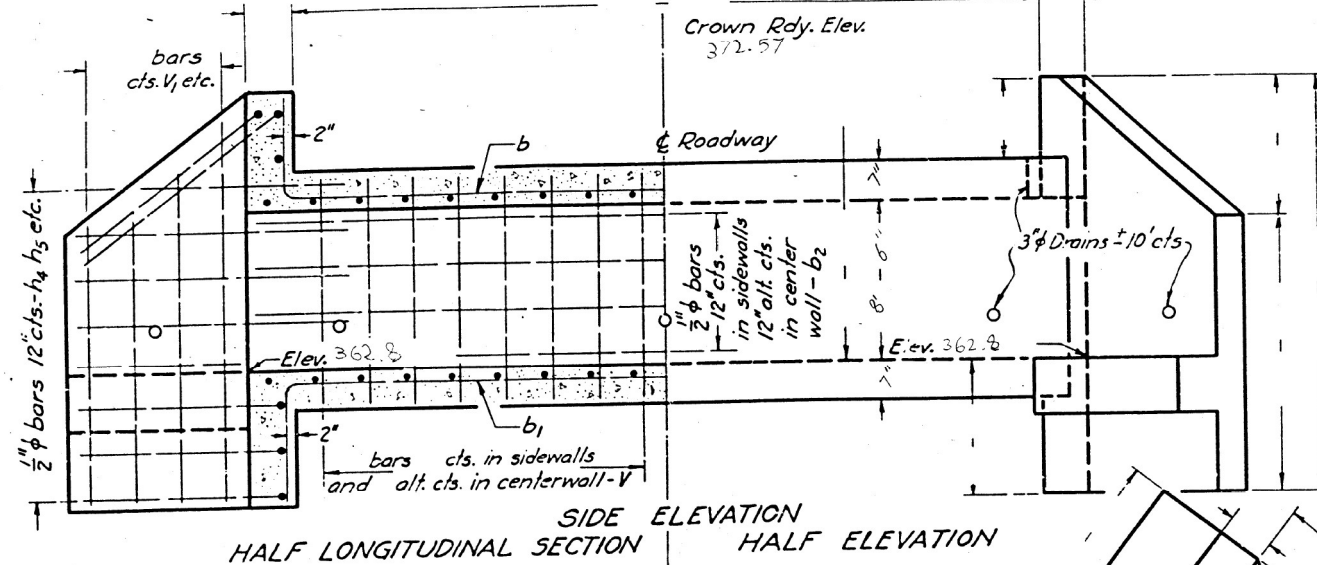
[Signature] CHIEF ENGINEER, Bureau of Public Roads

APPROVED

[Signature] CHIEF, Bureau of Public Roads

9-23

JACKSON COUNTY SECTION 123 ROUTE 150



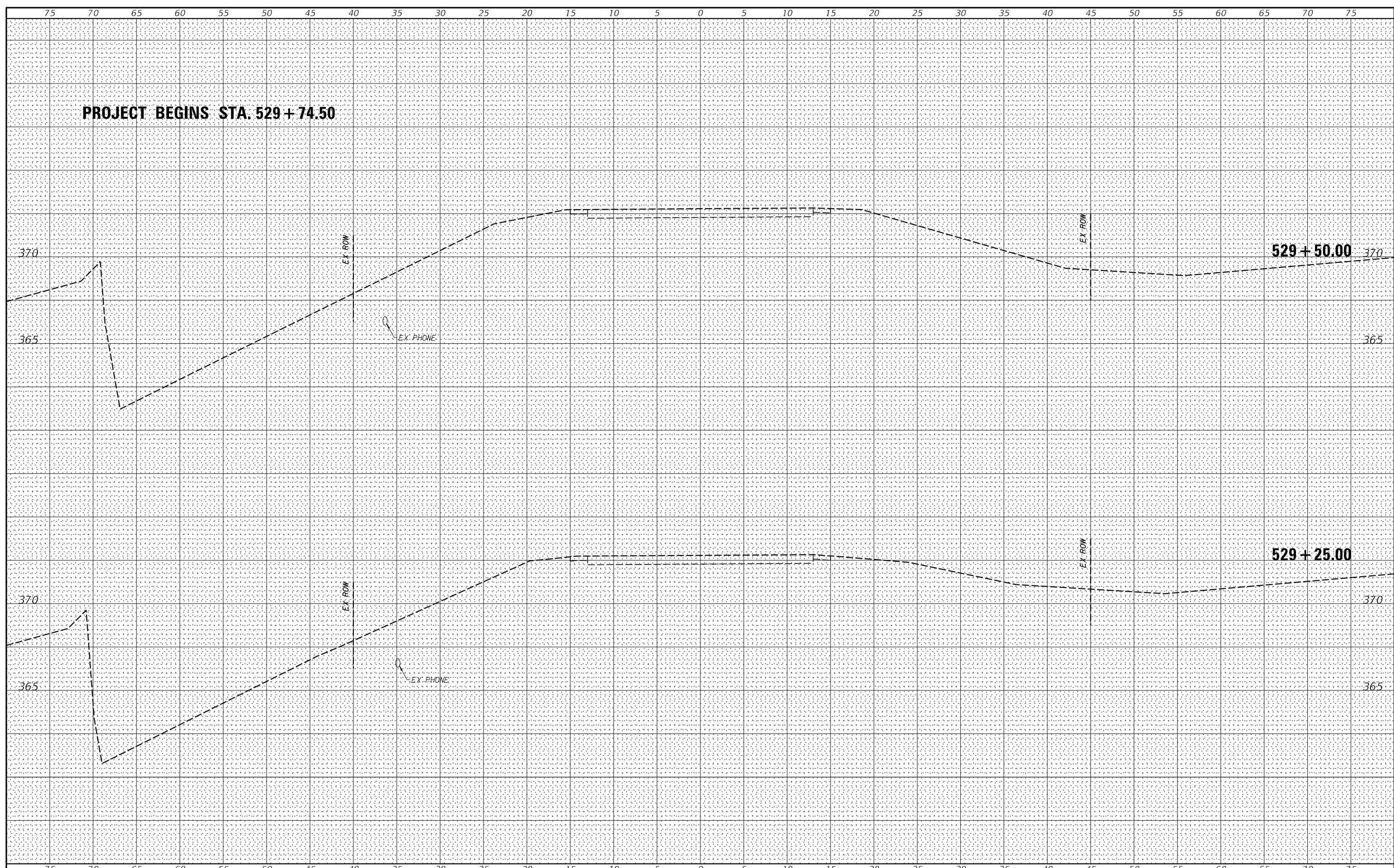
BILL OF MATERIAL

Bars	Number	Size	Length
a			
a ₁			
a ₂			
b			
b ₁			
b ₂			
h			
h ₁			
h ₂			
h ₃			
h ₄			
h ₅			
h ₆			
h ₇			
v			
v ₁			
v ₂			
v ₃			
w			
w ₁			
z			

Class X concrete Cu. Yds.
Reinforcing Steel Lbs.

STANDARD	COMPUTED —	EXAMINED —
	CHECKED —	
	DRAWN — J.C. Anderson	PASSED —
	CHECKED —	APPROVED —
	ASSEMBLED —	

Class X concrete shall be used throughout.
All reinforcing steel shall be wired securely in place before concrete is poured.



PROJECT BEGINS STA. 529 + 74.50

529 + 50.00

529 + 25.00

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

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

VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISED -
PLOT SCALE = *SCALE*	DRAWN -	REVISED -
PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

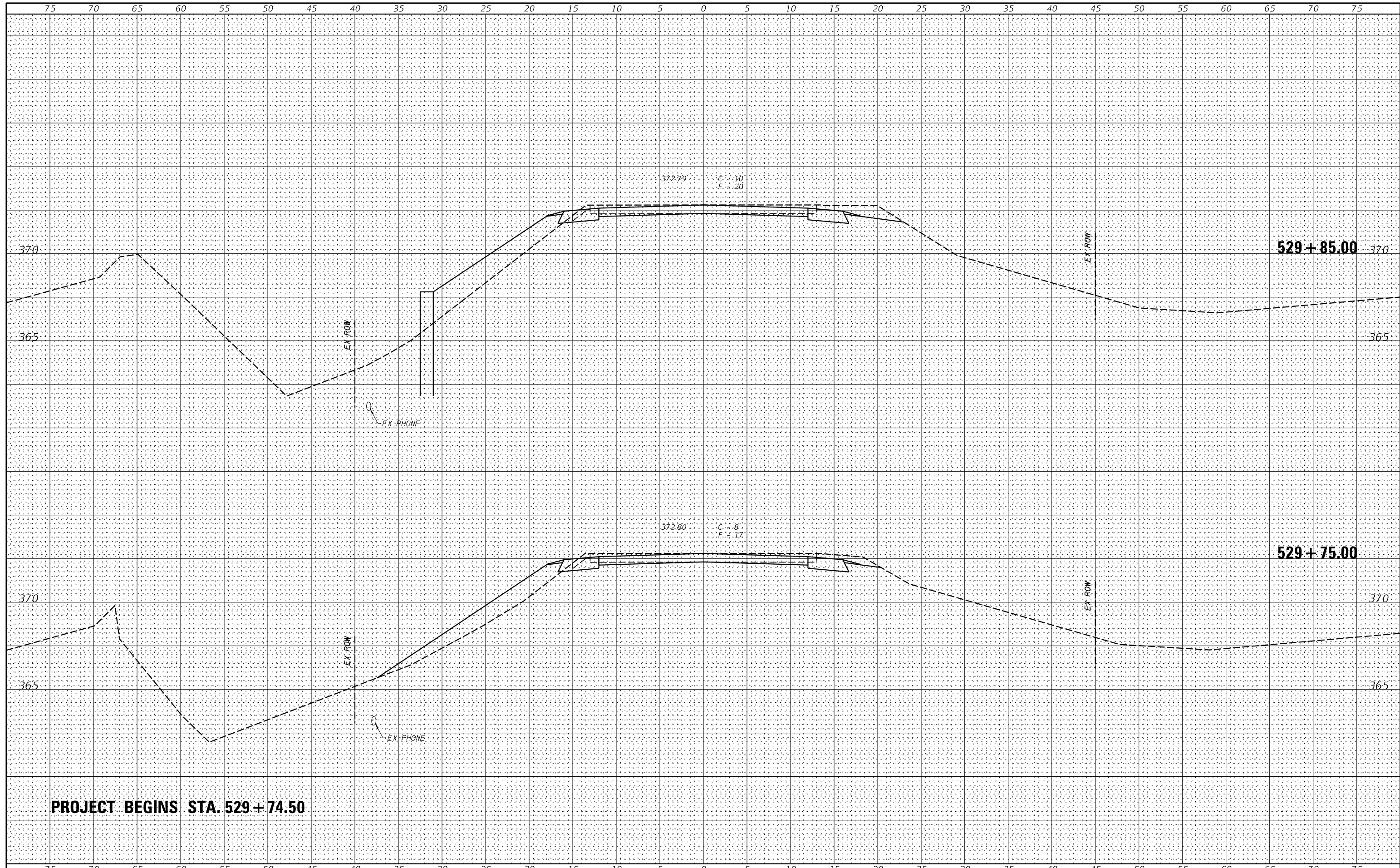
CROSS SECTIONS - SN 039-7126

SCALE: _____ SHEET NO. 1 OF 4 SHEETS STA. 529+25.00 TO STA. 529+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	29
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISED -
PLOT SCALE = *SCALE*	DRAWN -	REVISED -
PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

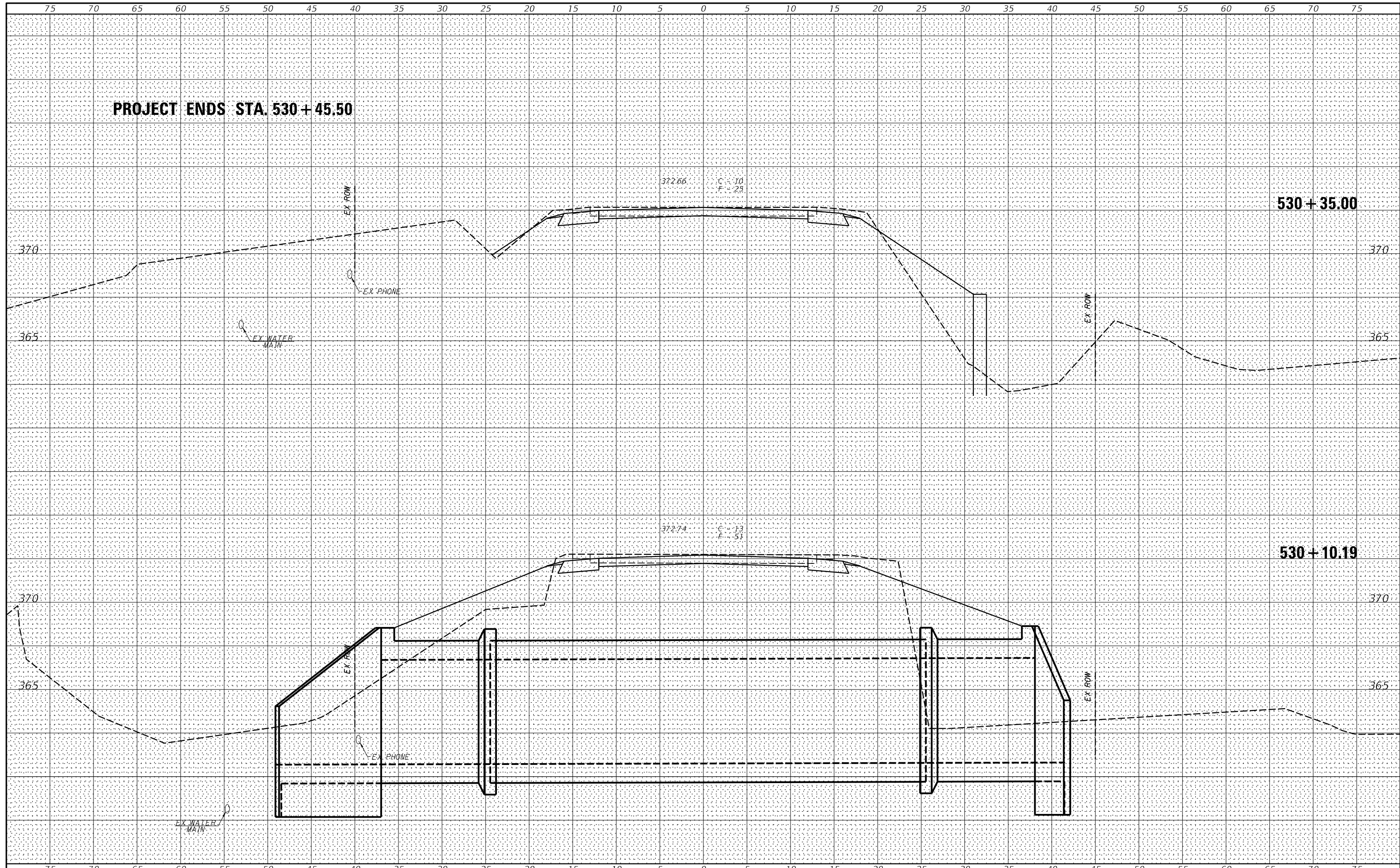
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-7126
 SCALE: _____ SHEET NO. 2 OF 4 SHEETS STA. 529+75.00 TO STA. 529+85.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	30
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT				

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

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



PROJECT ENDS STA. 530+45.50

530+35.00

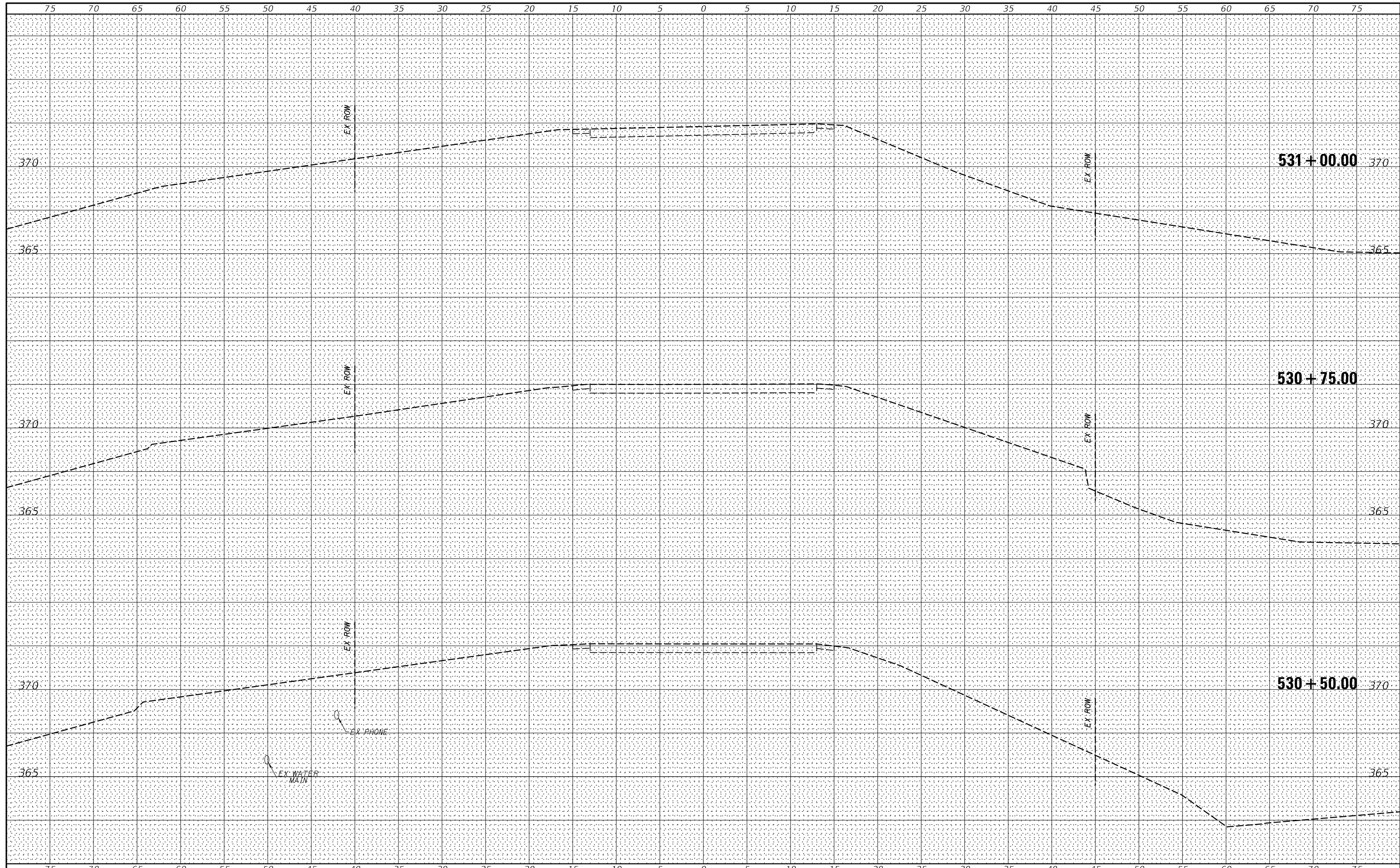
530+10.19

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	DRAWN -	REVISED -
PLOT SCALE = *SCALE*	CHECKED -	REVISED -
PLOT DATE = *DATE*	DATE -	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	31
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL Design Firm No. 184-001939

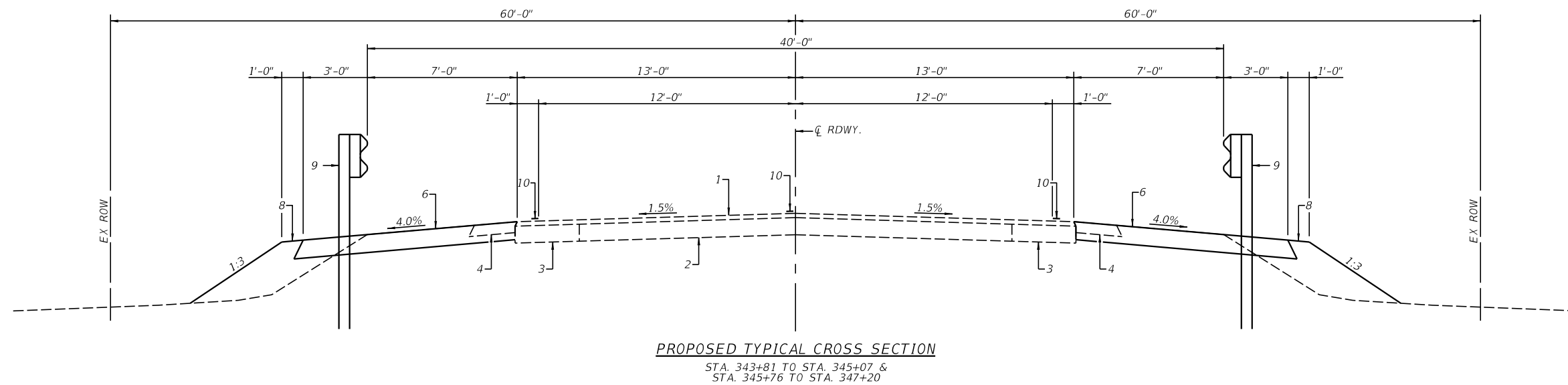
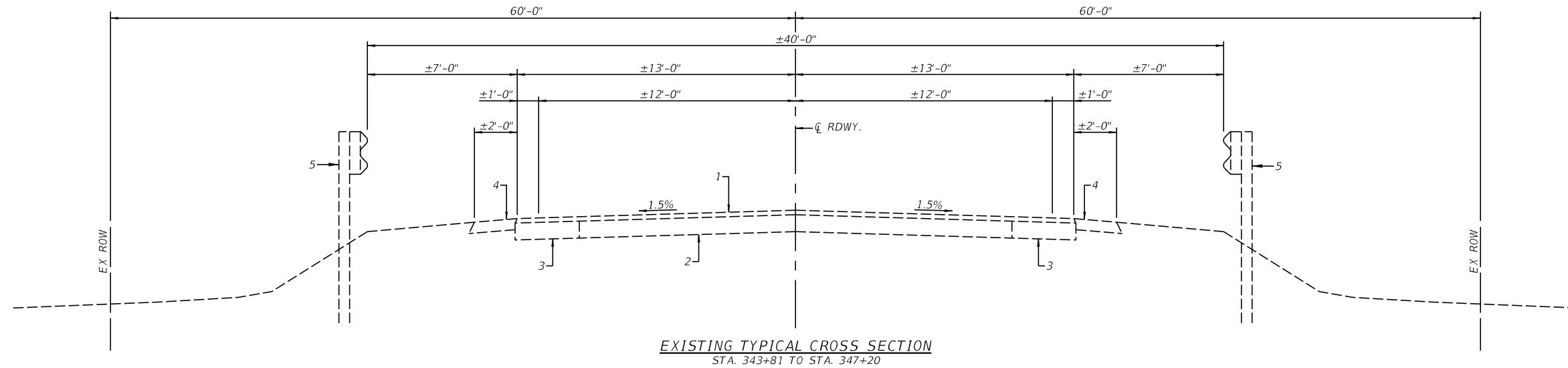
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PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-7126

SCALE: _____ SHEET NO. 4 OF 4 SHEETS STA. 530+50.00 TO STA. 531+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5	JACKSON	101	32
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



- PAVEMENT LEGEND**
- 1 - EX HMA SURF CSE ±2½"
 - 2 - EX PCC PAVEMENT ±9½"
 - 3 - EX HMA BSE CSE WIDENING
 - 4 - EX AGG SHOULDER
 - 5 - EX GUARDRAIL
 - 6 - PR HMA SHOULDER 10"
 - 7 - PR PCC PAVEMENT 10" MIN.
 - 8 - PR EARTH SHOULDER
 - 9 - PR GUARDRAIL
 - 10 - PR PAINT PAVEMENT MARKING - LINE 4"
 - 11 - PR TEMP. PAVEMENT MARKING - LINE 4" - PAINT

MODEL: 340DELENAME
FILE NAME: STS15



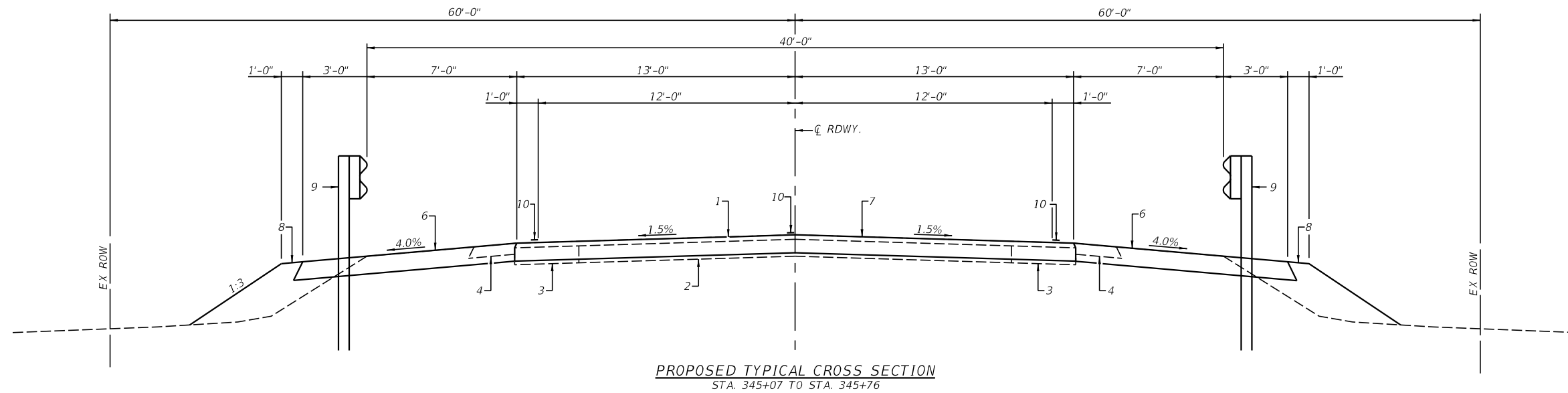
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DRAWN - _____	REVISIONS - _____	REVISIONS - _____
PLOT SCALE = \$SCALE\$	CHECKED - _____	REVISIONS - _____
PLOT DATE = \$DATE\$	DATE - _____	REVISIONS - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ROADWAY TYPICAL SECTIONS

SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	33
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL CROSS SECTION
STA. 345+07 TO STA. 345+76

PAVEMENT LEGEND

- 1 - EX HMA SURF CSE $\pm 2\frac{1}{2}$ "
- 2 - EX PCC PAVEMENT $\pm 9\frac{1}{2}$ "
- 3 - EX HMA BSE CSE WIDENING
- 4 - EX AGG SHOULDER
- 5 - EX GUARDRAIL
- 6 - PR HMA SHOULDER 10"
- 7 - PR PCC PAVEMENT 10" MIN.
- 8 - PR EARTH SHOULDER
- 9 - PR GUARDRAIL
- 10 - PR PAINT PAVEMENT MARKING - LINE 4"
- 11 - PR TEMP. PAVEMENT MARKING - LINE 4" - PAINT

MODEL: 41002ELMAMES
FILE NAME: SELELS



USER NAME = SUSERS	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 5SCALES	CHECKED - _____	REVISED - _____
PLOT DATE = SDATES	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ROADWAY TYPICAL SECTIONS

SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	34
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78790	

EARTHWORK								
LOCATION	EARTH EXCAVATION	ADJUSTED SHRINKAGE FACTOR	EARTH EXCAVATION (ADJUSTED)	EMBANKMENT	EARTHWORK BALANCE		FURNISHED EXCAVATION	REMARKS
					EXCAVATION REQUIRED TO COMPLETE	EXCESS EXCAVATION		
	CU. YD.	%	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	
STA. 343+90 TO STA. 347+20	119	25	89	98	0	0	9	
TOTAL	119		89	98	0	0	9	

TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS				
LOCATION	IMPACT ATTENUATORS, TEMPORARY (FULLY REDERECTIVE, NARROW), TEST LEVEL 3	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, RELOCATE (FULLY REDERECTIVE, NARROW) TEST LEVEL 3
	EACH	FOOT	FOOT	EACH
STA. 343+53.7 TO STA. 343+86.3 RT.	1			
STA. 343+86.3 TO STA. 346+98.2 (STAGE I)		312.5		
STA. 346+98.2 TO STA. 347+30.8 RT.	1			
STA. 343+53.7 TO STA. 343+86.5 LT.				1
STA. 343+86.5 TO STA. 346+99.0 (STAGE II)			312.5	
STA. 346+99.0 TO STA. 347+30.8 LT.				1
TOTAL	2	312.5	312.5	2

STEEL RAILING AND GUARDRAIL SCHEDULE					
LOCATION	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	STEEL PLATE BEAM GUARDRAIL 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 14	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REMOVAL
	EACH	FOOT	EACH	EACH	FOOT
STA. 344+20.0 TO STA. 344+70.0 RT	1				
STA. 344+70.0 TO STA. 345+20.0 RT		50			
STA. 345+20.0 TO STA. 345+40.2 RT			1		
STA. 345+62.5 TO STA. 345+84.6 RT			1		
STA. 345+84.6 TO STA. 346+34.6 RT	1				
STA. 344+49.4 TO STA. 344+99.4 LT	1				
STA. 344+99.4 TO STA. 345+21.5 LT			1		
STA. 345+43.8 TO STA. 345+66.0 LT			1		
STA. 345+66.0 TO STA. 346+16.0 LT		50			
STA. 346+16.0 TO STA. 346+66.0 LT	1				
STA. 344+20.0 RT				1	
STA. 344+49.4 LT				1	
STA. 346+34.6 RT				1	
STA. 346+66.0 LT				1	
STA. 343+93.2 TO STA. 346+03.4 RT					216
STA. 344+81.4 TO STA. 346+96.4 LT					216
TOTAL	4	100	4	4	432

PERMANENT SEEDING						
LOCATION	SEEDING CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH METHOD 2
	ACRE	POUND	POUND	POUND	TON	ACRE
STA. 343+81 TO STA. 345+50 RT.	0.14	13	13	13	0.28	0.14
STA. 345+60 TO STA. 347+20 RT.	0.10	9	9	9	0.20	0.10
STA. 343+81 TO STA. 345+02 LT.	0.10	9	9	9	0.20	0.10
STA. 345+40 TO STA. 347+20 LT.	0.15	14	14	14	0.30	0.15
TOTAL	0.49	45	45	45	0.98	0.49

USE 0.5 ACRE USE 45 LBS. USE 45 LBS. USE 45 LBS. USE 1 TON USE 0.5 ACRE

PAVEMENT REMOVAL	
LOCATION	PAVEMENT REMOVAL SQ. YD.
STA. 345+07.0 TO STA. 345+76.0	200
TOTAL	200

TEMPORARY EROSION CONTROL ITEMS			
LOCATION	SEEDING, CLASS 7	TEMPORARY EROSION CONTROL SEEDING	PERIMETER EROSION BARRIER
	ACRE	POUND	FOOT
STA. 343+81 TO STA. 347+20 RT.	0.23	23	
STA. 343+81 TO STA. 347+20 LT.	0.27	27	
STA. 343+ 81 TO STA. 344+90 LT.			109
STA. 345+50 TO STA. 347+20 LT.			170
STA. 343+81 TO STA. 345+10 RT.			129
STA. 345+80 TO STA. 346+80 RT.			100
TOTAL	0.50	50	508

USE 0.5 ACRE USE 50 LBS.

PAVEMENT MARKING REMOVAL - GRINDING	
LOCATION	PAVEMENT MARKING REMOVAL - GRINDING SQ. FT.
EXISTING PAVEMENT MARKING	
STA. 342+84.0 TO STA. 348+44.5 RT.	164
STA. 341+52 TO STA. 349+05 CENTERLINE SKIP DASH	64
STA. 342+12.0 TO STA. 348+48.0 LT.	212
TOTAL	440

PINNING TEMPORARY CONCRETE BARRIER	
LOCATION	PINNING TEMPORARY CONCRETE BARRIER EACH
STAGE I	
STA. 344+86.0 TO STA. 344+98.5	1
STA. 344+98.5 TO STA. 345+11.0	2
STA. 345+11.0 TO STA. 345+73.5	15
STA. 345+73.5 TO STA. 345+86.0	2
STA. 345+86.0 TO STA. 345+98.5	1
STAGE II	
STA. 252+17.0 TO STA. 252+29.5	1
STA. 252+29.5 TO STA. 252+42.0	2
STA. 252+42.0 TO STA. 253+04.5	15
STA. 253+04.5 TO STA. 253+17.0	2
STA. 253+17.0 TO STA. 253+29.5	1
TOTAL	42

REMOVE SIGN PANEL ASSEMBLY - TYPE B	
LOCATION	REMOVE SIGN PANEL ASSEMBLY EACH
STA. 344+70.5 23.6' RT (BRIDGE WEIGHT LIMIT)	1
STA. 346+56.5 23.4' LT (BRIDGE WEIGHT LIMIT)	1
TOTAL	2

70107025 CHANGEABLE MESSAGE SIGN	
LOCATION	CHANGEABLE MESSAGE SIGN
	CAL. DAY
MESSAGE BOARD SOUTHEAST OF IL 3/151 INTERSECTION (QUANTITY INCLUDED WITH SN 039-2035)	
MESSAGE BOARD NORTHWEST OF IL 3 AND RADDLE ROAD INTERSECTION	90
TOTAL	90

PAINT PAVEMENT MARKING SCHEDULE		
LOCATION	PAINT PAVEMENT MARKING - LINE 4"	
	30' SKIP 10' DASH (YELLOW)	EDGE LINE (WHITE)
	FOOT	FOOT
STA. 342+12 TO STA. 348+48 LT.		636
STA. 341+52 TO STA. 349+05 CL.	190	
STA. 342+84 TO STA. 348+45 RT.		561
SUBTOTAL	190	1197
TOTAL		1387

TEMPORARY RUMBLE STRIPS	
LOCATION	TEMPORARY RUMBLE STRIPS EACH
STA. 324+52 RT.	1
STA. 329+52 RT.	1
STA. 334+52 RT.	1
STA. 356+05 LT.	1
STA. 361+05 LT.	1
STA. 366+05 LT.	1
TOTAL	6

TEMPORARY BRIDGE TRAFFIC SIGNALS	
LOCATION	TEMPORARY BRIDGE TRAFFIC SIGNALS EACH
STA. 342+02 17.6' RT.	0.25
STA. 342+27 19.6' LT.	0.25
STA. 348+30 17.8' RT.	0.25
STA. 348+55 17.0' LT.	0.25
TOTAL	1

HOT-MIX ASPHALT SHOULDERS 10" & BITUMINOUS MATERIALS (TACK COAT)		
LOCATION	HOT-MIX ASPHALT SHOULDERS 10"	BITUMINOUS MAT'LS. (TACK COAT)*
	SQ. YD.	POUND
STAGE I		
STA. 343+81 TO STA. 347+20 RT. (7'-0" WIDTH)	257	116
STAGE II		
STA. 343+81 TO STA. 347+20 LT.	356	161
STA. 343+81 TO STA. 347+20 RT. (3'-0" WIDTH)	99	45
TOTAL	712	322

* ASSUMED TWO APPLICATIONS

PORTLAND CEMENT CONCRETE SCHEDULE		
LOCATION	PORTLAND CEMENT CONCRETE PAVEMENT 10"	WELDED WIRE REINFORCEMENT
	SQ. YD.	SQ. YD.
STA. 345+07 TO STA. 345+76	200	200
TOTAL	200	200



USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE =	DRAWN -	REVISED -
	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

QUANTITY SCHEDULES

SCALE: _____ SHEET NO. _ OF _ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	36
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

SECTION 29 T. 8 S. R. 4 W., 3rd PM

ROGER E. REES
07-29-100-017

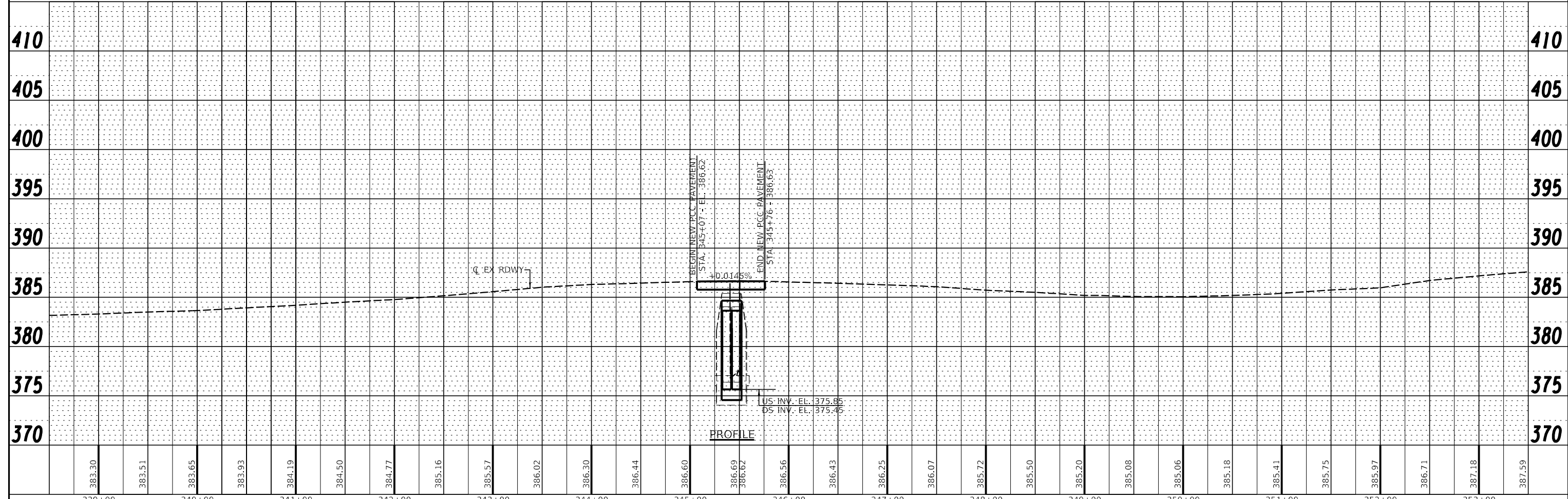
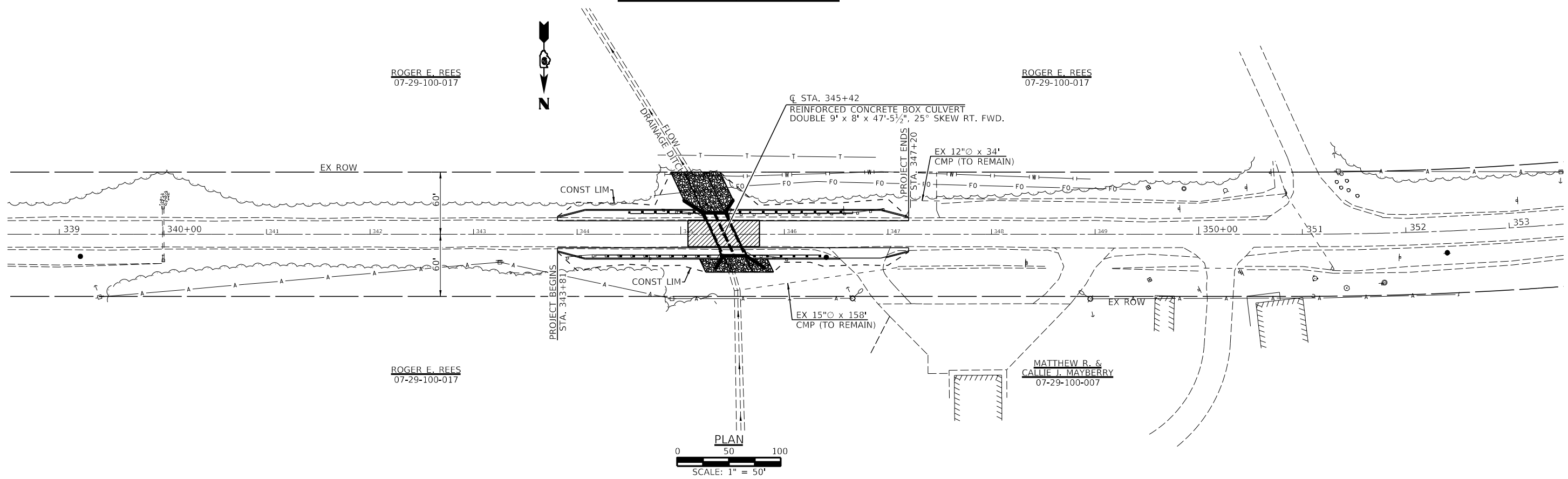
ROGER E. REES
07-29-100-017

ROGER E. REES
07-29-100-017

MATTHEW R. &
CALLIE J. MAYBERRY
07-29-100-007

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILED	
	CAD FILE NAME	
	NO.	

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



339+00	340+00	341+00	342+00	343+00	344+00	345+00	346+00	347+00	348+00	349+00	350+00	351+00	352+00	353+00																
383.30	383.51	383.65	383.93	384.19	384.50	384.77	385.16	385.57	386.02	386.30	386.44	386.60	386.69	386.62	386.56	386.43	386.25	386.07	385.72	385.50	385.20	385.08	385.06	385.18	385.41	385.75	385.97	386.71	387.18	387.59

VK
VEENSTRA & KIMM INC.
Springfield, IL Phone: (217)544-8033

USER NAME = *USER*	DESIGNED -	REVISED -
PLOT SCALE = *SCALE*	CHECKED -	REVISED -
PLOT DATE = *DATE*	DRAWN -	REVISED -
	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

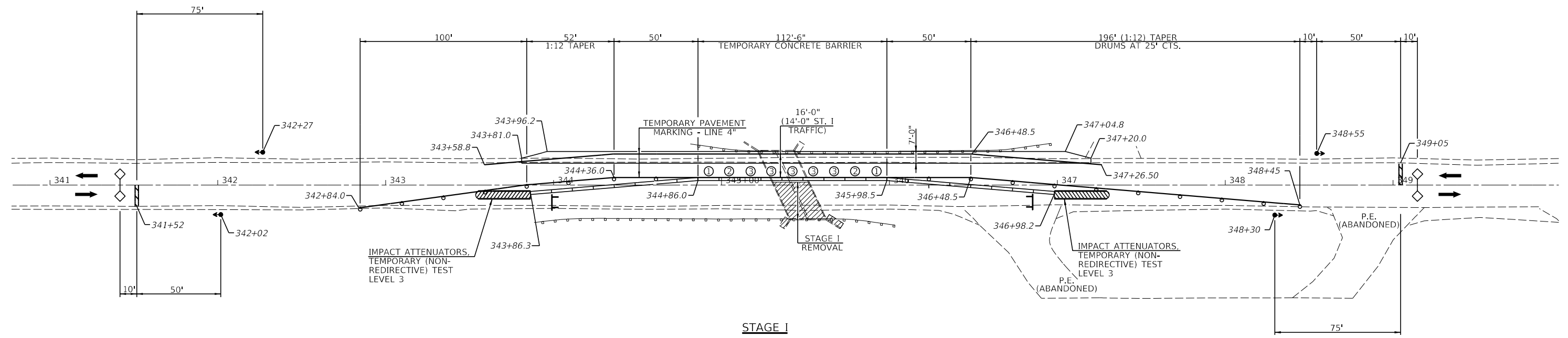
PLAN & PROFILE - SN 039-2034

SCALE: 1" = 50'	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	37
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

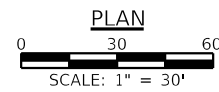
GENERAL NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN ACCORDING TO "TRAFFIC CONTROL & PROTECTION, STANDARD 701321.
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
4. ADDITIONAL SIGNAGE FOR ENTRANCES AND ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321.
5. THE DIMENSION SHOWN ON THE WIDTH RESTRICTION SIGN (W12-I10210)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-I103) SHOWN ON THE STAGE 2 PLAN SHEET FOR THIS STRUCTURE SHALL BE 14'-0" FOR STAGE 1 CONSTRUCTION.
6. SEE STD 701321 FOR COMPLETION OF STAGE CONSTRUCTION SIGNING AND ADVANCE DETECTOR LOOP PLACEMENT NOT SHOWN.
7. THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHALL APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.
8. THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHALL BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
9. VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE STAGE 2 NEW CO-10 RAIL. THE BARRIER WALL REFLECTORS SHALL BE INSTALLED PRIOR TO OPENING TO TRAFFIC.
10. ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC AND THE TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED OFF OR COVERED.
11. ALL TRAFFIC SIGNALS SHOWN ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
12. TEMPORARY PAVEMENT MARKING SHOWN ON THE DETAIL. THE COST OF THE TEMPORARY PAVEMENT MARKING AND ITS REMOVAL WILL BE INCLUDED IN THE COST OF STANDARD 701321.



STAGE I

① - INDICATES NUMBER OF PINS REQUIRED FOR EACH SECTION - 21 PINS REQUIRED FOR STAGE I



LEGEND

- ////// REMOVAL ITEMS
- ⊢ SIGN
- ⌈ TYPE III BARRICADE
- ⊙ DRUM WITH STEADY BURNING LIGHT
- ⊚ BARRICADE WITH STEADY BURNING LIGHT
- ◀ TRAFFIC SIGNAL
- ◻ ◊ INDUCTION LOOP DETECTOR
- ▬ DOUBLE VERTICAL PANEL
- ◊ TYPE C BIDIRECTIONAL REFLECTOR
- ▬▬▬ TEMPORARY CONCRETE BARRIER
- ▨▨▨ IMPACT ATTENUATOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS



USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

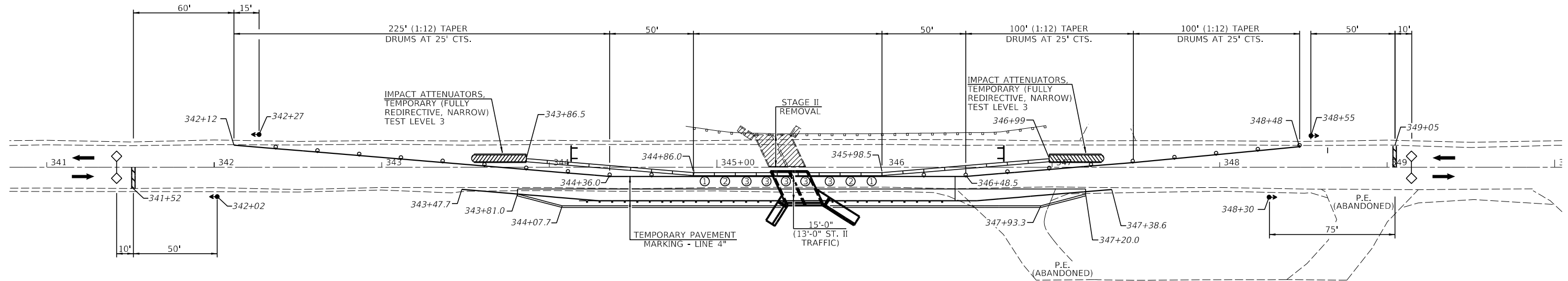
STAGE I CONSTRUCTION PLAN

SCALE: 1"=30' SHEET NO. 1 OF 2 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	38
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

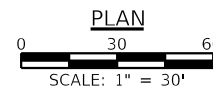
GENERAL NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN ACCORDING TO "TRAFFIC CONTROL & PROTECTION, STANDARD 701321.
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
4. ADDITIONAL SIGNAGE FOR ENTRANCES AND ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321.
5. THE DIMENSION SHOWN ON THE WIDTH RESTRICTION SIGN (W12-I10210)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-I103) SHOWN ON THE STAGE 2 PLAN SHEET FOR THIS STRUCTURE SHALL BE 13'-8" FOR STAGE II CONSTRUCTION.
6. SEE STD 701321 FOR COMPLETION OF STAGE CONSTRUCTION SIGNING AND ADVANCE DETECTOR LOOP PLACEMENT NOT SHOWN.
7. THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHALL APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.
8. THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHALL BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
9. VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE STAGE 2 NEW CO-10 RAIL. THE BARRIER WALL REFLECTORS SHALL BE INSTALLED PRIOR TO OPENING TO TRAFFIC.
10. ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC AND THE TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED OFF OR COVERED.
11. ALL TRAFFIC SIGNALS SHOWN ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
12. TEMPORARY PAVEMENT MARKING SHOWN ON THE DETAIL, THE COST OF THE TEMPORARY PAVEMENT MARKING AND ITS REMOVAL WILL BE INCLUDED IN THE COST OF STANDARD 701321.



STAGE II

① - INDICATES NUMBER OF PINS REQUIRED FOR EACH SECTION - 21 PINS REQUIRED FOR STAGE I

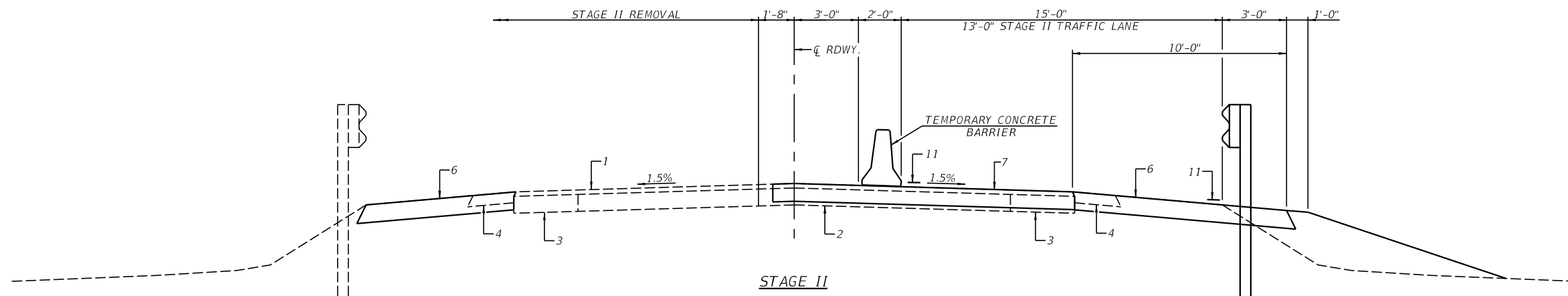
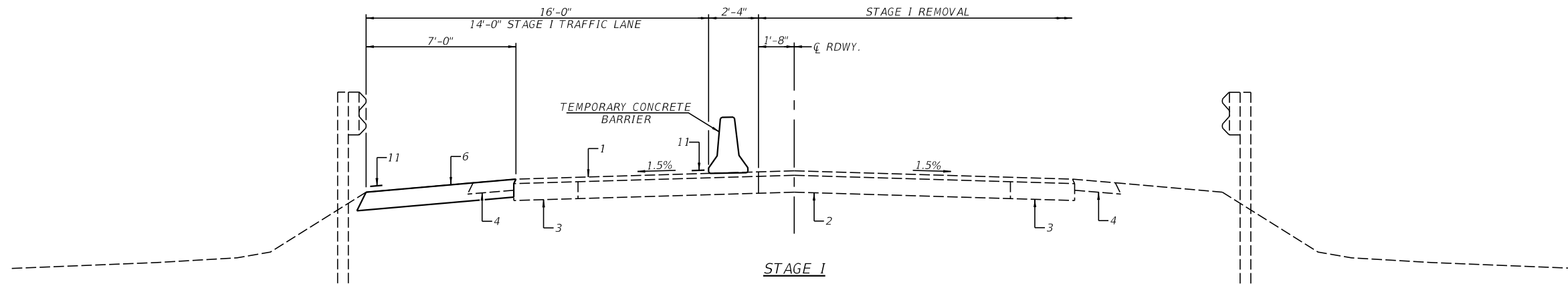


LEGEND

- ////// REMOVAL ITEMS
- ⊠ SIGN
- ⌌ TYPE III BARRICADE
- ⊙ DRUM WITH STEADY BURNING LIGHT
- ⊕ BARRICADE WITH STEADY BURNING LIGHT
- ◀ TRAFFIC SIGNAL
- ◻◻ INDUCTION LOOP DETECTOR
- ▬ DOUBLE VERTICAL PANEL
- ◇ TYPE C BIDIRECTIONAL REFLECTOR
- ▬▬ TEMPORARY CONCRETE BARRIER
- ▨▨▨ IMPACT ATTENUATOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS

USER NAME =	DESIGNED -	REVISED -
CHECKED -	REVISOR -	DATE -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	39
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



PAVEMENT LEGEND

- 1 - EX HMA SURF CSE $\pm 2\frac{1}{2}$ "
- 2 - EX PCC PAVEMENT $\pm 9\frac{1}{2}$ "
- 3 - EX HMA BSE CSE WIDENING
- 4 - EX AGG SHOULDER
- 5 - EX GUARDRAIL
- 6 - PR HMA SHOULDER 10"
- 7 - PR PCC PAVEMENT 10" MIN.
- 8 - PR EARTH SHOULDER
- 9 - PR GUARDRAIL
- 10 - PR PAVEMENT MARKING - LINE 4"
- 11 - PR TEMP. PAVEMENT MARKING - LINE 4" - PAINT

MODEL: 340DELNAM1ES
FILE NAME: ST1E15



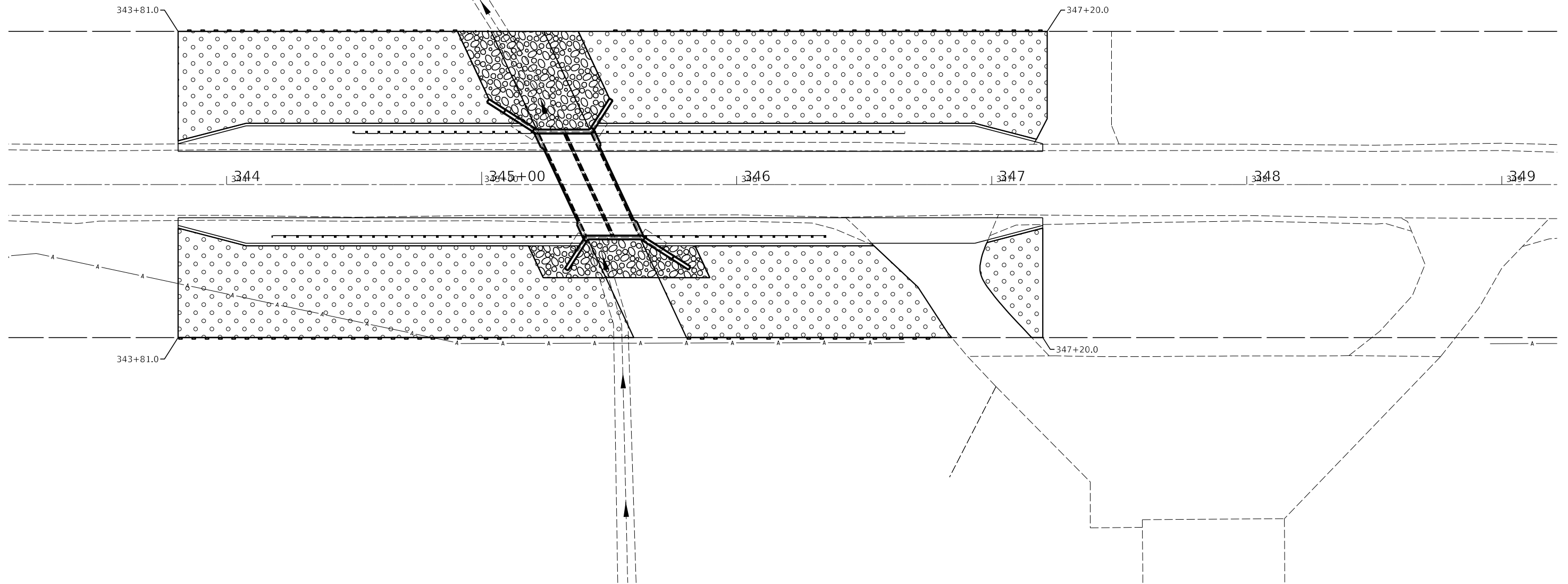
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PLOT DATE = \$DATE\$	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGING TYPICAL SECTIONS

SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	40
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



- LEGEND**
- SEEDING, CLASS 2A & 7
 - PERIMETER EROSION BARRIER
 - TEMPORARY DITCH CHECK
 - INLET PIPE PROTECTION
 - TEMPORARY CONSTRUCTION FENCE



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PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

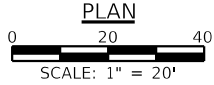
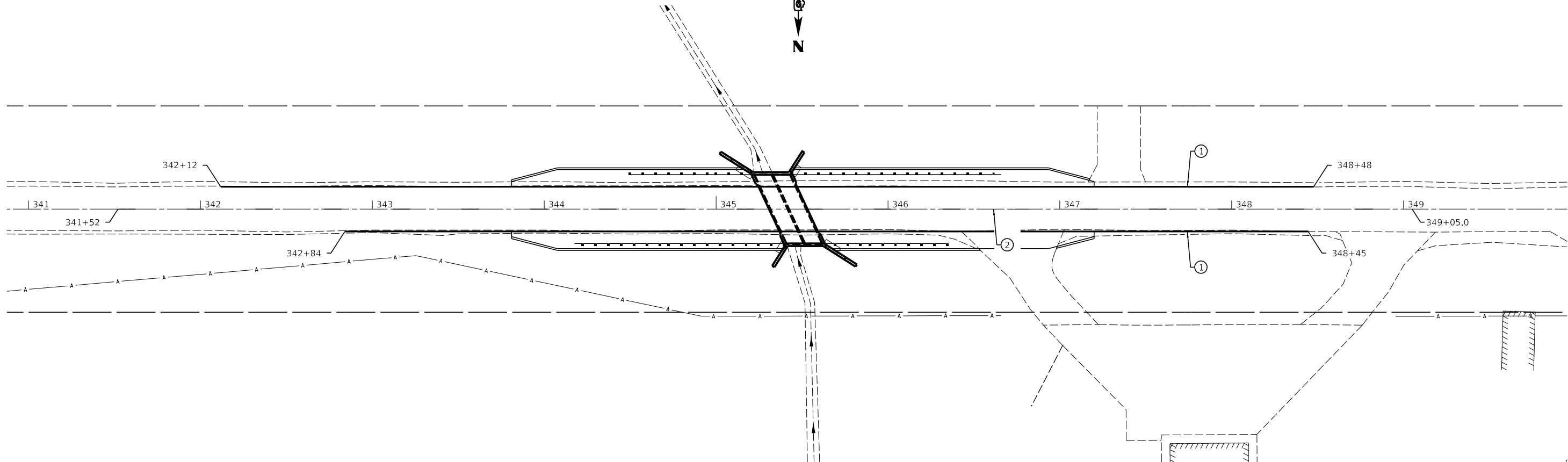
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

EROSION CONTROL PLAN

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	41
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

LEGEND	
①	- PAINT PAVEMENT MARKING - LINE 4" (WHITE)
②	- PAINT PAVEMENT MARKING - LINE 4" (YELLOW SKIP DASH)



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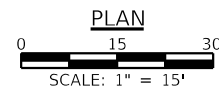
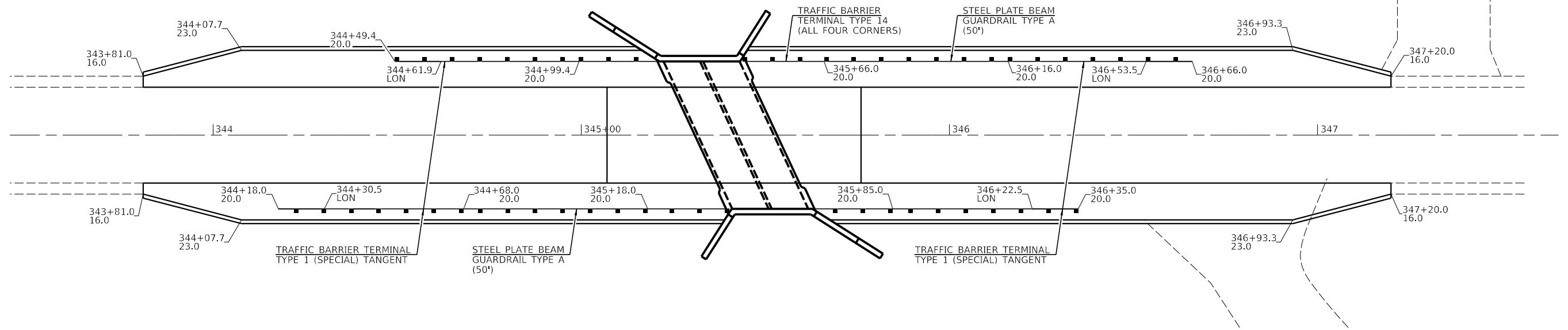
USER NAME =	DESIGNED -	REVISED -
CHECKED -	REVISIED -	
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	42
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



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 IL. Design Firm No. 184-001939

USER NAME =	DESIGNED -	REVISED -
CHECKED -	REVISED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GUARDRAIL PLAN

SCALE: 1"=15' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	43
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

B.M. 1004 Top of exposed rebar on the southeast corner of headwall on Structure No. 039-2014 along IL Route 3. Elev. 385.758

Existing Structure: S.N. 039-2014 originally built under SBI Route 150 under Section 123 in 1933. The structure is a double barrel reinforced box culvert (9'-0"W x 7'-0"H) 41'-4" out-to-out of headwalls, 45'-7 1/4" along centerline of culvert. 25° skew Rt. Fwd. The structure will be replaced utilizing stage construction. \bar{C} Structure Sta. 345+42.

No Salvage.

Precast option is not allowed.

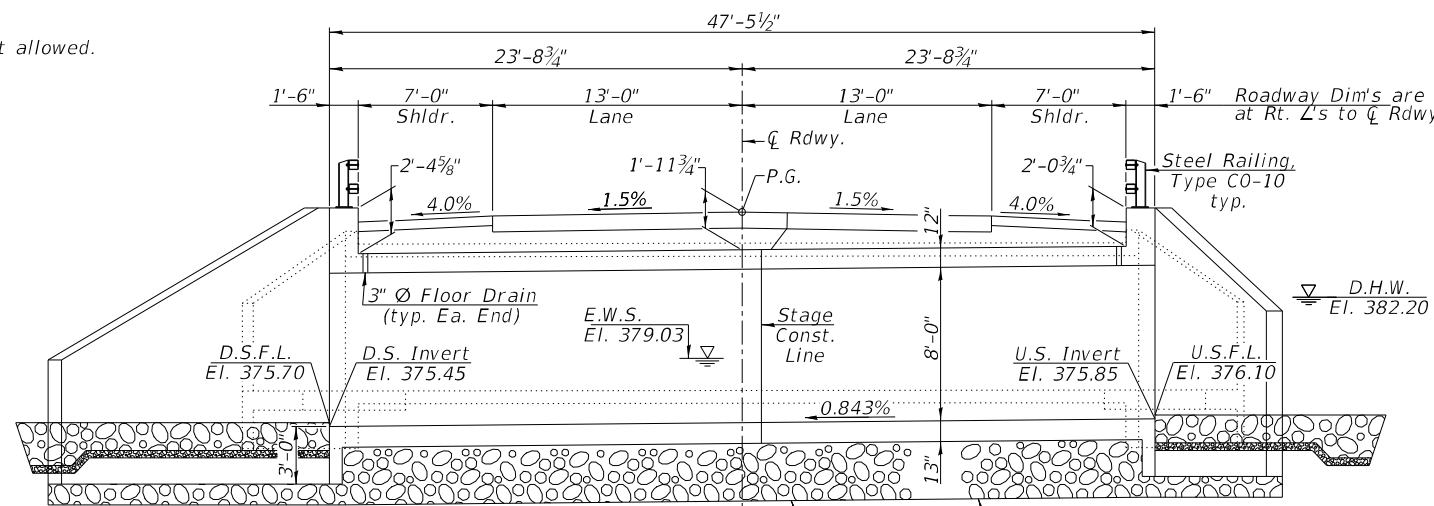
INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Stage Construction Details
4. Temporary Conc. Barrier For Stage Construction
5. Slab Reinforcement Plan
6. Culvert Details - 1
7. Culvert Details - 2
8. Steel Railing, Type C0-10
9. Bar Splicer Assembly And Mechanical Splicer Details
10. Soil Boring Logs
11. Existing Structure Plans - 1
12. Existing Structure Plans - 2

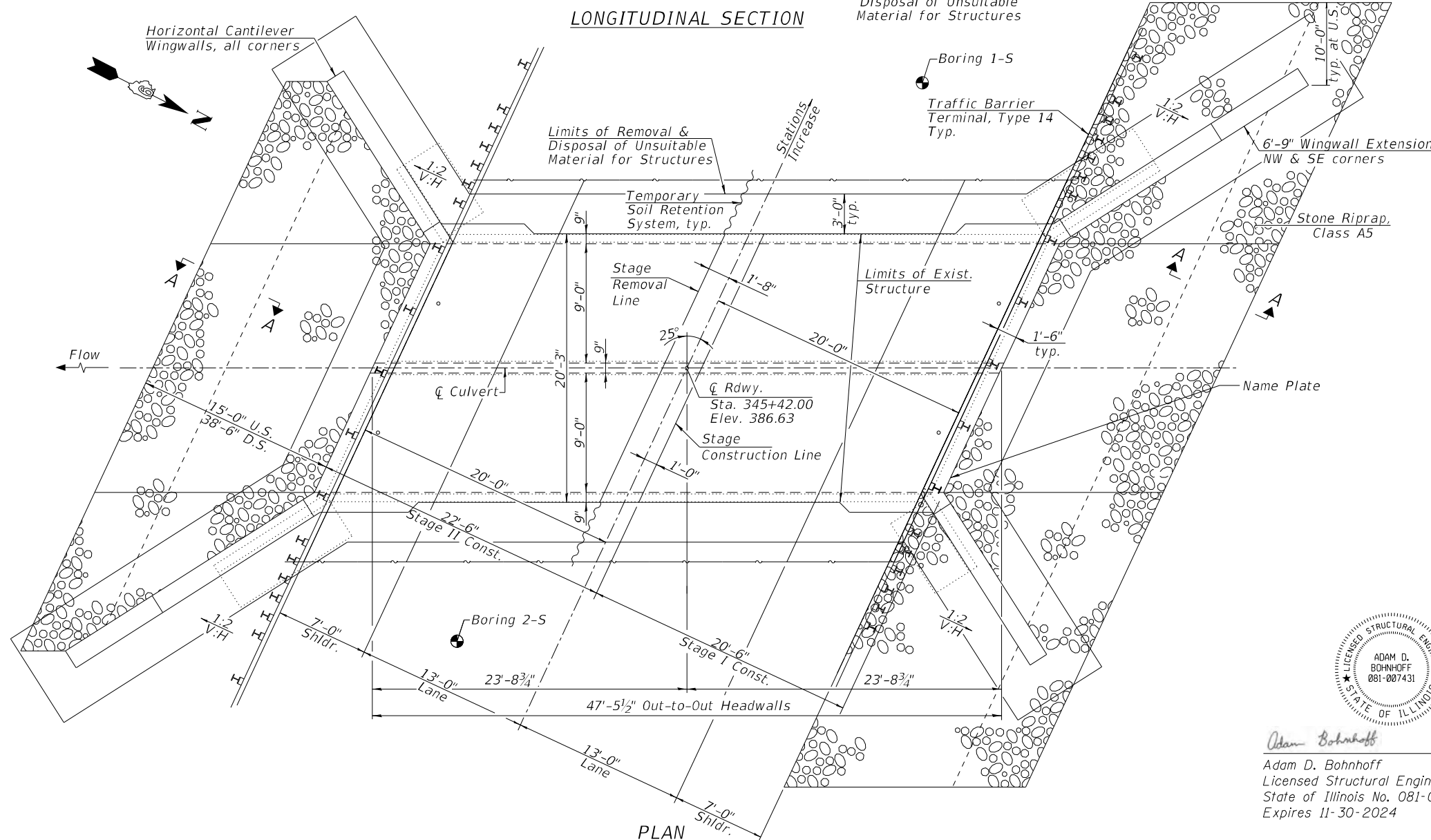
WATERWAY INFORMATION

Drainage Area = 0.8 Sq. Mi.		Exist. Overtopping Elev. = 386.8 @ Sta. 345+50							
		Prop. Overtopping Elev. = 386.8 @ Sta. 345+50							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	10	671	75	103	381.8	2.3	1.0	384.1	382.8
Base	50	1,140	83	110	382.2	2.9	2.5	385.1	384.7
Overtop Exist.	100	1,360	83	110	382.2	3.2	2.9	385.4	385.1
Overtop Prop.	N/A								
Max. Calc.	500	1,910	88	115	382.5	3.3	3.2	385.8	385.7

10 Yr. Outlet Velocity through Exist. Structure = 8.9 ft/s
10 Yr. Outlet Velocity through Prop. Structure = 6.5 ft/s



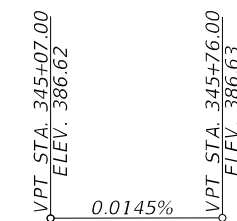
LONGITUDINAL SECTION



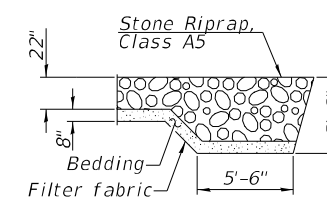
PLAN

STATION 345+42.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 312 SEC. 123B-6
LOADING HL-93
STR. NO. 039-2034

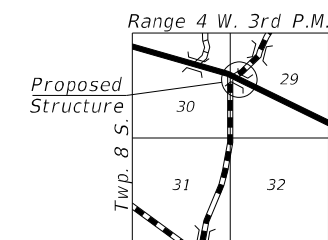
NAME PLATE
(Std. 515001)



PROFILE GRADE
(Along \bar{C} IL Rte. 3)



SECTION A-A



LOCATION SKETCH

LOADING HL-93

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

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
 f'_c = 4,500 psi (Top Slab & Headwalls)
 f_y = 60,000 psi (Reinforcement)

GENERAL PLAN & ELEVATION

IL. ROUTE 3 OVER DRAINAGE DITCH

F.A.P. RTE 312 - SECTION 123B-6

JACKSON COUNTY

STATION 345+42.00

STRUCTURE NO. 039-2034

APPROVED
For Structural Adequacy Only
Adam D. Bohnhoff
Engineer of Bridges & Structures



Adam Bohnhoff 03/13/2023
Adam D. Bohnhoff Date
Licensed Structural Engineer
State of Illinois No. 081-007431
Expires 11-30-2024



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 039-2034

SHEET NO. 1 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	44
CONTRACT NO. 78790				

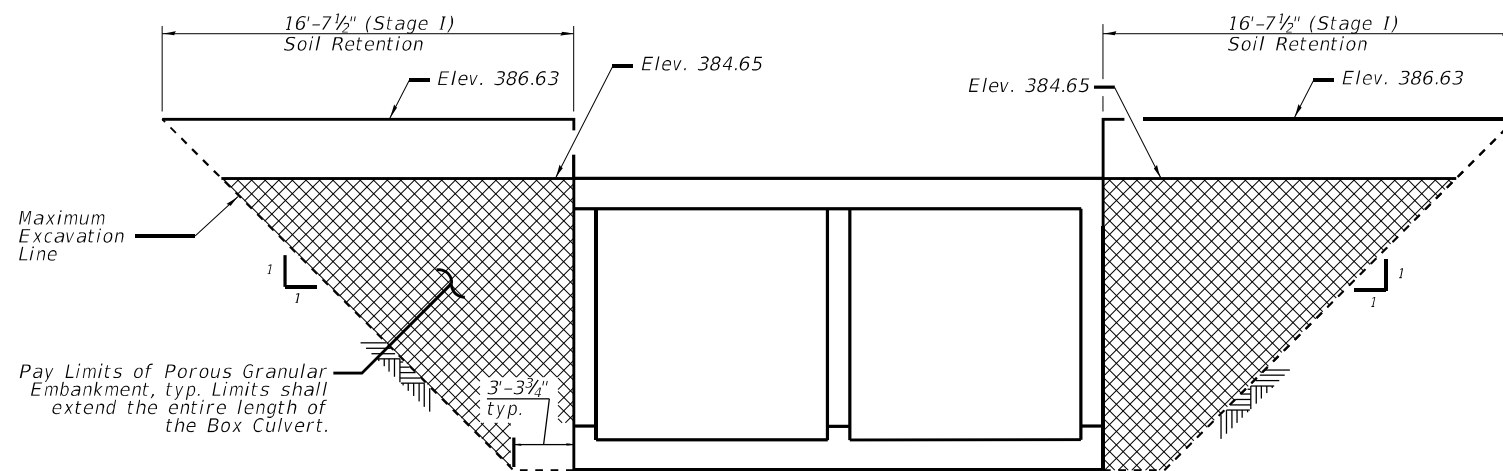
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GENERAL NOTES

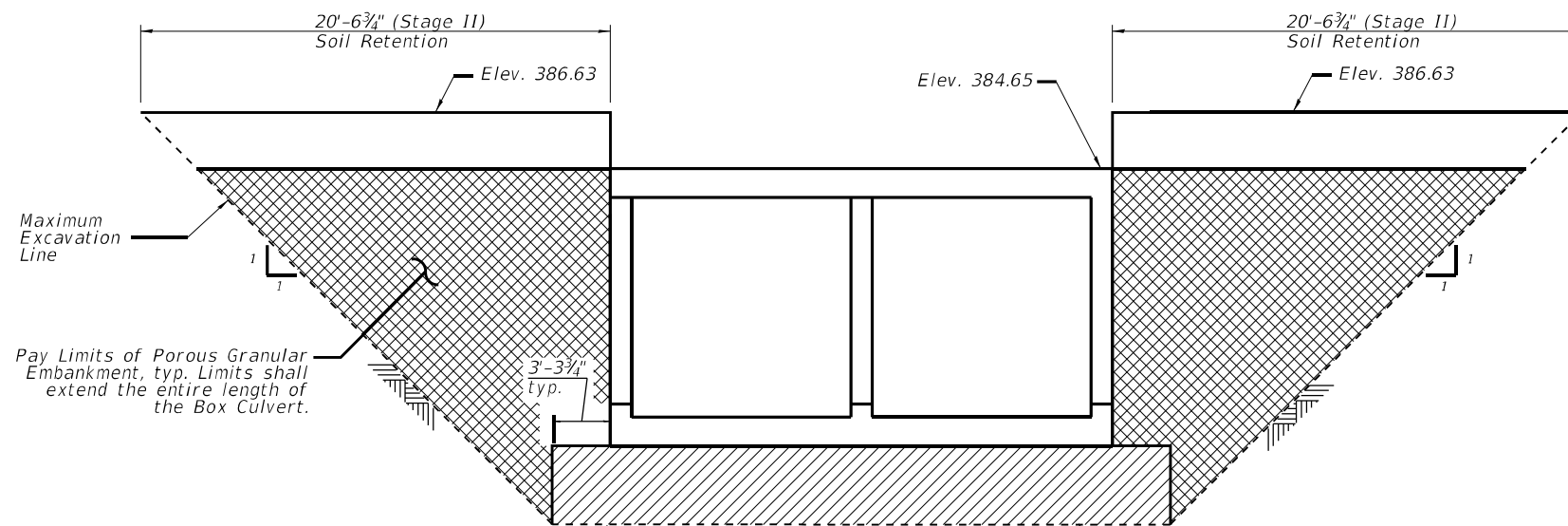
Reinforcement bars designated (E) shall be epoxy coated.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 Protective Coat shall not be applied to surfaces to which Membrane Waterproofing System for Buried Structures is applied.
 Precast alternative is not allowed.

TOTAL BILL OF MATERIAL

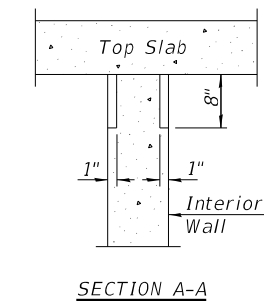
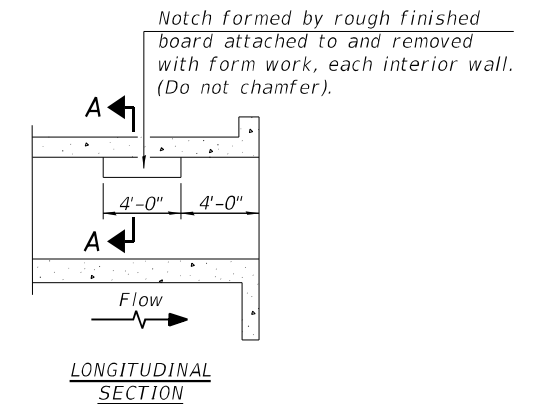
ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	414
Stone Riprap, Class A5	Ton	304
Filter Fabric	Sq. Yd.	295
Removal of Existing Structures No. 2	Each	1
Removal and Disposal of Unsuitable Materials for Structures	Cu. Yd.	326
Protective Coat	Sq. Yd.	18
Reinforcement Bars, Epoxy Coated	Pound	29,390
Bar Splicers	Each	111
Steel Railing, Type C0-10	Foot	48
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	155.0
Geocomposite Wall Drain	Sq. Yd.	122
Membrane Waterproofing System for Buried Structures	Sq. Yd.	122
Temporary Soil Retention System	Sq. Ft.	590
Temporary Support System	Each	2
Rock Fill - Foundation	Ton	515



Stage I Soil Retention System
 (Looking South)
 (Dimensions along Stage Construction Line)

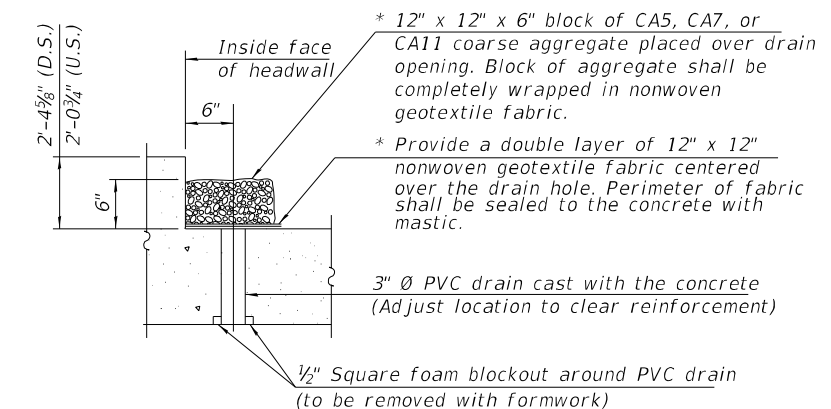


Stage II Soil Retention System
 (Looking South)
 (Dimensions along Stage Construction Line)



PHOEBE NESTING
SITE DETAILS
 (Downstream End Only)

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



DRAIN DETAIL (4 each)

(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 the associated work.)



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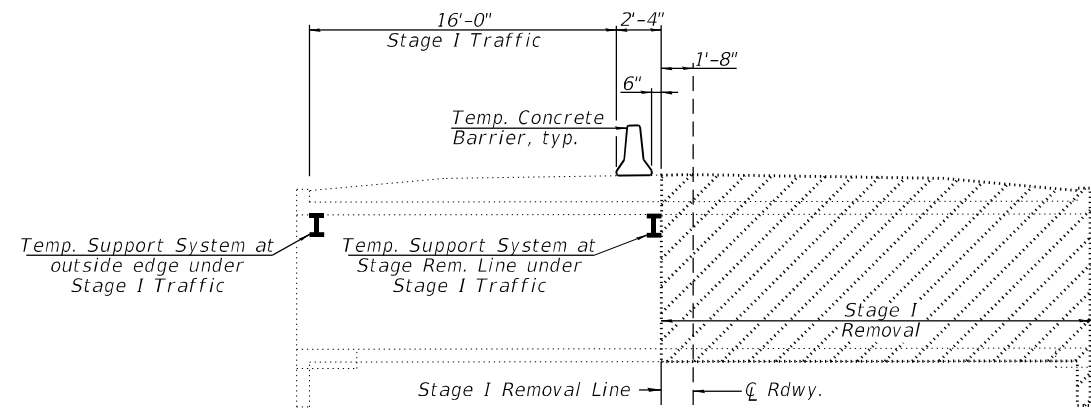
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GENERAL DATA
 STRUCTURE NO. 039-2034

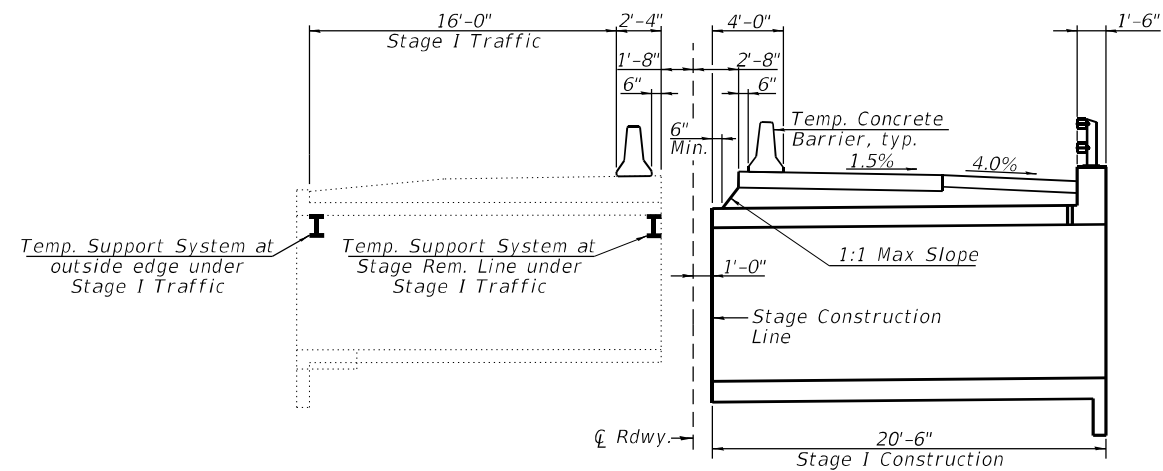
SHEET NO. 2 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	45
CONTRACT NO. 78790				

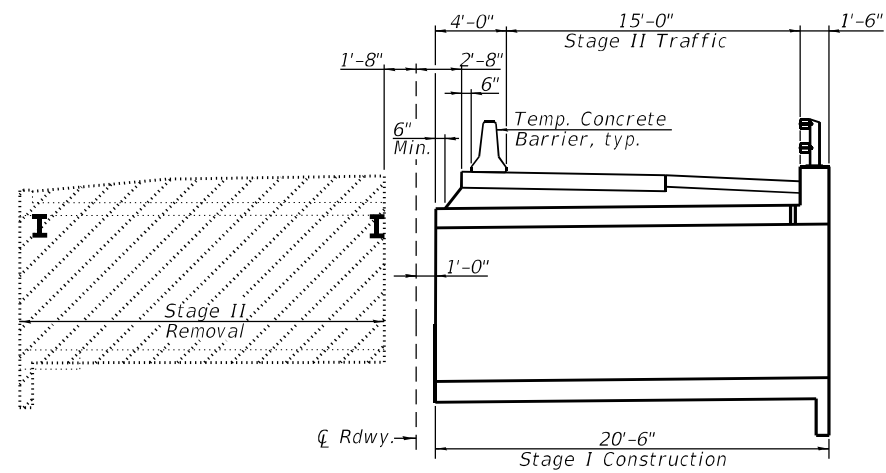
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STAGE I REMOVAL SECTION
(Looking West)



STAGE I CONSTRUCTION SECTION
(Looking West)



STAGE II REMOVAL SECTION
(Looking West)

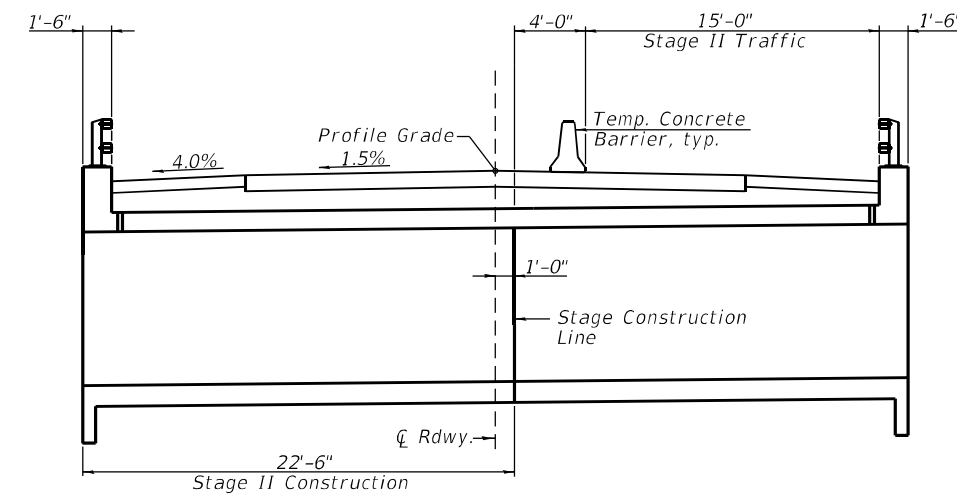
Notes:

Hatched areas indicate Removal of Existing Structures.

See Roadway Plans for quantity and details of Temporary Concrete Barrier.

A cantilevered sheet piling design does not appear to be feasible and additional members or other retention systems may be necessary. The Contractor shall submit a Temporary Soil Retention System design including plan details and calculations for review and acceptance by the Engineer.

The Contractor shall submit a Temporary Support System design including plan details and calculations for review and acceptance by the Engineer. Note that splices may be required to erect the Temporary Support System within the existing structure.



STAGE II CONSTRUCTION SECTION
(Looking West)



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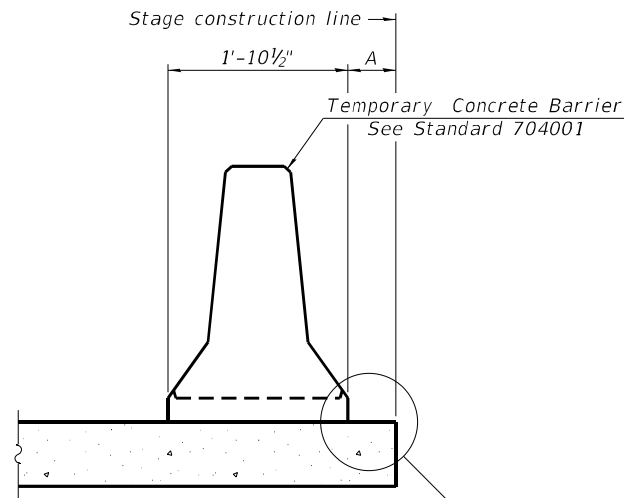
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**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 039-2034**

SHEET NO. 3 OF 12 SHEETS

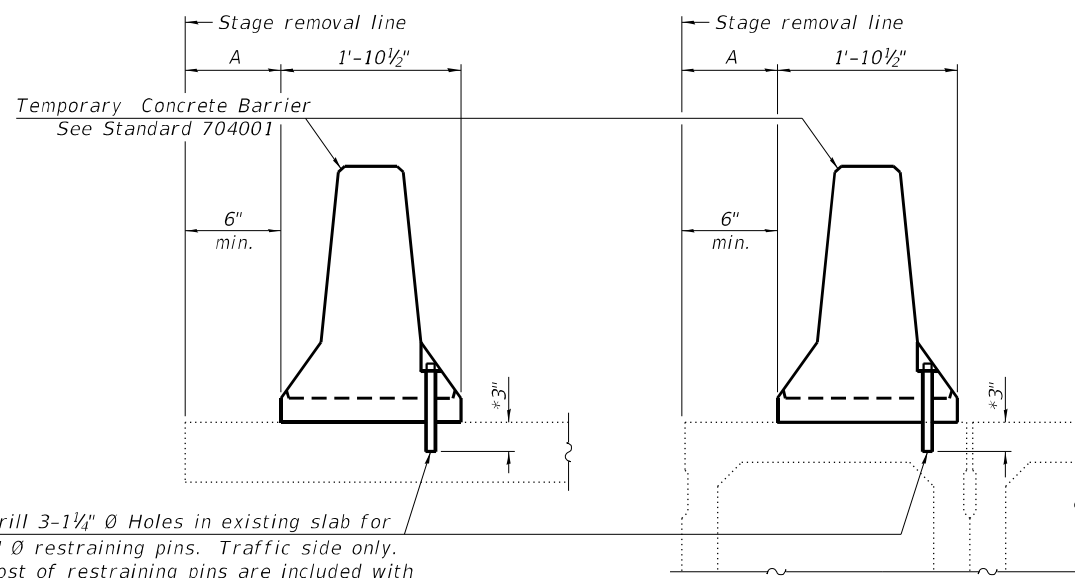
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	46
CONTRACT NO. 78790				

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When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



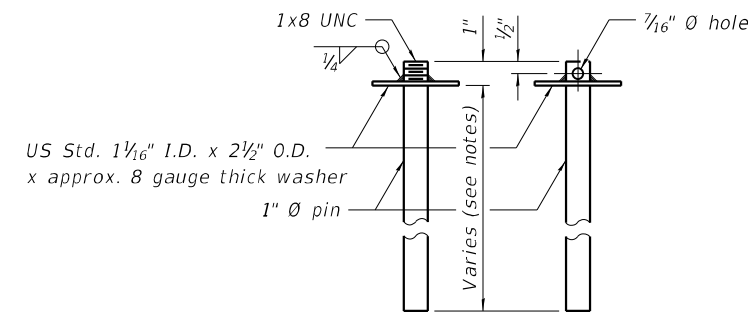
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

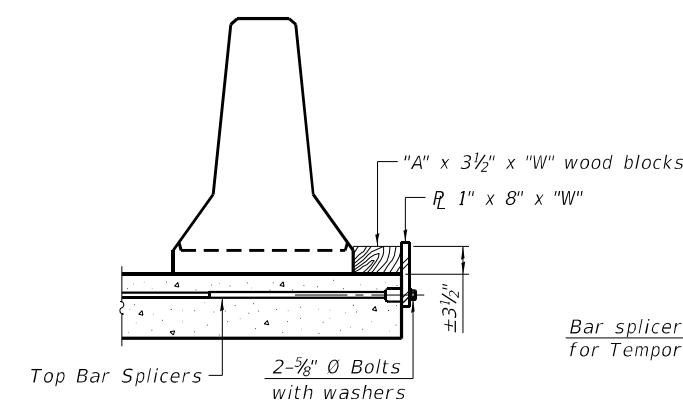
EXISTING DECK BEAM

* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

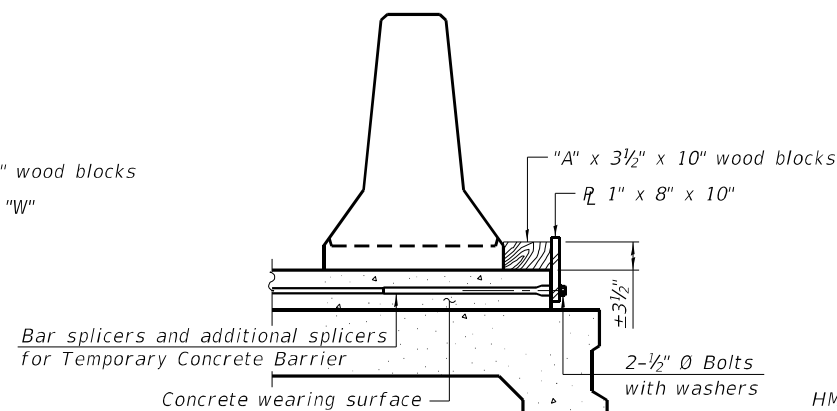
SECTIONS THRU SLAB OR DECK BEAM



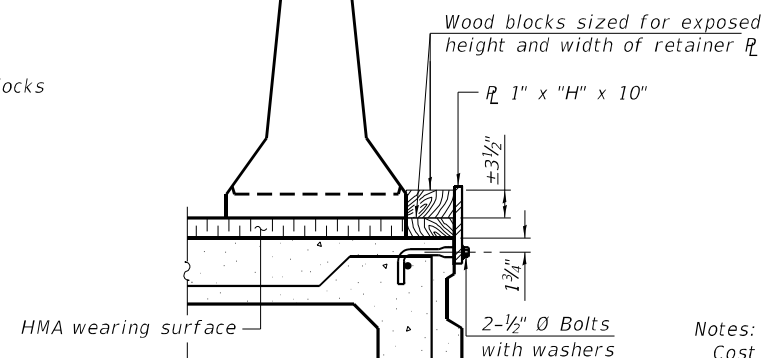
RESTRAINING PIN



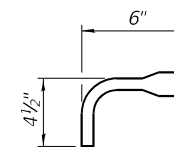
DETAIL I



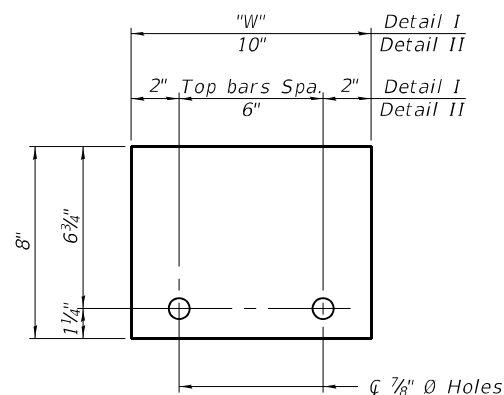
DETAIL II



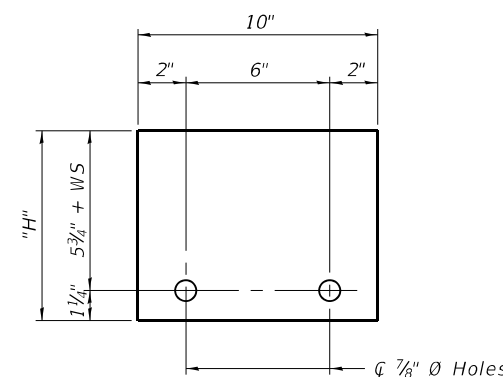
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER 1" x "H" x 10"
(Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{c} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021



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TEMP. CONCRETE BARRIER FOR STAGE CONST.
STRUCTURE NO. 039-2034

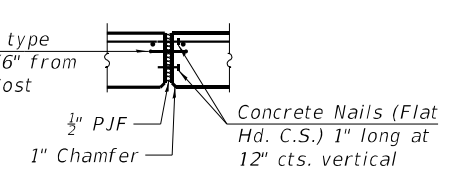
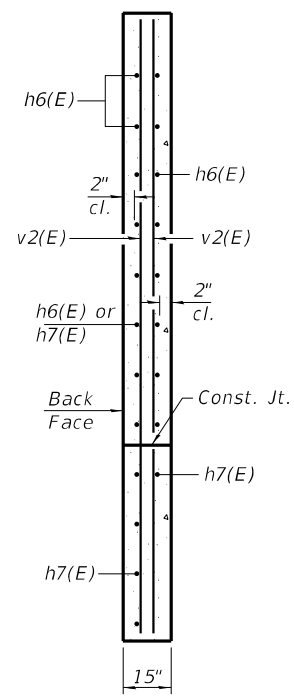
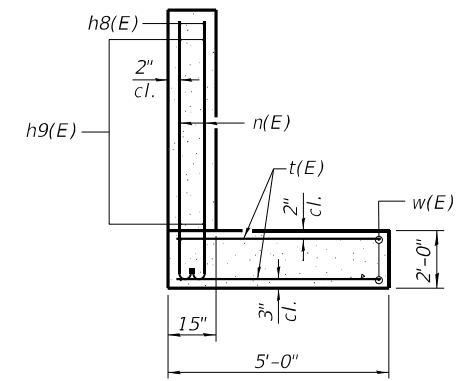
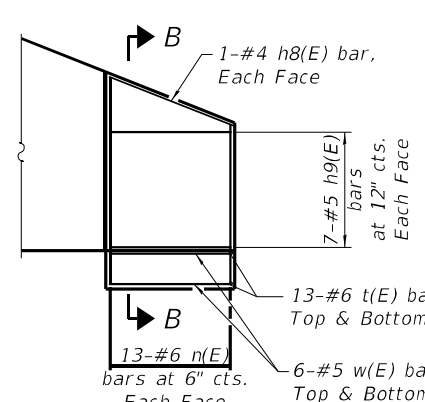
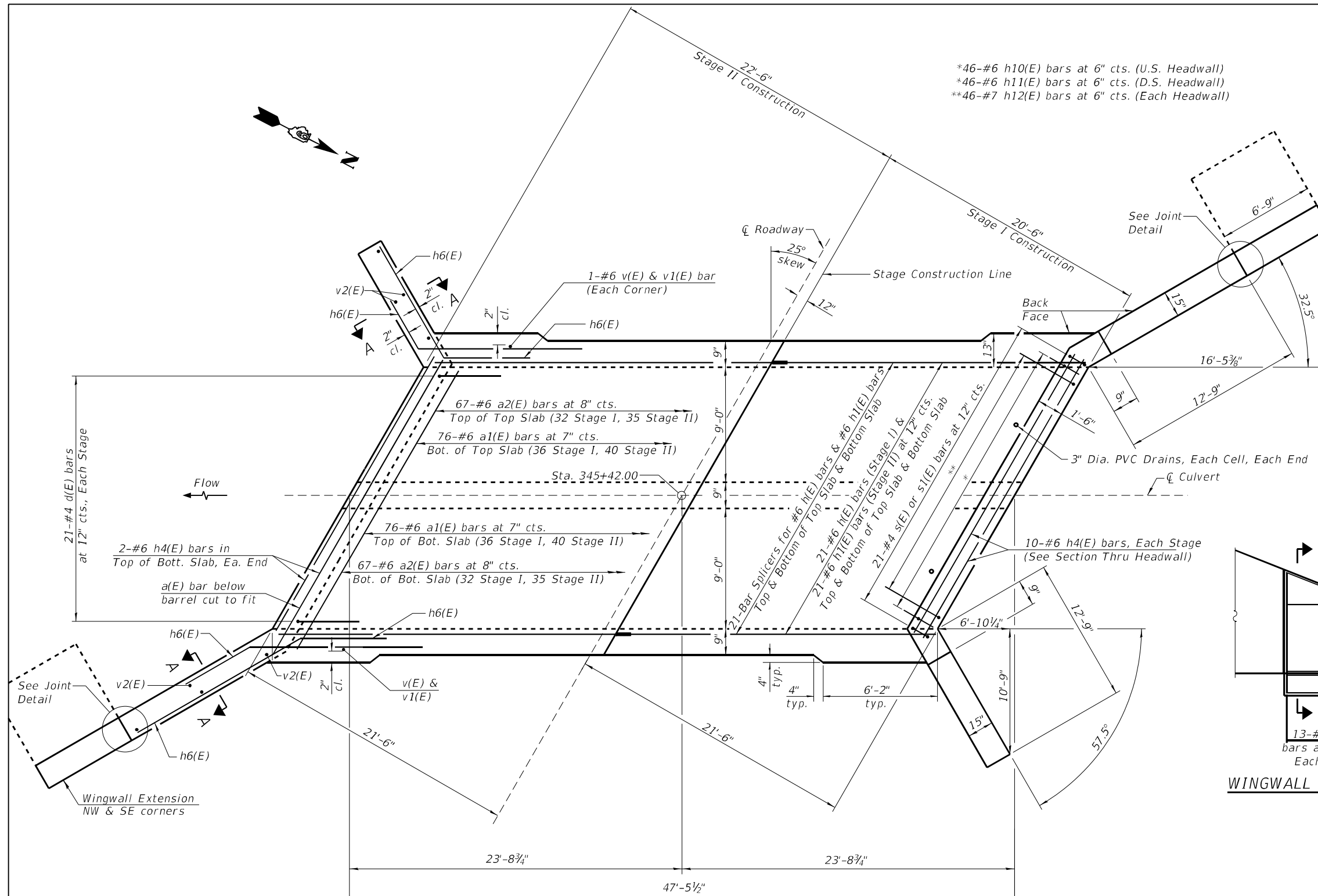
SHEET NO. 4 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	47
CONTRACT NO. 78790				

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BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	2	#4	21'-11"	—
a1(E)	152	#6	23'-3"	—
a2(E)	134	#6	21'-11"	—
d(E)	42	#4	4'-5"	—
h(E)	84	#6	22'-3"	—
h1(E)	84	#6	24'-5"	—
h2(E)	27	#5	22'-3"	—
h3(E)	27	#5	24'-5"	—
h4(E)	24	#6	20'-10"	—
h6(E)	84	#7	8'-0"	—
h7(E)	72	#7	15'-9"	—
h8(E)	4	#4	6'-10"	—
h9(E)	28	#5	6'-4"	—
h10(E)	46	#6	4'-8"	—
h11(E)	46	#6	5'-0"	—
h12(E)	92	#7	6'-11"	—
n(E)	26	#6	19'-0"	—
s(E)	21	#4	9'-5"	—
s1(E)	21	#4	8'-7"	—
t(E)	52	#6	4'-8"	—
v(E)	199	#6	8'-2"	—
v1(E)	199	#6	5'-5"	—
v2(E)	8	#4	22'-7"	—
w(E)	24	#5	6'-5"	—
Concrete Box Culverts			Cu. Yd.	155.0
Reinforcement Bars, Epoxy Coated			Pound	29,390



Notes:
 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.
 At the Contractor's option, a longer v1(E) bar may be ordered to replace the v(E) bar. No reduction in quantities shall be made for this substitution.



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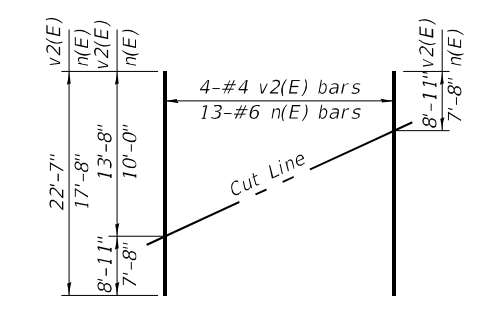
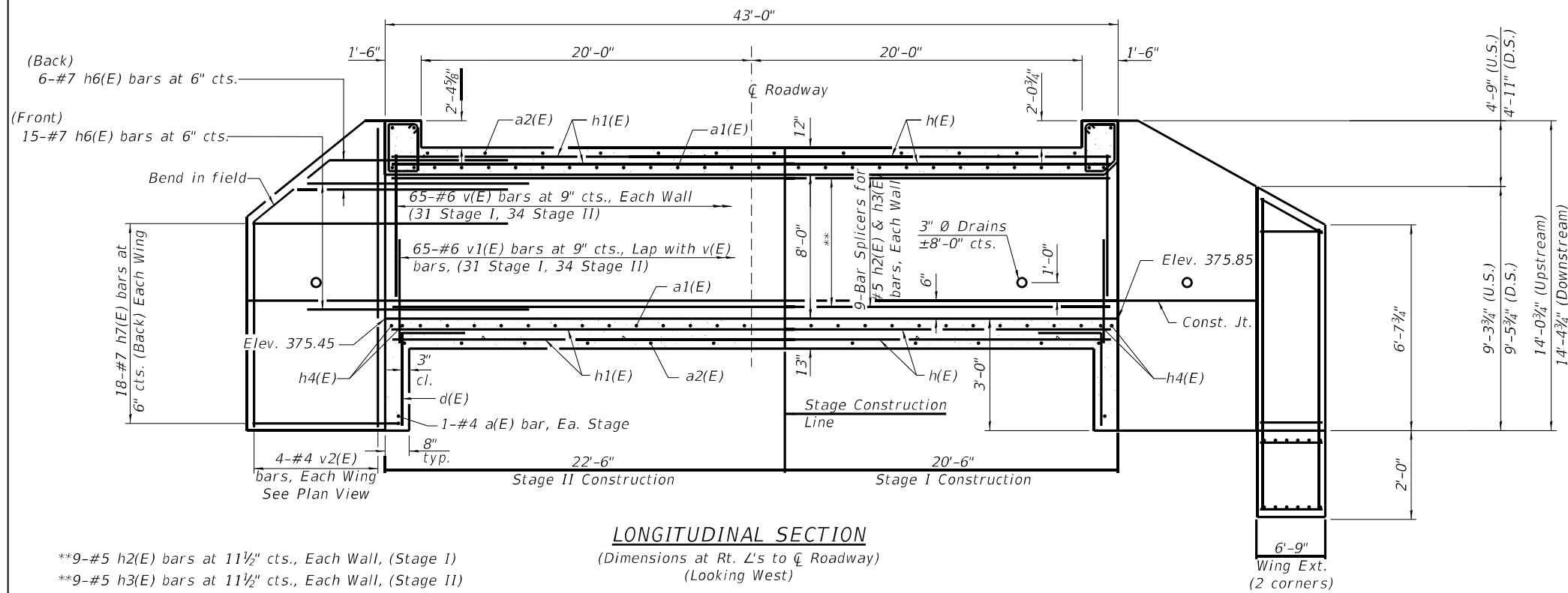
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SLAB REINFORCEMENT PLAN
 STRUCTURE NO. 039-2034**

SHEET NO. 5 OF 12 SHEETS

F.A.P. RTE. 312	SECTION 123B-6	COUNTY JACKSON	TOTAL SHEETS 101	SHEET NO. 48
CONTRACT NO. 78790				

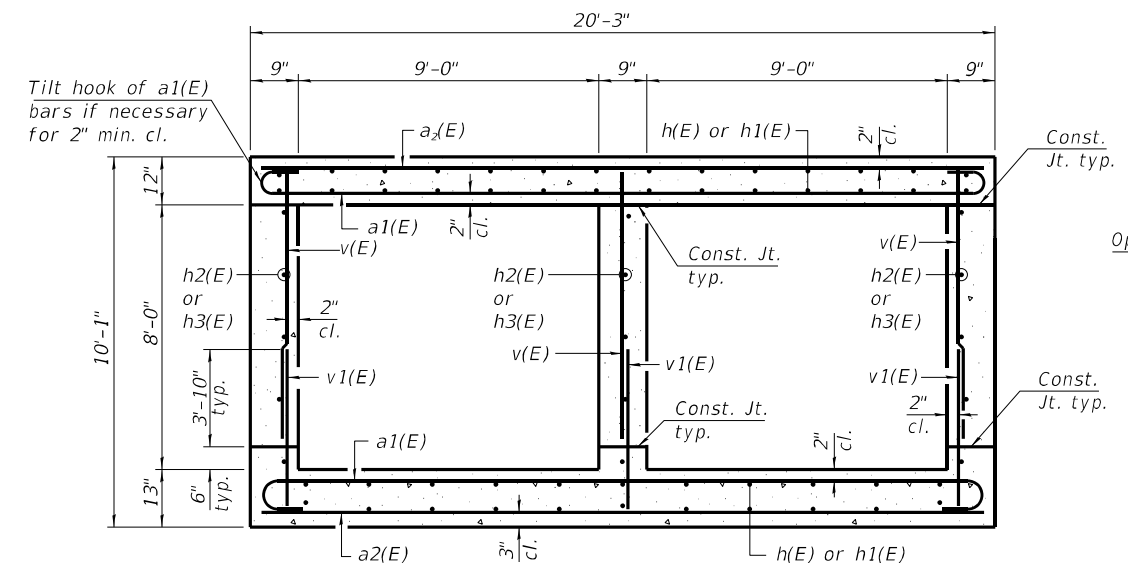
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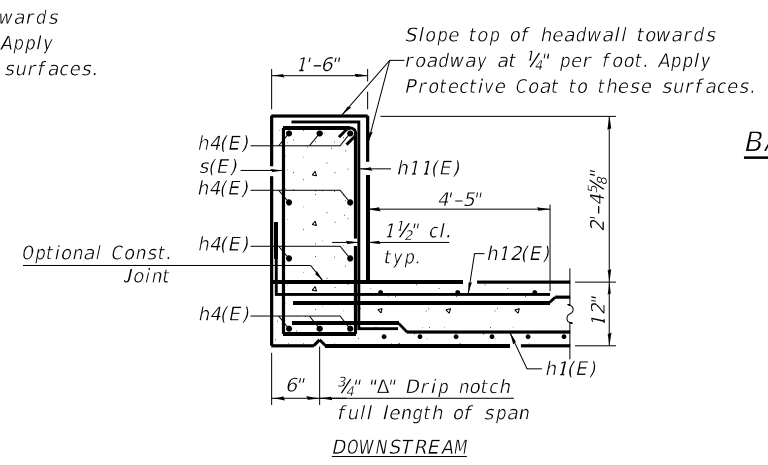
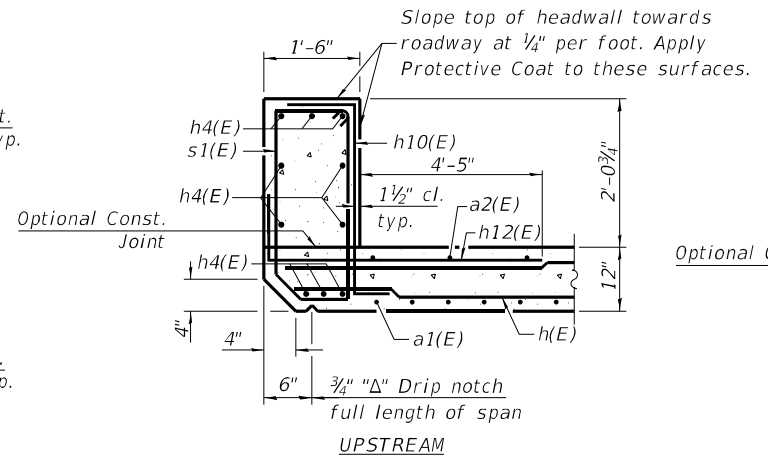
FIELD CUTTING DIAGRAM
Order v2(E) & n(E) bars full length. Cut as shown and use remainder of bars in opposite face.

**9-#5 h2(E) bars at 11½" cts., Each Wall, (Stage I)
**9-#5 h3(E) bars at 11½" cts., Each Wall, (Stage II)

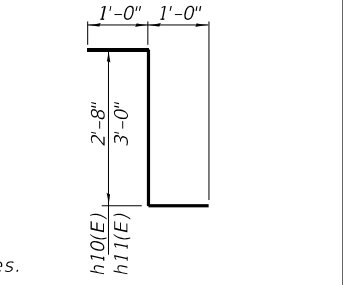
LONGITUDINAL SECTION
(Dimensions at Rt. L's to Roadway)
(Looking West)



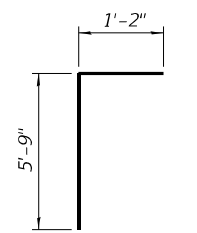
SECTION THRU BARREL



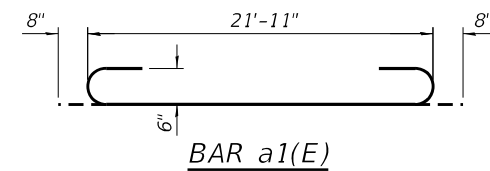
SECTION THRU HEADWALL



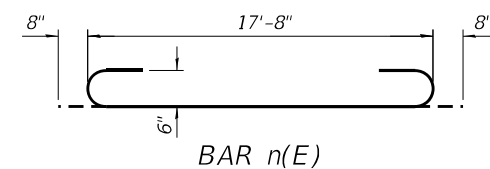
BARS h10(E) & h11(E)



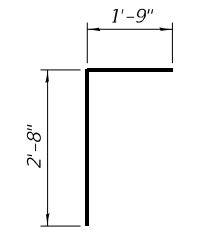
BAR h12(E)



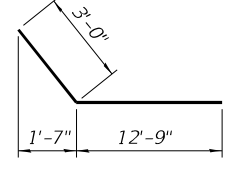
BAR a1(E)



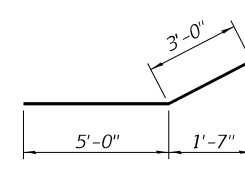
BAR n(E)



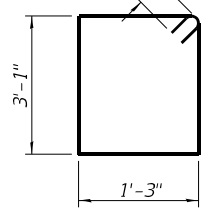
BAR d(E)



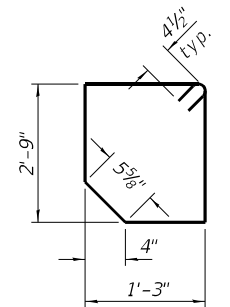
BAR h7(E)



BAR h6(E)



BAR s(E)



BAR s1(E)

Notes:
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.
At the Contractor's option, a longer v1(E) bar may be ordered to replace the v(E) bar. No reduction in quantities shall be made for this substitution.



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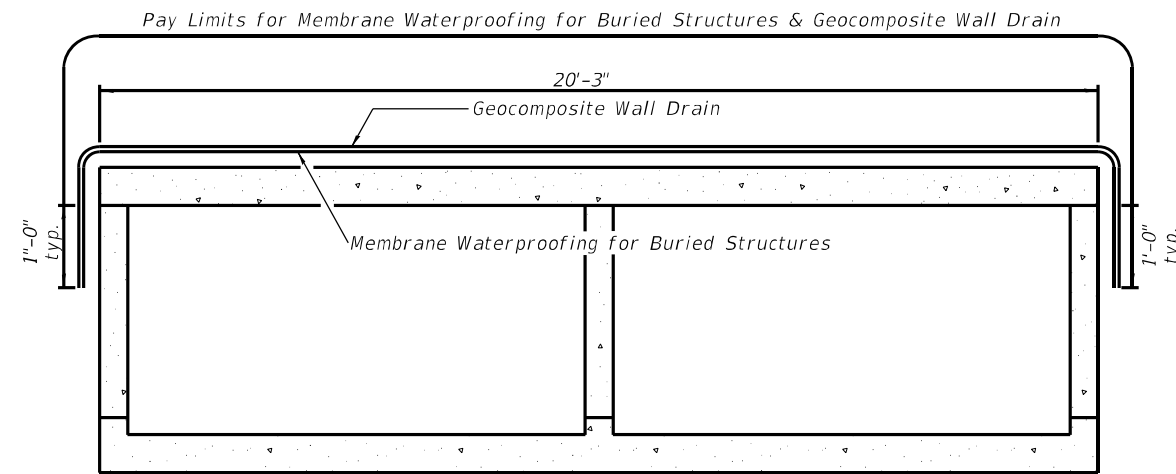
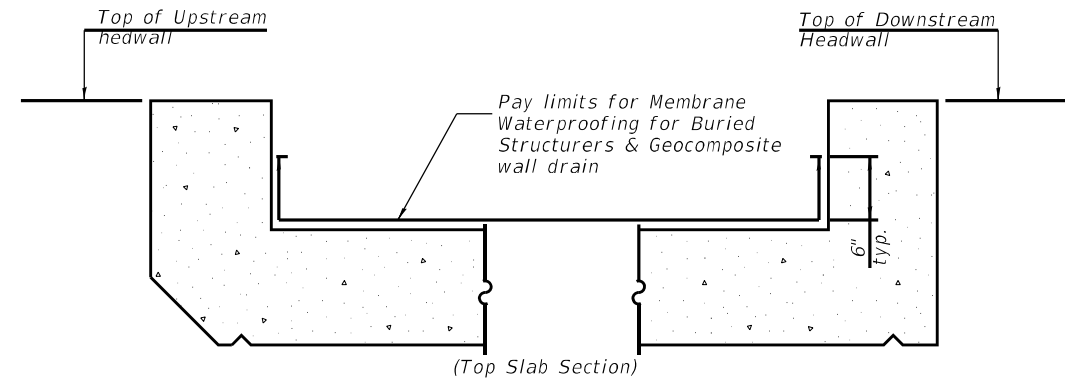
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CULVERT DETAILS - 1
STRUCTURE NO. 039-2034

SHEET NO. 6 OF 12 SHEETS

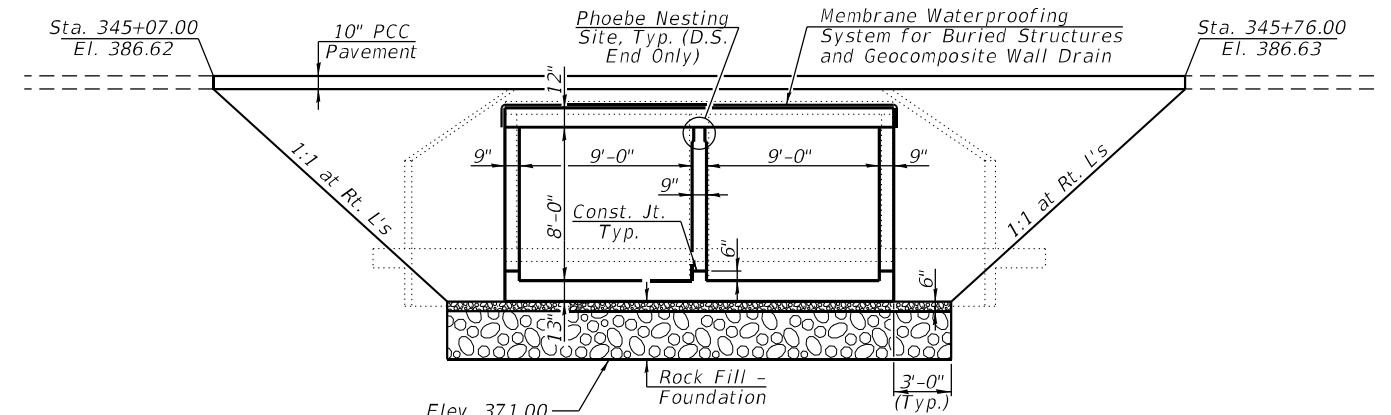
F.A.P. RTE. 312	SECTION 123B-6	COUNTY JACKSON	TOTAL SHEETS 101	SHEET NO. 49
CONTRACT NO. 78790				

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(Looking at Box Section)
**MEMBRANE WATERPROOFING
 FOR BURIED STRUCTURES**

Note: Membrane Waterproofing for Culverts shall cover top of the top slab, top one foot of side walls (below top slab joint), and 6 inches up inside face of headwalls.

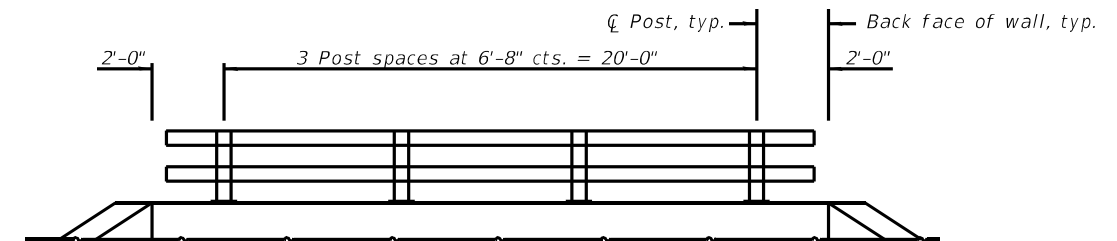


SECTION THRU CULVERT

(All horizontal dimensions are shown at Right Angles)
 (Existing bridge foundation within the limits of the proposed construction to be removed.)

Note:

The Rock Fill shall be capped according to the Rock Fill - Foundation Special Provision.
 The cost of the capping material shall be included in the pay item for Rock Fill - Foundation.



HEADWALL RAILING ELEVATION



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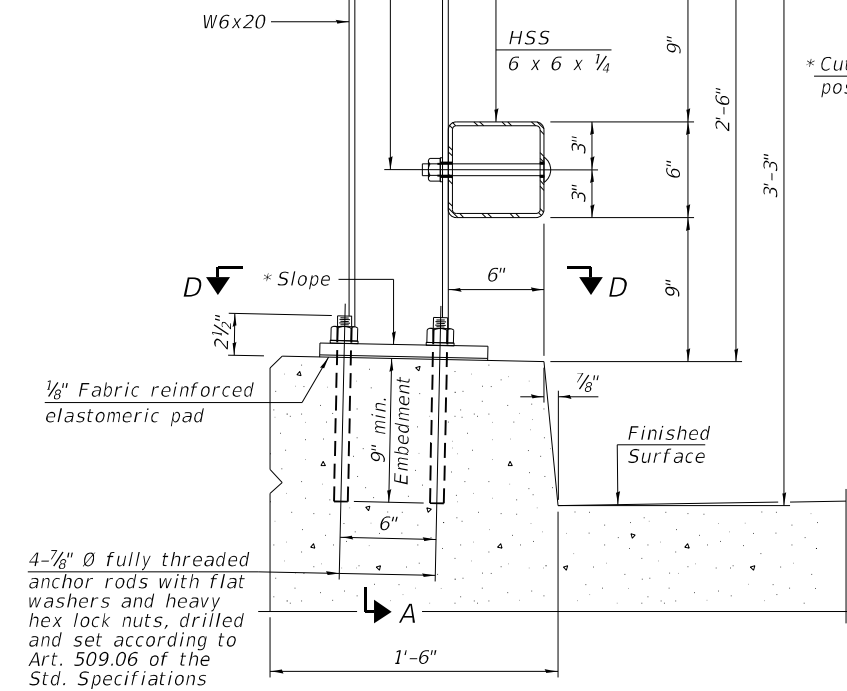
CULVERT DETAILS - 2
 STRUCTURE NO. 039-2034

SHEET NO. 7 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	50
CONTRACT NO. 78790				

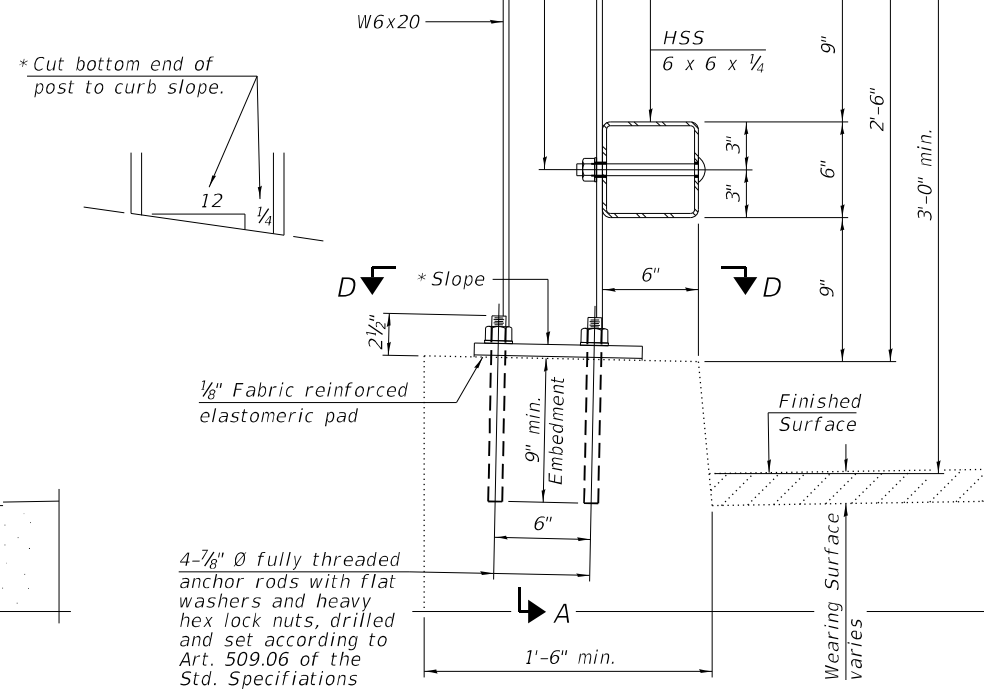
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4 - 3/4" Ø x 7 1/2" Round head bolts with heavy hex locknuts and flat washers. Field drill 1/8" Ø holes in HSS tubing using holes in post as template.

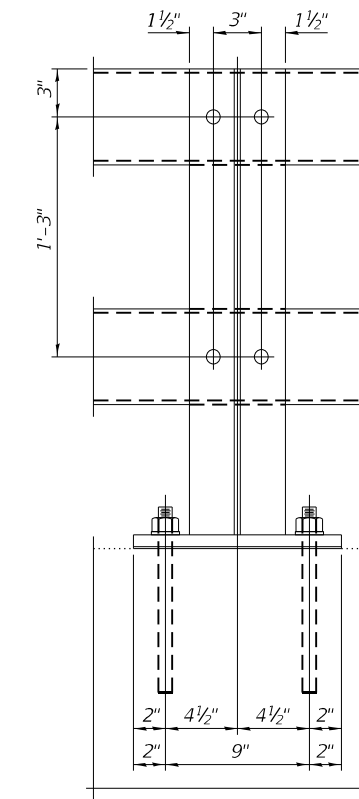


SECTION AT RAIL POST
(New construction)

4 - 3/4" Ø x 7 1/2" Round head bolts with heavy hex locknuts and flat washers. Field drill 1/8" Ø holes in HSS tubing using holes in post as template.

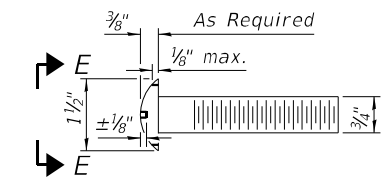


SECTION AT RAIL POST
(Retrofit construction)

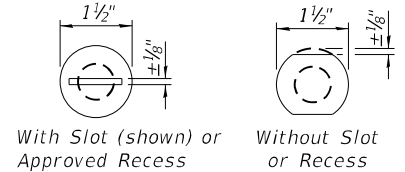


SECTION A-A

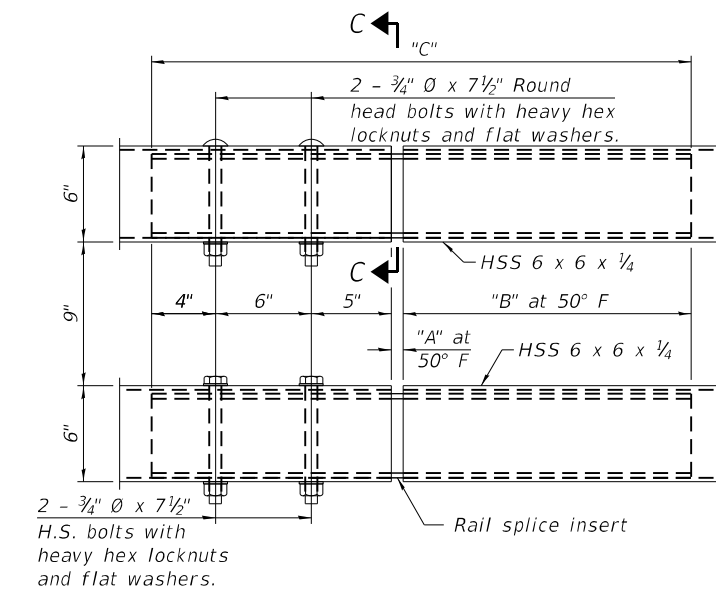
Notes:
 All HSS tubing shall be ASTM A500 grade C.
 All plates shall be AASHTO M270 grade 50.
 All heavy hex nuts shall be according to ASTM A563 grade DH.
 All fully threaded anchor rods shall be ASTM F1554 grade 105.
 The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 Posts shall not be located closer than 2'-6" to a bridge expansion joint.
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 All HSS tubing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
 Rail splice inserts may be built out of 2 - 3/8" bent plates in lieu of the 4 plate rail splice inserts shown, provided the outside dimensions are matched.
 All round head bolts shall be ASTM A449.
 The centerline of rail splices shall be placed between 1'-8" to 2'-6" from the centerline of the posts. The free end of the splice tube shall be oriented away from the closest post.



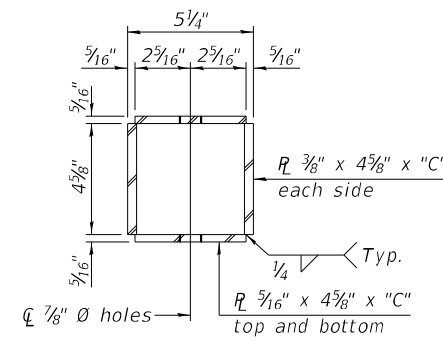
ROUND HEAD BOLT DETAIL



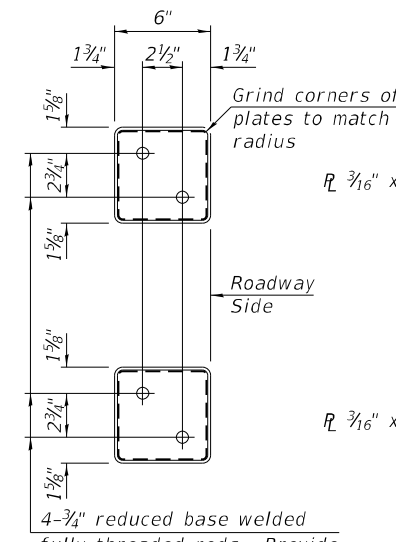
VIEW E-E



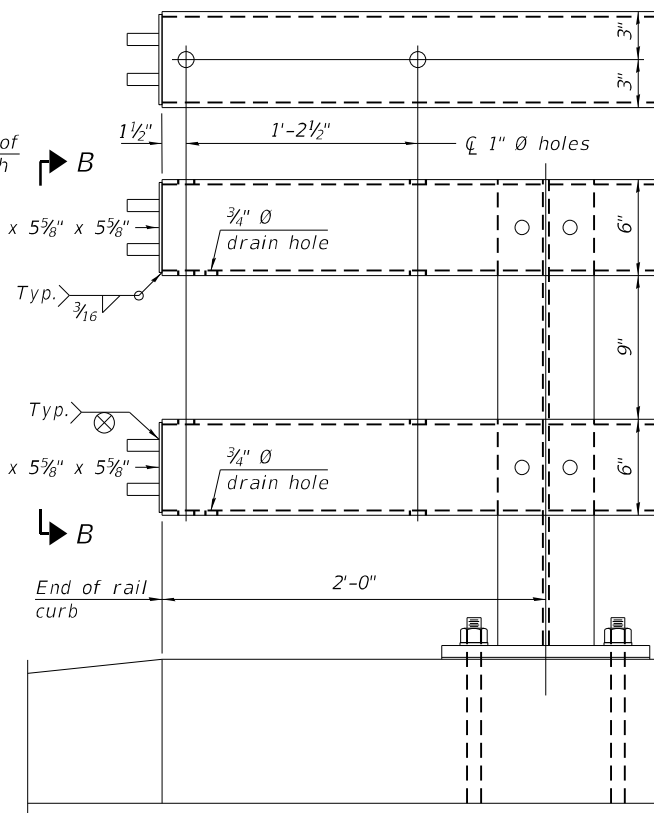
TOP AND BOTTOM RAIL SPLICE ELEVATION



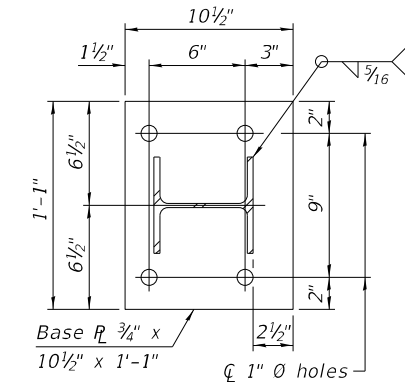
SECTION C-C



VIEW B-B



END OF RAIL DETAILS



SECTION D-D

RAILING CRITERIA

MASH 2016 Test Level	4
Railing Weight (plf)	75
Min f'c (psi)	4,500
Post Spacing Range	6'-8" - 10'-0"

SPLICE DIMENSIONS

Location	T	A	B	C
All locs. not over exp. jts.	0	1/2"	1'-6"	2'-9 1/2"
Over Strip Seal Jt.	≤ 4"	2 1/2"	1'-8"	3'-1 1/2"
Over Finger or Modular Jt.	≤ 9 1/2"	5 1/2"	1'-10 3/4"	3'-7 1/4"
Over Finger or Modular Jt.	≤ 15"	8 1/4"	2'-1 1/2"	4'-0 3/4"

T = ; total movement along centerline of roadway at expansion joint.

R-42 10-12-2021



USER NAME =
 DESIGNED - JAG
 CHECKED - ADB
 PLOT SCALE =
 DRAWN - JAG
 PLOT DATE =
 CHECKED - ADB

DESIGNED - JAG
 CHECKED - ADB
 DRAWN - JAG
 CHECKED - ADB
 REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STEEL RAILING, TYPE CO-10
 STRUCTURE NO. 039-2034**

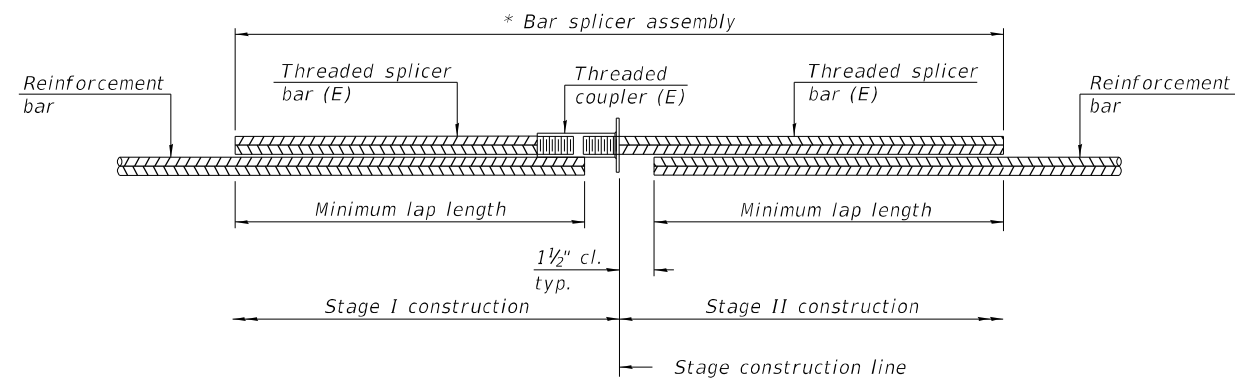
SHEET NO. 8 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	51
CONTRACT NO. 78790				

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type CO-10	Foot	48

ILLINOIS FED. AID PROJECT

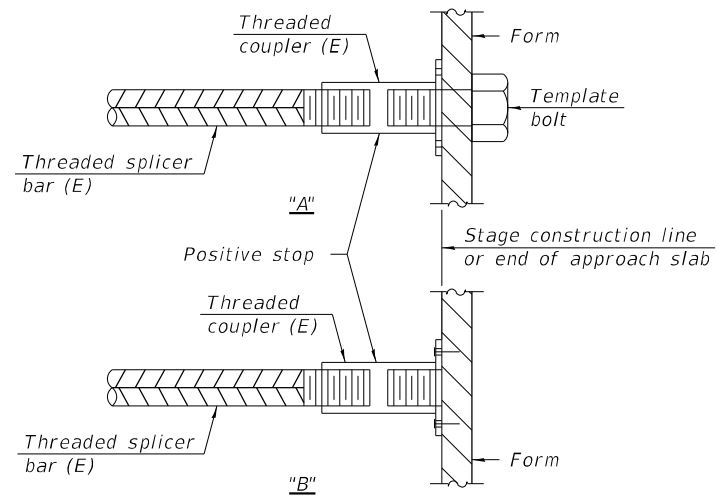


STANDARD BAR SPLICER ASSEMBLY PLAN
(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#6	21	3'-10"
Top Slab	#6	21	3'-10"
Bottom Slab	#6	21	3'-10"
Bottom Slab	#6	21	3'-10"
Walls	#5	27	3'-7"

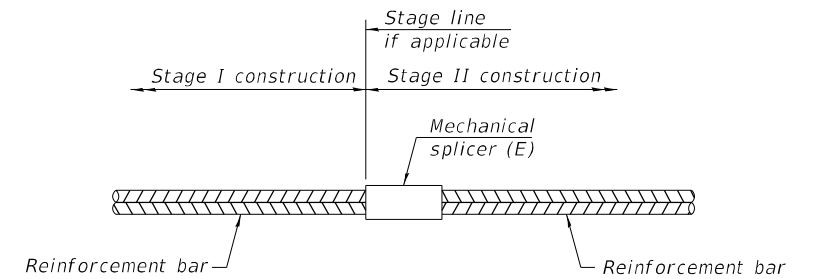


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020



USER NAME =	DESIGNED - JAG	REVISED -
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY & MECH. SPLICER DETAILS
STRUCTURE NO. 039-2034

SHEET NO. 9 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	52
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT



Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Page 1 of 1

Date 4/9/20

ROUTE IL 3 DESCRIPTION Box culvert over drainage ditch LOGGED BY L. Estel

SECTION 123B-6 LOCATION 0.1 mi. SE of Raddle Rd, SEC. 29, TWP. 8S, RNG. 4W, 3 PM

COUNTY Jackson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.	BORING NO.	DEPTH	SOIL	UCS	MOISTURE	WATER	TEMP.	REMARKS
039-2014	1-S							
Station 345+42	Station 345+69							
	Offset 7.0ft Right							
	Ground Surface Elev. 385.6 ft							
	Cored Pavement, 2.5" HMA over 9.5" PCC	384.60						
	M. Stiff Brown, Moist CLAY							
		1						
		3	0.8	27				
		2	B					
	(Stiff)							
		-5	1					
		2	1.6	22				
		5	B					
		378.60						
	V. Soft Brown, Moist to Wet SILT							
			WOH					
		1	0.2	28				
		1	B					
		-10	WOH					
			WOH	0.1	28			
			WOH	B				
			WOH					
			WOH	0.1	26			
			WOH	B				
		-15	WOH					
			WOH	0.1	26			
			WOH	B				
			WOH					
			WOH	0.1	30			
			WOH	B				
		-20	WOH					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\MATERIALS\GEO\PROJECTS\PROJECTS\STRUCTURES\039-2014\IL 3 OVER DRAINAGE DITCH\039-2014 IL 3 OVER DRAINAGE DITCH.DWG Date Printed: 4/23/20
Latitude: 37.481114 Longitude: 89.344535 Datum: NAD83 Job Number:



Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Page 1 of 1

Date 4/9/20

ROUTE IL 3 DESCRIPTION Box culvert over drainage ditch LOGGED BY L. Estel

SECTION 123B-6 LOCATION 0.1 mi. SE of Raddle Rd, SEC. 29, TWP. 8S, RNG. 4W, 3 PM

COUNTY Jackson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.	BORING NO.	DEPTH	SOIL	UCS	MOISTURE	WATER	TEMP.	REMARKS
039-2014	2-S							
Station 345+42	Station 345+16							
	Offset 7.0ft Left							
	Ground Surface Elev. 385.7 ft							
	Cored Pavement, 2.5" HMA over 9.5" PCC	384.70						
	M. Stiff Brown, Moist SILT							
		3						
		5	0.8	22				
		11	B					
		-5	1					
		2	0.7	26				
		3	B					
			WOH					
		1	0.6	23				
		3	B					
		-10	WOH					
			WOH	0.7	25			
			WOH	B				
			1					
			3	0.9	23			
			3	B				
		371.20						
	V. Soft Brown, Moist SILT							
			WOH					
		-15	WOH	0.2	27			
			WOH	B				
			WOH					
			WOH	0.2	26			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\MATERIALS\GEO\PROJECTS\PROJECTS\STRUCTURES\039-2014\IL 3 OVER DRAINAGE DITCH\039-2014 IL 3 OVER DRAINAGE DITCH.DWG Date Printed: 4/23/20
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USER NAME =	DESIGNED - JAG	REVISED -
CHECKED - ADB	REVISED -	
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-2034
SHEET NO. 10 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	53
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
STATE BOND ISSUE HIGHWAY**

BOND ISSUE ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
150	C-123	JACKSON	93	1
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	194

INDEX OF SHEETS

Sheet No. 1 Title Page.

2X Standard 1463.

2 Standard 1365, 135B.

3 Standard 1359, 135A.

4 Schedule of Culverts & Gutter.

4 Special Cross Section for 1359 (for Class C Excavation).

5 Plan & Profile Station 94+30 to Sta. 105+00.

6 " " " " 105+00 " 135+00.

7 " " " " 135+00 " 165+00.

8 " " " " 165+00 " 195+00.

9 " " " " 195+00 " 225+00.

10 " " " " 225+00 " 255+00.

11 " " " " 255+00 " 285+00.

12 " " " " 285+00 " 315+00.

13 " " " " 315+00 " 345+00.

14 " " " " 345+00 " 375+00.

15 " " " " 375+00 " 405+00.

16 " " " " 405+00 " 435+00.

17 " " " " 435+00 " 465+00.

18 " " " " 465+00 " 495+00.

19 " " " " 495+00 " 525+00.

20 " " " " 525+00 " 555+00.

21 " " " " 555+00 " 585+00.

22 " " " " 585+00 " 615+00.

23 to 69 (incl) Cross Sections.

69 Standard Culvert Design 1204-4, 1204-3.

69 Special Culvert Design Sta. 94+30, 95+29.

70 " " " " 103+05, 115+05, 120+10, 125+10.

71 " " " " 137+43, 151+41, 156+07, 163+19.

72 " " " " 170+65, 179+90, 215+10, 221+27.

73 " " " " 227+25, 234+19, 237+69, 240+02.

74 " " " " 241+69, 247+66, 252+73, 278+96.

75 " " " " 282+49, 286+07, 290+10, 295+79.

76 " " " " 317+47, 328+48, 335+17, 340+00.

77 " " " " 351+25, 360+25, 369+05, 379+37.

78 " " " " 383+07, 392+45, 401+00, 405+06.

79 " " " " 421+22, 433+17, 439+00, 446+00.

80 " " " " 450+02, 457+54, 476+15, 485+29.

81 " " " " 489+27, 495+34, 500+58, 504+73.

82 " " " " 509+37, 513+66, 523+00, 533+84.

83 " " " " 539+89, 550+45, 553+85, 572+62.

84 " " " " 573+06, 582+00, 594+45, 602+50.

85 " " " " 607+00.

85 Special Bridge Sta. 194+09 Sheet 1 of 2, & Sheet 2 of 2.

86 " " " " 345+42 " 1 of 1.

87 " " " " 370+74 " 1 of 1.

88 " " " " 413+10 " 1 of 3.

89 " " " " 413+10 " 2 of 3.

90 " " " " 413+10 " 3 of 3.

91 " " " " 530+10 " 1 of 1.

92 Standard 1162, 1203.

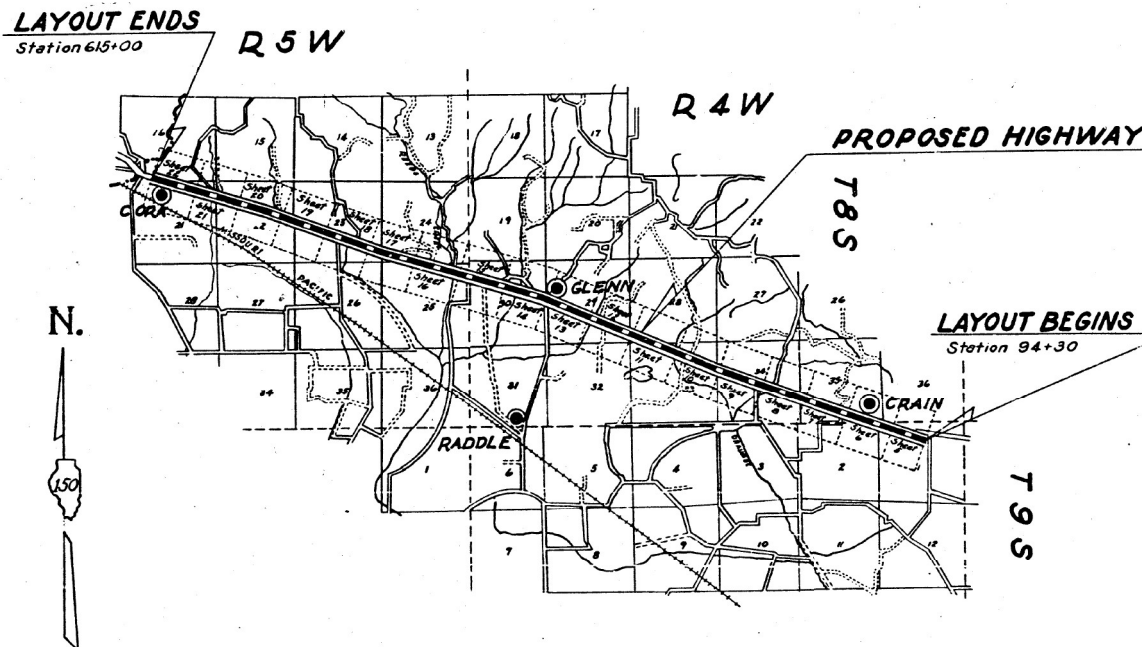
93 Standard 1470, 1471.

F.A. PROJECT 194-C
ROUTE 150 SECTION 123 JACKSON COUNTY

FROM A POINT NEAR THE S.E. CORNER OF THE N.E. 1/4 NW 1/4 OF SEC. 1, T. 9 S., R. 4 W. OF THE 3RD. P.M.
TO A POINT NEAR THE S.W. CORNER OF THE S.E. 1/4 SW 1/4 OF SEC. 16 T. 8 S., R. 5 W. OF THE 3RD. P.M.

SCALES

PLAN	1 INCH	100 FT.
PROFILE, HOR.	1 INCH	100 FT.
PROFILE, VERT.	1 INCH	10 FT.
CROSS-SECTIONS	1 INCH	5 FT.



LAYOUT

Approximate Scale 1 Inch = 1 Mile
Net Length of Layout 52070 Feet = 9.8617 Mile

STATE LINE	-----	RETAINING WALL	=====
COUNTY LINE	-----	BASE OR SURVEY LINE	-----
CITY, VILLAGE OR TOWN	-----	LEVEE	=====
TOWNSHIP LINE	-----	CULVERT	-----
SECTION LINE	-----	STORM SEWER	-----
GRANT LINE	-----	TILE DRAIN	-----
SECTION CORNER	-----	DROP INLET	-----
FENCE LINE	-----	TROLLEY POLE	-----
UNFENCED PROPERTY	-----	POWER POLE	-----
RIGHT OF WAY LINE	-----	TELEPHONE OR TELEGRAPH POLE	-----
GUARD RAIL	-----	MARSH	-----
STEAM RAILROAD	-----	HEDGE	-----
ELECTRIC RAILROAD	-----		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

February 4, 1932
G.A. Jamieson
DISTRICT ENGINEER

EXAMINED April 6, 1932
C.D. Johnson
CHIEF ENGINEER

PASSED April 6, 1932
H.A. [Signature]
ACTING SUPERVISOR OF HIGHWAYS

APPROVED April 6, 1932
[Signature]
DIRECTOR

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER, Bureau of Public Roads

RECOMMENDED FOR APPROVAL

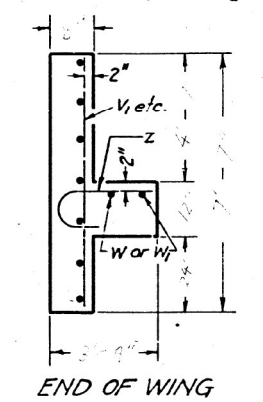
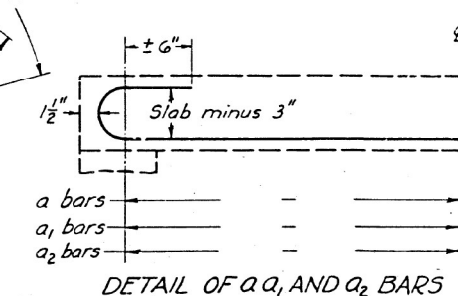
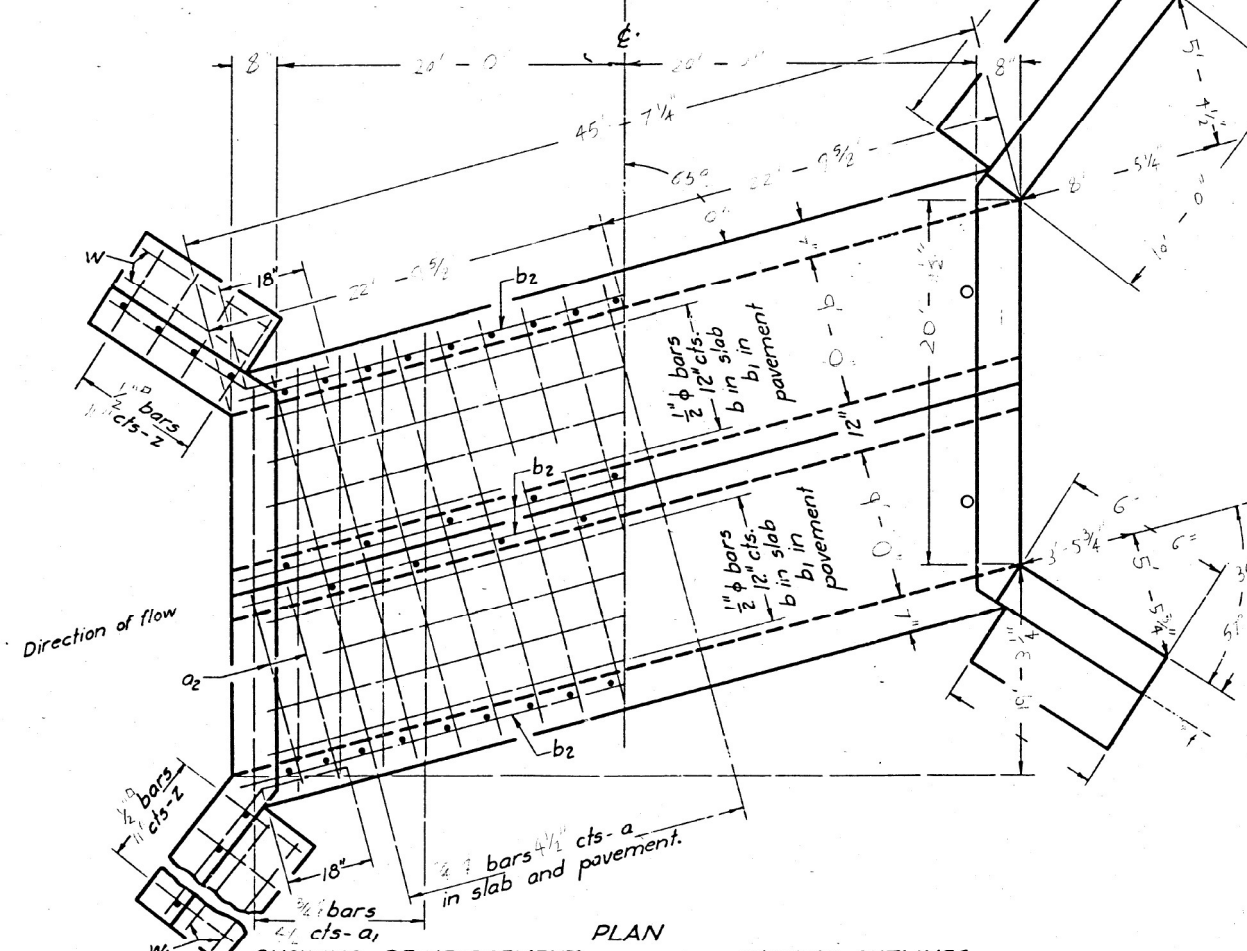
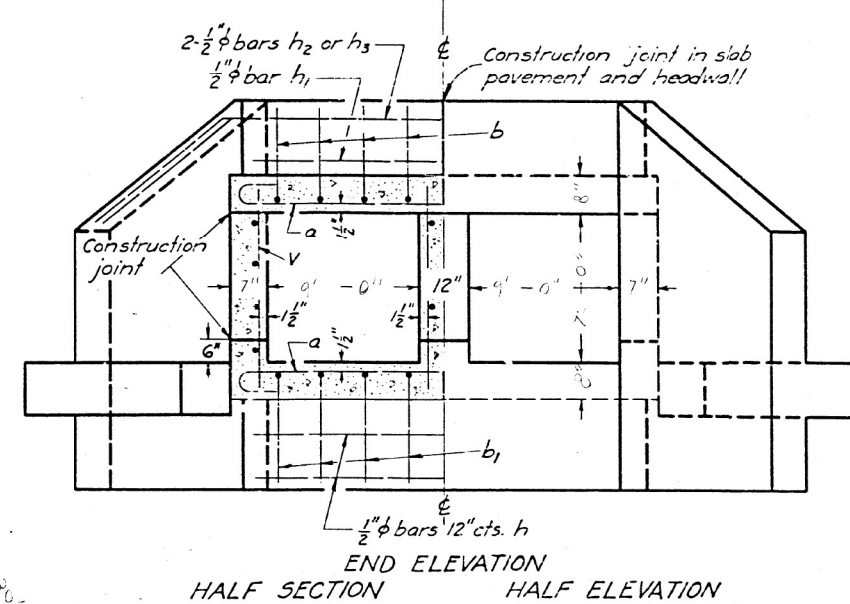
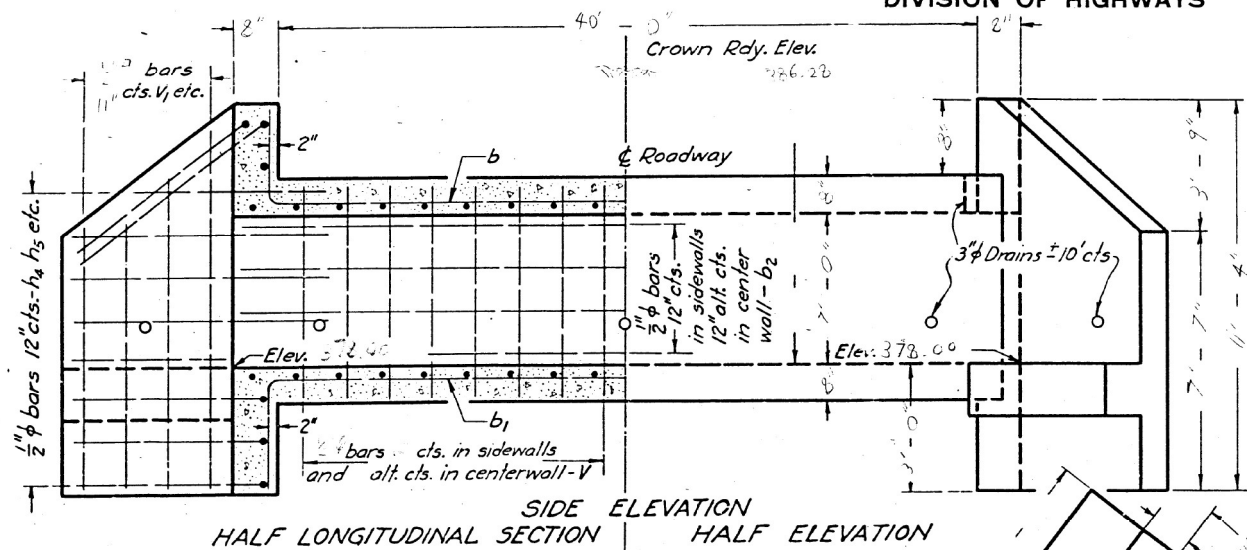
CHIEF ENGINEER, Bureau of Public Roads

APPROVED

CHIEF, Bureau of Public Roads

039-2014

9-23



BILL OF MATERIAL

Bars	Number	Size	Length
a	122		21'-0"
a ₁	92		20'-0"
a ₂			
b			
b ₁			
b ₂			
h			
h ₁			
h ₂			
h ₃			
h ₄			
h ₅			
h ₆			
h ₇			
v			
v ₁			
v ₂			
v ₃			
w			
w ₁			
z			

Class X concrete Cu.Yds.
Reinforcing Steel Lbs.

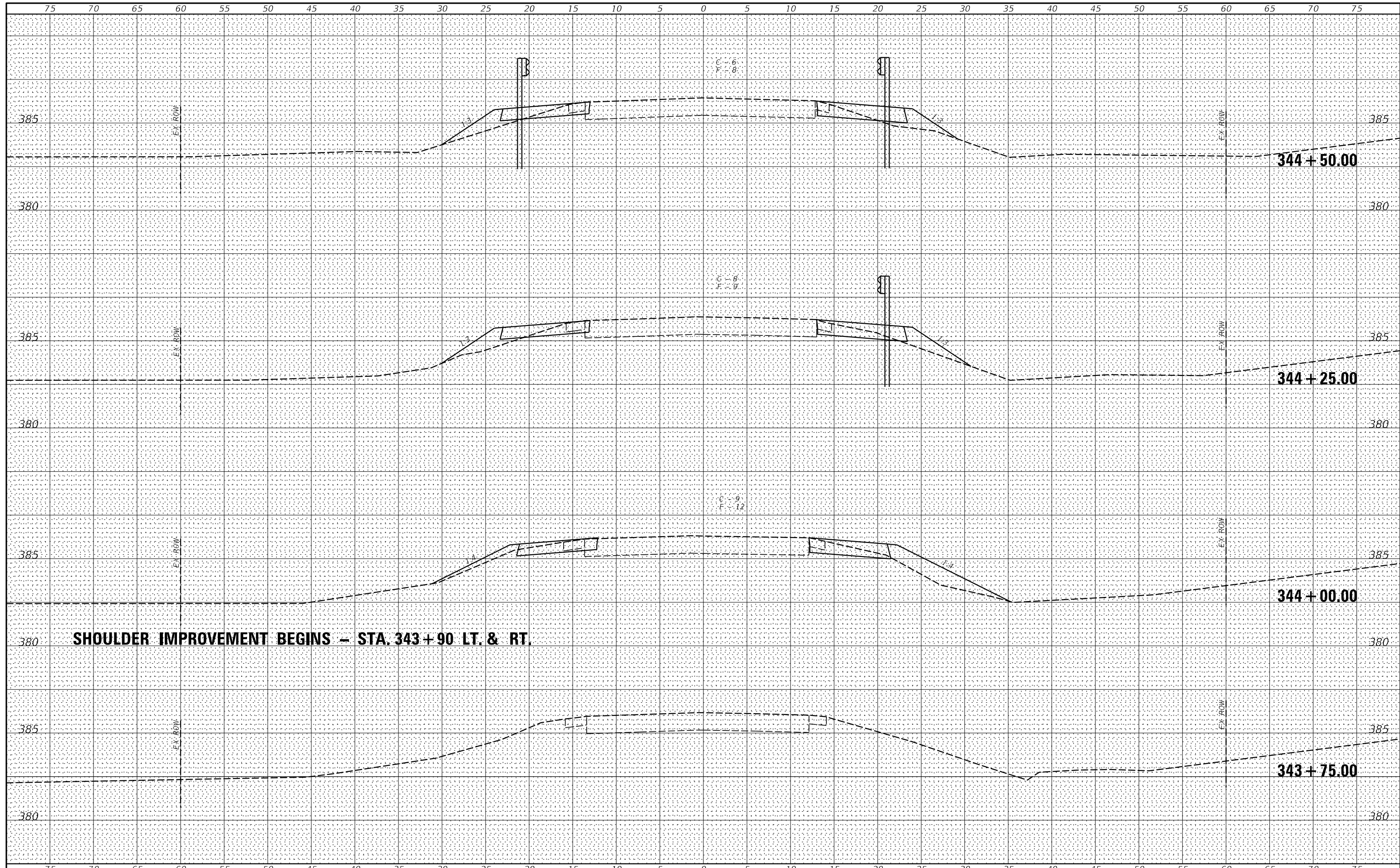
STANDARD	COMPUTED	—	EXAMINED	—	19
	CHECKED	—		BRIDGE ENGINEER	
SPECIAL	DRAWN	J.C. Anderson	PASSED	ENGINEER OF DESIGN	
	CHECKED	—	APPROVED	CHIEF HIGHWAY ENGINEER	
	ASSEMBLED	—			

Class X concrete shall be used throughout.
All reinforcing steel shall be wired securely in place before concrete is poured.
To be used for skewers up to and including 30° only.

Standard 1348

BY _____ DATE _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

BY _____ DATE _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



USER NAME = *USER*
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 PLOT DATE = *DATE*

DESIGNED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

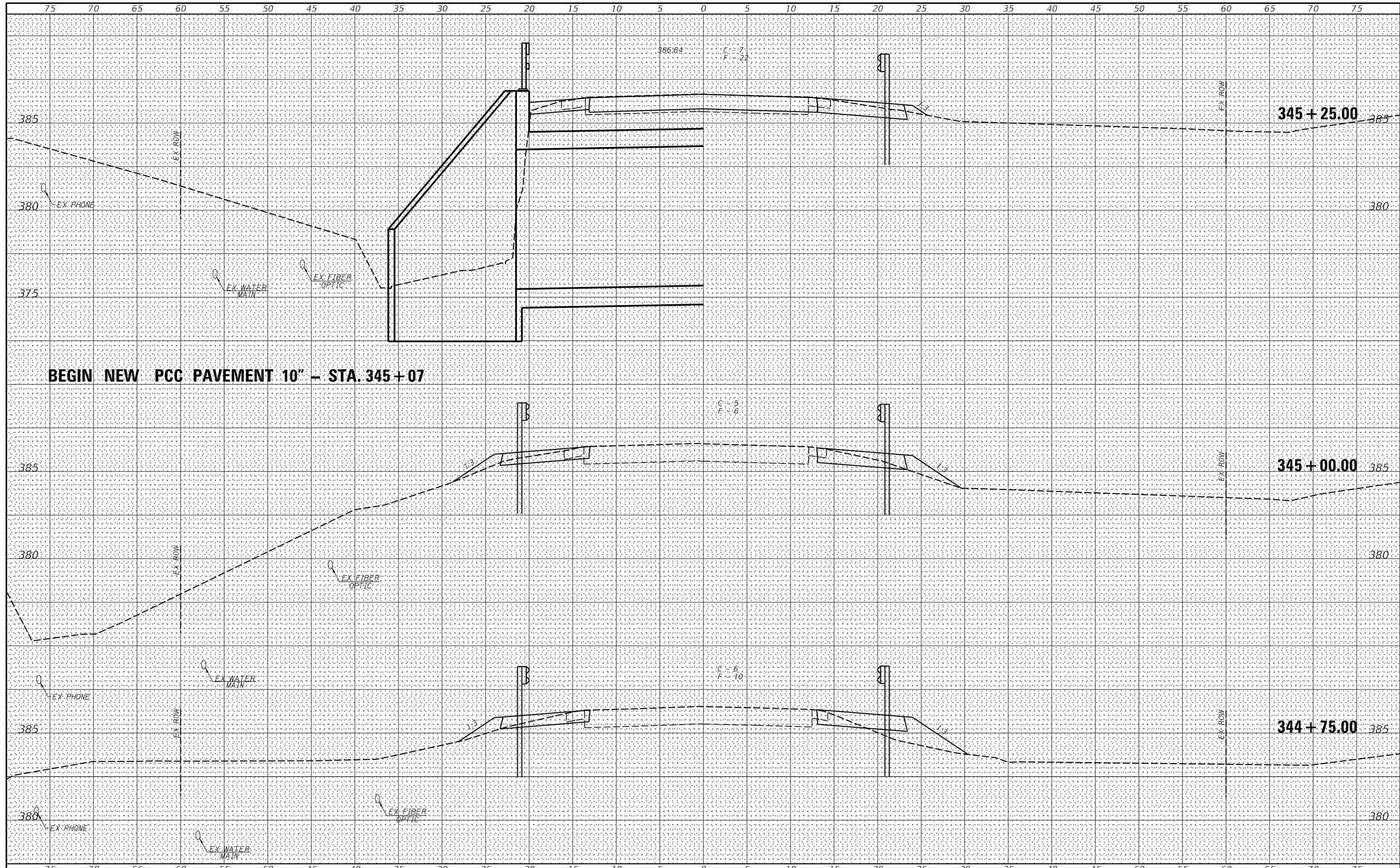
CROSS SECTIONS - SN 039-2034

SCALE: SHEET NO. 1 OF 5 SHEETS STA. 343+75.00 TO STA. 344+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	56
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____



BEGIN NEW PCC PAVEMENT 10" - STA. 345+07

VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

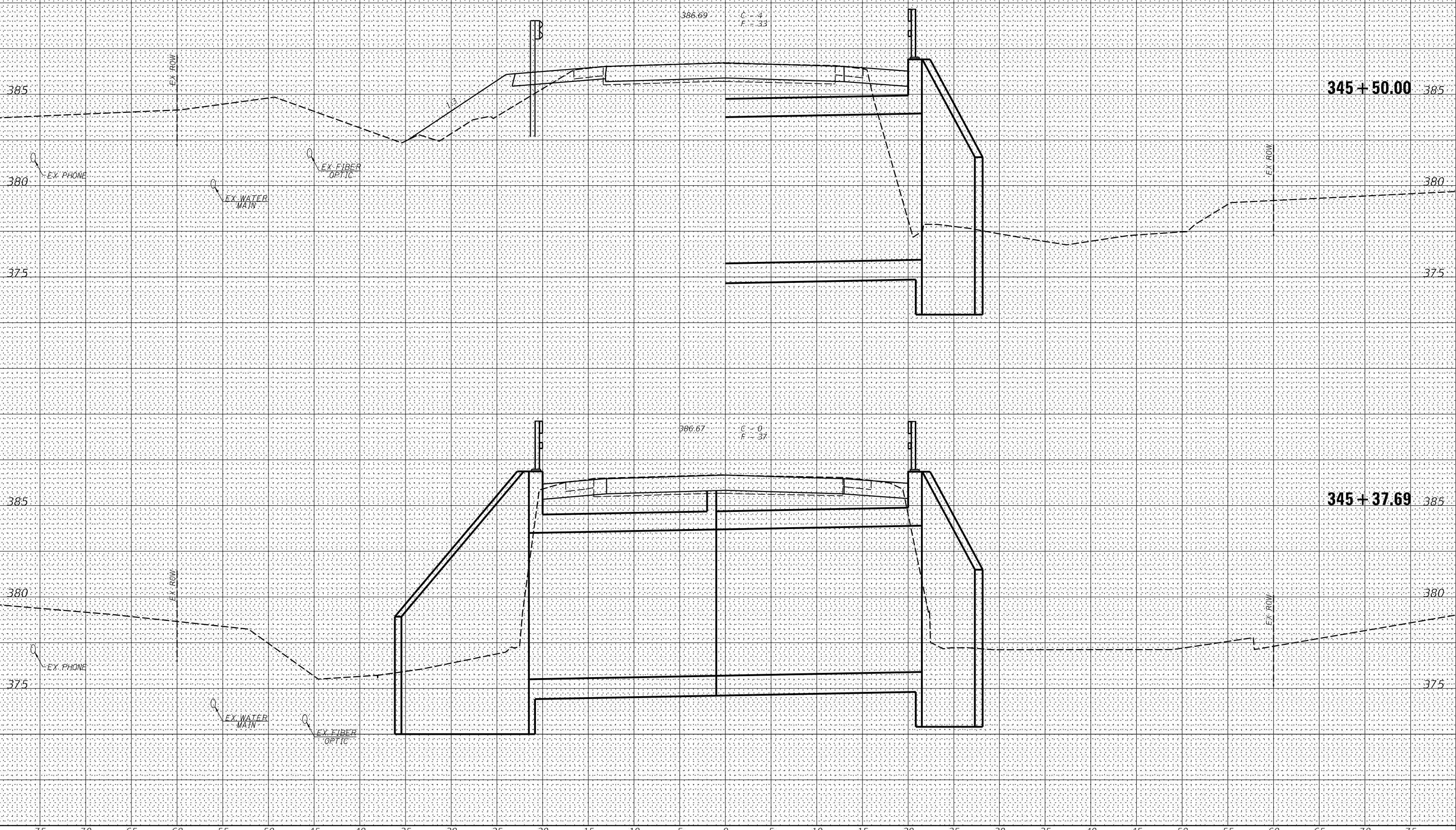
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PLOT SCALE = *SCALE*	DRAWN -	REVISED -
PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2034
 SCALE: SHEET NO. 2 OF 5 SHEETS STA. 344+75.00 TO STA. 345+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	57
CONTRACT NO. 78790				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

END NEW PCC PAVEMENT 10" - STA. 345+76



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

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

VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = *SCALE*	CHECKED -	REVISED -
PLOT DATE = *DATE*	DATE -	REVISED -

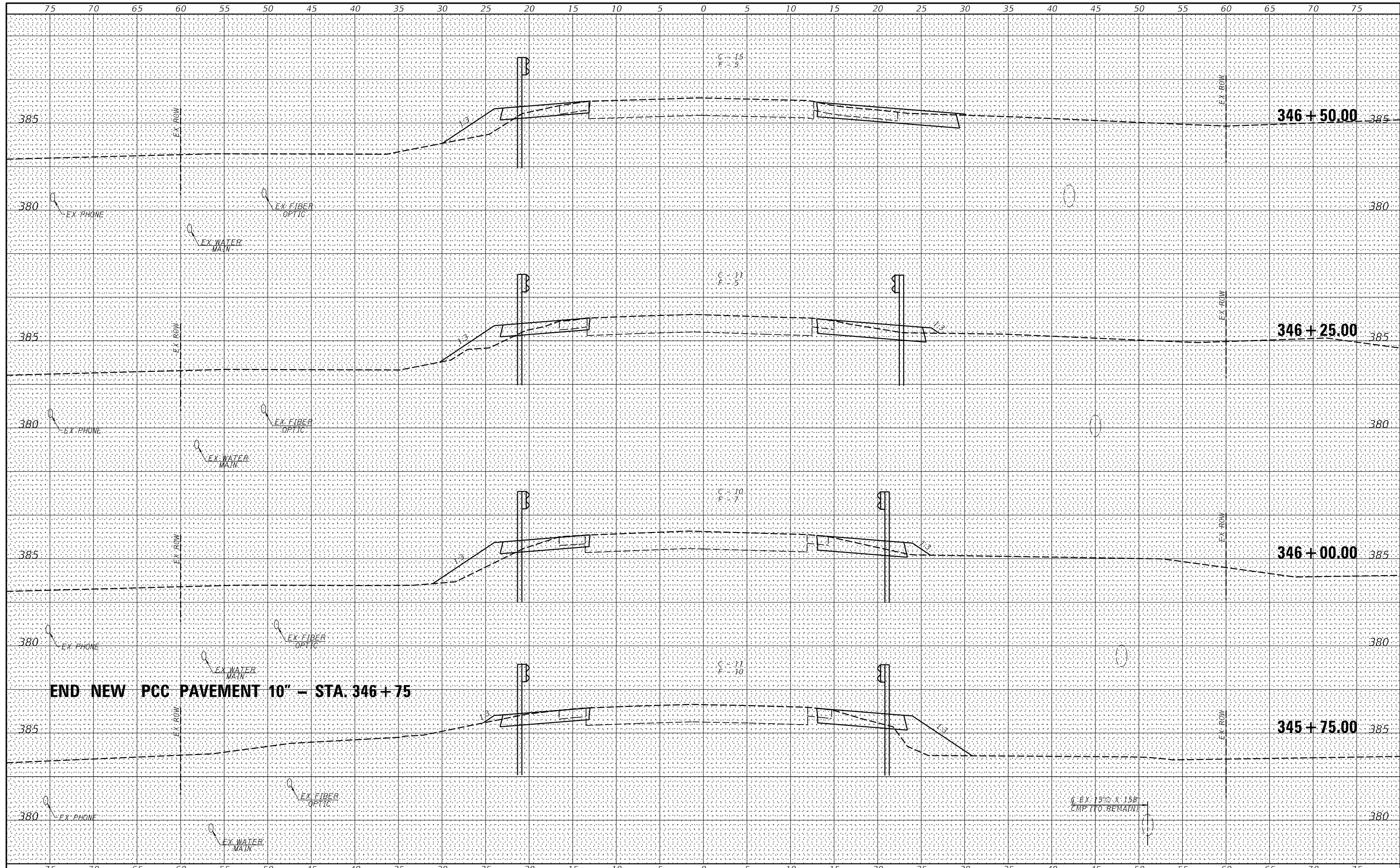
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2034
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	58
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

USER NAME = *USER*
 PLOT SCALE = *SCALE*
 PLOT DATE = *DATE*

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISÉ -
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 REVISÉ -
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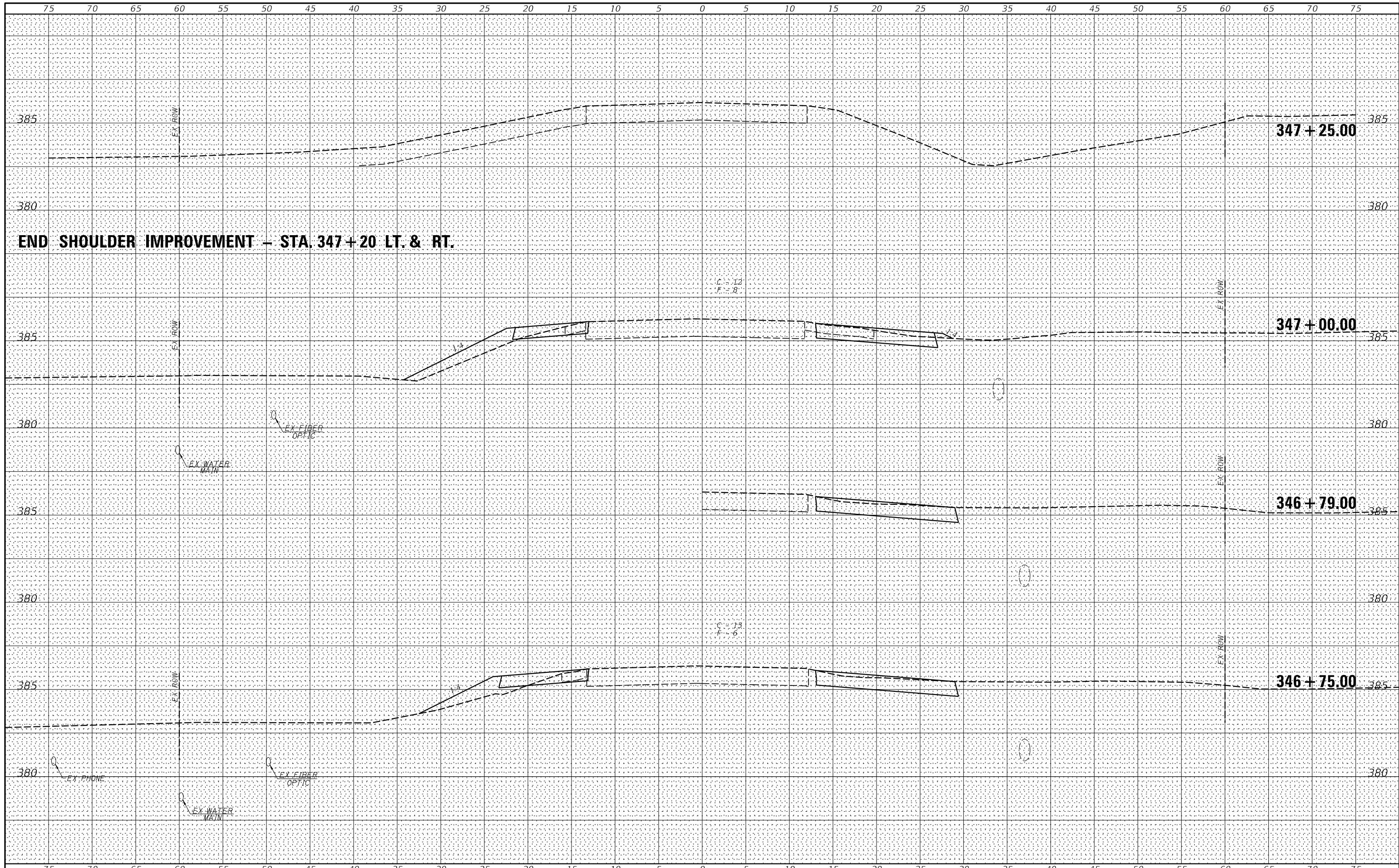
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2034
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	59
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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 BY: _____
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 AREAS CHECKED _____
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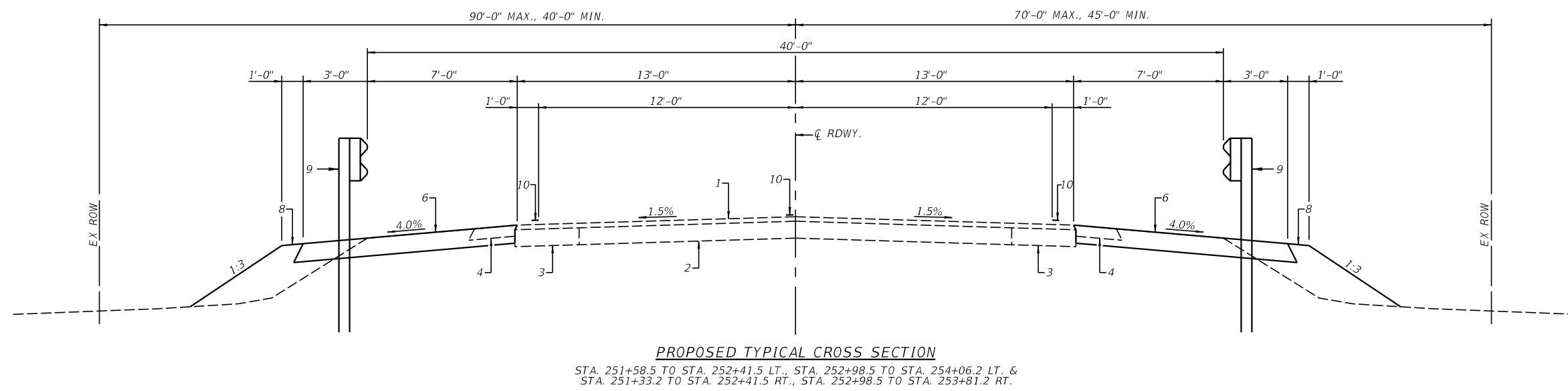
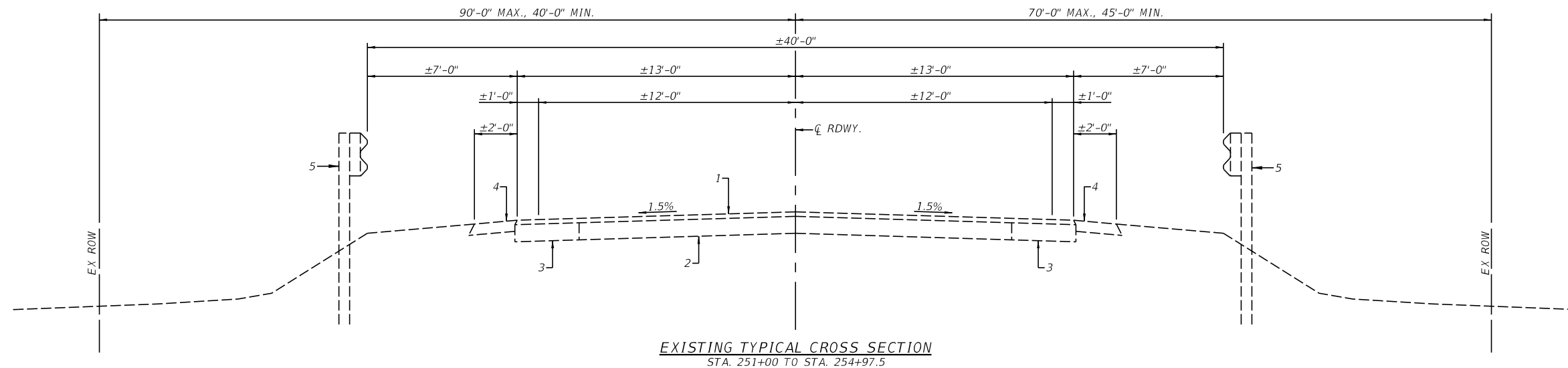
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 BY: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



END SHOULDER IMPROVEMENT - STA. 347+20 LT. & RT.

USER NAME: *USER*	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE: *SCALE*	CHECKED -	REVISED -
PLOT DATE: *DATE*	DATE -	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-6	JACKSON	101	60
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



- PAVEMENT LEGEND**
- 1 - EX HMA SURF CSE ±2½"
 - 2 - EX PCC PAVEMENT ±9½"
 - 3 - EX HMA BSE CSE WIDENING
 - 4 - EX AGG SHOULDER
 - 5 - EX GUARDRAIL
 - 6 - PR HMA SHOULDER 10"
 - 7 - PR PCC PAVEMENT 10" MIN.
 - 8 - PR EARTH SHOULDER
 - 9 - PR GUARDRAIL
 - 10 - PR PAVEMENT MARKING - LINE 4"
 - 11 - PR TEMP. PAVEMENT MARKING - LINE 4" - PAINT

MODEL: SHORLENAMES
FILE: NAME: SHEETS



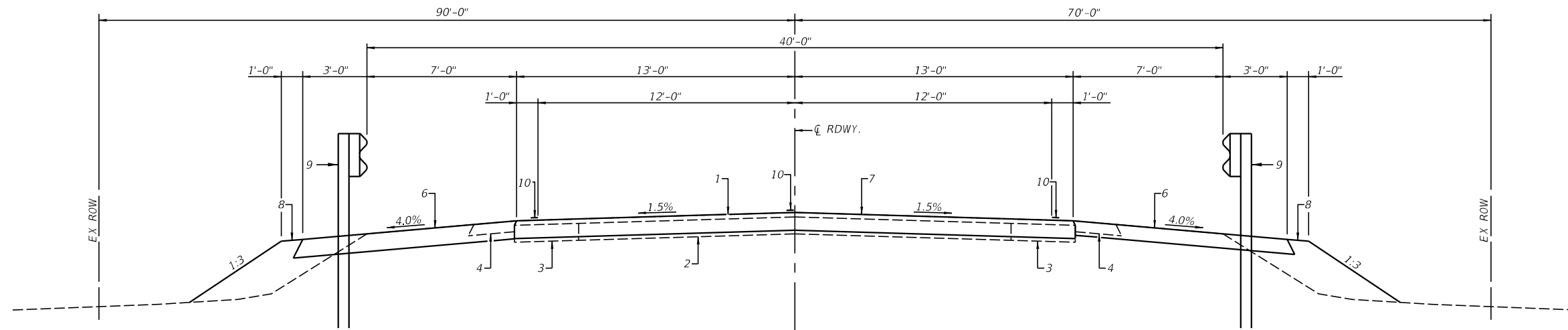
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

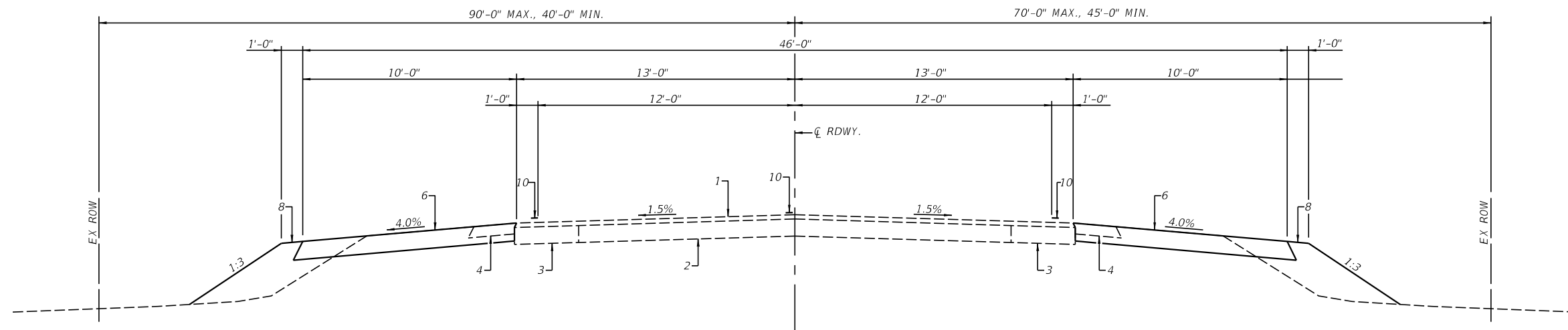
ROADWAY TYPICAL SECTIONS

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	1238-7	JACKSON	101	61
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL CROSS SECTION
 STA. 252+41.5 TO STA. 252+98.5



PROPOSED TYPICAL CROSS SECTION
 STA. 251+00 TO STA. 251+58.5 LT., STA. 254+06.2 TO STA. 254+97.5 LT. &
 STA. 251+00 TO STA. 251+33.2 RT., STA. 253+81.2 TO STA. 254+97.5 RT.

PAVEMENT LEGEND

- 1 - EX HMA SURF CSE ±2½"
- 2 - EX PCC PAVEMENT ±9½"
- 3 - EX HMA BSE CSE WIDENING
- 4 - EX AGG SHOULDER
- 5 - EX GUARDRAIL
- 6 - PR HMA SHOULDER 10"
- 7 - PR PCC PAVEMENT 10" MIN.
- 8 - PR EARTH SHOULDER
- 9 - PR GUARDRAIL
- 10 - PR PAVEMENT MARKING - LINE 4"
- 11 - PR TEMP. PAVEMENT MARKING - LINE 4" - PAINT

MODEL: 4100ELMAMES
 FILE NAME: SRIELS



USER NAME = \$USERS	DESIGNED - _____	REVISED - _____
PLOT SCALE = \$SCALES	DRAWN - _____	REVISED - _____
PLOT DATE = \$DATES	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ROADWAY TYPICAL SECTIONS

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	1238-7	JACKSON	101	62
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

EARTHWORK								
LOCATION	EARTH EXCAVATION	ADJUSTED SHRINKAGE FACTOR	EARTH EXCAVATION (ADJUSTED)	EMBANKMENT	EARTHWORK BALANCE		FURNISHED EXCAVATION	REMARKS
					EXCAVATION REQUIRED TO COMPLETE	EXCESS EXCAVATION		
					CU. YD.	CU. YD.		
STA. 251+00 TO STA. 254+97.5	510	25	382	640	258	0	258	
STA. 10+00 TO STA. 12+00 (PRIVATE ENTRANCE)	102	25	76	113	37	0	37	
TOTAL	612		458	753	295	0	295	

PERMANENT SEEDING						
LOCATION	SEEDING CLASS 2A	NITROGEN FERTILIZER	PHOSPHORUS FERTILIZER	POTASSIUM FERTILIZER	AGRICULTURAL GROUND LIMESTONE	MULCH METHOD 2
	ACRE	POUND	POUND	POUND	TON	ACRE
	STA. 251+00 TO STA. 254+97.5 LT.	0.39	35	35	35	0.78
STA. 251+00 TO STA. 254+97.5 LT.	0.46	42	42	42	0.92	0.46
TOTAL	0.85	77	77	77	1.70	0.85

USE 0.9 ACRE USE 81 LBS. USE 81 LBS. USE 81 LBS. USE 1.8 TON USE 0.9 ACRE

PIPE CULVERT SCHEDULE				
LOCATION	PIPE CULVERT REMOVAL	PIPE CULVERTS, CLASS D, TYPE 1 24"	PIPE CULVERTS, CLASS D, TYPE 1 30"	PIPE CULVERTS, CLASS C, TYPE 1 10"
	FOOT	FOOT	FOOT	FOOT
	STA. 253+27.7 TO STA. 253+63.5 LT.	36		
STA. 252+88.7 TO STA. 253+43.8 RT.	56			
STA. 254+14 40' LT. TO STA. 254+78 35' LT.		64		
STA. 254+22 35' RT. TO STA. 253+19 48' RT.			104	
STA. 253+18.5 50' RT. TO STA. 253+54.4 60' RT.				40
TOTAL	92	64	104	40

STEEL RAILING AND GUARDRAIL SCHEDULE					
LOCATION	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	STEEL PLATE BEAM GUARDRAIL 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 14	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REMOVAL
	EACH	FOOT	EACH	EACH	FOOT
	STA. 251+36.63 TO STA. 251+86.63 RT.	1			
STA. 251+86.63 TO STA. 252+36.63 RT.		50			
STA. 252+36.63 TO STA. 252+58.75 RT.			1		
STA. 252+81.25 TO STA. 253+03.37 RT.			1		
STA. 253+03.37 TO STA. 253+53.37 RT.	1				
STA. 251+86.63 TO STA. 252+36.63 LT.	1				
STA. 252+36.63 TO STA. 252+58.75 LT.			1		
STA. 252+81.25 TO STA. 253+03.37 LT.			1		
STA. 253+03.37 TO STA. 253+53.37 LT.		50			
STA. 253+53.37 TO STA. 254+03.37 LT.	1				
STA. 251+36.63 RT.				1	
STA. 251+86.63 LT.				1	
STA. 253+53.37 RT.				1	
STA. 254+03.37 LT.				1	
STA. 252+22.7 TO STA. 253+10.3 RT.					102
STA. 252+35.6 TO STA. 253+22.7 LT.					101
TOTAL	4	100	4	4	203

70107025 CHANGEABLE MESSAGE SIGN	
LOCATION	CHANGEABLE MESSAGE SIGN CAL. DAY
MESSAGE BOARD SOUTHEAST OF IL 3/151 INTERSECTION	90
MESSAGE BOARD NORTHWEST OF IL 3 AND RADDLE ROAD INTERSECTION (QUANTITY INCLUDED WITH SN 039-2034)	

END SECTION SCHEDULE		
LOCATION	METAL FLARED END SECTIONS 24"	METAL FLARED END SECTIONS 30"
	EACH	EACH
	STA. 254+14 40' LT	1
STA. 254+78 35' LT	1	
STA. 253+19 48' RT		1
STA. 254+22 35' RT.		1
TOTAL	2	2

RELOCATE SIGN, (SPECIAL)	
LOCATION	RELOCATE SIGN, (SPECIAL) EACH
RELOCATE EXISTING SIGNS TO:	
STA. 253+13 45' LT. (JAMES 'GENE' KORANDO POND SIGN)	1
STA. 253+15 45' LT. (JAMES 'GENE' KORANDO POND PLACARD)	1
STA. 253+15 47' LT. (JAMES 'GENE' KORANDO POND PLACARD)	1
TOTAL	3

REMOVE SIGN PANEL ASSEMBLY - TYPE B	
LOCATION	REMOVE SIGN PANEL ASSEMBLY EACH
STA. 252+35.5 25' RT (BRIDGE WEIGHT LIMIT)	1
STA. 253+07.3 23' LT (BRIDGE WEIGHT LIMIT)	1
TOTAL	2

PAVEMENT MARKING REMOVAL - GRINDING	
LOCATION	PAVEMENT MARKING REMOVAL - GRINDING SQ. FT.
EXISTING PAVEMENT MARKING	
STA. 249+67.7 TO STA. 255+31.5 LT.	169
STA. 249+55.0 TO STA. 255+85.5 CENTERLINE SKIP DASH	50
STA. 250+15.0 TO STA. 255+31.5 RT.	173
TOTAL	392



USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

QUANTITY SCHEDULES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	63
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS				
LOCATION	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
	EACH	FOOT	FOOT	EACH
STA. 250+91.7 TO STA. 251+17.3 RT.	1			
STA. 251+17.3 TO STA. 253+29.5 (STAGE I)		212.5		
STA. 253+29.5 TO STA. 253+55.1 LT.	1			
STA. 250+91.7 TO STA. 251+17.3 LT.				1
STA. 251+17.3 TO STA. 253+29.5 (STAGE II)			212.5	
STA. 253+29.5 TO STA. 253+55.1 RT.				1
TOTAL	2	212.5	212.5	2

TEMPORARY EROSION CONTROL ITEMS			
LOCATION	SEEDING, CLASS 7	TEMPORARY EROSION CONTROL SEEDING	PERIMETER EROSION BARRIER
	ACRE	POUND	FOOT
STA. 251+00 TO STA. 254+97.5 LT.	0.39	39	
STA. 251+00 TO STA. 254+97.5 RT. INCLUDES KORANDO TEMPORARY EASEMENT	0.46	46	
STA. 251+50 TO STA. 252+60 LT.			110
STA. 252+85 TO STA. 254+25 LT.			140
STA. 254+75 TO STA. 255+00 LT.			25
STA. 251+00 TO STA. 252+60 RT.			160
STA. 252+85 TO STA. 253+15 RT.			30
STA. 253+15 90' TO STA. 253+25 200' RT.			111
STA. 253+60 200' TO STA. 254+15 90' RT.			123
STA. 254+15 TO STA. 254+50			35
STA. 254+50 90' TO STA. 254+50 70' RT.			20
STA. 254+50 TO STA. 254+98 RT.			38
STA. 253+25 TO STA. 253+60 RT.			35
TOTAL	0.85	85	827

USE 0.9 ACRE USE 90 LBS.

PAVEMENT REMOVAL	
LOCATION	PAVEMENT REMOVAL SQ. YD.
STA. 252+41.5 TO STA. 252+98.5	165
TOTAL	165

PAINT PAVEMENT MARKING SCHEDULE		
LOCATION	PAINT PAVEMENT MARKING - LINE 4"	
	30' SKIP 10' DASH (YELLOW)	EDGE LINE (WHITE)
	FOOT	FOOT
STA. 249+67.7 TO STA. 255+31.5 LT.		564
STA. 249+55.0 TO STA. 255+85.5 CL.	160	
STA. 250+15.0 TO STA. 255+31.5 RT.		517
SUBTOTAL	160	1081
TOTAL		1241

PINNING TEMPORARY CONCRETE BARRIER	
LOCATION	PINNING TEMPORARY CONCRETE BARRIER EACH
STAGE I	
STA. 252+17.0 TO STA. 252+29.5	1
STA. 252+29.5 TO STA. 252+42.0	2
STA. 252+42.0 TO STA. 253+04.5	15
STA. 253+04.5 TO STA. 253+17.0	2
STA. 253+17.0 TO STA. 253+29.5	1
STAGE II	
STA. 252+17.0 TO STA. 252+29.5	1
STA. 252+29.5 TO STA. 252+42.0	2
STA. 252+42.0 TO STA. 253+04.5	15
STA. 253+04.5 TO STA. 253+17.0	2
STA. 253+17.0 TO STA. 253+29.5	1
TOTAL	42

70106700 TEMPORARY RUMBLE STRIPS	
LOCATION	TEMPORARY RUMBLE STRIPS EACH
STA. 233+55.0 RT.	1
STA. 238+55.0 RT.	1
STA. 243+55.0 RT.	1
STA. 262+85.5 LT.	1
STA. 267+85.5 LT.	1
STA. 272+85.5 LT.	1
TOTAL	6

TEMPORARY BRIDGE TRAFFIC SIGNALS	
LOCATION	TEMPORARY BRIDGE TRAFFIC SIGNALS EACH
STA. 250+05.0 18.4' RT.	0.2
STA. 250+30.0 20.5' LT.	0.2
STA. 254+00.0 26.3' LT.	0.2
STA. 255+10.5 18.9' RT.	0.2
STA. 255+33.5 17.8' LT.	0.2
TOTAL	1

STONE RIPRAP, CLASS A4	
LOCATION	STONE RIPRAP, CLASS A4 TON
STA. 252+92 TO STA. 253+25 LT. IN DITCH	20
STA. 253+00 TO STA. 253+20 RT. IN DITCH	12
TOTAL	32

HOT-MIX ASPHALT SHOULDERS 10"		
LOCATION	HOT-MIX ASPHALT SHOULDERS 10" SQ. YD.	BITUMINOUS MAT'L'S. TACK COAT* POUND
STAGE I		
STA. 251+00 TO STA. 252+35 LT.	150	68
STA. 252+35 TO STA. 253+10 LT.	59	27
STA. 253+10 TO STA. 254+97.5 LT.	209	94
STAGE II		
STA. 251+00 TO STA. 254+97.5 RT.	423	199
STA. 252+35 TO STA. 253+10 LT.	25	12
TOTAL	866	400

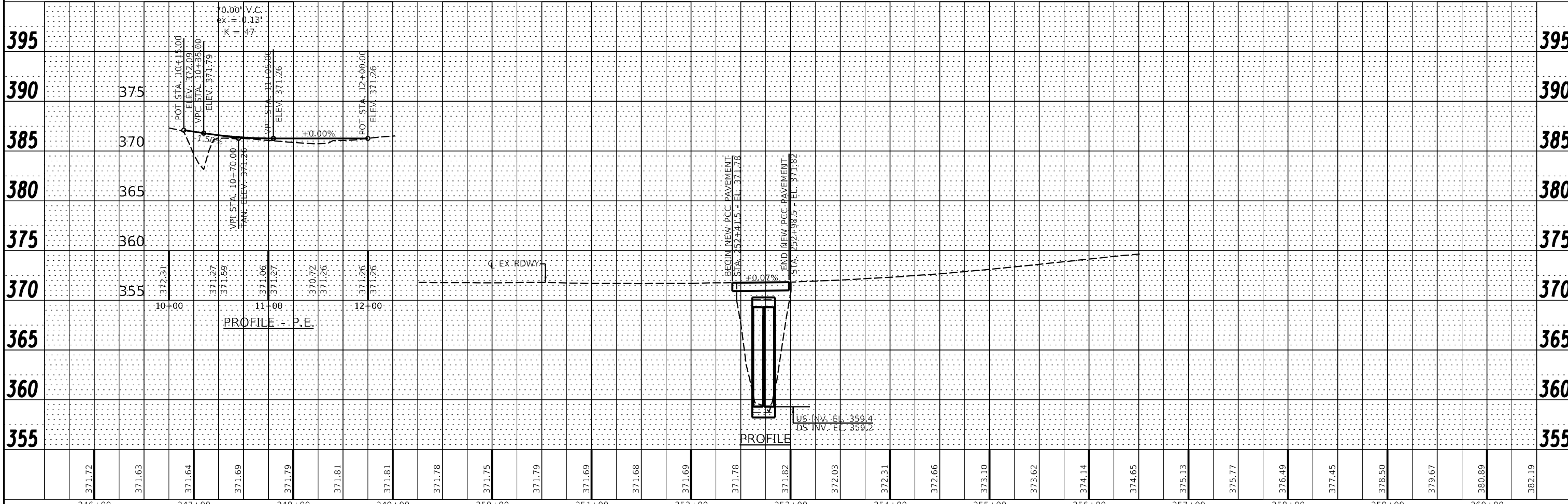
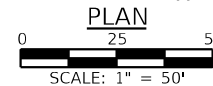
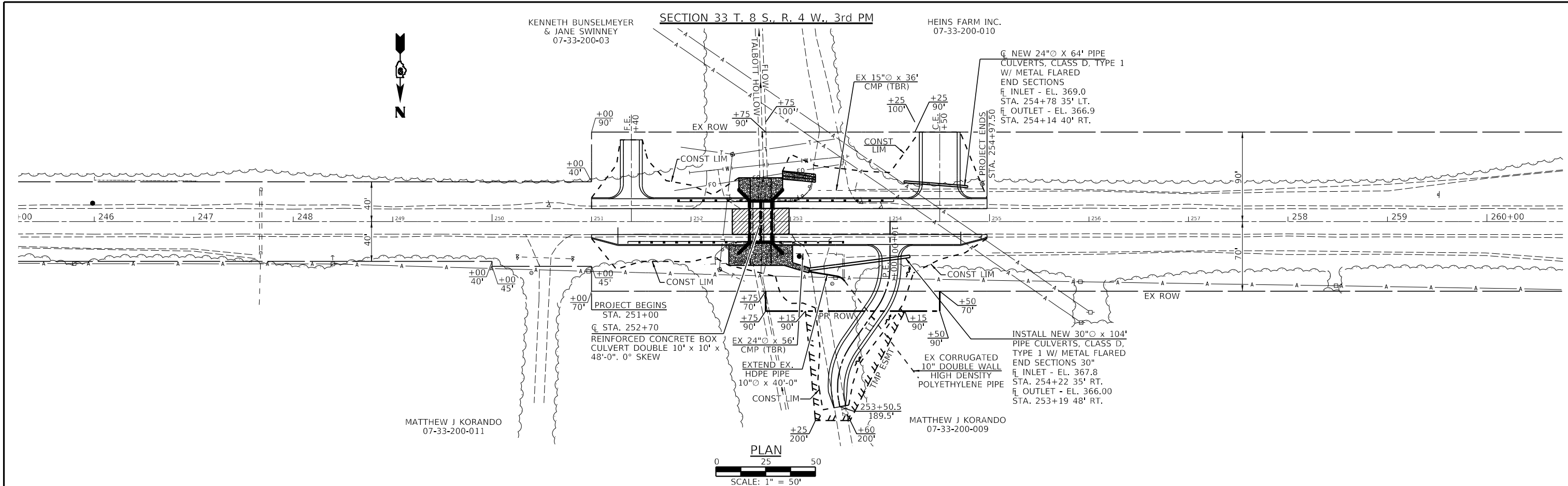
* TWO APPLICATIONS

PORTLAND CEMENT CONCRETE SCHEDULE		
LOCATION	PORTLAND CEMENT CONCRETE PAVEMENT 10" SQ. YD.	WELDED WIRE REINFORCEMENT SQ. YD.
STA. 252+41.5 TO STA. 252+98.5	165	165
TOTAL	165	165

AGGREGATE SURFACE	
LOCATION	AGGREGATE SURFACE COURSE, TYPE B TON
F.E. STA. 251+40 LT.	40
P.E. STA. 254+00 RT.	106
C.E. STA. 254+50 LT.	93
TOTAL	239

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	



371.72	371.63	371.64	371.69	371.79	371.81	371.81	371.78	371.75	371.79	371.69	371.68	371.69	371.78	371.82	372.03	372.31	372.66	373.10	373.62	374.14	374.65	375.13	375.77	376.49	377.45	378.50	379.67	380.89	382.19		
246+00	247+00	248+00	249+00	250+00	251+00	252+00	253+00	254+00	255+00	256+00	257+00	258+00	259+00	260+00																	

VK
VEENSTRA & KIMM INC.
Springfield, IL Phone: (217)544-8033

USER NAME = *USER*	DESIGNED -	REVISD -
PLOT SCALE = *SCALE*	CHECKED -	REVISD -
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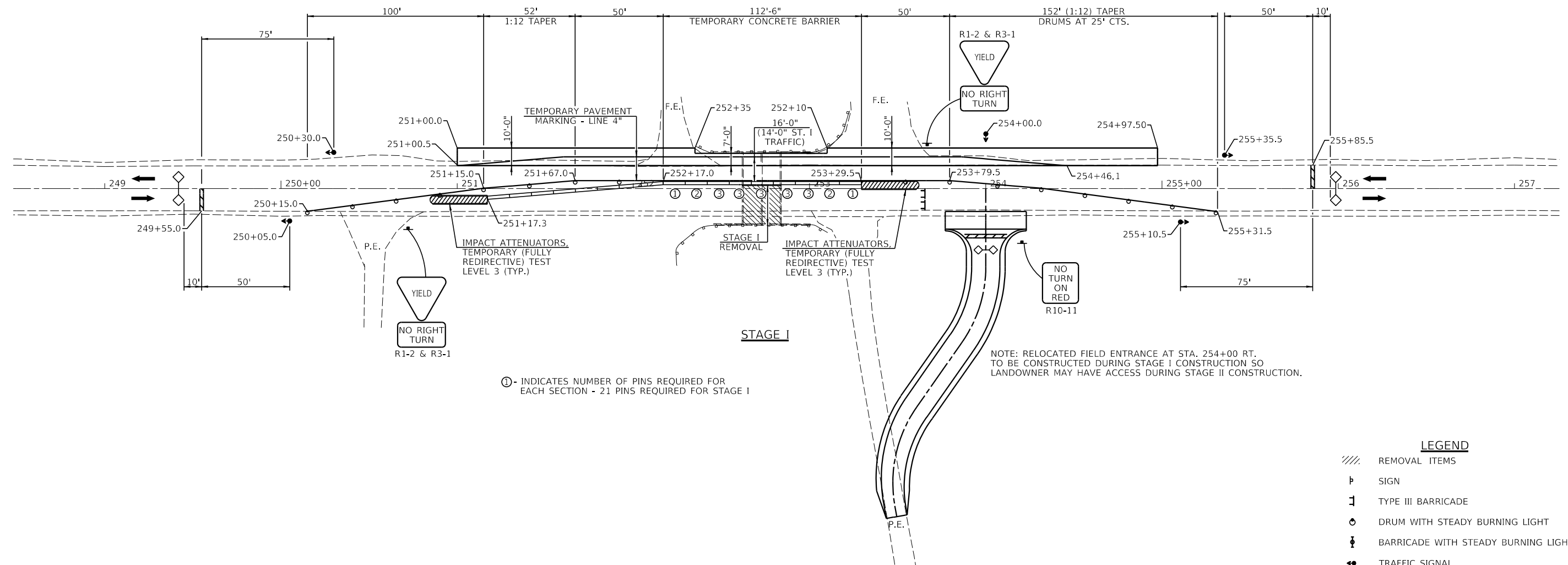
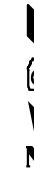
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE SN 039-2035			
SCALE: 1" = 50'	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	65
CONTRACT NO. 78790				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

GENERAL NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN ACCORDING TO "TRAFFIC CONTROL & PROTECTION, STANDARD 701321.
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
4. ADDITIONAL SIGNAGE FOR ENTRANCES AND ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321.
5. THE DIMENSION SHOWN ON THE WIDTH RESTRICTION SIGN (W12-I10210)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-I103) SHOWN ON THE STAGE 2 PLAN SHEET FOR THIS STRUCTURE SHALL BE 14'-0" FOR STAGE 1 CONSTRUCTION.
6. SEE STD 701321 FOR COMPLETION OF STAGE CONSTRUCTION SIGNING AND ADVANCE DETECTOR LOOP PLACEMENT NOT SHOWN.
7. THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHALL APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.
8. THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHALL BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
9. VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE STAGE 2 NEW CO-10 RAIL. THE BARRIER WALL REFLECTORS SHALL BE INSTALLED PRIOR TO OPENING TO TRAFFIC.
10. ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC AND THE TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED OFF OR COVERED.
11. ALL TRAFFIC SIGNALS SHOWN ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
12. THE ADDITIONAL DETECTOR LOOPS AT THE ENTRANCE ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH AND SHALL BE PHASED WITH MAINLINE SIGNALS.
13. TEMPORARY BRIDGE TRAFFIC SIGNALS SHALL BE A 3-PHASE SIGNAL WITH ACTUATION FOR THE PRIVATE ENTRANCE AT STA. 254+00 RT.
14. TEMPORARY PAVEMENT MARKING SHOWN ON THE DETAIL, THE COST OF THE TEMPORARY PAVEMENT MARKING AND ITS REMOVAL WILL BE INCLUDED IN THE COST OF STANDARD 701321.

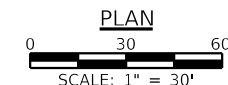


① - INDICATES NUMBER OF PINS REQUIRED FOR EACH SECTION - 21 PINS REQUIRED FOR STAGE I

NOTE: RELOCATED FIELD ENTRANCE AT STA. 254+00 RT. TO BE CONSTRUCTED DURING STAGE I CONSTRUCTION SO LANDOWNER MAY HAVE ACCESS DURING STAGE II CONSTRUCTION.

LEGEND

- ////// REMOVAL ITEMS
- ⊠ SIGN
- ⌈ TYPE III BARRICADE
- ⊙ DRUM WITH STEADY BURNING LIGHT
- ⊕ BARRICADE WITH STEADY BURNING LIGHT
- ◀ TRAFFIC SIGNAL
- ◻ ◻ INDUCTION LOOP DETECTOR
- ▬ DOUBLE VERTICAL PANEL
- ◇ TYPE C BIDIRECTIONAL REFLECTOR
- ▬▬▬ TEMPORARY CONCRETE BARRIER
- ▨▨▨ IMPACT ATTENUATOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS



USER NAME =	DESIGNED -	REVISED -
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PLOT SCALE =	DRAWN -	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

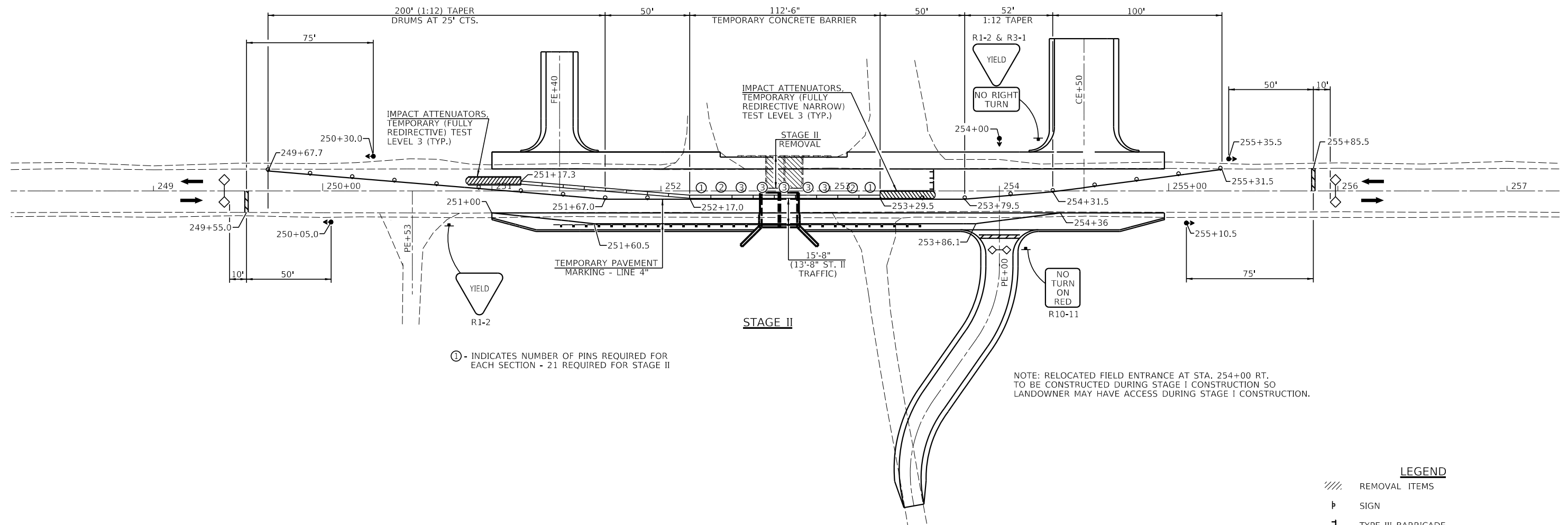
STAGE I CONSTRUCTION PLAN

SCALE: 1"=30' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	66
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN ACCORDING TO "TRAFFIC CONTROL & PROTECTION, STANDARD 701321.
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS
3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
4. ADDITIONAL SIGNAGE FOR ENTRANCES AND ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321.
5. THE DIMENSION SHOWN ON THE WIDTH RESTRICTION SIGN (W12-110210)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-1103) SHOWN ON THE STAGE 2 PLAN SHEET FOR THIS STRUCTURE SHALL BE 13'-8" FOR STAGE 2 CONSTRUCTION.
6. SEE STD 701321 FOR COMPLETION OF STAGE CONSTRUCTION SIGNING AND ADVANCE DETECTOR LOOP PLACEMENT NOT SHOWN.
7. THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHOULD APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.
8. THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHALL BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
9. VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE STAGE 2 NEW CO-10 RAIL. THE BARRIER WALL REFLECTORS SHALL BE INSTALLED PRIOR TO OPENING TO TRAFFIC.
10. ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC AND THE TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED OFF OR COVERED.
11. ALL TRAFFIC SIGNALS SHOWN ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
12. THE ADDITIONAL DETECTOR LOOPS AT THE ENTRANCE ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH AND SHALL BE PHASED WITH MAINLINE SIGNALS.
13. TEMPORARY BRIDGE TRAFFIC SIGNALS SHALL BE A 3-PHASE SIGNAL WITH ACTUATION FOR THE PRIVATE ENTRANCE AT STA. 254+00 RT.
14. TEMPORARY PAVEMENT MARKING SHOWN ON THE DETAIL, THE COST OF THE TEMPORARY PAVEMENT MARKING AND ITS REMOVAL WILL BE INCLUDED IN THE COST OF STANDARD 701321.

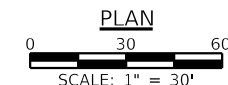


① - INDICATES NUMBER OF PINS REQUIRED FOR EACH SECTION - 21 REQUIRED FOR STAGE II

NOTE: RELOCATED FIELD ENTRANCE AT STA. 254+00 RT. TO BE CONSTRUCTED DURING STAGE I CONSTRUCTION SO LANDOWNER MAY HAVE ACCESS DURING STAGE I CONSTRUCTION.

LEGEND

- ////// REMOVAL ITEMS
- ⊠ SIGN
- ⌈ TYPE III BARRICADE
- ⊙ DRUM WITH STEADY BURNING LIGHT
- ⊕ BARRICADE WITH STEADY BURNING LIGHT
- ⬅ TRAFFIC SIGNAL
- ◻◻ INDUCTION LOOP DETECTOR
- ▬ DOUBLE VERTICAL PANEL
- ◇ TYPE C BIDIRECTIONAL REFLECTOR
- ▬▬ TEMPORARY CONCRETE BARRIER
- ▨ IMPACT ATTENUATOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS



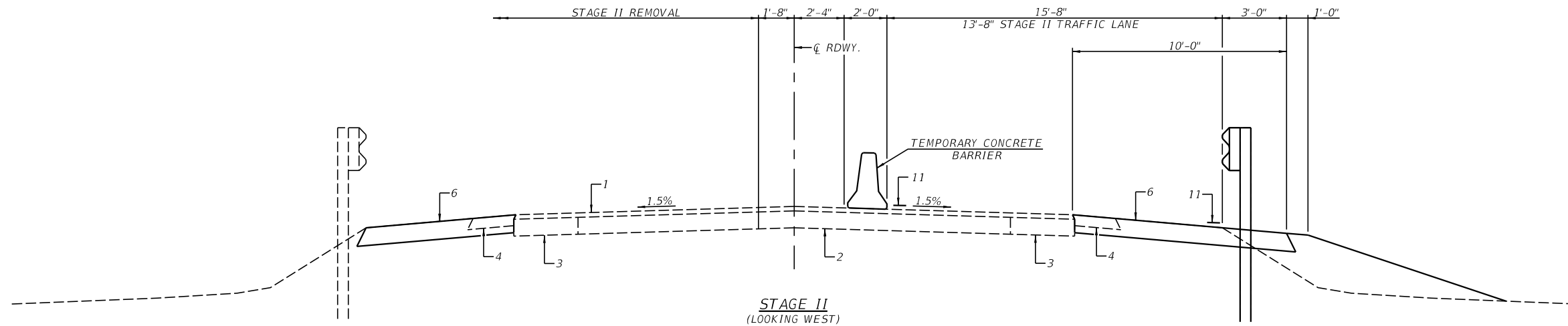
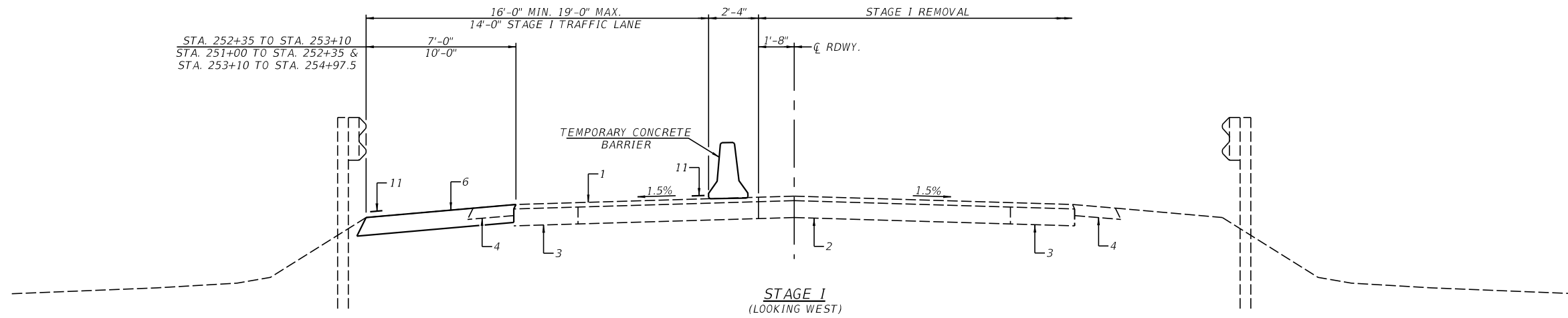
USER NAME =	DESIGNED -	REVISED -
CHECKED -	REVISIED -	
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE II CONSTRUCTION PLAN

SCALE: 1"=30' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	67
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



PAVEMENT LEGEND

- 1 - EX HMA SURF CSE $\pm 2\frac{1}{2}$ "
- 2 - EX PCC PAVEMENT $\pm 9\frac{1}{2}$ "
- 3 - EX HMA BSE CSE WIDENING
- 4 - EX AGG SHOULDER
- 5 - EX GUARDRAIL
- 6 - PR HMA SHOULDER 10"
- 7 - PR PCC PAVEMENT 10" MIN.
- 8 - PR EARTH SHOULDER
- 9 - PR GUARDRAIL
- 10 - PR PAVEMENT MARKING - LINE 4"
- 11 - PR TEMP. PAVEMENT MARKING - LINE 4"

MODEL: 3/08/2015
FILE: 3/08/2015

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

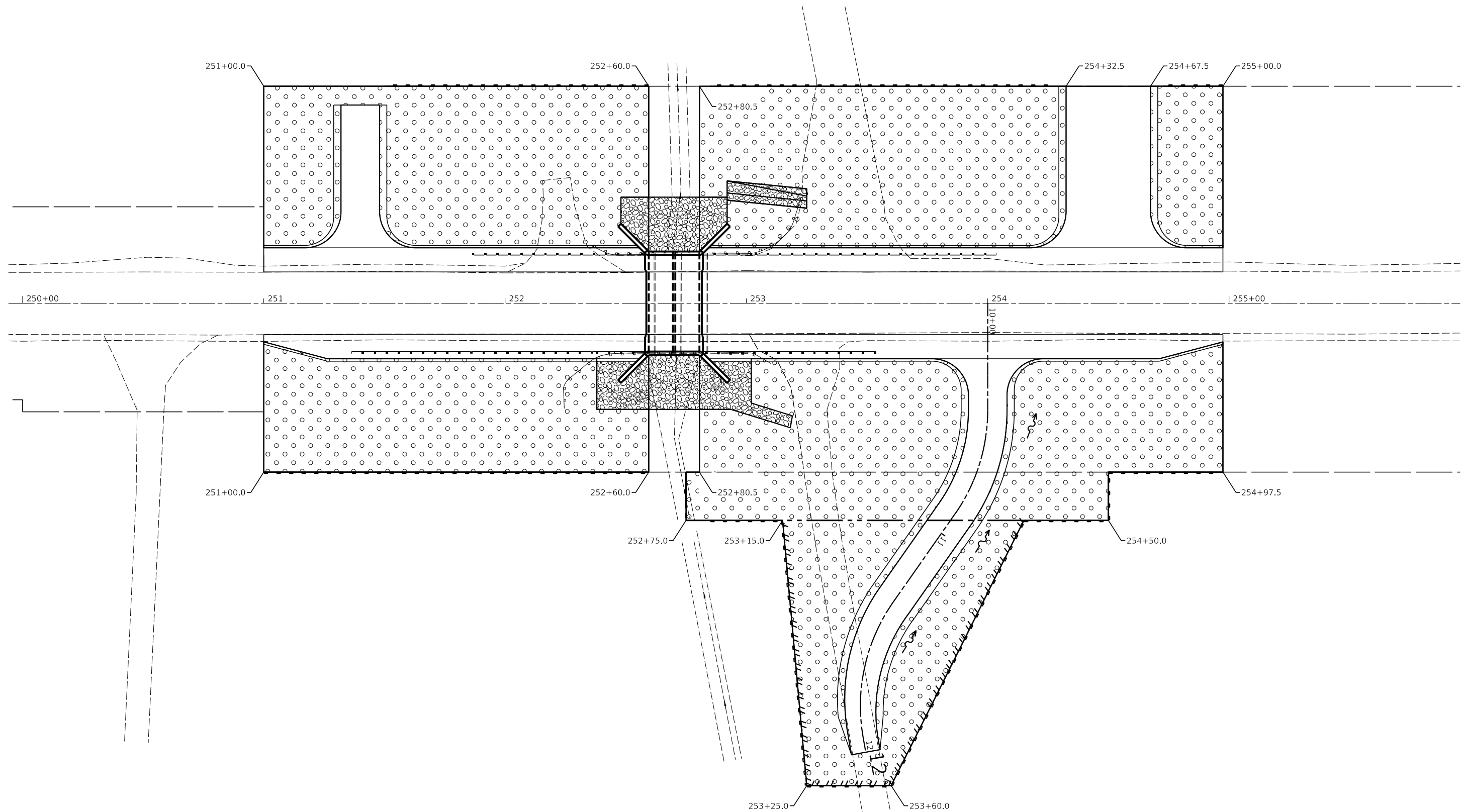
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PLOT DATE = \$DATE\$	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGING TYPICAL SECTIONS

SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	68
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



- LEGEND**
- SEEDING, CLASS 2A & 7
 - PERIMETER EROSION BARRIER
 - TEMPORARY DITCH CHECK
 - INLET PIPE PROTECTION
 - TEMPORARY CONSTRUCTION FENCE

VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

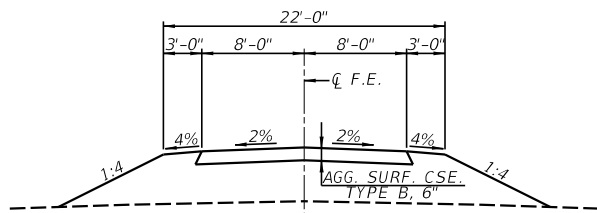
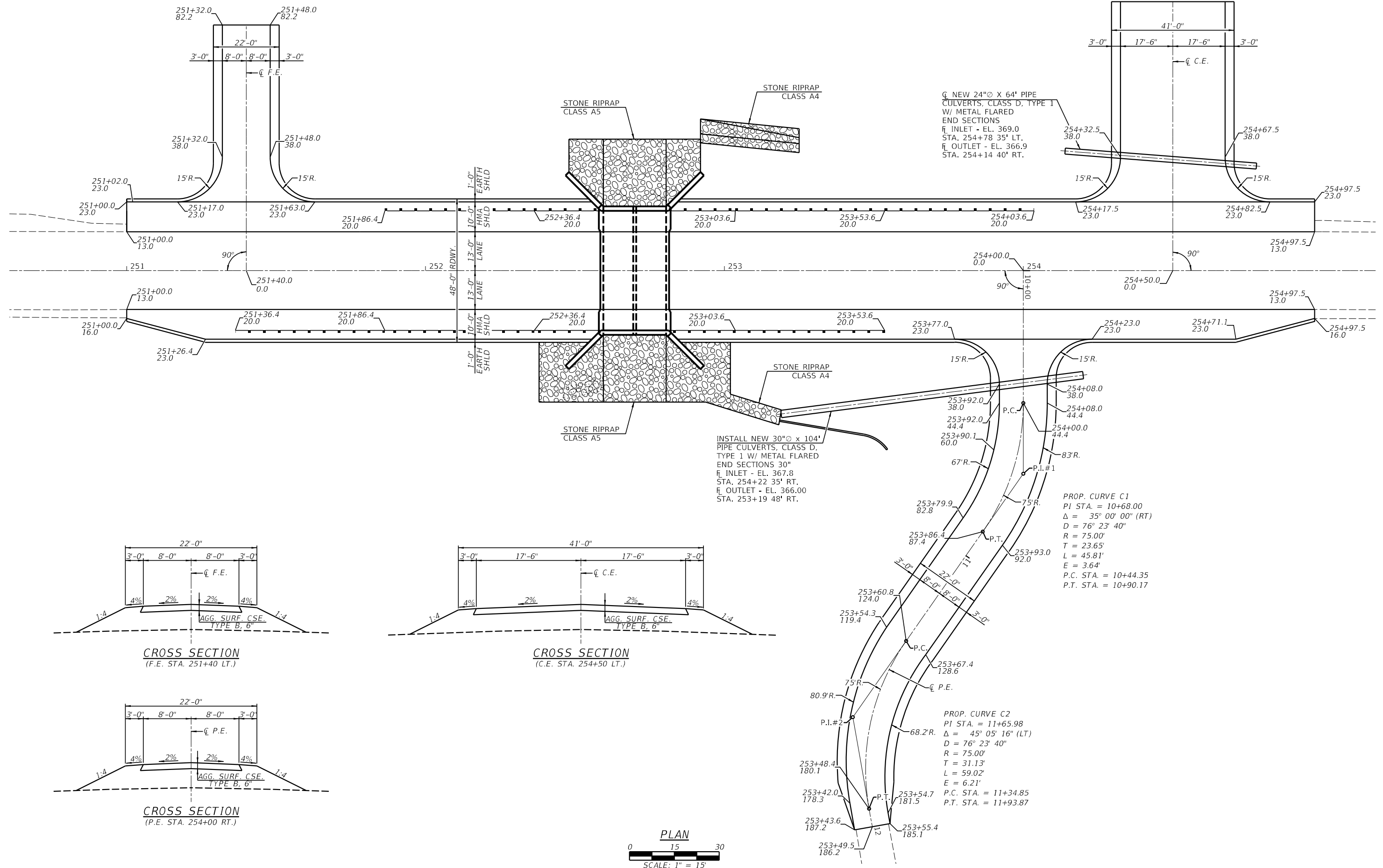
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	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

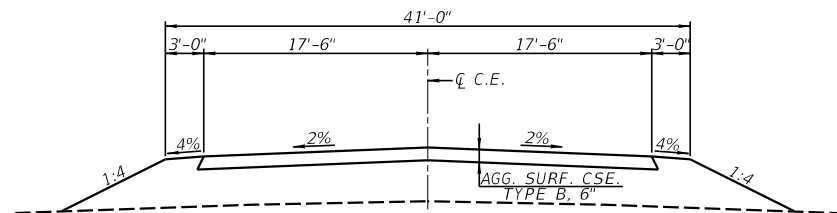
EROSION CONTROL PLAN

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

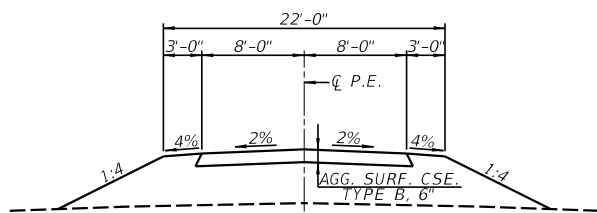
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	69
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				



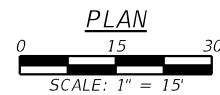
CROSS SECTION
(F.E. STA. 251+40 LT.)



CROSS SECTION
(C.E. STA. 254+50 LT.)



CROSS SECTION
(P.E. STA. 254+00 RT.)



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

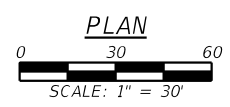
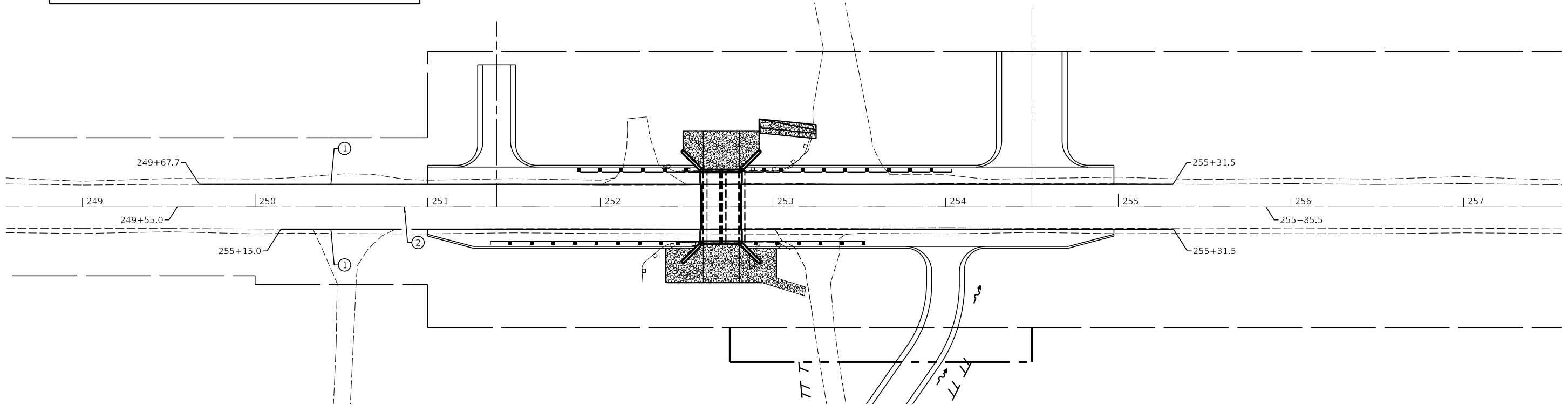
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	70
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

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Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE =	DRAWN -	REVISED -
	CHECKED -	REVISED -

LEGEND	
①	- PAINT PAVEMENT MARKING - LINE 4" (WHITE)
②	- PAINT PAVEMENT MARKING - LINE 4" (YELLOW SKIP DASH)



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

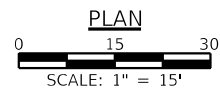
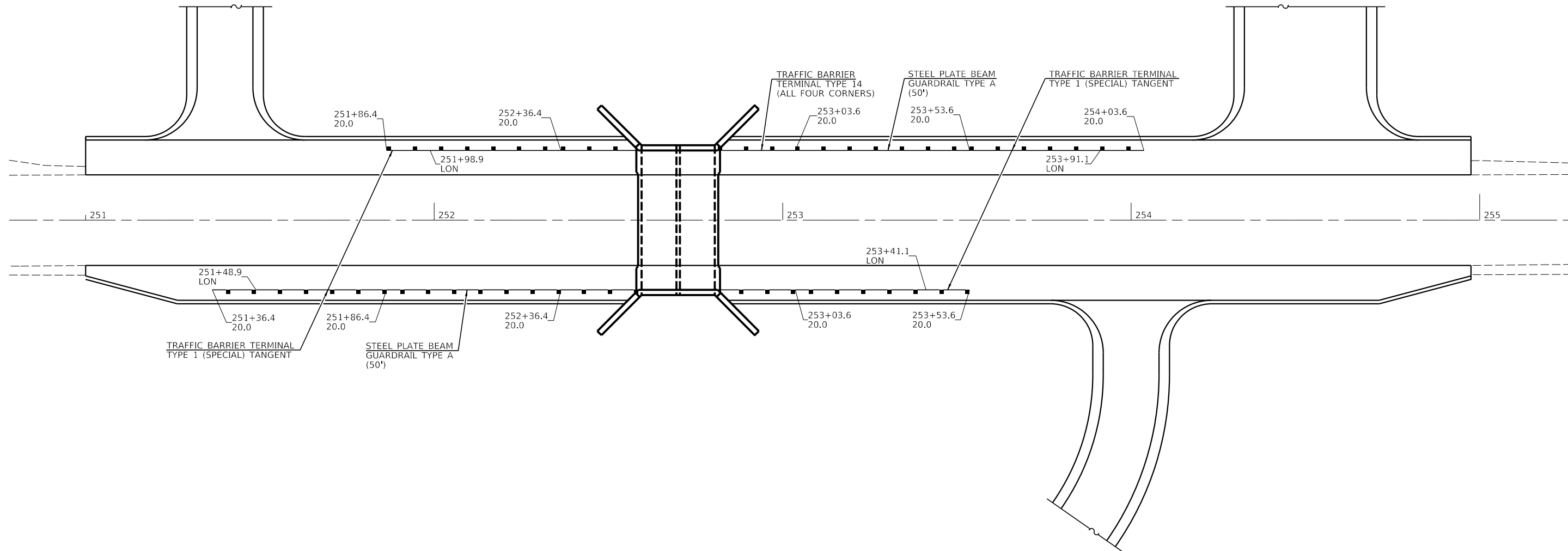
USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN

SCALE: 1"=30' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	71
				CONTRACT NO. 78790
ILLINOIS FED. AID PROJECT				



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GUARDRAIL PLAN

SCALE: 1"=15' SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	72
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				

ALIGNMENT INFO

FAP 312 (IL 3)

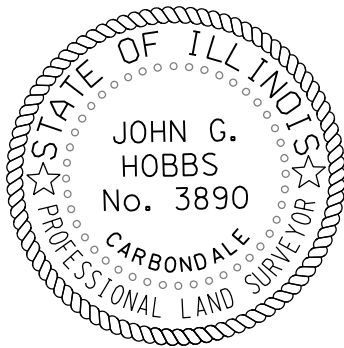
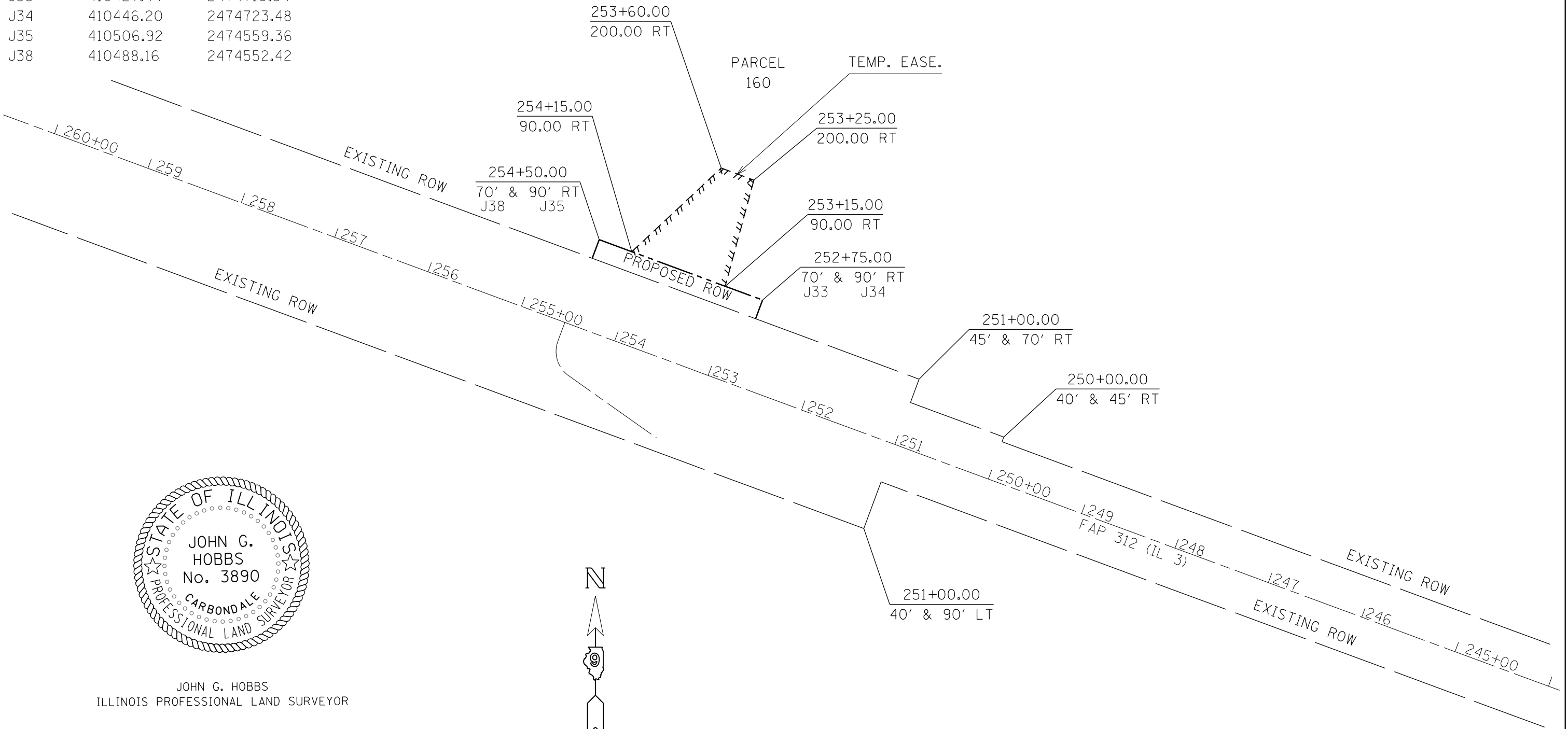
POINT#	STATION	NORTHING	EASTING
IL31	226+00.00	409433.61	2477201.06
P.C.3	26464.16	410774.41	2473576.97

COORDINATE DATA

PT#	NORTHING	EASTING
J33	410427.44	2474716.54
J34	410446.20	2474723.48
J35	410506.92	2474559.36
J38	410488.16	2474552.42

PARCEL#	PROPERTY OWNER	PURPOSE	ACREAGE
160	MATTHEW J. KORANDO	ROW/TE	0.080/0.171 ACRES±

NE QUARTER
SECTION 33
T. 8 S., R. 4 W., 3RD P.M.



JOHN G. HOBBS
ILLINOIS PROFESSIONAL LAND SURVEYOR

Current license expires 11/2022.

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

COORDINATES BASED ON WGS 84
97 ADJUSTMENT, ILLINOIS WEST ZONE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY SHEET
SN 039-2015 FAP 312(IL 3)

SCALE: 1" = 100' SHEET 1 OF 2 SHEETS STA. 245+00.00 TO STA. 260+00.00

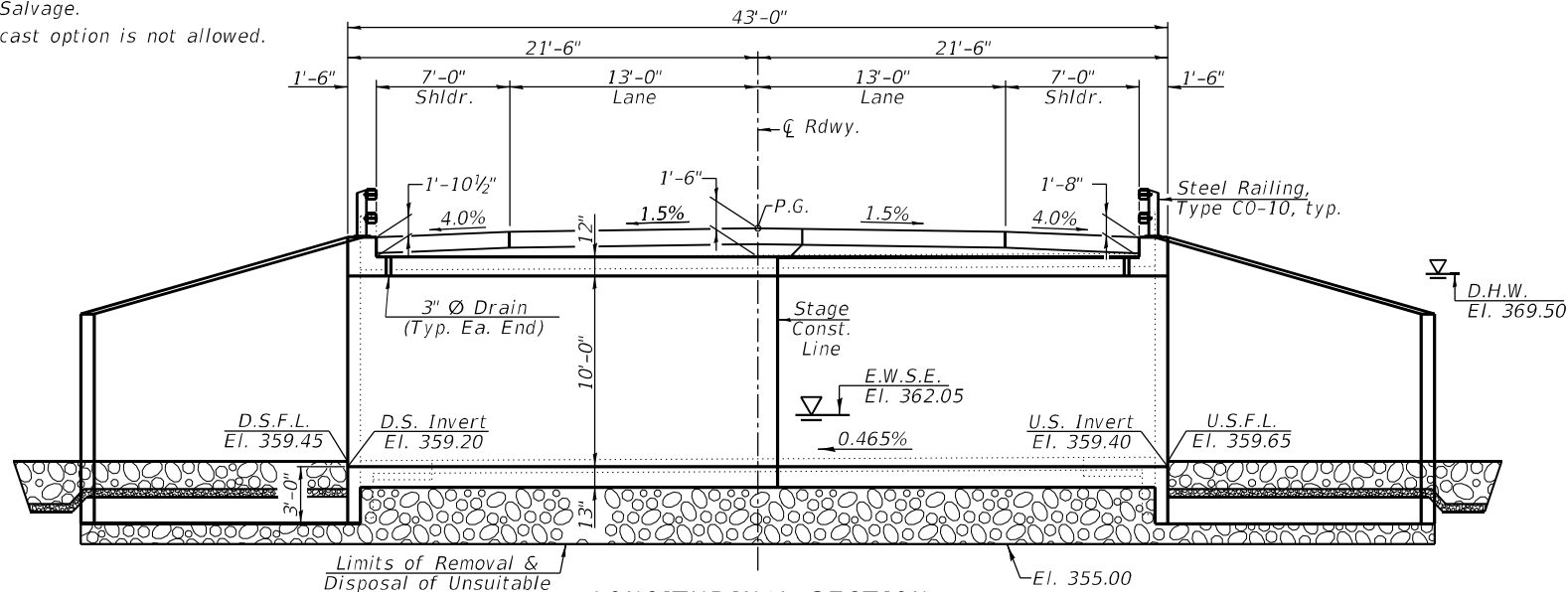
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-5; B-6; B-7	JACKSON	101	73
CONTRACT NO. 78790				
R-99-014-20 ILLINOIS FED. AID PROJECT				

MODEL: Default FILE: M:\Map_E_Producer\sw_bentley.com\PROJECTS\78790\CADD\DATA\CAD\sheet303xxx-SHE-ROW.dgn

B.M. 1001 Chiseled "□" on top of Northeast headwall of SN 039-2015 along IL Route 3. Elev. 371.801

Existing Structure: S.N. 039-2015 originally built under SBI Route 150 under Section 123 in 1933. The structure is a double barrel reinforced concrete box culvert (10'-0"x10'-0") 41'-8" out-to-out of headwalls and along centerline of culvert. Traffic to be maintained utilizing Stage Construction.

No Salvage.
Precast option is not allowed.



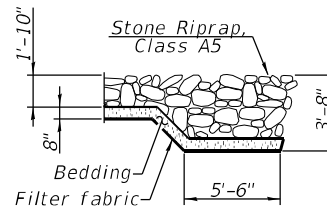
INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Stage Construction Details
4. Temporary Conc. Barrier for Stage Construction
5. Slab Reinforcement Plan
6. Culvert Details - 1
7. Culvert Details - 2
8. Steel Railing, Type C0-10
9. Bar Splicer Assembly and Mechanical Splicer Details
10. Boring Logs
11. Existing Structure Plans - 1
12. Existing Structure Plans - 2

WATERWAY INFORMATION

Drainage Area = 1.2 Sq. Mi.		Exist. Overtopping Elev. = 371.68 @ Sta. 251+50 Prop. Overtopping Elev. = 371.68 @ Sta. 251+50							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	850	172	194	369.4	0.0	0.0	369.4	369.4
Base	50	1,450	174	196	369.5	1.6	0.5	371.1	370.0
Max. Calc.	100	1,750	174	196	369.5	2.3	1.6	371.8	371.1
	500	2,480	174	196	369.5	2.7	2.5	372.2	372.0

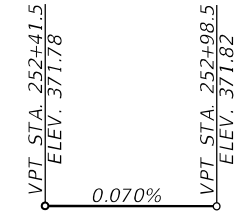
10 Yr. Outlet Velocity through Exist. Structure = 4.9 ft/s
10 Yr. Outlet Velocity through Prop. Structure = 4.4 ft/s



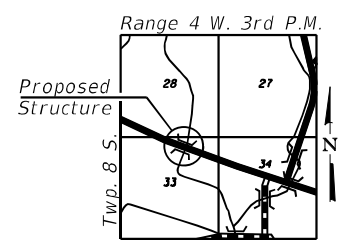
SECTION A-A

STATION 252+70.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 312 SEC. 123B-7
LOADING HL-93
STR. NO. 039-2035

NAME PLATE
(Std. 515001)



PROFILE GRADE
(Along CL Rte. 3)



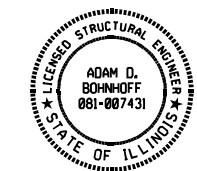
LOCATION SKETCH

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface

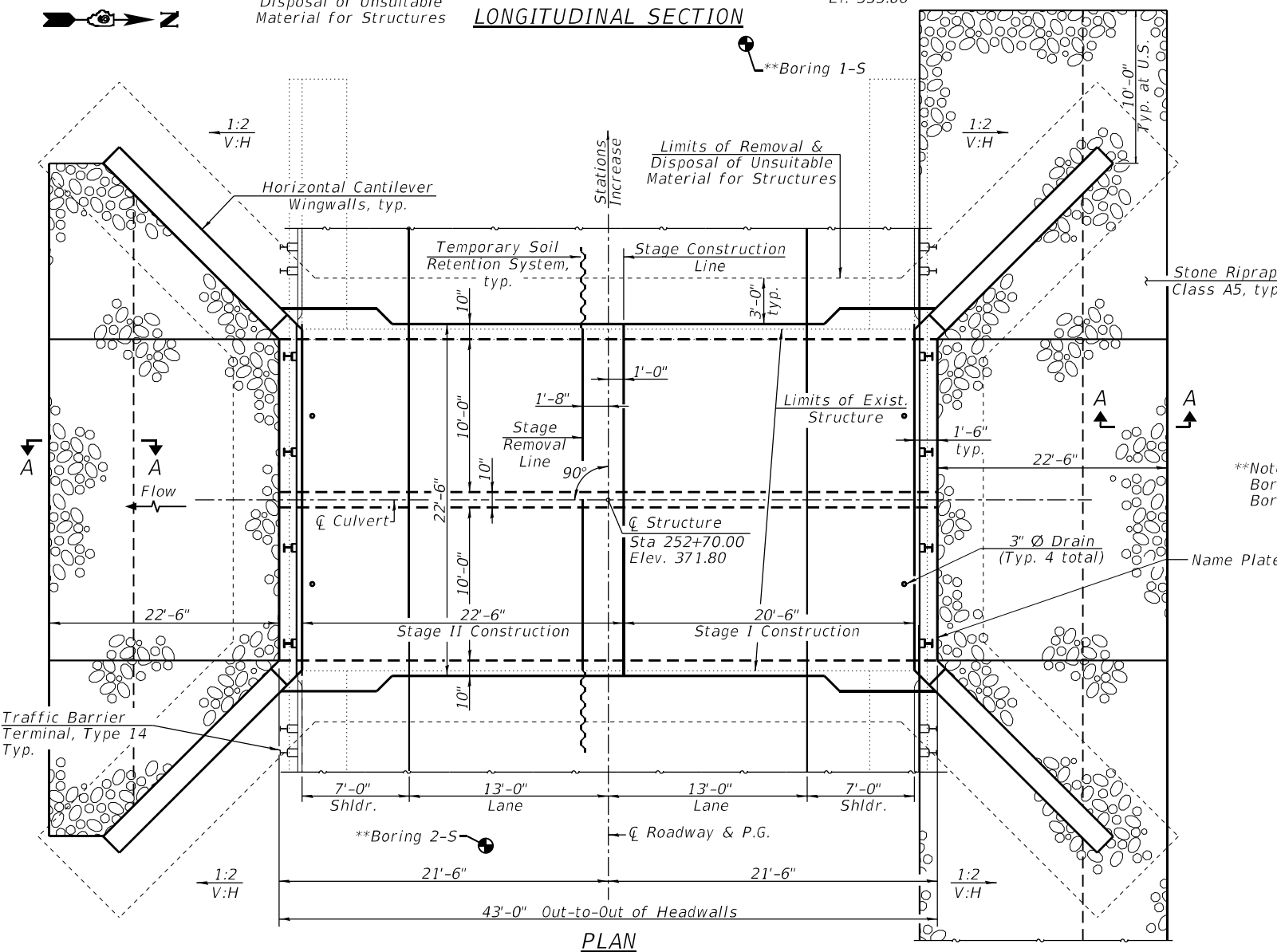
DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
f'c = 4,500 psi (Top Slab & Headwalls)
fy = 60,000 psi (Reinforcement)

APPROVED
For Structural Adequacy Only
Jay F. Schuff
Engineer of Bridges & Structures



Adam D. Bohnhoff
Licensed Structural Engineer
State of Illinois No. 081-007431
Expires 11-30-2024
Date: 03/13/2023



PLAN

GENERAL PLAN & ELEVATION
IL. ROUTE 3 OVER TALBOTT HOLLOW CREEK
F.A.P. RTE 312 - SECTION 123B-7
JACKSON COUNTY
STATION 252+70.00
STRUCTURE NO. 039-2035

MODEL: TSL
FILE NAME: P:\Effingham\4268 - IDOT 199-33 D9 VV_VK\Work Order # 111\CAD\Phase 2_Design\039-2035\039-2035_Sheet 1_Gen. Plan & Elev.dgn
3/13/2023 10:06:30 AM



USER NAME =	DESIGNED - JAG	REVISIONS -
PLOT SCALE =	CHECKED - ADB	REVISIONS -
PLOT DATE =	DRAWN - JAG	REVISIONS -
	CHECKED - ADB	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 039-2035

SHEET 1 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	74
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

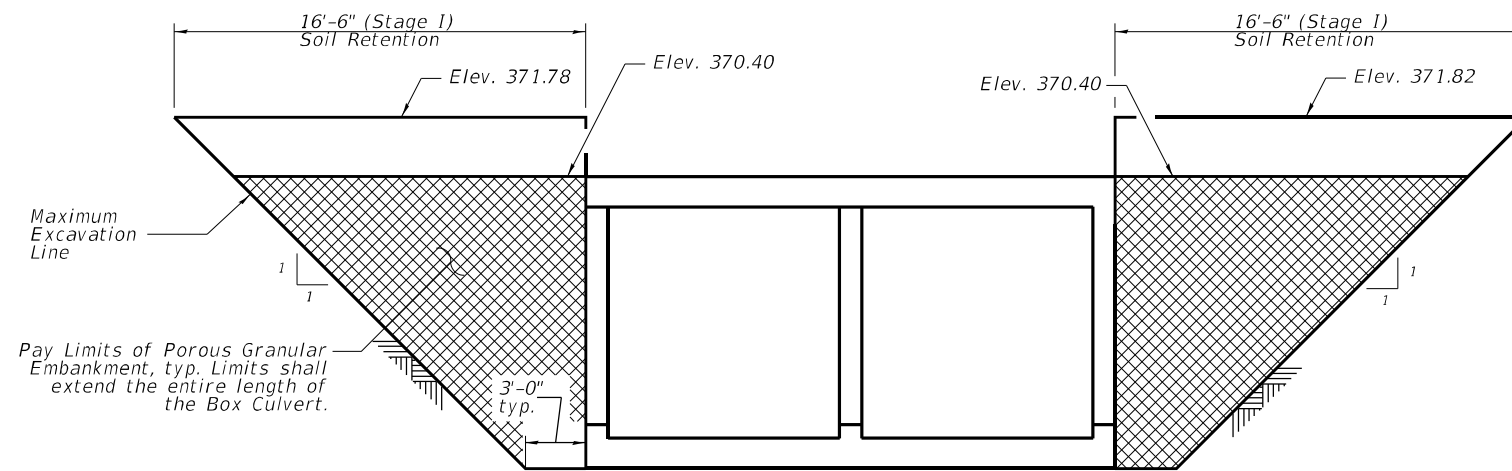
Precast alternate is not allowed.

Protective Coat shall not be applied to surfaces to which Membrane Waterproofing System for Buried Structures is applied.

The limits and quantities of Removal and Disposal of Unsuitable Materials for Structures and replacement with Rock Fill - Foundation are based on the soil boring data and may be modified by the District Geotechnical Engineer and/or the Field Engineer for variable subsurface conditions actually encountered in the field.

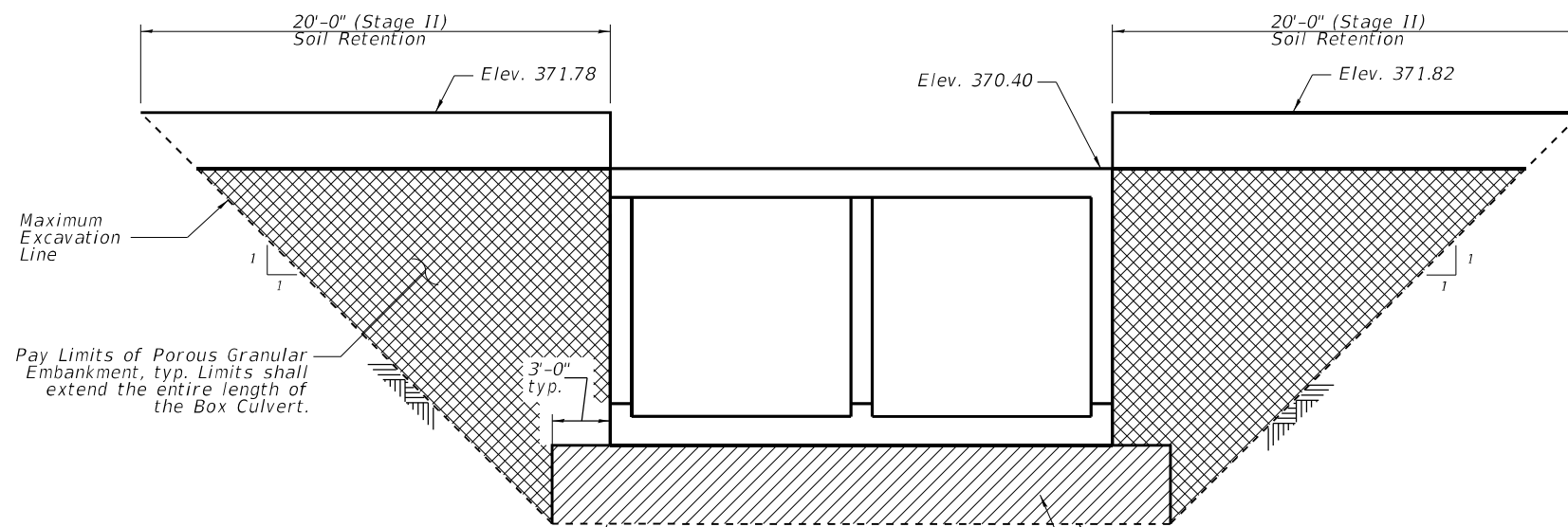
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	425
Stone Riprap, Class A5	Ton	295
Filter Fabric	Sq. Yd.	279
Removal of Existing Structures No. 3	Each	1
Removal and Disposal of Unsuitable Materials for Structures	Cu. Yd.	235
Protective Coat	Sq. Yd.	17
Reinforcement Bars, Epoxy Coated	Pound	43,310
Bar Splicers	Each	158
Steel Railing, Type C0-10	Foot	45
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	201.5
Geocomposite Wall Drain	Sq. Yd.	127
Membrane Waterproofing System for Buried Structures	Sq. Yd.	127
Temporary Soil Retention System	Sq. Ft.	648
Rock Fill - Foundation	Ton	482



STAGE I SOIL RETENTION SYSTEM

(Looking South)
(Dimensions along Stage Construction Line)

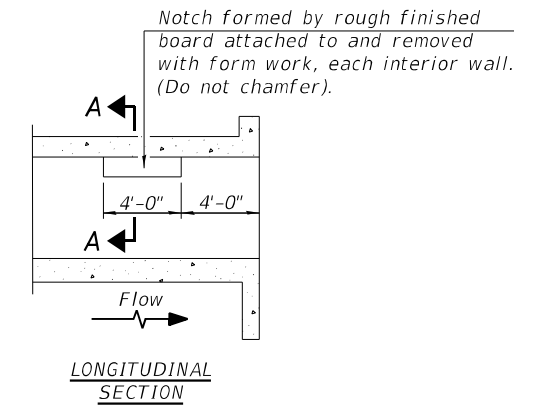


STAGE II SOIL RETENTION SYSTEM

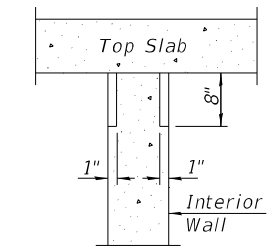
(Looking South)
(Dimensions along Stage Construction Line)

Limits of Removal & Disposal of Unsuitable Material for Structures. Backfill shall be paid for as Rock Fill - Foundation.

The excavated area below the bottom of Concrete Box Culverts adjacent to the Stage Line shall be backfilled immediately following excavation of Unsuitable Material, as directed by the Engineer



LONGITUDINAL SECTION

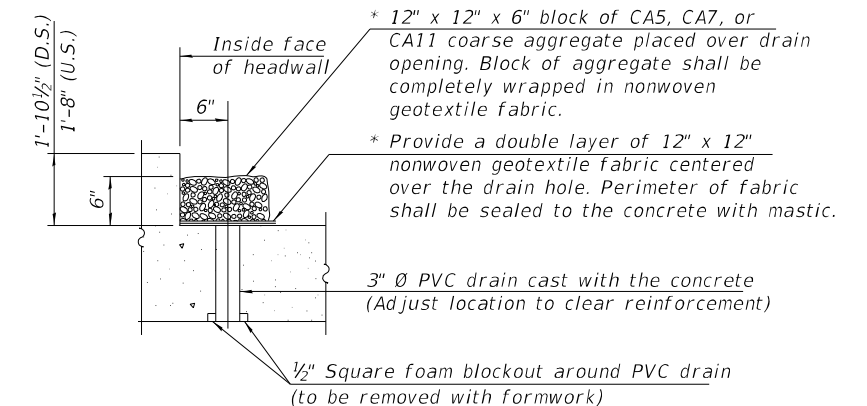


SECTION A-A

PHOEBE NESTING

SITE DETAILS
(Downstream End Only)

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



DRAIN DETAIL (4 each)

(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 the associated work.)



USER NAME =	DESIGNED - JAG	REVISED -
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PLOT DATE =	DRAWN - JAG	REVISED -
	CHECKED - ADB	REVISED -

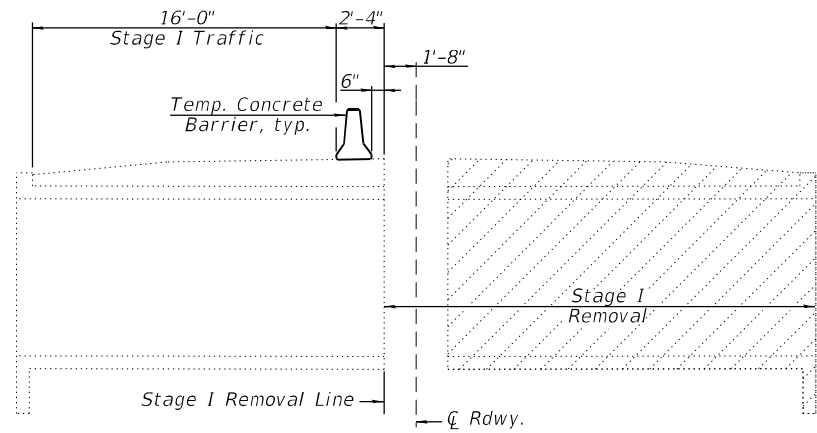
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 039-2035

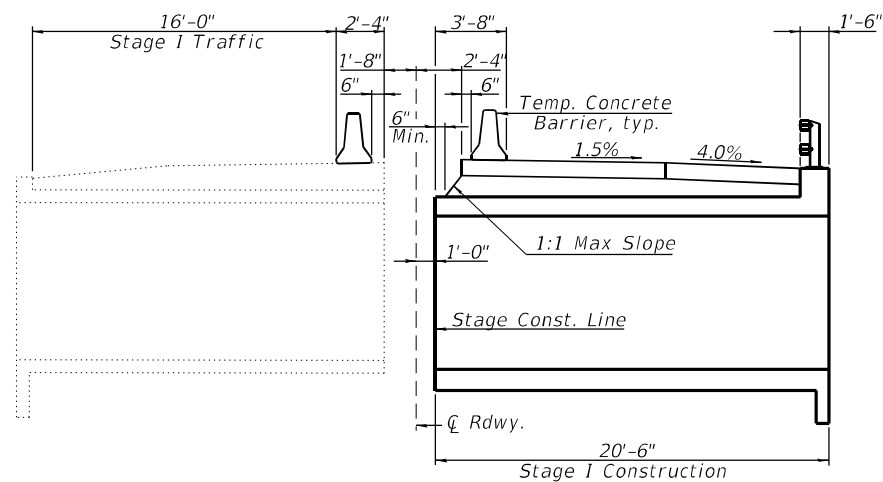
SHEET NO. 2 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	75
CONTRACT NO. 78790				

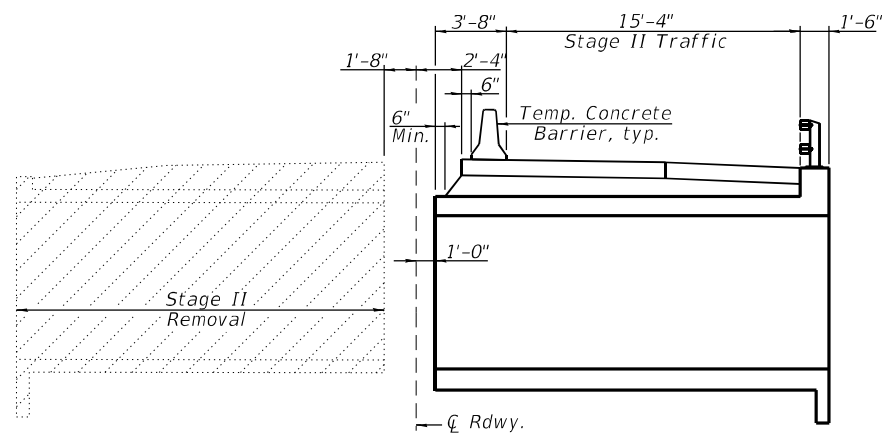
ILLINOIS FED. AID PROJECT



STAGE I REMOVAL SECTION
(Looking West)



STAGE I CONSTRUCTION SECTION
(Looking West)



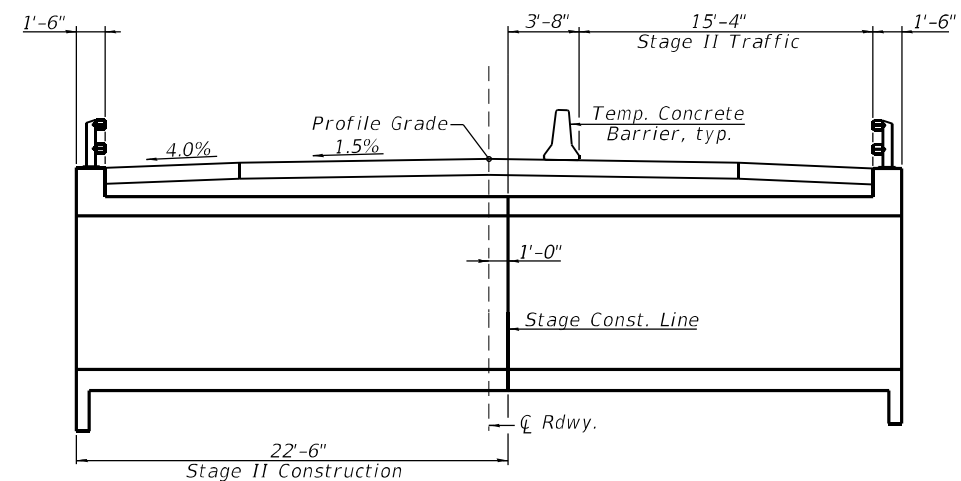
STAGE II REMOVAL SECTION
(Looking West)

Notes:

Hatched areas indicate Removal of Existing Structures.

See Roadway Plans for quantity and details of Temporary Concrete Barrier.

A cantilevered sheet piling design does not appear to be feasible and additional members or other retention systems may be necessary. The Contractor shall submit a Temporary Soil Retention System design including plan details and calculations for review and acceptance by the Engineer.



STAGE II CONSTRUCTION SECTION
(Looking West)



USER NAME =	DESIGNED - JAG	REVISED -
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

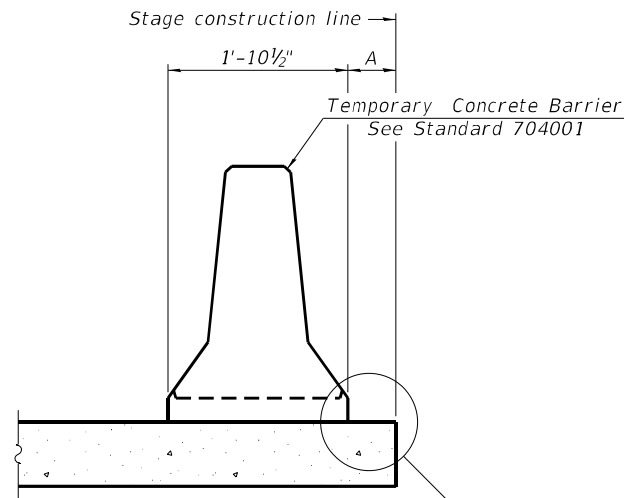
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 039-2035

SHEET NO. 3 OF 12 SHEETS

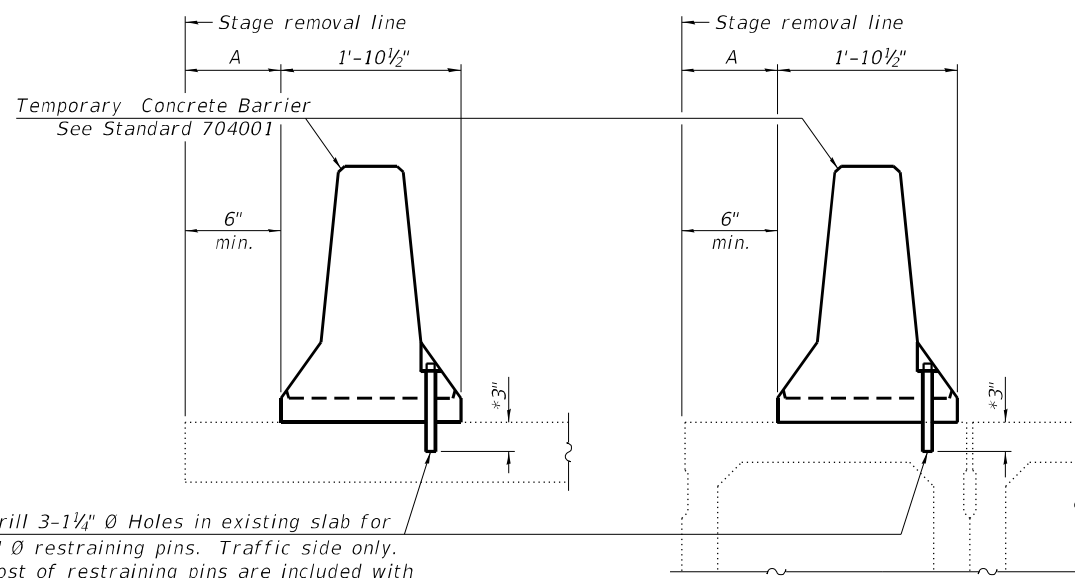
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	76
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

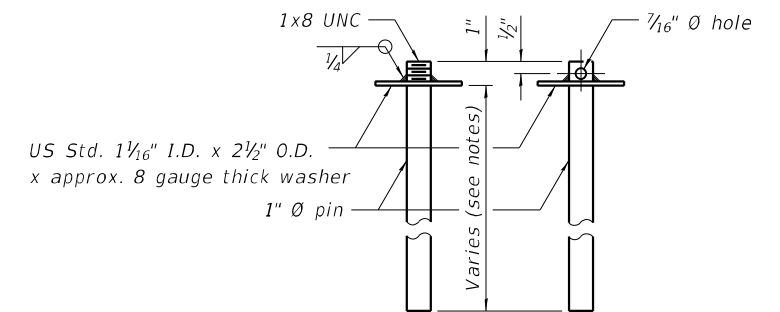


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

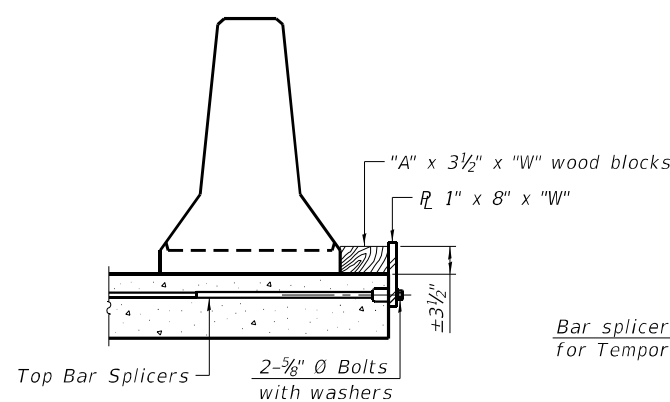
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

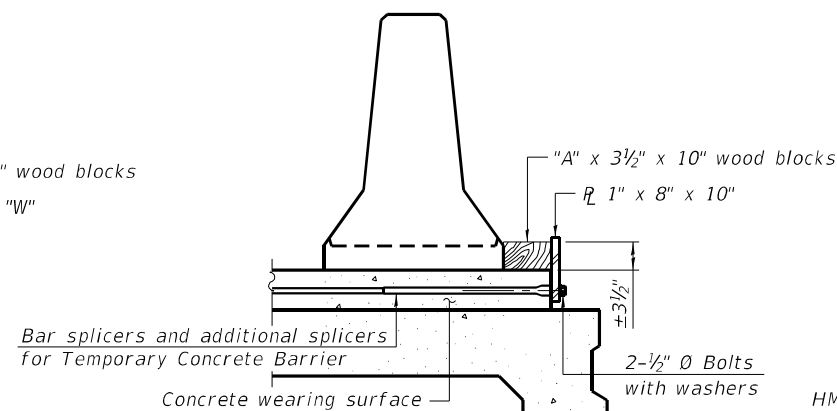


RESTRAINING PIN

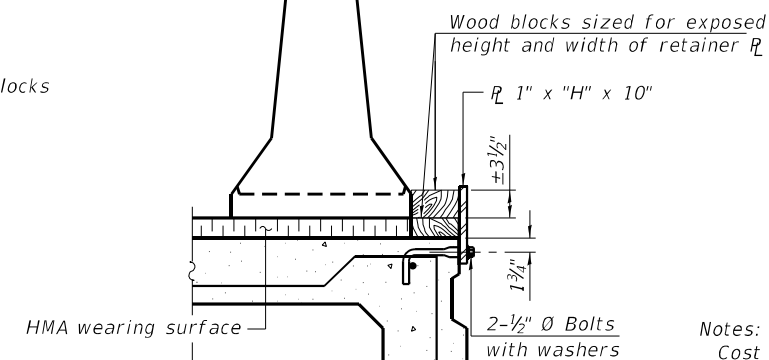
SECTIONS THRU SLAB OR DECK BEAM



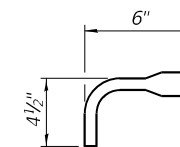
DETAIL I



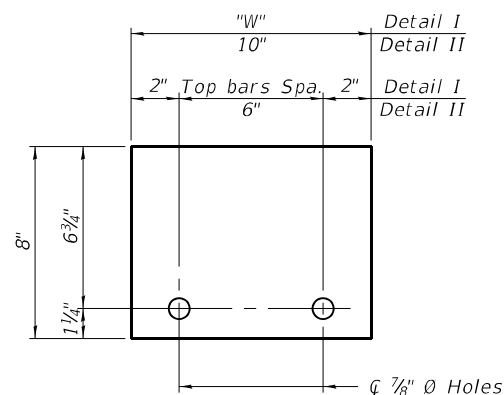
DETAIL II



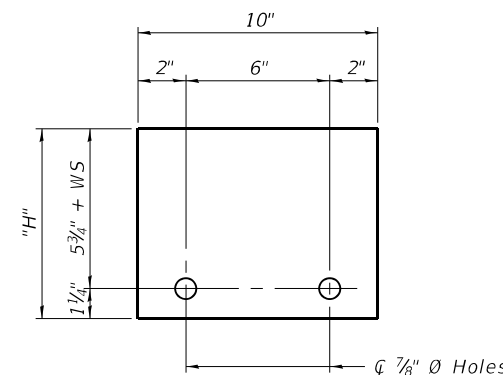
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate $\frac{1}{2}$ of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021



USER NAME =	DESIGNED - JAG	REVISED -
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMP. CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 039-2035

SHEET NO. 4 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	77
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

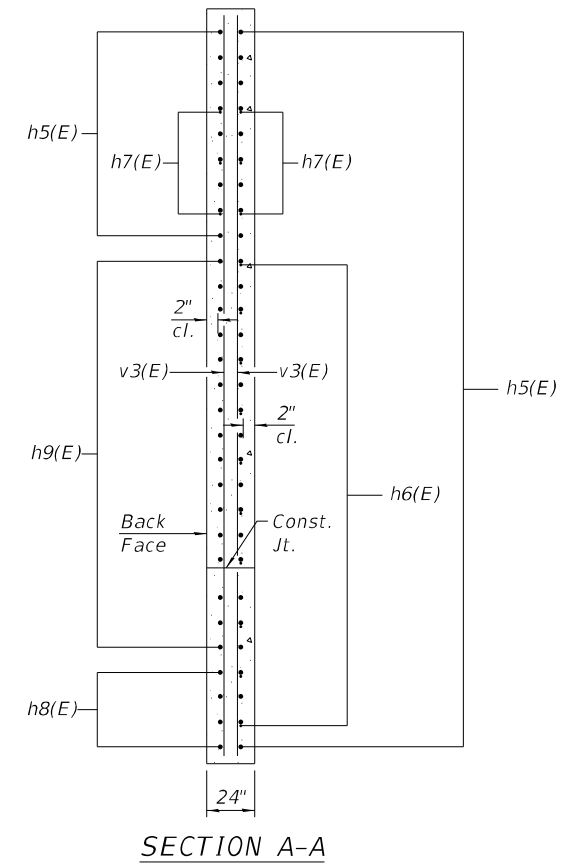
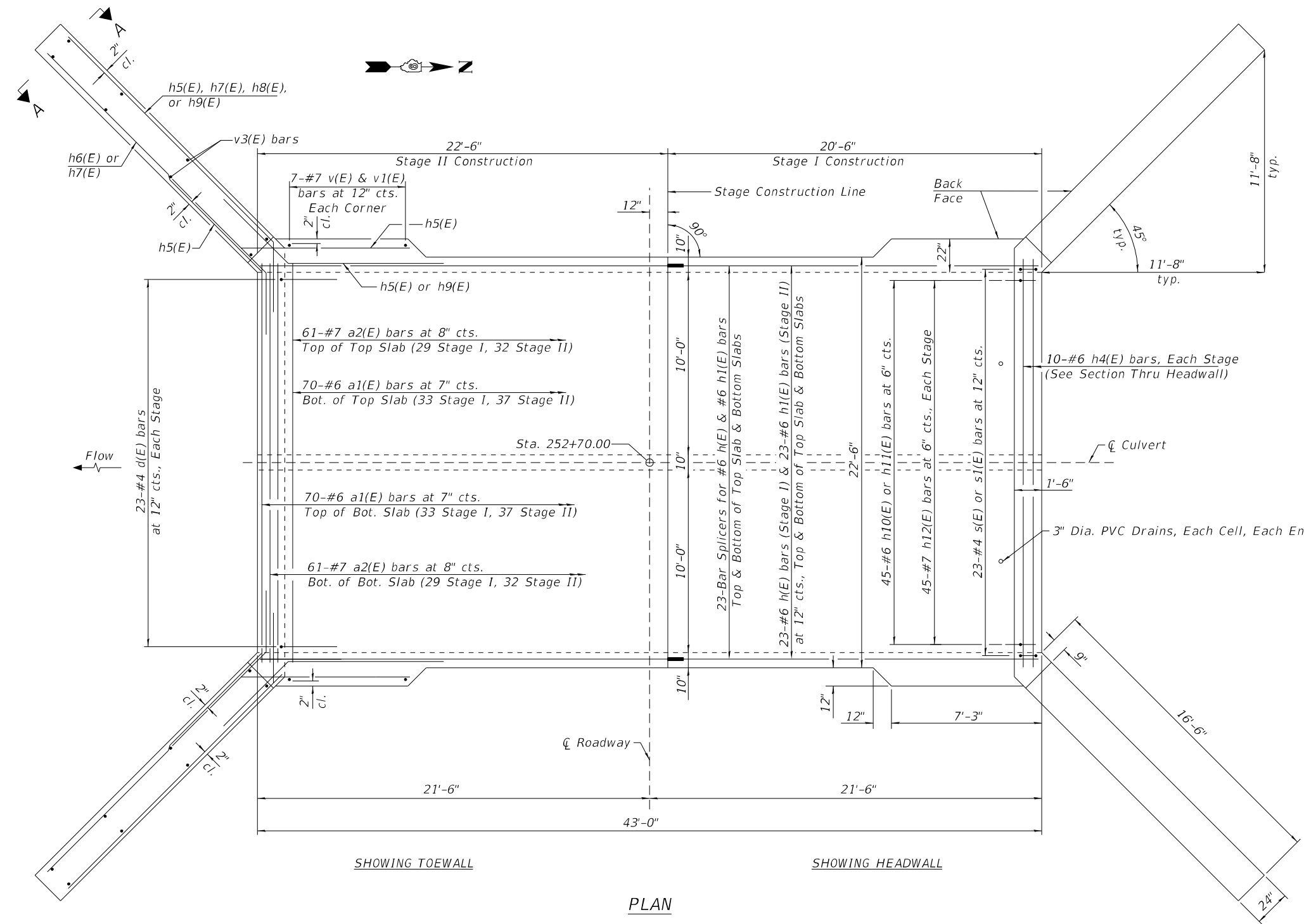
Notes:

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.

At the Contractor's option, a longer v1(E) bar may be ordered to replace the v(E) bar. No reduction in quantities shall be made for this substitution.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	2	#4	22'-2"	—
a1(E)	140	#6	23'-6"	—
a2(E)	122	#7	22'-2"	—
d(E)	46	#4	4'-5"	—
h(E)	92	#6	20'-2"	—
h1(E)	92	#6	22'-2"	—
h2(E)	66	#5	20'-2"	—
h3(E)	66	#5	22'-2"	—
h4(E)	24	#6	20'-8"	—
h5(E)	152	#8	13'-10"	—
h6(E)	40	#4	16'-4"	—
h7(E)	12	#4	22'-2"	—
h8(E)	16	#8	20'-8"	—
h9(E)	64	#8	21'-0"	—
h10(E)	45	#6	4'-4"	—
h11(E)	45	#6	4'-6"	—
h12(E)	90	#7	6'-11"	—
s(E)	23	#4	8'-5"	—
s1(E)	23	#4	7'-11"	—
v(E)	264	#7	10'-2"	—
v1(E)	264	#7	6'-0"	—
v2(E)	88	#6	9'-2"	—
v3(E)	40	#4	15'-4"	—
Concrete Box Culverts			Cu. Yd.	201.5
Reinforcement Bars, Epoxy Coated			Pound	43,310



USER NAME =	DESIGNED - JAG	REVISED -
PLOT SCALE =	CHECKED - ADB	REVISED -
PLOT DATE =	DRAWN - JAG	REVISED -
	CHECKED - ADB	REVISED -

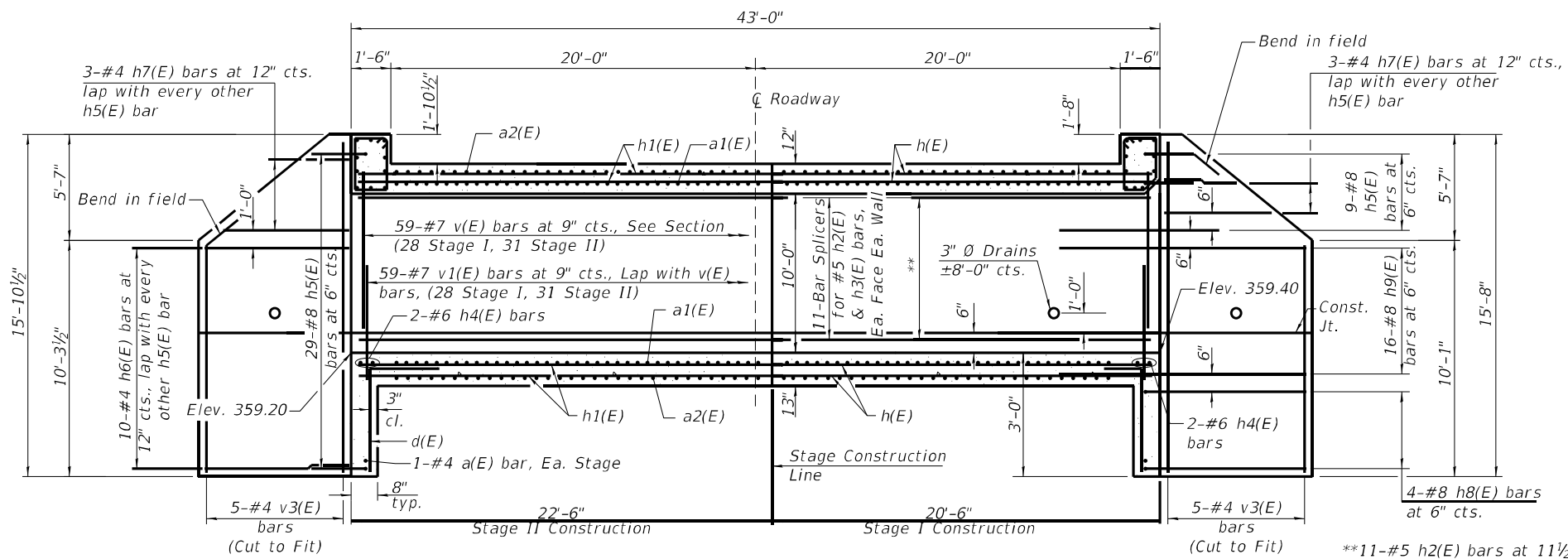
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SLAB REINFORCEMENT PLAN
STRUCTURE NO. 039-2035**

SHEET NO. 5 OF 12 SHEETS

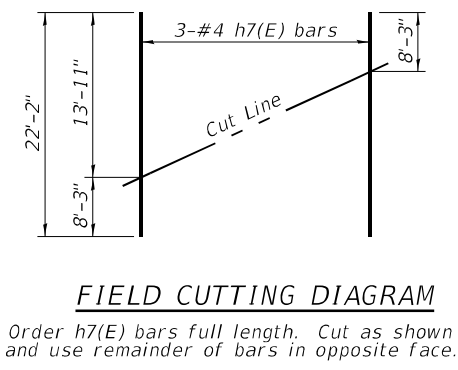
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	78
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

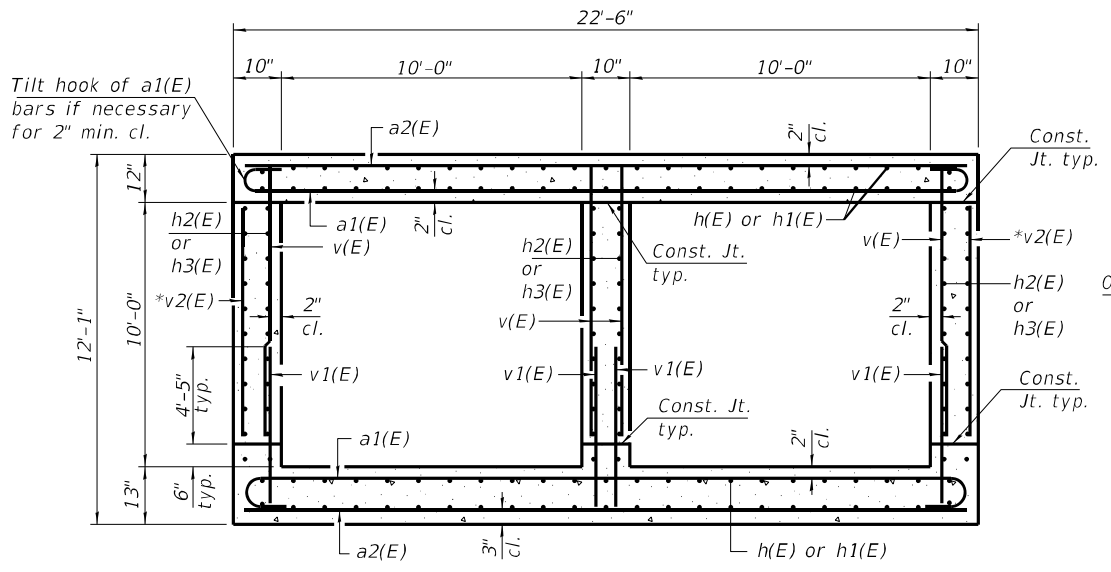


LONGITUDINAL SECTION
(Looking West)
SHOWING REINFORCEMENT IN FRONT FACE

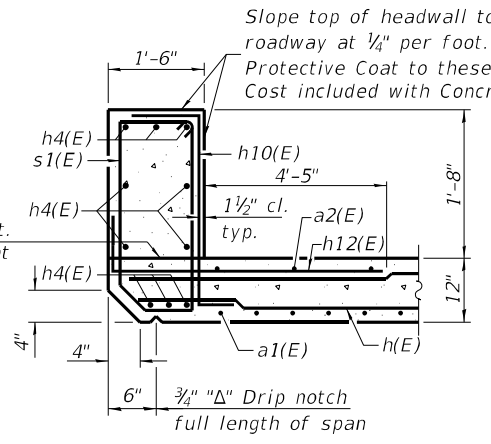
SHOWING REINFORCEMENT IN BACK FACE



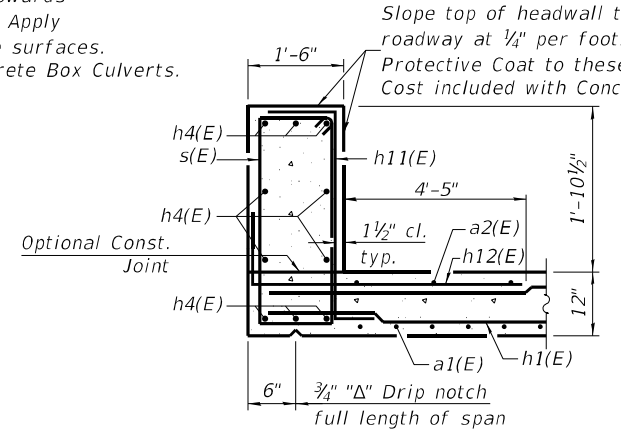
FIELD CUTTING DIAGRAM
Order h7(E) bars full length. Cut as shown and use remainder of bars in opposite face.



SECTION THRU BARREL

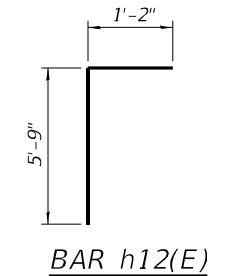


UPSTREAM

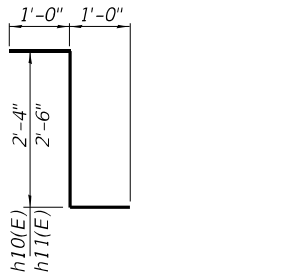


DOWNSTREAM

SECTION THRU HEADWALL



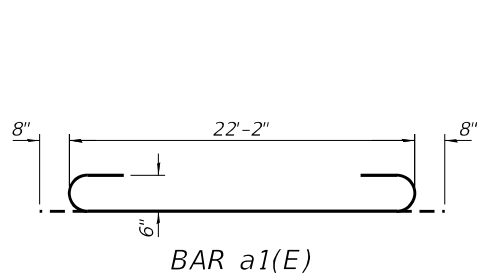
BAR h12(E)



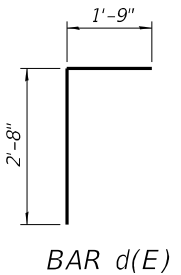
BARS h10(E) & h11(E)

*84-#6 v2(E) bars at 12" cts. (Each Stage)
(21 Stage I, Each Stage, 23 Stage II, Each Stage)

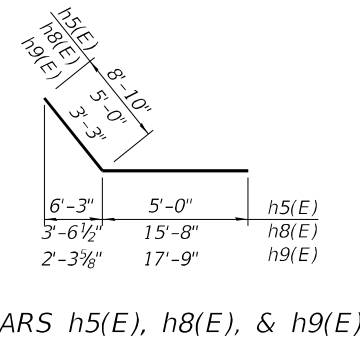
Notes:
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
At the Contractor's option, a longer v1(E) bar may be ordered to replace the v(E) bar. No reduction in quantities shall be made for this substitution.



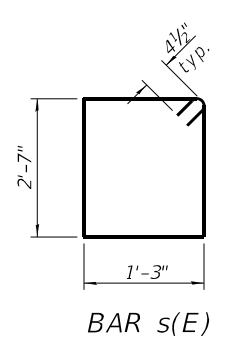
BAR a1(E)



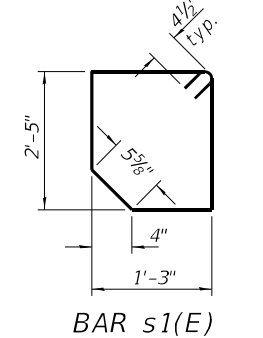
BAR d(E)



BARS h5(E), h8(E), & h9(E)



BAR s(E)



BAR s1(E)



USER NAME =	DESIGNED - JAG	REVISD -
PLOT SCALE =	CHECKED - ADB	REVISD -
PLOT DATE =	DRAWN - JAG	REVISD -
	CHECKED - ADB	REVISD -

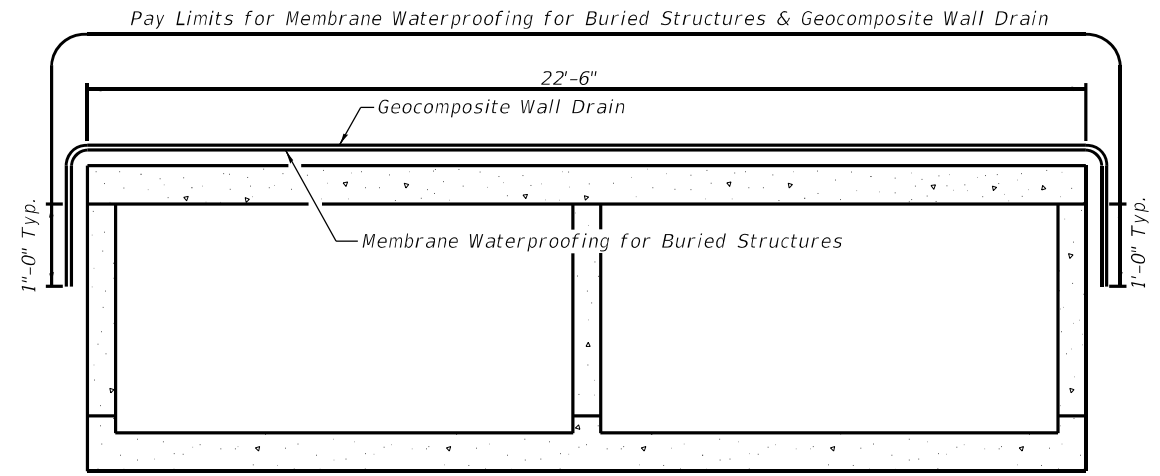
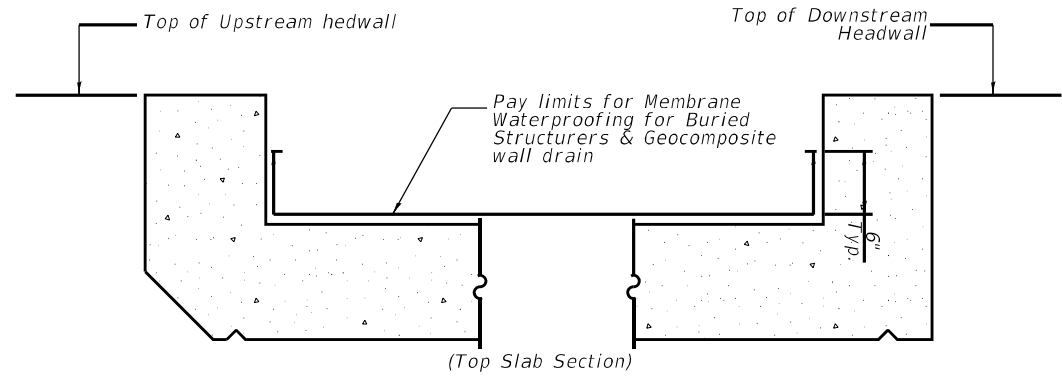
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS - 1
STRUCTURE NO. 039-2035

SHEET NO. 6 OF 12 SHEETS

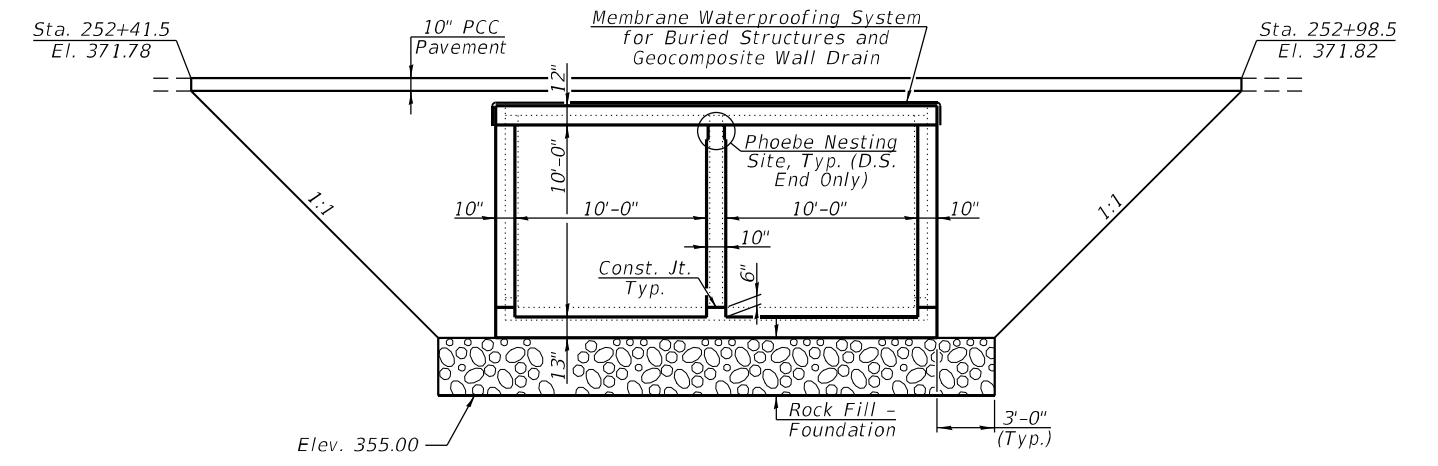
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	79
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT



(Looking at Box Section)
**MEMBRANE WATERPROOFING
 FOR BURIED STRUCTURES**

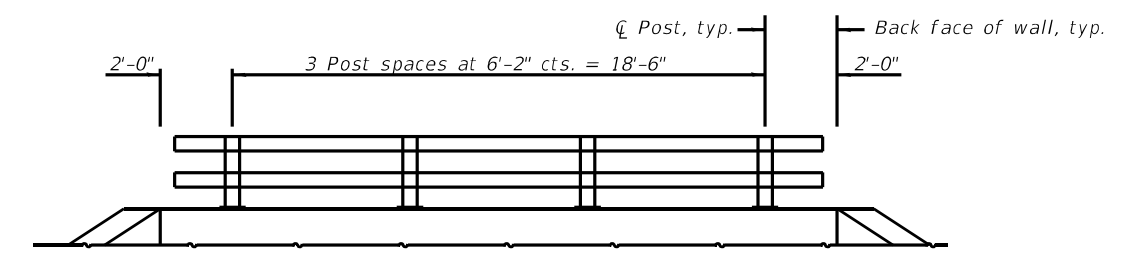
Note: Membrane Waterproofing for Culverts shall cover top of the top slab, top one foot of side walls (below top slab joint), and 6 inches up inside face of headwalls.



SECTION THRU BARREL

(Existing bridge foundation within the limits of the proposed construction to be removed.)

Note:
 The Rock Fill shall be capped according to the Rock Fill - Foundation Special Provision.
 The cost of the capping material shall be included in the pay item for Rock Fill - Foundation.



HEADWALL RAILING ELEVATION



USER NAME =	DESIGNED - JAG	REVISED -
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

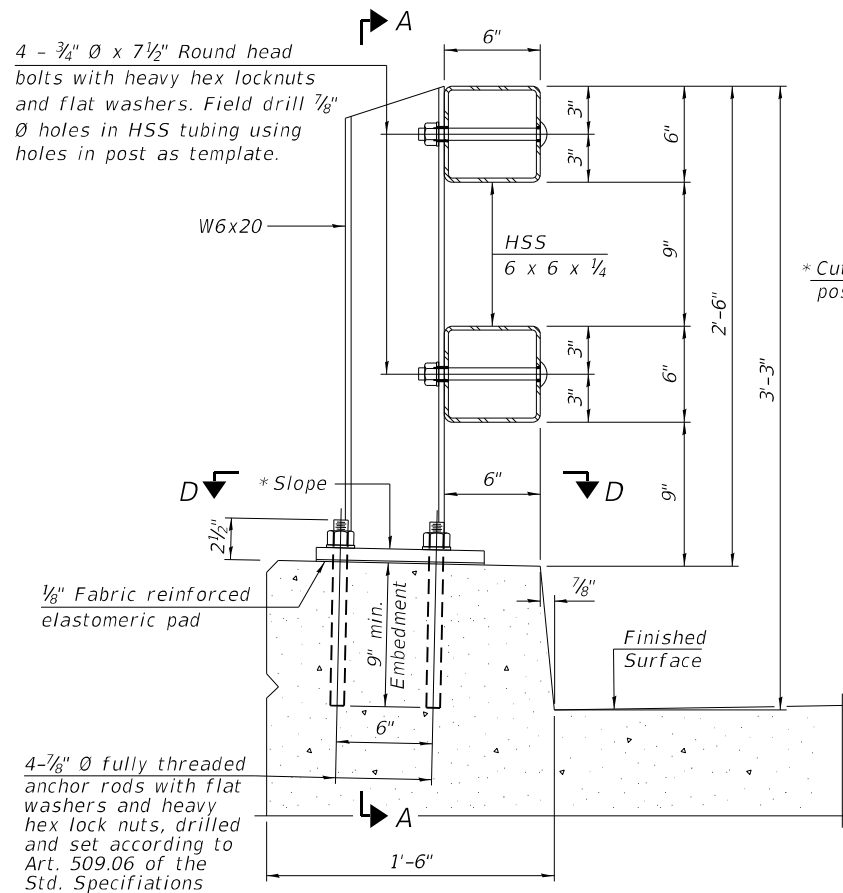
CULVERT DETAILS - 2
 STRUCTURE NO. 039-2035

SHEET NO. 7 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	80
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

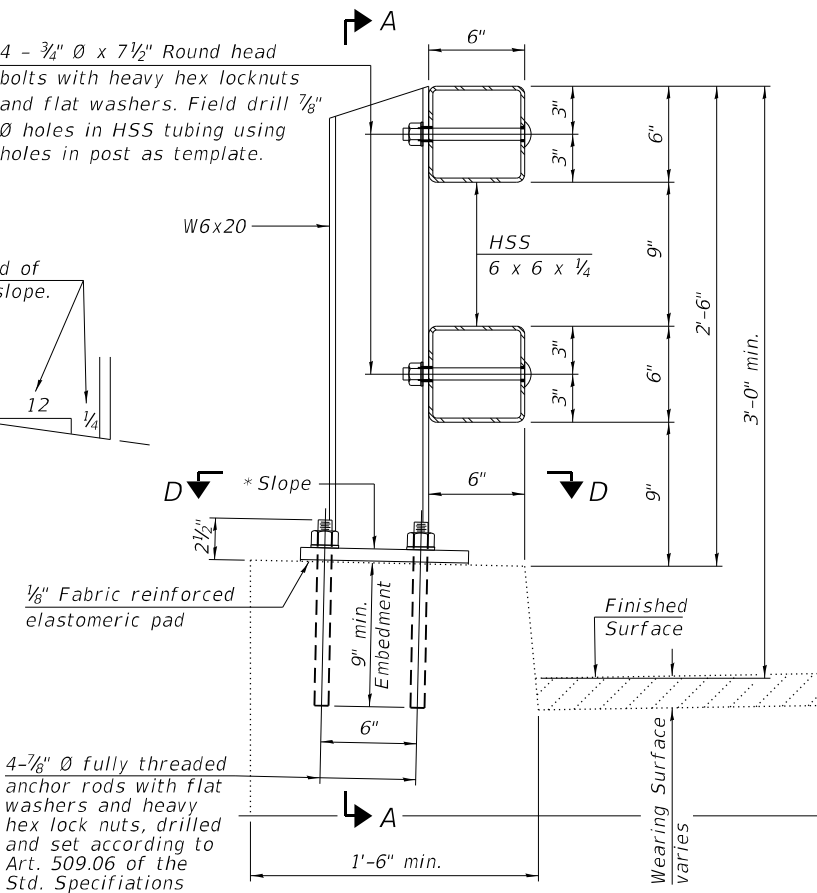
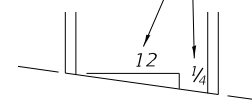
4 - 3/4" Ø x 7 1/2" Round head bolts with heavy hex locknuts and flat washers. Field drill 7/8" Ø holes in HSS tubing using holes in post as template.



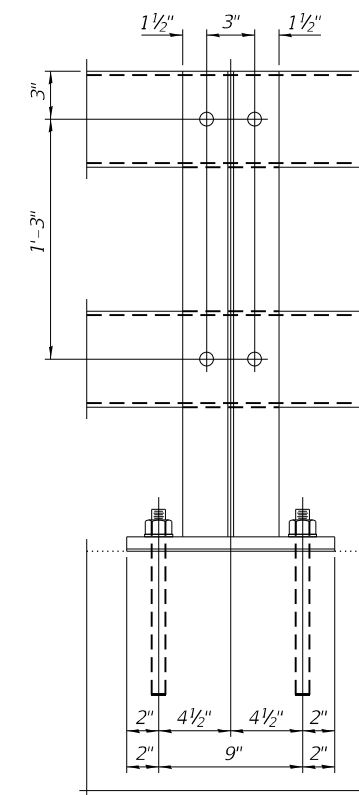
SECTION AT RAIL POST
(New construction)

4 - 3/4" Ø x 7 1/2" Round head bolts with heavy hex locknuts and flat washers. Field drill 7/8" Ø holes in HSS tubing using holes in post as template.

*Cut bottom end of post to curb slope.

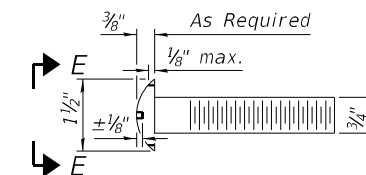


SECTION AT RAIL POST
(Retrofit construction)

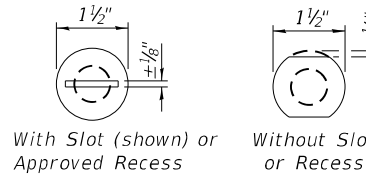


SECTION A-A

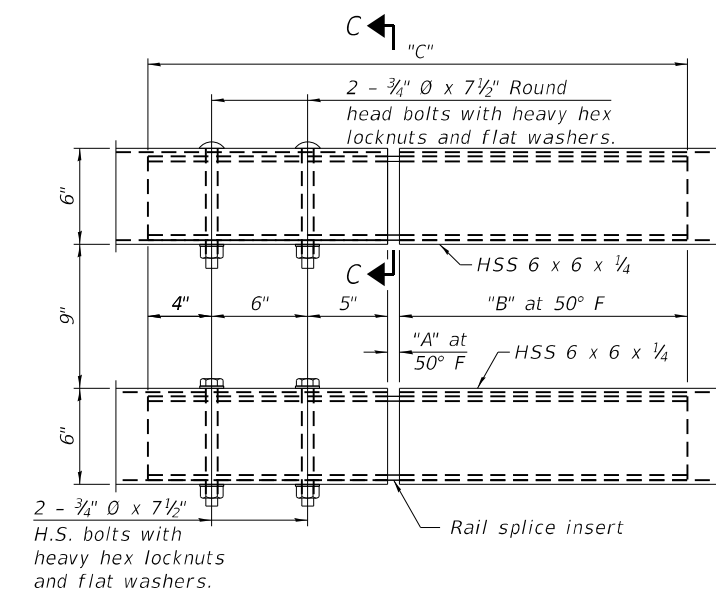
Notes:
 All HSS tubing shall be ASTM A500 grade C.
 All plates shall be AASHTO M270 grade 50.
 All heavy hex nuts shall be according to ASTM A563 grade DH.
 All fully threaded anchor rods shall be ASTM F1554 grade 105.
 The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 Posts shall not be located closer than 2'-6" to a bridge expansion joint.
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 All HSS tubing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
 Rail splice inserts may be built out of 2 - 3/8" bent plates in lieu of the 4 plate rail splice inserts shown, provided the outside dimensions are matched.
 All round head bolts shall be ASTM A449.
 The centerline of rail splices shall be placed between 1'-8" to 2'-6" from the centerline of the posts. The free end of the splice tube shall be oriented away from the closest post.



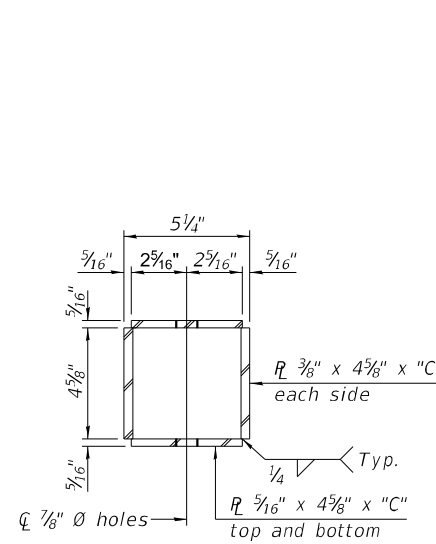
ROUND HEAD BOLT DETAIL



VIEW E-E

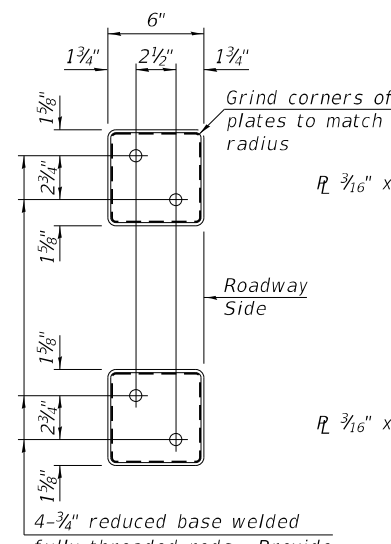


TOP AND BOTTOM RAIL SPLICE ELEVATION

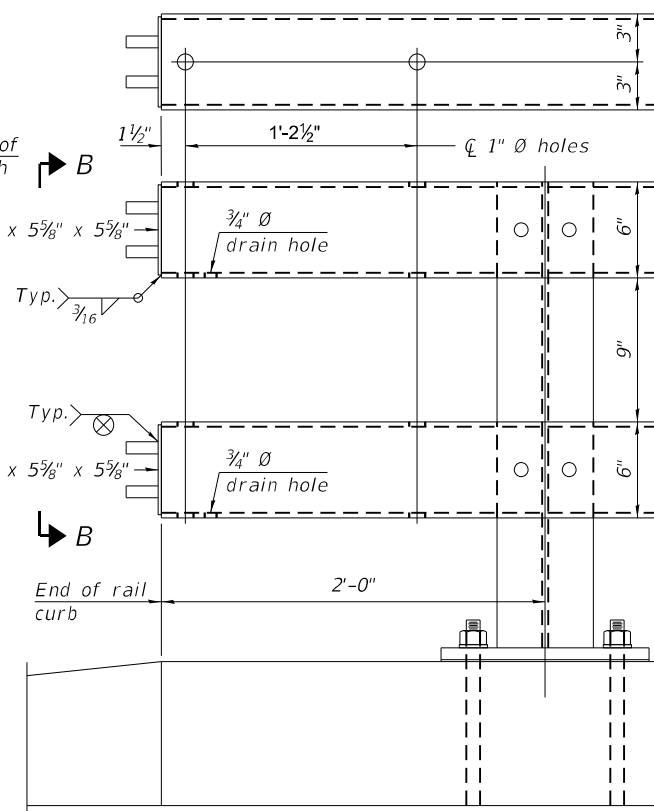


SECTION C-C

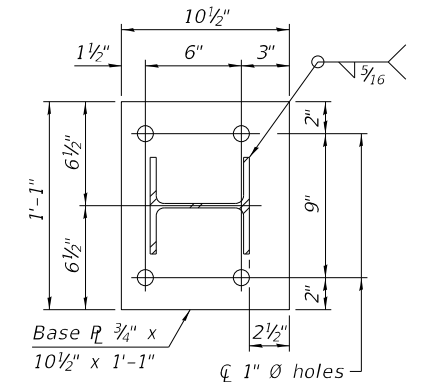
SPLICE DIMENSIONS



VIEW B-B



END OF RAIL DETAILS



SECTION D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type CO-10	Foot	45

RAILING CRITERIA

MASH 2016 Test Level	4
Railing Weight (plf)	75
Min f'c (psi)	4,500
Post Spacing Range	6'-8" - 10'-0"

Location	T	A	B	C
All locs. not over exp. jts.	0	1/2"	1'-6"	2'-9 1/2"
Over Strip Seal Jt.	≤ 4"	2 1/2"	1'-8"	3'-1 1/2"
Over Finger or Modular Jt.	≤ 9 1/2"	5 1/2"	1'-10 3/4"	3'-7 1/4"
Over Finger or Modular Jt.	≤ 15"	8 1/4"	2'-1 1/2"	4'-0 3/4"

T = ; total movement along centerline of roadway at expansion joint.

R-42

10-12-2021



USER NAME =
 DESIGNED - JAG
 CHECKED - ADB
 PLOT SCALE =
 DRAWN - JAG
 PLOT DATE =
 CHECKED - ADB

DESIGNED - JAG
 CHECKED - ADB
 DRAWN - JAG
 CHECKED - ADB

REVISED -
 REVISED -
 REVISED -
 REVISED -

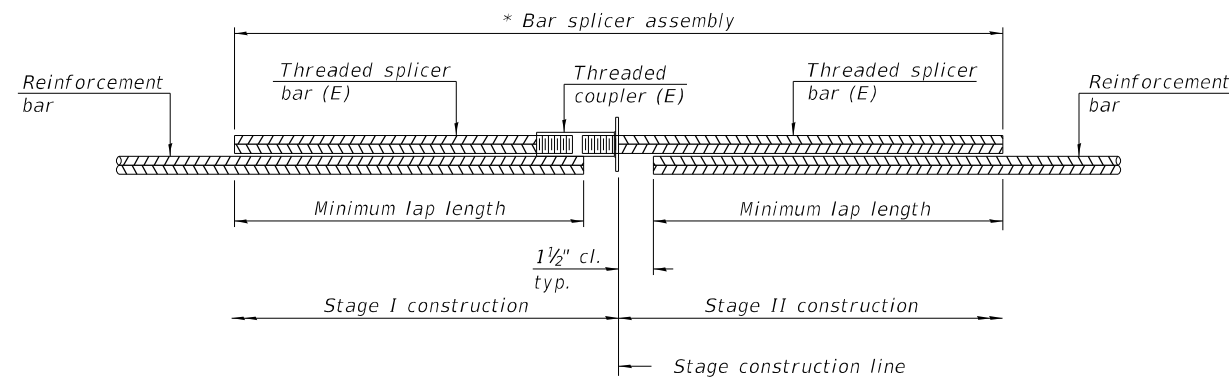
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE CO-10
STRUCTURE NO. 039-2035

SHEET NO. 8 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	81
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

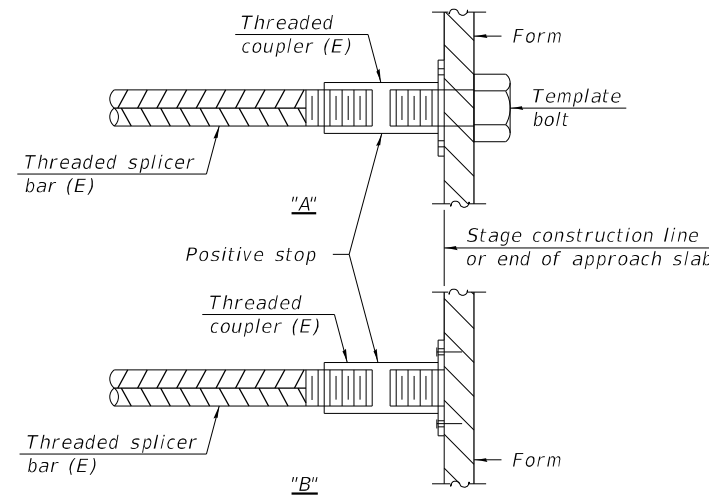


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

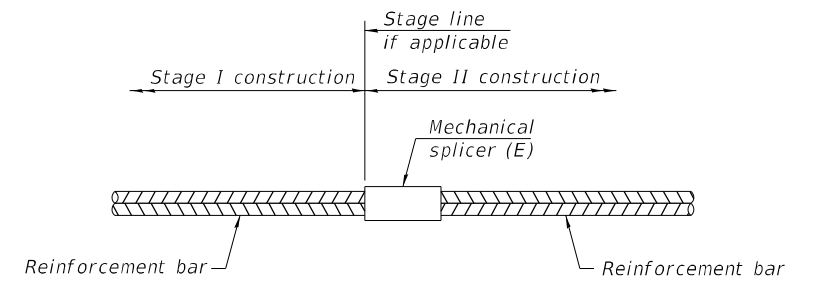
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#6	23	3'-10"
Top Slab	#6	23	3'-10"
Bottom Slab	#6	23	3'-10"
Bottom Slab	#6	23	3'-10"
Walls	#5	66	3'-7"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
 Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020



USER NAME =	DESIGNED - JAG	REVISED -
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECH. SPLICER DETAILS
 STRUCTURE NO. 039-2035

SHEET NO. 9 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	82
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT



SOIL BORING LOG

Date 4/9/20

ROUTE IL 3 DESCRIPTION Box Culvert over Talbott Hollow LOGGED BY L. Estel
 SECTION 123B-7 LOCATION 1.1 mi. NW of IL 151, SEC. 33, TWP. 8S, RNG. 4W, 3 PM
 COUNTY Jackson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	BLOWS	UCS (tsf)	MOIST (%)	SURFACE WATER ELEV. (ft)	STREAM BED ELEV. (ft)	GROUNDWATER ELEV. (ft)	DEPTH (ft)	BLOWS	UCS (tsf)	MOIST (%)
039-2015	252+73	1-S	253+09	9.0ft Right	371.7						360.7					
Cored Pavement, 2.5" HMA over 9.5" PCC																
Stiff Brown, Moist CLAY																
1																
4 1.5 20																
5 B																
367.20																
M. Stiff Brown, Moist CLAY																
-5 WOH																
1 0.8 22																
5 B																
364.70																
M. Stiff Brown, Moist SILTY CLAY																
WOH																
2 0.7 24																
3 S																
-10 WOH																
1 0.5 24																
1 S																
359.70																
M. Stiff Brown, Moist SILT																
1																
2 0.7 24																
3 B																
357.20																
Soft Brown, Moist SILT																
-15 WOH																
WOH 0.3 23																
2 B																
WOH																
1 0.1 26																
WOH B																
-20 WOH																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Date 4/9/20

ROUTE IL 3 DESCRIPTION Box Culvert over Talbott Hollow LOGGED BY L. Estel
 SECTION 123B-7 LOCATION 1.1 mi. NW of IL 151, SEC. 33, TWP. 8S, RNG. 4W, 3 PM
 COUNTY Jackson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	BLOWS	UCS (tsf)	MOIST (%)	SURFACE WATER ELEV. (ft)	STREAM BED ELEV. (ft)	GROUNDWATER ELEV. (ft)	DEPTH (ft)	BLOWS	UCS (tsf)	MOIST (%)
039-2015	252+73	2-S	252+40	8.0ft Left	371.6						360.7					
Cored Pavement, 2.5" HMA over 9.5" PCC																
V. Stiff Brown, Moist SILTY CLAY																
3																
7 2.3 18																
8 S																
367.10																
M. Stiff Brown, Moist SILTY CLAY																
-5																
2																
4 0.7 20																
3 S																
345.60																
1																
2 0.7 24																
3 B																
362.10																
Stiff Brown, Moist SILTY CLAY																
-10																
1																
2 1.2 23																
4 B																
359.60																
M. Stiff Brown, Moist SILTY CLAY																
1																
2 0.5 24																
3 B																
357.10																
Soft Brown, Moist SILT																
-15																
1																
2 0.4 23																
2 B																
WOH																
WOH 0.1 24																
1 B																
-20 WOH																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



USER NAME =	DESIGNED - JAG	REVISED -
PLOT SCALE =	CHECKED - ADB	REVISED -
PLOT DATE =	DRAWN - JAG	REVISED -
	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 039-2035

SHEET NO. 10 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	83
CONTRACT NO. 78790				

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 STATE BOND ISSUE HIGHWAY**

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
150	6-123	Jackson	93	1
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 194				

INDEX OF SHEETS

Sheet No. 1 Title Page.
 2A Standard 1463.
 2 Standard 1365, 1358.
 3 Standard 1357, 1359.
 4 Schedule of Culverts & Gutter.
 4 Special Cross Section for 1359 (for Class C Elevation).
 5 Plan & Profile Station 94+30 to Sta. 105+00.

6	105+00	135+00
7	135+00	165+00
8	165+00	195+00
9	195+00	225+00
10	225+00	255+00
11	255+00	285+00
12	285+00	315+00
13	315+00	345+00
14	345+00	375+00
15	375+00	405+00
16	405+00	435+00
17	435+00	465+00
18	465+00	495+00
19	495+00	525+00
20	525+00	555+00
21	555+00	585+00
22	585+00	615+00

23 to 68 (incl) Cross Sections.
 69 Standard Culvert Design 1204-4, 1204-3.
 69 Special Culvert Design Sta. 94+30 to 95+29.

70	103+05, 115+05, 120+10, 125+10
71	137+43, 151+41, 156+07, 163+19
72	170+65, 179+90, 215+40, 221+27
73	227+25, 234+19, 237+69, 240+02
74	241+69, 247+66, 252+73, 278+96
75	282+41, 286+07, 290+10, 295+79
76	317+47, 328+48, 335+17, 340+00
77	351+25, 360+25, 369+05, 379+37
78	383+01, 392+45, 401+00, 405+06
79	424+22, 433+17, 438+00, 446+00
80	450+02, 457+54, 476+15, 485+29
81	489+27, 496+34, 500+53, 504+73
82	508+37, 513+66, 523+00, 533+84
83	539+00, 550+45, 557+85, 572+62
84	573+04, 582+00, 594+45, 602+50
85	607+00

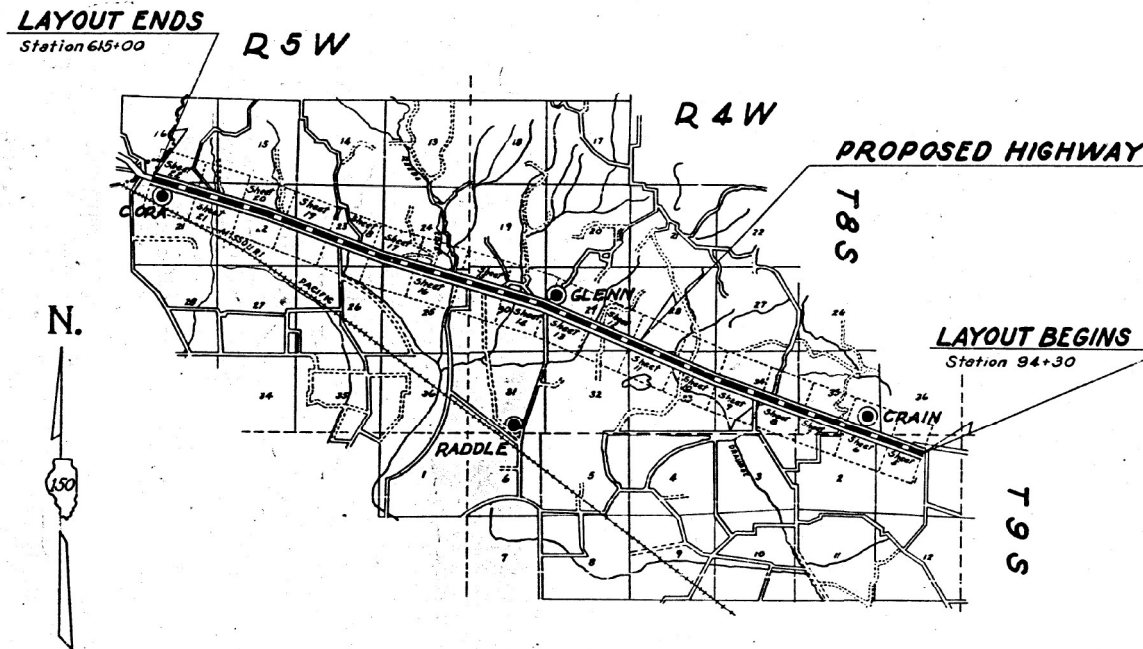
85 Special Bridge Sta. 194+09 Sheet 1 of 2 & Sheet 2 of 2.
 86 345+42 - 1 of 1
 87 370+74 - 1 of 1
 88 413+60 - 1 of 3
 89 413+60 - 2 of 3
 90 413+60 - 3 of 3
 91 530+10 - 1 of 1
 92 Standard 1162, 1203.
 93 Standard 1473, 1471.

039-2015

F.A. PROJECT 194-C
ROUTE 150 SECTION 123 JACKSON COUNTY

FROM A POINT NEAR THE S.E. CORNER OF THE N.E. 1/4 N.W. 1/4 OF SEC. 1, T. 9 S., R. 4 W. OF THE 3 R.D. P.M.
 TO A POINT NEAR THE S.W. CORNER OF THE S.E. 1/4 S.W. 1/4 OF SEC. 16 T. 8 S., R. 5 W. OF THE 3 R.D. P.M.

SCALES
 PLAN 1 INCH = 100 FT.
 PROFILE, HOR. 1 INCH = 100 FT.
 PROFILE, VERT. 1 INCH = 10 FT.
 CROSS-SECTIONS 1 INCH = 5 FT.



LAYOUT

Approximate Scale 1 Inch = 1 Mile
 Net Length of Layout 52070 Feet = 98.617 Miles

STATE LINE	—————	RETAINING WALL	—————
COUNTY-LINE	—————	BASE OR SURVEY LINE	—————
CITY, VILLAGE OR TOWN	—————	LEVEE	—————
TOWNSHIP LINE	—————	CULVERT	—————
SECTION LINE	—————	STORM SEWER	—————
GRANT LINE	—————	TILE DRAIN	—————
SECTION CORNER	⊙	DROP INLET	—————
FENCE LINE	—————	TROLLEY POLE	—————
UNFENCED PROPERTY	—————	POWER POLE	—————
RIGHT OF WAY LINE	—————	TELEPHONE OR TELEGRAPH POLE	—————
CARD RAIL	—————	MARSH	—————
STEAM RAILROAD	—————	HEDGE	—————
“L” “C” RAILROAD	—————		

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS

SUBMITTED February 4, 1932
 G.A. Somerville CONTRACT ENGINEER

EXAMINED April 6, 1932
 C.D. Johnson ROAD ENGINEER

PASSED April 6, 1932

APPROVED April 6, 1932
 H.A. Smith SUPERVISOR OF HIGHWAYS

APPROVED April 6, 1932
 W.H. ...

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER, Bureau of Public Roads

RECOMMENDED FOR APPROVAL

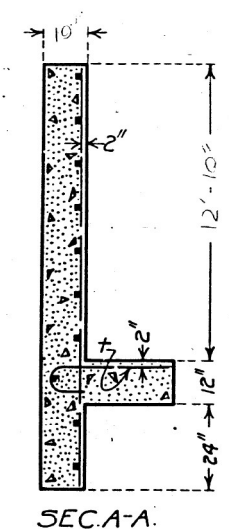
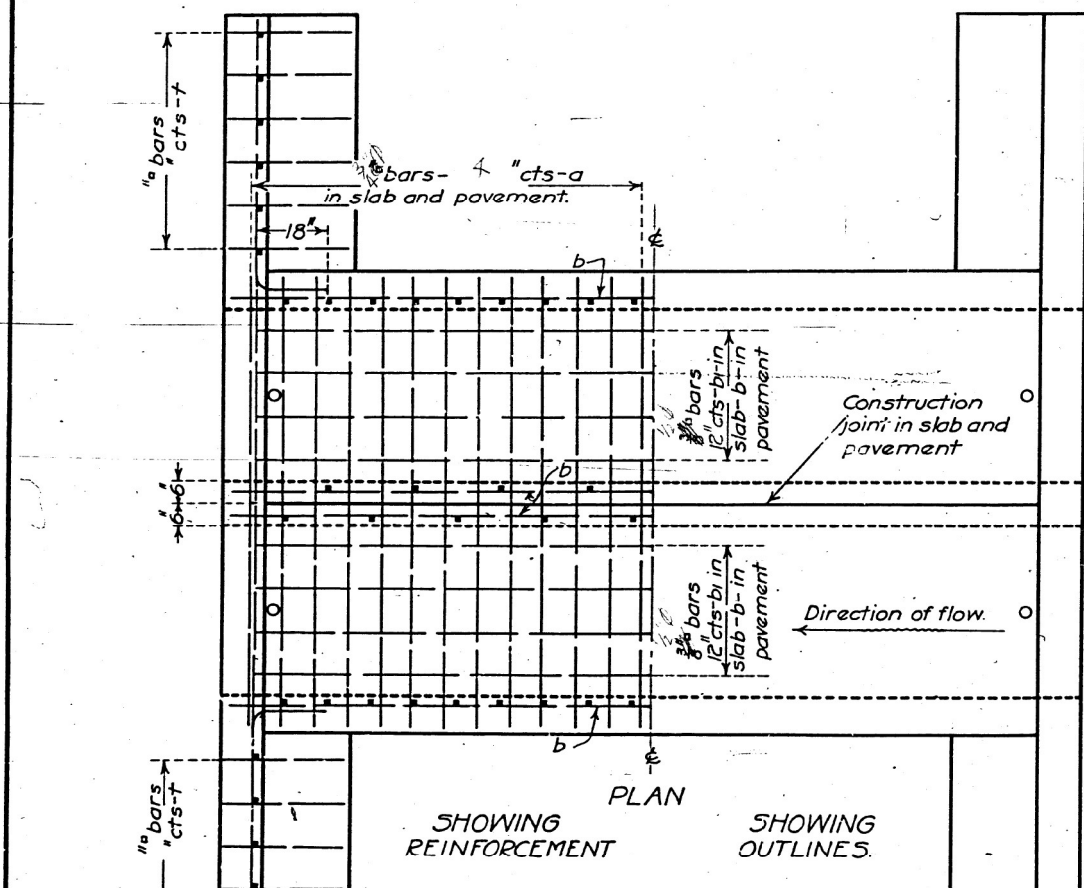
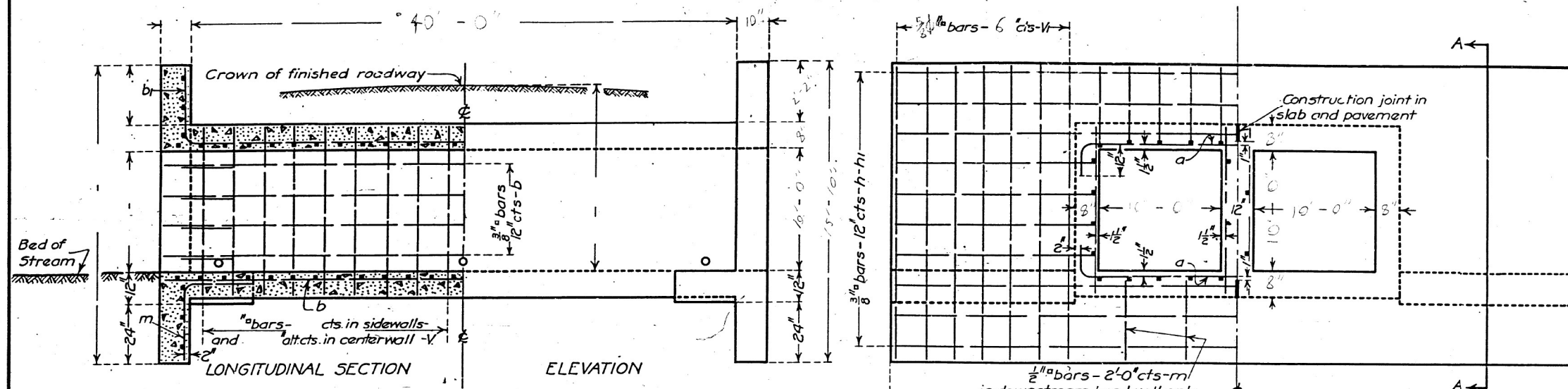
CHIEF ENGINEER, Bureau of Public Roads

APPROVED

CHIEF, Bureau of Public Roads

9-23

R.C. DOUBLE BOX CULVERT



SHOWING REINFORCEMENT END ELEVATION SHOWING OUTLINES.

BILL OF MATERIAL

BARS	NO	SIZE	LENGTH
V	120	1/2" φ	11'-0"
VI	132	3/8" φ	15'-6"
h	0	3/8" φ	28'-6"
h1	24	3/8" φ	18'-0"
a	250	3/4" φ	23'-6"
b	100	3/8" φ	21'-6"
b1	40	3/8" φ	24'-0"
t	132	5/8" φ	5'-6"
m	10	1/2" φ	5'-0"
Reinforcing Steel-Lbs.			15430
Concrete-Cu.Yds.			130.1

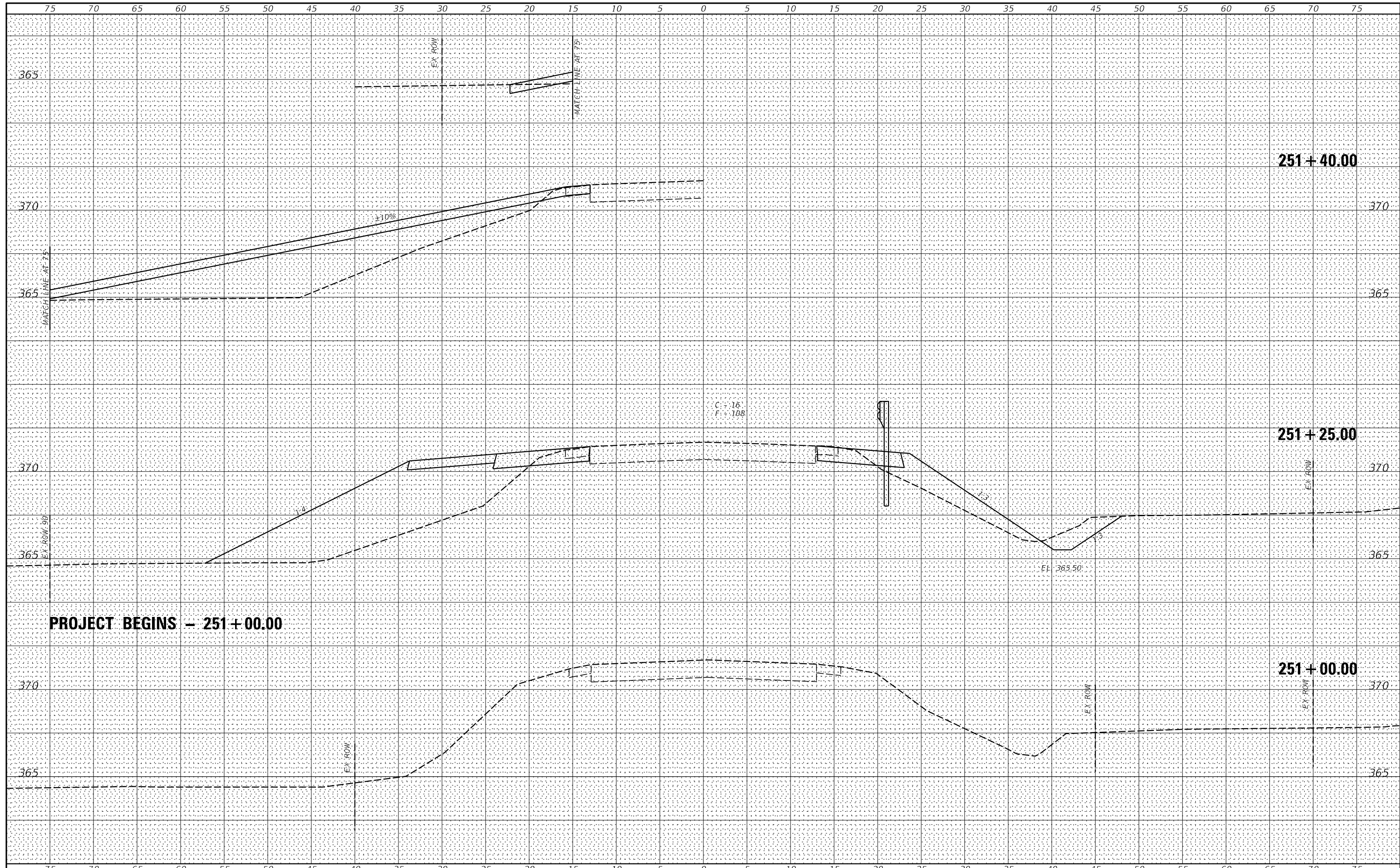
Class A Concrete to be used throughout. Proportions-1:2 1/2:4.

STANDARD	COMPUTED - <i>N.B. Halverson</i>	EXAMINED - _____
	CHECKED - <i>Ned Hillier</i>	_____
	DRAWN - <i>N.B.H.</i>	PASSED _____
	CHECKED - <i>N.B.H.</i>	BRIDGE ENGINEER
SPECIAL	ASSEMBLED - _____	APPROVED _____
	CHECKED - _____	ENGINEER OF DESIGN
		CHIEF HIGHWAY ENGINEER

1113

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

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



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISED -
PLOT SCALE = *SCALE*	DRAWN -	REVISED -
PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

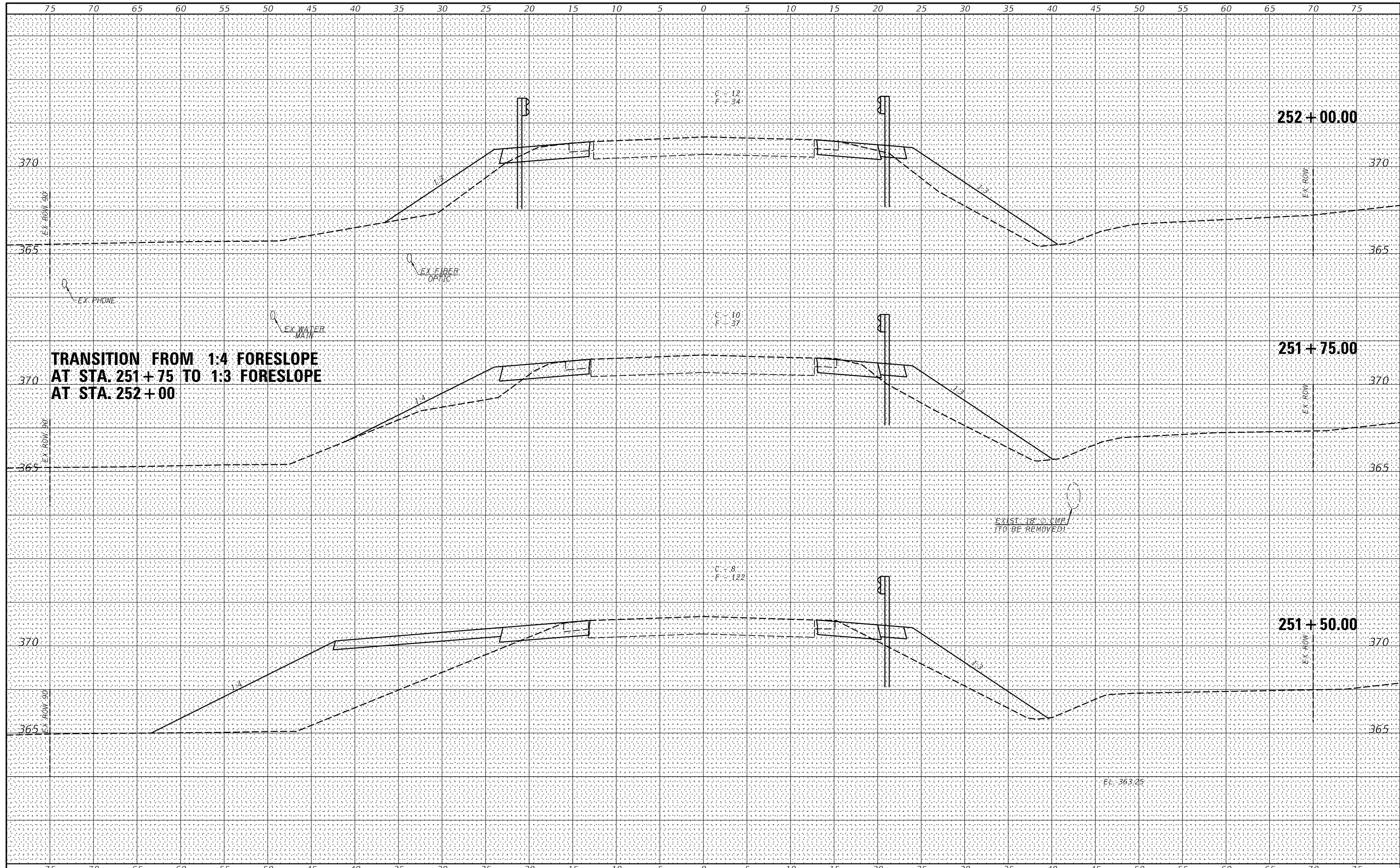
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2035
 SCALE: _____ SHEET NO. 1 OF 9 SHEETS STA. 251+00.00 TO STA. 251+40.00

F.A.P. RTE. 312	SECTION 123B-7	COUNTY JACKSON	TOTAL SHEETS 101	SHEET NO. 86
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



**TRANSITION FROM 1:4 FORESLOPE
 AT STA. 251+75 TO 1:3 FORESLOPE
 AT STA. 252+00**

VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISED -
PLOT SCALE = *SCALE*	DRAWN -	REVISED -
PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

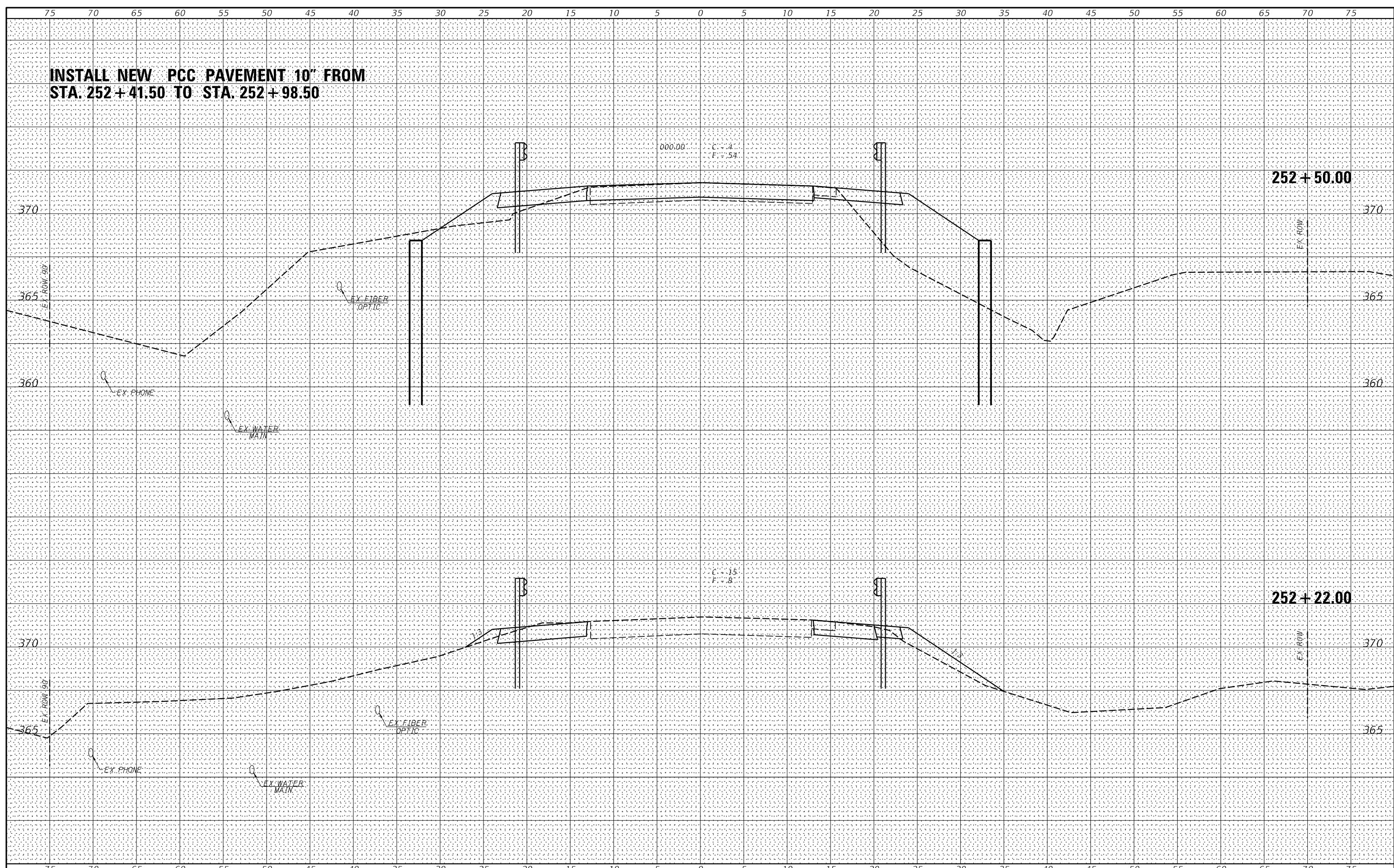
CROSS SECTIONS - SN 039-2035
 SCALE: _____ SHEET NO. 2 OF 9 SHEETS STA. 251+50.00 TO STA. 252+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	87
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT				

**INSTALL NEW PCC PAVEMENT 10' FROM
STA. 252+41.50 TO STA. 252+98.50**

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

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



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2035

**VK VEENSTRA
& KIMM INC.**
Springfield, IL. Phone: (217)544-8033
IL Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISD -
PLOT SCALE = *SCALE*	DRAWN -	REVISD -
PLOT DATE = *DATE*	CHECKED -	REVISD -
	DATE -	REVISD -

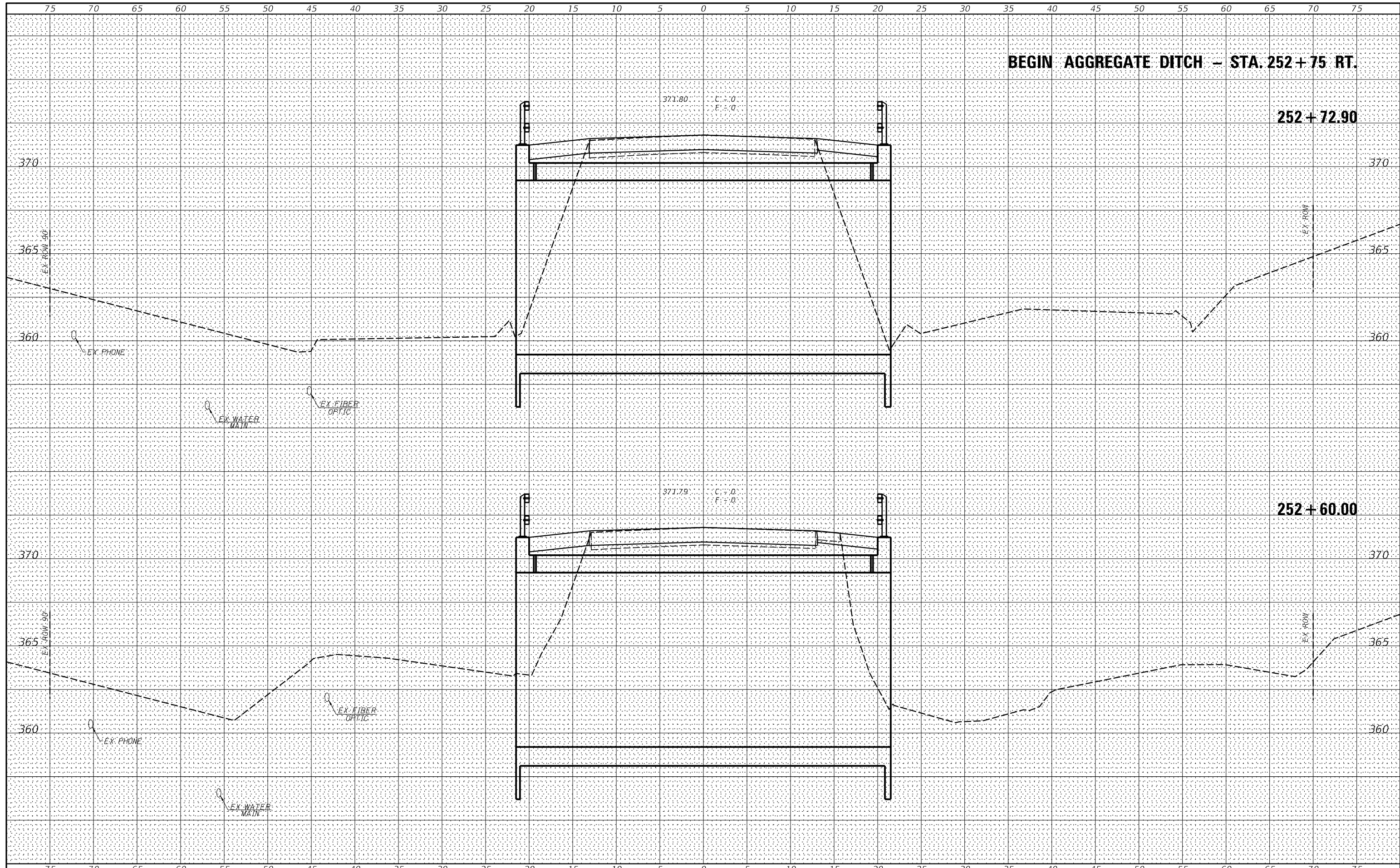
DESIGNED -	REVISD -
DRAWN -	REVISD -
CHECKED -	REVISD -
DATE -	REVISD -

SCALE: _____ SHEET NO. 3 OF 9 SHEETS STA. 252+22.00 TO STA. 252+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	88
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

DATE _____
 BY _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

DATE _____
 BY _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISED -
PLOT SCALE = *SCALE*	DRAWN -	REVISED -
PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

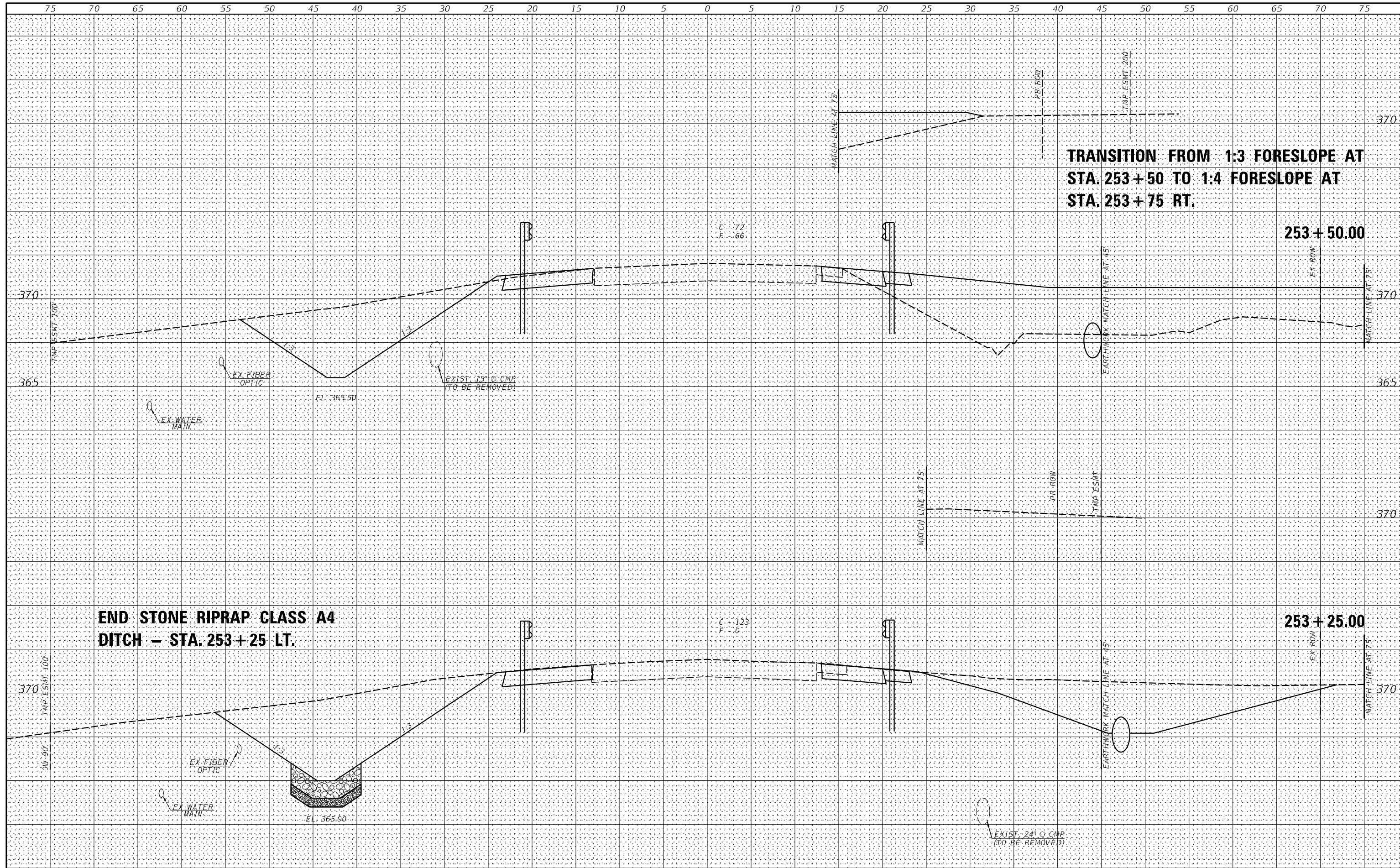
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2035
 SCALE: _____ SHEET NO. 4 OF 9 SHEETS STA. 252+60.00 TO STA. 252+72.90

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	89
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL Design Firm No. 184-001939

USER NAME = *USER*
 PLOT SCALE = *SCALE*
 PLOT DATE = *DATE*

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2035

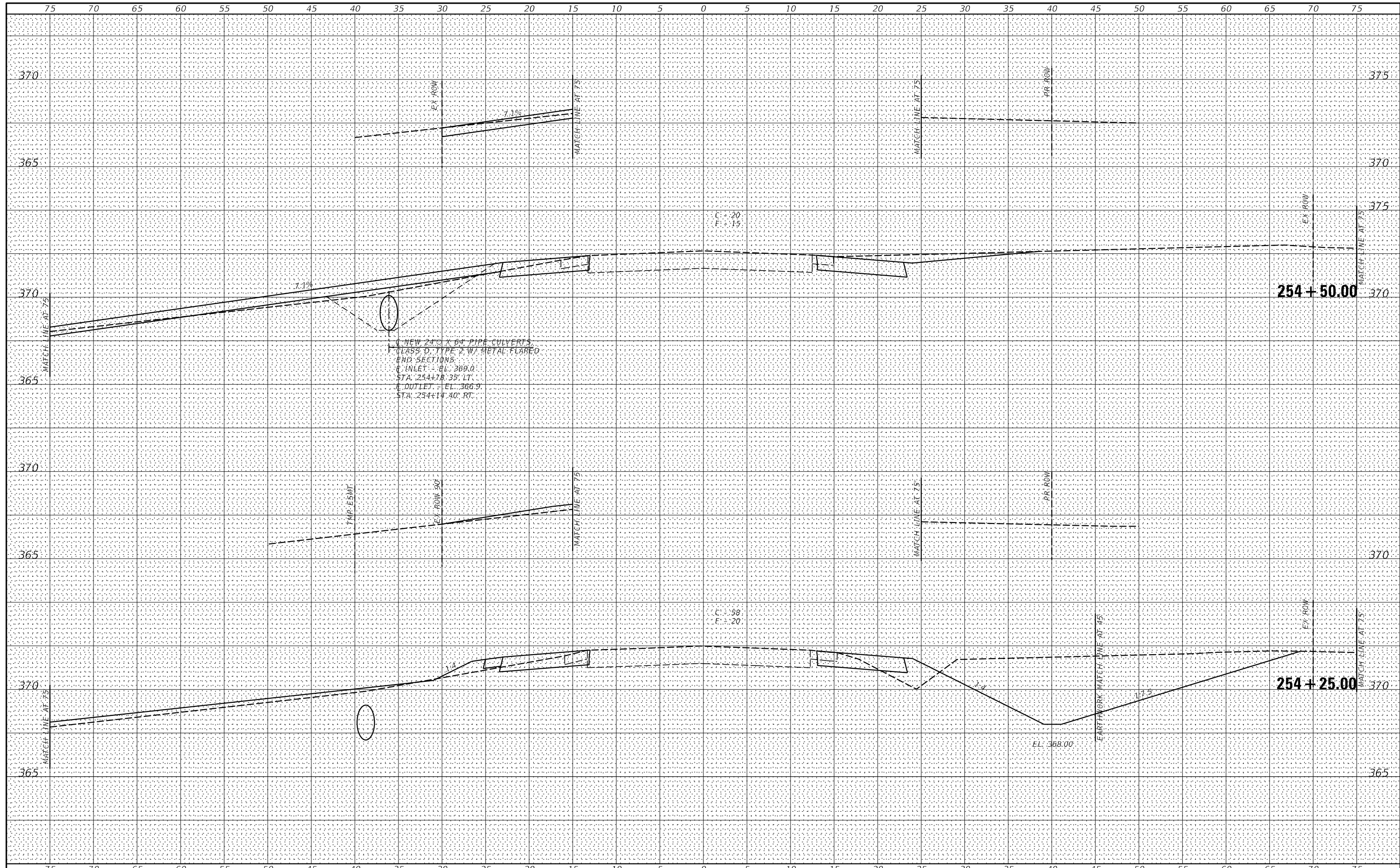
SCALE: _____ SHEET NO. 6 OF 9 SHEETS STA. 253+25.00 TO STA. 253+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	91
CONTRACT NO. 78790				

FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



NEW 24" X 64" PIPE CULVERTS
 CLASS D, TYPE 2 W/ METAL FLARED
 END SECTIONS
 INLET - EL. 369.0
 STA. 254+28.35' LT.
 OUTLET - EL. 366.9
 STA. 254+14.40' RT.

C = 20
 F = 15

C = 38
 F = 20

VK VEENSTRA & KIMM INC.
 Springfield, IL. Phone: (217)544-8033
 IL. Design Firm No. 184-001939

USER NAME = *USER*	DESIGNED -	REVISED -
PLOT SCALE = *SCALE*	DRAWN -	REVISED -
PLOT DATE = *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - SN 039-2035
 SCALE: _____ SHEET NO. 8 OF 9 SHEETS STA. 254+25.00 TO STA. 254+50.00

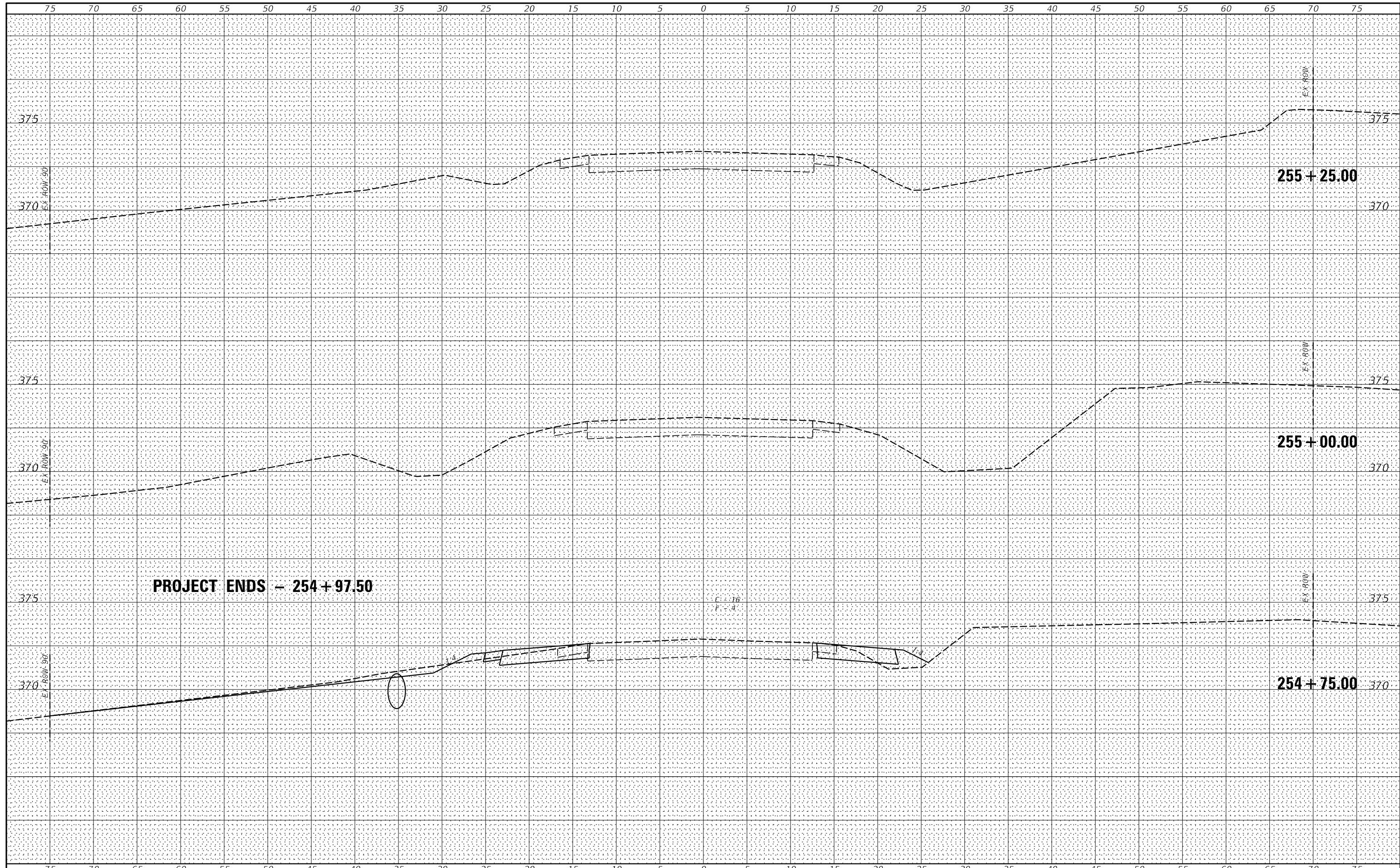
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	93
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT				

BY _____ DATE _____

FINAL SURVEY SURVEYED PLOTTED
NOTE BOOK TEMPLATE
AREAS AREAS
CHECKED CHECKED

BY _____ DATE _____

ORIGINAL SURVEY SURVEYED PLOTTED
NOTE BOOK TEMPLATE
AREAS AREAS
CHECKED CHECKED



VK VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL Design Firm No. 184-001939

USER NAME = *USER*
PLOT SCALE = *SCALE*
PLOT DATE = *DATE*

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

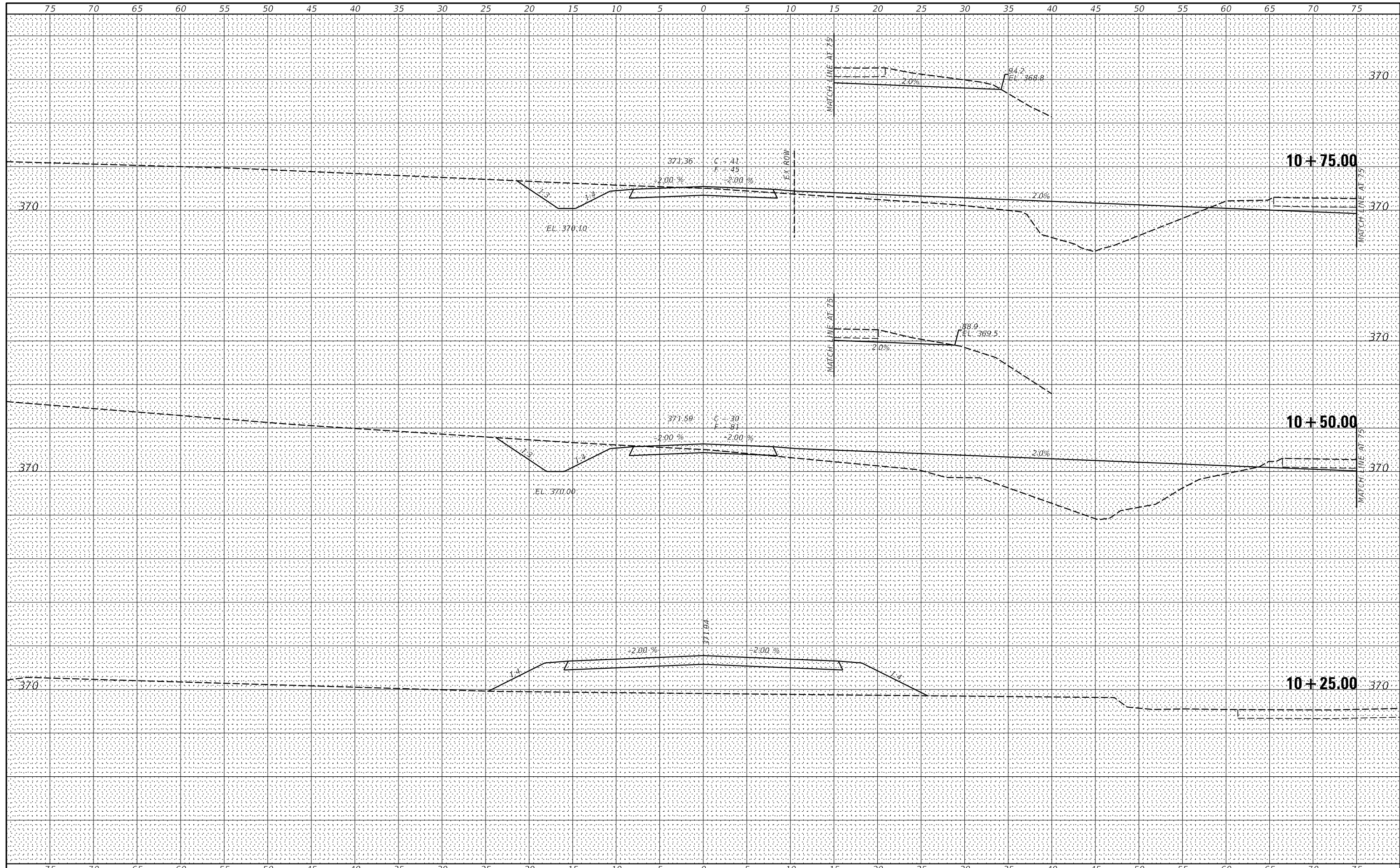
CROSS SECTIONS - SN 039-2035

SCALE: _____ SHEET NO. 9 OF 9 SHEETS STA. 254+75.00 TO STA. 255+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	123B-7	JACKSON	101	94
CONTRACT NO. 78790				
FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NO. _____



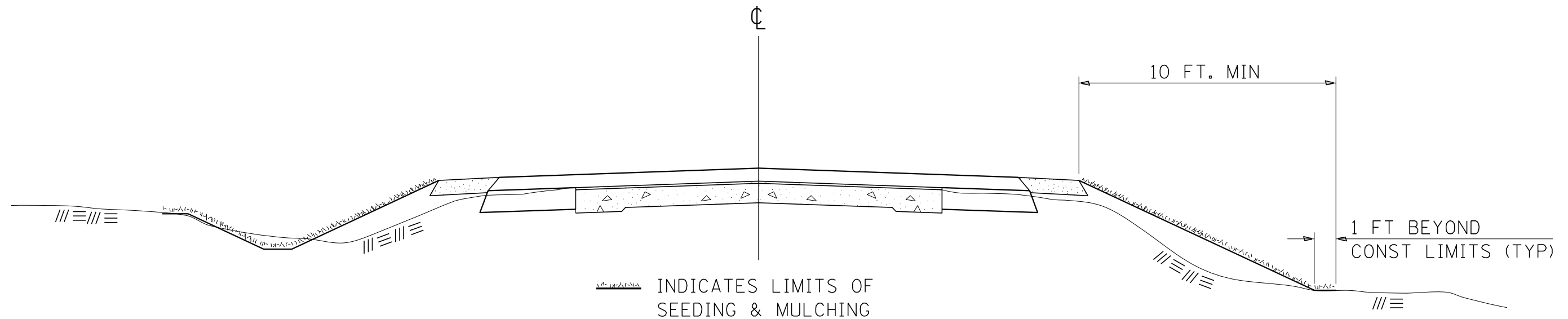
USER NAME : *USER*	DESIGNED -	REVISED -
PLOT SCALE : *SCALE*	DRAWN -	REVISED -
PLOT DATE : *DATE*	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - PRIVATE ENTRANCE
 SCALE: _____ SHEET NO. 1 OF 3 SHEETS STA. 10+25.00 TO STA. 10+75.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	125B-7	JACKSON	101	95
CONTRACT NO. 78790				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

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.

SECTIONS 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS SPECIFIED HEREIN OR AS NOTED IN THE SPECIAL PROVISIONS.

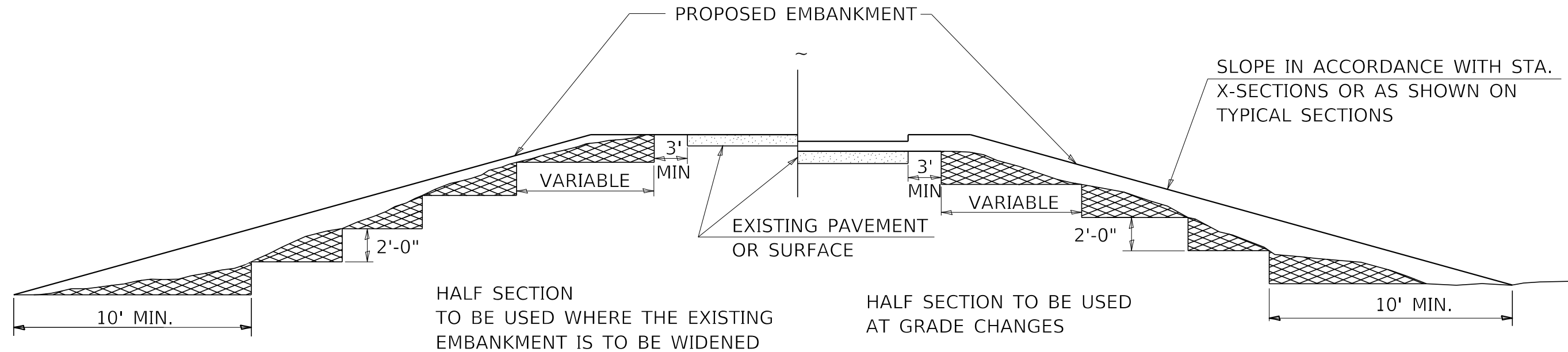
REVISIONS

REDRAWN	2-15-89
REVISED	8-15-94
REVISED	6-3-99
REVISED	3-27-08
REVISED	5-16-13

STD. 9-12

 Veenstra & Kimm, Inc. Springfield, IL. Phone: (217)544-8033	USER NAME = ___	DESIGNED - ___	REVISED - ___	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT STANDARDS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = ___	DRAWN - ___	REVISED - ___			312	125B-5, 125B-6, 125B-7	JACKSON	101	98
PLOT DATE = ___	CHECKED - ___	REVISED - ___	REVISED - ___	SCALE: SHEET NO. ___ OF ___ SHEETS STA. TO STA.		CONTRACT NO. 78790				
						ILLINOIS FED. AID PROJECT				

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL



STEPS SHALL BE CUT IN THE EXISTING SLOPE IN ACCORDANCE WITH ART. 205.03 EXCEPT THAT THE REQUIREMENT THAT STEPS SHALL BE CUT INTO THE EXISTING SLOPE BEFORE THE CONSTRUCTION OF THE EXISTING EMBANKMENT IS STARTED SHALL NOT APPLY. MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

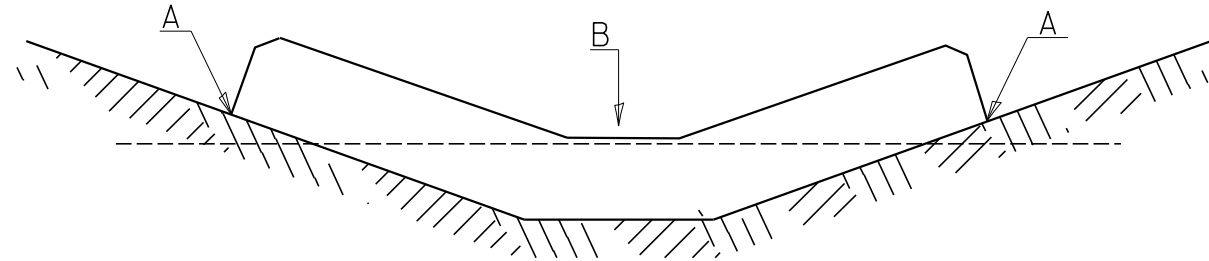
REVISIONS

REDRAWN	_2-15-89
REVISED	_8-15-94
CHECKED	_6-3-99
RESIZED	_5-7-08
REVIEWED	_5-17-13
REVISED	_4-22-21
REVISED	10-21-21

STD. 9-16

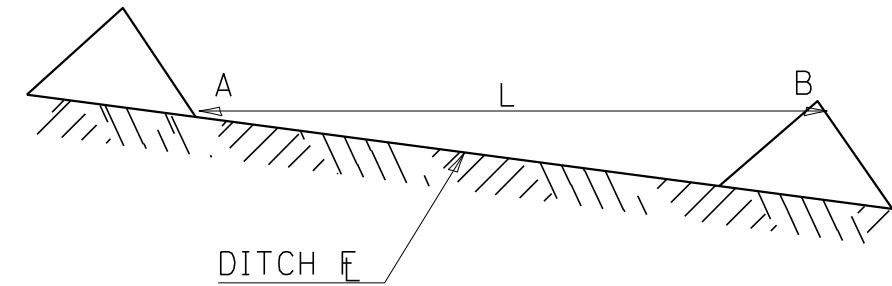
TEMPORARY DITCH CHECKS

PLACEMENT OF TEMPORARY DITCH CHECK IN DRAINAGE WAY



POINTS A SHOULD BE HIGHER THAN POINT B

SPACING BETWEEN TEMPORARY DITCH CHECKS



L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

B = THE LOW POINT IN CENTER OF CHECK

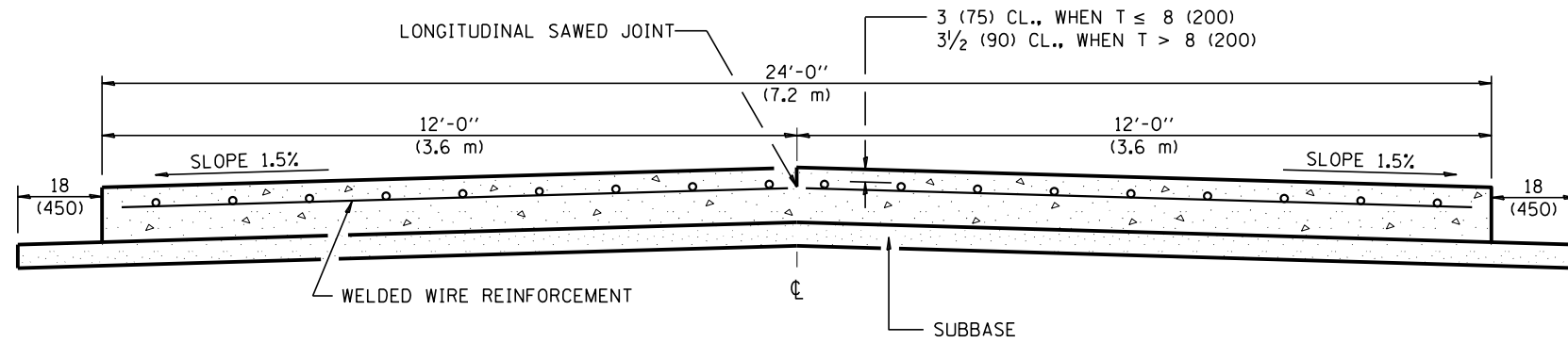
REVISIONS

DRAWN	9-01-99
REVISED	10-3-01
RESIZED	5-8-08
REVISED	05-04-10
REVIEWED	5-17-13

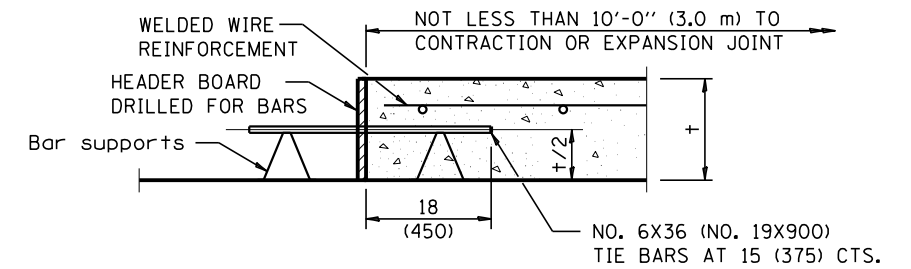
STD. 9-108

 Veenstra & Kimm, Inc. Springfield, IL. Phone: (217)544-8033	USER NAME = ___	DESIGNED - ___	REVISED - ___	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT STANDARDS	SCALE: _____	SHEET NO. ___ OF ___ SHEETS	STA. _____ TO STA. _____	F.A.P. RTE. 312 SECTION 125B-5, 125B-6, 125B-7 COUNTY JACKSON TOTAL SHEETS 101 SHEET NO. 100 CONTRACT NO. 78790 ILLINOIS FED. AID PROJECT
	PLOT SCALE = ___	DRAWN - ___	REVISED - ___			PLOT DATE = ___	CHECKED - ___	REVISED - ___	

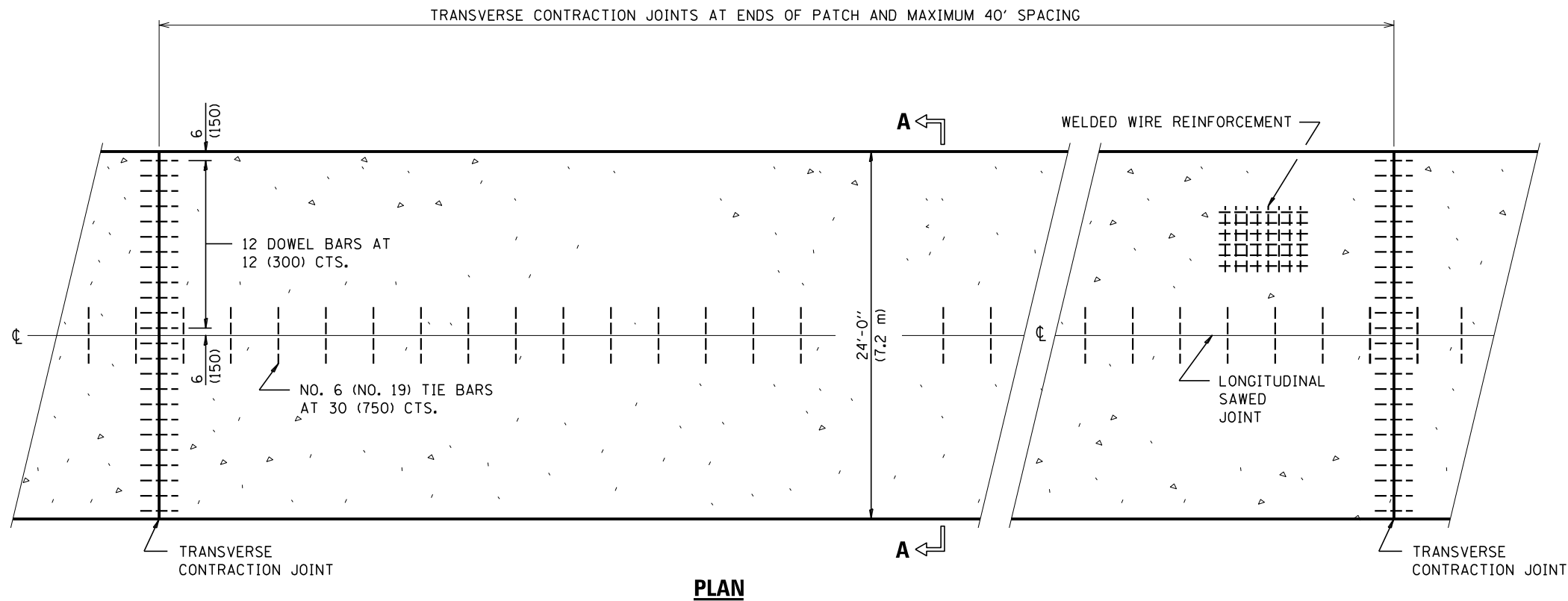
24' (7.2 m) PCC PAVEMENT OVER BOX CULVERT



SECTION A-A
(TYPICAL 2-LANE WITH SHOULDERS)



TRANSVERSE CONSTRUCTION JOINT
(IF NEEDED PER STANDARD SPECIFICATIONS)



PLAN

GENERAL NOTES

- SEE STANDARD 420001 FOR DETAILS NOT SHOWN.
- SEE STANDARD 420701 FOR WELDED WIRE REINFORCEMENT DETAILS.
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- ACTUAL DIMENSIONS TO MATCH FIELD CONDITIONS AND CONSTRUCTION METHODS.

REVISIONS

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

STD. 9-25



USER NAME =	DESIGNED -	REVISED -	
	CHECKED -	REVISED -	
PLOT SCALE =	DRAWN -	REVISED -	
PLOT DATE =	CHECKED -	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT STANDARDS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	125B-5, 125B-6, 125B-7	JACKSON	101	101
CONTRACT NO. 78790				
ILLINOIS FED. AID PROJECT				