## INDEX OF SHEETS

03-09-2018 LETTING ITEM 051

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

#### 

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TRAFFIC DATA

**FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL** 

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FOR SUMMARY OF QUANTITIES, SEE SHEET NOS. 10-13

# PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 877 (IL RTE. 141)

SECTION 101B-3; 101B-4

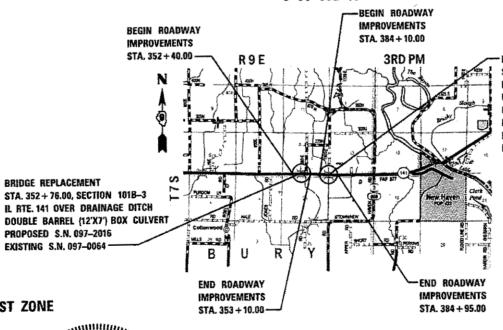
PROJECT STP-EIUW(830)

STRUCTURE REPLACEMENTS OVER

DRAINAGE DITCH AND UNNAMED STREAM

WHITE COUNTY

#### C-99-052-11



BRIDGE REPLACEMENT

STA. 384 + 52.00, SECTION 1018-4

IL RTE. 141 OVER

UNMARKED STREAM

DOUBLE BARREL (14'X8')

BOX CULVERT

PROPOSED S.N. 097-2017

EXISTING S.N. 097-0029

## D-99-841-11



## **TOWNSHIPS**

HERALDS PRAIRIE TOWNSHIP WHITE COUNTY

ASBURY TOWNSHIP GALLATIN COUNTY

ADT:

TRUCKS:

**DESIGN SPEED:** 

POSTED SPEED:

PV:

**DESIGN DESIGNATION: N.A.** 

COORDINATE SYSTEM : ILLINOIS COORDINATE SYSTEM, EAST ZONE

(NON-URBAN)

2,010 (2018)

74.1%

25.9%

55 MPH

55 MPH

POSTED SPEED: 55 MPH

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-8123 OR 811

PROJECT ENGINEER: DAVID PICHE
PROJECT DESIGNER: MODJESKI AND MASTERS, INC.

**CONTRACT NO. 78264** 

JERILYN M. HASSARD 062-055579

JERILYN M. HASSARD 11-20-17

JERILYN M. HASSARD ILLINOIS P.E. DATE
LICENSE EXPIRES 11/30/2019

LOCATION MAP NOT TO SCALE

SECTION 101B-3

GROSS LENGTH = 70.0 FT. = 0.013 MILE

NET LENGTH = 70.0 FT. = 0.013 MILE

SECTION 1018-4

GROSS LENGTH = 85.0 FT. = 0.016 MILE NET LENGTH = 85.0 FT. = 0.016 MILE



SUBMITTED Dec 4

20.17.

REGION FIVE ENGINEER

COMMENTED

COMMENT

STATE OF ILLINOIS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### **HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-09	PAVEMENT JOINTS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
515001-03	NAME PLATE FOR BRIDGES
542401-03	METAL FLARED END SECTION FOR PIPE CULVERTS
630001-12	STEEL PLATE BEAM GUARDRAIL
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-08	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	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
701321-17	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720006-04	SIGN PANEL ERECTION DETAILS
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

#### **GENERAL NOTES**

TREES SHALL BE PRESERVED THROUGHOUT THIS SECTION AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. GENERALLY, TREES OUTSIDE THE CLEAR ZONE, OR CONSTRUCTION LIMITS, AND WHICH DO NOT INTERFERE WITH CONSTRUCTION, SHALL NOT BE DISTURBED.

THERE ARE NO AVAILABLE WASTE SITES ON THE EXISTING RIGHT-OF-WAY WITHIN THE PROJECT LIMITS. DISPOSAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

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

ALL HOT MIX ASPHALT 2.016 TONS/CU.YD.
ALL AGGREGATE 2.05 TONS/CU.YD.
RIPRAP 1.50 TONS/CU.YD.
EARTH 110 LBS / CU. FT.

THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT AND SHOULDER SLOPES SHALL NOT EXCEED 10%. THE SHOULDER ON THE OUTSIDE OF SUPERELEVATED CURVES SHALL BE FLATTENED ACCORDINGLY.

THE THICKNESS OF HOT MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT MIX ASPHALT MIXTURE IS PLACED.

AT ALL LOCATIONS WHERE THE PROPOSED HOT MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.

TRIM EDGES OF EXISTING HOT MIX ASPHALT SURFACE FLUSH WITH EXISTING PAVEMENT PRIOR TO CONSTRUCTING NEW BASE COURSE WIDENING.

AFTER A LIFT OF HOT MIX ASPHALT HAS BEEN PLACED, THE LANE SHALL REMAIN CLOSED TO TRAFFIC UNTIL THE NEW MAT HAS COOLED TO 150 DEGREES FAHRENHEIT.

THE REMOVAL OF BROKEN CONCRETE FROM EXISTING DITCHES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

IF SO DIRECTED BY THE ENGINEER, DITCHES ADJACENT TO EMBANKMENTS SHALL BE CONSTRUCTED PRIOR TO STARTING THE CONSTRUCTION OF THE EMBANKMENT FILL.

ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC. THE TEMPORARY TRAFFIC SIGNALS SHALL BE SET TO FLASH ALL RED.

THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHOULD BE REMOVED IF A 10 FT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHOULD BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.

THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON TWO APPLICATIONS FOR THE PAVEMENT.

PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.

#### **MIXTURE REQUIREMENTS**

HOT-MIX ASPHALT SHOULDERS (TOP LIFT)
HOT-MIX ASPHALT SHOULDERS, IL-9.5L
PG 64-22
SEE SPECIAL PROVISION
4.0%, 30 GYRATION DESIGN
IL-9.5L
NONE
QC/QA

LOCATION(S):	HOT-MIX ASPHALT SHOULDERS (LOWER LIFTS)
MIXTURE USE(S):	HOT-MIX ASPHALT SHOULDERS, IL-19.0L
AC/PG:	PG 64-22
ABR% (MAX):	SEE SPECIAL PROVISION
DESIGN AIR VOIDS:	4.0%, 30 GYRATION DESIGN
MIX COMPOSITION:	IL-19.0L
(GRADATION)	
FRICTION AGGREGATE	NONE
QUALITY MGMT PROGRAM	QC/QA

LOCATION(S):	HOT-MIX ASPHALT BASE COURSE WIDENING
MIXTURE USE(S):	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70
AC/PG:	PG 64-22
ABR% (MAX):	SEE SPECIAL PROVISION
DESIGN AIR VOIDS:	4.0%, 70 GYRATION DESIGN
MIX COMPOSITION:	I L - 19 - 0mm
(GRADATION)	
FRICTION AGGREGATE	NONE
QUALITY MGMT PROGRAM	OC/QA

SCALE:

#### **COMMITMENTS:**

NONE AS OF DECEMBER 15, 2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT NINE

PREPARED BY:

DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY:

DISTRICT LAND ACQUISITION ENGINEER

EXAMINED BY:

ISTRICT PROGRAM DEVELOPMENT ENGINEER

EXAMINED BY:

DISTRICT OPERATIONS ENGINEE

EXAMINED BY:

DISTRICT PROJECT IMPLEMENTATION ENGINEER

EXAMINED BY

DISTRICT CONSTRUCTION ENGINEE

EXAMINED BY:

TO STA.

DISTRICT MATERIALS ENGINEER

MODJESKI == MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JMH	REVISED -
	DRAWN - PRC	REVISED -
PLOT SCALE =	CHECKED - JMH	REVISED -
PLOT DATE =	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGHWAY STANDARDS AND GENERAL NOTES

SHEET 1 OF 1 SHEETS STA.

				CONSTRUCTION CONST	TION CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	20% STATE BOX CULVERT 0010	20% STATE BOX CULVERT 0010
				S.N. 097-2016	S.N. 097-2017
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	28	28	0
20200100	EARTH EXCAVATION	CU YĐ	430	250	180
20700220	POROUS GRANULAR EMBANKMENT	CU YD	737	273	464
25000210	SEEDING, CLASS 2A	ACRE	0.75	0.375	0.375
25000350	SEEDING, CLASS 7.	ACRE	0.75	0.375	0.375
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	68	34	34
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	68	34	34
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	68	34	34
25000700	AGRICULTURAL GROUND LIMESTONE	TON	1.6	0.8	0.8
25100115	MULCH, METHOD 2	ACRE	1.50	0.75	0.75
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1154	865	289
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	76	38	38
28000305	TEMPORARY DITCH CHECKS	FOOT	94	84	10
28000400	PERIMETER EROSION BARRIER	FOOT	1608	787	821



USER NAME =	DESIGNED - JMH	REVISED -
•	DRAWN - PRC	REVISED -
PLOT SCALE =	CHECKED - JMH	REVISED -
PLOT DATE =	DATE - 11/20/2017	REVISED -
•		

STATE OF ILLINOIS		
DEPARTMENT OF TRANSPORTATION		

	SUMMARY OF QUANTITIES							
l	SCALE:	SHEET	1	OF	5	SHEETS	STA.	TO STA.

1	RTE.	SECTION	COUNTY	SHEETS	NO.
	877	1018-3; 101B-4	WHITE	65	3
_			CONTRAC	T NO. 78	3264
		ILLINOIS FEE	. AID PROJECT		

				TION CODE
			80% FEDERAL	
	1			20% STATE
ITEM	LINIT			0010
11 21-1	01111	QUANTITY		
,			3.N. 037-2.010	3.N. 097-2017
STONE RIPRAP, CLASS A5	SQ YD	464	221	243
FILTER FABRIC	SQ YD	464	221	243
HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	310	149	161
AGGREGATE SURFACE COURSE, TYPE A 6"	SQ YD	215	0	215
WELDED WIRE REINFORCEMENT	. SQ YD	449	203	246
PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	449	203	246
PROTECTIVE COAT	SQ YD	449	203	246
PAVEMENT REMOVAL	SQ YD	305	140	165
PAVED SHOULDER REMOVAL	SO YD	37	17	20
HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	255	125	130
HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	433	201	232
REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1	0
REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1	0	1
STRUCTURE EXCAVATION	CU YD	1340	532	808
	FILTER FABRIC  HOT-MIX ASPHALT BASE COURSE WIDENING, 10"  AGGREGATE SURFACE COURSE, TYPE A 6"  WELDED WIRE REINFORCEMENT  PORTLAND CEMENT CONCRETE PAVEMENT 10"  PROTECTIVE COAT  PAVEMENT REMOVAL  HOT-MIX ASPHALT SHOULDERS, 48"  HOT-MIX ASPHALT SHOULDERS, 10"  REMOVAL OF EXISTING STRUCTURES NO. 1	STONE RIPRAP, CLASS AS  SQ YD  FILTER FABRIC  SQ YD  HOT-MIX ASPHALT BASE COURSE WIDENING, 10°  AGGREGATE SURFACE COURSE, TYPE A 6°  SQ YD  WELDED WIRE REINFORCEMENT  PORTLAND CEMENT CONCRETE PAVEMENT 10°  PROTECTIVE COAT  PAVEMENT REMOVAL  SQ YD  HOT-MIX ASPHALT SHOULDERS, 18°  SQ YD  HOT-MIX ASPHALT SHOULDERS, 10°  REMOVAL OF EXISTING STRUCTURES NO. 1  EACH  REMOVAL OF EXISTING STRUCTURES NO. 2  EACH	STONE RIPRAP, CLASS AS  \$Q YD 464  FILTER FABRIC  \$Q YD 464  HOT-MIX ASPHALT BASE COURSE WIDENING, 10"  \$Q YD 310  AGGREGATE SURFACE COURSE, TYPE A 6"  \$Q YD 449  WELDED WIRE REINFORCEMENT  \$Q YD 449  PORTLAND CEMENT CONCRETE PAVEMENT 10"  \$Q YD 449  PROTECTIVE COAT  \$Q YD 449  PAVEMENT REMOVAL  \$Q YD 305  HOT-MIX ASPHALT SHOULDERS, 48"  \$Q YD 37  REMOVAL OF EXISTING STRUCTURES ND. 1  REMOVAL OF EXISTING STRUCTURES ND. 2  EACH 1  REMOVAL OF EXISTING STRUCTURES ND. 2	### ### ##############################

MODJESKI--MASTERS

USER NAME =	DESIGNED - JMH	REVISED -
	DRAWN - PRC	REVISED -
PLOT SCALE =	CHECKED - JMH	REVISED -
PLOT DATE =	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

	SUN	IMA	RY	OF QU	ANTII	TIES
HEET	2	QF	5	SHEETS	ŞTA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
877	101B-3; 101B-4	WHITE	65	4
		CONTRAC	T NO. 78	264
	TILINOIS CEN A	ID DDO IECT		

				CONSTRUC 80% FEDERAL	TION CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	20% STATE BOX CULVERT 0010 S.N. 097-2016	20% STATE BOX CULVERT 0010
Revision Revision				5.N. 097-2016	5.N. 097-201
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	67110	26690	40420
50800515	BAR SPLICERS	EACH	330	154	176
50900200	STEEL RAILING, TYPE 2399	FOOT	120	56	64
51500100	NAME PLATES	EACH	2	1	1
52200010	TEMPORARY SHEET PILING	SQ FT	727	727	0
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	379	0	379
54003000	CONCRETE BOX CULVERTS	CU YD	362.6	145.0	217.6
542D0229	PIPE CULVERTS, CLASS D. TYPE 1 24"	FOOT	39	0	39
54213459	END SECTIONS 24"	EACH	2	0	2
63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	250	125	125
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	8	4	4
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	8	4	4
63200310	GUARDRAIL REMOVAL	FOOT	1099	612	487
67000400	ENGINEER'S FIELD OFFICE. TYPE A	CAL MO	5	2.5	2.5
PECIALTY	ITEM				

#### \* SPECIALTY ITEM



USER NAME =	DESIGNED - JMH	REVISED -			_						F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	DRAWN - PRC	REVISED -	STATE OF ILLINOIS		5	SUMM	ARY (	OF QU	ANTITIES		877	1018-3; 101B-4	WHITE	65	5
PLOT SCALE ≈	CHECKED - JMH	REVISED -	DEPARTMENT OF TRANSPORTATION										CONTRAC	T NO. 7	3264
PLOT DATE =	DATE - 11/20/2017	REVISED -		SCALE:	SHEET	3 OF	F 5	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
CODE			TOTAL	BOX CULVERT	BOX CULVERT
NO.	ITEM	UNIT		0010	0010
			QUANTITY		S.N. 097-2017
67100100	MOBILIZATION	LSUM	1	0.5	0.5
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	2	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	0.5	0.5
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L.SUM	1	0.5	0.5
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DAY	12	6	6
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	6	6
70300100	SHORT TERM PAVEMENT MARKING	FOOT	280	136	144
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	94	46	48
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2862	1378	1484
70400100	TEMPORARY CONCRETE BARRIER	FOOT	712.5	350	362.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	687.5	325	362.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	2	2



MODJESKI-MASTERS
Experience great bridges.

USER NAME =	DESIGNED . JMH	REVISED .
	DRAWN - PRC	REVISED -
PLOT SCALE =	CHECKED - JMH	REVISED -
720100722	CHECKED - JWM	REVISED -
PLOT DATE =	DATE - 11/20/2017	DD #05D
FEOT DRIE -	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	:	SUN	ΛMA	RY	OF QU	ANTI	TIES	
LE:	SHEET	4	OF	- 5	SHEETS	STA		_

TO STA.

CONSTRUCTION CODE

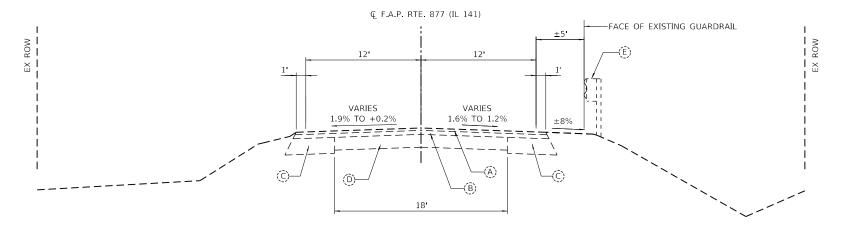
F.A.P. RTE. 877 
 COUNTY
 TOTAL SHEETS NO.

 WHITE
 65
 6

 CONTRACT NO. 78264
 SECTION 101B-3; 101B-4

					CONSTRUC 80% FEDERAL 20% STATE	TION CODE 80% FEDERAL 20% STATE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0010 S.N. 097-2016	BOX CULVERT 0010
-	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	8	4	4
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	4	4
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2862	1378	1484
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	20	10	10
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	16	8	8
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	20	10	10
*	86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	2	1	1
	X0322128	MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SQ YD	238.9	111.7	127.2
	X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	956	460	496
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DAY	28	14	14
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	956	460	496
	X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	117	54	. 63
3	Z0073500	TEMPORARY SUPPORT SYSTEM	LSUM	1	0.5	0.5
ø	20076600	TRAINEES	Hour	500	500	
			Hour			

MODJESKI and MASTERS
Experience great bridges.

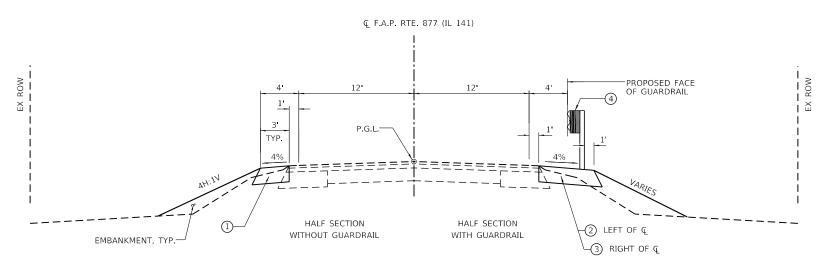


HALF SECTION WITHOUT GUARDRAIL

HALF SECTION WITH GUARDRAIL

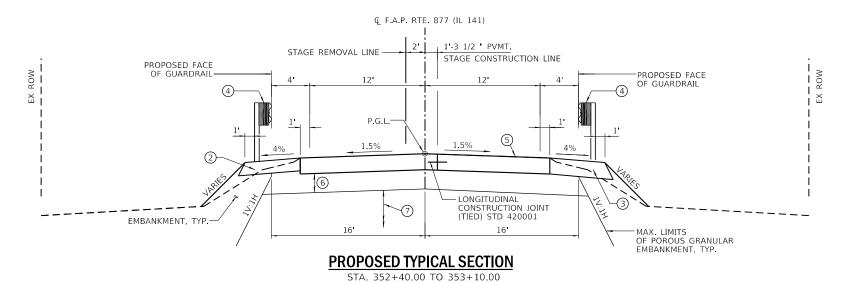
#### **EXISTING TYPICAL SECTION**

STA. 350+80.00 TO 354+80.00



#### PROPOSED TYPICAL SECTION

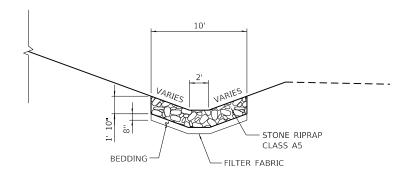
STA. 350+80.00 TO 352+40.00 STA. 353+10.00 TO 354+80.00



(SEE STRUCTURE PLANS FOR SECTION OVER CULVERT)

#### **EXISTING LEGEND**

- $\langle \widehat{\mathbf{A}} \rangle$  bituminous concrete surface course, cl. i, 1½"
- (B) BITUMINOUS CONCRETE BINDER COURSE, 2½"
- $(\hat{C})$  BASE COURSE WIDENING, 10"
- (D) CONCRETE PAVEMENT (9", 6", 9")
- (Ê) GUARDRAIL



#### **RIPRAP DITCH SECTION**

#### PROPOSED LEGEND

- 1 HOT-MIX ASPHALT BASE COURSE WIDENING, 10"
- 2 HOT-MIX ASPHALT SHOULDERS, 8"
- 3 HOT-MIX ASPHALT SHOULDERS, 10"
- 4 STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS, TRAFFIC BARRIER TERMINAL, TYPE 6A, OR TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT
- (5) PORTLAND CEMENT CONCRETE PAVEMENT 10"
  WITH WELDED WIRE REINFORCEMENT
- 6 1' MIN. CA-6 OR CA-10, QUANTITY INCLUDED IN POROUS GRANULAR EMBANKMENT
- 7 POROUS GRANULAR EMBANKMENT

#### NOTE

SEE EROSION CONTROL AND CROSS SECTION SHEETS FOR DITCH SECTION LOCATIONS, ELEVATIONS, AND VARIABLE EMBANKMENT SLOPES.

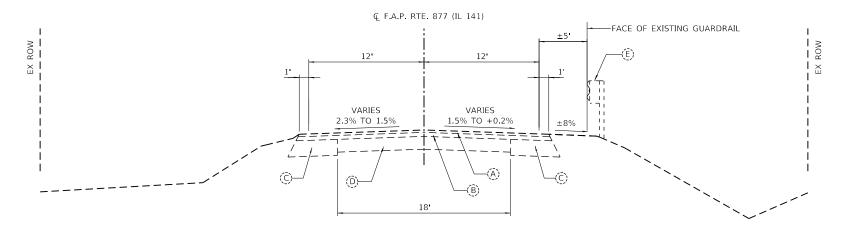


USER NAME = \$USER\$	DESIGNED - LKD/JMH	REVISED -
	DRAWN - AEC	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JMH	REVISED -
PLOT DATE = 11/20/2017	DATE _ 11/20/2017	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS STRUCTURE NO. 097-2016						
SHEET	1	OF	1	SHEETS	STA. 350+80.00	TO STA. 354+80.00

SCALE:

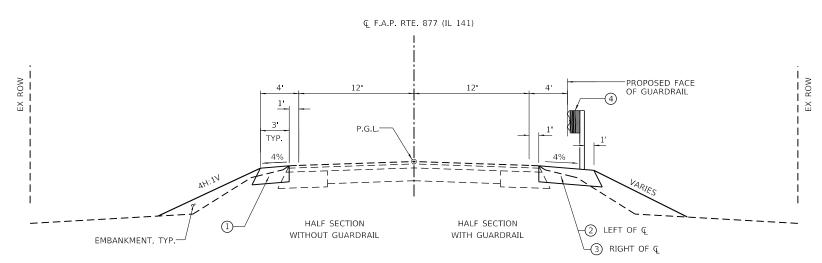


HALF SECTION WITHOUT GUARDRAIL

HALF SECTION WITH GUARDRAIL

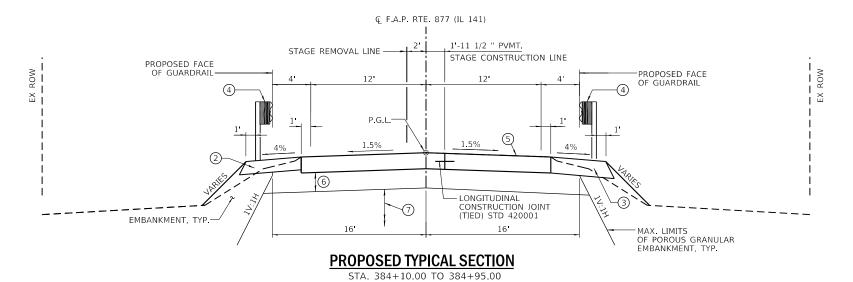
#### **EXISTING TYPICAL SECTION**

STA. 382+27.50 TO 386+57.00



#### PROPOSED TYPICAL SECTION

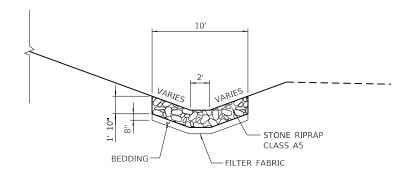
STA. 382+27.50 TO 384+10.00 STA. 384+95.00 TO 386+57.00



(SEE STRUCTURE PLANS FOR SECTION OVER CULVERT)

#### **EXISTING LEGEND**

- $\langle \widehat{\mathbf{A}} \rangle$  bituminous concrete surface course, cl. i, 1½"
- (B) BITUMINOUS CONCRETE BINDER COURSE, 2½"
- (C) BASE COURSE WIDENING, 10"
- (D) CONCRETE PAVEMENT (9", 6", 9")
- (Ê) GUARDRAIL



#### RIPRAP DITCH SECTION

#### PROPOSED LEGEND

- 1 HOT-MIX ASPHALT BASE COURSE WIDENING, 10"
- 2 HOT-MIX ASPHALT SHOULDERS, 8"
- 3 HOT-MIX ASPHALT SHOULDERS, 10"
- 4 STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS, TRAFFIC BARRIER TERMINAL, TYPE 6A, OR TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT
- (5) PORTLAND CEMENT CONCRETE PAVEMENT 10"
  WITH WELDED WIRE REINFORCEMENT
- 6 1' MIN. CA-6 OR CA-10, QUANTITY INCLUDED IN POROUS GRANULAR EMBANKMENT
- 7 POROUS GRANULAR EMBANKMENT

NOTE

SEE EROSION CONTROL AND CROSS SECTION SHEETS FOR DITCH SECTION LOCATIONS, ELEVATIONS, AND VARIABLE EMBANKMENT SLOPES.



USER NAME = \$USER\$	DESIGNED - LKD/JMH	REVISED -
	DRAWN - AEC	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JMH	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	S			AL SEC	TIONS 097-2017	
SHEET	1	OF	1	SHEETS	STA. 382+27.50	TO STA. 386+57.00

SCALE:

SEEDING SCH	EDULE									
					NITROGEN	PHOSPHORUS	POTASSIUM		AGR I CULTURAL	TEMPORARY
			SEEDING	SEEDING	FERTILIZER	FERTILIZER	FERTILIZER	MULCH	GROUND	EROSION CONTROL
			CL 2A	CL 7	NUTRIENT	NUTR I ENT	NUTR I ENT	METHOD 2	LIMESTONE	SEEDING
LOCATION	STATION	STATION	(ACRE)	(ACRE)	(POUND)	(POUND)	(POUND)	(ACRE)	(TON)	(POUND)
LEFT SIDE	350+45.00	354+90.00	0.19	0.19	17	17	17	0.38	0.4	19
RIGHT SIDE	350+45.00	354+70.00	0.19	0.19	17	17	17	0.38	0.4	19
LEFT SIDE	382+22.50	386+67.00	0.19	0.19	17	17	17	0.38	0.4	19
RIGHT SIDE	382+22.50	386+67.00	0.19	0.19	17	17	17	0.38	0.4	19
		TOTALS	0.75	0.75	68	68	68	1.50	1.6	76

ARTHWORK											
			FOR INFORMATION ONLY								
			EARTH		EARTHWORK		STRUCTURE				
			EXCAVATION		BALANCE		EXCAVATION				
		EARTH	ADJUSTED FOR		WASTE (+)	STRUCTURE	ADJUSTED FOR				
		EXCAVATION	25% SHRINKAGE	EMBANKMENT	SHORTAGE (-)	EXCAVATION	25% SHRINKAGE				
STATION	STATION	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)				
350+45.00	354+90.00	250	188	175	13						
382+22.50	386+67.00	180	135	260	-125						
352+40.00	353+10.00				399	532	399				
384+10.00	384+95.00				606	808	606				
	TOTALS	430	323		893						

						HEAVY DUTY		STONE
					PERIMETER	EROSION		DUMPED
					EROS I ON	CONTROL	FILTER	RIPRAP
					BARRIER	BLANKET	FABRIC	CLASS A5
LOCATION	STATION	OFFSET	STATION	OFFSET	(FOOT)	(SQ YD)	(SQ YD)	(SQ YD)
LEFT SIDE	350+45.00	34'	352+54.22	39 '	210		, , ,	
RIGHT SIDE	350+45.00	33 '	352+54.22	36.5	210			
LEFT SIDE	352+97.78	39'	354+90.00	28'	194			
RIGHT SIDE	352+97.78	38 '	354+70.00	29 '	173			
LEFT SIDE	351+00.00		352+60.63			329		
RIGHT SIDE	351+00.00		352+60.63			293		
LEFT SIDE	352+91.36		353+44.16			73		
RIGHT SIDE	352+91.36		354+00.00			170		
LEFT SIDE	352+40.00		353+10.00				114	114
RIGHT SIDE	352+40.00		353+10.00				107	107
LEFT SIDE	382+22.50	27 '	384+26.27	39'	210			
RIGHT SIDE	382+21.00	20 '	384+26.27	37'	231			
LEFT SIDE	384+77.73	47'	386+67.00	32 '	190			
RIGHT SIDE	384+77.73	40 '	386+67.00	34'	190			
LEFT SIDE	384+10.00		384+33.93		21			
RIGHT SIDE	384+18.00		384+33.93		9			
LEFT SIDE	384+70.07		385+50.00		166			
RIGHT SIDE	384+70.07		385+50.00		93			
LEFT SIDE	384+10.00		384+95.00				132	132
RIGHT SIDE	384+18.00		384+95.00				111	111
				TOTALS	1608	1154	464	464

DITCH CHECK	S		
			TEMPORARY
			DITCH
			CHECKS
LOCATION	STATION	OFFSET	(FOOT)
	351+00.00	32.50	12
LEFT SIDE	352+00.00	34 20	10
LEFT SIDE	352+40.00	32.30	10
	353+10.00	30.60	10
	351+40.00	33.30	10
	352+40.00	30.90	10
RIGHT SIDE	353+10.00	29 40	10
	354+10.00	29 60	12
LEFT SIDE	384+95.00	43.00	10
		TOTALS	94



USER NAME = jmhassard	DESIGNED - JMH	REVISED -
	DRAWN - PRC	REVISED -
PLOT SCALE = 2.0000 '/in.	CHECKED - RLM	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

							F.A.P. RTE	SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.
	SCF	IED	ULE	OF QU	ANTITIES	5	877	101B-3;	101B-4		WHITE	65	10
											CONTRACT	NO. 7826	64
SHEET	1	OF	4	SHEETS	STA.	TO STA.			ILLINOIS	FED AL	D PROJECT		

PAVEMENT										
				HMA BASE	AGGREGATE		PORTLAND			
			POROUS	COURSE	SURFACE	WELDED	CEMENT CONCRETE		HMA	HMA
			GRANULAR	WIDENING	COURSE	WIRE	PAVEMENT	PROTECTIVE	SHOULDERS	SHOULDERS
			EMBANKMENT	10"	TYPE A 6"	REINFORCEMENT	10"	COAT	8"	10"
LOCATION	STATION	STATION	(CU YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)
IL RTE. 141	352+45.42	353+06.52	273			, , , , = ,	, , , , , , ,	1	, , , - /	, , , , , , ,
LEFT SIDE	350+80.00	352+65.00		62						
LEFT SIDE	352+87.00	354+80.00		65						
RIGHT SIDE	353+95.69	354+60.00		22						
IL RTE. 141	352+40.00	353+10.00				203	203	203		
LEFT SIDE	351+56.31	354+58.19							125	
RIGHT SIDE	350+93.81	353+95.69								201
								_		
IL RTE. 141	384+15.09	384+88.93	464							
LEFT SIDE	382+32.00	384+38.00		69						
LEFT SIDE	384+66.00	386+57.00		64						
RIGHT SIDE	385+73.69	386+57.00		28						
RIGHT SIDE	382+35.77	382+64.26			215					
IL RTE. 141	384+10.00	384+95.00				246	246	246		
LEFT SIDE	383+30.31	386+36.19							130	
RIGHT SIDE	382+27.50	385+73.69								232
		TOTALS	737	310	215	449	449	449	255	433

TEMPORARY	PAVEMENT MA	RKING SCHEDUL	_E			
		SHORT TERM	SHORT TERM	TEMPORARY	TEMPORARY	
		PAVEMENT	PAVEMENT MARKING	PAVEMENT MARKING	PAVEMENT MARKING	REMARKS
		MARKING	REMOVAL	LINE 4"	REMOVAL	REMARKS
STATION	STATION	(FOOT)	(SQ FT)	(FOOT)	(SQ FT)	
349+39.00	356+24.20	68	23			SHORT TERM CENTER LINE
349+39.00	356+24.20	68	23			SHORT TERM CENTER LINE
350+07.00	355+89.00			582	194	SINGLE WHITE EOP LEFT SIDE
349+39.00	356+24.20			180	60	SKIP-DASH YELLOW CENTER LINE
349+49.00	355+64.20			616	206	SINGLE WHITE EOP RIGHT SIDE
381+02.50	388+36.50	72	24			SHORT TERM CENTER LINE
381+02.50	388+36.50	72	24			SHORT TERM CENTER LINE
381+62.50	388+26.50			664	222	SINGLE WHITE EOP LEFT SIDE
381+02.50	388+36.50			190	64	SKIP-DASH YELLOW CENTER LINE
381+12.50	387+41.90			630	210	SINGLE WHITE EOP RIGHT SIDE
	TOTALS	280	94	2862	956	

PAINT PAVEME	NT MARKING SC	HEDULE				
		PAVEMENT	PAINT	RAISED	RAISED	
		MARKING	PAVEMENT	REFLECTIVE	REFLECTIVE	
		REMOVAL	MARKING	PAV MARKER	PAVEMENT	REMARKS
		GRINDING	LINE 4"	REMOVAL	MARKER	THE PARTY OF
STATION	STATION	(SQ FT)	(FOOT)	(EACH)	(EACH)	
350+07.00	355+89.00	194	582			SINGLE WHITE EOP LEFT SIDE
349+39.00	356+24.20	60	180	10	10	SKIP-DASH YELLOW CENTER LINE
349+49.00	355+64.20	206	616			SINGLE WHITE EOP RIGHT SIDE
381+62.50	388+26.50	222	664			SINGLE WHITE EOP LEFT SIDE
381+02.50	388+36.50	64	190	10	10	SKIP-DASH YELLOW CENTER LINE
381+12.50	387+41.90	210	630			SINGLE WHITE EOP RIGHT SIDE
	TOTALS	956	2862	20	20	

PAVEMENT RE	EMOVALS			
			PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL
LOCATION			(SQ YD)	(SQ YD)
IL RTE. 141	352+40.00	352+65.00	73	
IL RTE. 141	352+87.00	353+10.00	67	
LEFT SIDE	352+40.00	352+65.00		9
LEFT SIDE	352+87.00	353+10.00		8
IL RTE. 141	384+10.00	384+38.00	81	
IL RTE. 141	384+66.00	384+95.00	84	
LEFT SIDE	384+10.00	384+38.00		10
LEFT SIDE	384+66.00	384+95.00		10
		TOTALS	305	37

MODJESKI and MASTERS Experience great bridges.
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Ī	USER NAME = \$USER\$	DESIGNED - JMH	REVISED -
		DRAWN - PRC	REVISED -
	PLOT SCALE = \$SCALE\$	CHECKED - RLM	REVISED -
	PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	F.A.P. RTE	SEC-	Γ <b>Ι</b> ΟΝ		COUNTY	TOTAL SHEETS	
SCHEDULE OF QUANTITIES	877	101B-3;	101B <b>-</b> 4		WHITE	65	11
					CONTRACT	NO. 7826	34
SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.			ILLINOIS	FED. All	D PROJECT		

									TERMINAL	
					STEEL PLATE BEAM GUARDRAIL	TRAFFIC BARRIER TERMINAL	TRAFFIC BARRIER TERMINAL, TYPE 1	GUARDRA I L REMOVAL	MARKER DIRECT	GUARDRAII MARKER
	T I		T T		TYPE A, 9' POSTS	TYPE 6A	(SPECIAL) TANGENT		APPLIED	TYPE A
LOCATION	STATION	OFFSET	STATION	OFFSET	(FOOT)	(EACH)	(EACH)	(FOOT)	(EACH)	(EACH)
IGHT SIDE	351+61.81		352+24.31		62.5					
	353+27.69		353+90.19		62.5					
EFT SIDE	352+24.31		352+64.00			1				
	352+88.00		353+27.69			1				
	352+24.31		352+64.00			1				
IGHT SIDE	352+88.00		353+27.69			1				
	351+11.81		351+61.81				1			
	353+27.69		353+77.69				1			
EFT SIDE	351+74.31		352+24.31				1			
	353+90.19		354+40.19				1			
RIGHT SIDE	351+12.00	17.57	352+64.81	17.50				153		
	352+87.02	17.65	354+40.11	17.51				153		
LEFT SIDE	351+12.47	17.86	352+64.50	17.60				153		
LLII JIDL	352+87.45	17.61	354+39.46	18.14				153		
IGHT SIDE	351+11.81								1	
IGHT SIDE	353+77.69								1	
LEFT SIDE	351+74.31								1	
LEFT SIDE	354+40.19								1	
RIGHT SIDE	351+11.81		353+77.69							4
LEFT SIDE	351+74.31		354+40.19							4
TOUT CIRE			202:00 21		62.5					T
RIGHT SIDE			383+98.31		62.5					
LEFT SIDE	385+05.69		385+68.19		62.5					
LEFT SIDE	383+98.31		384+38.00			1				
	384+66.00		385+05.69			1				
	383+98.31		384+38.00			1				
RIGHT SIDE	384+66.00		385+05.69			1	1			
	382+85.81		383+35.81				1			
	385+05.69		385+55.69				1			
	383+48.31		383+98.31				1			
LEFT SIDE	385+68.19	16.00	386+18.19	16.00			1	1.50		
	382+85.23	16.00	384+37.38	16.00				153		
	384+66.26	17.47	386+18.80	17.74				153		
	384+23.86	37.64	384+37.86	17.29				28		
IGHT SIDE	384+66.31	17.53	386+18.75	18.16				153	1	
	382+85.81								1	
	385+55.69								1	
LEFT SIDE	383+48.31								1	
	386+18.19		<u> </u>						1	
RIGHT SIDE			385+55.69							4
LEFT SIDE	383+48.31		386+18.19							4
				TOTALS	250	8	8	1099	8	16



USER NAME = \$USER\$	DESIGNED - JMH	REVISED -
	DRAWN - PRC	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - RLM	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

								F.A.P. RTE.	SECTION			COUNTY	TOTAL SHEETS	
SCHEDULE OF QUANTITIES						877	101B-3;101B-4		WHITE	65	12			
										CONTRACT	NO. 7826	64		
	SHEET	3	OF	4	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		

SIGN PANEL	REMOVAL		
			REMOVE
			SIGN PANEL
			ASSEMBLY
			TYPE A
LOCATION	CTATION	OFFCET	(EACH)
LOCATION	STATION	OFFSET	, , ,
RIGHT SIDE	352+08.00	18.9	1
RIGHT SIDE	352+42.00	18.1	1
LEFT SIDE	353+06.00	18.2	1
LEFT SIDE	353+36.00	20.1	1
RIGHT SIDE	384+31.00	22.0'	1
RIGHT SIDE	384+33.00	18.7	1
LEFT SIDE	384+83.00	18.2'	1
LEFT SIDE	384+86.00	19.7	1
		TOTAL	8

TREE REMOVA	L		
			TREE REMOVAL (OVER 15 UNITS
	LOCATION		DIAMETER)
ROUTE	STATION	OFFSET	(UNIT)
IL RTE. 141	352+66.23	31.40' LT.	28
		TOTAL	28

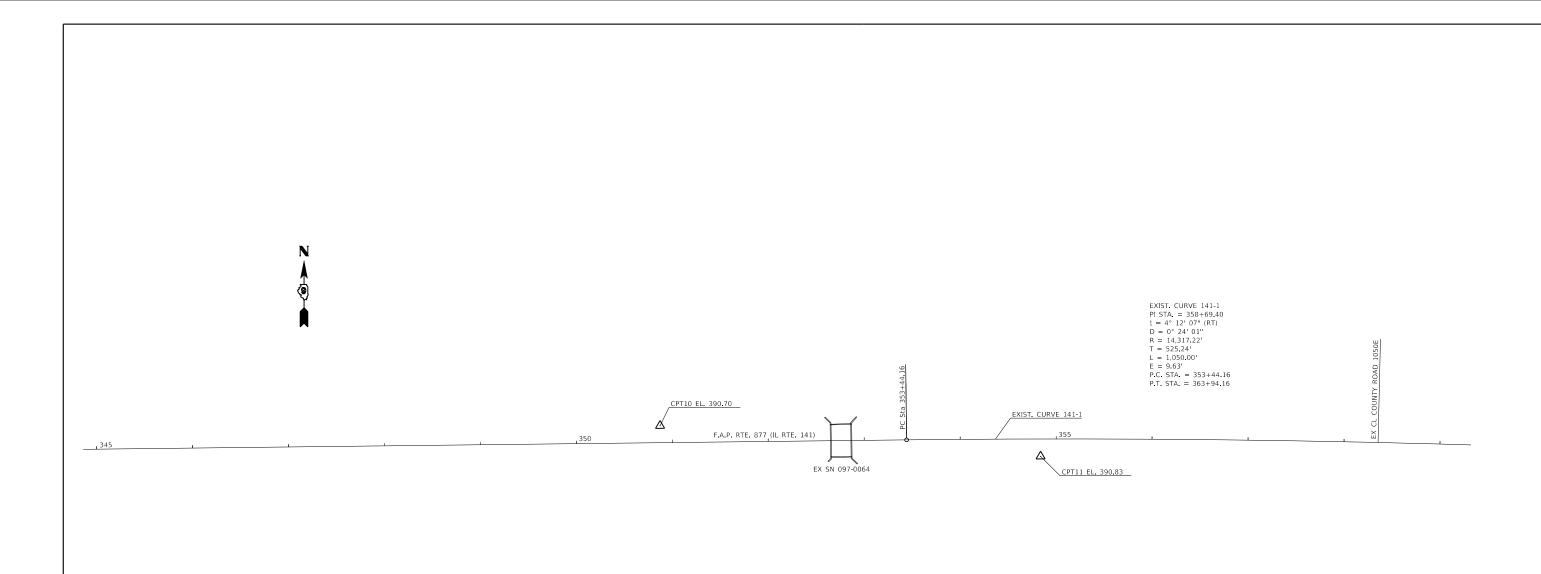
DRAINAGE S	STRUCTURE S	SCHEDULE					
						PIPE CULVERTS	END
						CLASS D	SECTIONS
			TYPE 1, 24"	24"			
ROUTE	STATION	OFFSET	STATION	OFFSET	NOTE	(FOOT)	(EACH)
IL RTE. 141	382+30.50	80' RT	382+69.50	80 RT	PR FIELD ENTRANCE	39	2
					TOTAL	39	2

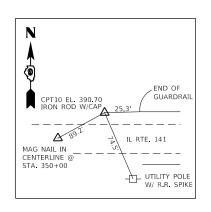


USER NAME = \$USER\$	DESIGNED - JMH	REVISED -	
	DRAWN - PRC	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED - RLM	REVISED -	
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

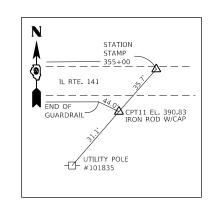
		F.A.P. RTE	SECTION	COUNTY		SHEET NO.
	SCHEDULE OF QUANTITIES	877	101B-3;101B-4	WHITE	65	13
				CONTRACT	NO. 78264	,
SCALE:	SHEET 4 OF 4 SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT		





## **CONTROL POINT #10** STA. 350+87.44, 17.70 LT. N=452053.6050 E=1027284.0860

ELEV=390.70



CONTROL POINT #11

STA. 354+83.77, 18.14 RT.
N=452021.6610
E=1027680.6340 ELEV=390.83

MODIESVI MASTERS
MODJESKI MASTERS
Experience great bridges.

USER NAME = \$USER\$	DESIGNED - JMH	REVISED -
	DRAWN - AEC	REVISED -
PLOT SCALE =	CHECKED - JMH	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

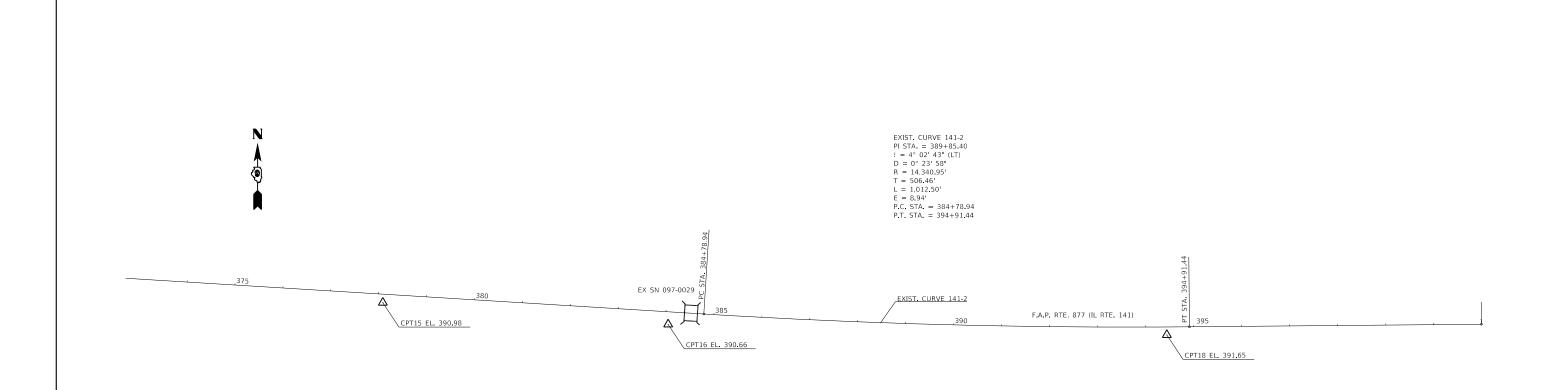
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

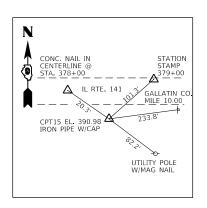
			,			BENCH 097-20:	MARKS 16
SCALE: N.T.S.	SHEET	1	OF	1	SHEETS	STA.	TO STA.

**BENCHMARK:** 

BM 108 - CHISELED SQUARE IN SOUTHWEST WINGWALL OF SN 097-0064, ELEV. 391.31

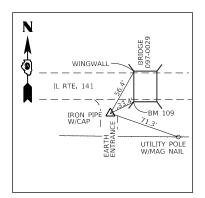
F.A.P. RTE	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
877	101B-3			WHITE	65	14
				CONTRACT	NO. 7826	64
		ILLINOIS	FED Δ	D PROJECT		





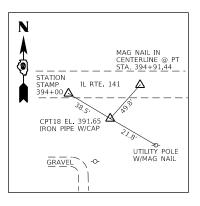
### **CONTROL POINT #15**

STA. 378+09.80, 17.78 RT. N=451907.5060 E=1029999.3780 ELEV=390.98



### **CONTROL POINT #16**

STA. 384+06.12, 28.24' RT. N=451860.2360 E=1030593.9160 ELEV=390.66



STA. 394+44.30, 16.46' RT. N=451840.3150 E=1031633.2320

### **CONTROL POINT #18**

ELEV=391.65

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--

USER NAME = \$USER\$	DESIGNED - JMH	REVISED -	
	DRAWN - AEC	REVISED -	
PLOT SCALE =	CHECKED - JMH	REVISED -	
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

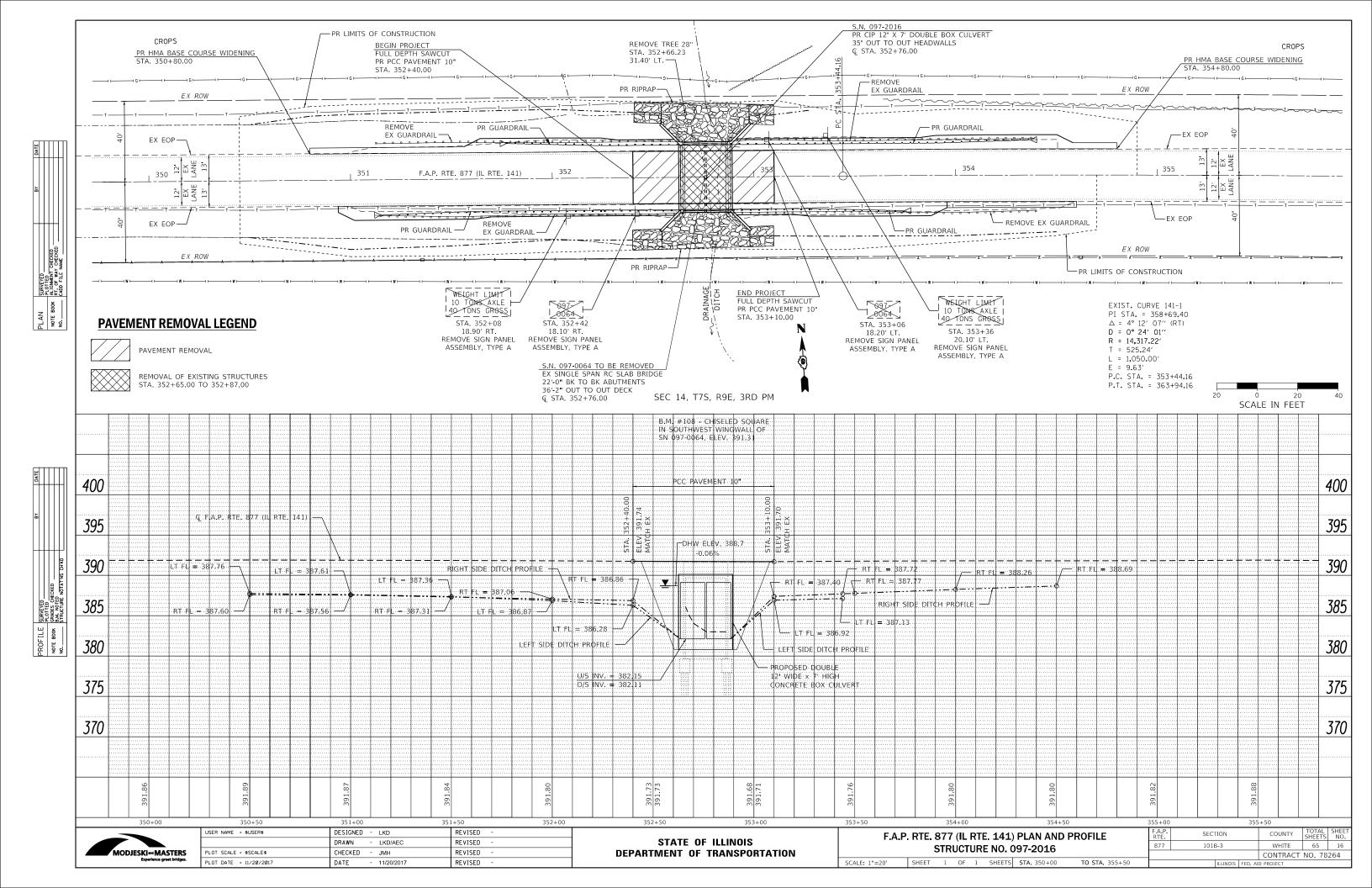
			,		S AND RE NO.		HMARKS )17
SCALE: N.T.S.	SHEET	1	OF	1	SHEETS	STA.	TO STA.

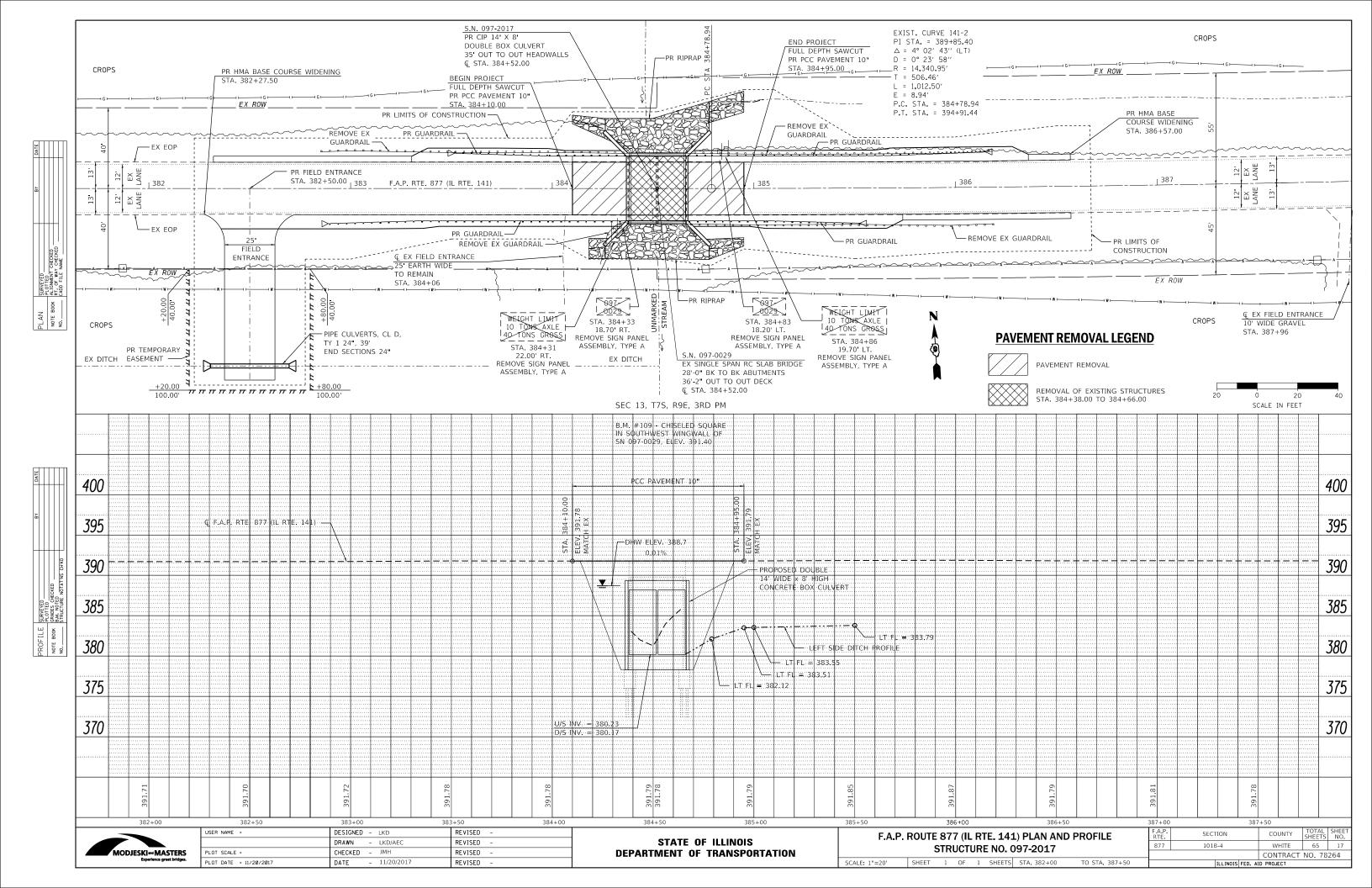
**BENCHMARK:** 

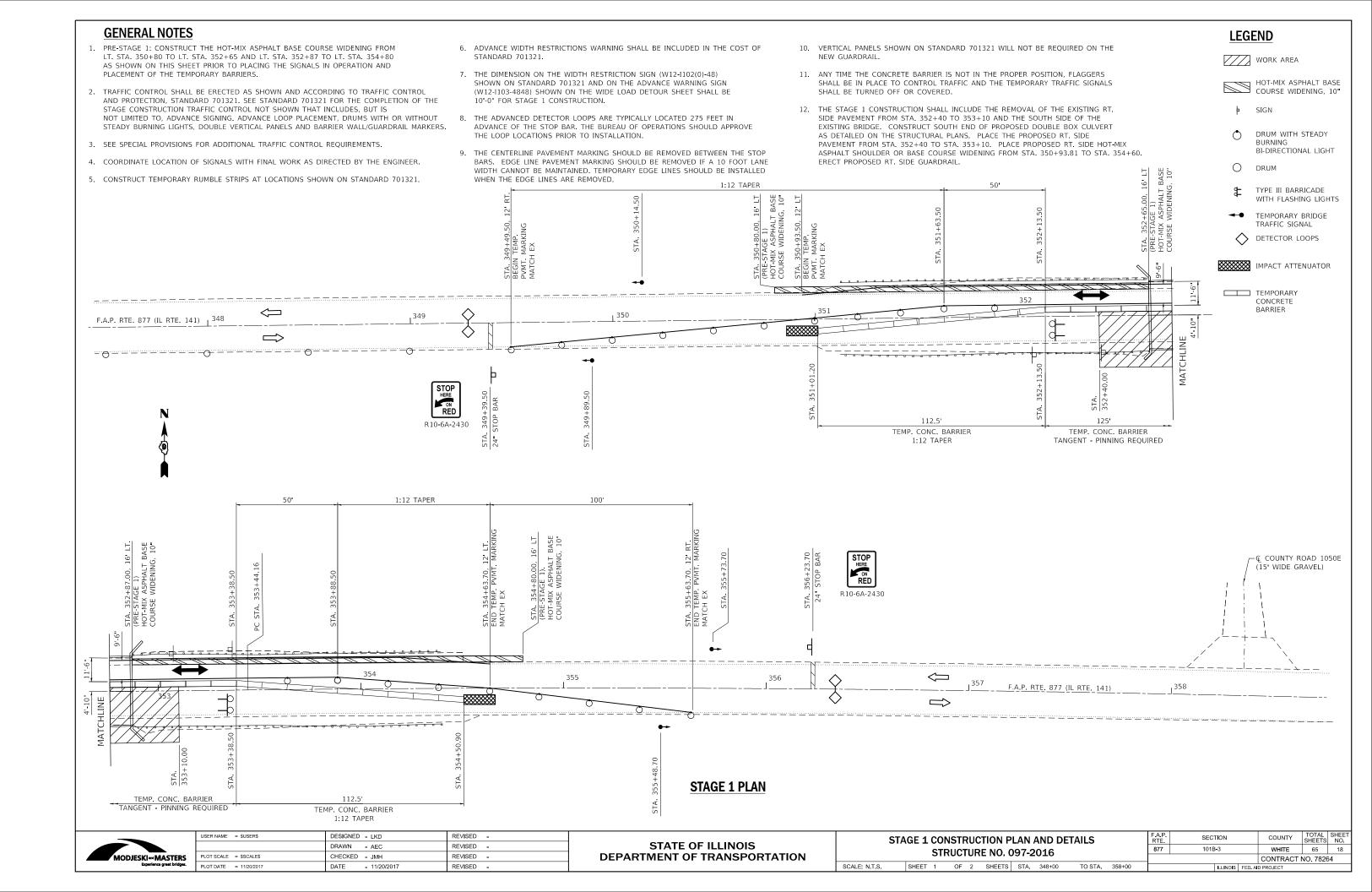
BM 109 - CHISELED SQUARE IN SOUTHWEST WINGWALL OF

SN 097-0029, ELEV. 391.40.

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.	
877	101B-4	WHITE	65	15	
		CONTRACT	NO. 7826	64	
	ILLINO	S FED. A	ID PROJECT		







# **GENERAL NOTES** 1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO TRAFFIC CONTROL AND PROTECTION, STANDARD 701321. SEE STANDARD 701321 FOR THE COMPLETION OF THE STAGE CONSTRUCTION TRAFFIC CONTROL NOT SHOWN THAT INCLUDES, BUT IS NOT LIMITED TO, ADVANCE SIGNING. ADVANCE LOOP PLACEMENT, DRUMS WITH OR WITHOUT STEADY BURNING LIGHTS, DOUBLE VERTICAL PANELS AND BARRIER WALL/GUARDRAIL MARKERS. 2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS. 3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE 4. CONSTRUCT TEMPORARY RUMBLE STRIPS AT LOCATIONS SHOWN ON 5. ADVANCE WIDTH RESTRICTIONS WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321. F.A.P. RTE. 877 (IL RTE. 141)

USER NAME = \$USER\$

LOT SCALE = \$SCALE\$

MODJESKI....MASTERS

DESIGNED - LKD

DRAWN - AEC

CHECKED - JMH

- 11/20/2017

DATE

REVISED -

REVISED -

REVISED -

REVISED -

- 6. THE DIMENSION ON THE WIDTH RESTRICTION SIGN (W12-I102(0)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-I103-4848) SHOWN ON THE WIDE LOAD DETOUR SHEET SHALL BE 10'-2" FOR STAGE 2 CONSTRUCTION (DUE TO THE STAGE 2 LANE WIDTH FOR SN 097-2017).
- 7. THE ADVANCED 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 SHOULD BE REMOVED BETWEEN THE STOP BARS. EDGE LINE PAVEMENT MARKING SHOULD BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHOULD BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
- 9. VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE NEW GUARDRAIL.

STOP HERE ON RED

R10-6A-2430

- 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
- 11. THE STAGE 2 CONSTRUCTION SHALL INCLUDE THE REMOVAL OF THE EXISTING LT. SIDE PAVEMENT FROM STA. 352+40 TO 353+10 AND THE NORTH SIDE OF EXISTING BRIDGE. CONSTRUCT NORTH END OF PROPOSED DOUBLE BOX CULVERT AS DETAILED ON THE STRUCTURAL PLANS. PLACE THE PROPOSED LT. SIDE PAVEMENT FROM STA. 352+40 TO STA. 353+10. PLACE PROPOSED LT. SIDE HOT-MIX ASPHALT SHOULDER FROM STA. 351+56.31 TO STA. 354+58.19. ERECT PROPOSED LT. SIDE GUARDRAIL.

. . . . . . . . . . . . . . . . . .

STAGE 2 CONSTRUCTION PLAN AND DETAILS

**STRUCTURE NO. 097-2016** 

SHEET 2 OF 2 SHEETS STA. 348+00

100

TEMP. CONC. BARRIER

1:12 TAPER

1:12 TAPER

SCALE: N.T.S.

WORK AREA

125

TEMP. CONC. BARRIER

TANGENT - PINNING REQUIRED

**LEGEND** 

HOT-MIX ASPHALT BASE COURSE WIDENING, 10"

DRUM WITH STEADY BI-DIRECTIONAL LIGHT

TYPE III BARRICADE WITH FLASHING LIGHTS

TEMPORARY BRIDGE TRAFFIC SIGNAL

DETECTOR LOOPS

IMPACT ATTENUATOR

TEMPORARY CONCRETE BARRIER

SECTION

101B-3

877

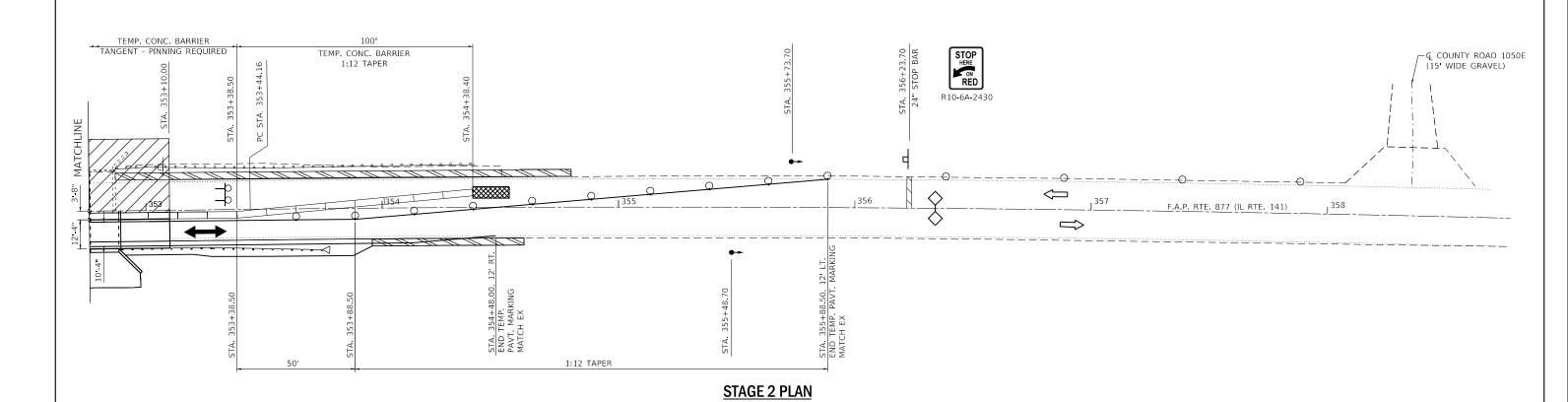
TO STA. 358+00

COUNTY

WHITE

CONTRACT NO. 78264

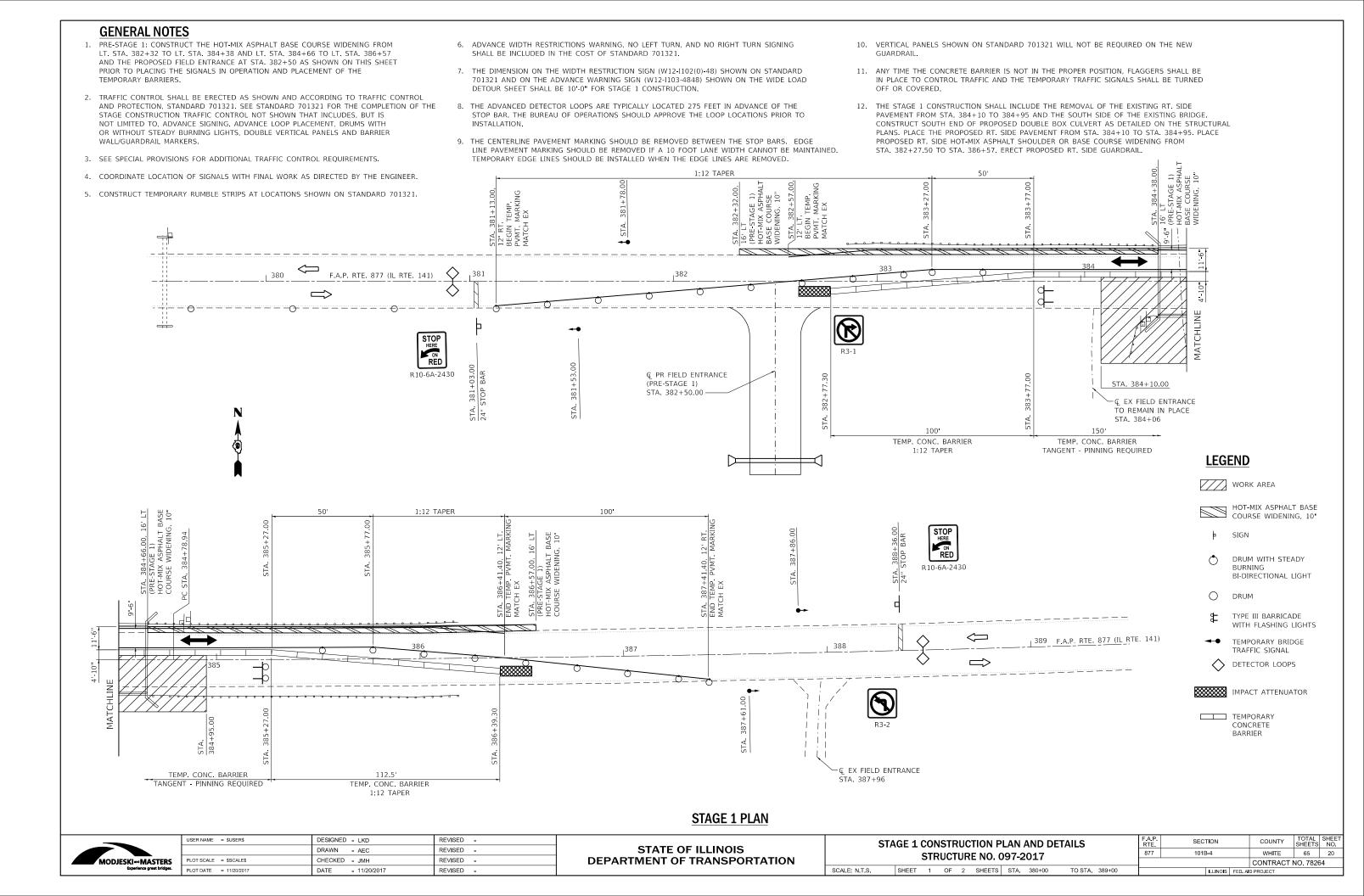
65 19



**STATE OF ILLINOIS** 

**DEPARTMENT OF TRANSPORTATION** 

100'



#### **GENERAL NOTES**

- I. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO TRAFFIC CONTROL AND PROTECTION, STANDARD 701321. SEE STANDARD 701321 FOR THE COMPLETION OF THE STAGE CONSTRUCTION TRAFFIC CONTROL NOT SHOWN THAT INCLUDES, BUT IS NOT LIMITED TO, ADVANCE SIGNING. ADVANCE LOOP PLACEMENT, DRUMS WITH OR WITHOUT STEADY BURNING LIGHTS, DOUBLE VERTICAL PANELS AND BARRIER WALL/GUARDRAIL MARKERS.
- 2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

JSER NAME = \$USER\$

LOT SCALE = \$SCALE\$

MODJESKI and MASTERS

DESIGNED - LKD

DRAWN - AEC

CHECKED - JMH

- 11/20/2017

DATE

REVISED -

REVISED -

REVISED -

REVISED -

- 3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
- 4. CONSTRUCT TEMPORARY RUMBLE STRIPS AT LOCATIONS SHOWN ON STANDARD 701321.
- ADVANCE WIDTH RESTRICTIONS WARNING, NO LEFT TURN, AND NO RIGHT TURN SIGNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321.
- 6. THE DIMENSION ON THE WIDTH RESTRICTION SIGN (W12-I102(0)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-I103-4848) SHOWN ON THE WIDE LOAD DETOUR SHEET SHALL BE 10'-2" FOR STAGE 2 CONSTRUCTION.
- 7. THE ADVANCED 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 SHOULD BE REMOVED BETWEEN THE STOP BARS. EDGE LINE PAVEMENT MARKING SHOULD BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHOULD BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
- VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE NEW GUARDRAIL.
- 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.

STAGE 2 CONSTRUCTION PLAN AND DETAILS

**STRUCTURE NO. 097-2017** 

TO STA. 389+00

SHEET 2 OF 2 SHEETS STA. 380+00

SCALE: N.T.S.

11. THE STAGE 2 CONSTRUCTION SHALL INCLUDE THE REMOVAL OF THE EXISTING LT. SIDE PAVEMENT FROM STA. 384+10 TO 384+95 AND THE NORTH SIDE OF THE EXISTING BRIDGE. CONSTRUCT NORTH END OF PROPOSED DOUBLE BOX CULVERT AS DETAILED ON THE STRUCTURAL PLANS. PLACE THE PROPOSED LT. SIDE PAVEMENT FROM STA. 384+10 TO STA. 384+95. PLACE PROPOSED LT. SIDE HOT-MIX ASPHALT SHOULDER FROM STA. 382+30.31 TO STA. 386+36.19. ERECT PROPOSED LT. SIDE GUARDRAIL.

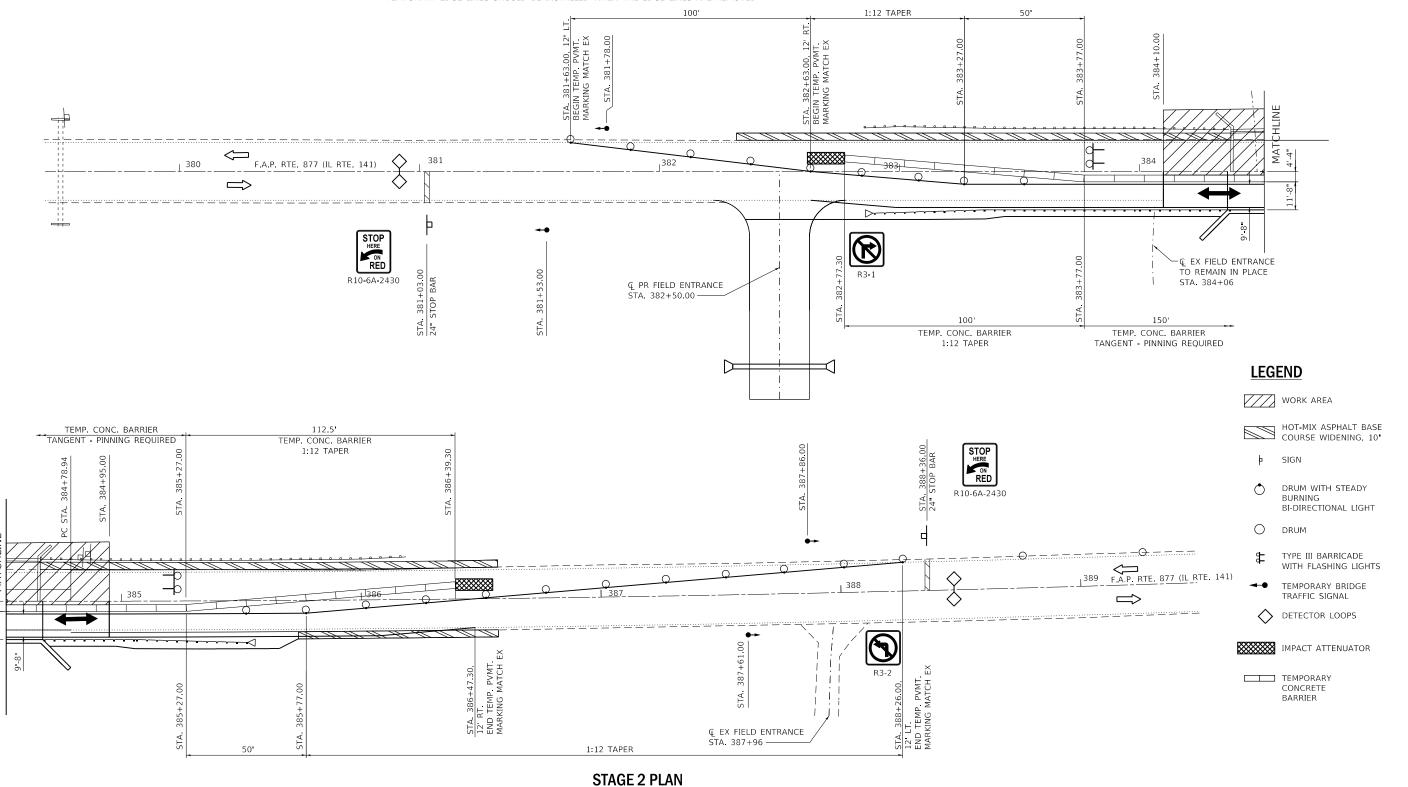
SECTION

101B-4

WHITE

CONTRACT NO. 78264

65 21



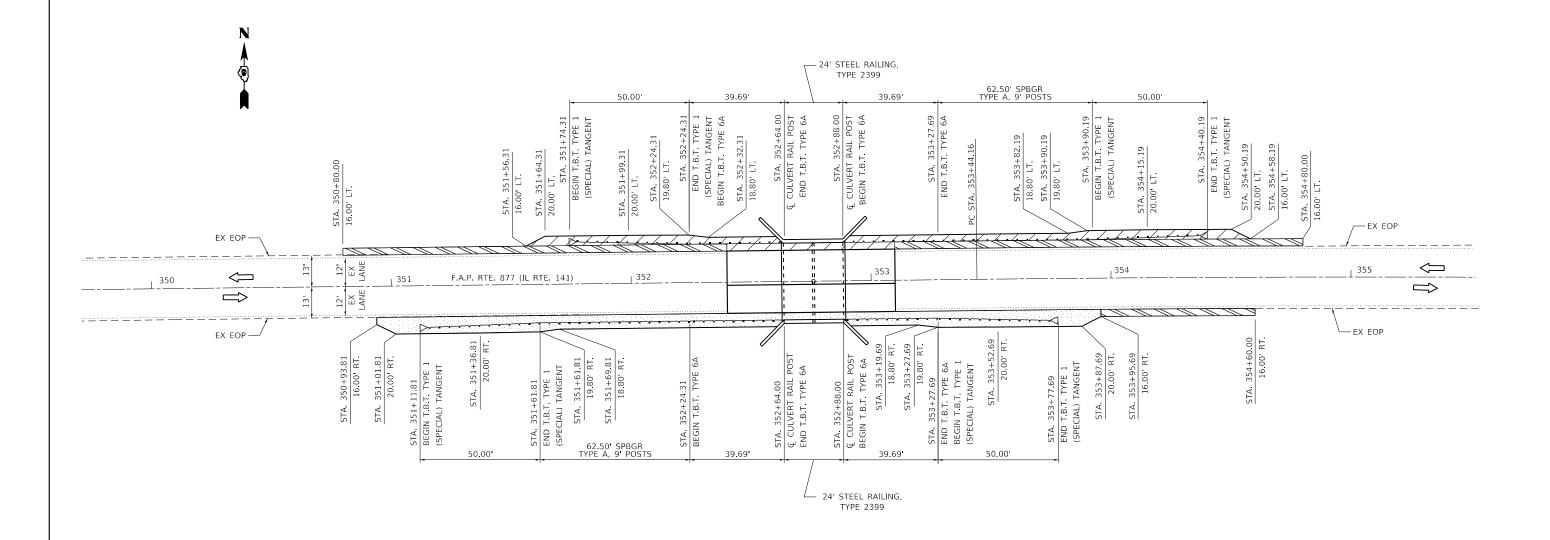
**STATE OF ILLINOIS** 

**DEPARTMENT OF TRANSPORTATION** 

# **SHOULDER LEGEND** HOT-MIX ASPHALT BASE COURSE WIDENING, 10"

HOT-MIX ASPHALT SHOULDERS, 8"

HOT-MIX ASPHALT SHOULDERS, 10"





MODJESKI and MASTERS Experience great bridges.
--

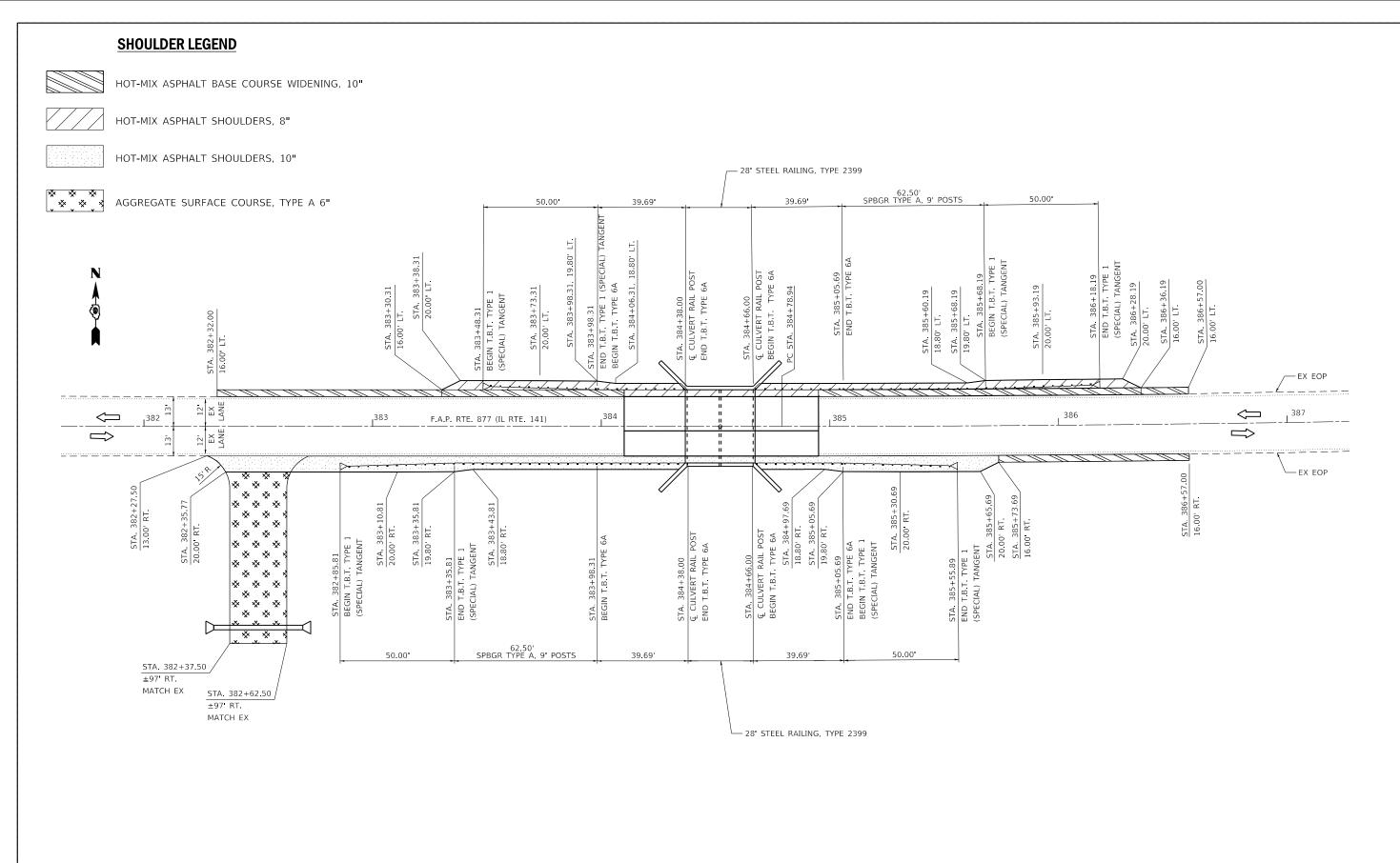
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	DRAWN - LKD	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - CJL/JMH	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1" = 20'

GUARDRAIL AND SHOULDER LAYOUT										SEC	TION		
STRUCTURE NO. 097-2016									877	877 101B-3			
	,,,,	oo.	UIV	L 140. C	/J I -2	2010							
SHEET	1	OF	1	SHEETS	STA	350+80 00	TO STA	354+80.00			III INOIS	Teer	

	F.A.P. RTE	SEC.	TION	COUNTY	TOTAL SHEETS	SHEET NO.		
	877	101B-3			WHITE	65	22	
				CONTRACT NO. 78264				
30.00			ILLINOIS	D PROJECT				





MODJESKI ∞ MASTERS	
Experience great bridges	

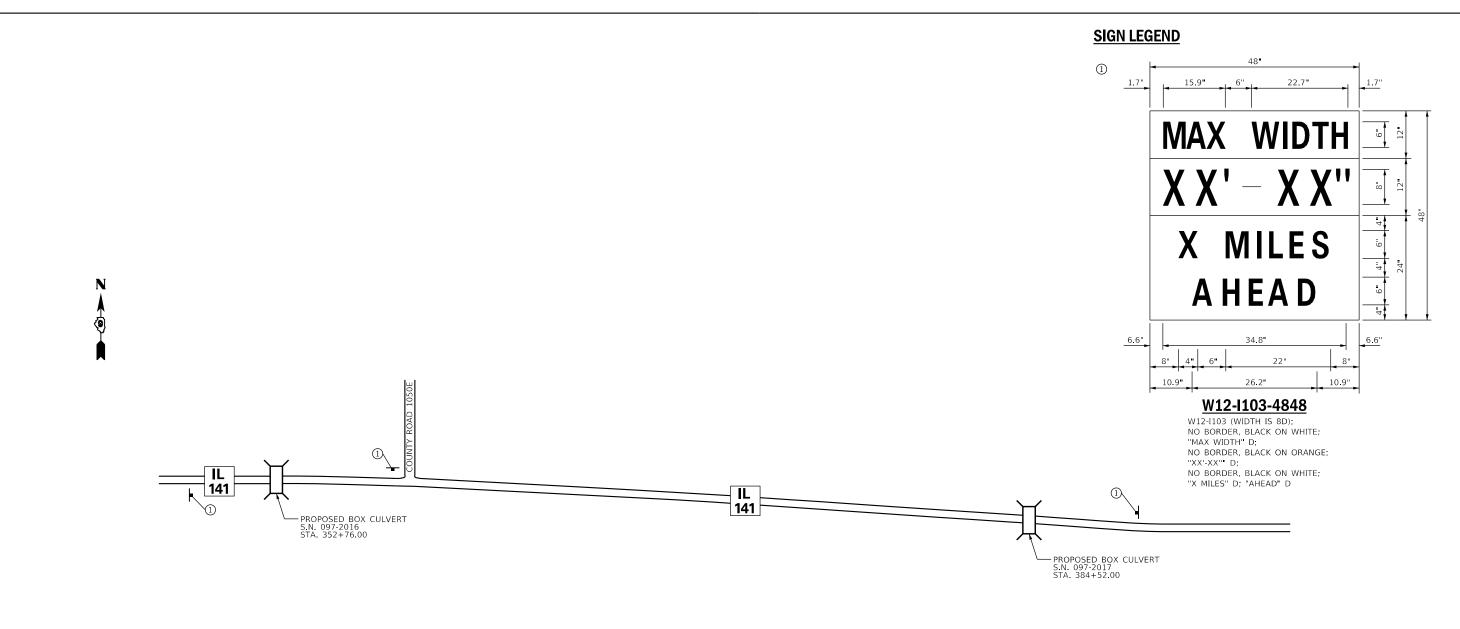
USER NAME = \$USER\$	DESIGNED - JMH/LKD	REVISED -
	DRAWN - LKD	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - CJL/JMH	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1" = 20'

GUAR	F.A.P. RTE									
STRUCTURE NO. 097-2017										
	J 111		011	_ 110. 0	) J I Z	<u> </u>				
SHEET	1	OF	1	SHEETS	STA.	382+27.50	TO STA.	386+57.00		

F.A.P. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEE NO.		
877	101E	3-4		WHITE	65	23		
				CONTRACT NO. 78264				
		ID PROJECT						



#### WIDE LOAD DETOUR SIGNING PLAN

#### NOTES:

- THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATIONS AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE POST MOUNTED.
- THE ABOVE NOTED WORK, INCLUDING SIGNS, POSTS, HARDWARE AND LABOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR TRAFFIC CONTROL AND PROTECTION, STD 701321 AND NO OTHER COMPENSATION WILL BE ALLOWED.
- 3. THE WIDTH SHOWN ON THE W12-I103 SIGN SHALL BE 10'-0" FOR STAGE I AND 10'-2" FOR STAGE II OR AS DIRECTED BY THE ENGINEER. THE "X" MILES AHEAD WILL BE DETERMINED BY THE ENGINEER.



	USER NAME = \$USER\$	DESIGNED - JMH	REVISED -					F.A.P.	SECTION	COUNTY	TOTAL S	SHEET
		DRAWN - AEC	REVISED -	STATE OF ILLINOIS		WIDE LOAD DETOUR	877	101B-3:101B-4	WHITE	65	24	
ΓERS	PLOT SCALE =	CHECKED - JMH	REVISED -	DEPARTMENT OF TRANSPORTATION				CONTRACT NO. 7826			4	
bridges.	PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -		SCALE: N.T.S.	SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FEE	. AID PROJECT		_



PERIMETER EROSION BARRIER



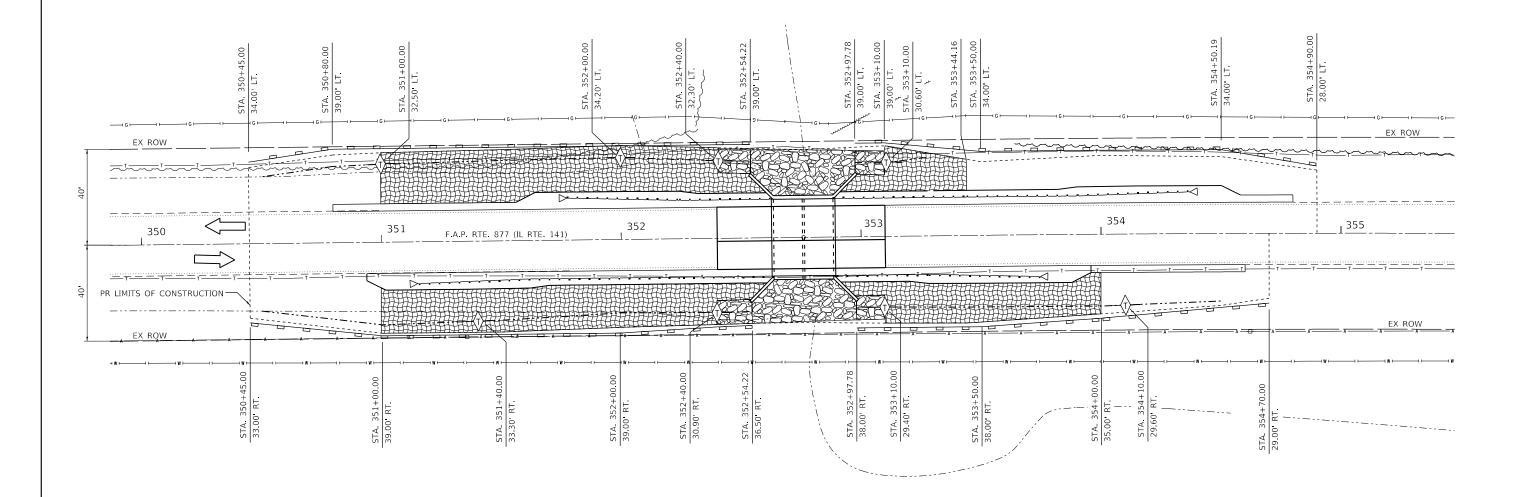
STONE RIPRAP, CLASS A5 WITH FILTER FABRIC



HEAVY DUTY EROSION CONTROL BLANKET



TEMPORARY DITCH CHECK





MODJESKI and MASTERS Experience great bridges.
--

USER NAME = \$USER\$	DESIGNED - LKD	REVISED -	
	DRAWN - AEC	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED - JMH	REVISED -	
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -	
			_

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'

	EROSION AND SEDIMENT CONTROL							F.A.P. RTE	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
STRUCTURE NO. 097-2016							877	877 101B-3			WHITE	65	25		
	31K0C10KE NO. 031-2010												CONTRACT	NO. 7826	64
	SHEET	1	OF	1 SHEETS	STA.	350+00	TO STA.	355+00	ILLINOIS FED. AID PROJECT						



PERIMETER EROSION BARRIER

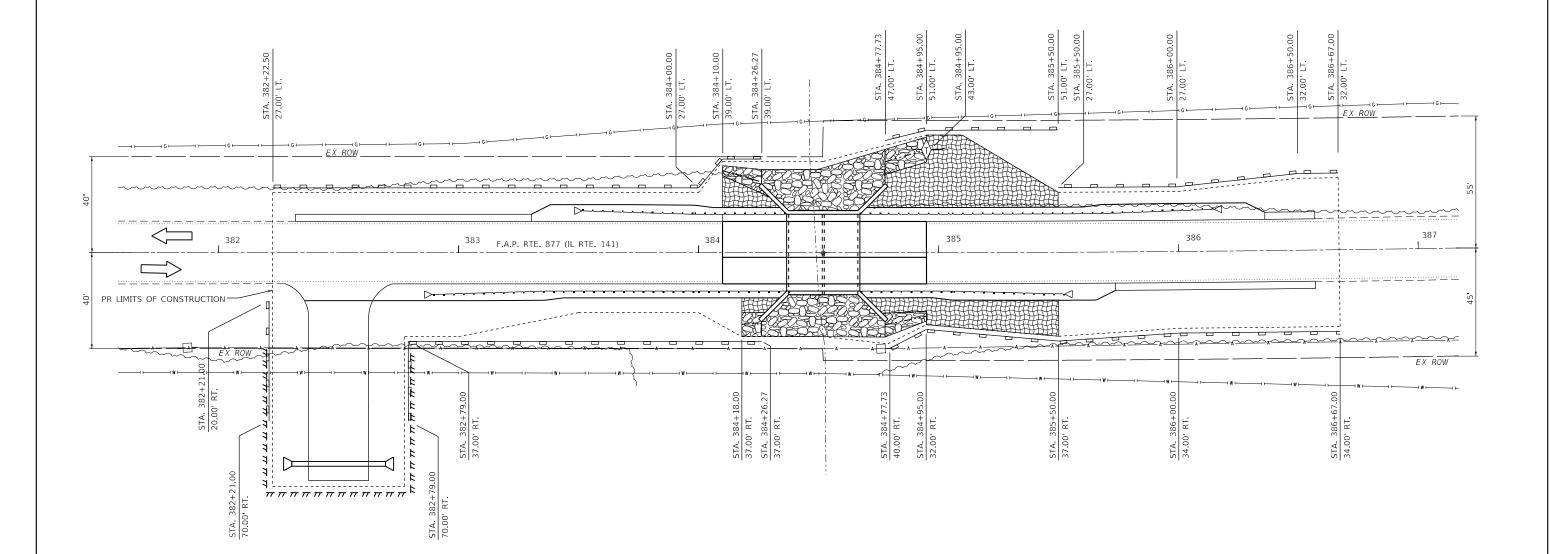
STONE RIPRAP, CLASS A5 WITH FILTER FABRIC



HEAVY DUTY EROSION CONTROL BLANKET



TEMPORARY DITCH CHECK





MODJESKI and MASTERS Experience great bridges.

USER NAME = \$USER\$	DESIGNED - LKD	REVISED -
	DRAWN - AEC	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JMH	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS			
DEPARTMENT OF TRANSPORTATION			

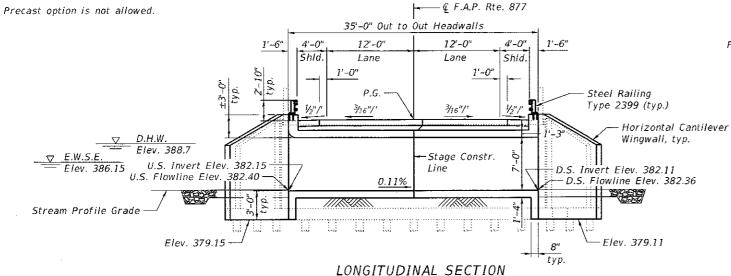
EROSION AND SEDIMENT CONTROL						F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEE NO.						
STRUCTURE NO. 097-2017					877	1018	3-4		WHITE	65	26					
		3111	.001	UIN	L 140. C	JJ1-2	.017							CONTRACT	NO. 7826	34
SCALE: 1"=20'	SHEET	1	OF	1	SHEETS	STA.	382+00	TO STA.	387+00			ILLINOIS	FED. A	ID PROJECT		

Bench Mark: BM 108 - Chiseled square in southwest wingwall of SN 097-0064, Elev. 391.31.

Existing Structure: SN 097-0064 was originally built in 1933 as SBI Route 141 (Section A-101) and resurfaced in 1970 as SBI Route 141 (Section 101W, RS). The existing structure is a 22 foot (back to back abutments) single span reinforced concrete slab bridge. The substructure consists of closed abutments founded on footings on timber piles. The deck measures 32'-8" between curbs and the overall out to out width of the bridge is 36'-2". The existing superstructure and abutment walls are to be removed. The existing foundation is to remain in place except as noted.

Traffic to be maintained utilizing stage construction.

No salvage.



(Looking Upstation)

Temporary Sheet Piling, typ.

V:H

1'-0"

typ

V:H

Flow

-Name Plate

APPROVED

For Structural Adequacy Only

Engineer of Bridges & Strectures

Boring 1-5

4'-0"

Shld.

12'-0"

Lane

r⊈ Structuré

Elev. 391.72

-Stage Constr. Line

2'-0"

35'-0" Out to Out Headwalls

<u>PLAN</u>

Stage I Constr.

17'-6"

Sta. 352+76,00

Sta.

12'-0"

Lane

& F.A.P. Route 877

4'-0"

Shld

1'-6"

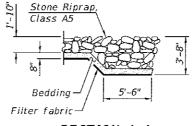
typ.

40'-0"

\*15'-0" min.

typ.

Temporary Support System

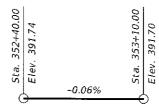


#### SECTION A-A

\* See Roadway Plans for riprap layout and payment

#### LEGEND

Partial Removal of Existing Foundation



PROFILE GRADE
(Along & Roadway)

STATION 352+76.00
BUILT 20\_\_ BY
STATE OF ILLINOIS
F.A.P. RTE. 877 SEC. 101B-3
LOADING HL-93
STRUCTURE NO. 097-2016

NAME PLATE
See Std. 515001

#### INDEX OF SHEETS

- 1. General Plan and Elevation
- General Structure Data
- Pre-Stage 1 Shoring Details
- Stage Construction Details
   Temporary Concrete Barrier
- 5. Temporary Concrete Barrie for Stage Construction
- 6. Culvert Details 1
- 7. Culvert Details 2
- 8. Steel Railing, Type 2399
- 9. Bar Splicer Assembly Details
- 10. Boring Logs 1
- 11. Boring Logs 2
- 12. Existing Structure Plans 1 (097-0064)
- 13. Existing Structure Plans 2 (097-0064)

#### LOADING HL-93

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

#### <u>DESIGN SPECIFICATIONS</u>

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 and 2016 Interims

## DESIGN STRESSES FIELD UNITS

f'c = 3,500 psi

fy = 60,000 psi (Reinforcement)

#### WATERWAY INFORMATION

Drainage A	Area = 4.2 sq. mi.					Low Grad	de Elev. 3	91.63 @	Sta. 380+9	8
Flood		Discha	arge (cfs)	Waterway Op	ening (sq. ft.)	Natural Head (ft.)		Headwater Elevation		
3 7000		Existing	Proposed	Existing	Proposed	H.W.E.	Existing	Proposed	Existing	Proposed
	Main Channel	1119	1145	136	217					
10	Relief Structure	779	753	110	141	388.3	2.1	1.7	390.4	390.0
	Total	1898	1898	246	358					
	Main Channel	n Channel 1221 1480 142 217	217							
OVT (E)	Relief Structure	862	1100	115	147	388.5	2.8	2.8	391.3	391.3
	Total	2083	2580	257	364					
	Main Channel	1146	1480	143	217		2.8	2.7	391.4	
OVT (P)	Relief Structure	808	1096	116	148	388.6				391.2
	Total	1954	2576	259	365					
	Main Channel	955	1260	146	217					
50	Relief Structure	674	950	118	151	388.7	2.8	2.7	391.4	391.4
	Total	1629	2210	264	368					
	Main Channel	631	918	150	217					
100	Relief Structure	434	672	121	154	388.8	2.8	2.7	391.6	391.5
	Total	1065	1590	271	371					

Note: SN 097-2016 is the relief structure.

10 year velocity through existing bridge = 5.48 ft/s 10 year velocity through proposed bridge = 4.65 ft/s

JERILYN M. HASSARD II OI 17
EDWARDSVILLE, BLINDIS
ILLINDIS LICENSED STRUCTURAL

JERILYN M. HASSARD II OI 17
EDWARDSVILLE, BLINDIS
ILLINDIS LICENSED STRUCTURAL

ENGINEER NO. 081-006521

EXPIRES 11/30/2018

SHEET NO. 1 OF 13 SHEETS

GENERAL PLAN AND ELEVATION

ILLINOIS ROUTE 141 OVER

DRAINAGE DITCH

F.A.P. ROUTE 877 - SEC. 101B-3

WHITE COUNTY

STATION 352+76.00

STRUCTURE NO. 097-2016



€ Culvert

R.O.W.

Exist.

_	USER NAME =	DESIGNED - YSS	REVISED -
		CHECKED - LNB	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

Stage Removal Line

Stage II Constr.

17'-6"

Boring 2-5

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

A.P. TÉ.	SECTION	COUNTY	TOTAL	SHEET NO.		
177	1018-3	WHITE	65	27		
CONTRACT NO. 78264						
ILLINDIS FED. AID PROJECT						

#### GENERAL NOTES

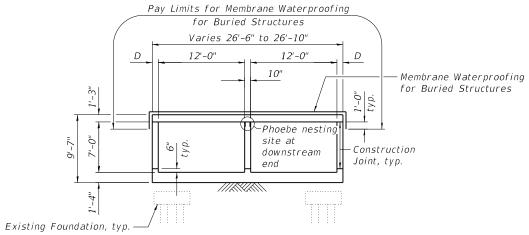
Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work

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

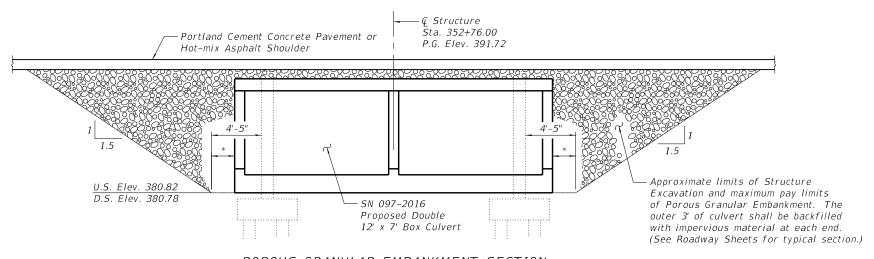
Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

The Contractor shall have the option of using either 2 bar splicers 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 with the anchoring devices, the Contractor shall provide one steel retainer plate, and 2,  $\frac{1}{2}$ " dia. bolts and washers every 6 feet as shown in Detail II on Standard R-27 from Sta. 352+40 to Sta. 353+10 for Stage II traffic. Cost to be included with Temporary Concrete Barrier.



#### SECTION THRU BARREL

D = Varies 10" at @ Roadway to 12" at each end of culvert



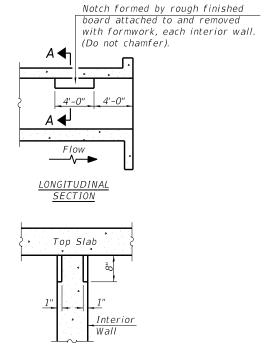
## POROUS GRANULAR EMBANKMENT SECTION AT STRUCTURE REPLACEMENT

\* Varies 2'-2" at @ Roadway to 2'-0" at each end of culvert Note: Porous Granular Embankment shall

be CA-7 or CA-11 capped with 1'-0" of CA-6 or CA-10.

#### TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	273
Removal of Existing Structures No. 1	Each	1
Structure Excavation	Cu. Yd.	532
Reinforcement Bars, Epoxy Coated	Pound	26,690
Bar Splicers	Each	154
Steel Railing, Type 2399	Foot	56
Name Plates	Each	1
Temporary Sheet Piling	Sq. Ft.	727
Concrete Box Culverts	Cu. Yd.	145.0
Temporary Support System	L. Sum	0.5
Membrane Waterproofing for Buried Structures	Sq. Yd.	111.7



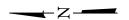
#### SECTION A-A

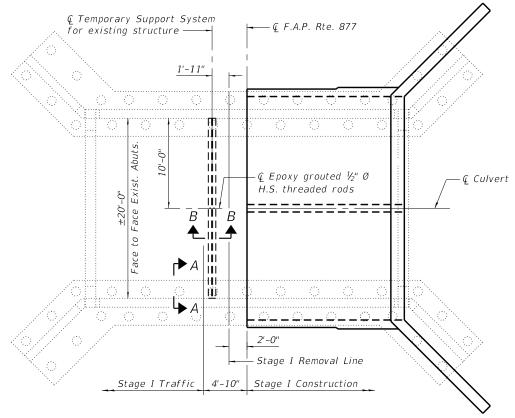
PHOEBE NESTING
SITE DETAILS
(Downstream End Only)

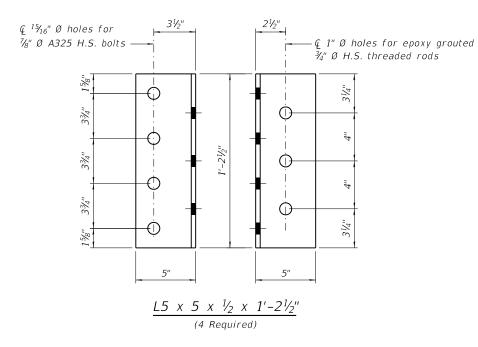


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	CHECKED - LNB	REVISED -
PLOT SCALE =	DRAWN - PRC	REVISED -
PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

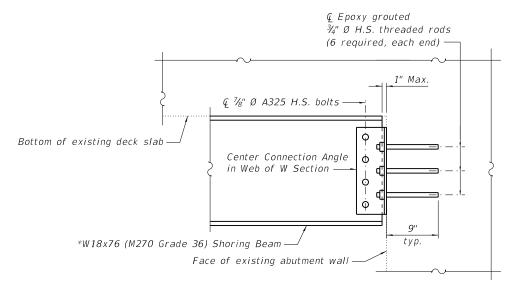
GENERAL STRUCTURE DATA	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 097-2016	877	101B-3	WHITE	65	28
31110010HL 140. 037-2010			CONTRACT	NO.	78264
SHEFT NO. 2 OF 13 SHEFTS		TILL INDIC EED A	IN PROJECT		





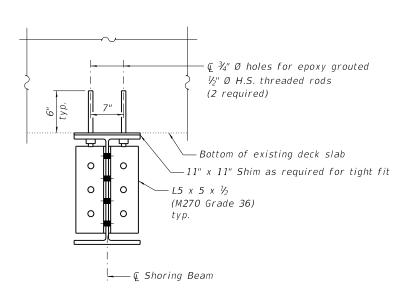


#### PLAN



#### SECTION A-A

Note: Prior to drilling holes in wall for placement of connection angles, location of existing reinforcement shall be determined. If necessary, adjust location of holes in order to avoid existing reinforcement.



#### SECTION B-B

Notes:

High strength threaded rods shall be ASTM F1554 Grade 105 and shall satisfy the requirements of Article 1006.09 of the Standard Specifications.

See Section 584 of the Standard Specifications for Grouting of Anchor Rods and Bars.

Furnishing and installing all components of the Temporary Support System, including drilling and grouting H.S. threaded rods, shall be paid for at the contract unit price per lump sum for Temporary Support System.

#### BILL OF MATERIAL

Item	Unit	Total
Temporary Support System	L. Sum	0.5

Note: Estimated weight of structural steel = 1,646 lbs.

COUNTY

WHITE 65 29

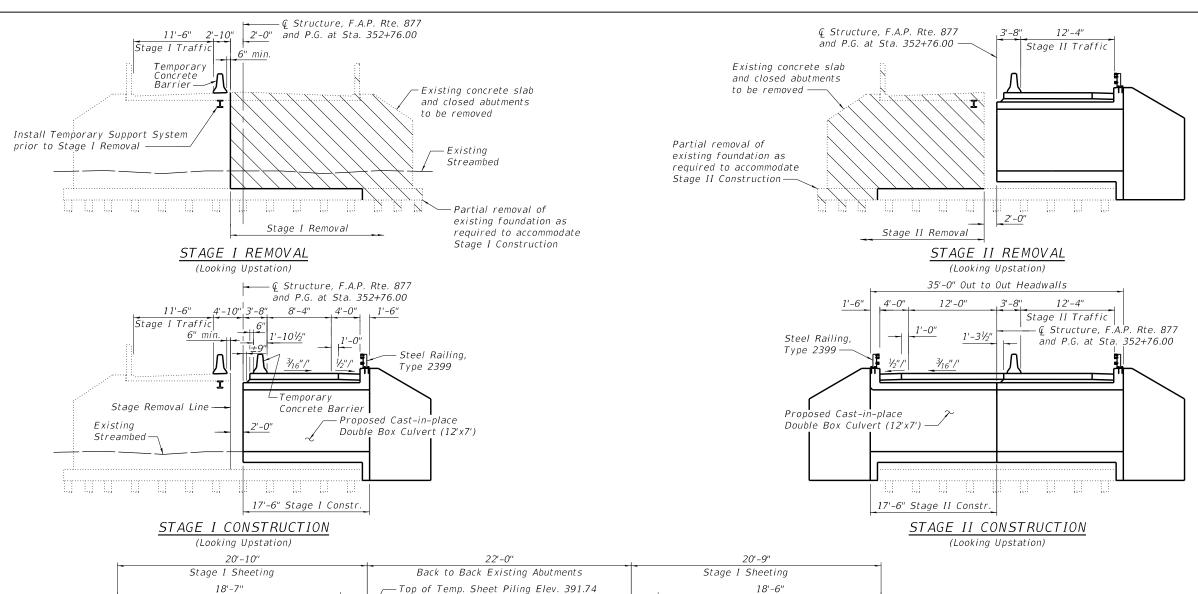
CONTRACT NO. 78264

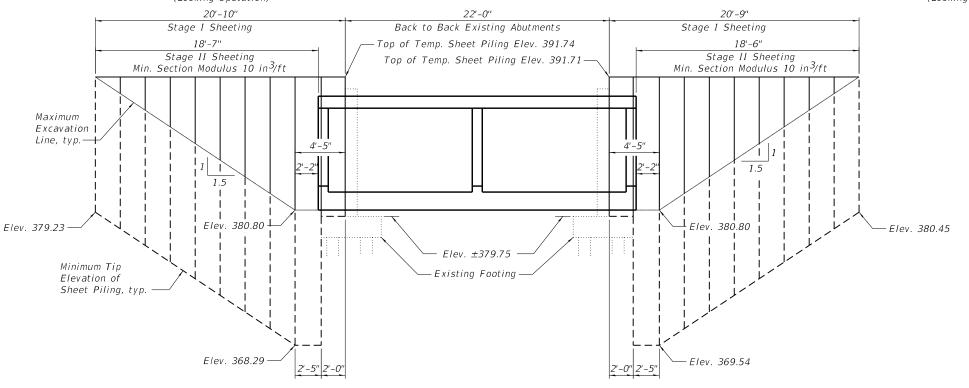
\* Clip corners of top and bottom flanges as needed for installation.



USER NAME =	DESIGNED - LNB	REVISED -
	CHECKED - CSG	REVISED -
PLOT SCALE =	DRAWN - PRC	REVISED -
PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

PRE-STAGE 1 SHORING DETAILS STRUCTURE NO. 097-2016		F.A.P. SECTION			
		101E	3-3		
3111001011L 140. 037-2010					Т
SHEET NO. 3 OF 13 SHEETS			ILLINOIS	FED.	A





Notes:

For details of Temporary Concrete Barrier see Sheet 5 of 13. For quantity of Temporary Concrete Barrier see Roadway Plans. Hatched areas indicate areas of removal to be paid for as Removal of Existing Structures No. 1. The existing structure, including foundation, shall be removed at least 1'-0" below the proposed groundline and as required for construction of culvert and wingwalls.

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations sealed by a licensed structural engineer will be required for review and acceptance by the Engineer.

The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

#### BILL OF MATERIAL

Item	Unit	Total
Temporary Sheet Piling	Sq. Ft.	727

## TEMPORARY SHEET PILING DETAILS

(Looking North)

MC	DDJESKI MASTERS
МС	DDJESKI end MASTERS Experience great bridges.

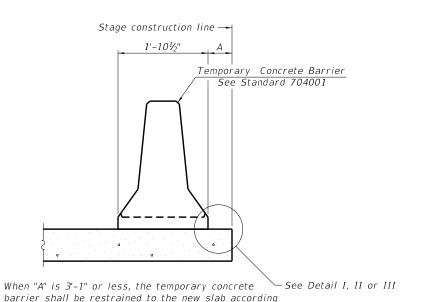
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	CHECKED -	CSG	REVISED -
PLOT SCALE =	DRAWN -	PRC	REVISED -
PLOT DATE = 11/01/2017	CHECKED -	RLM	REVISED -

STA	E CONSTRUCTION DETAILS
S	TRUCTURE NO. 097–2016

				CONTRACT	NO. 7	826
877 101B-3		WHITE	65	30		
	F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHE NO

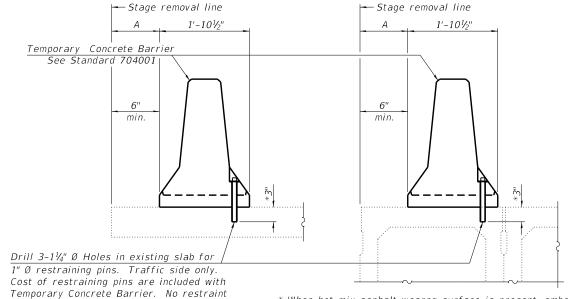
SHEET NO. 4 OF 13 SHEETS

O. 4 OF 13 SHEETS ILLINOIS FED. AID PROJECT



to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

#### NEW SLAB OR NEW DECK BEAM



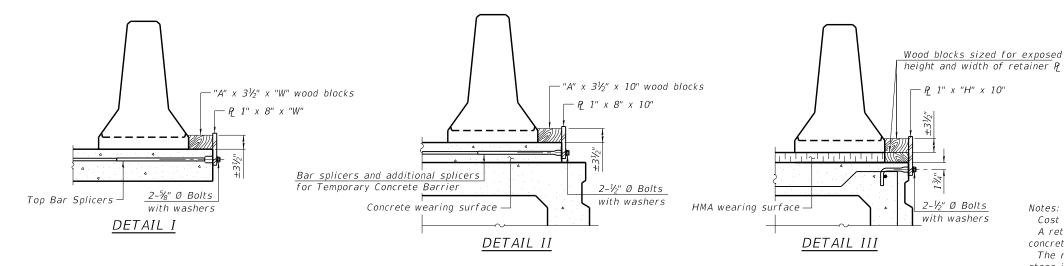
\* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

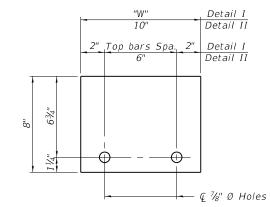
#### EXISTING DECK BEAM

EXISTING SLAB

#### SECTIONS THRU SLAB OR DECK BEAM

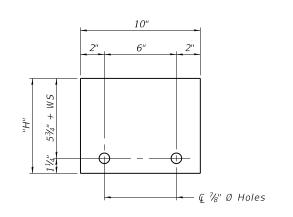
is required when "A" is greater than 3'-1".



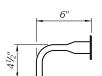


### STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



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



RESTRAINING PIN

#### BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary concrete barrier.

1x8 UNC

US Std.  $1\frac{1}{16}$ " I.D. x  $2\frac{1}{2}$ " O.D. x approx. 8 guage thick washer

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  $1\frac{1}{2}$ ", 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.

R-27

2-17-2017

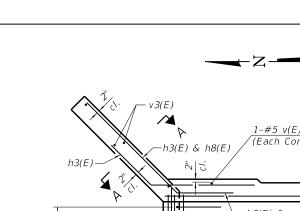
MODJESKI and MASTERS Experience great bridges.
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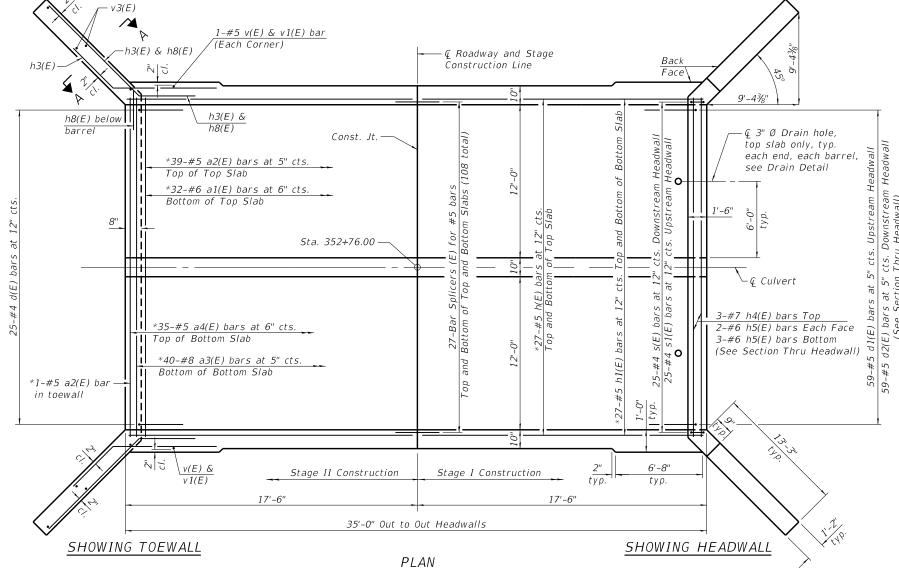
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	CHECKED - CSG	REVISED -
PLOT SCALE =	DRAWN - PRC	REVISED -
PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

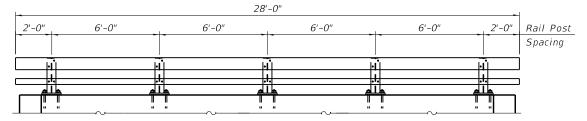
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION	F.A.P. RTE.	SECTI
STRUCTURE NO. 097-2016	877	101B
0111001011E 140.037-2010		
CHEET NO E OF 17 CHEETC		

COUNTY IB-3 WHITE 65 31 CONTRACT NO. 78264

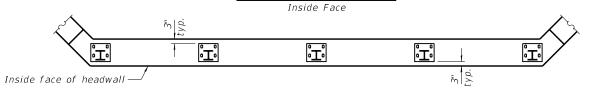




\* Bars typical for each stage of construction for double box

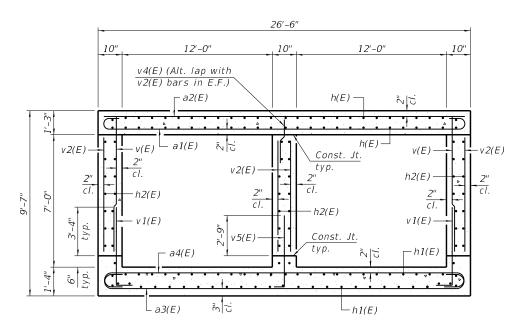


#### RAIL POST ELEVATION



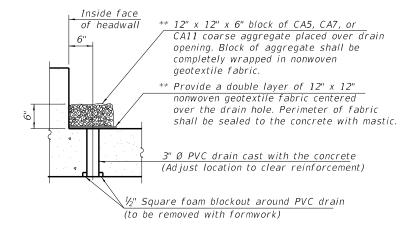
#### WESTBOUND RAIL POST PLAN

Eastbound Similar



#### SECTION THRU BARREL NEAR & ROADWAY

\*\* 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 locations)

(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.)

#### 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.

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

For Section A-A, Section Thru Headwall, additional details and Bill of Material, see Sheet 7 of 13.

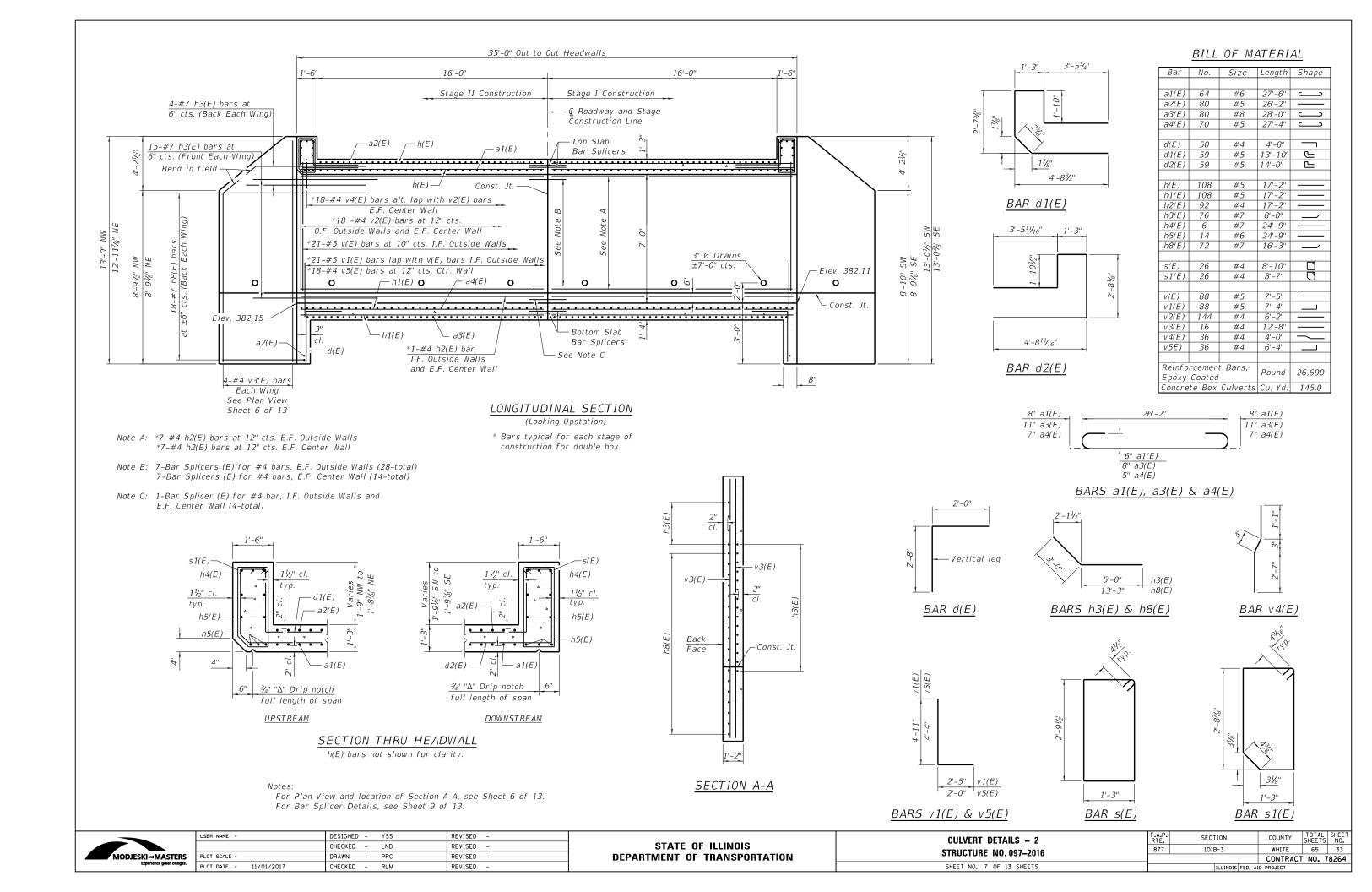


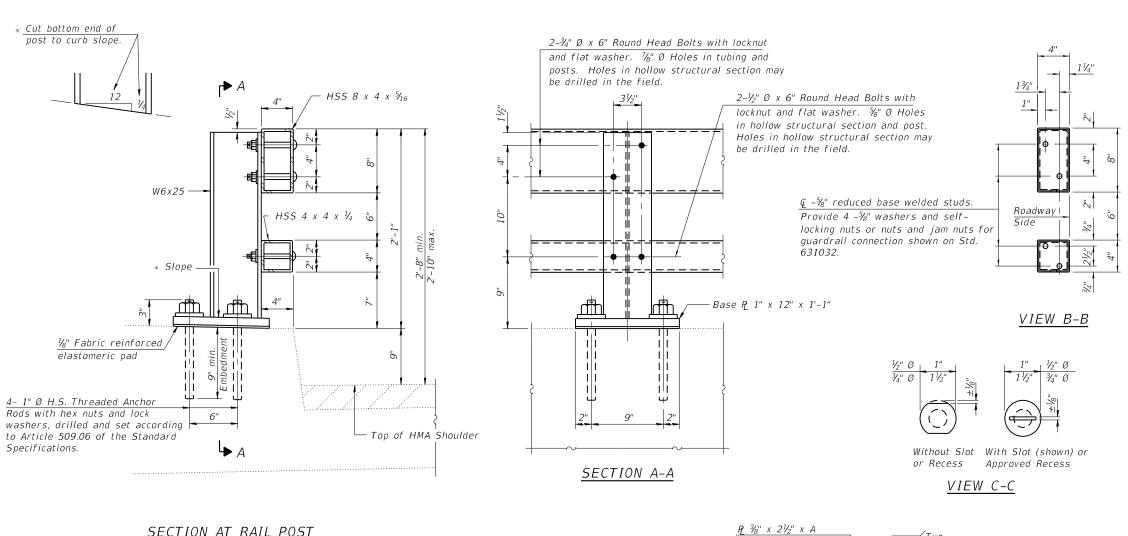
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	CHECKED - LNB	REVISED -
PLOT SCALE =	DRAWN - PRC	REVISED -
PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

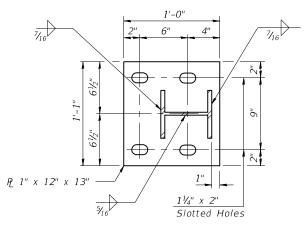
					.S – 1 97–2016	
SHEET	NO.	6	OF	13	SHEETS	

F.A.P. SECTION COUNTY TOTAL SHEET NO. 877 1018-3 WHITE 65 32 CONTRACT NO. 78264



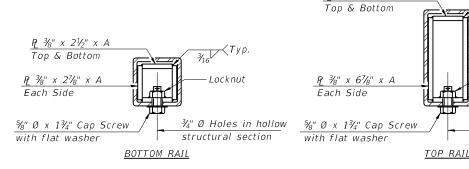


#### SECTION AT RAIL POST

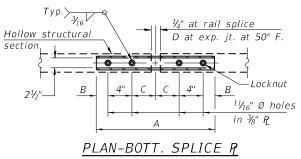


BASE PLATE DETAIL

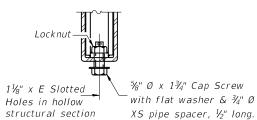
2-17-2017



#### SECTIONS AT RAIL SPLICE



TYPICAL



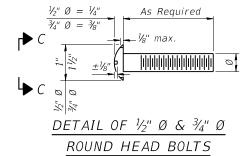
Locknut

¾" Ø Holes in hollow

structural section

RAIL SPLICE CONNECTION AT EXPANSION JT.

# 1'-21/2" P 3/16" x 31/2" x 71/2" ³⁄4" Ø drain hole PL 3/16" x 31/2" x 31/2" 3⁄4" Ø drain hole END OF RAIL DETAILS



#### Notes:

Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.

Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one  $\frac{1}{8}$ " and two  $\frac{1}{16}$ " 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.

#### SPLICE DIMENSIONS

T	D	Α	В	С	Е
≤ 4"	21/2"	1'-8"	2"	4"	21/2"
$> 4'' \le 6\frac{1}{2}''$	3¾"	2'-0"	21/2"	5½"	31/2"
$> 6^{1/2}" \le 9"$	5"	2'-4"	31/2"	6½"	9"
> 9" ≤ 13"	7"	2'-10"	41/2"	81/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	_

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

#### BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	56

#### (6'-3" Maximum Post Spacing)



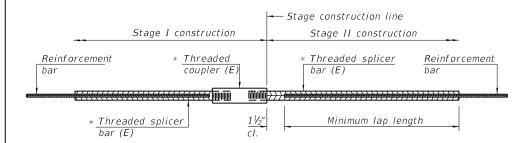
R-31

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PLOT DATE = 11/01/2017	CHECKED -	RLM	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

STEEL	RAI	LII	VG,	ΤY	PE	239	99
STRUC	TUF	RE	NO	. 0	97–	201	6
SHEET	NO.	8	ΩF	13	SHF	FTS	

SECTION COUNTY WHITE 65 34 877 101B-3 CONTRACT NO. 78264

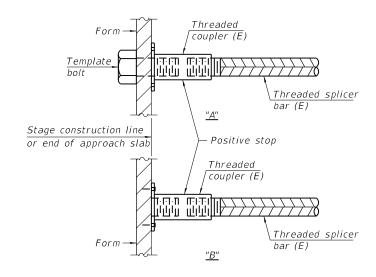


#### STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

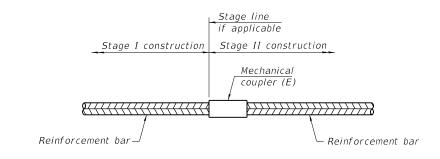
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#5	54	3'-2"
Top of Bottom Slab	#5	27	3'-7"
Bottom of Bottom Slab	#5	27	3'-2"
Culvert Walls	#4	46	2'-11"



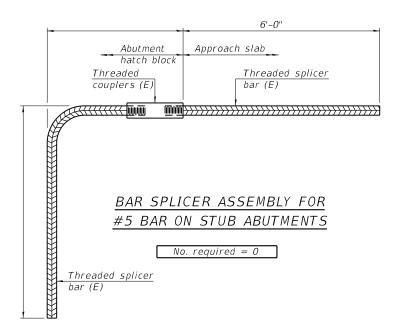
#### INSTALLATION AND SETTING METHODS

"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

2-17-2017

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	USER NAME =	DESIGNED -	LNB	REVISED -		BAR SPLICER ASSEMBLY DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
		CHECKED -	CSG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 097-2016	877	101B-3	WHITE	65 35
TERS	PLOT SCALE =	DRAWN -	PRC	REVISED -		31NUCTURE INU. 097-2010			CONTRACT	NO. 78264
t bridges.	PLOT DATE = 11/01/2017	CHECKED -	RLM	REVISED -		SHEET NO. 9 OF 13 SHEETS		ILLINOIS FED. AI	D PROJECT	

#### ILLINOIS DEPARTMENT OF TRANSPORTATION District Nine Materials

Bridge Foundation Boring Log

FAP 877 (IL 141) Over stream Sheet 1 of 2 Route: FAP 877 (IL 141 Structure Number: 097-0064 Date: 8/23/2011 Bored By: R Moberly Section 101 Checked By: R Graeff Location: 3 mi W of New Haven County: White Surf Wat Elev: 382.8 Boring No 1-S Ground Water Elevation L O W S Station 352+97 when Drilling \_\_\_ ō Offset 10' Rt CL Qu tsf At Completion W Ground Surface 391.6Ft W% tsf ₩% Hrs: Asphalt 0.3B 2 390.1 364.6 Medium, moist to very moist, grey, Clay A7-6 Medium, very moist, grey, Silty 2 0.8B 27 Clay Loam A-6 0.7B 2 362.1 /ery soft, wet, grey, Sandy Clay 0.2B 0.6B 2 31 Loam A-4 with Sand seams 2 Stiff, moist, grey, Clay A7-6 Stiff, moist, grey, Silty Clay A-6 1.3B 1.4B 26 2 2 382.1 357.1 Stiff, moist, grey mottled brown, 10.0 Medium, very moist, grey, Clay 25 A7-6 0.8B Clay A7-6 1.4B 2 379.6 354.6 Medium, very moist, grey mottled WH Stiff, moist, grey, Clay A7-6 1.2B brown, Clay A7-6 0.7B 3 377.1 352.1 Medium, very moist, brown mottled 15.0 WH Medium to stiff, moist to very 40.0 WH 0.6B 1.0B grey, Silty Clay to Clay A7-6 28 moist, grey, Clay A7-6 WH 374.6 Stiff, moist, grey mottled brown, Silty Clay to Silty Clay Loam A-6 1.**4**B 372.1 Stiff, moist, grey, Silt Loam A-4 20.0 Very stiff, damp, grey, Weathered \_\_\_\_45.0 23 Clay Shale 346.1 3.18 1.68 30 Hard, damp, brown and grey, 369.6 Clay Shale Stiff, moist, grey, Clay A7-6 1.1B 21 2 Hard, dry, grey, Clay Shale Soft, very moist, grey, Clay A7-6

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

	Sheet	2 of 2
Route: FAP 877 (IL 141)	Date:	8/23/2011
Section: 101		
Country White		

ion: 101  ity: White  Ing No: 1-8  E	D B E L	1 1
Ing No: 1-S  D B E L P O T W Qu		
ion: 352+97		
ion: 352+97		
ion: 352+97 P O T W Qu	E   L	1 1
set: 10' Rt CL T W Qu		
	P   O	
	T W	Qu VA/9/
ind Surface: 391.6Ft H S tsf W%	H S	tsf W%
l, dry, grey, Clay Shale		
<b>→</b>	<b>-</b>	
339.1		
ng abondoned due to		
	<del></del>	
hanical breakdown.	$\dashv$	
om of hole = 52.5 feet	<del></del>	
55.0	80.0	
water observed at 24.5 feet	$\dashv$	
ation referenced to DM 109	<del></del>	
ation referenced to BM 108	$\dashv$	
W corner; Elev.= 391.3 feet	<del> </del>	
shole advanced with hollow	$\dashv$	
n auger (8" O.D, 3.25" I.D.)	<del></del>	
Tauger (6 O.D., 3.23 1.D.)	$\dashv$	
onvert "N" values to "N60"		
iply by 1.25	85.0	
7		
i i		
<u>65.0</u>	90.0	
<del></del>		
70.0	95.0	
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N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

75.0

MODJE	SKI and MASTERS Experience great bridges.

	USER NAME =	DESIGNED - LNB	REVISED -
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5	PLOT SCALE =	DRAWN - PRC	REVISED -
5.	PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

STATE OF ILLINOIS					
DEPARTMENT	0F	TRANSPORTATION			

BORING LOGS – 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 097–2016	877	101B-3	WHITE	65	36
			CONTRACT	NO.	78264
SHEET NO. 10 OF 13 SHEETS		ILLINOIS FED. A	ID PROJECT		

100.0

# ILLINOIS DEPARTMENT OF TRANSPORTATION

	1				F OF TRANSPORTATION ne Materials		ridge F oring L		_~-
PAP 877 (IL 141) Over stream	n					S1	heet 1	of 2	
Route: FAP 877 (IL 141 St:	ructure	e Numbe	er: 097-	-0064		Date:	8,	24/201	.1
Section 101	_				Воз	ed By:	R Mobe:	cly	
County: White	Loca	tion: 3	mi W 🤇	of New	Haven Check	ed By:	R Graef	f	
Boring No 2-S	D	В			Surf Wat Elev: 382.8 Ground Water Elevation	- <u>p</u>	В		
Station 352+51	E     P	L		i	when Drilling 364.6	E   -  P	L		
Offset 10' Lt CL	] +	w	Qu		At Completion	-) <del>',</del>	w	Qu	
Fround Surface 391.6Ft		s	tsf	W%	At: Hrs:	Н	S	tsf	W%
Asphalt							2 2	1.2B	2
390.1					<del>-</del>			-	
Medium, very moist, brown, Silty					364.6				
Clay A-6		1			Medium, very moist, grey and		WH		
_		1	0.8B	24	brown, Silty Clay Loam A-6		1	0.6B	;
		2					2		
387.1					362.1				
Medium, moist to very moist, grey, _	5.0	1			Medium to stiff, very moist, grey,	30.0	1		
Clay to Silty Clay A7-6		2	0.8B	24	Silt Loam to Silty Clay Loam A-4		2	1.08	
_		2			<b>.</b>		3		
384.6					359.6				
Stiff, moist, grey, Clay A7-6		1			Medium, very moist, grey, Clay		WH		
-		2	1.7B	26	A7-6		1	0.7B	
		3			#	-	1		
382.1									
Stiff, moist, grey mottled brown,	10.0	1			1	35.0	WH		
Clay A7-6		2	1.4B	26	1		1	0.6B	
•		3			1		2		
379.6									
Medium, very moist, grey mottled		1			1	$\overline{}$	WH		
brown, Clay A7-6		1	0.9B	29	1		1	0.7B	
•		2			<u> </u>		2		
								·	
Soft, very moist, brown mottled	15.0	WH			1	40.0	WH		
grey, Silty Clay to Silty Clay Loam		1	0.3B	29	1	- 40.0	WH	0.6B	
A-6		1					1		
374.6									
Stiff, moist, brown mottled grey,		1			1				
Silty Clay to Silty Clay Loam A-6		2	1.3B	23	1				
· · · · ·		3							
070.4		-			047.4				
Medium venumoiet grev Clav	20.0	) 2			Medium to soft, very moist, grey,	45.0	WH		
Medium, very moist, grey, Clay A7-6	20.0	3	0.7B	33		45.0	WH	0.5B	
,,, ,		3	5.75	55			1	0.00	
					345.1				
369.6		ļ			Hard, damp to dry, grey, Clay		<u> </u>		
Stiff, moist, grey, Clay A7-6		1			Shale		100/6"		
with Silt lenses		2	1.6B	24			ł		
•		3			-∦		<del>                                     </del>		
		1					1		
ĺ	25.0	1			<b>1</b>	50.0	100/8"		

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

Sheet 2 of 2

Date: 8/24/2011

Route: FAP 877 (IL 141) Section: 101

County: White										
Boring No: 2-S Station: 352+51 Offset: 10' Lt CL Ground Surface: 391.6Ft	D E P T H	B L O W S	Qu tsf	w%			D E P T H	B L O W S	Qu tsf	
Ground Surface. 351.0FC	П	3	toi	1770			<u> </u>	3	tsi	
Hard, damp to dry, grey, Clay Shale  Note: Shale to soft to core								† - -		
<del>-</del>		i								
- -	55.0	100/6"					80.			
334.1		100/6"						-		
334.1		100/6"					_	1		
Bottom of hole = 57.5 feet	_									
Free water observed at 27.0 feet	60.0						85.	0		
Elevation referenced to BM 108 at SW corner; Elev.= 391.3 feet										
Borehole advanced with hollow stem auger (8" O.D, 3.25" I.D.)		<u></u>								
To convert "N" values to "N60" multiply by 1.25										
-	65.0	<u>)</u> ] ]					90	<u>o</u>		
-										
-		]						_		
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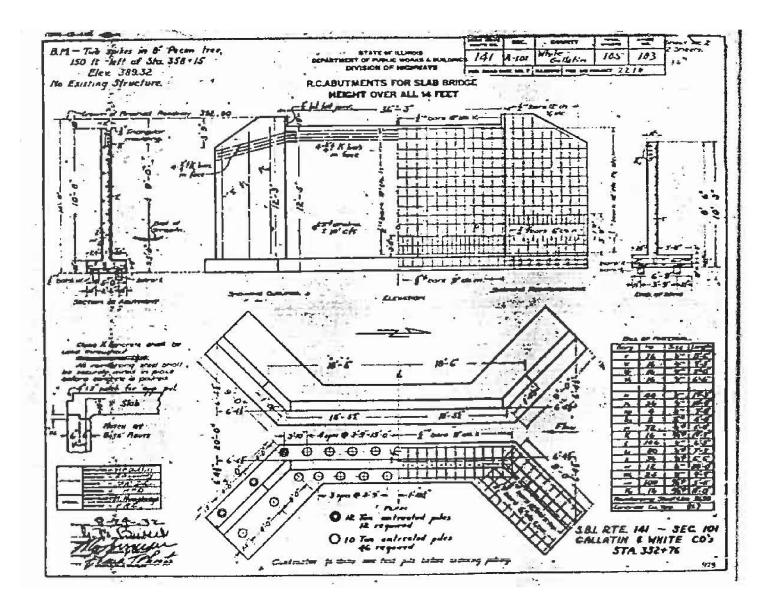
N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

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		CHECKED - CSG	REVISED -
;	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

STATE	E OF	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

BORING LOGS - 2 STRUCTURE NO. 097-2016 SHEET NO. 11 OF 13 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	877	101B-3	WHITE	65	37
			CONTRACT	NO.	78264
SHEET NO. 11 OF 13 SHEETS		ILLINOIS FED. A	ID PROJECT		

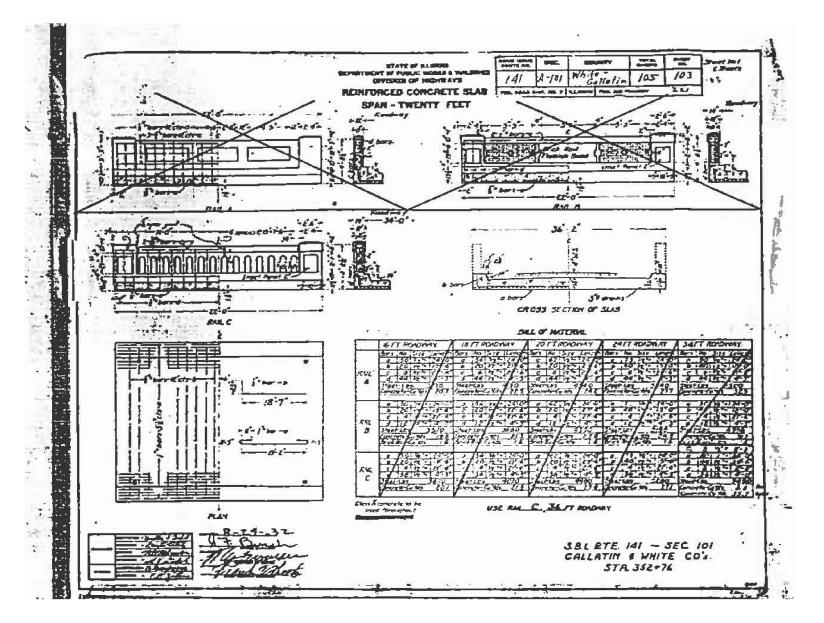


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	CHECKED - CSG	REVISED -
PLOT SCALE =	DRAWN - PRC	REVISED -
PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

EXISTING	STRU	CTU	RE	PL	AN.	IS - 1 (097-0064)	
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	CHEET	NO	12	ΛE	17	CHEETE	_



FOR INFORMATION ONLY

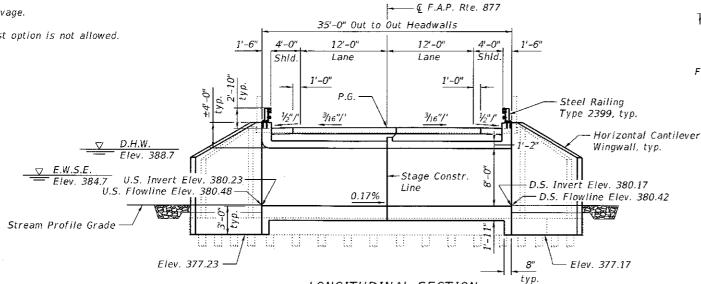


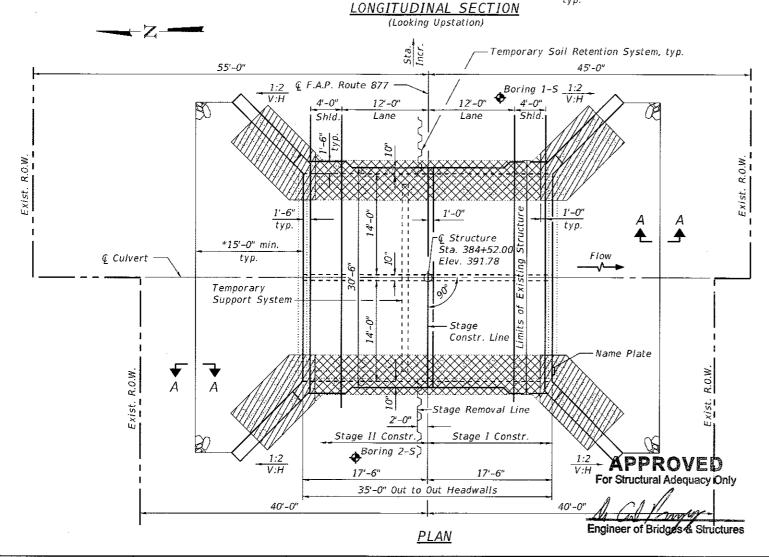
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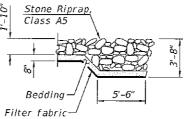
EXISTING STRUCTURE PLANS - 2 (097-0064)	F.A.P. RTE.	
STRUCTURE NO. 097-2016	877	
0111001011E 140: 037-2010		
SHEET NO. 13 OF 13 SHEETS		

		ILLINOIS	FED.	м,	ID FRUJECT		
		TI I INOTE	EED	A 1	D PROJECT		
					CONTRACT	NO. 7	8264
877	1018	3-3			WHITE	65	39
A.P.	SECT	ΓΙΟΝ			COUNTY	SHEETS	NO.

Bench Mark: BM 109 - Chiseled square in southwest wingwall of SN 097-0029, Elev. 391.40. Existing Structure: SN 097-0029 was originally built in 1933 as SBP Route 141 (Section A-101) and resurfaced in 1970 as SBI Route 141 (Section 101W, RS). The existing structure is a 28 foot (back to back abutments) single span reinforced concrete slab bridge. The substructure consists of closed abutments founded on footings on timber piles. The deck measures 32'-8" between curbs and the overall out to out width of the bridge is 36'-2". The existing superstructure and abutment walls are to be removed. The existing foundation is to remain in place except as noted. Traffic to be maintained utilizing stage construction. — € F.A.P. Rte. 877 No salvage. 35'-0" Out to Out Headwalls Precast option is not allowed. 1'-6" 4'-0' 12'-0" 12'-0" Shld. Lane Lane 1'-0" P.G.







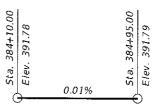
# SECTION A-A

\* See Roadway Plans for riprap layout and payment

#### LEGEND

Partial Removal of /// Existing Foundation in accordance with Section 501 of the Standard Specifications

Partial Removal of upper north upper portion of existing footing (see Detail A on General Structure Data sheet)



PROFILE GRADE (Along € Roadway)

STATION 384+52.00 BUILT 20\_\_ BY STATE OF ILLINOIS F.A.P. RTE. 877 SEC. 101B-4 LOADING HL-93 STRUCTURE NO. 097-2017

> NAME PLATE See Std. 515001

#### INDEX OF SHEETS

- General Plan and Elevation
- General Structure Data Pre-Stage 1 Shoring Details
- Stage Construction Details
- Temporary Concrete Barrier for Stage Construction
- 6. Culvert Details 1
- Culvert Details 2
- Steel Railing, Type 2399 9. Bar Splicer Assembly Details
- 10. Boring Logs 1
- 11. Boring Logs 2
- 13. Existing Structure Plans 2 (097-0029)
- 12. Existing Structure Plans 1 (097-0029)

#### *LOADING HL-93*

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

#### DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 and 2016 Interims

#### <u>DESIGN STRESSES</u> FIELD UNITS

 $f'c = 3,500 \ psi$ 

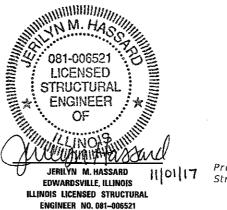
fy = 60,000 psi (Reinforcement)

# WATERWAY INFORMATION

		Discha	erge (cfs)	Matarway On	ening (sq. ft.)	Natural	Hos	d (ft.)	Handwinter	Flounties
Flood	ŀ	Existing								
	1		Proposed	Existing	Proposed	H.W.E.	Existing	Proposed	Existing	Proposed
	Main Channel	1119	1145	136	217					
10	Relief Structure	779	<i>753</i>	110	141	388.3	2.1	1.7	390.4	390.0
	Total	1898	1898	246	358		1		390.4 3 391.3 3 391.4 3	
	Main Channel	1221	1480	142	217					
OVT (E)	Relief Structure	862	1100	115	147	388.5	2.8	2.8	391.3	391.3
	Total	2083	2580	257	364				390.4 391.3 391.4 391.4	
	Main Channel	1146	1480	143	217					
OVT (P)	Relief Structure	808	1096	116	148	388.6	2.8	2.7	391.4	391.2
	Total	1954	2576	259	365			į į		
	Main Channel	955	1260	146	217			i		
50	Relief Structure	674	950	118	151	388.7	2.8	2.7	391.4	391.4
	Total	1629	2210	264	368					
	Main Channel	631	918	150	217		<u> </u>			
100	Relief Structure	434	672	121	154	388.8	2.8	2.7	391.6	391.5
	Total	1065	1590	271	371					

Note: SN 097-2017 is the main channel structure.

10 year velocity through existing bridge = 6.98 ft/s 10 year velocity through proposed bridge = 5.28 ft/s



EXPIRES 11/30/2018

R9E - 3rd PM Proposed Structure LOCATION SKETCH

SHEET NO. 1 OF 13 SHEETS

GENERAL PLAN AND ELEVATION ILLINOIS ROUTE 141 OVER UNMARKED STREAM F.A.P. ROUTE 877 - SEC. 101B-4 WHITE COUNTY STATION 384+52.00 STRUCTURE NO. 097-2017

	USER NAME =	DESIGNED - YSS	REVISED -
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H.	PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

RTE. SECTION		COUNTY	TOTAL SHEETS	SHEE1	
877 1018-4		₩HITE	65	40	
CONTRACT NO. 78264					
ILLINOIS FED. AID PROJECT					
	RTE.	877 10lE	877 1018-4	RTE.   SECTION   COUNTY	RTE.   SECTION   COUNTY   SHEETS

#### GENERAL NOTES

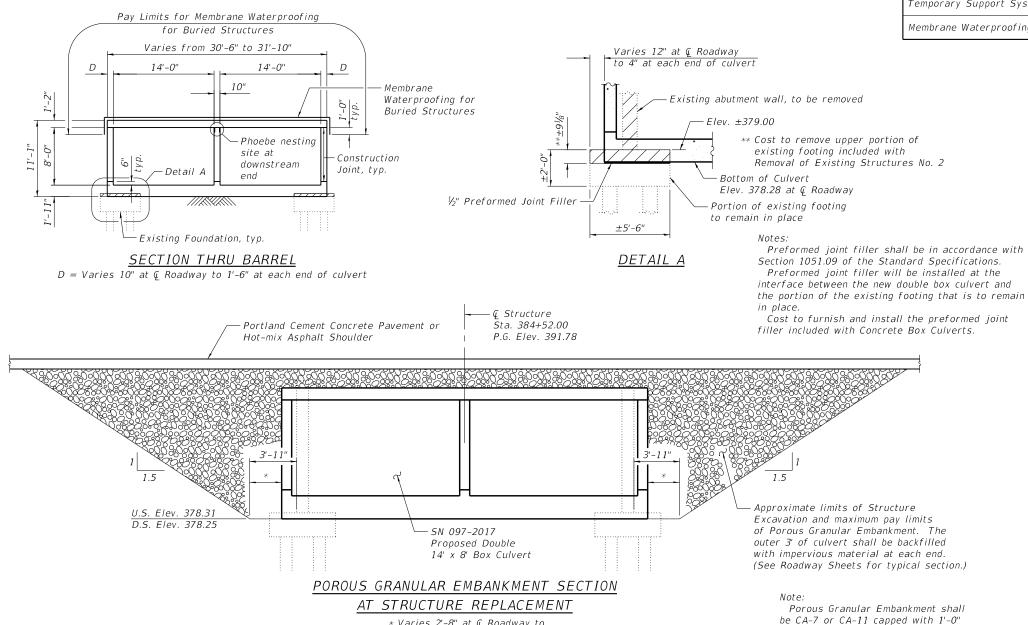
Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid

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

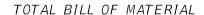
Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

The Contractor shall have the option of using either 2 bar splicers 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 with the anchoring devices, the Contractor shall provide one steel retainer plate, and 2, ½" dia. bolts and washers every 6 feet as shown in Detail II on Standard R-27 from Sta. 384+10 to Sta. 384+95 for Stage II traffic. Cost to be included with Temporary Concrete Barrier.

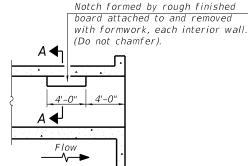


\* Varies 2'-8" at © Roadway to

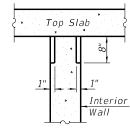
2'-0" at each end of culvert



ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	464
Removal of Existing Structures No. 2	Each	1
Structure Excavation	Cu. Yd.	808
Reinforcement Bars, Epoxy Coated	Pound	40,420
Bar Splicers	Each	176
Steel Railing, Type 2399	Foot	64
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	379
Concrete Box Culverts	Cu. Yd.	217.6
Temporary Support System	L. Sum	0.5
Membrane Waterproofing for Buried Structures	Sq. Yd.	127.2



LONGITUDINAL SECTION



SECTION A-A

PHOEBE NESTING SITE DETAILS (Downstream End Only)

-	
MODJ	ESKI and MASTERS Experience great bridges.

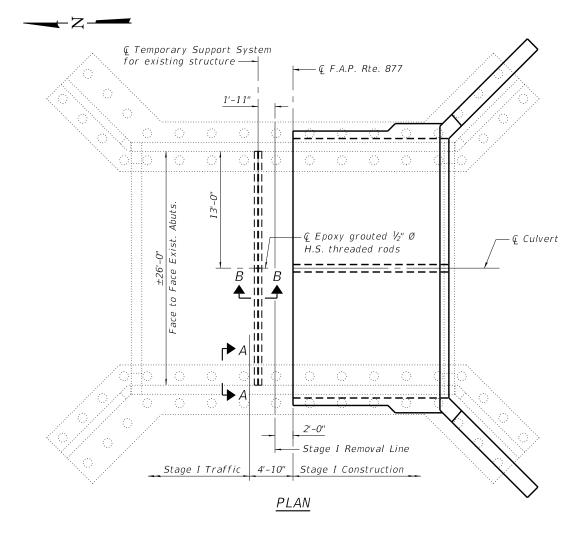
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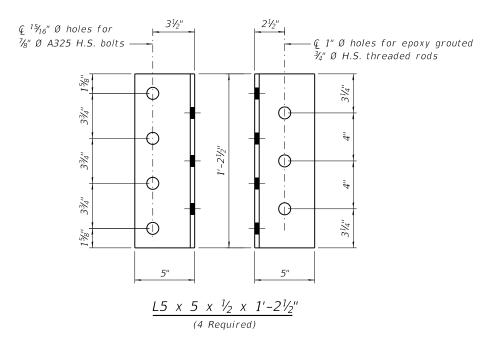
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

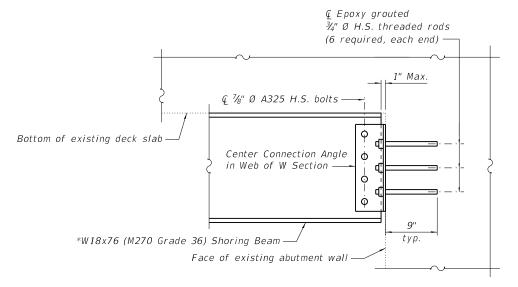
of CA-6 or CA-10.

GENERAL STRUCTURE DATA STRUCTURE NO. 097–2017				
SHEET NO.	2 OF 13 SHEETS			

SECTION COUNTY 877 101B-4 WHITE 65 41 CONTRACT NO. 78264

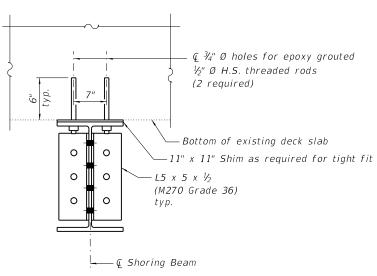






#### SECTION A-A

Note: Prior to drilling holes in wall for placement of connection angles, location of existing reinforcement shall be determined. If necessary, adjust location of holes in order to avoid existing reinforcement.



#### SECTION B-B

#### Notes

High strength threaded rods shall be ASTM F1554 Grade 105 and shall satisfy the requirements of Article 1006.09 of the Standard Specifications.

See Section 584 of the Standard Specifications for Grouting of Anchor Rods and Bars.

Furnishing and installing all components of the Temporary Support System, including drilling and grouting H.S. threaded rods, shall be paid for at the contract unit price per lump sum for Temporary Support System.

# BILL OF MATERIAL

Item	Unit	Total
Temporary Support System	L. Sum	0.5

Note: Estimated weight of structural steel = 2,102 lbs.

COUNTY

WHITE 65 42

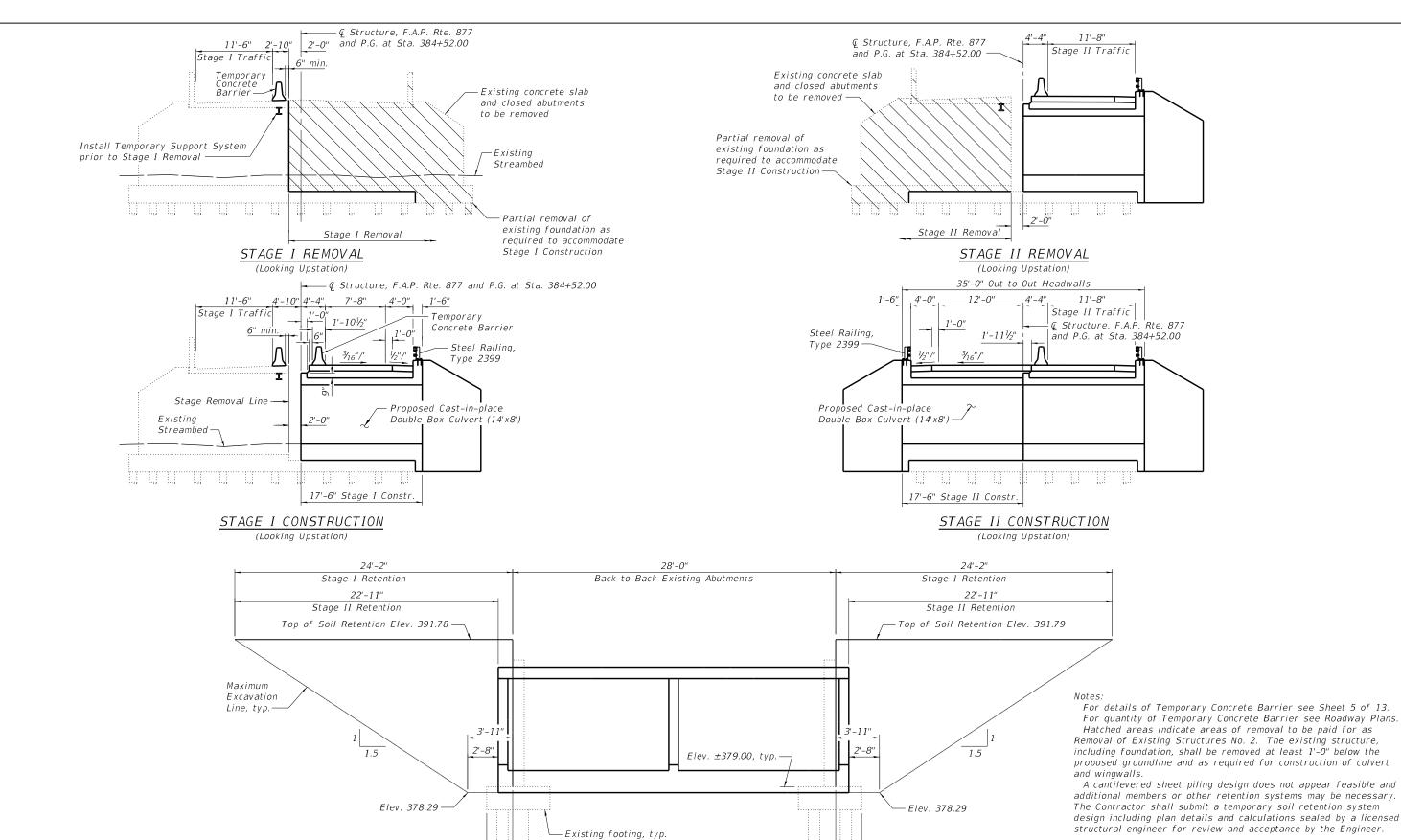
CONTRACT NO. 78264

\* Clip corners of top and bottom flanges as needed for installation.



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	F.A.P.	
PRE-STAGE 1 SHORING DETAILS STRUCTURE NO. 097-2017		SECTION
		101B-4
31110C1011L 140. 037-2017		
SHEET NO. 3 OF 13 SHEETS		ILLI



TEMPORARY SOIL RETENTION SYSTEM (Looking North)

BILL OF MATERIAL

	Item	Unit	Total
Ì	Temporary Soil Retention System	Sq. Ft.	379



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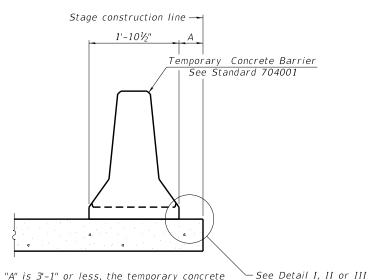
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTR	RUCTION	DETAILS			
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 SHEET NO.

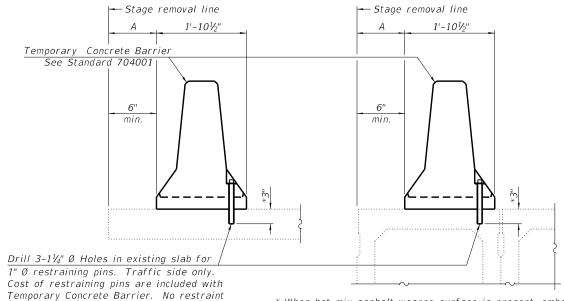
 877
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 WHITE
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 43

 CONTRACT NO. 78264



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



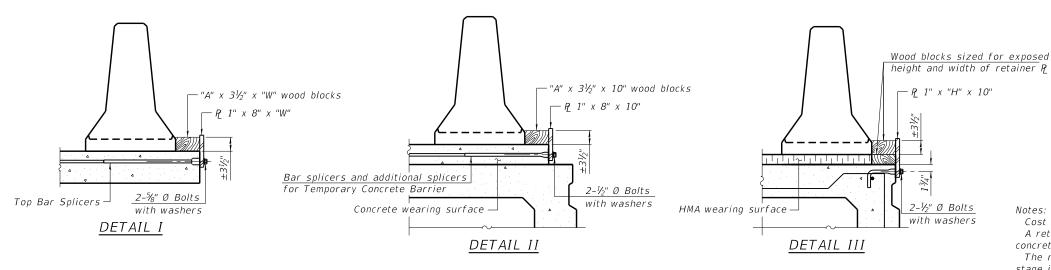
\* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

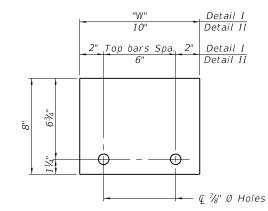
#### EXISTING DECK BEAM

# SECTIONS THRU SLAB OR DECK BEAM

EXISTING SLAB

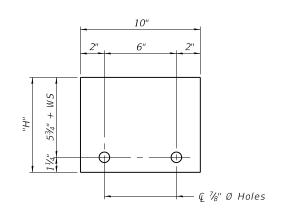
is required when "A" is greater than 3'-1".



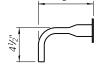


# STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



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



RESTRAINING PIN

#### BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary concrete barrier.

1x8 UNC

US Std.  $1\frac{1}{16}$ " I.D. x  $2\frac{1}{2}$ " O.D. x approx. 8 guage thick washer

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  $1\frac{1}{2}$ ", 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.

COUNTY

WHITE 65 44

CONTRACT NO. 78264



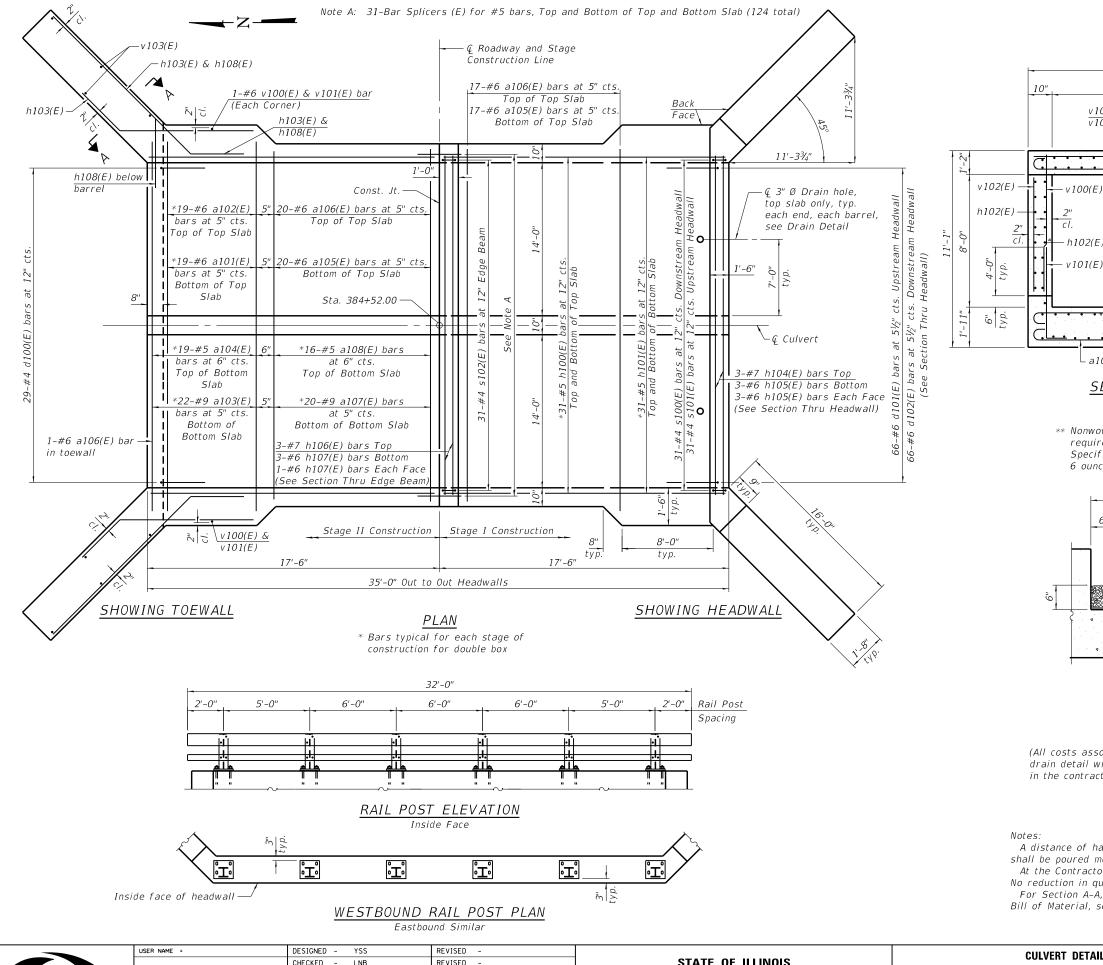
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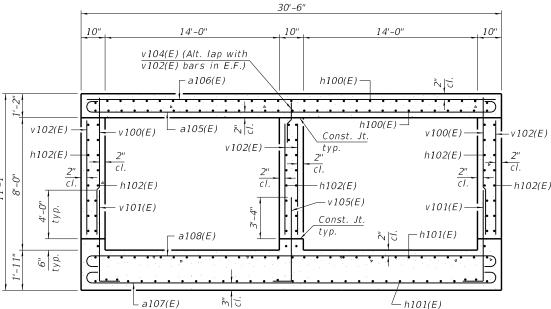
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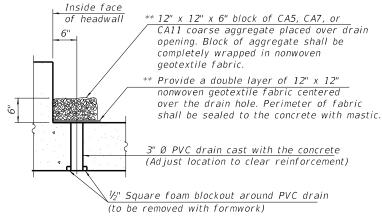
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION	F.A.P. RTE.	SECTION
STRUCTURE NO. 097-2017	877	101B-4
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SHEFT NO. 5 OF 13 SHEFTS		THE INOTE FEE





# SECTION THRU BARREL NEAR & ROADWAY

\*\* 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.



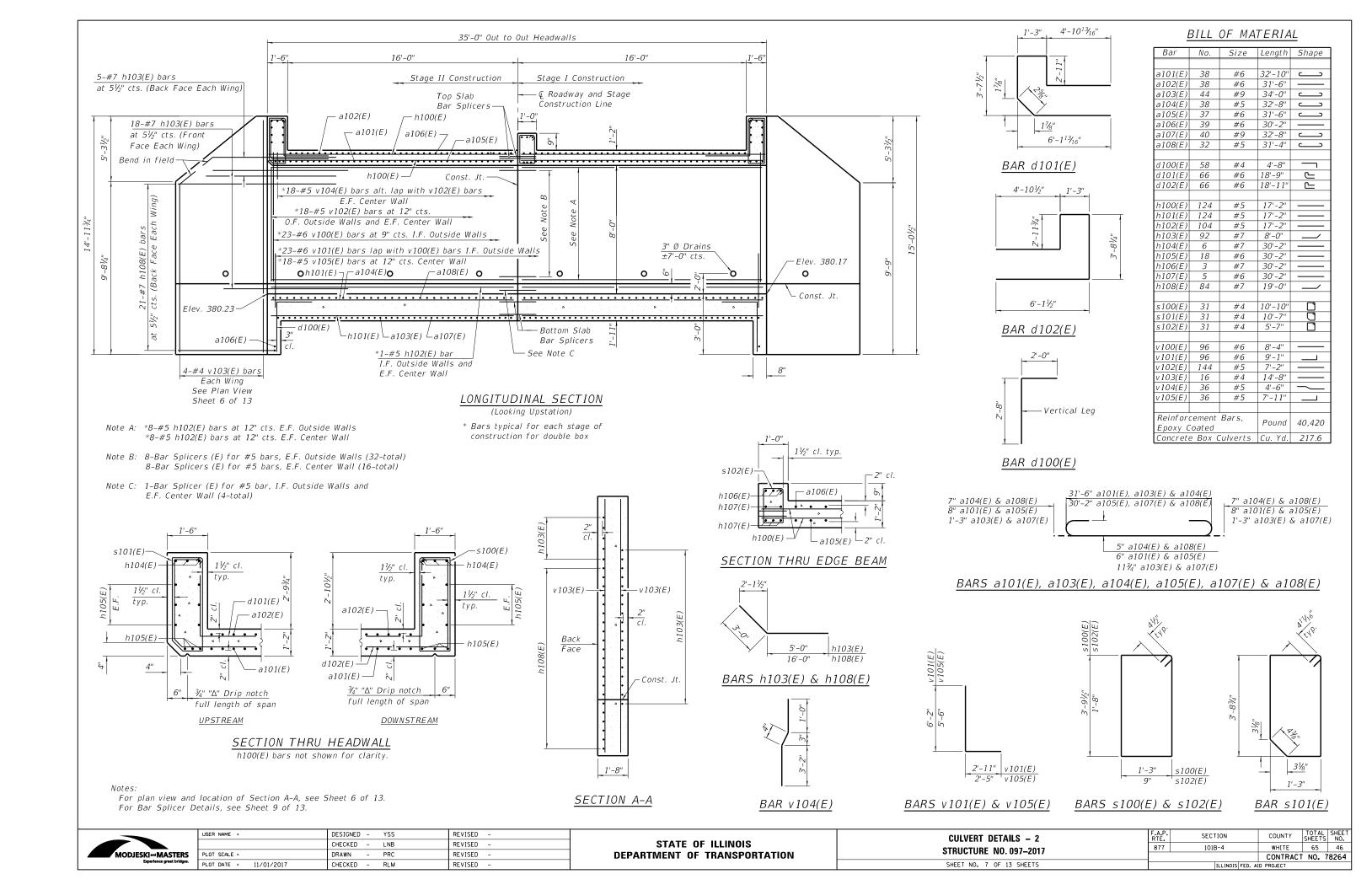
#### DRAIN DETAIL

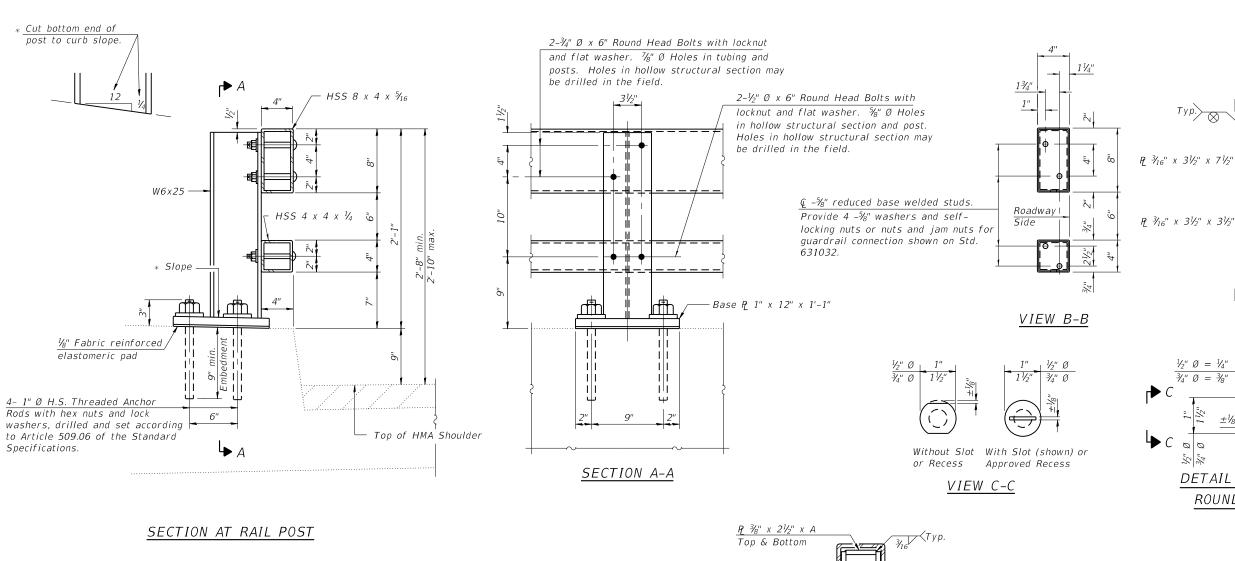
(4 locations)

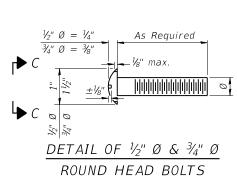
(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

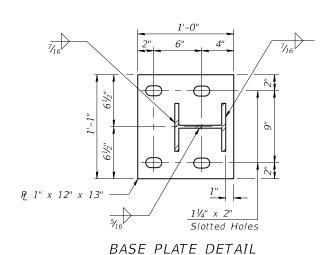
- A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
- At the Contractor's option, a longer v101(E) bar may be ordered to replace the v100(E) bar. No reduction in quantities shall be made for this substitution.
- For Section A-A, Section Thru Headwall, Section Thru Edge Beam, additional details and Bill of Material, see Sheet 7 of 13.

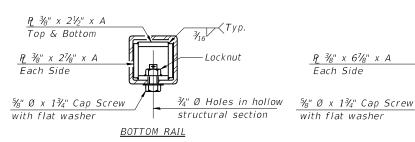
SECTION COUNTY CULVERT DETAILS - 1 STATE OF ILLINOIS CHECKED - LNB 877 101B-4 WHITE 65 45 **STRUCTURE NO. 097-2017** PLOT SCALE = DRAWN REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 78264 SHEET NO. 6 OF 13 SHEETS PLOT DATE = 11/01/2017 CHECKED - RLM REVISED -



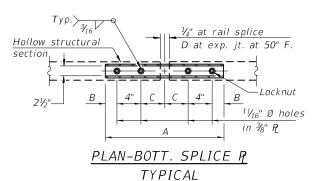


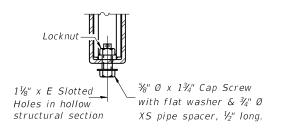






#### SECTIONS AT RAIL SPLICE





RAIL SPLICE CONNECTION
AT EXPANSION JT.

Locknut

¾" Ø Holes in hollow

structural section

TOP RAIL

#### Notes:

Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.

1'-21/2"

¾" Ø drain hole

3⁄4" Ø

drain hole

END OF RAIL DETAILS

Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one  $\frac{1}{8}$ " and two  $\frac{1}{16}$ " 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.

#### SPLICE DIMENSIONS

T	D	Α	В	С	Е
≤ 4"	21/2"	1'-8"	2"	4"	21/2"
$> 4'' \le 6\frac{1}{2}''$	3¾"	2'-0"	21/2"	5½"	31/2"
$> 6^{1/2}" \le 9"$	5"	2'-4"	31/2"	6½"	9"
> 9" ≤ 13"	7"	2'-10"	41/2"	81/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	_

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

#### BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	64

# 2-17-2017 (6'-3" Maximum Post Spacing)



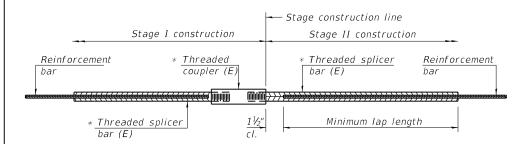
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

					PE 239 97–201	
SHEET	NO.	8	OF	13	SHEETS	

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			CONTRACT	NO. 7	8264
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F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.

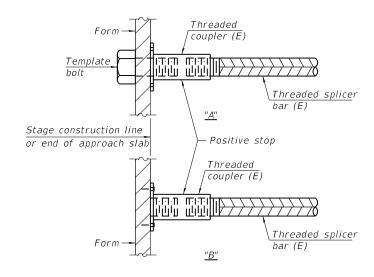


#### STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

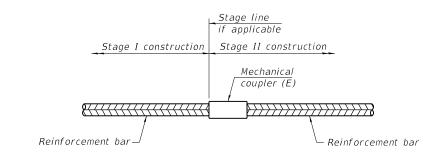
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#5	62	3'-2"
Top of Bottom Slab	#5	31	3'-7"
Bottom of Bottom Slab	#5	31	3'-2"
Culvert Walls	#5	52	3'-7"



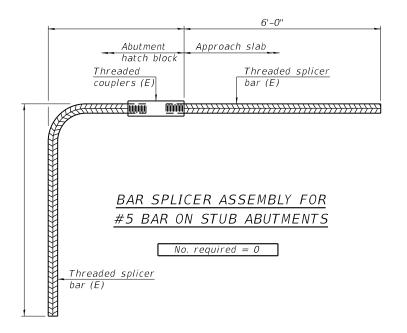
#### INSTALLATION AND SETTING METHODS

"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.

877

SECTION

101B-4

COUNTY

WHITE 65 48

CONTRACT NO. 78264

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

BSD-1

2-17-2017

MODJESKI and MASTERS Experience great bridges.

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TERS	PLOT SCALE =	DRAWN - PRC	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 097-2017
t bridges.	PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -		SHEET NO. 9 OF 13 SHEETS

#### ILLINOIS DEPARTMENT OF TRANSPORTATION District Nine Materials

Bridge Foundation Boring Log

Sheet 1 of 2 FAP 877 (IL 141) Over stream Route: FAP 877 (IL 141 Structure Number: 097-0029 Date: 8/17/2011 Bored By: R Moberly Section 101 Location: 2 mi W of New Haven Checked By: R Graeff County: White Surf Wat Elev: Boring No 1-S Ground Water Elevation L 0 W Station 384+77 when Drilling \_\_\_ 0 Offset 10' Rt CL Qu Qu tsf At Completion W tsf W% Ground Surface 391.6Ft W% Hrs: Asphalt over concrete Stiff, moist, grey, Clay A7-6 1.5B 390.1 364.6 Siff, moist, grey, Silty Clay A-6 Medium, very moist to moist, 0.9B 29 1.3B 25 grey, Clay A7-6 2 387.1 362.1 Stiff, moist, grey mottled brown, Soft, very moist, grey, Silty Clay 1.1B 0.3B Clay A7-6 27 Loam A-6 Medium to soft, very moist, brown Stiff, moist to very moist, grey, 2 1.1B 0.5B 26 Silty Clay Loam A-6 27 mottled grey, Silty Clay Loam A-6 2 357.1 382.1 Stiff, moist, grey mottled brown, Medium to soft, very moist, grey, 35.0 WH 27 Clay A7-6 0.5B Silty Clay A-6 1.1B 354.6 379.6 Medium, very moist, grey mottled Medium, very moist, grey, Clay WH 0.7B 0.9B 29 A7-6 brown, Silty Clay A-6 2 377.1 Soft, very moist, grey mottled 15.0 WH 0.7B brown, Silty Clay Loam A-6 0.3B 374.6 Stiff, very moist, brown and tan, Silty Clay Loam A-6 with 1.18 a sand layer 372.1 Soft, very moist, brown, Sandy Clay Loam to Sand Loam A-4 20.0 Medium, very moist, grey, Silty 0.4B 22 Clay A7-6 0.9B Soft, very moist, grey, Clay A7-6 WH 0.3B Stiff, moist, grey, Clay A7-6

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

Sheet 2 of 2 Route: FAP 877 (IL 141) 8/17/2011 Date:

	D	В				D	В		
soring No: 1-S	E	L				E	Ĺ	1	
tation: 384+77	P	0	!			P	0	1	
offset: 10' Rt CL	Т	W	Qu			T	W	Qu	ļ
round Surface: 391.6Ft	Н	S	tsf	W%_		Н	S	tsf	W%
oose to medium, very moist,		4		23					
grey and brown, Sand with		. 8			<u> </u>				
Silty layers					Wash-out procedures used from				
33% Silt					51.0 to 54.5 feet				
10% Sand		ļ			<b>  </b>				
7% Clay		ŀ			Borehole advanced with hollow				
		{			stem auger (8" O.D, 3.25" l.D.)				
337.1		! ,	Washed	<b>5</b> '	To convert "N" values to "N60"				
Stiff, moist, grey, Clay A7-6	55.0		vasileu	<u> </u>	multiply by 1.25	80.0			
	00.0	3	1.8B	25		00.0			
	_	4	1.00	20		_			
_		<del></del>			1				
		i			1				
334.1		1			ii .				
Hard, dry, grey, Clay Shale		1			1				
_									
332.6					<u>]</u>		[		
Very dense, dry, grey, Sand:332.1		100/0.5	"				Į		
Test @ 6,963 psi	60.0	1				85.0	]		
0 15041 0446 4		<del>                                     </del>			4		<b>!</b>		
Cored 59.4 to 64.4 feet		-					!		
020/ Page 18 90/ POD		1				_	ł		
93% Recovery; 8% RQD		1			1		ł		
Very dense, dry, grey and brown,		1					l		
Sandstone with clay seams		1			İ		i		
canadiana with day adding		1				_	i		
327.1		1			ij.		1		
	65.0	j				90.0	i		
_		1			Ĭ		1		
Cored 64.4 to 69.4 feet		1					1		
		]					]		
100% Recovery; 27% RQD							]		
	_	1			li .	_	Ţ		
Very dense, dry, grey, Sandstone		1					Į		
with clay seams	_	4				_	4		
		4					4		
Test @ 485 psi 322.1	70.0	-					-		
-	70.0	기 기				95.0	4		
		1				_	┨		
Bottom of hole = 69.4 feet		-					4		
DOLLOW OF HORE - 09.4 REEL	_	1				_	┨		
Free water observed at 17.0 feet		1					1		
THE WALL ODSCIVED AL IT.O IEEL	_	1				_	1		
Elevation referenced to BM 109		1			ll .		i		
at SW corner; Elev.= 391.4 feet	_	1				_	1		
		1					1		
	75.0	7			ii	100.	กี		

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

MODJESKI and MASTERS Experience great bridges.	

	USER NAME =	DESIGNED - LNB	REVISED -
		CHECKED - CSG	REVISED -
;	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -

STATE OF ILLINOIS						
DEPARTMENT	0F	TRANSPORTATION				

BORING LOGS – 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
STRUCTURE NO. 097-2017	877	101B-4	WHITE	65	49
3111001011L NO. 037-2017			CONTRACT	NO.	78264
SHEET NO. 10 OF 13 SHEETS		ILLINOIS FED. A	ID PROJECT		

# TLLINOIS DEPARTMENT OF TRANSPORTATION

Bridge Foundation Boring Log District Nine Materials

PAP 877 (IL 141) Over stream  Route: FAP 877 (IL 141) Str		Numbe	r: 097-	0029		Date:	8	/22/203	1.1.
Section 101					Bo	red By:	R Mobe	rly	
County: White	Locat	ion: 2	mi W c	of New		ed By:			
Soring No 2-8 Station 384+27 Offset 10' Lt CL	D E P T	B L O W	Qu tsf	W%	Surf Wat Elev: 381.1  Ground Water Elevation when Drilling 372.1  At Completion	- D E P T	B L O W	Qu tsf	W%
Fround Surface 391.6Ft	Н	S	toi	W /0	At: Hrs:	Н	S		
Asphalt					Stiff, moist, grey, Clay A7-6		4 5	1.9B	2
Stiff, moist, grey, Clay to Silty	-				364.6	⊣			
Clay A7-6		1			Medium, very moist, grey, Silty		1		
_		2	1.3B	24	Clay Loam A-4		2	0.7B	
	-	2				-	3		-
-	5.0	1			362.1 Medium, very moist, grey, Silty	30.0	1		
<del>-</del>	5.0	2	1.2B	26	Clay Loam A-6	30.0	2	0.6B	
_		2			,		2		
384.6	<u> </u>								
Stiff, moist to very moist, grey								0.55	
mottled brown, Silty Clay A7-6		1	1.1B	24			1 1	0.5B	
	$\dashv$	2					1		
382.1					357.1				
Stiff, moist, grey mottled brown,	10.0	1			Medium, very moist, grey, Clay	35.0	WH		
Clay A7-6	-	2 2	1.4B	26	A7-6	_	1 2	0.7B	
- 379.6					] {				
Medium, very moist, brown		1			1		1		
mottled grey, Silty Clay A7-6		1	0.6B	28	1		1	0.9B	
		2			1		2		
377.1					352.1				
Medium to soft, very moist, brown	15.0	1			Stiff, moist, grey, Clay A7-6	40.0	1		
mottled grey, Silt Loam to Silty		1	0.5B	24	1		1	1.2B	
Clay Loam A-4		2					2		
374.6									
Stiff, moist, brown mottled grey,		1			4				
Silty Clay Loam A-4 with Clay		2	1.4B	23	II				
layers		2			1				
372.1					347.1				
Stiff, moist, grey, Clay A7-6	20.0	1			Medium, very moist, grey, Clay	45.0	WH		
with Sand layers		3	1.1B	30	to Clay Loam A7-6		1	0.8B	
		3			-		2		
369.6							1		
Medium, very moist, grey, Clay		WH_			4		ļ		
A7-6		1   1	0.8B	21			1		
		<del>- '-</del>				_	1		
367.1		<u> </u>			342.1				
Stiff, moist, grey, Clay A7-6	25.0	1			Medium, very moist, grey, Clay	50.0	1		

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

Sheet 2 of 2

Route: FAP 877 (IL 141)
Section: 101\_\_\_\_\_

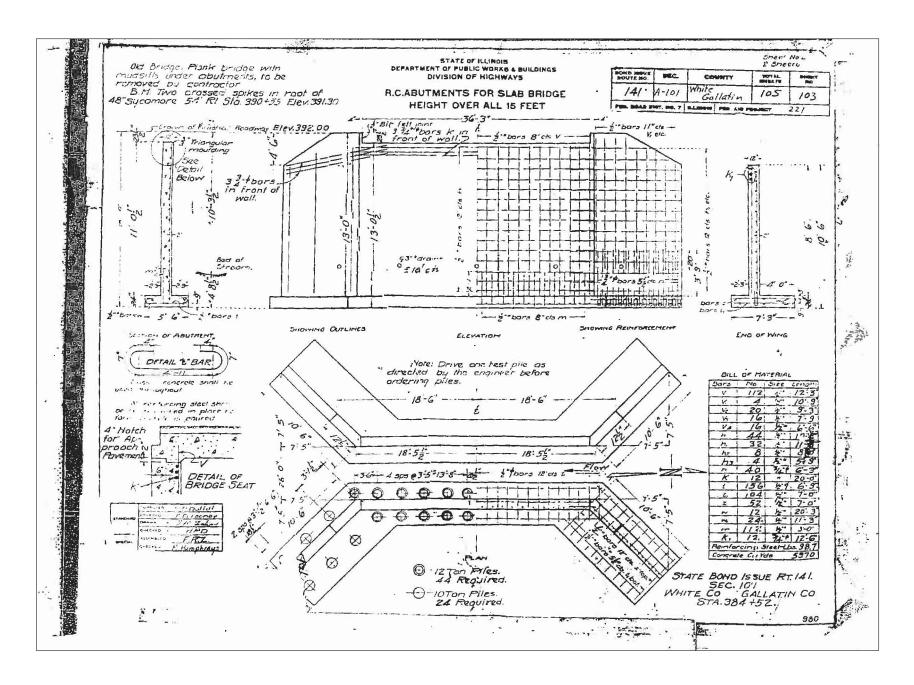
Boring No: 2-S Station: 384+27 Offset: 10' Lt CL Ground Surface: 391.6Ft	D E P T H	B L O ≷ %	Qu tsf	<b>W</b> %		D E P T H	B L O W S	Qu tsf	
A7-6		2	0.8B	23					_
-		2			_				
_					_				
						_			
-					_				
-					_		]		
_	55.0	1		···	_	80.0			
		3	0.9B	21			]		
-		3			_		j		
-					_		ļ		
					_		j		
333.1						_	ļ		
Very dense, dry, grey, Sandstone _ with Clay Shale seams					-				
331.6	60.0	100/1"			_	85.0			
	_				<u> </u>	_			
Bottom of hole = 59.6 feet					_		]		
Free water observed at 19.5 feet		_			_		1		
		]			_		]		
Elevation referenced to BM 109 at SW corner; Elev.= 391.4 feet		1				_	┨		
		]			_				
Borehole advanced with hollow stem auger (8" O.D, 3.25" I.D.)	65.0	<u>1</u>			-	90.0	4		
		]			_		]		
To convert "N" values to "N60" multiply by 1.25		-					-		
		]			_		]		
					-		1		
		]			_		]		
	70.0	1				95.0			
		1			-		<u></u>		
,		-					4		
		1			_		_		
	_	-				_	4		
		_							
		_					-		
	75.0	0				100.	9		

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

MODJESKI and MASTERS  Experience great bridge	

USER NAME =	DESIGNED -	LNB	REVISED -
	CHECKED -	CSG	REVISED -
PLOT SCALE =	DRAWN -	PRC	REVISED -
PLOT DATE = 11/01/2017	CHECKED -	RLM	REVISED -

BORING LOGS – 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
STRUCTURE NO. 097-2017	877	101B-4	WHITE	65	50
31110C1011L 110: 037-2017			CONTRACT	NO.	7826
SHEET NO. 11 OF 13 SHEETS		ILLINOIS FED. A	D PROJECT		



# FOR INFORMATION ONLY



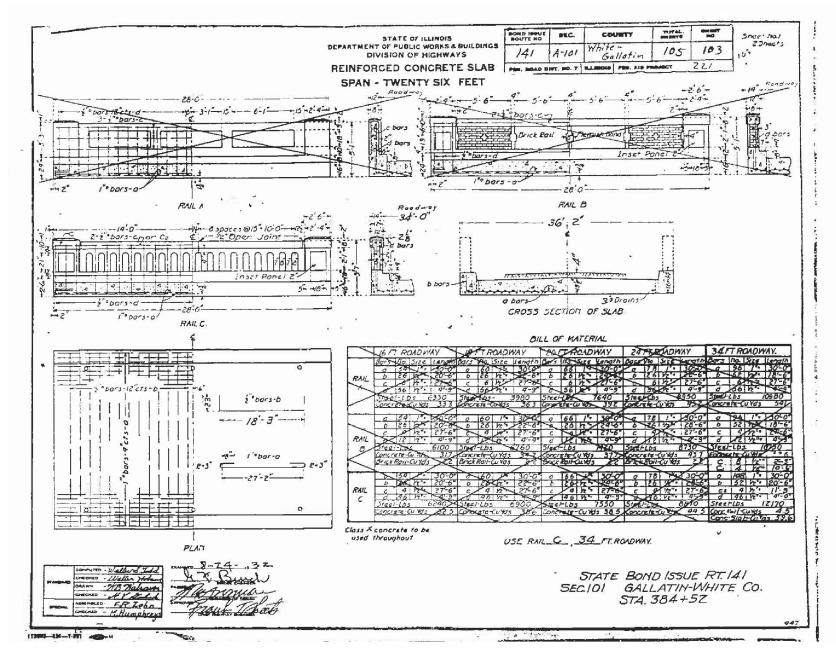
USER NAME =	DESIGNED -	REVISED -		
	CHECKED -	REVISED -		
PLOT SCALE =	DRAWN - PRC	REVISED -		
PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -		

EXISTING STRUCTURE PLANS - 1 (097-0029)		SECTIO
STRUCTURE NO. 097-2017		101B
OTHOUTOIL NO. 037-2017		
SHEET NO. 12 OF 13 SHEETS		TI.

COUNTY

WHITE 65 51

CONTRACT NO. 78264



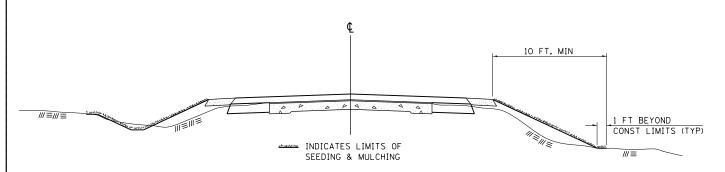
FOR INFORMATION ONLY



USER NAME =		DESIGNED -	REVISED -	
		CHECKED -	REVISED -	
	PLOT SCALE =	DRAWN - PRC	REVISED -	
	PLOT DATE = 11/01/2017	CHECKED - RLM	REVISED -	

EXISTING STRUCTURE PLANS – 2 (097–0029)		
STRUCTURE NO. 097-2017	877	
SHEET NO. 13 OF 13 SHEETS		

# **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.

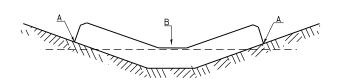
THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR ROAD AND BRIDGE CONSTRUCTION.

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

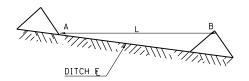
#### TEMPORARY DITCH CHECKS

# 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

	REVI	SIONS
	DRAWN	9-01-9
	REVISED	10-3-0
	RESIZED	5-8-0
	REVISED	05-04-
108	REVIEWED	5-17-1

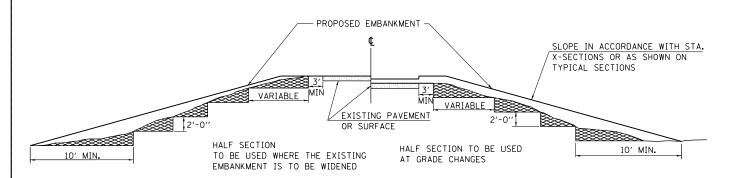
# TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL

REVISED -

REVISED -

REVISED -

REVISED

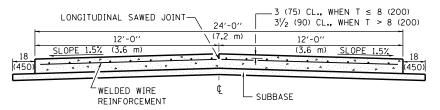




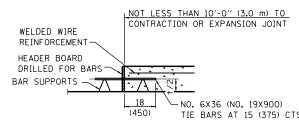
MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

REDRAWN 2-15-89 REVISED 8-15-94 CHECKED 6-3-99 RESIZED 5-7-08 9-16 REVIEWED 5-17-13

# 24' (7.2 m) PCC PAVEMENT OVER BOX CULVERT

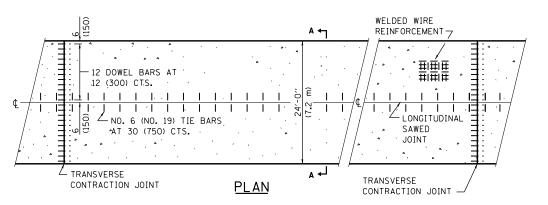


# SECTION A-A (TYPICAL 2-LANE WITH SHOULDERS)



STD. 9-

# TRANSVERSE CONSTRUCTION JOINT



#### 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.

REVISIONS				
DRAWN	11-9-17			

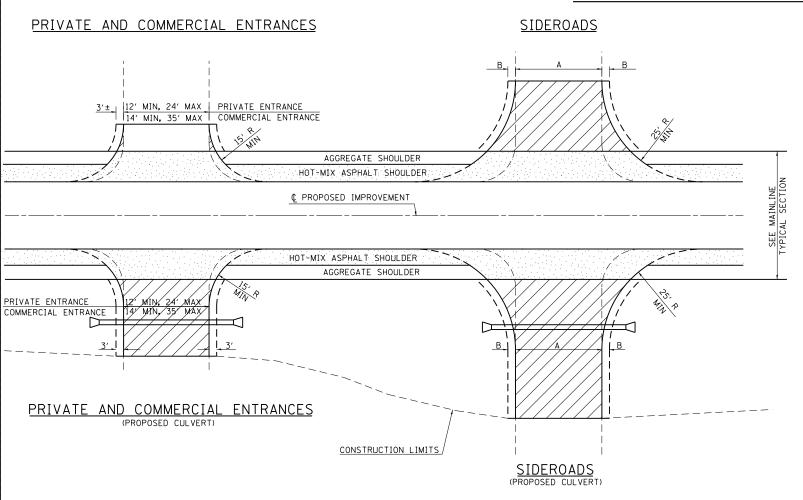
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT DETAILS
F.A.P. RTE. 877 (IL RTE. 141)

SHEET OF SHEETS STA.

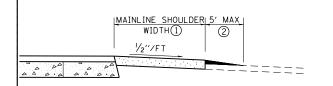
TO STA.

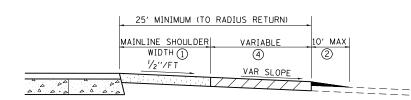
# **RURAL SIDE APPROACH DETAILS**

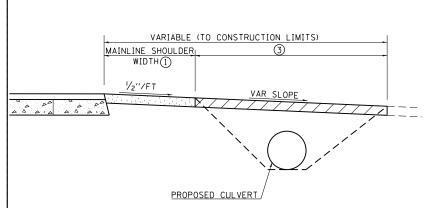


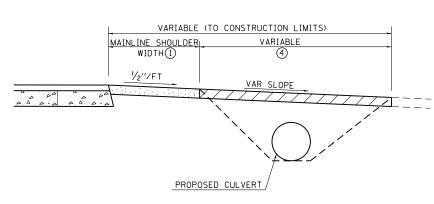
#### SIDEROADS

#### PRIVATE AND COMMERCIAL ENTRANCES









#### SIDEROAD DIMENSIONS (MIN.)

ADT	A (FT)	B (FT)	
0 TO 250	18′	2′	
250 TO 400	20'	2′	
GREATER THAN 400	22′	4′	

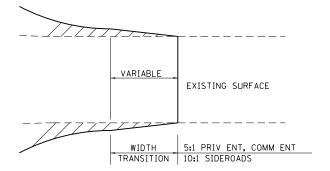
#### FIELD ENTRANCE TREATMENT

CONSTRUCT MAINLINE HOT-MIX ASPHALT AND AGGREGATE SHOULDERS THROUGH FIELD ENTRANCES.

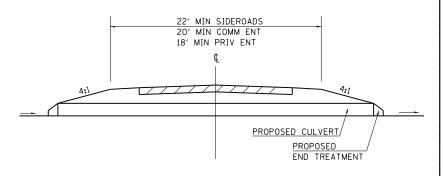
IF A PIPE IS REQUIRED, PROVIDE A 22' WIDE EARTH EMBANKMENT WITH 15' RADII AT THE INTERSECTION.

# WIDTH TRANSITION DETAIL TO EXISTING

(IF APPLICABLE)



#### DETAIL FOR CALCULATING CULVERT LENGTH



#### LEGEND

- CONSTRUCT HOT-MIX ASPHALT SHOULDER "FULL SHOULDER WIDTH" THROUGH ENTRANCE/INTERSECTION UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- IF REQUIRED, AGGREGATE TAPER FOR EXISTING GRAVEL SURFACE; HOT-MIX ASPHALT TAPER FOR EXISTING HIGHER TYPE SURFACES.
- 3 6" AGGREGATE SURFACE COURSE FOR EXISTING GRAVEL SURFACE; 2" HOT-MIX ASPHALT RESURFACING ON 4" AGGREGATE BASE COURSE FOR EXISTING HOT-MIX ASPHALT SURFACE; PCC DRIVEWAY PAVEMENT (6" PE; 7" CE) FOR EXISTING CONCRETE SURFACE.
- 3" MINIMUM HOT-MIX ASPHALT RESURFACING ON 8" MINIMUM AGGREGATE BASE COURSE FOR EXISTING GRAVEL SURFACE OR OIL & CHIP SURFACE; MATCH EXISTING FOR EXISTING HIGHER TYPE SURFACES.

#### GENERAL NOTES

SCALE:

- ENTRANCE LOCATIONS ARE TO COMPLY WITH IDOT'S POLICY "ACCESS TO STATE HIGHWAYS".
- 2. IN GENERAL, RELOCATED PRIVATE ENTRANCES ARE TO HAVE A 16' WIDE SURFACE WITH 3' WIDE SHOULDERS (22' WIDE EMBANKMENT).
- 3. SEE PLANS FOR PROPOSED PROFILE GRADES AT ENTRANCES/SIDEROADS. THE DESIRABLE MAXIMUM PROFILE GRADE FOR ENTRANCES ARE 12% FOR PE; 10% FOR CF.
- 4. ENTRANCE PIPE CULVERTS ARE TO BE A MINIMUM 15" DIAMETER AND NORMALLY REPLACED IN KIND; SIDEROAD PIPE CULVERTS ARE GENERALLY TO BE CONCRETE (18" MINIMUM DIAMETER).
- 5. THE INTERSECTION RADII OF SIDEROADS CONSTRUCTED TO FULL POLICY STANDARDS SHOULD COMPLY WITH THAT NOTED IN THE BUREAU OF LOCAL ROADS ADMINISTRATIVE POLICIES MANUAL (5-8-13).

STN 9-83



MODJESKI and MASTERS Experience great bridges.	

USER NAME = \$USER\$	DESIGNED - IDOT	REVISED -
	DRAWN - IDOT	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 11/20/2017	DATE - 11/20/2017	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A		RICT DET . 877 (IL	TAILS RTE. 141	)
SHEET	OF	SHEETS	STA.	TO STA.

F.A.P. RTE			COUNTY	TOTAL SHEETS	SHEE NO.
877	101B-3; 101B-4		WHITE	65	54
			CONTRACT	NO. 7826	64
ILLINOIS FED. A			D PROJECT		

