

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 332 (IL ROUTE 1 /14)
SECTION 5B-1
PROJECT ACF-0332 (117)
WHITE COUNTY
C-99-054-11
STRUCTURE REPLACEMENT
IL 1 /14 OVER CROOKED CREEK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	1
		ILLINOIS	CONTRACT NO. 78266	

INDEX OF SHEETS

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1.	COVER SHEET
2.	GENERAL NOTES AND STANDARDS
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18.	GUARDRAIL LAYOUT
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21.	PAVED SHOULDER LAYOUT
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25.-37.	STRUCTURE PLANS
38.-39.	SOIL BORING
40.-51.	CROSS SECTIONS

UTILITIES

FIBER OPTIC COMMUNICATION
CLEARWAVE
P.O. BOX 808
HARRISBURG, IL 62946
ATTN: AARON CARIAN

TELEPHONE
FRONTIER
208 WEST UNION
MARION, IL 62959
ATTN: RICK SHAW

WATER
CROSSVILLE WATER & GAS
P.O. BOX 309
CROSSVILLE, IL 62821
ATTN: CHUCK CONNER

ELECTRIC DISTRIBUTION
WAYNE WHITE ELECTRIC
P.O. BOX DRAWER E
FAIRFIELD, IL 62837
ATTN: ERIN HALLEY

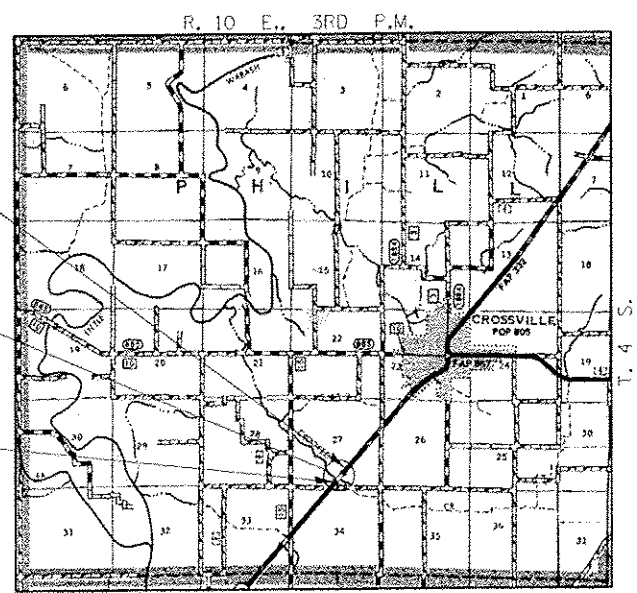
TELEPHONE
CROSSVILLE COMMUNICATION
P.O. BOX 209
CROSSVILLE, IL 62821
ATTN: STAN RAWLINSON

PIPELINE
COUNTRYMARK
1200 REFINERY ROAD
MT. VERNON, IN 47620
ATTN: MICKEY SMITH



TRAFFIC DATA

FUNCTIONAL CLASSIFICATION:	OTHER PRINCIPAL ARTERIAL
DESIGN SPEED:	55 MPH
POSTED SPEED:	55 MPH
ADT:	4890 (2014)
	5960 (2034)
PV:	90.24%
TRUCKS:	9.76%



IMPROVEMENT ENDS
STATION 338+02.88

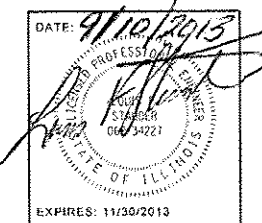
STA. 336+25.25
3 SPAN SLAB BRIDGE
65'-6" BK TO BK ABUTMENTS
40' CLEAR WIDTH; SKEW = 0°
EXISTING STRUCTURE NO. 097-0006
PROPOSED STRUCTURE NO. 097-0079

IMPROVEMENT BEGINS
STATION 334+49.13

LOCATION MAP

APPROXIMATE SCALE: 0 1 MILE

NET LENGTH OF PROJECT = 353.75 FEET = 0.067 MILES
GROSS LENGTH OF PROJECT = 353.75 FEET = 0.067 MILES
ROADWAY LENGTH = 290.25 FEET = 0.055 MILES
BRIDGE LENGTH = 63.5 FEET = 0.012 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct 16 20 13

Jeffrey J. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 6 20 13
John D. Baranzelli, PE
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 6 20 13
Omer Osman, PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

PROJECT ENGINEER: DAVID PICHE (618) 351-5227

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

PHILLIPS TOWNSHIP

CONTRACT NO. 78266

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

GENERAL NOTES

- 1 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING FIELD DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- 2 WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- 3 ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THE PLANS.
- 4 PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NORMAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. THE CONTRACTOR, HOWEVER, WILL BE PAID FOR THE ACTUAL QUANTITY FURNISHED AT THE UNIT PRICE FOR THE WORK. CONSTRUCTION PLANS ARE AVAILABLE FOR REVIEW AT THE DISTRICT 9 OFFICE.
- 5 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.
- 6 ALL OBSTRUCTIONS WHICH ARE WITHIN THE CLEAR ZONE SHOWN ON THE TYPICAL SECTION AND ARE NOT SHIELDED BY THE PROPOSED GUARDRAIL SHALL BE REMOVED BETWEEN STATION 333+00 AND STATION 339+00. TYPICAL OBSTRUCTIONS ARE HEADWALLS, FOUNDATIONS, ETC. WHICH PROJECT 100 mm (4 IN.) OR MORE ABOVE THE GROUND LINE; AND TREES WHICH WILL MATURE TO A DIAMETER OF 100 mm (4 IN.) OR GREATER.
- 7 IF SO DIRECTED BY THE ENGINEER, DITCHES ADJACENT TO EMBANKMENTS SHALL BE CONSTRUCTED PRIOR TO STARTING THE CONSTRUCTION OF THE EMBANKMENT FILL.
- 8 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. (112 LBS/SQ.YD./INCH OF THICKNESS)
ALL AGGREGATE 2.05 TONS/CU.YD.
BITUMINOUS MATERIALS:
ON PAVEMENT - 0.1 GAL./SQ.YD.
INTERMEDIATE LIFTS (FOG COAT) - 0.04 GAL./SQ.YD.
ON AGGREGATE SURFACE - 0.32 GAL./SQ.YD.
AGGREGATE (PRIME COAT) - 0.002 TONS/SQ.YD.
RIPRAP - 1.5 TONS/CU.YD.
- 9 TREES SHALL BE PRESERVED THROUGHOUT THIS SECTION AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. GENERALLY, TREES OUTSIDE THE CLEAR ZONE, AND WHICH DO NOT INTERFERE WITH CONSTRUCTION, SHALL NOT BE DISTURBED.
- 10 TRIM EDGES OF EXISTING HOT MIX ASPHALT SURFACE FLUSH WITH EXISTING PAVEMENT PRIOR TO CONSTRUCTING NEW BASE COURSE WIDENING.
- 11 EARTHWORK COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.
- 12 THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION FOR THE SURFACE COURSE AND LEVELING BINDER COURSE.
- 13 WHEN WIDENING FLEXIBLE BASE PAVEMENT, THE CONTRACTOR SHALL TRIM EXISTING SURFACE AND BASE TO A FIRM, NEAR VERTICAL PLANE BEFORE CONSTRUCTING THE WIDENING. THE COST OF THIS REQUIREMENT IS INCLUDED IN THE UNIT PRICE BID FOR THE BASE COURSE WIDENING.

GENERAL NOTES

- 14 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.
- 15 THE MINIMUM VERTICAL CLEARANCE FOR PERMANENT SIGNS PLACED ON BACKSLOPES SHALL BE 0.914 m (3 FT.) MEASURED FROM A POINT DIRECTLY BENEATH THE FAR EDGE OF THE SIGN.
- 16 THE LIMITS OF ROCK AND EARTH SLOPES SHOWN IN THE CROSS SECTIONS ARE APPROXIMATE. THE ACTUAL SLOPE USED SHALL BE DETERMINED BY THE MATERIAL CLASSIFICATION AS DEFINED IN ARTICLE 202.04, AND AS DIRECTED BY THE ENGINEER.
- 17 QUANTITIES SHOWN IN THE PLANS FOR BRIDGE DECK GROOMING AND PROTECTIVE COAT INCLUDE THE BRIDGE AND THE BRIDGE APPROACH SLAB.
- 18 PROTECTIVE COAT SHALL BE APPLIED TO THE BRIDGE AND THE BRIDGE APPROACH SLAB IN ACCORDANCE WITH ARTICLE 503.19 OF THE STANDARD SPECIFICATIONS. THE SEASONAL EXCEPTION SHALL NOT APPLY. THE PROTECTIVE COAT SHALL BE APPLIED REGARDLESS OF THE CURING METHOD USED. THE RATE OF APPLICATION FOR EACH COAT IN SAW CUT GROOVED AREAS SHALL BE 25 SQUARE YARDS PER GALLON OF MIXTURE.
- 19 PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHOULD CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.
- 20 IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.
- 21 THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHOULD APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.
- 22 THE CENTERLINE PAVEMENT MARKING SHOULD BE REMOVED FROM THE STOP BAR TO THE SAND AT TENUATORS OR DRUMS. 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.
- 23 VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE STAGE II NEW BRIDGE PARAPET. THE BARRIER WALL REFLECTORS SHALL BE INSTALLED PRIOR TO OPENING TO TRAFFIC.
- 24 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 TURNED OFF OR COVERED.
- 25 ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE LEFT IN PLACE UNTIL REMOVAL IS REQUIRED TO CONSTRUCT FINAL GRADE LINES.
- 26 COMMITMENTS: NONE AS OF 10/13/2013

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
- 420001-07 PAVEMENT JOINTS
- 420401-10 BRIDGE APPROACH PAVEMENT CONNECTOR
- 515001-03 NAME PLATE FOR BRIDGES
- 542401-01 METAL END SECTION FOR PIPE CULVERTS
- 601101-01 CONCRETE HEADWALL FOR PIPE DRAIN
- 610001-06 SHOULDER INLET WITH CURB
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630201-06 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-06 SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
- 631031-12 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 701001-02 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5M (15') AWAY
- 701006-05 OFF-ROAD OPERATIONS 2L, 2W, 4.5M (15') TO 600 MM (24") FROM PAVEMENT EDGE
- 701011-04 OFF-ROAD 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
- 701321-13 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS > 45 MPH
- 701901-03 TRAFFIC CONTROL DEVICES
- 704001-07 TEMPORARY CONCRETE BARRIER
- 780001-04 TYPICAL PAVEMENT MARKINGS
- 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREPARED BY: Joe Zdaniewicz
DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY: [Signature]
DISTRICT LAND ACQUISITION ENGINEER

EXAMINED BY: Carrie Nelson
DISTRICT PROGRAM DEVELOPMENT ENGINEER

EXAMINED BY: Keel Kelly
DISTRICT OPERATIONS ENGINEER

EXAMINED BY: [Signature]
DISTRICT PROJECT IMPLEMENTATION ENGINEER

EXAMINED BY: Dayle J. Tullish
DISTRICT CONSTRUCTION ENGINEER

EXAMINED BY: [Signature]
DISTRICT MATERIALS ENGINEER

FILE NAME: 110253-district-notes.dgn	USER NAME: #USER#	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES AND HIGHWAY STANDARDS ILLINOIS ROUTE 1/14			F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. STATE OF ILLINOIS PROFESSIONAL ENGINEERS 228 N. WASHINGTON ST., SUITE 201 CHICAGO, IL 60610-3703	PLT SCALE: #SCALE#	DRAWN - L.G.C.	REVISED -					332	5B-1	WHITE	51	2
ILLINOIS PROFESSIONAL ENGINEERS 121 N. W. 1ST ST. CHICAGO, IL 60602	PLT DATE: 9/11/2013	CHECKED - J.W.F.	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT				
		DATE: 08/15/13	REVISED -		CONTRACT NO. 78266							

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011	
		UNIT	097-0079 FUNDING NHS 80% FEDERAL 20% STATE
20200100	EARTH EXCAVATION	CU YD	125
20300100	CHANNEL EXCAVATION	CU YD	320
20700220	POROUS GRANULAR EMBANKMENT	CU YD	45
25000210	SEEDNG, CLASS 2A	ACRE	0.25
25000350	SEEDING, CLASS 7	ACRE	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	11
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	7
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	7
25000700	AGRICULTURAL GROUND LIMESTONE	TON	0.2
25100115	MULCH, METHOD 2	ACRE	0.5
25100630	EROSION CONTROL BLANKET	SQ YD	272
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	35
28000305	TEMPORARY DITCH CHECKS	FOOT	12
28000400	PERIMETER EROSION BARRIER	FOOT	735

^ SEE SPECIAL PROVISIONS

FILE NAME = c:\pwwork\pwwork\1\awander\1\UREFS38045.D978266\1\16201.dgn	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES ILLINOIS ROUTE 1/14		P.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 2000 STEVENSON DRIVE, SUITE 301 SPRINGFIELD, ILLINOIS 62761	DRAWN - L.G.C.	REVISED -		332	58-1	WHITE	51	3		
FLDT SCALE = 2.8988' / 1" =	CHECKED - J.W.F.	REVISED -		SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.		CONTRACT NO. 78266				
FLDT DATE = 9/23/2013	DATE - 08/15/13	REVISED -		ILLINOIS FED. AID PROJECT						

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011	
		UNIT	097-0079 FUNDING NHS 80% FEDERAL 20% STATE
28100107	STONE RIPRAP, CLASS A4	SQ YD	14
28100109	STONE RIPRAP, CLASS A5	SQ YD	538
28200200	FILTER FABRIC	SQ YD	552
35501324	HOT-MIX ASPHALT BASE COURSE, 10"	SQ YD	727
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	82
40600300	AGGREGATE (PRIME COAT)	TON	2
40600847	LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N90	TON	27
40600882	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	266
40600990	TEMPORARY RAMP	SQ YD	136
40603345	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	85
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	56
44000100	PAVEMENT REMOVAL	SQ YD	397
44004250	PAVED SHOULDER REMOVAL	SQ YD	416
48203006	HOT-MIX ASPHALT SHOULDERS, 2 1/4"	SQ YD	370

111 ^SEE SPECIAL PROVISIONS

FILE NAME * D:\970266\sh1-5002.dgn	USER NAME * #USER#	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES ILLINOIS ROUTE 1/14	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 2045 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62761	PLOT SCALE * #SCALE#	DRAWN - L.G.C.	REVISED -			332	5B-1	WHITE	51	4	
ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PR / SE COMP. 184.002954	PLOT DATE * 9/17/2013	CHECKED - J.W.F.	REVISED -			CONTRACT NO. 78266					
	DATE - 08/15/13	REVISED -				SCALE:	SHEET NO. 2 OF 6 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011	
		UNIT	097-0079 FUNDING NHS 80% FEDERAL 20% STATE
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	160
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	176
50200300	COFFERDAM EXCAVATION	CU YD	268
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	166.4
50300255	CONCRETE SUPERSTRUCTURE	CU YD	287.7
50300260	BRIDGE DECK GROOVING	SQ YD	521
50300265	SEAL COAT CONCRETE	CU YD	118
50300300	PROTECTIVE COAT	SQ YD	032
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	85170
50800515	BAR SPLICERS	EACH	445
51200950	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	1879

14 ^ SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011	
		UNIT	097-0079 FUNDING NHS 80% FEDERAL 20% STATE
51202305	DRIVING PILES	FOOT	1879
51203200	TEST PILE METAL SHELLS	EACH	1
51500100	NAME PLATES	EACH	1
54215547	METAL END SECTIONS 12'	EACH	2
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	46
60100945	PIPE DRAINS 12'	FOOT	28
61000115	TYPE E INLET BOX STANDARD 610001	EACH	2
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	50
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2
63200310	GUARDRAIL REMOVAL	FOOT	404
68201120	CONCRETE SHOULDER CURB	FOOT	32
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6
67100100	MOBILIZATION	L SUM	1

1/ ^SEE SPECIAL PROVISIONS

* SPECIALTY ITEM

FILE NAME : 0178266-sh1-5004.dgn	USER NAME : *USER*	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES ILLINOIS ROUTE 1/14	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 335 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62769	PLOT SCALE : #SCALE#	DRAWN - L.G.C.	REVISED -			332	58-1	WHITE	51	6
ILLINOIS PROFESSIONAL DESIGN FIRM 181/182 IBC CORP. 184-000018	PLOT DATE : 9/17/2013	CHECKED - J.W.F.	REVISED -			CONTRACT NO. 78266		ILLINOIS FED. AID PROJECT		
DATE - 08/15/13				REVISED -	SCALE:	SHEET NO. 4 OF 6 SHEETS		STA.	TO STA.	

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011	
		UNIT	097-0079 FUNDING NHS 80% FEDERAL 20% STATE
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	6
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	90
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1944
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	678
70400100	TEMPORARY CONCRETE BARRIER	FOOT	482.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	338
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1944

U ^SEE SPECIAL PROVISIONS

* SPECIALTY ITEM

FILE NAME * 0970266-sh1-5005.dgn	USER NAME * USER*	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES ILLINOIS ROUTE 1/14		F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 2005 STEPHENSON DRIVE, SUITE 301 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE * SCALE*	DRAWN - L.G.C.	REVISED -		332	5B-1	WHITE	51	7		
ELR ILLINOIS PROFESSIONAL DESIGN FIRM 131 PLYER CORP. 104-902018	PLOT DATE * 9/17/2013	CHECKED - J.W.F.	REVISED -		SCALE:	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO. 78266		
	DATE - 08/15/13	REVISED -							ILLINOIS FED. AID PROJECT		

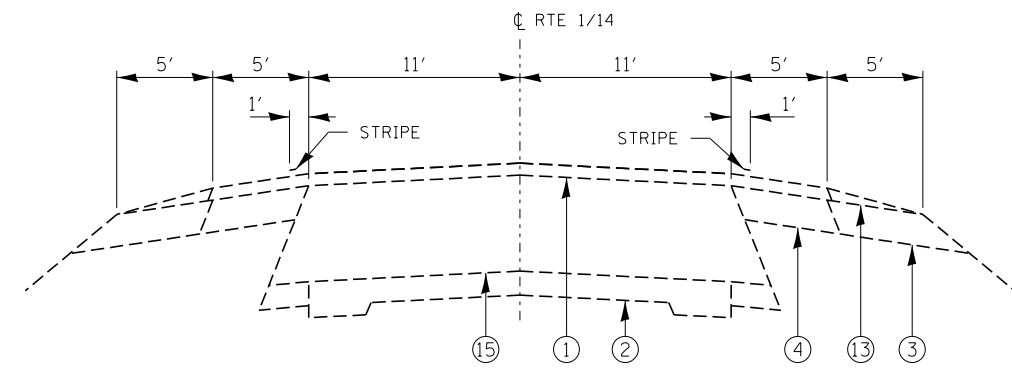
SUMMARY OF QUANTITIES			
CODE NO.	ITEM	CONSTRUCTION TYPE CODE	
		UNIT	097-0079 FUNDING NHS 80% FEDERAL 20% STATE
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	4
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	4
* 78200420	GUARDRAIL MARKERS, TYPE B	EACH	4
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	326
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	6
* 86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
* 8680110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	71
* 8830103	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT	EACH	2
X7050167	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	2
* Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	36
* Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	136
φ Z0076000	TRAINEES	HOOR	500
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	416
φ Z0076001	TRAINEES TRAINING PROGRAM GRADUATE	HOOR	500

* SEE SPECIAL PROVISIONS

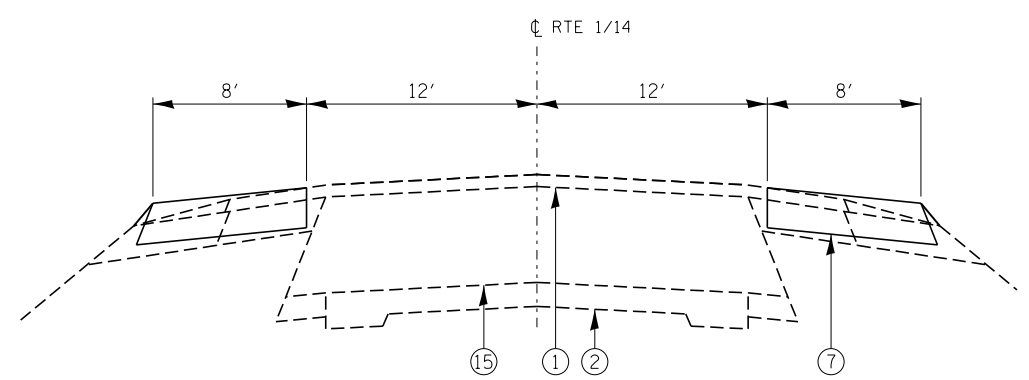
* SPECIALTY ITEM

φ 0042

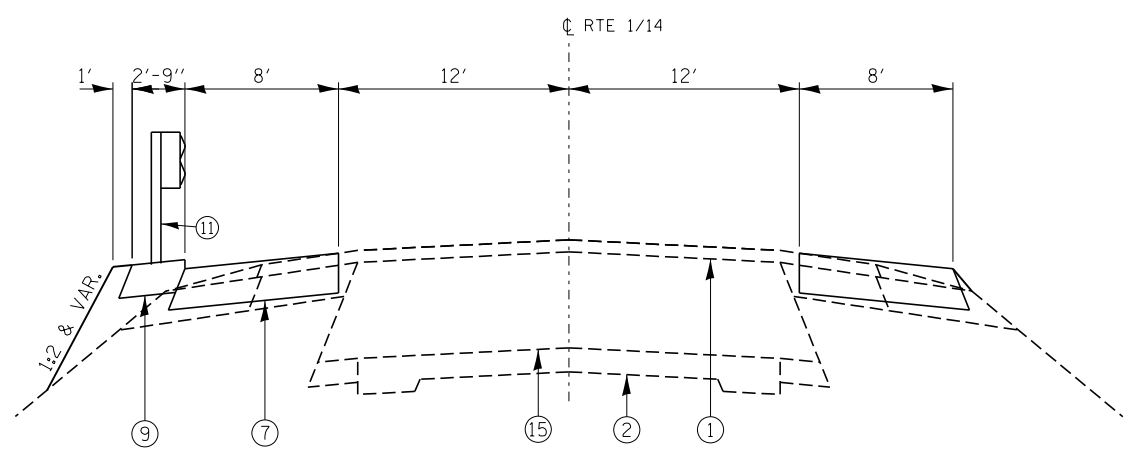
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HAMPTON, LENZINI AND RENWICK, INC. 3045 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = *SCALE*	DRAWN - L.G.C.	REVISED -			332	5B-1	WHITE	51	8	
ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. / S.O.M. / 184-000000	PLOT DATE = 9/17/2013	CHECKED - J.W.F.	REVISED -			CONTRACT NO. 78266					
	DATE = 08/15/13	REVISOR -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET NO. 6 OF 6 SHEETS	STA.	TO STA.				



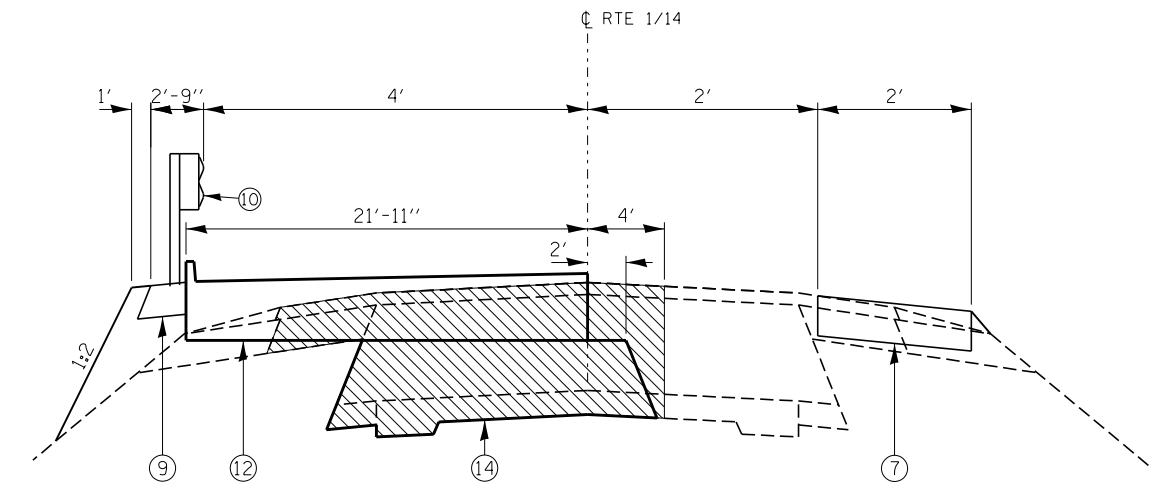
EXISTING CROSS SECTION
 STA. 333+80.00 TO STA. 336+17.00
 STA. 336+43.00 TO STA. 338+75.00



PROPOSED STAGE 1 CROSS SECTION
 STA. 333+80.00 TO STA. 334+49.13
 STA. 338+02.38 TO STA. 338+75.00



PROPOSED STAGE 1 CROSS SECTION
 STA. 334+49.13 TO STA. 335+57.50
 STA. 336+93.00 TO STA. 338+02.88



PROPOSED STAGE 1 CROSS SECTION
 STA. 335+57.50 TO STA. 335+93.50
 STA. 336+57.00 TO STA. 336+93.00

LEGEND

- ① EXISTING HMA OVERLAY (1 1/2" Min)
- ② EXIST CONCRETE PAVEMENT (9X6X9)
- ③ EXISTING AGGREGATE SHOULDERS
- ④ EXISTING HMA SHOULDERS 6"
- ⑤ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90 (1 1/2" Min)
- ⑥ LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N90 (3/4" MIN)
- ⑦ HMA BASE COURSE 10"
- ⑧ HMA SHOULDERS 2 1/4"
- ⑨ HMA SHOULDERS 8"
- ⑩ TRAFFIC BARRIER TERMINAL, TYPE 6
- ⑪ STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POST
- ⑫ BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) OR BRIDGE APPROACH SLAB
- ⑬ EXISTING AGGREGATE WEDGE SHOULDERS
- ⑭ POROUS GRANULAR EMBANKMENT
- ⑮ EXISTING HMA BINDER COURSE VARIABLE THICKNESS

	HMA MIXTURE REQUIREMENTS			
LOCATION(S):	IL RTE 1/14 WIDENING	IL RTE 1/14 SURFACE	IL RTE 1/14 LEVELING BINDER	IL RTE 1/14 SHOULDERS
MIXTURE USE(S):	HMA BASE COURSE	HMA SURFACE COURSE	LEVELING BINDER (MM), IL 9.5 FG N90	HOT-MIX ASPHALT SHOULDERS, 8"
AC/PG:	PG 64-22	PG 64-22	PG 64-22	PG 58-22
RAP % (MAX):	SEE SPECIAL PROVISIONS	SEE SPECIAL PROVISIONS	SEE SPECIAL PROVISIONS	SEE SPECIAL PROVISIONS
DESIGN AIR VOIDS:	4% @ Ndes 90	4% @ Ndes 90	4% @ Ndes 90	2% @ Ndes 30
MIXTURE COMPOSITION: (GRADATION MIXTURE):	IL 19.0	IL 9.5	IL 9.5 FG	HMA SHOULDERS
FRICITION AGGREGATE:	NONE	MIXTURE D	NONE	NONE
MIXTURE WEIGHTS:	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS

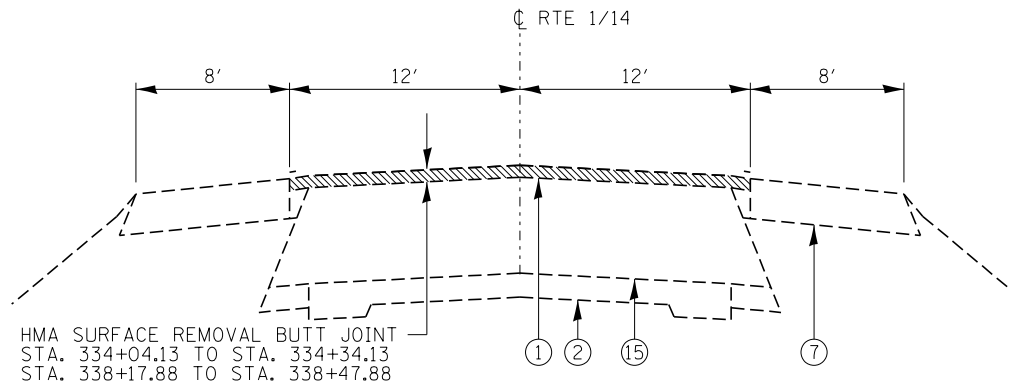
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HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = *SCALE*	DRAWN - T.W.K.	REVISED -
PLOT DATE = 9/17/2013		CHECKED - J.W.F.	REVISED -
		DATE - 08/15/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

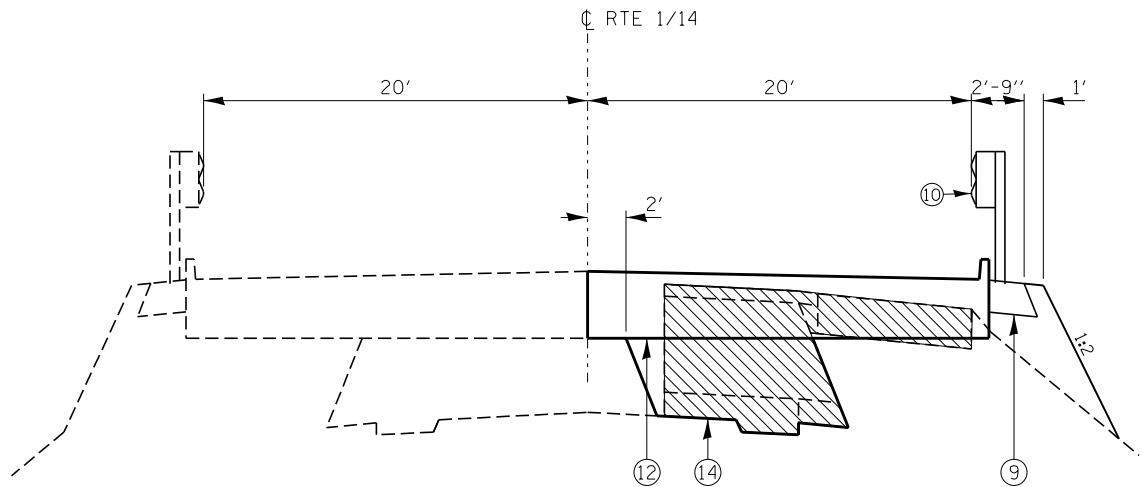
**TYPICAL SECTIONS
 ILLINOIS ROUTE 1/14**

SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

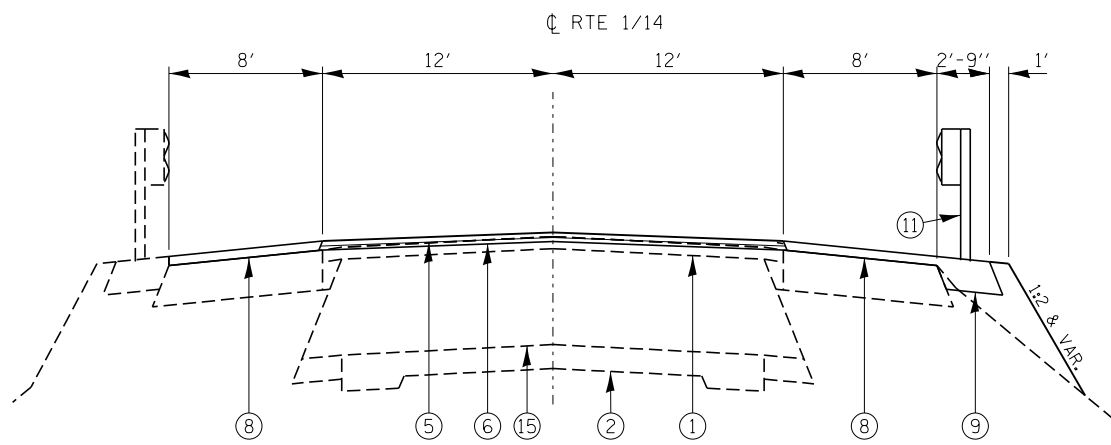
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	9
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				



PROPOSED STAGE 2 CROSS SECTION
 STA. 333+80.00 TO STA. 334+49.13
 STA. 338+02.38 TO STA. 338+75.00



PROPOSED STAGE 2 CROSS SECTION
 STA. 335+57.50 TO STA. 335+93.50
 STA. 336+57.00 TO STA. 336+93.00



PROPOSED STAGE 2 CROSS SECTION
 STA. 334+49.13 TO STA. 335+57.50
 STA. 336+93.00 TO STA. 338+02.88

LEGEND

- ① EXISTING HMA OVERLAY (1 1/2" Min)
- ② EXIST CONCRETE PAVEMENT (9X6X9)
- ③ EXISTING AGGREGATE SHOULDERS
- ④ EXISTING HMA SHOULDERS 6"
- ⑤ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90 (1 1/2" Min)
- ⑥ LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N90 (3/4" MIN)
- ⑦ HMA BASE COURSE 10"
- ⑧ HMA SHOULDERS 2 1/4"
- ⑨ HMA SHOULDERS 8"
- ⑩ TRAFFIC BARRIER TERMINAL, TYPE 6
- ⑪ STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POST
- ⑫ BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) OR BRIDGE APPROACH SLAB
- ⑬ EXISTING AGGREGATE WEDGE SHOULDERS
- ⑭ POROUS GRANULAR EMBANKMENT
- ⑮ EXISTING HMA BINDER COURSE VARIABLE THICKNESS

FILE NAME = D978266-sht-typical.dgn	USER NAME = #USER*	DESIGNED - L.F.S.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = *SCALE*	DRAWN - T.W.K.	REVISED -
	PLOT DATE = 9/17/2013	CHECKED - J.W.F.	REVISED -
		DATE - 08/15/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS ILLINOIS ROUTE 1/14	
SCALE:	SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	10
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				

PAVEMENT MARKING SCHEDULE												
LOCATION	TEMPORARY PAVEMENT MARKING						SHORT TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL	PAVEMENT REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL
	4"			4" SKIPPED								
	4" SINGLE WHITE EDGE LINE	4" SINGLE YELLOW CENTERLINE	4" DASHED YELLOW CENTERLINE	4" SINGLE WHITE EDGE LINE	4" SINGLE YELLOW CENTERLINE	4" DASHED YELLOW CENTERLINE						
	70300220	70300220	70300220	78001110	78001110	78001110						
FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	70300100	70301000	78300100	78100100	78100105	78300200	
						FOOT	SQ FT	SQ FT	EACH	EACH	EACH	
FAP 332 IL 1/14												
RT. STA 332+27 TO RT. STA 340+14	787			787				262	165			
LCL. STA 332+27 TO LCL. STA 334+00		173			173			58	14			
CL. STA 332+27 TO CL. STA 340+14			197			197	90	96	27	4	2	6
LT. STA 332+27 TO LT. STA 340+14	787			787				262	120			
SUBTOTAL	1574	173	197	1574	173	197	90	678	326	4	2	6
TOTAL		1944			1944		90	678	326	4	2	6

28000400 PERIMETER EROSION BARRIER	
LOCATION	FOOT
FAP 332 IL 1/14	
STAGE I	
LT. STA 333+80 TO LT. STA 335+83.5	204
RT. STA 336+67 TO RT. STA 335+83.5	119
LT. STA 336+67 TO LT. STA 338+75	204
RT. STA 336+67 TO RT. STA 338+75	208
TOTAL	735

25100630 EROSION CONTROL BLANKET	
LOCATION	SQ YD
FAP 332 IL 1/14	
STAGE I	
LT. STA 334+82 TO LT. STA 335+84	50
LT. STA 336+67 TO LT. STA 337+93	122
STAGE II	
RT. STA 334+57 TO RT. STA 335+84	49
RT. STA 336+67 TO RT. STA 337+68	51
TOTAL	272

28000305 TEMPORARY DITCH CHECKS	
LOCATION	FOOT
FAP 332 IL 1/14	
STAGE I	
LT. STA 336+72	12
TOTAL	12

20700110 POROUS GRANULAR EMBANKMENT	
LOCATION	CU YD
FAP 332 IL 1/14	
STAGE I	
LT. STA 335+67.5 TO LT. STA 335+87	12
LT. STA 336+64.34 TO LT. STA 336+93	14
STAGE II	
RT. STA 335+57.5 TO RT. STA 335+87	9
RT. STA 336+64.34 TO RT. STA 336+93	10
TOTAL	45

66201120 CONCRETE SHOULDER CURB	
LOCATION	CONCRETE SHOULDER CURB
	66201120
	FOOT
FAP 332 IL 1/14	
STAGE I	
LT. STA 336+87 TO LT. STA 337+03	16
STAGE II	
RT. STA 336+87 TO RT. STA 337+03	16
TOTAL	32

GUARDRAIL SCHEDULE									
LOCATION	GUARDRAIL REMOVAL	STEEL PLATE BEAM GUARD RAIL TYPE A 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL TYPE 6	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT)	TERMINAL MARKER DIRECT APPLIED	GUARDRAIL MARKERS TYPE A	GUARDRAIL MARKERS TYPE B	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL TANGENT	TEMPORARY TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT)
	63200310	63000001	63100085	63100167	78201000	78200410	78200420	X6330103	X7050167
	FOOT	FOOT	EACH	EACH	EACH	EACH	EACH	EACH	EACH
FAP 332 IL 1/14									
STAGE I									
LT. STA 334+82.26 TO LT. STA 335+81.00			1	1	1				
LT. STA 336+69.50 TO LT. STA 337+93.25		25	1	1	1				
LT. STA 334+98.36 TO LT. STA 335+99.01	101								
LT. STA 336+61.77 TO LT. STA 337+62.58	101								
LT. STA 334+82.26 TO LT. STA 337+93.25						2	2		
RT. STA 335+06.31 TO RT. STA 335+56.31	50								
RT. STA 335+03.19 TO RT. STA 335+56.31									1
RT. STA 337+04.35 TO RT. STA 337+54.35	50								1
RT. STA 337+04.35 TO RT. STA 337+57.47									
STAGE II									
RT. STA 334+57.26 TO RT. STA 335+81.00		25	1	1	1			1	
RT. STA 336+69.50 TO RT. STA 337+68.25			1	1	1			1	
RT. STA 335+56.31 TO RT. STA 336+06.87	51								
RT. STA 336+63.82 TO RT. STA 337+04.35	51								
RT. STA 334+57.26 TO RT. STA 337+68.25						2	2		
TOTAL	404	50	4	2	4	4	4	2	2

EARTHWORK SUMMARY							
LOCATION	EARTH EXCAVATION	CHANNEL EXCAVATION	SHRINKAGE FACTOR	% USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT REQUIRED	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CUBIC YARD	CUBIC YARD			CUBIC YARD	CUBIC YARD	CUBIC YARD
	20200100	20300100					
FAP 332 IL 1/14							
STAGE I							
333+80 TO 335+92.50	58		25.00%	100.00%	44	11	33
336+58.00 TO 338+75	55		25.00%	100.00%	41	27	14
STAGE II							
333+80 TO 335+92.50	7		25.00%	100.00%	5	7	-2
336+58.00 TO 338+75	5		25.00%	100.00%	4	3	1
CHANNEL EXCAVATION		320	25.00%	75.00%	180		180
TOTAL USE	125	320			274	48	226
						WASTE =	226 CU.YD.

ROADWAY SCHEDULE												
LOCATION	HOT-MIX ASPHALT SURFACE COURSE MIX D, N90	LEVELING BINDER (MACHINE METHOD) IL-9.5FG N90	HOT-MIX ASPHALT BASE COURSE 10"	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	BITUMINOUS MATERIAL PRIME COAT	AGGREGATE PRIME COAT	HOT-MIX ASPHALT SURFACE REMOVAL BUTT-JOINT	TEMPORARY RAMP	PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL	HOT-MIX ASPHALT SHOULDERS 2 1/4"	HOT-MIX ASPHALT SHOULDERS 8"
FAP 332 IL 1/14	40603345	40600647	35501324	42001430	40600100	40600300	40600982	40600990	44000100	44004250	48203006	48203029
	TON	TON	SQ YD	SQ YD	GAL	TON	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD
STAGE I												
RT. STA 333+80 TO RT. STA 338+75			416							208		
LT. STA 333+80 TO LT. STA 338+75			311	28				36	197	208		80
STAGE II												
RT. STA 333+80 TO RT. STA 338+75				28				36	200			80
CL. STA 334+04.13 TO CL. STA 335+63.50	42	13			41	1	133	33			192	
CL. STA 336+87.00 TO CL. STA 338+47.88	43	14			41	1	133	33			178	
TOTAL	85	27	727	56	82	2	266	138	397	416	370	160

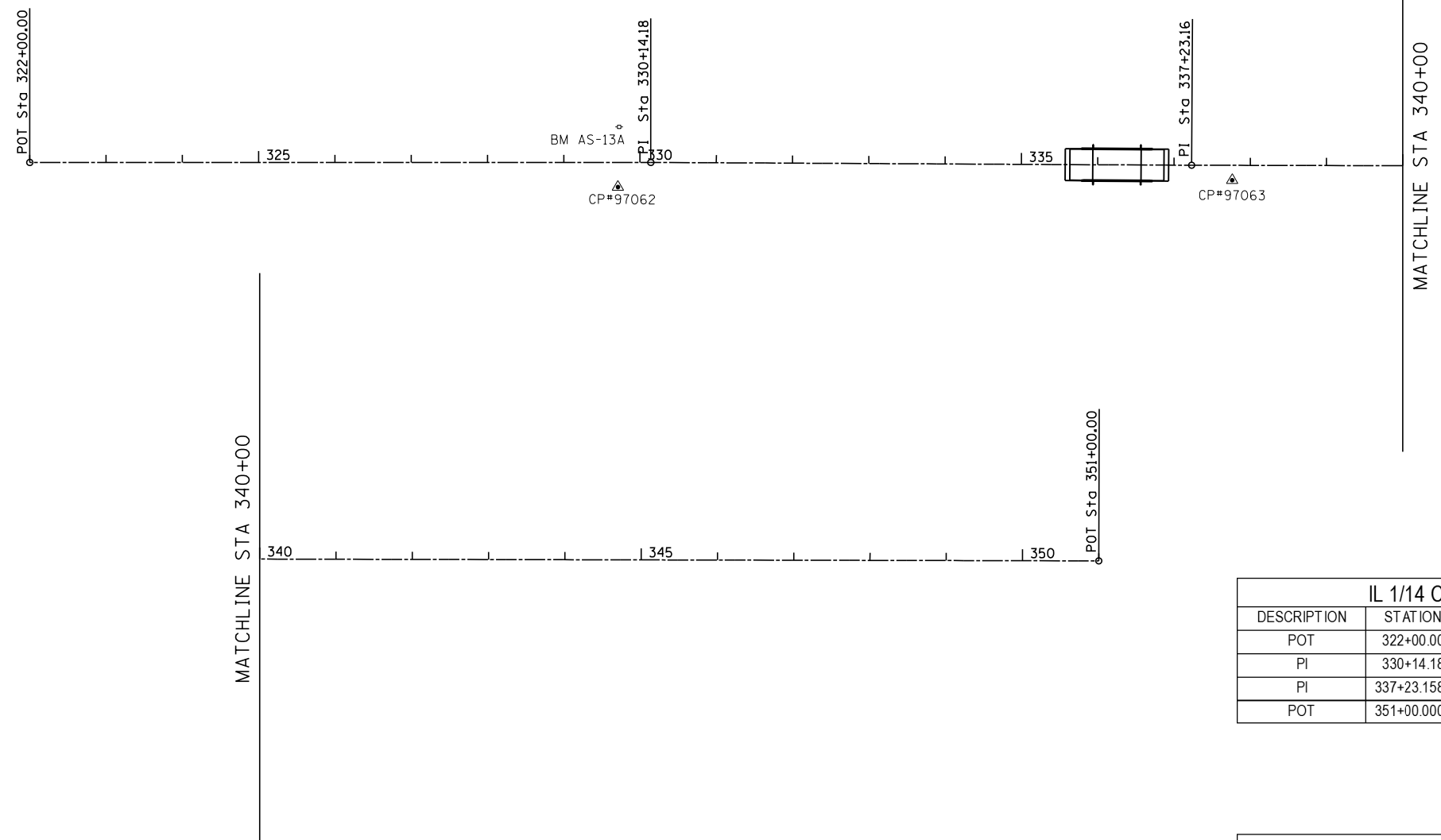
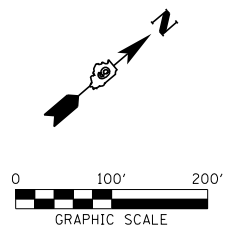
INLET AND CULVERT SCHEDULE			
LOCATION	TYPE E INLET BOX STANDARD	PIPE DRAINS 12"	METAL END SECTIONS 12"
	610001		
	61000115	60100945	54215547
	EACH	FOOT	EACH
FAP 332 IL 1/14			
RT STA 336+98	1	17	1
LT STA 336+98	1	9	1
TOTAL	2	26	2

STONE RIPRAP SCHEDULE		
LOCATION	STONE RIPRAP CLASS #4	FILTER FABRIC
	28100107	28200200
FAP 332 IL1/14	SQ YD	SQ YD
LT. STA 336+98	7	7
RT. STA 336+98	7	7
TOTAL	14	14

MAINTENANCE OF TRAFFIC SCHEDULE					
LOCATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	TEMPORARY BRIDGE TRAFFIC SIGNALS	IMPACT ATTENUATORS TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	IMPACT ATTENUATORS RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3
	70400100	70400200	70106500	70600250	70600350
	FOOT	FOOT	EACH	EACH	EACH
FAP 332 IL 1/14					
STAGE I					
STA 332+27.29 TO STA. 340+14.21	462.5		1	2	
STAGE II					
STA 332+27.29 TO STA. 340+14.21		337.5			2
TOTAL	462.5	337.5	1	2	2
TOTAL USE	462.5	338	1	2	2

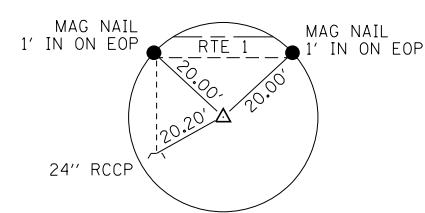
SEEDING SCHEDULE								
LOCATION	SEEDING CLASS 2A	SEEDING CLASS 7	TEMPORARY EROSION CONTROL SEEDING *	NITROGEN FERTILIZER NUTRIENT**	PHOSPHORUS FERTILIZER NUTRIENT 90 LBS/ACRE	POTASSIUM FERTILIZER NUTRIENT 90 LBS/ACRE	AGRICULTURAL GROUND LIMESTONE 2 TONS/ACRE	MULCH METHOD 2
	25000210	25000350	28000250	25000400	25000500	25000600	25000700	25100115
	ACRE	ACRE	LBS	LBS	LBS	LBS	TONS	ACRE
FAP 332 IL 1/14								
STAGE I								
LT STA 333+80 TO LT 335+84	0.02	0.02	6	2	1	1	0.03	0.03
LT STA 336+675 TO LT 338+75	0.03	0.03	13	4	3	3	0.06	0.06
STAGE II								
RT STA 333+80 TO RT 335+84	0.02	0.02	9	3	2	2	0.04	0.04
RT STA 336+675 TO RT 338+75	0.02	0.02	7	2	1	1	0.03	0.03
TOTAL	0.09	0.09	35	11	7	7	0.16	0.16
TOTAL USE	0.25	0.25	35	11	7	7	0.2	0.50

* 100 LBS/ACRE FOR 4 APPLICATIONS
 ** 90 LBS/ACRE FOR SEEDING CLASS 2 AND 40 LBS/ACRE FOR SEEDING CLASS 7

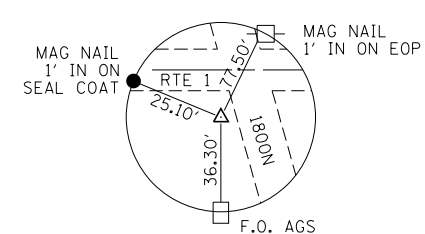


IL 1/14 CENTERLINE			
DESCRIPTION	STATION	NORTHING	EASTING
POT	322+00.00	536182.5372	1054082.2707
PI	330+14.18	536802.7730	1054609.7142
PI	337+23.1588	537340.4574	1055071.8250
POT	351+00.0004	538387.3970	1055966.0343

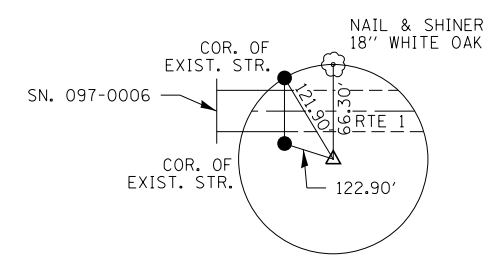
CONTROL POINTS					
POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	ELEVATION
97061	320+10.43±	24.83' RT±	536022.039	1053978.382	399.062
97062	329+71.01	31.37' RT	536749.562	1054605.649	394.197
97063	377+73.38	19.52' RT	537368.245	1055121.231	386.642



CP#97061 STA. 320+10.43±
 IRON PIN/CAP
 N. 536022.039
 E. 1053978.382



CP#97062 STA. 329+71.01
 IRON PIN/CAP
 N. 536749.562
 E. 1054605.649



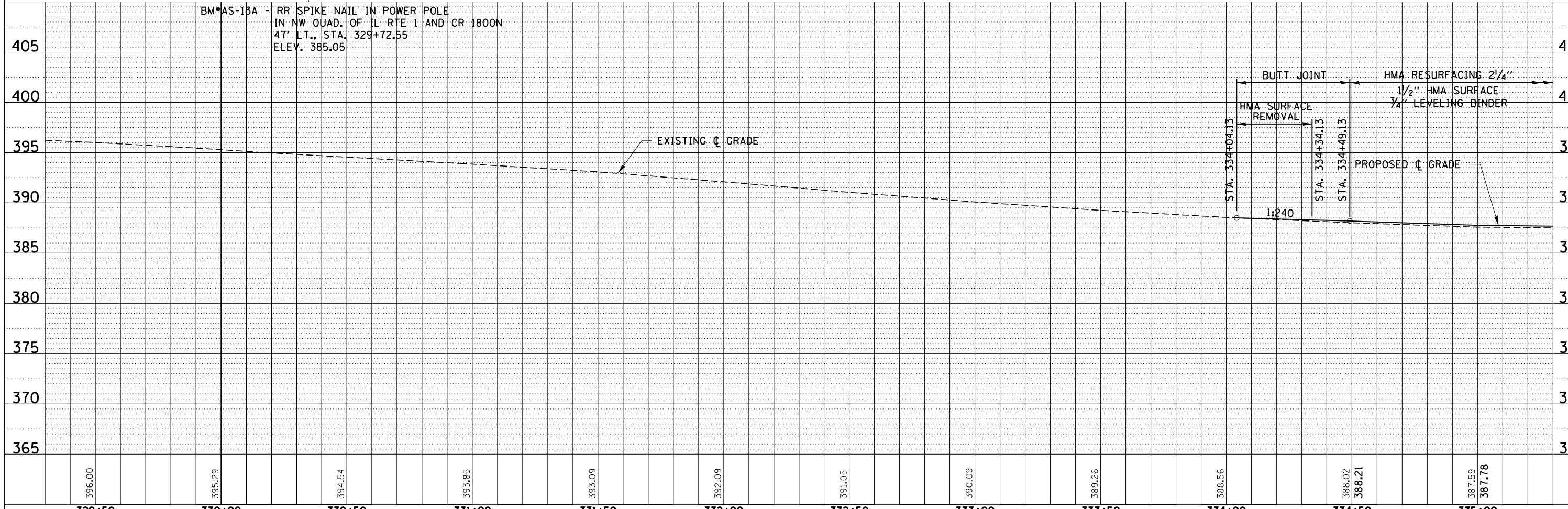
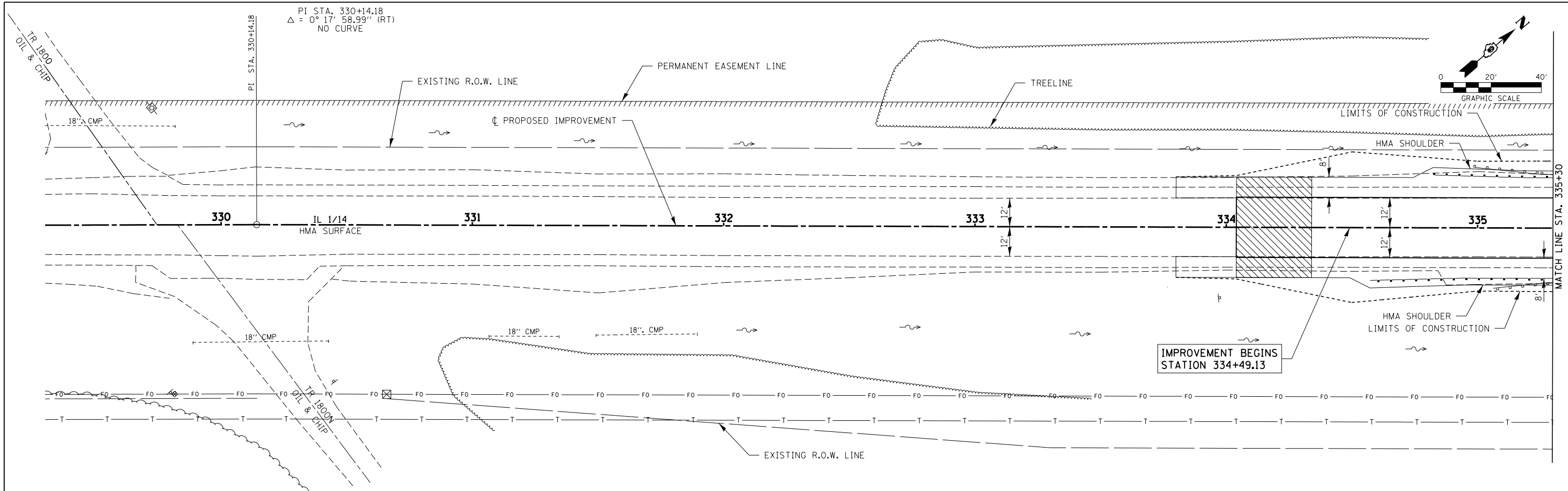
CP#97063 STA. 377+73.38
 IRON PIN/CAP
 N. 537368.245
 E. 1055121.231

BM AS-13
 1.9 MILES SOUTH OF INTERSECTION OF RTE 1 AND 14 IN CROSSVILLE,
 SET CHISELED SQUARE IN NORTH WEST WINGWALL OF BRIDGE SN 097-0006
 (REFER TO BOOK #3003 PG #29) FROM IDOT ELEV 385.051

BM AS-13A
 RAILROAD SPIKE IN POWER POLE IN
 NORTH WEST QUADRANT OF IL RTE 1
 AND CR1800 N, FROM IDOT
 46.56' LT STA 329+72.55 ELEV 395.163

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

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE	NOT AT THIS OFFICE
	NO.	

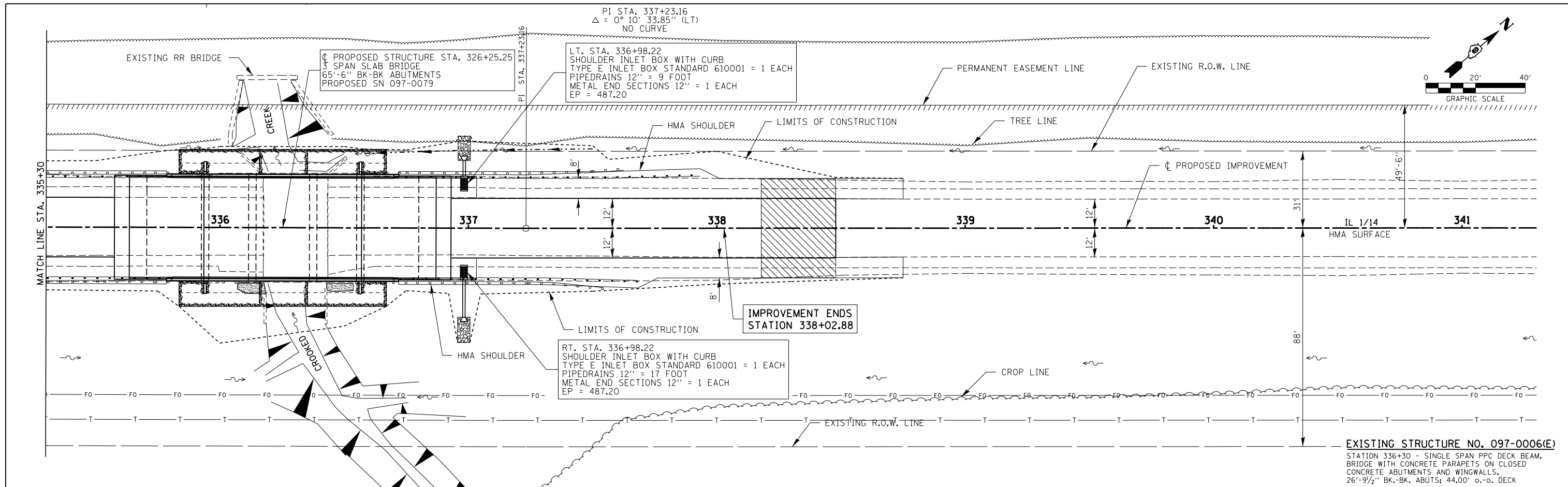


FILE NAME = D978266-shr-plnprfl.dgn	USER NAME = *USER*	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE IL RTE 1/14	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = *SCALE*	DRAWN - T.W.K.	REVISED -			332	5B-1	WHITE	51	14
PLOT DATE = 9/17/2013	DATE = 08/15/13	CHECKED - J.W.F.	REVISED -			CONTRACT NO. 78266				
		DATE = 08/15/13	REVISED -			ILLINOIS FED. AID PROJECT				

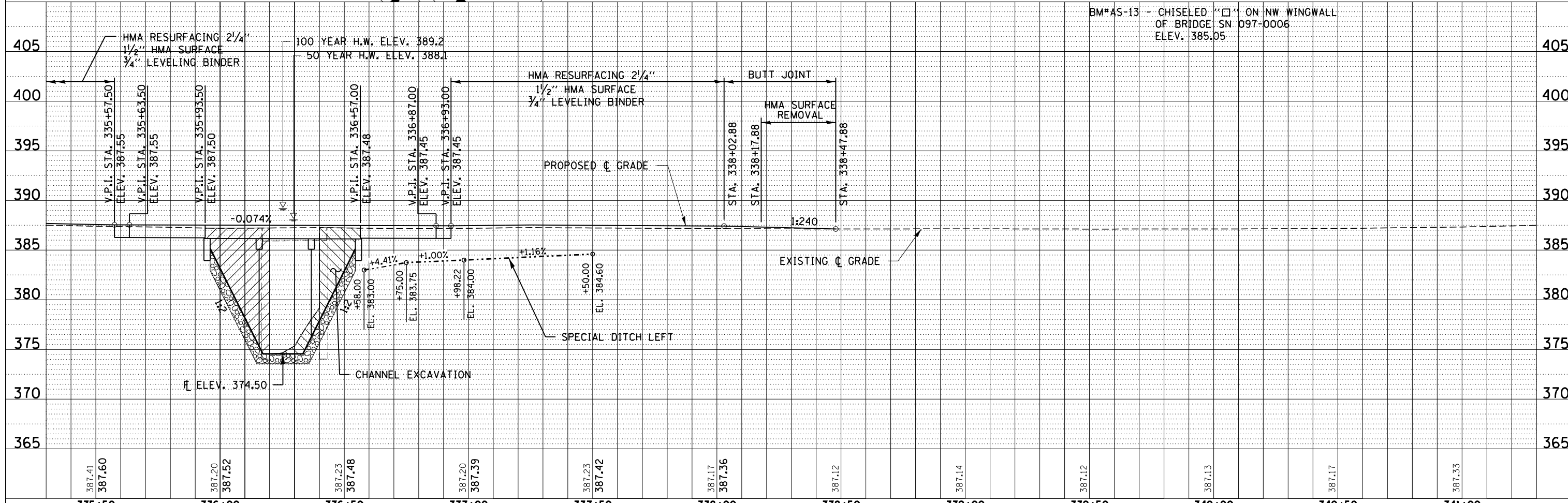
SCALE: 20H:5V SHEET NO. 1 OF 2 SHEETS STA. 325+30.00 TO STA. 335+30.00

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NOTE BOOK NO.	
	CADD FILE NAME	



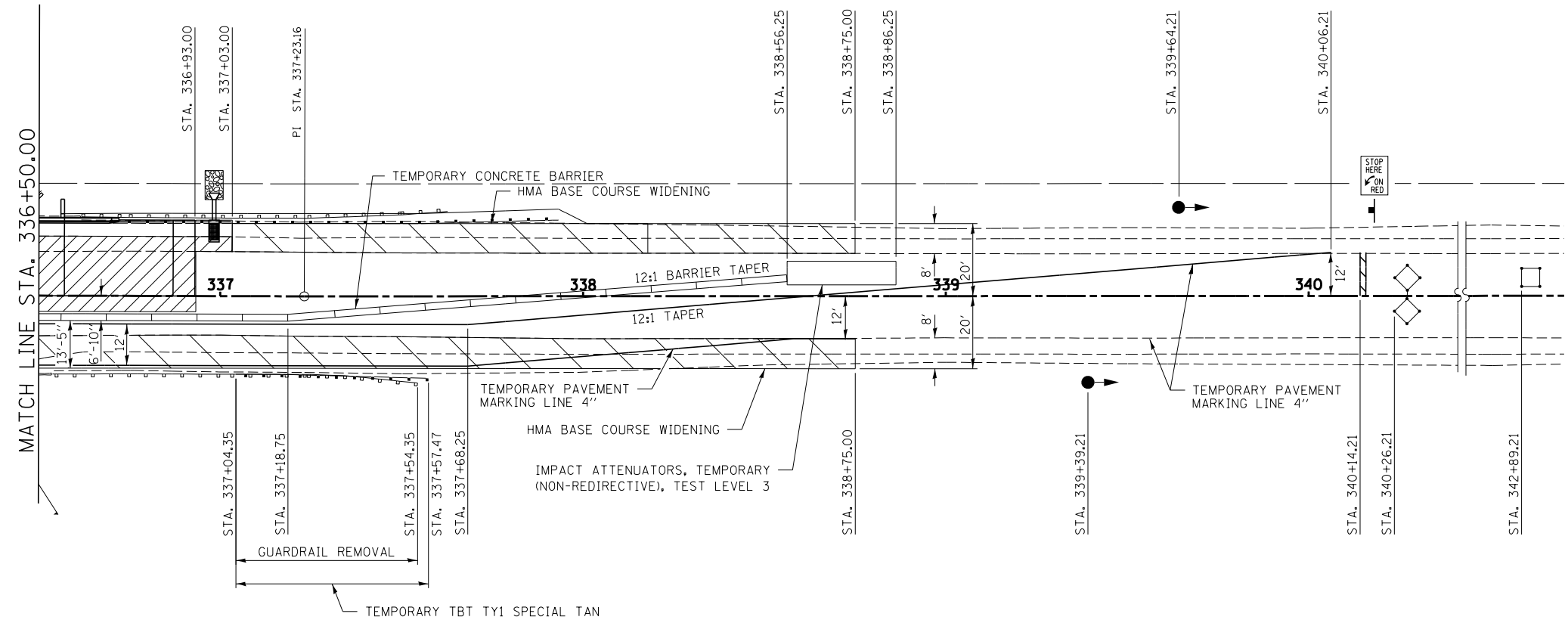
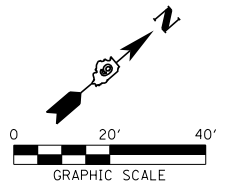
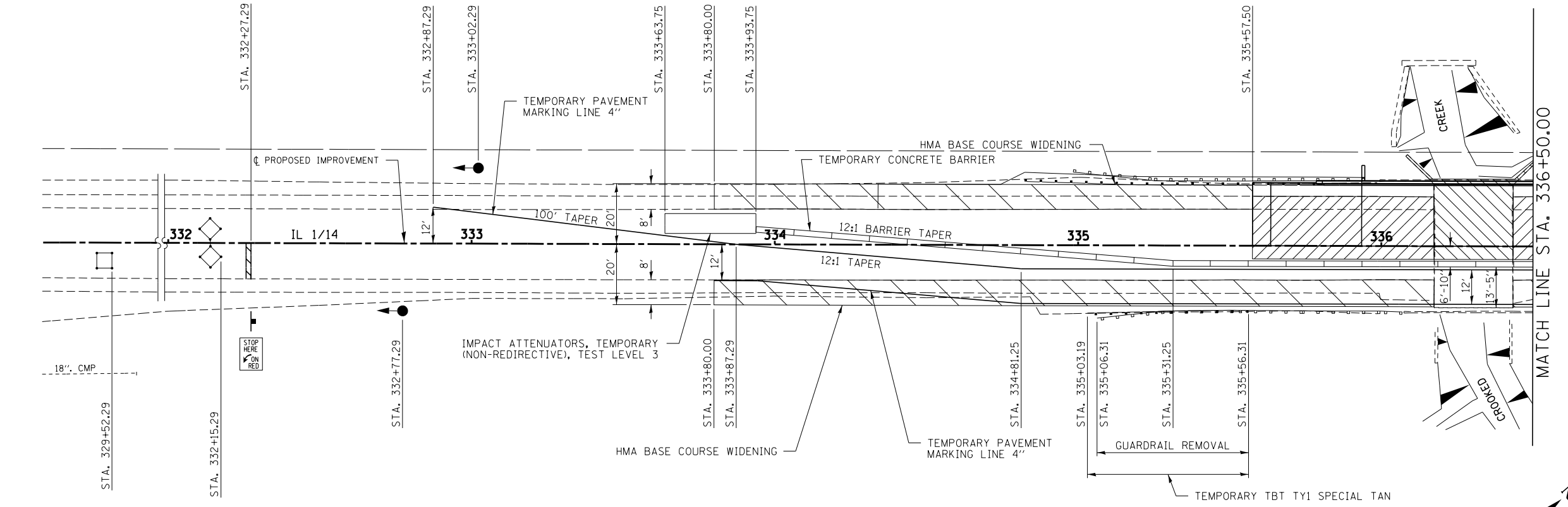
EXISTING STRUCTURE NO. 097-0006(E)
 STATION 336+30 - SINGLE SPAN PPC DECK BEAM BRIDGE WITH CONCRETE PARAPETS ON CLOSED CONCRETE ABUTMENTS AND WINGWALLS. 26'-9 1/2" BK-BK. ABUTS; 44.00' o-o. DECK



BM*AS-13 - CHISELED "X" ON NW WINGWALL OF BRIDGE SN 097-0006 ELEV. 385.05

FILE NAME = D:\978266-sht-plnprf2.dgn	USER NAME = *USER*	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE IL RTE 1/14	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = *SCALE*	DRAWN - T.W.K.	REVISED -			332	5B-1	WHITE	51	15
PLOT DATE = 9/17/2013	CHECKED - J.W.F.	REVISOR -	REVISED -			CONTRACT NO. 78266				
DATE = 08/15/13	DATE -	REVISOR -	REVISED -			ILLINOIS FED. AID PROJECT				

SCALE: 20H:5V SHEET NO. 2 OF 2 SHEETS STA. 335+30.00 TO STA. 341+30.00



LEGEND

	PAVEMENT & SHOULDER REMOVAL
	EXISTING STRUCTURE REMOVAL
	BASE COURSE WIDENING
	HMA REMOVAL BUTT JOINT

FILE NAME = D978266-sht-staging.dgn	USER NAME = #USER*	DESIGNED - L.F.S.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3305 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L5 / PE / SE CORP. 184.000959	PLOT SCALE = #SCALE*	DRAWN - T.W.K.	REVISED -
PLOT DATE = 9/17/2013		CHECKED - J.W.F.	REVISED -
		DATE - 08/15/13	REVISED -

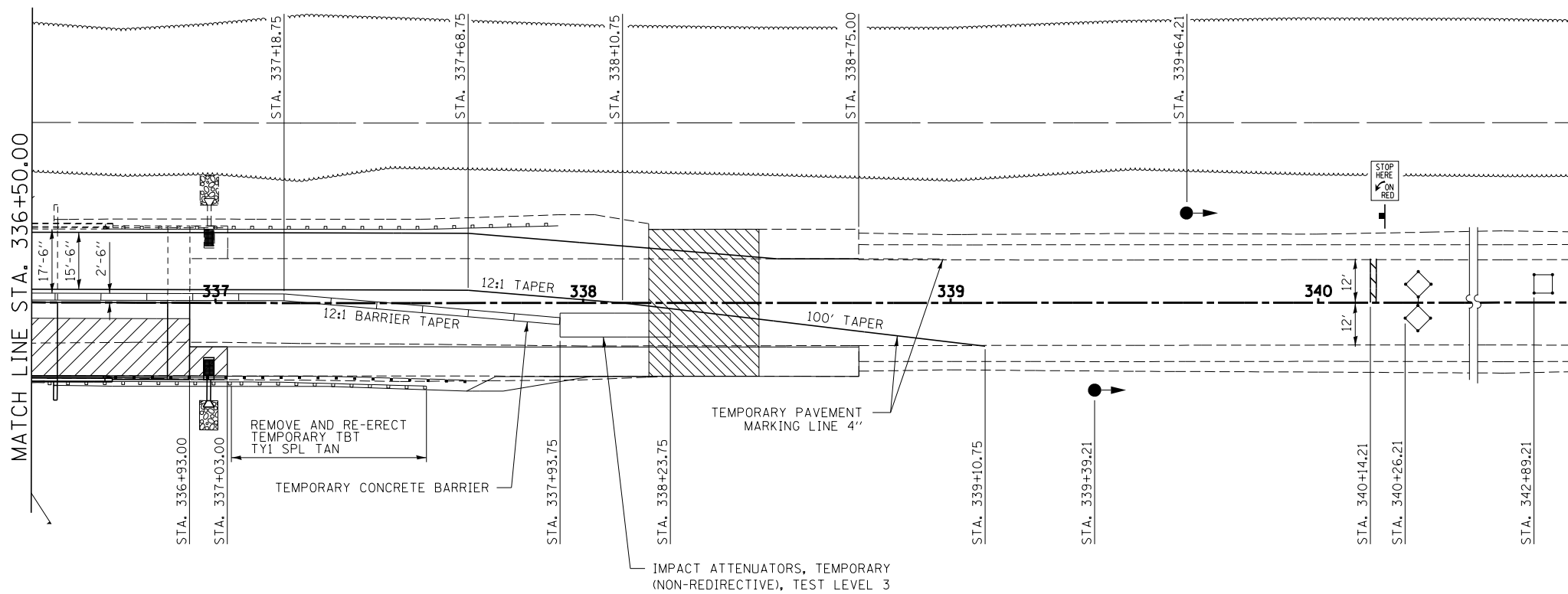
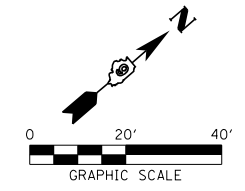
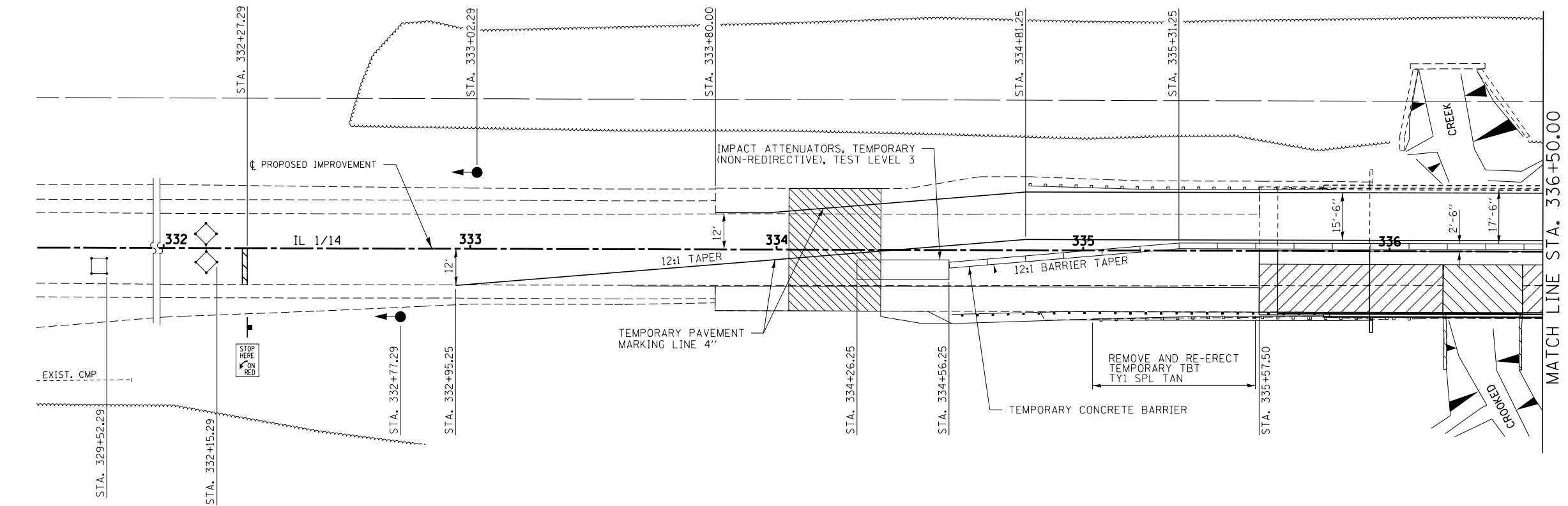
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PLAN VIEW STAGE 1
IL RTE 1 / 14**

SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	16
CONTRACT NO. 78266				

ILLINOIS FED. AID PROJECT



LEGEND

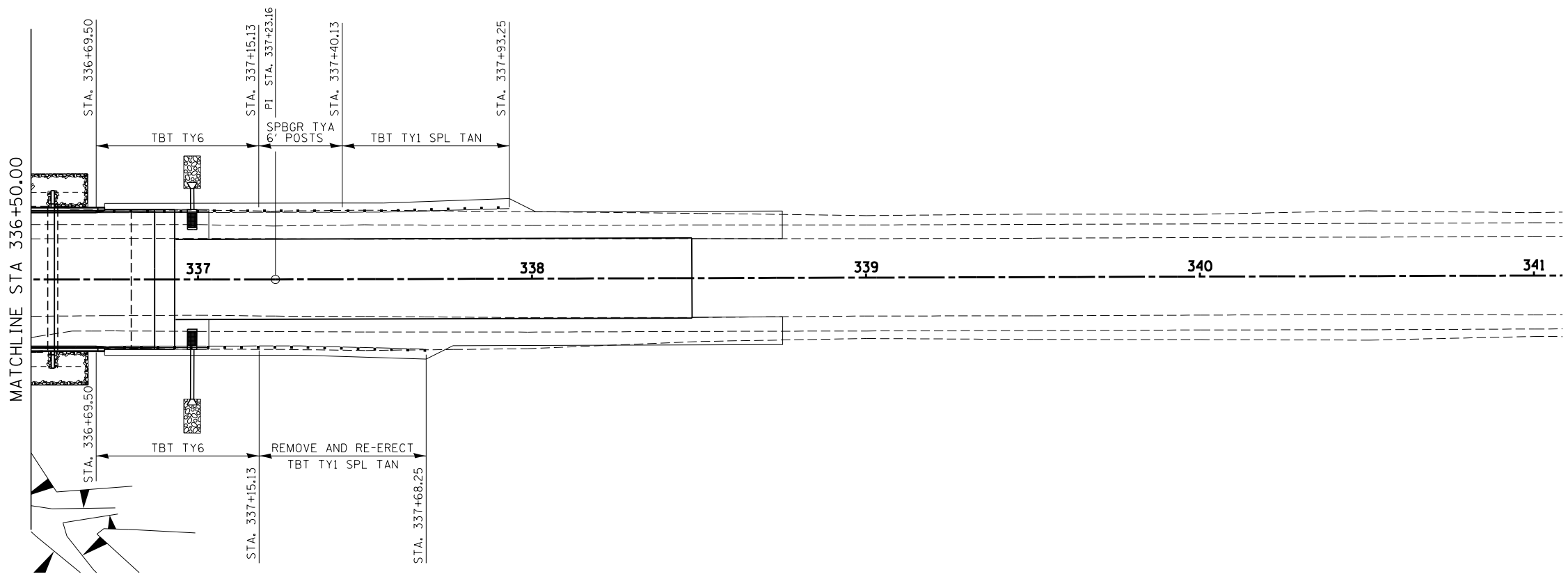
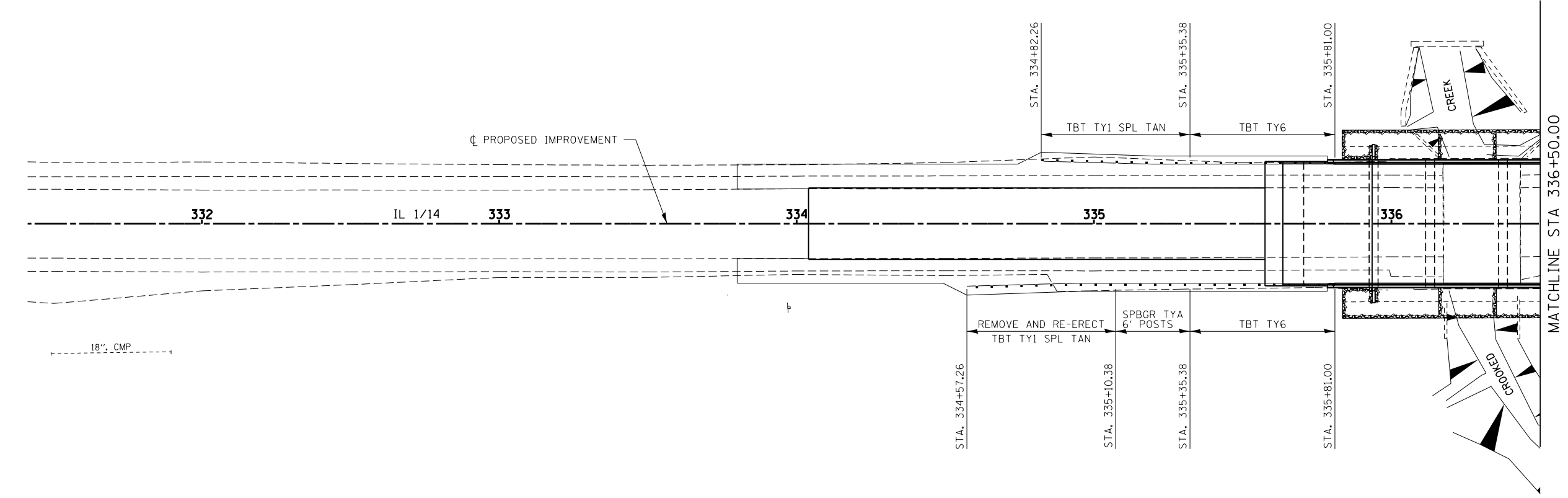
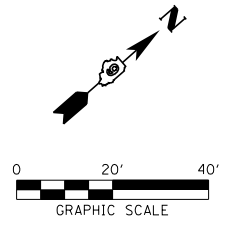
	PAVEMENT & SHOULDER REMOVAL
	EXISTING STRUCTURE REMOVAL
	BASE COURSE WIDENING
	HMA REMOVAL BUTT JOINT

FILE NAME = D:\978266-sht-staging.dgn	USER NAME = *USER*	DESIGNED - L.F.S.	REVISED -
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	PLOT SCALE = *SCALE*	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 9/17/2013	DATE - 08/15/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN VIEW STAGE 2 IL RTE 1 / 14	
SCALE:	TO STA.
SHEET NO. 2 OF 2 SHEETS	STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	17
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				



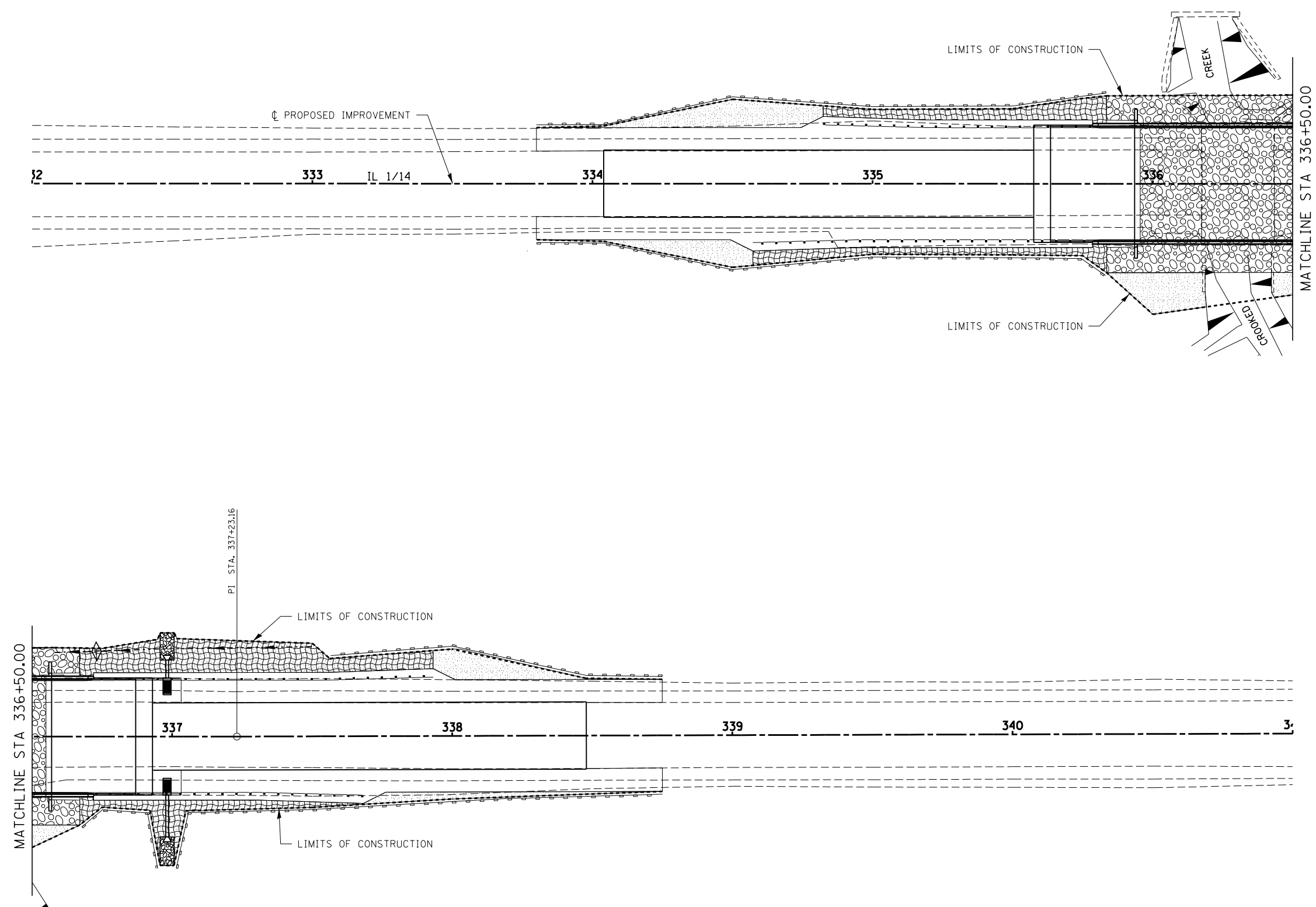
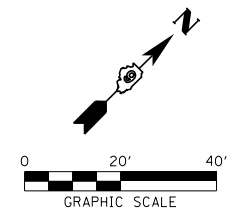
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HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62776 ILLINOIS PROFESSIONAL DESIGN FIRM L5 / PE / SE CORP. 184.000959	PLOT SCALE = *SCALE*	DRAWN - L.G.C.	REVISED -
	PLOT DATE = 9/17/2013	CHECKED - J.W.F.	REVISED -
		DATE - 08/15/13	REVISED -

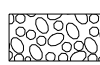



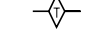
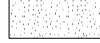
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL LAYOUT
ILLINOIS ROUTE 1 /14**

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

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	18
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				



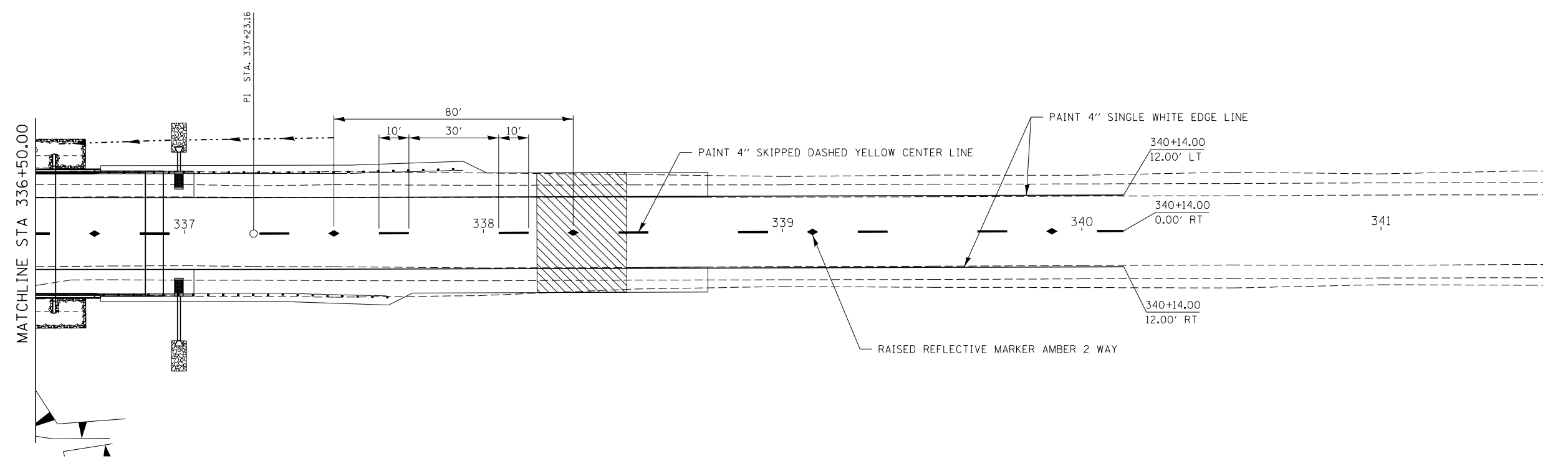
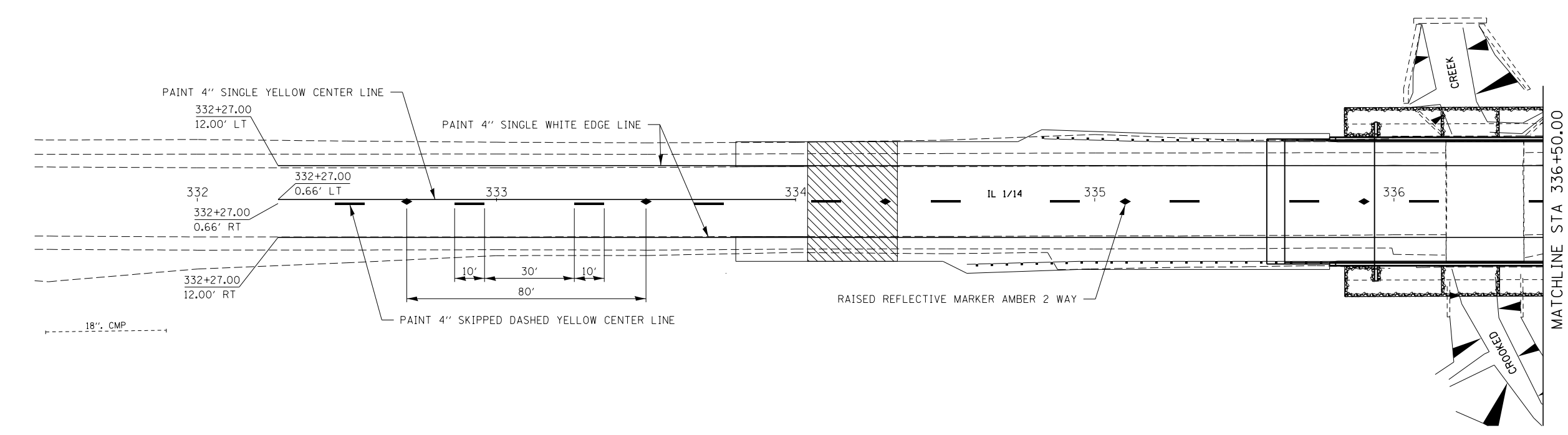
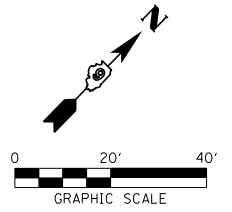
- LEGEND**
-  STONE RIPRAP CLASS A5
 -  STONE RIPRAP CLASS A4
 -  EROSION CONTROL BLANKET AND SEEDING
 -  PERIMETER EROSION BARRIER
 -  TEMPORARY DITCH CHECK
 -  SEEDING

FILE NAME = D978266-sht-eros.dgn	USER NAME = *USER*	DESIGNED - L.F.S.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. <small>3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959</small>	PLOT SCALE = *SCALE*	DRAWN - L.G.C.	REVISED -
	PLOT DATE = 9/17/2013	CHECKED - J.W.F.	REVISED -
		DATE - 08/15/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EROSION CONTROL PLAN ILLINOIS ROUTE 1/14				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	19
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				



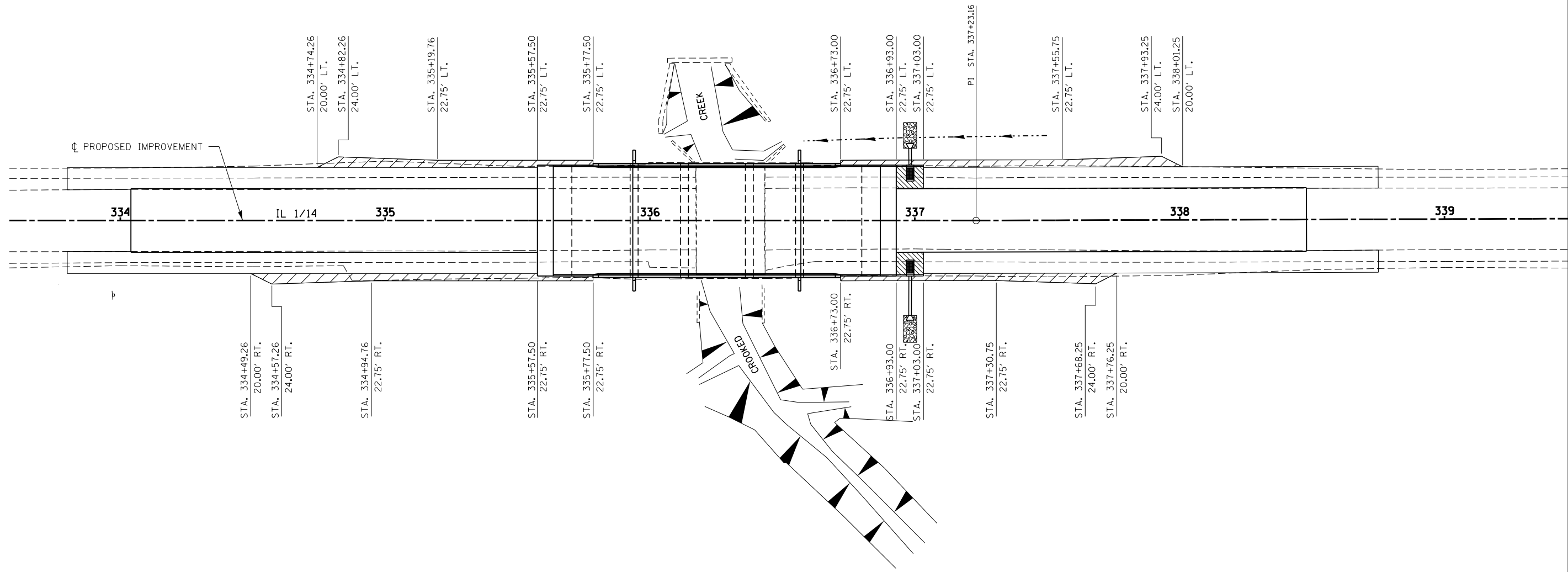
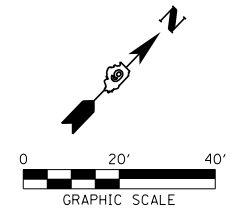
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HLR	PLOT DATE = 9/17/2013	CHECKED - J.W.F.	REVISED -
		DATE - 08/15/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
ILLINOIS ROUTE 1 /14**

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

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	20
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				



LEGEND

	HMA SHOULDERS 8"
	PORTLAND CEMENT CONCRETE SHOULDERS 8"

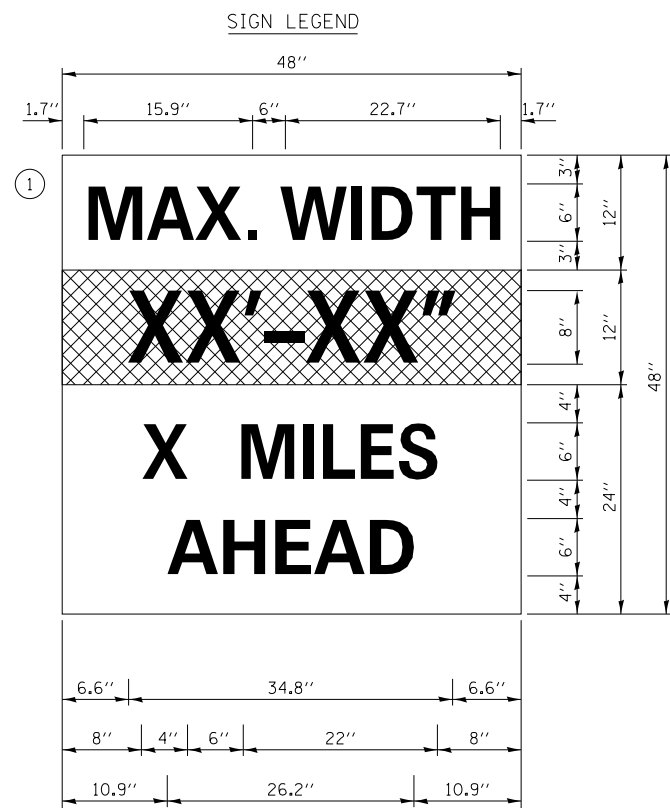
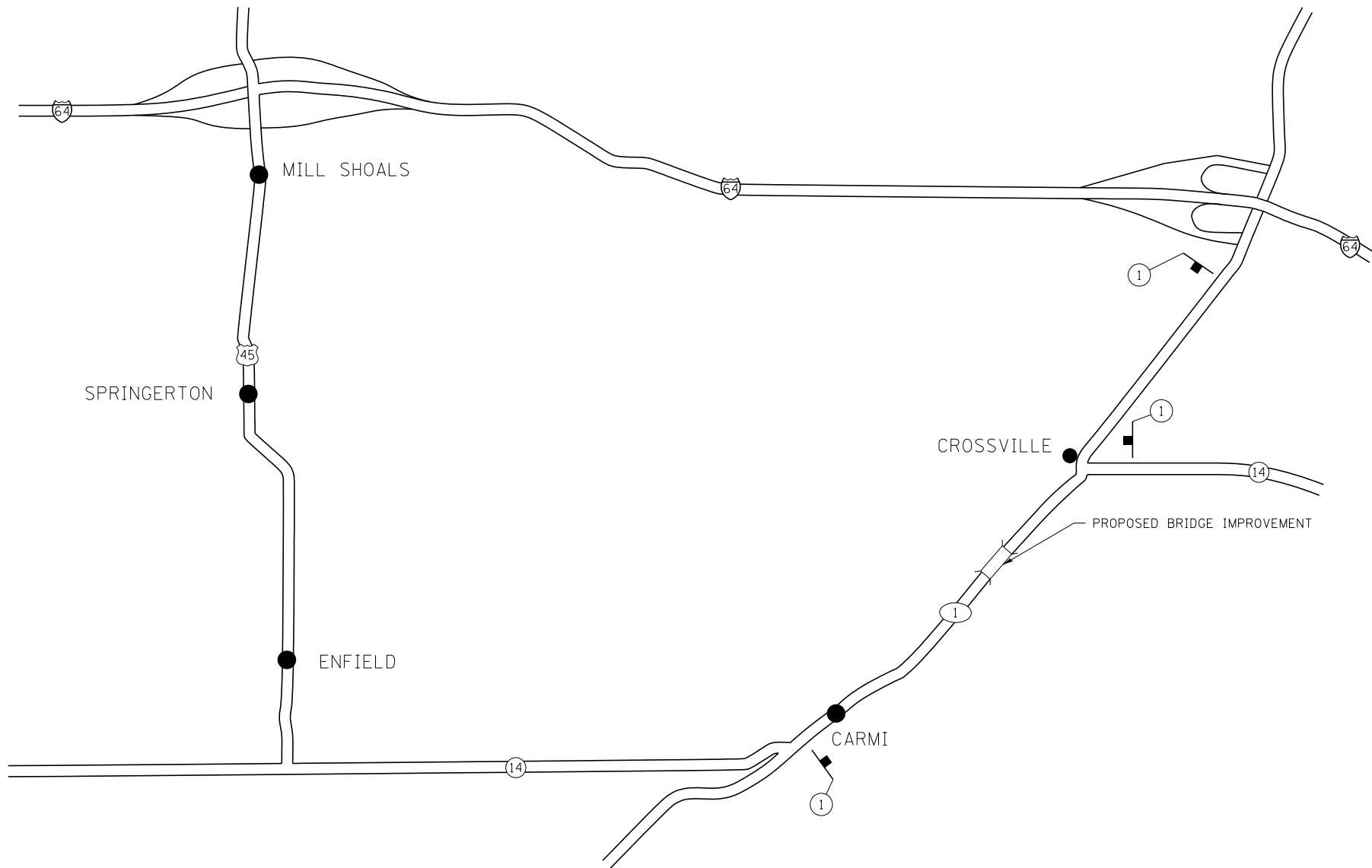
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	PLOT SCALE = *SCALE*	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 9/17/2013	DATE - 08/15/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVED SHOULDER PLAN
ILLINOIS ROUTE 1/14**

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	21
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				



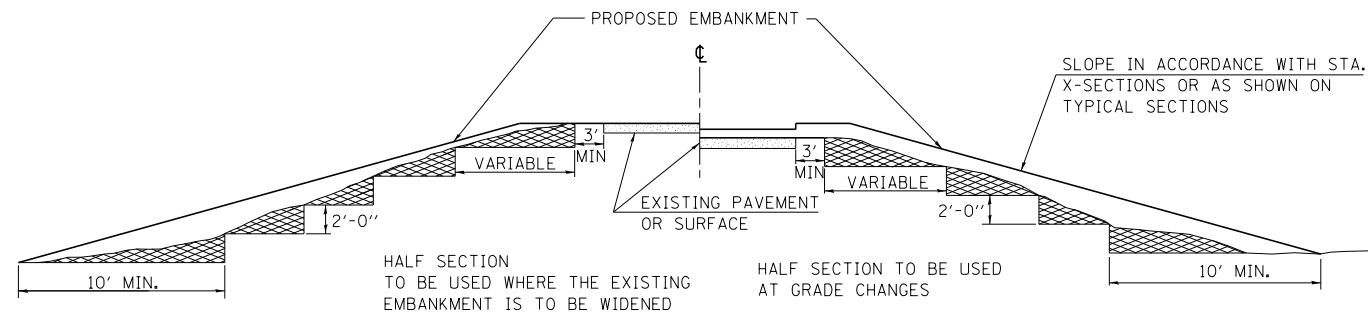
W12-I103
W12-I103 (WIDTH IS 80)
NO BORDER, BLACK ON WHITE:
"MAX WIDTH" D:
NO BORDER, BLACK ON ORANGE:
"XX'-XX'" D:
NO BORDER, BLACK ON WHITE:
"X MILES" D: "AHEAD" D:

DETOUR NOTES

1. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATION DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE POST MOUNTED.
2. THE ABOVE NOTED WORK INCLUDING SIGN, 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 1'-6" LESS THAN ACTUAL STAGING WIDTH OR AS DIRECTED BY THE ENGINEER. THE "X" AHEAD WILL BE DETERMINED BY THE ENGINEER.

FILE NAME = D978266-sht-details4.dgn	USER NAME = *USER*	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WIDE LOAD DETOUR ILLINOIS ROUTE 1/14	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. <small>3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959</small>		DRAWN - L.G.C.	REVISED -			332	5B-1	WHITE	51	22	
PLOT SCALE = *SCALE*		CHECKED - J.W.F.	REVISED -			CONTRACT NO. 78266					
PLOT DATE = 9/17/2013		DATE - 08/15/13	REVISED -			SCALE:		SHEET NO. OF SHEETS		STA. TO STA.	

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL

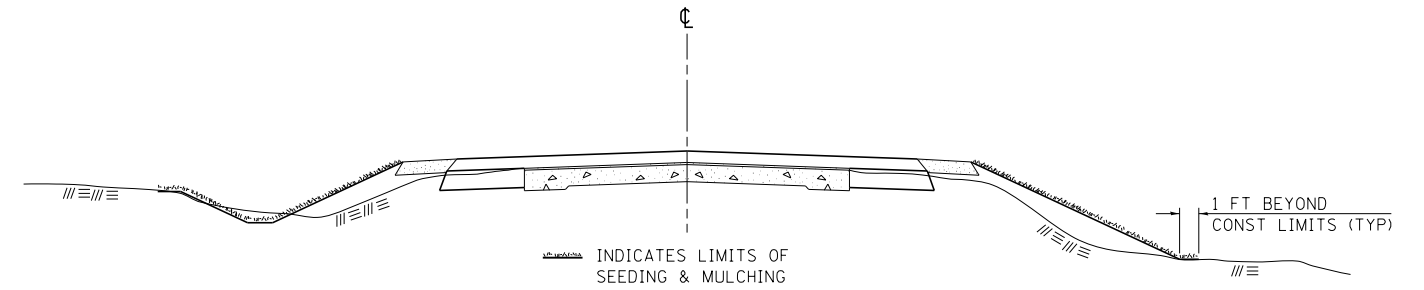


MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
CHECKED	6-3-99
RESIZED	5-7-08

STD. 9-16

SEEDING & MULCHING



GENERAL NOTES

IN GENERAL, ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION OPERATIONS SHALL BE SEEDED AND MULCHED UPON COMPLETION OF ALL GRADING OPERATIONS.

FERTILIZER NUTRIENTS AND LIMESTONE SHALL BE APPLIED TO ALL SEEDED AREAS.

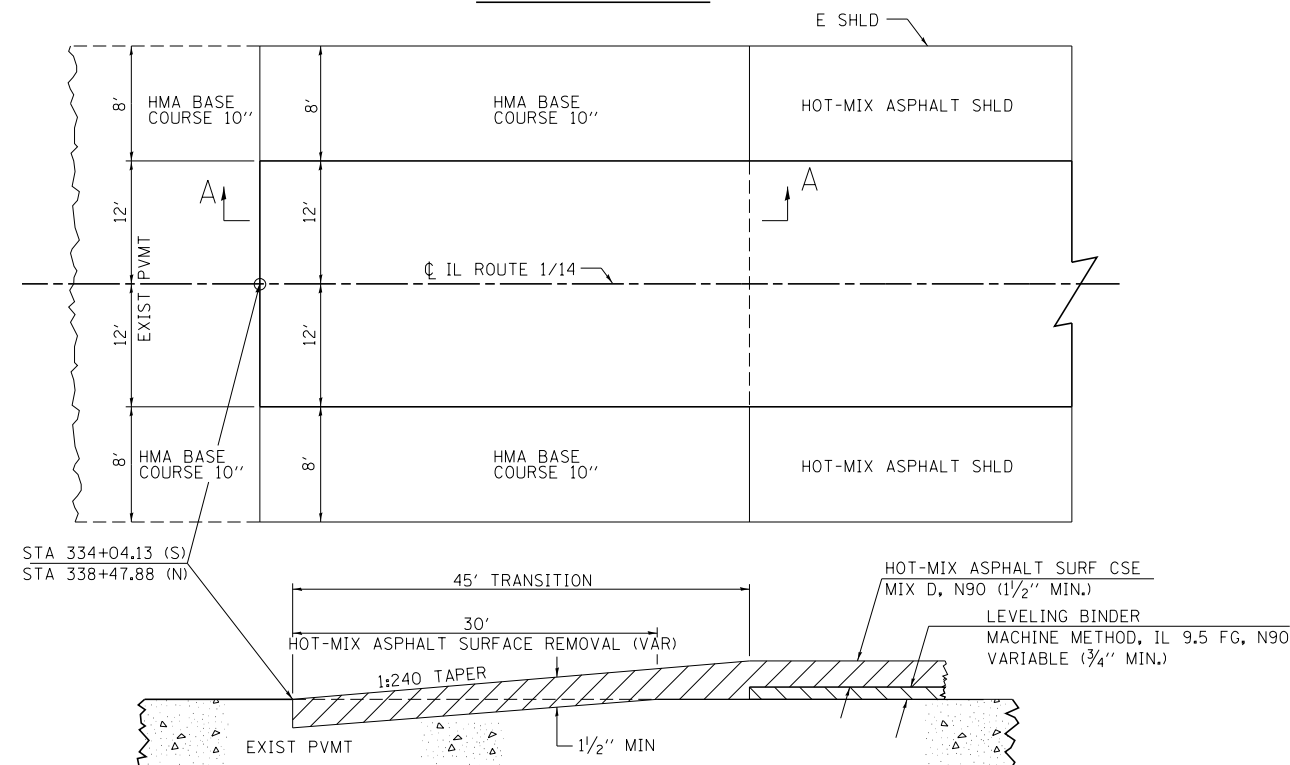
THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

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

STD. 9-12

BUTT JOINT



SECTION A-A

REVISIONS	
DRAWN	10-17-90
REVISED	01-11-07
REVISED	3-25-08
REVISED	

STD. 9-86

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HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = #SCALE*	DRAWN - L.G.C.	REVISED -
PLOT DATE = 9/17/2013		CHECKED - J.W.F.	REVISED -
		DATE - 08/15/13	REVISED -

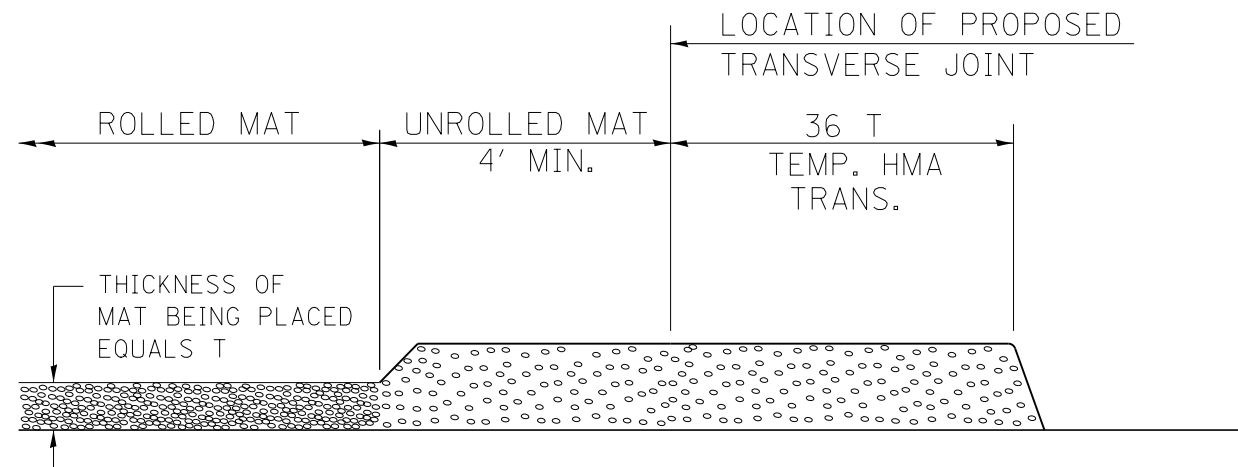
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STANDARD DETAILS DISTRICT 9
ILLINOIS ROUTE 1/14**

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	23
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				

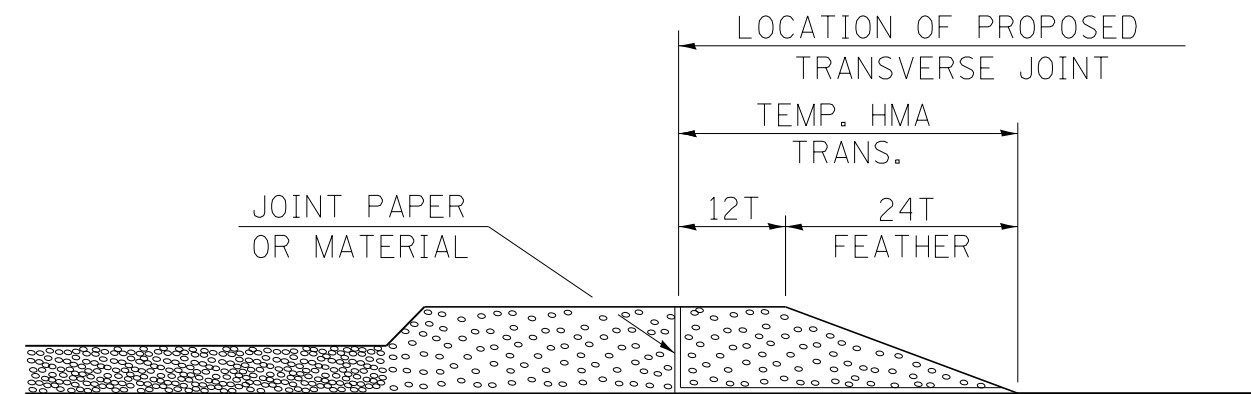
SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

TEMPORARY HOT-MIX ASPHALT TRANSITIONS



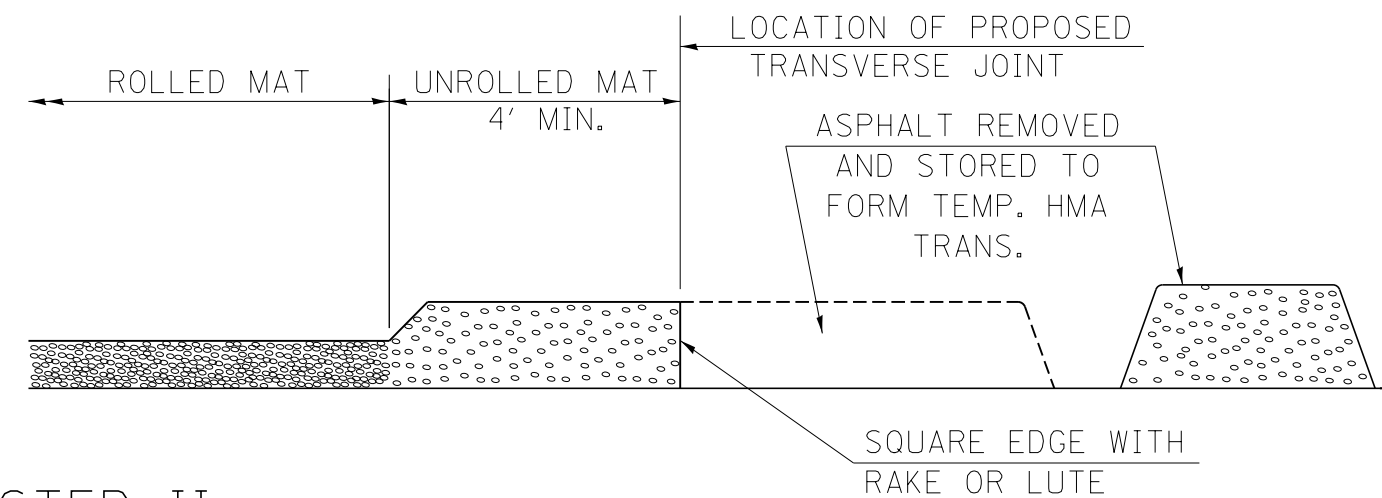
STEP I

1. PLACE HOT-MIX ASPHALT MAT, LENGTH 36 TIMES THE THICKNESS OF THE MAT BEING PLACED PAST THE PROPOSED TRANSVERSE JOINT LOCATION USING NORMAL OPERATING PROCEDURES. EXTREME CARE SHOULD BE TAKEN TO MAINTAIN ENOUGH MATERIAL IN FRONT OF THE SCREED TO MAINTAIN REQUIRED PAVING DEPTH.



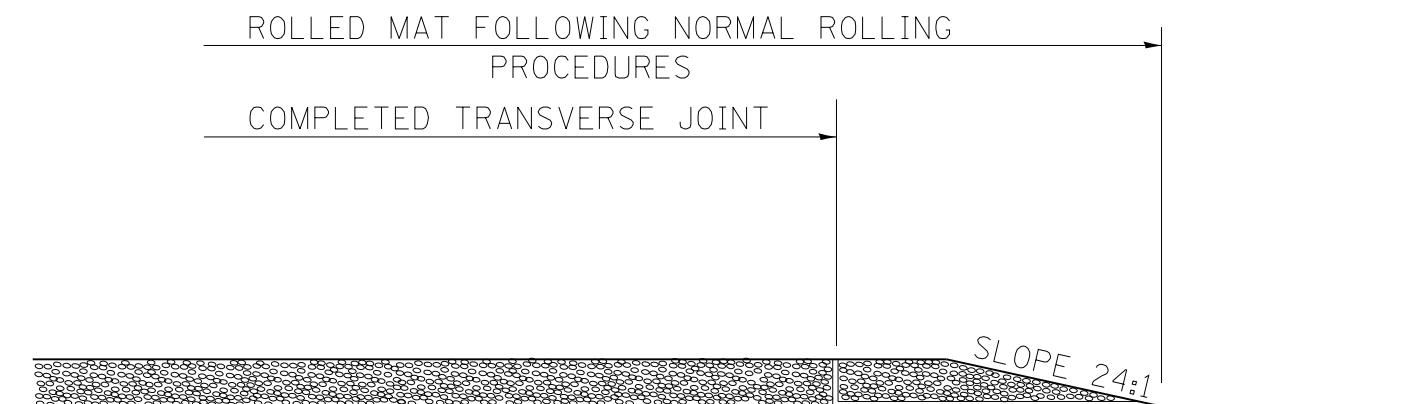
STEP III

1. JOINT PAPER OR OTHER PRESELECTED JOINT MATERIAL IS THEN PLACED IN THE CLEARED AREA AND THE EXCESS ASPHALT USED TO HAND FORM A TRANSITION TO THE DIMENSIONS SHOWN ABOVE.
2. NOTE THAT IN CONSTRUCTING THE TRANSITION, THE MAT DEPTH IS CONTINUED AS PART OF THE TRANSITION BEFORE FORMING THE FEATHER.



STEP II

1. MOVE THE PAVER OUT OF THE WAY AND REMOVE THE ASPHALT FROM THE AREA OF THE PROPOSED TEMPORARY HOT-MIX ASPHALT TRANSITION.
2. SQUARE UP THE END OF THE MAT WITH A RAKE OR LUTE.
3. NOTE THAT THE MAT WITHIN 4' OF THE END OF JOINT IS NOT TO BE ROLLED AT THIS TIME.



STEP IV

1. COMPLETE TEMPORARY TRANSITION BY ROLLING.
2. TO RESUME PAVING, AT THE JOINT, REMOVE TEMPORARY TRANSITION AND DISPOSE OF THE MATERIAL ACCORDING TO ART. 202.03 OF THE STD. SPECS. (COST INCLUDED IN THE CONTRACT).
3. CONSTRUCTING THE TEMPORARY TRANSITIONS WILL NOT BE PAID FOR SEPARATELY IN ACCORDANCE WITH ARTICLE 406.14 OF THE STANDARD SPECIFICATIONS.

STD. 9-26

REVISIONS	
REDRAWN	2-15-89
REVISED	8-16-94
REVISED	01-09-07
RESIZED	05-8-08

FILE NAME = D978266-sht-details5.dgn	USER NAME = *USER*	DESIGNED - L.F.S.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - L.G.C.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = *SCALE*	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 9/17/2013	DATE - 08/15/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS DISTRICT 9
ILLINOIS ROUTE 1/14

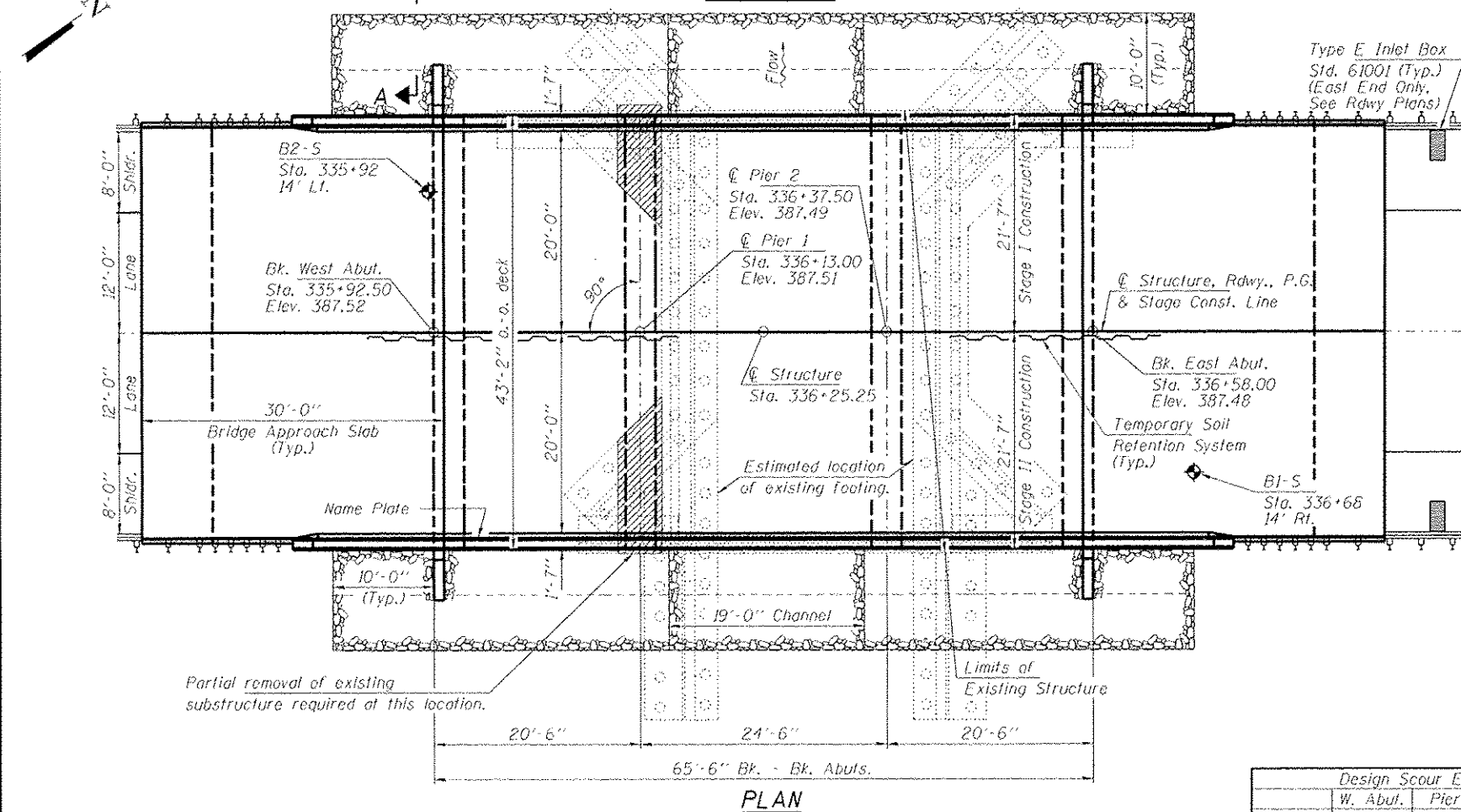
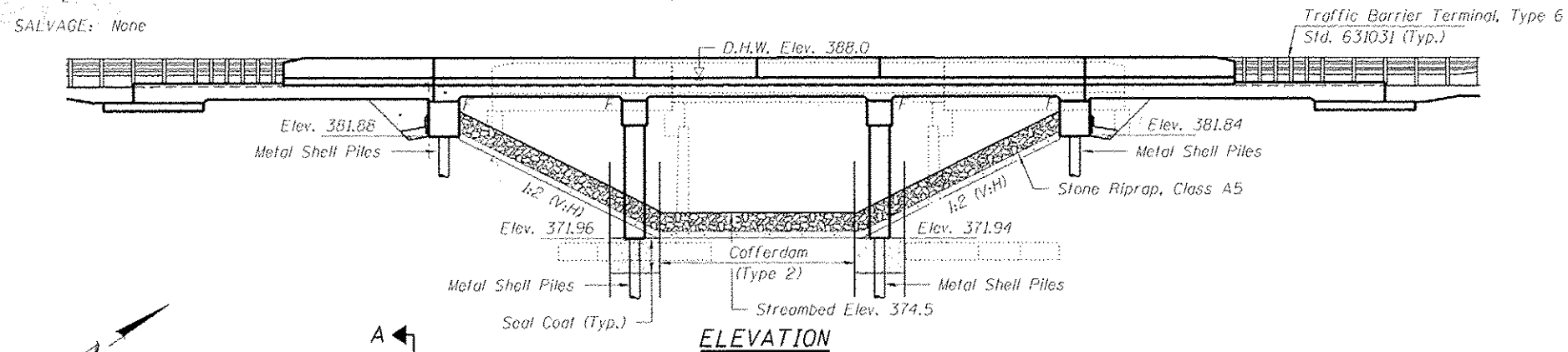
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	24
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				

BENCHMARK: Chisled "C" in NW wingwall of bridge. 22.5' Lt., Sta. 336+44. Elev. 385.05

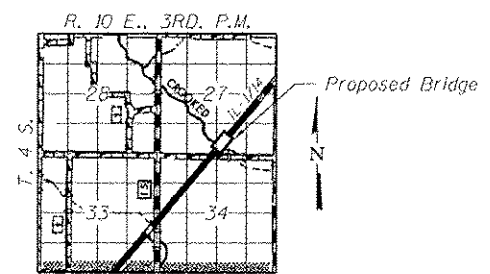
EXISTING STRUCTURE: SN 097-0006 was built in 1923 as SBI Route 1, Section 5B, BY Sec 5BR. It consisted of a 1-span RC slab bridge on closed abutments. In 1950 the bridge was widened in kind. In 1978, the superstructure was replaced with PPC deck beams. The bridge is 26'-9 1/2" bk.-bk. and 44'-0" o.-o. Structure is to be removed and replaced using stage construction to maintain one lane of traffic at all times.

SALVAGE: None

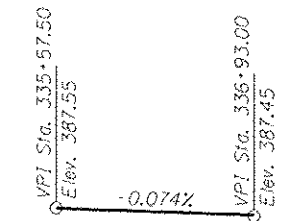


INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. General Details
3. Stage Construction Details
4. Temporary Concrete Barrier
5. Superstructure
- 6-7. Superstructure Details
- 8-9. Bridge Approach Slab Details
10. Abutments
11. Piers
12. Bar Splicer Details
13. Metal Shell Pile Details
- 14-15. Borings



LOCATION SKETCH



PROFILE GRADE (along & roadway)

Design Scour Elevations (ft.)

	W. Abut.	Pier 1	Pier 2	E. Abut.
0100	382.0	361.0	361.0	381.9
0500	382.0	361.0	361.0	381.9

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_{pl}) = 0.288g
 Design Spectral Acceleration at 0.2 sec. (S₀₅) = 0.684g
 Soil Site Class = D

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications

LOADING HL-93

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

DESIGN STRESSES

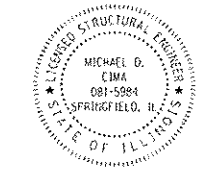
f_c = 3,500 psi
 f_y = 60,000 psi (Reinf.)

WATERWAY INFORMATION

Drainage Area = 5.26 Sq. Mi. Existing Low Grade Elev. 387.12 @ Sta. 339+50
 Proposed Low Grade Elev. 387.50 @ Sta. 336+26

Flood	Freq. Yr.	0 C.F.S.	Opening Sq. Ft.		Natural Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Min. Calc.	10	1160	225	400	385.7	0.8	0.2	386.5	385.9
Ex. Overtop	15	1285	225	422	386.1	1.0		387.1	
Pr. Overtop	26	1615	225	422	387.1		0.4		387.4
Design	50	1900	225	422	388.0	0.1	0.1	388.1	388.1
Base	100	2230	225	422	389.1	0.0	0.0	389.2	389.2

APPROVED
 For Structural Adequacy Only
Michael D. Cina
 Engineer of Bridges & Structures



Michael D. Cina
 ILLINOIS STRUCTURAL NO. 081-5984

Expires 11-30-2014
 9-11-2013

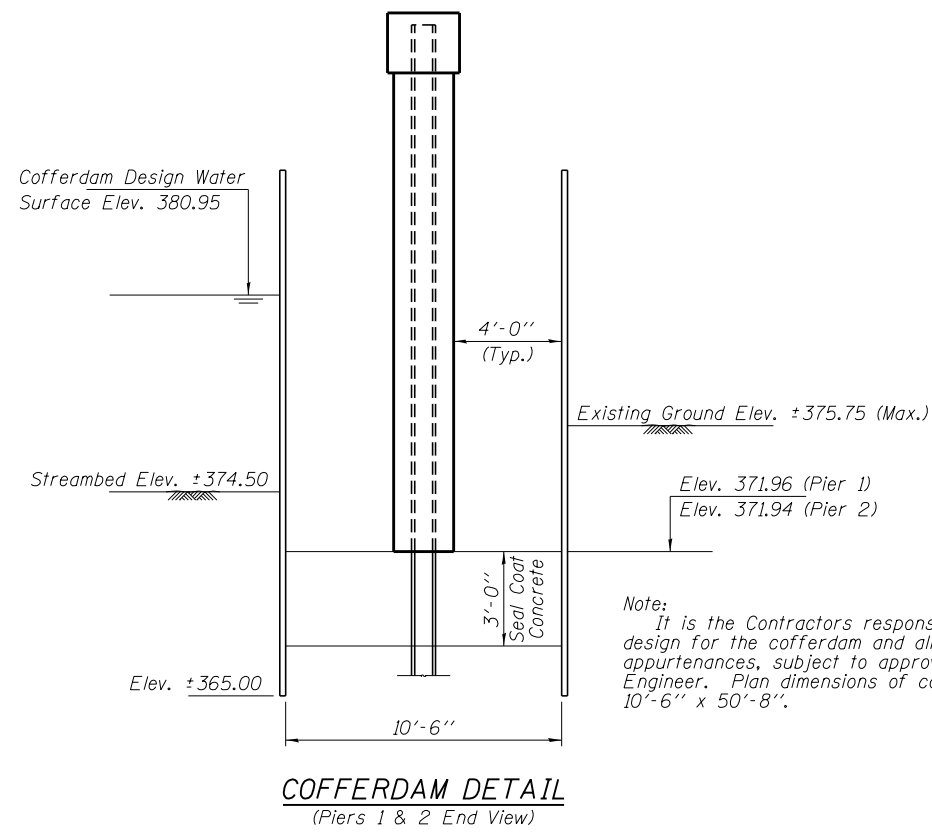
GENERAL PLAN AND ELEVATION
 IL ROUTE 1/14
 OVER CROOKED CREEK
 FAP ROUTE 332 - SECTION 5B-1
 WHITE COUNTY
 STATION 336+25.25
 STRUCTURE NO. 097-0079

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.
 The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.
 Forms for deck slab shall be removed prior to placement of bridge approach slab.
 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 1 removal to ensure the remaining portion will not be prematurely damaged.
 Slip-Forming of the parapets is not allowed.

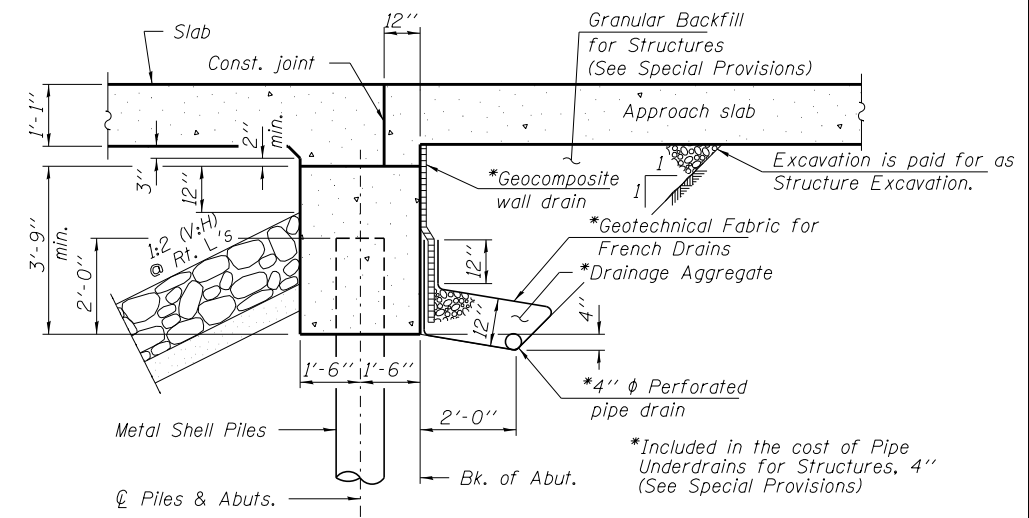
STATION 336+25.25
 BUILT 201L BY
 STATE OF ILLINOIS
 F.A.P. RTE. 332 SEC. 5B-1
 LOADING HL-93
 STR. NO. 097-0079

NAME PLATE
 See Std. 515001



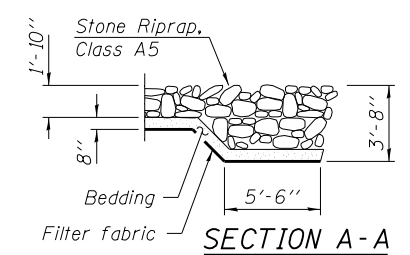
COFFERDAM DETAIL
 (Piers 1 & 2 End View)

Note:
 It is the Contractors responsibility to provide a design for the cofferdam and all other required appurtenances, subject to approval of the Engineer. Plan dimensions of cofferdam are 10'-6" x 50'-8".



SECTION THRU INTEGRAL ABUTMENT

Note:
 All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



SECTION A-A

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.			538
Filter Fabric	Sq. Yd.			538
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.			176
Cofferdam Excavation	Cu. Yd.			268
Cofferdam (Type 2) (Location - 1)	Each			1
Cofferdam (Type 2) (Location - 2)	Each			1
Concrete Structures	Cu. Yd.		166.4	166.4
Concrete Superstructure	Cu. Yd.	267.7		267.7
Bridge Deck Grooving	Sq. Yd.	521		521
Seal Coat Concrete	Cu. Yd.			118
Protective Coat	Sq. Yd.	632	0	632
Reinforcement Bars, Epoxy Coated	Pound	67,910	17,260	85,170
Bar Splicers	Each	257	188	445
Furnishing Metal Shell Piles 14"x0.312"	Foot		1,879	1,879
Driving Piles	Foot		1,879	1,879
Test Pile Metal Shells	Each		1	1
Name Plates	Each			1
Geocomposite Wall Drain	Sq. Yd.			46
Asbestos Bearing Pad Removal	Each			36
Pipe Underdrains for Structures, 4"	Foot			136
Temporary Soil Retention System	Sq. Ft.			416
Granular Backfill for Structures	Cu. Yd.			71

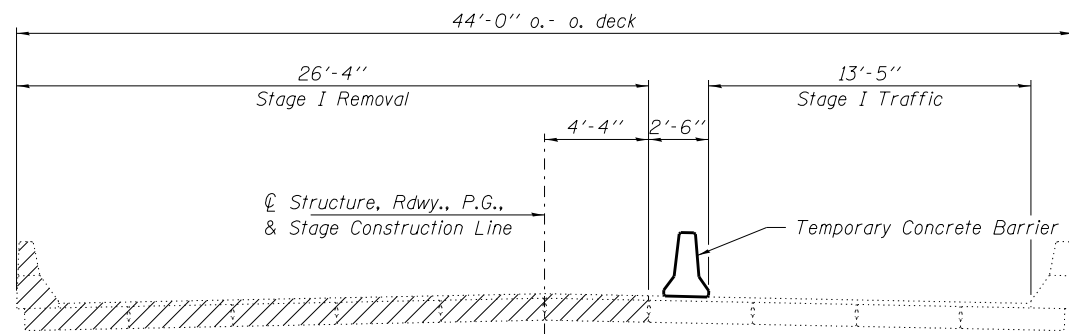
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HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.009959		CHECKED - S.M.S.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 9/17/2013	CHECKED - M.D.C.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

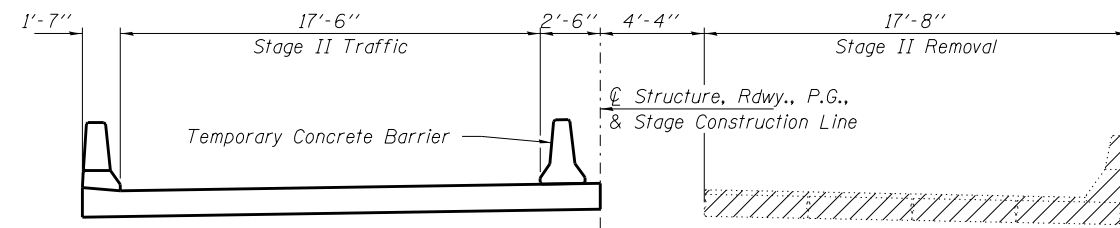
GENERAL DETAILS
STRUCTURE NO. 097-0079

SHEET NO. 2 OF 15 SHEETS

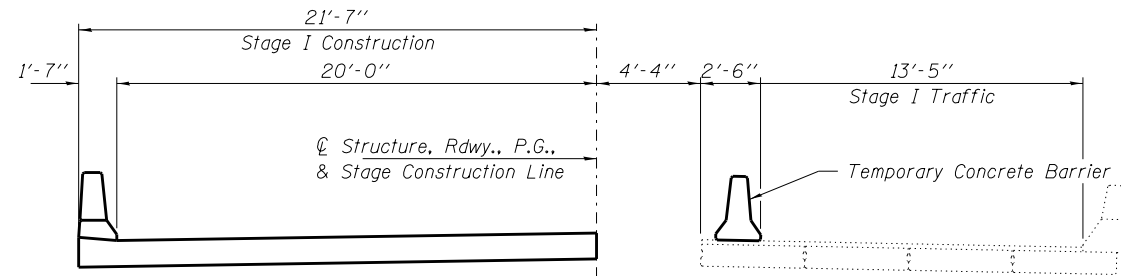
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	26
IL RTE 1/14 OVER CROOKED CR.			CONTRACT NO. 78266	
ILLINOIS FED. AID PROJECT				



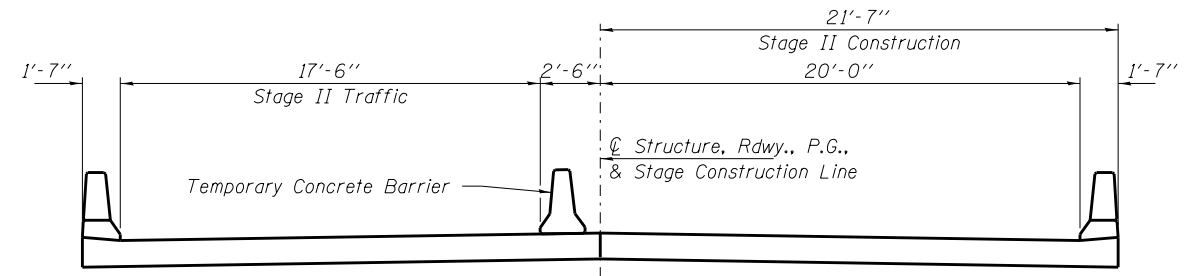
STAGE I REMOVAL



STAGE II REMOVAL

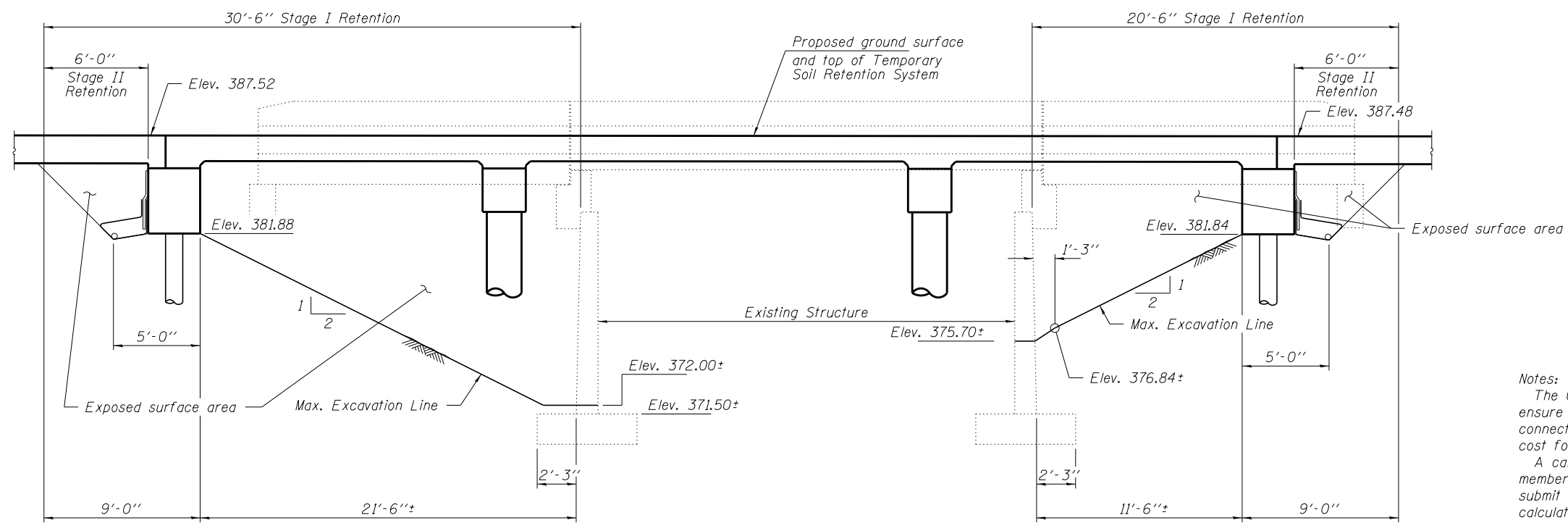


STAGE I CONSTRUCTION



STAGE II CONSTRUCTION

Notes:
 All sections are looking East.
 Hatched areas indicate removal.
 For Temporary Concrete Barrier quantities
 see Roadway Plans.



TEMPORARY SOIL RETENTION SYSTEM

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

FILE NAME = #FILE#	USER NAME =	DESIGNED - T.J.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - S.M.S.	REVISED -
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		CHECKED - M.D.C.	REVISED -

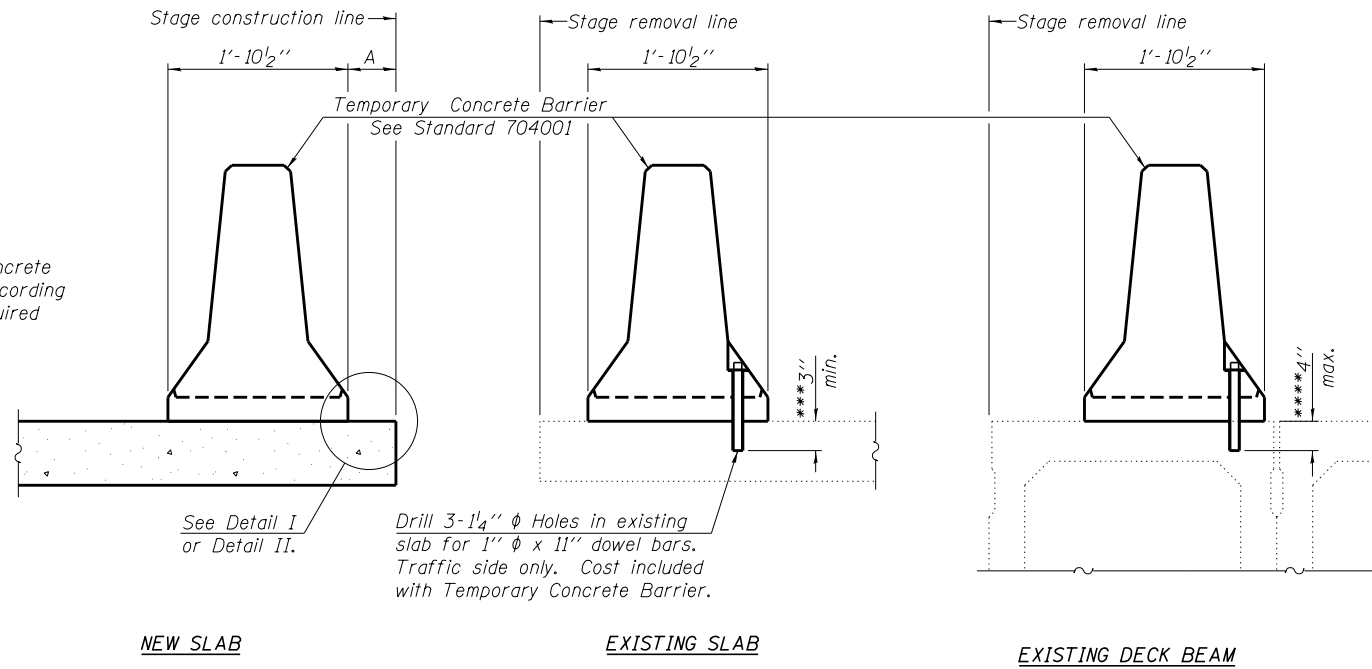
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS
 STRUCTURE NO. 097-0079**

SHEET NO. 3 OF 15 SHEETS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	27
IL RTE 1/14 OVER CROOKED CR.			CONTRACT NO. 78266	
ILLINOIS FED. AID PROJECT				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

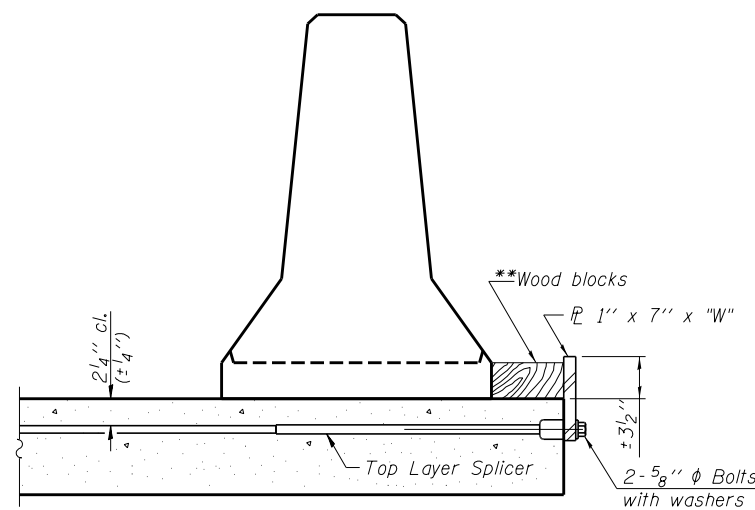
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

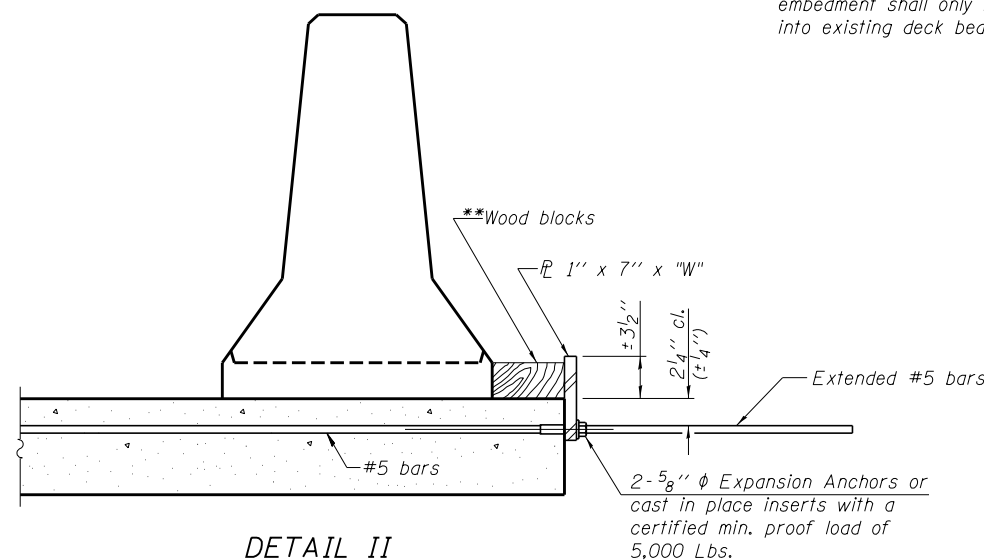
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



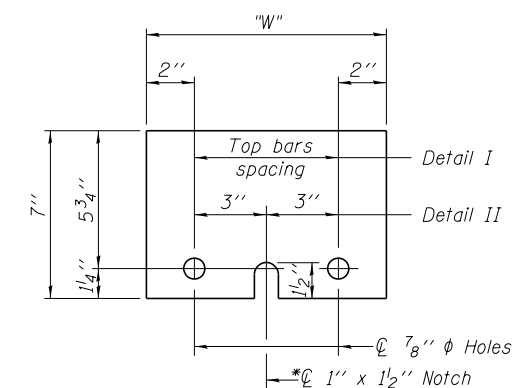
DETAIL I



DETAIL II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

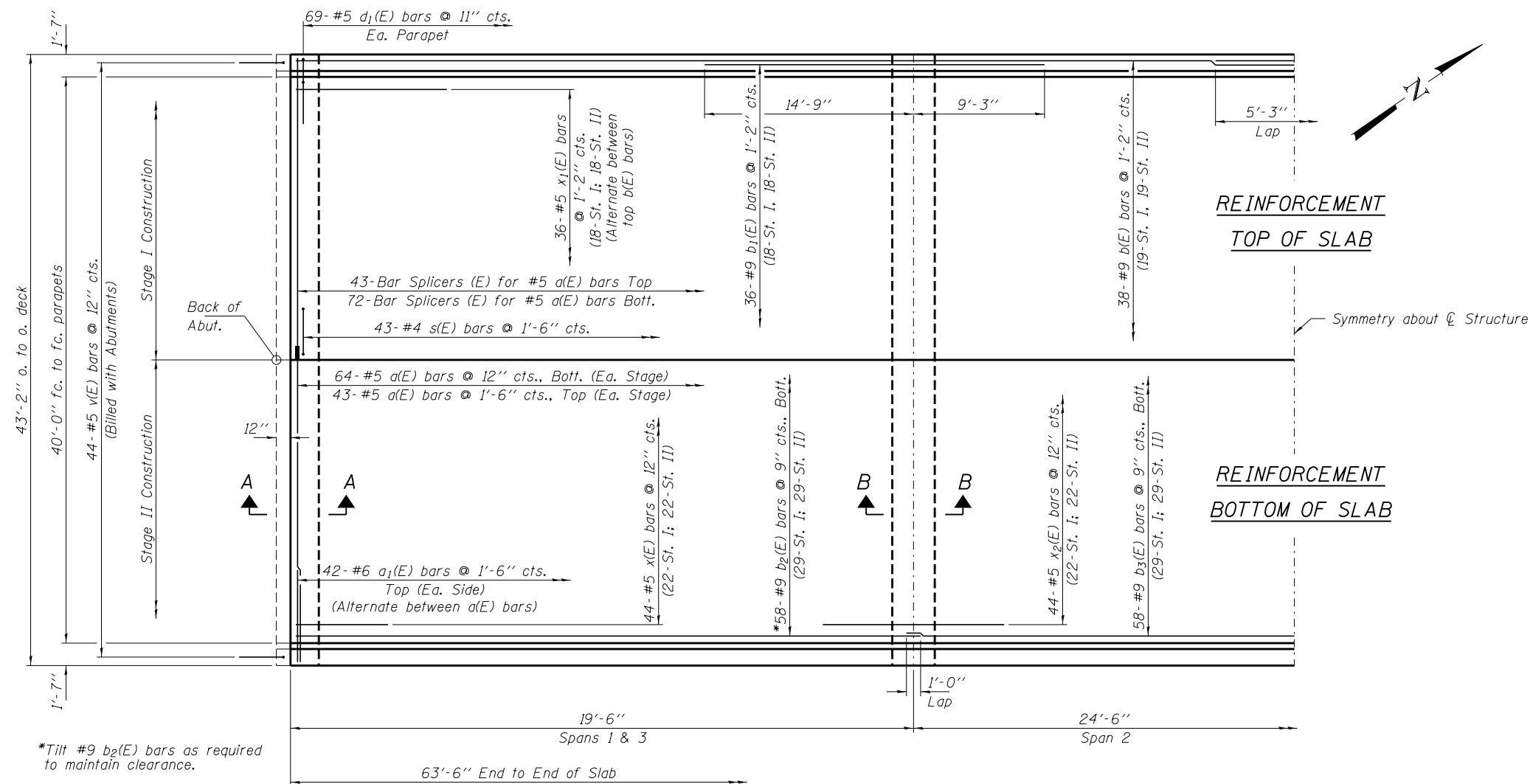


STEEL RETAINER \bar{L} 1" x 7" x "W"

* Required only with Detail II

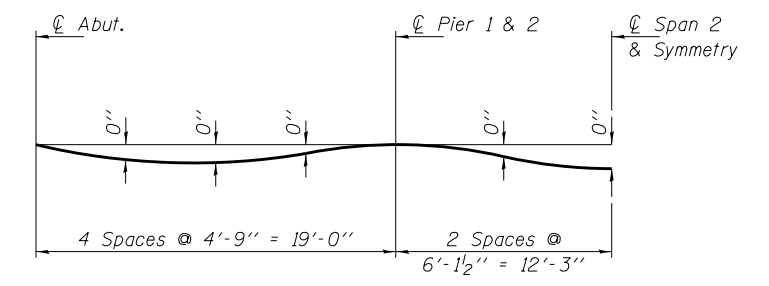
R-27 7-1-10

FILE NAME = \$FILE\$	USER NAME =	DESIGNED - T.J.A.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 097-0079	FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - S.M.S.	REVISED -			332	5B-1	WHITE	51	28
	PLOT DATE = 9/17/2013	DRAWN - D.A.B.	REVISED -			IL RTE 1/14 OVER CROOKED CR.	CONTRACT NO. 78266			
		CHECKED - M.D.C.	REVISED -			SHEET NO. 4 OF 15 SHEETS		ILLINOIS FED. AID PROJECT		



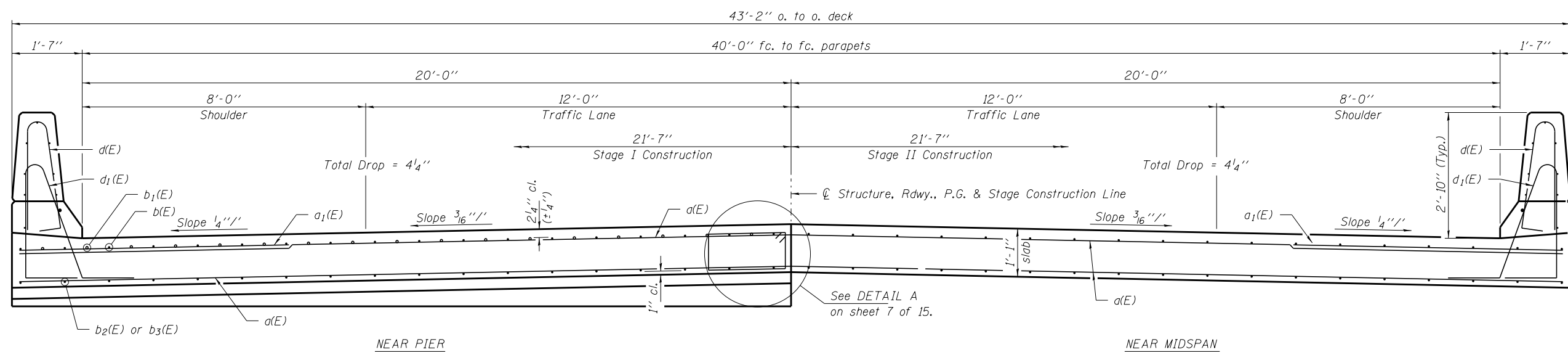
Notes:
 See sheets 6 & 7 of 15 for Superstructure Details and Bill of Material.
 See sheet 6 of 15 for parapet reinforcement.
 See sheet 7 of 15 for SECTION A-A, SECTION B-B and DETAIL A.
 See sheet 12 of 15 for Bar Splicer Details.

MIN. BAR LAP
 #5 bars = 2'-7"
 #9 bars = 5'-3"



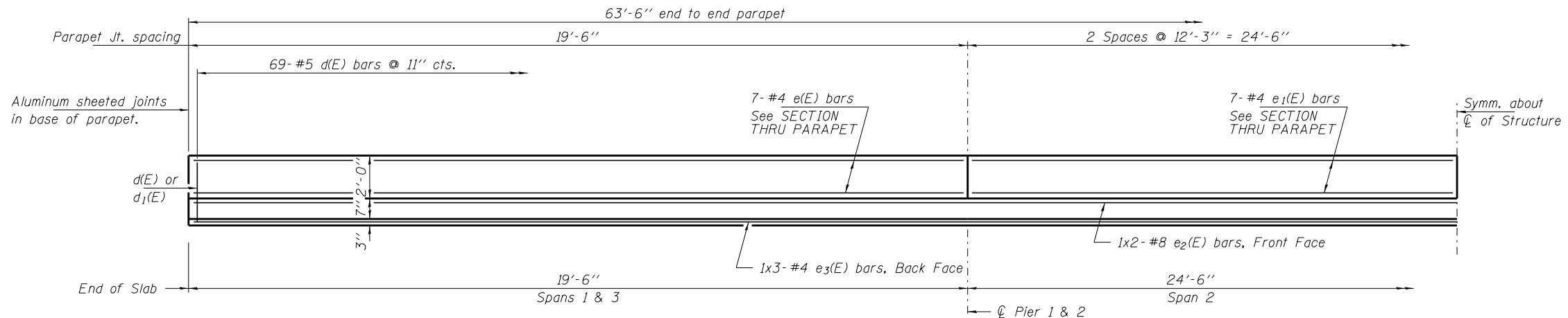
DEAD LOAD DEFLECTION DIAGRAM
 (Includes weight of concrete only.)

PLAN



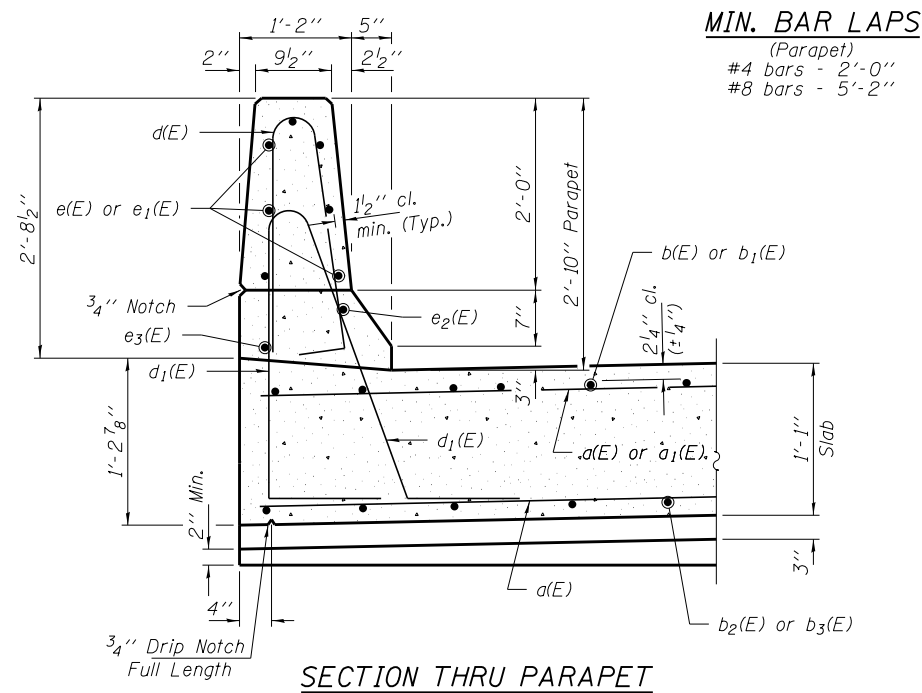
CROSS SECTION
 (Looking East)

FILE NAME = #FILE#	USER NAME =	DESIGNED - T.J.A.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE STRUCTURE NO. 097-0079	FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - S.M.S.	REVISED -			332	5B-1	WHITE	51	29	
PLOT DATE = 9/17/2013	DRAWN - D.A.B.	CHECKED - M.D.C.	REVISED -			IL RTE 1/14 OVER CROOKED CR., CONTRACT NO. 78266					
						ILLINOIS FED. AID PROJECT					



INSIDE ELEVATION OF PARAPET

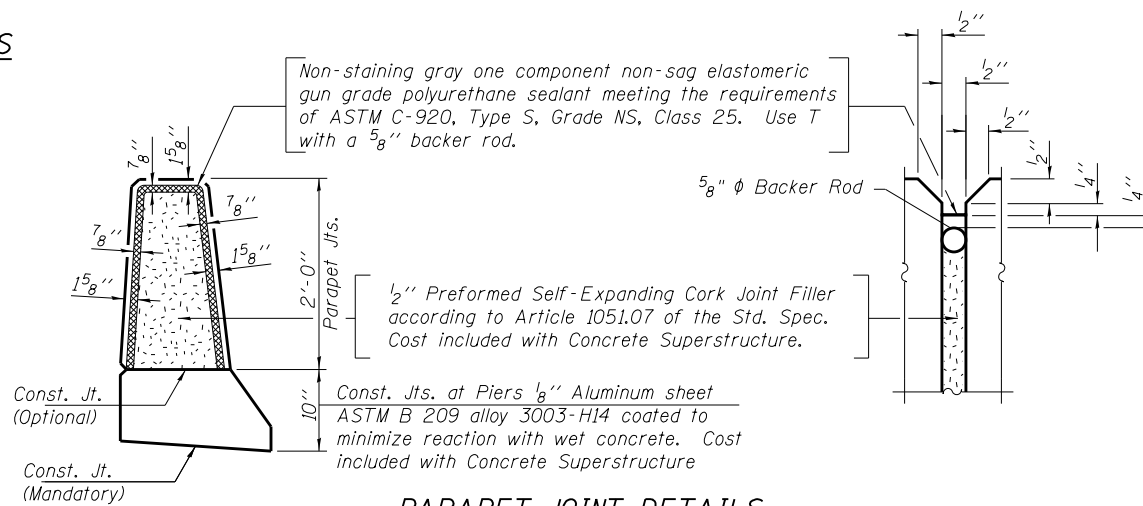
Note:
Bars indicated thus 1x3-#4 etc. indicates
1 lines of bars with 3 lengths per line.



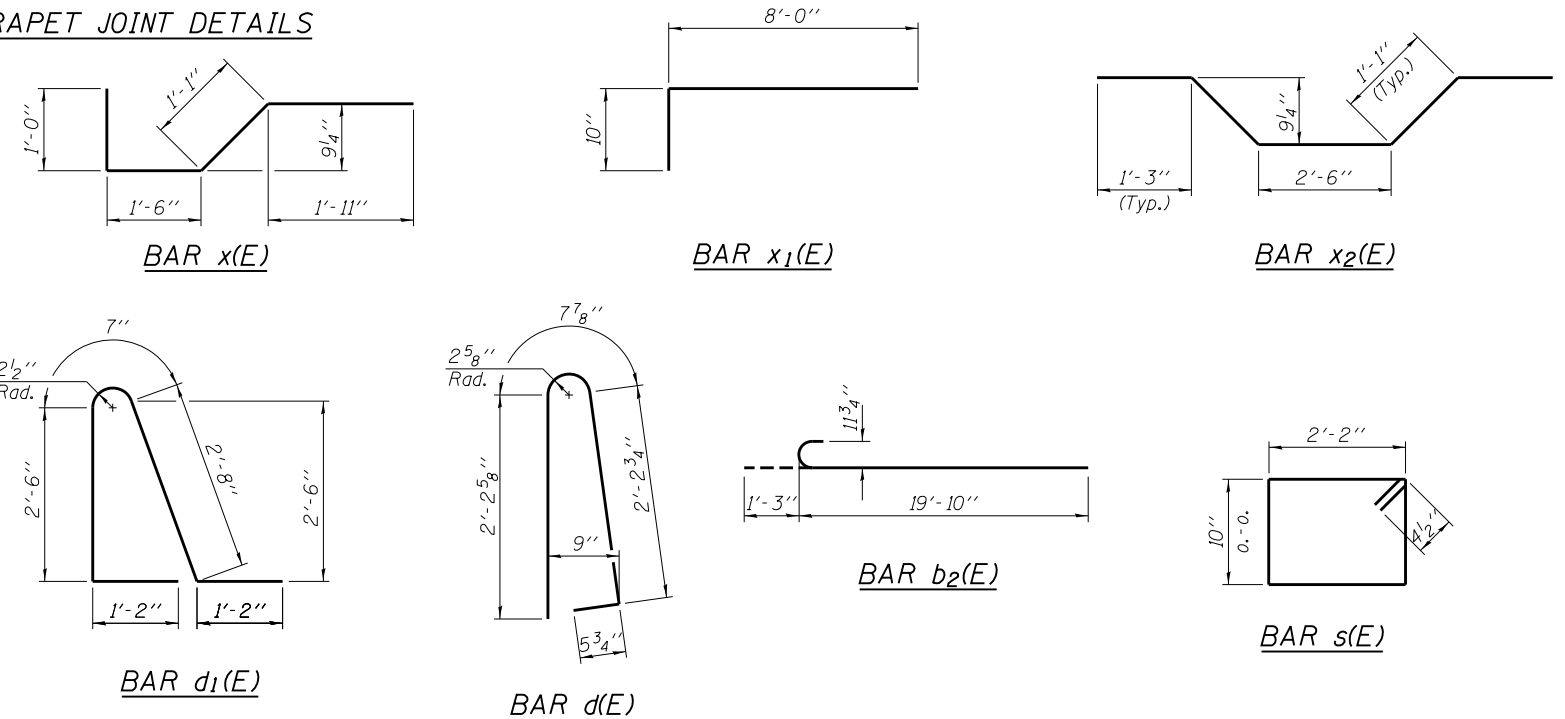
SECTION THRU PARAPET

MIN. BAR LAPS

(Parapet)
#4 bars - 2'-0"
#8 bars - 5'-2"



PARAPET JOINT DETAILS



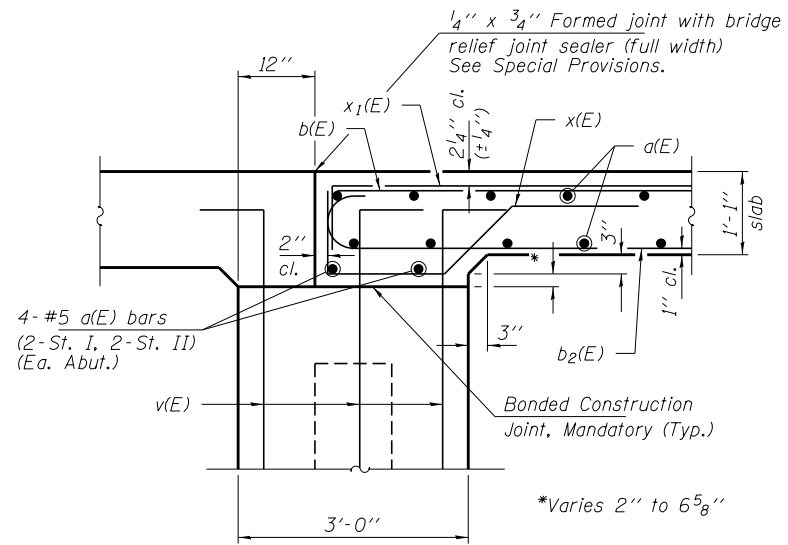
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	PLOT DATE = 9/17/2013	DRAWN - D.A.B.	REVISED -
		CHECKED - M.D.C.	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 097-0079**

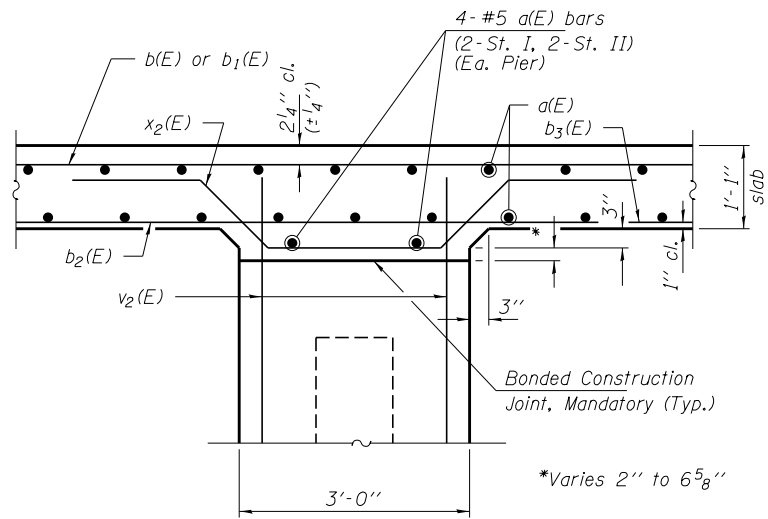
SHEET NO. 6 OF 15 SHEETS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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IL RTE 1/14 OVER CROOKED CR.		CONTRACT NO. 78266		
ILLINOIS FED. AID PROJECT				

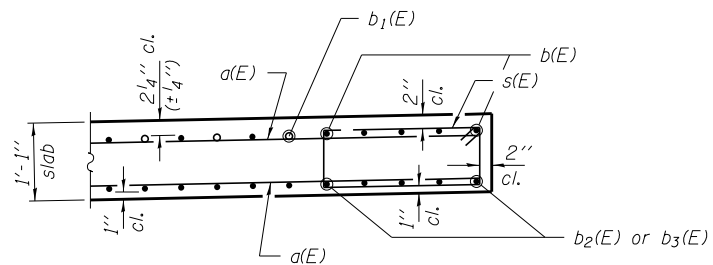


SECTION A-A

Note:
Pour bridge slab before
pouring approach slab.



SECTION B-B



DETAIL A

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	230	#5	21'-3"	—
a ₁ (E)	84	#6	6'-6"	—
b(E)	76	#9	34'-3"	—
b ₁ (E)	72	#9	24'-0"	—
b ₂ (E)	116	#9	21'-1"	C
b ₃ (E)	58	#9	25'-6"	—
d(E)	138	#5	5'-7"	⏏
d ₁ (E)	138	#5	8'-1"	⏏
e(E)	28	#4	19'-2"	—
e ₁ (E)	28	#4	11'-11"	—
e ₂ (E)	4	#8	34'-2"	—
e ₃ (E)	6	#4	22'-5"	—
s(E)	43	#4	6'-9"	⏏
x(E)	88	#5	5'-6"	⏏
x ₁ (E)	72	#5	8'-10"	⏏
x ₂ (E)	88	#5	7'-2"	⏏
Concrete Superstructure			Cu. Yd.	134.6
Bridge Deck Grooving			Sq. Yd.	268
Protective Coat			Sq. Yd.	336
Reinforcement Bars, Epoxy Coated			Pound	39,010
Bar Splicers			Each	115

FILE NAME = \$FILE\$	USER NAME =	DESIGNED - T.J.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S.	REVISED -
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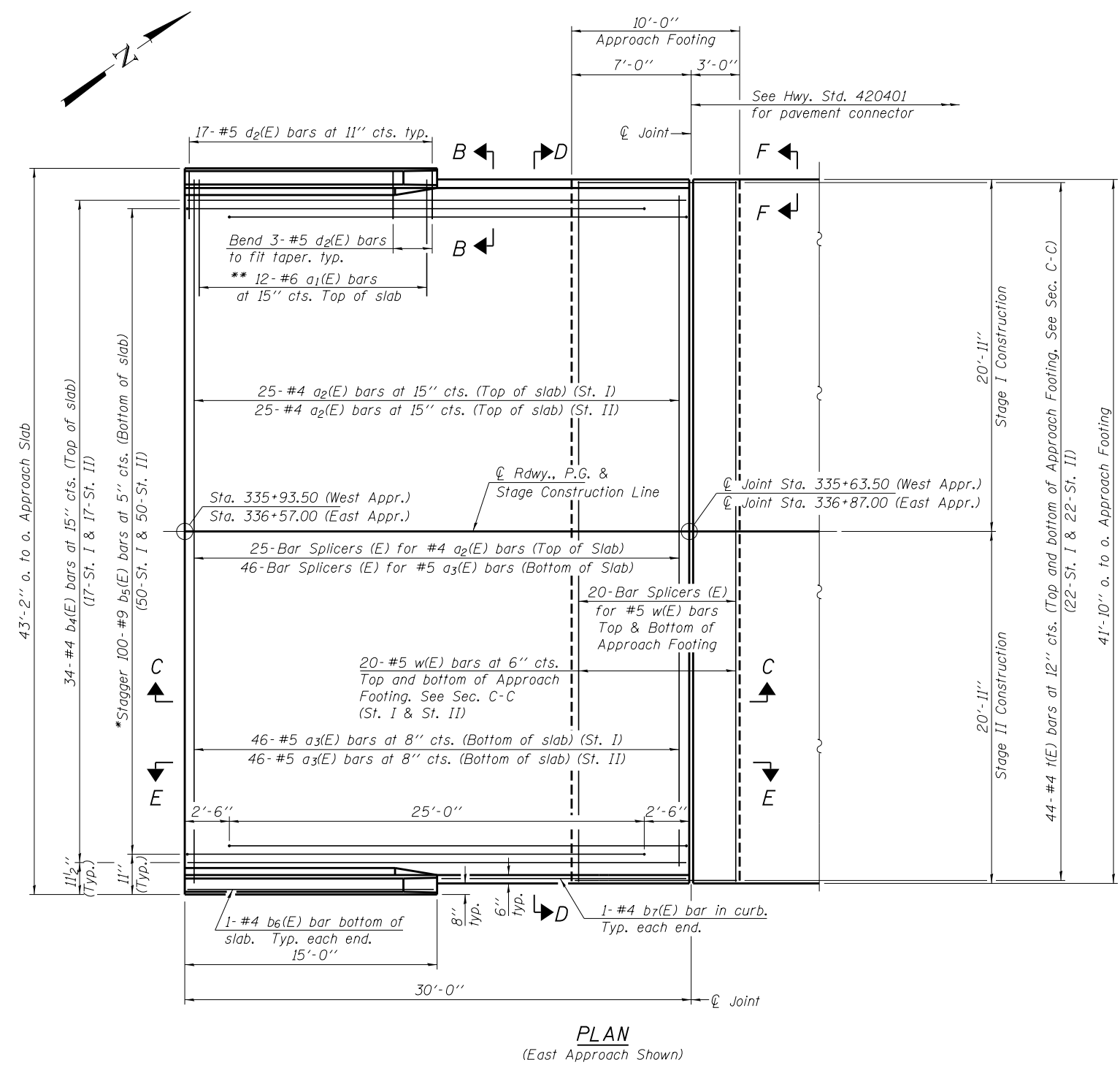
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 097-0079

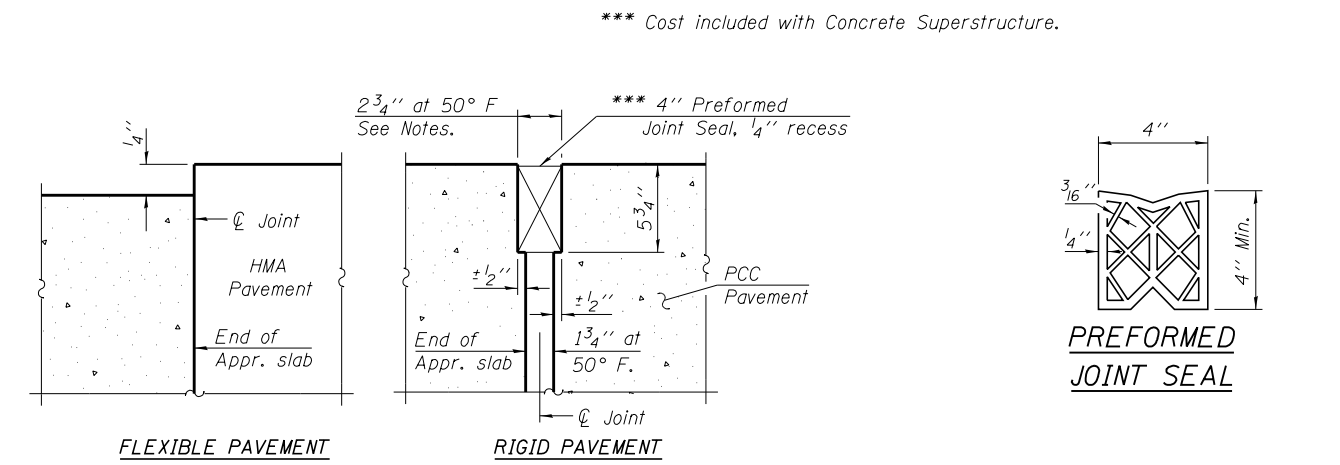
SHEET NO. 7 OF 15 SHEETS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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IL RTE 1/14 OVER CROOKED CR.		CONTRACT NO. 78266		
ILLINOIS FED. AID PROJECT				

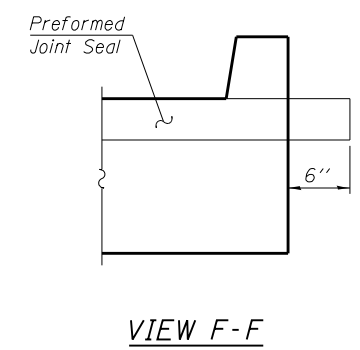
Notes:
 See sheet 9 of 15 for Sections C-C & D-D and View E-E.
 $a_2(E)$ and $a_3(E)$ bar spacings measured along \varnothing Rdwy.
 See sheet 9 of 15 for additional details.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be $1\frac{1}{2}'$ for installation purposes.



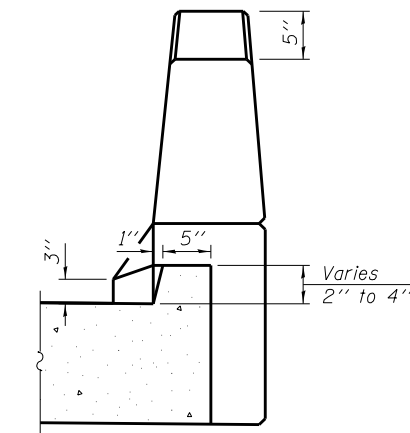
* Tilt #9 $b_5(E)$ bars as required to maintain clearance.
 ** Space between $a_2(E)$ bars, typ. ea. parapet.



DETAIL A



VIEW F-F



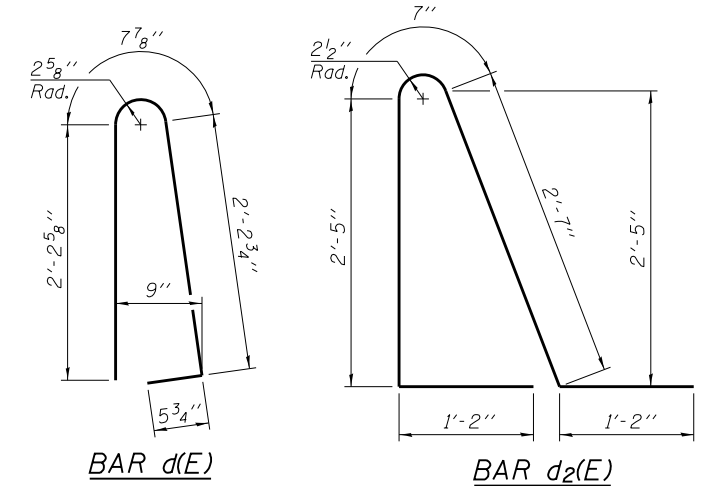
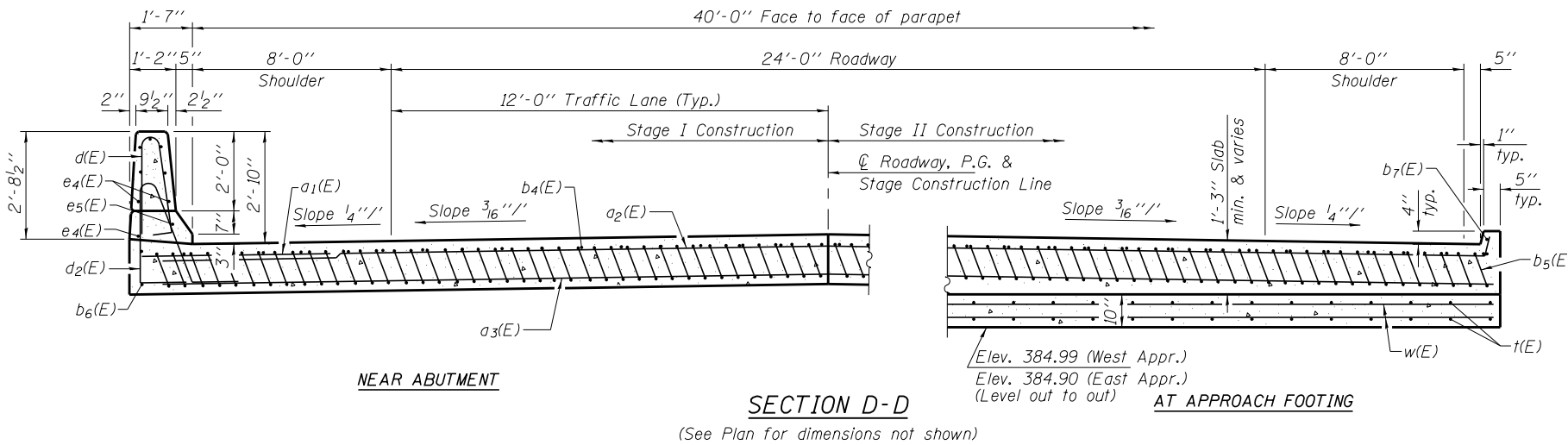
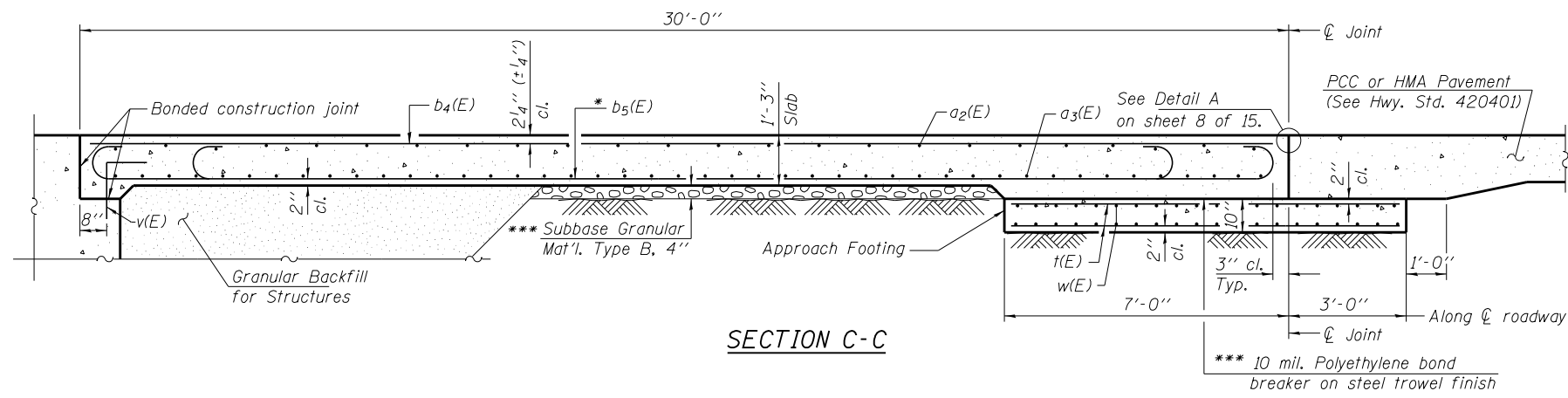
VIEW B-B

BA-0 12-12-12

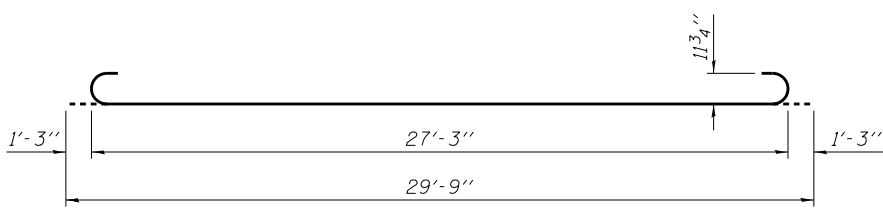
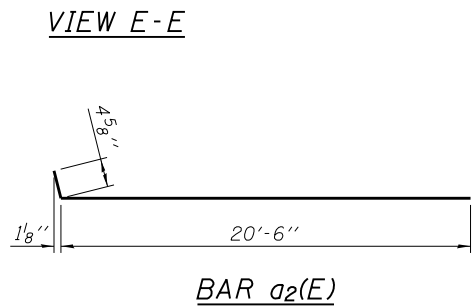
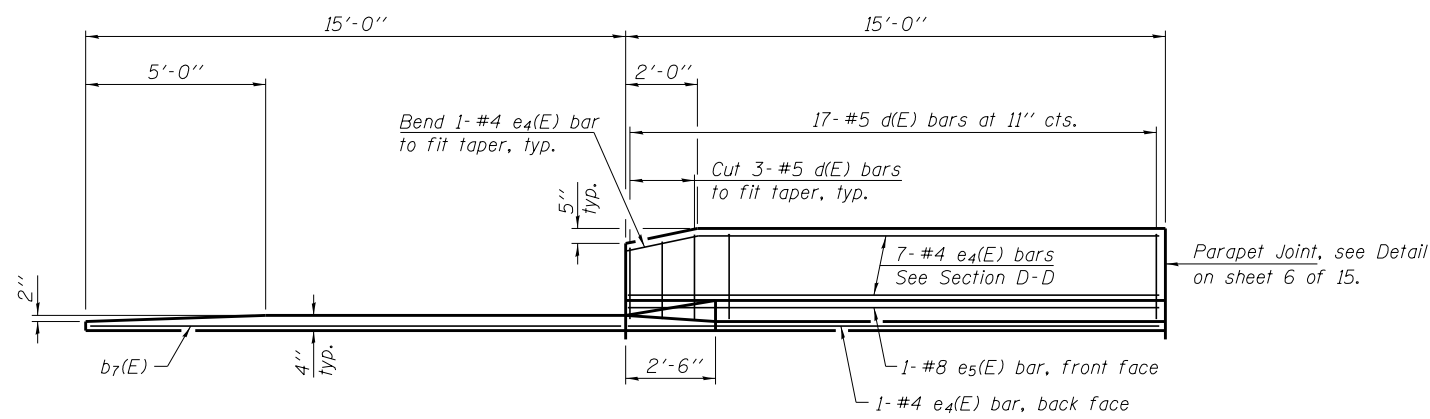
(Sheet 1 of 2)

FILE NAME = \$FILE\$	USER NAME =	DESIGNED - T.J.A.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 097-0079	FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S.	REVISED -			332	5B-1	WHITE	51	32	
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	PLOT DATE = 9/17/2013	CHECKED - M.D.C.	REVISED -			SHEET NO. 8 OF 15 SHEETS ILLINOIS FED. AID PROJECT					

Notes:
 See sheet 8 of 15 for Detail A and View B-B.
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 10 of 15.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 15.
 For additional parapet details, see sheet 6 of 15.



* Tilt #9 b₅(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.



**TWO APPROACHES
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a ₁ (E)	48	#6	6'-6"	—
a ₂ (E)	100	#4	20'-11"	—
a ₃ (E)	184	#5	20'-7"	—
b ₄ (E)	68	#4	29'-8"	—
b ₅ (E)	200	#9	29'-9"	—
b ₆ (E)	4	#4	14'-8"	—
b ₇ (E)	4	#4	14'-8"	—
d(E)	68	#5	5'-7"	—
d ₂ (E)	68	#5	7'-11"	—
e ₄ (E)	32	#4	14'-8"	—
e ₅ (E)	4	#8	14'-8"	—
t(E)	176	#4	9'-8"	—
w(E)	160	#5	20'-7"	—
Concrete Structures		Cu. Yd.	25.8	
Concrete Superstructure		Cu. Yd.	133.1	
Reinforcement Bars, Epoxy Coated		Pound	33,470	
Bar Splicers		Each	222	

BA-0

12-12-12

(Sheet 2 of 2)

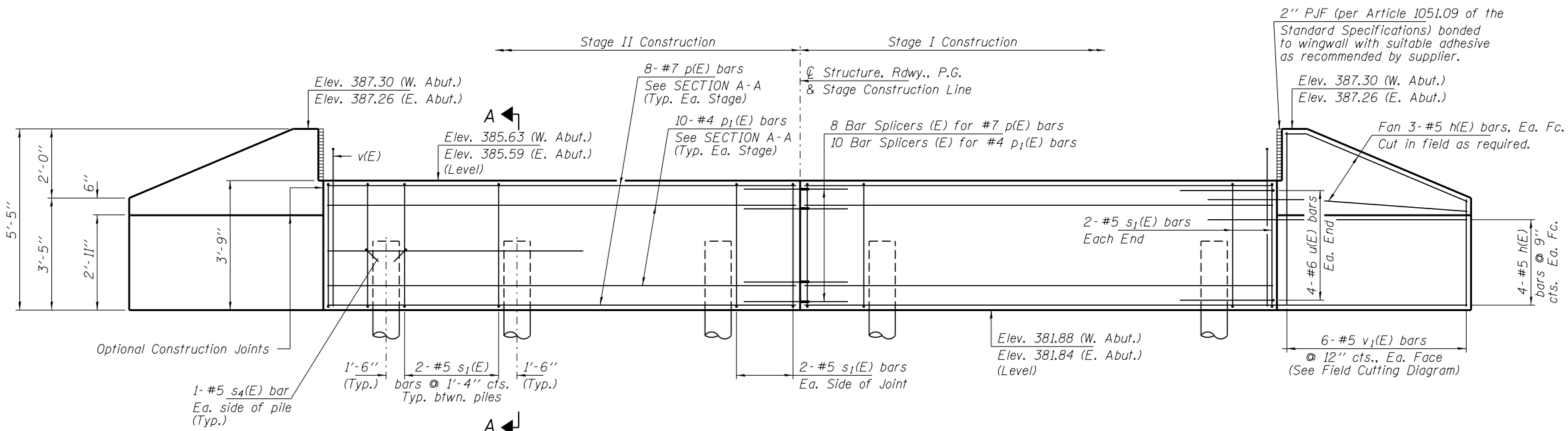
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3035 STEVENSON DRIVE, SUITE 201		DRAWN - D.A.B.	REVISED -
SPRINGFIELD, ILLINOIS 62703		CHECKED - M.D.C.	REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

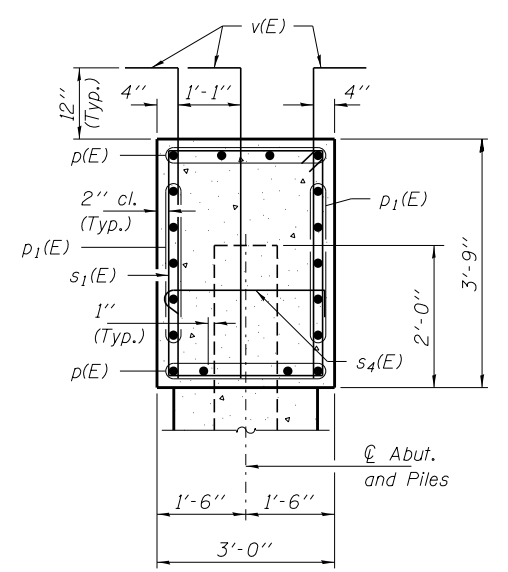
BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 097-0079

SHEET NO. 9 OF 15 SHEETS

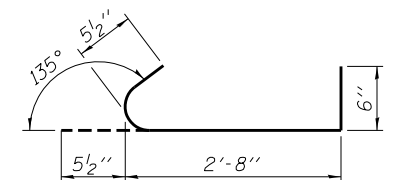
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	33
IL RTE 1/14 OVER CROOKED CR.			CONTRACT NO. 78266	
ILLINOIS FED. AID PROJECT				



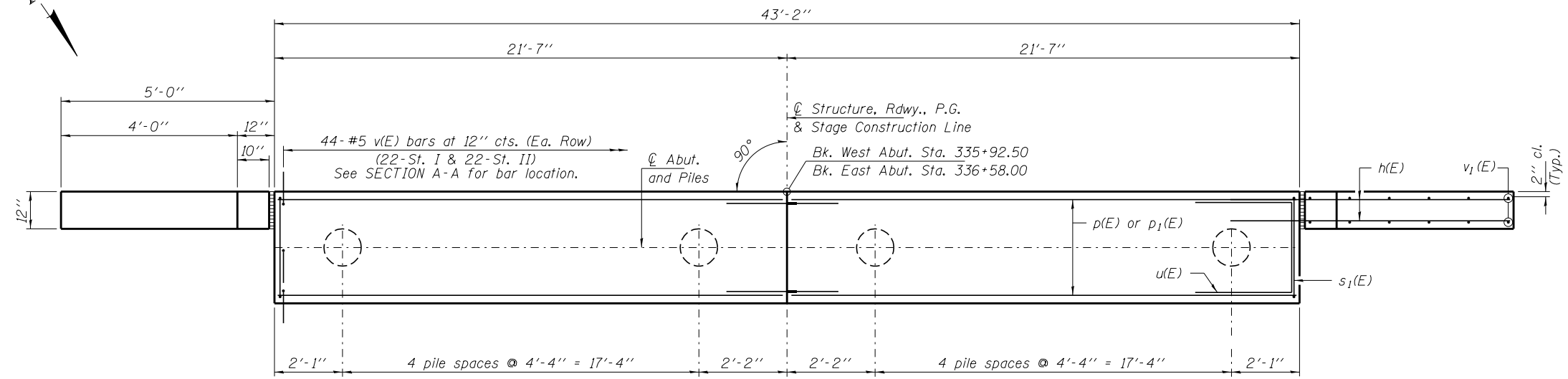
ELEVATION
(West Abut. shown, looking West)



SECTION A-A



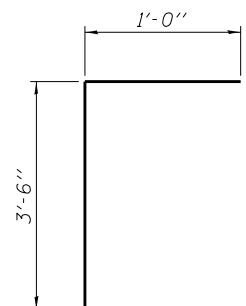
BAR s4(E)



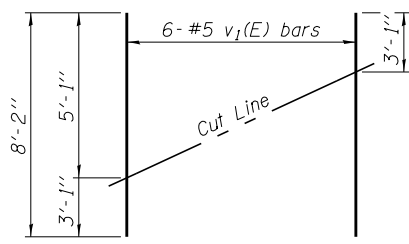
PLAN
(West Abut. shown)

PILE DATA

Type: Metal Shell Piles 14" x 0.312"
 Nominal Required Bearing: 212 Kips/pile
 Factored Resistance Available: 116 Kips/pile
 Est. Length: 51' (W. Abut.)
 41' (E. Abut.)
 No. Production Piles: 19
 No. Test Piles: 1 (E. Abut.)

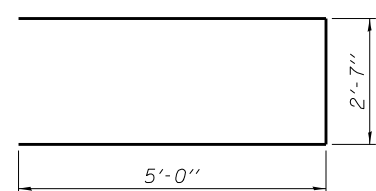


BAR v(E)

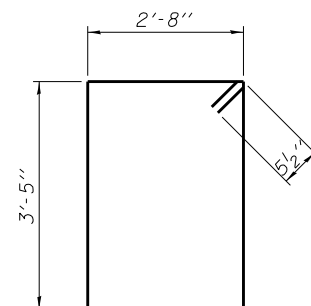


FIELD CUTTING DIAGRAM

Order v₁(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR u(E)



BAR s1(E)

**TWO ABUTMENTS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	56	#5	7'-8"	—
p(E)	32	#7	21'-3"	—
p ₁ (E)	40	#4	21'-3"	—
s ₁ (E)	48	#5	13'-1"	□
s ₄ (E)	40	#5	3'-8"	┘
u(E)	16	#6	12'-7"	—
v(E)	264	#5	4'-6"	┘
v ₁ (E)	24	#5	8'-2"	—
Concrete Structures		Cu. Yd.	37.8	
Reinforcement Bars, Epoxy Coated		Pound	4,960	
Bar Splicers		Each	36	
Furnishing Metal Shell Piles 14" x 0.312"		Foot	879	
Driving Piles		Foot	879	
Test Pile Metal Shells		Each	1	

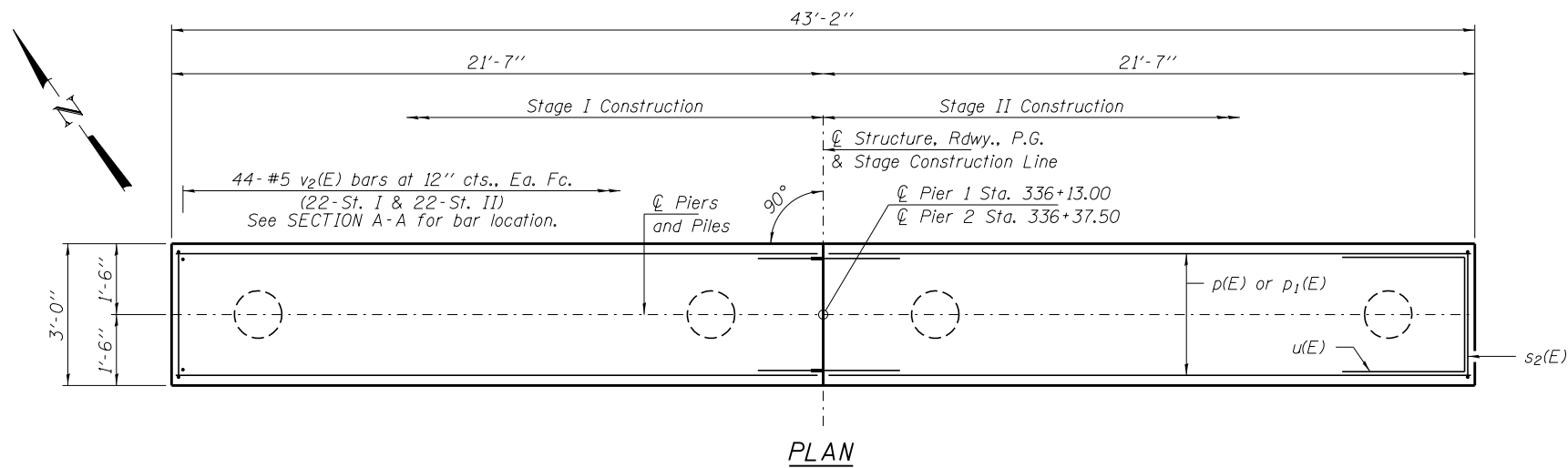
Notes:
 For details of Bar Splicers, see sheet 12 of 15.
 For details of piles, see sheet 13 of 15.

FILE NAME = \$FILE\$	USER NAME =	DESIGNED - T.J.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.M.S.	REVISED -
3085 STEVENSON DRIVE, SUITE 201		DRAWN - D.A.B.	REVISED -
SPRINGFIELD, ILLINOIS 62703		CHECKED - M.D.C.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM			
LS / PE / SE CORP. 184.000959			

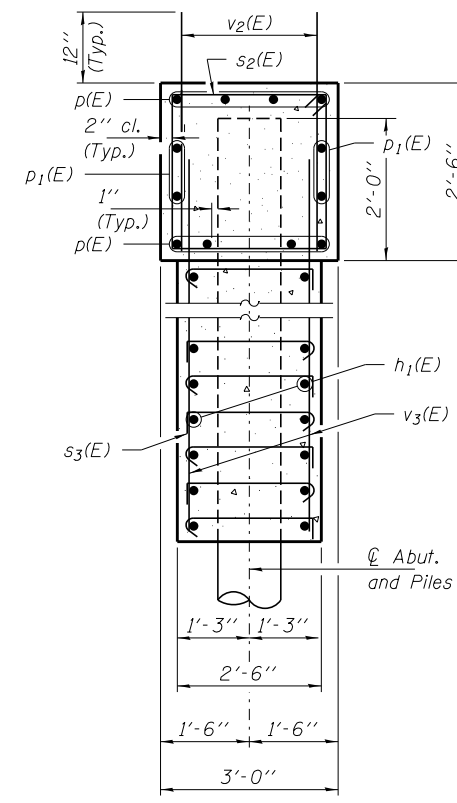
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENTS
STRUCTURE NO. 097-0079**
SHEET NO. 10 OF 15 SHEETS

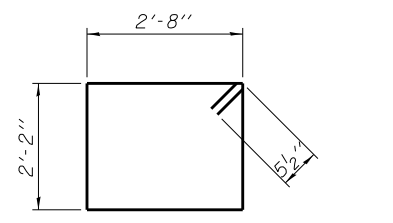
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	34
IL RTE 1/14 OVER CROOKED CR.			CONTRACT NO. 78266	
ILLINOIS FED. AID PROJECT				



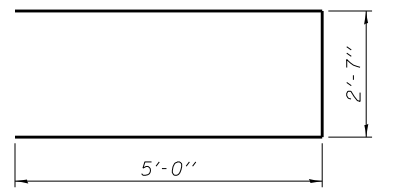
PLAN



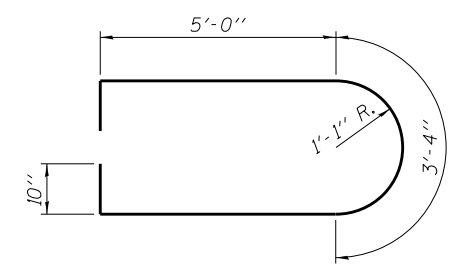
SECTION A-A



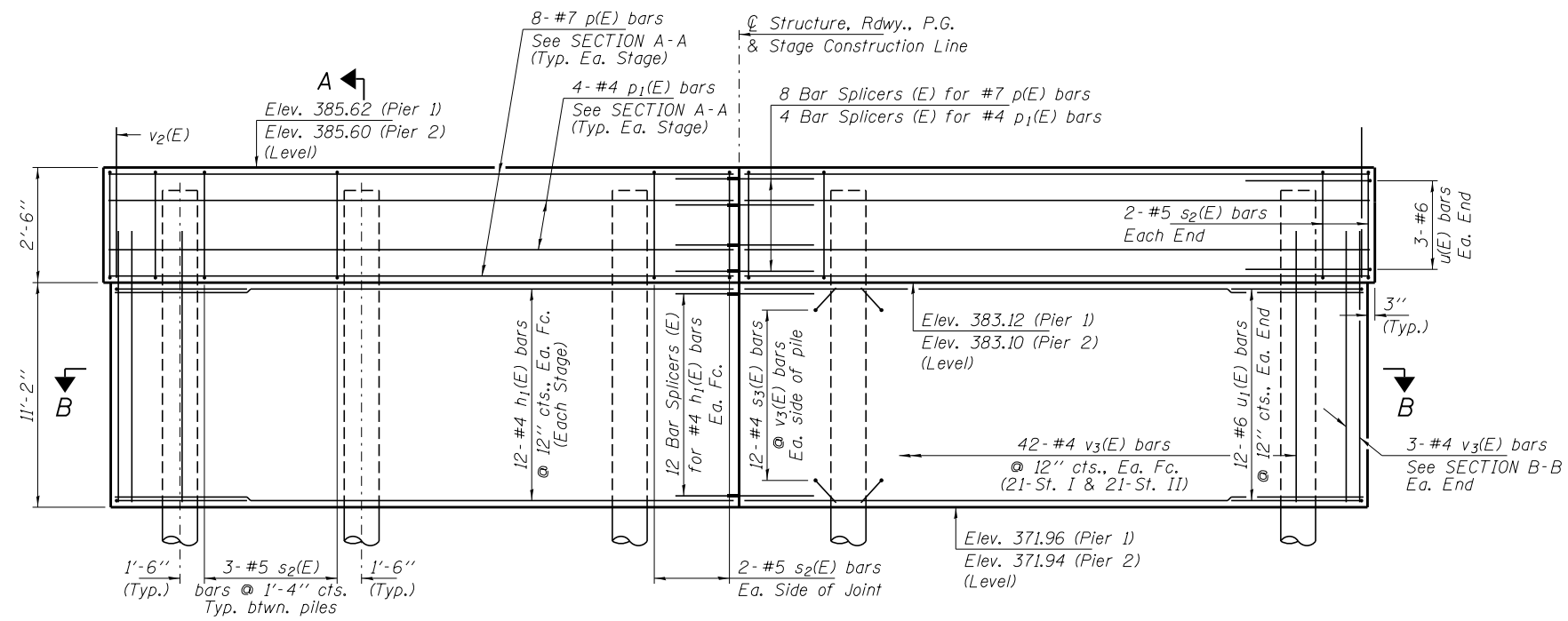
BAR s2(E)



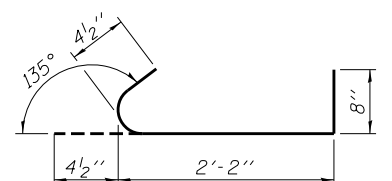
BAR u(E)



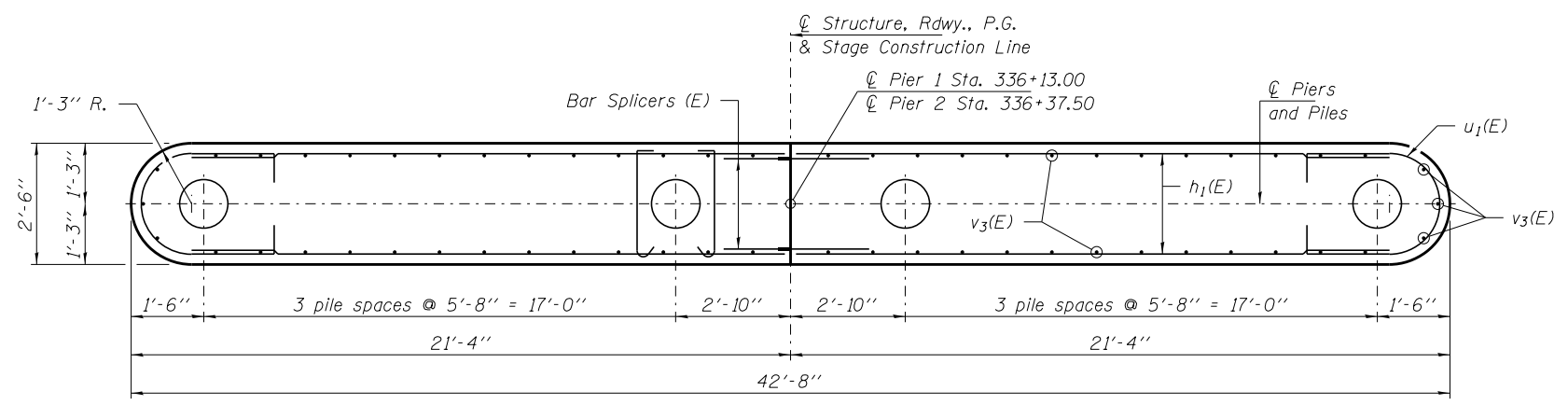
BAR u1(E)



ELEVATION
(Looking East)



BAR s3(E)



SECTION B-B

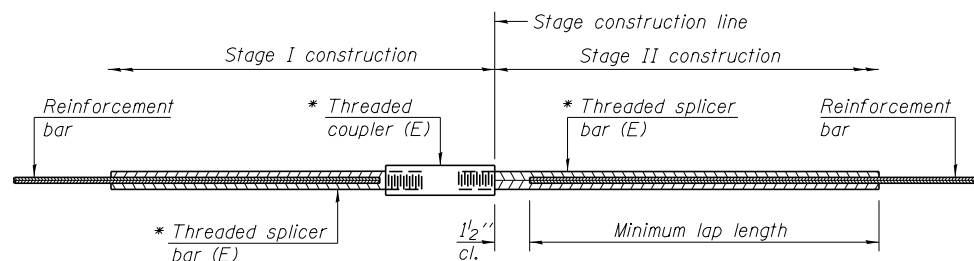
**TWO PIERS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	96	#4	19'-11"	—
p(E)	32	#7	21'-3"	—
p1(E)	16	#4	21'-3"	—
s2(E)	52	#5	10'-7"	□
s3(E)	384	#4	3'-3"	┌┐
u(E)	12	#6	12'-7"	—
u1(E)	48	#6	15'-0"	U
v2(E)	176	#5	3'-4"	—
v3(E)	180	#4	12'-6"	—
Concrete Structures		Cu. Yd.	102.8	
Reinforcement Bars, Epoxy Coated		Pound	7,730	
Bar Splicers		Each	72	
Furnishing Metal Shell Piles 14" x 0.312"		Foot	1,000	
Driving Piles		Foot	1,000	

PILE DATA

Type: Metal Shell Piles 14" x 0.312"
 Nominal Required Bearing: 360 Kips/pile
 Factored Resistance Available: 177 Kips/pile
 Est. Length: 68' (Pier 1)
 57' (Pier 2)
 No. Production Piles: 16

Notes:
 For details of Bar Splicers, see sheet 12 of 15.
 For details of piles, see sheet 13 of 15.



STANDARD BAR SPLICER ASSEMBLY

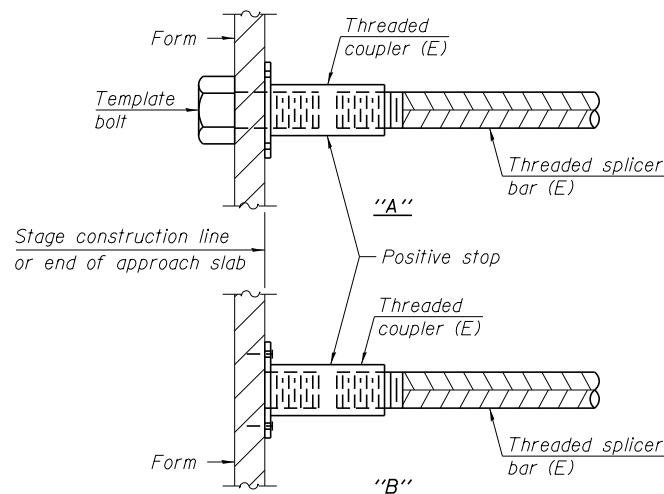
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

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

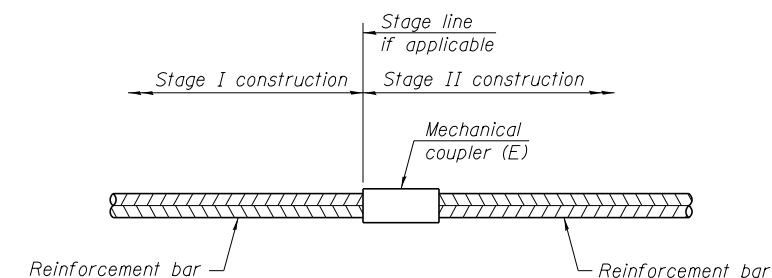
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Bridge Superstructure	#5	115	3
Abutments	#7	16	4
Abutments	#4	20	5
Piers	#7	16	4
Piers	#4	56	3
Approaches	#4	50	4
Approaches	#5	92	3
Approach Footings	#5	80	3



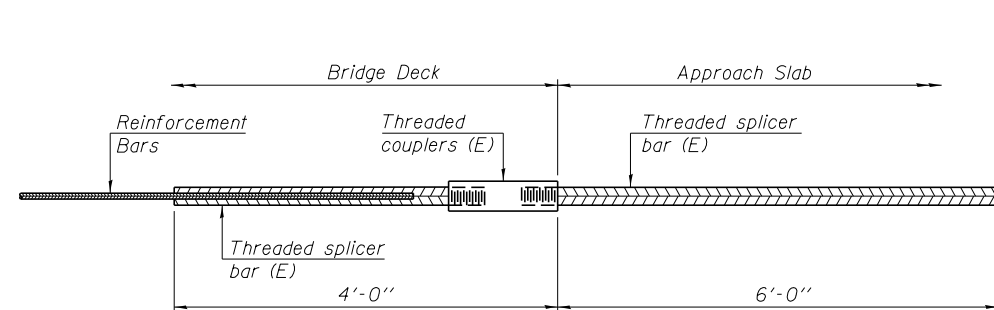
INSTALLATION AND SETTING METHODS

"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.



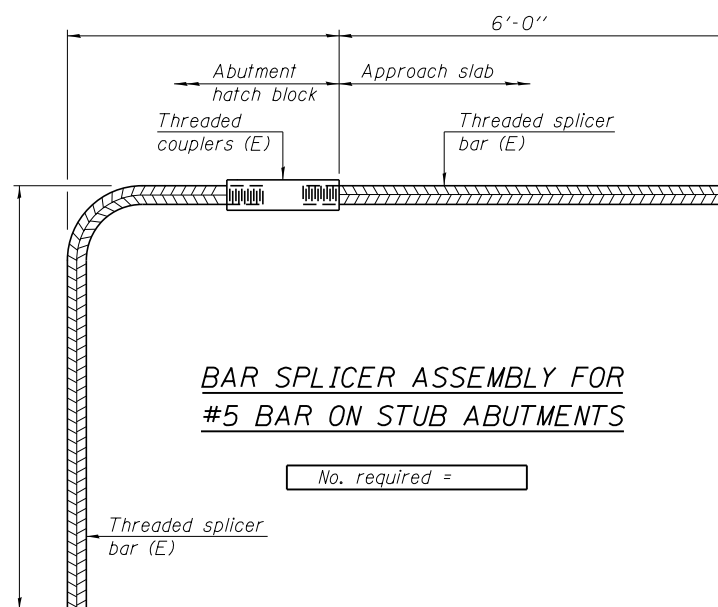
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

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

BSD-1 1-27-12

FILE NAME = \$FILE\$	USER NAME =	DESIGNED - T.J.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.M.S.	REVISED -
3085 STEVENSON DRIVE, SUITE 201		DRAWN - D.A.B.	REVISED -
SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - M.D.C.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM	PLOT DATE = 9/17/2013		
LS / PE / SE CORP. 184.000959			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 097-0079

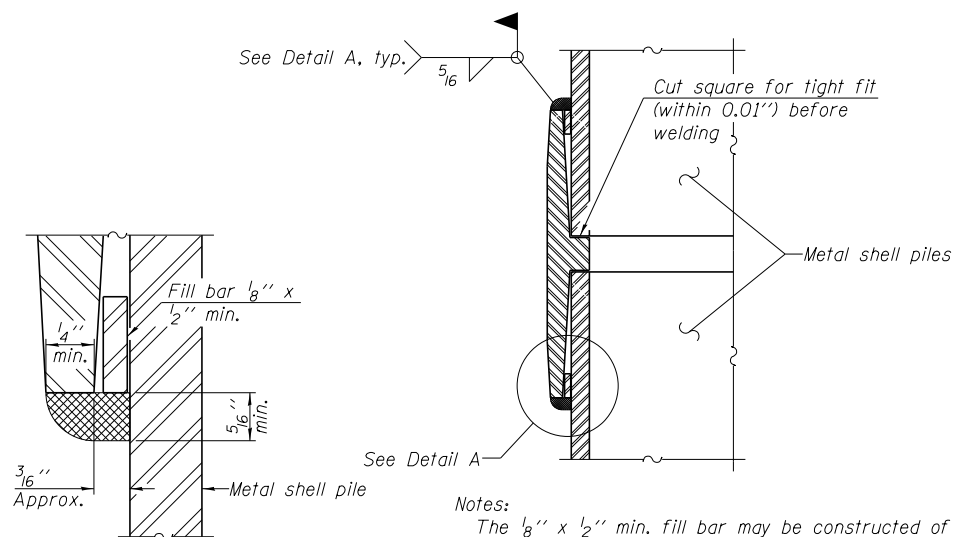
SHEET NO. 12 OF 15 SHEETS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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IL RTE 1/14 OVER CROOKED CR.			CONTRACT NO. 78266	
ILLINOIS FED. AID PROJECT				



METAL SHELL PILE TABLE

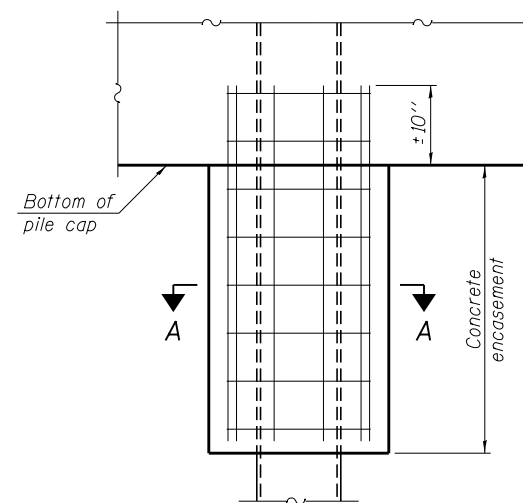
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



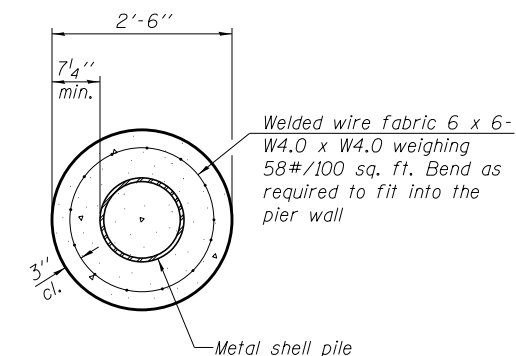
DETAIL A

Notes:
 The $\frac{1}{8}$ " x $\frac{1}{2}$ " min. fill bar may be constructed of 2 bars with a $\frac{1}{8}$ " max. gap between them.
 Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE



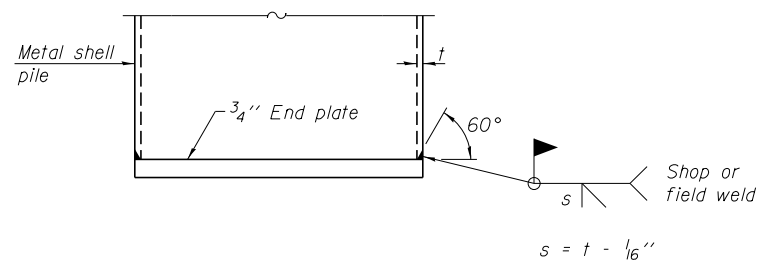
ELEVATION



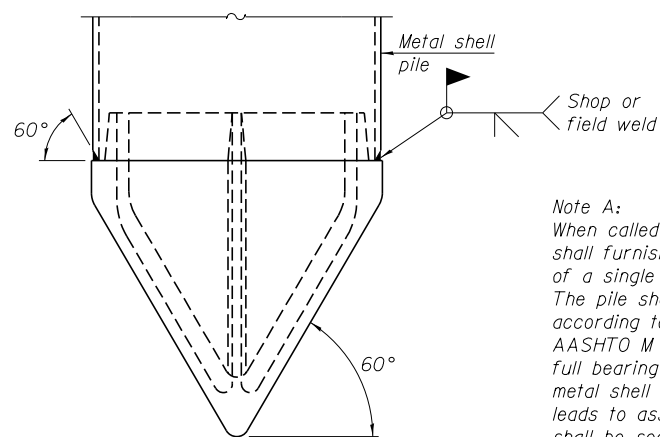
SECTION A-A

Note:
 Forms for encasement may be omitted when soil conditions permit.

CONCRETE ENCASEMENT AT PIERS



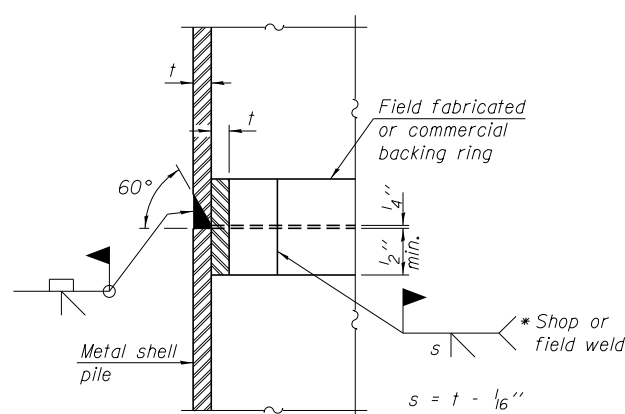
END PLATE ATTACHMENT



Note A:
 When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

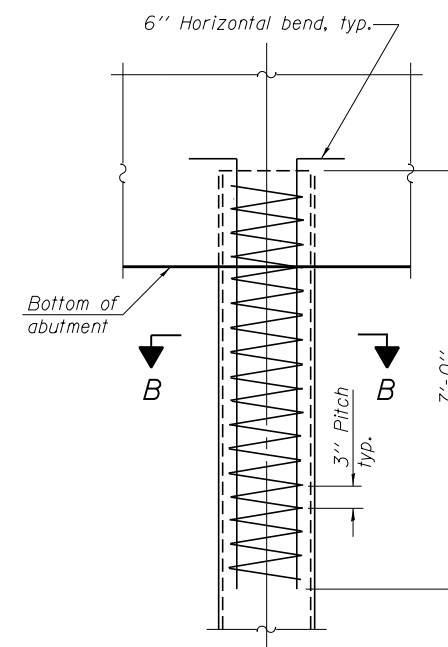
METAL SHELL PILE SHOE ATTACHMENT

(See Note A)

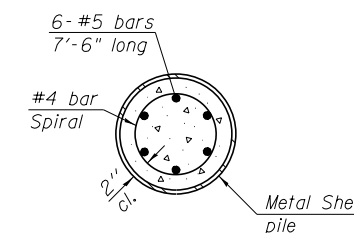


COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

Note:
 The metal shell piles shall be according to ASTM A 252 Grade 3.

F-MS 1-27-12

FILE NAME = \$FILE\$	USER NAME =	DESIGNED - T.J.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - S.M.S.	REVISED -
	PLOT DATE = 9/17/2013	DRAWN - D.A.B.	REVISED -
		CHECKED - M.D.C.	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

METAL SHELL PILE DETAILS
 STRUCTURE NO. 097-0079

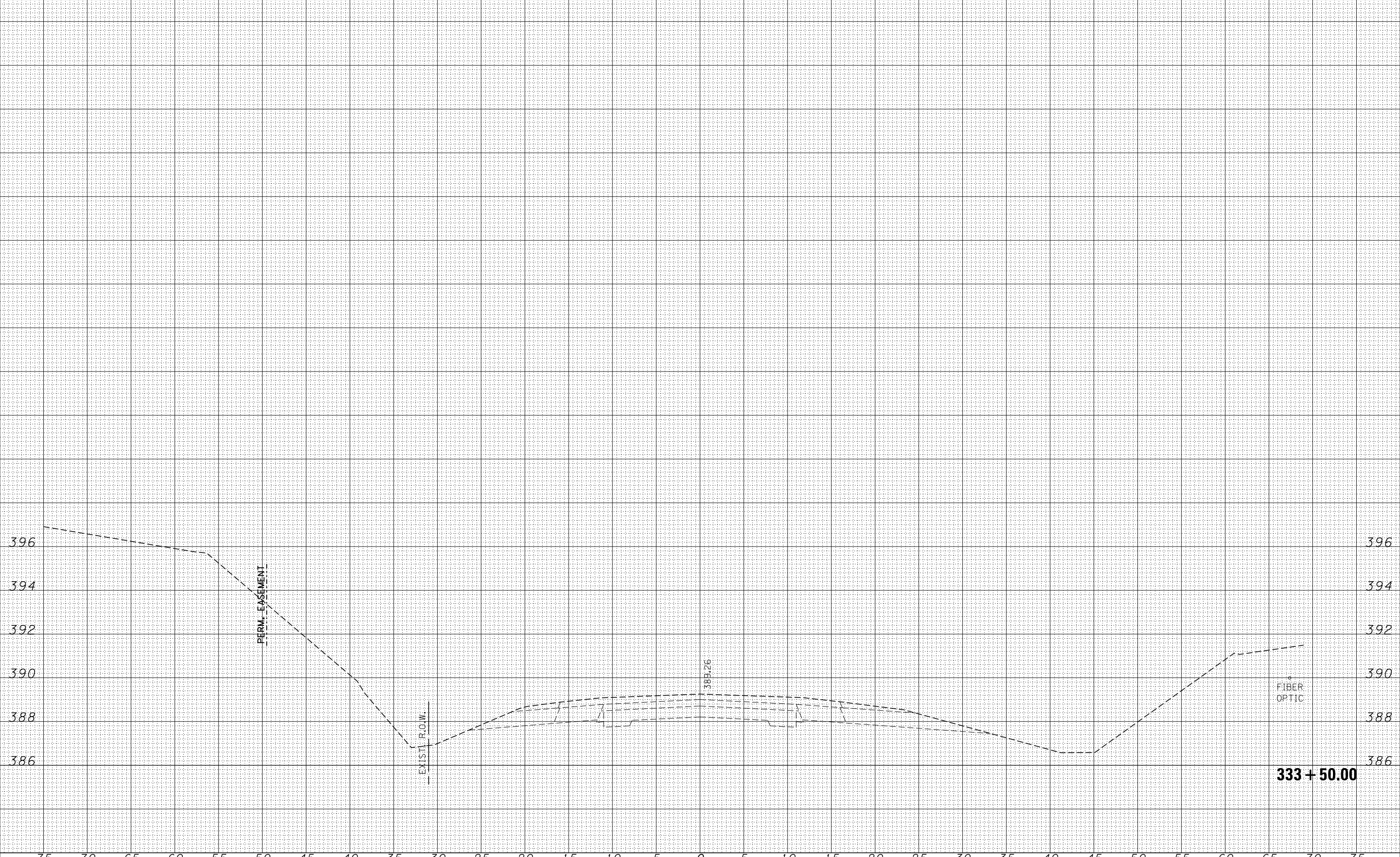
SHEET NO. 13 OF 15 SHEETS

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	37
IL RTE 1/14 OVER CROOKED CR.		CONTRACT NO. 78266		
ILLINOIS FED. AID PROJECT				

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

DATE	BY
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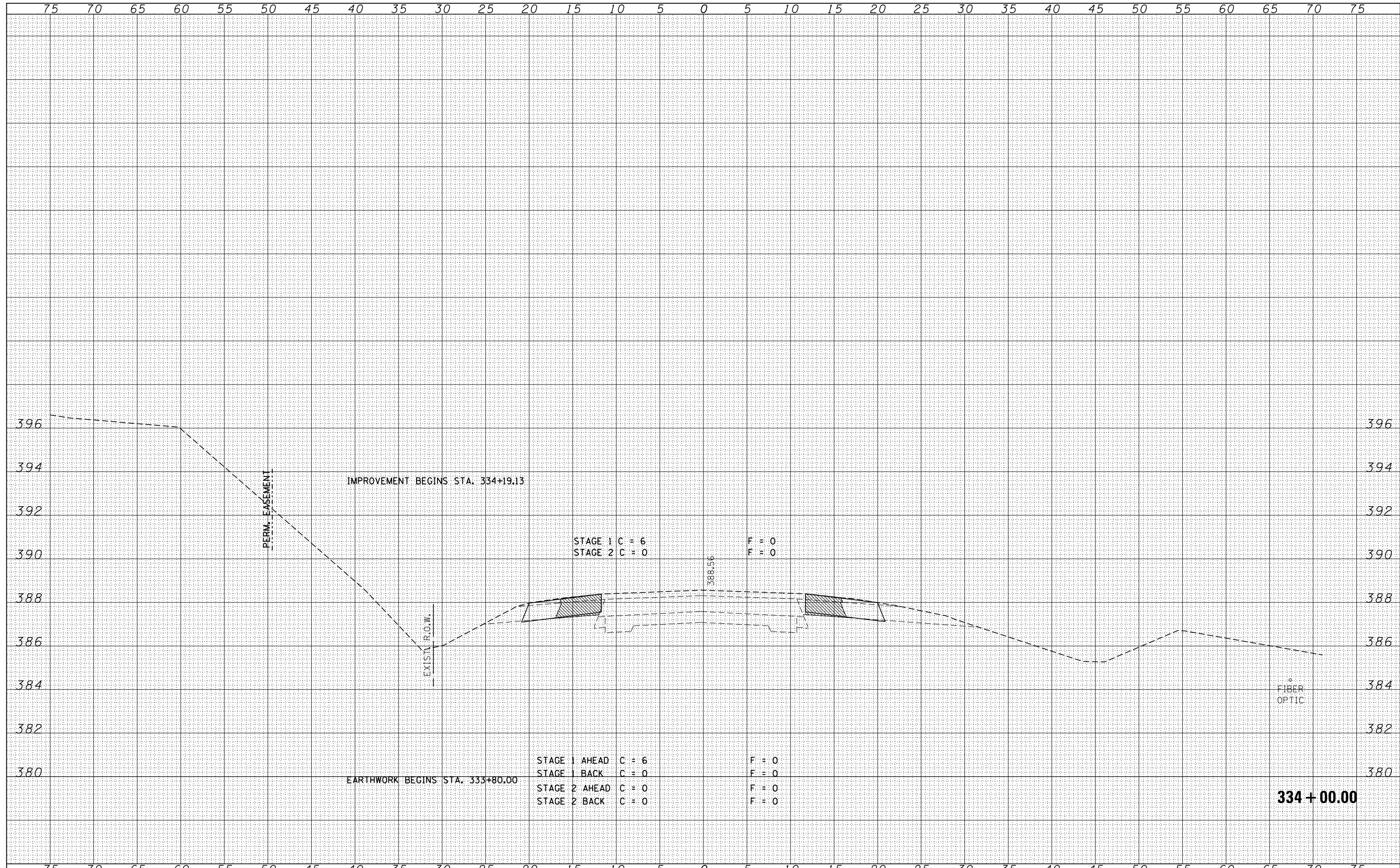
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HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -			332	5B-1	WHITE	51	40	
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184.000958		CHECKED - J.W.F.	REVISED -			CONTRACT NO. 78266					
		DATE - 08/15/13	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA. 333+50.00	TO STA. 333+50.00

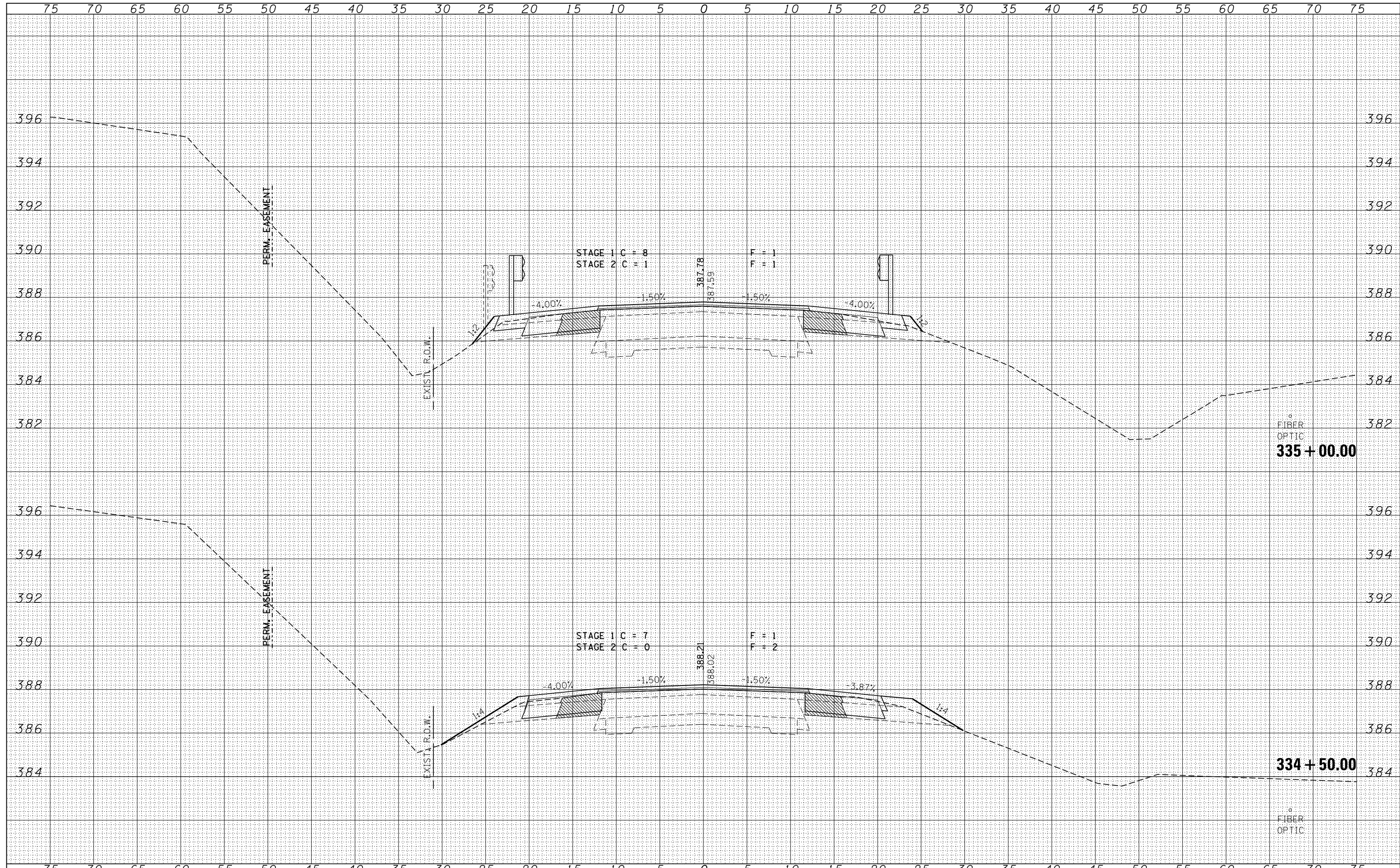
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BY	
FINAL SURVEY	SURVEYED
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NO.	TEMPLATE
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DATE	
BY	
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NO.	TEMPLATE
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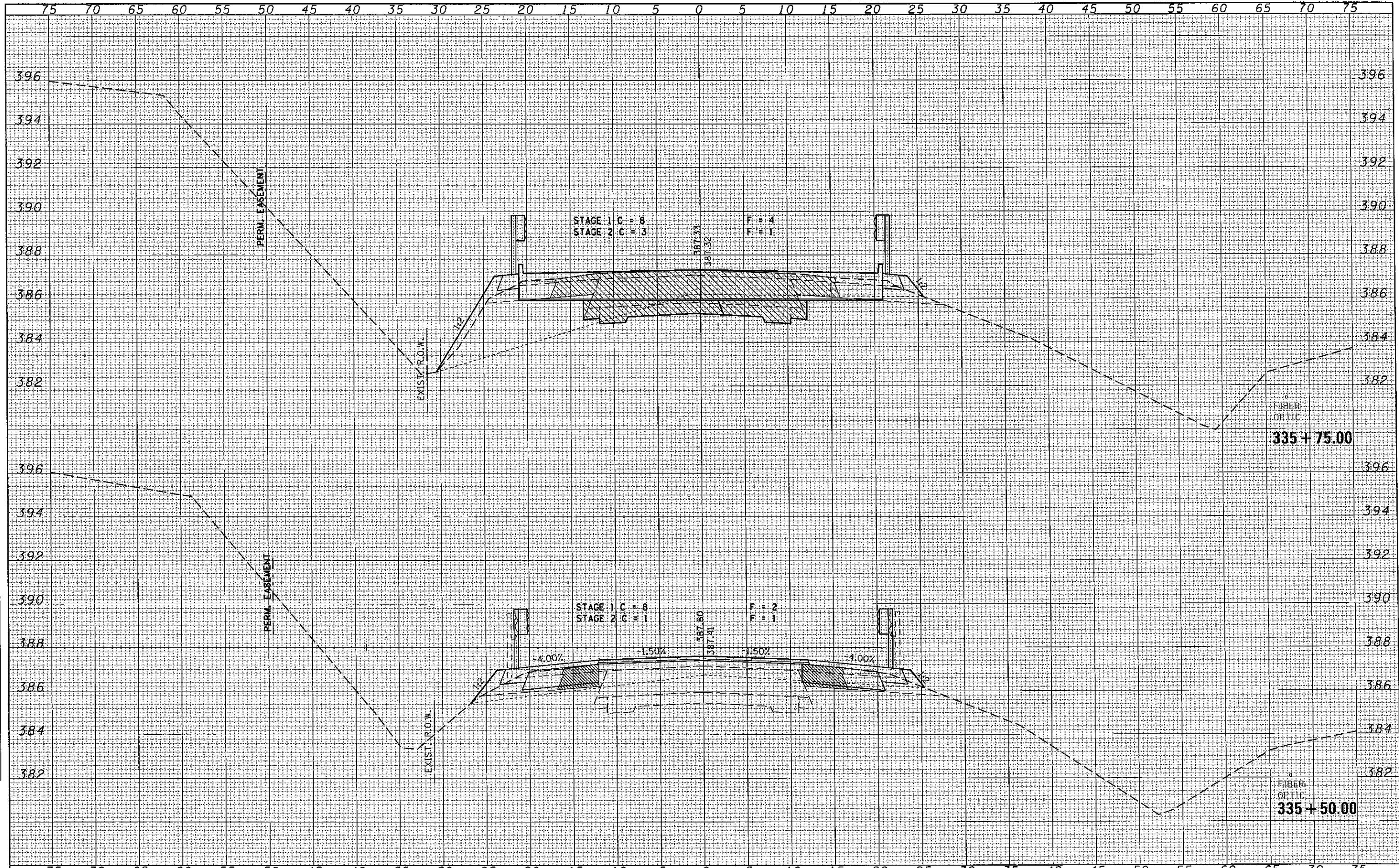
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BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
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BY	DATE

BY	DATE



FILE NAME	c:\pwwork\pwwork\1st\stdt\stdt\1363136\1363136.dwg
DESIGNED	- L.F.S.
DRAWN	- T.W.K.
CHECKED	- J.W.F.
DATE	- 08/15/13
REVISIONS	

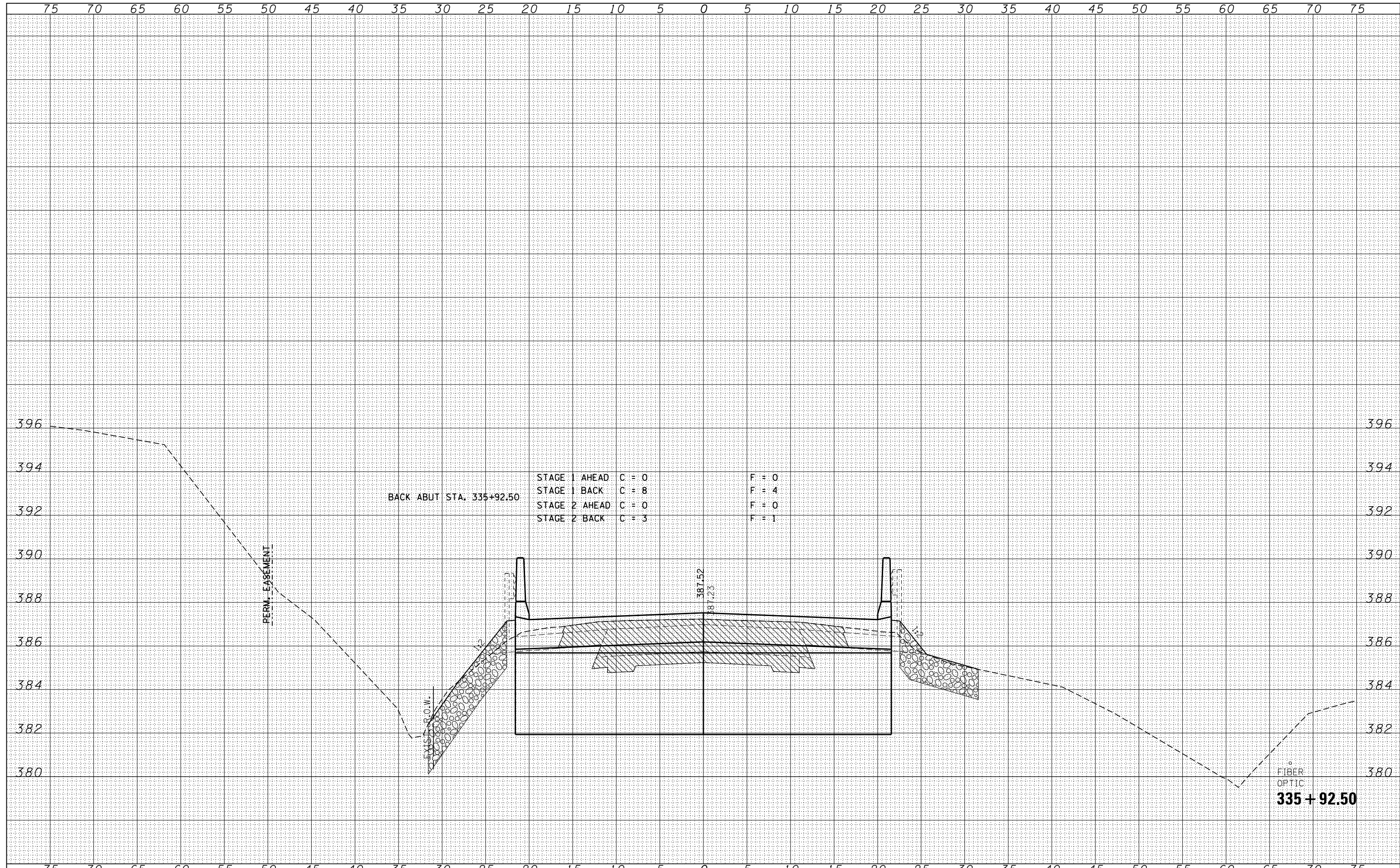
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
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DRAWN	- T.W.K.
CHECKED	- J.W.F.
DATE	- 08/15/13
REVISIONS	

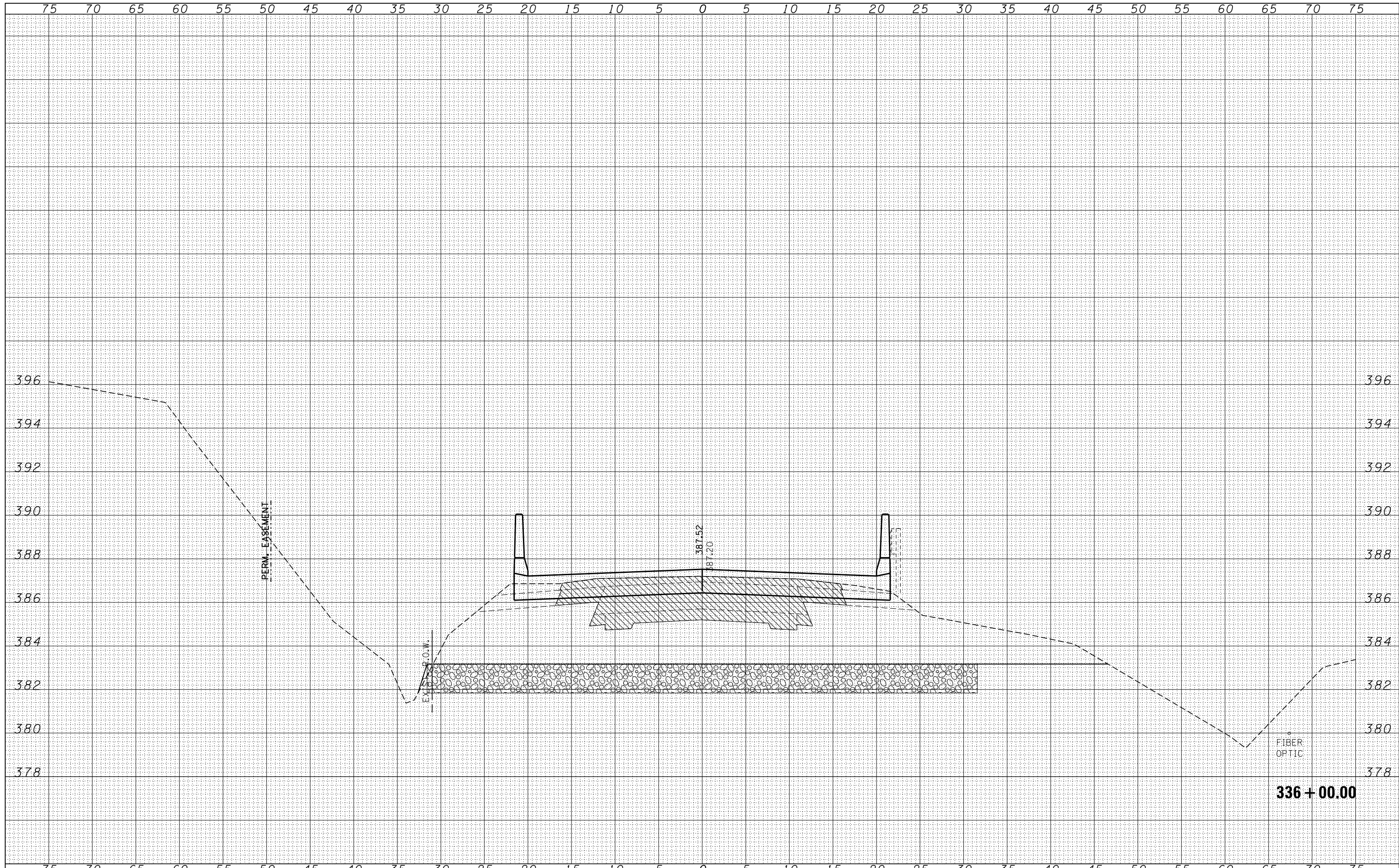
CROSS SECTIONS IL RTE 1/14			
SCALE:	SHEET NO.	OF SHEETS	STA. 335+50.00 TO STA. 335+50.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	43
CONTRACT NO. 78266			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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	AREAS CHECKED

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





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

BY	DATE
ORIGINAL SURVEY NO.	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
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FILE NAME = D978266-shr-ssht.dgn
 USER NAME = *USER*
HAMPTON, LENZINI AND RENWICK, INC.
 3885 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
HLR ILLINOIS PROFESSIONAL DESIGN FIRM
 L.S. / P.E. / SE CORP. 184-009958

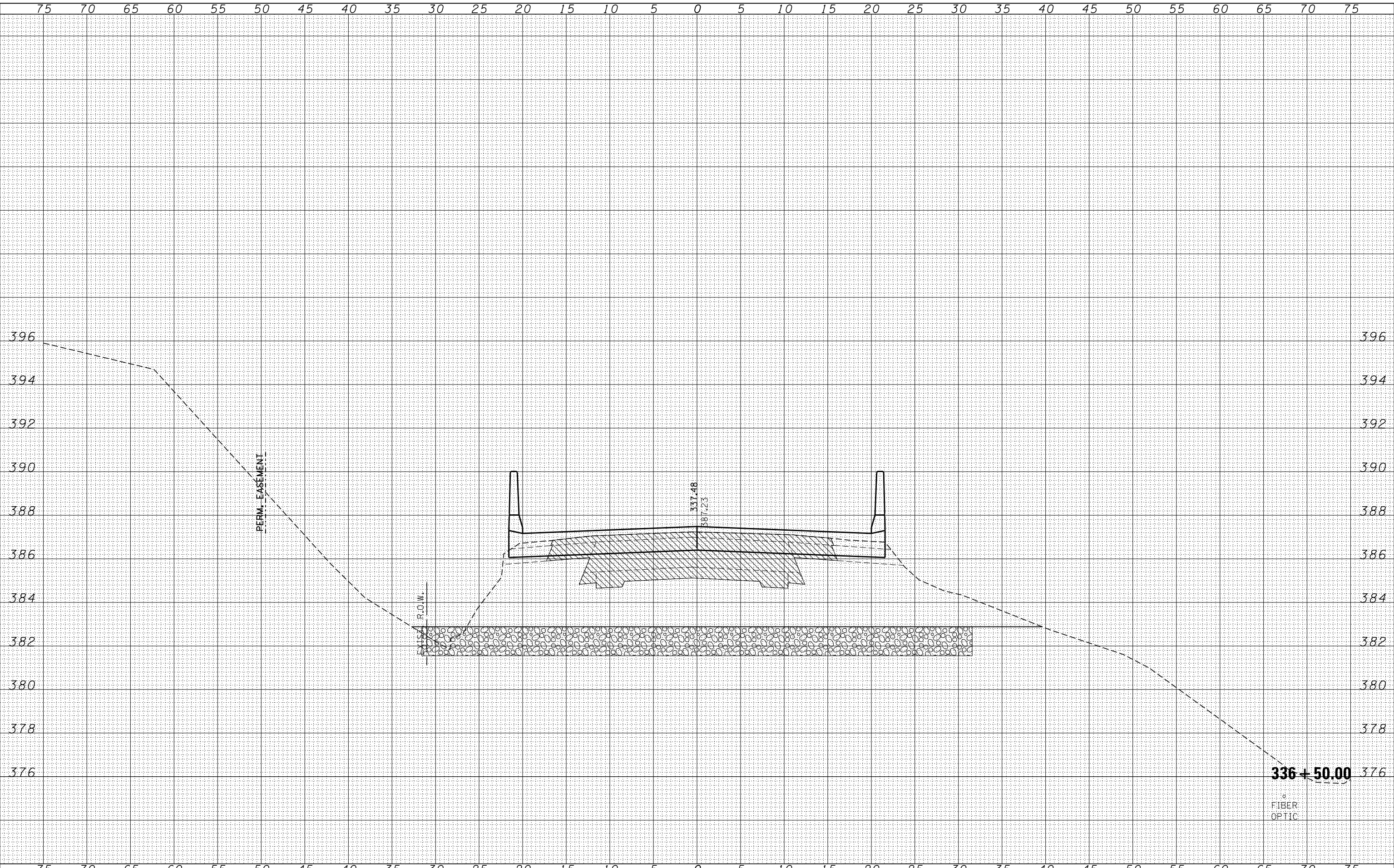
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 DRAWN - T.W.K.
 CHECKED - J.W.F.
 DATE - 08/15/13

REVISIONS
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 1 - - -
 2 - - -
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 4 - - -
 5 - - -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS
IL RTE 1/14
 SCALE: SHEET NO. OF SHEETS STA. 336+00.00 TO STA. 336+00.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	45
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				



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

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
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NOTE BOOK	
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FILE NAME = D978266-sht-ssht.dgn
 HAMPTON, LENZINI AND RENWICK, INC.
 3885 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184-000958

USER NAME = *USERS*
 PLOT SCALE = *SCALE*
 PLOT DATE = 9/17/2013

DESIGNED - L.F.S.
 DRAWN - T.W.K.
 CHECKED - J.W.F.
 DATE - 08/15/13

REVISED -
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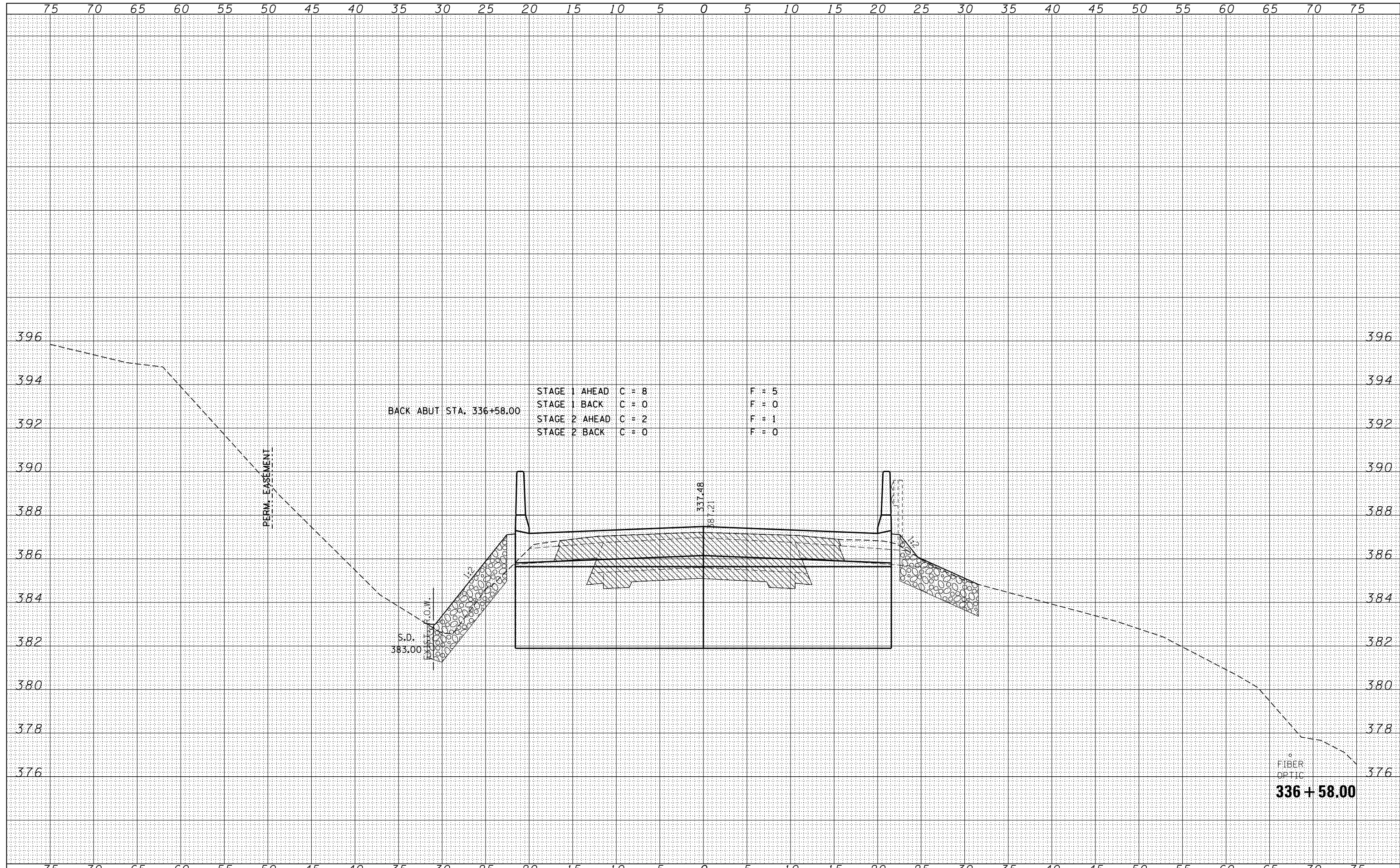
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 IL RTE 1/14**
 SCALE: SHEET NO. OF SHEETS STA. 336+50.00 TO STA. 336+50.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	5B-1	WHITE	51	46
CONTRACT NO. 78266				
ILLINOIS FED. AID PROJECT				

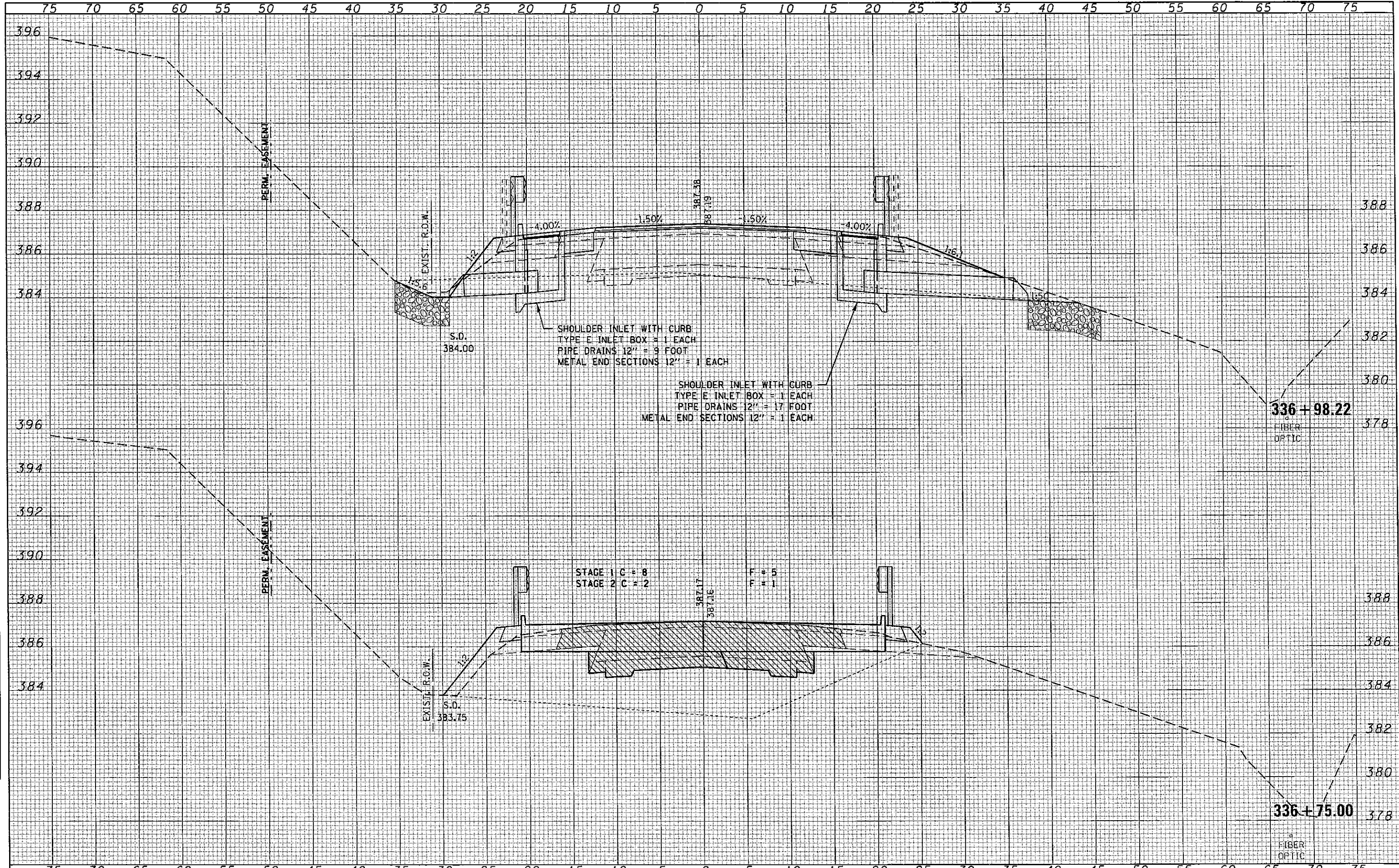
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DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
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ORIGINAL SURVEY	
NOTE BOOK	
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FINAL SURVEY	DATE
SURVEYED	BY
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TEMPLATE	
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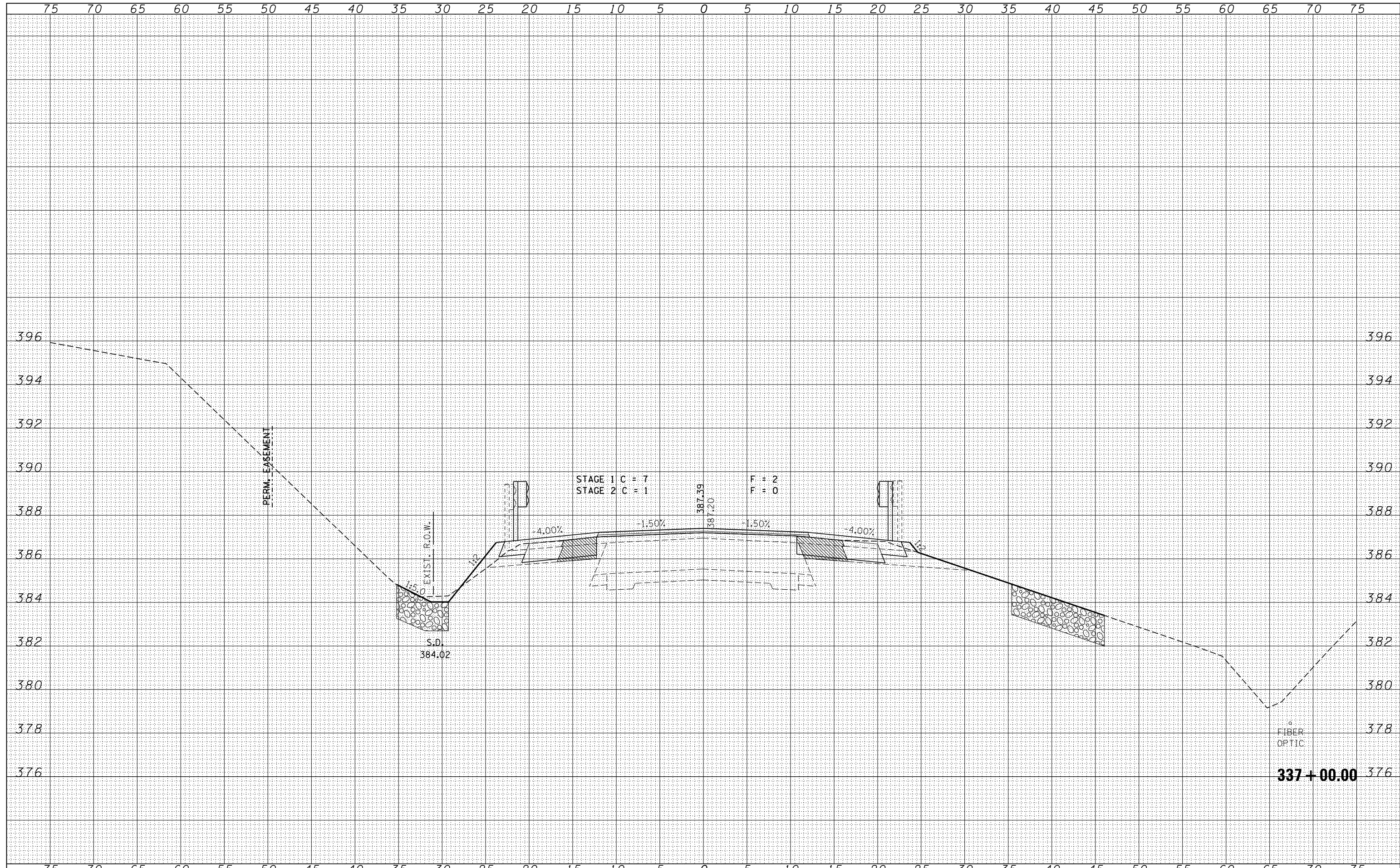
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TEMPLATE	
NOTE BOOK	
AREAS	
CHECKED	



FILE NAME: HAMPTON, LENZINI AND RENWICK, INC. 3800 S. WILSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62761 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 181699399	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS IL RTE 1/14			F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - T.W.K.	REVISED -		332	58-1	WHITE	51	48			
PLOT SCALE = 1/8" = 10' / in.	CHECKED - J.W.F.	REVISED -	SCALE:	SHEET NO.	OF SHEETS	STA. 336+98.22 TO STA. 336+98.22		CONTRACT NO. 78266			
PLOT DATE = 9/25/2013	DATE - 08/15/13	REVISED -	ILLINOIS FED. AID PROJECT								

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

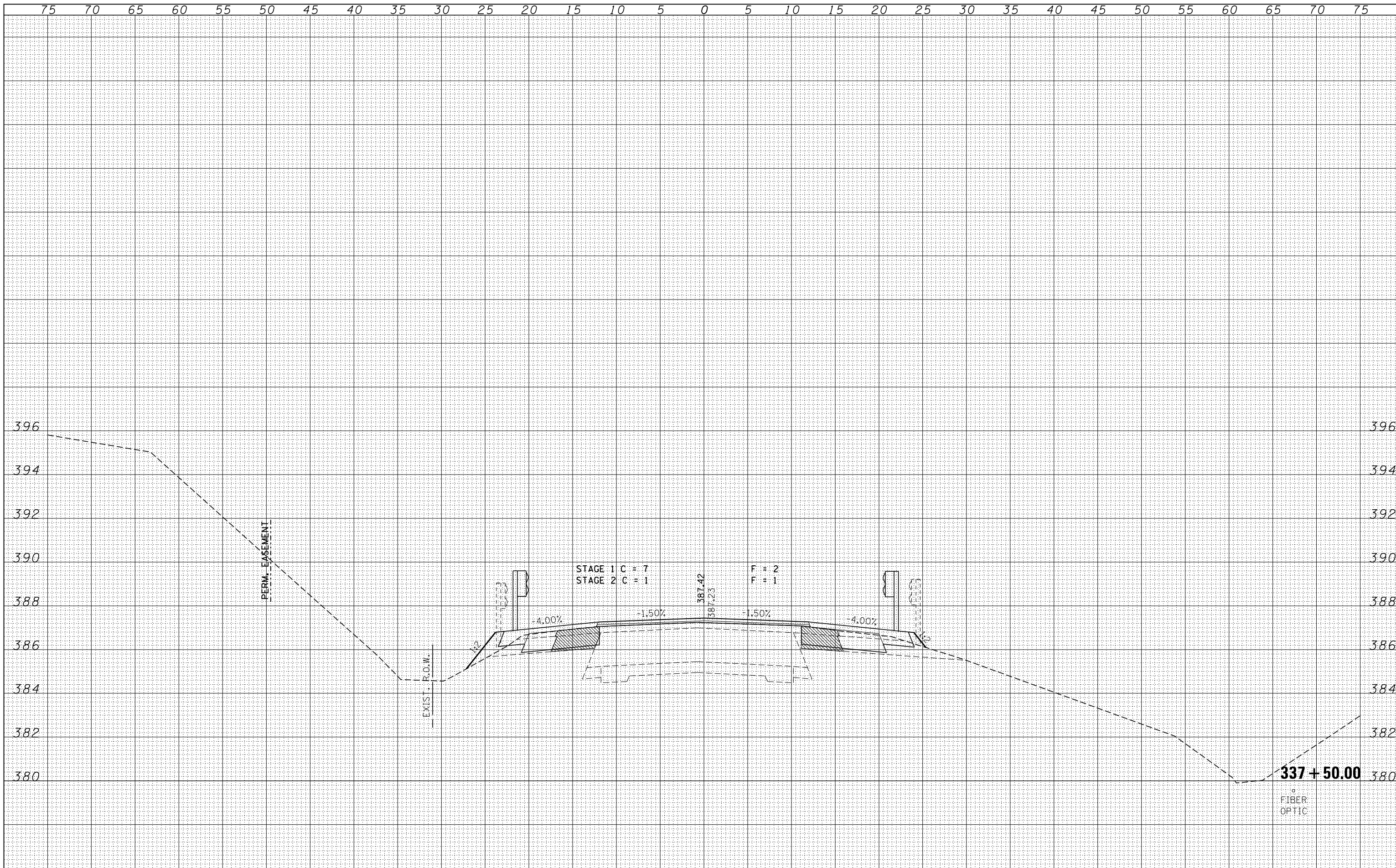
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



FILE NAME = D978266-shr-ssht.dgn	USER NAME = *USERS*	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS IL RTE 1/14	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.	DRAWN - T.W.K.	REVISED -	332			5B-1	WHITE	51	49	
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L5 / PE / SE CORP. 184.000958	CHECKED - J.W.F.	REVISED -	CONTRACT NO. 78266							
PLOT SCALE = *SCALE*	DATE - 08/15/13	REVISED -	SCALE:			SHEET NO.	OF SHEETS	STA. 337+00.00	TO STA. 337+00.00	ILLINOIS FED. AID PROJECT

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

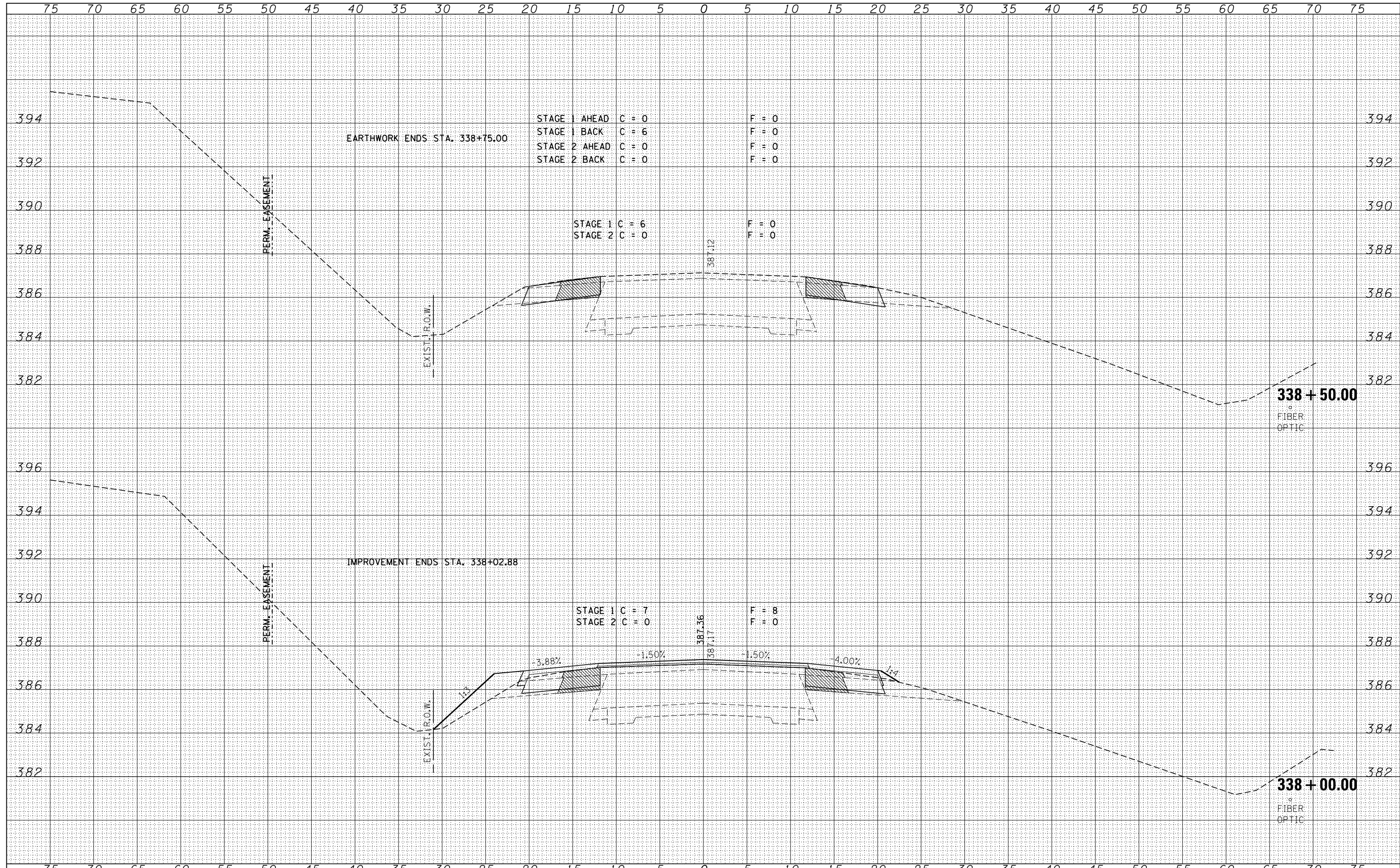
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	



FILE NAME = D978266-sht-ssht.dgn	USER NAME = *USERS*	DESIGNED - L.F.S.	REvised -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS IL RTE 1/14				F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REvised -						332	5B-1	WHITE	51	50
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958		CHECKED - J.W.F.	REvised -						CONTRACT NO. 78266				
		DATE - 08/15/13	REvised -						SCALE:	SHEET NO.	OF SHEETS	STA. 337+50.00 TO STA. 337+50.00	ILLINOIS FED. AID PROJECT

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

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



FILE NAME = D978266-shr-ssht.dgn	USER NAME = *USERS*	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS IL RTE 1/14	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -			332	5B-1	WHITE	51	51	
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958		CHECKED - J.W.F.	REVISED -			CONTRACT NO. 78266					
		DATE - 08/15/13	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA. 338+00.00	TO STA. 338+50.00