027

11-09-2018 LETTING ITEM 027

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	1
	ILLINOIS	CONTRACT NO. 74619		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

F.A.P. ROUTE 332 (IL 1)
SECTION 18B
PROJECT NHPP-955F(217)
BRIDGE REPLACEMENT WITH CULVERT
LAWRENCE COUNTY

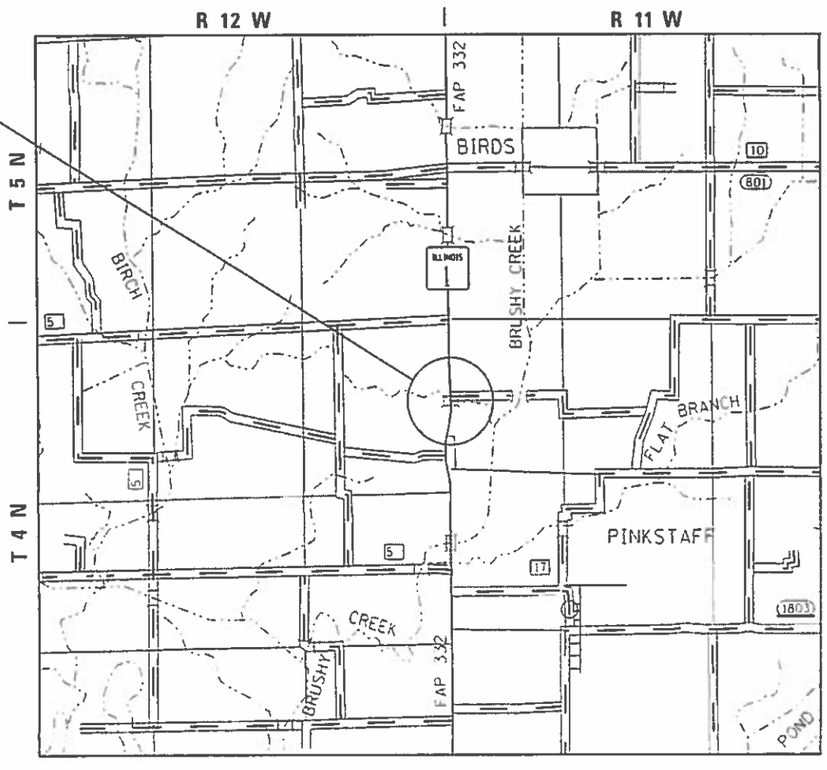
C-97-064-13

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT (2017) = 4450

EXISTING SN 051-8000:
REINFORCED CONCRETE SLAB BRIDGE
SURVEY STATION 304+33.80
SKEW 0°

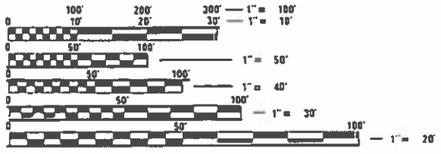
PROPOSED SN 051-2009
CAST-IN-PLACE DOUBLE CELL 12' X 5'
SURVEY STATION 304+33.80
SKEW 0°



GROSS LENGTH = 156 FT. = 0.030 MILE
NET LENGTH = 156 FT. = 0.030 MILE

D-97-019-13

LOCATION OF SECTION INDICATED THUS:- ■



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: DEBRA BARRETT
PROJECT MANAGER: BRIAN BIERMAN

CONTRACT NO. 74619

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 16, 20 18
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Oct 5, 20 18
ENGINEER OF DESIGN AND ENVIRONMENT
Oct 5, 20 18
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
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3

REV. - MS

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIAL. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESS TO THE HOT-MIX ASPHALT PLANT QUALITY CONTROL LAB SO THAT HOT-MIX ASPHALT PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF HOT-MIX ASPHALT ITEMS.

TREES 3" OR GREATER IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST THROUGH SEPTEMBER 30TH OF ANY GIVEN YEAR.

EXCAVATION FOR THE PORTLAND CEMENT CONCRETE BASE COURSE 10" WHICH CONSISTS OF 3 FT WIDE, 8" THICK HMA SHOULDER AND AGGREGATE SHOULDER SHALL BE PAID FOR AS EARTH EXCAVATION (WIDENING). EARTH EXCAVATION (WIDENING) MATERIAL SHALL BE USED TO SHAPE THE GROUND LINE WHERE PCC WIDENING IS REQUIRED. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED WITH THE PAY ITEM PORTLAND CEMENT CONCRETE BASE COURSE 10".

THE EXISTING PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS THAT CONFLICT WITH STAGE I & II OF STANDARD 701321 (SPECIAL) SHALL BE COVERED BY PAVEMENT MARKING BLACKOUT TAPE, 5".

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

APPLICATION	AC/PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE	TESTING PARAMETER
HMA SURFACE COURSE (1 1/2")	PG 64-22	4.0% @ N90	IL-9.5	MIXTURE C	QC/QA

SHEET NO	TITLE
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS & LIST OF STANDARDS
3-4	SUMMARY OF QUANTITIES
5	SCHEDULE OF QUANTITIES
6	TYPICAL SECTIONS
7	PLAN/PROFILE SHEET
8-9	STAGE CONSTRUCTION SHEETS
10	EROSION CONTROL SHEET
11	PAVING DETAILS
12-20	BRIDGE PLANS
21-24	CROSS SECTIONS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING THE LAST NUMBERED SHEET OF THE PLANS.

STANDARD NO	DESCRIPTION
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
483001-05	PCC SHOULDER
515001-03	NAME PLATE FOR BRIDGES
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 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
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701321-17	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES & INDEX OF SHEETS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	2
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

80% FED
20% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	159	159		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	54	54		
20200100	EARTH EXCAVATION	CU YD	891	891		
20200500	EARTH EXCAVATION (WIDENING)	CU YD	183	183		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	301	301		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	31	31		
28000305	TEMPORARY DITCH CHECKS	FOOT	40	40		
28100109	STONE RIPRAP, CLASS A5	SQ YD	124	124		
28200200	FILTER FABRIC	SQ YD	124	124		
31101900	SUBBASE GRANULAR MATERIAL, TYPE C	TON	67	67		
35300500	PORTLAND CEMENT CONCRETE BASE COURSE 10"	SQ YD	657	657		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	13	13		
40603320	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N90	TON	22	22		
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	149	149		

80% FED
20% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
42001300	PROTECTIVE COAT	SQ YD	149	149		
44000100	PAVEMENT REMOVAL	SQ YD	187	187		
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	149	149		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1		
50800105	REINFORCEMENT BARS	POUND	43090	43090		
50800515	BAR SPLICERS	EACH	122	122		
51500100	NAME PLATES	EACH	1	1		
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	326	326		
54003000	CONCRETE BOX CULVERTS	CU YD	210.1	210.1		
63200310	GUARDRAIL REMOVAL	FOOT	623	623		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5		
67100100	MOBILIZATION	L SUM	1	1		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A | SHEET 1 OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	3
		CONTRACT NO. 74619		
	ILLINOIS FED. AID PROJECT			

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20% STATE

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1		
		701326					
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DAY	6	6		
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
	70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6		
	70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	800	800		
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	362	362		
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	337	337		
	70600250	IMPACT ATTENUATORS, TEMPORARY (NON-	EACH	2	2		
		REDIRECTIVE), TEST LEVEL 3					
	70600350	IMPACT ATTENUATORS, RELOCATE (NON-	EACH	2	2		
		REDIRECTIVE), TEST LEVEL 3					
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	351	351		
*	A2001016	TREE, ACER RUBRUM (RED MAPLE), 2" CALIPER,	EACH	9	9		
		BALLED AND BURLAPPED					
*	B2001116	TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2"	EACH	9	9		
		CALIPER, TREE FORM, BALLED AND BURLAPPED					

80% FED
20% STATE

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
	X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	257	257		
*	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3	0.3		
	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE	SQ YD	117	117		
		DEPTH					
	X7010202	TRAFFIC CONTROL AND PROTECTION, STANDARD	EACH	1	1		
		701321 (SPECIAL)					
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DAY	28	28		
*	Z0054505	ROCK FILL - REPLACEMENT	TON	301	301		

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A | SHEET 1 OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	4

CONTRACT NO. 74619

ILLINOIS FED. AID PROJECT

REV. - MS

SHOULDER SCHEDULE

STATION TO STATION		SIDE	WIDTH	LENGTH	PORTLAND CEMENT CONCRETE BASE COURSE 10"	EARTH EXCAVATION (WIDENING)
MAINLINE		LT/RT	(FT)	FOOT	SQ YD	CU YD
302+27	306+27	LT	6.33	400	281.5	78.2
302+20	306+52	RT	7.83	432	376.0	104.4
				TOTALS:	657	183

EARTHWORK SCHEDULE

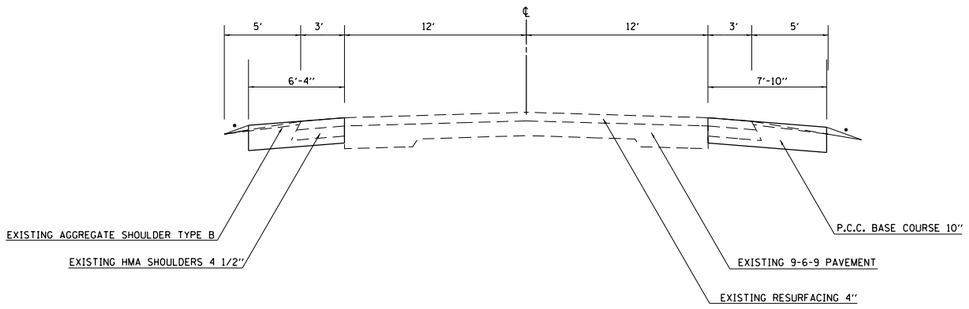
LOCATION			EARTH EXCAVATION (cut)	EARTH EXC ADJ. FOR SHRINKAGE	EMBANKMENT (fill)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
			CU YD	CU YD	CU YD	CU YD
303+00	TO	303+50	33.7	25.3	8.3	17.0
303+50	TO	303+90	85.9	64.4	20.3	44.1
303+90	TO	304+06	56.0	42.0	11.0	30.9
304+06	TO	304+21	214.0	160.5	15.8	144.7
304+21	TO	304+25	91.7	68.8	5.7	63.1
304+25	TO	304+43	0.0	0.0	25.6	-25.6
304+43	TO	304+47	98.4	73.8	5.7	68.1
304+47	TO	304+62	217.5	163.1	14.5	148.7
304+62	TO	304+90	70.9	53.2	12.7	40.5
304+90	TO	305+25	22.9	17.2	7.1	10.1
TOTALS:			891	668	127	542

PAVING SCHEDULE

STATION TO STATION		LENGTH	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N90	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SUBBASE GRANULAR MATERIAL, TYPE C	PORTLAND CEMENT CONCRETE PAVEMENT 10"	PROTECTIVE COAT	PAVEMENT REMOVAL
MAINLINE		FOOT	POUND	TON	SQ YD	SQ YD	TON	SQ YD	SQ YD	SQ YD
303+56	303+90	34	4.5	7.6	90.7	-	-	-	-	-
303+90	304+06	16	2.1	3.6	-	42.7	-	-	-	-
304+06	304+62	56	-	-	-	-	67.0	149.0	149.0	187.0
304+62	304+90	28	3.7	6.3	-	74.7	-	-	-	-
304+90	305+12	22	2.9	4.9	58.7	-	-	-	-	-
		TOTALS:	13	22	149	117	67	149	149	187

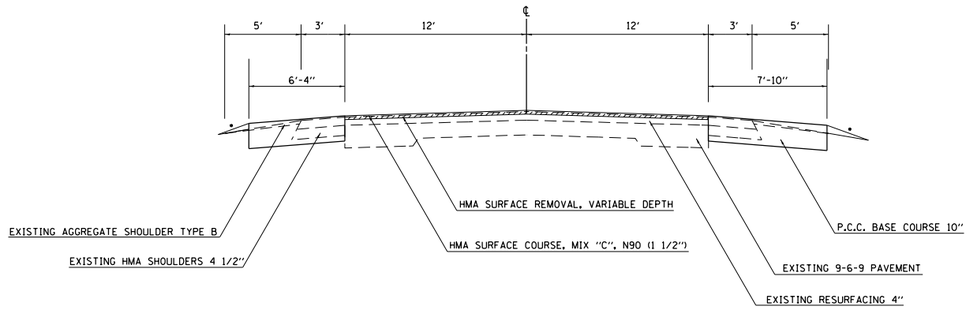
TREE REMOVAL

STATION	OFFSET	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)
303+27	40' LT	10	-
303+27	40' LT	10	-
303+31	40' LT	7	-
303+35	40' LT	10	-
303+50	45' LT	8	-
303+50	45' LT	12	-
303+65	41' LT	-	16
303+75	40' LT	13	-
304+00	65' LT	-	22
304+08	39' LT	8	-
304+20	49' LT	-	16
304+35	57' LT	13	-
304+56	52' LT	11	-
304+65	50' LT	11	-
304+79	47' LT	13	-
304+84	54' LT	11	-
304+86	47' LT	11	-
304+93	46' LT	11	-
	TOTALS:	159	54



TYPICAL CROSS SECTION

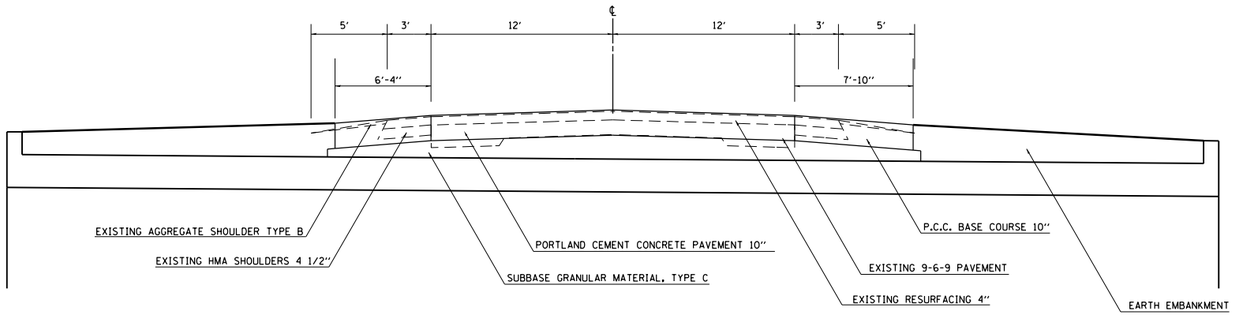
STA 302+27 TO STA 303+90
STA 304+90 TO STA 306+29



TYPICAL CROSS SECTION

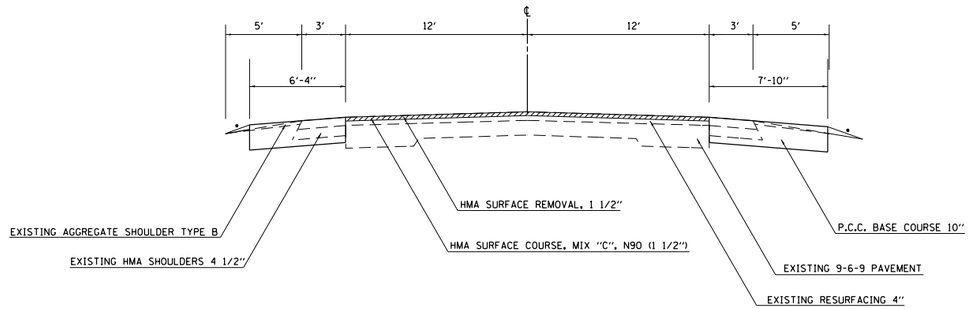
STA 303+90 TO STA 304+06
STA 304+62 TO STA 304+90

* SEE GENERAL NOTES FOR SHOULDER GRADING



TYPICAL CROSS SECTION

STA 304+06 TO STA 304+62



TYPICAL CROSS SECTION

STA 303+56 TO STA 303+90
STA 304+90 TO STA 305+12

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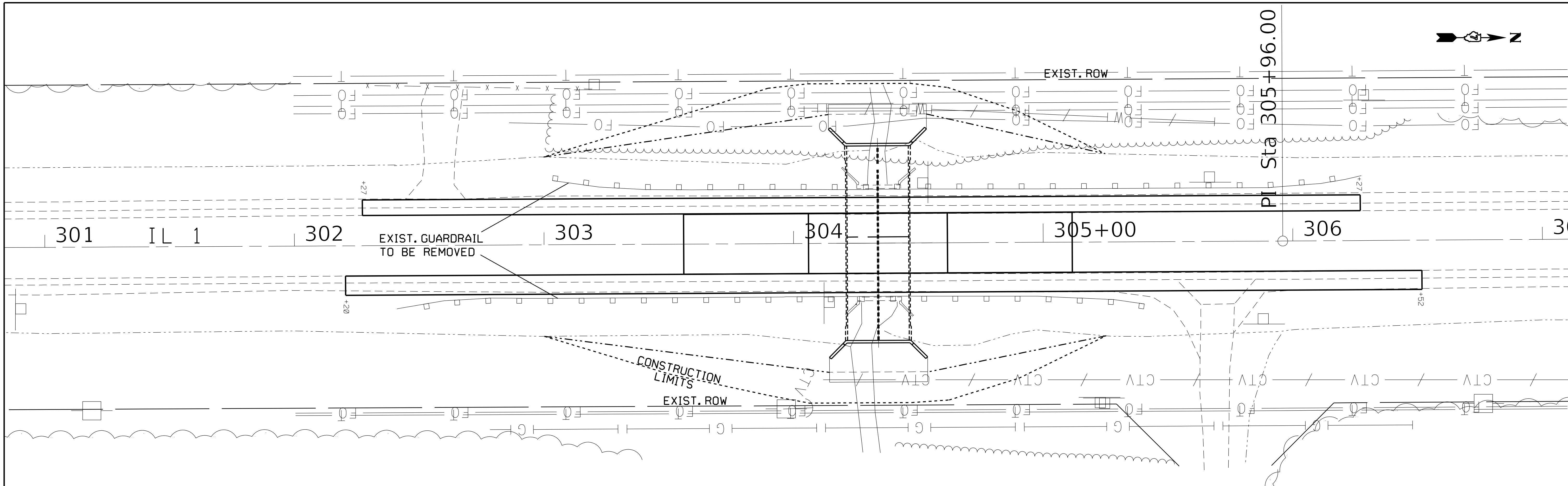
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	6
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		



PLAN
NOTE BOOK
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SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
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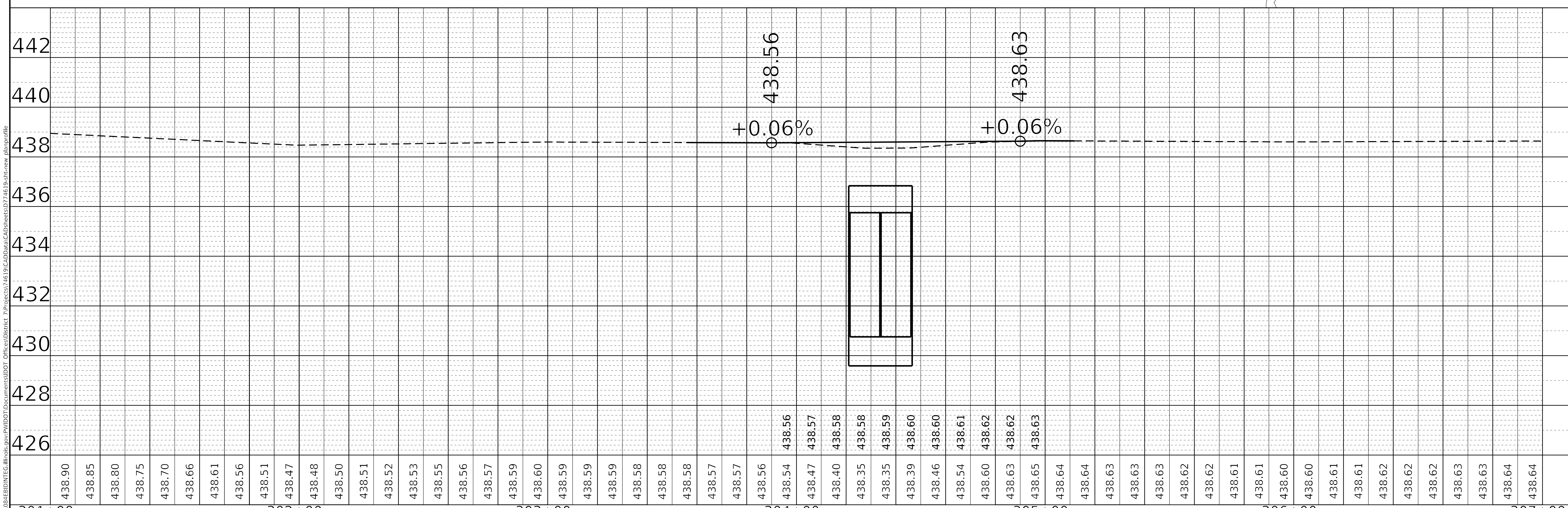
BY
DATE



PROFILE
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SURVEYED
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GRADES CHECKED
B.M. NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

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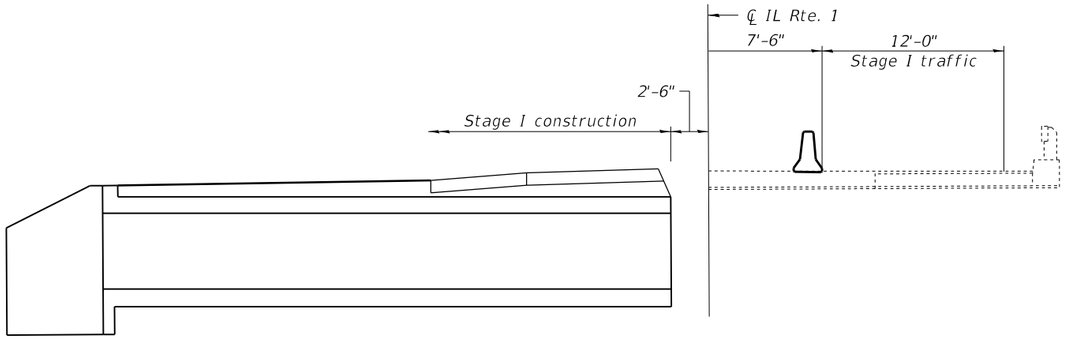
PLAN/PROFILE

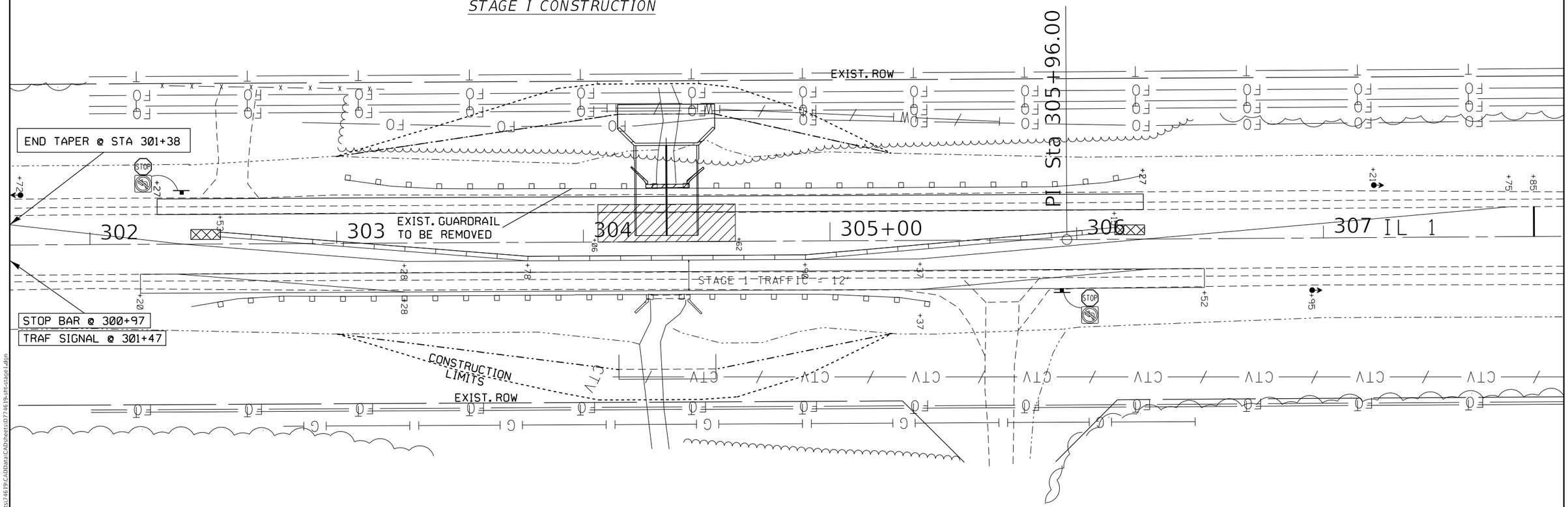
SCALE: | SHEET | OF | SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	7
		CONTRACT NO. 74619		

ILLINOIS | FED. AID PROJECT



STAGE I CONSTRUCTION



SYMBOLS

- TRAFFIC SIGNAL
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- PAVEMENT REMOVAL

NOTE: THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ENTRANCES DURING STAGE CONSTRUCTION AS DIRECTED BY THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE GIVEN FOR ADHERING TO THIS POLICY.

SUGGESTED SEQUENCE OF CONSTRUCTION: STAGE 1

1) COMPLETE RT SIDE PCC BASE COURSE 10" USING STD. 701326.
2) SET UP STAGE 1 TRAFFIC CONTROL AS SHOWN.
3) COMPLETE STAGE 1 CONSTRUCTION.
4) COMPLETE LT SIDE PCC BASE COURSE WIDENING 10".
5) SWITCH STAGE TRAFFIC CONTROL OVER TO STAGE 2.

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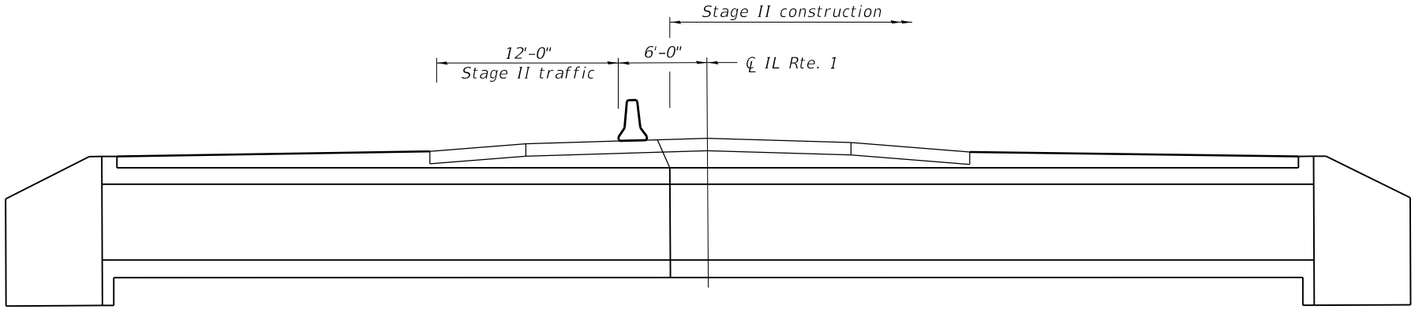
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

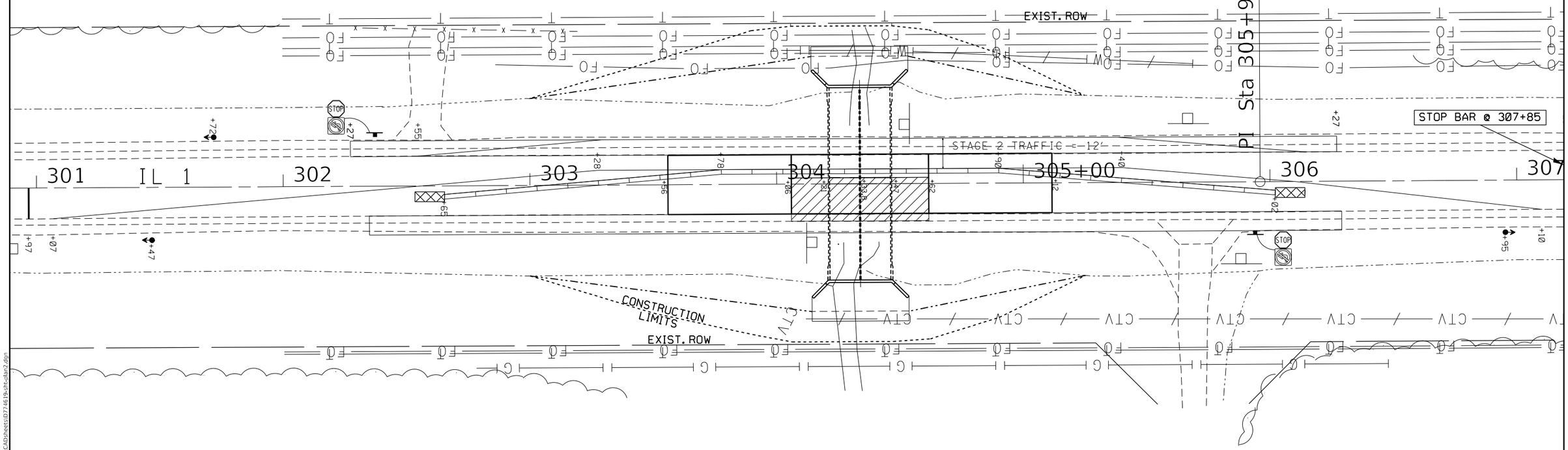
STAGE 1 CONSTRUCTION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	8
		CONTRACT NO. 74619		
		ILLINOIS	FED. AID PROJECT	



STAGE II CONSTRUCTION



SYMBOLS

- TRAFFIC SIGNAL
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- PAVEMENT REMOVAL

NOTE: THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ENTRANCES DURING STAGE CONSTRUCTION AS DIRECTED BY THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE GIVEN FOR ADHERING TO THIS POLICY.

SUGGESTED SEQUENCE OF CONSTRUCTION: STAGE 2

1) COMPLETE STAGE 2 CONSTRUCTION.
2) REMOVE STAGE TRAFFIC CONTROL.
3) MILL APPROACHES TO NEW PCC PAVEMENT AND RESURFACE USING STD. 701201.
4) COMPLETE PERMANENT STRIPING USING STD. 701311.

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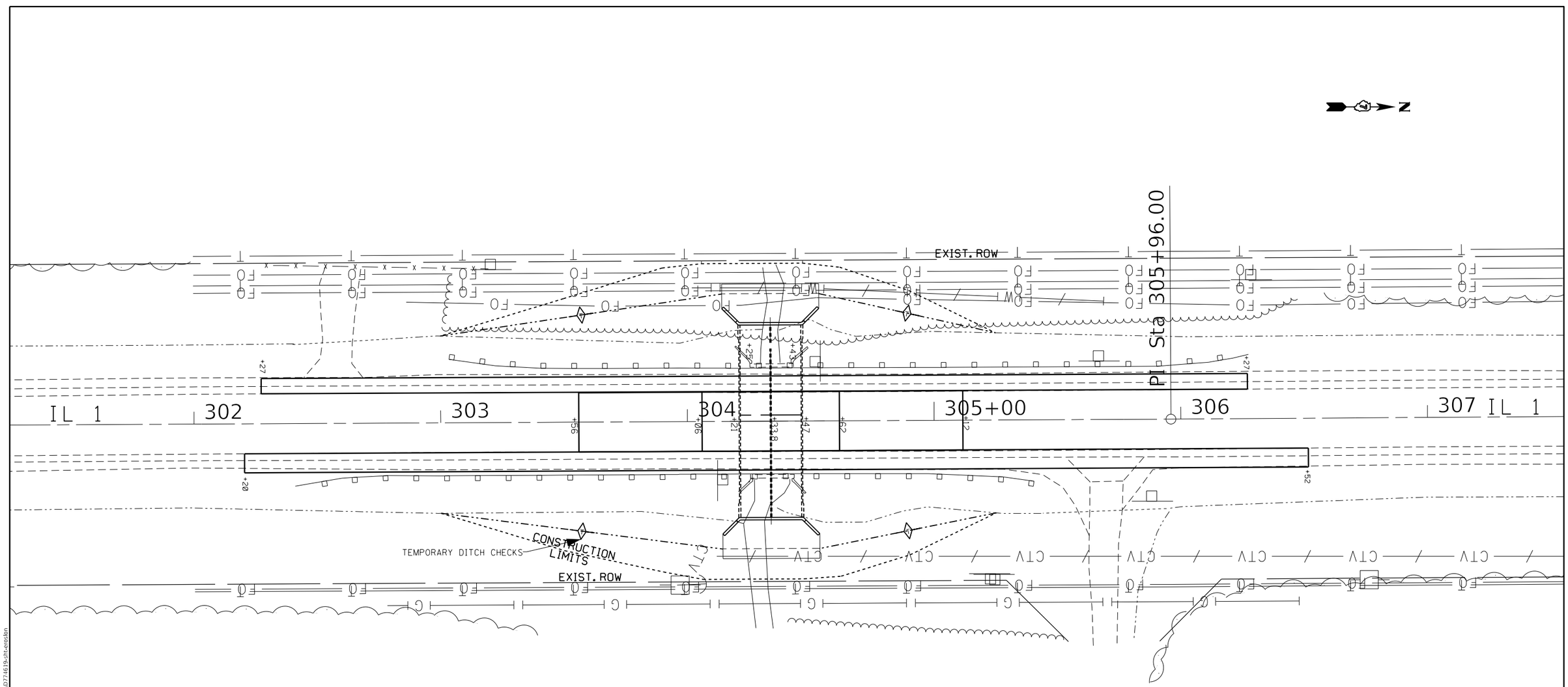
	DRAWN -	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/16/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2 CONSTRUCTION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	9
		CONTRACT NO. 74619		
	ILLINOIS FED. AID PROJECT			



EROSION CONTROL GENERAL NOTES

EROSION CONTROL MEASURES AT THE START OF CONSTRUCTION

1. THE AREAS OF EXCAVATION AND EMBANKMENT PLACEMENT SHALL BE MANAGED FOR THE PURPOSES OF CONTROLLING EROSION WITHIN THE IMPROVEMENT AREA. REDUCING WATER FLOW BY TEMPORARY DIVERSION, MINIMIZING SILTATION AT THE RIGHT-OF-WAY LINE, AND ESTABLISHING VEGETATIVE COVER WHICH WILL BECOME PERMANENT VEGETATION AND ACT AS AN EROSION CONTROL BARRIER. WORK AT THE START OF CONSTRUCTION SHALL CONSIST OF THE FOLLOWING:

(a) AREAS OF EXISTING VEGETATION (WOODS AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED FOR PRESERVING AND SHALL BE PROTECTED FROM BRUSH CUTTING, TREE REMOVAL AND OTHER ACTIVITIES THAT WOULD BE DETRIMENTAL TO THEIR MAINTENANCE AND DEVELOPMENT.

(b) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

(c) BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE START OF CONTRUCTION WHEN NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN CALENDAR DAYS.

EROSION CONTROL MEASURES DURING CONSTRUCTION

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED FROM DAMAGING EFFECTS OF CONSTRUCTION, THE CONTRACTOR SHALL NOT USE THIS AREA FOR PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

(a) WITHIN THE CONSTRUCTION ZONE, CRITICAL AREAS WHICH HAVE A HIGH FLOW OF WATER, AS DETERMINED BY THE ENGINEER, SHALL REMAIN UNDISTURBED UNTIL CONTINUOUS OPERATIONS CAN ENSURE TIMELY COMPLETION OF WORK IN THESE AREAS TO MINIMIZE SOIL EROSION.

(b) EARTH STOCKPILES SHALL BE TERMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN CALENDAR DAYS.

EROSION CONTROL MEASURES AFTER FINAL GRADING:

1. EXCAVATION AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDED WHEN FINAL GRADED.

(a) TEMPORARILY EROSION CONTROL SYSTEMS SHALL REMAIN IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY WITH ALL PROPOSED TURF AREAS SEEDED AND A PROPER STAND ESTABLISHED.

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	DRAWN -	REVISED -
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PLOT DATE = 8/16/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	10
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

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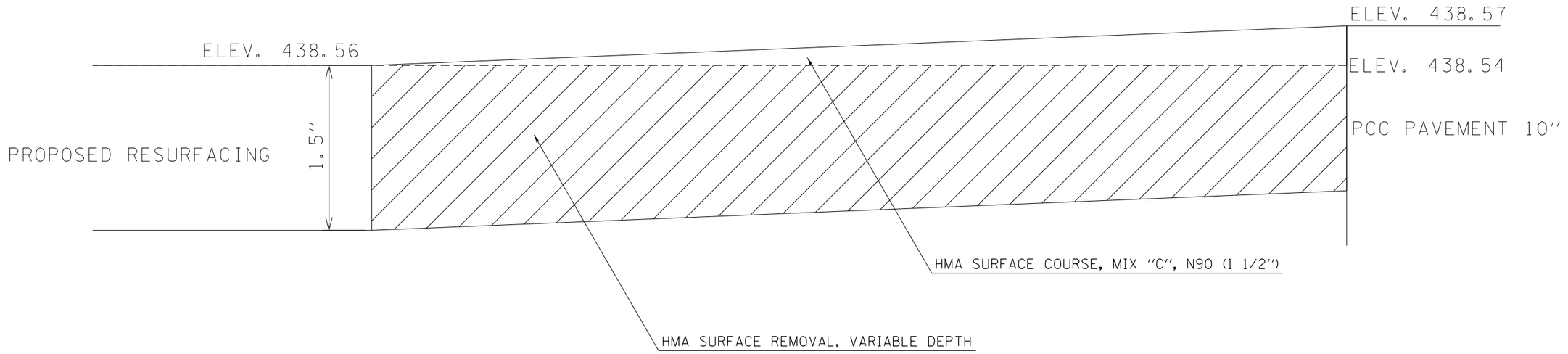
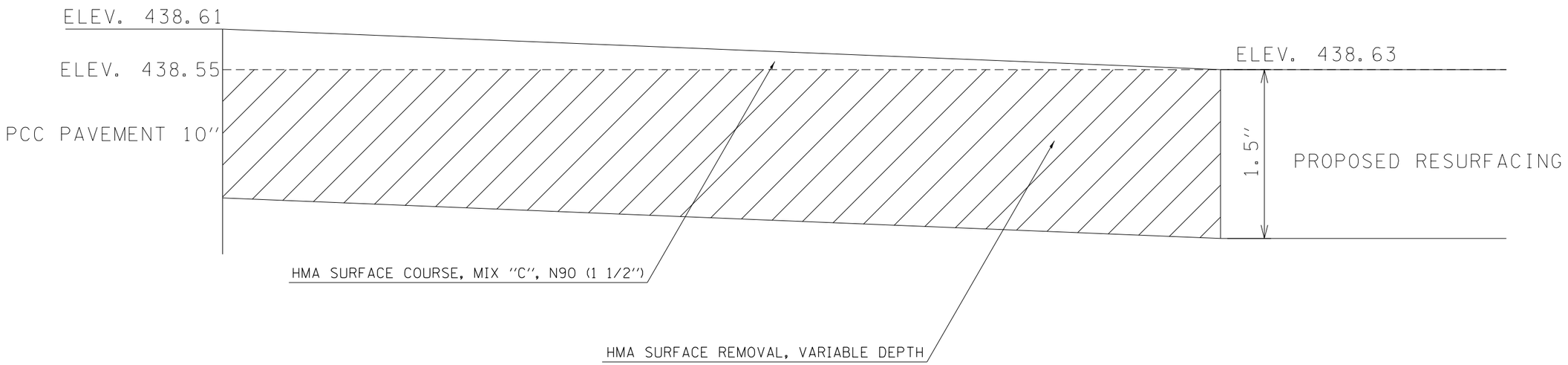


HMA RESURFACING DETAIL
STA 303+90 TO STA 304+06



HMA RESURFACING DETAIL
STA 303+62 TO STA 304+90

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	PLOT DATE = 8/16/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA RESURFACING DETAILS

SCALE: N/A | SHEET 1 OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	11
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

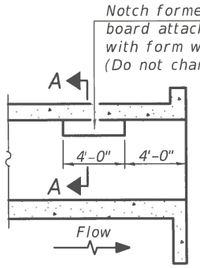
Benchmark: Cut Square on southeast corner of S.N. 051-8000, Station 304+25, Offset 25' Right, Elevation = 453.586

Existing Structure: S.N. 051-8000 slab was built in 1921 as Route 1, Section 18-B. In 1960 the bridge was widened to 46'-4" with new concrete wingwalls. Single span reinforced concrete slab supported on spread footing closed abutment.

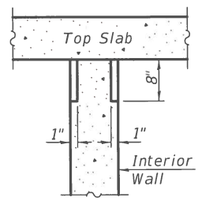
Traffic to be maintained utilizing stage construction.

No salvage.

INDEX OF SHEETS



LONGITUDINAL SECTION



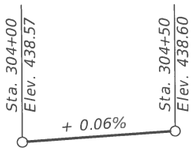
SECTION A-A

GENERAL NOTES

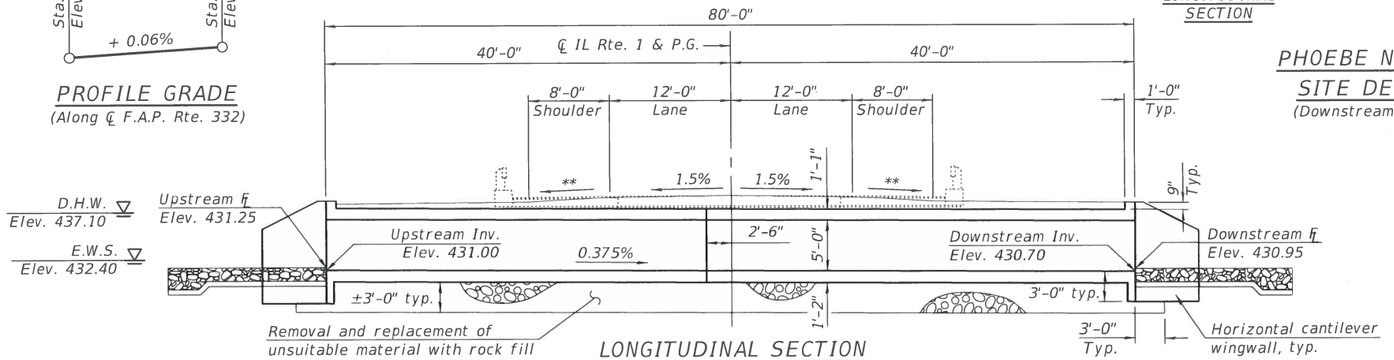
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

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

Precast alternate is not allowed.

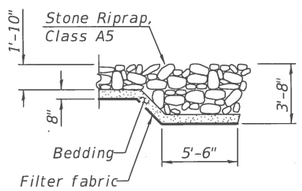


PROFILE GRADE
(Along ℄ F.A.P. Rte. 332)



LONGITUDINAL SECTION
** Match Roadway Cross-section

PHOEBE NESTING SITE DETAILS
(Downstream End Only)



SECTION A-A

TOTAL BILL OF MATERIAL

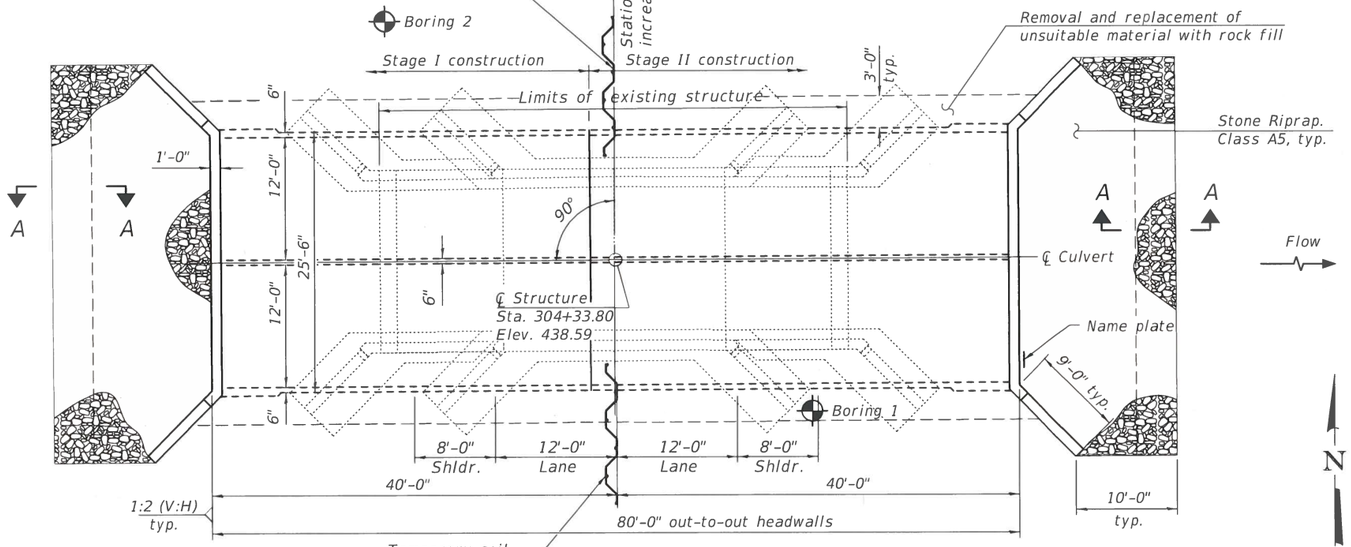
ITEM	UNIT	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	301
Stone Riprap, Class A5	Sq. Yd.	124
Filter Fabric	Sq. Yd.	124
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	43,090
Bar Splicers	Each	122
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	326
Concrete Box Culverts	Cu. Yd.	210.1
Rock Fill - Replacement	Ton	301
Membrane Waterproofing System for Buried Structures	Sq. Yd.	257

WATERWAY INFORMATION

Exist. Overtopping Elev. 438.16 @ Sta. 304+28
Drainage Area = 0.53 Sq. Miles Prop. Overtopping Elev. 438.28 @ Sta. 301+99

Flood	Freq. Yr.	Discharge C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	507	82	113	436.9	0.7	0.3	437.6	437.2
OVT (E)	20	687	82	113	437.0	1.6	0.4	438.6	437.4
Design	50	877	82	113	437.1	1.7	0.9	438.8	438.1
OVT (P)	60	948	82	113	437.2	1.7	1.4	438.9	438.6
Base	100	1050	82	113	437.3	1.7	1.4	438.9	438.7
Max. Calc.	200	1235	82	113	437.4	1.6	1.4	439.0	438.8

10-Year Outlet Velocity from Existing Structure = 6.2 fps
10-Year Outlet Velocity from Proposed Structure = 4.5 fps



PLAN

Note:
The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.

The rock fill shall be capped with 6 inches of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rock Fill - Replacement.

STATION 304+33.80
BUILT 201 BY
STATE OF ILLINOIS
F.A.P. RTE 332 SEC. 18B
LOADING HL-93
STRUCTURE NO. 051-2009

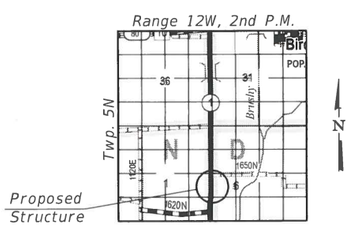
NAME PLATE
See Std. 515001

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

DESIGN STRESSES
FIELD UNITS

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

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



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 1 OVER UNNAMED CREEK
F.A.P. RTE. 332 - SEC. 18B
LAWRENCE COUNTY
STATION 304+33.80
STRUCTURE NO. 051-2009

REGISTERED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

DESIGNED -		EXAMINED	DATE - 10-3-2018
CHECKED -		PASSED	ENGINEER OF BRIDGE DESIGN
DRAWN -	MICHAEL B. MOSSMAN		ENGINEER OF BRIDGES AND STRUCTURES
CHECKED -	JSW/HID/GRA	REVISED -	
		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	12
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

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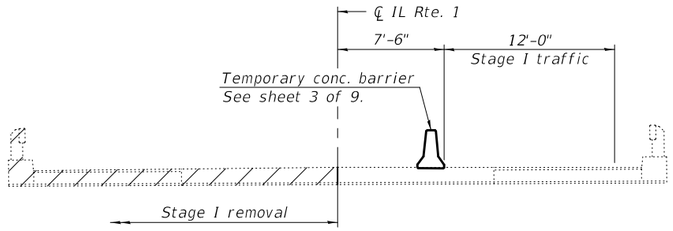
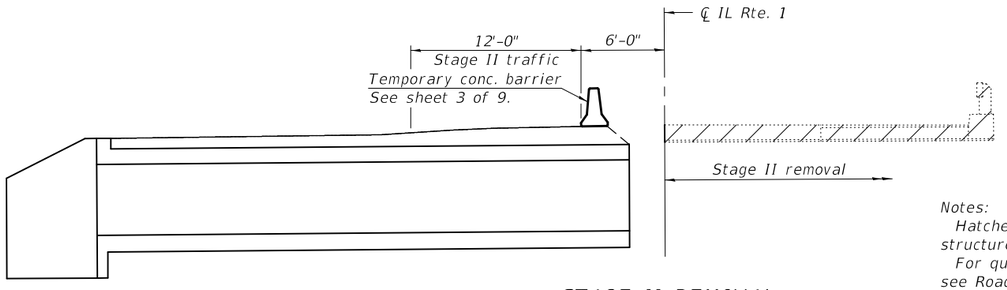


STAGE I REMOVAL



STAGE II REMOVAL

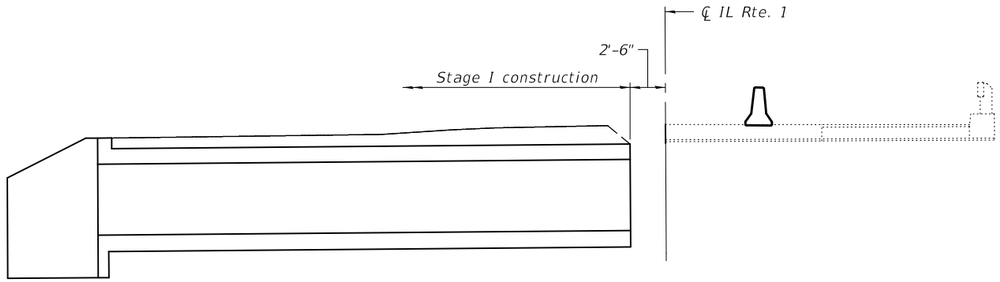
Notes:

Hatched areas indicate removal of existing structures.

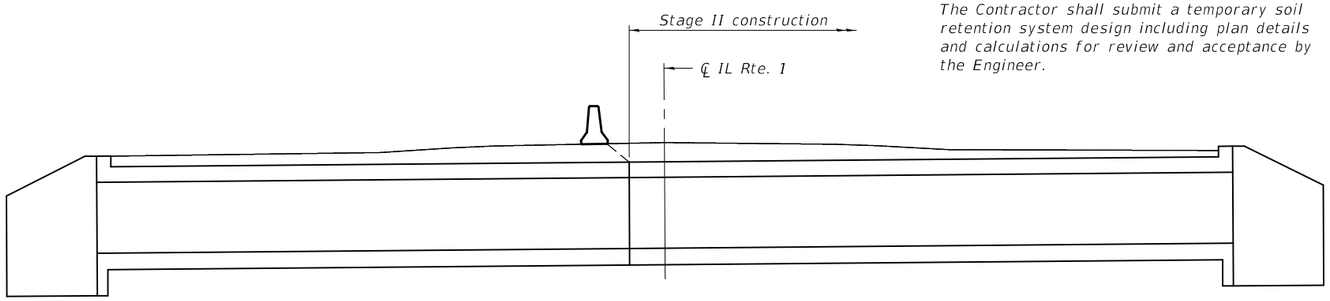
For quantity of temporary concrete barrier, see Roadway Plans.

All cross sections are taken looking North.

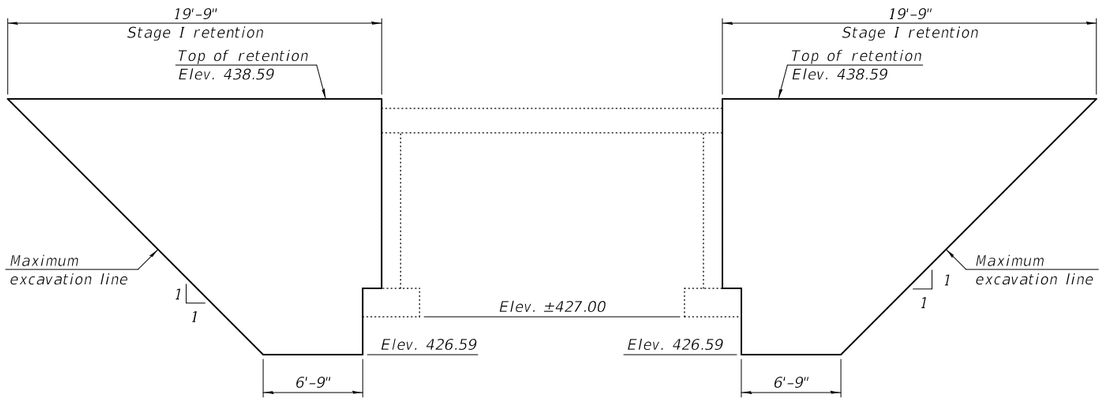
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



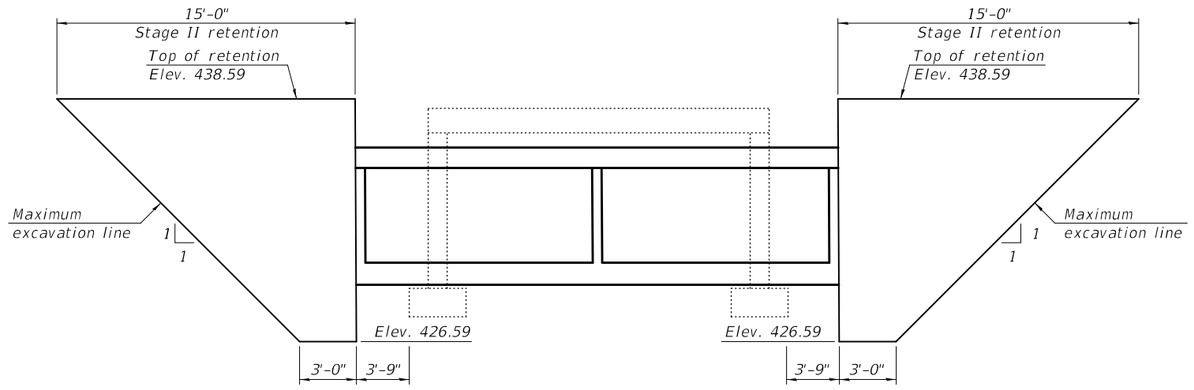
STAGE I CONSTRUCTION



STAGE II CONSTRUCTION



STAGE I SOIL RETENTION SYSTEM



STAGE II SOIL RETENTION SYSTEM

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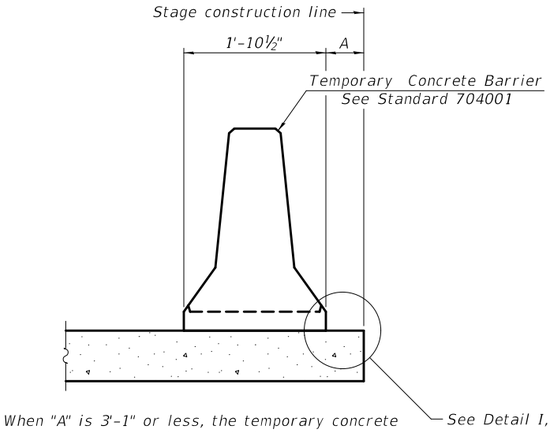
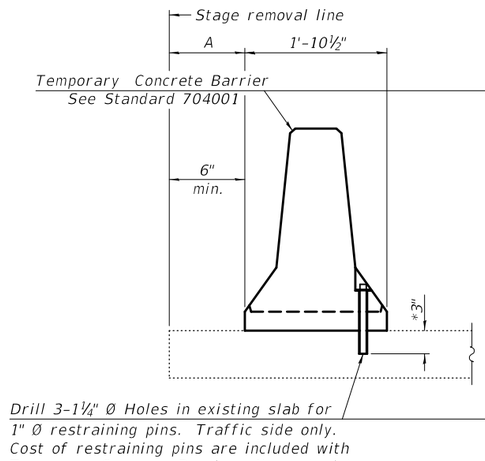
DESIGNED - JOSEPH G. YOUNG	EXAMINED		DATE - OCTOBER 3, 2018	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**STAGE CONSTRUCTION DETAILS STRUCTURE NO. 051 - 2009**
CHECKED - HAREEM I. DAR		ENGINEER OF BRIDGE DESIGN			SHEET 2 OF 9 SHEETS
DRAWN - MICHAEL B. MOSSMAN	PASSED		REVISED - ____		
CHECKED - J.G.Y. / H.I.D. / G.R.A.		ENGINEER OF BRIDGES AND STRUCTURES	REVISED - ____		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	13
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		



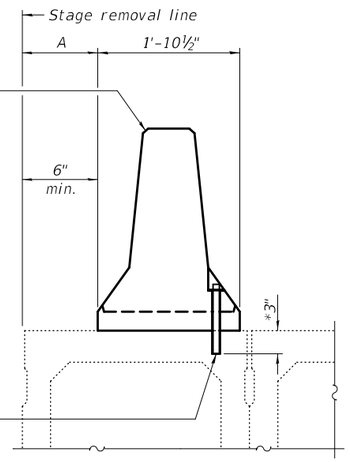
When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



Drill 3-1¼" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

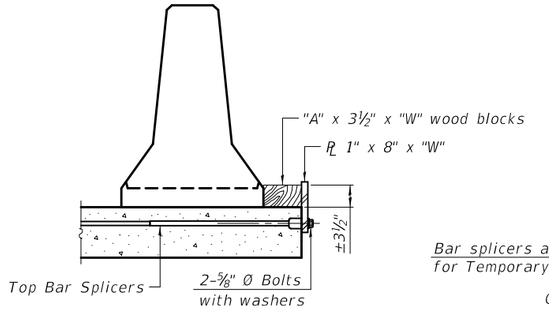
EXISTING SLAB



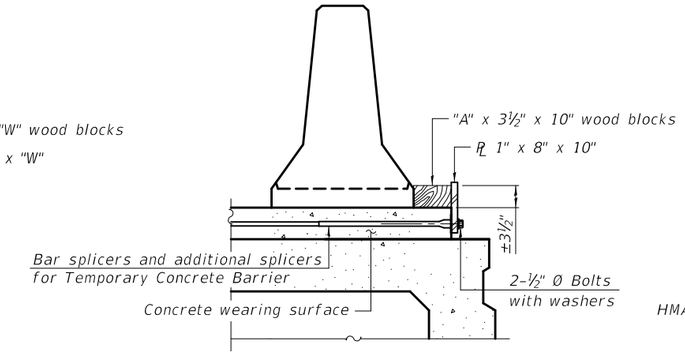
* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

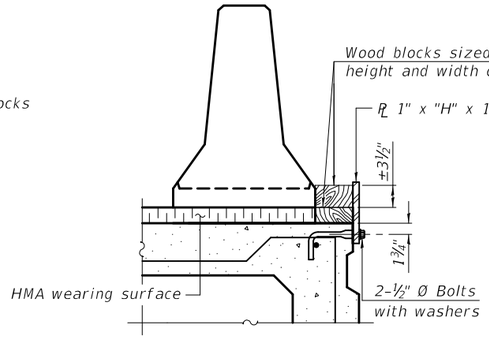
SECTIONS THRU SLAB OR DECK BEAM



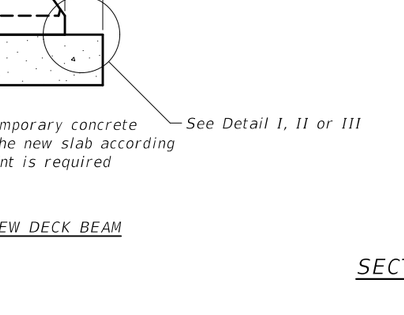
DETAIL I



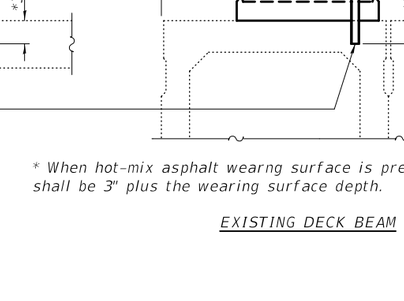
DETAIL II



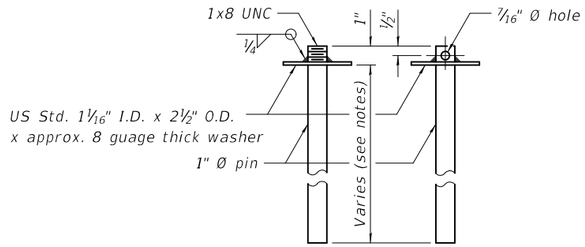
DETAIL III



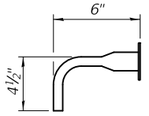
STEEL RETAINER ℄ 1" x 8" x "W"
(Detail I and II)



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



RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1½", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

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

R-27

8-11-2017

DESIGNED - JOSEPH G. YOUNG	EXAMINED	DATE - OCTOBER 3, 2018	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 051 - 2009	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - HAREEM I. DAR	PASSED	REVISED - ____			332	18B	LAWRENCE	24	14
DRAWN - MICHAEL B. MOSSMAN	ENGINEER OF BRIDGE DESIGN	REVISED - ____		SHEET 3 OF 9 SHEETS			CONTRACT NO. 74619		
CHECKED - J.G.Y. / H.I.D. / G.R.A.	ENGINEER OF BRIDGES AND STRUCTURES						ILLINOIS	FED. AID PROJECT	

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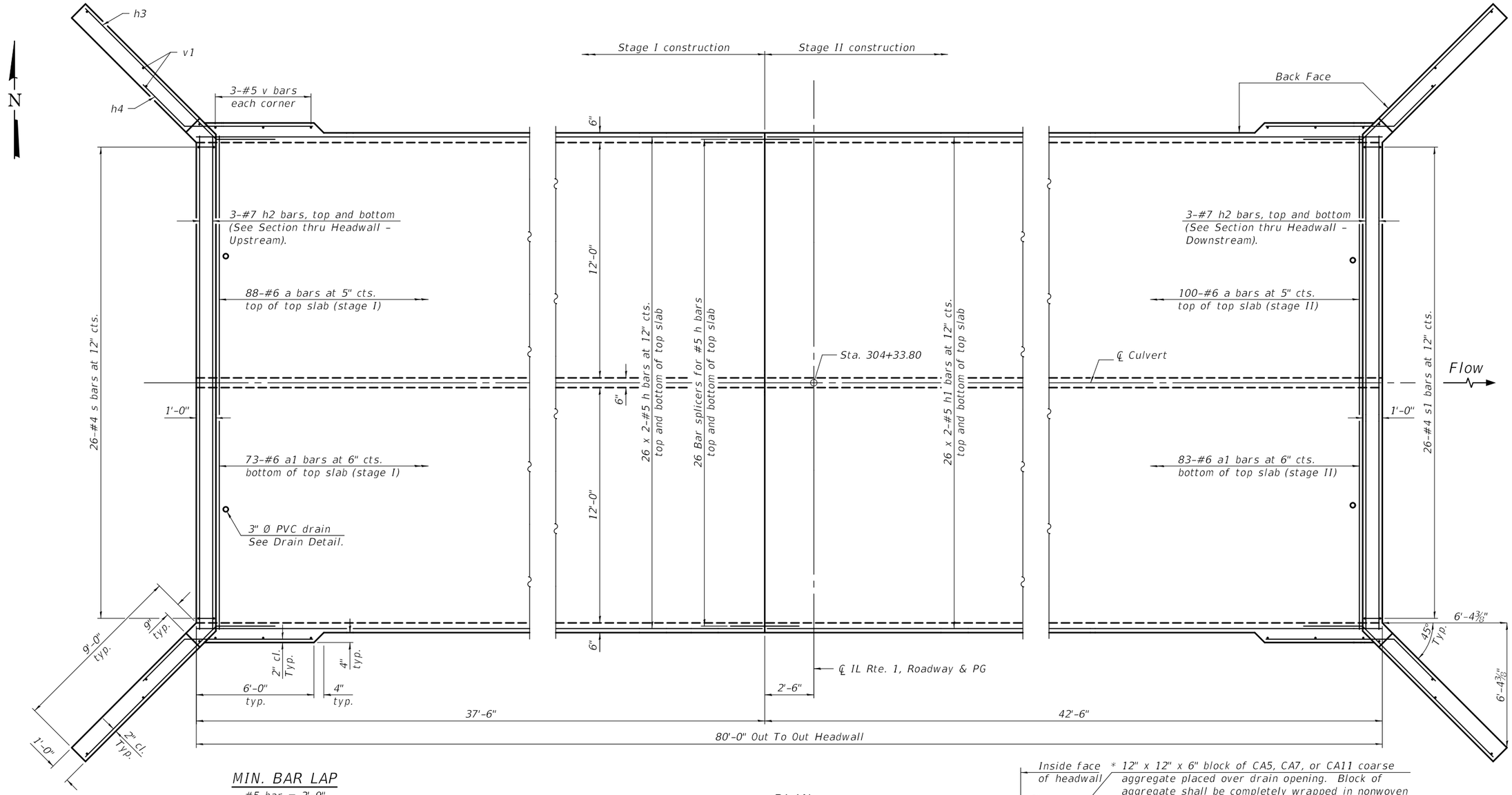


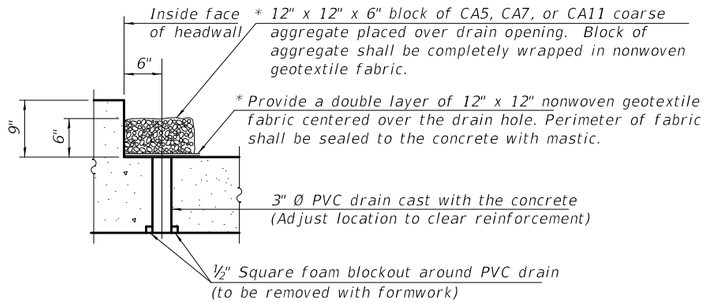
MIN. BAR LAP

#5 bar = 2'-9"

PLAN

Note:
Bars indicated thus 26 x 2-#5 etc. indicates 26 lines of bars with 2 lengths per line.

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



* 12" x 12" x 6" block of CA5, CA7, or CA11 coarse aggregate placed over drain opening. Block of aggregate shall be completely wrapped in nonwoven geotextile fabric.

* Provide a double layer of 12" x 12" nonwoven geotextile fabric centered over the drain hole. Perimeter of fabric shall be sealed to the concrete with mastic.

3" Ø PVC drain cast with the concrete
(Adjust location to clear reinforcement)

½" Square foam blockout around PVC drain
(to be removed with formwork)

DRAIN DETAIL

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

DESIGNED - JOSEPH G. YOUNG	EXAMINED		DATE - OCTOBER 3, 2018	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CULVERT DETAILS - TOP SLAB STRUCTURE NO. 051 - 2009**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - HAREEM I. DAR	PASSED	ENGINEER OF BRIDGE DESIGN	REVISED -		SHEET 4 OF 9 SHEETS	332	18B	LAWRENCE	24	15
DRAWN - MICHAEL B. MOSSMAN			REVISED -						CONTRACT NO. 74619	
CHECKED - J.G.Y. / H.I.D. / G.R.A.		ENGINEER OF BRIDGES AND STRUCTURES						ILLINOIS	FED. AID PROJECT	

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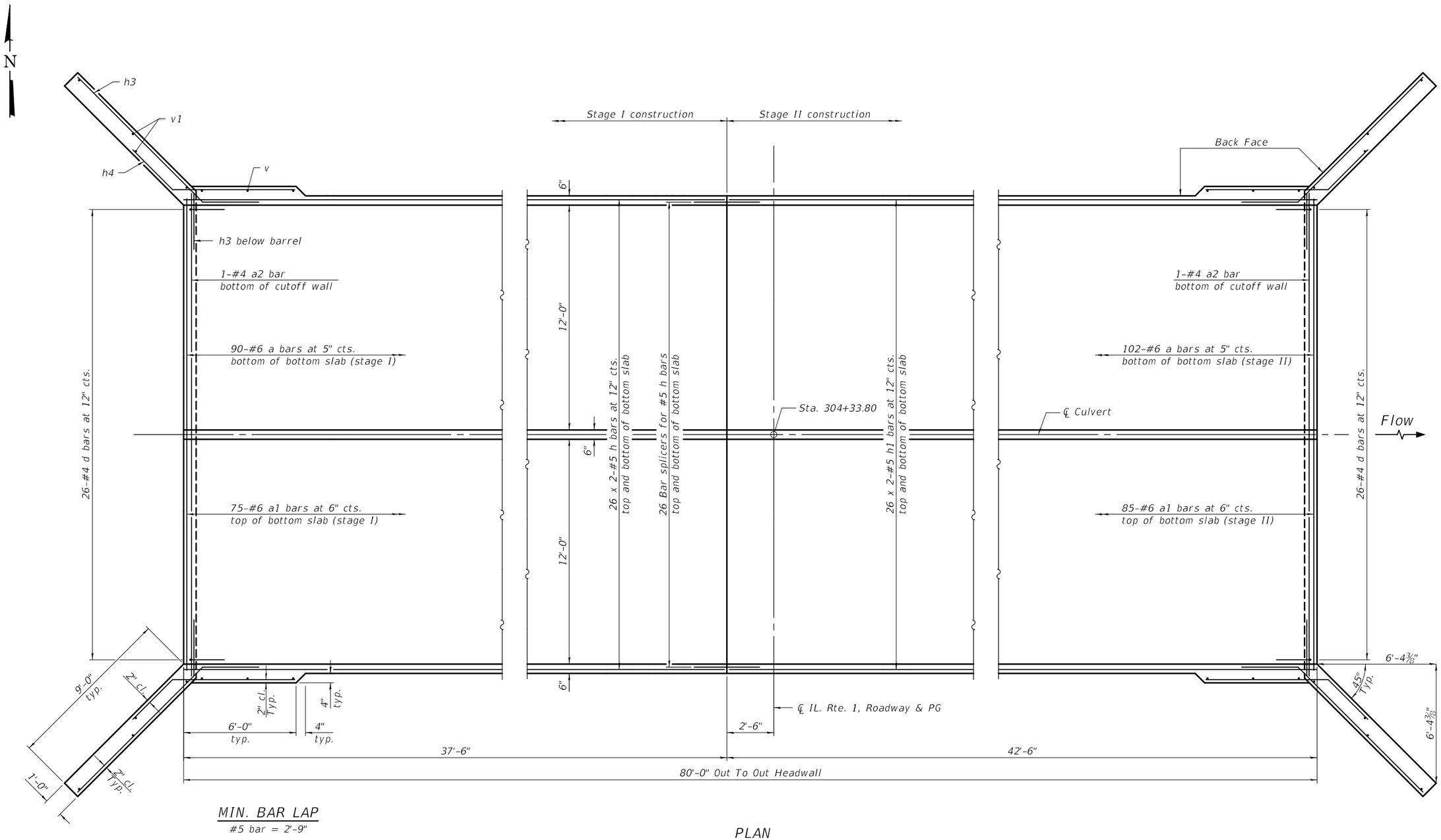

MIN. BAR LAP

#5 bar = 2'-9"

PLAN

Note:
Bars indicated thus 26 x 2-#5 etc. indicates 26 lines of bars with 2 lengths per line.

DESIGNED - JOSEPH G. YOUNG	EXAMINED	DATE - OCTOBER 3, 2018	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CULVERT DETAILS - BOTTOM SLAB STRUCTURE NO. 051 - 2009**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - HAREEM I. DAR					332	18B	LAWRENCE	24	16
DRAWN - MICHAEL B. MOSSMAN	PASSED	REVISED - ____		SHEET 5 OF 9 SHEETS			CONTRACT NO. 74619		
CHECKED - J.G.Y. / H.I.D. / G.R.A.	ENGINEER OF BRIDGE DESIGN	REVISED - ____					ILLINOIS	FED. AID PROJECT	
10/4/2018 10:48:42 AM	ENGINEER OF BRIDGES AND STRUCTURES								

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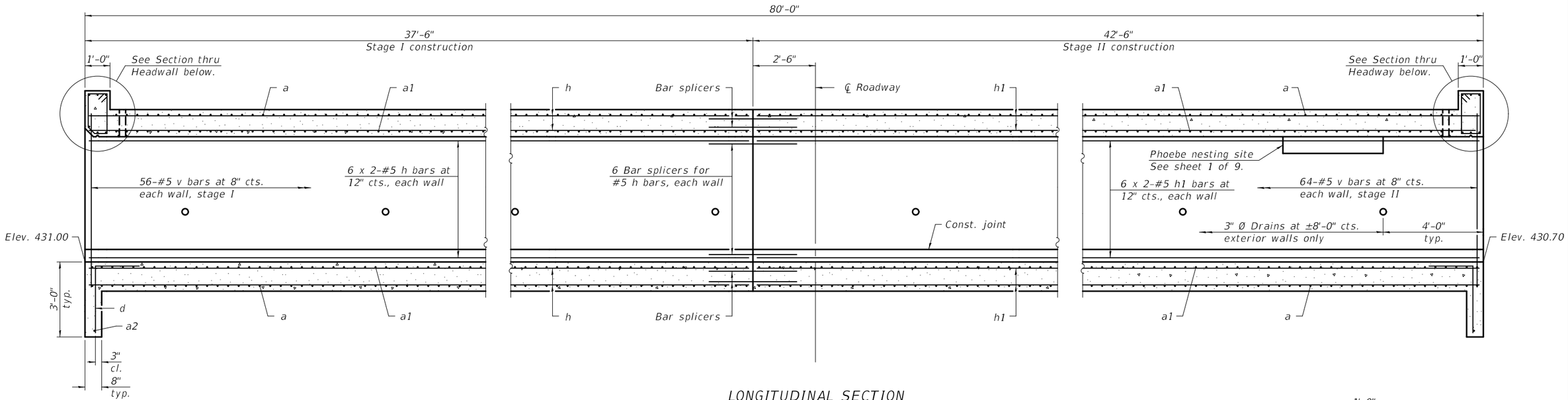
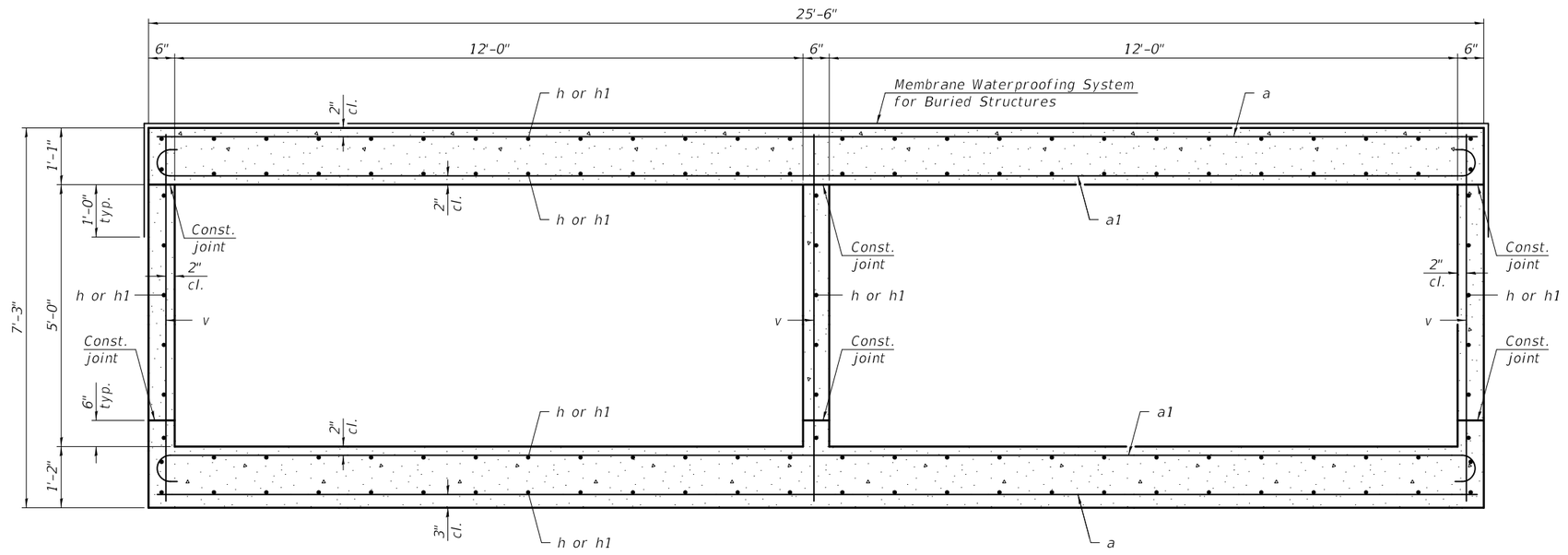


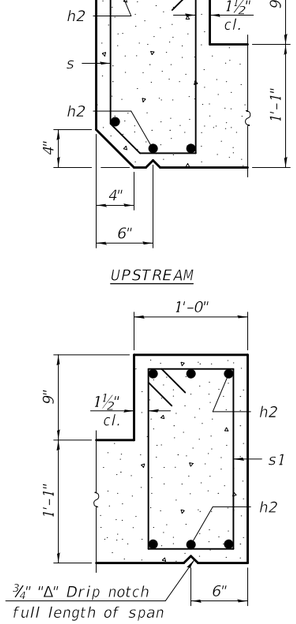
LONGITUDINAL SECTION



MIN. BAR LAP

#5 bar = 2'-9"

SECTION THRU BARREL



SECTION THRU HEADWALL

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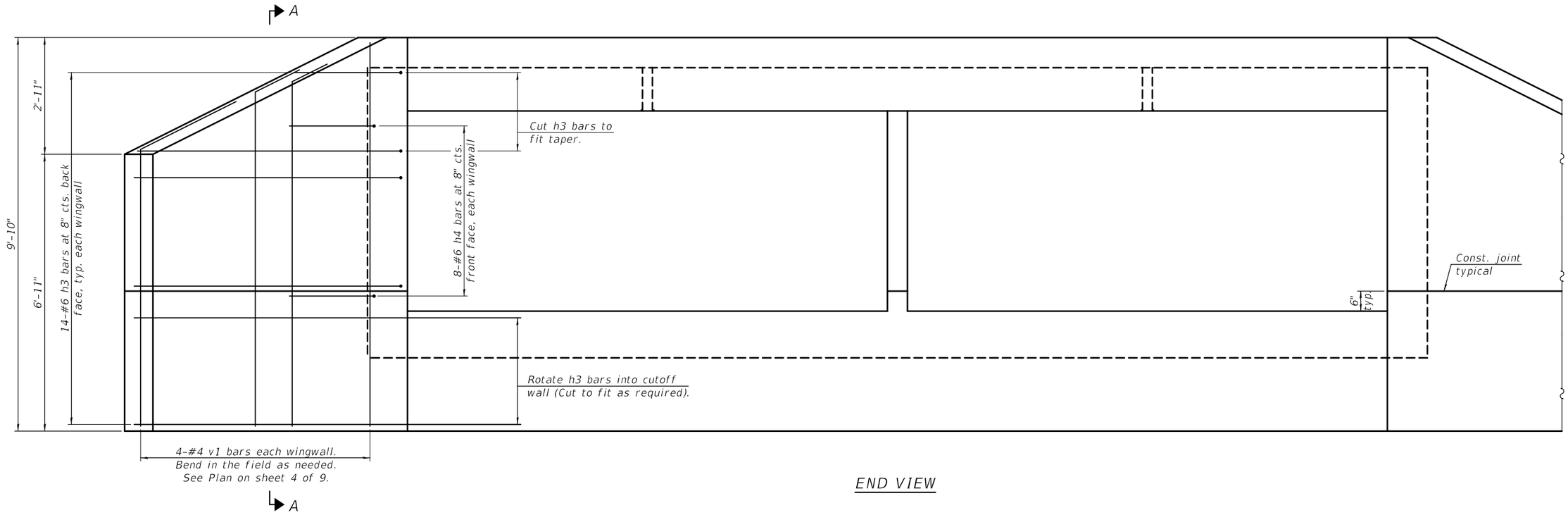
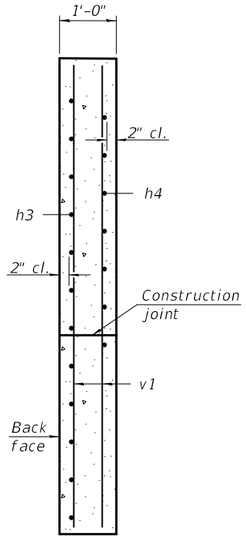
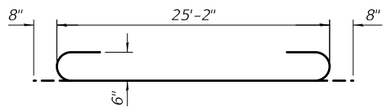
DESIGNED - JOSEPH G. YOUNG	EXAMINED		DATE - OCTOBER 3, 2018	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CULVERT DETAILS STRUCTURE NO. 051 - 2009	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - HAREEM I. DAR	PASSED	ENGINEER OF BRIDGE DESIGN ENGINEER OF BRIDGES AND STRUCTURES	REVISED - ____		SHEET 6 OF 9 SHEETS	332	18B	LAWRENCE	24	17
DRAWN - MICHAEL B. MOSSMAN			REVISED - ____					CONTRACT NO. 74619		
CHECKED - J.G.Y. / H.I.D. / G.R.A.								ILLINOIS FED. AID PROJECT		



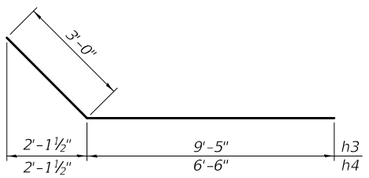
END VIEW



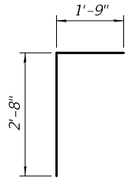
SECTION A-A



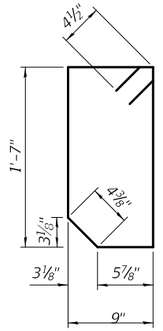
BAR a1



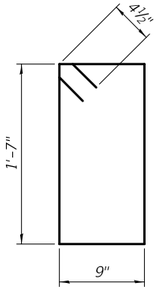
BARS h3 & h4



BAR d



BAR s



BAR s1

Notes:
A distance of half the length of the wingwall, but not less than six feet of the barrel, shall be poured monolithically with the wingwalls.
See Plan view on sheets 4 and 5 of 9 for additional reinforcement and dimensions for each wingwall.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	380	#6	25'-3"	
a1	316	#6	26'-6"	
a2	2	#4	25'-9"	
d	52	#4	4'-5"	
h	244	#5	20'-0"	
h1	244	#5	22'-6"	
h2	12	#7	25'-2"	
h3	56	#6	12'-5"	
h4	32	#6	9'-6"	
s	26	#4	5'-3"	
s1	26	#4	5'-5"	
v	372	#5	6'-11"	
v1	16	#4	9'-5"	
Concrete Box Culverts			Cu. Yd.	210.1
Reinforcement Bars			Pound	43,090

DESIGNED -	JOSEPH G. YOUNG	EXAMINED	DATE - OCTOBER 3, 2018
CHECKED -	HAREEM I. DAR		REVISED -
DRAWN -	MICHAEL B. MOSSMAN	PASSED	REVISED -
CHECKED -	J.G.Y. / H.I.D. / G.R.A.	ENGINEER OF BRIDGE DESIGN / ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS
STRUCTURE NO. 051 - 2009
SHEET 7 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	18
		CONTRACT NO. 74619		
		ILLINOIS	FED. AID PROJECT	

MODEL: 0512009-74619-007
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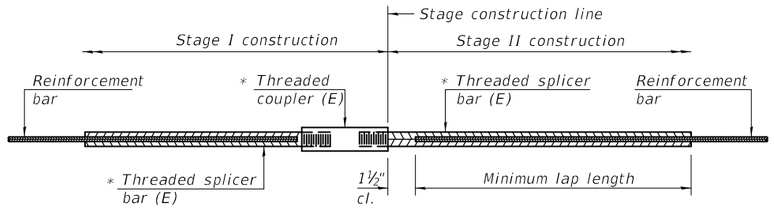
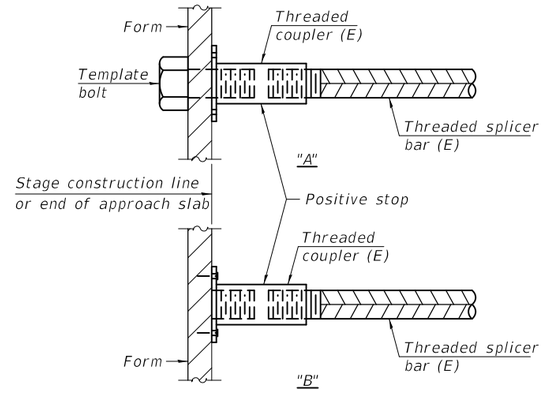


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

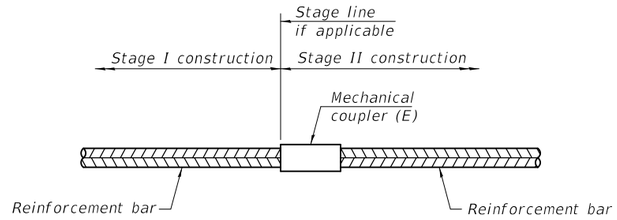
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top slab	#5	52	2'-9"
Walls	#5	18	2'-9"
Bottom slab	#5	52	2'-9"



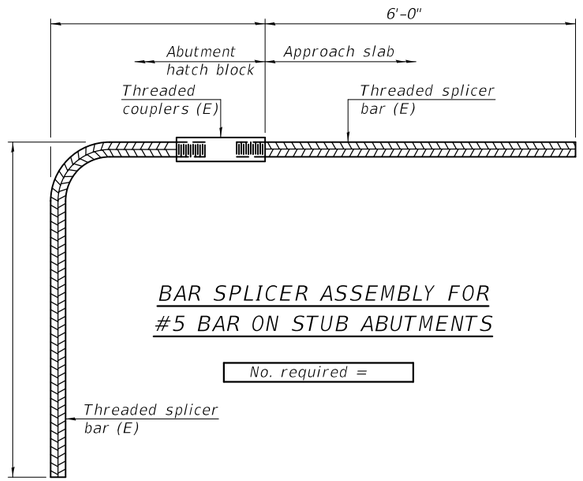
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



NOTES

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

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

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

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

BSD-1 2-17-2017

DESIGNED - JOSEPH G. YOUNG	EXAMINED	ENGINEER OF BRIDGE DESIGN	DATE - OCTOBER 3, 2018	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 051 - 2009
CHECKED - HAREEM I. DAR					
DRAWN - MICHAEL B. MOSSMAN	PASSED	ENGINEER OF BRIDGES AND STRUCTURES	REVISED - ____		SHEET 8 OF 9 SHEETS
CHECKED - J.G.Y. / H.I.D. / G.R.A.			REVISED - ____		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	19
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation

Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 8/10/11

ROUTE FAP 332 (IL 1) DESCRIPTION Unnamed Creek LOGGED BY E. Sandschafer

SECTION 18B LOCATION R 12 W - Sec 1 - E 1/2, R 11 W - Sec 6 - W 1/2, SEC, , TWP, 4 N, RNG, , 3 PM

COUNTY Lawrence DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 051-2009 (exist 8000)
Station 304+33.8

BORING NO. 1 (South)
Station 304+19
Offset 17.0ft Rt
Ground Surface Elev. 438.64 ft

Surface Water Elev. 432.83 ft
Stream Bed Elev. 431.91 ft

Groundwater Elev.:
▽ First Encounter 418.6 ft
▽ Upon Completion 425.1 ft
▼ After 48 Hrs. 432.1 ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	
				16" aggregate shoulder.
437.34				
				Soft, damp, gray, SILTY LOAM.
	1			
	2	0.3	20	
	2	B		
-5	0			
	0		12	
	1			
431.64 ▼				
	0			Medium, damp, gray marbled reddish brown, SILTY CLAY.
	0	0.5	22	
	1	B		
429.14				
-10	0			Soft, damp, red marbled gray, SANDY LOAM.
	1	0.3	22	
	1	B		
426.34				
	0			Stiff, damp, gray marbled reddish brown, SILTY CLAY.
	1	1.2	28	
	1	B		
▽				
-15	1			
422.94	2	1.2	32	
	3	B		
422.84				Very soft, very damp, gray, SILTY LOAM.
421.64				Gray, SANDY LOAM.
	0			Soft, damp, gray, SILTY LOAM.
	1	0.3	18	
	1	B		
419.14				
▽ -20	1			

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	
418.54	1	0.1	21	Gray, fine grained, SAND, 12% passing #200 sieve. (continued)
	2	B		
416.64				Very soft, very damp, gray, SANDY LOAM.
	5			Soft to medium, damp, gray, SANDY CLAY w/ Sandstone fragments.
	6	0.5	17	
415.24	13	S		
415.14				Brown, SANDSTONE.
				Extent of exploration.
-25				
				Benchmark: BM 445 chiseled square on the SE wingwall of existing SN 051-8000 = 439.46' elevation.
-30				
-35				
-40				

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

Illinois Department of Transportation

Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 8/10/11

ROUTE FAP 332 (IL 1) DESCRIPTION Unnamed Creek LOGGED BY E. Sandschafer

SECTION 18B LOCATION R 12 W - Sec 1 - E 1/2, R 11 W - Sec 6 - W 1/2, SEC, , TWP, 4 N, RNG, , 3 PM

COUNTY Lawrence DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 051-2009 (exist 8000)
Station 304+33.8

BORING NO. 2 (North)
Station 304+57
Offset 18.0ft Lt
Ground Surface Elev. 438.78 ft

Surface Water Elev. 432.83 ft
Stream Bed Elev. 431.91 ft

Groundwater Elev.:
▽ First Encounter Dry ft
▽ Upon Completion 426.5 ft
▼ After 48 Hrs. 432.3 ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	
				16" aggregate shoulder.
437.48				
				Soft to medium, damp, brown/gray, SILTY LOAM.
	3			
	4	0.4	19	
	3	S		
-5	3			
	1	0.6	20	
	2	B		
431.78 ▼				
	0			Medium to stiff, damp, gray, SILTY CLAY.
	1	1.0	21	
	2	B		
429.28				
-10	2			Stiff, damp, gray marbled brown, CLAY.
	3	1.3	27	
	3	B		
▽				
	1			
	2	1.7	26	
	3	B		
424.28				
-15	1			Very soft, very damp, gray, SILTY LOAM.
	1	0.2	30	
422.78	2	B		
				Extent of exploration.
				Benchmark: BM 445 chiseled square on the SE wingwall of existing SN 051-8000 = 439.46' elevation.
-20				

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

DESIGNED - JOSEPH G. YOUNG	EXAMINED		DATE - OCTOBER 3, 2018	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS STRUCTURE NO. 051 - 2009
CHECKED - HAREEM I. DAR		ENGINEER OF BRIDGE DESIGN			SHEET 9 OF 9 SHEETS
DRAWN - MICHAEL B. MOSSMAN	PASSED		REVISED - ____		
CHECKED - J.G.Y. / H.I.D. / G.R.A.		ENGINEER OF BRIDGES AND STRUCTURES	REVISED - ____		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	20
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

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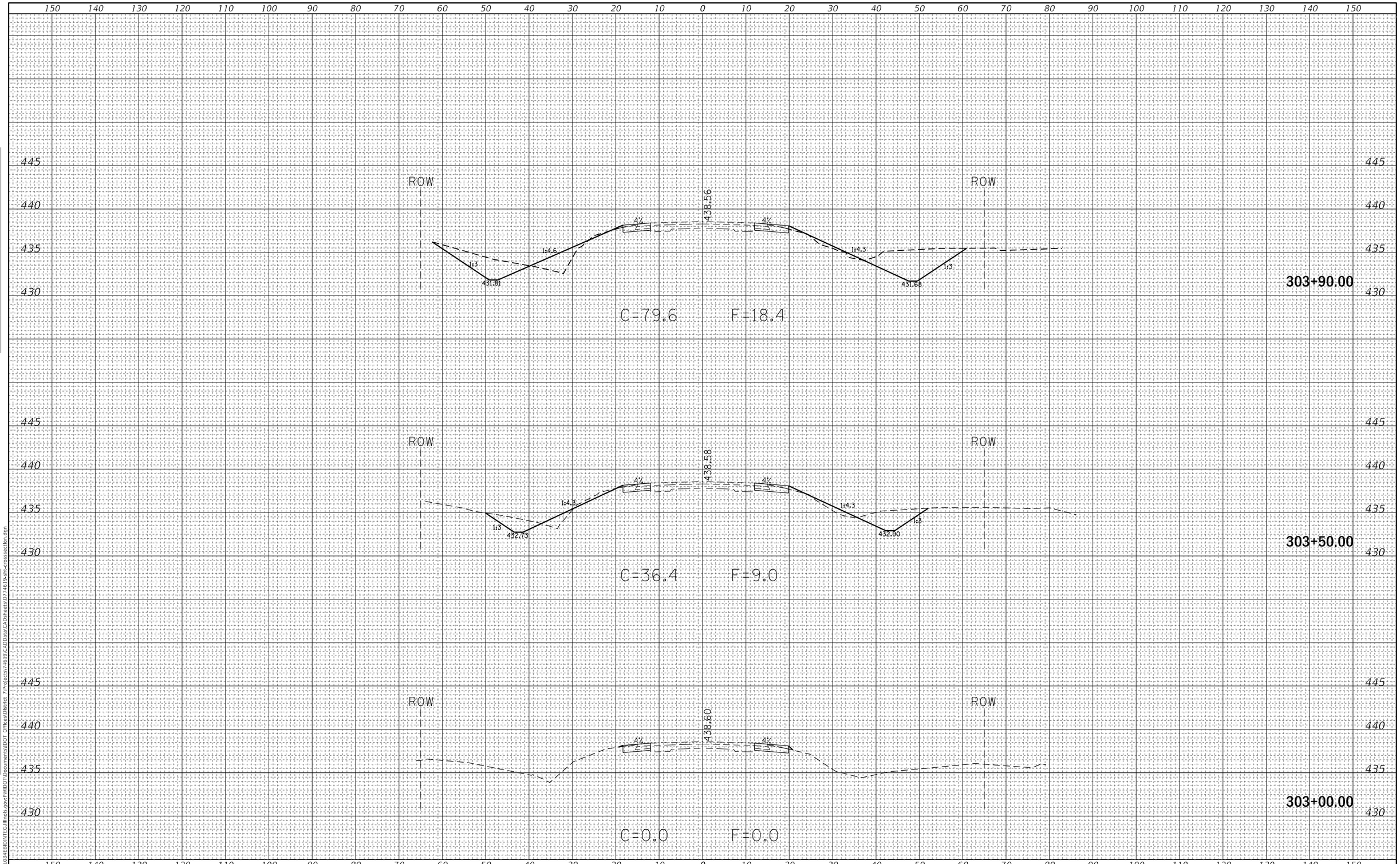

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PLOT DATE = 8/16/2018	DATE -	REVISED -	SCALE: SHEET OF SHEETS STA. 303+00.00 TO STA. 303+90.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	21
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

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

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445 440 435 430 425

ROW

438.58
438.49

4% 1.5% 1.5% 4%

1:1.9

431.25

430.95

1:40.3

C=577.2 F=38.2

304+25.00

ROW

438.58
438.50

4% 1.5% 1.5% 4%

1:1.8

431.25

430.95

1:3

C=661.2 F=38.2

304+21.00

ROW

438.57
438.54

4% 1.5% 1.5% 4%

1:2.7

1:4.7

1:4.3

1:2.9

431.44

431.20

C=109.3 F=18.8

304+06.00

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	DRAWN -	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/16/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 304+06.00 TO STA. 304+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	22
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		

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

ORIGINAL SURVEY
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NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
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BY
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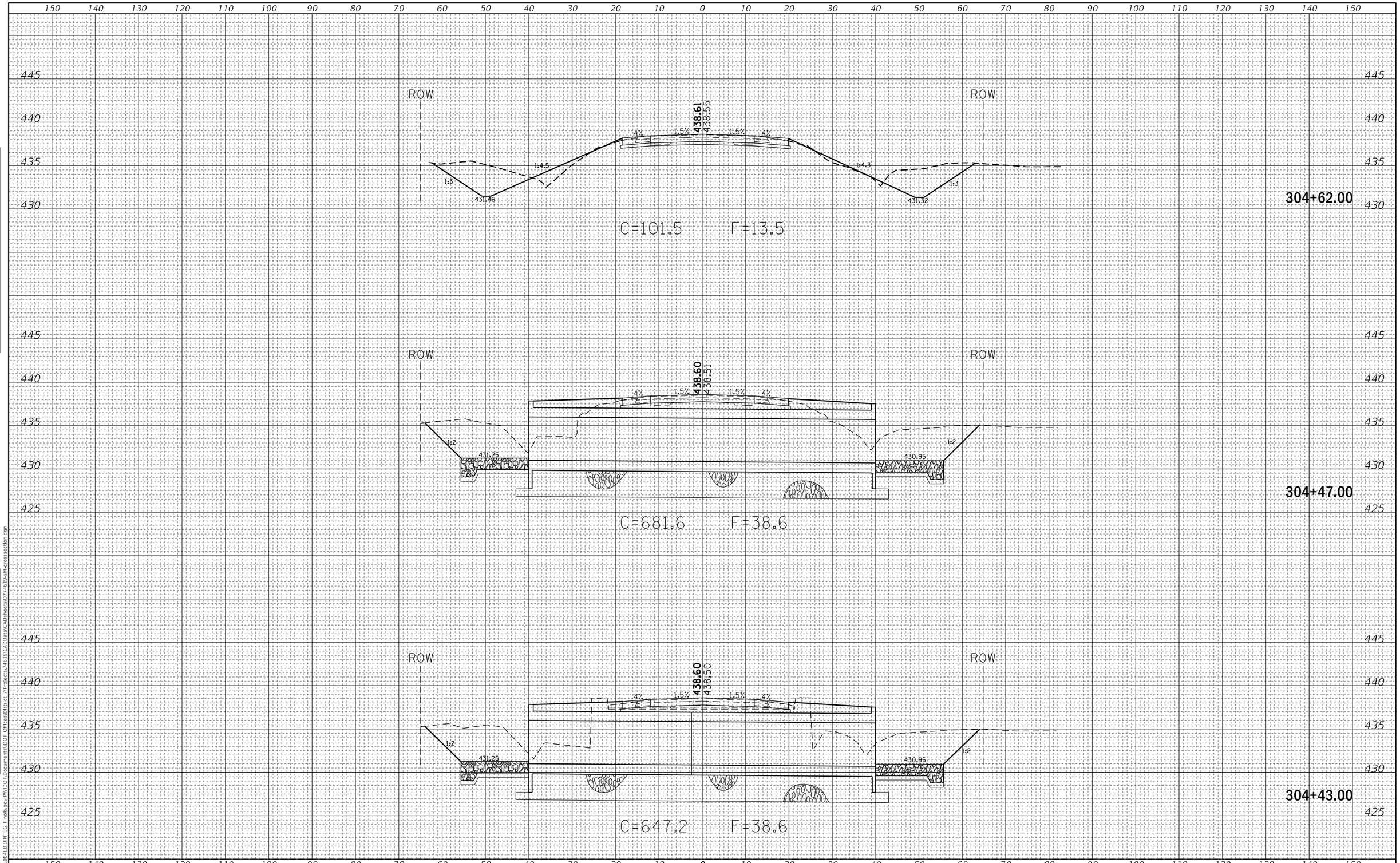

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PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/16/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 304+43.00 | TO STA. 304+62.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	23
		CONTRACT NO. 74619		
		ILLINOIS	FED. AID PROJECT	

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

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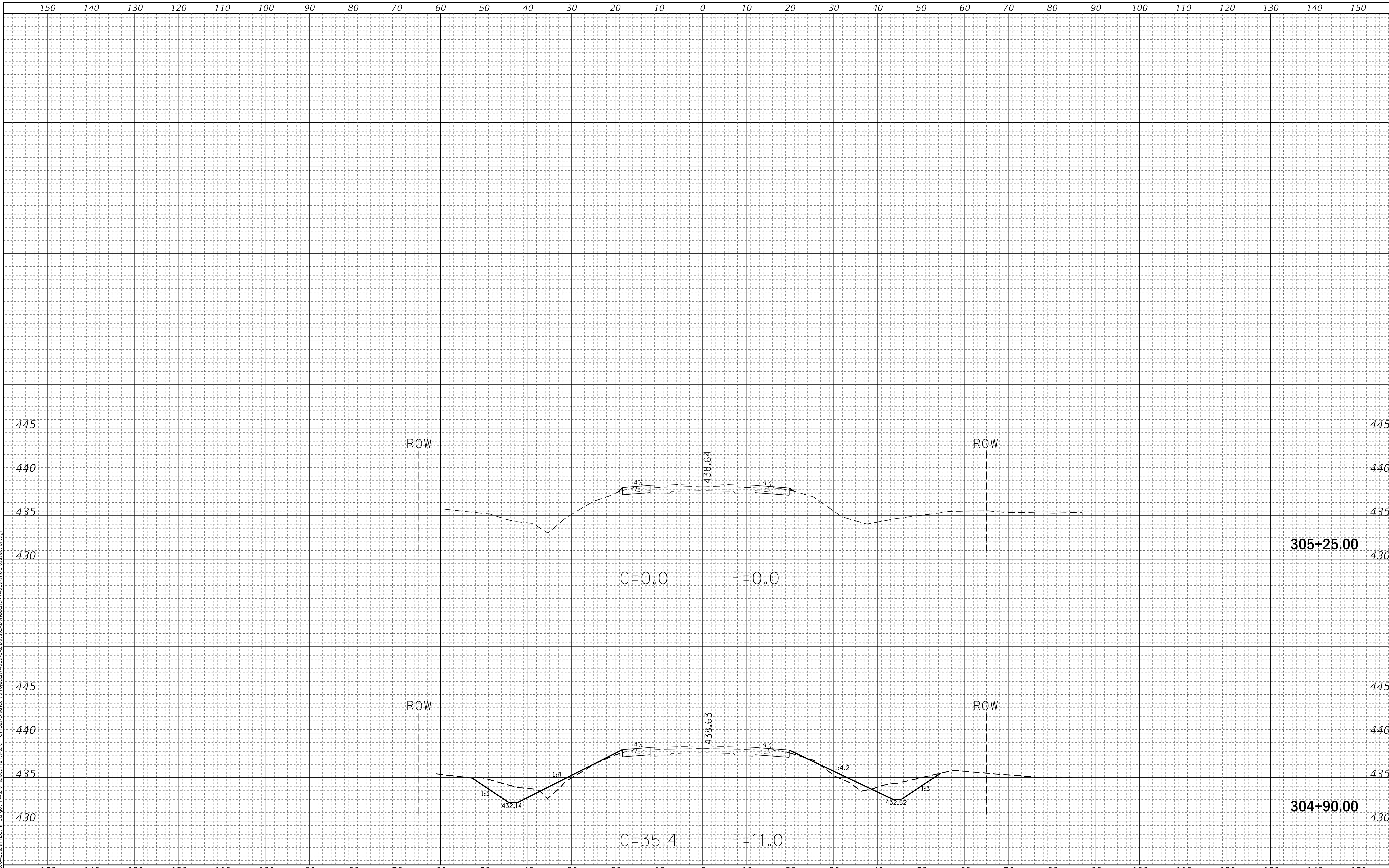
FINAL SURVEY	BY	DATE
NOTE BOOK NO.___	SURVEYED ___	
	PLOTTED ___	
	TEMPLATE ___	
	AREAS ___	
	AREAS CHECKED ___	

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



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FILE NAME: pw:\\IL084EBIDINTEG.Illinois.gov:PWIDOT\Documents\IDOT Offices\District 7\Projects\74619\CADData\CADsheets\D774619-sht-crosssection.dgn

USER NAME = steffenmk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	**STATE OF ILLINOIS**
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT DATE = 8/16/2018	DATE -	REVISED -	

CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 304+90.00 TO STA. 305+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	18B	LAWRENCE	24	24
		CONTRACT NO. 74619		
	ILLINOIS	FED. AID PROJECT		