STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** 

**PROPOSED** HIGHWAY PLANS

FAP ROUTE 310 (US 67)
SECTION (87B)BR
PROJECT: ACBHF-0310(138)
SCHUYLER COUNTY
C-96-060-08

**HOELSCHER** 

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FOR INDEX OF SHEETS, SEE SHEET NO. 2

115 North Nell Street, Suite 10: Champaion, Illinois 61820 **ENGINEERING** 

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: JOHN NEGANGARD (217) 782-6990 SQUAD LEADER: VINCE MADONIA (217) 785-9046

ADT 4700 (2007) FAP 310

STA 332+00.00-

END PROJECT (STA 337+50.00, LIMITS OF IMPROVEMENTS)

STA 320+00.00

BEGIN PROJECT (STA 315+64.00. LIMITS OF

IMPROVEMENT)

LENGTH OF IMPROVEMENT = 2,186.0 FT. = 0.414 MILE

LENGTH OF PROJECT = 1,200.00 FT. = 0.227 MILE

NOT TO SCALE

STA 325+95.00 PROJECT INCLUDES REHABILITATION
OF THE EX THREE-SPAN BRIDGE
CARRYING FAP 310 OVER CRANE CREEK/SCHUY-RUSH LAKE. (SN-085-0001), 174' - 7" BK TO BK OF ABUT. STA. 325+07.21 TO STA. 326+82.79



COUNTY TOTAL SHEETS NO.
SCHUYLER 80 1 1
ILLINOIS CONTRACT NO. 72B95 (87B)BR FED. ROAD DIST. NO. 6

#80+1=81



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

HOELSCHER ENGINEERING, P.C.

Fairview Heights, Illinois 62208 (618) 624-8610, Fax (618) 624-8611

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**CONTRACT NO. 72B95** 

### INDEX OF SHEETS

ILE NAME =

SHEET NO.	SHEET TITLE
1 2 3-4 5-7 8-10 11-21 22 23-32	COVER SHEET INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES SUMMARY OF OUANTITIES SCHEDULES OF QUANTITIES EXISTING AND PROPOSED TYPICAL SECTIONS STAGES OF CONSTRUCTION ALIGNMENT, TIES, AND BENCHMARKS PLAN AND PROFILE SHEETS
33-41 42-61 62-63 <b>A</b> 64-80	EROSION AND SEDIMENT CONTROL DETAILS BRIDGE PLANS CULVERT EXTENSION DETAILS CROSS SECTIONS

### LIST OF ILLINOIS DOT HIGHWAY STANDARDS

N.J.	
STANDARD NO.	STANDARD TITLE
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT REBARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420401-07	BRIDGE APPROACH PAVEMENT
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING
	AND RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
630001-08	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-07	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKERS AND MOUNTING DETAILS
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45MPH
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY,
701701 10	FOR SPEEDS > 45MPH
701321-10	LANE CLOSURE, 2L, 2W BRIDGE REPAIR WITH BARRIER LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS5 MPH
701326-03 701901-01	TRAFFIC CONTROL DEVICES
704001-05	TEMPORARY CONCRETE BARRIER
720001-05	SIGN PANEL MOUNTING DETAILS
720001-01	SIGN PANEL ERECTION DETAILS
720008-02	METAL POST FOR SIGNS, MARKERS AND DELINEATORS
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS
873001-02	TRAFFIC SIGNAL GROUNDING & BOUNDING
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS
701001-02	
701004-03	
701011-02	

USER NAME = default

heets\D9606008-sht-gennote.dgn

PLOT SCALE = 2.0000 '/ IN.

PLOT DATE = 8/25/2009

701301-031	
701311-03	EXAMINED Aug 12 20 09
	PROGRAM IMPLEMENTATION ENGINEER
	EXAMINED (tag 1) 20 09
	PROGRAM IMPLEMENTATION ENGINEER
	EXAMINED Aug 11 20 09
	PROGRAM DEVELOPMENT ENGINEER

DESIGNED - ERO

DRAWN - RAW

CHECKED - JSA

- 08/18/09

DATE

REVISED -

REVISED -

REVISED

REVISED

### GENERAL NOTES

- 1. THE STANDARDS INCLUDED IN THE BACK OF THESE PLANS SHALL APPLY TO THIS PROJECT. 8.
- THESE PLANS HAVE BEEN PREPARED USING STANDARD SYMBOLS AS INDICATED IN THESE PLANS, AND THEY SHALL TAKE PRECEDENCE OVER THOSE SHOWN ON STANDARD 000001 IF THERE IS A CONFLICT.
- 3. BEFORE ORDERING STORM SEWERS, INLETS, PIPE CULVERTS, PIPE DRAINS, AND MANHOLES, THE CONTRACTOR SHALL CONTACT THE ENGINEER AS TO THE EXACT LENGTH AND QUANTITY
- 4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 5. THE CONTRACTOR SHALL PROTECT UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

ADAMS ELECTRIC (ELECTRIC) 700 E. WOOD STREET CAMP POINT, IL 62320 (217) 593-7701

FRONTIER COMMUNICATIONS (PHONE) 145 S. HALL STREET ROSEVILLE, IL 61473 (402) 250-1095

HICKORY-KERTON (WATER) 616 N. 24TH STREET OUINCY, IL 62301 (217) 223-3670

### J.U.L.I.E. 1-800-892-0123

ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, BY CONTACTING THE UTILITY COMPANY DIRECTLY.

IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS TAKEN THE FOREGOING INTO CONSIDERATION IN SUBMITTING HIS BID. AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS OR INCONVENIENCES CAUSED BY THE SAME.

THE INFORMATION AND DATA SHOWN OR INDICATED ON THESE IMPROVEMENT PLANS WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AND UTILITIES AT OR CONTIGUOUS TO THE SITE IS BASED ON INFORMATION AND DATA FURNISHED BY THE OWNERS OF SUCH UNDERGROUND FACILITIES AND UTILITIES OR BY OTHERS, FIELD MARKINGS OF FACILITIES IN CRITICAL AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF 96 HOURS ADVANCE NOTICE TO THE RESIDENT ENGINEER SO THAT UTILITIES CAN BE GIVEN NOTICE. NO GUARANTEE IS IMPLIED AS TO THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA; AND CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR I) REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, (II) VERIFYING IF ANY CONFLICTS EXIST WITH THE PROPOSED WORKED AND UNDERGROUND FACILITIES AND UTILITIES SHOWN OR INDICATED ON THE IMPROVEMENT PLANS; (III) COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES AND UTILITIES DURING CONSTRUCTION, AND (IV) THE SAFETY AND PROTECTION OF ALL SUCH UNDERGROUND FACILITIES AND UTILITIES AND REPAIR ANY DAMAGE THERETO RESULTING FROM THE WORK AT HIS EXPENSE.

- 6. ALL UTILITIES TO BE RELOCATED BY OTHERS.
- 7. FULL DEPTH SAW CUTTING ON ALL EDGES FOR REMOVAL ITEMS SHALL BE INCLUDED IN THE COST OF THE REMOVAL ITEM AS INDICATED AND IN ACCORDANCE WITH SECTION 440 OF THE STANDARD SPECIFICATIONS.

### GENERAL NOTES (CONT.)

- 8. ALL AREAS DISTURBED WITHIN OR BEYOND THE CONSTRUCTION LIMITS FOR ANY REASON SHALL BE SEEDED WITH CLASS 2 SEEDING, AS DIRECTED BY THE ENGINEER. NUTRIENTS SHALL CONFORM TO ARTICLE 250.04. FINAL SEEDING SHALL BE PERFORMED AS SOON AS POSSIBLE
- MULCH, AS APPLIED TO FINAL SEEDING (CLASS 2), SHALL CONFORM TO SECTION 251
  OF THE STANDARD SPECIFICATIONS. MULCH UNLESS OTHERWISE PERMITTED BY THE
  FNGINEER. SHALL CONFORM TO METHOD 2 AS SPECIFIED IN ARTICLE 251.03 (b).
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING THE REQUIREMENTS OF AN NPDES STORM WATER PERMIT FOR CONSTRUCTION ACTIVITY FOR THIS PROJECT.
- 11. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN, PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATE BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE A COPY OF THE MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.
- 12. THE DISTRICT'S NUCLEAR DENSITY SUPERVISOR SHALL BE CONTACTED UPON COMPLETION OF THE SUBGRADE AND PRIOR TO THE AGGREGATE BASE COURSE PLACEMENT TO DETERMINE THE NECESSITY OF THE SUBGRADE IMPROVEMENTS.
- 13. THE THICKNESS OF HMA MIXTURES 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 OF BASE ON WHICH THE HMA MIXTURE IS PLACED.
- 14. THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.
- 15. APPLICATION RATES FOR HOT-MIX ASPHALT ITEMS ARE AS FOLLOWS:

BITUMINOUS MATERIALS (PRIME COAT) ON EXISTING SURFACES 0.10 GAL/SY (0.00038 TON/SY)

AGGREGATE (PRIME COAT) ON EXISTING SURFACES 4 LBS/SY (0.002 TON/SY)

LEVELING BINDER AND HOT-MIX ASPHALT SURFACE COURSE 112 LBS/SY\*IN

- 16. 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/HER OPERATIONS.
- 17. ALL WORK AS SHOWN ON THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIAL PROVISIONS PREPARED BY HOELSCHER ENGINEERING, P.C. ENTITLED "FAP ROUTE 310 (US 67) SECTION (87B)BR, CONTRACT NO. 72B95".

### COMMITMENTS

- 1. THE FIELD/RESIDENT ENGINEER SHALL CONTACT STUDIES AND PLANS CONCERNING ANY MAJOR PLAN CHANGES TO MAKE SURE NO PREVIOUS COMMITMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN AND ALLOW IMPROVED DESIGN FOR FUTURE PROJECTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING THE REQUIREMENTS OF AN NPDES STORM WATER PERMIT FOR CONSTRUCTION ACTIVITY FOR THIS PROJECT.

### MIXTURE REQUIREMENTS

MIXTURE USE(S):	HMA SURFACE	HMA LEVELING BINDER	HMA-BSE CSE WID. 10"	HMA SHOULDERS
PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% e N70	4.0% • N70	4.0% <b>e</b> N70	4.0% <b>e</b> N70
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5 OR 12.5	IL 9.5	IL 19.0	IL 1940
FRICTION AGGREGATE:	MIX C	N/A	N/A	N/A

CTATE OF HILMOIC	INDEX OF	SHEETS, HIG	HWAY	STAND	ARDS, AND	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STATE OF ILLINOIS							310	(87B)BR	SCHUYLER	80	2
DEPARTMENT OF TRANSPORTATION					***************************************		<u> </u>		CONTRACT	NO.	72B95
	SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		

### ILLINOIS DEPARTMENT OF TRANSPORTATION

# SUMMARY OF QUANTITIES

			T()TA1	80%	FEDERAL 20%	STATE
CODE NO.	. ITEM	UNIT	TOTAL QUANTITIY	RDWY QUANTITY JOOO	SN 085-0001 QUANTITY XO 7/- ZA	BOX CULVER EXTENSION
20200100	EARTH EXCAVATION	CU YD	310.0	310		
***************************************						
20400800	FURNISHED EXCAVATION	CU YD	805	805		
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	, CU YD	88.5		88.5	
	• 1					
25000200	SEEDING, CLASS 2	ACRE	2.05	2.05		
	·					<u> </u>
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	185	185	<u> </u>	
				<u> </u>		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	185	185		
-				<del> </del>		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	185	185	<u> </u>	
25000700	AGRICULTURAL GROUND LIMESTONE	TON	4.1	4.1	· · · · · · · · · · · · · · · · · · ·	
		10,1				
25100115	MULCH, METHOD 2	ACRE	2.05	2.05	+	<b> </b>
	Process, Planton &	, ACINE	2.03	2.03	<del> </del>	
25101005	HEAVY DUTY EXCELSIOR BLANKET	SQ YD	3,219	3,219	<del> </del>	
23101003	TIENT DOTT EXCELSION DESIGNAT		3,213	3,213	-	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND '	500	500	-	
20000230	- TENFORMY ENGLISH CONTROL SELECTION	70010	300		<del> </del>	
28000400	PERIMETER EROSION BARRIER	FOOT	2,522	2,522	<del> </del>	ļ
20000400	FERRITE IN GROSSON DANNER	1001	2,322	2,522	+	
28001000	AGGREGATE (EROSION CONTROL)	TON	84	84	1	
20001000	AGGREGATE (EROSION CONTROL)	TON	07		+	
28100708	STONE DUMPED RIPRAP, CLASS A4 (SPECIAL)	SQ YD	135	41	94	
20100700	STORE DURING CENSO AT (STECKE)	1 30 15	133			
28200200	FILTÉR FABRIC	SQ YD	135	41	94	
20200200	I LLC I ADRIC	30 10		<del>                                     </del>	1	
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	736.6	736.6	<del> </del>	
22000110	Transfer Other or total sections transfer the AV	3410	, 50.0	1.30.0		
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1.96	1.96		
40000200	DITOPINGOS PIATERAES (FRAME COAT)	7014	1,50	1.50	+	
40600300	AGGREGATE (PRIME COAT)	TON	10.0	10.0		
70000000	AGGREGATE (PRIME COAT)	TON	10.0	10.0		
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	133.9	133.9	<u> </u>	
-0000033	PEACETTO DIADEL (LILVOITIAE LIETHOD) IAAA	1014	133.3	133,3	<b>-</b>	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	160	160	-	
,000002	The comment of the control of the co	34,10				
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	216.6	216.6	-	
	The contract of the second property of the		220.0		-	
42001165	BRIDGE APPROACH PAVEMENT	SQ:YB	240	240		
- COOTTOO	ECONOMIC INTERPRETATION OF THE PROPERTY.	1 34 10	~~~	1 -70	1	1

			TOTAL	80%	FEDERAL 20%	T
CODE NO.	ITEM	UNIT	QUANTITIY	RDWY QUANTITY 1000	SN 085-0001 QUANTITY XO7/-ZA	BOX CUL EXTENS
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	48	48	•	
44000100	PAVEMENT REMOVAL	SQ YD	353	353		
49101700	AGGREGATE SHOULDERS, TYPE B (SPECIAL)	TON	194.1	194.1		ļ
48101300	AGGREGATE SHOOLDERS, TIFE B (SPECIAL)	101	194.1	194.1		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	1,377.5	1,377.5		<u> </u>
		-		·		<b></b>
48203100	HOT-MIX ASPHALT SHOULDERS	TON	162	162		
		·				
50102400	CONCRETE REMOVAL	CU YD	27.4		27.4	
50104650	SLOPE WALL REMOVAL	SQ YD	517.5		517.5	ļ
50404700	DEMOVAL OF EVICTING CONVENTED DEGIC					
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1	
50200100	STRUCTURE EXCAVATION	CUYD	105		105	
***************************************	,					
50300225	CONCRETE STRUCTURES	. CU YD	58.20		58.20	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	305		305	
			<u> </u>			
50300260	BRIDGE DECK GROOVING	- SQ YD	651		651	<u> </u>
50300300	PROTECTIVE COAT		689 .		689	
30300300	PROTECTIVE COAT	SQ YD	009.		003	<u> </u>
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	3,749		3,749	
		· · · · · · · · · · · · · · · · · · ·				
50500505	STUD SHEAR CONNECTORS	EACH	2,700		2,700	
				·		
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH .	. 12		- 12	
	,		<b>=0.686</b>			ļ
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	73,980		72,696	1,28
50800515	BAR SPLICERS	EACH	771		771	<del> </del>
20000212	BUIL OF FISCHED	EACH	//1		//1	<del> </del>
50901050	STEEL RAILING, TYPE SM	FOOT	392		392	<del> </del>
	WIOTH RESTRICTION SIGNING	LSUM			-	<del> </del>

FILE NAME =	USER NAME ≈ laughlinrl	DESIGNED -	ERO	REVISED -				SUMMA	RY OF QUA	ANTITIES		F.A.P.	SECTIO	ON
c:\pw_work\PWIDOT\LAUGHLINRL\dØ159736\D96	Ø6ØØ8-sht-S00.dgn	DRAWN -	RAW	REVISED -	STATE OF ILLINOIS			•••••••••				310	(878)8	JR
	PLOT SCALE = 2.0000 '/ IN.	CHECKED -	JSA	REVISED -	DEPARTMENT OF TRANSPORTATION								· ·	
	PLOT DATE = Sep-03-2009 11:35:29AM	DATE -	08/18/09	REVISED -		SCALE: N.T.S.	SHEET NO	. OF	SHEETS	STA.	TO STA.		ILI	LINOIS FED

### ILLINOIS DEPARTMENT OF TRANSPORTATION

# SUMMARY OF QUANTITIES

			TOTAL	80%	FEDERAL 20%	STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITIY	RDWY QUANTITY <i>TOOO</i>	SN 085-0001 OUANTITY XO71-2A	BOX CULVER EXTENSION
51100300	SLOPE WALL 6 INCH	SQ YD	517.5		517.5	
51205200	TEMPORARY SHEET PILING	SQ FT	384		384	
51500100	NAME PLATES	EACH	1		1	
52000110	PERFORMED JOINT STRIP SEAL	FOOT	72.0		72.0	
					-	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12 .		12	
52100510	ANCHOR BOLTS, 3/4"	EACH	16			16
						,
52100520	ANCHOR BOLTS, 1"	EACH	24		24	
54003000	CONCRETE BOX CULVERTS	CU YD	7			7
58700300	CONCRETE SEALER	SQ FT	348		348	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	50.4		50.4	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	72 .		72	
63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	1,512.5	1,512.5		
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4		
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		
63200310	GUARDRAIL REMOVAL	FOOT	1,936	1,936		
		•				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12		
67100100	MOBILIZATION	L SUM	1	1		
70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1	1		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1		
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1		
					1	1

Γ				<del></del>	80%	FEDERAL 20%	STATE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITIY	RDWY QUANTITY 1000	SN 085-0001 QUANTITY XOTI - ZA	BOX CULVERT EXTENSION
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10		
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
L	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	274	. 274		
L	70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	4,480	4,480		·
L		,				ļ	
-	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	24	24	ļ	
-							
-	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,880	1,880		
-						-	
-	70400100	TEMPORARY CONCRETE BARRIER	FOOT	600	600		
-	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	600	600	-	
H	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	1001	000	000		
H	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	9	9		
H	72.00300	THE CONTINUE OF THE PROPERTY O	27,017	<u> </u>			
*	78001120	PAINT PAVEMENT MARKING-LINE 5"	FOOT	4,918	4,918		
-							
r	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	23	23	<b>-</b>	
T							
×	78200410	GUARDRAIL MARKERS, TYPE A	EACH	45	45		
							:
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
1	78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,023	1,023	<u> </u>	
-							
L	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	23 .	23		
١	V000F100	TREE PENOVAL	I CUM		1	-	
٣	X0325129	TREE REMOVAL	L SUM	1	1		
ı	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Γ	20013730	CONSTRUCTION DATEOUT	20011		<u> </u>		
1	7.0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2		
r	P 2 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			_			
1	Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
٢		, , , , , , , , , , , , , , , , , , , ,	<del> </del>			<del> </del>	
_		<u> </u>	<u> </u>	L	<u> </u>		J

• INDICATES SPECIALTY ITEM

• INDICATES SPECIALTY ITEM

FILE NAME ≈	USER NAME ≈ laughlinrl	DESIGNED -	- ERO	REVISED -			SUMMARY OF QU	IANTITIES	F.A.P. RTE.	SECTION		TOTAL SHEET NO.
ct/pw_work/PWIDOT/LAUGHLINRL/dØ159736/D96	06008-aht-500.dgn	DRAWN -	- RAW	REVISED -	STATE OF ILLINOIS				310	(87B)BR	SCHUYLER	32 4
	PLOT SCALE = 2.0000 '/ IN.	CHECKED -	- JSA	REVISED	DEPARTMENT OF TRANSPORTATION	,					CONTRACT	NO. 72895
	PLOT DATE = Sep-03-2009 11:35:36AM	DATE -	- 01/30/09	REVISED -		SCALE: N.T.S.	SHEET NO. 3 OF 32 SHEETS	STA. TO STA.		ILLINOIS FED. A	ID PROJECT	

DATE						
ВУ						
	SURVEYED	- LOLIED	ALIGNMENT CHECKED	RT. OF WAY CHECKED	CADD FILE NAME	
	FLAN		NOTE BOOK	į	ġ	



	ROADWAY REMOVAL SCHEDULE								
STATION	OFFSET	LOCATION	то	STATION	OFFSET	LOCATION	LENGTH	PAVEMENT REMOVAL	GUARDRAIL REMOVAL
							(FT)	(SQ YD)	(FT)
315+64.00	12.00'	RT	TO	325+11.74	12.00'	RT	947.7	164	
316+52.00	12.00'	LT	TO	325+11.77	12.00'	LT	859.8	87	
318+33.41	22.11'	RT	TO	325+02.42	17.15'	RT	669.0		669
318+99.26	21.01'	LT	TO	325+02.52	16.54'	LT	603.3		603
320+00.00			TO	324+78.71			478.7		
324+25.00		LT	TO	324+77.21		LT	52.2	5	
324+25.00		RT	ТО	324+77.21		RT	52.2	7	
326+84.78	15.04'	RT	TO	332+62.98	12.15'	RT	578.2	76	
326+93.26	16.72'	LT	TO	330+63.05	22.35'	LT	369.8		370
326+93.37	17.00'	RT	TO	329+87.44	22.26'	RT	294.1		294
327+11.51			TO	332+00.00			488.5		
327+12.79		LT	ТО	327+75.00		LT	62.2	6	
327+12.79		RT	ТО	327+75.00		RT	62.2	8	
							TOTAL	353	1936

TEMPORARY CONCRETE BARRIER SCHEDULE									
STATION LOCATION TO STATION LOCATION  TEMPORARY CONCRETE BARRIER  RELOCATE TEMPORA CONCRETE BARRIER									
	FOOT FOOT								
323+00.00 LT TO 329+00.00 LT STAC	E 1 600								
323+00.00 RT TO 329+00.00 RT STAC	E 2 600								
	,								
тот	AL 600 600								

SEEDING AND FERTILIZER SCHEDULE									
STATION OFFSET LOCATION TO STATION OFFSET LOCATION	SEEDING, CLASS 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH, METHOD 2	AGGREGATE GROUND LIMESTONE			
	(ACRE)	(POUND)	(POUND)	(POUND)	(ACRE)	(TON)			
315+64.00 TO 337+61.40	2.05	185	185	185	2.05	4.10			
TOTAL	0.05	405	405	405	0.05	4.40			
TOTAL	2.05	185	185	185	2.05	4.10			

	TREE REMOVAL SCHEDULE									
STATION	OFFSET	LOCATION	то	STATION	OFFSET	LOCATION	TREE REMOVAL, ACRES			
							(UNITS)			
321+94.21	66.89'	RT	то	322+99.03	66.89'	RT	0.0036			
324+44.07	52.82'	RT	ТО	325+19.02	66.94'	RT	0.0110			
326+57.40	37.78'	LT	то	326+86.15	43.42'	LT	0.0045			
331+25.64	37.73'	LT	ТО	331+73.56	59.05'	LT	0.0014			
						TOTAL	0.02			

	RAISED REFLECTIVE PAVEMENT MARKER SCHEDULE								
STATION	OFFSET	LOCATION	то	STATION	OFFSET	LENGTH	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFL. PVT MARKER REM	
							EACH	EACH	
1712+00.00		CENTER	то	1730+00.00		CENTER	23	23	
						TOTAL	23	23	

RI	ELOCATE	SIGN PA	NEL ASSEMBLY - T	YPE A
			SIGN	RELOCATE SIGN PANEL ASSEMBLY
				EACH
STATION	OFFSET (FT)	LOCATION		
317+88.13	31.44	RT	NO PASSING	1
318+66.75	27.97	LT	CROSS ROAD	1
319+53.39	21.68	RT	NO PARKING	1
321+32.98	21.90	LT	NO PARKING	1
321+88.51	21.95	LT	WARNING	1
323+15.65	23.06	RT	NO PARKING	1
324+97.93	18.60	LT	NO PARKING	1
327+00.28	17.92	RT	NO PARKING	1
328+82.98	21.33	LT	NO PARKING	1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORT** 

IMPACT ATTENUATOR SCHEDULE								
STATION	OFFSET LOCATION	IMPACT ATTENUATORS TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3					
		EACH	EACH					
323+00.00	STAGE 1	1						
329+00.00	STAGE 1	1						
323+00.00	STAGE 2		1					
329+00.00	STAGE 2		1					
	TOTAL	2	2					

RI	RELOCATE SIGN PANEL ASSEMBLY - TYPE A								
			SIGN	RELOCATE SIGN PANEL ASSEMBLY -					
				EACH					
STATION	OFFSET (FT)	LOCATION		•					
317+88.13	31.44	RT	NO PASSING	1					
318+66.75	27.97	LT	CROSS ROAD	1					
319+53.39	21.68	RT	NO PARKING	1					
321+32.98	21.90	LT	NO PARKING	1					
321+88.51	21.95	LT	WARNING	1					
323+15.65	23.06	RT	NO PARKING	1					
324+97.93	18.60	LT	NO PARKING	1					
327+00.28	17.92	RT	NO PARKING	1					
328+82.98	21.33	LT	NO PARKING	1					
		TOTAL		9					

		9								
		SC	CHEDULE OF QU	ANTITIES		F.A.P. RTE.	SECTION	COUNTY	TOTAL S SHEETS	NO.
				310	(87B)BR	SCHUYLER	80	5		
RTATION								CONTRAC	T NO. 72	B95
	CONF. NTS	SHEET NO	OF SHEETS	I CTA	TO STA		TI L THATC FEB	ATD DOG IFOT		

TEMPORARY AND PERMANENT PAVEMENT MARKING SCHEDULE

WHITE EDGE LINE

YELLOW SKIP DASH

WHITE EDGE LINE

YELLOW EDGE LINE

YELLOW EDGE LINE

WHITE EDGE LINE

TOTAL

EMBANKMENT

(FILL)

CU YD

573

463

1,040

WHITE EDGE LINE

LT

RT

CL

LR/RT

LT CL

EXCAVATION

ADJUSTMENT FOR

SHRINKAGE

CU YD

126

106

**EARTHWORK SCHEDULE** 

EARTH

EXCAVATION

CU Y D

168

141

STATION OFFSET LOCATION TO STATION OFFSET LOCATION

315+64.00 11.00 RT TO 337+50.00 11.00 RT 315+64.00 0.00 RT TO 337+50.00 0.00 RT

320+40.00 11.00 LT TO 331+60.00 12.00 LT

320+40.00 11.00 LT TO 331+60.00 12.00 LT 320+40.00 12.00 LT TO 331+60.00 12.00 LT 320+40.00 12.00 LT TO 329+25.00 12.00 LT 320+45.00 12.00 LT TO 324+77.21 12.00 LT

331+60.00 0.00 LT TO 331+60.00 11.95 LT

327+12.79 RT/LT TO 324+77.21 327+12.79 12.00 LT TO 329+40.00 12.00 329+44.00 0.00 CL TO 331+60.00 0.00

CL TO 320+40.00 0.00 RT TO 329+25.00 12.00

CL TO 332+00.00 0.00

LT TO 337+50.00 11.00 RT TO 324+00.00 0.00

 320+00.00
 0.00
 CL
 TO 324+77.21
 0.00
 CL
 YELLOW EDGE LINE

 320+00.00
 RT/LT
 TO 324+77.21
 LR/RT
 YELLOW EDGE LINE

LT TO 331+60.00 11.00 LT

RT TO 331+60.00 12.50 RT

 320+50.00
 12.50
 LT
 TO 331+00.00
 12.50
 LT
 WHITE EDGE LINE

 320+40.00
 12.00
 RT
 TO 331+60.00
 12.00
 RT
 WHITE EDGE LINE

 321+00.00
 11.00
 RT
 TO 331+50.00
 11.00
 RT
 WHITE EDGE LINE

RT/LT

315+64.00 11.00

324+00.00 0.00

320+40.00 11.00

320+40.00 12.50

322+65.00 0.00 322+75.00 12.00

327+12.79 0.00

LOCATION

315+00.00 TO 325+00.00

327+00.00 TO 337+27.42

EARTH EMBANKMENT SHRINKAGE FACTOR = 25%

PAVEMENT

MARKING -

(FT)

2186

546

2186

4918

PAVEMENT

MARKING

REMOVAL

372 98

273

91

1023

EARTH BALANCE WASTE (+) OR

SHORTAGE (-)

(FURNISHED

**EXCAVATION**)

CU YD

447 357

805

MARKING -

LINE 5"

(FT)

1120

1120 1120

4480

SHORT-TERM

PAVEMENT

MARKING

40

40

274

PAVEMENT

MARKING

REMOVAL

(SQ FT)

470

470

470

1880

PAVEMENT

MARKING -

(FT)

12

24

FILE NAME =	USER NAME = laughlinrl	DESIGNED	-	ER0	REVISED	-
c:\pw_work\PWIDOT\LAUGHLINRL\dØ159736\D96	Ø6ØØ8-sht-schedule.dgn	DRAWN	-	RAW	REVISED	-
	PLOT SCALE = 2.00000 '/ IN.	CHECKED	-	JSA	REVISED	-
	PLOT DATE = Sep-03-2009 11:37:28AM	DATE	-	08/18/09	REVISED	-

-LAIN SURVEYED PLOTTED ROTTED ROTTED RITE BOOK ALTOMENT CHECKED RITE WAY CHECKED NO. CADD FILE MANE			BY	DATE
	PLAN	SURVEYED		
		PLOTTED		
		ALIGNMENT CHECKED		
CADD FILE NAME		RT, OF WAY CHECKED		
	Ī	CADD FILE NAME		

TE	TEMPORARY EROSION CONTROL SCHEDULE								
STATION	OFFSET	LOCATION	PERIMETER EROSION BARRIER	TEMPORARY EROSION CONTROL SEEDING	AGGREGATE (EROSION CONTROL)				
	(FT)		(FT)	(POUND)	(TON)				
319+00 TO 325+42		RT	685						
315+64 TO 337+61.40				500					
318+80 TO 325+42		LT	677						
316+73.98	34.28	RT			4				
317+55.39	33.39	LT			4				
317+73.98	34.28	RT			4				
318+55.39	33.39	LT			4				
318+66.68	35.63	LT			4				
318+73.98	32.58	RT			4				
318+88.74	35.6	RT			4				
326+55 TO 329+95		RT	356						
326+55 TO 334+50		LT	804						
329+89.66	39.65	RT			4				
329+97.76	36.57	RT			4				
330+97.76	37.61	RT			4				
331+97.76	36.97	RT			4				
332+97.76	36.48	RT			4				
333+97.76	35.68	RT			4				
334+42.10	42.92	LT			4				
334+51.40	39.9	LT			4				
334+91.76	35.4	RT			4				
335+51.16	32.95	LT			4				
335+97.76	35.4	RT			4				
336+51.16	33.31	LT			4				
336+95.96	38.97	RT			4				
337+05.56	41.17	LT			4				
			2522	500	84				

1		BY
PROFILE	PROFILE SURVEYED	
	PLOTTED	
NOTE BOOK	GRADES CHECKED	
100	B.M. NOTED	
ě	STRUCTURE NOTATINS CHIKD	

			(	CULVER	TEXTE	NSION SC	HEDULE	
STATION	OFFSET	LOCATION	то	STATION	OFFSET	LOCATION	BOX CULVERT END SECTION	CONCRETE BOX CULVERTS
							(CU YD)	(CU YD)
337+10.77	29.21'	LT	TO				1.5	
337+11.36	28.19'	LT	ТО	337+15.34	21.24'	LT		2
337+40.35	22.55'	RT	ТО	337+44.33	29.50'	RT		2
337+44.94	30.56'	RT	ТО				1.5	
							3	4

FILE NAME =	USER NAME = laughlinrl	DESIGNED - ERO	REVISED -			SCHEDULE OF QUANTITIES	
c:\pw_work\PWIDOT\LAUGHLINRL\dØ159736\D96	Ø6008-sht-schedule.dgn	DRAWN - RAW	REVISED -	STATE OF ILLINOIS		SUILDULE OF GOARTHIES	
	PLOT SCALE = 2.00000 '/ IN.	CHECKED - JSA	REVISED -	DEPARTMENT OF TRANSPORTATION			
	PLOT DATE = Sep-03-2009 11:37:36AM	DATE - 01/30/09	REVISED -		SCALE: N.T.S.	SHEET NO. 5 OF 32 SHEETS STA.	TO STA.

		PERMAN	IENT EF	ROSION CONT	ROL SCHEDU	LE
LO	LOCATION		LT/RT	HEAVY DUTY EXCELSIOR BLANKET	STONE RIPRAP, CLASS A4, 16"	FILTER FABRIC
STATION	TO	STATION		(SQ YD)	(SQ YD)	(SQ YD)
319+50.00		325+40.41	RT	1836		
319+50.00		325+40.47	LT	1081		
324+88.71		325+08.71	LT/RT		47	47
326+81.29		327+01.29	LT/RT		47	47
326+55.24		333+50.00	LT	1026		
326+55.28		328+50.00	RT	276		
336+88.46		337+29.08	LT		41	
337+28.06		337+66.74	RT			41
Т	OTAL:	 S		3219	135	135

F.A.P. RTE. 310

SECTION (87B)BR

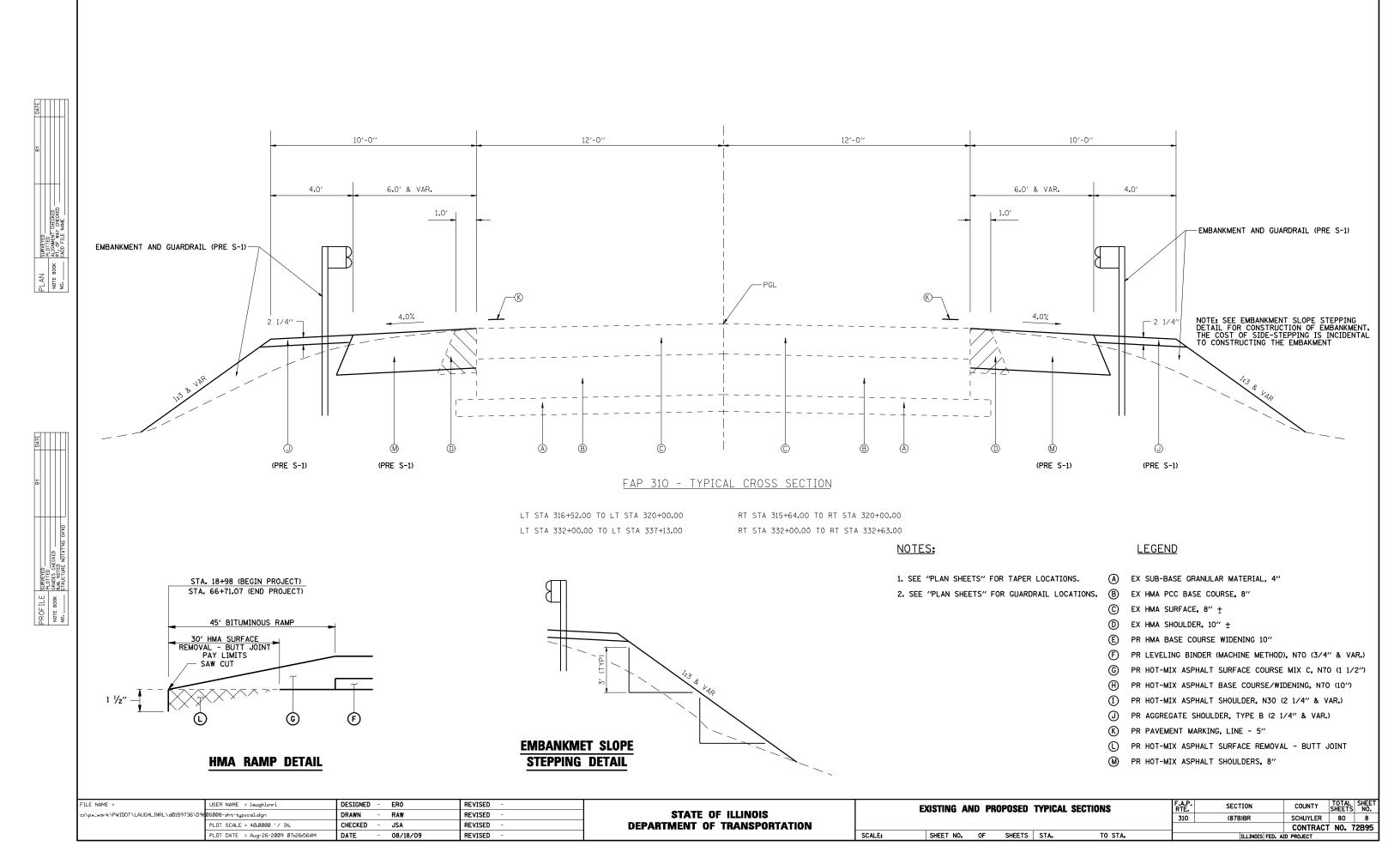
DATE						
ΒY						
	SURVEYED	PLOTTED	ALIGNMENT CHECKED	RT. OF WAY CHECKED	CADD FILE NAME	
	FLAN		NOTE BOOK	Š	ģ	

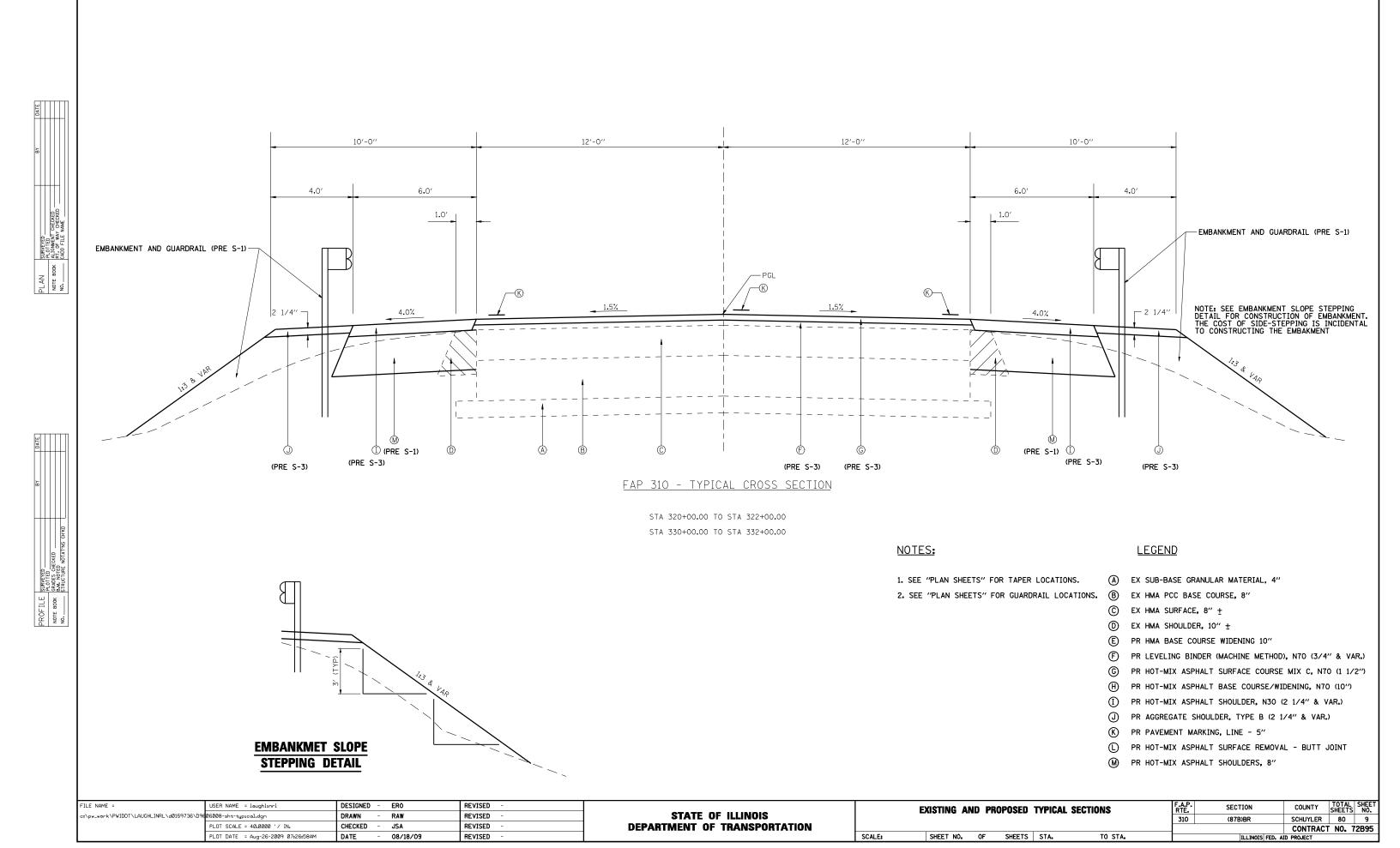
84
SURVEYED
PROFILE SURVEYED

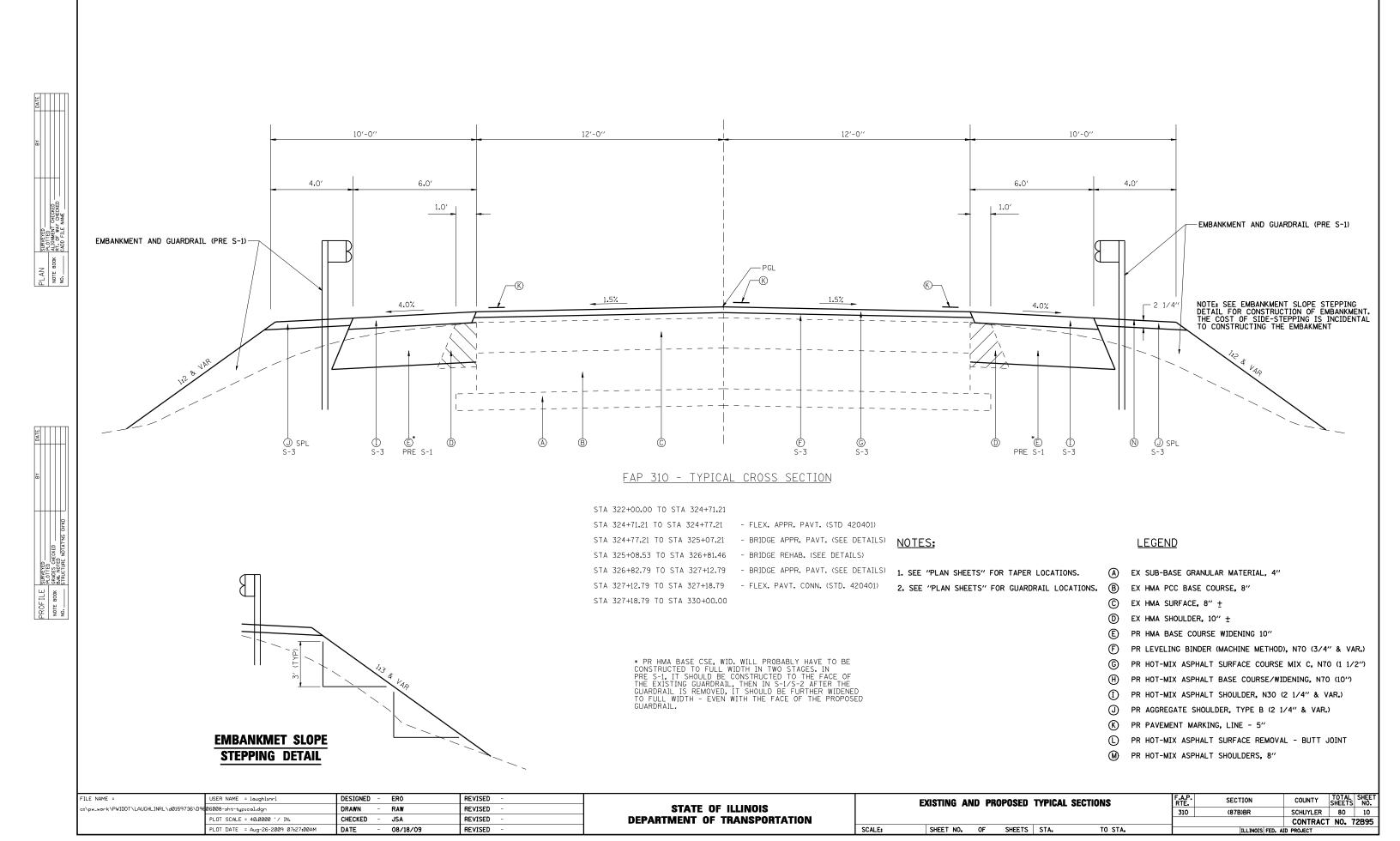
								PAVING	SCHEDULE						
STATION	то	STATION	LOCATION	LENGTH	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	LEVELING BINDER (MACHINE METHOD), N70	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	BRIDGE APPROACH PAVEMENT	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	AGGREGATE SHOULDERS, TYPE B (SPECIAL)	HOT-MIX ASPHALT SHOULDERS	HOT-MIX ASPHALT SHOULDERS, 8"
				(FT)	(SQ YD)	(TON)	(TON)	(TON)	(SQ YD)	(TON)	(SQ YD)	(SQ YD)	(TON)	(TON)	(SQ YD)
315+64.00	то	324+89.21	RT	925.2									53.7		
315+64.00	TO	322+00.00	RT	636.0											410.7
316+52.00	TO	324+89.21	LT	837.2									48.6		
316+52.00	TO	322+00.00	LT	548.0											347.0
320+00.00	TO	320+30.00		30.0					80.0						
320+00.00	TO	320+30.00		30.0											
320+00.00	TO	324+71.21		471.2		0.97	5.0	53.6		107.2					
320+00.00	TO	324+71.21	RT	471.2										40.1	
320+00.00	TO	324+71.21	LT	471.2										40.1	
322+00.00	TO	324+71.21	RT	271.2	180.8										
322+00.00	TO	324+71.21	LT	271.2	180.8										
324+25.00	TO	324+77.21	LT	52.2				5.1							
324+25.00	TO	324+77.21	RT	52.2				6.6							
324+48.71	ТО	324+78.71		30.0											
324+71.21	TO	324+77.21		6.0								24.0			
324+77.21	ТО	325+07.21		30.0							120.0				
326+82.79	TO	327+12.79		30.0							120.0				
327+12.79	TO	327+18.79		6.0								24.0			
327+18.79	TO	330+00.00	RT	281.2	187.5										
327+18.79	TO	330+00.00	LT	281.2	187.5										
327+12.79	ТО	332+00.00	RT	487.2										40.9	
327+12.79	TO	332+00.00	LT	487.2										40.9	
327+12.79	ТО	327+75.00	LT	62.2				6.1							
327+12.79	TO	327+75.00	RT	62.2				7.8					+		
326+82.29	ТО	327+75.00		93											
327+00.71	TO	332+63.00	RT	562.3									33.0		
327+00.71	TO	337+13.00	LT	1012.3									58.6		
327+11.46	то	327+41.46		30.0									1		
327+18.79	то	332+00.00		481.2		0.99	5.0	54.7		109.4					
327+11.51	то	332+00.00		488.5		5.55	0.0	J		100.1					
330+00.00	TO	332+63.00	RT	263.0									1		157.8
330+00.00	TO	337+13.00	LT	713.0											462.0
331+70.00	TO	332+00.00	LI	30.0					80.0				+		402.0
331+70.00	TO	332+00.00		30.0					00.0				+		
331+70.00	10	332+00.00		30.0											
				TOTAL	736.6	1.96	10.0	133.9	160.0	216.6	240.0	48.0	193.9	162.0	1377.5

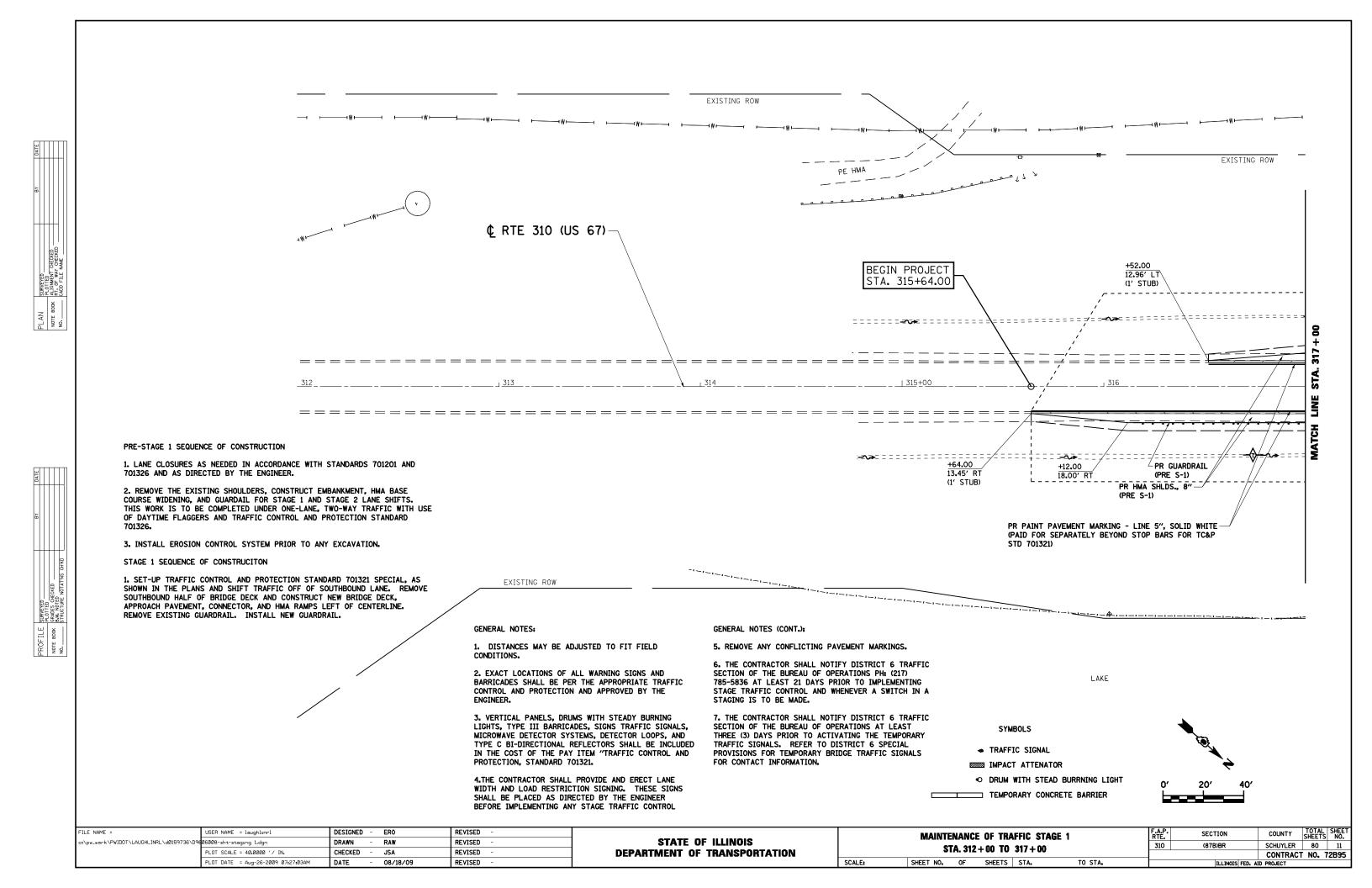
			G	UARDRAIL SC	HEDULE		
				TRAFFI	TERMINAL		
LO	CATION	LT/RT	STEEL PLATE BEAM GUARD- RAIL, TYPE A	TYPE 1, SPECIAL (TAN)	TYPE 6A	GUARDRAIL MARKER TYPE A	MARKER - DIRECT APPLIED
STATION	TO STATION		(F00T)	(EACH)	(EACH)	(EACH)	(EACH)
316+14.78	316+64.78	RT		1			1
316+64.78	324+64.78	RT	800.0			11	
317+02.28	317+52.28	LT		1			1
317+52.28	324+64.78	LT	712.5			10	
324+64.78	325+08.53	LT			1	1	
324+64.78	325+08.53	RT			1	1	
326+81.41	327+25.16	LT			1	1	
326+81.41	327+25.16	RT			1	1	
327+25.16	331+62.66	RT	437.5			6	
327+25+16	336+12.66	LT	887.5			12	
331+62.66	332+12.66	RT		1			1
336+12.66	336+62.66	LT		1			1
T	OTALS		1512.5	4	4	45	4

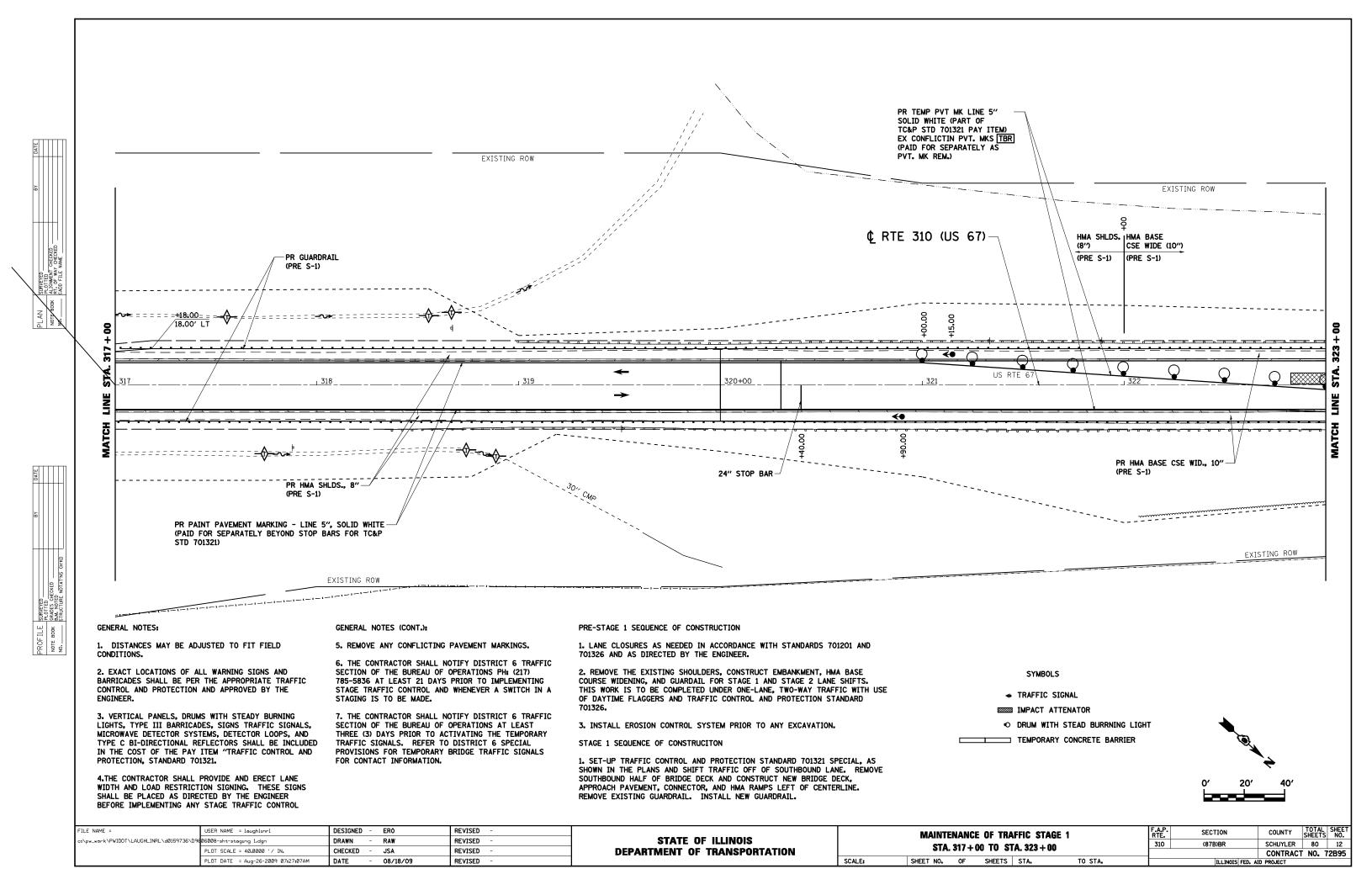
Ī	ILE NAME =	USER NAME = laughlinrl	DESIGNED - ERO	REVISED -			SCHEDULE OF QUA	ANTITIES		F.A.P.	SECTION	COUNTY	TOTAL SHEET
- 1	:\pw_work\PWIDOT\LAUGHLINRL\dØ159736\D96	Ø6ØØ8-sht-schedule.dgn	DRAWN - RAW	REVISED -	STATE OF ILLINOIS		CONEDULE OF GOA	44111120		310	(87B)BR	SCHUYLER	32 7
- 1		PLOT SCALE = 2.0000 '/ IN.	CHECKED - JSA	REVISED -	DEPARTMENT OF TRANSPORTATION								NO. 72B95
L		PLOT DATE = Sep-03-2009 11:38:00AM	DATE - 01/30/09	REVISED -		SCALE: N.T.S.	SHEET NO. 5 OF 32 SHEETS	STA.	TO STA.		ILLINOIS FED. AI		

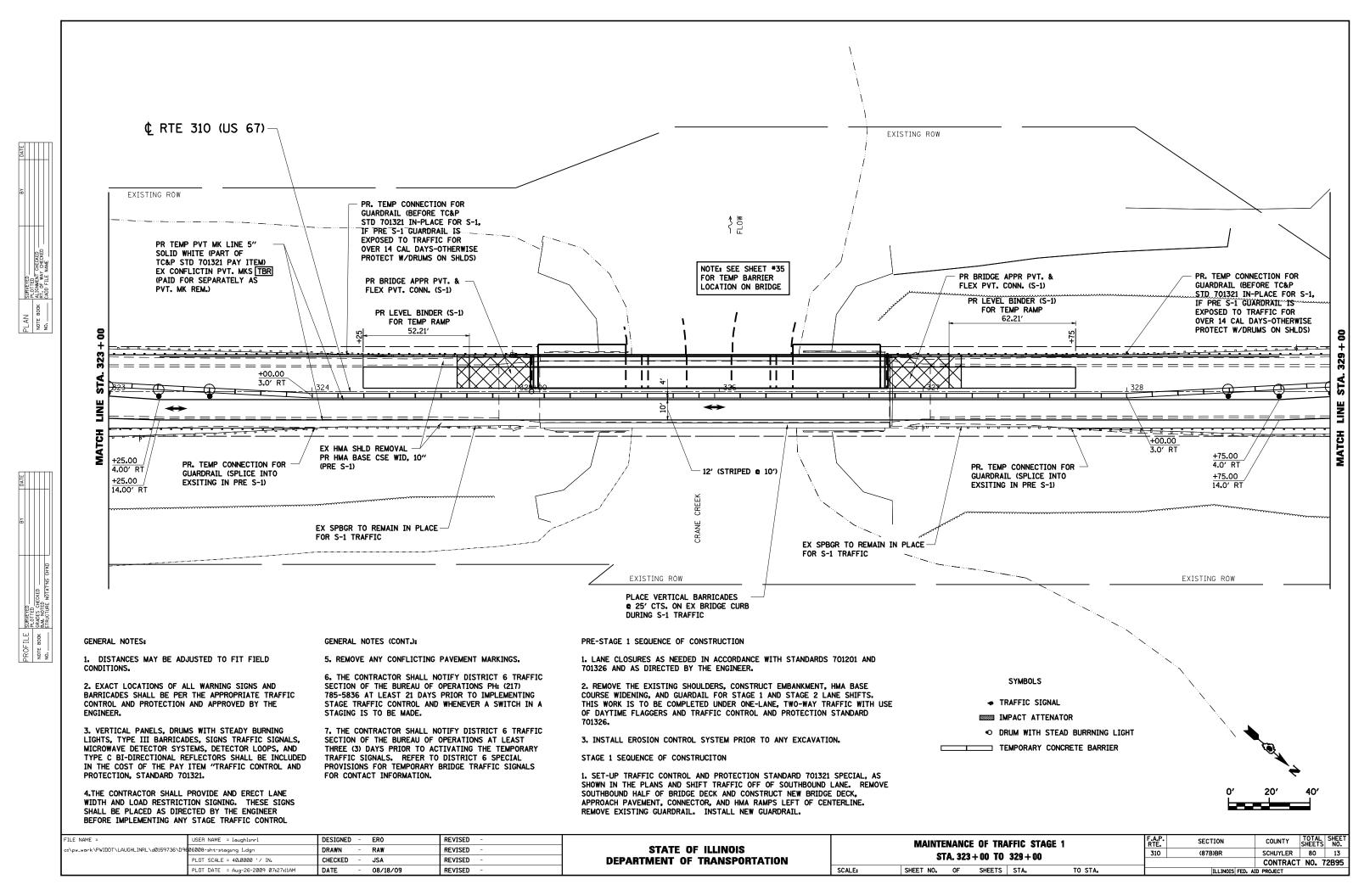


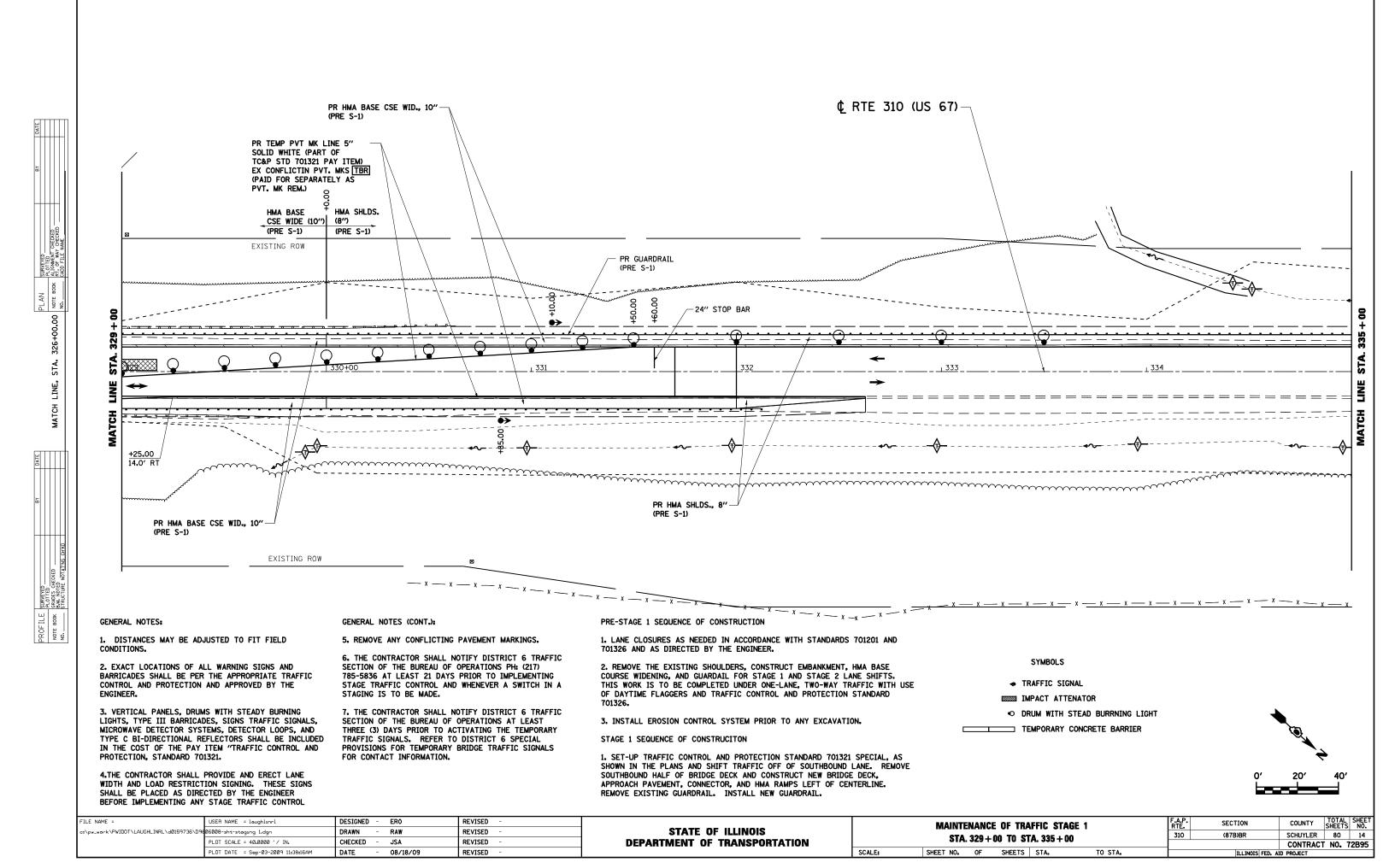




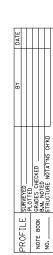


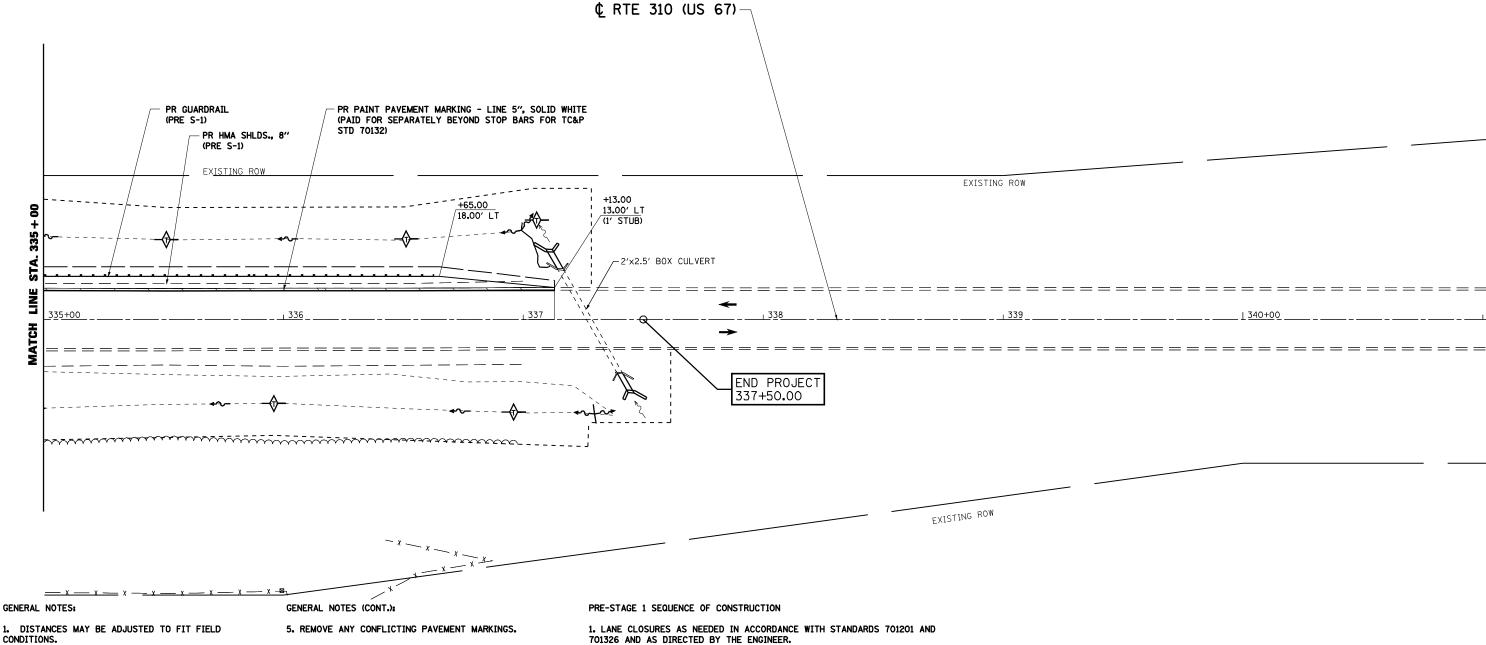












2. EXACT LOCATIONS OF ALL WARNING SIGNS AND BARRICADES SHALL BE PER THE APPROPRIATE TRAFFIC CONTROL AND PROTECTION AND APPROVED BY THE ENGINEER.

3. VERTICAL PANELS, DRUMS WITH STEADY BURNING LIGHTS, TYPE III BARRICADES, SIGNS TRAFFIC SIGNALS, MICROWAVE DETECTOR SYSTEMS, DETECTOR LOOPS, AND TYPE C BI-DIRECTIONAL REFLECTORS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, STANDARD 701321.

4.THE CONTRACTOR SHALL PROVIDE AND ERECT LANE WIDTH AND LOAD RESTRICTION SIGNING. THESE SIGNS SHALL BE PLACED AS DIRECTED BY THE ENGINEER BEFORE IMPLEMENTING ANY STAGE TRAFFIC CONTROL

6. THE CONTRACTOR SHALL NOTIFY DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS PH: (217) 785-5836 AT LEAST 21 DAYS PRIOR TO IMPLEMENTING STAGE TRAFFIC CONTROL AND WHENEVER A SWITCH IN A STAGING IS TO BE MADE.

7. THE CONTRACTOR SHALL NOTIFY DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS AT LEAST THREE (3) DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS. REFER TO DISTRICT 6 SPECIAL PROVISIONS FOR TEMPORARY BRIDGE TRAFFIC SIGNALS FOR CONTACT INFORMATION.

2. REMOVE THE EXISTING SHOULDERS, CONSTRUCT EMBANKMENT, HMA BASE COURSE WIDENING, AND GUARDAIL FOR STAGE 1 AND STAGE 2 LANE SHIFTS. THIS WORK IS TO BE COMPLETED UNDER ONE-LANE, TWO-WAY TRAFFIC WITH USE OF DAYTIME FLAGGERS AND TRAFFIC CONTROL AND PROTECTION STANDARD

3. INSTALL EROSION CONTROL SYSTEM PRIOR TO ANY EXCAVATION.

STAGE 1 SEQUENCE OF CONSTRUCITON

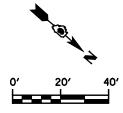
1. SET-UP TRAFFIC CONTROL AND PROTECTION STANDARD 701321 SPECIAL, AS SHOWN IN THE PLANS AND SHIFT TRAFFIC OFF OF SOUTHBOUND LANE. REMOVE SOUTHBOUND HALF OF BRIDGE DECK AND CONSTRUCT NEW BRIDGE DECK, APPROACH PAVEMENT, CONNECTOR, AND HMA RAMPS LEFT OF CENTERLINE. REMOVE EXISTING GUARDRAIL. INSTALL NEW GUARDRAIL.

### SYMBOLS

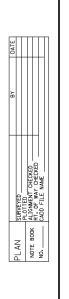
**◆ TRAFFIC SIGNAL** 

IMPACT ATTENATOR

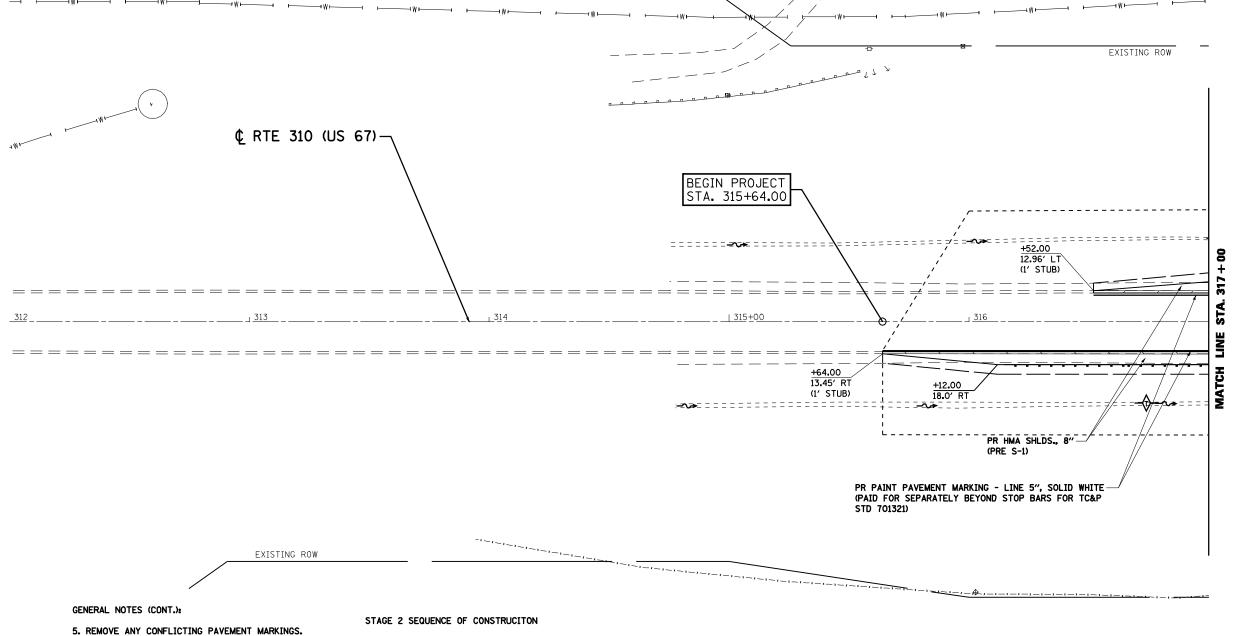
O DRUM WITH STEAD BURRNING LIGHT TEMPORARY CONCRETE BARRIER



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### GENERAL NOTES:

- 1. DISTANCES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
- 2. EXACT LOCATIONS OF ALL WARNING SIGNS AND BARRICADES SHALL BE PER THE APPROPRIATE TRAFFIC CONTROL AND PROTECTION AND APPROVED BY THE ENGINEER.
- 3. VERTICAL PANELS, DRUMS WITH STEADY BURNING LIGHTS, TYPE III BARRICADES, SIGNS TRAFFIC SIGNALS, MICROWAVE DETECTOR SYSTEMS, DETECTOR LOOPS, AND TYPE C BI-DRECTIONAL REFLECTORS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, STANDARD 701321.

4.THE CONTRACTOR SHALL PROVIDE AND ERECT LANE WIDTH AND LOAD RESTRICTION SIGNING. THESE SIGNS SHALL BE PLACED AS DIRECTED BY THE ENGINEER BEFORE IMPLEMENTING ANY STAGE TRAFFIC CONTROL

6. THE CONTRACTOR SHALL NOTIFY DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS PH: (217) 785-5836 AT LEAST 21 DAYS PRIOR TO IMPLEMENTING STAGE TRAFFIC CONTROL AND WHENEVER A SWITCH IN A STAGING IS TO BE MADE.

7. THE CONTRACTOR SHALL NOTIFY DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS AT LEAST THREE (3) DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS. REFER TO DISTRICT 6 SPECIAL PROVISIONS FOR TEMPORARY BRIDGE TRAFFIC SIGNALS FOR CONTACT INFORMATION.

1. SET-UP TRAFFIC CONTROL AND PROTECTION STANDARD 701321 SPECIAL, AS SHOWN IN THE PLANS AND SHIFT TRAFFIC OFF OF NORTHBOUND LANE. REMOVE NORTHBOUND HALF OF BRIDGE DECK AND CONSTRUCT NEW BRIDGE DECK, APPROACH PAVEMENT, CONNECTOR, AND HMA RAMPS LEFT OF CENTERLINE. REMOVE EXISTING GUARDRAIL. INSTALL NEW GUARDRAIL.

EXISTING ROW

### SYMBOLS

- TRAFFIC SIGNAL
- IMPACT ATTENATOR
- O DRUM WITH STEAD BURRNING LIGHT

  TEMPORARY CONCRETE BARRIER

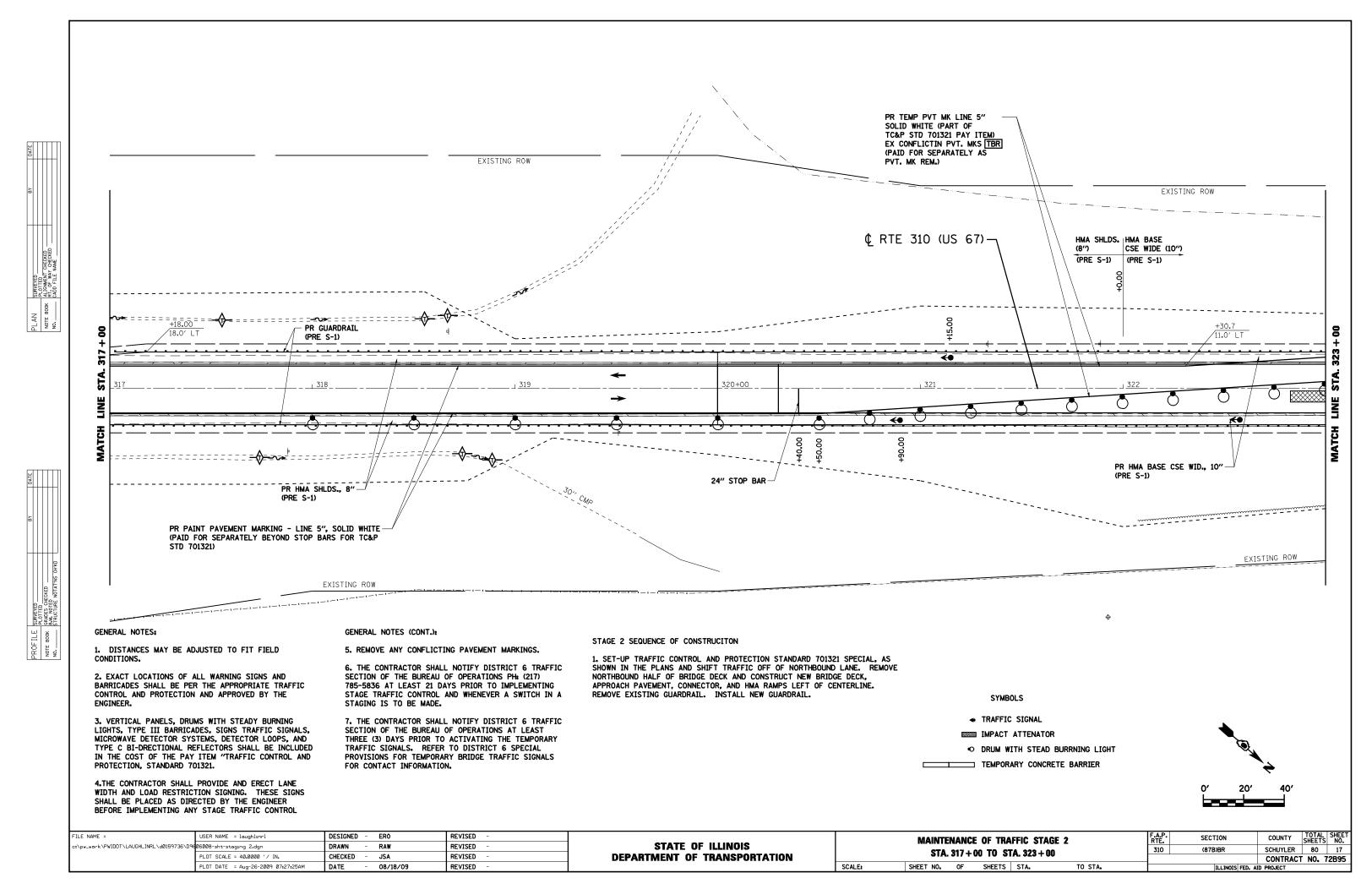


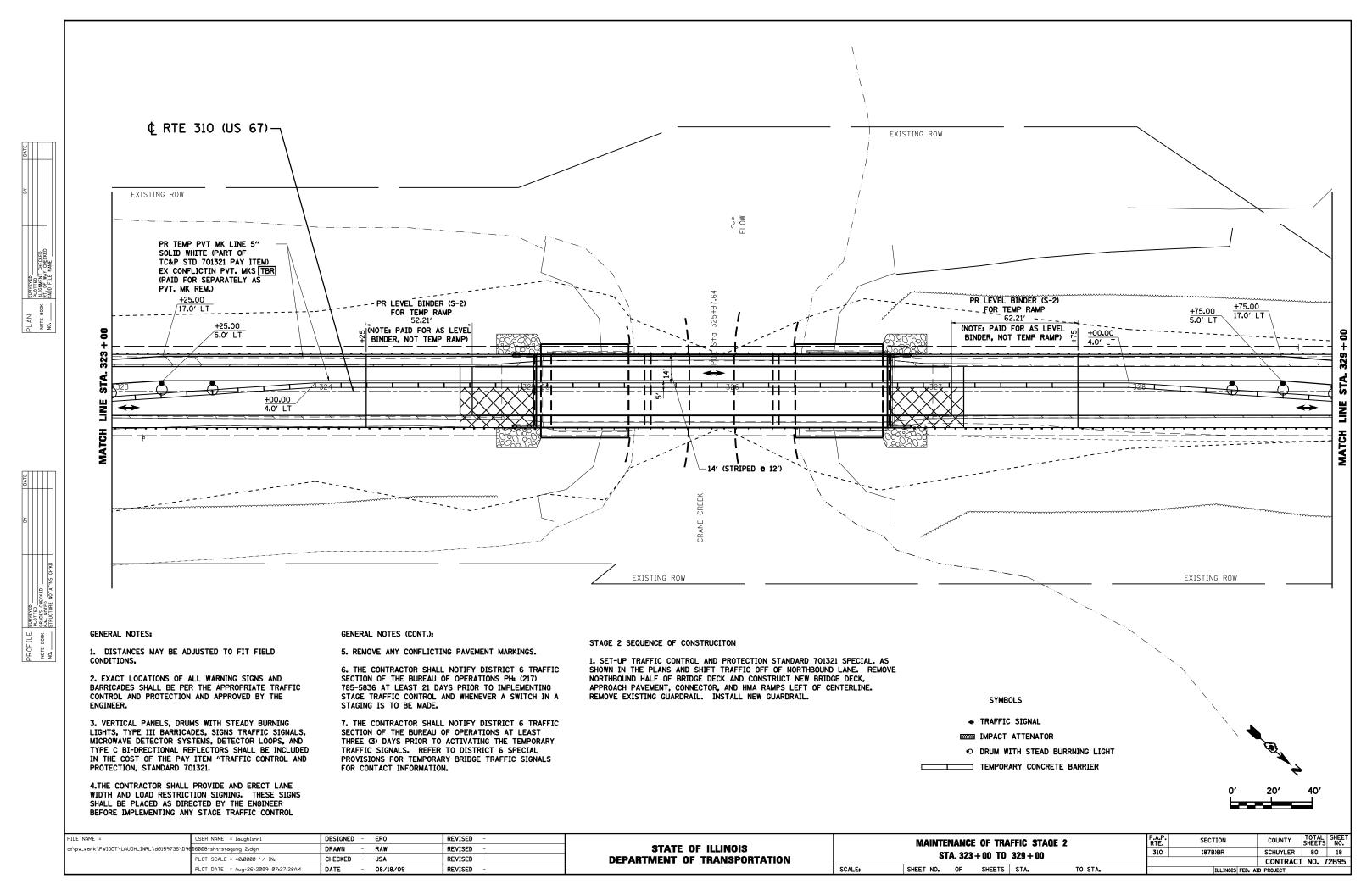
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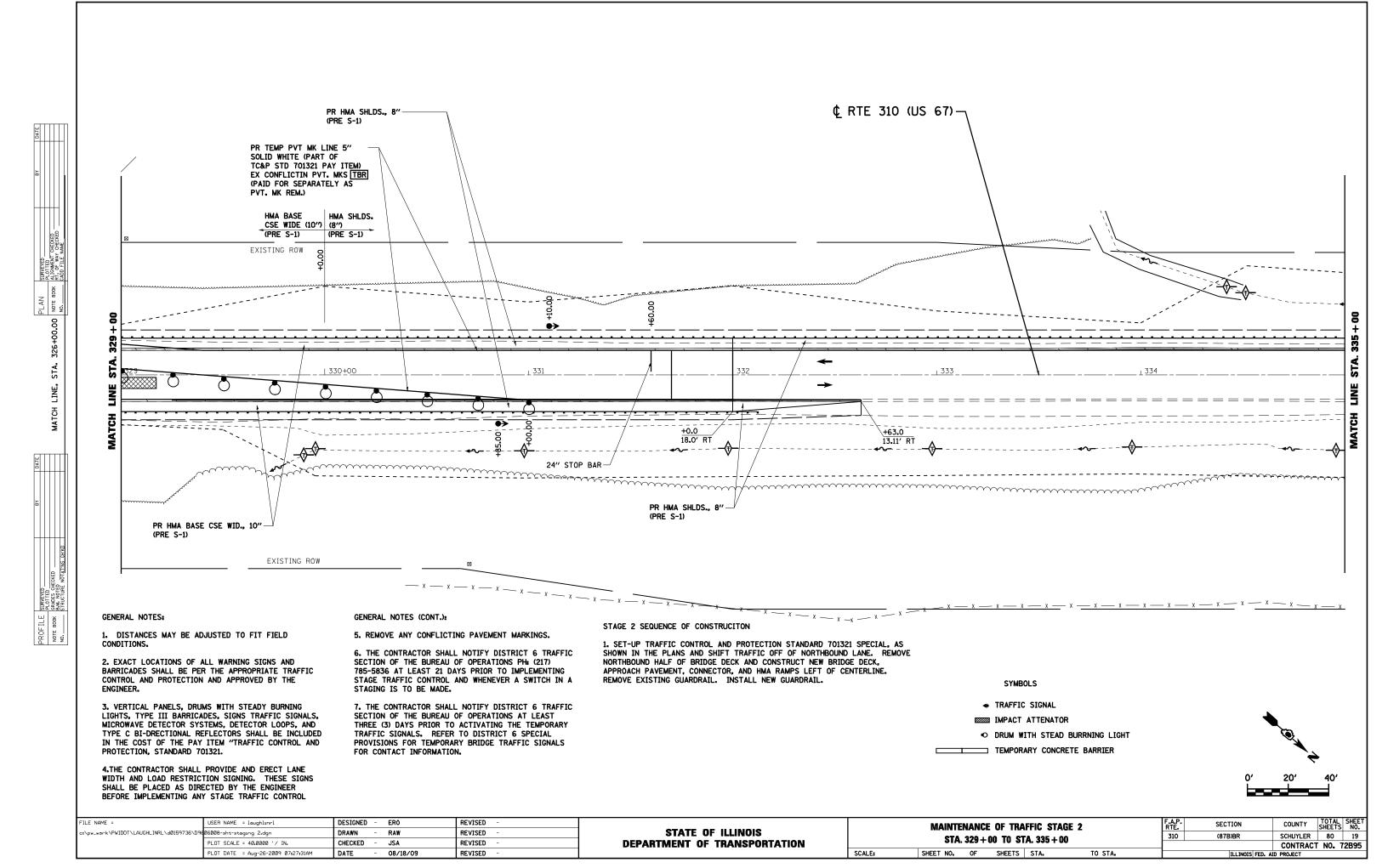
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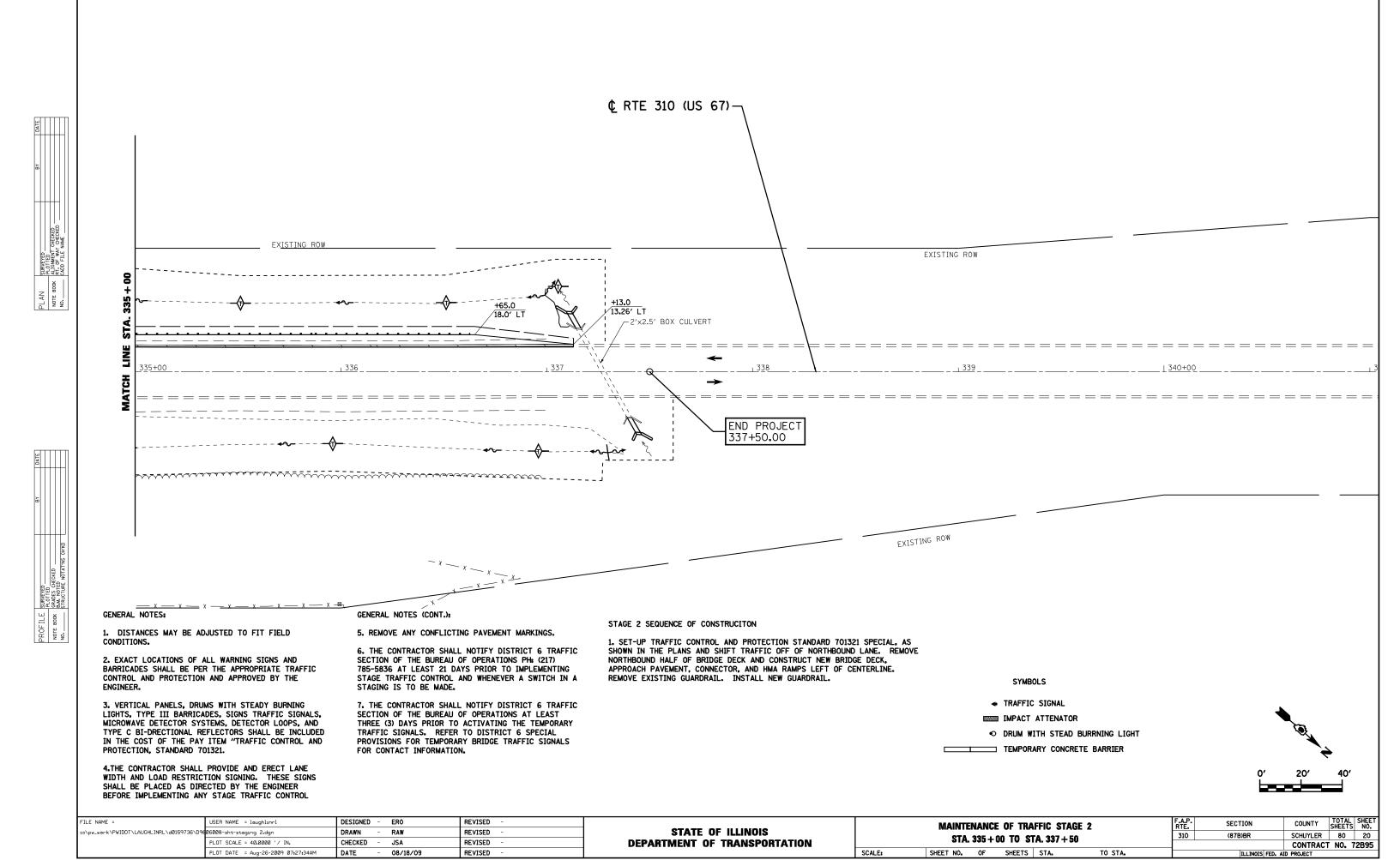
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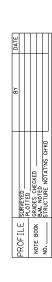


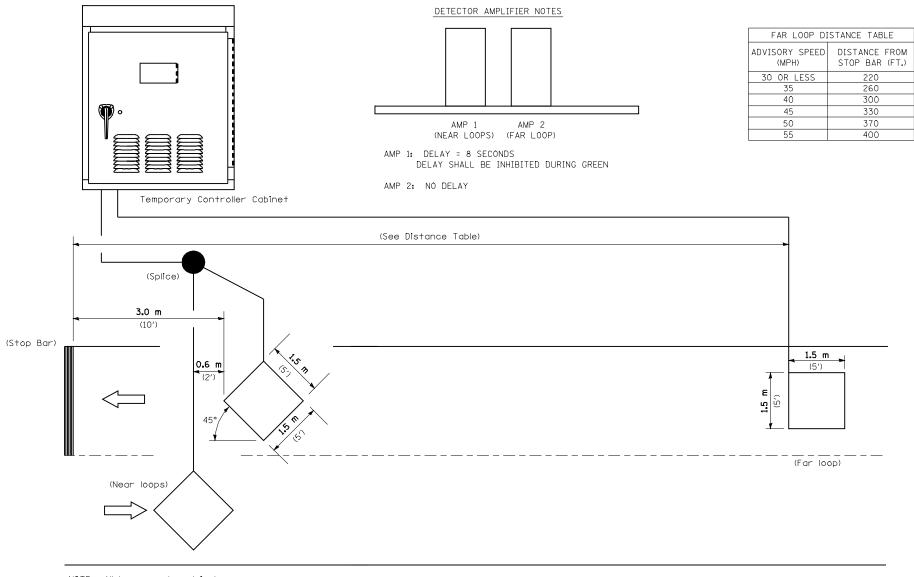












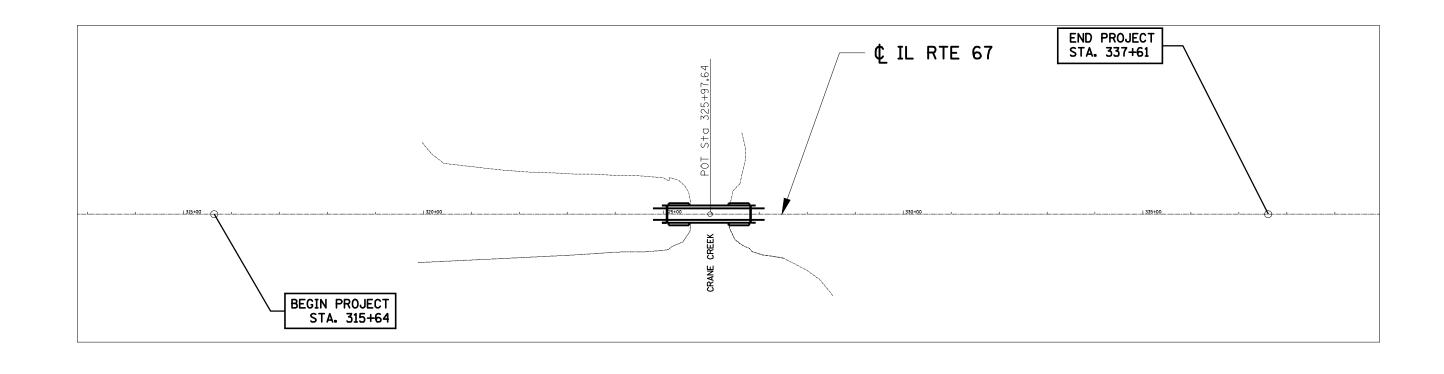
NOTE: All loops centered in lane.

## INDUCTION LOOP DETECTOR

### BRIDGE TEMP SIGNAL.DGN

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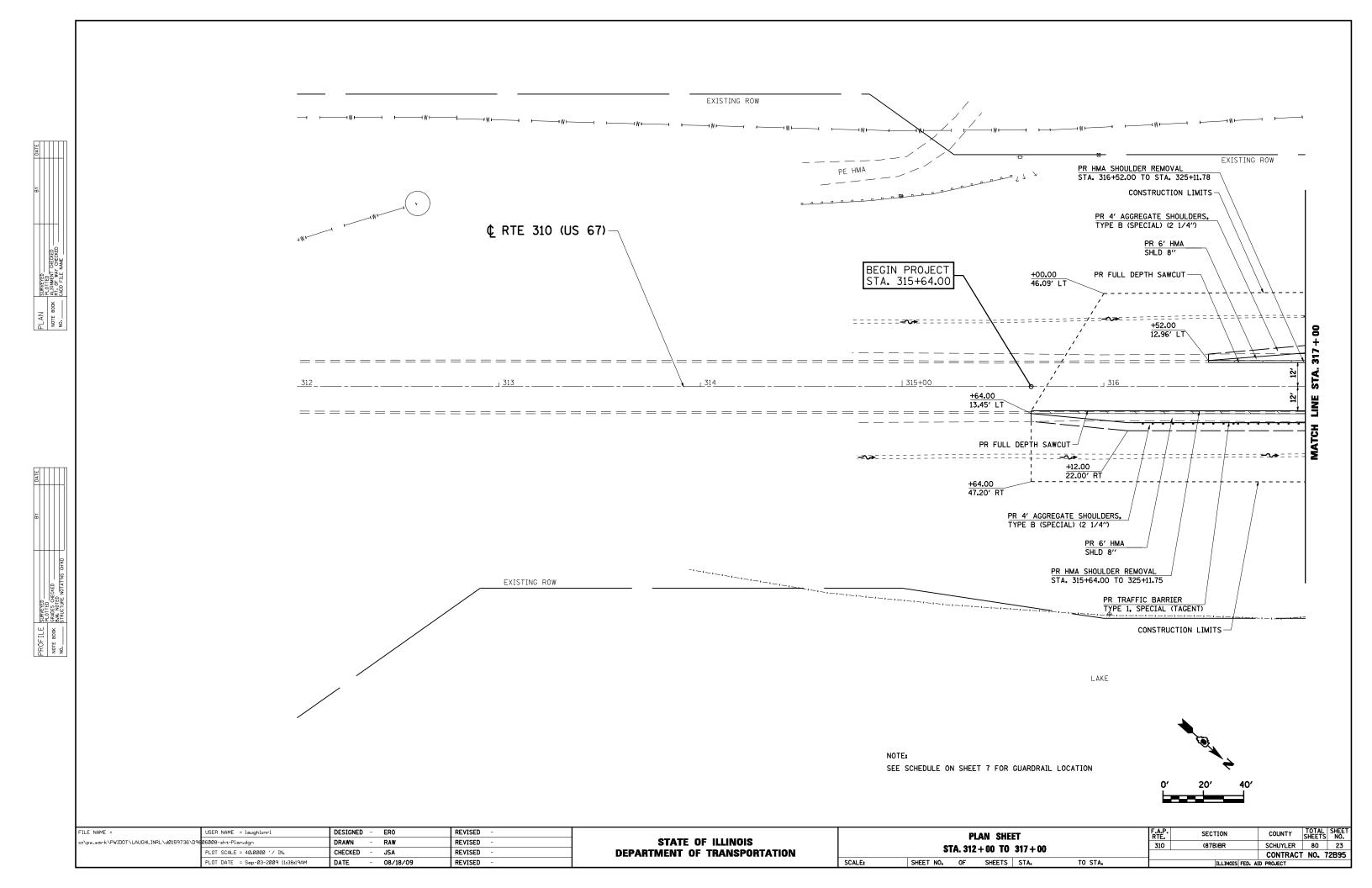


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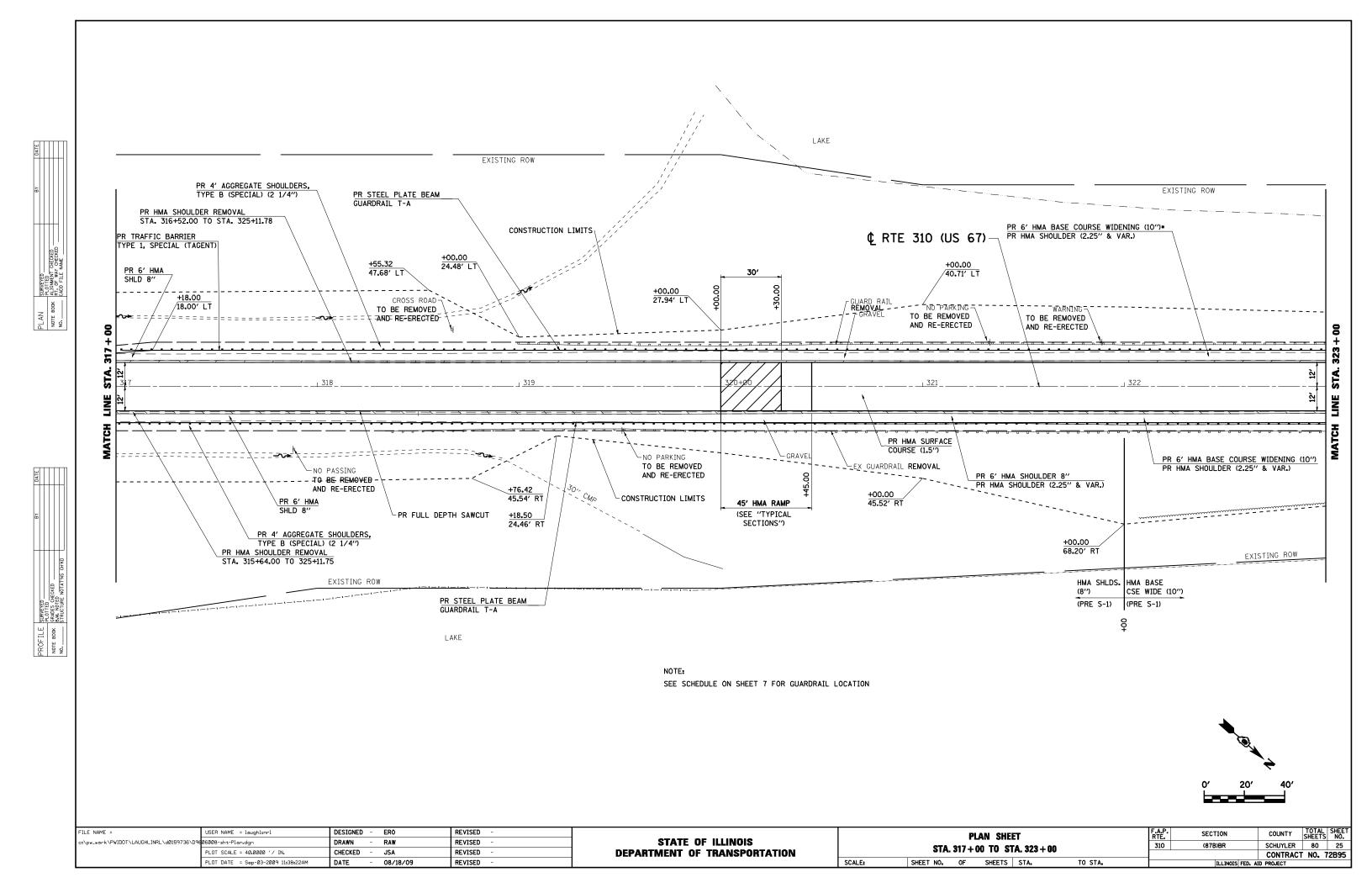
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FOUND CHISELED """ ON
TOP OF NORTHEAST
CORNER BRIDGE #085-0001
STA. 326+80, 16.6' RT.
ELEV. 535.97

B.M. DA 2
FOUND CHISELED """ ON
TOP CENTER OF NORTH
CONCRETE HEADWALL
STA. 312+01, 22.3' RT.
ELEV. 577.71

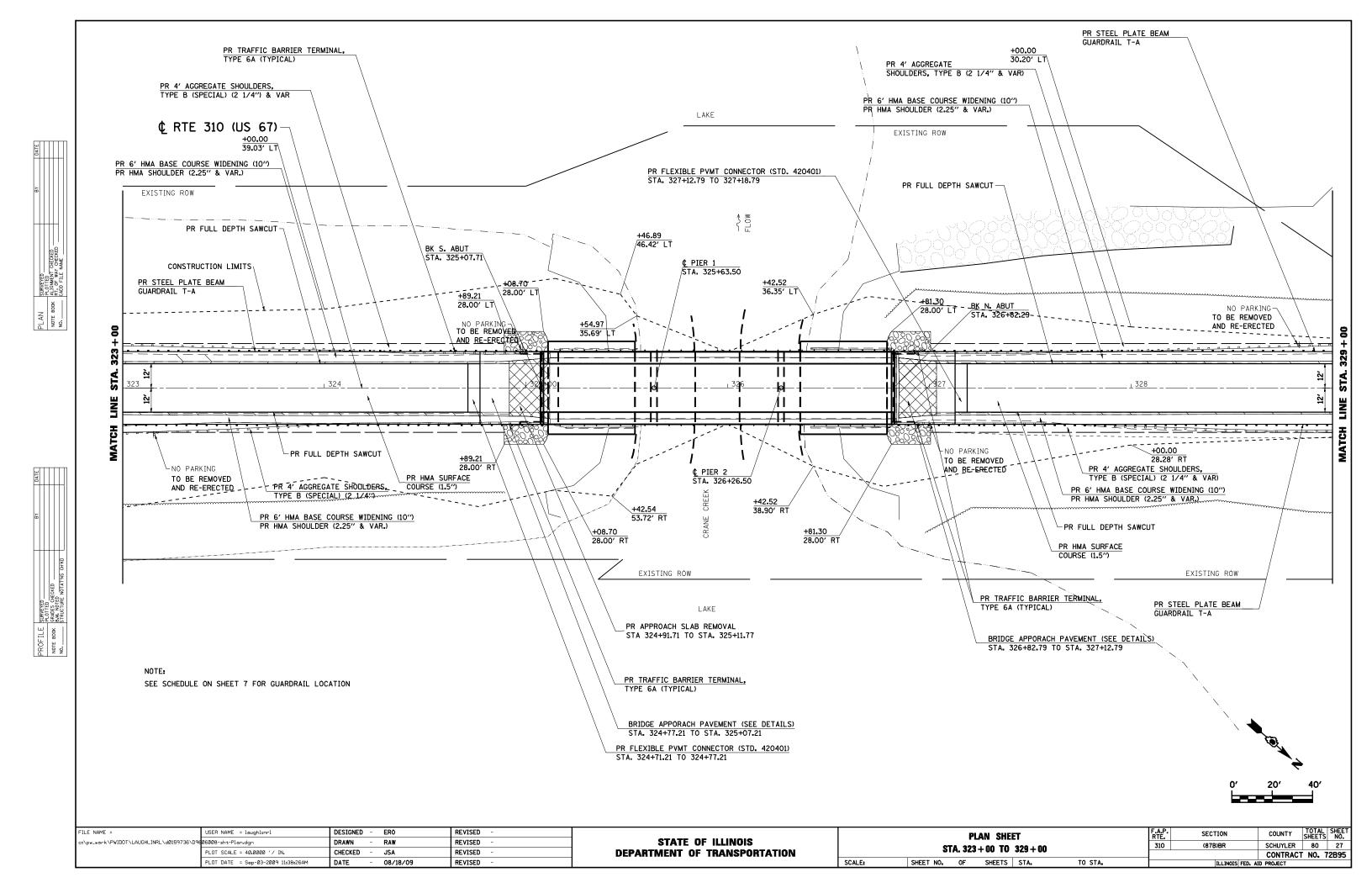
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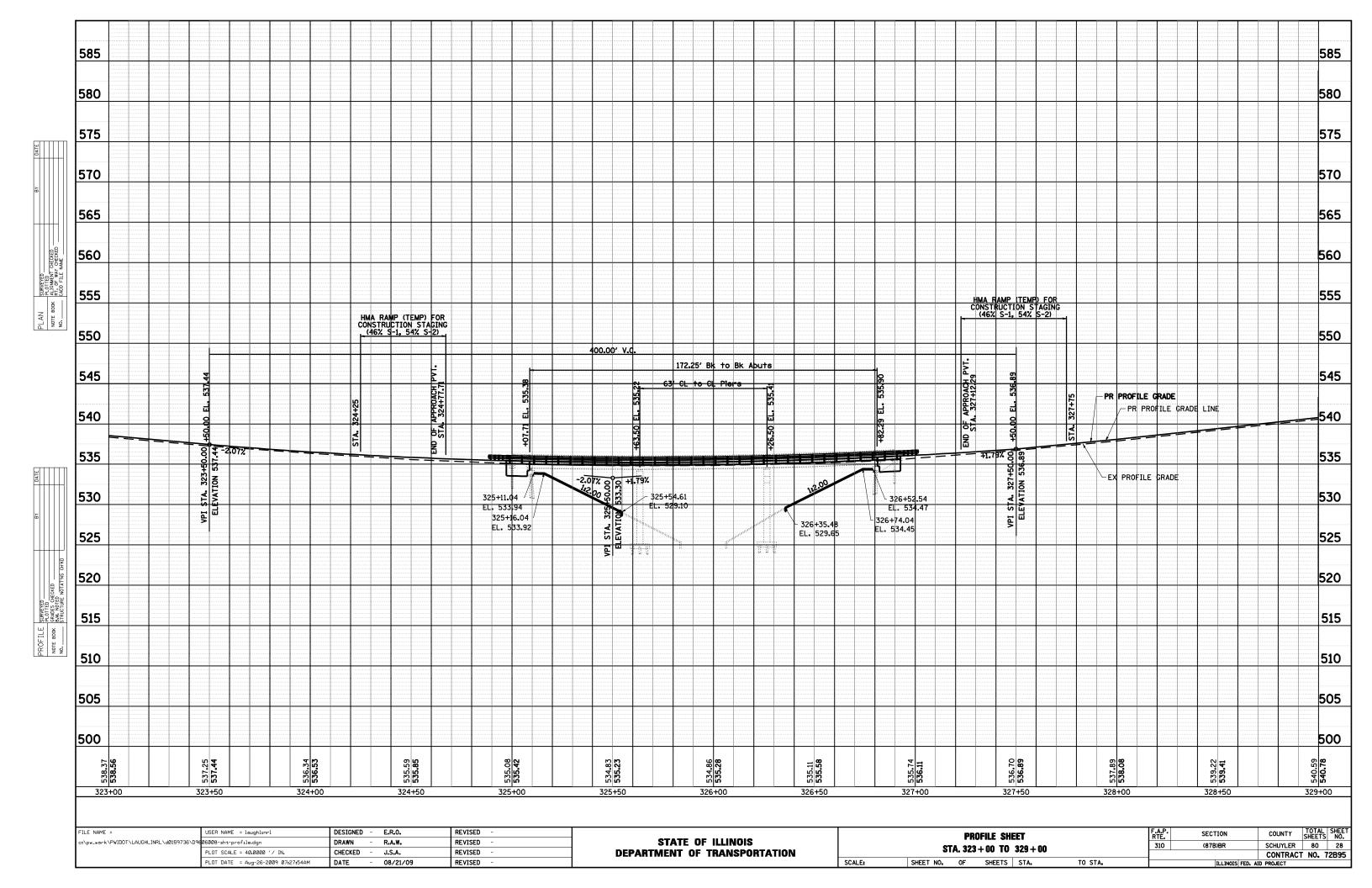


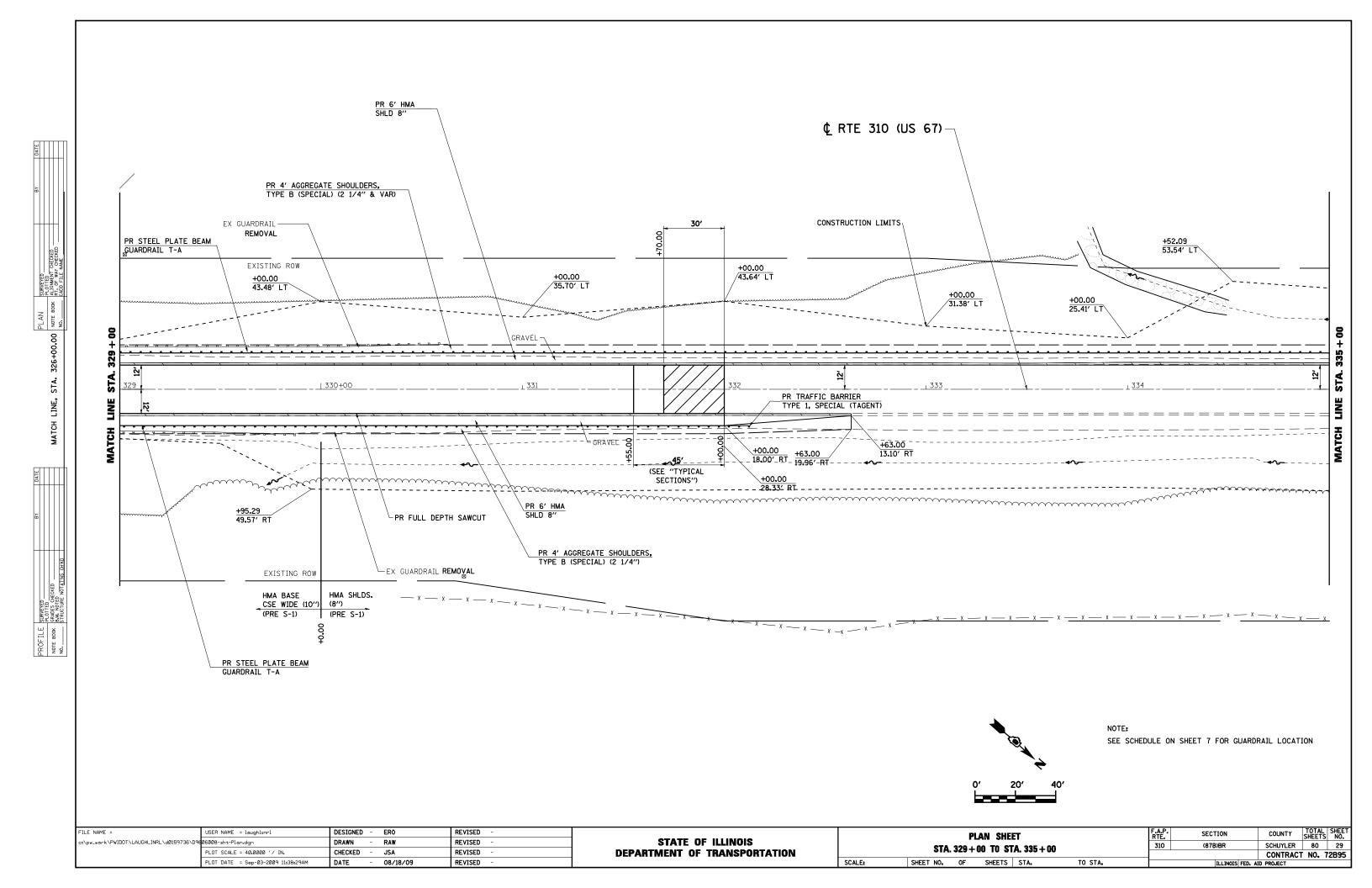
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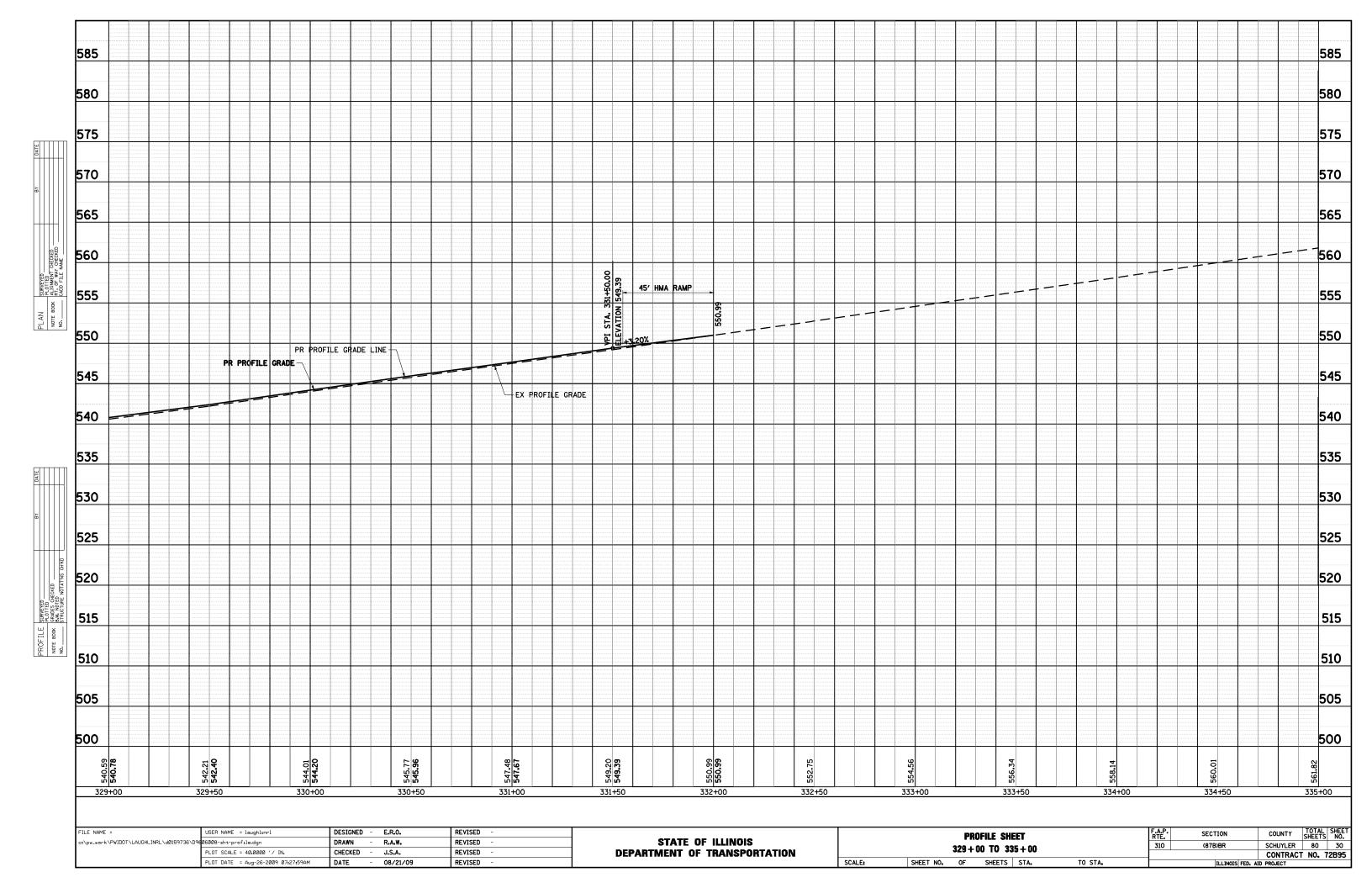


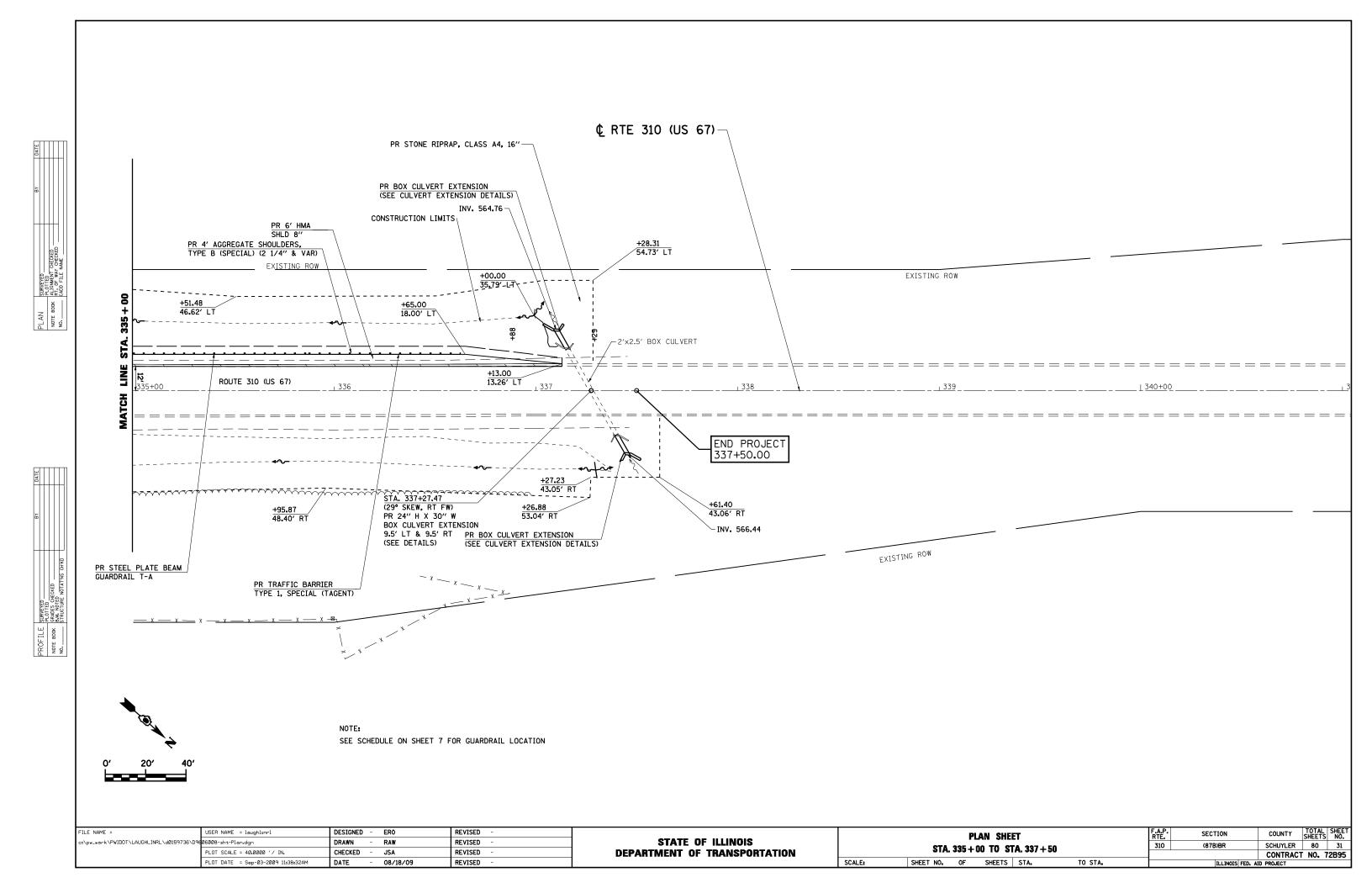
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### STORM WATER POLLUTION PREVENTION PLAN

Route: FAP 310

Marked: US 67

Section: (87B)BR

Project No.:

County: SCHUYLER

Contract No.: C-96-060-08

This plan has been prepared to comply with the provision of the NPDES Permit Number ILR10 \_\_\_\_\_\_\_issued by the Illinois Environmental Protection Agency for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquire of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Signature)

9/1/09

Region of Engreen

Note: The above boxed in area will be filled out by IDOT - Construction after the award of the contract to obtain the required NPDES permit.

The following plan was established and included in these plans to direct the Contractor in the placement of temporary erosion control systems and to provide a storm water pollution prevention plan for compliance under NPDES. The Contractor shall abide to all requirements within this plan as part of the contract.

The purpose of this plan is to prevent / minimize siltation within the construction zone and to eliminate sediments from entering and leaving the construction zone by utilizing proper temporary erosion control systems and providing ground cover within a reasonable time.

Certain items, as shown in this plan and referenced by the legend, shall be placed by the Contractor at the beginning of construction. Other items shall be placed by the Contractor as directed by the Engineer on a case by case situation resulting from the Contractor's sequence of activities, time of the year, and expected weather conditions.

The Contractor shall place permanent erosion control systems and seeding within a reasonable amount of time; therefore, reducing the amount of area being open to the possibility of erosion and reducing the amount of temporary erosion control systems and temporary seeding. The Resident Engineer will determine if temporary erosion control systems shown in the plan can be deleted, the size of the proposed ditch checks, the proper method of installation, and if any additional temporary erosion control systems shall be added which are not included in this plan. The Contractor shall perform all work as directed by the Engineer and as shown in special details and in Standard 280001 of the plans.

The special provisions Temporary Seeding, Temporary Erosion Control Seeding, and Temporary Erosion Control additionally supplement this plan.

All disturbed areas having high potential for erosion, as determined by the Engineer, shall be temporarily seeded or permanently seeded by October 1st of each construction year and shall not be reopened until after the winter shutdown period.

### SITE DESCRIPTION

### Description of Construction Activity:

- The proposed project consists of replacing the bridge on FAP 310 (US 67) approximately 2.5 miles southeast of Rushville. The project will the existing alignment and will include reconstruction / resurfacing of approx. 0.414 mi of FAP 310 (US 67).
- Construction consists of grading, constructing bridge and culvert, HMA pavement, widening, HMA resurfacing, placing aggregate shoulders and other miscellaneous work to complete improvements to the proposed roadways.

# Description of Intended Sequence of Major Construction Activities Which Will Disturb Earth and Lead to Possible Erosion for Major Portions of the Construction Site:

. Tree removal will be completed to clear approximately 0.02 acres of wooded land.

- Excavation will be completed along the entire length to grade out for proposed roadway ditches and waterways.
- Excavation will also be completed in proposed cut sections to lower the existing ground elevation to meet the proposed roadway grade/vertical alignment.
- 4. Embankment will be completed in fill areas to raise the existing ground elevation to meet the proposed roadway foreslope and backslope.
- 5. Drainage structures will be installed before and/or during the construction of the excavation and embankment to allow proper drainage across the proposed two lane facility.
- 6. Placement, maintenance, removal and proper clean-up of temporary erosion control, such as erosion control fence, hay or straw bale ditch checks, riprap ditch checks, sediment basins, temporary seeding, etc.
- 7. Placement of permanent erosion control, such as riprap ditch lining, riprap stilling basins, riprap dry dams, excelsion blanket, seeding, etc.
- 8. Final grading, paving and other miscellaneous items.

### Area of Construction Site:

The total drainage area entering and including the construction site is estimated to be approx. In which acres will be disturbed by excavation, grading or other activities.

sa miles

## Other Reports, Studies and Pians which Ald in the Development of this Storm Water Pollution Prevention Pian as Referenced Documents:

- Estimated run-off coefficients are contained in the project drainage study which were utilized for proposed placement of the temporary erosion control systems.
- 2. Information on the soils within the site was obtained from field reviews which were utilized for proposed placement of the temporary erosion control systems.
- Site maps indicating drainage patterns and approximate slopes were contained in the project design report, USGS drainage maps, project drainage study, and project plan documents were all utilized for proposed placement of the temporary erosion control systems.

### Drainage Tributaries Receiving Water from this Construction Site:

SCALE

Crane Creek

Schuy-Rush Lake

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### CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

Description of Stabilization Practices at the Beginning of Construction:

- The area between the existing and proposed right-of-way/temporary easement boundaries and limits of the project will be improved and managed for the purposes of controlling erosion within the area, reducing water flow by temporary diversion and minimizing siltation into the construction zone, and establishing vegetative cover which will become permanent vegetation and act as an erosion barrier. Work at the beginning of construction will consist of the following:
  - (a) Areas of existing vegetation (woods and grasslands) outside the proposed construction slope limits shall be identified for preserving and shall be protected from mowing, brush cutting, tree removal and other activities which 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, along with required tree removal.
  - (c) As soon as reasonable access is available (such as trees cleared) to all locations where water drains away from the project, sediment basins, riprap ditch checks, temporary ditch checks, and/or erosion control fence shall be installed as called out in this plan and directed by the Engineer.
  - (d) Bare and sparsely vegetated ground in highly erodable areas as determined by the Engineer shall be temporarily seeded at the beginning of construction where no construction activities are immediately expected as stated in the special provision "Temporary Erosion
  - (e) Immediately after tree removal is completed in certain areas which are highly erodable areas as determined by the Engineer, the areas shall be temporarily seeded where no construction activities are immediately expected as stated in the special provision \*Temporary Erosion Control Seeding\*.
  - (f) At locations where a significant amount of water drains into the construction zone from outside areas (adjacent landowners), erosion control fence, temporary ditch checks, or riprap ditch checks will be utilized to locally divert water, reduce flow rates, and collect outside siltation inside the right-of-way line. Erosion control items will not be allowed to be installed to cause flooding to upstream private property which could cause crop damages or other undesireable conditions.
- 2. Establishment of these temporary erosion control measures will have additional benefits to the project. Desirable grass seed will become established in these areas and will spread seeds onto the construction site until permanent seeding/mowing and overseeding can be complete.
- 3. A third benefit of these filter areas is that they will begin to provide a screen and buffer. They will help protect the construction site from winds and excess sun and mitigate construction noise and dust.

### Description of Stabilization Practices During Construction:

- 1. During roadway construction, areas outside the construction slope limits as outlined previous herein shall be protected from damaging effects of construction. The Contractor shall not use this area for staging (except as designated on the plans or directed by the Engineer), parking of vehicles or construction equipment, storage of materials, or other construction related activities.
  - (a) Within the construction zone, critical areas which have high flows of water as determined by the Engineer shall remain undisturbed until full scale construction is underway to prevent unnecessary soil erosion.
  - (b) Top soil and earth stockpiles shall be temporarily seeded if they are to remain unused for more than fourteen days.
  - (c) As the Contractor constructs a portion of roadway in a fill section, he/she shall follow the following steps as directed by the Engineer:
  - 1. Place temporary erosion control systems at locations where water leaves and enters the construction zone
  - 11. Temporary seed highly erodable areas outside the construction slope limits
  - 111. Construct roadside ditches and provide temporary erosion control systems

  - iv. Temporary divert water around proposed culvert locationsv. Build necessary embankment at culvert locations and then excavate and place culvert vi. Continue building up the embankment to the proposed grade while at the same time
  - place permanent erosion control such as riprap ditch lining and conduct final shaping to the
  - (d) The Contractor shall immediately follow major earth moving operations with final grading equipment. After the major earth spread operation has moved to a new location, final grading shall be completed within fourteen days. If grading is not completed within fourteen days, all major earth moving operations will be stopped, as directed by the Engineer, until disturbed areas are final graded and seeded.
  - (e) Excavated areas and embankments shall be permanently seeded when final graded. If not, they shall be temporarily seeded as stated in the special provision "Temporary Erosion Control Seeding ".

- (f) Construction equipment shall be stored and fueled only at designated locations. All necessary measures shall be taken to contain any fuel or pollution run-off in compliance with EPA water quality regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site.
- (g) The Resident Engineer shall inspect the project daily during activities and weekly or after large rains during the winter shutdown period. The project shall additionally be inspected by the Construction Field Engineer on a bi-weekly basis to determine that erosion control efforts are in place and effective and if other control work is necessary.
- (h) Sediment collected during construction by the various temporary erosion control systems shall be disposed of on the site on a regular basis as directed by the Engineer. The cost of this maintenance will be paid for in accordance with Article 109.04 of the Standard Specifications.
- (i) The temporary erosion control systems shall be removed as directed by the Engineer after use is no longer needed or no longer functioning. The costs of this removal shall be included in the unit bid price for the temporary erosion control system. No additional compensation will be allowed.

### Description of Structural Practices After Final Grading:

- Temporary erosion control systems shall be left in place with proper maintenance until permanent erosion control is in place and working properly and all proposed turf areas seeded and established with a proper stand.
- 2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up, and disturbed turf reseeded. Temporary riprap ditch checks will be allowed to remain in place where approved by the

### Maintenance after Construction:

- 1. Construction is complete after acceptance is received at the final inspection.
- 2. Areas will be inspected on a regular basis by IDOT District 6 Bureau of Operations.
- 3. Maintenance crews will perform regular mowings to aid in keeping weeds down and establishing a good roadside seed stand.
- Maintenance crews will also aid in any ditch lining maintenance or in any drainage
- All maintenance will be conducted at times when weather conditions will not cause site damaae.

### DOCUMENTATION

- A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with Section 4.b. shall be made and retained as part of the plan for at least three years after the date of inspection. The report shall be signed in accordance with part VI.G of the general permit.
- 2. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incident of Noncompliance (ION)" report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI.G. of the general permit. The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 2200 Churchill Road, P.O. Box 19276 Springfield, IL 62794-9276 Attn: Compliance Assurance Section

SCALE:

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### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

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CONTRACTOR CERTIFICA	TION STATEMENT
	Storm Water Pollution Plan for the project described R10, issued by the Illinois Environmental
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County:	Contract No.:
Discharge Elimination System (NPDES) permit	stand the terms of the general National Pollutant that authorizes the storm water discharges be construction site identified as part of this certification.  Date
Ti†le	
Name of Firm	
Street Address	
Cîty, State, Zîp	
Phone Number	

Note: The above boxed in area shall be filled out by the Contractor after the award of the contract to obtain the required NPDES Permit from IEPA. This is a requirement for this contract.

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CVA/DDL AND DON	PLOT SCALE = 40.000 '/ IN.	CHECKED	-	JSM	REVISED	-			
SWPPLAN.DGN	PLOT DATE = Sep-01-2009 07:13:24AM	DATE	-	<b>ARR</b> 1118.∕50,91999	REVISED	-			ı

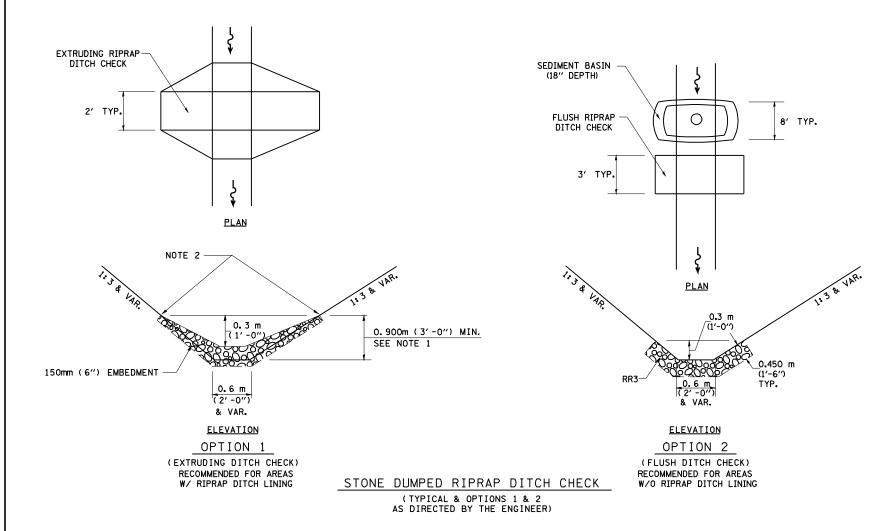
STATE O	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

SCALE:

STORM WATER POLLUTION					F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PREVENTION PLAN					310	(87B)BR	SCHUYLER	80	35
	FF	ILAL	ALICIA	FLAN				CONTRACT	NO. 7	72B95
	SHEET NO.	OF	SHFFTS	STA.	TO STA.		TILLINOIS FED AT	n ppn.iect		

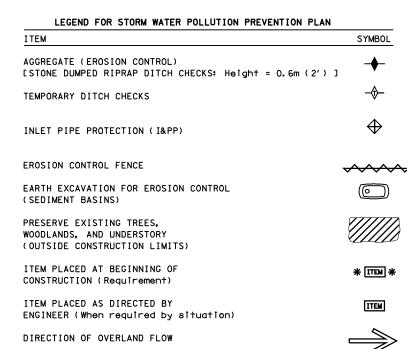






NOTE 1: RIPRAP SHALL EXTEND FAR ENOUGH UP THE SLOPES TO ALLOW O.3m (1') OVERTOPPING TO AVOID ERODING AROUND THE EDGES OF THE RIPRAP

NOTE 2: ENDS SHALL BE TIED INTO SLOPES.



### GENERAL NOTES:

All items shall be constructed as shown on this sheet, on Standard 280001, and as directed by the Engineer.

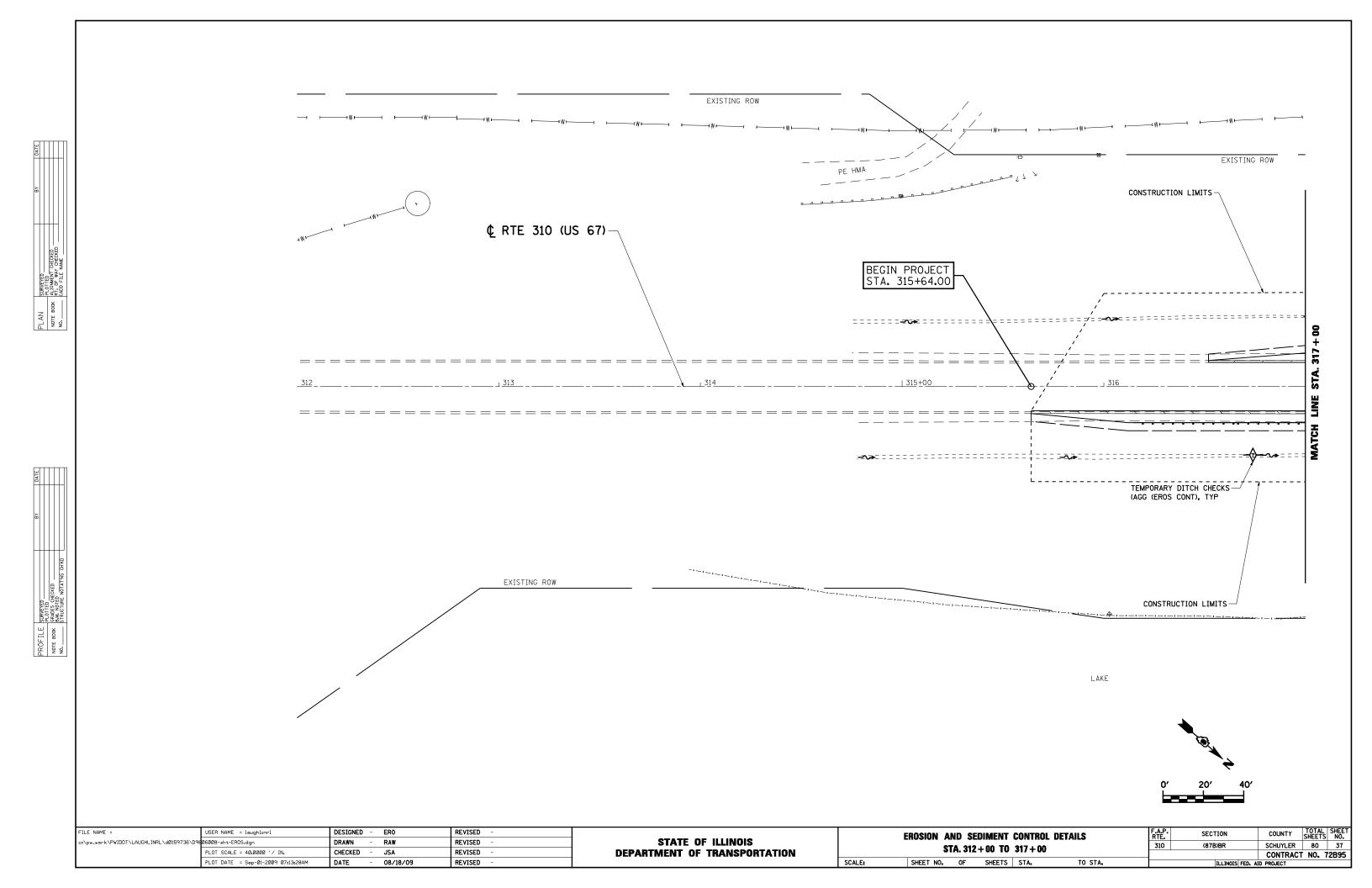
The symbology on the STORM WATER POLLUTION PREVENTION PLAN sheets does not represent the size or quantity of bales, for number of bales refer to details and notes shown on this sheet and/or as directed by the Engineer.

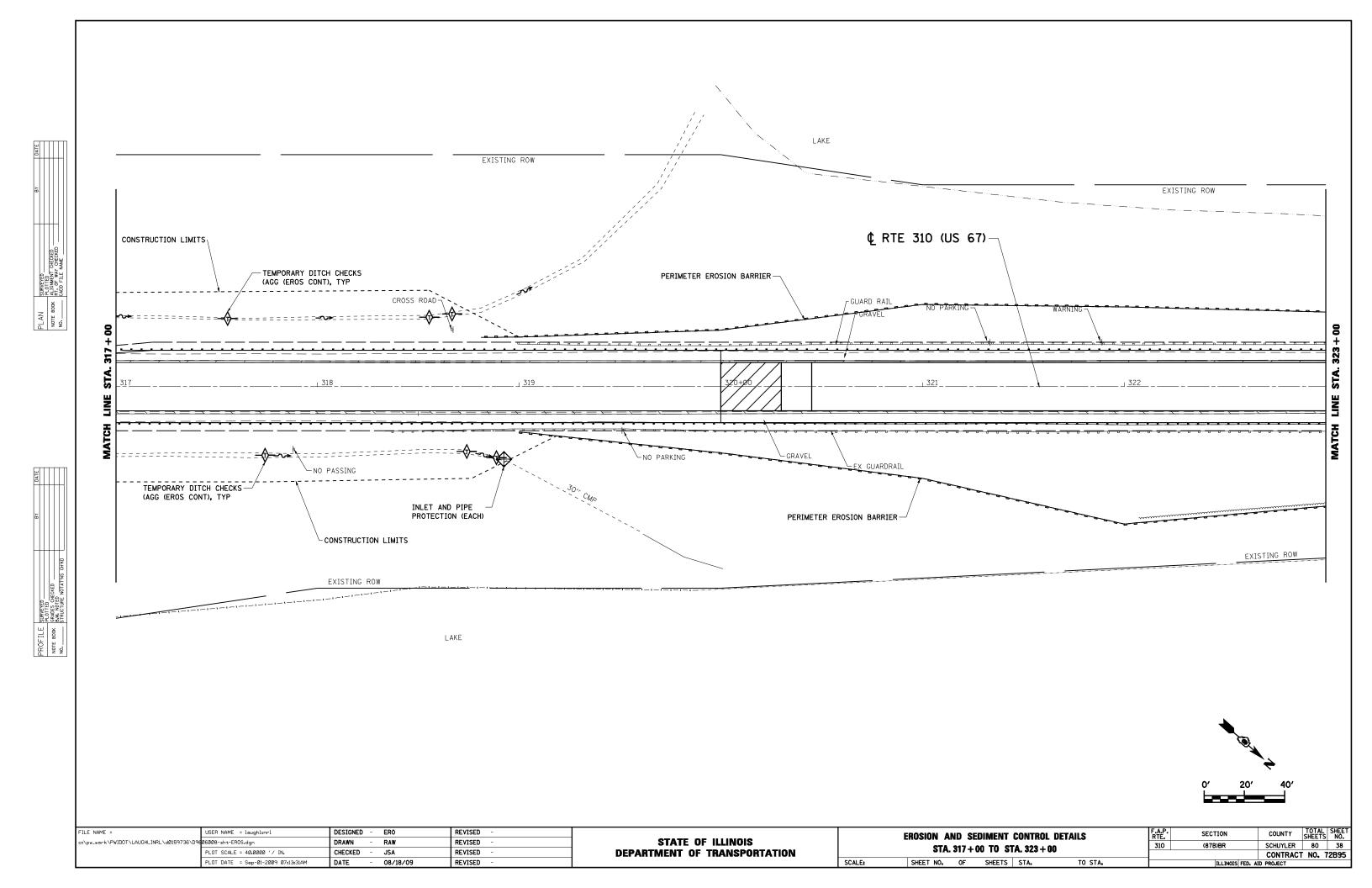
THE CONTRACTOR SHALL INSTALL DITCH CHECKS AS DIRECTED BY THE ENGINEER. IF THE ENGINEER ELECTS TO UTILIZE FLUSH RIPRAP DITCH CHECKS IN LIEU OF TEMPORARY DITCH CHECKS AS SHOWN ON THE FOLLOWING PLAN SHEETS, THE SPACING SHOULD BE DOUBLED.

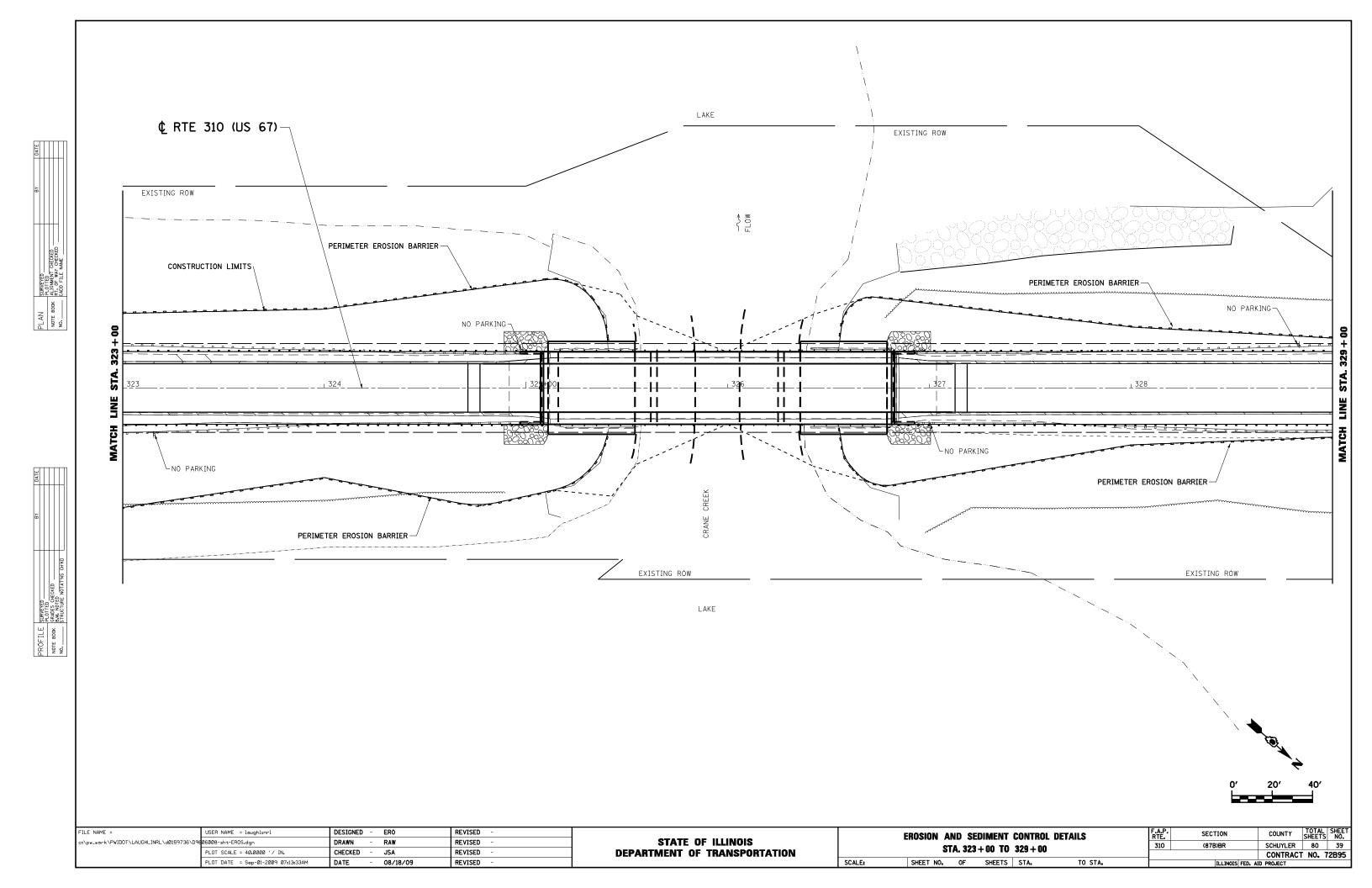
FILE NAME =	USER NAME = laughlinrl	DESIGNED	-	ER0	REVISED	- AUG 2007	(JCN)
::\pw_work\PWIDOT\LAUGHLINRL\dØ159736\d96Ø008-sht-EROS-swpplan.dgn			-	RAND	REVISED	-	
CVA/DDI ANI DON	PLOT SCALE = 40.000 '/ IN.	CHECKED	-	JSM	REVISED	-	
SWPPLAN.DGN	PLOT DATE = Sep-01-2009 07:13:26AM	DATE	-	<b>MBRNS/50,9</b> 1999	REVISED	-	

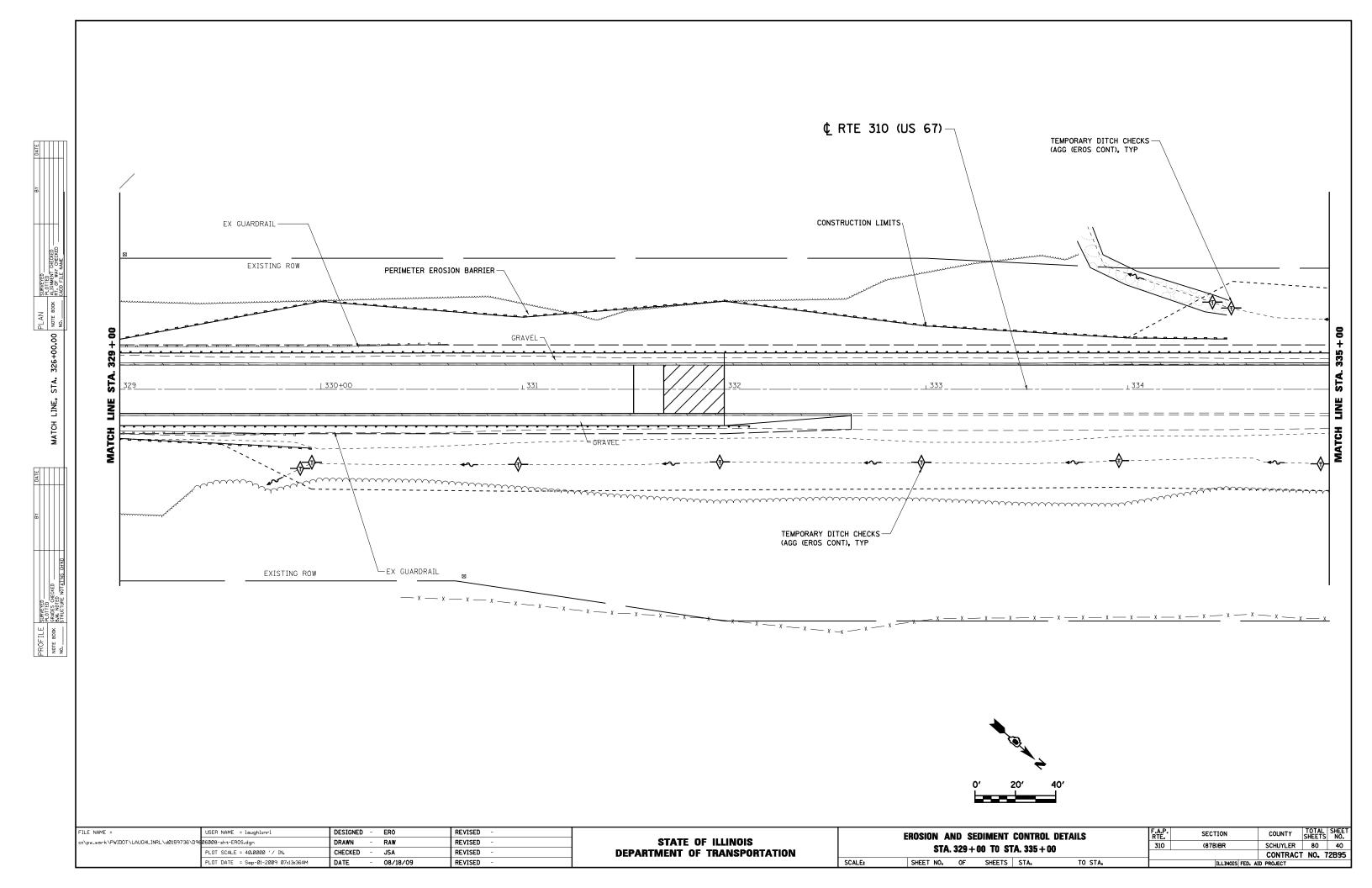
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

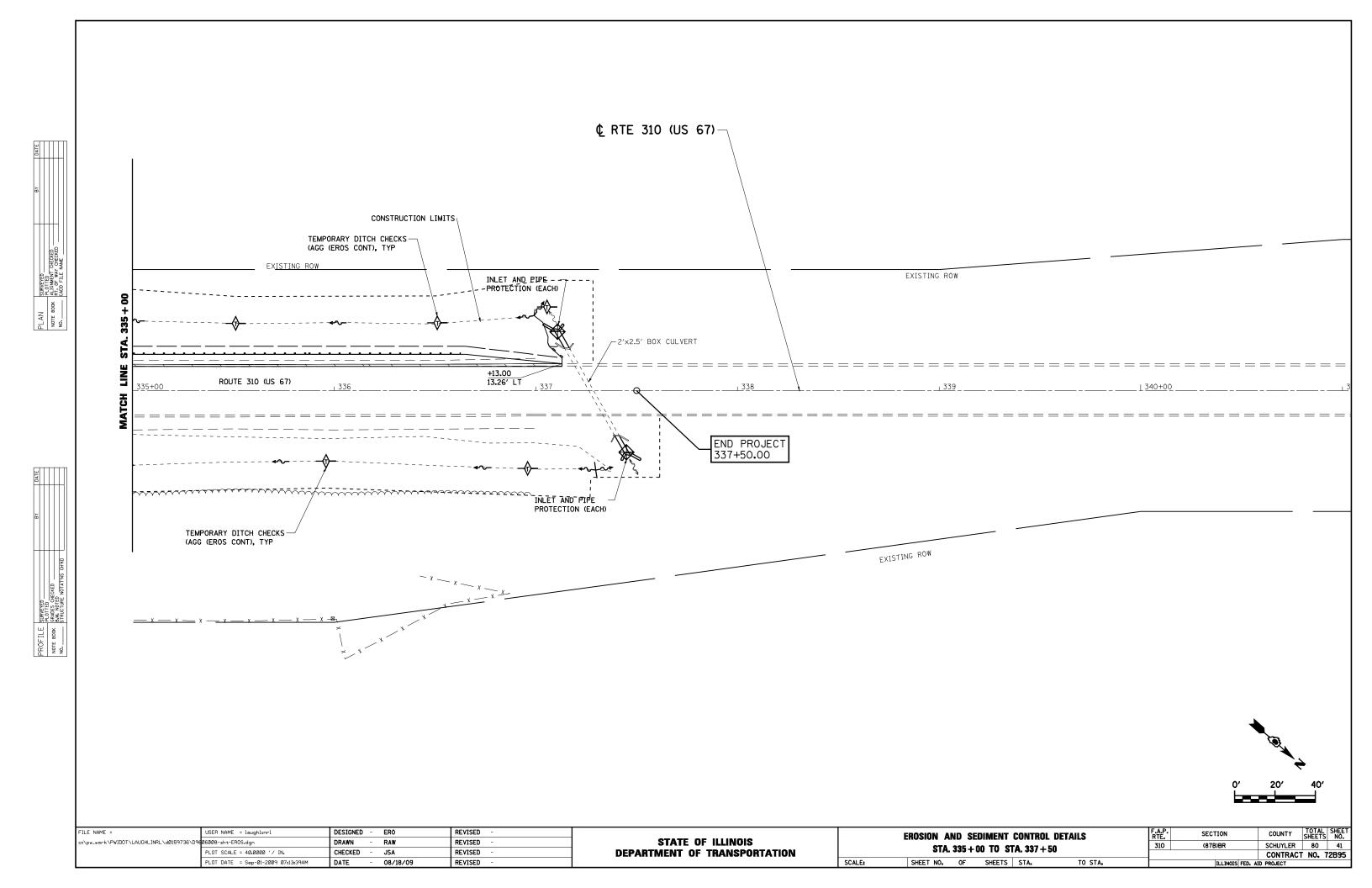
STORM WATER POLLUTION				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PREVENTION PLAN				310	10 (87B)BR SC		80	36	
	PREVENTION PLAN							CONTRACT	NO.	72B95
	SHEET NO.	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

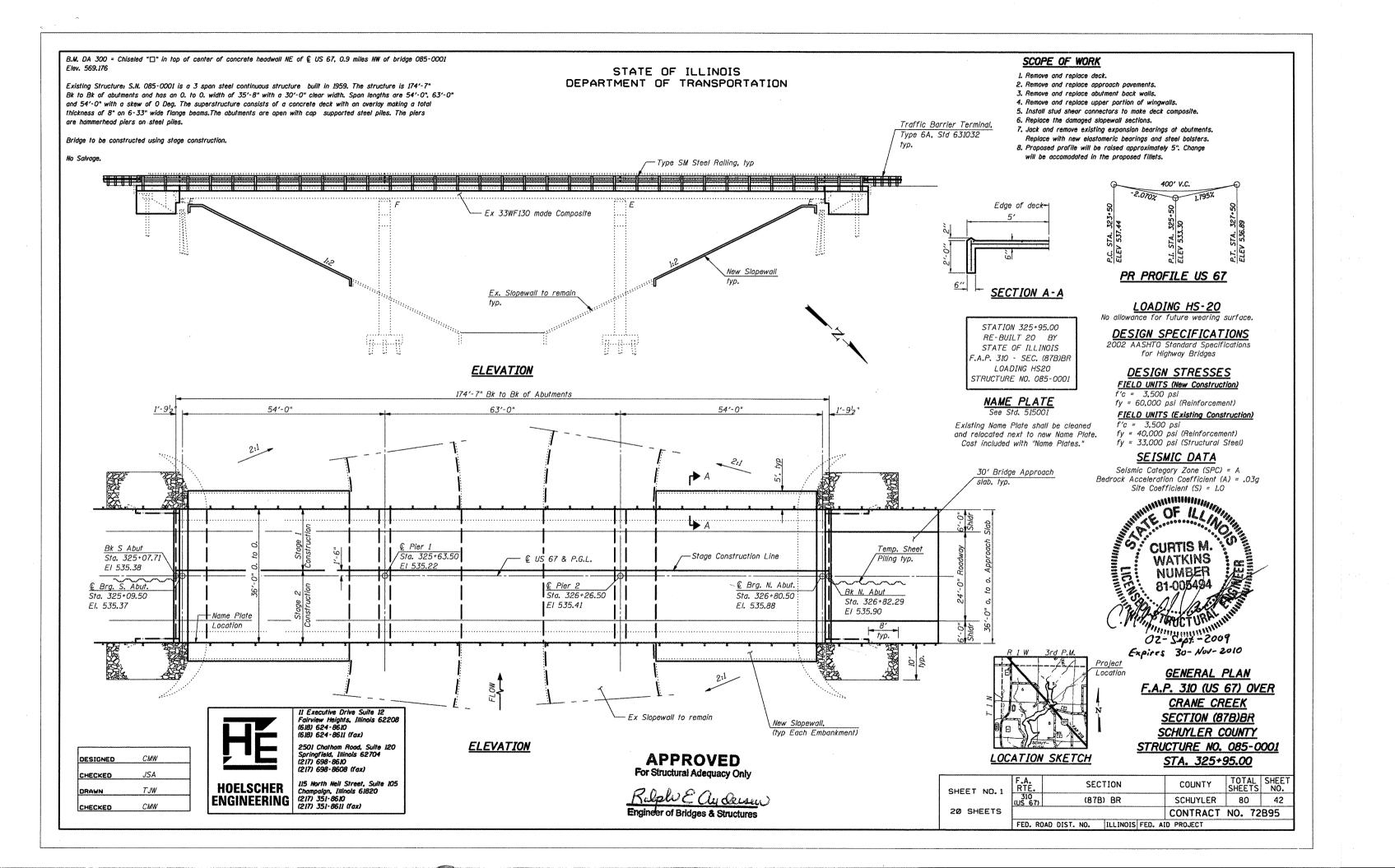












#### GENERAL NOTES

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding  ${}^{\prime}_4$  inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Slopewall shall be reinforced with welded wire fabric,  $6^{\prime\prime}$  x  $6^{\prime\prime}$  - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

Concrete Sealer shall be applied to the designated areas of the abutment backwalls.

All new structural steel shall be shop primed with an inorganic zinc rich primer per AASHTO M300. Type 1.

Cleaning and field painting of structural steel shall be done under a separate painting contract.

# DESIGNED CMW CHECKED JSA DRAWN TJW CHECKED CMW

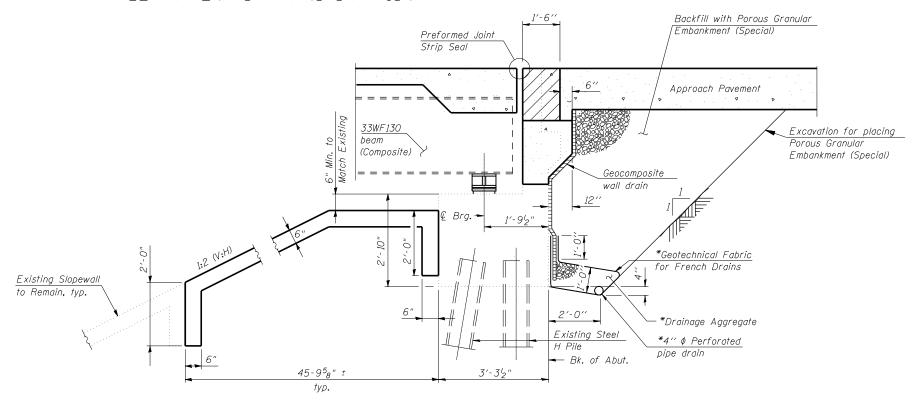


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## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



#### SECTION THRU ABUTMENT

(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures.

#### 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).

#### INDEX OF SHEETS

- 1. General Plan and Elevation
- 2. General Data
- 3. Stage Construction Details
- Temporary Barrier Details
- Top of Slab Elevations
  Top of Slab Elevations
- 7. Top of South Approach Slab Elevations
- . Top of North Approach Slab Elevations
- Superstructure Plan and Cross Section Superstructure Details
- 11. Bridge Approach Slab Details
- 12. Bridge Approach Slab Details
- 3. Bridge Railing Details
- 14. Preformed Joint Strip Seal
- 5. Structural Steel Details 6. Bearing Details
- 7. Concrete Removal
- 18. South Abutment
- 19. North Abutment
- 20. Bar Splicer Assembly Details

#### TOTAL BILL OF MATERIAL

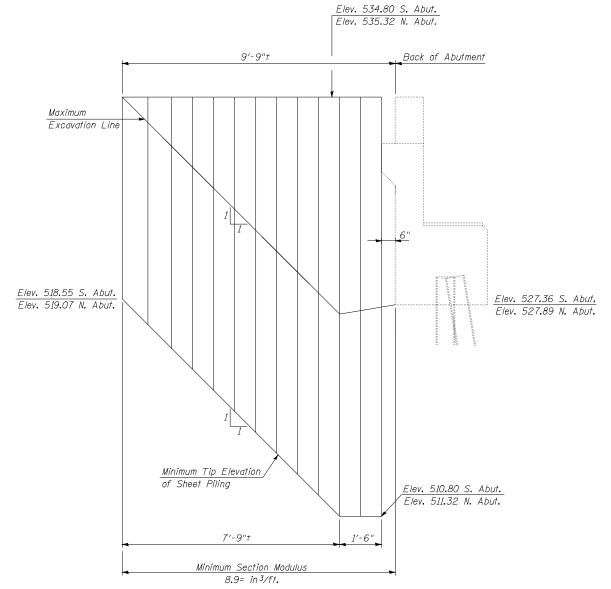
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	=.	88.5	88.5
Concrete Removal	Cu. Yd.	-	27.4	27.4
Slope Wall Removal	Sq. Yd.	-	517.5	517.5
Removal of Existing Concrete Deck	Each	1	-	1
Structure Excavation	Cu. Yd.	-	105	105
Concrete Structures	Cu. Yd.	-	58.2	58.2
Concrete Superstructure	Cu. Yd.	305.0	-	305.0
Bridge Deck Grooving	Sq. Yd.	651	-	651
Protective Coat	Sq. Yd.	689	-	689
Furnishing and Erecting Structural Steel	Pound	3749	-	3749
Stud Shear Connectors	Each	2700	-	2700
Jack and Remove Existing Bearings	Each	12	1	12
Reinforcement Bars, Epoxy Coated	Pound	67876	4820	72696
Bar Splicers	Each	669	102	771
Steel Railing, Type SM	Foot	392		392
Slope Wall 6 Inch	Sq. Yd.	-	<i>517.5</i>	517.5
Temporary Sheet Piling	Sq. Ft.	-	384	384
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	72.0	-	72.0
Elastomeric Bearing Assembly, Type I	Each	12	-	12
Anchor Bolt 1"	Each	24	-	24
Concrete Sealer	Sq. Ft.	-	348	348
Geocomposite Wall Drain	Sq. Yd.	-	50.4	50.4
Pipe Underdrains for Structures 4''	Foot	-	72	72

#### <u>GENERAL DATA</u> <u>STRUCTURE NO. 085-0001</u>

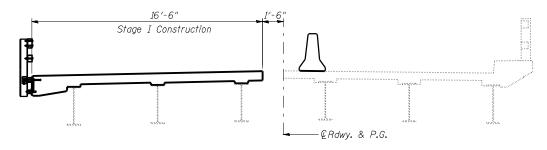
SHEET NO.2	F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
0.1221 11012	310 (US 67)		(87B) BR			SCHUYLER	80	43
20 SHEETS						CONTRACT	NO. 72	B95
	FED. RO	AD DIST.	NO.	ILLINOIS	FED. A	AID PROJECT		

# Stage I Removal Stage I Traffic Temp. Conc. Barrier See Sheet No. 4 of 20

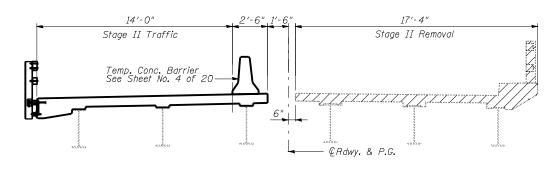
# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



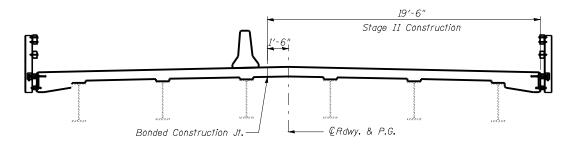
STAGE I REMOVAL



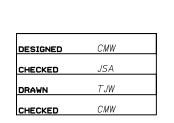
#### STAGE I CONSTRUCTION



#### STAGE II REMOVAL



#### STAGE II CONSTRUCTION





**ENGINEERING** 

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115 North Nell Street, Suite 105 Champaign, Illinois 61820 (217) 351-8610 (217) 351-8611 (fax) Vote;

All Cross Sections are Looking Upstation.

Hatched area indicates removal of existing structures.

For quantity of Temporary Concrete Barrier, see roadway plans.

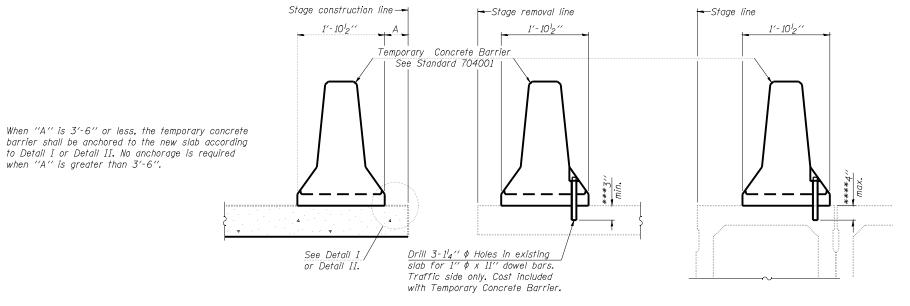
#### TEMPORARY SHEET PILING AND ABUTMENTS

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

# STAGE CONSTRUCTION DETAILS STRUCTURE NO. 085-0001

SHEET NO.3	F.A. RTE.		SEC	TION			COUNTY	TOT.		SHEET NO.
SHEET HOLD	310 (US 67)		(87B) BR				SCHUYLER	80	)	44
20 SHEETS							CONTRACT	NO.	72	B95
	FED. RO	DAD DIST.	NO.	ILLINOIS	FED.	ΑI	D PROJECT			

EXISTING DECK BEAM



#### **NOTES**

Detail I - With Bar Splicer or Couplers: Connect one (1) 1"x7"x10" steel £ to the top layer of couplers with 2-58" \$\phi\$ bolts screwed to coupler at approximate & of each barrier panel.

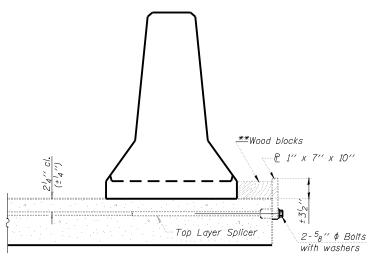
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel £ to the concrete slab or concrete wearing surface with 2-58''\$ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate € of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" 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.

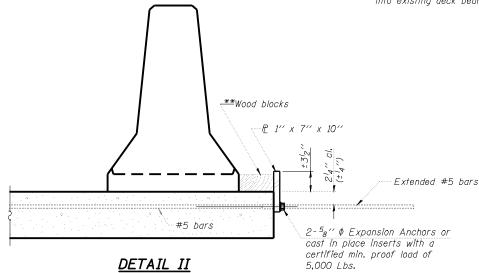
#### SECTIONS THRU SLAB OR DECK BEAM

EXISTING SLAB

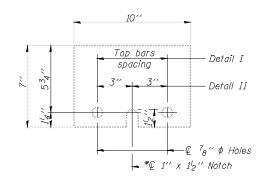
- \*\*\*Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
- \*\*\*\*If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



\*\*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.

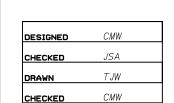


#### STEEL RETAINER P 1" x 7" x 10"

\*Required only with Detail II

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 085-0001

SHEET NO.4	F.A. RTE.		SEC	TION			COUNTY	TOTAL SHEETS	SHEET NO.
	310 (US 67)		(87B) BR				SCHUYLER	80	45
3Ø SHEETS							CONTRACT	NO. 7	2B95
	FED. RO	DAD DIST.	NO.	ILLINOIS	FED.	ΑI	D PROJECT		



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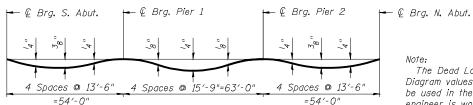
<u>NEW SLAB</u>

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R-27 Modified

11-1-06

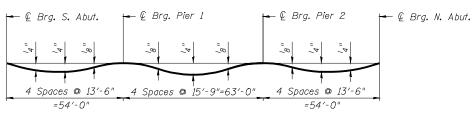


EXTERIOR BEAM DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

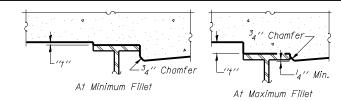
Note:

The Dead Load Deflection Diagram values are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on sheet 6 of 20.



#### INTERIOR BEAM DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below and on sheet 6 of 20, minus slab thickness, equals the fillet heights "t" above top flange of

#### FILLET HEIGHTS

BEAM 1

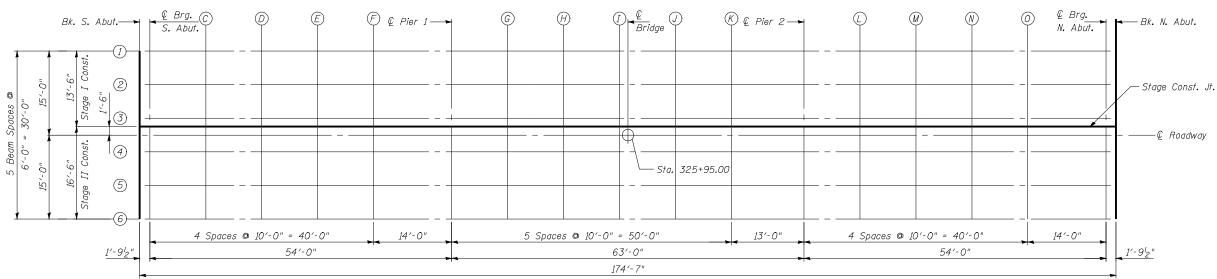
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.  © Brg S. Abut.  C D  E  F  © Exist. Pier 1  G  H  I  J  K  © Exist. Pier 2  L  M  N  O  © Brg N. Abut.  Bk. N. Abut.	325+07.71 325+09.50 325+19.50 325+29.50 325+49.50 325+49.50 325+33.50 325+33.50 325+93.50 326+03.50 326+136.50 326+26.50 326+46.50 326+6.50 326+80.50 326+80.50 326+80.50	-15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00 -15.00	535.06 535.05 535.01 534.97 534.92 534.91 534.91 534.95 534.95 535.03 535.10 535.16 535.24 535.32 535.56 535.56	535.06 535.05 535.00 534.97 534.91 534.92 534.95 534.95 535.00 535.00 535.10 535.17 535.26 535.35 535.44 535.56 535.58

Lo	ocation	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
© Brg © Exist © Exist	G H I J K	325+07.71 325+09.50 325+19.50 325+29.50 325+39.50 325+49.50 325+63.50 325+73.50 325+93.50 326+03.50 326+13.50 326+26.50 326+36.50 326+36.50 326+36.50 326+36.50 326+36.50 326+36.50 326+36.50 326+36.50 326+36.50 326+36.50	-9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00 -9.00	535.19 535.18 535.09 535.06 535.04 535.04 535.04 535.05 535.11 535.15 535.22 535.22 535.26 535.36 535.36 535.54 535.69 535.71	535.19 535.18 535.15 535.12 535.09 535.04 535.04 535.07 535.09 535.12 535.16 535.22 535.38 535.47 535.56 535.69 535.71

BEAM 2

Location	Station	Off set	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.  © Brg S. Abut.  C D E F  © Exist. Pier 1 G H I J K  © Exist. Pier 2 L M N O © Brg N. Abut. Bk. N. Abut.	325+07.71 325+09.50 325+19.50 325+29.50 325+39.50 325+63.50 325+63.50 325+83.50 325+93.50 326+03.50 326+03.50 326+26.50 326+36.50 326+46.50 326+46.50 326+66.50 326+80.50 326+80.50	-3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00 -3.00	535.31 535.30 535.22 535.19 535.16 535.16 535.16 535.20 535.23 535.23 535.24 535.41 535.49 535.57 535.81 535.83	535.31 535.30 535.27 535.24 535.18 535.16 535.17 535.19 535.29 535.25 535.25 535.25 535.60 535.60 535.60 535.81 535.83

BEAM 3



PLAN

<u> </u>		
DESIGNED	CMW	
CHECKED	JSA	
DRAWN	TJW	
CHECKED	СМW	

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<u>TOP</u>	<u>0F</u>	SLA	<u>B El</u>	L <i>EVA</i>	<u>TIONS</u>
STR	UC7	<i>TURE</i>	NO.	085-	-0001

COUNTY

SCHUYLER

TOTAL SHEET NO.

46

80

CONTRACT NO. 72B95

SHEET NO.5	F.A. RTE.			COUNT			
011221 11010	310 (US 67)		(87B)	) BR			SCHUYLI
20 SHEETS							CONTRA
	FED. ROAD	DIST.	NO.	ILLINOIS	FED.	ΑI	D PROJECT

E-S

5-16-08

STAGE CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.  © Brg S. Abut.  C D E F © Exist. Pier 1 G H I J K © Exist. Pier 2 L	325+07.71 325+09.50 325+19.50 325+29.50 325+39.50 325+49.50 325+63.50 325+83.50 325+83.50 326+03.50 326+13.50 326+13.50 326+26.50	-1.50 -1.50 -1.50 -1.50 -1.50 -1.50 -1.50 -1.50 -1.50 -1.50 -1.50	535.35 535.34 535.29 535.25 535.20 535.20 535.20 535.21 535.23 535.27 535.33 535.38	535.35 535.34 535.30 535.27 535.24 535.19 535.20 535.22 535.25 535.28 535.32 535.32 535.38
M N O © Brg N. Abut. Bk. N. Abut.	326+46.50 326+56.50 326+66.50 326+80.50 326+82.29	-1.50 -1.50 -1.50 -1.50 -1.50	535.52 535.60 535.70 535.84 535.86	535.54 535.63 535.72 535.84 535.86

<u>€ RDWY.</u>

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.  © Brg S. Abut.  C D E F © Exist. Pier 1 J J C Exist. Pier 2 L M N O © Brg N. Abut. Bk. N. Abut.	325+07.71 325+09.50 325+19.50 325+29.50 325+39.50 325+63.50 325+63.50 325+83.50 325+93.50 326+03.50 326+13.50 326+13.50 326+26.50 326+46.50 326+6.50 326+80.50 326+80.50	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	535.38 535.37 535.28 535.25 535.25 535.22 535.24 535.24 535.30 535.34 535.41 535.41 535.48 535.55 535.73 535.73 535.88	535.38 535.37 535.30 535.27 535.25 535.22 535.25 535.25 535.25 535.31 535.31 535.31 535.35 535.41 535.48 535.57 535.66 535.75 535.88 535.88

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.  © Brg S. Abut.  C  D  E  F  © Exist. Pier 1  G  H  I  J  K  © Exist. Pier 2  L  M  N  O  © Brg N. Abut. Bk. N. Abut.	325+07.71 325+09.50 325+19.50 325+29.50 325+39.50 325+63.50 325+63.50 325+83.50 325+93.50 326+03.50 326+03.50 326+36.50 326+36.50 326+46.50 326+46.50 326+66.50 326+80.50 326+80.50	3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	535.31 535.30 535.26 535.22 535.17 535.16 535.16 535.20 535.23 535.23 535.24 535.49 535.49 535.57 535.67 535.81 535.83	535.31 535.30 535.27 535.24 535.18 535.16 535.17 535.19 535.22 535.22 535.25 535.28 535.28 535.69 535.69 535.81 535.81

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.  © Brg S. Abut.  C D E F © Exist. Pier 1 G H I J K © Exist. Pier 2 L M N O © Brg N. Abut. Bk. N. Abut.	325+07.71 325+09.50 325+19.50 325+29.50 325+39.50 325+49.50 325+63.50 325+73.50 325+83.50 325+93.50 326+03.50 326+13.50 326+26.50 326+26.50 326+46.50 326+46.50 326+66.50 326+80.50 326+80.50	9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00	535.19 535.18 535.13 535.09 535.06 535.04 535.04 535.05 535.08 535.11 535.15 535.22 535.22 535.29 535.45 535.54 535.69 535.71	535.19 535.18 535.15 535.12 535.06 535.04 535.04 535.07 535.07 535.12 535.12 535.16 535.22 535.30 535.30 535.30 535.30 535.30

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut. © Brg S. Abut. C D E F	325+07.71 325+09.50 325+19.50 325+29.50 325+39.50	15.00 15.00 15.00 15.00 15.00	535.06 535.05 535.01 534.97 534.94	535.06 535.05 535.03 535.00 534.97
© Exist. Pier 1 G H I J	325+49.50 325+63.50 325+73.50 325+83.50 325+93.50 326+03.50	15.00 15.00 15.00 15.00 15.00 15.00	534.92 534.91 534.91 534.93 534.95 534.98	534.94 534.91 534.92 534.95 534.98 535.00
© Exist. Pier 2 L M N	326+13.50 326+26.50 326+36.50 326+46.50 326+56.50	15.00 15.00 15.00 15.00	535.03 535.10 535.16 535.24 535.32	535.04 535.10 535.17 535.26 535.35
O & Brg N. Abut. Bk. N. Abut.	326+66.50 326+80.50 326+82.29	15.00 15.00 15.00	535.42 535.56 535.58	535.44 535.56 535.58

CMWDESIGNED JSA CHECKED TJWDRAWN CMW CHECKED



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2501 Chatham Road, Sulte 120 Springfield, Illinois 62704 (217) 698-8610 (217) 698-8608 (fax)

TOP OF SLAB ELEVATIONS STRUCTURE NO. 085-0001

SHEE	ĒΤ	NO. 6
20	SH	EETS

. 6	F.A. RTE.	SECTION			COUNTY	TOTAL SHEETS		SHEET NO.				
• •	310 (US 67)		(87B) BR		SCHUYLER	80	)	47				
TS									CONTRACT	NO.	72	B95
	FFD. RC	ח ממ	IST.	NO.	TI I	INOIS	FFD.	ΔΙ	D PROJECT			

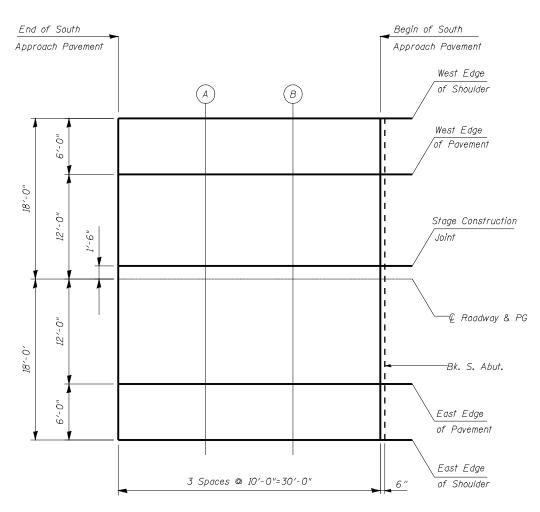
#### WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	324+77.21	18.00	535.17
А	324+87.21	18.00	535.11
В	324+97.21	18.00	535.06
Begin S. Appr. Pav't.	325+07.21	18.00	535.00

#### WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	324+77.21	-12.00	535.41
A	324+87.21	-12.00	535.32
В	324+97.21	-12.00	<i>535.22</i>
Begin S. Appr. Pav't.	325+07.21	-12.00	535.13





#### <u>PLAN</u>

DESIGNED	CMW	
CHECKED	JSA	
DRAWN	TJW	
CHECKED	CMW	



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#### STAGE CONSTRUCTION JOINT

Station	Offset	Theoretical Grade Elevations
324+77.21	-1.50	535.57
324+87.21	-1.50	535.50
324+97.21	-1.50	535.42
325+07.21	-1.50	535.35
	324+77.21 324+87.21 324+97.21	324+77.21 -1.50 324+87.21 -1.50 324+97.21 -1.50

#### & ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	324+77.21	0.00	535.59
Α	324+87.21	0.00	535.51
В	324+97.21	0.00	535.44
Begin S. Appr. Pav't.	325+07.21	0.00	535.38

#### EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations		
End S. Appr. Pav't.	324+77.21	12.00	535.41		
Α	324+87.21	12.00	535.32		
В	324+97.21	12.00	535.22		
Begin S. Appr. Pav't.	325+07.21	12.00	535.13		

#### EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.  A B Begin S. Appr. Pav't	324+77.21 324+87.21 324+97.21	18.00 18.00 18.00	535.17 535.11 535.06
Begin S. Appr. Pav't.	325+07.21	18.00	535.00

#### TOP OF SOUTH APPROACH SLAB ELEVATIONS STRUCTURE NO.085-0001

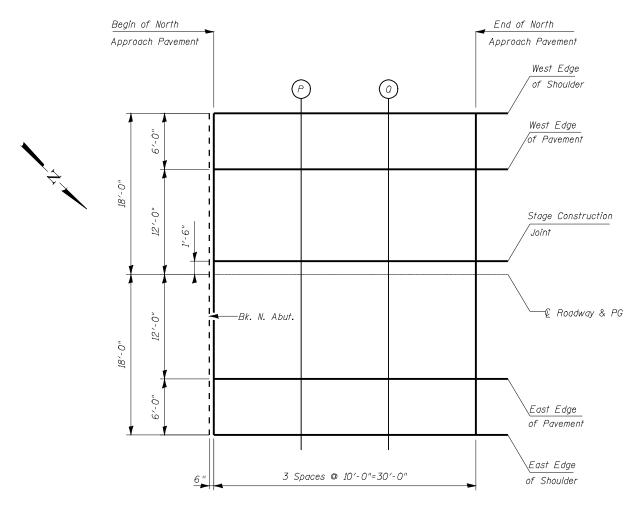
SHEET NO. 7 F.A. SECTION				COUNTY	TOTAL SHEETS	SHEET NO.	
311221 140 <b>1</b> 7	310 (US 67)	(87B) BR			SCHUYLER	80	48
20 SHEETS					CONTRACT	NO. 72	B95
	FED. RC	AD DIST. NO.	ILLINOIS	FED. AI	D PROJECT		

#### WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	
Begin N. Appr. Pav't.	326+82.79	-18.00	535.53	
P	326+92.79	-18.00	535.64	
Q	327+02.79	-18.00	535.76	
End N. Appr. Pav't.	327+12.79	-18.00	535.87	

#### WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Begin N. Appr. Pav't. P Q	326+82.79 326+92.79 327+02.79	-12.00 -12.00 -12.00	535.65 535.80 535.96
End N. Appr. Pav't.	327+12.79	-12.00	536.11



#### <u>PLAN</u>

]	H	F (4)
	HOELSCHER ENGINEERING	11 C C C

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JSA

TJW

CMW

5-16-08

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#### STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	
Begin N. Appr. Pav't.	326+82.79	-1.50	535.87	
P	326+92.79	-1.50	536.00	
Q	327+02.79	-1.50	536.14	
End N. Appr. Pav't.	327+12.79	-1.50	536.27	

#### & ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations	
Begin N. Appr. Pav't.	326+82.79	0.00	535.90	
P	326+92.79	0.00	536.02	
Q	327+02.79	0.00	536.15	
End N. Appr. Pav't.	327+12.79	0.00	536.29	

#### EAST EDGE OF PAVEMENT

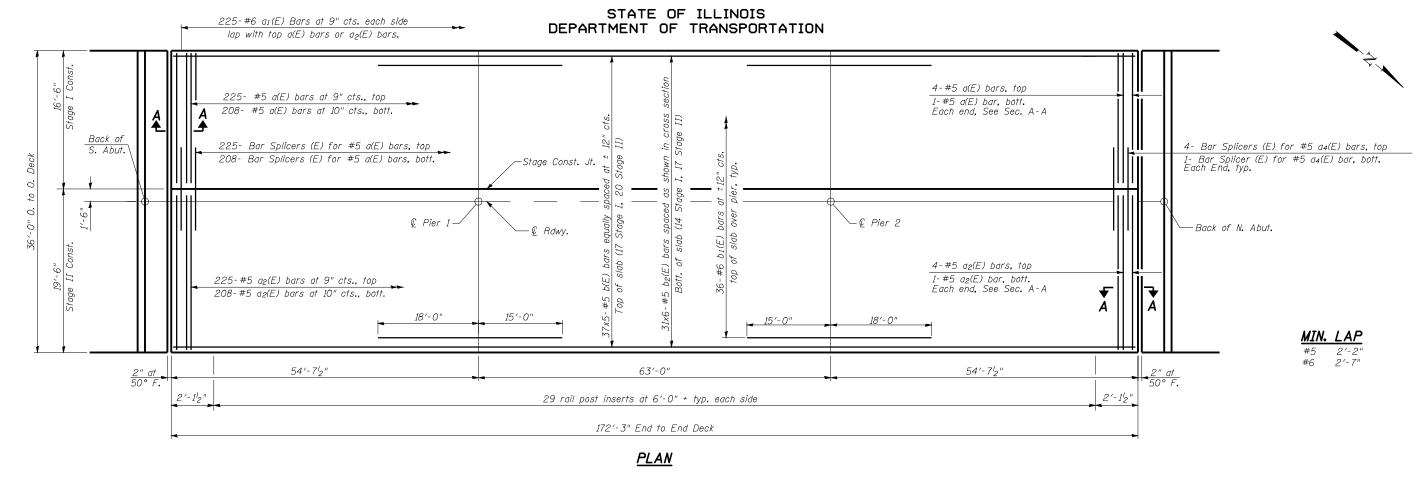
Location	Station	Offset	Theoretical Grade Elevations	
Begin N. Appr. Pav't.	326+82.79	12.00	535.65	
P	326+92.79	12.00	535.80	
a	327+02.79	12.00	535.96	
End N. Appr. Pav't.	327+12.79	12.00	536.11	

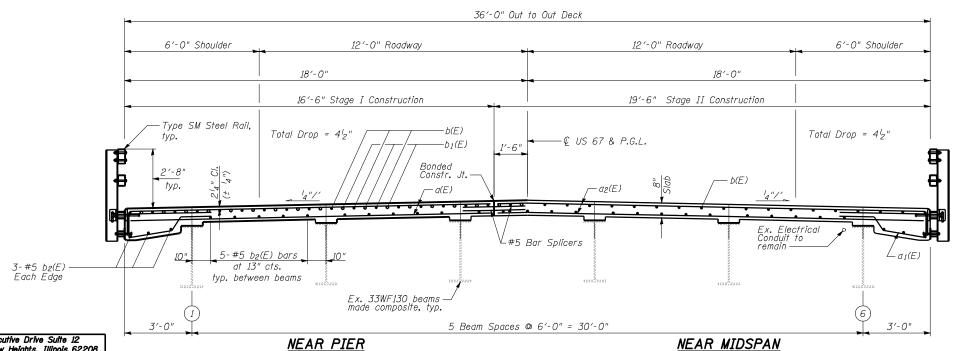
#### EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	
Begin N. Appr. Pav't.	326+82.79	18.00	535.53	
P	326+92.79	18.00	535.64	
End N. Appr. Pav't.	327+02.79	18.00	535.76	
	327+12.79	18.00	535.87	

#### TOP OF NORTH APPROACH SLAB ELEVATIONS STRUCTURE NO. 085-0001

SHEET NO.8	F.A. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO. 5	310 (US 67)	(87B) BR			SCHUYLER	80	49
20 SHEETS					CONTRACT	NO. 72	B95
	FED. RC	DAD DIST. NO.	ILLINOIS	FED. AI	D PROJECT		





CMW DESIGNED JSA CHECKED TJWDRAWN CMWCHECKED

**HOELSCHER ENGINEERING** 

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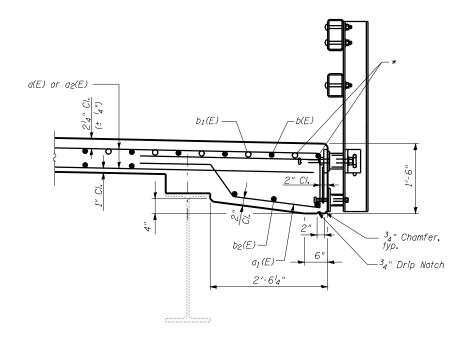
2501 Chatham Road, Suite 120 Springfield, Illinois 62704 (217) 698-8610 (217) 698-8608 (fax)

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CROSS SECTION (Looking North)

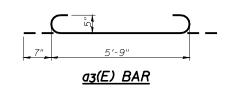
#### SUPERSTRUCTURE PLAN & CROSS SECTION STRUCTURE NO. 085-0001

SHEET NO.9	F.A. RTE.	SECTION				COUNTY	TOTAL SHEETS	SHEET NO.	
SHEET NO. 9	310 (US 67)	(87B) BR				SCHUYLER	80	50	
20 SHEETS							CONTRACT	NO. 72	B95
	FED. RC	AD DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		

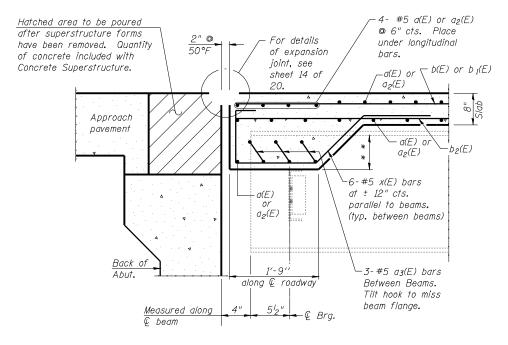


#### SECTION THRU EDGE OF SLAB

\* Note: Reinforcement bars in the top of the deck may be placed with a  $1^l_2$ " minimum clearance in the area of the rail post anchor devices. The studs of the anchor devices shall be positioned below the top reinforcement bars and the outermost longitudinal reinforcement bars (b(E) and b1(E) Bars) shall be placed directly above the studs of the rail post anchor device.







SECTION A-A

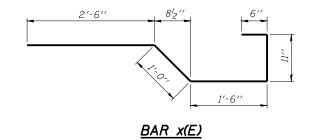
\*\* 21/8" Beam 1 & Beam 6 3<sup>3</sup><sub>8</sub>" Beam 2 & Beam 5

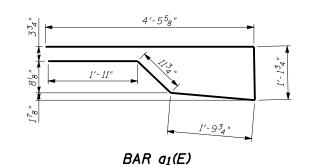
4" Beam 3 & Beam 4

#### *SUPERSTRUCTURE* BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	443	#5	16′-4"	
a1(E)	450	#6	10'-4"	P
a2(E)	443	#5	19'-4"	
a3(E)	30	#5	6′-11"	]
b(E)	185	#5	36′-2"	
b1(E)	72	#6	33′-0"	
b2(E)	186	#5	30′-6"	
x(E)	60	#5	6′-5″	7
Reinfor	Reinforcement Bars,			40546
Epoxy Coated			Pound	40340
Concre	te		Cu. Yds.	204
Supers	tructure		Cu. 103.	204

Bars indicated thus 31 x 6 - #5 etc. indicates 31 lines of bars with 6 lengths per line.





SUPERSTRUCTURE DETAILS STRUCTURE NO. 085-0001

SHEET NO. 10	F.A. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
	310 (US 67)	(87B) BR				SCHUYLER	80	51
20 SHEETS					CONTRACT	NO. 72	B95	
	FED. RO	AD DIST.	NO.	ILLINOIS	FED. A	ID PROJECT		



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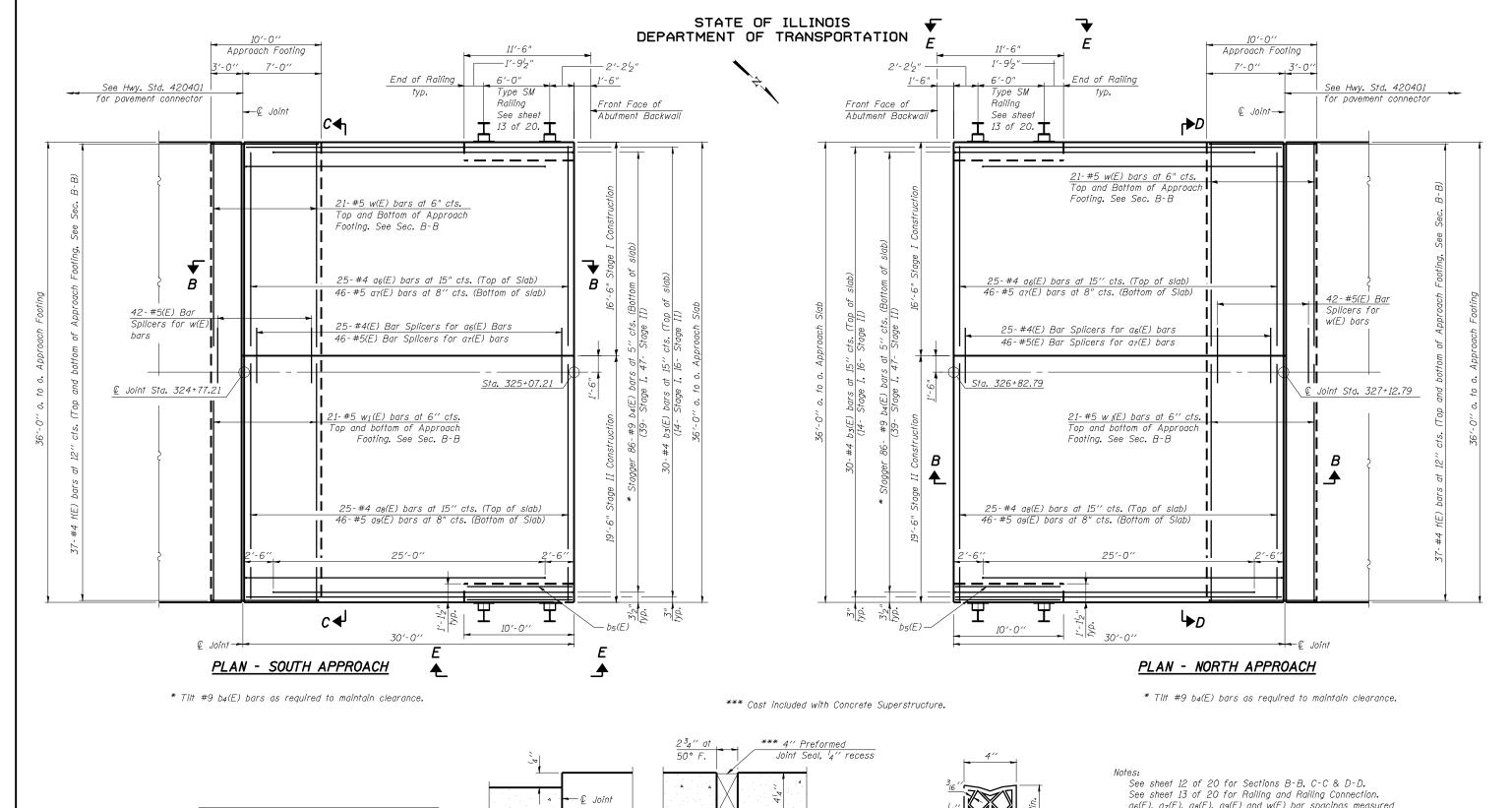
CMW

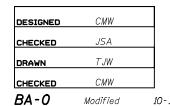
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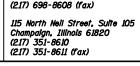


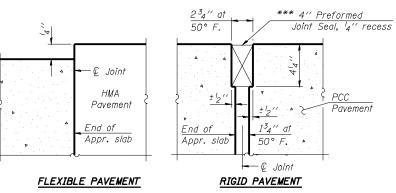
Modified



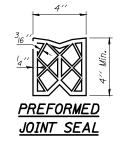
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Springfield, Illinois 62704 (217) 698-8610 (217) 698-8608 (fax)





DETAIL A

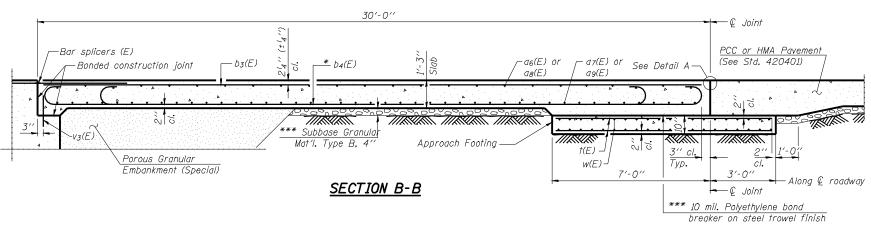


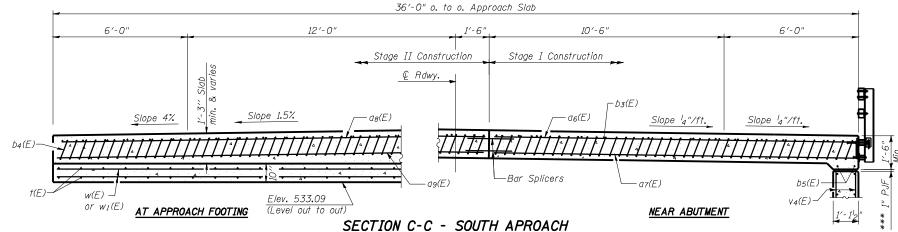
 $a_6(E)$ ,  $a_7(E)$ ,  $a_8(E)$ ,  $a_9(E)$  and w(E) bar spacings measured parallel to € Rdwy.

(Sheet 1 of 2)

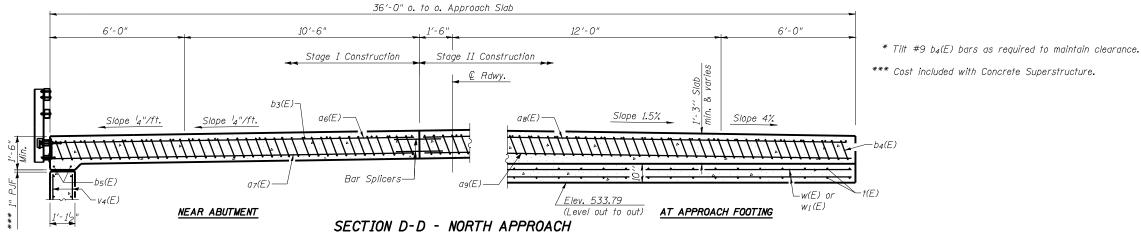
#### BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 085-0001

SHEET NO. 11	F.A. RTE.		SEC	TION			COUNTY	TOTAL SHEETS	SHEET NO.
311221 113111	310 (US 67)	(87B) BR				SCHUYLER	80	52	
20 SHEETS							CONTRACT	NO. 72	B95
	FED. RO	AD DIST.	NO.	ILLINOIS	FED.	AIC	PROJECT		





(Looking South - See Plan for dimensions not shown)



See sheet 11 of 20 for Detail A.

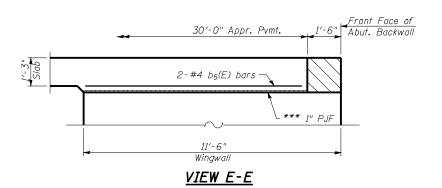
Notes.

Approach slab 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  $v_3(E)$  and  $v_4(E)$  bar details, see sheet 18 and sheet 19 of 20.

The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf. For bar splicer details, see sheet 20 of 20.

Cost of excavation for approach footing included with Concrete Structures. For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 20.



#### TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>6</sub> (E)	50	#4	16'-4"	
a7(E)	92	#5	16′-4"	
as(E)	50	#4	19'-4"	
a9(E)	92	#5	19'-4"	
b3(Е)	60	#4	29′-8"	
b4(E)	172	#9	29'-9"	
b5(E)	8	#4	9′-8"	
†(E)	148	#4	9'-8''	
w(E)	84	#5	16′-4″	
w1(E)	84	#5	19'-4"	
Concrete	Superstri	Cu. Yd.	101.0	
Concrete Structures			Cu. Yd.	11.1
Reinforcement Bars, Epoxy Coated			Pound	27330

#### (Looking North - See Plan for dimensions not shown)

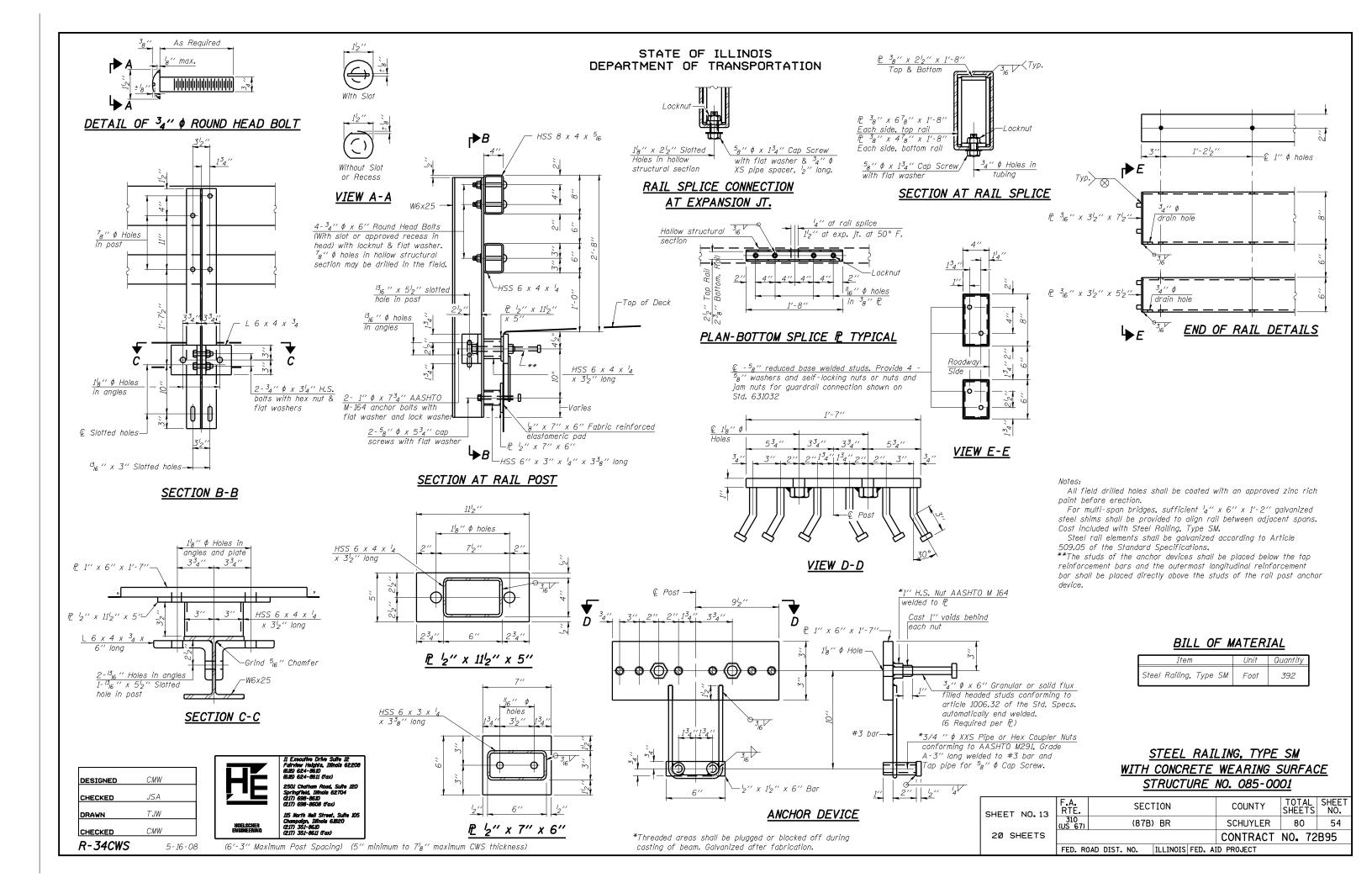
	OUW.	
DESIGNED	CMW	
CHECKED	JSA	
DRAWN	TJW	HOELSCHER
CHECKED	CMW	ENGINEERING
BA-O	Modified	10-31-08

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		113,
<u>1'-3''</u>	27′-3′′	1'-3"
-	29′-9′′	
	BAR b4(E)	

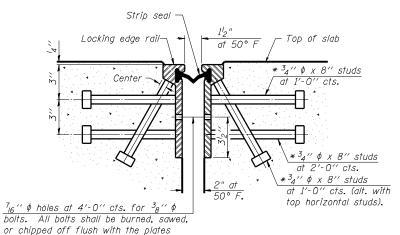
#### BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 085-0001

SHEET NO. 12	F.A. RTE.		SEC	ΓΙΟΝ			COUNTY	TOTAL SHEETS	SHEET NO.
3/12E1 140.12	310 (US 67)	(87B) BR				SCHUYLER	80	53	
20 SHEETS						С	CONTRACT	NO. 72	B95
	FED. RO	AD DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		



\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

after forms are removed, typ.



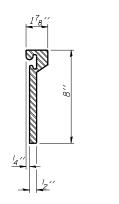
#### Strip seal-Locking edge rail-— Top of slab at 2'-0" cts. Anchor plate Place plates at 1'-0" cts. $\frac{7}{16}$ '' $\phi$ holes at 4'-0'' cts. for $\frac{3}{8}$ '' $\phi$ (alt, with top horizontal studs) bolts. All bolts shall be burned, sawed, or chipped off flush with the plates

#### SECTION THRU ROLLED RAIL JOINT

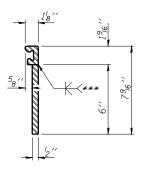
#### SECTION THRU WELDED RAIL JOINT

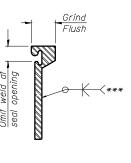
ANCHOR P

(for welded rail.



**ROLLED** EXTRUDED RAIL





after forms are removed, typ.

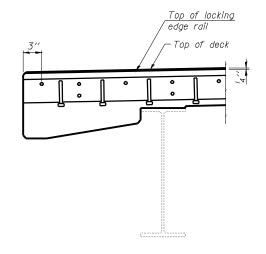
#### \*\*\*Back gouge not required if complete joint penetration is verified by mock-up.

#### LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

LOCKING EDGE RAILS

WELDED RAIL



Notes:

and stage construction joints.

shall be made at no additional cost to the State.

Article 520.03 of the Standard Specifications.

The strip seal shall be made continuous and shall have a minimum thickness

of  $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the

Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications

strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities

#### END TREATMENT AT EDGE OF SLAB

#### BILL OF MATERIAL

•		
Item	Unit	Total
Preformed Joint Strip Seal	Foot	72.0

#### PREFORMED JOINT STRIP SEAL STRUCTURE NO. 085-0001

SHEET NO.14	F.A. RTE.	SECTION		C	COUNTY	TOTAL SHEETS	SHEET NO.		
SHEET NO. 14	310 (US 67)	(87B) BR			SC	CHUYLER	80	55	
20 SHEETS						CO	NTRACT	NO. 72	B95
	FED. RO	AD DIST.	NO.	ILLINOIS	FED.	AID PR	OJECT		



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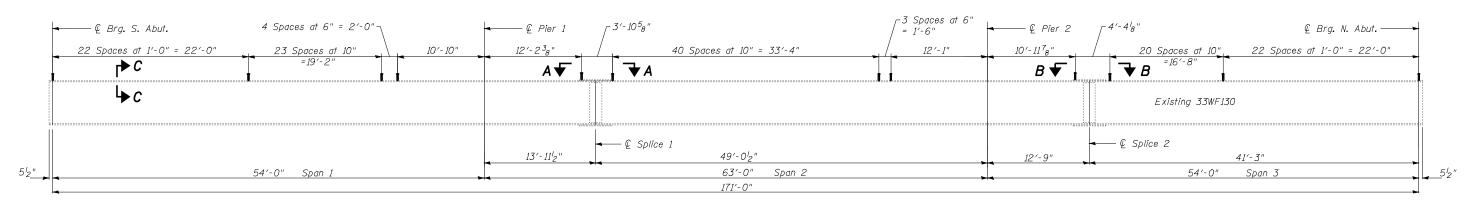
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115 North Neil Street, Suite 105 Champaign, Illinois 61820 (217) 351-8610 (217) 351-8611 (fax)

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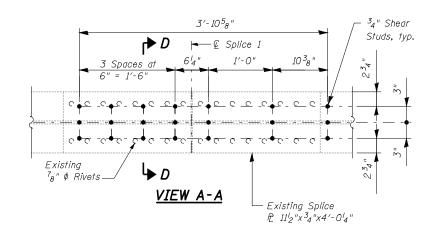
EJ-SSJ

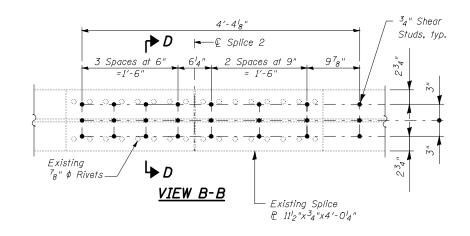
10 - 1 - 08

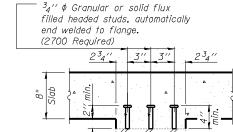


#### EXISTING BEAM ELEVATION

Showing Stud Shear Connector Spacing



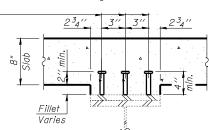




Fillet

Varies

3<sub>a</sub> " ♦ Granular or solid flux filled headed studs, automatically end welded to flange.



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CHECKED	JSA	
DRAWN	TJW	HOELSCI
CHECKED	CMW	ENGINEE

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INTERIOR BEAM MOMENT TABLE							
		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2			
$I_s$	(in <sup>4</sup> )	6699	6699	6699			
$I_c(n)$	(in <sup>4</sup> )	18161	-	18161			
$I_c(3n)$	(in <sup>4</sup> )	13173	-	13173			
Ss	(in <sup>3</sup> )	405	405	405			
Sc(n)	(in³)	605	-	605			
Sc(3n)	(in³)	543	-	543			
Z	(in <sup>3</sup> )	-	466	-			
P	(k/')	0.80	0.82	0.80			
M P	('k)	<i>1</i> 69	279	123			
s P	(k/')	0.02	-	0.02			
Ms Q	('k)	4	-	3			
MŁ	(′k)	<i>332</i>	174	332			
M im	('k)	93	47	88			
<sup>5</sup> 3 [M4 + I]	('k)	708	368	700			
Mα	(′k)	<i>1146</i>	842	1074			
Mυ	('k)	1894	1282	1894			
f₅ ⊉non-comp	(ksi)	5.0	8.3	3.6			
$f_s$ $Q$ (comp)	(ksi)	0.1	-	0.1			
fs <sup>5</sup> 3 [M \ + M <sub>I</sub> ]	(ksi)	14.0	<i>10.</i> 9	<i>13.9</i>			
$f_{\mathcal{S}}$ (Overload)	(ksi)	<i>19.1</i>	19.2	<i>17.6</i>			
fs (Total)	(ksi)	-	-	-			
VR	(k)	<i>32.</i> 5	-	33.5			

\*Compact section

<sup>\*\*</sup>Braced non-compact and partially braced section

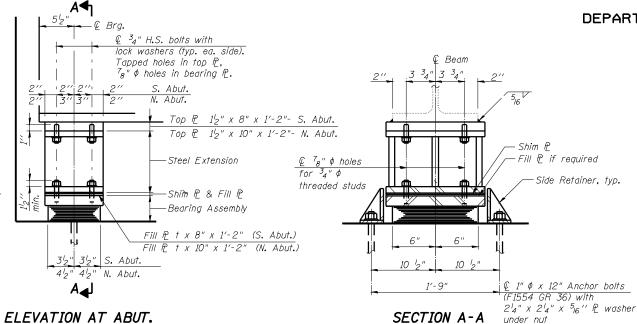
INTE	RIOR E	REAM REACTION	N TABLE
		Abuts.	Piers
R Q	(k)	17.9	<i>53.0</i>
R4	(k)	31.6	36.6
$R_I$	(k)	8.8	7.6
R Total	(k)	58 <b>.</b> 3	97.2

- $I_s$ ,  $S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) due to non-composite dead loads (in.4 and in.3).
- $I_c(n)$ ,  $S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total and Overload) due to short-term composite live loads (in.4 and in.3).
- $I_c(3n)$ ,  $S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total and Overload) due to long-term composite (superimposed) dead loads (in.4 and in.3).
  - Z: Plastic Section Modulus of the steel section in non-composite areas (in.3).
  - ₽: Un-factored non-composite dead load (kips/ft.).
  - MP: Un-factored moment due to non-composite dead load (kip-ft.).
  - $s \, \bar{\ell}$ : Un-factored long-term composite (superimposed) dead load (kips/ft.)
  - Ms Q: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
  - Mt: Un-factored live load moment (kip-ft.).
  - M1: Un-factored moment due to impact (kip-ft.).
  - Ma: Factored design moment (kip-ft.).

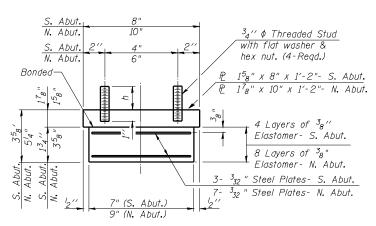
  - 1.3 [  $MQ + M_SQ + \frac{5}{3}$  ( $ML + M_I$ )] Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
- fs (Overload). Sum of stresses as computed from the moments below (ksi).  $M\Psi+M_S\Psi+rac{5}{3}\left(M\Psi+M_I\right)$  fs (Total): Sum of stresses as computed from the moments below on
- non-compact section (ksi).
  - 1.3 [MQ +  $M_sQ$  +  $\frac{3}{5}$  (M½ +  $M_I$ )] VR. Maximum½ + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

#### STRUCTURAL STEEL DETAILS STRUCTURE NO. 085-0001

SHEET NO.15	F.A. RTE.	SECTION				COUNTY	TOTAL SHEETS	SHEET NO.	
	310 (US 67)	(87B) BR				SCHUYLER	80	56	
20 SHEETS							CONTRACT	NO. 72	B95
	FED. RO	AD DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		



#### TYPE I ELASTOMERIC EXP. BRG.



#### BEARING ASSEMBLY

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place. Drilled and set anchor bolts shall be installed according

to Article 521.06 of the Standard Specifications. Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Two 18 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

#### "t" Dimensions

Location (Beam No.)	S. Abut.	N. Abut.
1	0	1 <sub>2</sub> '
2	38"	0
3	3 <sub>4</sub> "	3 <sub>4</sub> "
4	<sup>5</sup> 8"	1/4"
5	0	3 <sub>8</sub> "
6	0	3,"

# **HOELSCHER ENGINEERING**

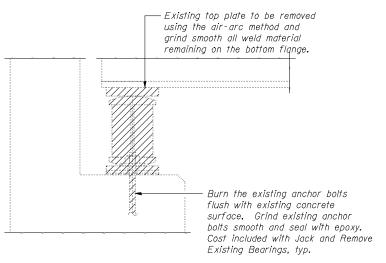
11 Executive Drive Suite 12 Fairview Heights, Illinois 62208 (618) 624-8610 (618) 624-8611 (fax)

2501 Chatham Road, Suite 120 Springfield, Illinois 62704 (217) 698-8610 (217) 698-8608 (fax)

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#### "h" Dimensions

Location (Beam No.)	S. Abut.	N. Abut.
1	234"	314"
2	3"	2 <sup>3</sup> 4"
3	3½"	2 <sup>5</sup> 8"
4	3 <sup>3</sup> 8"	4′
5	2 <sup>5</sup> 8"	21/8"
6	2 <sup>3</sup> 4"	21/8"



#### EXISTING ABUTMENT BEARING REMOVAL

#### JACK AND REMOVE EXISTING BEARING PROCEDURE

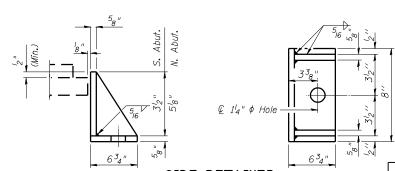
(North and South Abutments)

- 1. The Contractor shall submit for approval by the Engineer, plans for jacking existing beams and installing new bearings prior to commencing any related work.
- 2. Jacking and removing existing bearings shall be done after existing concrete deck is removed and prior to pouring the concrete deck.
- 3. Prior to ordering any material, the Contractor shall verify steel extension height and shim plate thickness required at each bearing so that total height of new bearing, steel extension and fill matches height of existing bearing and shim.
- 4. There shall be at least one jack per bearing, and the Jack shall be placed close to the bearings.
- 5. For limitations on lift amounts, see Special Provisions.
- 6. The maximum dead load reaction per beam (weight of steel only) at South and North Abutments is 3.2 kips. Minimum Jack capacity is 5 Kips for South and North Abutments.
- 7. The new bearing and steel extensions shall be in place and the jacks shall be lowered before the new concrete deck is poured.
- 8. Jacking against diaphragms is prohibited.

#### Note:

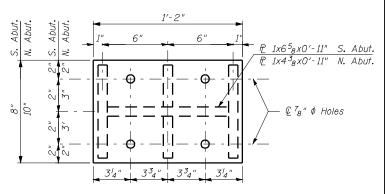
Shim plates shall not be placed under Bearing Assembly.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

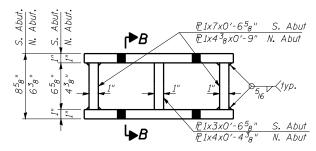


SIDE RETAINER Equivalent rolled angle with stiffeners

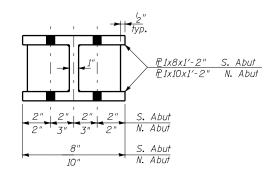
will be allowed in lieu of welded plates.



#### PLAN TOP AND BOTTOM PLATE



STEEL EXTENSION DETAIL



#### SECTION B-B

#### BILL OF MATERIAL

Item	Unit	Total		
Elastomeric Bearing Assembly Type 1	Each	12		
Jack and Remove Existing Bearings	Each	12		
Anchor Bolts, 1"	Each	24		

#### BEARING DETAILS STRUCTURE NO. 085-0001

SHEET NO. 16 20 SHEETS

F.A. RTE.			SECT	ΓΙΟΝ			COUNTY	TOT SHEE		SHEET NO.
310 (US 67)			(87B)	BR			SCHUYLER	80	)	57
							CONTRACT	NO.	72	B95
FED RO	חאר	TZIO	NO	THETHOUS	FFD	ΔΤ	D PROJECT			

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DESIGNED

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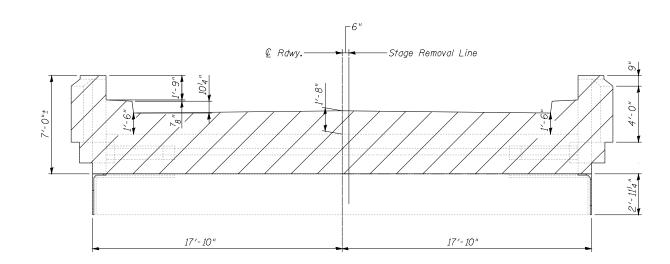
CMW

JSA

TJW

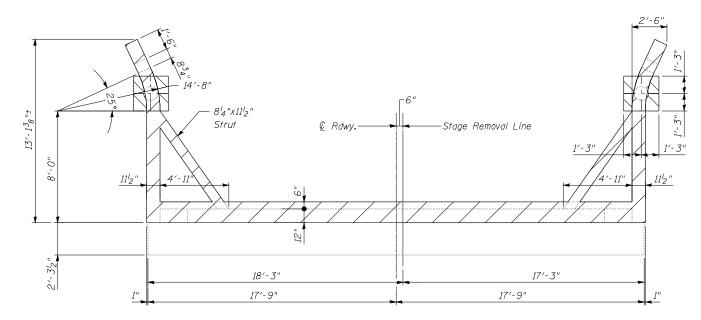
CMW

10-1-08



#### ELEVATION-NORTH ABUTMENT

(Looking North) (South Abutment Similar)

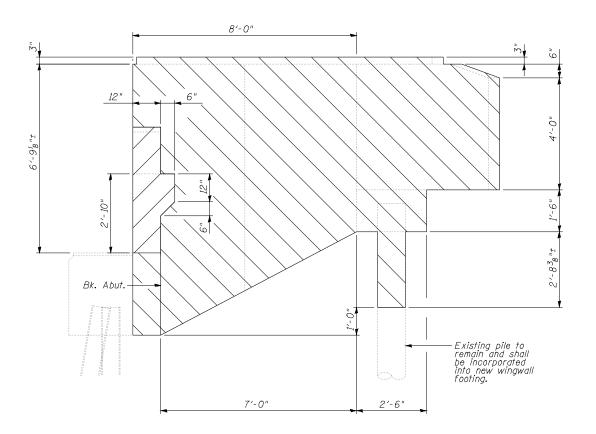


#### PLAN-NORTH ABUTMENT

(South Abutment Similar)







#### WINGWALL ELEVATION-NORTH ABUTMENT

(South Abutment Similar)

Notes:

Hatched area indicates Concrete Removal.

Existing reinforcement bars extending into the new construction shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.

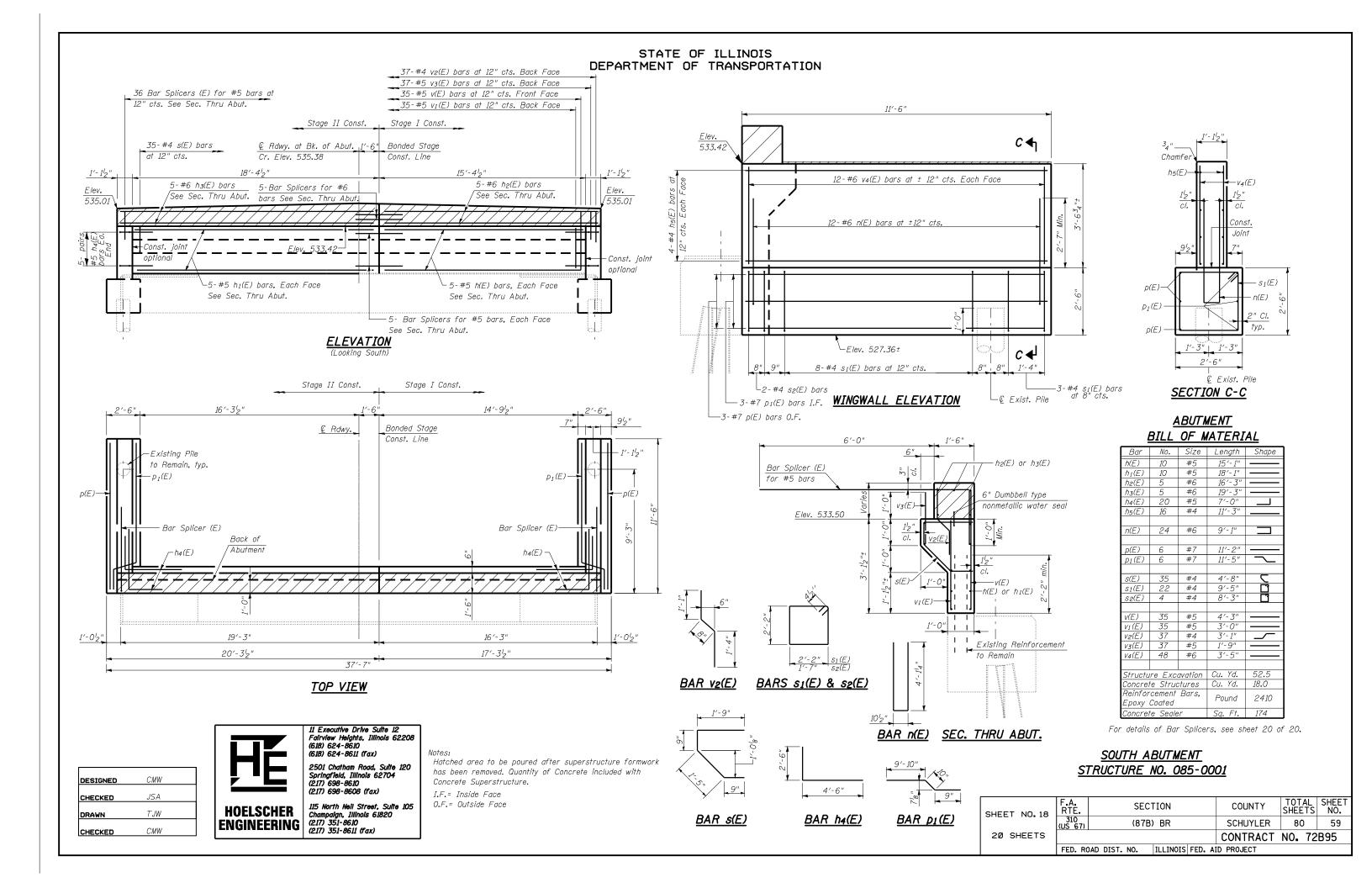
Existing reinforcement bars not extending into the new construction shall be cut off and covered with a 2" layer of cement grout. Cost included with Concrete Removal.

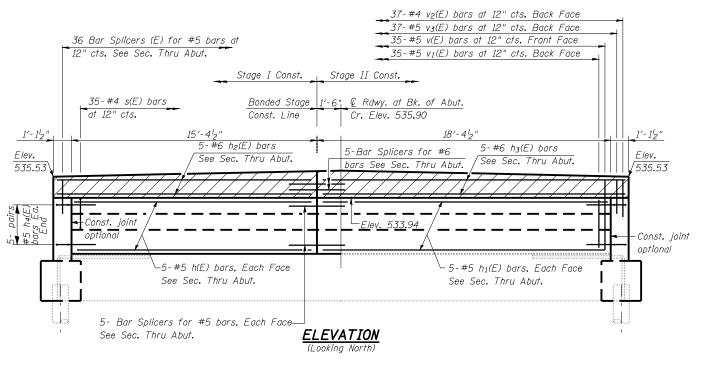
# TWO ABUTMENTS BILL OF MATERIAL

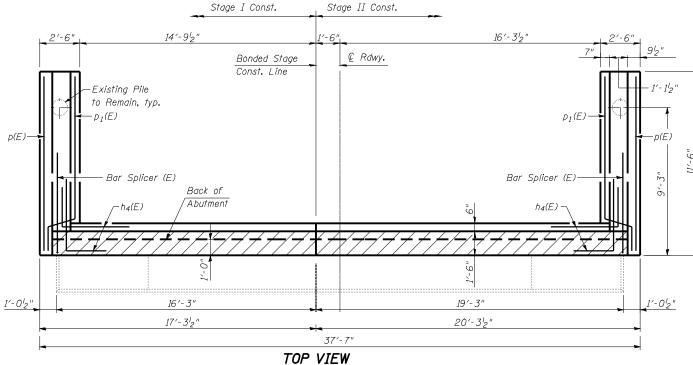
ITEM	UNIT	Quantity
Concrete Removal	Cu. Yd.	27.4

# CONCRETE REMOVAL STRUCTURE NO. 085-0001

SHEET NO.17	F.A. RTE.	F.A. SI	SECT	TION			COUNTY	TOT/ SHEE		SHEET NO.
3HEET NO. 17	310 (US 67)	(87B) BR					SCHUYLER	80	)	58
20 SHEETS							CONTRACT	NO.	72	B95
	FED. RC	DAD DIST.	NO.	ILLINOIS	FED.	ΑII	D PROJECT			









CMW

JSA

TJW

CMW

DESIGNED

CHECKED

CHECKED

DRAWN

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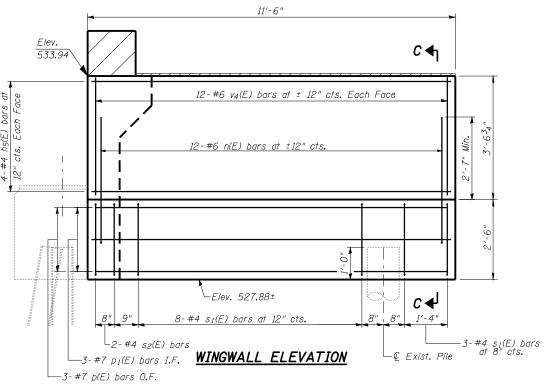
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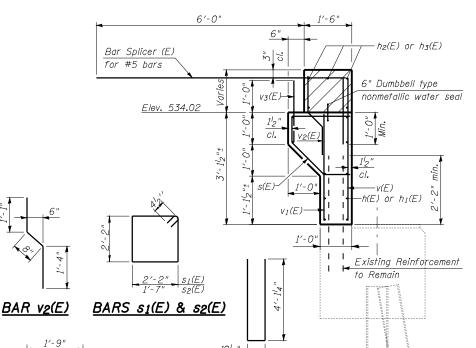
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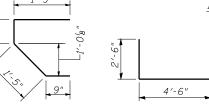
#### Notes:

Notes:
Hatched area to be poured after superstructure formwork
has been removed. Quantity of Concrete included with
Concrete Superstructure.

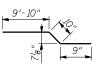
I.F.= Inside Face O.F.= Outside Face







BAR s(E) BAR h4(E)



BAR n(E)

BAR  $p_1(E)$  | SHEET NO. 19

SEC. THRU ABUT.

## 

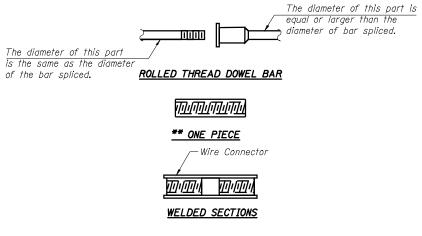
#### <u>ABUTMENT</u> BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	10	#5	15′-1"	
h1(E)	10	#5	18'-1"	
ha(E)	5	#6	16'-3"	
h3(E)	5	#6	19'-3"	
h4(E)	20	#5	7′-0"	
h5(E)	16	#4	11'-3"	
n(E)	24	#6	9'-1"	
p(E)	6	#7	11'-2"	
p1(E)	6	#7	11'-2" 11'-5"	7
s(E)	35	#4	4′-8"	U
s1(E)	22	#4	9′-5"	
s2(E)	4	#4	8′-3"	
v(E)	35	#5	4'-3"	
v1(E)	35	#5	3′-0"	
v2(E)	37	#4	3′-1"	\
ν3(E)	37	#5	1'-9"	
V4(E)	48	#6	3′-5"	
Structu	ire Exc	avation	Cu. Yd.	52.5
	te Struc		Cu. Yd.	18.0
Reinfor	cement	Bars,	Pound	2410
Ероху	Coated		i ourid	2 710
Concre	te Seale	er	Sq. Ft.	174
		C /		

For details of Bar Splicers, see sheet 20 of 20.

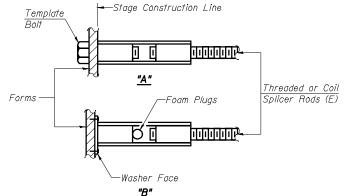
#### NORTH ABUTMENT STRUCTURE NO. 085-0001

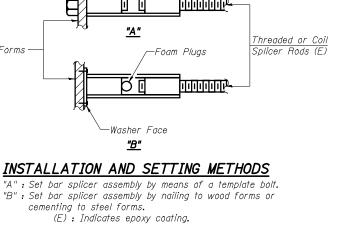
			<del>,                                    </del>					<u>-</u>				
19	F.A. RTE.			SEC	ΓΙΟΝ			COUNTY	TOT/ SHEE	AL TS	SHEET NO.	
• ′	310 (US 67)			(87B)	BR			SCHUYLER	80	)	60	
S								CONTRACT	NO.	72	B95	
	FED. RO	DAD	DIST.	NO.	ILLINOIS	FED.	ΑII	PROJECT				

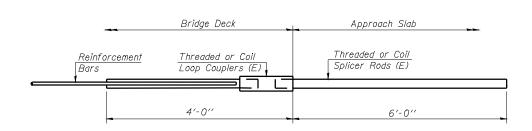


#### BAR SPLICER ASSEMBLY ALTERNATIVES

\*\*Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.







#### FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =

DESIGNED	CMW	
CHECKED	JSA	
DRAWN	TJW	
CHECKED	CMW	



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6′-0′′	1'-378"	
Approach slab Threaded or Coil Splicer Rods (E)	Abutment hatch block Threaded or Coil Loop Couplers (E)	
Reinforcement bars 1½" cl.		
<u>FOR STUB</u> <u>ABUTMENTS</u>		

	Bar	Splicer	for #5	5 bar	
	Capacity				
Min.	Pull-out	Strength	= 12.	3 kips -	tension
No.	Required	= 72			

#### <u>NOTES</u>

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

1

Minimum Capacity = 1.25 x fy x A<sub>t</sub>

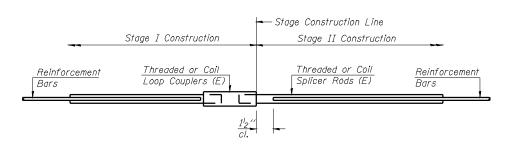
(Tension in kips) = 1.25 x fy x A<sub>t</sub>

Minimum \*Pull-out Strength = 0.66 x fy x A<sub>t</sub>

Where fy = Yield strength of lapped reinforcement bars in ksi.

 $A_t$  = Tensile stress area of lapped reinforcement bars. \* = 28 day concrete

BAR SPLICER ASSEMBLIES					
	Splicer Rod or Dowel Bar Length	Strength Requirements			
Bar Size to be Spliced			Min. Pull-Out Strength kips - tension		
#4	1′-8′′	14.7	7.9		
#5	2'-2"	23.0	12.3		
#6	2'-7''	33.1	17.4		
#7	3′-5″	45.1	23.8		
#8	4′-6′′	58.9	31.3		
#9	5′-9″	75.0	<i>39.</i> 6		
#10	7′-3′′	95.0	50.3		
#11	9'-0''	117.4	61.8		



#### STANDARD

Bar Size	No. Assemblies Required	Location	
5	438	Deck	
4	25	S. Approach	
5	88	S. Approach	
4	25	N. Approach	
5	88	N. Approach	
5	10	S. Abutment	
6	5	S. Abutment	
5	10	N. Abutment	
6	5	N. Abutment	

#### BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO.

SHEET NO. 20	F.A. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
	310 (US 67)	(87B) BR			SCHUYLER	80	61
20 SHEETS					CONTRACT	NO. 72	B95
	FED. RO	AD DIST. NO.	ILLINOIS	FED. AI	D PROJECT		

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