

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 72A94	

D-96-522-07

PROPOSED HIGHWAY PLANS

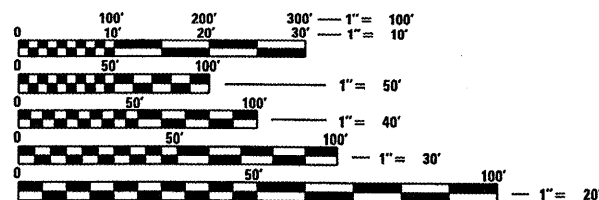
FAP ROUTE 761 {IL 108}
SECTION 107B-2 PROJECT: ACBRF-0761(011)
STRUCTURE OVER HODGES CREEK
MACOUPIN COUNTY
C-96-126-10

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HIGHWAY CLASSIFICATION = MINOR ARTERIAL (RURAL)
IL ROUTE 108 ADT = 800 (2007)
IL ROUTE 108 ADT = 1,020 (2031)

HIGHWAY STANDARDS
SEE SHEET NO. 2

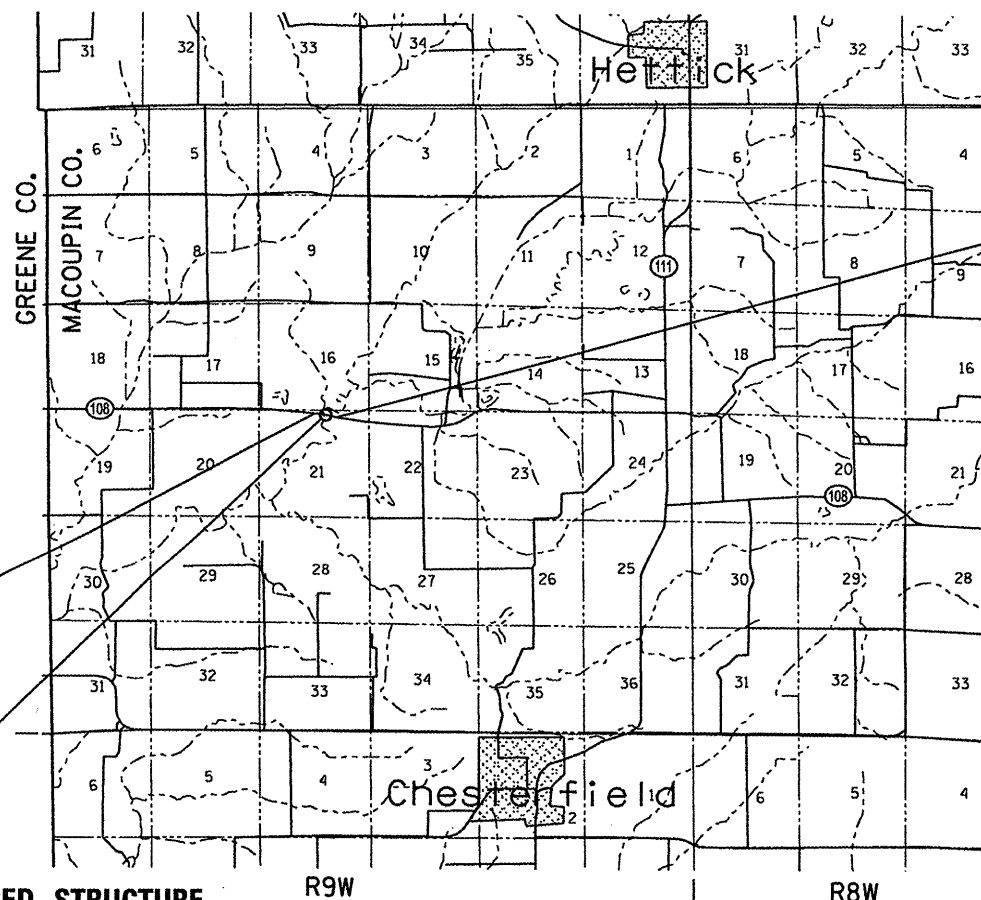


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

IDOT PROJECT ENGINEER SAL MADONIA (217) 782-4761
IDOT PROJECT MANAGER KEN ANDERSON (217) 524-7546

CONTRACT NO. 72A94



PROJECT ENDS
STATION 703+00

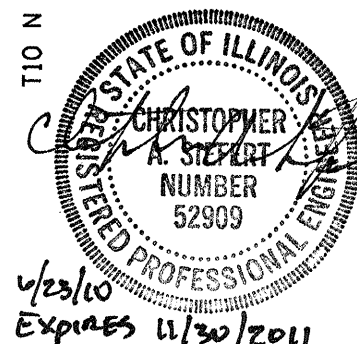
PROPOSED STRUCTURE
REPLACEMENT
IL 108 OVER HODGES CREEK
STATION 695+48.88
SN 059-0510

LOCATION MAP

NET LENGTH OF PROJECT = 1,500 FEET = 0.284 MILES



PROJECT BEGINS
STATION 688+00



HOMER L.
CHASTAIN
& ASSOCIATES, LLP
CONSULTING ENGINEERS
DECATUR (217) 422-8544
CHICAGO (773) 714-0050
ROCKFORD (815) 489-0050
184-001597



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 28 2010
Raymond Driskell
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 13 2010
Scott E. Stitt, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

August 13 2010
Christine M. Reader
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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GENERAL NOTES

- REFERENCE TO THE SSRB SHALL BE INTERPRETED AS REFERENCE TO THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 (SSRB). COPIES OF THESE SPECIFICATIONS CAN BE PURCHASED FROM THE FOLLOWING ORGANIZATION:
ILLINOIS DEPARTMENT OF TRANSPORTATION
2300 S. DIRKSEN PARKWAY
SPRINGFIELD, IL 62764
WWW.DOT.STATE.IL.US/DESENV/STDSPECS07.HTML
- ALL ELEVATIONS ARE BASED ON U.S.G.S. MEAN SEA-LEVEL DATUM. THE PROPOSED GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND STATION CROSS SECTIONS ARE THE ELEVATIONS FOR THE FINISHED SURFACE AT LOCATIONS AS INDICATED.
- THE LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES WERE OBTAINED FROM RECORDS AND FIELD SURVEYS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO EXCAVATION FOR THE NEW WORK.
- IN ADDITION TO FIELD SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS AND FIELD CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR QUANTITIES ACTUALLY FURNISHED AND PLACED AT THE CONTRACT UNIT PRICE FOR THE WORK.
- THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT ARE NOT GUARANTEED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THEIR EXACT LOCATIONS FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION. THE CONTRACTOR IS REQUIRED TO CONTACT J.U.L.I.E. AT 1-800-892-0123, PRIOR TO PROCEEDING WITH ANY EXCAVATION AND WORK ON THE PROJECT.
- ALL REFERENCES TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBERS LISTED ON THE GENERAL NOTES SHEET, OR THE COPY OF STANDARDS INCLUDED IN THESE PLANS.
- WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND/OR MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- DIMENSIONS FOR RADII SHOWN ON PLAN SHEETS ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES SPECIFIED IN THE SPECIAL PROVISIONS AND THE PLANS DURING THE COURSE OF THE PROJECT.
- THE THICKNESS OF HOT-MIX ASPHALT OVERLAY SHOWN ON THE PLANS IS THE NOMINAL THICKNESS FOR THE OVERLAY. DEVIATIONS FROM THE NOMINAL THICKNESS WILL ONLY BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE ON WHICH THE OVERLAY IS PLACED.
- ALL SAW CUTS NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED. THE MINIMUM SAW CUT DEPTH IN THE PAVEMENT SHALL BE 1-1/2" UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- STATION AND OFFSET LOCATIONS OF FLARED END SECTIONS ARE CALLED OUT TO THE FLARED END.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY-PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE SSRB. THE J.U.L.I.E. NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT HOURS ADVANCE NOTICE IS REQUIRED.
- THE DISTRICT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS (PH: 217-785-5312).
- CONTRACTOR CAN REQUEST TO REVIEW MICRO FILM PLANS AT THE DISTRICT. CONTACT PROJECT ENGINEER OR TEAM ENGINEER/MANAGER AS SHOWN ON THE COVER SHEET.

APPLICATION RATES

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE THE PLAN QUANTITIES:

BITUMINOUS MATERIALS (PRIME COAT)	- 0.00038 TON/SQ YD (ON PAVEMENT)
BITUMINOUS MATERIALS (PRIME COAT)	- 0.001425 TON/SQ YD (ON AGGREGATE)
AGGREGATE PRIME COAT	- 0.002 TON/SQ YD
HOT-MIX ASPHALT SURFACE/BINDER	- 0.056 TON/SQ YD/IN
AGGREGATE MATERIAL	- 2.05 TON/CU YD
RIPRAP	- 1.50 TON/CU YD
MULCH METHOD	- 2.0 TON/ACRE
AGRICULTURAL GROUND LIMESTONE	- 2.0 TON/ACRE
NITROGEN FERTILIZER NUTRIENT	- 90 LB/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	- 90 LB/ACRE
POTASSIUM FERTILIZER NUTRIENT	- 90 LB/ACRE

HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS ABBREVIATIONS & PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HOT-MIX ASPHALT SHOULDERS ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
609001-05	BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN
630001-08	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 GUARDRAIL TERMINALS
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701321-10	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING 45 MPH+
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

HOT-MIX ASPHALT MIXTURE REQUIREMENT

LOCATION(S):
MIXTURE USE(S): LEVELING BINDER
PG: PG 64-22
DESIGN AIR VOIDS: 4.0% @Ndes=50
MIXTURE COMPOSITION: IL 9.5
FRICTION AGGREGATE: N/A

LOCATION(S):
MIXTURE USE(S): SURFACE AND HMA SHOULDERS
PG: PG 64-22
DESIGN AIR VOIDS: 4.0% @Ndes=50
MIXTURE COMPOSITION: IL 9.5 OR 12.5
FRICTION AGGREGATE: MIX C

LOCATION(S):
MIXTURE USE(S): BASE COURSE WIDENING
PG: PG 64-22
DESIGN AIR VOIDS: 4.0% @Ndes=50
MIXTURE COMPOSITION: IL 19.0
FRICTION AGGREGATE: N/A

LOCATION(S):
MIXTURE USE(S): BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
PG: PG 64-22
DESIGN AIR VOIDS: 4.0% @Ndes=50
MIXTURE COMPOSITION: IL 19.0
FRICTION AGGREGATE: N/A

COMMITMENTS

NO COMMITMENTS

DISTRICT SIX	
EXAMINED <u>June 7</u> 20 <u>10</u> <i>Arie W. Welch</i>	
OPERATIONS ENGINEER	
EXAMINED <u>JUNE 8</u> 20 <u>10</u> <i>Jimmy F. ...</i>	
PROJECT IMPLEMENTATION ENGINEER	
EXAMINED <u>June 9</u> 20 <u>10</u> <i>ARM ...</i>	
PROGRAM DEVELOPMENT ENGINEER	

IL RTE 108 ROADWAY 80% FEDERAL 20% STATE	SN 059-0510 BRIDGE 80% FEDERAL 20% STATE
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PAY CODE	ITEM	UNITS	TOTAL QUANTITY	CONSTRUCTION CODE TYPES	
				I000	X071-2A
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	100	100	
20100500	TREE REMOVAL, ACRES	ACRE	0.44	0.44	
20200100	EARTH EXCAVATION	CU YD	888	888	
20300100	CHANNEL EXCAVATION	CU YD	2,394	2,394	
20400800	FURNISHED EXCAVATION	CU YD	2,784	2,784	
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	154		154
25000200	SEEDING, CLASS 2	ACRE	2	2	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	180	180	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	180	180	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	180	180	
25100115	MULCH, METHOD 2	ACRE	2	2	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	189	189	
28000315	AGGREGATE DITCH CHECKS	TON	355	355	
28000400	PERIMETER EROSION BARRIER	FOOT	1,407	1,407	
28000500	INLET AND PIPE PROTECTION	EACH	2	2	
28100109	STONE RIPRAP, CLASS A5	SQ YD	1205		1205
28100707	STONE DUMPED RIPRAP, CLASS A4	SQ YD	308	308	
28200200	FILTER FABRIC	SQ YD	1,821	308	1513
35101400	AGGREGATE BASE COURSE, TYPE B	TON	30	30	
35650500	BASE COURSE WIDENING 10"	SQ YD	484	484	

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 3
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	

Rev.

PAY CODE	ITEM	UNITS	TOTAL QUANTITY	CONSTRUCTION CODE TYPES	
				IL RTE 108 ROADWAY 80% FEDERAL 20% STATE	SN 059-0510 BRIDGE 80% FEDERAL 20% STATE
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	44	44	X071-2A
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	3	3	
40600300	AGGREGATE (PRIME COAT)	TON	10	10	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	98	98	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	116	116	
40600990	TEMPORARY RAMP	SQ YD	65	65	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	205	205	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	48	48	
44000100	PAVEMENT REMOVAL	SQ YD	245	245	
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	713	713	
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	2,037	2,037	
44004250	PAVED SHOULDER REMOVAL	SQ YD	285	285	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	256	256	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	78	78	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50104400	CONCRETE HEADWALL REMOVAL	EACH	1	1	
50105220	PIPE CULVERT REMOVAL	FOOT	102	102	
50200100	STRUCTURE EXCAVATION	CU YD	690		690
50300225	CONCRETE STRUCTURES	CU YD	389.7		389.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	814.7		814.7
50300260	BRIDGE DECK GROOVING	SQ YD	2,378		2,378

PAY CODE	ITEM	UNITS	TOTAL QUANTITY	IL RTE 108	SN 059-0510
				ROADWAY	BRIDGE
				80% FEDERAL	80% FEDERAL
				20% STATE	20% STATE
				CONSTRUCTION CODE TYPES	
				I000	X071-2A
50300280	CONCRETE ENCASEMENT	CU YD	18.4		18.4
50300300	PROTECTIVE COAT	SQ YD	3,036		3,036
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	6,588		6,588
50800105	REINFORCEMENT BARS	POUND	45	45	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	244,300		244,300
50800515	BAR SPLICERS	EACH	2,233		2,233
51201600	FURNISHING STEEL PILES HP12X53	FOOT	1,792		1,792
51201610	FURNISHING STEEL PILES HP12X63	FOOT	3,144		3,144
51202305	DRIVING PILES	FOOT	4,936		4,936
51203600	TEST PILE STEEL HP12X53	EACH	2		2
51203610	TEST PILE STEEL HP12X63	EACH	4		4
51204650	PILE SHOES	EACH	48		48
51500100	NAME PLATES	EACH	1		1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	114		114
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24		24
52100520	ANCHOR BOLTS, 1"	EACH	48		48
52100530	ANCHOR BOLTS, 1 1/4"	EACH	12		12
52100540	ANCHOR BOLTS, 1 1/2"	EACH	36		36
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	15	15	
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	35	35	

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 5
CONTRACT NO. 72A94				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

Rev.

IL RTE 108
ROADWAY
80% FEDERAL
20% STATE

SN 059-0510
BRIDGE
80% FEDERAL
20% STATE

PAY CODE	ITEM	UNITS	TOTAL	CONSTRUCTION CODE TYPES	
			QUANTITY	I000	X071-2A
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	1	
54215547	METAL END SECTIONS 12"	EACH	2	2	
54215559	METAL END SECTIONS 24"	EACH	2	2	
54248510	CONCRETE COLLAR	CU YD	0.5	0.5	
58700300	CONCRETE SEALER	SQ FT	1,958		1,958
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	71		71
60100945	PIPE DRAINS 12"	FOOT	109	109	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	160		160
60900215	TYPE C INLET BOX, STANDARD 609001	EACH	2	2	
60900515	CONCRETE THRUST BLOCKS	EACH	2	2	
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	563	563	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARD RAIL REMOVAL	FOOT	880	880	
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	7	7	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	18	5	13
67100100	MOBILIZATION	L SUM	1	0.5	0.5
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	
70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1		1

* SPECIALTY ITEMS

FILE NAME =	USER NAME = leughl@nr1	DESIGNED -	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	6
CONTRACT NO. 72A94				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

IL RTE 108 ROADWAY 80% FEDERAL 20% STATE	SN 059-0510 BRIDGE 80% FEDERAL 20% STATE
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PAY CODE	ITEM	UNITS	TOTAL		CONSTRUCTION CODE TYPES	
			QUANTITY		I000	X071-2A
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5		5	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1		1	
70106700	TEMPORARY RUMBLE STRIP	EACH	6		6	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	24		4	20
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1,500		1,500	
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	3,465		3,465	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	988		988	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	875		875	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	850		850	
* 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	3,465		3,465	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12		12	
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	12		12	
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	16		16	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4		4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,713		1,713	
Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	6			6
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	325			325
X5080600	MECHANICAL SPLICERS	EACH	138			138
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1		1	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	220			220
Z0030260	IMPACT ATTENUATORS TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2			2
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1	
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	2			2

*SPECIALTY ITEMS

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	PLOT DATE = Jun-28-2010 07:48:00AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

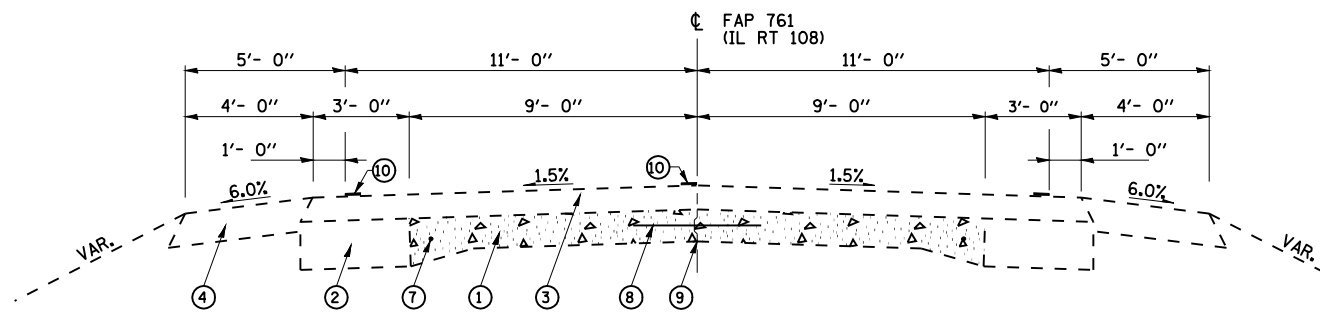
SUMMARY OF QUANTITIES

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

F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 7
CONTRACT NO. 72A94				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

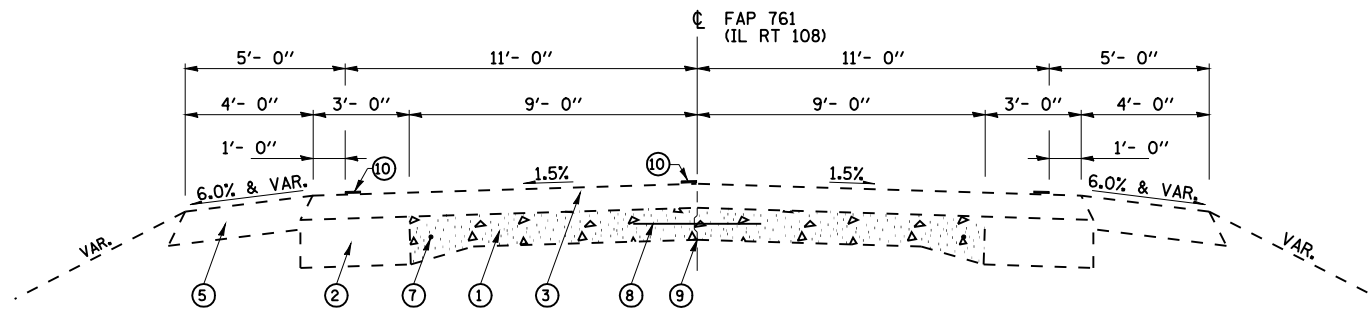
Rev.

EXISTING ROADWAY TYPICALS



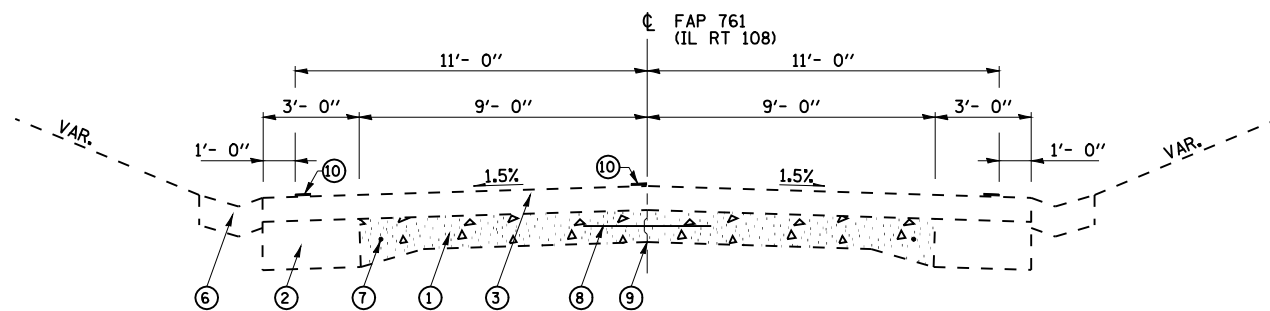
TYPICAL #1

LT. STA. 685+00 TO STA. 691+64.71
RT. STA. 685+00 TO STA. 691+78.16



TYPICAL #2

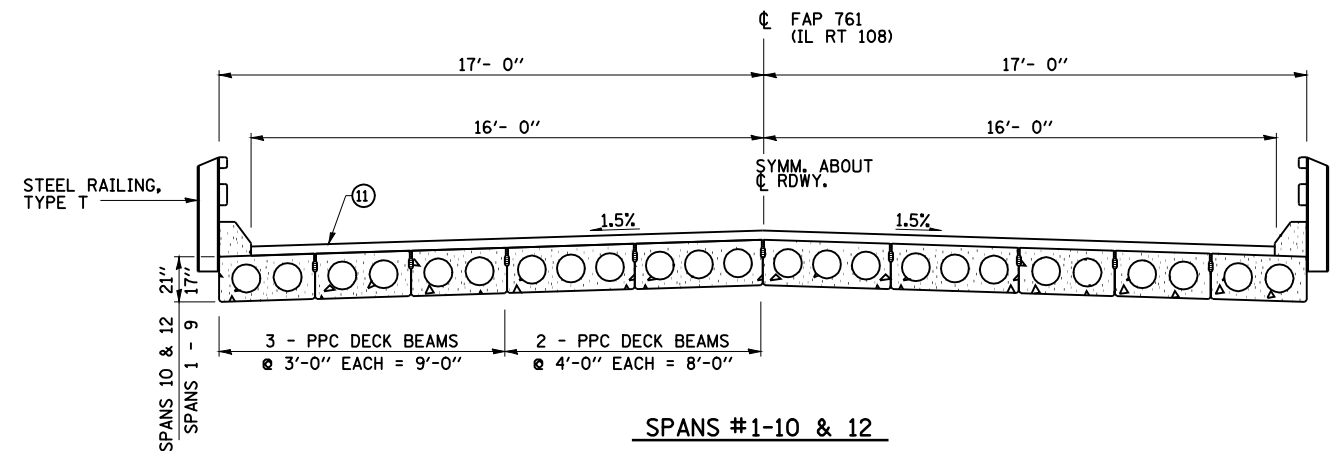
LT. STA. 691+64.71 TO STA. 692+77.69
RT. STA. 691+78.16 TO STA. 692+77.69
BRIDGE OMISSION STA. 692+77.69 TO STA. 698+38.41
LT. STA. 698+38.41 TO STA. 700+40.21
RT. STA. 698+38.41 TO STA. 700+25.39



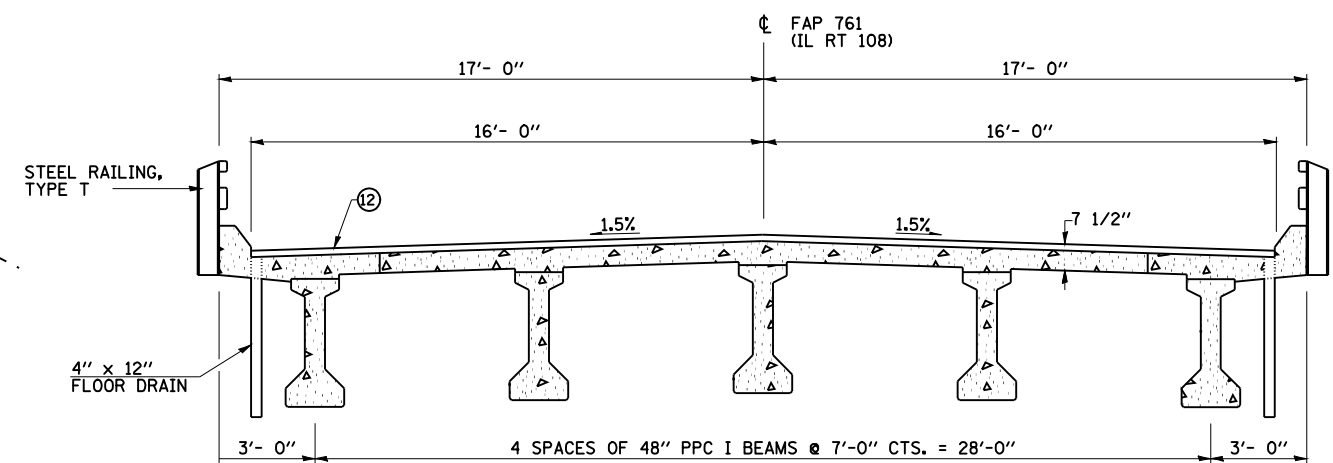
TYPICAL #3

LT. STA. 700+40.21 TO STA. 707+00.00
RT. STA. 700+25.39 TO STA. 707+00.00

EXISTING BRIDGE TYPICALS



SPANS #1-10 & 12



SPAN #11

EXISTING LEGEND

- ① EX PCC PAVEMENT (9-6-9)
- ② EX HOT-MIX ASPHALT BASE COURSE WIDENING - 9"
- ③ EX HOT-MIX ASPHALT OVERLAY (4")
- ④ EX AGGREGATE SHOULDERS
- ⑤ EX HOT-MIX ASPHALT SHOULDERS - 6"
- ⑥ EX GUTTER OR CLASS X CONC. OUTLETS
- ⑦ EX 3/4" SMOOTH BAR
- ⑧ EX 1/2" DEFORMED BAR
- ⑨ EX LONGITUDINAL METAL JOINT
- ⑩ EX PAVEMENT MARKING LINE
- ⑪ EX REINFORCED CONCRETE WEARING SYSTEM - 4 1/4" & VAR.
- ⑫ EX MICROSILICA CONCRETE OVERLAY - 2 1/2" & VAR.

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -
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PLOT DATE = Jun-28-2010 02:00:20PM		DATE -	REVISED -

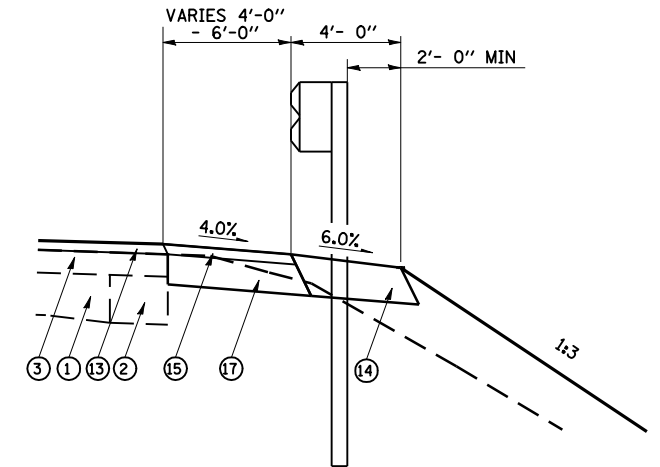
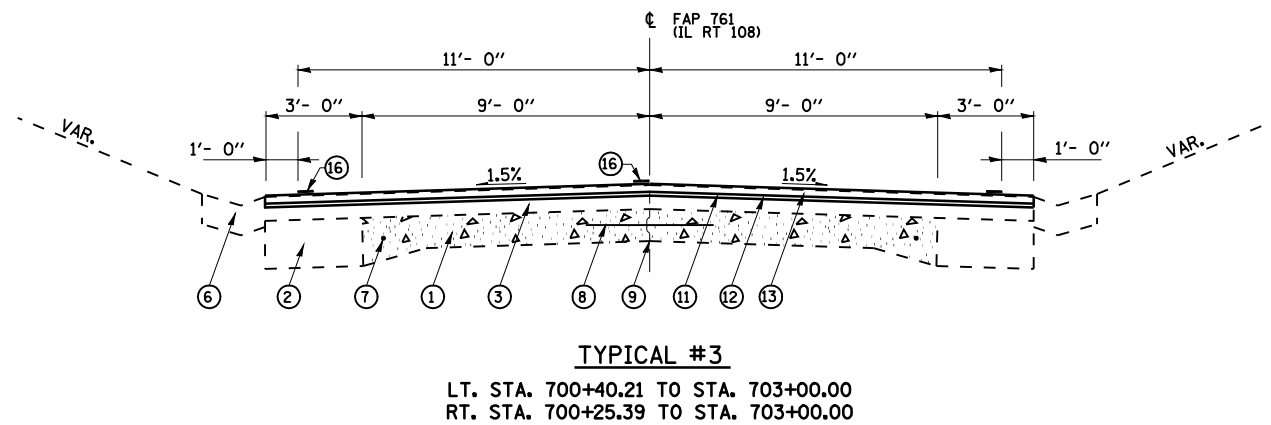
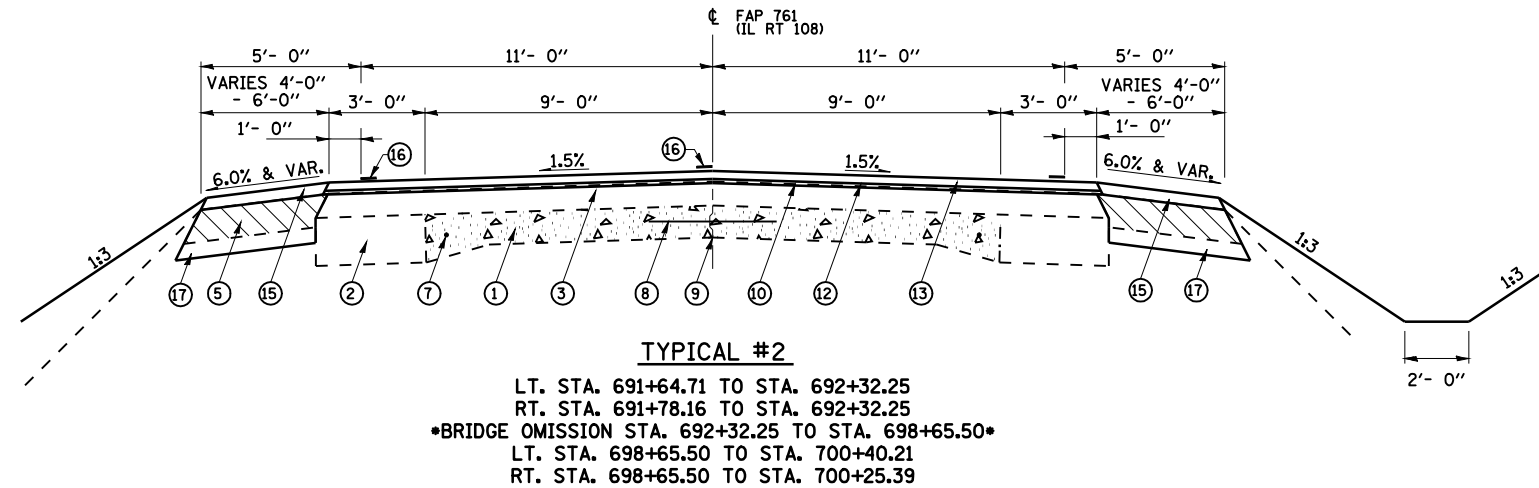
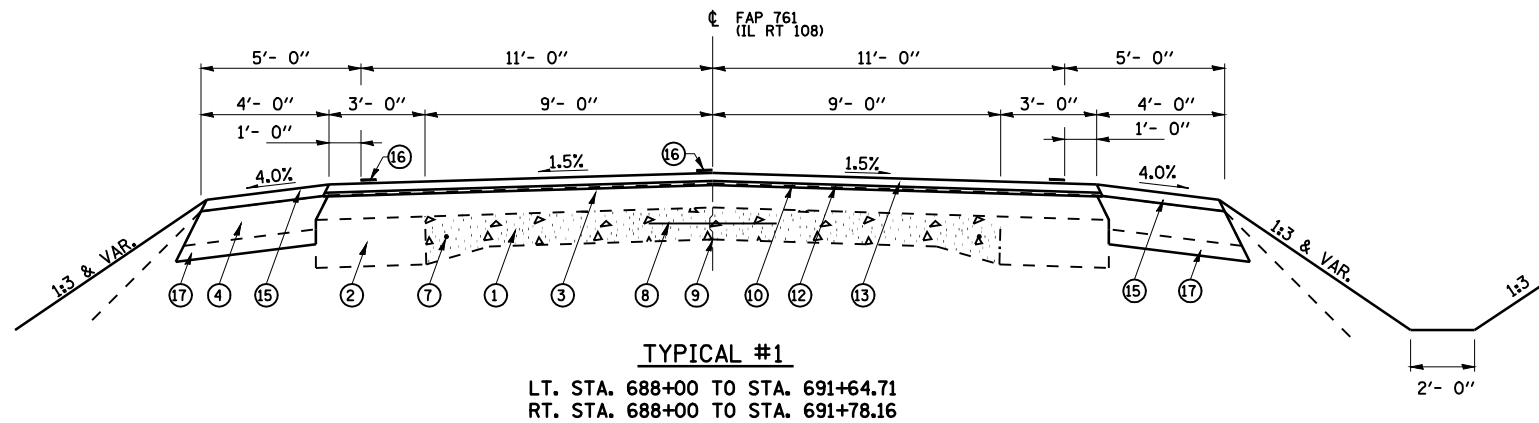
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING TYPICAL SECTIONS

SCALE: _____ STA. TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	8
CONTRACT NO. 72A94				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PROPOSED ROADWAY TYPICALS



- LEGEND**
- ① EX PCC PAVEMENT (9-6-9)
 - ② EX HOT-MIX ASPHALT BASE COURSE WIDENING - 9"
 - ③ EX HOT-MIX ASPHALT OVERLAY (4")
 - ④ EX AGGREGATE SHOULDERS
 - ⑤ EX HOT-MIX ASPHALT SHOULDERS - 6"
 - ⑥ EX GUTTER OR CLASS X CONC. OUTLETS
 - ⑦ EX 3/4" SMOOTH BAR
 - ⑧ EX 1/2" DEFORMED BAR
 - ⑨ EX LONGITUDINAL METAL JOINT
 - ⑩ PR HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH
 - ⑪ PR HOT-MIX ASPHALT SURFACE REMOVAL 2"
 - ⑫ PR LEVEL BINDER (MACHINE METHOD)(3/4")
 - ⑬ PR HOT-MIX ASPHALT SURFACE COURSE (1 1/2")
 - ⑭ PR AGGREGATE SHOULDERS, TYPE B - 11 1/2"
 - ⑮ PR HOT-MIX ASPHALT SHOULDERS (2 1/4")
 - ⑯ PR PAVEMENT MARKING - LINE 5"
 - ⑰ PR BASE COURSE WIDENING, 10"

PAVED SHOULDER REMOVAL

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED TYPICAL SECTIONS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -				761	107B-2	MACOUPIN	98	9	
		CHECKED -	REVISED -									CONTRACT NO. 72A94
		DATE -	REVISED -			SCALE:	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

REMOVAL SCHEDULE

STA	IQ	STA	OFFSET	PAVEMENT REMOVAL (SQ YD)	HMA SURFACE REMOVAL 2" (SQ YD)	HMA SURFACE REMOVAL VARIABLE DEPTH (SQ YD)	PAVED SHOULDER REMOVAL (SQ YD)	CONCRETE HEADWALL REMOVAL (EACH)	PIPE CULVERT REMOVAL (FOOT)	GUARDRAIL REMOVAL (FOOT)
692+26.25		692+77.69		149						
698+38.40		698+71.50		96						
700+40.20		703+00.00	LT		346					
700+25.40		703+00.00	RT		366					
688+00.00		688+78.00				217				
688+78.00		692+26.25				929				
698+71.50		700+61.70	LT			254				
698+71.50		700+43.00	RT			229				
689+47.30		692+26.25	LT			124				
689+47.30		692+26.25	RT			124				
698+71.50		700+61.70	LT			85				
698+71.50		700+43.00	RT			76				
691+64.70		692+77.70	LT				50			
691+78.20		692+77.70	RT				44			
698+38.40		700+61.00	LT				99			
698+38.40		700+43.00	RT				91			
688+84.70			35 RT					1		
692+68.00			36 LT						73	
692+71.00			76 RT						18	
698+38.00			25 RT						11	
690+13.43		692+76.80	LT							263
690+13.43		692+76.80	RT							263
698+37.78		700+40.00	LT							202
698+37.78		699+88.40	RT							151
PROJECT TOTAL				245	713	2,037	285	1	102	880

SHOULDER DRAIN SCHEDULE

STA	OFFSET	TYPE C INLET BOX STANDARD 609001 (EACH)	PIPE DRAINS 12" (FOOT)	METAL END SECTION 24" (EACH)	CONCRETE THRUST BLOCKS (EACH)
692+47.00	LT	1	56	1	1
692+47.00	RT	1	53	1	1
PROJECT TOTAL		2	109	2	2

SEEDING SCHEDULE

STA	IQ	STA	OFFSET	SEEDING CLASS 2 (ACRE)	NITROGEN FERT. NUT. (POUND)	PHOSPHORUS FERT. NUT. (POUND)	POTASSIUM FERT. NUT. (POUND)	MULCH METHOD 2 (ACRE)
688+00.		693+00.	LT	0.86	80.00	80.00	80.00	0.86
688+00.		693+00.	RT	0.68	65.00	65.00	65.00	0.68
698+00.		703+00.	LT	0.21	20.00	20.00	20.00	0.21
698+00.		703+00.	RT	0.14	15.00	15.00	15.00	0.14
PROJECT TOTAL				2.0	180.0	180.0	180.0	2.0

EARTHWORK SCHEDULE

ALIGNMENT	STATION	TO	STATION	1	2	3	4
				EARTH EXCAVATION (CU YD)	*EXCAVATION TO BE USED IN EMBANKMENT (ADJUSTED FOR SHRINKAGE) (COL 1 x 0.75) (CU YD)	*EMBANKMENT (FILL) (CU YD)	EARTHWORK BALANCE WASTE (+) OR FURNISHED EXCAVATION (-) (COL 2 - COL 3) (CU YD)
IL 108	688+00.00		703+00.00	888	666	3,450	-2,784
PROJECT TOTAL				888	666	3,450	-2,784

EARTH EXCAVATION SHRINKAGE FACTOR = 25%
ITEMS MARKED WITH AN ASTERISK (*) ARE FOR INFORMATIONAL PURPOSES ONLY

EROSION CONTROL SCHEDULE

STA	IQ	STA	OFFSET	TEMPORARY EROSION CONTROL SEEDING (POUND)	AGGREGATE DITCH CHECKS (TON)	PERIMETER EROSION BARRIER (FOOT)	INLET AND PIPE PROTECTION (EACH)	STONE RIPRAP CLASS A5 (SQ YD)	STONE DUMPED RIPRAP CLASS A4 (SQ YD)	FILTER FABRIC (SQ YD)
688+00.		693+00.	LT	86						
688+00.		693+00.	RT	68						
698+00.		703+00.	LT	21						
698+00.		703+00.	RT	14						
693+50.			LT		22					
693+50.			RT		22					
696+40.			LT		22					
696+50.			LT		22					
696+90.			RT		22					
697+00.			RT		22					
698+75.			LT		22					
699+00.			LT		22					
699+50.			LT		22					
699+75.			LT		22					
700+00.			LT		22					
700+25.			LT		22					
698+50.			RT		22					
698+75.			RT		22					
699+00.			RT		22					
699+50.			RT		22					
688+00.		693+00.	LT			627				
688+00.		692+84.	RT			550				
697+86.		699+00.	LT			146				
697+86.		698+63.	RT			84				
688+84.7			RT				1			
692+50.7			RT				1			
692+61.		692+81.						319		319
698+05.		698+49.						886		886
698+36.		699+97.	RT						152	152
698+75.		700+40.	LT						156	156
PROJECT TOTAL				189	355	1407	2	1,205	308	1,513

TREE REMOVAL SCHEDULE

STATION	OFFSET	(6"-15") UNITS
689+07.	69 LT	7
689+13.	55 LT	8
689+33.	65 LT	8
689+70.	54 LT	7
689+71.	53 LT	11
690+28.	54 LT	7
690+29.	56 LT	10
690+30.	55 LT	7
690+31.	53 LT	12
690+32.	55 LT	7
691+02.	58 LT	14
PROJECT TOTAL		100

TREE REMOVAL SCHEDULE

STATION	OFFSET	STATION	OFFSET	ACRES
691+37.	56 LT	696+69.	56 LT	0.39
691+37.	88 LT	696+69.	88 LT	
692+22.	118 RT	692+70.	118 RT	0.05
692+54.	71 RT	693+02.	69 RT	
PROJECT TOTAL				0.44

CULVERT SCHEDULE

STA	IQ	STA	OFFSET	PIPE CULVERTS CLASS A, TY 1 24" (FOOT)	PIPE CULVERTS CLASS D, TY 1 24" (FOOT)	PRC FLARED END SECTION 24" (EACH)	METAL END SECTION 24" (EACH)
688+84.70		688+84.70	RT	15		1	
692+69.30		692+50.70	RT		35		
692+50.70			RT				1
692+69.00			RT				1
PROJECT TOTAL				15	35	1	2

CHANNEL EXCAVATION SCHEDULE

ALIGNMENT	STATION	TO	STATION	OFFSET	CHANNEL EXCAVATION (CU YD)
IL 108	692+61.75		692+77.92	LT	409.3
	692+77.92		693+00.00	LT	363.5
	693+00.00		693+53.27	LT	42.4
	693+53.27		694+00.00	LT	19.0
	694+00.00		695+00.00	LT	94.4
	695+00.00		696+00.00	LT	150.0
	696+00.00		696+49.90	LT	123.8
	696+49.90		696+72.51	LT	69.9
	696+72.51		697+37.51	LT	102.3
	697+37.51		697+76.45	LT	157.9
	697+76.45		698+00.00	LT	300.5
	698+00.00		698+08.79	LT	185.1
	698+08.79		698+36.00	LT	375.9
PROJECT TOTAL					2,394

PAVEMENT SCHEDULE

STA	IO	STA	OFFSET	AGGREGATE SURFACE COURSE TYPE B (TON)	AGGREGATE BASE COURSE TYPE B (TON)	BASE COURSE WIDENING 10' (SQ YD)	HMA SURFACE REMOVAL BUTT JOINT (SQ YD)	BITUMINOUS MATERIALS PRIME COAT (TON)	AGGREGATE PRIME COAT (TON)	LEVELING BINDER MM N50 (TON)	HMA SURFACE MIX "C" N50 (TON)	BRIDGE APPROACH PAVEMENT CONNECTOR FLEXIBLE (SQ YD)	HMA SHOULDERS (TON)	AGGREGATE SHOULDERS TYPE B (TON)
687+65.00		688+00.00					101.11	0.08	0.4		8			
688+00.00		688+78.00						0.16	0.87	9	18			
688+78.00		692+32.25						0.72	3.78	40	79			
698+65.50		703+05.00						0.89	4.69	49	98			
703+00.00		703+05.00					14.44							
689+48.70		692+48.80	LT											78
688+98.10		692+48.80	RT											90
688+00.00		691+32.25	LT					0.11				19		
688+00.00		691+22.25	RT					0.11				18		
691+32.30		692+32.25	LT					0.04				7		
691+22.25		692+32.25	RT					0.05				8		
698+48.90		700+31.10	LT											50
698+48.90		699+92.50	RT											38
698+65.50		700+60.00	LT					0.08				14		
698+65.50		700+43.00	RT					0.07				12		
692+26.25		692+32.25									24			
698+65.50		698+71.50									24			
692+60.00			RT	22	30									
700+67.00			RT	22										
689+47.30		692+77.70	LT			147								
689+47.30		692+77.70	RT			147								
698+37.80		700+60.00	LT			99								
698+37.80		700+43.00	RT			91								
PROJECT TOTAL				44	30	484	116	3	10	98	205	48	78	256

TEMPORARY RAMP SCHEDULE

STA	STA	OFFSET	TEMPORARY RAMP (SQ YD)	COMMENTS
687+65.	687+70.		14	STAGE III
692+27.3	692+32.3	LT	9	STAGE I
692+27.3	692+32.3	LT	9	STAGE II
698+65.5	698+70.5	RT	9	STAGE I
698+65.5	698+70.5	RT	9	STAGE II
703+00.	703+05.		14	STAGE III
PROJECT TOTAL			65	

RIGHT OF WAY MARKERS SCHEDULE

STATION	OFFSET	LT OR RT	FURNISHING AND ERECTING ROW MARKERS (EACH)
687+00.	40	RT	1
689+00.	75	RT	1
697+50.	75	RT	1
697+50.	75	LT	1
698+50.	50	RT	1
699+00.	75	RT	1
700+00.	50	RT	1
PROJECT TOTAL			7

GUARDRAIL SCHEDULE

STA	IO	STA	OFFSET	SPBGR TYPE A 6 FOOT POSTS (FOOT)	TRAFFIC BARRIER TERMINAL TYPE 6 (EACH)	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT (EACH)	TERMINAL MARKER DIRECT-APPLIED (EACH)
689+82.10		692+07.10	RT	225			
690+32.10		692+07.10	LT	175			
698+92.65		699+55.15	RT	62.5			
698+92.65		699+92.65	LT	100.0			
692+07.10			LT		1		
692+07.10			RT		1		
698+47.00			LT		1		
698+47.00			RT		1		
689+82.10			LT			1	1
689+32.10			RT			1	1
699+92.65			LT			1	1
699+55.15			RT			1	1
690+90.00		691+57.25	17 LT				
691+57.25		699+41.25	17 LT				
699+41.25		700+00.	11 LT				
700+00.00		703+41.25	11 LT				
688+00.00		703+00.					
687+65.00		703+05.	11 LT				
687+65.00		703+05.	11 RT				
687+65.00		703+05.	CL				
690+44.50		700+72.	11 LT				
690+44.50		700+72.	11 RT				
690+44.50		700+72.	CL				
688+00.00							
688+80.00							
689+60.00							
690+40.00							
691+20.00							
692+00.00							
698+80.00							
699+60.00							
700+40.00							
701+20.00							
702+00.00							
702+80.00							
PROJECT TOTAL				562.5	4	4	4

PAVEMENT MARKING SCHEDULE

STA	OFFSET	IO	STA	OFFSET	SHORT-TERM PAVEMENT MARKING (SQ YD) (FOOT)	TEMPORARY PAVEMENT MARKING LINE 5" (FOOT)	WORK ZONE PAVEMENT MARKING REMOVAL (SQ FT)	PAINT PAVEMENT MARKING LINE 5" (FOOT)	RAISED REFLECTIVE PAVEMENT MARKER (EACH)	PAVEMENT MARKING REMOVAL (SQ FT)
698+00.00			703+00.00		1,500					
689+57.25	12 LT		691+57.25	3 RT			84			
691+57.25	3 RT		699+41.25	3 RT			327			
699+41.25	3 RT		701+41.25	11 LT			84			
689+57.25	13 RT		691+57.25	16 RT			83			
691+57.25	16 RT		699+41.25	16 RT			327			
699+41.25	16 RT		699+89.85	13 RT			20			
699+89.85	13 RT		701+41.25	13 RT			63			
689+57.25	13 RT		691+57.25	4 LT						
691+57.25	4 LT		701+41.25	11 RT						
701+41.25	11 RT		703+41.25	11 RT						
689+57.25	12 LT		690+90.	12 LT						
690+90.	11 LT		691+57.25	17 LT						
691+57.25	17 LT		699+41.25	17 LT						
699+41.25	17 LT		700+00.	11 LT						
700+00.	11 LT		703+41.25	11 LT						
688+00.			703+00.							
687+65.	11 LT		703+05.	11 LT		1,540		1,540		
687+65.	11 RT		703+05.	11 RT		1,540		1,540		
687+65.	CL		703+05.	CL		385		385		
690+44.5	11 LT		700+72.	11 LT						428
690+44.5	11 RT		700+72.	11 RT						428
690+44.5	CL		700+72.	CL						856
688+00.	CL								1	
688+80.	CL								1	
689+60.	CL								1	
690+40.	CL								1	
691+20.	CL								1	
692+00.	CL								1	
698+80.	CL								1	
699+60.	CL								1	
700+40.	CL								1	
701+20.	CL								1	
702+00.	CL								1	
702+80.	CL								1	
PROJECT TOTAL					1,500	3,465	988	3,465	12	1,713

GUARDRAIL SCHEDULE

TRAFFIC BARRIER TERMINAL
TYPE 1 SPECIAL (TANGENT)
STA 689+82.1, LT TO STA 690+32.1 LT

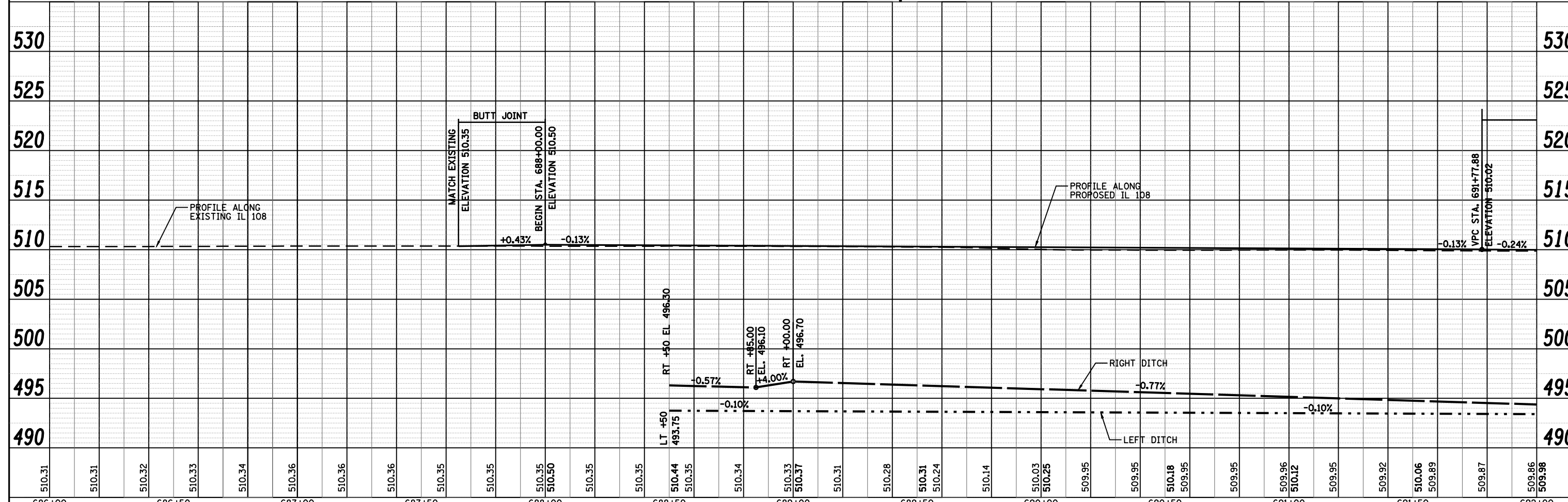
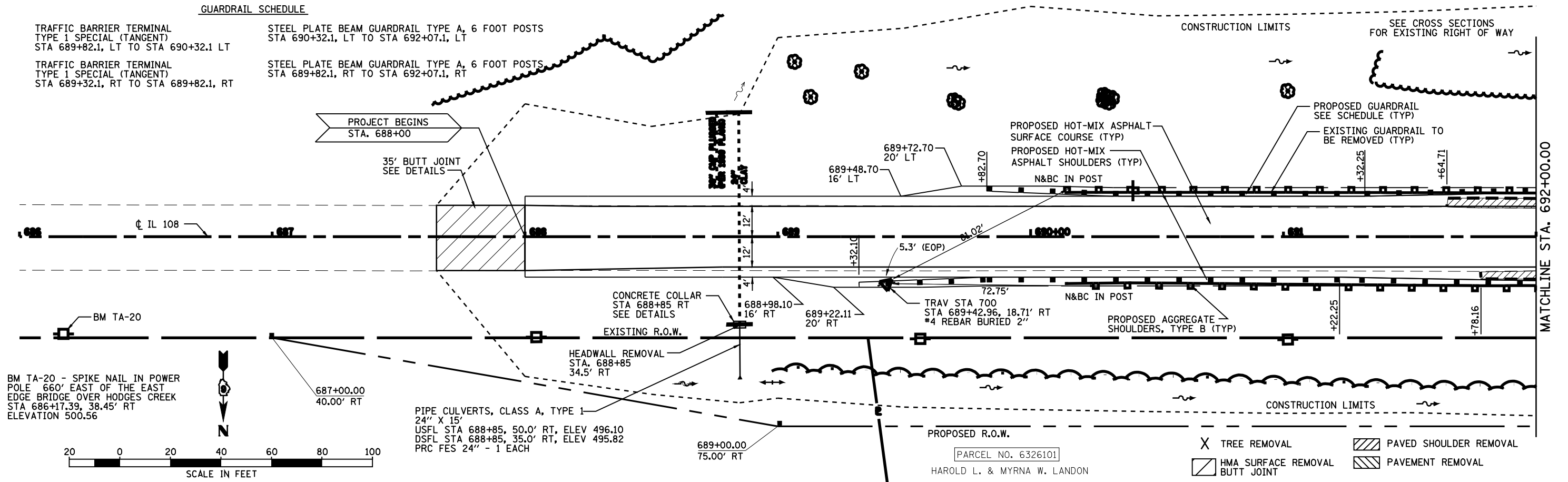
TRAFFIC BARRIER TERMINAL
TYPE 1 SPECIAL (TANGENT)
STA 689+32.1, RT TO STA 689+82.1, RT

STEEL PLATE BEAM GUARDRAIL TYPE A, 6 FOOT POSTS
STA 690+32.1, LT TO STA 692+07.1, LT

STEEL PLATE BEAM GUARDRAIL TYPE A, 6 FOOT POSTS
STA 689+82.1, RT TO STA 692+07.1, RT

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
	STRUCTURE	
	NOTATIONS	
	CHP	
	NO.	



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		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

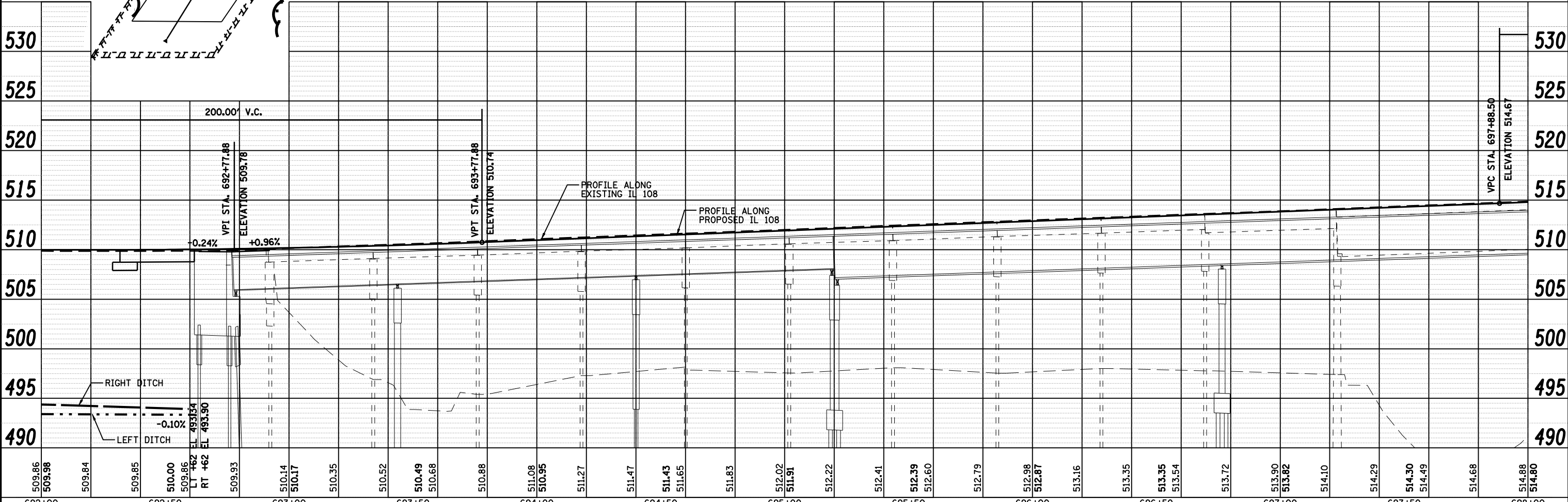
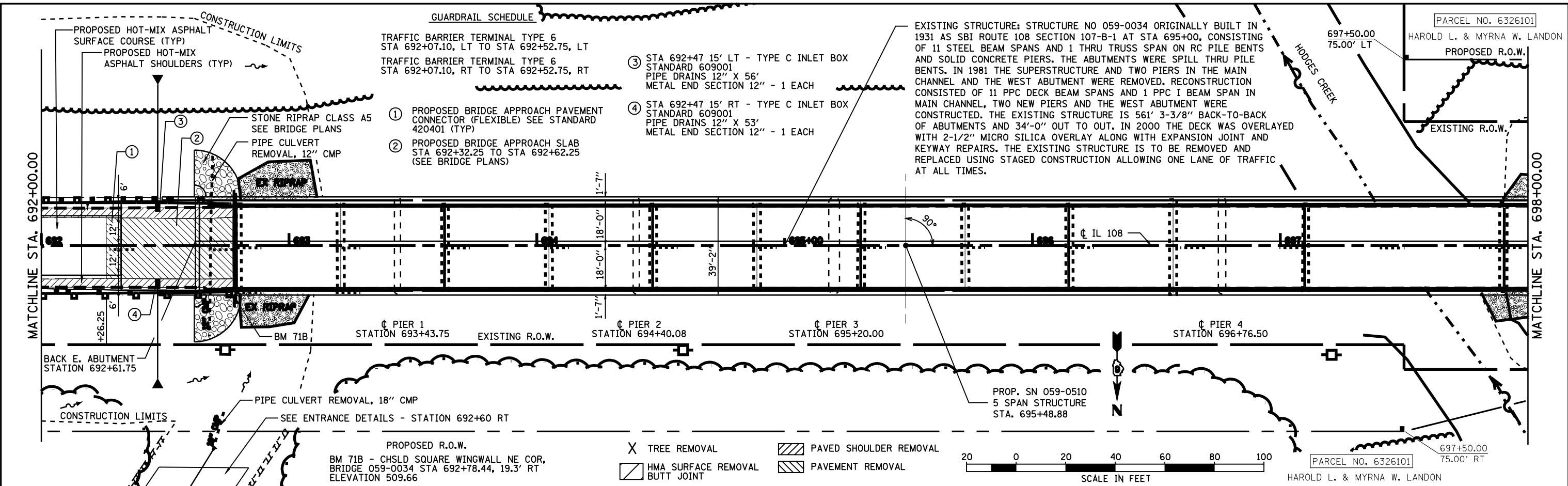
PLAN & PROFILE IL 108

SCALE: STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	12
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 72A94		

DATE	
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PROFILE	SURVEYED
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	DATE
	FILE NAME



FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -
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PLOT SCALE = 40.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = Jun-28-2010 02:00:35PM		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN & PROFILE IL 108

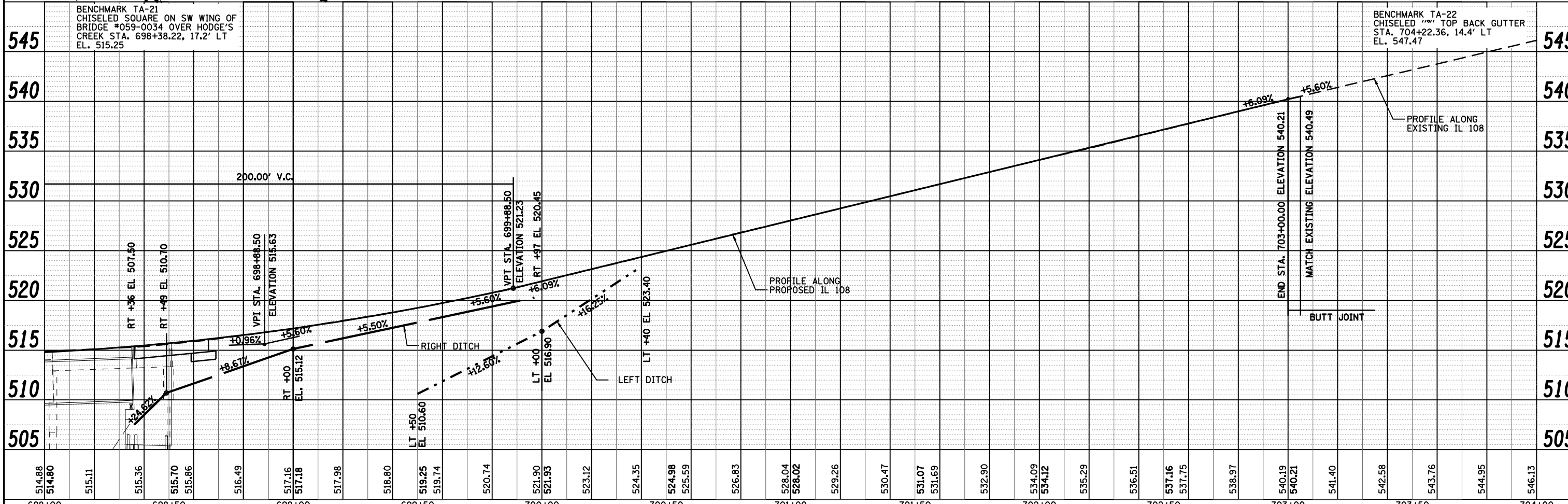
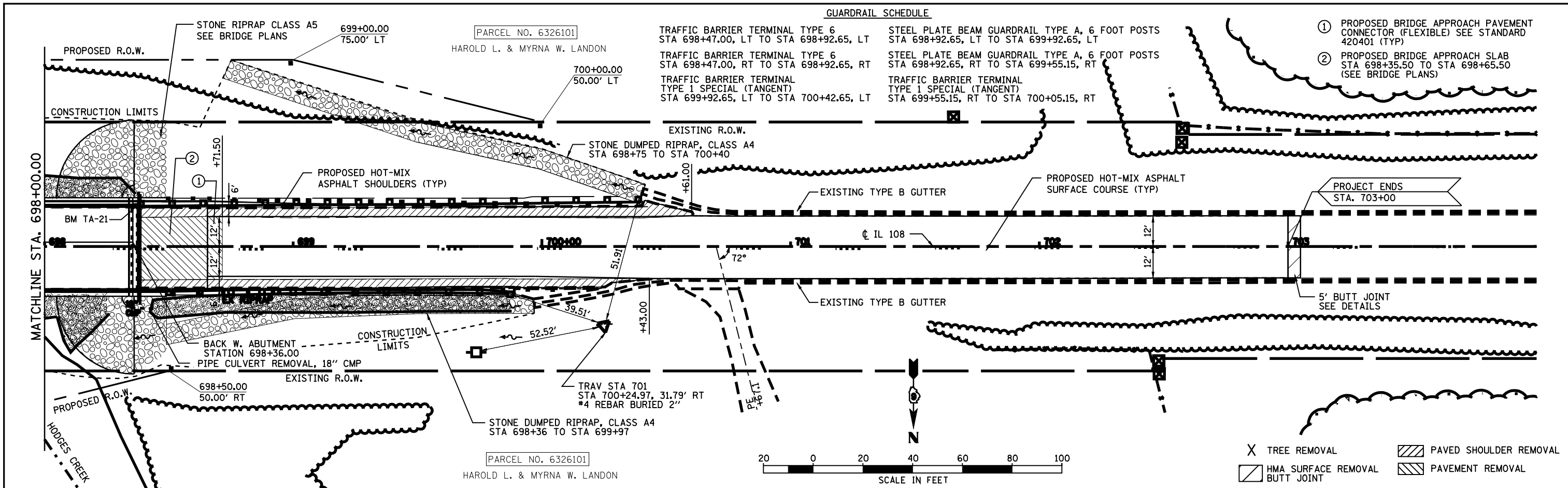
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F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 13
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 72A94

PLAN	SURVEYED	DATE
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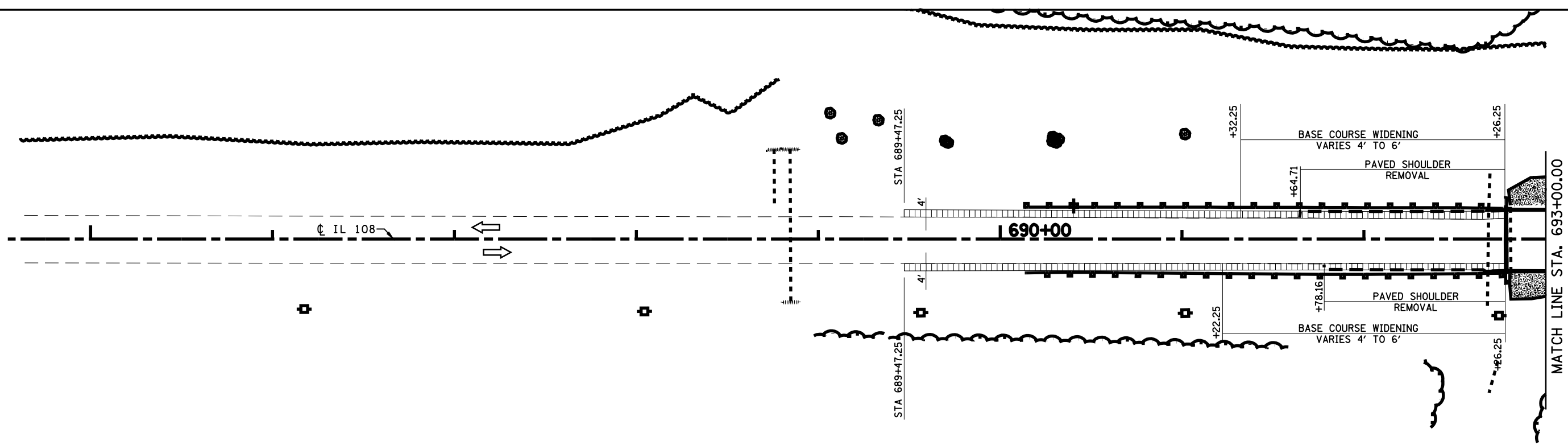
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	PLOT DATE = Jun-28-2010 02:00:39PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE IL 108

SCALE: STA. TO STA.

F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 14
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TRAFFIC STAGING NOTES

- 1 THIS TRAFFIC CONTROL PLAN SHALL BE USED IN CONJUNCTION WITH STANDARD 701321, STANDARD 701306 AND AS DIRECTED BY THE ENGINEER.
- 2 DURING STAGE CONSTRUCTION ADDITIONAL FLAGGERS ARE NECESSARY FOR BRIDGE DECK PAVING OPERATIONS.
- 3 ALL WORK REQUIRED TO SET UP, MAINTAIN, AND REMOVE TRAFFIC CONTROL FOR STAGES 1 AND 2 AS DETAILED IN THESE PLANS WILL BE INCLUDED IN THE COST FOR "TRAFFIC CONTROL AND PROTECTION STANDARD 701321 (SPECIAL)."
- 4 THE CONTRACTOR SHALL PLACE MAXIMUM WIDTH SIGNS PRIOR TO IMPLEMENTING ANY STAGE OF TRAFFIC CONTROL. THESE SIGNS WILL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION STANDARD 701321 (SPECIAL)." REFER TO DETAILS FOR SIGN DETAILS.
- 5 TEMPORARY SIGNING AND TEMPORARY WALL BARRIER REFLECTORS SHALL BE PLACED IN ACCORDANCE WITH STANDARD 701321, OR AS DIRECTED BY THE ENGINEER.
- 6 THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (Ph: 217-785-5836) AT LEAST 21 DAYS PRIOR TO IMPLEMENTING STAGE 1 TRAFFIC CONTROL AND WHENEVER A SWITCH IN STAGING IS MADE.
- 7 THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS AT LEAST THREE (3) DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS, PLEASE REFER TO THE DISTRICT 6 SPECIAL PROVISION FOR TEMPORARY BRIDGE TRAFFIC SIGNALS FOR CONTACT INFORMATION.
- 8 THE FIRST AND LAST SECTION OF EVERY RUN OF TEMPORARY CONCRETE BARRIER WALL SHALL BE SECURED TO THE PAVEMENT WITH PINS IN ACCORDANCE WITH ARTICLE 704.04 OF THE STANDARD SPECIFICATIONS.
- 9 SAW CUTS FOR PROPOSED PAVEMENT AND SHOULDER REMOVAL WILL BE INCLUDED IN THE COSTS FOR "PAVEMENT REMOVAL" AND "PAVED SHOULDER REMOVAL."
- 10 EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE REVISED STAGE TRAFFIC PATTERNS DURING ALL PHASES OF STAGE CONSTRUCTION SHALL BE REMOVED AS SPECIFIED IN SECTION 783 OF THE STANDARD SPECIFICATIONS AND PAID FOR AS "PAVEMENT MARKING REMOVAL."
- 11 THE COST TO INSTALL AND REMOVE TEMPORARY PAVEMENT MARKINGS DETAILED ON THESE SHEETS WILL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION STANDARD 701321 (SPECIAL)."

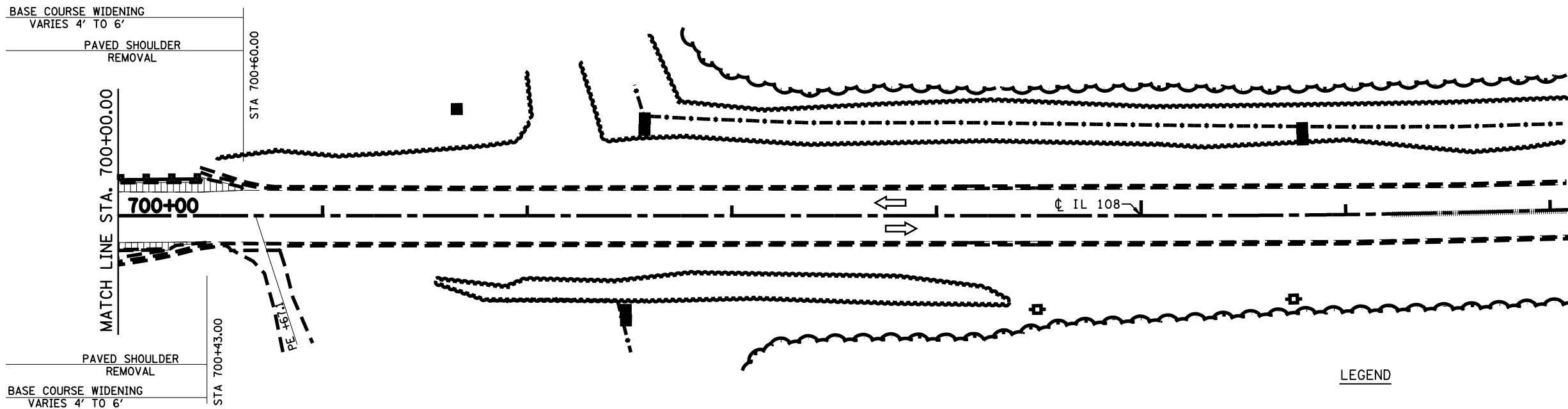
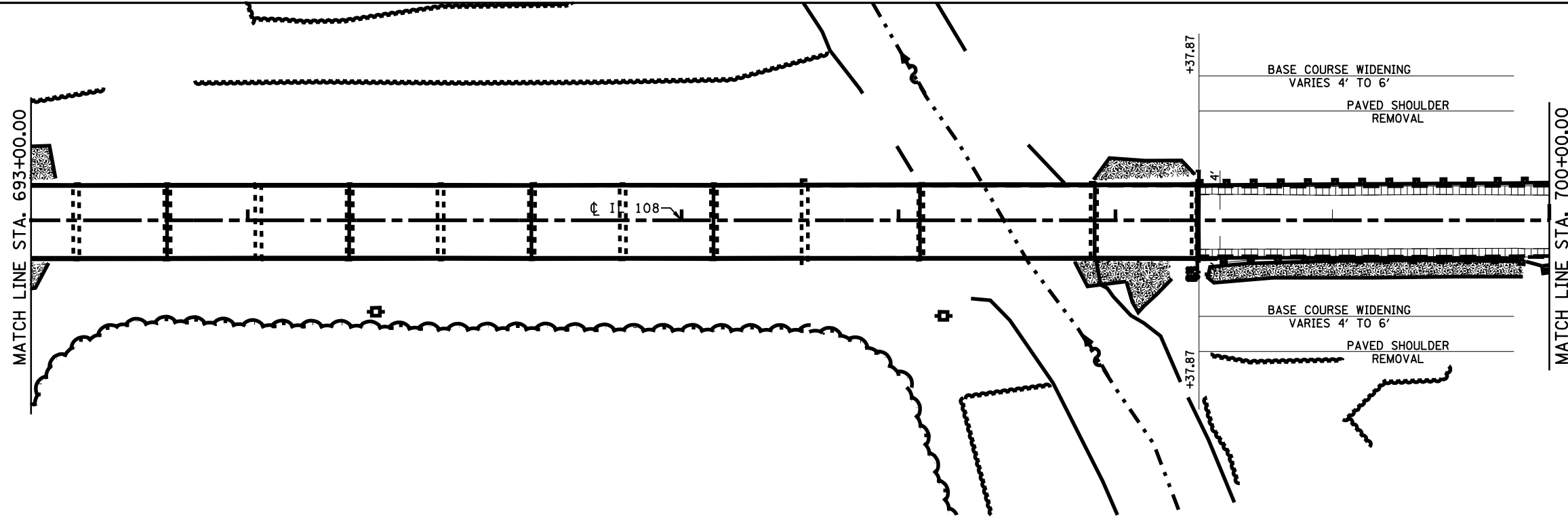
PRELIMINARY STAGE - SUGGESTED CONSTRUCTION SEQUENCE

- 1 PERFORM SHOULDER REMOVAL AND CONSTRUCT BASE COURSE WIDENING, USING STANDARD 701326. THE CONTRACTOR SHALL PRESERVE THE EXISTING CURB AND GUTTER AND REPAIR ANY DAMAGES CAUSED BY THE CONTRACTOR'S ACTIVITIES AT HIS/HER OWN EXPENSE.
- 2 REMOVE ALL OTHER EXISTING TRAFFIC CONTROL DEVICES ERECTED PRIOR TO THIS CONTRACT AND DELIVER AND STOCKPILE AT IDOT'S LITCHFIELD YARD AS PER SPECIAL PROVISION IN THESE PLANS. THE REMOVAL, DELIVERY AND STOCKPILING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR "TRAFFIC CONTROL AND PROTECTION STANDARD 701321 (SPECIAL)."
- 3 UPON COMPLETION OF PRELIMINARY STAGE SET UP STAGE 1, TRAFFIC CONTROL UTILIZING THESE PLANS IN CONJUNCTION WITH THE LATEST REVISION OF HIGHWAY STANDARD 701321 AS INCLUDED WITH THESE PLANS.
- 4 PLACE MAXIMUM WIDTH SIGNING AT THE LOCATIONS AS SHOWN IN THESE PLANS.
- 5 PLACE TEMPORARY CONCRETE BARRIER AND PAVEMENT MARKINGS IN ACCORDANCE WITH THESE PLANS.
- 6 INSTALL TEMPORARY SIGNALIZATION AND DETECTION SYSTEMS AT THE LOCATIONS CALLED OUT IN THESE PLANS. THE ENTRANCE AT APPROXIMATE STA 700+65 RIGHT SHALL REMAIN OPEN AT ALL TIMES DURING CONSTRUCTION OF THIS STRUCTURE.
- 7 ALL SIGNALS ARE TO BE ACTUATED.
- 8 PROVIDE TWO MESSAGE BOARDS FOR THE DURATION OF THE CONTRACT AND ADJUST AS DIRECTED BY THE ENGINEER.

LEGEND

- IMPACT ATTENUATOR, NARROW
- TEMPORARY BARRIER WALL
- HOT-MIX ASPHALT BINDER COURSE RAMP
- BASE COURSE WIDENING, 10"
- DOUBLE VERTICAL PANEL
- SIGN
- INDUCTION LOOP DETECTOR
- TEMPORARY BRIDGE TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- 24" STOP BAR
- TYPE III BARRICADES
- TYPE C BIDIRECTIONAL REFLECTOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
- TEMPORARY RUMBLE STRIP

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - PRELIMINARY STAGE			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.			



LEGEND

- IMPACT ATTENUATOR, NARROW
- TEMPORARY BARRIER WALL
- HOT-MIX ASPHALT BINDER COURSE RAMP
- BASE COURSE WIDENING, 10"
- DOUBLE VERTICAL PANEL
- SIGN
- INDUCTION LOOP DETECTOR
- TEMPORARY BRIDGE TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- 24" STOP BAR
- TYPE III BARRICADES
- TYPE C BIDIRECTIONAL REFLECTOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
- TEMPORARY RUMBLE STRIP

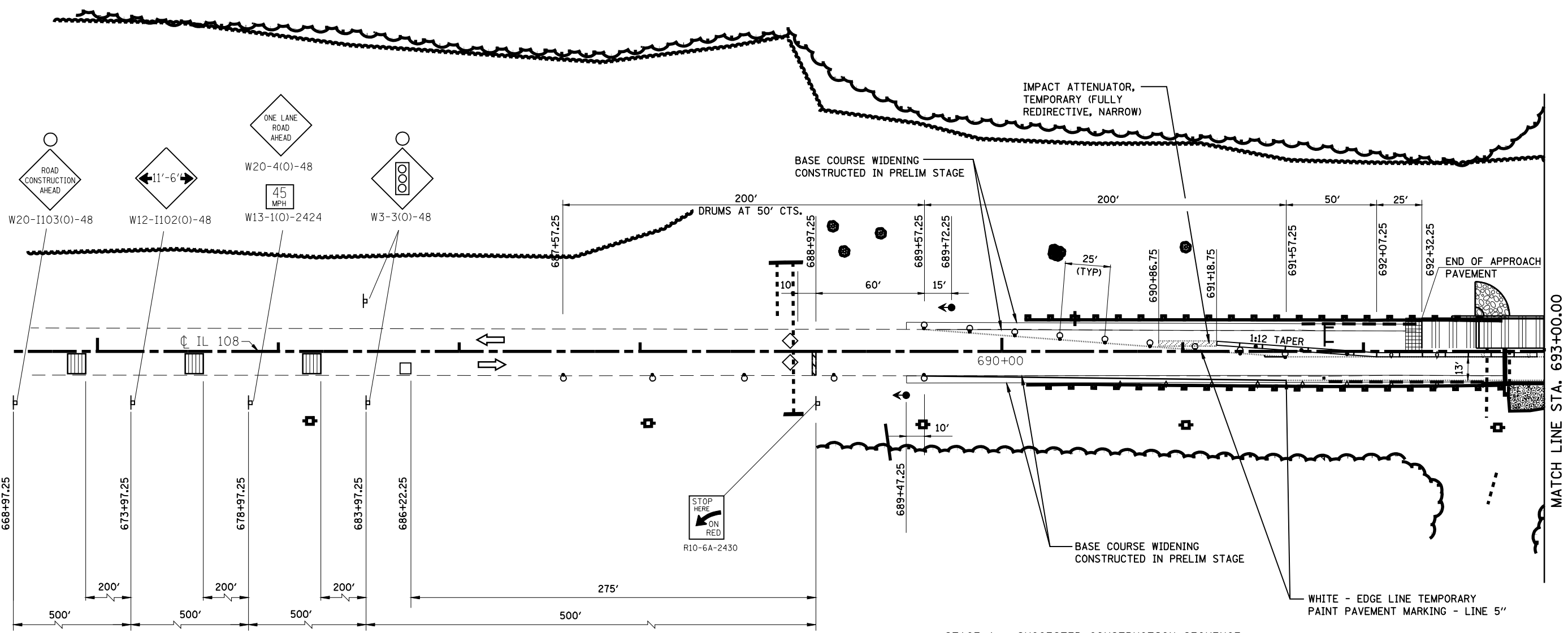
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

MAINTENANCE OF TRAFFIC - PRELIMINARY STAGE

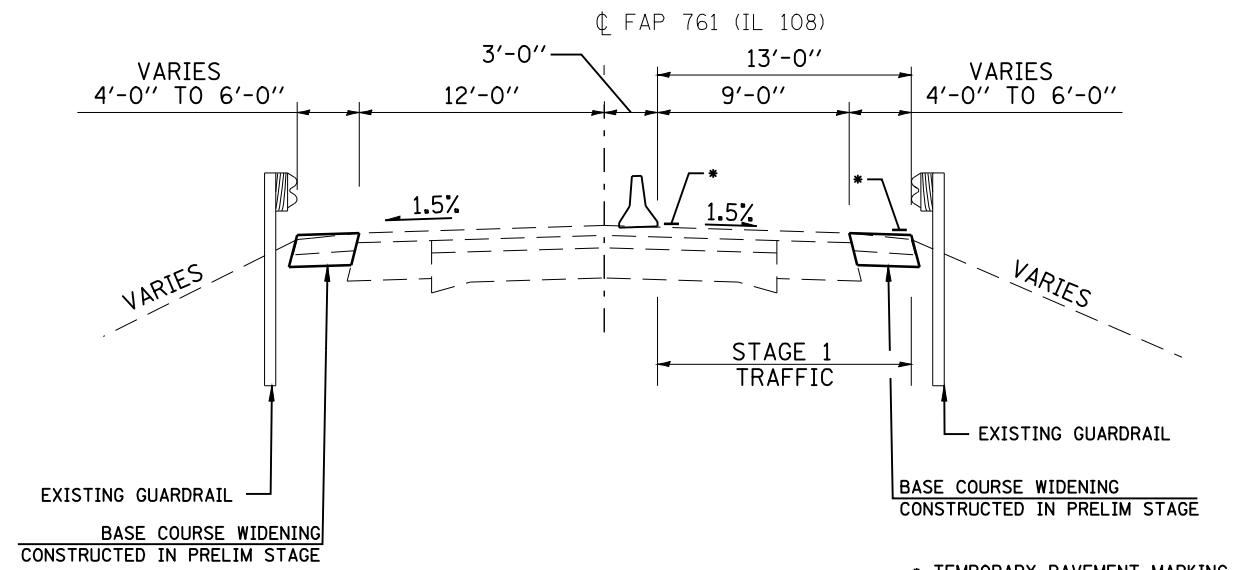
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	16
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	



STAGE 1 - SUGGESTED CONSTRUCTION SEQUENCE

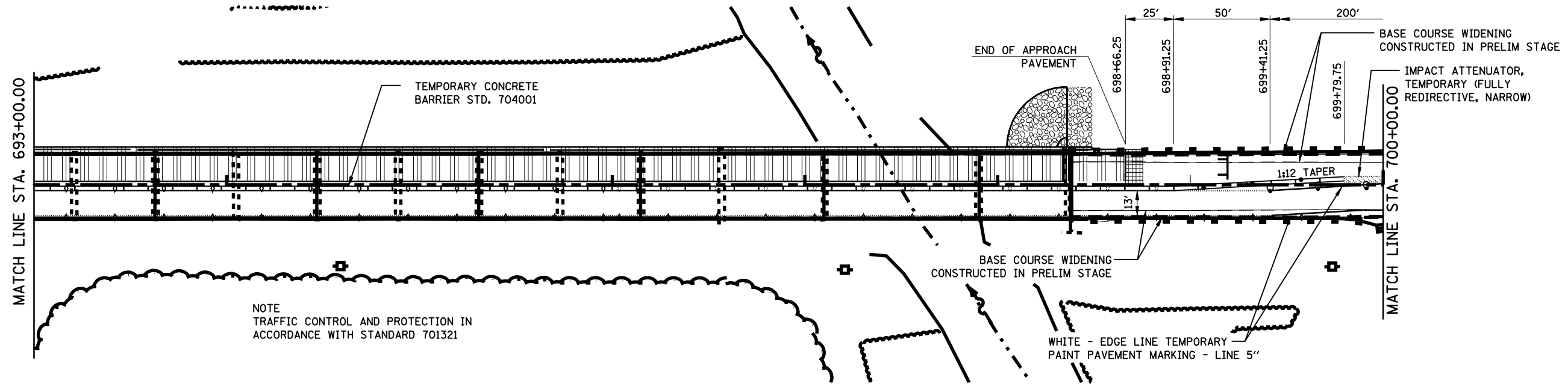
- 1 PERFORM STAGE 1 STRUCTURE AND SHOULDER REMOVAL FOR CONSTRUCTION OF HODGES CREEK STRUCTURE (SN 059-0510).
- 2 DRIVE SHEET PILING PRIOR TO ANY EXCAVATION.
- 3 PERFORM ALL EXCAVATION WORK FOR STAGE 1 STRUCTURE (SN 059-0510).
- 4 PERFORM ALL CONSTRUCTION WORK FOR STAGE 1 STRUCTURE (SN 059-0510).
- 5 INSTALL TEMPORARY RAMPS AT EACH END OF STRUCTURE (SN 059-0510) FOR STAGE 2 TRAFFIC.
- 6 REMOVE TEMPORARY PAVEMENT MARKINGS.
- 7 ALL FINAL RESURFACING WILL BE COMPLETED IN STAGE 3.



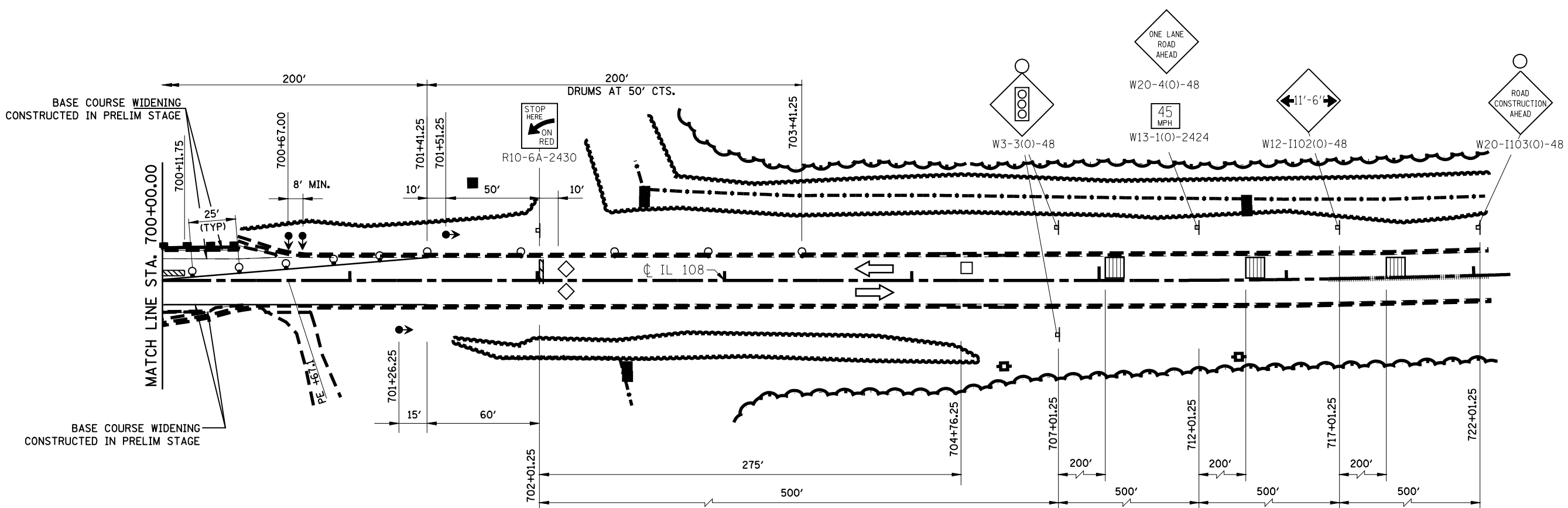
LEGEND

	- BRIDGE CONSTRUCTION, STAGE I		- TEMPORARY BRIDGE TRAFFIC SIGNALS
	- IMPACT ATTENUATOR, NARROW		- DRUM WITH STEADY BURNING LIGHT
	- TEMPORARY BARRIER WALL		- 24" STOP BAR
	- HOT-MIX ASPHALT BINDER COURSE RAMP		- TYPE III BARRICADES
	- BASE COURSE WIDENING, 10"		- TYPE C BIDIRECTIONAL REFLECTOR
	- SIGN		- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
	- INDUCTION LOOP DETECTOR		- TEMPORARY RUMBLE STRIP

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - STAGE I	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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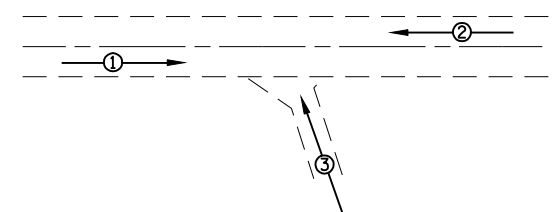
NOTE
TRAFFIC CONTROL AND PROTECTION IN
ACCORDANCE WITH STANDARD 701321



LEGEND

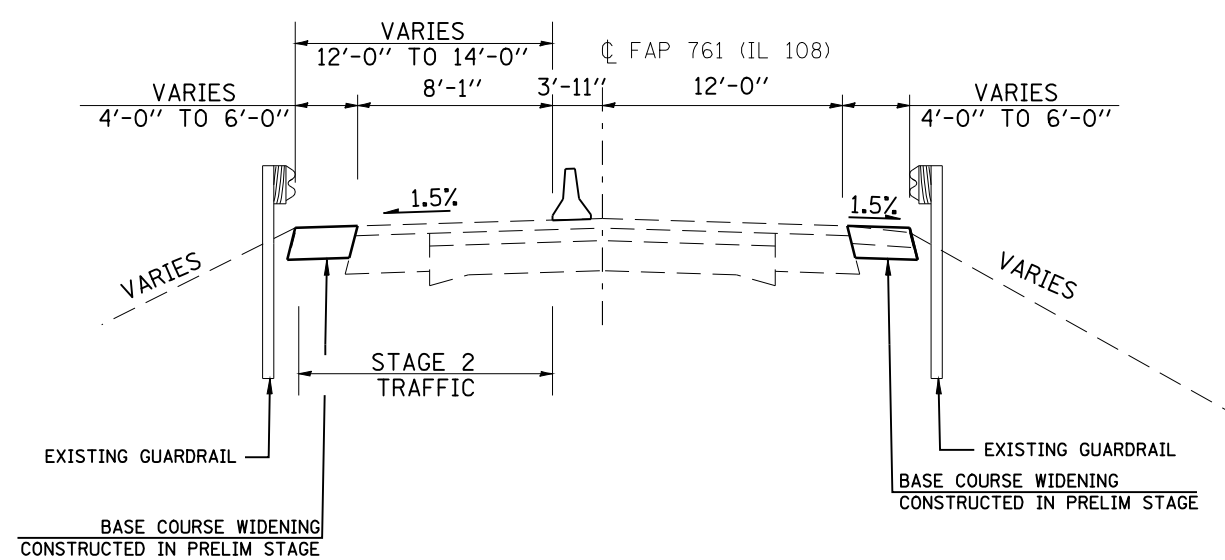
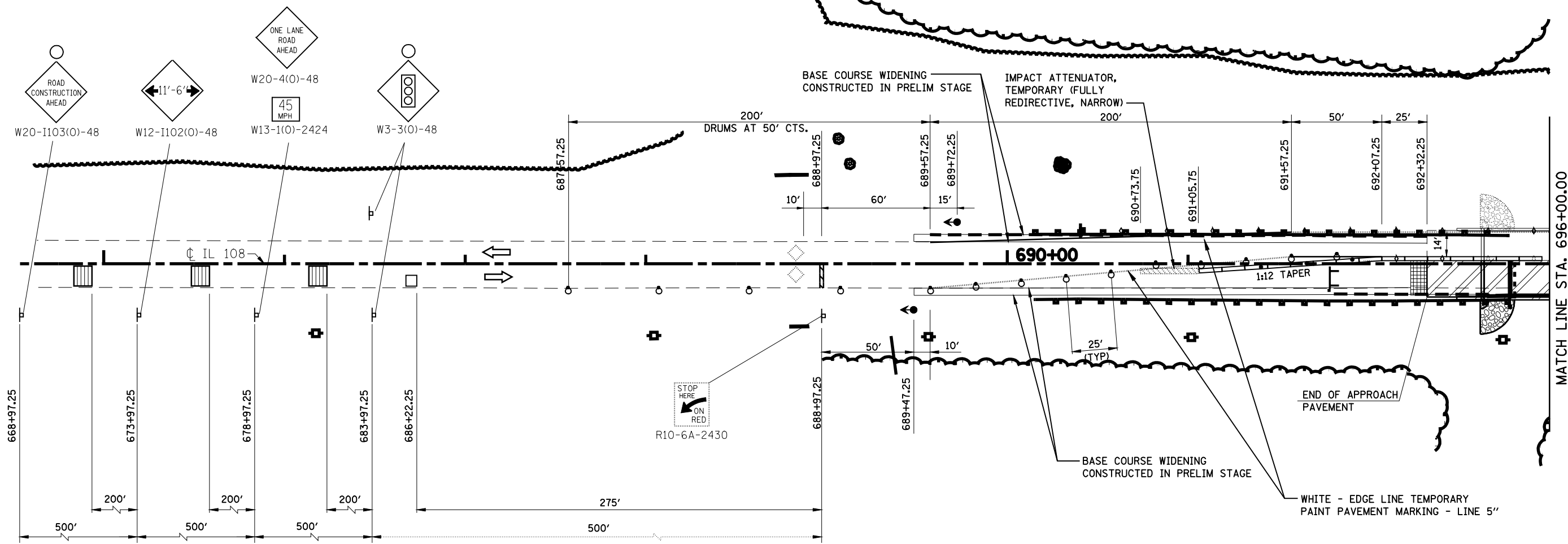
- BRIDGE CONSTRUCTION, STAGE I
- IMPACT ATTENUATOR, NARROW
- TEMPORARY BARRIER WALL
- HOT-MIX ASPHALT BINDER COURSE RAMP
- BASE COURSE WIDENING, 10"
- SIGN
- INDUCTION LOOP DETECTOR
- TEMPORARY BRIDGE TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- 24" STOP BAR
- TYPE III BARRICADES
- TYPE C BIDIRECTIONAL REFLECTOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
- TEMPORARY RUMBLE STRIP

NOTE
TRAFFIC CONTROL AND PROTECTION IN
ACCORDANCE WITH STANDARD 701321



TEMPORARY PHASE DESIGNATION DIAGRAM
NOTE: OVERLAP A = 2 + 3

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - STAGE I			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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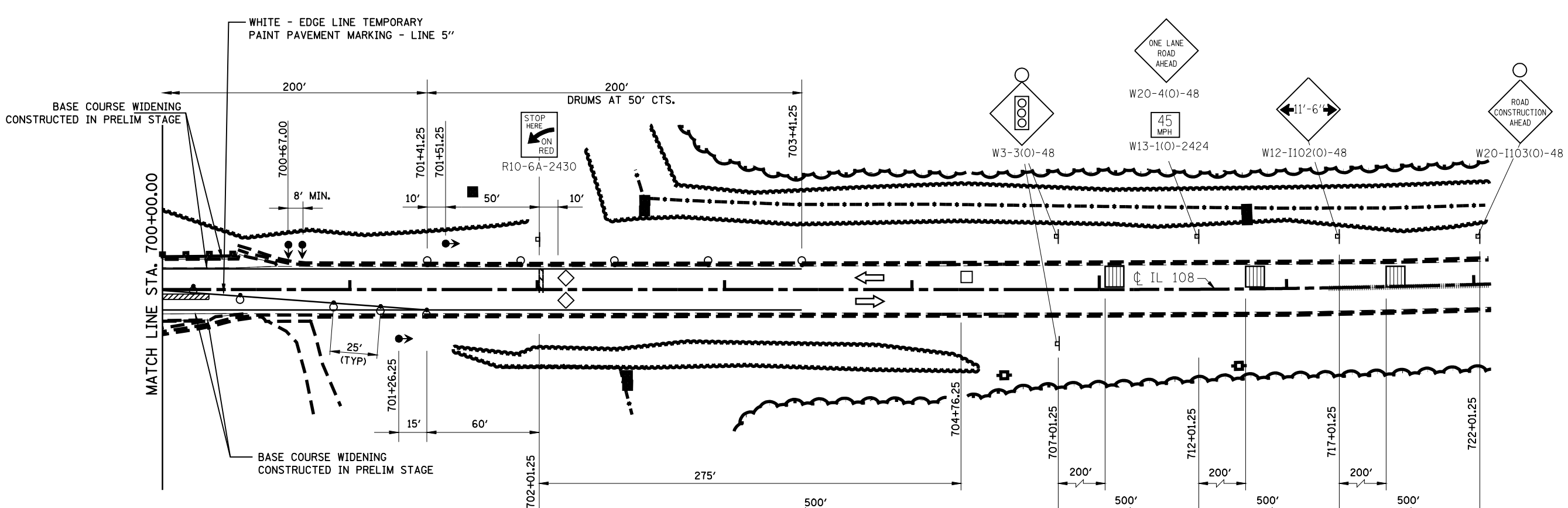
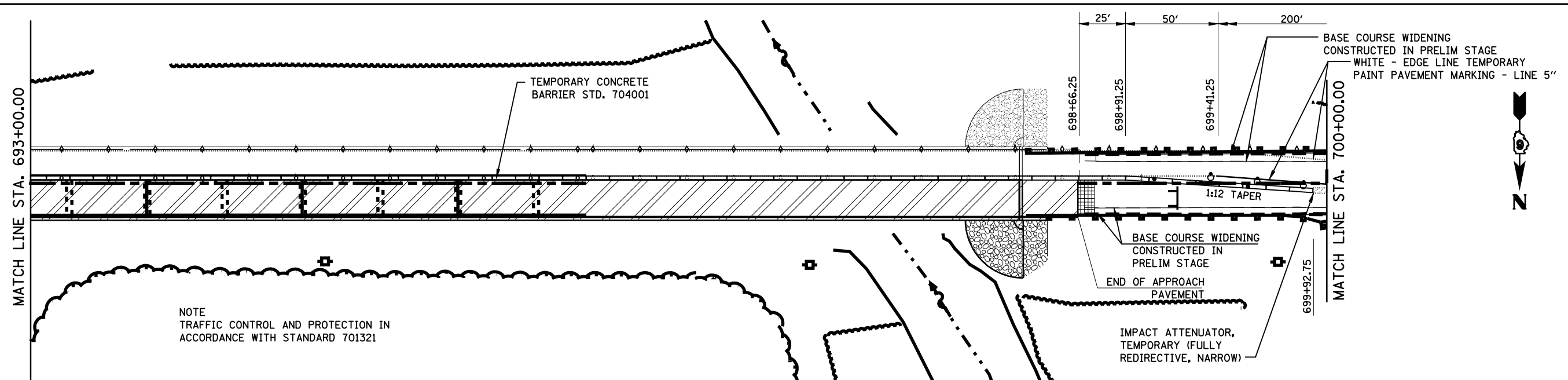


- STAGE 2, - SUGGESTED CONSTRUCTION SEQUENCE**
 FOLLOWING COMPLETION OF STAGE 1 CONSTRUCTION
- 1 RELOCATE THE TEMPORARY CONCRETE BARRIER WALL AND PLACE TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE WITH THESE PLANS AND IN CONJUNCTION WITH THE LATEST REVISION OF HIGHWAY STANDARD 701321 AS INCLUDED WITH THESE PLANS.
 - 2 PERFORM STAGE 2 STRUCTURE AND SHOULDER REMOVAL FOR CONSTRUCTION OF HODGES CREEK STRUCTURE (SN 059-0510).
 - 3 PERFORM ALL EXCAVATION WORK FOR STAGE 2 STRUCTURE (SN 059-0510).
 - 4 PERFORM ALL CONSTRUCTION WORK FOR STAGE 2 STRUCTURE (SN 059-0510).
 - 5 INSTALL TEMPORARY RAMPS AT EACH END OF STRUCTURE (SN 059-0510) FOR STAGE 3 TRAFFIC.

LEGEND

- BRIDGE CONSTRUCTION, STAGE II	- TEMPORARY BRIDGE TRAFFIC SIGNALS
- IMPACT ATTENUATOR, NARROW	- DRUM WITH STEADY BURNING LIGHT
- TEMPORARY BARRIER WALL	- 24" STOP BAR
- HOT-MIX ASPHALT BINDER COURSE RAMP	- TYPE III BARRICADES
- BASE COURSE WIDENING, 10"	- TYPE C BIDIRECTIONAL REFLECTOR
- SIGN	- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
- INDUCTION LOOP DETECTOR	- TEMPORARY RUMBLE STRIP

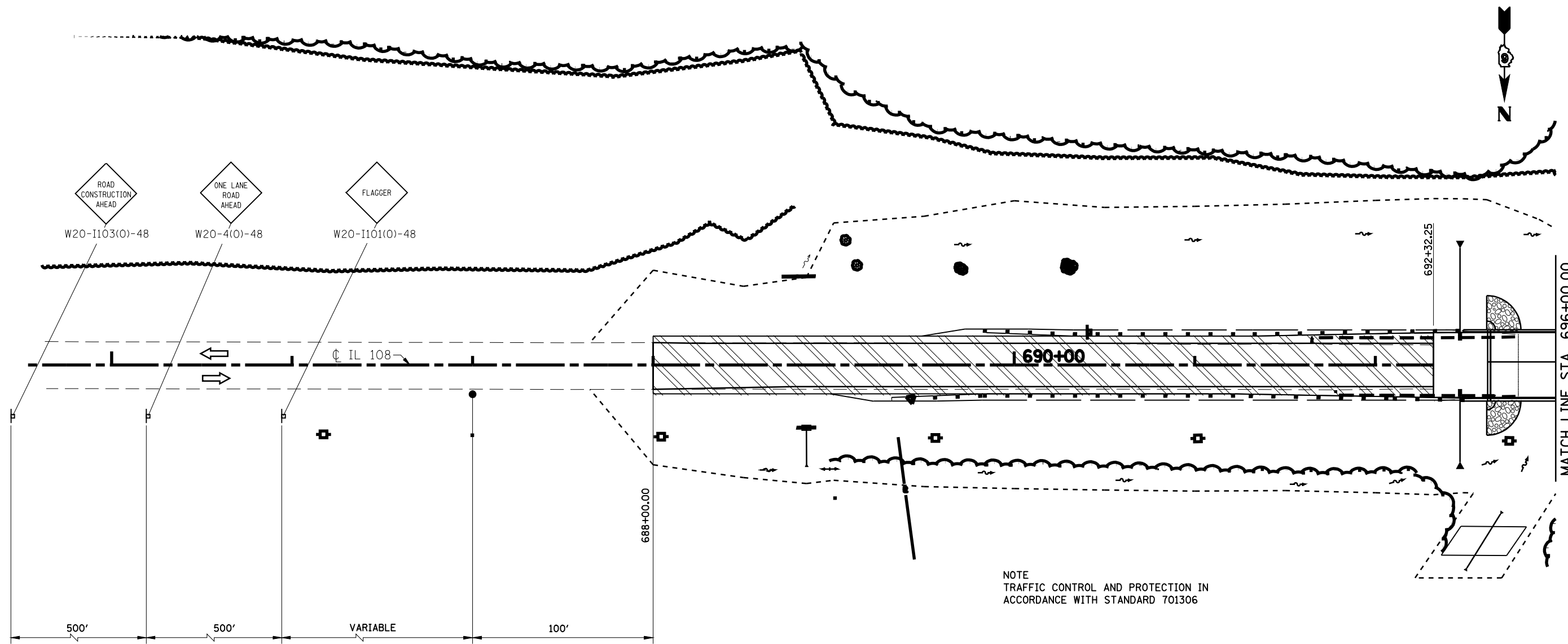
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- LEGEND**
- BRIDGE CONSTRUCTION, STAGE II
 - IMPACT ATTENUATOR, NARROW
 - TEMPORARY BARRIER WALL
 - HOT-MIX ASPHALT BINDER COURSE RAMP
 - BASE COURSE WIDENING, 10"
 - SIGN
 - INDUCTION LOOP DETECTOR
 - TEMPORARY BRIDGE TRAFFIC SIGNALS
 - DRUM WITH STEADY BURNING LIGHT
 - 24" STOP BAR
 - TYPE III BARRICADES
 - TYPE C BIDIRECTIONAL REFLECTOR
 - STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
 - TEMPORARY RUMBLE STRIP

NOTE
TRAFFIC CONTROL AND PROTECTION IN ACCORDANCE WITH STANDARD 701321

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - STAGE II				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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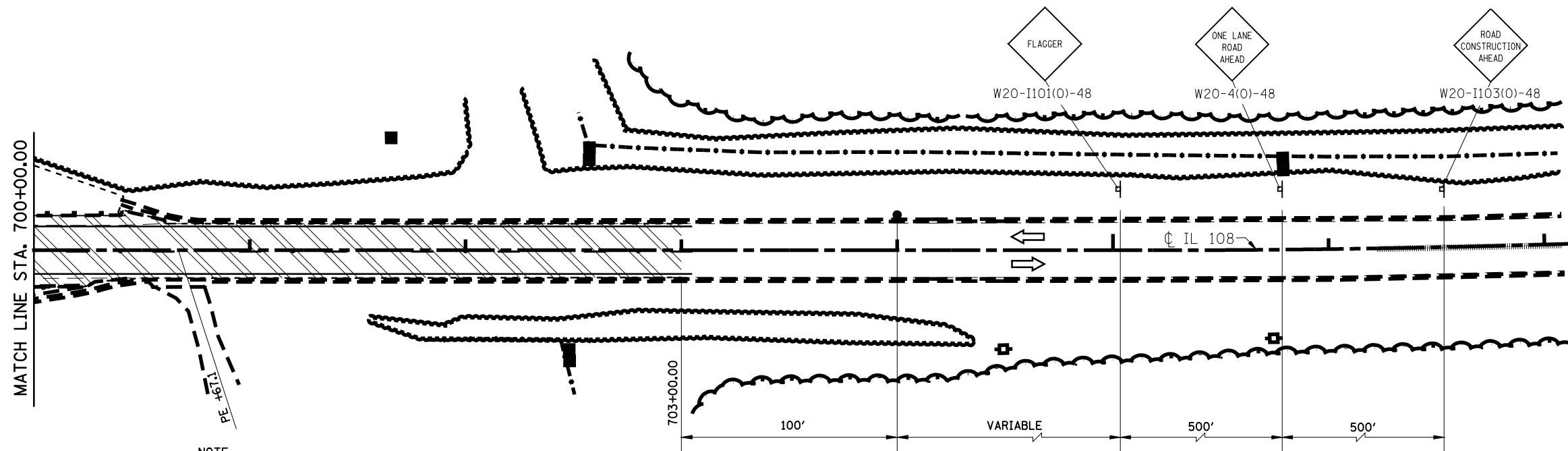
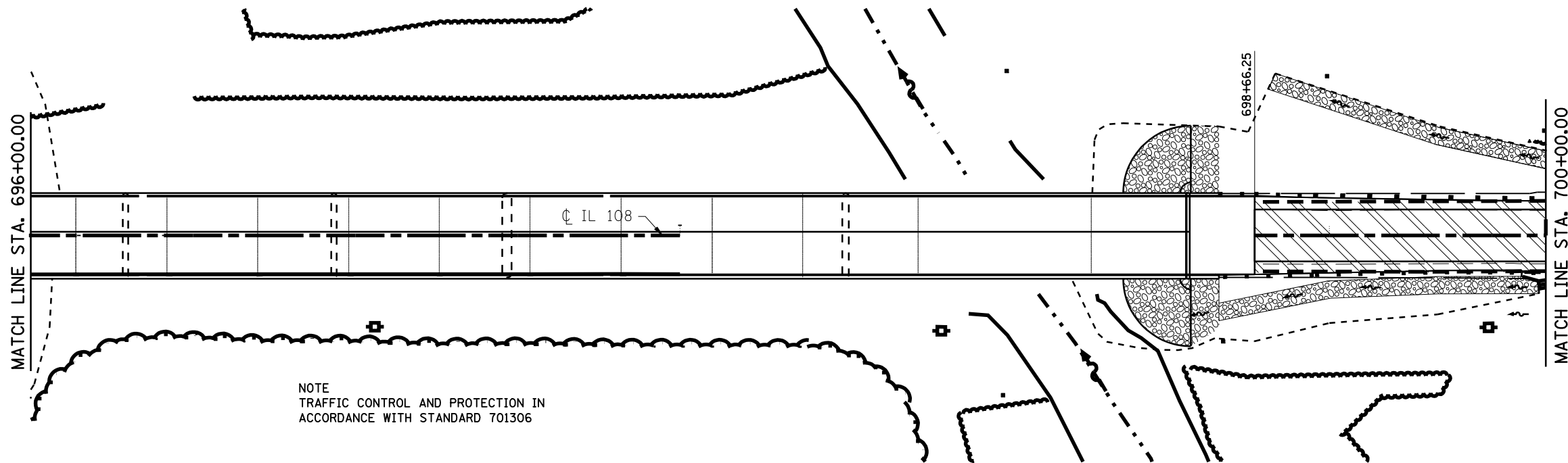
NOTE
TRAFFIC CONTROL AND PROTECTION IN
ACCORDANCE WITH STANDARD 701306

- LEGEND**
- CONSTRUCTION, STAGE III
 - - FLAGGER
 - ⊥ - SIGN
 - X - TREE REMOVAL

STAGE 3 - SUGGESTED CONSTRUCTION SEQUENCE

- 1 FOLLOWING THE COMPLETION OF STAGE 2 CONSTRUCTION, REMOVE ALL TEMPORARY CONCRETE BARRIER WALLS, TEMPORARY SIGNALS AND OTHER TRAFFIC CONTROL DEVICES USED IN STAGE CONSTRUCTION.
- 2 REMOVE TEMPORARY PAVEMENT MARKINGS FOR STAGE CONSTRUCTION AND PLACE TEMPORARY PAVEMENT MARKING FOR TWO-WAY TRAFFIC.
- 3 SET UP STAGE 3 TRAFFIC CONTROL UTILIZING THE LATEST REVISION OF HIGHWAY STANDARD 701306 AS INCLUDED WITH THESE PLANS.
- 4 PERFORM ALL IL 108 ROADWAY WORK BY MILLING AND PAVING WITH LEVELING BINDER (3/4") AND HMA SURFACE COURSE (1 1/2") OVER THE EXISTING ROADWAY AND SHOULDERS AS SHOWN IN THESE PLANS.
- 5 PLACE FINAL EMBANKMENT, CONSTRUCT AGGREGATE SHOULDERS AND INSTALL GUARDRAIL AS SHOWN IN THE PLANS.
- 6 UTILIZE ALL APPROPRIATE HIGHWAY TRAFFIC CONTROL STANDARDS WHILE PLACING THE PROPOSED SURFACE AND OTHER FINAL PAY ITEMS.
- 7 IF UNEVEN LANES WILL BE OPEN TO OVERNIGHT TRAFFIC FLOW, INCLUDE "UNEVEN LANES" SIGN W8-11(O)48. SIGNS TO BE INCLUDED IN THE CONTRACT UNIT PRICES FOR CONSTRUCTION ITEMS INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - STAGE III				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = Jun-28-2010 02:01:00PM	DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								



LEGEND

- CONSTRUCTION, STAGE III
- - FLAGGER
- ⊣ - SIGN

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

MAINTENANCE OF TRAFFIC - STAGE III

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	22
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 72A94	

STORM WATER POLLUTION PREVENTION PLAN

Route: FAP 761 Marked: IL 108
 Section: 107B-2 Project No.: C-96-126-10
 County: MACOUPIN Contract No.: 72A94

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 inquiry 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) (Date)

 (Title)

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.

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:

1. The proposed project consists of replacing one bridge carrying IL 108 over Hodges Creek southwest of Hettick in Macoupin County. The project will include resurfacing of approx. 0.16 mi of IL 108.
2. Construction consists of grading, constructing bridge / culverts, HMA pavement, widening, HMA resurfacing, placing HMA 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:

1. 11 individual trees and 0.44 acres of trees will be removed.
2. Excavation will be completed along the entire length to grade out for proposed roadway ditches and waterways.
3. 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. 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.
6. Placement of permanent erosion control, such as riprap ditch lining, riprap stilling basins, riprap dry dams, excelsior blanket, seeding, etc.
7. 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. 155 sq miles in which 2.6 acres will be disturbed by excavation, grading or other activities.

Other Reports, Studies and Plans which Aid in the Development of this Storm Water Pollution Prevention Plan as Referenced Documents:

1. 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.
3. 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:

Hodges Creek

FILE NAME = SWPPLAN.DGN	USER NAME = laughlinr1	DESIGNED -	REVISED - AUG 2007 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STORM WATER POLLUTION PREVENTION PLAN			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	et:\pwork\PIWIDOT\LAUGHLINRL\0212999\672A94-Sht-swpllan.dgn	DRAWN - CADD	REVISED -		761	107B-2	MACOUPIN	98	23			
	PLOT SCALE = 40.0000' / IN.	CHECKED - JCN	REVISED -		CONTRACT NO. 72A94							
	PLOT DATE = Jun-28-2010 02:01:05PM	DATE - APRIL 5, 1999	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

Description of Stabilization Practices at the Beginning of Construction:

1. 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 erodible 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 Control Seeding".
 - (e) Immediately after tree removal is completed in certain areas which are highly erodible 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 undesirable 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:
 - I. Place temporary erosion control systems at locations where water leaves and enters the construction zone
 - II. Temporary seed highly erodible areas outside the construction slope limits
 - III. Construct roadside ditches and provide temporary erosion control systems
 - IV. Temporary divert water around proposed culvert locations
 - V. 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 slopes
 - (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 Standard Specifications for 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:

1. 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 of grass.
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 Engineer.

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.
4. Maintenance crews will also aid in any ditch lining maintenance or in any drainage problems.
5. All maintenance will be conducted at times when weather conditions will not cause site damage.

DOCUMENTATION

1. 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

FILE NAME = et:\pwork\pwork\IDOT\LAUGHLIN\la0212999\672A94-Sht-swpllan.dgn	USER NAME = laughlinr1	DESIGNED - DRAWN - CADD	REVISED - AUG 2007 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STORM WATER POLLUTION PREVENTION PLAN				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
SWPPLAN.DGN	PLOT SCALE = 40.0000' / IN.	CHECKED - JCN	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	761	107B-2	MACOUPIN	98	24
PLOT DATE = Jun-28-2010 02:01:08PM	DATE - APRIL 5, 1999	REVISED -							CONTRACT NO. 72A94					
									FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

CONTRACTOR CERTIFICATION STATEMENT

This certification statement is part of the Storm Water Pollution Plan for the project described below in accordance with NPDES Permit No. ILR10 _____, issued by the Illinois Environmental Protection Agency on _____.

Route: _____ Marked: _____
 Section: _____ Project No.: _____
 County: _____ Contract No.: _____

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature _____ Date _____
 Title _____
 Name of Firm _____
 Street Address _____
 City, State, Zip _____
 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.

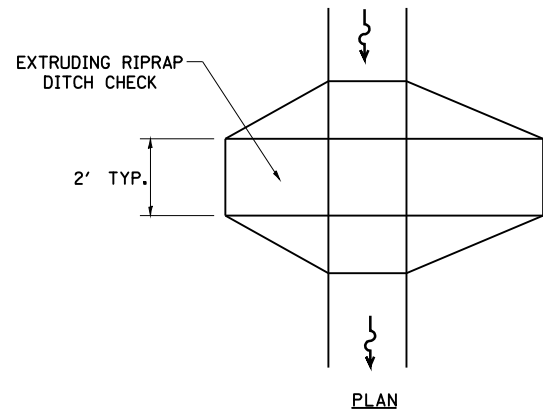
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		CHECKED - JCN	REVISED -
		DATE - APRIL 5, 1999	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

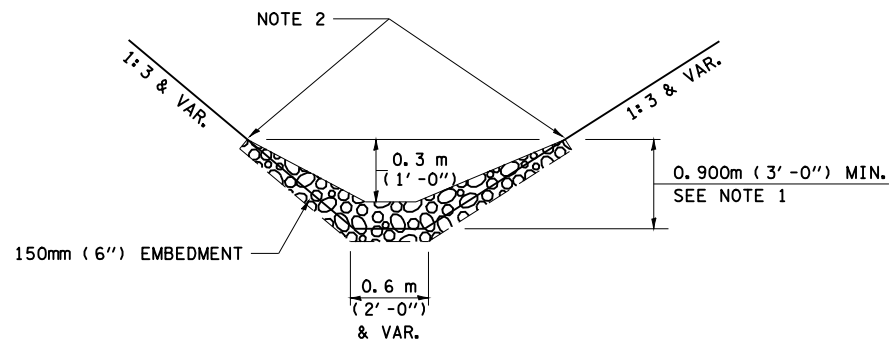
STORM WATER POLLUTION
PREVENTION PLAN

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	25
CONTRACT NO. 72A94				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



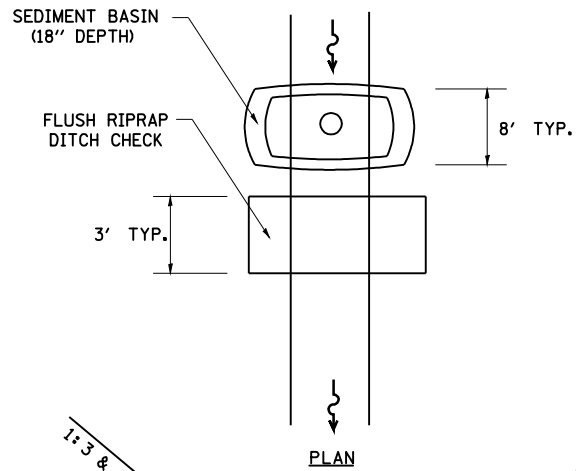
PLAN



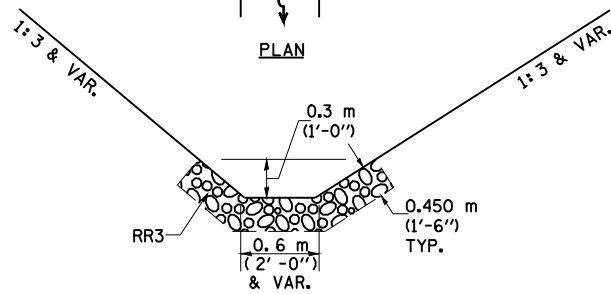
ELEVATION

OPTION 1

(EXTRUDING DITCH CHECK)
RECOMMENDED FOR AREAS
W/ RIPRAP DITCH LINING



PLAN



ELEVATION

OPTION 2

(FLUSH DITCH CHECK)
RECOMMENDED FOR AREAS
W/O RIPRAP DITCH LINING

STONE DUMPED RIPRAP DITCH CHECK

(TYPICAL & OPTIONS 1 & 2
AS DIRECTED BY THE ENGINEER)

NOTE 1: RIPRAP SHALL EXTEND FAR ENOUGH UP THE SLOPES TO ALLOW 0.3m (1') OVERTOPPING TO AVOID ERODING AROUND THE EDGES OF THE RIPRAP.

NOTE 2: ENDS SHALL BE TIED INTO SLOPES.

LEGEND FOR STORM WATER POLLUTION PREVENTION PLAN

ITEM	SYMBOL
AGGREGATE (EROSION CONTROL)	
ESTONE DUMPED RIPRAP DITCH CHECKS: Height = 0.6m (2')	
TEMPORARY DITCH CHECKS	
INLET PIPE PROTECTION (I&PP)	
PERIMETER EROSION BARRIER	
EARTH EXCAVATION FOR EROSION CONTROL (SEDIMENT BASINS)	
PRESERVE EXISTING TREES, WOODLANDS, AND UNDERSTORY (OUTSIDE CONSTRUCTION LIMITS)	
ITEM PLACED AT BEGINNING OF CONSTRUCTION (Requirement)	
ITEM PLACED AS DIRECTED BY ENGINEER (When required by situation)	
DIRECTION OF OVERLAND FLOW	

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.

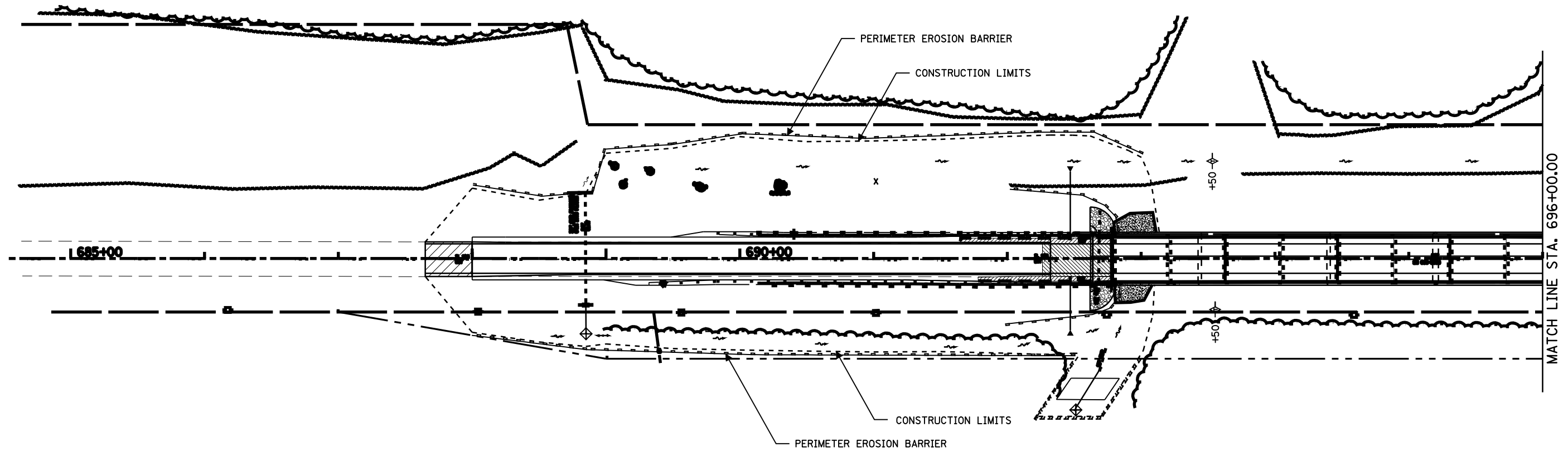
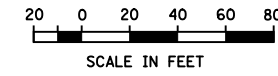
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		CHECKED - JCN	REVISED -
		DATE - APRIL 5, 1999	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STORM WATER POLLUTION
PREVENTION PLAN**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	26
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	



LEGEND FOR STORM WATER POLLUTION PREVENTION PLAN

ITEM	SYMBOL
TEMPORARY DITCH CHECKS	
INLET PIPE PROTECTION (I&PP)	
PERIMETER EROSION BARRIER	

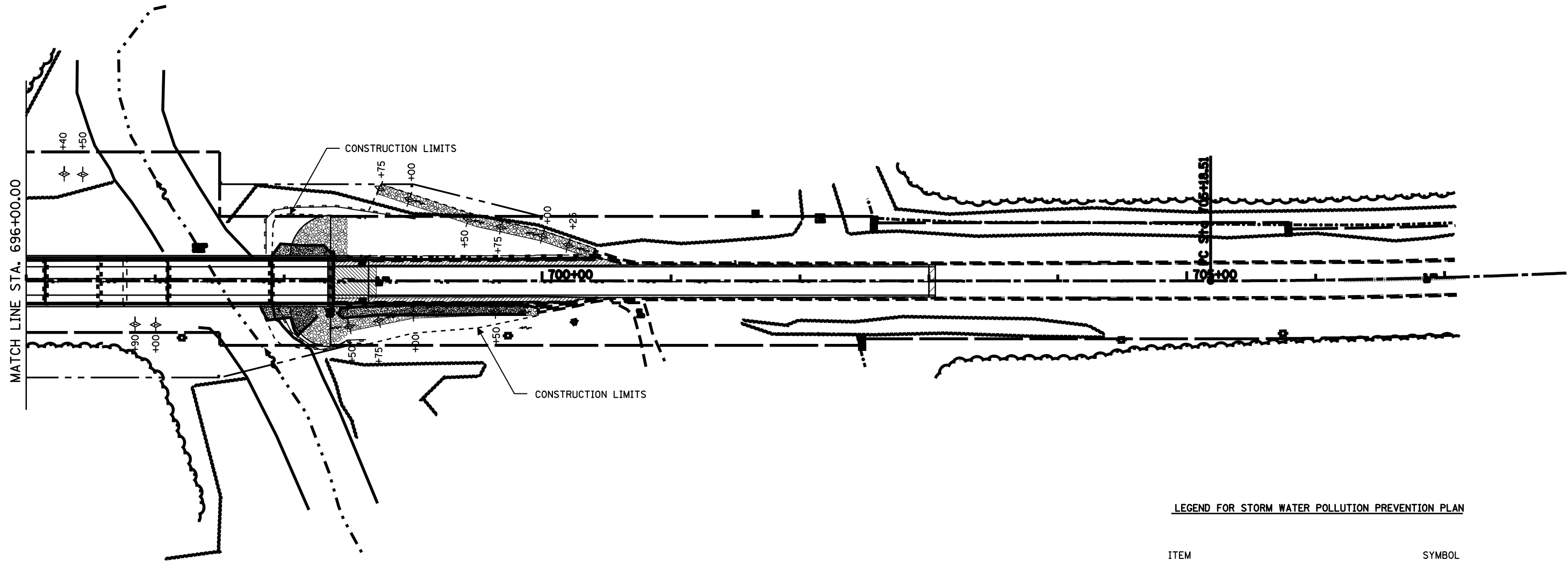
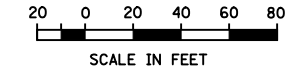
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	PLOT DATE = Jun-28-2010 02:01:16PM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STORM WATER POLLUTION
PREVENTION PLAN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	27
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	



LEGEND FOR STORM WATER POLLUTION PREVENTION PLAN

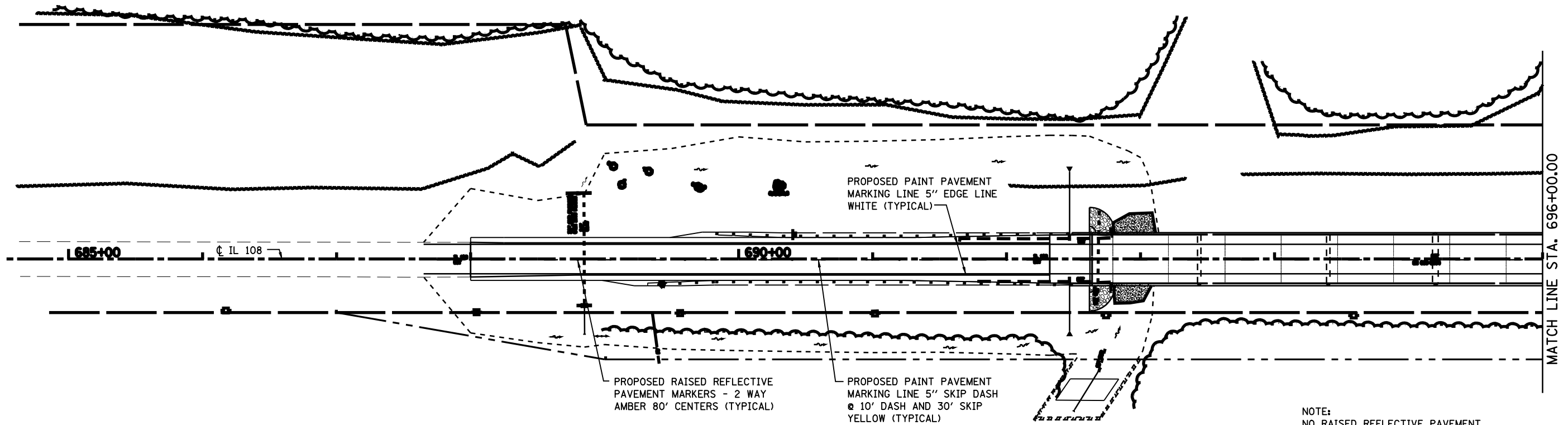
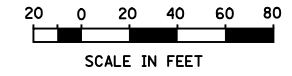
ITEM	SYMBOL
TEMPORARY DITCH CHECKS	
INLET PIPE PROTECTION (I&PP)	
PERIMETER EROSION BARRIER	

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STORM WATER POLLUTION PREVENTION PLAN				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	28
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	



NOTE:
NO RAISED REFLECTIVE PAVEMENT MARKERS WILL BE PLACED ON BRIDGE DECK SURFACES.

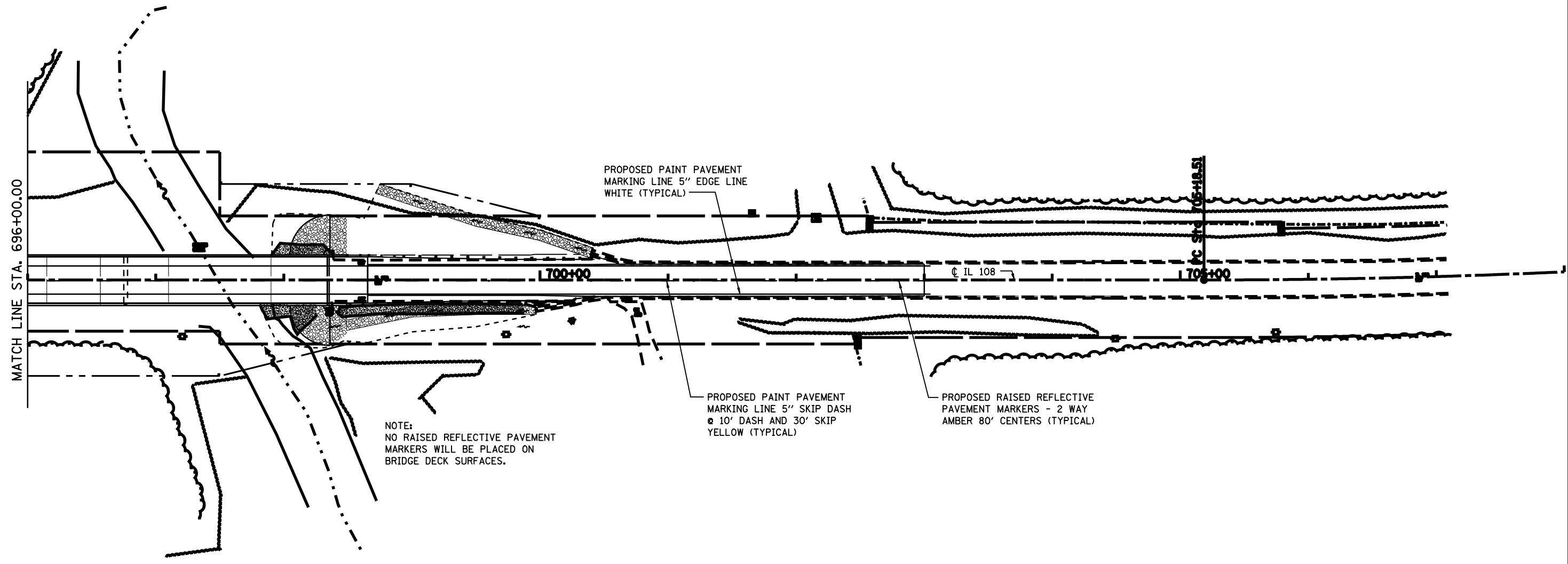
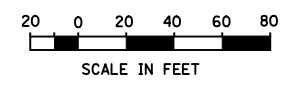
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	PLOT DATE = Jun-28-2010 02:01:23PM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	29
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	



NOTE:
NO RAISED REFLECTIVE PAVEMENT
MARKERS WILL BE PLACED ON
BRIDGE DECK SURFACES.

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	30
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	

Benchmark: Chiseled square in southwest wingwall of existing Hodges Creek bridge Sta. 698+38.22, Elev. 515.254

Existing Structure: Structure No. 059-0034, originally built in 1931 as SBI Route 108 Section 107-B-1 at Station 695+00, consisting of 11 steel beam spans and 1 thru truss span on R.C. Pile Bents and solid concrete piers. The abutments were spill thru pile bents. In 1981 the superstructure and two piers in the main channel and the west abutment were removed. Reconstruction consisted of 11 PPC Deck Beam spans and 1 PPC I Beam span in main channel. Two new piers and the west abutment were constructed. The existing structure is 561'-3 3/8" back to back of abutments and 34'-0" o. to o.. In 2000 the deck was overlaid with 2 1/2" Micro Silica overlay along with expansion joint and keyway repairs. The existing structure is to be removed and replaced using Staged Construction allowing one lane of traffic at all times.

No salvage.

Traffic Barrier Terminal Std. 631031 Type 6, typ.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**Quantity included with Roadway Plans

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 and 2009 Interims

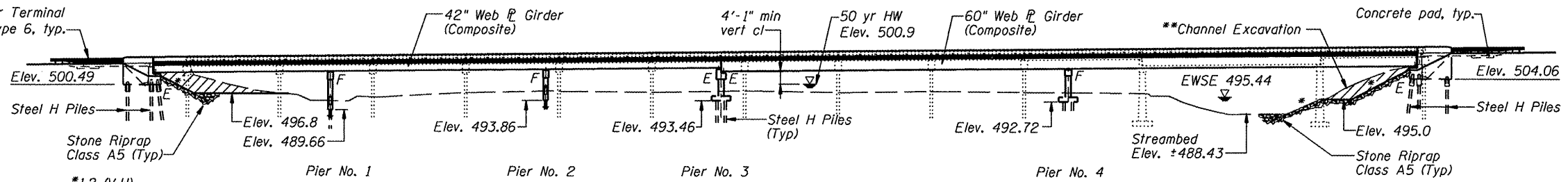
DESIGN STRESSES

FIELD UNITS

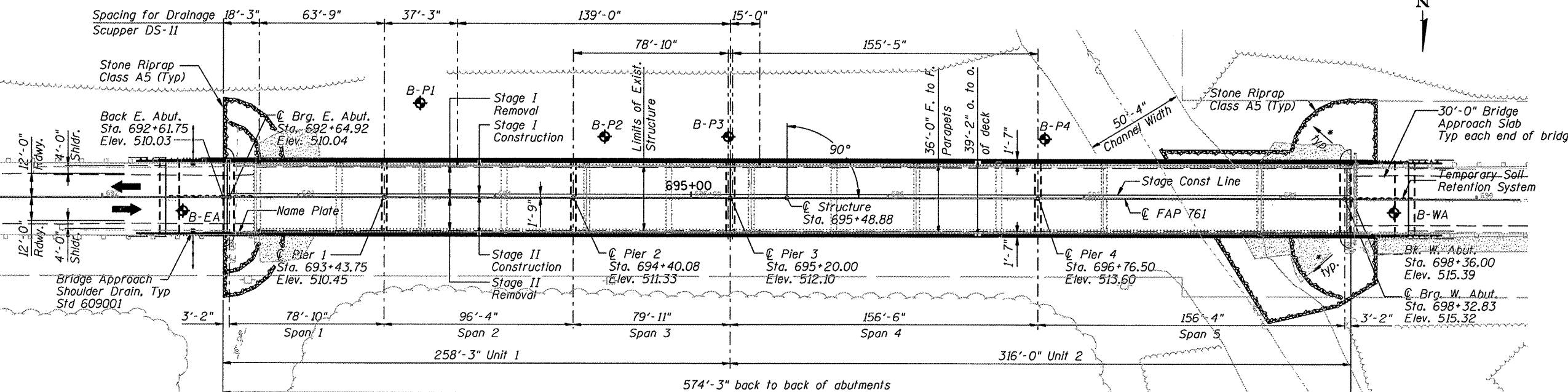
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (Structural Steel M270 Grade 50W)

SEISMIC DATA

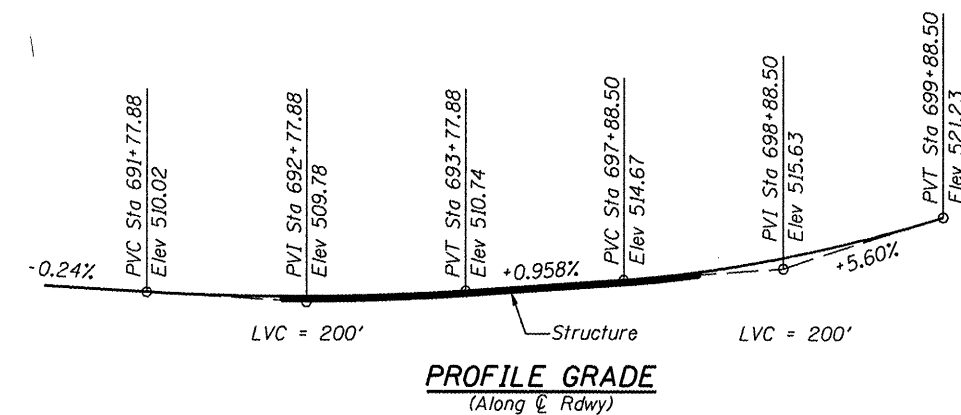
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 Sec. (SD1) = 0.257 g
Design Spectral Acceleration at 0.2 Sec. (SDS) = 0.548 g
Soil Site Class = E



ELEVATION



PLAN



PROFILE GRADE
(Along & Rdwy)

WATERWAY INFORMATION

Drainage Area = 155 mi² Low Grade Elev. 508.66 @ Sta. 692+65.26

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	8,761	1193	1274	500.0	1.7	1.5	501.7	501.6
Base	50	13,667	1588	1690	500.9	2.2	2.1	503.1	502.9
Overtopping	100	15,828	1738	1848	501.2	2.4	2.2	503.6	503.4
Max. Calc.	500	21,108	2077	2202	501.9	2.8	2.6	504.7	504.5

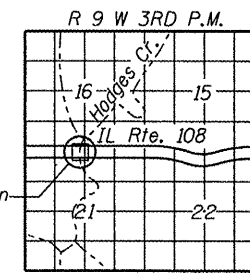
10 year velocity through existing bridge = 3.70 fps
10 year velocity through proposed bridge = 3.48 fps

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	W. Abut.
	500.5	489.4	494.1	492.6	494.0	504.1

APPROVED
For Structural Adequacy Only

Robert E. Anderson (TS)
Engineer of Bridges & Structures



LOCATION SKETCH

STATION 695+48.88
BUILT 20 BY
STATE OF ILLINOIS
FAP RT. 761 SECTION 107B-2
LOADING HL93
STR NO. 059-0510

NAME PLATE
See Std. 515001

LICENSED STRUCTURAL ENGINEER
JEREMY BUENING
081-006696
STATE OF ILLINOIS
JEREMY BUENING, P.E., S.E.
DATE: 8/5/10
EXP 11/30/10

GENERAL PLAN
IL ROUTE 108 OVER
HODGES CREEK
F.A.P. ROUTE 761
SECTION 107B-2
MACOUPIN COUNTY
STATION 695+48.88
STRUCTURE NUMBER 059-0510

DESIGNED - J.M.B.
CHECKED - T.E.S.
DRAWN - R KING
CHECKED - J.M.B.

HOMER L. CHASTAIN & ASSOCIATES, LLP
CONSULTING ENGINEERS
DECATUR (217) 422-8544
CHICAGO (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

SHEET NO.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1	761	107B-2	MACOUPIN	98	31
OF 51 SHEETS		FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94	
		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

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- 2 General Structure Data
- 3 Foundation Plan and Details
- 4 Stage Construction Details
- 5 Temporary Concrete Barrier For Stage Construction
- 6 Deck Elevations - Unit 1
- 7 Deck Elevations - Unit 1
- 8 Deck Elevations - Unit 1
- 9 Deck Elevations - Unit 1
- 10 Deck Elevations - Unit 2
- 11 Deck Elevations - Unit 2
- 12 Deck Elevations - Unit 2
- 13 Deck Elevations - Unit 2
- 14 Top of East Approach Slab Elevations
- 15 Top of West Approach Slab Elevations
- 16 Bridge Approach Slab Details
- 17 Bridge Approach Slab Details
- 18 Deck Plan And Cross Section - Unit 1
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- 21 Superstructure Details
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- 24 Framing Plan and Details - Unit 1
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- 32 East Abutment Details
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- 36 Pier 1 Details
- 37 Pier 1 Details
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- 40 Pier 3 Details
- 41 Pier 3 Details
- 42 Pier 4 Details
- 43 Pier 4 Details
- 44 Steel HP Pile Details
- 45 Bar Splicer Assembly And Mechanical Splicer Details
- 46 Concrete Parapet Slipforming Option
- 47 Soil Boring Logs
- 48 Soil Boring Logs
- 49 Soil Boring Logs
- 50 Soil Boring Logs
- 51 Soil Boring Logs

GENERAL NOTES:

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{1}{2}$ " ϕ in holes $\frac{15}{16}$ " ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 816,700 lb
All structural steel shall be AASHTO M 270 Grade 50W except expansion joints which shall be AASHTO M 270 Grade 50. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

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

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the designated areas of the abutments and Pier 3.

All structural steel and exposed surfaces of bearings within a distance of 10 ft. each way from the deck joints shall be painted as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

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

Reinforcement bars designated (E) shall be epoxy coated.

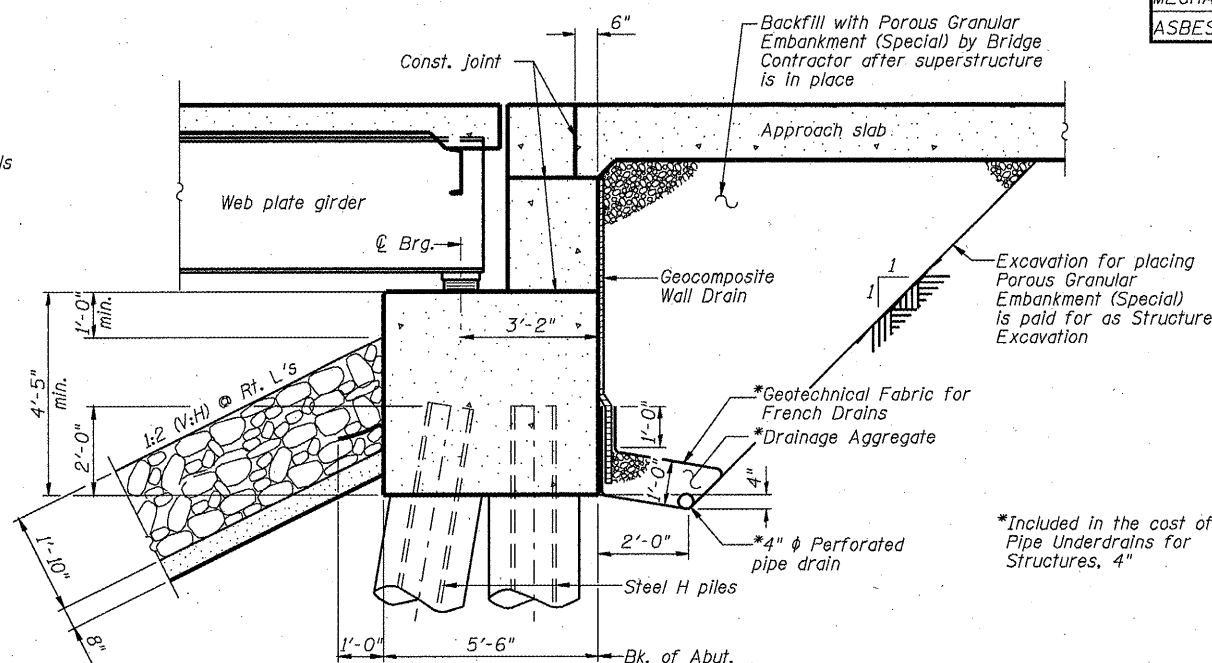
The Contractor is advised that the existing PPC deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing beams when developing construction procedures for removal and replacement of the superstructure.

If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the existing beams for the proposed loads. Cost included with Removal of Existing Structures.

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)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
POROUS GRANULAR EMBANKMENT, SPECIAL	CU. YD.		154	154
STONE RIPRAP, CLASS A5	SQ. YD.		1205	1205
FILTER FABRIC	SQ. YD.		1205	1205
REMOVAL OF EXISTING STRUCTURES	EACH		1	1
STRUCTURE EXCAVATION	CU. YD.		690	690
CONCRETE STRUCTURES	CU. YD.		389.7	389.7
CONCRETE SUPERSTRUCTURE	CU. YD.	814.7		814.7
BRIDGE DECK GROOVING	SQ. YD.	2378		2378
CONCRETE ENCASEMENT	CU. YD.		18.4	18.4
PROTECTIVE COAT	SQ. YD.	3036		3036
FURNISHING & ERECTING STRUCTURAL STEEL	L SUM	1		1
STUD SHEAR CONNECTORS	EACH	6588		6588
REINFORCEMENT BARS, EPOXY COATED	POUND	209,560	34,740	244,300
BAR SPLICERS	EACH	1976	257	2233
FURNISHING STEEL PILES HP 12X53	FOOT		1792	1792
FURNISHING STEEL PILES HP 12X63	FOOT		3144	3144
DRIVING PILES	FOOT		4936	4936
TEST PILE STEEL HP 12X53	EACH		2	2
TEST PILE STEEL HP 12X63	EACH		4	4
PILE SHOES	EACH		48	48
NAME PLATES	EACH	1		1
PREFORMED JOINT STRIP SEAL	FOOT	114		114
ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	24		24
ANCHOR BOLTS, 1"	EACH		48	48
ANCHOR BOLTS, 1 1/4"	EACH		12	12
ANCHOR BOLTS, 1 1/2"	EACH		36	36
CONCRETE SEALER	SQ. FT.		1958	1958
GEOCOMPOSITE WALL DRAIN	SQ. YD.		71	71
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT		160	160
DRAINAGE SCUPPERS, DS-11	EACH	6		6
TEMPORARY SOIL RETENTION SYSTEM	SQ. FT.		325	325
MECHANICAL SPLICERS	EACH		138	138
ASBESTOS BEARING PAD REMOVAL	EACH		220	220



SECTION THRU PILE SUPPORTED STUB ABUTMENT

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

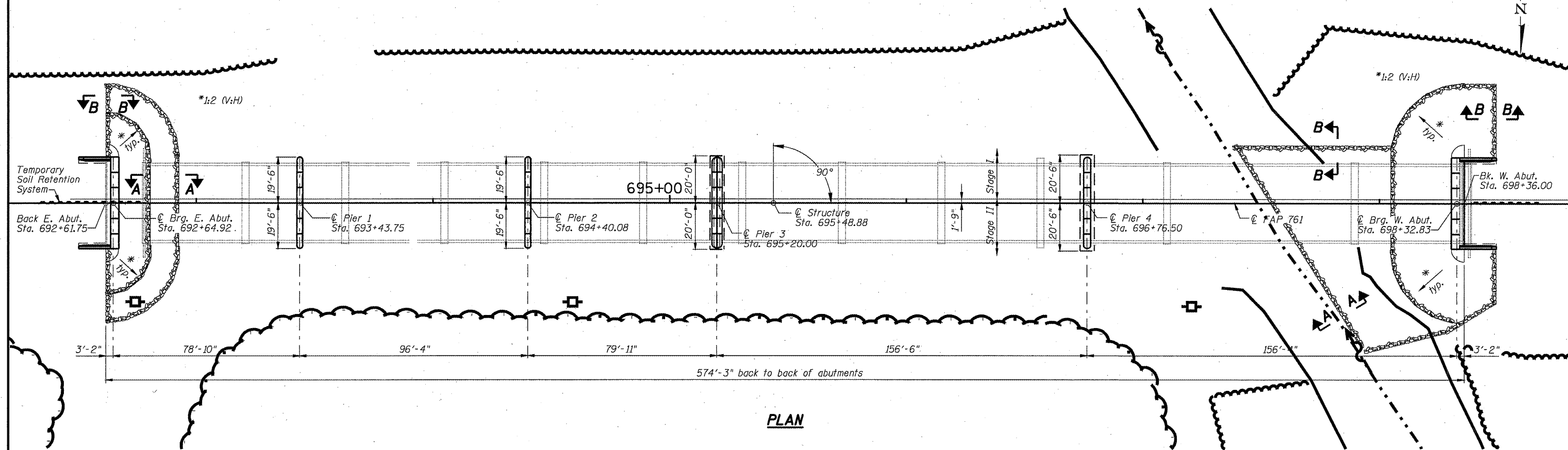
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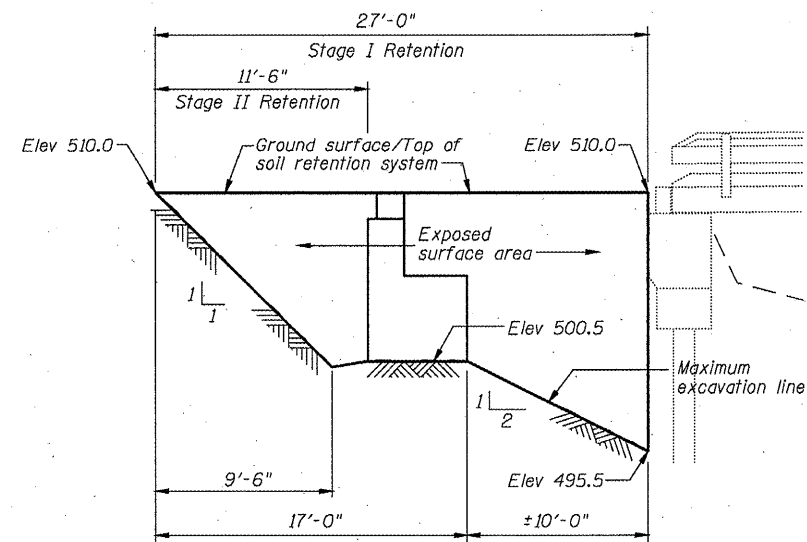
**GENERAL STRUCTURE DATA
STRUCTURE NUMBER 059-0510**

SHEET NO. 2 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	32
FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

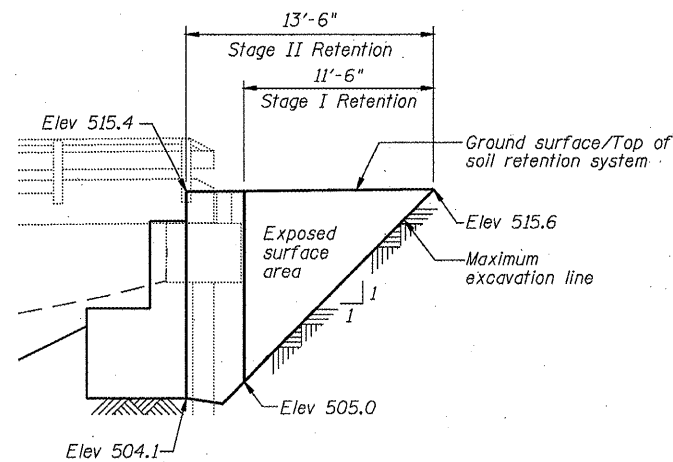
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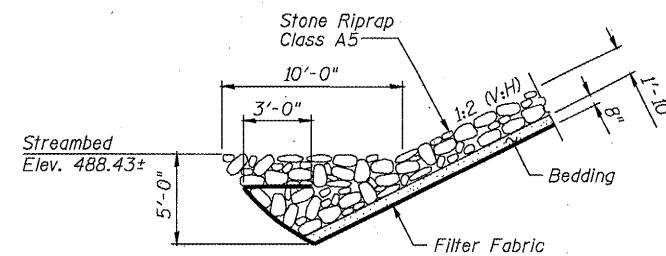
PLAN



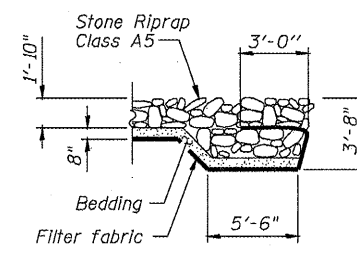
EAST ABUTMENT



WEST ABUTMENT



SECTION A-A



SECTION B-B

TEMPORARY SOIL RETENTION SYSTEM

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

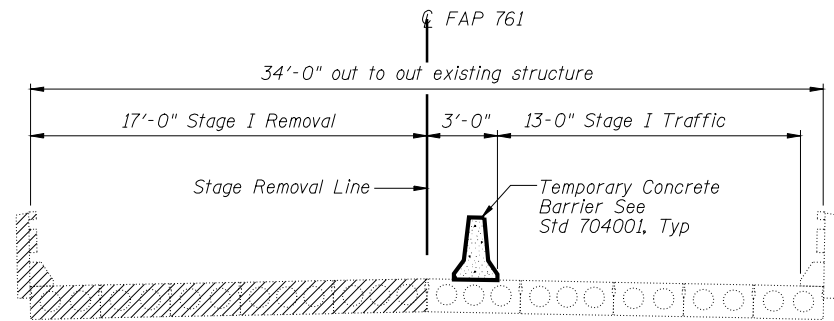
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**FOUNDATION PLAN AND DETAILS
STRUCTURE NUMBER 059-0510**

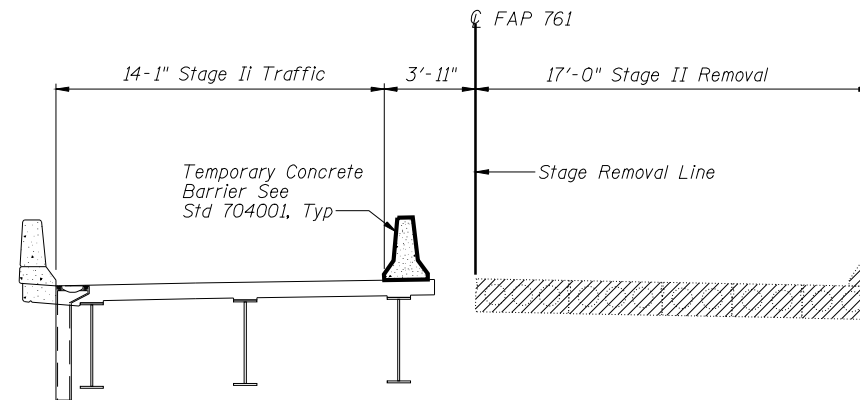
SHEET NO. 3 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 33
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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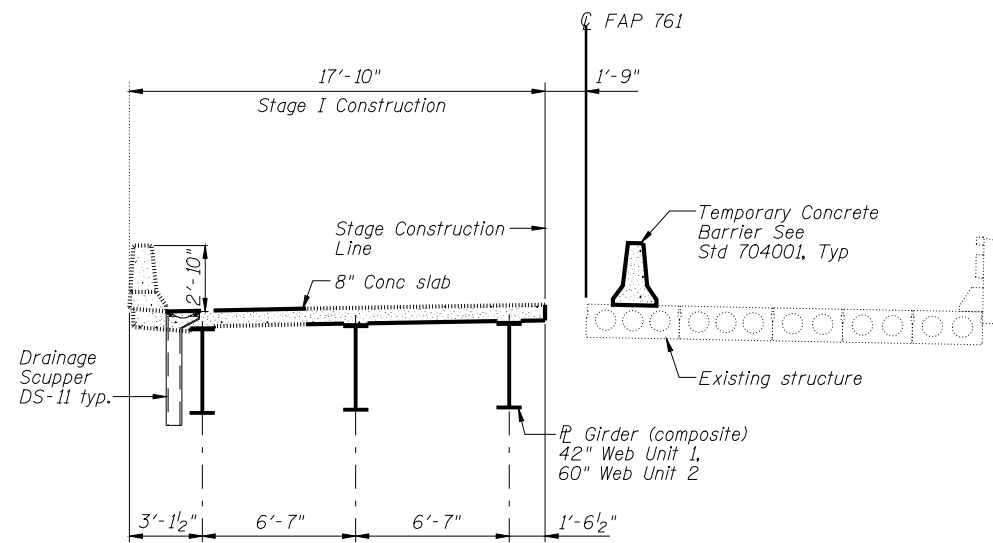
STAGE I REMOVAL

(Looking West)



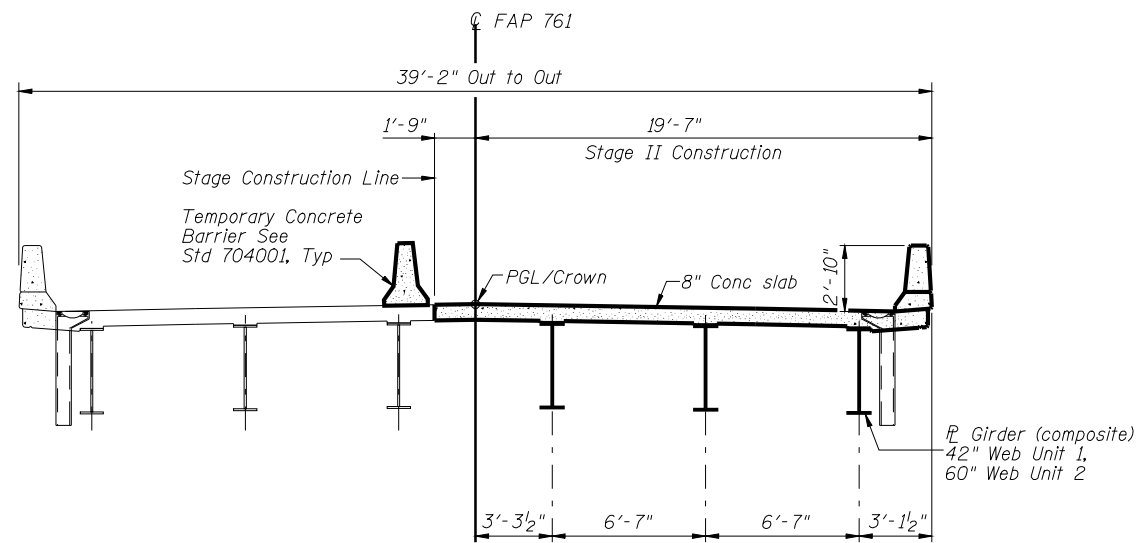
STAGE II REMOVAL

(Looking West)



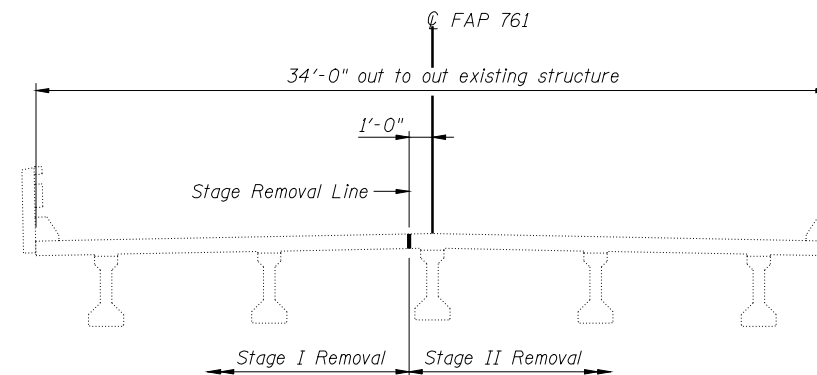
STAGE I CONSTRUCTION

(Looking West)



STAGE II CONSTRUCTION

(Looking West)



CROSS SECTION THRU EXISTING SPAN II

(Looking West)

Note:
For quantity of Temporary Concrete Barrier See Roadway Plans.

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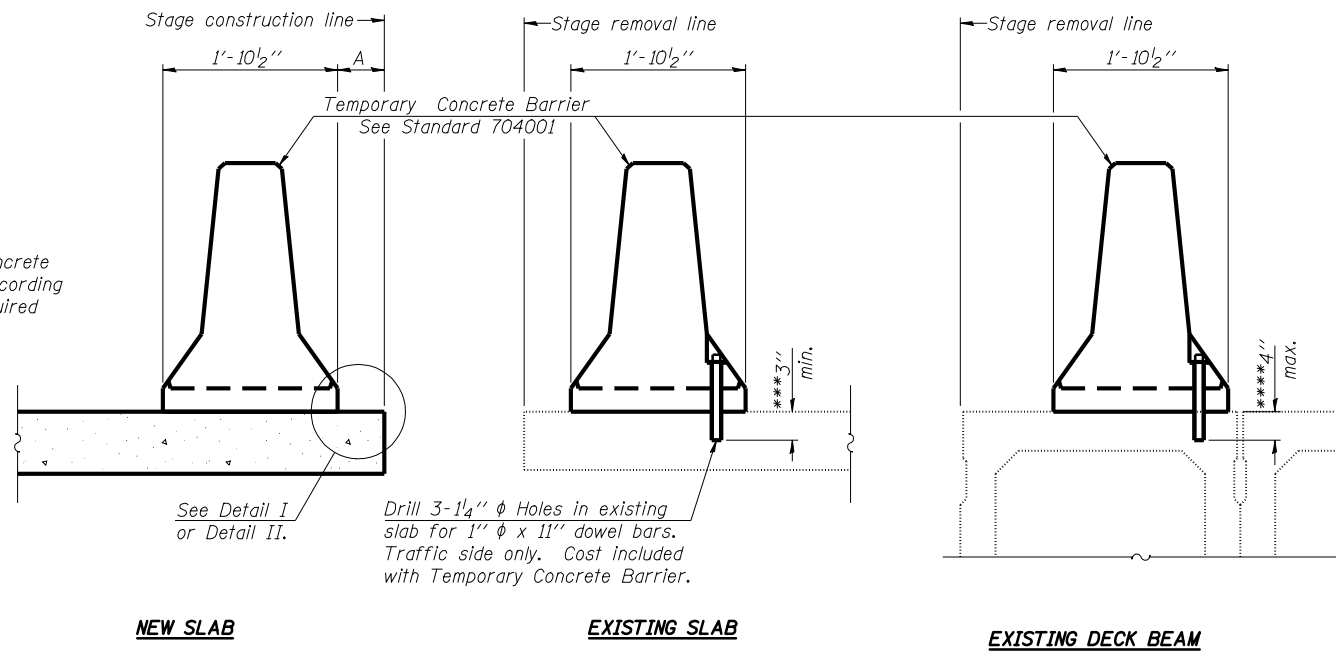
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**STAGE CONSTRUCTION DETAILS
STRUCTURE NUMBER 059-0510**

SHEET NO. 4 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	34
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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



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

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

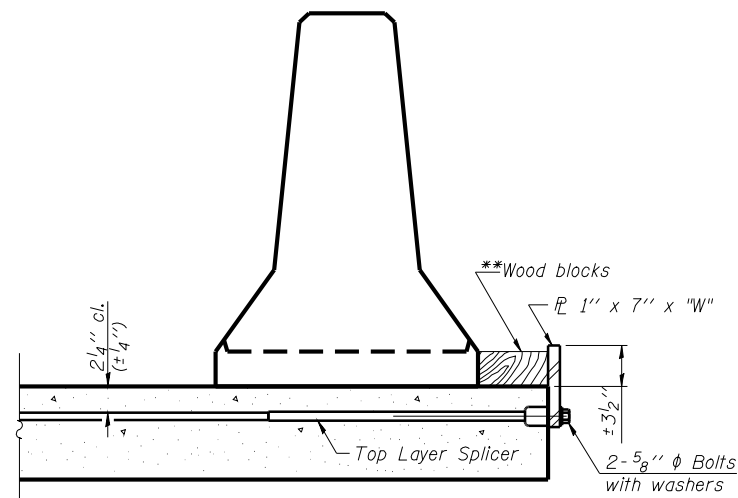
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

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

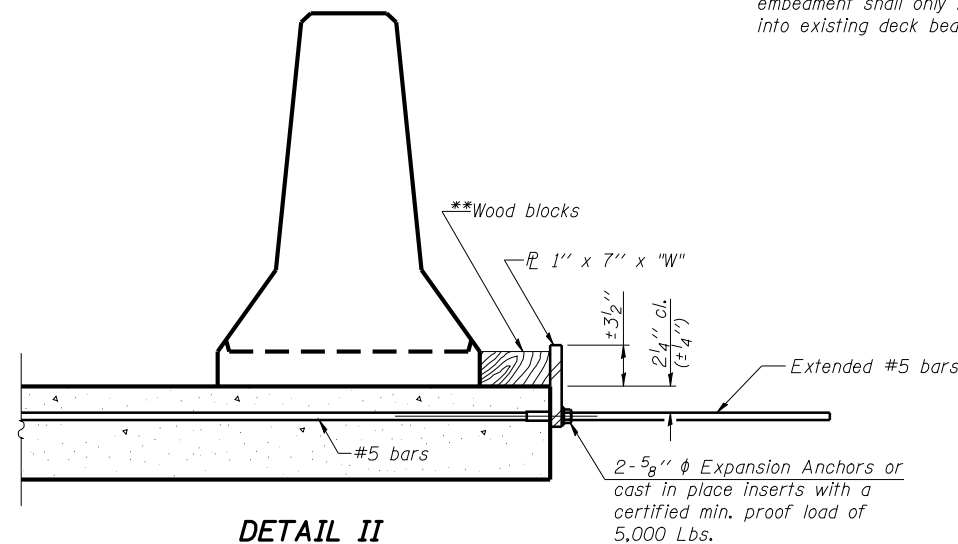
SECTIONS THRU SLAB OR DECK BEAM

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

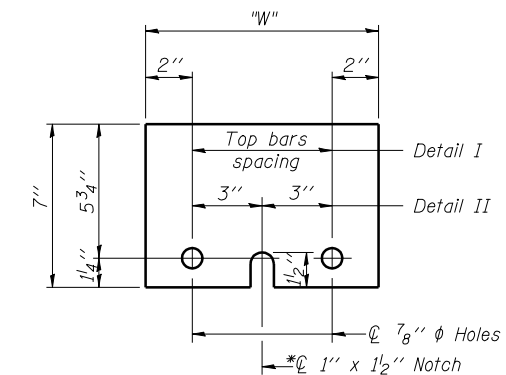
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 1" x 7" x 10"

* Required only with Detail II

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

"W" = Top bars spacing + 4"

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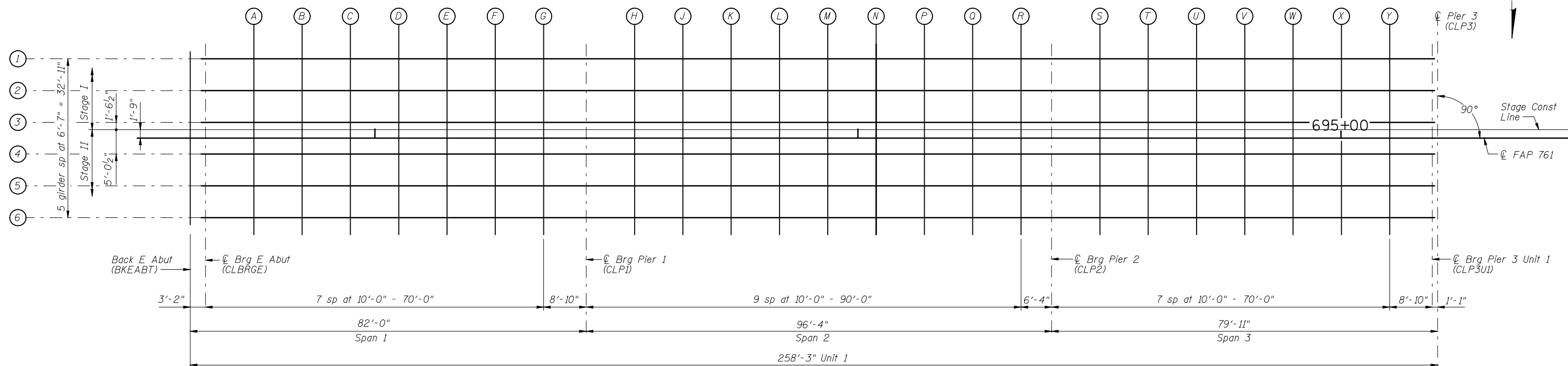
R-27

11-1-09

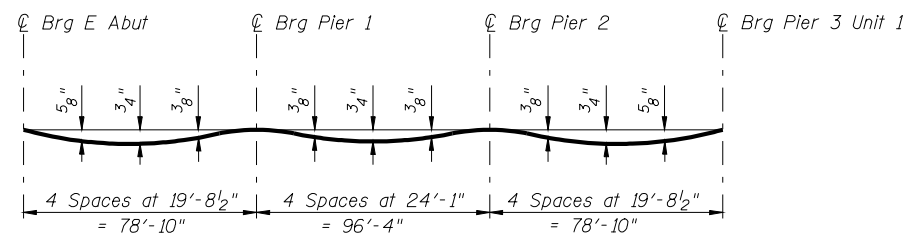
**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NUMBER 059-0510**

SHEET NO. 5 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	35
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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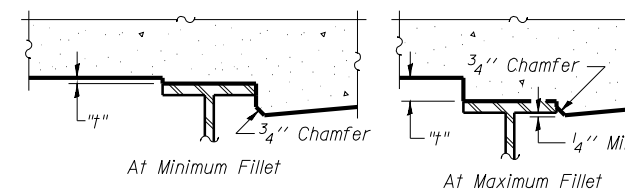
DECK ELEVATION LAYOUT - UNIT 1



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown in the tables.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 7 - 9 of 51, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

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DECK ELEVATIONS - UNIT 1
STRUCTURE NUMBER 059-0510

SHEET NO. 6 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	36
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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GIRDER 1				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	-16.46	509.75	509.75
CLBRGE	69264.92	-16.46	509.76	509.76
A	69274.92	-16.46	509.79	509.82
B	69284.92	-16.46	509.83	509.88
C	69294.92	-16.46	509.87	509.93
D	69304.92	-16.46	509.92	509.98
E	69314.92	-16.46	509.97	510.02
F	69324.92	-16.46	510.03	510.06
G	69334.92	-16.46	510.10	510.11
CLP1	69343.75	-16.46	510.17	510.17
H	69353.75	-16.46	510.24	510.25
J	69363.75	-16.46	510.33	510.35
K	69373.75	-16.46	510.42	510.46
L	69383.75	-16.46	510.51	510.57
M	69393.75	-16.46	510.61	510.67
N	69403.75	-16.46	510.71	510.76
P	69413.75	-16.46	510.80	510.84
Q	69423.75	-16.46	510.90	510.92
R	69433.75	-16.46	510.99	511.00
CLP2	69440.09	-16.46	511.05	511.05
S	69450.09	-16.46	511.15	511.16
T	69460.09	-16.46	511.25	511.27
U	69470.09	-16.46	511.34	511.39
V	69480.09	-16.46	511.44	511.50
W	69490.09	-16.46	511.53	511.60
X	69500.09	-16.46	511.63	511.68
Y	69510.09	-16.46	511.72	511.75
CLP3U1	69518.92	-16.46	511.81	511.81
CLP3	69520.00	-16.46	511.82	511.82

GIRDER 2				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	-9.87	509.88	509.88
CLBRGE	69264.92	-9.87	509.88	509.88
A	69274.92	-9.87	509.91	509.95
B	69284.92	-9.87	509.95	510.01
C	69294.92	-9.87	510.00	510.06
D	69304.92	-9.87	510.04	510.11
E	69314.92	-9.87	510.10	510.15
F	69324.92	-9.87	510.16	510.19
G	69334.92	-9.87	510.23	510.24
CLP1	69343.75	-9.87	510.29	510.29
H	69353.75	-9.87	510.37	510.38
J	69363.75	-9.87	510.45	510.48
K	69373.75	-9.87	510.54	510.58
L	69383.75	-9.87	510.64	510.70
M	69393.75	-9.87	510.74	510.79
N	69403.75	-9.87	510.83	510.88
P	69413.75	-9.87	510.93	510.97
Q	69423.75	-9.87	511.02	511.04
R	69433.75	-9.87	511.12	511.13
CLP2	69440.09	-9.87	511.18	511.18
S	69450.09	-9.87	511.28	511.29
T	69460.09	-9.87	511.37	511.40
U	69470.09	-9.87	511.47	511.51
V	69480.09	-9.87	511.56	511.63
W	69490.09	-9.87	511.66	511.72
X	69500.09	-9.87	511.75	511.80
Y	69510.09	-9.87	511.85	511.88
CLP3U1	69518.92	-9.87	511.93	511.93
CLP3	69520.00	-9.87	511.95	511.95

GIRDER 3				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	-3.29	509.98	509.98
CLBRGE	69264.92	-3.29	509.99	509.99
A	69274.92	-3.29	510.02	510.05
B	69284.92	-3.29	510.05	510.11
C	69294.92	-3.29	510.10	510.16
D	69304.92	-3.29	510.15	510.21
E	69314.92	-3.29	510.20	510.25
F	69324.92	-3.29	510.26	510.29
G	69334.92	-3.29	510.33	510.34
CLP1	69343.75	-3.29	510.39	510.39
H	69353.75	-3.29	510.47	510.48
J	69363.75	-3.29	510.56	510.58
K	69373.75	-3.29	510.65	510.69
L	69383.75	-3.29	510.74	510.80
M	69393.75	-3.29	510.84	510.90
N	69403.75	-3.29	510.93	510.99
P	69413.75	-3.29	511.03	511.07
Q	69423.75	-3.29	511.13	511.15
R	69433.75	-3.29	511.22	511.23
CLP2	69440.09	-3.29	511.28	511.28
S	69450.09	-3.29	511.38	511.39
T	69460.09	-3.29	511.47	511.50
U	69470.09	-3.29	511.57	511.62
V	69480.09	-3.29	511.67	511.73
W	69490.09	-3.29	511.76	511.82
X	69500.09	-3.29	511.86	511.91
Y	69510.09	-3.29	511.95	511.98
CLP3U1	69518.92	-3.29	512.04	512.04
CLP3	69520.00	-3.29	512.05	512.05

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**DECK ELEVATIONS - UNIT 1
STRUCTURE NUMBER 059-0510**

SHEET NO. 7 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	37
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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STAGED CONSTRUCTION				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	-1.75	510.00	510.00
CLBRGE	69264.92	-1.75	510.01	510.01
A	69274.92	-1.75	510.04	510.08
B	69284.92	-1.75	510.08	510.13
C	69294.92	-1.75	510.12	510.19
D	69304.92	-1.75	510.17	510.24
E	69314.92	-1.75	510.23	510.28
F	69324.92	-1.75	510.29	510.32
G	69334.92	-1.75	510.35	510.37
CLP1	69343.75	-1.75	510.42	510.42
H	69353.75	-1.75	510.50	510.50
J	69363.75	-1.75	510.58	510.60
K	69373.75	-1.75	510.67	510.71
L	69383.75	-1.75	510.77	510.82
M	69393.75	-1.75	510.86	510.92
N	69403.75	-1.75	510.96	511.01
P	69413.75	-1.75	511.05	511.09
Q	69423.75	-1.75	511.15	511.17
R	69433.75	-1.75	511.25	511.25
CLP2	69440.09	-1.75	511.31	511.31
S	69450.09	-1.75	511.40	511.41
T	69460.09	-1.75	511.50	511.53
U	69470.09	-1.75	511.59	511.64
V	69480.09	-1.75	511.69	511.75
W	69490.09	-1.75	511.79	511.85
X	69500.09	-1.75	511.88	511.93
Y	69510.09	-1.75	511.98	512.00
CLP3U1	69518.92	-1.75	512.06	512.06
CLP3	69520.00	-1.75	512.07	512.07

PGL				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	0.00	510.03	510.03
CLBRGE	69264.92	0.00	510.04	510.04
A	69274.92	0.00	510.07	510.10
B	69284.92	0.00	510.11	510.16
C	69294.92	0.00	510.15	510.21
D	69304.92	0.00	510.20	510.26
E	69314.92	0.00	510.25	510.30
F	69324.92	0.00	510.31	510.34
G	69334.92	0.00	510.38	510.39
CLP1	69343.75	0.00	510.45	510.45
H	69353.75	0.00	510.52	510.53
J	69363.75	0.00	510.61	510.63
K	69373.75	0.00	510.70	510.74
L	69383.75	0.00	510.79	510.85
M	69393.75	0.00	510.89	510.95
N	69403.75	0.00	510.99	511.04
P	69413.75	0.00	511.08	511.12
Q	69423.75	0.00	511.18	511.20
R	69433.75	0.00	511.27	511.28
CLP2	69440.09	0.00	511.33	511.33
S	69450.09	0.00	511.43	511.44
T	69460.09	0.00	511.53	511.55
U	69470.09	0.00	511.62	511.67
V	69480.09	0.00	511.72	511.78
W	69490.09	0.00	511.81	511.88
X	69500.09	0.00	511.91	511.96
Y	69510.09	0.00	512.00	512.03
CLP3U1	69518.92	0.00	512.09	512.09
CLP3	69520.00	0.00	512.10	512.10

GIRDER 4				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	3.29	509.98	509.98
CLBRGE	69264.92	3.29	509.99	509.99
A	69274.92	3.29	510.02	510.05
B	69284.92	3.29	510.05	510.11
C	69294.92	3.29	510.10	510.16
D	69304.92	3.29	510.15	510.21
E	69314.92	3.29	510.20	510.25
F	69324.92	3.29	510.26	510.29
G	69334.92	3.29	510.33	510.34
CLP1	69343.75	3.29	510.39	510.39
H	69353.75	3.29	510.47	510.48
J	69363.75	3.29	510.56	510.58
K	69373.75	3.29	510.65	510.69
L	69383.75	3.29	510.74	510.80
M	69393.75	3.29	510.84	510.90
N	69403.75	3.29	510.93	510.99
P	69413.75	3.29	511.03	511.07
Q	69423.75	3.29	511.13	511.15
R	69433.75	3.29	511.22	511.23
CLP2	69440.09	3.29	511.28	511.28
S	69450.09	3.29	511.38	511.39
T	69460.09	3.29	511.47	511.50
U	69470.09	3.29	511.57	511.62
V	69480.09	3.29	511.67	511.73
W	69490.09	3.29	511.76	511.82
X	69500.09	3.29	511.86	511.91
Y	69510.09	3.29	511.95	511.98
CLP3U1	69518.92	3.29	512.04	512.04
CLP3	69520.00	3.29	512.05	512.05

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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184-001397

DECK ELEVATIONS - UNIT 1
STRUCTURE NUMBER 059-0510

SHEET NO. 8 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	38
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 5				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	9.88	509.88	509.88
CLBRGE	69264.92	9.88	509.88	509.88
A	69274.92	9.88	509.91	509.95
B	69284.92	9.88	509.95	510.01
C	69294.92	9.88	510.00	510.06
D	69304.92	9.88	510.04	510.11
E	69314.92	9.88	510.10	510.15
F	69324.92	9.88	510.16	510.19
G	69334.92	9.88	510.23	510.24
CLP1	69343.75	9.88	510.29	510.29
H	69353.75	9.88	510.37	510.38
J	69363.75	9.88	510.45	510.48
K	69373.75	9.88	510.54	510.58
L	69383.75	9.88	510.64	510.70
M	69393.75	9.88	510.74	510.79
N	69403.75	9.88	510.83	510.88
P	69413.75	9.88	510.93	510.97
Q	69423.75	9.88	511.02	511.04
R	69433.75	9.88	511.12	511.13
CLP2	69440.09	9.88	511.18	511.18
S	69450.09	9.88	511.28	511.29
T	69460.09	9.88	511.37	511.40
U	69470.09	9.88	511.47	511.51
V	69480.09	9.88	511.56	511.63
W	69490.09	9.88	511.66	511.72
X	69500.09	9.88	511.75	511.80
Y	69510.09	9.88	511.85	511.88
CLP3U1	69518.92	9.88	511.93	511.93
CLP3	69520.00	9.88	511.95	511.95

GIRDER 6				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKEABUT	69261.75	16.46	509.75	509.75
CLBRGE	69264.92	16.46	509.76	509.76
A	69274.92	16.46	509.79	509.82
B	69284.92	16.46	509.83	509.88
C	69294.92	16.46	509.87	509.93
D	69304.92	16.46	509.92	509.98
E	69314.92	16.46	509.97	510.02
F	69324.92	16.46	510.03	510.06
G	69334.92	16.46	510.10	510.11
CLP1	69343.75	16.46	510.17	510.17
H	69353.75	16.46	510.24	510.25
J	69363.75	16.46	510.33	510.35
K	69373.75	16.46	510.42	510.46
L	69383.75	16.46	510.51	510.57
M	69393.75	16.46	510.61	510.67
N	69403.75	16.46	510.71	510.76
P	69413.75	16.46	510.80	510.84
Q	69423.75	16.46	510.90	510.92
R	69433.75	16.46	510.99	511.00
CLP2	69440.09	16.46	511.05	511.05
S	69450.09	16.46	511.15	511.16
T	69460.09	16.46	511.25	511.27
U	69470.09	16.46	511.34	511.39
V	69480.09	16.46	511.44	511.50
W	69490.09	16.46	511.53	511.60
X	69500.09	16.46	511.63	511.68
Y	69510.09	16.46	511.72	511.75
CLP3U1	69518.92	16.46	511.81	511.81
CLP3	69520.00	16.46	511.82	511.82

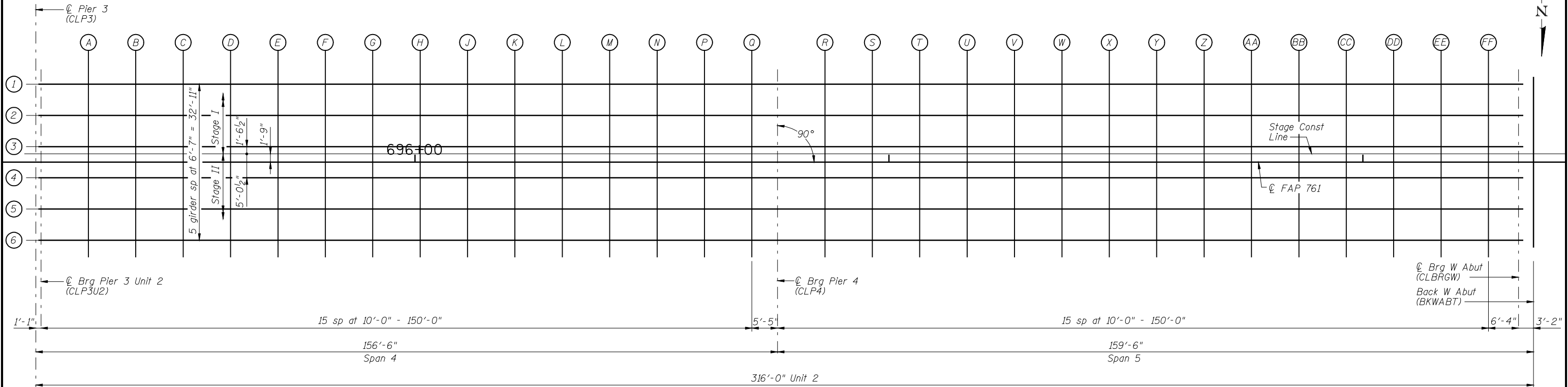
DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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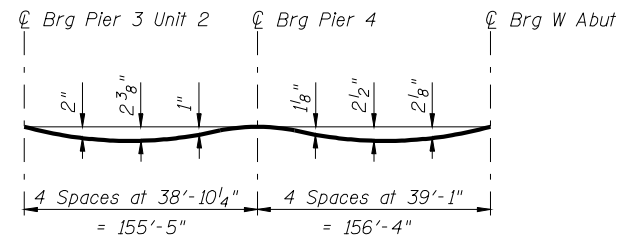
DECK ELEVATIONS - UNIT 1
STRUCTURE NUMBER 059-0510

SHEET NO. 9 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	39
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



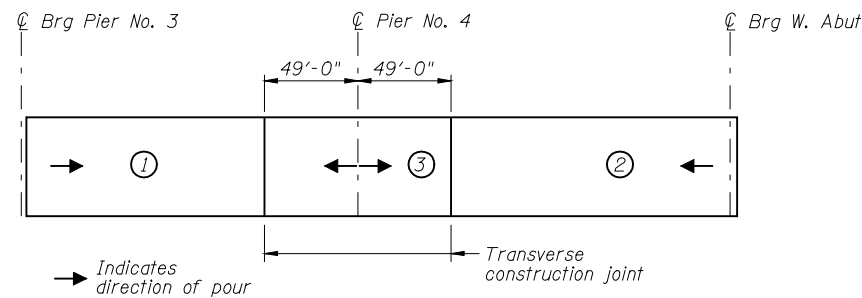
DECK ELEVATION LAYOUT - UNIT 2



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

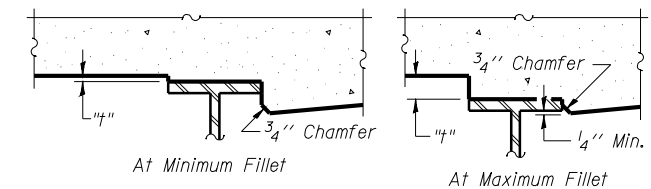
Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown in the tables.



When the deck pour is stopped for the day at one or more of the Transverse Construction Joints in the Deck Pouring Sequence as shown, the next pour shall not be made until both of the following requirements are met:

1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum modulus of rupture of 650 psi or a minimum compressive strength of 3500 psi.

DECK POURING SEQUENCE



To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 11 - 13 of 51, minus slab thickness, equals the fillet heights "f" above top flange of beams.

FILLET HEIGHTS

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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184-001397

**DECK ELEVATIONS - UNIT 2
STRUCTURE NUMBER 059-0510**

SHEET NO. 10 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 40
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 1				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	-16.46	511.82	511.82
CLP3U2	69521.08	-16.46	511.83	511.83
A	69531.08	-16.46	511.93	511.98
B	69541.08	-16.46	512.02	512.12
C	69551.08	-16.46	512.12	512.26
D	69561.08	-16.46	512.21	512.38
E	69571.08	-16.46	512.31	512.50
F	69581.08	-16.46	512.40	512.61
G	69591.08	-16.46	512.50	512.70
H	69601.08	-16.46	512.60	512.79
J	69611.08	-16.46	512.69	512.86
K	69621.08	-16.46	512.79	512.93
L	69631.08	-16.46	512.88	512.99
M	69641.08	-16.46	512.98	513.05
N	69651.08	-16.46	513.08	513.12
P	69661.08	-16.46	513.17	513.19
Q	69671.08	-16.46	513.27	513.27
CLP4	69676.50	-16.46	513.32	513.32
R	69686.50	-16.46	513.41	513.43
S	69696.50	-16.46	513.51	513.54
T	69706.50	-16.46	513.61	513.66
U	69716.50	-16.46	513.70	513.79
V	69726.50	-16.46	513.80	513.92
W	69736.50	-16.46	513.89	514.05
X	69746.50	-16.46	513.99	514.17
Y	69756.50	-16.46	514.09	514.29
Z	69766.50	-16.46	514.18	514.39
AA	69776.50	-16.46	514.28	514.48
BB	69786.50	-16.46	514.37	514.57
CC	69796.50	-16.46	514.48	514.64
DD	69806.50	-16.46	514.60	514.73
EE	69816.50	-16.46	514.75	514.84
FF	69826.50	-16.46	514.92	514.96
CLBRGW	69832.83	-16.46	515.04	515.04
BKWABT	69836.00	-16.46	515.11	515.11

GIRDER 2				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	-9.87	511.95	511.95
CLP3U2	69521.08	-9.87	511.96	511.96
A	69531.08	-9.87	512.05	512.10
B	69541.08	-9.87	512.15	512.25
C	69551.08	-9.87	512.24	512.38
D	69561.08	-9.87	512.34	512.51
E	69571.08	-9.87	512.43	512.63
F	69581.08	-9.87	512.53	512.73
G	69591.08	-9.87	512.63	512.83
H	69601.08	-9.87	512.72	512.91
J	69611.08	-9.87	512.82	512.99
K	69621.08	-9.87	512.91	513.05
L	69631.08	-9.87	513.01	513.12
M	69641.08	-9.87	513.11	513.18
N	69651.08	-9.87	513.20	513.25
P	69661.08	-9.87	513.30	513.31
Q	69671.08	-9.87	513.39	513.40
CLP4	69676.50	-9.87	513.44	513.44
R	69686.50	-9.87	513.54	513.55
S	69696.50	-9.87	513.64	513.67
T	69706.50	-9.87	513.73	513.79
U	69716.50	-9.87	513.83	513.92
V	69726.50	-9.87	513.92	514.05
W	69736.50	-9.87	514.02	514.18
X	69746.50	-9.87	514.12	514.30
Y	69756.50	-9.87	514.21	514.41
Z	69766.50	-9.87	514.31	514.52
AA	69776.50	-9.87	514.40	514.61
BB	69786.50	-9.87	514.50	514.69
CC	69796.50	-9.87	514.60	514.77
DD	69806.50	-9.87	514.73	514.86
EE	69816.50	-9.87	514.88	514.96
FF	69826.50	-9.87	515.05	515.08
CLBRGW	69832.83	-9.87	515.17	515.17
BKWABT	69836.00	-9.87	515.23	515.23

GIRDER 3				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	-3.29	512.05	512.05
CLP3U2	69521.08	-3.29	512.06	512.06
A	69531.08	-3.29	512.15	512.21
B	69541.08	-3.29	512.25	512.35
C	69551.08	-3.29	512.35	512.49
D	69561.08	-3.29	512.44	512.61
E	69571.08	-3.29	512.54	512.73
F	69581.08	-3.29	512.63	512.84
G	69591.08	-3.29	512.73	512.93
H	69601.08	-3.29	512.83	513.02
J	69611.08	-3.29	512.92	513.09
K	69621.08	-3.29	513.02	513.16
L	69631.08	-3.29	513.11	513.22
M	69641.08	-3.29	513.21	513.28
N	69651.08	-3.29	513.30	513.35
P	69661.08	-3.29	513.40	513.42
Q	69671.08	-3.29	513.50	513.50
CLP4	69676.50	-3.29	513.55	513.55
R	69686.50	-3.29	513.64	513.66
S	69696.50	-3.29	513.74	513.77
T	69706.50	-3.29	513.84	513.89
U	69716.50	-3.29	513.93	514.02
V	69726.50	-3.29	514.03	514.15
W	69736.50	-3.29	514.12	514.28
X	69746.50	-3.29	514.22	514.40
Y	69756.50	-3.29	514.31	514.52
Z	69766.50	-3.29	514.41	514.62
AA	69776.50	-3.29	514.51	514.71
BB	69786.50	-3.29	514.60	514.80
CC	69796.50	-3.29	514.70	514.87
DD	69806.50	-3.29	514.83	514.96
EE	69816.50	-3.29	514.98	515.07
FF	69826.50	-3.29	515.15	515.19
CLBRGW	69832.83	-3.29	515.27	515.27
BKWABT	69836.00	-3.29	515.34	515.34

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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184-001397

**DECK ELEVATIONS - UNIT 2
STRUCTURE NUMBER 059-0510**

SHEET NO. 11 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	41
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGED CONSTRUCTION				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	-1.75	512.07	512.07
CLP3U2	69521.08	-1.75	512.08	512.08
A	69531.08	-1.75	512.18	512.23
B	69541.08	-1.75	512.27	512.37
C	69551.08	-1.75	512.37	512.51
D	69561.08	-1.75	512.47	512.64
E	69571.08	-1.75	512.56	512.75
F	69581.08	-1.75	512.66	512.86
G	69591.08	-1.75	512.75	512.95
H	69601.08	-1.75	512.85	513.04
J	69611.08	-1.75	512.95	513.11
K	69621.08	-1.75	513.04	513.18
L	69631.08	-1.75	513.14	513.25
M	69641.08	-1.75	513.23	513.31
N	69651.08	-1.75	513.33	513.37
P	69661.08	-1.75	513.42	513.44
Q	69671.08	-1.75	513.52	513.53
CLP4	69676.50	-1.75	513.57	513.57
R	69686.50	-1.75	513.67	513.68
S	69696.50	-1.75	513.76	513.79
T	69706.50	-1.75	513.86	513.92
U	69716.50	-1.75	513.95	514.05
V	69726.50	-1.75	514.05	514.18
W	69736.50	-1.75	514.15	514.31
X	69746.50	-1.75	514.24	514.43
Y	69756.50	-1.75	514.34	514.54
Z	69766.50	-1.75	514.43	514.64
AA	69776.50	-1.75	514.53	514.74
BB	69786.50	-1.75	514.63	514.82
CC	69796.50	-1.75	514.73	514.90
DD	69806.50	-1.75	514.85	514.99
EE	69816.50	-1.75	515.00	515.09
FF	69826.50	-1.75	515.18	515.21
CLBRGW	69832.83	-1.75	515.30	515.30
BKWABT	69836.00	-1.75	515.36	515.36

PGL				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	0.00	512.10	512.10
CLP3U2	69521.08	0.00	512.11	512.11
A	69531.08	0.00	512.21	512.26
B	69541.08	0.00	512.30	512.40
C	69551.08	0.00	512.40	512.54
D	69561.08	0.00	512.49	512.66
E	69571.08	0.00	512.59	512.78
F	69581.08	0.00	512.68	512.89
G	69591.08	0.00	512.78	512.98
H	69601.08	0.00	512.88	513.07
J	69611.08	0.00	512.97	513.14
K	69621.08	0.00	513.07	513.21
L	69631.08	0.00	513.16	513.27
M	69641.08	0.00	513.26	513.33
N	69651.08	0.00	513.36	513.40
P	69661.08	0.00	513.45	513.47
Q	69671.08	0.00	513.55	513.55
CLP4	69676.50	0.00	513.60	513.60
R	69686.50	0.00	513.69	513.71
S	69696.50	0.00	513.79	513.82
T	69706.50	0.00	513.89	513.94
U	69716.50	0.00	513.98	514.07
V	69726.50	0.00	514.08	514.20
W	69736.50	0.00	514.17	514.33
X	69746.50	0.00	514.27	514.45
Y	69756.50	0.00	514.37	514.57
Z	69766.50	0.00	514.46	514.67
AA	69776.50	0.00	514.56	514.76
BB	69786.50	0.00	514.65	514.85
CC	69796.50	0.00	514.76	514.92
DD	69806.50	0.00	514.88	515.01
EE	69816.50	0.00	515.03	515.12
FF	69826.50	0.00	515.20	515.24
CLBRGW	69832.83	0.00	515.32	515.32
BKWABT	69836.00	0.00	515.39	515.39

GIRDER 4				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	3.29	512.05	512.05
CLP3U2	69521.08	3.29	512.06	512.06
A	69531.08	3.29	512.15	512.21
B	69541.08	3.29	512.25	512.35
C	69551.08	3.29	512.35	512.49
D	69561.08	3.29	512.44	512.61
E	69571.08	3.29	512.54	512.73
F	69581.08	3.29	512.63	512.84
G	69591.08	3.29	512.73	512.93
H	69601.08	3.29	512.83	513.02
J	69611.08	3.29	512.92	513.09
K	69621.08	3.29	513.02	513.16
L	69631.08	3.29	513.11	513.22
M	69641.08	3.29	513.21	513.28
N	69651.08	3.29	513.30	513.35
P	69661.08	3.29	513.40	513.42
Q	69671.08	3.29	513.50	513.50
CLP4	69676.50	3.29	513.55	513.55
R	69686.50	3.29	513.64	513.66
S	69696.50	3.29	513.74	513.77
T	69706.50	3.29	513.84	513.89
U	69716.50	3.29	513.93	514.02
V	69726.50	3.29	514.03	514.15
W	69736.50	3.29	514.12	514.28
X	69746.50	3.29	514.22	514.40
Y	69756.50	3.29	514.31	514.52
Z	69766.50	3.29	514.41	514.62
AA	69776.50	3.29	514.51	514.71
BB	69786.50	3.29	514.60	514.80
CC	69796.50	3.29	514.70	514.87
DD	69806.50	3.29	514.83	514.96
EE	69816.50	3.29	514.98	515.07
FF	69826.50	3.29	515.15	515.19
CLBRGW	69832.83	3.29	515.27	515.27
BKWABT	69836.00	3.29	515.34	515.34

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DRAWN -	R KING
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**DECK ELEVATIONS - UNIT 2
STRUCTURE NUMBER 059-0510**

SHEET NO. 12 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	42
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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GIRDER 5				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	9.88	511.95	511.95
CLP3U2	69521.08	9.88	511.96	511.96
A	69531.08	9.88	512.05	512.10
B	69541.08	9.88	512.15	512.25
C	69551.08	9.88	512.24	512.38
D	69561.08	9.88	512.34	512.51
E	69571.08	9.88	512.43	512.63
F	69581.08	9.88	512.53	512.73
G	69591.08	9.88	512.63	512.83
H	69601.08	9.88	512.72	512.91
J	69611.08	9.88	512.82	512.99
K	69621.08	9.88	512.91	513.05
L	69631.08	9.88	513.01	513.12
M	69641.08	9.88	513.11	513.18
N	69651.08	9.88	513.20	513.25
P	69661.08	9.88	513.30	513.31
Q	69671.08	9.88	513.39	513.40
CLP4	69676.50	9.88	513.44	513.44
R	69686.50	9.88	513.54	513.55
S	69696.50	9.88	513.64	513.67
T	69706.50	9.88	513.73	513.79
U	69716.50	9.88	513.83	513.92
V	69726.50	9.88	513.92	514.05
W	69736.50	9.88	514.02	514.18
X	69746.50	9.88	514.12	514.30
Y	69756.50	9.88	514.21	514.41
Z	69766.50	9.88	514.31	514.52
AA	69776.50	9.88	514.40	514.61
BB	69786.50	9.88	514.50	514.69
CC	69796.50	9.88	514.60	514.77
DD	69806.50	9.88	514.73	514.86
EE	69816.50	9.88	514.88	514.96
FF	69826.50	9.88	515.05	515.08
CLBRGW	69832.83	9.88	515.17	515.17
BKWABT	69836.00	9.88	515.23	515.23

GIRDER 6				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
CLP3	69520.00	16.46	511.82	511.82
CLP3U2	69521.08	16.46	511.83	511.83
A	69531.08	16.46	511.93	511.98
B	69541.08	16.46	512.02	512.12
C	69551.08	16.46	512.12	512.26
D	69561.08	16.46	512.21	512.38
E	69571.08	16.46	512.31	512.50
F	69581.08	16.46	512.40	512.61
G	69591.08	16.46	512.50	512.70
H	69601.08	16.46	512.60	512.79
J	69611.08	16.46	512.69	512.86
K	69621.08	16.46	512.79	512.93
L	69631.08	16.46	512.88	512.99
M	69641.08	16.46	512.98	513.05
N	69651.08	16.46	513.08	513.12
P	69661.08	16.46	513.17	513.19
Q	69671.08	16.46	513.27	513.27
CLP4	69676.50	16.46	513.32	513.32
R	69686.50	16.46	513.41	513.43
S	69696.50	16.46	513.51	513.54
T	69706.50	16.46	513.61	513.66
U	69716.50	16.46	513.70	513.79
V	69726.50	16.46	513.80	513.92
W	69736.50	16.46	513.89	514.05
X	69746.50	16.46	513.99	514.17
Y	69756.50	16.46	514.09	514.29
Z	69766.50	16.46	514.18	514.39
AA	69776.50	16.46	514.28	514.48
BB	69786.50	16.46	514.37	514.57
CC	69796.50	16.46	514.48	514.64
DD	69806.50	16.46	514.60	514.73
EE	69816.50	16.46	514.75	514.84
FF	69826.50	16.46	514.92	514.96
CLBRGW	69832.83	16.46	515.04	515.04
BKWABT	69836.00	16.46	515.11	515.11

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**DECK ELEVATIONS - UNIT 2
STRUCTURE NUMBER 059-0510**

SHEET NO. 13	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	43
OF 51 SHEETS	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End of E. Appr	692+32.25	-18.00	509.43
A	692+42.25	-18.00	509.51
B	692+52.25	-18.00	509.66
W. End of E. Appr	692+62.25	-18.00	509.75

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End of E. Appr	692+32.25	-12.00	509.79
A	692+42.25	-12.00	509.80
B	692+52.25	-12.00	509.82
W. End of E. Appr	692+62.25	-12.00	509.84

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
E. End of E. Appr	692+32.25	-1.75	509.95
A	692+42.25	-1.75	509.96
B	692+52.25	-1.75	509.98
W. End of E. Appr	692+62.25	-1.75	510.00

☉ FAP 761

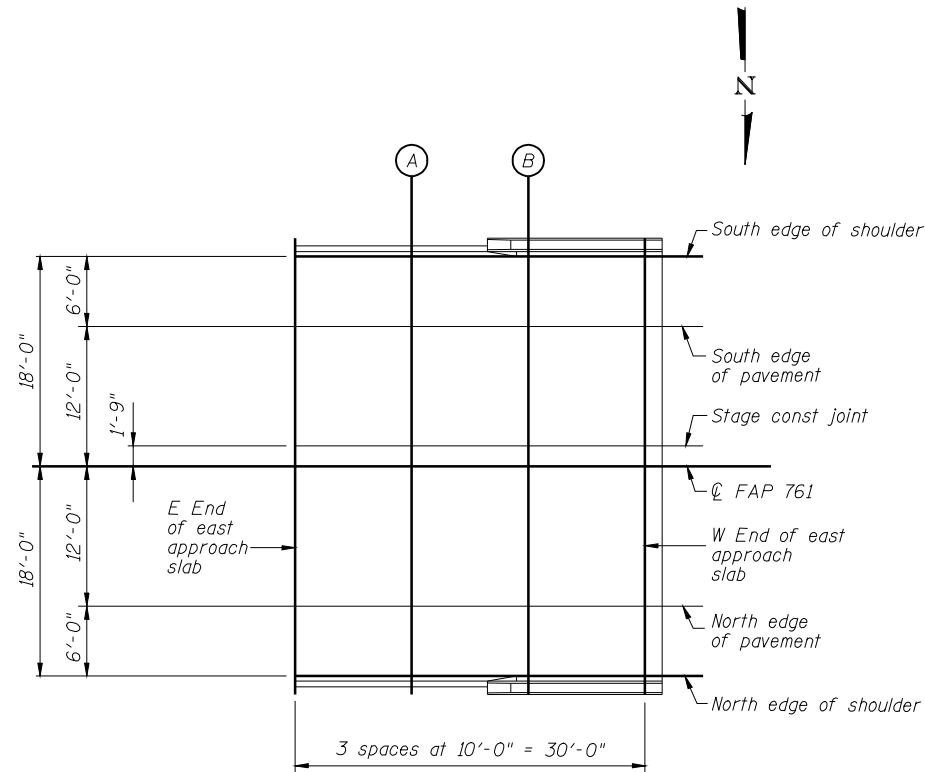
Location	Station	Offset	Theoretical Grade Elevations
E. End of E. Appr	692+32.25	0.00	509.98
A	692+42.25	0.00	509.99
B	692+52.25	0.00	510.01
W. End of E. Appr	692+62.25	0.00	510.03

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End of E. Appr	692+32.25	12.00	509.79
A	692+42.25	12.00	509.80
B	692+52.25	12.00	509.82
W. End of E. Appr	692+62.25	12.00	509.84

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End of E. Appr	692+32.25	18.00	509.43
A	692+42.25	18.00	509.51
B	692+52.25	18.00	509.66
W. End of E. Appr	692+62.25	18.00	509.75



PLAN

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E-AS 11-1-06

**TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NUMBER 059-0510**

SHEET NO. 14 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 44
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End of W. Appr	698+35.50	-18.00	515.10
A	698+45.50	-18.00	515.25
B	698+55.50	-18.00	515.35
W. End of W. Appr	698+65.50	-18.00	515.55

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End of W. Appr	698+35.50	-12.00	515.19
A	698+45.50	-12.00	515.41
B	698+55.50	-12.00	515.65
W. End of W. Appr	698+65.50	-12.00	515.91

STAGE CONSTRUCTION JOINT

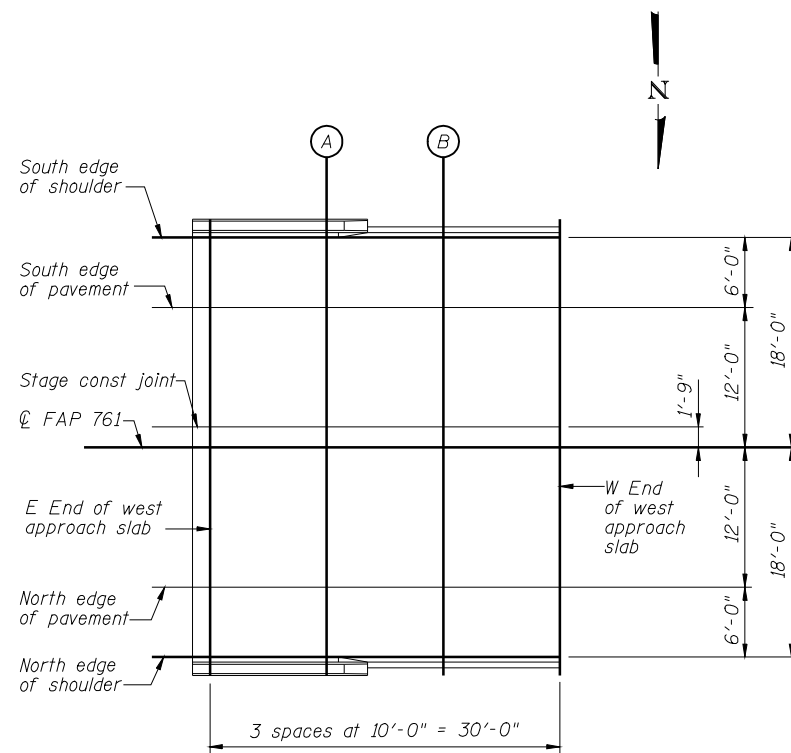
Location	Station	Offset	Theoretical Grade Elevations
E. End of W. Appr	698+35.50	-1.75	515.35
A	698+45.50	-1.75	515.57
B	698+55.50	-1.75	515.81
W. End of W. Appr	698+65.50	-1.75	516.07

☉ FAP 761

Location	Station	Offset	Theoretical Grade Elevations
E. End of W. Appr	698+35.50	0.00	515.38
A	698+45.50	0.00	515.60
B	698+55.50	0.00	515.83
W. End of W. Appr	698+65.50	0.00	516.10

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End of W. Appr	698+35.50	12.00	515.19
A	698+45.50	12.00	515.41
B	698+55.50	12.00	515.65
W. End of W. Appr	698+65.50	12.00	515.91



PLAN

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End of W. Appr	698+35.50	18.00	515.10
A	698+45.50	18.00	515.25
B	698+55.50	18.00	515.35
W. End of W. Appr	698+65.50	18.00	515.55

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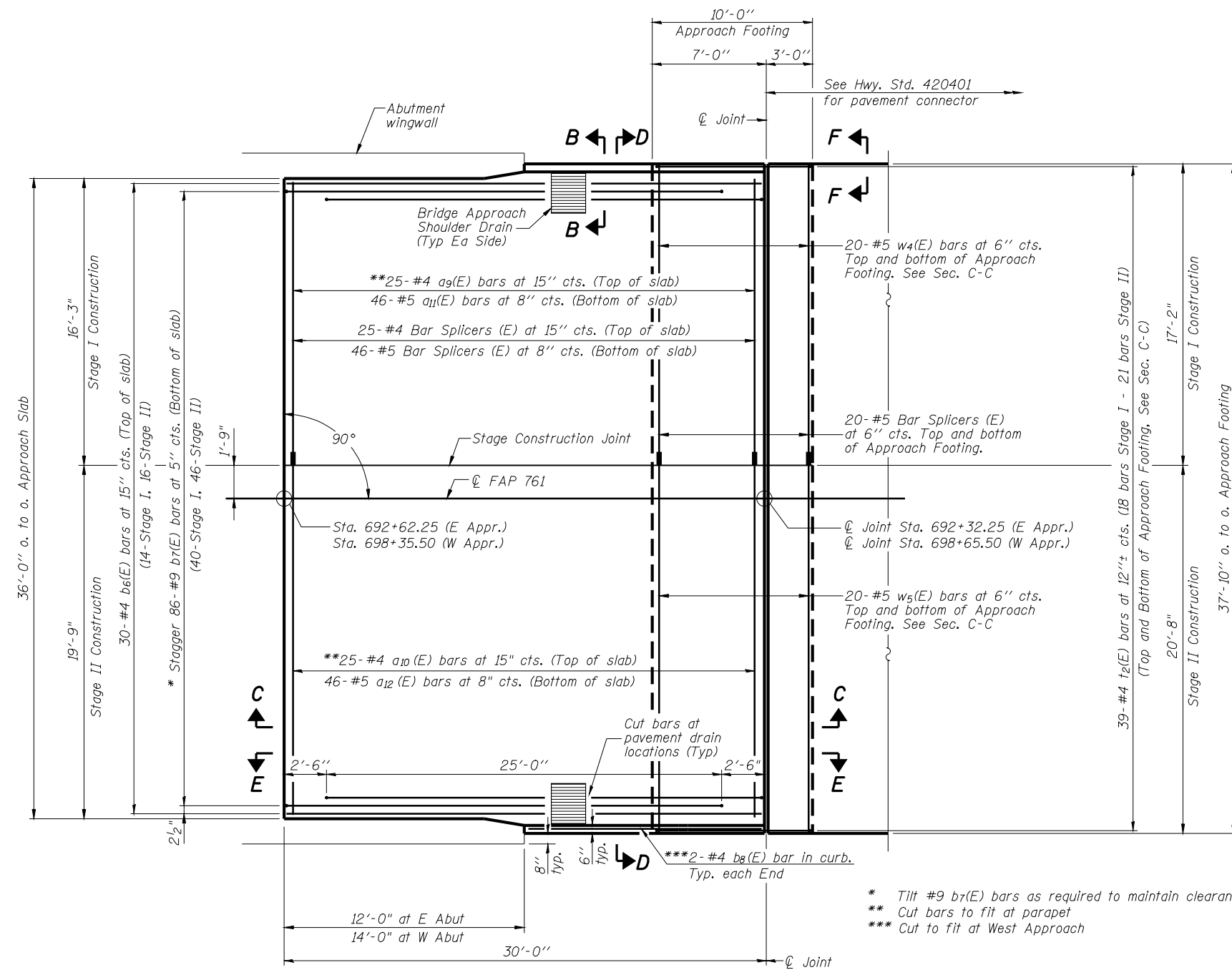
E-AS 11-1-06

**TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NUMBER 059-0510**

SHEET NO. 15 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	45
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

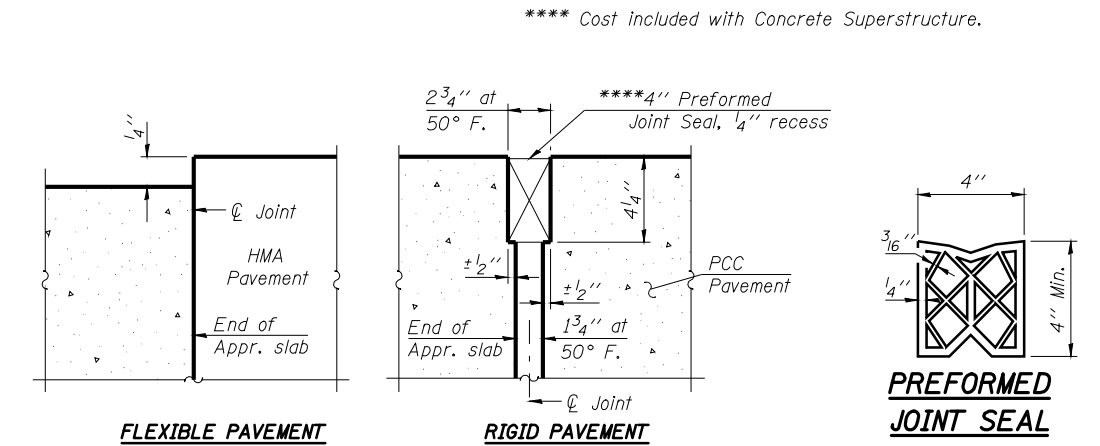
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Notes:
See sheet 17 of 51 for Sections C-C and D-D.
a₉(E) thru a₁₂(E), w₄(E) and w₅(E) bar spacings measured along ϕ Rdwy.

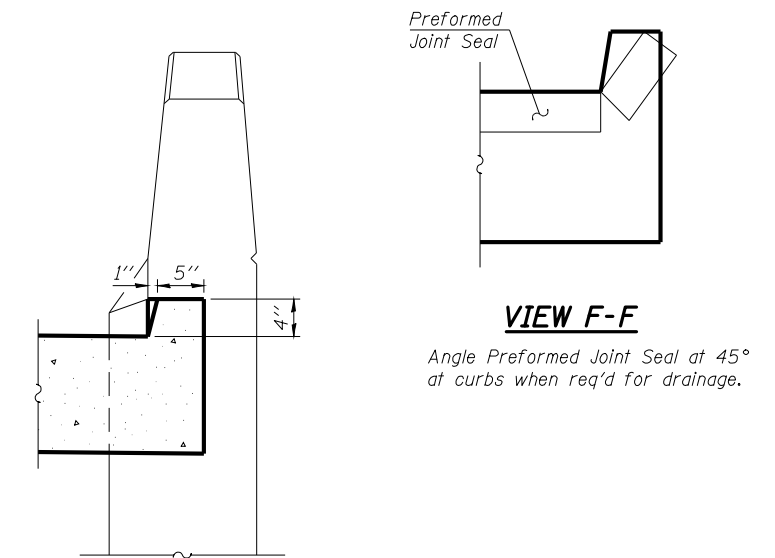


APPROACH SLAB PLAN
West approach shown, East approach similar

- * Tilt #9 b₇(E) bars as required to maintain clearance.
- ** Cut bars to fit at parapet
- *** Cut to fit at West Approach



DETAIL A



VIEW B-B

VIEW F-F
Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

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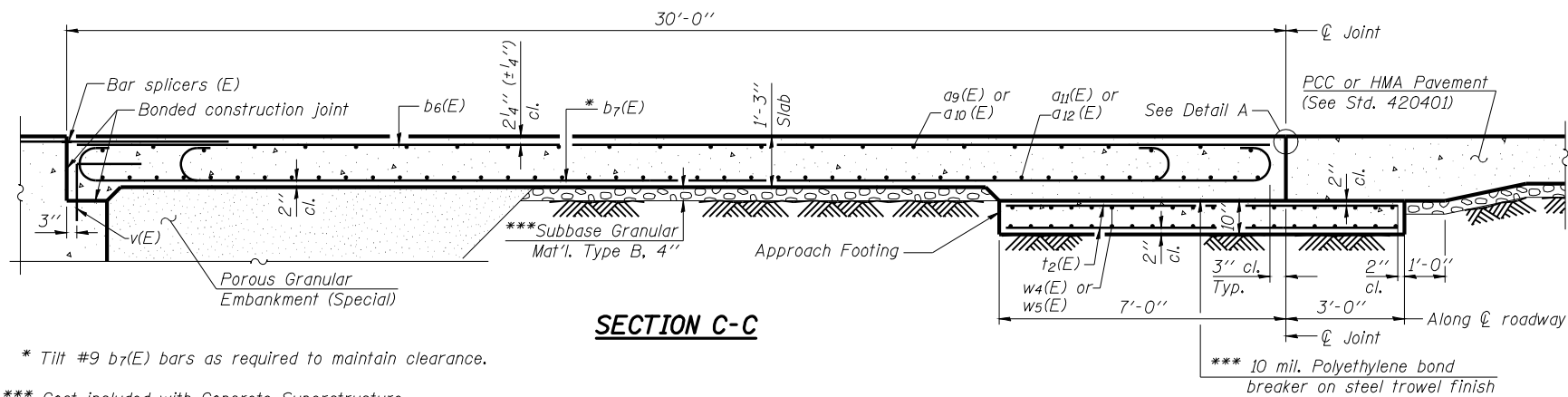
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11-1-09

(Sheet 1 of 2)
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NUMBER 059-0510

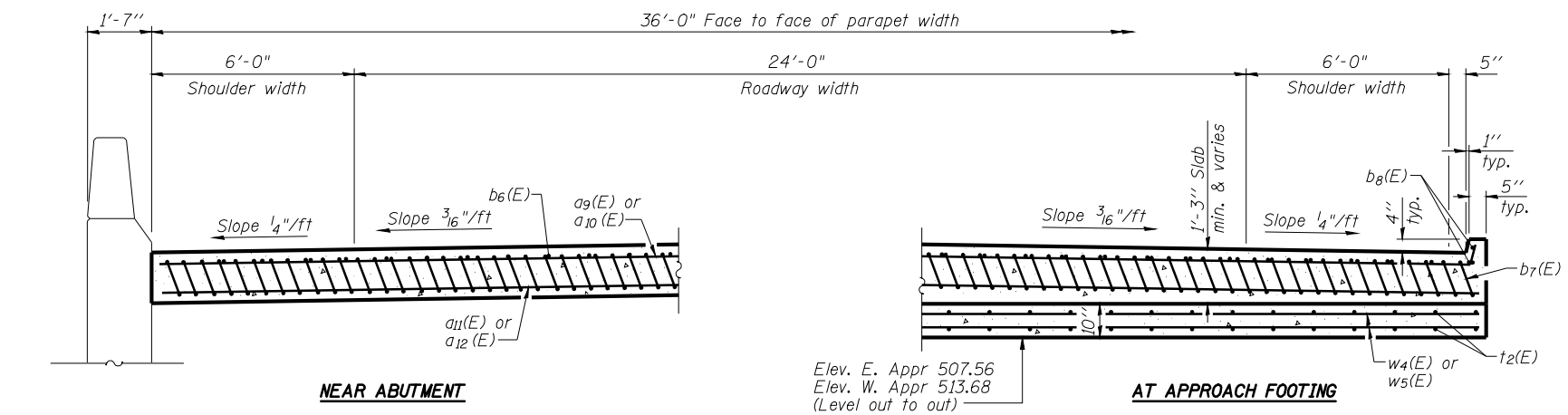
SHEET NO. 16 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	46
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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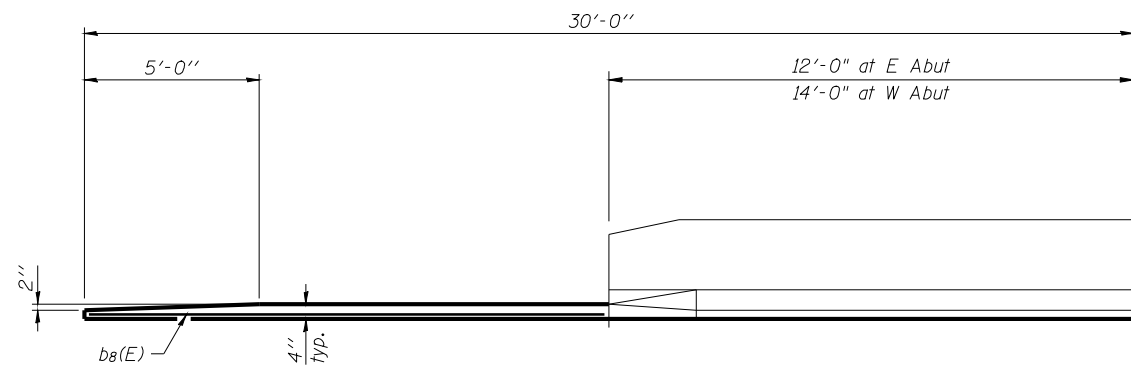


* Tilt #9 b7(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.



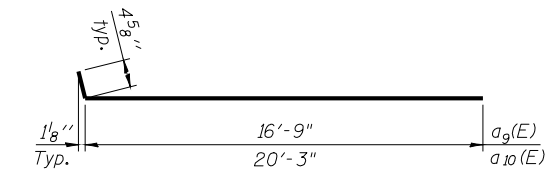
SECTION D-D
(See Plan for dimensions not shown)



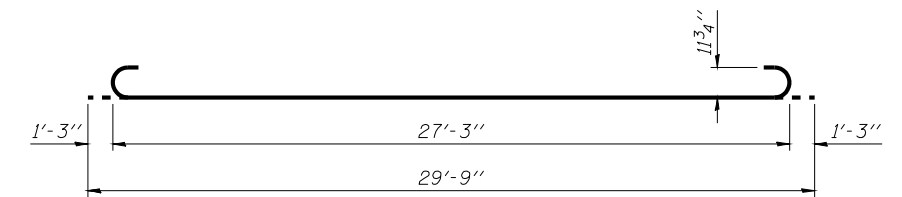
VIEW E-E

Notes:

See sheet 16 of 51 for Detail A and View B-B.
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(E) bar details, see sheet 32 and 34 of 51.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 45 of 51.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 51.



BARS a9(E) & a10(E)



BAR b7(E)

**TWO APPROACHES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a9(E)	50	#4	17'-2"	┌───┐
a10(E)	50	#4	20'-8"	┌───┐
a11(E)	92	#5	16'-9"	┌───┐
a12(E)	92	#5	20'-3"	┌───┐
b6(E)	60	#4	29'-8"	┌───┐
b7(E)	172	#9	29'-9"	┌───┐
b8(E)	8	#4	17'-8"	┌───┐
t2(E)	156	#4	9'-8"	┌───┐
w4(E)	80	#5	16'-11"	┌───┐
w5(E)	80	#5	20'-5"	┌───┐
Concrete Superstructure		Cu. Yd.	102.9	
Concrete Structures		Cu. Yd.	23.4	
Reinforcement Bars, Epoxy Coated		Pound	27,620	
Bridge Deck Grooving		Sq. Yd.	226	
Protective Coat		Sq. Yd.	252	
Bar Splicers		Each	222	

(Sheet 2 of 2)

**BRIDGE APPROACH SLAB DETAILS
STRUCTURE NUMBER 059-0510**

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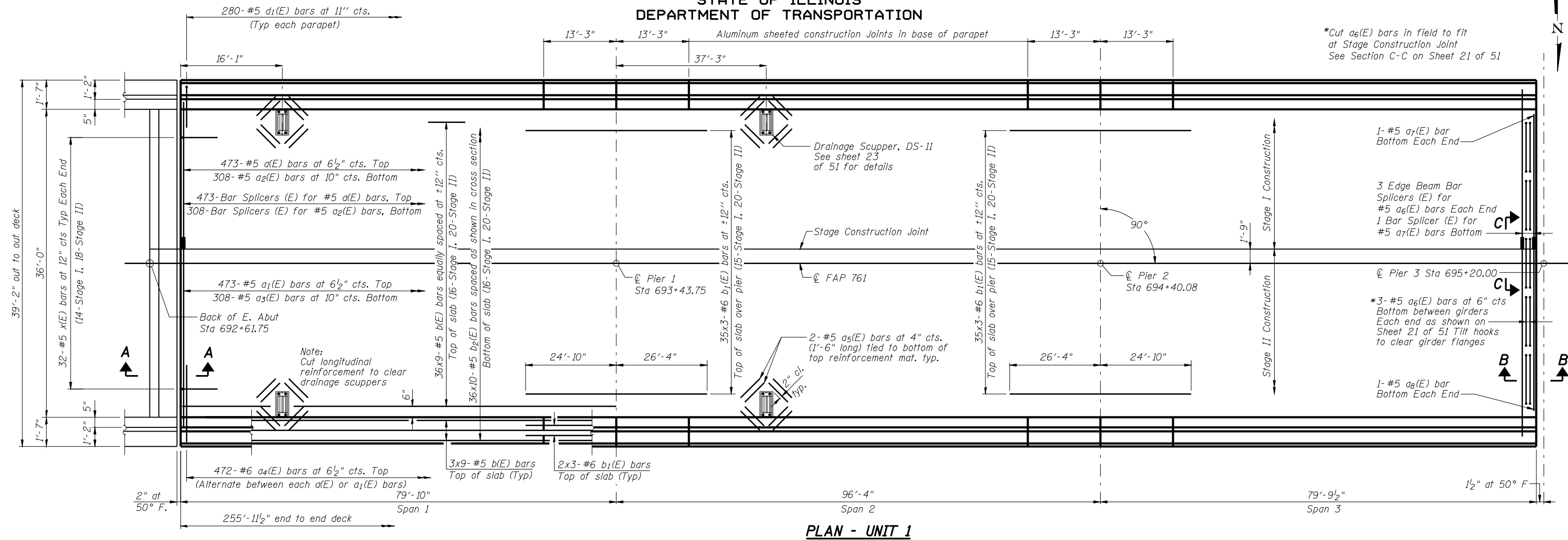
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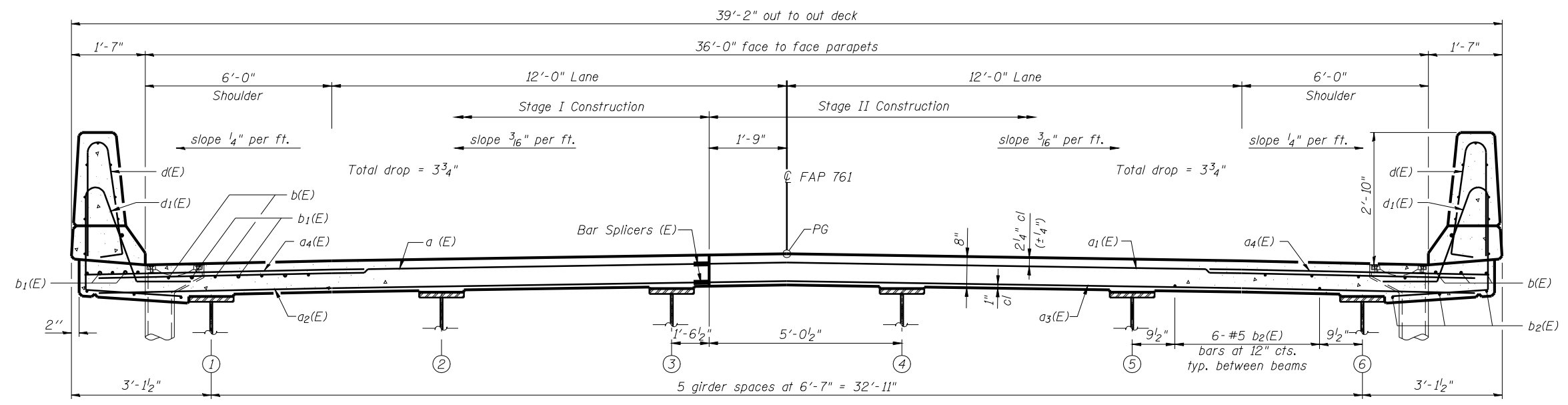
SHEET NO. 17 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	47
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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*Cut a6(E) bars in field to fit at Stage Construction Joint See Section C-C on Sheet 21 of 51

PLAN - UNIT 1



MIN BAR LAP

(Deck)
#5 bar = 3'-3"
#6 bar = 3'-10"

Notes:
See Sheet 21 of 51 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 20 of 51 for parapet reinforcement.

DESIGNED -	J.M.B.
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DRAWN -	R KING
CHECKED -	J.M.B.

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NEAR PIER

CROSS SECTION
(Looking Up Station)

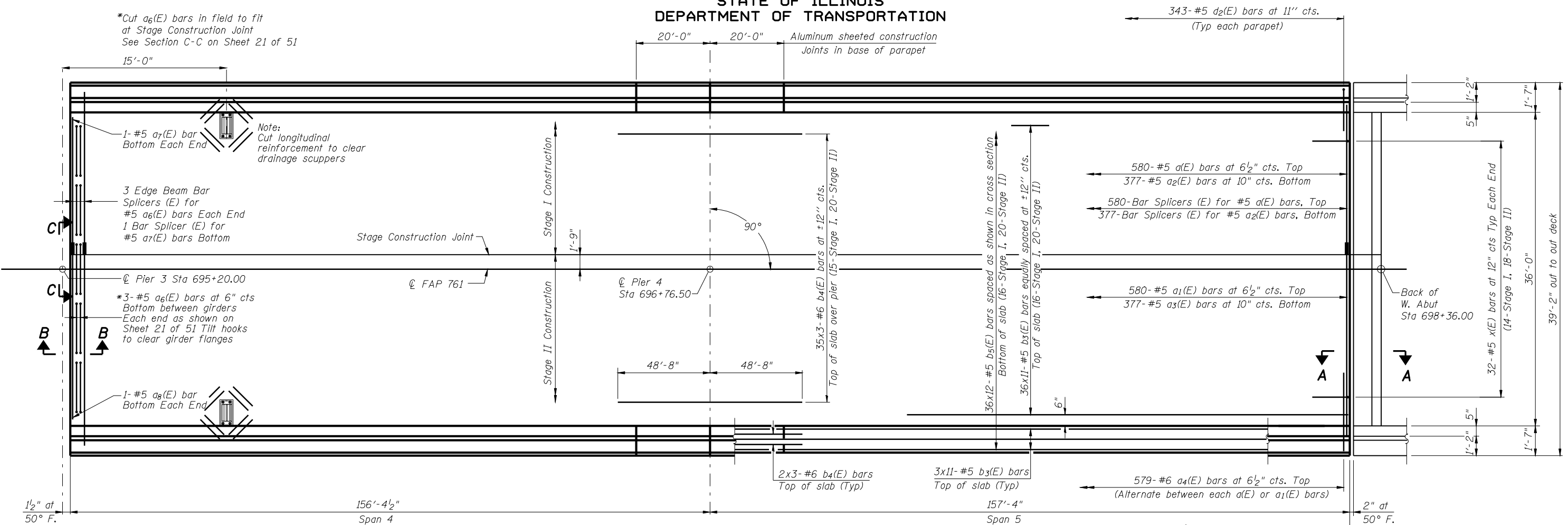
NEAR MIDSPAN

DECK PLAN AND CROSS SECTION - UNIT 1
STRUCTURE NUMBER 059-0510

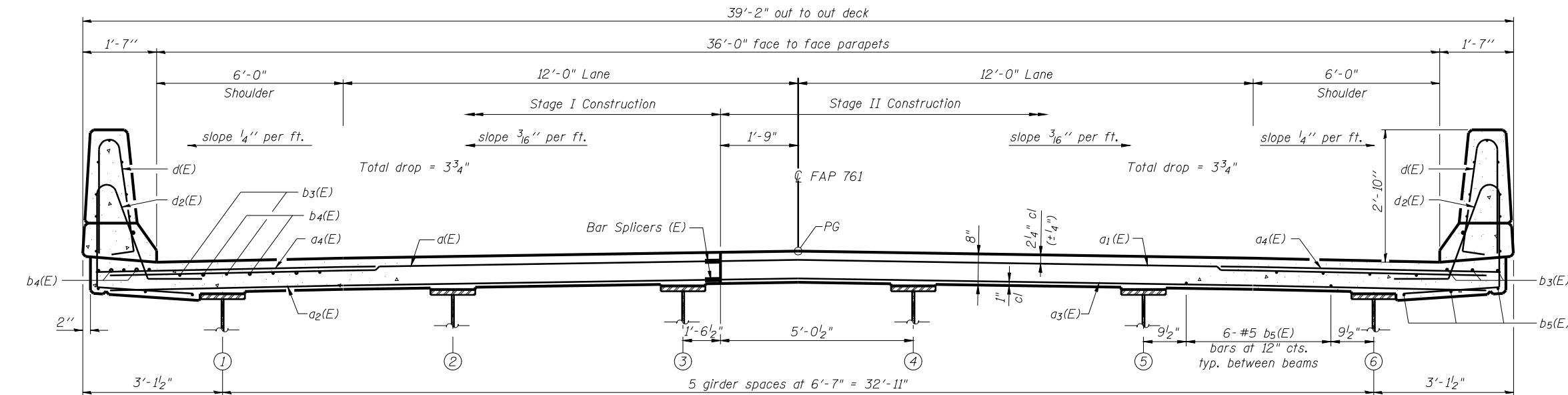
SHEET NO. 18 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	48
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

S-2-0 11-1-06

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PLAN - UNIT 2



MIN BAR LAP

(Deck)
#5 bar = 3'-3"
#6 bar = 3'-10"

Notes:
See Sheet 21 of 51 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 20 of 51 for parapet reinforcement.

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NEAR PIER

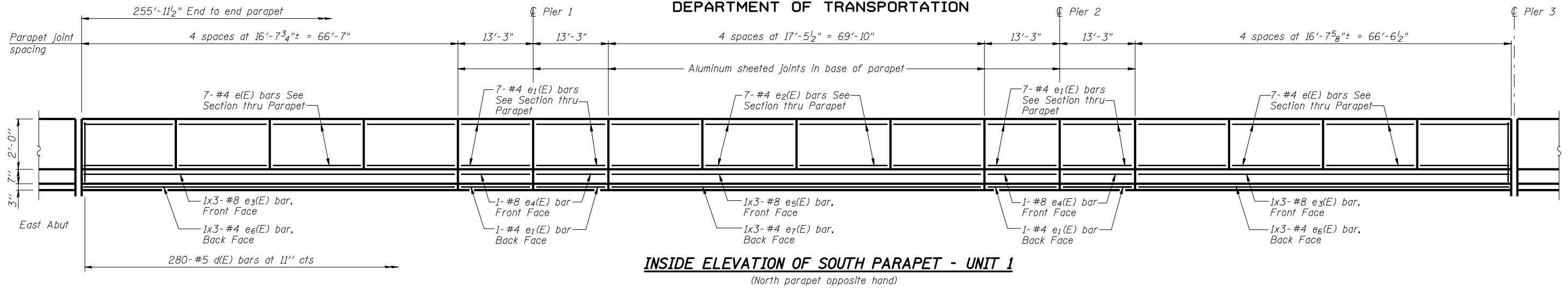
CROSS SECTION
(Looking Up Station)

NEAR MIDSPAN

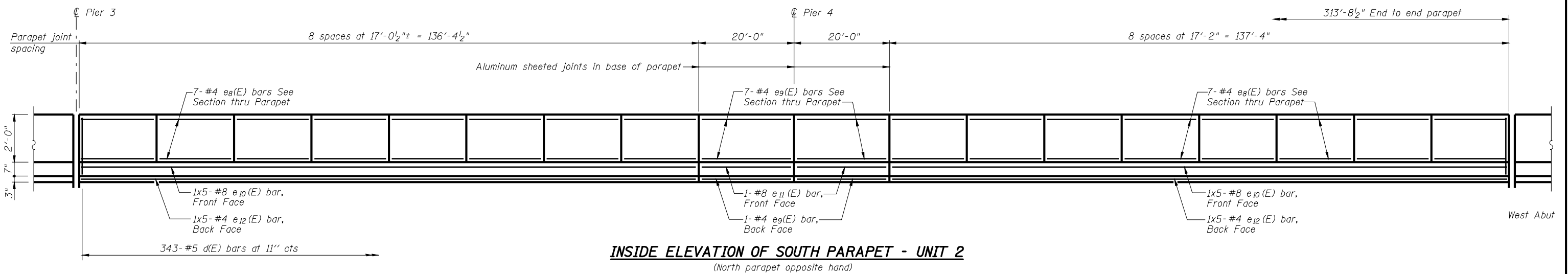
DECK PLAN AND CROSS SECTION - UNIT 2
STRUCTURE NUMBER 059-0510

SHEET NO. 19 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	49
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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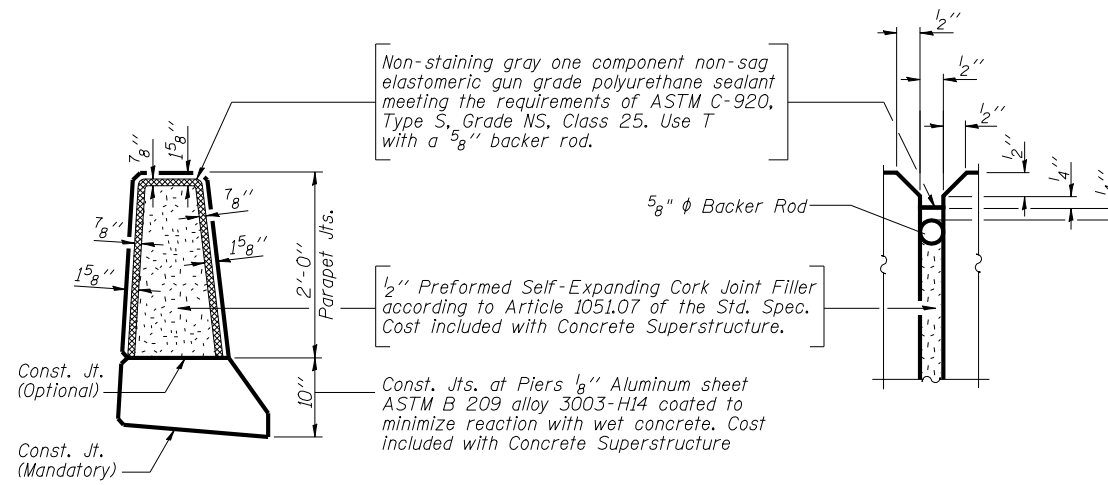
INSIDE ELEVATION OF SOUTH PARAPET - UNIT 1
(North parapet opposite hand)



INSIDE ELEVATION OF SOUTH PARAPET - UNIT 2
(North parapet opposite hand)

MINIMUM BAR LAP

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



PARAPET JOINT DETAILS

DESIGNED -	J.M.B.
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DRAWN -	R KING
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S-D

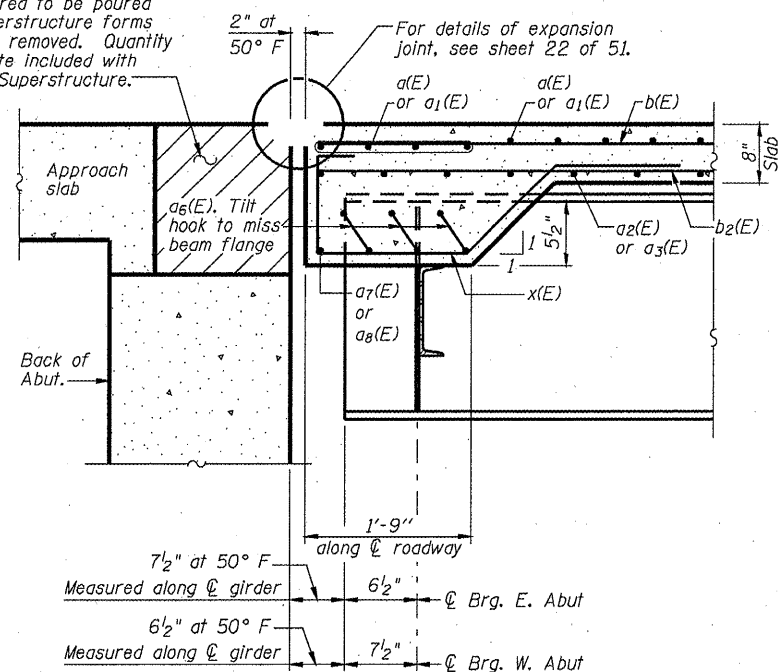
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SUPERSTRUCTURE DETAILS
STRUCTURE NUMBER 059-0510

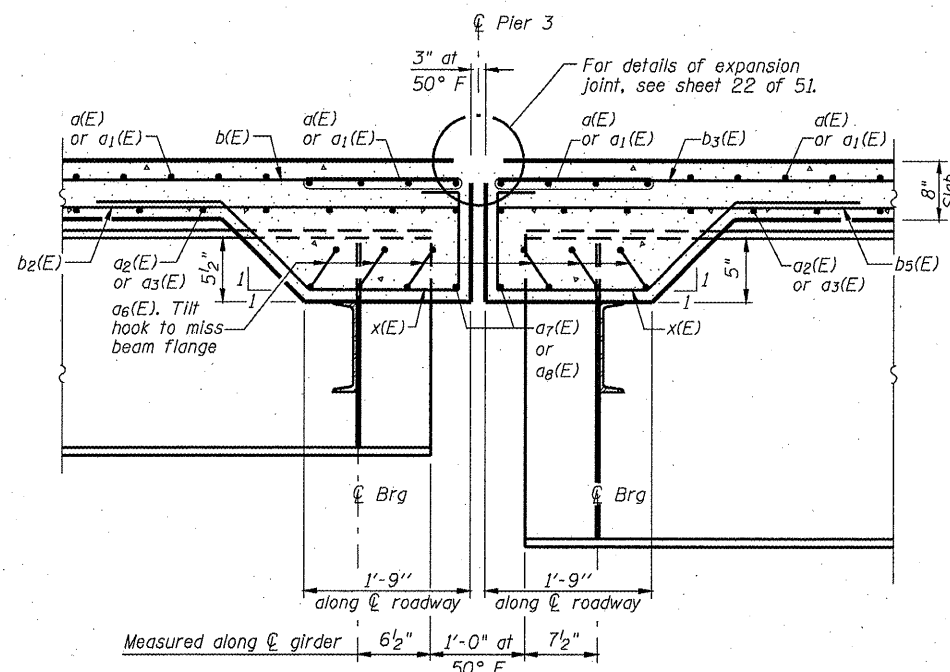
SHEET NO. 20 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	50
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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DEPARTMENT OF TRANSPORTATION

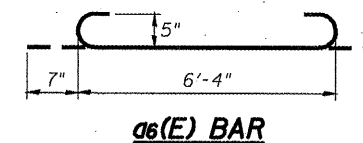
Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.



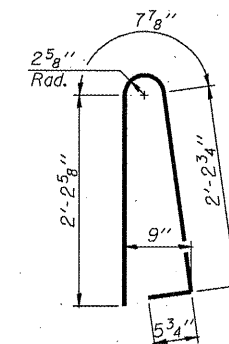
SECTION A-A



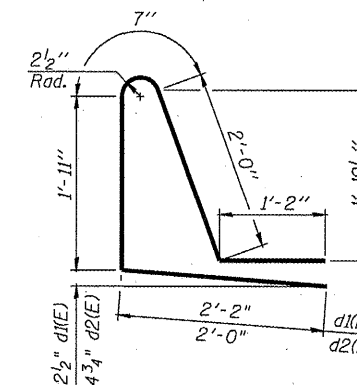
SECTION B-B



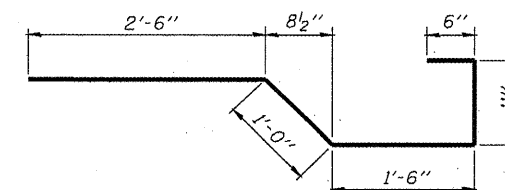
a6(E) BAR



BAR d(E)



BAR d1(E) OR d2(E)

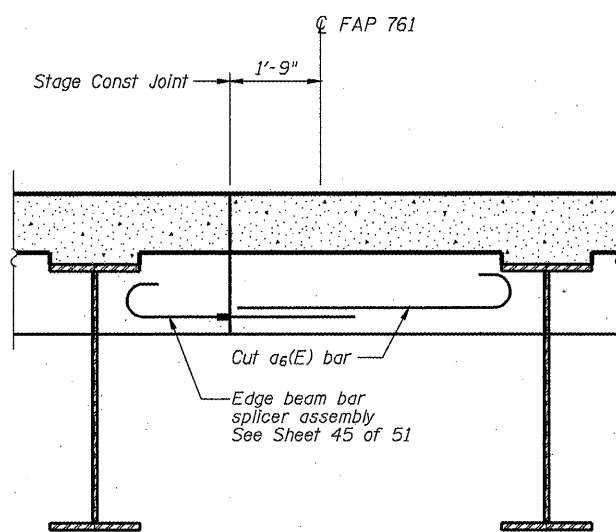


BAR x(E)

SUPERSTRUCTURE
BILL OF MATERIAL

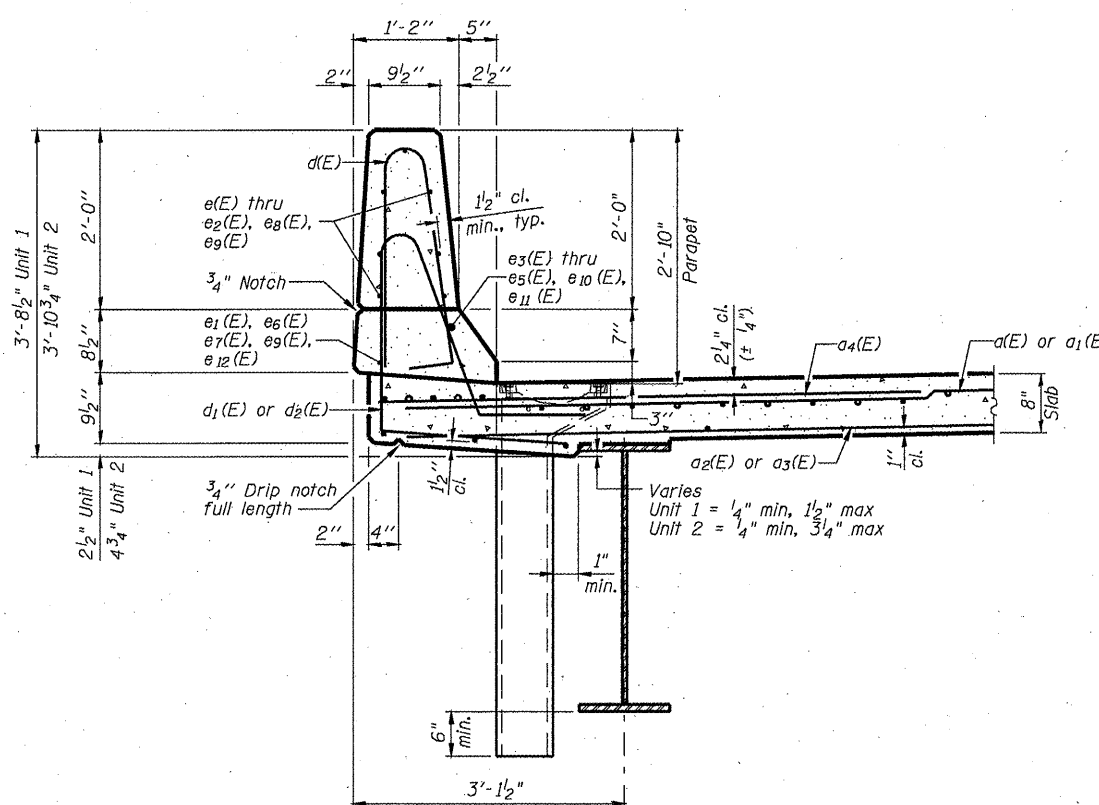
Bar	No.	Size	Length	Shape
a(E)	1053	#5	17'-3"	U
a1(E)	1053	#5	20'-9"	U
a2(E)	689	#5	17'-0"	U
a3(E)	689	#5	20'-6"	U
a4(E)	2102	#6	6'-6"	U
a5(E)	48	#5	1'-6"	U
a6(E)	60	#5	7'-6"	U
a7(E)	4	#5	14'-5"	U
a8(E)	4	#5	17'-11"	U
b(E)	378	#5	31'-4"	U
b1(E)	234	#6	19'-8"	U
b2(E)	360	#5	28'-6"	U
b3(E)	462	#5	31'-6"	U
b4(E)	117	#6	35'-0"	U
b5(E)	432	#5	29'-2"	U
d(E)	1246	#5	5'-7"	U
d1(E)	560	#5	7'-10"	U
d2(E)	686	#5	7'-8"	U
e(E)	112	#4	16'-4"	U
e1(E)	64	#4	13'-0"	U
e2(E)	56	#4	17'-3"	U
e3(E)	12	#8	25'-7"	U
e4(E)	8	#8	13'-0"	U
e5(E)	6	#8	26'-8"	U
e6(E)	12	#4	23'-6"	U
e7(E)	6	#4	24'-6"	U
e8(E)	224	#4	16'-9"	U
e9(E)	32	#4	19'-9"	U
e10(E)	20	#8	31'-7"	U
e11(E)	4	#8	19'-9"	U
e12(E)	20	#4	29'-0"	U
x(E)	128	#5	6'-5"	U
Reinforcement Bars, Epoxy Coated			Pound	181,940
Concrete Superstructure			Cu. Yd.	711.8
Bridge Deck Grooving			Sq. Yd.	2152
Protective Coat			Sq. Yd.	2784
Bar Splicers			Each	1754

Bars indicated thus 1 x 5-#8 etc. indicates 1 line of bars with 5 lengths per line.



SECTION C-C

(Deck reinforcement not shown for clarity)



SECTION THRU PARAPET

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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184-001397

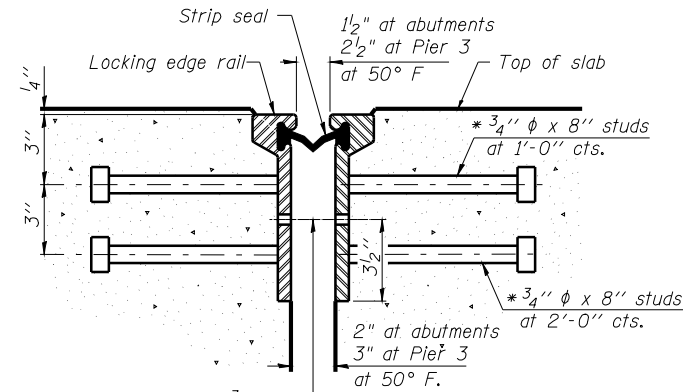
S-D 10-1-08

SUPERSTRUCTURE DETAILS
STRUCTURE NUMBER 059-0510

SHEET NO. 21 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 51
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

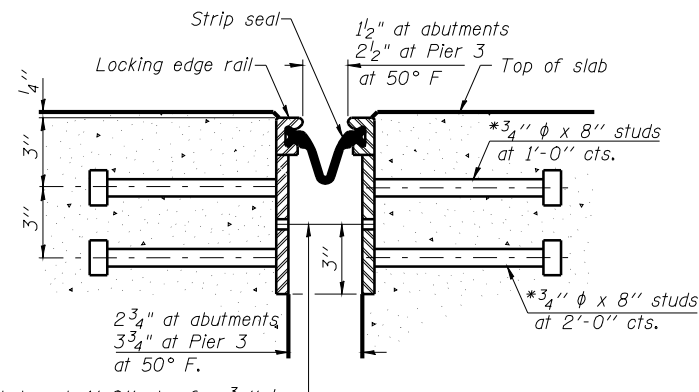
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* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



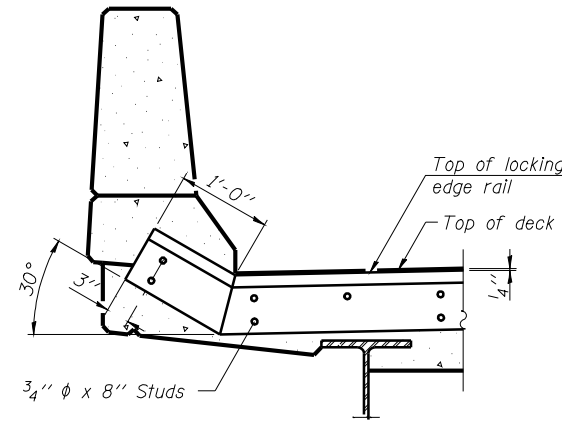
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU
ROLLED RAIL JOINT**



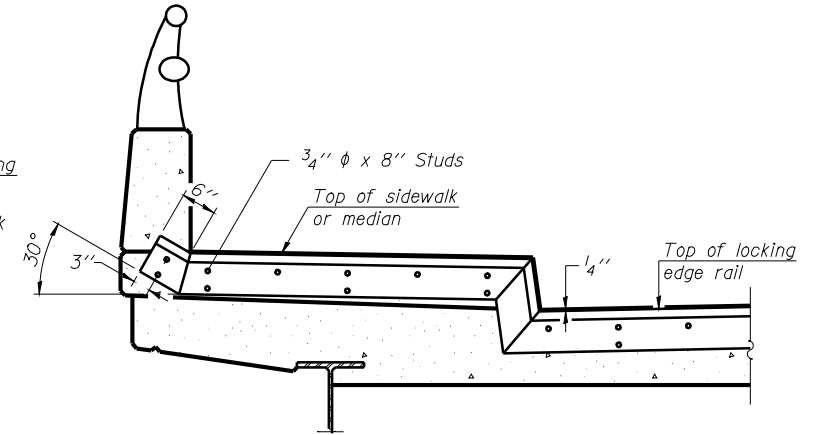
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU
WELDED RAIL JOINT**



AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

Notes:

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

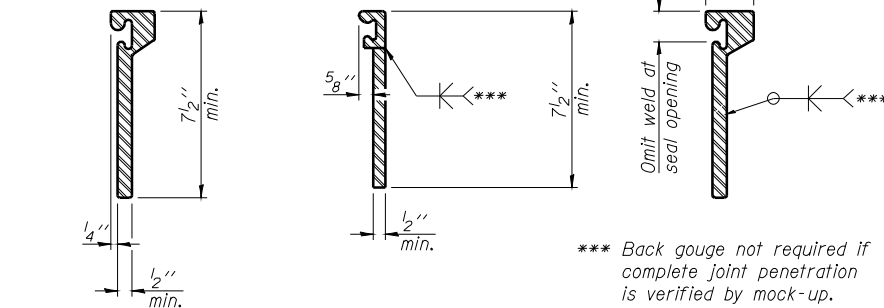
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

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 shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

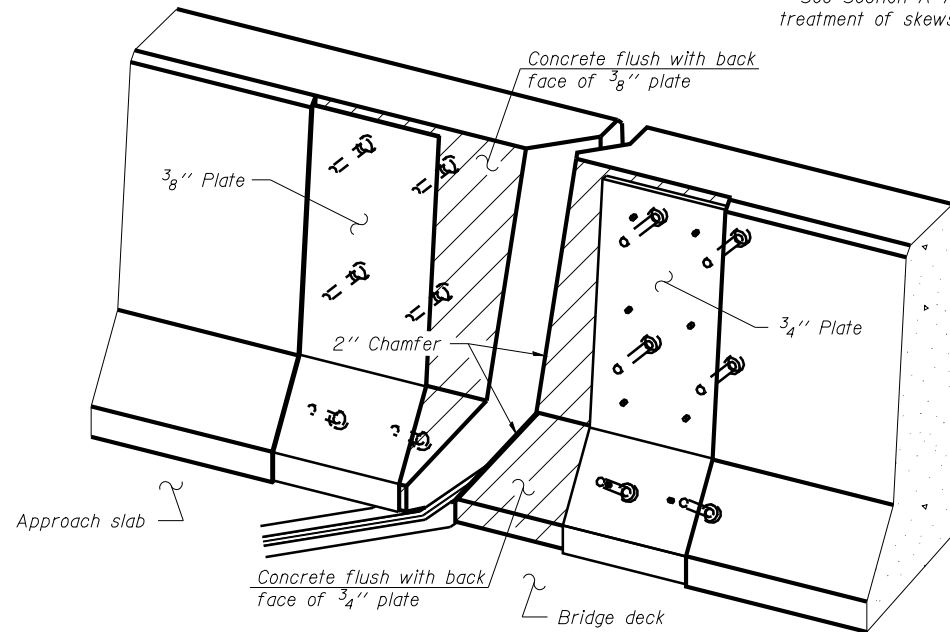
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.



**ROLLED
EXTRUDED RAIL** **WELDED RAIL**

**LOCKING EDGE
RAIL SPLICE**

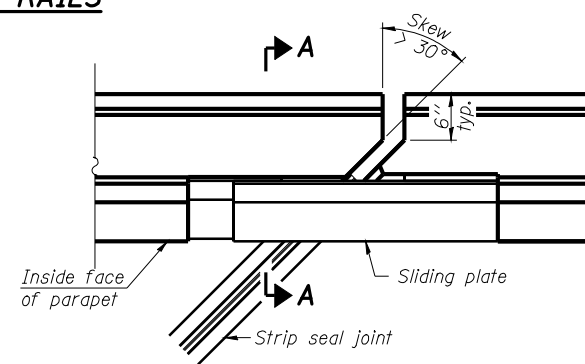
The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.



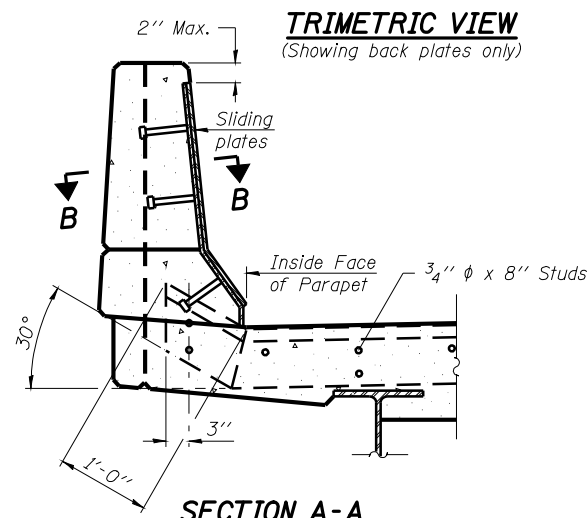
TRIMETRIC VIEW

(Showing back plates only)

LOCKING EDGE RAILS



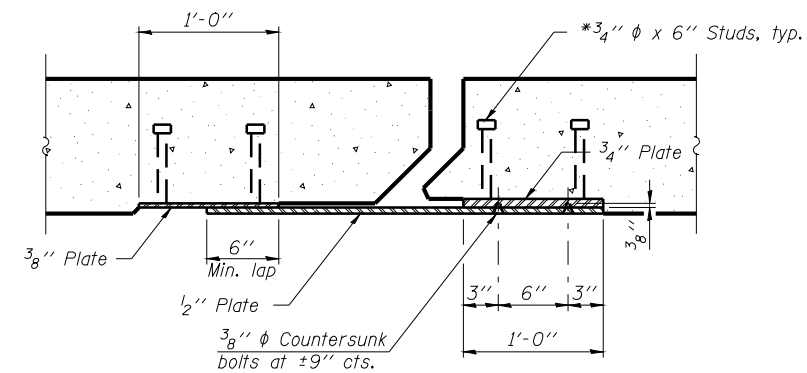
PLAN



SECTION A-A

POINT BLOCK DETAILS

(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	114

**PREFORMED JOINT STRIP SEAL
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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CHASTAIN
& ASSOCIATES, LLP**
CONSULTING ENGINEERS

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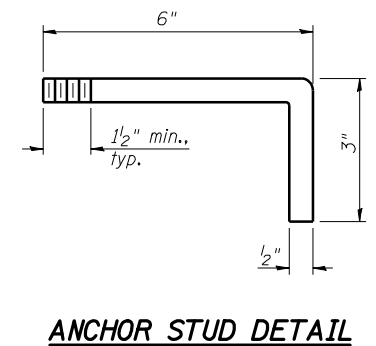
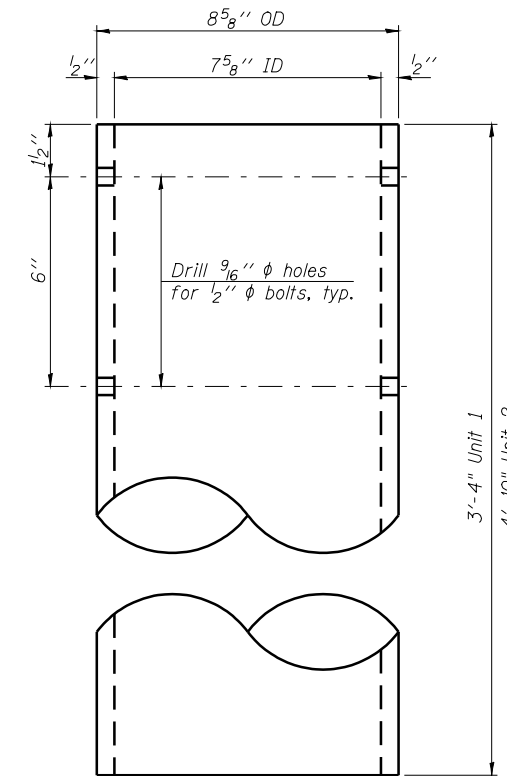
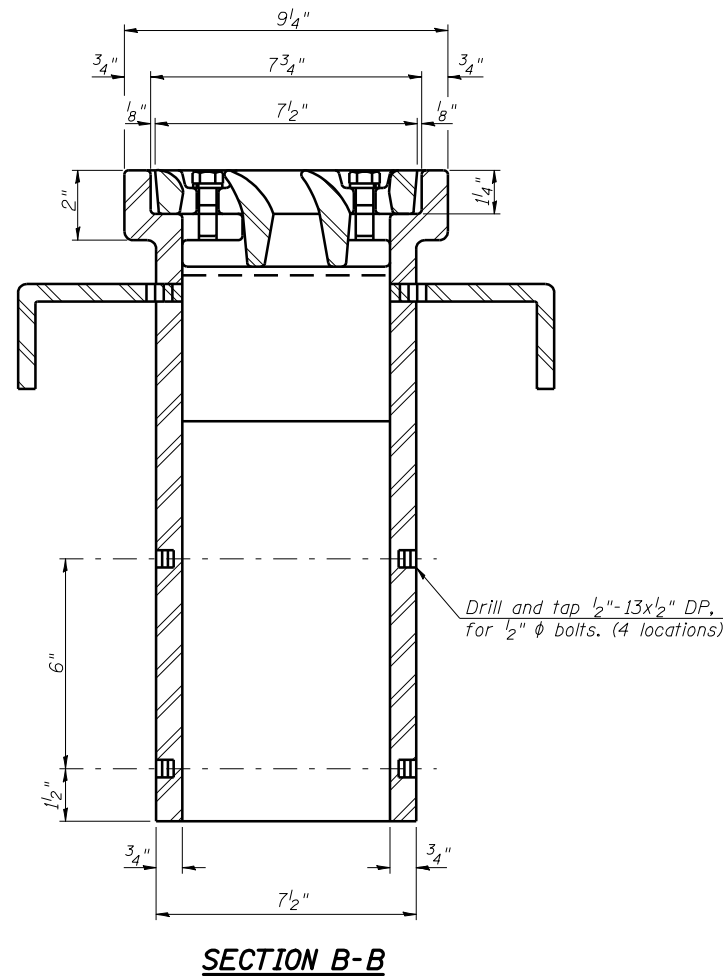
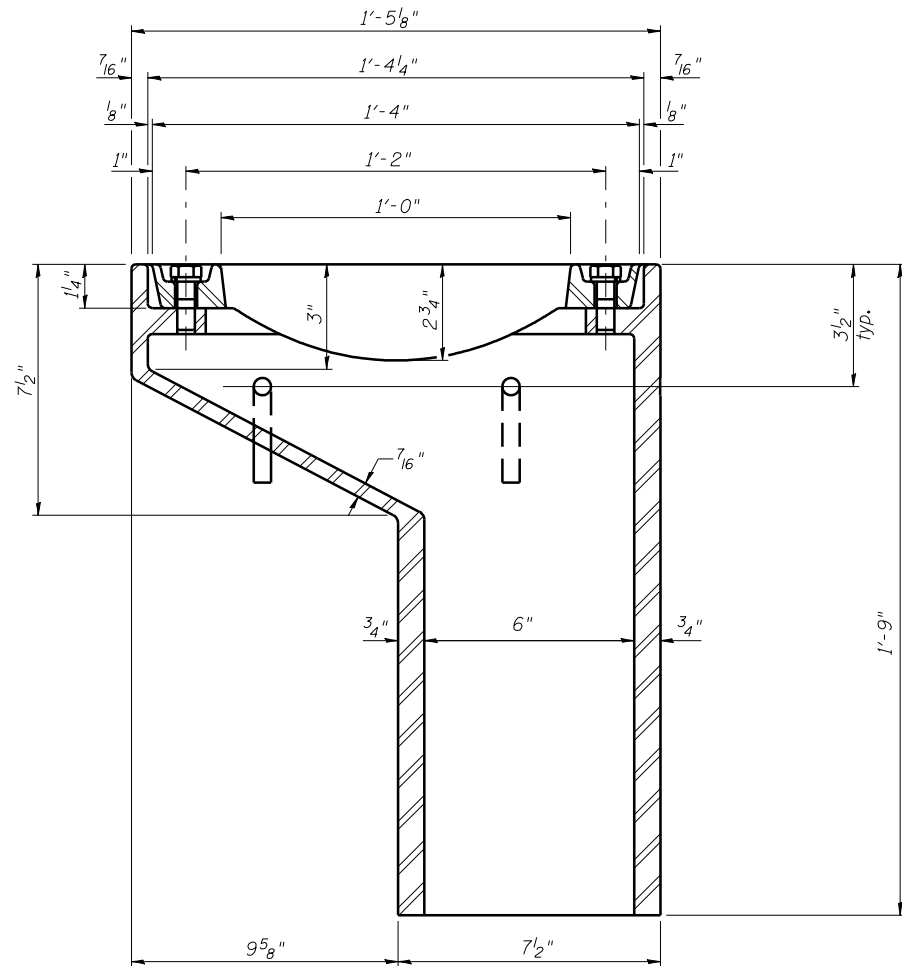
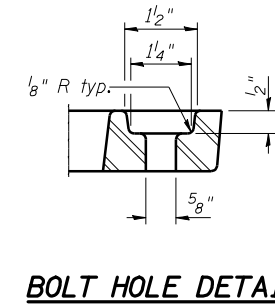
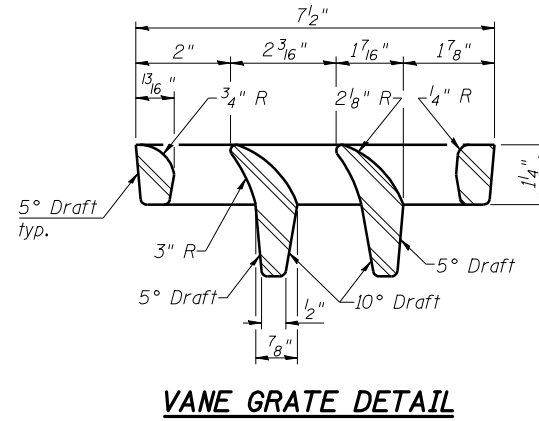
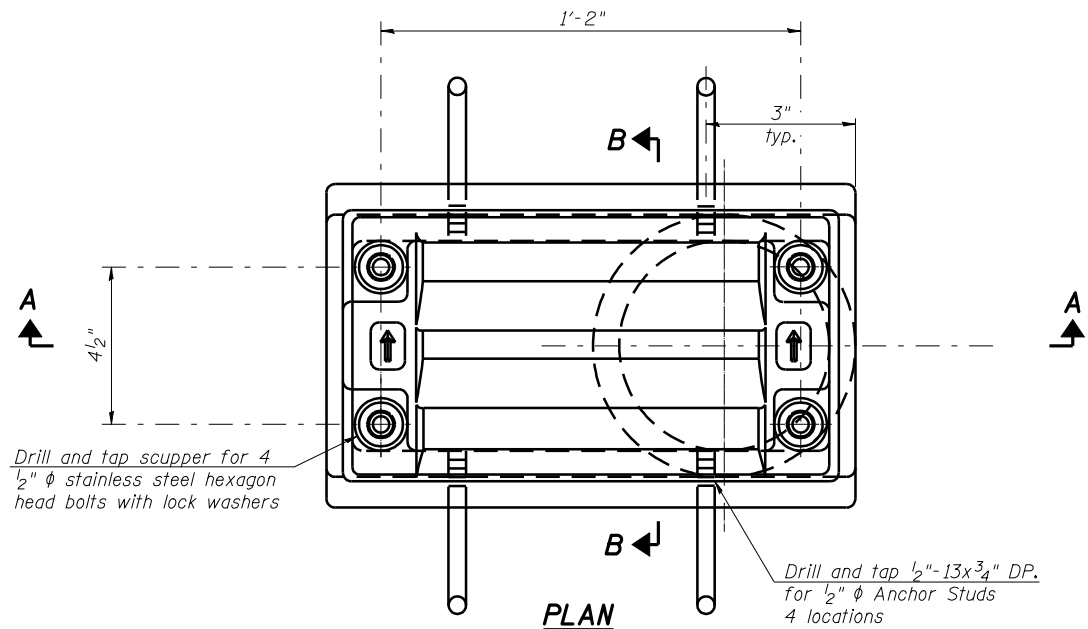
184-001397

EJ-SSJ

11-1-09

SHEET NO. 22	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
OF 51 SHEETS	761	107B-2	MACOUPIN	98	52
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	6

DRAINAGE SCUPPER, DS-11
STRUCTURE NUMBER 059-0510

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

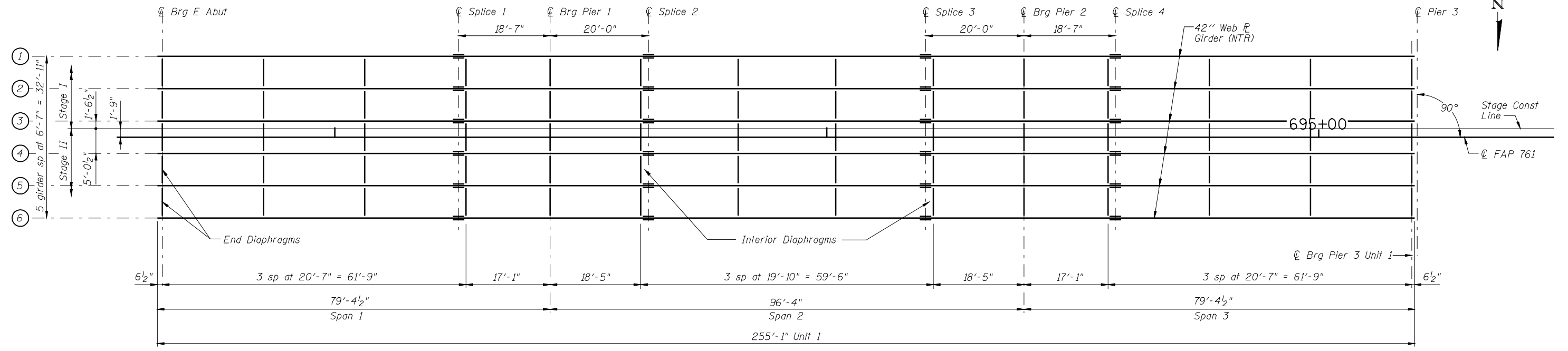
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DS-11 11-1-09

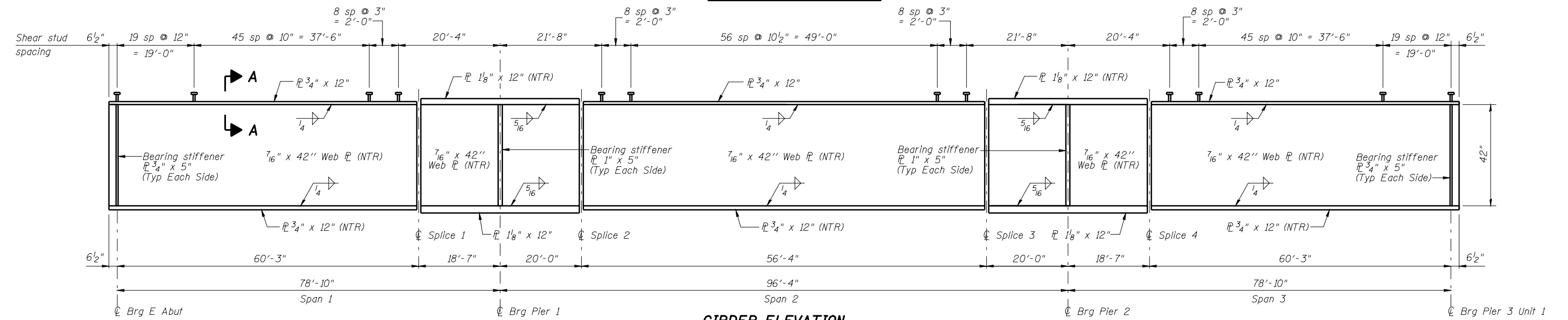
SHEET NO. 23 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	53
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 72A94	

Notes:
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M11.
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.
Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

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FRAMING PLAN - UNIT 1



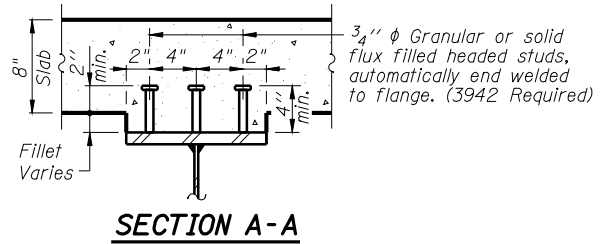
GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

NOTES:

Structural steel shall be AASHTO M270 Grade 50W for the girders, diaphragms and connection plates and all splice plate material.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements For Notch Toughness, Zone 2.



SECTION A-A

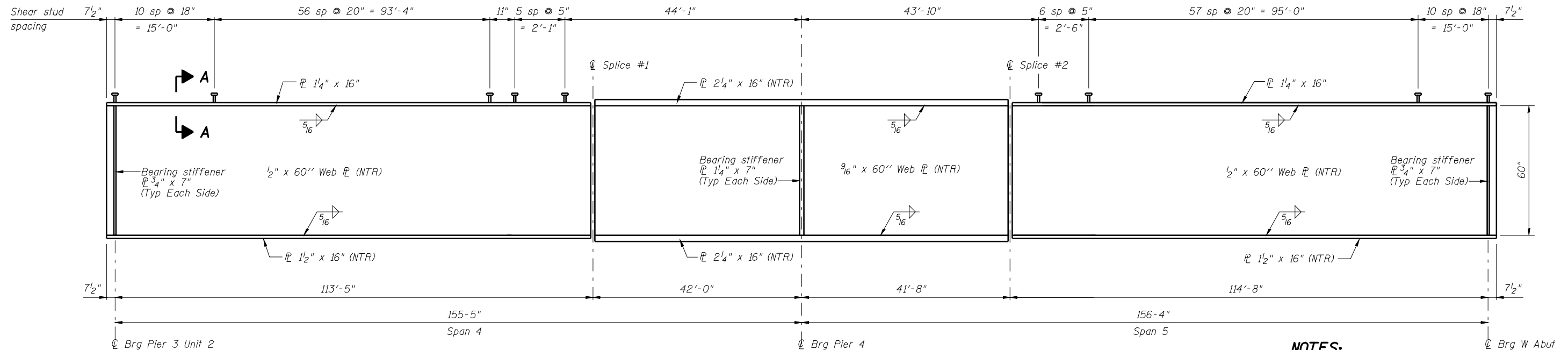
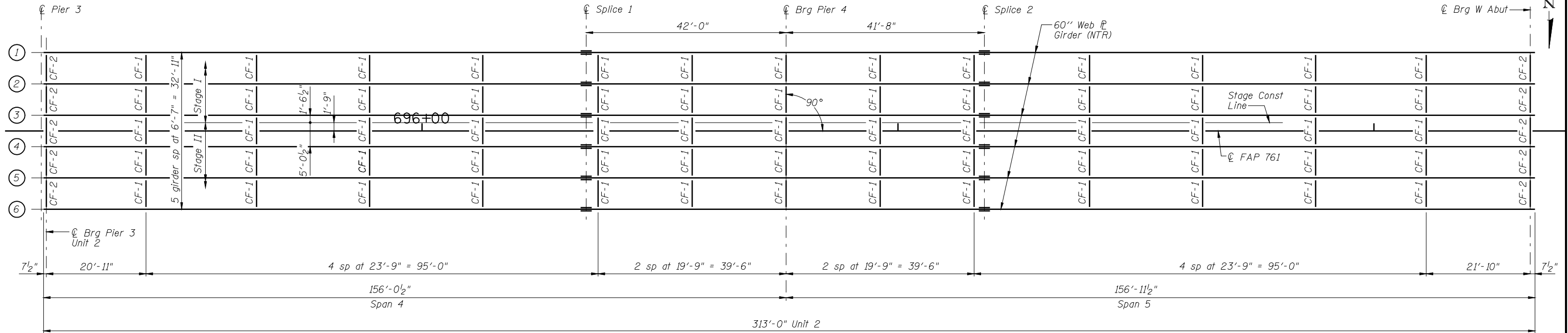
DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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**FRAMING PLAN AND DETAILS - UNIT 1
STRUCTURE NUMBER 059-0510**

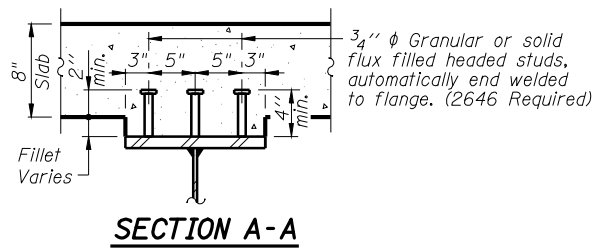
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	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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GIRDER ELEVATION
"NTR" denotes plates to which notch toughness requirements are applicable.

NOTES:
Structural steel shall be AASHTO M270 Grade 50W for the girders, cross frames and connection plates and all splice plate material.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements For Notch Toughness, Zone 2.



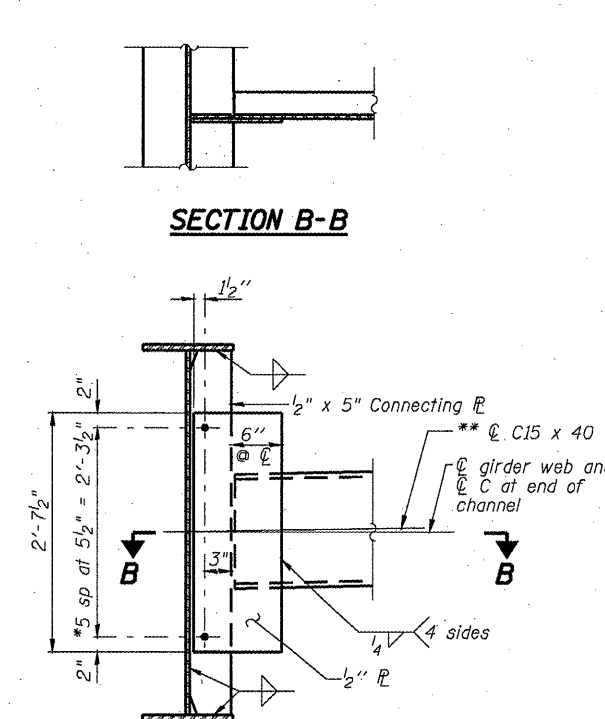
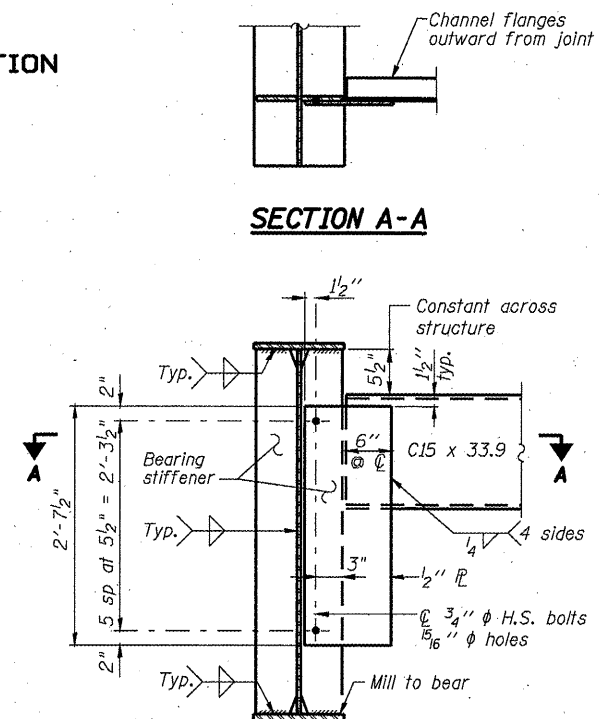
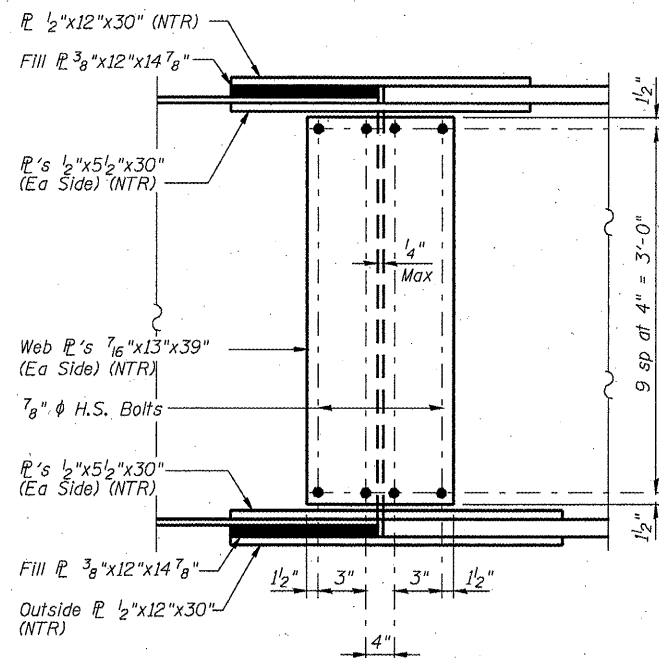
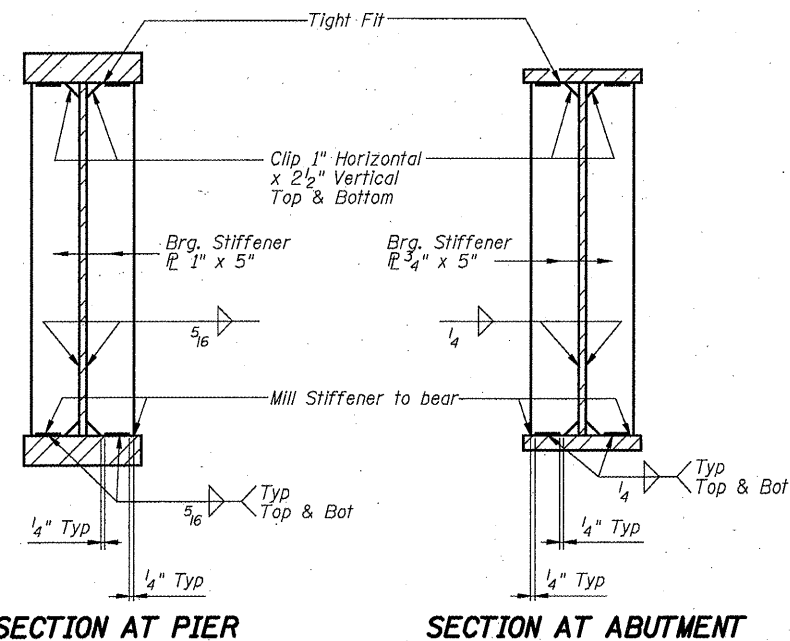
DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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FRAMING PLAN AND DETAILS - UNIT 2
STRUCTURE NUMBER 059-0510

SHEET NO. 25 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 55
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

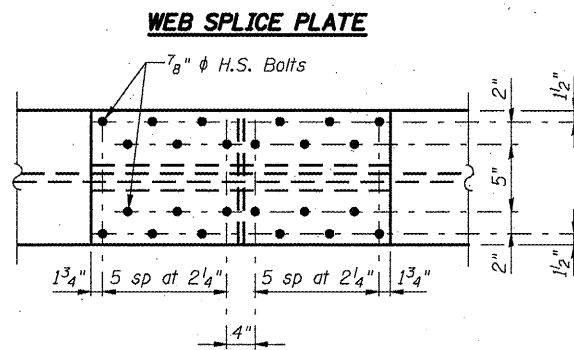
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***TOP OF WEB ELEVATIONS**

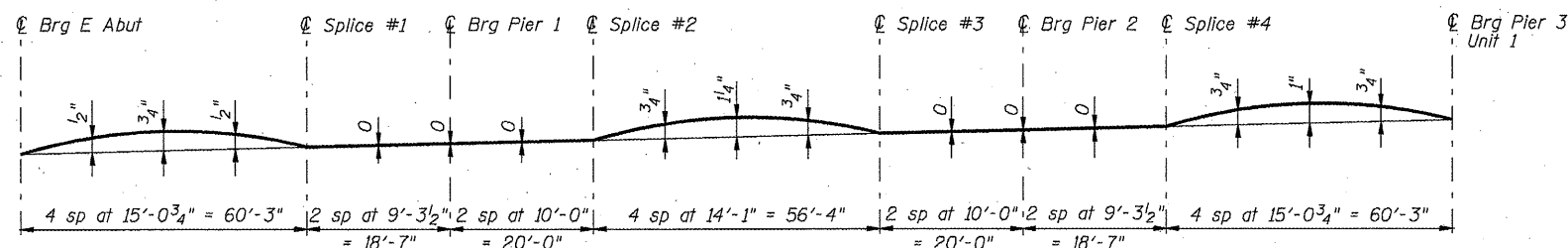
Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
CL Brg at E. Abut	508.966	509.092	509.195	509.195	509.092	508.966
CL Splice 1	509.206	509.332	509.435	509.435	509.332	509.206
CL Brg at Pier 1	509.344	509.470	509.572	509.572	509.470	509.344
CL Splice 2	509.492	509.618	509.721	509.721	509.618	509.492
CL Splice 3	510.028	510.155	510.257	510.257	510.155	510.028
CL Brg at Pier 2	510.220	510.346	510.449	510.449	510.346	510.220
CL Splice 4	510.398	510.524	510.627	510.627	510.524	510.398
CL Brg at Pier 3 Unit 1	511.017	511.143	511.246	511.246	511.143	511.017

* For fabrication only



TOP & BOTTOM FLANGE SPlice PLATE

FIELD SPlice DETAILS



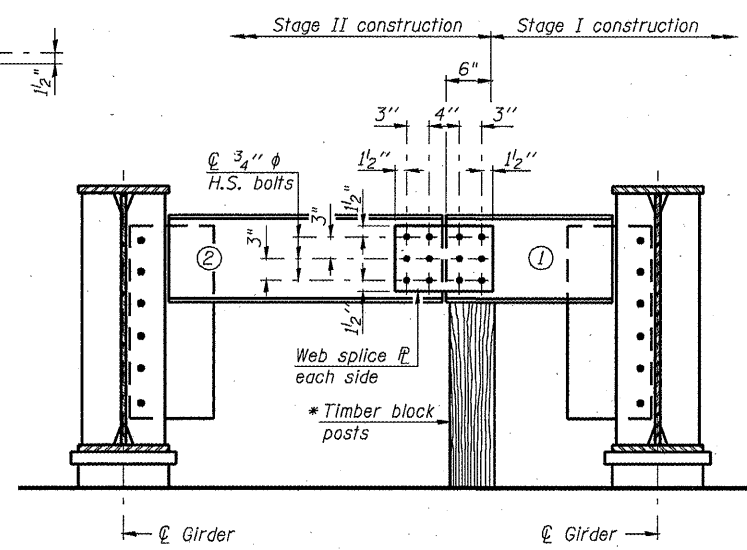
CAMBER DIAGRAM

Note:
Two hardened washers required for each set of oversized holes.

Note:
Two hardened washers required for each set of oversized holes.
* 3/4" phi HS bolts, 15/16" phi holes.

* For diaphragms at staged construction line, use slotted 1 1/8" x 1 1/8" holes at one end of bracing and 1 1/8" phi oversized holes at other end. Bolts shall be finger tight until Stage II pour is complete.

** Alternate channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on C15x40 sections. The alternate, if utilized, shall be provided at no extra cost to the Department.



END DIAPHRAGM AT STAGE CONSTRUCTION JOINT
(2 required)

END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

- 1.) Order diaphragm in two sections.
- 2.) Attach section ① of diaphragm to girder.
- 3.) Place timber block posts between section ① of diaphragm and abutment bearing section.
- 4.) Attach section ② of diaphragm to both girder and section ① of diaphragm during stage II construction with splice plates.
- 5.) Remove timber block posts.

* Cost of Timber Block Posts is included with Structural Steel.

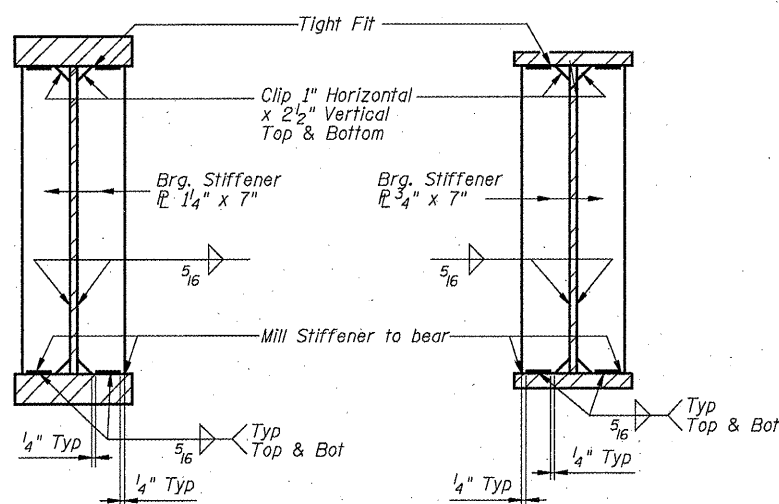
DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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CONSULTING ENGINEERS
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NOTES
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

SHEET NO. 26 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	56
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 72A94	

FRAMING DETAILS - UNIT 1
STRUCTURE NUMBER 059-0510



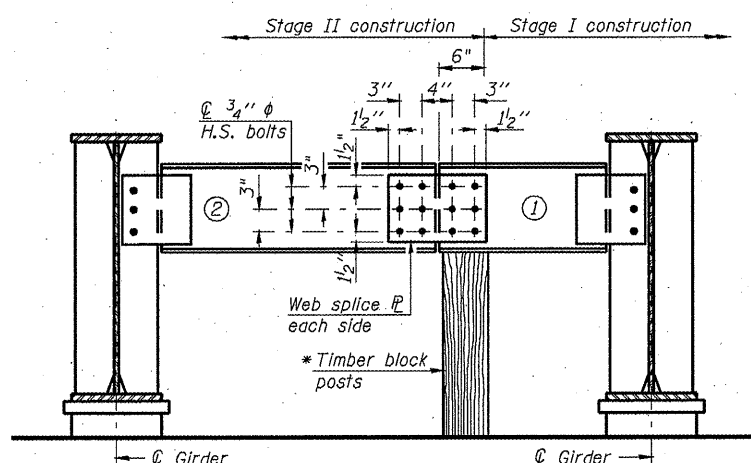
SECTION AT PIER

SECTION AT ABUTMENT

***TOP OF WEB ELEVATIONS**

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
CL Brg at Pier 3 Unit 2	510.996	511.123	511.225	511.225	511.123	510.996
CL Splice 1	512.000	512.126	512.229	512.229	512.126	512.000
CL Brg at Pier 4	512.402	512.528	512.631	512.631	512.528	512.402
CL Splice 2	512.801	512.927	513.030	513.030	512.927	512.801
CL Brg at W Abut	514.190	514.316	514.419	514.419	514.316	514.190

* For fabrication only



END CROSS FRAME AT STAGE CONSTRUCTION JOINT

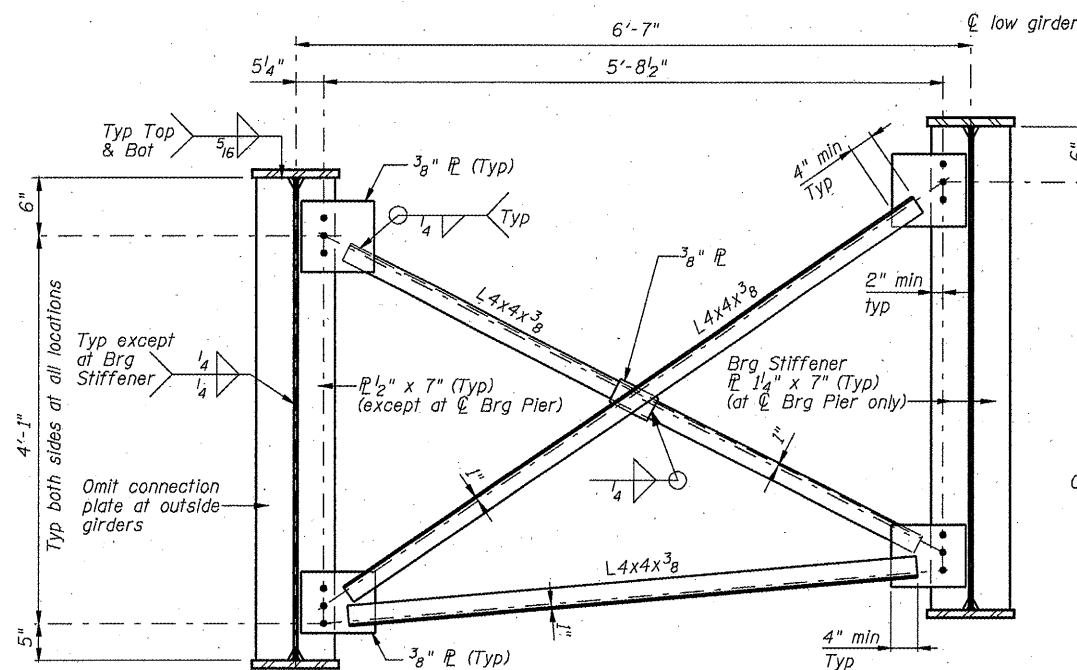
* Cost of Timber Block Posts is included with Structural Steel.

END CROSS FRAME STAGE CONSTRUCTION SEQUENCE

- 1.) Order top member in two sections.
- 2.) Attach section ① of top member to girder 3.
- 3.) Place timber block posts between section ① of top member and abutment bearing section.
- 4.) Attach section ② to both girder and section ① of top member during Stage II construction with splice plates.
- 5.) Remove timber block posts.
- 6.) Install lower portion of cross frame members.

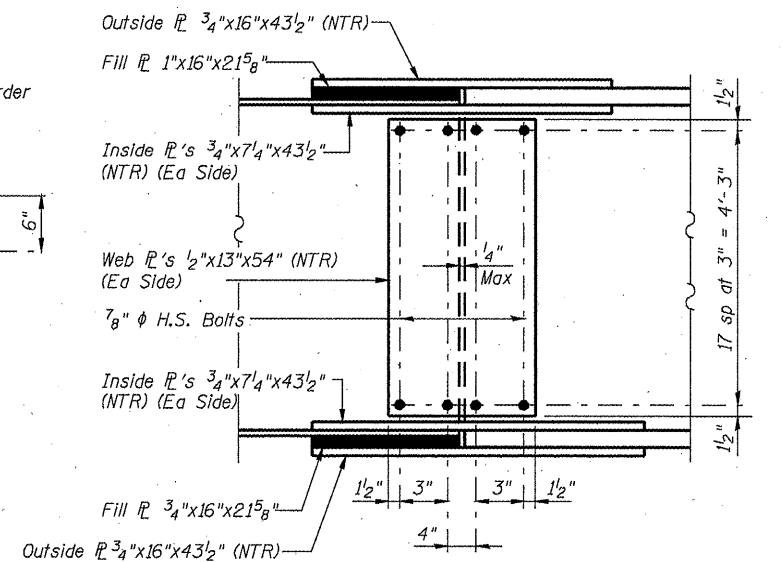
NOTE: Cross frame members not shown for clarity. See Typical End Cross Frame for details. Omit bearing side retainer at Girder 3 until timber block post is removed during Stage II Construction.

**STATE OF ILLINOIS
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TYPICAL INTERIOR CROSS FRAME - CF-1

(At ϕ Brg. Pier 4 cross frame shall be connected to Bearing Stiffeners (65 required))



WEB FLANGE SPLICE PLATE

**TOP & BOTTOM FLANGE SPLICE PLATE
FIELD SPLICE DETAILS**

NOTES

All cross frames shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.

Fasteners for field splices shall be 7/8" AASHTO M164 high-strength bolts in 1 5/16" dia holes.

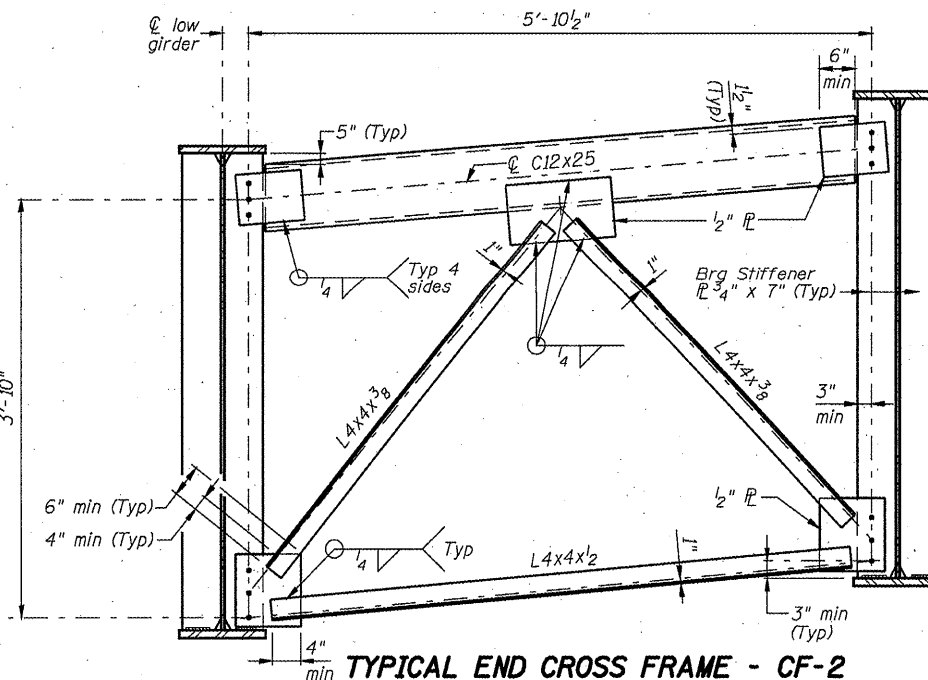
Fasteners for cross frames shall be 3/4" AASHTO M164 high-strength bolts in 1 5/16" dia holes.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Two hardened washers shall be required over all oversized holes.

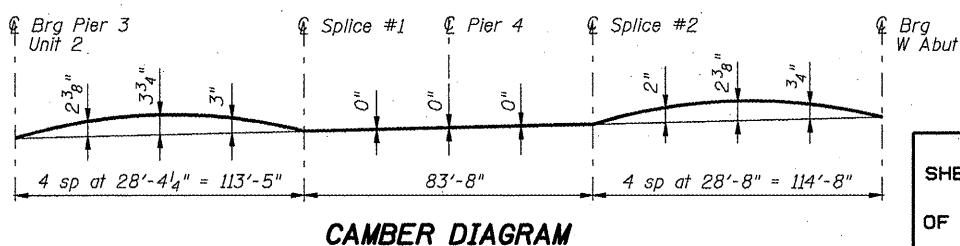
Place diaphragm with channel flange and outstanding angle legs outward from abutment backwall.

For interior cross frames, connection plates and corresponding full depth connection plates at staged construction line, use slotted 1 5/16" x 1 5/8" holes at one end of bracing and 1 5/16" ϕ oversized holes at other end. Fabricator to detail to allow at least 2 1/2" of vertical movement. Bolts shall be finger tight until Stage II pour is complete.



TYPICAL END CROSS FRAME - CF-2

(8 required)



CAMBER DIAGRAM

**FRAMING DETAILS - UNIT 2
STRUCTURE NUMBER 059-0510**

DESIGNED - J.M.B.
CHECKED - T.E.S.
DRAWN - R KING
CHECKED - J.M.B.

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SHEET NO. 27 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 57
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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DEPARTMENT OF TRANSPORTATION

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 0.6 Sp. 3	Pier 1 or Pier 2	0.5 Sp. 2
I_s	(in ⁴)	10926	15257	10926
I_c (n)	(in ⁴)	28128	-	28128
I_c (3n)	(in ⁴)	21053	-	21053
S_s	(in ³)	502.3	689.7	502.3
S_c (n)	(in ³)	717.4	-	717.4
S_c (3n)	(in ³)	655.2	-	655.2
Z	(in ³)	-	-	-
DC ₁	(k/')	0.82	0.85	0.82
M _{DC1}	(k)	341	684	277
DC ₂	(k/')	0.15	0.15	0.15
M _{DC2}	(k)	69	108	66
DW	(k/')	0.329	0.329	0.329
M _{DW}	(k)	151	237	145
M _{LL+IMP}	(k)	929	792	934
M _u (Strength II)	(k)	2365	2732	2281
$\phi_r M_n$ $\phi_r M_{nc}$	(k)	3622	3185	3668
f_s DC ₁	(ksi)	8.15	11.90	6.62
f_s DC ₂	(ksi)	1.26	1.88	1.21
f_s DW	(ksi)	2.77	4.12	2.66
f_s 1.3(LL+I)	(ksi)	20.2	17.9	20.3
f_s (Service II)	(ksi)	32.4	35.8	30.8
f_s (Total)(Strength I)	(ksi)	-	-	-
V _r	(k)	25.5	-	19.5

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: 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-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in⁴ and in³).

Z: Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations (in³).

DC₁: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC₂: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_L + IM: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + IM

$\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_r M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).

f_s (Service II): Sum of stresses as computed from the moments below (ksi).
M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_L + IM

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + IM

V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

INTERIOR GIRDER REACTION TABLE HL93 Loading			
		E. Abut. Pier 3 - Unit 1	Pier 1 Pier 2
R _{DC1}	(k)	24.6	81.9
R _{DC2}	(k)	4.5	14.5
R _{DW}	(k)	10.0	31.8
R _{LL+IMP}	(k)	75.5	123.2
R _{Total}	(k)	114.6	251.4

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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**MOMENT TABLES - UNIT 1
STRUCTURE NUMBER 059-0510**

SHEET NO. 28 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 58
	FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1	Pier 4	0.6 Sp. 2
I_s	(in ⁴)	50246	79906	50246
I_c (n)	(in ⁴)	101819	-	101819
I_c (3n)	(in ⁴)	75639	-	75639
S_s	(in ³)	1686.1	2477.7	1686.1
S_c (n)	(in ³)	2114.2	-	2114.2
S_c (3n)	(in ³)	1946.4	-	1946.4
Z	(in ³)	-	-	-
DC ₁	(k/')	0.94	1.05	0.94
M _{DC1}	(k)	1442	3308	1475
DC ₂	(k/')	0.15	0.15	0.15
M _{DC2}	(k)	249	464	254
DW	(k/')	0.329	0.329	0.329
M _{DW}	(k)	547	1017	558
M _{LL+IMP}	(k)	2215	2119	2227
M _u (Strength I)	(k)	6811	9949	6896
$\phi_r M_n$, $\phi_r M_{nc}$	(k)	10527	11101	10527
f_s DC ₁	(ksi)	10.26	16.02	10.50
f_s DC ₂	(ksi)	1.54	2.25	1.57
f_s DW	(ksi)	3.37	4.93	3.44
f_s 1.3(LL+I)	(ksi)	16.3	13.3	16.4
f_s (Service II)	(ksi)	31.5	36.5	31.9
f_s (Total)(Strength I)	(ksi)	-	-	-
V _r	(k)	30.2	-	30.1

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: 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-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in⁴ and in³).

Z: Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations (in³).

DC₁: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC₂: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{LL + IMP}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL + IMP}

$\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_r M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).

f_s (Service II): Sum of stresses as computed from the moments below (ksi).
M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_{LL + IMP}

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL + IMP}

V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

INTERIOR GIRDER REACTION TABLE HL93 Loading				
		Pier 3 - Unit 2	Pier 4	W. Abut.
R _{DC1}	(k)	53.4	196.7	54.0
R _{DC2}	(k)	8.7	29.3	8.8
R _{DW}	(k)	19.0	64.3	19.2
R _{LL+Imp}	(k)	94.7	188.9	94.9
R _{Total}	(k)	175.8	479.2	176.9

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

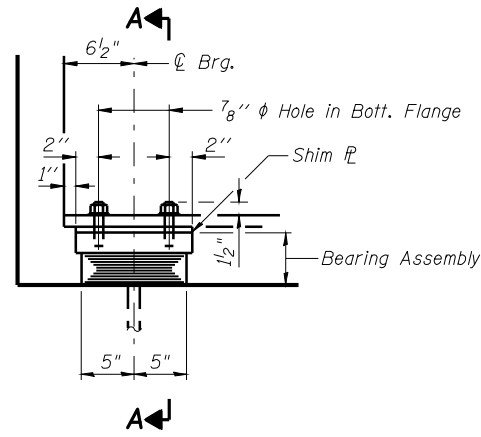
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**MOMENT TABLES - UNIT 2
STRUCTURE NUMBER 059-0510**

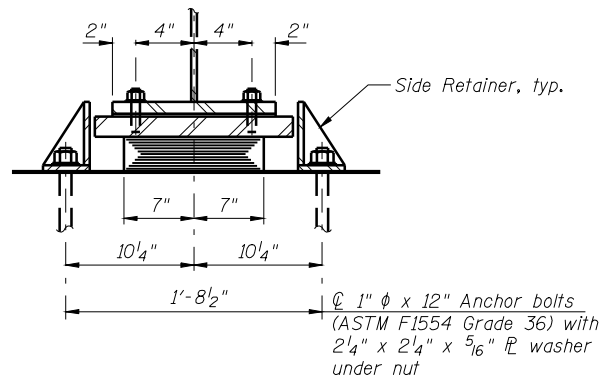
SHEET NO. 29 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 59
	FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
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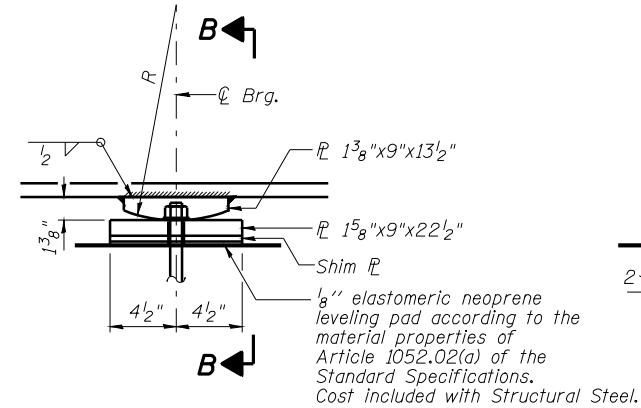


ELEVATION AT E. ABUT AND PIER 3 - UNIT 1

TYPE I ELASTOMERIC EXP. BRG.

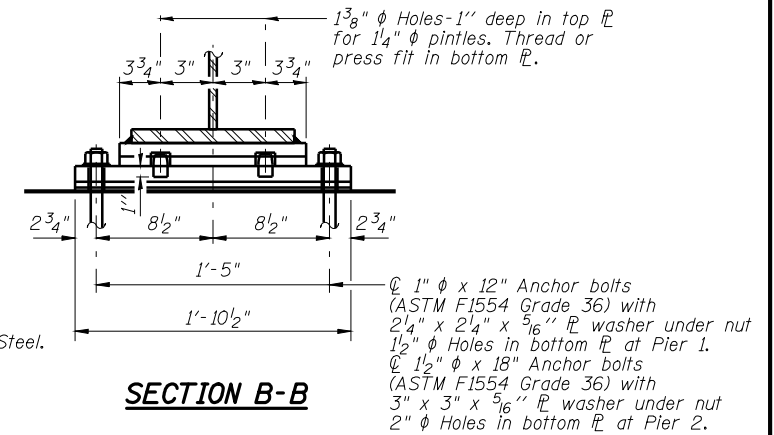


SECTION A-A

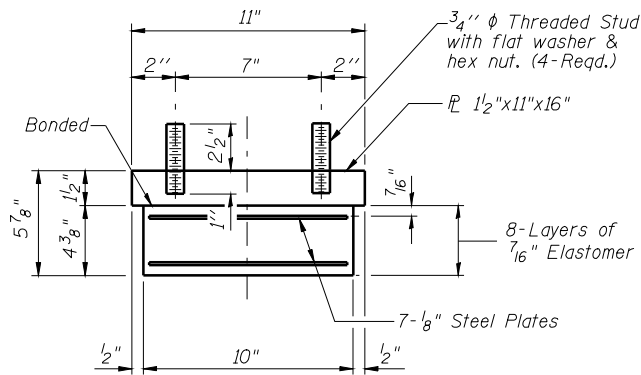


ELEVATION AT PIER 1 AND 2

FIXED BEARING
(12 req'd)

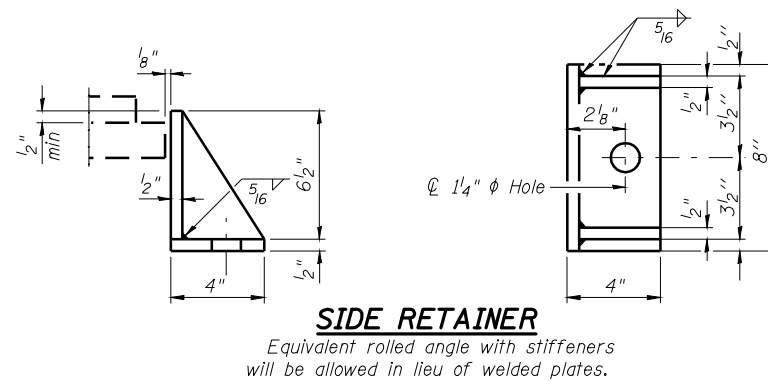


SECTION B-B



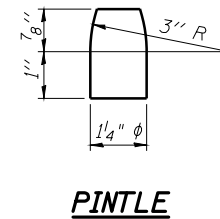
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PINTLE

Notes:
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.

The structural steel plates and pintles of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50W.

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Anchor Bolts 1"	Each	36
Anchor Bolts 1 1/2"	Each	12

BEARING DETAILS - UNIT 1
STRUCTURE NUMBER 059-0510

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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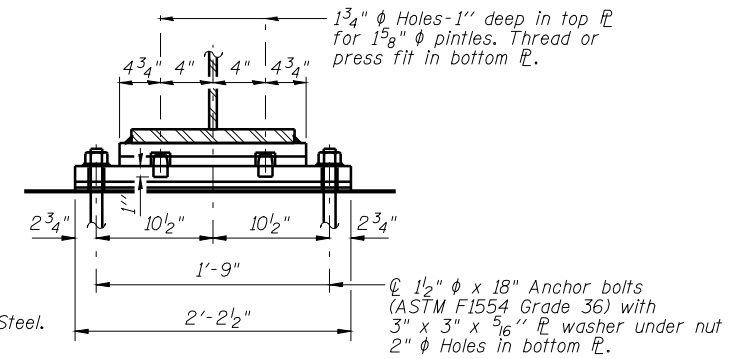
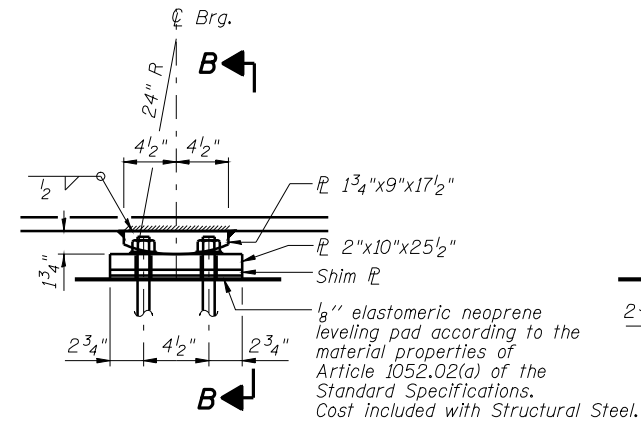
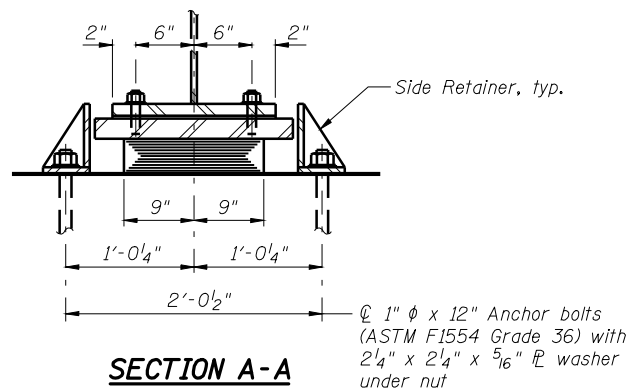
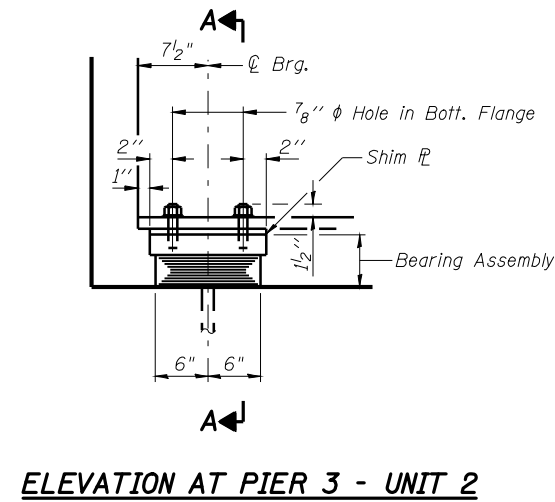
184-001397

I-2E-1

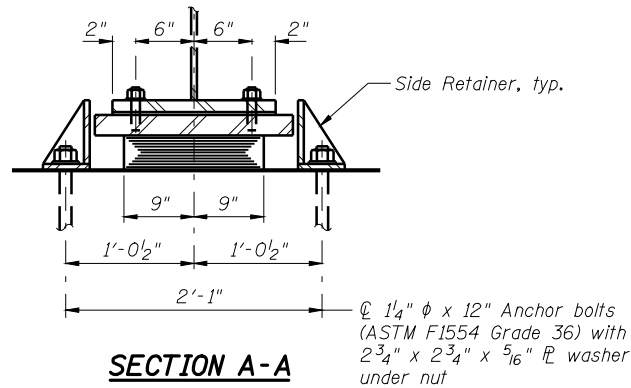
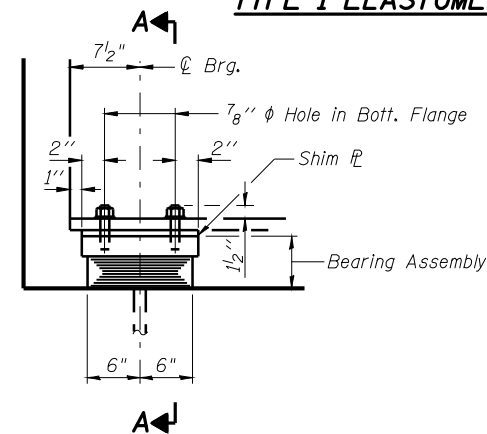
11-1-09

SHEET NO. 30 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	60
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

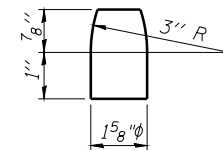
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TYPE I ELASTOMERIC EXP. BRG.



FIXED BEARING
(6 req'd)



Notes:
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.

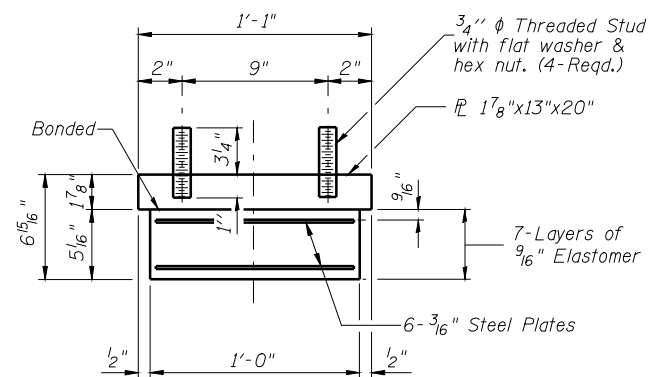
Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates and pintles of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50W.

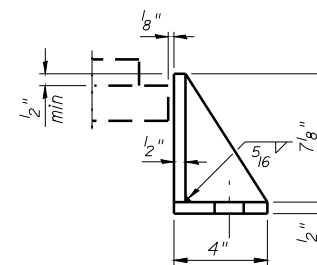
The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

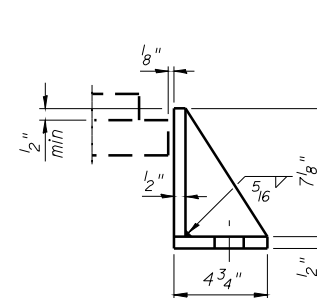
TYPE I ELASTOMERIC EXP. BRG.



Note:
Shim plates shall not be placed under Bearing Assembly.



Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Anchor Bolts 1"	Each	12
Anchor Bolts 1 1/4"	Each	12
Anchor Bolts 1 1/2"	Each	24

**BEARING DETAILS - UNIT 2
STRUCTURE NUMBER 059-0510**

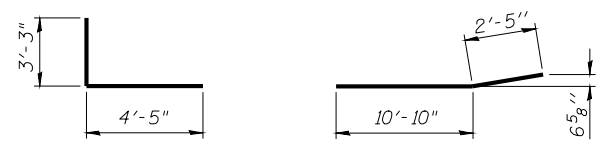
DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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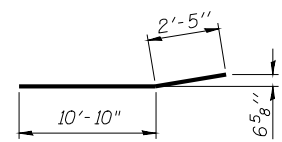
I-2E-1 11-1-09 184-001397

SHEET NO. 31 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	61
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		

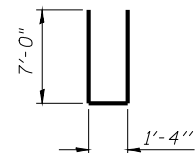
STATE OF ILLINOIS
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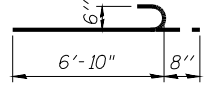
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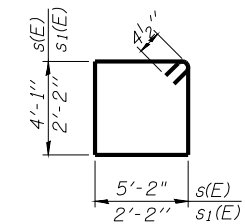
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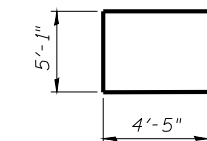
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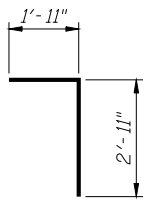
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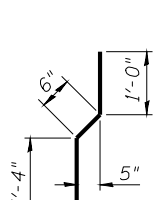
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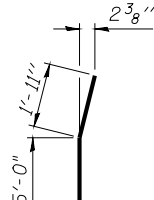
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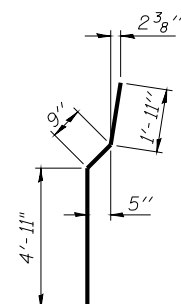
BAR v(E)



BAR v1(E)



BAR v5(E)



BAR v6(E)

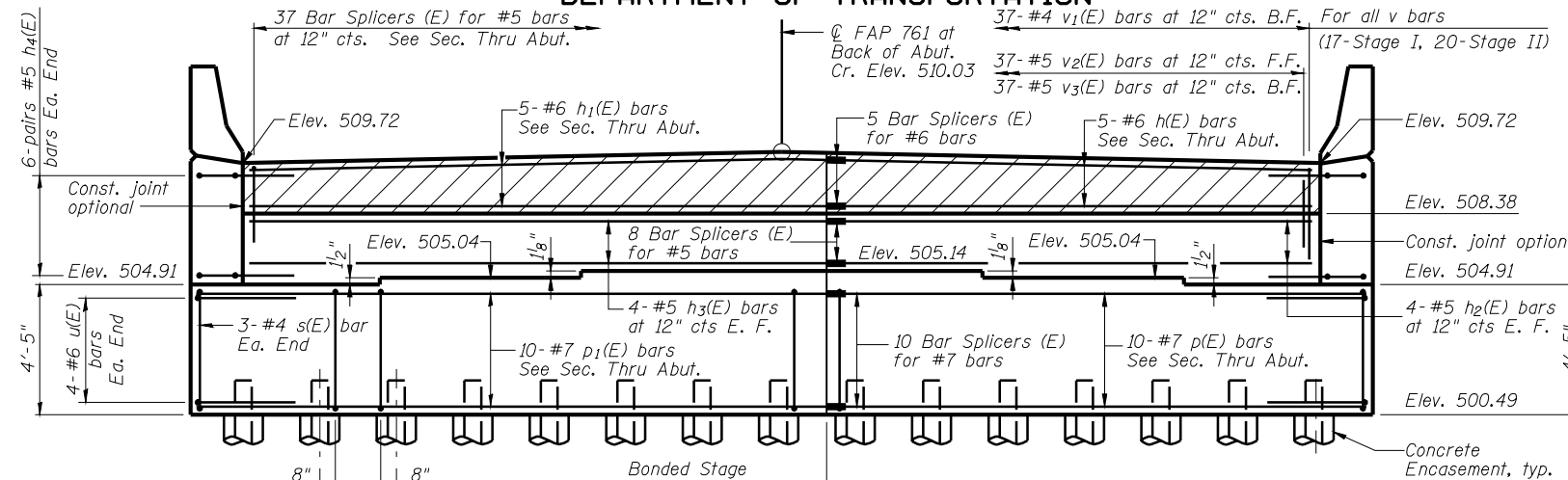
PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 290 kips
Factored Resistance Available: 145 kips
Est. Length: 72'
No. Req'd: 16
Test Pile: 1

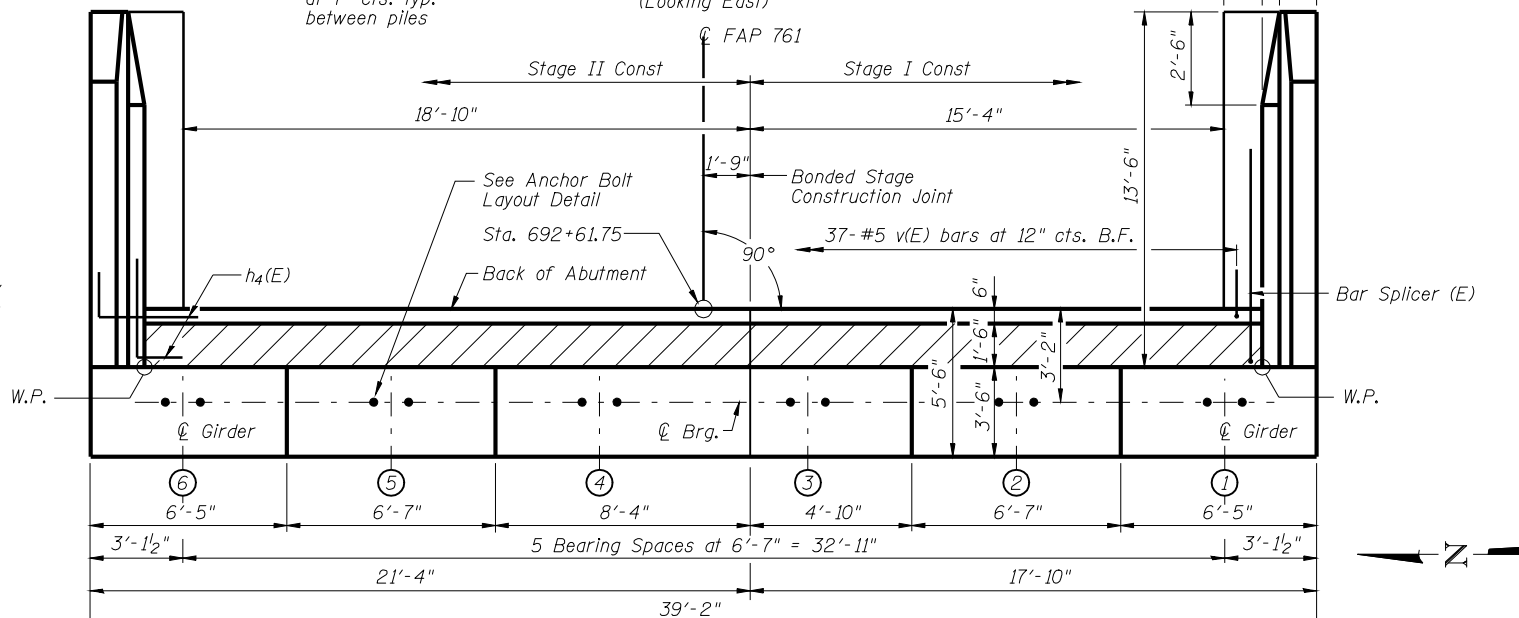
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CONSULTING ENGINEERS

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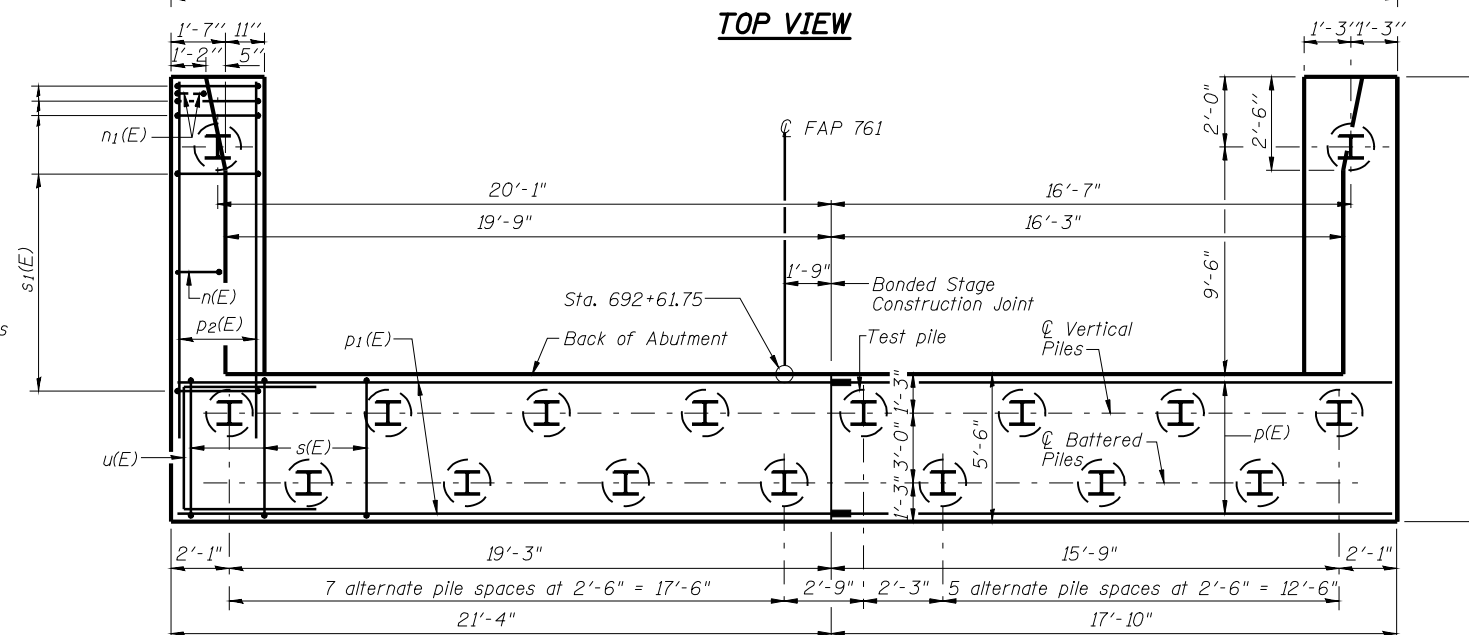
184-001397



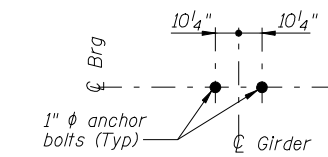
ELEVATION
(Looking East)



TOP VIEW



PLAN-PILE CAP



ANCHOR BOLT LAYOUT DETAIL

ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	5	#6	16'-0"	—
h1(E)	5	#6	19'-6"	—
h2(E)	8	#5	16'-0"	—
h3(E)	8	#5	19'-6"	—
h4(E)	24	#5	7'-8"	┌
h5(E)	22	#4	13'-3"	—
h6(E)	14	#4	13'-3"	—
n(E)	22	#6	15'-4"	┌
n1(E)	12	#6	7'-6"	┌
p(E)	10	#7	17'-7"	—
p1(E)	10	#7	21'-1"	—
p2(E)	12	#7	14'-6"	—
s(E)	48	#4	19'-3"	□
s1(E)	30	#4	9'-5"	□
u(E)	8	#6	13'-11"	┌
v(E)	37	#5	4'-10"	┌
v1(E)	37	#4	2'-10"	┌
v2(E)	37	#5	6'-10"	┌
v3(E)	37	#5	5'-9"	┌
v4(E)	28	#6	7'-4"	┌
v5(E)	6	#6	6'-11"	┌
v6(E)	22	#6	7'-7"	┌
Structure Excavation			Cu. Yd.	258
Concrete Structures			Cu. Yd.	59.6
Reinforcement Bars, Epoxy Coated			Pound	5200
Furnishing Steel Piles HP12x53			Foot	1152
Driving Piles			Foot	1152
Test Pile Steel HP12x53			Each	1
Concrete Encasement			Cu. Yd.	6.0
Concrete Sealer			Sq. Ft.	453
Bar Splicers			Each	60

Note:
For details of Bar Splicers, see sheet 45 of 51.

For details of piles and Concrete Encasement, see sheet 44 of 51.

B.F.= Back Face, F.F.= Front Face, E.F.= Each Face

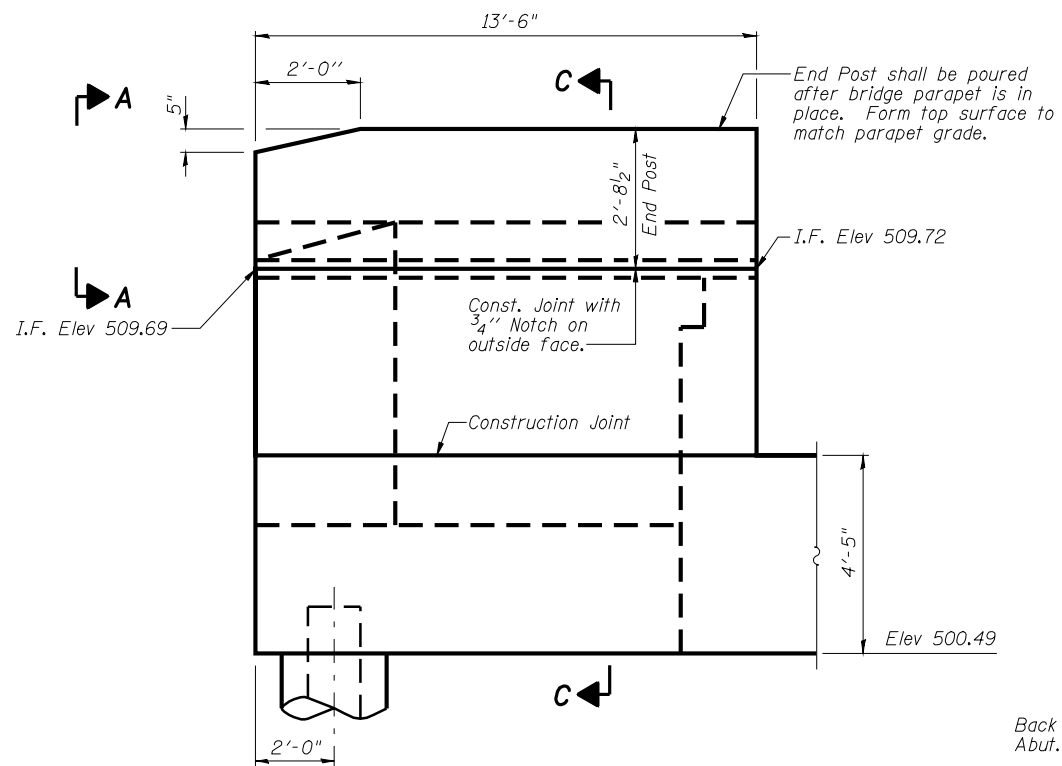
EAST ABUTMENT DETAILS
STRUCTURE NUMBER 059-0510

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

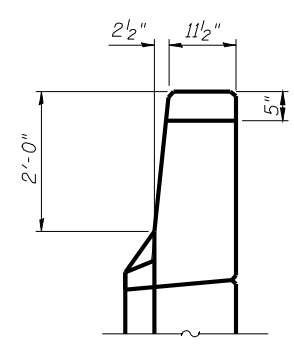
A-1 10-1-08

SHEET NO. 32 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 62
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

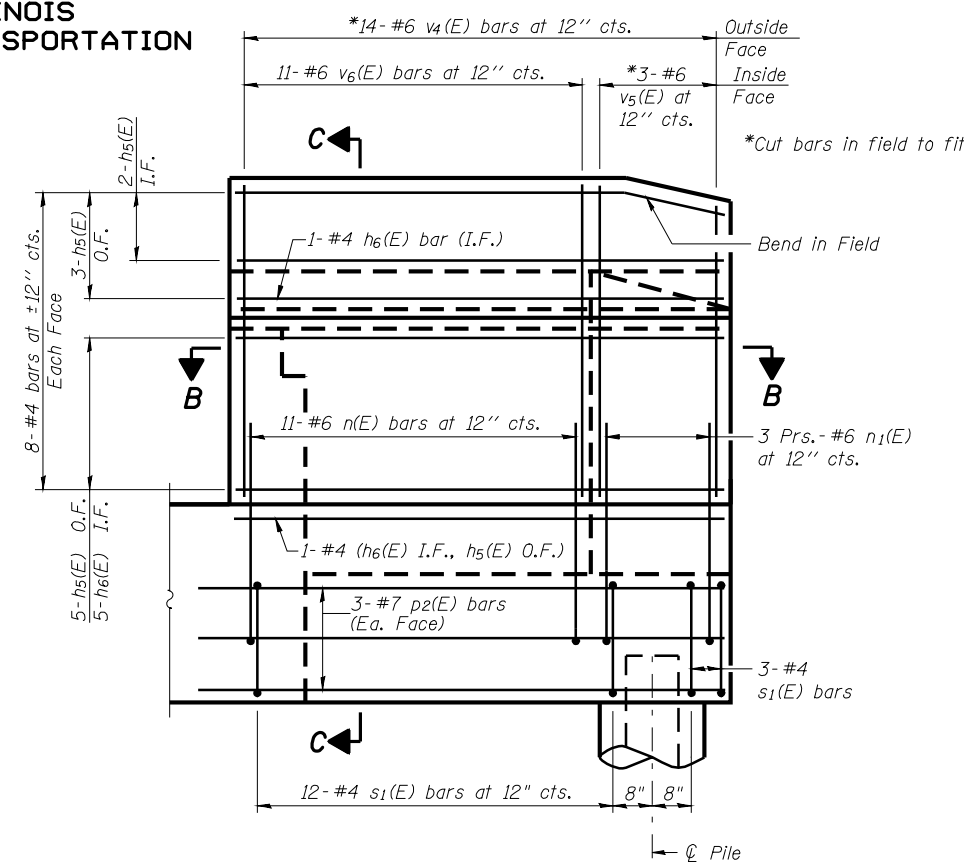
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



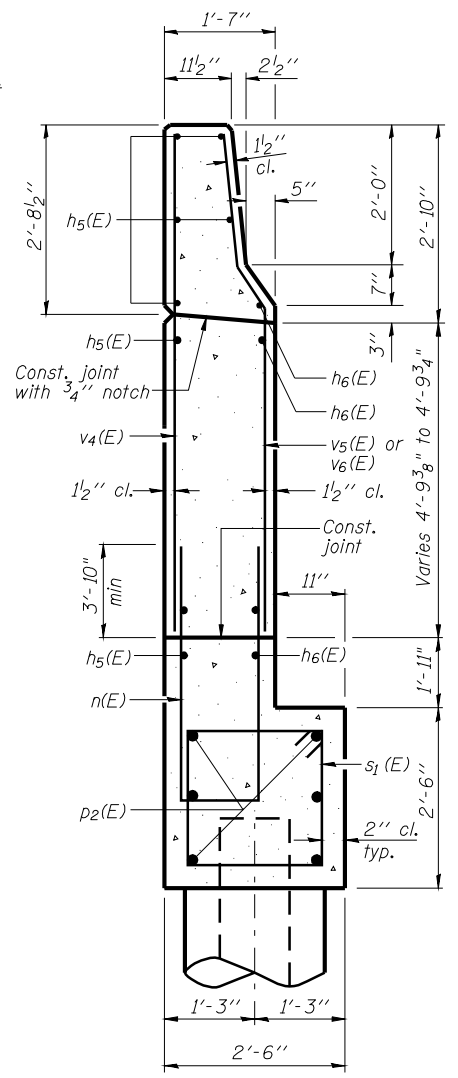
WING WALL ELEVATION
Showing Dimensions



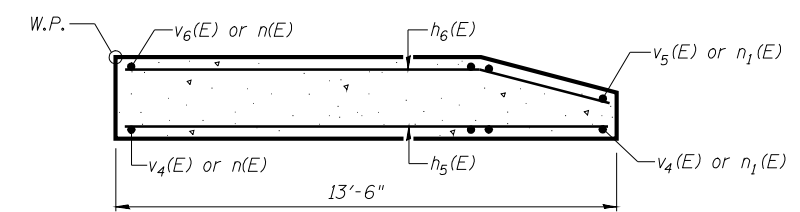
VIEW A-A
(South wingwall only)



WING WALL ELEVATION
Showing Reinforcement

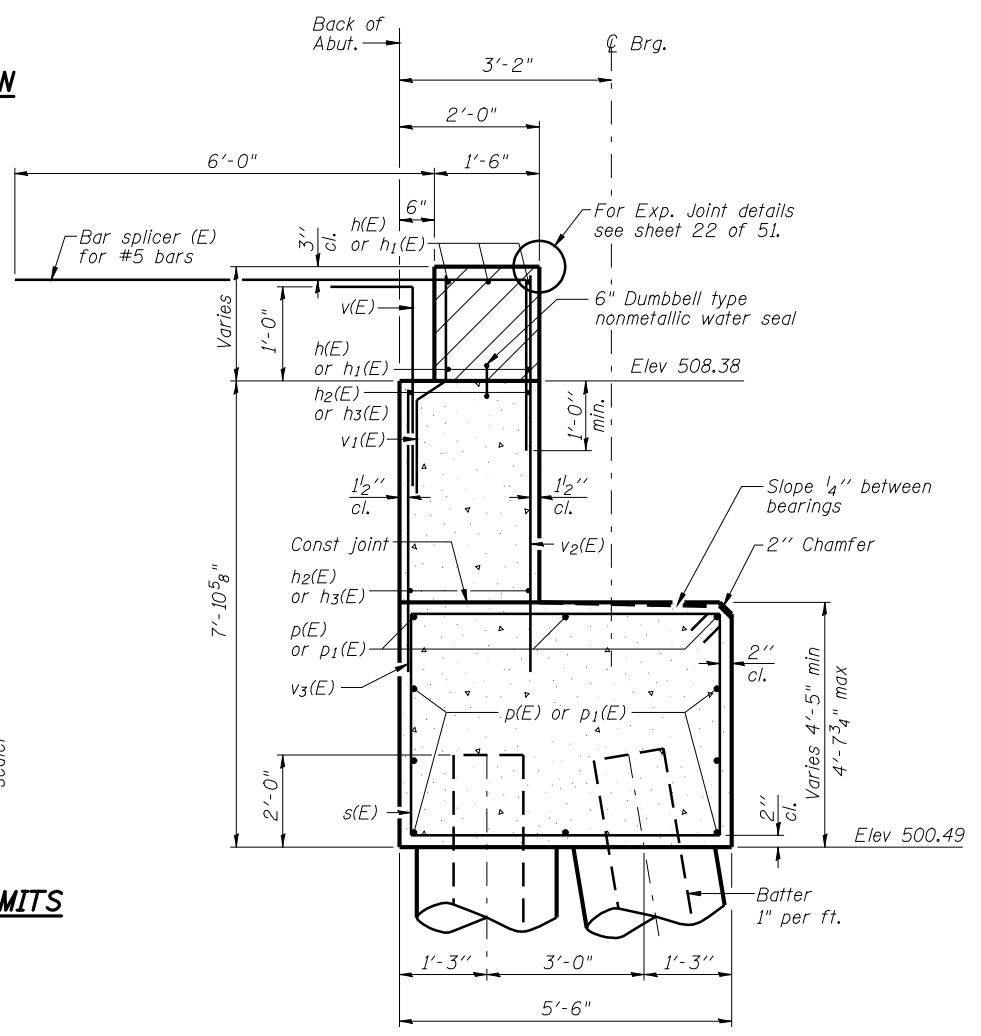


SECTION C-C

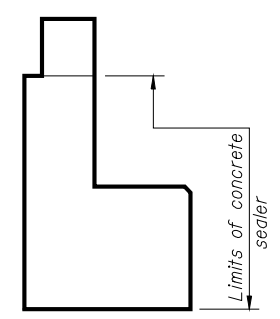


SECTION B-B

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure on sheet 21 of 51.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Quantity of concrete in end post included with Concrete Superstructure on sheet 21 of 51.
For Concrete Encasement details, see sheet 44 of 51.
I.F. = Inside Face O.F. = Outside Face



SEC. THRU ABUT.



CONCRETE SEALER LIMITS

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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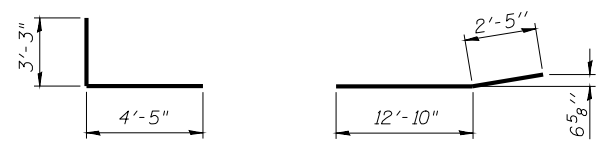
184-001397

A-1-D 10-1-08

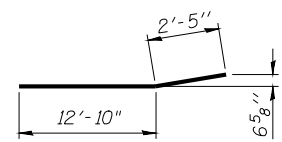
EAST ABUTMENT DETAILS
STRUCTURE NUMBER 059-0510

SHEET NO. 33 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	63
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

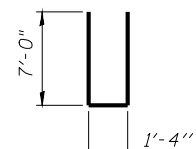
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



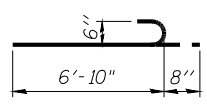
BAR h4(E)



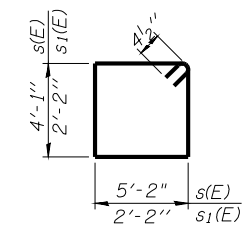
BAR h8(E)



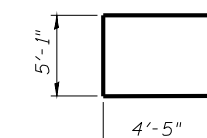
BAR n(E)



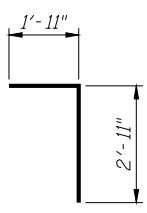
BAR n1(E)



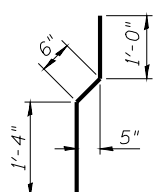
BARS s(E) & s1(E)



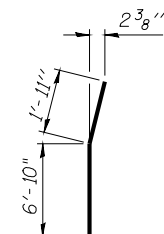
BAR u(E)



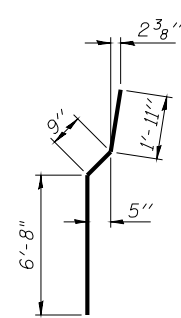
BAR v(E)



BAR v1(E)



BAR v10(E)



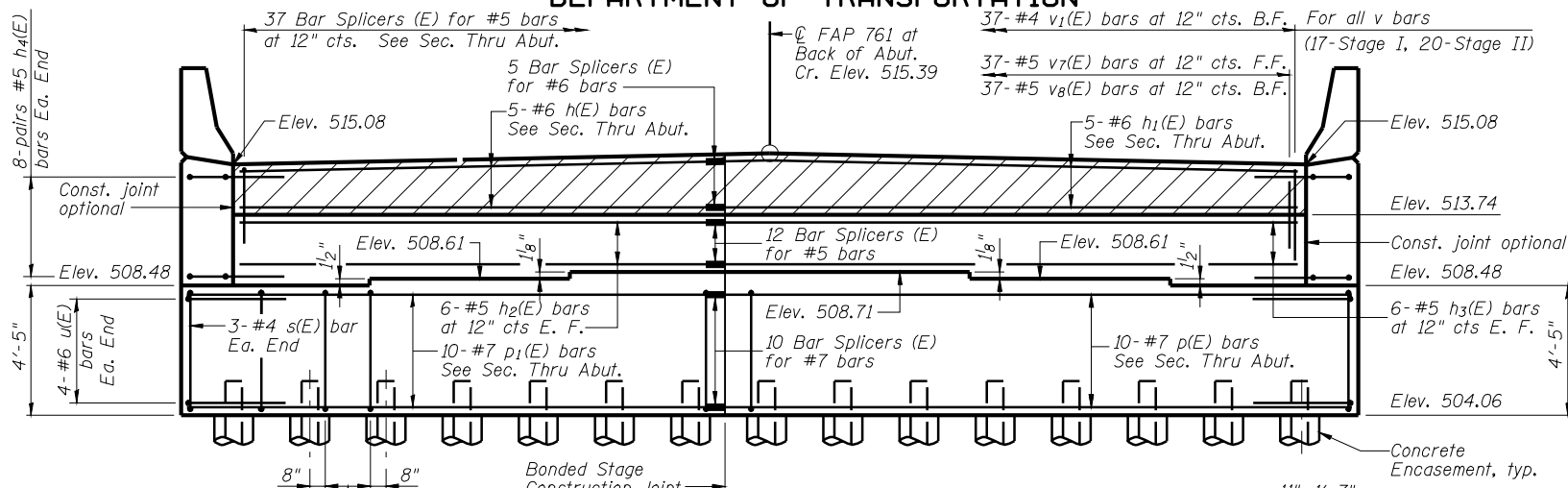
BAR v11(E)

PILE DATA
Type: Steel HP12x53
Nominal Required Bearing: 294 kips
Factored Resistance Available: 147 kips
Est. Length: 40'
No. Req'd: 16
Test Pile: 1

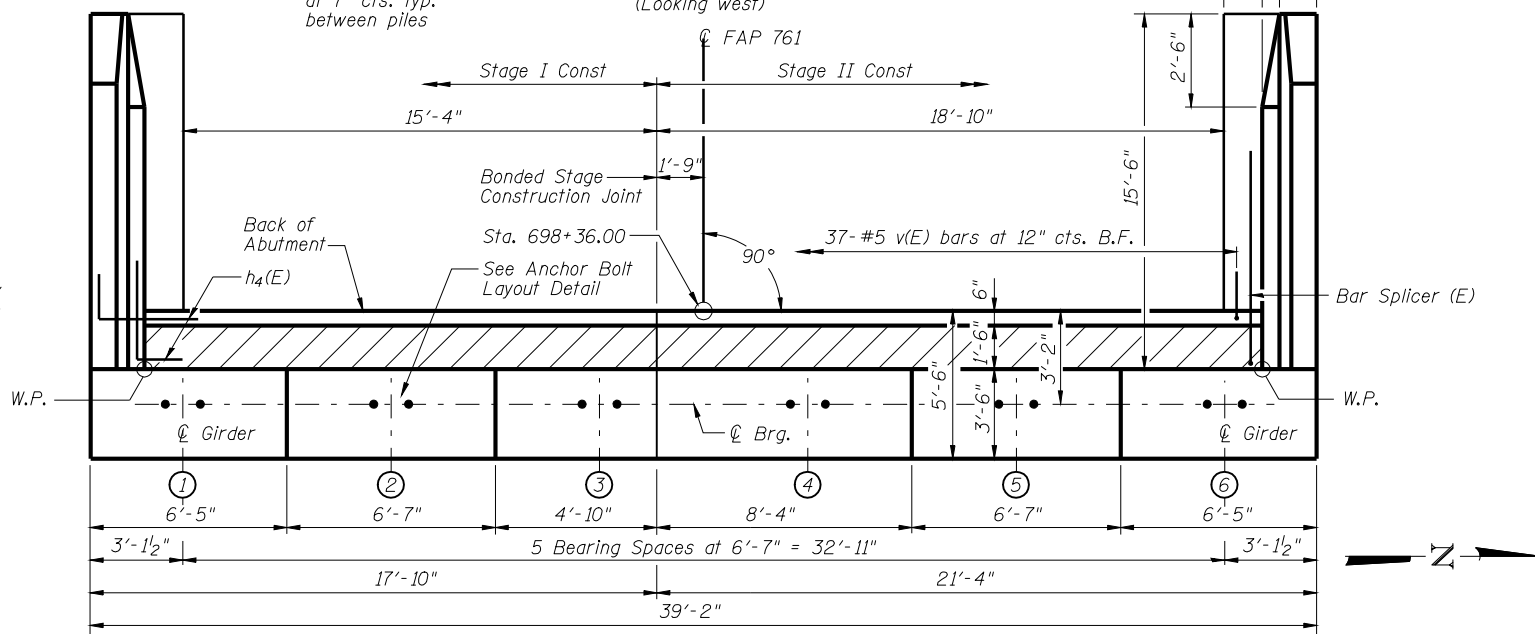
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CHICAGO (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

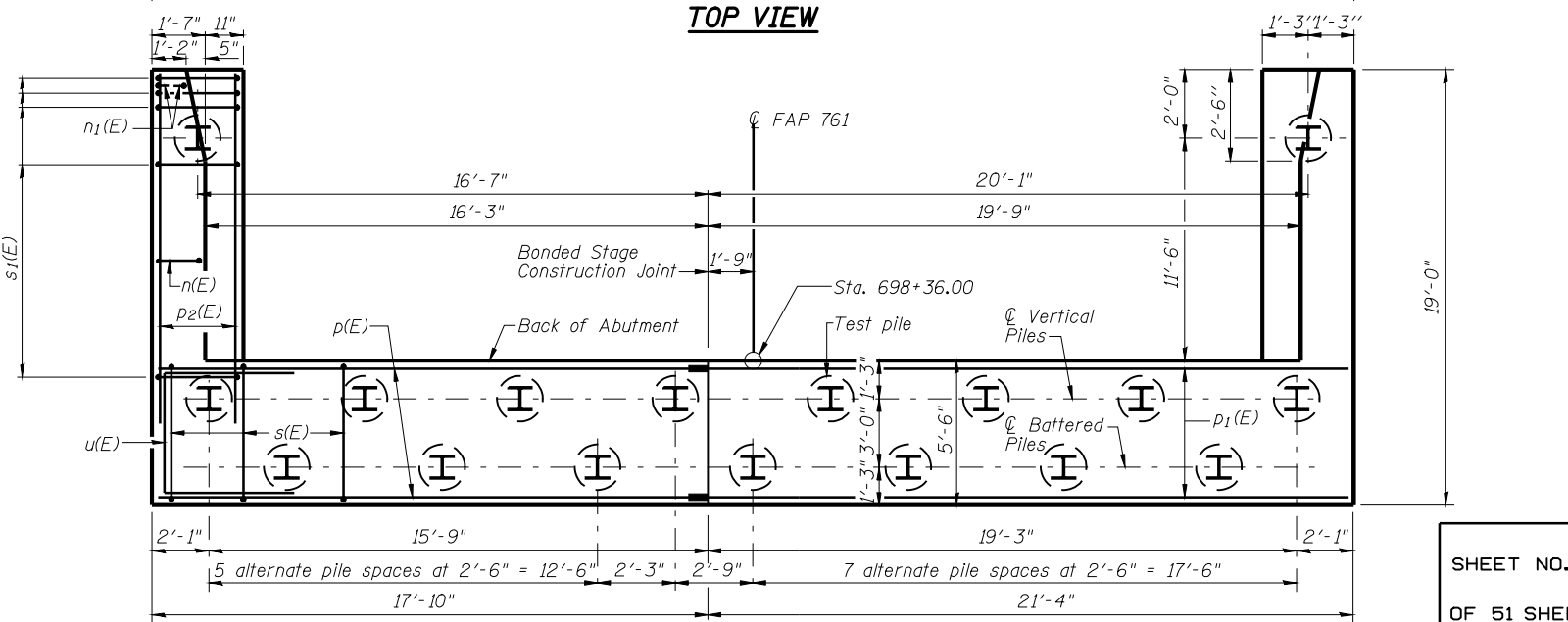
A-1 10-1-08



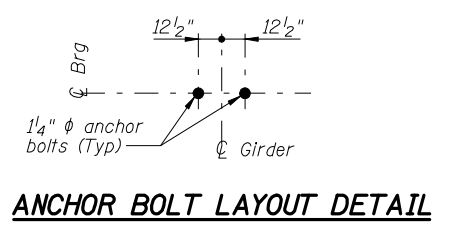
ELEVATION
(Looking west)



TOP VIEW



PLAN-PILE CAP



ANCHOR BOLT LAYOUT DETAIL

**ABUTMENT
BILL OF MATERIAL**

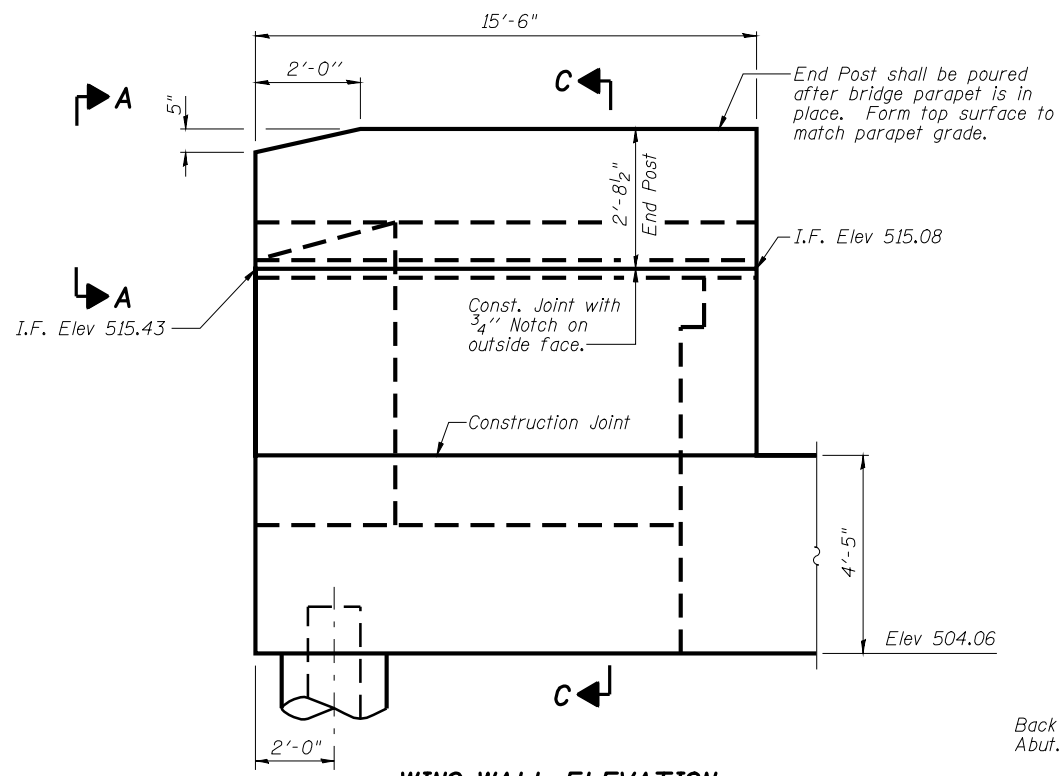
Bar	No.	Size	Length	Shape
h(E)	5	#6	16'-0"	—
h1(E)	5	#6	19'-6"	—
h2(E)	12	#5	16'-0"	—
h3(E)	12	#5	19'-6"	—
h4(E)	32	#5	7'-8"	—
h7(E)	26	#4	15'-3"	—
h8(E)	18	#4	15'-3"	—
n(E)	26	#6	15'-4"	—
n1(E)	12	#6	7'-6"	—
p(E)	10	#7	17'-7"	—
p1(E)	10	#7	21'-1"	—
p3(E)	12	#7	16'-6"	—
s(E)	48	#4	19'-3"	—
s1(E)	34	#4	9'-5"	—
u(E)	8	#6	13'-11"	—
v(E)	37	#5	4'-10"	—
v1(E)	37	#4	2'-10"	—
v7(E)	37	#5	8'-8"	—
v8(E)	37	#5	7'-7"	—
v9(E)	32	#6	9'-2"	—
v10(E)	6	#6	8'-9"	—
v11(E)	26	#6	9'-4"	—
Structure Excavation			Cu. Yd.	198
Concrete Structures			Cu. Yd.	70.0
Reinforcement Bars, Epoxy Coated			Pound	6110
Furnishing Steel Piles HP12x53			Foot	640
Driving Piles			Foot	640
Test Pile Steel HP12x53			Each	1
Concrete Encasement			Cu. Yd.	6.0
Concrete Sealer			Sq. Ft.	523
Bar Splicers			Each	64

Note:
For details of Bar Splicers, see sheet 45 of 51.
For details of piles and Concrete Encasement, see sheet 44 of 51.
B.F.= Back Face, F.F.= Front Face, E.F.= Each Face

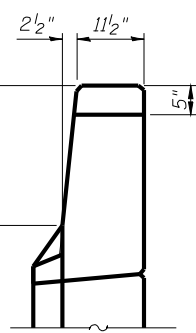
**WEST ABUTMENT DETAILS
STRUCTURE NUMBER 059-0510**

SHEET NO. 34 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 64
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

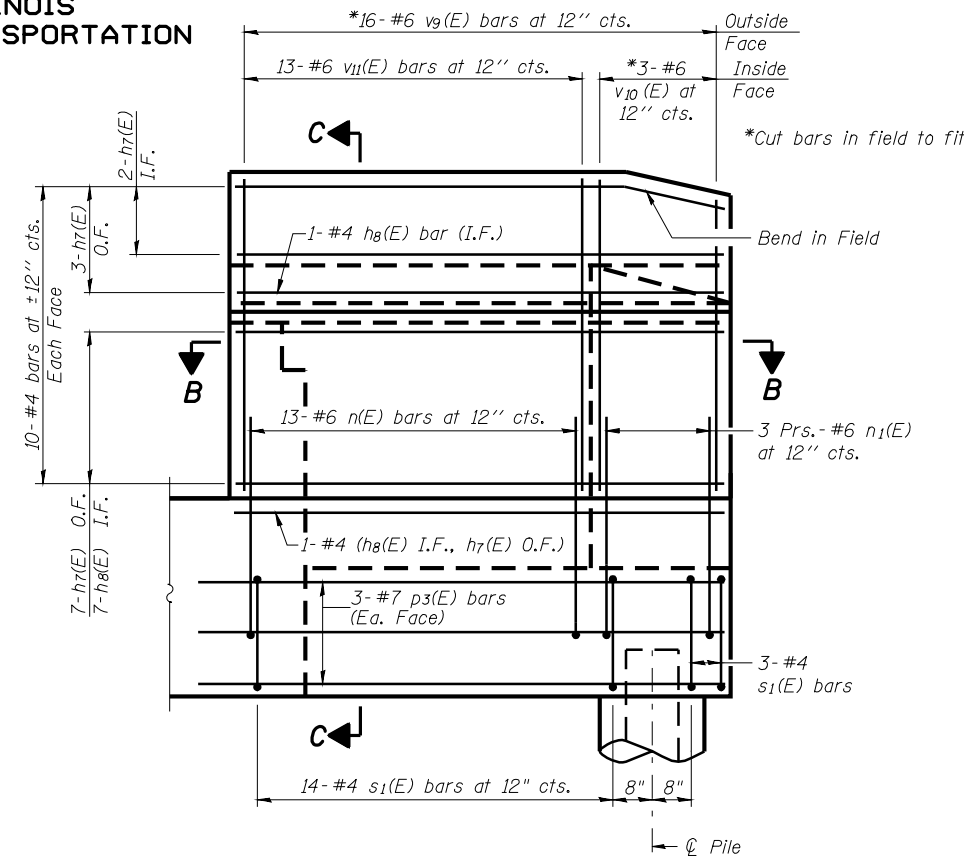
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



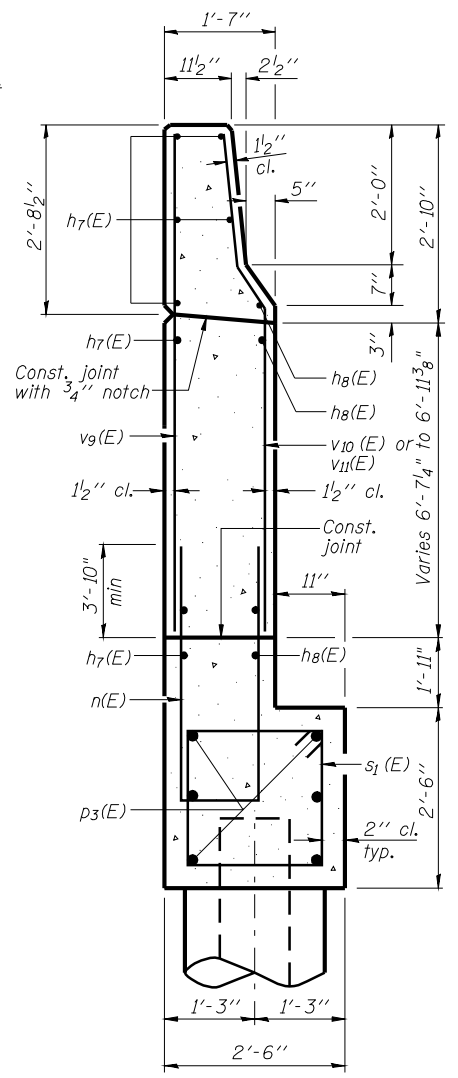
WING WALL ELEVATION
Showing Dimensions



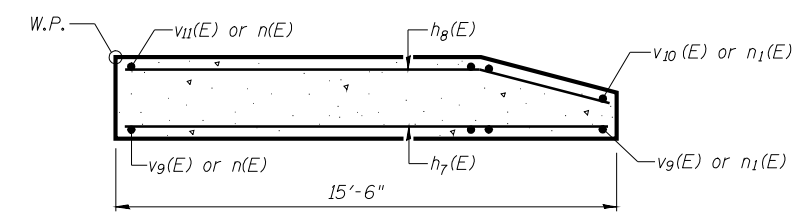
VIEW A-A



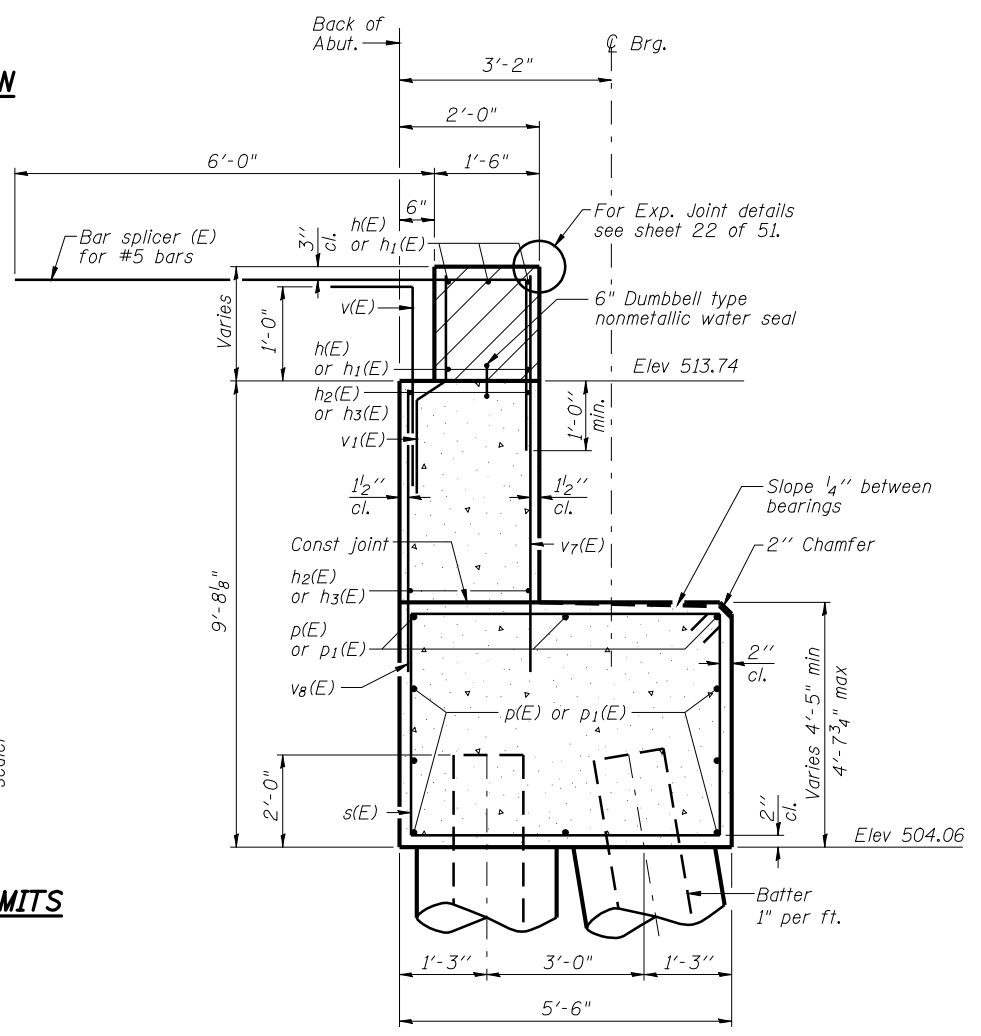
WING WALL ELEVATION
Showing Reinforcement



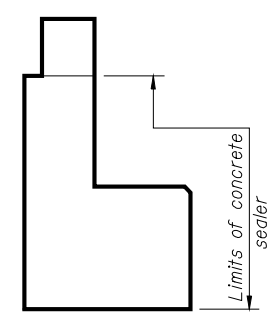
SECTION C-C



SECTION B-B



SEC. THRU ABUT.



CONCRETE SEALER LIMITS

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure on sheet 21 of 51.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Quantity of concrete in end post included with Concrete Superstructure on sheet 21 of 51.
For Concrete Encasement details, see sheet 44 of 51.
I.F. = Inside Face O.F. = Outside Face

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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CONSULTING ENGINEERS

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ROCKFORD (815) 489-0050

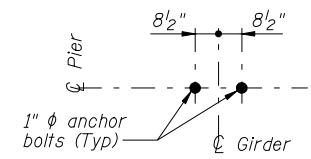
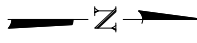
184-001397

A-1-D 10-1-08

WEST ABUTMENT DETAILS
STRUCTURE NUMBER 059-0510

SHEET NO. 35 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 65
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

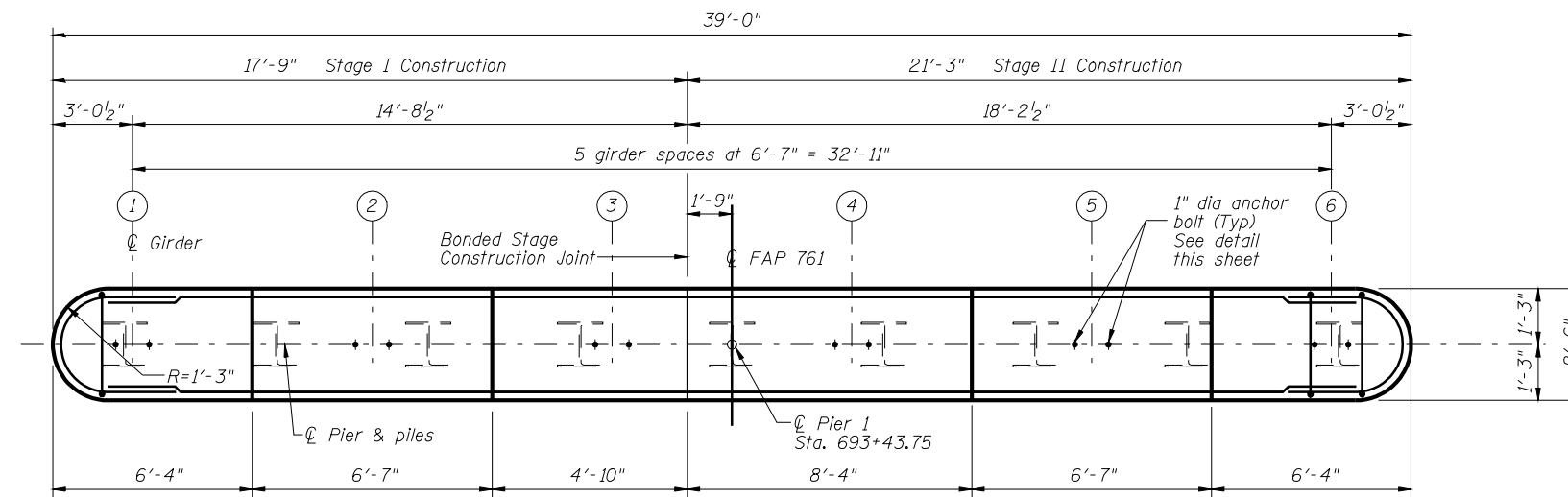
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ANCHOR BOLT LAYOUT DETAIL

PILE DATA

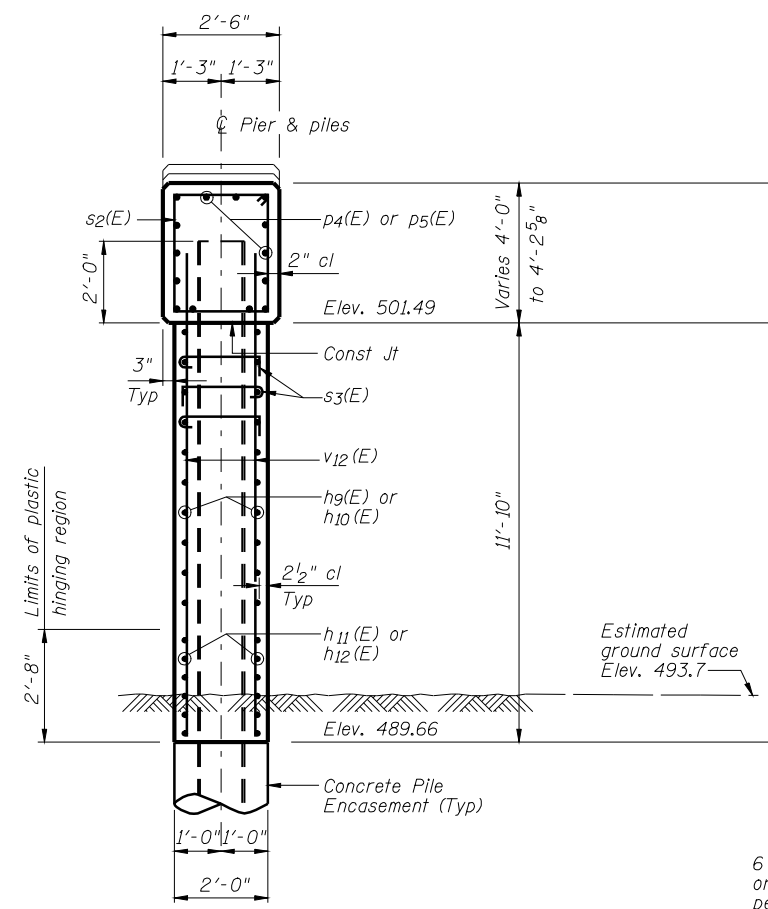
Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 243 kips
Est. Length: 75'
No. Req'd: 8
Test Pile: 1



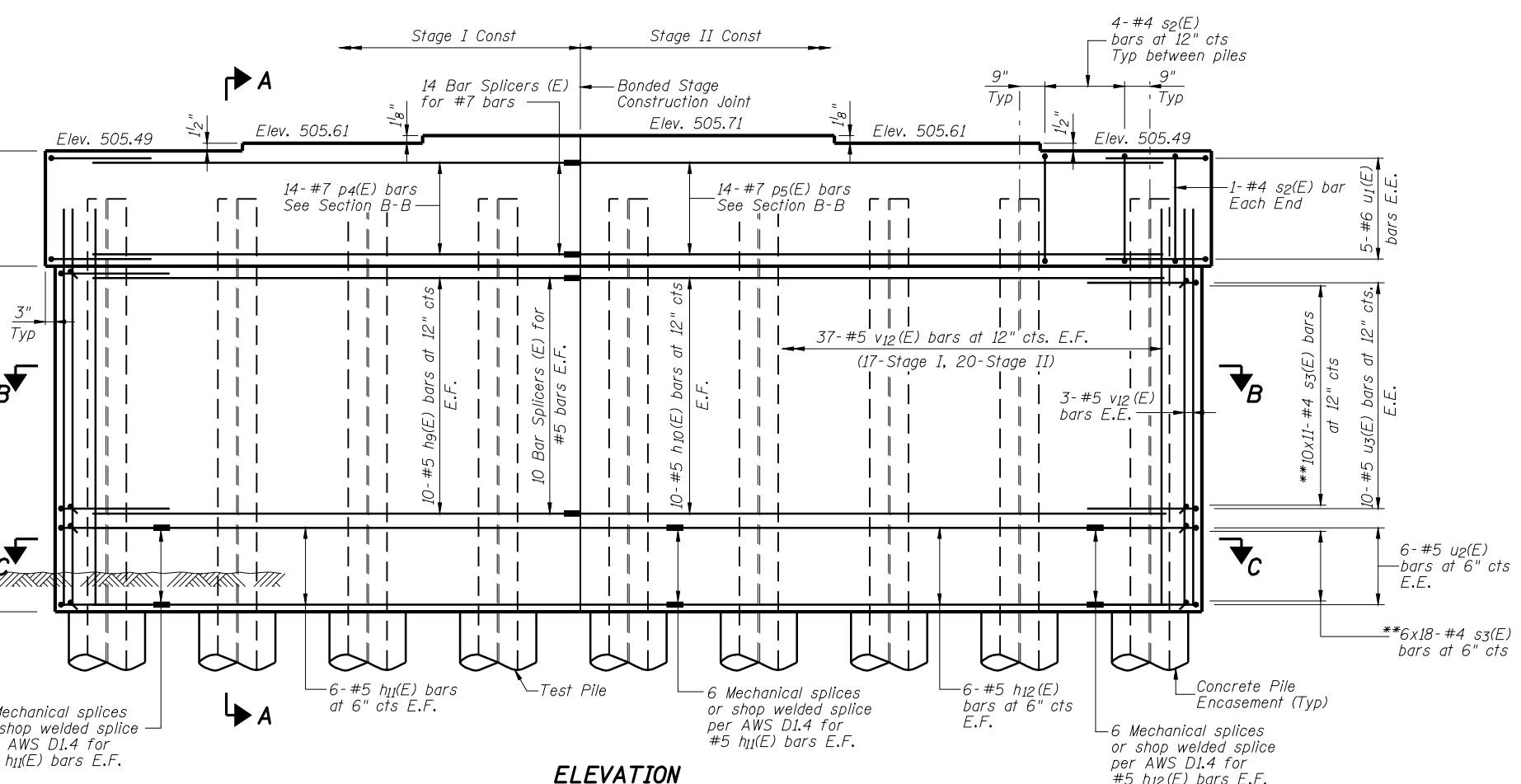
TOP PLAN

MIN BAR LAP

#5 bar = 3'-8"
#6 bar = 4'-5"



SECTION A-A



ELEVATION
(Looking Up Station)

****Note:**
The 90° hooks of two successive crossties, s3(E), shall be alternated end for end as shown in Sec A-A. For horizontal spacing see sheet 37 of 51.
Bars indicated thus 10x14- #4 etc indicates 10 lines of bars with 14 bars per line.
E.F. = Each Face E.E. = Each End

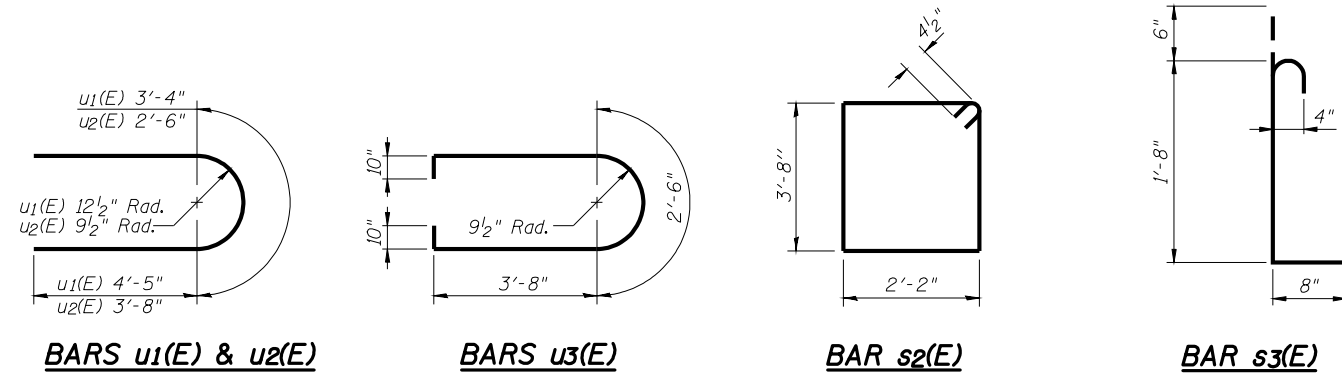
**PIER 1 DETAILS
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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ROCKFORD (815) 489-0050
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SHEET NO. 36 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 66
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

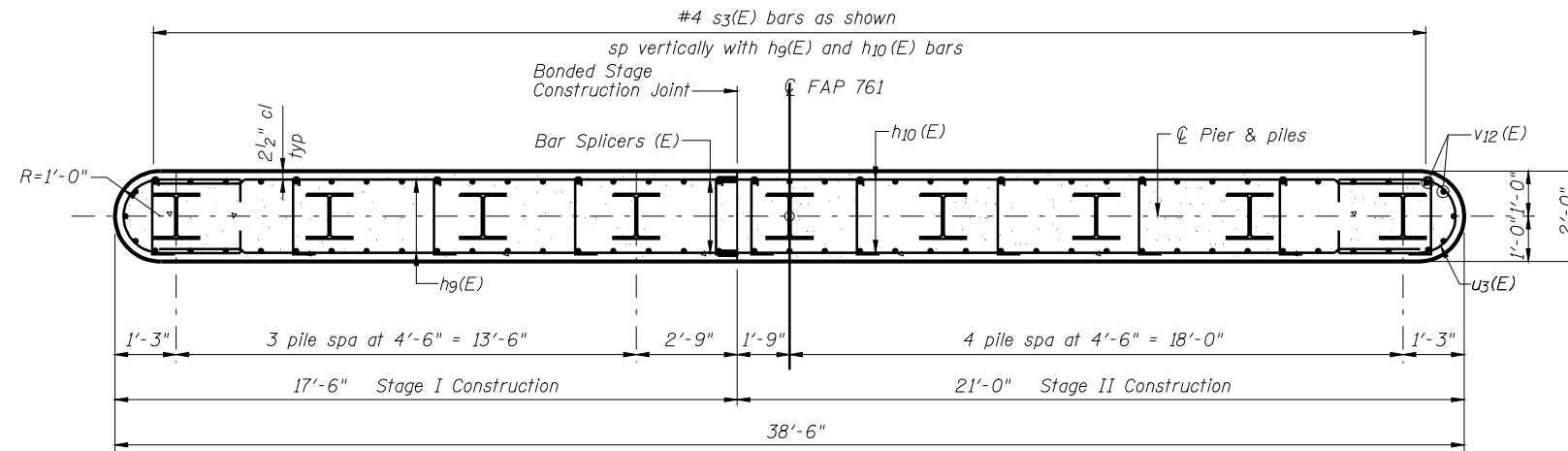
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



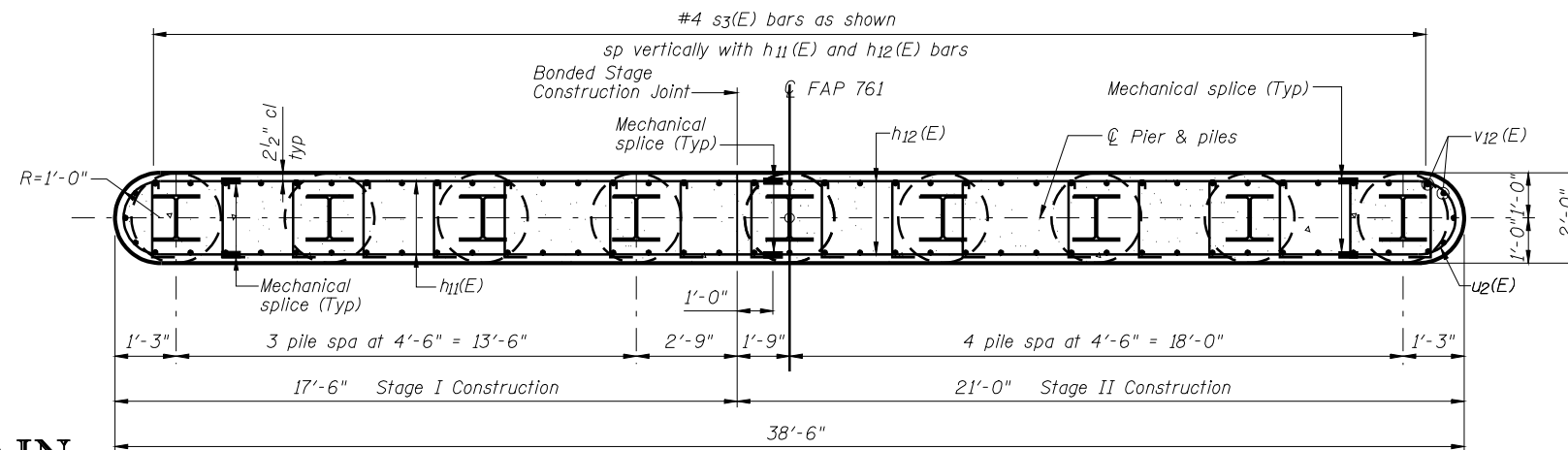
Alternate the position of the 90° hooks on the $s_3(E)$ bars in the field.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_9(E)$	20	#5	16'-4"	—
$h_{10}(E)$	20	#5	19'-10"	—
$h_{11}(E)$	12	#5	14'-3"	—
$h_{12}(E)$	12	#5	15'-9"	—
$p_4(E)$	14	#7	16'-4"	—
$p_5(E)$	14	#7	19'-10"	—
$s_2(E)$	34	#4	12'-5"	⊠
$s_3(E)$	218	#4	2'-10"	⊠
$u_1(E)$	10	#6	12'-2"	U
$u_2(E)$	12	#5	9'-10"	U
$u_3(E)$	20	#5	11'-6"	U
$v_{12}(E)$	80	#5	13'-7"	—
Structure Excavation		Cu. Yd.	38	
Concrete Structures		Cu. Yd.	48.5	
Reinforcement Bars, Epoxy Coated		Pound	4540	
Furnishing Steel Piles HP12x63		Foot	600	
Driving Piles		Foot	600	
Mechanical Splice		Each	36	
Concrete Encasement		Cu. Yd.	3.2	
Test Pile Steel HP12x63		Each	1	
Pile Shoes		Each	9	
Bar Splicers		Each	34	



SECTION B-B



SECTION C-C

Note:
 Four steps monolithically with cap.
 For details of Bar Splicers, see sheet 45 of 51.
 For details of piles and Concrete Encasement, see sheet 44 of 51.
 All edges shall have standard 3/4" chamfer.
 Space reinforcement in cap to miss anchor bolts.

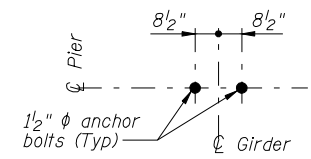
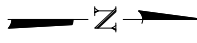
**PIER 1 DETAILS
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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 CONSULTING ENGINEERS
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 CHICAGO (773) 714-0050
 ROCKFORD (815) 489-0050
 184-001397

SHEET NO. 37 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 67
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

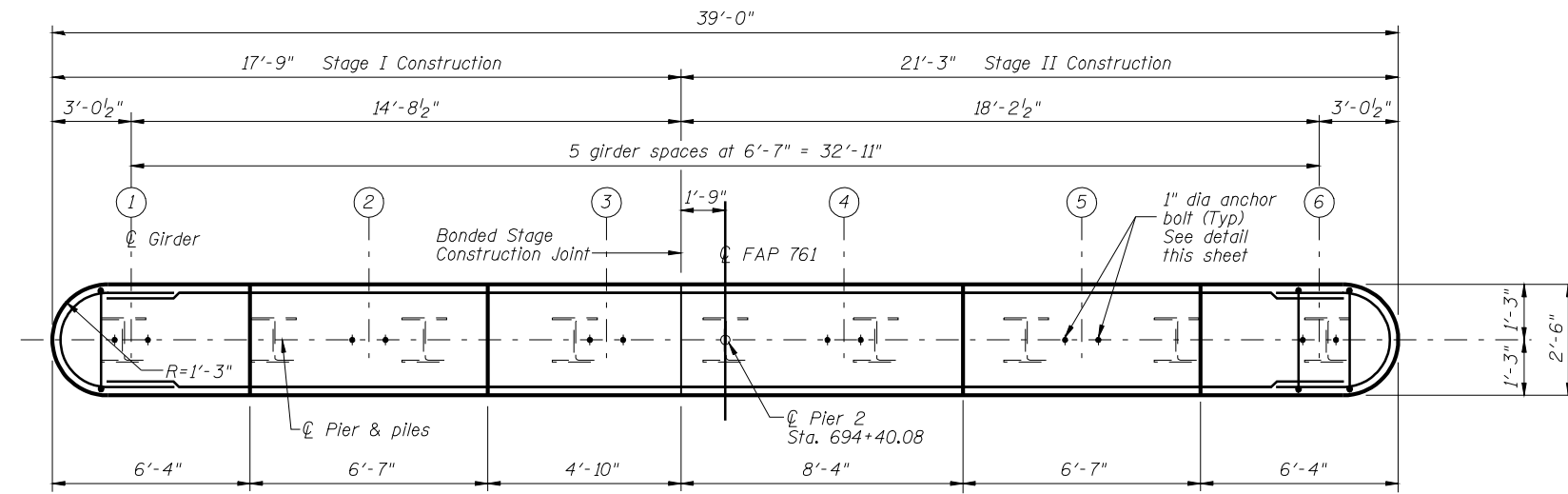
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ANCHOR BOLT LAYOUT DETAIL

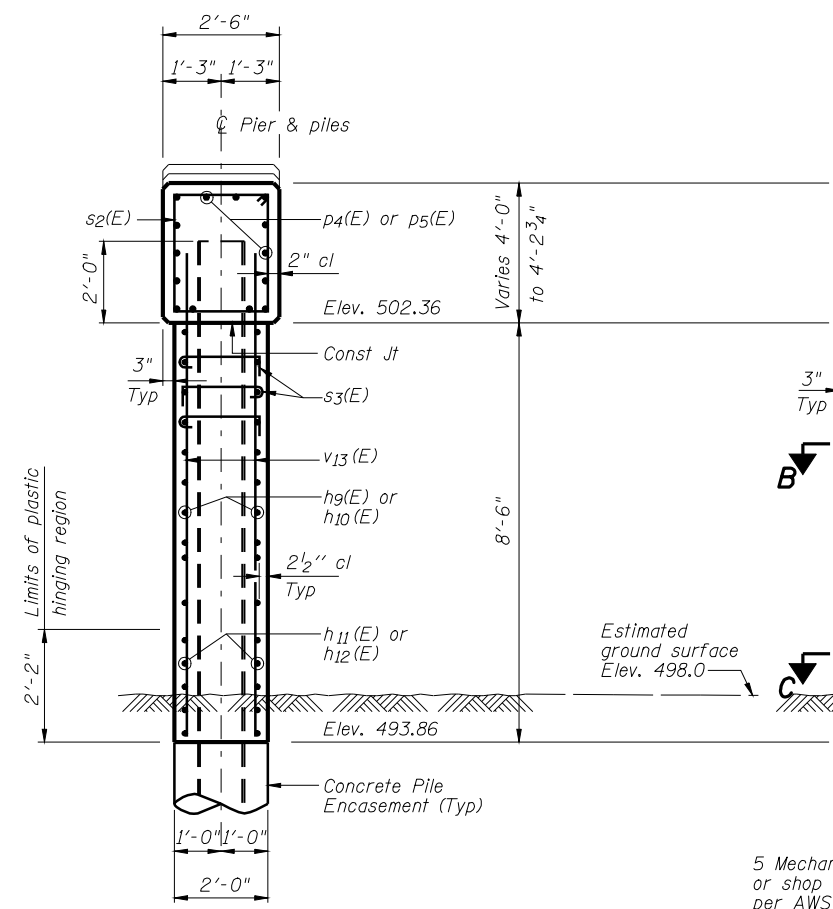
PILE DATA

Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 240 kips
Est. Length: 78'
No. Req'd: 8
Test Pile: 1

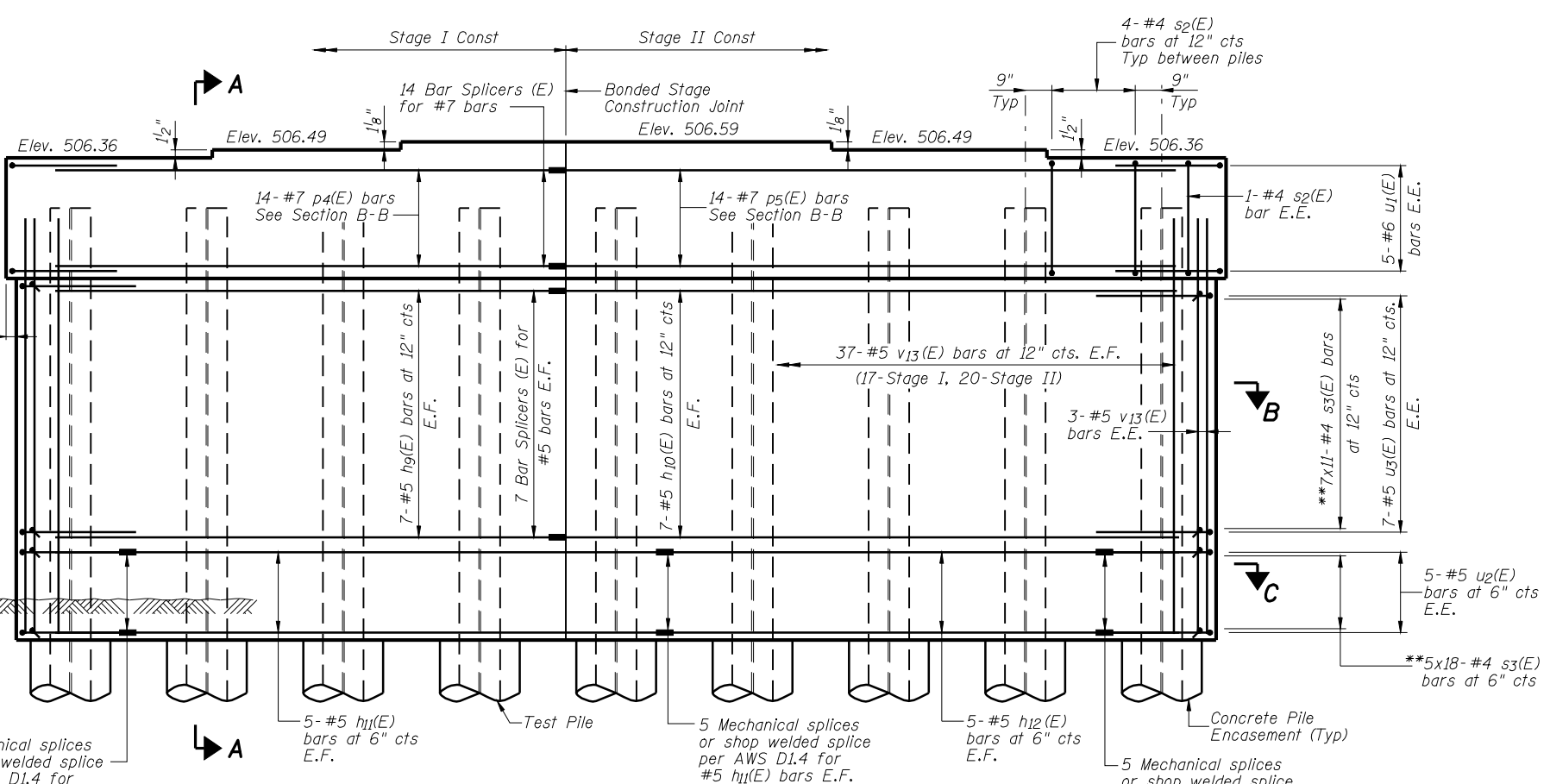


TOP PLAN

MIN BAR LAP
#5 bar = 3'-8"
#6 bar = 4'-5"



SECTION A-A



ELEVATION
(Looking Up Station)

****Note:**
The 90° hooks of two successive crossties, s3(E), shall be alternated end for end as shown in Sec A-A. For horizontal spacing see sheet 39 of 51.
Bars indicated thus 10x14-#4 etc indicates 10 lines of bars with 14 bars per line.
E.F. = Each Face E.E. = Each End

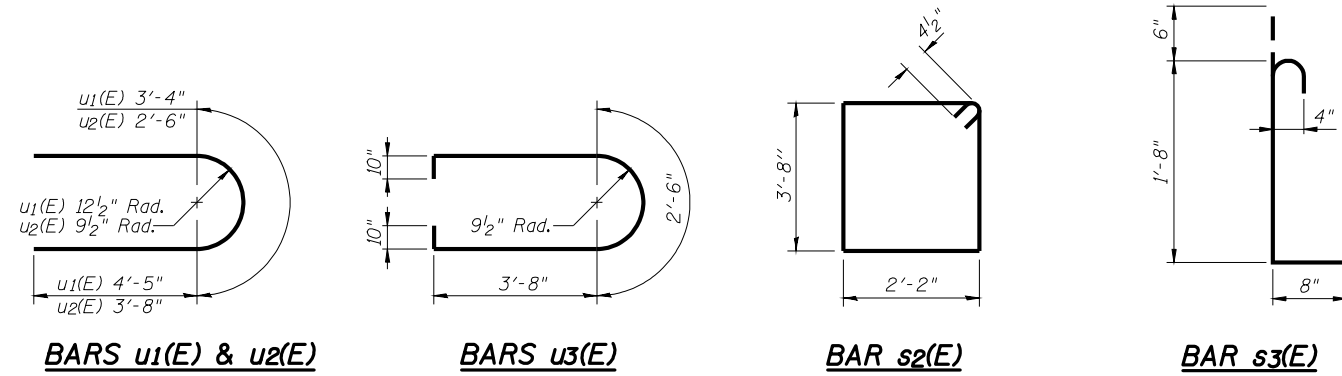
**PIER 2 DETAILS
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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SHEET NO. 38 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 68
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

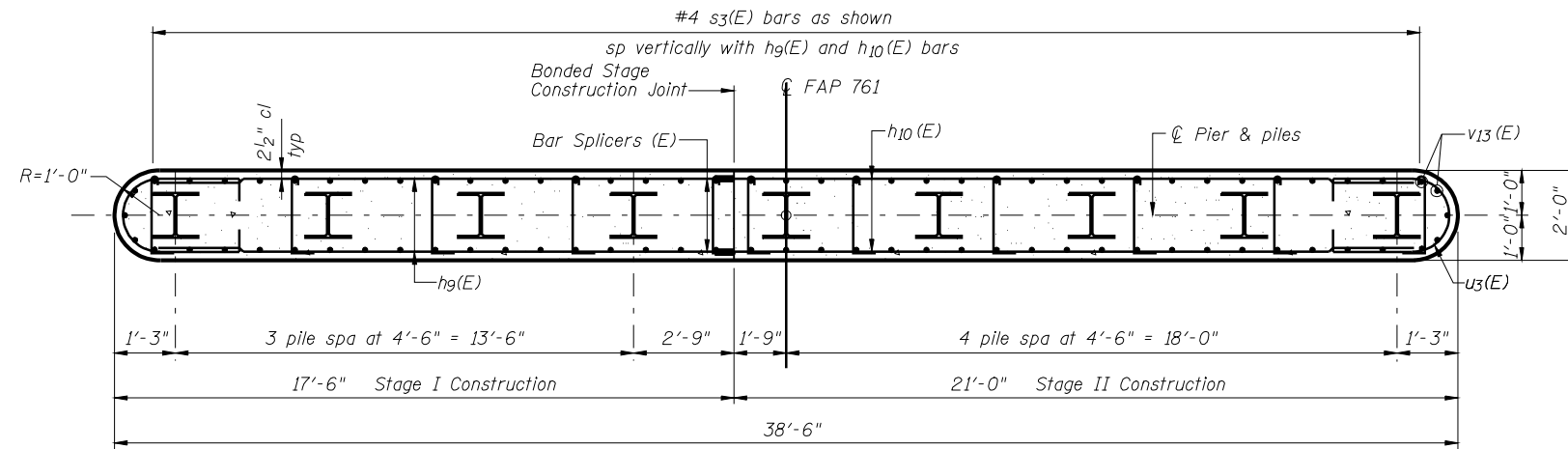
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



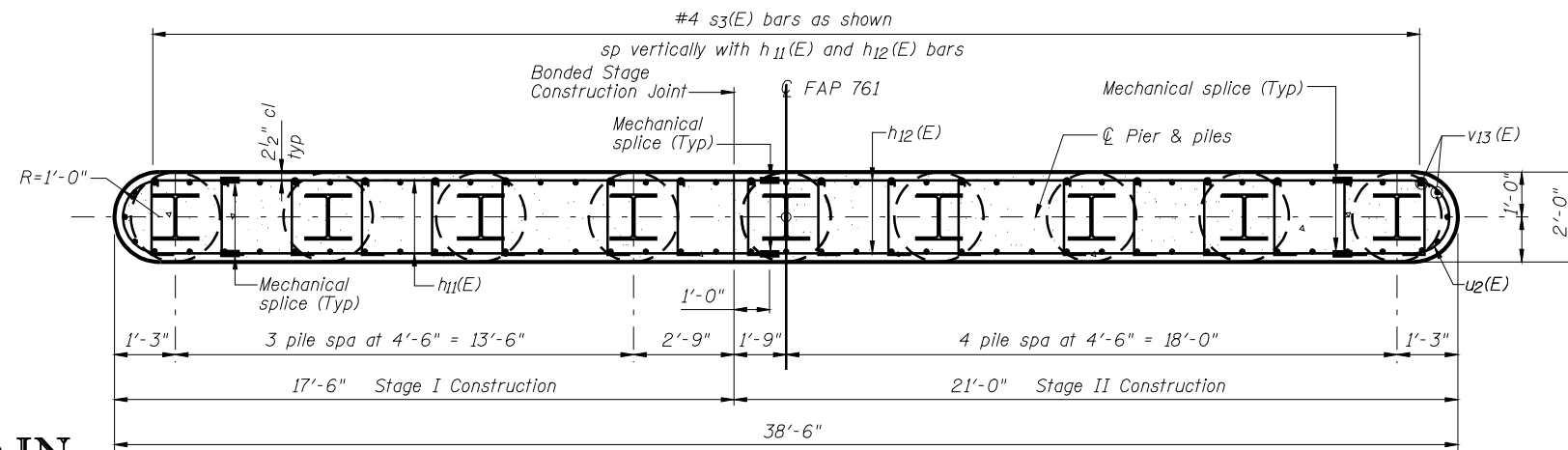
Alternate the position of the 90° hooks on the s3(E) bars in the field.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h9(E)	14	#5	16'-4"	—
h10(E)	14	#5	19'-10"	—
h11(E)	10	#5	14'-3"	—
h12(E)	10	#5	15'-9"	—
p4(E)	14	#7	16'-4"	—
p5(E)	14	#7	19'-10"	—
s2(E)	34	#4	12'-5"	⊠
s3(E)	167	#4	2'-10"	⊠
u1(E)	10	#6	12'-2"	U
u2(E)	10	#5	9'-10"	U
u3(E)	14	#5	11'-6"	U
v13(E)	80	#5	10'-3"	—
Structure Excavation	Cu. Yd.		39	
Concrete Structures	Cu. Yd.		39.0	
Reinforcement Bars, Epoxy Coated	Pound		3780	
Furnishing Steel Piles HP12x63	Foot		624	
Driving Piles	Foot		624	
Mechanical Splice	Each		30	
Concrete Encasement	Cu. Yd.		3.2	
Test Pile Steel HP12x63	Each		1	
Pile Shoes	Each		9	
Bar Splicers	Each		28	



SECTION B-B



SECTION C-C

Note:
Pier steps monolithically with cap.
For details of Bar Splicers, see sheet 45 of 51.
For details of piles and Concrete Encasement, see sheet 44 of 51.
All edges shall have standard 3/4" chamfer.
Space reinforcement in cap to miss anchor bolts.

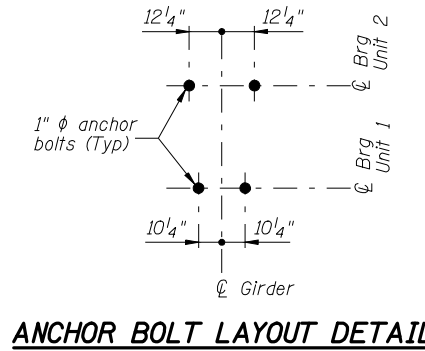
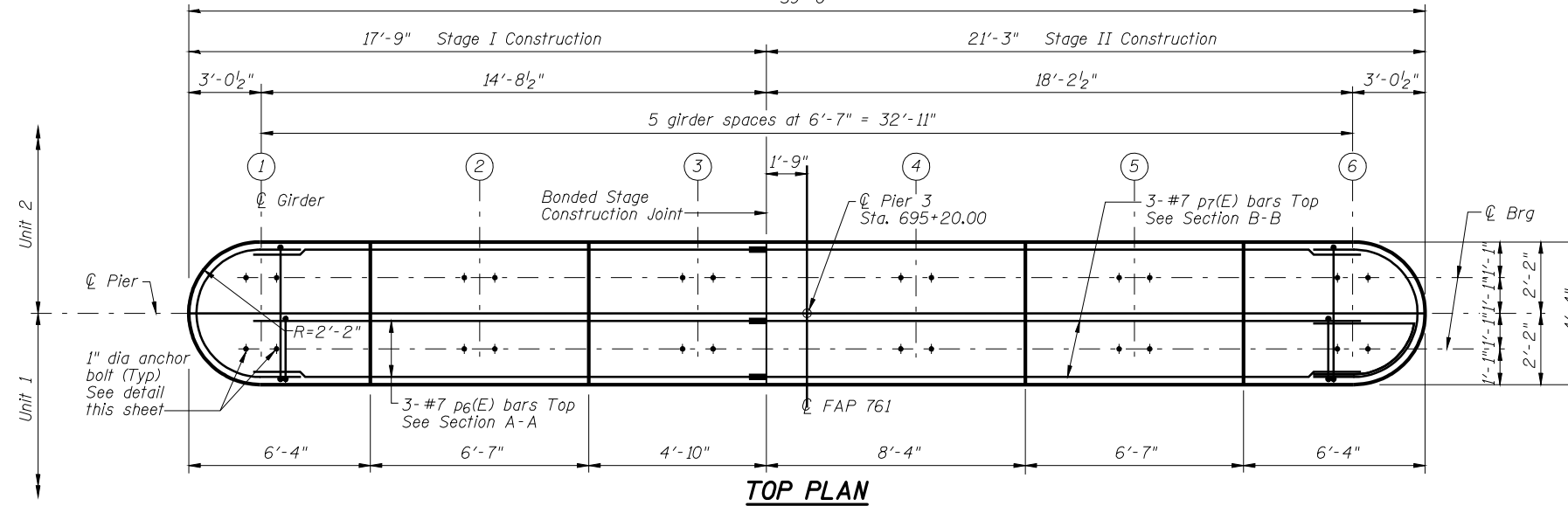
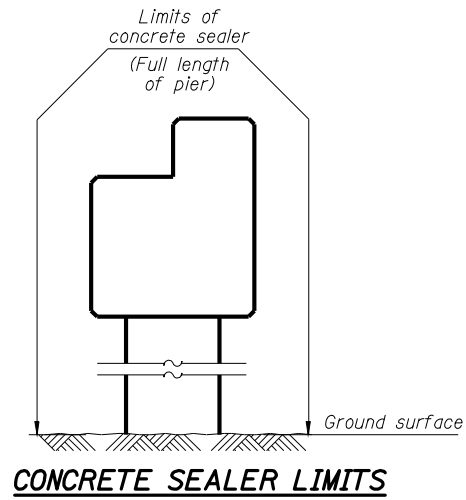
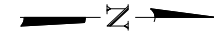
**PIER 2 DETAILS
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

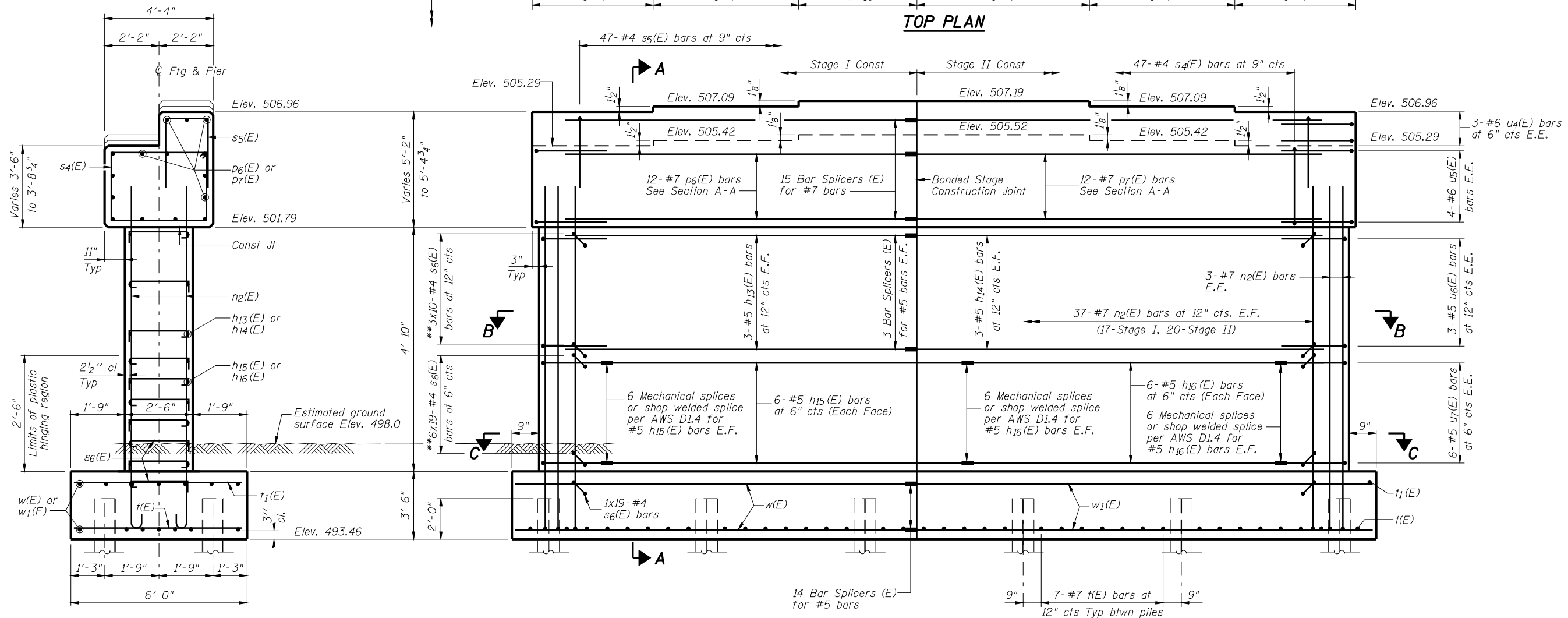
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SHEET NO. 39 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 69
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
39'-0"



MIN BAR LAP
#5 bar = 3'-8"
#6 bar = 4'-5"



DESIGNED	J.M.B.
CHECKED	T.E.S.
DRAWN	R KING
CHECKED	J.M.B.

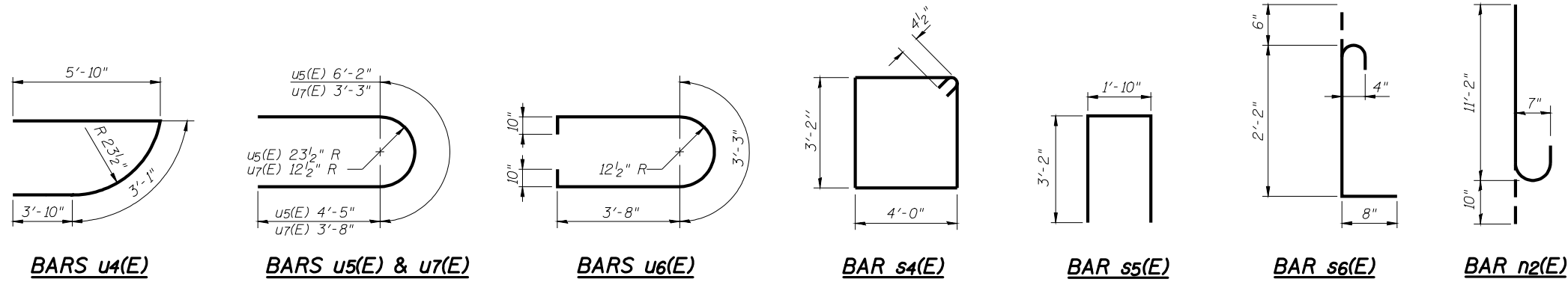
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Note:
The 90° hooks of two successive crossties, s6(E), shall be alternated end for end as shown in Sec A-A. For horizontal spacing see sheet 41 of 51.
Bars indicated thus 10x14-#4 etc indicates 10 lines of bars with 14 bars per line.
E.F. = Each Face E.E. = Each End

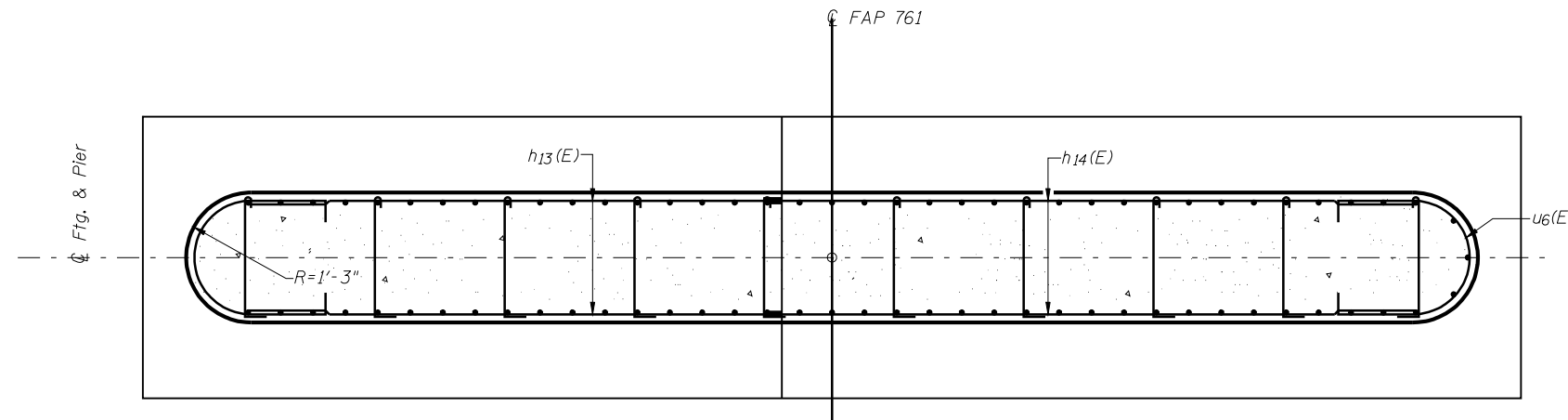
PIER 3 DETAILS
STRUCTURE NUMBER 059-0510

SHEET NO. 40 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 70
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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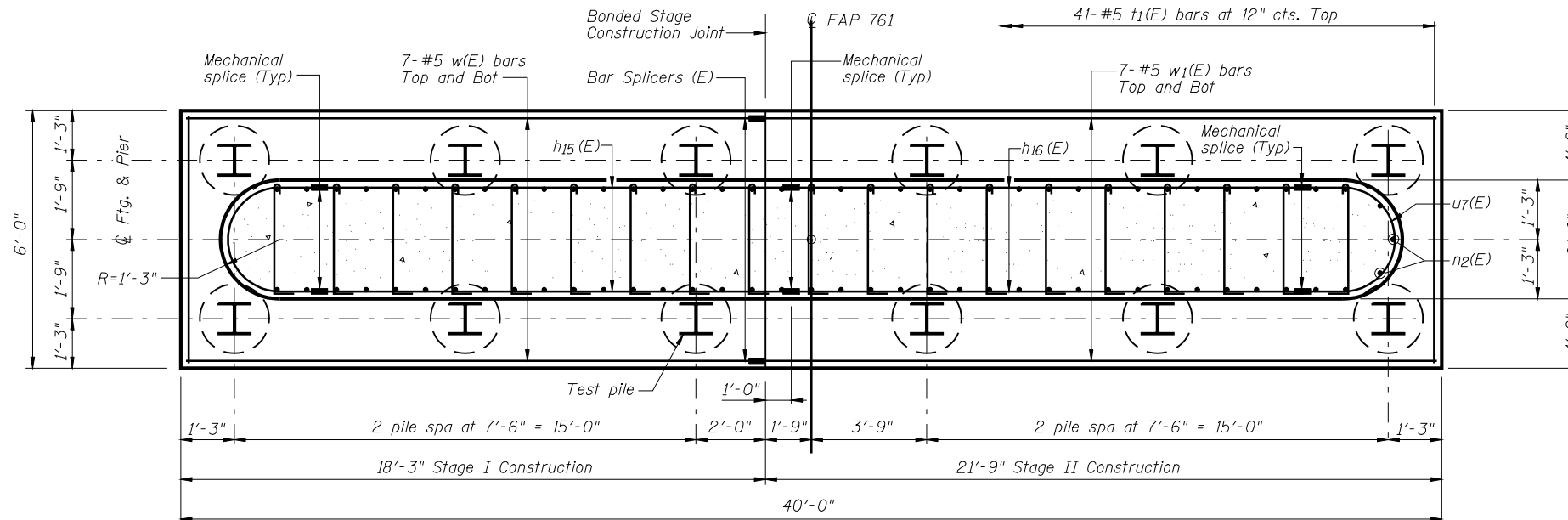
Alternate the position of the 90° hooks on the s6(E) bars in the field.



SECTION B-B

PILE DATA

Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 242 kips
Est. Length: 71'
No. Req'd: 11
Test Pile: 1



SECTION C-C

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h13(E)	6	#5	16'-1"	—
h14(E)	6	#5	19'-7"	—
h15(E)	12	#5	14'-0"	—
h16(E)	12	#5	15'-6"	—
n2(E)	80	#7	12'-0"	U
p6(E)	15	#7	15'-6"	—
p7(E)	15	#7	19'-0"	—
s4(E)	47	#4	15'-1"	—
s5(E)	47	#4	8'-2"	—
s6(E)	163	#4	3'-4"	—
t(E)	37	#7	5'-9"	—
t1(E)	41	#5	5'-9"	—
u4(E)	6	#6	12'-9"	—
u5(E)	8	#6	13'-10"	—
u6(E)	6	#5	11'-5"	—
u7(E)	12	#5	9'-9"	—
w(E)	14	#5	18'-0"	—
w1(E)	14	#5	21'-6"	—
Structure Excavation		Cu. Yd.	74	
Concrete Structures		Cu. Yd.	76.2	
Reinforcement Bars, Epoxy Coated		Pound	6440	
Furnishing Steel Piles HP12x63		Foot	781	
Driving Piles		Foot	781	
Pile Shoes		Each	12	
Test Pile Steel HP12x63		Each	1	
Concrete Sealer		Sq. Ft.	982	
Mechanical Splice		Each	36	
Bar Splicers		Each	35	

Note:
Pour steps monolithically with cap.
Reinforcement Bars designated (E) shall be epoxy coated.
For details of Bar Splicers, see sheet 45 of 51.
For details of piles see sheet 44 of 51.
All edges shall have standard 3/4" chamfer.
Space reinforcement in cap to miss anchor bolts.

(Sheet 2 of 2)

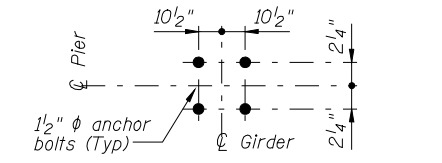
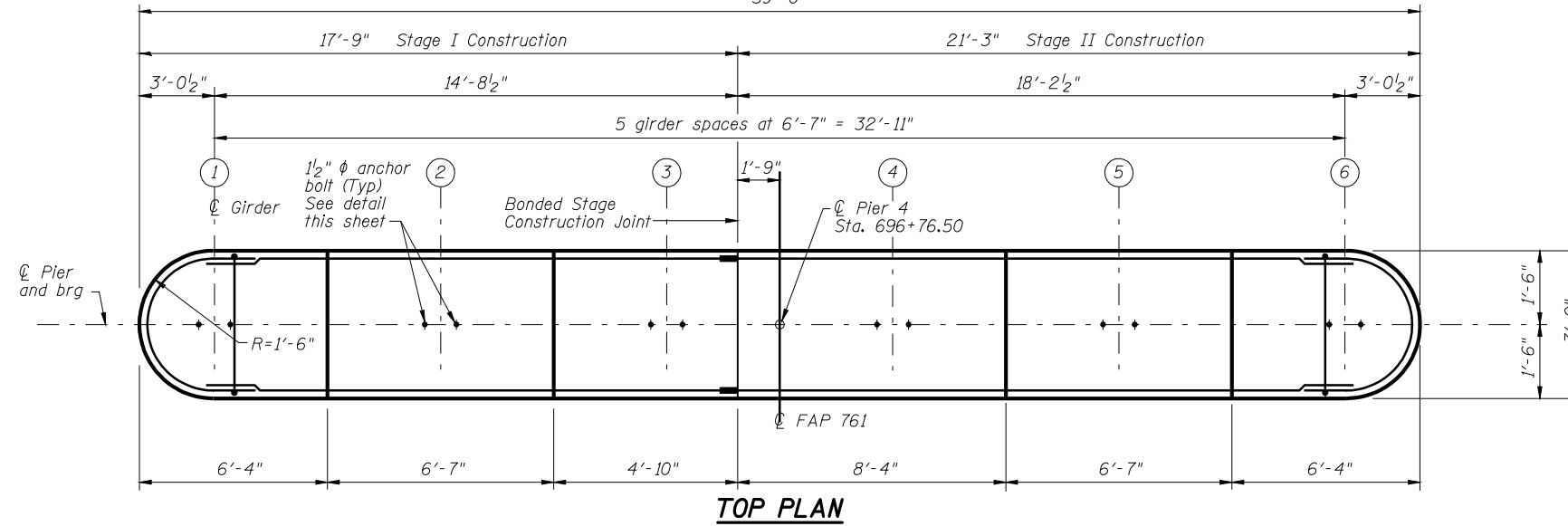
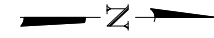
**PIER 3 DETAILS
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
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DRAWN -	R KING
CHECKED -	J.M.B.

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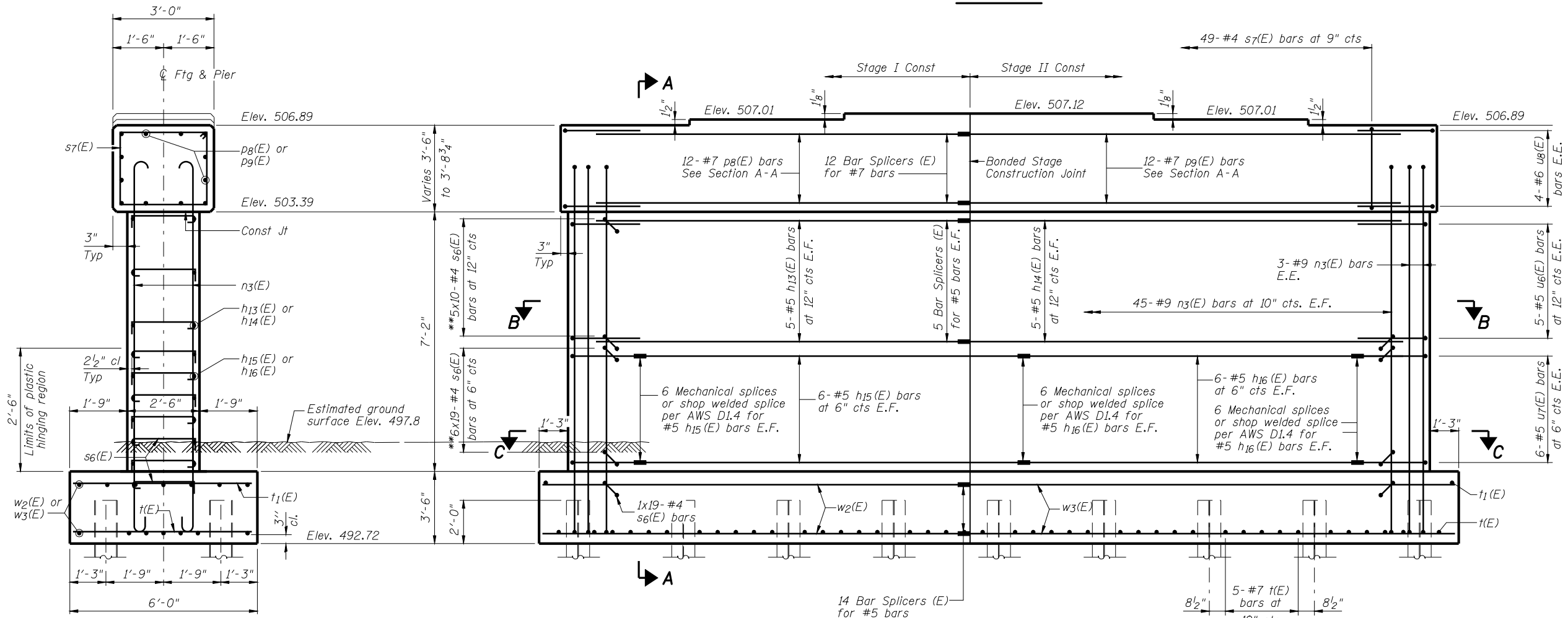
SHEET NO. 41 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 71
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
39'-0"



ANCHOR BOLT LAYOUT DETAIL

MIN BAR LAP
#5 bar = 3'-8"
#6 bar = 4'-5"



SECTION A-A

ELEVATION
(Looking Up Station)

****Note:**
The 90° hooks of two successive crossties, s₆(E), shall be alternated end for end as shown in Sec A-A. For horizontal spacing see sheet 43 of 51.
Bars indicated thus 10x14-#4 etc indicates 10 lines of bars with 14 bars per line.
E.F. = Each Face E.E. = Each End

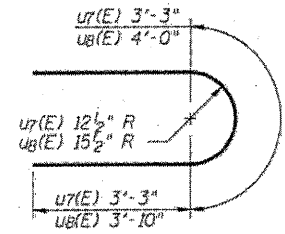
**PIER 4 DETAILS
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

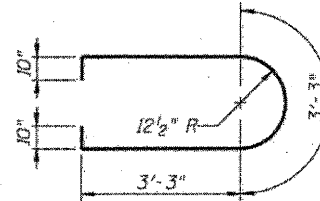
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SHEET NO. 42 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 72
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

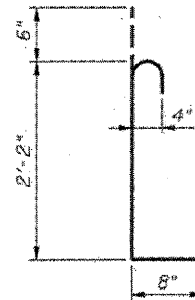
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



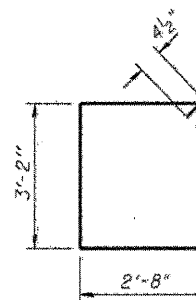
BARS u7(E) & u8(E)



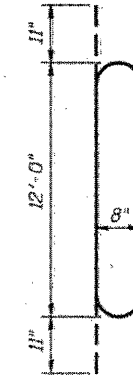
BARS u6(E)



BAR s6(E)



BAR s7(E)

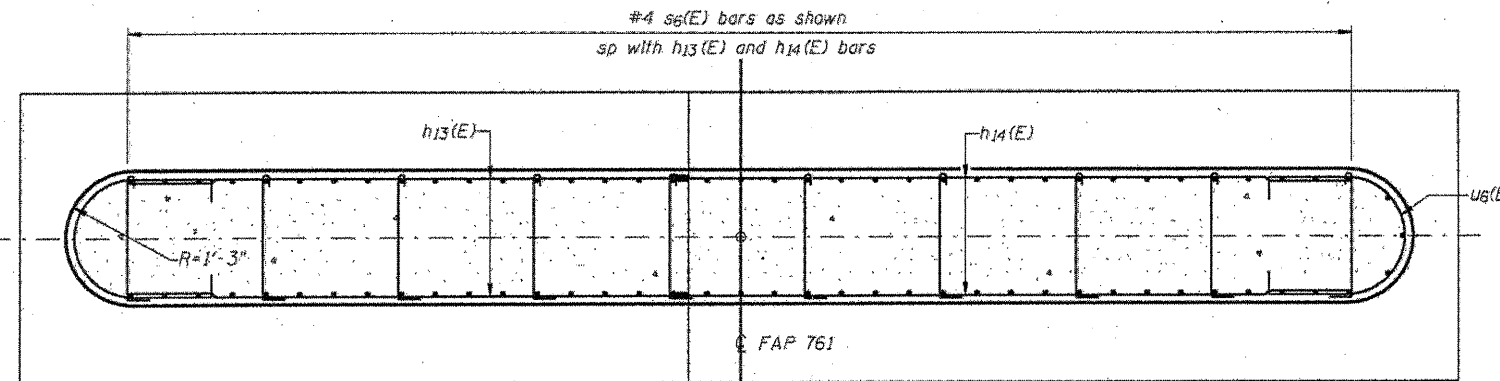


BAR n3(E)

Alternate the position of the 90° hooks on the s6(E) bars in the field.

BILL OF MATERIAL

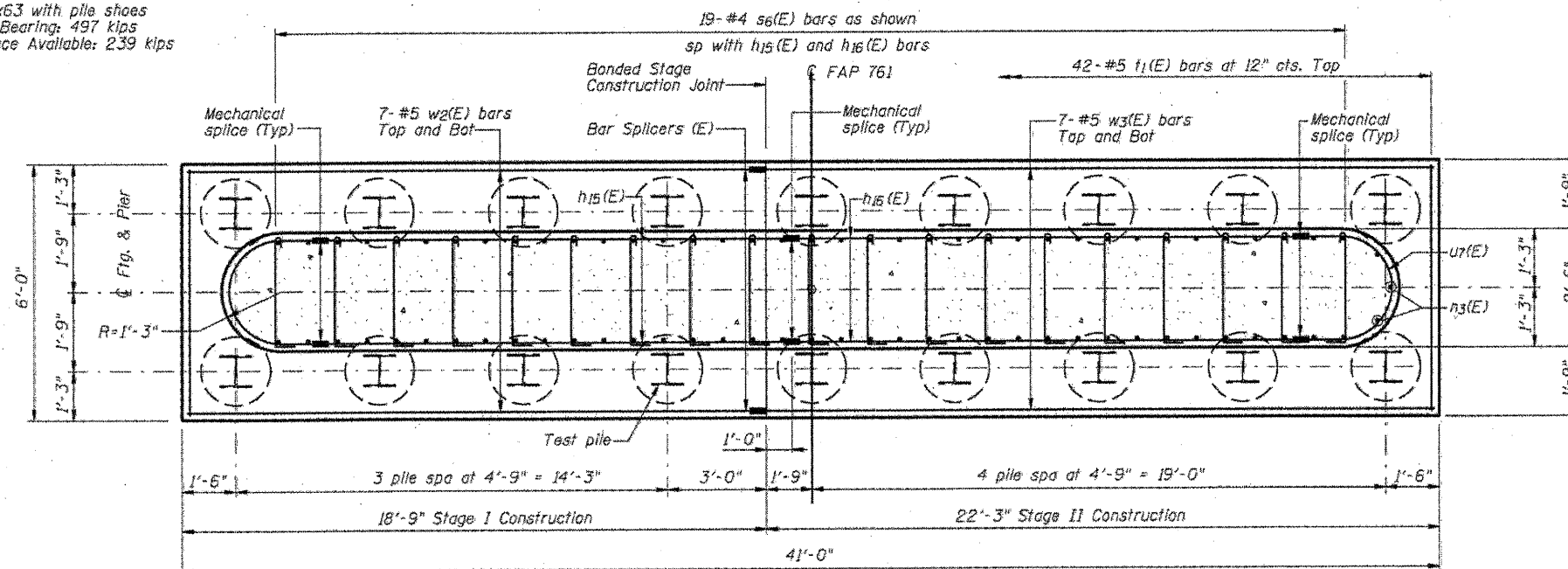
Bar	No.	Size	Length	Shape
h13(E)	10	#5	16'-1"	—
h14(E)	10	#5	19'-7"	—
h15(E)	12	#5	14'-0"	—
h16(E)	12	#5	15'-6"	—
n3(E)	96	#9	13'-10"	⊂
p8(E)	12	#7	16'-2"	—
p9(E)	12	#7	19'-8"	—
s6(E)	183	#4	3'-4"	⊂
s7(E)	49	#4	12'-5"	⊂
t1(E)	42	#7	5'-9"	—
t1(E)	42	#5	5'-9"	—
u6(E)	10	#5	11'-5"	⊂
u7(E)	12	#5	9'-9"	⊂
u8(E)	8	#6	11'-8"	⊂
w2(E)	14	#5	18'-6"	—
w3(E)	14	#5	22'-0"	—
Structure Excavation		Cu. Yd.	84	
Concrete Structures		Cu. Yd.	73.0	
Reinforcement Bars, Epoxy Coated		Pound	8670	
Furnishing Steel Piles HP12x63		Foot	1139	
Driving Piles		Foot	1139	
Pile Shoes		Each	18	
Test Pile Steel HP12x63		Each	1	
Concrete Encasement		Cu. Yd.	5.5	
Mechanical Splice		Each	36	
Bar Splicers		Each	36	



SECTION B-B

PILE DATA

Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 239 kips
Est. Length: 67'
No. Req'd: 17
Test Pile: 1



SECTION C-C

Note:
Four steps monolithically with cap.
Reinforcement Bars designated (E) shall be epoxy coated.
For details of Bar Splicers, see sheet 45 of 51.
For details of piles see sheet 44 of 51.
All edges shall have standard 3/4" chamfer.
Space reinforcement in cap to miss anchor bolts.

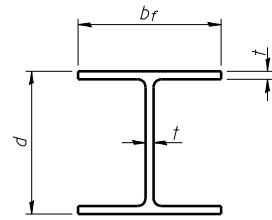
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DRAWN -	R KING
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(Sheet 2 of 2)
PIER 4 DETAILS
STRUCTURE NUMBER 059-0510

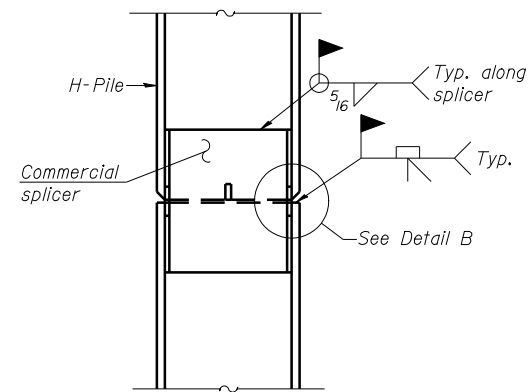
SHEET NO. 43 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	73
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

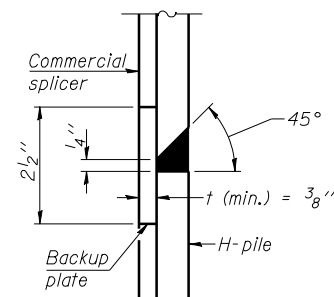


STEEL PILE TABLE

Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 3/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

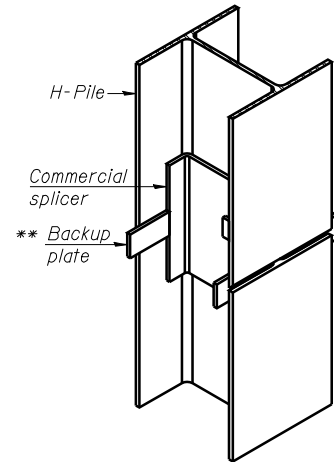


ELEVATION

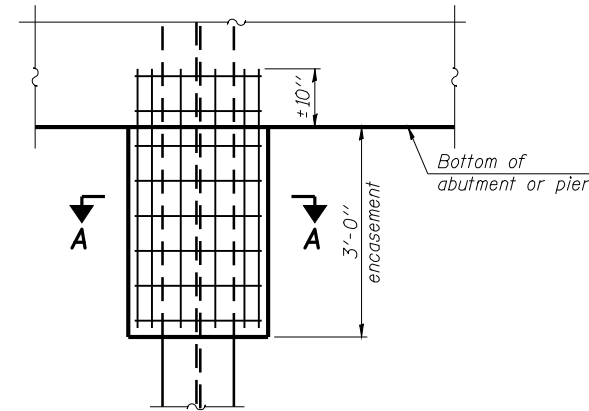


DETAIL "B"

WELDED COMMERCIAL SPLICE

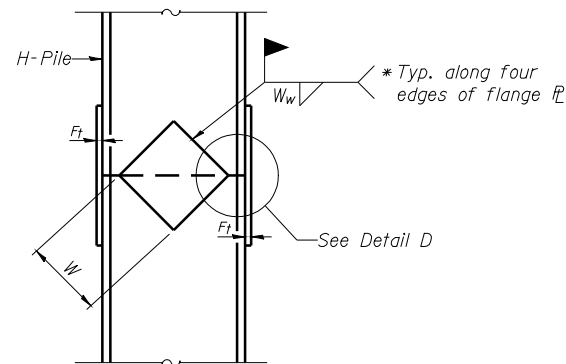


ISOMETRIC VIEW

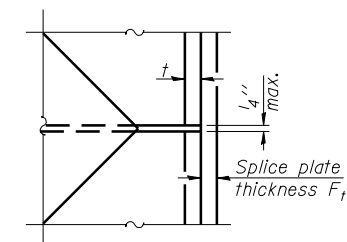


ELEVATION

PILE ENCASEMENT

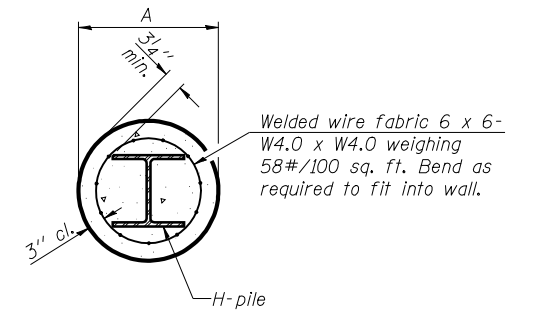


ELEVATION



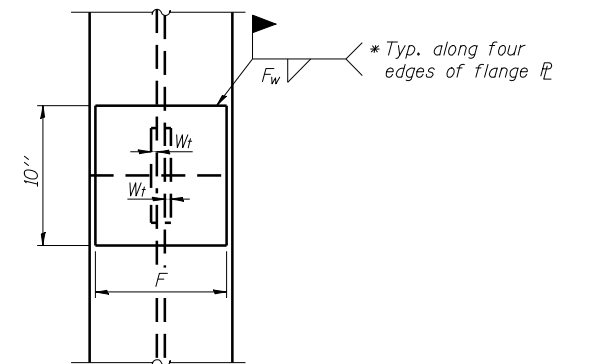
DETAIL D

WELDED PLATE FIELD SPLICE



SECTION A-A

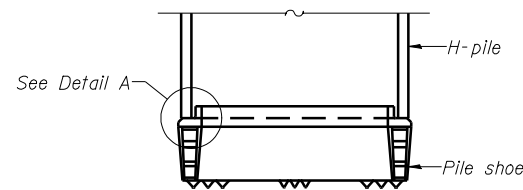
Note:
Forms for encasement may be omitted when soil conditions permit.



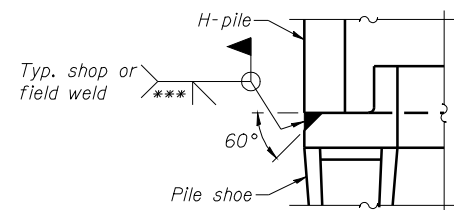
END VIEW

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 1/2"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 1/2"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5 1/2"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 1/2"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5 1/2"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5 1/2"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

**STEEL HP PILE DETAILS
STRUCTURE NUMBER 059-0510**

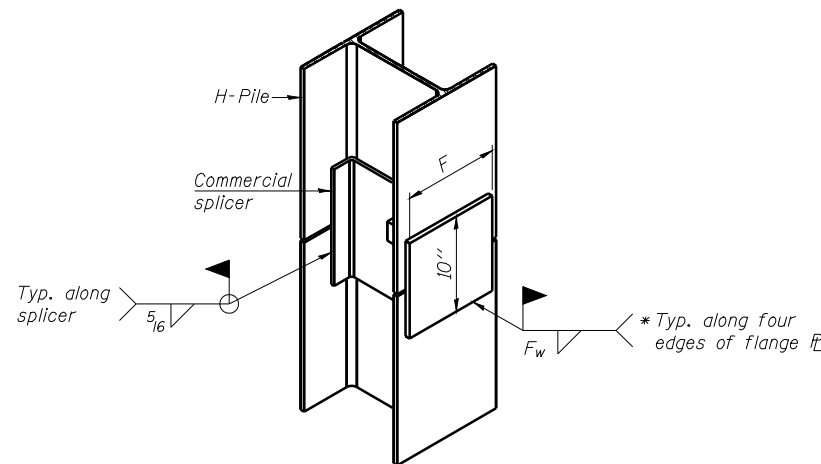


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

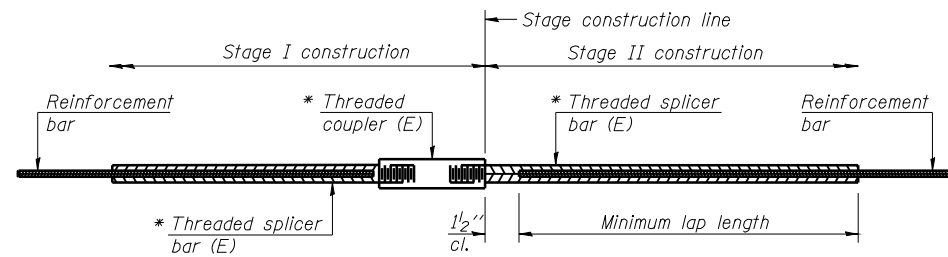
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DRAWN -	R KING
CHECKED -	J.M.B.

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F-HP 11-1-09 184-001397

SHEET NO. 44 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	74
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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STANDARD BAR SPLICER ASSEMBLY

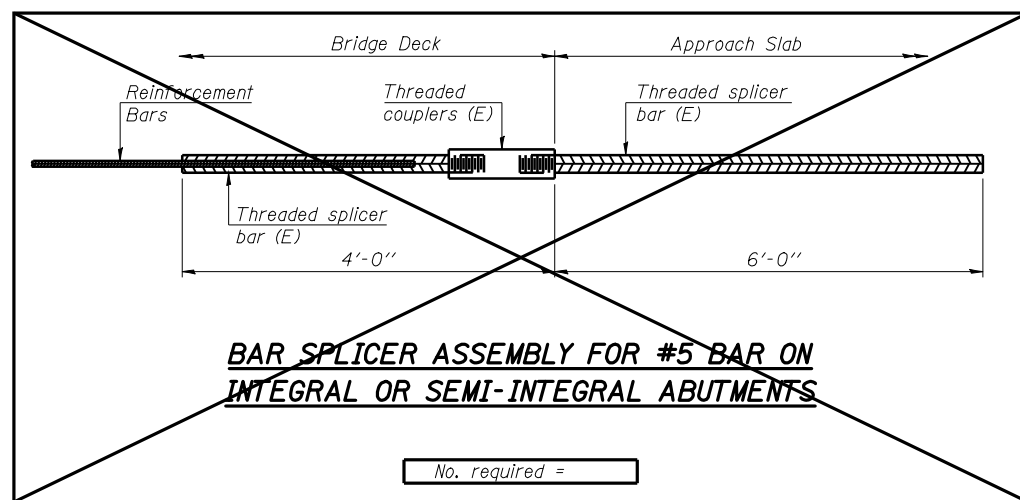
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

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

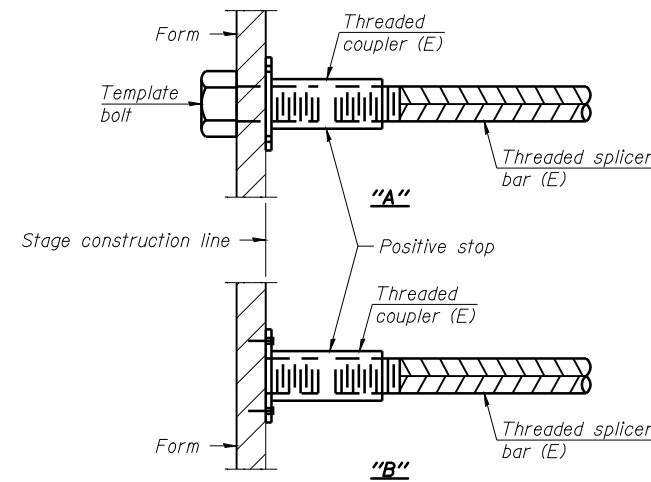
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Approach slab	#4	50	3
Approach slab	#5	172	3
Unit 1 deck	#5	783	3
Unit 2 deck	#5	959	3
Abutments	#5	20	4
Abutments	#6	10	4
Abutments	#7	20	4
Piers	#5	78	4
Piers	#7	55	4



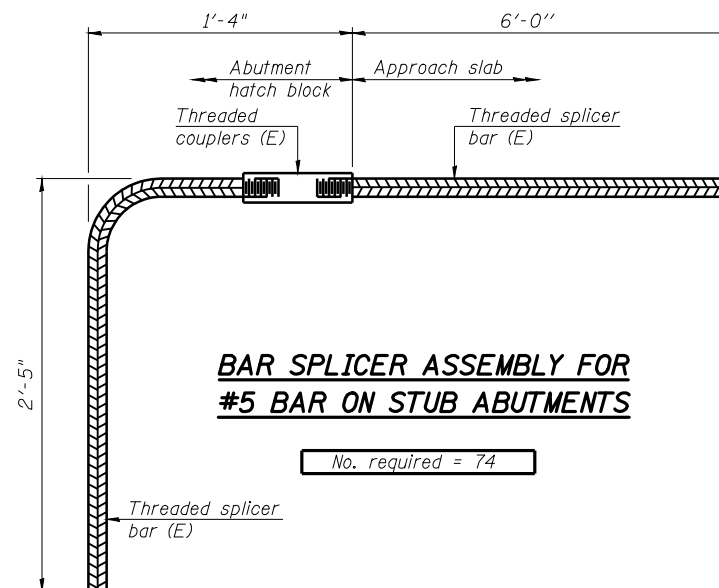
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



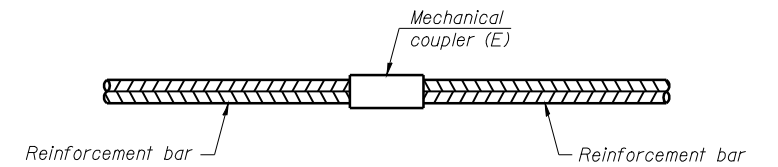
INSTALLATION AND SETTING METHODS

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



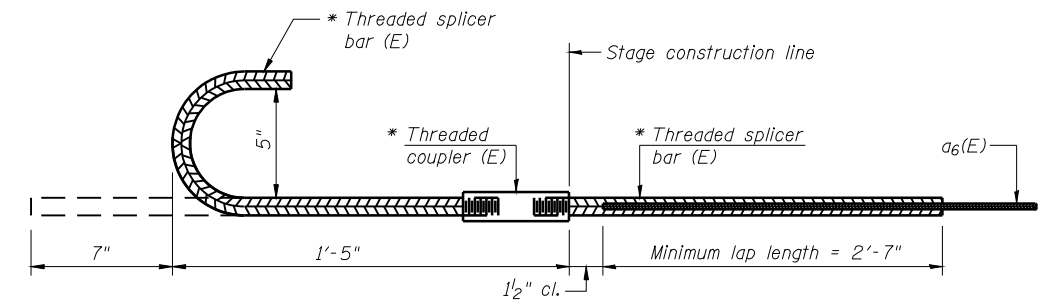
BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 74



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1	#5	36
Pier 2	#5	30
Pier 3	#5	36
Pier 4	#5	36



EDGE BEAM BAR SPLICER ASSEMBLY

Location	Bar size	No. assemblies required
Unit 1 deck	#5	6
Unit 2 deck	#5	6

NOTES

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

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NUMBER 059-0510**

DESIGNED -	J.M.B.
CHECKED -	T.E.S.
DRAWN -	R KING
CHECKED -	J.M.B.

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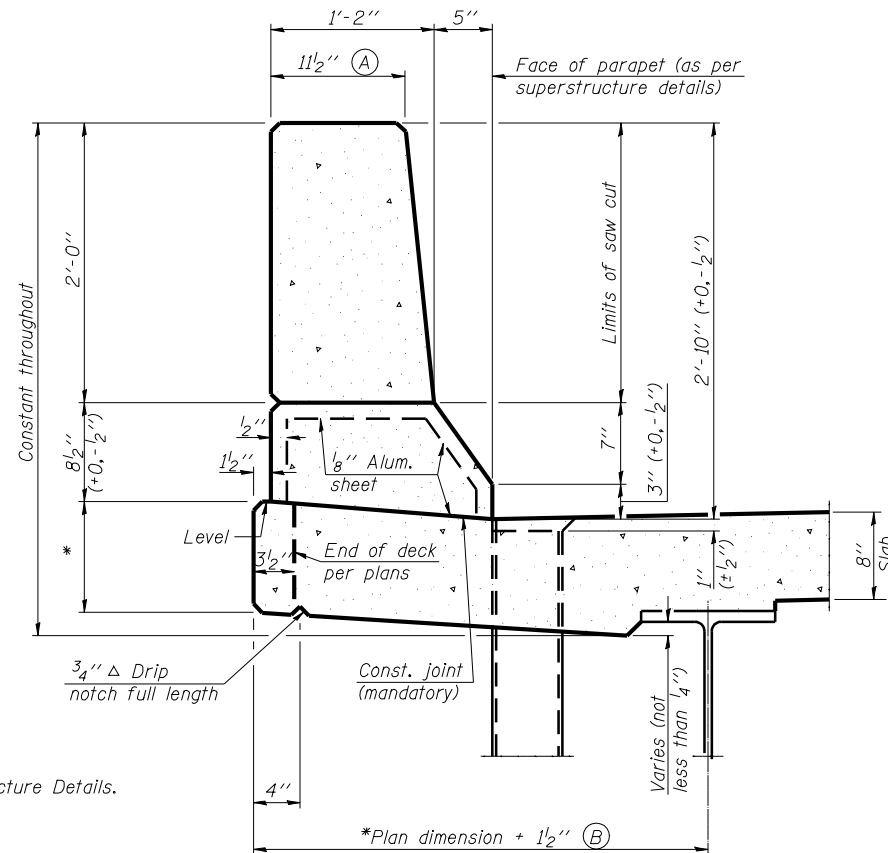
184-001397

BSD-1

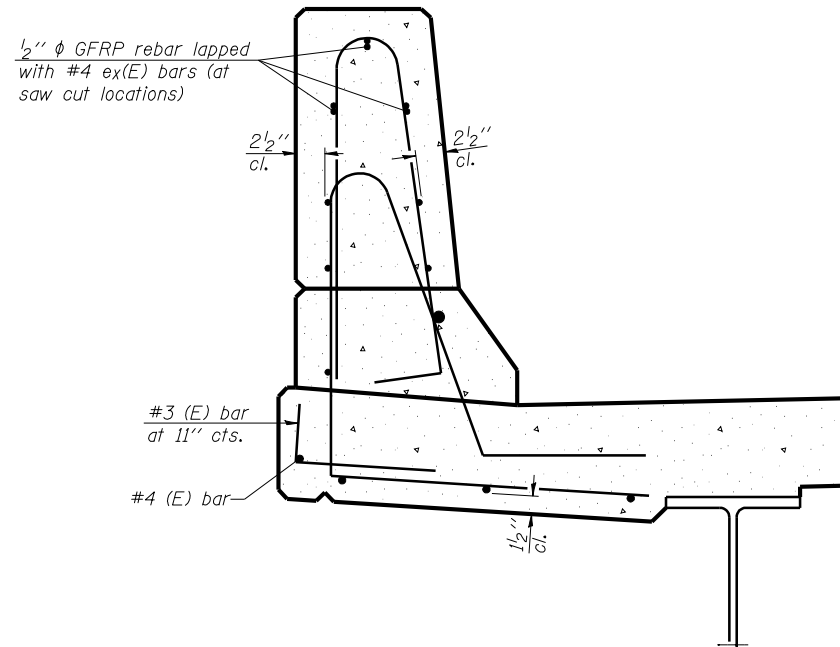
11-1-09

SHEET NO. 45 OF 51 SHEETS	F.A.P. RTE. 761	SECTION 107B-2	COUNTY MACOUPIN	TOTAL SHEETS 98	SHEET NO. 75
	FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

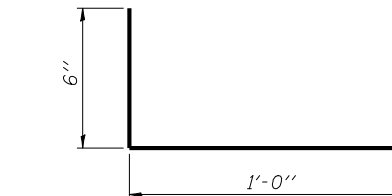
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



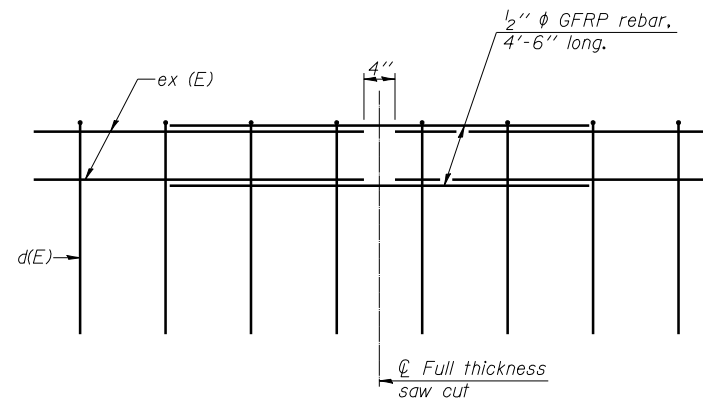
SECTION
(Showing dimensions)



SECTION
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

GENERAL NOTES
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. of parapet.
Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.
Steel superstructure shown. Other superstructure types similar.

* See Superstructure Details.

DESIGNED -	J.M.B.
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DRAWN -	R KING
CHECKED -	J.M.B.

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SFP-34

11-1-09

184-001397

**CONCRETE PARAPET
SLIPFORMING OPTION
STRUCTURE NUMBER 059-0510**

SHEET NO. 46 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	76
FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Page 1 of 2

SOIL BORING LOG

Date 1-22-09/2-5-09

ROUTE FAP 761 DESCRIPTION IL 108 Over Hodges Creek, Pier 1 LOGGED BY M. Tappan

SECTION 107B-2 LOCATION NE 1/4, SEC. 21, TWP. 10N, RNG. 9W, 3 PM

COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O I S T
059-0510 695+48.88					489.8 486.3				
BORING NO. <u>B-P1</u> Station <u>693+62</u> Offset <u>48.0ft LT</u> Ground Surface Elev. <u>495.5</u>					Groundwater Elev.: First Encounter <u>489.0</u> Upon Completion <u>Washed</u> After 20 Days/Hrs. <u>494.5</u>				
Brownish Gray Moist SILTY CLAY	1				474.50	0			
	2	1.4		24		1	0.3		28
	2	B			472.50				
Gray V. Moist SILTY CLAY	1	0.2		32		1			
	1	B				2			
	-5								
Gray Wet SILTY CLAY LOAM	0	0.0		33					
	0								
	0								
	0	0.0		36		2			
	0					5			
	-10					6			
w/ Gray Wet Loam Seams	0	0.0		33					
	0								
	0								
Gray Med SAND	0					2			
	0					3			
	-13					5			
Washed	1								
	1								
	2								
Gray Dirty Med SAND	1					5			
	2					10			
	-20					14			

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

Page 2 of 2

SOIL BORING LOG

Date 1-22-09/2-5-09

ROUTE FAP 761 DESCRIPTION IL 108 Over Hodges Creek, Pier 1 LOGGED BY M. Tappan

SECTION 107B-2 LOCATION NE 1/4, SEC. 21, TWP. 10N, RNG. 9W, 3 PM

COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O I S T
059-0510 695+48.88					489.8 486.3				
BORING NO. <u>B-P1</u> Station <u>693+62</u> Offset <u>48.0ft LT</u> Ground Surface Elev. <u>495.5</u>					Groundwater Elev.: First Encounter <u>489.0</u> Upon Completion <u>Washed</u> After 20 Days/Hrs. <u>494.5</u>				
Washed Gray Fine SAND					436.00				
Washed (continued)									
Dk Gray Moist SILTY CLAY (Till)	2				452.50	100/5			11
	4	1.9		20					
	-45	5	B						
Gray Moist LOAM	3					100/4			10
	5	2.0		15					
	-58	8	B						
Gray Fine SAND	0								
	2								
	8								

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

Page 1 of 2

SOIL BORING LOG

Date 2/6/09

ROUTE FAP 761 DESCRIPTION IL 108 Over Hodges Creek, Pier 2 LOGGED BY M. Tappan

SECTION 107B-2 LOCATION NE 1/4, SEC. 21, TWP. 10N, RNG. 9W, 3 PM

COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O I S T
059-0510 695+48.88					489.8 486.3				
BORING NO. <u>B-P2</u> Station <u>694+59</u> Offset <u>31.0ft LT</u> Ground Surface Elev. <u>498.3</u>					Groundwater Elev.: First Encounter <u>491.8</u> Upon Completion <u>Washed</u> After 19 Days/Hrs. <u>495.3</u>				
Brownish Gray Moist SILTY CLAY	1								
	4	1.8		23					
	3	B							
Gray Dirty Med SAND	2								
	0								
	2								
	3	1.0		25					
	-5	2	B						
Gray Dirty Med SAND w/ 3" Seam of Gray V Moist Silty Clay Loam	1								
	-25								
Washed									
Grayish Brown V Moist LOAM	0								
FREE WATER	0	0.1		31					
	1	B							
	0								
	0	0.0		27					
	0								
	-19	0							
Gray Med SAND	1								
	2								
	-30								
Grayish Brown Dirty Fine SAND	0								
	0								
	-18	1							
Gray Fine to Med SAND w/ 4" Gray V Moist Silt Seam	2								
	3								
	-35								
Gray Med to Coarse SAND	1								
	1								
	1								
Gray Dirty Med SAND	0								
	1								
	-1								

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

DESIGNED	J.M.B.
CHECKED	T.E.S.
DRAWN	R KING
CHECKED	J.M.B.

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**SOIL BORING LOGS
STRUCTURE NUMBER 059-0510**

SHEET NO. 48 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	78
	FAP ROUTE 761 (IL RT 108)			CONTRACT NO. 72A94	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Page 1 of 2

SOIL BORING LOG

Illinois Department of Transportation
Division of Highways
District 6

ROUTE FAP 761 DESCRIPTION IL 108 Over Hodges Creek, Pier 4 LOGGED BY M. Tappan
SECTION 107B-2 LOCATION NE 1/4, SEC. 21, TWP. 10N, RNG. 9W, 3 PM
COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 059-0510 Surface Water Elev. 489.8 ft
Station 695+48.88 Stream Bed Elev. 486.3 ft

BORING NO. B-P4 Groundwater Elev.:
Station 696+80 First Encounter 481.2 ft
Offset 30.0ft LT Upon Completion Washed ft
Ground Surface Elev. 497.7 ft (ft) /6" (tsf) (%) After 35 Days/Hrs. 492.7 ft (ft) /6" (tsf) (%)

DEPTH (ft)	BULGE	S-SHEAR	P-PENETROMETER	ESTIMATED	DESCRIPTION	DEPTH (ft)	BULGE	S-SHEAR	P-PENETROMETER	ESTIMATED
0					Dk Gray Moist SILTY CLAY (Disturbed) w/ Broken Concrete	0				
3						5				
6						3				
8	2.1		12			2				
8	S-14					6				
12						4				
15						3				
18						25				
21						3				
24						3				
27						3				
30						3				
33						1				
36						1				
39						3				
42						3				
45						3				
48						2				
51						2				
54						2				
57						2				
60						2				
63						2				
66						2				
69						2				
72						2				
75						2				
78						2				
81						2				
84						2				
87						2				
90						2				
93						2				
96						2				
99						2				
102						2				
105						2				
108						2				
111						2				
114						2				
117						2				
120						2				
123						2				
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267						2				
270						2				
273						2				
276						2				
279						2				
282						2				
285						2				
288						2				
291						2				
294						2				
297						2				
300						2				

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

Page 2 of 2

SOIL BORING LOG

Illinois Department of Transportation
Division of Highways
District 6

ROUTE FAP 761 DESCRIPTION IL 108 Over Hodges Creek, Pier 4 LOGGED BY M. Tappan
SECTION 107B-2 LOCATION NE 1/4, SEC. 21, TWP. 10N, RNG. 9W, 3 PM
COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 059-0510 Surface Water Elev. 489.8 ft
Station 695+48.88 Stream Bed Elev. 486.3 ft

BORING NO. B-P4 Groundwater Elev.:
Station 696+80 First Encounter 481.2 ft
Offset 30.0ft LT Upon Completion Washed ft
Ground Surface Elev. 497.7 ft (ft) /6" (tsf) (%) After 35 Days/Hrs. 492.7 ft (ft) /6" (tsf) (%)

DEPTH (ft)	BULGE	S-SHEAR	P-PENETROMETER	ESTIMATED	DESCRIPTION	DEPTH (ft)	BULGE	S-SHEAR	P-PENETROMETER	ESTIMATED
0					LI Brownish Gray to Gray Moist SILTY CLAY Interbedded w/ Gray Silt Seams and Organics (continued)	0				
3						5				
6						3				
9						2				
12						6				
15						4				
18						3				
21						25				
24						3				
27						3				
30						3				
33						3				
36						3				
39						3				
42						3				
45						3				
48						3				
51						3				
54						3				
57						3				
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72						3				
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171						3				
174						3				
177						3				
180										

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Illinois Department
of Transportation
Division of Highways
District 6

SOIL BORING LOG

Page 2 of 2

Date 2/24/09

ROUTE FAP 761 DESCRIPTION IL 108 Over Hodges Creek, West Abutment LOGGED BY M. Tappan

SECTION 107B-2 LOCATION NE 1/4, SEC. 21, TWP. 10N, RNG. 9W, 3 PM

COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 059-0510
Station 695+46.88
BORING NO. B-WA
Station 696+58
Offset 7.0ft RT
Ground Surface Elev. 516.0 ft

Surface Water Elev. 489.8 ft
Stream Bed Elev. 486.3 ft
Groundwater Elev.:
First Encounter No Encounter ft
Upon Completion Water Added ft
After Hrs. Plugged ft

D B U M
E L O C
P O S
T W S
H S Qu T

D B U M
E L O C
P O S
T W S
H S Qu T

Soil Description	(ft)	/6"	(tsf)	(%)	(ft)	/6"	(tsf)	(%)
Gray and Olive Brown Moist CLAY LOAM (Till) Added Water to Boring (continued)	2		5.4	16				
	13							
	48	11	B					
Gray and Olive Brown Moist SILTY CLAY (Till) w/ Slickensides	2		3.0	22				
	8							
	10		S-12					
Gray Moist CLAY LOAM (Till)	1							
	6		3.7	17				
	12		B					
w/ Woody Organics	2		3.0	21				
	5							
	7		B					

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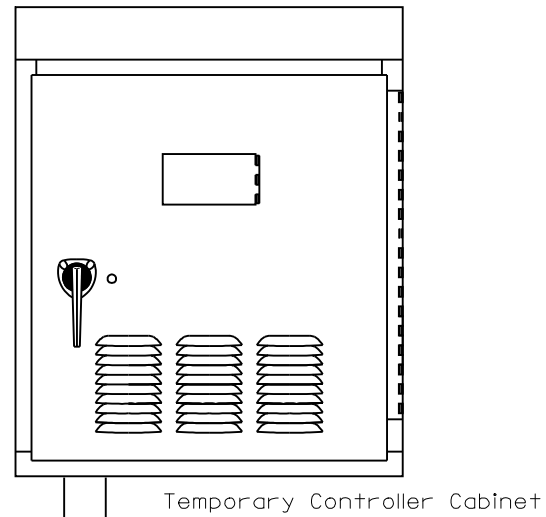
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CHECKED	T.E.S.
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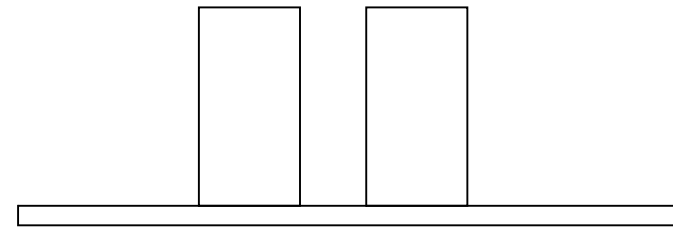
HOMER L. CHASTAIN & ASSOCIATES, LLP
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 ROCKFORD (815) 489-0050
 184-001597

SOIL BORING LOGS
STRUCTURE NUMBER 059-0510

SHEET NO. 51 OF 51 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	761	107B-2	MACOUPIN	98	81
FAP ROUTE 761 (IL RT 108)		CONTRACT NO. 72A94			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		



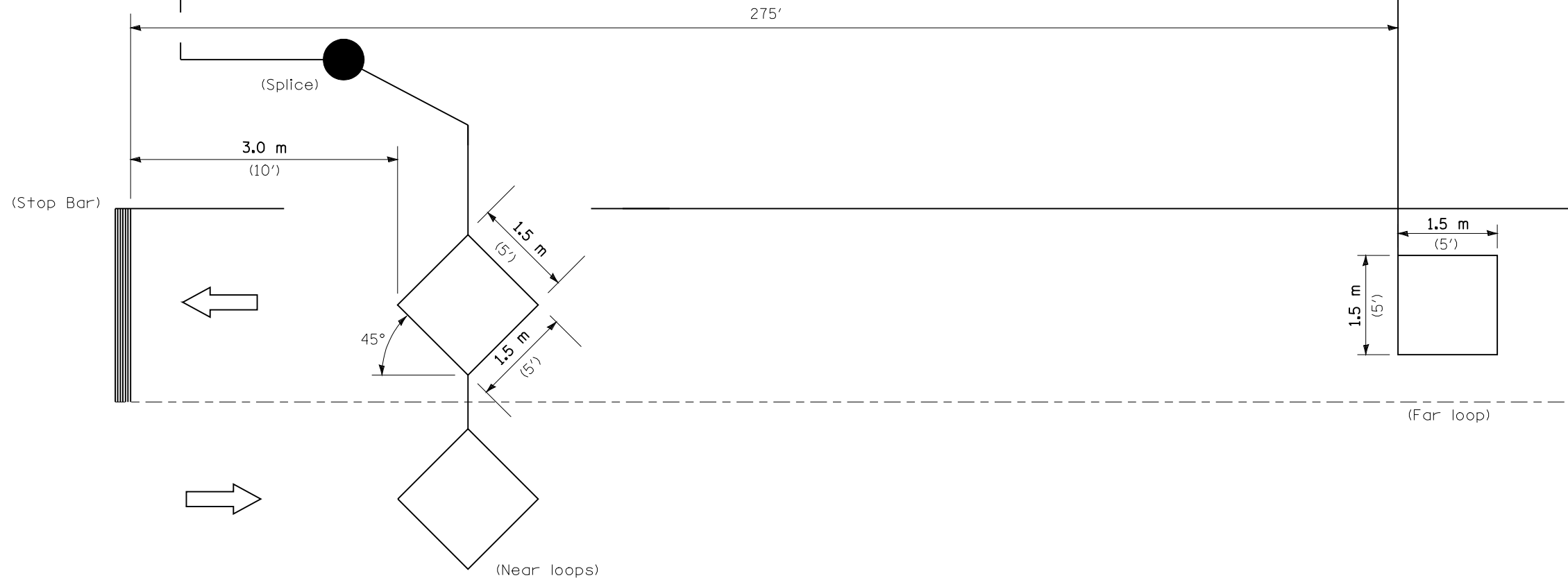
DETECTOR AMPLIFIER NOTES



AMP 1 (NEAR LOOPS) AMP 2 (FAR LOOP)

AMP 1: DELAY = 8 SECONDS
DELAY SHALL BE INHIBITED DURING GREEN

AMP 2: NO DELAY



NOTE: All loops centered in lane.

INDUCTION LOOP DETECTOR

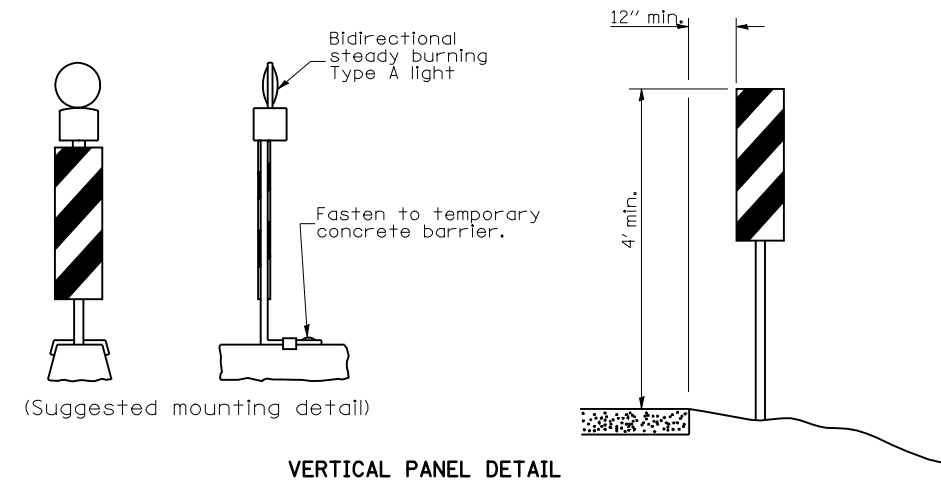
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

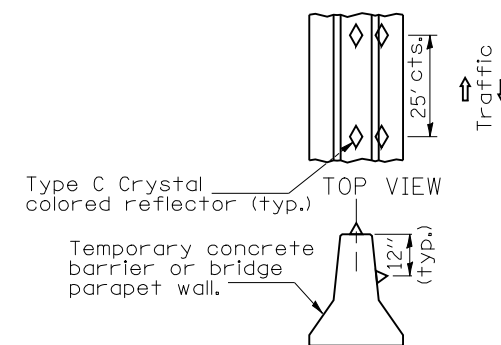
TRAFFIC CONTROL
MAINTENANCE OF TRAFFIC DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	82
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	



VERTICAL PANEL DETAIL



BARRIER WALL REFLECTORS DETAIL

GENERAL NOTES

This Standard is used where, at any time any vehicle, equipment, workers, or their activities will encroach on one lane of a bridge. Traffic signals and a positive barrier are required.

Temporary concrete barrier shall be according to Standard 704001.

Bi-directional lights shall be used at night along the centerline where the work area is separated from the travel lane using barricades or drums. Monodirectional lights shall be used at night on all other barricades or drums.

Existing or temporary pavement marking shall be on both sides of the open lane from stop bar to stop bar.

Actual Max Widths are to be measured by the Engineer after temporary concrete barrier wall is placed for Stage 1. Width shall be remeasured and signs updated for Stage 2.

Highway Standard 701321 shall be referenced for additional information.

Actual distances for Max Widths signs are to be verified by the Engineer prior to being placed.

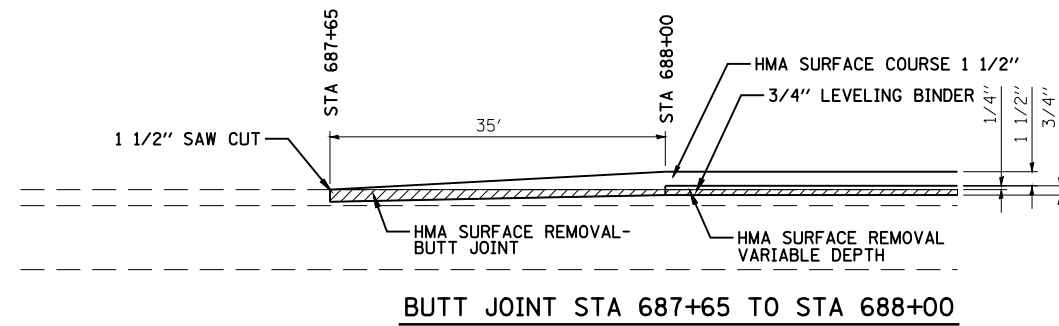
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	PLOT DATE = Jun-28-2010 02:04:38PM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

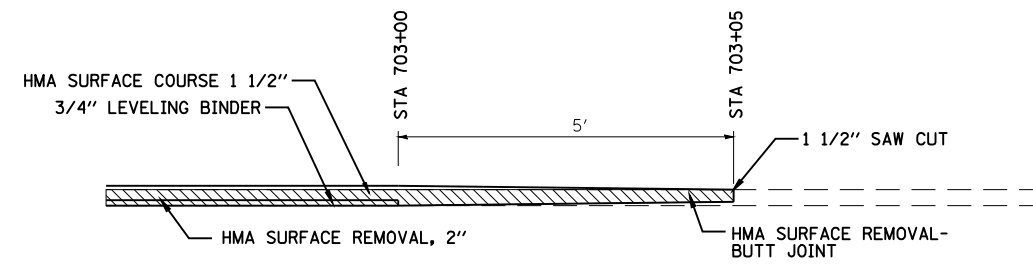
**TRAFFIC CONTROL
MAINTENANCE OF TRAFFIC DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	83
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A94	

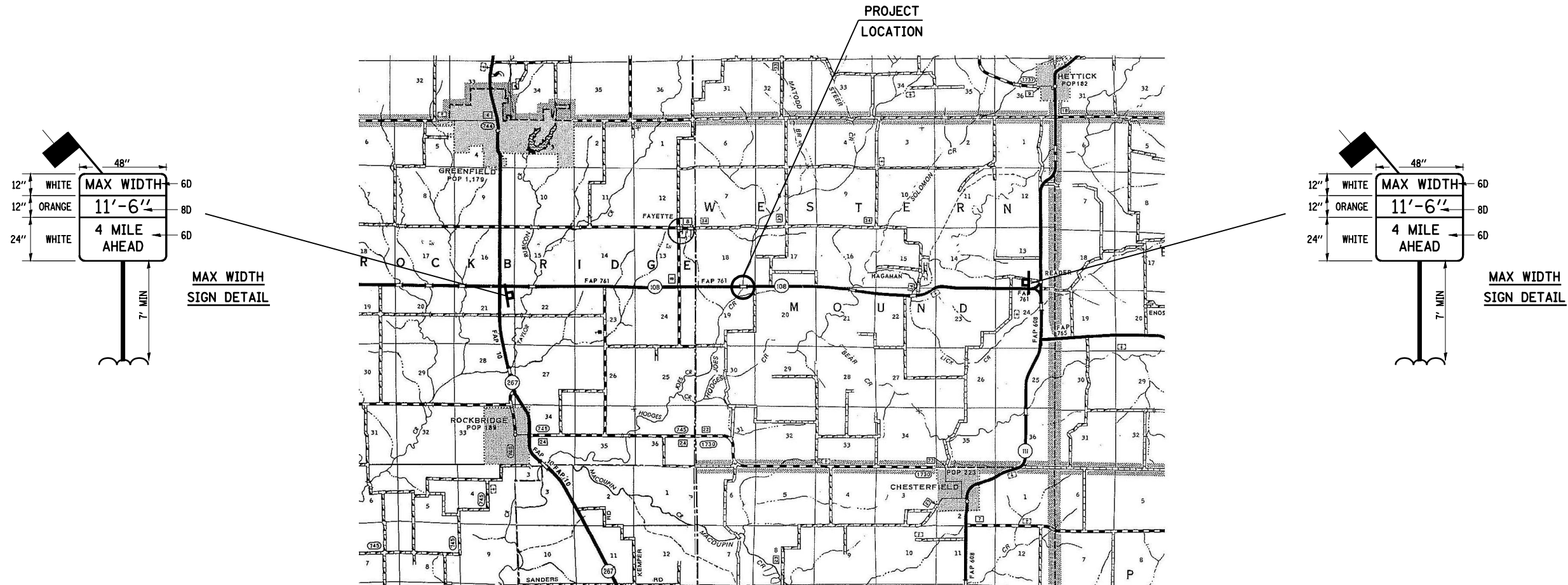


BUTT JOINT STA 687+65 TO STA 688+00



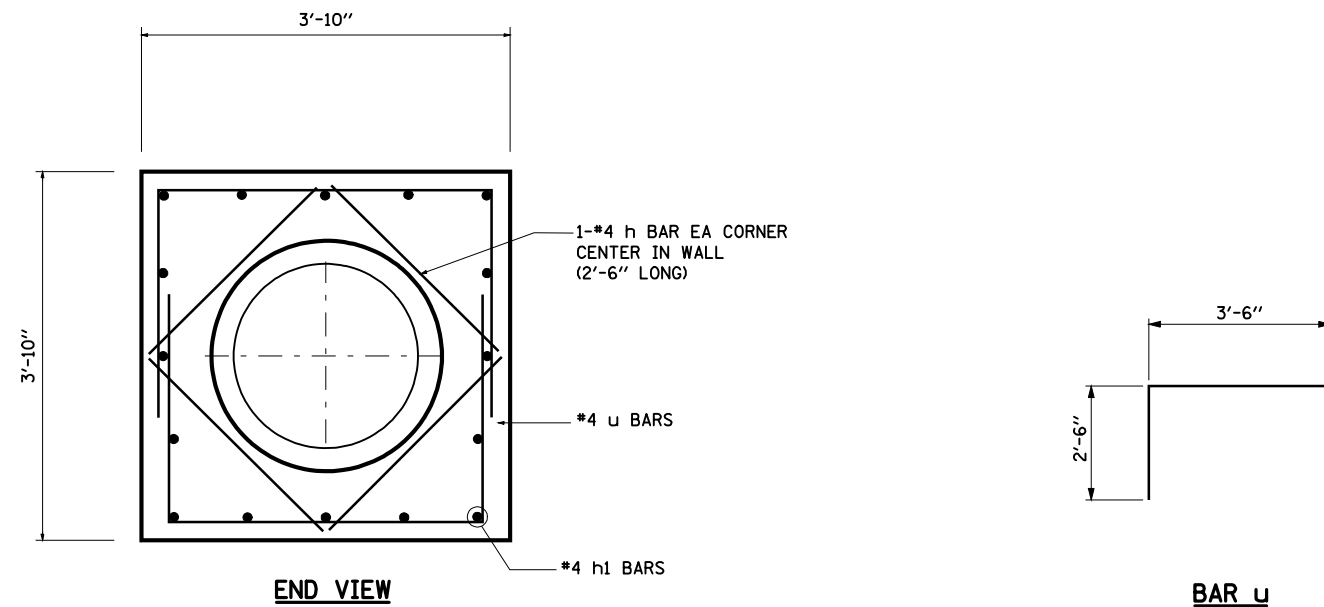
BUTT JOINT STA 703+00 TO STA 703+05

BUTT JOINT DETAILS



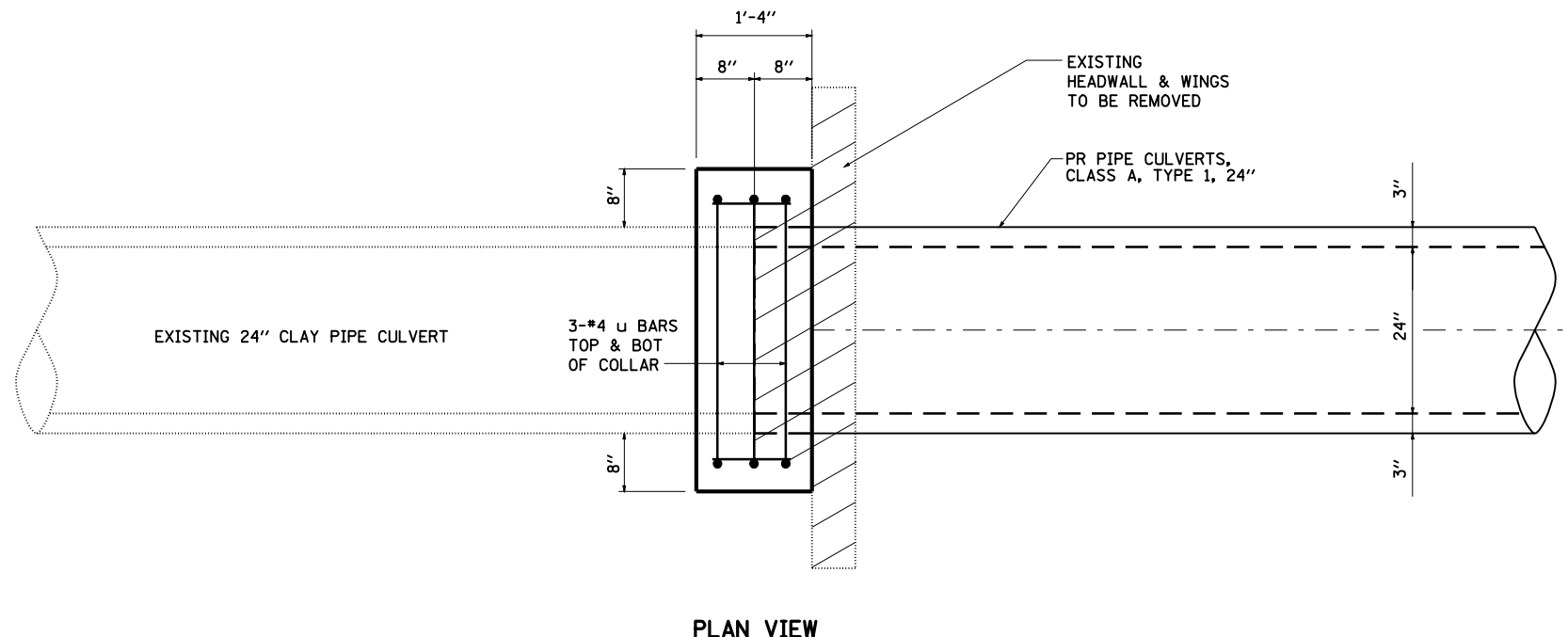
WIDTH RESTRICTION SIGN PLACEMENT

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = Jun-28-2010 02:04:14PM	DATE -	CHECKED -	REVISED -		CONTRACT NO. 72A94				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
		DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.				



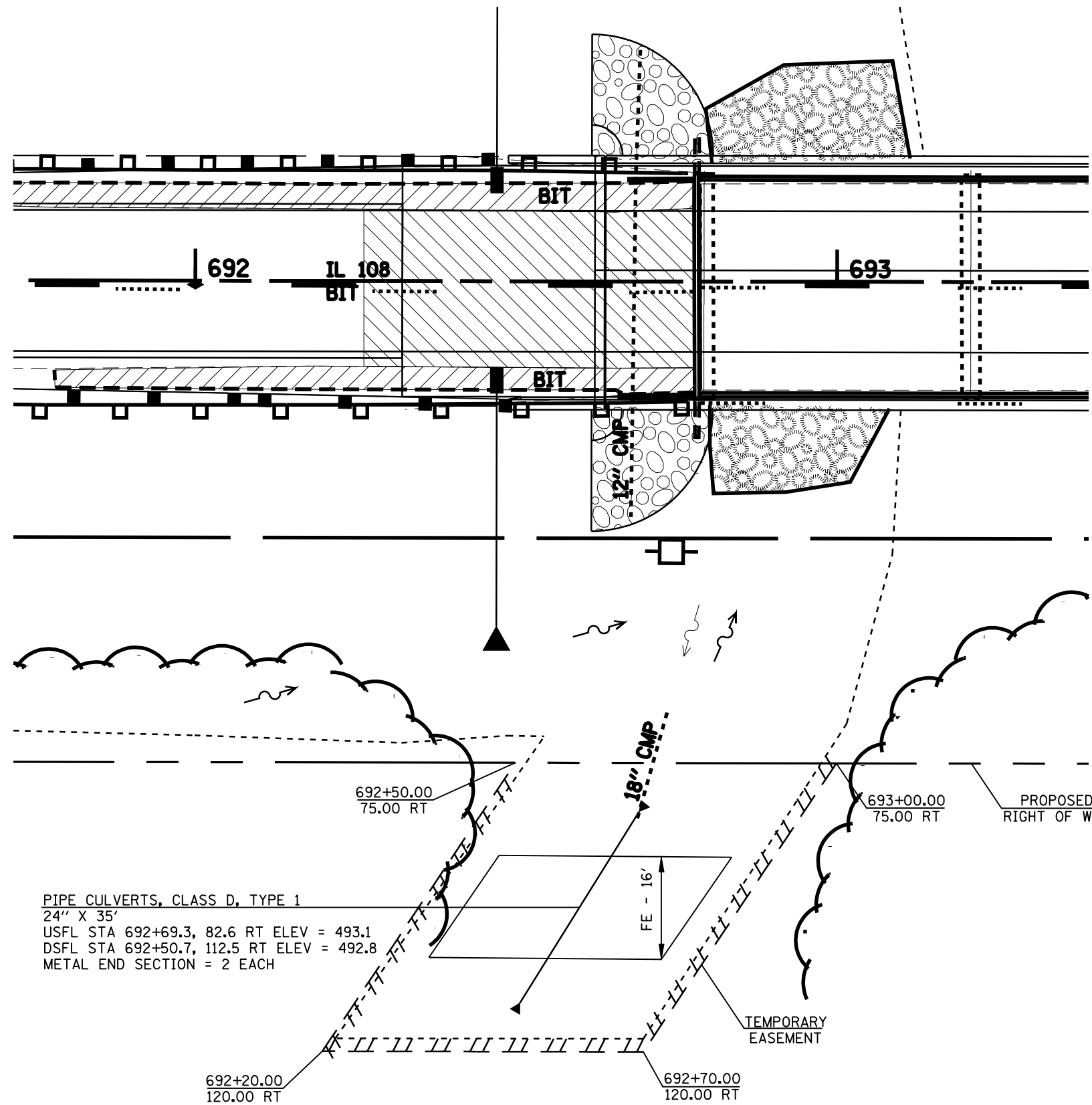
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CONCRETE COLLAR	CU YD	0.5
REINFORCEMENT BARS	POUND	45



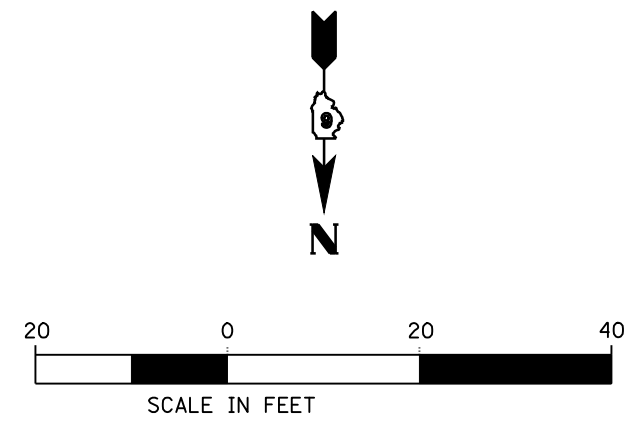
**CULVERT EXTENSION & COLLAR DETAIL
STA 688+85 RT**

NOTES:
 ALL CONCRETE SHALL BE CLASS SI CONCRETE.
 ALL REBAR SHALL BE AASHTO M-31 OR M-322, GRADE 60.
 PROVIDE 2" CLEAR TO REINFORCEMENT BARS UNLESS NOTED OTHERWISE.

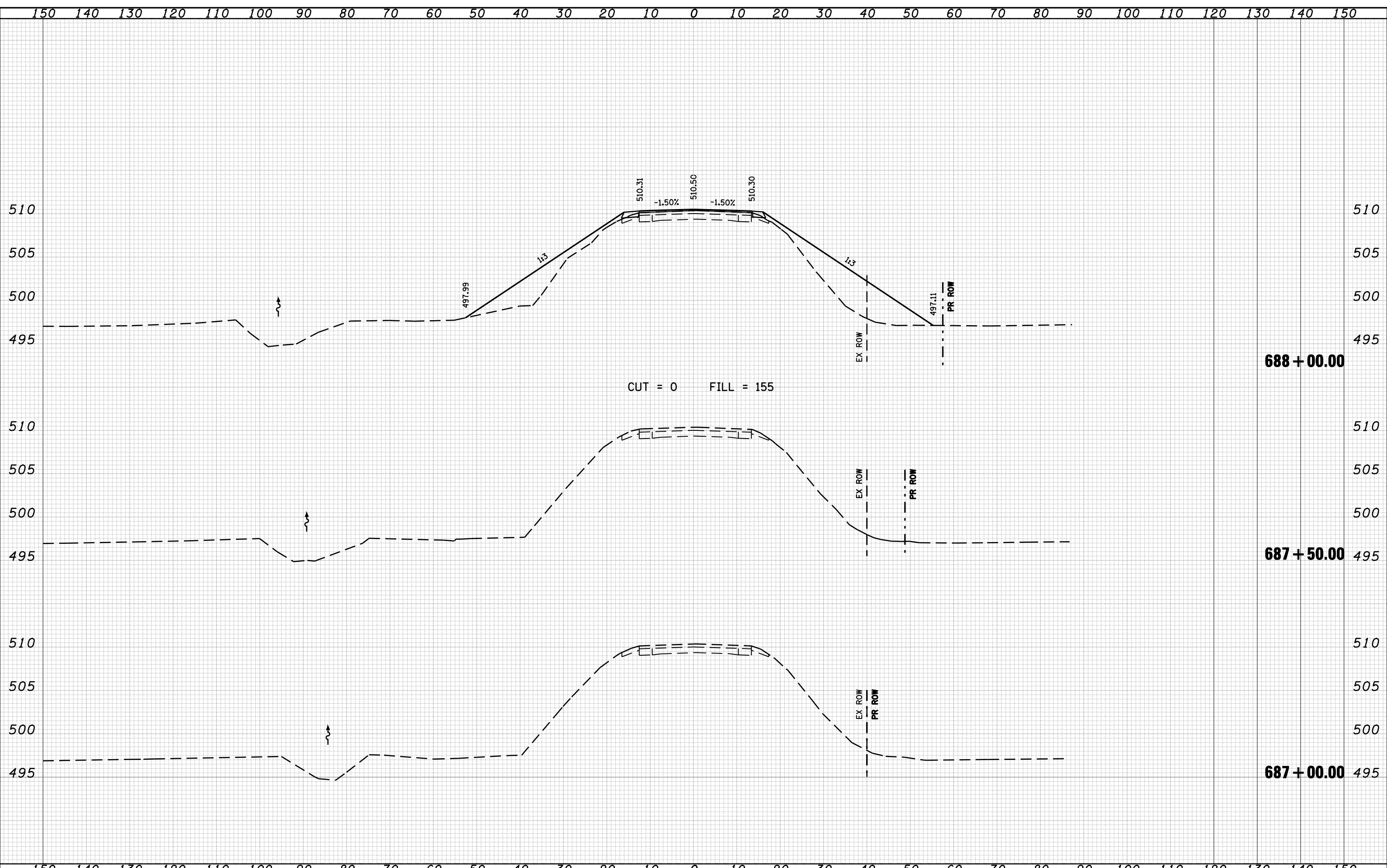


PIPE CULVERTS, CLASS D, TYPE 1
 24" X 35"
 USFL STA 692+69.3, 82.6 RT ELEV = 493.1
 DSFL STA 692+50.7, 112.5 RT ELEV = 492.8
 METAL END SECTION = 2 EACH

FIELD ENTRANCE - STA 692+60 RT



FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ENTRANCE DETAILS - STA 692+60 RT				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwork\LAUGHLINRL\0212999\672A94-Sht-Details.ent.dgn	PLOT SCALE = 20.0000' / IN.	DRAWN -	REVISED -						761	107B-2	MACOUPIN	98	86
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		DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								

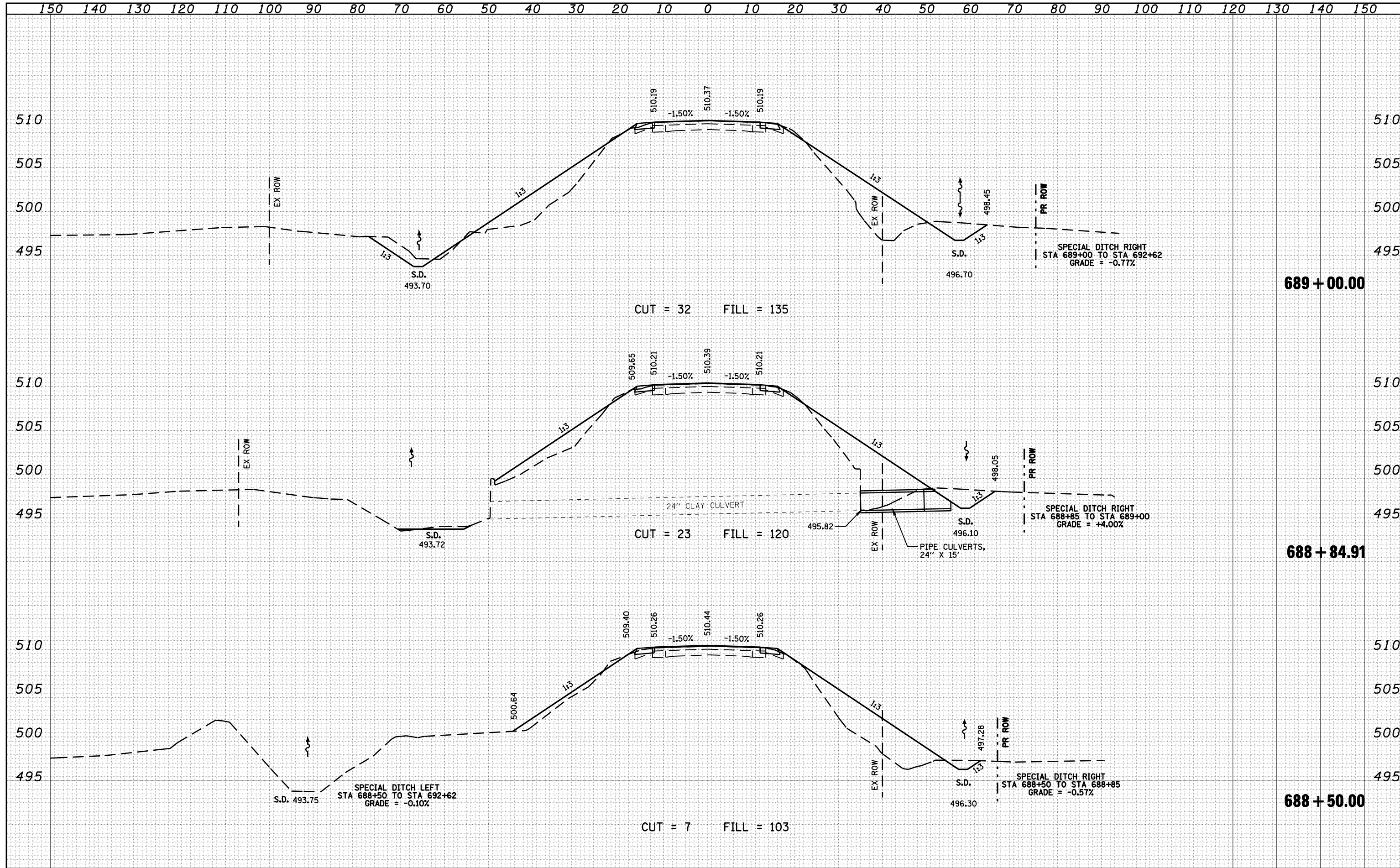


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BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

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

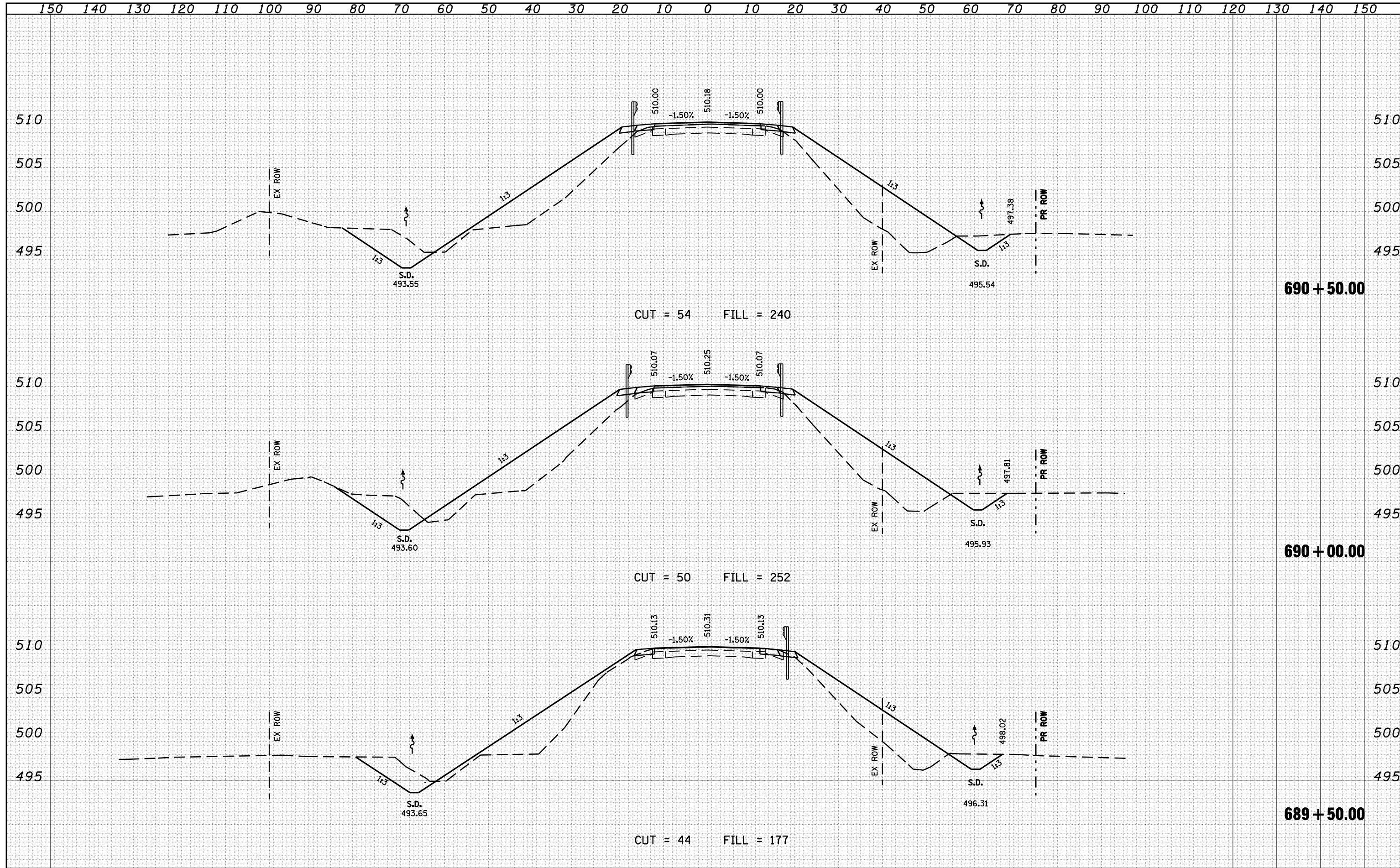
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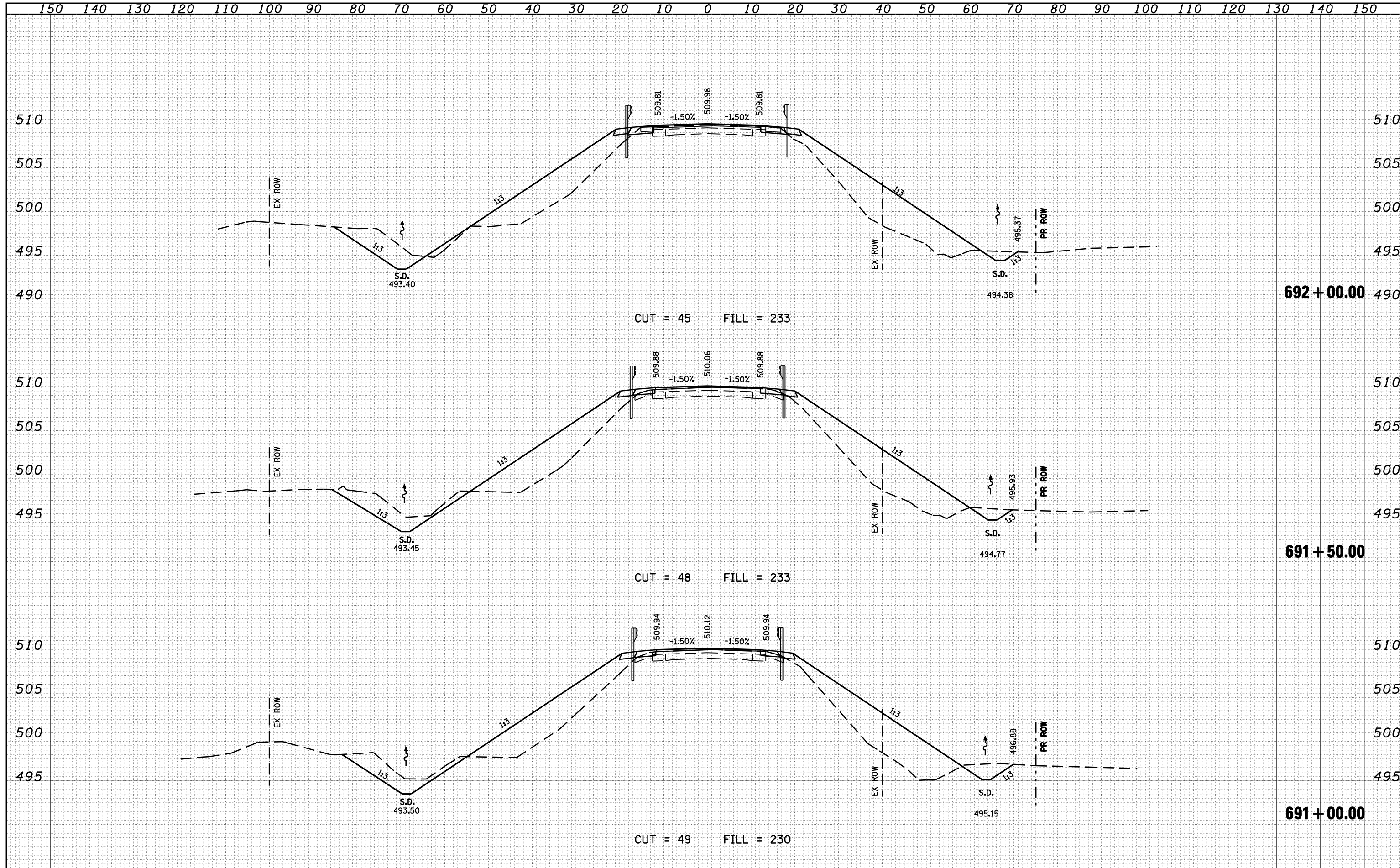
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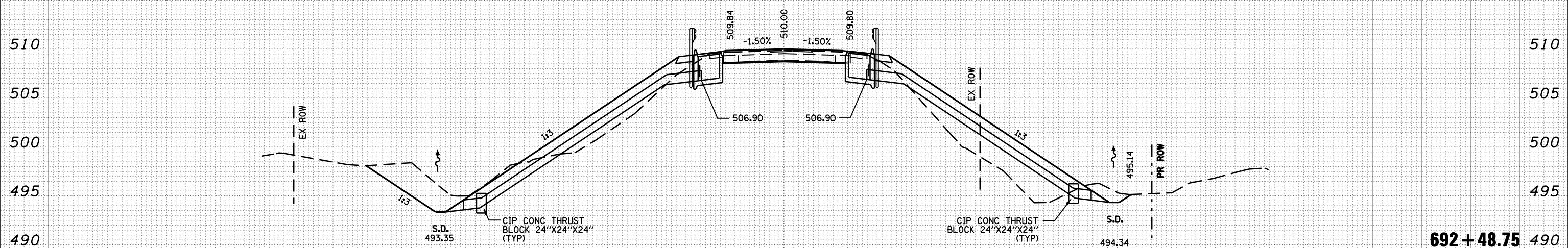
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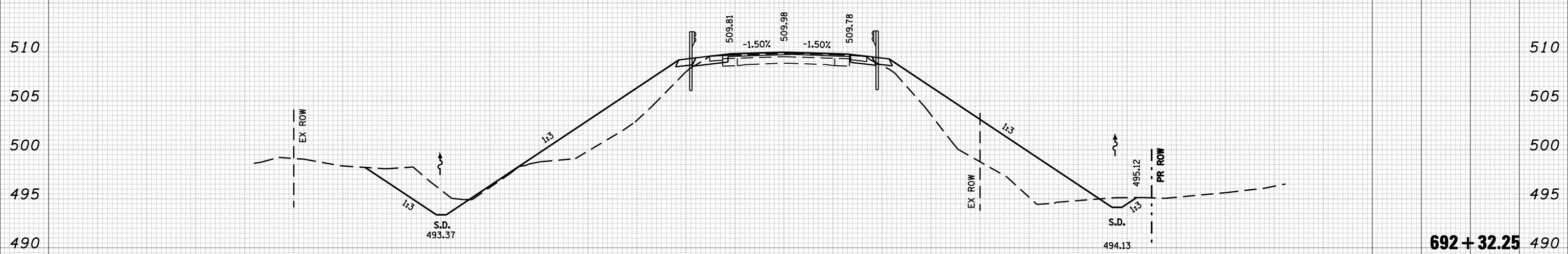
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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CUT = 51 FILL = 209



CUT = 48 FILL = 220

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CHECKED -	REVISD -
DATE -	REVISD -

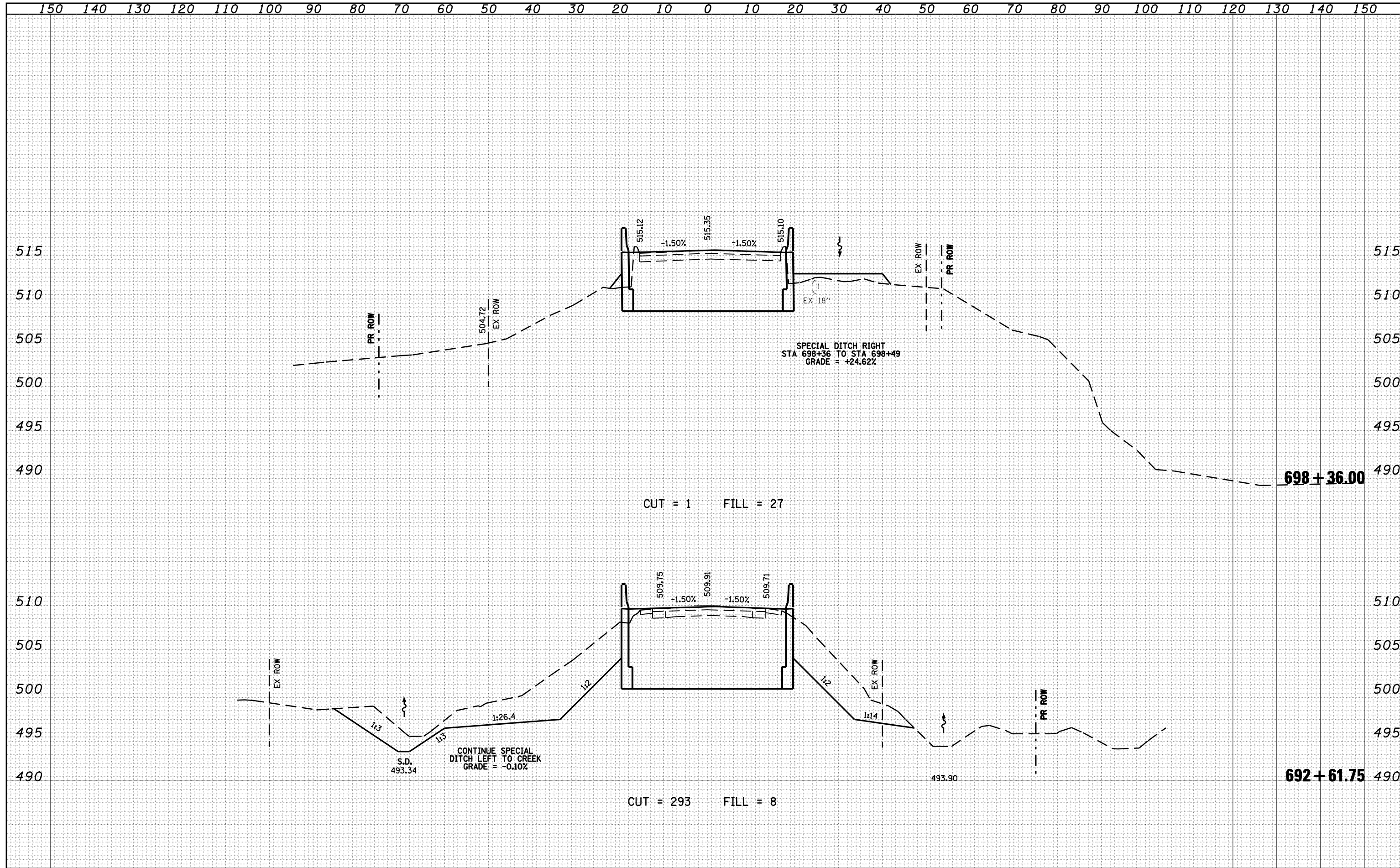
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS FOR IL 108 OVER HODGES CREEK	
SCALE:	SHEET NO. OF SHEETS STA. 692+32.25 TO STA. 692+48.75

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	107B-2	MACOUPIN	98	91
CONTRACT NO. 72A94			ILLINOIS FED. AID PROJECT	

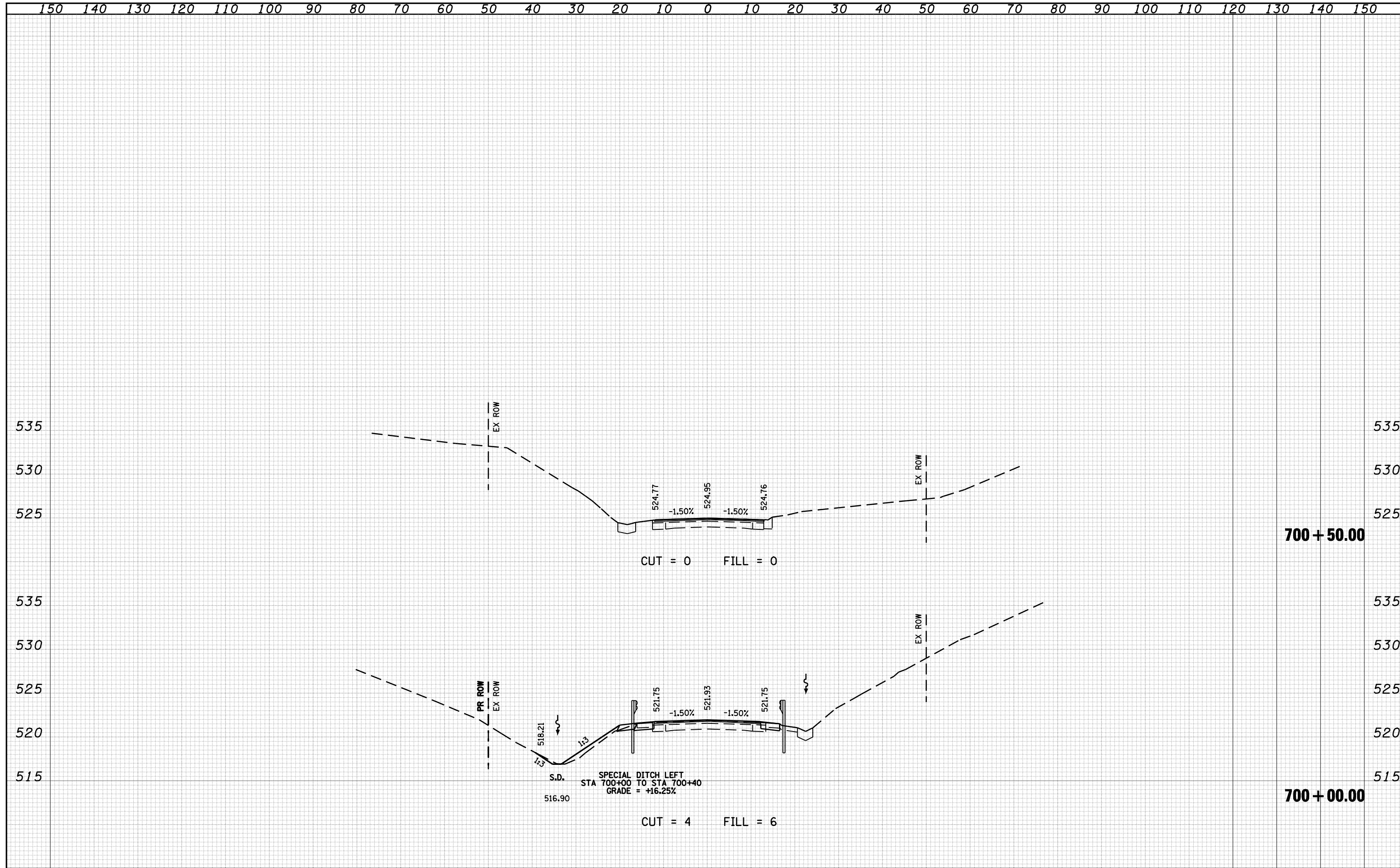
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
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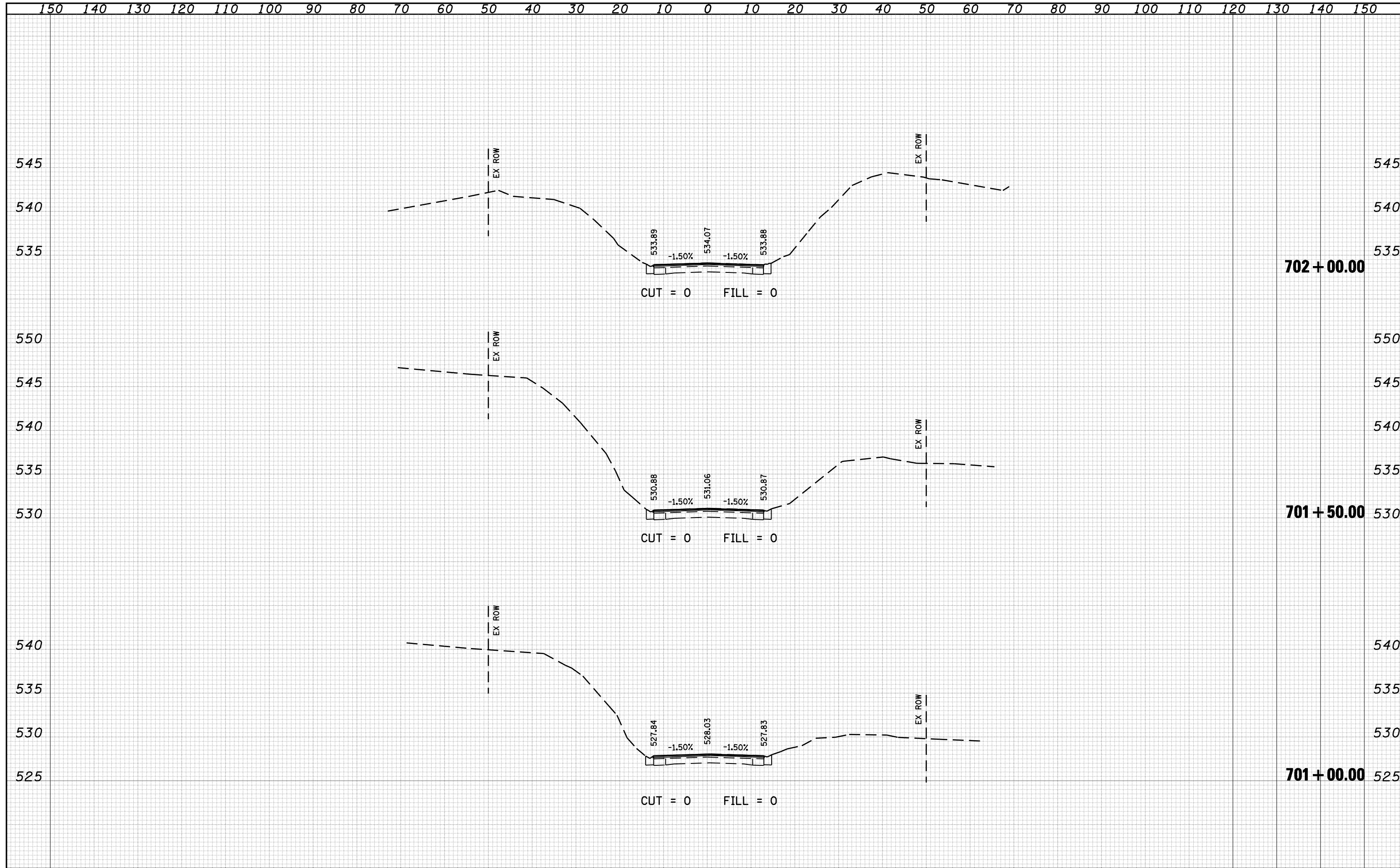
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TEMPLATE	
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ORIGINAL SURVEY	
NOTE BOOK	
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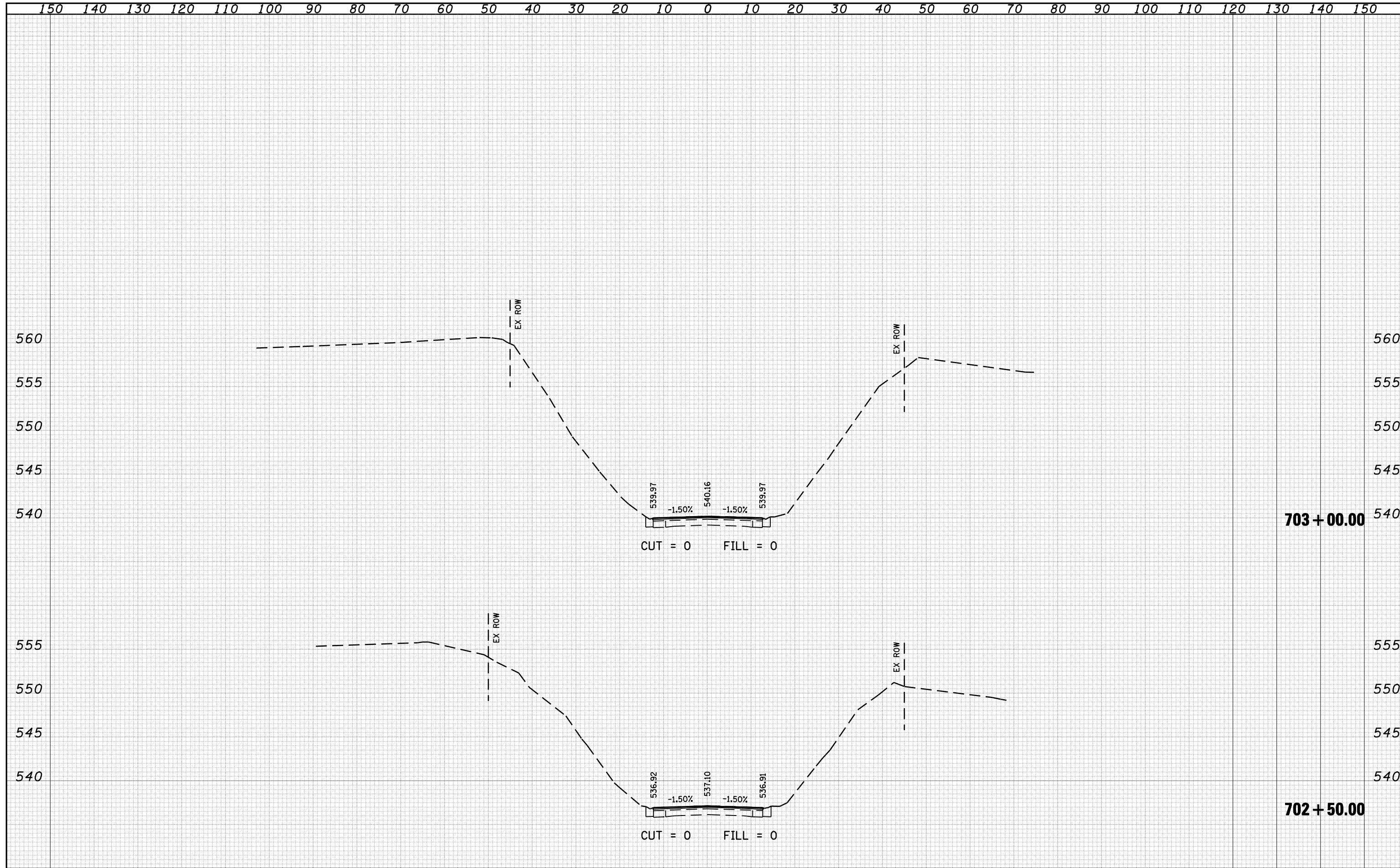
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FILE NAME =	USER NAME = laughlin1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS FOR IL 108 OVER HODGES CREEK		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = Jun-28-2010 02:05:34PM	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								
				SCALE:	SHEET NO.	OF SHEETS	STA. 701+00.00	TO STA. 702+00.00			

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