

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 72A03		

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

**PROPOSED  
HIGHWAY PLANS**

**FAP 713 (IL ROUTE 101)  
SECTION 120B-3  
PROJECT: ACRF-0713(008)  
SCHUYLER COUNTY  
STRUCTURE REPLACEMENT  
C-96-127-10**

**INDEX OF SHEETS**

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3-6 SUMMARY OF QUANTITIES
- 7 TYPICAL SECTIONS
- 8-9 SCHEDULE OF QUANTITIES
- 10 ALIGNMENT & BENCHMARK DATA
- 11-15 TRAFFIC CONTROL AND PROTECTION
- 16-19 PLAN AND PROFILE
- 20 EROSION CONTROL PLAN
- 21-65 S.N. 085-0514 PLANS
- 66 ENTRANCE DETAILS
- 66A-75 CROSS SECTIONS

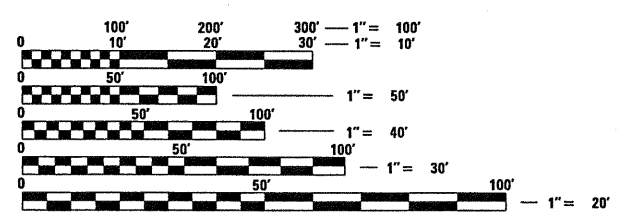
**HIGHWAY STANDARDS**

000001-05	630001-08	701301-03
001001-02	631031-08	701306-02
280001-05	635006-03	701311-03
420401-08	635011-02	701321-10
515001-03	701001-02	701326-03
542401-01	701006-03	701901-01
601101-01	701011-02	704001-06
606201-02	701201-03	780001-02

*542406-01  
609001-05*

**DESIGN DESIGNATION**

FAP 713 (IL 101)  
MINOR ARTERIAL (NON URBAN)  
ADT = 500 (2008); 570 (2020)  
DESIGN SPEED = 55 MPH



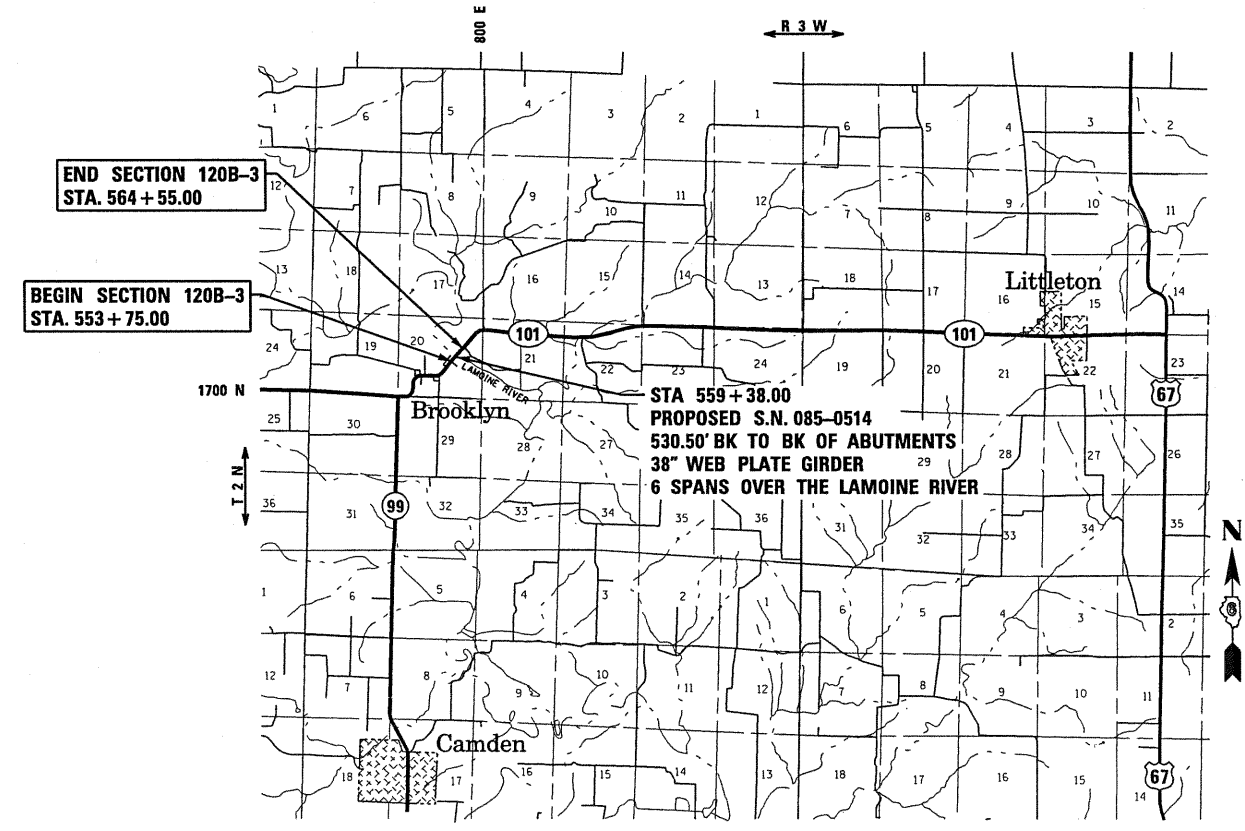
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: SAL MADONIA (217) 782-4761  
PROJECT MANAGER: MARCUS BRUCE (217) 524-0946

CONTRACT NO. 72A03

D-96-533-05



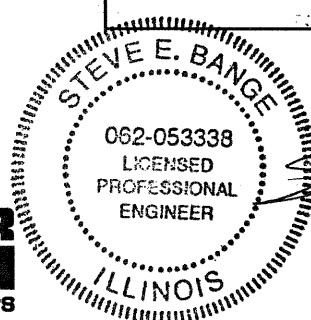
**LOCATION MAP**  
SCALE: 1" = 5000'

GROSS LENGTH OF SECTION 120B-3 = 0.2045 MILES (1080.00 FT)  
NET LENGTH OF SECTION 120B-3 = 0.2045 MILES (1080.00 FT)

PLANS PREPARED BY:

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors

615 North 24th Street, Quincy, IL Ph (217) 223-3678 - Fax (217) 223-3683  
4518 Paris Gravel Road, Hannibal, MO Ph (573) 221-8828 - Fax (573) 221-8812  
318 N. 4th Street, Suite 100, Burlington, IA Ph (319) 753-1636 - Fax (319) 752-3585  
49 North Frame Street, Galesburg, IL Ph (309) 342-4842 - Fax (309) 341-3781  
Internet Address: www.klingner.com



STEVE E. BANGE DATE  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF ILLINOIS NO. 062-053338  
LICENSE EXPIRES NOVEMBER 30, 2011

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED *April 17 2010*  
*Reginald D. Kelly*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

*October 1 2010*  
*Scott E. Stitt, P.E.*  
acting ENGINEER OF DESIGN AND ENVIRONMENT

*October 1 2010*  
*Christine M. Reed, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

**GENERAL NOTES**

1. THE NOMINAL THICKNESS FOR BINDER AND SURFACE COURSES ARE SHOWN ON THE TYPICAL SECTIONS, SCHEDULES, OR SPECIAL DETAILS. THE CONSTRUCTED THICKNESS SHALL NOT BE LESS THAN 90 PERCENT OF THE NOMINAL THICKNESS AT ANY LOCATION.
2. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED AGENT, OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
3. ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE SEEDED, FERTILIZED, AND MULCHED AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER.
4. DO NOT INCLUDE MULCH OR EMULSIFIED ASPHALT ON EROSION CONTROL BLANKET AREAS.
5. IN ACCORDANCE WITH STATE OF ILLINOIS P.A. 86-0674, THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES NOT MORE THAN 14 DAYS NOR LESS THAN 48 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS) IN ADVANCE OF THE START OF EXCAVATION OR DEMOLITION.

J.U.L.I.E. TELEPHONE NUMBER  
1-800-892-0123

KNOWN UTILITIES LOCATED WITHIN THE LIMITS OF THIS IMPROVEMENT ARE:

GAS  
AMEREN GAS

ELECTRIC  
ADAMS ELECTRIC COOPERATIVE  
(800) 232-4797

WATER  
CAMDEN-LITTLETON WATER COMMISSION  
(217) 392-2690

6. THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE, AND ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVE GROUND UTILITY LOCATIONS, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVE GROUND UTILITIES, REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
8. MAINTAIN EXISTING TRAFFIC CONTROL AT ALL INTERSECTIONS DURING CONSTRUCTION.
9. ANY 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 INCIDENTAL TO THE CONTRACT AND NO COMPENSATION WILL BE ALLOWED.
10. EXISTING RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE REMOVED PRIOR TO HOT-MIX ASPHALT SURFACE REMOVAL.
11. NO PASSING ZONES SHALL BE FIELD VERIFIED BY OPERATIONS, (217) 785-5312, 14 DAYS PRIOR TO FINAL PAVEMENT MARKINGS.
12. THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE FOR THE DURATION OF THIS PROJECT.
13. THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE NUMBER:	1	2	3	4
LOCATIONS:	IL 101	IL 101	IL 101	IL 101
MIXTURE USES:	HMA SURFACE COURSE	HMA BINDER COURSE	HMA BASE CS (WIDENING)	HMA SHOULDERS
AC/PG:	PG64-22	PG64-22	PG64-22	PG58-22
DESIGN AIR VOIDS:	4.0% @ N DESIGN = 50	4.0% @ N DESIGN = 50	4.0% @ N DESIGN = 50	2.0% @ N DESIGN = 30
MIXTURE COMPOSITION (GRADATION MIXTURE):	IL 9.5 or 12.5	IL 19.0	IL 19.0	BAM (OTHER)
FRICTION AGGREGATE:	MIX "C"	N/A	N/A	N/A

**GENERAL NOTES**

14. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED SHALL BE DETERMINED BY THE ENGINEER.
15. ACCESS TO ALL SIDEROADS SHALL BE MAINTAINED AT ALL TIMES.
16. SHOULD THE CONTRACTOR REQUEST OLD/EXISTING STRUCTURE PLANS, THEY CAN CONTACT THE PROJECT ENGINEER OR TEAM ENGINEER AS SHOWN ON THE COVERT SHEET.

**RATES OF APPLICATION TABLE**

AGGREGATE (SURFACE, BASE, SUBBASE, OR BACKFILL)	2.05 TON / CU YD
SUBBASE GRANULAR MATERIAL, TYPE C	2.05 TON / CU YD
STONE DUMPED RIPRAP	1.50 TON / CU YD
<b>HOT-MIX ASPHALT:</b>	
BITUMINOUS MATERIALS (PRIME COAT)	0.00038 TON / 50 YD (on pavement)
BITUMINOUS MATERIALS (PRIME COAT)	0.001425 TON / 50 YD (on aggregate)
AGGREGATE PRIME COAT	0.002 TON / 50 YD
SURFACE / BINDER (112 lbs)	0.056 TON / 50 YD • IN
<b>SEEDING AREAS:</b>	
NITROGEN FERTILIZER NUTRIENT	90 LBS / ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LBS / ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS / ACRE
AGRICULTURAL GROUND LIMESTONE	2 TON / ACRE
MULCH	2 TON / ACRE

**COMMITMENTS**

1. THE LOCAL TOWNSHIP AGENCY SHALL BE NOTIFIED PRIOR TO ENTRANCE CLOSURE REQUIRED FOR STAGE CONSTRUCTION.
2. CONSTRUCTION PERSONAL SHALL CONTACT STUDIES AND PLANS ON ANY MAJOR PLAN CHANGES.

DISTRICT SIX	
EXAMINED <u>August 13</u> 20 <u>10</u>	<u>Oil Well</u>
OPERATIONS ENGINEER	
EXAMINED <u>August 11</u> 20 <u>10</u>	<u>Jimmy F. L.</u>
PROJECT IMPLEMENTATION ENGINEER	
EXAMINED <u>August 17</u> 20 <u>10</u>	<u>DRMLL</u>
PROGRAM DEVELOPMENT ENGINEER	

SUMMARY OF QUANTITIES			80% FED. 20% STATE TOTAL QUANTITIES		CONSTRUCTION AND SAFETY TYPE CODE					
CODE NO.	ITEM	SP. PROV.	UNIT		0005 ROADWAY	0011 STRUCTURE				
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)		UNIT	96	96					
20200100	EARTH EXCAVATION		CU YD	200	200					
20200500	EARTH EXCAVATION (WIDENING)	*	CU YD	65	65					
20400800	FURNISHED EXCAVATION		CU YD	5	5					
25000210	SEEDING, CLASS 2A		ACRE	0.25	0.25					
25000400	NITROGEN FERTILIZER NUTRIENT		POUND	23	23					
25000500	PHOSPHORUS FERTILIZER NUTRIENT		POUND	23	23					
25000600	POTASSIUM FERTILIZER NUTRIENT		POUND	23	23					
25000700	AGRICULTURAL GROUND LIMESTONE		TON	1	1					
25100115	MULCH, METHOD 2		ACRE	0.25	0.25					
25100630	EROSION CONTROL BLANKET		SQ YD	948	948					
28000250	TEMPORARY EROSION CONTROL SEEDING		POUND	50	50					
28000400	PERIMETER EROSION BARRIER		FOOT	1421	1421					
28000500	INLET AND PIPE PROTECTION		EACH	1	1					
28100109	STONE RIPRAP, CLASS A5	*	SO YD	520	69	451				
28100707	STONE DUMPED RIPRAP, CLASS A4	*	SO YD	355	355					
28100709	STONE DUMPED RIPRAP, CLASS A5	*	SO YD	1293		1293				
28200200	FILTER FABRIC		SQ YD	2168	424	1744				
35101400	AGGREGATE BASE COURSE, TYPE B		TON	16	16					
35501324	HOT-MIX ASPHALT BASE COURSE, 10"	*	SO YD	507	507					
40600200	BITUMINOUS MATERIALS (PRIME COAT)		TON	0.5	0.5					
40600300	AGGREGATE (PRIME COAT)		TON	3	3					
40600990	TEMPORARY RAMP	*	SO YD	135	135					
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50		TON	107	107					
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING		TON	10	10					
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)		SO YD	46	46					
44000100	PAVEMENT REMOVAL	*	SO YD	372	372					
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"		SO YD	1673	1673					
44000400	GUTTER REMOVAL		FOOT	648	648					
48101200	AGGREGATE SHOULDERS, TYPE B		TON	17	17					

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
ea\pwork\p\idot\laughlin\1\0233251\06	2403-ahc-500.dgn		
PLOT SCALE :	CHECKED :	REVISED :	REVISED :
100.0000 / in.			
PLOT DATE :	DATE :	REVISED :	REVISED :
Aug-17-2010 01:18:07PM			

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET NO. 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	1208-3	SCHUYLER	75	3
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 72A03	

SUMMARY OF QUANTITIES		SP. PROV.	UNIT	80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION AND SAFETY TYPE CODE				
CODE NO.	ITEM				0005 ROADWAY	0011 STRUCTURE			
48203100	HOT-MIX ASPHALT SHOULDERS		TON	34	34				
50100100	REMOVAL OF EXISTING STRUCTURES		EACH	1		1			
50105220	PIPE CULVERT REMOVAL	*	FOOT	17	17				
50200100	STRUCTURE EXCAVATION		CU YD	341		341			
50300100	FLOOR DRAINS		EACH	26		26			
50300225	CONCRETE STRUCTURES		CU YD	290.6		290.6			
50300255	CONCRETE SUPERSTRUCTURE		CU YD	719.2		719.2			
50300260	BRIDGE DECK GROOVING		SQ YD	1965		1965			
50300280	CONCRETE ENCASEMENT		CU YD	11.2		11.2			
50300300	PROTECTIVE COAT		SQ YD	2569		2569			
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL		L SUM	1		1			
50500505	STUD SHEAR CONNECTORS		EACH	6588		6588			
50800105	REINFORCEMENT BARS		POUND	4940		4940			
50800205	REINFORCEMENT BARS, EPOXY COATED		POUND	251,440		251,440			
50800515	BAR SPLICERS		EACH	2356		2356			
51201600	FURNISHING STEEL PILES HP12X53		FOOT	900		900			
51202305	DRIVING PILES		FOOT	900		900			
51203600	TEST PILE STEEL HP12X53		EACH	2		2			
51204650	PILE SHOES		EACH	32		32			
51500100	NAME PLATES		EACH	1		1			
* 51603000	DRILLED SHAFT IN SOIL		CU YD	135.1		135.1			
* 51604000	DRILLED SHAFT IN ROCK		CU YD	28.8		28.8			
52000220	FINGER PLATE EXPANSION JOINT, 6"		FOOT	64		64			
52000600	<b>FABRIC REINFORCED ELASTOMERIC TROUGH</b>		<b>FOOT</b>	<b>76</b>		<b>76</b>			
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I		EACH	18		18			
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II		EACH	18		18			
52100530	ANCHOR BOLTS, 1 1/4"		EACH	48		48			
52100510	<b>ANCHOR BOLTS 3/4"</b>		<b>EACH</b>	<b>24</b>		<b>24</b>			
52100520	ANCHOR BOLTS, 1"		EACH	12		12			
54205479	PIPE CULVERTS, CLASS D, TYPE 1 EQUIVALENT ROUND-SIZE 24"		FOOT	40	40				
54215547	METAL END SECTIONS 12"	*	EACH	2	2				
54215769	METAL END SECTIONS, EQUIVALENT ROUND-SIZE 24"	*	EACH	2	2				

\* Specialty Items Rev.

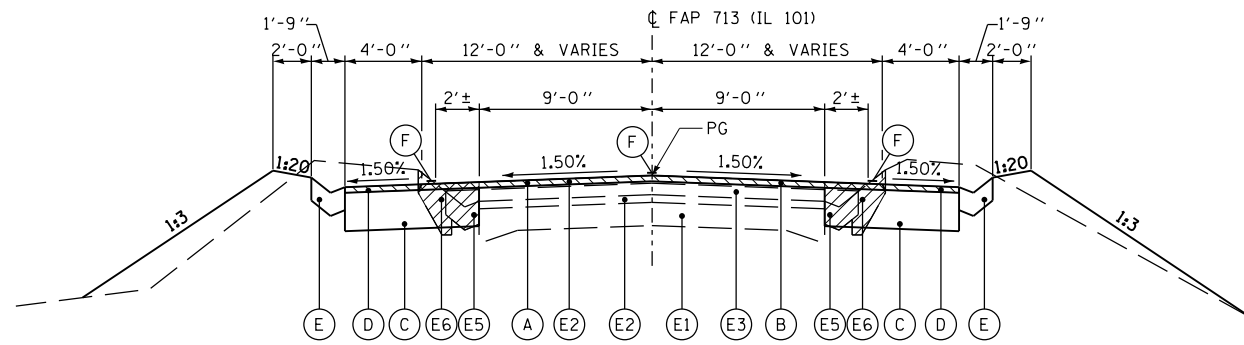
FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED - 8/18/10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pwwork\p\ridot\laughlinr1\0233251\06	2\03-shr-500.dgn	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 20F	4SHEETS	STA. TO STA.	713	120B-3	SCHUYLER	75	4
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -						CONTRACT NO. 72A03				
	PLOT DATE = Aug-19-2010 08:51:39AM	DATE -	REVISED -						FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

SUMMARY OF QUANTITIES				80% FED. 20% STATE TOTAL QUANTITIES		CONSTRUCTION AND SAFETY TYPE CODE						
CODE NO.	ITEM	SP. PROV.	UNIT			0005 ROADWAY	0011 STRUCTURE					
58700300	CONCRETE SEALER		SO FT		780		780					
59100100	GEOCOMPOSITE WALL DRAIN		SO YD		48		48					
60100060	CONCRETE HEADWALL FOR PIPE DRAINS		EACH		4	4						
60100935	PIPE DRAINS 10"		FOOT		40	40						
<b>20046304</b>	PIPE UNDERDRAINS FOR STRUCTURES 4"	•	FOOT		151		151					
60500060	REMOVING INLETS		EACH		1	1						
60600095	CLASS SI CONCRETE (OUTLET)		CU YD		6.1	6.1						
60900115	TYPE B INLET BOX, STANDARD 609001		EACH		2	2						
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS		FOOT		131.25	131.25						
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6		EACH		4	4						
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	•	EACH		4	4						
63200310	GUARDRAIL REMOVAL		FOOT		360	360						
67000400	ENGINEER'S FIELD OFFICE, TYPE A		CAL MO		17	17						
67100100	MOBILIZATION		L SUM		1	1						
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	•	L SUM		1	1						
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	•	L SUM		1	1						
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	•	L SUM		1	1						
70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	•	EACH		1	1						
70103815	TRAFFIC CONTROL SURVEILLANCE		CAL DA		10	10						
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	•	EACH		1	1						
70300100	SHORT-TERM PAVEMENT MARKING		FOOT		200	200						
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"		FOOT		7020	7020						
70301000	WORK ZONE PAVEMENT MARKING REMOVAL		SO FT		2444	2444						
70400100	TEMPORARY CONCRETE BARRIER		FOOT		823.3	823.3						
70400200	RELOCATE TEMPORARY CONCRETE BARRIER		FOOT		823.3	823.3						
* 78001120	PAINT PAVEMENT MARKING - LINE 5"		FOOT		3510	3510						
* 78200420	GUARDRAIL MARKERS, TYPE B	•	EACH		16	16						
* 78201000	TERMINAL MARKER - DIRECT APPLIED	•	EACH		4	4						
78300100	PAVEMENT MARKING REMOVAL		SO FT		1076	1076						
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	•	CU YD		94		94					

\*Specialty Items

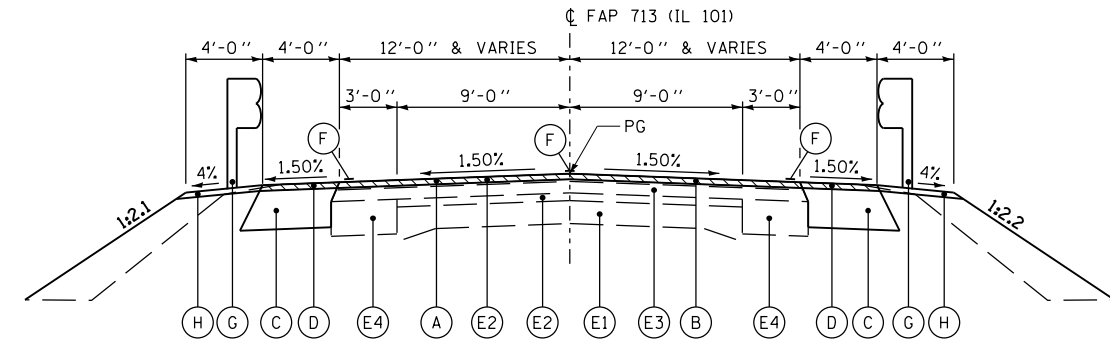
FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED - 8/18/10	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pwr\work\pwr\dot\laughlinr1\d0233251\06	2A03-shr-500.dgn	DRAWN -	REVISED -					713	120B-3	SCHUYLER	75	5
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		SCALE: NONE SHEET NO. 30F 4SHEETS STA. TO STA.			CONTRACT NO. 72A03				
	PLOT DATE = Aug-19-2010 08:51:48AM	DATE -	REVISED -		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT					





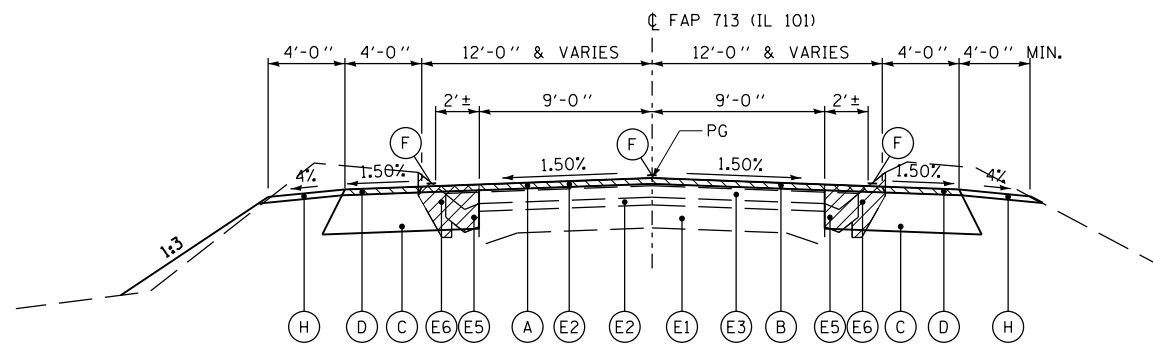
TYPICAL FAP 713 (IL 101) SECTION

STA 553+75.00 TO STA 553+99.00



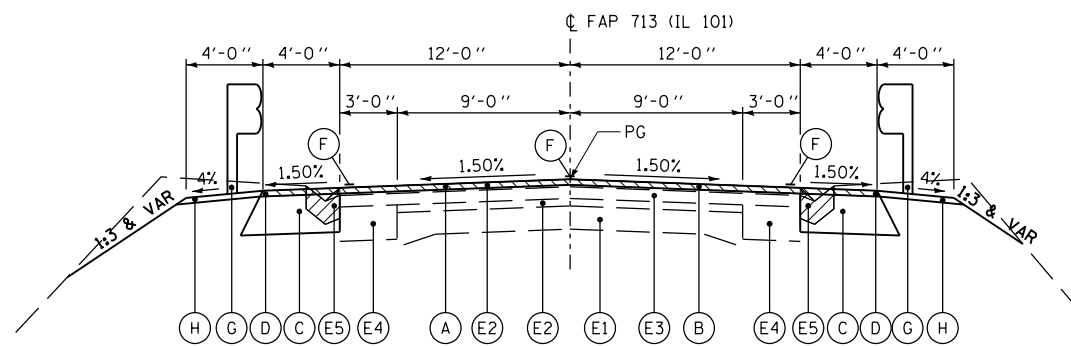
TYPICAL FAP 713 (IL 101) SECTION

STA 562+03.25 TO STA 562+32.75 APPROACH PAVEMENT OMISSION  
STA 562+32.75 TO STA 564+55.00



TYPICAL FAP 713 (IL 101) SECTION

STA 553+99.00 TO STA 555+47.00

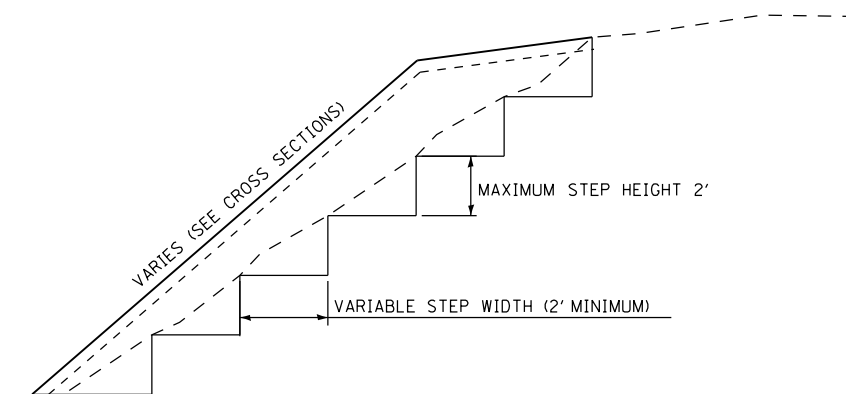


TYPICAL FAP 713 (IL 101) SECTION

STA 555+47.00 TO STA 556+43.25  
STA 556+43.25 TO STA 556+72.75 APPROACH PAVEMENT OMISSION  
STA 556+72.75 TO STA 562+03.25 SN 085-0514 OMISSION

LEGEND

- (E1) EXISTING 9'-6"-9" PCC PAVEMENT
- (E2) EXISTING HMA SURFACING, VARIABLE DEPTH
- (E3) EXISTING HMA SURFACING, 3"
- (E4) EXISTING PCC BASE COURSE WIDENING, 9"
- (E5) EXISTING TYPE B CONCRETE GUTTER
- (E6) EXISTING CONCRETE GUTTER SPECIAL
- (A) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1/2"
- (B) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1/2"
- (C) PROPOSED HOT-MIX ASPHALT BASE COURSE, 10" (ANY WIDTH)
- (D) PROPOSED HOT-MIX ASPHALT SHOULDERS, 1/2"
- (E) PROPOSED CONCRETE GUTTER, TYPE B OUTLET
- (F) PROPOSED PAINT PAVEMENT MARKING - LINE 5"
- (G) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A (SEE PLANS FOR LOCATIONS)
- (H) PROPOSED AGGREGATE SHOULDERS, TYPE B, 1/2"  
PROPOSED AGGREGATE SHOULDERS, TYPE B (SPECIAL), 1/2" (NEXT TO GUARDRAIL)



NOTE:  
THIS DETAIL APPLIES TO SIDESLOPE FILLS WHERE THE EXISTING SLOPE IS GREATER THAN 12 FT HIGH AND / OR STEEPER THAN 1:3.  
STEPS MAY BE CUT IN CONJUNCTION WITH NEW FILL PLACEMENT.

TYPICAL FILLSLOPE STEPPING DETAIL

NOT TO SCALE

FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -
et:\pwork\pwork\laughlinr1\0233251\0672A03-sh-typical.dgn		DRAWN -	REVISED -
PLOT SCALE = 100.0000' / 1in.		CHECKED -	REVISED -
PLOT DATE = Aug-17-2010 01:26:14PM		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS			
SCALE: none	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	7
CONTRACT NO. 72A03				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EARTH EXCAVATION SCHEDULE

LOCATION STATION TO STATION	SIDE	20200100		20400800		
		EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED (25%)	EMBANKMENT	EARTHWORK BALANCE	
		CU YD				
PRE-STAGE 1						
FAP 713 (IL 101)						
553+75	556+99	RT	59	45	1	44
553+75	556+37	LT	51	38	1	38
SUB-TOTAL PRE-STAGE 1			110	83	2	81
STAGE 1						
FAP 713 (IL 101)						
553+75	556+37	LT	4	3	74	(71)
562+39	564+55	LT	1	1	26	(25)
SUB-TOTAL STAGE 1			5	4	100	(96)
STAGE 2						
FAP 713 (IL 101)						
553+75	556+37	RT	80	60	1	59
562+39	564+55	RT	1	1	50	(49)
SUB-TOTAL STAGE 2			81	61	51	(10)
TOTALS			196	148	153	(5)
USE			200			(5)

TREE REMOVAL (OVER 15 UNITS DIAMETER)

STATION	SIDE	OFFSET	UNIT
20100210			
FAP 713 (IL 101)			
555+94.6	LT	20.7	34
556+32.0	LT	24.7	24
556+40.5	LT	20.7	18
556+63.2	LT	24.0	20
TOTAL			96

EARTH EXCAVATION (WIDENING)

STATION TO STATION	SIDE	AVE WIDTH	CU YD	
20200500				
FAP 713 (IL 101)				
561+82.6	564+55.0	RT	4.2	34.7
562+38.8	564+55.0	LT	4.4	29.5
TOTALS			64.2	
USE			65	

EROSION CONTROL BLANKET

STATION TO STATION	SIDE	WIDTH	SO YD	
25100630				
FAP 713 (IL 101)				
554+50.0	555+50.0	LT	18	200.0
555+14.3	556+43.3	RT	18	257.8
562+50.0	564+55.0	LT	VAR.	244.8
562+50.0	564+55.0	RT	VAR.	245.2
TOTAL			947.8	
USE			948	

PERIMETER EROSION BARRIER

STATION TO STATION	SIDE	FOOT	
28000400			
FAP 713 (IL 101)			
553+75.0	554+79.3	RT	104.3
553+75.0	557+20.0	LT	345.0
555+14.3	557+20.0	RT	205.7
557+20.0	557+20.0	LT & RT	78.0
561+50.0	561+50.0	LT & RT	78.0
561+50.0	564+55.0	LT	305.0
561+50.0	564+55.0	RT	305.0
TOTAL		1421.0	
USE		1421	

INLET AND PIPE PROTECTION

STATION	SIDE	OFFSET	EACH
28000500			
FAP 713 (IL 101)			
554+74.2	RT	31.0	1
TOTAL			1

SEEDING SCHEDULE

STATION TO STATION	SIDE	WIDTH	SEEDING CLASS 2A ACRE	FERTILIZER NUTRIENTS			MULCH METHOD 2 ACRE	AGRICULTURAL LIMESTONE TON	
				NITROGEN	PHOSPHORUS	POTASSIUM			
				POUND					
25000210 25000400 25000500 25000600 25100115 25000700									
FAP 713 (IL 101)									
553+75.0	554+83.3	RT	14	0.03	3.1	3.1	3.1	0.03	0.1
554+99.3	556+43.3	RT	20	0.07	5.9	5.9	5.9	0.07	0.1
553+75.0	554+15.8	LT	22	0.02	1.9	1.9	1.9	0.02	0.1
554+50.0	555+50.0	LT	20	0.05	4.1	4.1	4.1	0.05	0.1
TOTALS				0.17	15.1	15.1	15.1	0.17	0.4
USE				0.25	23	23	23	0.25	1

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

STATION TO STATION	SIDE	SURF WIDTH	SO YD	TON
40603310				
FAP 713 (IL 101)				
553+75.0	553+99.0	LT & RT	21.0	56.8
553+99.0	556+37.3	LT & RT	24.0	635.3
562+38.8	564+55.0	LT & RT	24.0	576.7
TOTAL				106.6
USE				107

PAVEMENT REMOVAL

STATION TO STATION	SIDE	WIDTH	SO YD	
44000100				
FAP 713 (IL 101)				
556+37.3	556+98.7	LT & RT	24.7	168.6
556+37.3	556+98.7	RT	4.2	28.7
561+83.4	562+38.8	RT	3.5	21.5
561+83.4	562+38.8	LT & RT	24.8	152.4
TOTAL			371.1	
USE			372	

- EXISTING PAVEMENT
- HMA BASE COURSE USED FOR STAGING

HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"

STATION TO STATION	SIDE	WIDTH	SO YD	
44000155				
FAP 713 (IL 101)				
553+75.0	553+99.0	LT & RT	21.0	56.8
553+99.0	556+37.3	LT & RT	32.0	847.1
562+38.8	564+55.0	LT & RT	32.0	768.9
TOTAL			1672.8	
USE			1673	

GUTTER REMOVAL

STATION TO STATION	SIDE	FOOT	
44000400			
FAP 713 (IL 101)			
553+75.0	556+98.7	LT	323.7
553+75.0	556+98.7	RT	323.7
TOTAL		647.3	
USE		648	

REMOVING INLETS

STATION	SIDE	OFFSET	EACH
60500060			
FAP 713 (IL 101)			
556+49.3	RT	14.6	1
TOTAL			1

RIPRAP SCHEDULE

LOCATION	WIDTH	28100109	28100707	28100709	28200200
		STONE RR CL A5	STONE DUMP RR CL A4	STONE DUMP RR CL A5	FILTER FABRIC
		SO YD	SO YD	SO YD	SO YD
FAP 713 (IL 101)					
554+15.6	TO 554+79.3	RT	VAR	100.5	100.5
554+15.8	TO 554+50.0	LT	18'	68.4	68.4
555+50.0	TO 556+43.2	LT	18'	186.5	186.5
WEST ABUTMENT			VAR	216.1	216.1
PIER 1			VAR		388.8
PIER 2			VAR		526.3
PIER 3			10'		125.9
PIER 4			10'		125.9
PIER 5			10'		125.9
EAST ABUTMENT			VAR	235.0	235
562+32.8	TO 562+50.0	LT	18'	34.4	34.4
562+32.8	TO 562+50.0	RT	18'	34.4	34.4
TOTALS				519.9	355.4
USE				520	355
				1292.8	2168.1
				1293	2168

ENTRANCE SCHEDULE

STATION	SIDE	TYPE	WIDTH	LENGTH	35101400	40800050
					AGGREGATE BASE COURSE TYPE B	INCIDENTAL HMA SURFACING
					SO YD	SO YD
FAP 713 (IL 101)						
554+91.3	RT	CE	16	23.0	15.1	9.6
TOTAL					15.1	9.6
USE					16	10

NOTE: DEPTH OF AGGREGATE AND HOT-MIX ASPHALT IS 8".

HOT-MIX ASPHALT BASE COURSE, 10"

STATION TO STATION	SIDE	AVE WIDTH	SO YD	
35501324				
FAP 713 (IL 101)				
553+99.0	556+37.3	LT	4.6	122.2
553+99.0	556+98.6	RT	4.8	160.1
562+38.8	564+55.0	LT	4.1	99.2
561+82.6	564+55.0	RT	4.1	125.0
TOTAL			506.5	
USE			507	

MISCELLANEOUS PAVING ITEMS SCHEDULE

ITEM	UNIT	TOTAL
TEMPORARY RAMP	SO YD	135
BITUMINOUS MATERIALS (PRIME COAT)	TON	0.5
AGGREGATE (PRIME COAT)	TON	3

THE SCHEDULE FOR MISCELLANEOUS PAVING ITEMS ARE ESTIMATED QUANTITIES. IT MAY BE REDUCED, INCREASED, OR DELETED BY THE ENGINEER BASED ON ACTUAL FIELD CONDITIONS. NO WORK INVOLVING THESE ESTIMATED QUANTITIES SHALL BE PERFORMED WITHOUT THE DIRECTION AND APPROVAL OF THE ENGINEER.

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

STATION TO STATION	SIDE	WIDTH	SO YD	
42001430				
FAP 713 (IL 101)				
556+37.3	556+43.3	LT & RT	33.83	22.6
562+32.8	562+38.8	LT & RT	33.83	22.6
TOTAL			45.2	
USE			46	



AGGREGATE SHOULDERS, TYPE B

48101200

STATION TO STATION	SIDE	WIDTH	TON
FAP 713 (IL 101)			
554+11.6	555+65.1	LT	4
554+11.6	554+74.3	RT	4
555+08.3	555+18.2	RT	4
563+10.9	564+55.0	RT	4
563+95.3	564+55.0	LT	4
TOTAL			16.3
USE			17

AGGREGATE SHOULDERS, TYPE B (SPECIAL)

X4811300

STATION TO STATION	SIDE	WIDTH	TON
FAP 713 (IL 101)			
555+18.2	556+58.3	RT	4
555+65.1	556+58.3	LT	4
562+17.8	563+95.3	LT	4
562+17.8	563+10.9	RT	4
TOTAL			19.1
USE			20

HOT-MIX ASPHALT SHOULDERS

48203100

STATION TO STATION	SIDE	SURFACE WIDTH	SQ YD	TON
FAP 713 (IL 101)				
554+00.9	556+37.3	LT	4	105.0
554+00.9	556+37.3	RT	4	105.0
562+38.8	564+55.0	LT	4	96.1
562+38.8	564+55.0	RT	4	96.1
TOTAL				33.8
USE				34

PIPE CULVERT REMOVAL

50105220

STATION	SIDE	DESCRIPTION	FOOT
FAP 713 (IL 101)			
556+49.5	RT	15" CMP	17
TOTAL			17

PIPE CULVERTS, CLASS D TYPE 1  
EQUIVALENT ROUND-SIZE 24"

54205479

STATION	SIDE	OFFSET	FOOT
FAP 713 (IL 101)			
554+91.3	RT	29.9	40
TOTAL			40

METAL END SECTIONS  
EQUIVALENT ROUND-SIZE 24"

54215769

STATION	SIDE	OFFSET	EACH
FAP 713 (IL 101)			
554+91.3	RT	29.9	2
TOTAL			2

CLASS SI CONCRETE (OUTLET)

60600095

STATION TO STATION	SIDE	CU YD
FAP 713 (IL 101)		
553+75.0	553+99.0	LT
553+75.0	553+99.0	RT
TOTAL		6.02
USE		6.1

GUARDRAIL SCHEDULE

63200310 63000001 63100167 63100085 78200410 78201000

STATION TO STATION	SIDE	GUARDRAIL REMOVAL	SPBGR TYPE A 6' POSTS	TRAFFIC BARRIER TERMINALS		GUARDRAIL MARKERS TYPE A	TERMINAL MARKERS DIRECT APPLIED
				TYPE 1 SPECIAL (TANGENT)	TYPE 6		
FAP 713 (IL 101)				FOOT			
555+18.23	556+60.75	RT	90	46.87	1	1	4
555+65.10	556+60.75	LT	90		1	1	4
562+15.25	563+10.90	RT	90		1	1	4
562+15.25	563+95.28	LT	90	84.38	1	1	4
TOTALS			360	131.25	4	4	16

TEMPORARY CONCRETE BARRIER

70400100

STATION TO STATION	SIDE	FOOT
FAP 713 (IL 101)		
555+26.6	563+49.4	LT & RT
TOTAL		823.3

RELOCATE TEMPORARY CONCRETE BARRIER

70400200

STATION TO STATION	SIDE	FOOT
FAP 713 (IL 101)		
555+26.6	563+49.4	LT & RT
TOTAL		823.3

PAINT PAVEMENT MARKING - LINE 5"

78001120

STATION TO STATION	SIDE	DESCRIPTION	WHITE	YELLOW
			FOOT	
FAP 713 (IL 101)				
553+75.0	564+55.0	CL	NO-PASSING	1080.0
553+75.0	564+55.0	CL	SKIP-DASH	270.0
553+75.0	564+55.0	LT	EDGE LINE	1080.0
553+75.0	564+55.0	RT	EDGE LINE	1080.0
TOTALS			2160.0	1350.0
USE			3510	

PAVEMENT MARKING REMOVAL

78300100

STATION TO STATION	SIDE	DESCRIPTION	SQ FT
FAP 713 (IL 101)			
553+24.0	555+10.6	CL	SKIP-DASH
553+24.0	555+10.6	CL	NO-PASSING
563+55.4	565+20.0	CL	SKIP-DASH
563+55.4	565+20.0	CL	NO-PASSING
555+10.6	563+55.4	RT	EDGE LINE
555+04.5	563+59.5	LT	EDGE LINE
TOTAL			1075.5
USE			1076

BRIDGE APPROACH DRAINS

54215547 60100935 60900115

LOCATION	SIDE	EACH	FT	EACH
FAP 713 (IL 101)				
562+27.75	LT	1	19.2	1
	RT	1	19.2	1
TOTAL		2	38.4	2
USE		2	40	2

IMPACT ATTENUATORS, TEMPORARY  
(FULLY REDIRECTIVE, NARROW)  
TEST LEVEL 3

Z0030260

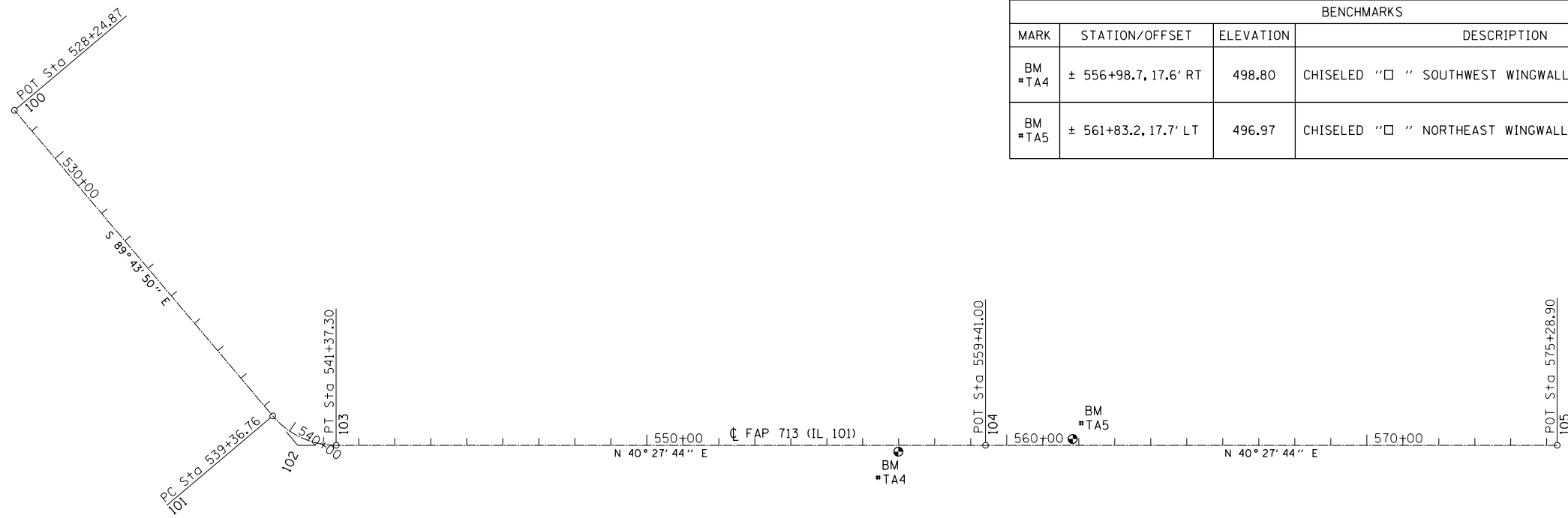
STATION	SIDE	EACH
FAP 713 (IL 101)		
555+26.6	LT	1
563+49.4	LT	1
TOTAL		2

IMPACT ATTENUATORS, RELOCATE  
(FULLY REDIRECTIVE)  
TEST LEVEL 3

Z0030330

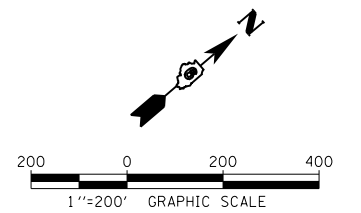
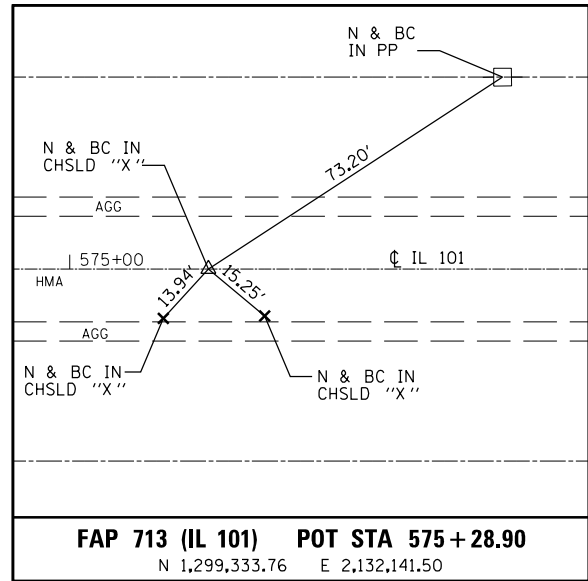
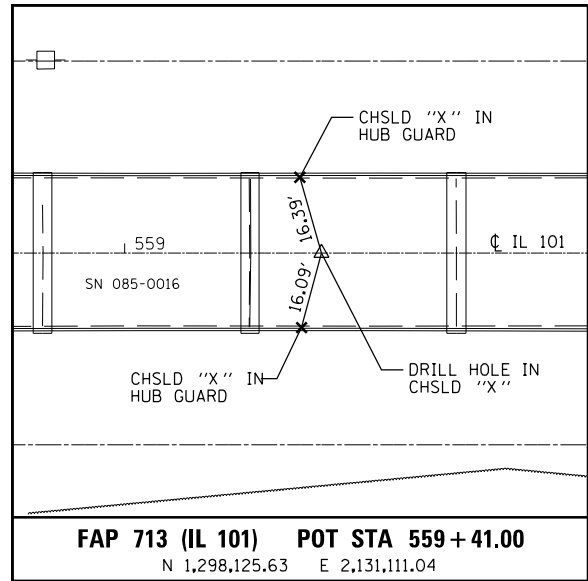
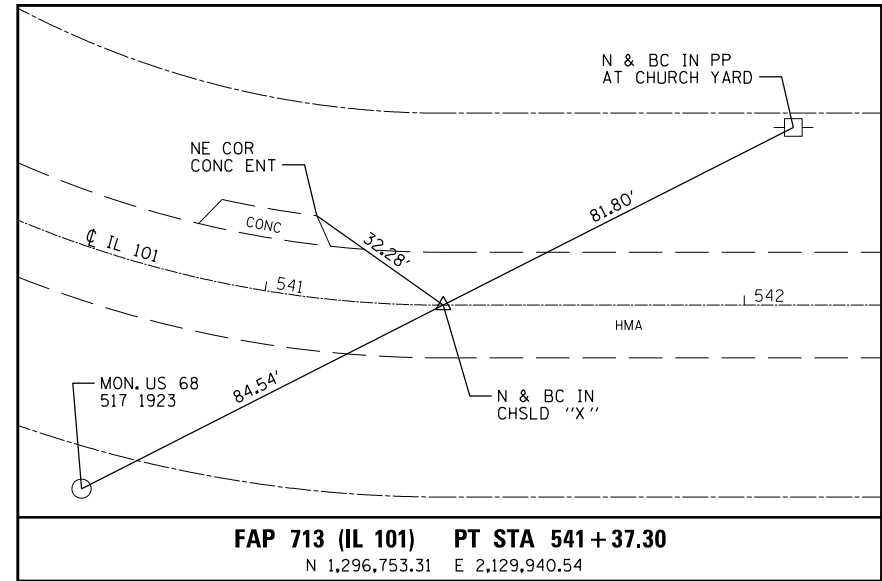
STATION	SIDE	EACH
FAP 713 (IL 101)		
555+26.6	RT	1
563+49.4	RT	1
TOTAL		2

BENCHMARKS			
MARK	STATION/OFFSET	ELEVATION	DESCRIPTION
BM #TA4	± 556+98.7, 17.6' RT	498.80	CHISELED "□" " SOUTHWEST WINGWALL OF SN 085-0016
BM #TA5	± 561+83.2, 17.7' LT	496.97	CHISELED "□" " NORTHEAST WINGWALL OF SN 085+0016

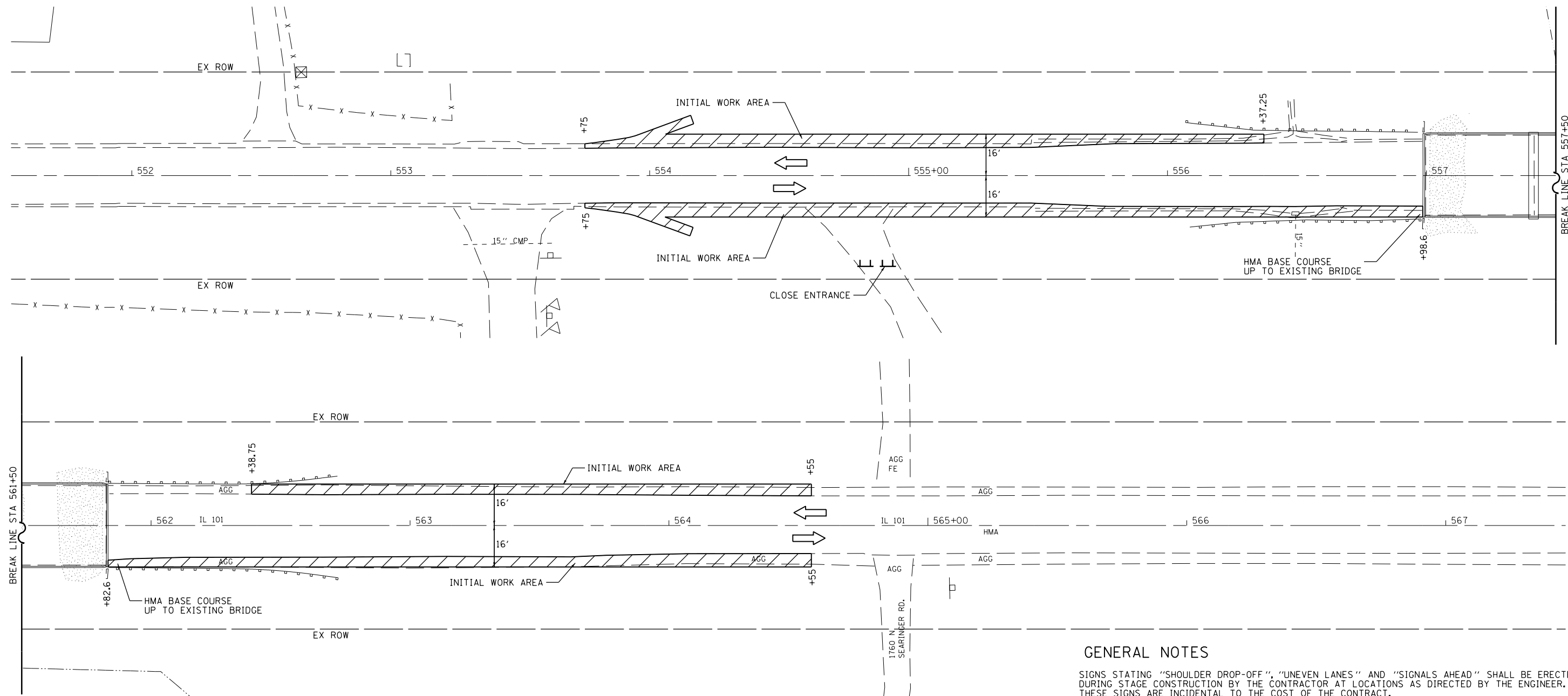


EXIST. CURVE 215  
 102 P.I. STA. = 540+43.86  
 $\Delta = 49^\circ 48' 26''$  (LT)  
 $D = 24^\circ 50' 13''$   
 $R = 230.69'$   
 $T = 107.10'$   
 $L = 200.54'$   
 $E = 23.65'$   
 101 P.C. STA. = 539+36.76  
 103 P.T. STA. = 541+37.30

CONTROL POINTS		
POINT	NORTHING	EASTING
100	1,296,677.5609	2,128,652.0624
101	1,296,672.3310	2,129,763.9386
102	1,296,671.8272	2,129,871.0374
103	1,296,753.3126	2,129,940.5395
104	1,298,125.6297	2,121,111.0434
105	1,299,333.7588	2,132,141.5048



FILE NAME =	USER NAME = laughlir1	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ALIGNMENT &amp; BENCHMARK DATA</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwork\laughlir1\0233251\062A03-sh1-ATB01.dgn	2A03-sh1-ATB01.dgn	DRAWN -	REVISED -					713	120B-3	SCHUYLER	75	10
	PLOT SCALE = 400.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 72A03							
	PLOT DATE = Aug-17-2010 01:26:27PM	DATE -	REVISED -		SCALE: 1"=200'	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	



**STAGE CONSTRUCTION SEQUENCE**

THE FOLLOWING STAGE CONSTRUCTION SEQUENCE IS FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PLANNING AND EXECUTING THIS PROJECT WHICH SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

**INITIAL CONSTRUCTION OPERATIONS:**

REMOVE EXISTING BITUMINOUS SHOULDERS AND CURB STA 553+75 TO STA 556+37.3 LT AND STA 562+38.8 TO STA 564+55. REPLACE WITH HOT-MIX ASPHALT BASE COURSE 10" AND TYPE B GUTTER OUTLET. UTILIZE TRAFFIC CONTROL AND PROTECTION STANDARD 701201 OR 701326.

REMOVE EXISTING BITUMINOUS SHOULDERS AND CURB STA 553+75 TO STA 556+98.6 RT AND STA 561+82.6 TO STA 564+55. REPLACE WITH HOT-MIX ASPHALT BASE COURSE 10" AND TYPE B GUTTER OUTLET. UTILIZE TRAFFIC CONTROL AND PROTECTION STANDARD 701201 OR 701326.

OVERNIGHT HOLES OR DROPOFFS ADJACENT TO THE PAVEMENT SHALL NOT BE ALLOWED.

PLACE "MAX WIDTH" SIGNING AT THE LOCATIONS SHOWN IN THE PLANS.

SET UP STAGE 1 TRAFFIC CONTROL UTILIZING THESE PLANS IN CONJUNCTION WITH STANDARD 701321.

PLACE TEMPORARY CONCRETE BARRIER AND PAVEMENT MARKINGS IN ACCORDANCE WITH THESE PLANS.

INSTALL TEMPORARY SIGNALIZATION AND MICROWAVE DETECTION SYSTEMS AT THE LOCATIONS CALLED OUT IN THESE PLANS.

**GENERAL NOTES**

SIGNS STATING "SHOULDER DROP-OFF", "UNEVEN LANES" AND "SIGNALS AHEAD" SHALL BE ERRECTED DURING STAGE CONSTRUCTION BY THE CONTRACTOR AT LOCATIONS AS DIRECTED BY THE ENGINEER. THESE SIGNS ARE INCIDENTAL TO THE COST OF THE CONTRACT.

THE CONTRACTOR SHALL PLACE "MAX WIDTH" SIGNS BEFORE IMPLEMENTING ANY STAGE TRAFFIC CONTROL. THESE SIGNS SHALL BE PAID FOR AS "WIDTH RESTRICTIVE SIGNING". (SEE MAX WIDTH SIGN DETAIL SHEET)

THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (217-785-5836) AT LEAST ONE WEEK PRIOR TO IMPLEMENTING STAGE TRAFFIC CONTROL.

THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (217-558-6523) AT LEAST THREE DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS.

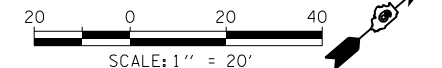
THE CONTRACTOR SHALL NOTIFY BROOKLYN TOWNSHIP PERSONNEL AT LEAST ONE WEEK PRIOR TO CLOSING THE ENTRANCE AT STATION 554+19 RT.

THE FIRST AND LAST SECTION OF EVERY RUN OF TEMPORARY CONCRETE BARRIER WALL SHALL BE SECURED TO THE PAVEMENT WITH DOWEL BARS IN ACCORDANCE WITH SECTION 704.06 OF THE STANDARD SPECIFICATIONS.

REMOVE ALL CONFLICTING PAVEMENT MARKINGS.

EXCAVATION AND REMOVAL FOR CONSTRUCTION ON BOTH SIDES OF THE PAVEMENT AT ANY ONE LOCATION WILL NOT BE PERMITTED AS PER SPECIFICATION 701.08 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" DATED JANUARY 1, 2007.

DIFFERENTIAL IN ELEVATION EXCEEDING 3 IN. WITHIN 12 FEET OF THE IL 101 CENTERLINE WILL REQUIRE LANE CLOSURE AND WILL NOT BE ALLOWED TO REMAIN OVERNIGHT. OTHER DROP-OFFS SHALL BE IN ACCORDANCE WITH SPECIFICATION 701.07 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" DATED JANUARY 1, 2007.



LEGEND	
	DIRECTION OF TRAFFIC
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	DOUBLE VERTICAL PANEL
	DRUM WITH BI-DIRECTIONAL STEADY BURNING LIGHT
	TEMPORARY TRAFFIC SIGNAL
	MICROWAVE DETECTOR SYSTEM
	TEMPORARY IMPACT ATTENUATOR
	WORK ZONE

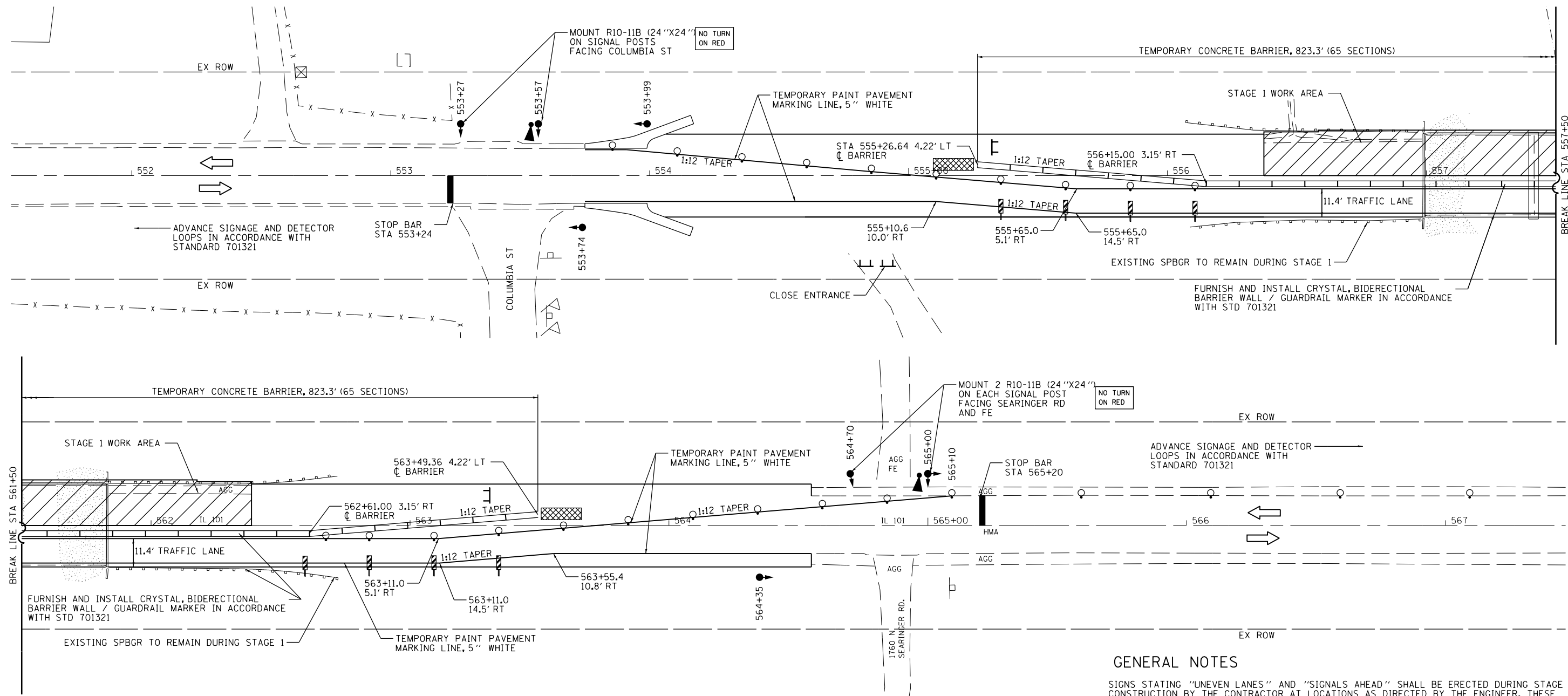
FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -
ei:\pw\work\p\d0233251\062\2A03-sh-t-staging01.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = Aug-17-2010 01:27:00PM	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL & PROTECTION  
STAGING - INITIAL CONSTRUCTION**

SCALE: 1"=20' SHEET NO. 1 OF 35 SHEETS STA. 553+00 STA. 559+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	11
CONTRACT NO. 72A03				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**STAGE CONSTRUCTION SEQUENCE**

THE FOLLOWING STAGE CONSTRUCTION SEQUENCE IS FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PLANNING AND EXECUTING THIS PROJECT WHICH SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

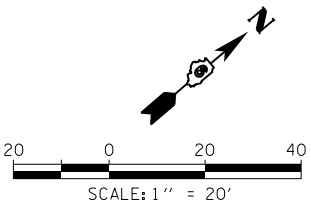
- STAGE 1:**
- COMPLETE INSTALLATION OF ALL STAGE 1 TRAFFIC CONTROL ITEMS SHOWN IN THE PLANS.
  - INSTALL REUSABLE ENERGY ABSORBING CRASH TERMINALS AT STA 555+26.64 AND STA 563+49.36.
  - PERFORM STAGE 1 STRUCTURE REMOVAL FOR STRUCTURE NO. 085-0016. REMOVE EXISTING PAVEMENT FOR PROPOSED STRUCTURE AND BRIDGE APPROACH CONSTRUCTION.
  - CONSTRUCT NORTH (LT) SECTION OF STRUCTURE NO. 085-0514 AND BRIDGE APPROACHES. CONSTRUCT ROADWAY SLOPES AND RIPRAP. INSTALL STEEL PLATE BEAM GUARDRAIL ALONG LT SIDE. CONSTRUCT TEMPORARY RAMP IF REQUIRED.
  - RELOCATE TRAFFIC CONTROL ITEMS FOR STAGE 2 CONSTRUCTION.

**GENERAL NOTES**

- SIGNS STATING "UNEVEN LANES" AND "SIGNALS AHEAD" SHALL BE ERECTED DURING STAGE CONSTRUCTION BY THE CONTRACTOR AT LOCATIONS AS DIRECTED BY THE ENGINEER. THESE SIGNS ARE INCIDENTAL TO THE COST OF THE CONTRACT.
- THE CONTRACTOR SHALL PLACE "MAX WIDTH" SIGNS BEFORE IMPLEMENTING ANY STAGE TRAFFIC CONTROL. THESE SIGNS SHALL BE PAID FOR AS "WIDTH RESTRICTIVE SIGNING". (SEE MAX WIDTH SIGN DETAIL SHEET)
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (217-785-5836) AT LEAST ONE WEEK PRIOR TO IMPLEMENTING STAGE TRAFFIC CONTROL.
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (217-558-6523) AT LEAST THREE DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS.
- VERTICAL PANELS, DRUMS WITH STEADY BURNING LIGHTS, TYPE III BARRICADES, SIGNS, TEMPORARY PAVEMENT MARKINGS, DETECTOR LOOPS, TEMPORARY RUMBLE STRIPS, AND TYPE C BIDIRECTIONAL REFLECTORS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)".
- THE FIRST AND LAST SECTION OF EVERY RUN OF TEMPORARY CONCRETE BARRIER WALL SHALL BE SECURED TO THE PAVEMENT WITH DOWEL BARS IN ACCORDANCE WITH SECTION 704.06 OF THE STANDARD SPECIFICATIONS.
- THIS WORK SHALL SUPPLEMENT AND BE IN ACCORDANCE WITH HIGHWAY STANDARD 701321.
- REMOVE ALL CONFLICTING PAVEMENT MARKINGS.
- EXISTING GUARDRAIL SHALL REMAIN IN PLACE DURING STAGE 1 FOR EASTBOUND TRAFFIC.

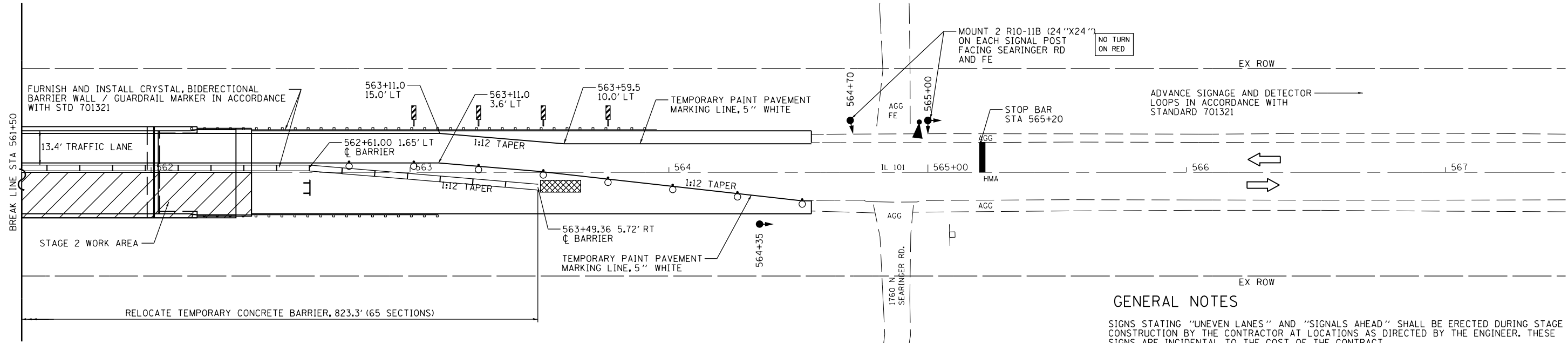
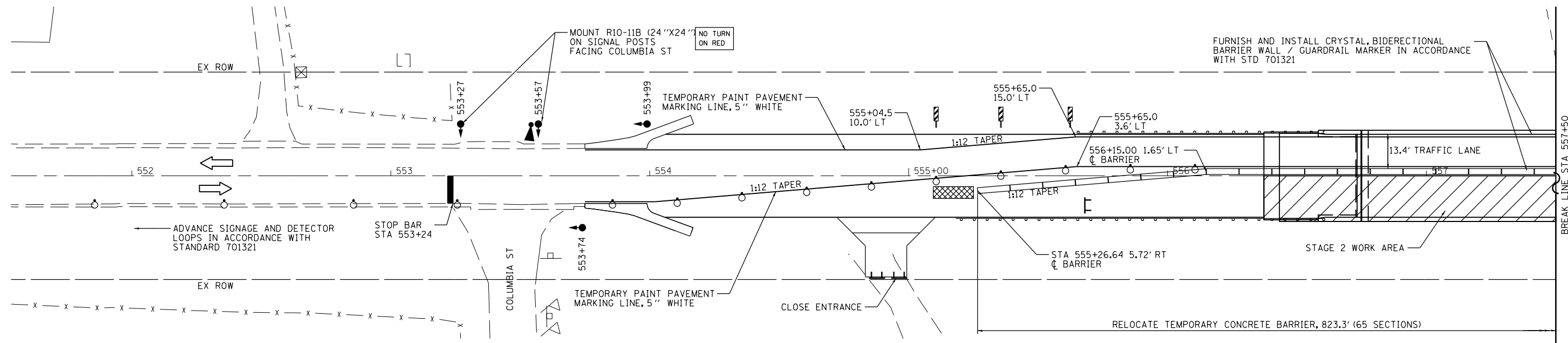
**LEGEND**

- DIRECTION OF TRAFFIC
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DOUBLE VERTICAL PANEL
- DRUM WITH BI-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY TRAFFIC SIGNAL
- MICROWAVE DETECTOR SYSTEM
- TEMPORARY IMPACT ATTENUATOR
- WORK ZONE



FILE NAME =	USER NAME = laughl1n1	DESIGNED -	REVISED - 8/18/10	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL &amp; PROTECTION STAGING - STAGE 1</b>	F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p1dot\laughl1n1\0233251\0672A03-sh1-staging02.dgn	PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -			713	120B-3	SCHUYLER	75	12
PLOT DATE = Aug-19-2010 09:12:48AM	DATE -	CHECKED -	REVISED -			CONTRACT NO. 72A03				
		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCALE: 1" = 20'      SHEET NO. 20F      35 SHEETS      STA. 553+00 STA. 559+00



**GENERAL NOTES**

- SIGNS STATING "UNEVEN LANES" AND "SIGNALS AHEAD" SHALL BE ERECTED DURING STAGE CONSTRUCTION BY THE CONTRACTOR AT LOCATIONS AS DIRECTED BY THE ENGINEER. THESE SIGNS ARE INCIDENTAL TO THE COST OF THE CONTRACT.
- THE CONTRACTOR SHALL PLACE "MAX WIDTH" SIGNS BEFORE IMPLEMENTING ANY STAGE TRAFFIC CONTROL. THESE SIGNS SHALL BE PAID FOR AS "WIDTH RESTRICTIVE SIGNING". (SEE MAX WIDTH SIGN DETAIL SHEET)
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (217-785-5836) AT LEAST ONE WEEK PRIOR TO IMPLEMENTING STAGE TRAFFIC CONTROL.
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (217-558-6523) AT LEAST THREE DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS.
- VERTICAL PANELS, DRUMS WITH STEADY BURNING LIGHTS, TYPE III BARRICADES, SIGNS, TEMPORARY PAVEMENT MARKINGS, DETECTOR LOOPS, TEMPORARY RUMBLE STRIPS, AND TYPE C BIDIRECTIONAL REFLECTORS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)".
- THE FIRST AND LAST SECTION OF EVERY RUN OF TEMPORARY CONCRETE BARRIER WALL SHALL BE SECURED TO THE PAVEMENT WITH DOWEL BARS IN ACCORDANCE WITH SECTION 704.06 OF THE STANDARD SPECIFICATIONS.
- THIS WORK SHALL SUPPLEMENT AND BE IN ACCORDANCE WITH HIGHWAY STANDARD 701321.
- REMOVE ALL CONFLICTING PAVEMENT MARKINGS.

**LEGEND**

- DIRECTION OF TRAFFIC
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DOUBLE VERTICAL PANEL
- DRUM WITH BI-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY TRAFFIC SIGNAL
- MICROWAVE DETECTOR SYSTEM
- TEMPORARY IMPACT ATTENUATOR
- WORK ZONE

**STAGE CONSTRUCTION SEQUENCE**

THE FOLLOWING STAGE CONSTRUCTION SEQUENCE IS FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PLANNING AND EXECUTING THIS PROJECT WHICH SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

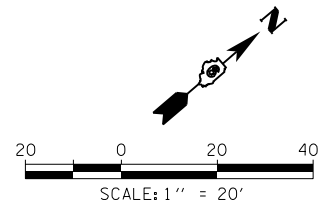
**STAGE 2:**  
 FOLLOWING THE COMPLETION OF STAGE 1 RELOCATE TEMPORARY CONCRETE BARRIER WALL AND DRUMS AND PLACE TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS.

PERFORM STAGE 2 STRUCTURE REMOVAL FOR STRUCTURE NO. 085-0016. REMOVE EXISTING PAVEMENT FOR PROPOSED STRUCTURE AND BRIDGE APPROACH CONSTRUCTION.

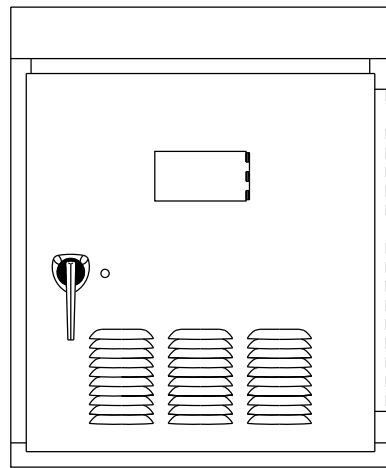
CONSTRUCT SOUTH (RT) SECTION OF STRUCTURE NO. 085-0514 AND BRIDGE APPROACHES. CONSTRUCT ROADWAY SLOPES AND RIPRAP. INSTALL STEEL PLATE BEAM GUARDRAIL ALONG RT SIDE. CONSTRUCT TEMPORARY RAMP IF REQUIRED.

REMOVE TRAFFIC CONTROL ITEMS FOR STAGE 2 CONSTRUCTION.

MILL AND RESURFACE IL 101. UTILIZE TRAFFIC CONTROL AND PROTECTION STANDARD 701306. INSTALL FINAL PAVEMENT MARKINGS.

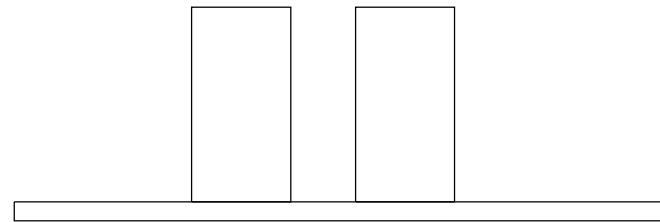


FILE NAME =	USER NAME = laughl1n1	DESIGNED -	REVISED - 8/18/10	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL &amp; PROTECTION STAGING - STAGE 2</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ei:\pw\work\p1dot\laughl1n1\d0233251\0672A03-sh-t-staging03.dgn	DRAWN -	REVISED -	713					120B-3	SCHUYLER	75	13	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 72A03									
PLOT DATE = Aug-19-2010 09:12:55AM	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT									
				SCALE: 1" = 20'		SHEET NO. 30F 3SHEETS		STA. 553+00 STA. 559+00				



Temporary Controller Cabinet

DETECTOR AMPLIFIER NOTES

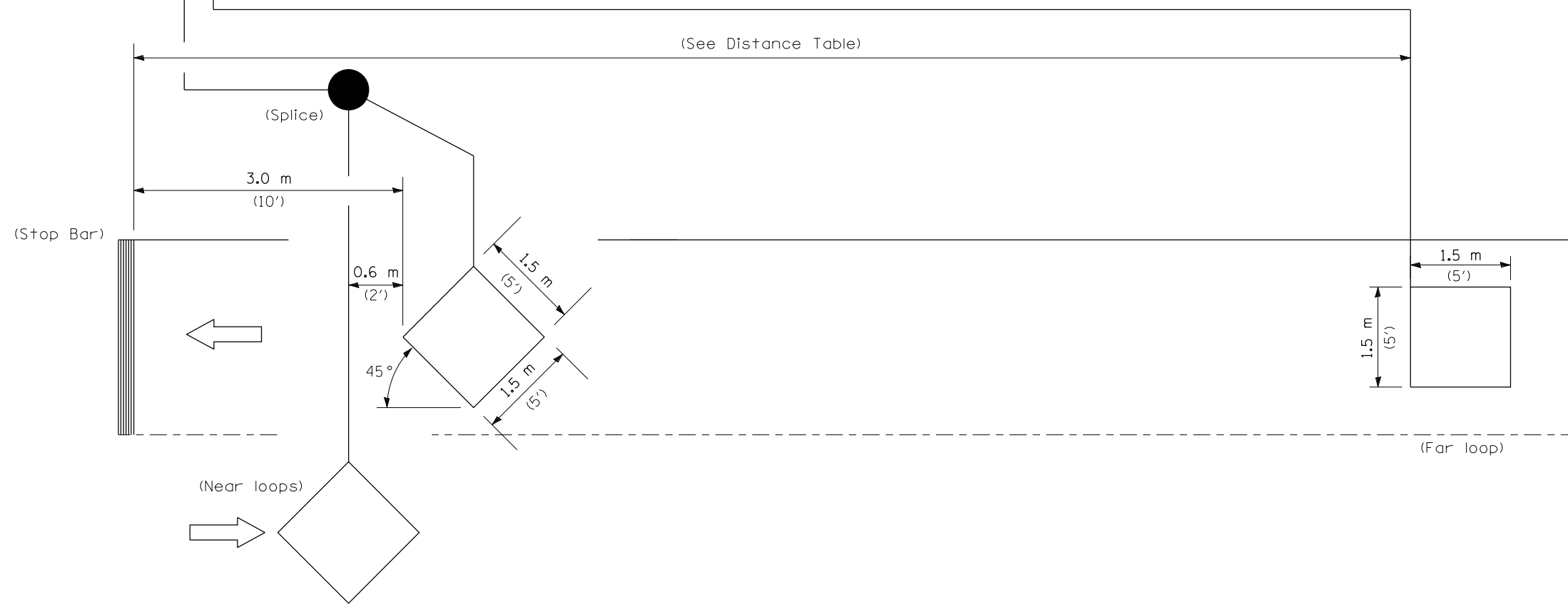


AMP 1 (NEAR LOOPS) AMP 2 (FAR LOOP)

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

AMP 2: NO DELAY

FAR LOOP DISTANCE TABLE	
ADVISORY SPEED (MPH)	DISTANCE FROM STOP BAR (FT.)
30 OR LESS	220
35	260
40	300
45	330
50	370
55	400



NOTE: All loops centered in lane.

INDUCTION LOOP DETECTOR

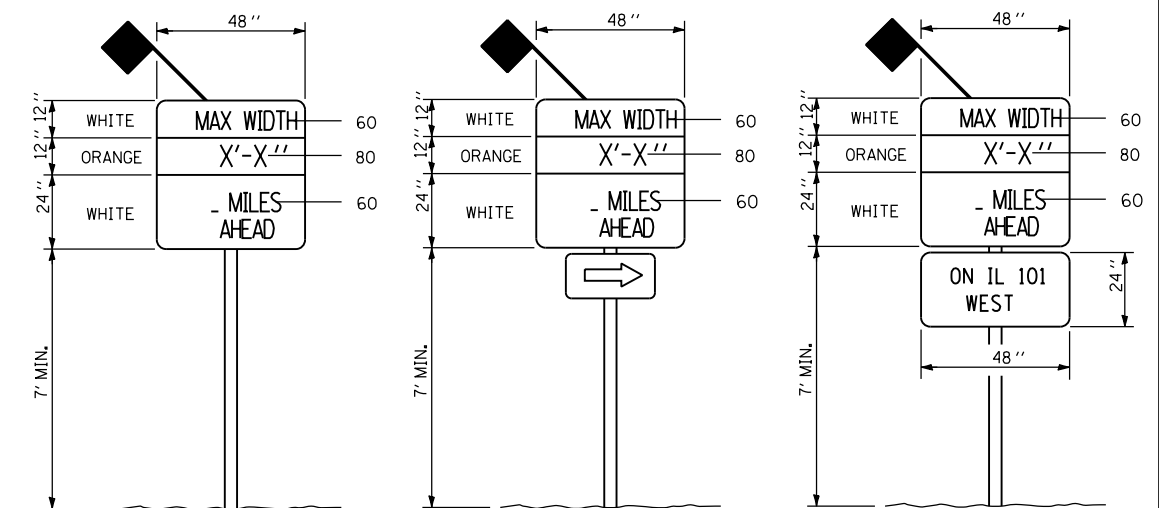
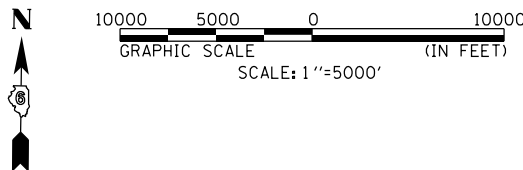
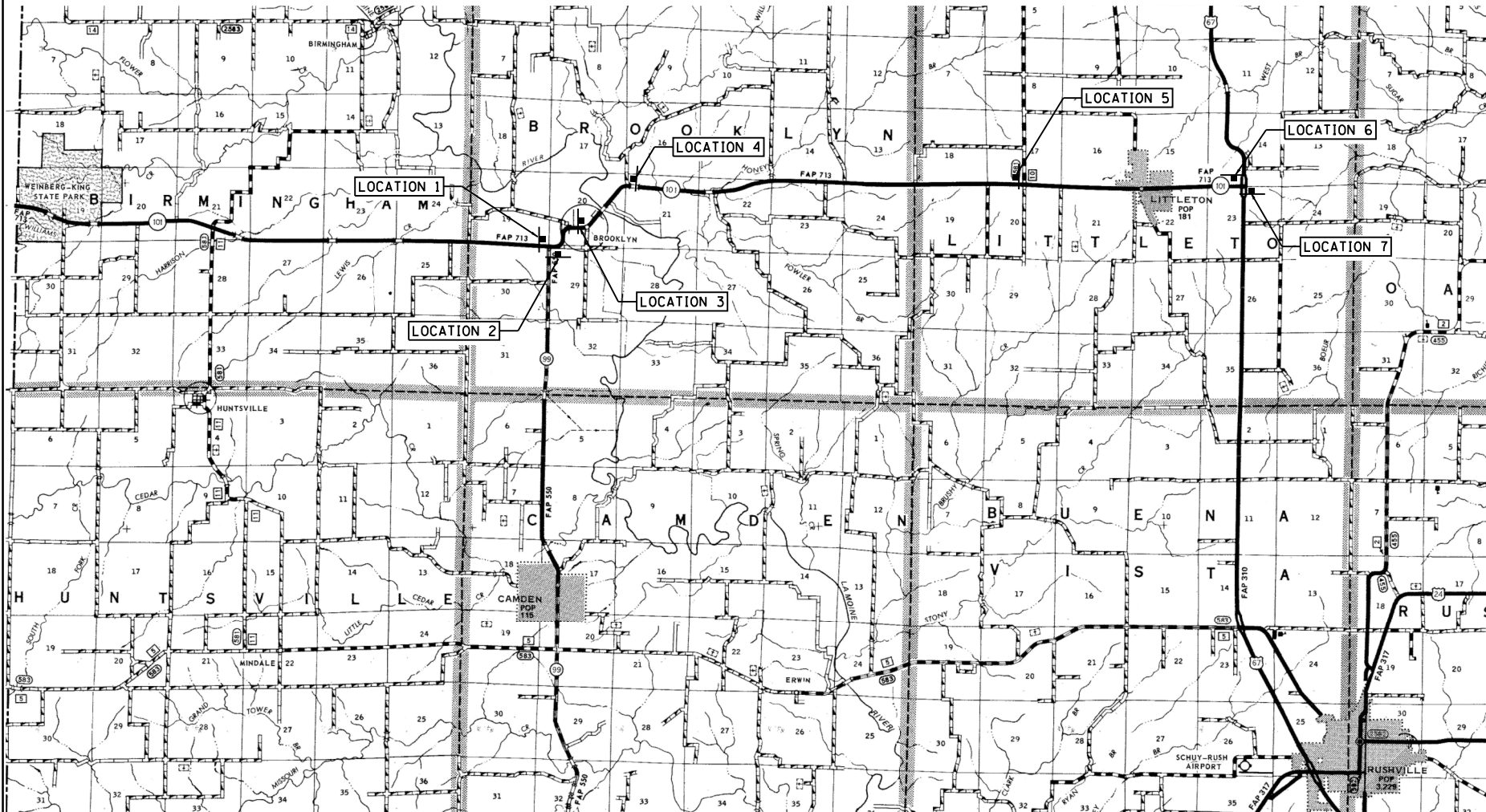
FILE NAME =	USER NAME = laughlinc1	DESIGNED - IDOT	REVISED -
et:\pwork\pwork\laughlinc1\0233251\062A03-shit-staging04.dgn		DRAWN - IDOT	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = Aug-17-2010 01:27:40PM	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL & PROTECTION  
TEMPORARY BRIDGE TRAFFIC SIGNAL LOOP PLACEMENT DETAIL

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	14
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A03	



**SIGN A**  
(WIDTH RESTRICTION SIGN)

**SIGN B**  
(WIDTH RESTRICTION SIGN)

**SIGN C**  
(WIDTH RESTRICTION SIGN)

LOCATION	SIGN	DISTANCE
1 IL 101 EB AT IL 99 INTERSECTION	A	1.0 MILES
2 IL 99 NB AT IL 101 INTERSECTION	B	1.0 MILES
3 IL 101 EB AT KENTUCKY ST INTERSECTION	A	0.3 MILES
4 IL 101 WB AT CENTER RIDGE RD INTERSECTION	A	0.6 MILES
5 IL 101 WB AT CH 10 INTERSECTION	A	5.8 MILES
6 US 67 SB AT IL 101 INTERSECTION	C	9.0 MILES
7 US 67 NB AT IL 101 INTERSECTION	C	9.0 MILES

**GENERAL NOTES:**  
 ACTUAL MAXIMUM WIDTH IS 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.  
 MAXIMUM WIDTH SIGNS SHALL BE PAID FOR AS ONE LUMP SUM ITEM AS "WIDTH RESTRICTION SIGNING".  
 ALL SIGNS SHALL BE POST MOUNTED IN ACCORDANCE WITH ARTICLE 701.14 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

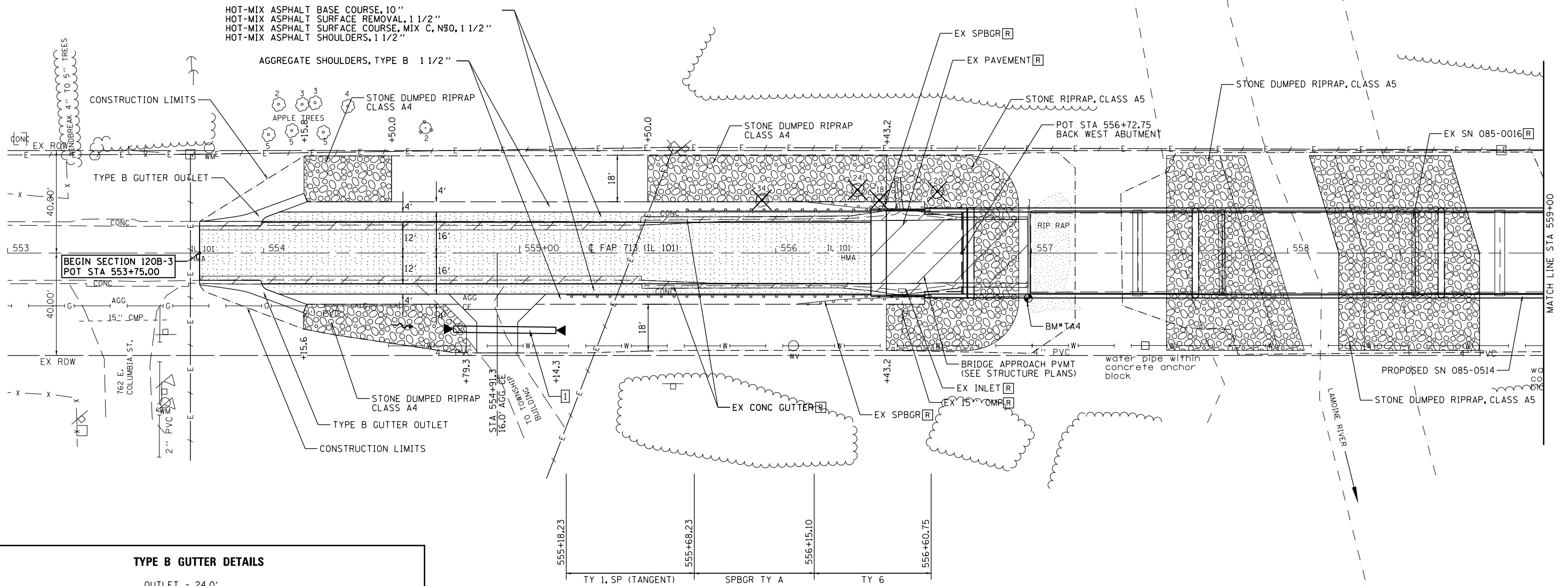
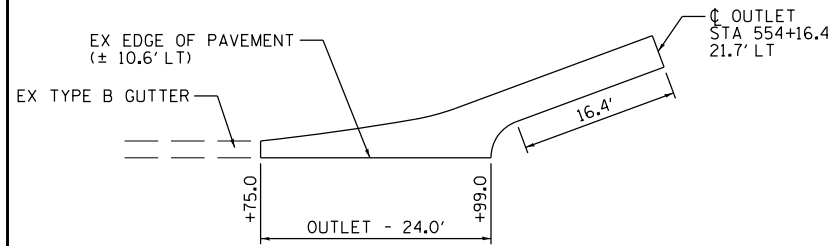
FILE NAME =	USER NAME = laughlinr1	DESIGNED -	REVISED -
ei:\pw\work\pwidot\laughlinr1\0233251\062\03-shit-staging05.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

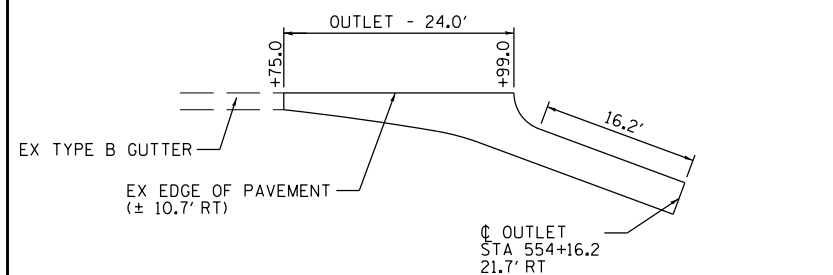
<b>TRAFFIC CONTROL &amp; PROTECTION MAXIMUM WIDTH SIGNING DETAIL</b>			
SCALE: NONE	SHEET NO. 1 OF	1SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	15
CONTRACT NO. 72A03				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

**TYPE B GUTTER DETAILS**



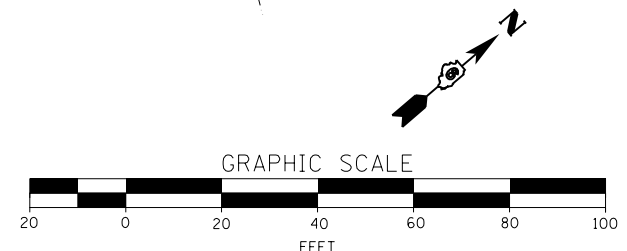
**TYPE B GUTTER DETAILS**



SEE STANDARD 606201 FOR ADDITIONAL DETAILS

1 - STA 554+91.3 29.9' RT  
PIPE CULVERT, CLASS D, TY 1, 24" ERS Ø. 40"  
METAL END SECTIONS, 2 EACH  
USFL = 500.84 (554+74.2, 29.7' RT)  
DSFL = 498.92 (555+14.2, 30.2' RT)

BM\*TA4 - FOUND CHSLD " □ " SOUTHWEST WINGWALL OF S.N. 085-0016  
STA 556+98.7, 17.6' RT ELEV = 498.80



FILE NAME =	USER NAME = laughl1n1
ei:\pwork\p1dot\laughl1n1\0233251\0672A03-sh1-plan01.dgn	
PLOT SCALE = 40.0000' / in.	
PLOT DATE = Aug-17-2010 01:28:04PM	

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

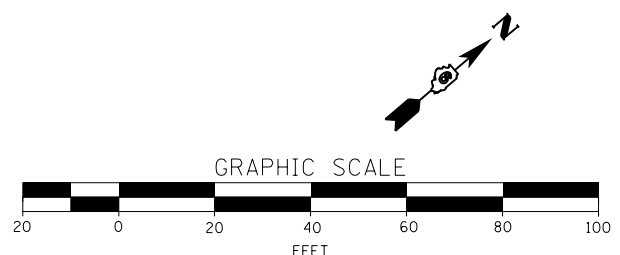
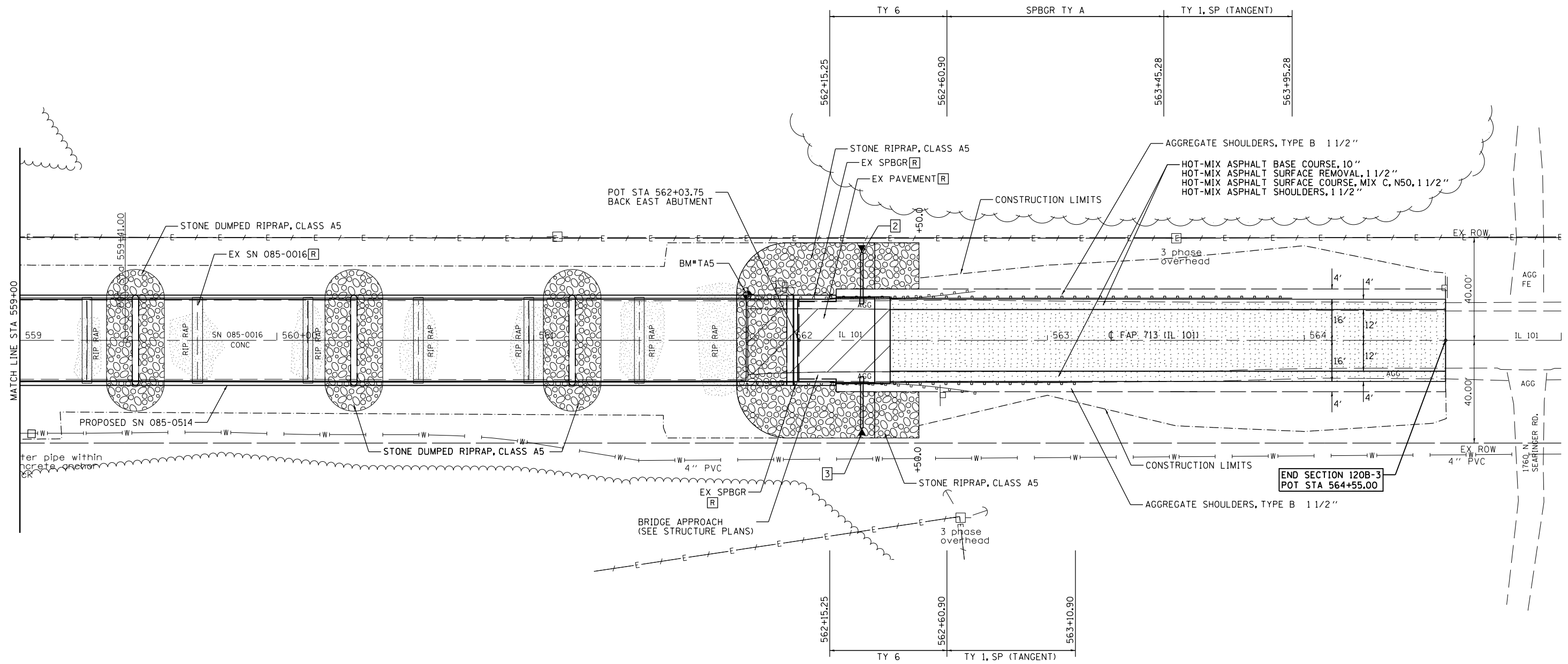
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	16
CONTRACT NO. 72A03				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





2 STA 562+27.75 LT  
 TYPE B INLET BOX, STANDARD 609001, 1 EACH  
 PIPE DRAINS 12", 20"  
 METAL END SECTIONS 12", 1 EACH  
 USFL = 494.62  
 DSFL = 488.50

3 STA 562+27.75 RT  
 TYPE B INLET BOX, STANDARD 609001, 1 EACH  
 PIPE DRAINS 12", 20"  
 METAL END SECTIONS 12", 1 EACH  
 USFL = 494.62  
 DSFL = 488.50



BM\*TA5 - SET CHSLD " " NORTHEAST  
 WINGWALL OF S.N. 085-0016  
 STA 561+83.2, 17.7' LT ELEV = 496.97

FILE NAME =	USER NAME = laughl1n1	DESIGNED -	REVISED - 8/18/10
et:\pw\work\pwidot\laughl1n1\d0233251\0672A03-sh1-plan02.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = Aug-19-2010 08:51:53AM	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PLAN SHEET

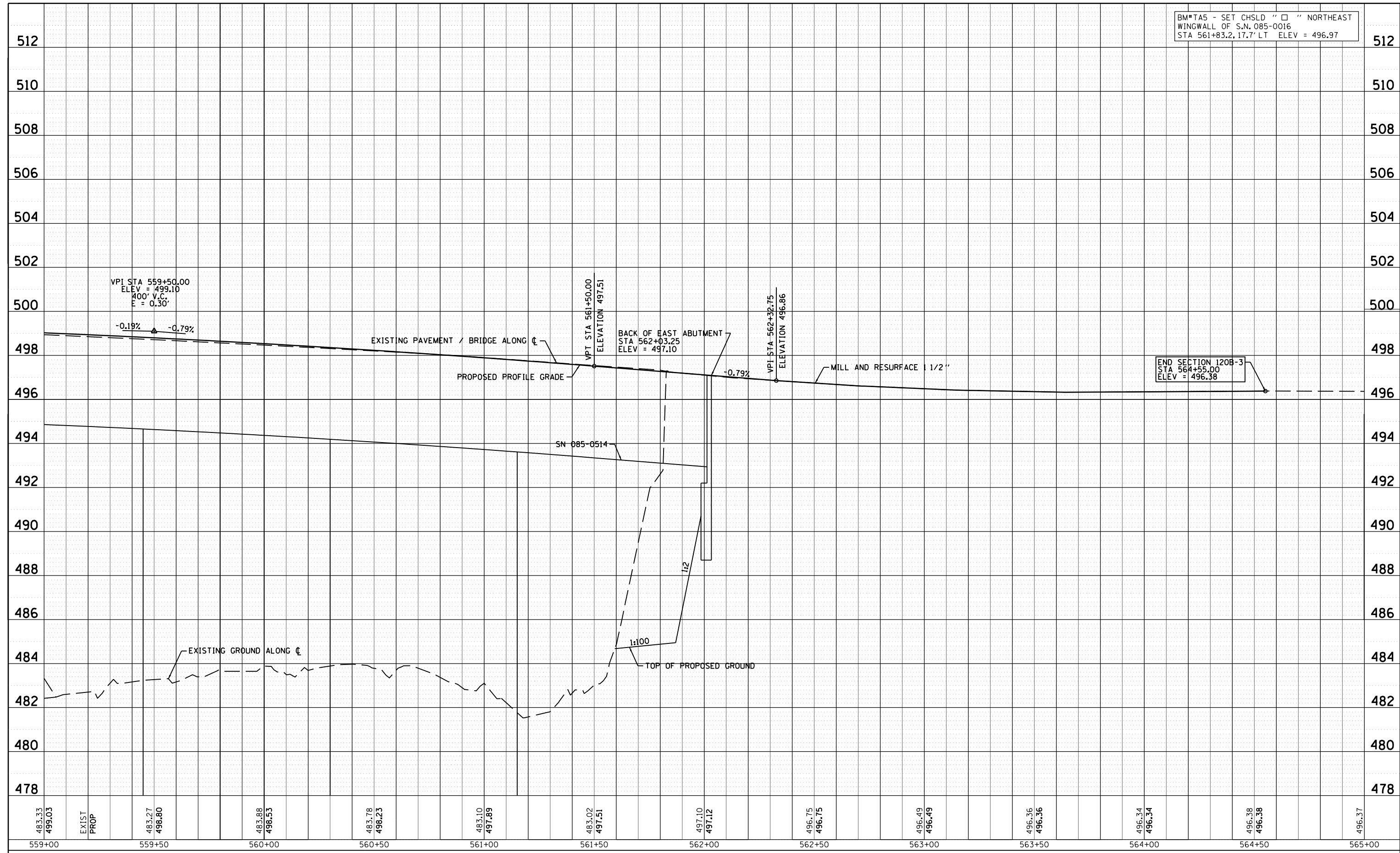
SCALE: 1"=20' SHEET NO. 30F 4SHEETS STA. 559+00 STA. 565+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	18
CONTRACT NO. 72A03				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BM\*TA5 - SET CHSLD " " NORTHEAST  
 WINGWALL OF S.N. 085-0016  
 STA 561+83.2, 17.7' LT ELEV = 496.97

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

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



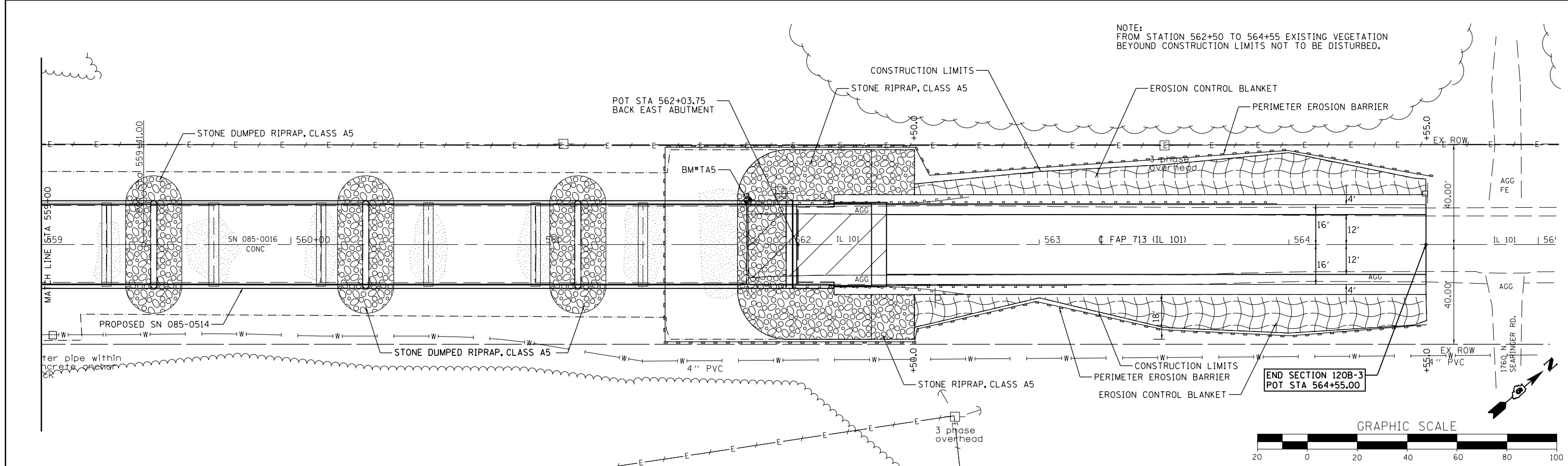
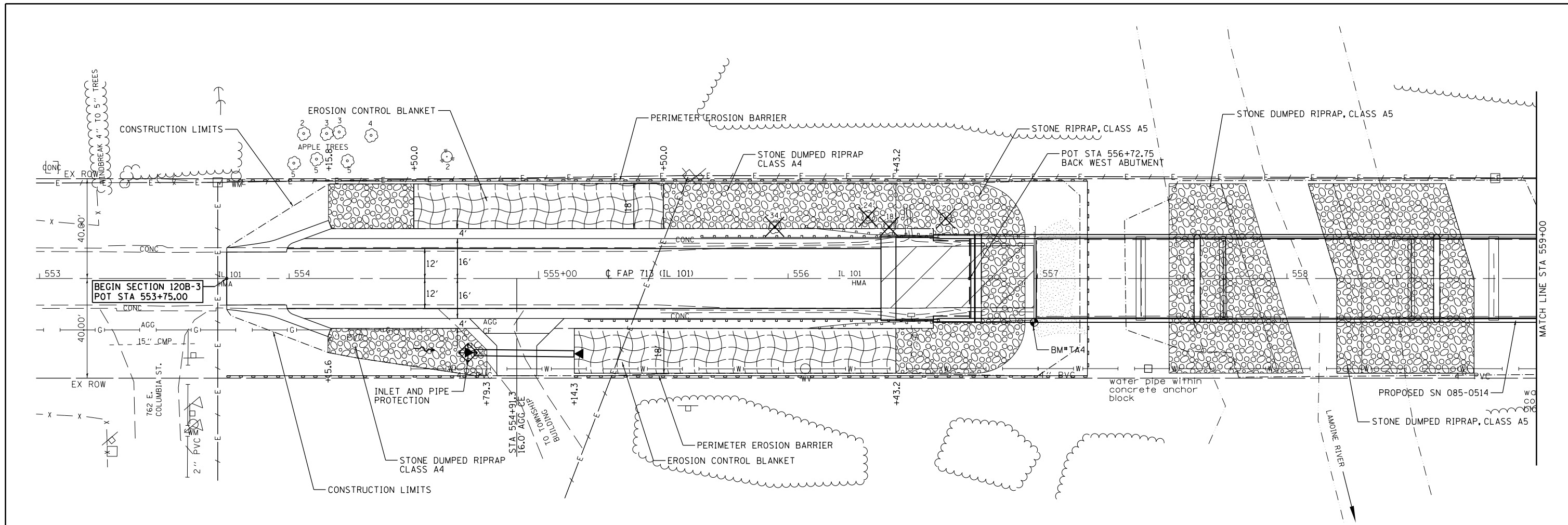
FILE NAME =	USER NAME = laughlinc1	DESIGNED -	REVISED -
c:\pwork\pwork\laughlinc1\d0233251\0672403-sht-plan02.dgn		CHECKED -	REVISED -
	PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
	PLOT DATE = Aug-17-2010 01:28:19PM	CHECKED -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

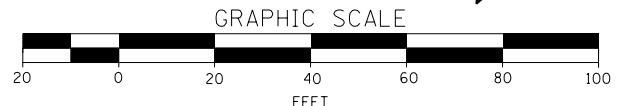
SCALE: 1"=20'    SHEET NO. 40F    4SHEETS    STA. 559+00 STA. 565+00

**PROFILE SHEET**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	19
CONTRACT NO. 72A03				
FED. ROAD DIST. NO.    ILLINOIS FED. AID PROJECT				



NOTE:  
FROM STATION 562+50 TO 564+55 EXISTING VEGETATION  
BEYOND CONSTRUCTION LIMITS NOT TO BE DISTURBED.



FILE NAME =	USER NAME = lauhlinr1	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EROSION CONTROL PLAN</b>			F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwidot\lauhlinr1\0233251\0672A03-shr-erosi.dgn	2A03-shr-erosi.dgn	DRAWN -	REVISED -		SCALE: 1"=20'	SHEET NO. 1 OF 1 SHEETS	STA. 553+000 STA. 559+00	713	120B-3	SCHUYLER	75	20
		CHECKED -	REVISED -					CONTRACT NO. 72A03				
		DATE -	REVISED -					FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark: Chiseled square on Pier #1, Sta. 557+41, right of C, Elev. 497.43

Existing Structure: Structure Number 085-0016 was built in 1928 as S.B.I. Rte. 101, Section 120B over the Lamoine River. The superstructure was replaced in 1977 with PPC deck beams under Section 120BR. The substructure was also widened during the 1977 construction and Piers 2 and 3 were added. A 5" reinforced concrete wearing surface was constructed over the deck beams in 1998 under Section (120BR)I, along with expansion joint replacement and riprap placement around the piers. In 2006, two deck beams were replaced in span 4 under Section (120BR)I-1. In 2008, three deck beams were replaced in span 3 and twelve deck beams were braced using steel wide flange beams under Section (120BR)I-2. The existing structure is an eleven span PPC deck beam bridge on closed concrete abutments and concrete piers on footings. The existing structure is 486'-0" long back-to-back abutments and 33'-0" wide out-to-out of deck.

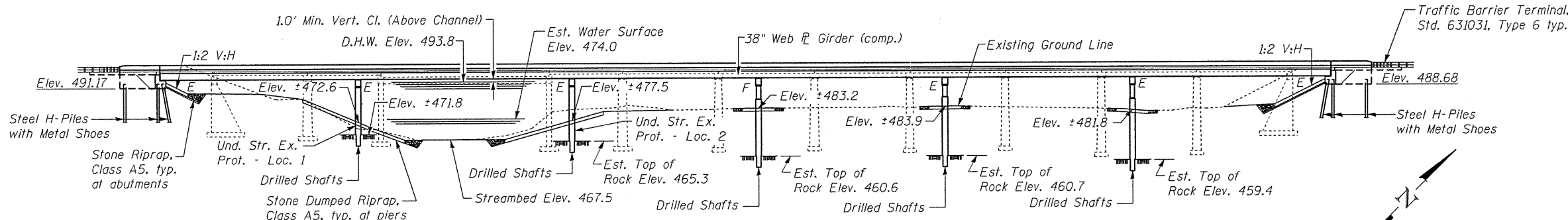
The existing structure shall be removed and replaced.

Traffic to be maintained utilizing stage construction.

Existing structural steel to remain property of IDOT. Contact Buddy Foster at (217) 782-7416 to arrange a pick-up time.

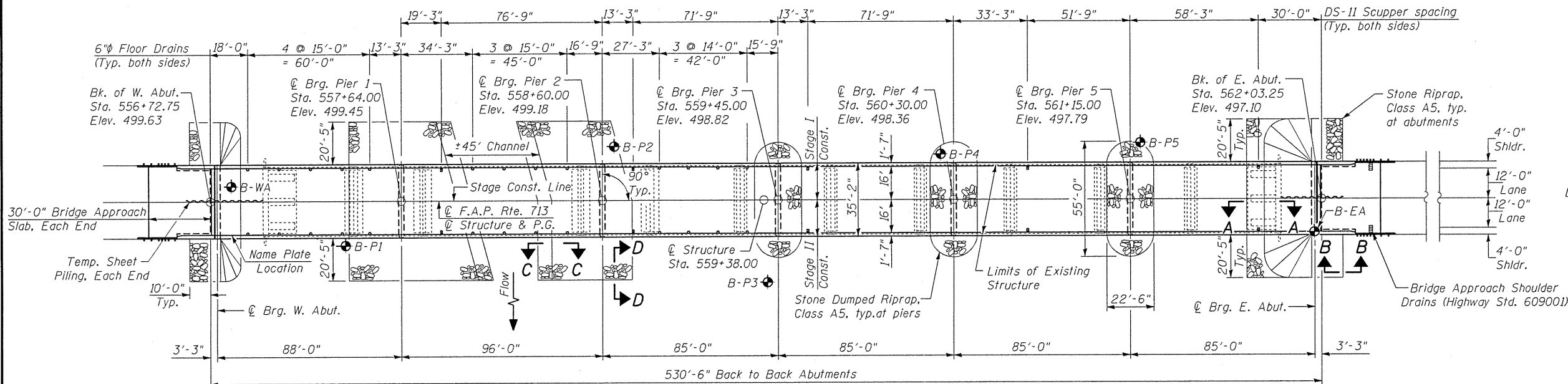
**INDEX OF SHEETS**

- 1 General Plan and Elevation
- 2 General Data
- 3-4 Stage Construction Details
- 5 Temporary Concrete Barrier for Stage Construction
- 6-9 Top of Slab Elevations
- 10 Top of West Approach Slab Elevations
- 11 Top of East Approach Slab Elevations
- 12 Superstructure
- 13-14 Superstructure Details
- 15 Drainage Scupper, DS-II
- 16-17 Bridge Approach Slab Details
- 18-19 Joint Details at Abutments
- 20 Trough Details at Abutments
- 21 Framing Plan
- 22-24 Girder Details
- 25-26 Bearing Details
- 27 West Abutment
- 28 West Abutment Details
- 29 East Abutment
- 30 East Abutment Details
- 31 Pier 1
- 32 Pier 2
- 33 Pier 3
- 34 Pier 4
- 35 Pier 5
- 36 Bar Splicer Assembly Details
- 37 HP Pile Details
- 38 Concrete Parapet Slipforming Option
- 39-45 Boring Logs



**ELEVATION**

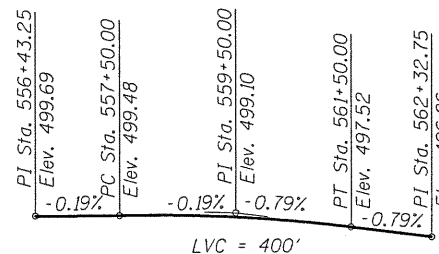
Note:  
See sheet 2 of 45 for Sections A-A, B-B, C-C and D-D.



**PLAN**

**APPROVED**  
For Structural Adequacy Only

*Ralph E. Anderson (TJD)*  
Engineer of Bridges & Structures



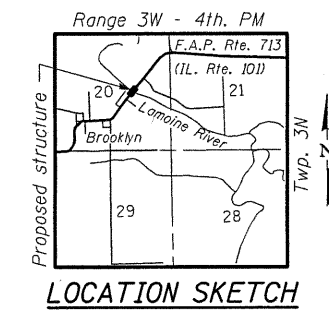
**PROFILE GRADE**  
(along C roadway)

**DESIGN SCOUR ELEVATION TABLE**

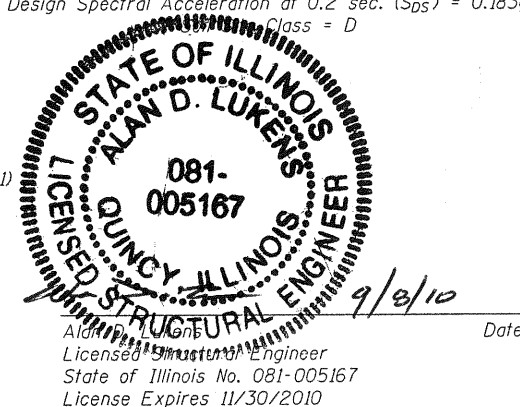
Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	E. Abut.
	491.2	471.8	468.1	474.2	475.0	473.3	488.7

**WATERWAY INFORMATION**

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	38,400	5,252	5,788	493.8	6.3	6.4	500.1	500.2
Base	100	44,500	5,514	6,097	494.4	6.2	6.4	500.6	500.8
Overtopping	-	-	12 yr.	13 yr.	-	-	-	-	-
Max. Calc.	500	59,100	6,012	6,097	495.6	5.9	6.5	501.6	502.1



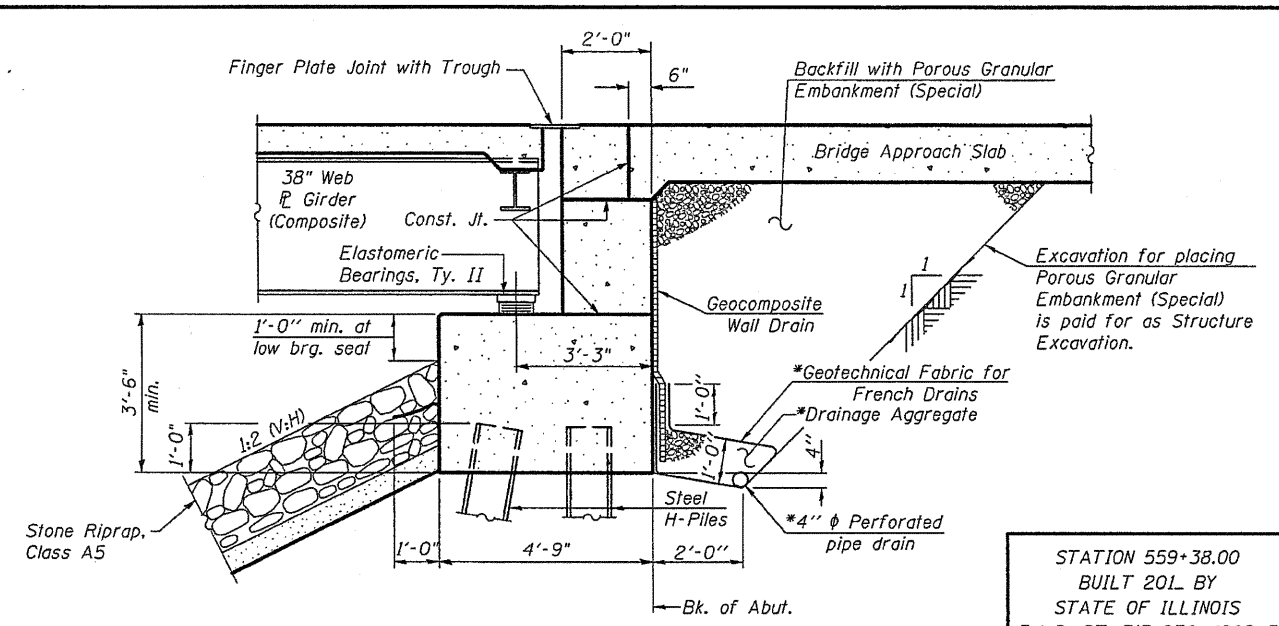
**LOCATION SKETCH**



**GENERAL PLAN & ELEVATION**  
**IL 101 OVER LAMOINE RIVER**  
**FAP ROUTE 713 SECTION 120B-3**  
**SCHUYLER COUNTY**  
**STATION 559+38.00**  
**S.N. 085-0514**

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
45 SHEETS	713	120B-3	SCHUYLER	75	21
FED. ROAD DIST. NO. _ ILLINOIS			FED. AID PROJECT		

10:26:48 AM, 9/10/2010 P:\06files\060245\021\_0101.Lemoine\BRIDGE PLANS\GPE & GENERAL DETAILS.dgn



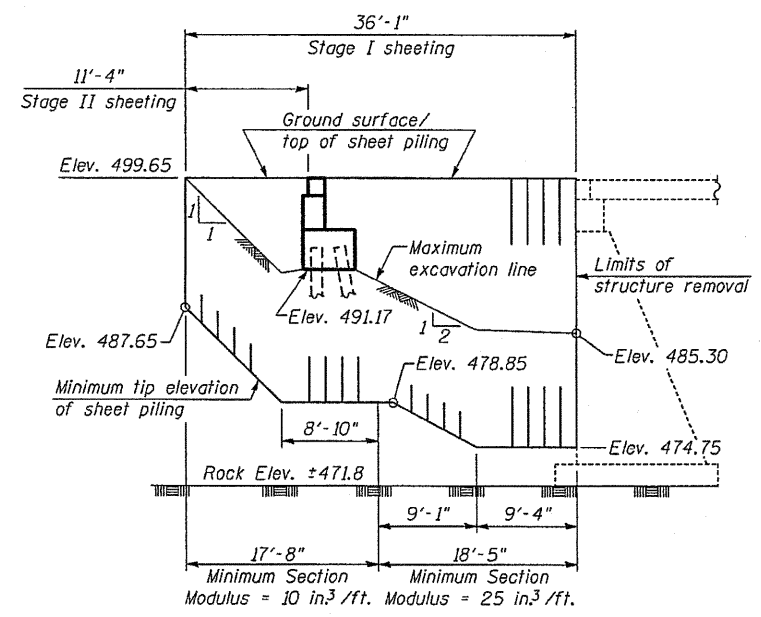
**SECTION THRU PILE SUPPORTED STUB ABUTMENT**  
(Horiz. dim. @ Rt. L's)

STATION 559+38.00  
BUILT 2011 BY  
STATE OF ILLINOIS  
F.A.P. RT. 713 SEC. 120B-3  
LOADING HL-93  
STRUCTURE NO. 085-0514

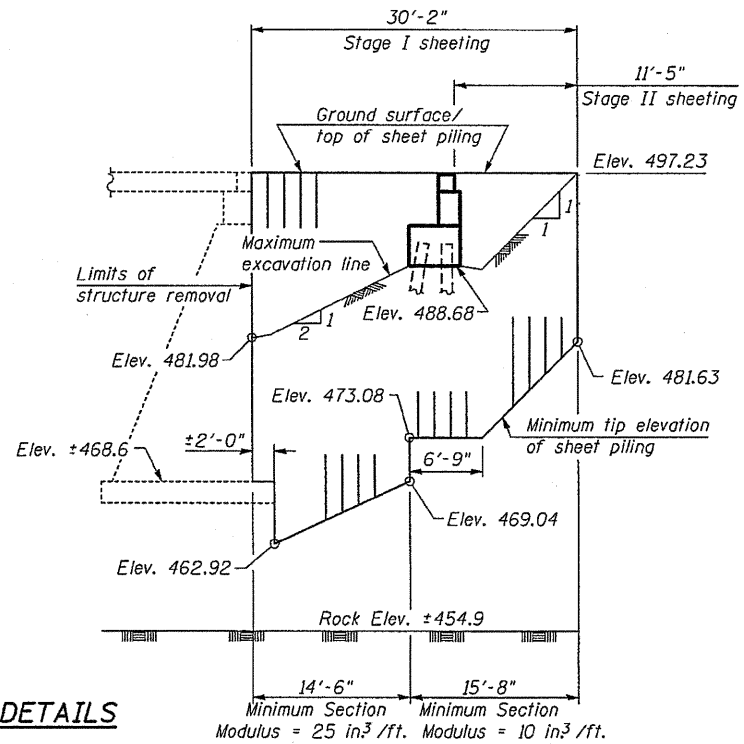
**NAME PLATE**  
See Std. 515001

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

**Note:**  
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



WEST ABUTMENT



EAST ABUTMENT

**Notes:**  
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.  
The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

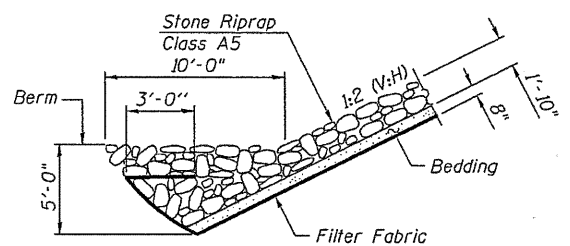
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

**GENERAL NOTES**

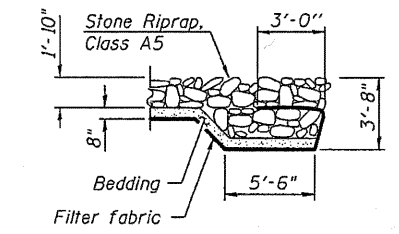
Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts 3/4" φ, holes 15/16" φ, unless otherwise noted.  
Calculated weight of Structural Steel = 536,740 pounds.  
All structural steel shall be AASHTO M 270 Grade 50W except expansion joints which shall be AASHTO M270 Grade 50.  
No field welding is permitted except as specified in the contract documents.  
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.  
Reinforcement bars designated (E) shall be epoxy coated.  
Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 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.  
Structural steel shall only be painted for a distance of 10 ft. each way from the deck joints. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".  
All exposed structural steel of the bearings shall be cleaned and shop painted as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".  
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.  
The depth of excavation around existing piers shall not vary by more than 2 feet while they support traffic.  
A copy of the existing bridge plans will be provided upon request.  
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 beams when developing construction procedures for removal of the superstructure.  
If the Contractor's procedures for existing deck beam removal 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 beams for the proposed loads. Cost included with Removal of Existing Structures.

**TOTAL BILL OF MATERIAL**

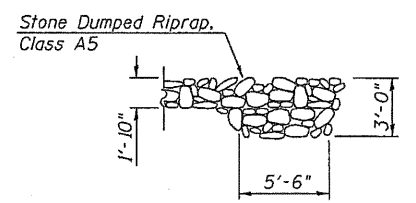
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		94	94
Stone Riprap, Class A5	Sq. Yd.		451	451
Stone Dumped Riprap, Class A5	Sq. Yd.		1,293	1,293
Filter Fabric	Sq. Yd.		1,744	1,744
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		341	341
Floor Drains	Each	26		26
Concrete Structures	Cu. Yd.		290.8	290.8
Concrete Superstructure	Cu. Yd.	719.2		719.2
Bridge Deck Grooving	Sq. Yd.	1,965		1,965
Concrete Encasement	Cu. Yd.		11.2	11.2
Protective Coat	Sq. Yd.	2,569		2,569
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	6,588		6,588
Reinforcement Bars	Pound		4,940	4,940
Reinforcement Bars, Epoxy Coated	Pound	172,430	79,010	251,440
Bar Splicers	Each	1,749	607	2,356
Furnishing Steel Piles HPI2x53	Foot		900	900
Test Pile Steel HPI2x53	Each		2	2
Temporary Sheet Piling	Sq. Ft.		1,556	1,556
Driving Piles	Foot		900	900
Name Plates	Each	1		1
Anchor Bolts, 3/4"	Each	24		24
Anchor Bolts, 1"	Each	12		12
Anchor Bolts, 1 1/4"	Each	48		48
Pile Shoes	Each		32	32
Elastomeric Bearing Assembly, Type I	Each	18		18
Elastomeric Bearing Assembly, Type II	Each	18		18
Concrete Sealer	Sq. Ft.		780	780
Geocomposite Wall Drain	Sq. Yd.		48	48
Pipe Underdrains for Structures 4"	Foot		151	151
Drainage Scuppers, DS-II	Each	10		10
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Finger Plate Expansion Joint, 6"	Foot	64.0		64.0
Drilled Shaft in Soil	Cu. Yd.		135.1	135.1
Drilled Shaft in Rock	Cu. Yd.		28.8	28.8
Asbestos Bearing Pad Removal	Each	121		121
Temporary Shoring	Each		8	8
Fabric Reinforced Elastomeric Trough	Foot	76		76



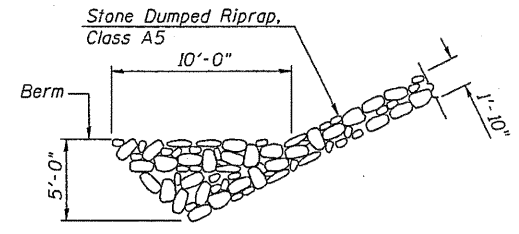
SECTION A-A



SECTION B-B



SECTION D-D



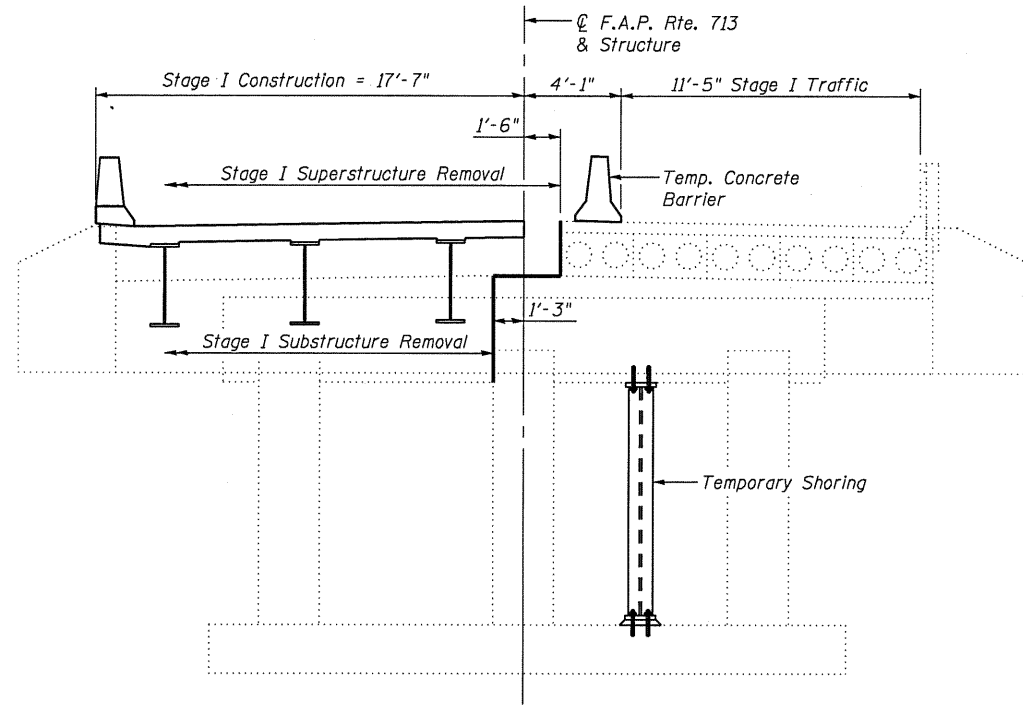
SECTION C-C

**GENERAL DATA**  
S.N. 085-0514

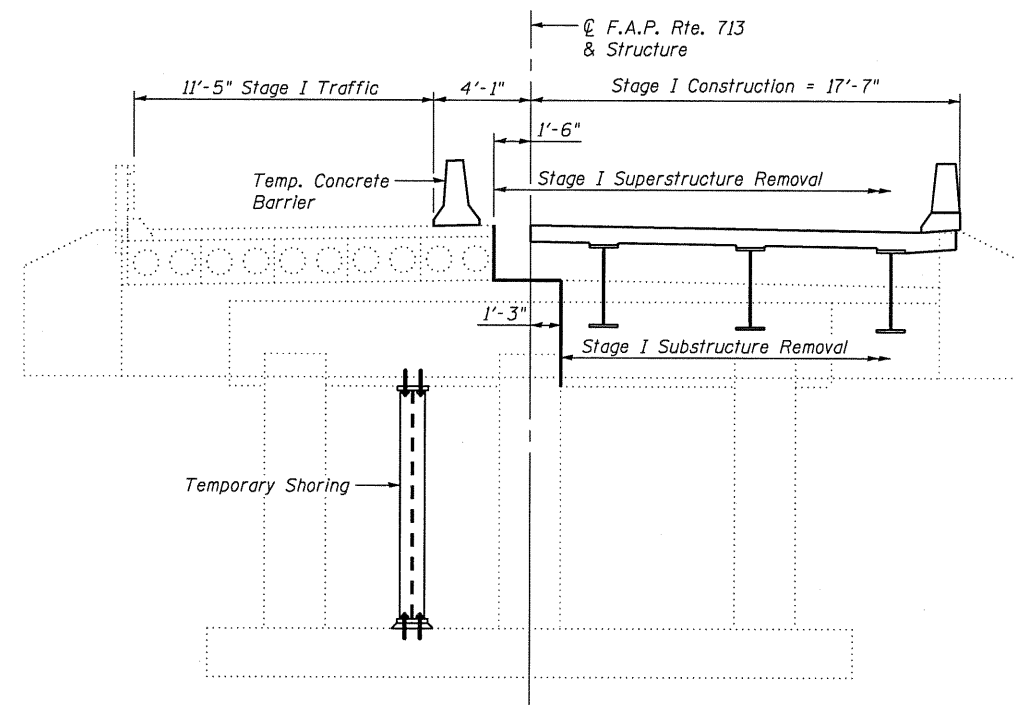
SHEET NO. 2	F.A.P. RTE. 713	SECTION 120B-3	COUNTY SCHUYLER	TOTAL SHEETS 75	SHEET NO. 22
45 SHEETS		CONTRACT NO. 72A03			
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

Klingner & Associates P.C.

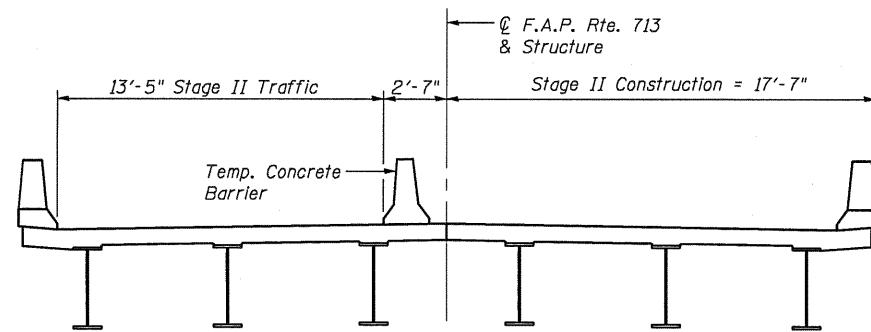
Sep-07-2010 10:30:06AM AM



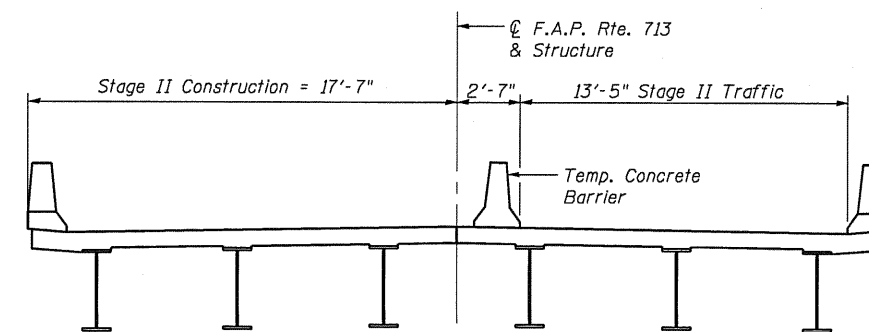
**EAST ABUTMENT - Stage I**  
(Looking East)



**WEST ABUTMENT - Stage I**  
(Looking West)



**EAST ABUTMENT - Stage II**  
(Looking East)



**WEST ABUTMENT - Stage II**  
(Looking West)

Notes:  
 Temporary Shoring shall be in place before superstructure removal.  
 Removal of existing railing and overlay is included with Removal of Existing Structures.  
 See sheet 5 of 45 for details of Temporary Concrete Barrier.  
 For quantity of Temporary Concrete Barrier see Roadway Plans.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Removal of Existing Structures	Each	1
Temporary Shoring	Each	8

For other locations of Temporary Shoring and additional details, see sheet 4 of 45.

(Sheet 1 of 2)

**STAGE CONSTRUCTION DETAILS**  
**S.N. 085-0514**

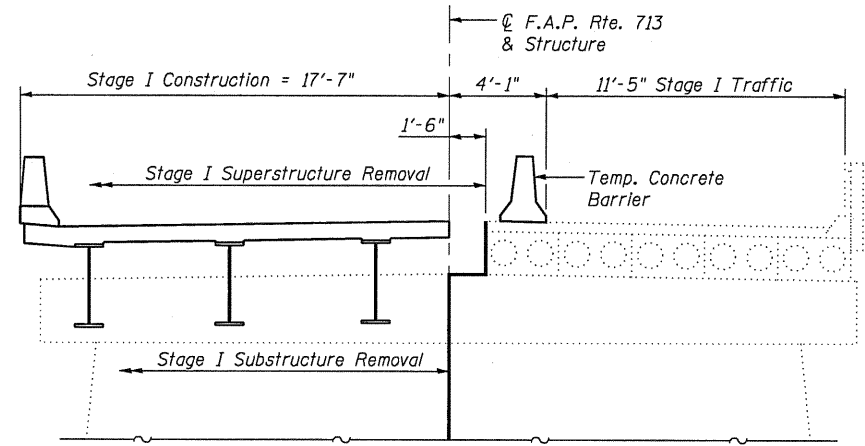
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	23
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

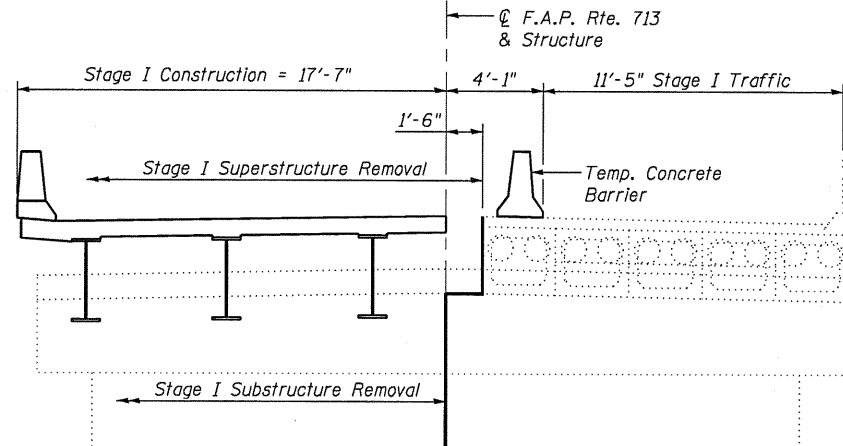
Klingner & Associates P.C.

\$FILE\$

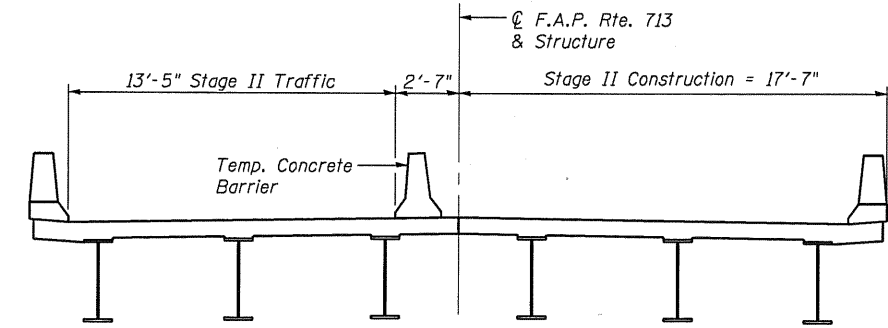
Sep-07-2010 10:30:15 AM



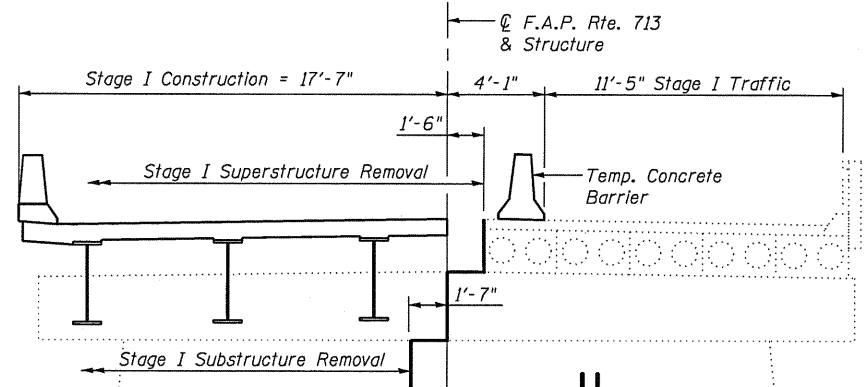
**PIERS 1 & 4 - Stage I**  
(Looking East)



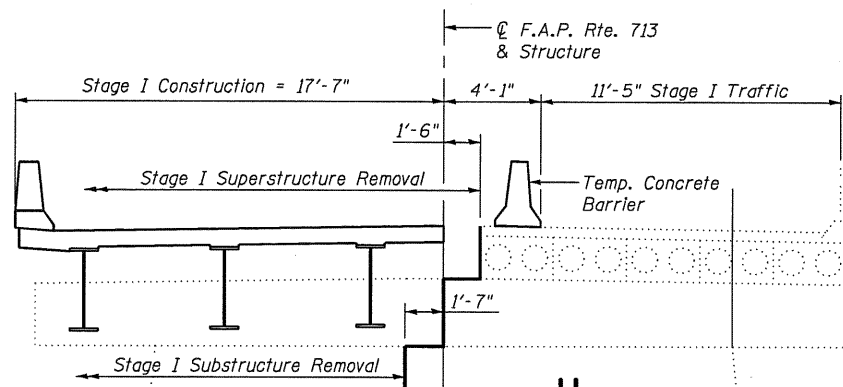
**PIERS 2 & 3 - Stage I**  
(Looking East)



**PIERS - Stage II**  
(Looking East)



**PIERS 5, 8, 9 & 10 - Stage I**  
(Looking East)



**PIERS 6 & 7 - Stage I**  
(Looking East)

Notes:  
 Temporary Shoring shall be in place before superstructure removal.  
 For Bill of Material, see sheet 3 of 45.  
 For quantity of Temporary Concrete Barrier see Roadway Plans.  
 See sheet 5 of 45 for details of Temporary Concrete Barrier.  
 Removal of existing railing and overlay is included with Removal of Existing Structures.

(Sheet 2 of 2)

**STAGE CONSTRUCTION DETAILS**  
**S.N. 085-0514**

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

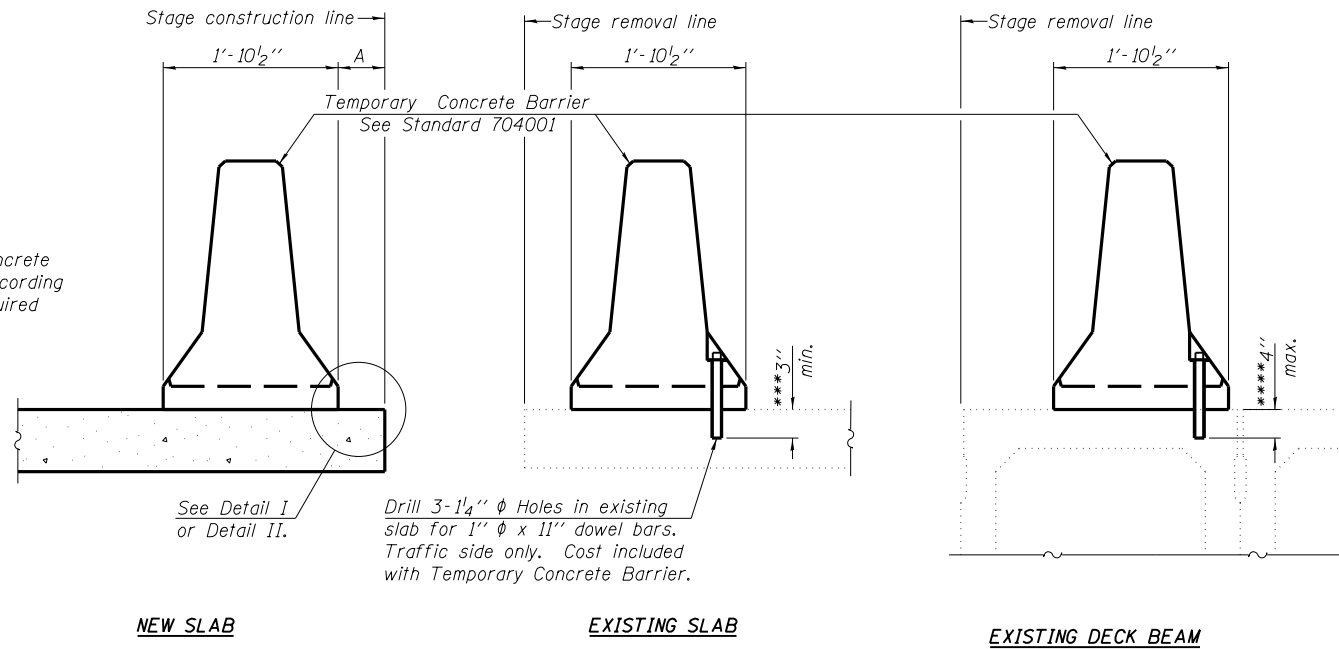
SHEET NO. 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	24
45 SHEETS	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 72A03

Killingner & Associates P.C.

\$FILES



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".



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

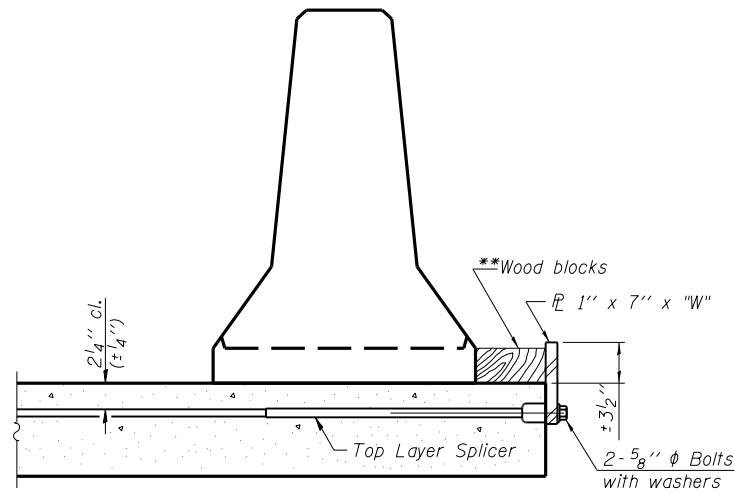
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate CL of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1"x7"x10" steel PL 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 CL of each barrier panel.

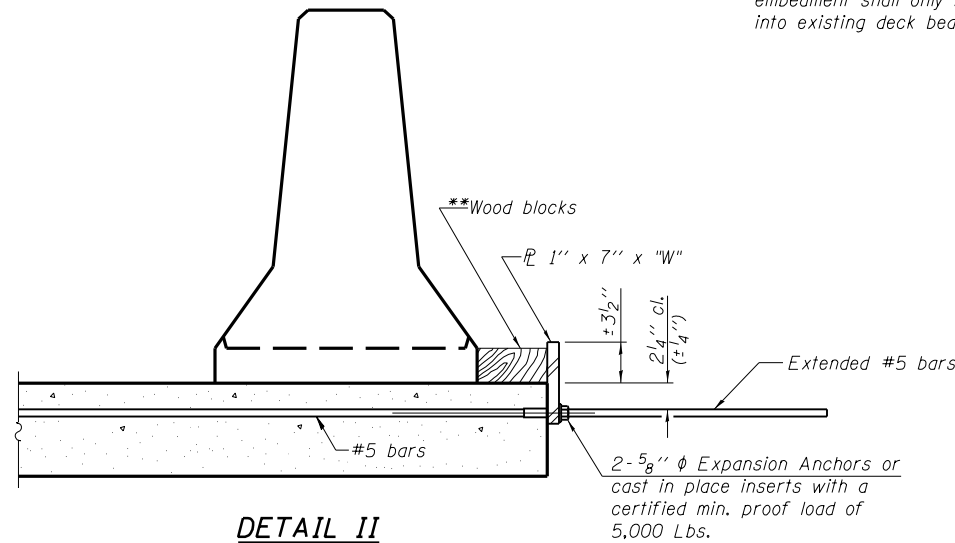
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

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



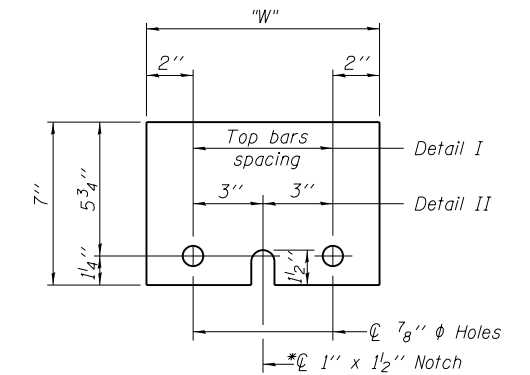
**DETAIL I**



**DETAIL II**

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

"W" = Top bars spacing + 4"



**STEEL RETAINER PL 1' x 7' x 10'**  
\* Required only with Detail II

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

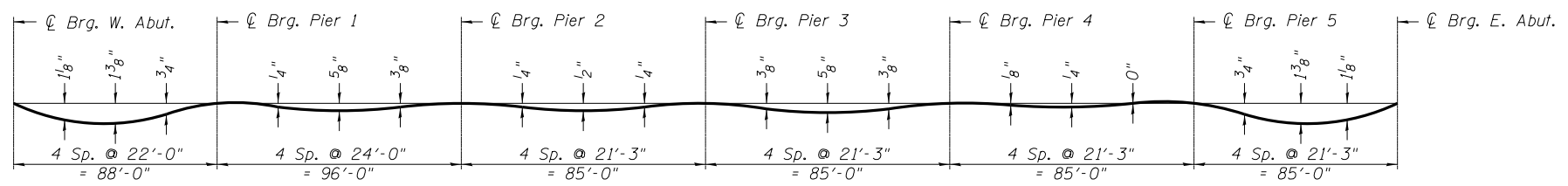
R-27

11-1-09

**TEMPORARY CONCRETE BARRIER  
FOR STAGE CONSTRUCTION  
S.N. 085-0514**

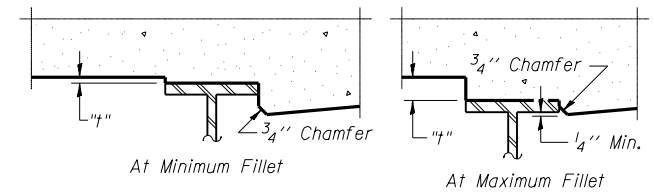
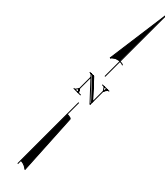
SHEET NO. 5 45 SHEETS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	25
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
				CONTRACT NO. 72A03	

Aug-17-2010 01:29:42 PM



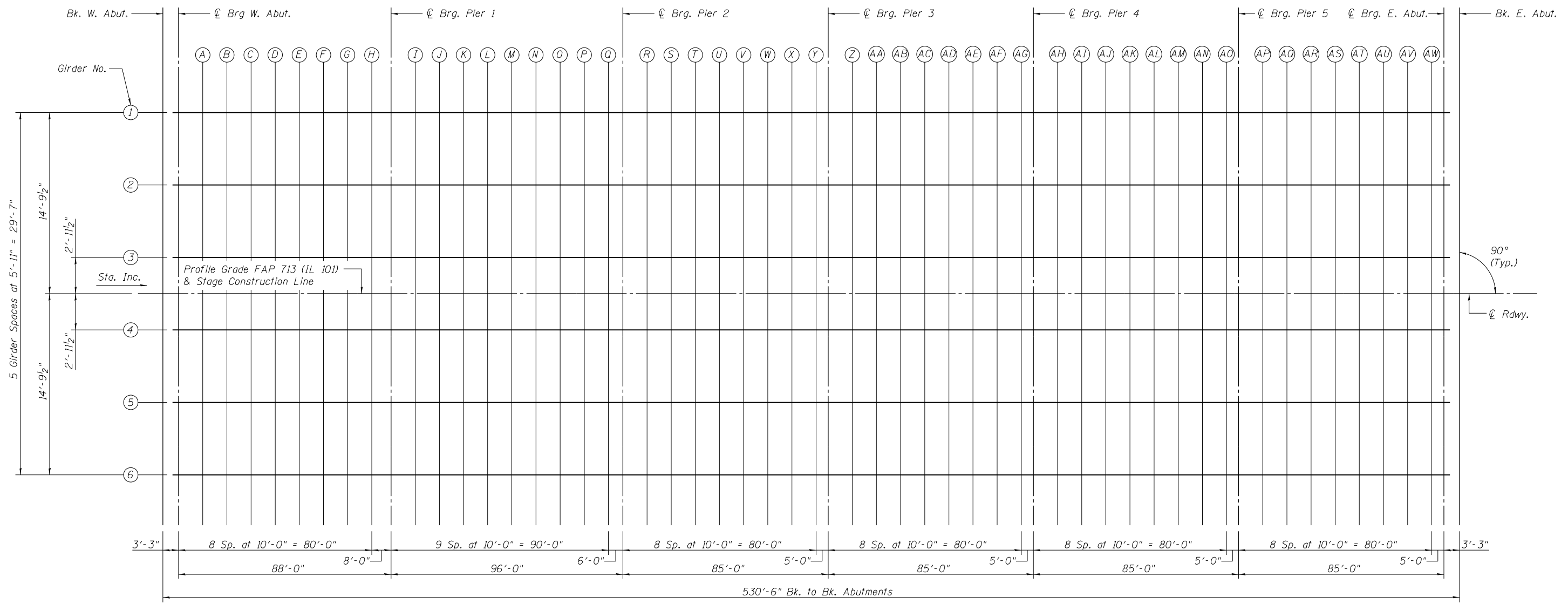
**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)  
 Notes:  
 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 on Sheets 7 thru 9 of 45.  
 See Sheets 7 thru 9 of 45 for Elevations.  
 Offsets to the left are negative. Offsets to the right are positive.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 7 thru 9 of 45, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**



**PLAN**

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

**TOP OF SLAB ELEVATIONS**  
**S.N. 085-0514**

SHEET NO. 6 45 SHEETS	F.A.P RTE. 713	SECTION 120B-3	COUNTY SCHUYLER	TOTAL SHEETS 75	SHEET NO. 26
	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

**PROFILE GRADE FAP 713 & STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	556+72.75	0.00	499.63	499.63
☉ Brg. W. Abut.	556+76.00	0.00	499.62	499.62
A	556+86.00	0.00	499.60	499.65
B	556+96.00	0.00	499.58	499.68
C	557+06.00	0.00	499.56	499.68
D	557+16.00	0.00	499.54	499.66
E	557+26.00	0.00	499.53	499.63
F	557+36.00	0.00	499.51	499.58
G	557+46.00	0.00	499.49	499.53
H	557+56.00	0.00	499.47	499.48
☉ Brg. Pier 1	557+64.00	0.00	499.45	499.45
I	557+74.00	0.00	499.43	499.43
J	557+84.00	0.00	499.41	499.42
K	557+94.00	0.00	499.38	499.41
L	558+04.00	0.00	499.36	499.41
M	558+14.00	0.00	499.33	499.38
N	558+24.00	0.00	499.30	499.35
O	558+34.00	0.00	499.27	499.31
P	558+44.00	0.00	499.24	499.26
Q	558+54.00	0.00	499.20	499.21
☉ Brg. Pier 2	558+60.00	0.00	499.18	499.18
R	558+70.00	0.00	499.14	499.15
S	558+80.00	0.00	499.11	499.13
T	558+90.00	0.00	499.07	499.10
U	559+00.00	0.00	499.03	499.07
V	559+10.00	0.00	498.98	499.02
W	559+20.00	0.00	498.94	498.97
X	559+30.00	0.00	498.90	498.91
Y	559+40.00	0.00	498.85	498.85
☉ Brg. Pier 3	559+45.00	0.00	498.82	498.82
Z	559+55.00	0.00	498.78	498.79
AA	559+65.00	0.00	498.72	498.75
AB	559+75.00	0.00	498.67	498.71
AC	559+85.00	0.00	498.62	498.67
AD	559+95.00	0.00	498.56	498.61
AE	560+05.00	0.00	498.51	498.54
AF	560+15.00	0.00	498.45	498.47
AG	560+25.00	0.00	498.39	498.40
☉ Brg. Pier 4	560+30.00	0.00	498.36	498.36
AH	560+40.00	0.00	498.30	498.30
AJ	560+50.00	0.00	498.24	498.25
AI	560+60.00	0.00	498.17	498.19
AK	560+70.00	0.00	498.10	498.12
AL	560+80.00	0.00	498.04	498.06
AM	560+90.00	0.00	497.97	497.98
AN	561+00.00	0.00	497.90	497.90
AO	561+10.00	0.00	497.82	497.82
☉ Brg. Pier 5	561+15.00	0.00	497.79	497.79
AP	561+25.00	0.00	497.71	497.73
AQ	561+35.00	0.00	497.64	497.70
AR	561+45.00	0.00	497.56	497.65
AS	561+55.00	0.00	497.48	497.60
AT	561+65.00	0.00	497.40	497.53
AU	561+75.00	0.00	497.32	497.43
AV	561+85.00	0.00	497.24	497.32
AW	561+95.00	0.00	497.16	497.19
☉ Brg. E. Abut.	562+00.00	0.00	497.13	497.13
Bk. E. Abut.	562+03.25	0.00	497.10	497.10

**GIRDER 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	556+72.75	-14.79	499.38	499.38
☉ Brg. W. Abut.	556+76.00	-14.79	499.37	499.37
A	556+86.00	-14.79	499.36	499.41
B	556+96.00	-14.79	499.34	499.43
C	557+06.00	-14.79	499.32	499.43
D	557+16.00	-14.79	499.30	499.41
E	557+26.00	-14.79	499.28	499.38
F	557+36.00	-14.79	499.26	499.33
G	557+46.00	-14.79	499.24	499.28
H	557+56.00	-14.79	499.22	499.23
☉ Brg. Pier 1	557+64.00	-14.79	499.21	499.21
I	557+74.00	-14.79	499.18	499.18
J	557+84.00	-14.79	499.16	499.17
K	557+94.00	-14.79	499.14	499.17
L	558+04.00	-14.79	499.11	499.16
M	558+14.00	-14.79	499.08	499.13
N	558+24.00	-14.79	499.05	499.10
O	558+34.00	-14.79	499.02	499.06
P	558+44.00	-14.79	498.99	499.01
Q	558+54.00	-14.79	498.96	498.97
☉ Brg. Pier 2	558+60.00	-14.79	498.93	498.93
R	558+70.00	-14.79	498.90	498.91
S	558+80.00	-14.79	498.86	498.88
T	558+90.00	-14.79	498.82	498.85
U	559+00.00	-14.79	498.78	498.82
V	559+10.00	-14.79	498.74	498.77
W	559+20.00	-14.79	498.69	498.73
X	559+30.00	-14.79	498.65	498.66
Y	559+40.00	-14.79	498.60	498.60
☉ Brg. Pier 3	559+45.00	-14.79	498.58	498.58
Z	559+55.00	-14.79	498.53	498.54
AA	559+65.00	-14.79	498.48	498.50
AB	559+75.00	-14.79	498.43	498.47
AC	559+85.00	-14.79	498.37	498.43
AD	559+95.00	-14.79	498.32	498.36
AE	560+05.00	-14.79	498.26	498.29
AF	560+15.00	-14.79	498.20	498.22
AG	560+25.00	-14.79	498.14	498.16
☉ Brg. Pier 4	560+30.00	-14.79	498.11	498.11
AH	560+40.00	-14.79	498.05	498.05
AJ	560+50.00	-14.79	497.99	498.00
AI	560+60.00	-14.79	497.92	497.95
AK	560+70.00	-14.79	497.86	497.88
AL	560+80.00	-14.79	497.79	497.81
AM	560+90.00	-14.79	497.72	497.73
AN	561+00.00	-14.79	497.65	497.65
AO	561+10.00	-14.79	497.58	497.58
☉ Brg. Pier 5	561+15.00	-14.79	497.54	497.54
AP	561+25.00	-14.79	497.47	497.49
AQ	561+35.00	-14.79	497.39	497.45
AR	561+45.00	-14.79	497.31	497.41
AS	561+55.00	-14.79	497.23	497.35
AT	561+65.00	-14.79	497.16	497.28
AU	561+75.00	-14.79	497.08	497.18
AV	561+85.00	-14.79	497.00	497.07
AW	561+95.00	-14.79	496.92	496.94
☉ Brg. E. Abut.	562+00.00	-14.79	496.88	496.88
Bk. E. Abut.	562+03.25	-14.79	496.85	496.85

**GIRDER 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	556+72.75	-8.88	499.49	499.49
☉ Brg. W. Abut.	556+76.00	-8.88	499.48	499.48
A	556+86.00	-8.88	499.46	499.52
B	556+96.00	-8.88	499.44	499.54
C	557+06.00	-8.88	499.42	499.54
D	557+16.00	-8.88	499.41	499.52
E	557+26.00	-8.88	499.39	499.49
F	557+36.00	-8.88	499.37	499.44
G	557+46.00	-8.88	499.35	499.39
H	557+56.00	-8.88	499.33	499.34
☉ Brg. Pier 1	557+64.00	-8.88	499.31	499.31
I	557+74.00	-8.88	499.29	499.29
J	557+84.00	-8.88	499.27	499.28
K	557+94.00	-8.88	499.24	499.27
L	558+04.00	-8.88	499.22	499.27
M	558+14.00	-8.88	499.19	499.24
N	558+24.00	-8.88	499.16	499.21
O	558+34.00	-8.88	499.13	499.17
P	558+44.00	-8.88	499.10	499.12
Q	558+54.00	-8.88	499.06	499.07
☉ Brg. Pier 2	558+60.00	-8.88	499.04	499.04
R	558+70.00	-8.88	499.01	499.02
S	558+80.00	-8.88	498.97	498.99
T	558+90.00	-8.88	498.93	498.96
U	559+00.00	-8.88	498.89	498.93
V	559+10.00	-8.88	498.85	498.88
W	559+20.00	-8.88	498.80	498.83
X	559+30.00	-8.88	498.76	498.77
Y	559+40.00	-8.88	498.71	498.71
☉ Brg. Pier 3	559+45.00	-8.88	498.69	498.69
Z	559+55.00	-8.88	498.64	498.65
AA	559+65.00	-8.88	498.59	498.61
AB	559+75.00	-8.88	498.53	498.58
AC	559+85.00	-8.88	498.48	498.53
AD	559+95.00	-8.88	498.43	498.47
AE	560+05.00	-8.88	498.37	498.40
AF	560+15.00	-8.88	498.31	498.33
AG	560+25.00	-8.88	498.25	498.26
☉ Brg. Pier 4	560+30.00	-8.88	498.22	498.22
AH	560+40.00	-8.88	498.16	498.16
AJ	560+50.00	-8.88	498.10	498.11
AI	560+60.00	-8.88	498.03	498.05
AK	560+70.00	-8.88	497.97	497.99
AL	560+80.00	-8.88	497.90	497.92
AM	560+90.00	-8.88	497.83	497.84
AN	561+00.00	-8.88	497.76	497.76
AO	561+10.00	-8.88	497.69	497.69
☉ Brg. Pier 5	561+15.00	-8.88	497.65	497.65
AP	561+25.00	-8.88	497.57	497.59
AQ	561+35.00	-8.88	497.50	497.56
AR	561+45.00	-8.88	497.42	497.51
AS	561+55.00	-8.88	497.34	497.46
AT	561+65.00	-8.88	497.26	497.39
AU	561+75.00	-8.88	497.18	497.29
AV	561+85.00	-8.88	497.10	497.18
AW	561+95.00	-8.88	497.03	497.05
☉ Brg. E. Abut.	562+00.00	-8.88	496.99	496.99
Bk. E. Abut.	562+03.25	-8.88	496.96	496.96

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

**TOP OF SLAB ELEVATIONS  
S.N. 085-0514**

SHEET NO. 7	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	27
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

**GIRDER 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	556+72.75	-2.96	499.58	499.58
☉ Brg. W. Abut.	556+76.00	-2.96	499.57	499.57
A	556+86.00	-2.96	499.56	499.61
B	556+96.00	-2.96	499.54	499.63
C	557+06.00	-2.96	499.52	499.63
D	557+16.00	-2.96	499.50	499.61
E	557+26.00	-2.96	499.48	499.58
F	557+36.00	-2.96	499.46	499.53
G	557+46.00	-2.96	499.44	499.48
H	557+56.00	-2.96	499.42	499.43
☉ Brg. Pier 1	557+64.00	-2.96	499.41	499.41
I	557+74.00	-2.96	499.38	499.38
J	557+84.00	-2.96	499.36	499.37
K	557+94.00	-2.96	499.34	499.37
L	558+04.00	-2.96	499.31	499.36
M	558+14.00	-2.96	499.28	499.33
N	558+24.00	-2.96	499.25	499.30
O	558+34.00	-2.96	499.22	499.26
P	558+44.00	-2.96	499.19	499.21
Q	558+54.00	-2.96	499.16	499.17
☉ Brg. Pier 2	558+60.00	-2.96	499.13	499.13
R	558+70.00	-2.96	499.10	499.11
S	558+80.00	-2.96	499.06	499.08
T	558+90.00	-2.96	499.02	499.05
U	559+00.00	-2.96	498.98	499.02
V	559+10.00	-2.96	498.94	498.97
W	559+20.00	-2.96	498.89	498.93
X	559+30.00	-2.96	498.85	498.86
Y	559+40.00	-2.96	498.80	498.80
☉ Brg. Pier 3	559+45.00	-2.96	498.78	498.78
Z	559+55.00	-2.96	498.73	498.74
AA	559+65.00	-2.96	498.68	498.70
AB	559+75.00	-2.96	498.63	498.67
AC	559+85.00	-2.96	498.57	498.63
AD	559+95.00	-2.96	498.52	498.56
AE	560+05.00	-2.96	498.46	498.49
AF	560+15.00	-2.96	498.40	498.42
AG	560+25.00	-2.96	498.34	498.35
☉ Brg. Pier 4	560+30.00	-2.96	498.31	498.31
AH	560+40.00	-2.96	498.25	498.25
AJ	560+50.00	-2.96	498.19	498.20
AI	560+60.00	-2.96	498.12	498.14
AK	560+70.00	-2.96	498.06	498.08
AL	560+80.00	-2.96	497.99	498.01
AM	560+90.00	-2.96	497.92	497.93
AN	561+00.00	-2.96	497.85	497.85
AO	561+10.00	-2.96	497.78	497.78
☉ Brg. Pier 5	561+15.00	-2.96	497.74	497.74
AP	561+25.00	-2.96	497.67	497.69
AQ	561+35.00	-2.96	497.59	497.65
AR	561+45.00	-2.96	497.51	497.61
AS	561+55.00	-2.96	497.43	497.55
AT	561+65.00	-2.96	497.36	497.48
AU	561+75.00	-2.96	497.28	497.38
AV	561+85.00	-2.96	497.20	497.27
AW	561+95.00	-2.96	497.12	497.14
☉ Brg. E. Abut.	562+00.00	-2.96	497.08	497.08
Bk. E. Abut.	562+03.25	-2.96	497.05	497.05

**GIRDER 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	556+72.75	2.96	499.58	499.58
☉ Brg. W. Abut.	556+76.00	2.96	499.57	499.57
A	556+86.00	2.96	499.56	499.61
B	556+96.00	2.96	499.54	499.63
C	557+06.00	2.96	499.52	499.63
D	557+16.00	2.96	499.50	499.61
E	557+26.00	2.96	499.48	499.58
F	557+36.00	2.96	499.46	499.53
G	557+46.00	2.96	499.44	499.48
H	557+56.00	2.96	499.42	499.43
☉ Brg. Pier 1	557+64.00	2.96	499.41	499.41
I	557+74.00	2.96	499.38	499.38
J	557+84.00	2.96	499.36	499.37
K	557+94.00	2.96	499.34	499.37
L	558+04.00	2.96	499.31	499.36
M	558+14.00	2.96	499.28	499.33
N	558+24.00	2.96	499.25	499.30
O	558+34.00	2.96	499.22	499.26
P	558+44.00	2.96	499.19	499.21
Q	558+54.00	2.96	499.16	499.17
☉ Brg. Pier 2	558+60.00	2.96	499.13	499.13
R	558+70.00	2.96	499.10	499.11
S	558+80.00	2.96	499.06	499.08
T	558+90.00	2.96	499.02	499.05
U	559+00.00	2.96	498.98	499.02
V	559+10.00	2.96	498.94	498.97
W	559+20.00	2.96	498.89	498.93
X	559+30.00	2.96	498.85	498.86
Y	559+40.00	2.96	498.80	498.80
☉ Brg. Pier 3	559+45.00	2.96	498.78	498.78
Z	559+55.00	2.96	498.73	498.74
AA	559+65.00	2.96	498.68	498.70
AB	559+75.00	2.96	498.63	498.67
AC	559+85.00	2.96	498.57	498.63
AD	559+95.00	2.96	498.52	498.56
AE	560+05.00	2.96	498.46	498.49
AF	560+15.00	2.96	498.40	498.42
AG	560+25.00	2.96	498.34	498.35
☉ Brg. Pier 4	560+30.00	2.96	498.31	498.31
AH	560+40.00	2.96	498.25	498.25
AJ	560+50.00	2.96	498.19	498.20
AI	560+60.00	2.96	498.12	498.14
AK	560+70.00	2.96	498.06	498.08
AL	560+80.00	2.96	497.99	498.01
AM	560+90.00	2.96	497.92	497.93
AN	561+00.00	2.96	497.85	497.85
AO	561+10.00	2.96	497.78	497.78
☉ Brg. Pier 5	561+15.00	2.96	497.74	497.74
AP	561+25.00	2.96	497.67	497.69
AQ	561+35.00	2.96	497.59	497.65
AR	561+45.00	2.96	497.51	497.61
AS	561+55.00	2.96	497.43	497.55
AT	561+65.00	2.96	497.36	497.48
AU	561+75.00	2.96	497.28	497.38
AV	561+85.00	2.96	497.20	497.27
AW	561+95.00	2.96	497.12	497.14
☉ Brg. E. Abut.	562+00.00	2.96	497.08	497.08
Bk. E. Abut.	562+03.25	2.96	497.05	497.05

DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL

**TOP OF SLAB ELEVATIONS**  
**S.N. 085-0514**

SHEET NO. 8	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	28
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

**GIRDER 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	556+72.75	8.88	499.49	499.49
☉ Brg. W. Abut.	556+76.00	8.88	499.48	499.48
A	556+86.00	8.88	499.46	499.52
B	556+96.00	8.88	499.44	499.54
C	557+06.00	8.88	499.42	499.54
D	557+16.00	8.88	499.41	499.52
E	557+26.00	8.88	499.39	499.49
F	557+36.00	8.88	499.37	499.44
G	557+46.00	8.88	499.35	499.39
H	557+56.00	8.88	499.33	499.34
☉ Brg. Pier 1	557+64.00	8.88	499.31	499.31
I	557+74.00	8.88	499.29	499.29
J	557+84.00	8.88	499.27	499.28
K	557+94.00	8.88	499.24	499.27
L	558+04.00	8.88	499.22	499.27
M	558+14.00	8.88	499.19	499.24
N	558+24.00	8.88	499.16	499.21
O	558+34.00	8.88	499.13	499.17
P	558+44.00	8.88	499.10	499.12
Q	558+54.00	8.88	499.06	499.07
☉ Brg. Pier 2	558+60.00	8.88	499.04	499.04
R	558+70.00	8.88	499.01	499.02
S	558+80.00	8.88	498.97	498.99
T	558+90.00	8.88	498.93	498.96
U	559+00.00	8.88	498.89	498.93
V	559+10.00	8.88	498.85	498.88
W	559+20.00	8.88	498.80	498.83
X	559+30.00	8.88	498.76	498.77
Y	559+40.00	8.88	498.71	498.71
☉ Brg. Pier 3	559+45.00	8.88	498.69	498.69
Z	559+55.00	8.88	498.64	498.65
AA	559+65.00	8.88	498.59	498.61
AB	559+75.00	8.88	498.53	498.58
AC	559+85.00	8.88	498.48	498.53
AD	559+95.00	8.88	498.43	498.47
AE	560+05.00	8.88	498.37	498.40
AF	560+15.00	8.88	498.31	498.33
AG	560+25.00	8.88	498.25	498.26
☉ Brg. Pier 4	560+30.00	8.88	498.22	498.22
AH	560+40.00	8.88	498.16	498.16
AJ	560+50.00	8.88	498.10	498.11
AI	560+60.00	8.88	498.03	498.05
AK	560+70.00	8.88	497.97	497.99
AL	560+80.00	8.88	497.90	497.92
AM	560+90.00	8.88	497.83	497.84
AN	561+00.00	8.88	497.76	497.76
AO	561+10.00	8.88	497.69	497.69
☉ Brg. Pier 5	561+15.00	8.88	497.65	497.65
AP	561+25.00	8.88	497.57	497.59
AQ	561+35.00	8.88	497.50	497.56
AR	561+45.00	8.88	497.42	497.51
AS	561+55.00	8.88	497.34	497.46
AT	561+65.00	8.88	497.26	497.39
AU	561+75.00	8.88	497.18	497.29
AV	561+85.00	8.88	497.10	497.18
AW	561+95.00	8.88	497.03	497.05
☉ Brg. E. Abut.	562+00.00	8.88	496.99	496.99
Bk. E. Abut.	562+03.25	8.88	496.96	496.96

**GIRDER 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	556+72.75	14.79	499.38	499.38
☉ Brg. W. Abut.	556+76.00	14.79	499.37	499.37
A	556+86.00	14.79	499.36	499.41
B	556+96.00	14.79	499.34	499.43
C	557+06.00	14.79	499.32	499.43
D	557+16.00	14.79	499.30	499.41
E	557+26.00	14.79	499.28	499.38
F	557+36.00	14.79	499.26	499.33
G	557+46.00	14.79	499.24	499.28
H	557+56.00	14.79	499.22	499.23
☉ Brg. Pier 1	557+64.00	14.79	499.21	499.21
I	557+74.00	14.79	499.18	499.18
J	557+84.00	14.79	499.16	499.17
K	557+94.00	14.79	499.14	499.17
L	558+04.00	14.79	499.11	499.16
M	558+14.00	14.79	499.08	499.13
N	558+24.00	14.79	499.05	499.10
O	558+34.00	14.79	499.02	499.06
P	558+44.00	14.79	498.99	499.01
Q	558+54.00	14.79	498.96	498.97
☉ Brg. Pier 2	558+60.00	14.79	498.93	498.93
R	558+70.00	14.79	498.90	498.91
S	558+80.00	14.79	498.86	498.88
T	558+90.00	14.79	498.82	498.85
U	559+00.00	14.79	498.78	498.82
V	559+10.00	14.79	498.74	498.77
W	559+20.00	14.79	498.69	498.73
X	559+30.00	14.79	498.65	498.66
Y	559+40.00	14.79	498.60	498.60
☉ Brg. Pier 3	559+45.00	14.79	498.58	498.58
Z	559+55.00	14.79	498.53	498.54
AA	559+65.00	14.79	498.48	498.50
AB	559+75.00	14.79	498.43	498.47
AC	559+85.00	14.79	498.37	498.43
AD	559+95.00	14.79	498.32	498.36
AE	560+05.00	14.79	498.26	498.29
AF	560+15.00	14.79	498.20	498.22
AG	560+25.00	14.79	498.14	498.16
☉ Brg. Pier 4	560+30.00	14.79	498.11	498.11
AH	560+40.00	14.79	498.05	498.05
AJ	560+50.00	14.79	497.99	498.00
AI	560+60.00	14.79	497.92	497.95
AK	560+70.00	14.79	497.86	497.88
AL	560+80.00	14.79	497.79	497.81
AM	560+90.00	14.79	497.72	497.73
AN	561+00.00	14.79	497.65	497.65
AO	561+10.00	14.79	497.58	497.58
☉ Brg. Pier 5	561+15.00	14.79	497.54	497.54
AP	561+25.00	14.79	497.47	497.49
AQ	561+35.00	14.79	497.39	497.45
AR	561+45.00	14.79	497.31	497.41
AS	561+55.00	14.79	497.23	497.35
AT	561+65.00	14.79	497.16	497.28
AU	561+75.00	14.79	497.08	497.18
AV	561+85.00	14.79	497.00	497.07
AW	561+95.00	14.79	496.92	496.94
☉ Brg. E. Abut.	562+00.00	14.79	496.88	496.88
Bk. E. Abut.	562+03.25	14.79	496.85	496.85

DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL

**TOP OF SLAB ELEVATIONS**  
**S.N. 085-0514**

SHEET NO. 9	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	29
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

**NORTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	556+43.25	-16.00	499.41
A1	556+53.25	-16.00	499.39
A2	556+63.25	-16.00	499.37
E. End West Appr. Slab	556+73.25	-16.00	499.36

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	556+43.25	-12.00	499.50
A1	556+53.25	-12.00	499.48
A2	556+63.25	-12.00	499.46
E. End West Appr. Slab	556+73.25	-12.00	499.44

**☉ ROADWAY, PROFILE GRADE & STAGE CONST. JT.**

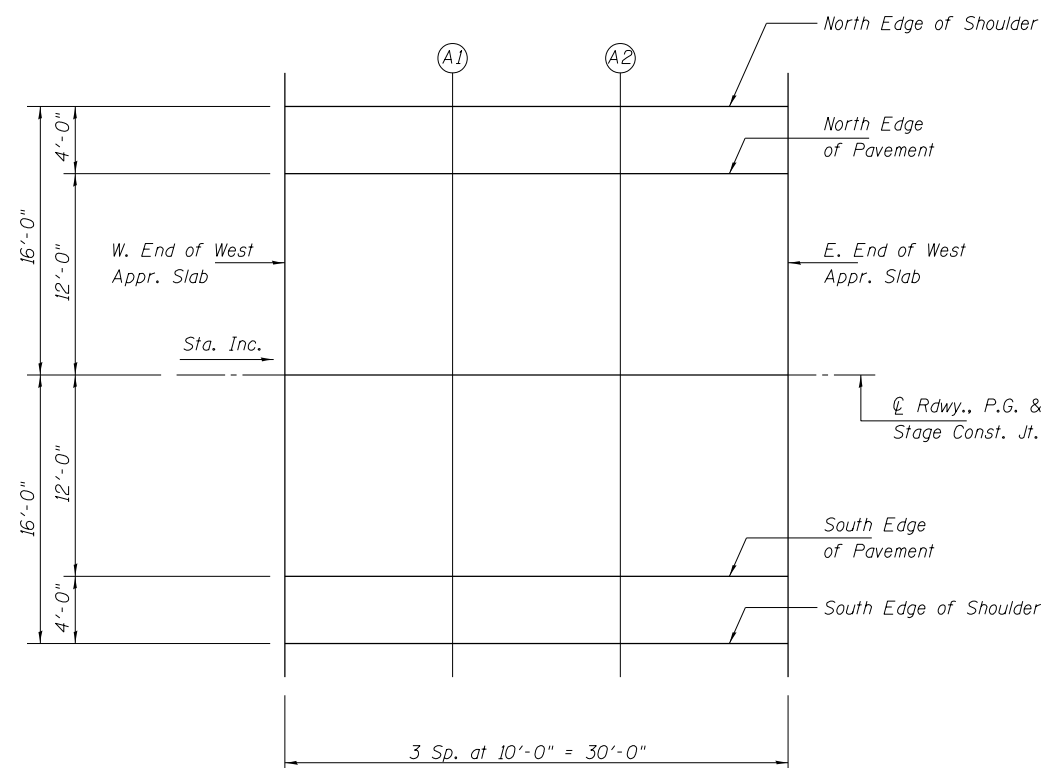
Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	556+43.25	0.00	499.68
A1	556+53.25	0.00	499.66
A2	556+63.25	0.00	499.65
E. End West Appr. Slab	556+73.25	0.00	499.63

**SOUTH EDGE OF PAVEMENT**

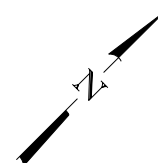
Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	556+43.25	12.00	499.50
A1	556+53.25	12.00	499.48
A2	556+63.25	12.00	499.46
E. End West Appr. Slab	556+73.25	12.00	499.44

**SOUTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	556+43.25	16.00	499.41
A1	556+53.25	16.00	499.39
A2	556+63.25	16.00	499.37
E. End West Appr. Slab	556+73.25	16.00	499.36



**PLAN**



**TOP OF WEST APPROACH  
SLAB ELEVATIONS  
S.N. 085-0514**

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

**E-AS** 11-1-09

SHEET NO. 10 45 SHEETS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	30
			CONTRACT NO. 72A03		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

**NORTH EDGE OF SHOULDER**

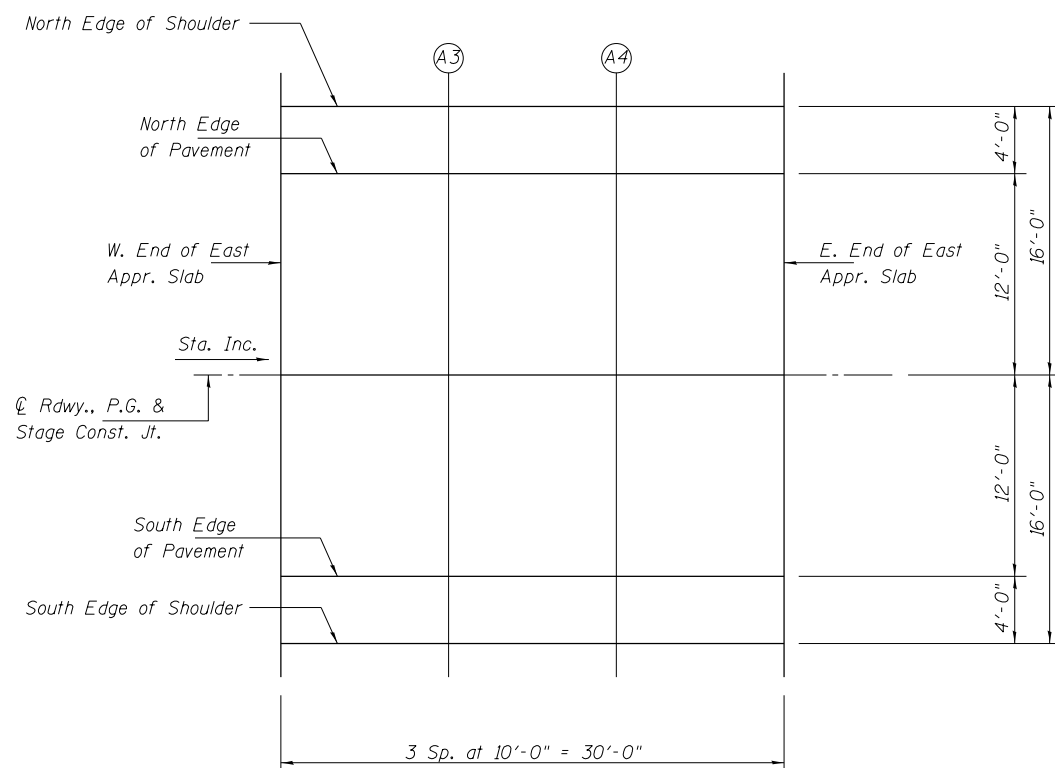
Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	562+02.75	-16.00	496.83
A3	562+12.75	-16.00	496.75
A4	562+22.75	-16.00	496.67
E. End East Appr. Slab	562+32.75	-16.00	496.60

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	562+02.75	-12.00	496.92
A3	562+12.75	-12.00	496.84
A4	562+22.75	-12.00	496.76
E. End East Appr. Slab	562+32.75	-12.00	496.68

**☉ ROADWAY, PROFILE GRADE & STAGE CONST. JT.**

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	562+02.75	0.00	497.10
A3	562+12.75	0.00	497.02
A4	562+22.75	0.00	496.95
E. End East Appr. Slab	562+32.75	0.00	496.87



**PLAN**

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	562+02.75	12.00	496.92
A3	562+12.75	12.00	496.84
A4	562+22.75	12.00	496.76
E. End East Appr. Slab	562+32.75	12.00	496.68

**SOUTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	562+02.75	16.00	496.83
A3	562+12.75	16.00	496.75
A4	562+22.75	16.00	496.67
E. End East Appr. Slab	562+32.75	16.00	496.60

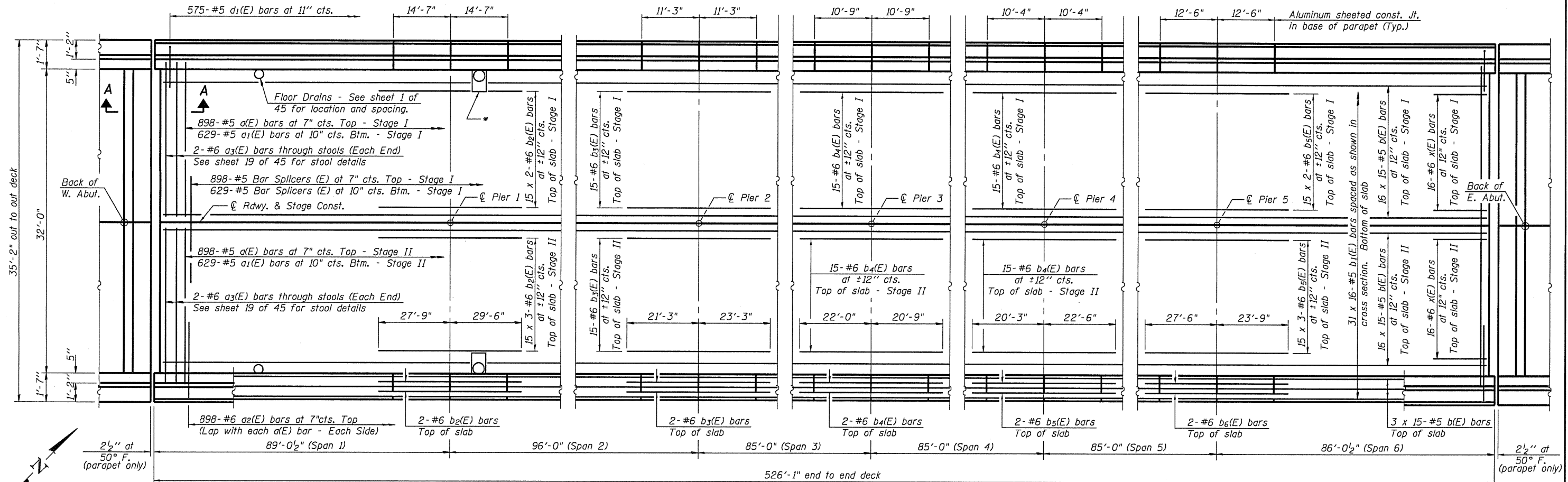
**TOP OF EAST APPROACH  
SLAB ELEVATIONS  
S.N. 085-0514**

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

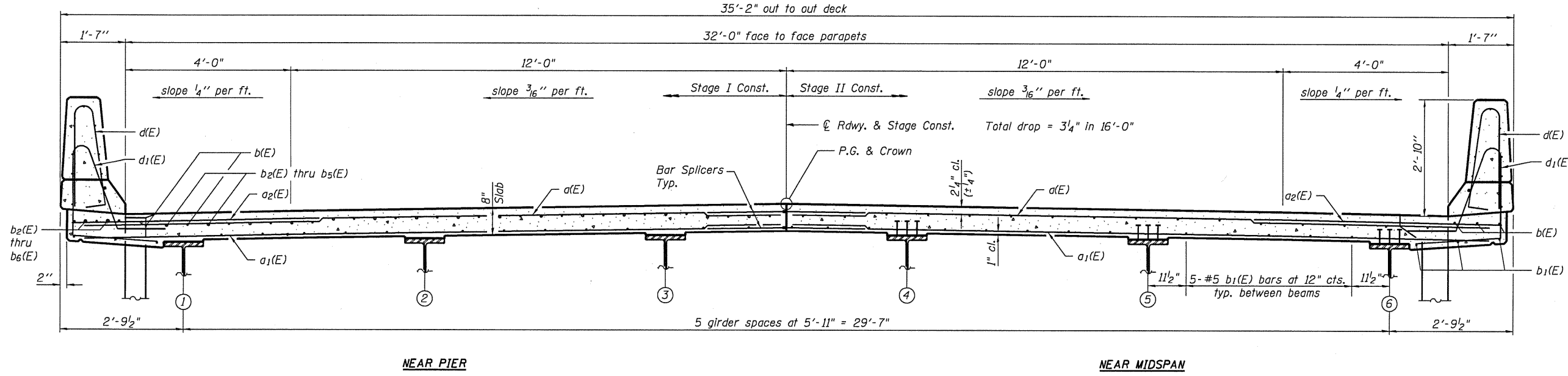
**E-AS**

11-1-09

SHEET NO. 11	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	31
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		



\*See sheet 1 of 45 for scupper location and spacing. See sheet 13 of 45 for additional reinforcing at scuppers.



**MINIMUM BAR LAP**

#5 bar = 3'-3"

#6 bar = 3'-10"

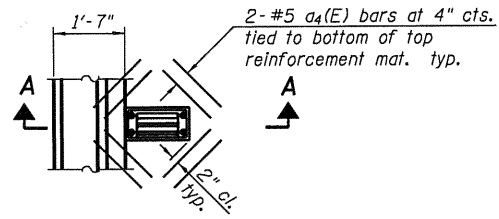
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

S-2-0 11-1-09

Notes:  
See Sheet 13 of 45 for superstructure details and Bill of Material.  
Bars indicated thus 16 x 19-#5 etc. indicates 16 lines of bars with 19 lengths per line.  
See Sheet 14 of 45 for parapet reinforcement.  
See Sheet 19 of 45 for Section A-A.

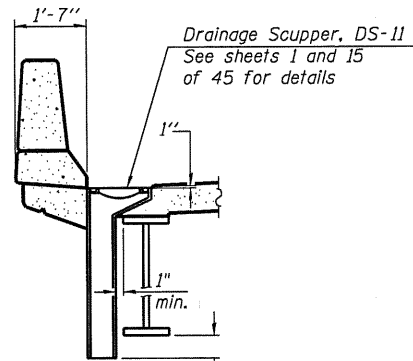
<b>SUPERSTRUCTURE</b>		<b>S.N. 085-0514</b>			
SHEET NO.12	F.A.P R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
45 SHEETS	713	120B-3	SCHUYLER	75	32
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 72A03	



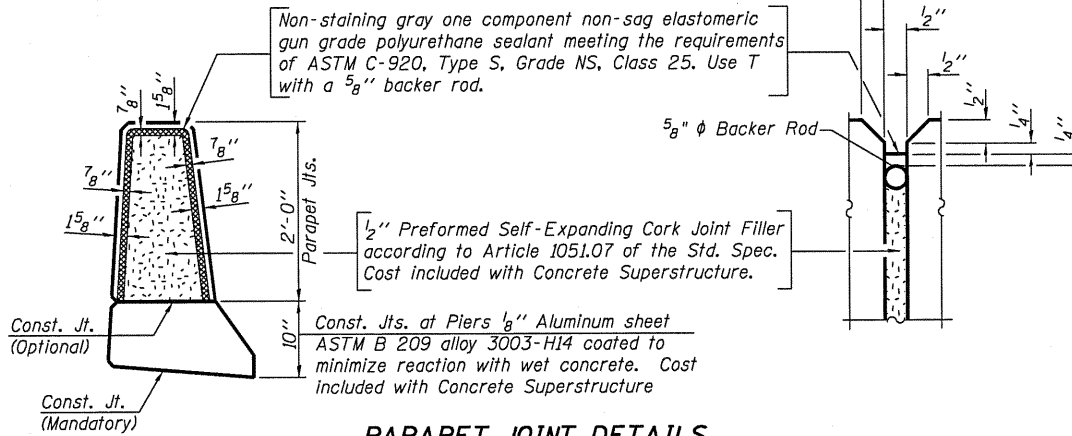


**PLAN**

Note:  
Cut longitudinal reinforcement to clear drainage scuppers.

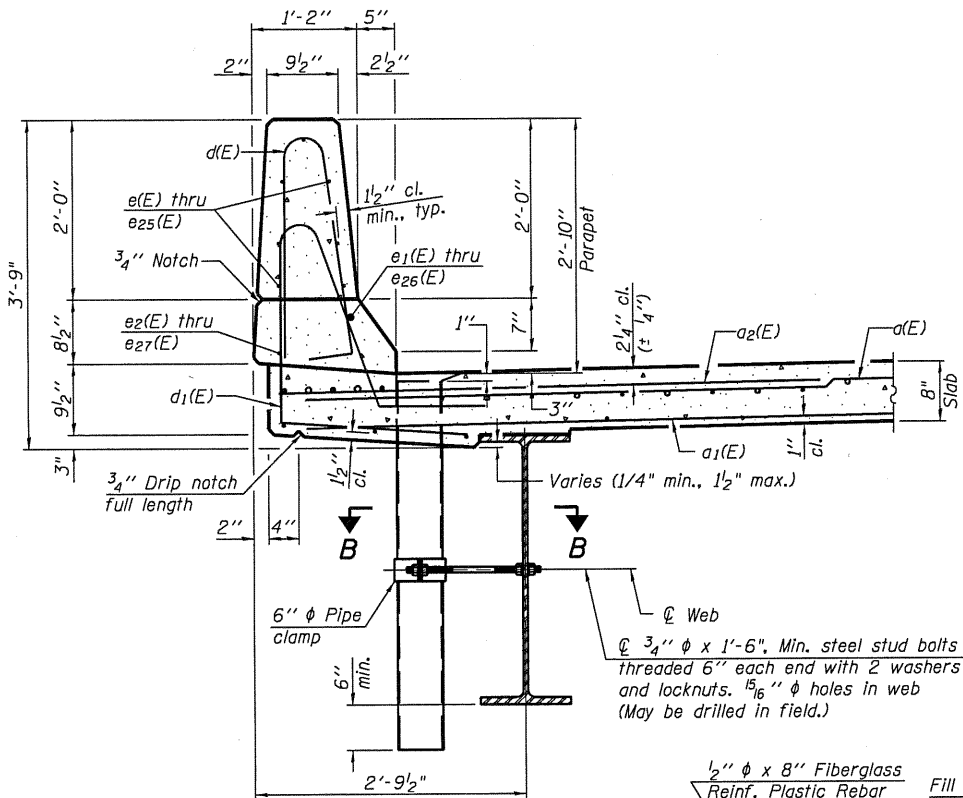


**SECTION A-A**

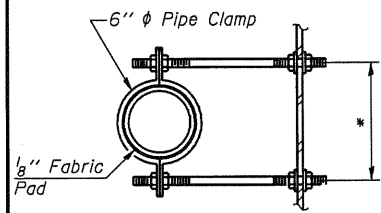


**PARAPET JOINT DETAILS**

Notes:  
Drains shall be located clear of all diaphragms.  
Floor Drains need not be painted  
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
Galvanize clamping device according to AASHTO M232. Cost of clamping device and galvanizing included with Floor Drains.

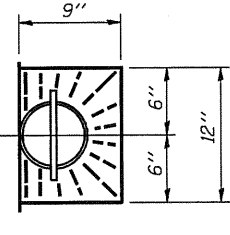


**SECTION THRU PARAPET**

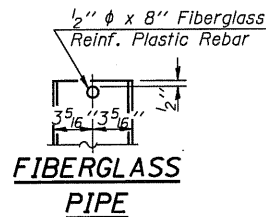


**SECTION B-B**

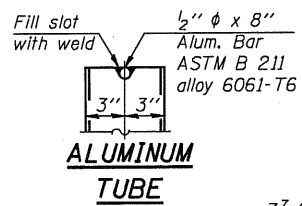
\* Dimension as required by Pipe Clamp



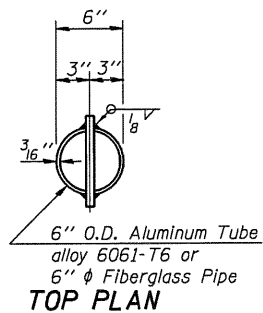
**TOP PLAN**



**FIBERGLASS PIPE**

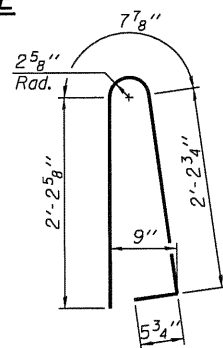


**ALUMINUM TUBE**

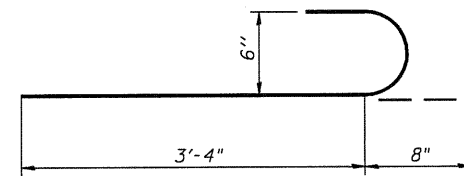


**TOP PLAN**

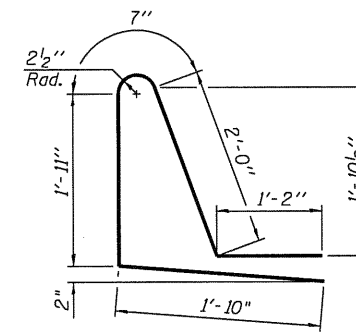
(Showing Aluminum Tube)



**BAR d1(E)**



**BAR x(E)**



**BAR d1(E)**

**SUPERSTRUCTURE BILL OF MATERIAL**

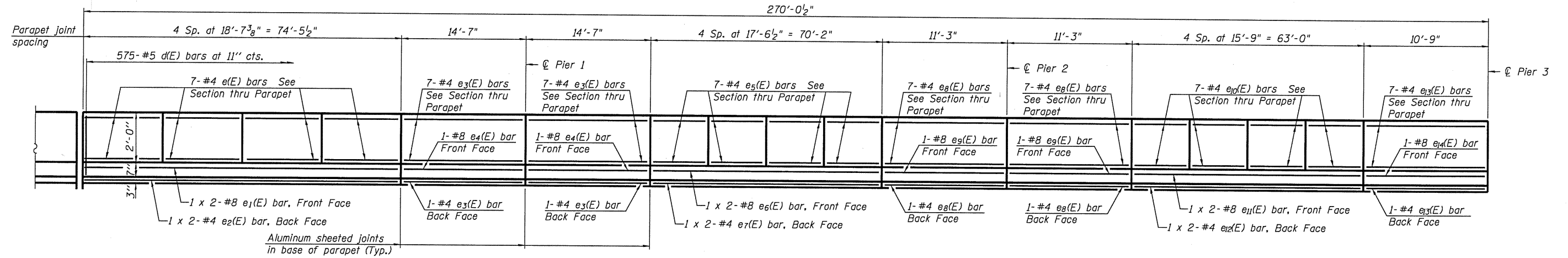
Bar	No.	Size	Length	Shape
d1(E)	1,796	#5	17'-0"	—
a1(E)	1,258	#5	16'-8"	—
a2(E)	1,796	#6	6'-6"	—
a3(E)	8	#6	17'-0"	—
a4(E)	80	#5	1'-6"	—
b(E)	570	#5	38'-2"	—
b1(E)	465	#5	35'-11"	—
b2(E)	102	#6	21'-8"	—
b3(E)	34	#6	44'-6"	—
b4(E)	68	#6	42'-9"	—
b5(E)	102	#6	19'-8"	—
d(E)	1,150	#5	5'-7"	—
d1(E)	1,150	#5	7'-6"	—
e(E)	56	#4	18'-4"	—
e1(E)	4	#8	39'-9"	—
e2(E)	4	#4	38'-2"	—
e3(E)	32	#4	14'-4"	—
e4(E)	4	#8	14'-4"	—
e5(E)	56	#4	17'-3"	—
e6(E)	4	#8	37'-7"	—
e7(E)	4	#4	36'-0"	—
e8(E)	32	#4	11'-0"	—
e9(E)	4	#8	11'-0"	—
e10(E)	56	#4	15'-6"	—
e11(E)	4	#8	34'-0"	—
e12(E)	4	#4	32'-5"	—
e13(E)	32	#4	10'-6"	—
e14(E)	4	#8	10'-6"	—
e15(E)	56	#4	15'-8"	—
e16(E)	4	#8	34'-5"	—
e17(E)	4	#4	32'-10"	—
e18(E)	32	#4	10'-1"	—
e19(E)	4	#8	10'-1"	—
e20(E)	56	#4	15'-3"	—
e21(E)	4	#8	33'-7"	—
e22(E)	4	#4	32'-0"	—
e23(E)	32	#4	12'-3"	—
e24(E)	4	#8	12'-3"	—
e25(E)	56	#4	18'-1"	—
e26(E)	4	#8	39'-3"	—
e27(E)	4	#4	37'-8"	—
x(E)	64	#6	4'-0"	—
Reinforcement Bars, Epoxy Coated		Pound	147,890	
Concrete Superstructure		Cu. Yds.	599.4	
Floor Drains		Each	26	
Bar Splicers		Each	1,527	

Bars indicated thus 1 x 2-#8 etc. Indicates 1 line of bars with 2 lengths per line.

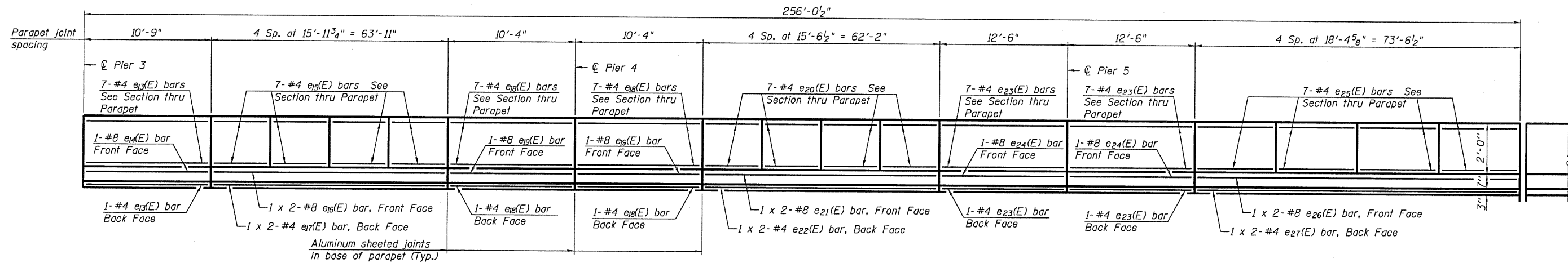
**SUPERSTRUCTURE DETAILS S.N. 085-0514**

SHEET NO.13 45 SHEETS	F.A.P. RTE. 713	SECTION 120B-3	COUNTY SCHUYLER	TOTAL SHEETS 75	SHEET NO. 33
	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

Sep-07-2010 10:35:20AM 0:35:20 AM



**INSIDE ELEVATION OF PARAPET**  
(West Parapet shown - East Parapet opposite hand)



**INSIDE ELEVATION OF PARAPET**  
(West Parapet shown - East Parapet opposite hand)

**MINIMUM BAR LAP**  
(Parapet)  
#4 bar = 2'-0"  
#8 bar = 5'-2"

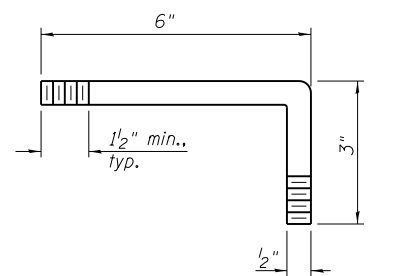
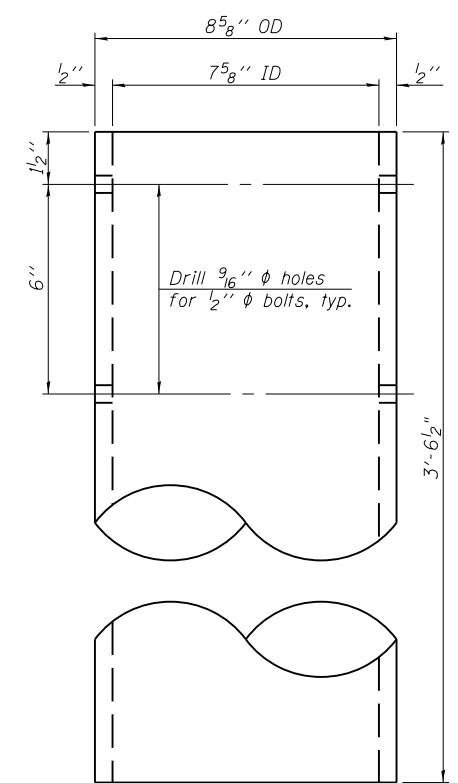
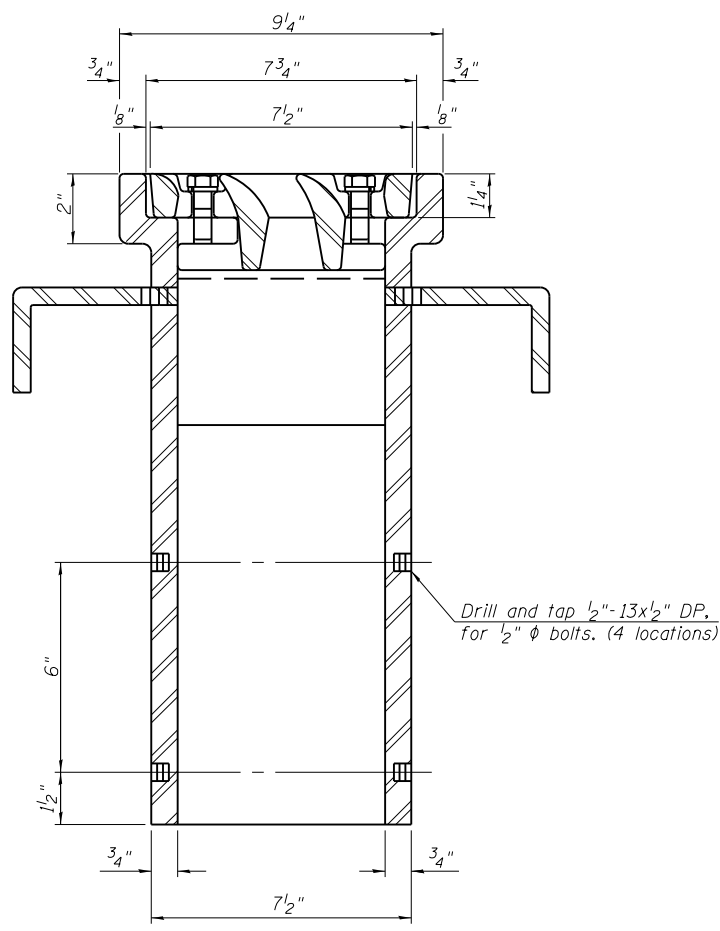
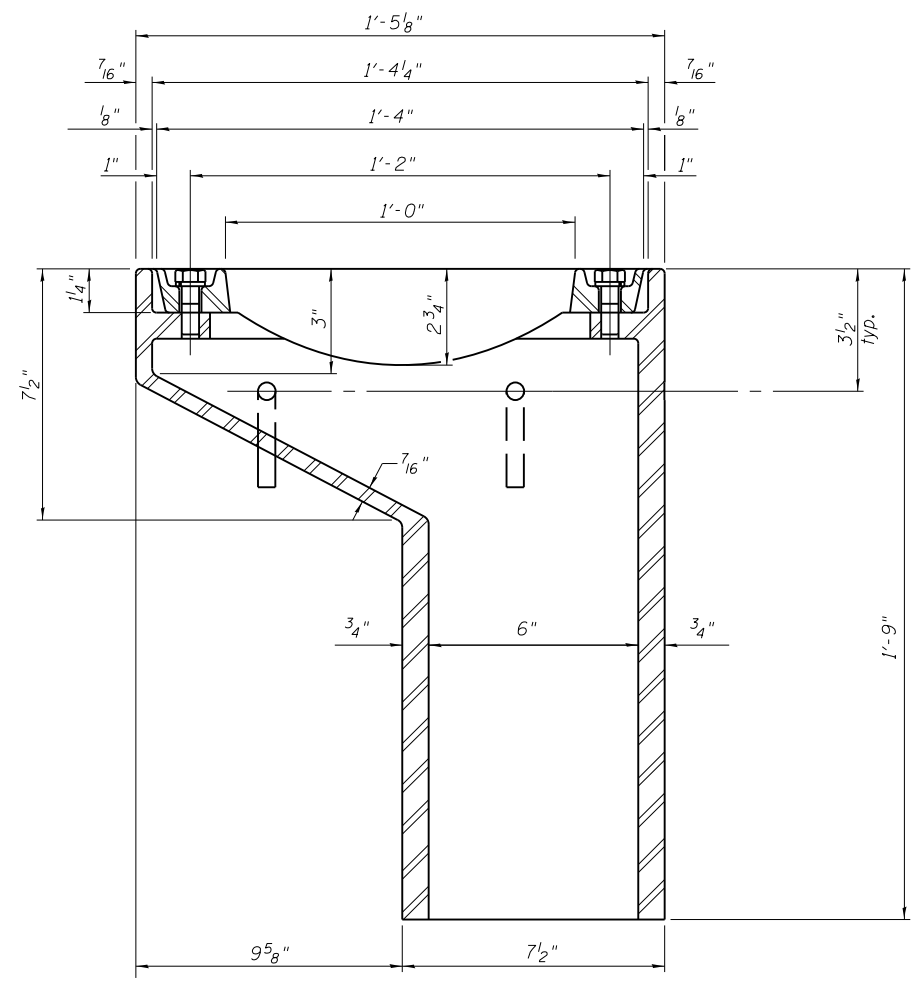
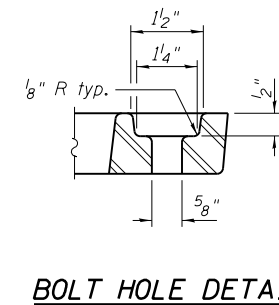
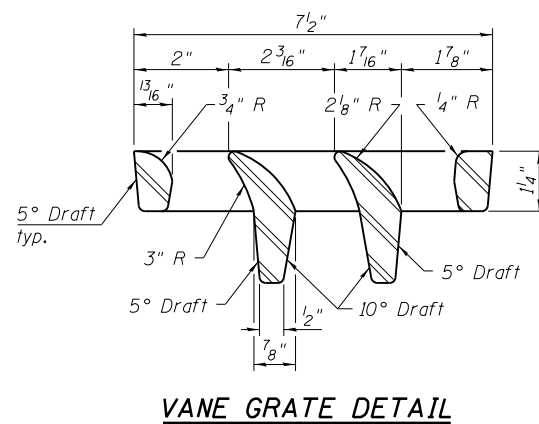
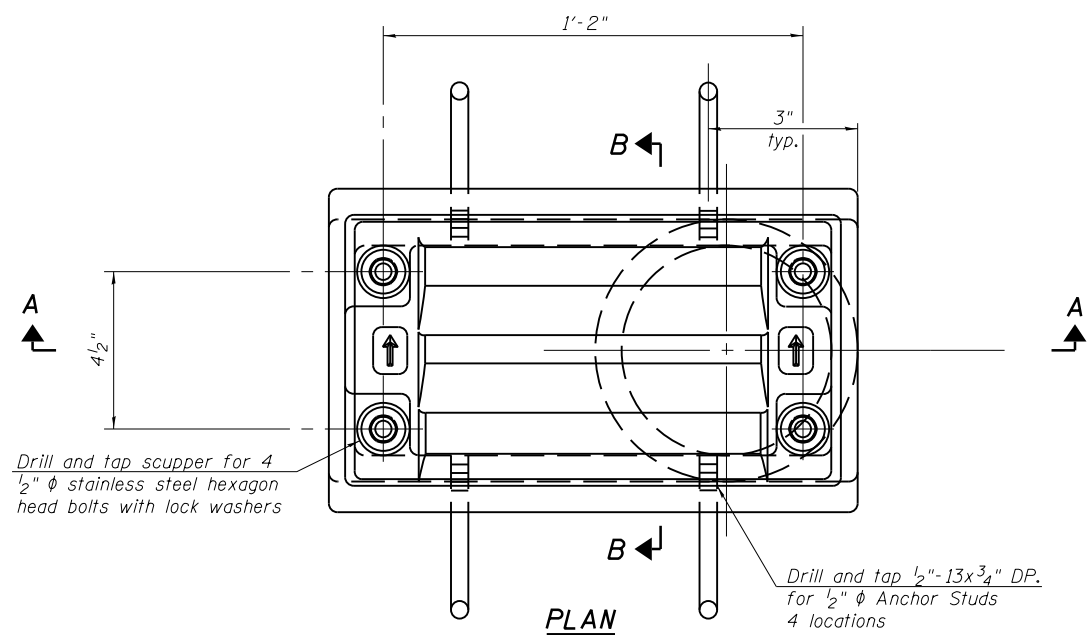
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

**SUPERSTRUCTURE DETAILS**  
**S.N. 085-0514**

SHEET NO.14 45 SHEETS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	34
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 72A03	

Kilgner & Associates P.C.

Aug-17-2010 01:29:25PM29:25 PM



**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-II	Each	10

See sheet 13 of 45 for scupper location relative to parapet.

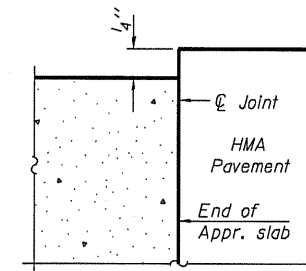
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

DS-II 11-1-09

**DRAINAGE SCUPPER, DS-II**  
**S.N. 085-0514**

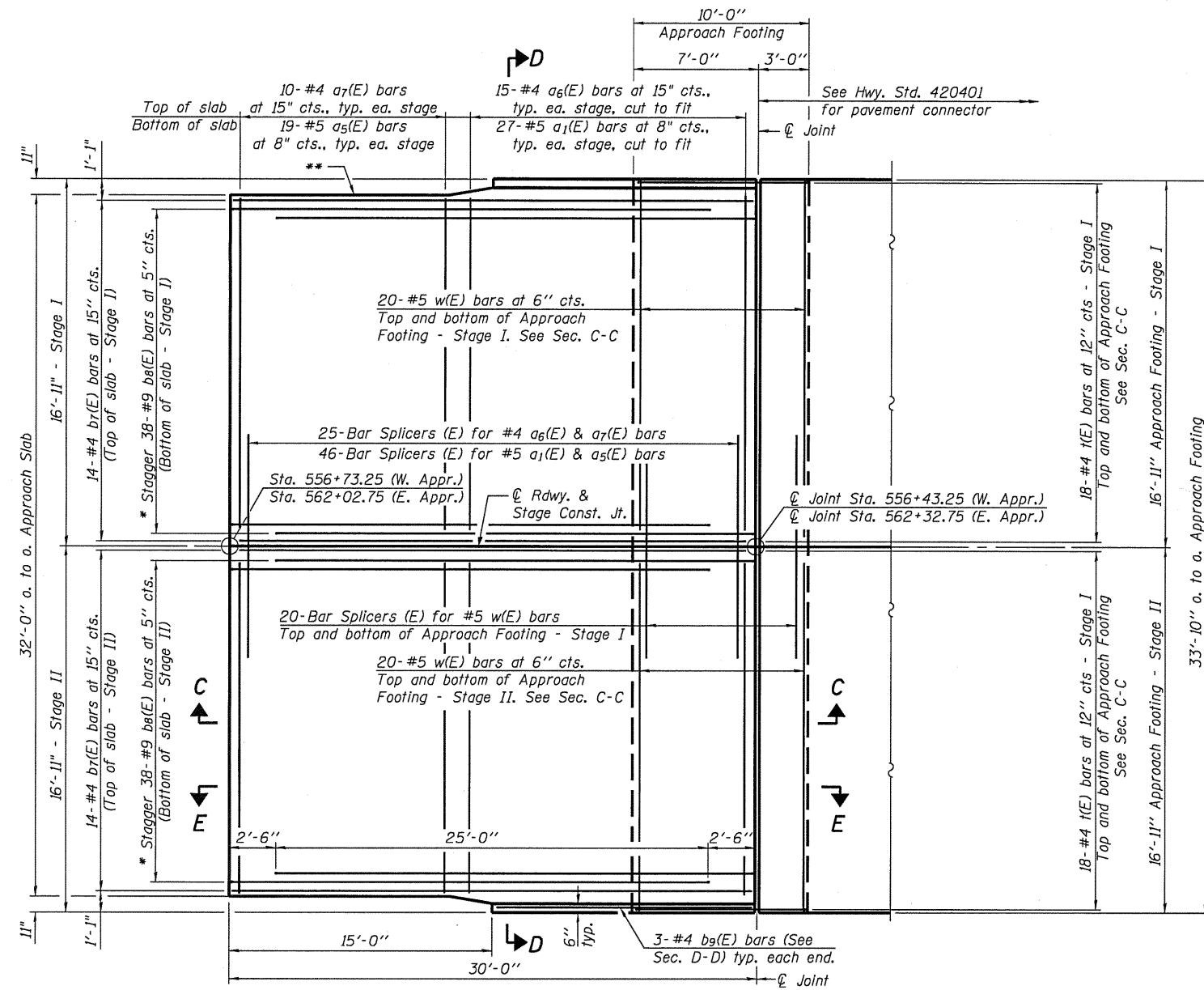
SHEET NO.15	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	35
45 SHEETS	CONTRACT NO. 72A03				
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Notes:  
See sheet 17 of 45 for Sections C-C & D-D.  
a<sub>1</sub>(E), a<sub>5</sub>(E), a<sub>6</sub>(E), a<sub>7</sub>(E), and w(E) bar spacings measured along  $\varnothing$  Rdwy.



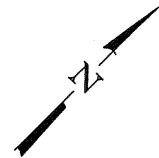
FLEXIBLE PAVEMENT

DETAIL A



PLAN

- \* Tilt #9 b<sub>8</sub>(E) bars as required to maintain clearance.
- \*\* Closed cell joint filler according to Article 1051.08 of the Std. Specifications; full depth of slab, full length of parapet. Typical each parapet.

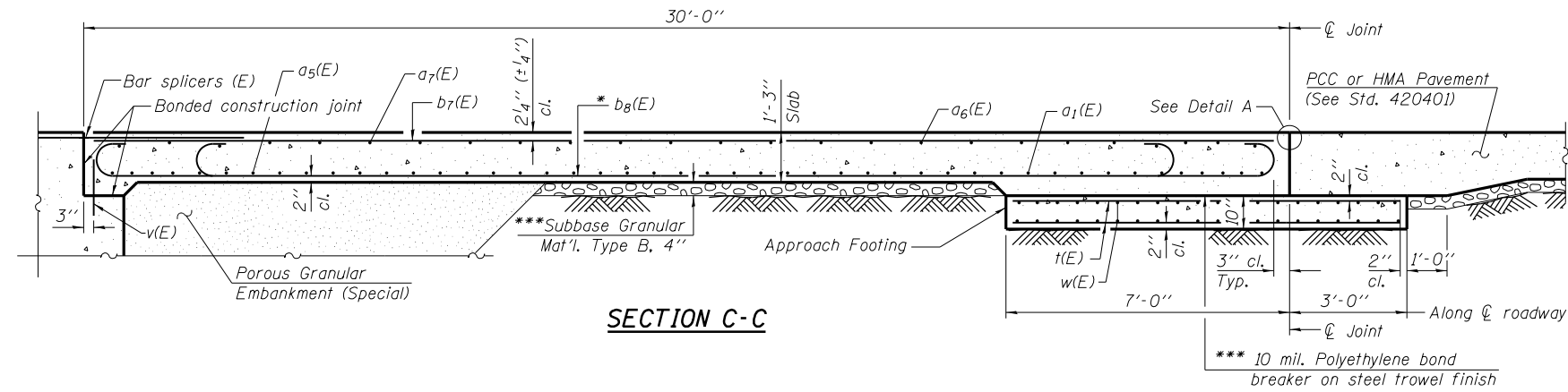


DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

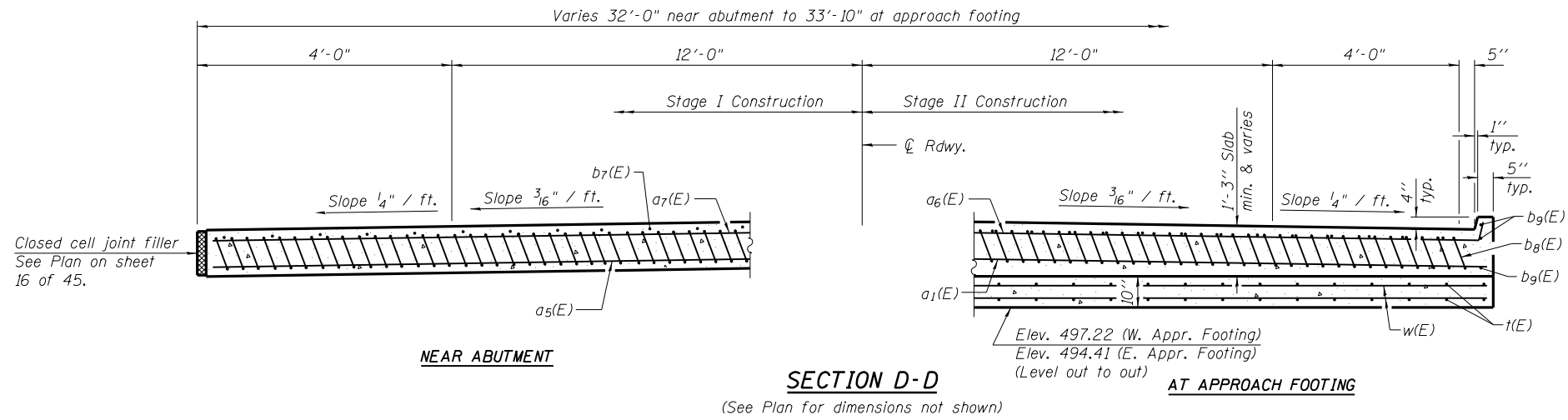
(Sheet 1 of 2)  
**BRIDGE APPROACH SLAB DETAILS**  
**S.N. 085-0514**

SHEET NO.16	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	36
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

Aug-17-2010 01:29:35PM:2:9:35 PM



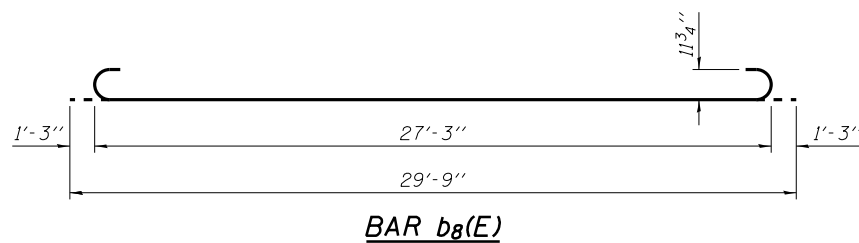
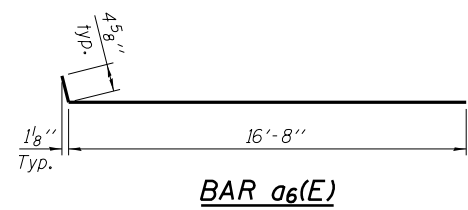
Notes:  
 See sheet 16 of 45 for Detail A.  
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For v(E) bar details, see sheets 28 and 30 of 45.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 For bar splicer details, see sheet 36 of 45.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 45.



\* Tilt #9 b8(E) bars as required to maintain clearance.  
 \*\*\* Cost included with Concrete Superstructure.

**TWO APPROACHES  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a1(E)	108	#5	16'-8"	—
a5(E)	76	#5	15'-9"	—
a6(E)	60	#4	17'-1"	—
a7(E)	40	#4	15'-9"	—
b7(E)	56	#4	29'-8"	—
b8(E)	152	#9	29'-9"	—
b9(E)	12	#4	14'-8"	—
t(E)	144	#4	9'-8"	—
w(E)	160	#5	16'-8"	—
Concrete Superstructure		Cu. Yd.	119.8	
Concrete Structures		Cu. Yd.	20.9	
Reinforcement Bars, Epoxy Coated		Pound	24,540	
Bar Splicers		Each	222	



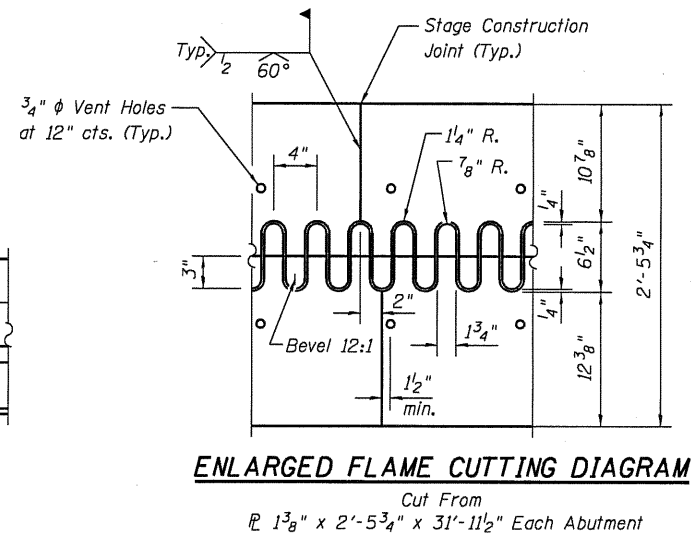
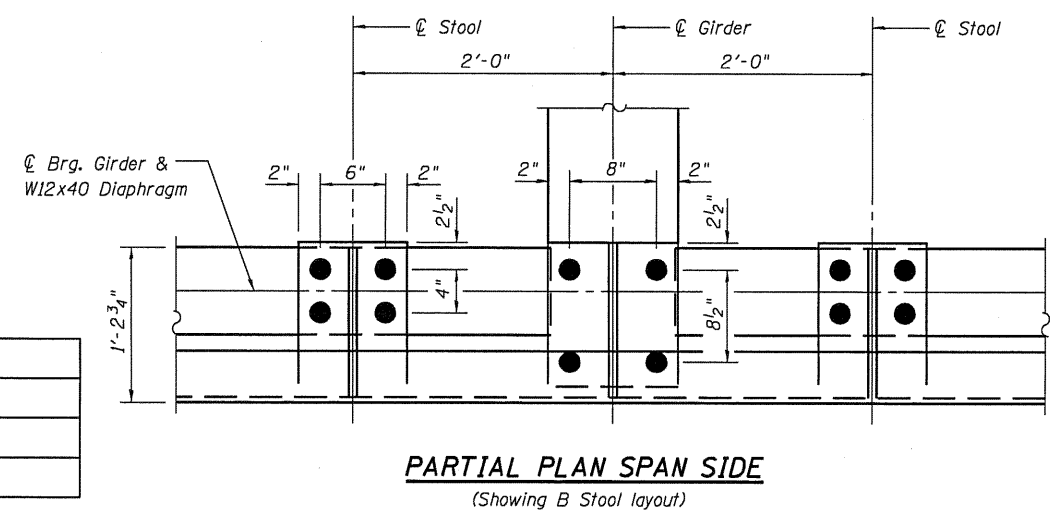
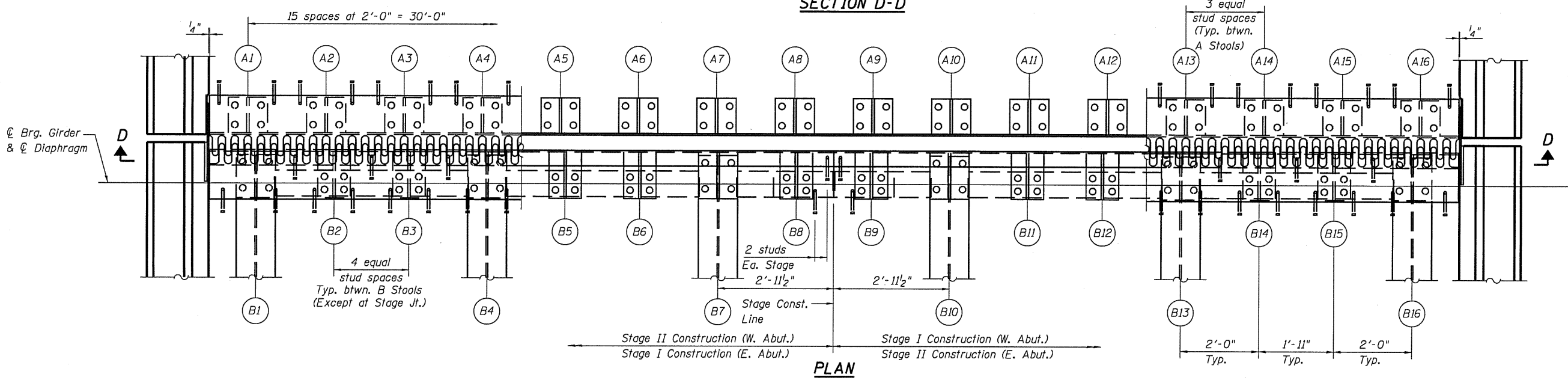
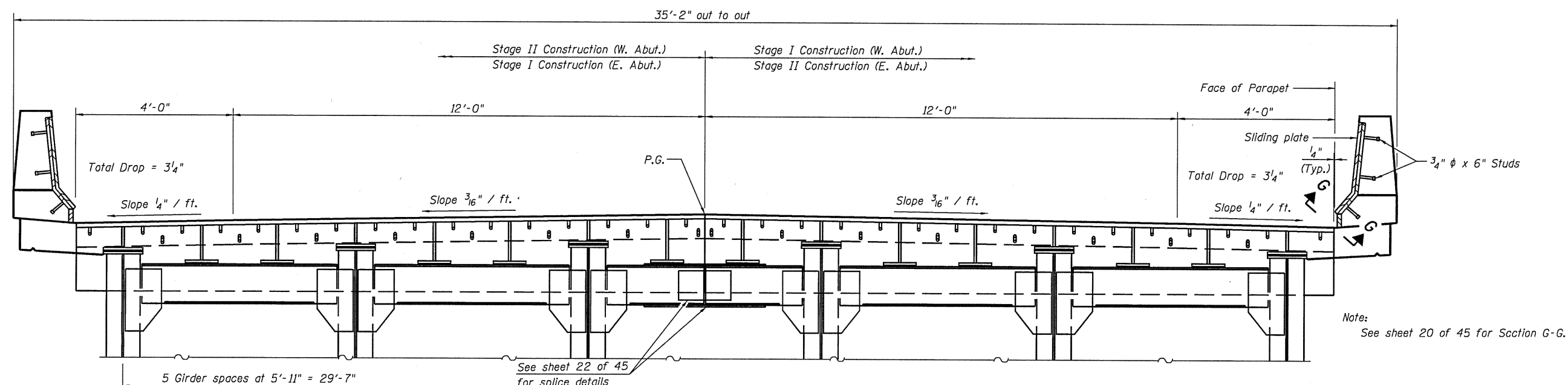
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

(Sheet 2 of 2)  
**BRIDGE APPROACH SLAB DETAILS**  
**S.N. 085-0514**

SHEET NO. 17	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	37
45 SHEETS	CONTRACT NO. 72A03				
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Klingner & Associates P.C.

Sep-07-2010 10:35:25AM 0:35:25 AM



**BILL OF MATERIAL (2 ABUTS.)**

Finger Plate Expansion Joint, 6"	Foot	64.0
----------------------------------	------	------

**JOINT DETAILS AT ABUTMENTS  
S.N. 085-0514**

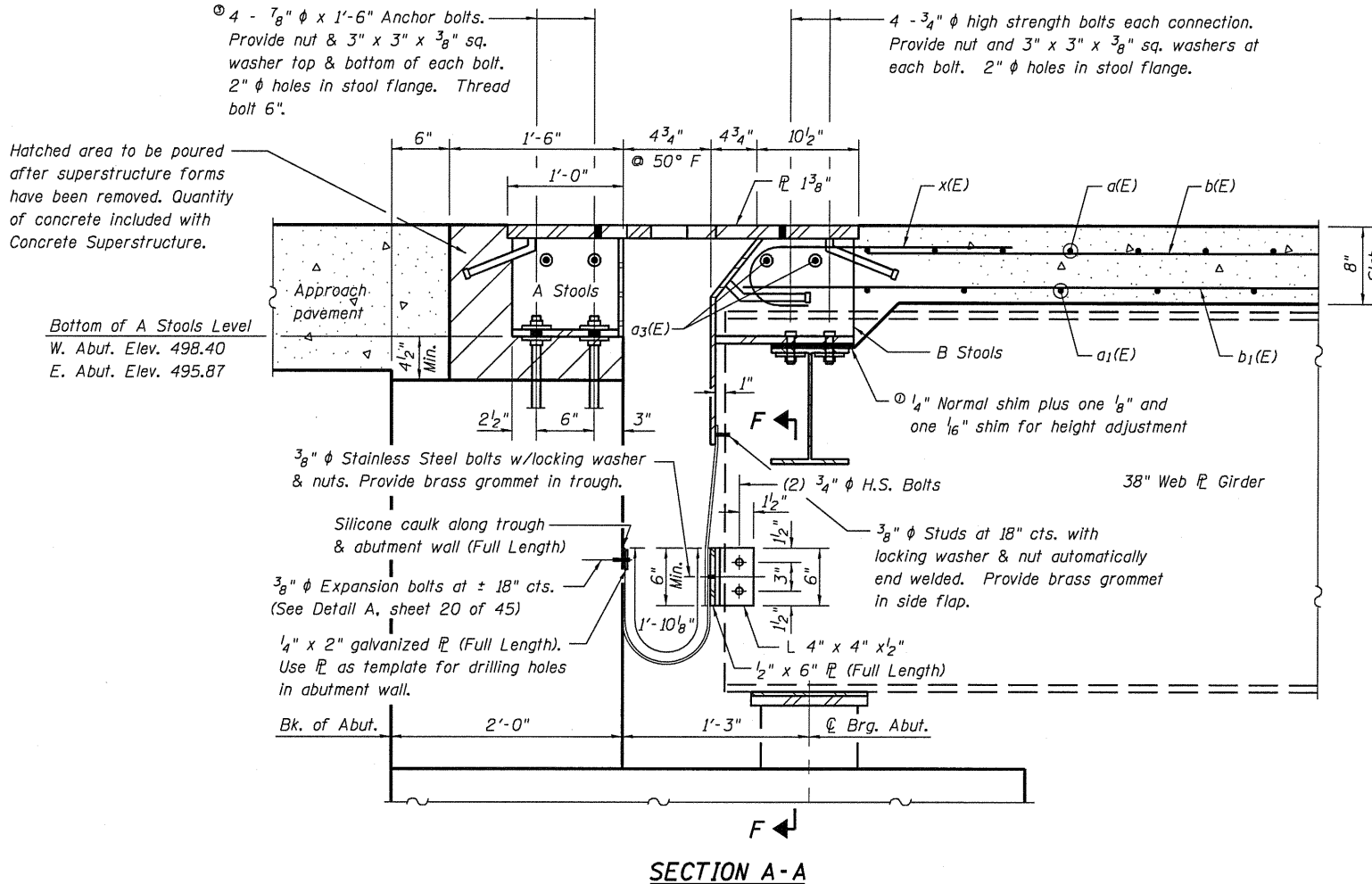
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

SHEET NO. 18 45 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	38
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	CONTRACT NO. 72A03	

Sep-07-2010 10:35:25AM:35:25 AM

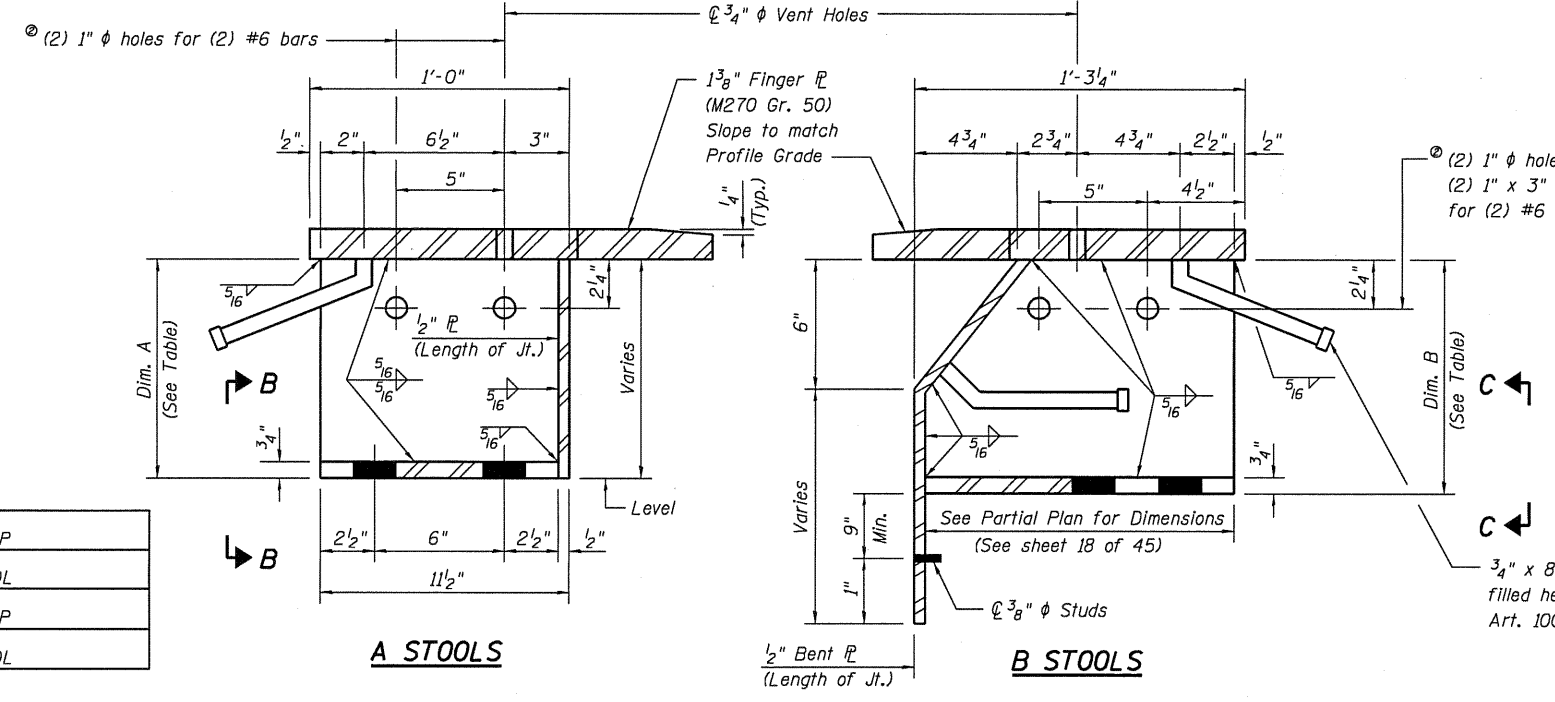
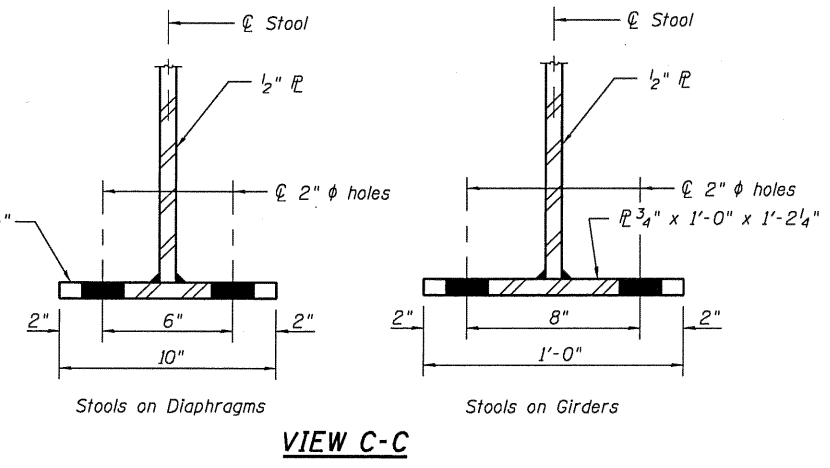
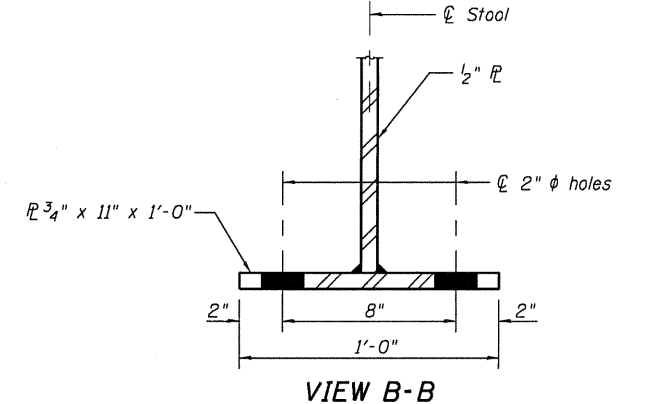
**TABLE FOR DIMENSION A & B**

Stool No.	Dimension A	Stool No.	Dimension B
A1	10 <sup>3</sup> / <sub>8</sub> "	B1	7 <sup>1</sup> / <sub>2</sub> "
A2	10 <sup>7</sup> / <sub>8</sub> "	B2	11 <sup>3</sup> / <sub>4</sub> "
A3	11 <sup>3</sup> / <sub>8</sub> "	B3	12 <sup>1</sup> / <sub>8</sub> "
A4	11 <sup>7</sup> / <sub>8</sub> "	B4	7 <sup>1</sup> / <sub>2</sub> "
A5	12"	B5	12 <sup>7</sup> / <sub>8</sub> "
A6	12 <sup>3</sup> / <sub>8</sub> "	B6	13 <sup>1</sup> / <sub>4</sub> "
A7	12 <sup>7</sup> / <sub>8</sub> "	B7	7 <sup>1</sup> / <sub>2</sub> "
A8	13 <sup>1</sup> / <sub>4</sub> "	B8	13 <sup>3</sup> / <sub>8</sub> "
A9	13 <sup>3</sup> / <sub>4</sub> "	B9	13 <sup>1</sup> / <sub>2</sub> "
A10	12 <sup>7</sup> / <sub>8</sub> "	B10	7 <sup>1</sup> / <sub>2</sub> "
A11	12 <sup>3</sup> / <sub>8</sub> "	B11	13 <sup>1</sup> / <sub>4</sub> "
A12	12"	B12	12 <sup>7</sup> / <sub>8</sub> "
A13	11 <sup>3</sup> / <sub>8</sub> "	B13	7 <sup>1</sup> / <sub>2</sub> "
A14	11 <sup>7</sup> / <sub>8</sub> "	B14	12 <sup>1</sup> / <sub>8</sub> "
A15	10 <sup>7</sup> / <sub>8</sub> "	B15	11 <sup>3</sup> / <sub>4</sub> "
A16	10 <sup>3</sup> / <sub>8</sub> "	B16	7 <sup>1</sup> / <sub>2</sub> "



- Ⓞ Provide one 1/4" normal shim, one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint. Cost shall be included with Furnishing and Erecting Structural Steel.
- Ⓞ #6 bars shall be placed continuously thru the stools by the steel fabricator. Mechanical Splice in field at the stage construction line. Cost shall be included with Furnishing and Erecting Structural Steel.
- Ⓞ The anchor bolts, furnished and installed shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

**Notes:**  
 For Stool locations, see sheet 18 of 45.  
 For View F-F, see sheet 20 of 45.  
 Reinforcement Bars are billed on sheet 13 of 45.  
 Structural Steel for the finger plate joint assembly shall be AASHTO M270 Gr. 50 steel.  
 The cost of the stools, studs, plates, and angles shall be included in the unit bid price for Furnishing and Erecting Structural Steel.  
 Finger Plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.



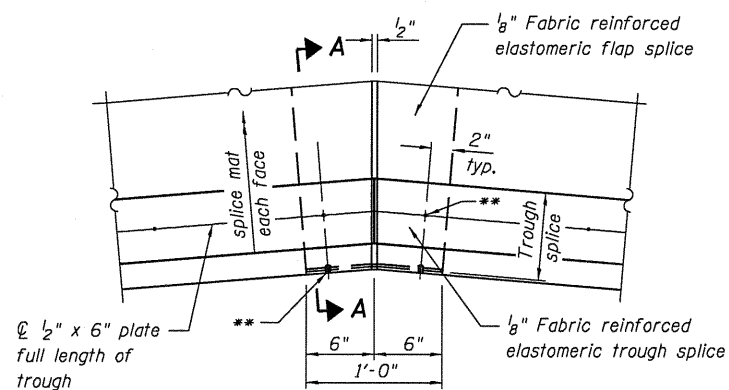
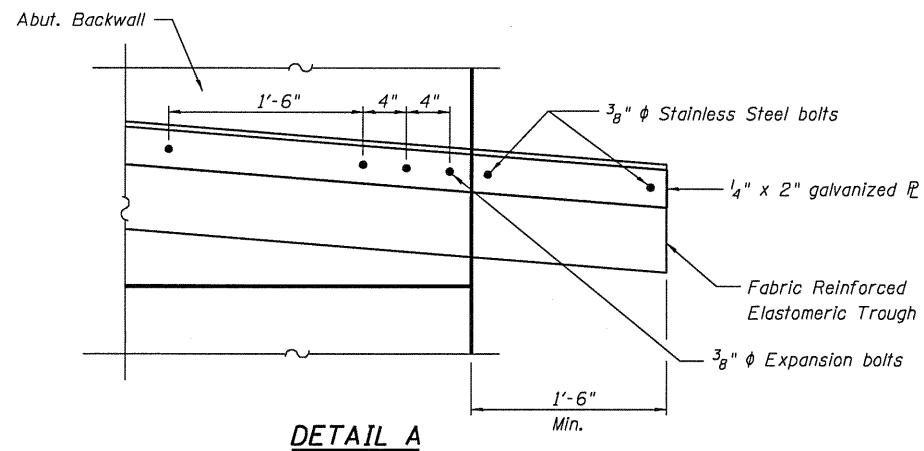
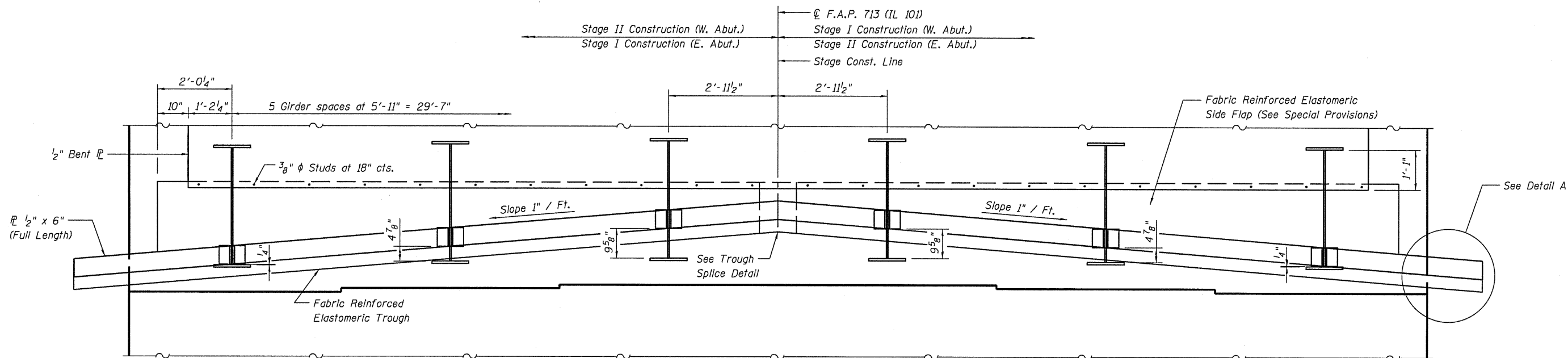
**JOINT DETAILS AT ABUTMENTS  
S.N. 085-0514**

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

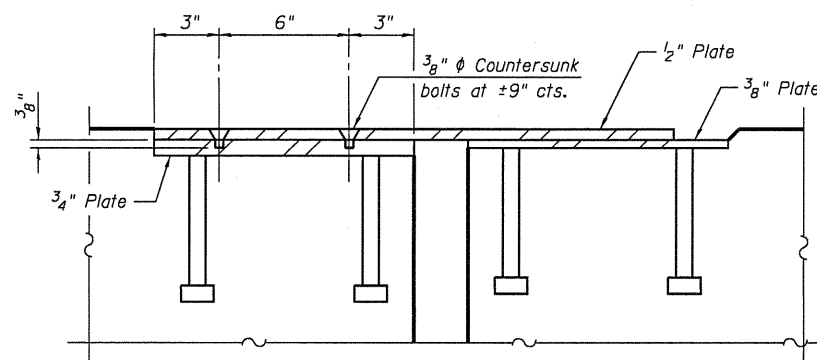
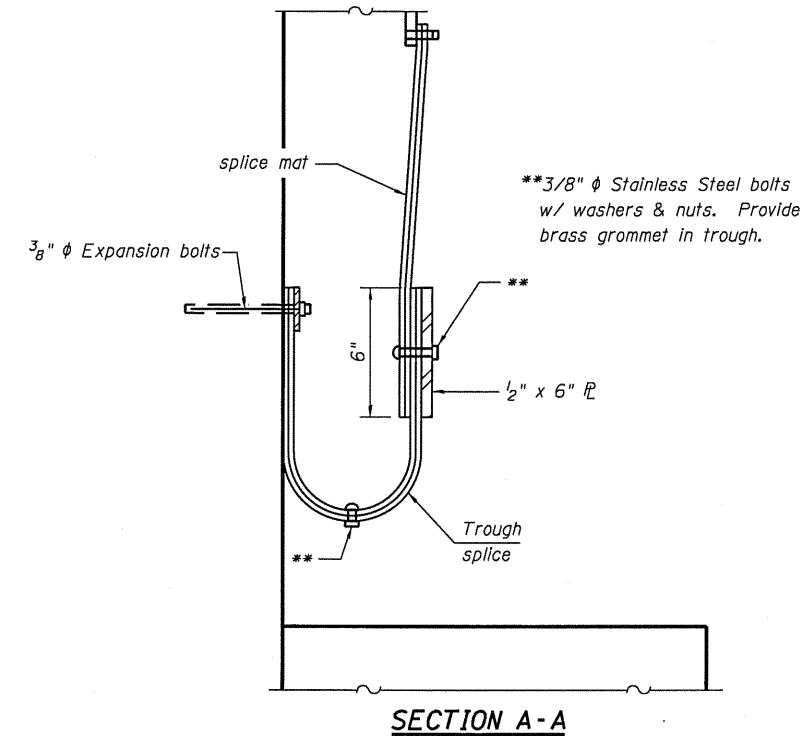
SHEET NO. 19 45 SHEETS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	39
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			
CONTRACT NO. 72A03					

Klingner & Associates P.C.

Sep-07-2010 10:35:26AM 35:26 AM



\*\*3/8" φ Stainless Steel bolts w/ washers & nuts. Provide brass grommet in trough.



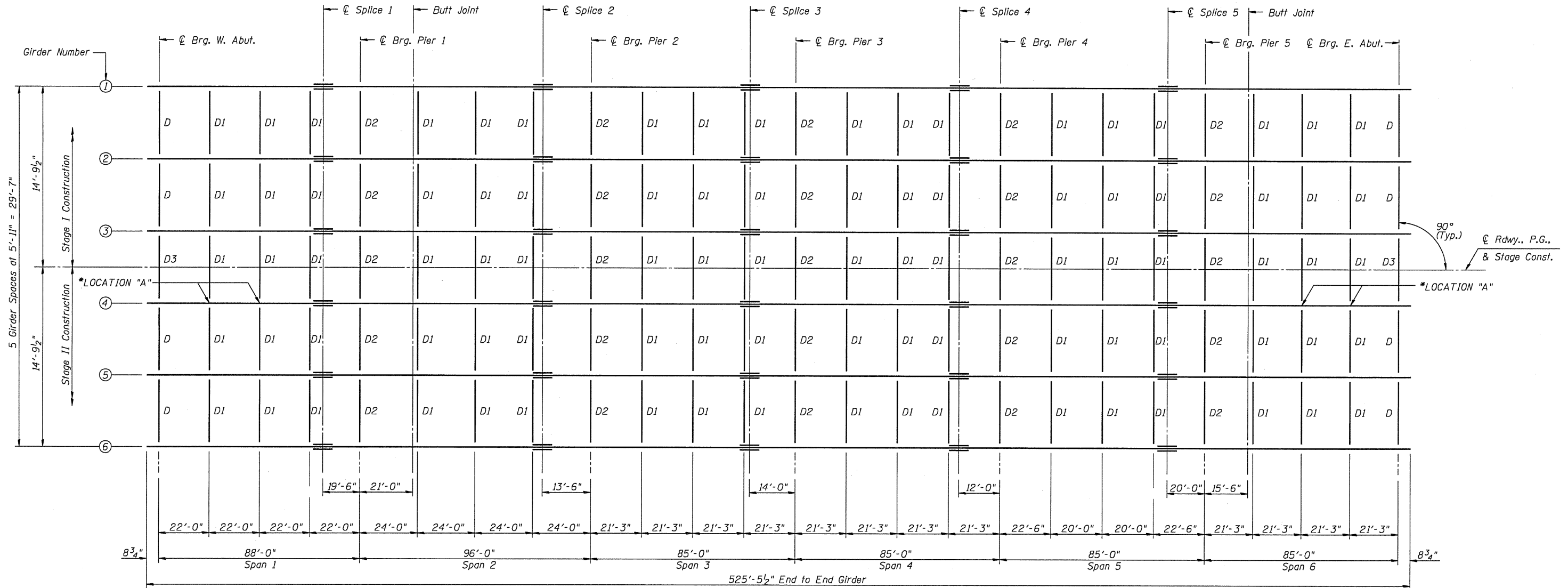
TROUGH DETAILS AT ABUTMENTS  
S.N. 085-0514

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

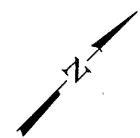
SHEET NO. 20 45 SHEETS	F.A.P. RTE. 713	SECTION 120B-3	COUNTY SCHUYLER	TOTAL SHEETS 75	SHEET NO. 40
	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72A03	

Klingner & Associates P.C.





**FRAMING PLAN**



\* Use  $\frac{3}{16}$ " x  $1\frac{1}{4}$ " slotted holes in  $L6 \times 4 \times \frac{1}{2}$  or  $\frac{1}{2}$ " bent  $\bar{L}$  in diaphragm at location "A" only. Provide  $\frac{5}{16}$ " plate washer for slotted holes. Bolts shall be finger-tightened prior to the deck pour for Stage II Construction and then be fully tightened after completion of the pour. Bolts shall start at the bottom of the slot.

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

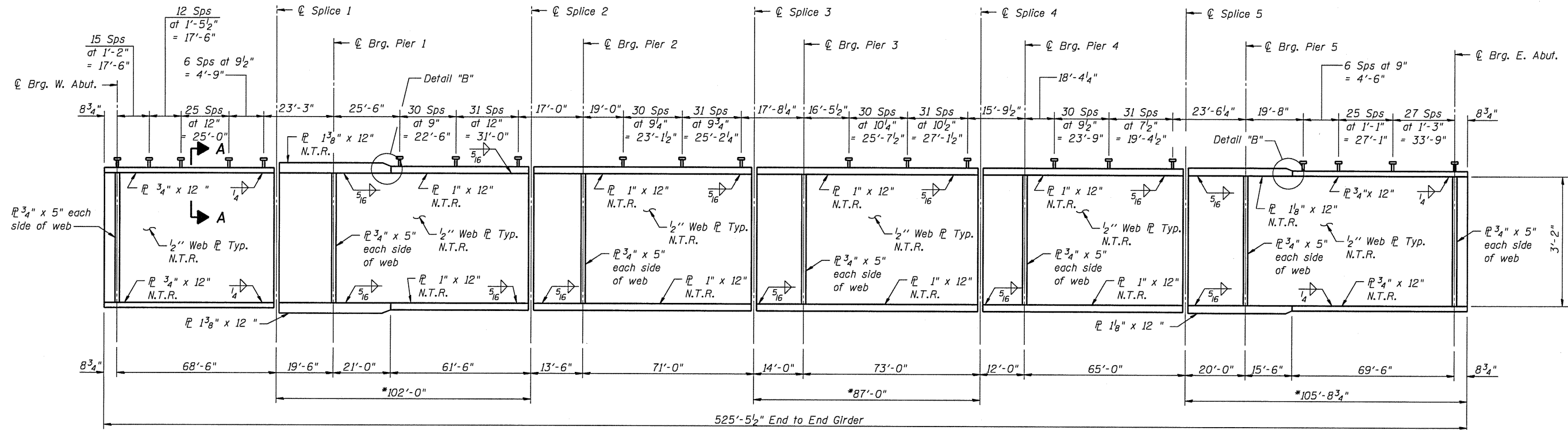
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

**FRAMING PLAN**  
**S.N. 085-0514**

SHEET NO. 21	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	41
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

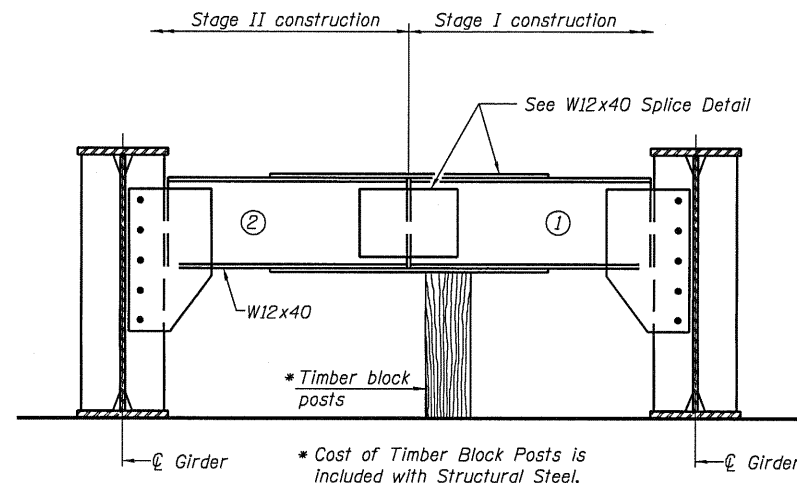
Sep-07-2010 10:35:31AM

\$FILES



**GIRDER ELEVATION**

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

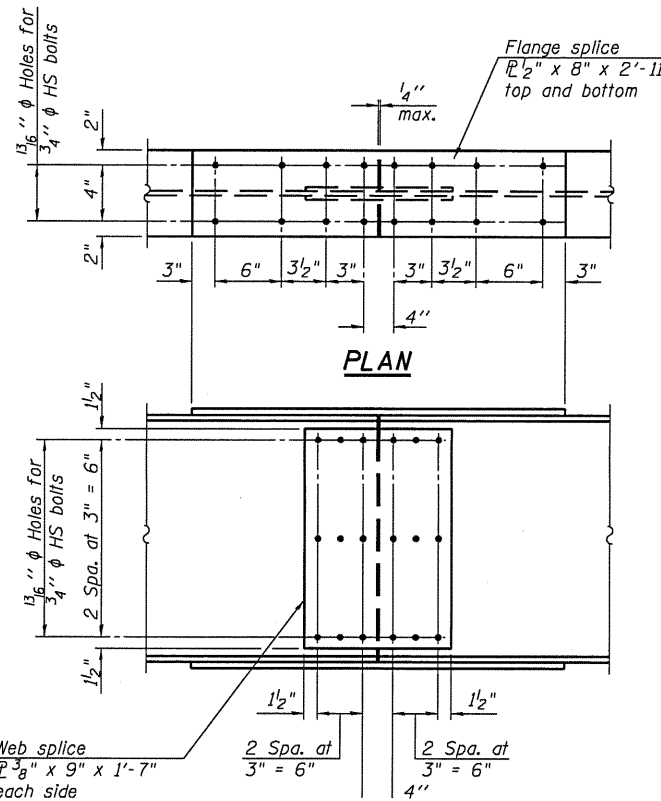


**END DIAPHRAGM, D3**  
(2 Required)

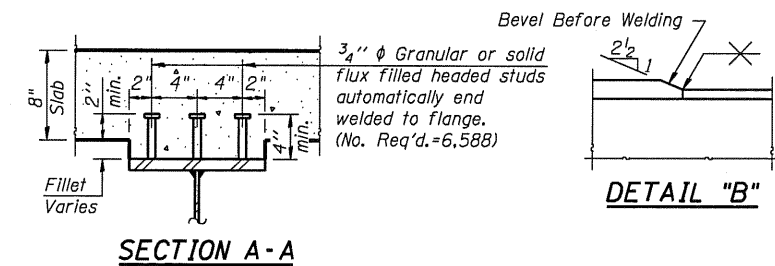
**END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE**

- 1.) Order Diaphragm in two sections.
- 2.) Attach section ① and splice plates of Diaphragm to Beam
- 3.) Place Timber Block Posts between section ① of diaphragm and abutment bearing section.
- 4.) Attach section ② of diaphragm to both Beam and section ① of diaphragm during Stage II Construction with splice plates.
- 5.) Remove Timber Block Posts.

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL



**W12x40 SPLICE DETAIL**  
(2 Required)

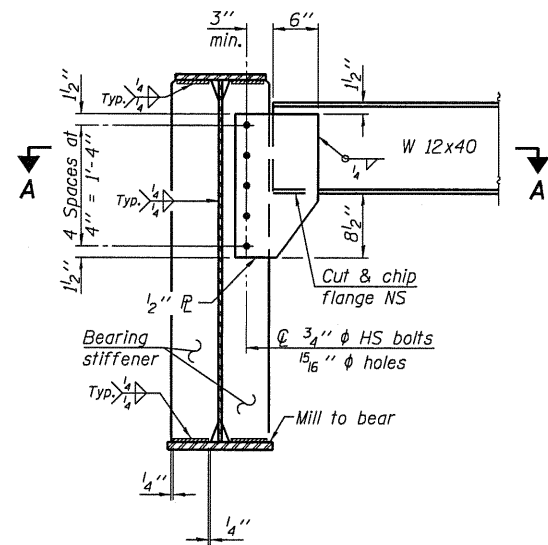


Notes:  
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.  
\*The Contractor shall submit plans showing bracing details for transporting, erection, and deck forming for the section to the Engineer for approval.

**GIRDER DETAILS**  
**S.N. 085-0514**

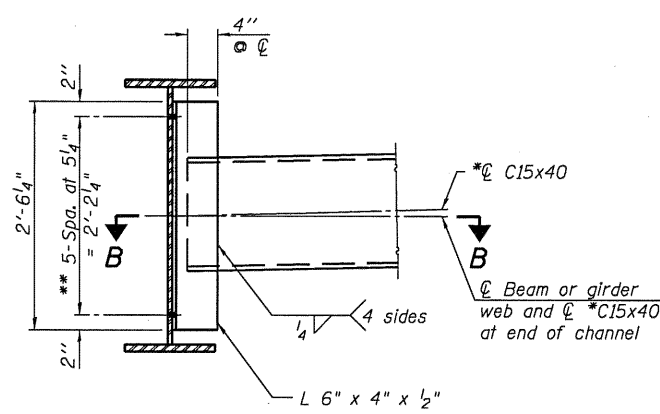
SHEET NO.22	F.A.P	SECTION	COUNTY	TOTAL	SHEET
	RTE.	120B-3	SCHUYLER	SHEETS	NO.
45 SHEETS	713	CONTRACT NO. 72A03		75	42
	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

Klingner & Associates P.C.



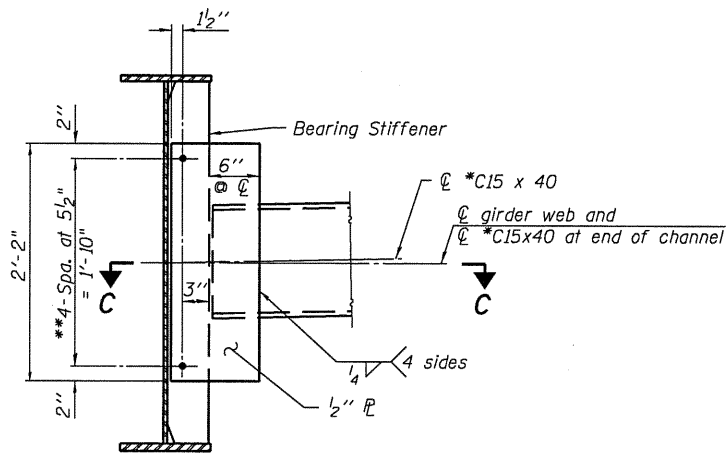
**END DIAPHRAGM, D**  
(8 Required)

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



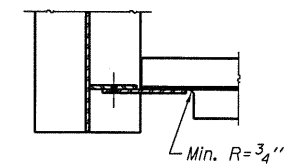
**INTERIOR DIAPHRAGM, D1**  
(90 Required)

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

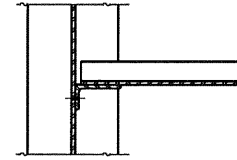


**INTERIOR DIAPHRAGM, D2**  
(25 Required)

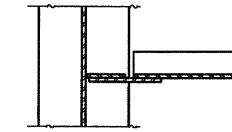
Note: Two hardened washers required for each set of oversized holes.



**SECTION A-A**



**SECTION B-B**

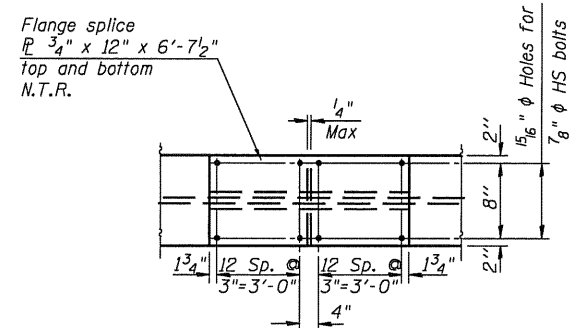


**SECTION C-C**

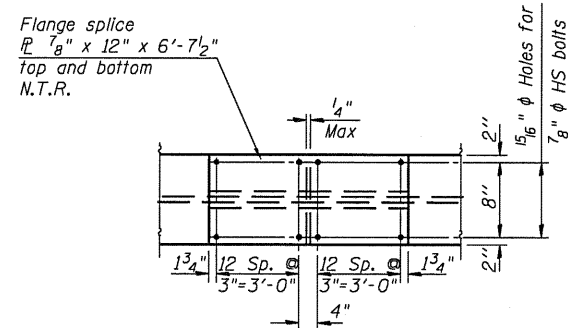
Note: Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

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

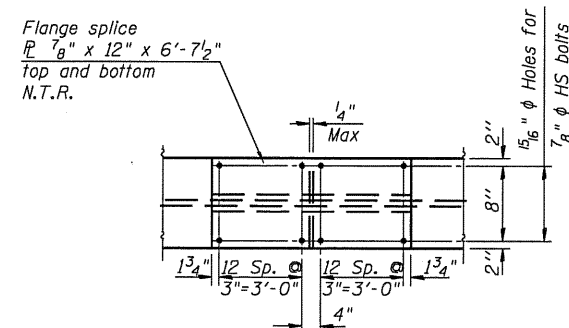
\*\* 3/4" φ HS bolts, 15/16" φ holes



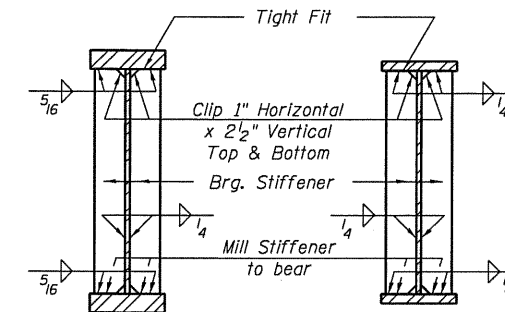
**PLAN**



**PLAN**

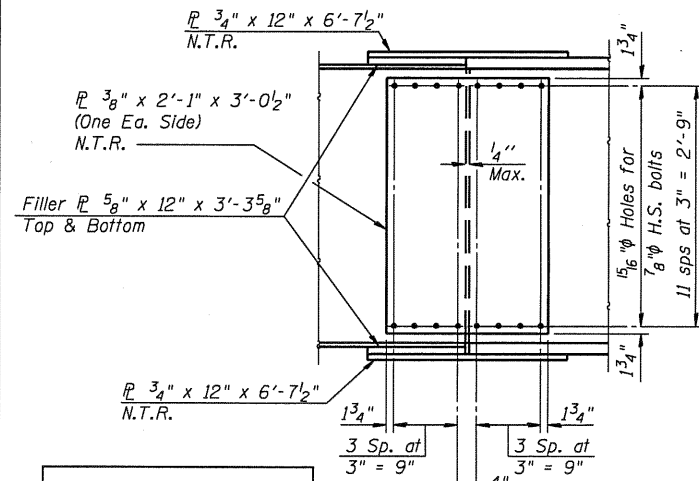


**PLAN**



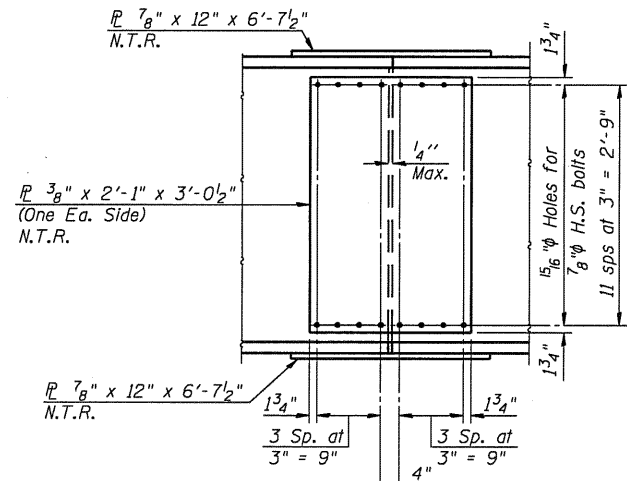
**SECTION AT PIER**

**SECTION AT ABUTMENT**



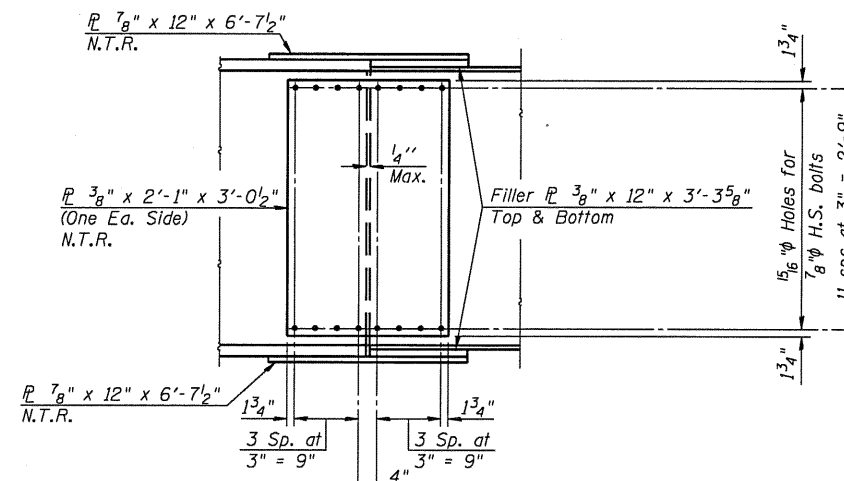
**ELEVATION**

**SPLICE #1 DETAIL**



**ELEVATION**

**SPLICE #2, #3, & #4 DETAIL**



**ELEVATION**

**SPLICE #5 DETAIL**

DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL

**GIRDER DETAILS**  
**S.N. 085-0514**

SHEET NO.23	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	43
45 SHEETS	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 72A03

② TOP OF WEB ELEVATIONS

Girder No.	¢ Brg. W. Abut.	① ¢ Splice 1	¢ Brg. Pier 1	① ¢ Splice 2	¢ Brg. Pier 2	① ¢ Splice 3	¢ Brg. Pier 3	① ¢ Splice 4	¢ Brg. Pier 4	① ¢ Splice 5	¢ Brg. Pier 5	¢ Brg. E. Abut.
1	498.572	498.379	498.326	498.104	498.049	497.761	497.688	497.306	497.224	496.781	496.647	496.076
2	498.679	498.486	498.433	498.211	498.156	497.868	497.795	497.413	497.331	496.888	496.754	496.183
3	498.771	498.578	498.526	498.304	498.249	497.960	497.887	497.506	497.424	496.981	496.847	496.276
4	498.771	498.578	498.526	498.304	498.249	497.960	497.887	497.506	497.424	496.981	496.847	496.276
5	498.679	498.486	498.433	498.211	498.156	497.868	497.795	497.413	497.331	496.888	496.754	496.183
6	498.572	498.379	498.326	498.104	498.049	497.761	497.688	497.306	497.224	496.781	496.647	496.076

② For fabrication only.

INTERIOR GIRDER MOMENT TABLE

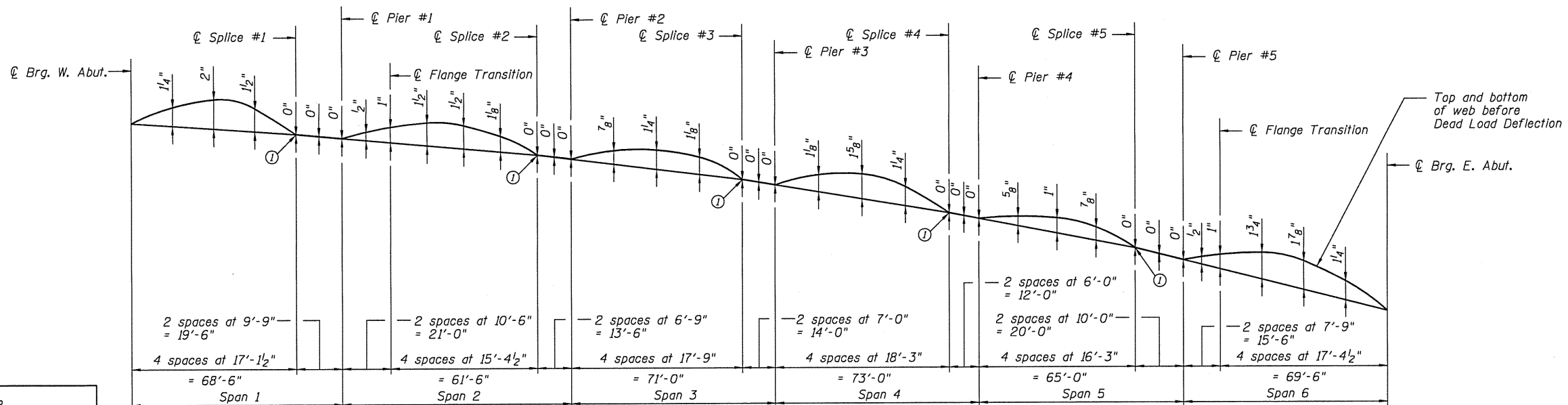
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.5 Sp. 5	Pier 5	0.6 Sp. 6
$I_s$	(in <sup>4</sup> )	9,044	15,082	11,414	11,414	11,414	11,414	11,414	11,414	11,414	12,622	9,044
$I_c(n)$	(in <sup>4</sup> )	23,981		28,156		28,156		28,156		28,156		23,981
$I_c(3n)$	(in <sup>4</sup> )	17,834		20,891		20,891		20,891		20,891		17,834
$S_s$	(in <sup>3</sup> )	458	740	571	571	571	571	571	571	627	458	
$S_c(n)$	(in <sup>3</sup> )	669		795		795		795		795		669
$S_c(3n)$	(in <sup>3</sup> )	609		726		726		726		726		609
DC1	(k/')	0.762	0.814	0.783	0.783	0.783	0.783	0.783	0.783	0.783	0.793	0.762
$M_{DC1}$	(k)	401	780	271	491	226	471	259	426	179	633	410
DC2	(k/')	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150
$M_{DC2}$	(k)	88	128	66	86	52	80	57	76	45	104	88
DW	(k/')	0.296	0.296	0.296	0.296	0.296	0.296	0.296	0.296	0.296	0.296	0.296
$M_{DW}$	(k)	174	252	130	170	103	158	113	150	90	205	175
$M_k + IM$	(k)	1,034	862	1,006	701	862	646	864	645	856	729	985
$M_u$ (Strength I)	(k)	2,682	3,022	2,377	2,203	2,011	2,056	2,077	1,981	1,913	2,505	2,609
$\phi_r M_n$	(k)	3,332		4,047		4,047		4,047		4,047		3,326
$f_s$ DC1	(ksi)	10.5	12.6	5.7	10.3	4.7	9.9	5.4	9.0	3.8	12.1	10.7
$f_s$ DC2	(ksi)	1.7	2.1	1.1	1.8	0.9	1.7	0.9	1.6	0.7	2.0	1.7
$f_s$ DW	(ksi)	3.4	4.1	2.1	3.6	1.7	3.3	1.9	3.2	1.5	3.9	3.4
$f_s$ 1.3(k+IM)	(ksi)	24.1	18.2	19.7	19.2	16.9	17.6	17.0	17.6	16.8	18.1	23.0
$f_s$ (Service II)	(ksi)	39.6	37.0	28.6	34.9	24.2	32.5	25.1	31.3	22.7	36.2	38.7
$f_s$ (Total)(Strength I)	(ksi)	52.4	49.0	38.0	46.3	32.1	43.2	33.4	41.6	30.3	47.9	51.2
$V_r$	(k)	33.9		30.5		28.9		28.5		28.9		33.0

\* Compact sections

\*\* Non-Compact and slender sections

INTERIOR GIRDER REACTION TABLE

	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	E. Abut.	
$R_{DC1}$	(k)	25.5	84.6	68.2	66.8	63.6	76.3	25.7
$R_{DC2}$	(k)	5.2	15.7	13.2	12.7	12.4	14.3	5.2
$R_{DW}$	(k)	10.2	31.0	26.1	25.1	24.4	28.2	10.2
$R_k + IM$	(k)	72.6	121.7	112.9	105.5	105.2	111.3	71.8
$R_{Total}$	(k)	113.5	253.0	220.4	210.1	205.6	230.1	112.9



**CAMBER DIAGRAM**

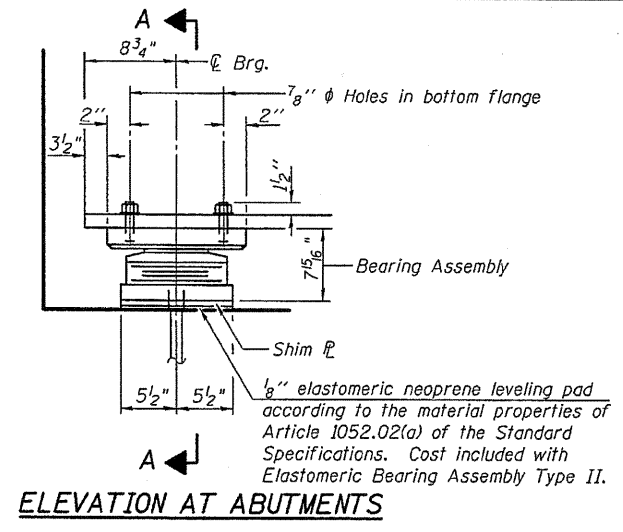
① Theoretical elevation before dead load deflection

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

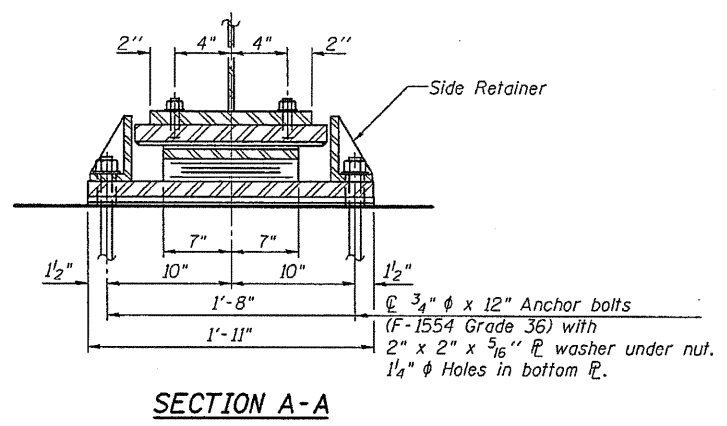
**GIRDER DETAILS**  
**S.N. 085-0514**

SHEET NO.24	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	44
45 SHEETS	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 72A03		

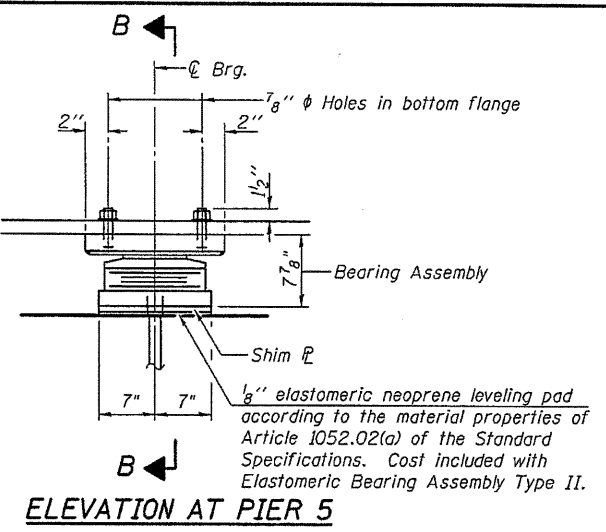




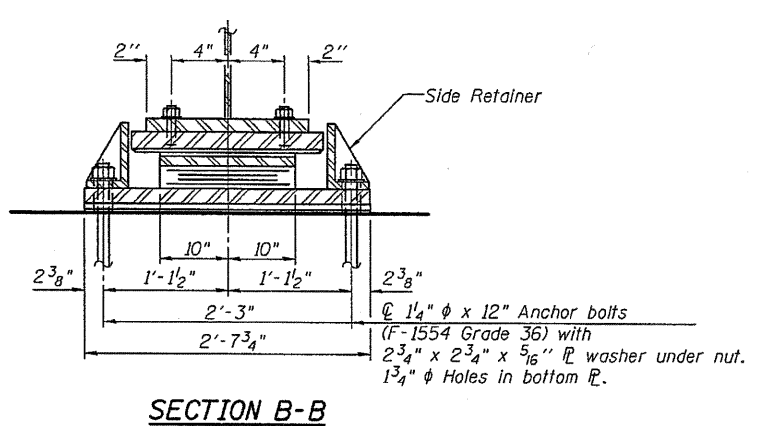
ELEVATION AT ABUTMENTS



SECTION A-A



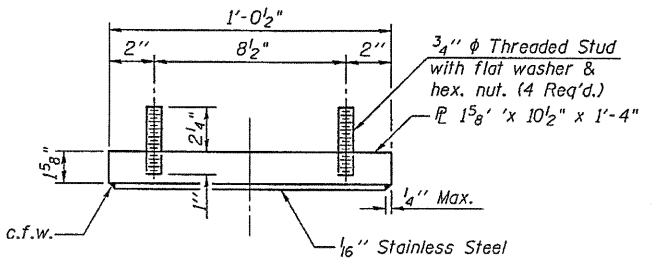
ELEVATION AT PIER 5



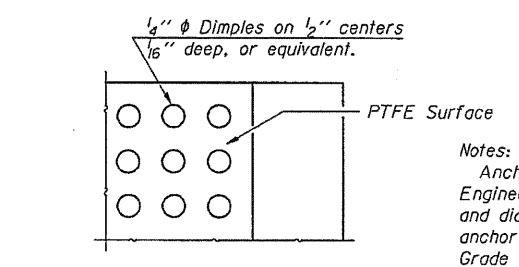
SECTION B-B

TYPE II ELASTOMERIC EXP. BRG. - ABUTMENTS

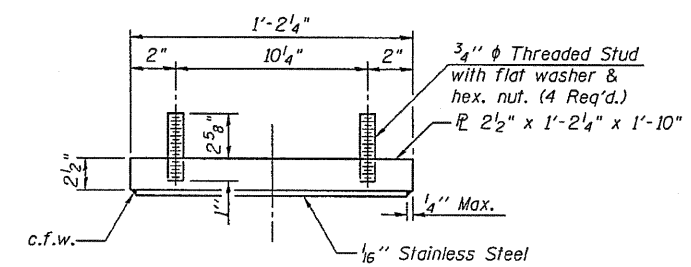
TYPE II ELASTOMERIC EXP. BRG. - PIER 5



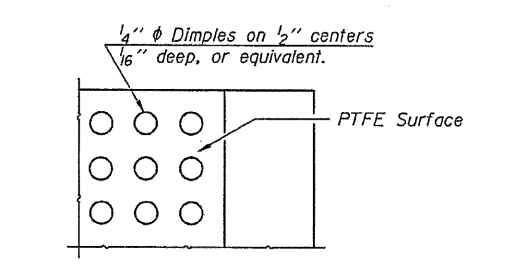
TOP BEARING ASSEMBLY - ABUTS.



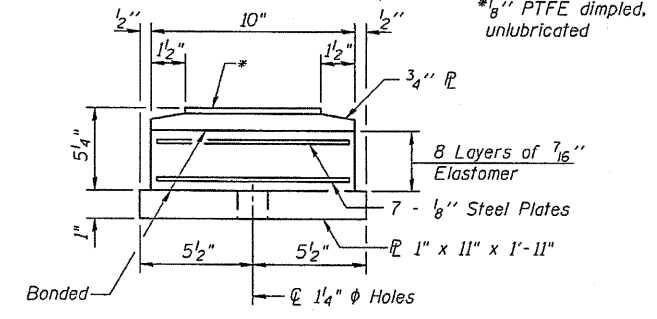
PLAN-PTFE SURFACE - ABUTS.



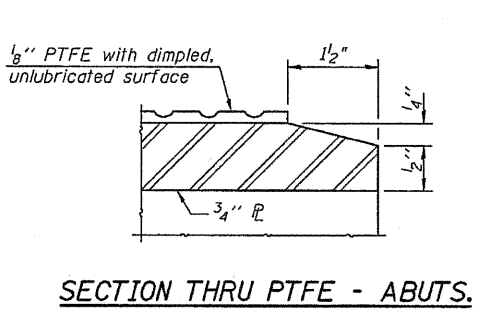
TOP BEARING ASSEMBLY - PIER 5



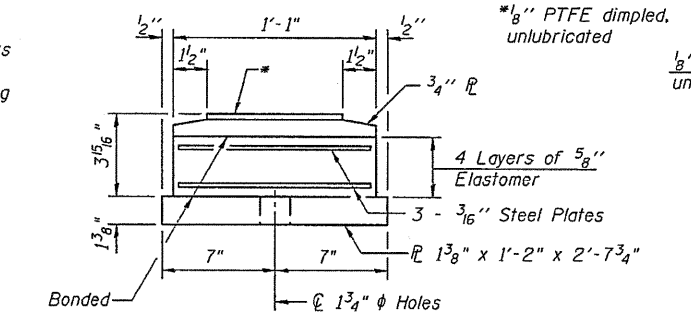
PLAN-PTFE SURFACE - PIER 5



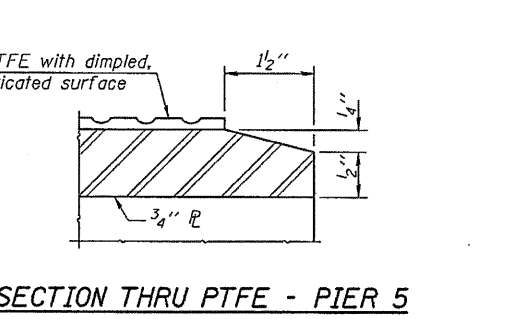
BOTTOM BEARING ASSEMBLY - ABUTS.



SECTION THRU PTFE - ABUTS.



BOTTOM BEARING ASSEMBLY - PIER 5



SECTION THRU PTFE - PIER 5

Notes:  
 Anchor bolts shall be ASTM F1554 all-thread for 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 for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.  
 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 II.  
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.  
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.  
 Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.  
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.

BILL OF MATERIAL

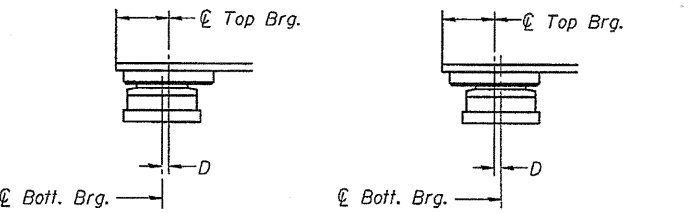
Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	18
Anchor Bolts, 3/4"	Each	24
Anchor Bolts, 1/4"	Each	12

BEARING DETAILS S.N. 085-0514

SHEET NO.26	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	46
45 SHEETS	CONTRACT NO. 72A03				
	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL

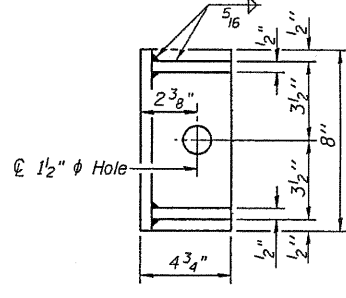
I-2E-2 11-1-09

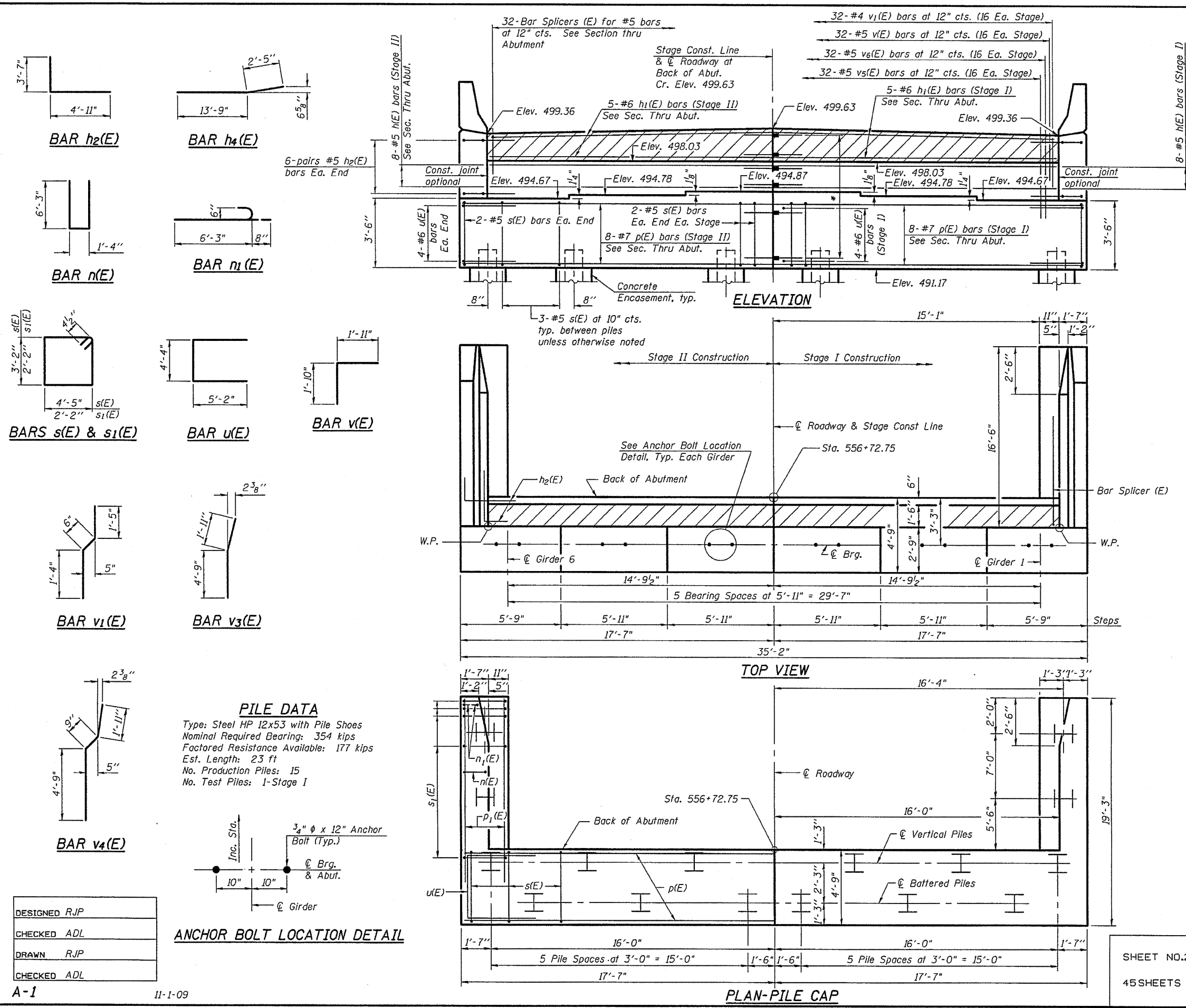


SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

SIDE RETAINER - PIER 5 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.





\*8-Bar Splicers (E) for #7 bars  
 5-Bar Splicers (E) for #6 bars  
 8-Bar Splicers (E) for #5 bars

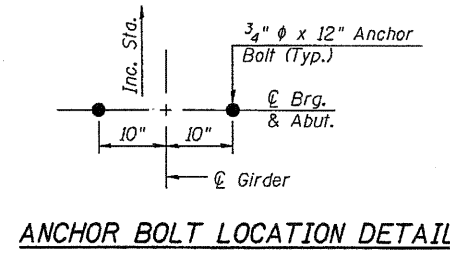
**WEST ABUTMENT  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	16	#5	15'-8"	
h1(E)	10	#6	15'-8"	
h2(E)	24	#5	8'-6"	
h3(E)	24	#4	16'-2"	
h4(E)	16	#4	16'-2"	
n(E)	28	#6	13'-10"	
n1(E)	12	#6	6'-11"	
p(E)	16	#7	17'-3"	
p1(E)	12	#7	16'-2"	
s(E)	38	#5	15'-11"	
s1(E)	36	#4	9'-5"	
u(E)	12	#6	14'-8"	
v(E)	32	#5	3'-9"	
v1(E)	32	#4	3'-3"	
v2(E)	34	#6	7'-2"	
v3(E)	6	#6	6'-8"	
v4(E)	28	#6	7'-5"	
v5(E)	32	#5	4'-10"	
v6(E)	32	#5	5'-5"	
Structure Excavation		Cu. Yd.	163	
Concrete Structures		Cu. Yd.	47.1	
Reinforcement Bars, Epoxy Coated		Pound	5,200	
Furnishing HP 12x53 Piles,		Foot	345	
Driving Piles		Foot	345	
Test Pile, HP 12x53		Each	1	
Pile Shoes		Each	16	
Bar Splicers		Each	53	
Concrete Encasement		Cu. Yd.	5.6	
Concrete Sealer		Sq. Ft.	390	

For details of Bar Splicers, see sheet 36 of 45.  
 For details of piles and Concrete Encasement, see sheet 37 of 45.

**PILE DATA**

Type: Steel HP 12x53 with Pile Shoes  
 Nominal Required Bearing: 354 kips  
 Factored Resistance Available: 177 kips  
 Est. Length: 23 ft  
 No. Production Piles: 15  
 No. Test Piles: 1-Stage I



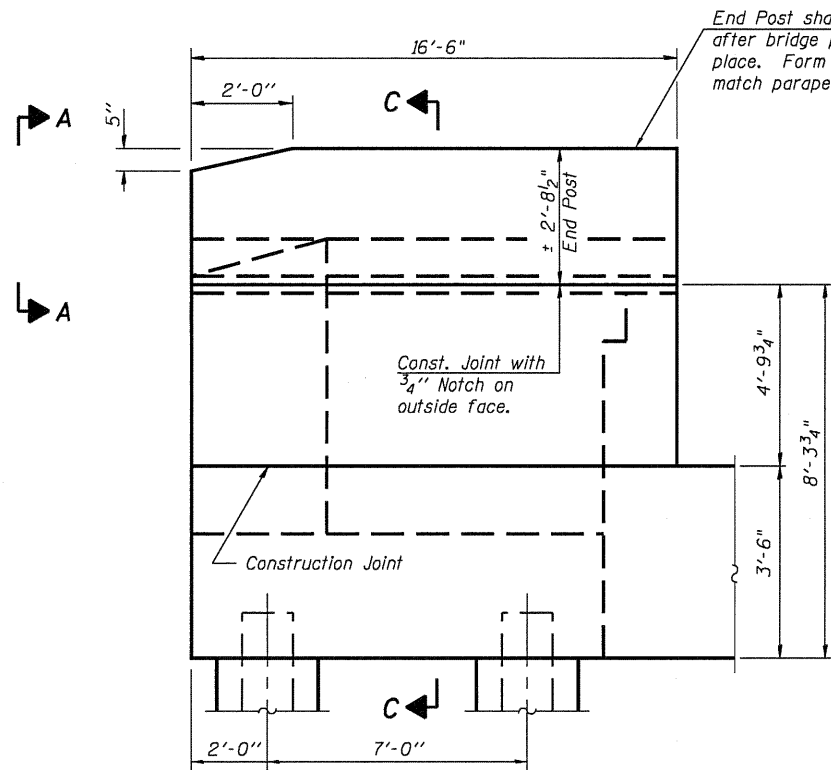
**ANCHOR BOLT LOCATION DETAIL**

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

A-1 11-1-09

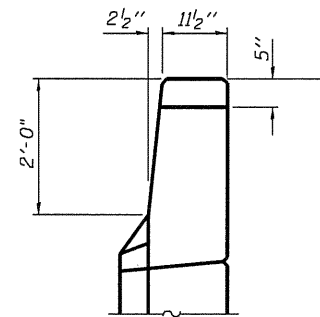
**WEST ABUTMENT  
 S.N. 085-0514**

SHEET NO. 27 45 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	47
			CONTRACT NO. 72A03		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

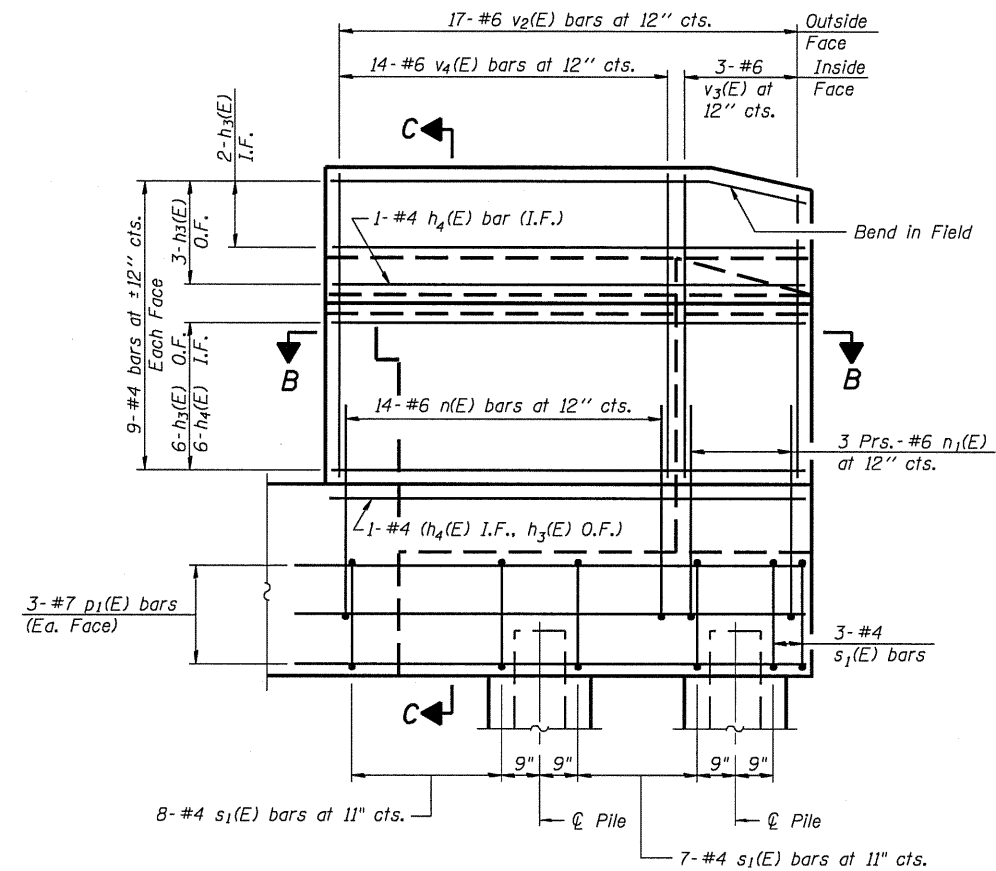


**WING WALL ELEVATION**  
Showing Dimensions

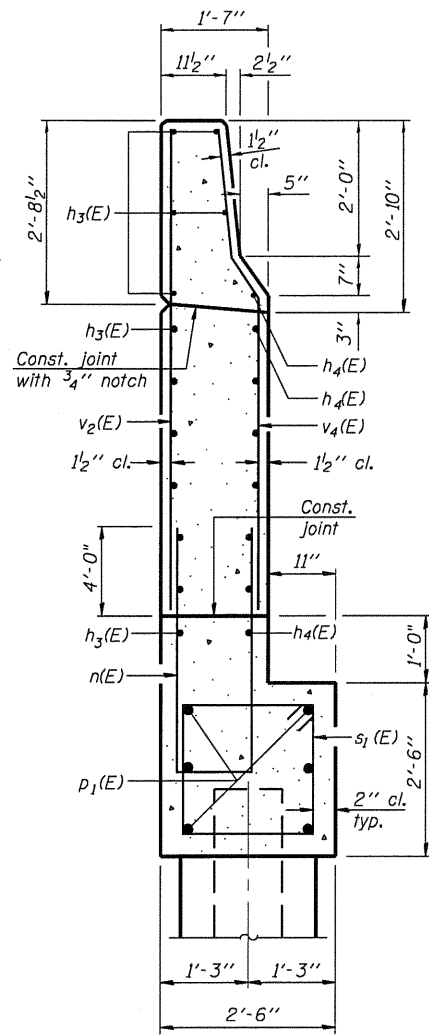
End Post shall be poured after bridge parapet is in place. Form top surface to match parapet grade.



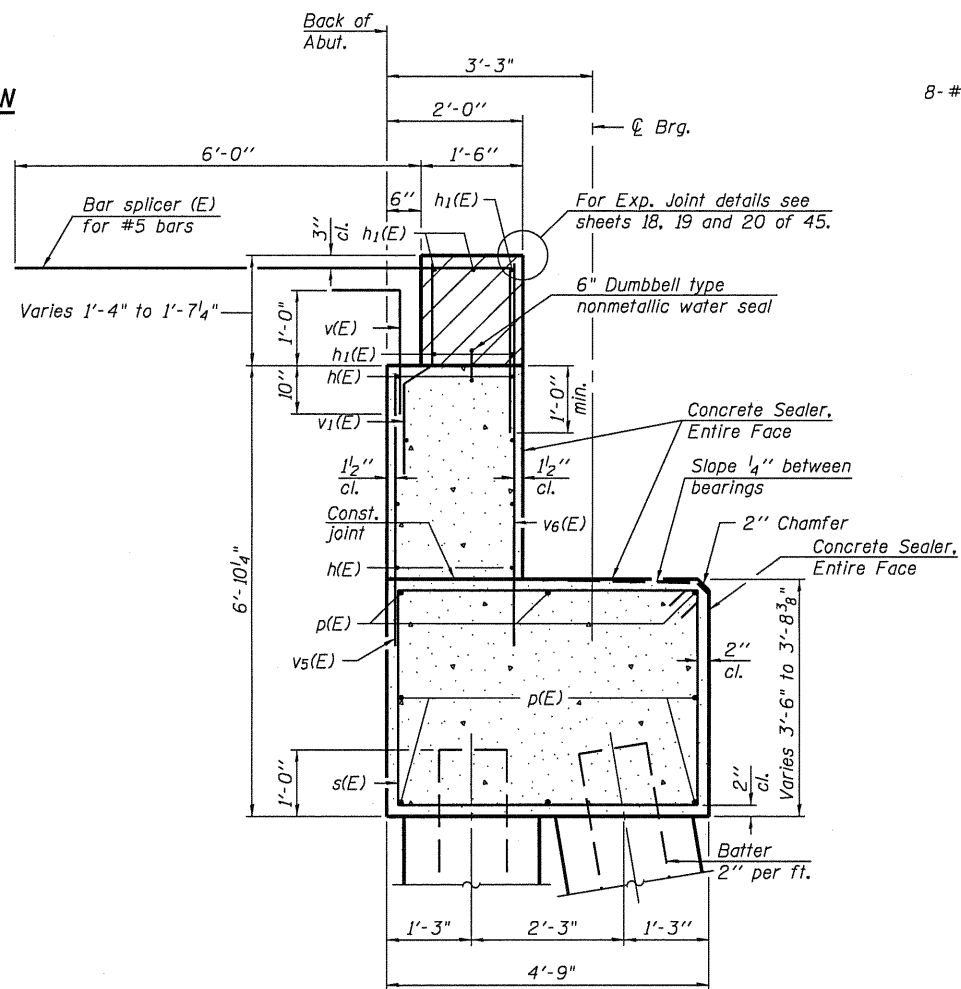
**VIEW A-A**



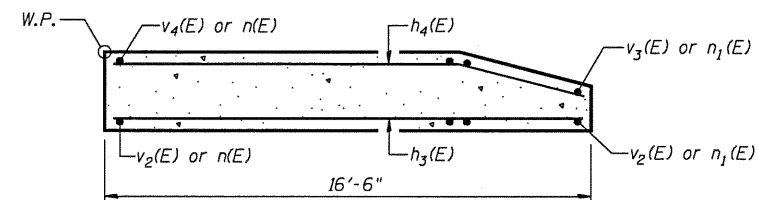
**WING WALL ELEVATION**  
Showing Reinforcement



**SECTION C-C**



**SEC. THRU ABUT.**



**SECTION B-B**

Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 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 13 of 45.  
 For Concrete Encasement details, see sheet 37 of 45.  
 Apply Concrete Sealer to entire face of backwall, bridge seats, and front face of abutment cap.  
 Place Bar Splicers parallel to approach slab reinforcement.

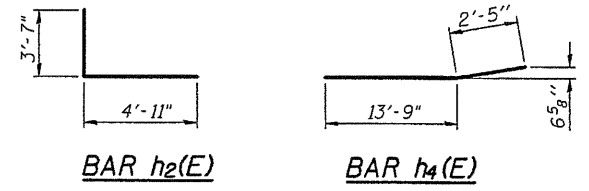
DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL
<b>A-I-D</b>

11-1-09

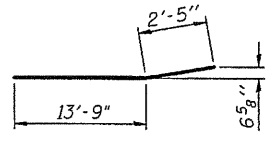
**WEST ABUTMENT DETAILS**  
**S.N. 085-0514**

SHEET NO.28	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	48
45 SHEETS	CONTRACT NO. 72A03				
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

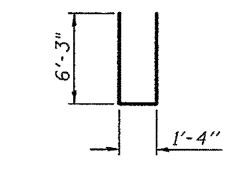




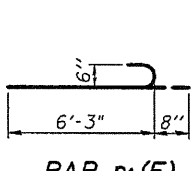
BAR h2(E)



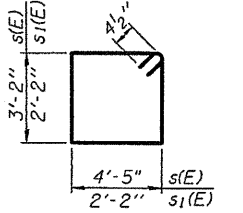
BAR h4(E)



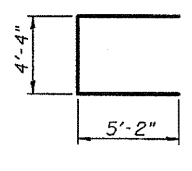
BAR n(E)



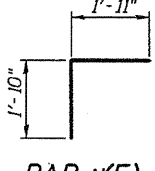
BAR n1(E)



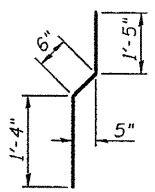
BARS s(E) & s1(E)



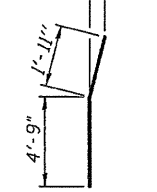
BAR u(E)



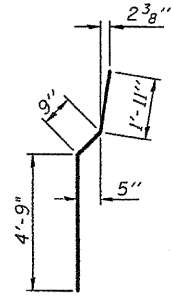
BAR v(E)



BAR v1(E)

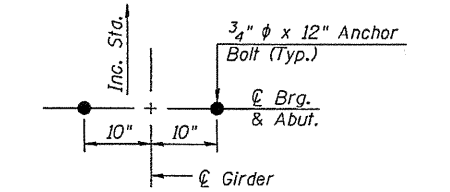


BAR v3(E)



BAR v4(E)

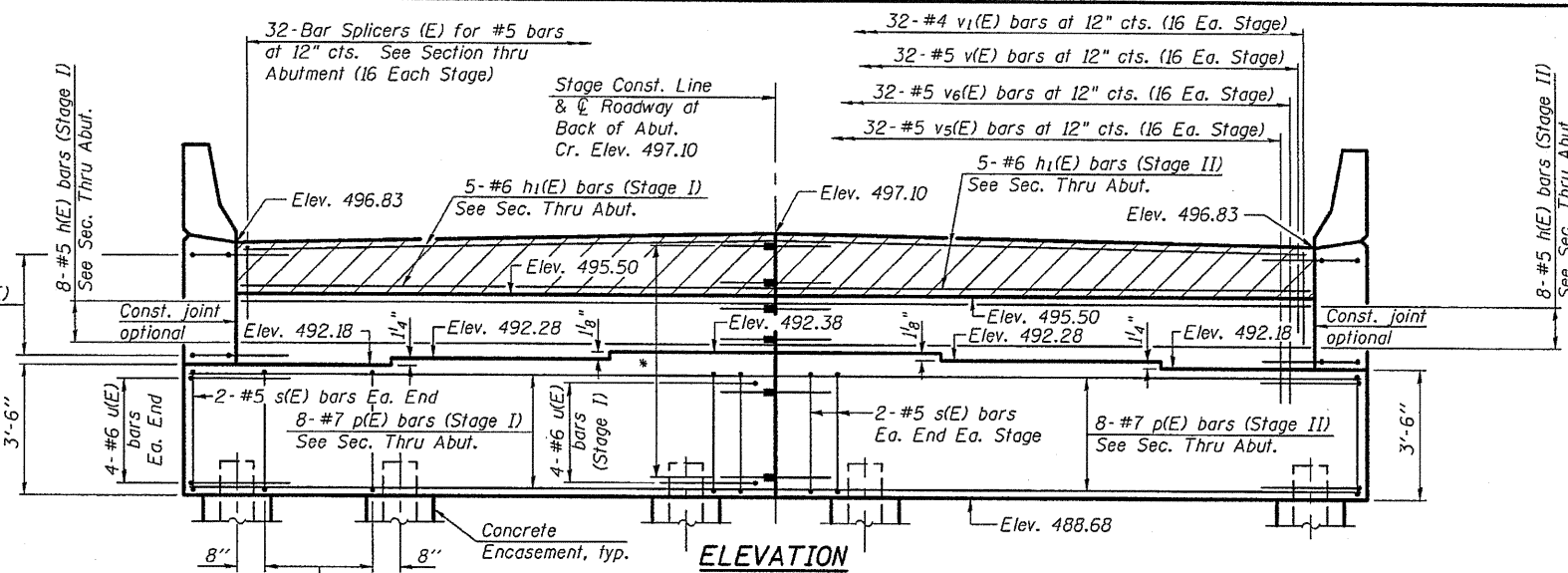
**PILE DATA**  
 Type: Steel HP 12x53 with Pile Shoes  
 Nominal Required Bearing: 354 kips  
 Factored Resistance Available: 177 kips  
 Est. Length: 37 ft  
 No. Production Piles: 15  
 No. Test Piles: 1-Stage I



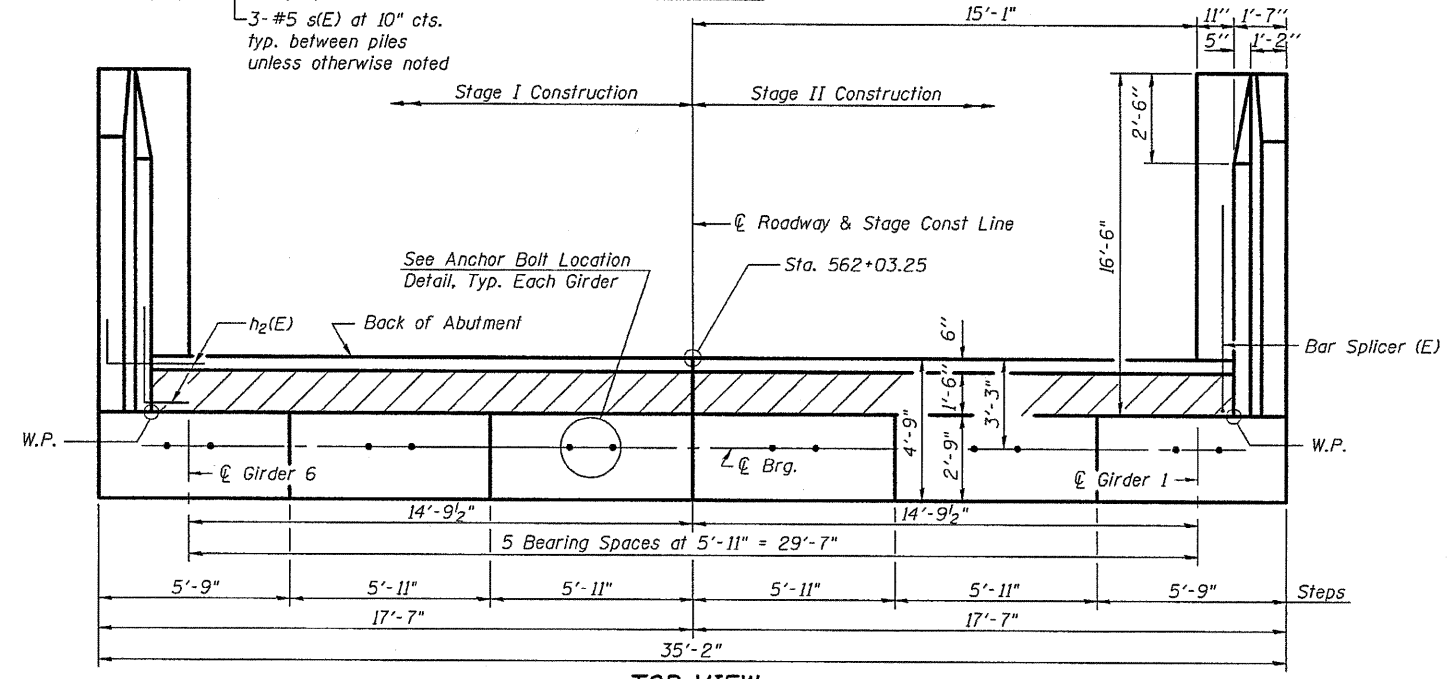
ANCHOR BOLT LOCATION DETAIL

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

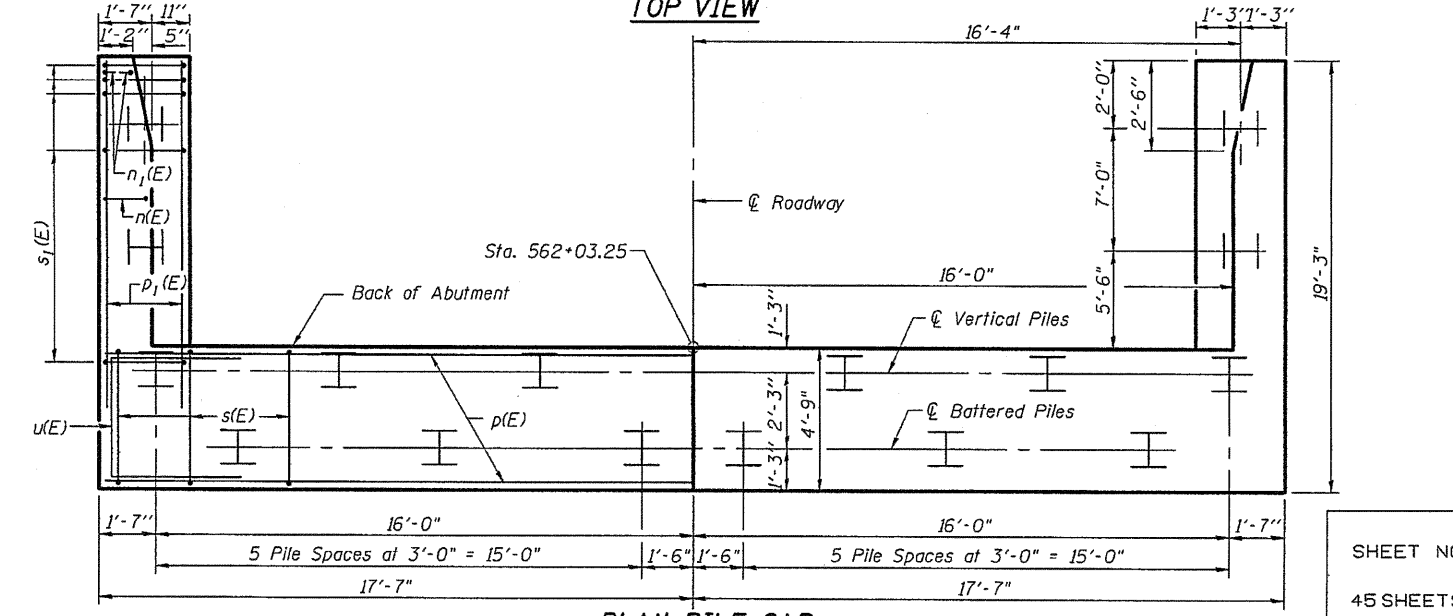
A-1 11-1-09



ELEVATION



TOP VIEW



PLAN-PILE CAP

\*8-Bar Splicers (E) for #7 bars  
 5-Bar Splicers (E) for #6 bars  
 8-Bar Splicers (E) for #5 bars

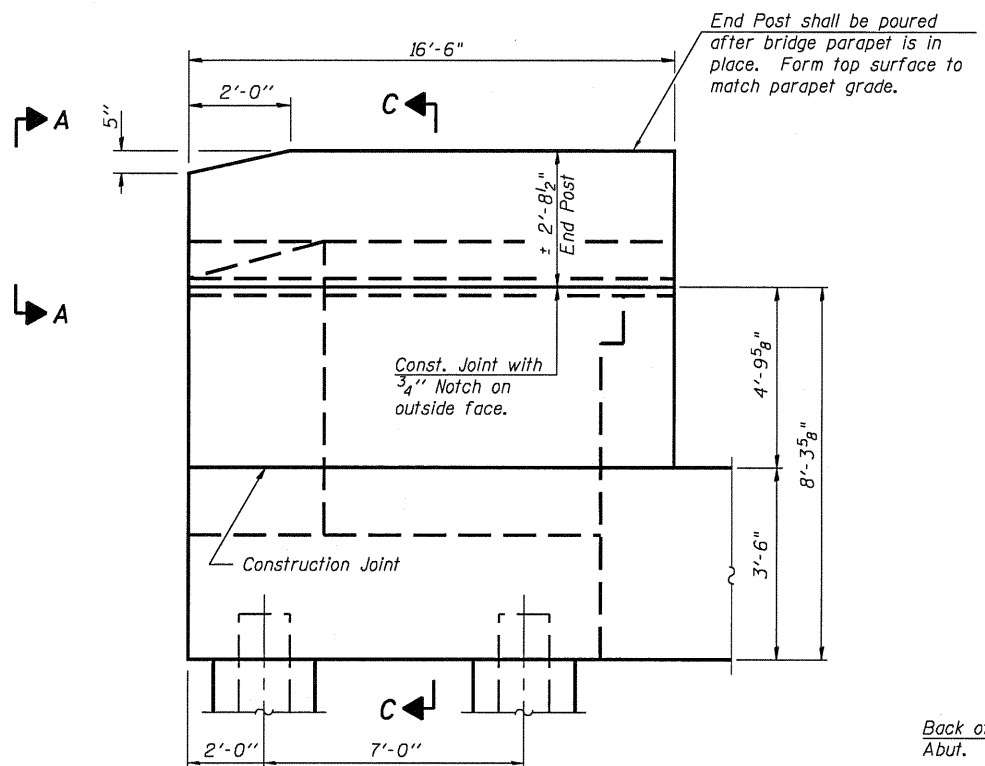
**EAST ABUTMENT  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	16	#5	15'-8"	
h1(E)	10	#6	15'-8"	
h2(E)	24	#5	8'-6"	
h3(E)	24	#4	16'-2"	
h4(E)	16	#4	16'-2"	
n(E)	28	#6	13'-10"	
n1(E)	12	#6	6'-11"	
p(E)	16	#7	17'-3"	
p1(E)	12	#7	16'-2"	
s(E)	38	#5	15'-11"	
s1(E)	36	#4	9'-5"	
u(E)	12	#6	14'-8"	
v(E)	32	#5	3'-9"	
v1(E)	32	#4	3'-3"	
v2(E)	34	#6	7'-2"	
v3(E)	6	#6	6'-8"	
v4(E)	28	#6	7'-5"	
v5(E)	32	#5	4'-10"	
v6(E)	32	#5	5'-5"	
Structure Excavation			Cu. Yd.	163
Concrete Structures			Cu. Yd.	47.1
Reinforcement Bars, Epoxy Coated			Pound	5,200
Furnishing HP 12x53 Piles,			Foot	555
Driving Piles			Foot	555
Test Pile, HP 12x53			Each	1
Pile Shoes			Each	16
Bar Splicers			Each	53
Concrete Encasement			Cu. Yd.	5.6
Concrete Sealer			Sq. Ft.	390

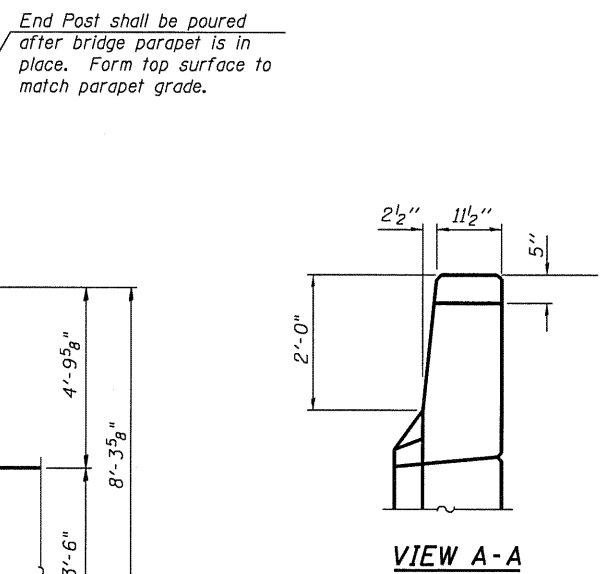
For details of Bar Splicers, see sheet 36 of 45.  
 For details of piles and Concrete Encasement, see sheet 37 of 45.

**EAST ABUTMENT  
 S.N. 085-0514**

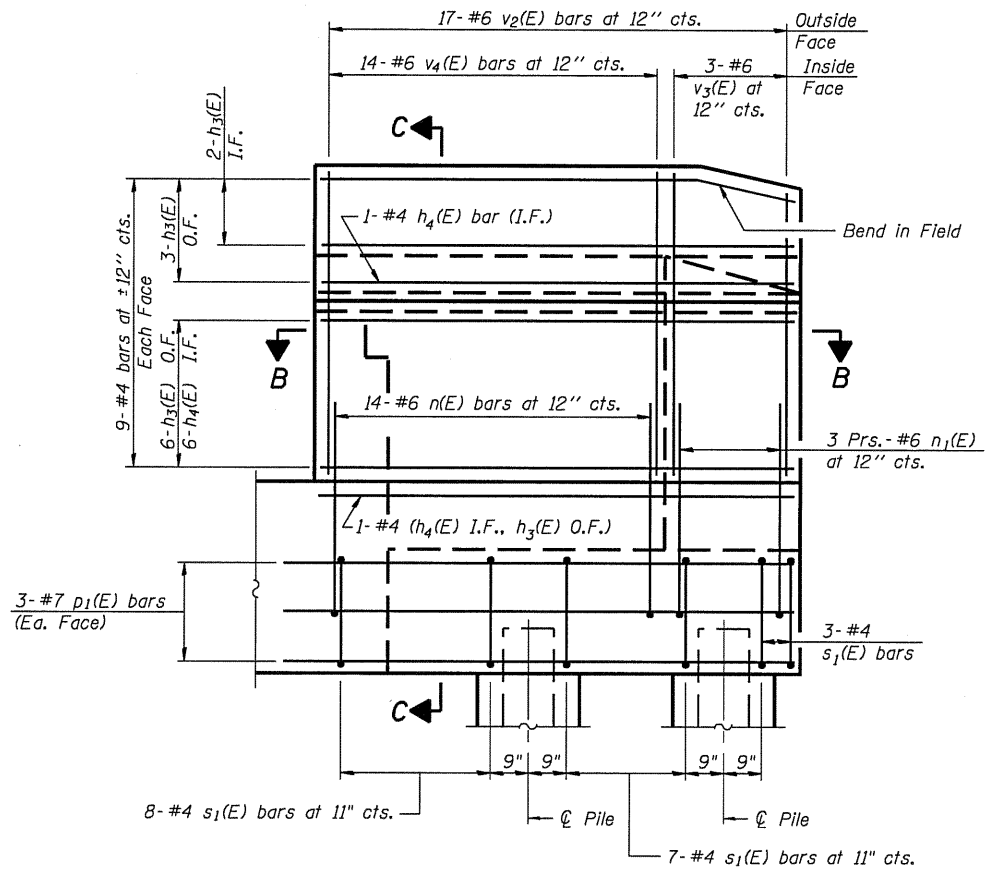
SHEET NO.29	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	49
45 SHEETS	CONTRACT NO. 72A03				
	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



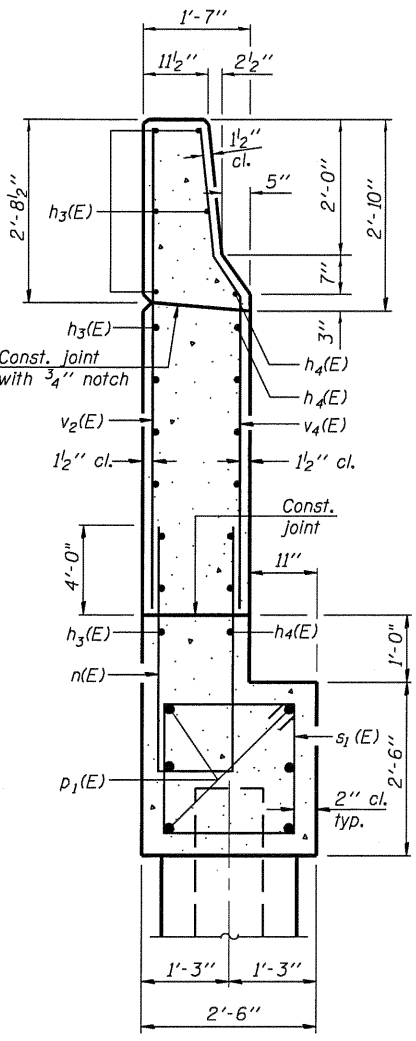
**WING WALL ELEVATION**  
Showing Dimensions



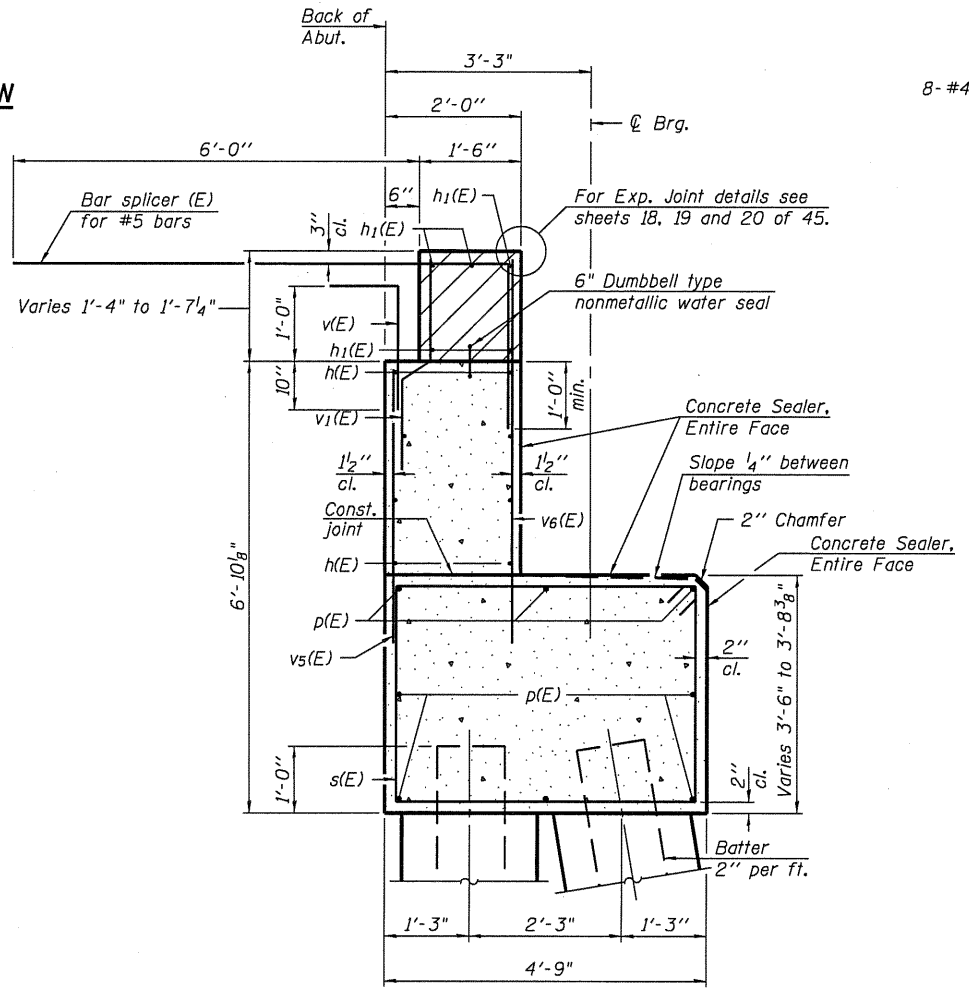
**VIEW A-A**



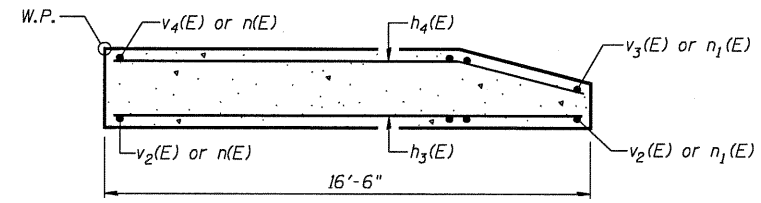
**WING WALL ELEVATION**  
Showing Reinforcement



**SECTION C-C**



**SEC. THRU ABUT.**



**SECTION B-B**

Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 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 13 of 45.  
 For Concrete Encasement details, see sheet 37 of 45.  
 Apply Concrete Sealer to entire face of backwall, bridge seats, and front face of abutment cap.  
 Place Bar Splicers parallel to approach slab reinforcement.

DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL

A-I-D

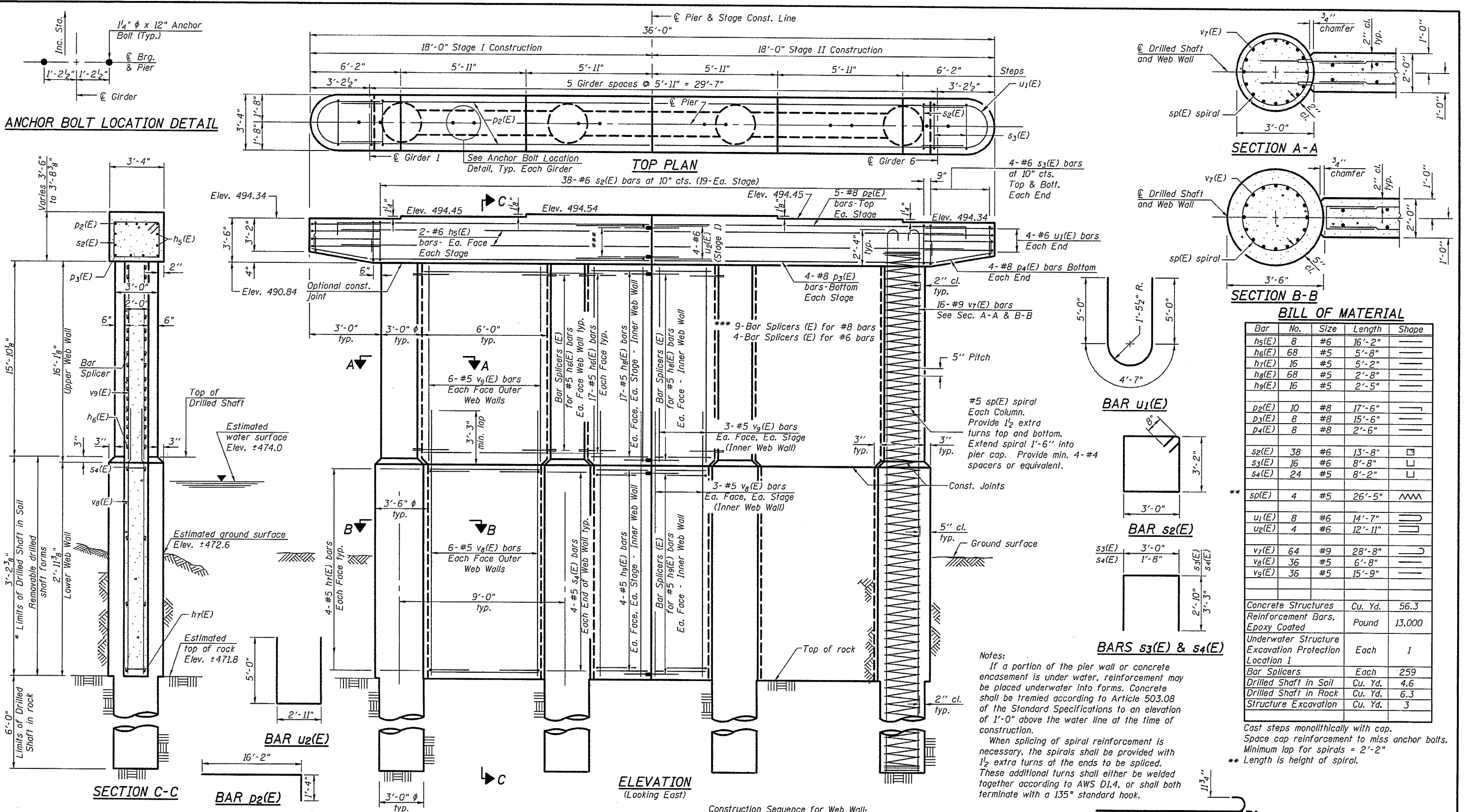
11-1-09

**EAST ABUTMENT DETAILS**  
S.N. 085-0514

SHEET NO. 30	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	50
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

9/10/2010

P:\06f1es\060245\021\_01010\_1.Lemoine\BRIDGE PLANS\PIERS.dgn



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h5(E)	8	#6	16'-2"	—
h6(E)	68	#5	5'-8"	—
h7(E)	16	#5	5'-2"	—
h8(E)	68	#5	2'-8"	—
h9(E)	16	#5	2'-5"	—
p2(E)	10	#8	17'-6"	—
p3(E)	8	#8	15'-6"	—
p4(E)	8	#8	2'-6"	—
s2(E)	38	#6	13'-8"	□
s3(E)	16	#6	8'-8"	□
s4(E)	24	#5	8'-2"	□
sp(E)	4	#5	26'-5"	~
u1(E)	8	#6	14'-7"	U
u2(E)	4	#6	12'-11"	U
v7(E)	64	#9	28'-8"	U
v8(E)	36	#5	6'-8"	—
v9(E)	36	#5	15'-9"	—
<b>Concrete Structures</b> Cu. Yd. 56.3				
<b>Reinforcement Bars, Epoxy Coated</b> Pound 13,000				
<b>Underwater Structure Excavation Protection Location 1</b> Each 1				
<b>Bar Splicers</b> Each 259				
<b>Drilled Shaft in Soil</b> Cu. Yd. 4.6				
<b>Drilled Shaft in Rock</b> Cu. Yd. 6.3				
<b>Structure Excavation</b> Cu. Yd. 3				

**Notes:**

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

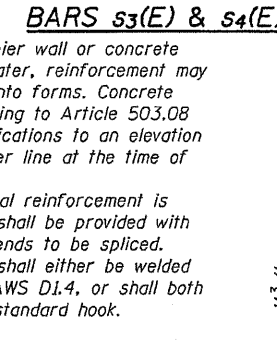
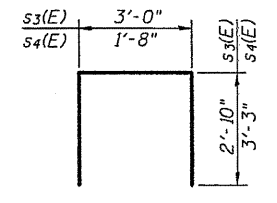
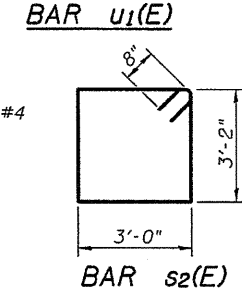
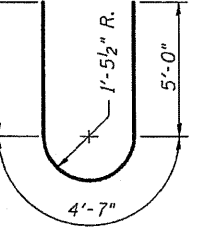
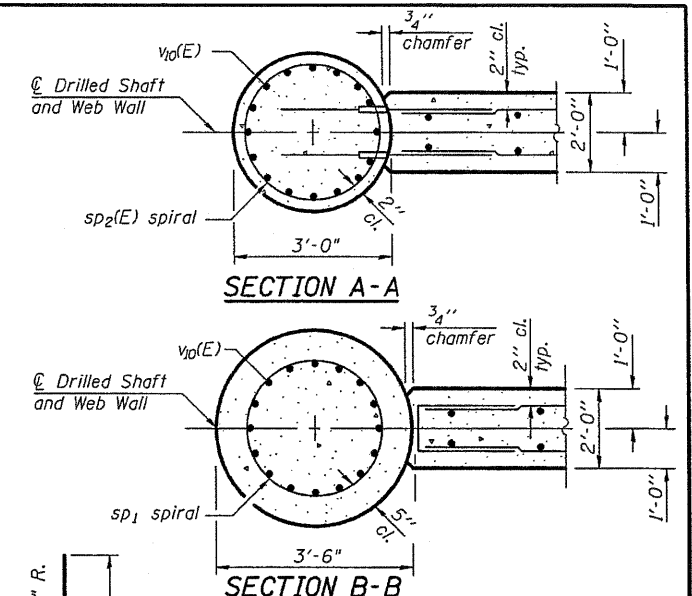
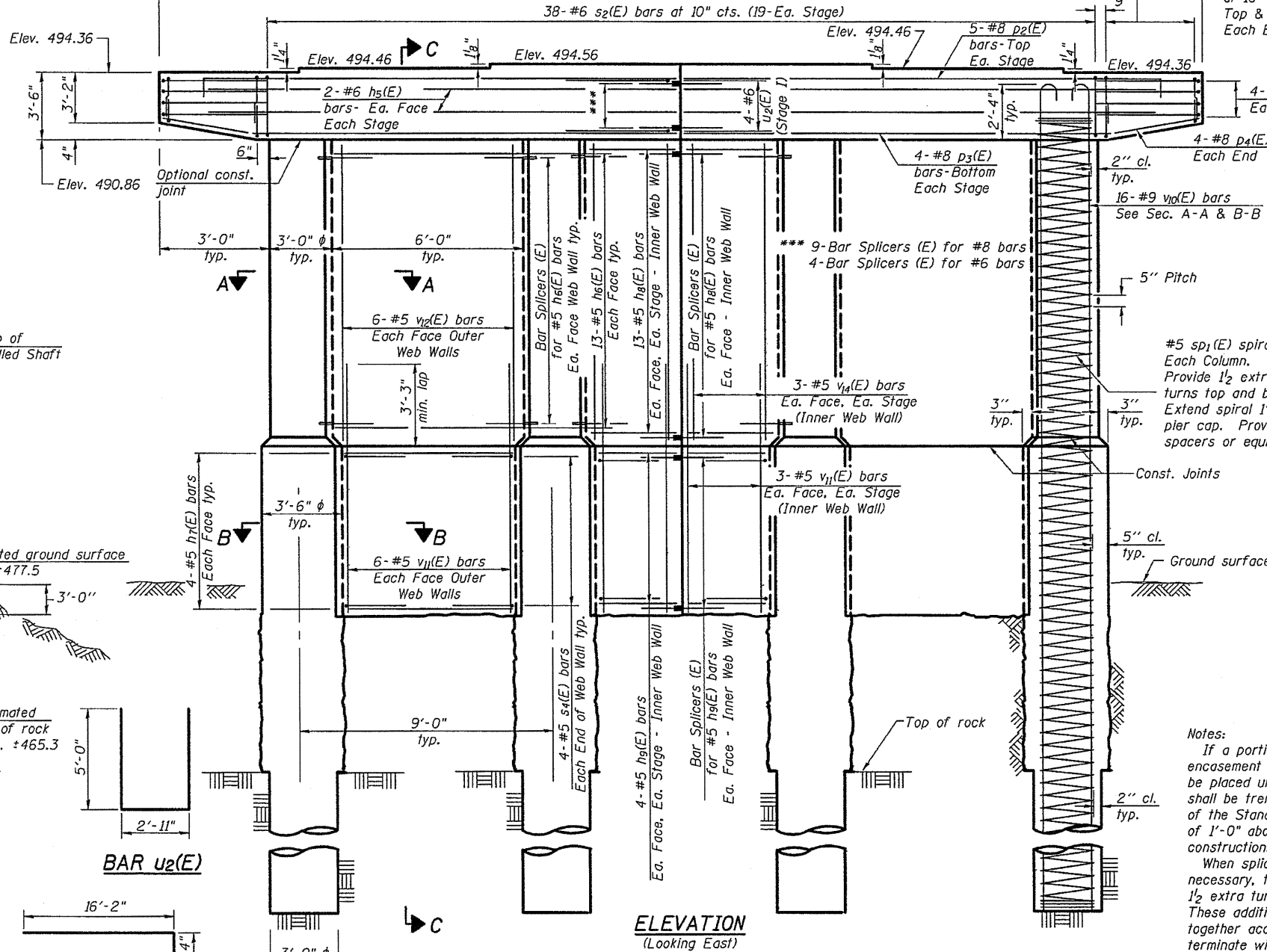
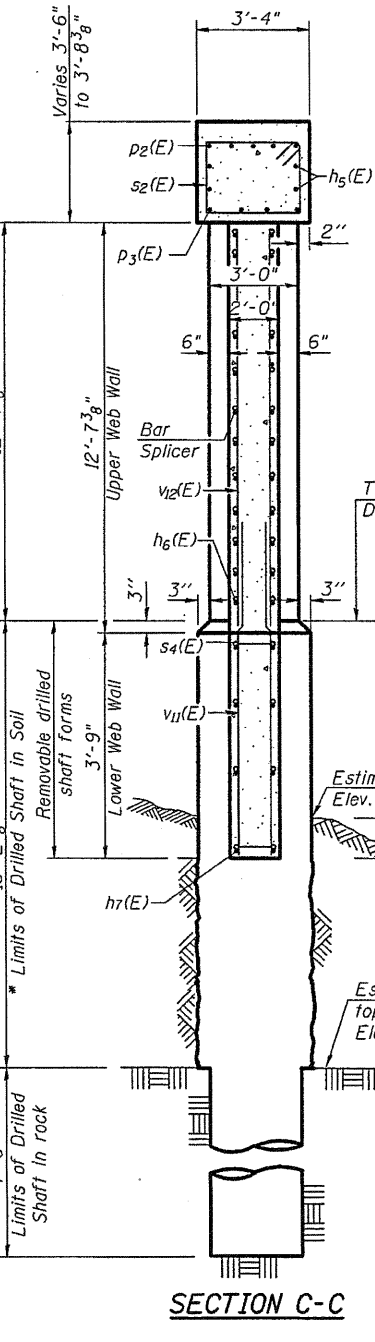
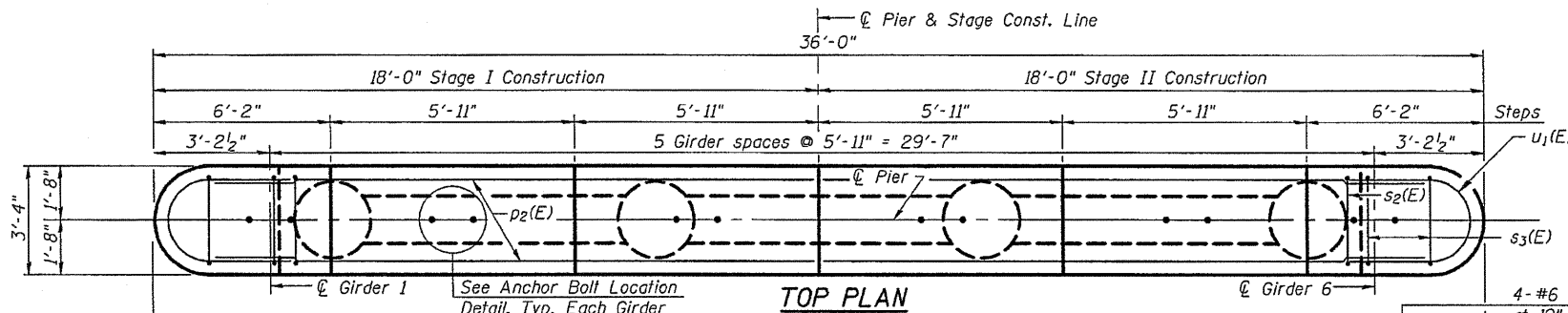
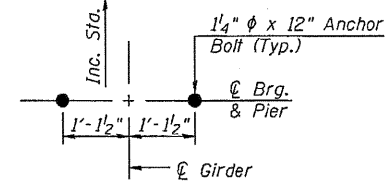
\* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

SHEET NO. 31	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	51
45 SHEETS	CONTRACT NO. 72A03		FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT		

**PIER 1**  
S.N. 085-0514

Klingner & Associates P.C.

ANCHOR BOLT LOCATION DETAIL



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5(E)	8	#6	16'-2"	—
h6(E)	52	#5	5'-8"	—
h7(E)	16	#5	5'-2"	—
h8(E)	52	#5	2'-8"	—
h9(E)	16	#5	2'-5"	—
p2(E)	10	#8	17'-6"	—
p3(E)	8	#8	15'-6"	—
p4(E)	8	#8	2'-6"	—
s2(E)	38	#6	13'-8"	□
s3(E)	16	#6	8'-8"	□
s4(E)	24	#5	8'-2"	□
sp1(E)	4	#5	31'-0"	~
u1(E)	8	#6	14'-7"	—
u2(E)	4	#6	12'-11"	—
v10(E)	64	#9	33'-2"	—
v11(E)	36	#5	7'-0"	—
v12(E)	36	#5	12'-3"	—
Concrete Structures		Cu. Yd.	49.2	
Reinforcement Bars, Epoxy Coated		Pound	13,840	
Underwater Structure Excavation Protection Location 2		Each	1	
Bar Splicers		Each	203	
Drilled Shaft in Soil		Cu. Yd.	18.8	
Drilled Shaft in Rock		Cu. Yd.	4.2	
Structure Excavation		Cu. Yd.	12	

Notes:  
 If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.  
 When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

Cast steps monolithically with cap. Space cap reinforcement to miss anchor bolts. Minimum lap for spirals = 2'-2" \*\* Length is height of spiral.

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

\* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

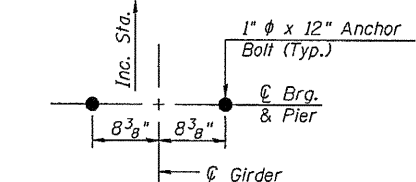
- Construction Sequence for Web Wall:
- Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
  - Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
  - If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
  - Construct Columns.
  - Construct upper web walls.

SHEET NO.32	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	52
45 SHEETS	FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT		CONTRACT NO. 72A03		

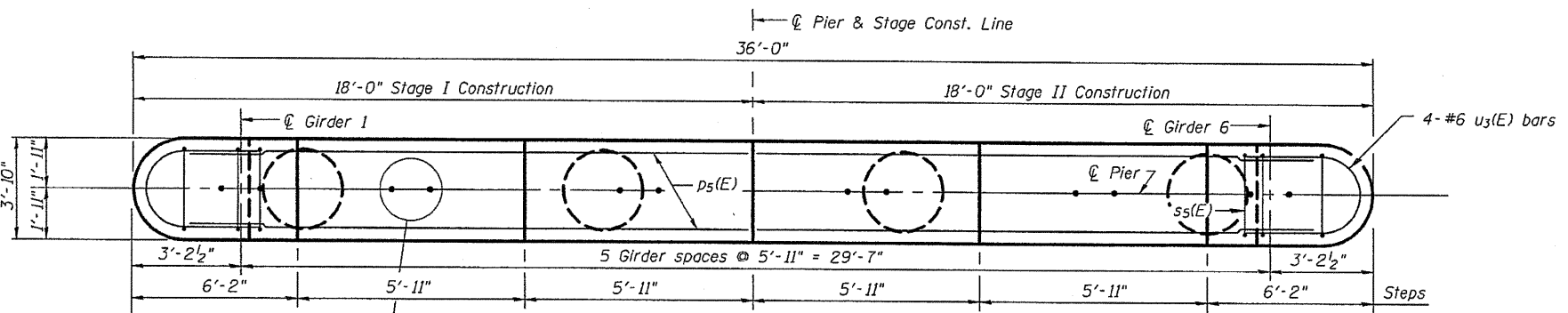
PIER 2  
S.N. 085-0514

9/10/2010

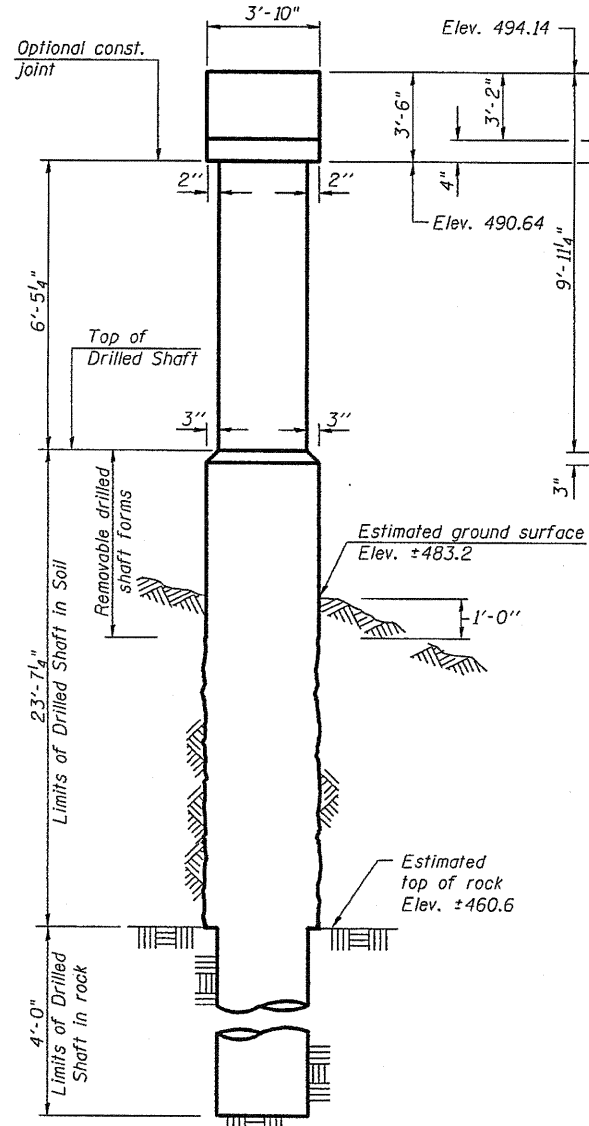
P:\06f\ies\060245\021\_0101\_1\_Lemoine\BRIDGE PLANS\PIERS.dgn



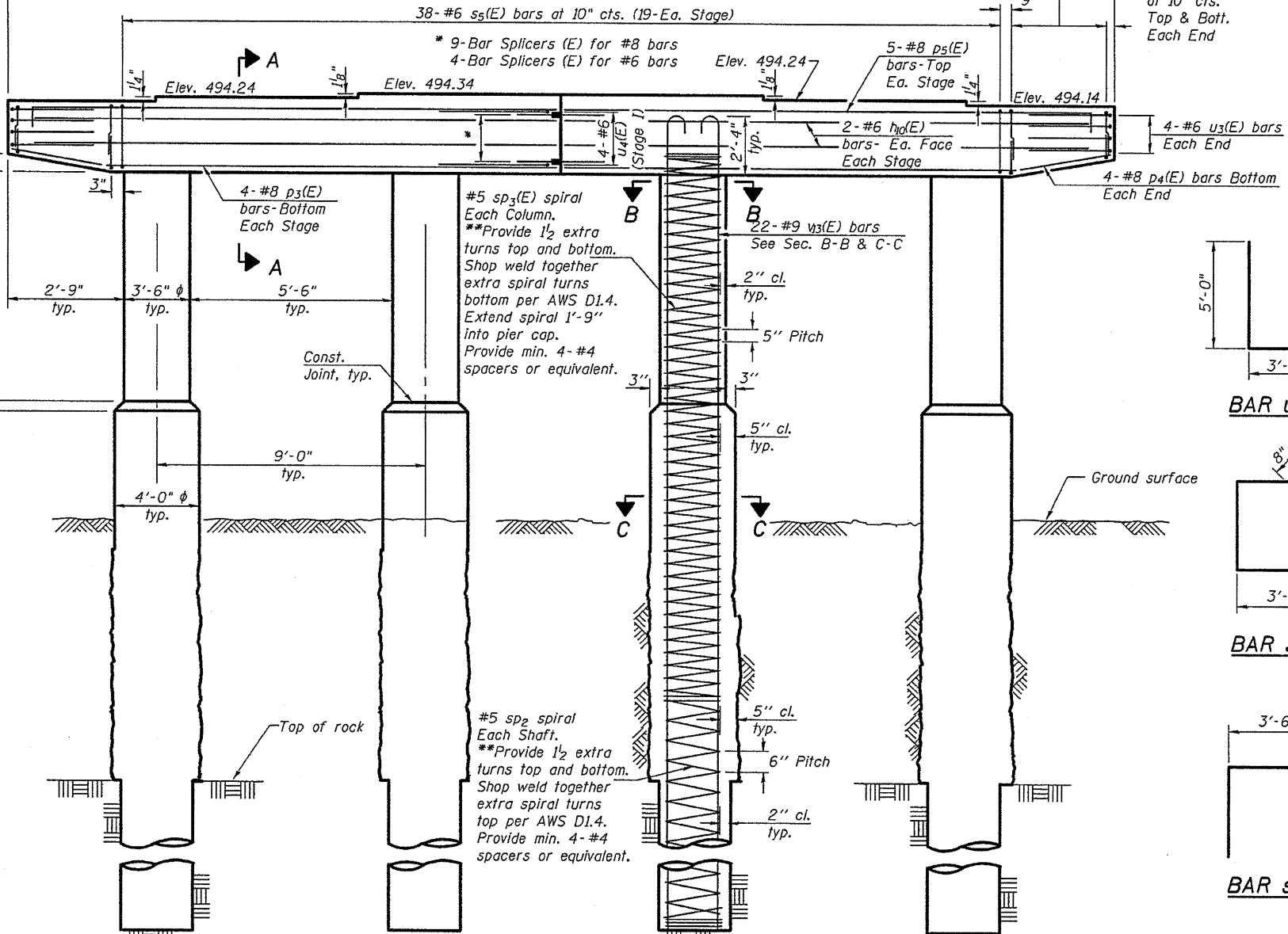
ANCHOR BOLT LOCATION DETAIL



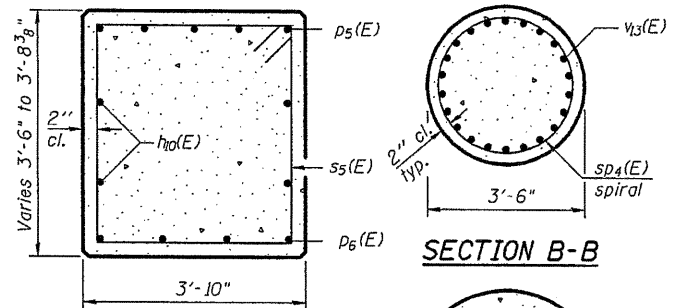
TOP PLAN



END VIEW

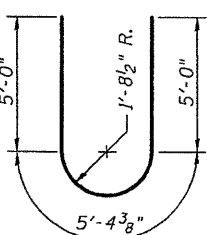


ELEVATION (Looking East)



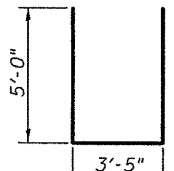
SECTION B-B

SECTION A-A

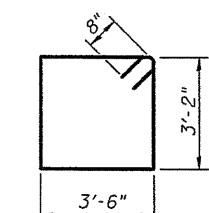


SECTION C-C

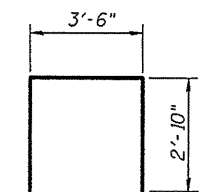
BAR u3(E)



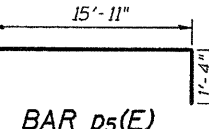
BAR u4(E)



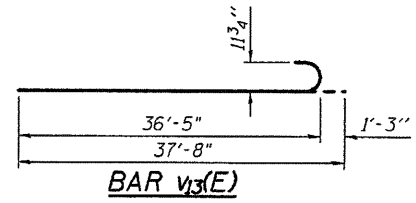
BAR s5(E)



BAR s6(E)



BAR p5(E)



BAR v3(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h0(E)	8	#6	15'-11"	—
p3(E)	8	#8	15'-6"	—
p4(E)	8	#8	2'-6"	—
p5(E)	10	#8	17'-3"	—
s5(E)	38	#6	14'-8"	□
s6(E)	16	#6	9'-2"	U
sD2	4	#5	14'-6"	AAA
sD3(E)	4	#5	19'-4"	AAA
u3(E)	8	#6	15'-5"	U
u4(E)	4	#6	13'-5"	U
v3(E)	88	#9	37'-8"	—
Concrete Structures		Cu. Yd.	27.0	
Reinforcement Bars, Epoxy Coated		Pound	16,190	
Reinforcement Bars		Pounds	1,590	
Drilled Shaft in Soil		Cu. Yd.	43.9	
Drilled Shaft in Rock		Cu. Yd.	5.7	
Bar Splicers		Each	13	

Cast steps monolithically with cap. Space cap reinforcement to miss anchor bolts. Minimum lap for spirals = 2'-2" \*\* Length is height of spiral.

DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL

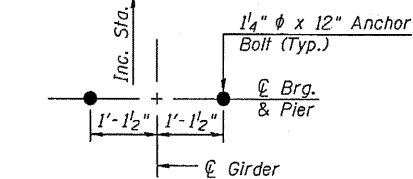
\*\*Allowable substitution: Provide 1/2 extra turns top and bottom with 135° standard hook into core at ends of spiral.

Note: When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

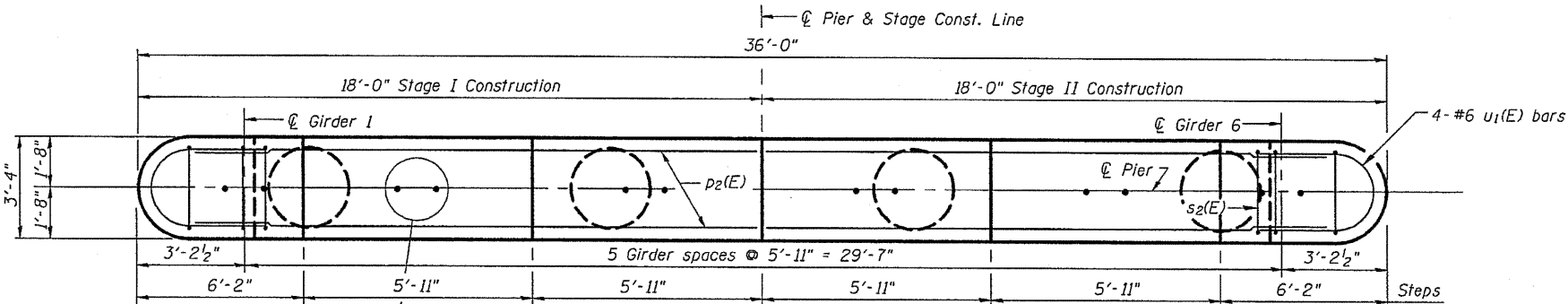
PIER 3  
S.N. 085-0514

SHEET NO.33 45 SHEETS	F.A.P. RTE. 713	SECTION 120B-3	COUNTY SCHUYLER	TOTAL SHEETS 75	SHEET NO. 53
	CONTRACT NO. 72A03				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

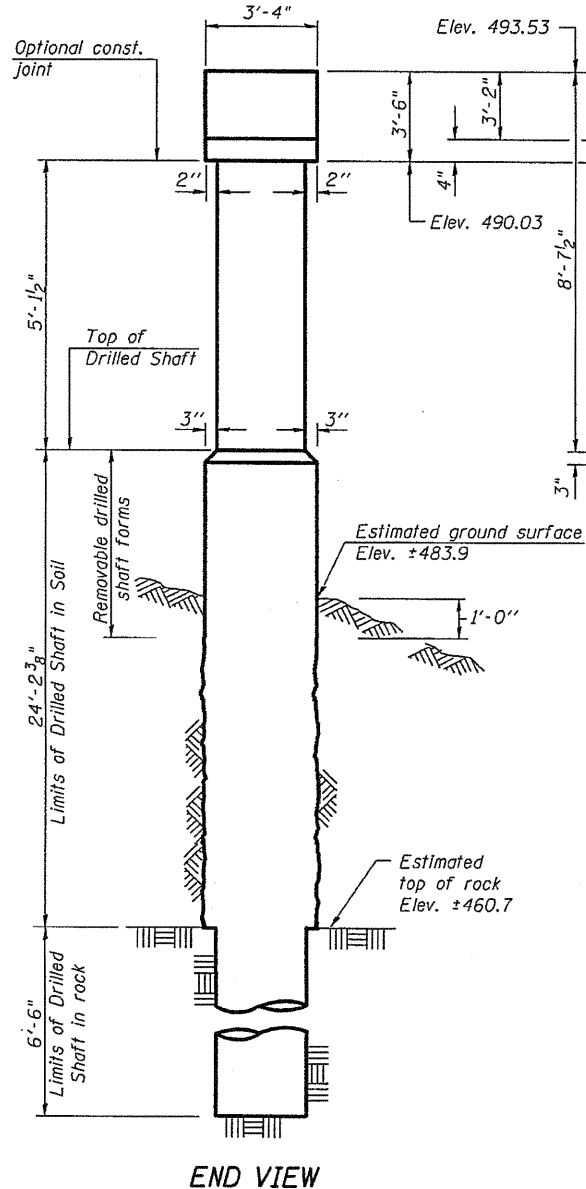
Klingner & Associates P.C.



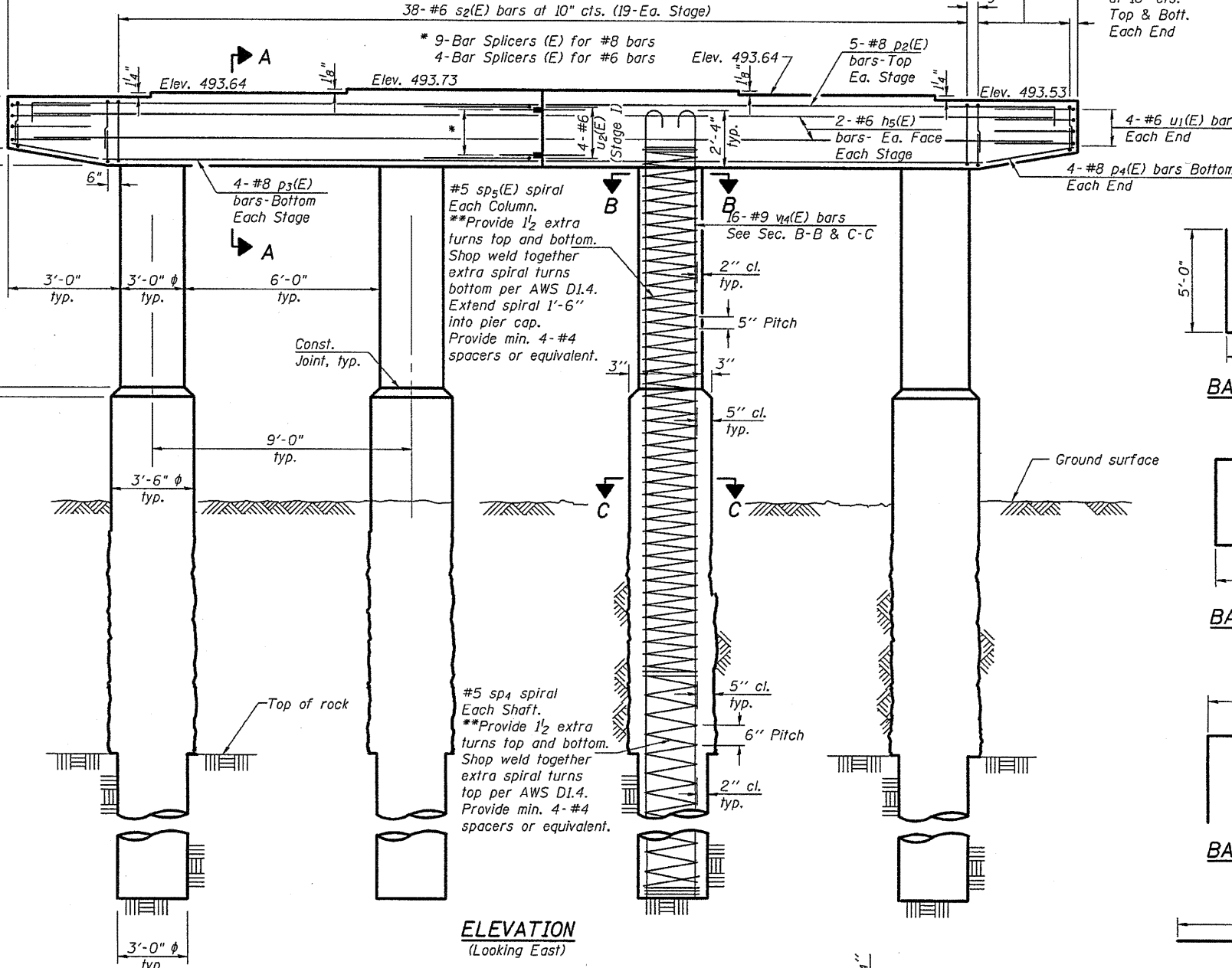
**ANCHOR BOLT LOCATION DETAIL**



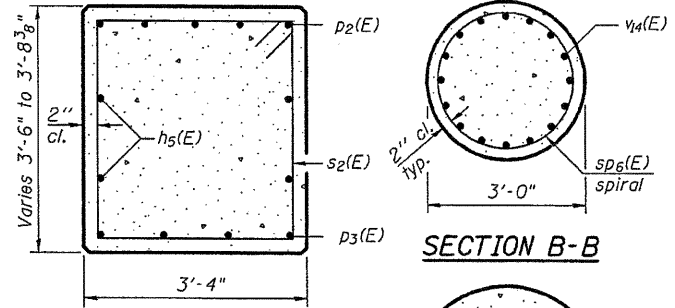
**TOP PLAN**



**END VIEW**

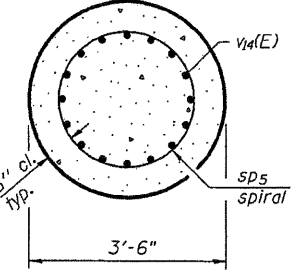


**ELEVATION  
(Looking East)**



**SECTION A-A**

**SECTION B-B**



**SECTION C-C**

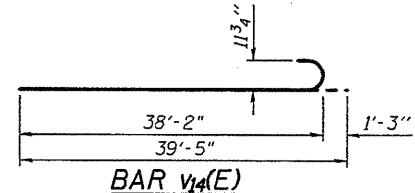
**BAR u1(E)**

**BAR u2(E)**

**BAR s2(E)**

**BAR s3(E)**

**BAR p2(E)**



**BAR v4(E)**

**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
h5(E)	#8	16'-2"	—
p2(E)	#8	17'-6"	—
p3(E)	#8	15'-6"	—
p4(E)	#8	2'-6"	—
s2(E)	#6	13'-8"	□
s3(E)	#6	8'-8"	U
sp4	#5	19'-1"	~
sp5(E)	#5	16'-6"	~
u1(E)	#6	14'-7"	—
u2(E)	#6	12'-11"	—
v4(E)	#9	39'-5"	—
Concrete Structures	Cu. Yd.	20.9	
Reinforcement Bars, Epoxy Coated	Pound	12,770	
Reinforcement Bars	Pounds	1,750	
Drilled Shaft in Soil	Cu. Yd.	34.5	
Drilled Shaft in Rock	Cu. Yd.	6.8	
Bar Splicers	Each	13	

Cast steps monolithically with cap. Space cap reinforcement to miss anchor bolts. Minimum lap for spirals = 2'-2" \*\* Length is height of spiral.

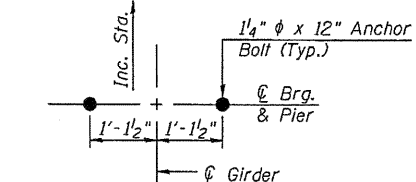
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

\*\*Allowable substitution: Provide 1/2 extra turns top and bottom with 135° standard hook into core at ends of spiral.

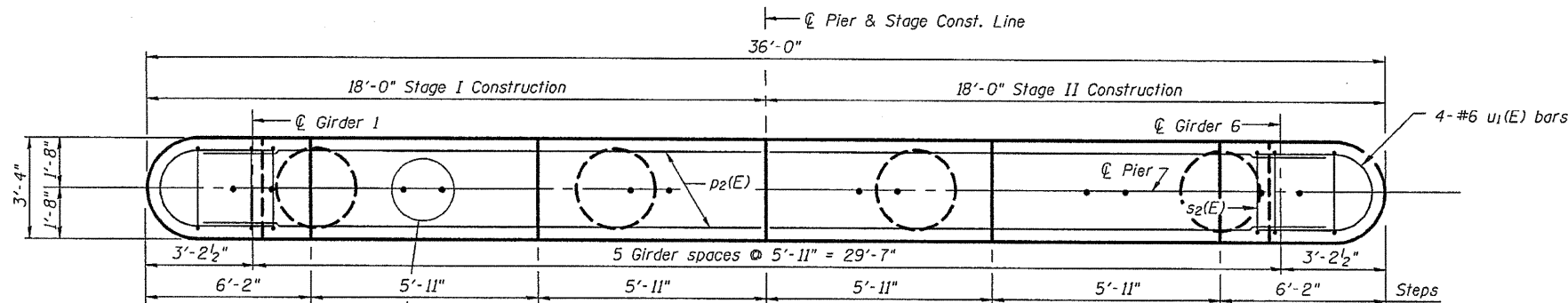
Note: When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

**PIER 4  
S.N. 085-0514**

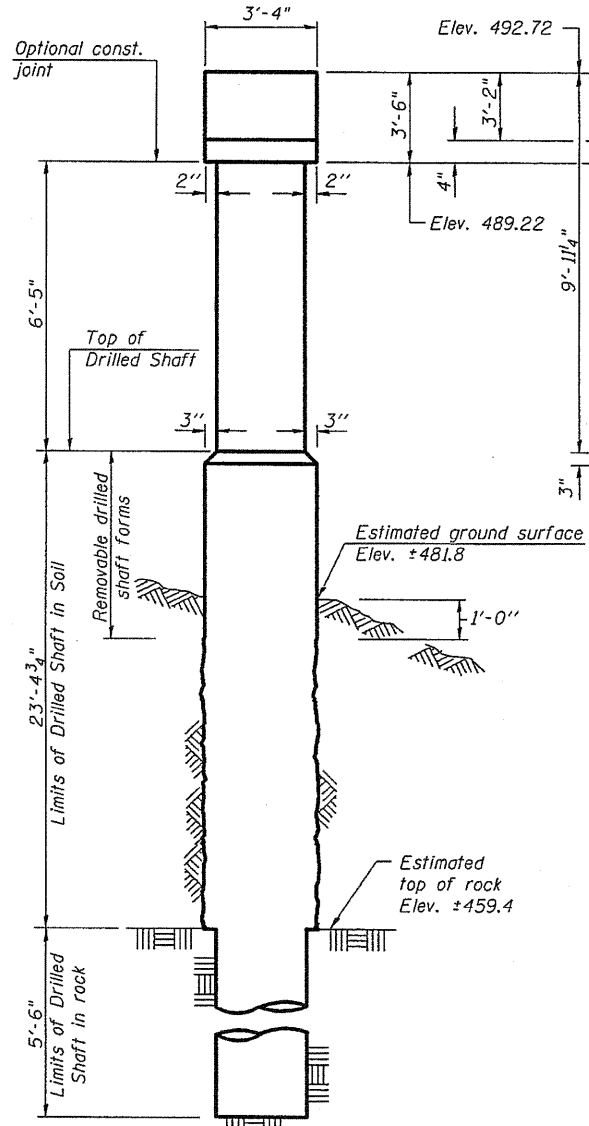
SHEET NO.34 45 SHEETS	F.A.P. RTE. 713	SECTION 120B-3	COUNTY SCHUYLER	TOTAL SHEETS 75	SHEET NO. 54
	CONTRACT NO. 72A03				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



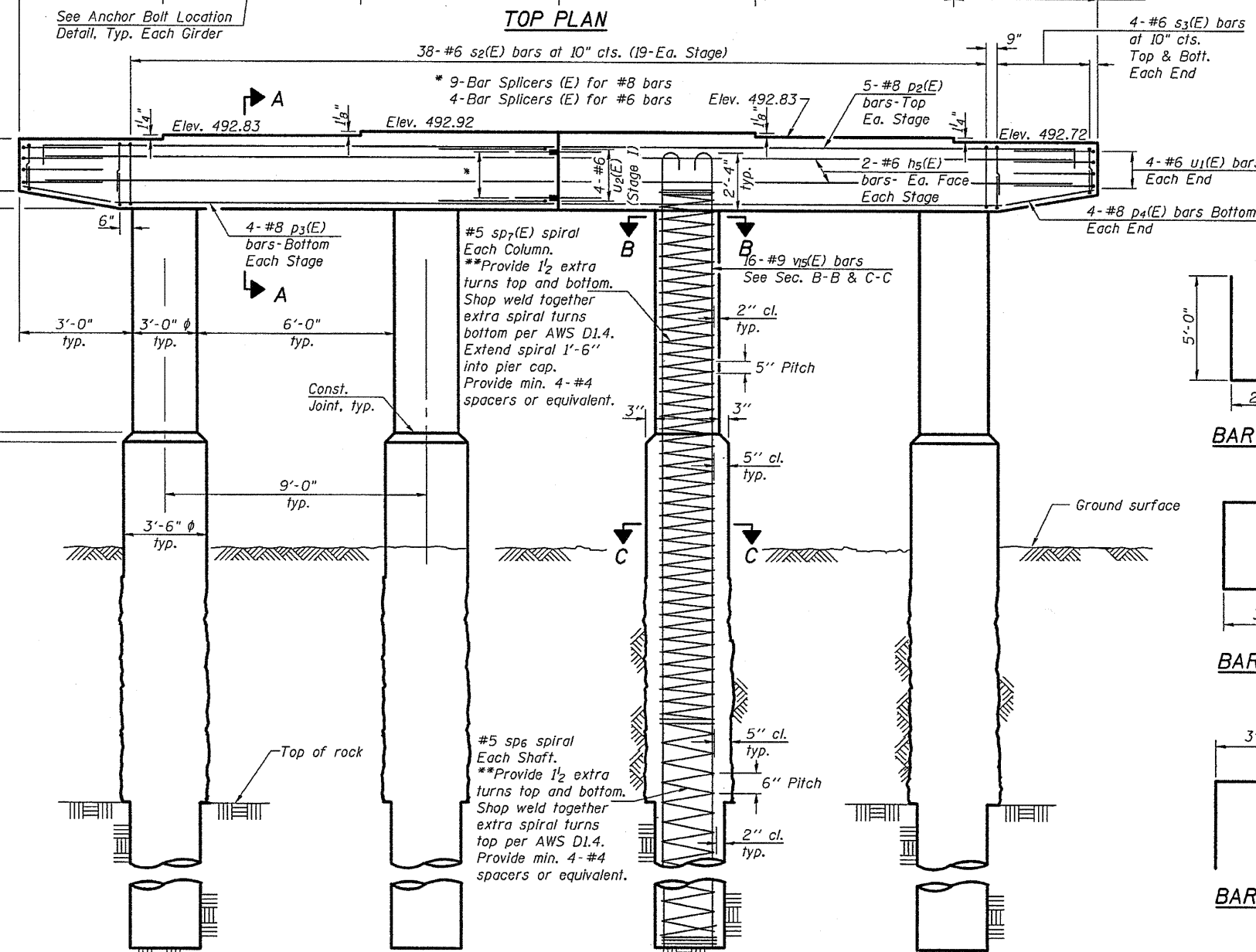
**ANCHOR BOLT LOCATION DETAIL**



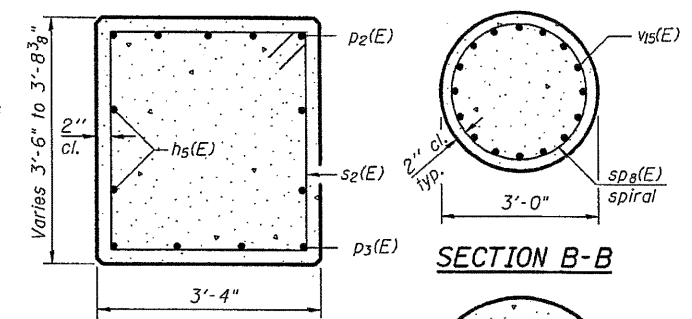
**TOP PLAN**



**END VIEW**

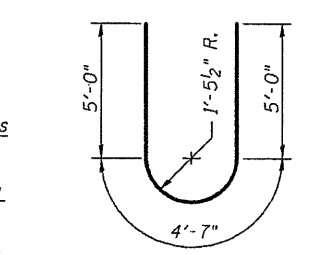


**ELEVATION**  
(Looking East)

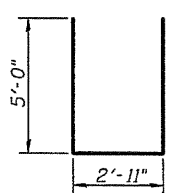


**SECTION A-A**

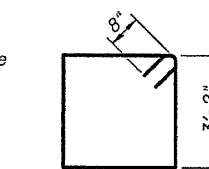
**SECTION B-B**



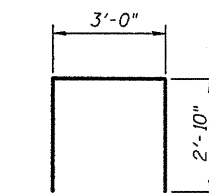
**BAR U1(E)**



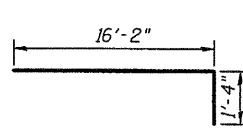
**BAR U2(E)**



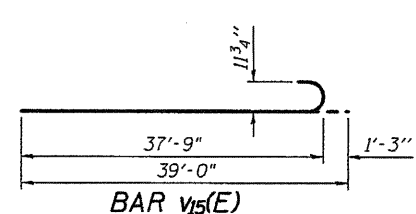
**BAR S2(E)**



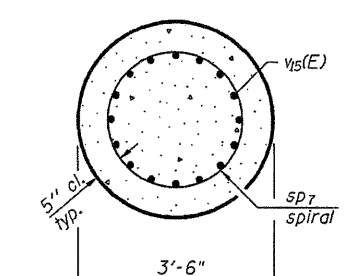
**BAR S3(E)**



**BAR P2(E)**



**BAR V5(E)**



**SECTION C-C**

**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
h5(E)	#8	16'-2"	—
p2(E)	#8	17'-6"	—
p3(E)	#8	15'-6"	—
p4(E)	#8	2'-6"	—
s2(E)	#6	13'-8"	□
s3(E)	#6	8'-8"	□
sd6	#5	17'-4"	~
sd7(E)	#5	17'-10"	~
u1(E)	#6	14'-7"	U
u2(E)	#6	12'-11"	U
v5(E)	#9	39'-0"	—
Concrete Structures	Cu. Yd.	22.3	
Reinforcement Bars, Epoxy Coated	Pound	12,810	
Reinforcement Bars	Pounds	1,600	
Drilled Shaft in Soil	Cu. Yd.	33.3	
Drilled Shaft in Rock	Cu. Yd.	5.8	
Bar Splicers	Each	13	

Cast steps monolithically with cap.  
Space cap reinforcement to miss anchor bolts.  
Minimum lap for spirals = 2'-2"  
\*\* Length is height of spiral.

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

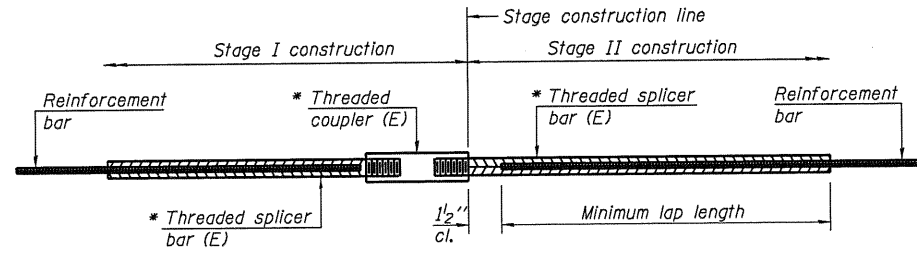
\*\*Allowable substitution:  
Provide 1/2 extra turns top and bottom with 135° standard hook into core at ends of spiral.

Note:  
When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

**PIER 5**  
**S.N. 085-0514**

SHEET NO. 35	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	55
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

Sep-07-2010 10:35:52AM:35:52 AM



**STANDARD BAR SPLICER ASSEMBLY**

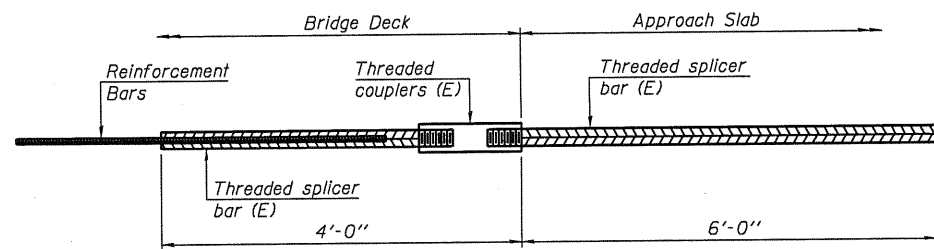
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

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 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
Abutments	#7	16	Table 3
Abutments	#6	10	Table 3
Abutments	#5	16	Table 3
Approaches	#4	50	Table 4
Approaches	#5	172	Table 3
Piers	#8	45	Table 3
Piers	#6	20	Table 3
Piers	#5	436	Table 3
Bridge Deck	#5	1,527	Table 3

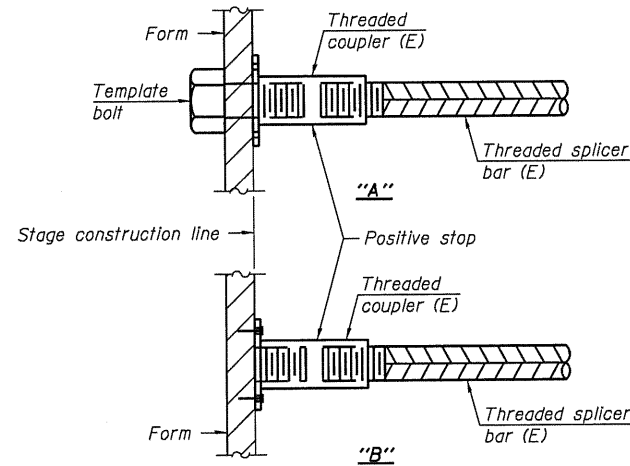


**BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

No. required =

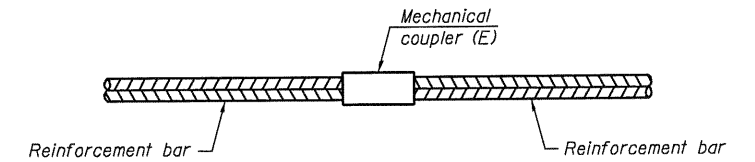
DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

BSD-1 11-1-09



**INSTALLATION AND SETTING METHODS**

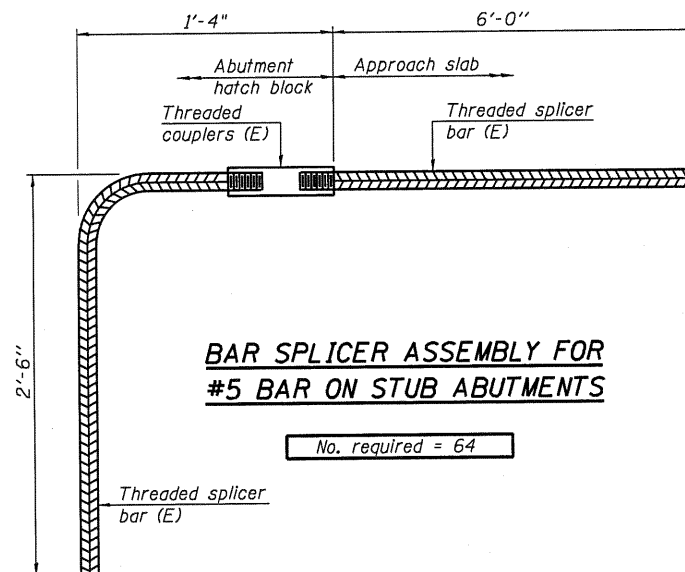
"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required
W. Abutment	#6	*4
E. Abutment	#6	*4

\*Cost Included with Furnishing and Erecting Structural Steel. See sheet 19 of 45.



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required = 64

**NOTES**

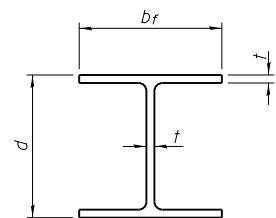
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.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

**BAR SPLICER ASSEMBLY DETAILS**  
 S.N. 085-0514

SHEET NO.36	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	56
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

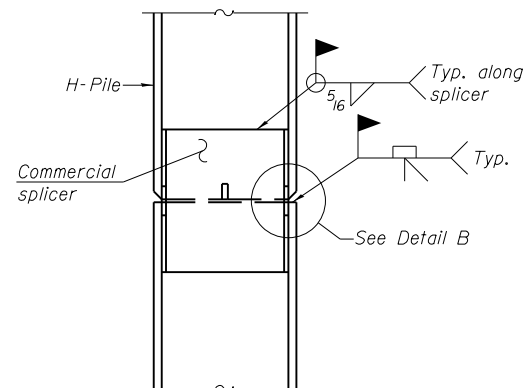
Klingner & Associates P.C.



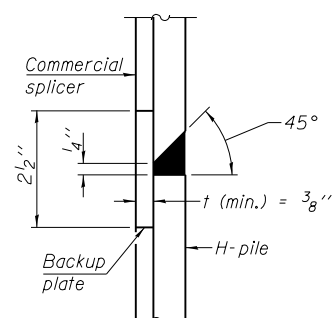


**STEEL PILE TABLE**

Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	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"	11/16"	24"
x74	12 1/8"	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"

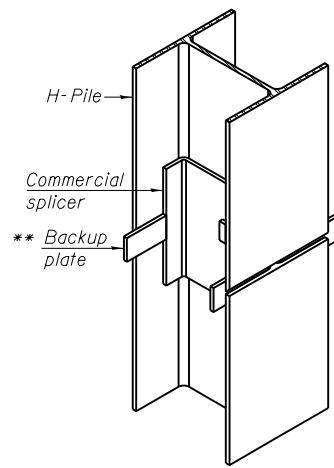


**ELEVATION**

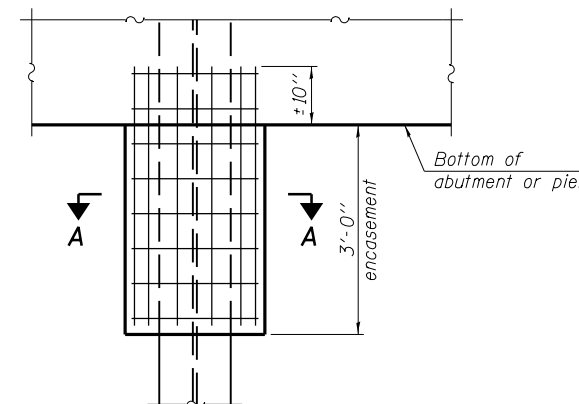


**DETAIL "B"**

**WELDED COMMERCIAL SPLICE**

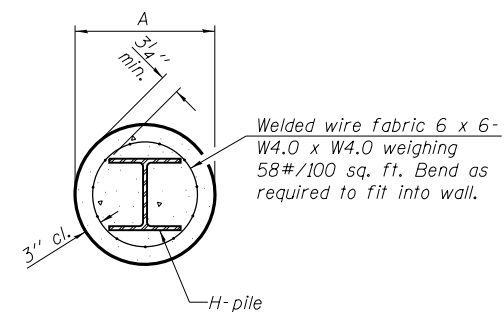


**ISOMETRIC VIEW**



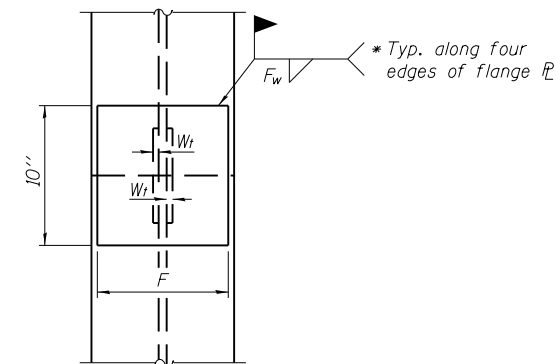
**ELEVATION**

**PILE ENCASEMENT**

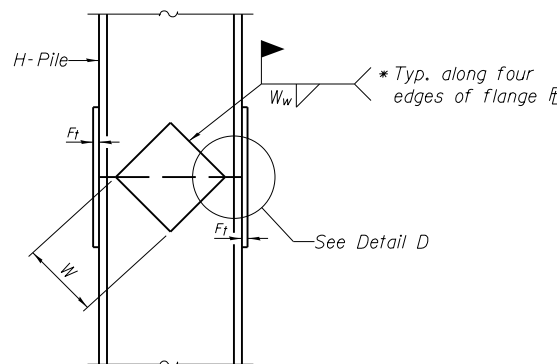


Note:  
Forms for encasement may be omitted when soil conditions permit.

**SECTION A-A**

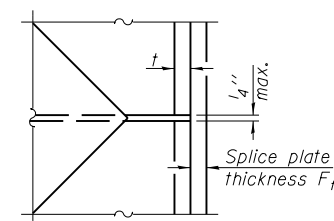


**END VIEW**



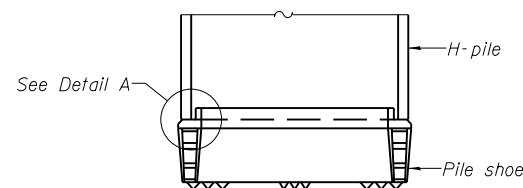
**ELEVATION**

**WELDED PLATE FIELD SPLICE**



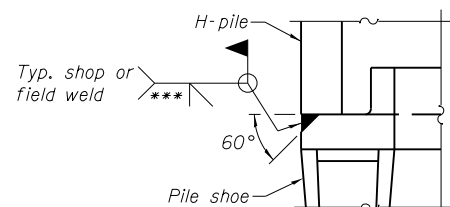
**DETAIL D**

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 8/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 8/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5 8/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 8/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5 8/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5 8/8"	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"

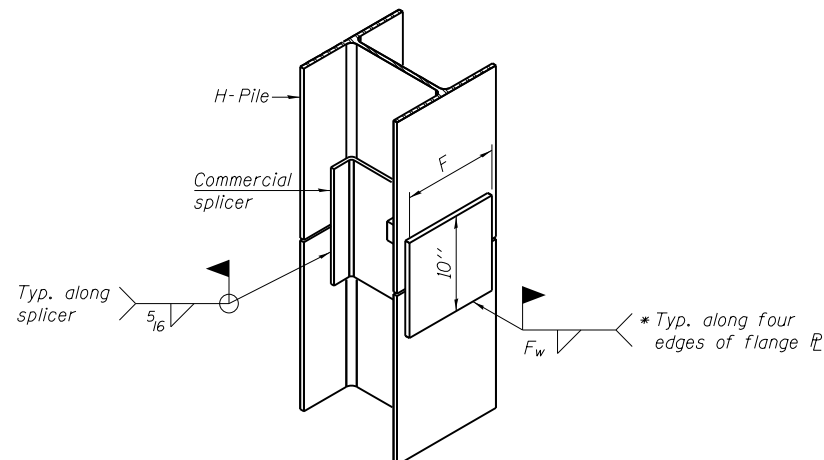


**ELEVATION**

**H-PILE SHOE ATTACHMENT**



**DETAIL A**



**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.).

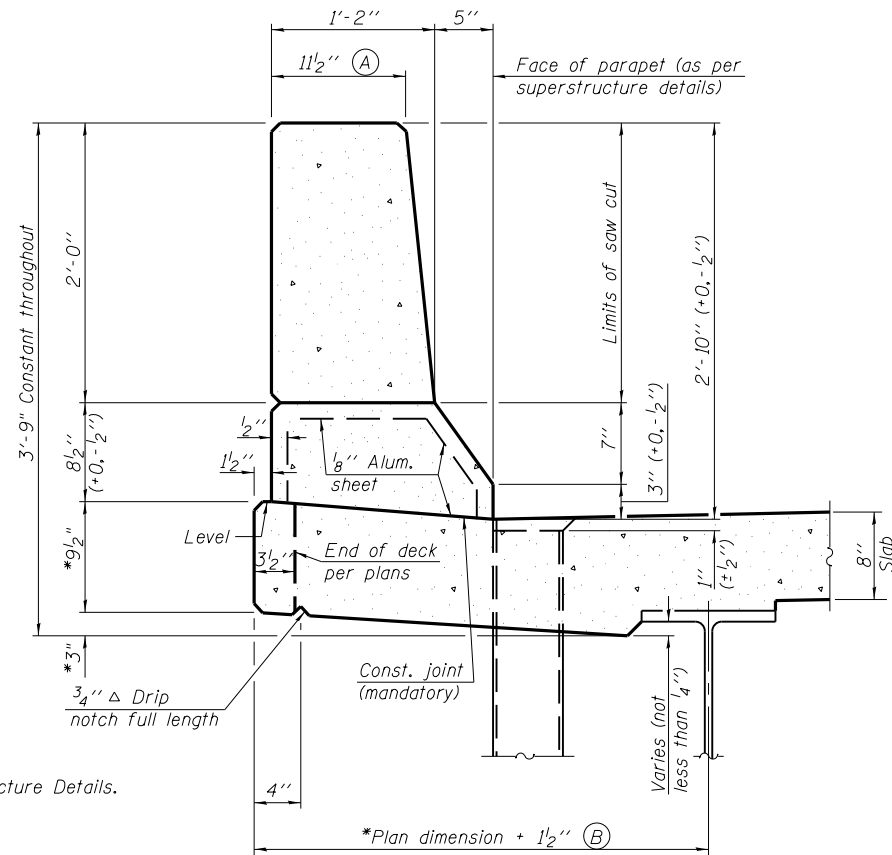
Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

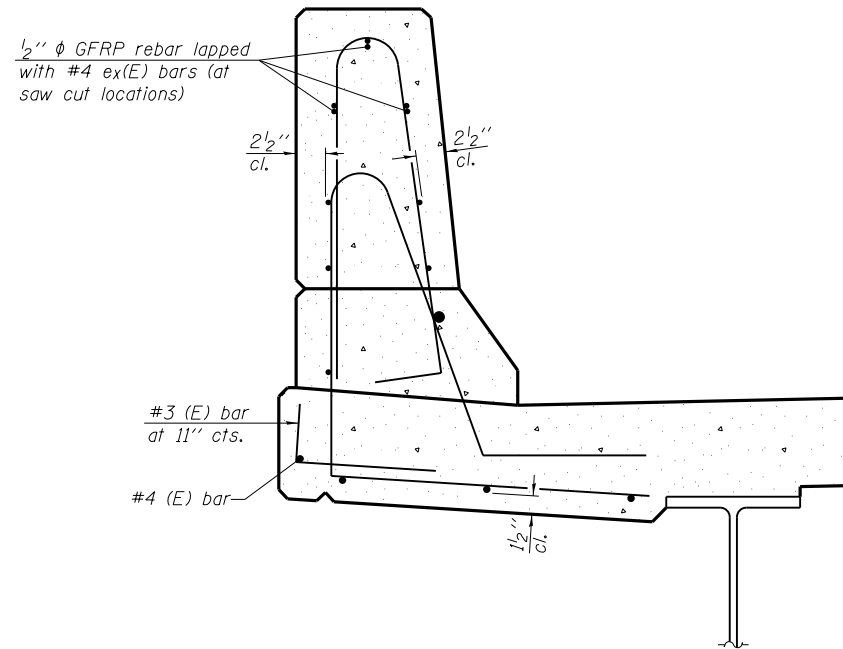
F-HP 11-1-09

SHEET NO.37	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	57
45 SHEETS	CONTRACT NO. 72A03				
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

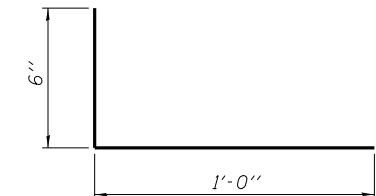
**HP PILE DETAILS  
S.N. 085-0514**



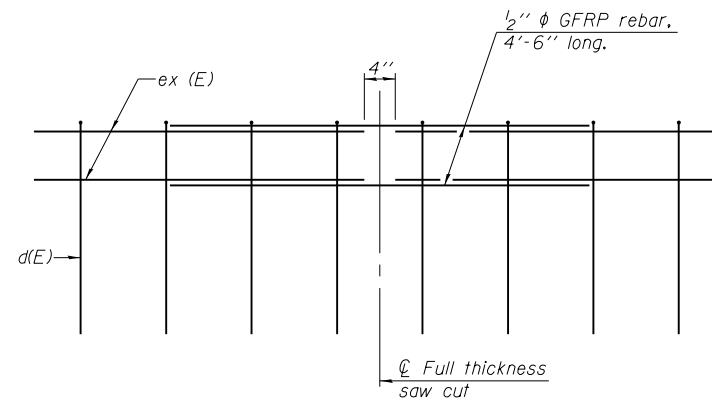
**SECTION**  
(Showing dimensions)



**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.)

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL

SFP-34

11-1-09

**CONCRETE PARAPET  
SLIPFORMING OPTION  
S.N. 085-0514**

SHEET NO.38 45 SHEETS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	58
			CONTRACT NO. 72A03		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		



Aug-18-2010 08:52:31AM 8:52:31 AM



Illinois Department of Transportation  
Division of Highways  
District 6

## SOIL BORING LOG

Page 1 of 2

Date 10/30/08

ROUTE FAP 713 DESCRIPTION IL 101 over the Lamoine River LOGGED BY M. Tappan

SECTION 120 B-3 LOCATION NE1/4, SEC. 20, TWP. 3N, RNG. 3W, 4 PM

COUNTY Schuyler DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 085-0514 Pr  
085-0016 Ex  
Station 559+36.5

BORING NO. B-P1  
Station 557+32  
Offset 20.0ft RT  
Ground Surface Elev. 485.8 ft

DEPTH (ft)	DIAMETER (in)	UNIT	MOISTURE (%)	REMARKS
0				Surface Water Elev. <u>470</u> ft Stream Bed Elev. <u>466.5</u> ft
				Groundwater Elev.: <input checked="" type="checkbox"/> First Encounter <u>No Encounter</u> ft <input checked="" type="checkbox"/> Upon Completion <u>Cored</u> ft <input checked="" type="checkbox"/> After <u>      </u> Hrs. <u>Plugged</u> ft
0	6	tsf		Brown and Gray Moist SILTY CLAY (Fill) w/ Limestone Rip Rap
1				
3	1.1		18	
5	B			
5				
1				
5	1.0		22	
3	B			
1				
2	0.6		27	
1	B			
10				
474.80				Gray Fine Wet SAND
1				
3				
6				
472.30				Brownish Gray Weathered Argillaceous LIMESTONE
17				
471.30	100/1			
15				Borehole continued with rock coring.
20				

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

DESIGNED	RJP
CHECKED	ADL
DRAWN	RJP
CHECKED	ADL



Illinois Department of Transportation  
Division of Highways  
District 6

## ROCK CORE LOG

Page 2 of 2

Date 10/30/08

ROUTE FAP 713 DESCRIPTION IL 101 over the Lamoine River LOGGED BY M. Tappan

SECTION 120 B-3 LOCATION NE1/4, SEC. 20, TWP. 3N, RNG. 3W, 4 PM

COUNTY Schuyler CORING METHOD Double Tube with Water

STRUCT. NO. 085-0514 Pr  
085-0016 Ex  
Station 559+36.5

BORING NO. B-P1  
Station 557+32  
Offset 20.0ft RT  
Ground Surface Elev. 485.8 ft

DEPTH (ft)	CORER	RECOVERY (%)	Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)	REMARKS
471.30	1	94	42			Lt Grayish Brown Weathered well Indurated MacrocrySTALLINE LIMESTONE Closed Joints Spaced <2"
469.70						
469.40						Dk Gray Mod. Indurated Clayey SHALE Closed Joints Spaced <2"
467.80					785	Dk Gray Mod. to Well Indurated Argillaceous LIMESTONE Closed Joints Spaced 2"-12"
466.50						Dk Gray Mod to Well Ind. Calcareous SHALE Closed Joints Spaced 2"-12"
461.50	2	100	80		843	Gray V. Well Ind. Crystalline LIMESTONE Interbedded w/ 1"-4" gray Clayey Shale Open Joints Spaced 2"-12" filled w/ Clayey Shale and Limestone
461.50	3	100	98		734	Gray V. Well Indurated Crystalline LIMESTONE Closed Joints Filled w/ Gray Calcareous Shale Spaced 1'-3'
456.50						
30						

Color pictures of the cores Yes, On File  
Cores will be stored for examination until 5 Years after Construction  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
RQD is the ratio of the total length of sound core specimens >4" to total length of core run  
BBS, form 138 (Rev. 8-99)

### BORING B-P1

### BORING LOGS S.N. 085-0514

SHEET NO. 40	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	713	120B-3	SCHUYLER	75	60
45 SHEETS	CONTRACT NO. 72A03				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		



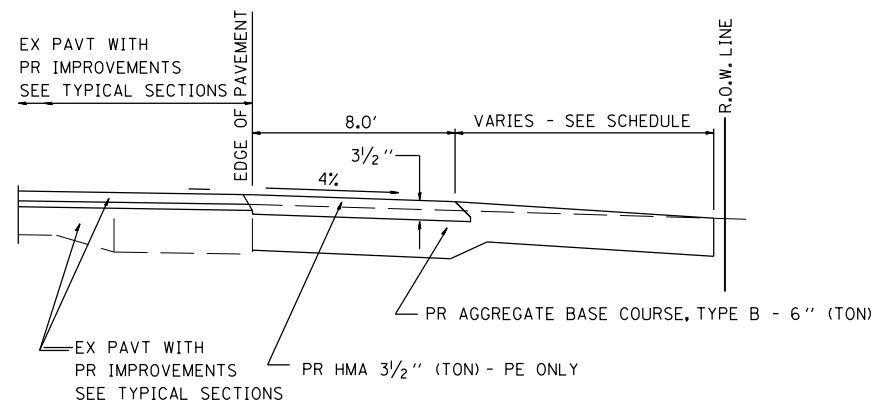




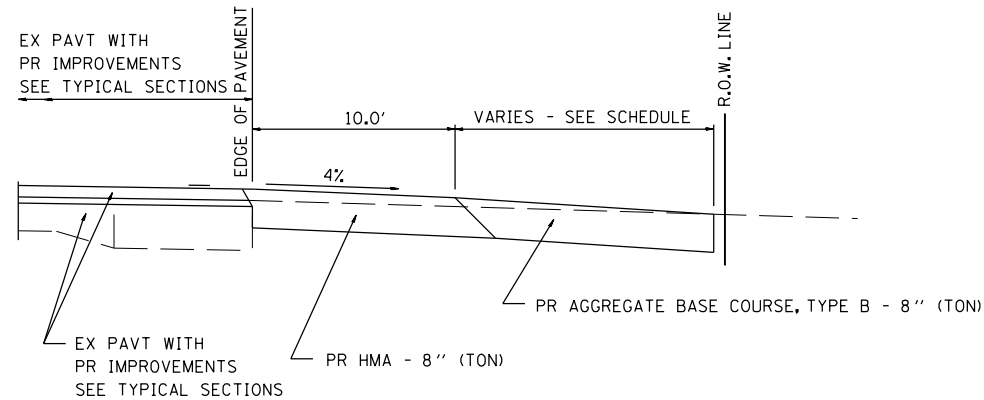




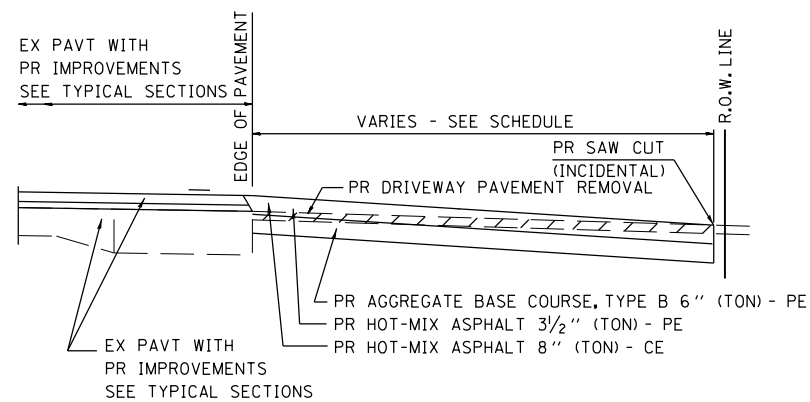




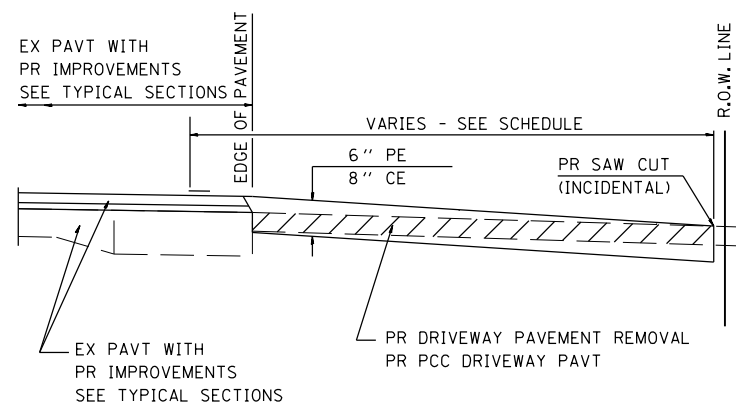
SECTION A-A FOR EX EARTH/AGGREGATE FE & PE



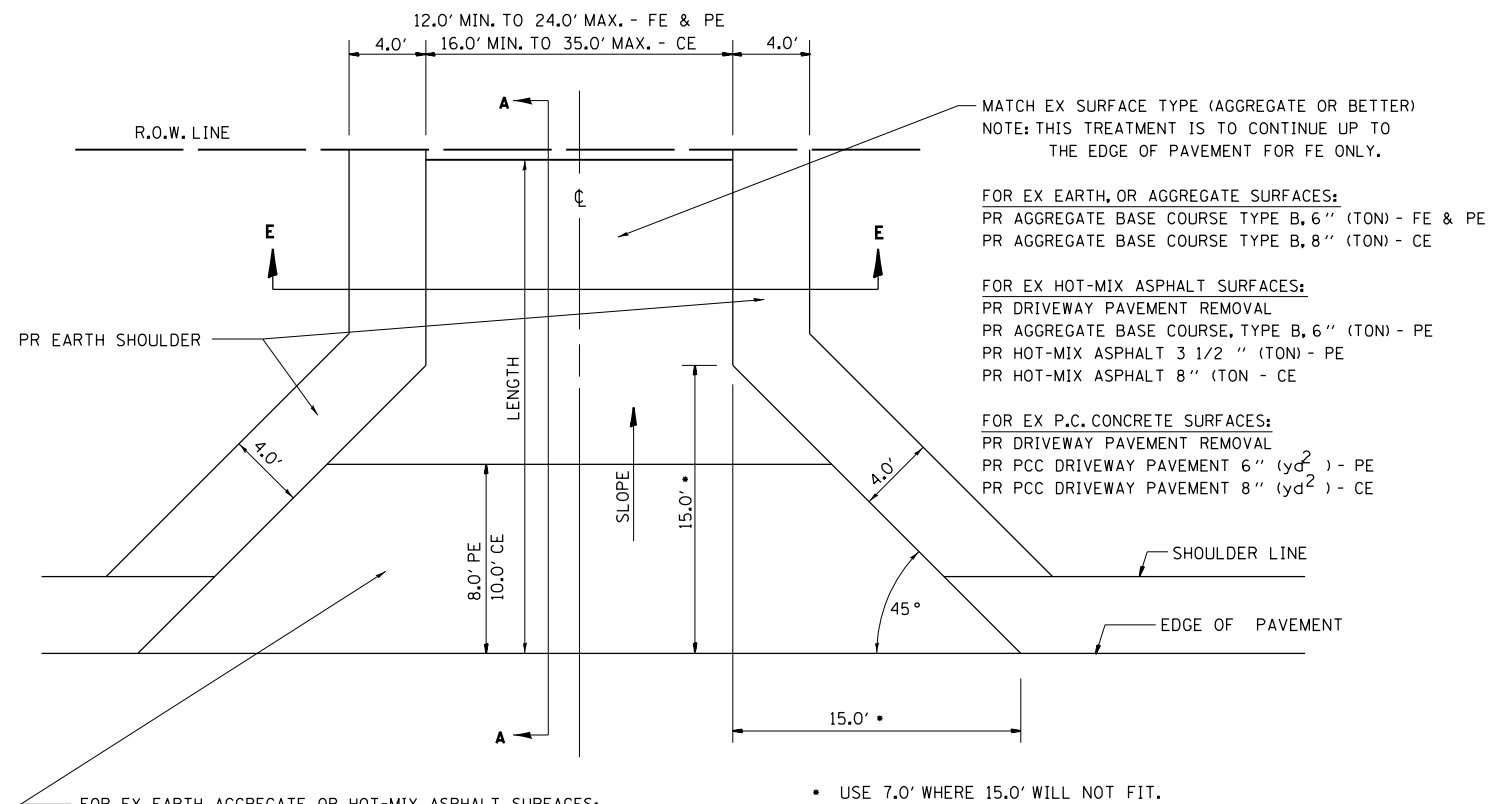
SECTION A-A FOR EX EARTH/AGGREGATE CE



SECTION A-A FOR EX HOT-MIX ASPHALT PE & CE



SECTION A-A FOR EX P.C. CONC. PE & CE



FOR EX EARTH, AGGREGATE, OR HOT-MIX ASPHALT SURFACES:  
 PR DRIVEWAY PAVEMENT REMOVAL (IF APPLICABLE)  
 PR AGGREGATE BASE COURSE TYPE B 6" (TON) - FE  
 PR AGGREGATE BASE COURSE TYPE B, 6" (TON) &  
 PR HOT-MIX ASPHALT 3 1/2" (TON) - PE  
 PR HOT-MIX ASPHALT 8" (TON) - CE

FOR P.C. CONCRETE SURFACES:  
 PR DRIVEWAY PAVEMENT REMOVAL  
 PR PCC DRIVEWAY PAVT 6" (yd<sup>2</sup>) - PE  
 PR PCC DRIVEWAY PAVT 8" (yd<sup>2</sup>) - CE

MATCH EX SURFACE TYPE (AGGREGATE OR BETTER)  
 NOTE: THIS TREATMENT IS TO CONTINUE UP TO THE EDGE OF PAVEMENT FOR FE ONLY.

FOR EX EARTH, OR AGGREGATE SURFACES:  
 PR AGGREGATE BASE COURSE TYPE B, 6" (TON) - FE & PE  
 PR AGGREGATE BASE COURSE TYPE B, 8" (TON) - CE

FOR EX HOT-MIX ASPHALT SURFACES:  
 PR DRIVEWAY PAVEMENT REMOVAL  
 PR AGGREGATE BASE COURSE, TYPE B, 6" (TON) - PE  
 PR HOT-MIX ASPHALT 3 1/2" (TON) - PE  
 PR HOT-MIX ASPHALT 8" (TON) - CE

FOR EX P.C. CONCRETE SURFACES:  
 PR DRIVEWAY PAVEMENT REMOVAL  
 PR PCC DRIVEWAY PAVEMENT 6" (yd<sup>2</sup>) - PE  
 PR PCC DRIVEWAY PAVEMENT 8" (yd<sup>2</sup>) - CE

\* USE 7.0' WHERE 15.0' WILL NOT FIT.

GENERAL NOTES:

THE RESIDENT ENGINEER WILL DETERMINE THE EXACT TYPE OF IMPROVEMENT TO BE COMPLETED FOR ALL ENTRANCES, SIDEROADS AND MAILBOX TURNOUTS ON THIS PROJECT.

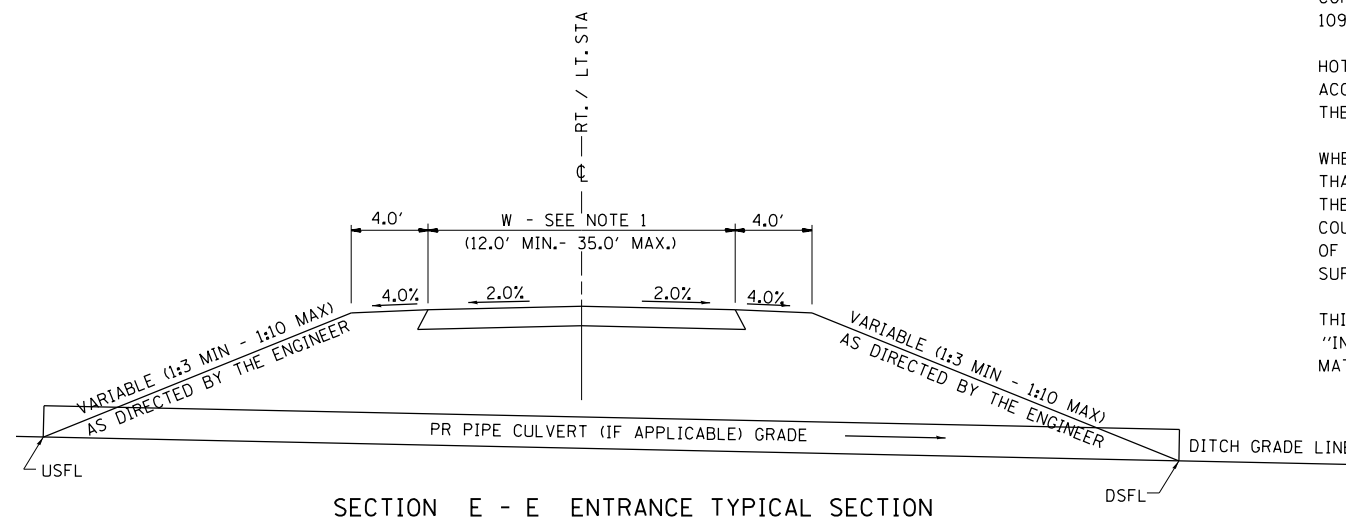
THE PLAN DETAILS AND SCHEDULES SHOULD BE USED AS A GUIDE FOR THE ENGINEER TO IMPLEMENT THE FINAL DESIGN. THE ENGINEER MAY DECIDE TO SALVAGE PORTIONS OF THE EXISTING ENTRANCE PAVEMENT STRUCTURE; THEREFORE, REDUCING PAY ITEM QUANTITIES. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS REDUCTION IN QUANTITIES.

ANY WORK THE ENGINEER REQUIRES WHICH IS NOT COVERED BY A PAY ITEM CONTAINED IN THE PLANS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

HOT-MIX ASPHALT REQUIRED TO CONSTRUCT THE ENTRANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 406 AND 408 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

WHEN THE HOT-MIX ASPHALT PROPOSED FOR THE IMPROVEMENT IS THICKER THAN 3 INCHES AND REQUIRE PLACEMENT IN MORE THAN ONE LIFT. THE BOTTOM LIFT(S) SHALL MEET THE REQUIREMENTS OF HOT-MIX ASPHALT BASE COURSE IN SECTION 406 OF THE STANDARD SPECIFICATIONS AND THE TOP LIFT OF 2 INCHES SHALL MEET THE REQUIREMENTS OF HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C".

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR "INCIDENTAL HOT-MIX ASPHALT SURFACING" WHICH SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INVOLVED.



SECTION E - E ENTRANCE TYPICAL SECTION

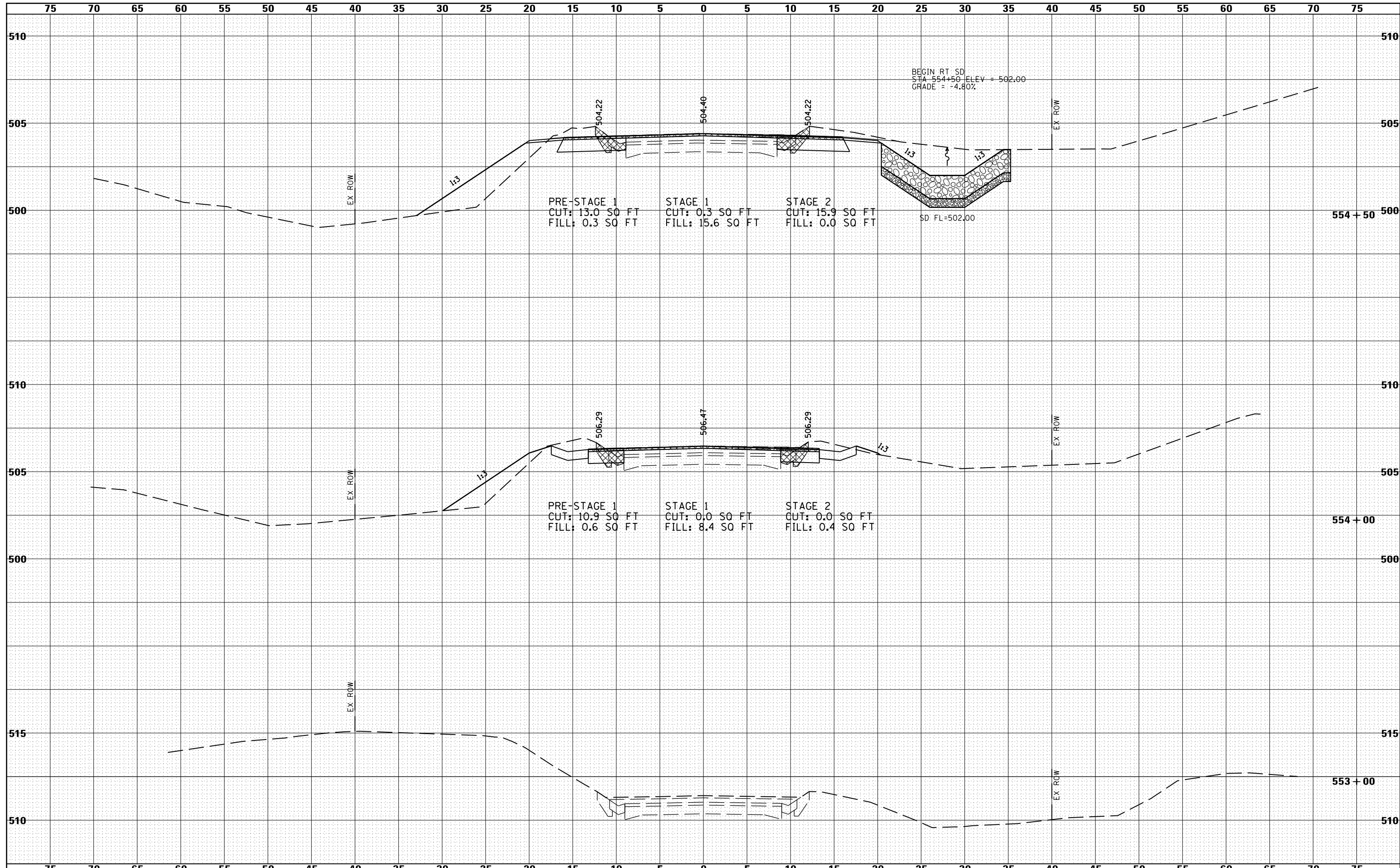
NOTE 1: WIDTH OF ENTRANCE MAY BE INCREASED AT THE PIPE CULVERT DUE TO THE DITCHLINE BEING LOCATED IN THE ENTRANCE FLARE AREA.

FILE NAME =	USER NAME = laughl1n1	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ENTRANCE DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwork\1\laughl1n1\1\0233251\062\2A03-shit-details.dgn		DRAWN -	REVISED -					713	120B-3	SCHUYLER	75	66
PLOT SCALE = 100.0000' / 1in.		CHECKED -	REVISED -					CONTRACT NO. 72A03				
PLOT DATE = Aug-17-2010 01:31:03PM		DATE -	REVISED -					FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
				SCALE: none	SHEET NO. 1 OF	1 SHEETS	STA.	TO STA.				



DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

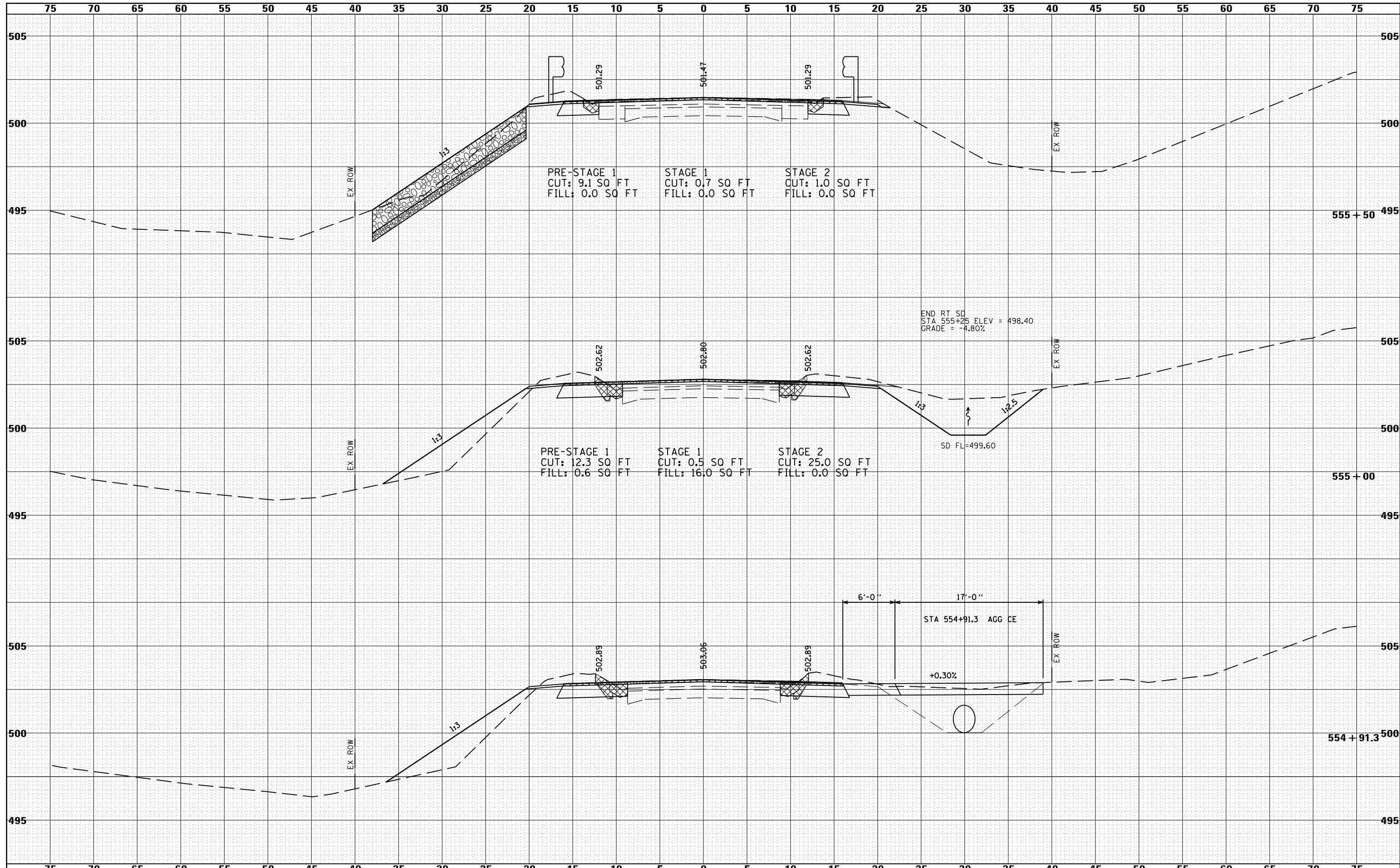
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	



FILE NAME =	USER NAME = laughl1nr1	DESIGNED -	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>IL 101</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pw-work\pwidot\laughl1nr1\d0233251\0672A03-sh1-xssht1.dgn	CHECKED -	REVISIED -	713				120B-3	SCHUYLER	75	67	
PLOT SCALE = 10.0000' / in.	DRAWN -	REVISIED -	CONTRACT NO. 72A03								
PLOT DATE = Aug-17-2010 01:31:13PM	CHECKED -	REVISIED -	SCALE: 1" = 5'H		SHEET NO. OF 95 SHEETS	STA. 553+00 STA. 554+50	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

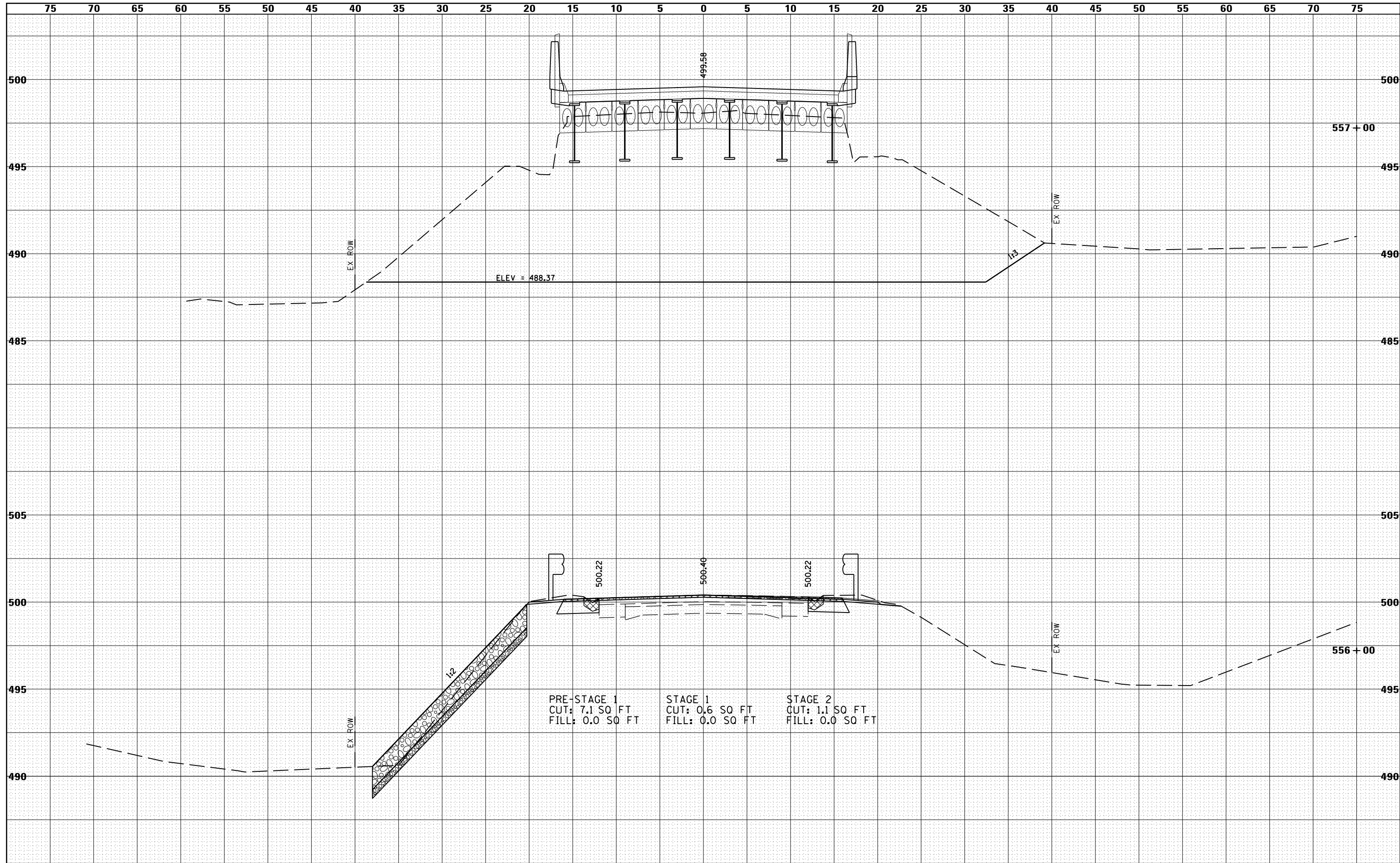
DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

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



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

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



FILE NAME =	USER NAME = laughl1nr1	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
IL 101**

SCALE: 1"=5'H  
1/2"=2.5'V

SHEET NO. 0F 9SHEETS STA. 556+00 STA. 557+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
713	120B-3	SCHUYLER	75	69
CONTRACT NO. 72A03				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



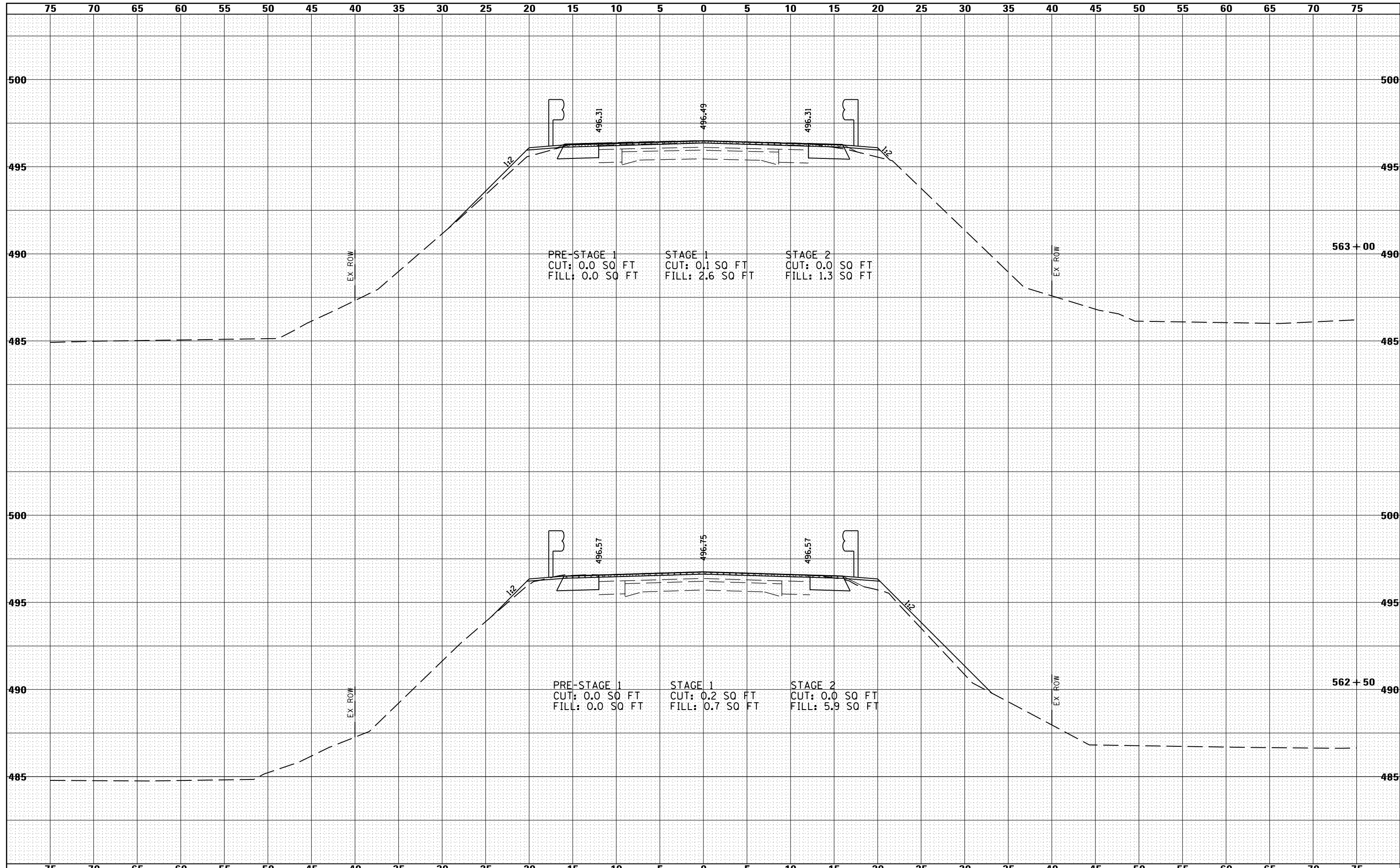






DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

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



FILE NAME =	USER NAME = laughl1nr1	DESIGNED -	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>IL 101</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pwork\pwork\laughl1nr1\d0233251\0672A03-sh1t-xssht1.dgn	CHECKED -	REVISIED -	713				120B-3	SCHUYLER	75	73	
PLOT SCALE = 10.0000' / in.	DRAWN -	REVISIED -	CONTRACT NO. 72A03								
PLOT DATE = Aug-17-2010 01:31:16PM	CHECKED -	REVISIED -	SCALE: 1" = 5'H 1" = 2.5'V		SHEET NO. OF 9SHEETS	STA. 562+50 STA. 563+00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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

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

