

06-14-13 LETTING ITEM 226

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH. 26	05-00044-01-BR	DE KALB	49	1
		ILLINOIS	CONTRACT NO. 87477	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM**

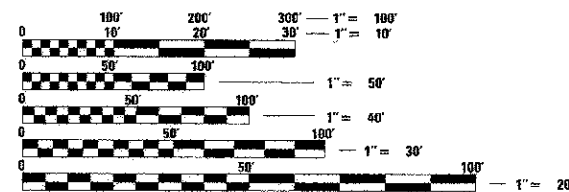
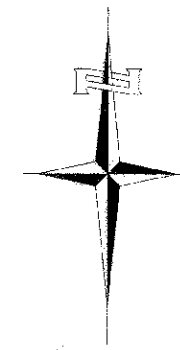
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DE KALB COUNTY
SECTION 05-00044-01-BR
C.H. 26 (FIVE POINTS RD.) OVER
SOUTH BRANCH OF KISHWAUKEE RIVER
PROJECT NO. BRS-1122(108)

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2.

JOB NUMBER C-93-156-10



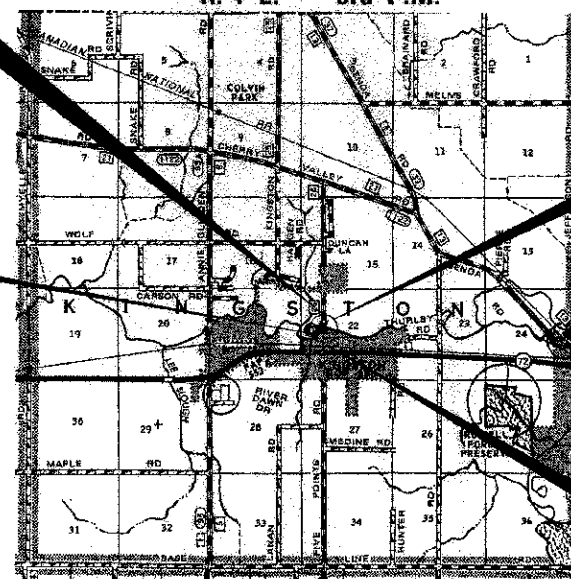
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 87477

END IMPROVEMENT
STA 23 + 39.00

PROPOSED STRUCTURE NO. 019-3065
THREE SPAN STEEL I-BEAM WITH
CONCRETE DECK SUPERSTRUCTURE
ON CONC. SOLID STEM PIERS AND
CONC. CLOSED ABUTMENTS,
190'-0" BK. TO BK. AND 36'-6" O. TO O.,
35° RT. AH. SKEW



EXISTING STRUCTURE 019-3027
THREE SPAN STEEL I-BEAM WITH
CONC. DECK SUPERSTRUCTURE
ON CONC. CLOSED ABUTMENTS ON
TIMBER PILE FOOTINGS AND CONC.
WALL PIERS ON TIMBER PILE FOOTINGS,
159'-0" BK. TO BK., AND 27'-8" O. TO O.,
35° SKEW RT. AH. (TO BE REMOVED)

BEGIN IMPROVEMENT
STA 14 + 35.00

LOCATION MAP



APPROXIMATE SCALE

NET LENGTH OF PROJECT = 904.00 FEET = 0.171 MILE

UTILITY COMPANIES

COMMONWEALTH EDISON
ROCKFORD, IL.

NICOR GAS
NAPERVILLE, IL.

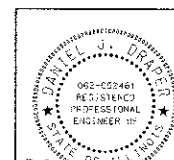
VERIZON
SYCAMORE, IL.

Illinois Professional Design Firm # 184-000625

Hutchison Engineering, Inc.
Jacksonville - Peoria - Shorewood
Since 1945

2012

JOB #2553



Signature of Daniel J. Orsini, dated 03/19/13.

ENGINEER'S SEAL

DESIGN CLASSIFICATION
MINOR-COLLECTOR (NON-URBAN)
DESIGN ADT = 2,550 (2030)
DESIGN SPEED = 30 MPH

AGENCY RESPONSIBLE FOR LETTING

APPROVED March 20 2013

Signature of De Kalb County Engineer

PASSED 4-4 2013

Signature of District 3 Engineer of Local Roads & Streets

RELEASING FOR BID BASED ON LIMITED REVIEW 4-4 2013

Signature of Deputy Director of Highways, Region 2 Engineer

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 420401-09 BRIDGE APPROACH PAVEMENT CONNECTOR
- 515001-03 NAME PLATE FOR BRIDGES
- 542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 542401-01 METAL END SECTION FOR PIPE CULVERTS
- 602301-03 INLET - TYPE A
- 602306-03 INLET - TYPE B
- 602401-03 MANHOLE TYPE A
- 602601-02 PRECAST REINFORCED CONCRETE FLAT SLAB TOP
- 604001-03 FRAME AND LIDS TYPE 1
- 604006-04 FRAME AND GRATE TYPE 3
- 604036-02 GRATE TYPE 8
- 606001-05 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 609006-05 BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 631011-09 TRAFFIC BARRIER TERMINAL, TYPE 2
- 631031-11 TRAFFIC BARRIER TERMINAL, TYPE 6
- 631032-08 TRAFFIC BARRIER TERMINAL, TYPE 6A
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAIL
- 666001-01 RIGHT OF WAY MARKERS
- 701901-02 TRAFFIC CONTROL DEVICES
- 780001-03 TYPICAL PAVEMENT MARKINGS
- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- BLR 22-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC)

GENERAL NOTES

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION. HE WILL NOT BE ALLOWED TO BUILD FIRES ON THE SITE.

ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT ORANGE VESTS AND HARD HATS AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO FULL SIZE PLANS AND NOT TO THE REDUCED SIZE PLANS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT, SPECIFICALLY AS THEY RELATE TO THE LUMP SUM PAY ITEMS.

THE LOCATIONS OF KNOWN UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE AND DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THESE UTILITIES AND THE EXISTENCE AND LOCATION OF ANY UTILITY NOT SHOWN ON THE PLANS.

THE CONTRACTOR SHALL NOTIFY THE UTILITIES AT LEAST TEN (10) DAYS PRIOR TO ANY CONSTRUCTION IN THE AREA AND SHALL COMPLY WITH ALL RESTRICTIONS FOR EQUIPMENT MOVEMENTS AND CLEARANCES AS REGARDS TO THEIR FACILITIES.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR MUST CALL J.U.L.I.E. AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRICAL, TELEPHONE, GAS FACILITIES, AND ALL PUBLIC UTILITIES. A 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWER AND APPURTENANCES THAT MUST BE KEPT IN OPERATION. IN PARTICULAR, THE CONTRACTOR WILL TAKE ADEQUATE MEASURES TO PREVENT THE UNDERMINING OF UTILITIES AND SEWERS WHICH ARE STILL IN SERVICE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ADJUTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT.

ALL SCHOOL DISTRICTS, LOCAL POLICE DEPARTMENTS AND FIRE DEPARTMENTS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST TEN (10) DAYS PRIOR TO THE START OF CONSTRUCTION.

THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACE OR BASES ON WHICH THE HOT-MIX ASPHALT MIXTURES ARE TO BE PLACED.

HOT-MIX ASPHALT SURFACE COURSE SHALL NOT BE PLACED UNTIL ALL EARTH EXCAVATION, TOPSOIL PLACEMENT, AGGREGATE BASE COURSE, AND HOT-MIX ASPHALT BINDER COURSE HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER.

COMMITMENTS

- 1. NONE --/--/----

IF ANY LOOSE MATERIAL IS DEPOSITED DURING CONSTRUCTION OPERATIONS IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THAT IT RESTRICTS THE NATURAL FLOW OF WATER, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SO AFFECTED SHALL BE FREE FROM ALL DEBRIS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THIS CONTRACT.

ALL FRAMES, GRATES, SIGNS, FENCES AND DELINEATORS, NEW OR EXISTING, DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

FOR ALL MANHOLES OR INLETS NOT CONSTRUCTED IN CONJUNCTION WITH THE CURB AND GUTTER OR CURB, THE OFFSET DISTANCE SHOWN ON THE PLANS IS TO THE CENTER OF THE MANHOLE OR INLET.

NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ALL EXISTING GRANULAR MATERIAL AND BITUMINOUS MATERIALS TO BE REMOVED AND NOT PAID AS A SPECIFIC ITEM SHALL BE CONSIDERED EARTH EXCAVATION AND WILL BE PAID FOR AT THE UNIT PRICE FOR EARTH EXCAVATION. THE CONTRACTOR WILL HAVE THE OPTION OF REMOVING THE EXISTING BITUMINOUS MATERIAL BY GRINDING OR EXCAVATING THE MATERIAL. IF THE BITUMINOUS MATERIAL IS REMOVED BY EXCAVATION, NO SUCH MATERIAL MAY BE USED IN EMBANKMENT AREAS UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER.

ALL EMBANKMENTS AND SUB-GRADE SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER PRIOR TO PLACING SUB-BASE GRANULAR MATERIAL, TYPE A, TYPE B, OR TYPE C.

ALL CLEARING, REMOVAL OF BUSHES, HEDGES AND TREES UNDER 6" DIAMETER WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

TOP SOIL SHALL BE PLACED AT A DEPTH OF FOUR INCHES (4").

THE CROSS SECTIONS INDICATE THE FINISHED GRADE OF TOP SOIL.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS/CU YD
AGGREGATE (PRIME COAT)	0.002	TONS/SQ YD
HMA RESURFACING	112	LBS/SQ YD/INCH
SHORT TERM PAVEMENT MARKING	10	FT/100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS/SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS/SQ YD
SUPPLEMENTAL WATERING	3	GAL/SQ YD/APPLICATION
CALCIUM CHLORIDE	2	LB/SQ YD/APPLICATION
AGGREGATE DITCH CHECKS	5	TONS AGGREGATE

BITUMINOUS MATERIALS (PRIME COAT) RATES		
SURFACE TYPE	ESTIMATED TRUCK APPLICATION RATE	RESIDUAL RATE
AGGREGATE BASES	0.375 GAL/SQ YD	N/A
MILLED HMA OR PCC PAVEMENT	0.08 GAL/SQ YD	0.04 GAL/SQ YD
EXISTING PAVEMENT	0.05 GAL/SQ YD	0.025 GAL/SQ YD
FOG COAT (BETWEEN ADDITIONAL HMA LIFTS)	0.05 GAL/SQ YD	0.025 GAL/SQ YD

ESTIMATED TRUCK APPLICATION RATE USED FOR CALCULATING PLAN QUANTITIES.




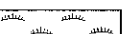
THE WORK REQUIRED TO CONNECT ANY SEWER TO AN EXISTING DRAINAGE STRUCTURE OR PIPE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE SEWER ITEMS.

MEMBERS OF J.U.L.I.E. KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

- 1. COMMONWEALTH EDISON
- 2. NICOR GAS
- 3. FRONTIER

THE CONTRACTOR SHALL CONTACT J.U.L.I.E. AT LEAST 48 HOURS PRIOR TO EXCAVATION WHICH UTILITIES ARE IN THE AREA.

LEGEND

-  TREE (TO BE REMOVED)
-  EORS EQUIVALENT ROUND-SIZE
-  PROPOSED DITCH FLOW
-  EXISTING WETLAND AREAS

FILE NAME =	USER NAME = smcrist1	DESIGNED -	REVISED -	DE KALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	C.H. 26 (FIVE POINTS RD.) HIGHWAY STANDARDS, GENERAL NOTES, COMMITMENTS & LEGEND	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
W:\2555\CA20 SHEETS\2555-ahf-gennet.dwg		DRAWN -	REVISED -			CH 26	05-00044-01-BR	DE KALB	49	2	
		CHECKED -	REVISED -			SCALE: N/A		SHEET NO. 1 OF 1 SHEETS		STA. N/A	TO STA. N/A
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT CONTRACT NO. 87477					

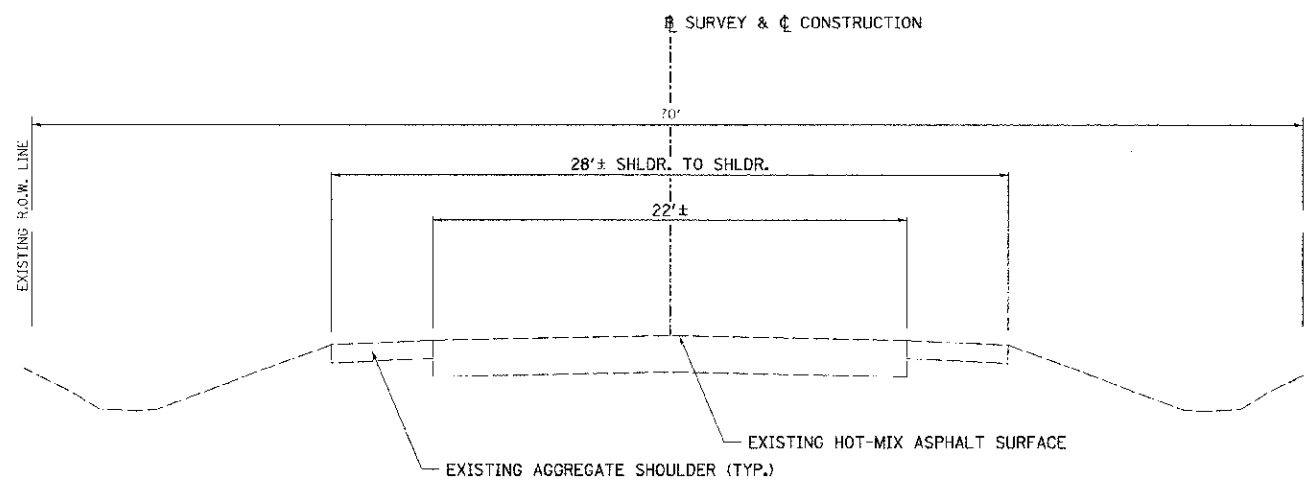
SUMMARY OF QUANTITIES

ITEM NO.	SPECIALTY ITEM &/OR SPECIAL PROVISION	CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
						ROADWAY 0004	BRIDGE 0011
1		20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	155	155	
2		20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	178	178	
3		20200100	EARTH EXCAVATION	CU YD	737	737	
4		20300100	CHANNEL EXCAVATION	CU YD	455		455
5		20400800	FURNISHED EXCAVATION	CU YD	3176	3176	
6		20800150	TRENCH BACKFILL	CU YD	98	98	
7	SI	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	4846	4846	
8	SI	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	91	91	
9	SI	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	91	91	
10	SI	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	91	91	
11	SI	25100115	MULCH, METHOD 2	ACRE	1	1	
12	SI	25200100	SODDING	SQ YD	4846	4846	
13	SI	25200200	SUPPLEMENTAL WATERING	UNIT	58	58	
14	SI	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	400	400	
15	BDE, SI	28000305	TEMPORARY DITCH CHECKS	FOOT	96	96	
16	SI	28000400	PERIMETER EROSION BARRIER	FOOT	1186	1186	
17		28000500	INLET AND PIPE PROTECTION	EACH	4	4	
18		28000510	INLET FILTERS	EACH	4	4	
19		28100107	STONE RIPRAP, CLASS A4	SQ YD	115	115	
20		28100209	STONE RIPRAP, CLASS A5	TON	825		825
21		28200200	FILTER FABRIC	SQ YD	688	197	491
22		31101810	SUB-BASE GRANULAR MATERIAL, TYPE B 12"	SQ YD	2460	2460	
23		35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	131	131	
24		40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	120	120	
25	SP	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	39	39	
26		40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	932	932	
27		40600300	AGGREGATE (PRIME COAT)	TON	10	10	
28		40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	714	714	
29		40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	182	182	
30		40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	22	22	
31		42001300	PROTECTIVE COAT	SQ YD	1217	143	1074
32		42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	36	36	
33		44000100	PAVEMENT REMOVAL	SQ YD	1875	1875	
34		44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	89	89	
35		48101200	AGGREGATE SHOULDERS, TYPE B	TON	139	139	
36		48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	347	347	
37	SP	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
38		50105220	PIPE CULVERT REMOVAL	FOOT	92	92	
39		50200300	COFFERDAM EXCAVATION	CU YD	2950		2950
40	GBSP	50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1

ITEM NO.	SPECIALTY ITEM &/OR SPECIAL PROVISION	CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
						ROADWAY 0004	BRIDGE 0011
41	GBSP	50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1
42	GBSP	50201123	COFFERDAM (TYPE 2) (LOCATION - 3)	EACH	1		1
43	GBSP	50201124	COFFERDAM (TYPE 2) (LOCATION - 4)	EACH	1		1
44		50300100	FLOOR DRAINS	EACH	28		28
45		50300225	CONCRETE STRUCTURES	CU YD	688.2		688.2
46		50300255	CONCRETE SUPERSTRUCTURE	CU YD	350.2		350.2
47		50300260	BRIDGE DECK GROOVING	SQ YD	762		762
48		50300265	SEAL COAT CONCRETE	CU YD	488		488
49		50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50		50500505	STUD SHEAR CONNECTORS	EACH	4050		4050
51	BDE	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	157300		157300
52		50800515	BAR SPLICERS	EACH	90		90
53		50900105	ALUMINUM RAILING, TYPE L	FOOT	211		211
54		50901050	STEEL RAILING, TYPE SM	FOOT	219		219
55		51201400	FURNISHING STEEL PILES HP10X42	FOOT	3654		3654
56		51201600	FURNISHING STEEL PILES HP12X53	FOOT	574		574
57		51202305	DRIVING PILES	FOOT	4228		4228
58		51203400	TEST PILE STEEL HP10X42	EACH	2		2
59		51203600	TEST PILE STEEL HP12X53	EACH	2		2
60		51204650	PILE SHOES	EACH	134		134
61		51500100	NAME PLATES	EACH	1		1
62		52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12		12
63		52000110	PREFORMED JOINT STRIP SEAL	FOOT	88		88
64		52100520	ANCHOR BOLTS, 1"	EACH	48		48
65		54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1	
66		54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1	1	
67		54213693	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	EACH	2	2	
68		54215553	METAL END SECTIONS 18"	EACH	2	2	
69		542A1093	PIPE CULVERTS, CLASS A, TYPE 2, 48"	FOOT	94	94	
70		542D0223	PIPE CULVERTS, CLASS D, TYPE 1, 18"	FOOT	42	42	
71		550A0060	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	138	138	
72		550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	88	88	
73		58700300	CONCRETE SEALER	SQ FT	486		486
74		59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	315		315
75		60218500	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	1	1	
76		60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	2	2	
77		60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1	1	
78		60240215	INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	EACH	2	2	
79		60240220	INLETS, TYPE B, TYPE 3 FRAME AND GRATE	EACH	1	1	
80		60240301	INLETS, TYPE B, TYPE 8 GRATE	EACH	1	1	

SP = SPECIAL PROVISIONS / SI = SPECIALITY ITEMS / BDE = BUREAU OF DESIGN AND ENVIRONMENT / GBSP = GUIDE BRIDGE SPECIAL PROVISION

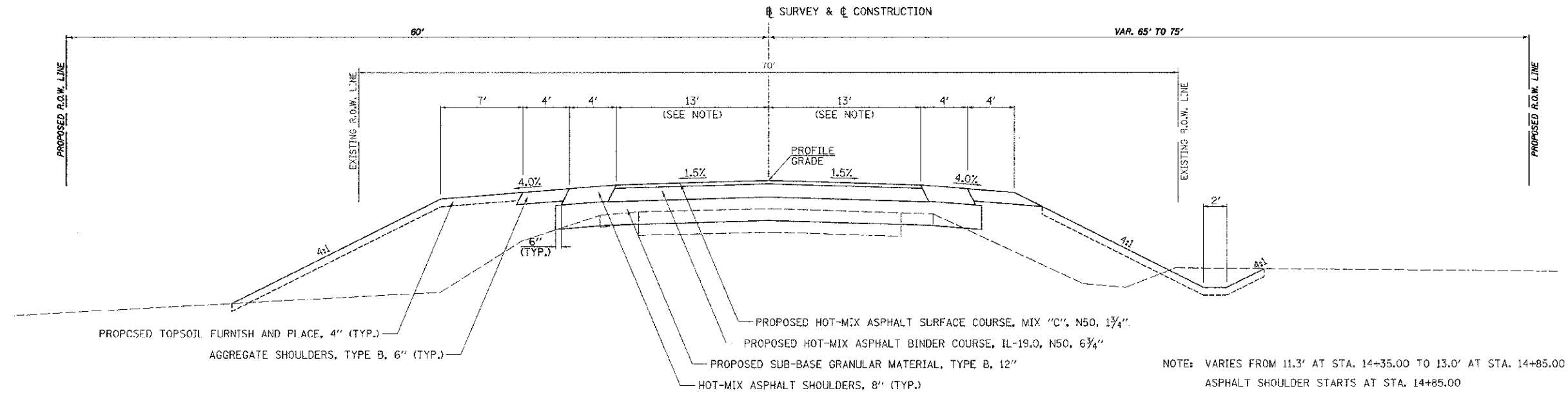
FILE NAME = \\V2595\CADD SHEETS\2595-sh1-SC0-1.dgn	USER NAME = amousta1	DESIGNED -	REVISED -	DE KALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	C.H. 26 (FIVE POINTS RD.) SUMMARY OF QUANTITIES	RTE. NO. CH 26	SECTION 05-00044-01-BR	COUNTY DE KALB	TOTAL SHEETS 49	SHEET NO. 3	
	PLOT SCALE = 1:2000' / 1"	CHECKED -	REVISED -			SCALE: N/A	SHEET NO. 1 OF 2 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87477	
	PLOT DATE = 3/28/2013	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



EXISTING TYPICAL SECTION
C.H. 26 (FIVE POINTS RD.)

STA. 14+00 TO STA. 27+50

FILE NAME =	USER NAME = smounts	DESIGNED -	REVISED -	DEKALB COUNTY COUNTY HIGHWAY 26 OVER SOUTH BRANCH OF THE KISHWAUKEE RIVER	C.H. 26 (FIVE POINTS RD.) TYPICAL SECTIONS	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
V:\2555\ADD SHEETS\2555-ahc-typic01-1.dgn	DRAWN -	REVISED -	CH 26			05-00044-01-BR	DE KALB	49	5	
PLOT SCALE = 5.0000' = 1" IN.	CHECKED -	REVISED -	CONTRACT NO. 87477							
PLOT DATE = 3/26/2013	DATE -	REVISED -	SCALE: N/A			SHEET NO. 1 OF 2 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		



C.H. 26 (FIVE POINTS RD.) STRUCTURAL PAVEMENT DESIGN

STRUCTURAL DESIGN TRAFFIC (S.D.T.) YEAR 2020
 PY = 2046 SU = 163 MU = 116
 CLASS II ROAD
 SUBGRADE SUPPORT RATING: POOR
 PERCENT OF S.D.T. IN DESIGN LANE: 50%
 TRAFFIC FACTOR = 0.63
 PAVEMENT STRUCTURE MATERIALS: RECONSTRUCTION
 SURFACE COURSE TYPE: HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1 3/4"
 BASE COURSE TYPE: HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 6 3/4"
 SUB-BASE TYPE: SUB-BASE GRANULAR MATERIAL, TYPE B, 12"

PROPOSED TYPICAL SECTION

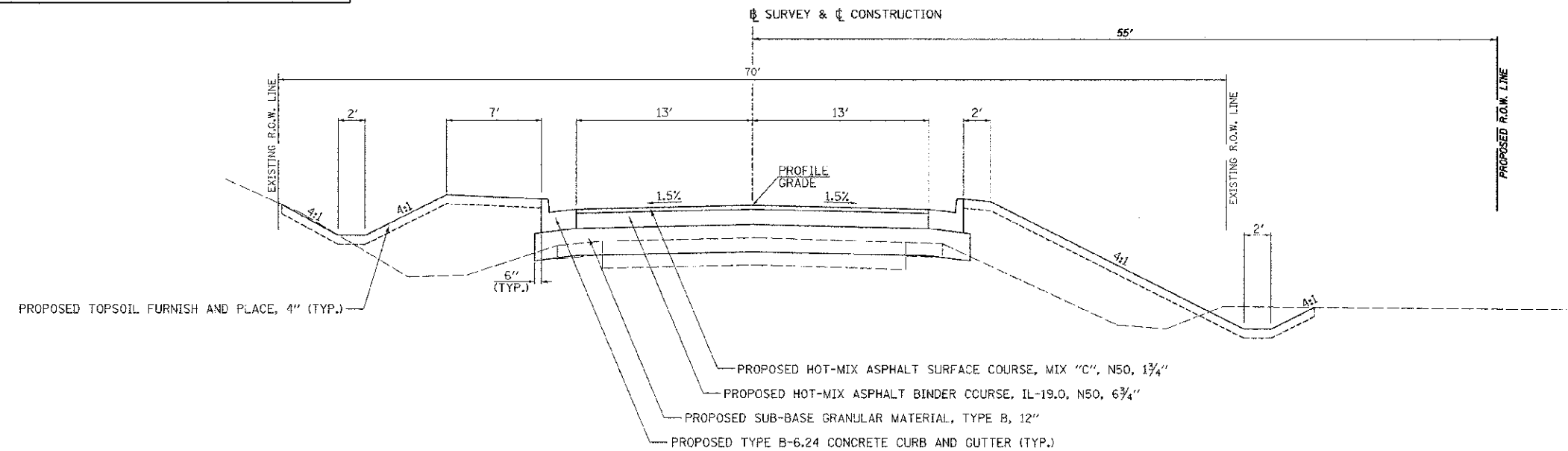
C.H. 26 (FIVE POINTS RD.)

STA. 14+35.00 TO STA. 18+69.47

BRIDGE OMISSION
 STA. 18+69.47 TO STA. 18+75.47 BRIDGE APPROACH PAVEMENT CONNECTOR
 STA. 18+75.47 TO STA. 19+05.47 BRIDGE APPROACH PAVEMENT
 STA. 19+05.47 TO STA. 20+94.25 BRIDGE
 STA. 20+94.25 TO STA. 21+24.25 BRIDGE APPROACH PAVEMENT
 STA. 21+24.25 TO STA. 21+30.25 BRIDGE APPROACH PAVEMENT CONNECTOR

MIXTURES TABLE

	HMA SURFACE C.H. 26 (FIVE POINTS RD.)	HMA BINDER C.H. 26 (FIVE POINTS RD.)	HMA SHOULDER C.H. 26 (FIVE POINTS RD.)
PG GRADE	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION	IL 9.5	IL 19.0	IL 19.0
FRICITION AGGREGATE	MIXTURE C		
DENSITY TEST METHOD	CORES	CORES	CORES



PROPOSED TYPICAL SECTION

C.H. 26 (FIVE POINTS RD.)

STA. 21+30.25 TO STA. 23+39.00

FILE NAME =	USER NAME = smountal	DESIGNED -	REVISED -	DE KALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	C.H. 26 (FIVE POINTS RD.) TYPICAL SECTIONS	RT. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\2585\CADD SHEETS\2356-ant-typic01-2.dgn	DRAWN -	REVISED -	CH 26			05-00044-01-BR	DE KALB	49	6	
PLOT SCALE = 5.0000' / 1" =	CHECKED -	REVISED -	CONTRACT NO. 87477							
PLOT DATE = 3/26/2013	DATE -	REVISED -	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT							

TOPSOIL, SODDING, SUPPLEMENTAL WATERING & NUTRIENTS										
STATION +/-	TO	STATION +/-	SIDE	SODDING, IN ACRES, IS FOR INFORMATION ONLY	TOPSOIL FURNISH AND PLACE 4"	SODDING	SUPPLEMENTAL WATERING	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
					SQ YD	SQ YD	UNIT	POUND	POUND	POUND
14+35.0	TO	23+39.0	LT	0.4	1904	1904	23	35.4	35.4	35.4
14+35.0	TO	23+39.0	RT	0.6	2942	2942	35	54.7	54.7	54.7
TOTAL					4846	4846	58	91	91	91

NOTE: FERTILIZER NUTRIENT IS FIGURED AT THE RATE OF APPLICATION OF 90 POUNDS/ACRE.

PERIMETER EROSION BARRIER				
STATION	TO	STATION	SIDE	LENGTH FOOT
14+35	TO	14+83	LT	70
14+35	TO	15+48	RT	127
15+07	TO	18+64	LT	384
15+72	TO	19+12	RT	373
21+42	TO	23+40	RT	232
TOTAL 1186				

PERIMETER EROSION BARRIER IS SILT FENCE.

INLET AND PIPE PROTECTION			
STATION	OFFSET	SIDE	EACH
14+91.3	41.7'	RT	1
15+38.3	43.6'	RT	1
21+25.0	30.0'	LT	1
22+25.0	31.8'	RT	1
TOTAL 4			

TREE REMOVAL			
LOCATION	6 TO 15 UNITS DIAMETER	OVER 15 UNITS DIAMETER	
STATION	OFFSET		
15+96.80	40.4 RT		18
15+96.80	40.4 RT	15	
16+72.83	50.1 RT	8	
16+94.69	48.9 RT		16
17+32.86	46.0 RT	10	
17+36.13	49.4 RT		18
17+37.78	45.9 RT	15	
17+51.91	45.0 RT	6	
17+59.88	41.3 RT		24
17+59.88	41.3 RT		24
17+60.83	52.2 RT	15	
17+63.90	48.7 RT	12	
17+72.45	46.3 RT	12	
17+73.95	48.9 RT		18
18+04.10	36.9 RT		20
18+04.10	36.9 RT		20
18+04.10	36.9 RT		20
18+32.18	54.9 RT	12	
18+35.37	46.1 RT	10	
18+63.59	49.4 RT	8	
18+79.30	56.2 RT	12	
18+87.53	51.6 RT	10	
19+34.13	44.7 RT	10	
TOTAL			178

EARTHWORK						
1	3	4	5	6		
STATION	TO	STATION	EARTH EXCAVATION	EARTH EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE(+) OR SHORTAGE(-)
CU YD						
14+35.0	TO	19+25.0	641.0	480.8	3216.0	-2735.3
21+25.0	TO	23+39.0	96.0	72.0	513.0	-441.0
TOTAL			737	553	3729	-3176

*SEE SPECIAL PROVISIONS.
SHRINKAGE FACTORS: 25%
EARTH EXCAVATION:
COLUMN 1, 3, & 5 - LOCATION AND QUANTITIES FROM CROSS SECTIONS.
CUT = EARTH EXCAVATION, FILL = EMBANKMENT
COLUMN 4 = (COLUMN 3) x (EARTH EXCAVATION SHRINKAGE FACTOR)
COLUMN 6 = COLUMN 4 - COLUMN 5

PAY ITEMS:
COLUMN # 3 EARTH EXCAVATION = 737 CU YD
COLUMN # 6 FURNISHED 3176 CU YD

TEMPORARY DITCH CHECKS (ROLLED EXCELSIOR)		
STATION	SIDE	LENGTH FOOT
17+30	RT	24
18+80	RT	24
22+30	RT	24
22+80	RT	24
TOTAL 96		

INLET FILTERS			
STATION	OFFSET	SIDE	EACH
22+50.0	15.0'	RT	1
22+50.0	15.0'	LT	1
22+66.5	15.0'	RT	1
22+66.5	15.0'	LT	1
TOTAL 4			

RIPRAP			
STATION	SIDE	STONE RIPRAP, CLASS A4	FILTER FABRIC
SQ YD			
15+30.7	LT	33	58
20+57.5	LT	33	58
21+18.5	RT	49	81
TOTAL		115	197

FURNISHING AND ERECTING RIGHT OF WAY MARKERS			
STATION	SIDE	OFFSET	EACH
14+42.75	LT	40.0'	1
14+42.75	LT	60.0'	1
14+25.00	RT	40.0'	1
14+25.00	RT	65.0'	1
18+00.00	RT	65.0'	1
18+00.00	RT	75.0'	1
21+15.00	LT	35.0'	1
21+15.00	LT	60.0'	1
21+25.00	RT	55.0'	1
21+25.00	RT	75.0'	1
23+40.00	RT	35.0'	1
23+40.00	RT	55.0'	1
TOTAL			12

TEMPORARY EROSION CONTROL SEEDING								
STATION +/-	TO	STATION +/-	SIDE	SEEDING CLASS 7 ACRES	POUNDS PER APPLICATION PER ACRE	NUMBER OF APPLICATIONS	TOTAL POUND	MULCH, METHOD 2 ACRE
14+35.0	TO	23+39.0	LT	0.4	100.0	4	160	0.4
14+35.0	TO	23+39.0	RT	0.6	100.0	4	240	0.6
TOTAL							400	1.0

NOTE: MULCH METHOD 2 IS USED FOR TEMPORARY MULCHING, ONLY ONE APPLICATION OF MULCHING HAS BEEN INCLUDED.

AGGREGATE FOR TEMPORARY ACCESS						
LOCATION	LENGTH	WIDTH	THICKNESS	TON		
STATION	SIDE	TYPE	FOOT			
15+59.80	RT	PE	54	19	0.5	39
TOTAL 39						

ENTRANCE						
STATION	SIDE	TYPE	AGGREGATE BASE COURSE, TYPE B, 8"	AGGREGATE SURFACE COURSE, TYPE B	INCIDENTAL HOT-MIX ASPHALT SURFACING	BITUMINOUS MATERIALS (PRIME COAT) 0.375 G/SY
			SQ YD	TON		GALLON
14+83.7	LT	FE		120		
15+59.8	RT	CE	131		22	49
TOTAL			131	120	22	49

PAVEMENT									
STATION	TO	STATION	BITUMINOUS MATERIAL (PRIME COAT) 0.375 GAL/SQ YD	AGGREGATE (PRIME COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	SUB-BASE GRANULAR MATERIAL, TYPE B, 12"	HOT-MIX ASPHALT SHOULDER, 8"	AGGREGATE SHOULDERS, TYPE B
			GALLON	TON	TON	TON	SQ YD	SQ YD	TON
14+35.00	TO	18+69.47	657	7	486	123	1714	347	139
21+30.25	TO	23+39.00	226	3	228	59	746		
TOTAL			883	10	714	182	2460	347	139

COMBINATION CONCRETE CURB AND GUTTER					
STATION	TO	STATION	SIDE	TYPE B-6.24	PROTECTIVE COAT
				FOOT	SQ YD
21+14.00	TO	23+39.00	LT	225	75.0
21+34.40	TO	23+39.00	RT	205	68.0
TOTAL				430	143

PIPE CULVERTS						
STATION	SIDE	PIPE CULVERTS, CLASS A, TYPE 2, 48"	PIPE CULVERTS, CLASS D, TYPE 1, 18"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	METAL END SECTIONS 18"	TRENCH BACKFILL
		FOOT	FOOT	EACH	EACH	CU YD
15+11.05	X-RD	94		2		51
15+59.80	RT		42		2	7
TOTAL		94	42	2	2	58

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)			
STATION	TO	STATION	AREA SQ YD
18+69.47	TO	18+75.47	18
21+24.25	TO	21+30.25	18
TOTAL			36

STORM SEWER, INLETS & MANHOLES, END SECTIONS												
STATION TO STATION (STATION)	SIDE	STORM SEWERS, CLASS A, TYPE 1	STORM SEWERS, CLASS A, TYPE 1	INLETS, TYPE A, TYPE 3 F&G	INLETS, TYPE A, TYPE 8 GRATE	INLETS, TYPE B, TYPE 1 FR CL	INLETS, TYPE B, TYPE 3 F&G	INLETS, TYPE B, TYPE 8 GRATE	MANHOLES, TYPE A, 4'-DIA, TYPE 3 F&G	PRECAST REINF. CONC. FLRD. END SECTION 12"	PRECAST REINF. CONC. FLRD. END SECTION 15"	TRENCH BACKFILL
		12" FOOT	15" FOOT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CU YD
20+71.00	LT									1		
20+71.00 TO 20+89.60	LT	18										
20+89.60	LT					1						
20+89.60 TO 21+25.00	LT	36										
21+25.00	LT				1							
21+38.00	RT										1	
21+38.00 TO 21+46.00	RT		10									
21+46.00	RT					1						
21+46.00 TO 22+25.00	RT		78									
22+25.00	RT							1				
22+25.00 TO 22+50.00	RT	28										
22+50.00	RT								1			1
22+50.00 TO 22+66.50	RT	14										
22+66.50	RT			1								
22+50.00	X-RD	28										4
22+50.00	LT								1			
22+50.00 TO 22+66.50	LT	14										1
22+66.50	LT			1								
TOTAL		138	88	2	1	2	1	1	1	1	1	6

PAVEMENT REMOVAL			
STATION	TO	STATION	SQ YD
14+35	TO	19+21	1219
20+79	TO	23+39	656
TOTAL			1875

NOTE: REMOVAL OF THE SUB-BASE IS INCLUDED IN THE COST OF THE PAVEMENT REMOVAL.

DRIVEWAY PAVEMENT REMOVAL		
STATION	SIDE	HOT-MIX ASPHALT SQ YD
15+59.8	RT	89
TOTAL		89

STEEL PLATE BEAM GUARD RAIL						
STATION +/- TO STATION +/-	SIDE	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 2	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 6A	TERMINAL MARKER DIRECT APPLIED
		EACH	EACH	EACH	EACH	EACH
18+07.2 TO 19+01.0	RT	1			1	1
20+95.3 TO 21+89.0	LT	1		1		1
21+19.8 TO 21+76.2	RT		1		1	1
TOTAL		2	1	1	2	3

GUARDRAIL REMOVAL		
QUADRANT	SIDE	GUARDRAIL REMOVAL FOOT
SOUTHWEST	LT	102
SOUTHEAST	RT	102
NORTHWEST	LT	102
NORTHEAST	RT	102
TOTAL		408

PIPE CULVERT REMOVAL				
STATION +/-	OFFSET	TYPE	LENGTH	TRENCH BACKFILL
			FOOT	CU YD
14+89.0	X-RD	36" CMP	47	34
20+99.0	25.0' LT	15" CMP	45	
TOTAL			92	34

EPOXY PAVEMENT MARKING					
STATION	TO	STATION	LINES		
			4" WHITE SOLID	4" YELLOW SOLID	4" YELLOW SKIP DASH
14+35.0	TO	18+50.0		415	
14+35.0	TO	23+39.0	1808		226
TOTAL				2449	

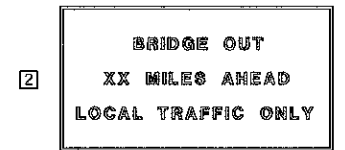
DUST CONTROL WATERING							
STATION	TO	STATION	SIDE	WIDTH FOOT	AREA ACRE	GALLONS*	UNIT
14+65.00	TO	23+39.00	LT	VARIES	0.4	3872	4
14+65.00	TO	23+39.00	RT	VARIES	0.6	5808	6
TOTAL						10	

*ASSUMED RATE OF 1 GALLON PER SQUARE YARD & 2 APPLICATIONS.

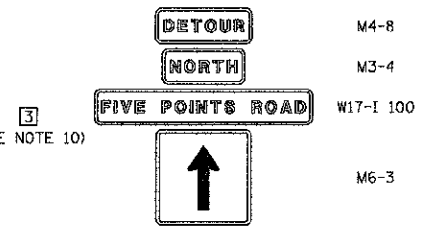
UNDERGROUND CONDUIT		
STATION	SIDE	PVC, 4" FOOT
18+50	X-RD	46
21+50	X-RD	36
TOTAL		82



R11-3A (MODIFIED) WITH AMBER FLASHING LIGHTS.
M4-10
M4-10



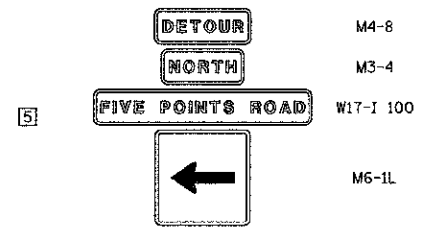
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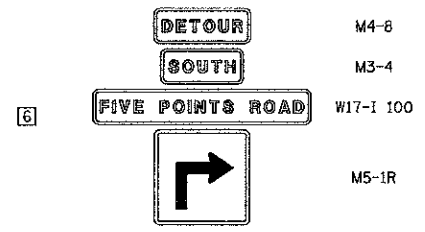
M4-8
M3-4
W17-I 100
M6-3



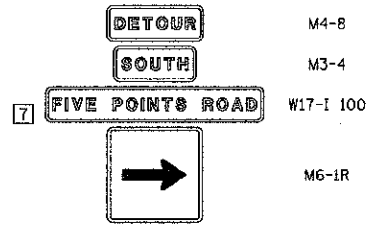
M4-8
M3-4
W17-I 100
M5-1L



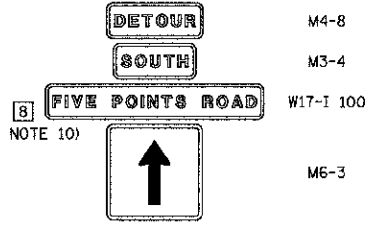
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M3-4
W17-I 100
M6-1L



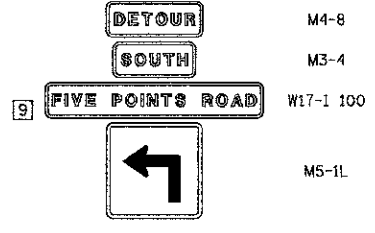
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M3-4
W17-I 100
M5-1R



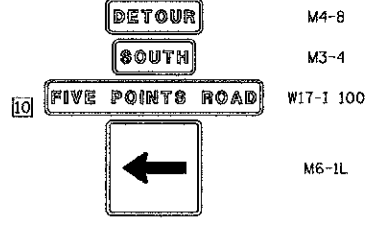
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M3-4
W17-I 100
M6-1R



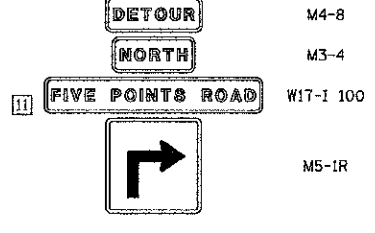
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W17-I 100
M6-3



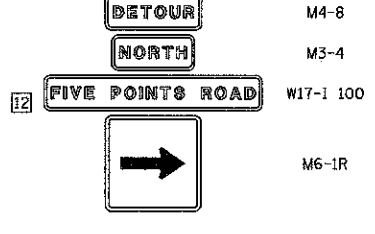
M4-8
M3-4
W17-I 100
M5-1L



M4-8
M3-4
W17-I 100
M6-1L



M4-8
M3-4
W17-I 100
M5-1R



M4-8
M3-4
W17-I 100
M6-1R



M4-8a
W17-I 100



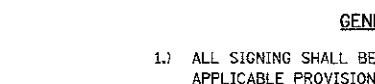
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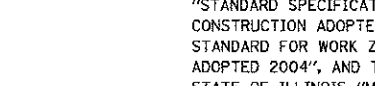
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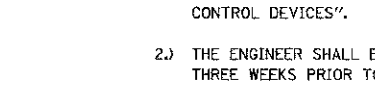
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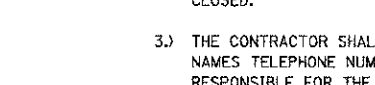
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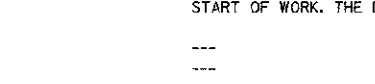
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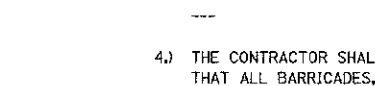
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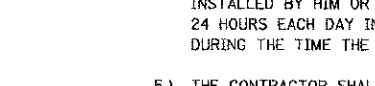
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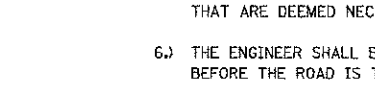
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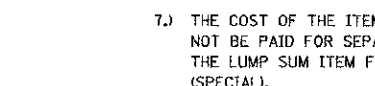
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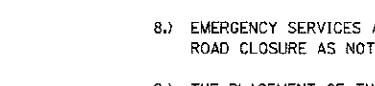
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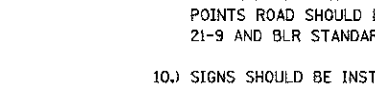
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W20-3



W20-3



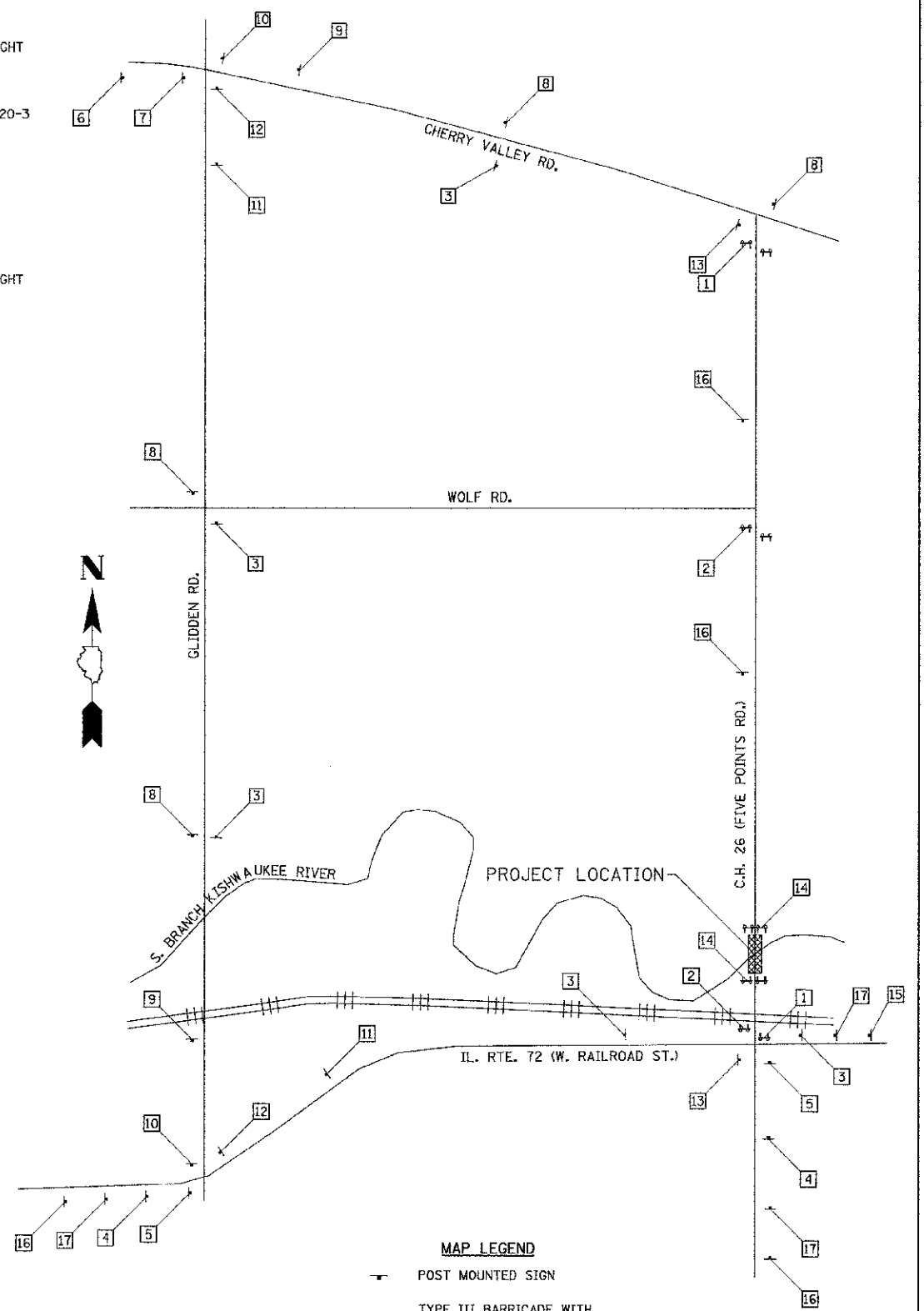
W20-3



W20-3

GENERAL NOTES

- ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JAN. 1, 2012", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2004", AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
- THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE ROAD IS TO BE CLOSED.
- THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES TELEPHONE NUMBERS OF HIS OR HER REPRESENTATIVES RESPONSIBLE FOR THE ROAD CLOSURE PRIOR TO THE START OF WORK. THE DE KALB COUNTY REPRESENTATIVE IS:
 -
 -
 -
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHER DEVICES INSTALLED BY HIM OR HER ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE CLOSURE IS IN EFFECT.
- THE CONTRACTOR SHALL MAKE ALL CHANGES IN SIGNING THAT ARE DEEMED NECESSARY BY THE ENGINEER.
- THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC.
- THE COST OF THE ITEMS ASSOCIATED WITH THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE LUMP SUM ITEM FOR TRAFFIC CONTROL & PROTECTION (SPECIAL).
- EMERGENCY SERVICES ARE TO BE NOTIFIED A WEEK BEFORE ROAD CLOSURE AS NOTED IN THE SPECIAL PROVISIONS.
- THE PLACEMENT OF THE ROAD CLOSURE SIGNAGE ON FIVE POINTS ROAD SHOULD BE IN ACCORDANCE WITH BLR STANDARD 21-9 AND BLR STANDARD 22-7.
- SIGNS SHOULD BE INSTALLED WITHIN 1000 FEET AFTER A DETOUR ROUTE TURN POINT.



MAP LEGEND

- POST MOUNTED SIGN
- †† TYPE III BARRICADE WITH FLASHING LIGHTS (2 EA.)
- XXXX ROAD CLOSURE LOCATION

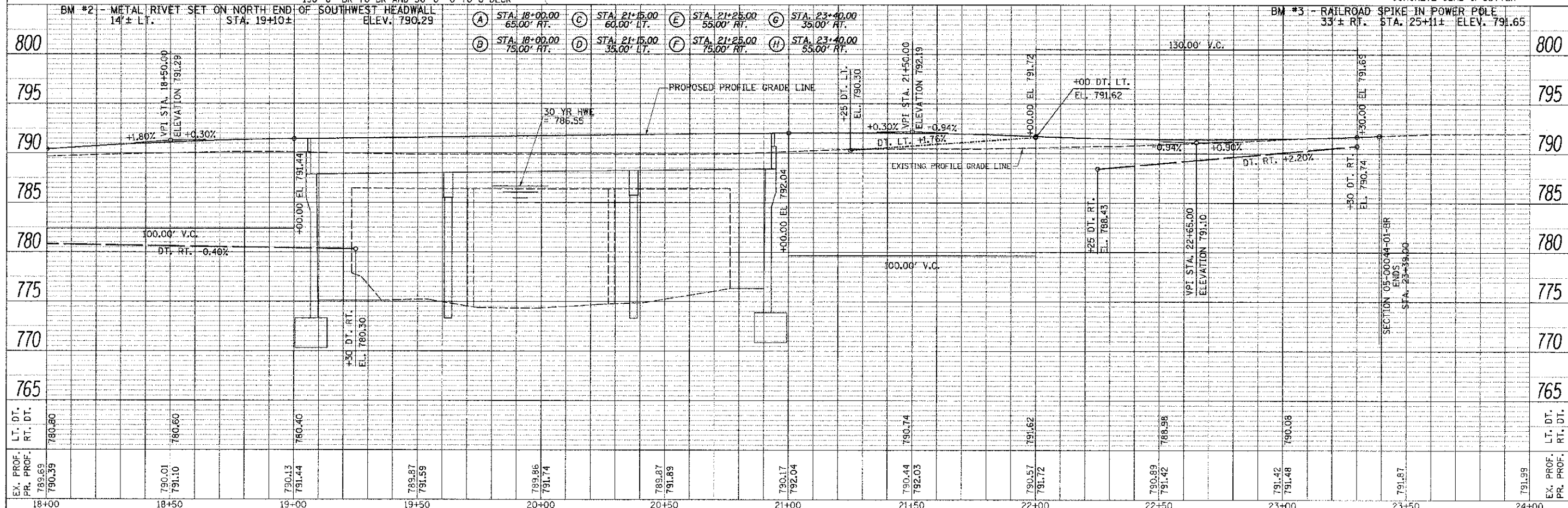
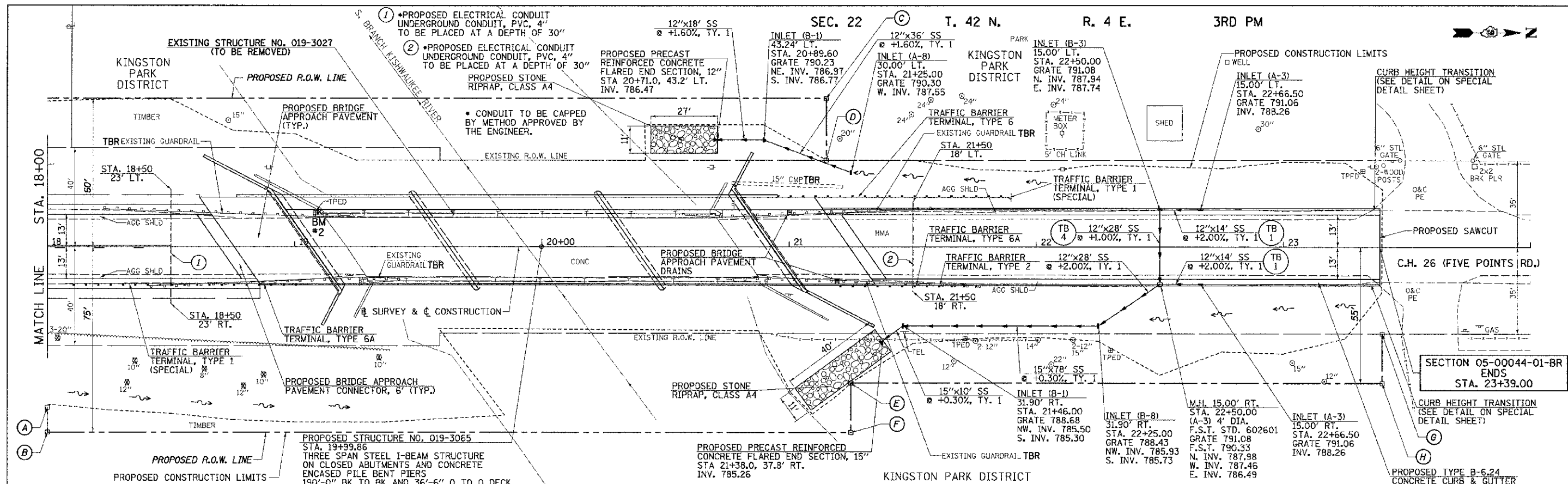
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PLOT SCALE = 5/8" = 1'	CHECKED -	DRAWN -	REVISED -
PLOT DATE = 3/26/2013	DATE -	DATE -	REVISED -

DE KALB COUNTY
C.H. 26 (FIVE POINTS RD.)
OVER SOUTH BRANCH OF KISHWAUKEE RIVER

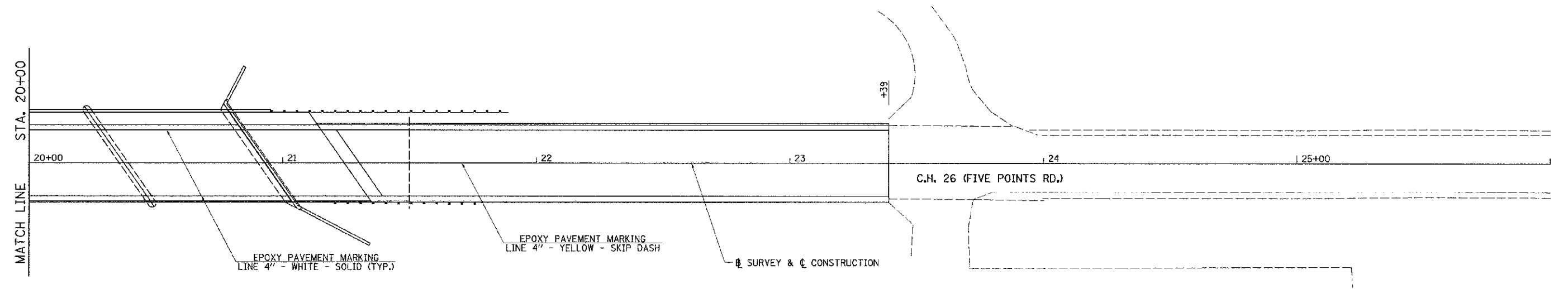
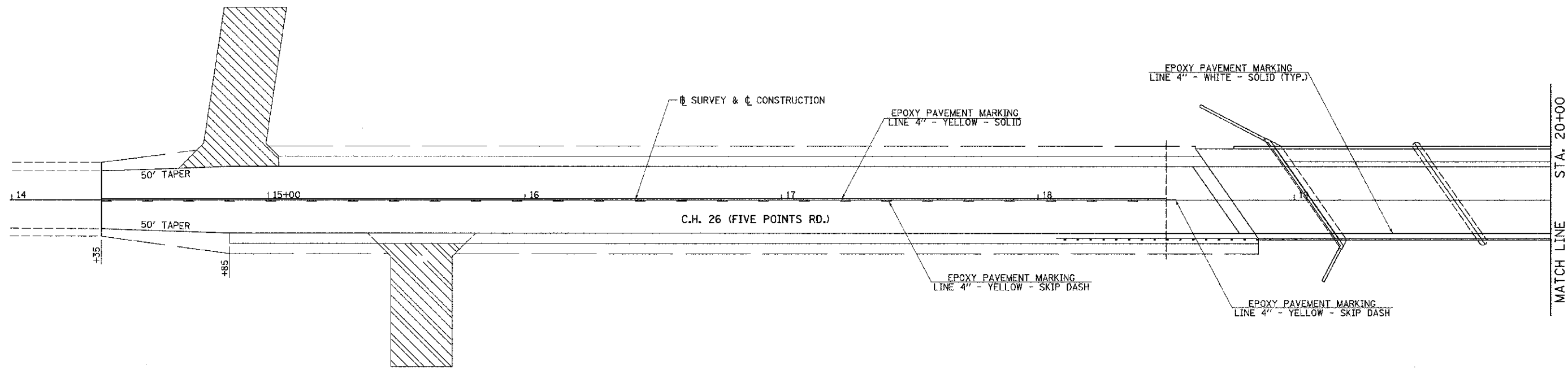
C.H. 26 (FIVE POINTS RD.) DETOUR PLAN

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-0044-01-BR	DE KALB	19	9
CONTRACT NO. 87477				
ILLINOIS FED. AID PROJECT				



EX. PROF. PR. PROF.	789.69 790.39	790.01 791.10	790.13 791.44	789.87 791.59	789.86 791.74	789.87 791.89	790.17 792.04	790.44 792.03	790.57 791.72	790.89 791.42	791.42 790.08	791.87	791.99
STA.	18+00	18+50	19+00	19+50	20+00	20+50	21+00	21+50	22+00	22+50	23+00	23+50	24+00



FILE NAME =
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PLOT SCALE = 20.000' / 1" =
PLOT DATE = 3/26/2013

DESIGNED -
DRAWN -
CHECKED -
DATE -

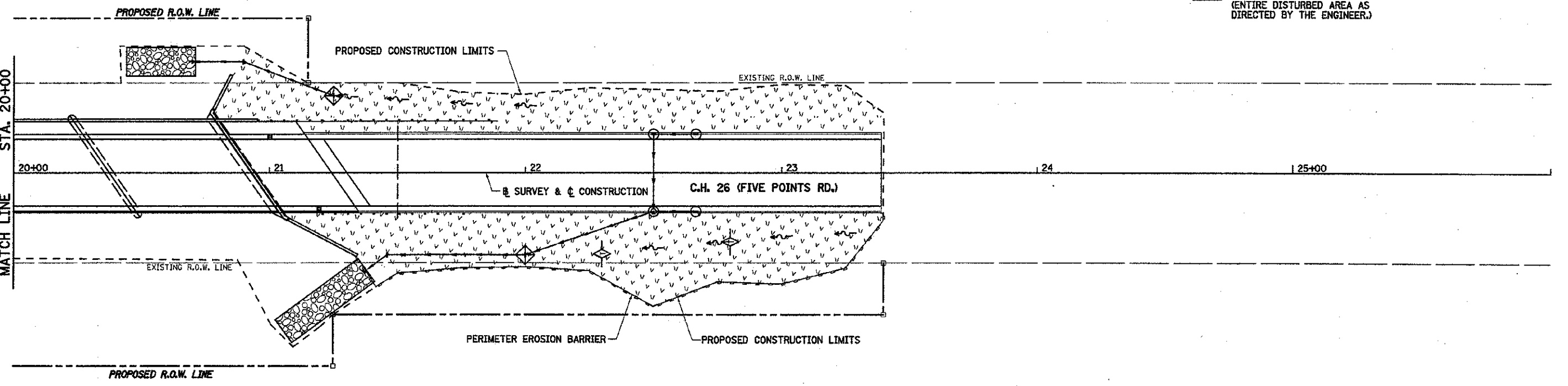
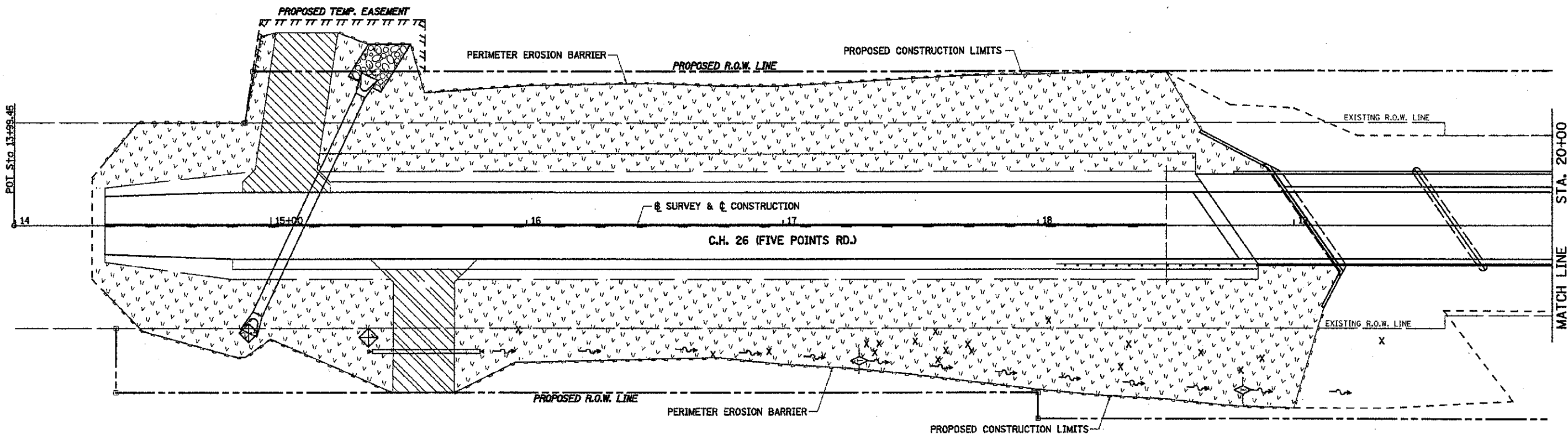
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REVISED -

**DE KALB COUNTY
C.H. 26 (FIVE POINTS RD.)
OVER SOUTH BRANCH OF KISHWAUKEE RIVER**






**C.H. 26 (FIVE POINTS RD.)
PAVEMENT MARKING PLAN**
SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. 13+99.45 TO STA. 26+00

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-00044-01-BR	DE KALB	49	12

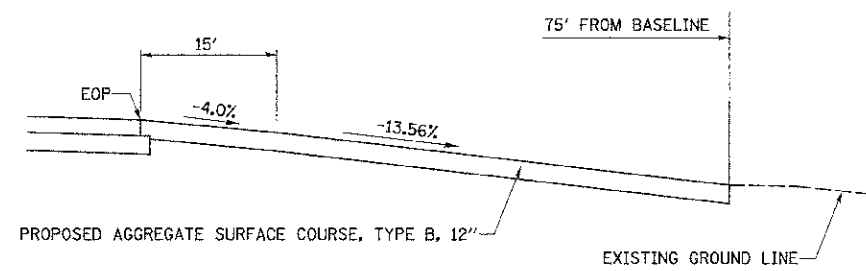
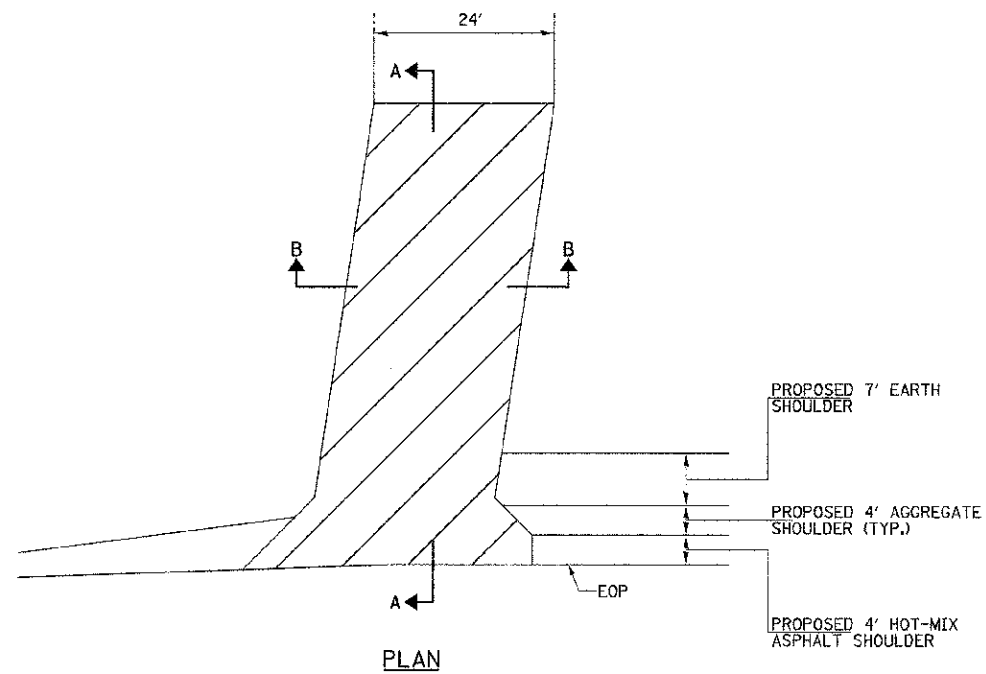
CONTRACT NO. 87477
ILLINOIS FED. AID PROJECT



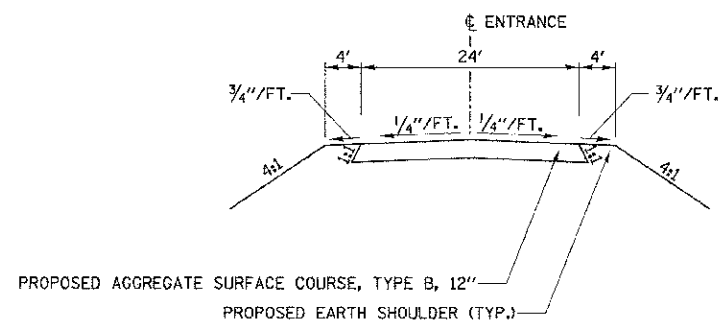
TEMPORARY EROSION CONTROL LEGEND

-  INLET AND PIPE PROTECTION
-  FILTER FABRIC - INLET PROTECTION
-  TEMPORARY DITCH CHECKS
-  PERIMETER EROSION BARRIER
-  TEMPORARY EROSION CONTROL SEEDING (ENTIRE DISTURBED AREA AS DIRECTED BY THE ENGINEER.)

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	DE KALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	C.H. 26 (FIVE POINTS RD.) EROSION CONTROL PLAN	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			CH 26	05-00044-01-BR	DE KALB	49	13	
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	PLOT DATE = #DATE#	DATE -	REVISED -			CONTRACT NO. 87477 ILLINOIS FED. AID PROJECT					

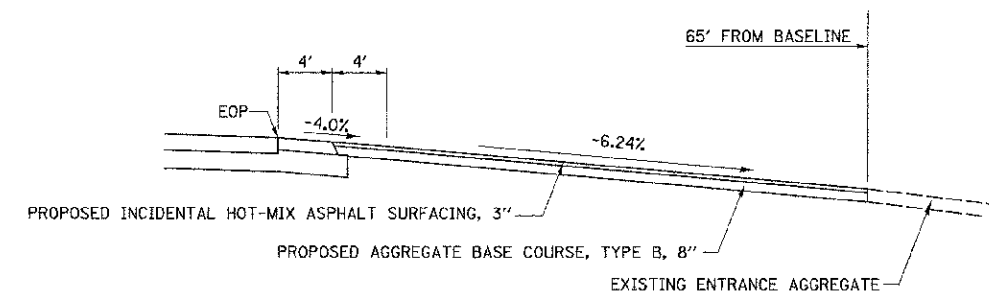
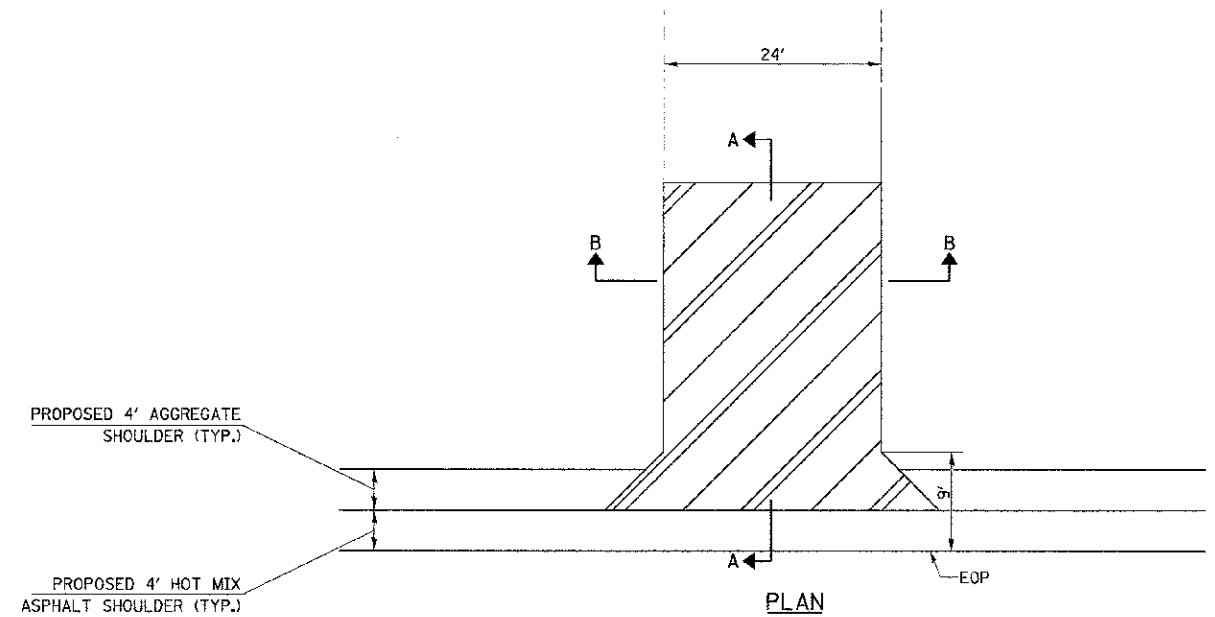


SECTION A-A

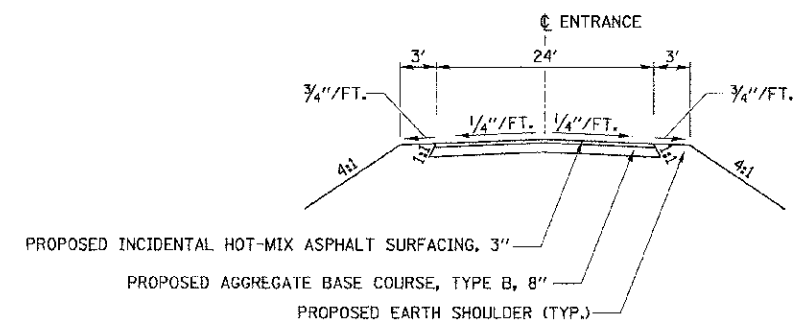


SECTION B-B

FIELD ENTRANCE (FE) DETAILS
STA. 14+83.67, RT.



SECTION A-A



SECTION B-B

PRIVATE ENTRANCE (PE) DETAILS
STA. 15+59.8, RT.

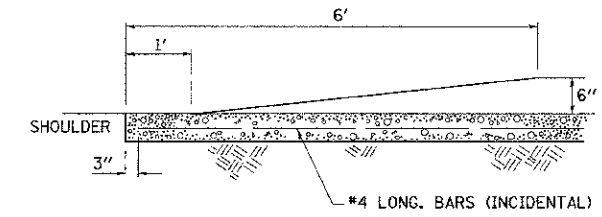
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		CHECKED -	REVISED -
		DATE -	REVISED -

DE KALB COUNTY
C.H. 26 (FIVE POINTS RD.)
OVER SOUTH BRANCH OF KISHWAUKEE RIVER

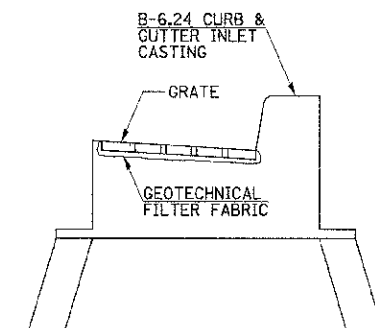
C.H. 26 (FIVE POINTS RD.)
ENTRANCE & SPECIAL DETAILS

SCALE: N/A SHEET NO. 1 OF 2 SHEETS STA. TO STA.

RT. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-00044-01-BR	DE KALB	19	14
FED. ROAD DIST. NO. 7 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 87477	



CURB HEIGHT TRANSITION DETAIL



FILTER FABRIC-INLET PROTECTION DETAIL

FILE NAME =	USER NAME = amunts1	DESIGNED -	REVISED -
VA\2555\CADD SHEETS\2555-sh1-detaila-2.dgn		DRAWN -	REVISED -
	PLOT SCALE = 5.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2013	DATE -	REVISED -

**DE KALB COUNTY
C.H. 26 (FIVE POINTS RD.)
OVER SOUTH BRANCH OF KISHWAUKEE RIVER**

**C.H. 26 (FIVE POINTS RD.)
ENTRANCE & SPECIAL DETAILS**

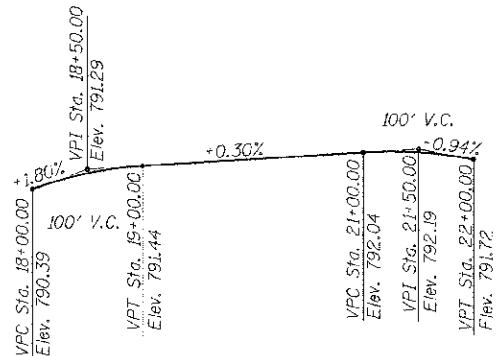
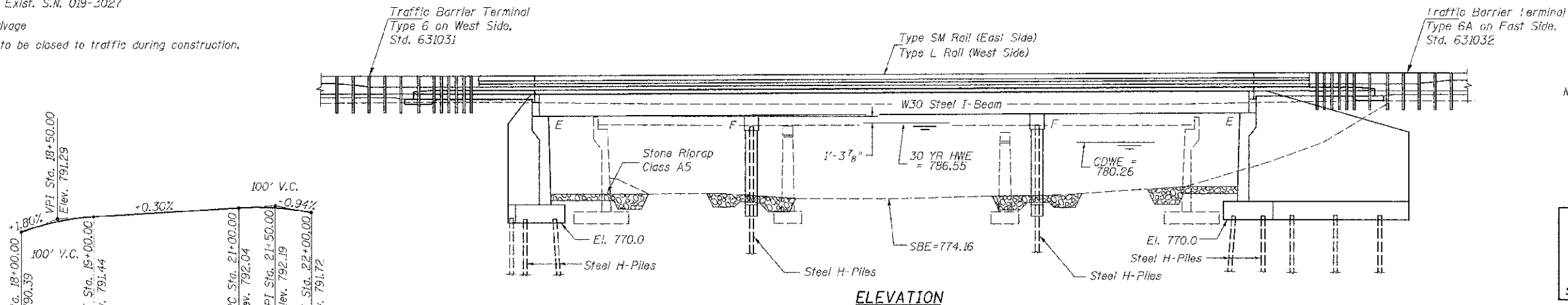
SCALE: N/A SHEET NO. 2 OF 2 SHEETS STA. _____ TO STA. _____

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-00044-01-BR	DE KALB	49	15
CONTRACT NO. 87477				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

B.M. #1: Railroad Spike in Power Pole, Station 11+60.30' Lt. Elev. 790.48
 B.M. #2: Railroad Spike in Power Pole, Sta 25+11.33' Lt Elev. 791.65

Existing Structure:
 Three span steel I-Beam with reinforced concrete deck and steel bridge rail on curb superstructure with concrete closed abutments on timber pile supported footings and concrete wall piers on timber pile supported footings. Constructed in 1952. Structure is 159'-0" Dk. to Bk. of Abutments & 27'-8" O. to O. with 24'-0" pavement, skewed 35° Rt. Ah. Exist. S.N. 019-3027

No Salvage
 Road to be closed to traffic during construction.



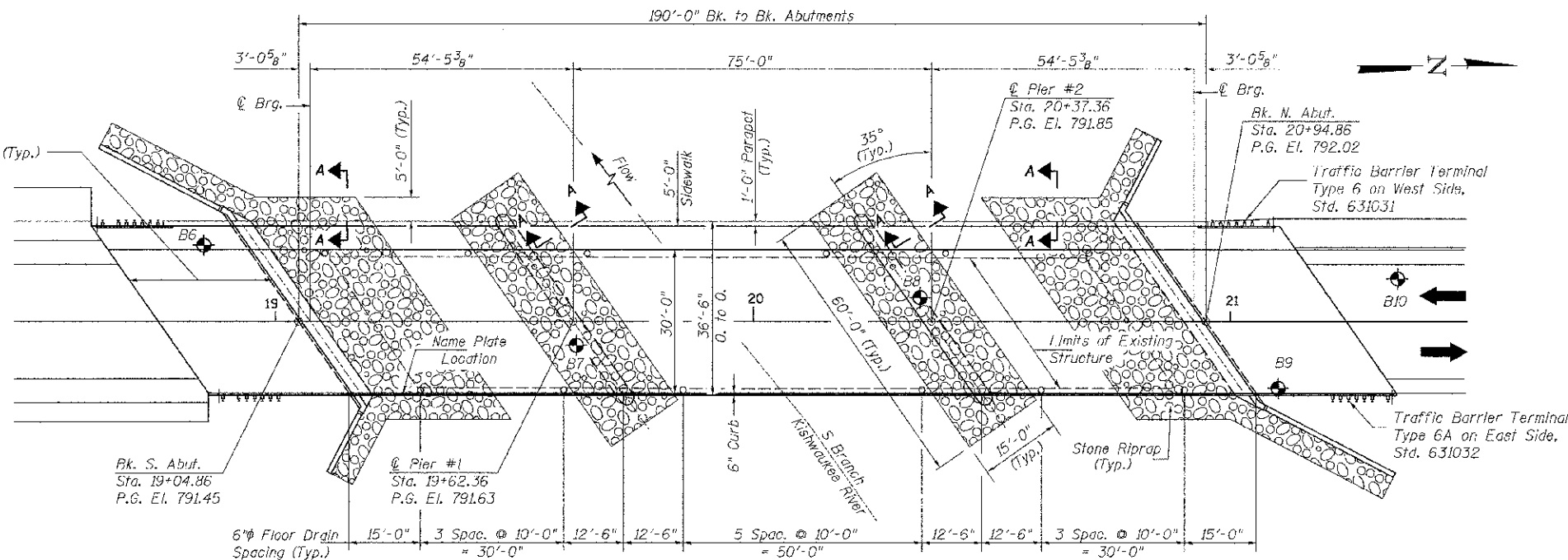
PROPOSED PROFILE GRADE
 COUNTY HIGHWAY 26

Note: For Index of Sheets, Bill of Material and General Notes, See Sheet 2 of 28.

S. BRANCH KISHWAUKEE RIVER
 BUILT 20__ BY
 DEKALB COUNTY
 SEC. 05-00044-01-BR
 C.H. 26 STATION 19+99.86
 F.A. PROJ.
 STR. NO. 019-3065 LOADING HL-93

NAME PLATE

Locate Name Plate on S.E. Wingwall of Bridge (See Std. 51500)



PLAN

DESIGN STRESSES

(Field Units)
 f'c = 5,000 p.s.i. (Superstructure)
 f'c = 3,500 p.s.i. (Substructure)
 fy = 60,000 p.s.i. (Reinforcement)
 fy = 50,000 p.s.i. (Structural Steel)
 (AASHTO M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S₀₁) = 0.06g
 Design Spectral Acceleration at 0.2 sec. (S₀₅) = 0.12g
 Soil Site Class = C

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Design Specifications
 4th Edition with Interims

LOADING HL-93

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

OVER-THE-ROAD AREA

Freq. Yr.	Existing	Proposed
30	0	0
100	15	4

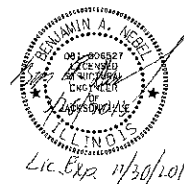
Construction of this project complies with IDNR, Office of Water Resources Statewide Permit #2.

DESIGN SCOUR TABLE

Location	S. Abut	Pier 1	Pier 2	N. Abut
Design Scour Elevation	770.0	768.2	768.2	770.0

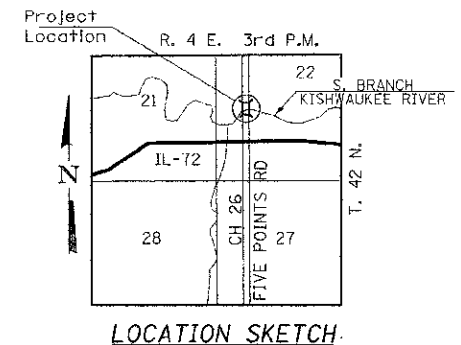
WATERWAY INFORMATION

Drainage Area = 279.4 Sq. Mi.		Low Grade Elev. = 788.09 @ Sta. 15+84.45						
Flood	Freq. Yr.	Q	Opening Sq. Ft.		Nat. h.W.E.	Head Ft.	Leadwater El.	
		C.F.S.	Exist.	Prop.			Exist.	
Design	30	7,978	1,374	1,645	786.55	0.90	0.23	787.45
Base	100	10,105	1,374	1,884	788.18	0.90	0.31	789.08



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of Highway Bridges.

Benjamin A. Webb
 Illinois Structural No. 6527
 Expires 11/30/2014

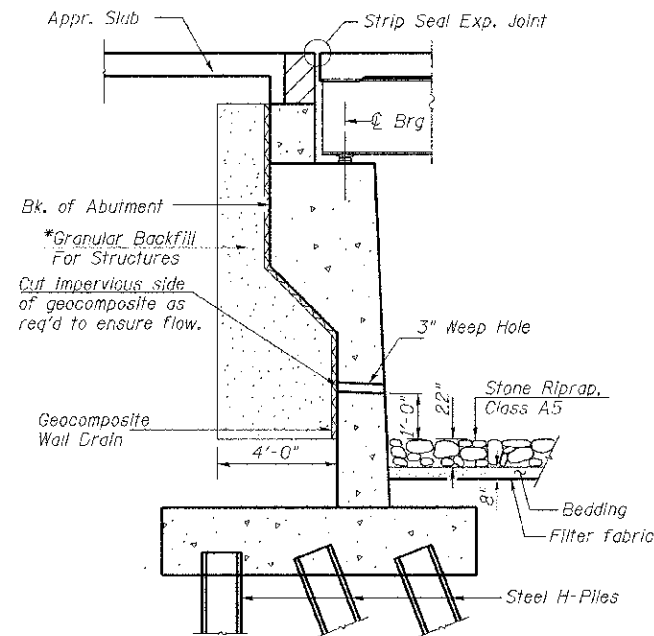


LOCATION SKETCH

GENERAL PLAN & ELEVATION
 C.H. 26 OVER S. BRANCH
 KISHWAUKEE RIVER
 SECTION 05-00044-01-BR
 DEKALB COUNTY
 STATION 19+99.86
 STR. NO. 019-3065

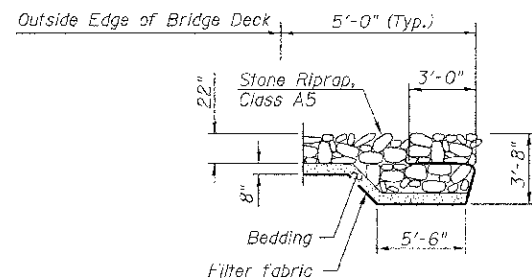
FILE NAME	USER NAME	DESIGNED	REVISED	DEKALB COUNTY	GENERAL PLAN & ELEVATION	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
V:\Bridges\2565-DeKalb\Structure\2565b00.dgn	bnebel	TAC	-	DEKALB COUNTY	GENERAL PLAN & ELEVATION	CH 26	05-00044-01-BR	DEKALB	49	16
		CTM	-	OVER SOUTH BRANCH OF KISHWAUKEE RIVER						
		DATE	-		SCALE: N/A				SHEET NO. 1 OF 28 SHEETS	STA. N/A TO STA. N/A
										CONTRACT NO. 87477
										ILLINOIS FED. AID PROJECT BR5-1122108

*Excavation for placing Granular Backfill For Structures is paid for as Cofferdam Excavation.



SECTION THRU ABUTMENT

(Horizontal dimensions are at right angles to abutment)



SECTION A-A

BRIDGE PLANS
INDEX TO SHEETS

SHEET #'s	DESCRIPTION
1	General Plan
2	General Data
3	Footing Layout
4 - 5	Top of Slab Elevations
6	Top of Slab Elevations South Approach Pavement
7	Top of Slab Elevations North Approach Pavement
8	Superstructure
9 - 11	Superstructure Details
12 - 13	Bridge Approach Slab Details
14	Aluminum Railing, Type L
15	Steel Railing, Type SM
16	Preformed Joint Strip Seal Details
17	Framing Plan and Details
18	Structural Steel Details
19	Bearing Details
20	South Abutment
21	South Abutment Footing Plan
22	South Abutment Details
23	North Abutment
24	North Abutment Footing Plan
25	North Abutment Details
26	Piers 1 & 2
27	HP Pile Details
28	Bar Splicer Assembly and Mechanical Splicer Details

GENERAL NOTES

Calculated weight of Structural Steel = 161,930 lbs. (AASHTO M270, Grade 50W). The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All structural steel shall be AASHTO M 270 Grade 50W (except expansion joints which shall be AASHTO M 270 Grade 50).

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 50.

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts 3/4 in. ϕ , holes 1/8 in. ϕ , unless otherwise noted.

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

Bearing seat surfaces shall be constructed or adjusted to the 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.

All structural steel and exposed surfaces of bearings within a distance of 8 ft. each way from the deck joints shall be painted as specified in Section 506 of the Standard Specifications.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all beams shall be Reddish Brown, Munsell No. 2.5 YR 3/4.

The Test Piles shall be driven to 110 percent of the nominal required bearing indicated in the pile data information.

Reinforcement bars designated (F) shall be epoxy coated.

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

Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

For Soil Borings, see Special Provisions.

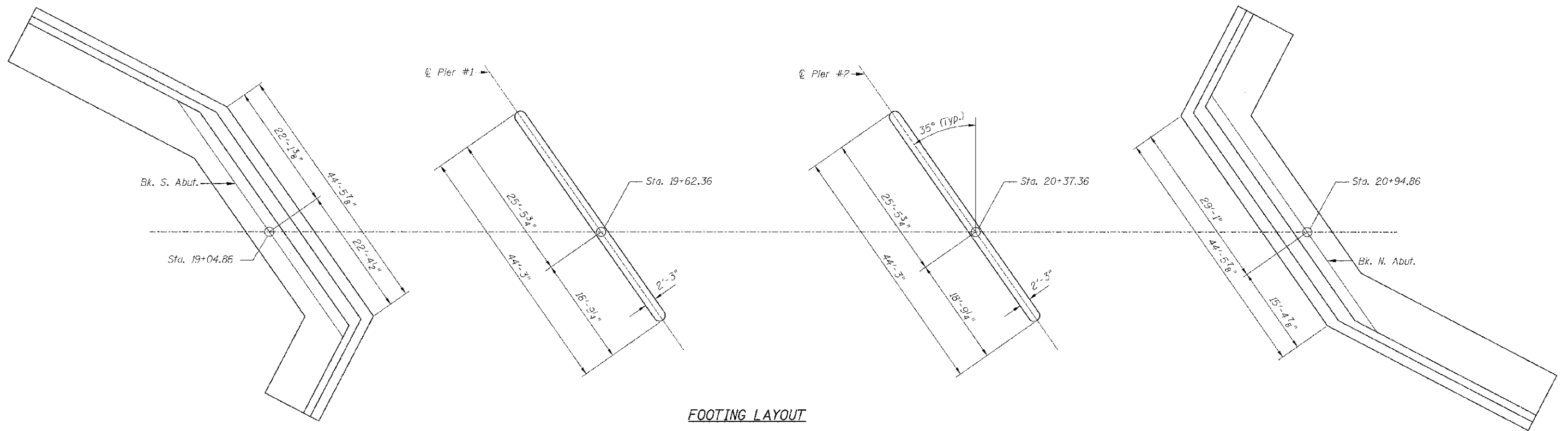
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
① Removal of Existing Structures	EACH	---	---	1
Channel Excavation	CU YD	---	455	455
Cofferdam Excavation	CU YD	---	2,950	2,950
① Cofferdam (Type 2) (Location No. 1)	EACH	---	1	1
① Cofferdam (Type 2) (Location No. 2)	EACH	---	1	1
① Cofferdam (Type 2) (Location No. 3)	EACH	---	1	1
① Cofferdam (Type 2) (Location No. 4)	EACH	---	1	1
Filter Fabric	SQ YD	---	491	491
Stone Riprap, Class A5	TON	---	825	825
Test Pile Steel HP10x42	EACH	---	2	2
Test Pile Steel HP12x53	EACH	---	2	2
Furnishing Steel Piles HP10x42	FOOT	---	3,654	3,654
Furnishing Steel Piles HP12x53	FOOT	---	574	574
Driving Steel Piles	FOOT	---	4,228	4,228
Pile Shoes	EACH	---	134	134
Concrete Structures	CU YD	---	688.2	688.2
Reinforcement Bars, Epoxy Coated	POUND	83,390	73,910	157,300
Concrete Sealer	SQ FT	---	486	486
Furnishing and Erecting Structural Steel	L SUM	1	---	1
Stud Shear Connectors	EACH	4,050	---	4,050
Concrete Superstructure	CU YD	350.2	---	350.2
Preformed Joint Strip Seal	FOOT	88	---	88
Protective Coat	SQ YD	1,074	---	1,074
Bar Splicers	EACH	---	90	90
Geocomposite Wall Drain	SQ YD	---	315	315
① Granular Backfill For Structures	CU YD	---	360	360
Anchor Bolts, 1"	EACH	---	48	48
Elastomeric Bearing Assembly, Type I	EACH	---	12	12
Aluminum Railing, Type L	FOOT	211	---	211
Steel Railing, Type SM	FOOT	219	---	219
Bridge Deck Grooving	SQ YD	762	---	762
Seal Coat Concrete	CU YD	---	188	188
Floor Drains	EACH	28	---	28
Name Plates	EACH	1	---	1

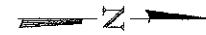
① See Special Provisions

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	82-27-2013\2555\022.dgn	DRAWN TAC	REVISED -		CH 26	05-0044-01-BR	DEKALB	49	17				
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	PLOT DATE = 3/26/2013	DATE -	REVISED -					ILLINOIS			FED. AID PROJECT 8RS-1122(08)		

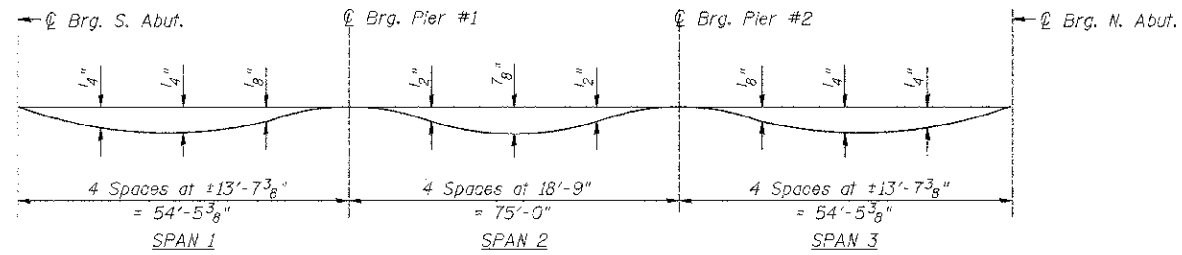
CONTRACT NO. 87477



FOOTING LAYOUT



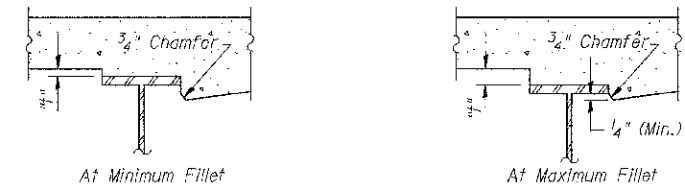
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V:\2655\CADD SHEETS\STRUCTURES - Resid	02-27 2013\2655\02.dgn	DRAWN TAC	REVISED -		SCALE: N/A	SHEET NO. 3 OF 28 SHEETS	STA. N/A	TO STA. N/A	CH 25	05-00044-01-BR	DEKALB	49	18
	PLOT SCALE = NONE	CHECKED CTM	REVISED -		CONTRACT NO. 87477								
	PLOT DATE = 3/26/2013	DATE -	REVISED -		ILLINOIS FED. AID PROJECT BR3-1122108								



DEAD LOAD DEFLECTION DIAGRAM

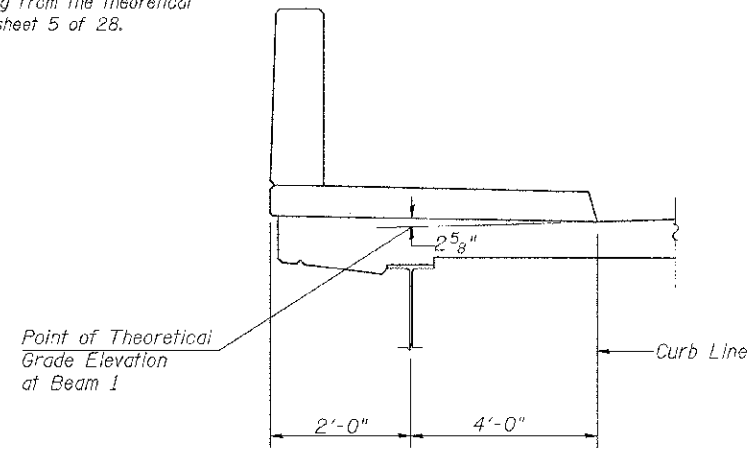
(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the theoretical grade elevations adjusted for dead load deflections as shown in the tables on sheet 5 of 28.

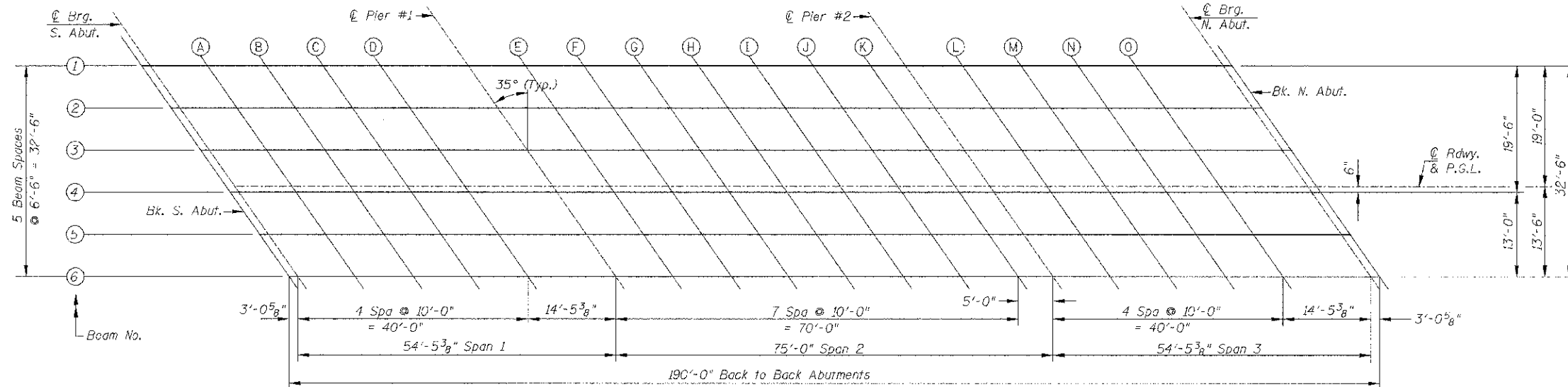


FILLET HEIGHTS

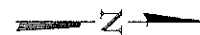
To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" minus slab thickness, equals the fillet heights "t"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



SECTION THRU SIDEWALK



PLAN



FILE NAME =	USER NAME = smountal	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	TOP OF SLAB ELEVATIONS			RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT SCALE = NONE	CHECKED CTM	REVISED -							CONTRACT NO. 87477			
	PLOT DATE = 3/26/2013	DATE -	REVISED -							ILLINOIS FED. AID PROJECT BRS-1122(08)			

BEAM #1					BEAM #2					BEAM #3					PROFILE GRADE				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S. Abutment	1891.56	-19.00	791.08	791.08	Bk S. Abutment	1896.11	-12.50	791.23	791.23	Bk S. Abutment	1900.66	-6.00	791.35	791.35	Bk S. Abutment	1904.86	0.00	791.45	791.45
CL Brg S. Abut.	1894.61	-19.00	791.09	791.09	CL Brg S. Abut.	1899.16	-12.50	791.24	791.24	CL Brg S. Abut.	1903.71	-6.00	791.36	791.36	CL Brg S. Abut.	1907.91	0.00	791.46	791.46
A	1904.61	-19.00	791.12	791.14	A	1909.16	-12.50	791.27	791.29	A	1913.71	-6.00	791.39	791.41	A	1917.91	0.00	791.49	791.51
B	1914.61	-19.00	791.15	791.18	B	1919.16	-12.50	791.30	791.33	B	1923.71	-6.00	791.42	791.45	B	1927.91	0.00	791.52	791.55
C	1924.61	-19.00	791.18	791.21	C	1929.16	-12.50	791.33	791.35	C	1933.71	-6.00	791.45	791.47	C	1937.91	0.00	791.55	791.58
D	1934.61	-19.00	791.21	791.22	D	1939.16	-12.50	791.36	791.37	D	1943.71	-6.00	791.48	791.49	D	1947.91	0.00	791.58	791.59
Pier 1	1949.06	-19.00	791.25	791.25	Pier 1	1953.61	-12.50	791.40	791.40	Pier 1	1958.16	-6.00	791.52	791.52	Pier 1	1962.36	0.00	791.63	791.63
E	1959.06	-19.00	791.28	791.31	E	1963.61	-12.50	791.43	791.46	E	1968.16	-6.00	791.55	791.58	E	1972.36	0.00	791.66	791.68
F	1969.06	-19.00	791.31	791.37	F	1973.61	-12.50	791.46	791.52	F	1978.16	-6.00	791.58	791.64	F	1982.36	0.00	791.69	791.74
G	1979.06	-19.00	791.34	791.44	G	1983.61	-12.50	791.49	791.59	G	1988.16	-6.00	791.61	791.71	G	1992.36	0.00	791.72	791.82
H	1989.06	-19.00	791.37	791.46	H	1993.61	-12.50	791.52	791.61	H	1998.16	-6.00	791.64	791.73	H	2002.36	0.00	791.75	791.83
I	1999.06	-19.00	791.40	791.47	I	2003.61	-12.50	791.55	791.62	I	2008.16	-6.00	791.67	791.74	I	2012.36	0.00	791.78	791.85
J	2009.06	-19.00	791.43	791.48	J	2013.61	-12.50	791.58	791.63	J	2018.16	-6.00	791.70	791.75	J	2022.36	0.00	791.81	791.86
K	2019.06	-19.00	791.46	791.48	K	2023.61	-12.50	791.61	791.62	K	2028.16	-6.00	791.73	791.74	K	2032.36	0.00	791.84	791.85
Pier 2	2024.06	-19.00	791.48	791.48	Pier 2	2028.61	-12.50	791.63	791.63	Pier 2	2033.16	-6.00	791.75	791.75	Pier 2	2037.36	0.00	791.85	791.85
L	2034.06	-19.00	791.51	791.51	L	2038.61	-12.50	791.66	791.66	L	2043.16	-6.00	791.78	791.78	L	2047.36	0.00	791.88	791.89
M	2044.06	-19.00	791.54	791.56	M	2048.61	-12.50	791.69	791.71	M	2053.16	-6.00	791.81	791.82	M	2057.36	0.00	791.91	791.93
N	2054.06	-19.00	791.57	791.60	N	2058.61	-12.50	791.72	791.75	N	2063.16	-6.00	791.84	791.86	N	2067.36	0.00	791.94	791.97
O	2064.06	-19.00	791.60	791.62	O	2068.61	-12.50	791.75	791.77	O	2073.16	-6.00	791.87	791.89	O	2077.36	0.00	791.97	792.00
CL Brg N. Abut.	2078.51	-19.00	791.64	791.64	CL Brg N. Abut.	2083.06	-12.50	791.79	791.79	CL Brg N. Abut.	2087.61	-6.00	791.91	791.91	CL Brg N. Abut.	2091.81	0.00	792.02	792.02
Bk N. Abutment	2081.56	-19.00	791.65	791.65	Bk N. Abutment	2086.11	-12.50	791.80	791.80	Bk N. Abutment	2090.66	-6.00	791.92	791.92	Bk N. Abutment	2094.86	0.00	792.02	792.02

BEAM #4				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S. Abutment	1905.21	0.50	791.45	791.45
CL Brg S. Abut.	1908.26	0.50	791.46	791.46
A	1918.26	0.50	791.49	791.51
B	1928.26	0.50	791.52	791.55
C	1938.26	0.50	791.55	791.57
D	1948.26	0.50	791.58	791.59
Pier 1	1962.71	0.50	791.62	791.62
E	1972.71	0.50	791.65	791.67
F	1982.71	0.50	791.68	791.74
G	1992.71	0.50	791.71	791.81
H	2002.71	0.50	791.74	791.83
I	2012.71	0.50	791.77	791.84
J	2022.71	0.50	791.80	791.85
K	2032.71	0.50	791.83	791.84
Pier 2	2037.71	0.50	791.85	791.85
L	2047.71	0.50	791.88	791.88
M	2057.71	0.50	791.91	791.92
N	2067.71	0.50	791.94	791.96
O	2077.71	0.50	791.97	791.99
CL Brg N. Abut.	2092.16	0.50	792.01	792.01
Bk N. Abutment	2095.21	0.50	792.02	792.02

BEAM #5				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S. Abutment	1909.76	7.00	791.36	791.36
CL Brg S. Abut.	1912.81	7.00	791.37	791.37
A	1922.81	7.00	791.40	791.42
B	1932.81	7.00	791.43	791.46
C	1942.81	7.00	791.46	791.48
D	1952.81	7.00	791.49	791.50
Pier 1	1967.26	7.00	791.53	791.53
E	1977.26	7.00	791.56	791.59
F	1987.26	7.00	791.59	791.65
G	1997.26	7.00	791.62	791.72
H	2007.26	7.00	791.65	791.74
I	2017.26	7.00	791.68	791.75
J	2027.26	7.00	791.71	791.76
K	2037.26	7.00	791.74	791.75
Pier 2	2042.26	7.00	791.76	791.76
L	2052.26	7.00	791.79	791.79
M	2062.26	7.00	791.82	791.84
N	2072.26	7.00	791.85	791.88
O	2082.26	7.00	791.88	791.90
CL Brg N. Abut.	2096.71	7.00	791.92	791.92
Bk N. Abutment	2099.76	7.00	791.93	791.93

BEAM #6				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S. Abutment	1914.31	13.50	791.26	791.26
CL Brg S. Abut.	1917.36	13.50	791.27	791.27
A	1927.36	13.50	791.30	791.32
B	1937.36	13.50	791.33	791.36
C	1947.36	13.50	791.36	791.39
D	1957.36	13.50	791.39	791.40
Pier 1	1971.81	13.50	791.44	791.44
E	1981.81	13.50	791.47	791.49
F	1991.81	13.50	791.50	791.55
G	2001.81	13.50	791.53	791.63
H	2011.81	13.50	791.56	791.64
I	2021.81	13.50	791.59	791.66
J	2031.81	13.50	791.62	791.67
K	2041.81	13.50	791.65	791.66
Pier 2	2046.81	13.50	791.66	791.66
L	2056.81	13.50	791.69	791.70
M	2066.81	13.50	791.72	791.74
N	2076.81	13.50	791.75	791.78
O	2086.81	13.50	791.78	791.81
CL Brg N. Abut.	2101.26	13.50	791.82	791.82
Bk N. Abutment	2104.31	13.50	791.83	791.83

WEST EDGE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevations
S. End S. App. Slab	18+61.47	-20.000	790.86
A	18+71.47	-20.000	790.94
B	18+81.47	-20.000	791.00
N. End S. App. Slab	18+91.47	-20.000	791.05

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End S. App. Slab	18+64.97	-15.000	790.99
A	18+74.97	-15.000	791.07
B	18+84.97	-15.000	791.13
N. End S. App. Slab	18+94.97	-15.000	791.17

WEST EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End S. App. Slab	18+67.07	-12.000	791.07
A	18+77.07	-12.000	791.14
B	18+87.07	-12.000	791.20
N. End S. App. Slab	18+97.07	-12.000	791.24

PROFILE GRADE LINE

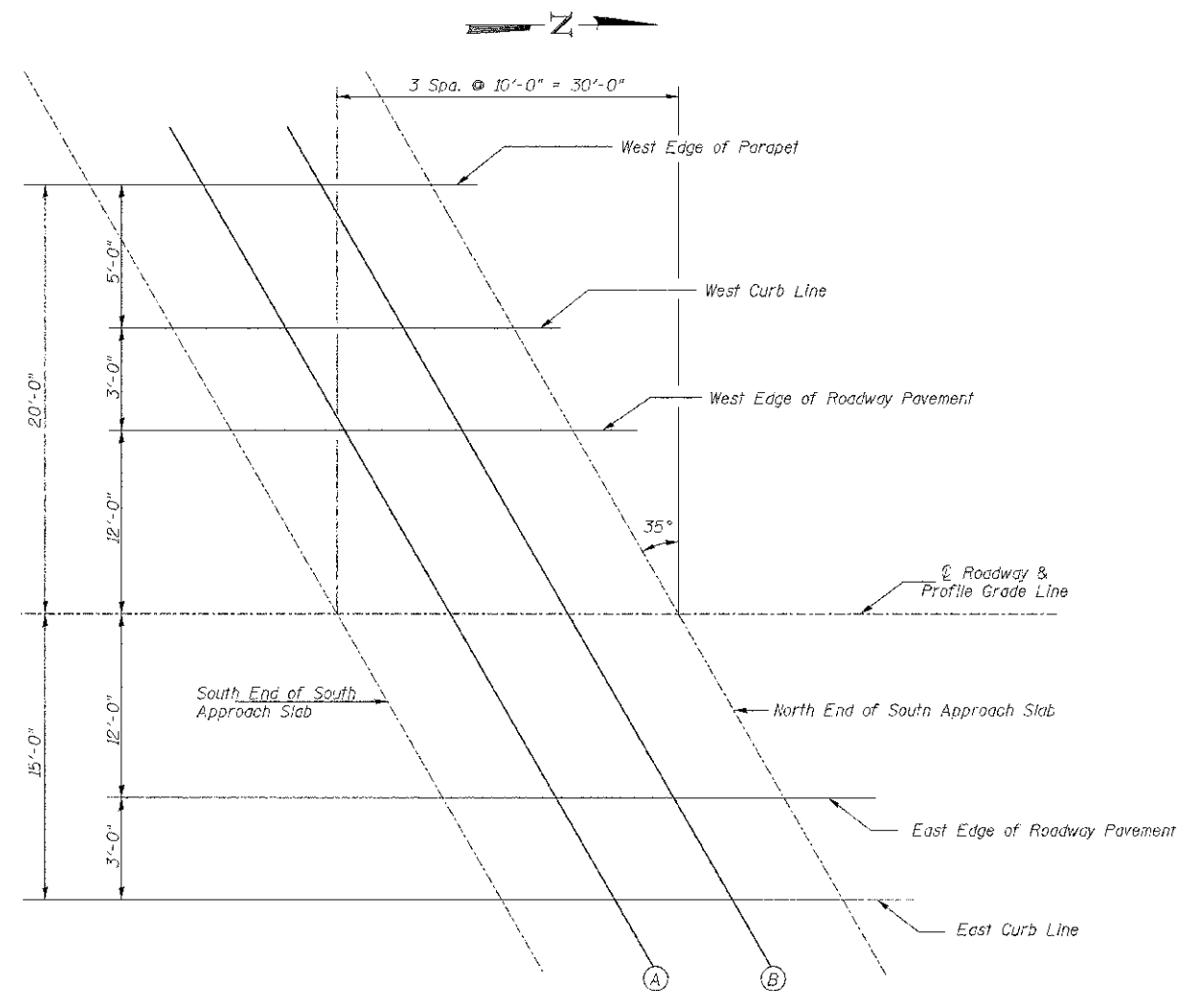
Location	Station	Offset	Theoretical Grade Elevations
S. End S. App. Slab	18+75.47	0.000	791.32
A	18+85.47	0.000	791.38
B	18+95.47	0.000	791.42
N. End S. App. Slab	19+05.47	0.000	791.46

EAST EDGE OF ROADWAY PAVEMENT

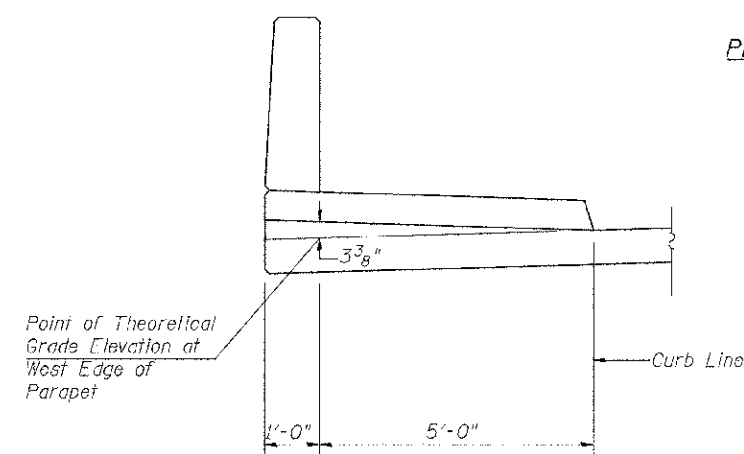
Location	Station	Offset	Theoretical Grade Elevations
S. End S. App. Slab	18+85.87	12.000	791.18
A	18+93.87	12.000	791.23
B	19+03.87	12.000	791.26
N. End S. App. Slab	19+13.87	12.000	791.29

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End S. App. Slab	18+85.97	15.000	791.13
A	18+95.97	15.000	791.18
B	19+05.97	15.000	791.21
N. End S. App. Slab	19+15.97	15.000	791.24



PLAN SOUTH APPROACH PAVEMENT



SECTION THRU SIDEWALK

FILE NAME =	USER NAME = smc/ntsl	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	TOP OF APPROACH SLAB ELEVATIONS - SOUTH APPROACH SLAB		RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
W:\2555\ROAD STRUCTURES	02 27 23:32:2555b306.dwg	DRAWN TAC	REVISED -		CH 26	05-00044-01-BR	DEKALB	49	21	CONTRACT NO. 87477	
	PLOT SCALE - NONE	CHECKED CTM	REVISED -		SCALE: N/A	SHEET NO. 6 OF 28 SHEETS	STA. N/A	TO STA. N/A		ILLINOIS FED. AID PROJECT BRS-1122008	
	PLOT DATE = 3/26/2013	DATE -	REVISED -								

WEST EDGE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevations
S. End N. App. Slab	20+80.25	-20.000	791.63
A	20+90.25	20.000	791.66
B	21+00.25	-20.000	791.69
N. End N. App. Slab	21+10.25	-20.000	791.71

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End N. App. Slab	20+83.75	-15.000	791.74
A	20+93.75	-15.000	791.77
B	21+03.75	-15.000	791.80
N. End N. App. Slab	21+13.75	-15.000	791.82

WEST EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End N. App. Slab	20+85.85	-12.000	791.81
A	20+95.85	-12.000	791.84
B	21+05.85	-12.000	791.87
N. End N. App. Slab	21+15.85	-12.000	791.88

PROFILE GRADE LINE

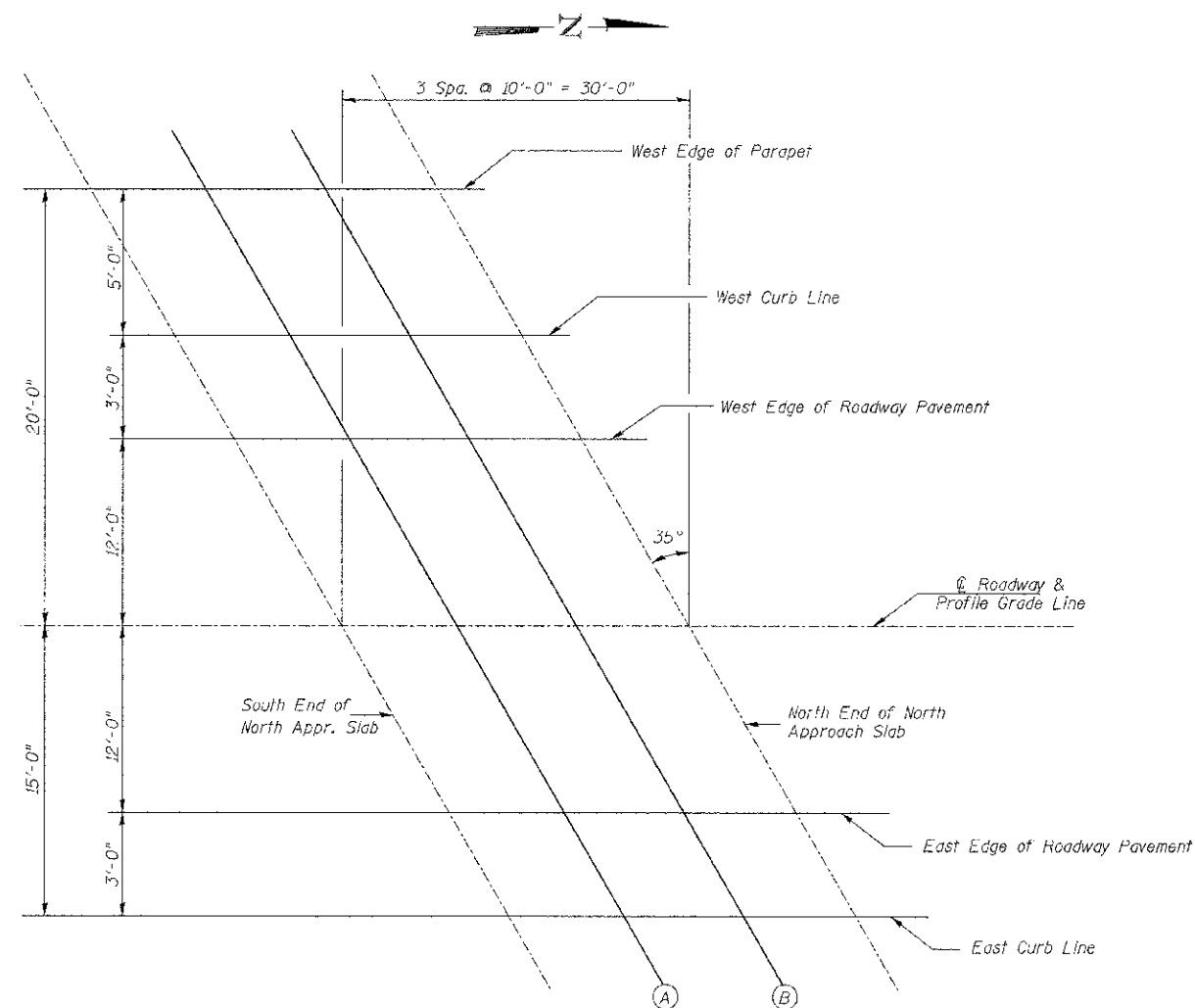
Location	Station	Offset	Theoretical Grade Elevations
S. End N. App. Slab	20+94.25	0.000	792.02
A	21+04.25	0.000	792.05
B	21+14.25	0.000	792.07
N. End N. App. Slab	21+24.25	0.000	792.08

EAST EDGE OF ROADWAY PAVEMENT

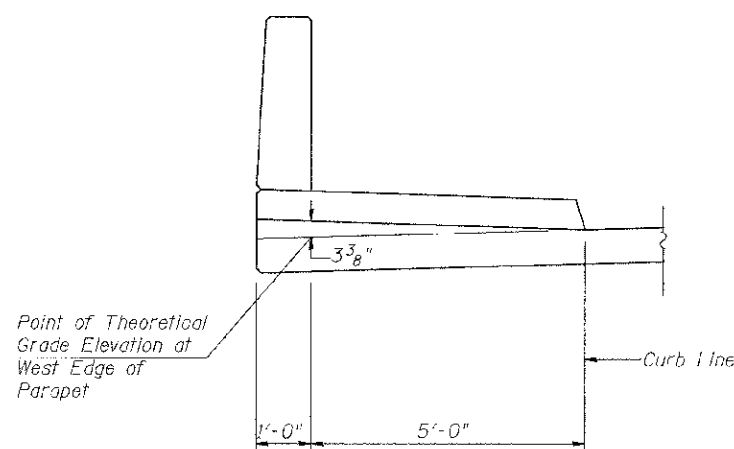
Location	Station	Offset	Theoretical Grade Elevations
S. End N. App. Slab	21+02.65	12.000	791.86
A	21+12.65	12.000	791.88
B	21+22.65	12.000	791.89
N. End N. App. Slab	21+32.65	12.000	791.88

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End N. App. Slab	21+04.75	15.000	791.80
A	21+14.75	15.000	791.82
B	21+24.75	15.000	791.83
N. End N. App. Slab	21+34.75	15.000	791.82

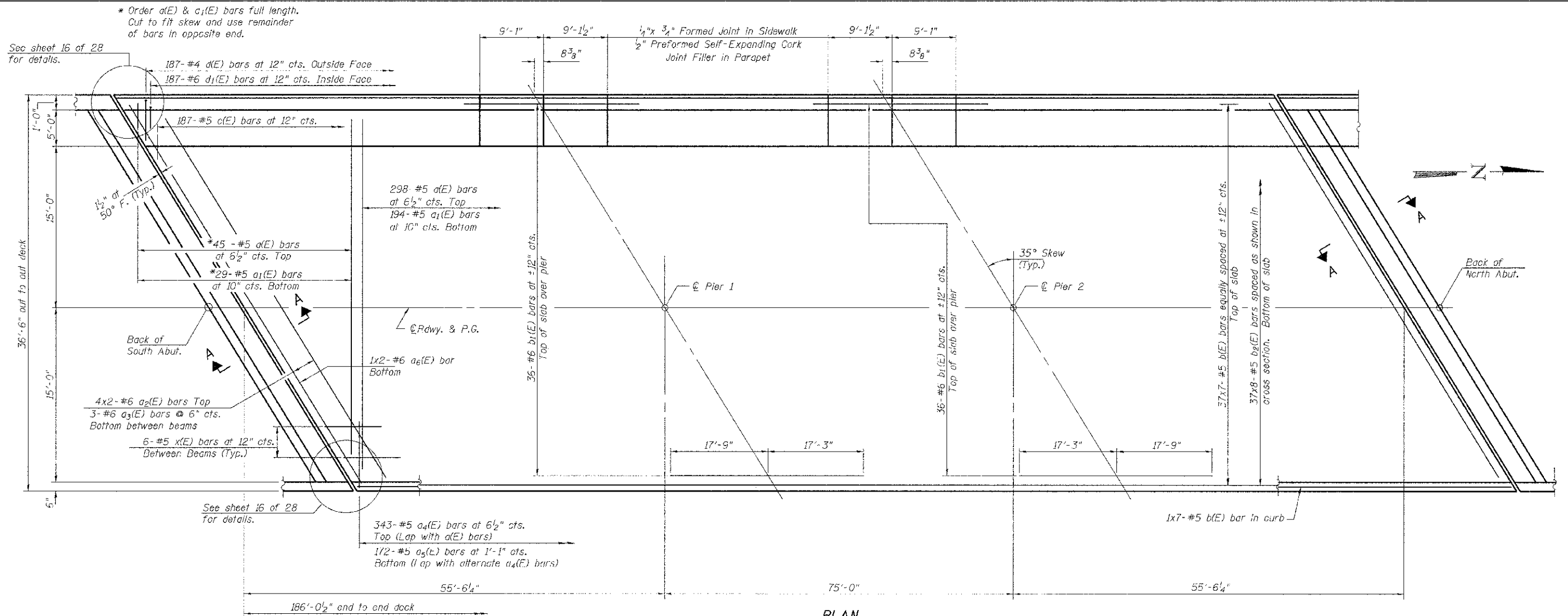


PLAN NORTH APPROACH PAVEMENT



SECTION THRU SIDEWALK

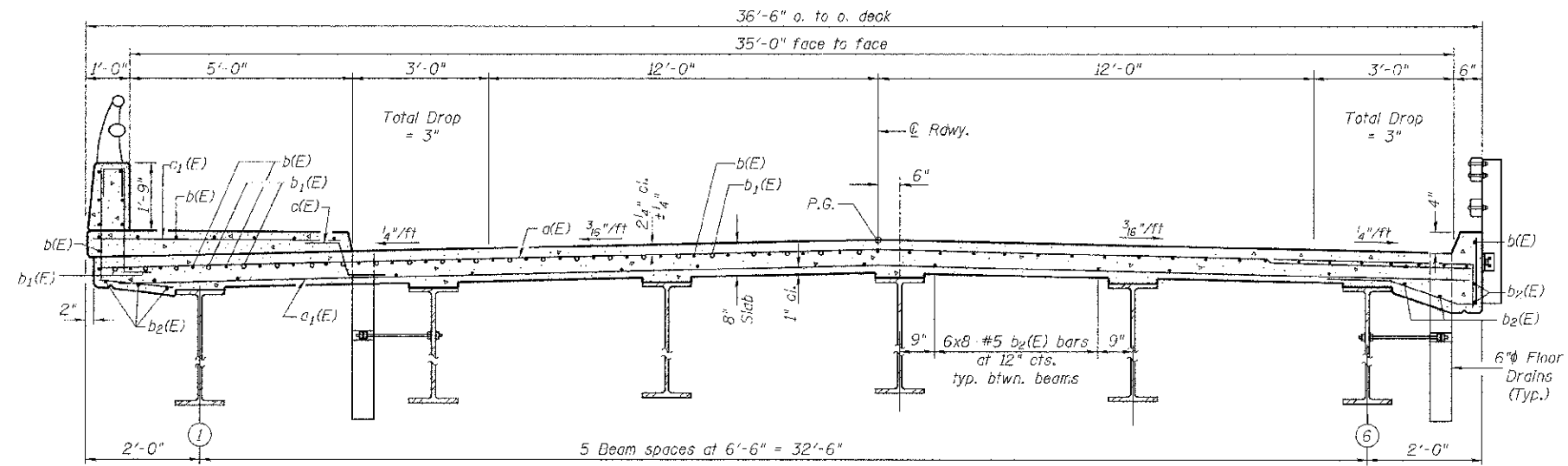
FILE NAME = V:\2556\CADD SHEETS\STRUCTURES - Res'd	USER NAME = amountal	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	TOP OF APPROACH SLAB ELEVATIONS -- NORTH APPROACH SLAB		RTE. NO. CH 26	SECTION 05-00044-01-BR	COUNTY DEKALB	TOTAL SHEETS 49	SHEET NO. 22	
	02-27-2013\2556b007.dgn	DRAWN TAC	REVISED -		SCALE: N/A	SHEET NO. 7 OF 28 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87477			
	PLOT SCALE = NONE	CHECKED CTM	REVISED -		ILLINOIS FED. AID PROJECT BR5-1122(08)							
	PLOT DATE = 3/26/2013	DATE -	REVISED -									



PLAN

MIN. BAR LAP

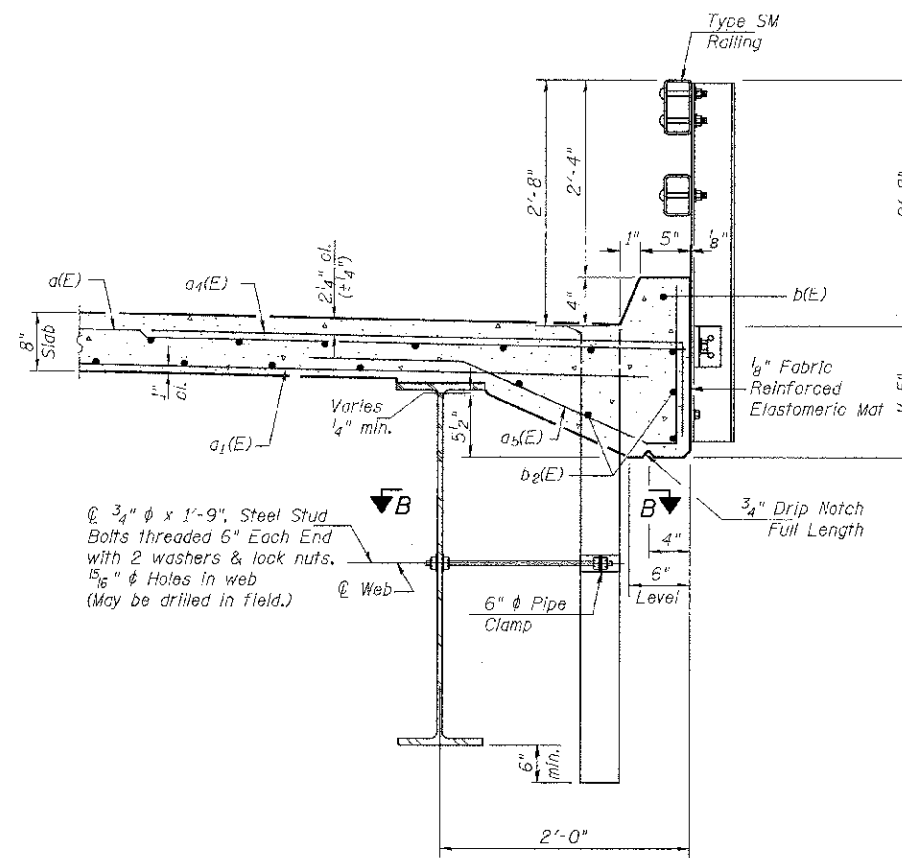
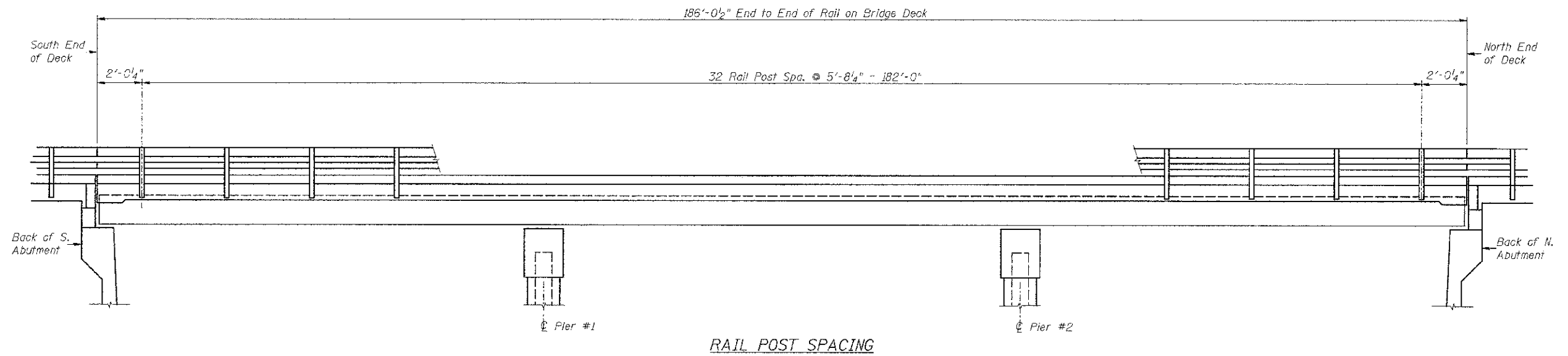
- #5 = 3'-3"
- #6 = 3'-10"



CROSS SECTION
(Looking North)

Notes:
 See Sheets 9 thru 11 of 28 for superstructure details, Section A A, floor drain details, and Bill of Material.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See Sheet 9 & 10 of 28 for parapet and sidewalk reinforcement.
 See Sheet 1 of 28 for floor drain locations.

FILE NAME = V:\2855\CAD\DRG\STRUCTURES - Reo'd USER NAME = amount1 DESIGNED BAN DRAWN TAC CHECKED CTM DATE - PLOT SCALE = NONE PLOT DATE = 3/26/2013		REVISED - REVISED - REVISED - REVISED -		DEKALB COUNTY C.H. 26 (FIVE KINIS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER		SUPERSTRUCTURE		RTE. NO. CH 26	SECTION 05-00044-01-BR	COUNTY DEKALB	TOTAL SHEETS 49	SHEET NO. 23	CONTRACT NO. 87477 <small>FED. AID PROJECT BR5-1122(108)</small>	
				SCALE: N/A	SHEET NO. 8 OF 28 SHEETS	STA. N/A	TO STA. N/A							

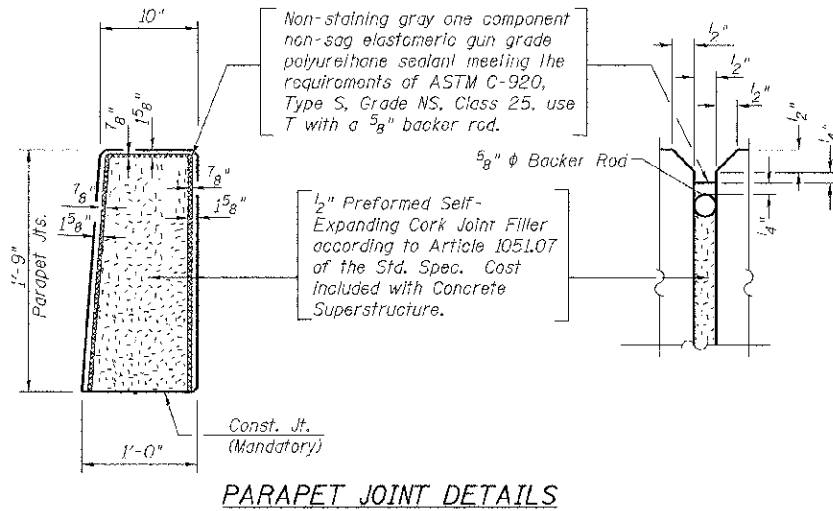


SECTION THRU CURB

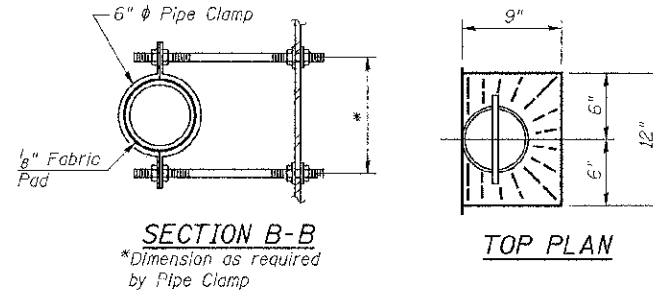
See Sheet 15 of 28 for Rail Post Anchor Details

Notes:
 See Sheet 11 of 28 for bar details, floor drain details and Bill of Material.
 See Sheet 13 of 28 for rail spacing on approach pavement.
 See sheet 15 of 28 for rail details.

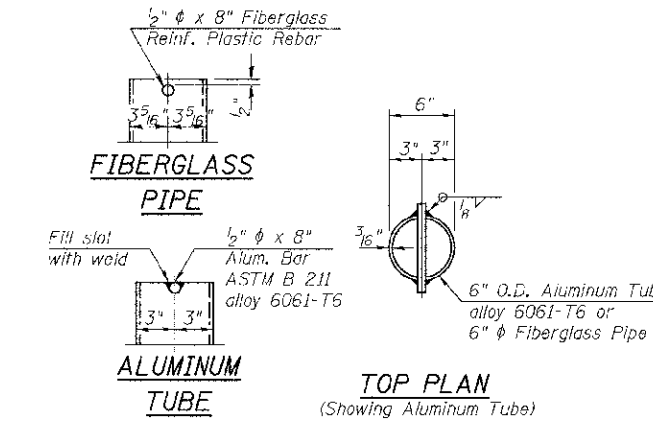
FILE NAME =	USER NAME = sncountal	DESIGNED BAN	REVISED -	DEKALB COUNTY	SUPERSTRUCTURE DETAILS	R/E. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VA\2585\CA00 DIRECTS\STRUCTURES - Res'd	02-27-2013\2585e010.dgn	DRAWN TAC	REVISED -	C.H. 26 (FIVE POINTS RD.)		CH 26	05-00044-01-BR	DEKALB	49	25
	PLOT SCALE = NONE	CHECKED CTM	REVISED -	OVER SOUTH BRANCH OF KISHAWUEE RIVER	SCALE: N/A					
	PLOT DATE = 3/26/2013	DATE -	REVISED -		SHEET NO. 10 OF 28 SHEETS	STA. N/A	TO STA. N/A			CONTRACT NO. 87477
								ILLINOIS FED. AID PROJECT BRS-112210R		



PARAPET JOINT DETAILS



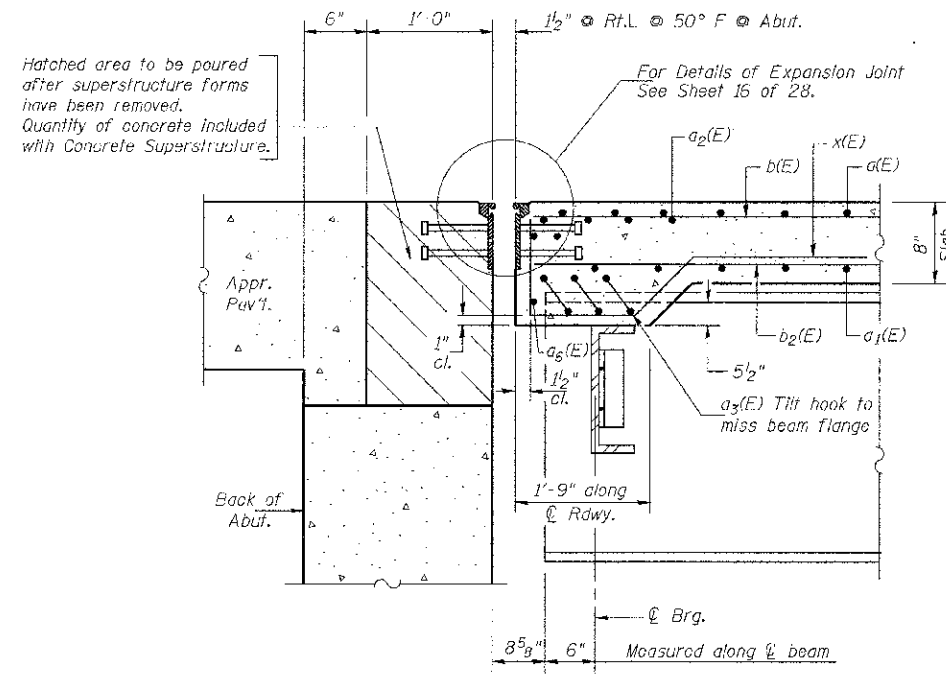
SECTION B-B
*Dimension as required by Pipe Clamp



FIBERGLASS PIPE

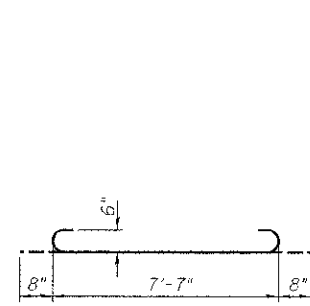
ALUMINUM TUBE

TOP PLAN (Showing Aluminum Tube)

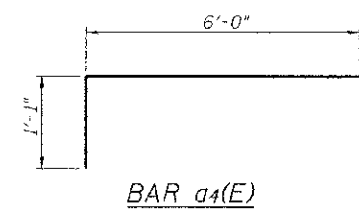


SECTION A-A

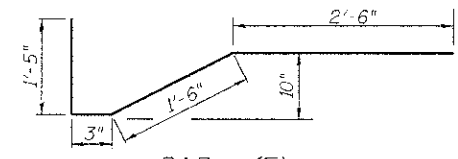
Notes:
Drains shall be located clear of all diaphragms.
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.
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 inserts is included in Floor Drains.



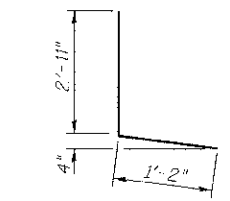
BAR a3(E)



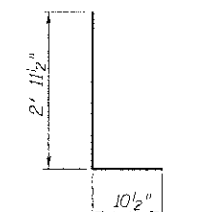
BAR a4(E)



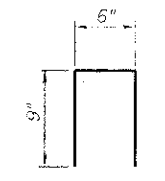
BAR a5(E)



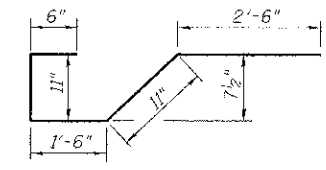
BAR d(E)



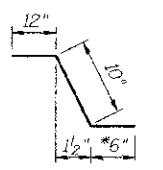
BAR d1(E)



BAR d2(E)



BAR x(E)



BAR c(F)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	343	#5	36'-1"	U
a1(E)	223	#5	35'-1"	U
a2(E)	16	#6	24'-0"	U
a3(E)	30	#6	8'-11"	U
a4(E)	343	#5	7'-1"	U
a5(E)	172	#5	5'-8"	U
a6(E)	4	#6	23'-4"	U
b(E)	322	#5	29'-5"	U
b1(E)	72	#6	35'-0"	U
b2(E)	296	#5	26'-2"	U
c(E)	187	#5	2'-4"	U
c1(E)	187	#5	5'-7"	U
c2(F)	2	#5	6'-9"	U
d(E)	187	#4	4'-1"	L
d1(E)	187	#6	3'-10"	L
d2(E)	14	#4	2'-0"	U
e(E)	36	#4	15'-2"	U
e1(E)	18	#4	18'-8"	U
e2(E)	24	#4	8'-10"	U
x(E)	60	#5	6'-4"	U
Reinforcement Bars, Epoxy Coated			POUND	51,810
Concrete Superstructure			CU YD	222.2

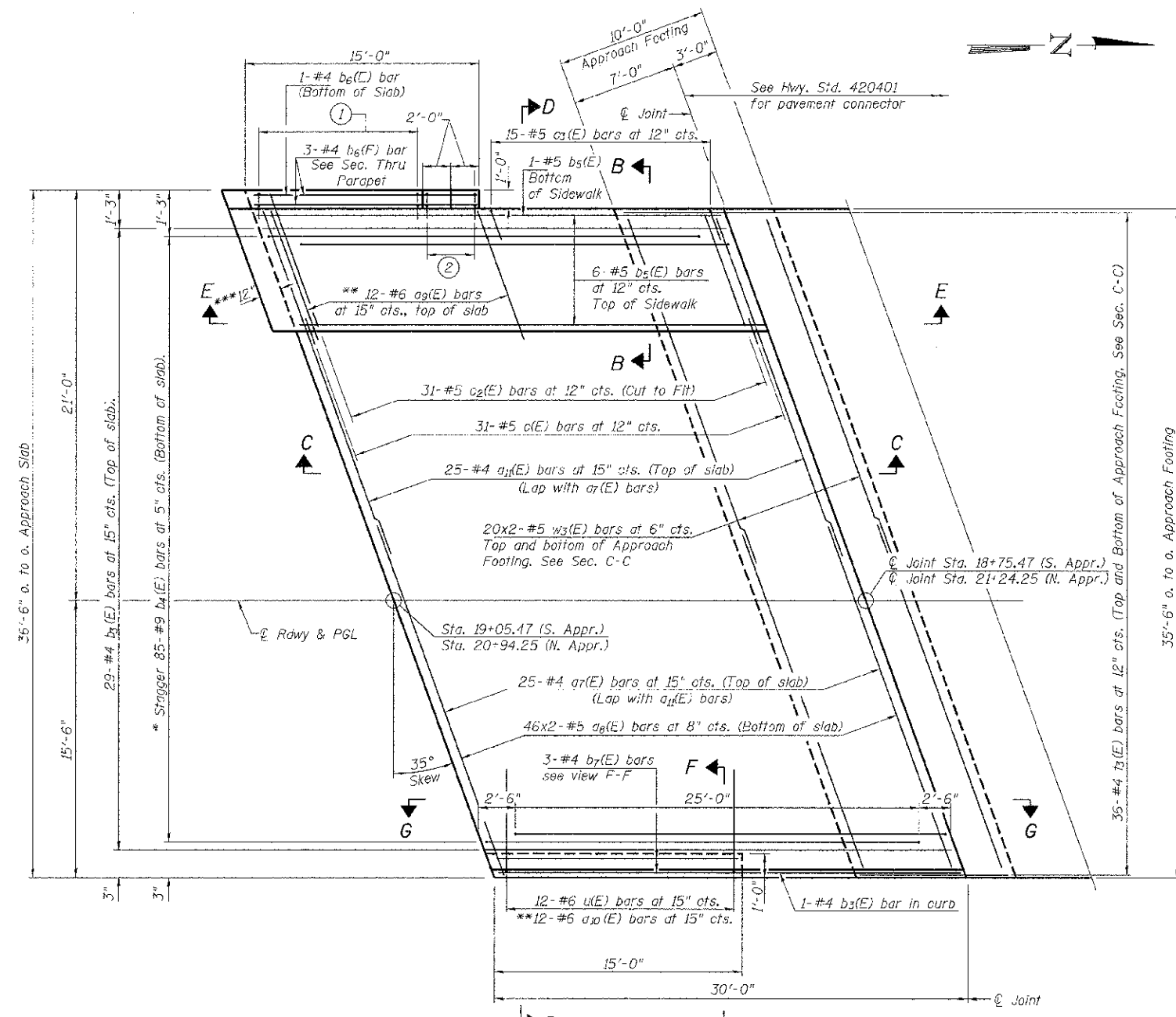
Bars indicated thus 1 x 5 - #5 etc. indicates 1 line of bars with 5 lengths per line.

* In lieu of hollow leg, c(E) bars may be cored and set according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of cored hole shall not exceed 6".

FILE NAME = V:\2556\CADD SHEETS\STRUCTURES	USER NAME = smounts1	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	SUPERSTRUCTURE DETAILS	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	02 27 2013 125556.dgn	DRAWN TAC	REVISED -			CH 26	05-00044-01-BR	DEKALB	49	26	
	PLOT SCALE = NONE	CHECKED CTM	REVISED -			SCALE: N/A	SHEET NO. 11 OF 28 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87477	
	PLOT DATE = 3/26/2013	DATE -	REVISED -			ILLINOIS FED. AID PROJECT BR5-1122(08)					

- ① 12-#4 d4(E) bars at 12" cts. O.F.
12-#6 d3(E) bars at 12" cts. I.F.
- ② 5-#4 d6(E) bars at 11" cts. O.F., cut to fit taper
5-#6 d5(E) bars at 11" cts. I.F., cut to fit taper

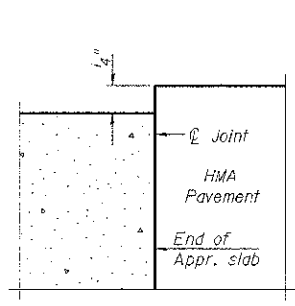
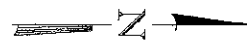
Notes:
See sheet 13 of 28 for Sections C-C & D-D, E-E and View G-G.
a7(E), a8(E) and a11(E) bar spacings measured along @ Rdwy.



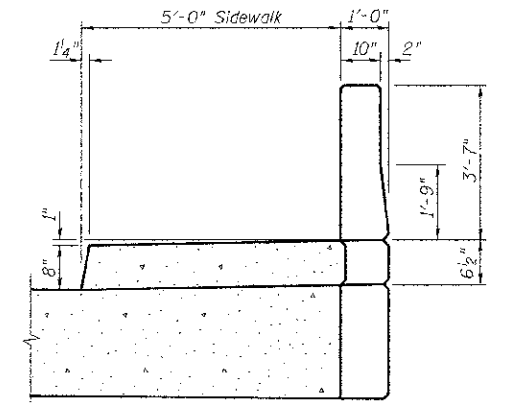
PLAN
(North Approach shown, South Approach Similar)

* Tilt #9 b4(E) bars as required to maintain clearance.
** Space between a7(E) bars.
*** Concrete for sidewalk and parapet on hatch block shall be included in Concrete Superstructure in Bridge Approach Slab Bill of Material.

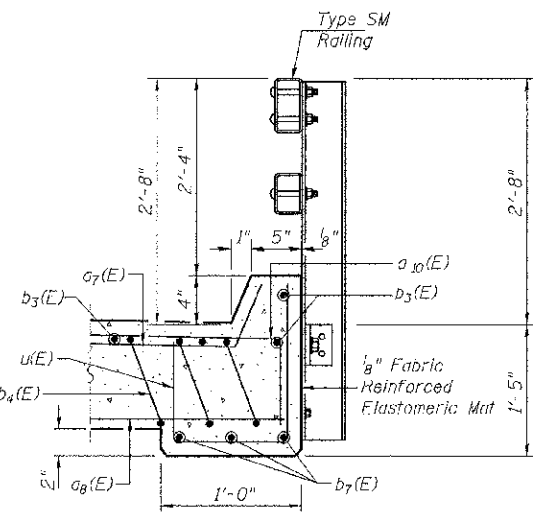
MIN. BAR LAP
#4 = 2'-3"
#5 = 2'-6"



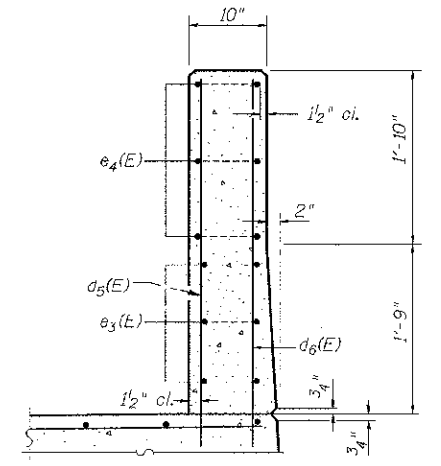
DETAIL A
FLEXIBLE PAVEMENT



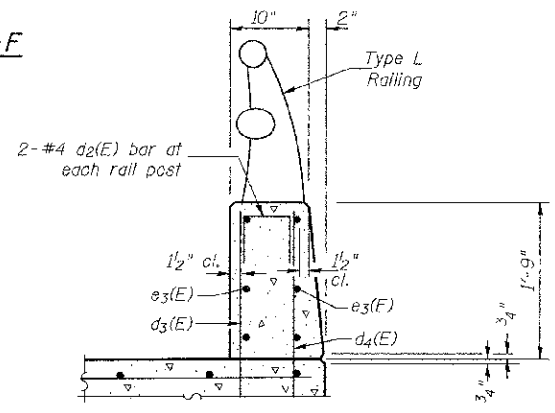
VIEW B-B



SECTION F-F

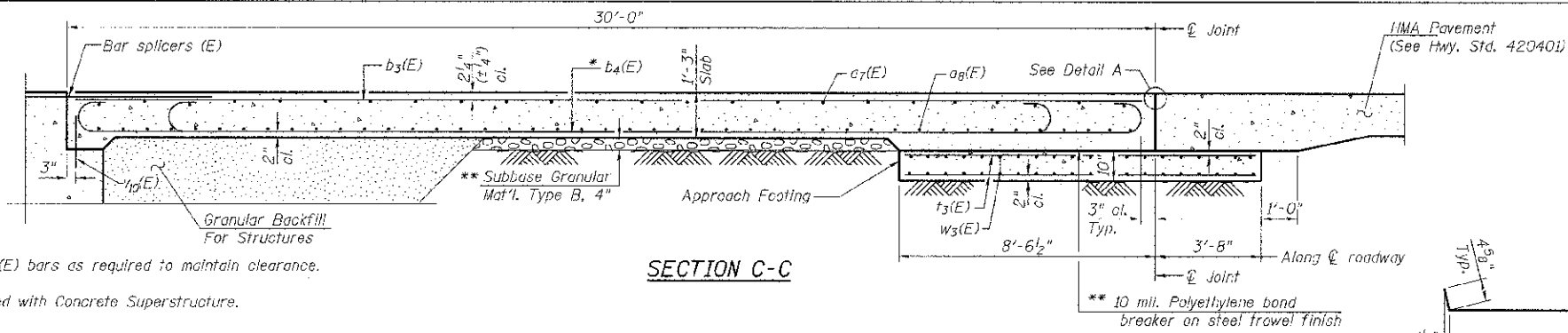


SECTION THRU END OF PARAPET



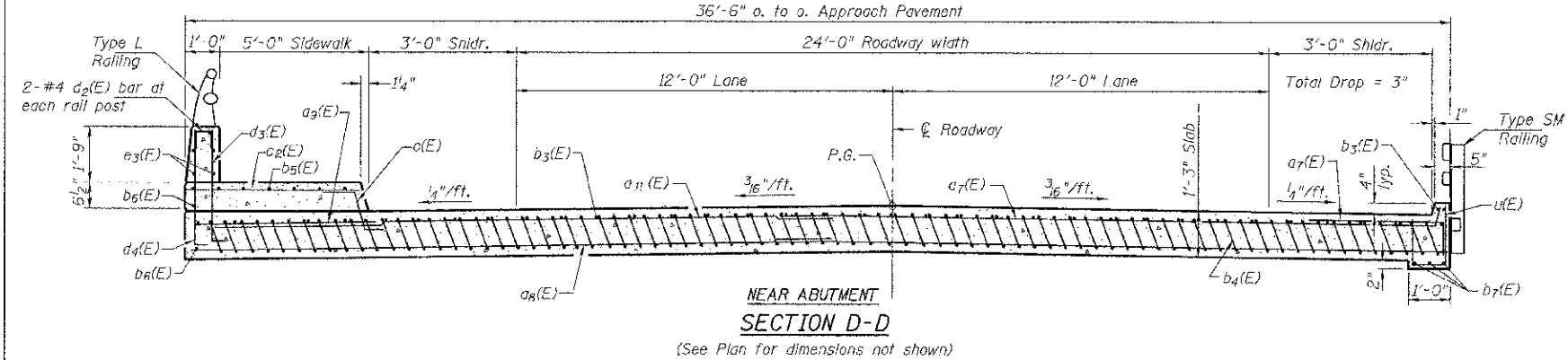
SECTION THRU PARAPET

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	82-27-2013\2555\0400.dgn	DRAWN FAC	REVISED -			CH 26	05-00044-01-BR	DEKALB	49	27	
	PLOT SCALE = NONE	CHECKED CTM	REVISED -			SCALE: N/A	SHEET NO. 12 OF 28 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87477	
	PLOT DATE = 3/26/2013	DATE -	REVISED -					ILLINOIS	FED. AID PROJECT BR3-1122108		

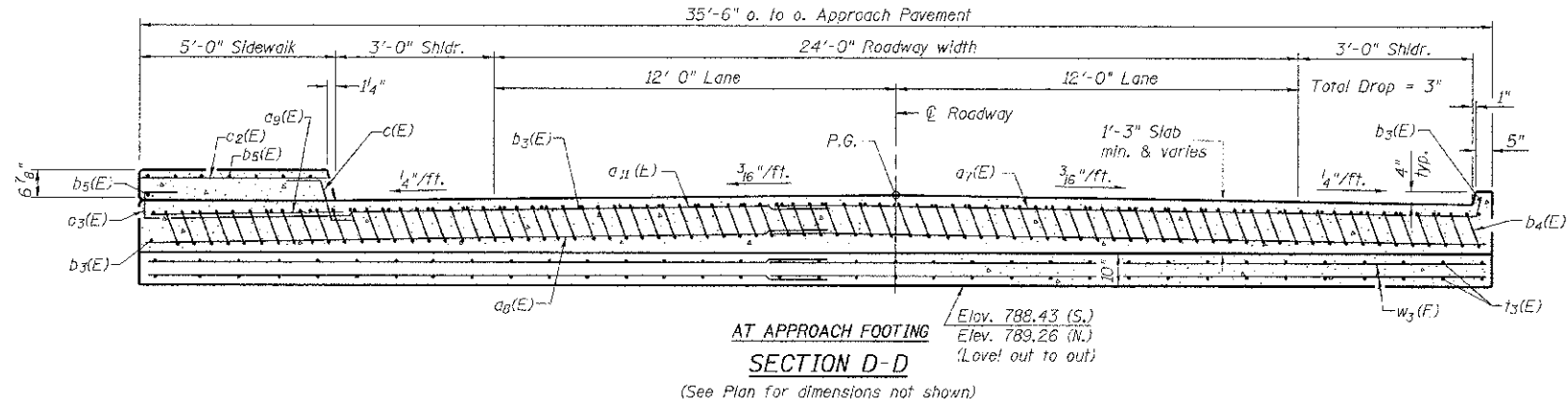


Notes:
 See sheet 12 of 28 for Detail A & Section thru Parapet.
 Approach slab, sidewalk, & parapet, including sidewalk and parapet on hatch block, shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet 28 of 28.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 28.

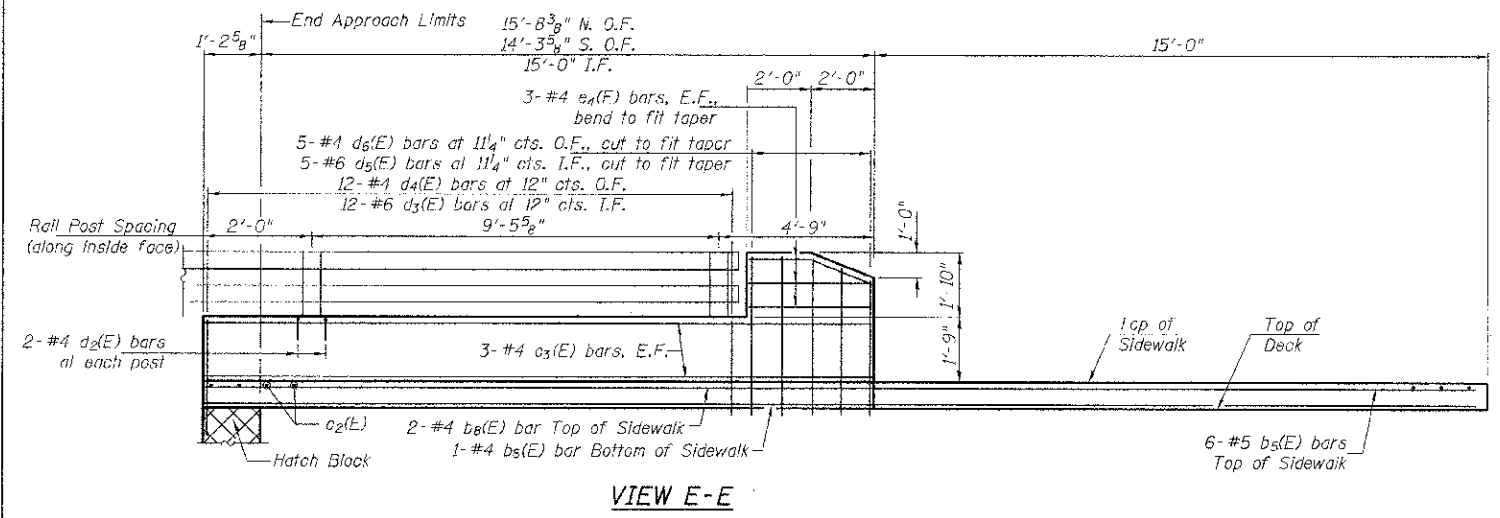
* Tilt #9 $b_4(E)$ bars as required to maintain clearance.
 ** Cost included with Concrete Superstructure.



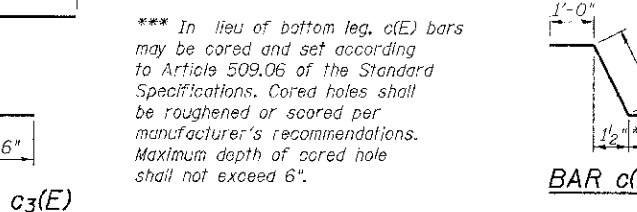
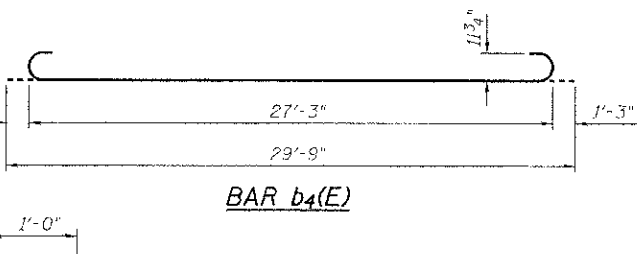
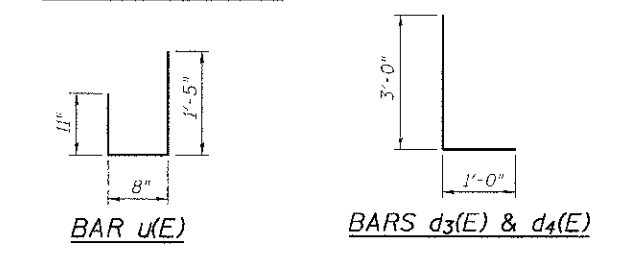
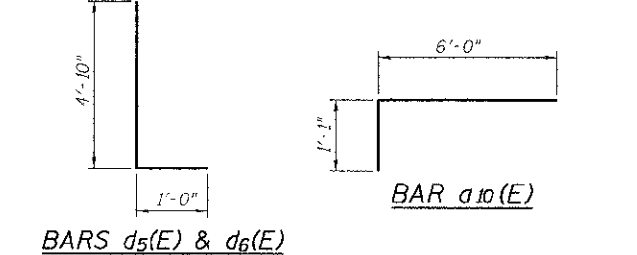
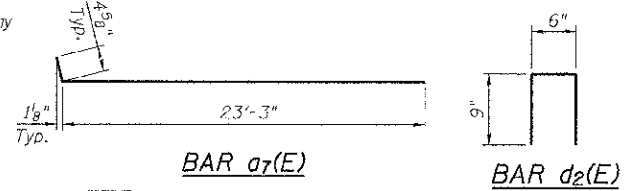
NEAR ABUTMENT SECTION D-D
 (See Plan for dimensions not shown)



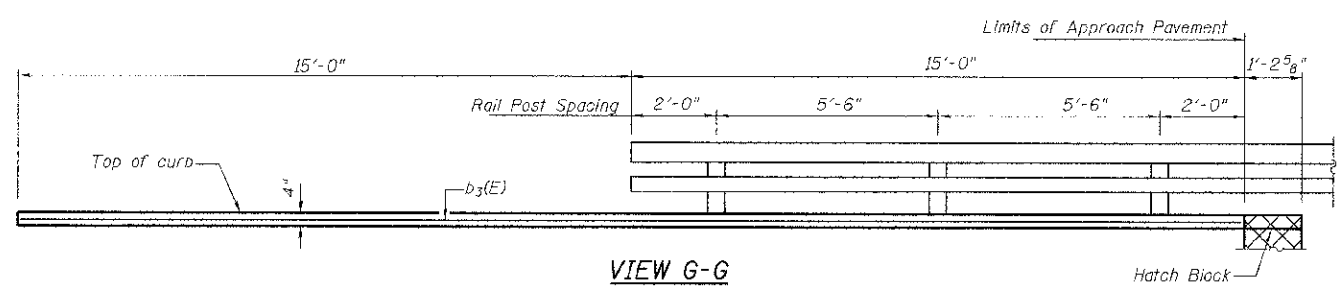
AT APPROACH FOOTING SECTION D-D
 (See Plan for dimensions not shown)



VIEW E-E



*** In lieu of bottom leg, c(E) bars may be cored and set according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of cored hole shall not exceed 6".

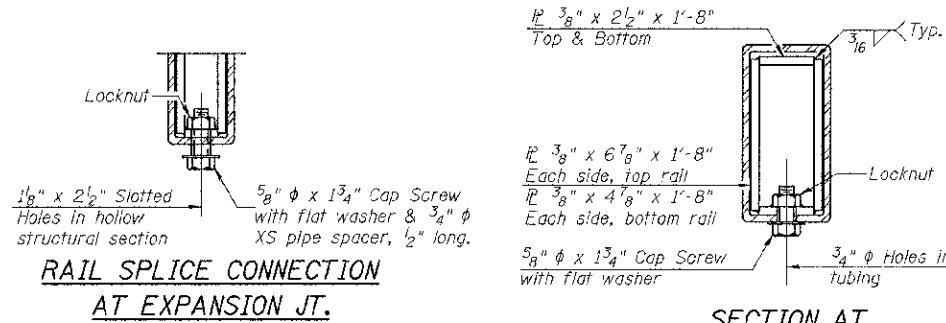
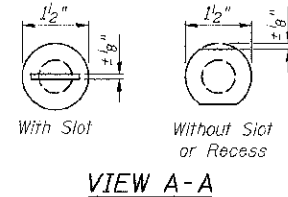
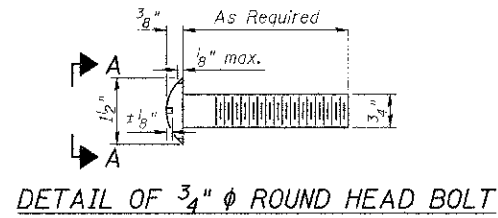


VIEW G-G

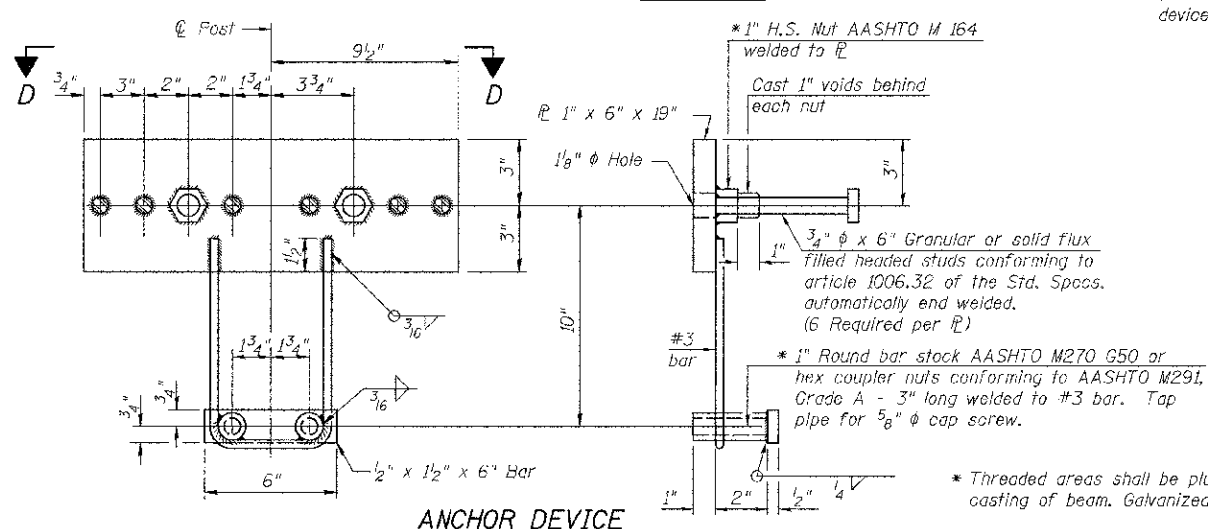
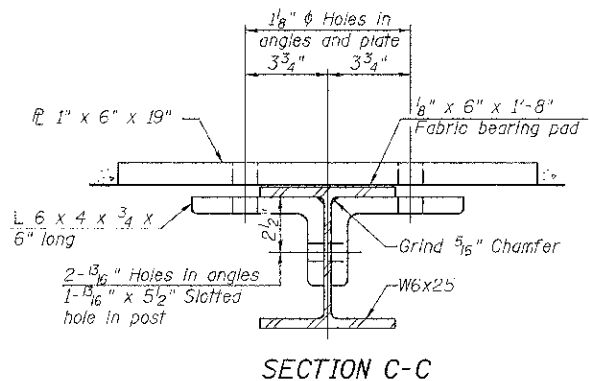
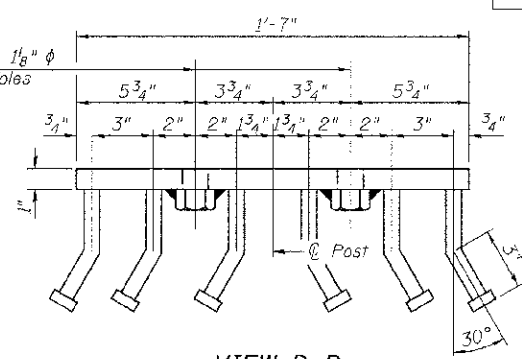
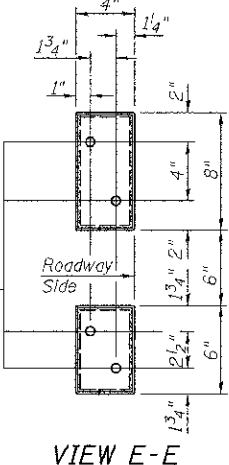
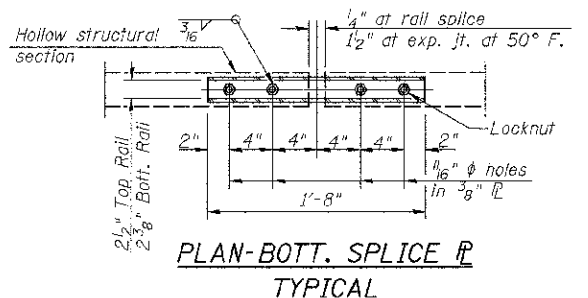
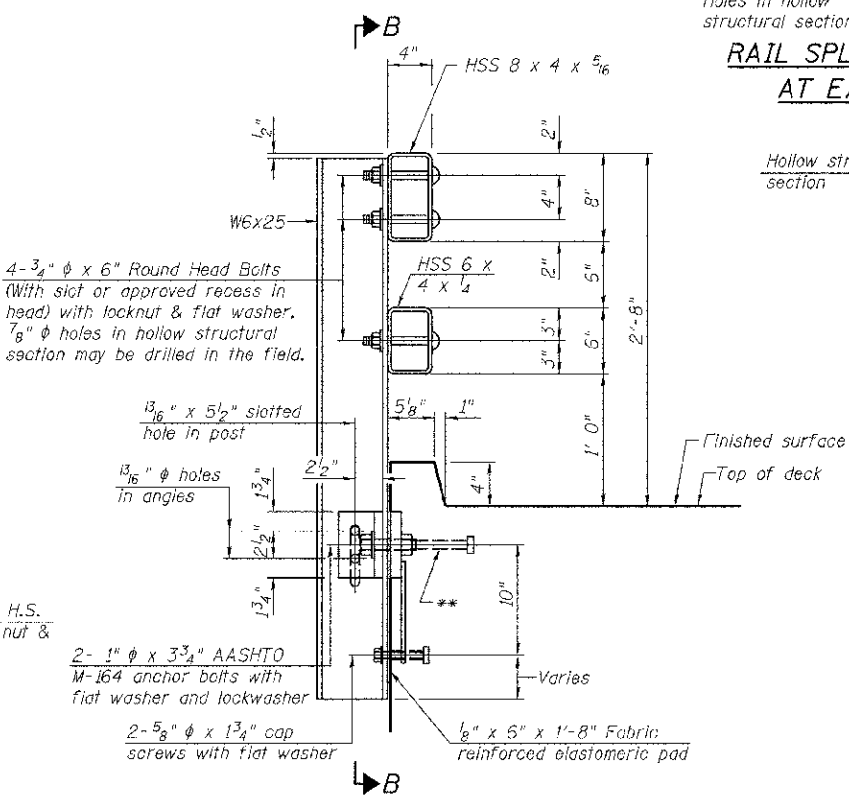
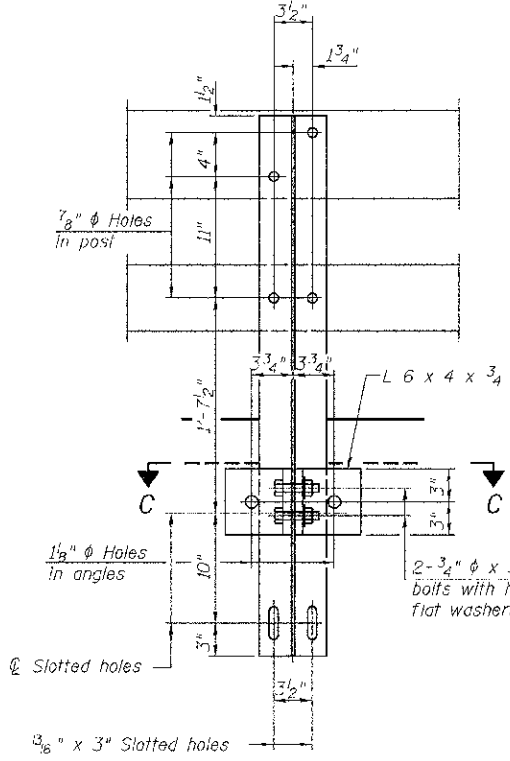
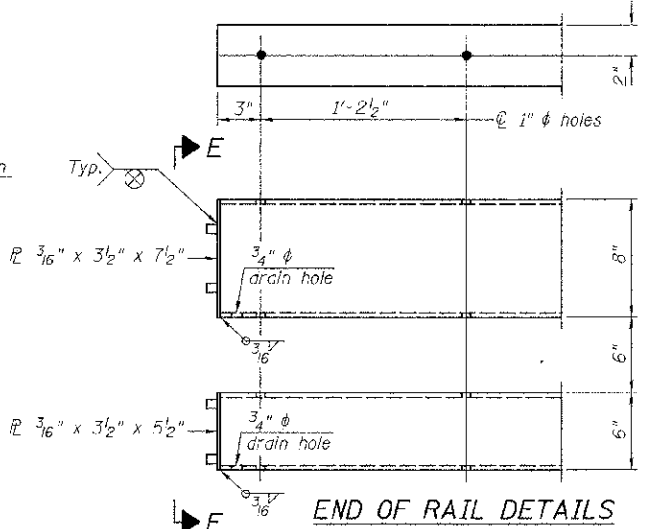
TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a7(E)	50	#4	23'-8"	—
a9(E)	184	#5	23'-4"	—
a9(E)	24	#6	6'-6"	—
a10(E)	12	#6	7'-3"	—
a11(E)	50	#4	23'-3"	—
b3(F)	62	#4	29'-8"	—
b4(F)	170	#9	29'-9"	—
b5(E)	14	#5	30'-10"	—
b6(E)	8	#4	14'-8"	—
b7(E)	6	#4	14'-8"	—
c1(E)	62	#5	2'-4"	—
c2(E)	62	#5	6'-9"	—
c3(E)	30	#5	2'-4"	—
d2(E)	8	#4	2'-0"	—
d3(E)	24	#6	4'-0"	—
d4(E)	24	#4	4'-0"	—
d5(E)	10	#6	5'-10"	—
d6(E)	10	#4	5'-10"	—
e3(E)	12	#4	15'-10"	—
e4(E)	12	#4	3'-8"	—
f3(E)	144	#4	11'-9"	—
u(E)	24	#5	3'-0"	—
w3(E)	160	#5	22'-9"	—
Concrete Superstructure	CU YD		128.0	
Concrete Structures	CU YD		26.8	
Reinforcement Bars, Epoxy Coated	POUND		31,580	

SEE SHEET 10 & 13 OF 28 FOR RAIL POST SPACING.



SECTION AT RAIL SPLICE



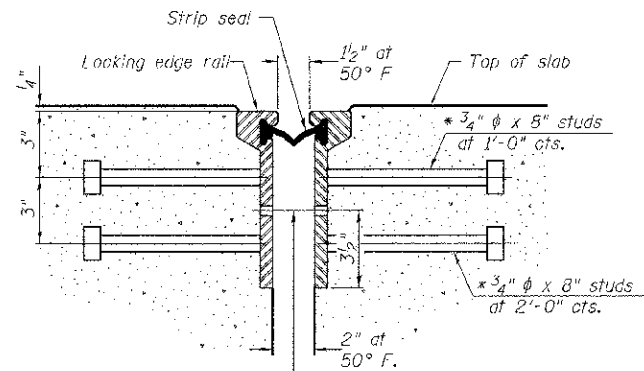
Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
 All steel railing elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 ** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	FOOT	219

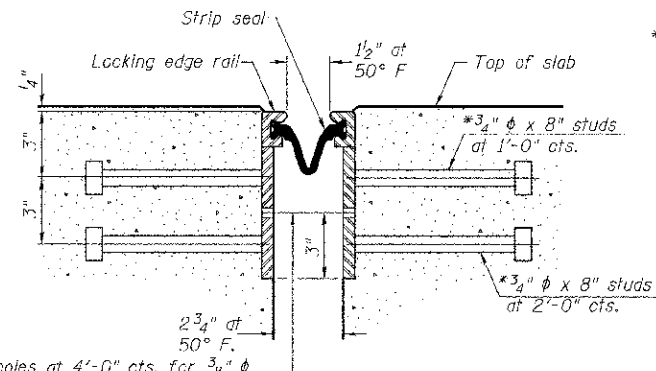
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	02-27-2013\2556\013.dgn	DRAWN TAC	REVISED -		CH 26	05-00044-01-BR	DEKALB	49	30
	PLOT SCALE = NONE	CHECKED CTM	REVISED -		STEEL RAILING, TYPE SM				
	PLOT DATE = 3/26/2013	DATE -	REVISED -		SCALE: N/A	SHEET NO. 15 OF 28 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87477

FED. AID PROJECT BRS-11220CB



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

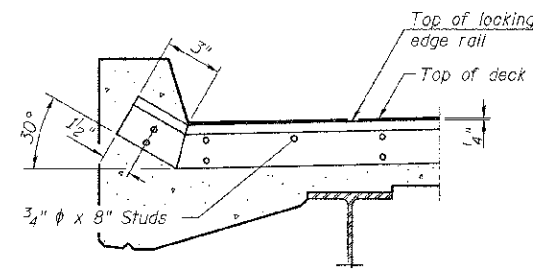
SECTION THRU ROLLED RAIL JOINT



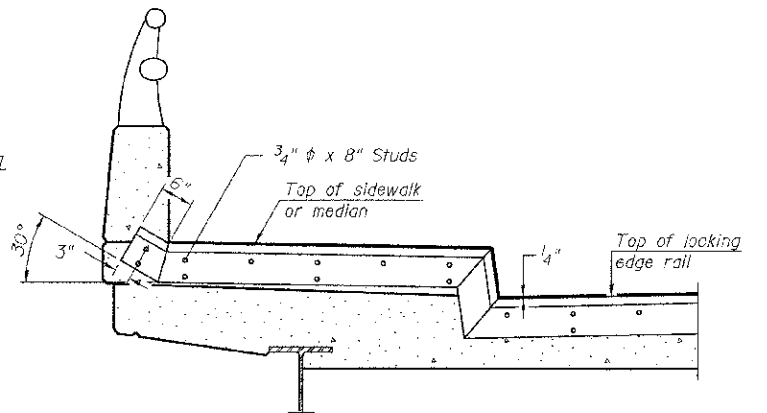
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

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



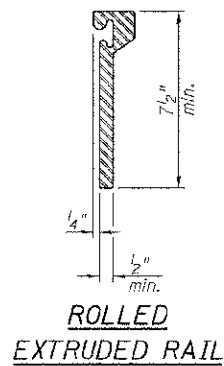
AT CURB



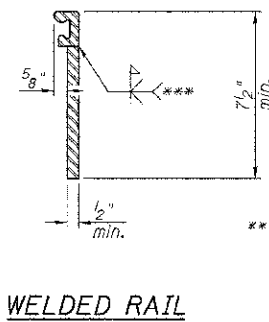
AT SIDEWALK

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

TYPICAL END TREATMENTS

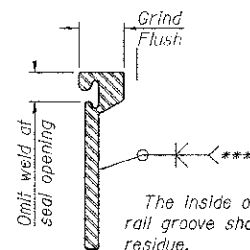


ROLLED EXTRUDED RAIL



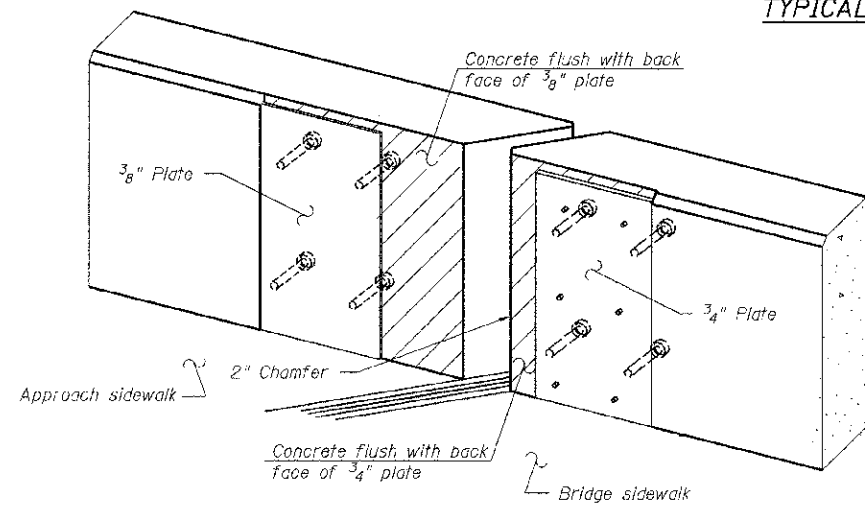
WELDED RAIL

LOCKING EDGE RAILS



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

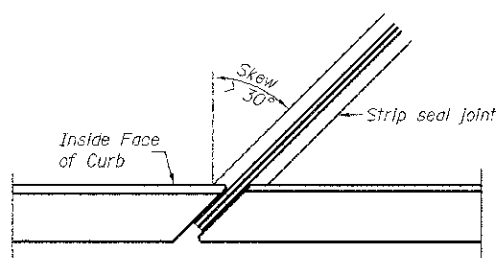
LOCKING EDGE RAIL SPLICE



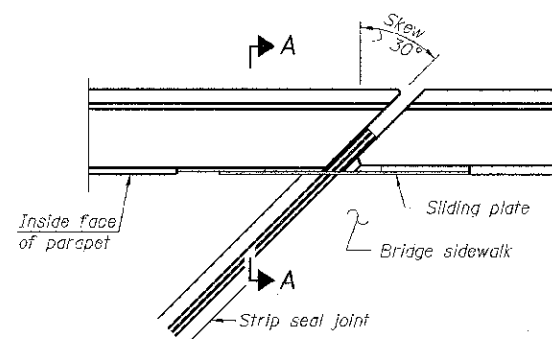
TRIMETRIC VIEW (Showing back plates only)

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches. The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities. The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the County. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant. Joints in rail within 10' of curbs shall be welded. Parapet plate anchorage studs for skews >30° included in the cost of Preformed Joint Strip Seal.

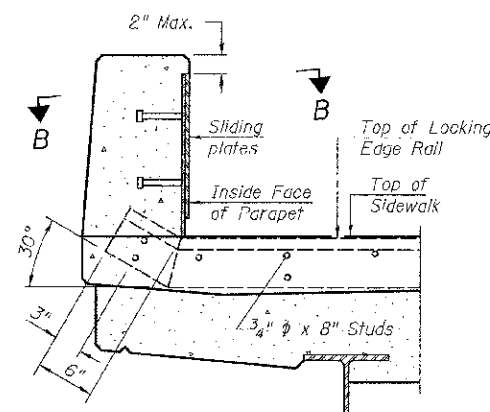
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



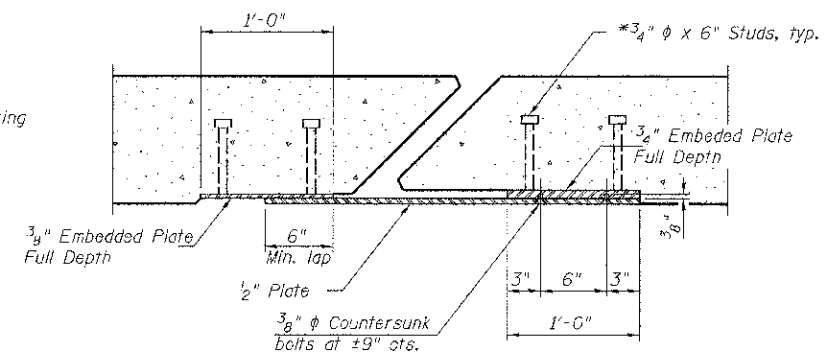
PLAN AT CURB (for skews > 30°)



PLAN AT SIDEWALK (for skews > 30°)



SECTION A-A

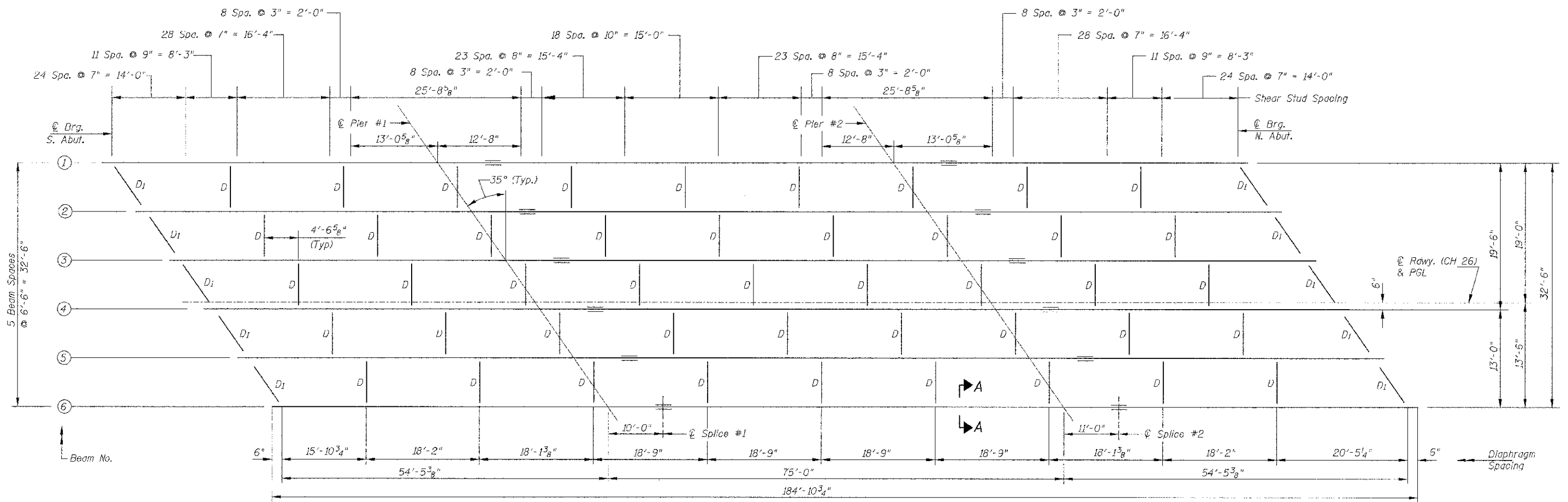


SECTION B-B

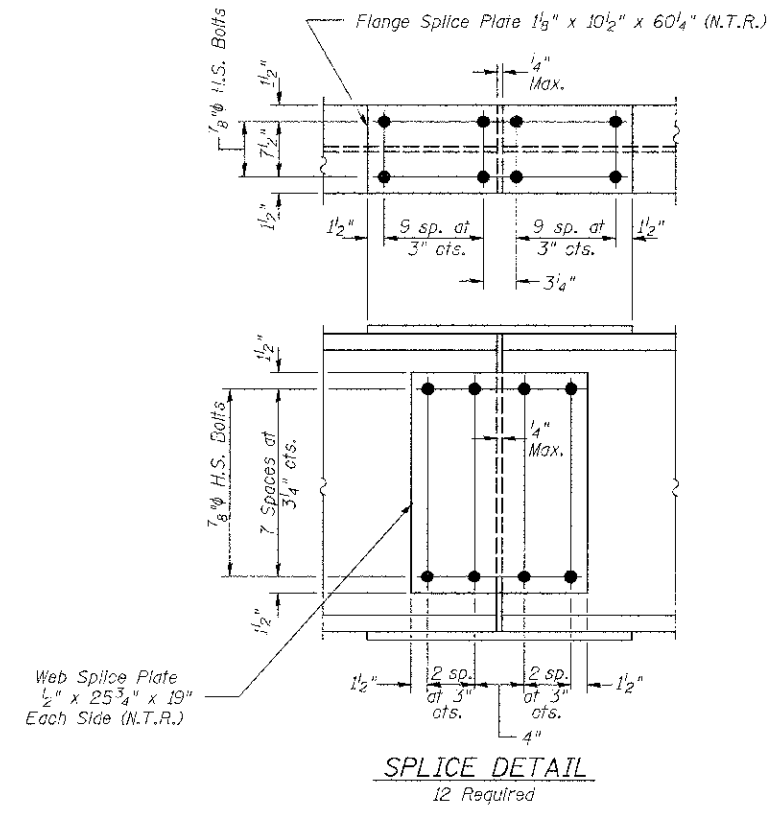
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	FOOT	86'

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	02-27-2013\2555\BIB.dgn	DRAWN TAC	REVISED -			CH 26	05-00044-01-BR	DEKALB	49	31
	PLOT SCALE = NONE	CHECKED CTM	REVISED -			CONTRACT NO. 87477				
	PLOT DATE = 3/26/2013	DATE -	REVISED -			ILLINOIS FED. AID PROJECT BR5-1122(108)				
				SCALE: N/A	SHEET NO. 16 OF 28 SHEETS	STA. N/A	TO STA. N/A			



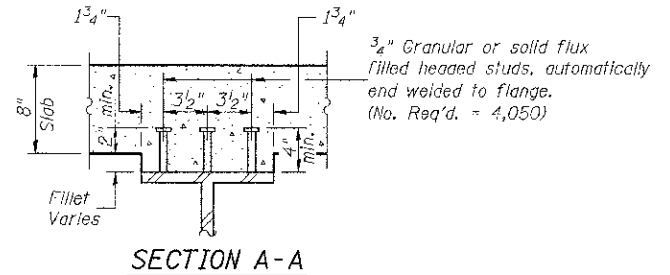
FRAMING PLAN



TOP OF BEAM ELEVATIONS

Beam No.	℄ Brg. South Abut.	℄ Brg. Pier #1	℄ Splice #1	℄ Brg. Pier #2	℄ Splice #2	℄ Brg. North Abut.
1	790.38	790.48	790.50	790.68	790.71	790.93
2	790.53	790.63	790.65	790.83	790.86	791.08
3	790.65	790.75	790.77	790.95	790.98	791.20
4	790.75	790.85	790.87	791.04	791.07	791.30
5	790.66	790.76	790.78	790.96	790.99	791.21
6	790.56	790.67	790.69	790.86	790.89	791.11

(For Fabrication Only)



SECTION A-A

Notes: All beams are W30x124 AASHTO M270 Grade 50W (NTR).
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
See Sheet 18 of 28 for Structural Steel Details.

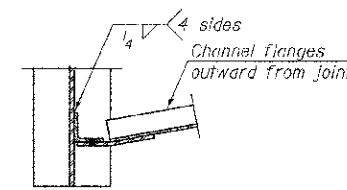
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W:\2555\CADD SHEETS\STRUCTURES - Road\	02-27-2013\2555\017.dgn	DRAWN TAC	REVISED -			CH 26	05-00044-01-BR	DEKALB	49	32	
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	PLOT DATE = 3/26/2013	DATE -	REVISED -			SCALE: N/A	SHEET NO. 17 OF 28 SHEETS	STA. N/A	TO STA. N/A	ILLINOIS FED. AID PROJECT BR5-1122108	

- I_s, S_x : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).
- $I_o(n), S_o(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in⁴ and in³).
- $I_o(3n), S_o(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in⁴ and in³).
- Un-factored non-composite dead load (kips/ft.).
- DC1: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- M_{DC1}: future wearing surface) dead load (kips/ft.).
- M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- M_{DC2}: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- DW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M_{DW}: Un-factored live load moment plus dynamic load allowance (impact) (kip ft.).
- M_{L + IM}: Factored design moment (kip-ft.).
- M_u (Strength I): $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{L + IM}$
Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
- $\phi_f M_n$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
- $\phi_f M_{nc}$: Sum of stresses as computed from the moments below (ksi).
- f_s (Service II): $M_{DC1} + M_{DC2} + M_{DW} + 1.5 M_{L + IM}$
Sum of stresses as computed from the moments below on non-compact section (ksi).
- f_s (Total)(Strength I): $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{L + IM}$
- V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

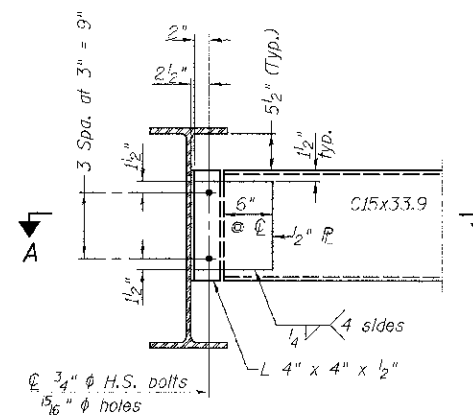
INTERIOR BEAM MOMENT TABLE				
Units		0.4 Span 1 & 0.6 Span 3	Piers 1 & 2	0.5 Span 2
I_s	(in ⁴)	5,360	5,360	5,360
$I_o(n)$	(in ⁴)	14,916	-	14,916
$I_o(3n)$	(in ⁴)	10,920	-	10,920
Z	(in ³)	355	355	355
$S_o(n)$	(in ³)	534	-	534
$S_o(3n)$	(in ³)	481	-	481
DC1	(K/ft.)	0.825	0.825	0.825
M _{DC1}	(K)	151	57	22.5
DC2	(K/ft.)	0.144	0.144	0.144
M _{DC2}	(K)	31	47	52
DW	(K/ft.)	0.325	0.325	0.325
M _{DW}	(K)	73	108	122
M _{L + IM}	(K)	612	427	770
M _u (Strength I)	(K)	1,409	1,414	1,874
$\phi_f M_n, \phi_f M_{nc}$	(K)	2,748	-	2,674
f_s DC1	(k.s.i.)	5.10	12.06	7.55
f_s DC2	(k.s.i.)	0.78	1.58	1.30
f_s DW	(k.s.i.)	1.82	3.65	3.03
f_s 1.3(L+IM)	(k.s.i.)	17.89	18.76	22.49
f_s (Service II)	(k.s.i.)	25.59	36.05	34.38
f_s (Total)(Strength I)	(k.s.i.)	-	47.78	-
V _r	(K)	41.2	-	37.4

* Compact sections
** Non-Compact and slender sections

INTERIOR BEAM REACTION TABLE			
Units	S. & N. Abuts.	Piers 1 & 2	
R _{DC1}	(K)	15.9	59.9
R _{DC2}	(K)	3.0	10.0
R _{DW}	(K)	6.9	23.2
R _{L + IM}	(K)	75.2	127.6
R _{Total}	(K)	101.0	220.7



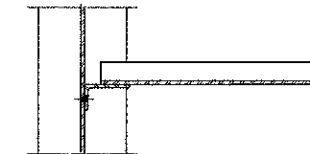
SECTION A-A



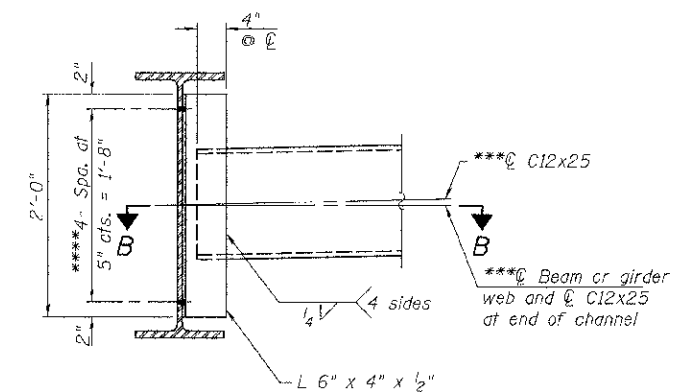
DIAPHRAGM D1

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

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



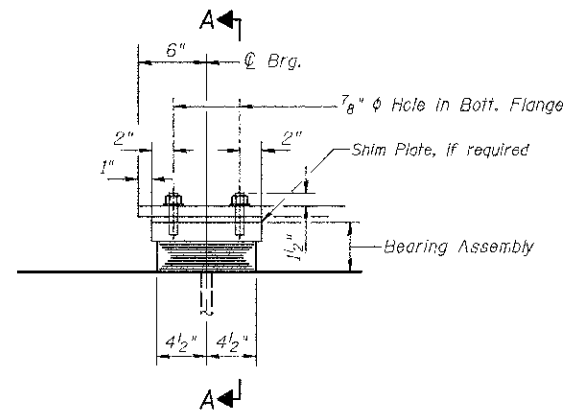
SECTION B-B



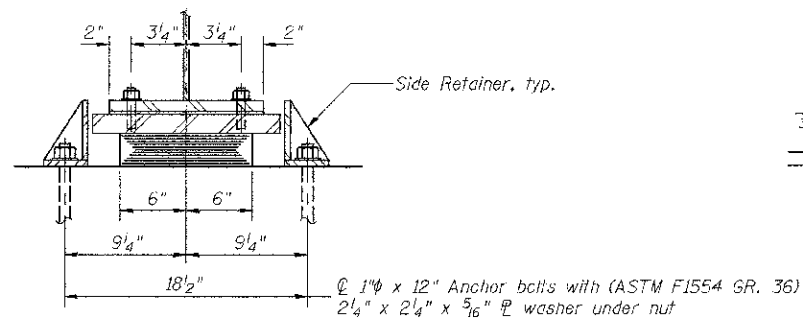
DIAPHRAGM D

Note:
Two hardened washers required for each set of oversized holes.
***Alternate channels C12x30, are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Department.
****3/4" ϕ HS bolts, 15/16" ϕ holes

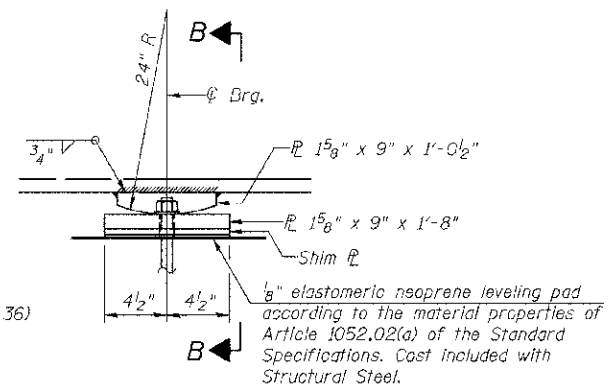
FILE NAME =	USER NAME = smourst	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	STRUCTURAL STEEL DETAILS	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
V:\2005\CADD SHEETS\STRUCTURES Rec'd	02-27-2013\25556818.dgn	DRAWN TAC	REVISED -			CH 26	05-00044-01-BR	DEKALB	49	33	
	PLOT SCALE = NONE	CHECKED CTM	REVISED -			CONTRACT NO. 87477					
	PLOT DATE = 3/26/2013	DATE -	REVISED -			SCALE: N/A	SHEET NO. 18 OF 28 SHEETS	STA. N/A	TO STA. N/A	[ILLINOIS] FED. AID PROJECT BRS-1122(06)	



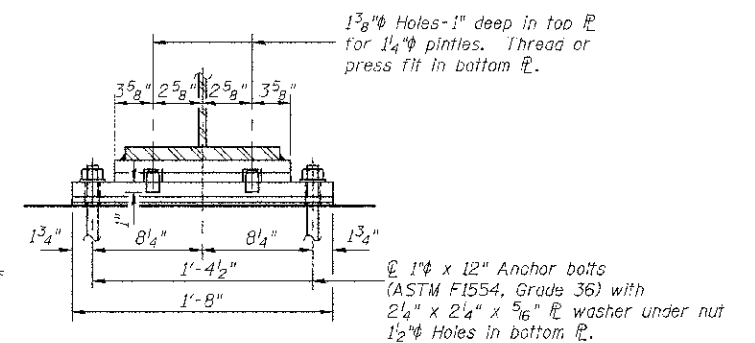
**ELEVATION AT
NORTH & SOUTH ABUTMENTS**



SECTION A-A



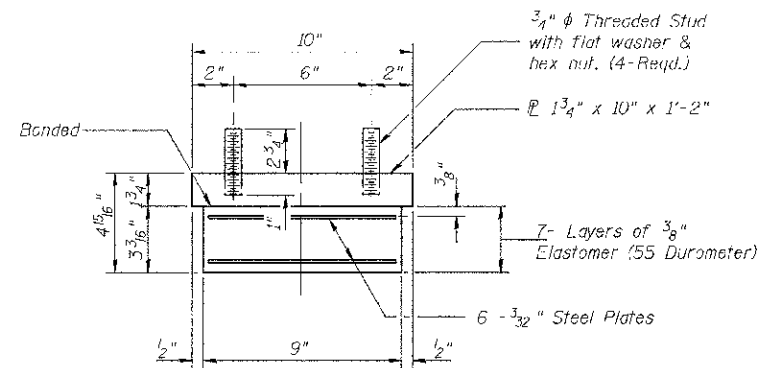
ELEVATION AT PIERS 1 & 2



SECTION B-B

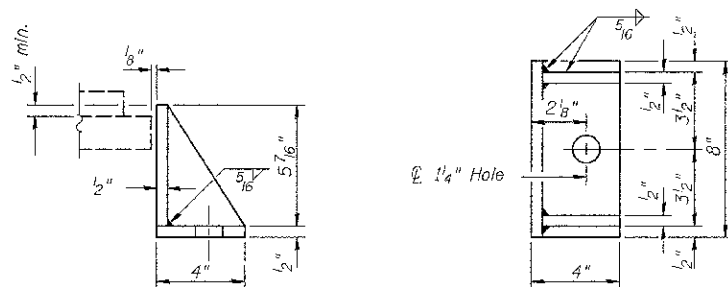
TYPE I ELASTOMERIC EXP. BRG.

FIXED BEARING



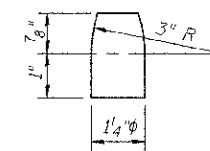
BEARING ASSEMBLY

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



SIDE RETAINER

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



**PINTLE
(Grade 50W)**

Notes:

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

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

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

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

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

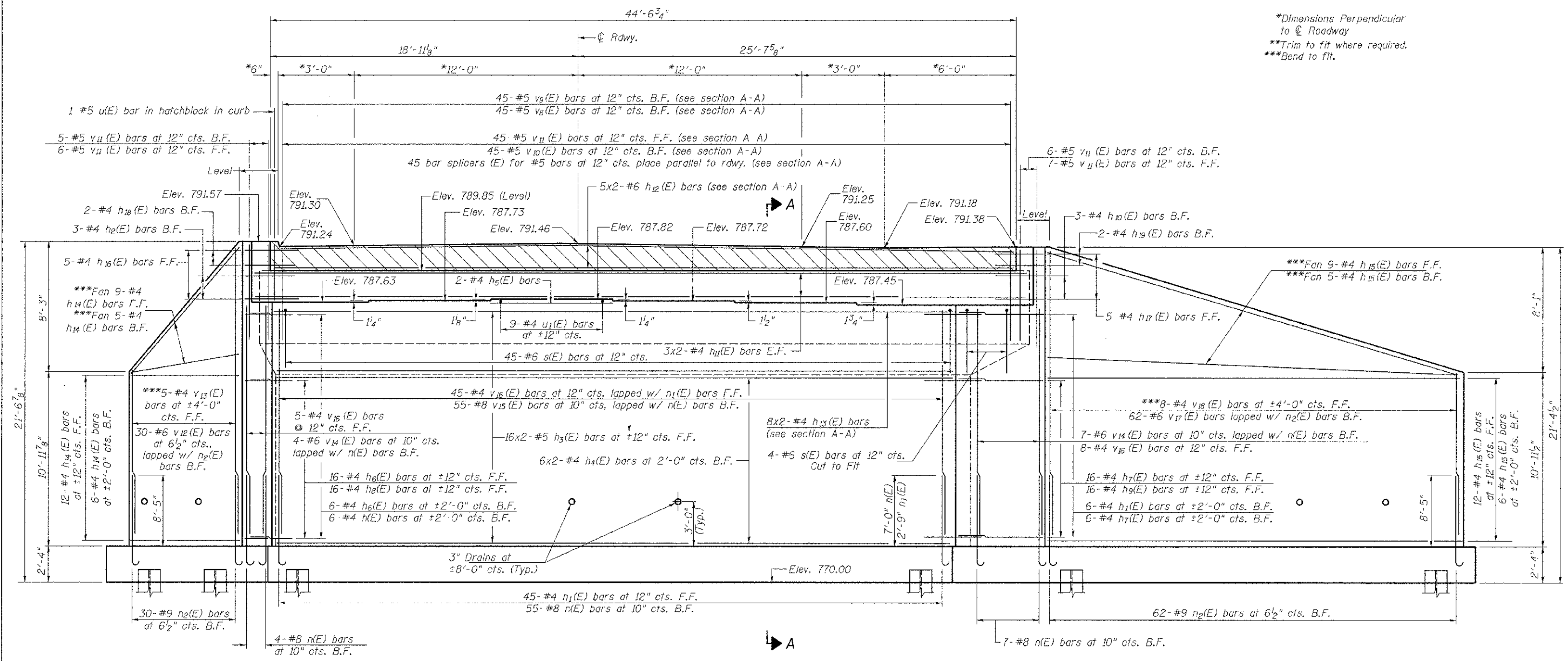
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	EACH	12
Anchor Bolts, 1"	EACH	48

FILE NAME = V:\2856\CADD SHEETS\STRUCTURES - Rev'd	USER NAME = smountsl	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	BEARING DETAILS	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = 3/26/2013	DATE -	REVISED -			SCALE: N/A	SHEET NO. 19 OF 28 SHEETS	STA. N/A	TO STA. N/A	ILLINOIS FED. AID PROJECT BRS-1122(108)	

*Dimensions Perpendicular to \odot Roadway
 **Trim to fit where required.
 ***Bend to fit.

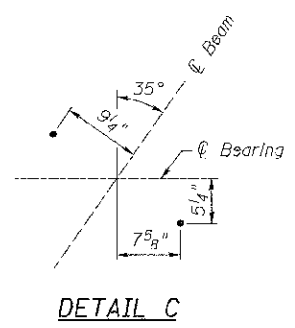


ELEVATION
(Looking South)

Notes:
 See sheet 22 of 28 for Section A-A, Bar Details & Bill of Materials.
 Pour steps monolithically with cap.
 Hatched area to be poured after superstructure is in place.
 See sheet 21 of 28 for footing details, pile locations & anchor bolt layout.
 Space reinforcement in cap to miss anchor bolts.
 See sheet 19 of 28 for anchor bolt details.

MIN. BAR LAP
 (Vertical)
 #4 bar = 2'-7"
 #6 bar = 3'-10"
 #8 bar = 6'-9"
 (Horizontal)
 #4 bar = 2'-0"
 #5 bar = 2'-6"
 #6 bar = 3'-0"

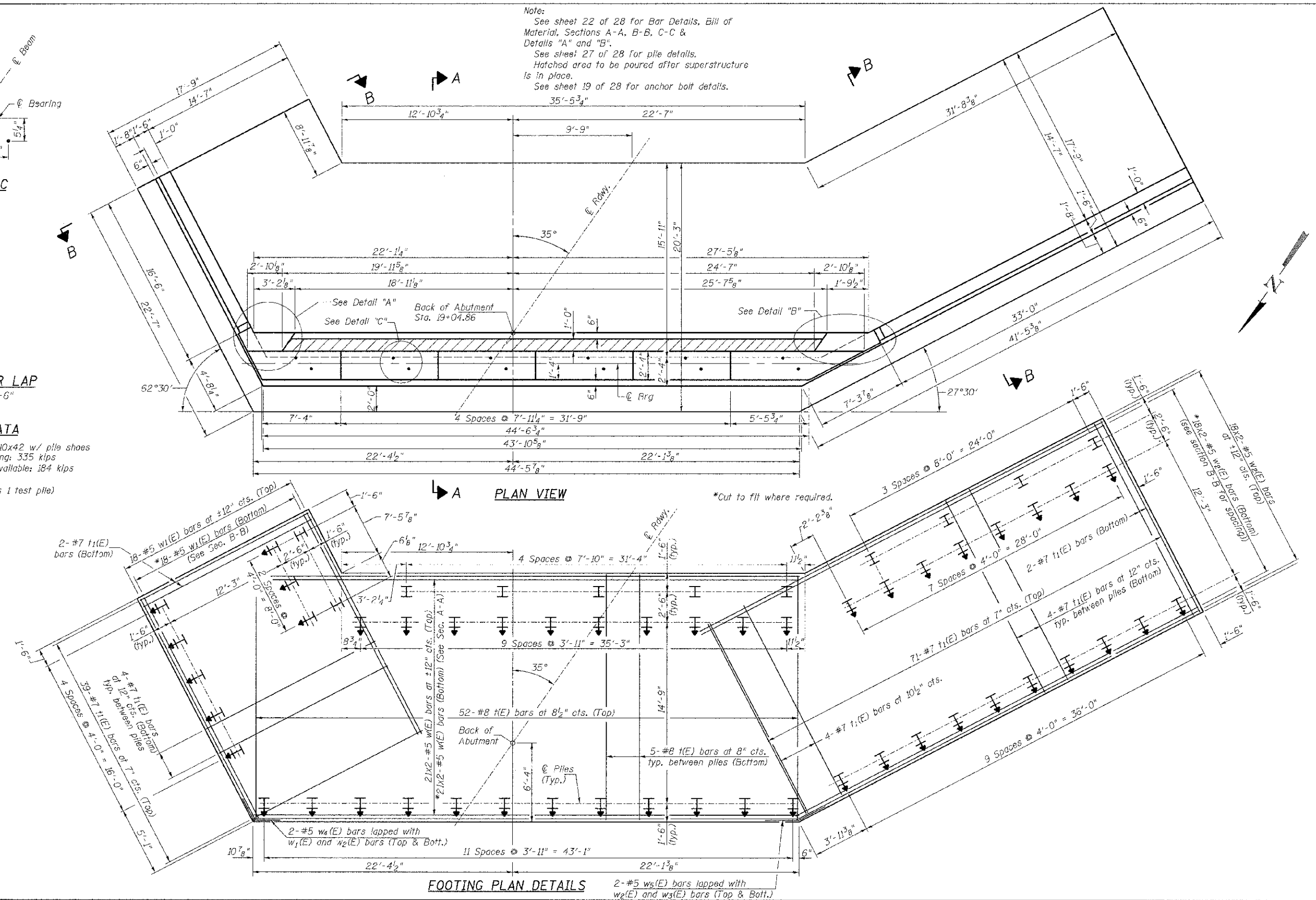
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	02-27-2013\2555\E20.dgn	DRAWN TAC	REVISED -			CH 26	05-00044-01-BR	DEKALB	49	35	
	PLOT SCALE = NONE	CHECKED CTM	REVISED -			CONTRACT NO. 87477					
	PLOT DATE = 3/26/2013	DATE -	REVISED -			SCALE: N/A	SHEET NO. 20 OF 26 SHEETS	STA. N/A	TO STA. N/A	ILLINOIS FED. AID PROJECT BR3-11221089	



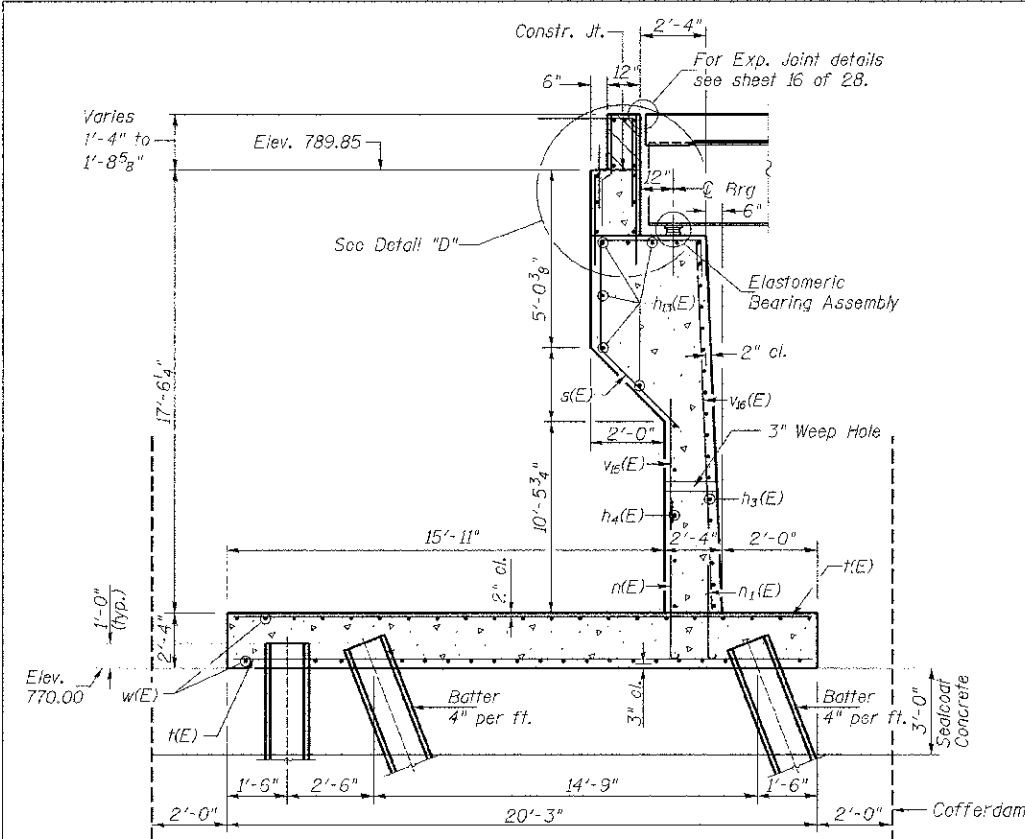
Note:
 See sheet 22 of 28 for Bar Details, Bill of Material, Sections A-A, B-B, C-C & Details "A" and "B".
 See sheet 27 of 28 for pile details.
 Hatched area to be poured after superstructure is in place.
 See sheet 19 of 28 for anchor bolt details.

MIN. BAR LAP
 #5 = 2'-6"

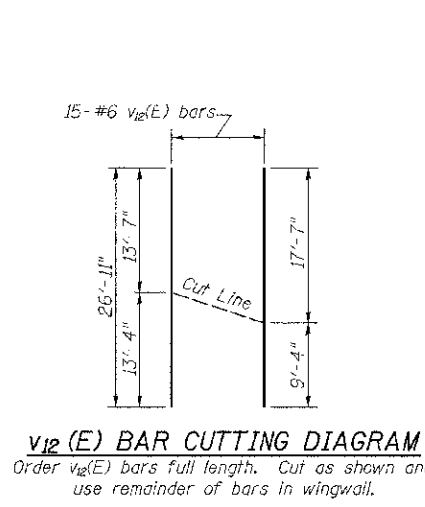
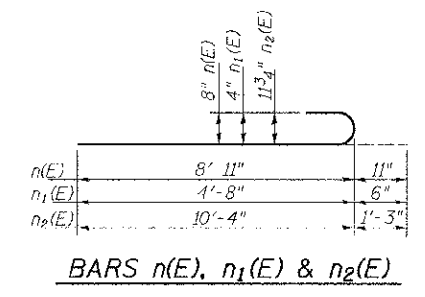
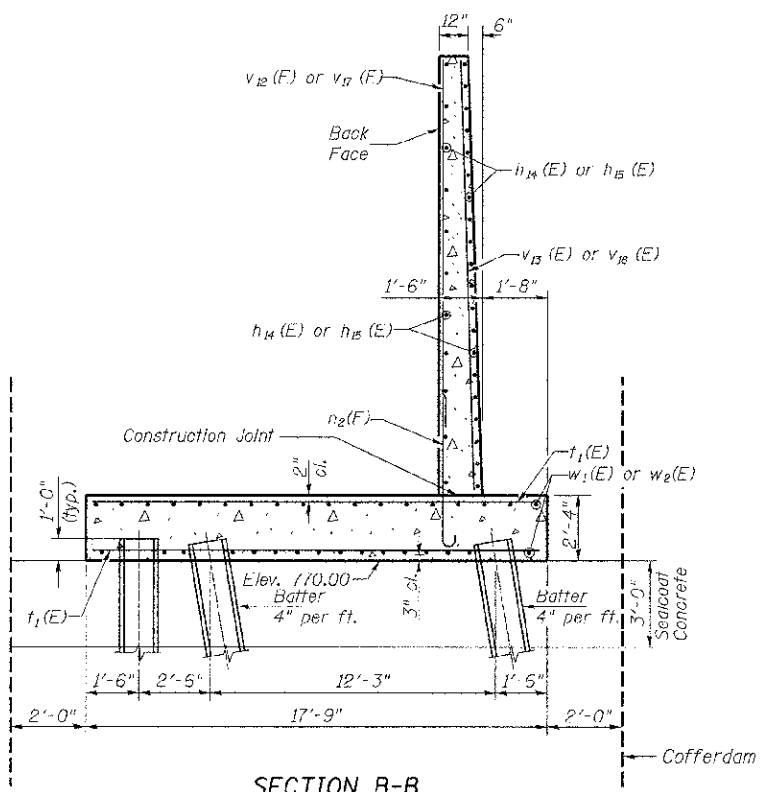
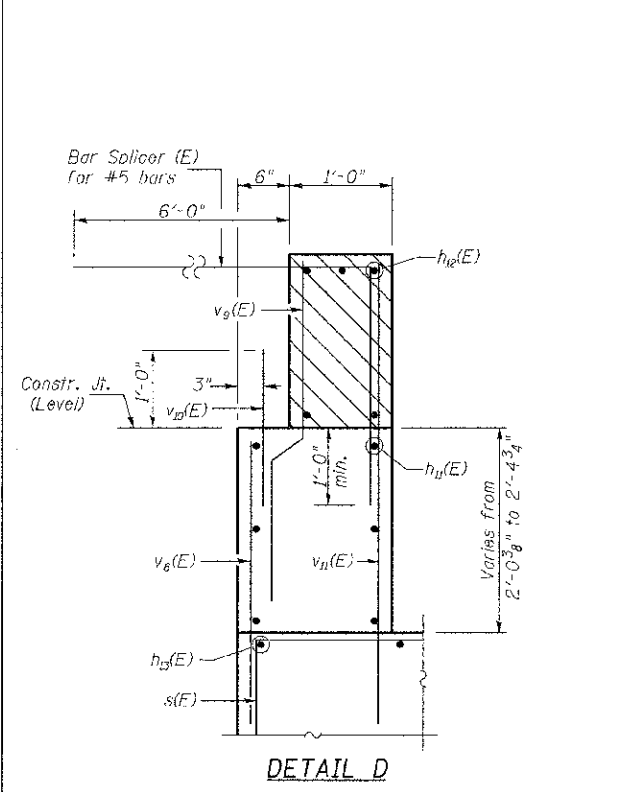
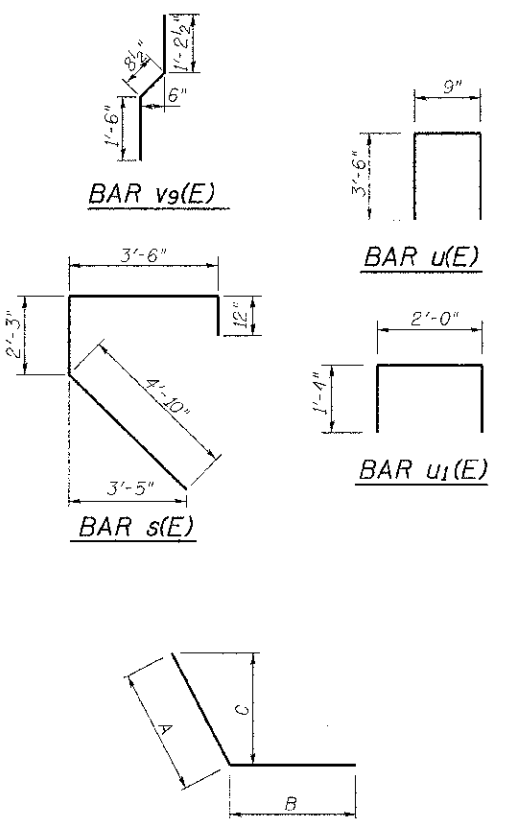
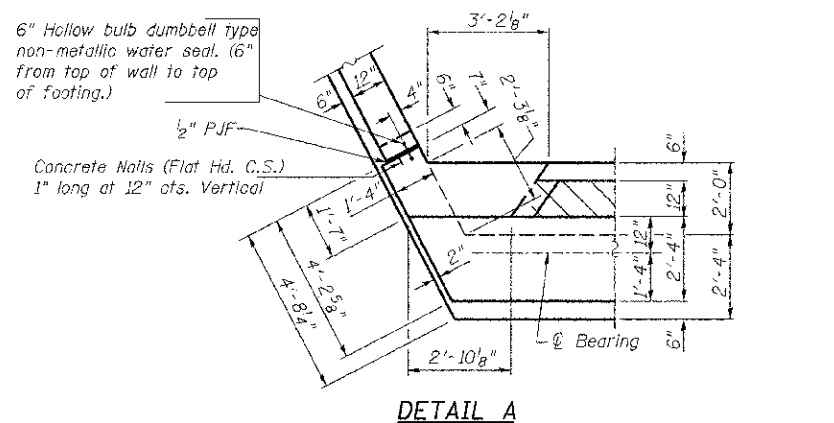
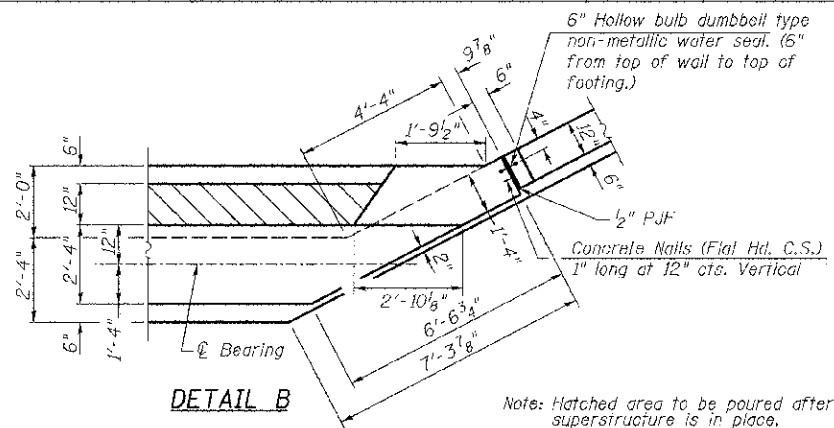
PILE DATA
 Type & Size: Steel HP10x42 w/ pile shoes
 Nominal Required Bearing: 335 kips
 Factored Resistance Available: 184 kips
 Est. Length: 28'
 No. Req'd: 59 (Includes 1 test pile)



FILE NAME = V:\2555\CAOD SHEETS\STRUCTURES - Red'd	USER NAME = amounts! 82-27-2813\2555b021.esn	DESIGNED BAN DRAWN TAC	REVISED - REVISED - REVISED - REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER		SOUTH ABUTMENT & FOOTING PLAN SCALE: N/A SHEET NO. 21 OF 28 SHEETS STA. N/A TO STA. N/A		RTE. NO. CH 26	SECTION 05-00044-01-BR	COUNTY DEKALB	TOTAL SHEETS 49	SHEET NO. 36
								CONTRACT NO. 87477		ILLINOIS	FED. AID PROJECT BRS-112210B	

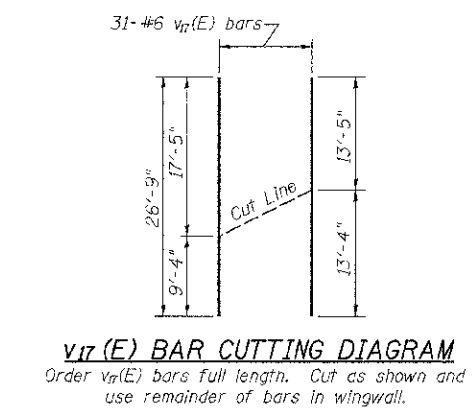


SECTION A-A
(Horizontal dimensions are at right angles to abutment)



BAR	A	B	C
h2(E)	6"	2'-6"	5 3/8"
h5(E)	2'-10"	2'-3"	2'-6"
h7(E)	3'-4"	2'-3"	1'-5 1/2"
h10(E)	8"	2'-10"	3 3/4"
h16(E)	1'-3"	5'-1"	1'-2"
h17(E)	1'-3"	4'-10"	7"
h18(E)	1'-1"	4'-9"	11 1/2"
h19(E)	1'-9"	3'-4"	9 1/2"
w4(E)	2'-6"	2'-6"	2'-2 3/4"
w5(E)	2'-6"	2'-6"	1'-2"

BARS h2(E), h5(E), h7(E), h10(E), h16(E), h17(E), h18(E), h19(E), w4(E) & w5(E)



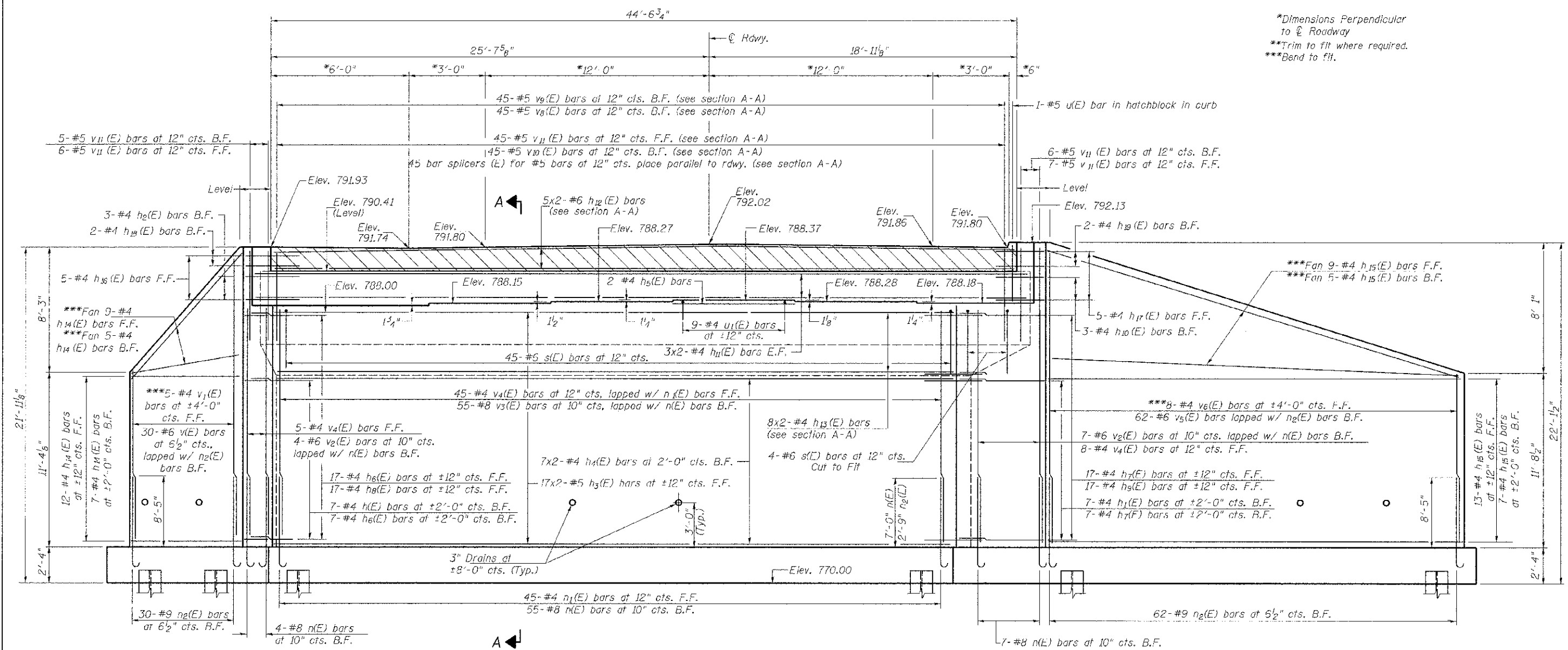
**SOUTH ABUTMENT
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h1(E)	6	#4	2'-9"	—
h2(E)	6	#4	5'-0"	—
h3(E)	3	#4	3'-0"	—
h4(E)	32	#5	23'-2"	—
h5(E)	12	#4	23'-2"	—
h6(E)	2	#4	7'-7"	—
h7(E)	22	#4	5'-7"	—
h8(E)	16	#4	3'-11"	—
h9(E)	16	#4	6'-4"	—
h10(E)	3	#4	3'-6"	—
h11(E)	12	#4	26'-2"	—
h12(E)	10	#6	23'-8"	—
h13(E)	16	#4	26'-11"	—
h14(E)	32	#4	16'-2"	—
h15(E)	32	#4	32'-8"	—
h16(E)	5	#4	6'-4"	—
h17(E)	5	#4	6'-1"	—
h18(E)	2	#4	5'-10"	—
h19(E)	2	#4	5'-1"	—
n(E)	66	#8	9'-10"	—
n1(E)	45	#4	5'-2"	—
n2(E)	92	#9	11'-7"	—
s(E)	49	#6	11'-7"	—
t(E)	107	#8	19'-11"	—
t1(F)	174	#7	17'-5"	—
u1(E)	1	#5	7'-9"	—
u2(E)	9	#4	4'-8"	—
v6(E)	45	#5	4'-8"	—
v9(E)	45	#5	3'-5"	—
v10(E)	45	#5	2'-6"	—
v11(E)	45	#5	5'-11"	—
v12(E)	15	#6	26'-11"	—
v13(E)	5	#4	19'-0"	—
v14(E)	11	#6	14'-11"	—
v15(E)	55	#8	12'-6"	—
v16(E)	58	#4	14'-11"	—
v17(E)	31	#6	26'-9"	—
v18(E)	8	#4	19'-0"	—
w(E)	84	#5	23'-5"	—
w1(F)	36	#5	22'-3"	—
w2(E)	72	#5	21'-11"	—
w4(E)	2	#5	5'-0"	—
w5(E)	2	#5	5'-0"	—
Concrete Structures	CU YD		267.4	
Reinforcement Bars, Epoxy Coated	POUND		31,510	
Cofferdam Excavation	CU YD		1,455	
Cofferdam (Type 2) (Location 1)	EACH		1	
Furnishing Steel Piles HP10x42	FOOT		1,624	
Driving Steel Piles	FOOT		1,624	
Test Pile Steel HP10x42	EACH		1	
Pile Shoes	EACH		59	
Concrete Scaler	SQ FT		243	
Seal Coat Concrete	CU YD		244	

① See Special Provisions

FILE NAME =	USER NAME = smounts1	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	SOUTH ABUTMENT DETAILS		RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
V:\256b\NADRI SHEETS\STRUCTURES - Rev'd	M2-27-2813\256b\022.dgn	DRAWN TAC	REVISED -		SCALE: N/A	SHEET NO. 22 OF 28 SHEETS	STA. N/A	TO STA. N/A	CH 26	05-00044-01-BR	DEKALB	49 37
	PLOT SCALE = NONE	CHECKED CTM	REVISED -									CONTRACT NO. 87477
	PLOT DATE = 3/26/2013	DATE -	REVISED -									ILLINOIS FED. AID PROJ. ECT BRG-1122(08)

*Dimensions Perpendicular to \perp Roadway
 **Trim to fit where required.
 ***Bend to fit.



ELEVATION
 (Looking North)

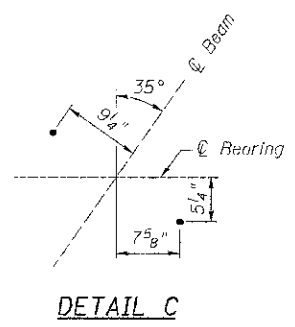
Notes:
 See sheet 25 of 28 for Section A-A, Bar Details & Bill of Materials.
 Pour steps monolithically with cap.
 Hatched area to be poured after superstructure is in place.
 See sheet 24 of 28 for footing details, pile locations & anchor bolt layout.
 Space reinforcement in cap to miss anchor bolts.
 See sheet 19 of 28 for anchor bolt details.

MIN. BAR LAP
 (Vertical)
 #4 bar = 2'-7"
 #6 bar = 3'-10"
 #8 bar = 6'-9"
 (Horizontal)
 #4 bar = 2'-0"
 #5 bar = 2'-6"
 #6 bar = 3'-0"

FILE NAME =	USER NAME =	DESIGNED BY	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	NORTH ABUTMENT	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = 3/26/2013	DATE -	REVISED -					ILLUSTRATIONS		FED. AID PROJECT BR5-1122(108)	

CONTRACT NO. 87477

Note:
 See sheet 25 of 28 for Bar Details, Bill of Material, Sections A-A, B-B, C-C & Details "A" and "B".
 See sheet 27 of 28 for pile details.
 Hatched area to be poured after superstructure is in place.
 See sheet 19 of 28 for anchor bolt details.

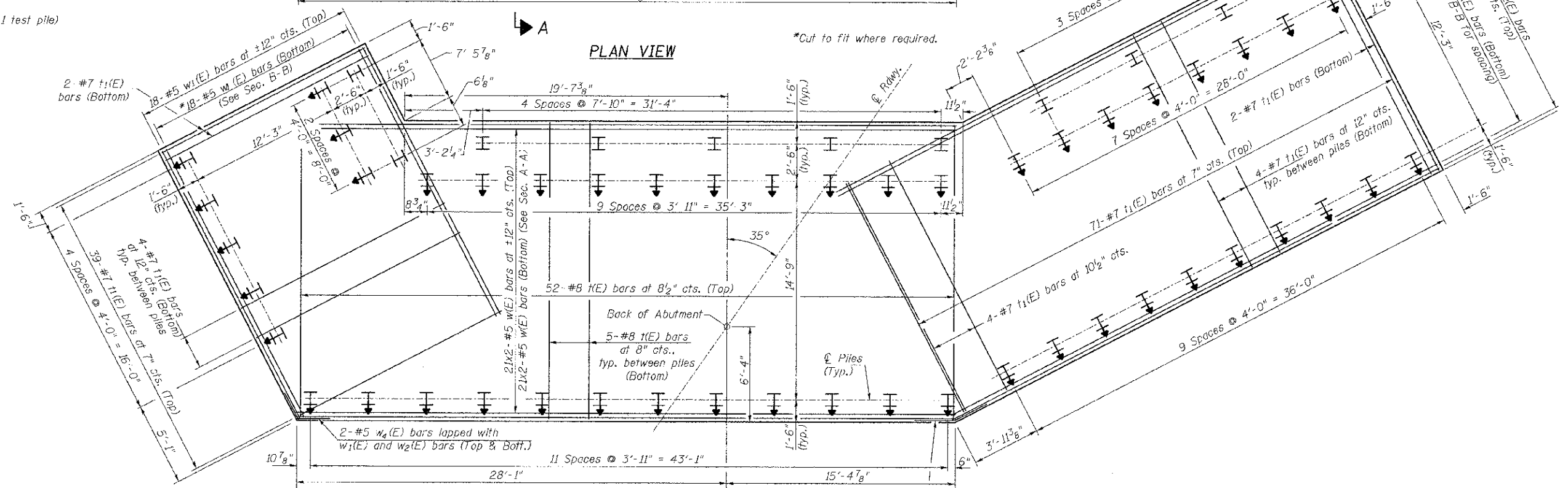


DETAIL C

MIN. BAR LAP
 #5 = 2'-6"

PILE DATA

Type & Size: Steel HP10x42 w/ pile shoes
 Nominal Required Bearing: 335 kips
 Factored Resistance Available: 184 kips
 Est. Length: 35'
 No. Req'd: 59 (Includes 1 test pile)



PLAN VIEW

FOOTING PLAN DETAILS

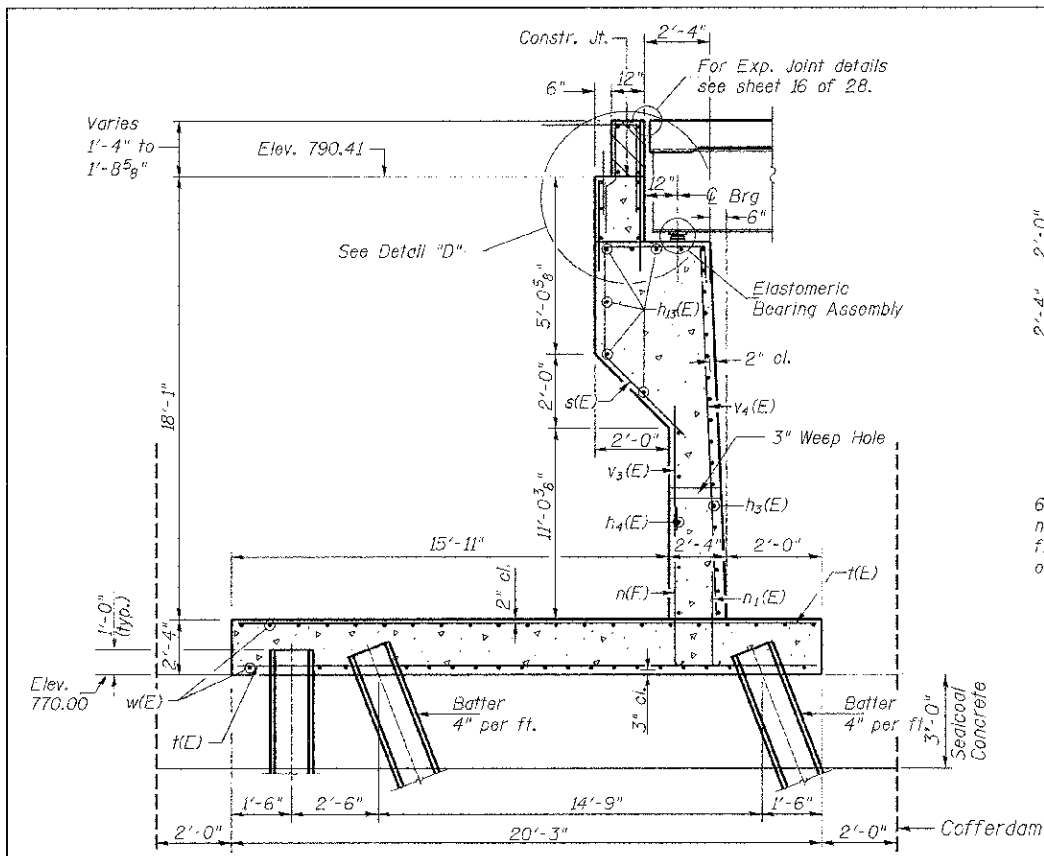
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V:\2005\1401 SHEETS\STRUCTURES - Road	02-27-2013\2005\024.dgn	DRAWN TAC	REVISED -		SCALE: N/A	SHEET NO. 24 OF 28 SHEETS	STA. N/A	TO STA. N/A	CH 26	05-00044-01-BR	DE KALB	49 39
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	PLOT DATE = 3/26/2013	DATE -	REVISED -									ILLINOIS FED. AID PROJECT BR5-11221001

**SOUTH ABUTMENT
BILL OF MATERIAL**

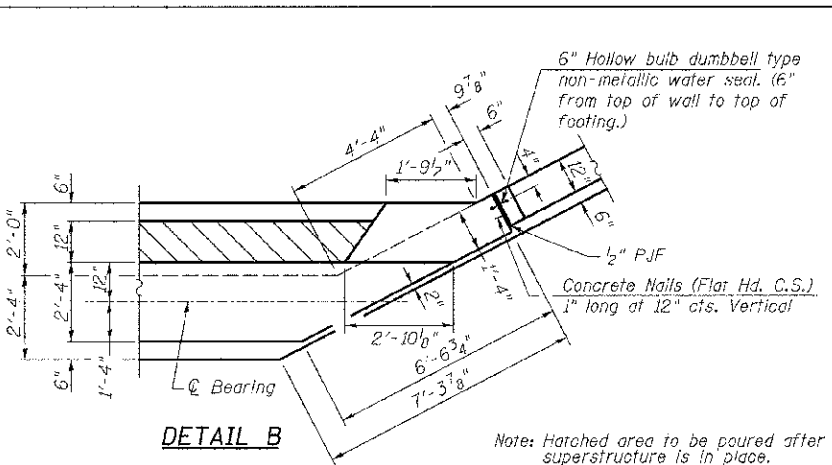
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	7	#4	2'-9"	—
h ₁ (E)	7	#4	5'-0"	—
h ₂ (E)	3	#4	3'-0"	—
h ₃ (F)	34	#5	23'-2"	—
h ₄ (E)	14	#4	23'-2"	—
h ₅ (E)	2	#4	7'-7"	—
h ₆ (E)	24	#4	5'-1"	—
h ₇ (E)	24	#4	5'-7"	—
h ₈ (E)	17	#4	3'-11"	—
h ₉ (E)	17	#4	6'-4"	—
h ₁₀ (E)	3	#4	3'-6"	—
h ₁₁ (E)	12	#4	26'-2"	—
h ₁₂ (E)	10	#6	23'-8"	—
h ₁₃ (E)	16	#4	26'-11"	—
h ₁₄ (E)	33	#4	16'-2"	—
h ₁₅ (E)	34	#4	32'-8"	—
h ₁₆ (E)	5	#4	6'-4"	—
h ₁₇ (E)	5	#4	6'-1"	—
h ₁₈ (E)	2	#4	5'-10"	—
h ₁₉ (E)	2	#4	5'-1"	—
n(E)	66	#8	9'-10"	—
n ₁ (E)	45	#4	5'-2"	—
n ₂ (E)	92	#9	11'-7"	—
s(E)	49	#6	11'-7"	—
k(E)	107	#8	19'-11"	—
t ₁ (E)	174	#7	17'-5"	—
u(E)	1	#5	7'-9"	—
u ₁ (E)	9	#4	4'-8"	—
v(E)	15	#6	27'-1"	—
v ₁ (E)	5	#4	19'-5"	—
v ₂ (E)	11	#6	15'-6"	—
v ₃ (E)	55	#8	13'-6"	—
v ₄ (E)	58	#4	15'-6"	—
v ₅ (E)	31	#6	28'-3"	—
v ₆ (E)	8	#4	19'-7"	—
v ₈ (E)	45	#5	4'-8"	—
v ₉ (E)	45	#5	3'-5"	—
v ₁₀ (E)	45	#5	2'-6"	—
v ₁₁ (E)	45	#5	5'-11"	—
w(E)	84	#5	23'-5"	—
w ₁ (E)	36	#5	22'-3"	—
w ₂ (E)	72	#5	21'-11"	—
w ₄ (E)	2	#5	5'-0"	—
w ₅ (E)	2	#5	5'-0"	—
Concrete Structures	CU YD		269.4	
Reinforcement Bars, Epoxy Coated	POUND		31,890	
Cofferdam Excavation	CU YD		1,495	
Cofferdam (Type 2) (Location 2)	EACH		1	
Furnishing Steel Piles HP10x42	FOOT		2,030	
Driving Steel Piles	FOOT		2,030	
Test Pile Steel HP10x42	EACH		1	
Pile Shaes	EACH		59	
Concrete Sealer	SQ FT		243	
Seal Coat Concrete	CU YD		244	

① See Special Provisions

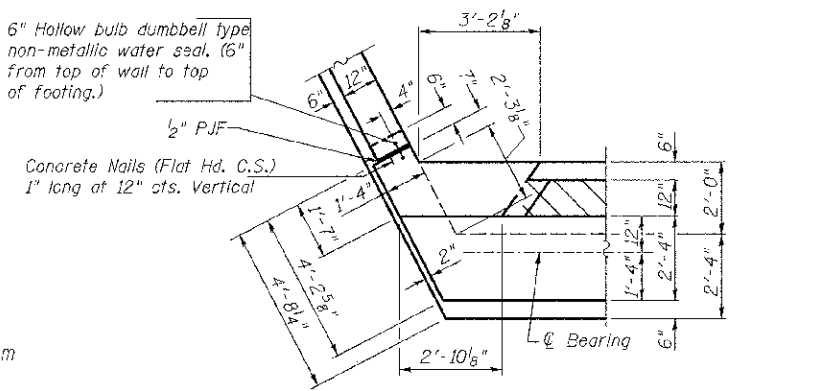
RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-00044-01-BR	DE KALB	49	40
				CONTRACT NO. 87477
				ILLINOIS FED. AID PROJECT BR5-1122108



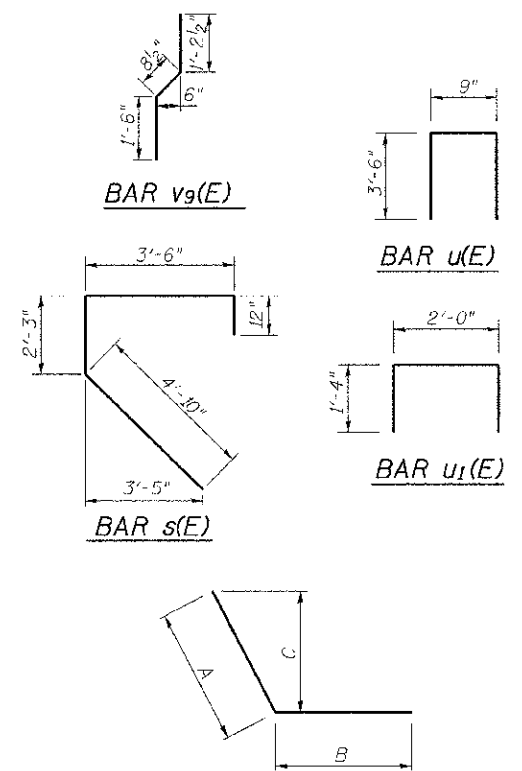
SECTION A-A
(Horizontal dimensions are at right angles to abutment)



DETAIL B

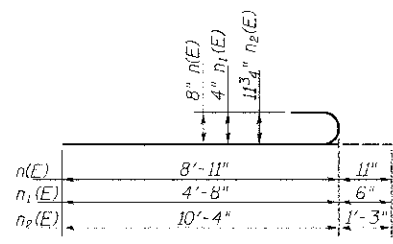


DETAIL A

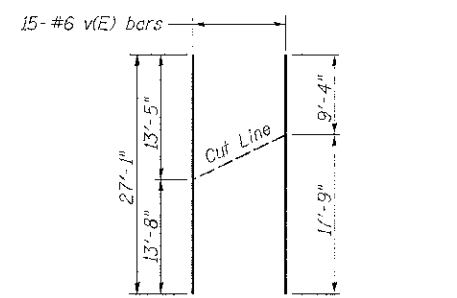


BAR	A	B	C
h ₂ (E)	6"	2'-6"	5 3/8"
h ₆ (E)	2'-10"	2'-3"	2'-6"
h ₇ (E)	3'-4"	2'-3"	1'-5 1/2"
h ₁₀ (E)	8"	2'-10"	3 3/4"
h ₁₆ (E)	1'-3"	5'-1"	1'-2"
h ₁₇ (E)	1'-3"	4'-10"	1"
h ₁₈ (E)	1'-1"	4'-9"	11 1/2"
h ₁₉ (E)	1'-9"	3'-4"	9 1/2"
w ₄ (E)	2'-6"	2'-6"	2'-2 3/4"
w ₅ (E)	2'-6"	2'-6"	1'-2"

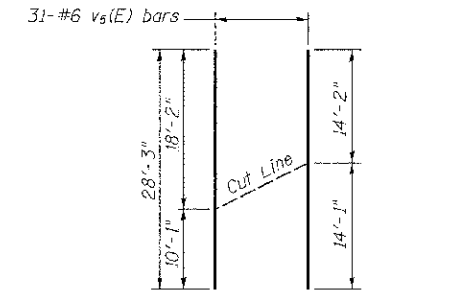
**BARS h₂(E), h₆(E), h₇(E),
h₁₀(E), h₁₆(E), h₁₇(E), h₁₈(E),
h₁₉(E), w₄(E) & w₅(E)**



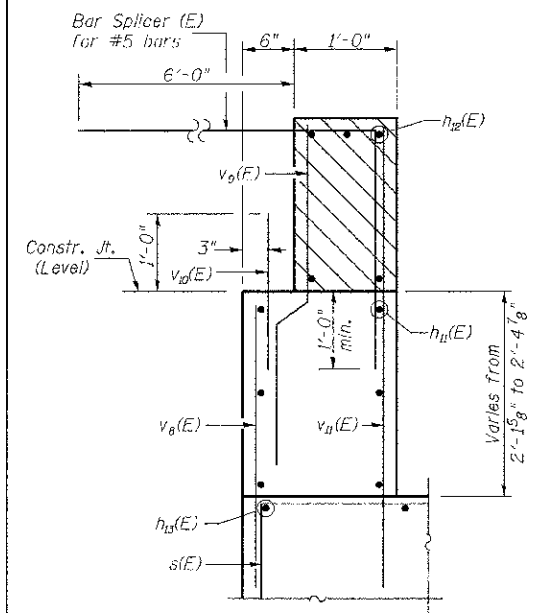
BARS n(E), n₁(E) & n₂(E)



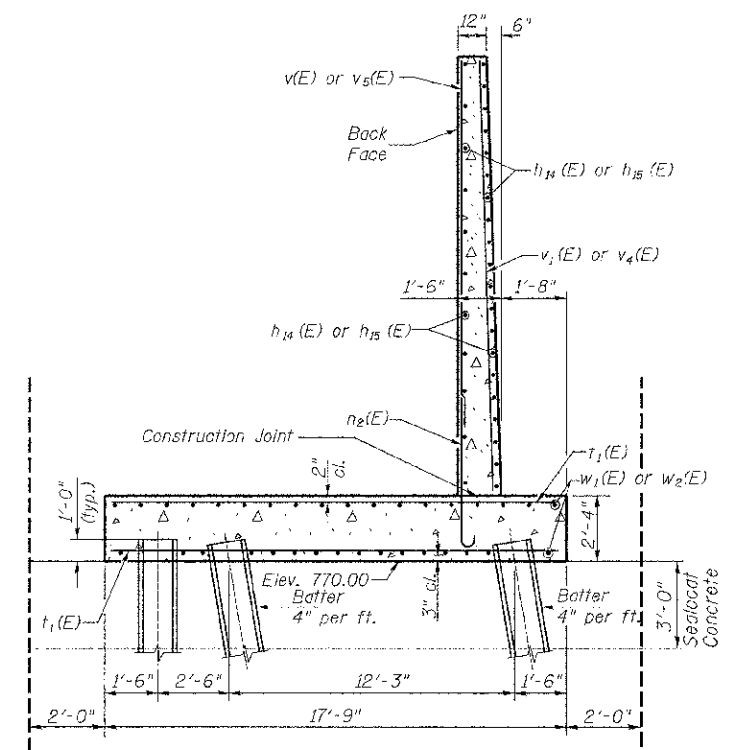
v(E) BAR CUTTING DIAGRAM
Order v(E) bars full length. Cut as shown and use remainder of bars in wingwall.



v₅(E) BAR CUTTING DIAGRAM
Order v₅(E) bars full length. Cut as shown and use remainder of bars in wingwall.



DETAIL D



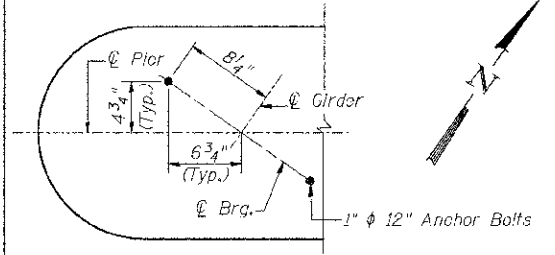
SECTION B-B

FILE NAME =	USER NAME = amount1	DESIGNED BAN	REVISED -
VA2555\CADD SHEETS\STRUCTURES - Rev'd	02-27-2013\2555-025.dgn	DRAWN TAC	REVISED -
	PLOT SCALE = NONE	CHECKED CTM	REVISED -
	PLOT DATE = 3/26/2013	DATE -	REVISED -

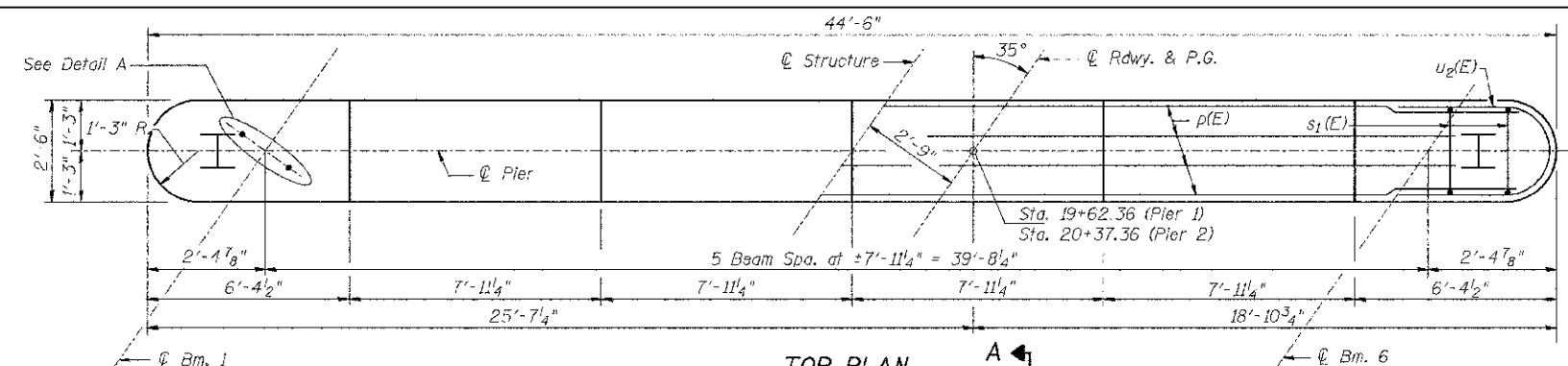
**DEKALB COUNTY
C.H. 26 (FIVE POINTS RD.)
OVER SOUTH BRANCH OF KISHWAUKEE RIVER**

NORTH ABUTMENT DETAILS
SCALE: N/A SHEET NO. 25 OF 28 SHEETS STA. N/A TO STA. N/A

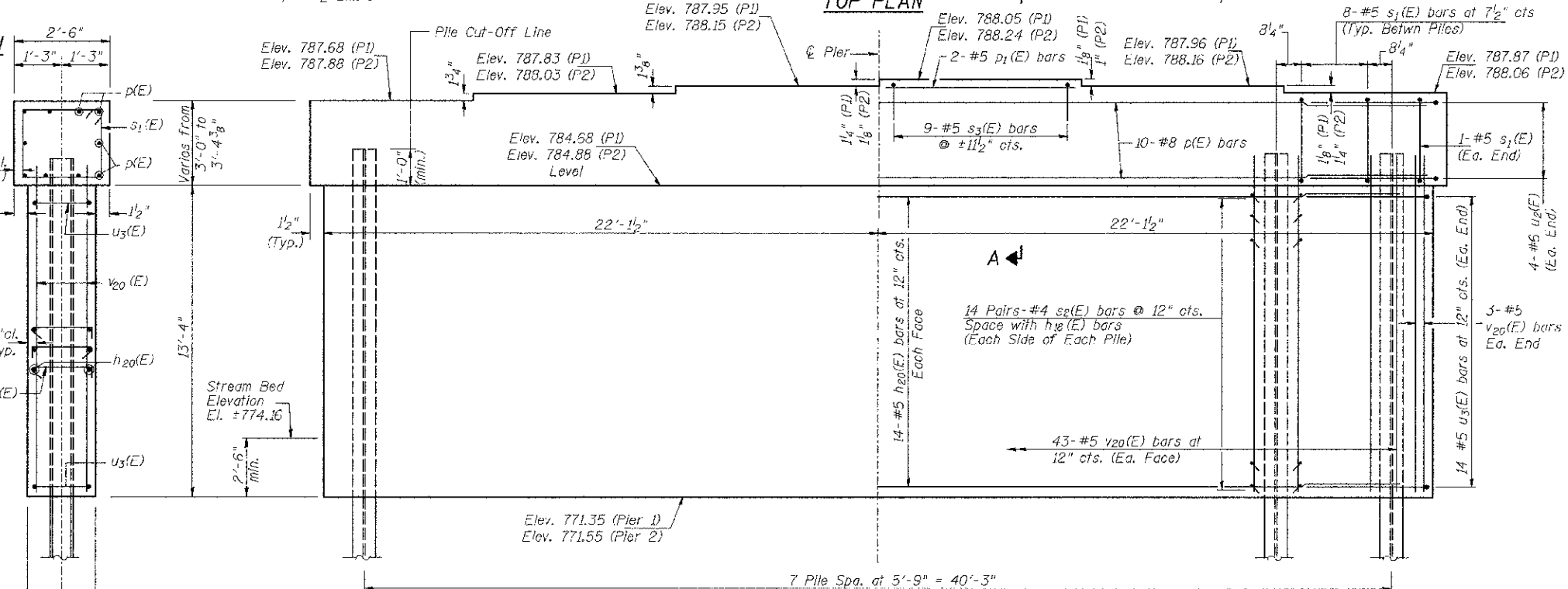
Notes:
 All edges shall have standard 3/4" chamfer.
 Pour steps monolithically with cap.
 Space reinforcement to miss anchor bolts.
 See Sh 27 of 28 for pile details.



DETAIL A
ANCHOR BOLT LOCATION



TOP PLAN

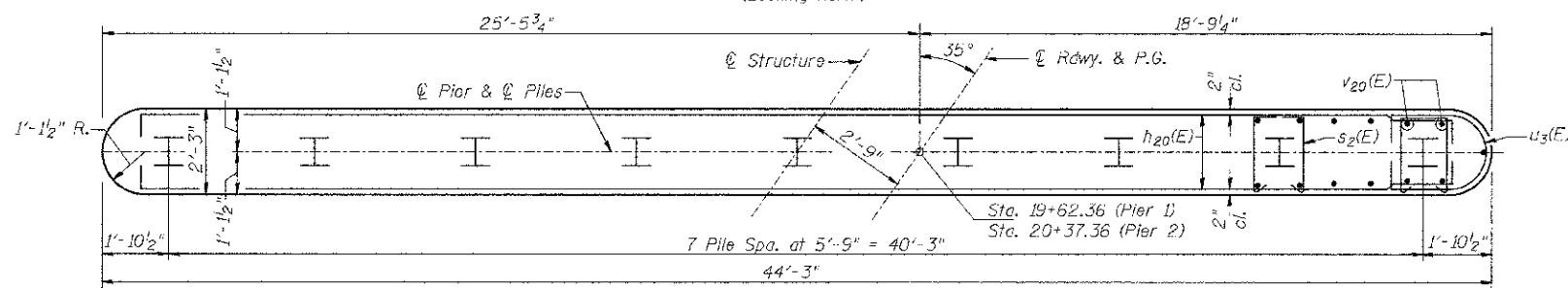


ELEVATION
 (Looking North)

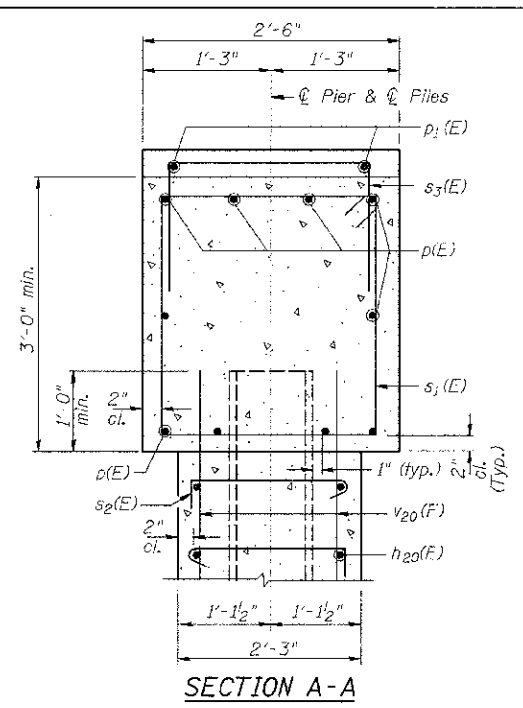
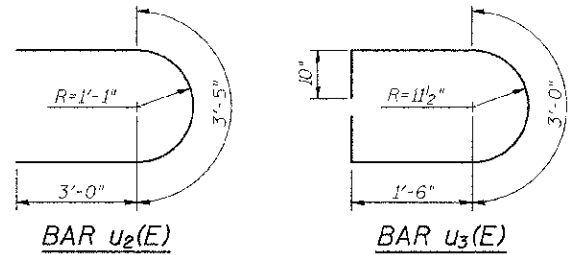
END VIEW

PILE DATA

Type & Size: Steel HP12x53
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 230 kips
 Est. Length: 41'
 No. Required: 16 (Includes 1 test pile at each pier)



FOOTING PLAN



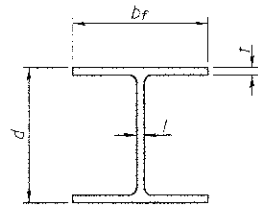
SECTION A-A

TWO PIERS
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h20(E)	56	#5	43'-8"	—
p(E)	20	#8	42'-0"	—
p1(E)	4	#5	7'-7"	—
s1(E)	116	#5	10'-7"	□
s2(E)	448	#4	3'-0"	—
s3(E)	18	#5	6'-0"	—
u2(E)	16	#6	9'-5"	—
u3(E)	56	#5	7'-8"	—
v20(E)	184	#5	14'-2"	—
Concrete Structures		CU YD	124.6	
Cofferdam Excavation		CU YD	72	
Reinforcement Bars, Epoxy Coated		POUND	10,510	
Furnishing Steel Piles HP12x53		FOOT	574	
Driving Steel Piles		FOOT	574	
Test Pile HP12x53		EACH	2	
Pile Shoes		EACH	16	
① Cofferdam, (Type 2) (Location 3)		EACH	1	
① Cofferdam, (Type 2) (Location 4)		EACH	1	

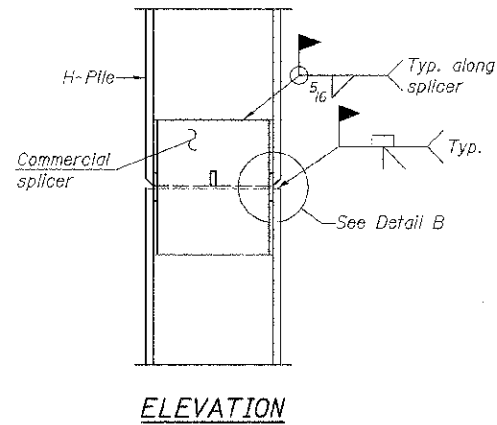
① See Special Provisions

FILE NAME = V:\2556\ADD SHEETS\STRUCT\UPES - Rec.d	USER NAME = amoutsl	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	PIERS 1 AND 2	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	02-27-2013\2556\026.dgn	DRAWN TAC	REVISED -			CH 26	05-00044-01-BR	DE KALB	49	41
	PLOT SCALE = NONE	CHECKED CTM	REVISED -			SCALE: N/A	SHEET NO. 26 OF 28 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87477
	PLOT DATE = 3/26/2013	DATE -	REVISED -							ILLINOIS FED. AID PROJECT BR5-1122108

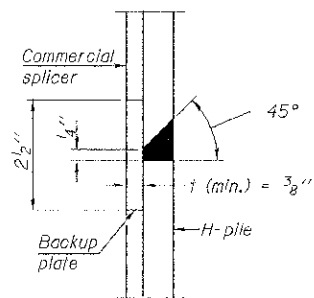


STEEL PILE TABLE

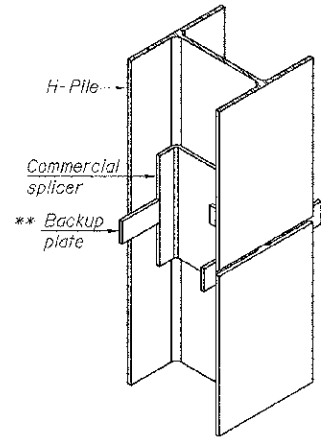
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/2"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53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

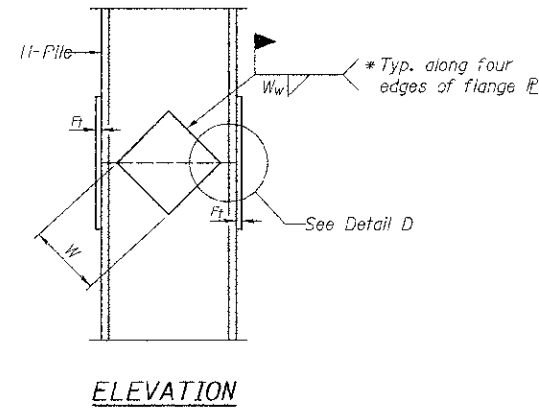


DETAIL "B"

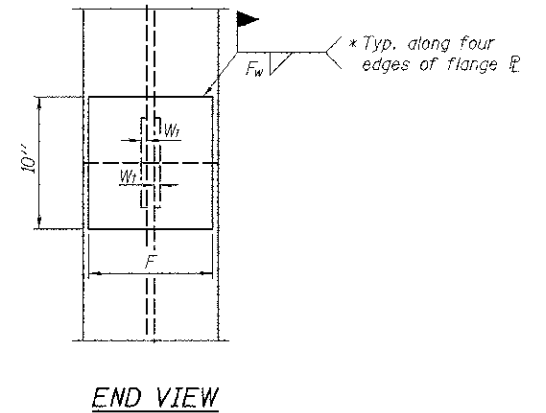


ISOMETRIC VIEW

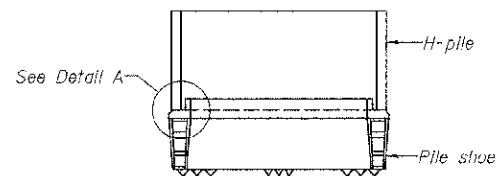
WELDED COMMERCIAL SPLICE



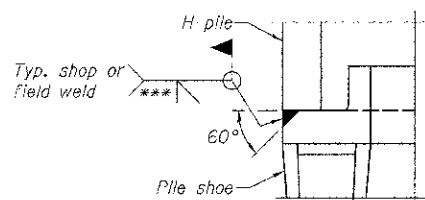
ELEVATION



END VIEW

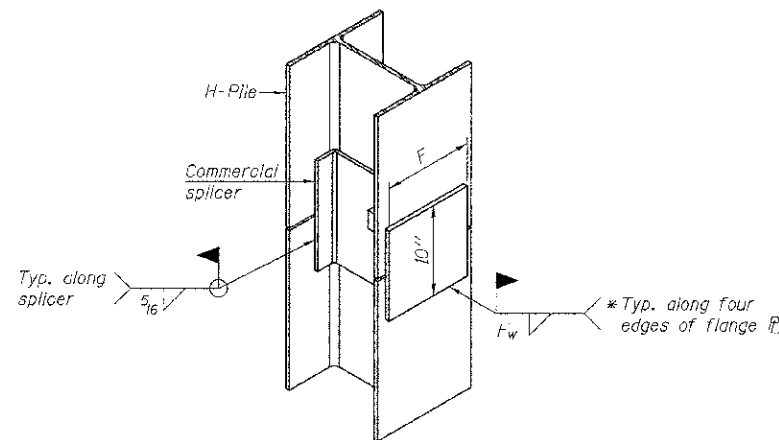


ELEVATION



DETAIL A

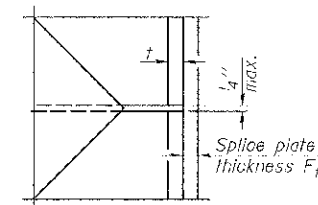
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

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



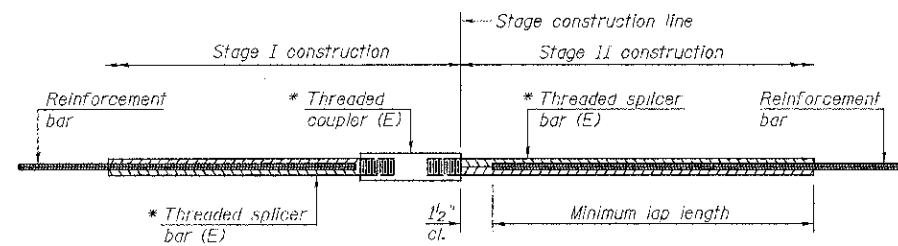
DETAIL D

WELDED PLATE FIELD SPLICE

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

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

FILE NAME =	USER NAME = smou.nst	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	HP PILE DETAILS			RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
V:\2555\400 SHEETS\STRUCTURES - Rec/d	82-27-2013-2555b027.dgn	DRAWN TAC	REVISED -					CH 26	05-00044-01-BR	DE KALB	49	42
	PLOT SCALE = NONE	CHECKED CTM	REVISED -		SCALE: N/A	SHEET NO. 27 OF 28 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87477			
	PLOT DATE = 3/26/2013	DATE -	REVISED -		[ILLINOIS] FED. AID PROJECT BR5-1122(08)							



STANDARD BAR SPLICER ASSEMBLY

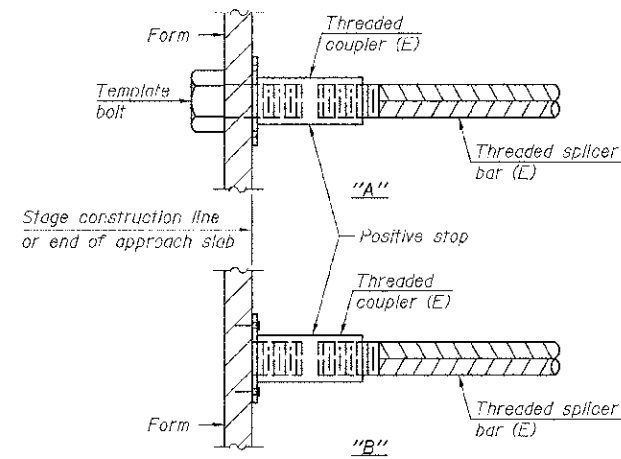
Bar size to be spliced	Minimum Lap Lengths					
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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

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

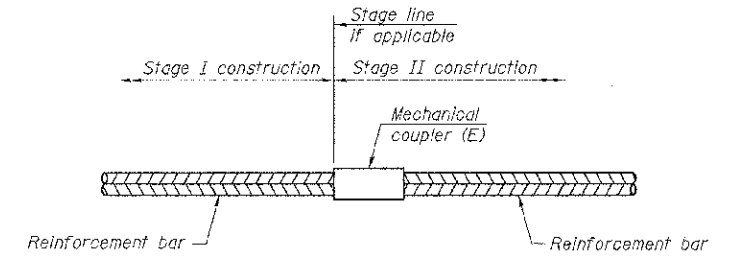
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



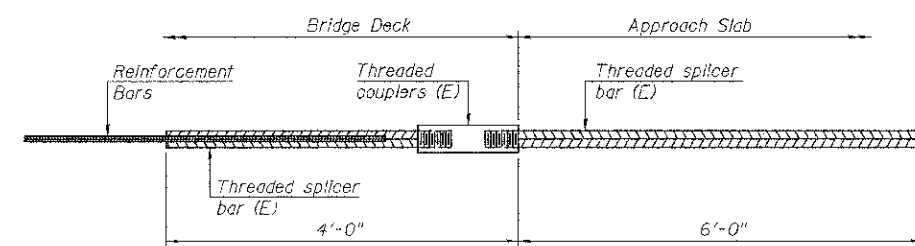
INSTALLATION AND SETTING METHODS

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



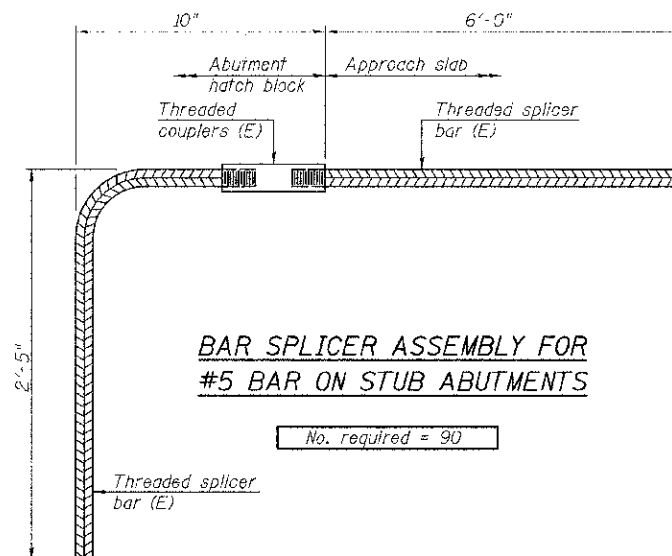
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 90

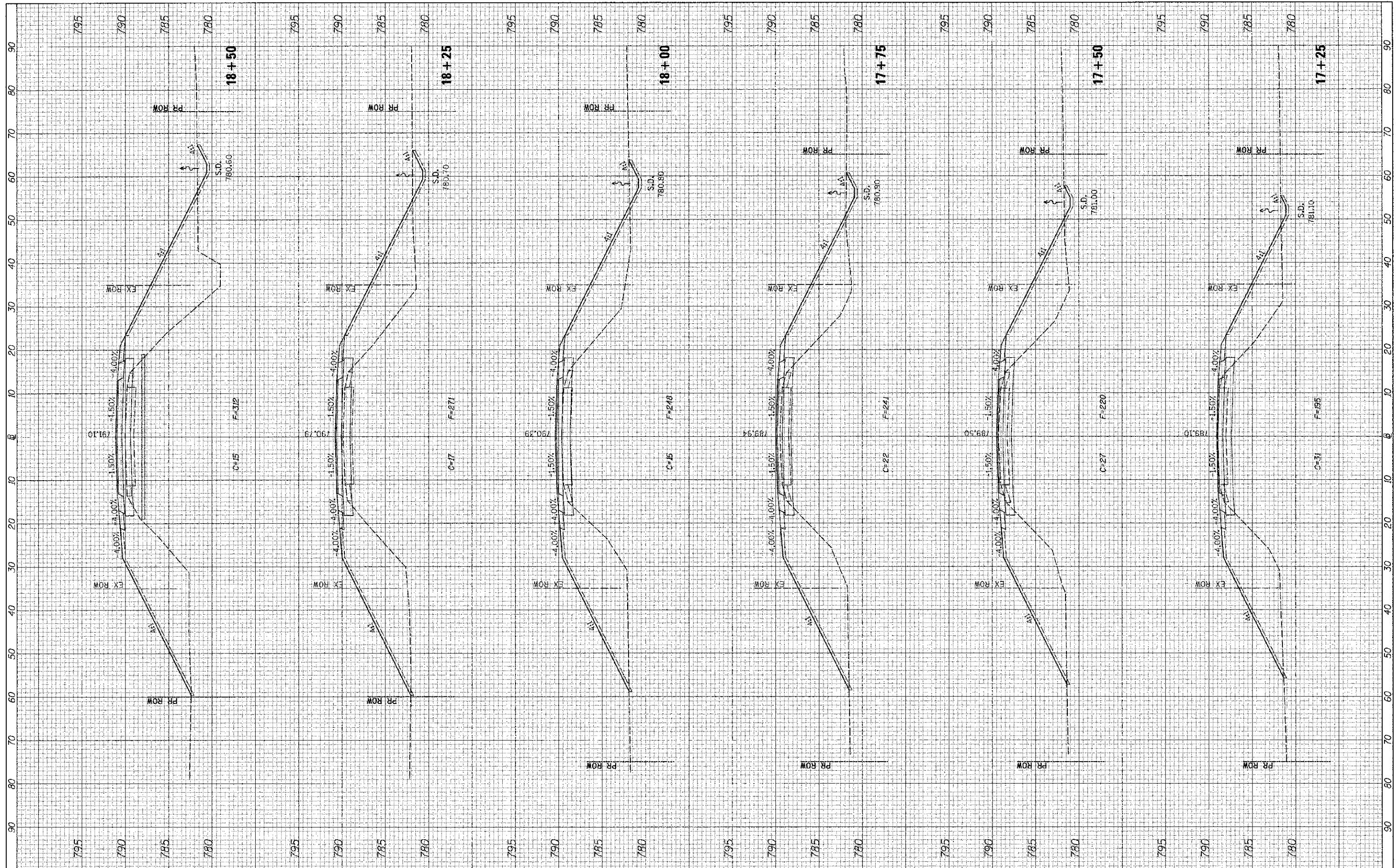
NOTES

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

FILE NAME =	USER NAME = smounts1	DESIGNED BAN	REVISED -	DEKALB COUNTY C.H. 26 (FIVE POINTS RD.) OVER SOUTH BRANCH OF KISHWAUKEE RIVER	BAR SPLICER ASSEMBLY	RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
V:\2555\0400 SHEETS\STRUCTURES - Rev\0	02-27-2013\2555L026.dwg	DRAWN TAC	REVISED -			CH 26	05-00044-01-BR	DE KALB	49	43	
	PLOT SCALE = NONE	CHECKED CTM	REVISED -			CONTRACT NO. 87477					
	PLOT DATE = 3/26/2013	DATE -	REVISED -			SCALE: N/A	SHEET NO. 28 OF 28 SHEETS	STA. N/A	TO STA. N/A	[ILLINOIS] FED. AID PROJECT BR5-112210(8)	

FINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	



FILE NAME - V:\2566\CADD SHEETS\2565-ah-t-wsht.dgn
 USER NAME = amountal
 PLOT SCALE = 9.9819' / in.
 PLOT DATE = 3/28/2013

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

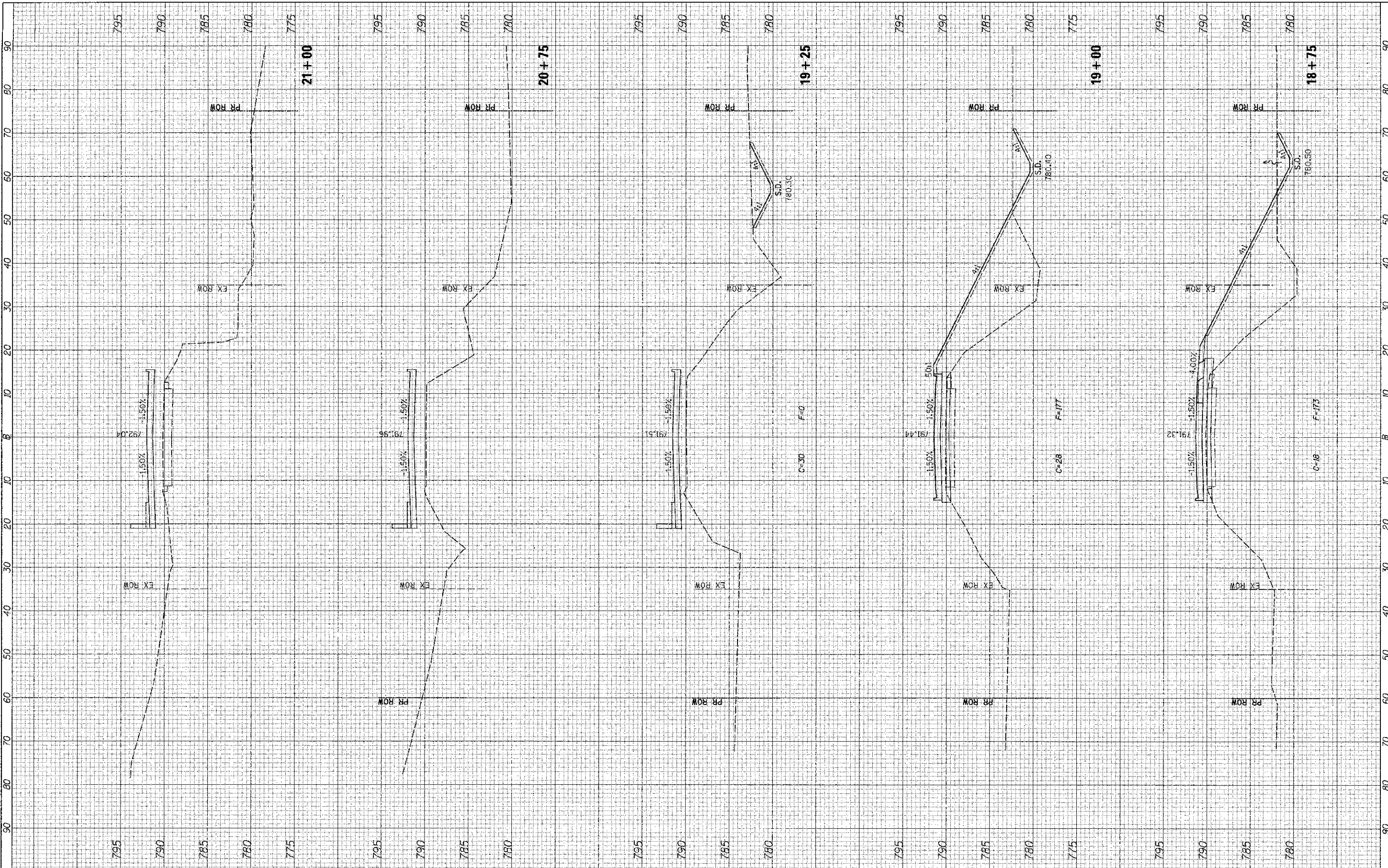
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

C.H. 26 (FIVE POINTS RD.) CROSS SECTIONS
 SCALE: H=10 V=5 SHEET 3 OF 6 SHEETS STA. 17+25 TO STA. 18+50

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-00044-01-BR	DE KALB	49	46
				CONTRACT NO. 87477
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME = V:\2555\CADD SHEETS\2555-shs-ssht.dgn
 USER NAME = smountsl
 PLOT SCALE = 1/8" = 1' / in.
 PLOT DATE = 3/29/2013

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

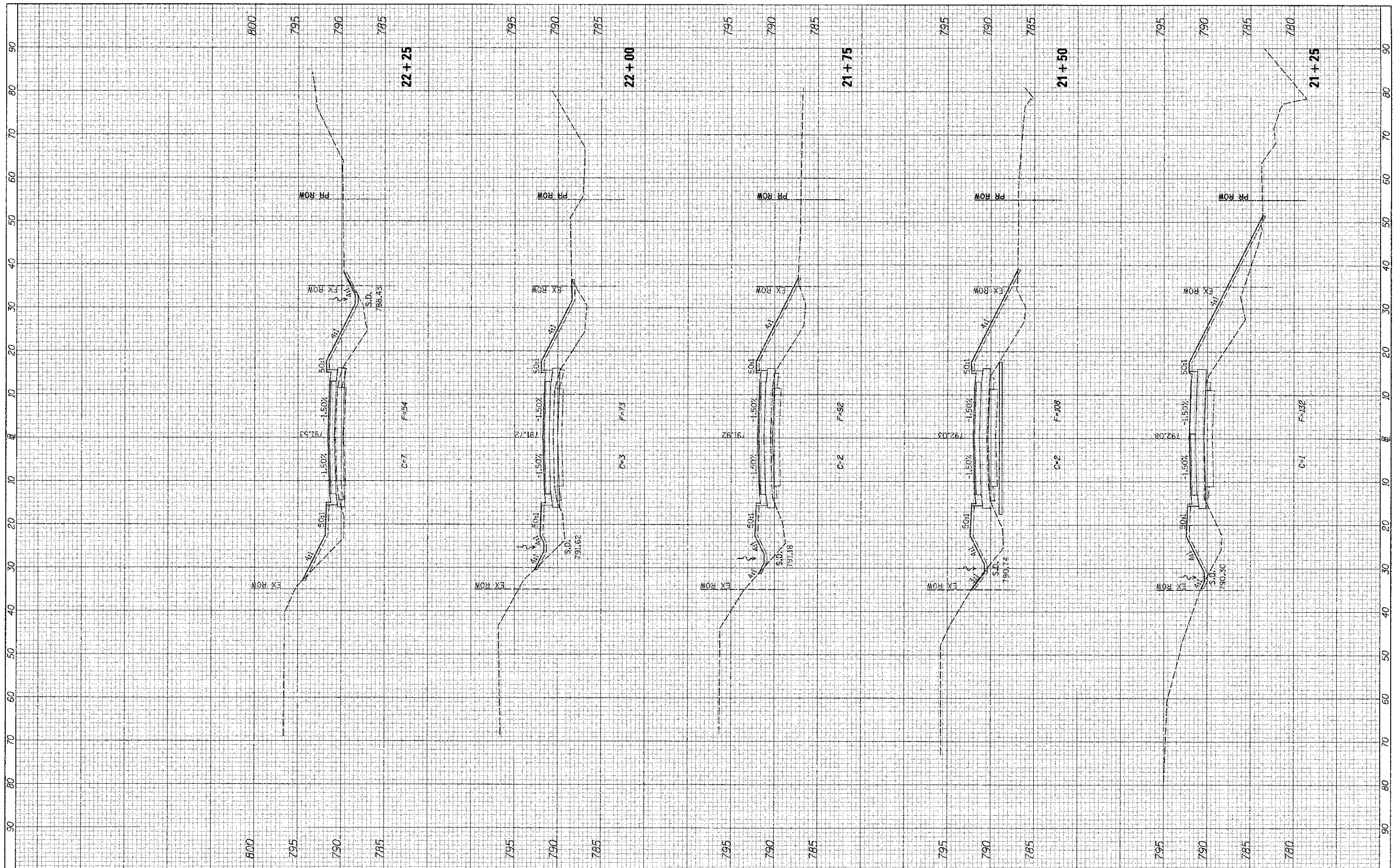
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

C.H. 26 (FIVE POINTS RD.) CROSS SECTIONS
 SCALE: H=10 V=5 SHEET 4 OF 6 SHEETS STA. 18+75 TO STA. 21+00

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-0044-01-9R	DE KALB	49	47
CONTRACT NO. 87477				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	DATE
NO. _____	BY _____
NOTE BOOK	DATE
NO. _____	BY _____
TEMPLATE	DATE
NO. _____	BY _____
AREAS CHECKED	DATE
NO. _____	BY _____

ORIGINAL SURVEY	DATE
NO. _____	BY _____
NOTE BOOK	DATE
NO. _____	BY _____
TEMPLATE	DATE
NO. _____	BY _____
AREAS CHECKED	DATE
NO. _____	BY _____



FILE NAME = V:\2655\CAED SHEETS\2655-ah1-ssht.dgn
 USER NAME = amountl
 PLOT SCALE = 1/8" = 1' / 31.68'
 PLOT DATE = 3/23/2013

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

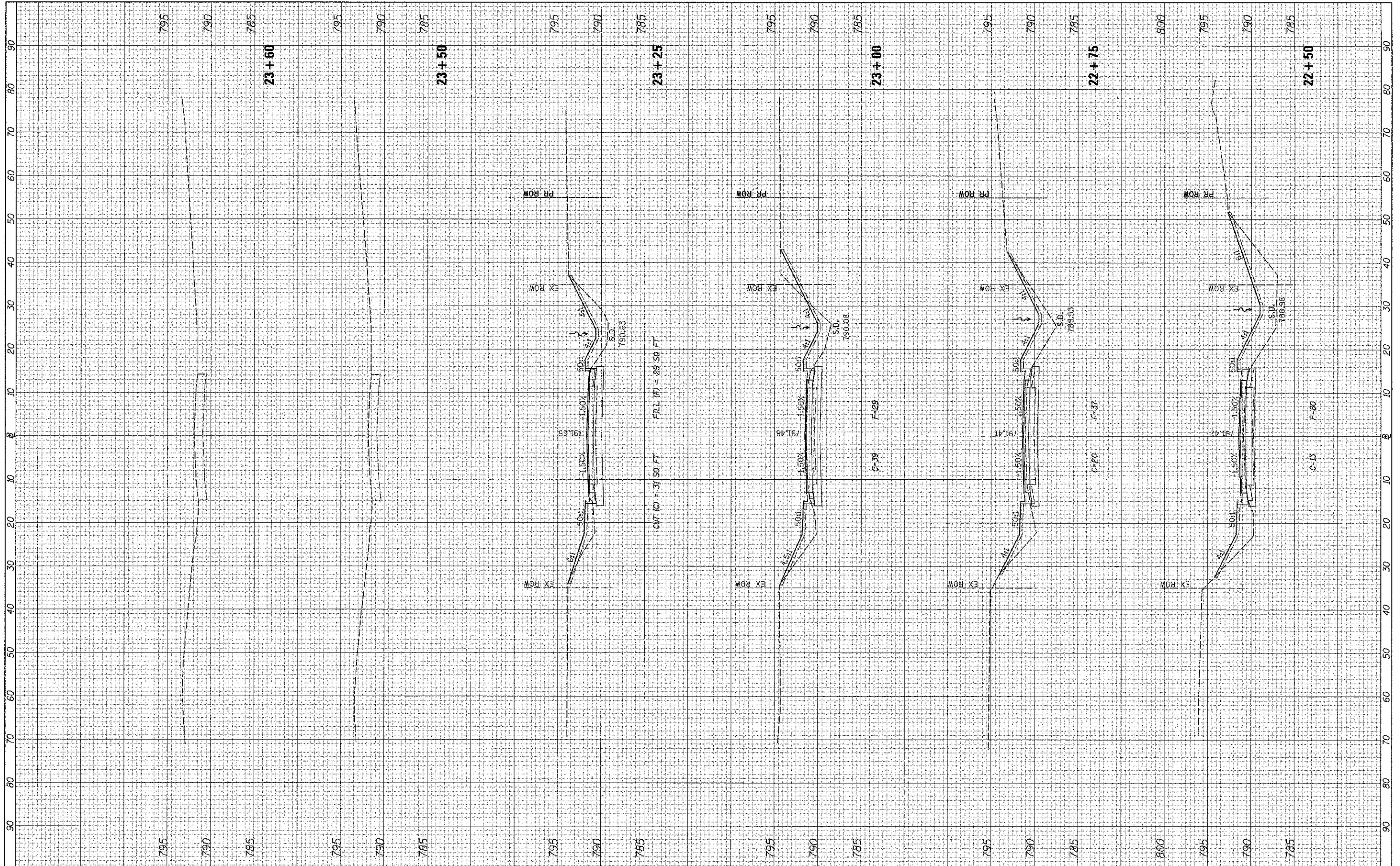
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

C.H. 26 (FIVE POINTS RD.) CROSS SECTIONS
 SCALE: H=10 V=5 SHEET 5 OF 6 SHEETS STA. 21+25 TO STA. 22+25

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-00044-01-BR	DE KALB	49	48
CONTRACT NO. 87477				
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME = V:\2885\CAED\CH26\2555 sht-xxsh.dgn
 USER NAME = sncjrtal

DESIGNED -	REVISD -
DRAWN -	REVISD -
CHECKED -	REVISD -
DATE -	REVISD -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

C.H. 26 (FIVE POINTS RD.) CROSS SECTIONS

SCALE: H=10 V=5 SHEET 6 OF 6 SHEETS STA. 22+50 TO STA. 23+60

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 26	05-00044-01-6R	DE KALB	49	49
CONTRACT NO. 87477				
ILLINOIS FED. AID PROJECT				