CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56 +13 69	1

6-15-07 Letting, Item 066

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

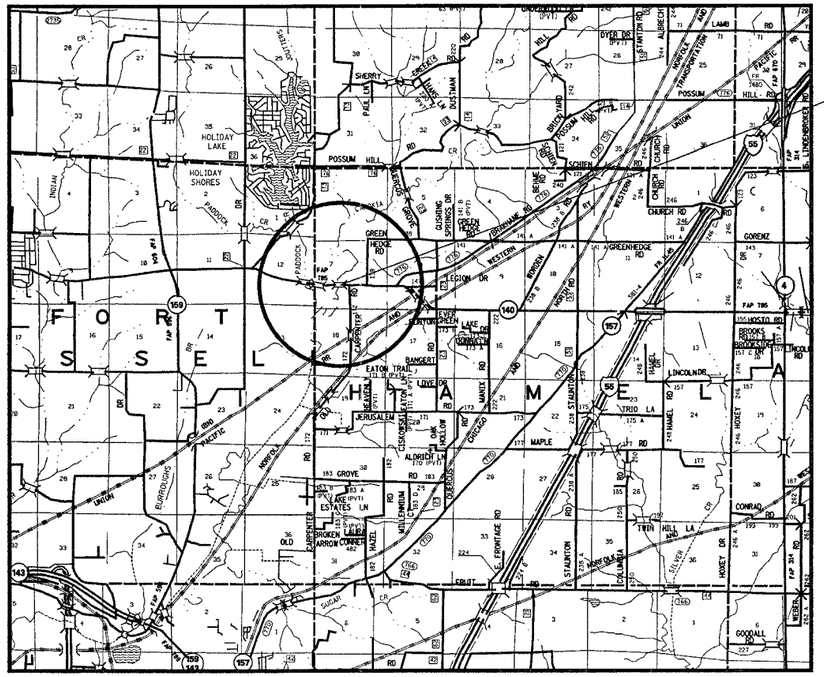
PROPOSED
HIGHWAY PLANS

FAP ROUTE 785 (IL ROUTE 140)
SECTION 134-1BR-2
PROJECT: F-0785(027)

REMOVAL AND REPLACEMENT OF THE STRUCTURE CARRYING IL ROUTE 140 OVER CAHOKIA CREEK W/ SCOUR MITIGATION

MADISON COUNTY
C-98-014-07

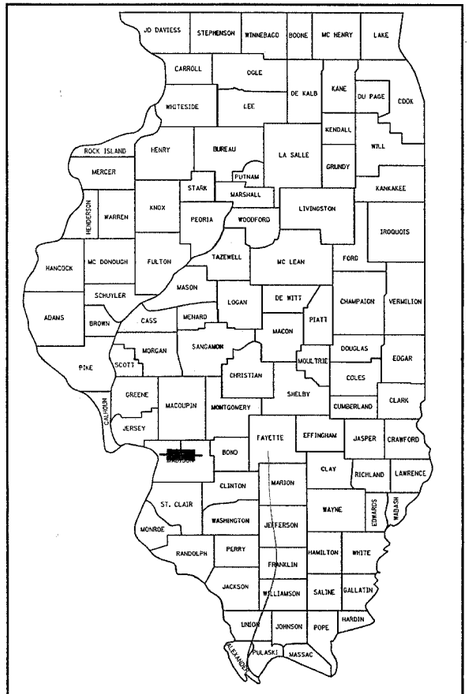
FOR INDEX OF SHEETS, AND LIST OF STANDARDS AND GENERAL NOTES SEE SHEET NO. 2



N

LAYOUT
0 MI 1 MI 2 MI 3 MI
1" = 1 MILE

D-98-043-05



LOCATION OF SECTION INDICATED THUS: -

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE ON THE FOLLOWING SHEETS

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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

CONTRACT NO. 76902

GROSS LENGTH = .05 MILES (290 FT)
NET LENGTH = .05 MILES (290 FT)
LATITUDE = 38.89481
LONGITUDE = 89.92170

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 22 2007
Mary C Lemi
DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER

May 11 2007
Eric E. Harm
ENGINEER OF DESIGN AND ENVIRONMENT

May 11 2007
Milton R. Sees PE/RS
DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: PATTI LEBEAU (618) 346-3179
SQUAD CONTACT: ART MUEHLFELD (618) 346-3209

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-04	631031-06	701321-08
001001-01	635006-02	701326-02
001006	635011-01	702001-06
280001-03	666001	704001-03
420401-05	701001-01	728001
515001-02	701006-02	886006
542401	701011-01	
630001-07	701201-02	
630301-04	701301-02	
631011-03	701306-01	

COMMITMENTS

NO COMMITMENTS

GENERAL NOTES

1. THE STANDARDS AND REVISIONS NUMBERS LISTED SHALL APPLY TO THIS PROJECT.
2. ANY REFERENCE TO "BITUMINOUS CONCRETE" IN THIS PLAN SHALL BE CONSTRUED TO DENOTE "HOT-MIX ASPHALT".
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIAL.
4. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THE LOCATION.
5. ILLINOIS STATE LAW REQUIRES A 48- HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
   - •AMEREN IP
   - •NORTHEAST CENTRAL COUNTY PUBLIC WATER DISTRICT
   - •AT&T CORPORATION
   - •SOUTHWESTERN ELECTRIC COOPERATIVE, INC.

   (MEMBERS OF J.U.L.I.E. (800) 892-0123 ARE INDICATED BY •. NON-MEMBERS MUST BE NOTIFIED INDIVIDUALLY.)
6. THE THICKNESS OF THE BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.
7. SHORT-TERM PAVEMENT MARKING SHALL BE APPLIED TO THE MILLED, PRIMED, AND FINAL SURFACE. REMOVAL SHALL BE FROM THE FINAL SURFACE ONLY AND SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL.
8. FLAGMEN SHALL BE PRESENT DURING ALL CLOSURE HOURS INCLUDING LUNCH HOURS AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ADJACENT PAVEMENT IS NOT DAMAGED DURING ANY OPERATION.
10. RIGHT OF WAY MARKERS SHALL BE SET SO THE BACK OF THE POST IS TWELVE (12") INCHES INSIDE THE RIGHT OF WAY BOUNDARY. RIGHT OF WAY PROPERTY CORNERS ARE MARKED BY A 5/8" IRON ROD WITH IDOT ALUMINUM CAP AND SHALL NOT BE REMOVED OR DISTURBED WHEN SETTING THE RIGHT OF WAY MARKER.
11. EXCAVATIONS ADJACENT TO THE EDGE OF PAVEMENT SHALL BE PROTECTED WITH EXTENDED LEG BARRICADES AND APPROPRIATE FLASHING OR STEADY BURNING LIGHTS. NO ADDITIONAL COMPENSATION FOR THIS WILL BE ALLOWED.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

FAP ROUTE
SECTION
COUNTY

SCALE: VERT.
HORIZ.
DATE

DRAWN BY
CHECKED BY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed04305\plan\pln04305a.dgn
PLOT SCALE = 1968.5039 ' / M.
REFERENCE = REF

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 80% FEDERAL 20% STATE X071-2A		
X0321430	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) SPECIAL	SQ YD	138	138		
X0325738	INLET BOX, TYPE D	EACH	4	4		
52100530	ANCHOR BOLTS, 1 1/4"	EACH	24	24		
20200100	EARTH EXCAVATION	CU YD	266	266		
20400800	FURNISHED EXCAVATION	CU YD	873	873		
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	203	203		
25000200	SEEDING, CLASS 2	ACRE	0.6	0.6		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	55	55		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	55	55		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	55	55		
25100115	MULCH, METHOD 2	ACRE	0.6	0.6		
25100630	EROSION CONTROL BLANKET	SQ YD	1115	1115		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	181	181		
28000400	PERIMETER EROSION BARRIER	FOOT	749	749		
28000500	INLET AND PIPE PROTECTION	EACH	4	4		
28100105	STONE RIPRAP, CLASS A3	SQ YD	32	32		
28100109	STONE RIPRAP, CLASS A5	SQ YD	3426	3426		
28200200	FILTER FABRIC	SQ YD	3426	3426		
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	378	378		
35100700	AGGREGATE BASE COURSE, TYPE A 8"	SQ YD	67	67		
35501320	HOT-MIX ASPHALT BASE COURSE, 9"	SQ YD	543	543		
40200700	AGGREGATE SURFACE COURSE, TYPE A 8"	SQ YD	325	325		
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	49	49		
40600300	AGGREGATE (PRIME COAT)	TON	1	1		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	236	236		
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	26	26		
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	13	13		
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	278	278		
42001200	PAVEMENT FABRIC	SQ YD	278	278		
42001300	PROTECTIVE COAT	SQ YD	416	416		
44000100	PAVEMENT REMOVAL	SQ YD	358	358		
44004250	PAVED SHOULDER REMOVAL	SQ YD	307	307		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1		
50200100	STRUCTURE EXCAVATION	CU YD	208	208		
50200300	COFFERDAM EXCAVATION	CU YD	796	796		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 80% FEDERAL 20% STATE X071-2A		
50202901	COFFERDAM (LOCATION-1)	EACH	1	1		
50202902	COFFERDAM (LOCATION-2)	EACH	1	1		
50300100	FLOOR DRAINS	EACH	24	24		
50300225	CONCRETE STRUCTURES	CU YD	336.8	336.8		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	423	423		
50300260	BRIDGE DECK GROOVING	SQ YD	1224	1224		
50300280	CONCRETE ENCASEMENT	CU YD	5.4	5.4		
50300300	PROTECTIVE COAT	SQ YD	1532	1532		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1		
50500505	STUD SHEAR CONNECTORS	EACH	4176	4176		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	151020	151020		
50800515	BAR SPLICERS	EACH	1299	1299		
51201610	FURNISHING STEEL PILES HP12X63	FOOT	4147	4147		
51202305	DRIVING PILES	FOOT	4147	4147		
51203610	TEST PILE STEEL HP12X63	EACH	4	4		
51204650	PILE SHOES	EACH	72	72		
51500100	NAME PLATES	EACH	1	1		
52100520	ANCHOR BOLTS, 1"	EACH	24	24		
54215547	METAL END SECTIONS 12"	EACH	4	4		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	99	99		
60100945	PIPE DRAINS 12"	FOOT	176	176		
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	170	170		
60900515	CONCRETE THRUST BLOCKS	EACH	4	4		
*63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	494	494		
*63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1		
*63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
*63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	2	2		
63200310	GUARDRAIL REMOVAL	FOOT	408	408		
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	4	4		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	20	20		
67100100	MOBILIZATION	L SUM	1	1		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1		

*SPECIALTY ITEMS

Rev.

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed04305\plan\pln04305a.dgn
PLOT SCALE = 1968.5000 ' / M.
REFERENCE = REF

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	4
STA. 4	TO STA.4			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 80% FEDERAL 20% STATE X071 -2A		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1		
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	100	100		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3091	3091		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	22	22		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1097	1097		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	520	520		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	520	520		
*78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1563	1563		
*78200410	GUARDRAIL MARKERS, TYPE A	EACH	17	17		
*78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	351	351		
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	1029	1029		
X7200200	WIDE LOAD SIGNING	L SUM	1	1		
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	180	180		
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
Z0073100	TEMPORARY SHORING	EACH	2	2		
@ Z0076600	TRAINEES	HOUR	1000	1000		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		

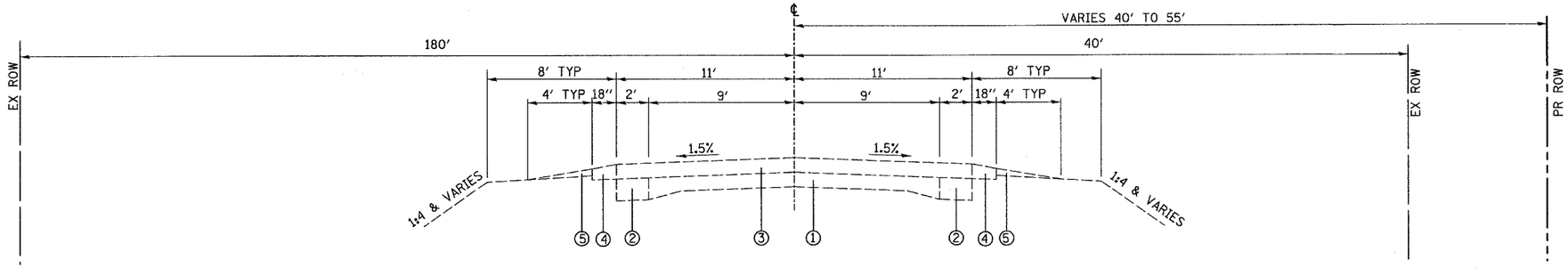
*SPECIALTY ITEMS @ Y080

Rev.

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\e804305\plan\pln04305a.dgn
PLOT SCALE = 1968.5000 ' / IN.
REFERENCE = #REF#

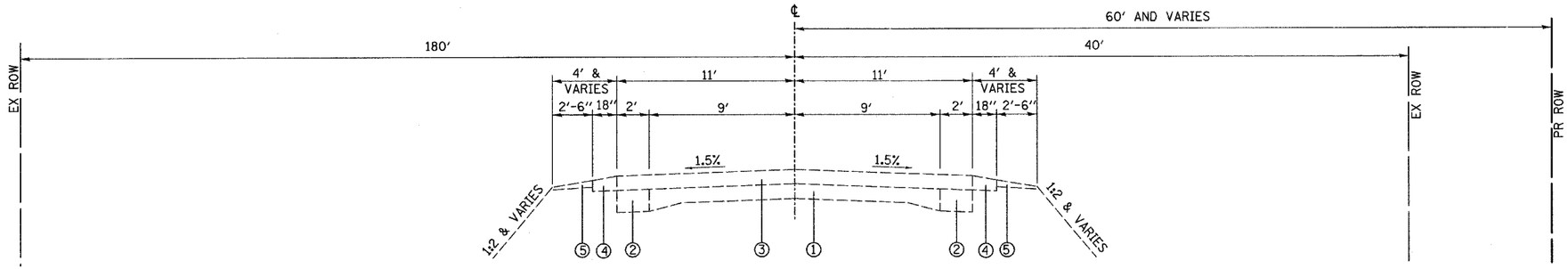
CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



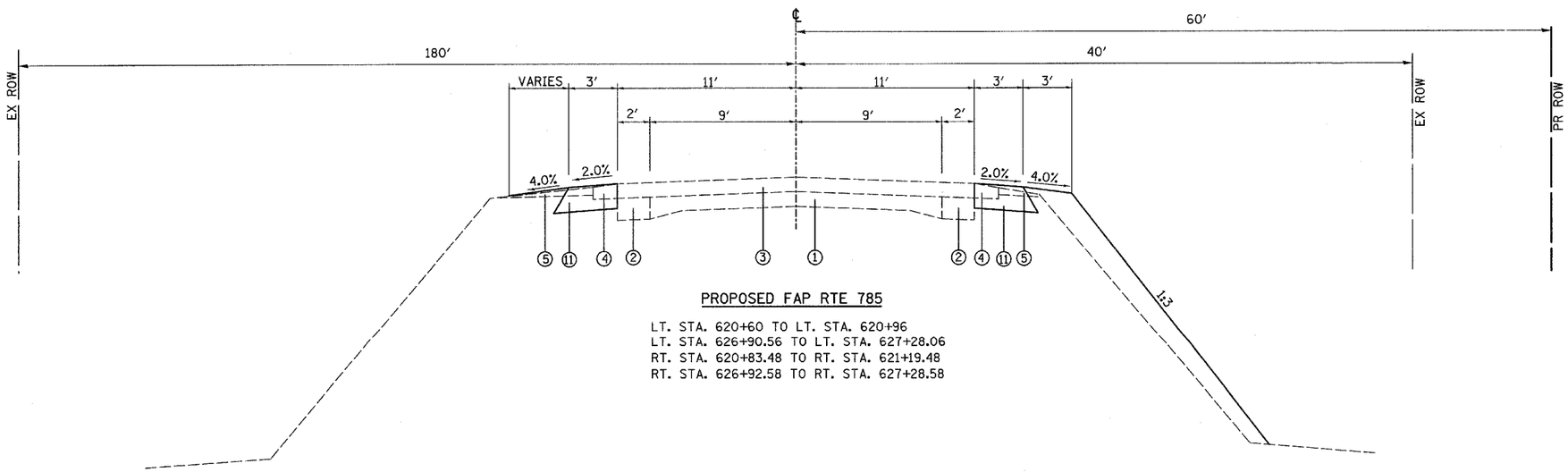
EXISTING FAP RTE 785

STA. 619+36 TO STA. 621+50



EXISTING FAP RTE 785

STA. 621+50 TO STA. 622+73
STA. 625+06 TO STA. 633+00



PROPOSED FAP RTE 785

LT. STA. 620+60 TO LT. STA. 620+96
LT. STA. 626+90.56 TO LT. STA. 627+28.06
RT. STA. 620+83.48 TO RT. STA. 621+19.48
RT. STA. 626+92.58 TO RT. STA. 627+28.58

LEGEND

1. EXISTING PCC PAVEMENT (9"-6"-9")
2. EXISTING PCC WIDENING 8"
3. EXISTING BITUMINOUS OVERLAYS 6"±
4. EXISTING BITUMINOUS SHOULDER (6" @ PAVEMENT & 4 1/2 " @ OUTER EDGE)
5. EXISTING AGGREGATE SHOULDER
6. PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 4"
7. PROPOSED BRIDGE APPROACH PAVEMENT, STD 420401
8. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, VARIABLE DEPTH
9. BITUMINOUS MATERIALS (PRIME COAT)
10. AGGREGATE (PRIME COAT)
11. HOT-MIX ASPHALT BASE COURSE 9"
12. PROPOSED BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), SPECIAL
13. PROPOSED PCC CURB, SEE TYPE D INLET BOX DETAIL SHEET 47

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

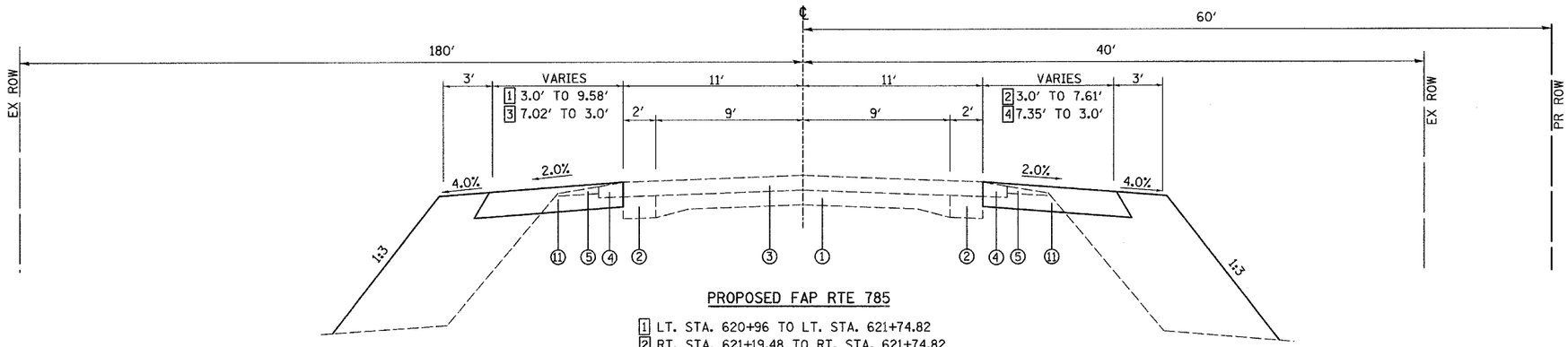
TYPICAL SECTIONS

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 03/21/2007
FILE NAME = H:\P\25004\Technical Production\Structural\SN 060-0240\Microstation\Pln0005a.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = MUSER1

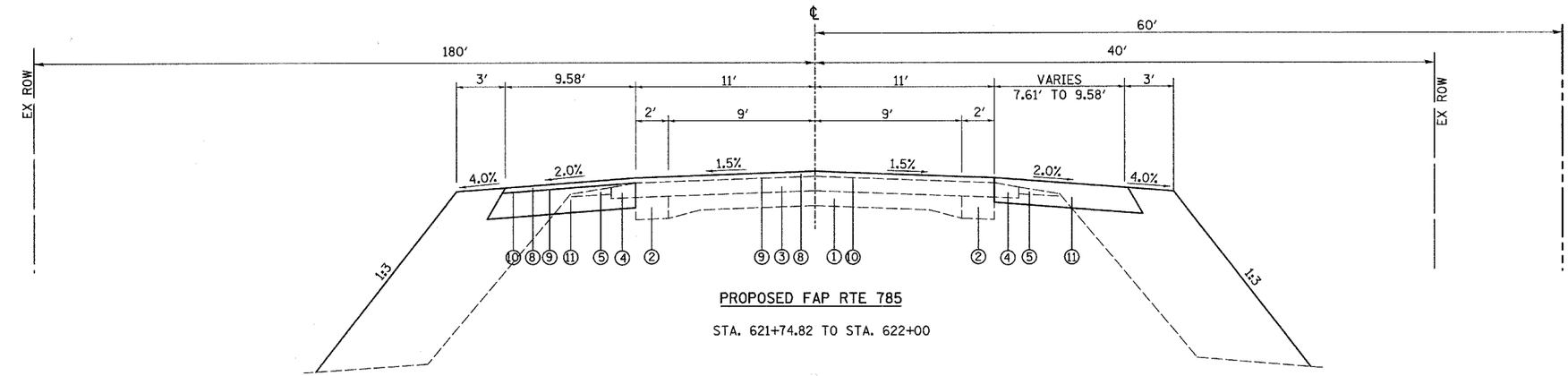
CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



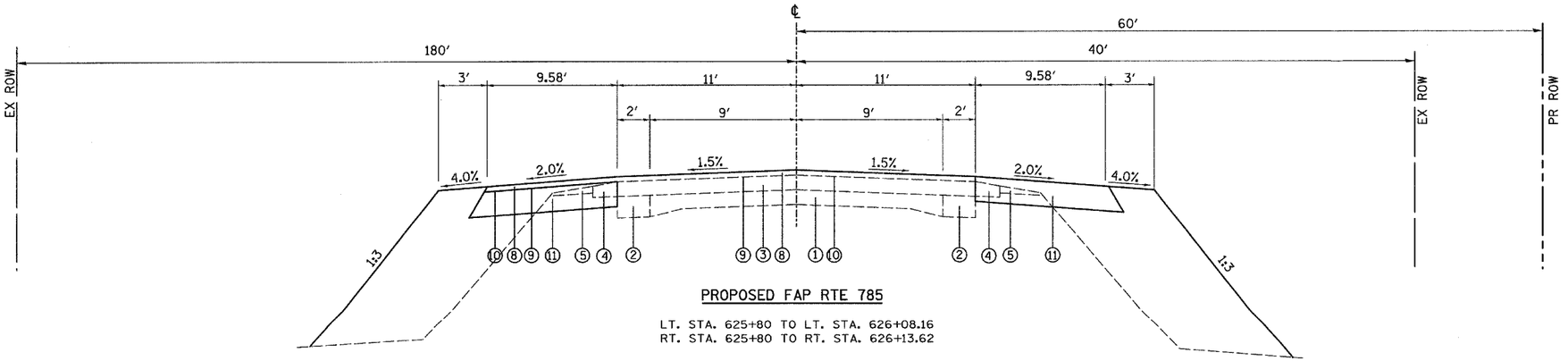
PROPOSED FAP RTE 785

1 LT. STA. 620+96 TO LT. STA. 621+74.82
2 RT. STA. 621+19.48 TO RT. STA. 621+74.82
3 LT. STA. 626+40.32 TO LT. STA. 626+90.56
4 RT. STA. 626+40.32 TO RT. STA. 626+92.58



PROPOSED FAP RTE 785

STA. 621+74.82 TO STA. 622+00



PROPOSED FAP RTE 785

LT. STA. 625+80 TO LT. STA. 626+08.16
RT. STA. 625+80 TO RT. STA. 626+13.62

LEGEND

① EXISTING PCC PAVEMENT (9″-6″-9″)
② EXISTING PCC WIDENING 8″
③ EXISTING BITUMINOUS OVERLAYS 6″±
④ EXISTING BITUMINOUS SHOULDER (6″ @ PAVEMENT & 4 1/2 ″ @ OUTER EDGE)
⑤ EXISTING AGGREGATE SHOULDER
⑥ PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 4″
⑦ PROPOSED BRIDGE APPROACH PAVEMENT, STD 420401
⑧ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, VARIABLE DEPTH
⑨ BITUMINOUS MATERIALS (PRIME COAT)
⑩ AGGREGATE (PRIME COAT)
⑪ HOT-MIX ASPHALT BASE COURSE 9″
⑫ PROPOSED BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), SPECIAL
⑬ PROPOSED PCC CURB, SEE TYPE D INLET BOX DETAIL SHEET 47

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

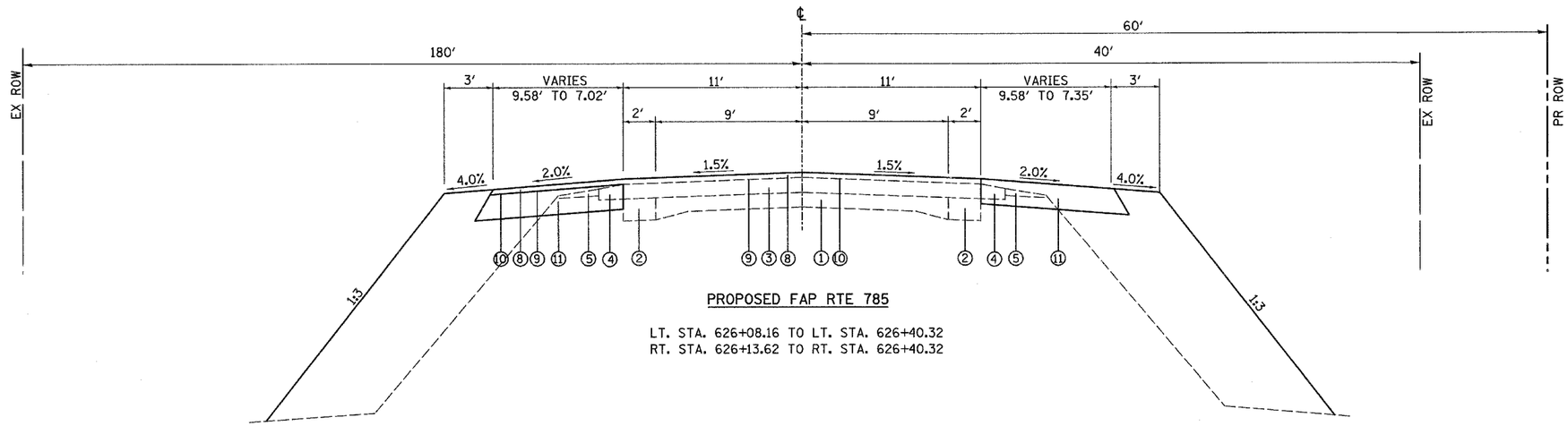
TYPICAL SECTIONS

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 03/21/2007
FILE NAME = H:\PC2884\Technical Products\Structural\SN 068-0248\Microstation\Tin805e.dgn
PLOT SCALE = 20.0000 '/ IN.
USER NAME = #USER#

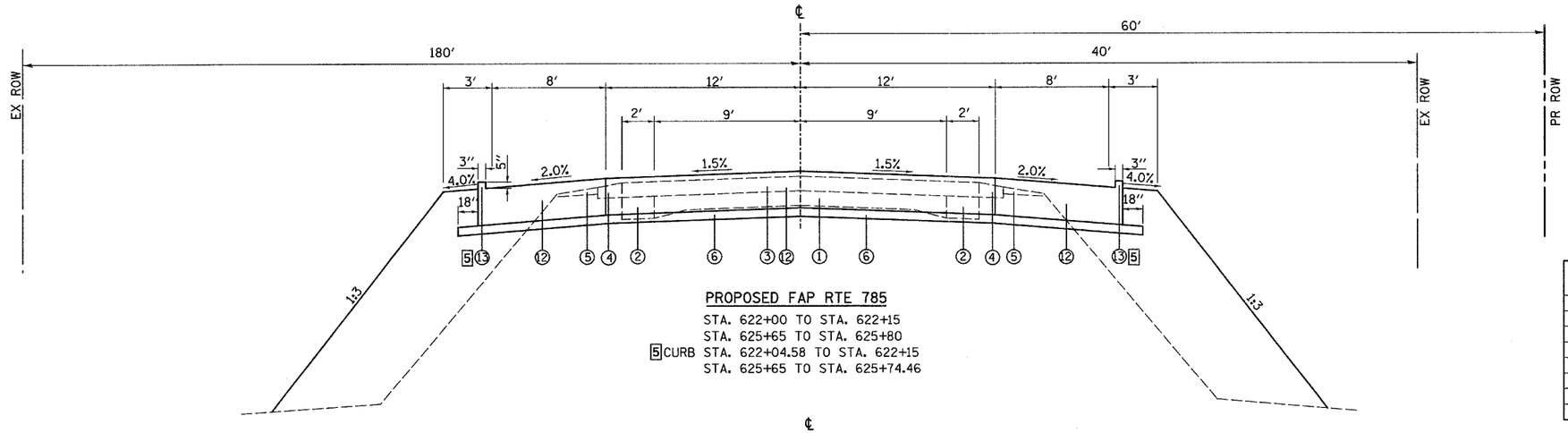
CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



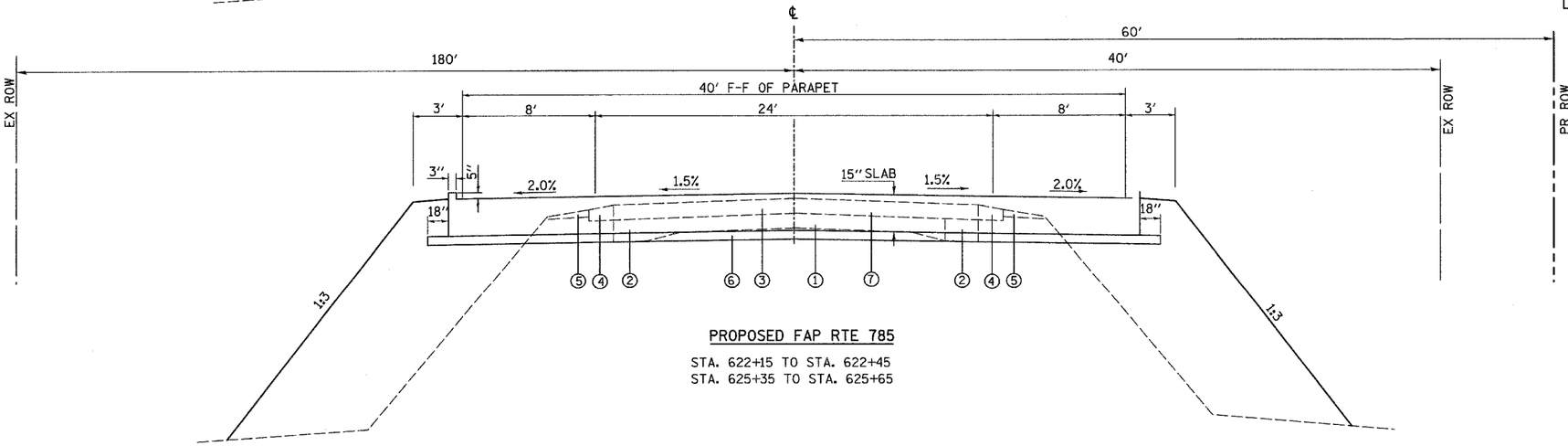
PROPOSED FAP RTE 785

LT. STA. 626+08.16 TO LT. STA. 626+40.32
RT. STA. 626+13.62 TO RT. STA. 626+40.32



PROPOSED FAP RTE 785

STA. 622+00 TO STA. 622+15
STA. 625+65 TO STA. 625+80
[5] CURB STA. 622+04.58 TO STA. 622+15
STA. 625+65 TO STA. 625+74.46



PROPOSED FAP RTE 785

STA. 622+15 TO STA. 622+45
STA. 625+35 TO STA. 625+65

LEGEND

1. EXISTING PCC PAVEMENT (9″-6″-9″)
2. EXISTING PCC WIDENING 8″
3. EXISTING BITUMINOUS OVERLAYS 6″±
4. EXISTING BITUMINOUS SHOULDER (6″ @ PAVEMENT & 4 1/2 ″ @ OUTER EDGE)
5. EXISTING AGGREGATE SHOULDER
6. PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 4″
7. PROPOSED BRIDGE APPROACH PAVEMENT, STD 420401
8. HOT-MIX ASPHALT SURFACE COURSE, MIX ″D″, N70, VARIABLE DEPTH
9. BITUMINOUS MATERIALS (PRIME COAT)
10. AGGREGATE (PRIME COAT)
11. HOT-MIX ASPHALT BASE COURSE 9″
12. PROPOSED BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), SPECIAL
13. PROPOSED PCC CURB, SEE TYPE D INLET BOX DETAIL SHEET 47

MIXTURE REQUIREMENTS SUPERPAVE PROJECT			
20 YR EASL'S:			
MIXTURE USE	SURFACE CSE	BASE COURSE	INCIDENTAL SURFACING
AC/PG	PG 64-22	PG 64-22	PG 64-22
RAP% (MAX)	10%	15%	10%
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0% @ Ndes=70	4.0% @ Ndes=70
MIX COMPOSITION			
(GRADATION MIXTURE)			
FRICTION AGG	MIXTURE ″D″	MIXTURE ″B″	MIXTURE ″C″

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 8/3/21/2007
FILE NAME = H:\P\25084\Technical Production\Structural\SN 060-0249\Microstation\Plan0005a.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = #USER#

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

STATION	STATION	EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (NOTE 1) (CU YD)	EMBANKMENT (NOTE 2) (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (NOTE 3) (CU YD)
620+98.00	622+73.00	137	103	669	-566
625+06.00	627+50.00	129	97	404	-307
TOTAL		266	200	1073	-873

EARTHWORK NOTES:

1. ESTIMATED SHRINKAGE FACTOR = 25%.
2. APPROXIMATE EMBANKMENT QUANTITY IS SHOWN FOR INFORMATION ONLY.
3. APPROXIMATE EARTHWORK BALANCE IS SHOWN FOR INFORMATION ONLY.

GUARDRAIL REMOVAL

STATION	STATION	GUARDRAIL REMOV (FOOT)
15.0' RT. STA. 620+90.2	44.0' RT. STA. 621+63.6	93
19.1' RT. STA. 621+83.4	22.0' RT. STA. 622+73.0	89
15.4' LT. STA. 619+11.3	16.1' LT. STA. 619+36.3	25
22.1' LT. STA. 621+83.1	22.0' LT. STA. 622+73.0	89
22.3' LT. STA. 625+06.6	23.0' LT. STA. 626+21.3	115
21.6 RT. STA. 625+06.6	21.0' RT. STA. 625+96.6	90
TOTAL		408

ENTRANCE SCHEDULE

STATION	ENTRANCE TYPE	ENTRANCE WIDTH "W" (FOOT)	ENTRANCE DEPTH "D" (FOOT)	EXISTING SURFACE TYPE	AGG BASE CSE A 8 (SQ YD)	AGG SURF CSE A 8 (SQ YD)	INCIDENTAL HMA SURF (NOTE 1) (TON)	BIT MATLS PR CT (NOTE 1) (GAL)
LT 621+56.05	FE	20	94.1	AGG	31	185	6	12
RT 621+68.48	FE	20	75.0	AGG	36	140	7	14
TOTAL					67	325	13	26

ENTRANCE NOTES:

1 INCIDENTAL HOT-MIX ASPHALT SURFACING QUANTITY IS CALCULATED AT A RATE OF 112 LB / SQ YD.
BITUMINOUS MATERIALS (PRIME COAT) QUANTITY IS CALCULATED AT A RATE OF 0.375 GAL/SQ. YD.

REMOVAL SCHEDULE

STATION	STATION	PAVEMENT REMOVAL (SQ YD)	PAVED SHLD REMOVAL (SQ YD)
RT 620+83.48	RT 622+73.05		32
LT 620+60.00	LT 622+73.05		36
RT 625+06.58	RT 627+28.58		37
LT 625+80.00	LT 627+28.06		25
621+74.82	622+00.00		
625+97.00	626+40.32		
622+00.00	622+73.05	179	
LT 625+06.58	LT 625+80.00	179	
LT 621+74.82	LT 622+73.05		89
LT 625+06.58	LT 626+08.20		88
TOTAL		358	307

ROW MARKERS SCHEDULE

STATION	OFFSET	FUR ERECT ROW MARKERS (EACH)
STA. 619+00	40' RT	1
STA. 620+00	60' RT	1
STA. 627+50	60' RT	1
STA. 628+10.11	40' RT	1
TOTAL		4

1. ROW MARKERS ARE TO BE SET 1' INSIDE OF THE ROW AT THE ROW/PROPERTY CORNERS

PAVEMENT SCHEDULE

STATION	STATION	SUB GRAN MAT A 4 (SQ YD)	BR APP PVT CON PCC SP (SQ YD)	BR APPR PAVT (SQ YD)	PROTECTIVE COAT (SQ YD)	HMA BASE CSE 9 (SQ YD)	BIT MATLS (PR CT) (GAL)	AGG PR CT (TON)	HMA SC "D" N70 (TON)
LT 620+60.00	LT 620+96.00					12			
LT 620+96.00	LT 621+88.40					70			
LT 621+88.40	LT 622+73.06					101			
RT 620+83.48	RT 621+19.48					12			
RT 621+19.48	RT 622+00.00					56			
LT 621+74.82	LT 622+00.00						2	0.1	2
621+74.82	622+00.00						5	0.1	5
622+00.00	622+15.00	60	69		69				
622+15.00	622+45.00	129		139	139				
625+35.00	625+65.00	129		139	139				
625+65.00	625+80.00	60	69		69				
625+80.00	625+97.00						3	0.1	5
625+97.00	626+40.32						8	0.2	9
LT 625+06.18	LT 625+80.00					86			
LT 625+80.00	LT 625+97.68					20	1	0.1	2
LT 625+97.68	LT 626+08.16					12	1	0.1	1
LT 626+08.16	LT 626+40.30					30	3	0.1	2
LT 626+40.30	LT 626+90.56					28			
LT 626+90.56	LT 627+28.06					13			
RT 625+80.00	RT 626+13.62					36			
RT 626+13.62	RT 626+92.58					55			
RT 626+92.58	RT 627+28.58					12			
TOTAL		378	138	278	416	543	23	1	26

PAVEMENT MARKING SCHEDULE

STATION	STATION	POLYUREA PM T1 LN 4 (FOOT)	SHORT-TERM PAVT MKING (FOOT)	PAVT MARKING REMOVAL (SQ FT)	COMMENTS
LT 620+60.00	LT 627+28.06	668		223	EDGE LINE
CL 619+65.00	CL 621+25.00	40	16	13	CENTER LINE
CL 621+25.00	CL 626+45.00	130	52		CENTER LINE
CL 626+45.00	CL 629+60.00	80	32	26	CENTER LINE
RT 620+83.48	RT 622+00.00	117		39	EDGE LINE
RT 622+00.00	RT 625+80.00	380			EDGE LINE
RT 625+80.00	RT 627+28.58	149		50	EDGE LINE
TOTAL		1563	100	351	

SEEDING SCHEDULE

STATION	STATION	SEEDING (SF)	SEEDING CL 2 (ACRE)	NITROGEN FERT NUTR (POUND)	PHOSPHORUS FERT NUTR (POUND)	POTASSIUM FERT NUTR (POUND)	MULCH METHOD 2 (ACRE)
LT 620+98.00	LT 622+73.00	4868	0.11	10	10	10	0.11
RT 620+98.00	RT 622+73.00	10531	0.24	22	22	22	0.24
LT 625+06.00	LT 627+50.00	4280	0.1	9	9	9	0.10
RT 625+06.00	RT 627+50.00	6603	0.15	14	14	14	0.15
TOTAL			0.60	55	55	55	0.60

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULES

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

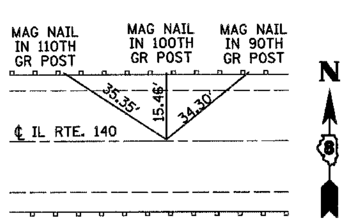
PLOT DATE = 02/21/2007
FILE NAME = N:\Projects\Technical Production\Structures\SN 060-0240\Microstation\Sch0605a.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = $USER$

PROPOSED GUARD RAIL

LOCATION	SPBGR (SHORT RADIUS) (FOOT)	TRAF BAR TERM T6 (EACH)	SPBGR TY A (FOOT)	TR BAR TRM T1 SPL TAN (EACH)	TERMINAL MARKER - DA (EACH)	GUARDRAIL MKR TYPE A (EACH)
15.0' RT. STA. 620+90.3 TO 16.0' RT. STA. 621+27.68			37.5			1
16.0' RT. STA. 621+27.68 TO 16.3' RT. STA. 621+40.18	12.5					1
16.3' RT. STA. 621+40.18 TO 33.5' RT. STA. 621+56.08	25					
33.5' RT. STA. 621+56.08 TO 46.0' RT. STA. 621+55.93	12.5					
41.5' RT. STA. 621+79.99 TO 28.9' RT. STA. 621+80.03	12.5					1
29.0' RT. STA.621+80.10 TO 20.58 RT. STA. 621+89.35	13.5					
20.58' RT. STA. 621+89.35 TO 20.58' RT. STA. 622+01.85	12.5					1
20.58' RT. STA. 622+01.85 TO 20.58' RT. STA. 622+45		1				
20.58 RT. STA. 625+35 TO 20.58' RT. STA. 625+78.15		1				1
20.58' RT. STA. 625+78.15 TO 20.58' RT. STA. 626+21.65			43.5			1
20.58' RT. STA. 626+21.65 TO 17.8' RT. STA. 626+65.65			44			1
17.8' RT. STA. 626+65.65 TO 15.2' RT. STA. 627+15.65				1	1	1
15.4' LT. STA. 619+11.27 TO 19.4' LT. STA. 621+17.68			206			3
19.4' LT. STA. 621+17.68 TO 19.5' LT. STA. 621+30.18	12.5					1
19.5' LT. STA. 621+30.18 TO 35.2' LT. STA. 621+46.83	25					
35.2' LT. STA. 621+46.83 TO 47.6' LT. STA. 621+47.83	12.5					
51.2' LT. STA. 621+72.2 TO 38.4' LT. STA. 621+71.8	12.5					
38.4' LT. STA. 621+71.8 TO 20.58' LT. STA. 621+89.35	29					
20.58' LT. STA. 621+89.35 TO 20.58' LT. STA. 622+01.85	12.5					
20.58' LT. STA. 622+01.85 TO 20.58' LT. STA. 622+45		1				1
20.58 LT. STA. 625+35 TO 20.58' LT. STA. 625+78.15		1				1
20.58 LT. STA. 625+78.15 TO 20.58' LT. STA. 626+21.65			43.5			1
20.58 LT. STA. 626+21.65 TO 17.7' LT. STA. 627+40.65			119			1
17.7 LT. STA. 627+40.65 TO 16.8' LT. STA. 627+90.65				1	1	1
TOTALS	**193**	**4**	**493.5**	**2**	**2**	**17**

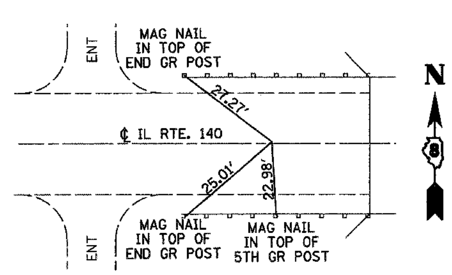
TRAFFIC CONTROL ITEMS

STATION	STATION	TEMP PVT MK LINE 4 (FOOT)	TEMP PVT MK LINE 24 (FOOT)	WORK ZONE PAVT MK REM (SQ FT)	TEMP CONC BARRIER (FOOT)	REL TEMP CONC BARRIER (FOOT)	IMP ATTN TEMP NRD TL3 (EACH)	IMP ATTN REL NRD TL3 (EACH)	TEMP RUMBLE STRIP (EACH)
STAGE 1									
RT 598+65									1
RT 605+65									1
RT 612+65									1
RT 619+65			11						
RT 619+65	RT 627+70	805		266					
LT 620+60	LT 627+28	668		220					
LT 621+90	LT 622+20						1		
LT 622+20	LT 627+40				520				
LT 627+40	LT 627+70						1		
LT 629+60			11						
LT 636+60									1
LT 643+60									1
LT 650+60									1
STAGE 2									
RT 619+65				22					
LT 619+88	LT 629+60	972		321					
RT 620+83	RT 627+29	646		213					
LT 621+90	LT 622+20							1	
LT 622+20	LT 627+40					520			
LT 627+40	LT 627+70							1	
LT 629+60				22					
SHORT-TERM PAVT MKING				33					
TOTAL		3091	22	1097	520	520	2	2	6



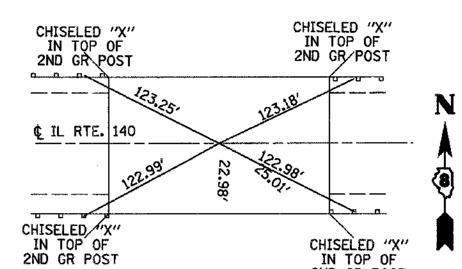
POL STA. 616+00

MAG NAIL IN PAVEMENT



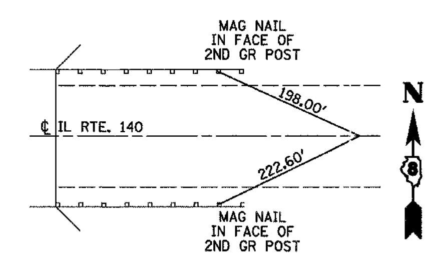
POL STA. 622+00

MAG NAIL IN PAVEMENT



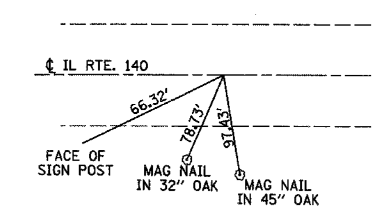
POL STA. 623+90

MAG NAIL IN PAVEMENT



PC STA. 628+10.11

MAG NAIL IN PAVEMENT



PT STA. 631+15.31

MAG NAIL IN PAVEMENT

SURVEY TIE POINTS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULES AND SURVEY TIES

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 03/21/2007
FILE NAME = H:\P\25004\Technical Production\Structural\SN 060-0248\Microstation\Sch005.dgn
PLOT SCALE = 20.0000 '/ IN.
USER NAME = $USER$

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	10
STA. 615+00		TO STA. 621+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN

DATE	BY	
		SURVEYED
		PLOTTED
		ALIGNMENT CHECKED
		STRUCTURE MARKED
		ROD FILE NAME

NOTE BOOK
NO.

EX ROW 180'

1.5' BIT SHLD

11'

11'

1.5' BIT SHLD

40'

615+00 | 616 | 617 | 618 | ℄ FAP RTE 785 (EX IL RTE 140) | 619 | 620+00

BEGIN SECTION
STA. 619+11.27

REMOVE EXISTING TERMINAL SECTION
AND CONNECT PROPOSED GUARD RAIL
TO EXISTING GUARD RAIL

CONST. LIMITS

AGG SHLD

1.5' BIT SHLD

11'

11'

1.5' BIT SHLD

60'

EX ROW

W G

619+00
40' RT

620+00
60' RT

PR ROW

EX ROW 180'

+60
11' LT

+96
14' LT

3'

3'

+83.48
11' RT

40'

CONST LIMITS

MATCH LINE STA. 621+00

N

SCALE: 1" = 20'

PROFILE

DATE	BY	
		SURVEYED
		PLOTTED
		GRADES CHECKED
		STRUCTURE NOTATNS CHKD

NOTE BOOK
NO.
STRUCTURE NO.

500
490
480
470
460

EXIST PROFILE ℄ FAP RTE 785 (IL RTE 140)

480.24 | 480.17 | 480.08 | 479.99 | 479.95 | 479.92 | 479.81 | 479.72 | 479.71 | 479.70 | 479.64 | 479.51 | 479.49

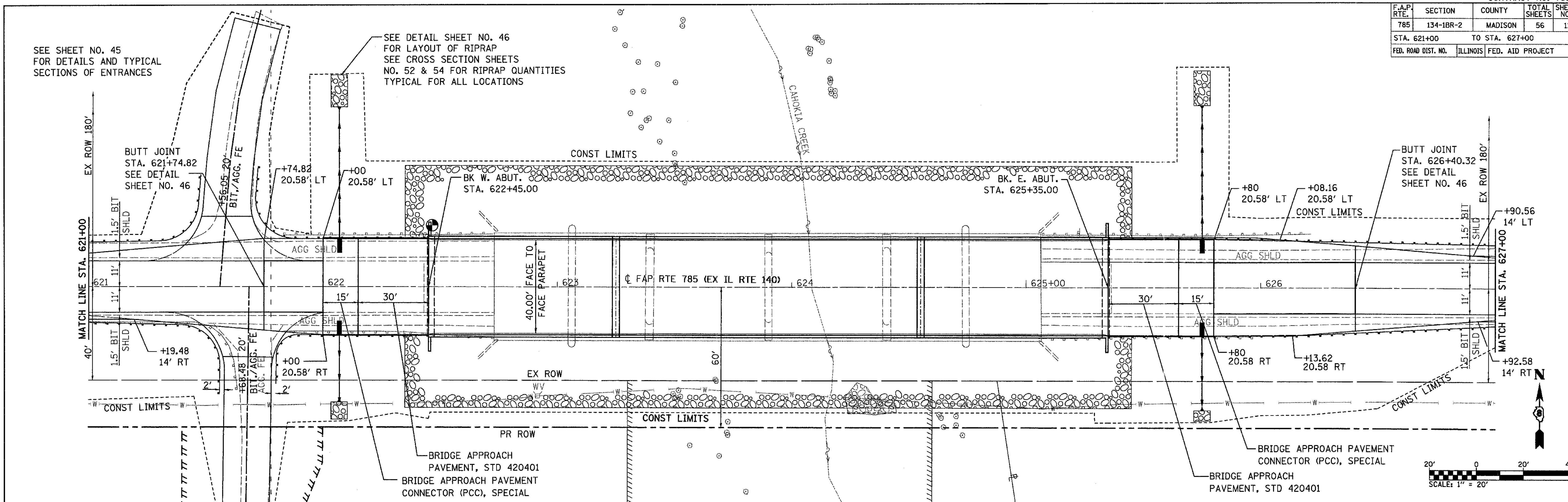
615+00 | 615+50 | 616+00 | 616+50 | 617+00 | 617+50 | 618+00 | 618+50 | 619+00 | 619+50 | 620+00 | 620+50 | 621+00

PLOT DATE = 03/21/2007
FILE NAME = H:\PV\25894\Technical Production\Structural\SN 060-0240\Mot
PLOT SCALE = 20.0000 ' / IN.
USER NAME = #USER#

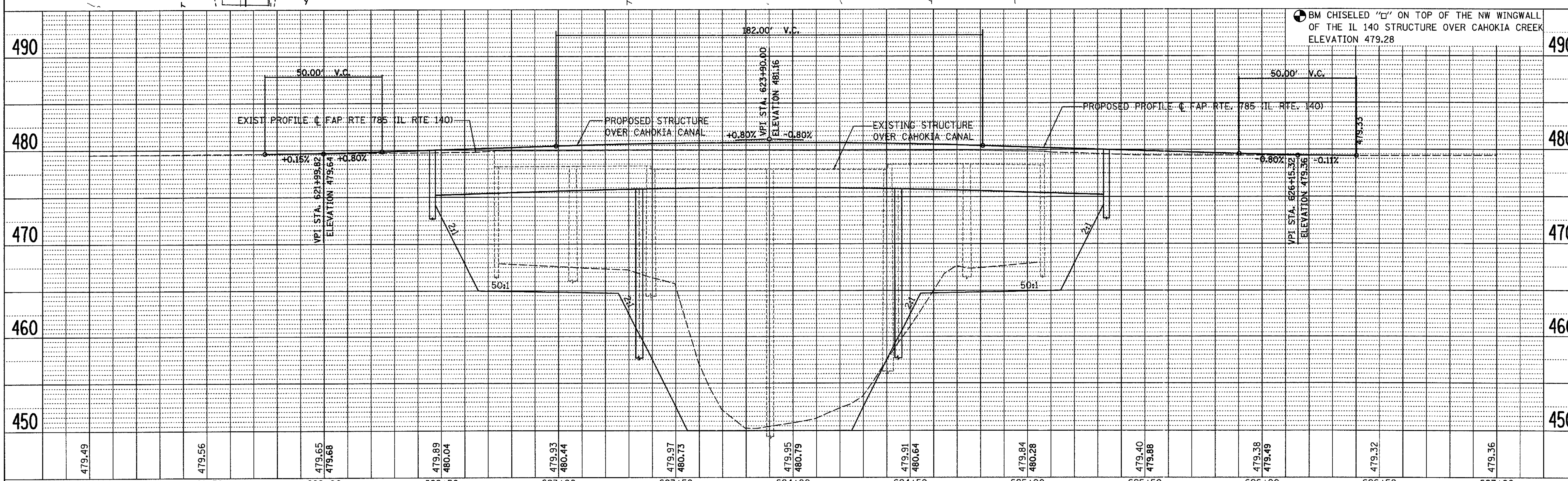
STA. 615+00 TO STA. 621+00

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	11
STA. 621+00	TO STA. 627+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SEE SHEET NO. 45
FOR DETAILS AND TYPICAL
SECTIONS OF ENTRANCES
SEE DETAIL SHEET NO. 46
FOR LAYOUT OF RIPRAP
SEE CROSS SECTION SHEETS
NO. 52 & 54 FOR RIPRAP QUANTITIES
TYPICAL FOR ALL LOCATIONS
CAHOKIA CREEK
CONST LIMITS
EX ROW 180'
BUTT JOINT
STA. 621+74.82
SEE DETAIL
SHEET NO. 46
+74.82
20.58' LT
+00
20.58' LT
BK W. ABUT.
STA. 622+45.00
BK. E. ABUT.
STA. 625+35.00
+80
20.58' LT
+08.16
20.58' LT
CONST LIMITS
BUTT JOINT
STA. 626+40.32
SEE DETAIL
SHEET NO. 46
+90.56
14' LT
MATCH LINE STA. 621+00
MATCH LINE STA. 627+00
1.5' BIT SHLD
AGG SHLD
40.00' FACE TO FACE PARAPET
℄ FAP RTE 785 (EX IL RTE 140)
621
622
623
624
625+00
626
15'
30'
11'
40'
60'
+19.48
14' RT
+00
20.58' RT
+68.48
+80
20.58 RT
+13.62
20.58 RT
+92.58
14' RT
EX ROW
PR ROW
CONST LIMITS
BIT./AGG. FE
20'
2'
BRIDGE APPROACH
PAVEMENT, STD 420401
BRIDGE APPROACH PAVEMENT
CONNECTOR (PCC), SPECIAL
N
SCALE: 1" = 20'



BM CHISELED "□" ON TOP OF THE NW WINGWALL
OF THE IL 140 STRUCTURE OVER CAHOKIA CREEK
ELEVATION 479.28
182.00' V.C.
50.00' V.C.
50.00' V.C.
EXIST PROFILE ℄ FAP RTE 785 (IL RTE 140)
PROPOSED STRUCTURE
OVER CAHOKIA CANAL
EXISTING STRUCTURE
OVER CAHOKIA CANAL
PROPOSED PROFILE ℄ FAP RTE. 785 (IL RTE. 140)
VPI STA. 623+90.00
ELEVATION 481.16
+0.80%
-0.80%
+0.15%
+0.80%
VPI STA. 621+99.82
ELEVATION 479.64
-0.80%
-0.11%
VPI STA. 626+15.32
ELEVATION 479.36
479.33
2:1
50:1
490
480
470
460
450
479.49
479.56
479.65
479.68
479.89
480.04
479.93
480.44
479.97
480.73
479.95
480.79
479.91
480.64
479.84
480.28
479.40
479.88
479.38
479.49
479.32
479.36
621+00
621+50
622+00
622+50
623+00
623+50
624+00
624+50
625+00
625+50
626+00
626+50
627+00

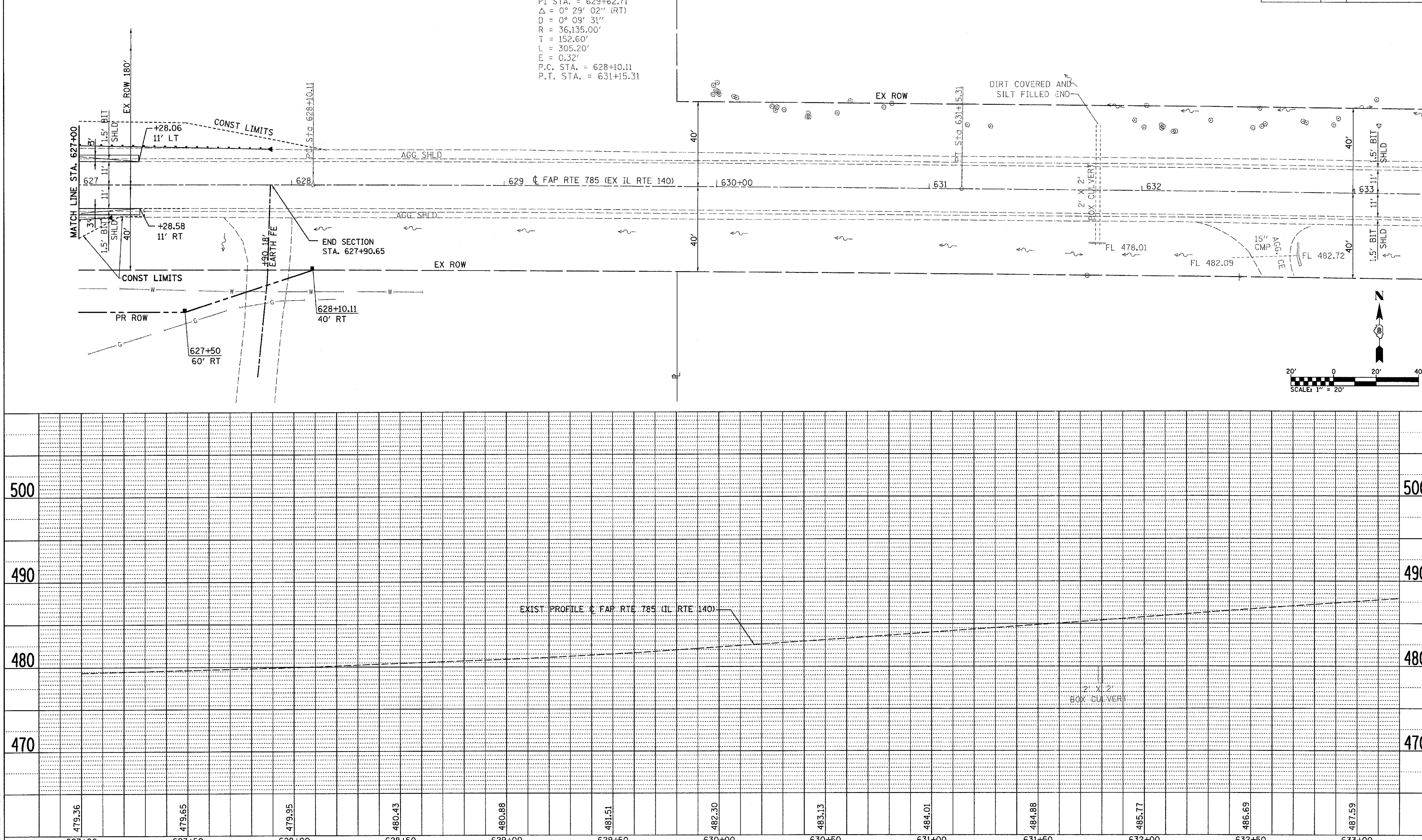
PLAN

PROFILE

PLOT DATE = 03/21/2007
PLOT SCALE = 20.0000 ' / IN.

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	12
STA. 627+00	TO STA. 633+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXIST. CURVE C1
PI STA. = 629+62.71
Δ = 0° 29' 02" (RT)
D = 0° 09' 31"
R = 36,135.00'
T = 152.60'
L = 305.20'
E = 0.32'
P.C. STA. = 628+10.11
P.T. STA. = 631+15.31
MATCH LINE STA. 627+00
EX ROW 180'
CONST LIMITS
+28.06 11' LT
+28.58 11' RT
AGG SHLD
℄ FAP RTE 785 (EX IL RTE 140)
END SECTION STA. 627+90.65
+90.18' EARTH FE
EX ROW
PR ROW
628+10.11 40' RT
627+50 60' RT
PC Sta 628+10.11
PT Sta 631+15.31
DIRT COVERED AND SILT FILLED END
2' X 2' BOX CULVERT
FL 478.01
FL 482.09
15" CMP
AGG CE
FL 482.72
1.5' BIT SHLD
N
SCALE: 1" = 20'
EXIST PROFILE ℄ FAP RTE 785 (IL RTE 140)
2' X 2' BOX CULVERT
500
490
480
470
479.36
479.65
479.95
480.43
480.88
481.51
482.30
483.13
484.01
484.88
485.77
486.69
487.59
627+00
627+50
628+00
628+50
629+00
629+50
630+00
630+50
631+00
631+50
632+00
632+50
633+00

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, R/T OF WAY CHECKED, CADD FILE NAME, NOTE BOOK NO. — BY — DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE NOTATIONS CHECKED, NOTE BOOK NO. — BY — DATE

PLOT DATE = 03/21/2007
FILE NAME = H:\...\SN 060-0248\...
PLOT SCALE = 20.0000 ' / IN.
USER NAME = $USER$

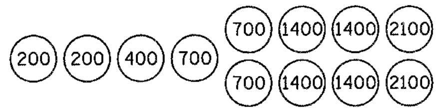
STA. 627+00 TO STA. 633+00

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	13

STA. 617+50 TO STA. 630+00

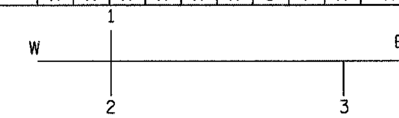
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

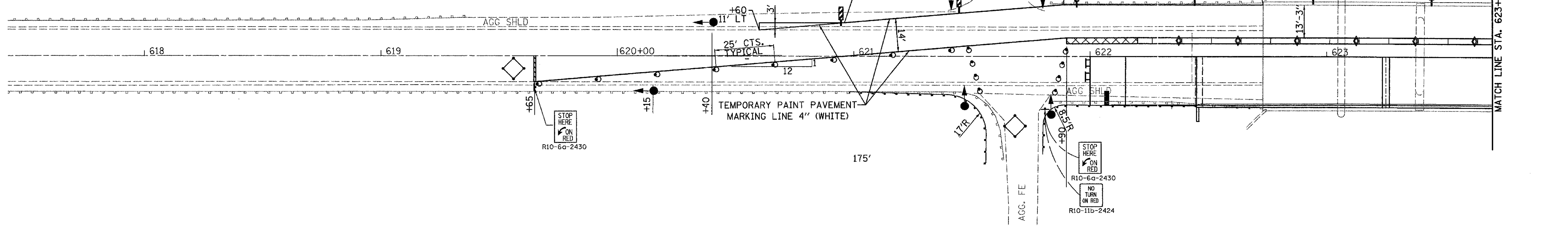


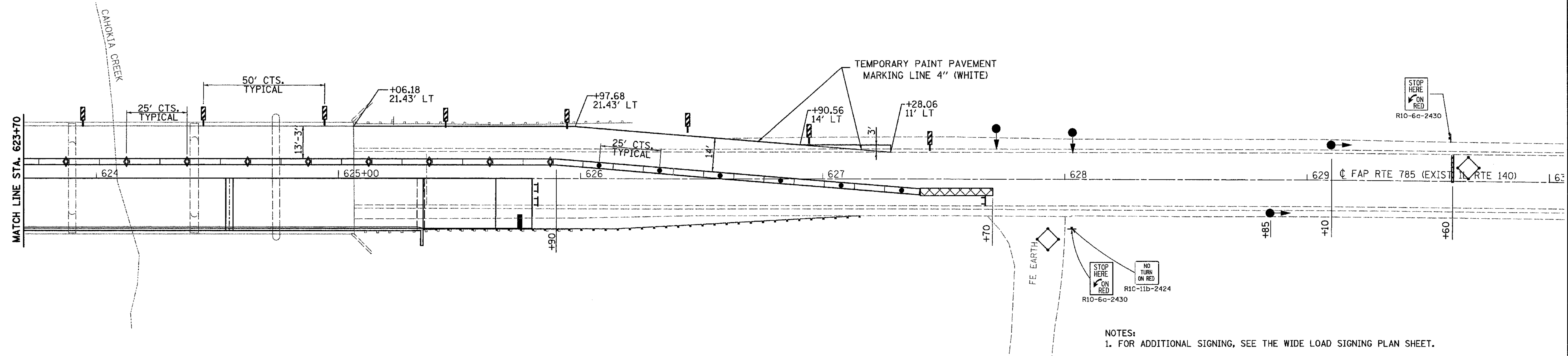
SAND MODULE IMPACT ATTENUATOR LAYOUT
(IF OPTION USED)

SEQUENCE OF OPERATIONS

PHASE	A			B			C			D		
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12
EB	G	Y	R	R	R	R	R	R	R	R	R	R
WB	R	R	R	G	Y	R	R	R	R	R	R	R
ENT. 1&2	R	R	R	R	R	R	R	R	R	G	Y	R
ENT. 3	R	R	R	R	R	R	G	Y	R	R	R	R







STAGE I
SEQUENCE OF OPERATIONS

1. PRIOR TO INSTALLING TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGING OPERATIONS, CONSTRUCT BITUMINOUS BASE COURSE USING TRAFFIC CONTROL AND PROTECTION 701006, 701301, 701306 AND 701326.

2. INSTALL TEMPORARY TRAFFIC SIGNALS, ATTENUATOR BASES, ATTENUATORS, TEMPORARY CONCRETE BARRIERS AND DRUMS USING TRAFFIC CONTROL AND PROTECTION STANDARDS 701006, 701201, AND 701301, AND ALL OTHER ITEMS AS PER THESE DETAILS AND AS PER LANE CLOSURE 2L, 2W, BRIDGE REPAIR WITH BARRIER STANDARD 701321. BEGIN OPERATING UNDER STAGE I TRAFFIC CONDITIONS WITH THE AID OF TRAFFIC CONTROL AND PROTECTION STANDARD 701201 AND 701006.

3. DRIVE TEMPORARY SHEET PILING, REMOVE EXISTING PAVEMENT, GUARDRAIL AND TRAFFIC BARRIER TERMINALS, EXCAVATE AND REMOVE A PORTION OF THE EXISTING STRUCTURE.

4. CONSTRUCT THE NEW PORTION OF THE PROPOSED STRUCTURE, BACKFILL, COMPACT, CONSTRUCT PAVEMENT, BRIDGE APPROACH PAVEMENT, BRIDGE APPROACH PAVEMENT CONNECTOR, INLETS, STEEL PLATE BEAM GUARDRAIL, TRAFFIC BARRIER TERMINALS AND GRADING.

LEGEND

- TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- STOP LINE 24"
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- DOUBLE VERTICAL PANEL
- TYPE C BIDIRECTIONAL REFLECTOR
- TYPE III BARRICADE WITH FLASHING LIGHTS
- TEMPORARY CONCRETE BARRIER
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS

NOTES:
1. FOR ADDITIONAL SIGNING, SEE THE WIDE LOAD SIGNING PLAN SHEET.
2. THE COST OF THE ADDITIONAL R10 SIGNS AND ADDITIONAL TYPE III BARRICADES SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701321.
3. THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER SHALL BE PAINTED WITH TEMPORARY PAVEMENT MARKING "WHITE". THE COST FOR THIS WORK SHALL BE INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER.
4. FOR DETAIL OF DETECTOR LOOP INSTALLATION AT FIELD ENTRANCES SEE DETAIL SHEET NO. 46

N

20' 0 20' 40'
SCALE: 1" = 20'

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL STAGE I

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

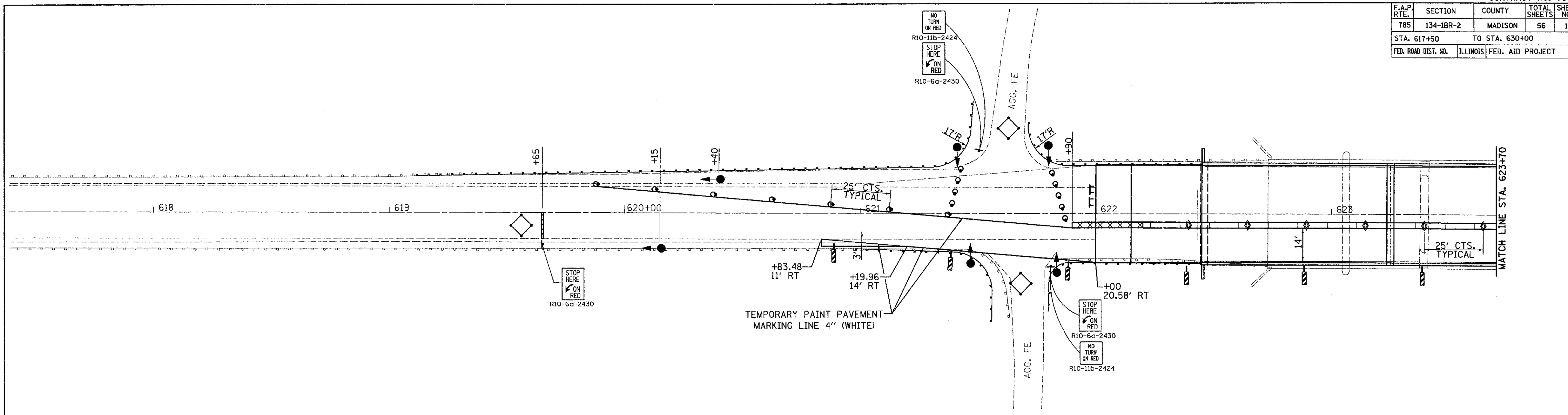
PLAN | NOTE BOOK NO. | SURVEYED | PLOTTED | ALIGNMENT CHECKED | RT. OF WAY CHECKED | CADD FILE NAME | BY | DATE

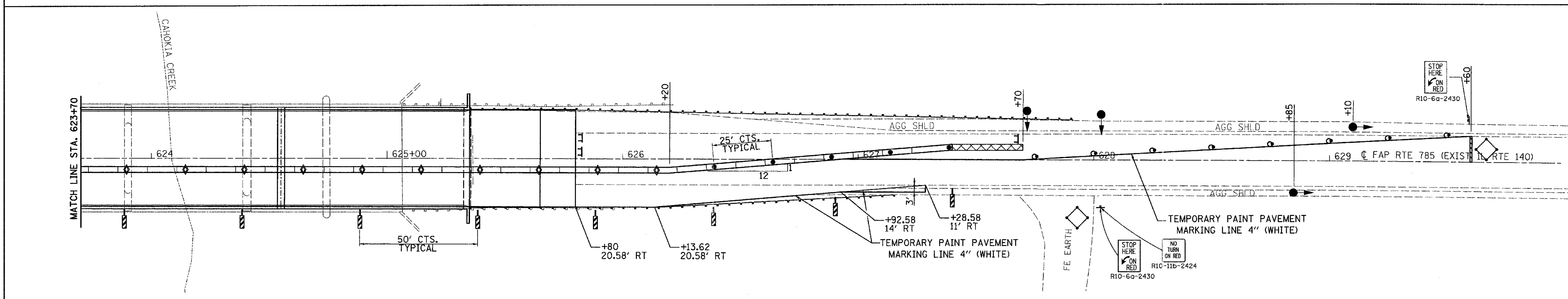
PLOT DATE = 03/21/2007
PLOT SCALE = 20.0000 ' / IN.
USER NAME = $USER$

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	14
STA. 617+50	TO STA. 630+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME





STAGE II
SEQUENCE OF OPERATIONS

1. PRIOR TO INSTALLING TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGING OPERATIONS, CONSTRUCT BITUMINOUS BASE COURSE USING TRAFFIC CONTROL AND PROTECTION 701006, 701301, 701306 AND 701326.
2. INSTALL TEMPORARY TRAFFIC SIGNALS, ATTENUATOR BASES, ATTENUATORS, TEMPORARY CONCRETE BARRIERS AND DRUMS USING TRAFFIC CONTROL AND PROTECTION STANDARDS 701201 AND 701006 AND ALL OTHER ITEMS AS PER THESE DETAILS AND AS PER LANE CLOSURE 2L, 2W, BRIDGE REPAIR WITH BARRIER STANDARD 701321. BEGIN OPERATING UNDER STAGE II TRAFFIC CONDITIONS WITH THE AID OF TRAFFIC CONTROL AND PROTECTION STANDARD 701006, 701201 AND 701301.
3. DRIVE TEMPORARY SHEET PILING, REMOVE EXISTING PAVEMENT, GUARDRAIL AND TRAFFIC BARRIER TERMINALS, EXCAVATE AND REMOVE THE REMAINING PORTION OF THE EXISTING STRUCTURE.
4. CONSTRUCT THE REMAINING PORTION OF THE PROPOSED STRUCTURE, BACKFILL, COMPACT, CONSTRUCT PAVEMENT, BRIDGE APPROACH PAVEMENT, BRIDGE APPROACH PAVEMENT CONNECTOR, INLETS, STEEL PLATE BEAM GUARDRAIL, TRAFFIC BARRIER TERMINALS AND GRADING.

LEGEND

- TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- STOP LINE 24"
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- DOUBLE VERTICAL PANEL
- TYPE C BIDIRECTIONAL REFLECTOR
- TYPE III BARRICADE WITH FLASHING LIGHTS
- TEMPORARY CONCRETE BARRIER
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS

NOTE:
1. THE COST OF THE ADDITIONAL R10 SIGNS AND THE ADDITIONAL TYPE III BARRICADES SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701321
2. THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER SHALL BE PAINTED WITH TEMPORARY PAVEMENT MARKING "WHITE". THE COST FOR THIS WORK SHALL BE INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER.
3. FOR DETAIL OF DETECTOR LOOP INSTALLATION AT FIELD ENTRANCES SEE DETAIL SHEET NO. 46

N

20' 0 20' 40'
SCALE: 1" = 20'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL STAGE II

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 03/21/2007
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USER NAME = $USER$

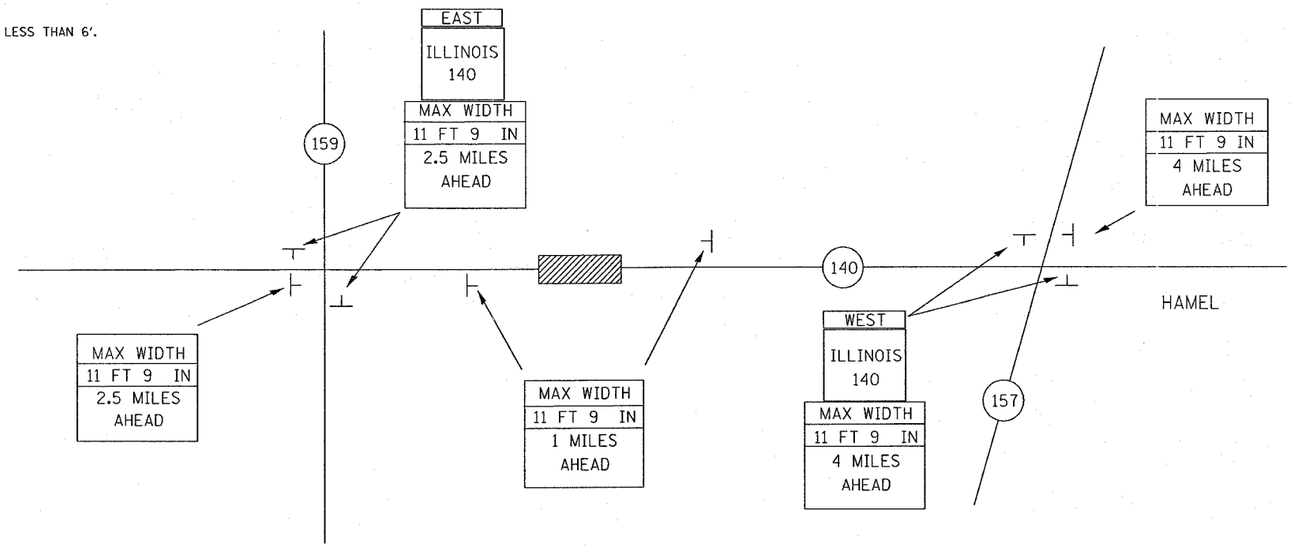
CONTRACT NO. 76902

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	15
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

WIDE LOAD SIGNING
IL 140 OVER CAHOKIA CREEK
S.N. 060-0097

NOTES

1. ALL SIGNS REQUIRED WILL BE SUPPLIED TO THE CONTRACTOR BY I.D.O.T.
2. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT SIGNS AT THE LOCATIONS SHOWN ON THIS SHEET, AS DIRECTED BY THE R.E./R.T. THE POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL GIVE ILLINOIS DEPARTMENT OF TRANSPORTATION, BUREAU OF OPERATIONS TWO WEEKS NOTICE FOR THE SIGNS. THE CONTRACTOR SHALL PICK UP THE SIGNS AT THE T.M. BUILDING IN FAIRVIEW HGTS., AND RETURN THEM UPON COMPLETION OF THE CONTRACT. CONTACT JEAN SLADE @ (618) 346-3289
4. THE ABOVE NOTED WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE, LUMP SUM, FOR WIDE LOADING SIGNING AND NO OTHER COMPENSATION WILL BE ALLOWED.
5. SIGN SPACING WILL BE 400' OR TO FIT FIELD CONDITIONS.
6. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 6'.



SIGNS REQUIRED

MAX WIDTH 11 FT 9 IN 1 MILES AHEAD	(2)	EAST	(2)
MAX WIDTH 11 FT 9 IN 2.5 MILES AHEAD	(3)	WEST	(2)
MAX WIDTH 11FT. 9 IN. 4 MILES AHEAD	(3)	ILLINOIS 140	(4)

DRAWING NOT TO SCALE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP 785 (IL. ROUTE 140)
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
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USER NAME = muenstermanga

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM SEWER WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO LIMIT SEDIMENTS FROM LEAVING THE CONSTRUCTION SITE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

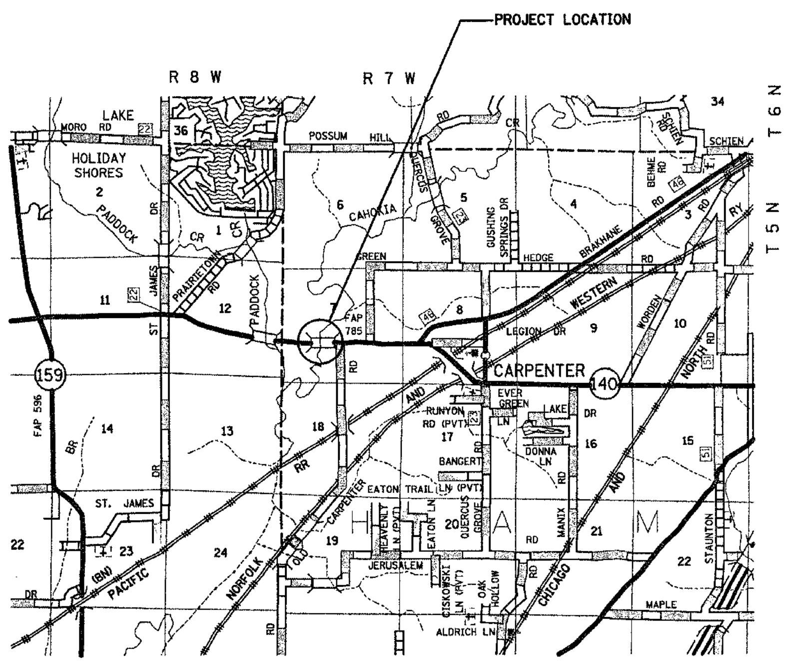
CERTAIN EROSION CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIME FRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 AND THESE PLANS.

SITE DESCRIPTION

DESCRIPTION OF CONSTRUCTION ACTIVITY:

1. THE PROJECT CONSISTS OF THE REMOVAL AND REPLACEMENT OF THE IL ROUTE 140 STRUCTURE OVER CAHOKIA CREEK ALONG WITH APPURTENANT IMPROVEMENTS.
2. PLACEMENT, MAINTENANCE, REMOVAL AND PROPER CLEAN-UP OF TEMPORARY EROSION CONTROL SUCH AS EROSION CONTROL FENCE, TEMPORARY SEEDING, ETC.
3. PLACEMENT OF PERMANENT EROSION CONTROL, SUCH AS RIPRAP, EROSION CONTROL BLANKET, SEEDING, ETC.



LOCATION MAP

AREA OF CONSTRUCTION:

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 1.4 ACRES OF WHICH 1.4 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN AS REFERENCED DOCUMENTS:

1. INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM TOPOGRAPHIC SURVEYS AND SOIL BORINGS THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.
2. PROJECT PLAN DOCUMENTS, STANDARD SPECIFICATIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF FROM THIS CONSTRUCTION SITE:

1. CAHOKIA CREEK

EROSION CONTROLS AND SEDIMENT CONTROL

DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION

1. THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION, AND OTHER APPROPRIATE MEASURES AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SUCH MEASURES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

   (a.) AREAS OF EXISTING VEGETATION (WOOD AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES.

   (b.) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, ALONG WITH ANY REQUIRED TREE REMOVAL.

   (c.) AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS, INLET AND PIPE PROTECTION, AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND AS DIRECTED BY THE ENGINEER.

   (d.) BARE AND SPARSELY VEGETATED GROUND IN HIGH ERODABLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN DAYS.

   (e) AT LOCATIONS WHERE A SIGNIFICANT AMOUNT OF WATER DRAINS INTO THE CONSTRUCTION ZONE FROM OUTSIDE AREAS (ADJACENT LANDOWNERS), TEMPORARY DITCH CHECKS WILL BE UTILIZED TO LOCALLY DIVERT WATER, REDUCE FLOW RATES, AND COLLECT OUTSIDE SILTATION INSIDE THE RIGHT-OF-WAY LINE.

2. ESTABLISHMENT OF THESE TEMPORARY EROSION CONTROL MEASURES WILL HAVE ADDITIONAL BENEFITS TO THE PROJECT. DESIRABLE GRASS SEED WILL BECOME ESTABLISHED IN THESE AREAS AND WILL SPREAD SEEDS ONTO THE CONSTRUCTION SITE UNTIL PERMANENT SEEDING/MOWING AND OVERSEEDNG CAN BE COMPLETED.

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

Mary C Lamie — 3-22-07

REGION 8 ENGINEER — DATE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STORM WATER POLUTION PREVENTION PLAN

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

STORM WATER POLLUTION PLAN

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

(a.) WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.

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

(c.) AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:

I. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.

II. TEMPORARILY SEED ERODABLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODABLE SURFACE WITHIN THE CONTRACT LIMITS.

III. CONSTRUCT ROADSIDE DITCHES AND PROVIDE TEMPORARY EROSION CONTROL SYSTEMS.

IV. CONTINUE BUILDING UP THE EMBANKMENT TO THE PROPOSED GRADE WHILE AT THE SAME TIME, PLACING PERMANENT CONTROL SUCH AS RIPRAP DITCH LINING AND CONDUCTING FINAL SHAPING TO THE SLOPES.

(d.) EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS.

(e.) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OF OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.

(f.) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF 1/2 INCH OR GREATER OR EQUIVALENT SNOWFALL AND DURING THE WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BIWEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.

(g) SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

(h) THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR TEMPORARY EROSION CONTROL SYSTEM.

EROSION CONTROL SCHEDULE

STATION	STATION	EROSION CONTR BLANKET (SQ YD)	PERIMETER EROS BAR (FOOT)	INLET & PIPE PROTECT (EACH)
LT 621+01	LT 621+61		124	
LT 621+86	LT 622+35		141	
LT 621+96	LT 622+16		21	
LT 621+40	LT 621+59	55		
LT 621+75	LT 621+78	24		
LT 622+06.5				1
LT 622+02	LT 622+12	58		
RT 622+06.5				1
RT 620+92	RT 621+54		130	
RT 620+93	RT 621+55	223		
RT 621+80	RT 622+49		110	
RT 621+82	RT 622+35	196		
LT 625+45	LT 628+15		272	
LT 625+63	LT 625+83		21	
LT 625+70	LT 625+80	58		
LT 625+73.5				1
RT 625+25	RT 627+22		216	
RT 625+45	RT 627+16	501		
RT 625+73.5				1
TOTAL		1115	749	4

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

1. TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED.

2. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEEDED.

MAINTENANCE AFTER CONSTRUCTION:

1. CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY I.D.O.T. FINAL INSPECTION. MAINTENANCE UP TO THIS DATE WILL BE BY THE CONTRACTOR.

MISCELLANEOUS:

1. TEMPORARY DITCH CHECKS SHALL BE LOCATED AT 1.5 FT. FALL/RISE IN DITCH GRADE.

2. TEMPORARY DITCH CHECKS, AGGREGATE USING GRADATION NO. 3 - REMOVE AT END OF CONSTRUCTION

3. ALL AREAS DISTURBED FOR ANY REASON SHALL BE SEEDED WITH CLASS 2 SEEDING, MULCH, AND THE NECESSARY NUTRIENTS AS DIRECTED BY THE ENGINEER. SEEDING AND NUTRIENTS SHALL CONFORM TO SECTION 250 AND MULCH SHALL CONFORM TO SECTION 251 USING METHODS 2. THIS WORK WILL BE PAID FOR AS SEEDING, CLASS 2; MULCH METHOD 2; & NUTRIENTS OF THE TYPE SPECIFIED IN THE PLANS.

4. TEMPORARY SEEDING AND TEMPORARY MULCH SHALL BE COMPLETED ON A WEEKLY BASIS ON EXPOSED GROUND AND SHALL BE IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS/ACRES. THIS WORK WILL BE PAID FOR AS TEMPORARY EROSION CONTROL SEEDING. TEMPORARY EROSION CONTROL MULCH SHALL BE IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST OF TEMPORARY EROSION CONTROL SEEDING.

5. STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER, AND SILT FENCES WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE CHOSEN FROM THE DEPARTMENT'S APPROVED LIST. THE ONLY PRODUCTS APPROVED ARE ENVIROBERM, TRIANGULAR SILT DIKE, GEORIDGE, AND ROLLED EXCELSIOR. ROLLED EXCELSIOR MUST COMPLY WITH THE SPECIFICATIONS OUTLINED IN THE IDOT BUREAU OF DESIGN AND ENVIRONMENT MANUAL (BDE). AGGREGATE DITCH CHECKS CAN BE USED WHERE SPECIFIED.

6. CONSTRUCT PERIMETER EROSION CONTROL AT BEGINNING OF CONSTRUCTION. REMOVE AT END OF CONSTRUCTION.

7. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLANS. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

LEGEND

- TEMPORARY DITCH CHECK- ROLLED EXCELSIOR, SILT WEDGES/PANELS
- TEMPORARY DITCH CHECK- AGGREGATE
- EROSION CONTROL BLANKET
- PERIMETER EROSION BARRIER- SILT FILTER FENCE OR OTHER AS APPROVED BY THE ENGINEER
- INLET AND PIPE PROTECTION- STRAW BALES, FILTER FABRIC, AGGREGATES

NOTE: ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD 280001 AND AS DIRECTED BY THE ENGINEER. MAINTENANCE AND CLEANING OF THE EROSION CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY ITEM.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STORM WATER POLUTION PREVENTION PLAN

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

STORM WATER POLLUTION PLAN

PLOT DATE = 03/21/2007
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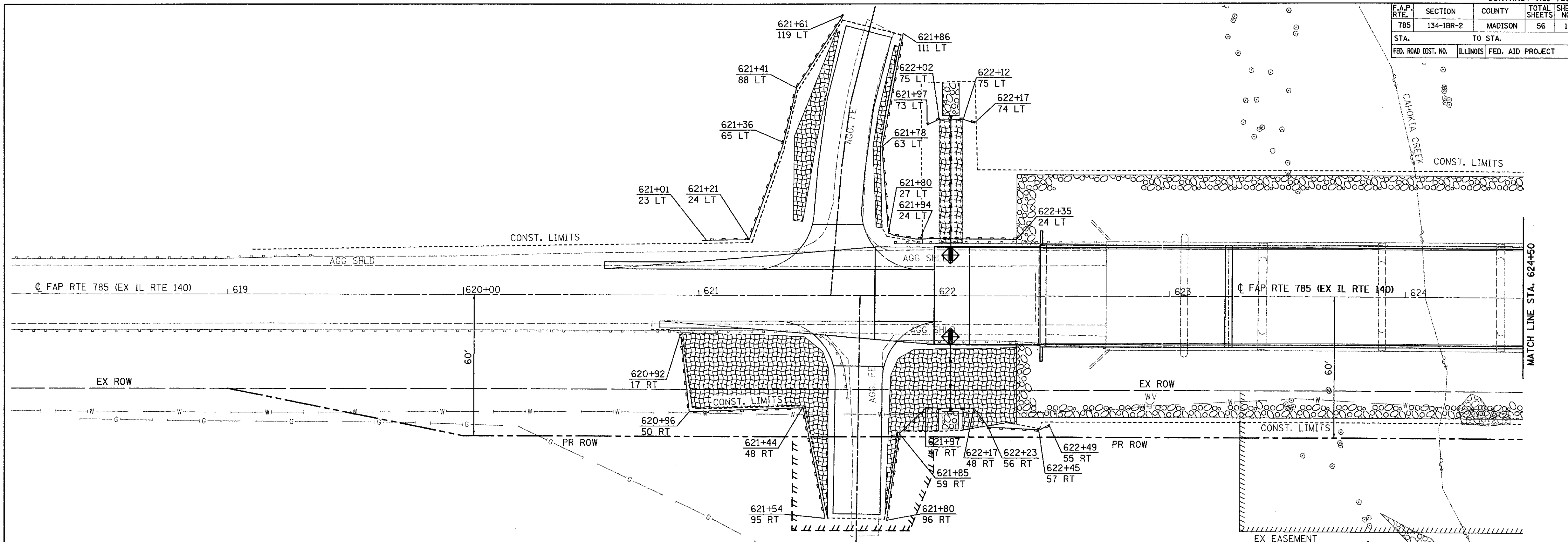
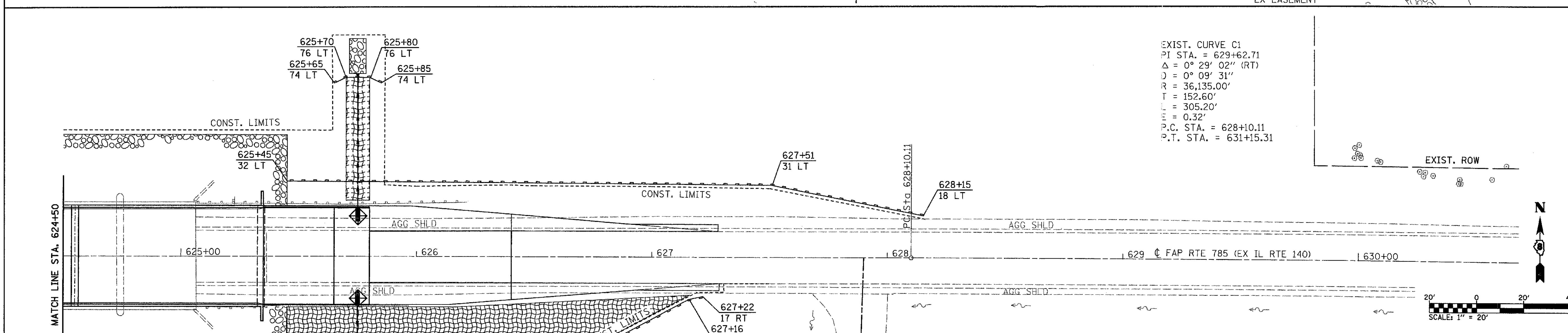
USER NAME = AUSTIN

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION PREVENTION PLAN

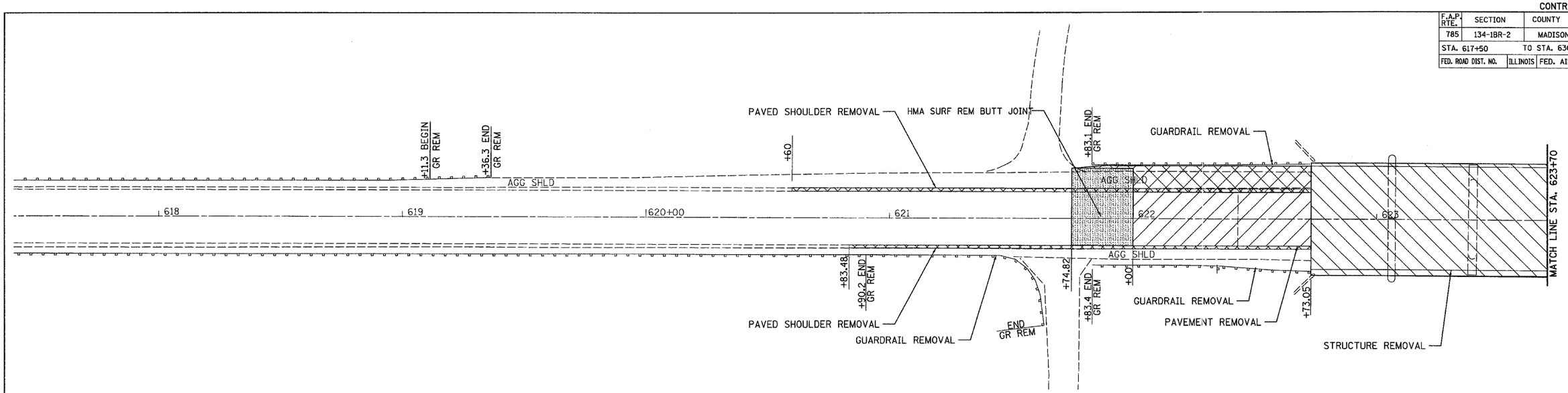
FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY
SN 060-0240

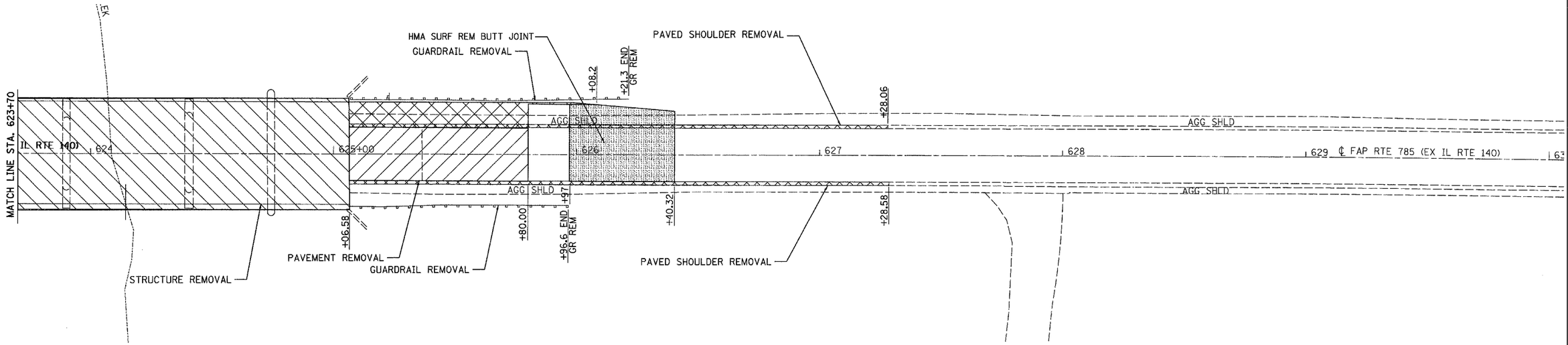
PLOT DATE = 03/21/2007
FILE NAME = M:\P\25004\Technical Production\Structural\SN 060-0240\Microstation\swppp05.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = $USER$

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	19
STA. 617+50		TO STA. 630+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CADD FILE NAME / NOTE BOOK / NO. — DATE / BY





LEGEND

- STRUCTURE REMOVAL
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- HMA SURFACE REMOVAL FOR BUTT JOINT

N

20′ 0 20′ 40′
SCALE: 1″ = 20′

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

REMOVAL

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 03/21/2007
FILE NAME = H:\P\25984\Technical Production\Structural\SN 068-0240\Microstation\RemPlan2005A.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = #USER#

REMOVAL PLAN

PART OF THE S.W. 1/4 OF SECTION 7, T5N, R7W, OF THE 3RD PM, MADISON COUNTY, ILLINOIS

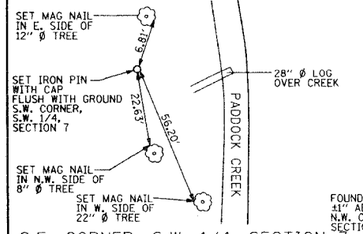
BEARINGS SHOWN HEREON ARE BASED ON SURVEY CONTROL DATA AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
785	134-1BR-2	MADISON	56	20
STA. 607+85.09 TO STA. 629+81.29				
CONTRACT NO.: 76902				

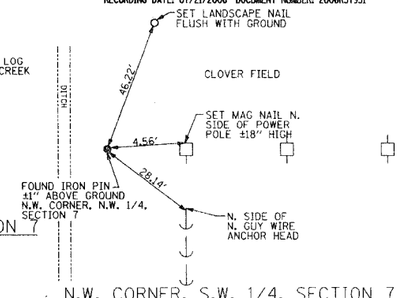
CROSS TIES

N.T.S.

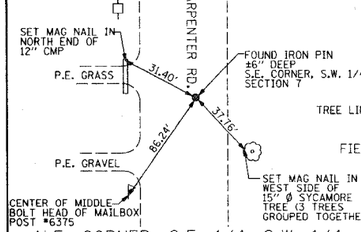
S.W. CORNER, S.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



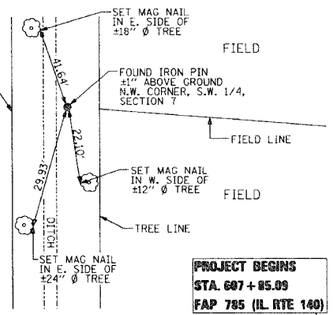
N.W. CORNER, N.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



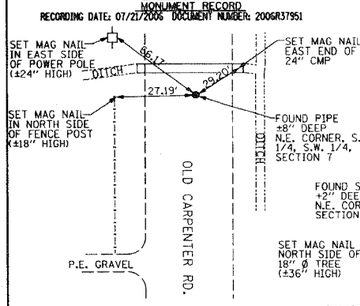
S.E. CORNER, S.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



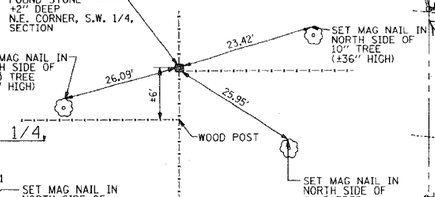
N.W. CORNER, S.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



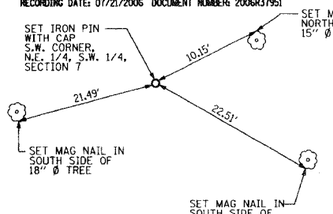
N.E. CORNER, S.E. 1/4, S.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



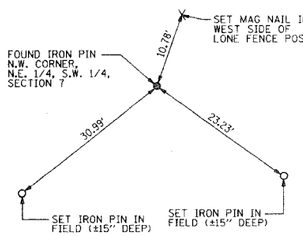
N.E. CORNER, S.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



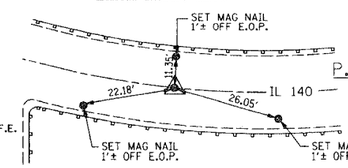
S.W. CORNER, N.E. 1/4, S.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



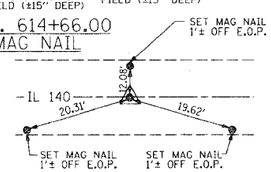
N.W. CORNER, N.E. 1/4, S.W. 1/4, SECTION 7
MONUMENT RECORD
RECORDING DATE: 07/21/2006 DOCUMENT NUMBER: 2006R37951



PROJECT BEGINS STA. 607+85.09
SET MAG NAIL



P.T. STA. 614+66.00
SET MAG NAIL



TOTAL HOLDING PLAT

(SEE SHEET 2 FOR PARCEL PLAT)
ALL OFFSETS AND STATIONS ARE REFERENCED TO THE PROPOSED CENTERLINE OF PAVEMENT OF RTE. 140, EXCEPT RECORD STATIONING SHOWN IN PARENTHESIS

FND. PIN N.W. COR., N.W. 1/4, SECTION 7 Sta 601+35.98 3376.66'LT

EXISTING ℄ OF RIGHT-OF-WAY
PI STA. = 609+22.79 (℄ R.O.W.) (609+22.8)
Δ = 11° 50' 00" (LT) (11° 50')
L = 1,183.35' (1,183.3')
R = 5,729.65' (5,729.65')
P.C. STA. = 603+29.00 (℄ R.O.W.) (603+29.0)
P.T. STA. = 615+12.35 (℄ R.O.W.) (615+12.3) (C)
= (615+16.6) (T)

PROPOSED ℄ OF PAVEMENT CURVE C2
PI STA. = 609+18.16 (609+22.8)
Δ = 10° 59' 58" (LT)
T = 551.23'
L = 1,099.07' (1,183.33')
R = 5,725.00' (5,729.65')
C = 1,097.38'
CB = S 84° 17' 41" E
P.C. STA. = 603+66.93 (603+29.0)
P.T. STA. = 614+66.00 (615+12.3)

PROPOSED ℄ OF PAVEMENT CURVE C1
PI STA. = 629+62.71
Δ = 00° 29' 02" (RT)
T = 152.60'
L = 305.20'
R = 36,135.00'
C = 305.20'
CB = S 89° 33' 09" E
P.C. STA. = 628+10.11
P.T. STA. = 631+15.31

N 00° 16' 52" E 2,386.95'

N.W. 1/4 SECTION 7

W. 1/2, E. 1/2, N.W. 1/4 | E. 1/4, N.W. 1/4

FND. PIN N.W. COR., S.W. 1/4, SECTION 7 Sta 606+37.19 1025.76'LT

S 84° 25' 36" E 1,351.19'

THE ESTATE OF JAMES W. MORRISON, DECEASED AS TO AN UNDIVIDED 2/3 INTEREST, HOWARD S. MORRISON AS TO AN UNDIVIDED 1/6 INTEREST AND ELINOR L. KEYS AS TO AN UNDIVIDED 1/6 INTEREST
BK. 3072 PG. 1952
BK. 3100 PG. 1536
BK. 538 PG. 293

FND. PIN N.W. COR., N.E. 1/4, S.W. 1/4, SECTION 7 Sta 621+33.33 948.51'LT
S 84° 25' 36" E 40.47'
Sta 621+73.62 944.72'LT
S 84° 25' 49" E 808.19'

WILLAREDT ACRES, INC., AN ILLINOIS CORPORATION BK. 3644 PG. 882

W. 1/2, S.W. 1/4 (LYING NORTH OF THE CENTER LINE OF THE ALTON AND GREENVILLE ROAD)

W. 3/5, N.E. 1/4, S.W. 1/4

N 00° 16' 52" E 847.49'

CURVE C3
R= 5,549.65'
CB= S 86° 02' 48" E
C= 725.52'
ARC LENGTH = 726.04'

N 00° 01' 23" W 764.73'
S 00° 01' 23" E 768.52'
1 ACRE OFF E. SIDE

Sta 607+62.42 185.65'LT
CURVE C3 / EXISTING R.O.W. LINE
Sta 621+36.39 180.00'LT
S 89° 47' 40" E 625.48'
Sta 621+76.67 180.00'LT
N 89° 47' 40" W 803.99'
PROPOSED ℄ OF PAVEMENT RTE. 140 & EXISTING ℄ OF R.O.W. = N 89° 47' 40" W

PROJECT ENDS
PC STA. 629+81.29
FAP 785 (IL RTE 140)

PROPOSED ℄ OF PAVEMENT Sta 607+85.09 = 5.47'RT OF EXISTING ℄ OF R.O.W. Sta 607+86.20

FAP 785(IL RTE 140)

PT Sta 614+66.00
8606012
40.28'
8606010
CURVE C1
P.C. Sta 628+10.11
P.T. Sta 631+15.31
N 89° 47' 40" W 534.35'
Sta 629+79.81 180.40'LT
Sta 629+80.96 40.40'LT
Sta 635+15.13 44.67'LT
PROPOSED ℄ OF PAVEMENT Sta 635+15.86 = 4.67'RT OF EXISTING ℄ OF R.O.W. Sta 635+21.49
POT Sta 637+42.22
FAP 785(IL RTE 140)

CURVE C2
CURVE C4
S 89° 47' 40" E 976.79'
Sta 607+89.15 34.57'RT
EXISTING R.O.W. LINE
APPROXIMATE ℄ ALTON AND GREENVILLE ROAD
OVERLAP AREA 0.9393 ACRES±
8606011
S 89° 47' 40" E 493.72' (494.14')
Sta 624+87.70 40.00'RT
8606010TE
S 89° 47' 40" E 534.70'
Sta 629+81.61 39.59'RT
Sta 635+16.44 35.32'RT

HOWARD DALE HALL AND GLORIA JEAN HALL, HUSBAND AND WIFE, AS JOINT TENANTS
BK. 3635 PG. 873 &
BK. 3313 PG. 298

S 08° 30' 31" E 423.78' (426.99')
N 00° 00' 24" E (30') 433.75' (433.16') (47.9')
BK. 3313 PG. 298 (69.4')
EXCEPTION (90.0')
BK. 2088 PG. 408
452.27'
S 00° 14' 47" E

CURVE C4
R= 5,769.65'
CB= S 86° 11' 20" E
C= 725.70'
ARC LENGTH = 726.18'

SET IRON PIN WITH CAP S.W. COR., N.E. 1/4, S.W. 1/4, SECTION 7 Sta 621+79.17 446.04'RT
N 87° 49' 12" W 372.96'
N 87° 49' 12" W 431.28' (431.28')
FND. PIN Sta 620+51.91 458.89'RT
Sta 629+85.22 473.33'RT
537.08' (537.08')
S. LINE N.E. 1/4, S.W. 1/4
FND. PIN Sta 635+27.09 706.10'RT
FND. PIPE S.E. COR., N.E. 1/4, S.W. 1/4, SECTION 7 Sta 635+23.83 487.53'RT

N 88° 01' 19" W 1341.90' (1341.85')
Sta 621+79.85 669.33'RT
S 00° 11' 56" E 1,311.91'

-5252.76'-
N 00° 16' 52" E 2863.81'
1794.53'

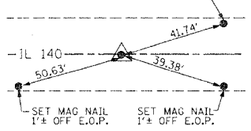
PART OF THE W. 1/2, S.W. 1/4

WILLAREDT ACRES, INC., AN ILLINOIS CORPORATION BK. 3644 PG. 882

℄ CAHOKIA CREEK
S 00° 01' 50" W 1322.01'

FND. PIN Sta 621+82.18 1433.10'RT
Sta 621+83.20 1768.04'RT
SET IRON PIN WITH CAP S.W. COR., S.W. 1/4, SECTION 7 Sta 609+48.00 1819.75'RT
S 89° 21' 06" W 1399.08'
N 88° 15' 29" W 1346.23' (1344.75')
FND. PIN S.E. COR., S.W. 1/4, SECTION 7 Sta 635+44.16 1799.29'RT

P.C. STA. 628+10.11
FND MAG NAIL



Sta 634+92.52 2147.17' LT FND. PIN N.W. COR., S.W. 1/4, N.E. 1/4, SECTION 7

EXCEPTIONS BK. 2463. PG. 614 BK. 4481. PG. 5933

(670.38')

S 00° 15' 41" E 1,323.31'

Sta 629+74.32 869.55'LT

533.41'

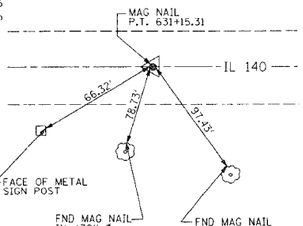
FND. STONE N.E. COR., S.W. 1/4, SECTION 7 Sta 635+02.41 823.89'LT

MARIE S. FUNKE, TRUSTEE UNDER THE MARIE S. FUNKE LIVING TRUST
BK. 4429 PG. 4506
(EXCEPTION BK. 1718 PG. 306)

E. 16 ACRES OF N.E. 1/4, S.W. 1/4

S 00° 00' 24" W 689.17'
829.17'
S 00° 14' 47" E 779.33'
-824.00'-
-1,311.60'-

P.T. STA. 631+15.31
FND MAG NAIL



LEGEND

SECTION CORNER
QUARTER SECTION CORNER

C.O.B. CENTER OF BRIDGE
P.O.L. POINT ON LINE
EXISTING CENTERLINE
EXISTING RIGHT OF WAY LINE
EXISTING EASEMENT LINE
PROPOSED CENTERLINE
PROPOSED RIGHT OF WAY LINE
PROPOSED TEMPORARY EASEMENT LINE
PROPOSED TEMPORARY USE PERMIT LINE
PROPOSED PERMANENT EASEMENT LINE
SECTION LINE
QUARTER SECTION LINE
QUARTER QUARTER SECTION LINE
℄ PROPERTY (DEED) LINE
APL APPARENT PROPERTY LINE
121.45 MEASURED DIMENSION
123.45 (COMP) COMPUTED DIMENSION
(123.45) RECORDED DIMENSION
● FOUND IRON PIPE OR IRON ROD AT CORNER UNLESS OTHERWISE NOTED
○ SET 5/8 INCH IRON ROD AT CORNER UNLESS OTHERWISE NOTED
PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 667101 (TO BE SET BY OTHERS)
CUT CROSS FOUND OR SET
SAME OWNERSHIP
EXISTING BUILDING

■ STAKING OF PROPOSED RIGHT OF WAY. SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

■M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
) SS
COUNTY OF MONTGOMERY)

I, TONY HARD, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY FOR THE PROPOSED PARCEL(S) TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON.

DATED November 13, 2006
TONY HARD, PLS NO. 2953
LICENSE EXPIRATION DATE: 11/30/2006

TONY HARD 2953 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS HILLSBORO, ILLINOIS

McDonough-Whitlow, P.C.
Consulting Engineers & Land Surveyors
138 East Wood Street
Hillsboro, IL 62049
Phone: 217.532.9233
Fax: 217.532.6300
PROFESSIONAL DESIGN NO. 184-002754

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAP ROUTE 785 (IL 140)
SECTION 134-1BR-2
MADISON COUNTY
JOB NO. R-98-006-06

STATION 607+85.09 TO STATION 629+81.29
200' 0 200' 400'
SCALE: 1" = 200'
SHEET 3 OF 3

COMPLETION DATE OF FIELD WORK PERFORMED
LAND SURVEY: 06-01-2006
RIGHT OF WAY STAKING: 10-24-2006

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198
SHEET 1 IS A COVER SHEET

NO.	DATE	DESCRIPTION	BY

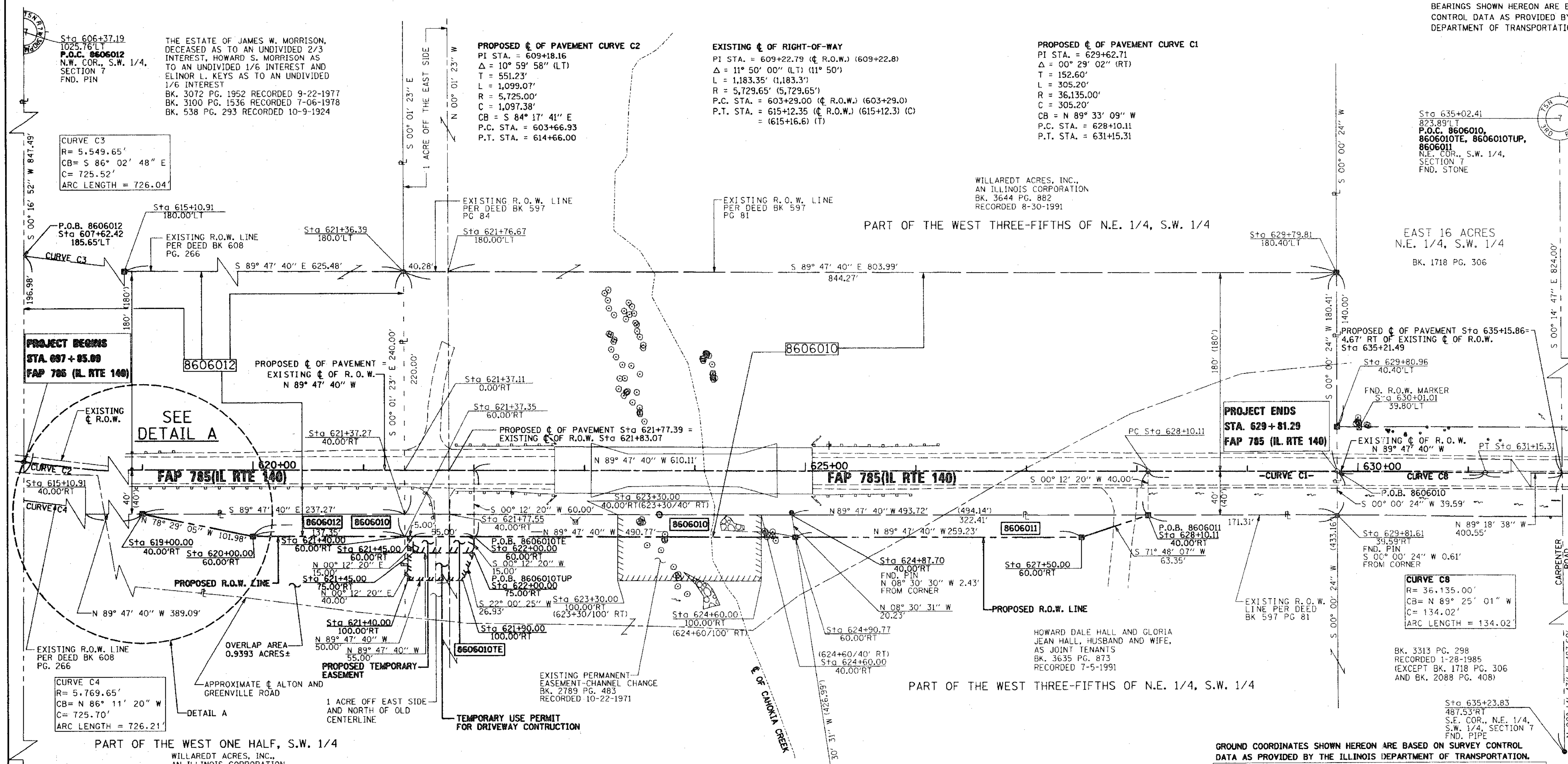
PART OF THE S.W. 1/4 OF SECTION 7, T5N, R7W, OF THE 3RD PM, MADISON COUNTY, ILLINOIS

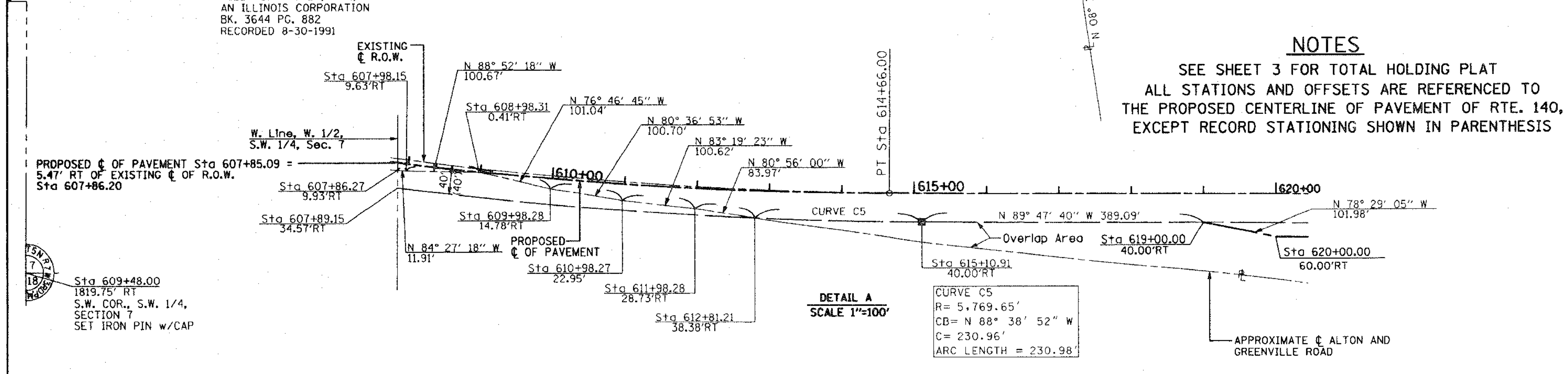
BEARINGS SHOWN HEREON ARE BASED ON SURVEY CONTROL DATA AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	21

STA. 607+85.09 TO STA. 629+81.29

CONTRACT NO.: 76902





NOTES

SEE SHEET 3 FOR TOTAL HOLDING PLAT

ALL STATIONS AND OFFSETS ARE REFERENCED TO THE PROPOSED CENTERLINE OF PAVEMENT OF RTE. 140, EXCEPT RECORD STATIONING SHOWN IN PARENTHESIS

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- C.O.B. — CENTER OF BRIDGE
- P.O.L. — POINT ON LINE
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- EXISTING EASEMENT LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED TEMPORARY USE PERMIT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- 121.45 — MEASURED DIMENSION
- 123.45 (COMP) — COMPUTED DIMENSION
- (123.45) — RECORDED DIMENSION
- FOUND IRON PIPE OR IRON ROD AT CORNER UNLESS OTHERWISE NOTED
- SET 5/8 INCH IRON ROD AT CORNER UNLESS OTHERWISE NOTED
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 667101 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- EXISTING BUILDING

■ STAKING OF PROPOSED RIGHT OF WAY. SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

■M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
) SS
COUNTY OF MONTGOMERY)

I, TONY HARD, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY FOR THE PROPOSED PARCEL(S) TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON.

DATED October 30, 2006

Tony Hard

TONY HARD, PLS NO. 2953
LICENSE EXPIRATION DATE: 11/30/2006

TONY HARD 2953 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS HILLSBORO, ILL.

GROUND COORDINATES SHOWN HEREON ARE BASED ON SURVEY CONTROL DATA AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

COORDINATE TABLE

STATION	OFFSET	NORTH	EAST
603+66.93	P.C.	811,583.7222	364,432.4697
601+35.98	3,376.66' LT	814,940.8920	364,862.0690
606+37.19	1,025.76' LT	812,551.9730	364,850.3430
607+85.09	BEGIN STA.	811,517.5112	364,845.2653
609+18.16	P.I.	811,476.6083	364,973.1905
609+48.00	1,819.75' RT	809,688.1975	364,836.2862
614+66.00	P.T.	811,474.6318	365,524.4149
619+00.00	0.00' RT	811,473.0755	365,958.4146
619+00.00	40.00' RT	811,433.0758	365,958.2712
620+00.00	60.00' RT	811,412.7173	366,058.1988
621+40.00	60.00' RT	811,412.2153	366,198.1979
621+40.00	100.00' RT	811,372.2156	366,198.0545
621+45.00	60.00' RT	811,412.1974	366,203.1979
621+45.00	75.00' RT	811,397.1975	366,203.1441
621+73.62	944.72' LT	812,416.8130	366,235.4220
621+79.17	446.04' RT	811,026.0353	366,235.9797
621+83.20	1,768.04' RT	809,704.0300	366,235.2716
621+90.00	100.00' RT	811,372.0363	366,248.0542
622+00.00	0.00' RT	811,471.9998	366,258.4126
622+00.00	60.00' RT	811,412.0002	366,258.1975
622+00.00	75.00' RT	811,397.0003	366,258.1437
624+87.70	0.00' RT	811,470.9681	366,546.1108
624+87.70	40.00' RT	811,430.9684	366,545.9716
624+90.77	60.00' RT	811,410.9575	366,548.9653
627+50.00	60.00' RT	811,410.0280	366,808.1940
628+10.11	P.C.	811,469.8121	366,868.5187
628+10.11	40.00' RT	811,429.8123	366,868.3753
629+62.71	P.I.	811,469.2649	367,021.1196
629+81.29	END STA.	811,468.7928	367,039.6927
631+15.31	P.T.	811,467.4288	367,173.7104
634+92.52	2,147.17' LT	813,609.9000	367,576.7280
635+02.41	823.89' LT	812,286.6010	367,570.6890
635+23.83	487.53' RT	810,975.0160	367,576.3290
635+44.16	1,799.29' RT	809,663.1100	367,580.8840

PARCEL NO.	OWNER	TOTAL HOLDING	FEE SIMPLE ACQUISITION						REMAINDER	EASEMENTS			PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
			GROSS		PREVIOUSLY DEDICATED		NET			TUP = TEMPORARY USE PERMIT TE = TEMPORARY		EASEMENT PURPOSE		
		ACRES	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	ACRES	SQ. FT.			
8606010	WILLAREDT ACRES, INC., AN ILLINOIS CORPORATION TITLE REPORT MA-3824.0; MA-3825.0	146.3515*	4.5113	196,511	4.2637	185,726	0.2476	10,785	141.8402	TE=0.0189 TUP=0.0333	825 1,450	ENTRANCE CONSTRUCTION ENTRANCE CONSTRUCTION	11-1-10-07-00-000-024	
8606011	HOWARD DALE HALL AND GLORIA JEAN HALL, HUSBAND AND WIFE, AS JOINT TENANTS TITLE REPORT MA-3826.0; MA3827.0	9.3616	0.1335	5,816	N/A	N/A	0.1335	5,816	9.2281	N/A	N/A	N/A	11-1-10-07-00-000-021	
8606012	THE ESTATE OF JAMES W. MORRISON, DECEASED AS TO AN UNDIVIDED 2/3 INTEREST, HOWARD S. MORRISON AS TO AN UNDIVIDED 1/6 INTEREST AND ELINOR L. KEYS AS TO AN UNDIVIDED 1/6 INTEREST TITLE REPORT MA-3823.0	33.0031*	6.6953	291,647	6.6093	287,901	0.0860	3,746	26.3078	N/A	N/A	N/A	11-1-10-07-00-000-023	

* TOTAL HOLDING INCLUDES OVERLAP AREA

COMPLETION DATE OF FIELD WORK PERFORMED
LAND SURVEY: 06-01-2006
RIGHT OF WAY STAKING: 10-24-2006

McDonough-Whitlow, P.C.
Consulting Engineers & Land Surveyors
138 East Wood Street
Hillsboro, IL 62049
Phone: 217.532.9233
Fax: 217.532.6300
PROFESSIONAL DESIGN NO. 184-002754

ILLINOIS DEPARTMENT OF TRANSPORTATION

PLAT OF HIGHWAYS

FAP ROUTE 785 (IL 140)
SECTION 134-1BR-2
MADISON COUNTY
JOB NO. R-98-006-06

STATION 607+85.09 TO STATION 629+81.29

50' 0 50' 100'
SCALE: 1" = 50'

SHEET 2 OF 3

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198

SHEET 1 IS A COVER SHEET

PLOT DATE: 02-09-06 9:05 A.M.

Bench Mark: Chiseled "□" on top of NW wingwall of Illinois Route 140 bridge over Cahokia Creek. Elevation 479.28

Existing Structure: S.N. 060-0097 built in 1927 as S.B.I. Route 160, Section 134C, at Station 623+90. Bridge was built as a five span bridge with a 234 foot length. Four spans were spanned by concrete T girders and the center span by a 100 foot truss. In 1971 the superstructure was removed, a center pier constructed, existing piers and abutments widened, and precast deck beams placed as the new superstructure.
Traffic to be maintained utilizing stage construction.
No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note: Soil will need to be removed to provide the required waterway opening under the proposed bridge. Hatched area gives a rough indication of the removal area. See roadway plans for quantities.

INDEX OF SHEETS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	22	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

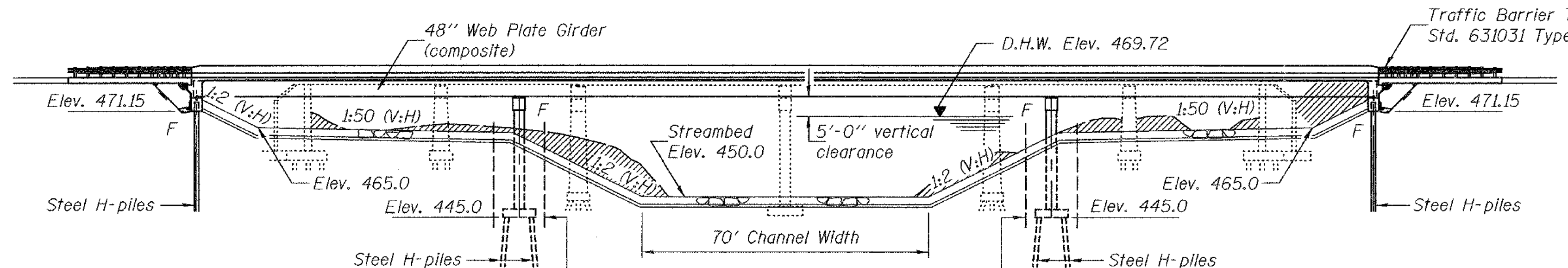
SHEET NO. 1
23 SHEETS

Contract #76902

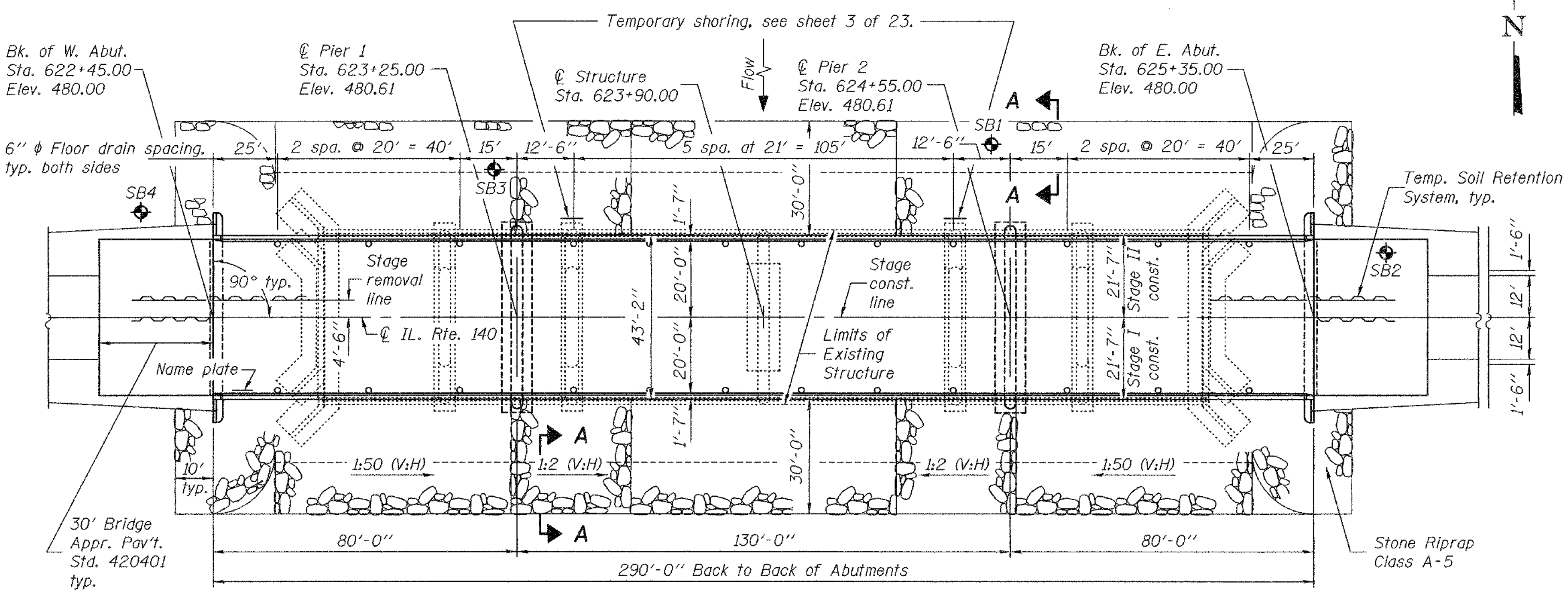
STATION 623+90.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 785 SEC. 134-1BR-2
LOADING HL-93
STRUCTURE NO. 060-0240

NAME PLATE

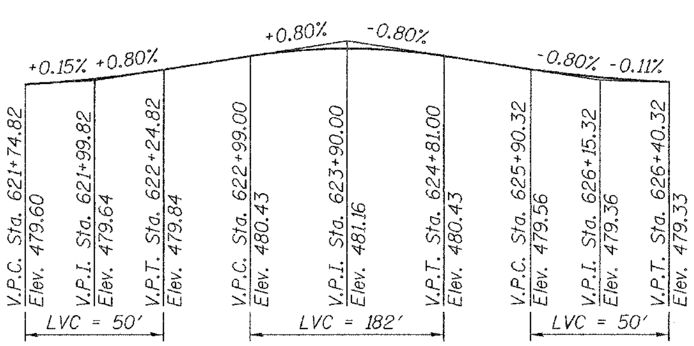
See Std. 515001



ELEVATION

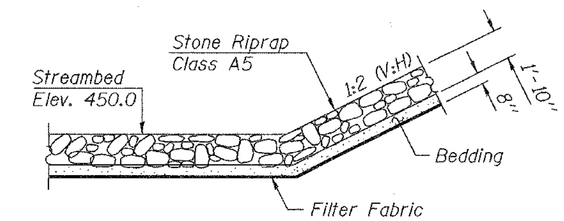


PLAN



PROFILE GRADE

Design Scour Elevation (feet)	W. Abutment	Pier 1	Pier 2	E. Abutment
	471	445	445	471



STONE RIPRAP DETAIL

WATERWAY INFORMATION

Drainage Area = 176.6 Sq. Miles Low Grade Elev. 479.32 Ft. @ Sta. 626+47

Flood	Freq. Yr.	S.N.	Q Exist. (CFS)	Q Prop. (CFS)	Opening Exist. (SQ FT)	Opening Prop. (SQ FT)	Natural H.W.E. (FT)	Created Head Exist. (FT)	Created Head Prop. (FT)	H.W.E. Exist. (FT)	H.W.E. Prop. (FT)
Design	50	060-0097	7394.28	7833.30	1686.58	1805.93	469.72	1.32	1.20	471.04	470.92
		060-0237	4835.50	4483.35	783.72	783.72					
		Culvert	1124.22	1037.35	200.00	200.00					
		Total	13354.00	13354.00	2670.30	2789.65					
Base	100	060-0097	8495.67	8975.92	1740.46	1869.33	469.97	1.45	1.32	471.42	471.29
		060-0237	5218.41	4832.31	804.90	804.90					
		Culvert	1166.92	1072.77	200.00	200.00					
		Total	14881.00	14881.00	2745.36	2874.23					
Over-topping	N/A									0.00	0.00
		Total	0.00	0.00	0.00	0.00					
Max. Calc.	500	060-0097	11212.24	11860.89	1861.14	2012.24	470.53	1.80	1.61	472.33	472.14
		060-0237	6205.61	5670.98	853.34	853.34					
		Culvert	1270.15	1156.13	200.00	200.00					
		Total	18688.00	18688.00	2914.48	3065.58					
Scour	10	060-0097	4582.57	4947.07	1531.42	1624.75	469.00	0.94	0.86	469.94	469.86
		060-0237	3912.73	3625.25	724.27	724.27					
		Culvert	995.70	918.68	187.80	187.80					
		Total	9491.00	9491.00	2443.49	2536.82					

10 yr. velocity through existing bridge = 3.45 fps
10 yr. velocity through proposed bridge = 3.57 fps

LOADING HL-93

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

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications
U.S. 3rd. Edition - 2004 w/ 2005 Interims

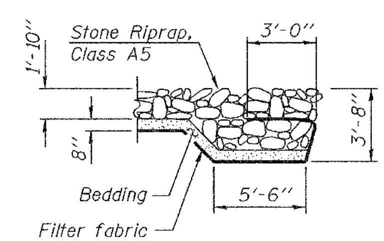
DESIGN STRESSES

FIELD UNITS

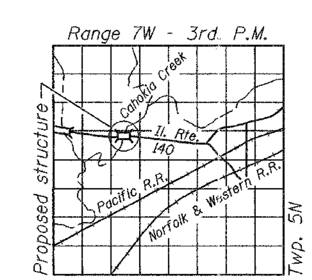
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (structural steel M 270, Gr. 50)
f_y = 36,000 psi (structural steel M 270, Gr. 36)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.085g
Site Coefficient (S) = 1.5



SECTION A-A



LOCATION SKETCH

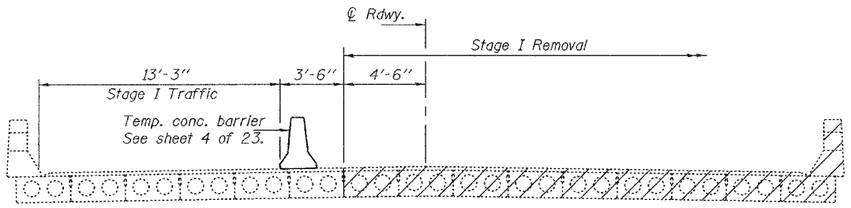
DESIGNED	[signature]
CHECKED	[signature]
DRAWN	h.t. duong
CHECKED	[initials]

EXAMINED [signature] April 9, 2007
ENGINEER OF BRIDGE DESIGN
PASSED [signature]
ENGINEER OF BRIDGES AND STRUCTURES

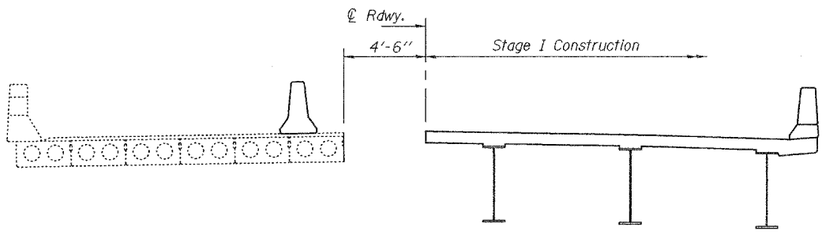
STATE OF ILLINOIS RALPH E. ANDERSON 081-004625 SPRINGFIELD LICENSED STRUCTURAL ENGINEER

EXPIRES 11-30-2008

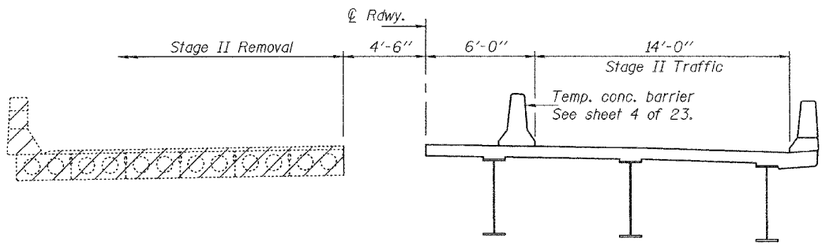
GENERAL PLAN
ILLINOIS ROUTE 140 OVER CAHOKIA CREEK
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240



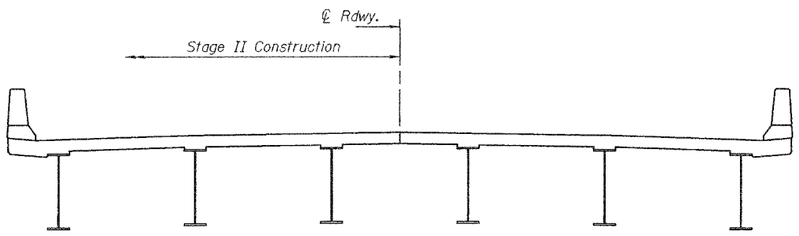
STAGE I REMOVAL



STAGE I CONSTRUCTION



STAGE II REMOVAL



STAGE II CONSTRUCTION

Notes: Hatched area indicates removal of existing structures.
All staging sections are looking east.
For quantity of temporary concrete barriers, see roadway plans.

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$" ϕ, holes $\frac{15}{16}$" ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 326520 lb (AASHTO M 270, Gr. 50)
36050 lb (AASHTO M 270, Gr. 36)

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

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

Reinforcement bars designated (E) shall be epoxy coated.

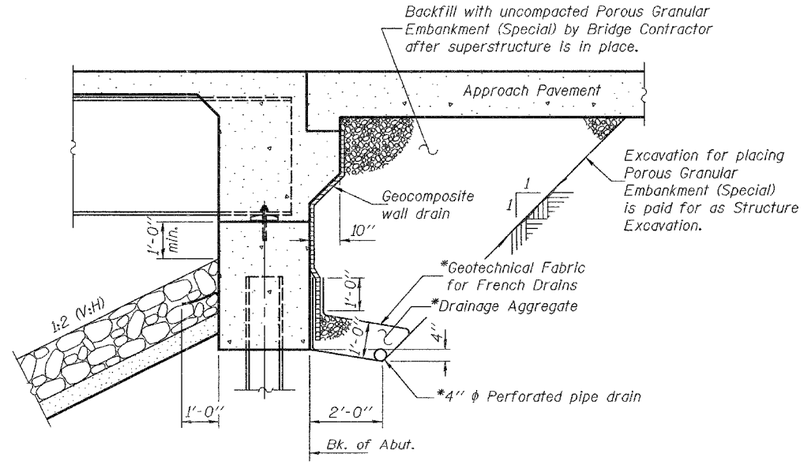
Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

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 interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

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

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

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



SECTION THRU INTEGRAL ABUTMENT

*Included in the cost of Pipe Underdrains for Structures, 4".

Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	23	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
23 SHEETS

Contract #76902

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		203	203
Stone Riprap, Class A5	Sq. Yd.		3426	3426
Filter Fabric	Sq. Yd.		3426	3426
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		208	208
Coiferdam Excavation	Cu. Yd.		796	796
Coifferdam (Location 1)	Each		1	1
Coifferdam (Location 2)	Each		1	1
Floor Drains	Each	24		24
Concrete Structures	Cu. Yd.		336.8	336.8
Concrete Superstructure	Cu. Yd.	423.0		423.0
Bridge Deck Grooving	Sq. Yd.	1224		1224
Concrete Encasement	Cu. Yd.		5.4	5.4
Protective Coat	Sq. Yd.	1532		1532
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	4176		4176
Reinforcement Bars, Epoxy Coated	Pound	108960	42060	151020
Bar Splicers	Each	1117	182	1299
Driving Piles	Foot		4147	4147
Furnishing Steel Piles HP12x63	Foot		4147	4147
Test Pile Steel HP12x63	Each		4	4
Pile Shoes	Each		72	72
Temporary Soil Retention System	Sq. Ft.	1029		1029
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		99	99
Pipe Underdrains for Structures, 4"	Foot		170	170
Anchor Bolts, 1" ϕ	Each	24		24
Anchor Bolts, 1¼" ϕ	Each	24		24
Temporary Shoring	Each		2	2
Asbestos Bearing Pad Removal	Each	180		180

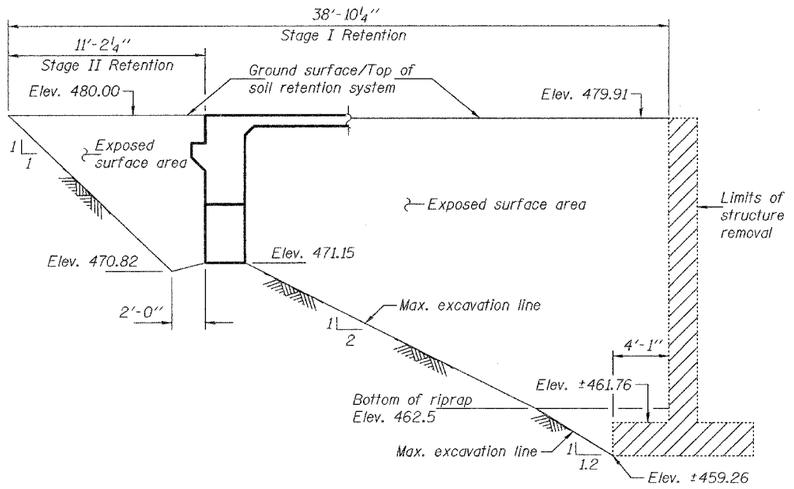
GENERAL DATA & STAGE CONSTRUCTION DETAILS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

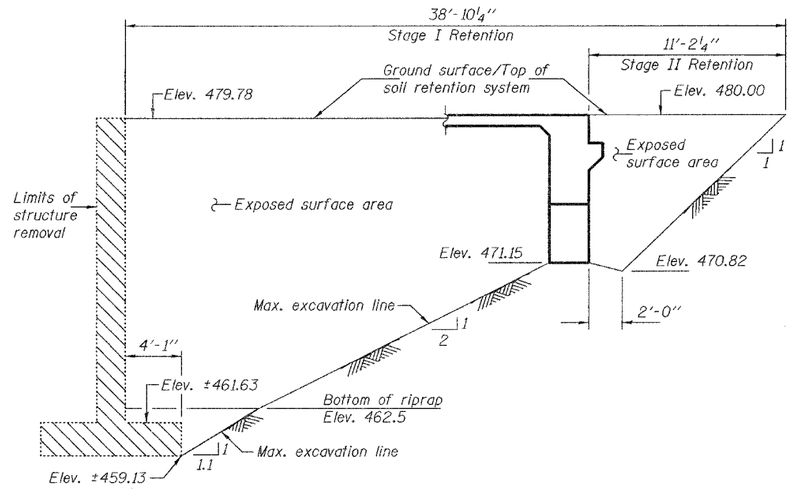
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	24	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
23 SHEETS

Contract #76902

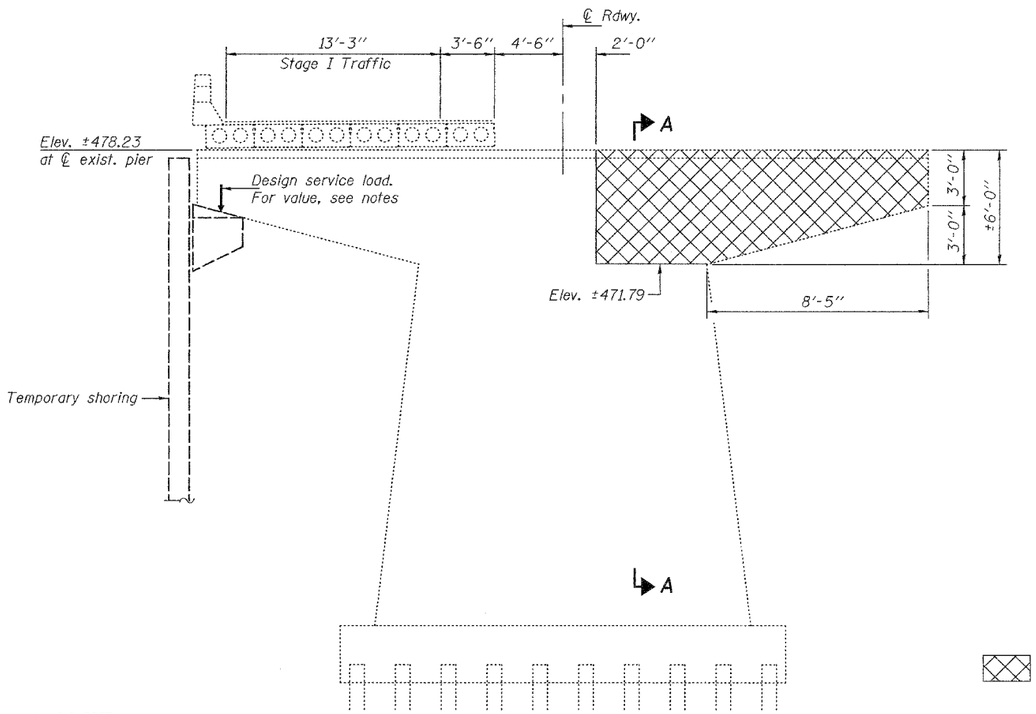


TEMPORARY SOIL RETENTION SYSTEM
AT WEST ABUTMENT

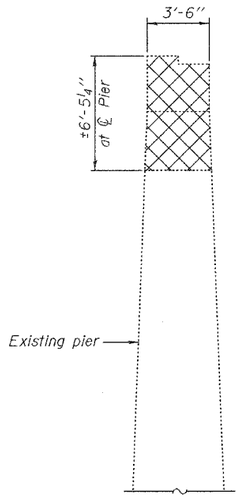


TEMPORARY SOIL RETENTION SYSTEM
AT EAST ABUTMENT

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



ELEVATION - EXISTING PIERS 2 & 4
(Looking east - Pier 2 shown; Pier 4 similar)



SECTION A-A

Hatched area indicates the maximum portion of the existing pier that may be removed during Stage I Removal to allow Stage I Construction. Remaining portions of the existing pier that are to be removed during Stage II Removal. Cost included with Removal of Existing Structures.

Notes: The cantilever portion of the existing piers shall be shored as shown on this sheet prior to beginning of Stage I Removal. The temporary shoring shall remain in place until the remaining existing superstructure has been completely removed during Stage II Removal. See Special Provision. (See sheet 2 of 23 for additional Stage Construction Details.)

Temporary shoring shall not be supported on any part of the pier or its footing.

Design service load at support contact as shown is 206 kips.

Horizontal and vertical removal lines shall be saw cut to a minimum depth of 12 inches on each face of the existing pier prior to jack hammering.

BILL OF MATERIAL

Item	Unit	Total
Temporary Shoring	Each	2

TEMPORARY SHORING DETAILS AT EXISTING PIERS

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STAGE CONSTRUCTION DETAILS &
TEMPORARY SOIL RETENTION SYSTEM
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

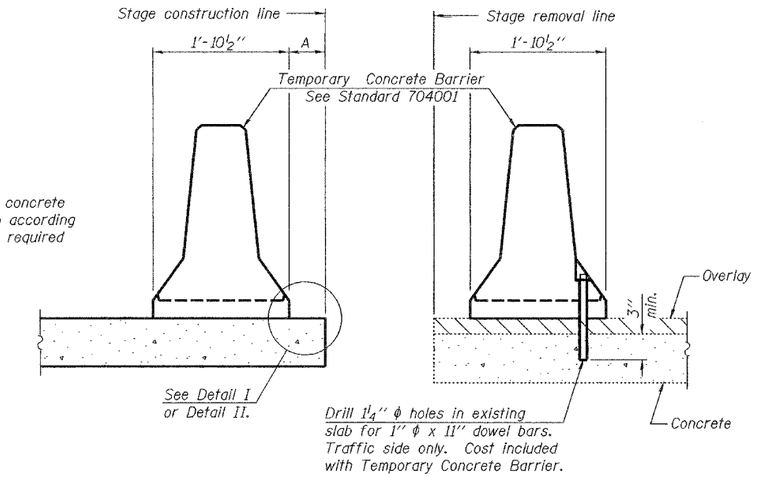
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	25	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 4
23 SHEETS

Contract #76902

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



SECTIONS THRU SLAB

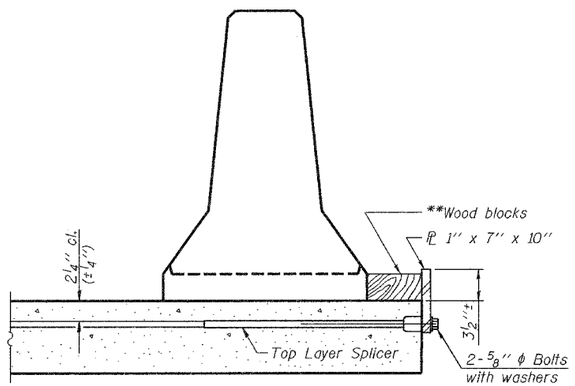
NOTES

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

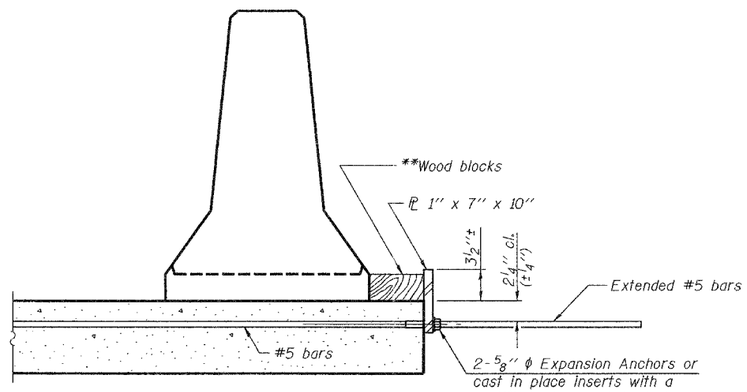
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel ℙ to the concrete slab with 2-$\frac{5}{8}$" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

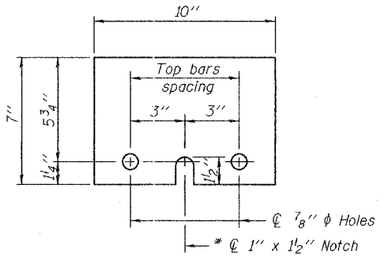
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1" x 7" x 10"

* Required only with Detail II

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

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

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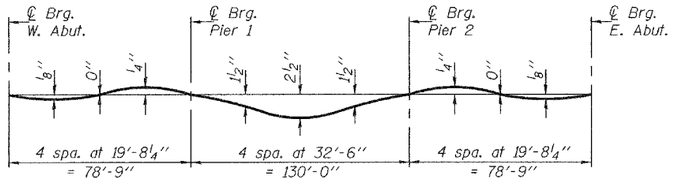
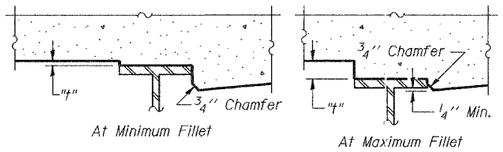


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 6 & 7 of 23.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



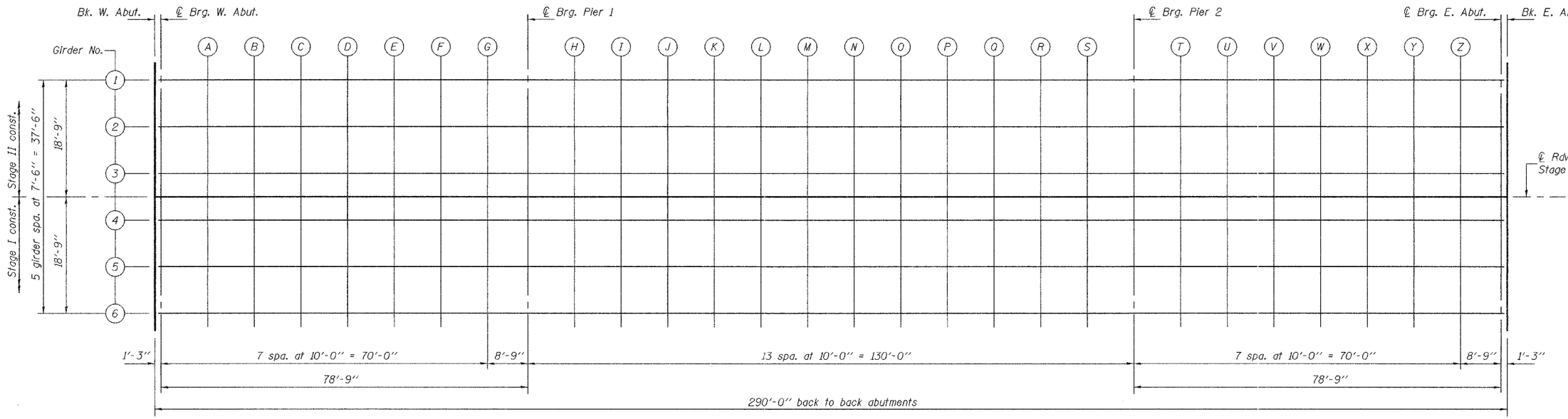
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	26	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
23 SHEETS

Contract #76902

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 6 & 7 of 23, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	27	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6
23 SHEETS

Contract #76902

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut	62245.00	-18.75	479.67	479.67
℄ Brg. W. Abut	62246.25	-18.75	479.68	479.68
A	62256.25	-18.75	479.76	479.77
B	62266.25	-18.75	479.84	479.85
C	62276.25	-18.75	479.92	479.93
D	62286.25	-18.75	480.00	480.00
E	62296.25	-18.75	480.08	480.07
F	62306.25	-18.75	480.16	480.14
G	62316.25	-18.75	480.23	480.22
℄ Brg. Pier 1	62325.00	-18.75	480.28	480.28
H	62335.00	-18.75	480.34	480.37
I	62345.00	-18.75	480.38	480.46
J	62355.00	-18.75	480.41	480.53
K	62365.00	-18.75	480.44	480.58
L	62375.00	-18.75	480.46	480.63
M	62385.00	-18.75	480.47	480.66
N	62395.00	-18.75	480.47	480.66
O	62405.00	-18.75	480.46	480.63
P	62415.00	-18.75	480.44	480.58
Q	62425.00	-18.75	480.41	480.53
R	62435.00	-18.75	480.38	480.46
S	62445.00	-18.75	480.34	480.37
℄ Brg. Pier 2	62455.00	-18.75	480.28	480.28
T	62465.00	-18.75	480.22	480.21
U	62475.00	-18.75	480.15	480.13
V	62485.00	-18.75	480.07	480.06
W	62495.00	-18.75	479.99	479.99
X	62505.00	-18.75	479.91	479.92
Y	62515.00	-18.75	479.83	479.84
Z	62525.00	-18.75	479.75	479.76
℄ Brg. E. Abut	62533.75	-18.75	479.68	479.68
Bk. E. Abut	62535.00	-18.75	479.67	479.67

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut	62245.00	-11.25	479.82	479.82
℄ Brg. W. Abut	62246.25	-11.25	479.83	479.83
A	62256.25	-11.25	479.91	479.92
B	62266.25	-11.25	479.99	480.00
C	62276.25	-11.25	480.07	480.08
D	62286.25	-11.25	480.15	480.15
E	62296.25	-11.25	480.23	480.23
F	62306.25	-11.25	480.31	480.30
G	62316.25	-11.25	480.38	480.37
℄ Brg. Pier 1	62325.00	-11.25	480.43	480.43
H	62335.00	-11.25	480.49	480.53
I	62345.00	-11.25	480.53	480.61
J	62355.00	-11.25	480.57	480.68
K	62365.00	-11.25	480.59	480.74
L	62375.00	-11.25	480.61	480.78
M	62385.00	-11.25	480.62	480.81
N	62395.00	-11.25	480.62	480.81
O	62405.00	-11.25	480.61	480.78
P	62415.00	-11.25	480.59	480.74
Q	62425.00	-11.25	480.57	480.68
R	62435.00	-11.25	480.53	480.61
S	62445.00	-11.25	480.49	480.53
℄ Brg. Pier 2	62455.00	-11.25	480.43	480.43
T	62465.00	-11.25	480.37	480.36
U	62475.00	-11.25	480.30	480.29
V	62485.00	-11.25	480.22	480.22
W	62495.00	-11.25	480.14	480.14
X	62505.00	-11.25	480.06	480.07
Y	62515.00	-11.25	479.98	479.99
Z	62525.00	-11.25	479.90	479.91
℄ Brg. E. Abut	62533.75	-11.25	479.83	479.83
Bk. E. Abut	62535.00	-11.25	479.82	479.82

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut	62245.00	-3.75	479.94	479.94
℄ Brg. W. Abut	62246.25	-3.75	479.95	479.95
A	62256.25	-3.75	480.03	480.04
B	62266.25	-3.75	480.11	480.12
C	62276.25	-3.75	480.19	480.20
D	62286.25	-3.75	480.27	480.27
E	62296.25	-3.75	480.35	480.34
F	62306.25	-3.75	480.43	480.41
G	62316.25	-3.75	480.50	480.49
℄ Brg. Pier 1	62325.00	-3.75	480.55	480.55
H	62335.00	-3.75	480.60	480.64
I	62345.00	-3.75	480.65	480.73
J	62355.00	-3.75	480.68	480.80
K	62365.00	-3.75	480.71	480.85
L	62375.00	-3.75	480.73	480.90
M	62385.00	-3.75	480.74	480.93
N	62395.00	-3.75	480.74	480.93
O	62405.00	-3.75	480.73	480.90
P	62415.00	-3.75	480.71	480.85
Q	62425.00	-3.75	480.68	480.80
R	62435.00	-3.75	480.65	480.73
S	62445.00	-3.75	480.60	480.64
℄ Brg. Pier 2	62455.00	-3.75	480.55	480.55
T	62465.00	-3.75	480.49	480.48
U	62475.00	-3.75	480.42	480.40
V	62485.00	-3.75	480.34	480.33
W	62495.00	-3.75	480.26	480.26
X	62505.00	-3.75	480.18	480.19
Y	62515.00	-3.75	480.10	480.11
Z	62525.00	-3.75	480.02	480.03
℄ Brg. E. Abut	62533.75	-3.75	479.95	479.95
Bk. E. Abut	62535.00	-3.75	479.94	479.94

℄ RDWY., P.G. & STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut	62245.00	0.00	480.00	480.00
℄ Brg. W. Abut	62246.25	0.00	480.01	480.01
A	62256.25	0.00	480.09	480.10
B	62266.25	0.00	480.17	480.18
C	62276.25	0.00	480.25	480.26
D	62286.25	0.00	480.33	480.33
E	62296.25	0.00	480.41	480.40
F	62306.25	0.00	480.49	480.47
G	62316.25	0.00	480.56	480.55
℄ Brg. Pier 1	62325.00	0.00	480.61	480.61
H	62335.00	0.00	480.66	480.70
I	62345.00	0.00	480.71	480.78
J	62355.00	0.00	480.74	480.86
K	62365.00	0.00	480.77	480.91
L	62375.00	0.00	480.79	480.95
M	62385.00	0.00	480.79	480.99
N	62395.00	0.00	480.79	480.99
O	62405.00	0.00	480.79	480.95
P	62415.00	0.00	480.77	480.91
Q	62425.00	0.00	480.74	480.86
R	62435.00	0.00	480.71	480.78
S	62445.00	0.00	480.66	480.70
℄ Brg. Pier 2	62455.00	0.00	480.61	480.61
T	62465.00	0.00	480.55	480.54
U	62475.00	0.00	480.48	480.46
V	62485.00	0.00	480.40	480.39
W	62495.00	0.00	480.32	480.32
X	62505.00	0.00	480.24	480.25
Y	62515.00	0.00	480.16	480.17
Z	62525.00	0.00	480.08	480.08
℄ Brg. E. Abut	62533.75	0.00	480.01	480.01
Bk. E. Abut	62535.00	0.00	480.00	480.00

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

E-S 10-22-04

TOP OF SLAB ELEVATIONS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	28	5b
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 7
23 SHEETS

Contract #76902

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut	62245.00	3.75	479.94	479.94
℄ Brg. W. Abut	62246.25	3.75	479.95	479.95
A	62256.25	3.75	480.03	480.04
B	62266.25	3.75	480.11	480.12
C	62276.25	3.75	480.19	480.20
D	62286.25	3.75	480.27	480.27
E	62296.25	3.75	480.35	480.34
F	62306.25	3.75	480.43	480.41
G	62316.25	3.75	480.50	480.49
℄ Brg. Pier 1	62325.00	3.75	480.55	480.55
H	62335.00	3.75	480.60	480.64
I	62345.00	3.75	480.65	480.73
J	62355.00	3.75	480.68	480.80
K	62365.00	3.75	480.71	480.85
L	62375.00	3.75	480.73	480.90
M	62385.00	3.75	480.74	480.93
N	62395.00	3.75	480.74	480.93
O	62405.00	3.75	480.73	480.90
P	62415.00	3.75	480.71	480.85
Q	62425.00	3.75	480.68	480.80
R	62435.00	3.75	480.65	480.73
S	62445.00	3.75	480.60	480.64
℄ Brg. Pier 2	62455.00	3.75	480.55	480.55
T	62465.00	3.75	480.49	480.48
U	62475.00	3.75	480.42	480.40
V	62485.00	3.75	480.34	480.33
W	62495.00	3.75	480.26	480.26
X	62505.00	3.75	480.18	480.19
Y	62515.00	3.75	480.10	480.11
Z	62525.00	3.75	480.02	480.03
℄ Brg. E. Abut	62533.75	3.75	479.95	479.95
Bk. E. Abut	62535.00	3.75	479.94	479.94

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut	62245.00	11.25	479.82	479.82
℄ Brg. W. Abut	62246.25	11.25	479.83	479.83
A	62256.25	11.25	479.91	479.92
B	62266.25	11.25	479.99	480.00
C	62276.25	11.25	480.07	480.08
D	62286.25	11.25	480.15	480.15
E	62296.25	11.25	480.23	480.23
F	62306.25	11.25	480.31	480.30
G	62316.25	11.25	480.38	480.37
℄ Brg. Pier 1	62325.00	11.25	480.43	480.43
H	62335.00	11.25	480.49	480.53
I	62345.00	11.25	480.53	480.61
J	62355.00	11.25	480.57	480.68
K	62365.00	11.25	480.59	480.74
L	62375.00	11.25	480.61	480.78
M	62385.00	11.25	480.62	480.81
N	62395.00	11.25	480.62	480.81
O	62405.00	11.25	480.61	480.78
P	62415.00	11.25	480.59	480.74
Q	62425.00	11.25	480.57	480.68
R	62435.00	11.25	480.53	480.61
S	62445.00	11.25	480.49	480.53
℄ Brg. Pier 2	62455.00	11.25	480.43	480.43
T	62465.00	11.25	480.37	480.36
U	62475.00	11.25	480.30	480.29
V	62485.00	11.25	480.22	480.22
W	62495.00	11.25	480.14	480.14
X	62505.00	11.25	480.06	480.07
Y	62515.00	11.25	479.98	479.99
Z	62525.00	11.25	479.90	479.91
℄ Brg. E. Abut	62533.75	11.25	479.83	479.83
Bk. E. Abut	62535.00	11.25	479.82	479.82

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut	62245.00	18.75	479.67	479.67
℄ Brg. W. Abut	62246.25	18.75	479.68	479.68
A	62256.25	18.75	479.76	479.77
B	62266.25	18.75	479.84	479.85
C	62276.25	18.75	479.92	479.93
D	62286.25	18.75	480.00	480.00
E	62296.25	18.75	480.08	480.07
F	62306.25	18.75	480.16	480.14
G	62316.25	18.75	480.23	480.22
℄ Brg. Pier 1	62325.00	18.75	480.28	480.28
H	62335.00	18.75	480.34	480.37
I	62345.00	18.75	480.38	480.46
J	62355.00	18.75	480.41	480.53
K	62365.00	18.75	480.44	480.58
L	62375.00	18.75	480.46	480.63
M	62385.00	18.75	480.47	480.66
N	62395.00	18.75	480.47	480.66
O	62405.00	18.75	480.46	480.63
P	62415.00	18.75	480.44	480.58
Q	62425.00	18.75	480.41	480.53
R	62435.00	18.75	480.38	480.46
S	62445.00	18.75	480.34	480.37
℄ Brg. Pier 2	62455.00	18.75	480.28	480.28
T	62465.00	18.75	480.22	480.21
U	62475.00	18.75	480.15	480.13
V	62485.00	18.75	480.07	480.06
W	62495.00	18.75	479.99	479.99
X	62505.00	18.75	479.91	479.92
Y	62515.00	18.75	479.83	479.84
Z	62525.00	18.75	479.75	479.76
℄ Brg. E. Abut	62533.75	18.75	479.68	479.68
Bk. E. Abut	62535.00	18.75	479.67	479.67

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

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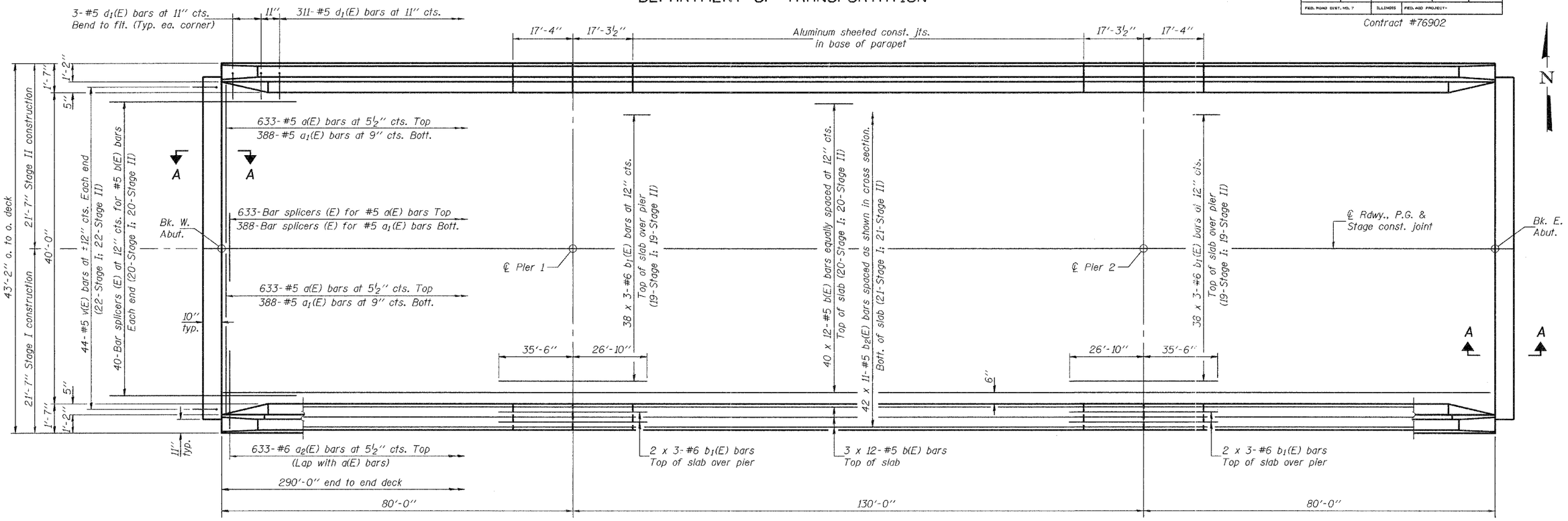
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	29	5p
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

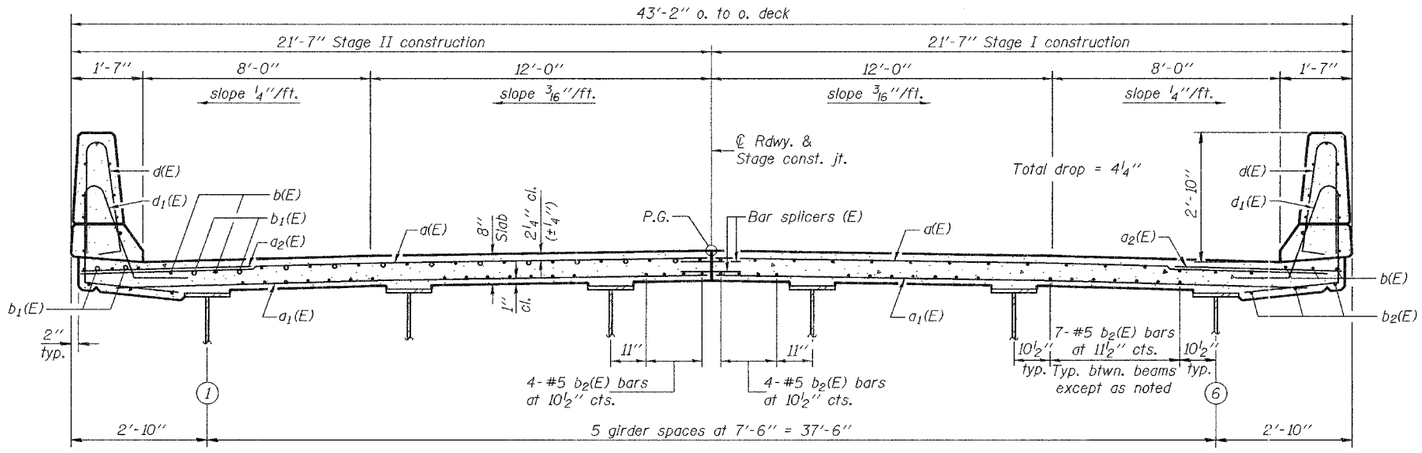
SHEET NO. 8
23 SHEETS

Contract #76902



PLAN

Notes: See sheet 9 of 23 for superstructure details, parapet reinforcement and Bill of Material.
Bars indicated thus 38 x 3-#5 etc. indicates 38 lines of bars with 3 lengths per line.
See sheet 10 of 23 for Section A-A and diaphragm details.
See sheet 18 of 23 for bar splicer details.
See sheet 9 of 23 for details of v(E) bars.



NEAR PIER NEAR MIDSPAN

CROSS SECTION
(Looking east)

MIN. BAR LAPS
#5 bar = 2'-2"
#6 bar = 2'-7"

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

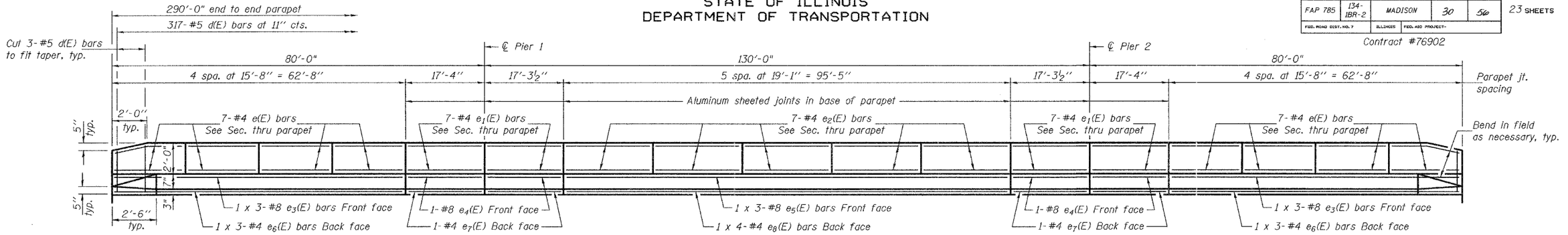
SUPERSTRUCTURE
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-IBR-2	MADISON	30	5@
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

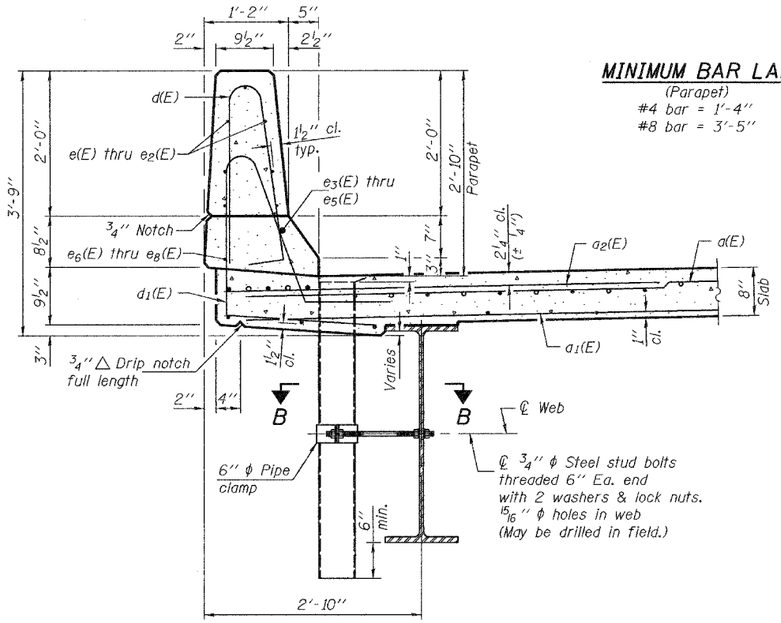
SHEET NO. 9
23 SHEETS

Contract #76902

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

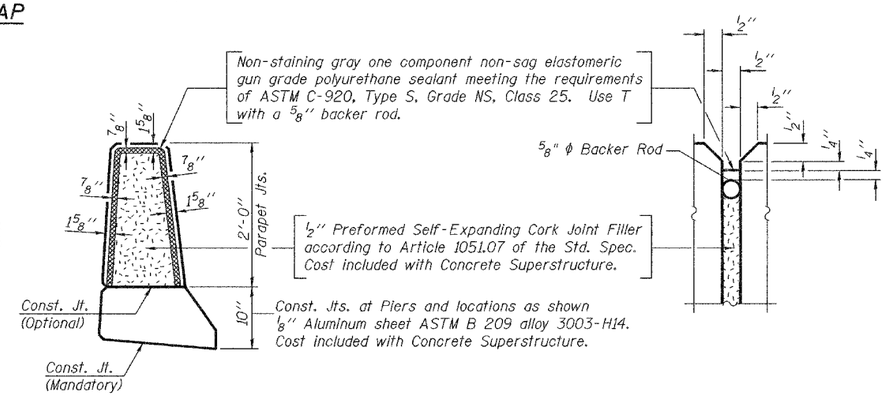


INSIDE ELEVATION OF PARAPET
(Looking north)

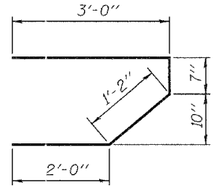


SECTION THRU PARAPET

MINIMUM BAR LAP
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"



PARAPET JOINT DETAILS

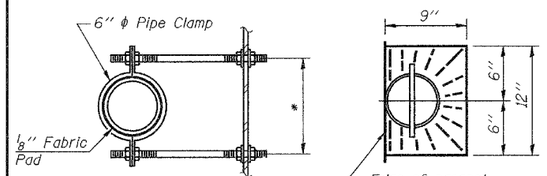


BAR s(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	1266	#5	21'-1"	——
a1(E)	776	#5	20'-3"	——
a2(E)	1266	#6	6'-0"	——
b(E)	552	#5	26'-2"	——
b1(E)	252	#6	22'-6"	——
b2(E)	462	#5	28'-4"	——
d(E)	634	#5	5'-7"	⌊
d1(E)	634	#5	7'-5"	L
e(E)	112	#4	15'-4"	——
e1(E)	56	#4	17'-0"	——
e2(E)	70	#4	18'-9"	——
e3(E)	12	#8	23'-1"	——
e4(E)	8	#8	17'-0"	——
e5(E)	6	#8	34'-0"	——
e6(E)	12	#4	21'-9"	——
e7(E)	8	#4	17'-0"	——
e8(E)	8	#4	24'-10"	——
m(E)	8	#6	20'-4"	——
m1(E)	12	#6	21'-3"	——
m2(E)	16	#6	10'-1"	——
m3(E)	8	#6	7'-2"	——
m4(E)	4	#6	2'-6"	——
m5(E)	4	#6	3'-5"	——
m6(E)	8	#6	7'-9"	——
s(E)	96	#5	6'-9"	⊐
s1(E)	88	#4	12'-4"	[
v(E)	88	#5	3'-4"	⌐
Reinforcement Bars, Epoxy Coated		Pound	108960	
Concrete Superstructure		Cu. Yds.	423.0	

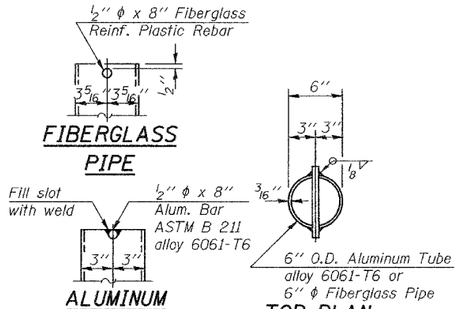
Bars indicated thus 1 x 3-#4 etc. indicates 1 line of bars with 3 lengths per line.



SECTION B-B

*Dimension as required by Pipe Clamp

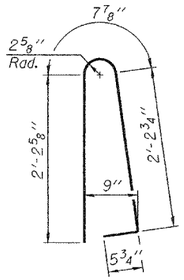
TOP PLAN



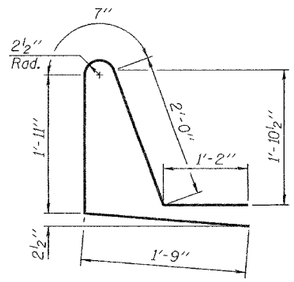
FIBERGLASS PIPE

ALUMINUM TUBE

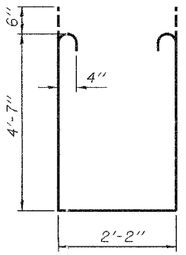
TOP PLAN
(Showing Aluminum Tube)



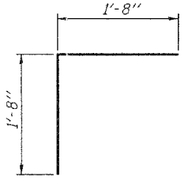
BAR d(E)



BAR d1(E)



BAR s1(E)



BAR v(E)

DESIGNED	R.L. Tharp		
CHECKED	N.R. Barnett		
DRAWN	h.t. duong		
CHECKED	RLT/NRB		

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

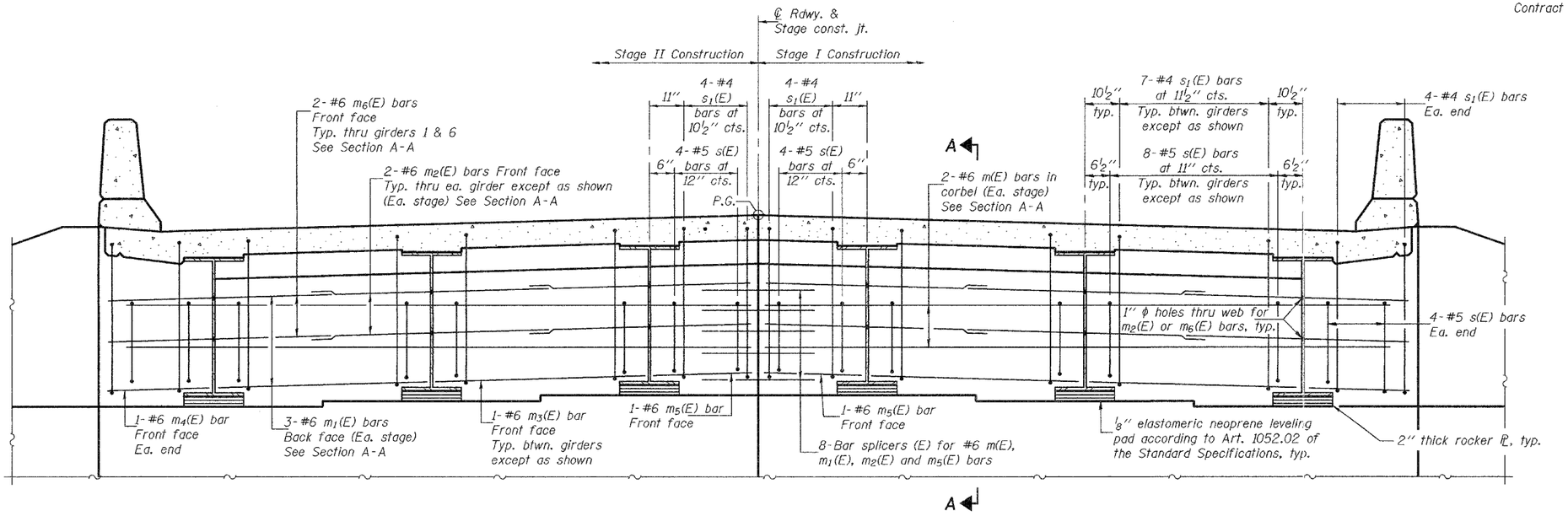
SUPERSTRUCTURE DETAILS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	31	5
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

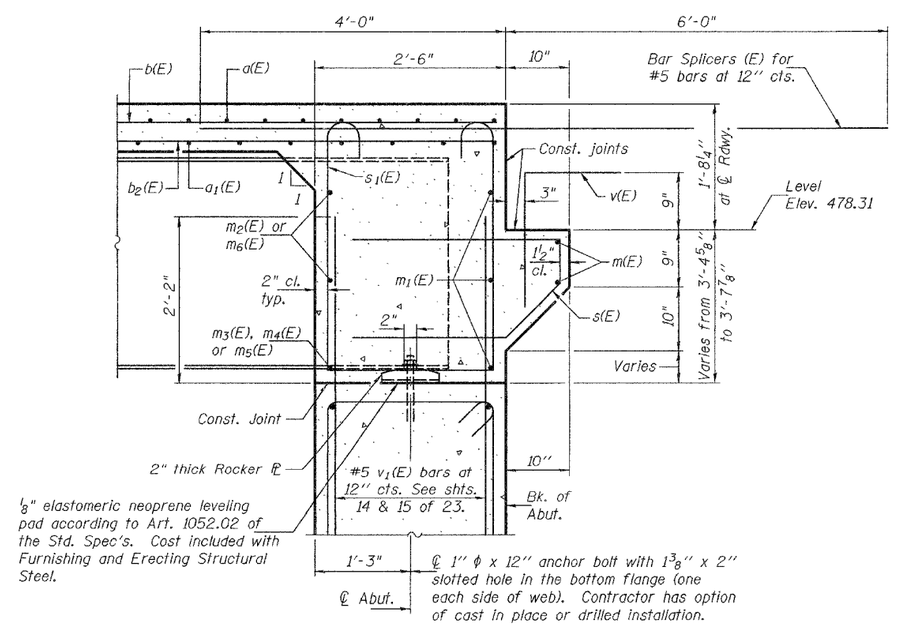
SHEET NO. 10
23 SHEETS

Contract #76902



DIAPHRAGM ELEVATION AT EAST ABUTMENT

(Looking East - West abutment similar)



SECTION A-A

Notes: Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 23.
Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 23.
For details of bars s(E) & s_1(E) see sheet 9 of 23.
See sheet 12 of 23 for holes thru web for m_2(E) or m_6(E) bars.
For bar splicer (E) details see sheet 18 of 23.

MIN. BAR LAP

#6 bar = 2'-7"

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

DIAPHRAGM DETAILS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

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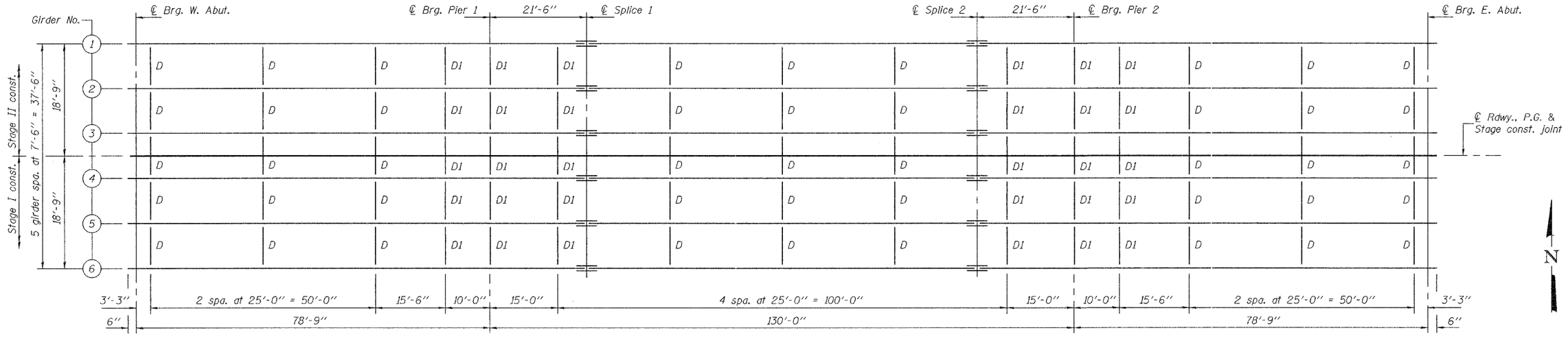
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

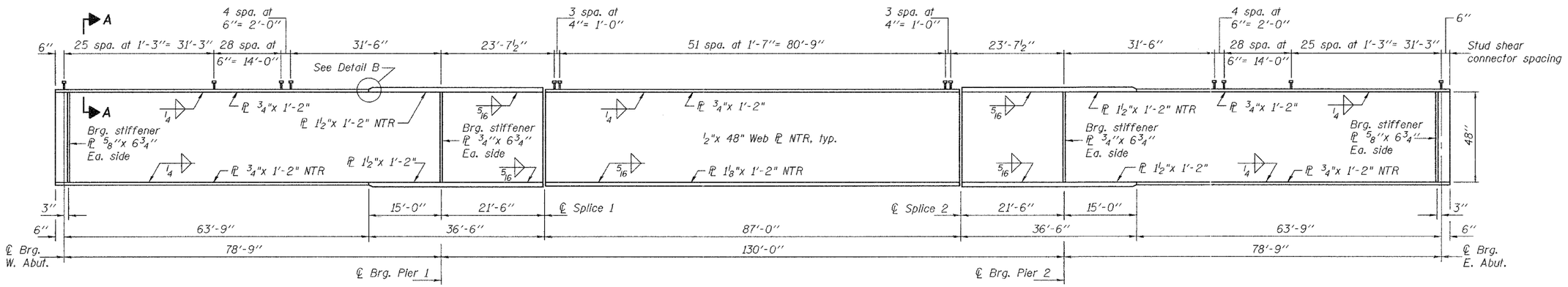
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	32	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 11
23 SHEETS

Contract #76902



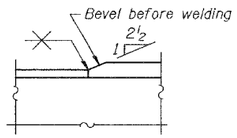
PLAN



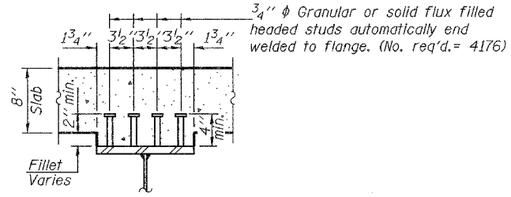
GIRDER ELEVATION

All plates and bearing stiffeners shall be AASHTO M 270 Grade 50.

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



DETAIL B



SECTION A-A

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STRUCTURAL STEEL
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

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INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or Pier 2	0.5 Sp. 2
Is	(in^4)	17086	30344	20010
Ic (n)	(in^4)	42576	———	52249
Ic (3n)	(in^4)	31800	———	38109
Ss	(in^3)	690	1190	889
Sc (n)	(in^3)	976	———	1237
Sc (3n)	(in^3)	890	———	1133
DC1	(k/')	0.944	1.031	0.966
M DC1	('k)	191	1289	766
DC2	(k/')	0.150	0.150	0.150
M DC2	('k)	48	159	158
DW	(k/')	0.375	0.375	0.375
M DW	('k)	120	398	394
M L+Imp	('k)	1022	1221	1567
Mu (Strength I)	('k)	2267	4544	4488
ϕf Mn	('k)	5129	———	6118
fs DC1	(ksi)	3.3	13.0	10.3
fs DC2	(ksi)	0.6	1.6	1.7
fs DW	(ksi)	1.6	4.0	4.2
fs 1.3(L+I)	(ksi)	16.3	16.0	19.8
fs (Service II)	(ksi)	21.8	34.6	36.0
fs (Total)(Strength I)	(ksi)	———	45.8	———
Vf	(k)	28.5	———	25.6

INTERIOR GIRDER REACTION TABLE HL93 Loading			
		Abuts.	Piers
R DC1	(k)	20.9	118.9
R DC2	(k)	3.9	17.7
R DW	(k)	9.7	44.2
R L + Imp	(k)	81.7	159.5
R Total	(k)	116.2	340.3

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.^{4} and in.^{3}).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in.^{4} and in.^{3}).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).

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

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

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

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

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

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

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

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\,(M_{DC1} + M_{DC2}) + 1.5\,M_{DW} + 1.75\,M_{L+Imp}$

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

f_s (Service II): Sum of stresses as computed from the moments below (ksi).
$M_{DC1} + M_{DC2} + M_{DW} + 1.3\,M_{L+Imp}$

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

V_f: Factored shear range computed according to Article 6.10.10.

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007

EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN

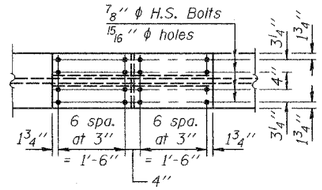
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

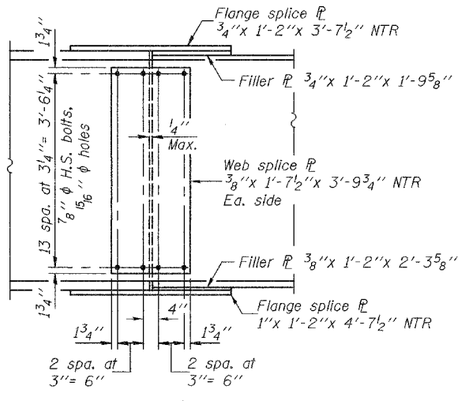
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	33	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 12
23 SHEETS

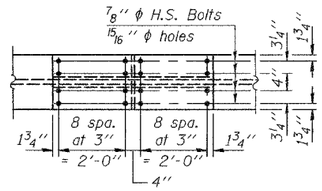
Contract #76902



PLAN - TOP FLANGE

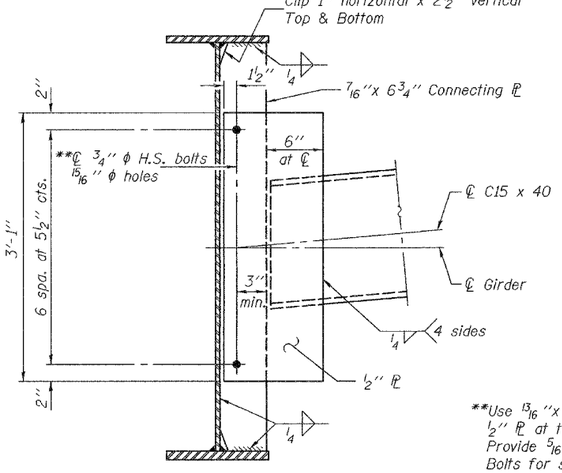


ELEVATION
(Splice 1 - Looking north, splice 2 mirror image)

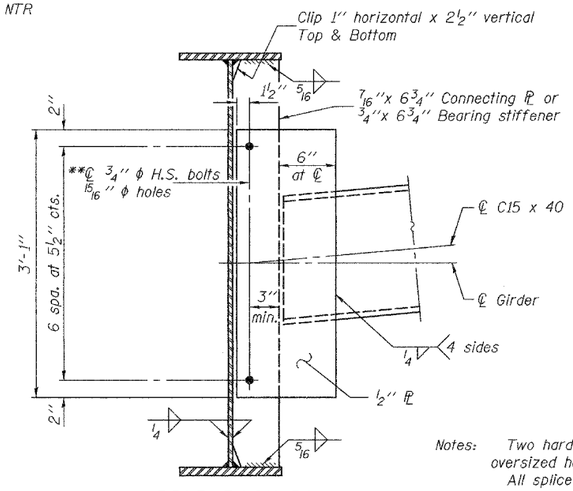


PLAN - BOTTOM FLANGE

SPLICE DETAIL
(12 required)



DIAPHRAGM D
(45 required)



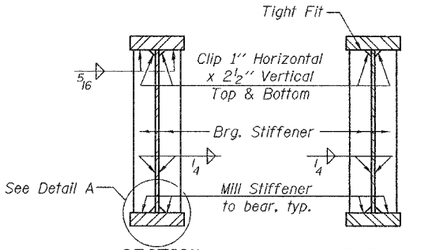
DIAPHRAGM D1
(30 required)

**Use 13/16" x 1 1/2" vertical slotted holes in 1/2" PL at the south side of Girder 3 only. Provide 5/16" PL washers for slotted holes. Bolts for slotted holes shall be finger-tightened prior to the deck pour for Stage II Construction, and then be fully tightened after completion of the deck pour for Stage II Construction.

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

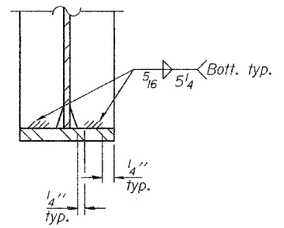
All splice plates shall be AASHTO M 270, Grade 50, except fill plates.

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 AT PIER

SECTION AT ABUTMENT

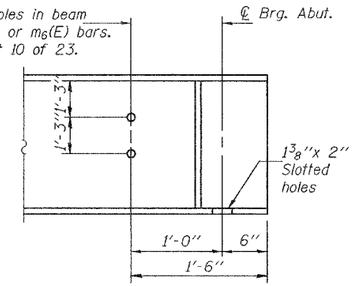


DETAIL A

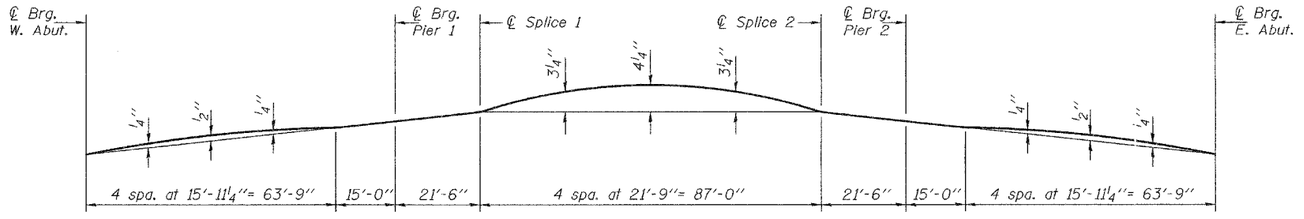
*TOP OF WEB ELEVATIONS

Location	℄ Brg. W. Abut.	℄ Brg. Pier 1	℄ Splice 1	℄ Splice 2	℄ Brg. Pier 2	℄ Brg. E. Abut.
Girder 1	478.89	479.41	479.55	479.55	479.41	478.89
Girder 2	479.04	479.56	479.71	479.71	479.56	479.04
Girder 3	479.16	479.68	479.82	479.82	479.68	479.16
Girder 4	479.16	479.68	479.82	479.82	479.68	479.16
Girder 5	479.04	479.56	479.71	479.71	479.56	479.04
Girder 6	478.89	479.41	479.55	479.55	479.41	478.89

*For fabrication use only.



TYPICAL END OF GIRDER ELEVATION



CAMBER DIAGRAM

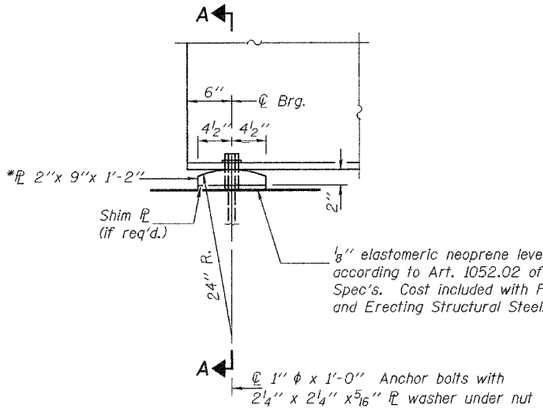
STRUCTURAL STEEL DETAILS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

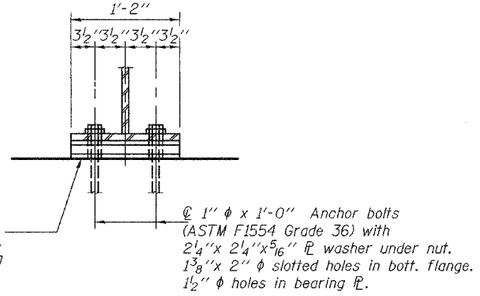
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-IBR-2	MADISON	31	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 13
23 SHEETS

Contract #76902



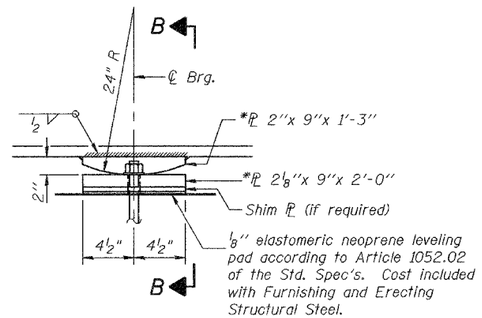
ELEVATION AT ABUTMENTS



SECTION A-A

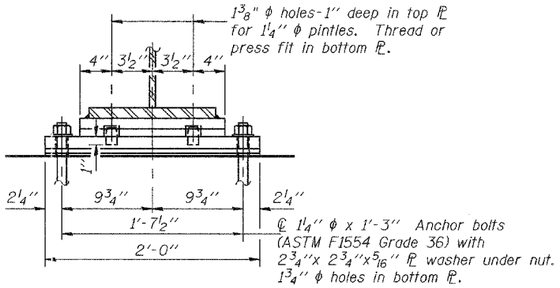
*AASHTO M270. Grade 50.

FIXED BEARING
(12 Required)

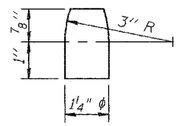


ELEVATION AT PIERS

FIXED BEARING
(12 Required)



SECTION B-B



*PINTLE

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

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

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

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1" ϕ	Each	24
Anchor Bolts, 1¼" ϕ	Each	24

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph L. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

BEARING DETAILS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

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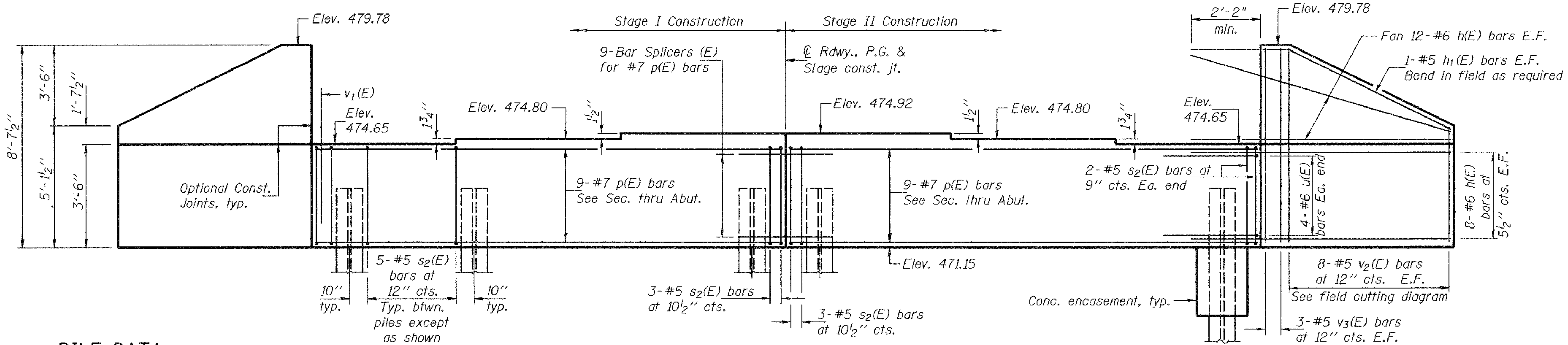
Notes: Pour steps monolithicaly with cap.
For bar splicer assembly details, see sheet 18 of 23.
For details of piles, see sheet 19 of 23.
If h(E) bars interfere with HP piles, cut h(E) to fit.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	35	56

SHEET NO. 14
23 SHEETS

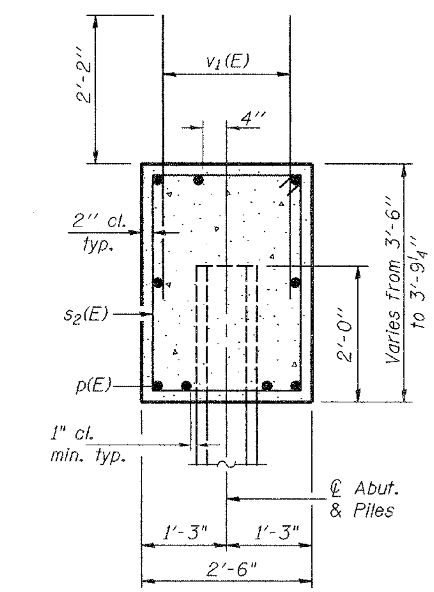
Contract #76902



ELEVATION
(Looking west)

PILE DATA

Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 280 Kips
Factored Resistance Available: 140 Kips
Estimated Pile Length: 55'
No. Production Piles: 7
No. Test Piles: 1



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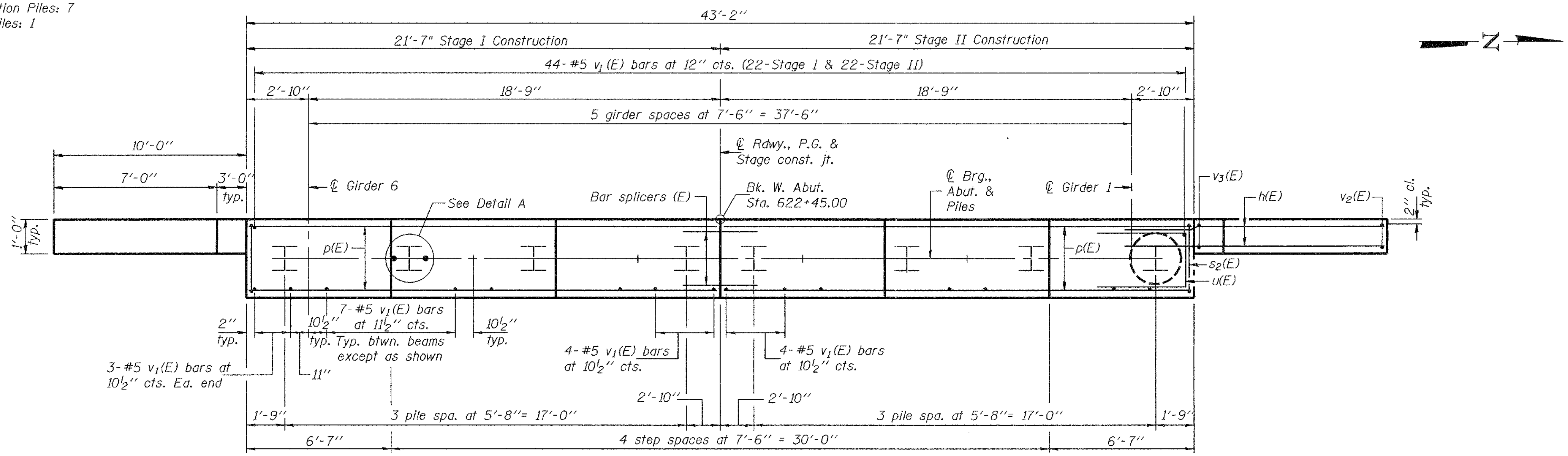
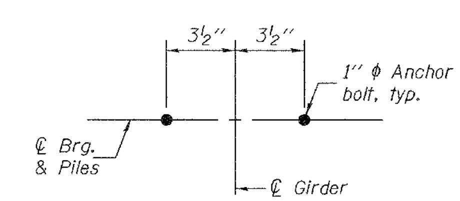


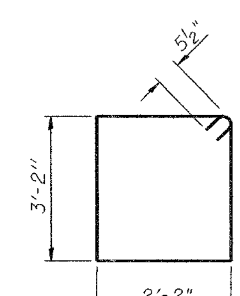
PLAN

BILL OF MATERIAL

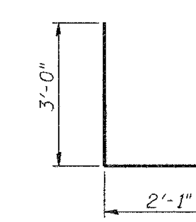
Bar	No.	Size	Length	Shape
h(E)	80	#6	12'-0"	———
h_1(E)	4	#5	13'-0"	———
p(E)	18	#7	21'-3"	———
s_2(E)	40	#5	11'-7"	□
u(E)	8	#6	8'-1"	⊐
v_1(E)	86	#5	4'-4"	———
v_2(E)	16	#5	13'-2"	———
v_3(E)	12	#5	8'-4"	———
Concrete Structures			Cu. Yd.	20.0
Reinforcement Bars, Epoxy Coated			Pound	3570
Structure Excavation			Cu. Yd.	104
Furnishing Steel Piles HP12x63			Foot	385
Driving Piles			Foot	385
Test Pile Steel HP12x63			Each	1
Pile Shoes			Each	8
Concrete Encasement			Cu. Yd.	2.7



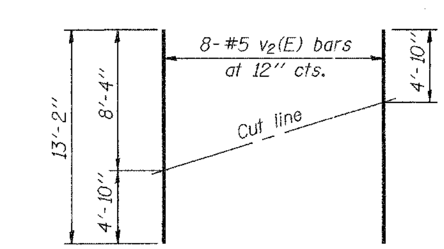
DETAIL A



BAR s_2(E)



BAR u(E)



FIELD CUTTING DIAGRAM

Order v_2(E) full length. Cut as shown and use remainder of bars in opposite face.

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED [signature] ENGINEER OF BRIDGE DESIGN
PASSED [signature] ENGINEER OF BRIDGES AND STRUCTURES

WEST ABUTMENT
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

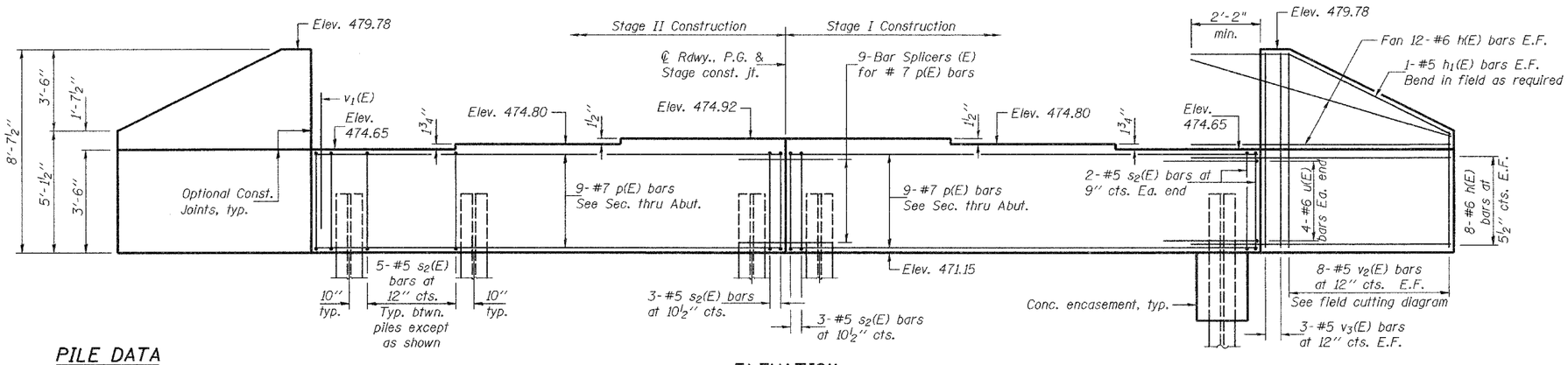
Notes: Pour steps monolithically with cap.
For bar splicer assembly details, see sheet 18 of 23.
For details of piles, see sheet 19 of 23.
If h(E) bars interfere with HP piles, cut h(E) to fit.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

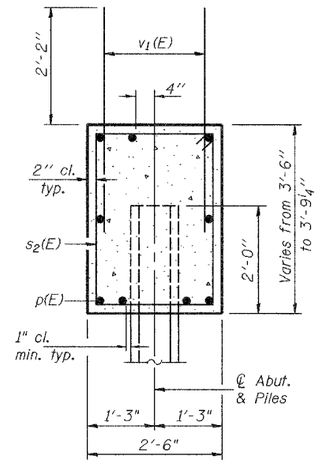
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	36	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 15
23 SHEETS

Contract #76902



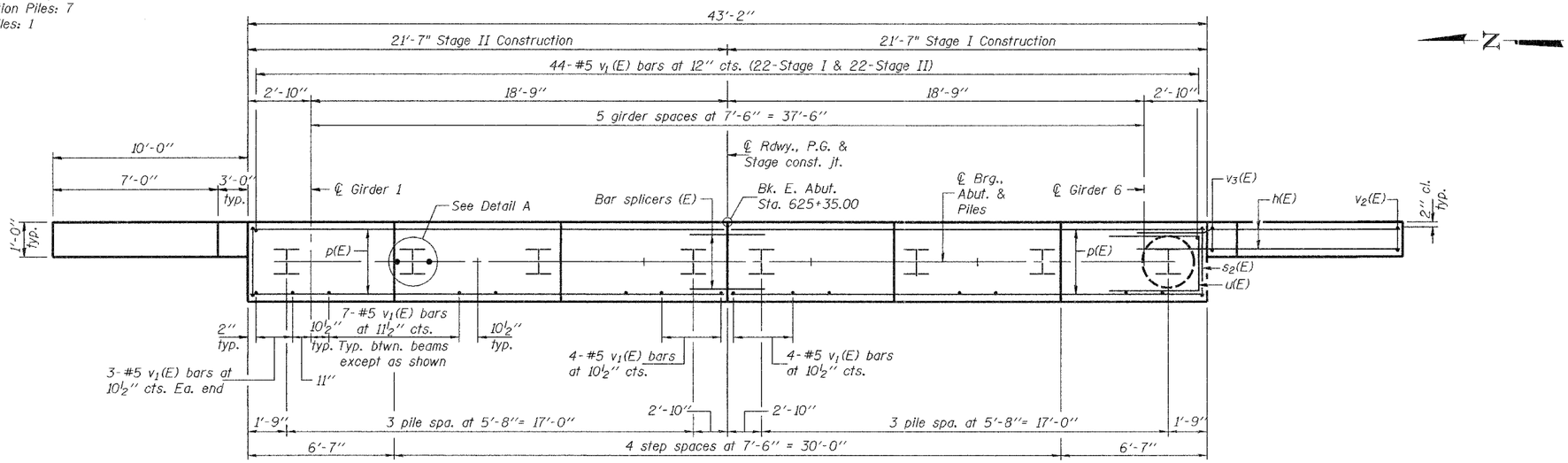
ELEVATION
(Looking east)



SEC. THRU ABUT.

PILE DATA

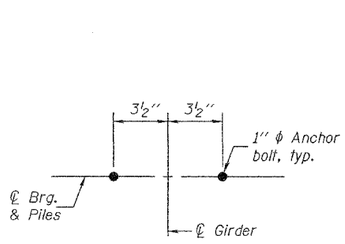
Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 280 Kips
Factored Resistance Available: 140 Kips
Estimated Pile Length: 63'
No. Production Piles: 7
No. Test Piles: 1



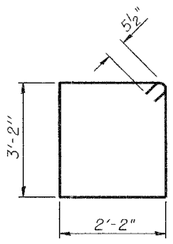
PLAN

BILL OF MATERIAL

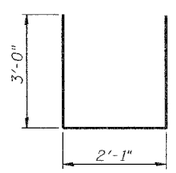
Bar	No.	Size	Length	Shape
h(E)	80	#6	12'-0"	
h1(E)	4	#5	13'-0"	
p(E)	18	#7	21'-3"	
s2(E)	40	#5	11'-7"	
u(E)	8	#6	8'-1"	
v1(E)	86	#5	4'-4"	
v2(E)	16	#5	13'-2"	
v3(E)	12	#5	8'-4"	
Concrete Structures			Cu. Yd.	20.0
Reinforcement Bars, Epoxy Coated			Pound	3570
Structure Excavation			Cu. Yd.	104
Furnishing Steel Piles HP12x63			Foot	441
Driving Piles			Foot	441
Test Pile Steel HP12x63			Each	1
Pile Shoes			Each	8
Concrete Encasement			Cu. Yd.	2.7



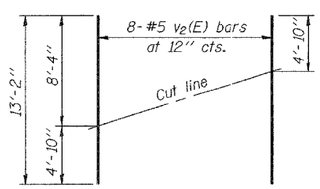
DETAIL A



BAR s2(E)



BAR u(E)



FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

EAST ABUTMENT
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

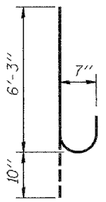
Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For bar splicer details, see sheet 18 of 23.
For details of piles, see sheet 19 of 23.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

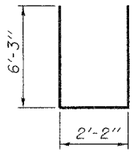
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-IBR-2	MADISON	37	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 16
23 SHEETS

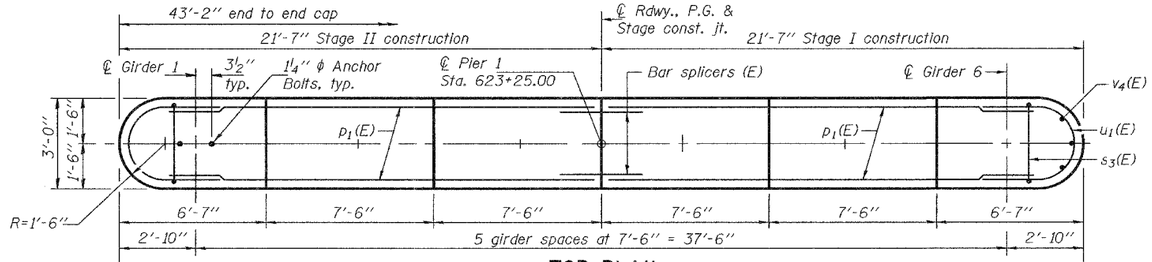
Contract #76902



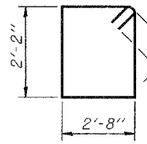
BAR $n_1(E)$



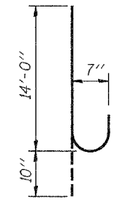
BAR $n(E)$



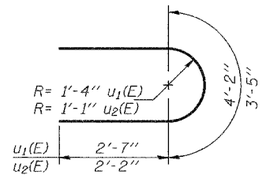
TOP PLAN



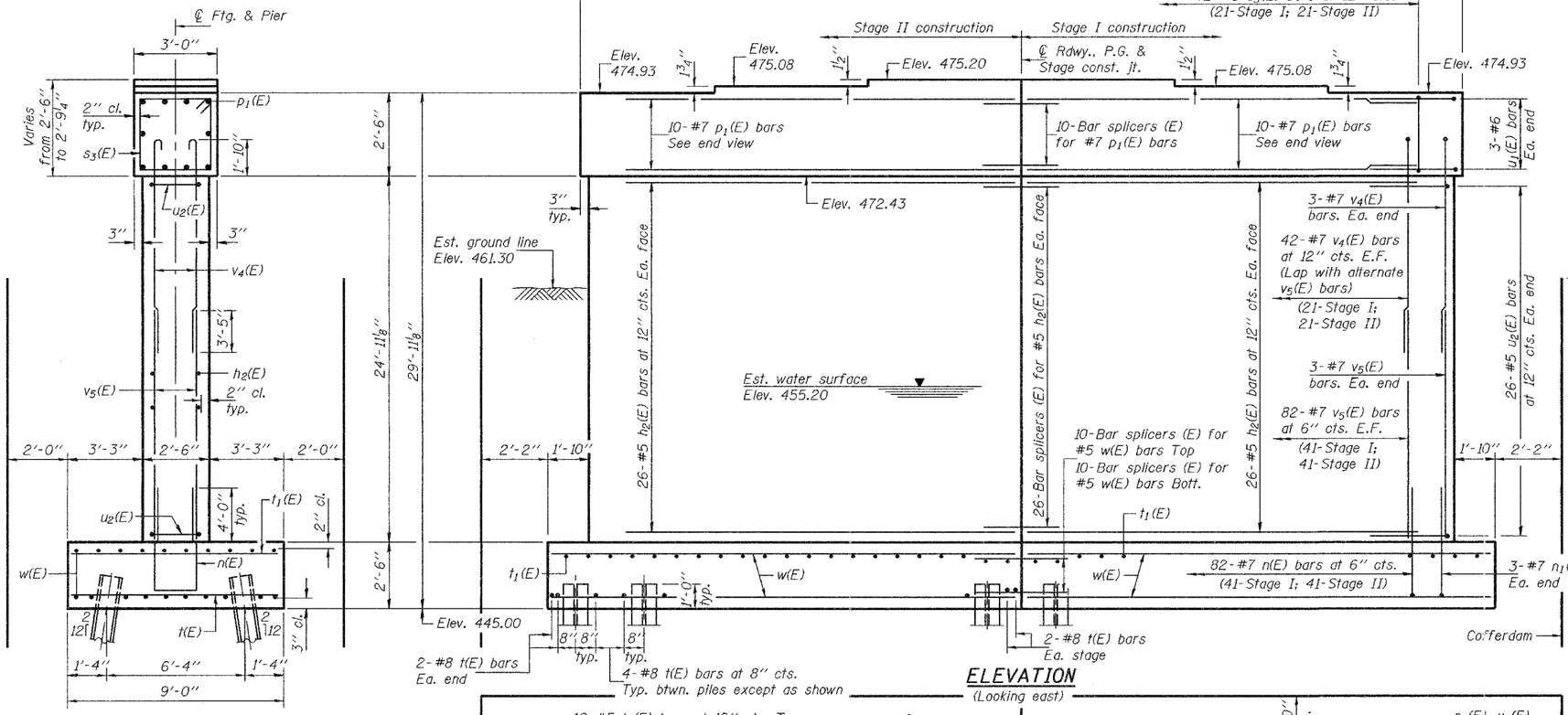
BAR $s_3(E)$



BAR $v_4(E)$



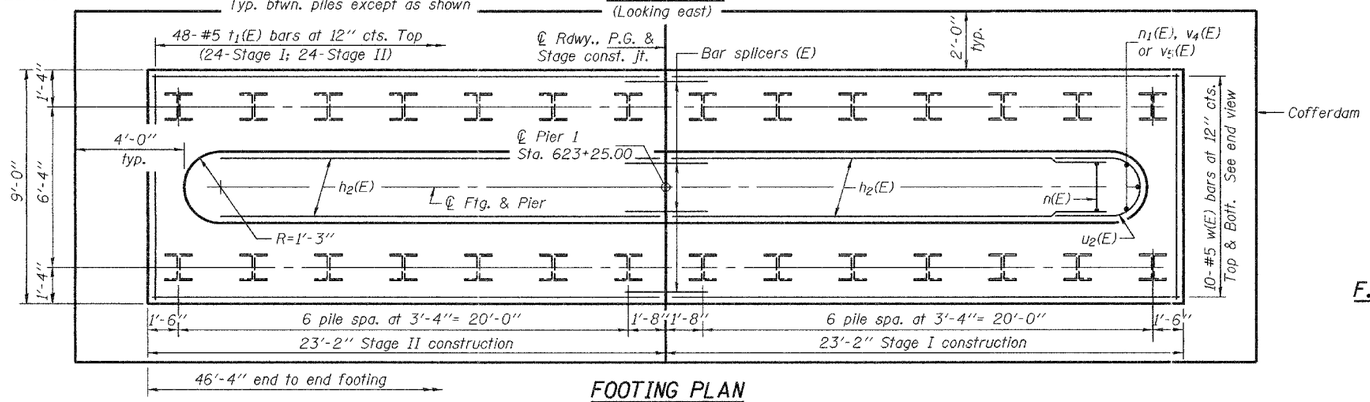
BARS $u_1(E)$ & $u_2(E)$



END VIEW

ELEVATION
(Looking east)

Top of cofferdam Elev.461.50



FOOTING PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_2(E)$	104	#5	19'-11"	——
n(E)	82	#7	14'-8"	⊔
$n_1(E)$	6	#7	7'-1"	⊃
$p_1(E)$	20	#7	19'-11"	——
$s_3(E)$	42	#5	10'-7"	□
t(E)	56	#8	8'-8"	——
$t_1(E)$	48	#5	8'-8"	——
$u_1(E)$	6	#6	9'-4"	⊃⊂
$u_2(E)$	52	#5	7'-9"	⊃⊂
$v_4(E)$	90	#7	14'-10"	⊃
$v_5(E)$	170	#7	16'-0"	——
w(E)	40	#5	22'-10"	——

Concrete Structures	Cu. Yd.	148.4
Reinforcement Bars, Epoxy Coated	Pound	17460
Furnishing Steel Piles HP12x63	Foot	1917
Driving Piles	Foot	1917
Test Pile Steel HP12x63	Each	1
Pile Shoes	Each	28
Cofferdam (Location 1)	Each	1
Cofferdam Excavation	Cu. Yd.	398

PILE DATA

Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 422 kips
Factored Resistance Available: 211 kips
Est. Pile Length: 71'
No. Production Piles: 27
No. Test Piles: 1

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PIER 1
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

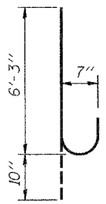
Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For bar splicer details, see sheet 18 of 23.
For details of piles, see sheet 19 of 23.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

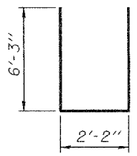
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	38	5(a)
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 17
23 SHEETS

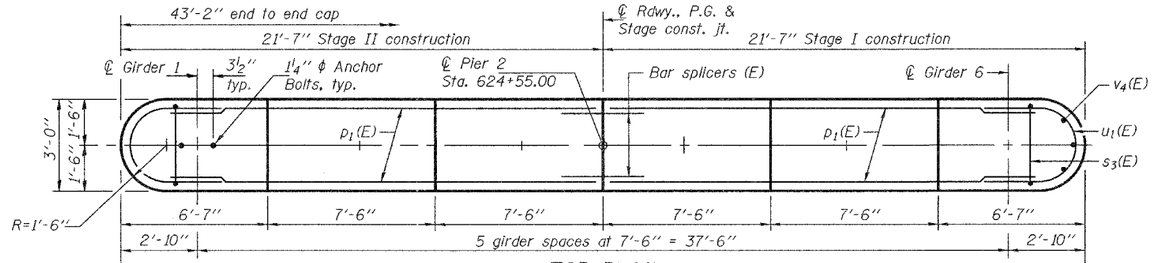
Contract #76902



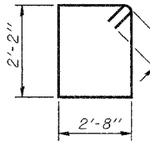
BAR $n_1(E)$



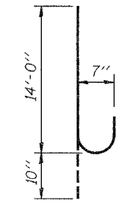
BAR $n(E)$



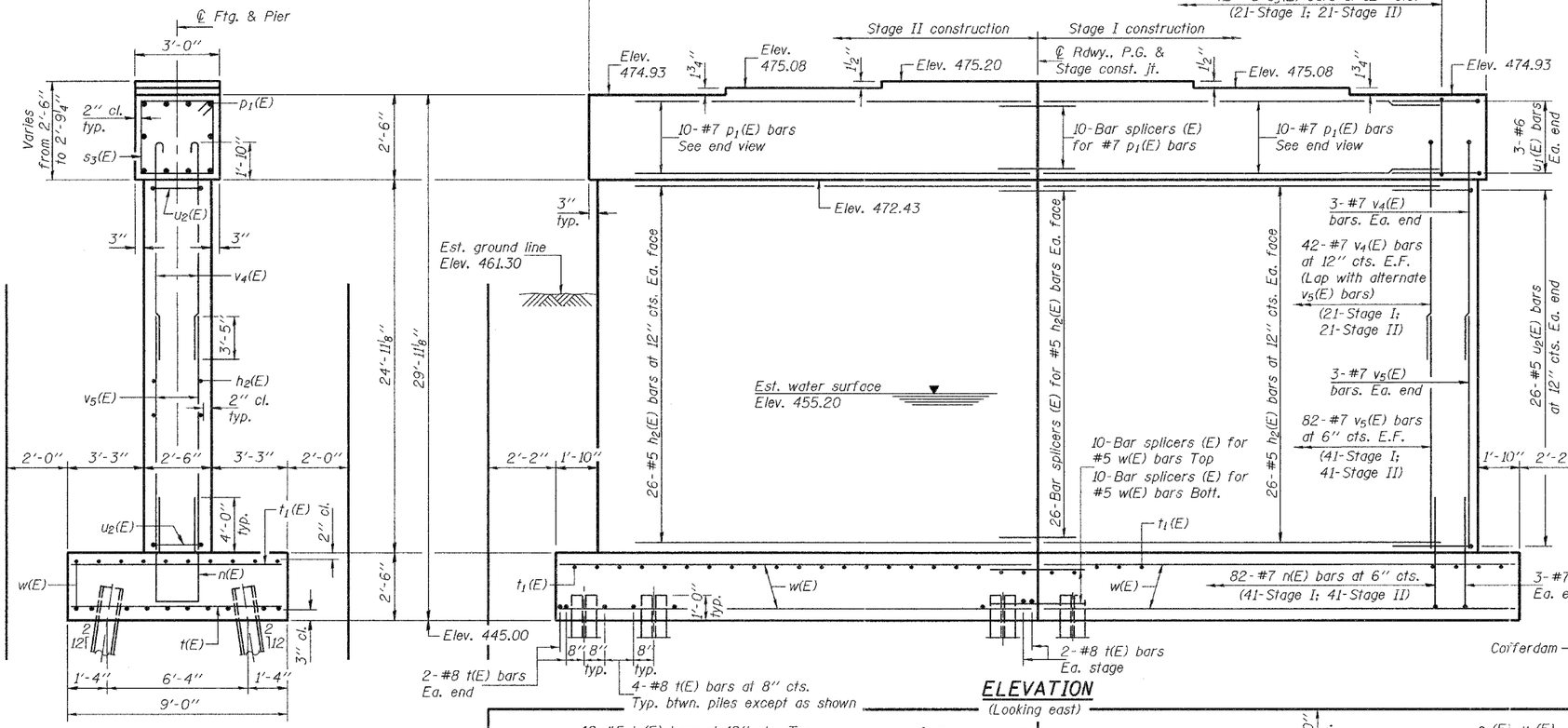
TOP PLAN



BAR $s_3(E)$

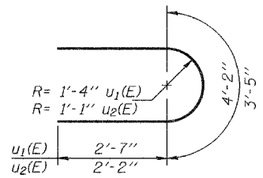


BAR $v_4(E)$



END VIEW

ELEVATION
(Looking east)



BARS $u_1(E)$ & $u_2(E)$

Top of cofferdam Elev. 461.50

BILL OF MATERIAL

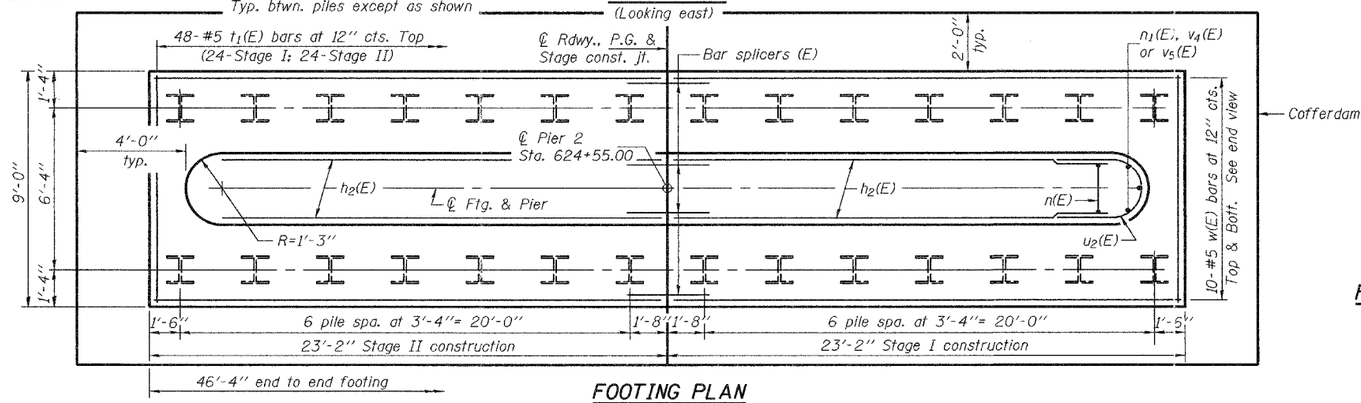
Bar	No.	Size	Length	Shape
$h_2(E)$	104	#5	19'-11"	——
$n(E)$	82	#7	14'-8"	⊔
$n_1(E)$	6	#7	7'-1"	⊃
$p_1(E)$	20	#7	19'-11"	——
$s_3(E)$	42	#5	10'-7"	□
$t(E)$	56	#8	8'-8"	——
$t_1(E)$	48	#5	8'-8"	——
$u_1(E)$	6	#6	9'-4"	⊃⊂
$u_2(E)$	52	#5	7'-9"	⊃⊂
$v_4(E)$	90	#7	14'-10"	⊃
$v_5(E)$	170	#7	16'-0"	——
$w(E)$	40	#5	22'-10"	——
Concrete Structures		Cu. Yd.	148.4	
Reinforcement Bars, Epoxy Coated		Pound	17460	
Furnishing Steel Piles HP12x63		Foot	1404	
Driving Piles		Foot	1404	
Test Pile Steel HP12x63		Each	1	
Pile Shoes		Each	28	
Cofferdam (Location 2)		Each	1	
Cofferdam Excavation		Cu. Yd.	398	

PILE DATA

Type: Steel HP12x63 with pile shoes
Nominal Required Bearing: 422 kips
Factored Resistance Available: 211 kips
Est. Pile Length: 52'
No. Production Piles: 27
No. Test Piles: 1

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



FOOTING PLAN

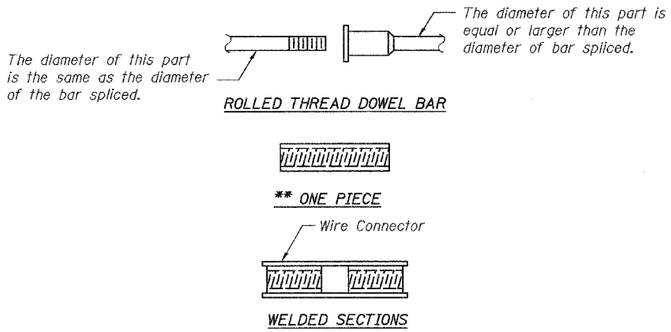
PIER 2
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	39	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

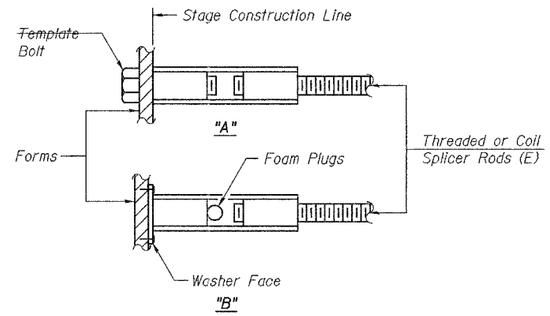
SHEET NO. 18
23 SHEETS

Contract #76902



BAR SPLICER ASSEMBLY ALTERNATIVES

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



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.

NOTES

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

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

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

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

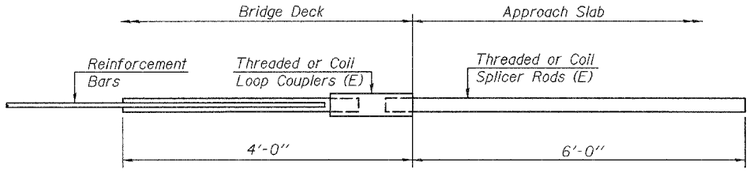
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

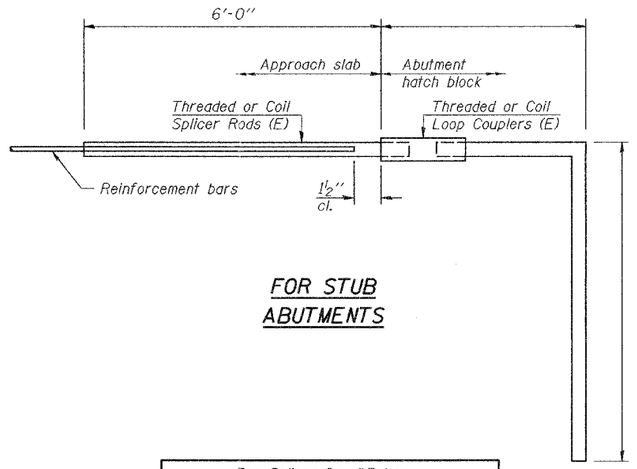
Where f_y = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



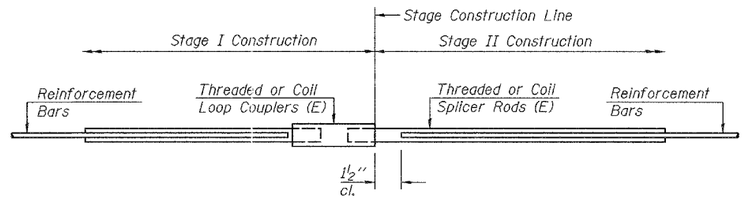
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 80



FOR STUB ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location
#5	1021	Deck
#6	16	Diaphragms
#7	18	Abutments
#7	20	Piers
#5	144	Piers

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

BSD-1 11-1-06

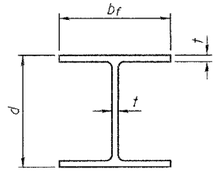
BAR SPLICER ASSEMBLY DETAILS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	40	50
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

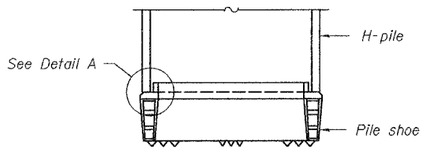
SHEET NO. 19
23 SHEETS

Contract #76902

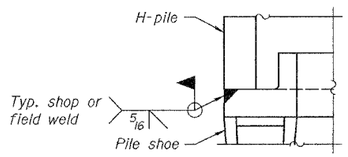


STEEL PILE TABLE

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

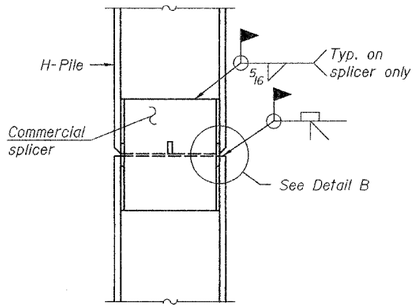


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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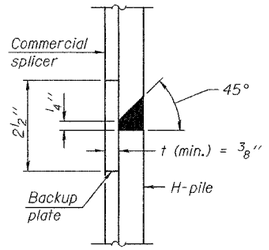
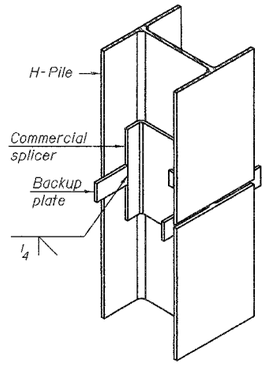
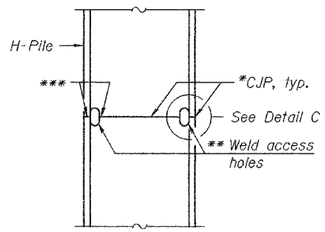


DETAIL "B"

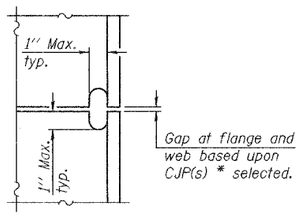


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

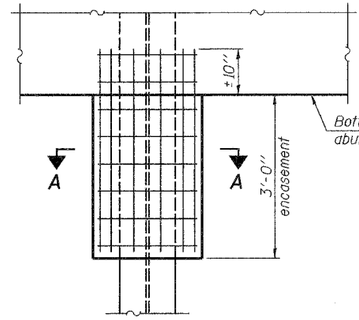


ELEVATION

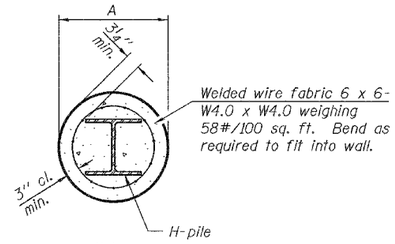


DETAIL C

COMPLETE PENETRATION WELD SPLICE



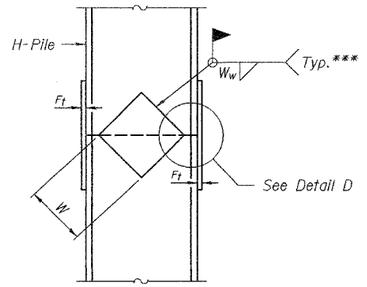
ELEVATION



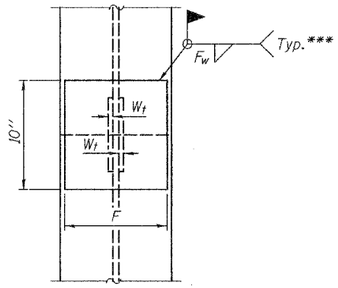
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

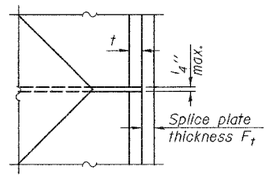
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_f	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

*** Interrupt welds 1/4" from end of each pile.

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

DESIGNED	R.L. Tharp
CHECKED	N.R. Barnett
DRAWN	h.t. duong
CHECKED	RLT/NRB

April 9, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph L. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

F-HP 11-1-06

PILE DETAILS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	41	5e
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 20
23 SHEETS

Contract #76902

Illinois Department of Transportation
Division of Highways
District 8 Materials

SOIL BORING LOG

Page 1 of 2

Date 3106

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station

BORING NO. SB 1 Pier 2
Station 624+50
Offset 45.50ft Left
Ground Surface Elev. 467.5 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 453.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Mottled Silty Clay LOAM			
	2		
	2	0.81	
	3	S/20	
463.50			
Gray Silt LOAM A-6(10) See Classification @ 8 ft	7		
	8	2.25	
	13	P	
(Mottled)	2		
	1	0.16	
	1	B	
458.00			
Mottled Sandy LOAM See Gradation @ 10 ft	2		
	1	NC	
456.00			
Gray Loamy Gravelly SAND See Gradation @ 12 ft	1		
	3		
	3	NC	
453.50			
Gray Silt LOAM A-4(7) See Classification @ 15 ft	0		
	0	0.49	
	2	B	
	0		
	0	0.26	
	0	B	
448.50			
Gray SAND	0		
447.50			
Gray Silty CLAY	3	NC	
	3	3.28	
		P	
	3		
	4	1.30	
	7	B	
	3		
	5	1.30	
	5	B	
	4		
	5	1.17	
	6	B	
433.50			
Brown CLAY	5		
	8	2.28	
	10	S/20	
429.50			
Mottled (Brown, Blue, Gray, Green) Silty Clay LOAM	4		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Illinois Department of Transportation
Division of Highways
District 8 Materials

SOIL BORING LOG

Page 2 of 2

Date 3106

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station

BORING NO. SB 1 Pier 2
Station 624+50
Offset 45.50ft Left
Ground Surface Elev. 467.5 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 453.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Mottled (Brown, Blue, Gray, Green) Silty Clay LOAM (continued)	5	1.37	
	8	B	
424.50			
Mottled Clay TILL	4		
	8	1.37	
	9	B	
419.50			
Dark Brown Silty CLAY	4		
	8	2.35	
	11	S/20	
414.50			
Gray Silty CLAY A-6(11) See Classification @ 55 ft	7		
	10	2.17	
	13	S/20	
Gray Silty CLAY A-6(11) See Classification @ 55 ft (continued)	11	2.28	
	13	S/20	
404.50			
Gray Clay TILL	4		
	11	1.63	
	50	S/20	
(Weathered Limestone) 401.00			
Weathered Gray LIMESTONE	50/NP		
	–		–
396.50	–	NS	
Refusal on Limestone – End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BORING LOGS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	42	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 21
23 SHEETS

Contract #76902

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG (Page 1 of 3)

Illinois Department of Transportation
Division of Highways
District 8 Materials

Page 1 of 3
Date 3/2/06

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 1/4, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station
BORING NO. SB 2 E. Abut
Station 625+54
Offset 17.00ft Left
Ground Surface Elev. 479.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 444.5 ft
Upon Completion ft
After Hrs. ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Mottled Silty Clay LOAM					
			2		
			2	1.25	
			3	P	
		-5	1		
			1	0.75	
			2	P	
			2		
			4	1.15	
			4	B	
	470.00				
Brown/Gray Silty CLAY		-10	2		
			3	0.98	
			4	S/20	
Grades to Dark Gray			2		
			3	0.97	
			4	S/15	
	465.00				
Gray Silty Clay LOAM A-4(8) See Classification @ 20 ft		-15	3		
			2	0.69	
			3	S/15	
			3		
			2	0.92	
			3	S/10	
		-20	2		

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty Clay LOAM A-4(8) See Classification @ 20 ft (continued)			2	0.65	
			3	S/20	
	457.00		WH		
Brown/Gray SILT A-4(8) See Classification @ 25 ft			–	0.26	
			–	S/20	
		-25	0		
			3	0.62	
			3	S/15	
			WH		
			–	0.52	
			–	S/20	
		-30	0		
	448.50		3	0.62	
Gray Sandy SILT			2	S/15	
				NC	
	444.50				
		-35	21		
Gray Clay TILL			36	3.30	
			37	S/10	
		-40	5		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

SOIL BORING LOG (Page 2 of 3)

Illinois Department of Transportation
Division of Highways
District 8 Materials

Page 2 of 3
Date 3/2/06

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 1/4, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station
BORING NO. SB 2 E. Abut
Station 625+54
Offset 17.00ft Left
Ground Surface Elev. 479.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 444.5 ft
Upon Completion ft
After Hrs. ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Clay TILL (continued)			8	1.63	
			9	S/20	
		-45	6		
			9	2.60	
			13	S/15	
		-50	6		
			7	2.28	
			10	S/20	
	426.50				
Brown/Gray Silty CLAY		-55	4		
			7	2.35	
			9	B	
	421.00				
Brown Sandy SILT		-60	4		

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Sandy SILT (continued)	418.50		6	0.76	
Brown SAND			14	S/15	
				NC	
	414.50				
		-65	7		
Gray Silty CLAY			9	2.44	
			12	S/20	
		-70	6		
			11	3.35	
			17	B	
		-75	7		
			7	1.96	
			7	S/20	
	401.00				
Gray Silty Clay LOAM		-80	4		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

SOIL BORING LOG (Page 3 of 3)

Illinois Department of Transportation
Division of Highways
District 8 Materials

Page 3 of 3
Date 3/2/06

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 1/4, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station
BORING NO. SB 2 E. Abut
Station 625+54
Offset 17.00ft Left
Ground Surface Elev. 479.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 444.5 ft
Upon Completion ft
After Hrs. ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty Clay LOAM (continued)			5	0.98	
			7	S/20	
Limestone/Sand	396.50				
			50/1"		–
Refusal – End of Boring				NS	
		-85			
		-90			
		-95			
		-100			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BORING LOGS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	43	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 22
23 SHEETS

Contract #76902

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, District 6 Materials

Page 1 of 4

Date 3/16/06

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station
BORING NO. SB 3 Pier 1
Station 623+19
Offset 38.80ft Left
Ground Surface Elev. 468.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 446.0 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Mottled Silt LOAM			
	4		
	5	2.5	
-5	4	P	
	7		
Rubble	5	1.46	
	5	S20	
	5		
Rubble	5	1.37	
459.00	11	S20	
Dark Gray LOAM	10		
-10	16	1.5	
Rock	9	P	
456.00			
	2		
Mottled SILT	3	0.89	
454.00	2	S20	
Gray SAND	1		
-15 See Gradation @ 15 ft	2		
Wood	2	NC	
451.00			
	3		
Gray SILT	2	0.65	
449.00	1	S20	
Gray Silty SAND			
-20	1		
Gray Silty SAND (continued)			
	2		
448.50	1	NC	
Gray Coarse SAND	10		
445.00	5		
	5	NC	
Gray Silty CLAY		1.85	
-25	3	S20	
	6	1.47	
441.50	7	B	
Gray Clay TILL	5		
	8	3.42	
	8	S20	
-30	3		
	5	1.56	
	7	B	
435.00			
Gray Silty CLAY			
A-6(10)			
See Classification @ 40 ft			
-35 Sand Lens	4		
	9	2.70	
	10	B	
-40 Mottled with Green and Brown	4		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, District 6 Materials

Page 2 of 4

Date 3/16/06

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station
BORING NO. SB 3 Pier 1
Station 623+19
Offset 38.80ft Left
Ground Surface Elev. 468.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 446.0 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY	6	2.70	
A-6(10)	9	B	
See Classification @ 40 ft			
(continued)			
Small Return (~ 3 - 4")	4	1.15	
-45	5	B	
-50	5		
	7	2.10	
	9	S20	
415.00			
Gray Silty Clay LOAM			
-55	2		
	5	1.80	
	6	B	
410.00			
Dark Gray Silty CLAY			
-60	5		
Dark Gray Silty CLAY (continued)	9	2.30	
	11	S20	
406.00			
Dark Gray Sandy LOAM			
-65	0		
	4	0.81	
End 3/16/06	5	S20	
Start 3/17/06			
400.00			
Dark Gray Clay TILL			
-70	7		
	12	1.3	
	11	P	
395.00			
Gray Silt LOAM			
-75	4		
	5	0.65	
	6	S20	
390.00			
Black Extremely Weathered SHALE	14		
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, District 6 Materials

Page 3 of 4

Date 3/16/06

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station
BORING NO. SB 3 Pier 1
Station 623+19
Offset 38.80ft Left
Ground Surface Elev. 468.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 446.0 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Black Extremely Weathered	12	1.5	
SHALE (continued)	14	P	
385.00			
Gray Weathered SHALE			
-85	30		
	50/4"	1.94	
	-	S5	
-90	20		
	27	3.46	
	47	S15	
375.00			
Gray Slightly Weathered SHALE			
-95	50/4"		
	-		
	-	NC	
End 3/17/06	371.00		
Borehole continued with rock coring.			
-100			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Illinois Department of Transportation — ROCK BORING LOG

Division of Highways, District 6 Materials

Page 4 of 4

Date 3/16/06

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison CORING METHOD

STRUCT. NO. 060-0097 CORING BARREL TYPE & SIZE
Station
Core Diameter 2 in
BORING NO. SB 3 Pier 1 Top of Rock Elev. 371.00 ft
Station 623+19 Begin Core Elev. 371.00 ft
Offset 38.80ft Left
Ground Surface Elev. 468.0 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Start 3/20/06					
371.00					
Gray LIMESTONE	1	21	18	16	
End 3/20/06					
Start 3/23/06	1	21	18	23	
	1	21	18	102	
-100					
	1	21	18	39	
367.00					
End of Boring and Rock Core					
-105					
-110					
-115					

Color pictures of the cores Upon Request
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BORING LOGS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 785	134-1BR-2	MADISON	44	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 23
23 SHEETS

Contract #76902

Illinois Department of Transportation
Division of Highways
District 6 Materials

SOIL BORING LOG

Page 1 of 3

Date 33106

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station

BORING NO. SB 4 W. Abut
Station 622+26
Offset 27.80ft Left
Ground Surface Elev. 479.75 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 415.8 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Brown Silty Clay LOAM			
	2		
	1	0.59	
	2	S/20	
-5	2		
	3	1.24	
	5	S/20	
473.25			
Mottled Silt LOAM	2		
	4		–
	3	NS	
-10	2		
469.25	4	0.81	
	5	S/20	
Dark Gray SILT		2.0	
	3	P	
	4	0.86	
	4	S/10	
-15	1		
	3	0.44	
	2	S/10	
463.25			
Mottled Silt LOAM	3		
	3	1.23	
	5	S/15	
-20	0		

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Mottled Silt LOAM (continued)			
	2	0.65	
	2	B	
458.25			
Gray Silty CLAY	WH		
	–	0.49	–
	–	B	
-25	0		
	0	0.59	–
	2	S/20	
453.25			
Dark Gray LOAM	0		
451.75	2	0.87	–
	1	S/15	–
Gray Loamy SAND		0.23	
		B	
-30	WH		
	–	0.5	–
	–	P	
445.75			
Gray Clay TILL Wood	3		
-35	5	5.54	–
	9	S/20	
-40	6		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Illinois Department of Transportation
Division of Highways
District 6 Materials

SOIL BORING LOG

Page 2 of 3

Date 33106

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station

BORING NO. SB 4 W. Abut
Station 622+26
Offset 27.80ft Left
Ground Surface Elev. 479.75 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 415.8 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Gray Clay TILL (continued)			
	8	3.10	–
	12	S/20	
-45	6		
	8	2.44	–
Mottled	11	B	
431.75			
Gray Silty Clay LOAM			
-50	7		
	11	4.73	–
	19	S/20	
426.75			
Gray Clay TILL			
-55	5		
	7	1.83	–
	10	B	
-60	6		

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Gray Clay TILL (continued)			
Mottled with Blue, Purple,	7	1.63	–
Brown	9	S/20	
416.75			
Gray Silt LOAM			
-65	5		
	8	2.17	–
	12	B	
-70	5		
	7	2.17	–
	8	S/20	
406.75			
Gray Silty Clay LOAM			
-75	0		
	3	1.21	–
	6	S/15	
End 3'31, Resume 4'4			
400.75			
Gray SAND & Weathered SHALE			
See Gradation @ 80 ft			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Illinois Department of Transportation
Division of Highways
District 6 Materials

SOIL BORING LOG

Page 3 of 3

Date 33106

ROUTE FAP 785 DESCRIPTION IL 140 over Cahokia Creek LOGGED BY Sarah Wiszkon

SECTION 134-1BR-2 LOCATION SW 14, SEC. 7, TWP. 5N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0097
Station

BORING NO. SB 4 W. Abut
Station 622+26
Offset 27.80ft Left
Ground Surface Elev. 479.75 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 415.8 ft
Upon Completion ft
After Hrs. ft

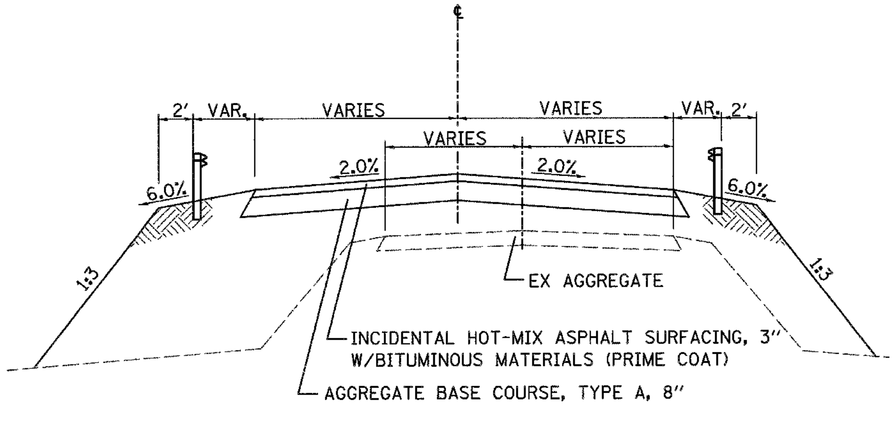
DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Gray SAND & Weathered SHALE			
See Gradation @ 80 ft			
(continued)		NS	–
394.75 -85	27		
	8	NC	
Gray Silt LOAM	10	2.35	
		S/20	
Sand Lens	5		
-90	15	2.61	
	18	S/20	
386.75			
Gray Coarse to Fine SAND			
See Gradation @ 95 ft			
-95	5		
384.25	6		
	10	NC	
Gray Silty Clay LOAM		3.10	
382.75		S/20	
	44		
Mottled Clay TILL	503"		
Weathered Shale 381.25	-	—	
Refusal - End of Boring			
-100			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

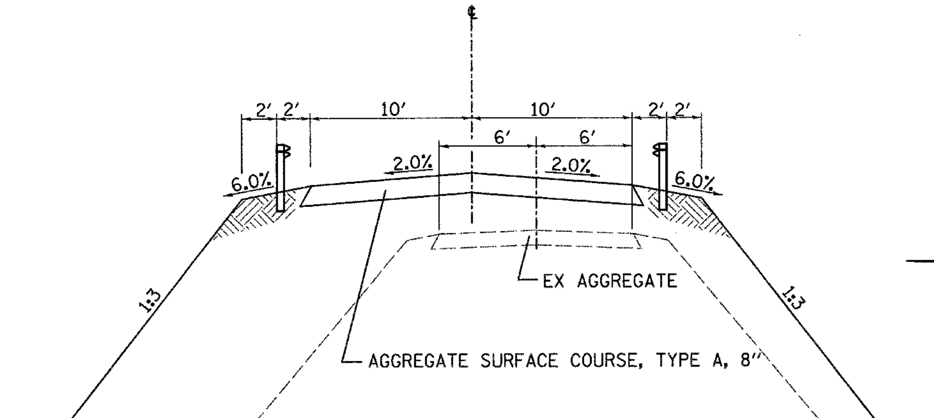
BORING LOGS
F.A.P. RTE. 785 - SEC. 134-1BR-2
MADISON COUNTY
STATION 623+90.00
STRUCTURE NO. 060-0240

CONTRACT NO. 76902

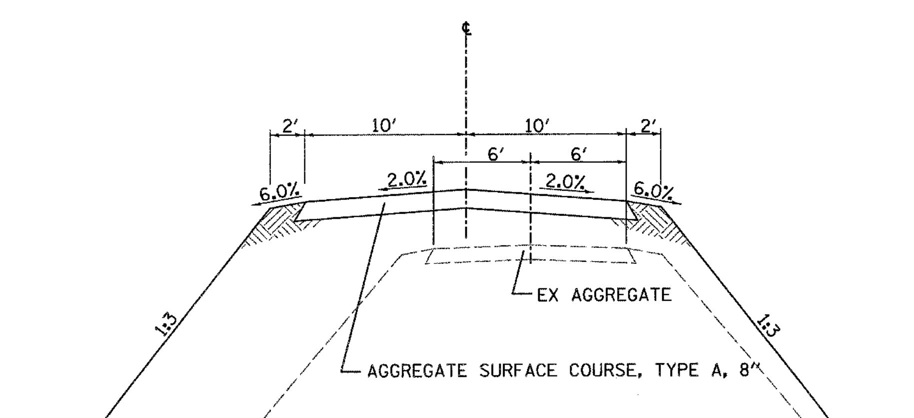
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	45
STA. 621+56.05 AND STA. 621+68.48				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



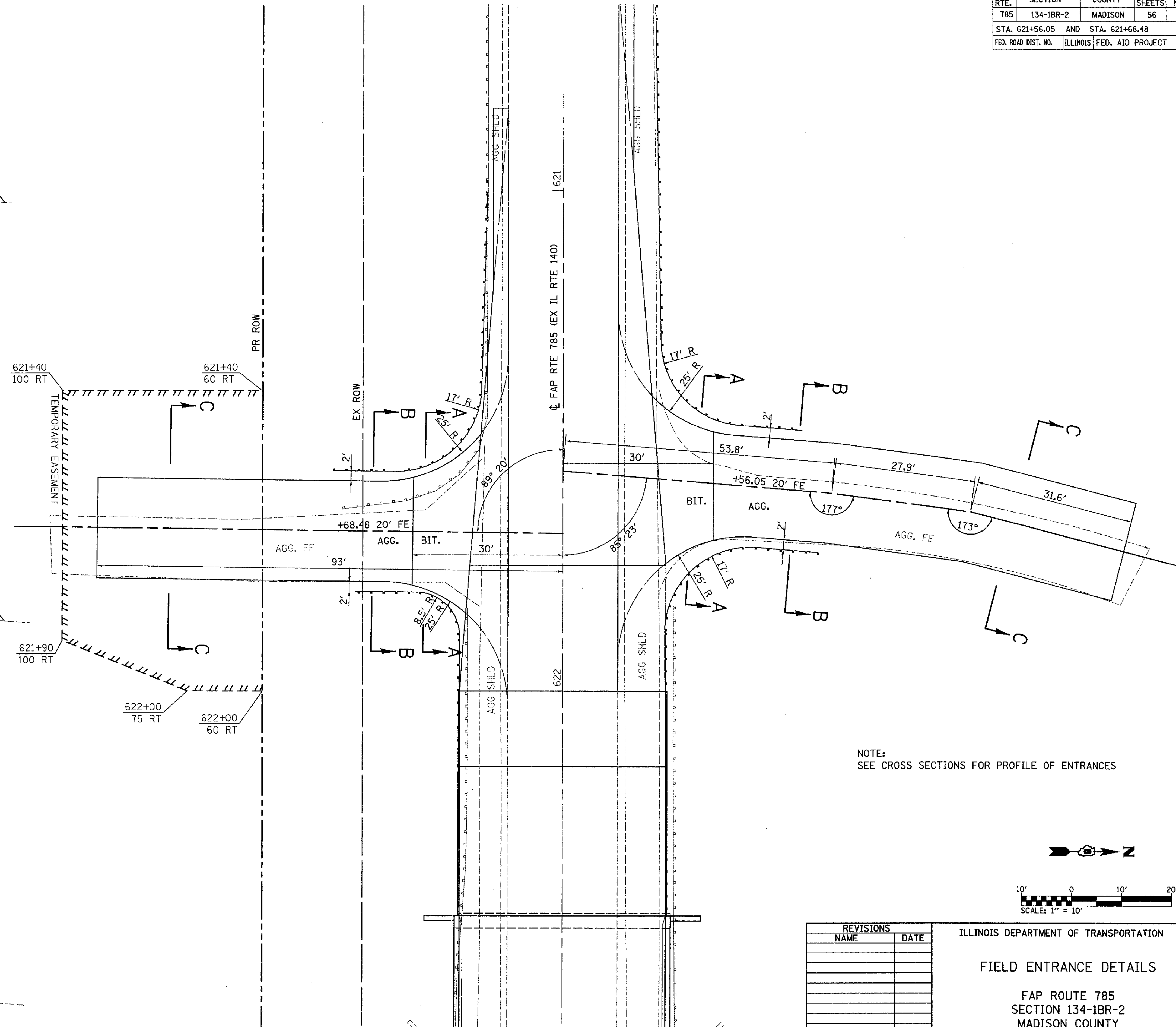
SECTION A-A



SECTION B-B



SECTION C-C



NOTE:
SEE CROSS SECTIONS FOR PROFILE OF ENTRANCES

SCALE: 1" = 10'

REVISIONS	
NAME	DATE

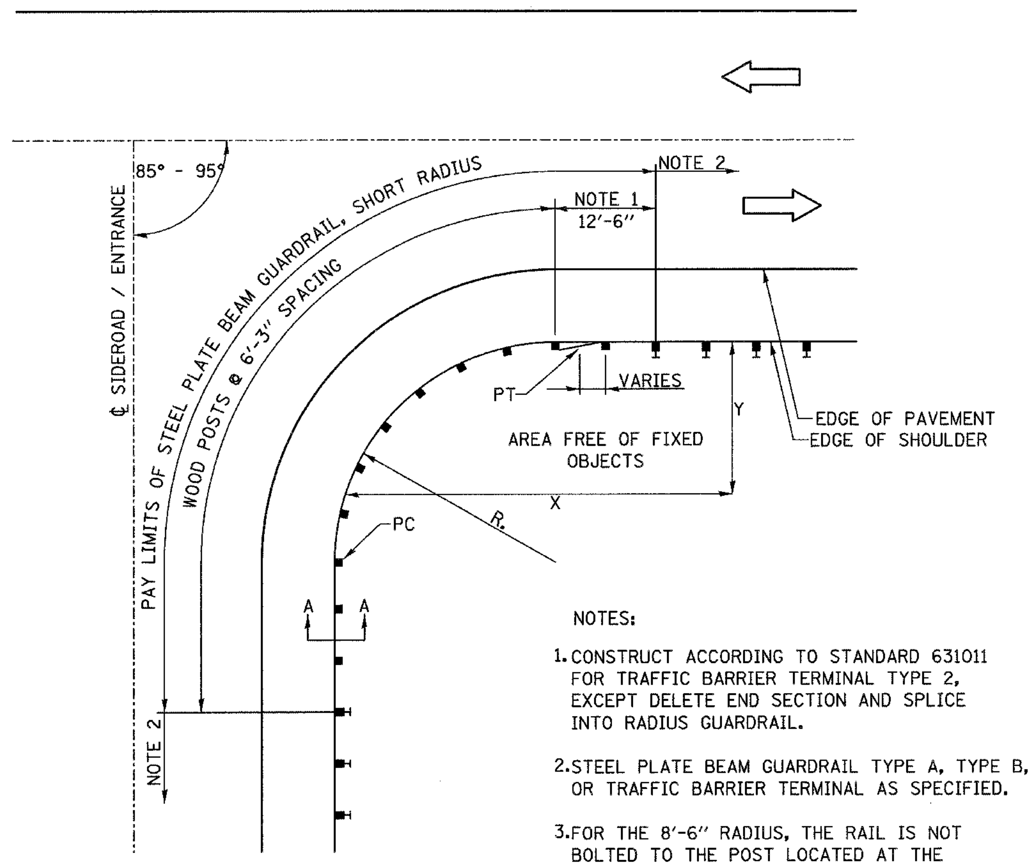
ILLINOIS DEPARTMENT OF TRANSPORTATION

FIELD ENTRANCE DETAILS

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 03/21/2007
FILE NAME = H:\P\25004\Technical Production\Structural\SN 060-0240\Microstation\Ent005e.dgn
PLOT SCALE = 10.0000 ' / IN.
USER NAME = $USER$

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	46
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

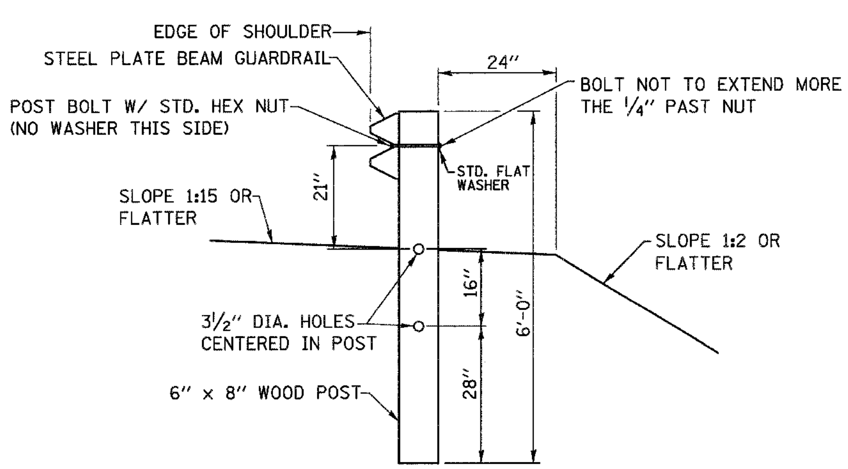
1. CONSTRUCT ACCORDING TO STANDARD 631011 FOR TRAFFIC BARRIER TERMINAL TYPE 2, EXCEPT DELETE END SECTION AND SPLICE INTO RADIUS GUARDRAIL.
2. STEEL PLATE BEAM GUARDRAIL TYPE A, TYPE B, OR TRAFFIC BARRIER TERMINAL AS SPECIFIED.
3. FOR THE 8'-6" RADIUS, THE RAIL IS NOT BOLTED TO THE POST LOCATED AT THE MIDPOINT OF THE CURVE.

PLAN VIEW SHORT RADIUS GUARDRAIL DETAIL

NOT TO SCALE

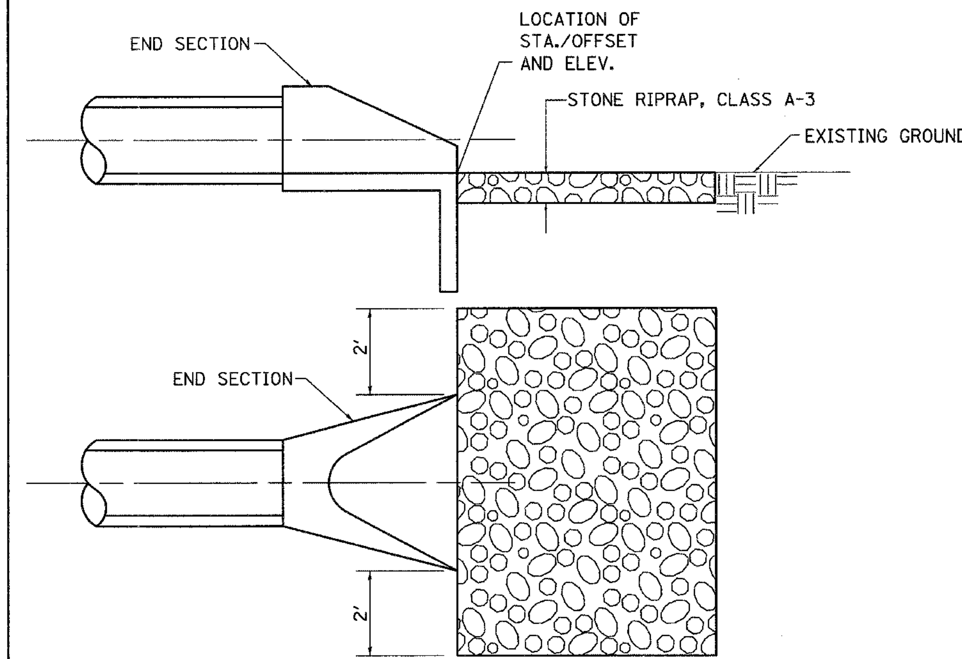
INSTALLATION CHARACTERISTICS PER DESIGN RADIUS

R	NO. OF WOOD POSTS	X	Y
8'-6"	5 (NOTE 3)	25'	15'
17'-0"	6	30'	15'
25'-6"	8	40'	20'
35'-0"	11	50'	20'

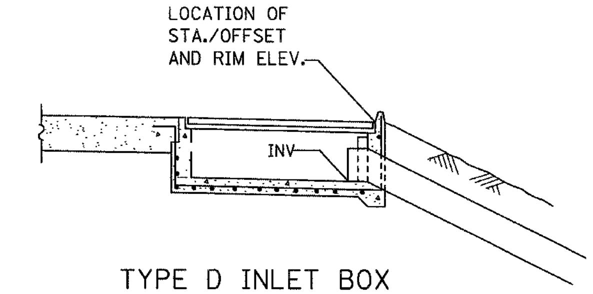


SECTION A-A

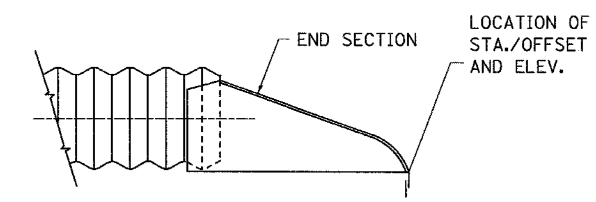
NOT TO SCALE



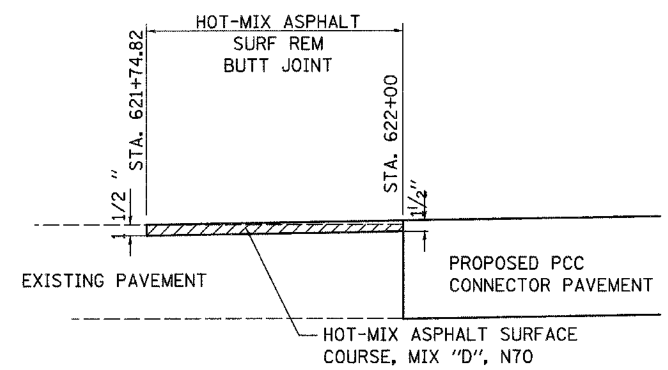
TYPICAL RIPRAP DETAIL



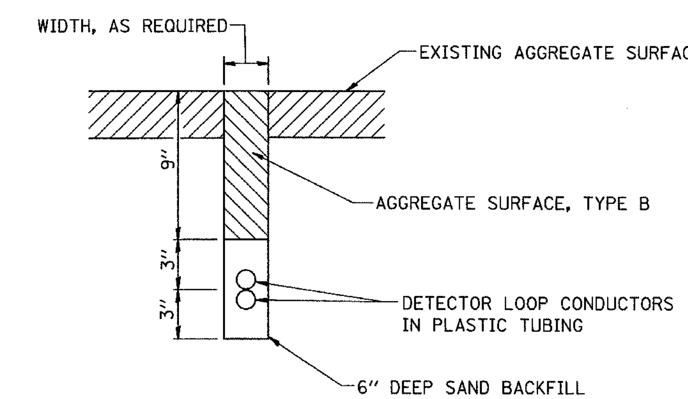
TYPE D INLET BOX



METAL END SECTION



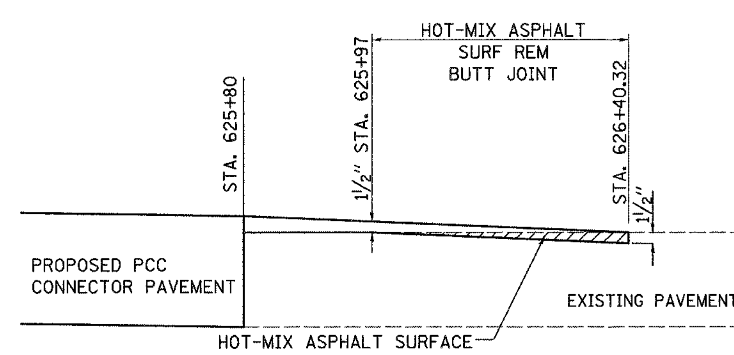
BUTT JOINT DETAIL WEST END



DETECTOR LOOP INSTALLED IN TRENCH

INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE PLANS AND SECTION 886 OF THE STANDARD SPECIFICATIONS WITH THE FOLLOWING EXCEPTIONS:

1. SLOTS ARE TO BE TRENCHED INSTEAD OF SAWED.
2. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701321.



BUTT JOINT DETAIL EAST END

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

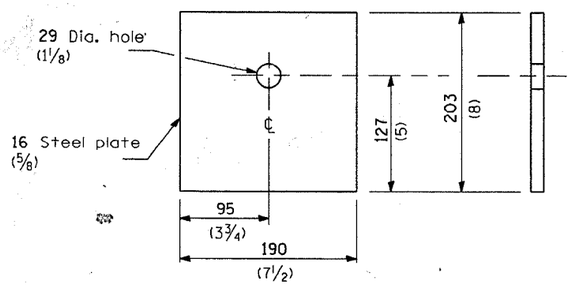
DETAIL SHEET
FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY
SN 060-0240

PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	R/W OF WAY CHECKED		
	CADD FILE NAME		

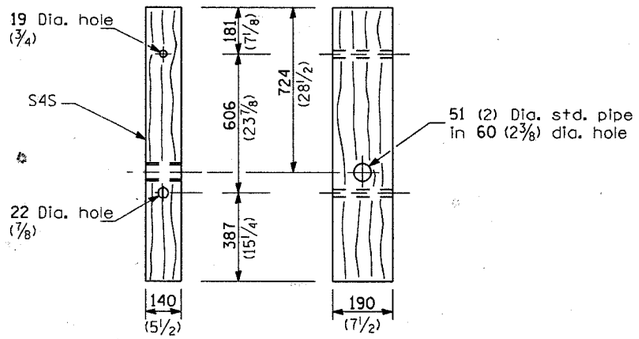
PLOT DATE = 03/21/2007
FILE NAME = H:\P\25004\Technical Production\Structural\SN 060-0240\Microstation\Details005.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = $USER$

Contract 76908

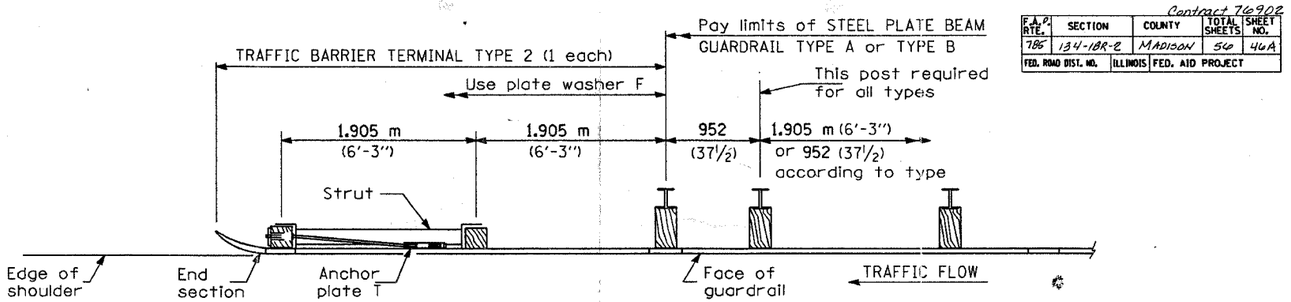
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	46A
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



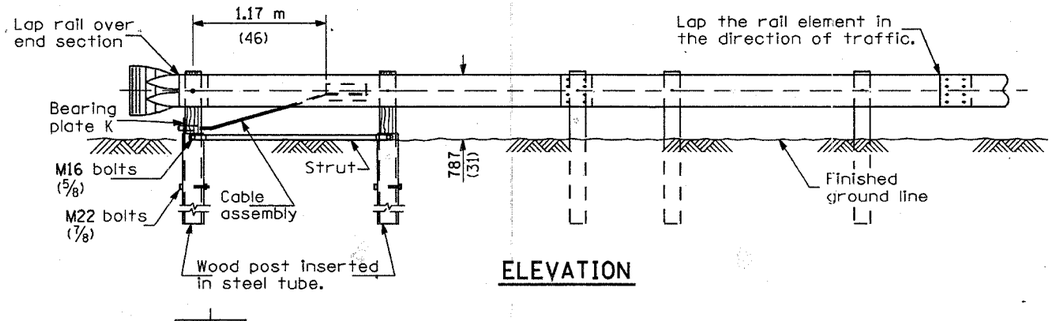
BEARING PLATE K



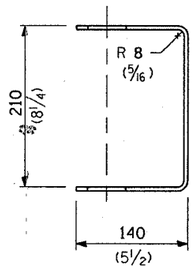
WOOD POST



PLAN

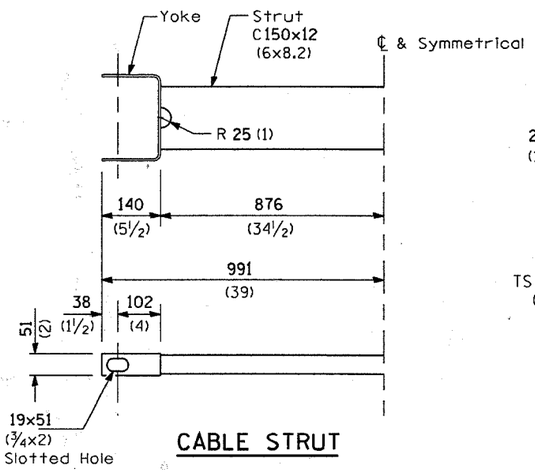


ELEVATION

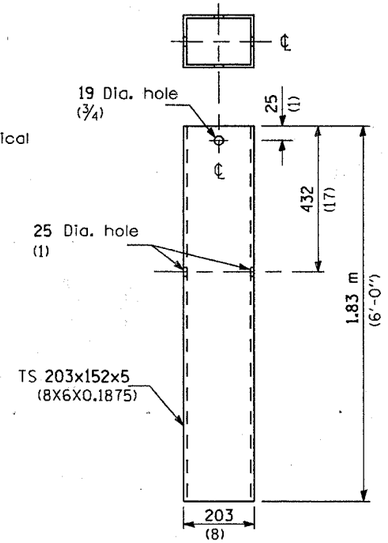


YOKE

5 (3/16) thick steel



CABLE STRUT



STEEL TUBE

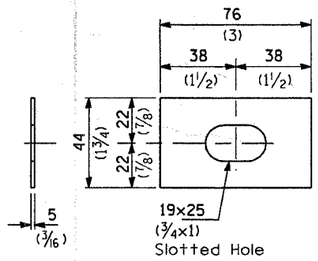


PLATE WASHER F

GENERAL NOTES

See Standard 630001 for details of guardrail not shown.

The bearing plate K shall be held in position by (2) two eight penny nails driven into the post and bent over the top of the plate.

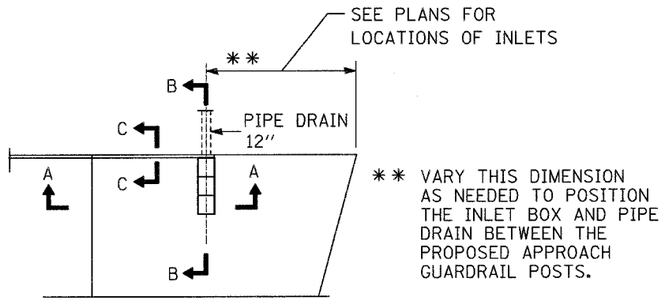
All dimensions are in millimeters (inches) unless otherwise shown.

TRAFFIC BARRIER TERMINAL, TYPE 2

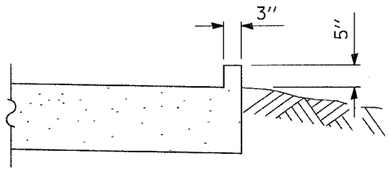
DETAIL

CONTRACT NO. 76902

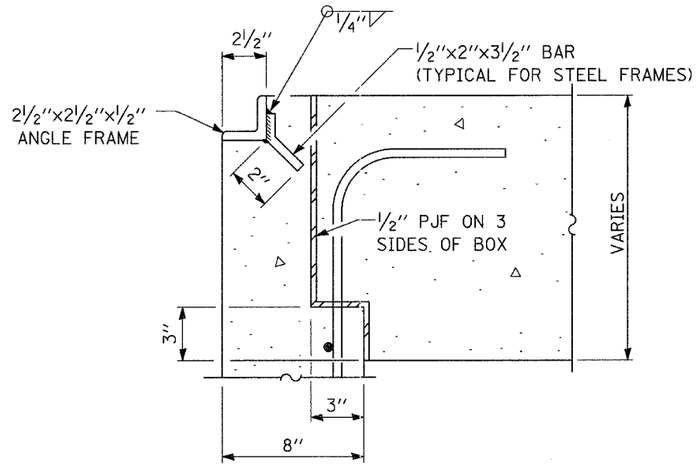
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	47
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



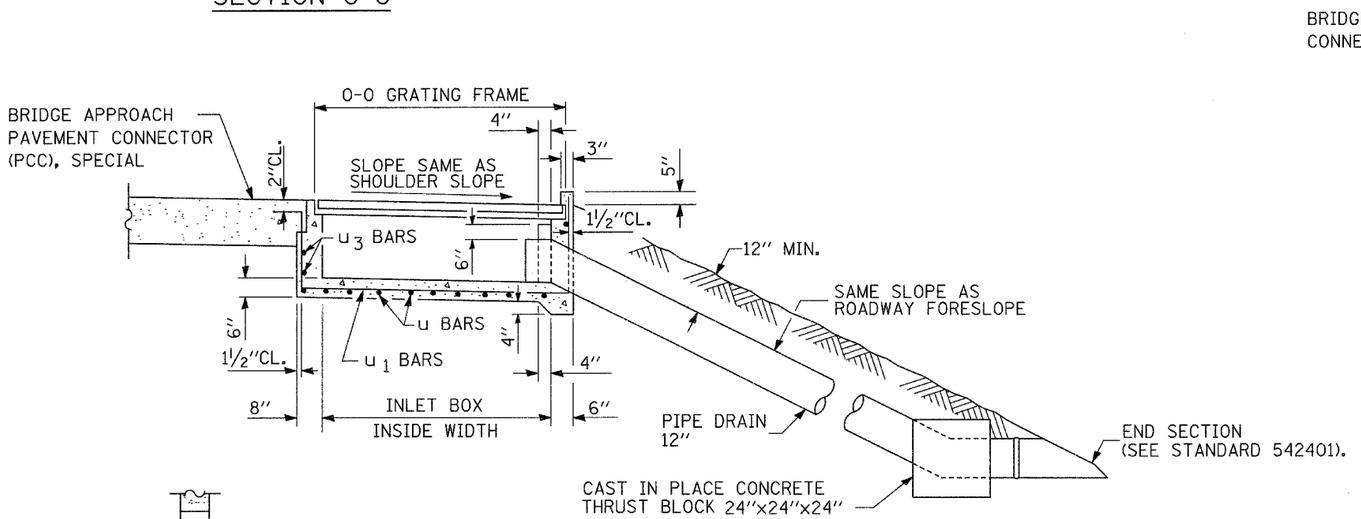
DETAIL PLAN



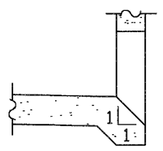
SECTION C-C



DETAIL A

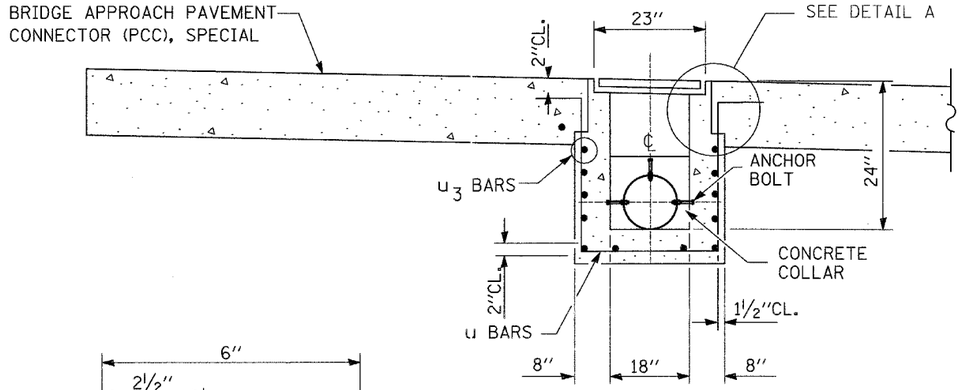


SEC. B-B

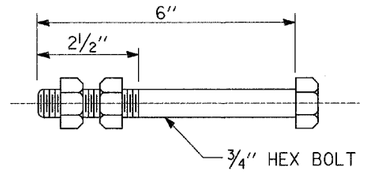


BOX OUTLET WHEN PRECAST

INLET TYPE	O-O GRATING FRAME	INLET BOX INSIDE WIDTH	INLET BOX INSIDE LENGTH
TYPE D	6'-5"	6'-0"	18"



SECTION A-A



ANCHOR BOLT

(USED TO TIE PIPE TO CONCRETE COLLAR)

GENERAL NOTES

ALL EXPOSED EDGES OF THE INLET, EXCEPT THE UPPER PERIMETER, SHALL BE BEVELED ¾".

REVISIONS NAME	DATE

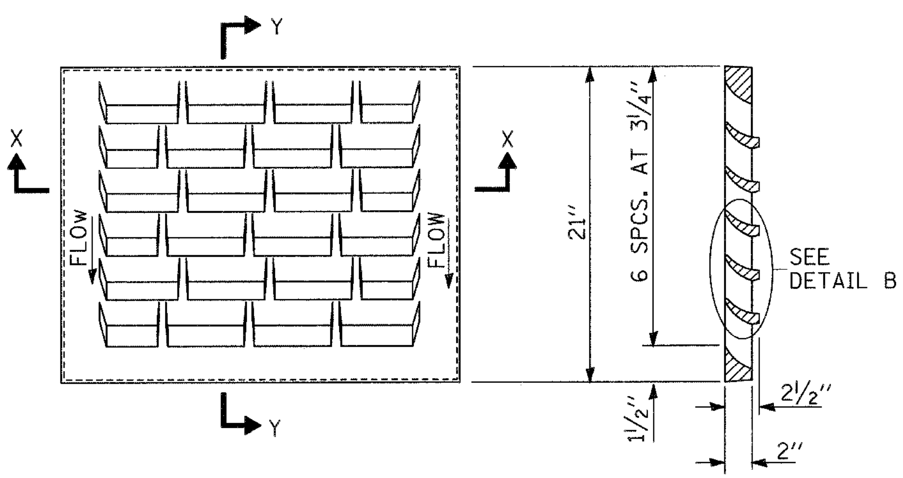
ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPE D INLET BOX DETAIL

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY
SN 060-0240

PLOT DATE = 03/21/2007
FILE NAME = H:\PJ\2006\1\Technical Production\Structural\SN 060-0240\Microstation\Details005.dgn
PLOT SCALE = 2.000000 '/ IN.
USER NAME = *USER*

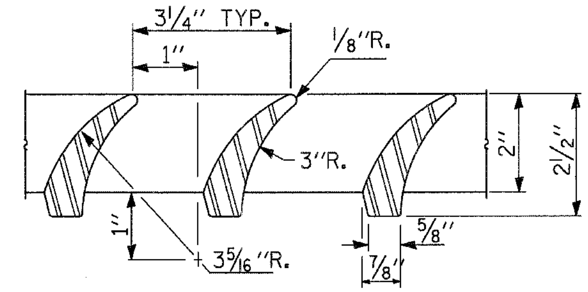
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	48
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



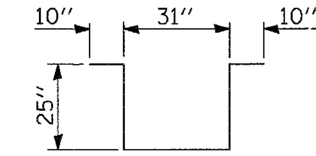
DETAIL OF CAST GRATE

TYPE D REQUIRES 3 GRATES

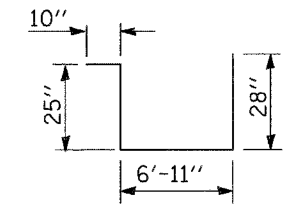
SECTION Y-Y



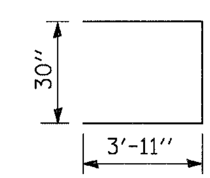
DETAIL B



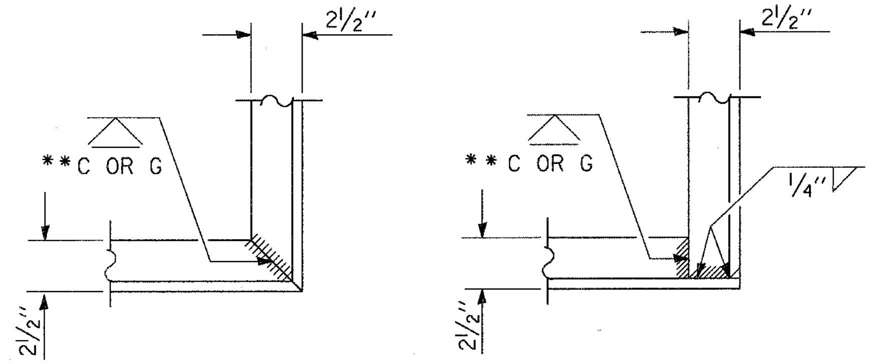
BAR u



BARS u_1



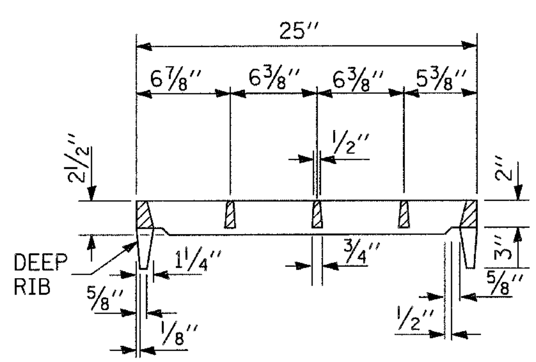
BAR u_3



ALT. 1 ALT. 2

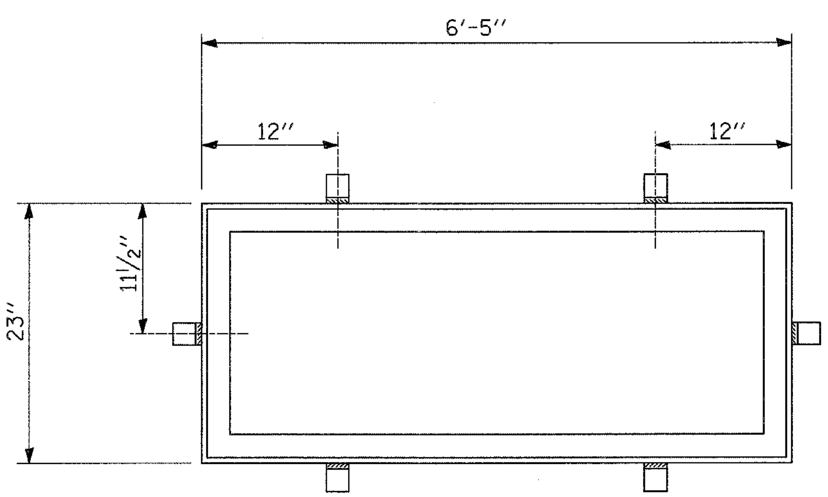
TYPICAL CORNER OF STEEL GRATING FRAME

**CUT OR GRIND FLUSH



SECTION X-X

(DEEP RIB SHALL BE OMITTED FOR END(S) RESTING ON FRAME PERIMETER)



DETAIL OF STEEL FRAME

CAST FRAME TO HAVE SAME BASIC DIMENSIONS.

TYPE D INLET BOX

REQUIRED MATERIAL			
BAR	QTY.	SIZE	LENGTH
u	8	NO. 4	8′-5″
u_1	3	NO. 4	12′-2″
u_3	4	NO. 4	10′-4″
CONCRETE		CU. YDS.	1.1
REINF. BARS		LBS.	97.0
GRATING		SQ. FT.	10.9

SHEET 2 OF 2

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

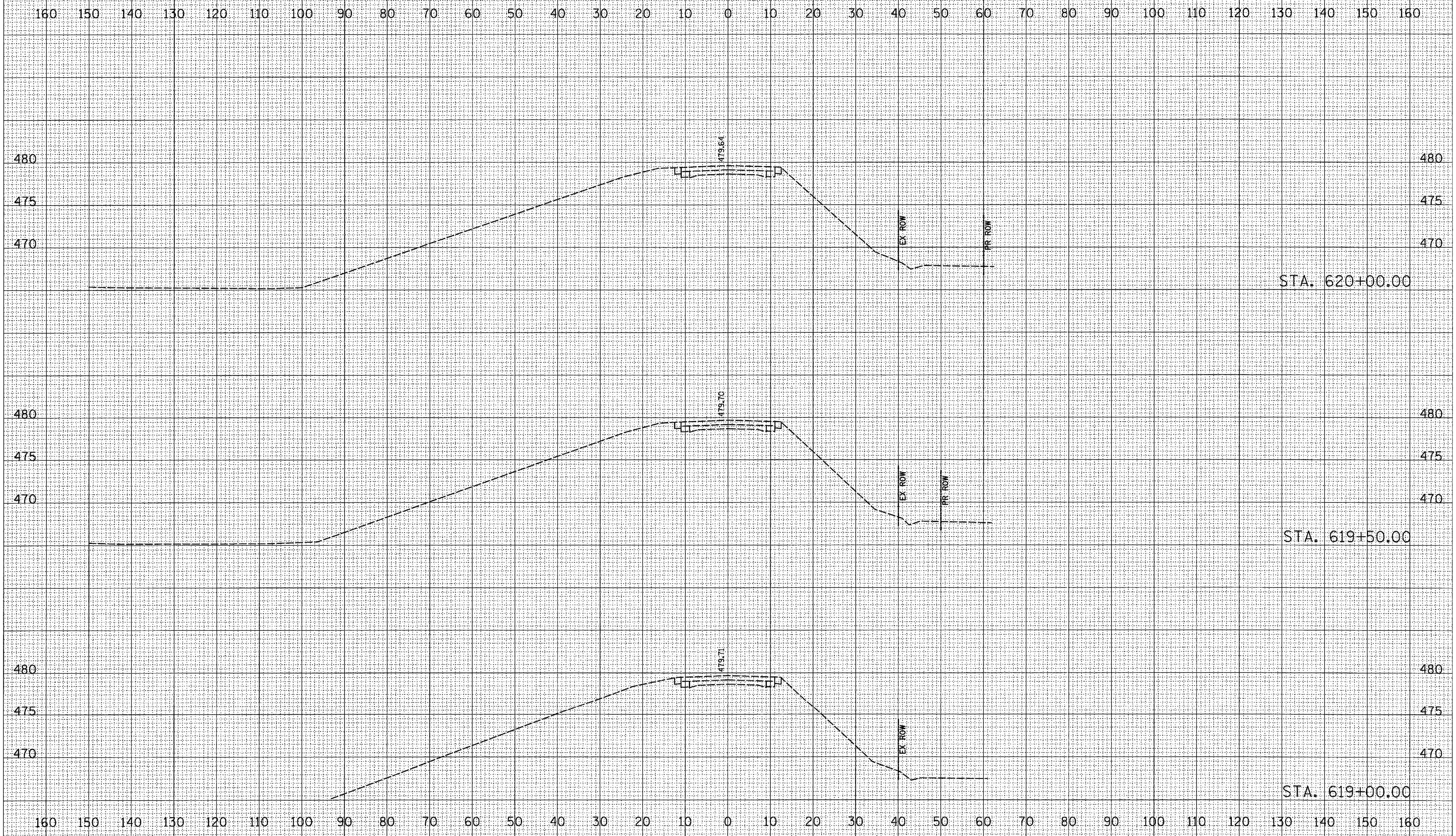
TYPE D INLET BOX DETAIL

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY
SN 060-0240

PLOT DATE = 03/21/2007
FILE NAME = H:\P\25004\Technical Production\Structural\SN 060-0240\Microstation\Details005.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = $USER$

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	49
STA. 619+00.00	TO STA. 620+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

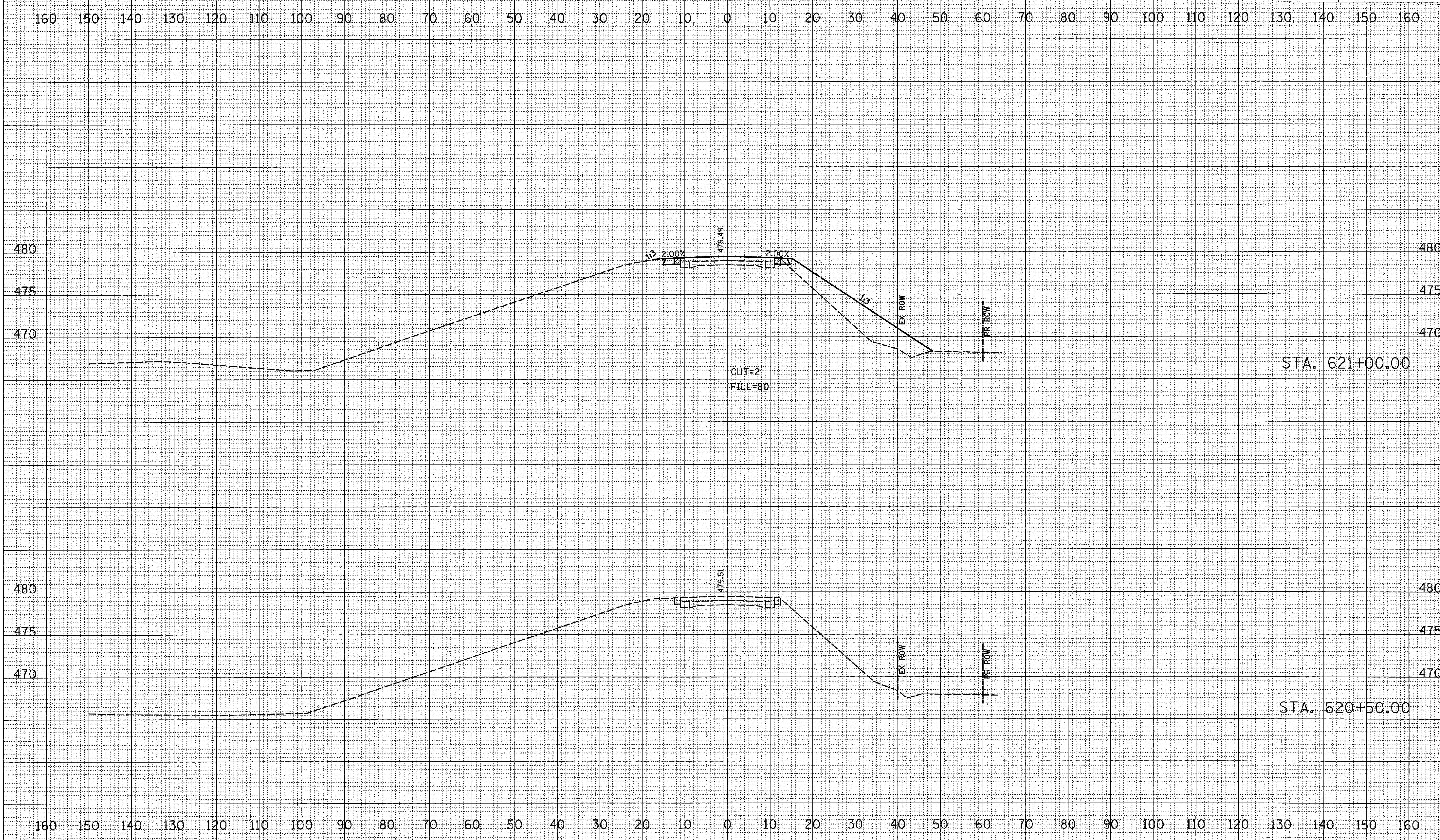
ORIGINAL SURVEY | SURVEYED | PLOTTED | AREAS | AREAS CHECKED | NO. | BY | DATE

PLOT DATE = 03/21/2007
FILE NAME = H:\P\25004\Technical Production\...
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = #REF#

CROSS SECTIONS STA. 619+00 TO STA. 620+00

CONTRACT NO. 7690

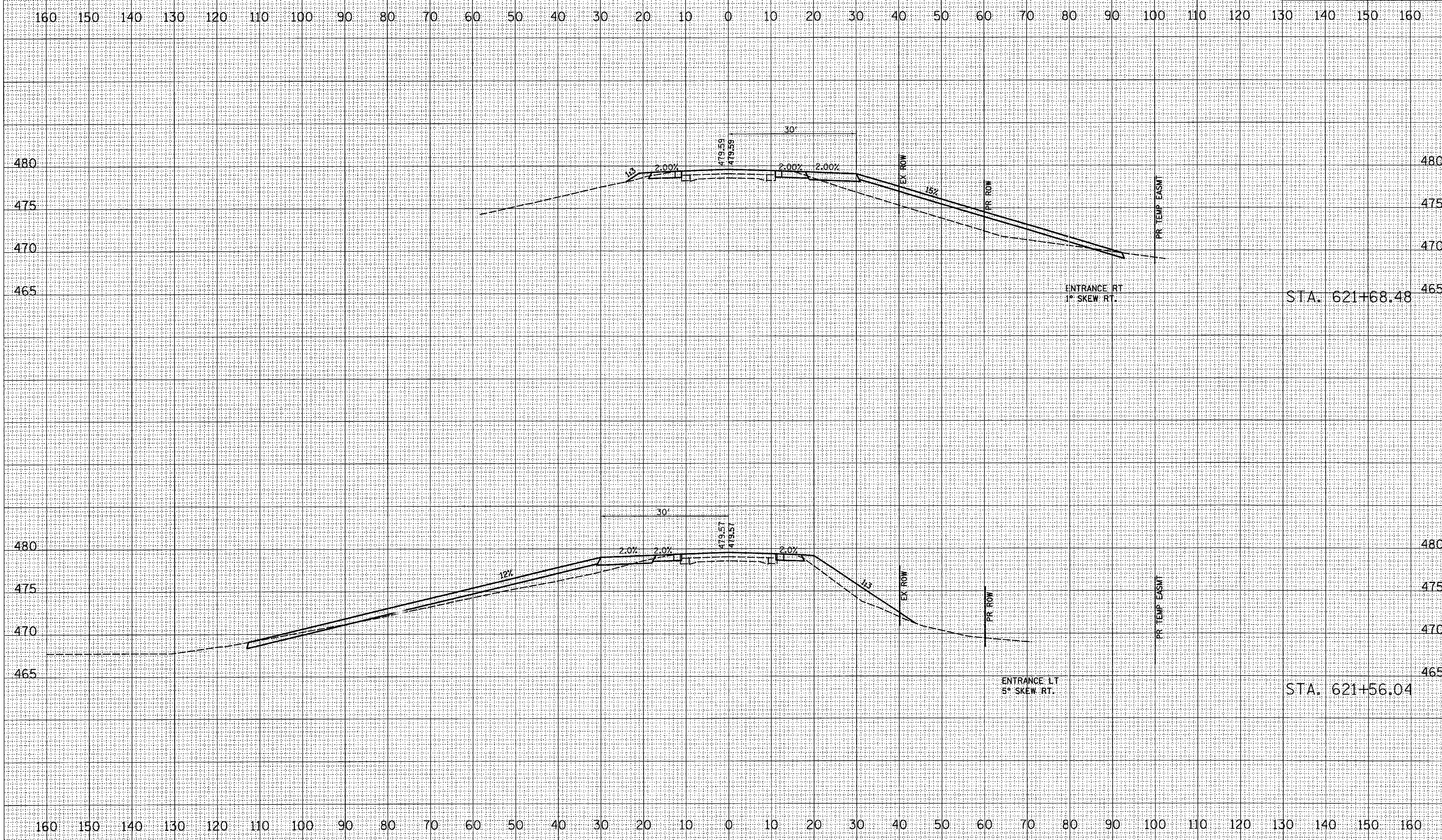
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	50
STA. 620+50.00 TO STA. 621+00.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CROSS SECTIONS STA. 620+50 TO STA. 621+50

CONTRACT NO. 76902

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	51
STA. 621+56.04	TO STA. 621+68.48			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = 03/21/2007
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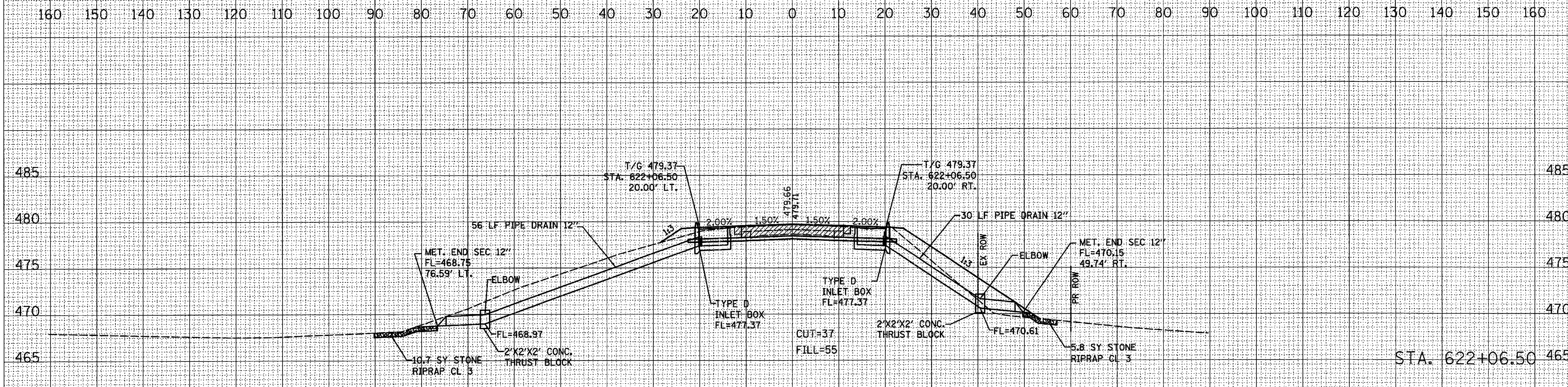
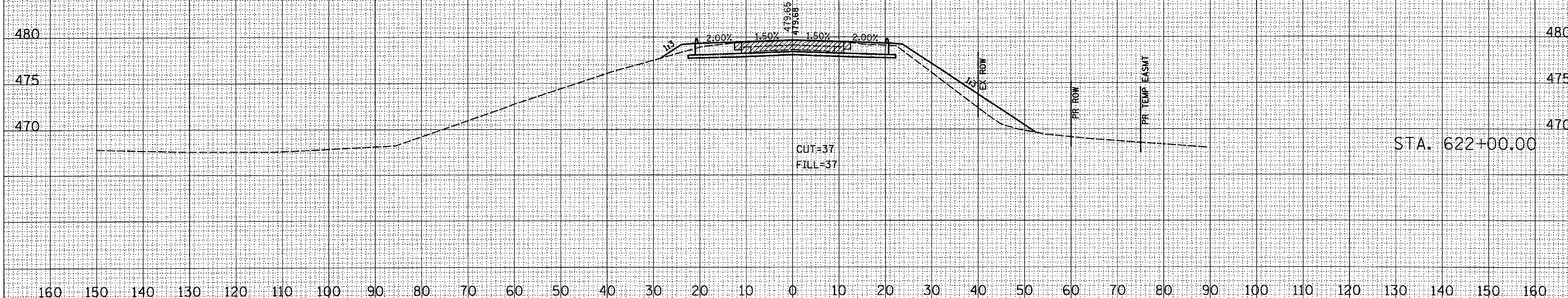
CONTRACT NO. 76902

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	52
STA. 622+00	TO STA. 622+06.50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



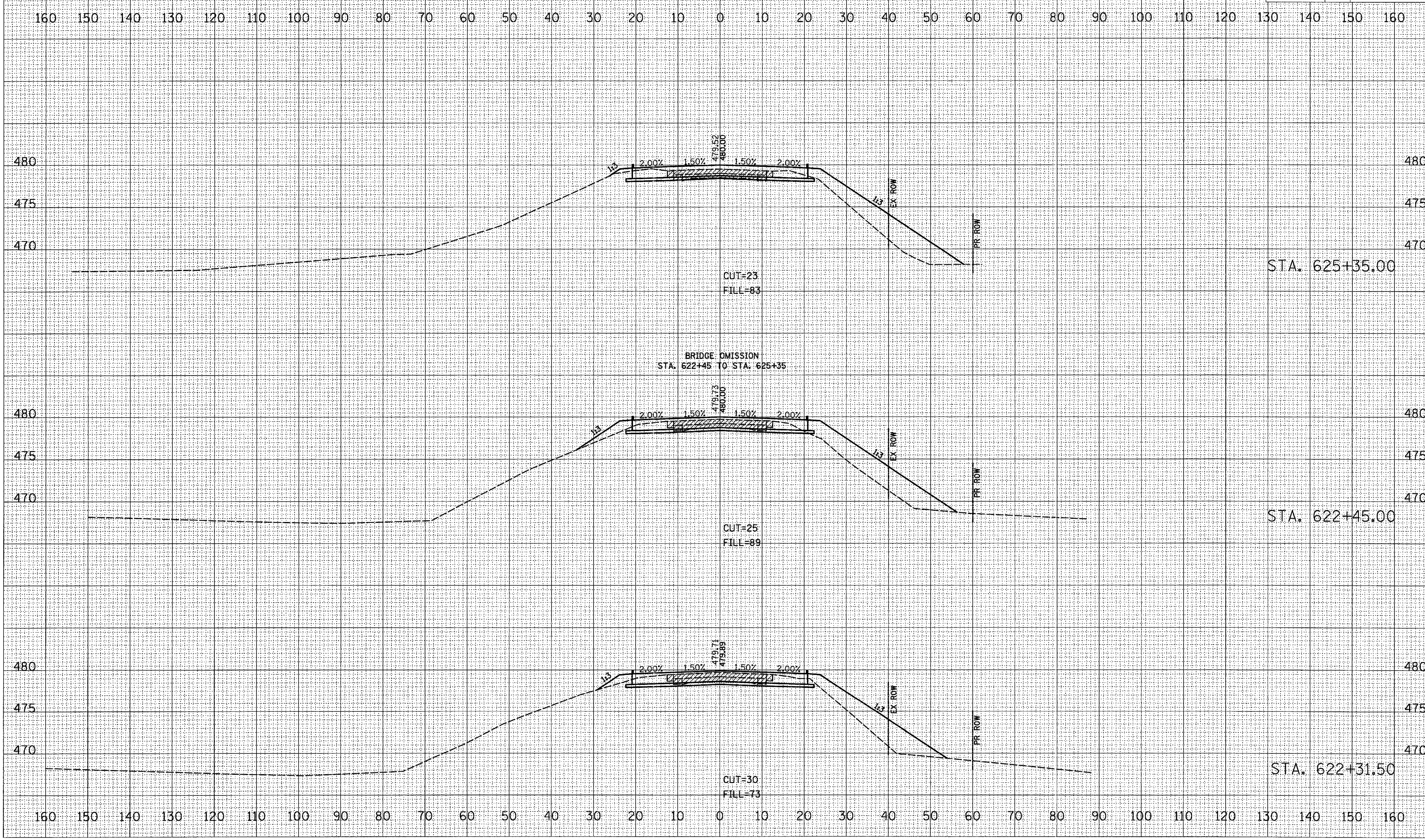


PLOT DATE = 03/21/2007
PLOT SCALE = 10.0000 '/ IN.
REFERENCE = #REF#

CROSS SECTIONS STA. 621+92.98 TO STA. 622+07

CONTRACT NO. 7690

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	53
STA. 622+31.50	TO STA. 625+35.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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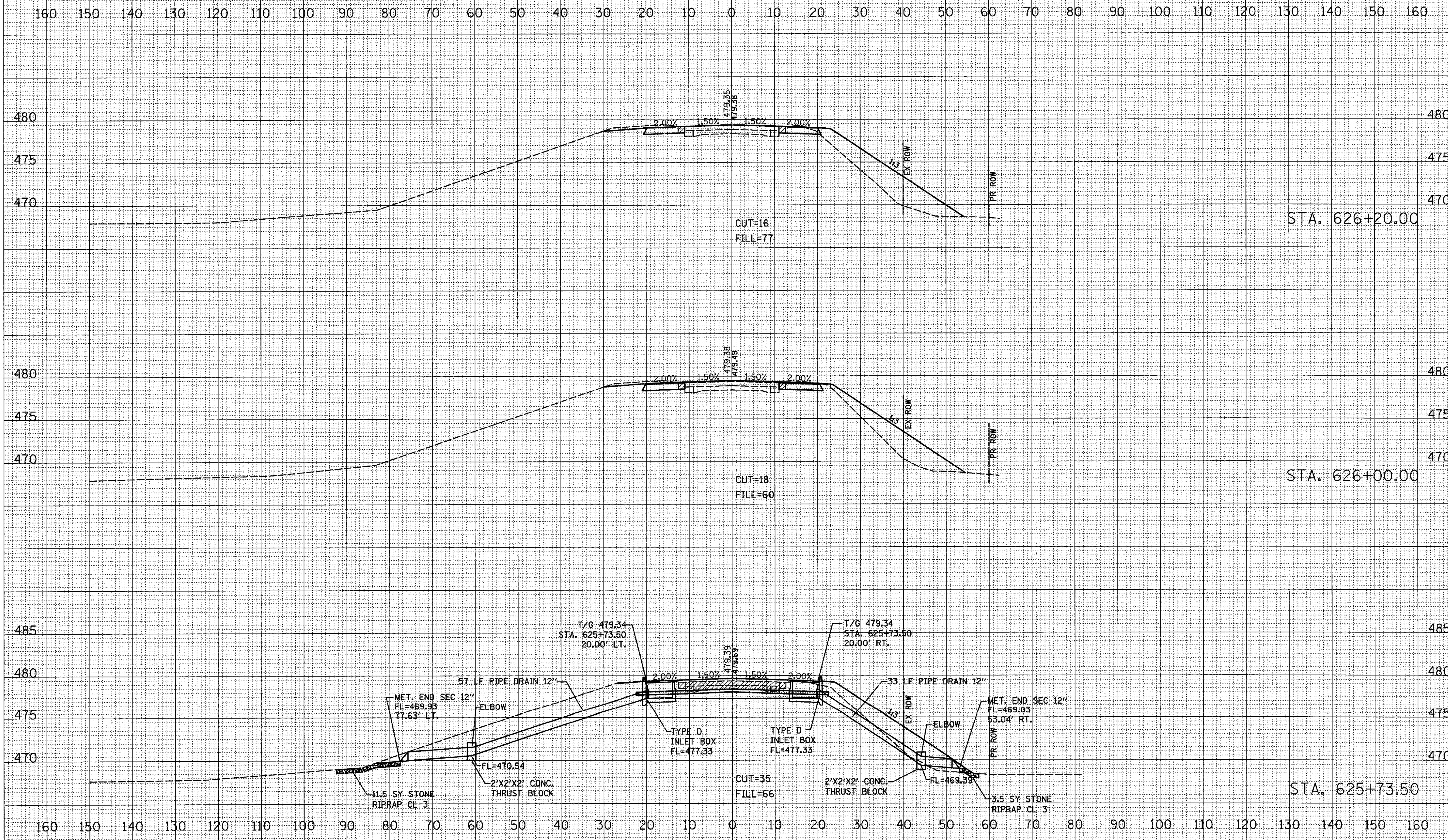
PLOT SCALE = 10.000 ' / IN.
REFERENCE = REF

CROSS SECTIONS STA. 622+31.50 TO STA. 625+35

CONTRACT NO. 76902

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	54
STA. 625+73.50 TO STA. 626+20.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



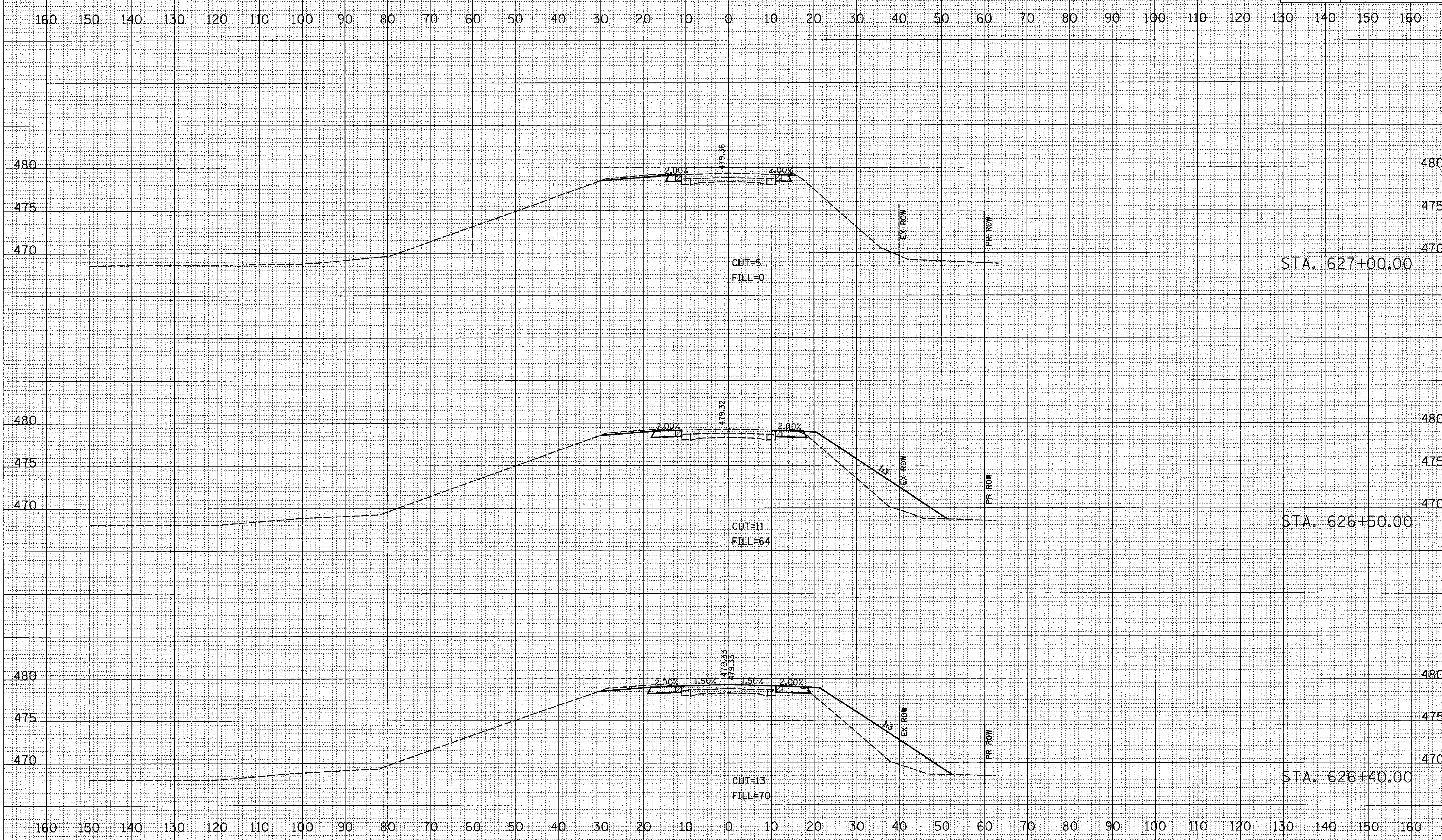
FINAL SURVEY | NOTE BOOK NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

ORIGINAL SURVEY | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

PLOT DATE = 03/21/2007
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = #REF#

CONTRACT NO. 76902

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	55
STA. 626+40.00 TO STA. 627+00.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 03/21/2007
FILE NAME = H:\P\25004\Technical Production\Structural\SN 060-0240\Microstation\xssht005.dgn
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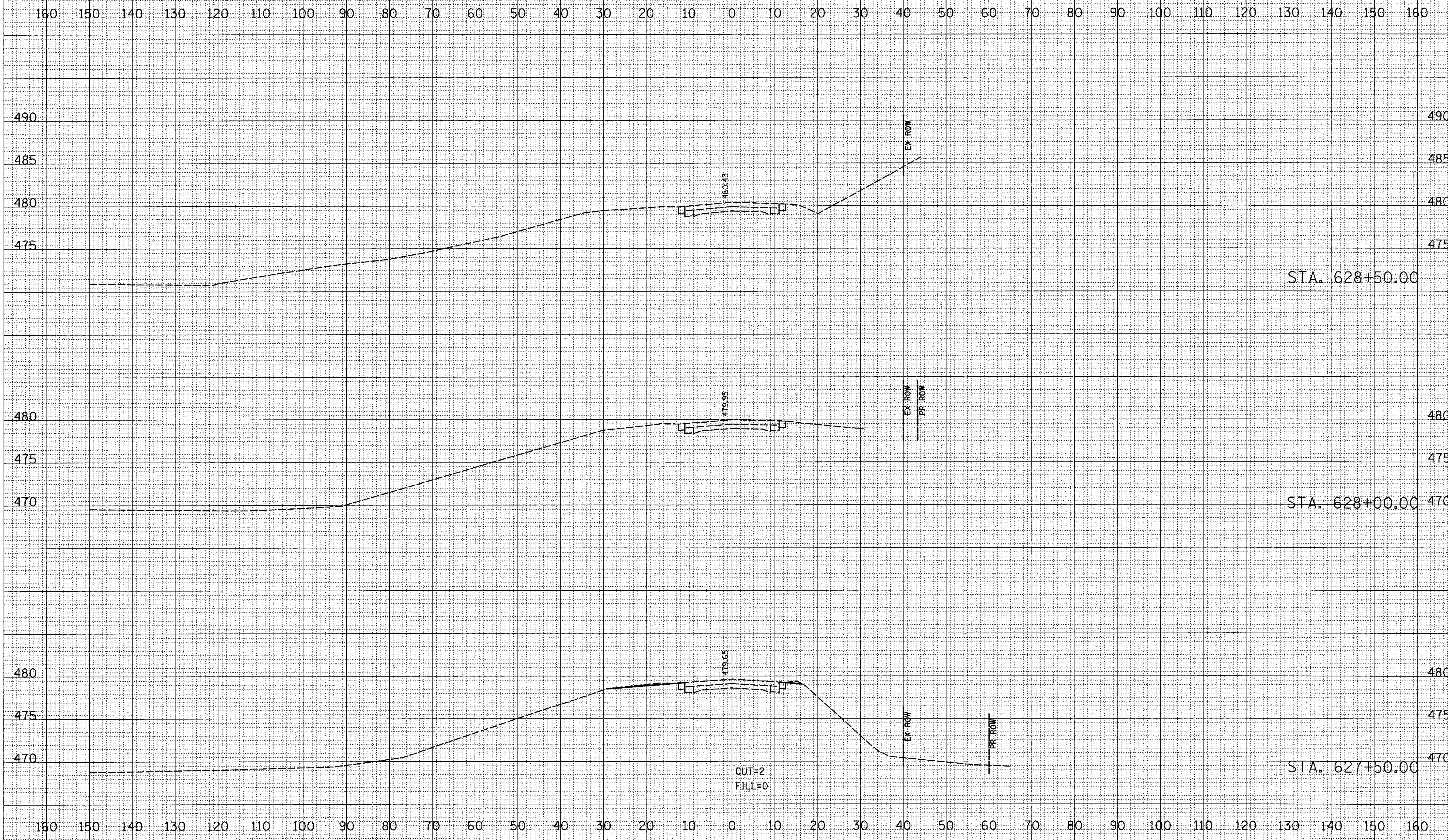
REFERENCE = REF

CROSS SECTIONS STA. 626+40 TO STA. 627+00

CONTRACT NO. 76902

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56
STA. 627+50.00 TO STA. 628+50.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

ORIGINAL SURVEY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | NO. | BY | DATE

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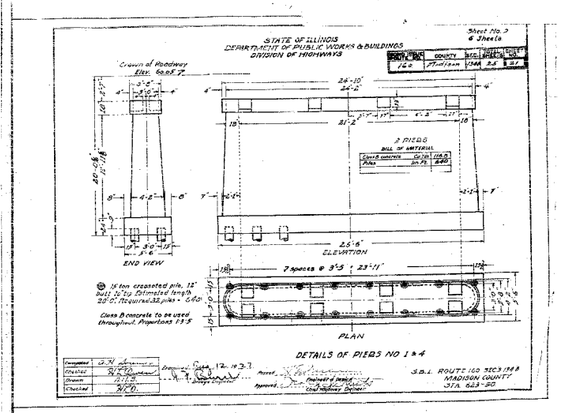
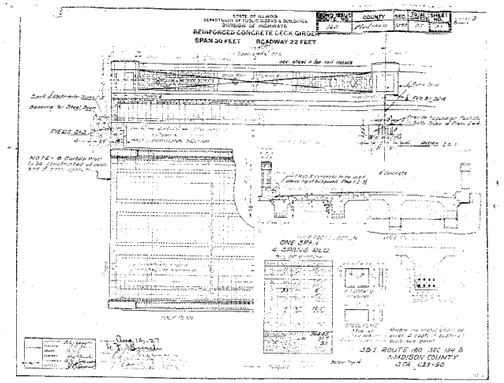
REFERENCE = REF

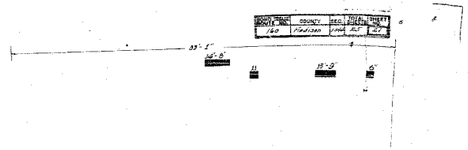
CROSS SECTIONS STA. 627+50 TO STA. 628+50

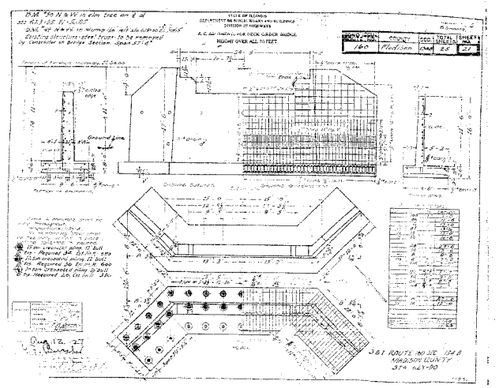
CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56A
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		









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REVISIONS NAME	DATE

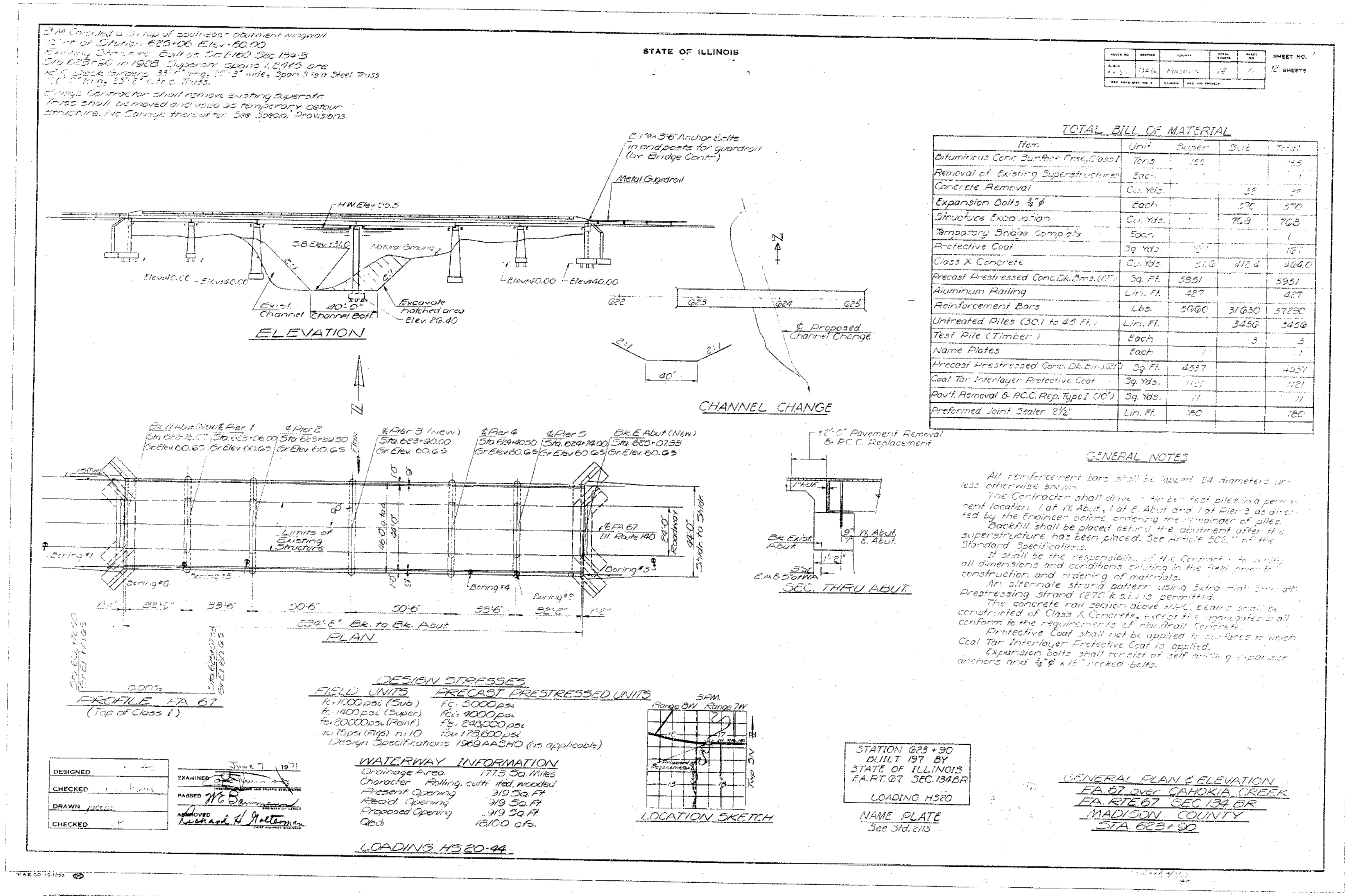
ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56B
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Conc. Surface Crse. Class I	Tons	155		155
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yds.		32	32
Expansion Bolts ¾"φ	Each		570	570
Structure Excavation	Cu. Yds.		768	768
Temporary Bridge Complete	Each			1
Protective Coat	Sq. Yds.	161		161
Class X Concrete	Cu. Yds.	51.6	412.4	464.0
Precast Prestressed Conc. Dk. Bms. (17")	Sq. Ft.	5951		5951
Aluminum Railing	Lin. Ft.	427		427
Reinforcement Bars	Lbs.	5060	31630	37290
Untreated Piles (30.1 to 45 Ft.)	Lin. Ft.		3450	3450
Test Pile (Timber)	Each		3	3
Name Plates	Each	1		1
Precast Prestressed Conc. Dk. Bms. (21")	Sq. Ft.	4537		4537
Coal Tar Interlayer Protective Coat	Sq. Yds.	1121		1121
Pav't. Removal & P.C.C. Rep. Type I (10")	Sq. Yds.	11		11
Preformed Joint Sealer 2½"	Lin. Ft.	180		180

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

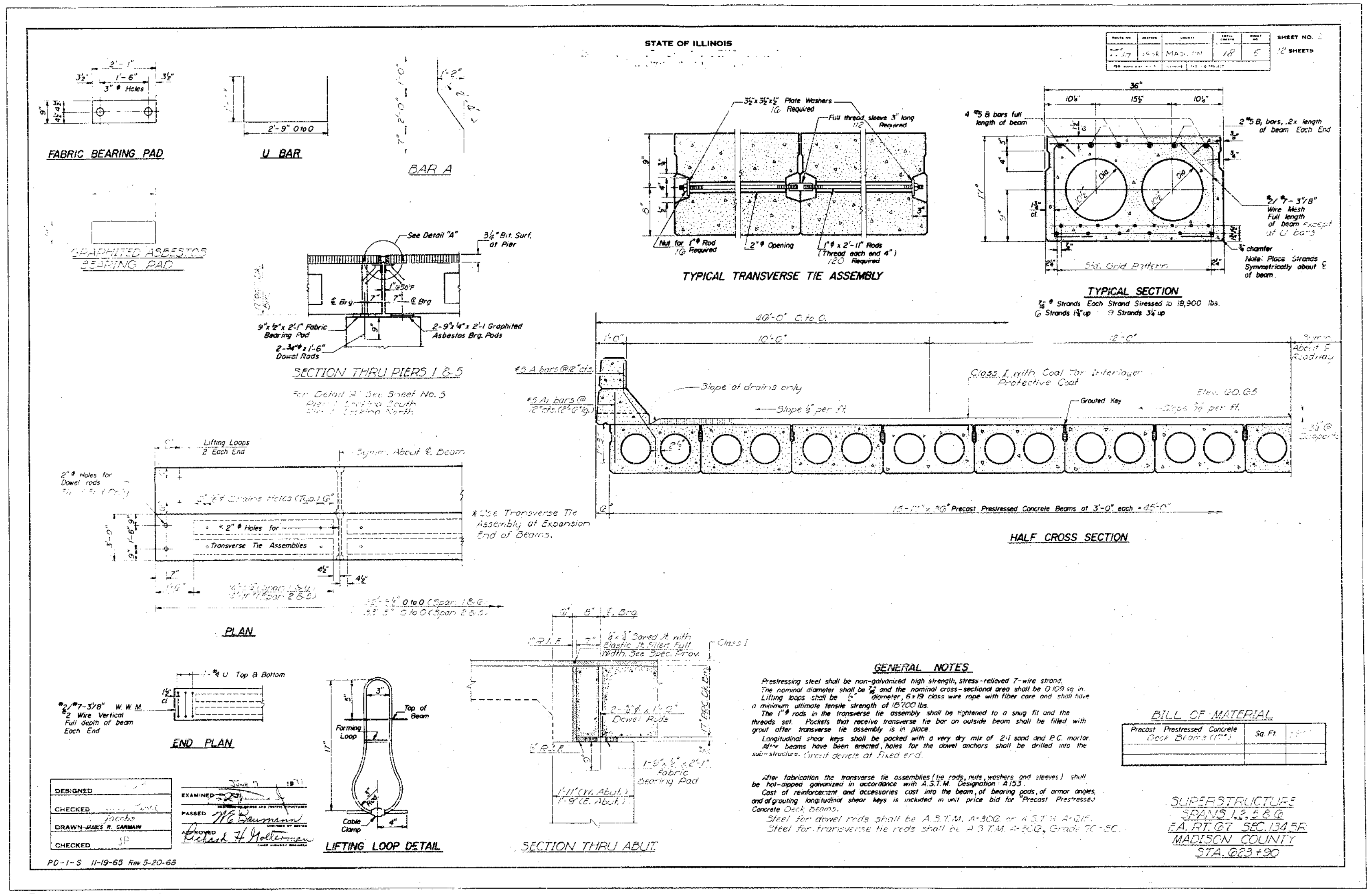
EXISTING BRIDGE PLANS FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed0069\plan\pln023a.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = osmanrm

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56C
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE
PLANS
FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed00691\plan\pln023e.dgn
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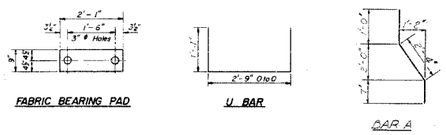
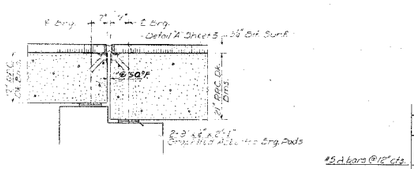
USER NAME = osmartm

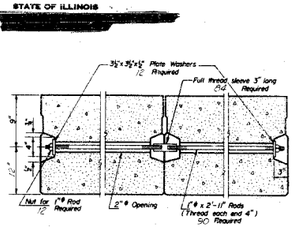
CONTRACT NO. 76902

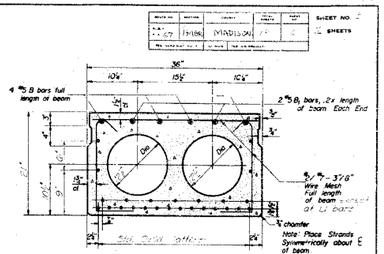
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56D
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

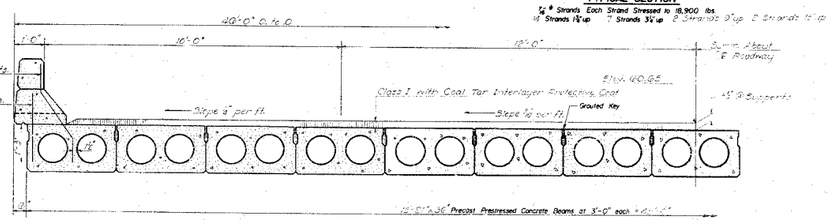
STATE OF ILLINOIS

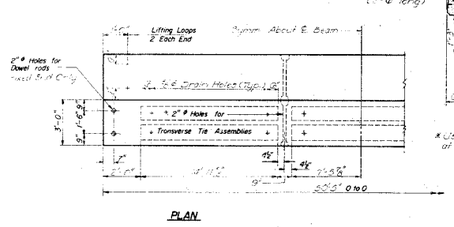




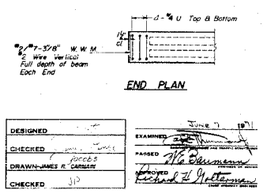


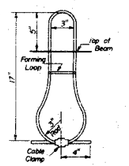


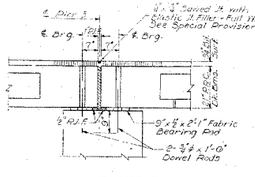




*Use Transverse Tie Assembly at Expansion End of Beams.







DESIGNED	
CHECKED	
DRAWN-JAMES R. CARLSEN	
CHECKED	

EXAMINED
PASSED
APPROVED

FD-1-S 11-19-65 Rev 5-20-68

GENERAL NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.109 sq in. Lifting loops shall be ⅝" diameter, 6 x 19 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 29,000 lbs.

The T.H. rods in the transverse tie assembly shall be tightened to a snug fit and the threads wet. Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place.

Longitudinal shear keys shall be packed with a very dry mix of 2-1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the sub-structure. Grout dowels at fixed end.

After fabrication the transverse tie assemblies (tie rods, nuts, washers and sleeves) shall be hot-dipped galvanized in accordance with A.S.T.M. Designation: A 153.

Cost of reinforcement and accessories cast into the beam, of bearing pads, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

Steel for dowel rods shall be A.S.T.M. A-307 or A.S.T.M. A-615.

Steel for transverse tie rods shall be A.S.T.M. A 370, Grade 70 ksi.

BILL OF MATERIAL

Precast Prestressed Concrete Deck Beams (21")	Sq. Ft.	12"

SUPERSTRUCTURE
SPANS 3 & 4
FAP RTE 785 SEC 134BR-2
MADISON COUNTY
STA 1225+90

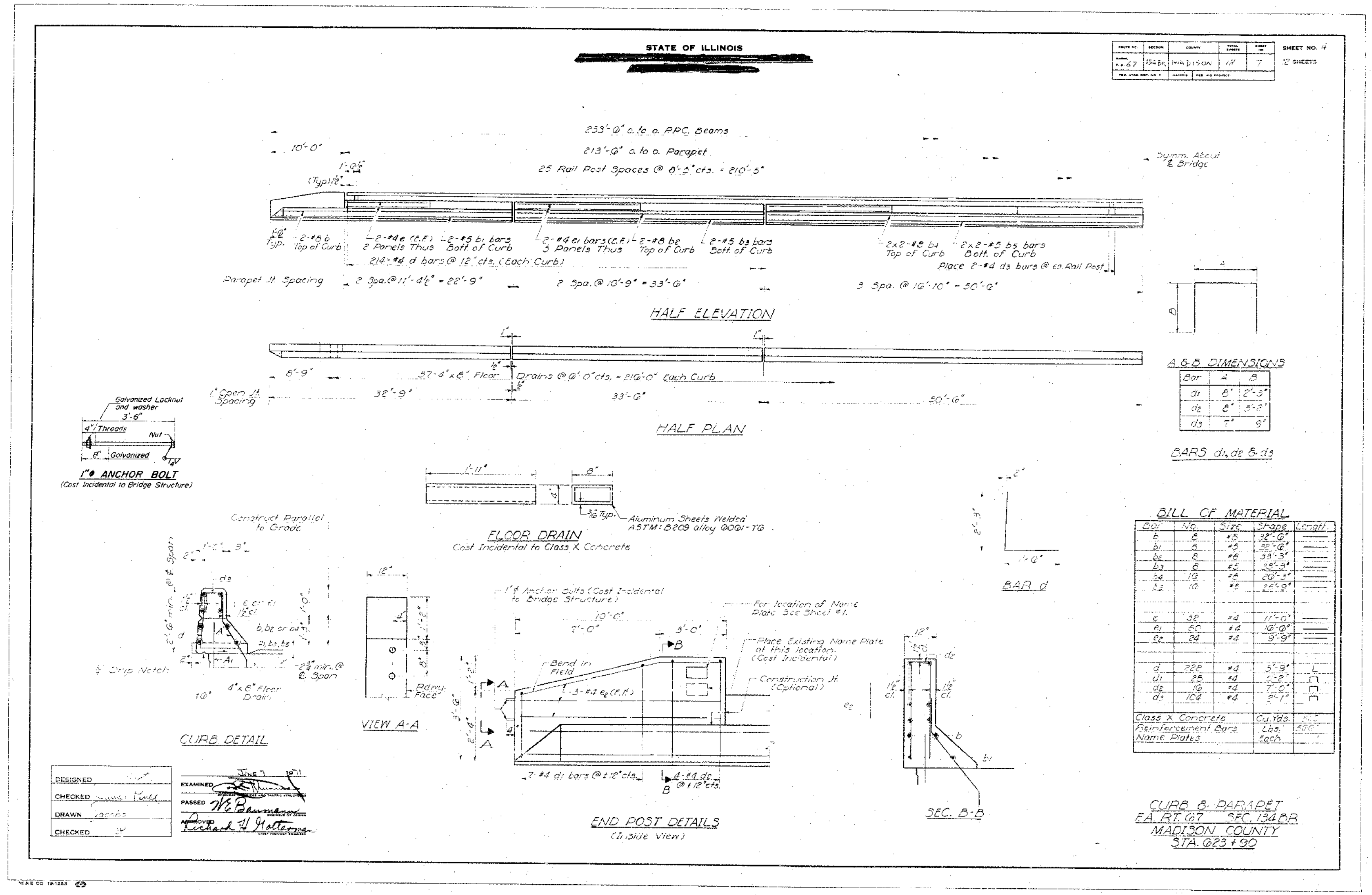
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE
PLANS
FYI
FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed8691\plan\plan023a.dgn
PLOT SCALE = 20.000 ' / IN.
USER NAME = cameron

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56E
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed00691\plan\pln023a.dgn
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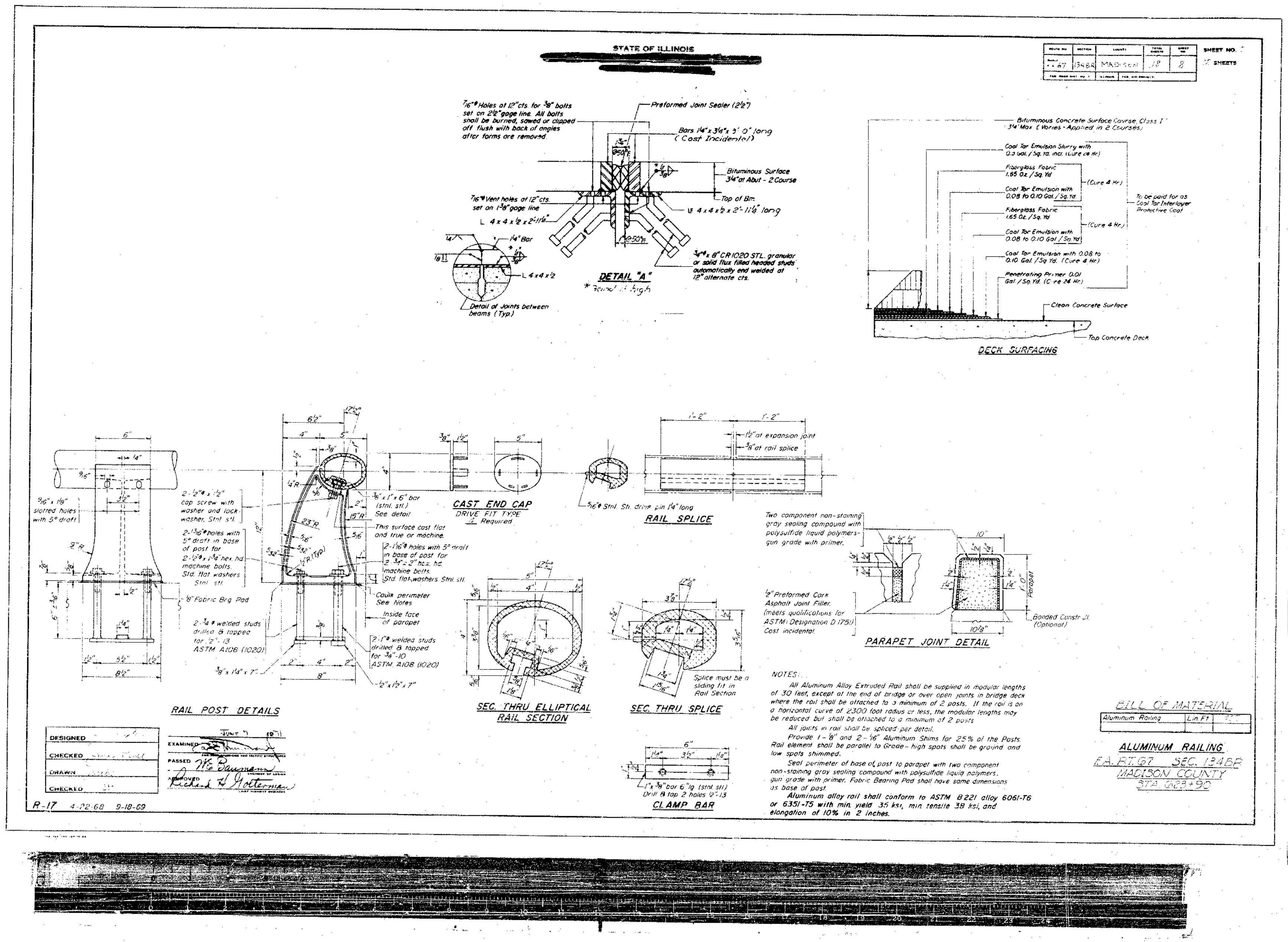
CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56F
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed00691\plan\pln023e.dgn
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USER NAME = osmantm

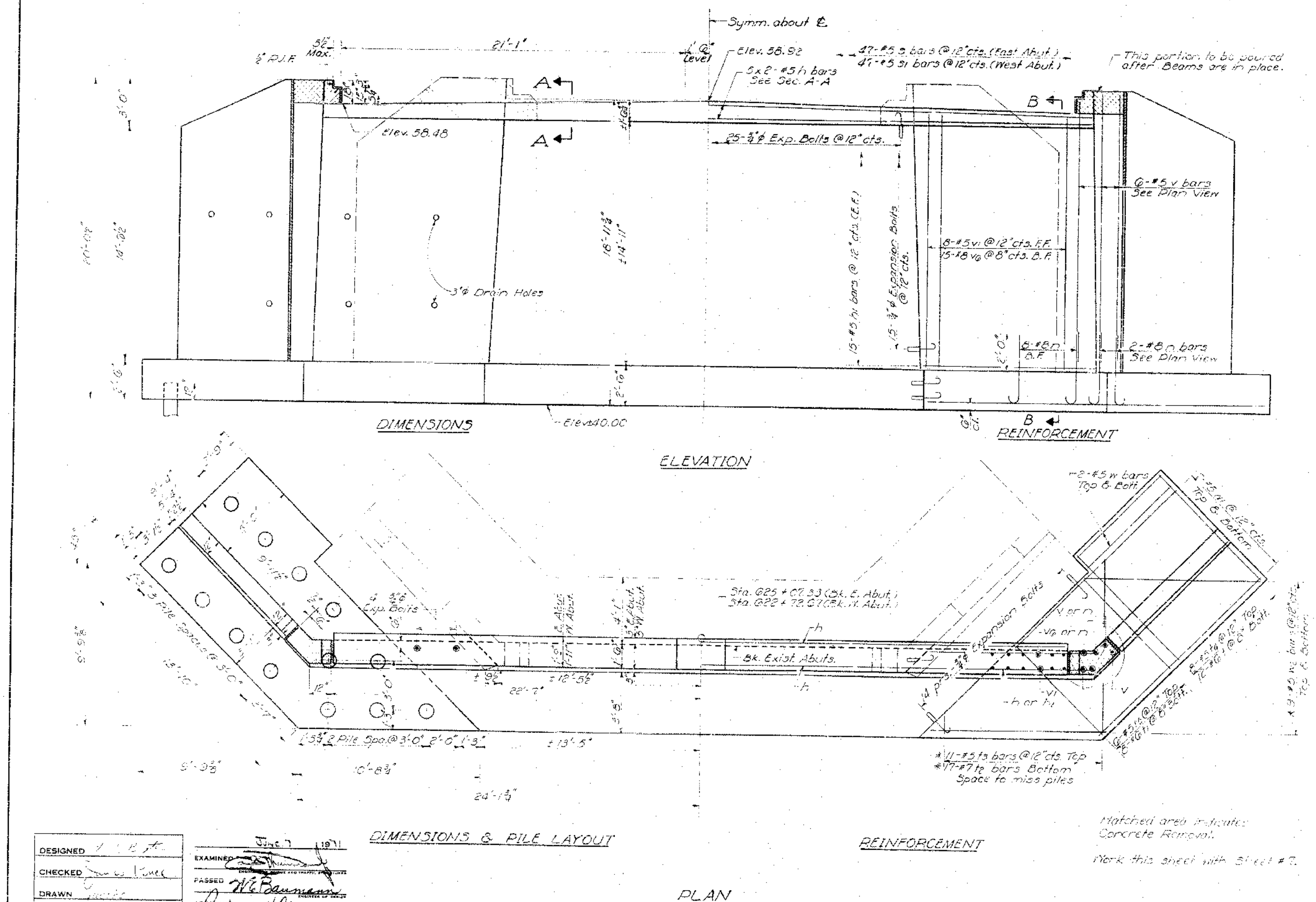
CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56G
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS

[redacted]

SHEET NO. 7 — 12 SHEETS



9-w2 bars (Cut 4 sets of 9 each)
17-t2 bars & (Cut 2 sets of 17 each)
11-t3 bars (Cut 2 sets of 11 each)

* Order t2, t3 and w2 bars full length. Cut to fit as shown. Use remainder of w2 bars in other face. Use remainder of t2 and t3 bars in other abutment.

Cut Line

BARS t2, t3 & w2

2 ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	80	#5	24'-6"	
h1	120	#5	10'-6"	
h2	55	#4	9'-6"	
n	40	#6	[illegible]	
n1	44	#6	6'-1"	
n2	48	#8	4'-5"	
s	47	#5	5'-5"	
s1	47	#5	3'-9"	
t	48	#6	9'-0"	
t1	32	#6	8'-0"	
t2	34	#7	12'-0"	
t3	22	#5	12'-0"	
t4	32	#5	9'-0"	
t5	24	#5	6'-0"	
v	36	#5	17'-3"	
v1	32	#5	15'-6"	
v2	44	#5	12'-6"	
v3	48	#7	6'-5"	
v4	16	#4	12'-6"	
v5	16	#4	6'-3"	
v6	60	#8	15'-6"	
w	16	#5	7'-3"	
w1	56	#5	14'-0"	
w2	56	#5	14'-6"	
Concrete Removal		Cu. Yds.	1	
Expansion Bolts ¾"φ		Each	238	
Class X Concrete		Cu. Yds.	155.5	
Reinforcement Bars		Lbs.	13,110	
Untreated Piles		Lin. Ft.	1600	
Test Pile (Timber)		Each	2	

Hatched area indicates Concrete Removal.

Work this sheet with Sheet #8.

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

June 7 1971
EXAMINED
PASSED W. E. Baumann, Engineer of Design
APPROVED Richard H. Golterman, Chief Highway Engineer

EAST & WEST ABUTMENTS
F.A. RT. 67 SEC. 134 BR
MADISON COUNTY
STA. 623+90

K&E CO 19-1255

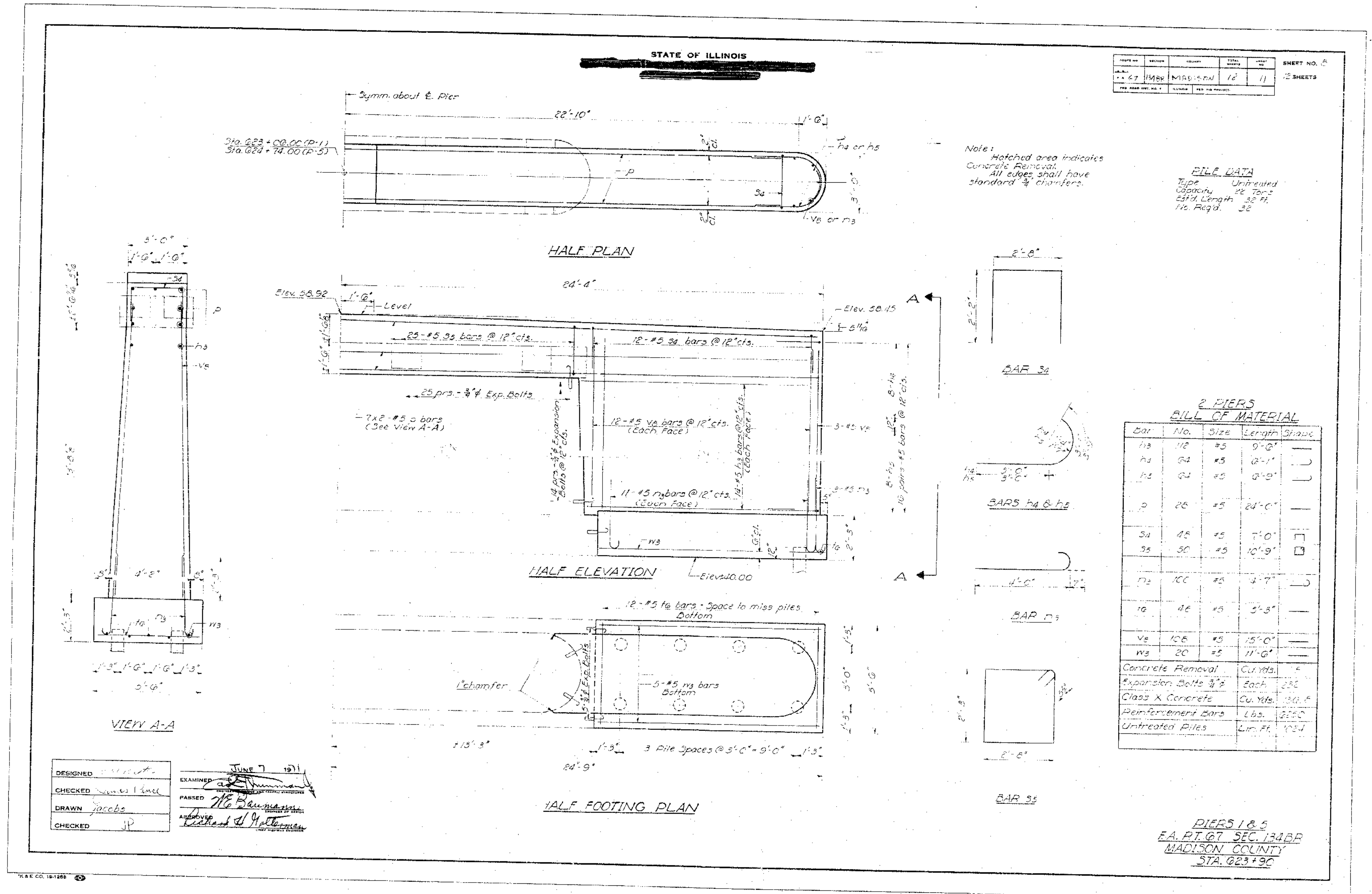
PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed00691\plan\pln023a.dgn
PLOT SCALE = 20.000 ' / IN.
USER NAME = osmantm

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE
PLANS
FYI
FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56H
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE
PLANS
FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = [illegible]
PLOT SCALE = 20.000 ' / IN.
USER NAME = [illegible]

CONTRACT NO. 76902

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56I
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS

SECTION A-A

SECTION B-B

SECTION THRU WING WALL

WING WALL REINFORCEMENT

BARS 1 & 2

BARS 3 & 4

CORNER DETAIL

PILE DATA

Type Untreated
Capacity 24 Tons
Length 35 ft.
No. Req'd. 36 + 8 test piles

Work this sheet with Sheet No. 2.

DESIGNED		EXAMINED	
CHECKED		PASSED	
DRAWN		APPROVED	
CHECKED			

ABUTMENT DETAILS
F.A.RT. 61 SEC. 134 BR
MADISON COUNTY
STA. 633+90

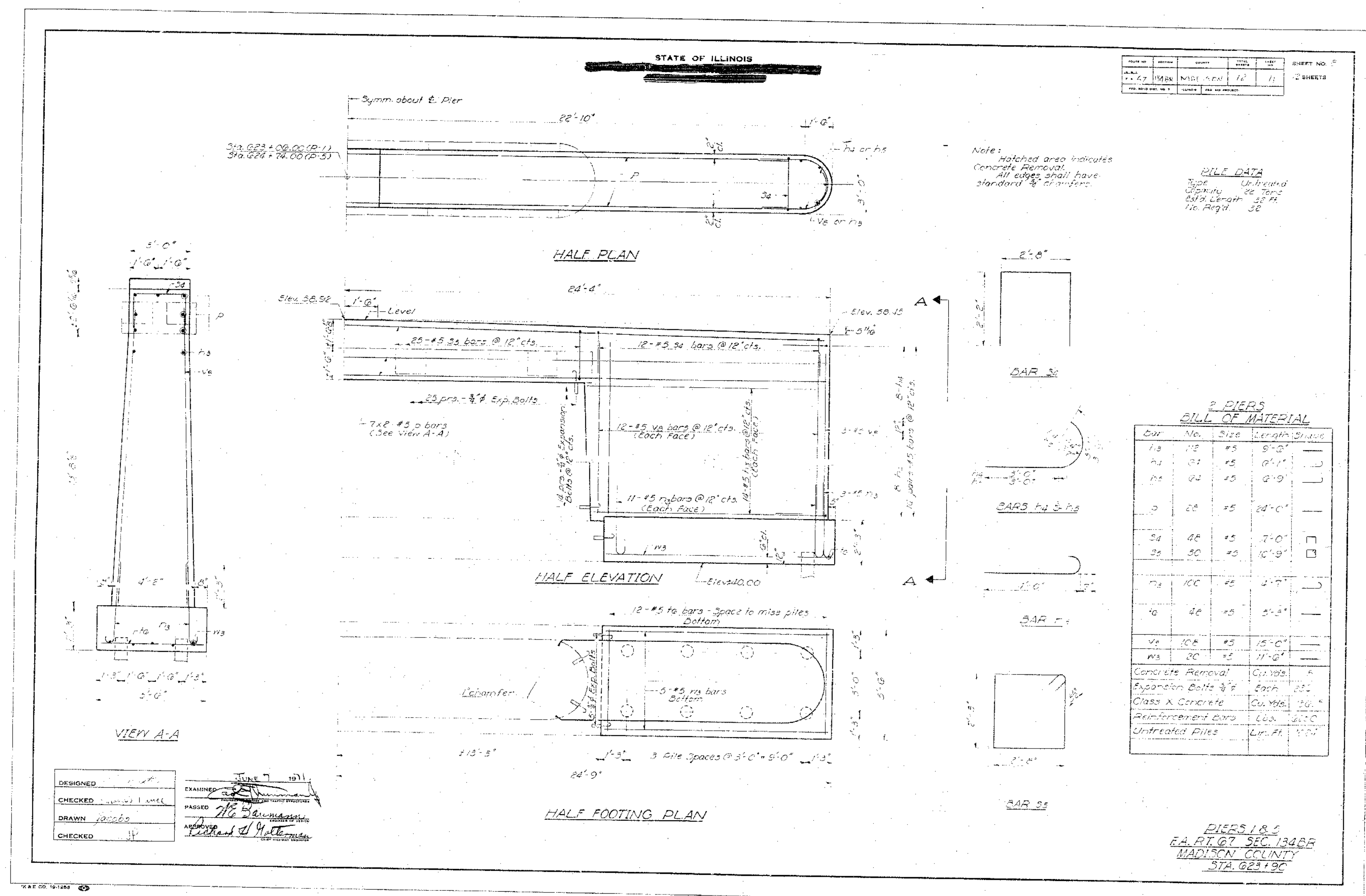
REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE
PLANS
FYI
FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed88691\plan\bhr823a.dgn
PLOT SCALE = 28.000 '/ IN.
USER NAME = osmanton

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56J
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

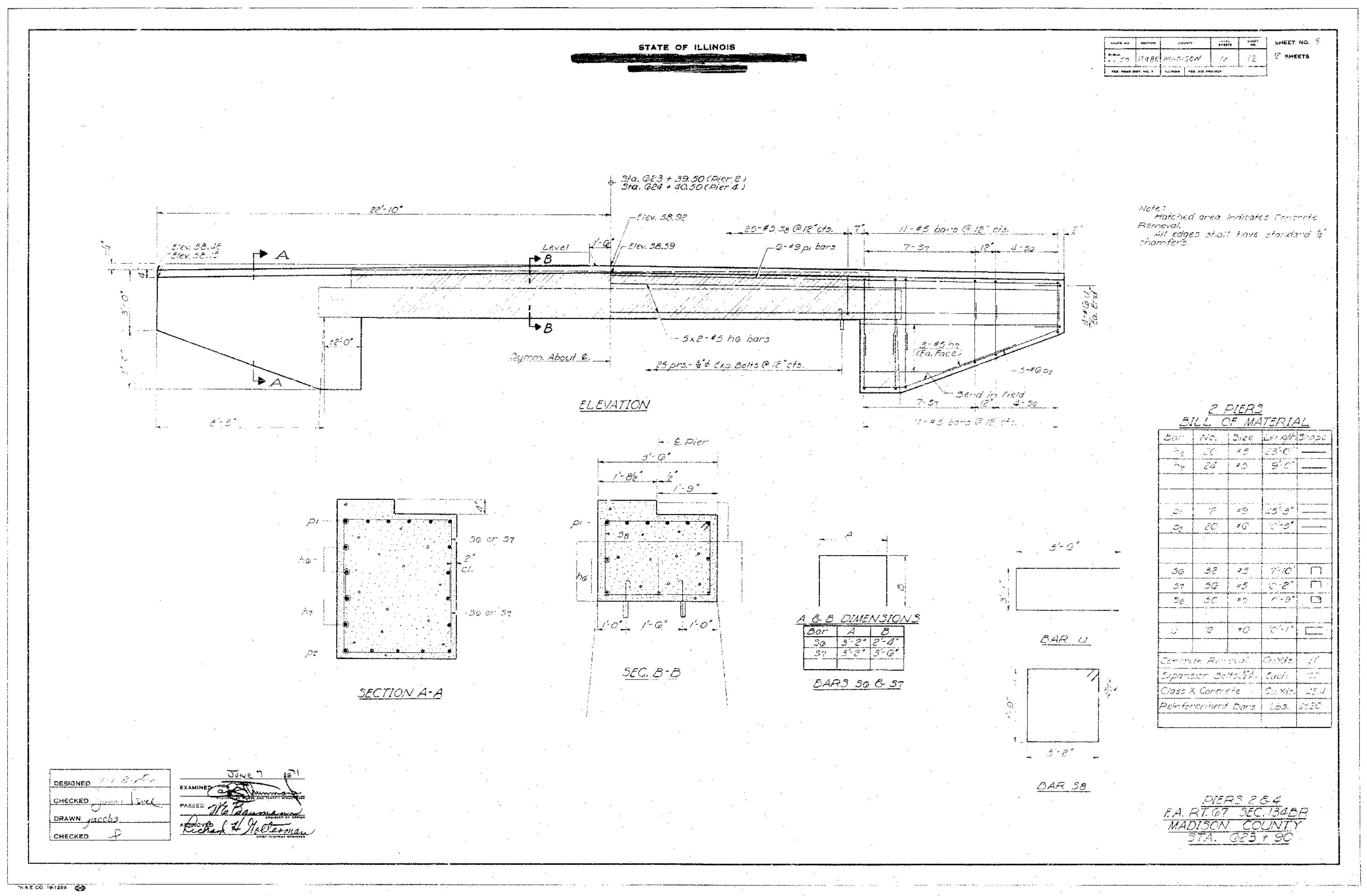
EXISTING BRIDGE PLANS FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\ed00691\plan\pln023a.dgn
PLOT SCALE = 20.000 ' / IN.
USER NAME = osmantm

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56K
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE
PLANS
FYI

FAP ROUTE 785
SECTION 134-1BR-2
MADISON COUNTY

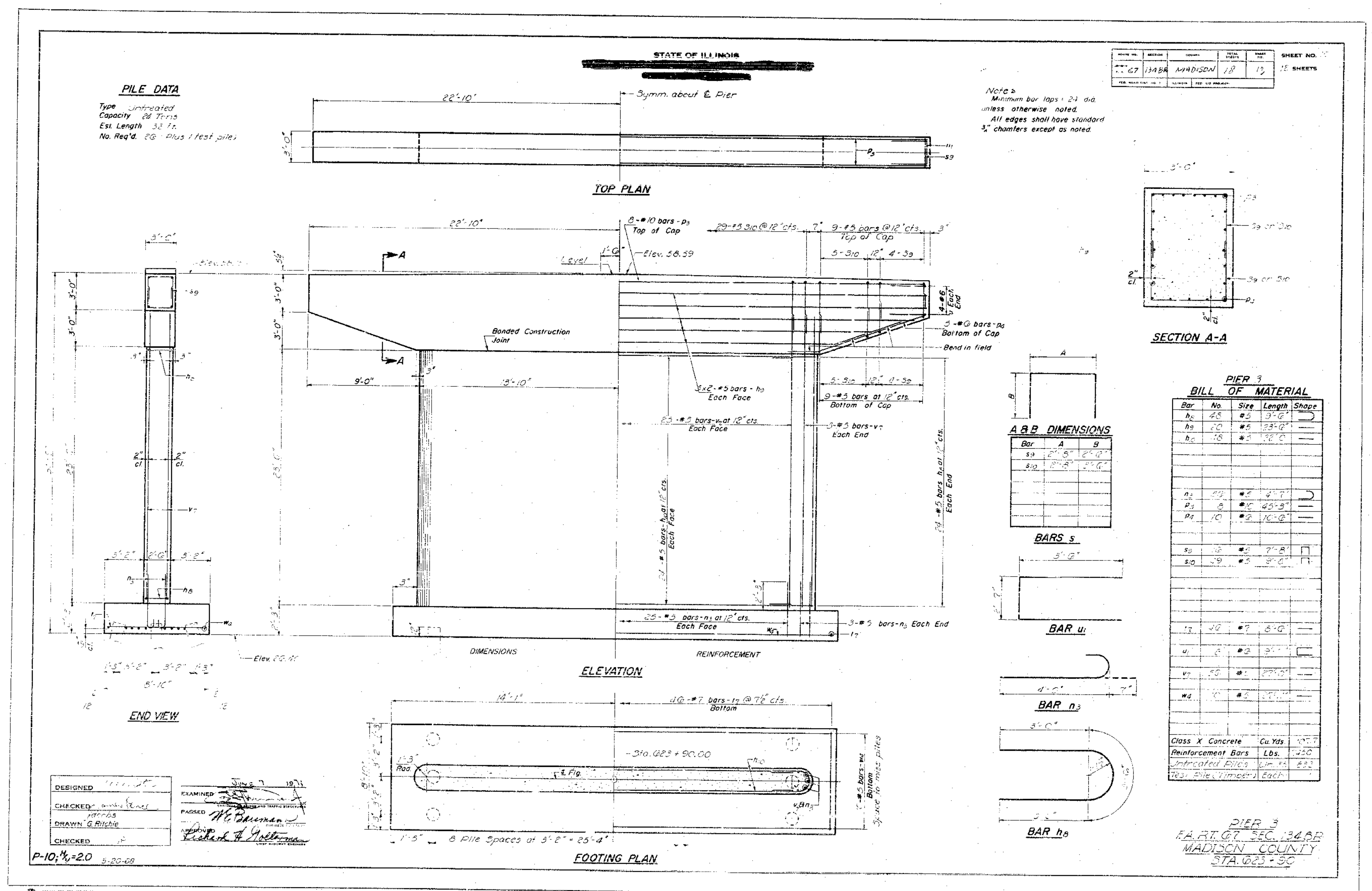
PLOT DATE = 3/22/2007
FILE NAME = o:\projects\ed00691\plan\pln023a.dgn
PLOT SCALE = 20.000 ' / IN.
USER NAME = osmantm

CONTRACT NO. 76902

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	134-1BR-2	MADISON	56	56L

STA. TO STA.

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS FYI

FAP ROUTE 785

SECTION 134-1BR-2

MADISON COUNTY

PLOT DATE = 3/22/2007
FILE NAME = a:\projects\ed00691\plan\pln623a.dgn
PLOT SCALE = 20.000 ' / IN.
USER NAME = osmanm