

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-2BR1)B-1	FAYETTE	71	1
		ILLINOIS	CONTRACT NO. 74235	

**INDEX OF SHEETS**

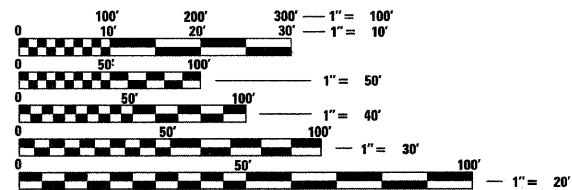
1. COVER SHEET
2. GENERAL NOTES & HIGHWAY STANDARDS
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTIONS
5. SCHEDULE OF QUANTITIES
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- 61-71. CROSS SECTIONS

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PROPOSED**  
**HIGHWAY PLANS**

**FAP ROUTE 752**  
**SECTION (U-2BR1)B-1**  
**PROJECT: ACBRF-0752(004)**  
**FAYETTE COUNTY**  
**BRIDGE REPLACEMENT**  
**IL ROUTE 185 (US ROUTE 40) OVER CAMP CREEK**

C-97-037-07  
R1E

PROJECT INCLUDES A FOUR SPAN  
STEEL WIDE FLANGE COMPOSITE  
BEAM BRIDGE. 394'-0" BACK TO  
BACK OF ABUTMENTS. 39'-2" OUT  
TO OUT DECK

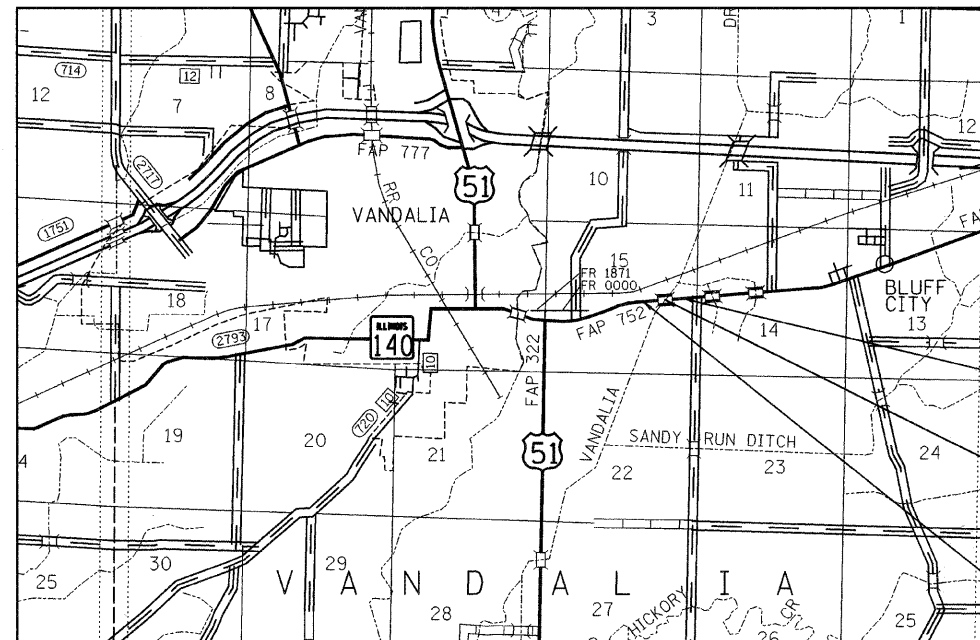


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT  
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS  
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

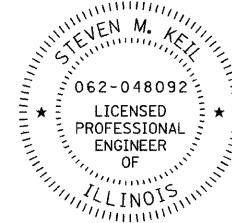
DISTRICT 7 NO. (217) 342-3951  
PROJECT ENGINEER: MARK DAUGHERTY  
UNIT CHIEF:  
TOWNSHIP:

CONTRACT NO. 74235

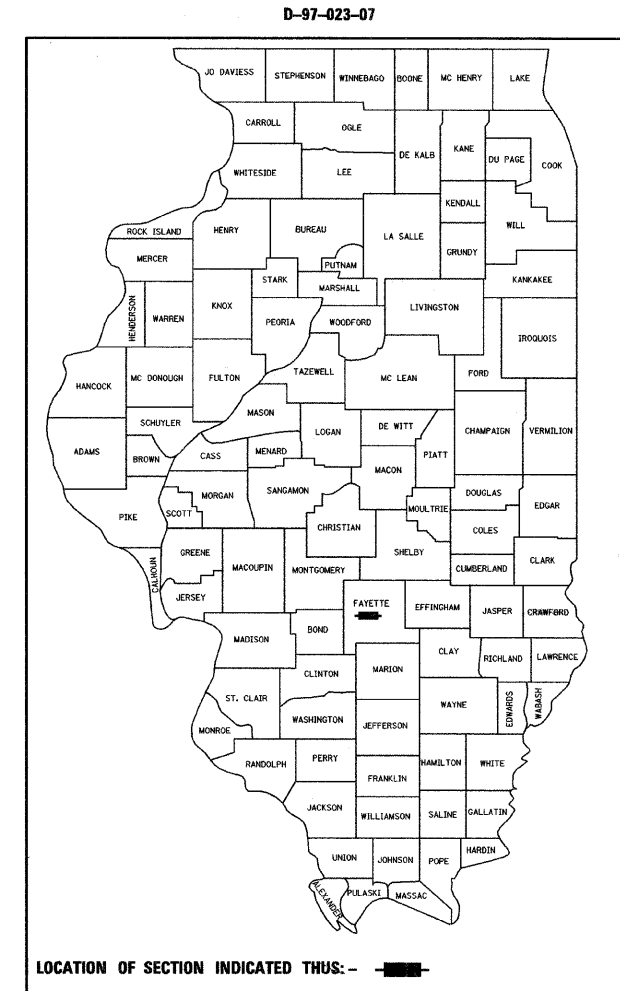


LOCATION MAP  
SCALE 1" = 6000'

GROSS LENGTH = 1069 FT. = 0.202 MILE  
NET LENGTH = 1069 FT. = 0.202 MILE



*Steven M. Keil*  
STEVEN M. KEIL, P.E.  
License Expires 11/30/2009  
09-25-09 Date



FUNCTIONAL CLASS: RURAL MINOR ARTERIAL  
DESIGN SPEED: 60 MPH  
POSTED SPEED: 55 MPH  
ADT: 3,900 (2009)  
PV: 92%  
SU: 5%  
MU: 3%

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED *October 9, 2009*

*Roger L. Dickell*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

*December 4, 2009*  
*Charles J. Ingersoll*  
ENGINEER OF DESIGN AND ENVIRONMENT

*December 4, 2009*  
*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

GENERAL NOTES

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED TO BE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. ILLINOIS LAW REQUIRES A MINIMUM 48-HOUR NOTICE TO ALL UTILITY COMPANIES BEFORE DIGGING. FIELD LOCATIONS OF UNDERGROUND FACILITIES MAY BE OBTAINED BY CALLING THE J.U.L.I.E. SYSTEM AT 800-892-0123 AND PROVIDING 48 HOURS ADVANCE NOTICE. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL AND REARRANGEMENT OPERATIONS IN ORDER THAT THESE OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.

THE CONTRACTOR SHALL STAGE ALL WORK IN SUCH A WAY AS TO MAINTAIN INGRESS AND EGRESS TO ALL ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH ALL EARTH SURFACES DISTURBED BY CONSTRUCTION. SEE THE SEEDING SCHEDULE FOR ESTIMATED PLAN QUANTITIES.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS INCLUDED IN THESE PLANS.

THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURES ARE PLACED.

THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.

FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES.

ALL HOT-MIX ASPHALT 2.016 TONS/CU YD

ALL AGGREGATE 2.05 TONS/CU YD

HOT-MIX MATERIALS:  
ON PAVEMENT 0.09 GAL/SQ YD  
INTERMEDIATE LIFTS (FOG COAT) 0.04 GAL/SQ YD  
ON AGGREGATE SURFACE 0.32 GAL/SQ YD

AGGREGATE (PRIME COAT) 0.0015 TONS/SQ YD

ALL EXISTING ROADWAY FEATURES SUCH AS PAVEMENT, CURB, SIDEWALK, DRIVEWAY PAVEMENT, CULVERTS, HEADWALLS, RIPRAP, FENCING, RETAINING WALLS, ETC. WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR UNLESS NOTED OTHERWISE ON THE PLANS. ALL MISCELLANEOUS FEATURES WHICH ARE TO BE REMOVED AND FOR WHICH THERE IS NO SPECIFIC PAY ITEM, WILL NOT BE MEASURED SEPARATELY FOR PAYMENT. THE COST OF THIS REMOVAL WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR EARTH EXCAVATION.

AGGREGATE SHOULDERS, TYPE B SHALL BE CRUSHED STONE, CRUSHED CONCRETE, OR RAP.

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE HMA PLANT QUALITY CONTROL LAB SO THAT HMA PLANT REPORTS CAN BE EMAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL HOT-MIX ASPHALT ITEMS.

WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A SAW CUT SHALL BE MADE TO ACHIEVE A NEAT BUTT JOINT. SAWED JOINTS FOR REMOVALS AND BUTT JOINTS SHALL BE CONSIDERED INCLUDED IN THE ITEM BEING REMOVED OR CONSTRUCTED.

AGGREGATE SURFACE COURSE, TYPE B SHALL BE CRUSHED STONE OR CRUSHED CONCRETE.

A PIPE DRAIN SHALL BE INSTALLED FROM THE ABUTMENT DRAIN DOWN THE SLOPE TO THE DITCH. ALL WORK NECESSARY TO ATTACH A PIPE DRAIN TO THE ABUTMENT DRAIN PIPE, TRENCHING IN THE PIPE DRAIN AND INSTALLING THE PIPE DRAIN TO THE CONCRETE HEADWALLS IS INCLUDED IN THE PAY ITEM PIPE UNDERDRAINS FOR STRUCTURES 4". SEE STRUCTURE PLANS FOR DESIGN INFORMATION.

SHORT-TERM PAVEMENT MARKINGS SHALL BE PAINT ON MILLED SURFACES AND TAPE ON THE FINAL SURFACE COURSE.

A SMALL WETLAND AREA EXISTS SOUTH OF THE BRIDGE BEYOND CONSTRUCTION LIMITS AND SHALL NOT BE DISTURBED. CONTACT THE DISTRICT 7 ENVIRONMENTAL COORDINATOR AT 217-342-8249 FOR LOCATION. THE CONTRACTOR SHALL DELINEATE THIS AREA WITH FENCING. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT.

TEMPORARY BRIDGE TRAFFIC SIGNALS SHALL ONLY BE USED FROM **MARCH 1** TO **NOVEMBER 1**.

THE FOLLOWING SYMBOLS, ABBREVIATIONS AND PATTERNS SUPPLEMENT OR SUPERCEDE HIGHWAY STANDARD 000001:

AD	ALGEBRAIC DIFFERENCE IN GRADE
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION
BVCS	BEGINNING OF VERTICAL CURVE STATION
BO	BY OTHERS (USED IN CONJUNCTION WITH TBA & TBR)
CONSTR	CONSTRUCTION
CP	CONTROL POINT
ESMT	EASEMENT
ELEV	ELEVATION
EVCE	END OF VERTICAL CURVE ELEVATION
EVCS	END OF VERTICAL CURVE STATION
K	LENGTH OF VERTICAL CURVE PER PERCENT GRADE DIFFERENCE
N/F	NOW OR FORMERLY
O/C	OIL AND CHIP
PERM	PERMANENT
PVI	POINT OF VERTICAL INTERSECTION
PVC	POLYVINYL CHLORIDE PIPE
TCE	TEMPORARY CONSTRUCTION EASEMENT
TUP	TEMPORARY USE PERMIT
TBA	TO BE ADJUSTED
TBRL	TO BE RELOCATED
TYP	TYPICAL
W	WIDTH

HIGHWAY STANDARDS

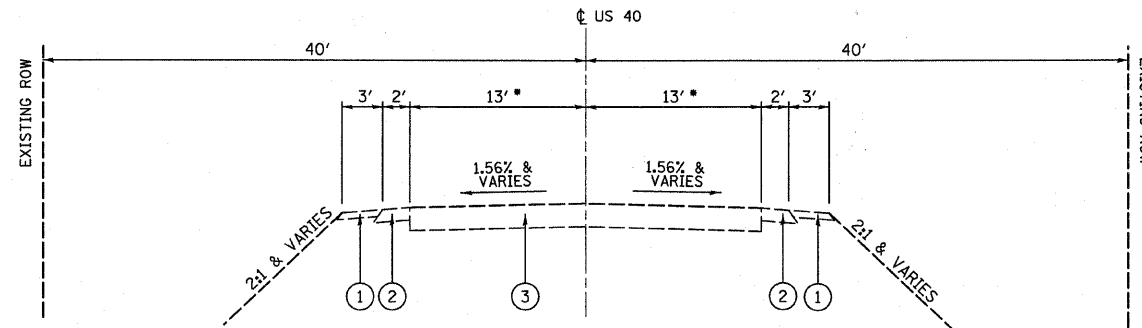
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
353001-04	PCC BASE COURSE WITH HMA BINDER AND SURFACE COURSES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
630001-08	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT OF WAY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-03	OFF-RD OPERATIONS, 2L, 2W 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701321-10	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES &amp; HIGHWAY STANDARDS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\27034\W07and8\W\crosstation\CA000\Sheet\74235-shr-gennote.dgn	DRAWN -	REVISED -	752		(U-2BR)B-1	FAYETTE	71	02					
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 74235										
PLOT DATE = 9/25/2009	DATE -	REVISED -	SCALE:		SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES			80% FED 20% STATE	CONSTRUCTION TYPE CODES	
CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	1000-2A	X070-2A
20200100	EARTH EXCAVATION	CU YD	1,350	80	1,270
20400800	FURNISHED EXCAVATION	CU YD	5,935	5,935	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	134	-	134
25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	1.75	1.75	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	480	480	
28000400	PERIMETER EROSION BARRIER	FOOT	2,259	2,259	
28000500	INLET AND PIPE PROTECTION	EACH	2	2	
28100109	STONE RIPRAP, CLASS A5	SQ YD	2,329	-	2,329
28200200	FILTER FABRIC	SQ YD	2,329	-	2,329
35650600	BASE COURSE WIDENING (VARIABLE DEPTH)	SQ YD	695	695	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	164	164	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	10	10	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	222	222	
40600300	AGGREGATE (PRIME COAT)	TON	5	5	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	462	462	
40600990	TEMPORARY RAMP	SQ YD	64	64	
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	438	438	
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	149	149	
44000151	HOT-MIX ASPHALT SURFACE REMOVAL, 1/2"	SQ YD	838	838	
44000100	PAVEMENT REMOVAL	SQ YD	149	149	
44004250	PAVED SHOULDER REMOVAL	SQ YD	370	370	
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	63	63	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	174	174	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	-	1
50200100	STRUCTURE EXCAVATION	CU YD	791	-	791
50300225	CONCRETE STRUCTURES	CU YD	431.7	-	431.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	551.1	-	551.1
50300260	BRIDGE DECK GROOVING	SO YD	1,698	-	1,698
50300280	CONCRETE ENCASEMENT	CU YD	15.8	-	15.8
50300300	PROTECTIVE COAT	SO YD	2,031	-	2,031
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	-	1
50500505	STUD SHEAR CONNECTORS	EACH	5,232	-	5,232
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	207,440	-	207,440
50800515	BAR SPLICERS	EACH	1,721	-	1,721
51201610	FURNISHING STEEL PILES HP12X63	FOOT	1,593	-	1,593
51201900	FURNISHING STEEL PILES HP14X89	FOOT	3,399	-	3,399
51202305	DRIVING PILES	FOOT	4,992	-	4,992
51203610	TEST PILE STEEL HP12X63	EACH	2	-	2
51203900	TEST PILE STEEL HP14X89	EACH	3	-	3
51205200	TEMPORARY SHEET PILING	SO FT	1,735	-	1,735
51500100	NAME PLATES	EACH	1	-	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	76.0	-	76.0

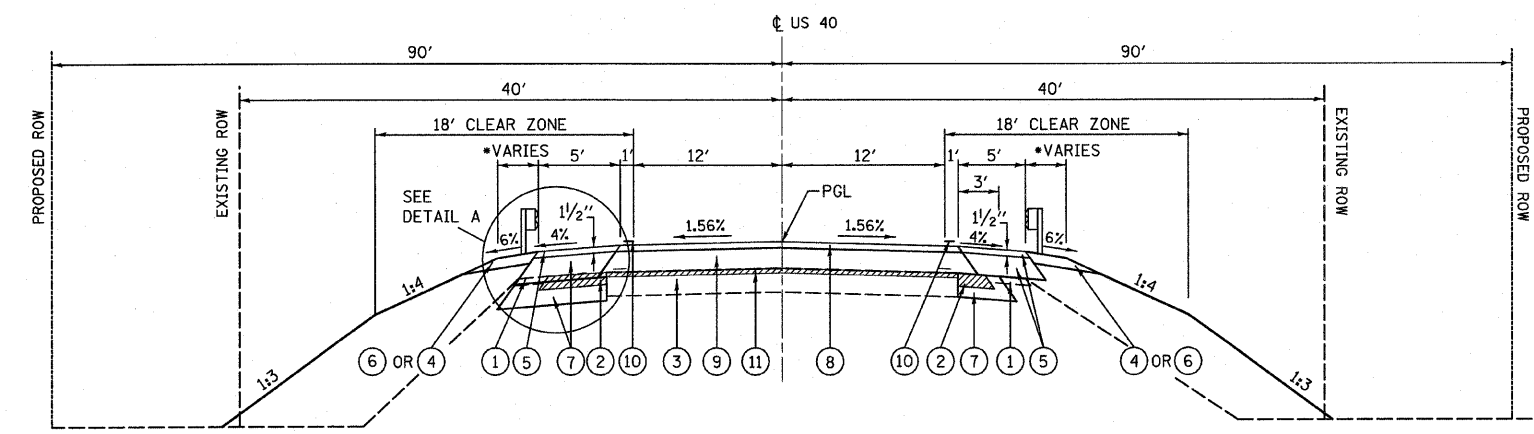
SUMMARY OF QUANTITIES			80% FED 20% STATE	CONSTRUCTION TYPE CODES	
CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	1000-2A	X070-2A
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12	-	12
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12	-	12
52100520	ANCHOR BOLTS, 1"	EACH	12	-	12
52100530	ANCHOR BOLTS, 1 1/4"	EACH	24	-	24
52100540	ANCHOR BOLTS, 1 1/2"	EACH	24	-	24
542D1069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	104	104	
54213459	END SECTIONS 24"	EACH	2	2	
58700300	CONCRETE SEALER	SO FT	532	-	532
59100100	GEOCOMPOSITE WALL DRAIN	SO YD	83	-	83
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	180	-	180
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	550.0	550.0	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	297	297	
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	10	10	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	20	20	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	632	632	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2,483	2,483	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1,644	1,644	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,038	1,038	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,038	1,038	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2,483	2,483	
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	17	17	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SO FT	827	827	
X0323830	DRAINAGE SCUPPERS, DS-11	EACH	4	-	4
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1	-	1
X5080600	MECHANICAL SPLICERS	EACH	370	-	370
⊙ 20076600	TRAINEES	HOUR	500	250	250
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	52	-	52
Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SO YD	367	367	

\* SPECIALTY ITEMS  
⊙ Y080



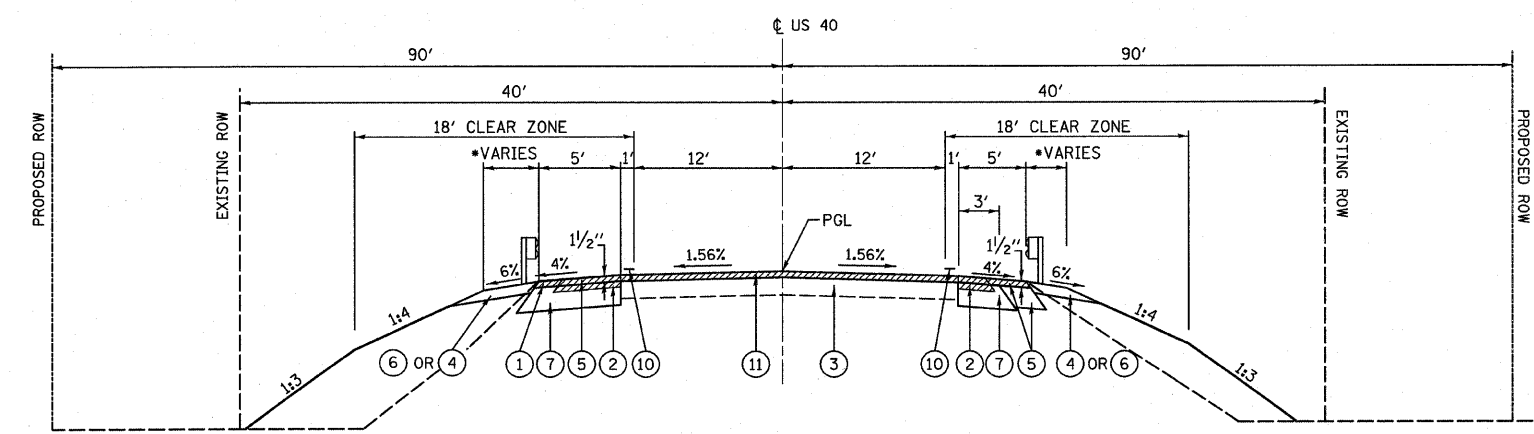
•NOTE:  
EX LANE WIDTH IS 12' & EX PAVED SHOULDER WIDTH IS 4' FROM:  
STA 48+42.28 TO 49+48.90 LT  
STA 48+42.29 TO 49+49.46 RT  
STA 53+75.60 TO STA 54+65.15 LT  
STA 53+75.60 TO STA 54+65.15 RT

**EXISTING TYPICAL SECTION**  
**US ROUTE 40**  
(NOT TO SCALE)  
STA. 45+98.00 TO STA. 49+19.46  
STA. 53+57.04 TO STA. 56+79.00



•NOTE: AGGREGATE SHOULDER SHALL BE 2'-0" WIDE WHERE GUARD RAIL IS NOT REQUIRED. BITUMINOUS SHOULDER STABILIZATION SHALL BE 3'-0" WIDE WHERE GUARD RAIL IS REQUIRED

**PROPOSED TYPICAL SECTION**  
**US ROUTE 40**  
(NOT TO SCALE)  
STA. 47+42.38 TO STA. 49+15.50  
OMISSION STA. 49+15.50 TO STA. 53+68.50  
STA. 53+68.50 TO STA. 55+21.42

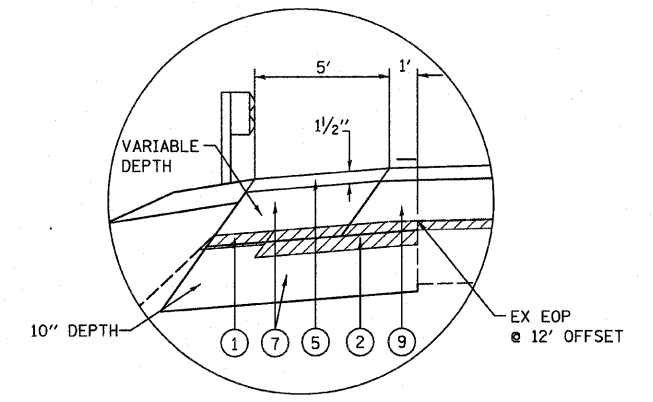


•NOTE: AGGREGATE SHOULDER SHALL BE 2'-0" WIDE WHERE GUARD RAIL IS NOT REQUIRED. BITUMINOUS SHOULDER STABILIZATION SHALL BE 3'-0" WIDE WHERE GUARD RAIL IS REQUIRED

**PROPOSED TYPICAL SECTION**  
**US ROUTE 40**  
(NOT TO SCALE)  
STA. 46+00.00 TO STA. 47+42.38  
STA. 55+21.42 TO STA. 56+69.00

- LEGEND**
- ① EXISTING AGGREGATE SHOULDER
  - ② EXISTING PAVED SHOULDER
  - ③ EXISTING PAVEMENT
  - ④ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8"
  - ⑤ PROPOSED HOT-MIX ASPHALT SHOULDERS, VARIABLE DEPTH
  - ⑥ PROPOSED BITUMINOUS STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL
  - ⑦ PROPOSED BASE COURSE WIDENING, VARIABLE DEPTH (10" MIN. UNDER TRAFFIC)
  - ⑧ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 1/2"
  - ⑨ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, VARIABLE DEPTH
  - ⑩ PROPOSED FINAL PAVEMENT MARKING
  - ⑪ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1/2"

TO BE REMOVED



**DETAIL A**  
STA 48+42.28 TO STA 49+15.50 LEFT  
STA 53+68.50 TO STA 54+65.15 LEFT  
EX PAVEMENT NARROWS TO 12' LANES APPROACHING THE EXISTING STRUCTURE.  
TO PROVIDE A STABLE BASE FOR PROPOSED PAVEMENT STRUCTURE, WIDEN LEFT SIDE DURING STAGE 1 (SEE CROSS SECTIONS):

**HMA MIXTURE REQUIREMENTS**

	HMA BINDER COURSE	HMA SURFACE COURSE	BASE COURSE WIDENING	HMA SHOULDERS
PG GRADE	PG64-22	PG64-22	PG64-22	PG58-22
DESIGN AIR Voids	4.0% @ N70	4.0% @ N70	4.0% @ N70	4.0% @ N30 (TOP LIFT) 4.0% @ N70 (BOTTOM LIFT)
MIXTURE COMPOSITION	IL-19.0	IL-9.5	IL-19.0	IL-9.5 (TOP LIFT) IL-19.0 (BOTTOM LIFT)
FRICTION AGGREGATE		MIXTURE C		MIX C (TOP LIFT)

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -
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PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 9/25/2009		DATE -	REVISED -

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

**TYPICAL SECTIONS**

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-2BR)B-1	FAYETTE	71	04
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74235	

**EARTHWORK SCHEDULE**

STATION	STATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
		20200100 (CU YD)	(NOTE 1) (CU YD)	(NOTE 2) (CU YD)	20400800 (CU YD)
38+45.00	39+55.00	15	12	738	-726
43+50.00	49+16.00			3066	-3066
49+16.00	53+45.00	1270	953		953
53+45.00	57+05.00	65	50	3146	-3096
<b>TOTAL</b>		<b>1350</b>	<b>1015</b>	<b>6950</b>	<b>-5935</b>

**EARTHWORK NOTES:**

- EARTH EXCAVATION QUANTITY INCLUDES REMOVING EXIST. END SLOPES UNDER THE BRIDGE
- ESTIMATED SHRINKAGE FACTOR = 25%.
- APPROXIMATE EMBANKMENT QUANTITY IS SHOWN FOR INFORMATION ONLY.

**TRAFFIC CONTROL ITEMS**

STATION	STATION	TEMP CONC BARRIER	REL TEMP CONC BARRIER	IMP ATTN TEMP NRD TL3	IMP ATTN REL NRD TL3
		70400100 (FOOT)	70400200 (FOOT)	Z0030250 (EACH)	Z0030350 (EACH)
46+17.40	47+17.40	100.0	100.0	1	1
47+17.40	55+54.90	837.5	837.5		
55+54.90	56+54.90	100.0	100.0	1	1
<b>TOTAL</b>		<b>1,038</b>	<b>1,038</b>	<b>2</b>	<b>2</b>

**SEEDING SCHEDULE**

STATION	STATION	SIDE	SEEDING CL 2 SPL	TEMP EROS CONTR SEED	NITROGEN FERT NUTR	PHOSPHORUS FERT NUTR	POTASSIUM FERT NUTR	MULCH METHOD 2
			25001000 (ACRE)	28000250 (NOTE 2) (POUND)	(NOTE1) (POUND)	(NOTE1) (POUND)	(NOTE1) (POUND)	(NOTE1) (TON)
38+49.52	39+49.92	RT	0.1	30	9	9	9	0.2
43+93.15	49+35.50	LT	0.4	120	36	36	36	0.8
45+00.00	49+45.50	RT	0.3	90	27	27	27	0.6
53+48.50	57+50.00	LT	0.3	90	27	27	27	0.6
53+48.50	57+50.00	RT	0.5	150	45	45	45	1.0
<b>TOTAL</b>			<b>1.75</b>	<b>480</b>	<b>144</b>	<b>144</b>	<b>144</b>	<b>3</b>

**SEEDING NOTES:**

- FERTILIZER AND MULCH QUANTITIES ARE SHOWN FOR INFORMATION ONLY. THE COST FOR FERTILIZER NUTRIENTS AND MULCH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR SEEDING, CLASS 2 (SPECIAL).
- THE TOTAL QUANTITY FOR TEMP EROS CONTR SEEDING ASSUMES AN APPLICATION RATE OF 100 LBS/ACRE AND INCLUDES 3 APPLICATIONS.

**PAVEMENT SCHEDULE**

STATION	STATION	SIDE	BASE CSE WID VAR DP	BIT MATLS PR CT	AGG PR CT	HMA BC IL-19.0 N70	HMA SC "C" N70	HMA SURF REM 1/2	PAVEMENT REMOVAL	PAVED SHLD REMOVAL	AGGREGATE SHLDS B 8	HMA SHOULDERS	BIT STAB 6 AT SPBGR
			35650600 (SQ YD)	40600100 (TON)	40600300 (TON)	40603085 (TON)	40603315 (TON)	44000151 (SQ YD)	44000100 (SQ YD)	44004250 (SQ YD)	48101600 (SQ YD)	48203100 (TON)	Z0005215 (SQ YD)
46+00.00	49+15.50	LT	176							102	29	17	74
48+42.28	49+15.50	LT	49										
53+68.50	54+65.15	LT	181										
53+68.50	56+69.00	LT	52							81	3	18	109
46+00.00	49+69.15	RT	131							109	6	78	109
53+37.75	56+69.00	RT	106							78	25	61	75
46+00.00	49+15.50	-		114	3	250	76	461					
49+12.50	49+49.17	-							103				
53+57.08	53+71.50	-							46				
53+68.50	56+69.00	-		108	2	188	73	377					
<b>TOTAL</b>			<b>695</b>	<b>222</b>	<b>5</b>	<b>438</b>	<b>149</b>	<b>838</b>	<b>149</b>	<b>370</b>	<b>63</b>	<b>174</b>	<b>367</b>

**BUTT JOINT SCHEDULE**

STATION	STATION	HMA SURF REM BUTT JT	TEMPORARY RAMP
		40600982 (SQ YD)	40600990 (SQ YD)
46+00.00	47+53.00	221	14
55+02.00	56+69.00	241	14
49+10.50	49+15.50		18
53+68.50	53+73.50		18
<b>TOTAL</b>		<b>462</b>	<b>64</b>

**EROSION CONTROL SCHEDULE**

STATION	STATION	SIDE	PERIMETER EROS BAR	INLET & PIPE PROTECT
			28000400 (FOOT)	28000500 (EACH)
38+48.62	38+84.00	RT	89	
38+48.00		RT		1
39+16.00	39+50.00	RT	88	
43+93.15	44+49.00	LT	79	
44+81.00	46+00.00	LT	143	
45+00.00	46+00.00	RT	101	
46+00.00	50+25.00	LT	428	
46+00.00	50+06.00	RT	408	
52+85.00	57+50.00	RT	485	
53+26.00	57+50.00	LT	438	
53+22.37		RT		1
<b>TOTAL</b>			<b>2,259</b>	<b>2</b>

**FURNISHING & ERECTING RIGHT OF WAY MARKERS SCHEDULE**

STATION	OFFSET	SIDE	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS
			66600105 (EACH)
43+99.97	40.00	LT	1
43+99.97	40.00	RT	1
46+00.00	65.00	LT	1
49+00.00	65.00	LT	1
49+00.00	100.00	RT	1
51+00.00	80.00	LT	1
55+00.00	80.00	LT	1
55+00.00	100.00	RT	1
59+00.00	40.00	RT	1
60+00.00	40.00	LT	1
<b>TOTAL</b>			<b>10</b>

**PAVEMENT MARKING SCHEDULE**

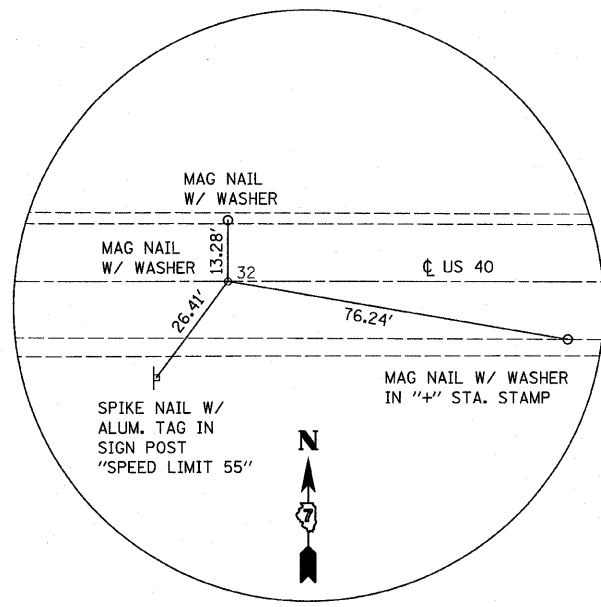
STATION	STATION	LOCATION	SHORT-TERM PAVT MKING	TEMP PVT MK LINE 4	WORK ZONE PAVT MK REM	PAINT PAVEMENT MARKING - LINE 4"	PAVT MARKING REMOVAL
			70300100 (FOOT)	70300220 (FOOT)	70301000 (SQ FT)	(NOTE 1) 78001110 (FOOT)	78300100 (SQ FT)
45+06.30	58+14.34	LT			463		
46+00.00	56+69.00	LT	128	1,069		1,069	356
46+00.00	56+69.00	RT	128	1,069		1,069	356
44+47.40	58+26.79	CL	376	345		345	115
46+43.23	56+24.97	RT			354		
44+68.02	57+46.90	RT			451		
46+16.92	56+69.00	LT			376		
<b>TOTAL</b>			<b>632</b>	<b>2,483</b>	<b>1,644</b>	<b>2,483</b>	<b>827</b>

**PAVEMENT MARKING NOTES:**

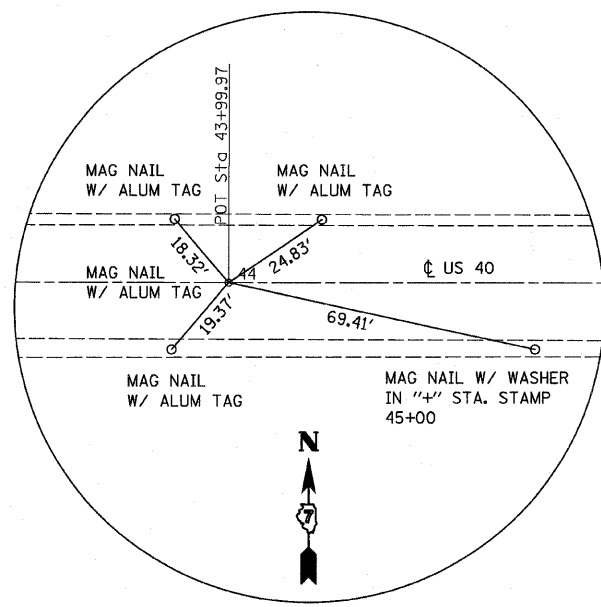
- SEE HIGHWAY STANDARD 780001 FOR PAVEMENT MARKING DETAILS.

**GUARDRAIL SCHEDULE**

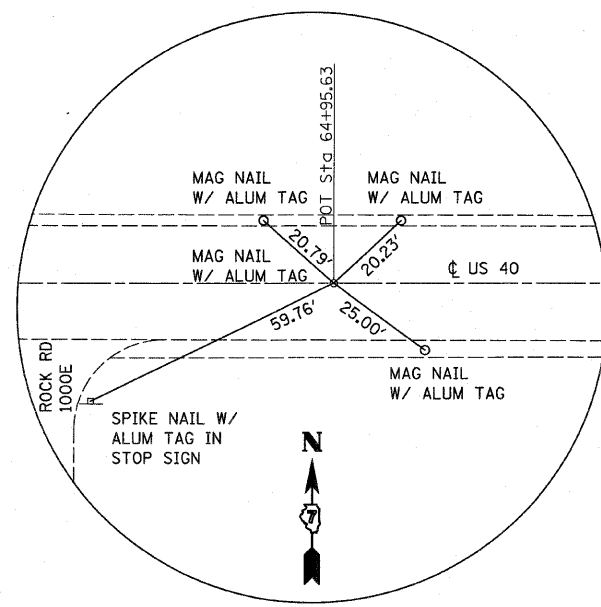
STATION	STATION	LOCATION	SPBGR TY A 6-FT POSTS	TRAF BAR TERM T6	TR BAR TRM T1 SPL TAN	GUARDRAIL REMOVAL	GUARDRAIL MKR TYPE A	TERMINAL MARKER - DIRECT APPLIED
			63000001 (FOOT)	63100085 (EACH)	63100167 (EACH)	63200310 (FOOT)	78200410 (EACH)	78201000 (EACH)
47+54.35	48+04.35	NW QUAD			1			1
48+04.35	48+91.85	NW QUAD	87.5				4	
48+91.85	49+35.00	NW QUAD		1				
49+06.13	49+84.50	NW QUAD				78		
46+54.35	47+04.35	SW QUAD			1			1
47+04.35	48+91.85	SW QUAD	187.5				4	
48+91.85	49+35.00	SW QUAD		1				
49+18.76	49+84.66	SW QUAD				66		
53+22.63	54+11.59	NE QUAD				89		
53+49.00	53+92.15	NE QUAD		1				
53+92.15	55+79.65	NE QUAD	187.5				4	
55+79.65	56+29.65	NE QUAD			1			1
53+22.08	53+85.98	SE QUAD				64		
53+49.00	53+92.15	SE QUAD		1				
53+92.15	54+79.65	SE QUAD	87.5				5	
54+79.65	55+29.65	SE QUAD			1			1
<b>TOTAL</b>			<b>550.0</b>	<b>4</b>	<b>4</b>	<b>297</b>	<b>17</b>	<b>4</b>



P.O.T. STA. 32+00.00  
 N 836,407.42  
 E 772,673.76



P.O.T. STA. 43+99.97  
 N 836,486.47  
 E 773,871.12



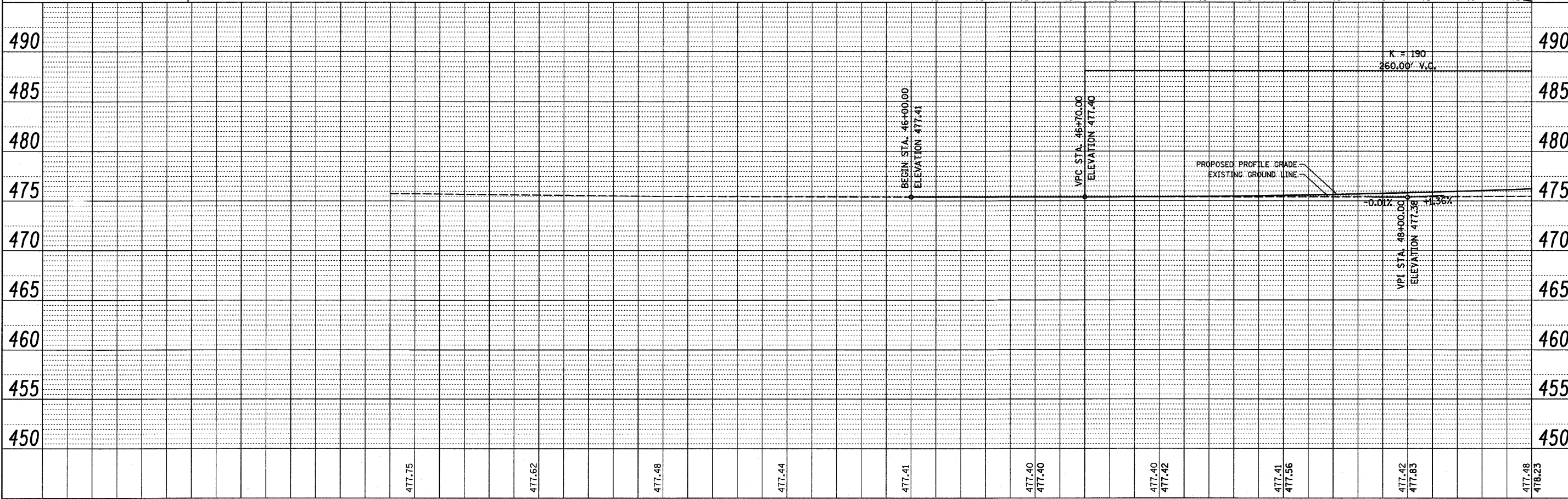
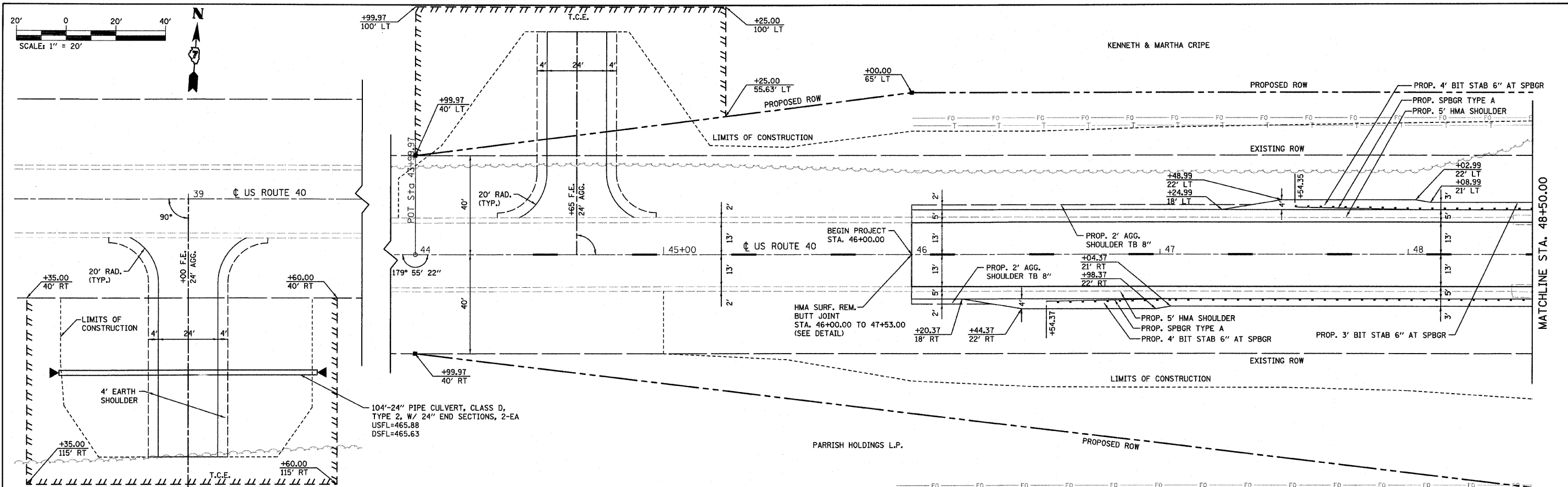
P.O.T. STA. 64+95.63  
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 E 775,962.04

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	PLOT DATE = 9/25/2009	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

ALIGNMENT, TIES & BENCHMARKS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-2BR)B-1	FAYETTE	71	06
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 74235	



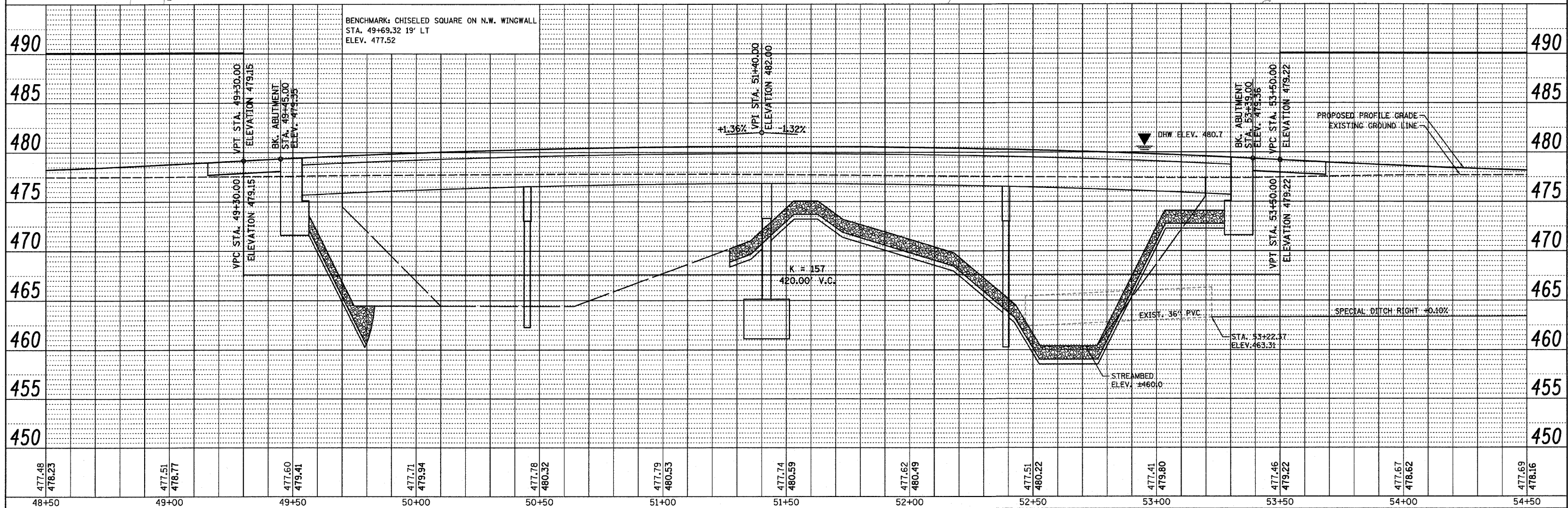
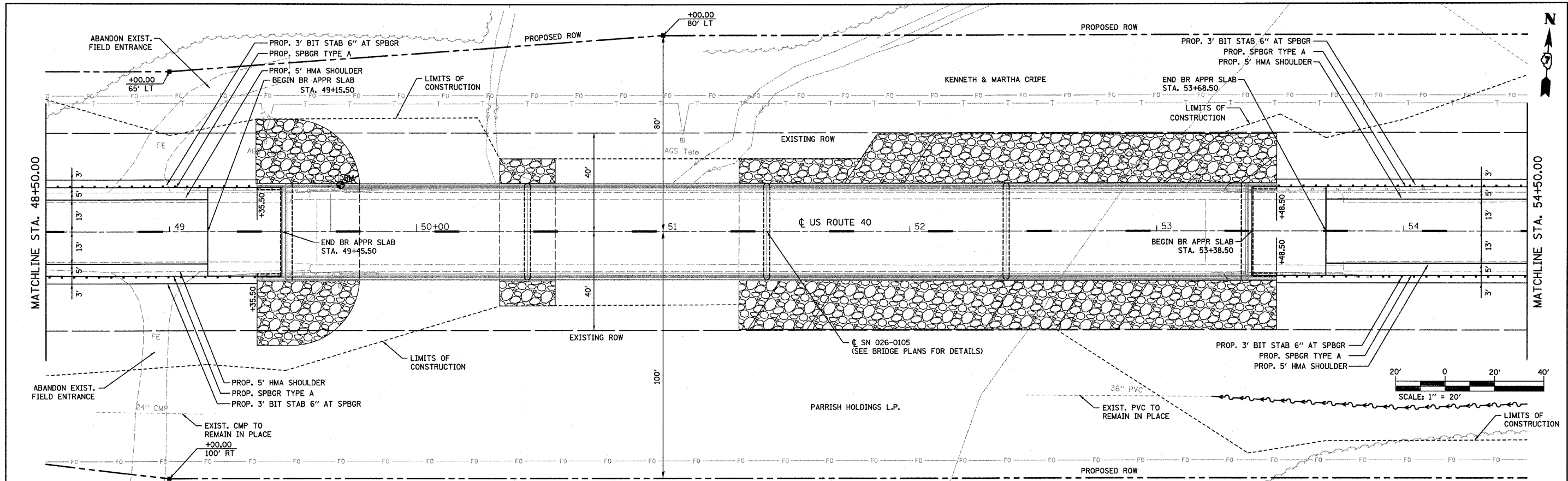
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PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 74235							
PLOT DATE = 9/25/2009	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							

PLAN	DATE
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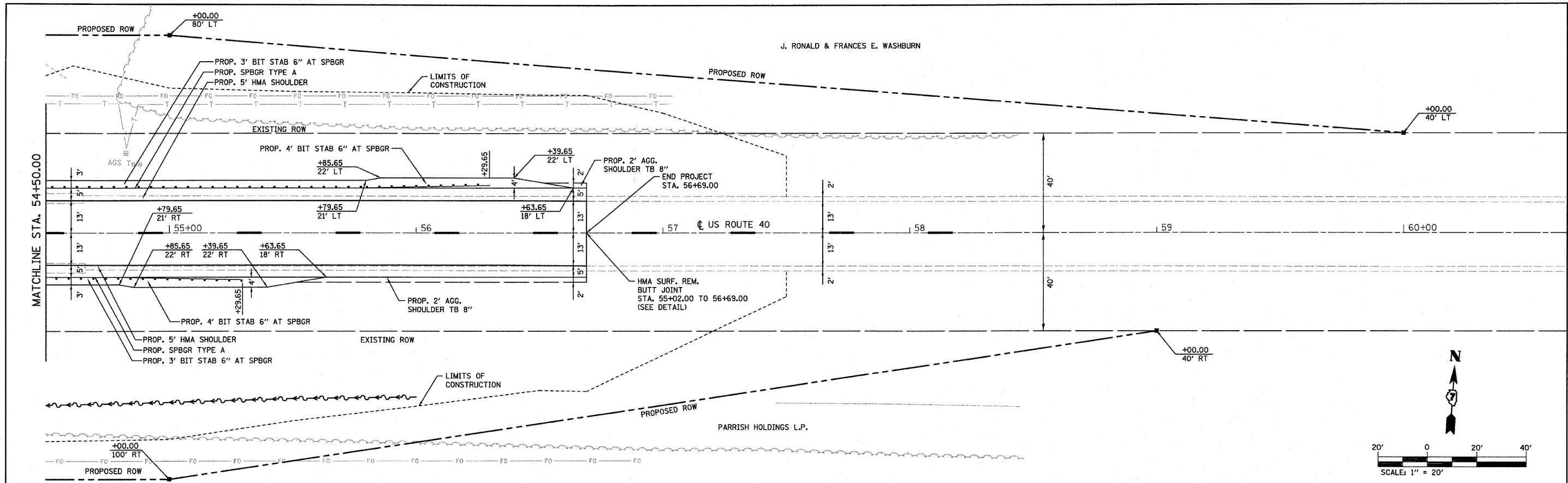


477.48 478.23	477.51 478.77	477.60 479.41	477.71 479.94	477.78 480.32	477.79 480.53	477.74 480.59	477.62 480.49	477.51 480.22	477.41 479.80	477.46 479.22	477.67 478.62	477.69 478.16
48+50	49+00	49+50	50+00	50+50	51+00	51+50	52+00	52+50	53+00	53+50	54+00	54+50

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN &amp; PROFILE SHEET</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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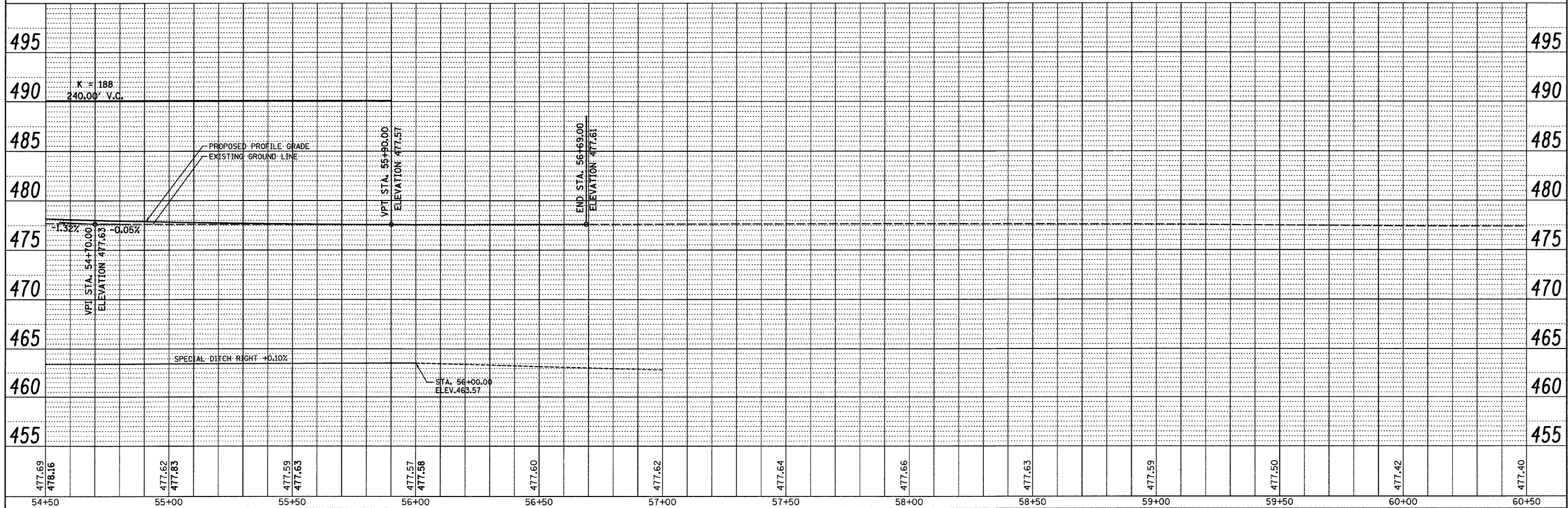
SCALE: 1"=20' SHEET NO. 02 OF 03 SHEETS STA. 48+50.00 TO STA. 54+50.00





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PROFILE	REVISIONS	DATE
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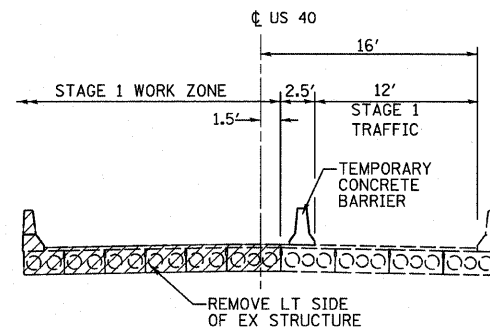


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		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

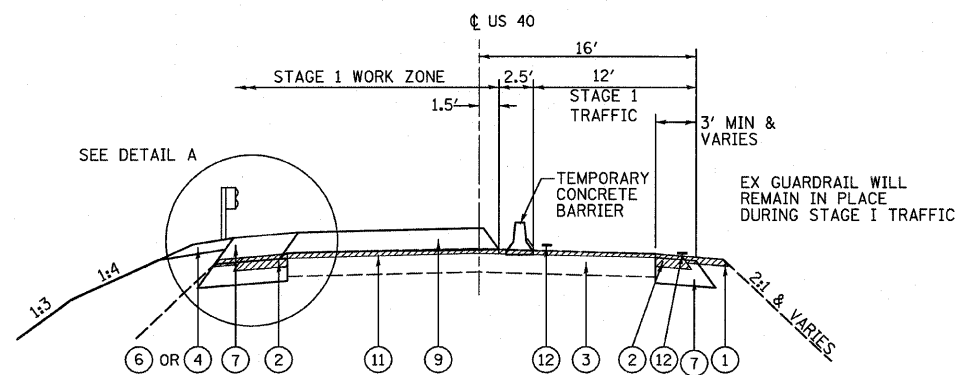
**LEGEND**

- ① EXISTING AGGREGATE SHOULDER
- ② EXISTING PAVED SHOULDER
- ③ EXISTING PAVEMENT
- ④ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8"
- ⑤ PROPOSED HOT-MIX ASPHALT SHOULDERS
- ⑥ PROPOSED BITUMINOUS STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL
- ⑦ PROPOSED BASE COURSE WIDENING, VARIABLE DEPTH (10" MIN. UNDER TRAFFIC)
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 1 1/2"
- ⑨ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, VARIABLE DEPTH
- ⑩ PROPOSED FINAL PAVEMENT MARKING
- ⑪ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1/2"
- ⑫ PROPOSED TEMPORARY PAVEMENT MARKING

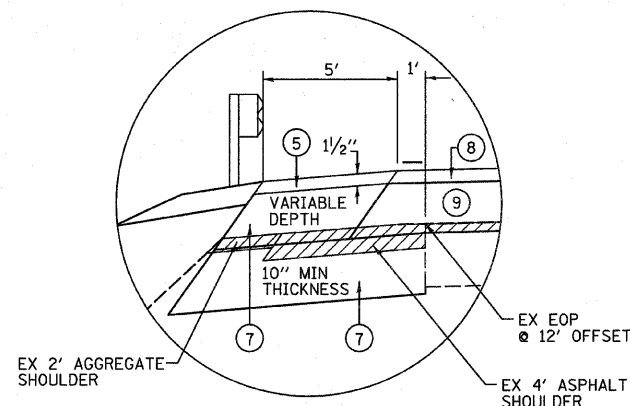
 TO BE REMOVED



**STAGE 1 BRIDGE CONSTRUCTION**



**STAGE 1 ROADWAY CONSTRUCTION**



**DETAIL A**

STA 48+42.28 TO STA 49+15.50 LEFT  
STA 53+68.50 TO STA 54+65.15 LEFT

EX PAVEMENT NARROWS TO 12' LANES APPROACHING THE EXISTING STRUCTURE.

TO PROVIDE A STABLE BASE FOR PROPOSED PAVEMENT STRUCTURE, WIDEN LEFT SIDE DURING STAGE 1 (SEE CROSS SECTIONS):

**STAGE CONSTRUCTION GENERAL NOTES**

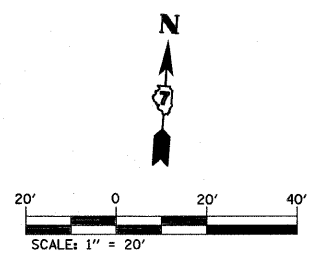
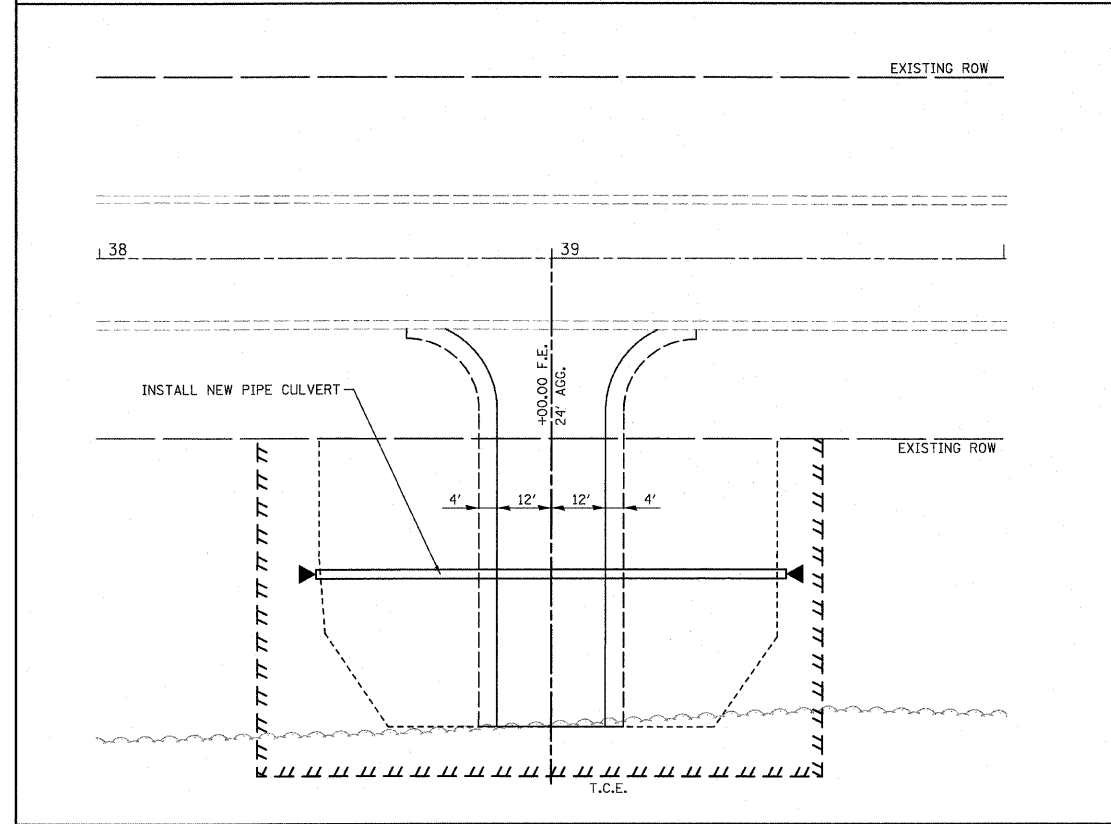
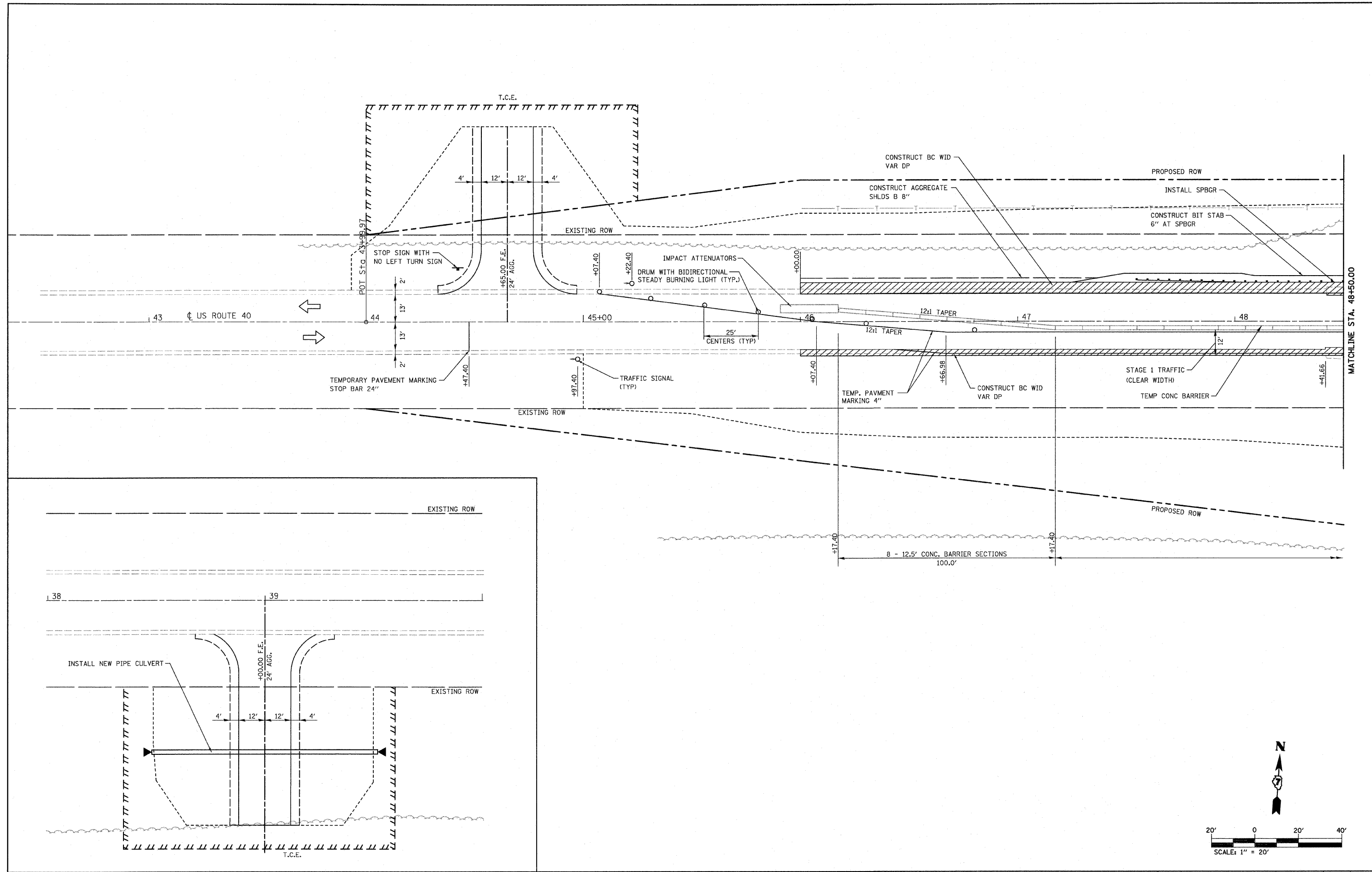
1. ONE LANE OF TRAFFIC ON US ROUTE 40 SHALL BE MAINTAINED AT ALL TIMES.
2. ADVANCED WARNING SIGNS, TEMPORARY RUMBLE STRIPS, VERTICAL PANELS, PAVEMENT MARKERS, AND BARRICADE REFLECTORS SHALL BE LOCATED IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
3. INSTALL WIDTH RESTRICTION SIGNING.
4. INSTALL STOP SIGN AND NO LEFT TURN SIGN AT F.E. 44+65 IN LOCATION DETERMINED BY THE ENGINEER. THE COST SHALL BE INCLUDED IN THE UNIT PRICE FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
5. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

**SUGGESTED STAGE CONSTRUCTION**

**SUGGESTED STAGE 1**

1. UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARD 701306, COMPLETE HMA SURFACE REMOVAL FOR BOTH LANES OF US ROUTE 40 FROM STA. 46+00.00 TO STA. 49+12.50 AND STA. 53+71.50 TO STA. 56+69.00. DO NOT GRIND SURFACE ON EXISTING BRIDGE OR APPROACH SLABS.
2. UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARD 701326, REMOVE PAVED SHOULDER AND CONSTRUCT THE BASE COURSE WIDENING ON THE RT SIDE OF THE ROADWAY FROM STA. 46+00.00 TO STA. 49+69.14 AND FROM STA. 53+37.35 TO STA. 56+69.00. THE PAVED SHOULDER REMOVAL INCLUDES THE COMPLETE REMOVAL OF THE EXISTING RT SIDE APPROACH SLAB SHOULDER OR AS DIRECTED BY THE ENGINEER.
3. UTILIZING FIELD ENTRANCE DETAIL ON SHEET 21 OF 71 AND TRAFFIC CONTROL AND PROTECTION STANDARDS 701006 & 701326, CONSTRUCT NEW AGGREGATE FIELD ENTRANCES AT STA 39+00.00 RT AND AT STA. 44+65.00 LT.
4. SET-UP STAGE 1 TRAFFIC CONTROL.
5. UTILIZING TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 AS DETAILED ON SHEETS 11 THRU 13, DIRECT TRAFFIC TO THE RT LANE OF US ROUTE 40.
6. COMPLETE STAGE 1 REMOVAL OF THE EXISTING SUPERSTRUCTURE AND APPROACH SLABS AS DETAILED ON SHEETS 25 AND 26 OF 71.
7. INSTALL STAGE 1 TEMPORARY SHEET PILING AT ABUTMENTS AND PROPOSED PIER 2 AS DETAILED ON SHEETS 25 AND 26 OF 71.
8. COMPLETE STAGE 1 REMOVAL OF THE EXISTING SUBSTRUCTURE AS DETAILED ON SHEETS 25 AND 26 OF 71. COMPLETE ROUGH REGRADING OF EMBANKMENT IN FRONT OF THE PROPOSED STAGE 1 ABUTMENTS.
9. COMPLETE STAGE 1 CONSTRUCTION OF THE SUBSTRUCTURE, SUPERSTRUCTURE, AND APPROACH SLABS AS DETAILED ON SHEETS 23 THRU 60 OF 71.
10. CONSTRUCT ADDITIONAL EMBANKMENT ON LT ROADWAY SIDE SLOPE.
11. REMOVE PAVED SHOULDER ON THE LT SIDE OF US ROUTE 40 FROM STA. 46+00.00 TO STA. 49+12.50 AND FROM STA. 53+71.50 TO STA. 56+69.00. CONSTRUCT BASE COURSE WIDENING (10" MIN.) FROM STA. 46+00.00 TO STA. 49+15.50 AND FROM STA. 53+68.50 TO STA. 56+69.00.
12. CONSTRUCT PROPOSED HMA BINDER COURSE FOR THE LT LANE FROM STA 47+42.38 TO STA 49+15.50 AND FROM STA. 53+68.50 TO STA. 55+21.42. CONSTRUCT VARIABLE DEPTH BASE COURSE WIDENING FROM STA. 48+42.28 TO STA. 49+15.50 AND STA. 53+68.50 TO STA. 54+65.15 ALONG THE LT SIDE.
13. INSTALL GUARD RAIL, BITUMINOUS STABILIZATION AND AGGREGATE SHOULDER ON LT SIDE OF ROADWAY.
14. INSTALL TEMPORARY PAVEMENT MARKING.

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED STAGE 1 CONSTRUCTION &amp; TRAFFIC CONTROL</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 9/25/2009	DATE -	CHECKED -	REVISED -				CONTRACT NO. 74235				
							ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. 01 OF 09 SHEETS	STA.	TO STA.				



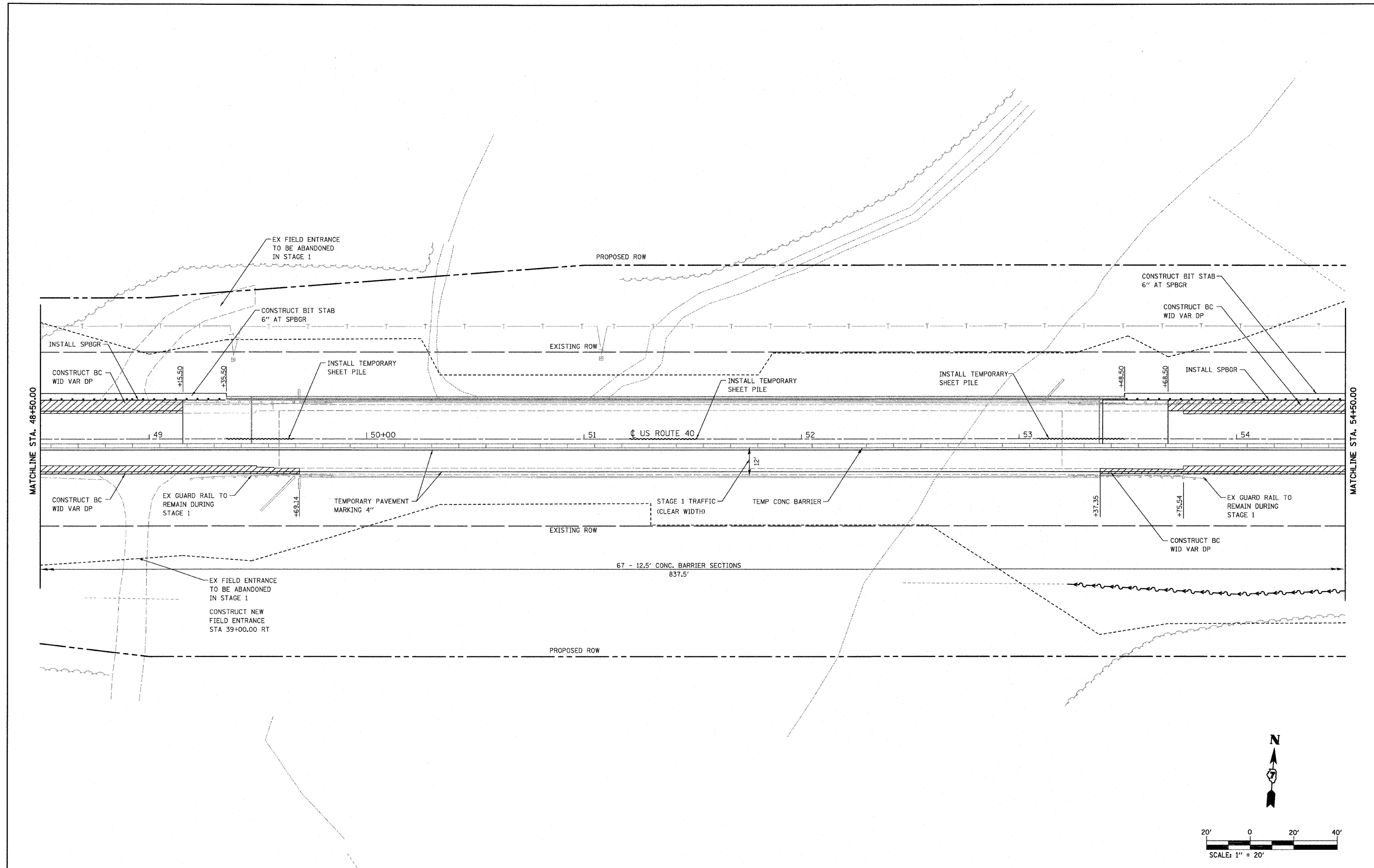
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	PLOT DATE = 9/25/2009	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGE 1 CONSTRUCTION & TRAFFIC CONTROL**

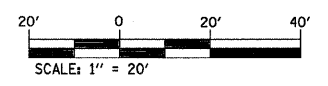
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-2BR)B-1	FAYETTE	71	11
CONTRACT NO. 74235				
ILLINOIS FED. AID PROJECT				

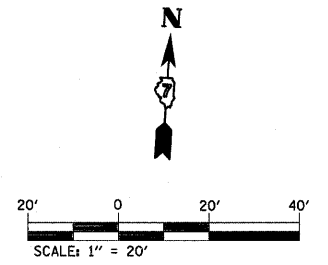
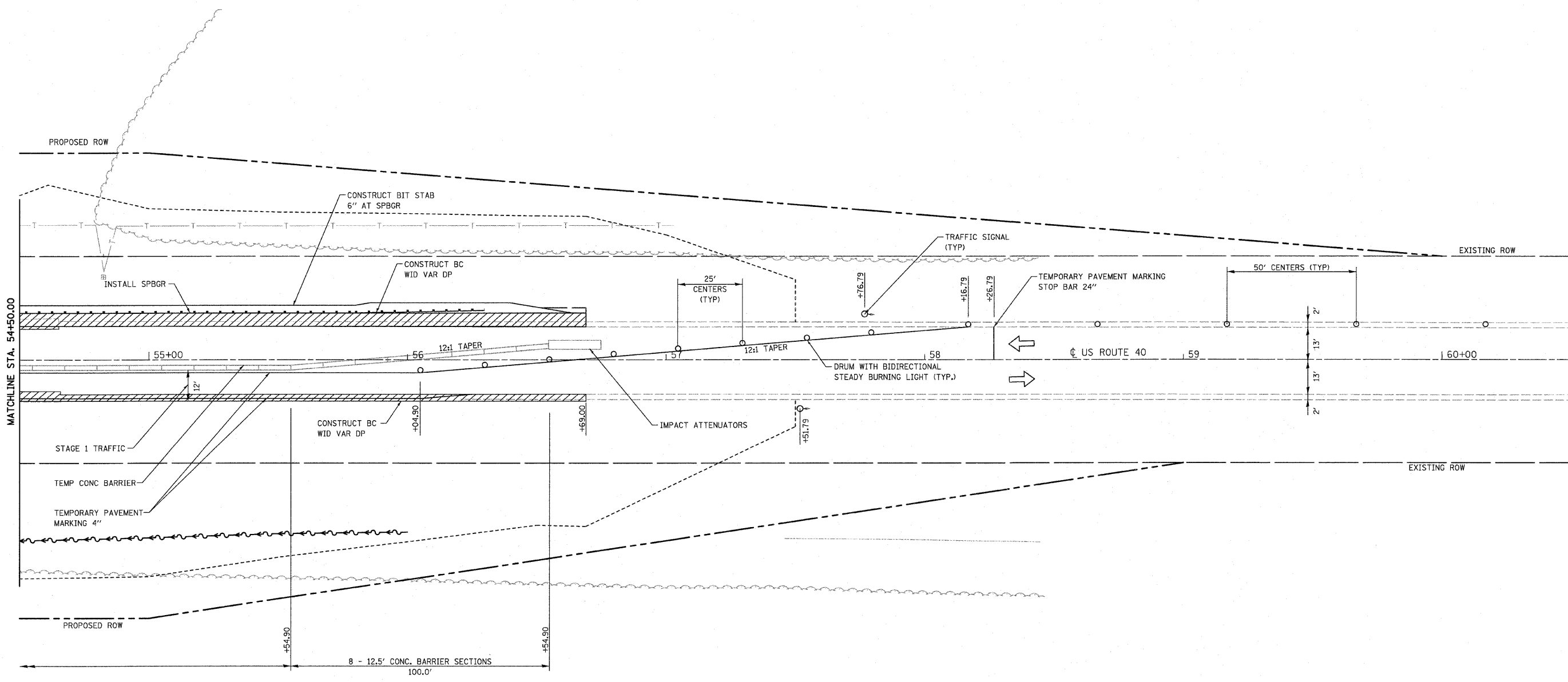


MATCHLINE STA. 48+50.00

MATCHLINE STA. 54+50.00




FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED STAGE 1 CONSTRUCTION &amp; TRAFFIC CONTROL</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
H:\P\27834\W07and8\Microstation\CADDShets\0774235-sh1-staging.dgn	PLOT SCALE = 20,0000 ' / IN.	DRAWN -	REVISED -			752	(U-2BR)B-1	FAYETTE	71	12	
	PLOT DATE = 9/25/2009	CHECKED -	REVISED -			CONTRACT NO. 74235					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE: 1"=20'	SHEET NO. 03 OF 09 SHEETS		STA.	TO STA.		

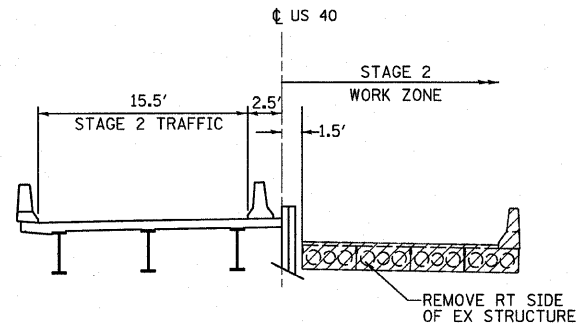


FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED STAGE 1 CONSTRUCTION &amp; TRAFFIC CONTROL</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\27834\W07and8\Microstation\CADDSheets\0774235-sh1-staging.dgn		DRAWN -	REVISED -					752	(U-2BR1B-1)	FAYETTE	71	13
PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISED -		SCALE: 1"=20'			SHEET NO. 04 OF 09 SHEETS STA. TO STA.			CONTRACT NO. 74235	
PLOT DATE = 9/25/2009		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

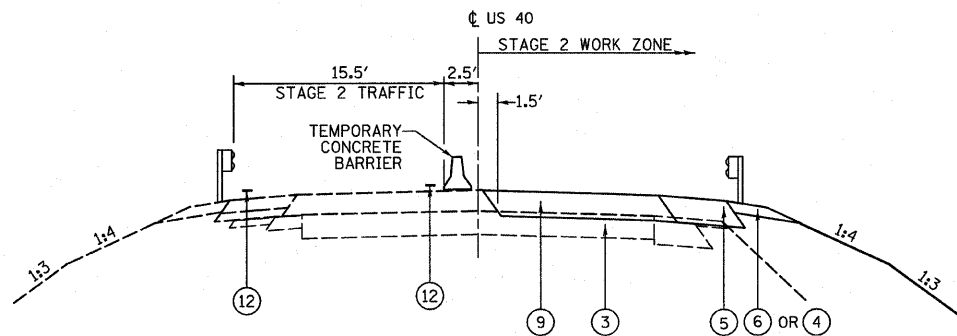
**LEGEND**

- ① EXISTING AGGREGATE SHOULDER
- ② EXISTING ASPHALT SHOULDER
- ③ EXISTING PAVEMENT
- ④ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8"
- ⑤ PROPOSED HOT-MIX ASPHALT SHOULDERS
- ⑥ PROPOSED BITUMINOUS STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL
- ⑦ PROPOSED BASE COURSE WIDENING, VARIABLE DEPTH (10" MIN. UNDER TRAFFIC)
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 1 1/2"
- ⑨ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, VARIABLE DEPTH
- ⑩ PROPOSED FINAL PAVEMENT MARKING
- ⑪ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1/2"
- ⑫ PROPOSED TEMPORARY PAVEMENT MARKING

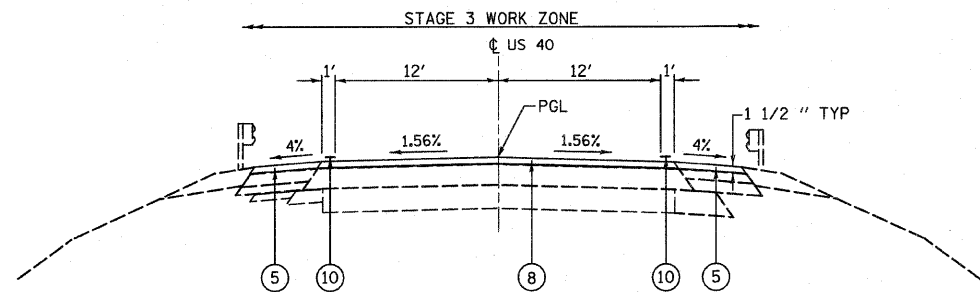
 TO BE REMOVED



**STAGE 2 BRIDGE CONSTRUCTION**



**STAGE 2 ROADWAY CONSTRUCTION**



**STAGE 3 ROADWAY CONSTRUCTION**

**SUGGESTED STAGE CONSTRUCTION**

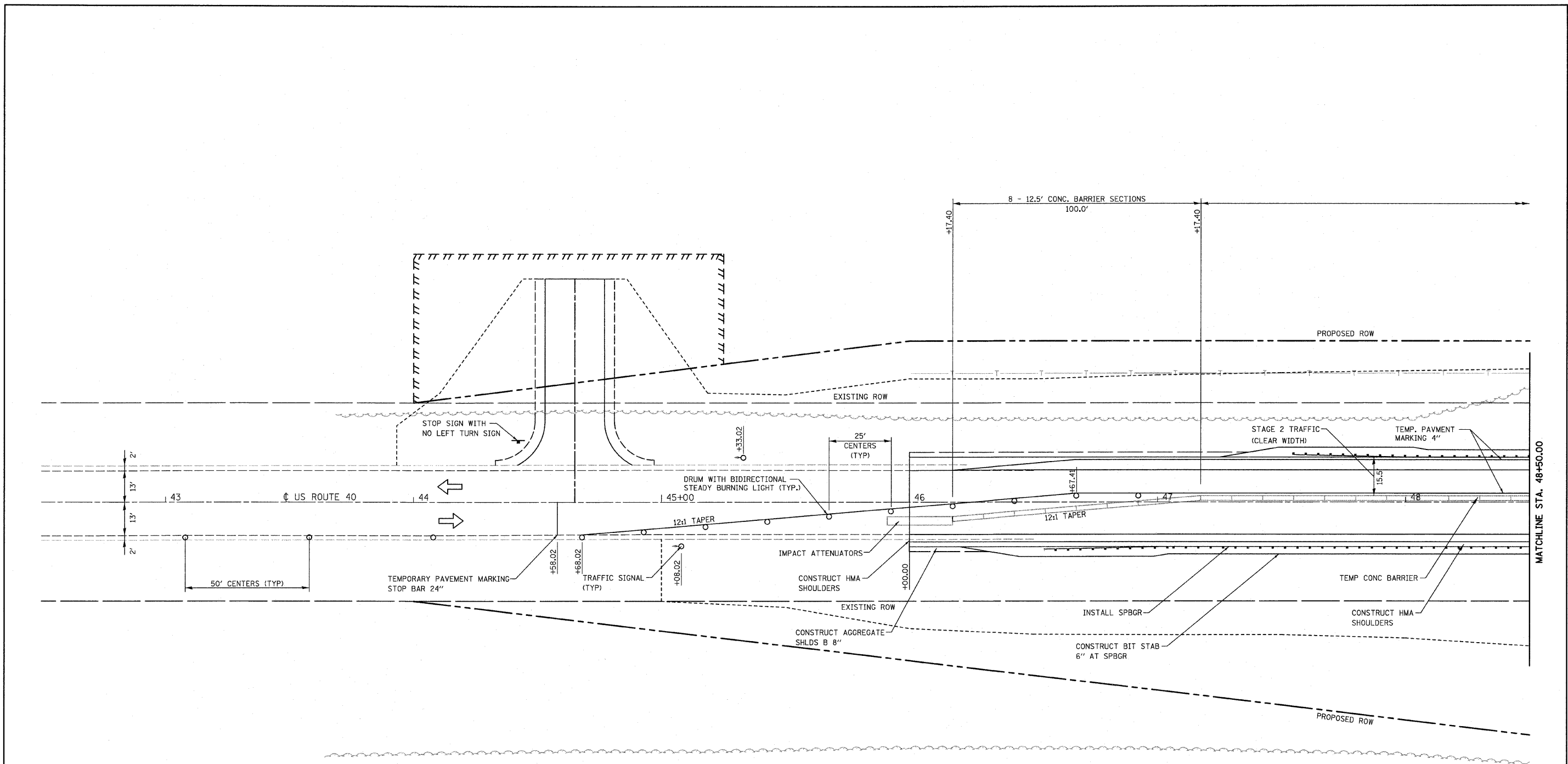
**SUGGESTED STAGE 2**

1. CHANGE WIDTH RESTRICTION SIGNING AND REMOVE CONFLICTING CENTERLINE STRIPES IN TAPER AREA.
2. UTILIZING TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 AS DETAILED ON SHEETS 15 THRU 17 OF 71, DIRECT TRAFFIC ON THE LT LANE OF US ROUTE 40.
3. COMPLETE STAGE II REMOVAL OF THE EXISTING SUPERSTRUCTURE AND APPROACH SLABS AS DETAILED ON SHEETS 25 AND 26 OF 71.
4. REMOVE STAGE I TEMPORARY SHEET PILING AS REQUIRED, LEAVING STAGE II TEMPORARY SHEET PILING IN PLACE AS DETAILED ON SHEETS 25 AND 26 OF 71.
5. COMPLETE STAGE II REMOVAL OF THE EXISTING SUBSTRUCTURE AS DETAILED ON SHEETS 25 AND 26 OF 71. COMPLETE ROUGH REGRADING OF EMBANKMENT IN FRONT OF THE PROPOSED ABUTMENTS.
6. COMPLETE STAGE II CONSTRUCTION OF THE SUBSTRUCTURE, SUPERSTRUCTURE, AND APPROACH SLABS AS DETAILED ON SHEETS 23 THRU 60 OF 71.
7. COMPLETE FINAL GRADING UNDER THE STRUCTURE AND INSTALL RIPRAP.
8. CONSTRUCT ADDITIONAL EMBANKMENT ON RT ROADWAY SIDE SLOPE.
9. CONSTRUCT PROPOSED HMA BINDER COURSE FOR THE RT LANE FROM STA 47+42.38 TO STA 49+15.50 AND FROM STA. 53+68.50 TO STA. 55+21.42.
10. INSTALL GUARD RAIL, BITUMINOUS STABILIZATION AND AGGREGATE SHOULDER ON RT SIDE OF ROADWAY.
11. REMOVE TRAFFIC CONTROL BARRIER, TRAFFIC SIGNALS, TEMPORARY PAVEMENT MARKINGS, TEMPORARY SIGNS AT F.E. 44+65, AND WIDTH RESTRICTION SIGNS.
12. INSTALL SHORT TERM PAVEMENT MARKING

**SUGGESTED STAGE 3**

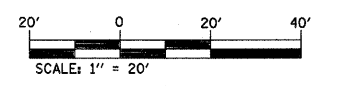
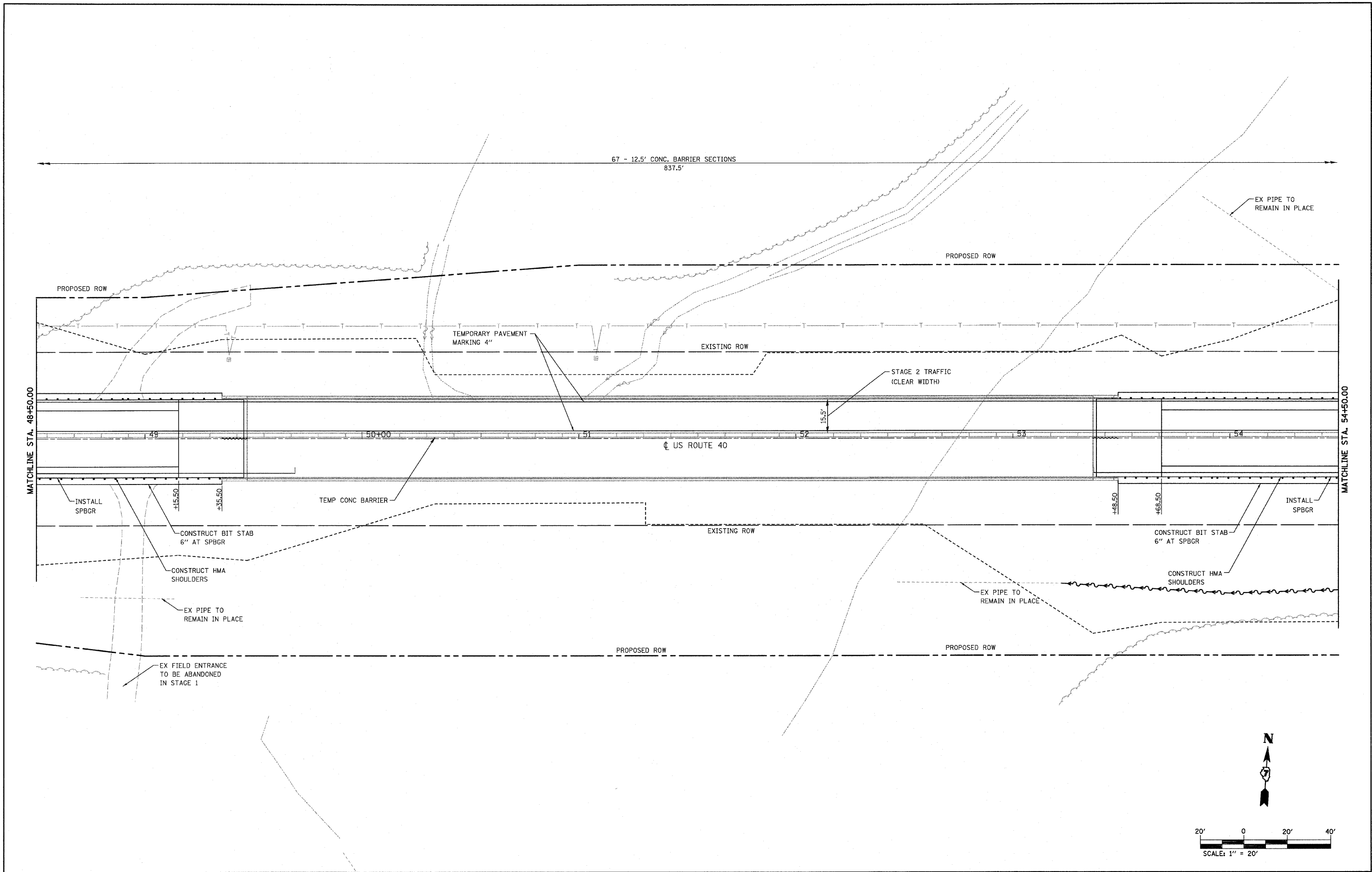
1. UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARD 701306, RESURFACE US ROUTE 40 AND CONSTRUCT PROPOSED HMA SHOULDERS 1 1/2" FOR BOTH LT AND RT SIDE OF ROADWAY.

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED STAGES 2&amp;3 CONSTRUCTION &amp; TRAFFIC CONTROL</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\27834\W07and8\Microstation\CADDShets\0774235-shr-staging.dgn		DRAWN -	REVISED -			752	(U-2BR)B-1	FAYETTE	71	14
PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 74235				
PLOT DATE = 9/25/2009		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
						SCALE:	SHEET NO. 05 OF 09 SHEETS	STA.	TO STA.	



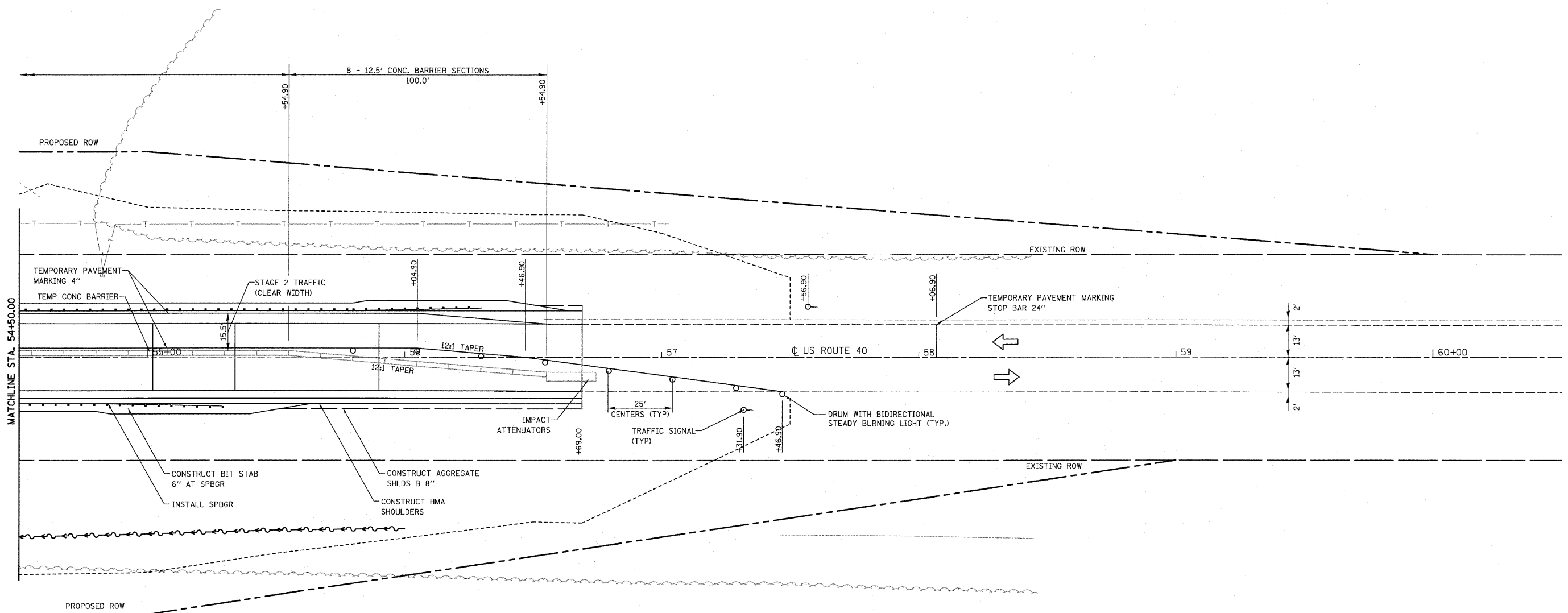
MATCHLINE STA. 48+50.00

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED STAGE 2 CONSTRUCTION AND TRAFFIC CONTROL</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\27834\W07and8\Microstation\CADDShets\0774235-sh2-staging.dgn	PLT SCALE = 20.0000' / IN.	DRAWN -	REVISED -					752	(J-2BR)B-1	FAYETTE	71	15
	PLT DATE = 9/25/2009	CHECKED -	REVISED -		SCALE: 1"=20'    SHEET NO. 06 OF 09 SHEETS    STA.    TO STA.			CONTRACT NO. 74235				
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

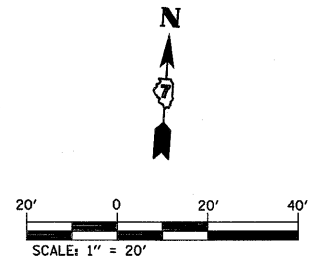


FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED STAGES 2 CONSTRUCTION &amp; TRAFFIC CONTROL</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
H:\P\27834\W07and8\Microstation\CA00Sheta\0774235-ah-rt-staging.dgn		DRAWN -	REVISED -			752	(U-2BR1)B-1	FAYETTE	71	16	
PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 74235					
PLOT DATE = 9/25/2009		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE: 1"=20'	SHEET NO. 07 OF 09 SHEETS	STA.	TO STA.			





MATCHLINE STA. 54+50.00



FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED STAGE 2 CONSTRUCTION &amp; TRAFFIC CONTROL</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
H:\P\27834\W07and9\Microstation\CADDShets\0774235-sh2-staging.dgn	PLOT SCALE = 20.0000' / IN.	DRAWN -	REVISED -			752	(U-2BR)B-1	FAYETTE	71	17	
	PLOT DATE = 9/25/2009	CHECKED -	REVISED -			CONTRACT NO. 74235					
		DATE -	REVISED -			[ILLINOIS] FED. AID PROJECT					

SCALE: 1"=20'    SHEET NO. 08 OF 09 SHEETS    STA.    TO STA.

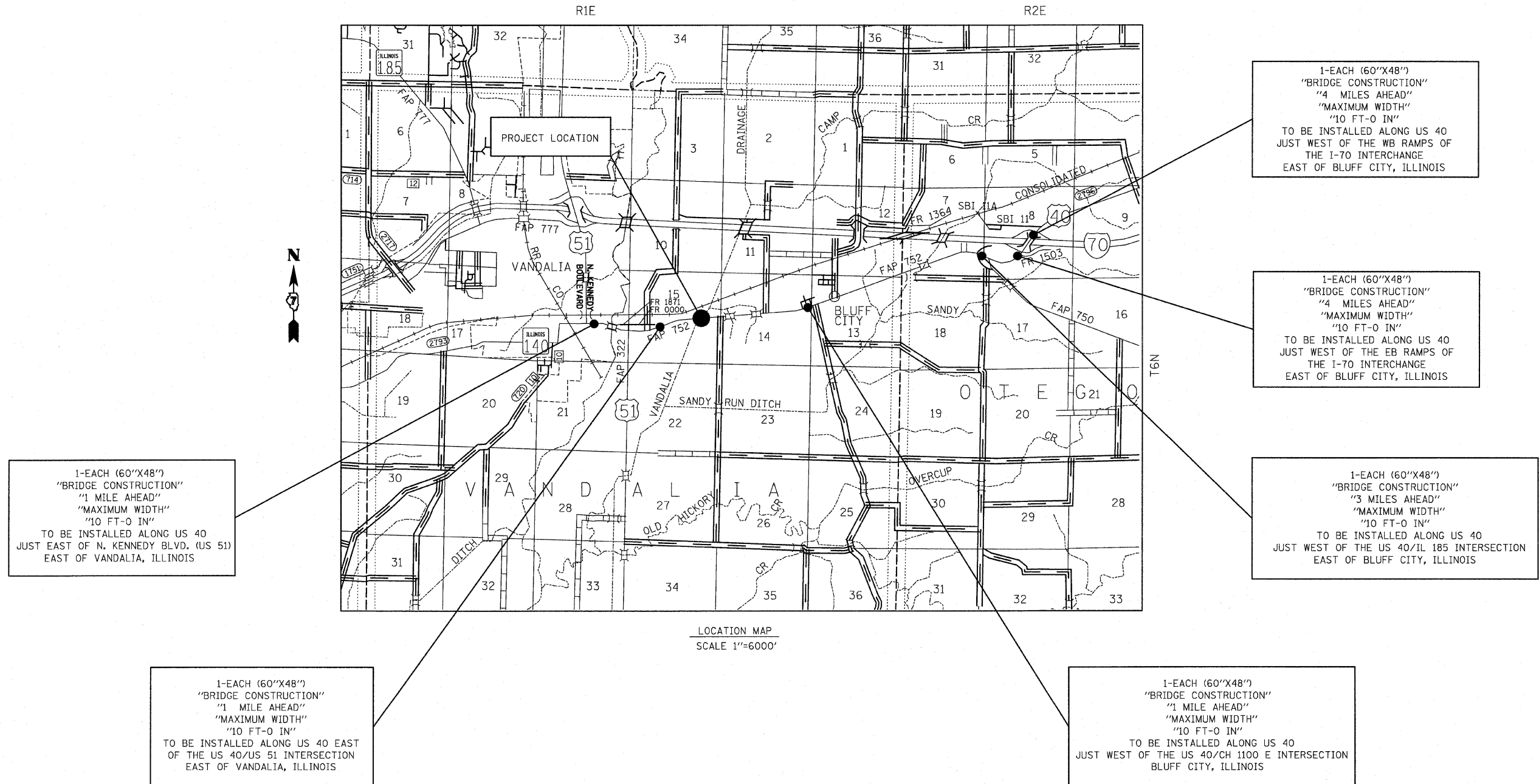
**NOTES:**

ACTUAL SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER. THESE SIGNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING STAGE 1 & 2 CONSTRUCTION. AT THE BEGINNING OF STAGE 2 THE CONTRACTOR SHALL CHANGE THE WIDTH RESTRICTION ON THE SIGNS TO 14'-0". SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

THE ENGINEER WILL NOTIFY DISTRICT 7 BUREAU OF OPERATIONS 14 CALENDAR DAYS PRIOR TO INSTALLING ANY TRAFFIC CONTROL DEVICES THAT WILL RESTRICT THE PAVEMENT WIDTH.



THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO MEET THIS REQUIREMENT.

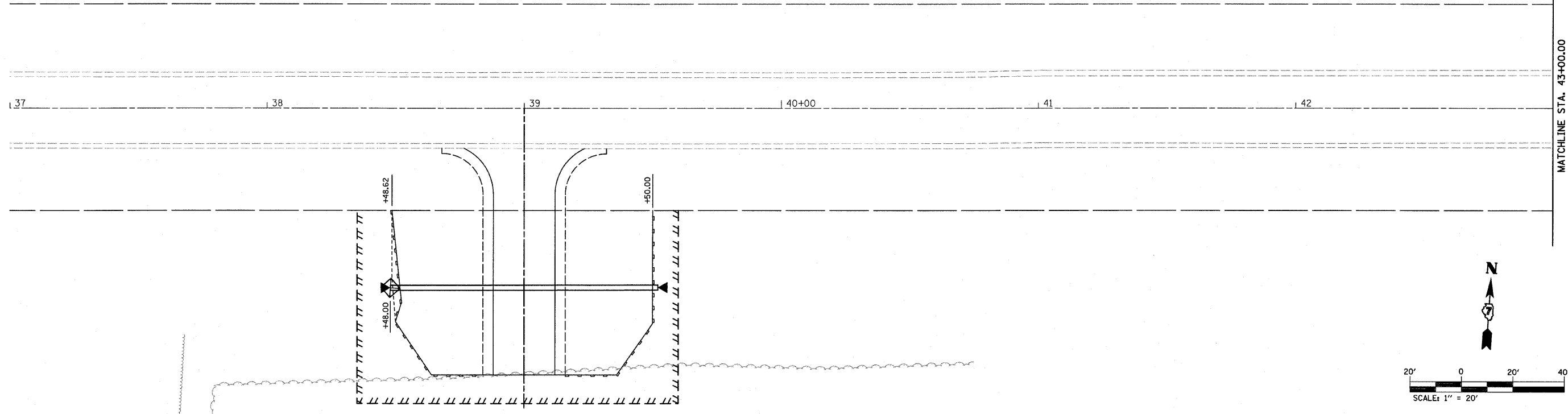
COST OF SUPPLYING, INSTALLING, MAINTAINING AND REMOVING WIDTH RESTRICTION SIGNS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION PAY ITEMS.





FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b>	<b>WIDTH RESTRICTION SIGNING</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\27834\W07end8\Microstation\CADDShets\0774235-sh1-staging.dgn		DRAWN -	REVISED -	<b>DEPARTMENT OF TRANSPORTATION</b>		752	(U-2BR)B-1	FAYETTE	71	18
PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISED -		SCALE:					
PLOT DATE = 9/25/2009		DATE -	REVISED -		SHEET NO. 09 OF 09 SHEETS	STA.	TO STA.			CONTRACT NO. 74235
										ILLINOIS FED. AID PROJECT

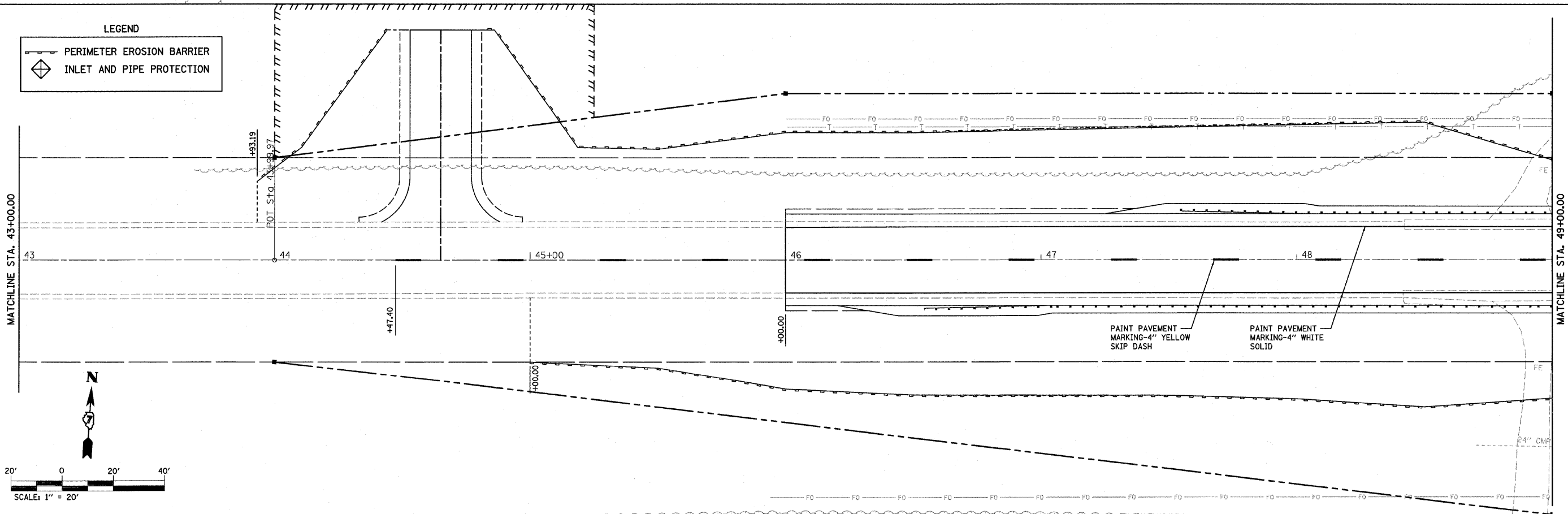
**LEGEND**

 PERIMETER EROSION BARRIER  
 INLET AND PIPE PROTECTION



**LEGEND**

 PERIMETER EROSION BARRIER  
 INLET AND PIPE PROTECTION



FILE NAME =	USER NAME = default
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PLOT SCALE = 20.0000 ' / IN.	
PLOT DATE = 9/25/2009	

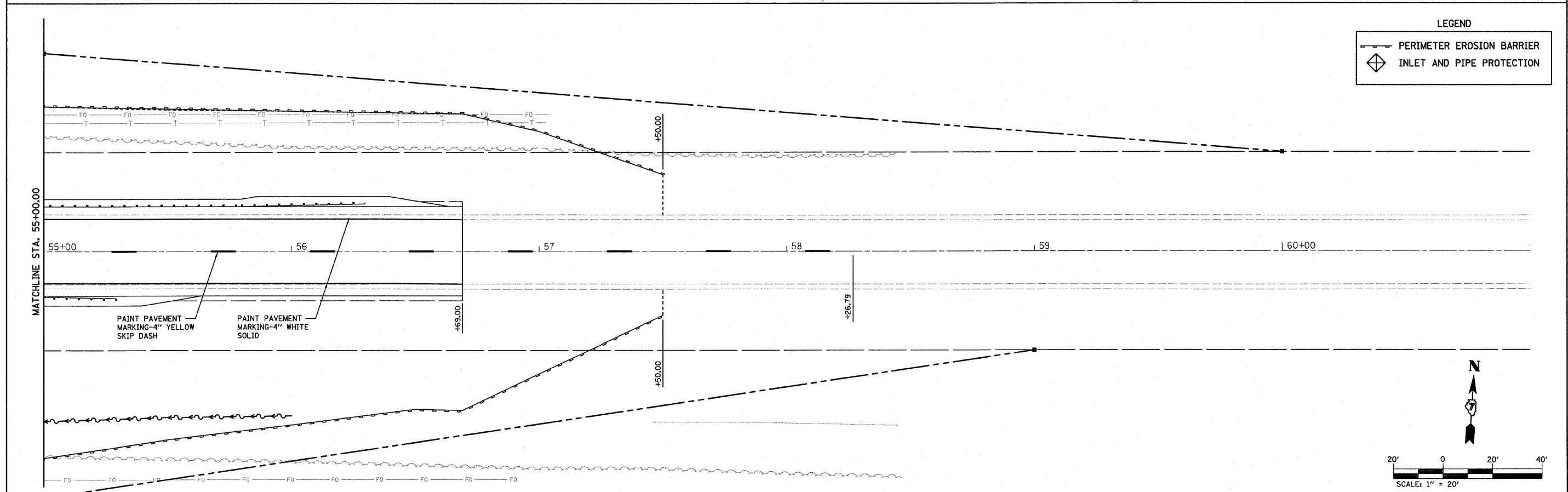
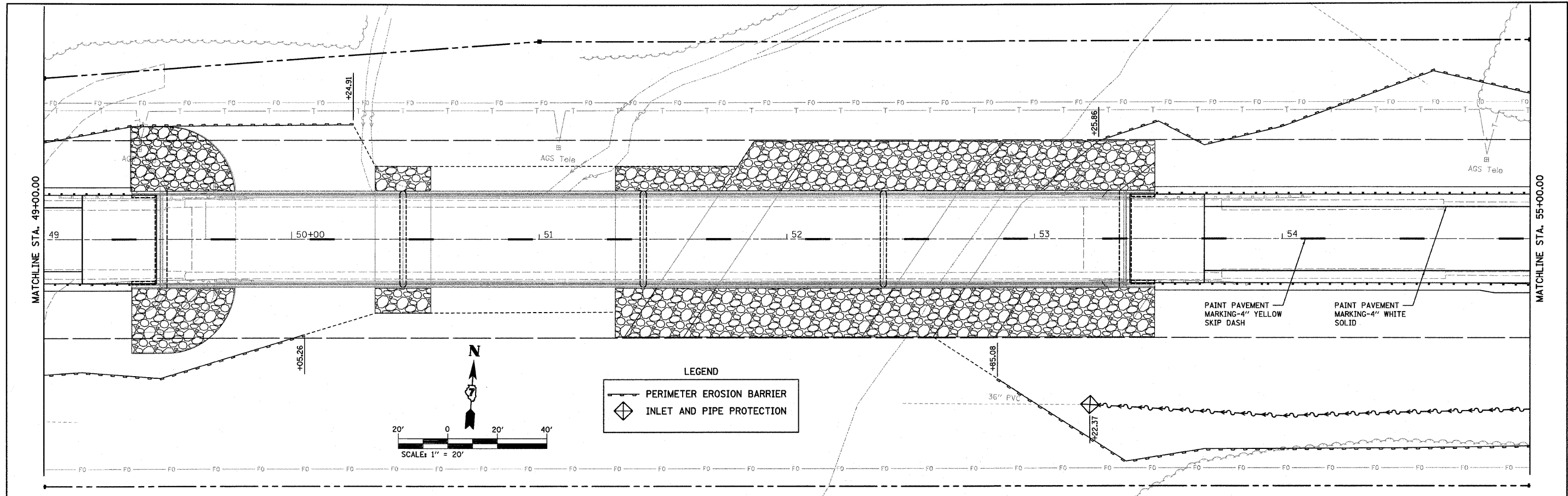
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL & PAVEMENT MARKINGS**

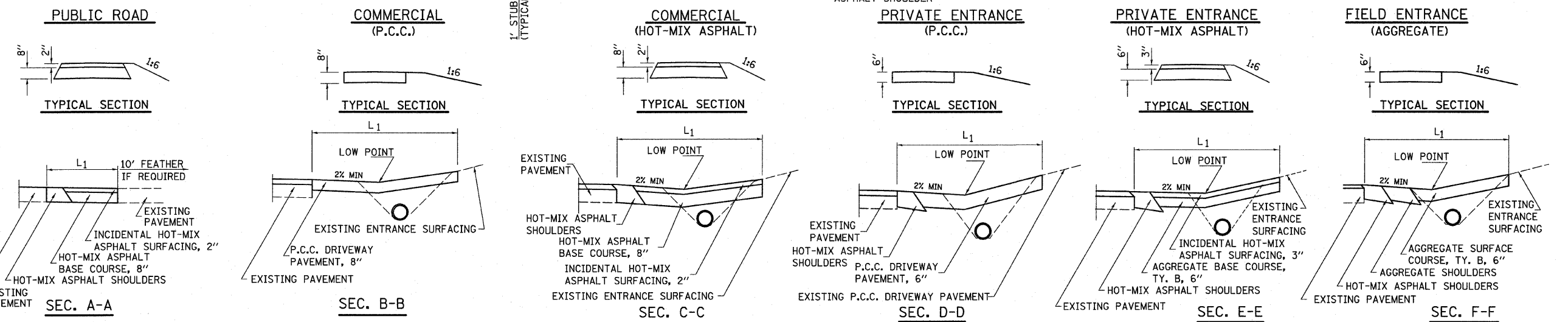
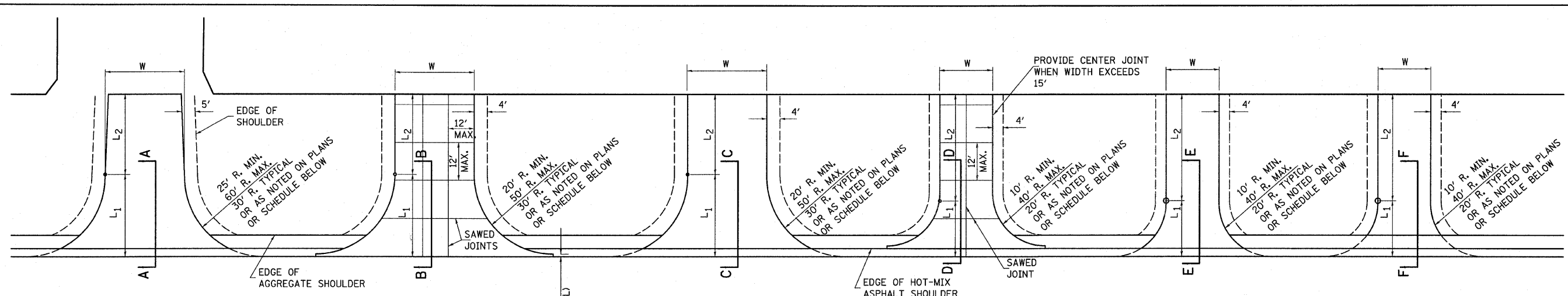
SCALE: 1"=20'    SHEET NO. 01 OF 02 SHEETS    STA. 37+00.00 TO STA. 49+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-28R1)B-1	FAYETTE	71	19
CONTRACT NO. 74235				
ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EROSION CONTROL &amp; PAVEMENT MARKINGS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = 9/25/2009	DATE -	CHECKED -	REVISED -			CONTRACT NO. 74235					
						ILLINOIS FED. AID PROJECT					

SCALE: 1"=20' SHEET NO. 02 OF 02 SHEETS STA. 49+00.00 TO STA. 61+00.00



ENTRANCE SCHEDULE

TYPE	SIDE/ STATION	WIDTH	LENGTH		RADIUS	AGGREGATE BASE, COURSE, TY. B, 6"	HOT-MIX ASPHALT BASE COURSE, 8"	AGGREGATE SURFACE COURSE, TYPE B	INCIDENTAL HOT-MIX ASPHALT SURFACING	P.C.C. DRIVEWAY PAVEMENT		PCC PAVEMENT 8"
			L1	L2						6"	8"	
F.E.	39+00.00 RT	24'	20'	70'	20'			88				
F.E.	44+65.00 LT	24'	20'	57'	20'		76					

NOTES

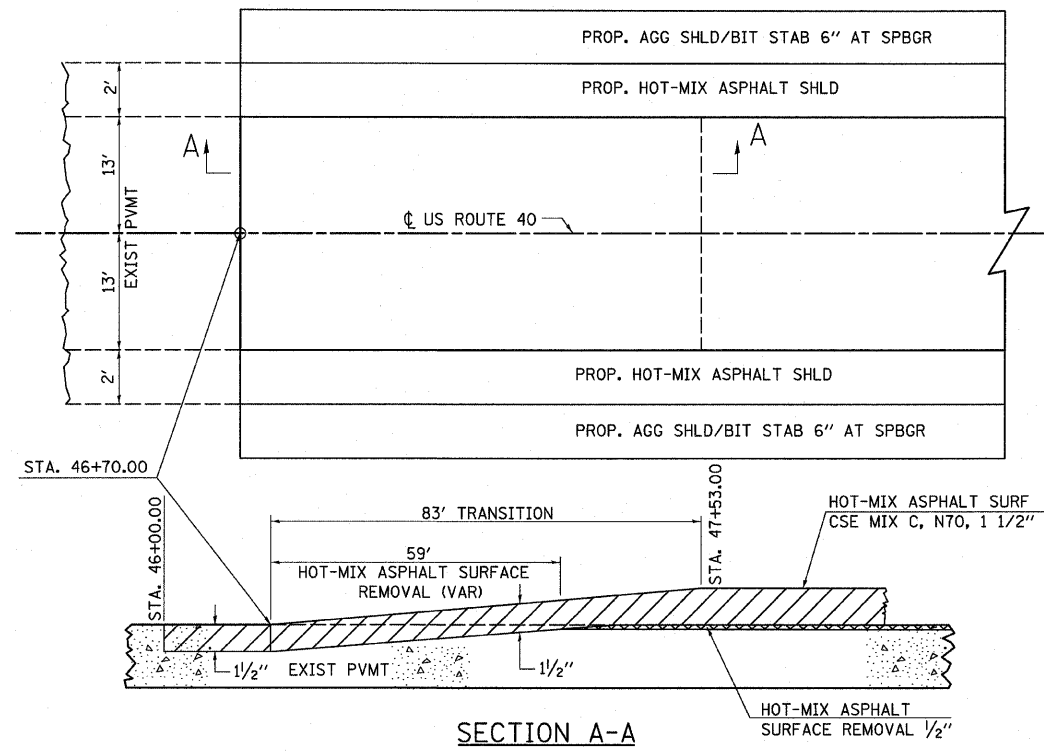
L1 = DISTANCE FROM EDGE OF PAVEMENT TO RADIUS POINT OR MAXIMUM DISTANCE OF 30'.  
 L2 = DISTANCE FROM RADIUS POINT OR MAXIMUM DISTANCE OF 30' FROM EDGE OF PAVEMENT TO R.O.W. LINE  
 MATERIAL USED TO CONSTRUCT L2 LENGTH SHALL BE THE SAME TYPE OF MATERIAL AS THE EXISTING ENTRANCE

THE THICKNESS OF THE HOT-MIX ASPHALT SHOULDERS THROUGH COMMERCIAL ENTRANCES (HOT-MIX ASPHALT) AND PUBLIC ROADS SHALL BE 10". THE COST OF THE EXTRA THICKNESS SHALL BE INCLUDED WITH THE HOT-MIX ASPHALT SHOULDERS PAY ITEM.

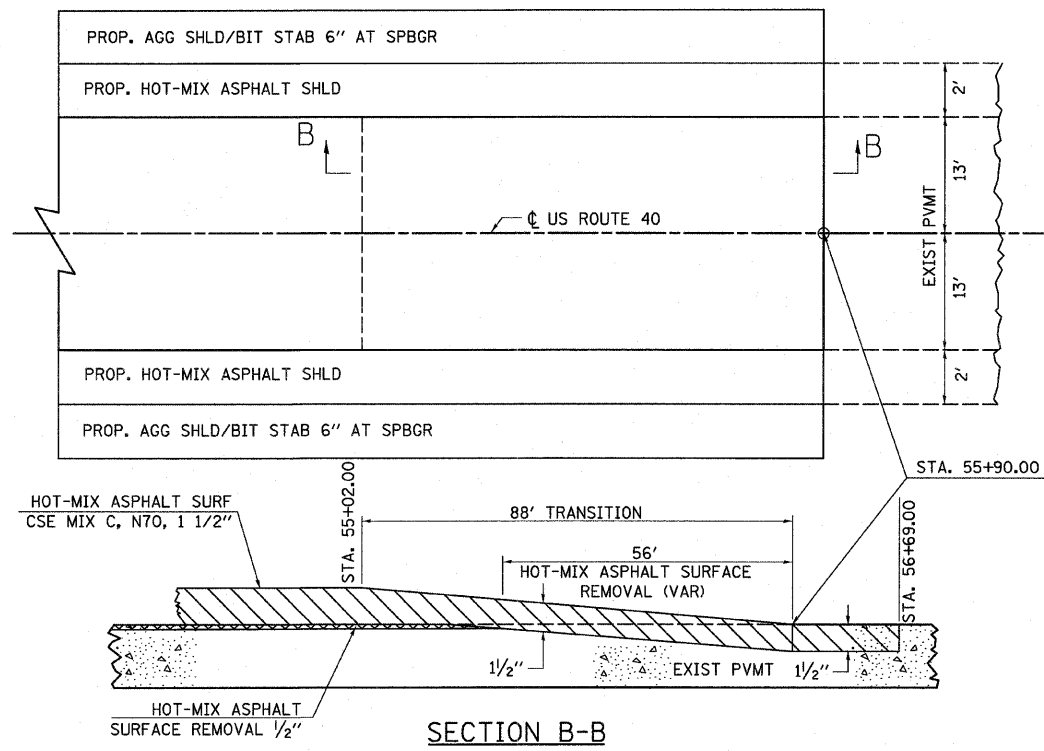
THE COST OF THE BITUMINOUS MATERIALS AND AGGREGATE (PRIME COAT) FOR ENTRANCES AND PUBLIC ROAD APPROACHES SHALL BE INCLUDED IN THE PAY ITEM INCIDENTAL HOT-MIX ASPHALT SURFACING.

HOT-MIX ASPHALT SHOULDERS SHALL NOT BE CONSTRUCTED THROUGH PCC ENTRANCE OR PUBLIC ROAD APPROACH.

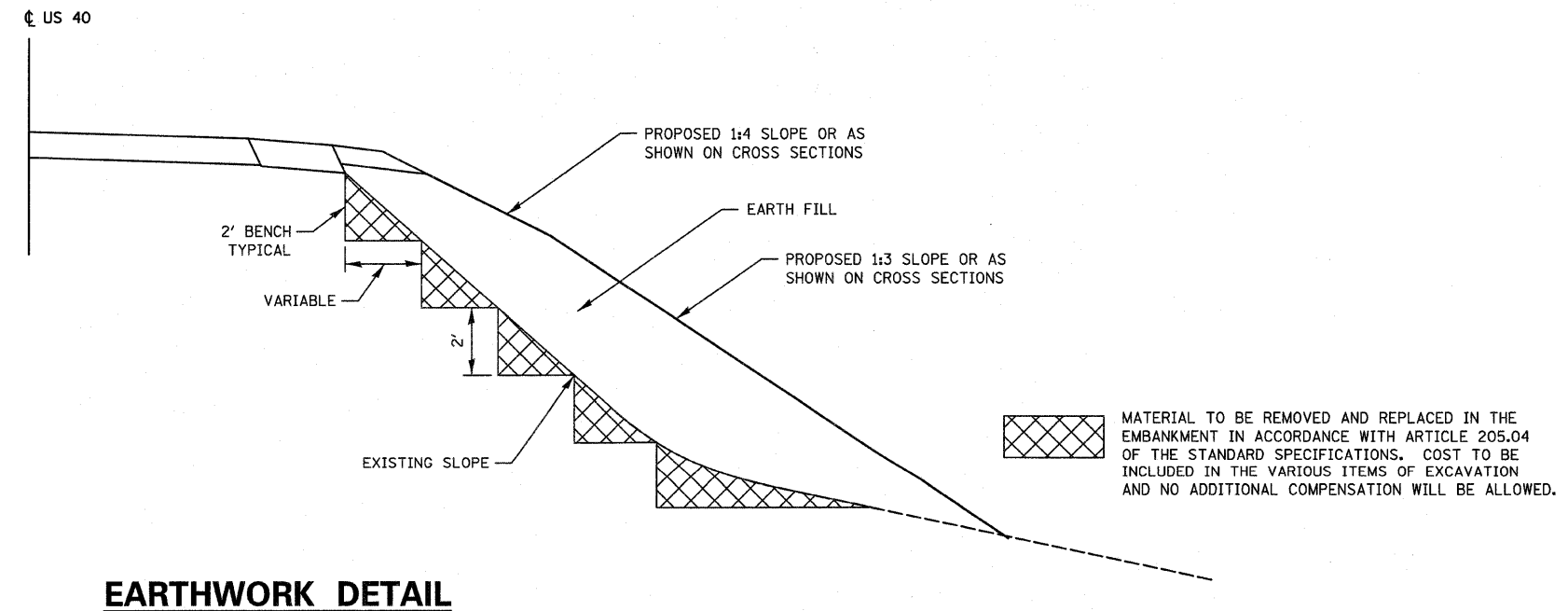
FE=FIELD ENTRANCE      PRA - PUBLIC ROAD APPROACH  
 PE=PRIVATE ENTRANCE    MBT - MAILBOX TURNOUT  
 CE=COMMERCIAL ENTRANCE



**SECTION A-A**  
**BUTT JOINT DETAIL**  
 STA. 46+00.00 TO STA. 47+53.00



**SECTION B-B**  
**BUTT JOINT DETAIL**  
 STA. 55+02.00 TO STA. 56+69.00



**EARTHWORK DETAIL**

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MISCELLANEOUS DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HA\PA\27834\W07andB\Miscrostation\CADDShets\0774235-sht-details.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -					752	(U-2BR)B-1	FAYETTE	71	22
PLOT DATE = 9/25/2009	DATE -	CHECKED -	REVISED -					CONTRACT NO. 74235				
								ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.				

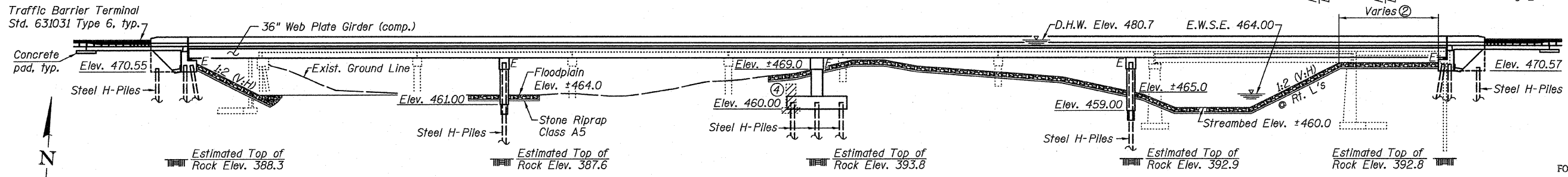
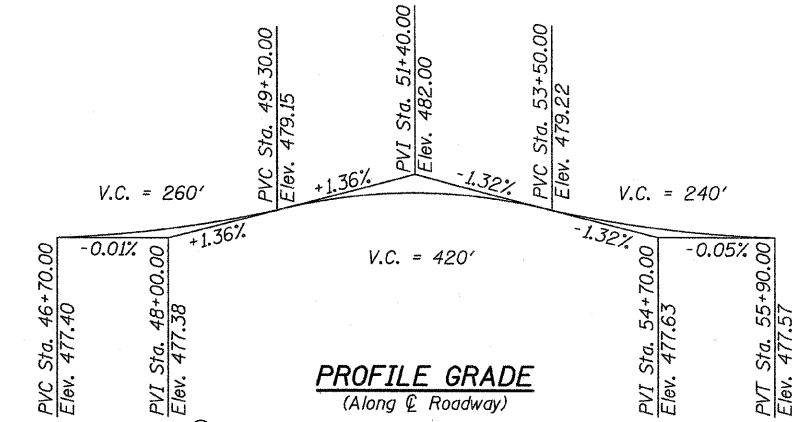
Bench Mark: Chiseled square on N.W. wingwall Sta. 49+69.32, 19' LT. Elev. 477.52

Existing Structure: S.N. 026-0059 built in 1921 as S.B.I. Route 11, Section U-2; widened in 1958 as S.B.I. Route 11, Section U-2BR, reconstructed in 1983 as F.A. Route 752 Section U-2BR-1, Sta. 51+53.12. Existing superstructure consists of six simple spans of precast prestressed concrete deck beams, one span of reinf. concrete deck supported on steel beam superstructure, and one reinf. concrete approach span. The superstructure is supported by one spill-thru pile bent abut., five pile bent piers, one solid wall pier on pile supported spread footing, one closed abutment on a pile supported spread footing, and one integral abutment supported by reinf. concrete piles. Steel WF beams were placed under deficient precast beams in 2007 (not shown below). The back-to-back abutment dimension is 368'-11" while the out-to-out width measures 35'-2". Structure to be removed and replaced.

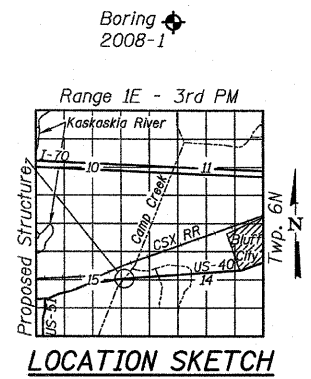
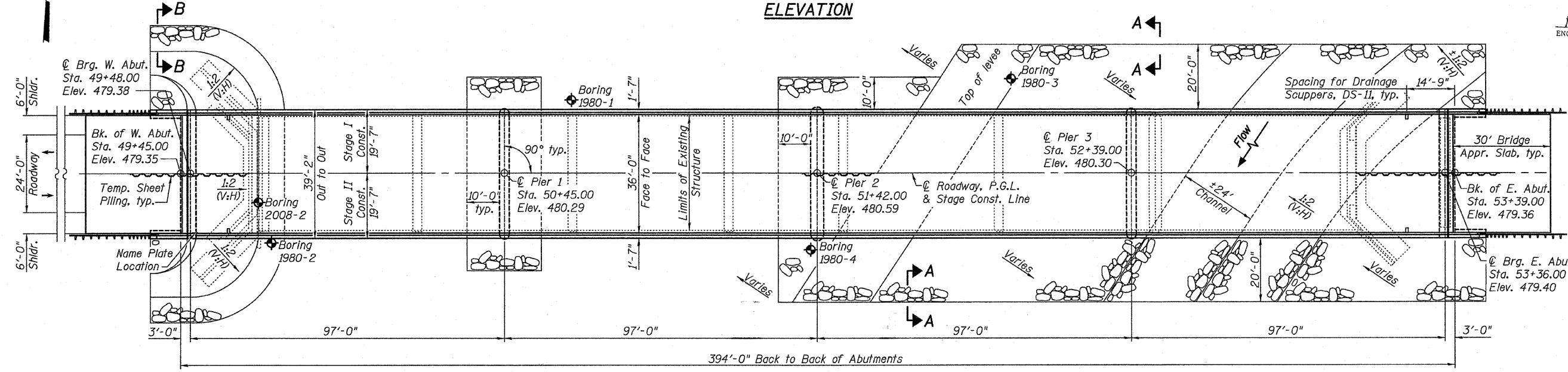
Traffic Control: Staged construction will be utilized by maintaining one lane of traffic during construction.

Salvage: Steel WF beams supporting deficient PPC deck beams. See General Notes on sheet 2 of 38.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



APPROVED  
FOR STRUCTURAL ADEQUACY ONLY  
Ralph E. Anderson (TSP)  
ENGINEER OF BRIDGES AND STRUCTURES



DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
	467.6	458.0	460.0	456.0	467.6

WATERWAY INFORMATION

Flood	Freq. (Yr)	Q (CFS)	S.N.	Opening (Sq Ft)		Natural H.W.E.		Head - Ft.		Headwater El.	
				Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Drainage Area = 1977 Sq. Miles											
Exist. Low Grade Elev. = 477.4 Ft. @ Sta. 34+79											
Prop. Low Grade Elev. = 477.4 Ft. @ Sta. 34+79											
Design	50	55,790	026-0059	2,606	2,996	477.4	1.1	1.0	478.5	478.4	Total
				7,768	8,158						
Base	100	67,020	026-0059	2,606	2,996	480.7	0.9	0.9	481.6	481.6	Total
				8,854	9,244						
Overtopping	<10	33,350	026-0059	2,606	2,996	482.2	0.7	0.7	482.9	482.9	Total
				9,366	9,756						
Max. Calc.	500	97,700	026-0059	2,606	2,996	487.4	1.1	1.0	478.5	478.4	Total
				7,768	8,158						
				2,606	2,996	485.7	0.3	0.3	486.0	486.0	Total
				10,669	11,059						

STATION 51+42.00  
BUILT 20\_\_ BY  
STATE OF ILLINOIS  
FAP ROUTE 752 - SECTION (U-2BR)B-1  
LOADING HL-93  
STRUCTURE NO. 026-0105

NAME PLATE  
See Std. 515001

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.23g  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.50g  
Soil Site Class = D

DESIGN STRESSES  
FIELD UNITS

$f'_c$  = 3,500 psi  
 $f_y$  = 60,000 psi (Reinforcement)  
 $f_y$  = 50,000 psi (AASHTO M 270 Grade 50)  
 $f_y$  = 36,000 psi (AASHTO M 270 Grade 36)

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims Allow 50#/sq. ft. for future wearing surface.

LOADING HL-93

- Notes:
- Discharge is for entire floodplain since levees overtop at 10-year flood event.
  - Berm varies from 0'-0" at north end of abutment to ±28'-0" at south end.
  - For Section A-A, Section B-B, and Index of Sheets, see sheet 2 of 38.
  - For note regarding removal of existing pier remnants buried in the vicinity of proposed Pier 2, see General Notes on sheet 2 of 38.

GENERAL PLAN  
US ROUTE 40 OVER CAMP CREEK  
FAP ROUTE 752 SECTION (U-2BR)B-1  
FAYETTE COUNTY  
STATION 51+42.00  
STRUCTURE NO. 026-0105

SHEET NO. 1 38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	23
CONTRACT NO. 74235					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
<p>Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115</p>			DESIGNED JAD CHECKED DGL DRAWN DGL CHECKED MAG		

BRUCE P. SCHOPP  
051-005158  
COLLINSVILLE, ILLINOIS  
STATE OF ILLINOIS  
9/27/09  
EXPIRES 11/30/10

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES**

Fasteners shall be AASHTO M 164 Type 1, mechanically galvanized bolts.  
Bolts  $\frac{7}{8}$  in.  $\phi$ , holes  $\frac{5}{16}$  in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = AASHTO M 270 Grade 50 = 423,430 pounds  
AASHTO M 270 Grade 36 = 35,350 pounds

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

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

Reinforcement bars designated (E) shall be epoxy coated.

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

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

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

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 the slope protection system may be varied to suit ground conditions in the field 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.

In lieu of the hammer selection criteria and use of the FHWA Modified Gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a nominal required bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.

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

Portions of Pier 6 from the original 1921 structure are buried and require removal for construction of proposed Pier 2. Cost of removal shall be included in Removal of Existing Structures.

The steel WF beams supporting deficient PPC deck beams shall be salvaged in accordance with Section 501.02 of the Standard Specifications for reuse by IDOT. The beams shall be removed, delivered to the IDOT Vandalia Maintenance Yard, and unloaded at the yard by the Contractor. Cost shall be included in Removal of Existing Structures.

Slipforming of the parapets is not allowed.

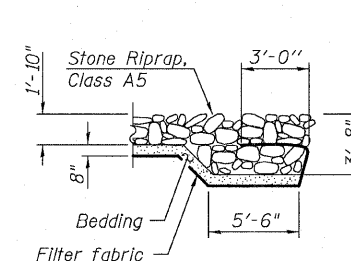
The SSPC QP1 Painting Contractor Certification is required for this contract.

**TOTAL BILL OF MATERIAL**

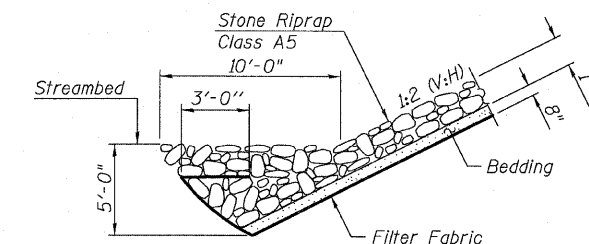
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	-	134	134
Stone Riprap, Class A5	Sq. Yd.	-	2,329	2,329
Filter Fabric	Sq. Yd.	-	2,329	2,329
Removal of Existing Structures	Each	-	-	1
Structure Excavation	Cu. Yd.	-	791	791
Concrete Structures	Cu. Yd.	23.4	408.3	431.7
Concrete Superstructure	Cu. Yd.	551.1	-	551.1
Bridge Deck Grooving	Sq. Yd.	1,698	-	1,698
Concrete Encasement	Cu. Yd.	-	15.8	15.8
Protective Coat	Sq. Yd.	2,031	-	2,031
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	5,232	-	5,232
Reinforcement Bars, Epoxy Coated	Pound	148,700	58,740	207,440
Bar Splicers	Each	1,421	300	1,721
Furnishing Steel Piles HP12X63	Foot	-	1,593	1,593
Furnishing Steel Piles HP14X89	Foot	-	3,399	3,399
Driving Piles	Foot	-	4,992	4,992
Test Pile Steel HP12X63	Each	-	2	2
Test Pile Steel HP14X89	Each	-	3	3
Temporary Sheet Piling	Sq. Ft.	-	1,735	1,735
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	76.0	-	76.0
Elastomeric Bearing Assembly, Type I	Each	12	-	12
Elastomeric Bearing Assembly, Type II	Each	12	-	12
Anchor Bolts, 1"	Each	12	-	12
Anchor Bolts, 1 1/4"	Each	24	-	24
Anchor Bolts, 1 1/2"	Each	24	-	24
Concrete Sealer	Sq. Ft.	-	532	532
Geocomposite Wall Drain	Sq. Yd.	-	83	83
Pipe Underdrains for Structures 4"	Foot	-	180	180
Drainage Scuppers, DS-II	Each	4	-	4
Underwater Structure Excavation Protection-Location 1	Each	-	1	1
Asbestos Bearing Pad Removal	Each	-	-	52
Mechanical Splicers	Each	-	370	370

**INDEX OF SHEETS**

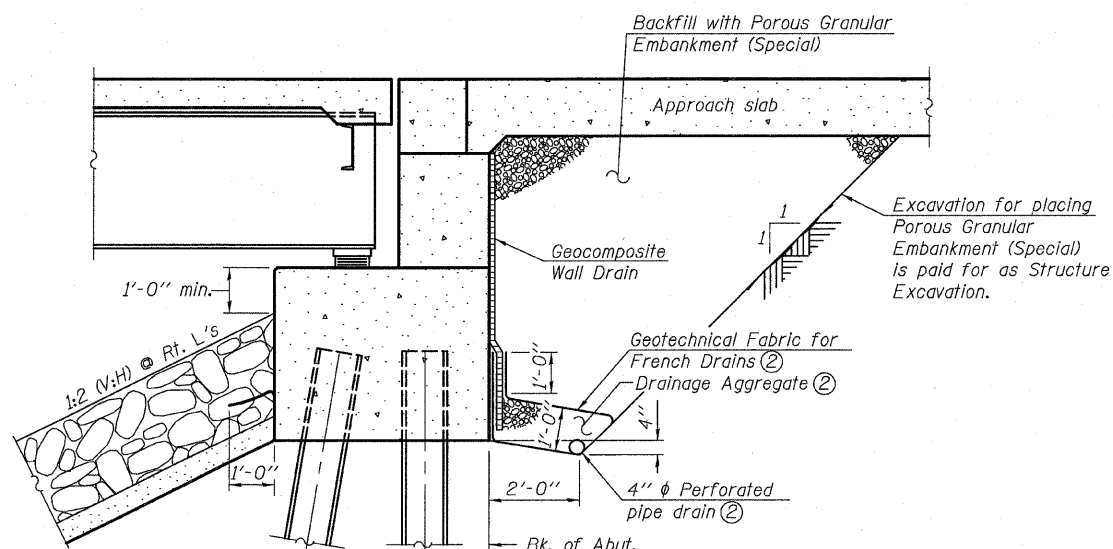
Sheet No.	Description
1	General Plan
2	General Data
3-4	Stage Construction Details
5	Temporary Concrete Barrier for Stage Construction
6-9	Top of Slab Elevations
10	Top of West Approach Slab Elevations
11	Top of East Approach Slab Elevations
12	Superstructure
13	Superstructure Details
14-15	Bridge Approach Slab Details
16	Preformed Joint Strip Seal
17	Drainage Scuppers, DS-II
18	Framing Plan
19-20	Girder Details
21-22	Bearing Details
23	West Abutment Details
24	East Abutment Details
25	Abutment Details
26	Pier 1 Details
27	Pier 2 Details
28	Pier 3 Details
29	HP Pile Details
30	Bar Splicer Assembly Details
31-38	Boring Logs



**SECTION A-A**



**SECTION B-B**



**SECTION THRU PILE SUPPORTED STUB ABUTMENT ①**

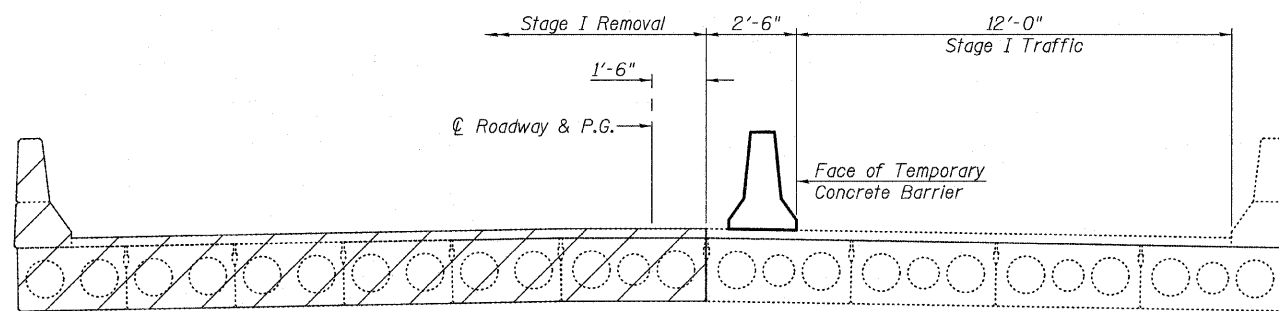
- Notes:
- ① All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. See roadway General Notes for additional requirements. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).
  - ② Included in the cost of Pipe Underdrains for Structures 4".

**GENERAL DATA  
STRUCTURE NO. 026-0105**

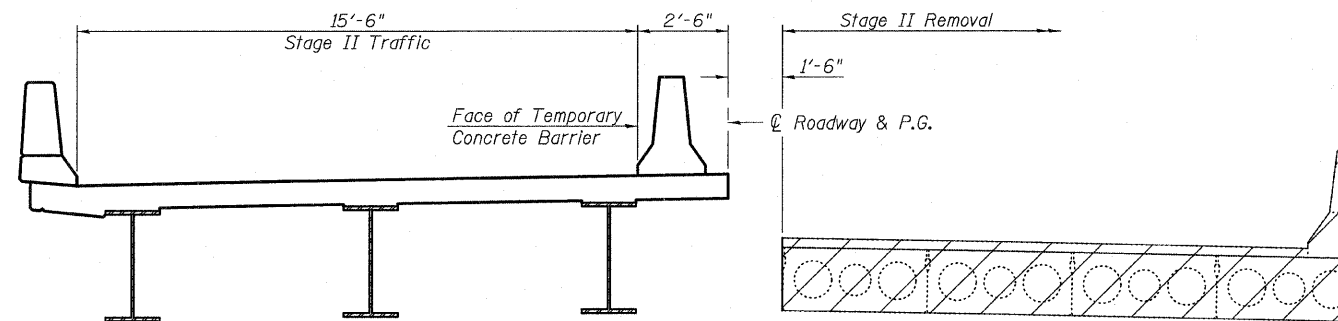
SHEET NO.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	752	(U-2BR)B-1	FAYETTE	71	24
38 SHEETS			CONTRACT NO. 74235		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
OATES ASSOCIATES Consulting Engineers Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115				DESIGNED MAG CHECKED DGL DRAWN DGL CHECKED NEL	



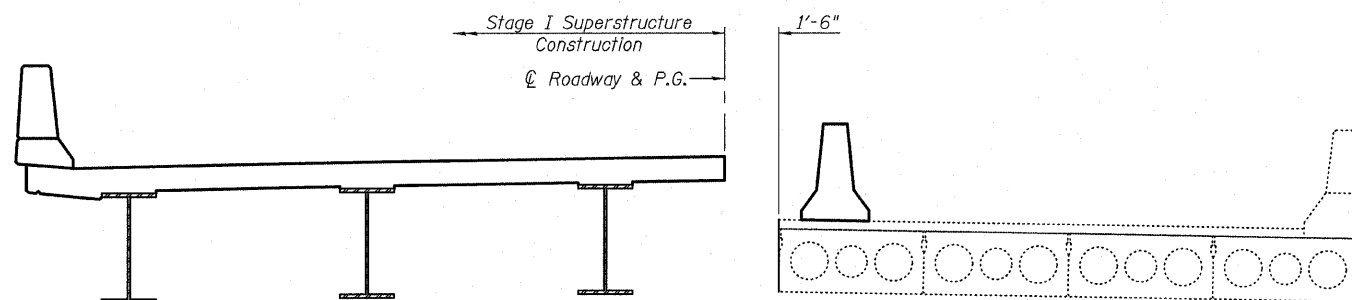
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



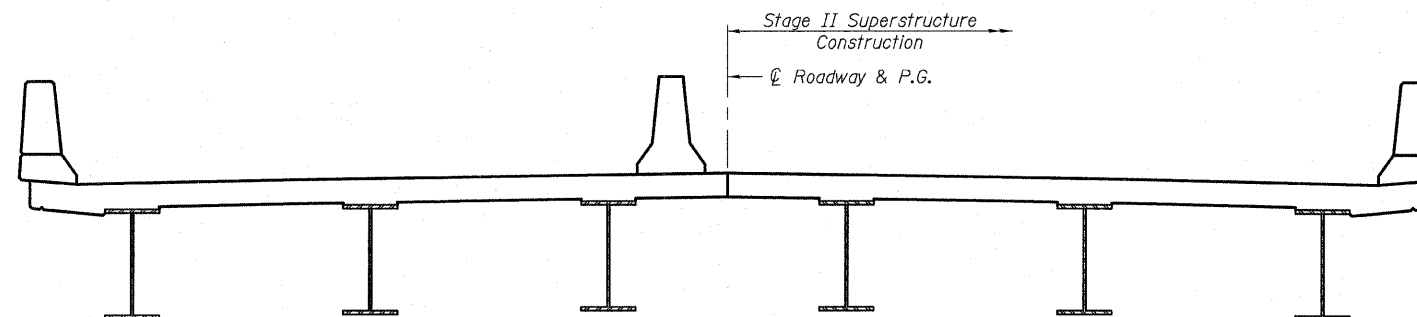
STAGE I REMOVAL ④



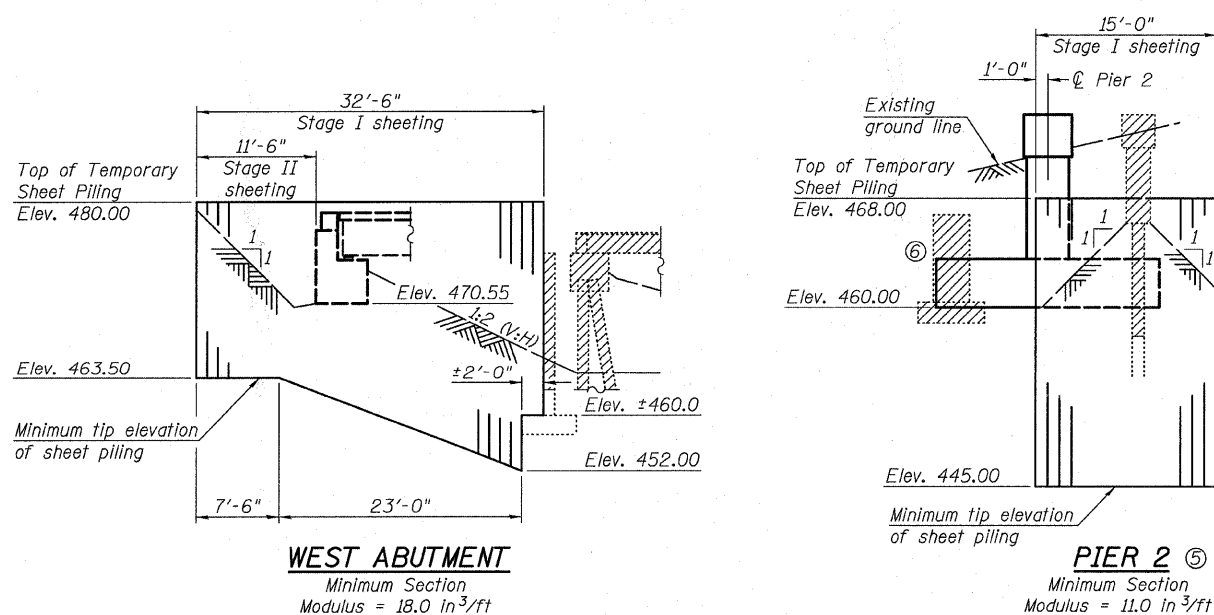
STAGE II REMOVAL ④



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION




TEMPORARY SHEET PILING DETAIL

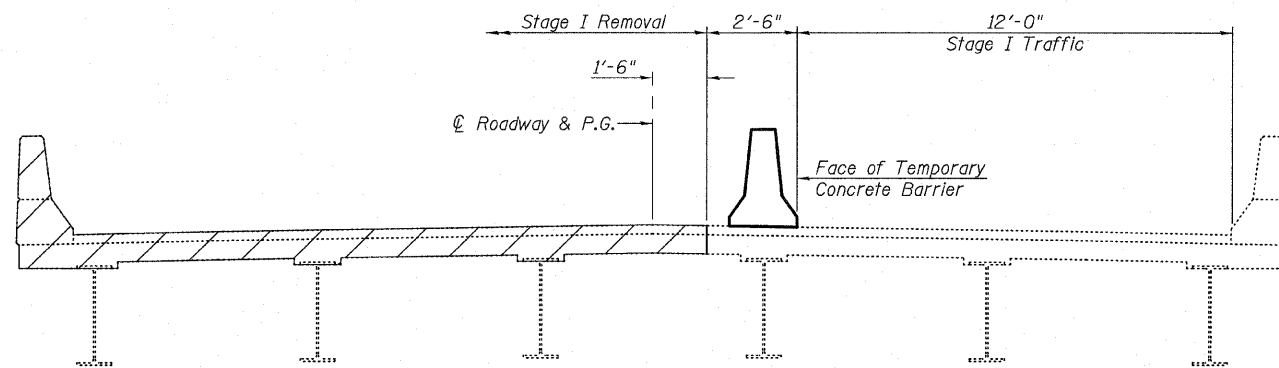
Notes:

- ① All views of existing Spans 1-6 looking east.
- ② For additional notes regarding stage construction and Temporary Sheet Piling details, see sheet 4 of 38.
- ③ Existing Span 6 support (Pier 10 in 1983 plans) shall be removed during Stage II Removal only. Partial removal of the support will be allowed during Stage I Removal as required to facilitate Stage I Superstructure Construction with the approval of the Engineer.
- ④ Steel WF beams support deficient PPC deck beams in some locations. The steel beams are not shown for clarity. The cost of their removal and salvage is included in Removal of Existing Structures. For additional requirements regarding the deficient PPC deck beams and the removal and salvage of the supporting steel WF beams, see General Notes on sheet 2 of 38.
- ⑤ The piles of existing Bent 5 remaining in service for Stage I Traffic shall not be exposed during Stage I Removal of Bent 5 or Stage I Construction of proposed Pier 2. Excavate to the bottom of Bent 5 wall encasement at the Stage Removal Line before installing Temporary Sheet Piling at Pier 2. Excavation perpendicular to the face of Bent 5 shall not be steeper than 1:1 while bent is in service. Excavation perpendicular to the back of the Temporary Sheet Piling shall not be steeper than 1:1. The cost of excavation outside of the limits of Structure Excavation shall be included in Removal of Existing Structures.
- ⑥ For note regarding removal of existing pier remnants buried in the vicinity of proposed Pier 2, see General Notes on sheet 2 of 38.

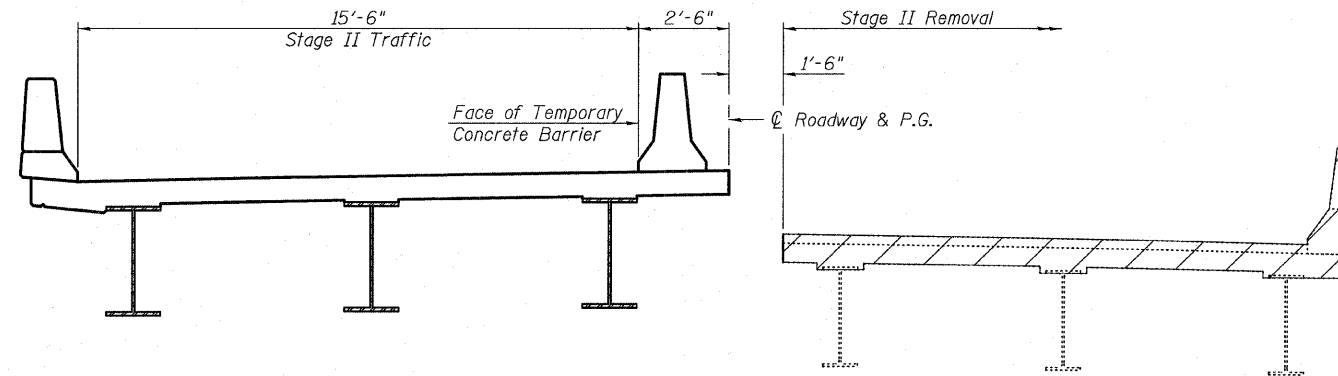
STAGE CONSTRUCTION DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 3 38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	25
			CONTRACT NO. 74235		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
 Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115				DESIGNED MAG CHECKED NEL DRAWN MAG CHECKED NEL	

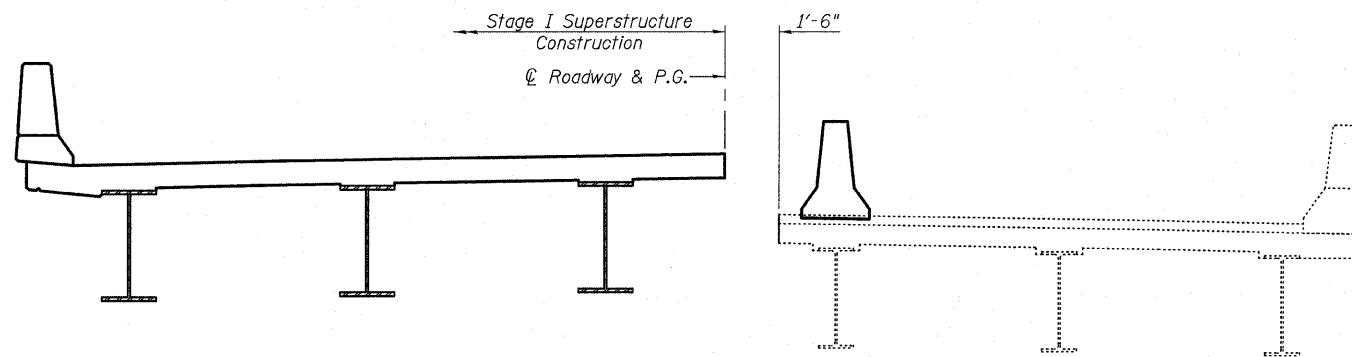
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



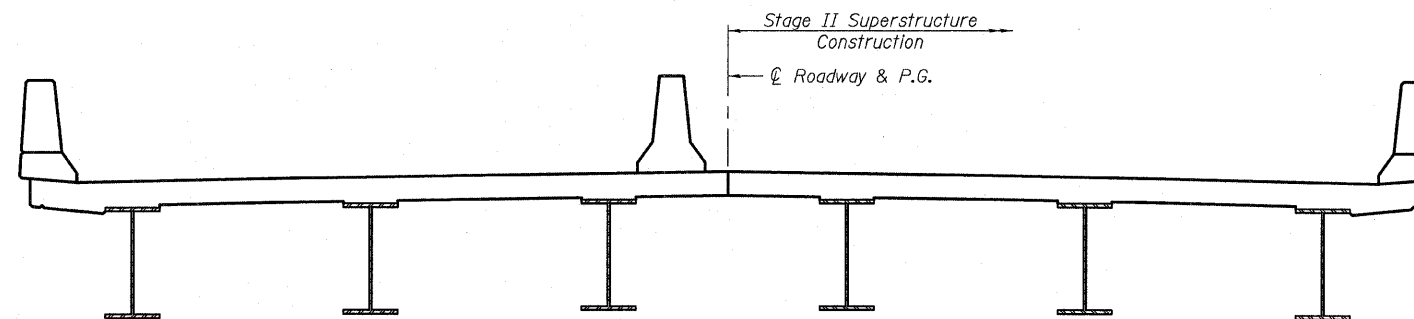
STAGE I REMOVAL



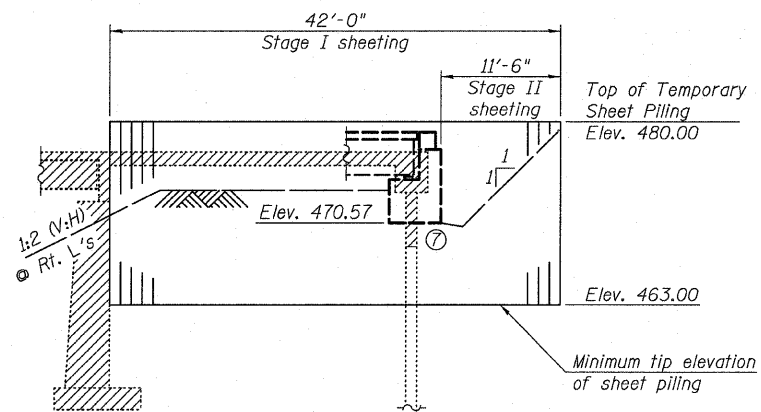
STAGE II REMOVAL



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION



EAST ABUTMENT


Minimum Section  
Modulus = 10.0 in<sup>3</sup>/ft

TEMPORARY SHEET PILING DETAIL

Notes:

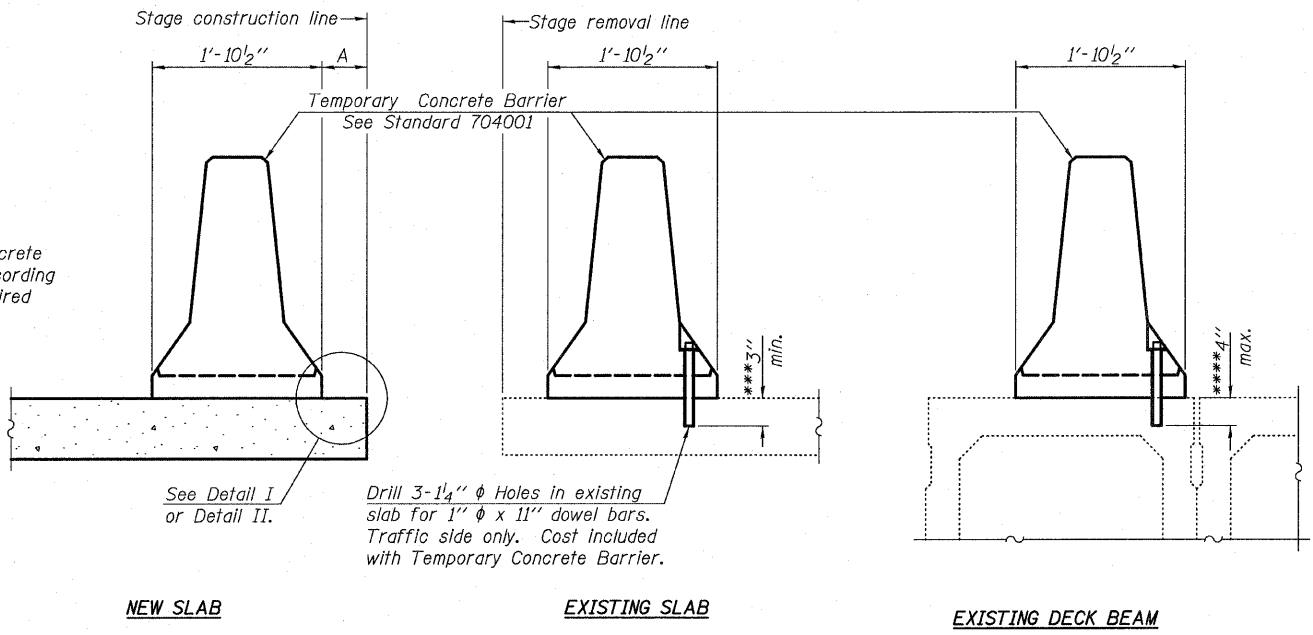
- ① All views of existing Span 7 looking east.
- ② For quantity of Temporary Concrete Barrier and related traffic control, see roadway plans.
- ③ For details of Temporary Concrete Barrier, see sheet 5 of 38.
- ④ Hatched areas indicate limits of Removal of Existing Structures.
- ⑤ The substructure stage removal and construction lines shall be similar to the superstructure stage removal and construction lines except as noted.
- ⑥ Existing Span 7 supports (Pier 10 and East Abutment in 1983 plans) shall be removed during Stage II Removal only. Partial removal of Span 7 supports will be allowed during Stage I Removal as required to facilitate Stage I Superstructure Construction with the approval of the Engineer.
- ⑦ Concrete piles supporting the existing east approach bent shall be removed to the depth required for construction of the proposed East Abutment pile cap and to facilitate the driving of the proposed battered steel piles. Cost included in Removal of Existing Structures.
- ⑧ The Contractor shall monitor the existing structure during Stage I Removal and pile driving to assure that no movement or damage is occurring. If movement or damage is observed, the Contractor shall immediately stop work and notify the Engineer. Cost included in Removal of Existing Structures.
- ⑨ If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
- ⑩ The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

STAGE CONSTRUCTION DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	752	(U-2BR)B-1	FAYETTE	71	26	
38 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 74235		
		Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED	MAG
					CHECKED	NEL
					DRAWN	MAG
					CHECKED	NEL

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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



**NEW SLAB**                      **EXISTING SLAB**                      **EXISTING DECK BEAM**

SECTIONS THRU SLAB OR DECK BEAM

**NOTES**

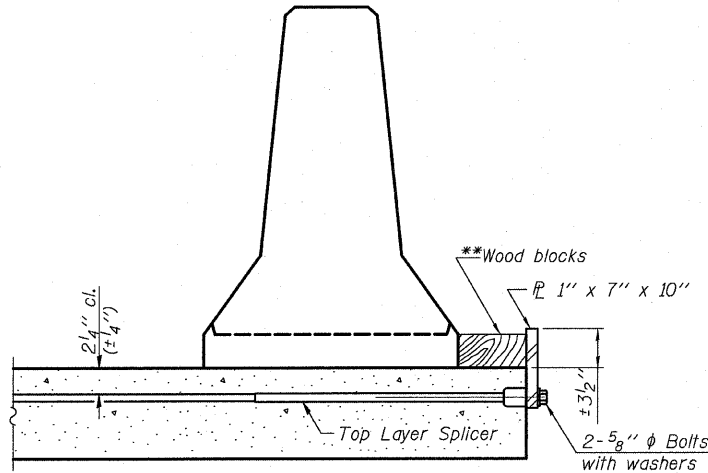
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1"x7"x10" steel  $\bar{L}$  to the top layer of couplers with 2-5/8"  $\phi$  bolts screwed to coupler at approximate  $\bar{C}$  of each barrier panel.

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

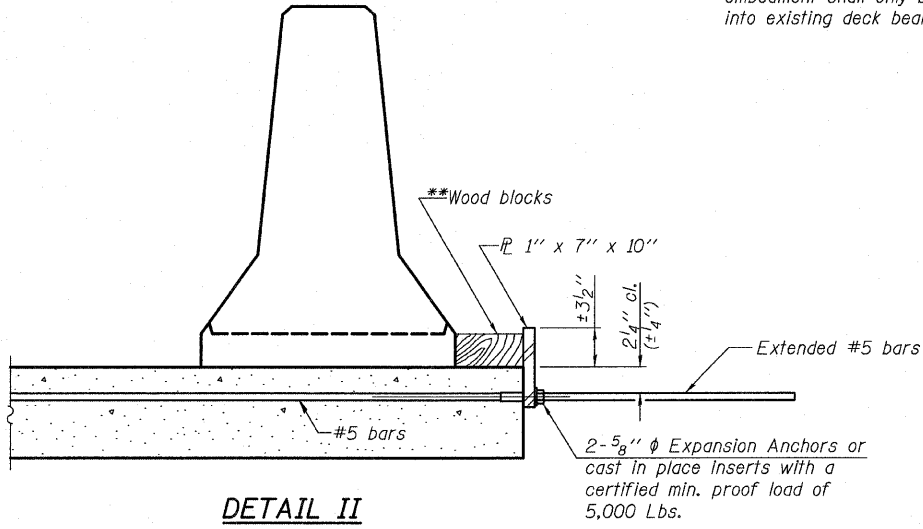
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

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

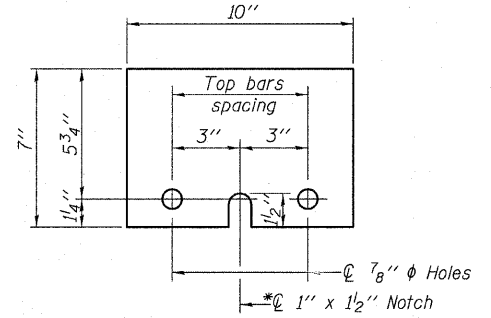


**DETAIL I**




**DETAIL II**

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

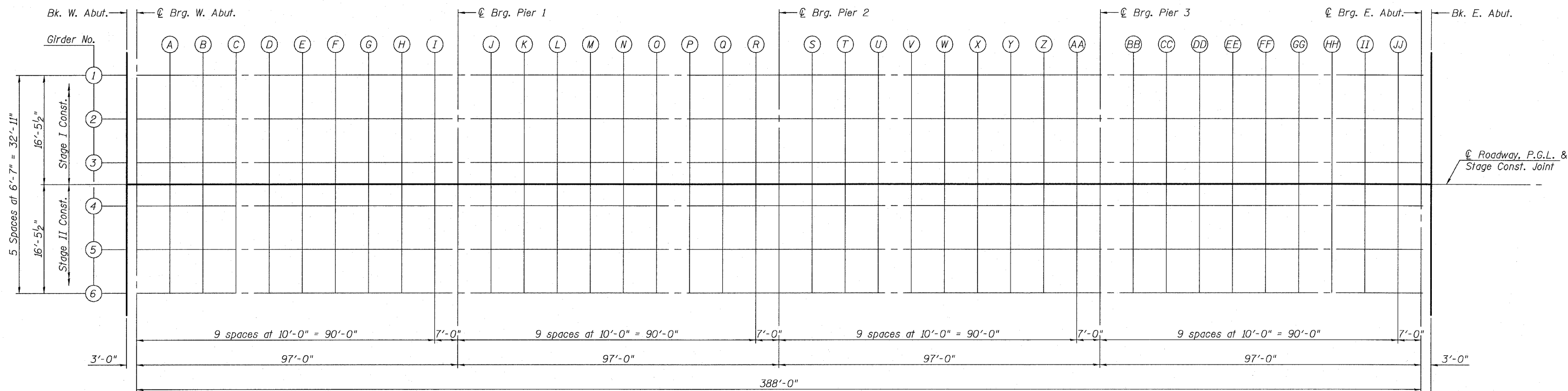


**STEEL RETAINER  $\bar{L}$  1" x 7" x 10"**  
\* Required only with Detail II

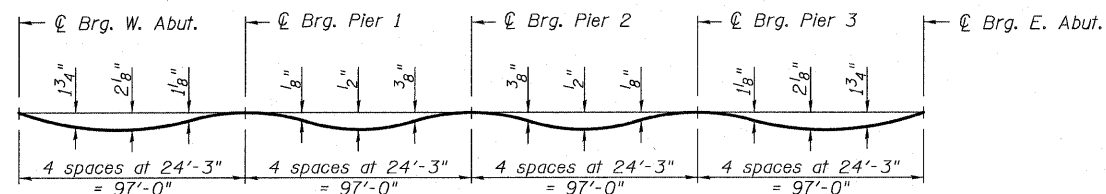
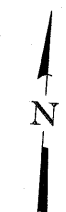
**TEMPORARY CONCRETE BARRIER  
FOR STAGE CONSTRUCTION  
STRUCTURE NO. 026-0105**

SHEET NO. 5 38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	27
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
CONTRACT NO. 74235					
 OATES ASSOCIATES Consulting Engineers Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED - CHECKED - DRAWN - CHECKED -		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



PLAN

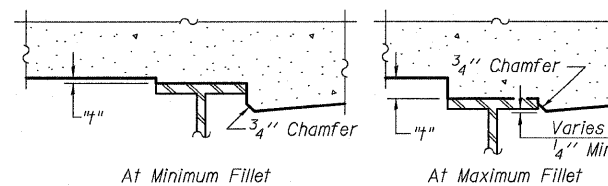


**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)

Note:


The above deflections are not to be used in the field if the engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" as shown on sheets 7 thru 9 of 38.



**FILLET HEIGHTS**

To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 7 thru 9 of 38, minus slab thickness, equals the fillet heights "t" above top flange of girders.

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 026-0105**

SHEET NO. 6 38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	28
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
 <b>OATES ASSOCIATES</b> Consulting Engineers			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115		
			DESIGNED	MAG	
			CHECKED	NEL	
			DRAWN	MAG	
			CHECKED	NEL	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	49+45.00	-16.46	479.07	479.07
☉ Brg. W. Abut.	49+48.00	-16.46	479.10	479.10
A	49+58.00	-16.46	479.22	479.29
B	49+68.00	-16.46	479.34	479.46
C	49+78.00	-16.46	479.45	479.61
D	49+88.00	-16.46	479.55	479.73
E	49+98.00	-16.46	479.64	479.81
F	50+08.00	-16.46	479.73	479.88
G	50+18.00	-16.46	479.82	479.92
H	50+28.00	-16.46	479.89	479.95
I	50+38.00	-16.46	479.96	479.98
☉ Brg. Pier 1	50+45.00	-16.46	480.01	480.01
J	50+55.00	-16.46	480.07	480.06
K	50+65.00	-16.46	480.12	480.12
L	50+75.00	-16.46	480.17	480.19
M	50+85.00	-16.46	480.21	480.24
N	50+95.00	-16.46	480.24	480.28
O	51+05.00	-16.46	480.27	480.31
P	51+15.00	-16.46	480.29	480.32
Q	51+25.00	-16.46	480.30	480.32
R	51+35.00	-16.46	480.31	480.31
☉ Brg. Pier 2	51+42.00	-16.46	480.31	480.31
S	51+52.00	-16.46	480.31	480.32
T	51+62.00	-16.46	480.30	480.32
U	51+72.00	-16.46	480.28	480.32
V	51+82.00	-16.46	480.26	480.31
W	51+92.00	-16.46	480.23	480.28
X	52+02.00	-16.46	480.20	480.23
Y	52+12.00	-16.46	480.16	480.17
Z	52+22.00	-16.46	480.11	480.11
AA	52+32.00	-16.46	480.06	480.05
☉ Brg. Pier 3	52+39.00	-16.46	480.02	480.02
BB	52+49.00	-16.46	479.95	479.98
CC	52+59.00	-16.46	479.88	479.95
DD	52+69.00	-16.46	479.80	479.92
EE	52+79.00	-16.46	479.72	479.87
FF	52+89.00	-16.46	479.63	479.80
GG	52+99.00	-16.46	479.53	479.71
HH	53+09.00	-16.46	479.43	479.58
II	53+19.00	-16.46	479.32	479.43
JJ	53+29.00	-16.46	479.20	479.25
☉ Brg. E. Abut.	53+36.00	-16.46	479.12	479.12
Bk. E. Abut.	53+39.00	-16.46	479.08	479.08


GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	49+45.00	-9.88	479.19	479.19
☉ Brg. W. Abut.	49+48.00	-9.88	479.23	479.23
A	49+58.00	-9.88	479.35	479.42
B	49+68.00	-9.88	479.46	479.59
C	49+78.00	-9.88	479.57	479.73
D	49+88.00	-9.88	479.68	479.85
E	49+98.00	-9.88	479.77	479.94
F	50+08.00	-9.88	479.86	480.00
G	50+18.00	-9.88	479.94	480.04
H	50+28.00	-9.88	480.02	480.07
I	50+38.00	-9.88	480.09	480.11
☉ Brg. Pier 1	50+45.00	-9.88	480.13	480.13
J	50+55.00	-9.88	480.19	480.19
K	50+65.00	-9.88	480.25	480.25
L	50+75.00	-9.88	480.29	480.31
M	50+85.00	-9.88	480.33	480.37
N	50+95.00	-9.88	480.37	480.41
O	51+05.00	-9.88	480.39	480.44
P	51+15.00	-9.88	480.41	480.45
Q	51+25.00	-9.88	480.43	480.45
R	51+35.00	-9.88	480.44	480.44
☉ Brg. Pier 2	51+42.00	-9.88	480.44	480.44
S	51+52.00	-9.88	480.44	480.44
T	51+62.00	-9.88	480.43	480.45
U	51+72.00	-9.88	480.41	480.45
V	51+82.00	-9.88	480.39	480.43
W	51+92.00	-9.88	480.36	480.40
X	52+02.00	-9.88	480.33	480.36
Y	52+12.00	-9.88	480.28	480.30
Z	52+22.00	-9.88	480.24	480.24
AA	52+32.00	-9.88	480.18	480.18
☉ Brg. Pier 3	52+39.00	-9.88	480.14	480.14
BB	52+49.00	-9.88	480.08	480.10
CC	52+59.00	-9.88	480.01	480.07
DD	52+69.00	-9.88	479.93	480.04
EE	52+79.00	-9.88	479.84	480.00
FF	52+89.00	-9.88	479.75	479.93
GG	52+99.00	-9.88	479.66	479.83
HH	53+09.00	-9.88	479.55	479.71
II	53+19.00	-9.88	479.44	479.55
JJ	53+29.00	-9.88	479.33	479.38
☉ Brg. E. Abut.	53+36.00	-9.88	479.24	479.24
Bk. E. Abut.	53+39.00	-9.88	479.21	479.21

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	49+45.00	-3.29	479.29	479.29
☉ Brg. W. Abut.	49+48.00	-3.29	479.33	479.33
A	49+58.00	-3.29	479.45	479.52
B	49+68.00	-3.29	479.57	479.69
C	49+78.00	-3.29	479.68	479.84
D	49+88.00	-3.29	479.78	479.96
E	49+98.00	-3.29	479.87	480.04
F	50+08.00	-3.29	479.96	480.11
G	50+18.00	-3.29	480.05	480.15
H	50+28.00	-3.29	480.12	480.18
I	50+38.00	-3.29	480.19	480.21
☉ Brg. Pier 1	50+45.00	-3.29	480.24	480.24
J	50+55.00	-3.29	480.30	480.29
K	50+65.00	-3.29	480.35	480.35
L	50+75.00	-3.29	480.40	480.42
M	50+85.00	-3.29	480.44	480.47
N	50+95.00	-3.29	480.47	480.51
O	51+05.00	-3.29	480.50	480.54
P	51+15.00	-3.29	480.52	480.55
Q	51+25.00	-3.29	480.53	480.55
R	51+35.00	-3.29	480.54	480.54
☉ Brg. Pier 2	51+42.00	-3.29	480.54	480.54
S	51+52.00	-3.29	480.54	480.55
T	51+62.00	-3.29	480.53	480.55
U	51+72.00	-3.29	480.51	480.55
V	51+82.00	-3.29	480.49	480.54
W	51+92.00	-3.29	480.46	480.51
X	52+02.00	-3.29	480.43	480.46
Y	52+12.00	-3.29	480.39	480.40
Z	52+22.00	-3.29	480.34	480.34
AA	52+32.00	-3.29	480.29	480.28
☉ Brg. Pier 3	52+39.00	-3.29	480.24	480.24
BB	52+49.00	-3.29	480.18	480.21
CC	52+59.00	-3.29	480.11	480.18
DD	52+69.00	-3.29	480.03	480.15
EE	52+79.00	-3.29	479.95	480.10
FF	52+89.00	-3.29	479.86	480.03
GG	52+99.00	-3.29	479.76	479.94
HH	53+09.00	-3.29	479.66	479.81
II	53+19.00	-3.29	479.55	479.66
JJ	53+29.00	-3.29	479.43	479.48
☉ Brg. E. Abut.	53+36.00	-3.29	479.35	479.35
Bk. E. Abut.	53+39.00	-3.29	479.31	479.31

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 026-0105

SHEET NO. 7	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	29
38 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS		CONTRACT NO. 74235		
FED. AID PROJECT					
 OATES ASSOCIATES Consulting Engineers			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115		
			DESIGNED MAG		
			CHECKED NEL		
			DRAWN MAG		
			CHECKED NEL		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

☉ ROADWAY, P.G.L. & STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	49+45.00	0.00	479.35	479.35
☉ Brg. W. Abut.	49+48.00	0.00	479.38	479.38
A	49+58.00	0.00	479.50	479.57
B	49+68.00	0.00	479.62	479.74
C	49+78.00	0.00	479.73	479.89
D	49+88.00	0.00	479.83	480.01
E	49+98.00	0.00	479.92	480.09
F	50+08.00	0.00	480.01	480.16
G	50+18.00	0.00	480.10	480.20
H	50+28.00	0.00	480.17	480.23
I	50+38.00	0.00	480.24	480.26
☉ Brg. Pier 1	50+45.00	0.00	480.29	480.29
J	50+55.00	0.00	480.35	480.34
K	50+65.00	0.00	480.40	480.40
L	50+75.00	0.00	480.45	480.47
M	50+85.00	0.00	480.49	480.52
N	50+95.00	0.00	480.52	480.57
O	51+05.00	0.00	480.55	480.59
P	51+15.00	0.00	480.57	480.60
Q	51+25.00	0.00	480.58	480.60
R	51+35.00	0.00	480.59	480.59
☉ Brg. Pier 2	51+42.00	0.00	480.59	480.59
S	51+52.00	0.00	480.59	480.60
T	51+62.00	0.00	480.58	480.60
U	51+72.00	0.00	480.56	480.60
V	51+82.00	0.00	480.54	480.59
W	51+92.00	0.00	480.51	480.56
X	52+02.00	0.00	480.48	480.51
Y	52+12.00	0.00	480.44	480.45
Z	52+22.00	0.00	480.39	480.39
AA	52+32.00	0.00	480.34	480.33
☉ Brg. Pier 3	52+39.00	0.00	480.30	480.30
BB	52+49.00	0.00	480.23	480.26
CC	52+59.00	0.00	480.16	480.23
DD	52+69.00	0.00	480.08	480.20
EE	52+79.00	0.00	480.00	480.15
FF	52+89.00	0.00	479.91	480.08
GG	52+99.00	0.00	479.81	479.99
HH	53+09.00	0.00	479.71	479.86
II	53+19.00	0.00	479.60	479.71
JJ	53+29.00	0.00	479.48	479.53
☉ Brg. E. Abut.	53+36.00	0.00	479.40	479.40
Bk. E. Abut.	53+39.00	0.00	479.36	479.36


GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	49+45.00	3.29	479.29	479.29
☉ Brg. W. Abut.	49+48.00	3.29	479.33	479.33
A	49+58.00	3.29	479.45	479.52
B	49+68.00	3.29	479.57	479.69
C	49+78.00	3.29	479.68	479.84
D	49+88.00	3.29	479.78	479.96
E	49+98.00	3.29	479.87	480.04
F	50+08.00	3.29	479.96	480.11
G	50+18.00	3.29	480.05	480.15
H	50+28.00	3.29	480.12	480.18
I	50+38.00	3.29	480.19	480.21
☉ Brg. Pier 1	50+45.00	3.29	480.24	480.24
J	50+55.00	3.29	480.30	480.29
K	50+65.00	3.29	480.35	480.35
L	50+75.00	3.29	480.40	480.42
M	50+85.00	3.29	480.44	480.47
N	50+95.00	3.29	480.47	480.51
O	51+05.00	3.29	480.50	480.54
P	51+15.00	3.29	480.52	480.55
Q	51+25.00	3.29	480.53	480.55
R	51+35.00	3.29	480.54	480.54
☉ Brg. Pier 2	51+42.00	3.29	480.54	480.54
S	51+52.00	3.29	480.54	480.55
T	51+62.00	3.29	480.53	480.55
U	51+72.00	3.29	480.51	480.55
V	51+82.00	3.29	480.49	480.54
W	51+92.00	3.29	480.46	480.51
X	52+02.00	3.29	480.43	480.46
Y	52+12.00	3.29	480.39	480.40
Z	52+22.00	3.29	480.34	480.34
AA	52+32.00	3.29	480.29	480.28
☉ Brg. Pier 3	52+39.00	3.29	480.24	480.24
BB	52+49.00	3.29	480.18	480.21
CC	52+59.00	3.29	480.11	480.18
DD	52+69.00	3.29	480.03	480.15
EE	52+79.00	3.29	479.95	480.10
FF	52+89.00	3.29	479.86	480.03
GG	52+99.00	3.29	479.76	479.94
HH	53+09.00	3.29	479.66	479.81
II	53+19.00	3.29	479.55	479.66
JJ	53+29.00	3.29	479.43	479.48
☉ Brg. E. Abut.	53+36.00	3.29	479.35	479.35
Bk. E. Abut.	53+39.00	3.29	479.31	479.31

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	49+45.00	9.88	479.19	479.19
☉ Brg. W. Abut.	49+48.00	9.88	479.23	479.23
A	49+58.00	9.88	479.35	479.42
B	49+68.00	9.88	479.46	479.59
C	49+78.00	9.88	479.57	479.73
D	49+88.00	9.88	479.68	479.85
E	49+98.00	9.88	479.77	479.94
F	50+08.00	9.88	479.86	480.00
G	50+18.00	9.88	479.94	480.04
H	50+28.00	9.88	480.02	480.07
I	50+38.00	9.88	480.09	480.11
☉ Brg. Pier 1	50+45.00	9.88	480.13	480.13
J	50+55.00	9.88	480.19	480.19
K	50+65.00	9.88	480.25	480.25
L	50+75.00	9.88	480.29	480.31
M	50+85.00	9.88	480.33	480.37
N	50+95.00	9.88	480.37	480.41
O	51+05.00	9.88	480.39	480.44
P	51+15.00	9.88	480.41	480.45
Q	51+25.00	9.88	480.43	480.45
R	51+35.00	9.88	480.44	480.44
☉ Brg. Pier 2	51+42.00	9.88	480.44	480.44
S	51+52.00	9.88	480.44	480.44
T	51+62.00	9.88	480.43	480.45
U	51+72.00	9.88	480.41	480.45
V	51+82.00	9.88	480.39	480.43
W	51+92.00	9.88	480.36	480.40
X	52+02.00	9.88	480.33	480.36
Y	52+12.00	9.88	480.28	480.30
Z	52+22.00	9.88	480.24	480.24
AA	52+32.00	9.88	480.18	480.18
☉ Brg. Pier 3	52+39.00	9.88	480.14	480.14
BB	52+49.00	9.88	480.08	480.10
CC	52+59.00	9.88	480.01	480.07
DD	52+69.00	9.88	479.93	480.04
EE	52+79.00	9.88	479.84	480.00
FF	52+89.00	9.88	479.75	479.93
GG	52+99.00	9.88	479.66	479.83
HH	53+09.00	9.88	479.55	479.71
II	53+19.00	9.88	479.44	479.55
JJ	53+29.00	9.88	479.33	479.38
☉ Brg. E. Abut.	53+36.00	9.88	479.24	479.24
Bk. E. Abut.	53+39.00	9.88	479.21	479.21

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 026-0105


SHEET NO. 8	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	30
38 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		
 OATES ASSOCIATES Consulting Engineers			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115		
			DESIGNED	MAG	
			CHECKED	NEL	
			DRAWN	MAG	
			CHECKED	NEL	
CONTRACT NO. 74235					

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	49+45.00	16.46	479.07	479.07
⊕ Brg. W. Abut.	49+48.00	16.46	479.10	479.10
A	49+58.00	16.46	479.22	479.29
B	49+68.00	16.46	479.34	479.46
C	49+78.00	16.46	479.45	479.61
D	49+88.00	16.46	479.55	479.73
E	49+98.00	16.46	479.64	479.81
F	50+08.00	16.46	479.73	479.88
G	50+18.00	16.46	479.82	479.92
H	50+28.00	16.46	479.89	479.95
I	50+38.00	16.46	479.96	479.98
⊕ Brg. Pier 1	50+45.00	16.46	480.01	480.01
J	50+55.00	16.46	480.07	480.06
K	50+65.00	16.46	480.12	480.12
L	50+75.00	16.46	480.17	480.19
M	50+85.00	16.46	480.21	480.24
N	50+95.00	16.46	480.24	480.28
O	51+05.00	16.46	480.27	480.31
P	51+15.00	16.46	480.29	480.32
Q	51+25.00	16.46	480.30	480.32
R	51+35.00	16.46	480.31	480.31
⊕ Brg. Pier 2	51+42.00	16.46	480.31	480.31
S	51+52.00	16.46	480.31	480.32
T	51+62.00	16.46	480.30	480.32
U	51+72.00	16.46	480.28	480.32
V	51+82.00	16.46	480.26	480.31
W	51+92.00	16.46	480.23	480.28
X	52+02.00	16.46	480.20	480.23
Y	52+12.00	16.46	480.16	480.17
Z	52+22.00	16.46	480.11	480.11
AA	52+32.00	16.46	480.06	480.05
⊕ Brg. Pier 3	52+39.00	16.46	480.02	480.02
BB	52+49.00	16.46	479.95	479.98
CC	52+59.00	16.46	479.88	479.95
DD	52+69.00	16.46	479.80	479.92
EE	52+79.00	16.46	479.72	479.87
FF	52+89.00	16.46	479.63	479.80
GG	52+99.00	16.46	479.53	479.71
HH	53+09.00	16.46	479.43	479.58
II	53+19.00	16.46	479.32	479.43
JJ	53+29.00	16.46	479.20	479.25
⊕ Brg. E. Abut.	53+36.00	16.46	479.12	479.12
Bk. E. Abut.	53+39.00	16.46	479.08	479.08

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 026-0105

SHEET NO. 9	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	31
38 SHEETS	CONTRACT NO. 74235				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
 <b>OATES ASSOCIATES</b> Consulting Engineers Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED MAG		
			CHECKED NEL		
			DRAWN MAG		
			CHECKED NEL		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	49+15.50	-18.00	478.65
A1	49+25.50	-18.00	478.78
A2	49+35.50	-18.00	478.91
E. End West Appr. Slab	49+45.50	-18.00	479.04

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	49+15.50	-12.00	478.77
A1	49+25.50	-12.00	478.90
A2	49+35.50	-12.00	479.04
E. End West Appr. Slab	49+45.50	-12.00	479.16

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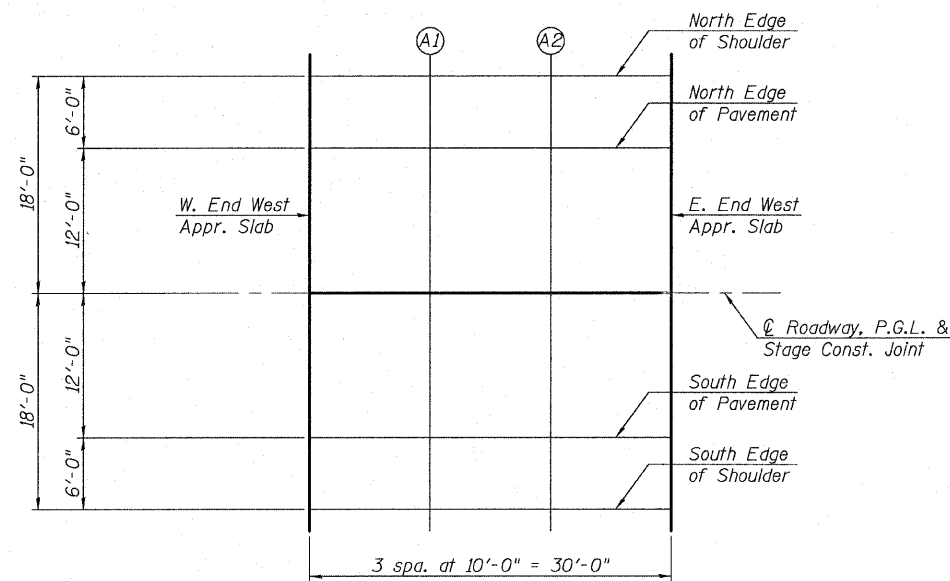
Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	49+15.50	0.00	478.96
A1	49+25.50	0.00	479.09
A2	49+35.50	0.00	479.22
E. End West Appr. Slab	49+45.50	0.00	479.35

SOUTH EDGE OF PAVEMENT

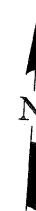
Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	49+15.50	12.00	478.77
A1	49+25.50	12.00	478.90
A2	49+35.50	12.00	479.04
E. End West Appr. Slab	49+45.50	12.00	479.16

SOUTH EDGE OF SHOULDER


Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	49+15.50	18.00	478.65
A1	49+25.50	18.00	478.78
A2	49+35.50	18.00	478.91
E. End West Appr. Slab	49+45.50	18.00	479.04



**PLAN**  
West Approach



TOP OF WEST APPROACH  
SLAB ELEVATIONS  
STRUCTURE NO. 026-0105

SHEET NO. 10	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	32
38 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 74235	
 OATES ASSOCIATES Consulting Engineers	Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED MAG	
				CHECKED NEL	
				DRAWN MAG	
				CHECKED NEL	



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	53+38.50	-18.00	479.05
A3	53+48.50	-18.00	478.93
A4	53+58.50	-18.00	478.80
E. End East Appr. Slab	53+68.50	-18.00	478.67

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	53+38.50	-12.00	479.18
A3	53+48.50	-12.00	479.05
A4	53+58.50	-12.00	478.92
E. End East Appr. Slab	53+68.50	-12.00	478.80

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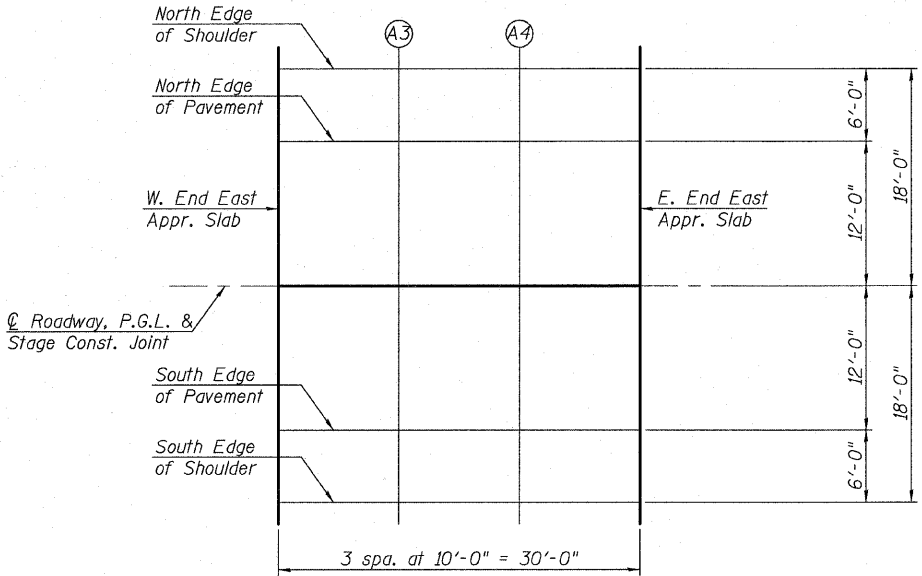
Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	53+38.50	0.00	479.37
A3	53+48.50	0.00	479.24
A4	53+58.50	0.00	479.11
E. End East Appr. Slab	53+68.50	0.00	478.98

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	53+38.50	12.00	479.18
A3	53+48.50	12.00	479.05
A4	53+58.50	12.00	478.92
E. End East Appr. Slab	53+68.50	12.00	478.80


SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	53+38.50	18.00	479.05
A3	53+48.50	18.00	478.93
A4	53+58.50	18.00	478.80
E. End East Appr. Slab	53+68.50	18.00	478.67

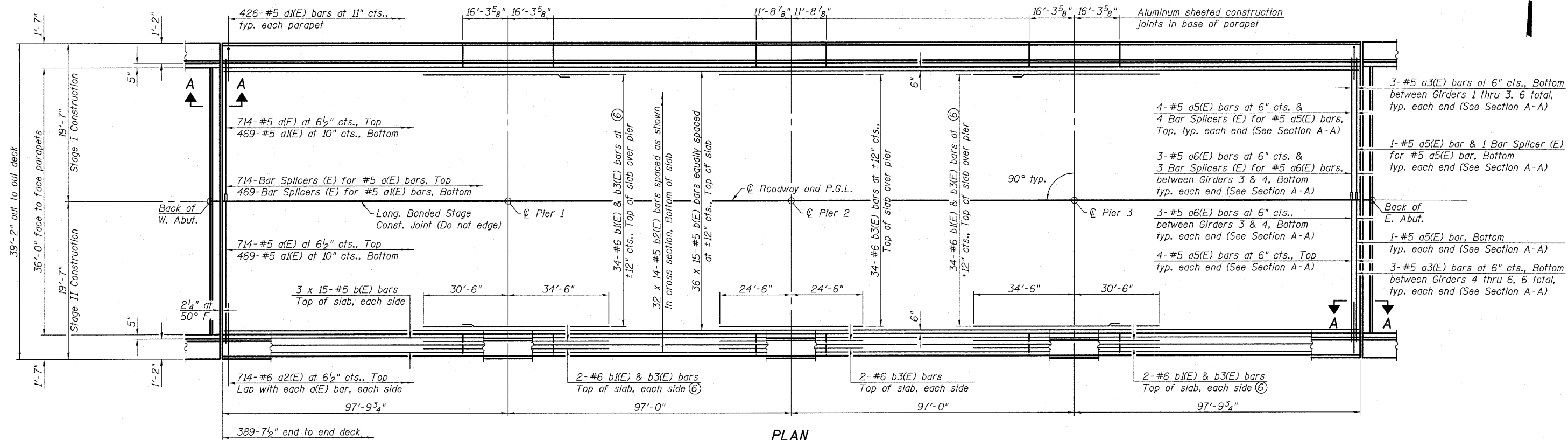
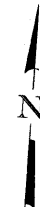


**PLAN**  
East Approach

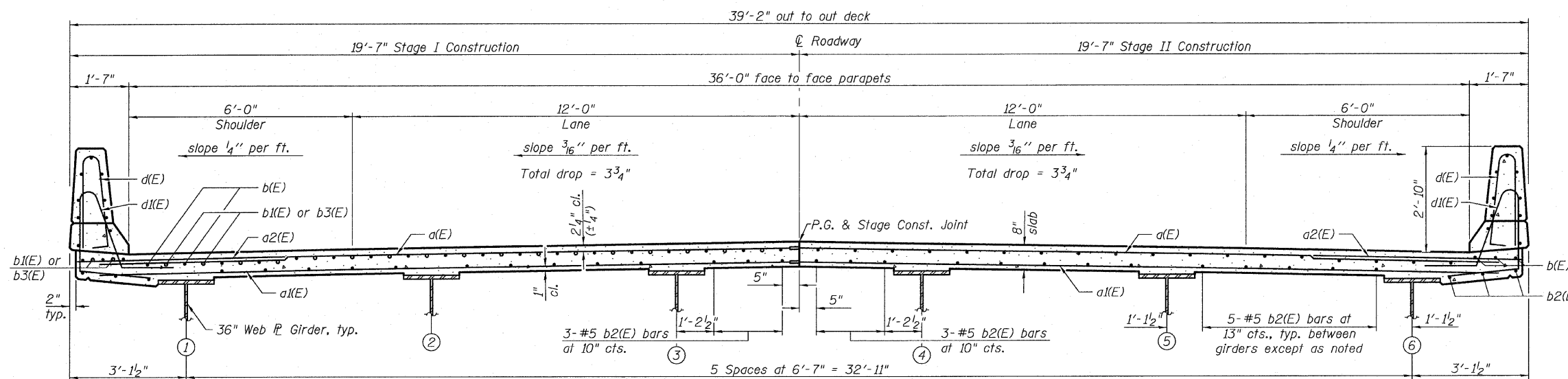
TOP OF EAST APPROACH  
SLAB ELEVATIONS  
STRUCTURE NO. 026-0105

SHEET NO. 11	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	33
38 SHEETS			CONTRACT NO. 74235		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
 Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115				DESIGNED MAG CHECKED NEL DRAWN MAG CHECKED NEL	

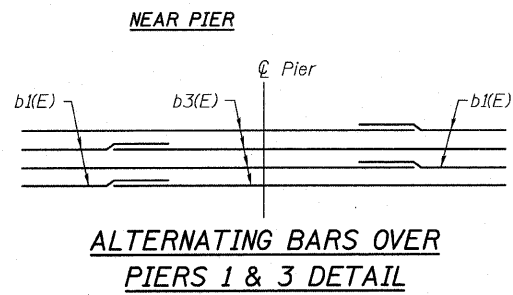
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



PLAN




CROSS SECTION  
(Looking East)



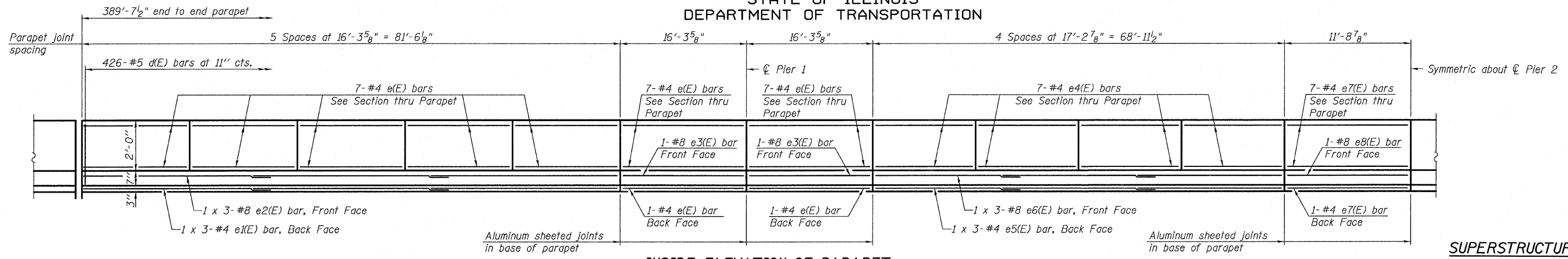
ALTERNATING BARS OVER  
PIERS 1 & 3 DETAIL

- Notes:
- For superstructure details, Bill of Material, Bar List, Bar Details, parapet reinforcement and Section A-A, see sheet 13 of 38.
  - Bars indicated thus 36 x 15-#5 etc. indicates 36 lines of bars with 15 lengths per line.
  - Minimum bar lap: #5 bars = 1'-8"  
#6 bars = 2'-0"
  - For bar splicer assembly details, see sheet 30 of 38.
  - Bar x(E) at concrete edge beam not shown for clarity. See Section A-A for location and callouts.
  - See Alternating Bars Over Piers 1 & 3 Detail.

SUPERSTRUCTURE  
STRUCTURE NO. 026-0105

SHEET NO. 12 38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	34
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
 OATES ASSOCIATES Consulting Engineers			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115		
			DESIGNED MAG		
			CHECKED NEL		
			DRAWN MAG		
			CHECKED NEL		

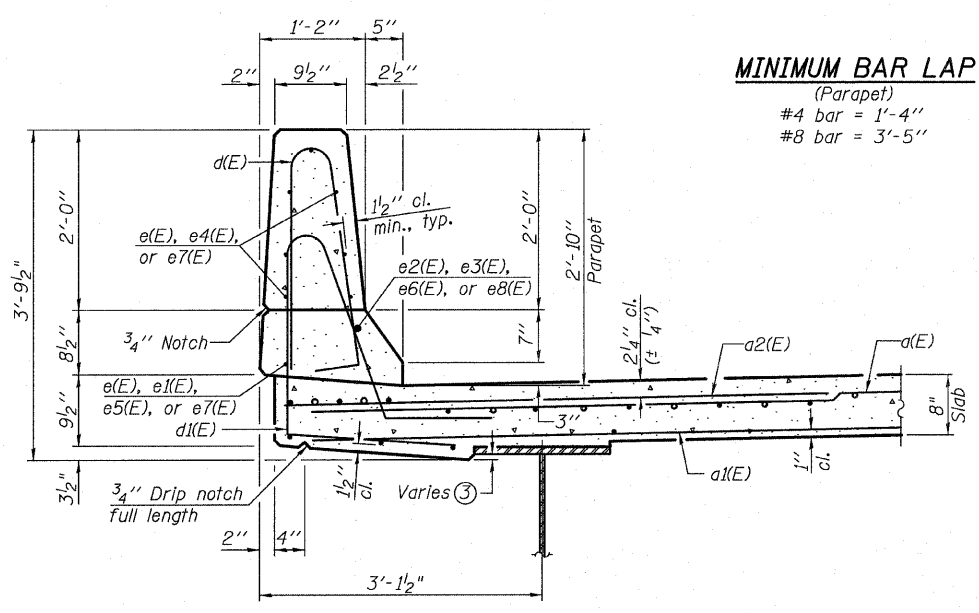
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



INSIDE ELEVATION OF PARAPET

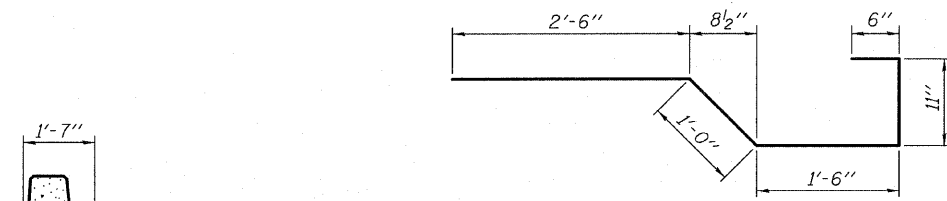
SUPERSTRUCTURE  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	1428	#5	19'-1"	—
a1(E)	938	#5	18'-9"	—
a2(E)	1428	#6	6'-0"	—
a3(E)	24	#5	7'-6"	—
a4(E)	-	-	-	-
a5(E)	20	#5	16'-1"	—
a6(E)	12	#5	3'-9"	—
a7(E)	32	#5	1'-6"	—
b(E)	630	#5	27'-6"	—
b1(E)	76	#6	18'-0"	—
b2(E)	448	#5	29'-5"	—
b3(E)	114	#6	49'-0"	—
d(E)	852	#5	5'-7"	—
d1(E)	852	#5	7'-6"	—
e(E)	204	#4	15'-11"	—
e1(E)	12	#4	28'-0"	—
e2(E)	12	#8	29'-4"	—
e3(E)	8	#8	15'-11"	—
e4(E)	112	#4	16'-10"	—
e5(E)	12	#4	23'-10"	—
e6(E)	12	#8	25'-2"	—
e7(E)	32	#4	11'-4"	—
e8(E)	4	#8	11'-4"	—
x(E)	60	#5	6'-5"	—
Reinforcement Bars, Epoxy Coated		Pound	120,840	
Concrete Superstructure		Cu. Yds.	500.1	



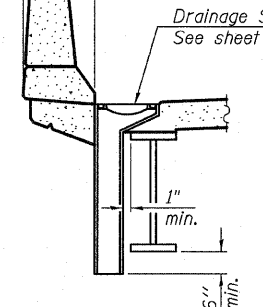
SECTION THRU PARAPET

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



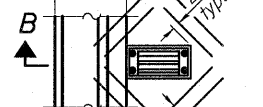
SECTION B-B

Drainage Scupper, DS-11  
See sheet 17 of 38 for details.



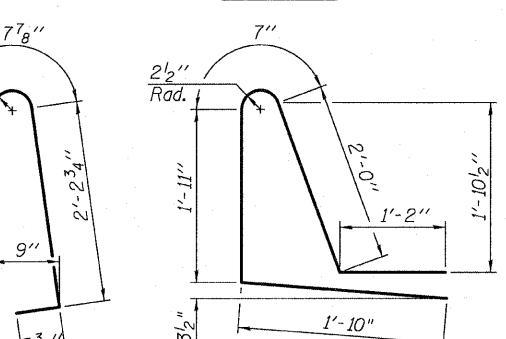
SECTION B-B

2-#5 a7(E) bars at 4" cts. tied to bottom of top reinforcement mat. typ.



PLAN

BAR x(E)



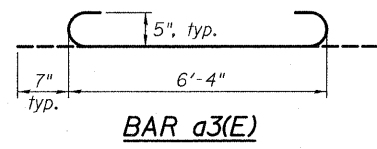
BAR d(E)



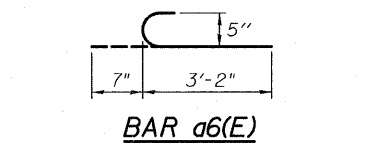
BAR d1(E)



BAR d1(E)

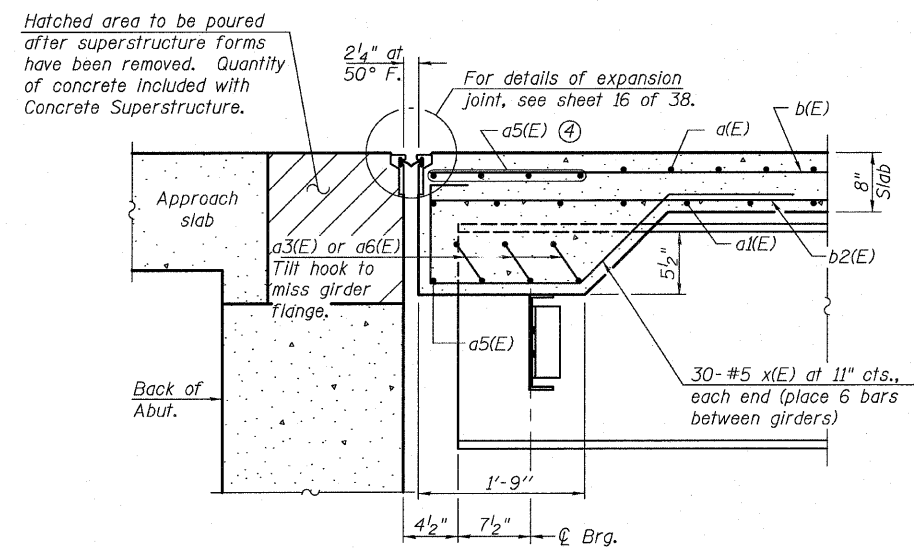


BAR a3(E)

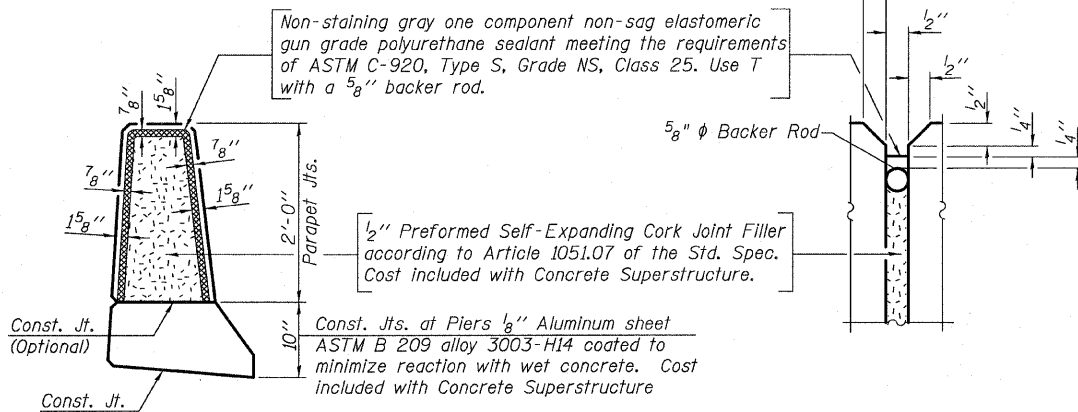


BAR a6(E)

- Notes:
- 1 Cut longitudinal reinforcement to clear drainage scuppers.
  - 2 Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.
  - 3 Dimension varies throughout the length of the structure from 1/4" minimum at the maximum fascia girder fillet height.
  - 4 Place a5(E) bars under longitudinal bars as shown in Section A-A.
  - 5 For location of drainage scuppers, see sheet 1 of 38.



SECTION A-A

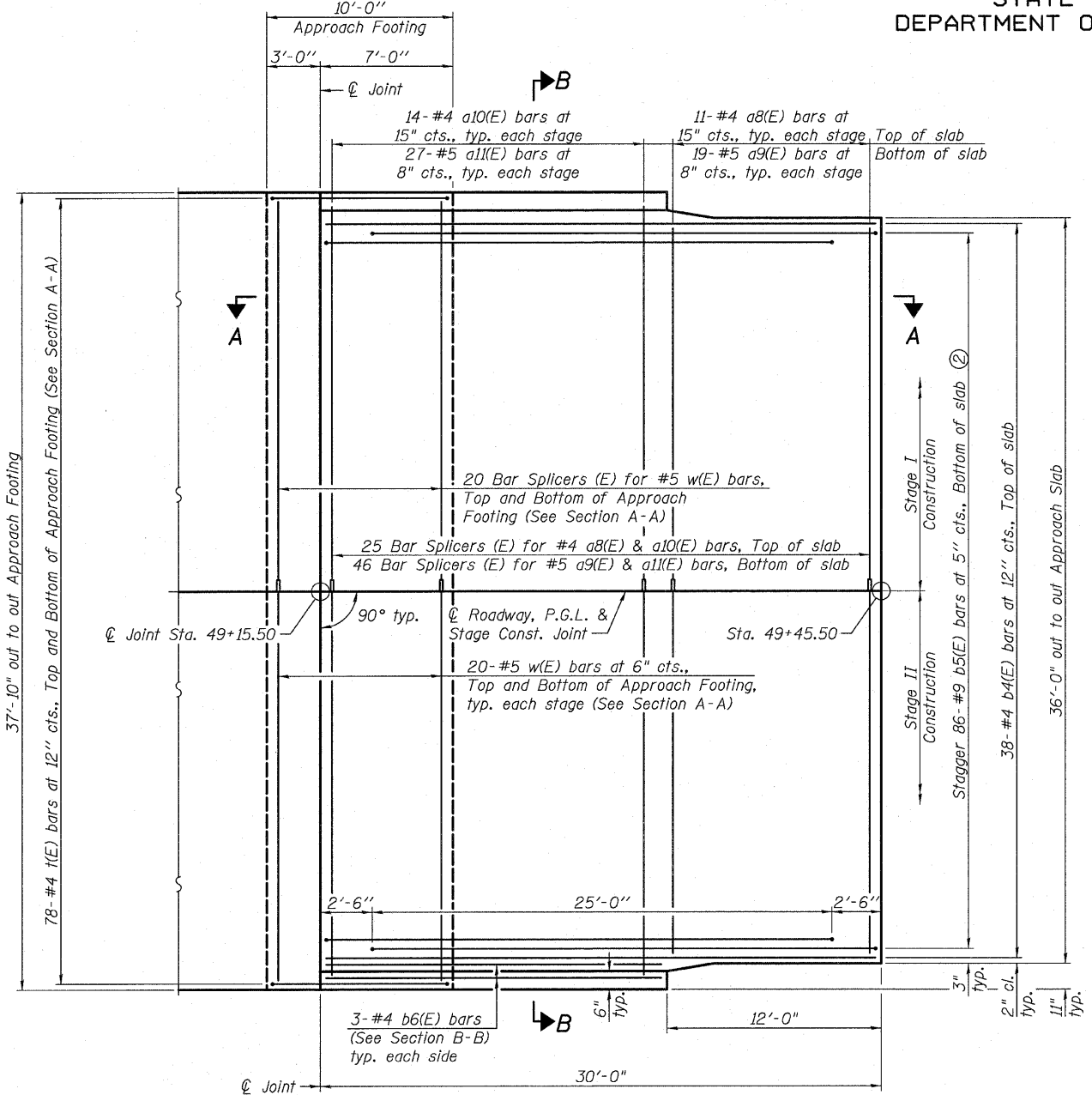


PARAPET JOINT DETAILS

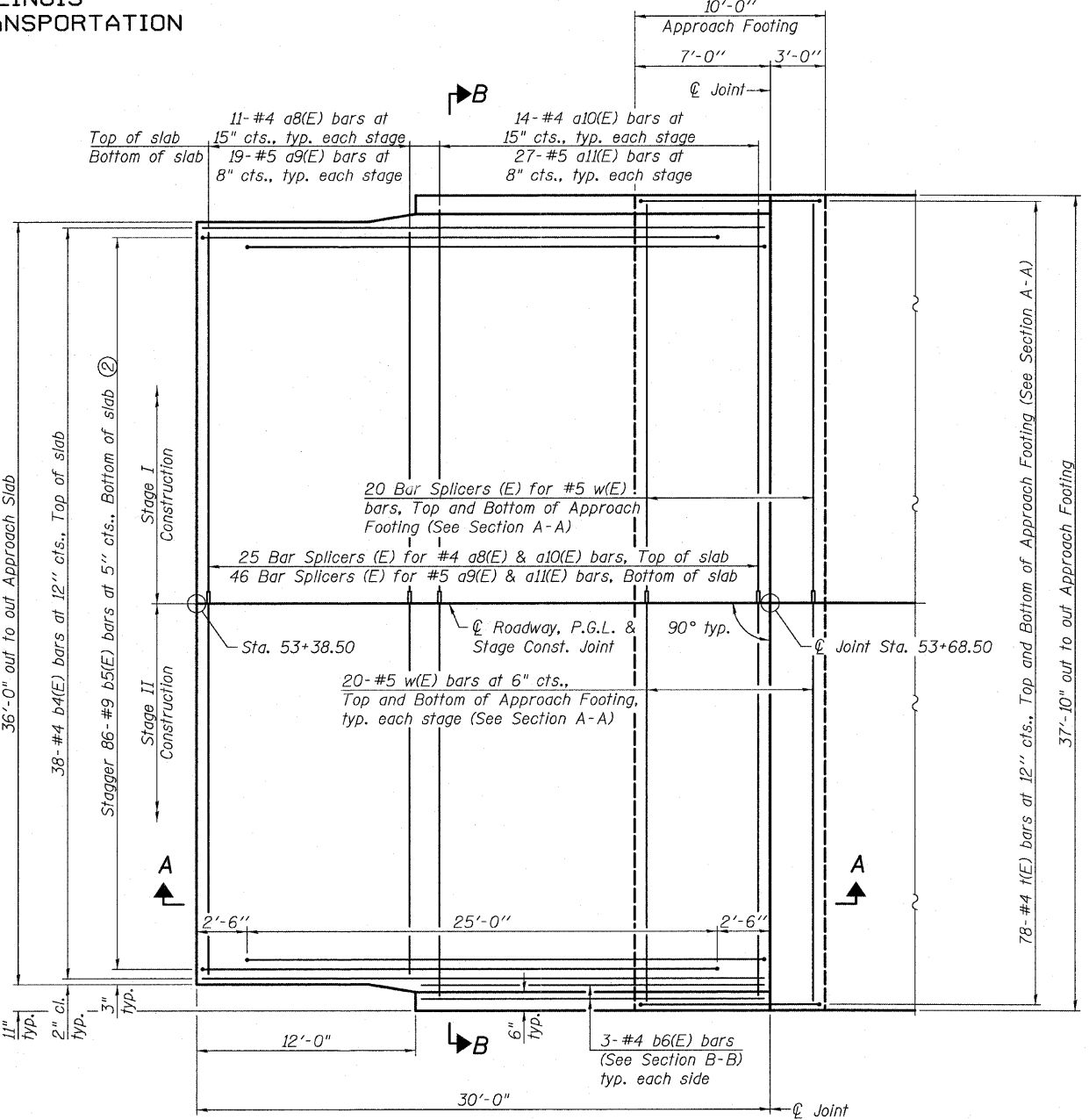
SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 13 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 35
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 74235	
OATES ASSOCIATES Consulting Engineers Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED MAG CHECKED NEL DRAWN MAG CHECKED NEL		

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DEPARTMENT OF TRANSPORTATION




**WEST APPROACH PLAN**



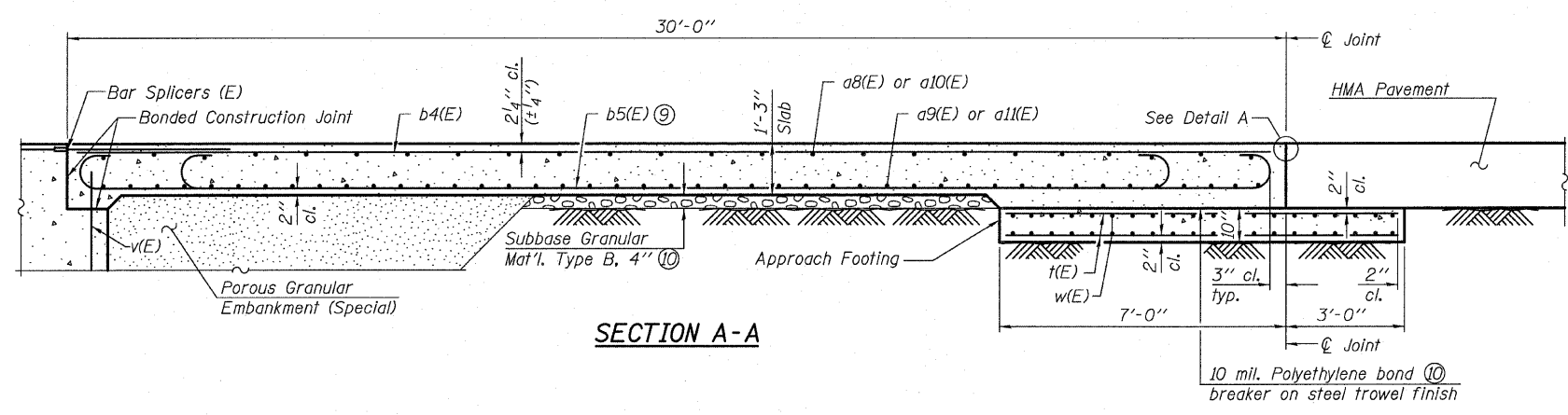
**EAST APPROACH PLAN**

- Notes:  
 ① See sheet 15 of 38 for Sections A-A & B-B.  
 ② Tilt #9 b5(E) bars as required to maintain clearance.

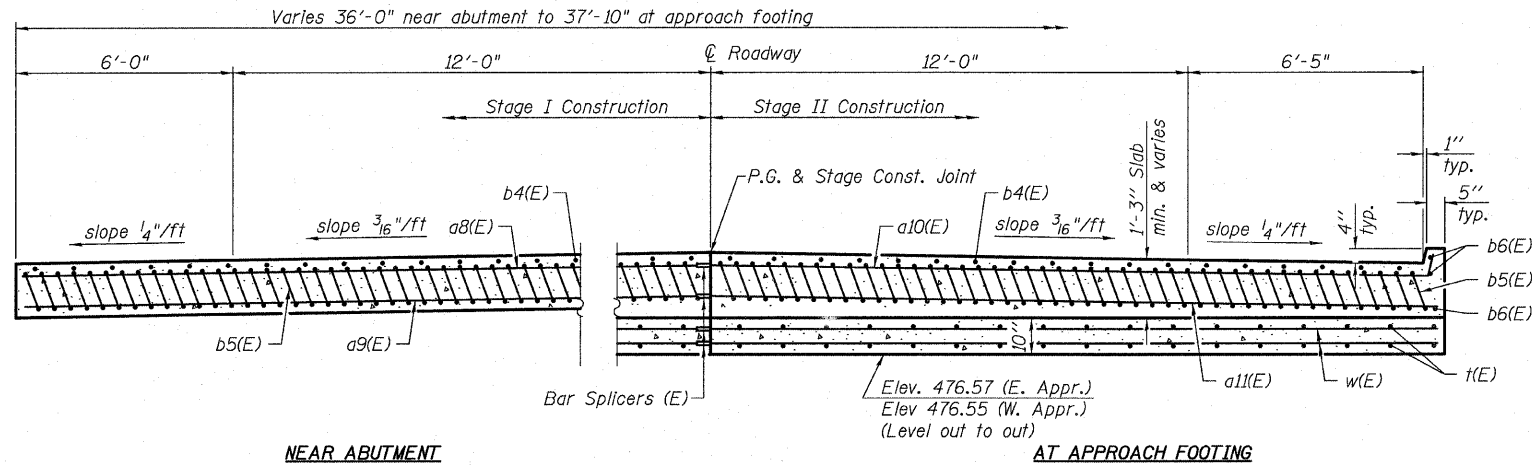
**BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 026-0105**

SHEET NO. 14  38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	36
			CONTRACT NO. 74235		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
 <b>OATES ASSOCIATES</b> Consulting Engineers	Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115				DESIGNED MAG
					CHECKED NEL
					DRAWN MAG
					CHECKED NEL

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



SECTION A-A

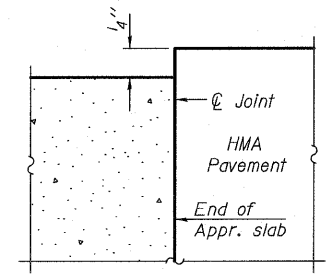


NEAR ABUTMENT

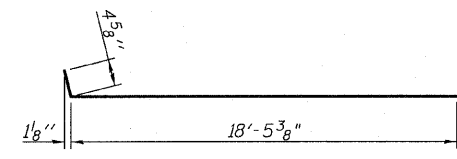
SECTION B-B

(See Plan for dimensions not shown)

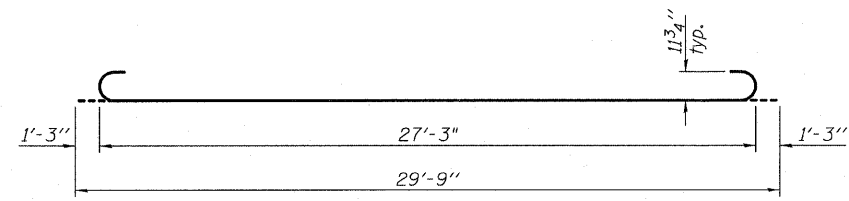
AT APPROACH FOOTING



DETAIL A



BAR a10(E)



BAR b5(E)


TWO APPROACHES  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a8(E)	44	#4	17'-8"	—
a9(E)	76	#5	17'-8"	—
a10(E)	56	#4	18'-10"	—
a11(E)	108	#5	18'-7"	—
b4(E)	76	#4	29'-6"	—
b5(E)	172	#9	29'-9"	—
b6(E)	12	#4	17'-6"	—
t(E)	156	#4	9'-8"	—
w(E)	160	#5	18'-7"	—
Concrete Superstructure			Cu. Yd.	51.0
Concrete Structures			Cu. Yd.	23.4
Reinforcement Bars, Epoxy Coated			Pound	27,860

- Notes:
- Approach slab shall be paid for as Concrete Superstructure.
  - Approach footing concrete shall be paid for as Concrete Structures.
  - Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
  - For v(E) bar details, see sheet 25 of 38.
  - The approach footing maximum applied service bearing pressure (Q<sub>max</sub>) = 2.0 ksf.
  - For bar splicer details, see sheet 30 of 38.
  - Cost of excavation for approach footing included with Concrete Structures.
  - For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 38.
  - Tilt #9 b5(E) bars as required to maintain clearance.
  - Cost included with Concrete Superstructure.

BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 026-0105

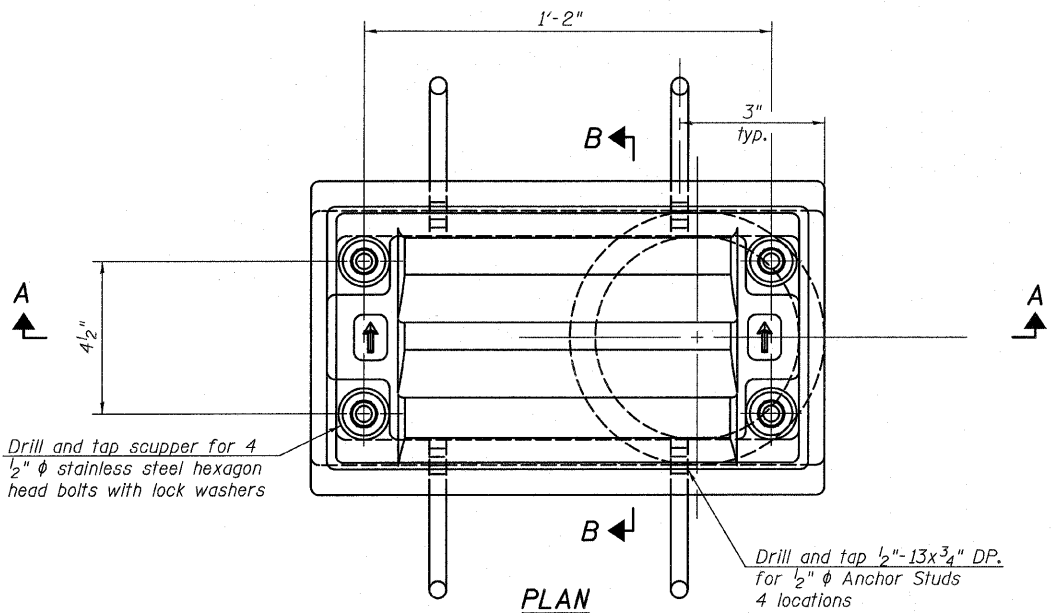
SHEET NO. 15	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	37
38 SHEETS	CONTRACT NO. 74235			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT	


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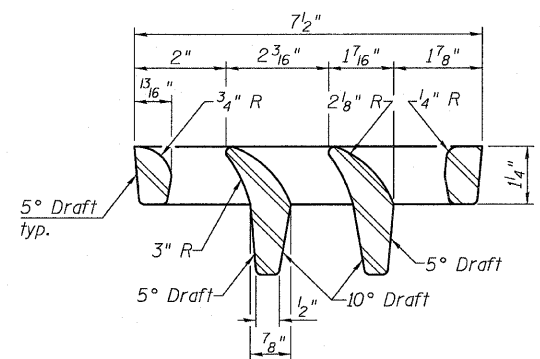
DESIGNED	MAG
CHECKED	NEL
DRAWN	MAG
CHECKED	NEL



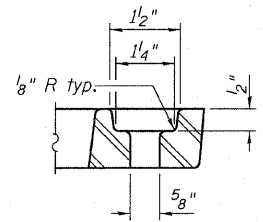
STATE OF ILLINOIS  
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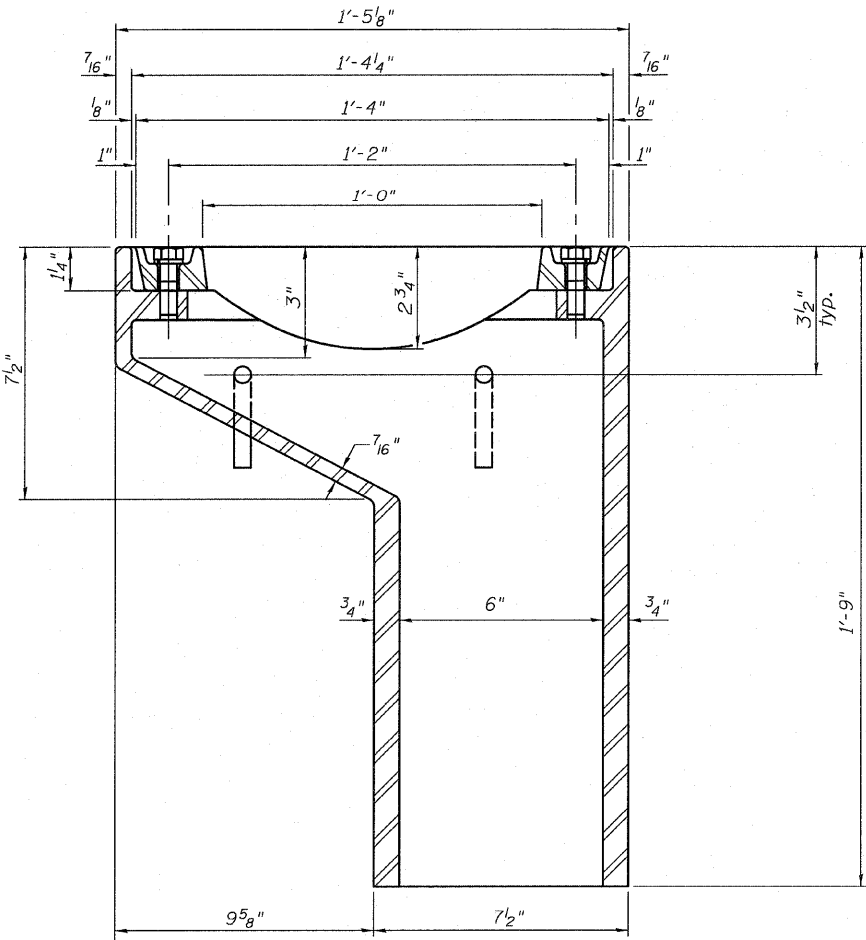
PLAN



VANE GRATE DETAIL

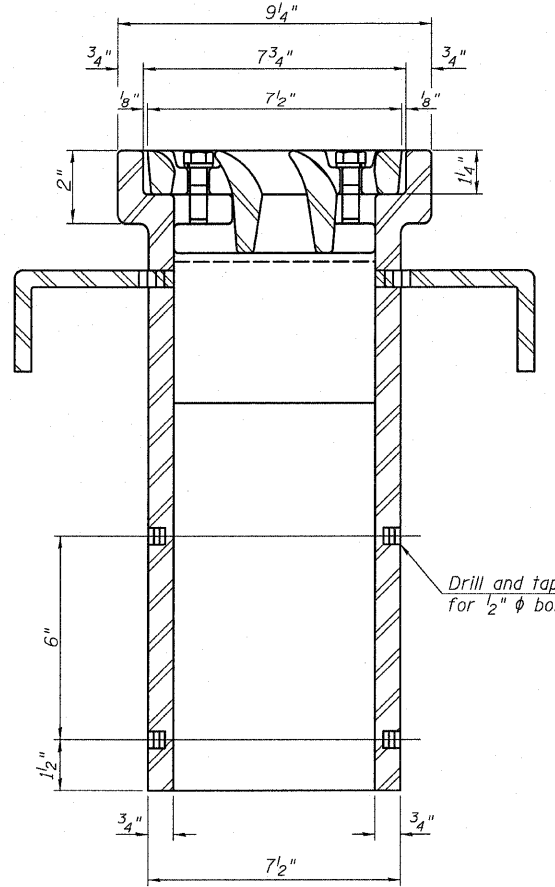


BOLT HOLE DETAIL



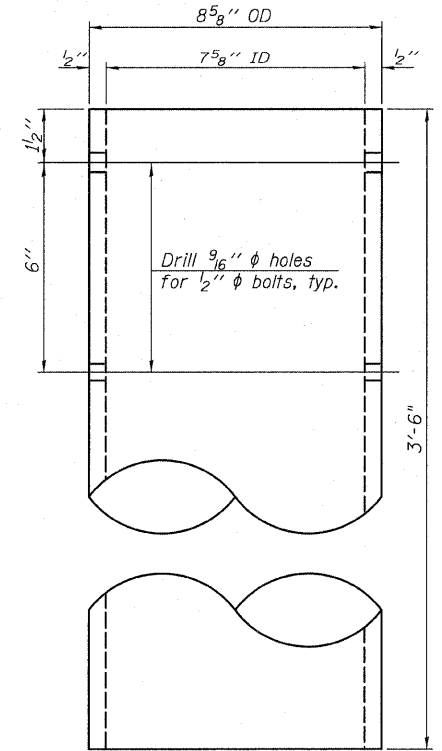
SECTION A-A

See sheet 13 of 38 for scupper location relative to parapet.

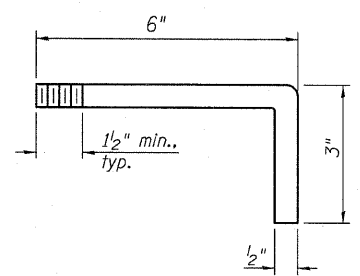


SECTION B-B

Drill and tap 1/2"-13x1/2" DP. for 1/2" φ bolts. (4 locations)



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

Item	Unit	Quantity
Drainage Scuppers, DS-11	Each	4

DRAINAGE SCUPPERS, DS-11  
STRUCTURE NO. 026-0105

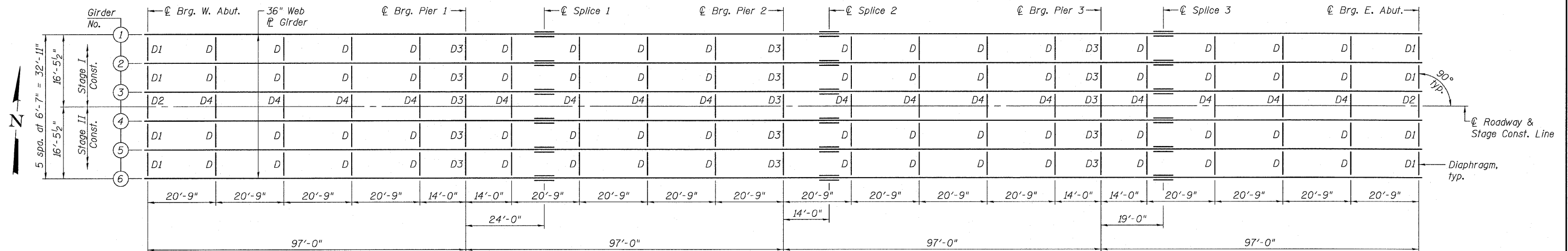
SHEET NO. 17 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 39
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 74235	



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DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

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	0.4 Sp. 1 or 0.6 Sp. 4	Pier 1 or 3	0.5 Sp. 2 or 3	Pier 2
$I_s$	11,062	17,560	11,062	14,268
$I_c(n)$	25,631	-	25,631	-
$I_c(3n)$	19,157	-	19,157	-
$S_s$	590	912	590	751
$S_c(n)$	786	-	786	-
$S_c(3n)$	722	-	722	-
Z	-	-	-	-
DC1	0.862	0.932	0.862	0.898
$M_{DC1}$	574.8	1,008.8	238.6	565.2
DC2	0.150	0.150	0.150	0.150
$M_{DC2}$	109.9	148.6	54.9	94.4
DW	0.300	0.300	0.300	0.300
$M_{DW}$	219.8	297.2	109.8	188.8
$M_k + IM$	1,228.9	1,032.3	1,029.0	897.7
$M_u$ (Strength I)	3,336.2	3,699.1	2,332.3	2,678.7
$\phi_r M_n$ , $\phi_r M_{nc}$	3,893.4	3,975.9	3,906.4	3,442.1
$f_s$ DC1	11.69	13.27	4.85	9.03
$f_s$ DC2	1.83	1.96	0.91	1.51
$f_s$ DW	3.65	3.91	1.82	3.02
$f_s$ 1.3(I+IM)	24.39	17.66	20.42	18.65
$f_s$ (Service II)	41.56	36.80	28.01	32.21
$f_s$ (Total)(Strength I)	-	-	-	-
$V_r$	27.0	-	23.0	-

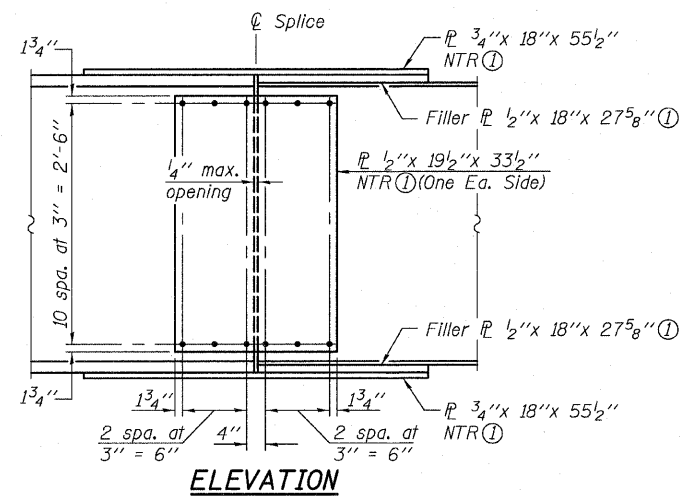
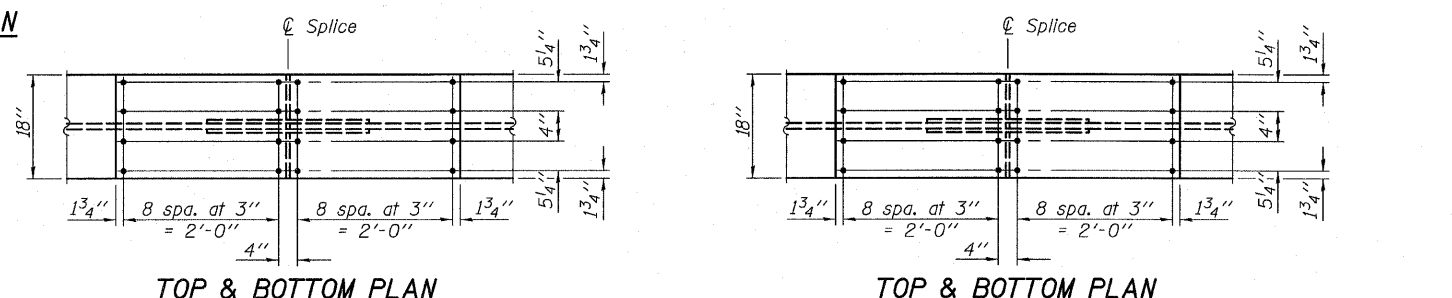
\* Compact sections  
\*\* Non-Compact and slender sections

	Abut.	Pier 1 or 3	Pier 2
$R_{DC1}$	31.5	101.3	75.8
$R_{DC2}$	5.7	16.6	13.4
$R_{DW}$	11.5	33.3	26.9
$R_k + IM$	80.4	143.5	138.0
$R$ (Total)(Strength I)	204.5	448.5	393.4

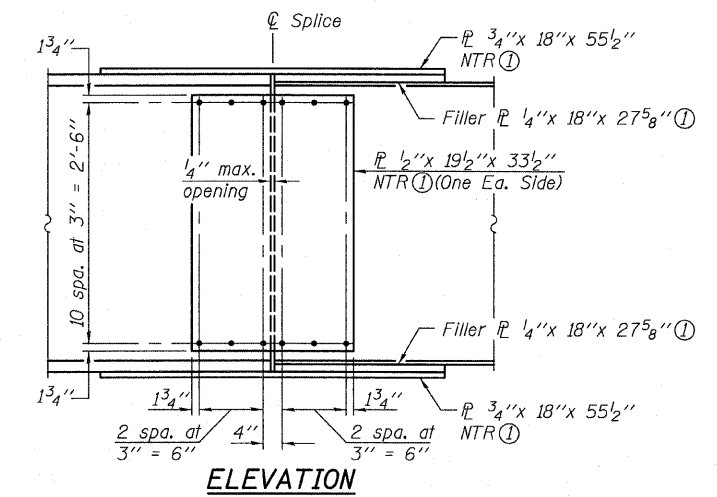
$I_s$ ,  $S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(n)$ ,  $S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(3n)$ ,  $S_c(3n)$ : 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<sup>4</sup> and in<sup>3</sup>).  
 Z: Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations (in<sup>3</sup>).  
 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.).  
 $M_k + IM$ : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).  
 $M_u$  (Strength I): Factored design moment (kip-ft.).  
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_k + IM$   
 $\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).  
 $\phi_r M_{nc}$ : Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).  
 $f_s$  (Service II): Sum of stresses as computed from the moments below (ksi).  
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_k + IM$   
 $f_s$  (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).  
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_k + IM$   
 $V_r$ : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

PLAN



SPLICE 1 & 3 DETAIL  
(12 Required)



SPLICE 2 DETAIL  
(6 Required)

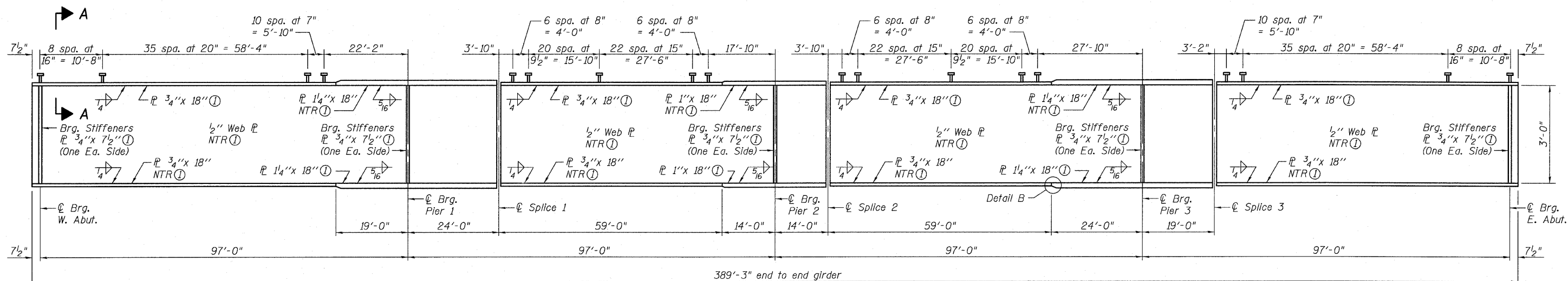
- Notes:  
 ① AASHTO M 270 Grade 50 steel.  
 ② Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.  
 ③ For girder elevation and details, see sheet 19 of 38.  
 ④ For diaphragm details, see sheet 20 of 38.  
 ⑤ All diaphragms shall be 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.

FRAMING PLAN  
STRUCTURE NO. 026-0105

SHEET NO. 18 38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	40
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
OATES ASSOCIATES Consulting Engineers			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115		
			DESIGNED JAD		
			CHECKED DGL		
			DRAWN JAD		
			CHECKED DGL		



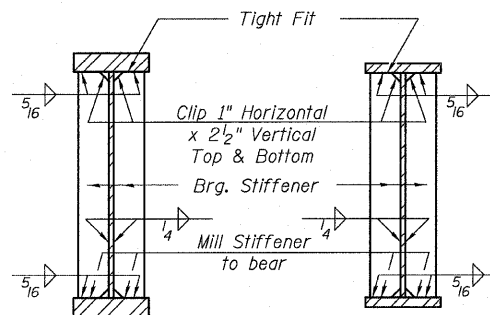
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GIRDER ELEVATION

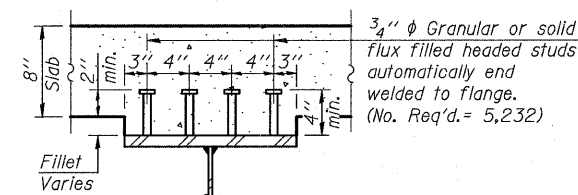
TOP OF WEB ELEVATIONS*						
	Girder #1	Girder #2	Girder #3	Girder #4	Girder #5	Girder #6
℄ Brg. W. Abut.	478.31	478.44	478.54	478.54	478.44	478.31
℄ Brg. Pier 1	479.15	479.27	479.38	479.38	479.27	479.15
℄ Splice 1	479.19	479.32	479.42	479.42	479.32	479.19
℄ Brg. Pier 2	479.44	479.56	479.67	479.67	479.56	479.44
℄ Splice 2	479.39	479.51	479.61	479.61	479.51	479.39
℄ Brg. Pier 3	479.14	479.26	479.37	479.37	479.26	479.14
℄ Splice 3	479.00	479.13	479.23	479.23	479.13	479.00
℄ Brg. E. Abut.	478.33	478.45	478.56	478.56	478.45	478.33

\*For fabrication only.



SECTION AT PIERS

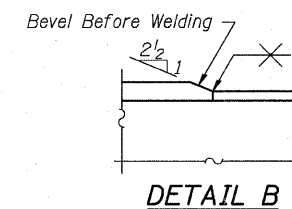
SECTION AT ABUTMENTS



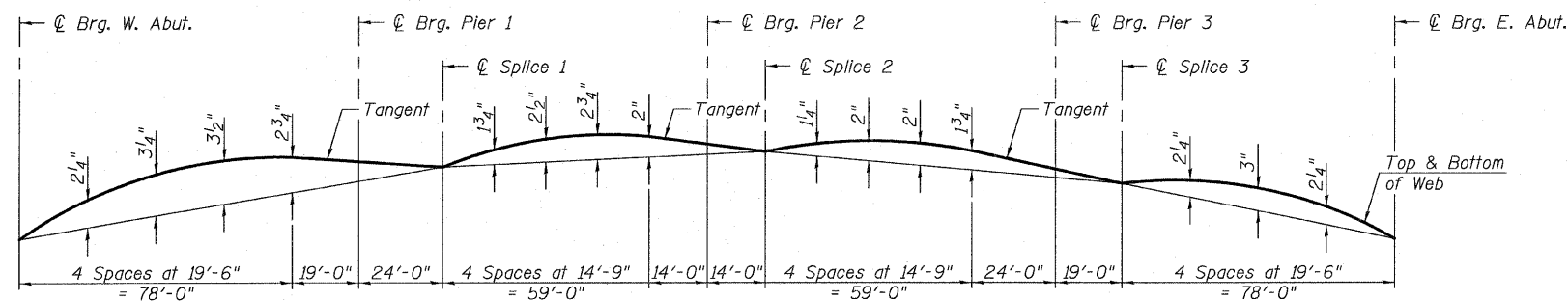
SECTION A-A

3/4"  $\phi$  Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd. = 5,232)

- Notes:  
 ① AASHTO M 270 Grade 50 Steel.  
 ② Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



DETAIL B



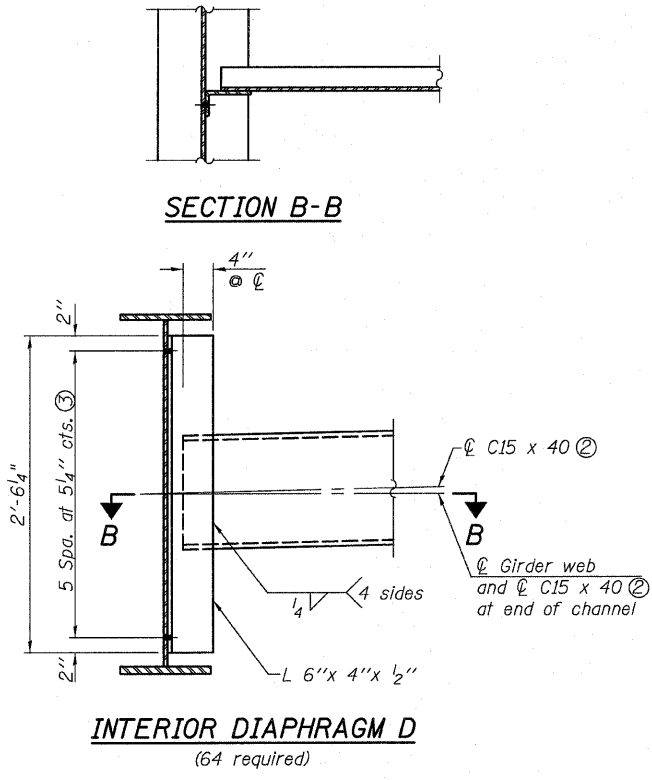
CAMBER DIAGRAM

GIRDER DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 19 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 41
	CONTRACT NO. 74235				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
OATES ASSOCIATES Consulting Engineers	Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED JAD CHECKED DGL DRAWN JAD CHECKED DGL	

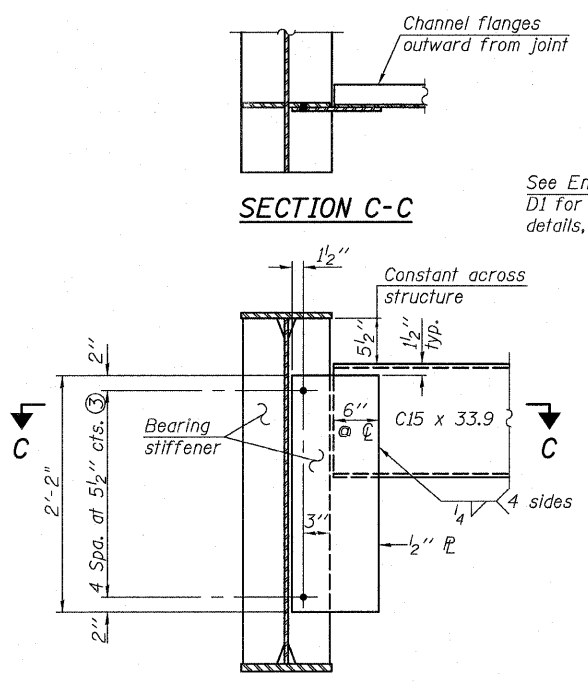
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SECTION B-B

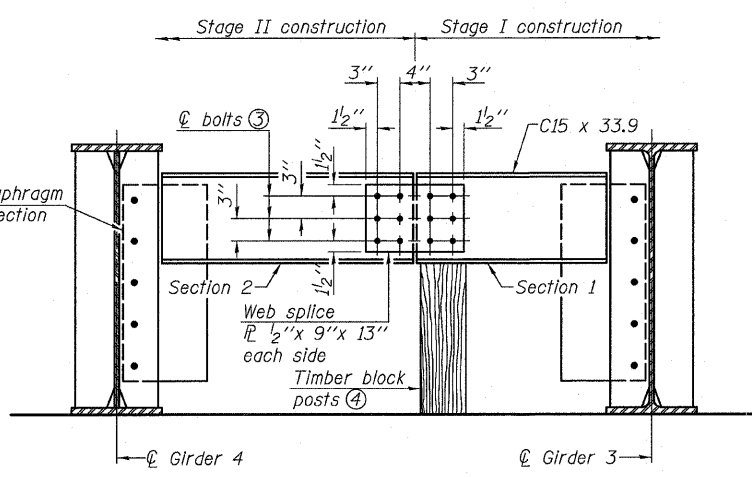


INTERIOR DIAPHRAGM D  
(64 required)

SECTION C-C



END DIAPHRAGM D1  
(8 required)

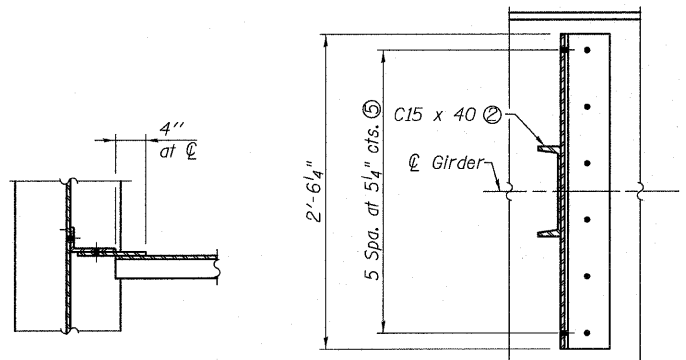


END DIAPHRAGM D2  
(2 required)

END DIAPHRAGM STAGE  
CONSTRUCTION SEQUENCE

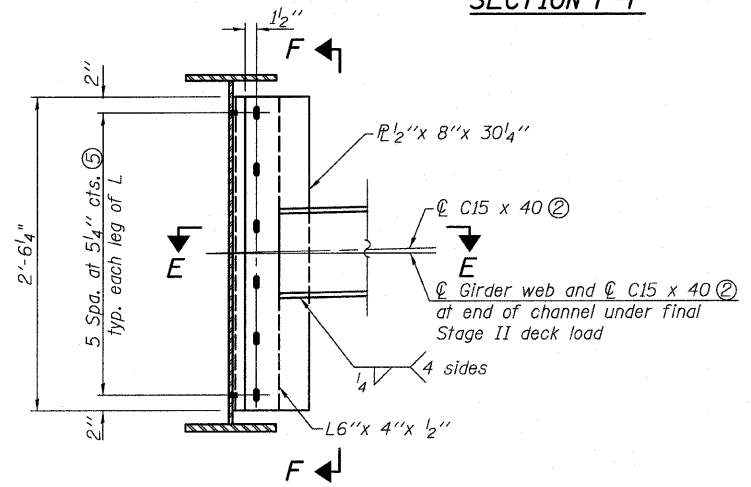
- 1.) Order Diaphragm in two sections.
- 2.) Attach section 1 of Diaphragm to Girder 3.
- 3.) Place Timber Block Posts between section 1 of diaphragm and abutment bearing section.
- 4.) Attach section 2 of diaphragm to both Girder 4 and section 1 of diaphragm during Stage II Construction with splice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

SECTION E-E

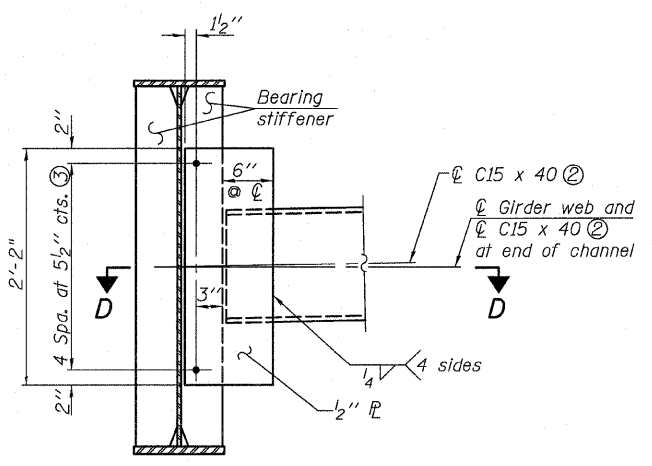


INTERIOR DIAPHRAGM D4  
(16 required)

SECTION F-F



SECTION D-D



INTERIOR DIAPHRAGM D3  
(15 required)

Notes:

- ① Two hardened washers required for each set of oversized holes.
- ② Alternate C15x50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
- ③ 3/4"  $\phi$  HS bolts, 1 1/8"  $\phi$  holes
- ④ Cost of Timber Block Posts is included with Furnishing and Erecting Structural Steel.
- ⑤ Use 3/4"  $\phi$  HS bolts. Provide 1 3/16" x 1 7/8" vertical slotted holes in connection plates attached to channel diaphragms only. Oversized 1 1/8"  $\phi$  holes shall be provided in the web of the girders and in both legs of the angle. Use 5/16" structural plate washers placed over all slotted holes in diaphragm connection. The bolts for the slotted holes shall be finger tight until the second stage pour is complete and then fully tightened. The connection plate and slots shall be positioned so bolts start at one end with no concrete load and finish near the opposite end under deck load, allowing maximum displacement without laterally stressing the main members. Fabricator shall detail connection plate location on channel to allow for differential deflection during Stage II concrete deck pour.

GIRDER DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 20	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	42
38 SHEETS			CONTRACT NO. 74235		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



Eastport Business Center 1  
100 Lanter Court, Suite 1  
Collinsville, Illinois 62234  
618-345-2200  
Design Firm License No. 184.001115

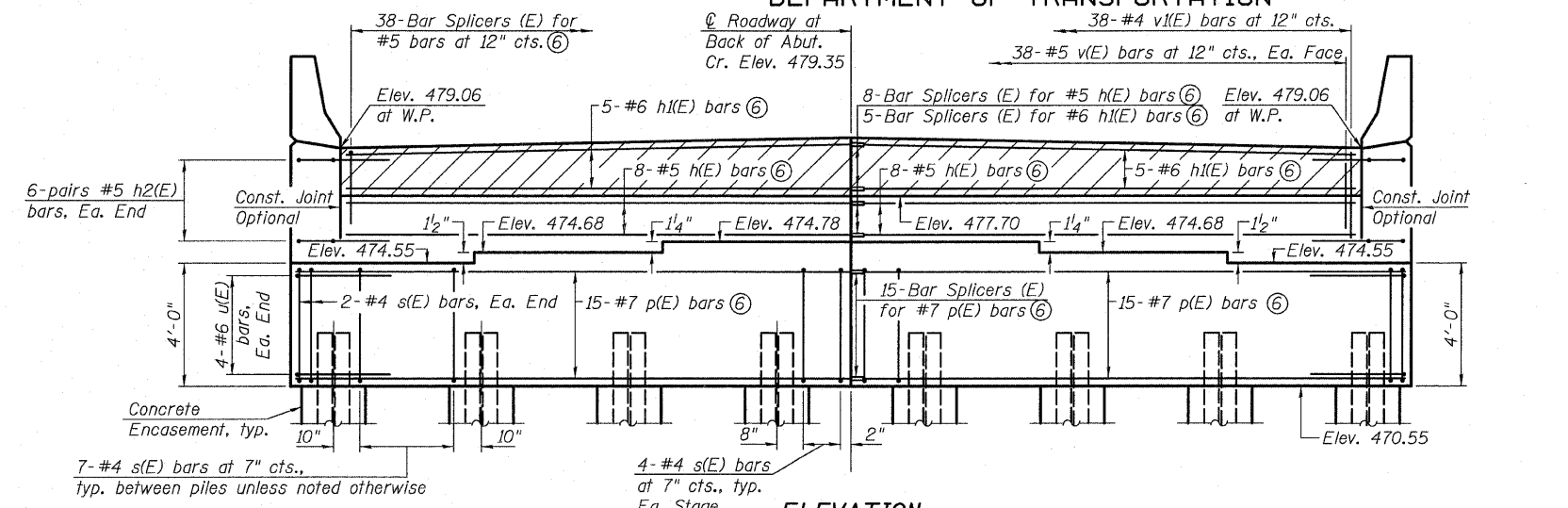
DESIGNED	JAD
CHECKED	DGL
DRAWN	JAD
CHECKED	DGL



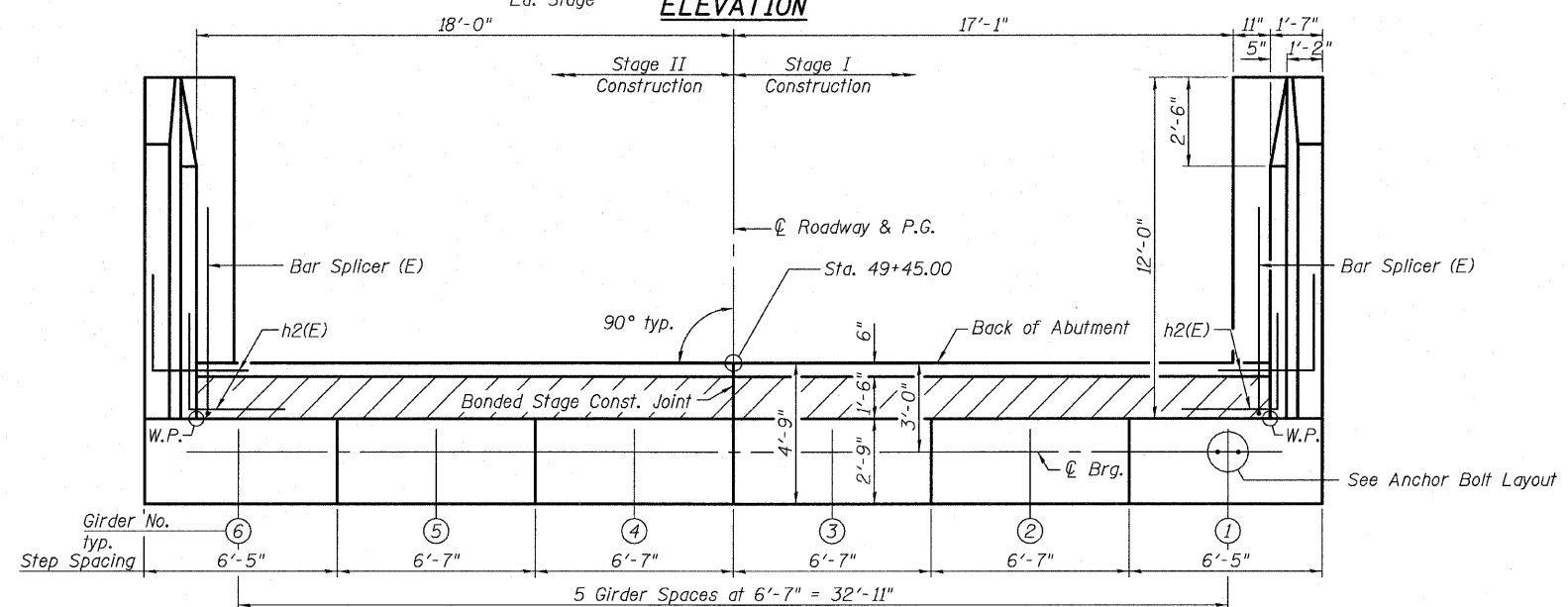


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT  
BILL OF MATERIAL



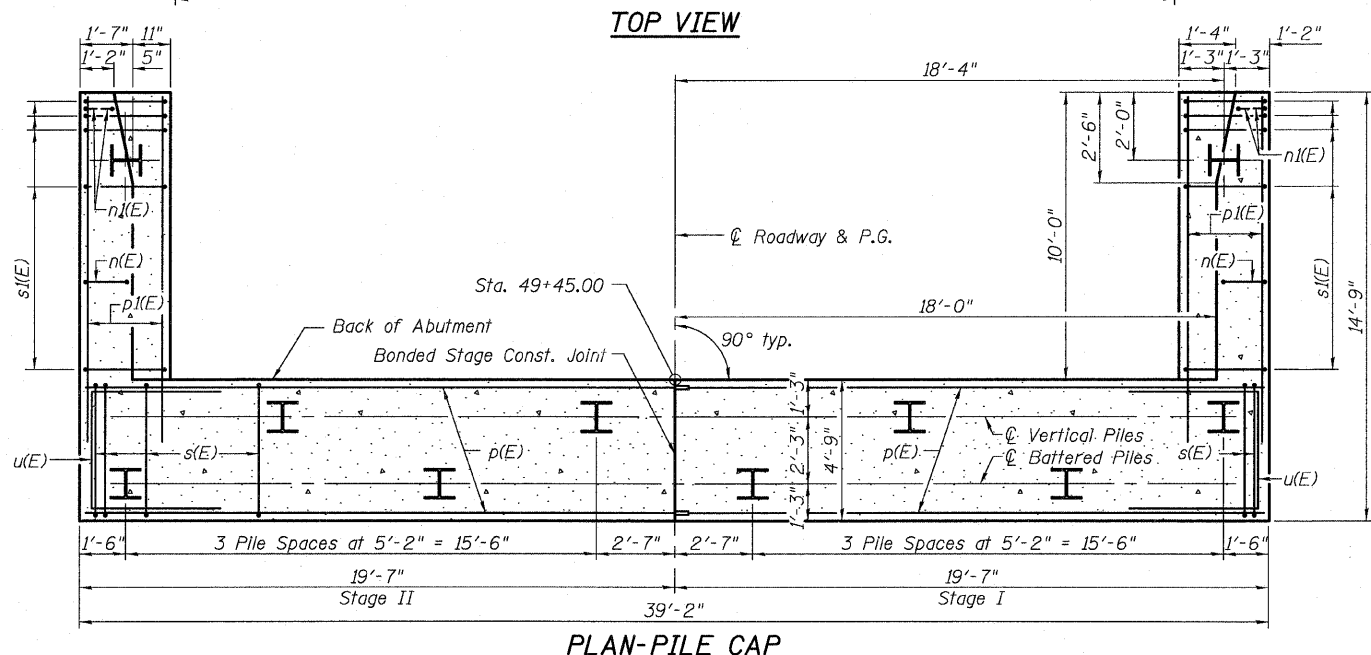
Bar	No.	Size	Length	Shape
h(E)	16	#5	19'-3"	—
h1(E)	10	#6	19'-3"	—
h2(E)	24	#5	7'-4"	L
h3(E)	20	#4	11'-8"	—
h4(E)	12	#4	11'-9"	—
n(E)	18	#6	13'-2"	—
n1(E)	12	#6	6'-7"	—
p(E)	30	#7	19'-3"	—
p1(E)	12	#7	11'-10"	—
s(E)	54	#4	16'-11"	—
s1(E)	32	#4	9'-5"	—
u(E)	8	#6	11'-6"	—
v(E)	76	#5	5'-7"	—
v1(E)	38	#4	3'-0"	—
v2(E)	24	#6	6'-6"	—
v3(E)	6	#6	6'-5"	—
v4(E)	18	#6	7'-2"	—
Structure Excavation			Cu. Yd.	164
Concrete Structures			Cu. Yd.	49.3
Concrete Encasement			Cu. Yd.	3.5
Reinforcement Bars, Epoxy Coated			Pound	4,940
Furnishing Steel Piles, HP12x63			Foot	819
Driving Piles			Foot	819
Test Pile Steel HP12x63			Each	1
Concrete Sealer			Sq. Ft.	266



- Notes:
- For details of Bar Splicers, see sheet 30 of 38.
  - For details of piles and Concrete Encasement, see sheet 29 of 38.
  - For wingwall reinforcing locations and reinforcement details, see sheet 25 of 38.
  - All edges shall have standard 3/4" chamfer.
  - Space reinforcement in cap to miss anchor bolts.
  - For bar locations, see Sec. Thru Abut. on sheet 25 of 38.

ANCHOR BOLT LAYOUT ⑤

**PILE DATA**  
 Type: HP12x63  
 Nominal Required Bearing: 497 Kip  
 Factored Resistance Available: 249 Kip  
 Est. Length: 91'  
 No. Production Piles: 9  
 No. Test Piles: 1

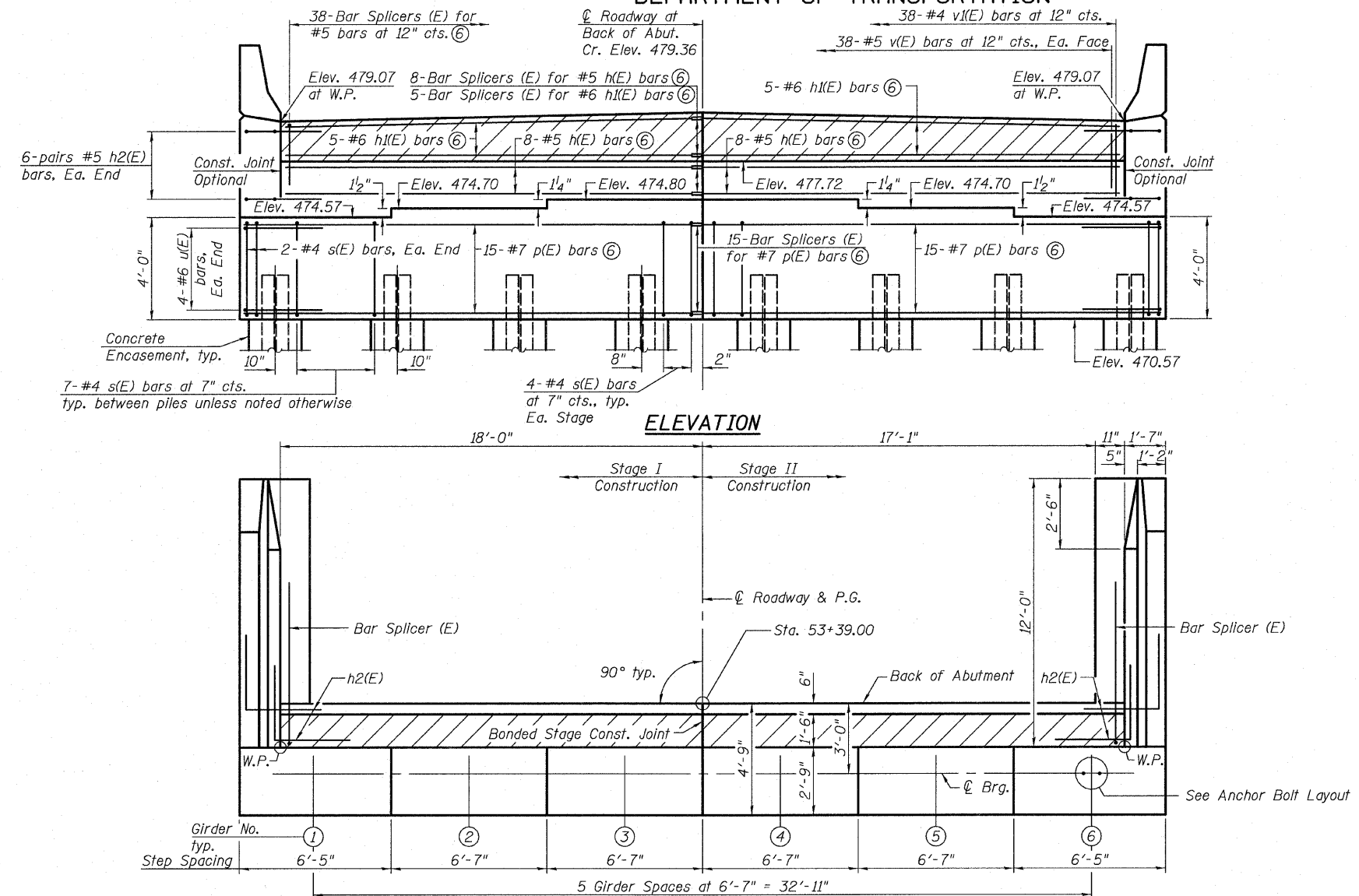


WEST ABUTMENT DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 23 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 45
	CONTRACT NO. 74235				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
<p>QATES ASSOCIATES Consulting Engineers</p>	Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED JAD CHECKED NEL DRAWN MAG CHECKED NEL	

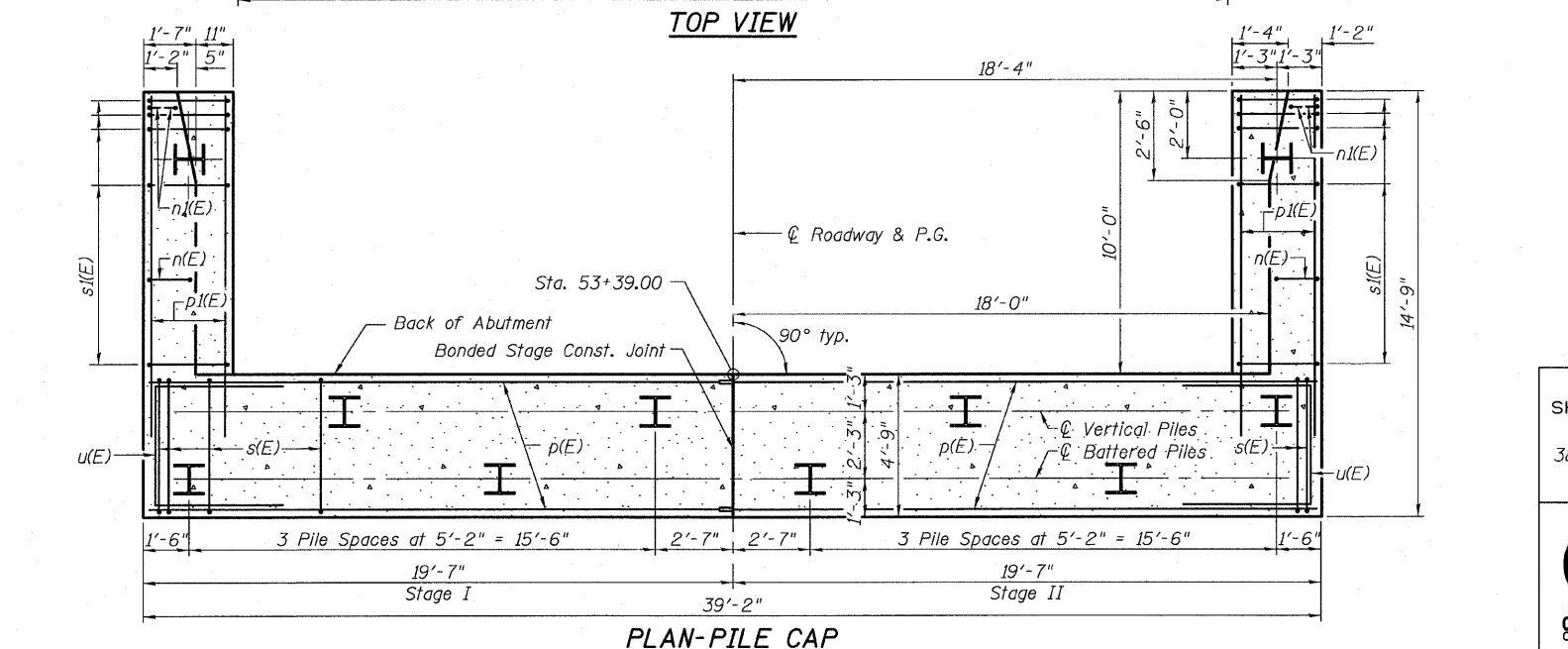
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**EAST ABUTMENT  
BILL OF MATERIAL**



Bar	No.	Size	Length	Shape
h(E)	16	#5	19'-3"	—
h2(E)	10	#6	19'-3"	—
h3(E)	24	#5	7'-4"	—
h4(E)	20	#4	11'-8"	—
h4(E)	12	#4	11'-9"	—
n(E)	18	#6	13'-2"	—
n2(E)	12	#6	6'-7"	—
p(E)	30	#7	19'-3"	—
p2(E)	12	#7	11'-10"	—
s(E)	54	#4	16'-11"	—
s2(E)	32	#4	9'-5"	—
u(E)	8	#6	11'-6"	—
v(E)	76	#5	5'-7"	—
v2(E)	38	#4	3'-0"	—
v3(E)	24	#6	6'-6"	—
v3(E)	6	#6	6'-5"	—
v4(E)	18	#6	7'-2"	—
Structure Excavation			Cu. Yd.	164
Concrete Structures			Cu. Yd.	49.3
Concrete Encasement			Cu. Yd.	3.5
Reinforcement Bars, Epoxy Coated			Pound	4,940
Furnishing Steel Piles, HP12x63			Foot	774
Driving Piles			Foot	774
Test Pile Steel HP12x63			Each	1
Concrete Sealer			Sq. Ft.	266

- Notes:
- For details of Bar Splicers, see sheet 30 of 38.
  - For details of piles and Concrete Encasement, see sheet 29 of 38.
  - For wingwall reinforcing locations and reinforcement details, see sheet 25 of 38.
  - All edges shall have standard 3/4" chamfer.
  - Space reinforcement in cap to miss anchor bolts.
  - For bar locations, see Sec. Thru Abut. on sheet 25 of 38.



**ANCHOR BOLT LAYOUT**

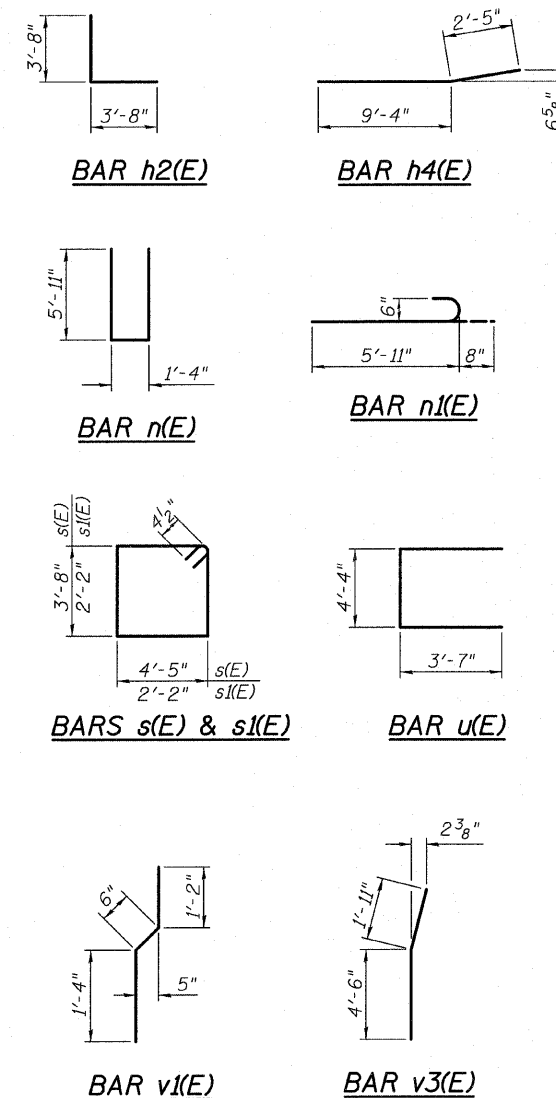
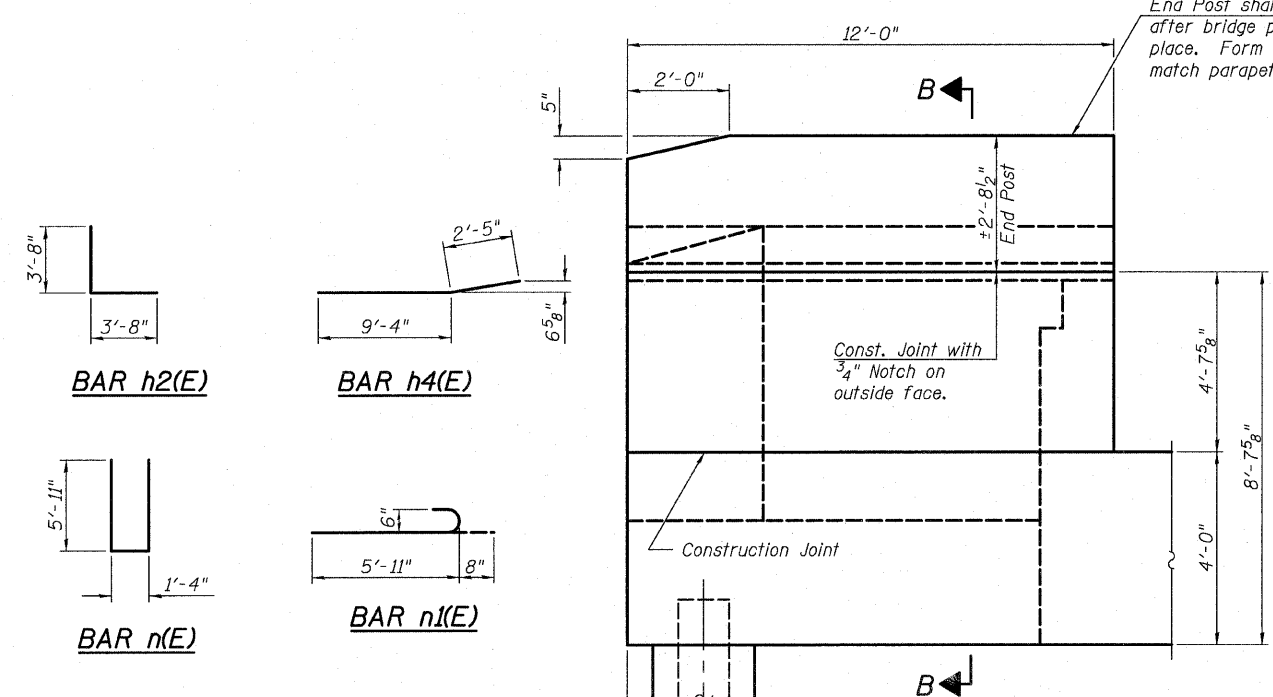
**PILE DATA**  
 Type: HP12x63  
 Nominal Required Bearing: 497 Kip  
 Factored Resistance Available: 249 Kip  
 Est. Length: 86'  
 No. Production Piles: 9  
 No. Test Piles: 1

**EAST ABUTMENT DETAILS  
STRUCTURE NO. 026-0105**

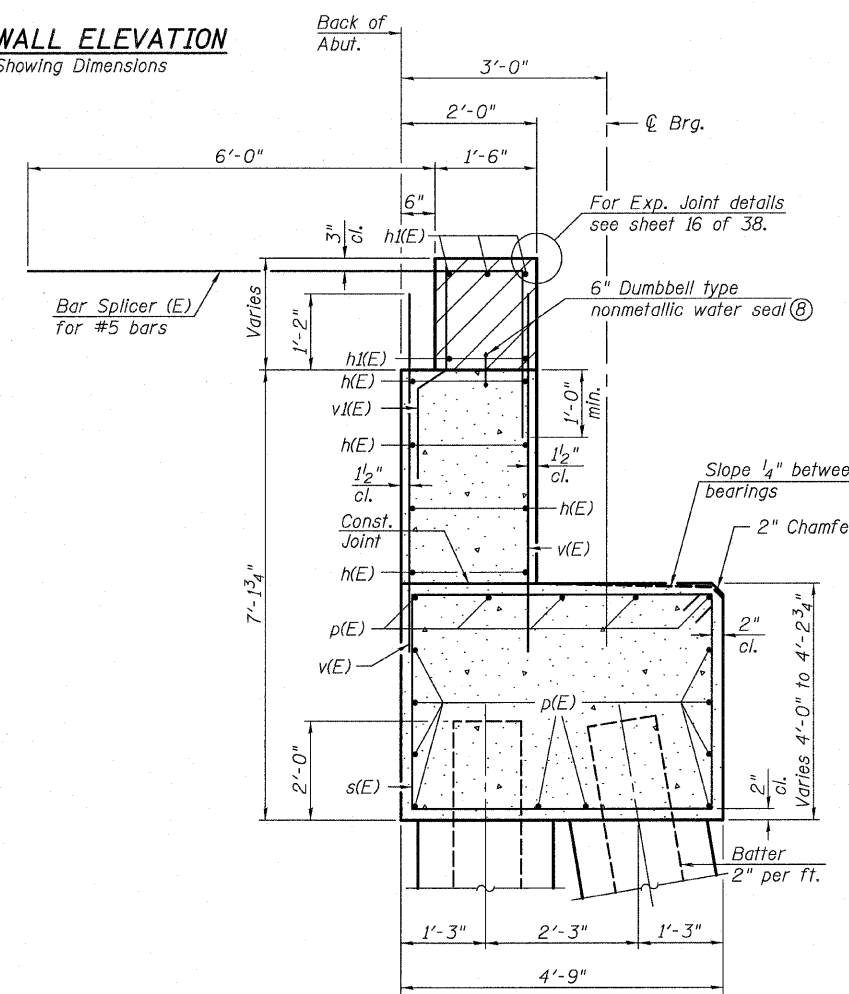
SHEET NO. 24 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 46
	CONTRACT NO. 74235				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
<p>OATES ASSOCIATES Consulting Engineers</p>	Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115				DESIGNED JAD
					CHECKED NEL
					DRAWN MAG
					CHECKED NEL

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

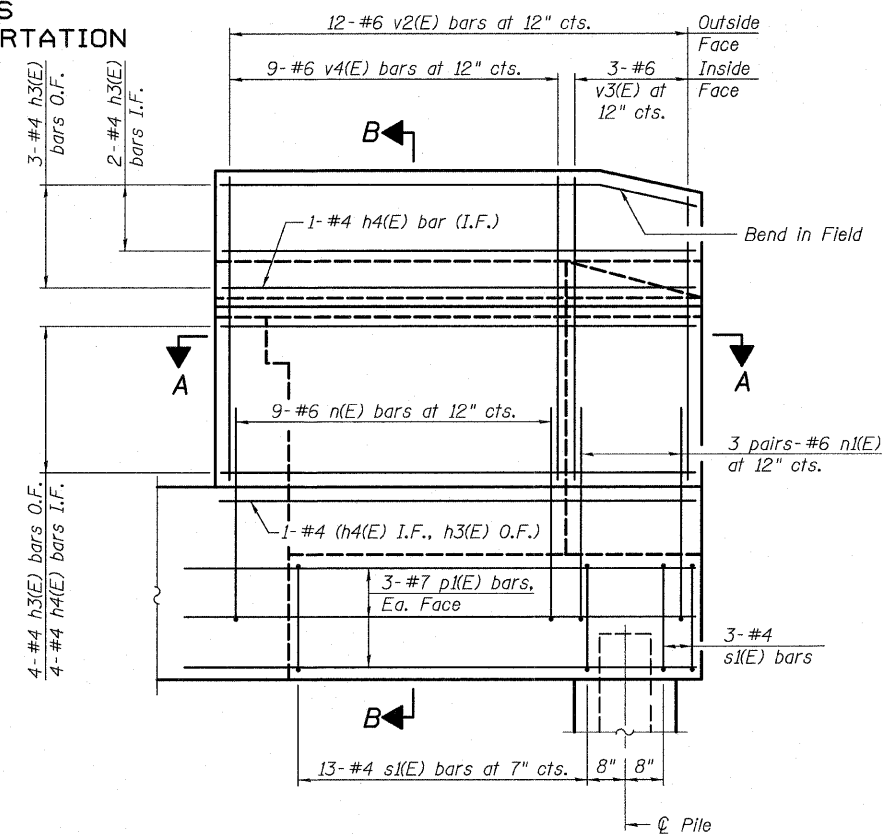
End Post shall be poured after bridge parapet is in place. Form top surface to match parapet grade.



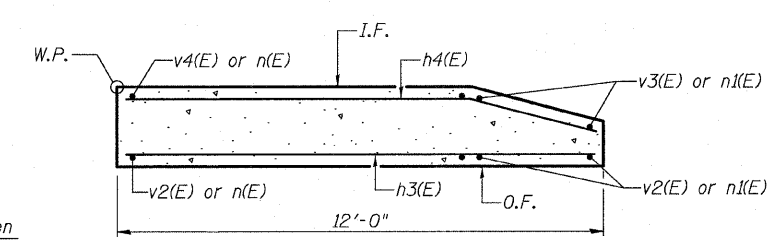
WING WALL ELEVATION  
Showing Dimensions



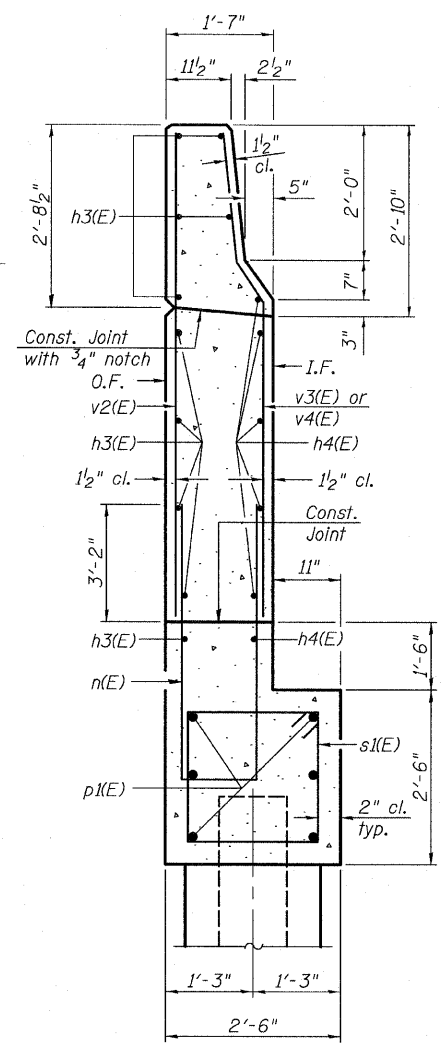
SEC. THRU ABUT.



WING WALL ELEVATION  
Showing Reinforcement



SECTION A-A



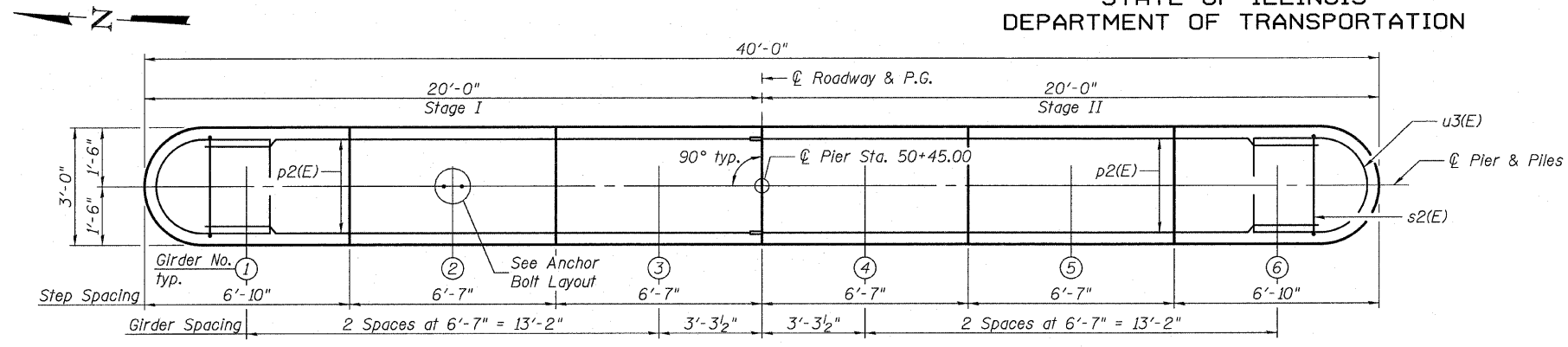
SECTION B-B

ABUTMENT DETAILS  
STRUCTURE NO. 026-0105

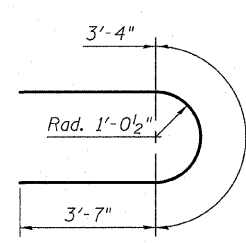
- Notes:
- Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
  - Space reinforcement in cap to miss anchor bolts.
  - Pour steps monolithically with cap.
  - Quantity of concrete in end post included with Concrete Superstructure on sheet 13 of 38.
  - For Concrete Encasement details, see sheet 29 of 38.
  - The abutments shall have all exposed surfaces of backwalls, bridge seats, and front faces of pile caps treated with Concrete Sealer.
  - I.F. denotes inside face.  
O.F. denotes outside face.
  - 6" Dumbbell type nonmetallic water seal shall be in accordance with Sections 503.12 and 1054 of the Standard Specifications. Cost included with Concrete Structures.

SHEET NO. 25 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)DB-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 47
	CONTRACT NO. 74235				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
 OATES ASSOCIATES Consulting Engineers	Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED JAD CHECKED NEL DRAWN MAG CHECKED NEL	

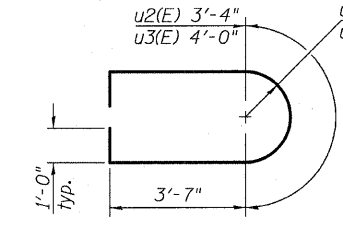
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



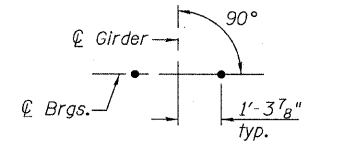
TOP PLAN



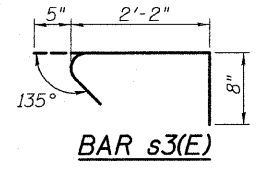
BAR u1(E)



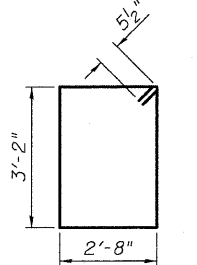
BARS u2(E) & u3(E)



ANCHOR BOLT LAYOUT (5)



BAR s3(E)

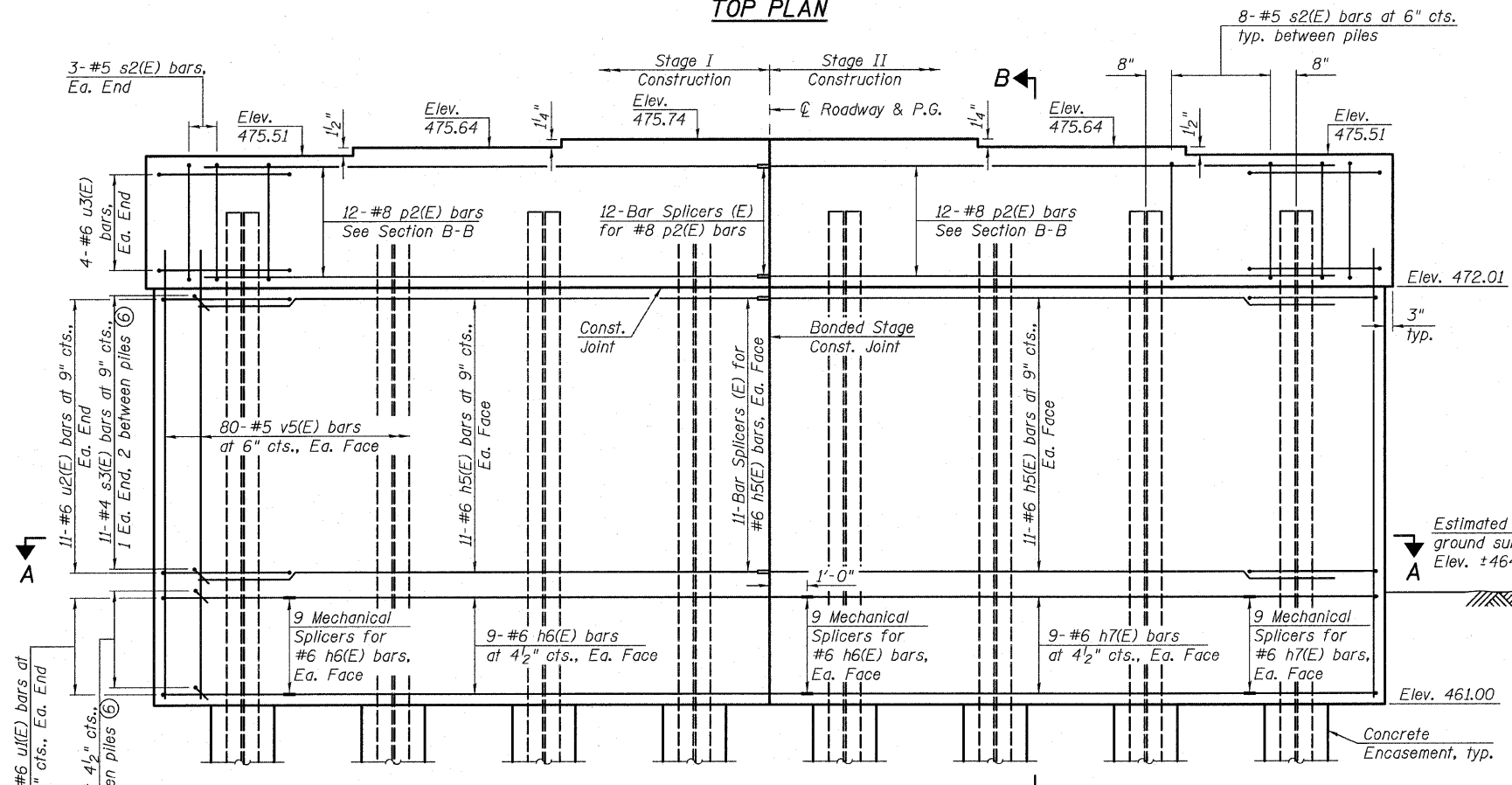


BAR s2(E)

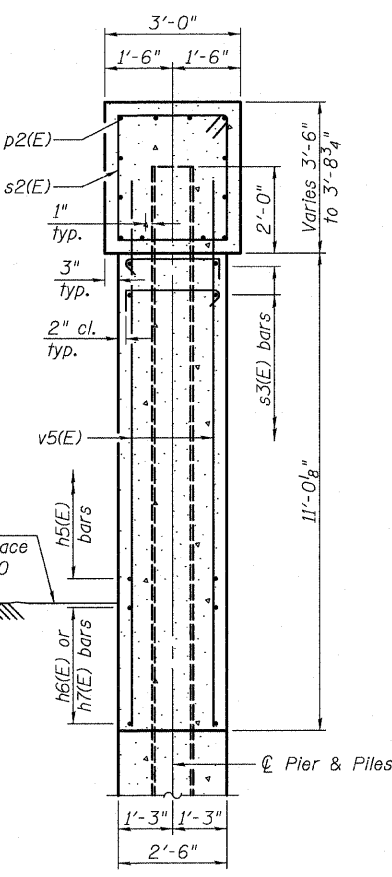
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5(E)	44	#6	18'-4"	—
h6(E)	18	#6	15'-11"	—
h7(E)	18	#6	13'-11"	—
p2(E)	24	#8	18'-4"	—
s2(E)	62	#5	12'-7"	□
s3(E)	383	#4	3'-3"	┌
u1(E)	18	#6	10'-6"	U
u2(E)	22	#6	12'-6"	U
u3(E)	8	#6	13'-2"	U
v5(E)	160	#5	12'-2"	—
Structure Excavation		Cu. Yd.	32	
Concrete Structures		Cu. Yd.	55.6	
Concrete Encasement		Cu. Yd.	4.4	
Reinforcement Bars, Epoxy Coated		Pound	7,720	
Furnishing Steel Piles, HP14x89		Foot	644	
Driving Piles		Foot	644	
Test Pile Steel HP14x89		Each	1	
Mechanical Splicers		Each	54	

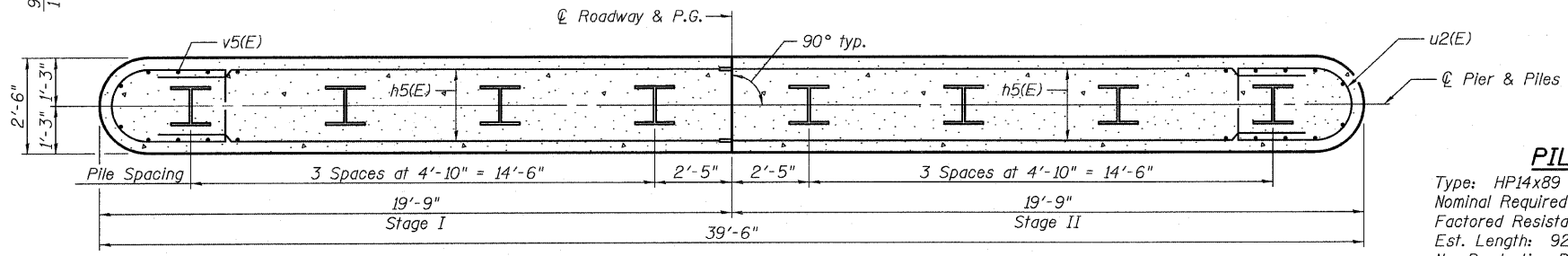
- Notes:  
 (1) Pour steps monolithically with cap.  
 (2) For details of Bar Splicers, see sheet 30 of 38.  
 (3) For details of piles and Concrete Encasement, see sheet 29 of 38.  
 (4) All edges shall have standard 3/4" chamfer.  
 (5) Space reinforcement in cap to miss anchor bolts.  
 (6) Alternate s3(E) bars end for end as shown in Section B-B.



ELEVATION  
(Looking East)



SECTION B-B



SECTION A-A

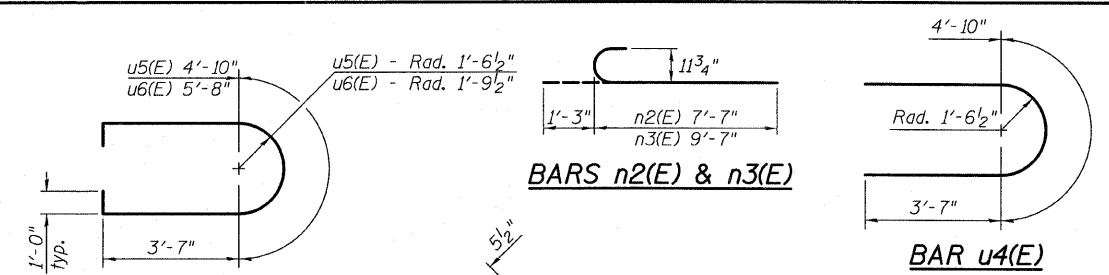
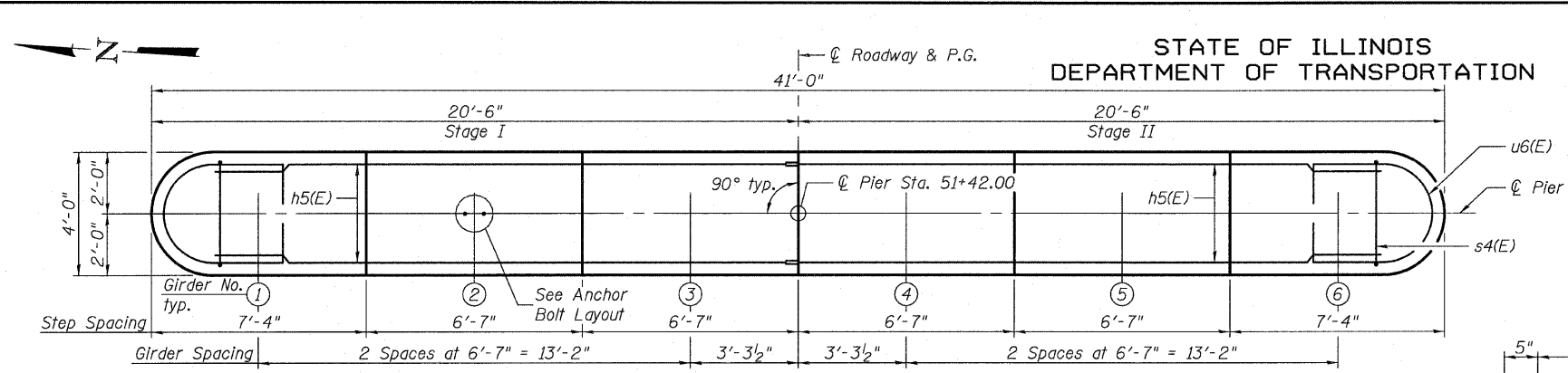
**PILE DATA**  
 Type: HP14x89  
 Nominal Required Bearing: 705 Kip  
 Factored Resistance Available: 353 Kip  
 Est. Length: 92'  
 No. Production Piles: 7  
 No. Test Piles: 1

PIER 1 DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 26	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
38 SHEETS	752	(U-2BR)B-1	FAYETTE	71	48
CONTRACT NO. 74235					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
OATES ASSOCIATES Consulting Engineers			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115		
			DESIGNED MAG		
			CHECKED NEL		
			DRAWN MAG		
			CHECKED NEL		

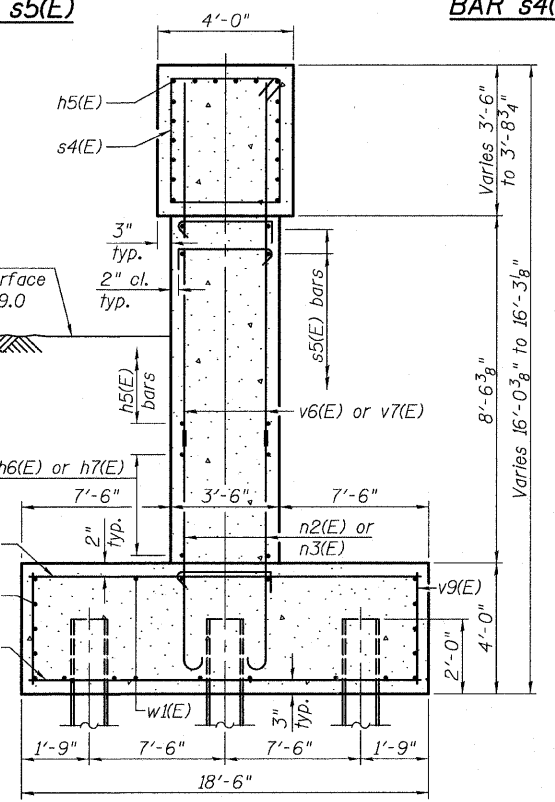
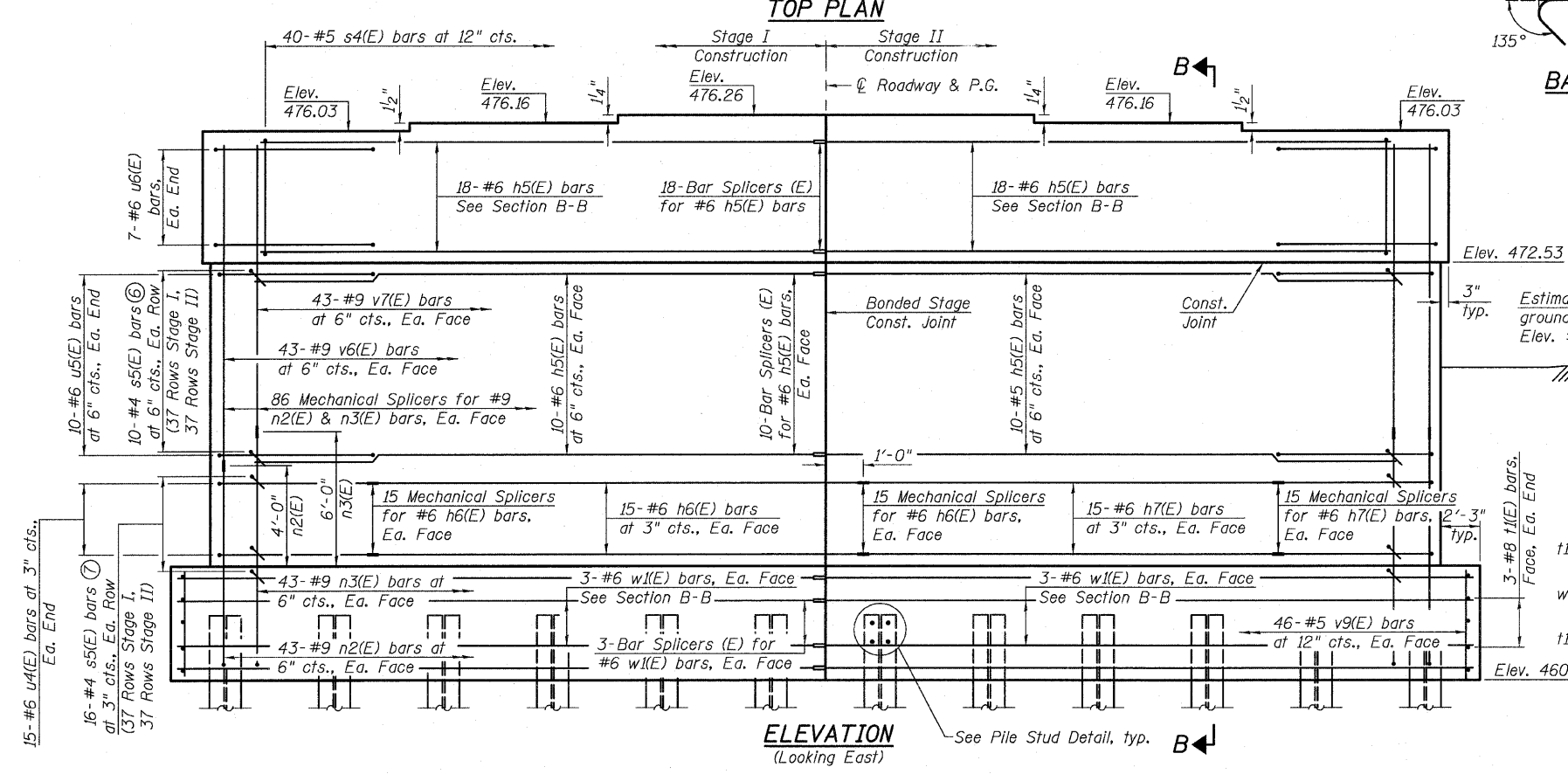


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



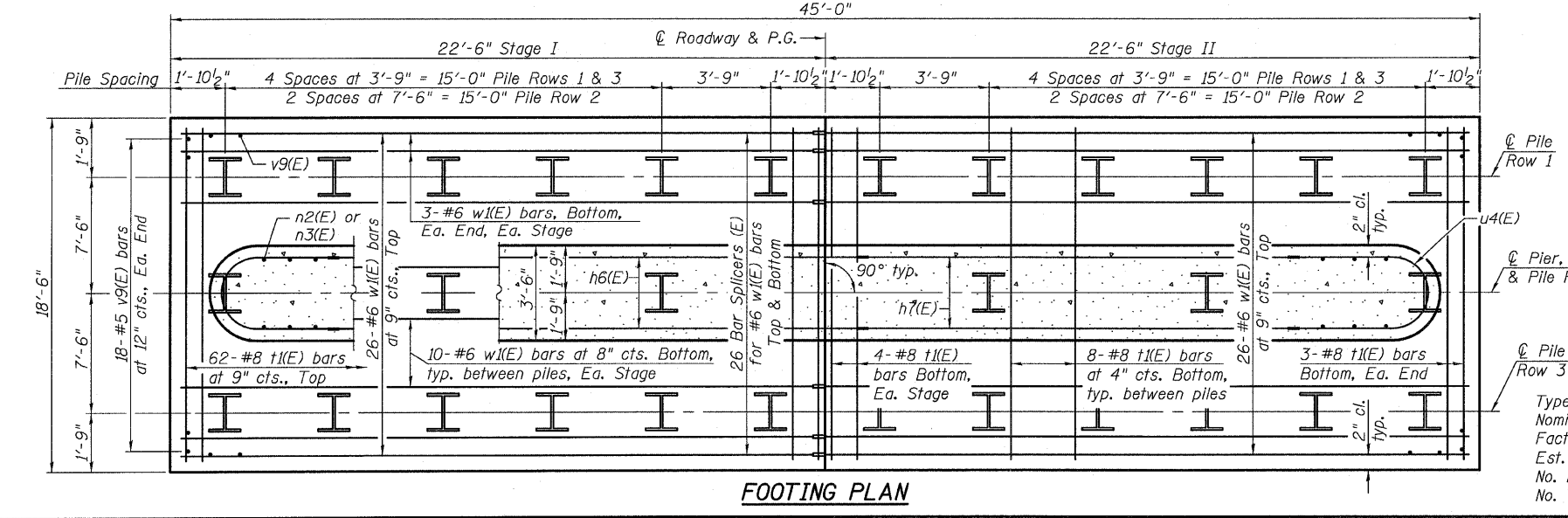
**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
h5(E)	#6	18'-4"	—
h6(E)	#6	15'-11"	—
h7(E)	#6	13'-11"	—
n2(E)	#9	8'-10"	U
n3(E)	#9	10'-10"	U
s4(E)	#5	14'-7"	□
s5(E)	#4	4'-3"	┌
t1(E)	#8	18'-2"	—
u4(E)	#6	12'-0"	U
u5(E)	#6	14'-0"	U
u6(E)	#6	14'-10"	U
v6(E)	#9	7'-10"	—
v7(E)	#9	5'-10"	—
v9(E)	#5	3'-7"	—
w1(E)	#6	22'-2"	—
Structure Excavation	Cu. Yd.	368	
Concrete Structures	Cu. Yd.	191.4	
Reinforcement Bars, Epoxy Coated	Pound	32,730	
Furnishing Steel Piles, HPI4x89	Foot	2,146	
Driving Piles	Foot	2,146	
Test Pile Steel HPI4x89	Each	1	
Mechanical Splicers	Each	262	



- Notes:
- Pour steps monolithically with cap.
  - For details of Bar Splicers, see sheet 30 of 38.
  - For details of piles, see sheet 29 of 38.
  - All edges shall have standard 3/4" chamfer.
  - Space reinforcement in cap to miss anchor bolts.
  - Space s5(E) bars horizontally with each v6(E) & v7(E) bar and vertically with h5(E) bars outside of the plastic hinge region. Alternate s5(E) bars end for end as shown in Section B-B.
  - Space s5(E) bars horizontally with each n2(E) & n3(E) bar and vertically with h6(E) & h7(E) bars inside of the plastic hinge region. Alternate s5(E) bars end for end as shown in Section B-B. Total includes one row of bars in top of footing.
  - Provide 4 - 3/4" φ x 4" granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications automatically end welded to piling, each flange, each pile. Cost included with Furnishing Steel Piles, HPI4x89.

**PIER 2 DETAILS  
STRUCTURE NO. 026-0105**



**ANCHOR BOLT LAYOUT** ⑤ **PILE STUD DETAIL** ⑧

**PILE DATA**

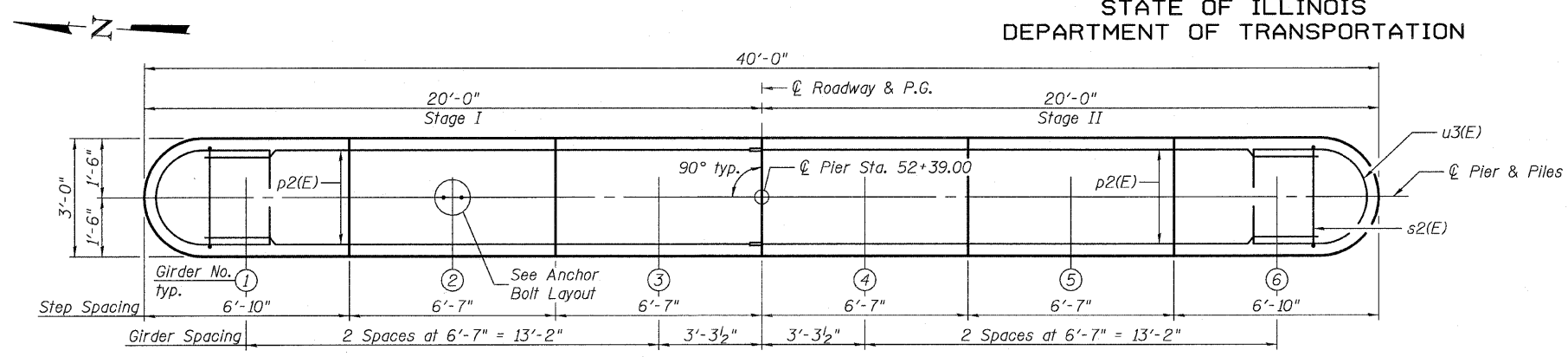
Type: HPI4x89  
Nominal Required Bearing: 705 Kip  
Factored Resistance Available: 353 Kip  
Est. Length: 74'  
No. Production Piles: 29  
No. Test Piles: 1

SHEET NO. 27 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 49
	FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT	
DESIGNED JAD			CHECKED NEL		
DRAWN MAG			CHECKED NEL		

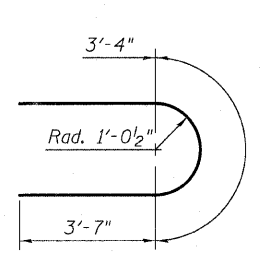
Eastport Business Center 1  
100 Lanter Court, Suite 1  
Collinsville, Illinois 62234  
618-345-2200  
Design Firm License No. 184.001115

**OATES ASSOCIATES**  
Consulting Engineers

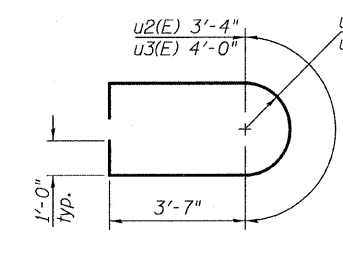
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



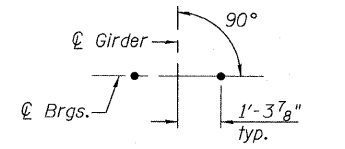
TOP PLAN



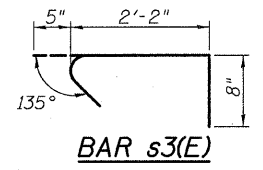
BAR u1(E)



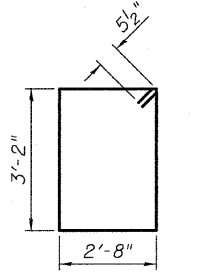
BARS u2(E) & u3(E)



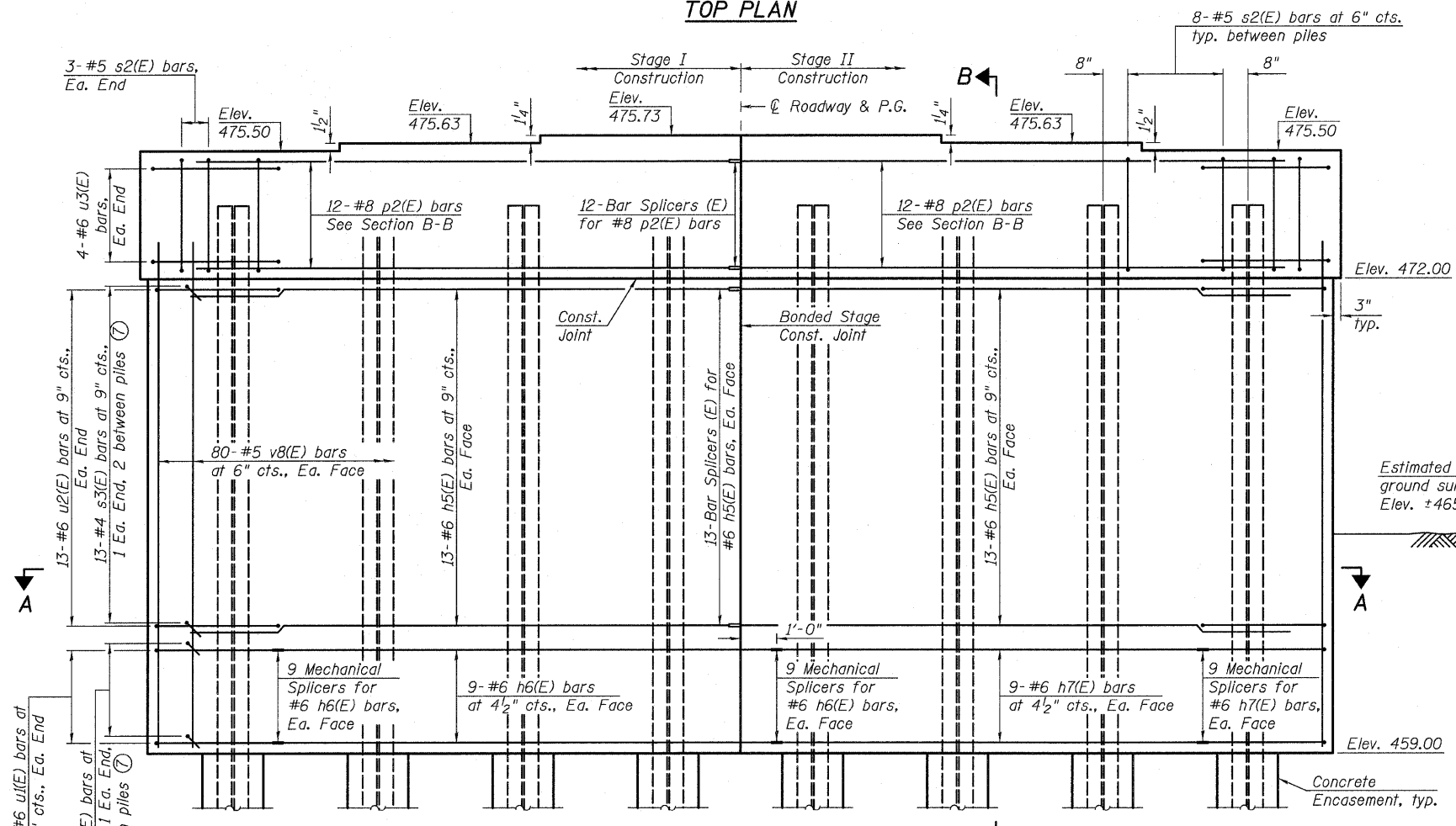
ANCHOR BOLT LAYOUT (5)



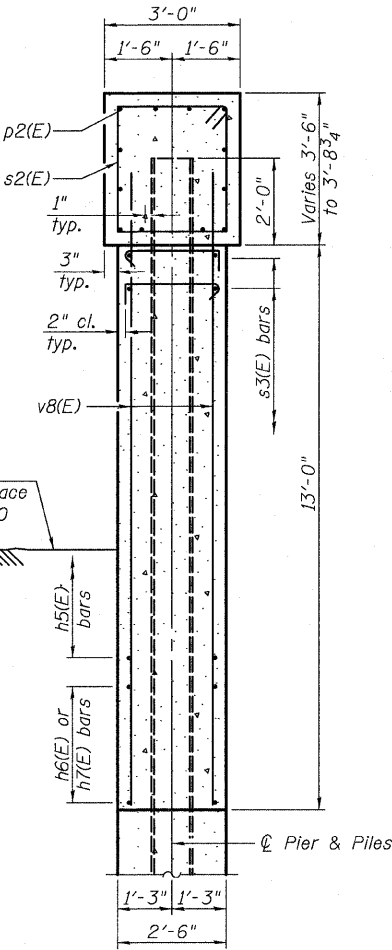
BAR s3(E)



BAR s2(E)



ELEVATION  
(Looking East)



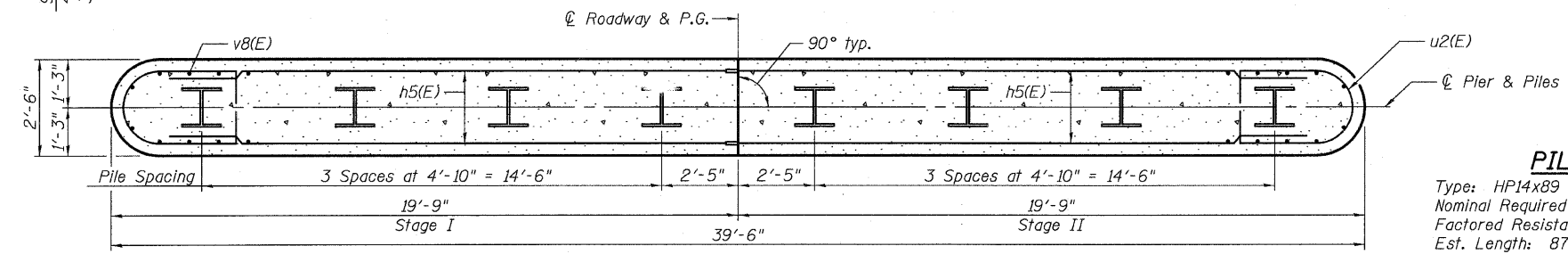
SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5(E)	52	#6	18'-4"	—
h6(E)	18	#6	15'-11"	—
h7(E)	18	#6	13'-11"	—
p2(E)	24	#8	18'-4"	—
s2(E)	62	#5	12'-7"	□
s3(E)	415	#4	3'-3"	┌
u1(E)	18	#6	10'-6"	U
u2(E)	26	#6	12'-6"	U
u3(E)	8	#6	13'-2"	U
v8(E)	160	#5	14'-1"	—
Structure Excavation		Cu. Yd.	63	
Concrete Structures		Cu. Yd.	62.7	
Concrete Encasement		Cu. Yd.	4.4	
Reinforcement Bars, Epoxy Coated		Pound	8,410	
Furnishing Steel Piles, HP14x89		Foot	609	
Driving Piles		Foot	609	
Test Pile Steel HP14x89		Each	1	
Underwater Structure Excavation Protection, Location 1		Each	1	
Mechanical Splicers		Each	54	

- Notes:
- ① Pour steps monolithically with cap.
  - ② For details of Bar Splicers, see sheet 30 of 38.
  - ③ For details of piles and Concrete Encasement, see sheet 29 of 38.
  - ④ All edges shall have standard 3/4" chamfer.
  - ⑤ Space reinforcement in cap to miss anchor bolts.
  - ⑥ If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
  - ⑦ Alternate s3(E) bars end for end as shown in Section B-B.

PIER 3 DETAILS  
STRUCTURE NO. 026-0105

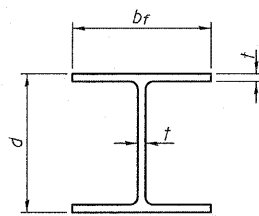


SECTION A-A

**PILE DATA**  
Type: HP14x89  
Nominal Required Bearing: 705 Kip  
Factored Resistance Available: 353 Kip  
Est. Length: 87'  
No. Production Piles: 7  
No. Test Piles: 1

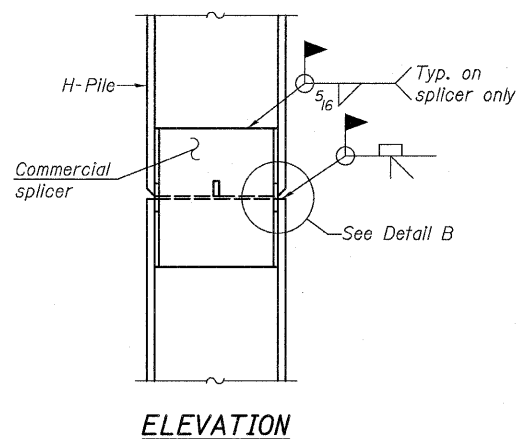
SHEET NO. 28 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 50	
	CONTRACT NO. 74235					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT						
<p>OATES ASSOCIATES Consulting Engineers</p>	Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115				DESIGNED MAG	
						CHECKED NEL
						DRAWN MAG
						CHECKED NEL

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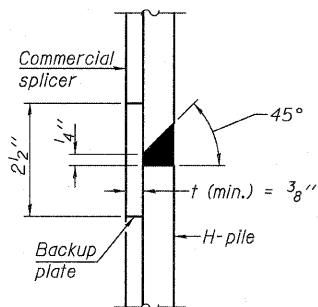


STEEL PILE TABLE

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

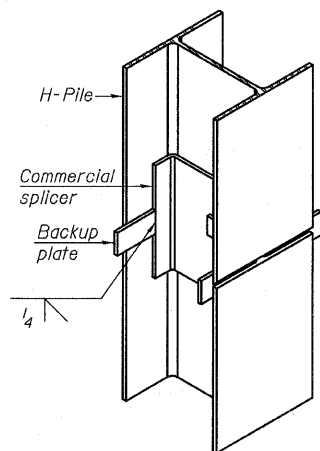


ELEVATION

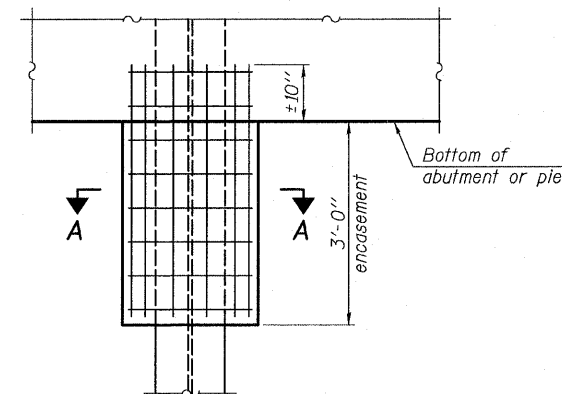


DETAIL "B"

WELDED COMMERCIAL SPLICE

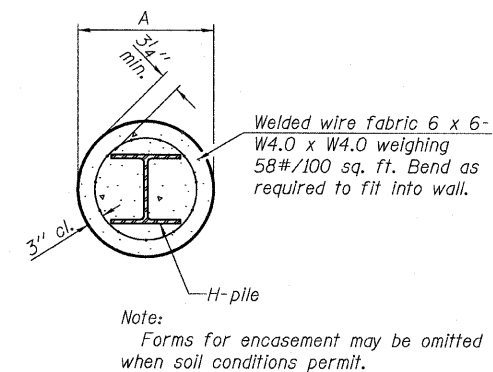


ISOMETRIC VIEW

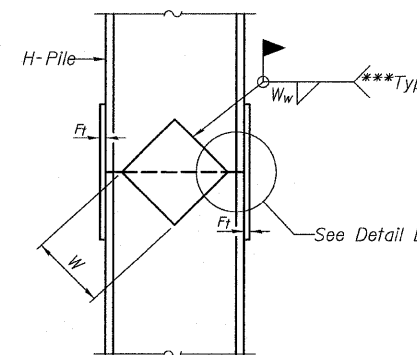


ELEVATION

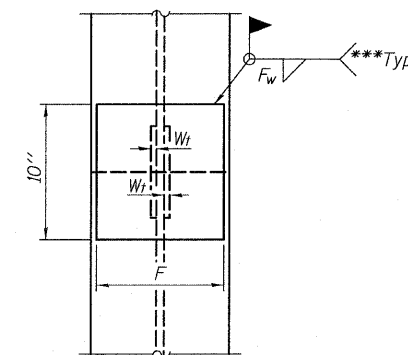
PILE ENCASEMENT



SECTION A-A

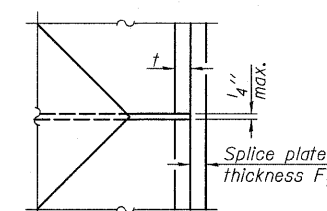


ELEVATION



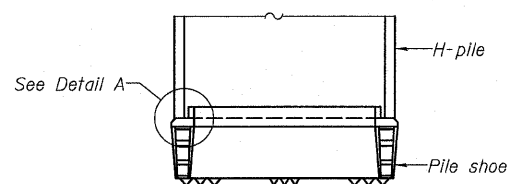
END VIEW

Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
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"	1/16"	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"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	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"

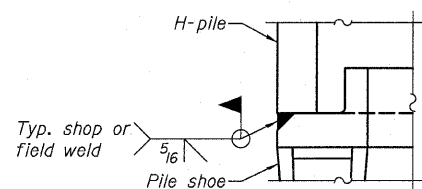


DETAIL D

WELDED PLATE FIELD SPLICE

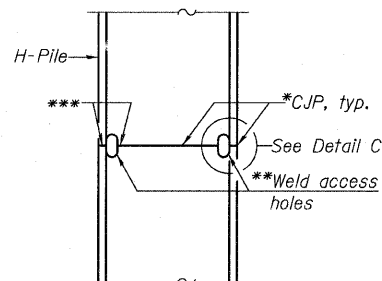


ELEVATION

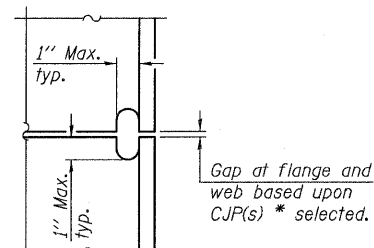


DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION




DETAIL C

COMPLETE PENETRATION WELD 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.

HP PILE DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 29 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)DB-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 51
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 74235	
 Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED -		
			CHECKED -		
			DRAWN -		
			CHECKED -		

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The diameter of this part is equal or larger than the diameter of bar spliced.

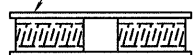
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



\*\* ONE PIECE

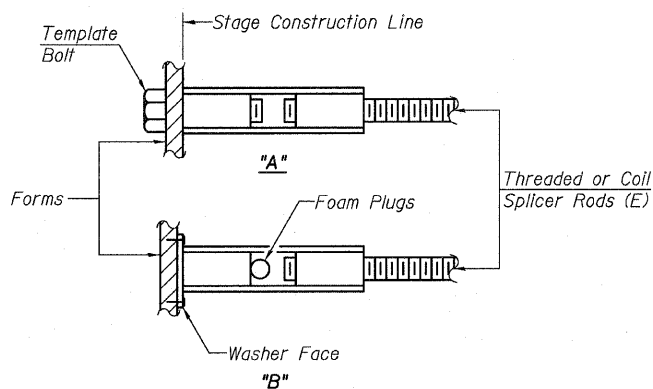
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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



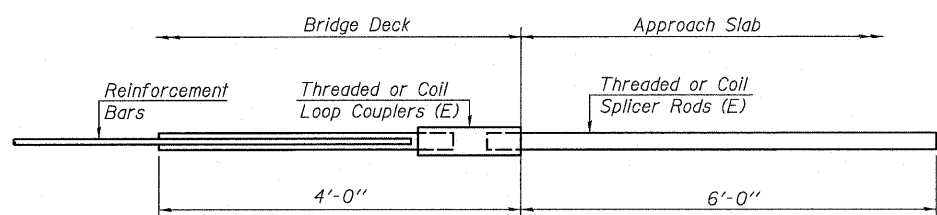
INSTALLATION AND SETTING METHODS

"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:

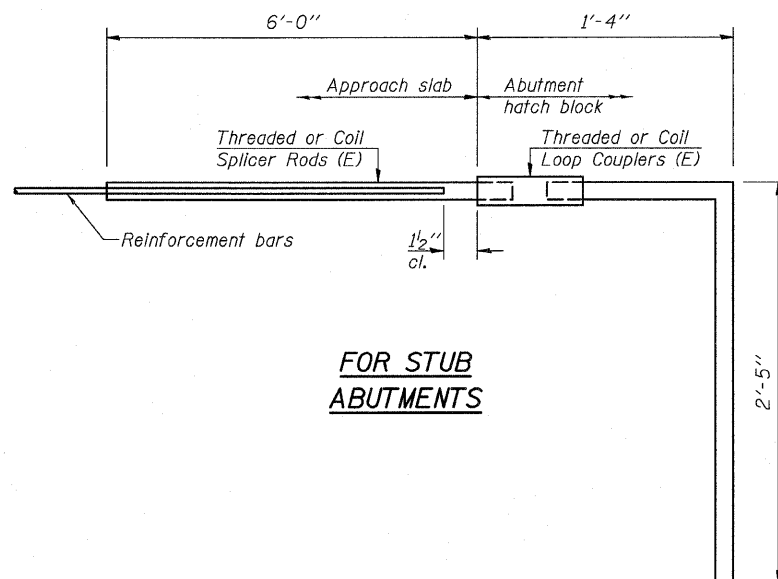
- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
  - ② Minimum \*Pull-out Strength (Tension in kips) =  $0.66 \times f_y \times A_t$
- Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

Bar 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'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



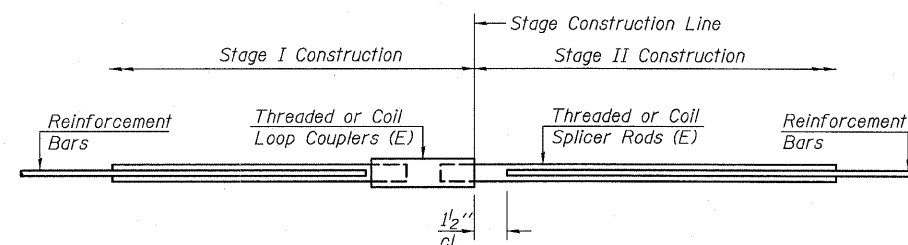
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 76



STANDARD

Bar Size	No. Assemblies Required	Location
#4	50	Appr. Slab
#5	1,199	Deck
#5	172	Appr. Slab
#5	8	W. Abut.
#5	8	E. Abut.
#6	5	W. Abut.
#6	22	Pier 1


Bar Size	No. Assemblies Required	Location
#6	96	Pier 2
#6	26	Pier 3
#6	5	E. Abut.
#7	15	W. Abut.
#7	15	E. Abut.
#8	12	Pier 1
#8	12	Pier 3

BAR SPLICER ASSEMBLY DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 30 38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 52
	CONTRACT NO. 74235				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
OATES ASSOCIATES Consulting Engineers Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED - CHECKED - DRAWN - CHECKED -		



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**SOIL BORING LOG**

Page 3 of 4  
Date 7/10/08

ROUTE FAP 752 (IL 165) DESCRIPTION Camp Creek LOGGED BY E. Sandschafer

SECTION (U-2BR1)B-1 LOCATION E 1/2, SEC. 15, TWP. 9 N, RNG. 1 E, 3 PM

COUNTY Fayette DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 026-0059	D E P T H S	B L O W S	U C S	M O I S T U R E	Surface Water Elev. 462.47 ft
Station 51+53					Stream Bed Elev. 461.43 ft
BORING NO. 2008 - 1	(ft)	(in)	(tsf)	(%)	Groundwater Elev.:
Station 54+08					First Encounter 450.8 ft
Offset 9.00R Lt					Upon Completion 465.3 ft
Ground Surface Elev. 477.84 ft					After 48 Hrs. 466.4 ft

Very stiff, damp, gray, SANDY LOAM TILL (continued)

392.84 -85


Very dense, moist, gray, CLAY SHALE

387.54 -90

Borehole continued with rock coring.

387.54 -90

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)  
BBS, from 137 (Rev. 8-99)



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

**ROCK CORE LOG**

Page 4 of 4  
Date 7/10/08

ROUTE FAP 752 (IL 165) DESCRIPTION Camp Creek LOGGED BY E. Sandschafer

SECTION (U-2BR1)B-1 LOCATION E 1/2, SEC. 15, TWP. 9 N, RNG. 1 E, 3 PM

COUNTY Fayette CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 026-0059	D E P T H S	C O R E	R E C O V E R Y	R Q D	T I M E	C O R E	S T R E N G T H
Station 51+53							

CORING BARREL TYPE & SIZE NW conv dbl bbl

Core Diameter 2.06 in  
Top of Rock Elev. 362.84 ft  
Begin Core Elev. 367.54 ft

Gray, moderately weathered, CLAY SHALE

387.54 -B1C1

Rock Core B1C1 at depth 90.9' to 91.8' Qu = 16.2 tsf.

-85

-86

Gray, severely weathered, CLAY SHALE

381.54 -B1C2

Gray, moderately weathered, CLAY SHALE

381.04 -B1C2

Rock Core B1C2 at depth 97.4' to 98.0' Qu = 55.3 tsf.


-100

-105


-110

Color pictures of the cores Available on request  
Cores will be stored for examination until 07/10/09  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, form 138 (Rev. 8-99)

**BORING LOGS**  
**STRUCTURE NO. 026-0105**

SHEET NO. 32	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	54
38 SHEETS	CONTRACT NO. 74235		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		
 <b>OATES ASSOCIATES</b> Consulting Engineers			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115		
			DESIGNED -		
			CHECKED -		
			DRAWN -		
			CHECKED -		

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Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Page 1 of 4  
Date 7/11/08


ROUTE FAP 752 (IL 185) DESCRIPTION Camp Creek LOGGED BY E. Sandschafer

SECTION (U-2BR1)B-1 LOCATION E 1/2, SEC. 15, TWP. 6 N, RNG. 1 E, 3 PM

COUNTY Fayette DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O D E	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O D E
026-0058 51+53					462.47 ft 461.43 ft				
2008-2 49+69					448.0 ft 467.2 ft				
9.006 ft					462.6 ft				
Ground Surface Elev. 477.79 ft									
9" asphalt on 9" concrete pavement									
476.29									
Very stiff to stiff, damp, gray & red, CLAY.	2	2.5	17						
	2	3	15	24					
	2	3	16	27					
	3	3.0	16						
	3	3	16	27					
	3	2.0	19						
	5	5	19	27					
	2	1.5	22						
	4	4	22	27					
	2	1.3	20						
	3	3	20	27					
	2	1.2	19						
	4	4	19	27					
	2	1.2	22						
	4	4	22	27					
458.29									
	2			3					

The Unconfined Compressive Strength (UCS) 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)  
BBS, from 137 (Rev. 8-99)



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### SOIL BORING LOG

Page 2 of 4  
Date 7/11/08

ROUTE FAP 752 (IL 185) DESCRIPTION Camp Creek LOGGED BY E. Sandschafer


SECTION (U-2BR1)B-1 LOCATION E 1/2, SEC. 15, TWP. 6 N, RNG. 1 E, 3 PM

COUNTY Fayette DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O D E	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O D E
026-0058 51+53					462.47 ft 461.43 ft				
2008-2 49+69					448.0 ft 467.2 ft				
9.006 ft					462.6 ft				
Ground Surface Elev. 477.79 ft									
Medium, wet, gray, fine grained, SAND w/ some sandstone fragments and small gravel.	6	9							
	9								
	3	3.3	13						
	6	6	13	18					
	10	10	13	18					
	4	7	3.0	13					
	7	11	13	18					
	2	1.5	19						
	3	3	19	27					
	2	1.2	19						
	4	4	19	27					
	2	1.2	22						
	4	4	22	27					
398.29									
	2			10					

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)  
BBS, from 137 (Rev. 8-99)

**BORING LOGS**  
**STRUCTURE NO. 026-0105**

SHEET NO. 33	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR1)B-1	FAYETTE	71	55
38 SHEETS	CONTRACT NO. 74235				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
 Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115					DESIGNED - CHECKED - DRAWN - CHECKED -

Notes:  
① Boring No. 2008-2 continued on next sheet.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Page 3 of 4

**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Date 7/11/08

ROUTE FAP 752 (IL 185) DESCRIPTION Camp Creek LOGGED BY E. Sandschafer

SECTION (U-2BR1)B-1 LOCATION E 1/2, SEC. 15, TWP. 6 N, RNG. 1 E, 3 PM

COUNTY Fayette DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 026-0059 Station 51+53

BORING NO. 2008-2 Station 49+69 Offset 9.00R Rt Ground Surface Elev. 477.79 ft

DEPTH (ft)	(#)	(%)	(tsf)	(%)
18	0.1	21		
37	B			
48	1.2	13		
50/2'	S			
50/2'				
50/3'		7		
50/1'				
50/0'				

Surface Water Elev. 462.47 ft  
Stream Bed Elev. 461.43 ft

Groundwater Elev.:  
First Encounter 448.0 ft  
Upon Completion 467.2 ft  
After 24 Hrs. 462.8 ft

Very soft, wet, gray, SANDY LOAM. (continued)

Shif. moist, blue gray, SILTY SHALE

Borehole continued with rock coring.

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)  
BBS, from 137 (Rev. 8-99)

Page 4 of 4

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### ROCK CORE LOG

Date 7/11/08

ROUTE FAP 752 (IL 185) DESCRIPTION Camp Creek LOGGED BY E. Sandschafer

SECTION (U-2BR1)B-1 LOCATION E 1/2, SEC. 15, TWP. 6 N, RNG. 1 E, 3 PM

COUNTY Fayette CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 026-0059 Station 51+53

BORING NO. 2008-2 Station 49+69 Offset 9.00R Rt Ground Surface Elev. 477.79 ft

CORING BARREL TYPE & SIZE NW conv dbl bbl  
Core Diameter 2.06 in  
Top of Rock Elev. 368.29 ft  
Begin Core Elev. 362.79 ft

DEPTH (ft)	(#)	(%)	(min/ft)	(tsf)
362.79	B2C1	100	0	1.6
369.66				
360.56				
378.85				
378.56				
-100	B2C2	68	78	1.2
372.79				
-105				
-110				
-119				

Gray, moderately weathered, SILTY CLAY SHALE.

Gray SANDSTONE

Gray, moderately weathered, SILTY CLAY SHALE.

Brown, hard, SANDSTONE

Gray, moderately weathered, SILTY CLAY SHALE.


Rock core B2C1 from 104.0' to 104.3' depth Qu = 25.7 tsf.

Extent of exploration.

Benchmark: BM 172 chiseled square on NW wingwall of existing bridge, Sta 49+85, 18.8 Lt = 477.48' elevation.

Color pictures of the cores Available on request  
Cores will be stored for examination until 07/11/09  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, form 138 (Rev. 8-99)

**BORING LOGS**  
**STRUCTURE NO. 026-0105**

SHEET NO. 34	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR1)B-1	FAYETTE	71	56
38 SHEETS	CONTRACT NO. 74235		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		
 <b>OATES ASSOCIATES</b> Consulting Engineers Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115	DESIGNED	-			
	CHECKED	-			
	DRAWN	-			
	CHECKED	-			





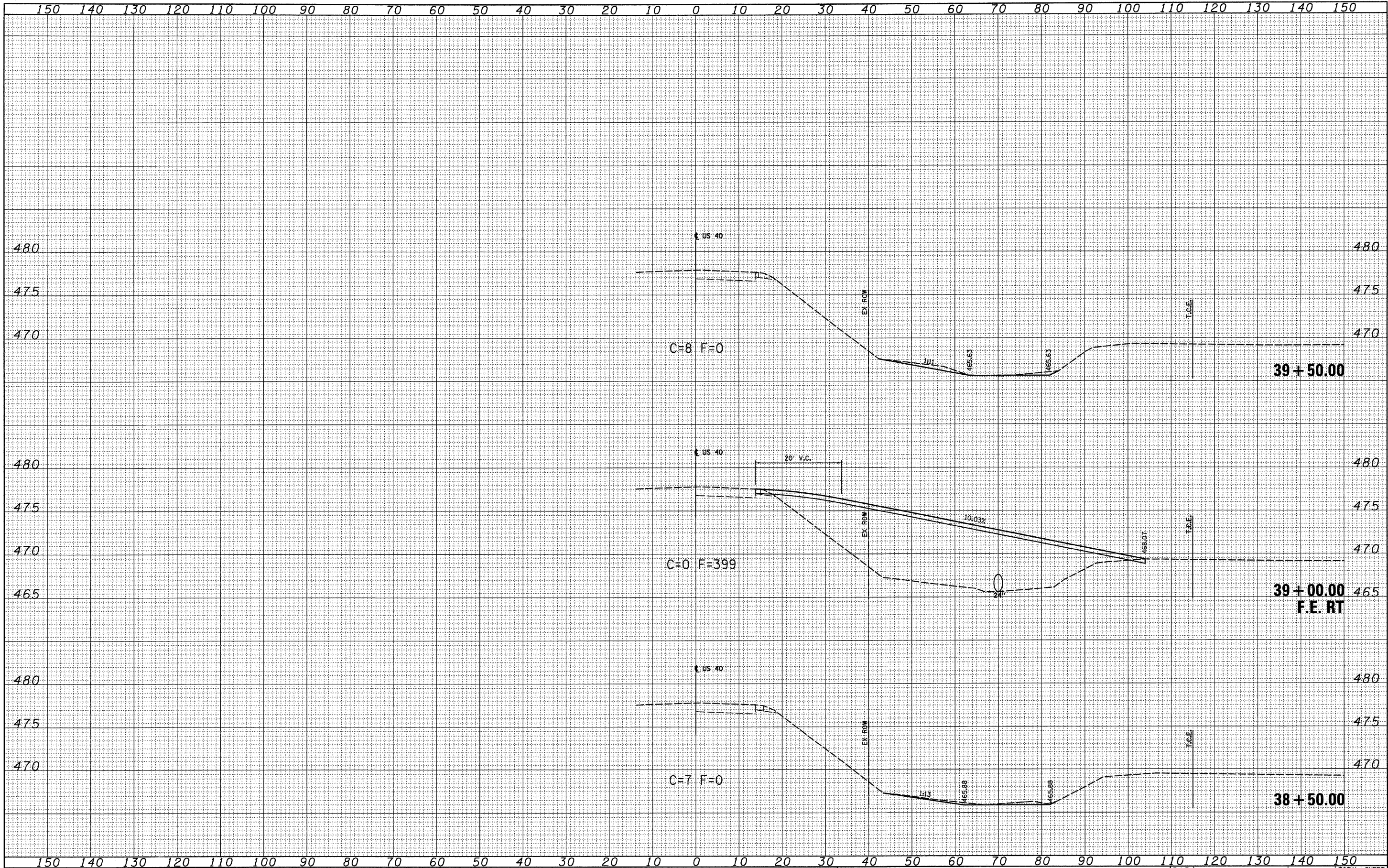






FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

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



FILE NAME = H:\V\27834\W07and8\Microstation\CADDSheets\07  
 USER NAME = default  
 4235-aht-xasht.dgn  
 PLOT SCALE = 10.0000' / IN.  
 PLOT DATE = 9/25/2009

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

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

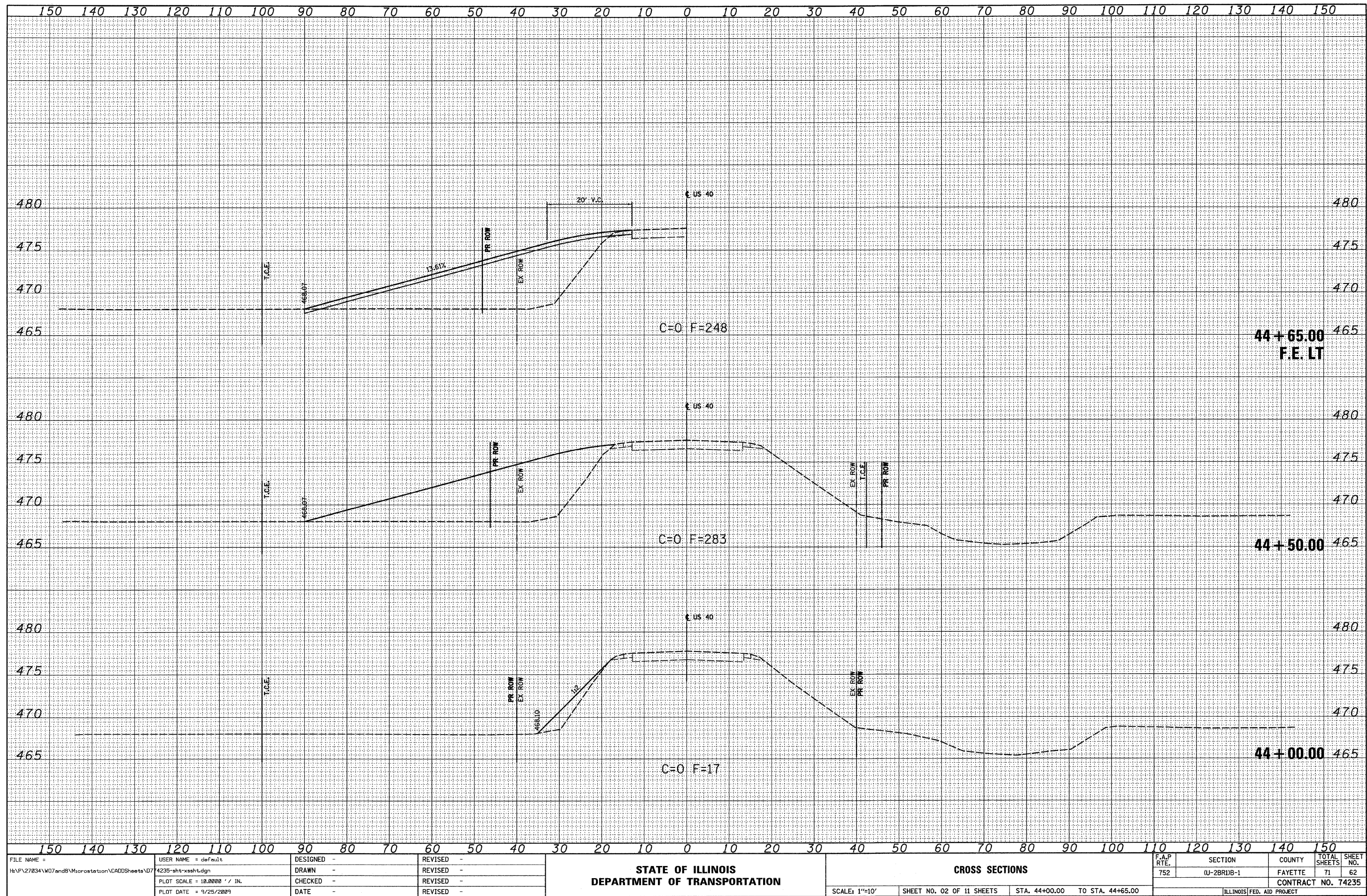
**CROSS SECTIONS**

SCALE: 1"=10'      SHEET NO. 01 OF 11 SHEETS      STA. 38+50.00 TO STA. 39+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-2BR)B-1	FAYETTE	71	61
CONTRACT NO. 74235			ILLINOIS FED. AID PROJECT	

FINAL SURVEY	DATE
NO. _____	_____
BY _____	_____
DESIGNED -	REVISIONS
DRAWN -	NO. _____
CHECKED -	DATE _____
DATE _____	

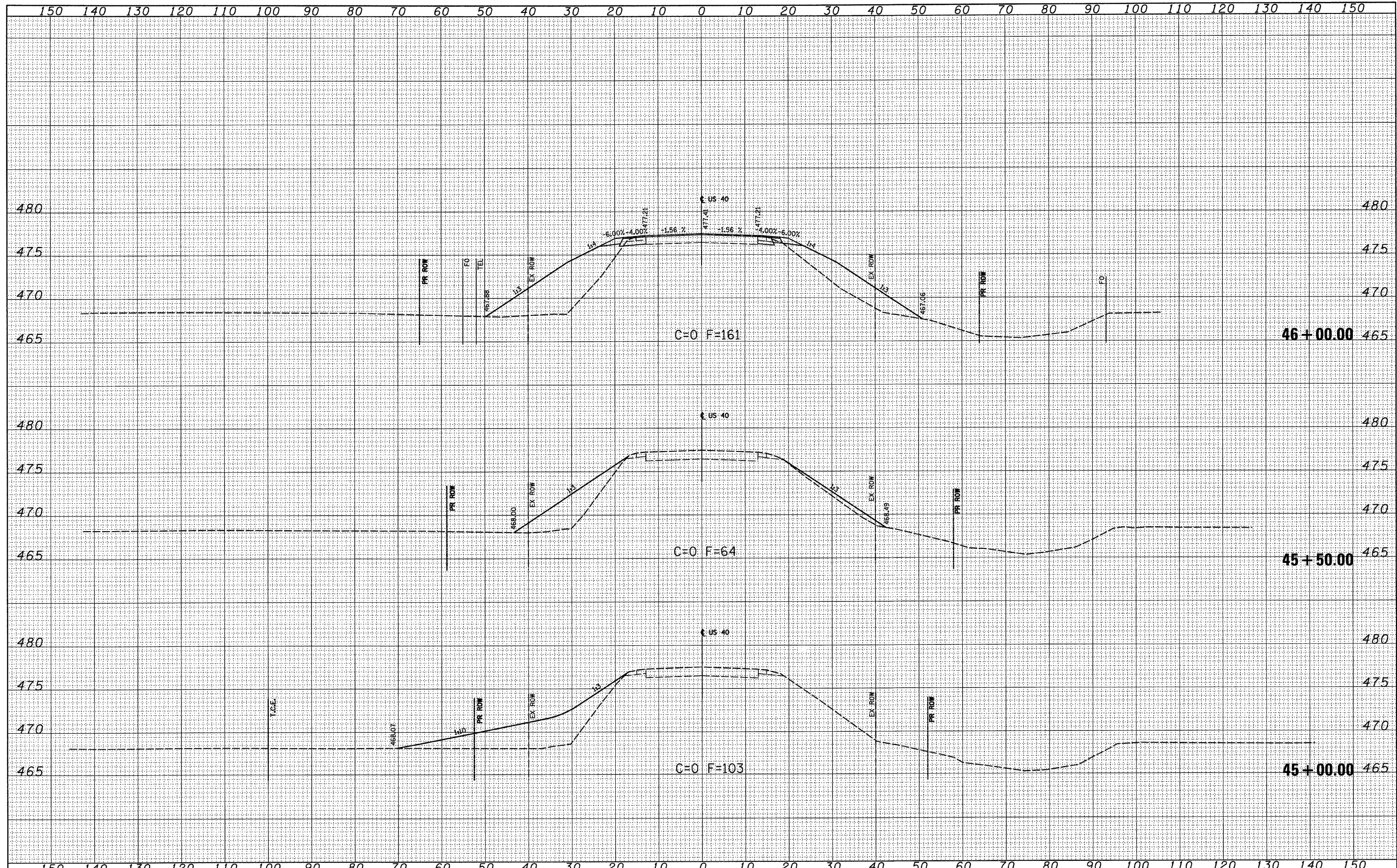
ORIGINAL SURVEY	DATE
NO. _____	_____
BY _____	_____
DESIGNED -	REVISIONS
DRAWN -	NO. _____
CHECKED -	DATE _____
DATE _____	



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4235-sht-xssht.dgn		DRAWN -	NO. _____		752	(U-2BR)B-1	FAYETTE	71	62		
PLOT SCALE = 18.0000' / IN.		CHECKED -	DATE _____		SCALE: 1"=10'		SHEET NO. 02 OF 11 SHEETS		STA. 44+00.00 TO STA. 44+65.00	CONTRACT NO. 74235	
PLOT DATE = 9/25/2009		DATE _____			ILLINOIS FED. AID PROJECT						

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

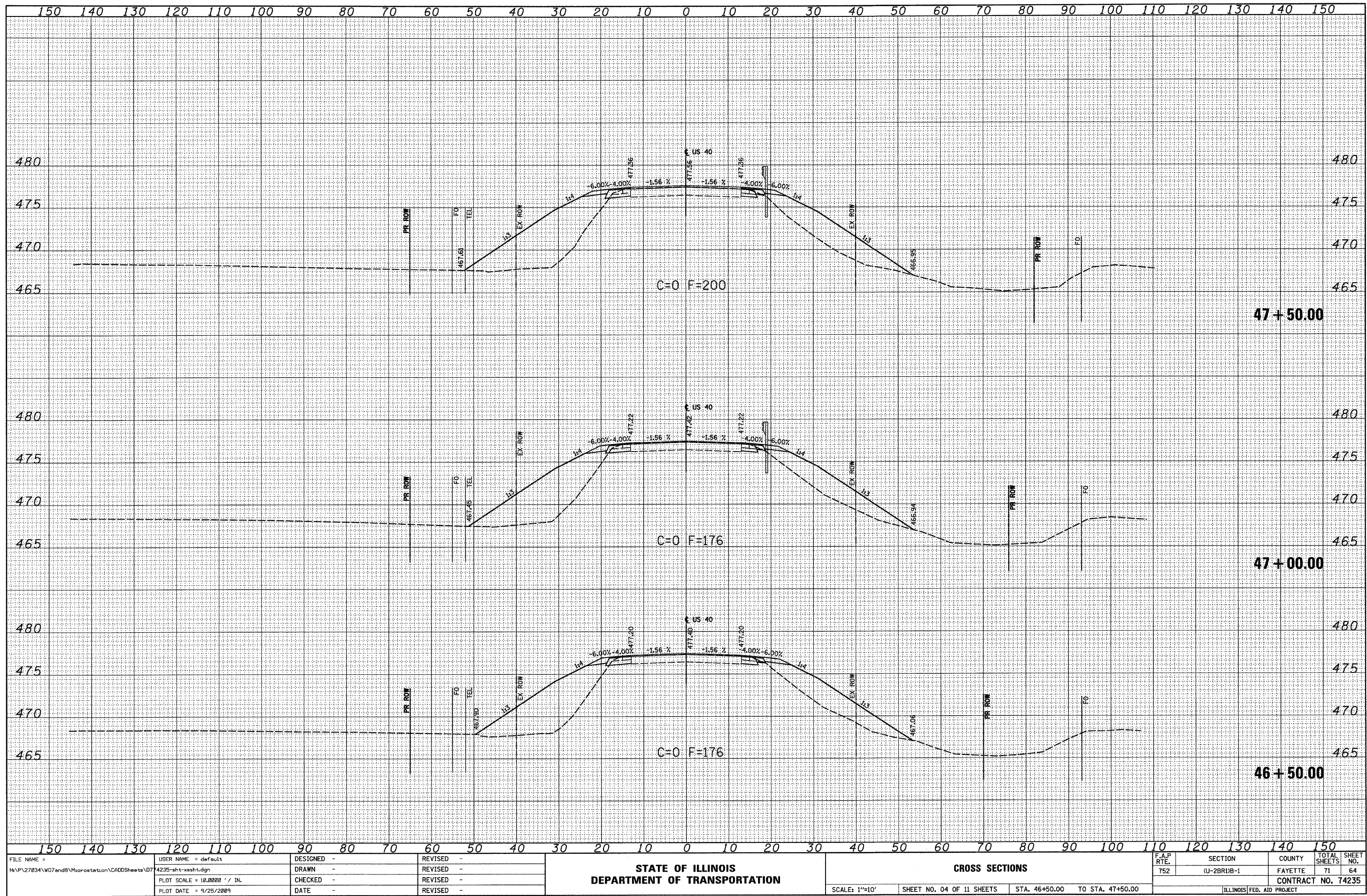
ORIGINAL SURVEY	BY	DATE
SELECTED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
CHECKED		
NO.		



FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\27834\W07and8\Microsoft\CAODSheets\07	4235-sht-xssht.dgn	DRAWN -	REVISED -		752	(U-28R1)B-1	FAYETTE	71	63			
	PLOT SCALE = 10.0000' / IN.	CHECKED -	REVISED -		SCALE: 1"=10'			SHEET NO. 03 OF 11 SHEETS		STA. 45+00.00 TO STA. 46+00.00	CONTRACT NO. 74235	
	PLOT DATE = 9/25/2009	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

DATE	
BY	
FINISHED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
ORIGINAL	
SURVEY	
NOTE BOOK	
AREAS	
CHECKED	
NO.	

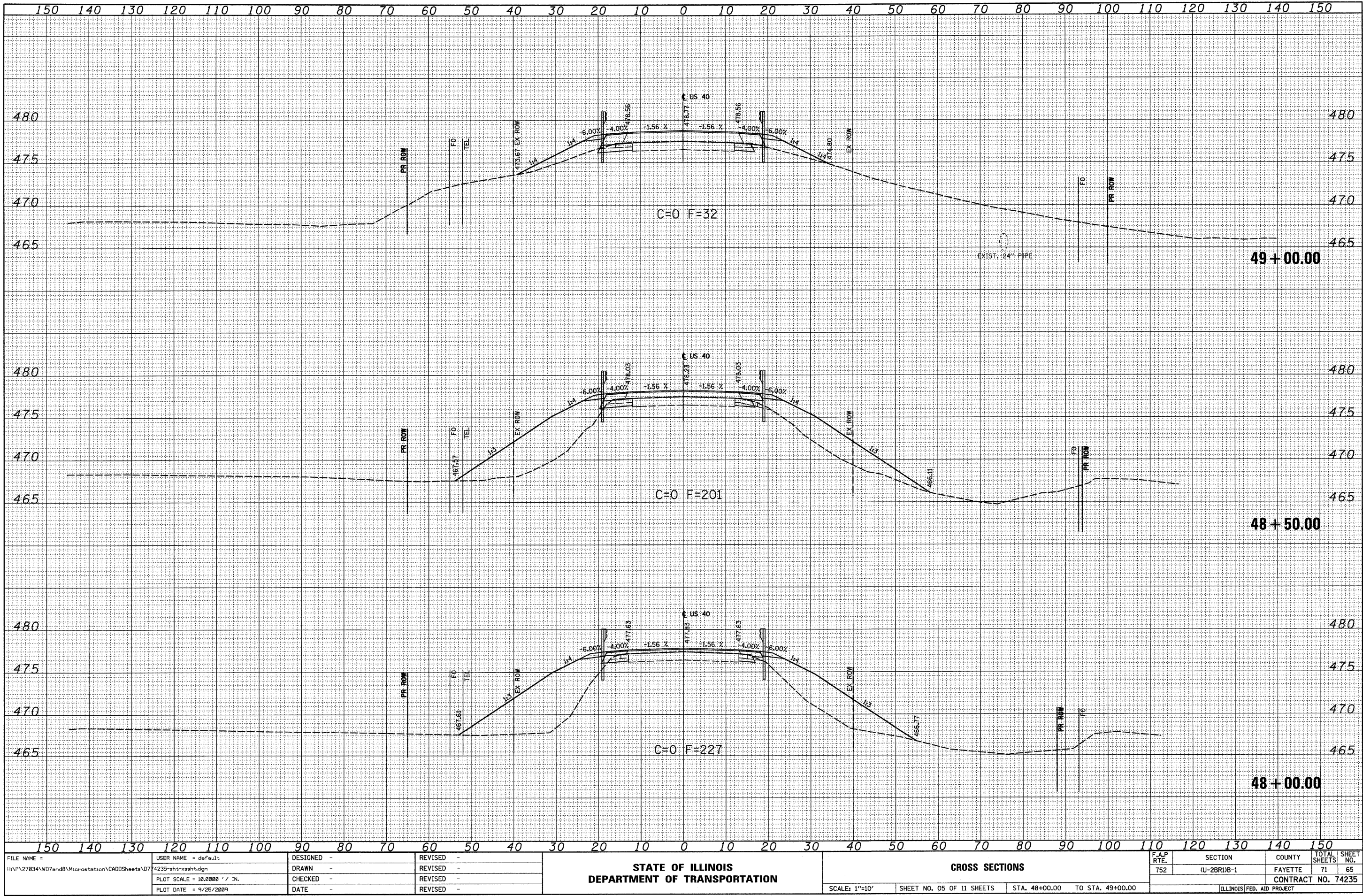


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H:\P\27034\W07andB\Microstation\CADD\Sheets\D7	4235-sht-xsh.t.dgn	DRAWN -	REVISED -		752	(U-2BR)B-1	FAYETTE	71	64			
	PLOT SCALE = 10.0000' / IN.	CHECKED -	REVISED -		SCALE: 1"=10'		SHEET NO. 04 OF 11 SHEETS		STA. 46+50.00 TO STA. 47+50.00		CONTRACT NO. 74235	
	PLOT DATE = 9/25/2009	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



DATE	
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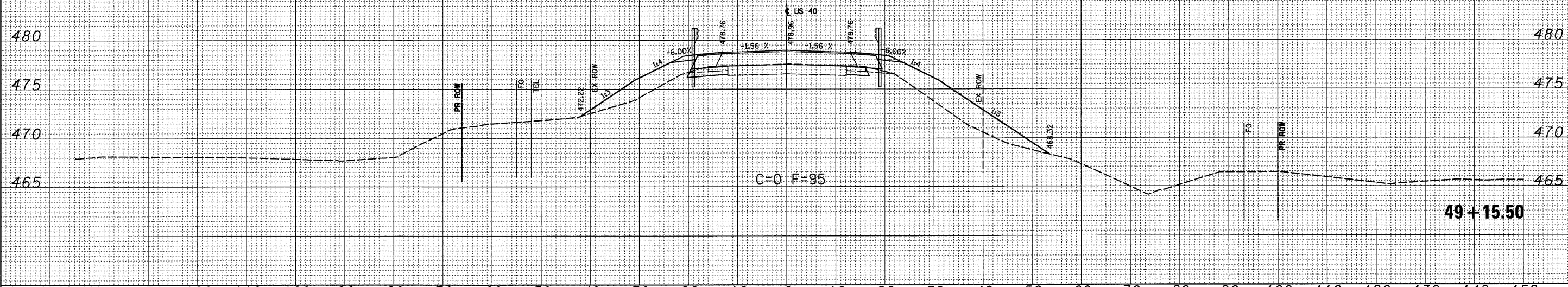
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4235-aht-xasht.dgn	PLOT SCALE = 10.0000' / IN.	DRAWN -	REVISED -		SCALE: 1"=10'	SHEET NO. 05 OF 11 SHEETS	STA. 48+00.00 TO STA. 49+00.00	CONTRACT NO. 74235		ILLINOIS FED. AID PROJECT		
PLOT DATE = 9/25/2009	DATE -	CHECKED -	REVISED -									
		DATE -	REVISED -									

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

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

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

BRIDGE OMISSION  
STA. 49+45.50 TO STA. 53+38.50



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

FILE NAME = H:\P\27834\W07and8\Microstation\CADDSheets\D7

USER NAME = default  
4235-sht-xasht.dgn  
PLOT SCALE = 10.0000' / IN.  
PLOT DATE = 9/25/2009

DESIGNED -  
DRAWN -  
CHECKED -  
DATE -

REVISED -  
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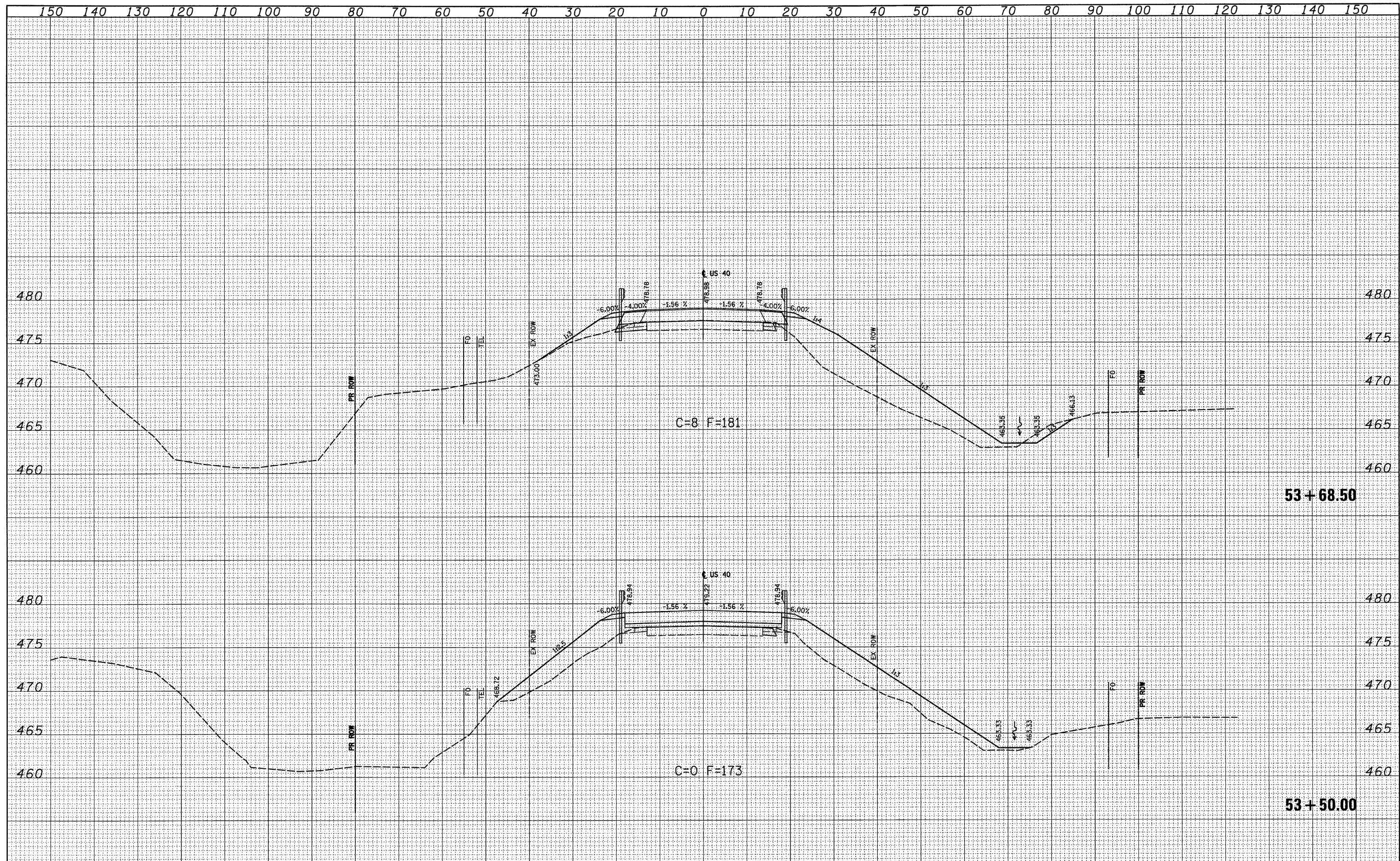
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
SCALE: 1"=10'  
SHEET NO. 06 OF 11 SHEETS  
STA. 49+15.50 TO STA. 49+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-2BR)B-1	FAYETTE	71	66
CONTRACT NO. 74235				
ILLINOIS FED. AID PROJECT				

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

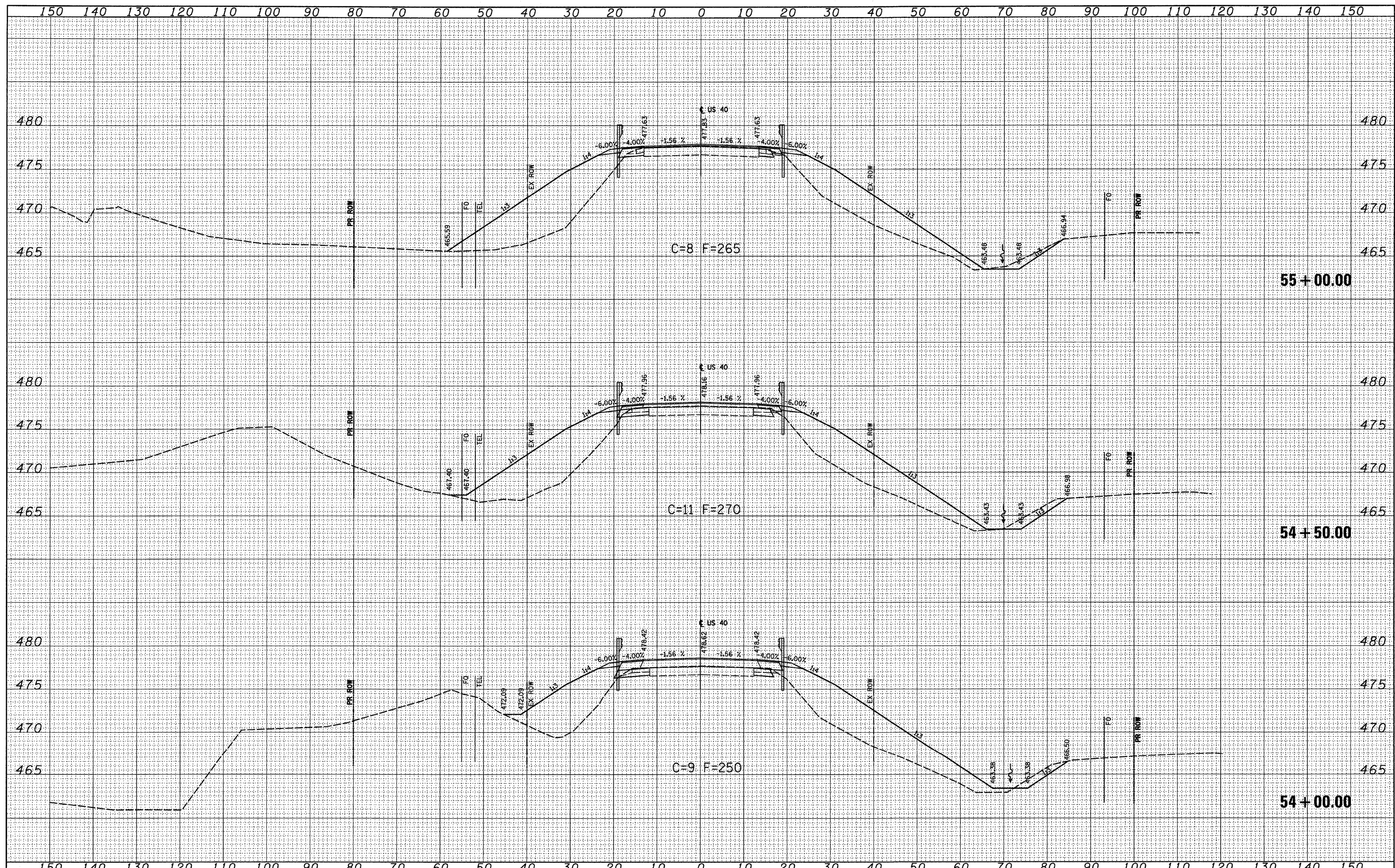
ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS	
	CHECKED	



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	4235-ahf-xshd.dgn	DRAWN -	REVISED -		SCALE: 1"=10'	SHEET NO. 07 OF 11 SHEETS	STA. 53+50.00 TO STA. 53+68.50	CONTRACT NO. 74235		ILLINOIS FED. AID PROJECT		
	PLOT SCALE = 18.0000' / IN.	CHECKED -	REVISED -									
	PLOT DATE = 9/25/2009	DATE -	REVISED -									

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

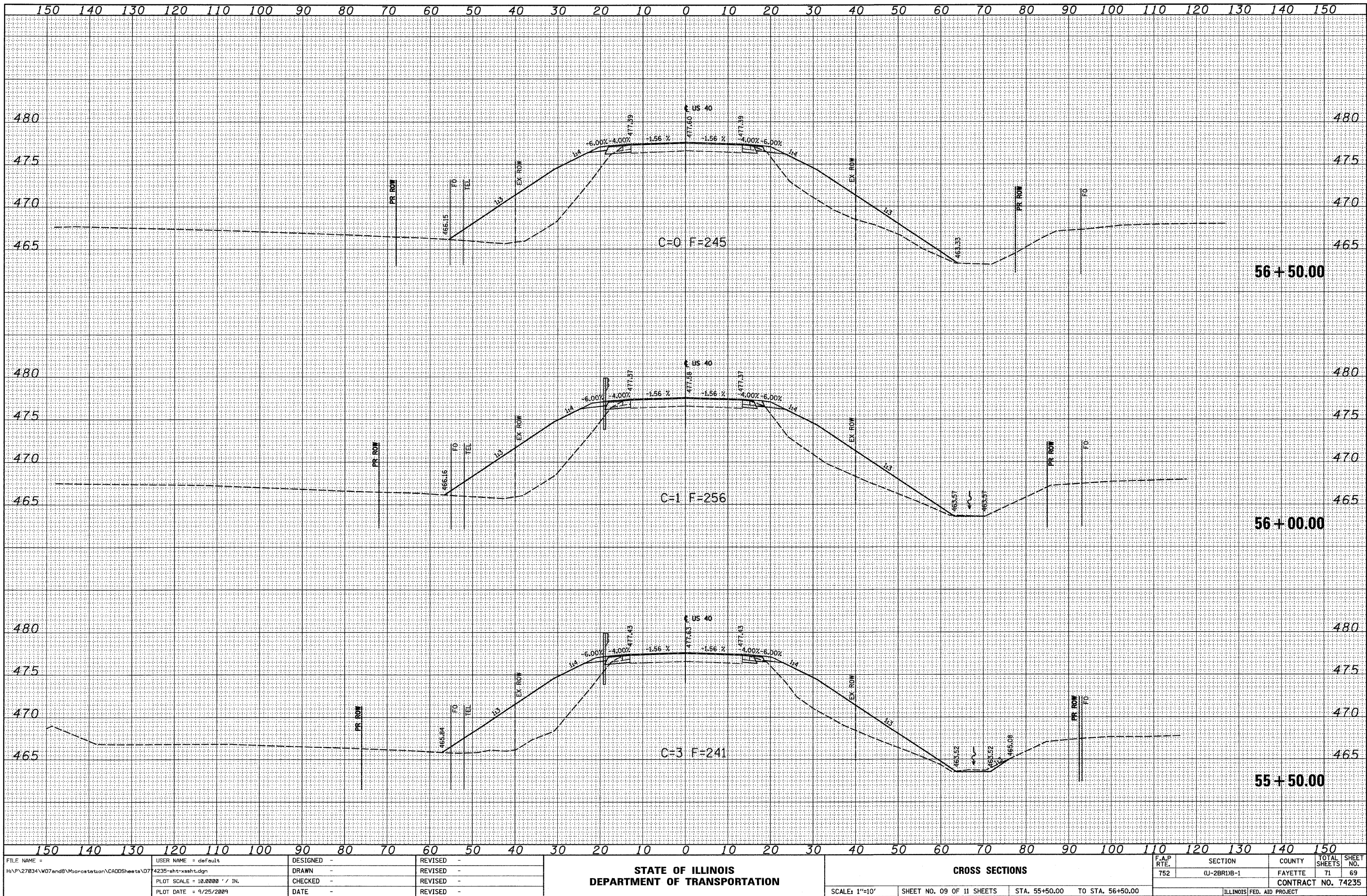
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NOTE BOOK	PLOTTED	
AREAS CHECKED	TEMPLATE	
	AREAS	
	CHECKED	



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PLOT SCALE = 18.0000' / IN.		DRAWN -	REVISED -		SCALE: 1"=10'	SHEET NO. 08 OF 11 SHEETS	STA. 54+00.00 TO STA. 55+00.00	CONTRACT NO. 74235		ILLINOIS FED. AID PROJECT	
PLOT DATE = 9/25/2009		CHECKED -	REVISED -								
		DATE -	REVISED -								

FINAL SURVEY	DATE
NO. _____	BY _____
NOTE BOOK	DESIGNED
NO. _____	DRAWN
AREAS CHECKED	CHECKED
AREAS CHECKED	DATE

ORIGINAL SURVEY	DATE
NO. _____	BY _____
NOTE BOOK	DESIGNED
NO. _____	DRAWN
AREAS CHECKED	CHECKED
AREAS CHECKED	DATE



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 PLOT DATE = 9/25/2009

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

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

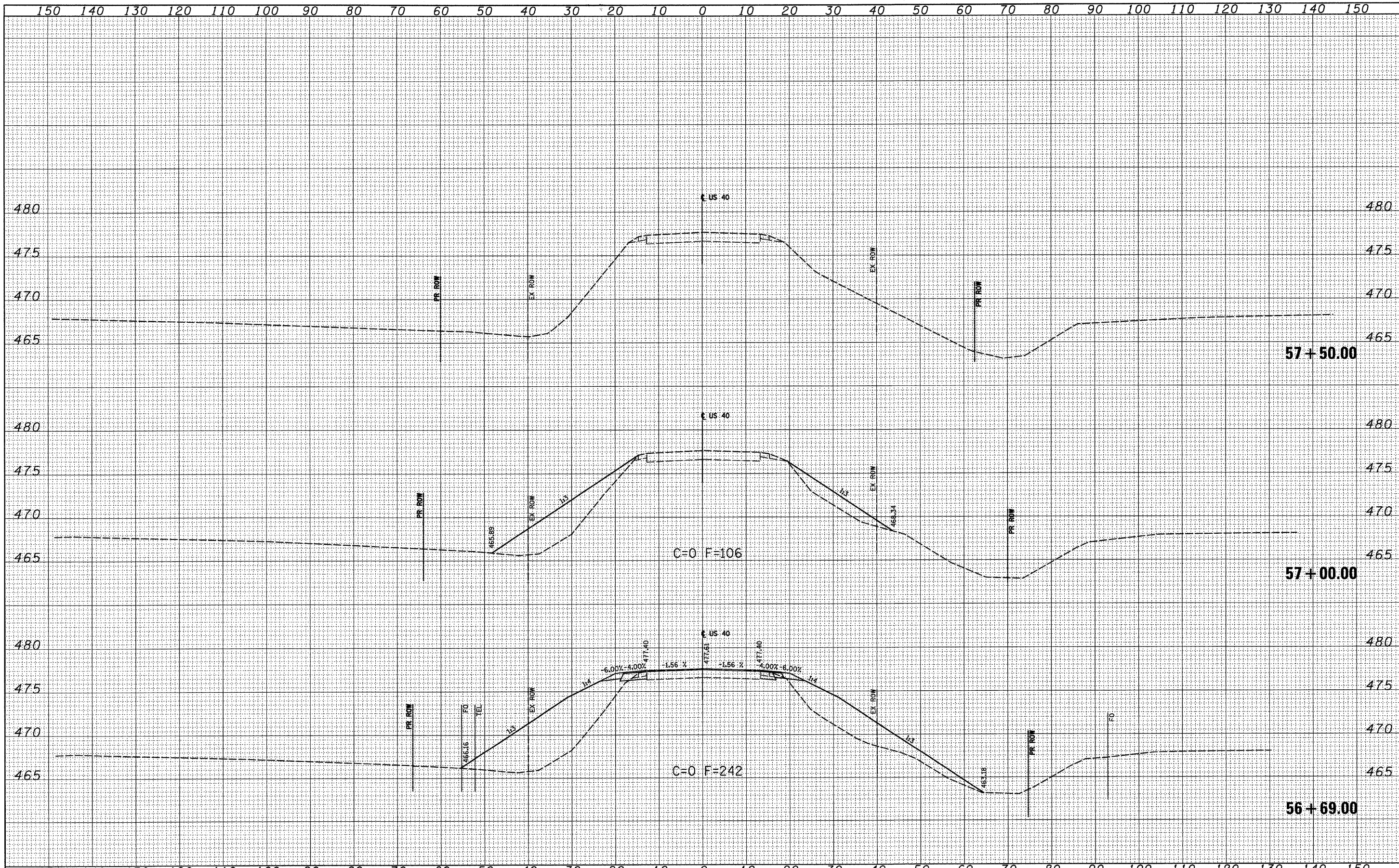
**CROSS SECTIONS**

SCALE: 1"=10'      SHEET NO. 09 OF 11 SHEETS      STA. 55+50.00 TO STA. 56+50.00

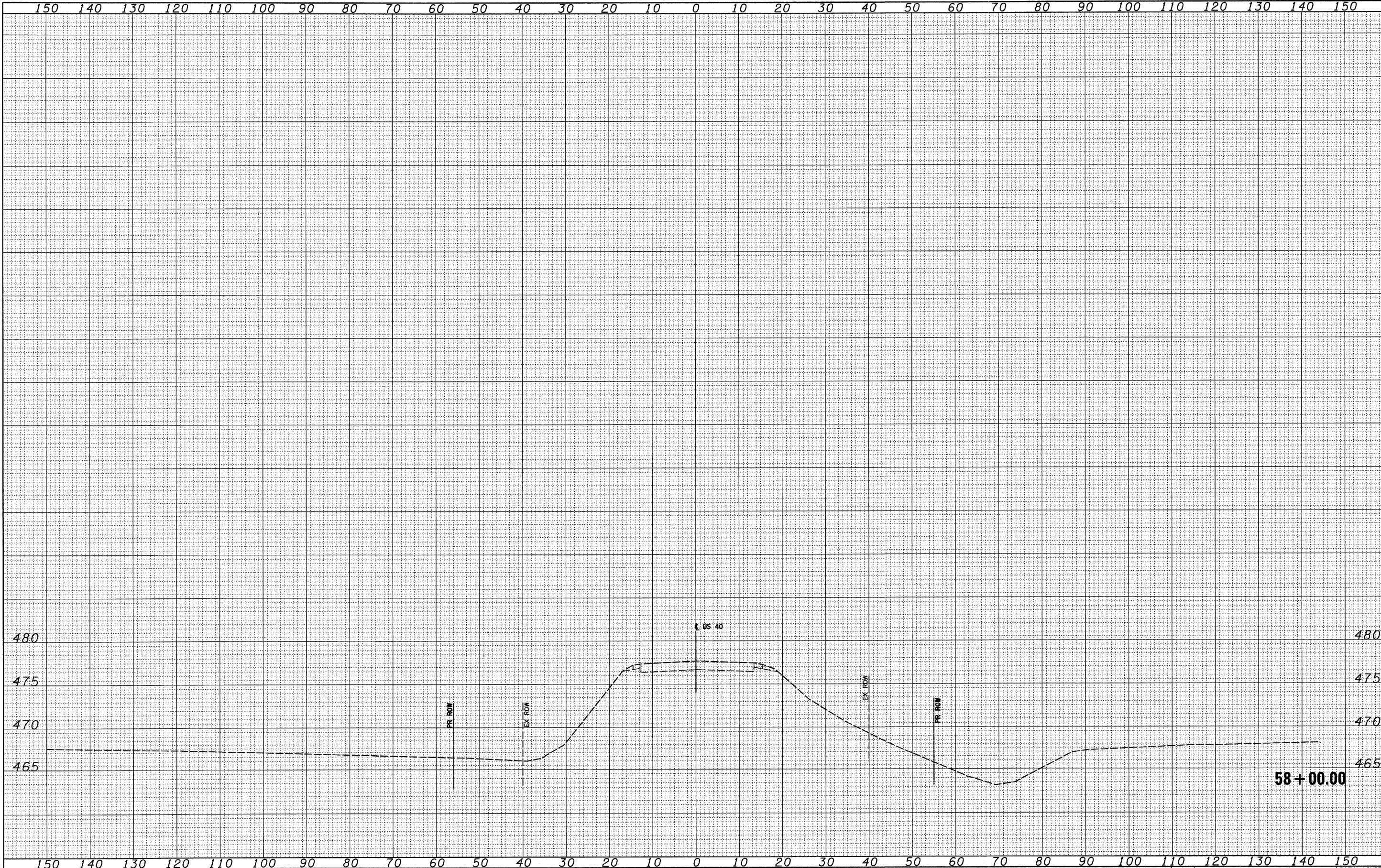
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	(U-2BR)B-1	FAYETTE	71	69
			CONTRACT NO. 74235	
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME = H:\P\27834\W07and8\Microstation\CAD\Sheets\07	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b>			F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4235-ahh-xsh.tdgn	4235-ahh-xsh.tdgn	DRAWN -	REVISED -		752	(U-2BR)B-1	FAYETTE	71	70			
PLOT SCALE = 10.0000' / IN.		CHECKED -	REVISED -		SCALE: 1"=10'			SHEET NO. 10 OF 11 SHEETS		STA. 56+69.00 TO STA. 57+50.00	CONTRACT NO. 74235	
PLOT DATE = 9/25/2009		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



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

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

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b>			F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 71
H:\P\27834\W07and8\Microstation\CA00Sheets\07	74235-ahtr-xssht.dgn	DRAWN -	REVISED -		SCALE: 1"=10'	SHEET NO. 11 OF 11 SHEETS	STA. 58+00.00	TO STA. 58+00.00	ILLINOIS FED. AID PROJECT			
	PLOT SCALE = 10.0000' / IN.	CHECKED -	REVISED -									
	PLOT DATE = 9/25/2009	DATE -	REVISED -									