

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	1

+3
= 61

D-98-017-02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED

HIGHWAY PLANS

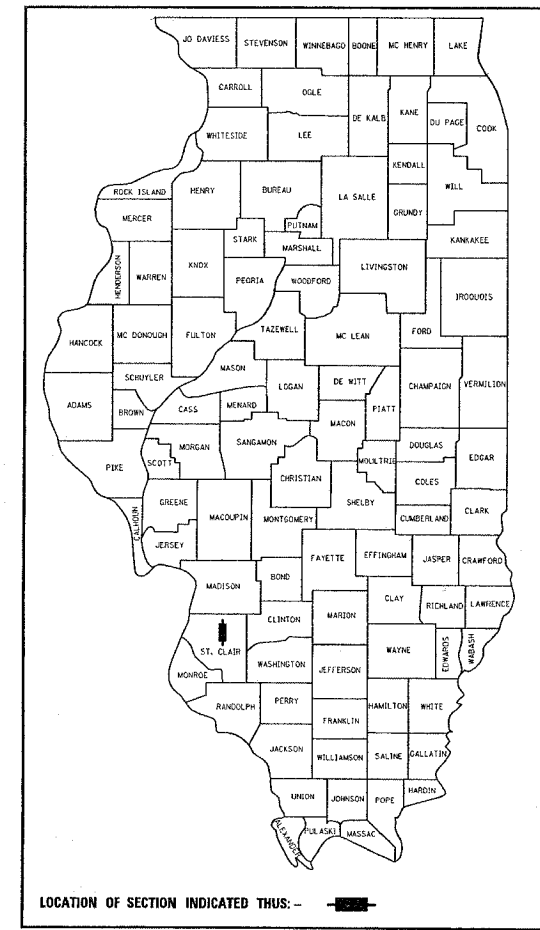
FAP ROUTE 805 {IL ROUTE 161}

SECTION 122 VBR-1

PROJECT: F-0805(069)

DECK REPLACEMENT OF STRUCTURE CARRYING IL ROUTE 161 OVER
THE METRO-LINK STATION & EB LEFT TURN LANE EXTENSION

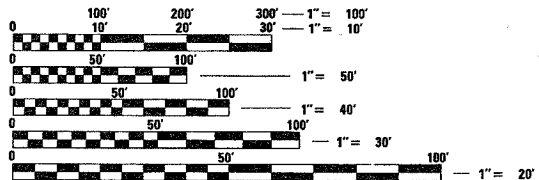
ST. CLAIR COUNTY
C-98-020-02



SEE SHEET 2 FOR INDEX OF SHEETS
LIST OF STANDARDS AND GENERAL NOTES

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

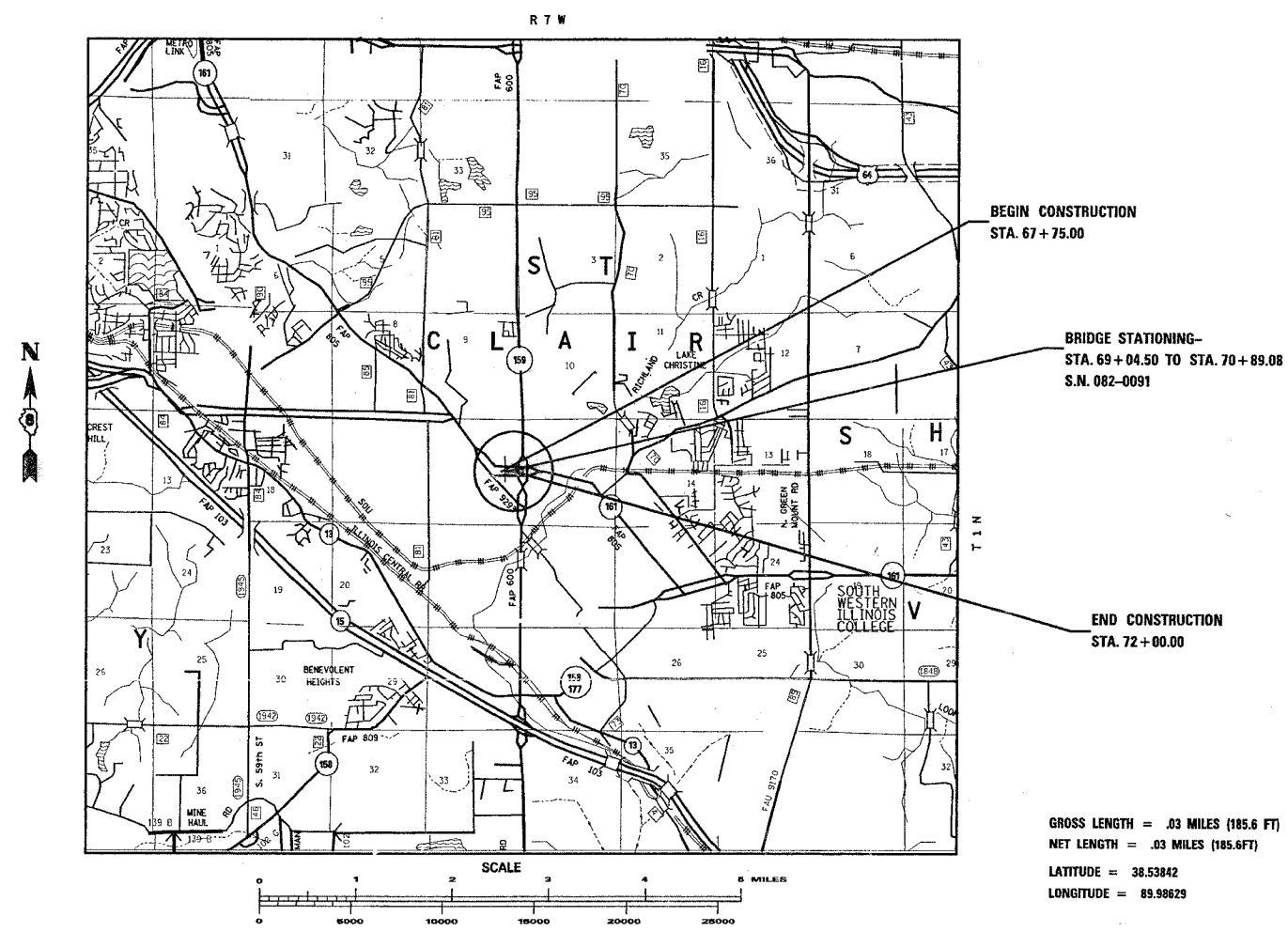
MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____



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

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

CONTRACT NO. 76558



GROSS LENGTH = .03 MILES (185.6 FT)
NET LENGTH = .03 MILES (185.6 FT)
LATITUDE = 38.53842
LONGITUDE = 89.98629

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 24, 2006
May Cotamini
DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER

October 13, 2006
Mike Hine
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 2006
Milton R. Sees, P.E.
DIRECTOR, DIVISION OF HIGHWAYS

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OF THE STATE OF ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-I	ST. CLAIR	58	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

- THE STANDARDS WITH THE REVISION NUMBERS STATED ON THIS SHEET SHALL APPLY TO THIS PROJECT.
- ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKINGS OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
 - AMERENIP
 - METRO
 - CHARTER COMMUNICATIONS, INC.
 - AT&T ILLINOIS
 - ILLINOIS AMERICAN WATER CO.
 - VILLAGE OF SWANSEA
 - MCLEOD USA TELECOMMUNICATIONS, INC.
 (MEMBERS OF J.U.L.I.E. (800)892-0123 ARE INDICATED BY *, NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.)
- THE THICKNESS OF BITUMINOUS MIXTURES SHOWN IN 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 ON WHICH THE BITUMINOUS MIXTURE IS PLACED.
- SAW CUTTING ON ALL EDGES FOR REMOVAL ITEMS SHALL BE INCLUDED IN THE COST OF THE REMOVAL AS INDICATED AND IN ACCORDANCE WITH SECTION 440 OF THE STANDARD SPECIFICATIONS.
- UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS AT PRESENT NOT KNOWN. VERIFICATION OF THE LOCATIONS AND ELEVATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ADJACENT PAVEMENT IS NOT DAMAGED DURING ANY OPERATION.
- WHEN ERECTING POSTS FOR CONSTRUCTION SIGNING IN AREAS OTHER THAN ALONG THE MAINLINE HIGHWAY, THE CONTRACTOR SHALL CALL J.U.L.I.E. TO LOCATE ANY BURIED UTILITIES THAT MAY BE IN THE AREA.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING THE CORRECT COLOR OF PAVEMENT MARKING. (REFER TO THE PAVEMENT MARKING PLAN SHEETS.) THIS WORK WILL BE DONE IN ACCORDANCE WITH SECTION 780 OF THE STANDARD SPECIFICATIONS.
- A PAY ITEM FOR TEMPORARY PAVEMENT MARKING-LINE 4" HAS BEEN INCLUDED IN THE PLANS. IT SHALL CONSIST OF YELLOW AND WHITE TEMPORARY PAVEMENT MARKING. THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 703 OF THE STANDARD SPECIFICATIONS.
- A QUANTITY OF 60 SQUARE YARDS OF TEMPORARY RAMP HAS BEEN INCLUDED IN THE PLANS. THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 406 OF THE STANDARD SPECIFICATIONS.
- ALL TEMPORARY PAVEMENT MARKING SHALL BE PLACED IN SUCH A MANNER AS TO NOT INTERFERE WITH PLACEMENT OF PERMANENT PAVEMENT MARKING.
- THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE AREA LOCATED WITHIN THE CONSTRUCTION LIMIT LINES SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING AN APPLICATION RATE OF .0015646 TONS/SQUARE YARD.
- A QUANTITY OF 570 SQUARE YARDS OF PAVEMENT REMOVAL HAS BEEN INCLUDED IN THE PLANS. 380 SQUARE YARDS OF THIS QUANTITY WILL CONSIST OF BRIDGE APPROACH PAVEMENT.
- ALL AREAS DISTURBED FOR WHATEVER REASON SHALL BE SEEDED WITH TEMPORARY SEEDING AS DESCRIBED IN THE ILLINOIS STANDARD SPECIFICATIONS AS SOON AS POSSIBLE TO DETER EROSION. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT BID PRICE.
- A SAW CUT LINE WILL BE REQUIRED AT THE EDGE OF PAVEMENT FOR THE REMOVAL OF THE CURB AND GUTTER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE REMOVAL ITEM AND IN ACCORDANCE WITH SECTION 440 OF THE STANDARD SPECIFICATIONS.
- DISTURBED AREAS WILL BE PERMANENTLY SEEDED WITH SEEDING, CLASS 2 AND SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT BID PRICE.
- AN ESTIMATED 400 TONS OF GRANULAR EMBANKMENT, SPECIAL AND 427 SQUARE YARDS OF GEOTECHNICAL FABRIC FOR GROUND STABILIZATION HAS BEEN INCLUDED IN THE PLANS FOR AREAS OF EROSION AND BACKFILL FOR THE RUN OF GUARDRAIL LOCATED IN THE NORTHWEST QUADRANT FROM APPROXIMATE STATION 64+25 TO APPROXIMATE STATION 69+04. THIS WORK WILL BE COMPLETED PRIOR TO CONSTRUCTION OF THE TEMPORARY SIDEWALK.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE	SURFACE	LEVEL BINDER	BINDER	INCIDENTAL SURF	BR. APPR. PAVT. CONN. (FLEXIBLE)
AC/PC	SBS 70-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
RAP % (MAX)	0%	10%	10%	10%	10%
DESIGN AIR VOIDS	4.0% @ Ndes=90	4.0% @ Ndes=90	4.0% @ Ndes=90	4.0% @ Ndes=90	4.0% @ Ndes=90
MIX COMPOSITION					
(GRADATION MIXTURE)					
FRICTION AGG	MIXTURE "E"	MIXTURE "C"	MIXTURE "B"	MIXTURE "E"	MIXTURE "B"

INDEX OF SHEETS

- COVER SHEET
- INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, COMMITMENTS
- SUMMARY OF QUANTITIES
- EXISTING AND PROPOSED ROADWAY TYPICALS
- SCHEDULE OF QUANTITIES
- ALIGNMENTS AND TIE POINTS
- PLAN SHEETS
- TRAFFIC CONTROL AND STAGE CONSTRUCTION PLANS
- TEMPORARY TRAFFIC SIGNAL PLAN
- BRIDGE PLANS
- BRIDGE APPROACH PAVEMENT DETAILS
- PAVEMENT MARKING PLAN SHEETS
- DETAILS

LIST OF STANDARDS

353001-02	630001-06	701801-03	001001
420001-06	630301-03	702001-06	001006
420401-05	631031-05	704001-02	
420701-01	635006-02	720006	
424001-04	635011-01	720011	
515001-02	701426-02	729001	
606001-02	701431-03	780001-01	
606101-01	701601-04	000001-04	
606301-02	701701-04	781001-02	
609006-02	701321-08		

COMMITMENTS

- THE DEPARTMENT HAS MADE THE FOLLOWING COMMITMENTS TO THE VILLAGE OF SWANSEA: CONTACT THE VILLAGE OF SWANSEA A MINIMUM OF ONE WEEK PRIOR TO SIDEWALK CLOSURE; HAVE THE SIDEWALK OPEN BY AUGUST 15, 2007.
- THE DEPARTMENT HAS MADE THE FOLLOWING COMMITMENTS TO HIGH MOUNT ELEMENTARY SCHOOL: CONTACT THE SCHOOL A MINIMUM OF ONE WEEK PRIOR TO SIDEWALK CLOSURE AND ENTRANCE RESTRICTION; TO LIMIT THE ENTRANCE RESTRICTION TO BETWEEN MAY 1, 2007 AND AUGUST 15, 2007.
- THE DEPARTMENT HAS MADE THE FOLLOWING COMMITMENTS TO THE CVS: CONTACT THE STORE A MINIMUM OF ONE WEEK PRIOR TO ENTRANCE RESTRICTION; TO LIMIT THE ENTRANCE RESTRICTION TO BETWEEN AUGUST 15, 2007 AND NOVEMBER 30, 2007.
- THE DEPARTMENT HAS COMMITTED TO COORDINATE WITH METRO DURING ALL PHASES OF CONSTRUCTION INVOLVING WORK OVER THE METRO LINK TRACK SYSTEM.

PLAN	DATE
NOTE BOOK	
REVISIONS	
PLOTTED	
CHECKED	
BY	
DATE	
FILE NAME	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES, INDEX OF SHEETS, LIST OF STANDARDS AND COMMITMENTS
 FAP ROUTE 805 (IL 161)
 SECTION 122 VBR-I
 ST. CLAIR COUNTY
 DRAWN BY:

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SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FEDERAL 20% STATE X071-2A	80% FEDERAL 20% STATE SFTY-3N
20201400	SUB-BASE GRANULAR MATERIAL, TYPE A	TON	214	214	
28100105	STONE RIPRAP, CLASS A3	SQ YD	294	294	
28200200	FILTER FABRIC	SQ YD	294	294	
31100910	SUB-BASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	972	972	
35300300	PORTLAND CEMENT CONCRETE BASE COURSE 8"	SQ YD	972	972	
40300200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.7	0.7	
40800030	AGGREGATE (PRIME COAT)	TON	3.1	3.1	
42001300	PROTECTIVE COAT	SQ YD	1867	1867	
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	570	570	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	114	114	
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	952	952	
42400610	TEMPORARY SIDEWALK	SQ FT	3448	3448	
44000008	BITUMINOUS SURFACE REMOVAL 2 1/2"	SQ YD	1032	1032	
44000100	PAVEMENT REMOVAL	SQ YD	876	876	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2344	2344	
44000600	SIDEWALK REMOVAL	SQ FT	1354	1354	
44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	6402	6402	
44003100	MEDIAN REMOVAL	SQ FT	2347	2347	
50102400	CONCRETE REMOVAL	CU YD	20.3	20.3	
50104650	SLOPE WALL REMOVAL	SQ YD	22	22	
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1	1	
50300100	FLOOR DRAINS	EACH	42	42	
50300225	CONCRETE STRUCTURES	CU YD	12.3	12.3	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	528.1	528.1	
50300260	BRIDGE DECK GROOVING	SQ YD	1248	1248	
50300310	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24	24	
50300320	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12	12	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	6730	6730	
50500505	STUD SHEAR CONNECTORS	EACH	3024	3024	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	124660	124660	
51500100	NAME PLATES	EACH	1	1	
54215547	METAL END SECTIONS 12"	EACH	2	2	
58700200	BRIDGE SEAT SEALER	SQ FT	639	639	
59000100	EPOXY CRACK SEALING	FOOT	118.5	118.5	
60100945	PIPE DRAINS 12"	FOOT	156	156	

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FEDERAL 20% STATE X071-2A	80% FEDERAL 20% STATE SFTY-3N
60500060	REMOVING INLETS	EACH	4	4	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1645	1645	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	699	699	
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	4763	4763	
60619700	CONCRETE MEDIAN, TYPE SB-6.12 (DOWELLED)	SQ FT	2596	2596	
60900140	TYPE B INLET BOX, STANDARD 609006	EACH	4	4	
60900515	CONCRETE THRUST BLOCKS	EACH	2	2	
*63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	537.5	537.5	
*63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2	
*63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	2	2	
63200310	GUARDRAIL REMOVAL	FOOT	664	664	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	18	18	
67100100	MOBILIZATION	L SUM	1	1	
70101200	TRAFFIC CONTROL AND PROTECTION, STANDARD 701431 (SPECIAL)	EACH	2	2	
70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701521 (SPECIAL)	EACH	2	2	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	102	102	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	907	907	
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	104.4	104.4	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	13875	13875	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1642	1642	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	712.5	712.5	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	662.5	662.5	
*78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	34.8	34.8	
*78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3820	3820	
*78008310	POLYUREA PAVEMENT MARKING TYPE II - LINE 4"	FOOT	1155	1155	
*78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	17	17	
*78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	6	6	

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*SPECIALTY ITEMS

PLOT DATE: 10/19/2006

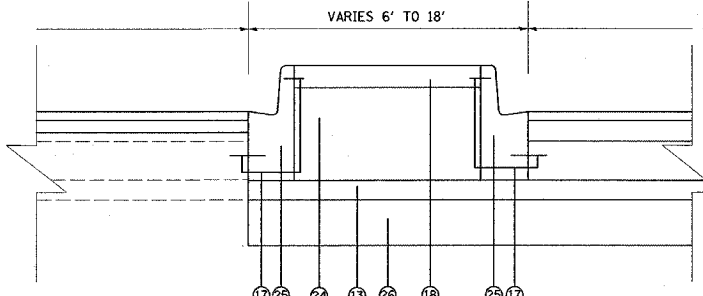
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-I	ST. CLAIR	58	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LEGEND

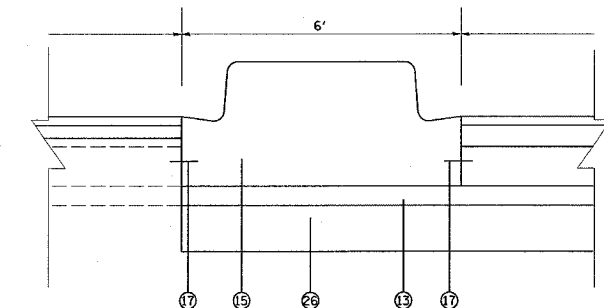
- ① EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ② EXISTING PCC PAVEMENT - VARIES 8" TO 10"
- ③ EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A - 4"
- ④ EXISTING BITUMINOUS CONCRETE SURFACE COURSE - 1 1/2"
- ⑤ EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12/B6.12
- ⑥ EXISTING COMPACT SAND - 4"
- ⑦ EXISTING CONCRETE MEDIAN SURFACE - 4"
- ⑧ EXISTING SIDEWALK - 4"
- ⑨ EXISTING BITUMINOUS CONCRETE BINDER COURSE - VARIES 1" TO 3 1/2"
- ⑩ EXISTING PCC BASE COURSE - 8"
- ⑪ EXISTING PAVEMENT FABRIC
- ⑫ PROPOSED PCC BASE COURSE - 8"
- ⑬ PROPOSED SUB-BASE GRANULAR MATERIAL TYPE A - 4"
- ⑭ PROPOSED POLYMERIZE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "E", N90 - 1 1/2"
- ⑮ PROPOSED CONCRETE MEDIAN SB-6.12*
- ⑯ PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N90 - VARIES 1" TO 3 3/4"
- ⑰ PROPOSED TIE BARS
- ⑱ PROPOSED CONCRETE MEDIAN SURFACE - 4"***
- ⑲ PROPOSED CONCRETE SIDEWALK - 4"
- ⑳ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ㉑ PROPOSED BITUMINOUS SURFACE REMOVAL - 2 1/2"
- ㉒ PROPOSED TEMPORARY SIDEWALK - 4"***
- ㉓ PROPOSED PAVEMENT FABRIC
- ㉔ PROPOSED COMPACT SAND FILL
- ㉕ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ㉖ PROPOSED PROCESSING LIME STABILIZED SOIL MIXTURE 12"
- ㉗ PROPOSED SAW CUT
- ㉘ EXISTING TIE BARS

- NOTES:
- *CONCRETE MEDIAN TYPE SB-6.12 EXTENDS FROM STA. 71+25.08 TO STA. 75+51.28 SEE DETAIL B AND D.
 - **CONCRETE MEDIAN SURFACE EXTENDS FROM STA. 65+14.95 TO STA. 68+68.50
 - ***TEMPORARY SIDEWALK EXTENDS FROM STA. 64+45.00 TO STA. 68+74.50 AND STA. 71+19.08 TO STA. 75+64.26(LT) AND STA. 64+40.00 TO STA. 64+87.00 (RT)
 - ****EXISTING RESURFACING DOES NOT EXTEND INTO GUTTER FLAG

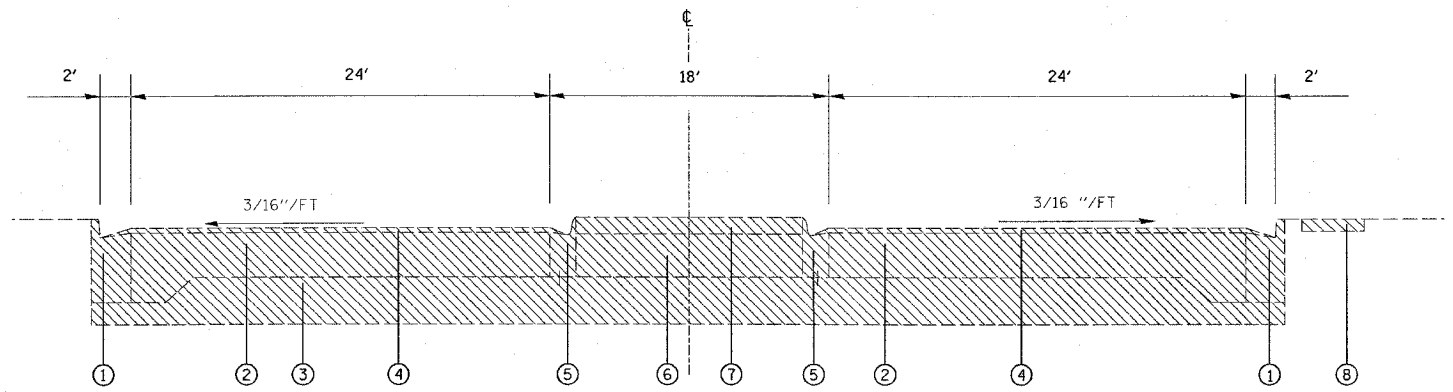
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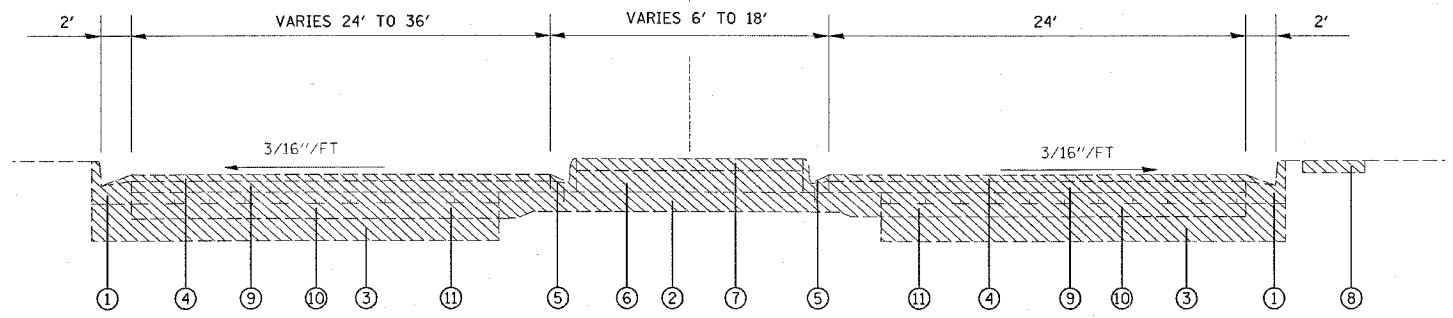
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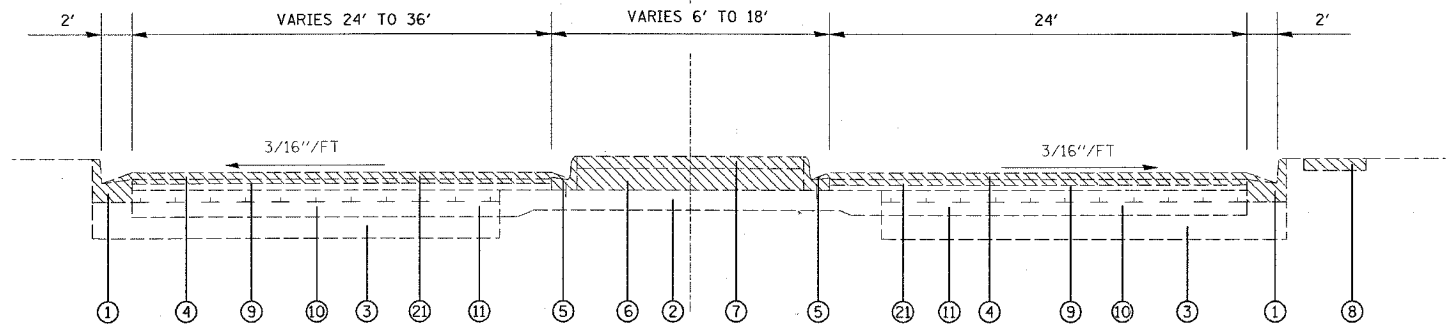
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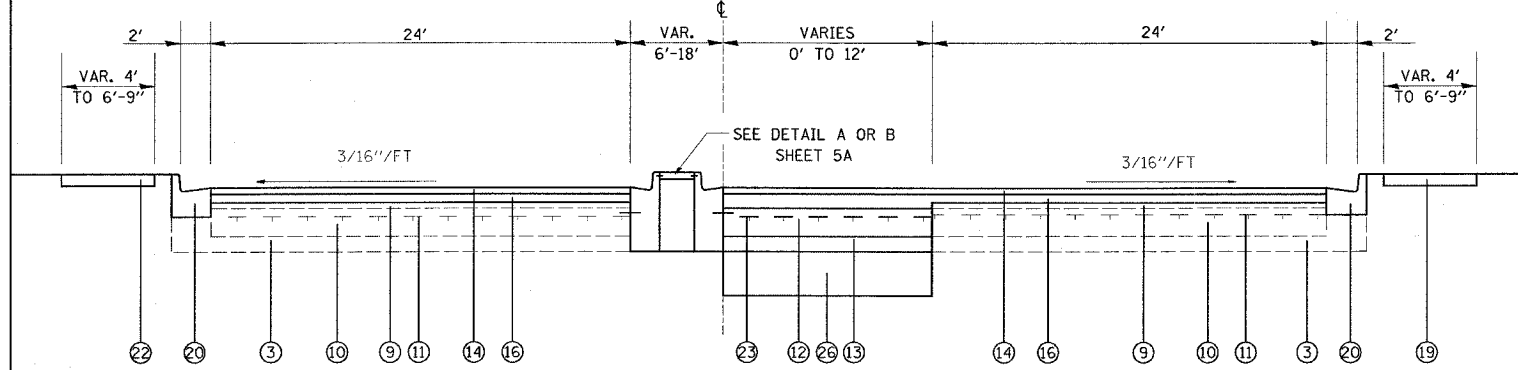
EXISTING TYPICALS
STA. 68+74.50 TO STA. 69+04.50
STA. 70+89.08 TO STA. 71+19.08)--SEE BRIDGE PLANS FOR PROP. BRIDGE APPR. PAVT.



EXISTING TYPICALS
STA. 68+68.50 TO STA. 68+74.50
STA. 71+19.08 TO STA. 71+25.08)--SEE BRIDGE PLANS FOR PROP. BRIDGE APPR. PAVT.



EXISTING TYPICALS
STA. 67+75.00 TO STA. 68+68.50
STA. 71+25.08 TO STA. 72+00.00****



PROPOSED TYPICALS
STA. 67+75.00 TO STA. 68+68.50 DETAIL A
STA. 71+25.08 TO STA. 72+00.00 DETAIL B

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**EXISTING AND PROPOSED
ROADWAY TYPICALS ROADWAY**
FAP ROUTE 805 (IL 161)
SECTION 122 VBR-I
ST. CLAIR COUNTY

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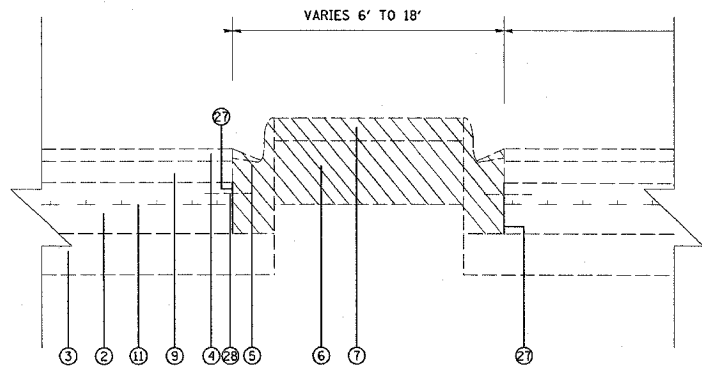
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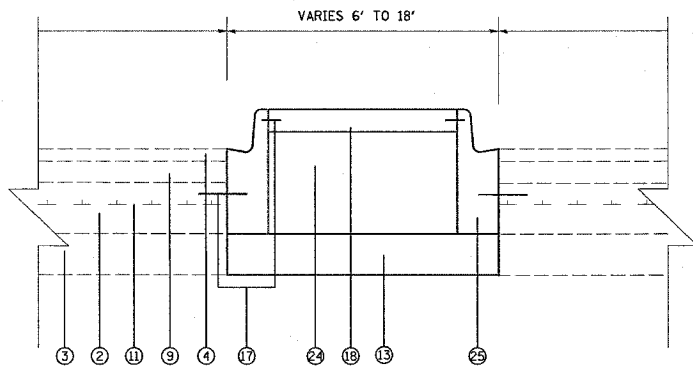
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PLOT DATE: 10/19/2006

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-I	ST. CLAIR	58	5A
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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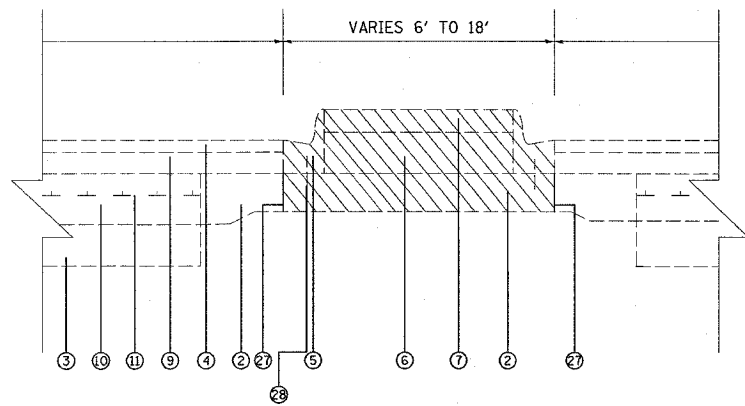


EXISTING TYPICAL
STA. 65+14.95.00 TO STA. 68+68.50

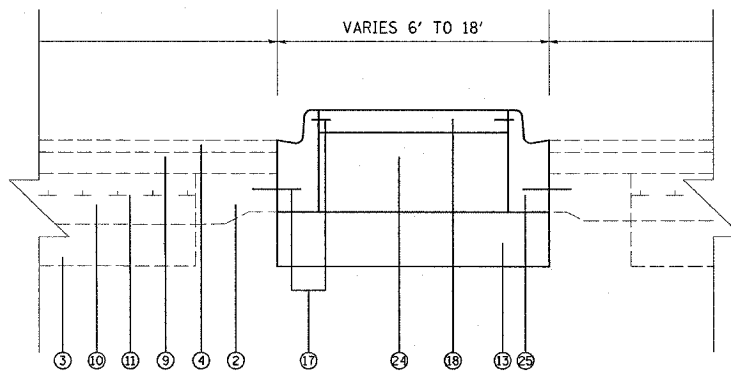


PROPOSED TYPICAL

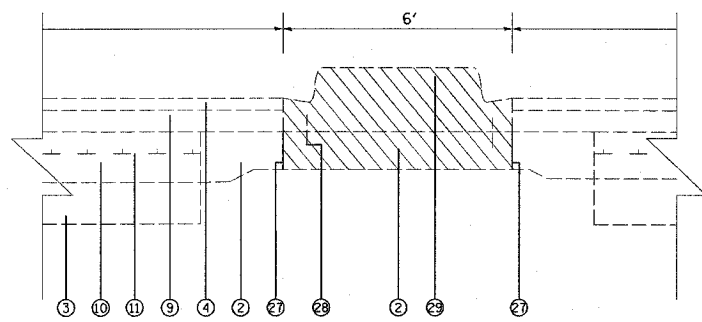
STA. 65+14.95.00 TO STA. 68+68.50



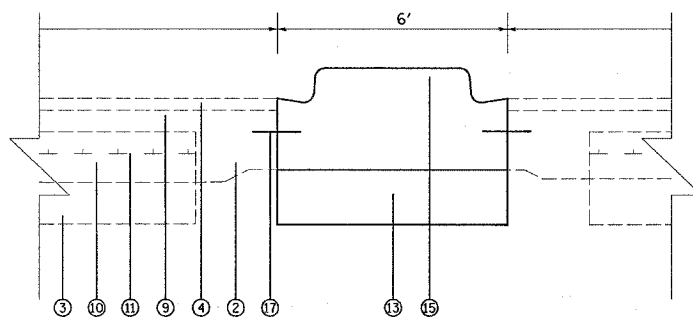
EXISTING TYPICAL
STA. 71+25.08 TO STA. 71+75.08



PROPOSED TYPICAL
STA. 71+25.08 TO STA. 71+75.08



EXISTING TYPICAL
STA. 71+75.08 TO STA. 75+51.67



PROPOSED TYPICAL
STA. 71+75.08 TO STA. 75+51.67

LEGEND

- ① EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
 - ② EXISTING PCC PAVEMENT - VARIES 8" TO 10"
 - ③ EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A - 4"
 - ④ EXISTING BITUMINOUS CONCRETE SURFACE COURSE - 1 1/2"
 - ⑤ EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12/B6.12
 - ⑥ EXISTING COMPACT SAND - 4"
 - ⑦ EXISTING CONCRETE MEDIAN SURFACE - 4"
 - ⑧ EXISTING SIDEWALK - 4"
 - ⑨ EXISTING BITUMINOUS CONCRETE BINDER COURSE - VARIES 1" TO 3 1/2"
 - ⑩ EXISTING PCC BASE COURSE - 8"
 - ⑪ EXISTING PAVEMENT FABRIC
 - ⑫ PROPOSED PCC BASE COURSE - 8"
 - ⑬ PROPOSED SUB-BASE GRANULAR MATERIAL TYPE A - 4"
 - ⑭ PROPOSED POLYMERIZE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "E", N90 - 1 1/2"
 - ⑮ PROPOSED CONCRETE MEDIAN SB-6.12*
 - ⑯ PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N90 - VARIES 1" TO 3 3/4"
 - ⑰ PROPOSED TIE BARS
 - ⑱ PROPOSED CONCRETE MEDIAN SURFACE - 4"***
 - ⑲ PROPOSED CONCRETE SIDEWALK - 4"
 - ⑳ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
 - ㉑ PROPOSED BITUMINOUS SURFACE REMOVAL - 2 1/2"
 - ㉒ PROPOSED TEMPORARY SIDEWALK - 4"***
 - ㉓ PROPOSED PAVEMENT FABRIC
 - ㉔ PROPOSED COMPACT SAND FILL
 - ㉕ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
 - ㉖ PROPOSED PROCESSING LIME STABILIZED SOIL MIXTURE 12"
 - ㉗ PROPOSED SAW CUT
 - ㉘ EXISTING TIE BARS
 - ㉙ EXISTING CONCRETE MEDIAN SB-6.12
- REMOVAL

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**EXISTING AND PROPOSED
ROADWAY TYPICALS ROADWAY**
FAP ROUTE 805 (IL 161)
SECTION 122 VBR-I
ST. CLAIR COUNTY

DRAWN BY:

PLOT DATE: 10/19/2006

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PAVING SCHEDULE

STATION	BIT. MAT'L.S. PRIME COAT (TON)	AGGREGATE PRIME COAT (TON)	POLYMERIZE BIT. CONC. SURF. CSE., SUPER. MIX "E" N90 (TON)	BIT. CONC. BIND. CSE., SUPER. IL-19.0, N90 (TON)	TEMPORARY RAMP. (SQ. YDS.)	PCC BASE CSE. - 8 (SQ. YDS.)	SUBBASE GRAN. MAT. TYPE, A -12" (SQ. YDS.)	SUBBASE GRAN. MAT. TYPE, A (TON)	BITUMINOUS SURFACE REM. - 2 1/2" (SQ. YDS.)
65+00.00 TO 67+00.00	.12	.48	29.7	20.0		310.0	310.0	83.2	
67+00.00 TO 73+00.00	.55	2.52	133.8	158.0		494.0	494.0	89.6	1032
73+00.00 TO 79+00.00	.03	.10	2.5	2.0	60.0	168.0	168.0	41.2	
TOTAL	.70	3.10	166.0	180.0	60.0	972.0	972.0	214.0	1032

GUARDRAIL SCHEDULE

LOCATION	GUARDRAIL REMOVAL FOOT	SPBGR TY A FOOT	TBT TY1 (SPEC) TANG EACH	GUARDRAIL MKRS., TY A EACH	TERM. MKR DIR. APPL. EACH	TBT TY 6 EACH	BARRIER WALL MKRS., TY C EACH
STA. 64+25.13 TO STA. 68+81.24 LT	463						
STA. 64+65.83 TO STA. 68+53.33 LT		387.5		5			
STA. 64+65.83 LT			1		1		
STA. 68+53.33 LT						1	
STA. 70+99.27 TO STA. 72+91.95 RT	201						
STA. 71+40.16 TO STA. 72+90.42 RT		150.0		4			
STA. 71+40.16 RT						1	
STA. 72+90.42 RT			1		1		
STA. 69+04.50 TO STA. 70+89.08							8
TOTAL	664	537.5	2	9	2	2	8

MEDIAN SCHEDULE

STATIONING	CONCRETE MEDIAN SURFACE REM. SQUARE FOOT	CONCRETE MEDIAN REMOVAL SQUARE FOOT	CONCRETE MEDIAN SURFACE-4" SQUARE FOOT	CONCRETE MEDIAN TYPE SB6.12 SQUARE FOOT
STA. 65+14.95 TO STA 69+04.50	5647		4763	
STA. 68+68.50 TO STA 69+04.50				216
STA. 70+89.08 TO STA 71+60.50	755			429
STA. 71+60.50 TO STA. 75+51.67		2347		1951
TOTAL	6402	2347	4763	2596

CURB AND GUTTER SCHEDULE

STATIONING	CURB AND GUTTER REMOVAL FOOT	COMB. CONC. CURB AND GUTTER TYPE B6.12 FOOT	COMB. CONC. CURB AND GUTTER TYPE B6.24 FOOT	REMOVAL REMARKS
STA. 65+14.95 TO STA 68+74.50	779	779		ADJACENT TO MEDIAN
STA. 64+25.00 TO STA 68+74.50	537		537	ADJACENT TO EOP (LT AND RT)
STA. 71+19.08 TO STA 75+51.67	866	866		ADJACENT TO MEDIAN
STA. 71+19.08 TO STA 72+00.00	162		162	ADJACENT TO EOP (LT AND RT)
TOTAL	2344	1645	699	

PAVEMENT MARKING SCHEDULE

STATIONING	SHORT-TERM PAVEMENT MARKING FOOT	WORK ZONE PVT. MRK. REMOVAL SQ FT	THERMOPLASTIC PAVEMENT MARKING - LINE 4" FOOT	THERMPOLASTIC PVT. MRK. LTRS. & SYM. SQ FT	POLYUREA PAVEMENT MARKING - LINE 4" FOOT	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL EACH	RAISED REFLECTIVE PAVEMENT MARKER EACH	RAISED REFLECTIVE PAVEMENT MARKER EACH	PAVEMENT MARKING REMOVAL SQUARE FOOT
STA. 62+50.00 TO STA 67+00.00			759.0			5		5	251
STA. 67+00.00 TO STA 73+00.00	321.0	108.0	1545.8	26.1	1155.0	14	6	8	343
STA. 73+00.00 TO STA 79+00.00			1138.0	8.7		3		3	379
STA. 79+00.00 TO STA 80+00.00			27.2			1		1	9
	321.0	108.0	3470.0	34.8	1155.0	23	6	17	982

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		ALIGNED
		CHECKED
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		NO.
		PLAN

DATE: 10/19/2006
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ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULES

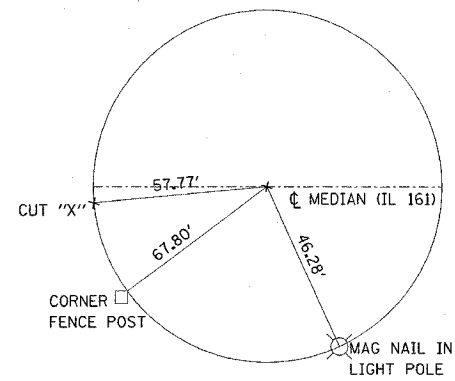
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 SECTION 122 VBR-1
 ST. CLAIR COUNTY

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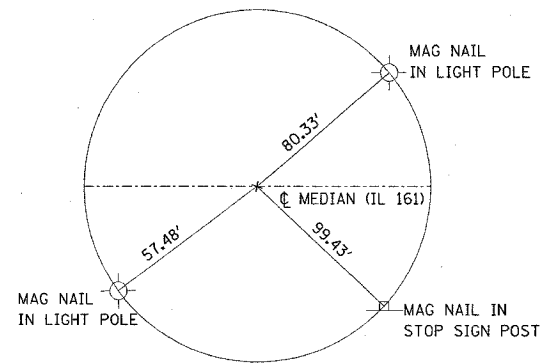
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NAME	DATE

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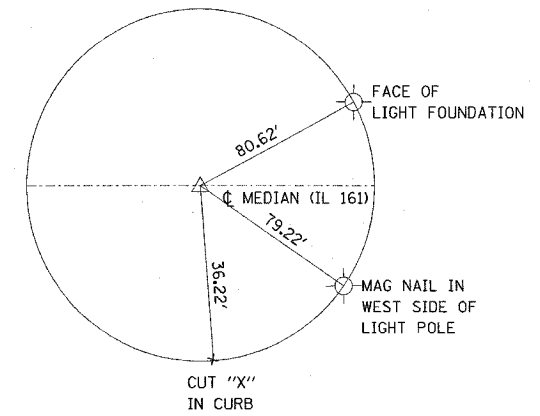
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805	122-VBR-I	ST. CLAIR	58	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



TIE POINT
CUT "X"
STA. 65+74.95



TIE POINT
MAG NAIL
STA. 72+51.21



TIE POINT
MAG NAIL
STA. 74+00

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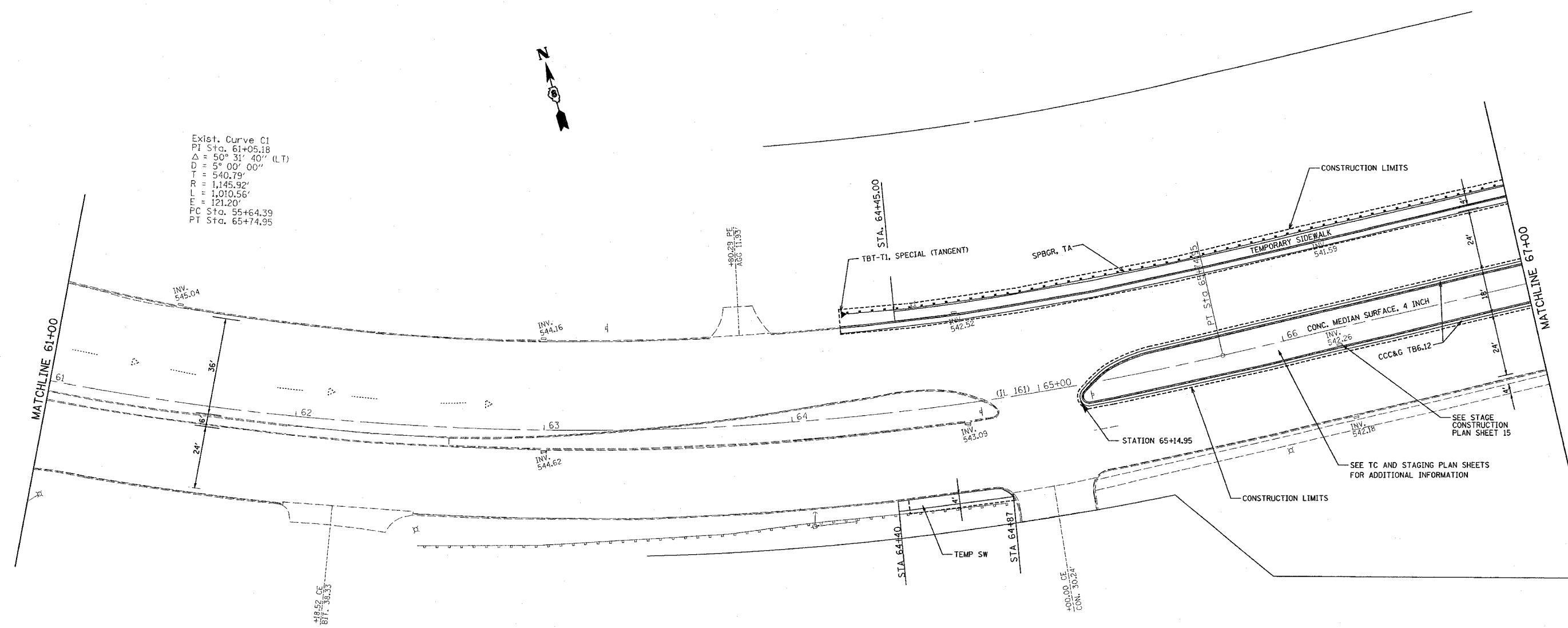
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ALIGNMENTS AND TIE POINTS
FAP ROUTE 805 (IL 161)
SECTION 122-VBR-I
ST. CLAIR COUNTY

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
805	122-VBR-1	ST. CLAIR	58	8
STA. 61+00.00 TO STA. 67+00.00		CONTRACT NO: 76558		

PLAN	REPORTED	DATE
NO.	BY	
NOTE BOOK	ALIGNED CHECKED	
	CARD FILE NAME	

Exist. Curve C1
 PI Sta. 61+05.18
 $\Delta = 50^\circ 31' 40''$ (LT)
 $D = 5^\circ 00' 00''$
 $T = 540.79'$
 $R = 1,145.92'$
 $L = 1,010.56'$
 $E = 121.20'$
 PC Sta. 55+64.39
 PT Sta. 65+74.95



*NOTE:
 TEMPORARY SIDEWALK WILL BE REMOVED IN STAGE 2A.



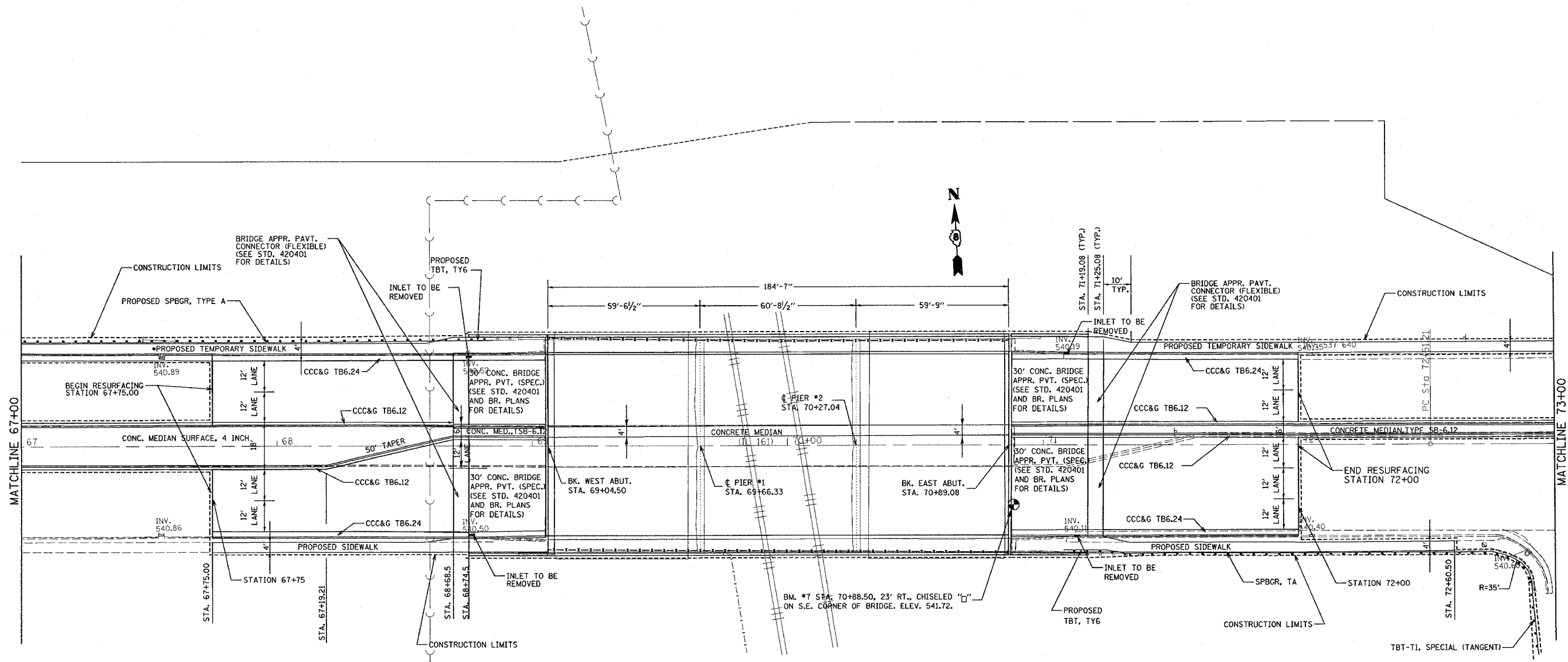
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAN VIEW
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY
 DRAWN BY:
 PLOT DATE: 10/19/2006

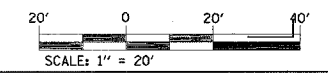
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FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
805	122-VBR-1	ST. CLAIR	58	9
STA. 67+00.00	TO STA. 73+00.00			
CONTRACT NO:		76558		

PLAN	SUBMITTED	DATE
NO.	BY	
NOTE BOOK	PLOTTED	
NO.	DATE	
	REVISIONS	
	NO.	DATE
	BY	
	DATE	



*NOTE:
TEMPORARY SIDEWALK WILL BE REMOVED IN STAGE 2A.



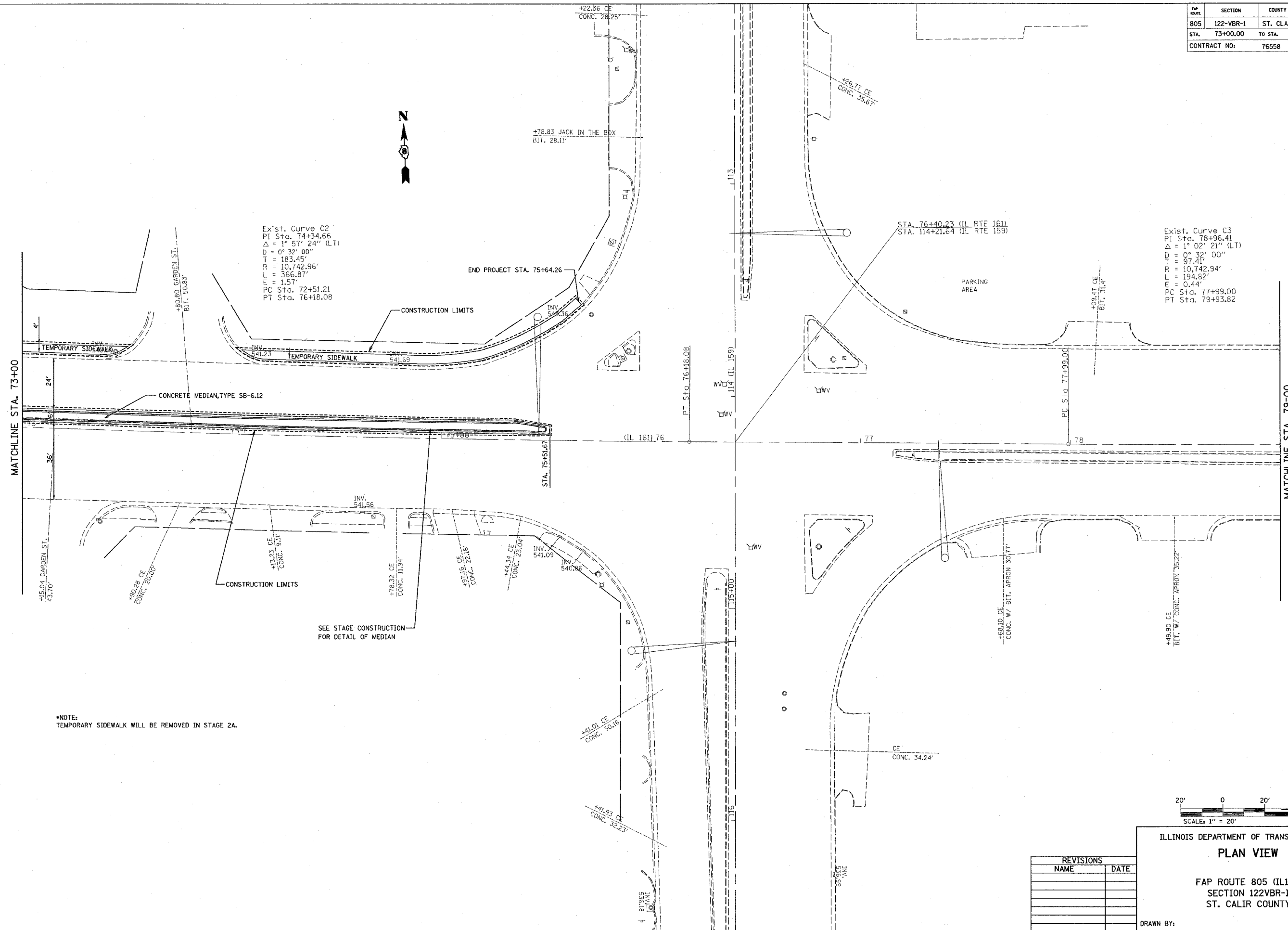
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAN VIEW
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 DRAWN BY:
 PLOT DATE: 10/19/2006

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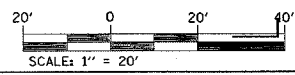
FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
805	122-VBR-1	ST. CLAIR	58	10
STA.	73+00.00	TO STA.	79+00.00	
CONTRACT NO:		76558		

PLAN	DATE
SUBMITTED	BY
PLOTTED	
REVISIONS	
NO.	



*NOTE:
TEMPORARY SIDEWALK WILL BE REMOVED IN STAGE 2A.

SEE STAGE CONSTRUCTION
FOR DETAIL OF MEDIAN



ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAN VIEW
FAP ROUTE 805 (IL161)
SECTION 122VBR-I
ST. CLAIR COUNTY

REVISIONS	
NAME	DATE

DRAWN BY:

PLOT DATE: 10/19/2006

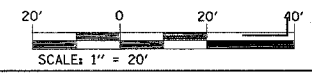
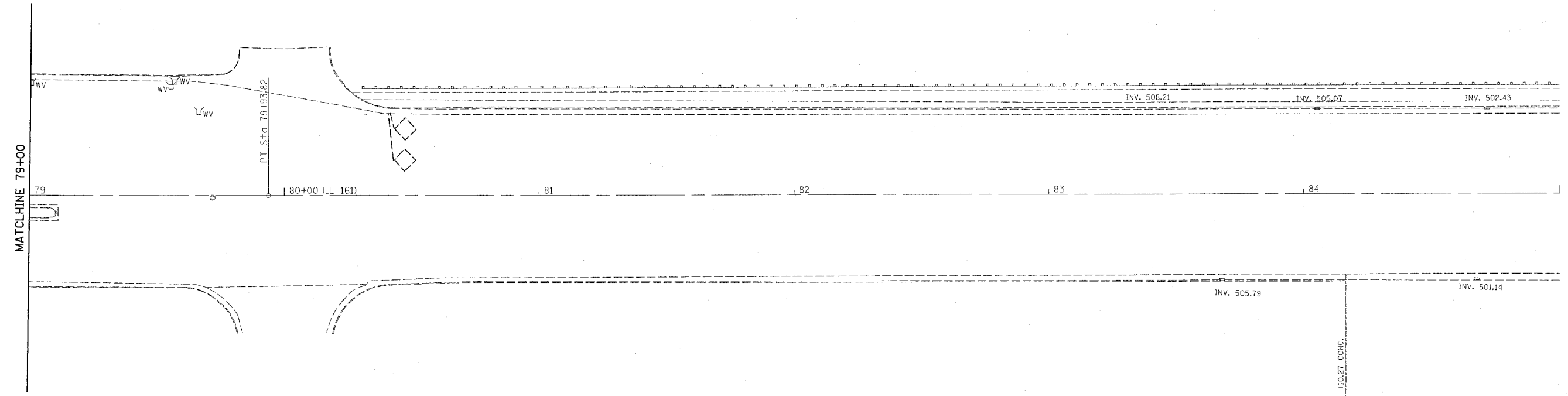
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FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
805	122-VBR-1	ST. CLAIR	58	11
STA. 79+00.00		TO STA. 85+00.00		
CONTRACT NO:		76558		

EXIST. CURVE C3
 PI STA. = 78+96.41
 $\Delta = 1^{\circ} 02' 21''$ (LT)
 $D = 0^{\circ} 32' 00''$
 $R = 10,742.94'$
 $T = 97.41'$
 $L = 194.82'$
 $E = 0.44'$
 $\phi =$ -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 77+99.00
 P.T. STA. = 79+93.82



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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAN VIEW
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CALIR COUNTY
 DRAWN BY:
 PLOT DATE: 10/19/2006

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FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
805	122-VBR-I	ST. CLAIR	58	12
STA. TO STA.		CONTRACT NO.: 76558		

PRESTAGE CONSTRUCTION:

1. THE PRESTAGE CONSTRUCTION SHALL CONSIST OF INSTALLING MESSAGE BOARDS TWO WEEKS PRIOR TO CONSTRUCTION, INSTALLING THE PROTECTIVE SHIELD SYSTEM, REPAIRING THE EROSION AREA BEHIND THE EXISTING GUARDRAIL, REMOVING THE EXISTING CONCRETE MEDIAN AND CURB AND GUTTER TO THE LIMITS SHOWN ON THE STAGE CONSTRUCTION PLANS, CONSTRUCTING THE TEMPORARY SIDEWALK AND THE COMBINATION CONCRETE CURB AND GUTTER, INSTALLING THE TEMPORARY PEDESTRIAN SIGNALS, AND CONSTRUCTING THE PAVEMENT TO BE PLACED IN THE AREA OF MEDIAN REMOVAL.
2. TRAFFIC CONTROL FOR THIS WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF STANDARDS 701601, 701701, AND 701801.
3. PAVEMENT CONSTRUCTION FOR AREA OF MEDIAN REMOVAL SHALL BE CONSTRUCTED AS SHOWN ON THE TYPICALS ON THIS SHEET.
4. A MINIMUM OF ONE LANE OF TRAFFIC IN BOTH DIRECTIONS SHALL BE OPEN TO TRAFFIC AT ALL TIMES DURING THE PRESTAGE OF CONSTRUCTION.

STAGE 1 CONSTRUCTION:

1. THE STAGE 1 CONSTRUCTION SHALL CONSIST OF COMPLETE REMOVAL AND REPLACEMENT OF THE PORTION OF THE CONCRETE DECK CARRYING THE WESTBOUND LANES OF TRAFFIC, SIDEWALK REMOVAL AND REPAIR, RIPRAP PLACEMENT, REMOVAL AND REPLACEMENT OF THE WESTBOUND BRIDGE APPROACH PAVEMENT AT EITHER END OF THE STRUCTURE, CONSTRUCTION OF THE CONCRETE MEDIAN TO THE LIMITS SHOWN, SUBSTRUCTURE REPAIR, AND RESURFACING OF THE WESTBOUND LANES OF TRAFFIC TO MATCH EXISTING PAVEMENT ELEVATIONS.
2. TRAFFIC CONTROL FOR THIS WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF STANDARD 701431, 701321, AND AS MODIFIED ON THE TRAFFIC CONTROL AND PROTECTION AND STAGING PLANS.
3. WHEN PLACING RESURFACING IN THE SOUTH EAST QUADRANT, REMOVE TEMPORARY CONCRETE BARRIER AND REPLACE WITH DRUMS.

STAGE 2 CONSTRUCTION:

1. THE STAGE 2 CONSTRUCTION SHALL CONSIST OF COMPLETE REMOVAL AND REPLACEMENT OF THE PORTION OF THE CONCRETE DECK CARRYING THE EASTBOUND LANES OF TRAFFIC, REMOVAL OF THE NORTHEAST PORTION OF THE SLOPEWALL, RIPRAP PLACEMENT, SUBSTRUCTURE REPAIR, AND REMOVAL AND REPLACEMENT OF THE EASTBOUND BRIDGE APPROACH PAVEMENT AT EITHER END OF THE STRUCTURE, AND RESURFACING OF THE EB LANES OF TRAFFIC TO MATCH EXISTING PAVEMENT ELEVATIONS.
2. TRAFFIC CONTROL FOR THIS WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF STANDARD 701431, 701321, AND AS MODIFIED ON THE TRAFFIC CONTROL AND PROTECTION AND STAGING PLANS.
3. WHEN PLACING RESURFACING IN THE NORTH EAST QUADRANT, REMOVE TEMPORARY CONCRETE BARRIER AND REPLACE WITH DRUMS.

STAGE 2A CONSTRUCTION:

1. THE STAGE 2A CONSTRUCTION SHALL CONSIST OF CONSTRUCTION OF THE REMAINDER OF THE RAISED CONCRETE MEDIAN, REMOVAL OF THE TEMPORARY SIDEWALK, REMOVAL OF THE PROTECTIVE SHIELD SYSTEM, GUARDRAIL REMOVAL AND REPLACEMENT, AND MISCELLANEOUS CONSTRUCTION AS NECESSARY.
2. TRAFFIC CONTROL FOR THIS WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF STANDARDS 701426, 701601, AND 701701.

NOTES:

1. THE PROTECTIVE SHIELD SYSTEM SHALL BE INSTALLED IN 7 CONSECUTIVE WORKING DAYS AND SHALL REMAIN IN PLACE UNTIL COMPLETION OF ALL WORK OVER THE METRO LINK. THE PROTECTIVE SHIELD SYSTEM SHALL BE REMOVED IN 7 CONSECUTIVE WORKING DAYS. PLEASE SEE METRO LINK SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. WHEN RECOMMENDED DISTANCES ARE NOT ATTAINABLE, THEY SHALL BE MODIFIED AS DIRECTED BY THE ENGINEER.
3. PLASTIC DRUMS WITH STEADY BURNING LIGHTS ARE AT 25' C-C SPACING.
4. GARDEN STREET SHALL REMAIN OPEN AT ALL TIMES.
5. THE COST OF ADDITIONAL SIGNS AND PAVEMENT MARKING AS CALLED OUT IN THE TRAFFIC CONTROL AND STAGING PLAN SHEETS SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE APPLICABLE TRAFFIC CONTROL STANDARD.
6. THE COST OF THE PAVEMENT MARKING AND ITS REMOVAL FOR THE TEMPORARY CROSSWALK SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
7. THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER SHALL BE PAINTED WHITE. THIS WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION 701431 (SPECIAL) AND NO OTHER COMPENSATION SHALL BE ALLOWED.
8. THE INLET AT APPROXIMATE STATION 66+22.71 WILL BE TEMPORARILY FILLED WITH SAND UPON THE REMOVAL OF THE MEDIAN. IT SHALL REMAIN FILLED UNTIL PLACEMENT OF THE PROPOSED CONCRETE MEDIAN SURFACE AFTER WHICH THE FILL SHALL BE REMOVED. THIS WORK WILL BE CONSIDERED AS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION 701601.
9. ROAD CONSTRUCTION AHEAD SIGNS SHALL BE REQUIRED AT ALL INTERSECTING SIDE ROADS THROUGH OUT THE PROJECT. THESE ITEMS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE APPLICABLE TRAFFIC CONTROL AND PROTECTION

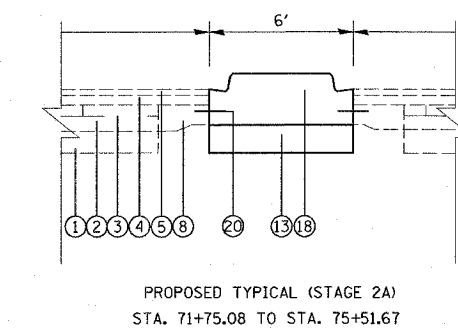
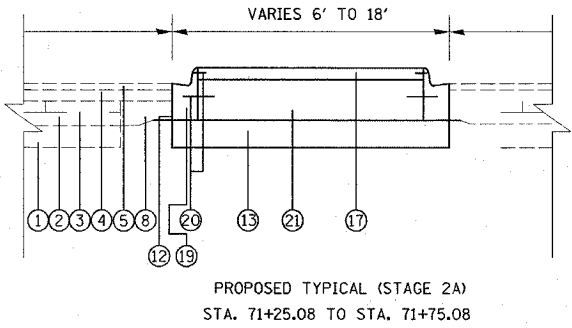
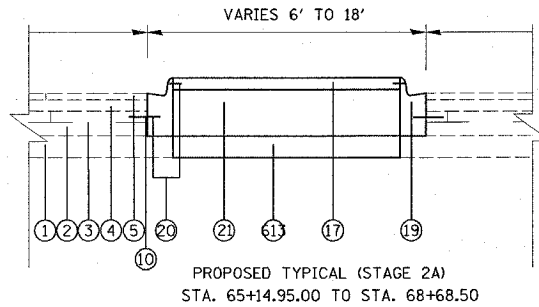
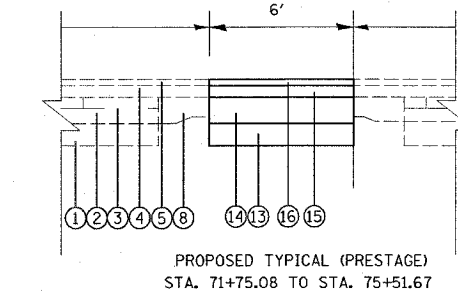
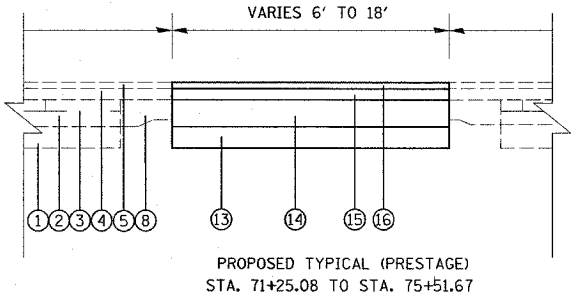
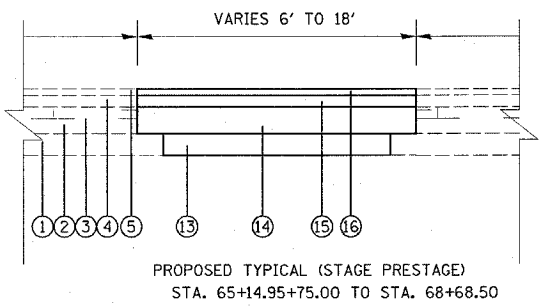
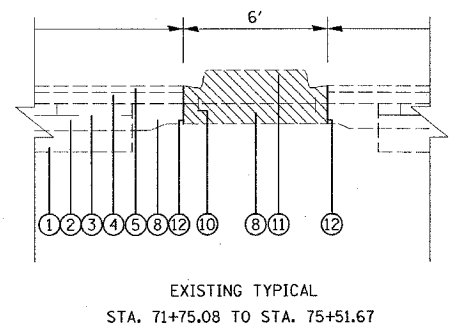
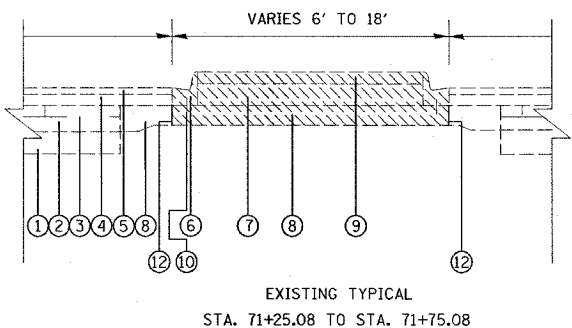
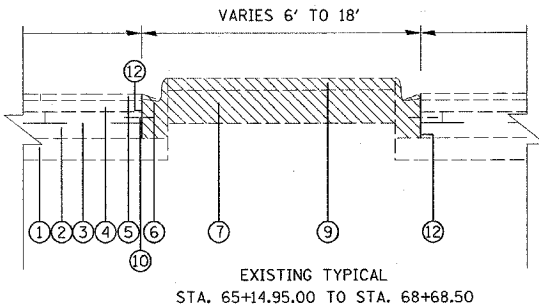
LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

LEGEND

- ① EXISTING SUBBASE GRANULAR MATERIAL, TYPE A - 4"
- ② EXISTING PCC PAVEMENT - VARIES 8" TO 10"
- ③ EXISTING PAVEMENT FABRIC
- ④ EXISTING BITUMINOUS BINDER COURSE - VARIES 1" TO 3/2"
- ⑤ EXISTING BITUMINOUS SURFACE COURSE - 1/2"
- ⑥ EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ⑦ EXISTING COMPACT SAND FILL - 4" AND VARIES
- ⑧ EXISTING PCC PAVEMENT
- ⑨ EXISTING MEDIAN SURFACE - 4"
- ⑩ EXISTING TIE BARS
- ⑪ EXISTING SOLID MEDIAN, TYPE SB-6.12
- ⑫ PROPOSED SAW CUT
- ⑬ PROPOSED SUB-BASE GRANULAR MATERIAL TYPE A - 4"
- ⑭ PROPOSED PCC BASE COURSE - 8"
- ⑮ PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70 - VARIES 1" TO 3/4"
- ⑯ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "E", N70 - 1/2"
- ⑰ PROPOSED CONCRETE MEDIAN SURFACE - 4"
- ⑱ PROPOSED CONCRETE MEDIAN SB-6.12
- ⑲ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ⑳ PROPOSED TIE BARS
- ㉑ PROPOSED COMPACT SAND FILL

-REMOVAL



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL & STAGING
 SEQUENCE OF CONSTRUCTION
 AND GENERAL NOTES**
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

DRAWN BY:

PLOT DATE: 10/19/2006

PLAN	SURVEYED	DATE
	PLOTTED	
	APPROVED	
	BY	
	NOTE BOOK	
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	NO. OF THIS SHEET	
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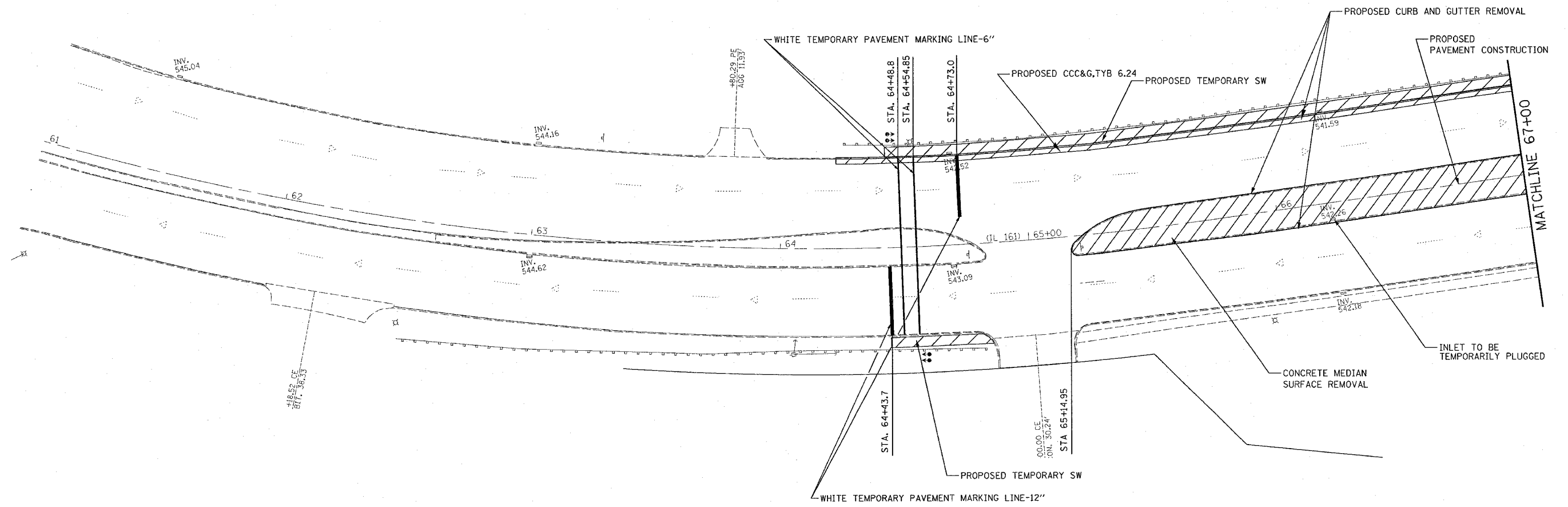
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FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-I	ST. CLAIR	58	13
STA.		TO STA.		
CONTRACT NO.: 76558				

POSTED SPEED 40 MPH
 DEVICES AT 25' CTS. (TYP.)
 UNLESS OTHERWISE NOTED



PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	ADJUSTMENT CHECKED		
	INT. OF WAY CHECKED		
	ADD. FILE NAME		



LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL & STAGING
PLAN VIEW
PRESTAGE
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

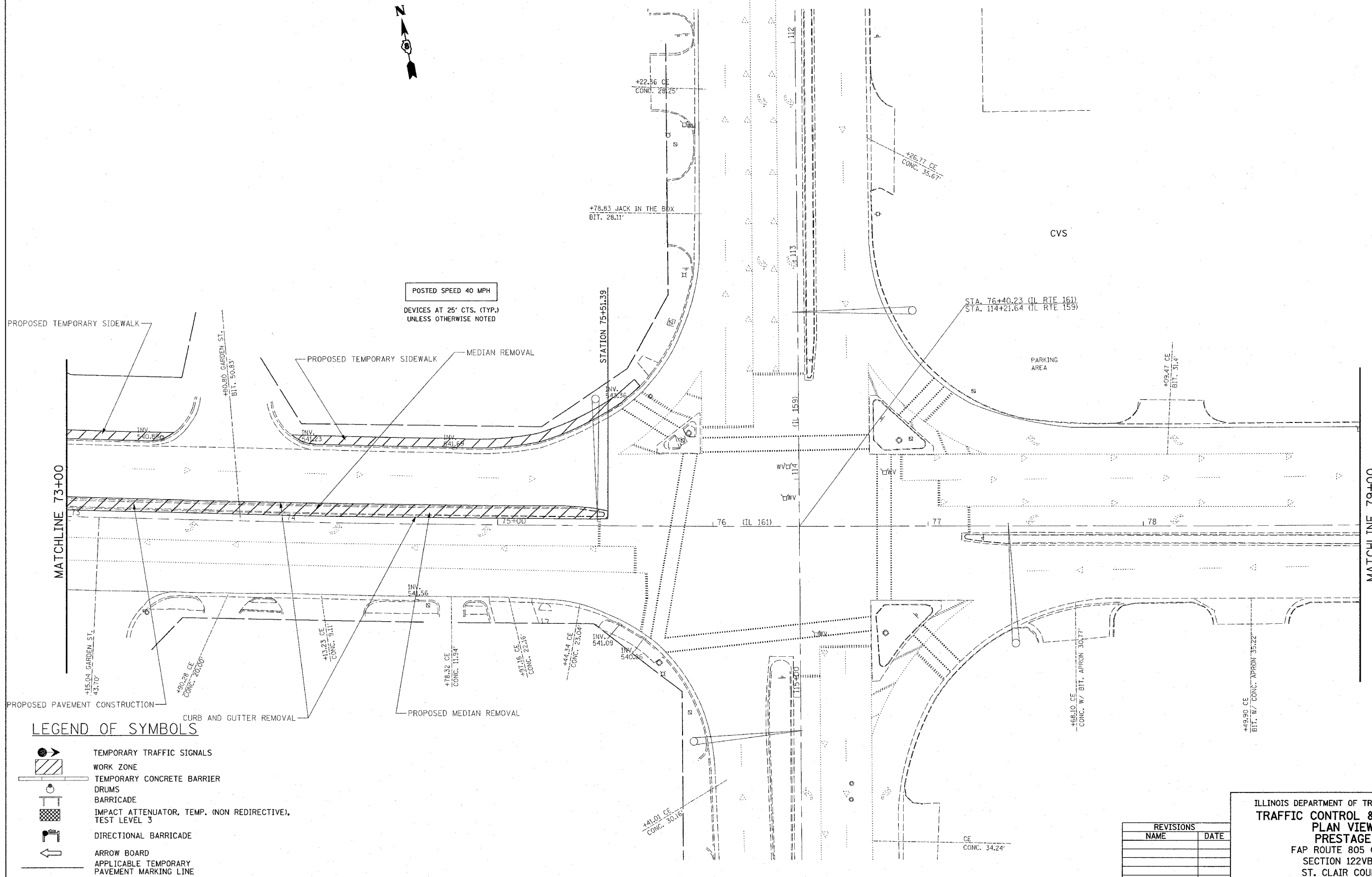
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PLOT DATE: 10/19/2006

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FILE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B05	122-VBR-I	ST. CLAIR	58	15
STA.	TO STA.			
CONTRACT NO.: 76558				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	NO. OF WAY CHECKED		
	CADD FILE NAME		



POSTED SPEED 40 MPH
 DEVICES AT 25' CTS. (TYP.)
 UNLESS OTHERWISE NOTED

LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL & STAGING
PLAN VIEW
PRESTAGE
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

DRAWN BY:
 PLOT DATE: 10/19/2006

10/19/2006
 10/19/2006
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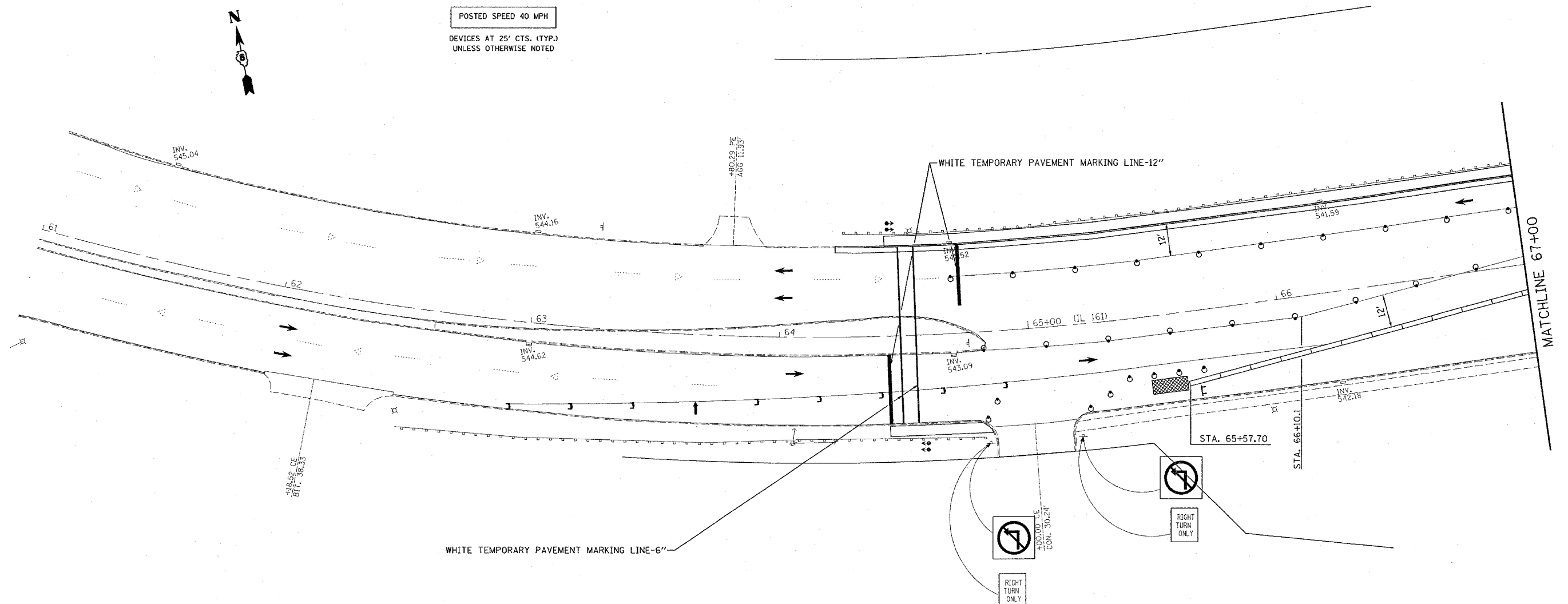
FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	17
STA.	TO STA.			
CONTRACT NO.: 76558				

400 700 1400 1400 1400 2100
 SAND MODULE IMPACT ATTENUATOR LAYOUT
 (IF OPTION USED)



POSTED SPEED 40 MPH
 DEVICES AT 25' CTS. (TYP.)
 UNLESS OTHERWISE NOTED

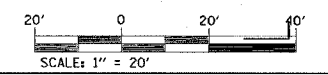
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	PLOTTED	
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LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN



REVISIONS	
NAME	DATE

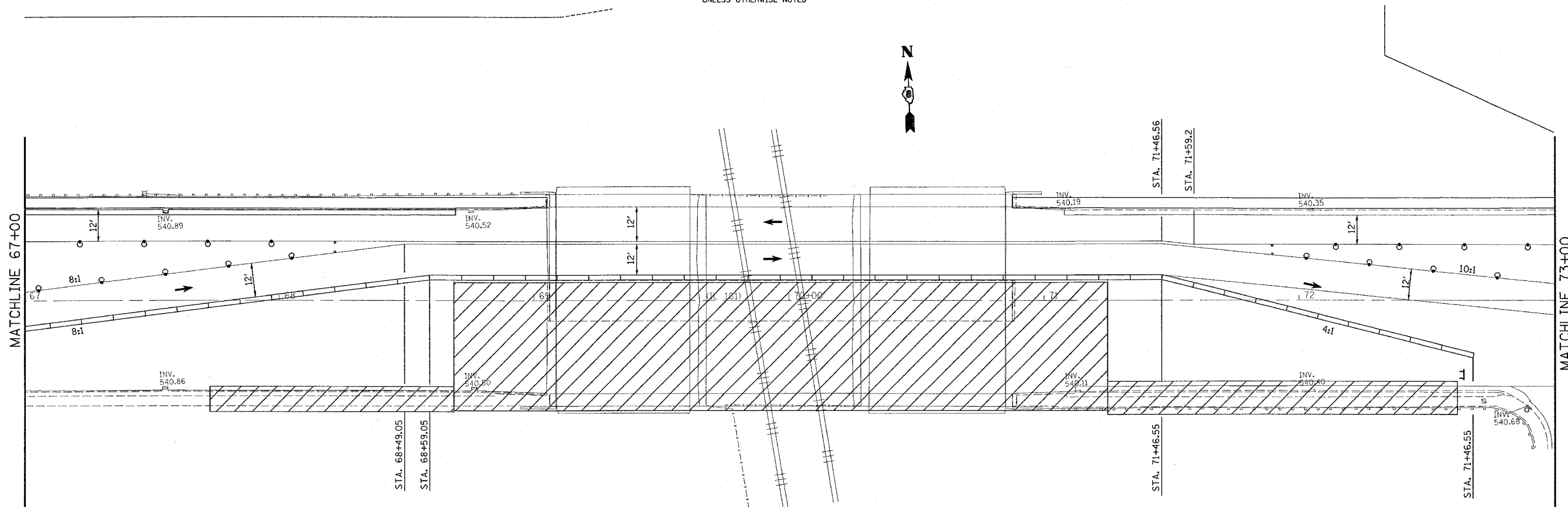
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL & STAGING
 PLAN VIEW
 STAGE 1 CONSTRUCTION
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-1
 ST. CLAIR COUNTY

DRAWN BY:
 PLOT DATE: 10/19/2006

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








FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-I	ST. CLAIR	58	18
STA.	TO STA.			
			CONTRACT NO.: 76558	

POSTED SPEED 40 MPH
 DEVICES AT 25' CTS. (TYP.)
 UNLESS OTHERWISE NOTED



PLAN	BY	DATE
REVISIONS		
NOTED		
ALIGNED		
CHECKED		
DESIGNED		
CARD FILE NAME		
NO.		

LEGEND OF SYMBOLS

-  TEMPORARY TRAFFIC SIGNALS
-  WORK ZONE
-  TEMPORARY CONCRETE BARRIER
-  DRUMS
-  BARRICADE
-  IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
-  DIRECTIONAL BARRICADE
-  ARROW BOARD
-  APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL & STAGING
 PLAN VIEW
 STAGE 1 CONSTRUCTION
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

DRAWN BY:

PLOT DATE: 10/19/2006

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 REF-df1\097.cpl

FAP NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-I	ST. CLAIR	58	19
STA.	TO STA.			
CONTRACT NO.: 76558				

POSTED SPEED 40 MPH

DEVICES AT 25' CTS. (TYP.)
UNLESS OTHERWISE NOTED



SEE STANDARD 701431
FOR ITEMS NOT SHOWN



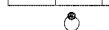




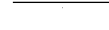
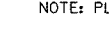
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STA. 114+21.64 (IL RTE 159)

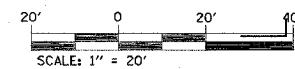
MATCHLINE 73+00

MATCHLINE 79+00

LEGEND OF SYMBOLS

-  TEMPORARY TRAFFIC SIGNALS
-  WORK ZONE
-  TEMPORARY CONCRETE BARRIER
-  DRUMS
-  BARRICADE
-  IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
-  DIRECTIONAL BARRICADE
-  ARROW BOARD
-  APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN



ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL & STAGING
PLAN VIEW
STAGE 1 CONSTRUCTION
FAP ROUTE 805 (IL161)
SECTION 122VBR-I
ST. CLAIR COUNTY

REVISIONS	
NAME	DATE

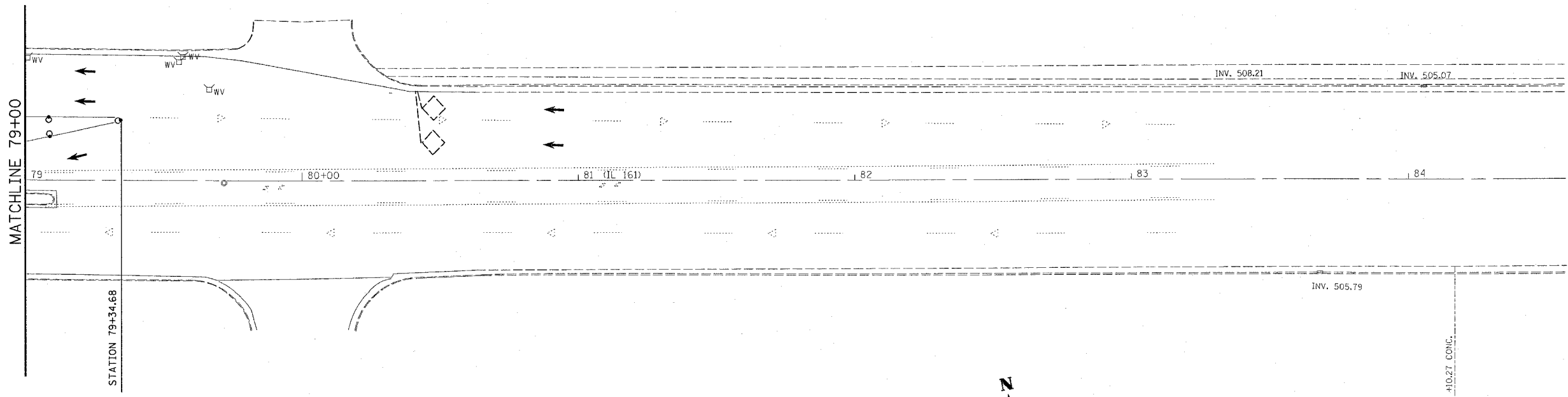
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PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNED	BY
NO.	CHECKED	
	BY FILE NAME	

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
805	122-VBR-I	ST. CLAIR	58	20
STA. TO STA.		CONTRACT NO.: 76558		



POSTED SPEED 40 MPH
 DEVICES AT 25' CTS. (TYP.)
 UNLESS OTHERWISE NOTED

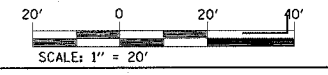


PLAN	SUBMITTED	DATE
NOTE BOOK	PLOTTED	
NO.	PT. OF WAY CHECKED	
	CAD FILE NAME	

LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL & STAGING
PLAN VIEW
STAGE 1 CONSTRUCTION
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

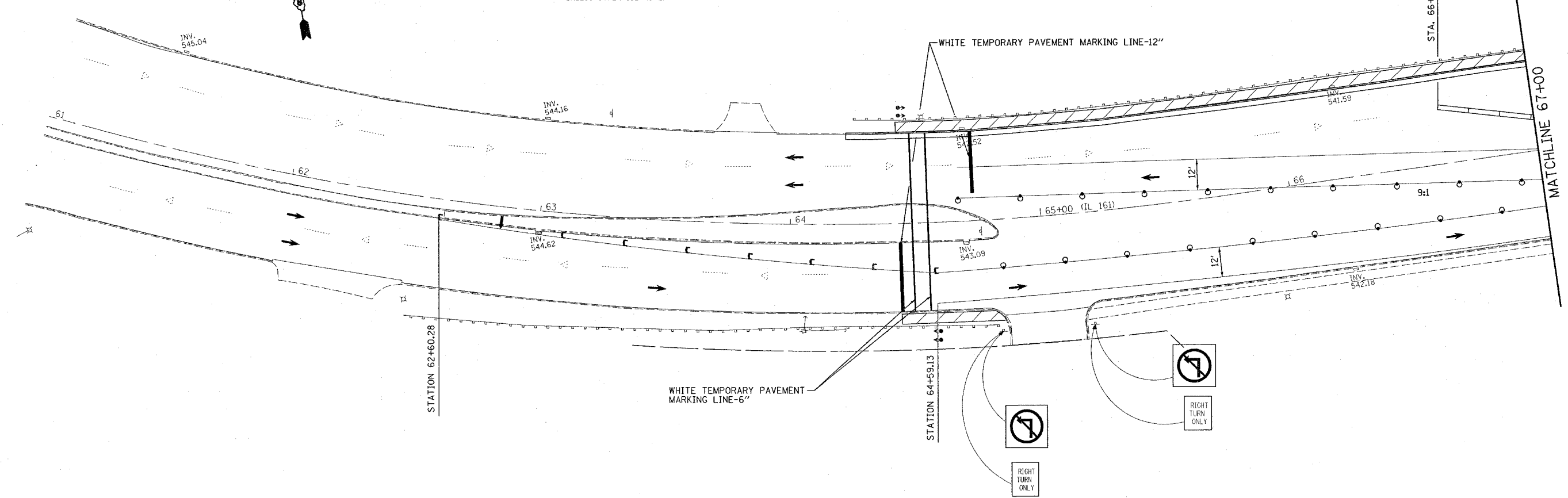
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PLOT DATE: 10/19/2006

10/19/2006
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 PLOT BY: jeste

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	21
STA.		TO STA.		
CONTRACT NO.: 76558				

POSTED SPEED 40 MPH
DEVICES AT 25' CTS. (TYP.)
UNLESS OTHERWISE NOTED

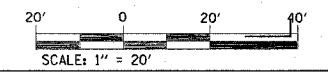


PLAN	SURVEYED	DATE
	NOTED	
	BY	
	NO. OF SHEETS	
	NO. OF THIS SHEET	
	DATE CHECKED	
	BY	
	DATE	

LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL & STAGING
PLAN VIEW
STAGE 2 CONSTRUCTION
FAP ROUTE 805 (IL161)
SECTION 122VBR-1
ST. CLAIR COUNTY

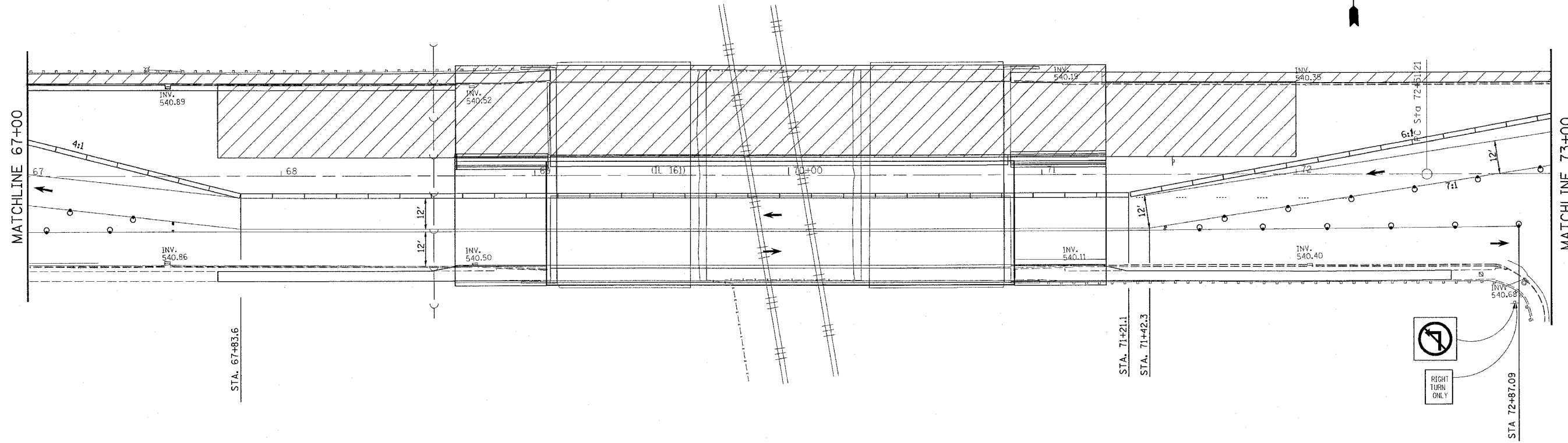
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FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	22
STA. TO STA.				
CONTRACT NO.:		76558		

POSTED SPEED 40 MPH
 DEVICES AT 25' CTS. (TYP.)
 UNLESS OTHERWISE NOTED



PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	BY	
	DATE	
	NO.	
	NO.	
	NO.	

LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN



REVISIONS	
NAME	DATE

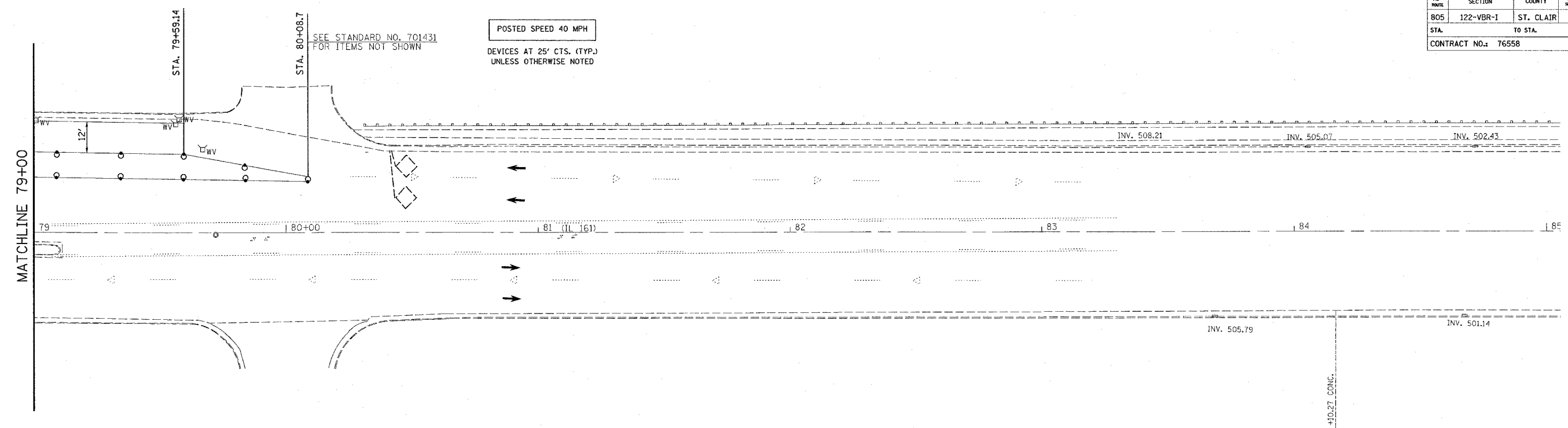
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL & STAGING
 PLAN VIEW
 STAGE 2 CONSTRUCTION
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-1
 ST. CLAIR COUNTY

DRAWN BY:

PLOT DATE: 10/19/2006

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FAP PROJECT	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-I	ST. CLAIR	58	24
STA. TO STA.		CONTRACT NO.: 76558		

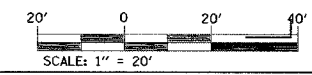


PLAN	SUBMITTED	DATE
NOTE BOOK	PLOTTED	BY
NO.	FILE NAME	

LEGEND OF SYMBOLS

- TEMPORARY TRAFFIC SIGNALS
- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DRUMS
- BARRICADE
- IMPACT ATTENUATOR, TEMP. (NON REDIRECTIVE), TEST LEVEL 3
- DIRECTIONAL BARRICADE
- ARROW BOARD
- APPLICABLE TEMPORARY PAVEMENT MARKING LINE

NOTE: PLEASE SEE APPLICABLE STANDARD FOR ITEMS NOT SHOWN



REVISIONS	
NAME	DATE

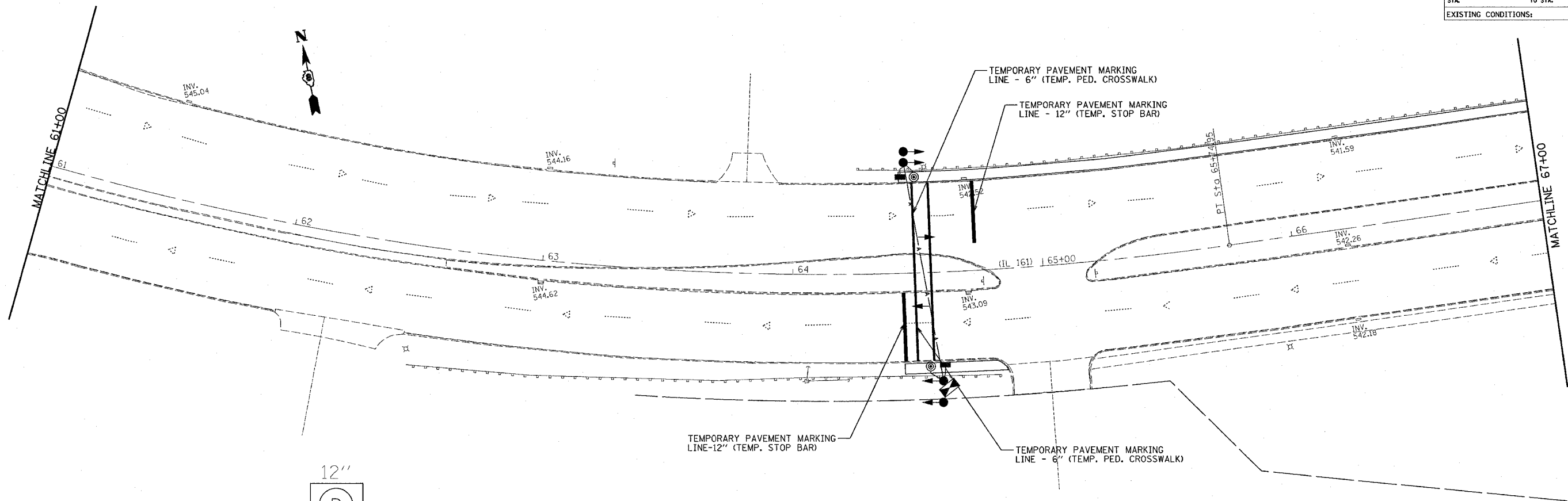
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL & STAGING
PLAN VIEW
STAGE 2 CONSTRUCTION
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

DRAWN BY: _____

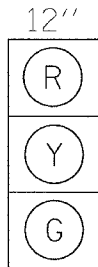
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FAP NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	25
STA. TO STA.		EXISTING CONDITIONS:		

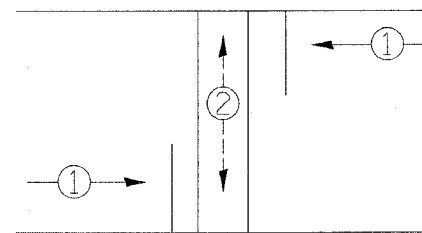


PLAN	DATE
SURVEYED	BY
ALIGNED	CHECKED
NOTE BOOK	NO.
NO.	



PED. SIG. HEAD

PROPOSED TRAFFIC SIGNAL
FACES



PHASE DESIGNATION DIAGRAM

LEGEND

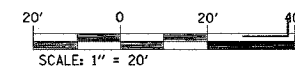
- PROPOSED WOOD POST
- ➔ PROPOSED SIGNAL HEAD
- PROPOSED PEDESTRIAN SIGNAL HEAD
- ⊙ PROPOSED PUSH BUTTON
- ⊠ PROPOSED CONTROLLER

NOTES:

1. THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 890 OF THE STANDARD SPECIFICATIONS AND STANDARD 880001. THE CONTRACTOR SHALL SUBMIT FOR THE DISTRICTS' APPROVAL A DETAILED PLAN SHOWING THE LOACTIONS OF TEMPORARY POLES, PHASING, SIGNAL HEADS, PEDESTRIAN SIGNALS, AND PUSH-BUTTONS.
2. PEDESTRIAN PUSH-BUTTONS SHALL BE IN ACCORDANCE WITH ARTICLES 888.02 AND 888.03 OF THE STANDARD SPECIFICATIONS EXCEPT IT SHALL BE MOUNTED APPROXIMATELY THIRTY INCHES (30") ABOVE THE HANDICAPPED RAMP LEVEL AND SHALL BE WITHIN THE REACH OF HANDICAPPED PERSON.

PROPOSED SEQUENCE OF OPERATION		
PHASE	1	2
MOVEMENT	← →	↓ ↑ *

*PEDESTRIAN SIGNALS UPON
ACTUATION ONLY



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

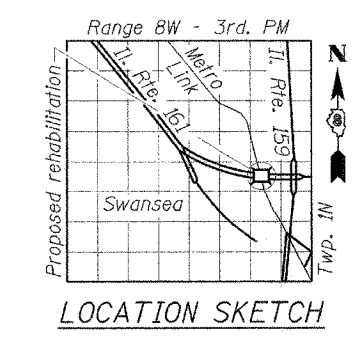
TEMPORARY TRAFFIC SIGNAL PLAN

FAP ROUTE 805 (IL161)
SECTION 122VBR-1
ST. CLAIR COUNTY

DRAWN BY:

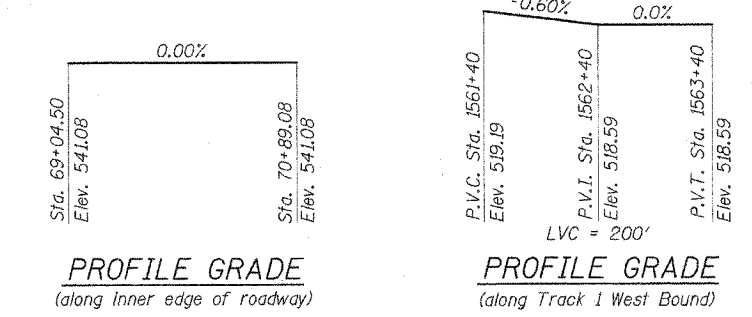
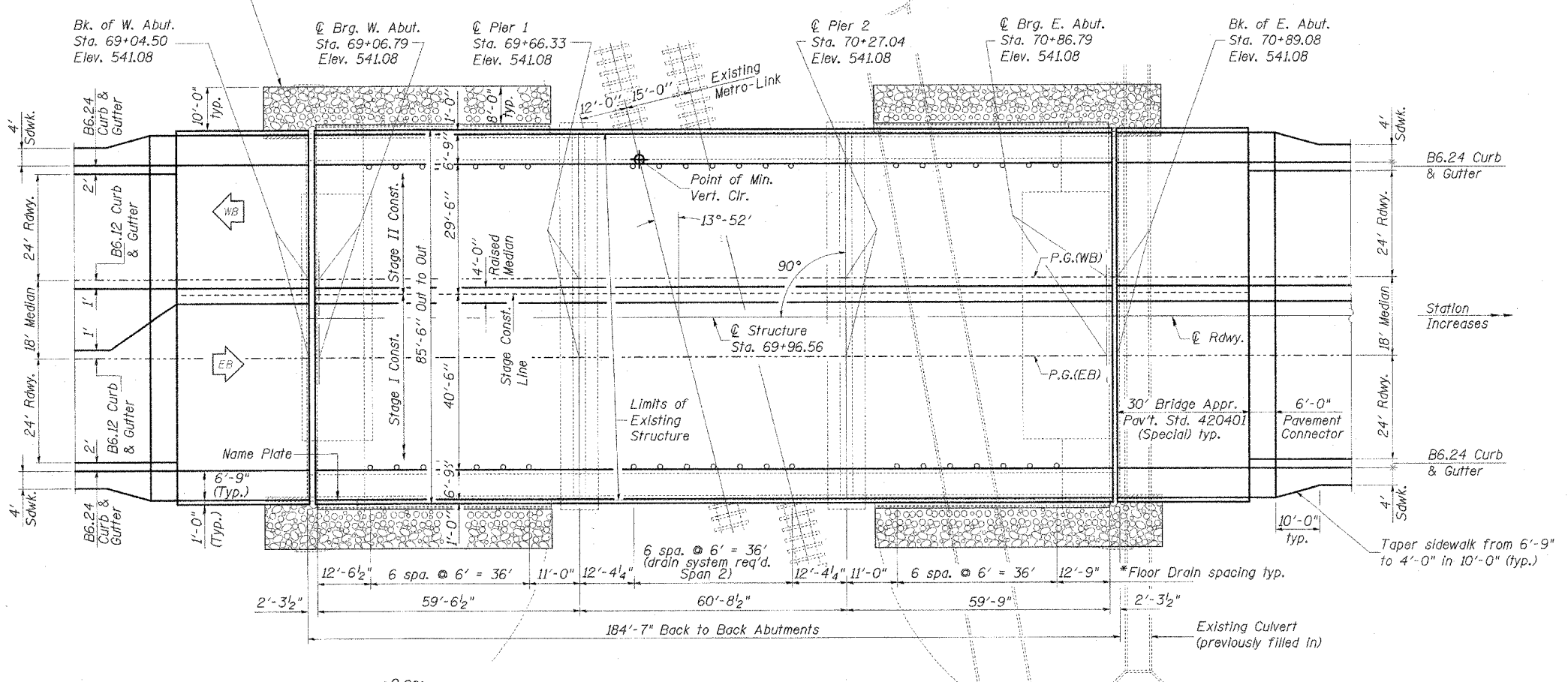
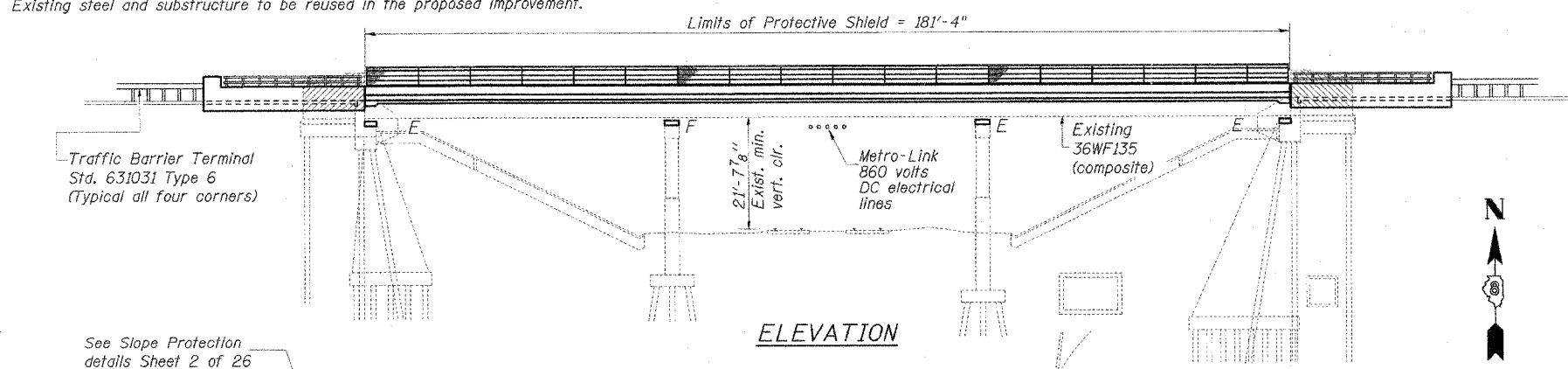
PLOT DATE: 10/19/2006

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	26
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
Contract #76558			SHEET 1 OF 26	



Bench Mark: Cut "□" on south parapet wall, west end of Il. 161 bridge over Metro Link. Elev. 543.308

Existing Structure: S.N. 082-0091, 3 span concrete deck on composite wide flange beams (except Span 2 non-composite). Built 1935 under SBI-161, Section 122VBR at Station 69+89.05, and widened with new superstructure in 1972. Open pile bent abutments & piers supported on timber piles. The existing concrete deck to be removed and replaced. Traffic maintained utilizing stage construction with median cross-overs. Existing steel and substructure to be reused in the proposed improvement.



STATION 69+96.56
REBUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RT. 805 SEC. 122VBR-1
LOADING HS 20
STR. NO. 082-0091

NAME PLATE
See Std. 515001

NOTE:
Existing name plate to be cleaned and relocated next to the new name plate. Cost included with Name Plates.

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2002 AASHTO
Seismic Retrofitting Manual for Highway Bridges
FHWA-RD-94-052 May 1995

DESIGN STRESSES
NEW UNITS
 $f_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (structural steel-AASHTO M270, Grade 50)

EXISTING UNITS
 $f_c = 1,200$ psi
 $f_s = 20,000$ psi (reinforcement)
 $f_s = 20,000$ psi (structural steel)

SEISMIC DATA
Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 12%
Site Coefficient (S) = 1.3

PLAN

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

REGISTERED PROFESSIONAL ENGINEER
GERALD B. ROTHERHAM
081-005673
STATE OF ILLINOIS
Expires: 11/30/2006
10/30/2006

CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

REVISIONS	
NAME	DATE

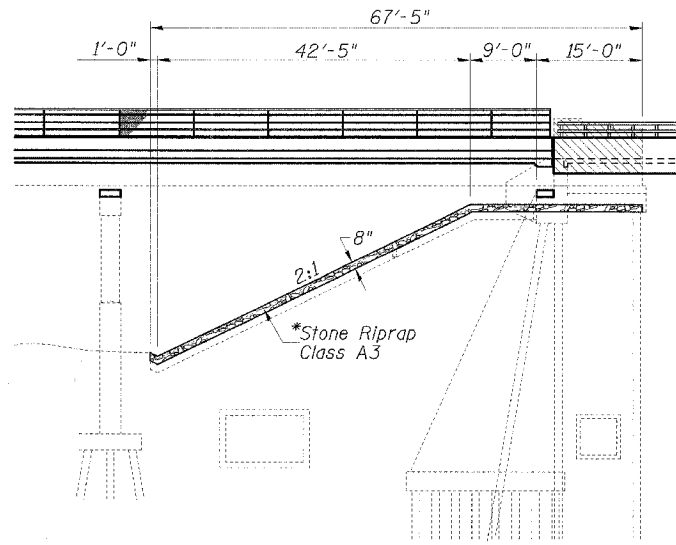
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
F.A.P. ROUTE 805
SECTION 122VBR-1
ST. CLAIR COUNTY
ILLINOIS ROUTE 161 OVER METRO-LINK
STATION 69+96.56 S.N. 082-0091
SCALE: NONE DRAWN BY: GLD
DATE: 7/03/06 CHECKED BY: GBR

L:\V00T_04\06610\WORK\04\cor-5\DRAW\Sheets\REVISED\DWG\STAGING CHANGE\GEN-PLAN_REV.DWG 6/30/2006

GENERAL NOTES

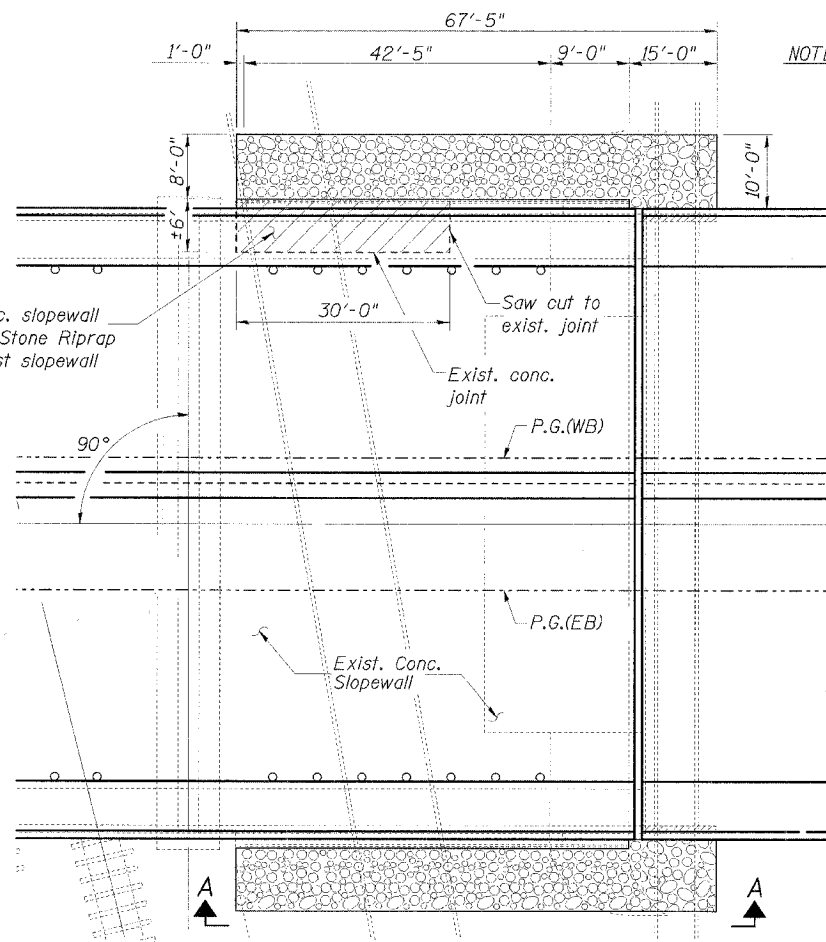
- Prior to beginning any work at the bridge location, it is the responsibility of the Contractor to coordinate with and satisfy all requirements set forth by Metro-Link for work that will be performed on, under, above, across or over the Metro-Link right-of-way. See Special Provisions for Metro-Link's policies and procedures for work performed on their right-of-way.
- Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.
- Field welding of construction accessories will not be permitted to beams.
- The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
- Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
- Elevations provided on the plans were obtained or calculated from a survey conducted by the Illinois Department of Transportation. The elevations provided were not taken or calculated from the existing bridge plans.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two $\frac{1}{8}$ " adjusting shims shall be provided for each bearing and placed as detailed.
- Prior to pouring the new concrete deck, all loose rust, loose mill scale, and all other loose, potentially detrimental foreign material shall be removed from the surfaces of the beams in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

All existing construction accessories welded to the top flange over the pier between the quarter points of the beams shall be removed. The remaining weld shall be ground smooth and inspected for cracks using magnetic particle testing. Any cracks that can not be removed by grinding approximately $\frac{1}{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of this work will be paid for according to Article 109.04.
- Bridge Seat Sealer shall be applied to the seat area of the East and West abutments.
- All construction joints shall be bonded.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06 of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Field painting of structural steel shall be done under a separate painting contract.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Remove dirt and debris that is located at the junction of the slopewalls and the piers. Cost included with "Stone Riprap, Class A3".
- See Roadway Plans for embankment widening.



SECTION A-A

*Provide 8" deep Class A3 riprap with 6" Class A1 bedding and filter fabric at all four corners.



PLAN-ABUTMENT SLOPE PROTECTION
(EAST ABUTMENT SHOWN-WEST SIMILAR)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	27
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #76558 SHEET 2 OF 26

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Sq. Yd.		294	294
Filter Fabric	Sq. Yd.		294	294
Concrete Removal	Cu. Yd.		20.3	20.3
Slopewall Removal	Sq. Yd.		22	22
Removal of Existing Concrete Deck	Each	1		1
Floor Drains	Each	42		42
Concrete Structures	Cu. Yd.		12.3	12.3
Concrete Superstructure	Cu. Yd.	528.1		528.1
Bridge Deck Grooving	Sq. Yd.	1248		1248
Protective Coat	Sq. Yd.	1867		1867
Elastomeric Bearing Assembly Type I	Each	24		24
Elastomeric Bearing Assembly Type II	Each	12		12
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.		57.5	57.5
Furnishing and Erecting Structural Steel	Pound	6730		6730
Stud Shear Connectors	Each	3024		3024
Reinforcement Bars, Epoxy Coated	Pound	120600	4060	124660
Name Plates	Each	1		1
Bridge Seat Sealer	Sq. Ft.		639	639
Epoxy Crack Sealing	Foot		118.5	118.5
Bar Splacers	Each	636	178	814
Drainage System	L. Sum	1		1
Jacking Existing Superstructure	L. Sum	1		1
Protective Shield	Sq. Yd.	1692		1692
Bridge Fence Railing	Foot	360		360
Bridge Joint System (Expansion) 1"	Foot	87		87
Bridge Joint System (Expansion) 1 1/2"	Foot	87		87

NOTE: All dimensions shown for slope protection are typical for all 4 corners.

Remove exist. conc. slopewall and replace w/8" Stone Riprap Class A3 (Northeast slopewall only)

Saw out to exist. joint
Exist. conc. joint

P.G.(WB)

P.G.(EB)

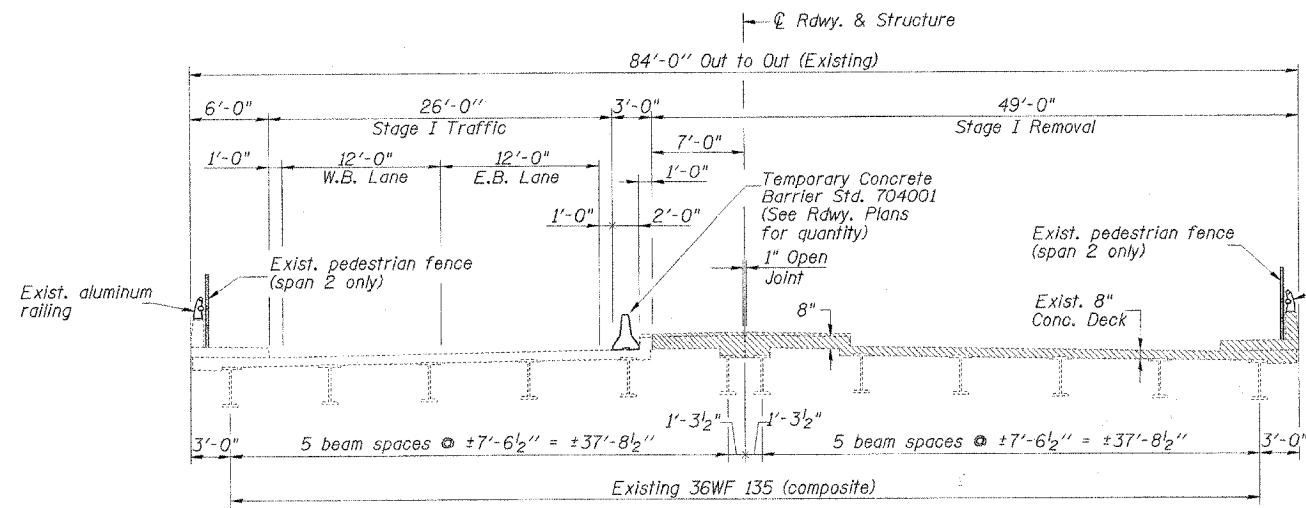
Exist. Conc. Slopewall

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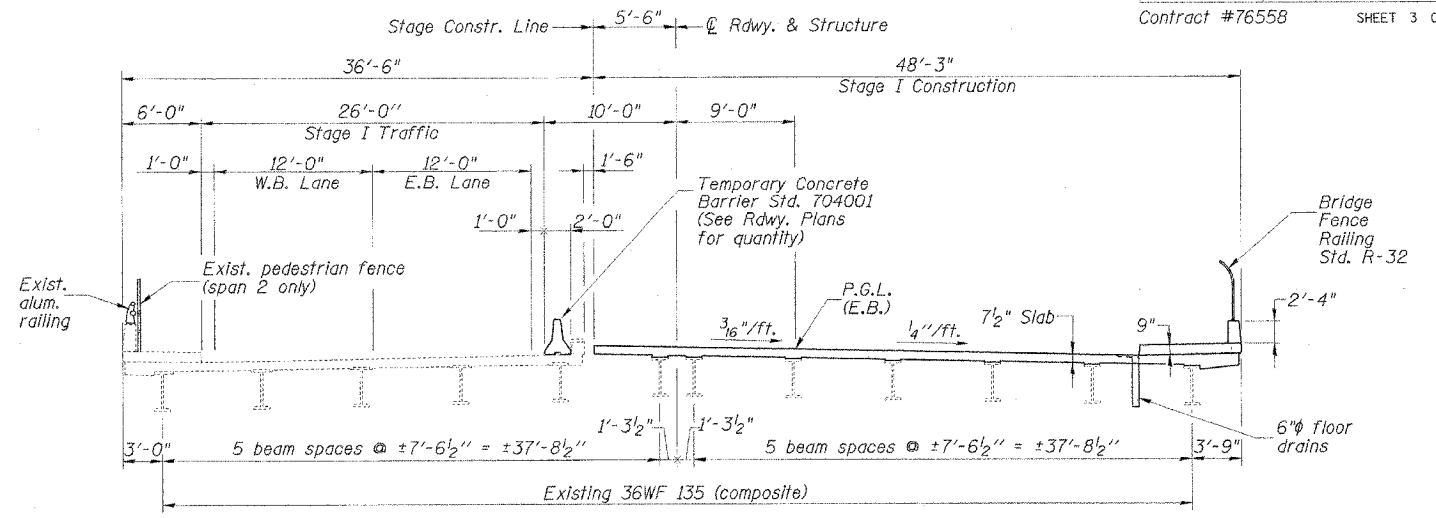
CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

REVISIONS	
NAME	DATE

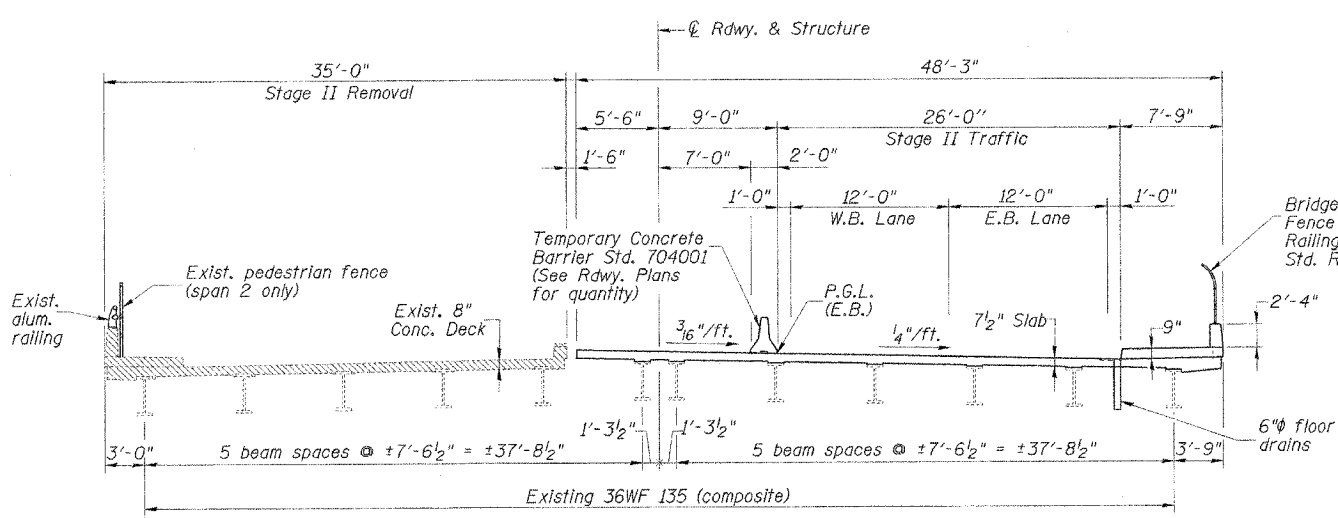
ILLINOIS DEPARTMENT OF TRANSPORTATION
NOTES AND BILL OF MATERIAL
F.A.P. ROUTE 805
SECTION 122VBR-1
ST. CLAIR COUNTY
ILLINOIS ROUTE 161 OVER METRO-LINK
STATION 69+96.56 S.N. 082-0091
SCALE: NONE DRAWN BY: GLD
DATE: 7/03/06 CHECKED BY: GBR



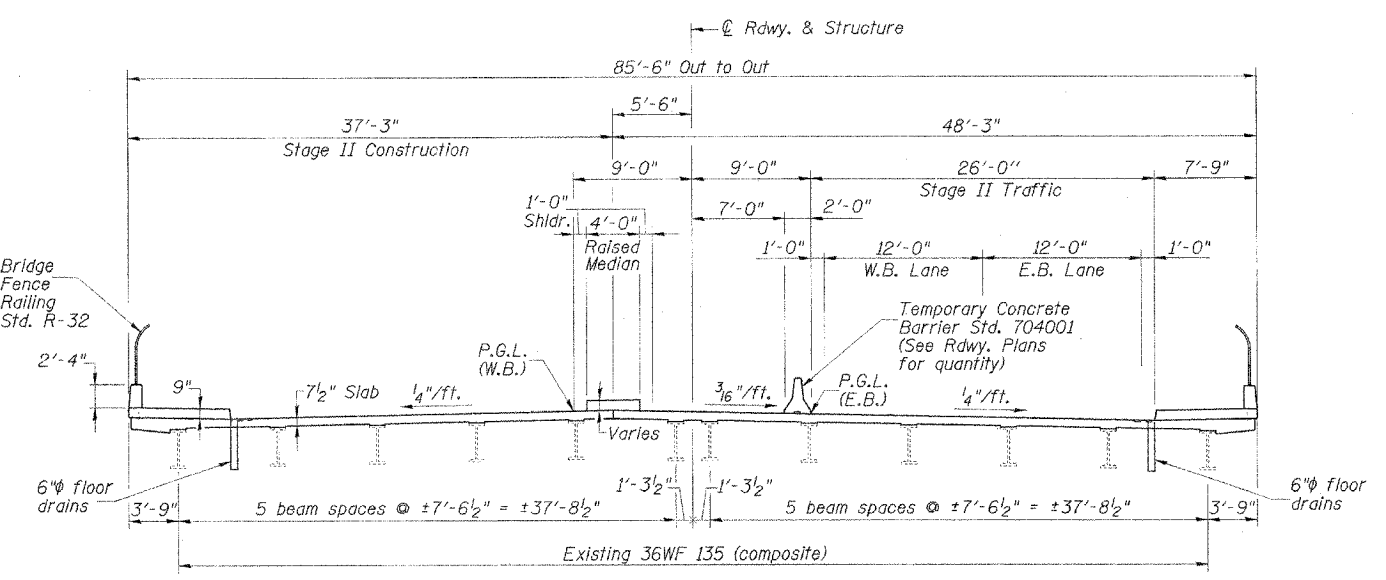
CROSS SECTION - STAGE I REMOVAL
(Looking East)



CROSS SECTION - STAGE I CONSTRUCTION
(Looking East)



CROSS SECTION - STAGE II REMOVAL
(Looking East)



CROSS SECTION - STAGE II CONSTRUCTION
(Looking East)

NOTES

1. For details of Temporary Concrete Barrier see sheet 4 of 26.
2. Hatched areas indicate "Removal of Existing Concrete Deck."
3. Cost of removing existing aluminum railing & pedestrian fence is included in the cost of Removal of Existing Concrete Deck.
4. Substructure concrete removal details are shown on sheet 20 of 26.

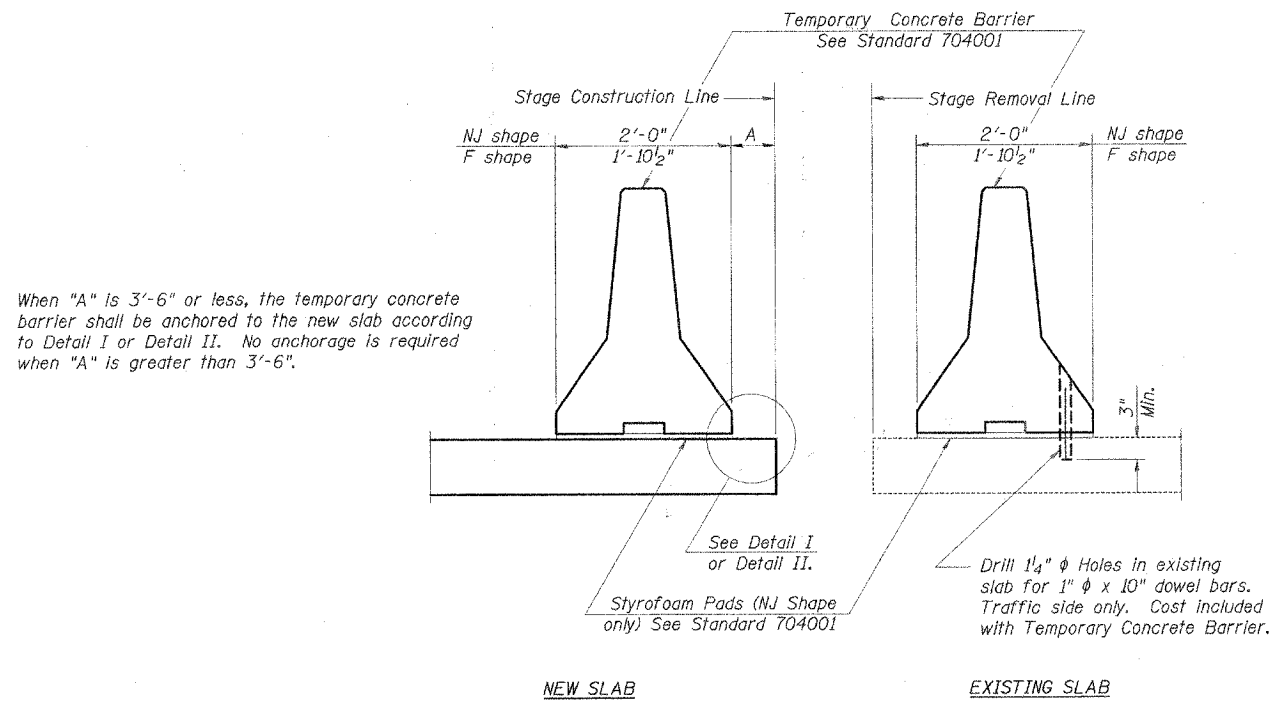
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGE CONSTRUCTION DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

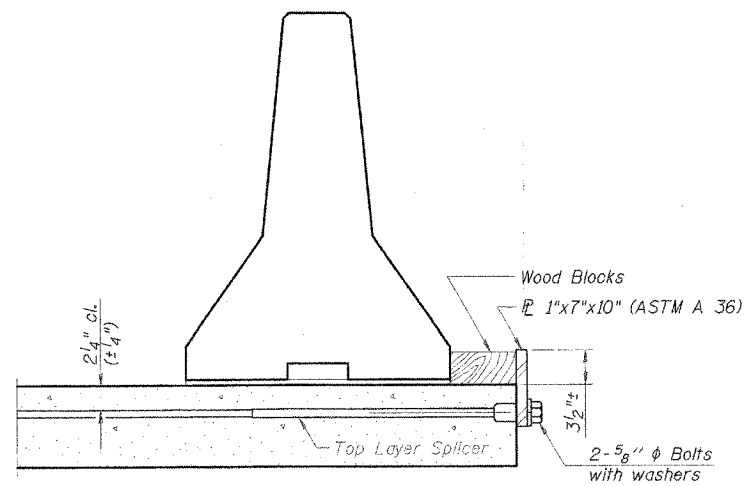


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 6/30/2006

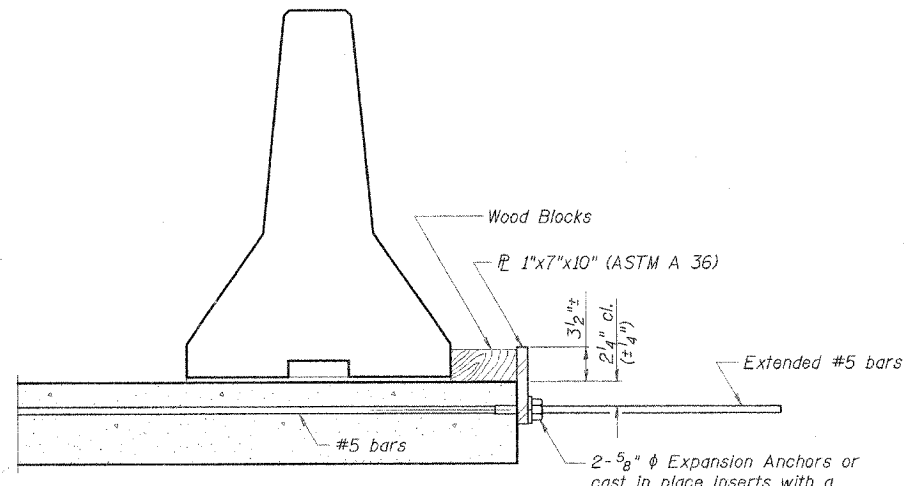
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	29
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		
Contract #76558		SHEET 4 OF 26		



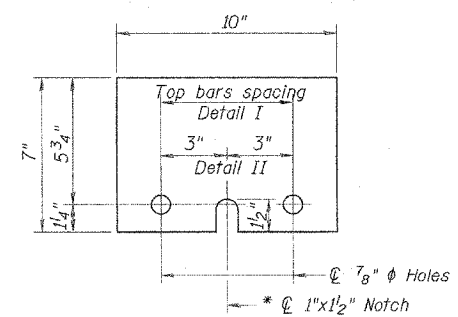
SECTIONS THRU SLAB



DETAIL I
The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II
The 1"x7"x10" 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.



1"x7"x10"
* Required only with Detail II

NOTES

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

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

Cost of anchorage is included with Temporary Concrete Barrier.

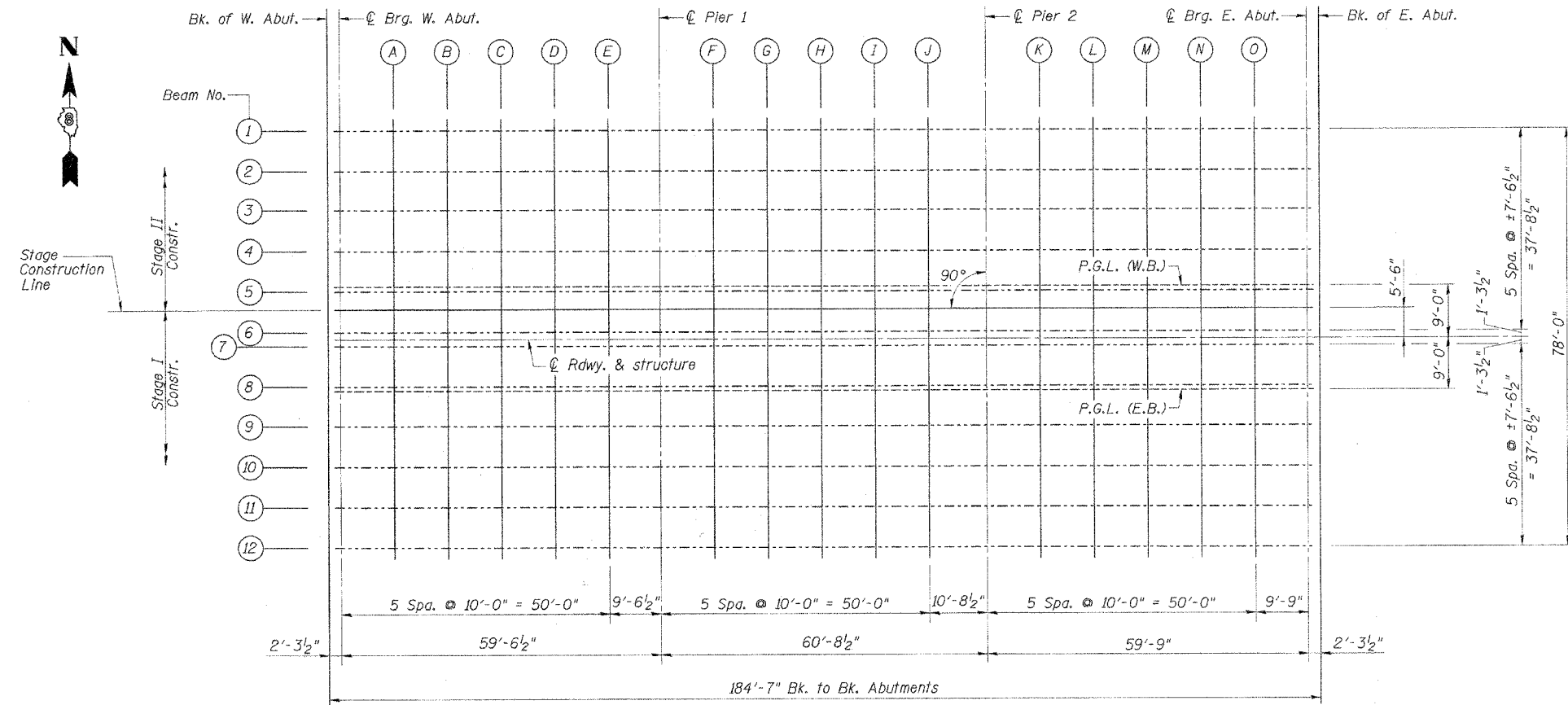
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY CONCRETE BARRIER
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

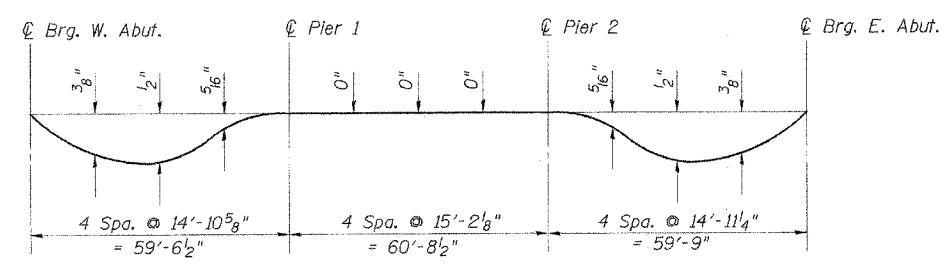
CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	30
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
Contract #76558				SHEET 5 OF 26



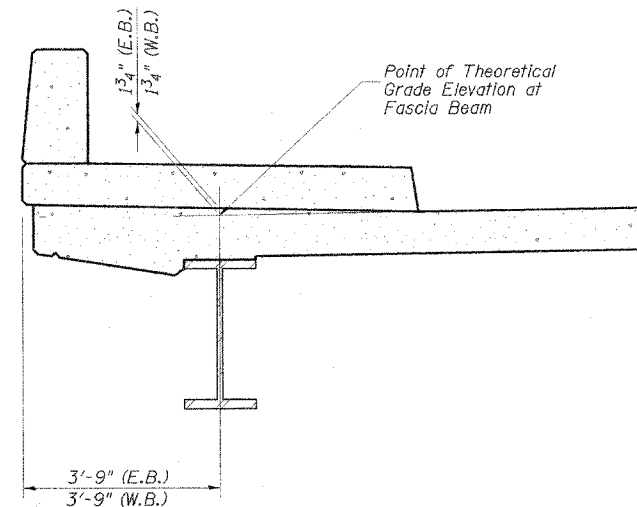
LAYOUT PLAN - DECK ELEVATIONS



DEAD LOAD DEFLECTION DIAGRAM

(INCLUDES WEIGHT OF CONCRETE ONLY)

NOTE: The above deflections are not for use in the field if the engineer is working from the theoretical grade elevations adjusted for dead load deflection shown on sheets 6, 7 & 8 of 26.



GRADE ELEVATION DETAIL AT FASCIA BEAMS



AT MINIMUM FILLET

AT MAXIMUM FILLET

METHOD OF DETERMINING FILLET HEIGHTS "H"

After all exist. beams are supported by new bearings, elevations of the top flanges of the beams shall be taken at the stations shown on Sheets 6, 7 & 8. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 6, 7 & 8, minus slab thickness equals the fillet heights "H" above top flange of beams. See Sheet 11 of 26 for determination of fillet height for beam 6.

NOTES

1. Work this Sheet with Sheets 6, 7 & 8 of 26.
2. Elevations for Stage I are to be determined from Stage I cross slope only.
3. Elevations for Stage II are to be determined from Stage II cross slope only.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK ELEVATIONS - 1
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 1/03/06 CHECKED BY: GBR

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 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

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*BEAM NO. 1

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-30.000	540.455	540.455
☉ Brg. W. Abut.	69+06.79	-30.000	540.455	540.455
A	69+16.79	-30.000	540.455	540.480
B	69+26.79	-30.000	540.455	540.496
C	69+36.79	-30.000	540.455	540.498
D	69+46.79	-30.000	540.455	540.487
E	69+56.79	-30.000	540.455	540.469
☉ Pier 1	69+66.33	-30.000	540.455	540.455
F	69+76.33	-30.000	540.455	540.455
G	69+86.33	-30.000	540.455	540.455
H	69+96.33	-30.000	540.455	540.455
I	70+06.33	-30.000	540.455	540.455
J	70+16.33	-30.000	540.455	540.455
☉ Pier 2	70+27.04	-30.000	540.455	540.455
K	70+37.04	-30.000	540.455	540.470
L	70+47.04	-30.000	540.455	540.488
M	70+57.04	-30.000	540.455	540.499
N	70+67.04	-30.000	540.455	540.496
O	70+77.04	-30.000	540.455	540.480
☉ Brg. E. Abut.	70+86.79	-30.000	540.455	540.455
Bk. E. Abut.	70+89.08	-30.000	540.455	540.455

*BEAM NO. 2

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-22.458	540.612	540.612
☉ Brg. W. Abut.	69+06.79	-22.458	540.612	540.612
A	69+16.79	-22.458	540.612	540.637
B	69+26.79	-22.458	540.612	540.653
C	69+36.79	-22.458	540.612	540.655
D	69+46.79	-22.458	540.612	540.644
E	69+56.79	-22.458	540.612	540.626
☉ Pier 1	69+66.33	-22.458	540.612	540.612
F	69+76.33	-22.458	540.612	540.612
G	69+86.33	-22.458	540.612	540.612
H	69+96.33	-22.458	540.612	540.612
I	70+06.33	-22.458	540.612	540.612
J	70+16.33	-22.458	540.612	540.612
☉ Pier 2	70+27.04	-22.458	540.612	540.612
K	70+37.04	-22.458	540.612	540.627
L	70+47.04	-22.458	540.612	540.645
M	70+57.04	-22.458	540.612	540.656
N	70+67.04	-22.458	540.612	540.653
O	70+77.04	-22.458	540.612	540.637
☉ Brg. E. Abut.	70+86.79	-22.458	540.612	540.612
Bk. E. Abut.	70+89.08	-22.458	540.612	540.612

*BEAM NO. 3

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-14.917	540.769	540.769
☉ Brg. W. Abut.	69+06.79	-14.917	540.769	540.769
A	69+16.79	-14.917	540.769	540.794
B	69+26.79	-14.917	540.769	540.810
C	69+36.79	-14.917	540.769	540.812
D	69+46.79	-14.917	540.769	540.801
E	69+56.79	-14.917	540.769	540.784
☉ Pier 1	69+66.33	-14.917	540.769	540.769
F	69+76.33	-14.917	540.769	540.769
G	69+86.33	-14.917	540.769	540.769
H	69+96.33	-14.917	540.769	540.769
I	70+06.33	-14.917	540.769	540.769
J	70+16.33	-14.917	540.769	540.769
☉ Pier 2	70+27.04	-14.917	540.769	540.769
K	70+37.04	-14.917	540.769	540.784
L	70+47.04	-14.917	540.769	540.802
M	70+57.04	-14.917	540.769	540.813
N	70+67.04	-14.917	540.769	540.810
O	70+77.04	-14.917	540.769	540.794
☉ Brg. E. Abut.	70+86.79	-14.917	540.769	540.769
Bk. E. Abut.	70+89.08	-14.917	540.769	540.769

*BEAM NO. 4

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-7.375	540.926	540.926
☉ Brg. W. Abut.	69+06.79	-7.375	540.926	540.926
A	69+16.79	-7.375	540.926	540.951
B	69+26.79	-7.375	540.926	540.967
C	69+36.79	-7.375	540.926	540.970
D	69+46.79	-7.375	540.926	540.958
E	69+56.79	-7.375	540.926	540.941
☉ Pier 1	69+66.33	-7.375	540.926	540.926
F	69+76.33	-7.375	540.926	540.926
G	69+86.33	-7.375	540.926	540.926
H	69+96.33	-7.375	540.926	540.926
I	70+06.33	-7.375	540.926	540.926
J	70+16.33	-7.375	540.926	540.926
☉ Pier 2	70+27.04	-7.375	540.926	540.926
K	70+37.04	-7.375	540.926	540.942
L	70+47.04	-7.375	540.926	540.959
M	70+57.04	-7.375	540.926	540.970
N	70+67.04	-7.375	540.926	540.967
O	70+77.04	-7.375	540.926	540.951
☉ Brg. E. Abut.	70+86.79	-7.375	540.926	540.926
Bk. E. Abut.	70+89.08	-7.375	540.926	540.926

*P.G.L. (W.B.)

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	0.000	541.080	541.080
☉ Brg. W. Abut.	69+06.79	0.000	541.080	541.080
A	69+16.79	0.000	541.080	541.105
B	69+26.79	0.000	541.080	541.121
C	69+36.79	0.000	541.080	541.123
D	69+46.79	0.000	541.080	541.112
E	69+56.79	0.000	541.080	541.094
☉ Pier 1	69+66.33	0.000	541.080	541.080
F	69+76.33	0.000	541.080	541.080
G	69+86.33	0.000	541.080	541.080
H	69+96.33	0.000	541.080	541.080
I	70+06.33	0.000	541.080	541.080
J	70+16.33	0.000	541.080	541.080
☉ Pier 2	70+27.04	0.000	541.080	541.080
K	70+37.04	0.000	541.080	541.095
L	70+47.04	0.000	541.080	541.113
M	70+57.04	0.000	541.080	541.124
N	70+67.04	0.000	541.080	541.121
O	70+77.04	0.000	541.080	541.105
☉ Brg. E. Abut.	70+86.79	0.000	541.080	541.080
Bk. E. Abut.	70+89.08	0.000	541.080	541.080

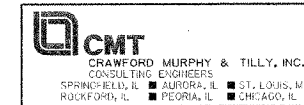
*BEAM NO. 5

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	0.167	541.084	541.083
☉ Brg. W. Abut.	69+06.79	0.167	541.084	541.083
A	69+16.79	0.167	541.084	541.108
B	69+26.79	0.167	541.084	541.124
C	69+36.79	0.167	541.084	541.127
D	69+46.79	0.167	541.084	541.115
E	69+56.79	0.167	541.084	541.098
☉ Pier 1	69+66.33	0.167	541.084	541.083
F	69+76.33	0.167	541.084	541.083
G	69+86.33	0.167	541.084	541.083
H	69+96.33	0.167	541.084	541.083
I	70+06.33	0.167	541.084	541.083
J	70+16.33	0.167	541.084	541.083
☉ Pier 2	70+27.04	0.167	541.084	541.083
K	70+37.04	0.167	541.084	541.099
L	70+47.04	0.167	541.084	541.116
M	70+57.04	0.167	541.084	541.127
N	70+67.04	0.167	541.084	541.124
O	70+77.04	0.167	541.084	541.108
☉ Brg. E. Abut.	70+86.79	0.167	541.084	541.083
Bk. E. Abut.	70+89.08	0.167	541.084	541.083

*OFFSET FROM WESTBOUND PROFILE GRADE LINE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK ELEVATIONS - 2
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR



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*** STAGE CONSTRUCTION LINE**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	3.500	541.153	541.153
☉ Brg. W. Abut.	69+06.79	3.500	541.153	541.153
A	69+16.79	3.500	541.153	541.453
B	69+26.79	3.500	541.153	541.642
C	69+36.79	3.500	541.153	541.672
D	69+46.79	3.500	541.153	541.537
E	69+56.79	3.500	541.153	541.325
☉ Pier 1	69+66.33	3.500	541.153	541.153
F	69+76.33	3.500	541.153	541.153
G	69+86.33	3.500	541.153	541.153
H	69+96.33	3.500	541.153	541.153
I	70+06.33	3.500	541.153	541.153
J	70+16.33	3.500	541.153	541.153
☉ Pier 2	70+27.04	3.500	541.153	541.153
K	70+37.04	3.500	541.153	541.336
L	70+47.04	3.500	541.153	541.548
M	70+57.04	3.500	541.153	541.681
N	70+67.04	3.500	541.153	541.645
O	70+77.04	3.500	541.153	541.449
☉ Brg. E. Abut.	70+86.79	3.500	541.153	541.153
Bk. E. Abut.	70+89.08	3.500	541.153	541.153

**** BEAM NO. 6**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-10.292	541.241	541.241
☉ Brg. W. Abut.	69+06.79	-10.292	541.241	541.241
A	69+16.79	-10.292	541.241	541.266
B	69+26.79	-10.292	541.241	541.282
C	69+36.79	-10.292	541.241	541.284
D	69+46.79	-10.292	541.241	541.273
E	69+56.79	-10.292	541.241	541.255
☉ Pier 1	69+66.33	-10.292	541.241	541.241
F	69+76.33	-10.292	541.241	541.241
G	69+86.33	-10.292	541.241	541.241
H	69+96.33	-10.292	541.241	541.241
I	70+06.33	-10.292	541.241	541.241
J	70+16.33	-10.292	541.241	541.241
☉ Pier 2	70+27.04	-10.292	541.241	541.241
K	70+37.04	-10.292	541.241	541.256
L	70+47.04	-10.292	541.241	541.274
M	70+57.04	-10.292	541.241	541.285
N	70+67.04	-10.292	541.241	541.282
O	70+77.04	-10.292	541.241	541.265
☉ Brg. E. Abut.	70+86.79	-10.292	541.241	541.241
Bk. E. Abut.	70+89.08	-10.292	541.241	541.241

**** ☉ IL. RTE 161 & ☉ STRUCTURE**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-9.000	541.221	541.221
☉ Brg. W. Abut.	69+06.79	-9.000	541.221	541.221
A	69+16.79	-9.000	541.221	541.246
B	69+26.79	-9.000	541.221	541.261
C	69+36.79	-9.000	541.221	541.264
D	69+46.79	-9.000	541.221	541.253
E	69+56.79	-9.000	541.221	541.235
☉ Pier 1	69+66.33	-9.000	541.221	541.221
F	69+76.33	-9.000	541.221	541.221
G	69+86.33	-9.000	541.221	541.221
H	69+96.33	-9.000	541.221	541.221
I	70+06.33	-9.000	541.221	541.221
J	70+16.33	-9.000	541.221	541.221
☉ Pier 2	70+27.04	-9.000	541.221	541.221
K	70+37.04	-9.000	541.221	541.236
L	70+47.04	-9.000	541.221	541.254
M	70+57.04	-9.000	541.221	541.265
N	70+67.04	-9.000	541.221	541.262
O	70+77.04	-9.000	541.221	541.245
☉ Brg. E. Abut.	70+86.79	-9.000	541.221	541.221
Bk. E. Abut.	70+89.08	-9.000	541.221	541.221

**** BEAM NO. 7**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-7.708	541.200	541.200
☉ Brg. W. Abut.	69+06.79	-7.708	541.200	541.200
A	69+16.79	-7.708	541.200	541.225
B	69+26.79	-7.708	541.200	541.241
C	69+36.79	-7.708	541.200	541.244
D	69+46.79	-7.708	541.200	541.232
E	69+56.79	-7.708	541.200	541.215
☉ Pier 1	69+66.33	-7.708	541.200	541.200
F	69+76.33	-7.708	541.200	541.200
G	69+86.33	-7.708	541.200	541.200
H	69+96.33	-7.708	541.200	541.200
I	70+06.33	-7.708	541.200	541.200
J	70+16.33	-7.708	541.200	541.200
☉ Pier 2	70+27.04	-7.708	541.200	541.200
K	70+37.04	-7.708	541.200	541.216
L	70+47.04	-7.708	541.200	541.233
M	70+57.04	-7.708	541.200	541.244
N	70+67.04	-7.708	541.200	541.241
O	70+77.04	-7.708	541.200	541.225
☉ Brg. E. Abut.	70+86.79	-7.708	541.200	541.200
Bk. E. Abut.	70+89.08	-7.708	541.200	541.200

**** BEAM NO. 8**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	-0.167	541.083	541.083
☉ Brg. W. Abut.	69+06.79	-0.167	541.083	541.083
A	69+16.79	-0.167	541.083	541.108
B	69+26.79	-0.167	541.083	541.123
C	69+36.79	-0.167	541.083	541.126
D	69+46.79	-0.167	541.083	541.115
E	69+56.79	-0.167	541.083	541.097
☉ Pier 1	69+66.33	-0.167	541.083	541.083
F	69+76.33	-0.167	541.083	541.083
G	69+86.33	-0.167	541.083	541.083
H	69+96.33	-0.167	541.083	541.083
I	70+06.33	-0.167	541.083	541.083
J	70+16.33	-0.167	541.083	541.083
☉ Pier 2	70+27.04	-0.167	541.083	541.083
K	70+37.04	-0.167	541.083	541.098
L	70+47.04	-0.167	541.083	541.116
M	70+57.04	-0.167	541.083	541.127
N	70+67.04	-0.167	541.083	541.124
O	70+77.04	-0.167	541.083	541.107
☉ Brg. E. Abut.	70+86.79	-0.167	541.083	541.083
Bk. E. Abut.	70+89.08	-0.167	541.083	541.083

*OFFSET FROM WESTBOUND PROFILE GRADE LINE
 **OFFSET FROM EASTBOUND PROFILE GRADE LINE

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK ELEVATIONS - 3
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

**** P.G.L. (E.B.)**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	0.000	541.080	541.080
☉ Brg. W. Abut.	69+06.79	0.000	541.080	541.080
A	69+16.79	0.000	541.080	541.105
B	69+26.79	0.000	541.080	541.121
C	69+36.79	0.000	541.080	541.123
D	69+46.79	0.000	541.080	541.112
E	69+56.79	0.000	541.080	541.094
☉ Pier 1	69+66.33	0.000	541.080	541.080
F	69+76.33	0.000	541.080	541.080
G	69+86.33	0.000	541.080	541.080
H	69+96.33	0.000	541.080	541.080
I	70+06.33	0.000	541.080	541.080
J	70+16.33	0.000	541.080	541.080
☉ Pier 2	70+27.04	0.000	541.080	541.080
K	70+37.04	0.000	541.080	541.095
L	70+47.04	0.000	541.080	541.113
M	70+57.04	0.000	541.080	541.124
N	70+67.04	0.000	541.080	541.121
O	70+77.04	0.000	541.080	541.105
☉ Brg. E. Abut.	70+86.79	0.000	541.080	541.080
Bk. E. Abut.	70+89.08	0.000	541.080	541.080

**** BEAM NO. 9**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	7.375	540.926	540.926
☉ Brg. W. Abut.	69+06.79	7.375	540.926	540.926
A	69+16.79	7.375	540.926	540.951
B	69+26.79	7.375	540.926	540.967
C	69+36.79	7.375	540.926	540.970
D	69+46.79	7.375	540.926	540.958
E	69+56.79	7.375	540.926	540.941
☉ Pier 1	69+66.33	7.375	540.926	540.926
F	69+76.33	7.375	540.926	540.926
G	69+86.33	7.375	540.926	540.926
H	69+96.33	7.375	540.926	540.926
I	70+06.33	7.375	540.926	540.926
J	70+16.33	7.375	540.926	540.926
☉ Pier 2	70+27.04	7.375	540.926	540.926
K	70+37.04	7.375	540.926	540.942
L	70+47.04	7.375	540.926	540.959
M	70+57.04	7.375	540.926	540.970
N	70+67.04	7.375	540.926	540.967
O	70+77.04	7.375	540.926	540.951
☉ Brg. E. Abut.	70+86.79	7.375	540.926	540.926
Bk. E. Abut.	70+89.08	7.375	540.926	540.926

**** BEAM NO. 10**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	14.917	540.769	540.769
☉ Brg. W. Abut.	69+06.79	14.917	540.769	540.769
A	69+16.79	14.917	540.769	540.794
B	69+26.79	14.917	540.769	540.810
C	69+36.79	14.917	540.769	540.812
D	69+46.79	14.917	540.769	540.801
E	69+56.79	14.917	540.769	540.784
☉ Pier 1	69+66.33	14.917	540.769	540.769
F	69+76.33	14.917	540.769	540.769
G	69+86.33	14.917	540.769	540.769
H	69+96.33	14.917	540.769	540.769
I	70+06.33	14.917	540.769	540.769
J	70+16.33	14.917	540.769	540.769
☉ Pier 2	70+27.04	14.917	540.769	540.769
K	70+37.04	14.917	540.769	540.784
L	70+47.04	14.917	540.769	540.802
M	70+57.04	14.917	540.769	540.813
N	70+67.04	14.917	540.769	540.810
O	70+77.04	14.917	540.769	540.794
☉ Brg. E. Abut.	70+86.79	14.917	540.769	540.769
Bk. E. Abut.	70+89.08	14.917	540.769	540.769

**** BEAM NO. 11**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	22.458	540.612	540.612
☉ Brg. W. Abut.	69+06.79	22.458	540.612	540.612
A	69+16.79	22.458	540.612	540.637
B	69+26.79	22.458	540.612	540.653
C	69+36.79	22.458	540.612	540.655
D	69+46.79	22.458	540.612	540.644
E	69+56.79	22.458	540.612	540.626
☉ Pier 1	69+66.33	22.458	540.612	540.612
F	69+76.33	22.458	540.612	540.612
G	69+86.33	22.458	540.612	540.612
H	69+96.33	22.458	540.612	540.612
I	70+06.33	22.458	540.612	540.612
J	70+16.33	22.458	540.612	540.612
☉ Pier 2	70+27.04	22.458	540.612	540.612
K	70+37.04	22.458	540.612	540.627
L	70+47.04	22.458	540.612	540.645
M	70+57.04	22.458	540.612	540.656
N	70+67.04	22.458	540.612	540.653
O	70+77.04	22.458	540.612	540.637
☉ Brg. E. Abut.	70+86.79	22.458	540.612	540.612
Bk. E. Abut.	70+89.08	22.458	540.612	540.612

**** BEAM NO. 12**

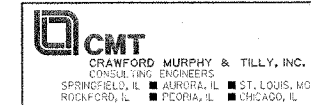
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
Bk. W. Abut.	69+04.50	30.000	540.455	540.455
☉ Brg. W. Abut.	69+06.79	30.000	540.455	540.455
A	69+16.79	30.000	540.455	540.480
B	69+26.79	30.000	540.455	540.496
C	69+36.79	30.000	540.455	540.498
D	69+46.79	30.000	540.455	540.487
E	69+56.79	30.000	540.455	540.469
☉ Pier 1	69+66.33	30.000	540.455	540.455
F	69+76.33	30.000	540.455	540.455
G	69+86.33	30.000	540.455	540.455
H	69+96.33	30.000	540.455	540.455
I	70+06.33	30.000	540.455	540.455
J	70+16.33	30.000	540.455	540.455
☉ Pier 2	70+27.04	30.000	540.455	540.455
K	70+37.04	30.000	540.455	540.470
L	70+47.04	30.000	540.455	540.488
M	70+57.04	30.000	540.455	540.499
N	70+67.04	30.000	540.455	540.496
O	70+77.04	30.000	540.455	540.480
☉ Brg. E. Abut.	70+86.79	30.000	540.455	540.455
Bk. E. Abut.	70+89.08	30.000	540.455	540.455

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	33
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
Contract #76558			SHEET 8 OF 26	

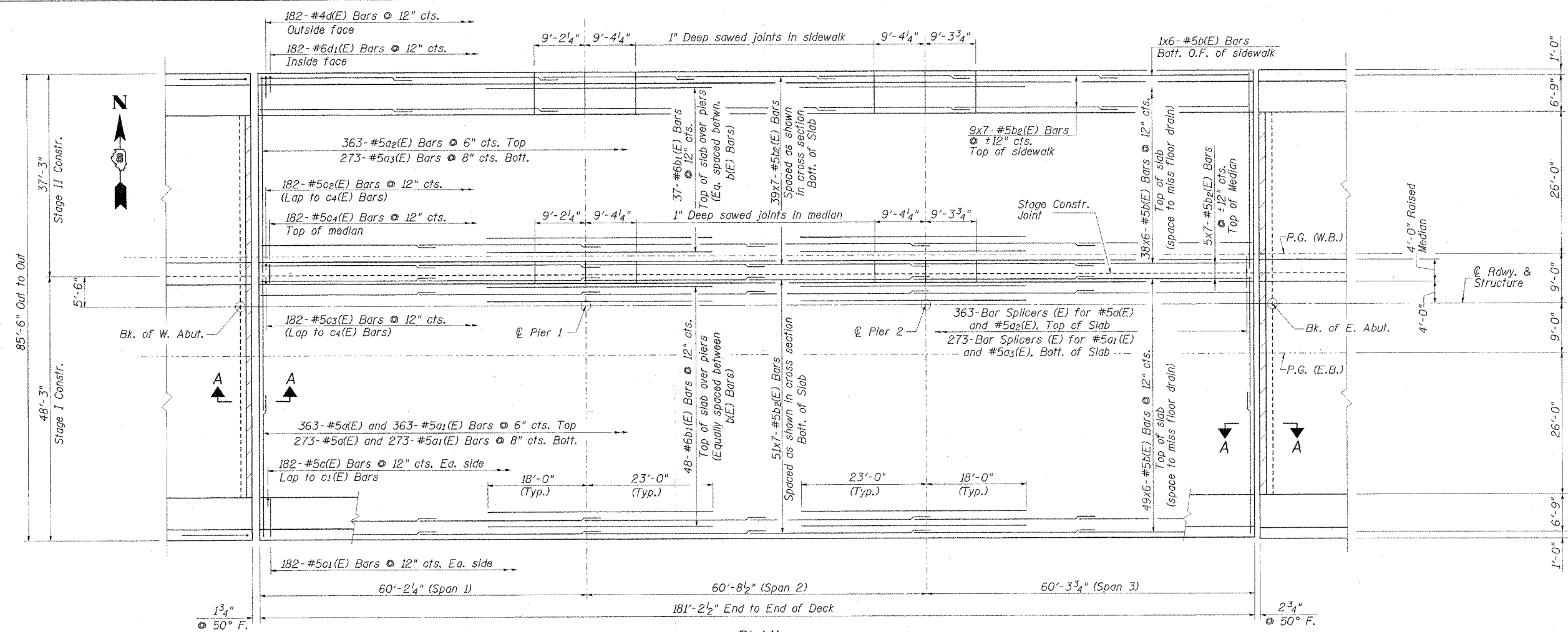
**OFFSET FROM EASTBOUND PROFILE GRADE LINE

REVISIONS	
NAME	DATE

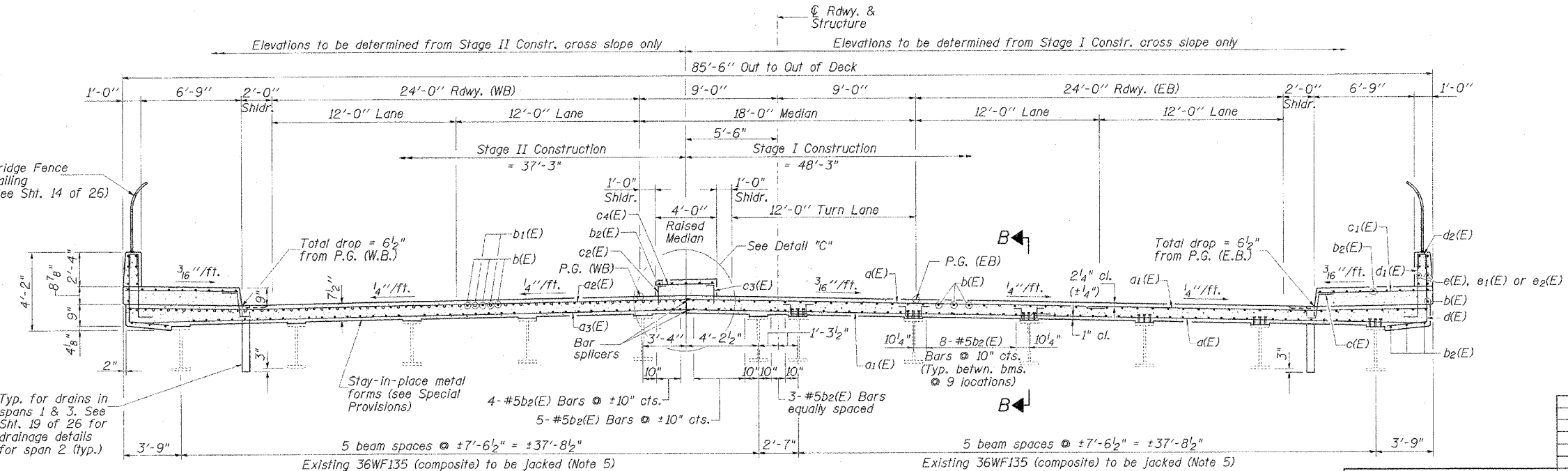
ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK ELEVATIONS - 4
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR



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PLAN



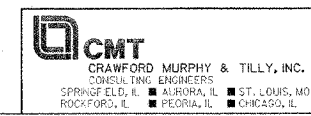
TYPICAL CROSS SECTION
(Looking East)

MINIMUM BAR LAPS
#5 Bar = 1'-8"

- NOTES:**
- See Sheets 10 & 11 of 26 for superstructure details, parapet reinforcement and Bill of Material.
 - Reinforcement bars designated (E) shall be epoxy coated.
 - Bars indicated thus 20X3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 - Dimensions are based on a PJS joint. If the contractor elects to use the alternate strip seal, the dimensions may require adjustments as described on Sheet 13 of 26.
 - See Sheet 25 of 26 for Jacking and Cribbing Details.
 - For Bar Splicer details see Sheet 26 of 26.
 - Hatch area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.
 - For Section A-A & B-B see Sheet 11 of 26.
 - See Sheet 1 of 26 for locations of floor drains.
 - See Sheet 14 of 26 for bridge fence railing.
 - Breakpoint for cross slope of the bridge deck is located at the stage constr. joint.
 - See Sheet 11 of 26 for Detail "C".

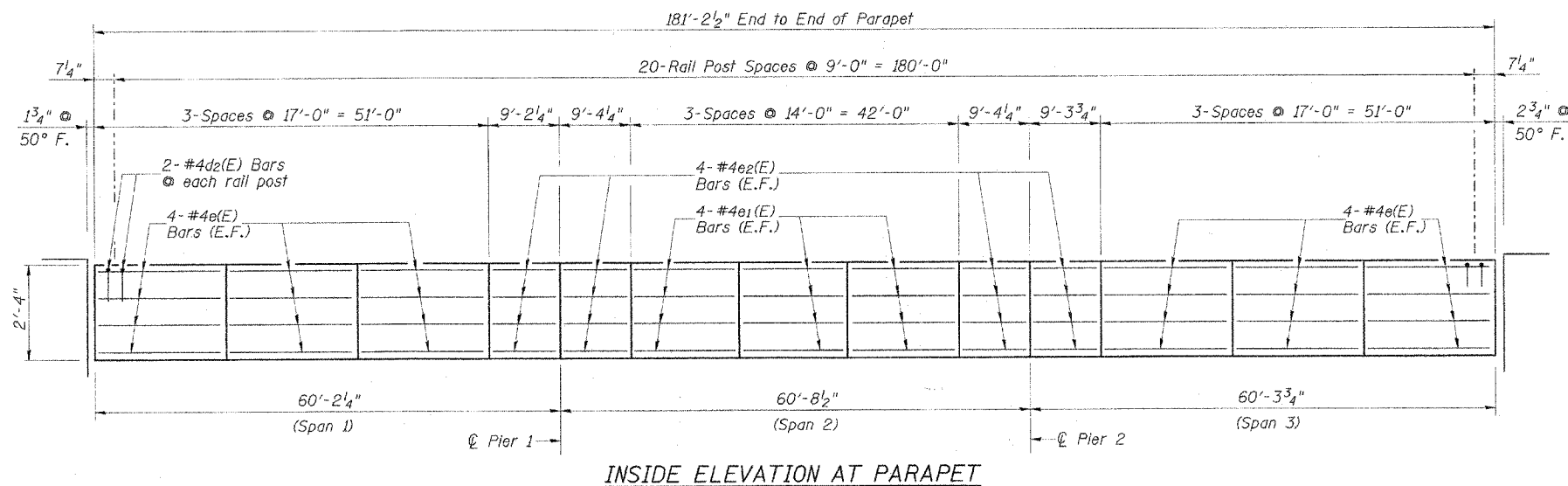
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE
F.A.P. ROUTE 805
SECTION 122VBR-1
ST. CLAIR COUNTY
ILLINOIS ROUTE 161 OVER METRO-LINK
STATION 69+96.56 S.N. 082-0091
SCALE: NONE DRAWN BY: GLD
DATE: 1/03/06 CHECKED BY: GBR

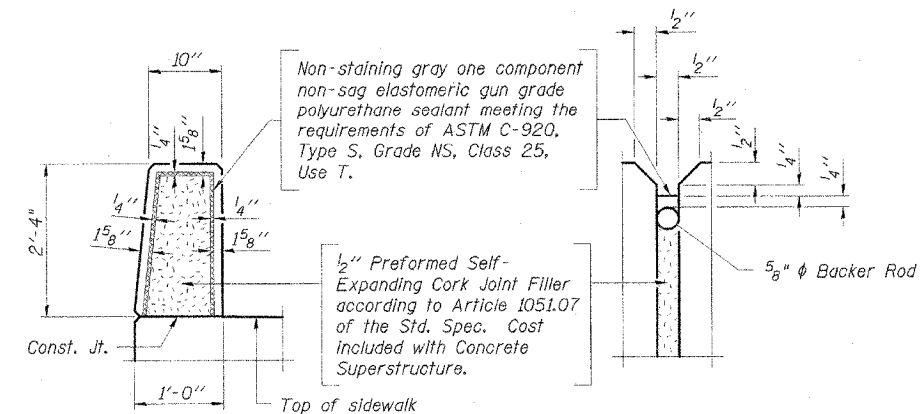


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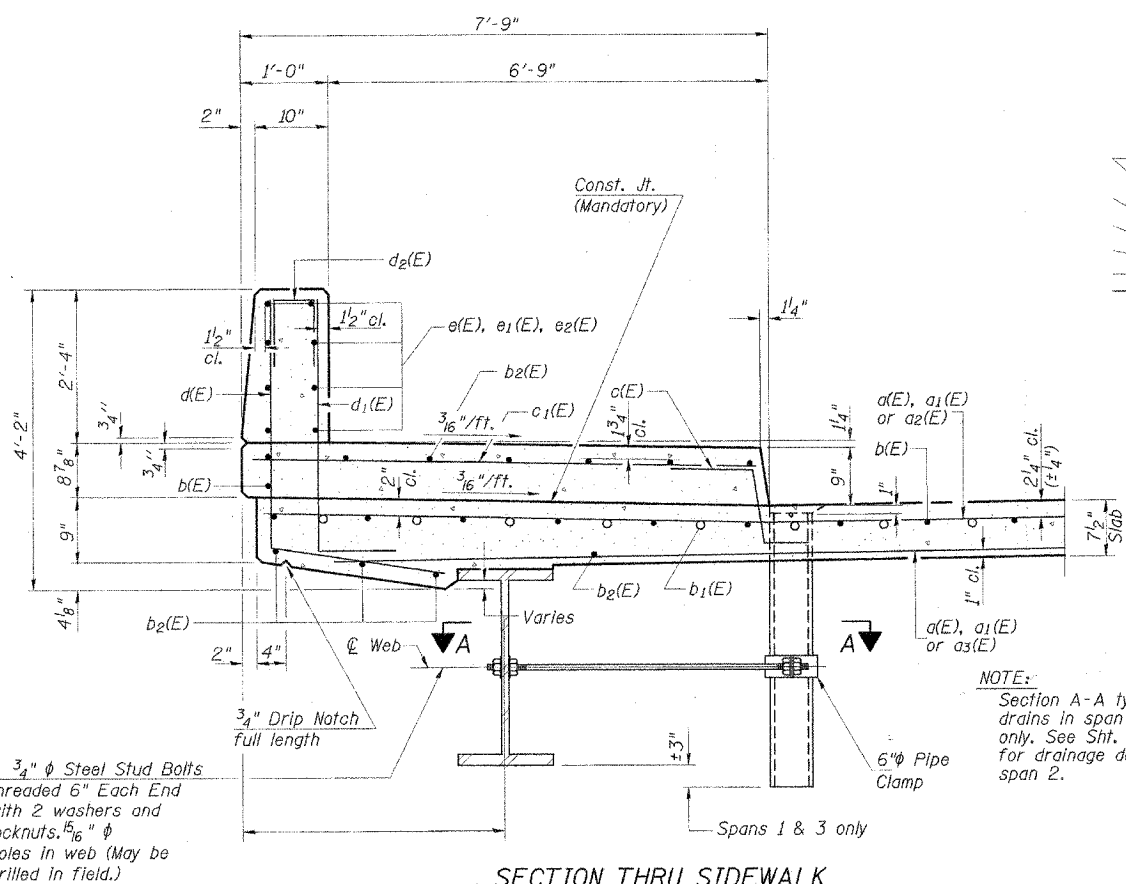
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	35
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
Contract #76558				SHEET 10 OF 26



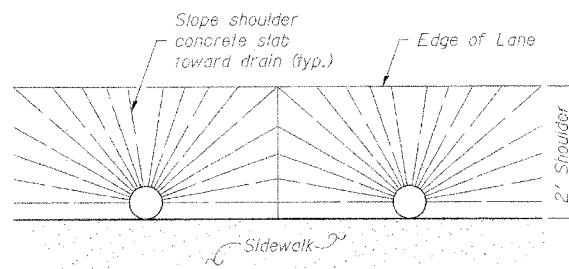
INSIDE ELEVATION AT PARAPET



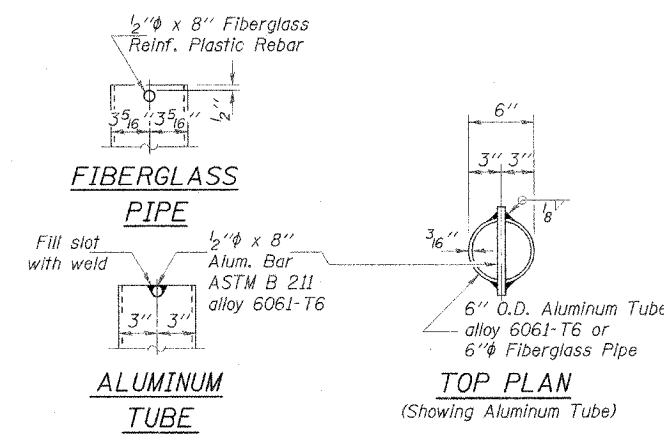
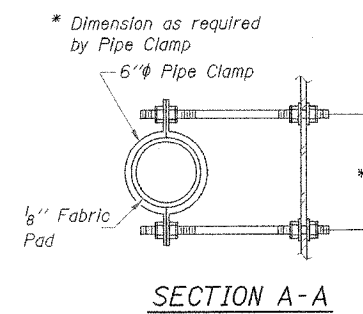
PARAPET JOINT DETAILS



SECTION THRU SIDEWALK



FLOOR DRAIN DETAIL



NOTES:

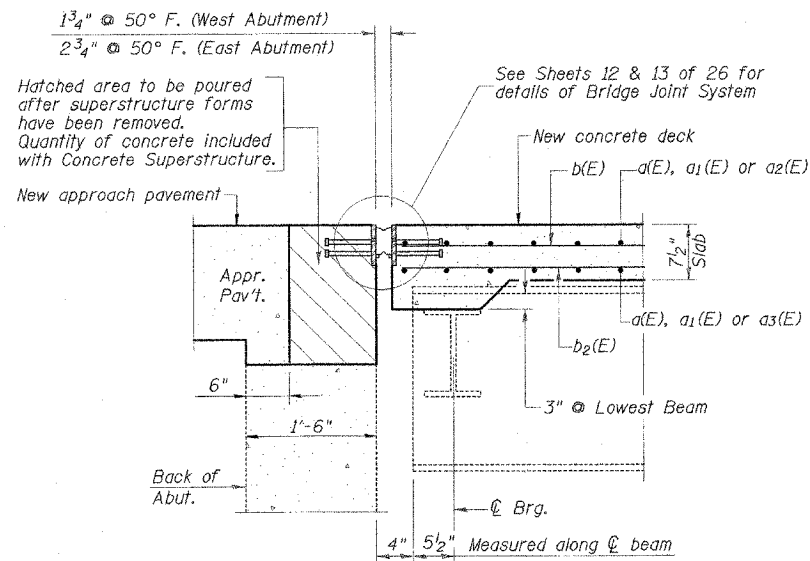
1. Reinforcement bars designated (E) shall be epoxy coated.
2. Floor drains need not be painted.
3. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
4. Dimensions are based on a PJS joint. If the Contractor elects to use the alternate strip seal, the dimensions may require adjustments as described on Sheet 13 of 26.

REVISIONS	
NAME	DATE

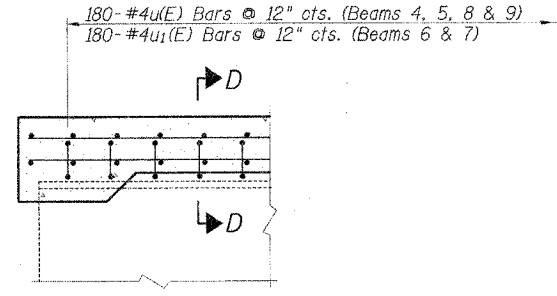
ILLINOIS DEPARTMENT OF TRANSPORTATION
 PARAPET DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

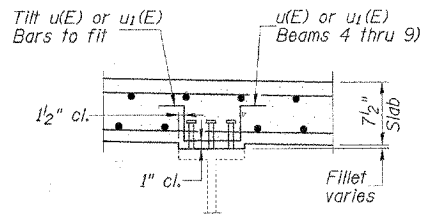
L:\UD01\010606\010606\010606\REVISED DGN'S STAGING CHANGE\PARAPET DETAILS.LDGN 6/30/2006



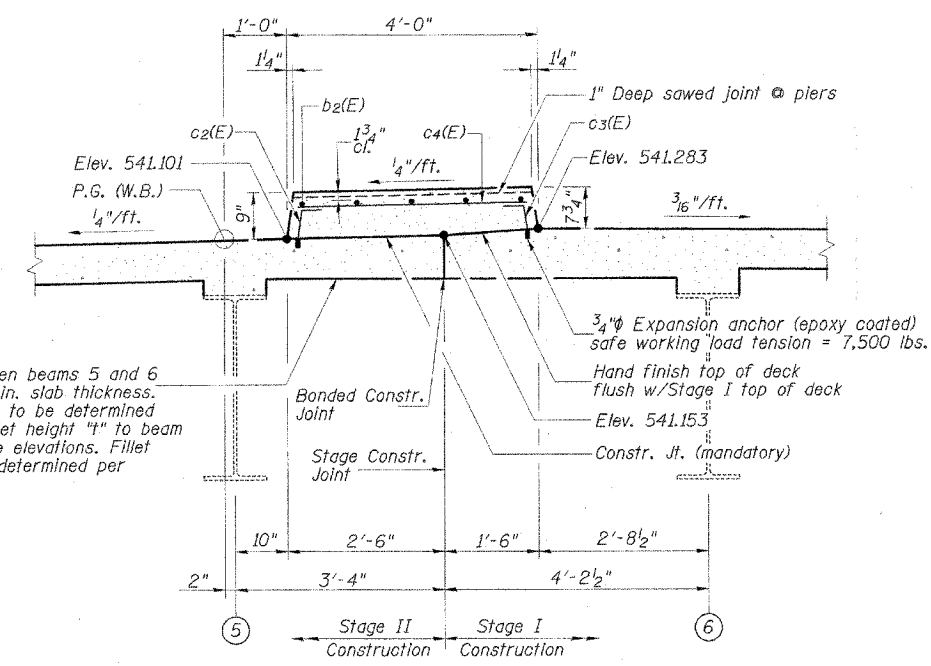
SECTION A-A



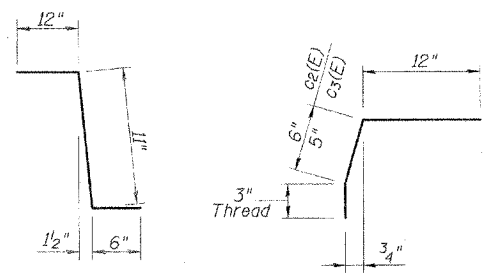
SECTION B-B



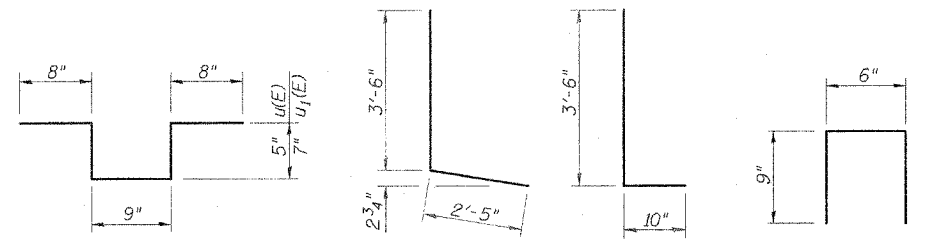
SECTION D-D



DETAIL "B"
SECTION THRU RAISED MEDIAN
(looking East)



BAR c(E) BAR c2(E) & c3(E)



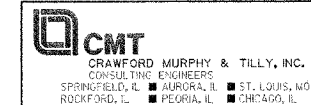
BAR u(E) & u1(E) BAR d(E) BAR d1(E) BAR d2(E)

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d(E)	636	#5	26'-3"	—
a1(E)	636	#5	23'-3"	—
a2(E)	363	#5	36'-9"	—
a3(E)	273	#5	35'-0"	—
b(E)	534	#5	31'-10"	—
b1(E)	170	#6	41'-0"	—
b2(E)	791	#5	27'-6"	—
c(E)	364	#5	2'-5"	┌
c1(E)	364	#5	7'-5"	┌
c2(E)	182	#5	1'-9"	┌
c3(E)	182	#5	1'-8"	┌
c4(E)	182	#5	3'-3"	—
d(E)	364	#4	5'-11"	┌
d1(E)	364	#6	4'-4"	┌
d2(E)	84	#4	2'-0"	┌
e(E)	96	#4	16'-9"	—
e1(E)	48	#4	13'-9"	—
e2(E)	64	#4	8'-11"	—
u(E)	720	#4	2'-11"	┌
u1(E)	360	#4	3'-3"	┌
Reinforcement Bars, Epoxy Coated		Pound	120600	
Concrete Superstructure		Cu. Yds.	528.1	
Bar Splicers		Each	636	

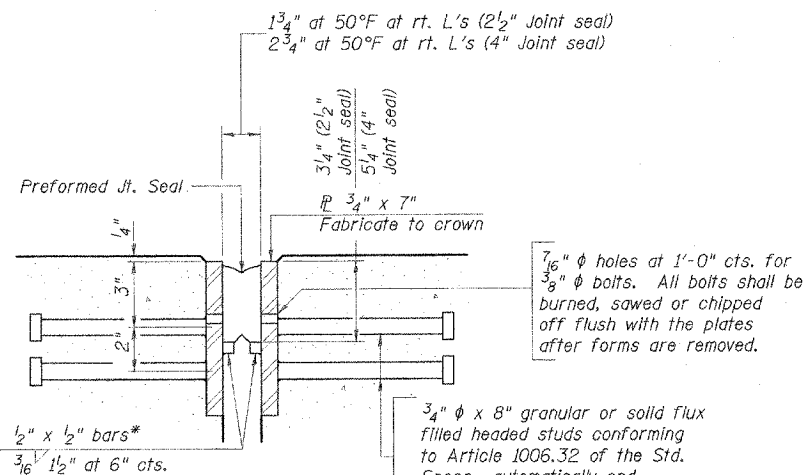
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 1 x -#5 etc. indicates 1 line of bars with lengths per line.

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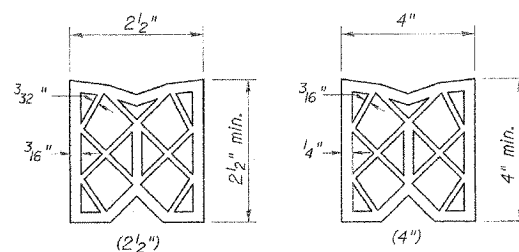
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
F.A.P. ROUTE 805
SECTION 122VBR-1
ST. CLAIR COUNTY
ILLINOIS ROUTE 161 OVER METRO-LINK
STATION 69+96.56 S.N. 082-0091
SCALE: NONE DRAWN BY: GLD
DATE: 7/03/06 CHECKED BY: GBR



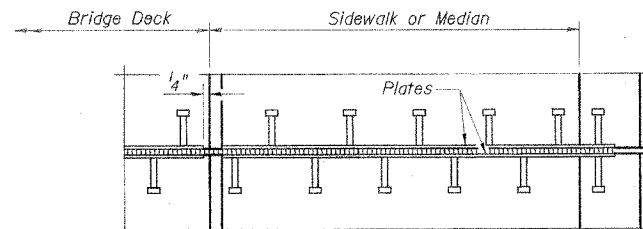
SECTION THRU EXPANSION JOINT
(2 1/2" and 4" joint seals)

*Cut retainer bars in sidewalk or median 6" short of the sidewalk or median face.

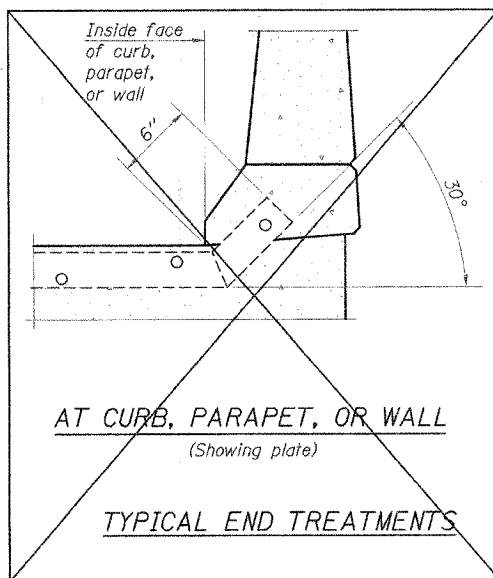
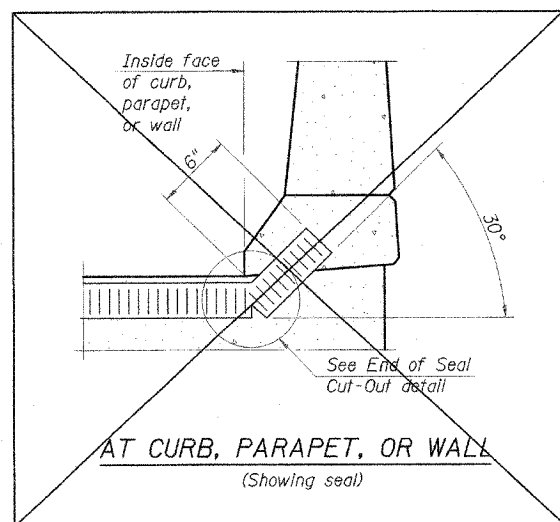


PREFORMED JOINT SEAL

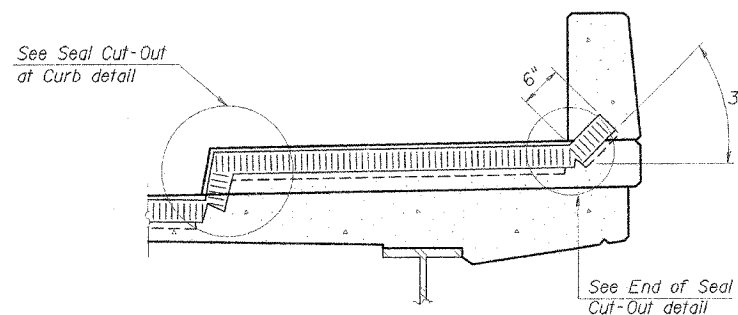
Bridge Joint System (Expansion)		
Design Movement	Required Preformed Joint Seal Size	Required Strip Seal Rated movement
1"	2 1/2"	1"
1 5/8"	4"	2"



PLAN AT SIDEWALK OR MEDIAN



TYPICAL END TREATMENTS



AT SIDEWALK OR MEDIAN*
(Showing plate and seal)

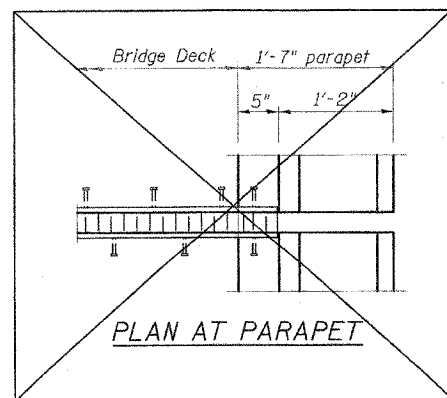
*Shorter plates with a single row of studs at 12" centers may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

BILL OF MATERIAL

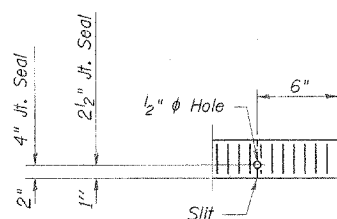
Item	Unit	Total
Bridge Joint System (Expansion) 1"	foot	87
Bridge Joint System (Expansion) 1 5/8"	foot	87

NOTES:

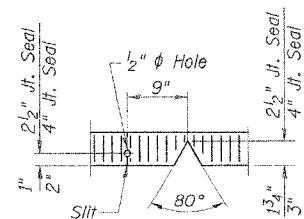
- Furnish steel plates in segments of 20 feet maximum length. Maximum space between installed segments shall be 3/16". Seal space with silicone sealant suitable for structural steel.



PLAN AT PARAPET



END OF SEAL CUT-OUT



SEAL CUT-OUT AT CURB

BRIDGE JOINT SYSTEM - EXPANSION
(PREFORMED JOINT SEAL)

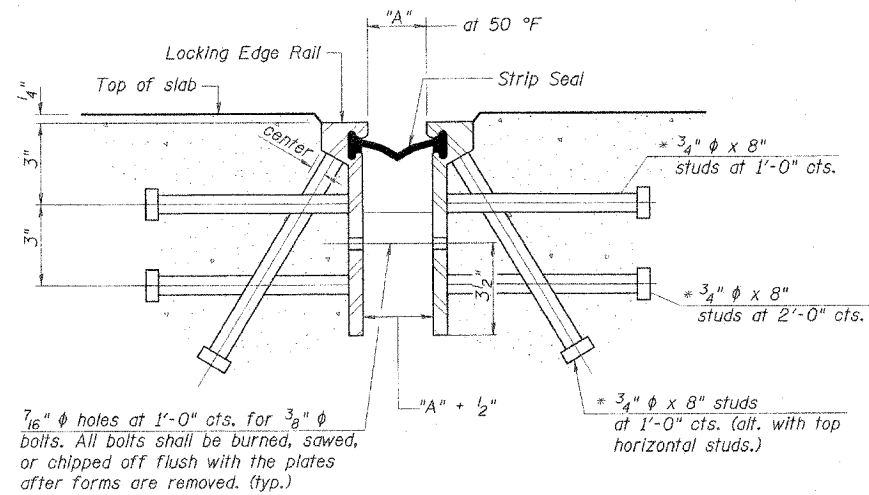


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE JOINT SYSTEM - 1
F.A.P. ROUTE 805
SECTION 122VBR-1
ST. CLAIR COUNTY
ILLINOIS ROUTE 161 OVER METRO-LINK
STATION 69+96.56 S.N. 082-0091
SCALE: NONE DRAWN BY: GLD
DATE: 7/03/06 CHECKED BY: GBR

L:\DOT\04066\0\work\01\draw\sheet\REVISED DGN\5. SI ADPINE CHANGE BR JOINT 515.1100N 7/3/2006

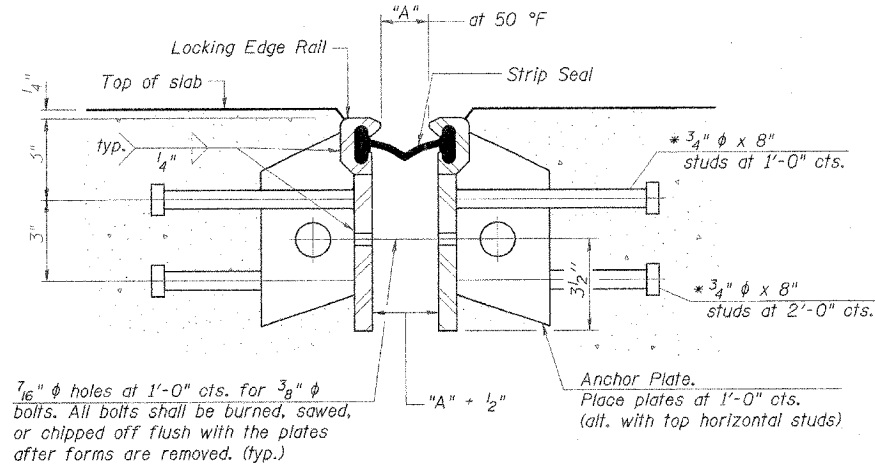
EJ-BJS



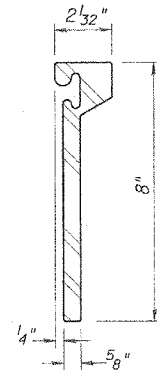
SECTION THRU ROLLED RAIL EXP. JOINT
(896 Studs Required)

Required Strip Seal rated movement	"A"
1"	1 1/8"
2"	1 3/4"

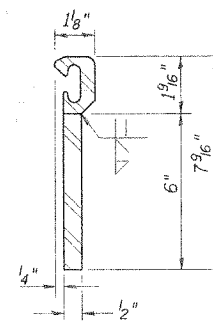
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



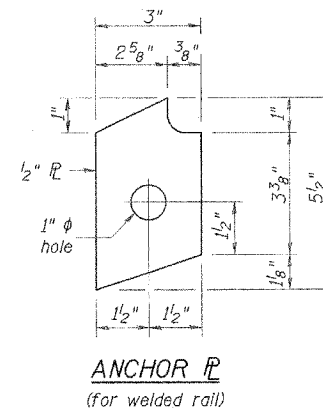
SECTION THRU WELDED RAIL EXP. JOINT
(556 Studs Required)
(340 Anchor Plates Required)



ROLLED (EXTRUDED) RAIL

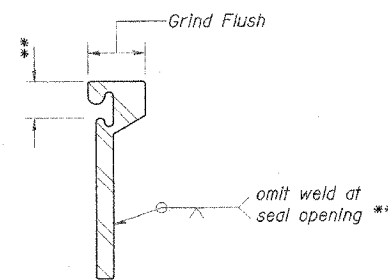


WELDED RAIL

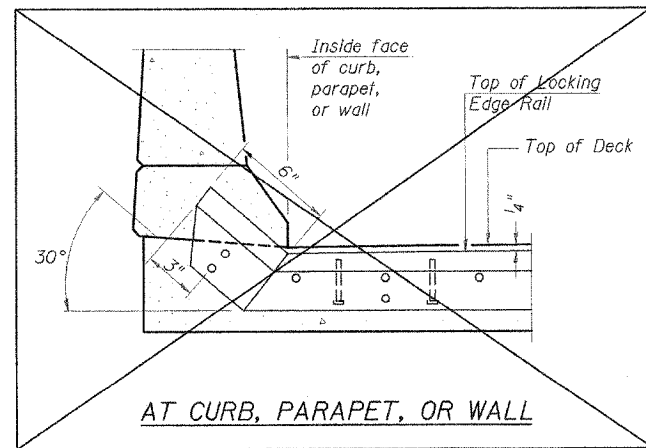


ANCHOR PLATE
(for welded rail)

LOCKING EDGE RAILS

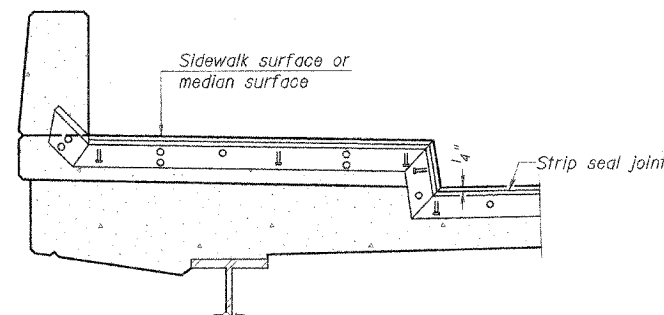


LOCKING EDGE RAIL SPLICE
The inside of the locking edge rail groove shall be free of weld residue.



TYPICAL END TREATMENTS

BRIDGE JOINT SYSTEM - EXPANSION
(ALTERNATE-STRIP SEAL)



AT SIDEWALK OR MEDIAN*

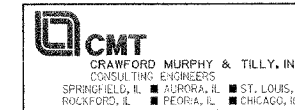
* Shorter plates with a single row of studs at 12" centers may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

NOTES:

1. The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.
2. The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.
3. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
4. The manufacturer's recommended installation methods shall be followed.
5. The joint opening and deck dimensions detailed on the superstructure are based on a preformed joint seal. If the contractor elects to use the alternate strip seal joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

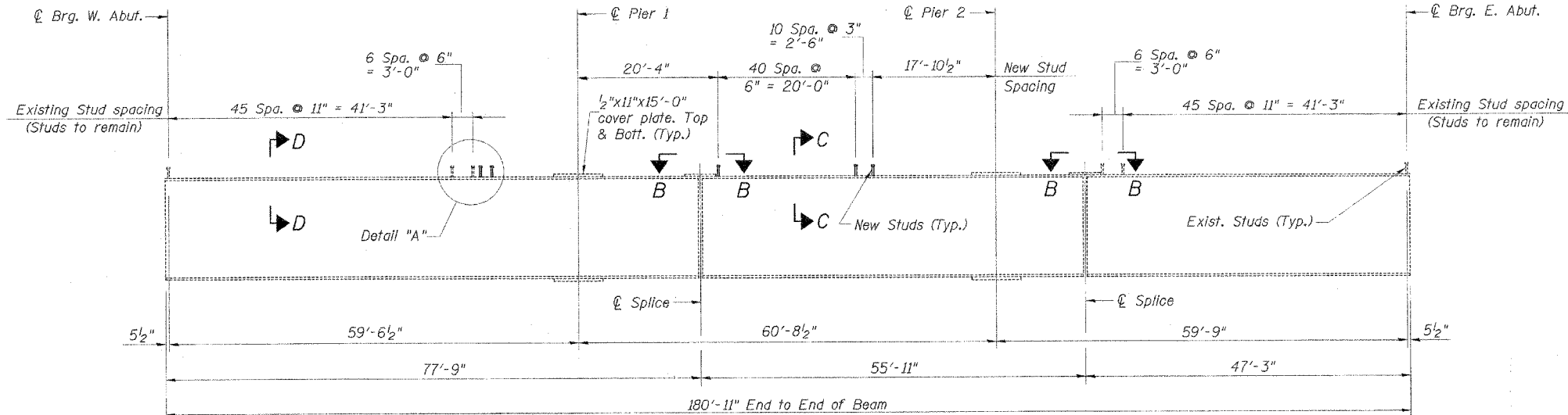
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE JOINT SYSTEM - 2
F.A.P. ROUTE 805
SECTION 122VBR-1
ST. CLAIR COUNTY
ILLINOIS ROUTE 161 OVER METRO-LINK
STATION 69+96.56 S.N. 082-0091
SCALE: NONE DRAWN BY: GLD
DATE: 7/03/06 CHECKED BY: CBR



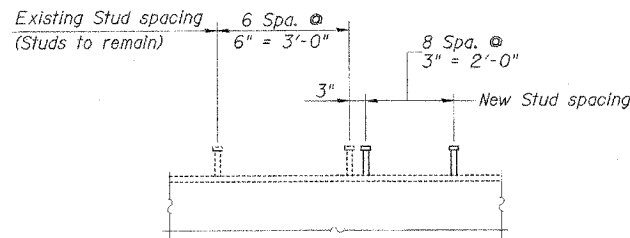
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EJ-BJS

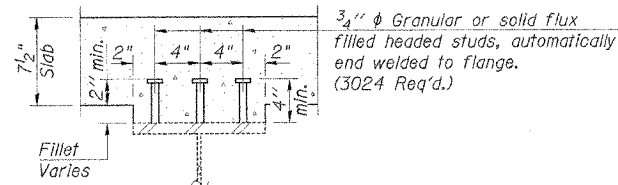


EXISTING BEAM ELEVATION
(36 WF 135)

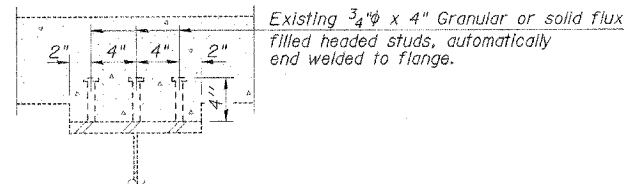
	0.4 Span 1 0.6 Span 3	Pier 1 & 2	0.5 Span 2
I_s (in ⁴)	7800	11374	7800
I_o (in ⁴)	22518	—	22518
I_c (3n) (in ⁴)	16407	—	16407
S_s (in ³)	439	623	439
S_c (n) (in ³)	679	—	679
S_c (3n) (in ³)	611	—	611
ϕ (k/ft.)	0.91	1.43	0.91
$M\phi$ (k)	250	520	71
$s\phi$ (k/ft.)	0.52	—	0.52
$Ms\phi$ (k)	155	—	69
$M\phi$ (k)	470	261	380
M (Imp) (k)	127	71	102
$^5_3[M\phi + M(imp)]$ (k)	995	553	803
Ma (k)	1820	1395	1226
$fs\phi$ non-comp (k.s.i.)	6.8	10.0	1.9
$fs\phi$ (comp) (k.s.i.)	3.0	—	1.4
$fs\phi$ (L + Imp) (k.s.i.)	17.6	10.7	14.2
fs (Overload) (k.s.i.)	27.4	20.7	17.5
fs (Total) (k.s.i.)	35.6	26.9	22.8
VR (k)	57.6	—	61.2



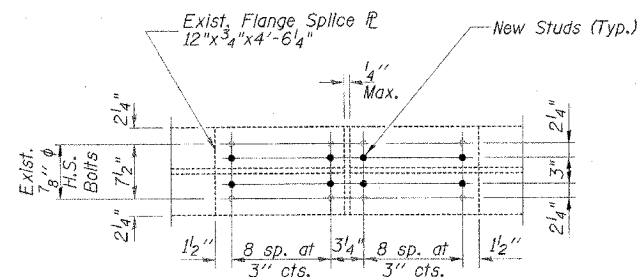
DETAIL "A"



SECTION C-C
(Showing New Studs)



SECTION D-D
(Showing Exist. Studs)



VIEW B-B

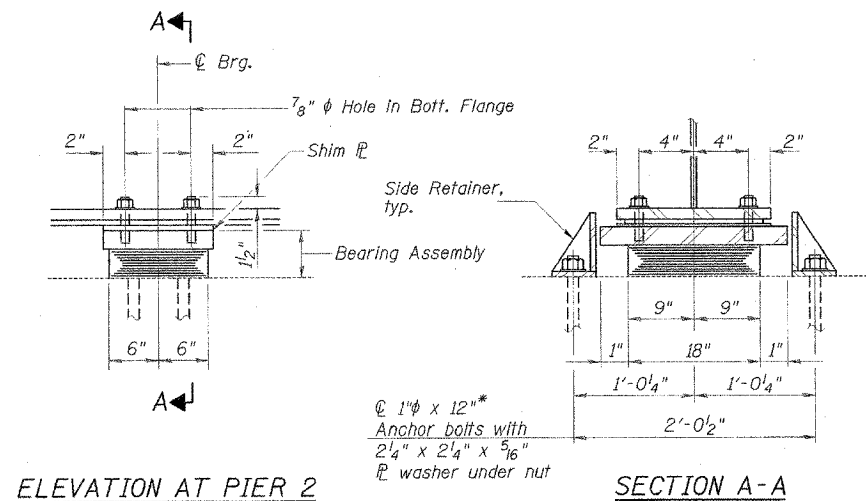
	ABUTS.	PIER
$R\phi$ (k)	34.0	95.4
R_L (k)	40.4	48.3
Imp. (k)	10.9	13.1
R (Total) (k)	85.3	156.8

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 I_o and S_o are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)
 VR is the maximum Live Load + Impact shear range in span.
 Ma (Applied Moment) = $1.3[M\phi + Ms\phi + ^5_3(M\phi + M(imp))]$.
 fs (Overload) is the sum of the stresses due to $M\phi + Ms\phi + ^5_3(M\phi + M(imp))$.
 fs (Total) (Non-compact section) is the sum of the stresses due to $1.3[M\phi + Ms\phi + ^5_3(M\phi + M(imp))]$.

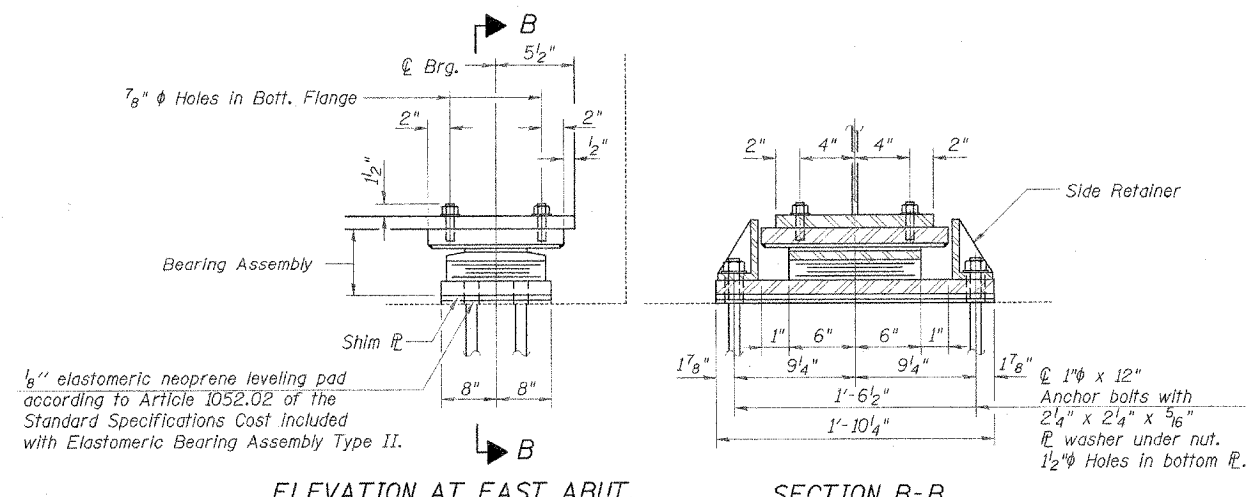
NOTE:
 All existing headed studs are to remain. Any studs damaged during concrete removal shall be repaired or replaced according to Article 501.03 of the Standard Specifications.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL STEEL DETAILS F.A.P. ROUTE 805 SECTION 122VBR-1 ST. CLAIR COUNTY ILLINOIS ROUTE 161 OVER METRO-LINK STATION 69+96.56 S.N. 082-0091
NAME	DATE	
		SCALE: NONE DRAWN BY: GLD
		DATE: 7/03/06 CHECKED BY: GBR

CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ ALBANY, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

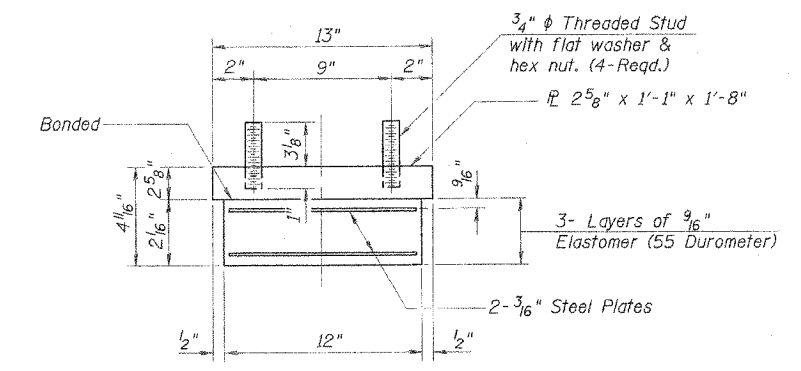


ELEVATION AT PIER 2
SECTION A-A
TYPE I ELASTOMERIC EXP. BRG. - PIER 2
 (12 REQUIRED)



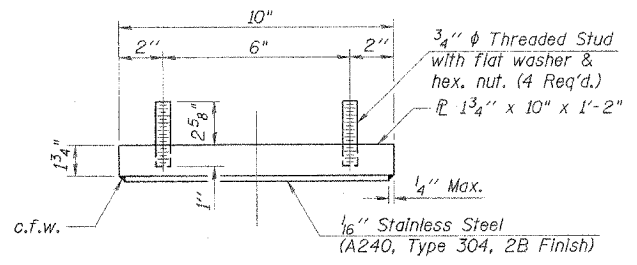
ELEVATION AT EAST ABUT.
SECTION B-B
TYPE II ELASTOMERIC EXP. BRG. - EAST ABUTMENT
 (12 REQUIRED)

Notes:
 All bearing plates, pintles & shim plates shall be AASHTO M270 Grade 50.

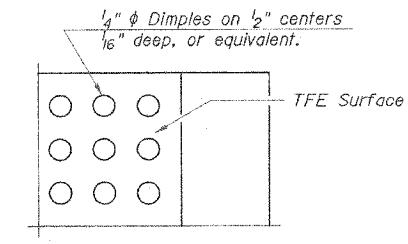


BEARING ASSEMBLY

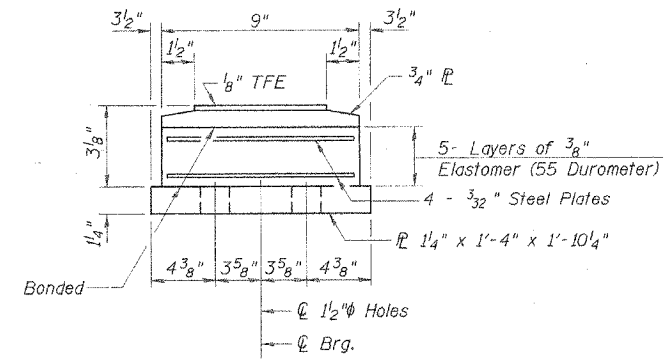
Note:
 Shim plates shall not be placed under Bearing Assembly.



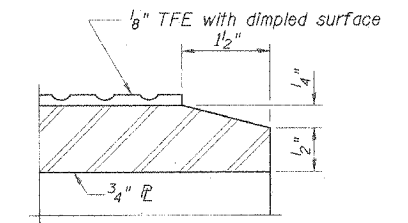
TOP BEARING ASSEMBLY



PLAN-TFE SURFACE

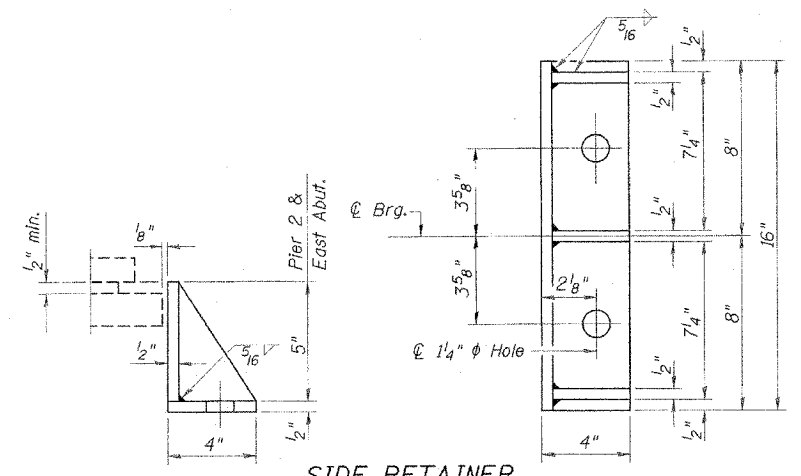


BOTTOM BEARING ASSEMBLY



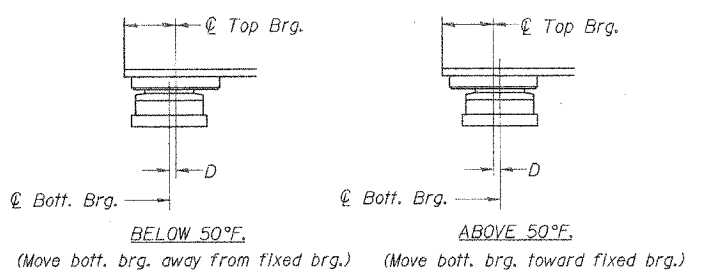
SECTION THRU TFE

Notes:
 The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces. Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.



SETTING ANCHOR BOLTS AT EXP. BRG.

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

*Length shown is the required total length for the Illinois Coil Anchor Bolt. The required total length for the sealed capsule alternate anchor bolt shall be according to the manufacturers recommendations.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Elastomeric Bearing Assembly Type II	Each	12

NOTES:

- Diaphragm removal & installation may be required to facilitate drilling holes. Cost shall be included in the cost of "Furnishing & Erecting Structural Steel".
- See Sheet 18 of 26 for anchor bolt installation.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BEARINGS DETAILS 2
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 1/03/06 CHECKED BY: GBR

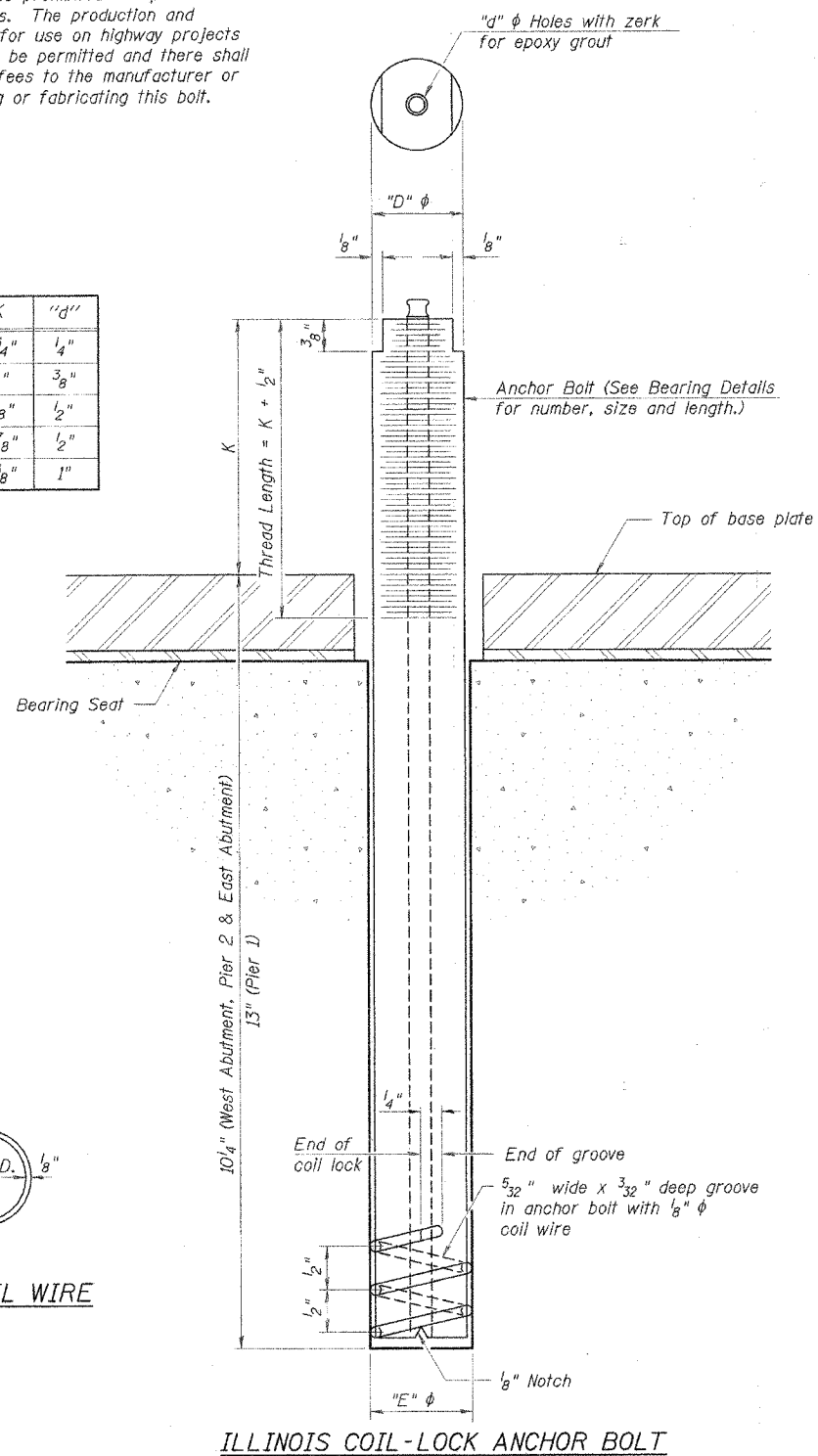
CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	43
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
Contract #76558			SHEET 18 OF 26	

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 3/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire. The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed. The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

- The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
West Abut.	A325
Pier 1	A325
Pier 2	A325
East Abut.	A325

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted. Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming. The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

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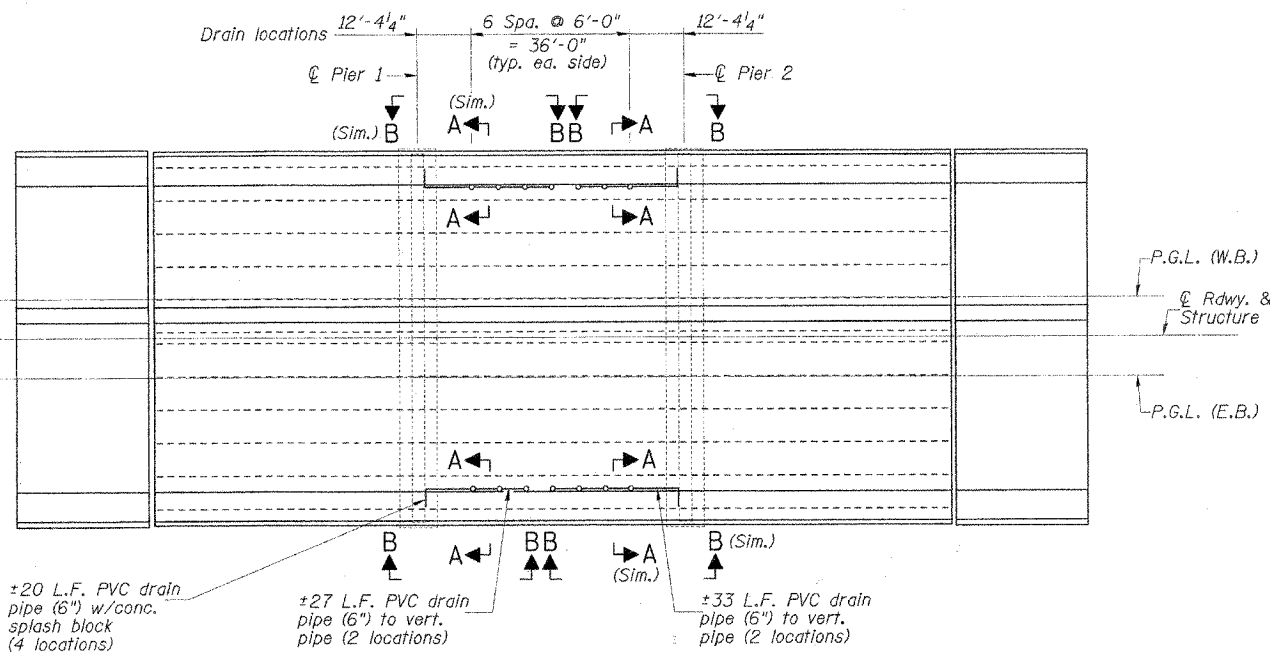
ABB-1



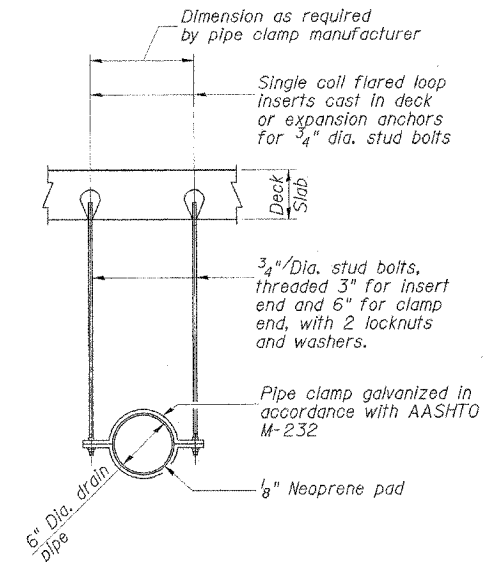
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ANCHOR BOLT DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

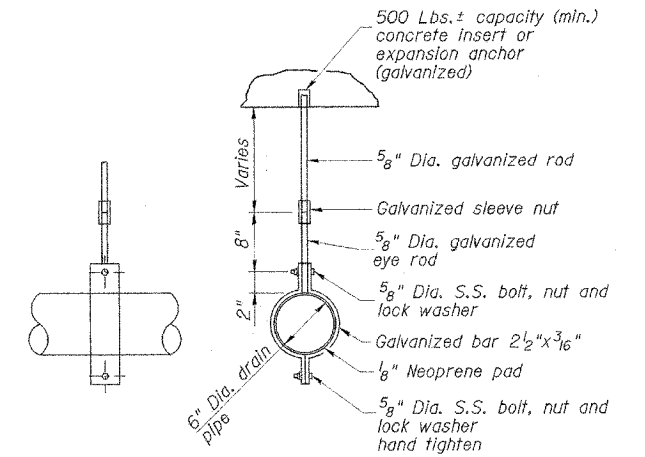
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	44
STA. N/A	TO STA. N/A			
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
Contract #76558			SHEET 19 OF 26	



DRAIN LOCATION PLAN

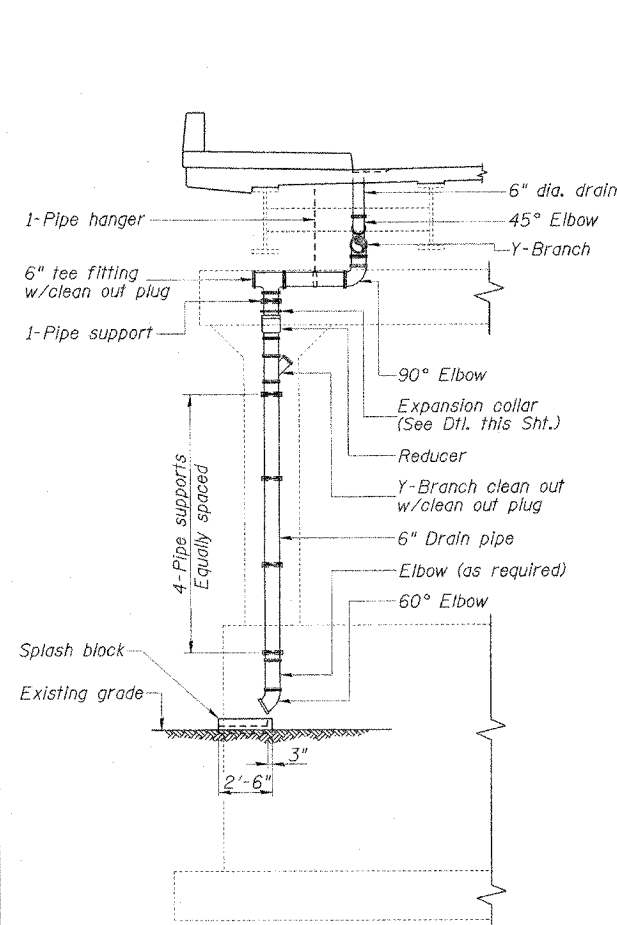


PIPE HANGER DETAILS

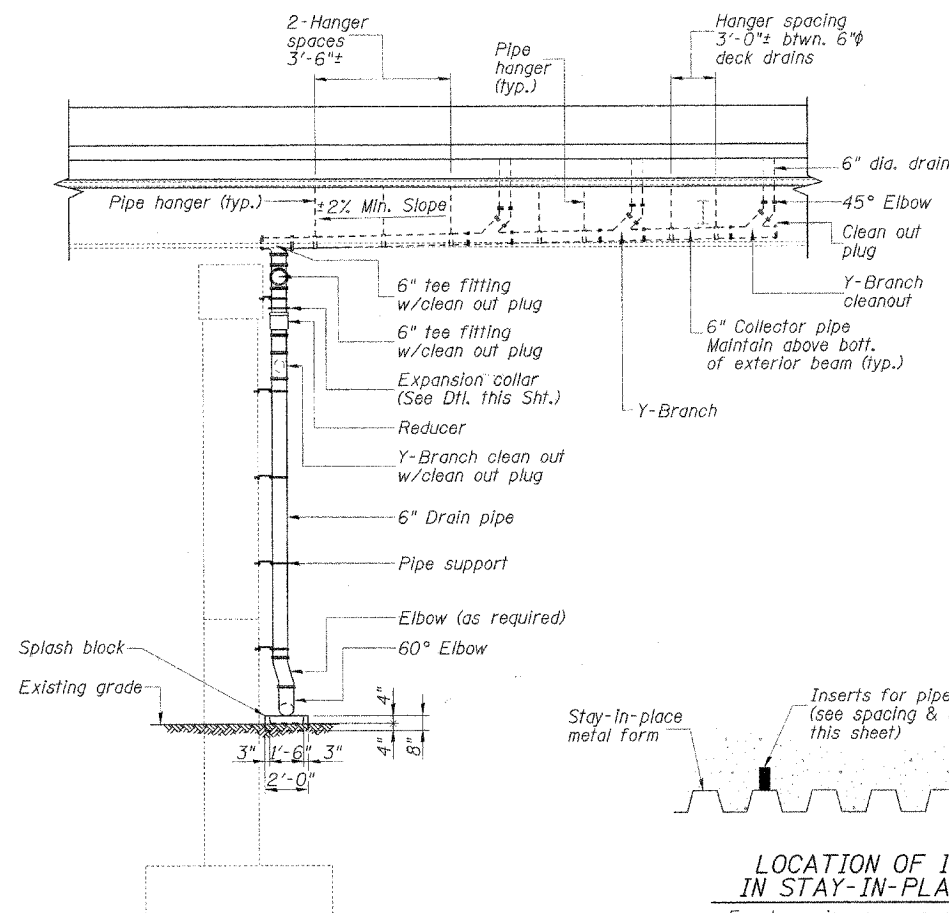


ELEVATION TYPICAL SECTION

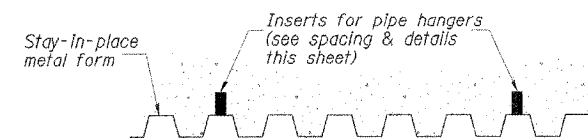
ALTERNATE PIPE HANGER DETAIL



SECTION A-A

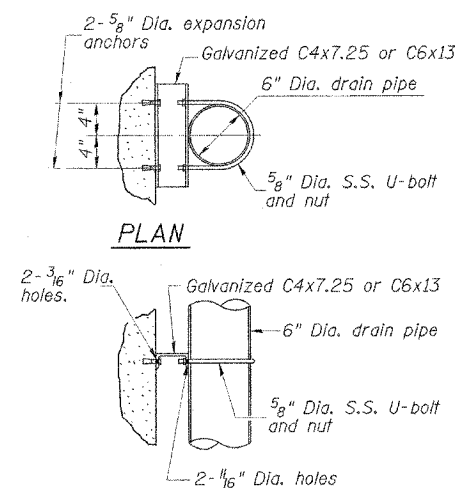


VIEW B-B

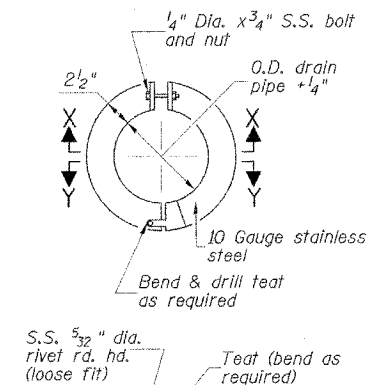
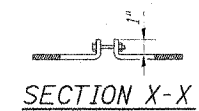


LOCATION OF INSERTS IN STAY-IN-PLACE FORMS

Exact spacing may vary slightly to ensure that inserts are located on peaks of forms



ELEVATION PIPE SUPPORT DETAIL



SECTION Y-Y DETAIL OF EXPANSION COLLAR

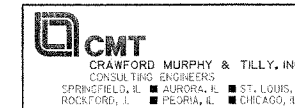
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Drainage System	L. Sum	1

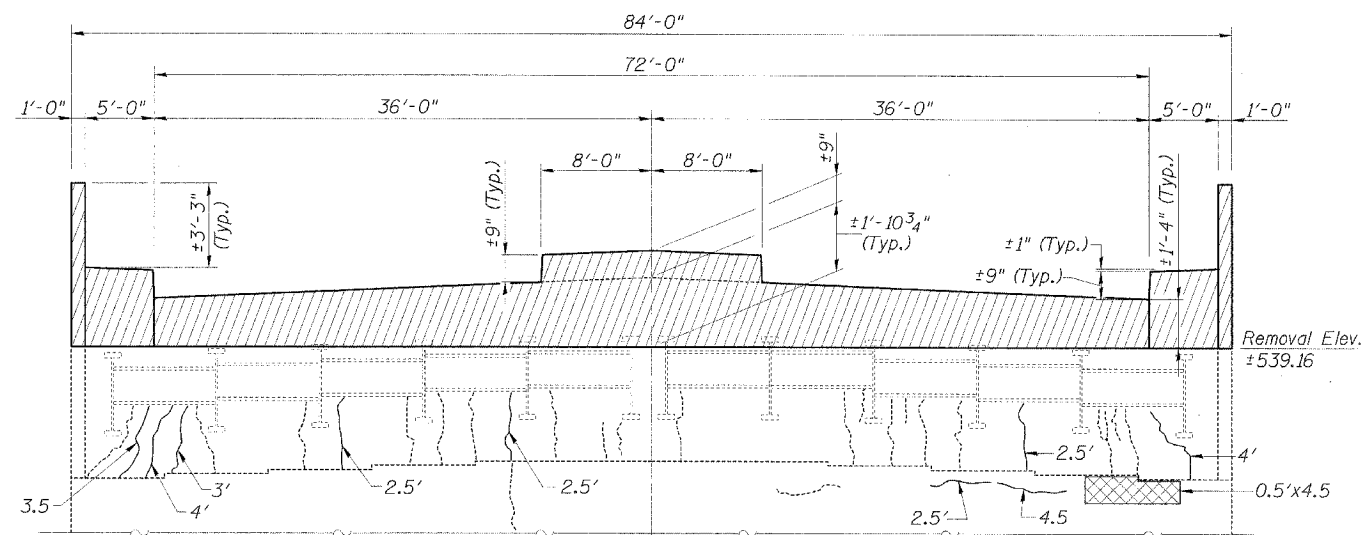
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRAINAGE SYSTEM DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091

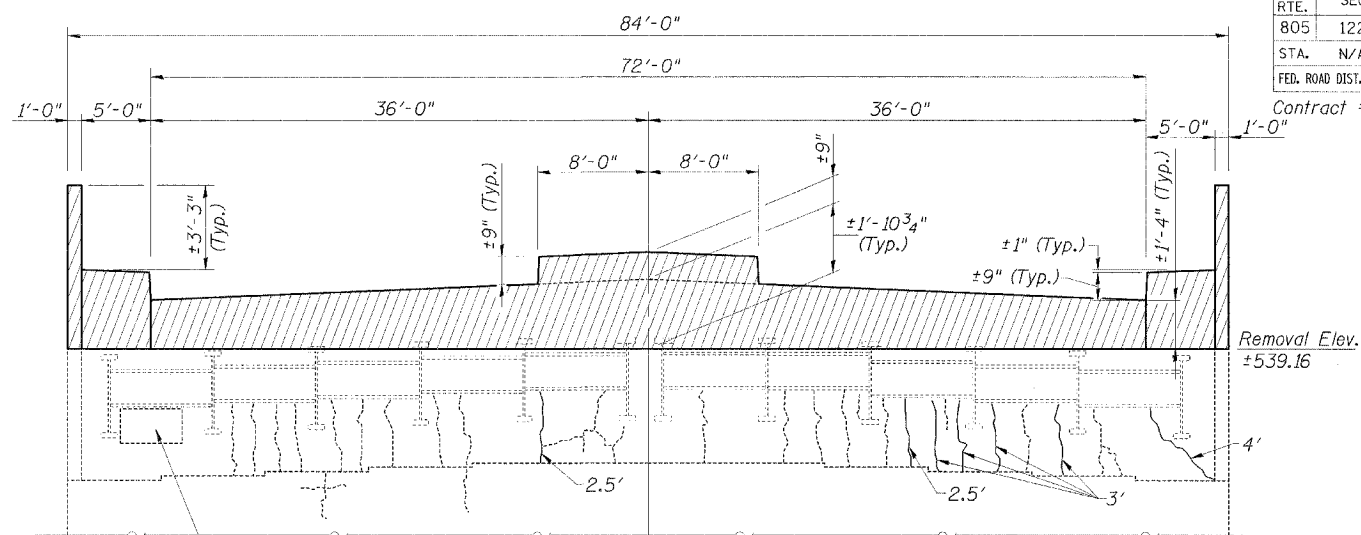
SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: CBR



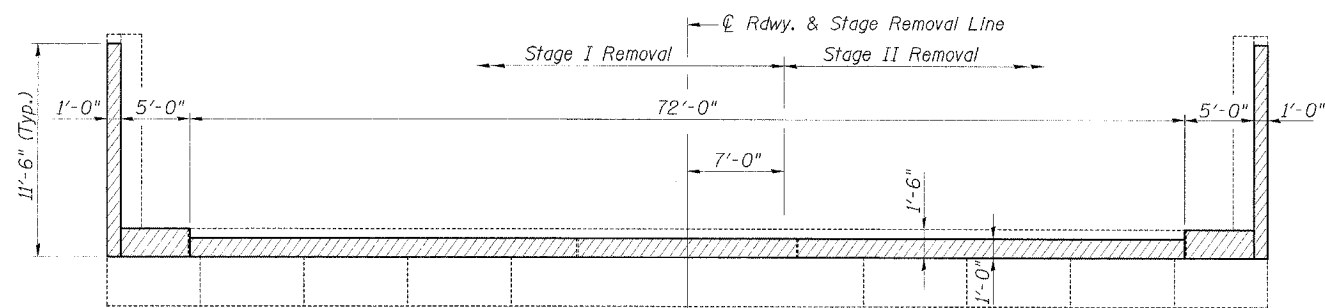
I:\ADOT\C40680\Wor\KCP\dr-5\Drawn\Sheets\REVISED DGN'S STAGING CHANGE\ADRAINAGE SYS DETAILS.DGN 7/3/2006



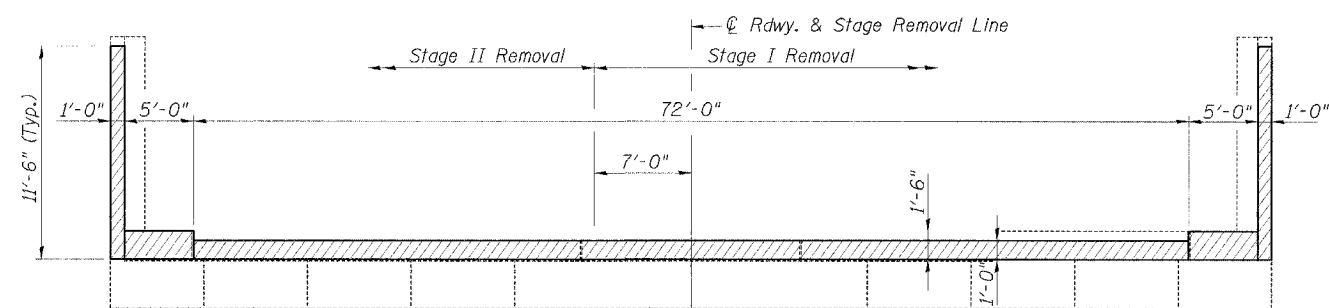
ELEVATION - WEST ABUTMENT
(Looking West)



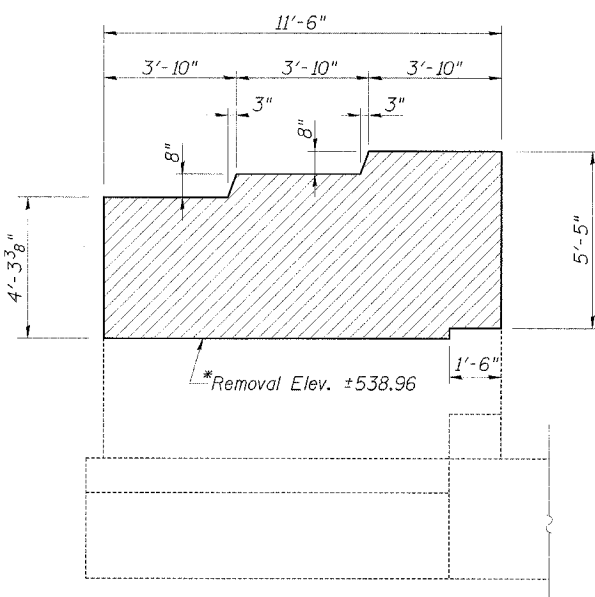
ELEVATION - EAST ABUTMENT
(Looking East)



TOP PLAN - WEST ABUTMENT



TOP PLAN - EAST ABUTMENT



WINGWALL ELEVATION

*Sawcut through the entire wall to the required elevation. Jack hammers will not be allowed. Sawcut shall be straight, level and smooth, typical requirement at all four corners.

LEGEND

- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)
- Epoxy Crack Sealing (Crack widths shown are approx. 1/16" to 1/8" in width)
- Hairline Crack (Not to be sealed)

BILL OF MATERIAL - TWO ABUTMENTS

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	20.3
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	2.3
Epoxy Crack Sealing	Foot	50

NOTES

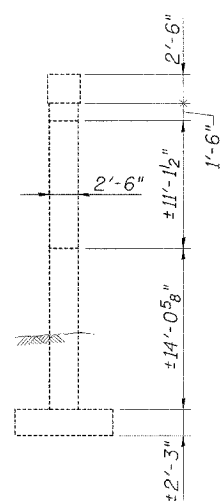
- Existing vertical reinforcing steel to be incorporated into new work shall be cleaned, straightened, cut (if required) and incorporated into new construction. Damaged reinforcing steel shall be replaced or repaired as directed by the engineer. Cost included with "Concrete Removal".

REVISIONS	
NAME	DATE

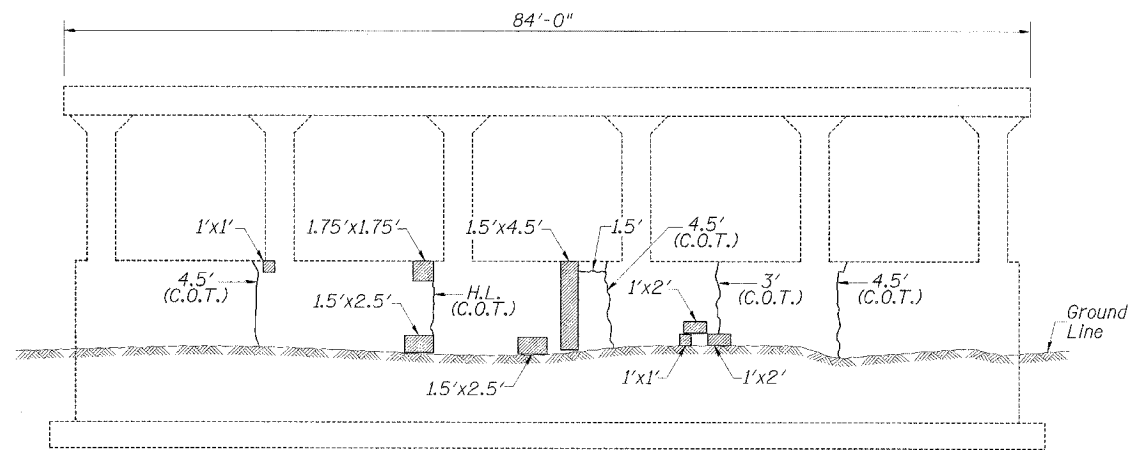
ILLINOIS DEPARTMENT OF TRANSPORTATION
ABUTMENT REMOVAL & REPAIR
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR



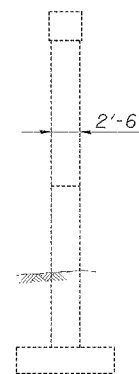
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 7/15/2006



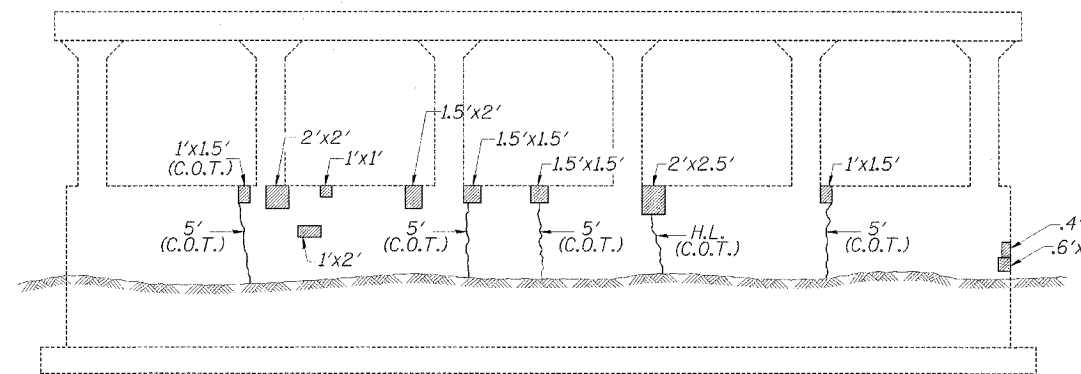
END VIEW - PIER 1
(Looking South)



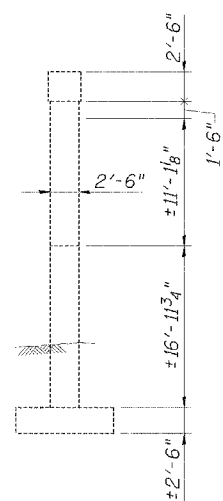
ELEVATION - PIER 1
(Looking East)



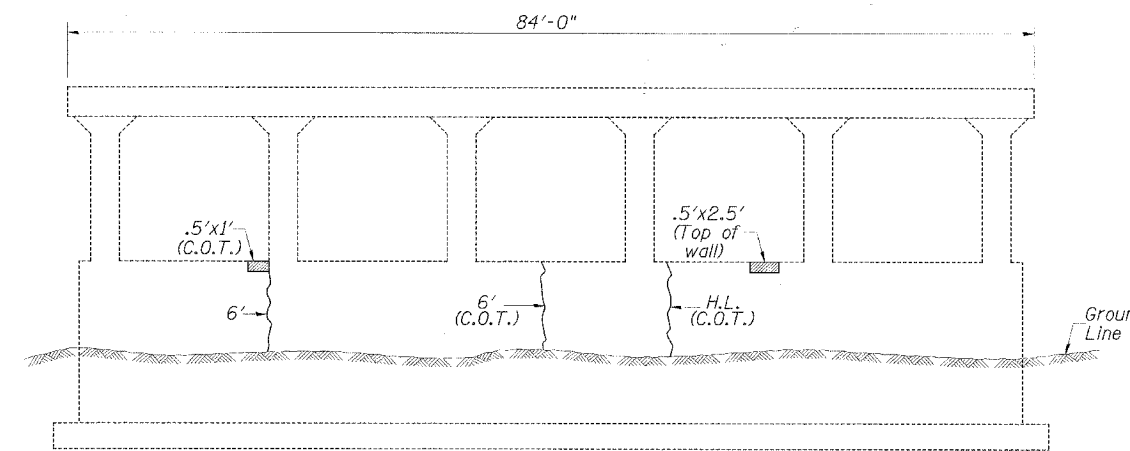
END VIEW - PIER 1
(Looking North)



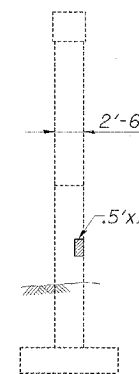
ELEVATION - PIER 1
(Looking West)



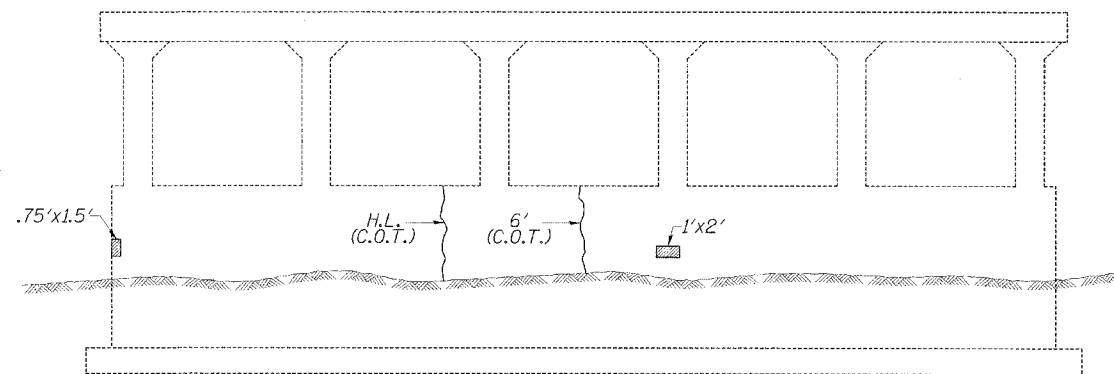
END VIEW - PIER 2
(Looking South)



ELEVATION - PIER 2
(Looking East)



END VIEW - PIER 2
(Looking North)



ELEVATION - PIER 2
(Looking West)

BILL OF MATERIAL - TWO PIERS

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	55.2
Epoxy Crack Sealing	Foot	68.5

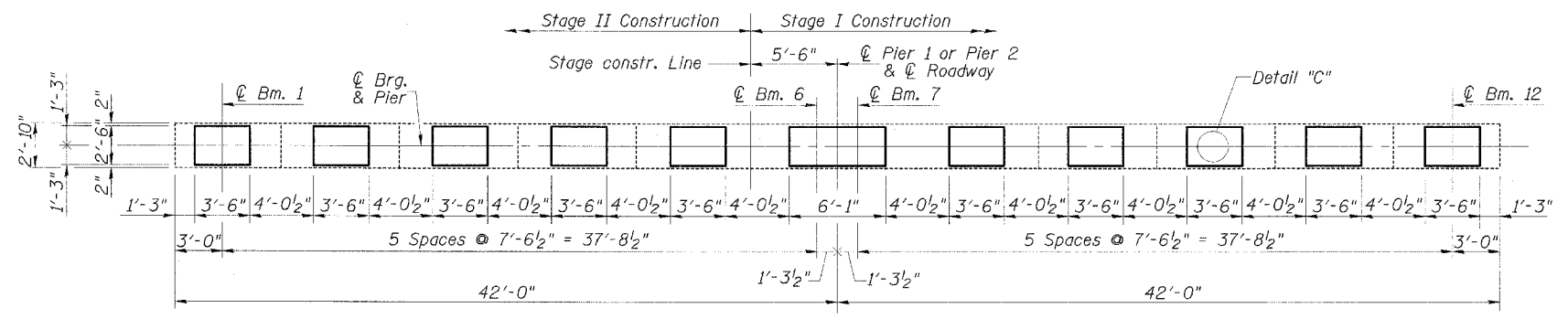
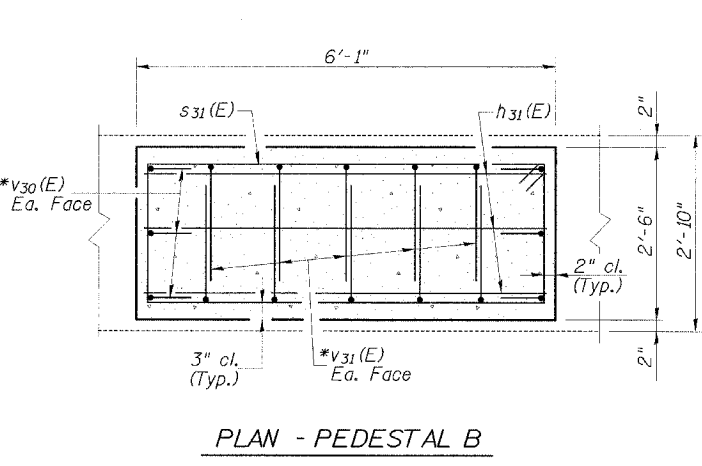
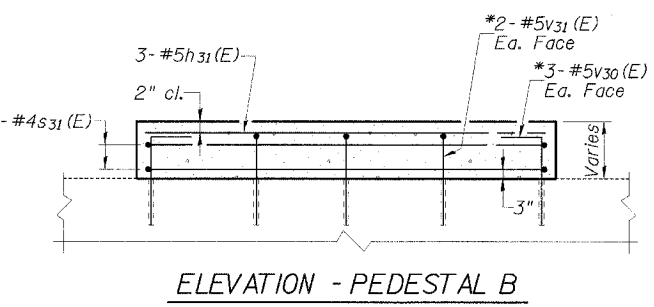
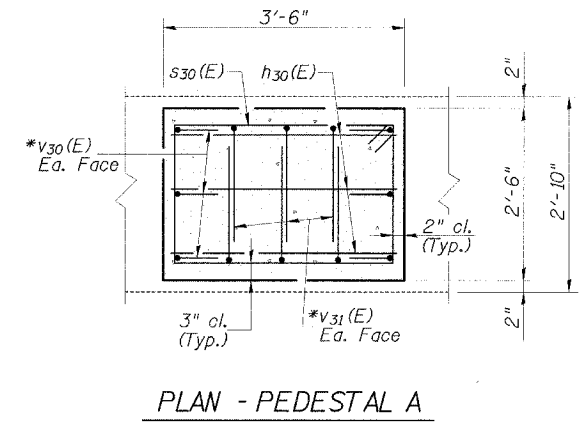
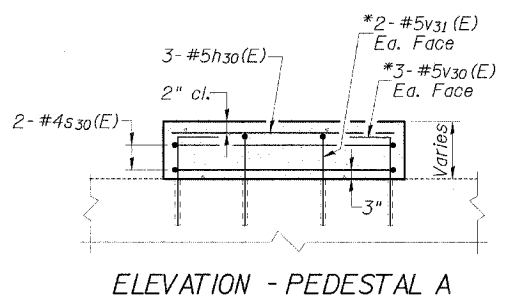
LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)
- Epoxy Crack Sealing (Crack widths shown are approx. 1/16" to 1/8" in width)
- Hairline Crack (Not to be sealed)
- C.O.T. = (Continues over top)

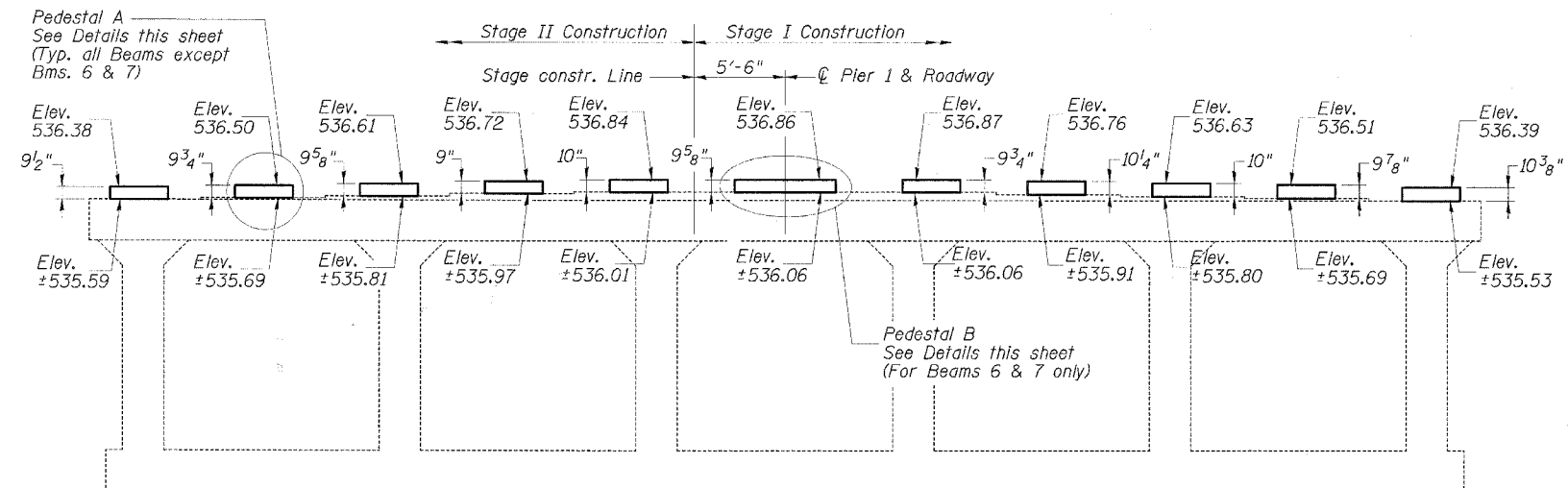
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER REPAIR DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

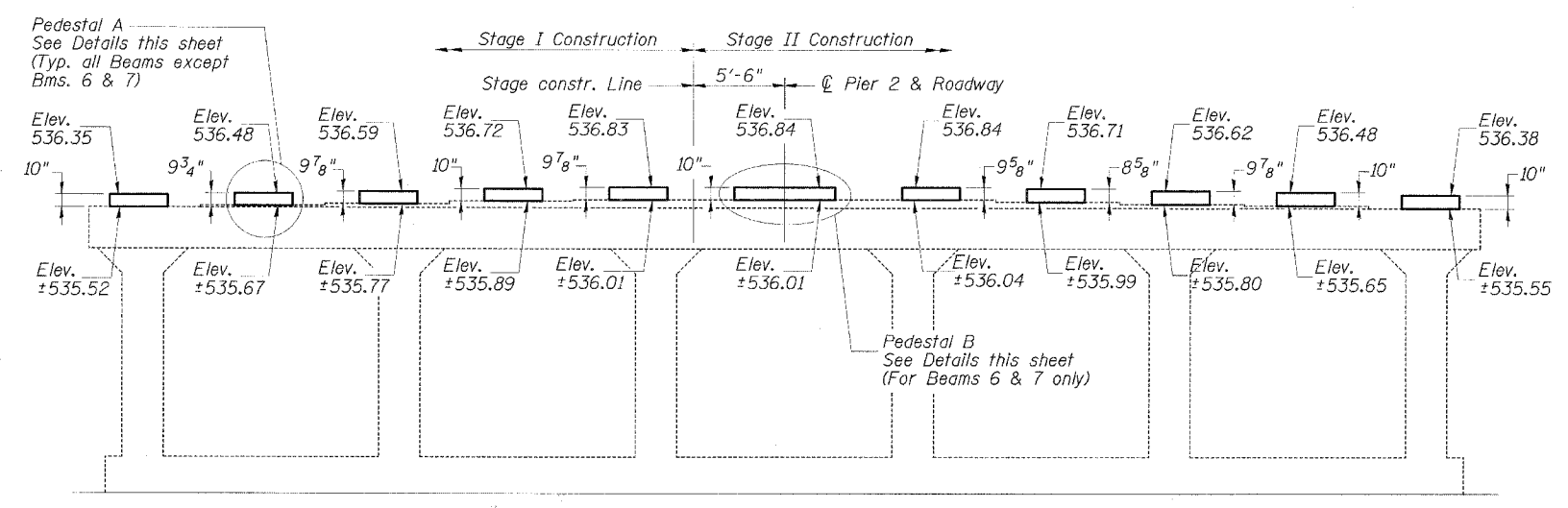




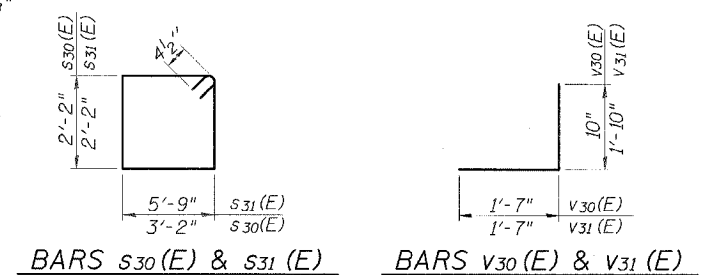
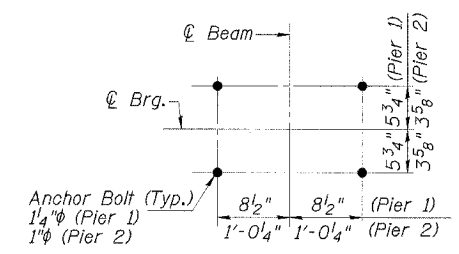
*Bars shall be epoxy grouted into 7/8" holes, 1'-0" min. depth according to Section 584 of the Standard Specifications.



PARTIAL ELEVATION - PIER 1 (Looking East)



PARTIAL ELEVATION - PIER 2 (Looking East)



BILL OF MATERIAL - TWO PIERS

Bar	No.	Size	Length	Shape
h30(E)	60	#5	3'-2"	—
h31(E)	6	#5	5'-9"	—
s30(E)	40	#4	11'-5"	□
s31(E)	4	#4	16'-7"	□
v30(E)	132	#5	2'-5"	—
v31(E)	140	#5	3'-5"	—
Concrete Structures		Cu. Yd.	6.2	
Reinforcement Bars, Epoxy Coated		Pound	1420	

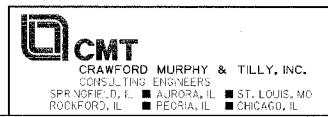
Reinforcement bars designated (E) shall be epoxy coated.

NOTES

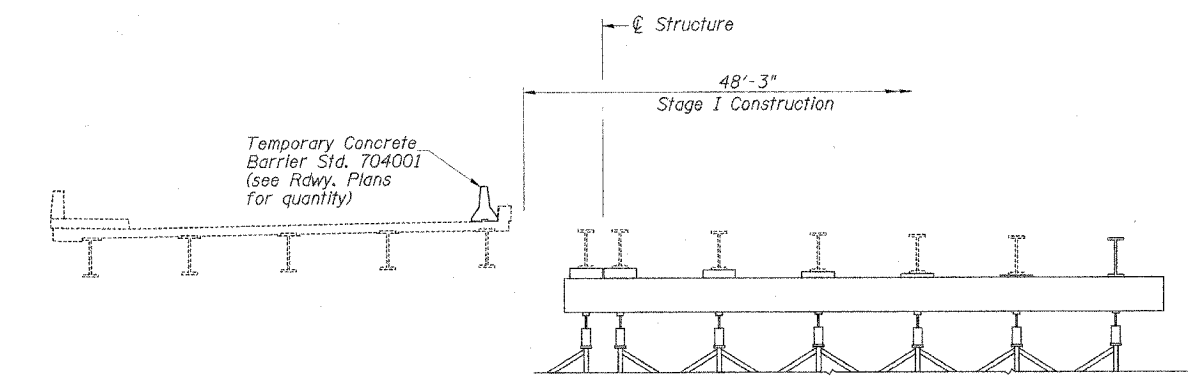
- For anchor bolt installation see sheet 18 of 26.
- Reinforcement in pedestals shall be placed to miss anchor bolts.
- Reinforcement bars designated (E) shall be epoxy coated.
- Diaphragm removal & reinstallation may be required to facilitate drilling holes. Cost shall be included in the cost of "Furnishing & Erecting Structural Steel".

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

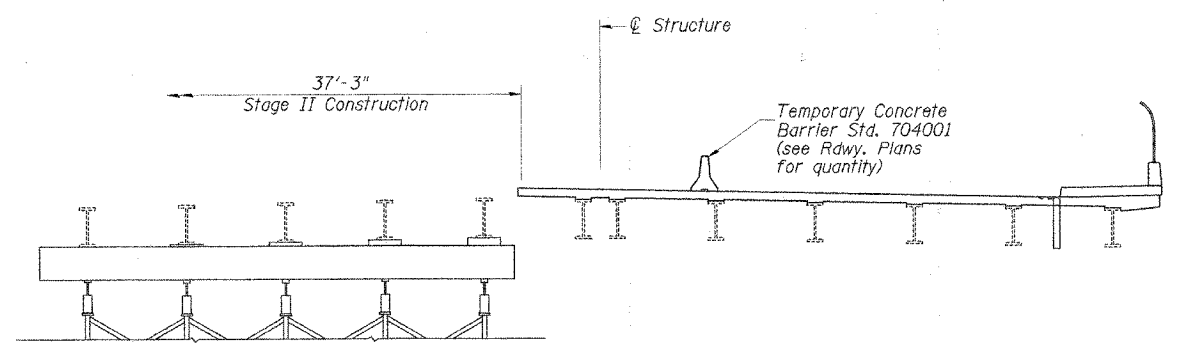


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MAIN STEEL SPANS

SECTION AT JACKING AND CRIBBING LOCATIONS - STAGE I
(Looking East)



MAIN STEEL SPANS

SECTION AT JACKING AND CRIBBING LOCATIONS - STAGE II
(Looking East)

INTERIOR BEAM REACTION TABLE

	W. Abut. or E. Abut.	Pier 1 & 2
*R@	(K)	4.2
		12.5

* For information only. Includes weight of steel beam and diaphragms only.

JACKING EXISTING SUPERSTRUCTURE NOTES:

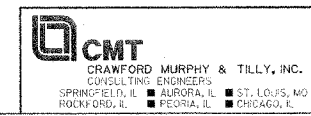
- Cribbing and falsework shall be designed to carry 150% of the Dead Load. The Contractor shall submit for approval by the Engineer, plans and design calculations, sealed by a Licensed Structural Engineer in the State of Illinois, for jacking, cribbing and bearing removal prior to commencing any work at the bearings including fabrication, erecting or construction of the cribbing. See Special Provisions for "Jacking Existing Superstructure".
- All beams at abutments and piers shall be lifted simultaneously to a maximum $\frac{3}{4}$ " above their current elevations.
- During the jacking and cribbing operation, the relative elevation between adjacent beams shall not vary more than $\frac{1}{8}$ " from their original elevation differential. Relative elevations at adjacent substructure locations shall not vary more than $\frac{1}{4}$ " from the original relative elevations.
- Jack capacities shall be based on maximum expected load present during lifting, derived from reactions shown in the Interior Beam Reaction Table, this sheet.
- Hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation. The Contractor shall design and attach steel stiffening angles to the web of the beams at the temporary jacking points when the beam web thickness is not adequate to carry the jacking load. Steel plates shall be placed under jacks bearing directly on the existing substructure to distribute the jacking load and prevent damage to the existing concrete. When lifting the entire superstructure as a unit, jacks shall be placed in a manner and in locations that will ensure that the jacks will be equally loaded and the load will be uniformly distributed to the foundation of the jacking system. Cost for designing and installing stiffening angles, hardwood timbers and miscellaneous hardware is included in "Jacking Existing Superstructure". Contractor's design calculations for jacking shall include calculations showing the adequacy of the existing structure to carry the jacking loads.
- Prior to ordering any material or commencing any work at the bearings, the Contractor shall verify in the field all bearing height and shim thickness dimensions shown in the as-built drawings. Any variations in these dimensions from the as-built drawings shall not be cause for additional compensation to the Contractor.
- Falsework shall be capable of carrying all expected vertical and horizontal forces included in Division I, Chapter 3, of the 2002 "Standard Specifications for Highway Bridges". Service load design may be used when considering Group Loads in Table 3.22.1A. Only Group I thru VI need to be considered for load combinations. Falsework shall be capable of accommodating thermal movements, and is included in "Jacking Existing Structure".
- When falsework is supported on timber mats, the following maximum allowable pressures shall be used to determine the required area of timber mats, unless information is available indicating that higher values may be used:

Supporting Material	Max. Allowable Pressure (Tons/ Sq. Ft.)
Natural Ground (unsaturated)	0.5
Concrete Slope Walls & Bituminous Shoulders	1.0
Bituminous Pavements	2.0
Concrete Pavements	4.0

Where footings for cribbing are on slope walls, Contractor to provide for leveling. The Contractor is responsible for locating and protecting underground facilities and utilities. Cost to repair or replace damaged facilities or utilities shall be borne by the Contractor. The Contractor shall monitor the settlement and make adjustments to maintain the superstructure at its original elevation.

- New bearing and concrete pedestals shall be in place and jacks lowered before pouring new deck or approach slab.

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
JACKING AND CRIBBING DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

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 = $1.25 \times f_y \times A_t$
(Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.

$f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

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	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

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

ROLLED THREAD DOWEL BAR



** ONE PIECE

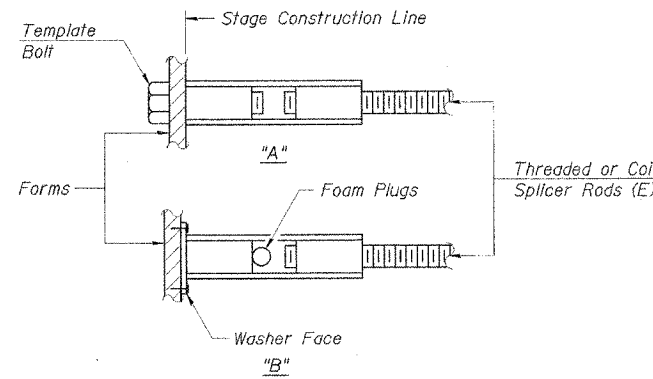
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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

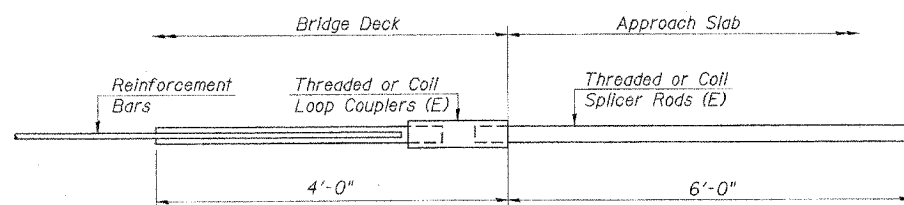


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

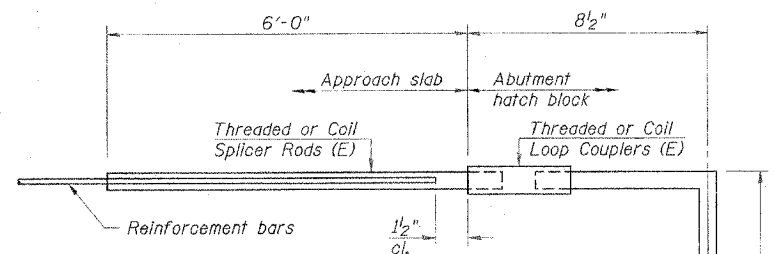
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



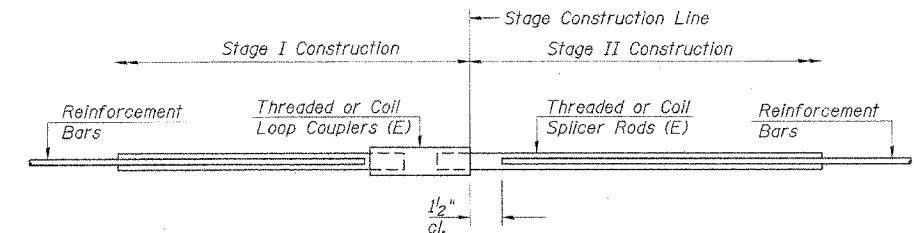
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = N.A.



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 170

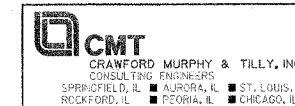


STANDARD

Bar Size	No. Assemblies Required	Location
#5	636	Superstructure
#6	4	West Abut.
#6	4	East Abut.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 STATION 69+96.56 S.N. 082-0091
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR



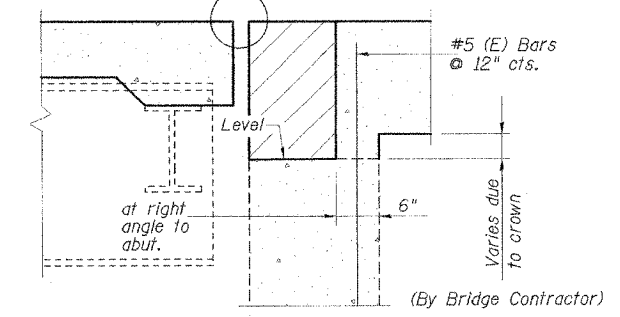
L:\DOT\CA08610\Work\Kor\dr-5\DRAW\Sheets\REVISED\DWG\5 STAGING CHANGE\BAR SPLICER.DWG 7/3/2006

BSD-1

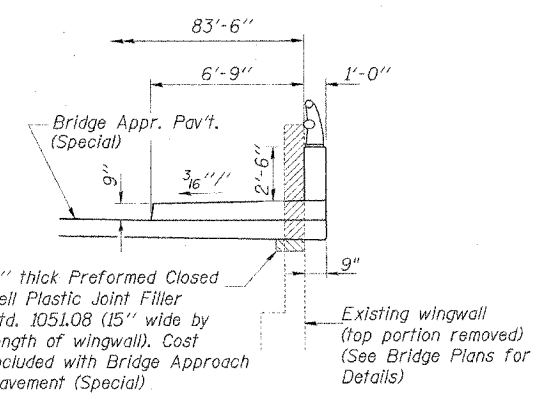
10-22-04

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	52
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS FED. AID PROJECT			
	Contract #76558		SHEET 1 OF 4	

See Bridge Plans for Bridge Joint System Details. Coordinate placement of Bridge Joint System with Bridge Contractor.



SECTION A-A



SECTION F-F

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $n = 8.5$

MIN. BAR LAPS

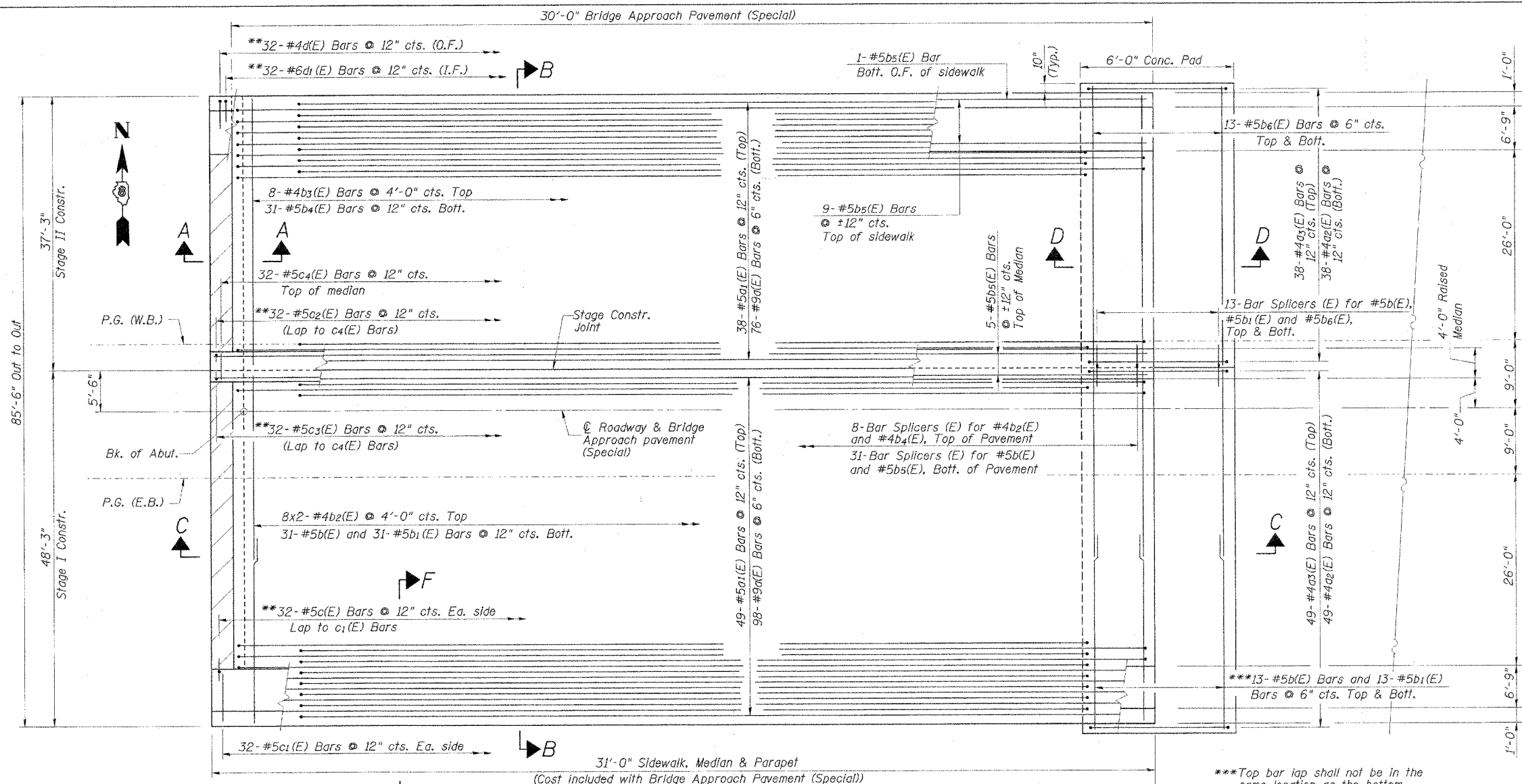
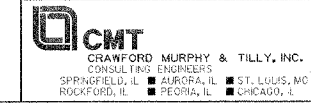
#4 Bar = 1'-4"
 #5 Bar = 1'-8"

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. All construction joints shall be bonded.
3. See Sheet 2 of 4 for Sections C-C, D-D & Detail "E".
4. For Bar Splicer Details see Sheet 4 of 4.
5. See Sheet 2 of 4 for Parapet Details and Bill of Material.
6. Hatch area to be poured after bridge superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure in Bridge Plans.
7. Bars indicated thus 8x2-#4 etc. indicates 8 lines of bars with 2 lengths per line.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE APPROACH PAVEMENT (SPECIAL)
 PLAN AND TYP. CROSS SECTION
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: CBR



PLAN - BRIDGE APPROACH PAVEMENT (SPECIAL)

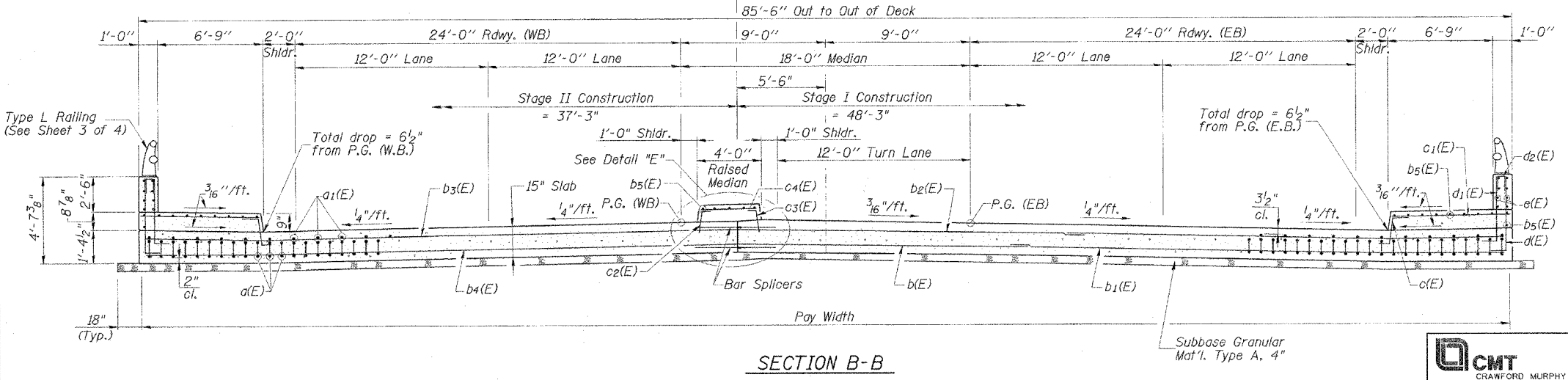
**Coordinate placement of c(E), cz(E), c3(E), d(E) & d1(E) bars located in the hatch block with bridge contractor. Cost included with Bridge Approach Pavement (Special)

*East Approach shown. West Approach similar.

***Top bar lap shall not be in the same location as the bottom bar lap.

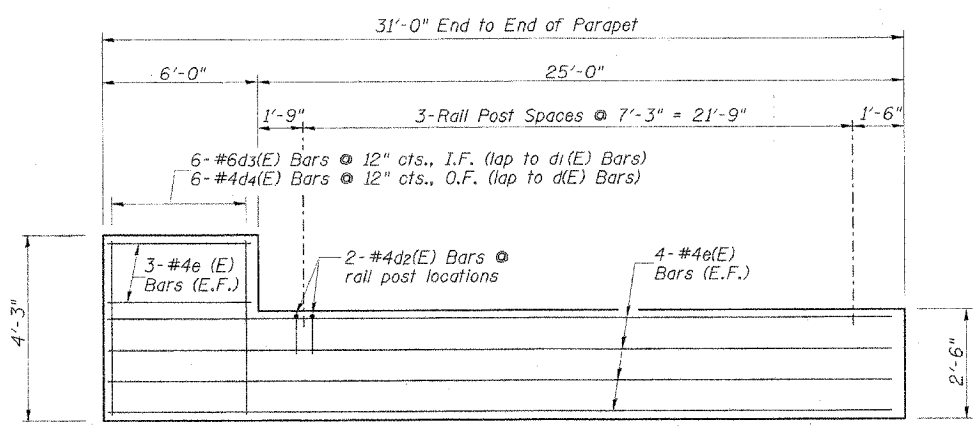
Elevations to be determined from Stage II Constr. cross slope only

Elevations to be determined from Stage I Constr. cross slope only

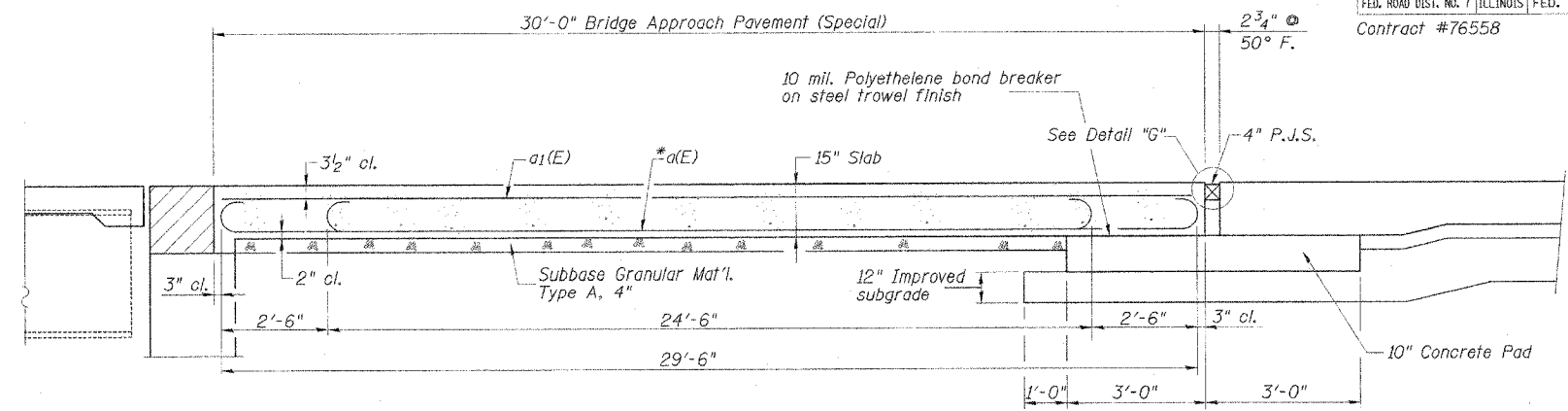


SECTION B-B

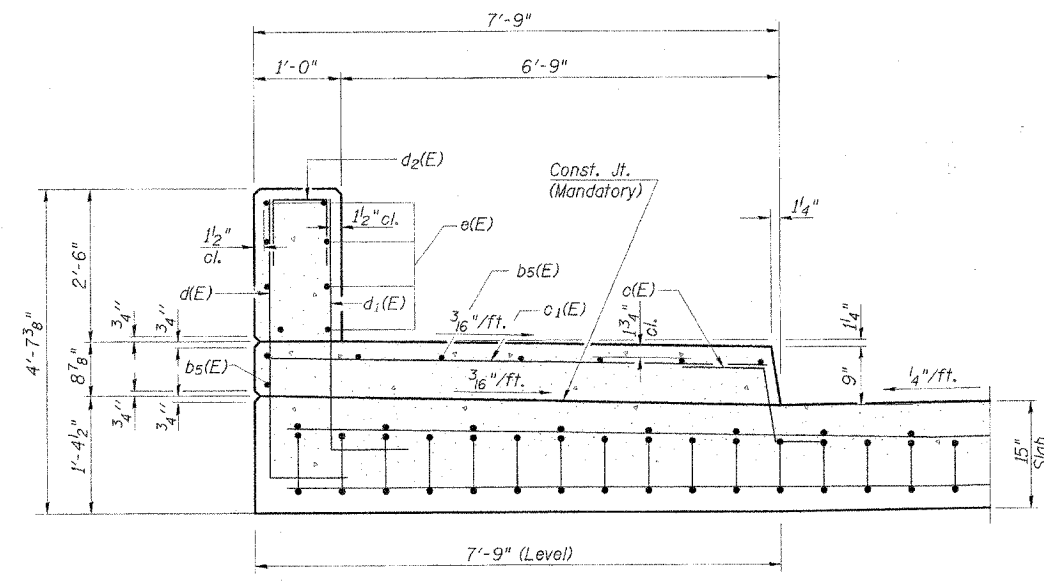
I:\SUBJECT\04061610\WORK\04061610.dwg: 5-DRAWN SHEETS: REVISIONS: STAGING CHANGE: BRIDGE APPROACH PLAN: REV: DON 7/27/2006



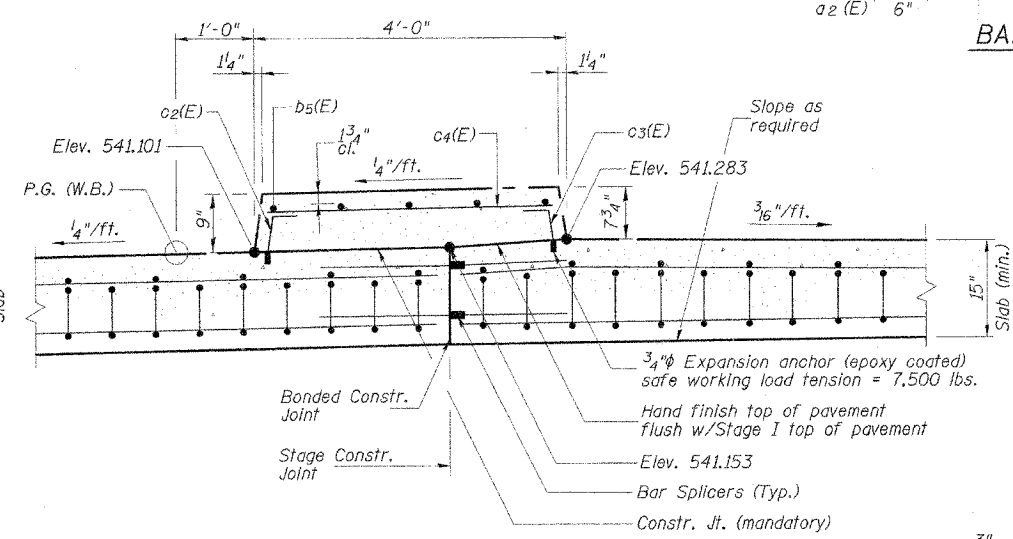
INSIDE ELEVATION - SOUTH PARAPET
(Looking South - North Parapet similar)



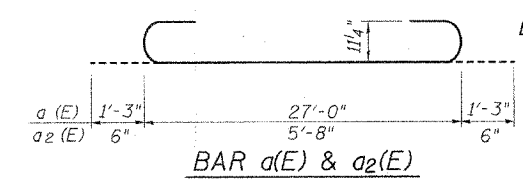
SECTION C-C
*Stagger a(E) Bars as shown on plan full width



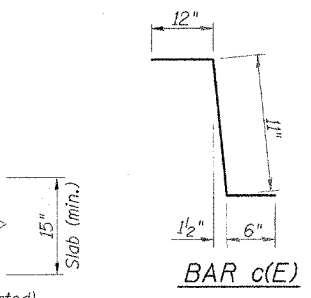
SECTION THRU SIDEWALK



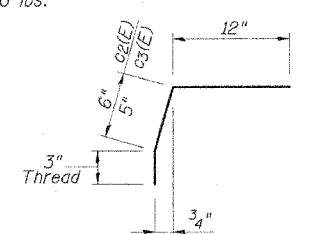
DETAIL 'E' SECTION THRU RAISED MEDIAN



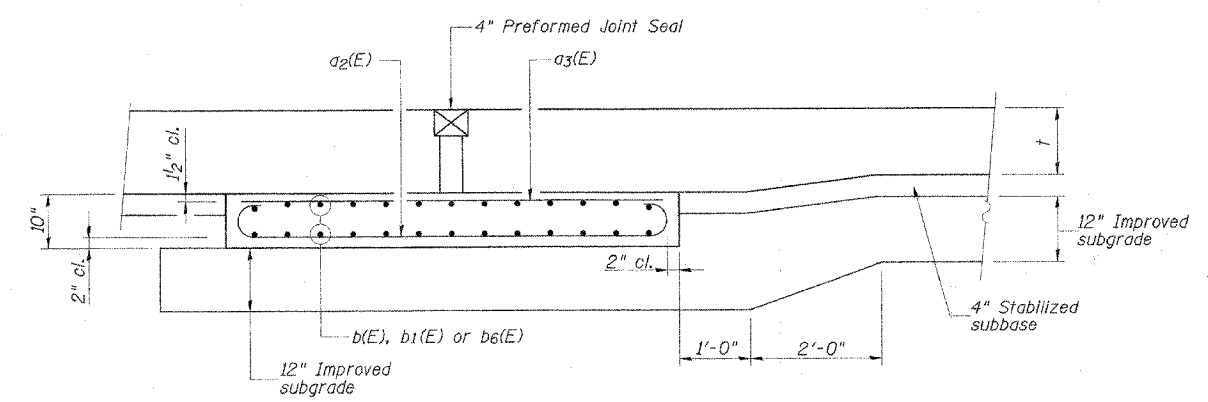
BAR a(E) & a2(E)



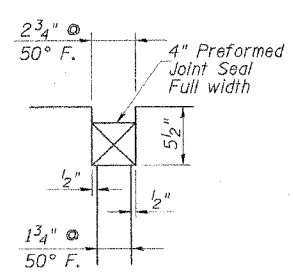
BAR c(E)



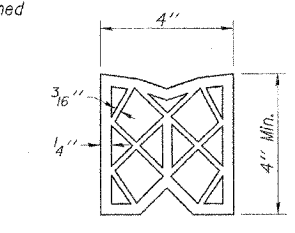
BAR c2(E) & c3(E)



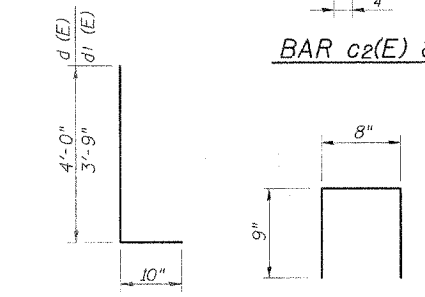
SECTION D-D - RIGID PAVEMENT



DETAIL G



PREFORMED JOINT SEAL



BAR d(E) & d1(E) BAR d2(E)

BILL OF MATERIAL - TWO APPROACHS BRIDGE APPROACH PAVEMENT (SPECIAL)

Bar	No.	Size	Length	Shape
a (E)	348	#9	29'-6"	U
a1 (E)	174	#5	29'-6"	—
a2 (E)	174	#4	6'-8"	U
a3 (E)	174	#4	5'-8"	—
b (E)	114	#5	17'-6"	—
b1 (E)	114	#5	33'-6"	—
b2 (E)	32	#4	24'-10"	—
b3 (E)	16	#4	37'-0"	—
b4 (E)	62	#5	37'-0"	—
b5 (E)	50	#5	30'-8"	—
b6 (E)	52	#5	37'-9"	—
c (E)	128	#5	2'-5"	L
c1 (E)	128	#5	7'-5"	—
c2 (E)	64	#5	1'-9"	L
c3 (E)	64	#5	1'-8"	L
c4 (E)	64	#5	3'-3"	—
d (E)	128	#4	4'-10"	L
d1 (E)	128	#6	4'-7"	L
d2 (E)	32	#4	2'-2"	L
d3 (E)	24	#6	4'-0"	—
d4 (E)	24	#4	4'-0"	—
e (E)	32	#4	30'-8"	—
e1 (E)	24	#4	5'-8"	—
Bridge Approach Pavement (Special)			Sq. Yd.	570

Reinforcement bars designated (E) shall be epoxy coated.

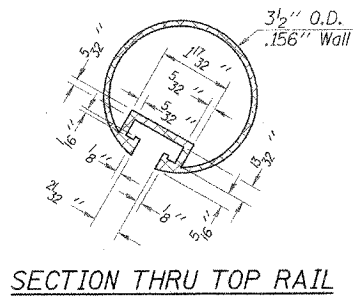
REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE APPROACH PAVEMENT (SPECIAL)
 SECTIONS AND DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK
 SCALE: NONE DRAWN BY: GLD
 DATE: 7/03/06 CHECKED BY: GBR

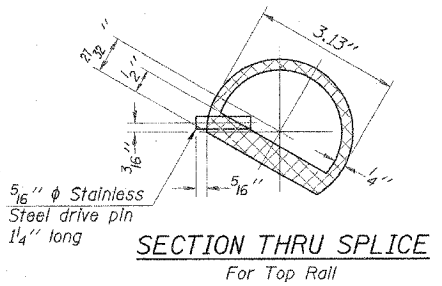
CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ BURLINGAME, CA ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

I:\DOT\104C6610\work\104c6610\REVISED DOW'S STAGING CHANGE\BRIDGE APPR PLAN 2 REV.dgn
 7/3/2006

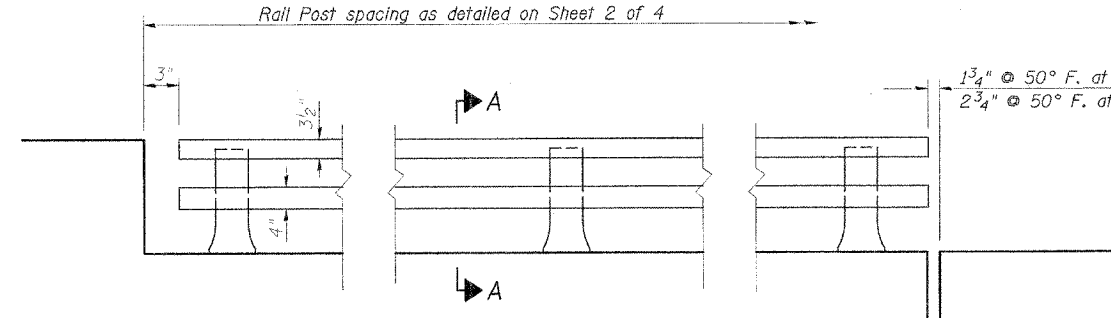
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122VBR-1	ST. CLAIR	58	54
STA.	TO STA.			
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
Contract #76558		SHEET 3 OF 4		



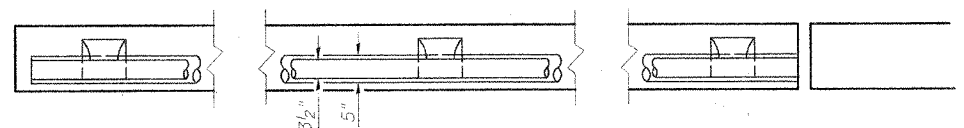
SECTION THRU TOP RAIL



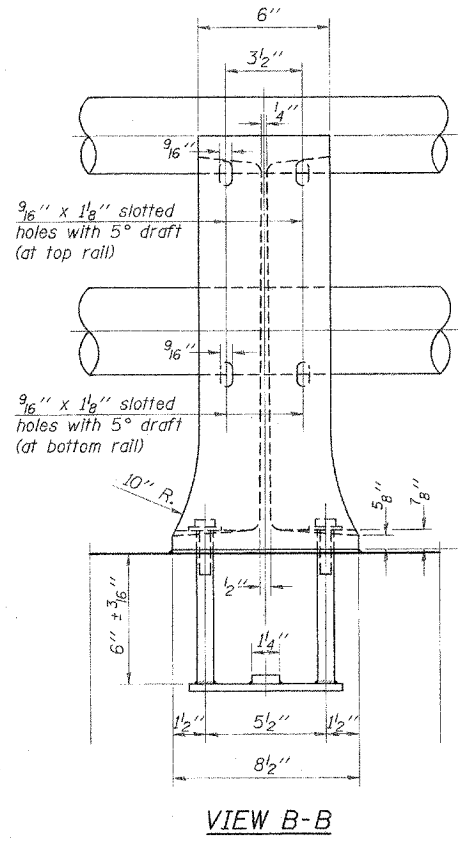
SECTION THRU SPLICE
For Top Rail



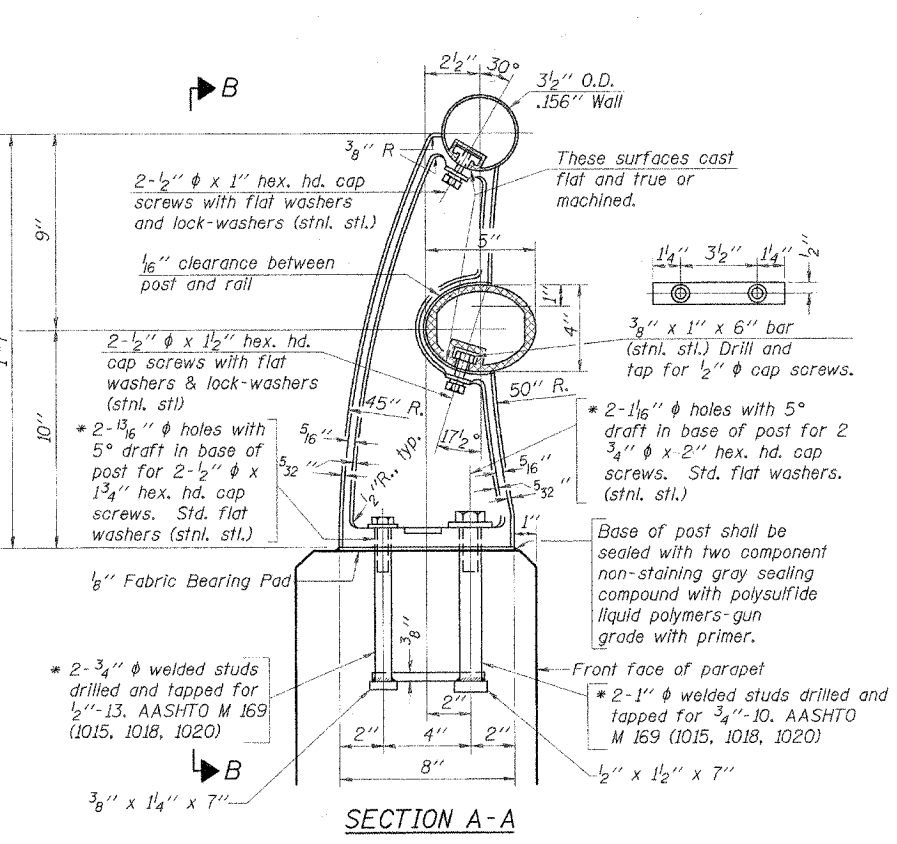
ELEVATION



PLAN

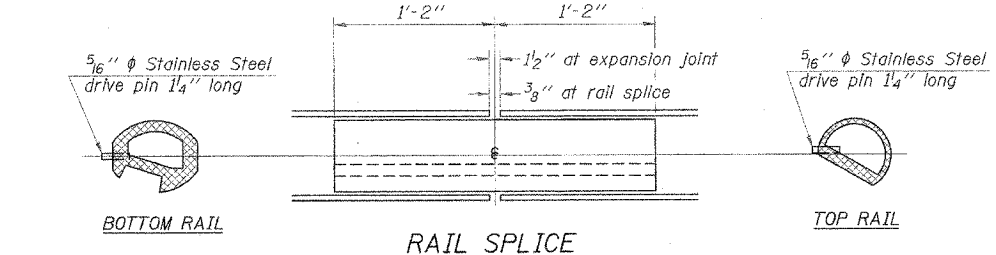


VIEW B-B

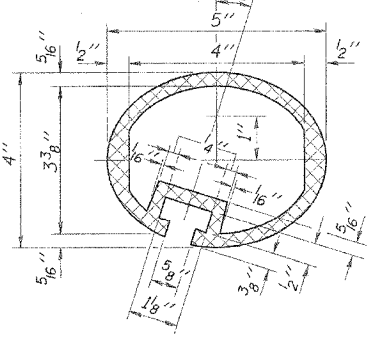


RAIL POST DETAILS

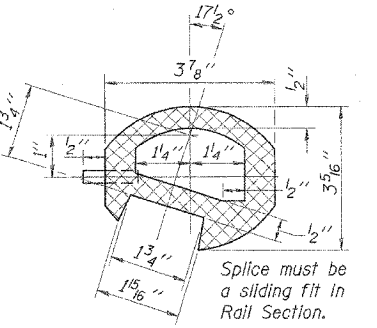
* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting stainless steel anchor rods of the same diameter and grade as the specified cap screws. Embedment shall be according to the manufacturer's specifications.



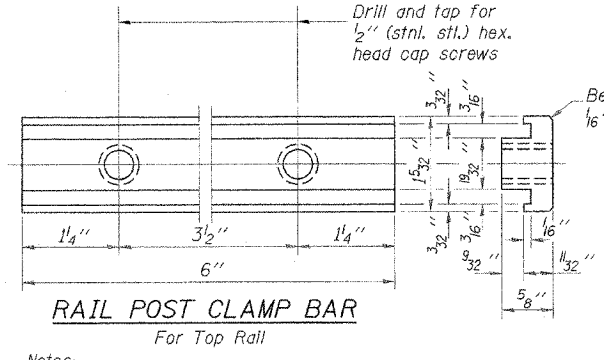
RAIL SPLICE



SEC. THRU ELLIPTICAL RAIL SECTION

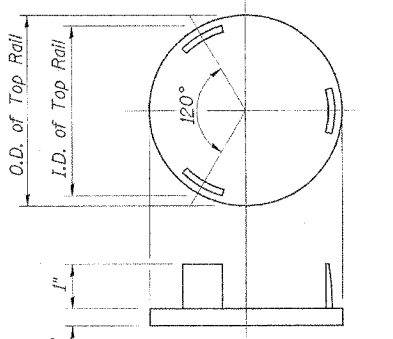


SEC. THRU SPLICE

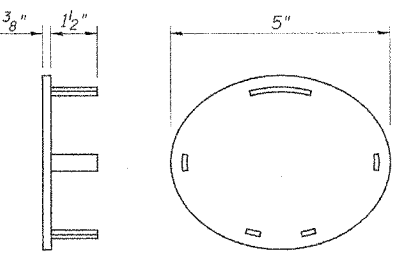


RAIL POST CLAMP BAR
For Top Rail

Notes:
All Posts shall be normal to parapet.
All joints in rail shall be spliced per detail.
Provide 1-1/8 inch and 2-1/8 inch Aluminum Shims for all Posts.
Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be included in the cost of Bridge Approach Pavement (Special)
Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.



CAST END CAP
For Top Rail
(8 Required)



CAST END CAP
For Bottom Rail
DRIVE FIT TYPE
(8 Required)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE APPROACH PAVEMENT (SPECIAL)
TYPE L RAILING DETAILS
F.A.P. ROUTE 805
SECTION 122VBR-1
ST. CLAIR COUNTY
ILLINOIS ROUTE 161 OVER METRO-LINK
SCALE: NONE
DATE: 7/03/06
DRAWN BY: GLD
CHECKED BY: GBR

CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

L:\DOT\060810\Work\for\del-SUBRAMANIAM\REVISED DCH'S STAGING CHANGE\TYPE L RAILING 7/27/06

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 = $1.25 \times f_y \times A_t$
(Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{sallow} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.

f_{sallow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

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	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be included in the cost of Bridge Approach Pavement (Special).

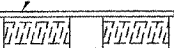
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

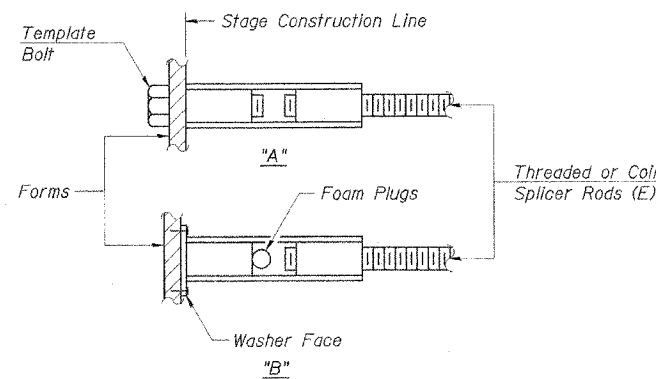
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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

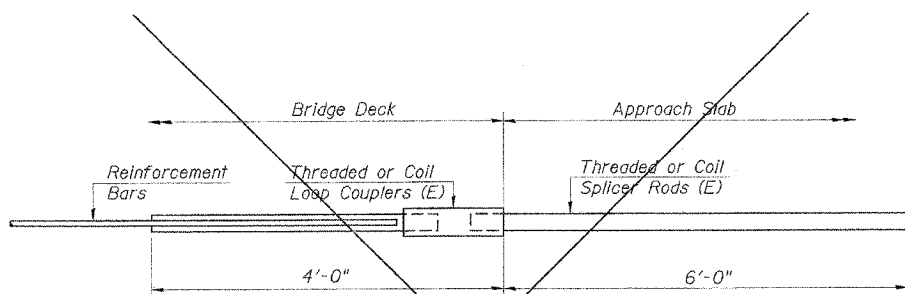


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

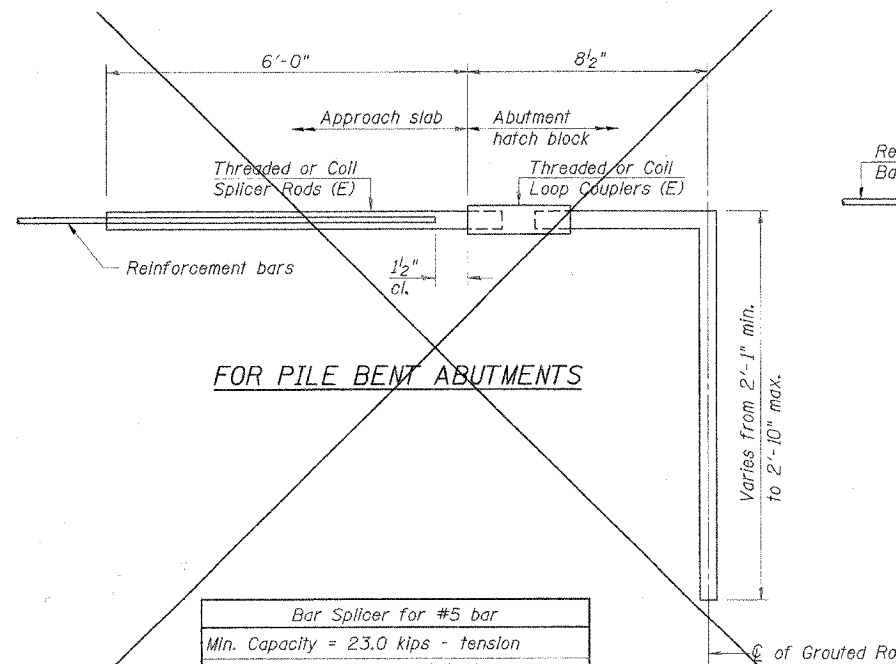
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



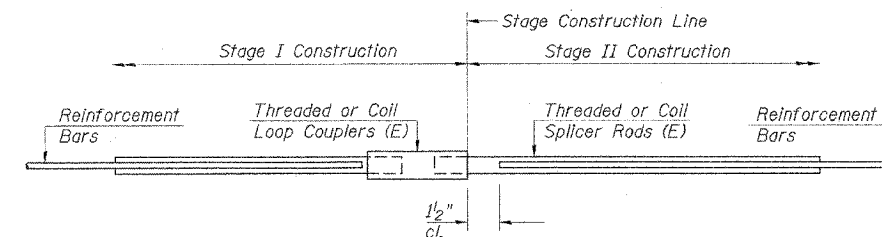
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = N.A.



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = N.A.



STANDARD

Bar Size	No. Assemblies Required	Location
#4	16	Appr. Pav'mt.
#5	62	Appr. Pav'mt.
#5	52	Conc. Pad

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE APPROACH PAVEMENT (SPECIAL)
 BAR SPLICER ASSEMBLY DETAILS
 F.A.P. ROUTE 805
 SECTION 122VBR-1
 ST. CLAIR COUNTY
 ILLINOIS ROUTE 161 OVER METRO-LINK

SCALE: NONE
 DATE: 7/03/06

DRAWN BY: GLD
 CHECKED BY: GBR



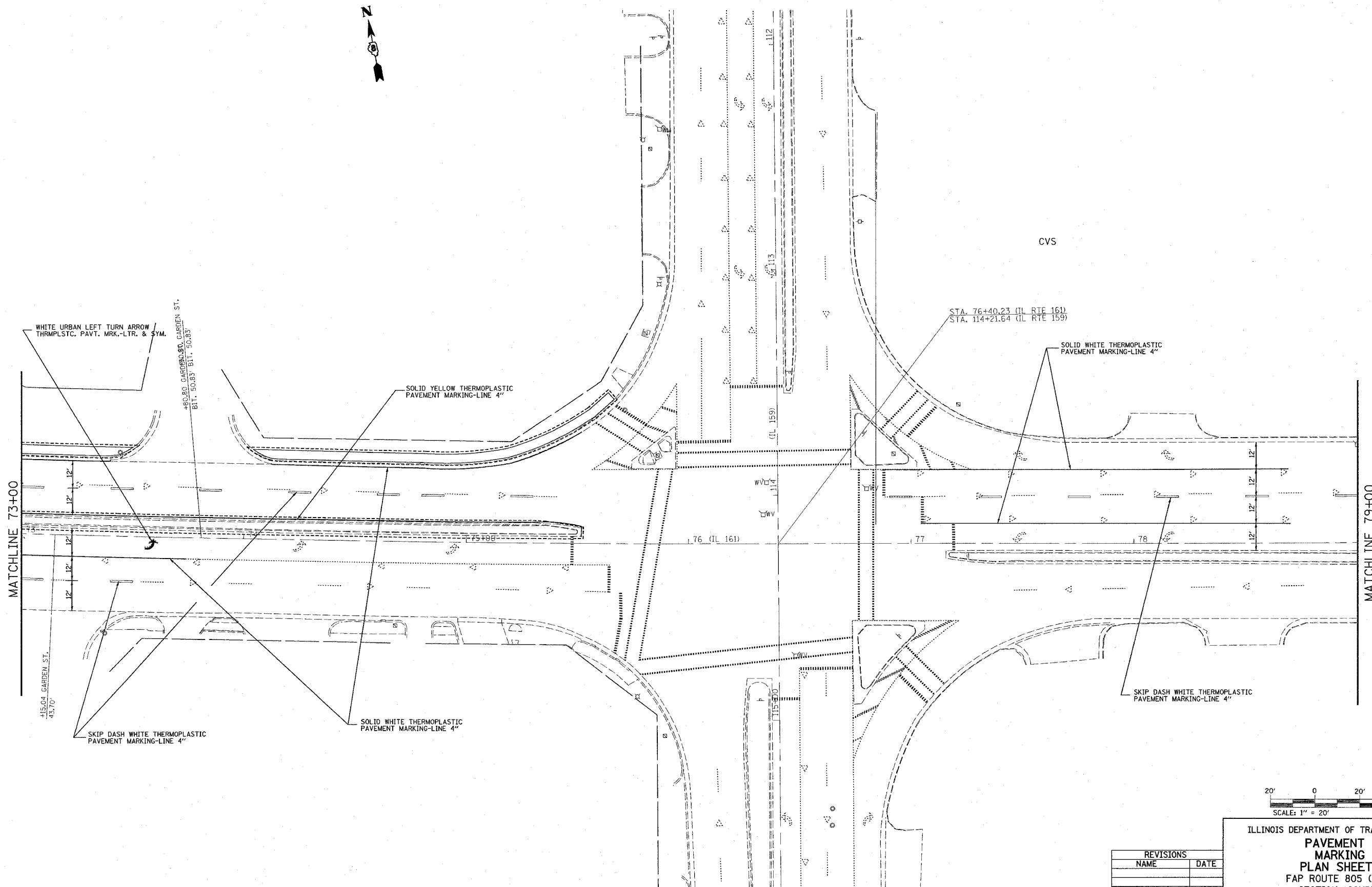
L:\DDOT\04066\04\Work\Drawings\5\DRAWING\Sheets\REVISED\DG\IS STAGING\CHANGE\APPROACH BAR SPLICER.dwg 7/3/2006

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	57A

STA. TO STA.

EXISTING CONDITIONS:

PLAN	DATE
DESIGNED	
PLOTTED	
ALIGNMENT CHECKED	
MARKED	
CADD FILE NAME	
NO.	



MATCHLINE 73+00

MATCHLINE 79+00

+15.04 GARDEN ST.
43.70'

WHITE URBAN LEFT TURN ARROW
THERMOPLSTC. PAVT. MK.-LTR. & SYM.

+PRO.80 GARDEN ST. GARDEN ST.
BIT. 50.83' BIT. 50.83'

SOLID YELLOW THERMOPLASTIC
PAVEMENT MARKING-LINE 4"

SKIP DASH WHITE THERMOPLASTIC
PAVEMENT MARKING-LINE 4"

SOLID WHITE THERMOPLASTIC
PAVEMENT MARKING-LINE 4"

STA. 76+40.23 (IL RTE 161)
STA. 114+21.64 (IL RTE 159)

CVS

SOLID WHITE THERMOPLASTIC
PAVEMENT MARKING-LINE 4"

SKIP DASH WHITE THERMOPLASTIC
PAVEMENT MARKING-LINE 4"



REVISIONS	
NAME	DATE

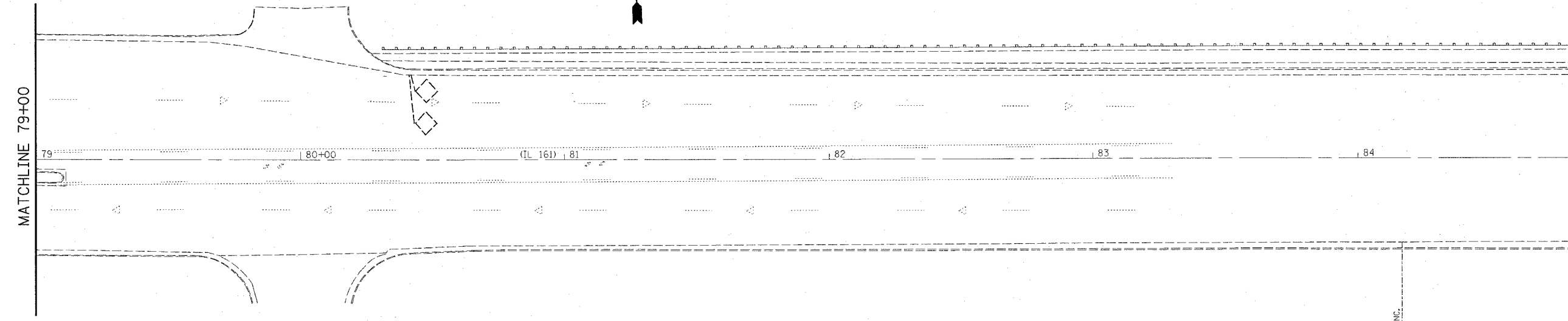
ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING PLAN SHEETS
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

DRAWN BY:

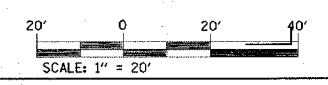
PLOT DATE: 10/19/2006

DATE: 10/19/2006
 ID: 1912006
 REF: 10007162
 REF: 101109762

CONTRACT NUMBER: T6558				
FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	122-VBR-1	ST. CLAIR	58	57B
STA.		TO STA.		
CONTRACT NO:				



PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	APPROVED		
	PL. OF MAY CHECKED		
	CADD FILE NAME		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING PLAN SHEETS
 FAP ROUTE 805 (IL161)
 SECTION 122VBR-I
 ST. CLAIR COUNTY

DRAWN BY:

PLOT DATE: 10/19/2006

68 01/15/06
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