

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	1
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
PROJECT BHF-0068(097)
LIVINGSTON COUNTY

C - 93 - 072 - 05
BRIDGE SUPERSTRUCTURE REPLACEMENT

INDEX OF SHEETS

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STATE STANDARDS

00001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001	AREAS OF REINFORCEMENT REBARS
001006	DECIMAL OF AN INCH AND OF A FOOT
515001-02	NAME PLATE FOR BRIDGES
630001-05	STEEL PLATE BEAM GUARDRAIL
631032-01	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701006-02	OFF-RD. OPERATIONS 2L, 2W 4.5 m (15') TO PAVEMENT EDGE FOR SPEEDS ≥ 45 MPH
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY ON-RD. TO 600 mm (24") FOR SPEEDS ≥ 45 MPH
701301-02	LANE CLOSURE 2L, 2W SHORT TERM OPERATIONS
701306-01	LANE CLOSURE 2L, 2W SLOW MOVING OPERATIONS - DAY ONLY FOR SPEEDS ≥ 45 MPH
701311-02	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701321-08	LANE CLOSURE 2L, 2W BRIDGE REPAIR WITH BARRIER
701326-02	LANE CLOSURE 2L, 2W PAVEMENT WIDENING FOR SPEEDS ≥ 45 MPH
702001-05	TRAFFIC CONTROL DEVICES
704001-02	TEMPORARY CONCRETE BARRIER
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

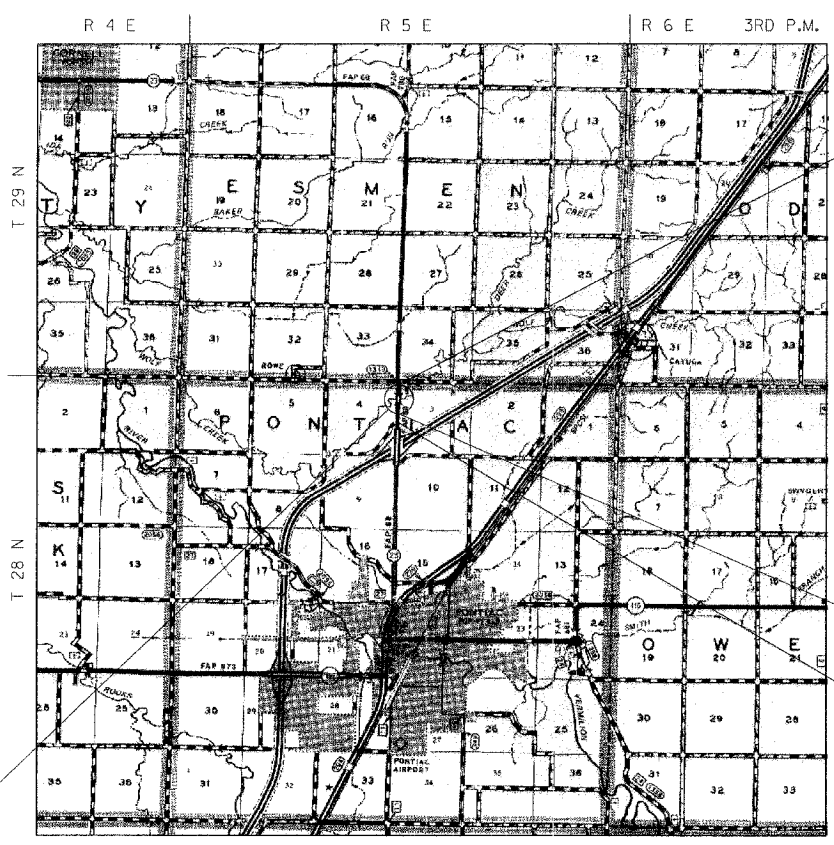
MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

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

DISTRICT 3 NO. (815) 434-6131
PROJECT ENGINEER: DAN DRAPER
UNIT CHIEF: PAT BRABOY
TOWNSHIP: PONTIAC

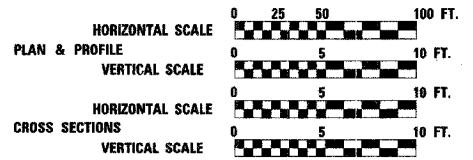
SEC. 105 BR-1
CONSISTS OF REMOVING THE EXISTING STRUCTURE'S SUPERSTRUCTURE (SN 053-0148) AT STA. 586+62.00 AND REPLACE WITH PRECAST PRESTRESSED CONCRETE DECK BEAM (21" DEPTH) AND PORTLAND CEMENT CONCRETE WEARING SURFACE 5" AND RELATED ROADWAY WORK.

PONTIAC TOWNSHIP, SECTIONS 3 & 4



NOT TO SCALE
LOCATION MAP

NET LENGTH OF PROJECT = 440.00 FEET = 0.083 MILES
GROSS LENGTH OF PROJECT = 440.00 FEET = 0.083 MILES



PROJECT ENDS
STA. 589+00.00

PROJECT BEGINS
STA. 584+60.00

STATION EQUATION
STA. 583+68.92 BK =
STA. 583+70.51 AH

D-93-049-05



DESIGN DESIGNATION: MINOR ARTERIAL 2005ADT = 5200

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 20

James P. M...
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
February 3, 20 06

Mike Stone
ENGINEER OF DESIGN AND ENVIRONMENT
February 3, 20 06

Milton R. Sosa, P.E./D
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS



Will C. Best 12/21/05
EXPIRES: 11/30/2007

REVISIONS	
NAME	DATE

GREENE & BRADFORD, INC.
REGISTERED PROFESSIONAL ENGINEERS
CONSULTING ENGINEERS
PROFESSIONAL DESIGN FIRM NO. 021-023

COMPUTER FILE NO.
03236.W011.COV.DGN
PROJECT 03236 W011
11/15/05 - MDS

PLOT DATE = 12/15/2005
FILE NAME = J:\03236\w011\dwg\mgs\03236.W011.COV.dgn
REFERENCE = REF: 03236 / IN:
OPERATOR = mchall

GENERAL NOTES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

THE THICKNESS OF BITUMINOUS MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

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

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ADDITIONAL LEVELING BINDER, AT THE RATE GIVEN ON THE TYPICAL SECTIONS, HAS BEEN ADDED TO THE QUANTITIES TO CORRECT TO A 1.5% CROWN ON SECTIONS OF EXISTING ROADWAYS.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

INSTALL A "TO ACTUATE SIGNAL" SIGN FOR THE TRAFFIC SIGNAL DETECTOR LOOPS THE DETAIL OF THIS SIGN IS INCLUDED IN THE PLANS. THIS WORK WILL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION STANDARD 701321".

The following application rates have been used in calculating plan quantities:

Bituminous Materials (Prime Coat)	0.10 Gal/Sq Yd
Aggregate (Prime Coat)	0.003 Ton/Sq Yd
Bituminous Concrete Surface Course	112 Lbs/Sq Yd/Inch
Aggregate Shoulders, Type B	2.1 Ton/Cu Yd
Leveling Binder (Machine Method)	112 Lbs/Sq Yd/Inch

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

COM ED	TOM STUTZMAN	630-437-2236
VERIZON NORTH, INC.	JANNA FRICKE	301-663-3422
NICOR GAS	SCOTT STOGSDILL	630-983-8676 EXT. 2362
MEDIA COM	MIKE HODGERSON	309-274-4500 EXT. 7712
WILTEL COMMUNICATIONS	ROXANNE DORRIES	888-265-2283

COMMITMENTS

1. Environmental Coordination
2. Vertical Clearance Form
3. No In-Stream work allowed

The following Mixture Requirements are applicable for this project:

	Superpave Level Binder	Superpave Level Binder	Superpave Base Course
PC Grade	PG64-22	PG64-22	PG64-22
Max % RAP Allowable**	15%	10%	25%
Design Air Voids	4.0% @ N70	4.0% @ N70	3.0% @ N50
Mixture Composition	IL 9.5	IL 12.5 or IL 9.5	BAM
Friction Aggregate		Mixture D	
Plant Control Limits	Class I	Class I	Non-Class I
Density Test Method	Satisfaction of the Engineer	3.8	3.8

* Material shall be compacted to 93-97 percent of the maximum theoretical density, except that the bottom lift shall be compacted to a minimum of 91.0 percent. The maximum theoretical density shall be determined from the moving average as specified in the QC/QA specification.

**If RAP option is selected, the asphalt cement grade may need to be adjusted. This will be determined by the Engineer.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

REVIEWED BY: Rich Powell
DISTRICT STUDIES & PLANS ENGINEER

DATE: 12-27-05

EXAMINED BY: Herbert E. G...
DISTRICT CONSTRUCTION ENGINEER

Kenneth Ransom
DISTRICT MATERIALS ENGINEER

Bruce O. Holter
DISTRICT OPERATIONS ENGINEER


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT. _____ DRAWN BY: BISHOP
HORIZ. _____ CHECKED BY: BOTT
DATE: _____

 <p>GREENE & BRADFORD, INC. OF SPRINGFIELD</p> <p><small>REGISTERED PROFESSIONAL ENGINEERS & ARCHITECTS</small></p>	<p>COMPUTER FILE NO. 03236.W011.GN</p> <p>PROJECT 03236 W011 12/19/05 - MML</p>
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PLOT DATE = 12/21/2005
 FILE NAME = J:\N03236\W011\Drawings\03236.W011.GN.dgn
 REFERENCE = REF03236 / IN.
 OPERATOR = michelle

SUMMARY OF QUANTITIES

CONTRACT NO. 66566

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	3

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

PAY CODE NUMBER	PAY ITEM	UNIT	TOTAL	80% FED 20% STATE	
				ROADWAY X081-2A	BRIDGE X081-2A
20200500	EARTH EXCAVATION (WIDENING)	CU. YD.	49	49	
35600500	BITUMINOUS CONCRETE BASE COURSE WIDENING 10 INCHES	SQ. YD.	272	272	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	50	50	
40600300	AGGREGATE (PRIME COAT)	TON	0.2	0.2	
40600990	TEMPORARY RAMP	SQ. YD.	151	151	
44000030	BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH)	SQ. YD.	490	490	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	26	26	
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU. YD.	10.9		10.9
50300225	CONCRETE STRUCTURES	CU. YD.	7.8		7.8
50300260	BRIDGE DECK GROOVING	SQ. YD.	426		426
50300300	PROTECTIVE COAT	SQ. YD.	446		446
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ. FT.	4008		4008
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9,490		9,490
50901005	STEEL BRIDGE RAIL, TYPE SM	FOOT	215		215
51500100	NAME PLATES	EACH	1		1
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4	
* 63304805	TRAFFIC BARRIER TERMINAL REMOVAL, TYPE 6	EACH	4	4	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL. MO.	2	2	
67100100	MOBILIZATION	L. SUM	1	1	
• 70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
• 70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L. SUM	1	1	
• 70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L. SUM	1	1	
• 70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L. SUM	1	1	
• 70103815	TRAFFIC CONTROL SURVEILLANCE	CAL. DAY	56	56	
• 70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6	
• 70300100	SHORT-TERM PAVEMENT MARKING	FOOT	150	150	
• 70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4,860	4,860	
• 70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	210	210	

PAY CODE NUMBER	PAY ITEM	UNIT	TOTAL	80% FED 20% STATE	
				ROADWAY X081-2A	BRIDGE X081-2A
• 70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	52	52	
70301000	WORKZONE PAVEMENT MARKING REMOVAL	SQ. FT.	1,184	1,184	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	450	450	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	450	450	
• 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,620	1,620	
• 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	210	210	
• 78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	7	7	
• 78100105	RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE)	EACH	1	1	
• 78200410	GUARDRAIL MARKERS, TYPE A	EACH	8	8	
• 78300100	PAVEMENT MARKING REMOVAL	SQ. FT.	610	610	
• 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	8	
X0323557	BRIDGE JOINT SYSTEM (EXPANSION), 1"	FOOT	92		92
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	42	42	
X4066765	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N50	TON	22	22	
X5030305	CONCRETE WEARING SURFACE, 5"	SQ. YD.	446		446
* Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	48		48
Z0002600	BAR SPLICERS	EACH	106		106
** Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
** Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
66410400	CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED	FOOT	109	109	

- * SPECIALTY ITEM
- ** S-TY-3N

PLOT DATE = 12/20/05
 FILE NAME = J:\03236\03236.W011.SUM.dgn
 PLOT SCALE = 0.25000000 / IN.
 REFERENCE = REF.
 OPERATOR = mchellal

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

VERT. SCALE: HORIZ. DRAWN BY: BISHOP

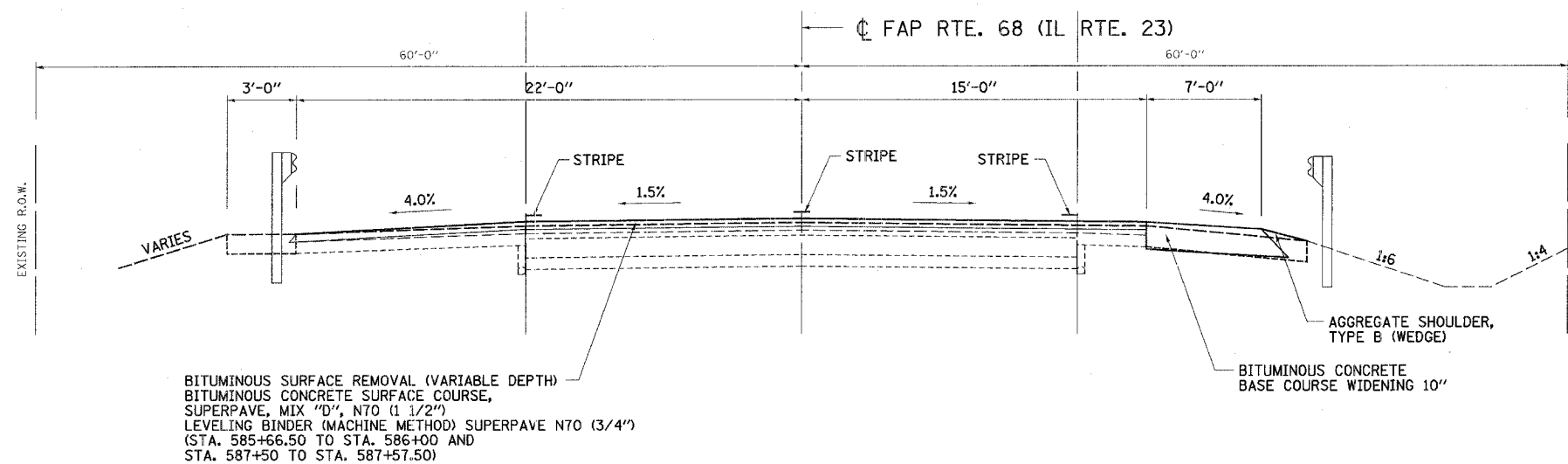
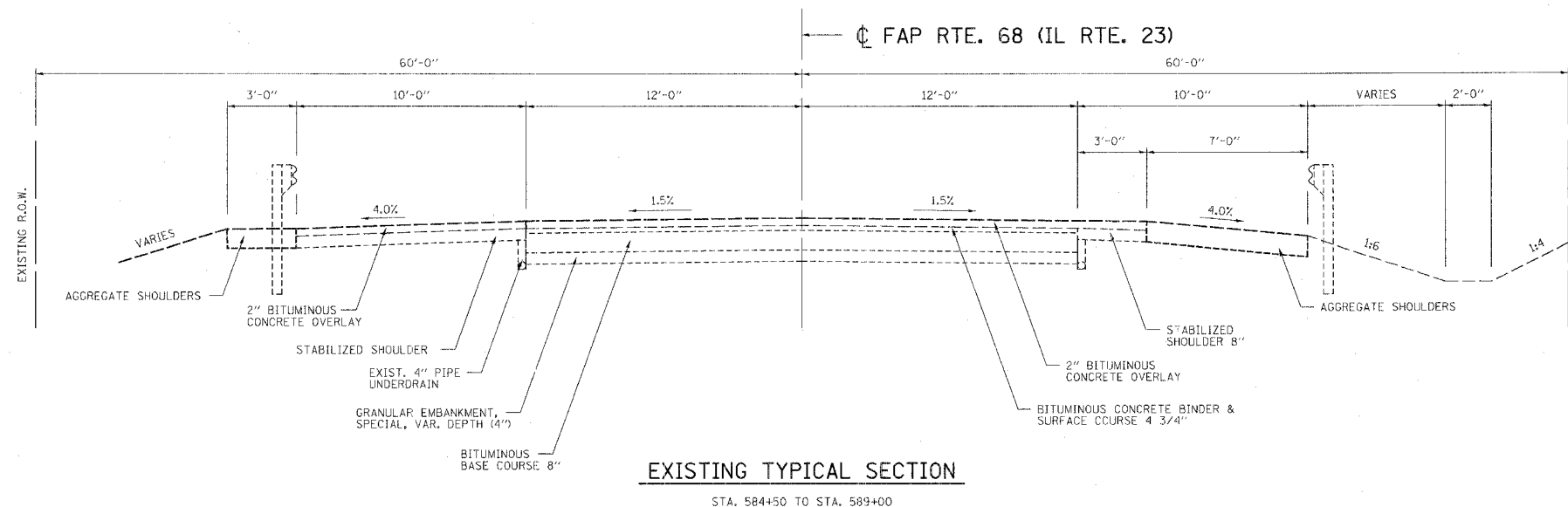
DATE: CHECKED BY: BOTT

GREEN & BRADFORD, INC.
OF SPRINGFIELD
CONSULTING ENGINEERS
INCORPORATED
1111 SOUTH BRIDGE STREET
SPRINGFIELD, ILLINOIS 62761
PHONE: 217-223-1100
FAX: 217-223-1101
WWW.GREEN-AND-BRADFORD.COM

COMPUTER FILE NO.
03236.W011.SUM

PROJECT 03236 W011
12/20/05 - MML

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



PLOT DATE = 12/21/2005
 FILE NAME = I:\03236\w011\drwg\A03236_w011.TYP.dgn
 PLOTTER = HP DesignJet 500
 REFERENCE = 8/27/2006 / IN
 OPERATOR = michelle1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION


TYPICAL SECTIONS

FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT. _____
HORIZ. _____

DATE: _____

DRAWN BY: BISHOP
CHECKED BY: BOTT



GREENE & BRADFORD, INC.
OF SPRINGFIELD
CONSULTING ENGINEERS
200 WEST WASHINGTON ST.
SPRINGFIELD, ILLINOIS 62782-4000
PROFESSIONAL ENGINEERS REG. NO. 0218
PROFESSIONAL SURVEYORS REG. NO. 0218
PHONE: 217-223-7171 FAX: 217-223-7172
WWW.GREENE-AND-BRADFORD.COM

COMPUTER FILE NO.
03236_W011.TYP

PROJECT 03236 W011
11/15/05 - MDS

SCHEDULE OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

20200500 EARTH EXCAVATION (WIDENING)

CU YD	LOCATION
21	584 + 60, RT. - 586 + 16.50, RT.
28	587 + 07.50, RT. - 589 + 00, RT.
49	TOTAL

63304805 TRAFFIC BARRIER TERMINAL REMOVAL, TYPE 6

EACH	LOCATION
1	586 + 16.50, RT.
1	586 + 16.50, LT.
1	587 + 07.50, RT.
1	587 + 07.50, LT.
4	TOTAL

78001110 PAINT PAVEMENT MARKING - LINE 4"

FOOT	LOCATION
810	582 + 70 - 590 + 80 - LT. EDGELINE - WHITE
810	582 + 70 - 590 + 80 - RT. EDGELINE - WHITE
1620	TOTAL

35600400 BITUMINOUS CONCRETE BASE COURSE WIDENING 10 INCHES

SQ YD	LOCATION
122	584 + 60, RT. - 586 + 16.50, RT.
150	587 + 07.50, RT. - 589 + 00, RT.
272	TOTAL

70300100 SHORT-TERM PAVEMENT MARKING

FOOT	LOCATION
50	584 + 50 - 589 + 00, LT. WHITE
50	584 + 50 - 589 + 00, CENTERLINE YELLOW
50	584 + 50 - 589 + 00, RT. WHITE
150	TOTAL

78001130 PAINT PAVEMENT MARKING - LINE 6"

FOOT	LOCATION
210	582 + 70 - 590 + 80 - CENTERLINE
210	TOTAL

40600100 BITUMINOUS MATERIALS (PRIME COAT)

GALLON	LOCATION
25	585 + 66.50 - 586 + 16.50
25	587 + 07.50 - 587 + 57.50
50	TOTAL

70300220 TEMPORARY PAVEMENT MARKING - LINE 4" (TP)

FOOT	LOCATION
1620	582 + 70 - 590 + 80 - EDGE - YELLOW - STAGE 1 LT. & RT.
1620	582 + 70 - 590 + 80 - EDGE - YELLOW - STAGE 1 LT. & RT.
1620	582 + 70 - 590 + 80 - EDGE - WHITE
4860	TOTAL

78100100 RAISED REFLECTIVE PAVEMENT MARKERS

EACH	LOCATION
4	582 + 70 - 586 + 16.50
3	587 + 07.50 - 590 + 80
7	TOTAL

40600300 AGGREGATE (PRIME COAT)

TON	LOCATION
0.1	585 + 66.50 - 586 + 16.50
0.1	587 + 07.50 - 587 + 57.50
0.2	TOTAL

70400240 TEMPORARY PAVEMENT MARKING - LINE 6"

FOOT	LOCATION
210	582 + 70 - 590 + 00 - CENTERLINE
210	TOTAL

78100105 RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE)

EACH	LOCATION
1	586 + 16.50 - 587 + 07.50
1	TOTAL

40600990 TEMPORARY RAMP

SQ YD	LOCATION
37	585 + 66.50 SURFACE REMOVAL
30	585 + 66.50 BRIDGE APPROACH - STAGE 1
47	587 + 57.50 BRIDGE APPROACH - STAGE 2
37	587 + 57.50 SURFACE REMOVAL
151	TOTAL

70300280 TEMPORARY PAVEMENT MARKING - LINE 24" (TP)

FOOT	LOCATION
13	582 + 70 - STAGE 1 - RT.
13	590 + 80 - STAGE 1 - LT.
13	582 + 70 - STAGE 2 - RT.
13	590 + 80 - STAGE 2 - LT.
52	TOTAL

78200410 GUARDRAIL MARKERS, TYPE A

EACH	LOCATION
2	586 + 16.50, RT. - TERMINAL, TYPE 6A
2	586 + 16.50, LT. - TERMINAL, TYPE 6A
2	587 + 07.50, RT. - TERMINAL, TYPE 6A
2	587 + 07.50, LT. - TERMINAL, TYPE 6A
8	TOTAL

44000030 BITUMINOUS SURFACE REMOVAL - (VARIABLE DEPTH)

SQ YD	LOCATION
245	585 + 66.50 - 586 + 16.50
245	587 + 07.50 - 587 + 57.50
490	TOTAL

70301000 WORKZONE PAVEMENT MARKING REMOVAL

SQ FT	LOCATION
283	582 + 70 - 590 + 80 - STAGE 1 - RT.
283	582 + 70 - 590 + 80 - STAGE 1 - LT.
283	582 + 70 - 590 + 80 - STAGE 2 - RT.
283	582 + 70 - 590 + 80 - STAGE 2 - LT.
1132	TOTAL

78300100 PAVEMENT MARKING REMOVAL

EACH	LOCATION
70	582 + 70 - 590 + 80, CENTERLINE
540	582 + 70 - 590 + 80, RT. & LT.
610	TOTAL

48101200 AGGREGATE SHOULDERS, TYPE B

TON	LOCATION
12	584 + 60.00 - 586 + 16.50
14	587 + 07.50 - 589 + 00.00
26	TOTAL

70400100 TEMPORARY CONCRETE BARRIER

TON	LOCATION
450	584 + 50 - 589 + 00 - STAGE 1
450	TOTAL

78300200 RAISED REFLECTIVE PAVEMENT MARKERS (REMOVAL)

EACH	LOCATION
8	582 + 70 - 590 + 80
8	TOTAL

63100087 TRAFFIC BARRIER TERMINAL, TYPE 6A

EACH	LOCATION
1	586 + 16.50, RT.
1	586 + 16.50, LT.
1	587 + 07.50, RT.
1	587 + 07.50, LT.
4	TOTAL

70400200 RELOCATE TEMPORARY CONCRETE BARRIER

TON	LOCATION
450	584 + 50 - 589 + 00 - STAGE 2
450	TOTAL

X4066414 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50

TON	LOCATION
21	585 + 66.50 - 586 + 16.50 - MAINLINE
21	587 + 07.50 - 587 + 57.50 - MAINLINE
42	TOTAL

X4066765 LEVELING BINDER (MACHINE METHOD), SUPERPAVE, N70

TON	LOCATION
11	585 + 66.50 - 586 + 16.50 - MAINLINE
11	587 + 07.50 - 587 + 57.50 - MAINLINE
22	TOTAL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT. _____
HORIZ. _____

DATE: _____

DRAWN BY: BISHOP
CHECKED BY: BOTT

GREENE & BRADFORD, INC.
OF SPRINGFIELD

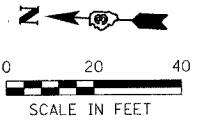
REGISTERED PROFESSIONAL ENGINEER
NO. 001234567
ILLINOIS LICENSE NO. 001234567
PROFESSIONAL DESIGN FIRM NO. 001234567
PROFESSIONAL & STRUCTURAL ENGINEERING CORPORATION
301.755.8844 FAX 301.755.8877 P.O. BOX 110000 SPRINGFIELD, IL 62711-0000

COMPUTER FILE NO.
03236_W01L.SQ

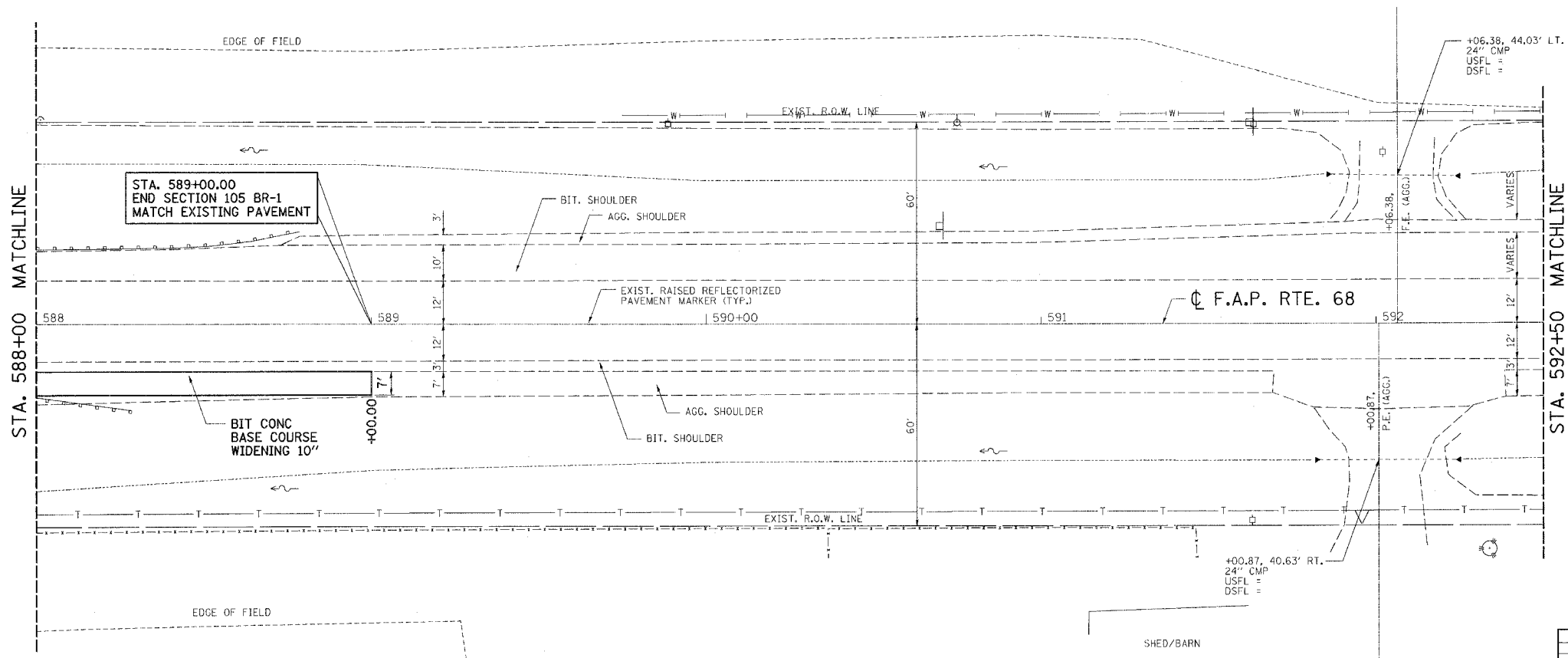
PROJECT 03236 W01L
12/19/05 - MML

PLT DATE = 12/21/2005
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OPERATOR = mschell

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	8
STA. 588+00.00 TO STA. 592+50.00		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		



PLAN	DATE
BY	
DESIGNED	
CHECKED	
IN CHARGE	
DATE	

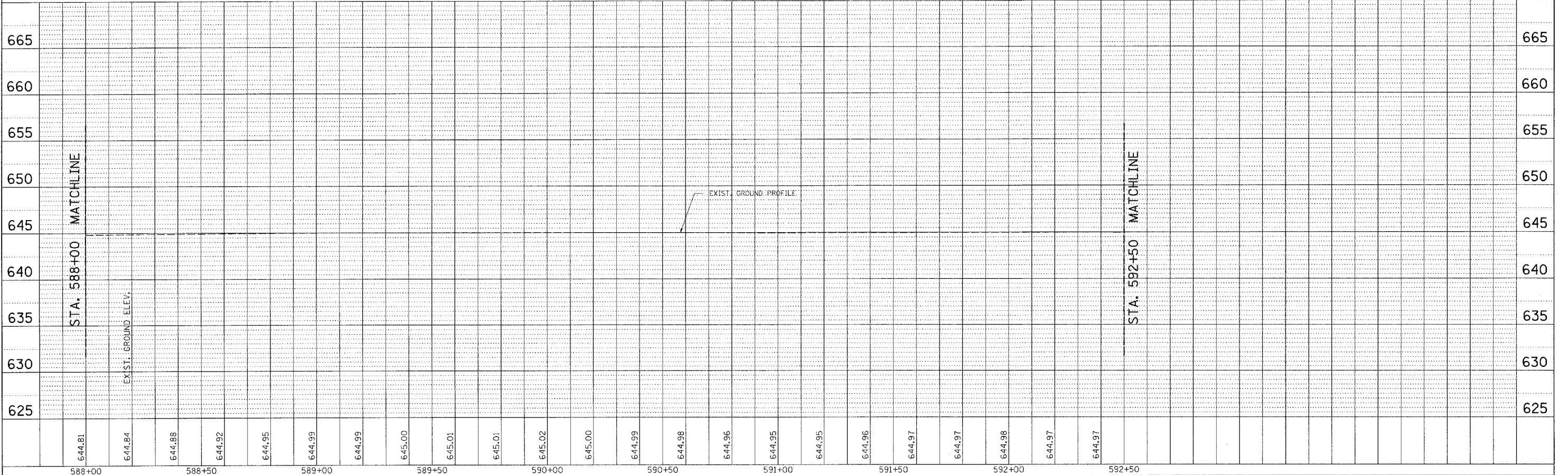


REVISION	DATE	BY

GREENE & BRADFORD, INC.
 OF SPRINGFIELD
 CIVIL ENGINEERS
 1100 WEST WASHINGTON ST.
 SPRINGFIELD, ILLINOIS 62760
 PHONE: 217-223-1100
 FAX: 217-223-1101
 WWW: www.greenebro.com

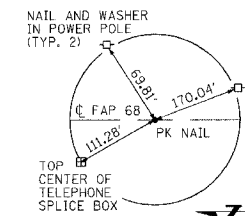
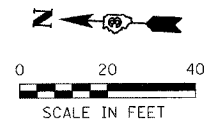
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03236.W011.PP-3
 PROJECT 03236 W11
 11/15/05 - MDS

PROFILE	DATE
BY	
DESIGNED	
CHECKED	
IN CHARGE	
DATE	



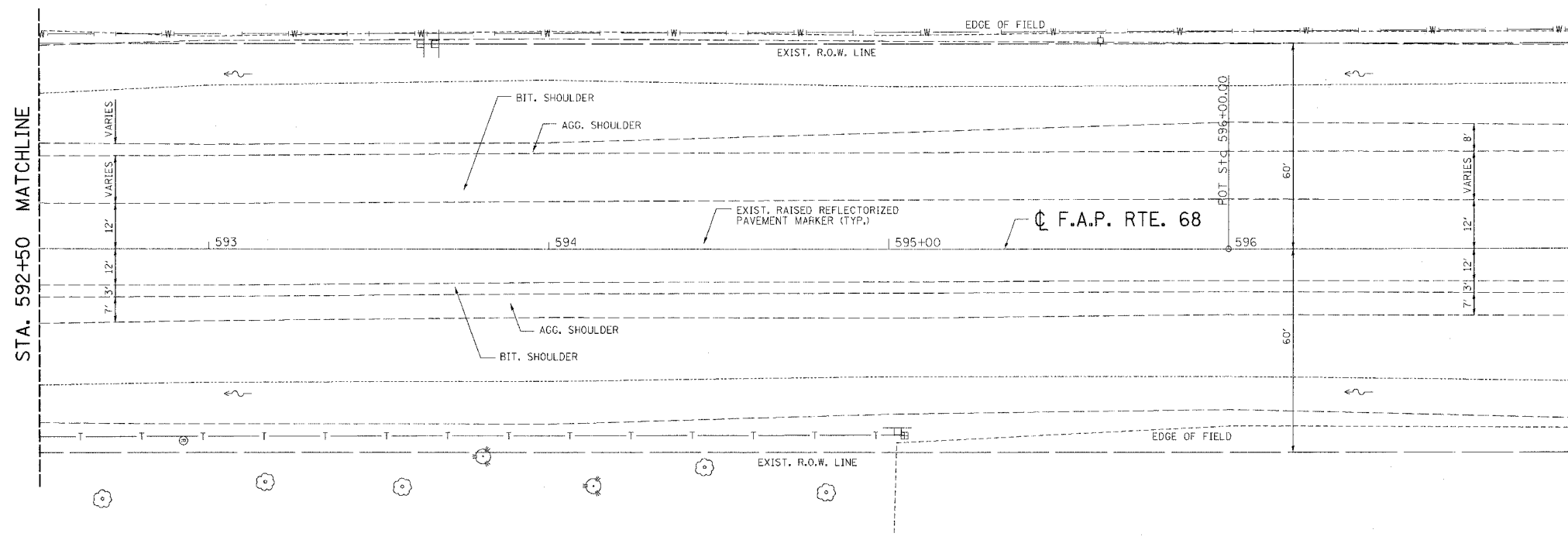
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 OPERATOR = michael1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	9
STA. 592+50.00 TO STA. 597+00.00		ILLINOIS FED. AID PROJECT		



P.O.T. STA. 596+00

PLAN	DATE
BY	
NOTED	
CHECKED	
BY	
DATE	



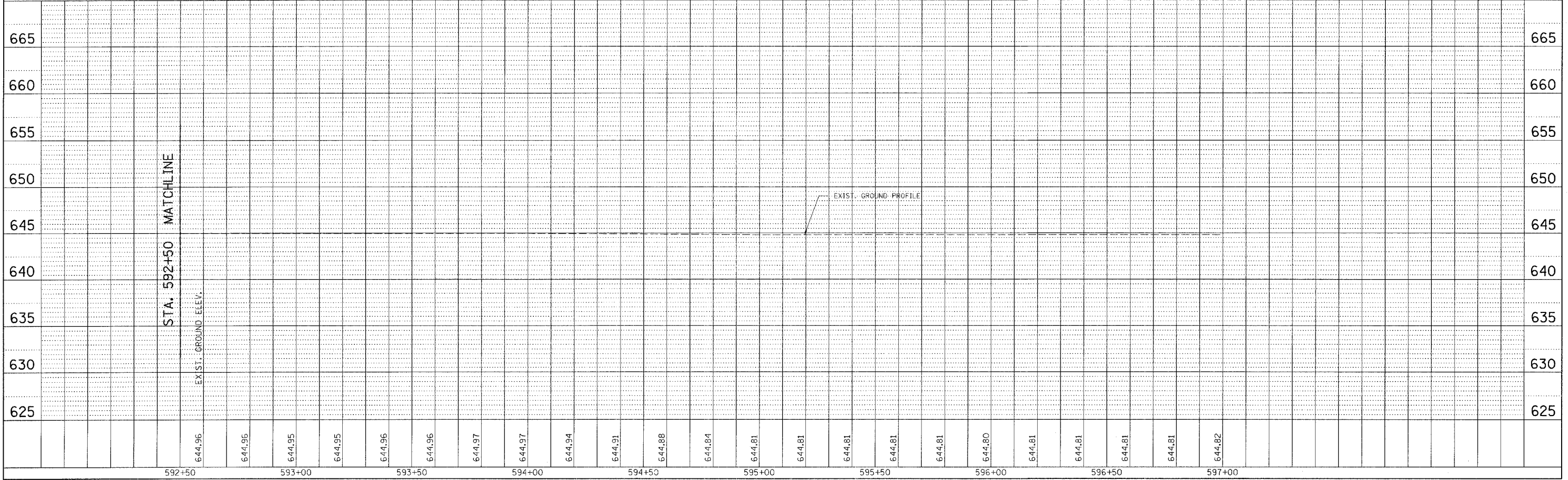
REVISION	DATE	BY

GREEN & BRADFORD, INC.
CONSULTING ENGINEERS
 2001 W. SPRINGFIELD
 SPRINGFIELD, ILLINOIS 62702
 PHONE: 217-223-1100 FAX: 217-223-1101
 000 700 800 200 700 500 300 200 100 000

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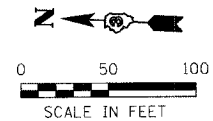
PROJECT 03236 W11
11/15/05 - MDS

PROFILE	DATE
BY	
NOTED	
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BY	
DATE	



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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	10
STA. 1580+00		TO STA. 1590+00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



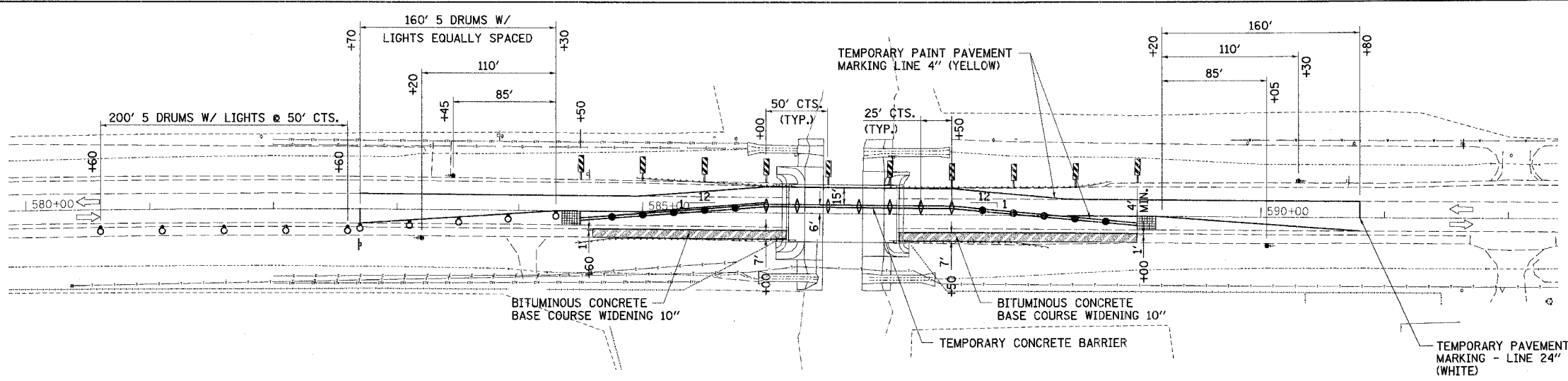
NOTE : TEMPORARY RUMBLE STRIPS AND SIGNS AS SHOWN IN TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND 702001 SHALL BE INSTALLED.

**STAGE I
SEQUENCE OF OPERATIONS**

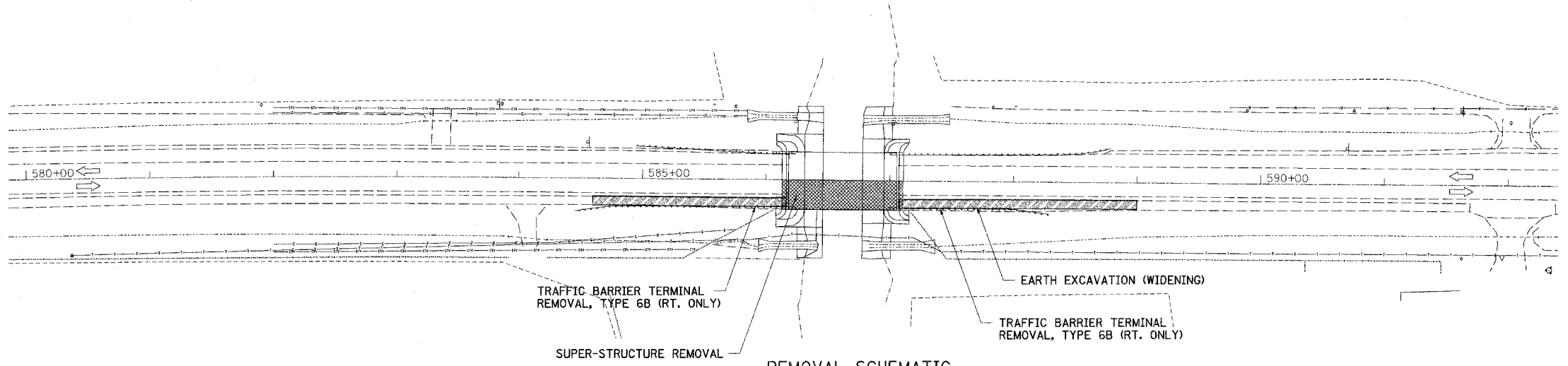
1. INSTALL TEMPORARY TRAFFIC SIGNALS, ATTENUATOR BASES, ATTENUATORS, TEMPORARY CONCRETE BARRIERS AND DRUMS WITH THE AID OF TRAFFIC CONTROL AND PROTECTION STANDARDS 701201 AND 701006. ALL OTHER ITEMS AS PER THESE DETAILS AND AS PER LANE CLOSURE 2L, 2W, BRIDGE REPAIR WITH BARRIER STANDARD 701321. BEGIN OPERATING UNDER STAGE I TRAFFIC CONDITIONS WITH THE AID OF TRAFFIC CONTROL AND PROTECTION STANDARD 701201 AND 701006.
2. REMOVE EXISTING AGGREGATE SHOULDERS, GUARDRAIL & TRAFFIC BARRIER TERMINALS, EXCAVATE, AND REMOVE PORTION OF EXISTING SUPER-STRUCTURE.
3. CONSTRUCT NEW PORTION OF PROPOSED SUPER-STRUCTURE, BACKFILL, COMPACT, BITUMINOUS CONCRETE BASE COURSE WIDENING, TRAFFIC BARRIER TERMINAL AND TEMPORARY RAMPS.

LEGEND

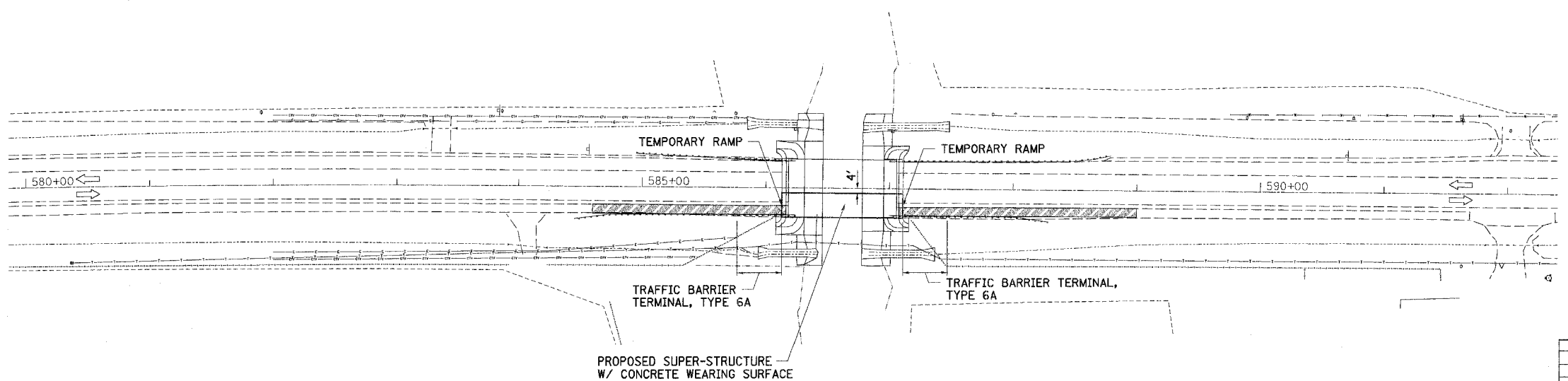
- STRUCTURE REMOVAL
- BITUMINOUS CONCRETE BASE COURSE WIDENING 10"
- TYPE III BARRICADE WITH FLASHING LIGHTS
- TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- STOP LINE 24"
- SAND MODULE IMPACT ATTENUATOR
- DOUBLE VERTICAL PANEL
- TYPE C BIDIRECTIONAL REFLECTOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANEL



TRAFFIC CONTROL



REMOVAL SCHEMATIC



CONSTRUCTION SCHEMATIC

PLOT DATE = 12/21/2005
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 PLOT SCALE = 50.000000 / IN.
 REFERENCE =
 DESIGNED BY =
 CHECKED BY =
 PLOTTED BY =

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT. _____
HORIZ. _____

DATE: _____

DRAWN BY: BISHOP
CHECKED BY: BOTT

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
OF SPRINGFIELD
CORPORATE OFFICE
1000 N. WASHINGTON ST.
SPRINGFIELD, IL 62761
PHONE: (217) 223-1100
FAX: (217) 223-1101
WWW.GRENEBRADFORD.COM

COMPUTER FILE NO.
03236_W011_STG1
PROJECT 03236 W011
11/15/05 - MDS

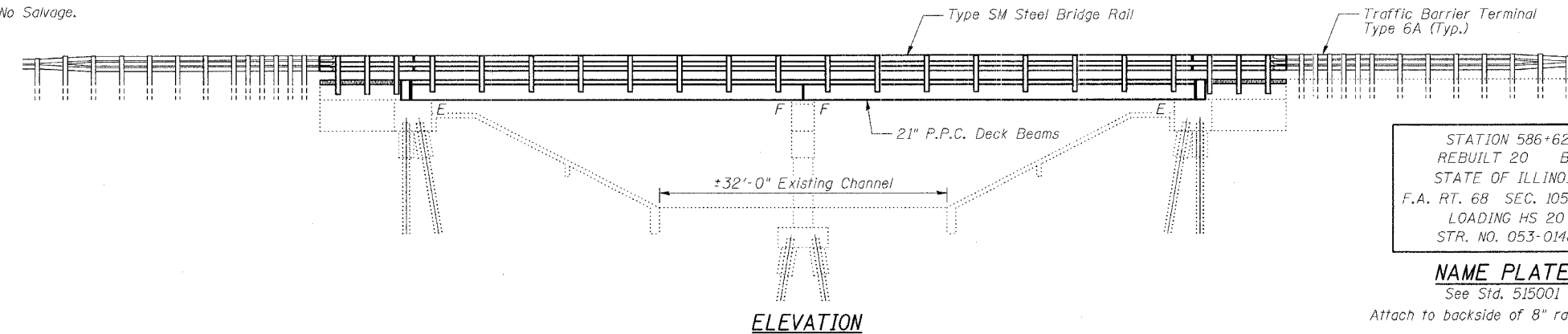
Bench Mark: Chiseled "□" on S.W. corner of parapet. S.N. 053-0148 Elev. 546.55

Existing Structure: S.N. 053-0148, two span 91'-0" bk. to bk. abutments, 46'-0" o. to o. precast, prestressed concrete deck beams on open pile bent abutments and solid concrete pier. Built as F.A. Route 105, Section 105 BR-1 in 1975. Traffic to be maintained utilizing stage construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 68	105 BR-1	LIVINGSTON	45	12	14 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		Contract #66566



STATION 586+62
REBUILT 20 BY
STATE OF ILLINOIS
F.A. RT. 68 SEC. 105 BR-1
LOADING HS 20
STR. NO. 053-0148

NAME PLATE
See Sid. 515001

Attach to backside of 8" rail element

* Existing Name Plate shall be removed, cleaned and reattached adjacent to the new name plate. Cost included with "Name Plates".

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

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.

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

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedures shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new beams. To distribute load to multiple beams and protect the concrete, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels, and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. Prior to placement of the timber mats, the following shall be done: placements and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum, and grouting and curing the shear keys.

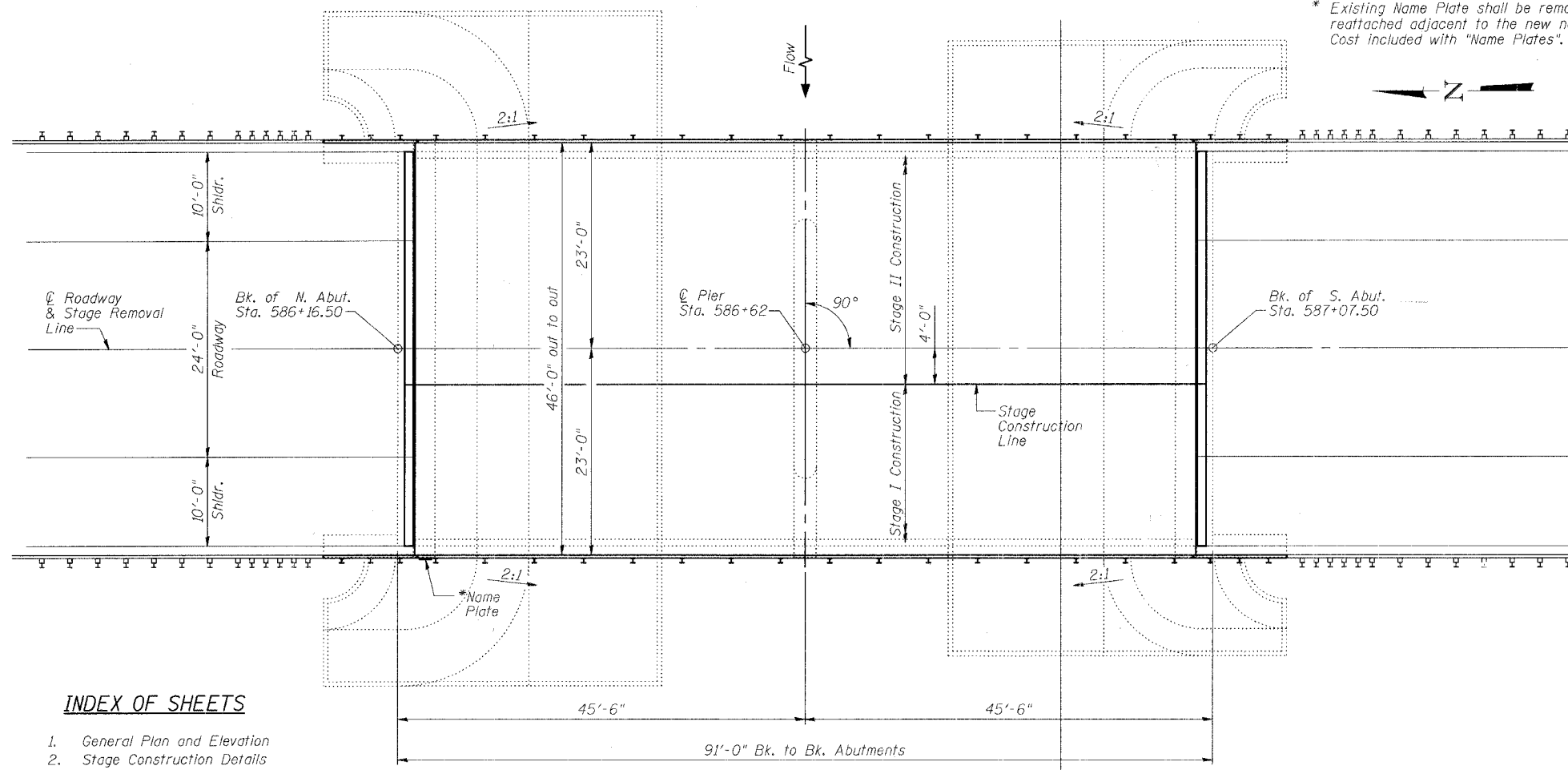
A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.

All structural steel shall conform to AASHTO classification M270 Gr. 36 unless otherwise noted.

All structural steel shall be shop painted with inorganic zinc rich primer per AASHTO M300, Type 1.

All construction joints shall be bonded.

No in-stream work will be allowed on this project.



PLAN

LOADING HS20-44

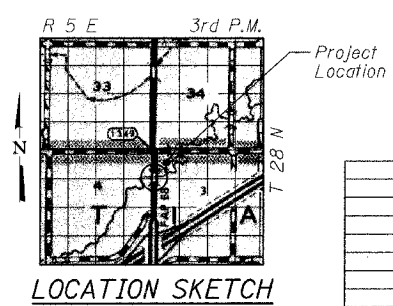
Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f'_c = 5,000$ psi (concrete wearing surface)
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " low lax strands)
 $f'_{si} = 202,000$ psi ($\frac{1}{2}$ " low lax strands)

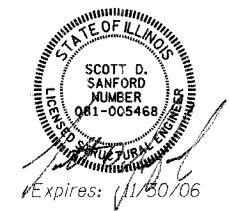


TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		10.9	10.9
Concrete Structures	Cu. Yd.		7.8	7.8
Bridge Deck Grooving	Sq. Yd.	426		426
Protective Coat	Sq. Yd.	446		446
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	4008		4008
Reinforcement Bars Epoxy Coated	Lb.	5830	3660	9490
Steel Bridge Rail, Type SM	Foot	215		215
Name Plates	Each	1		1
Bridge Joint System (Expansion), 1"	Foot	92		92
Concrete Wearing Surface, 5"	Sq. Yd.	446		446
Bar Splicers	Each	94	12	106
Asbestos Bearing Pad Removal	Each	48		48

INDEX OF SHEETS

- General Plan and Elevation
- Stage Construction Details
- Temporary Concrete Barrier for Stage Construction
- Superstructure Details
- Bridge Joint System-Exp. (PJS)
- Bridge Joint System-Exp. (Alt.-Strip Seal)
- Superstructure Details
- Superstructure Details
- Type SM Steel Bridge Rail Side Mounted
- Rail Details
- Concrete Removal Details
- North Abutment
- South Abutment
- Bar Splicer Assembly Details



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 PLOT TIME = 12:24:55
 OPERATOR = mitchell

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. _____
HORIZ. _____
DATE: 9/6/05

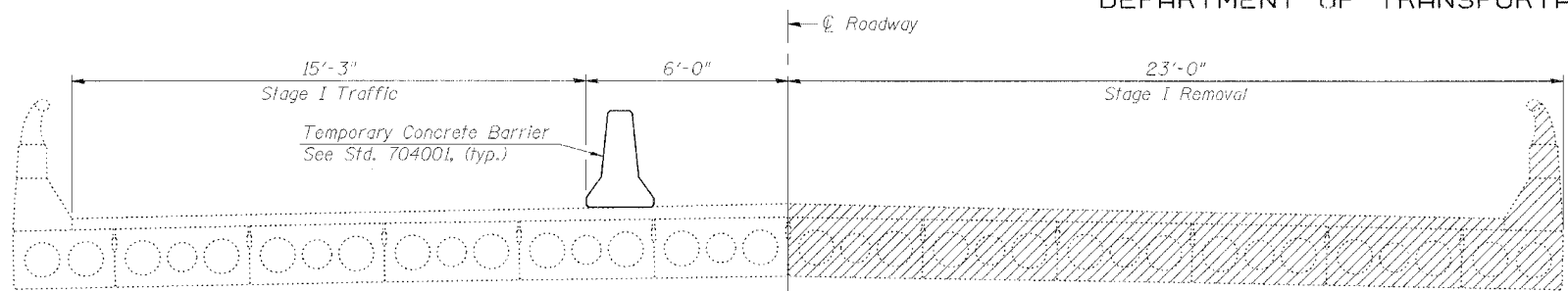
DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

COMPUTER FILE NO. SN053-0148.GPE
PROJECT 03236 W0-11
12/16/05-MML

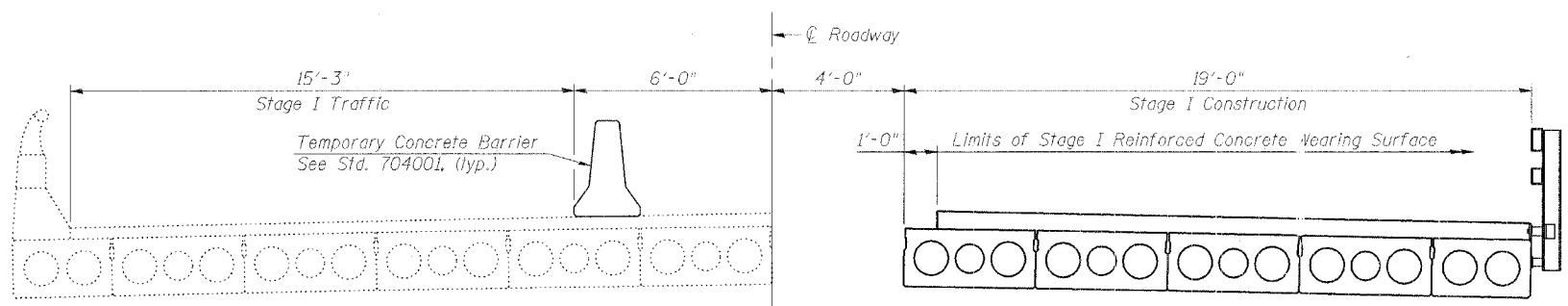
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
FAP 68	105 BR-1	LIVINGSTON	45	13	14 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			

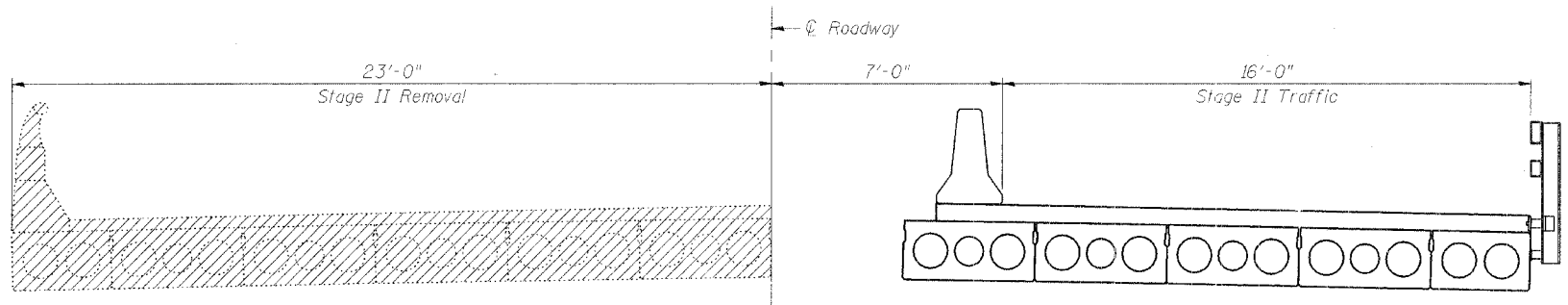
Contract #66566



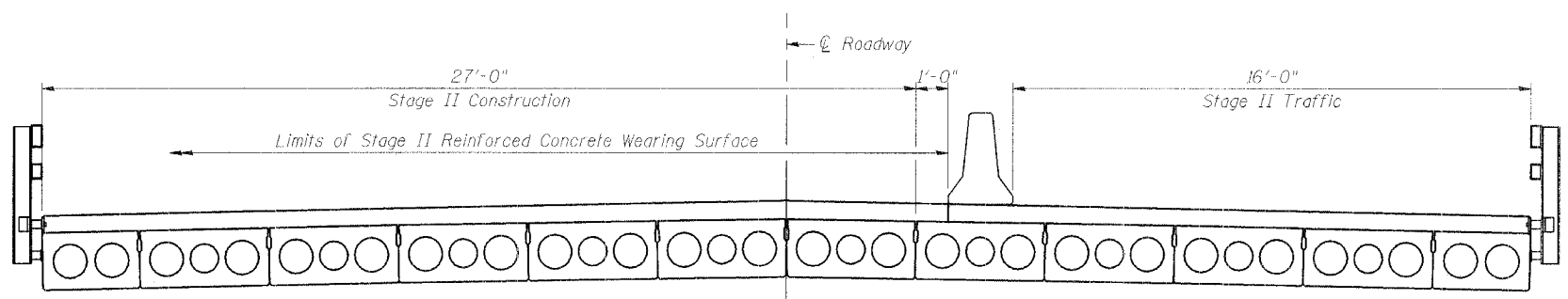
STAGE I REMOVAL



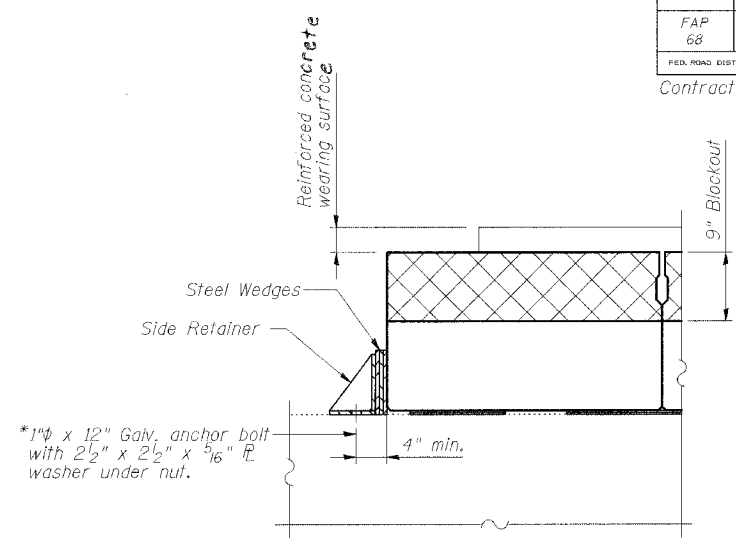
STAGE I CONSTRUCTION



STAGE II REMOVAL



STAGE II CONSTRUCTION

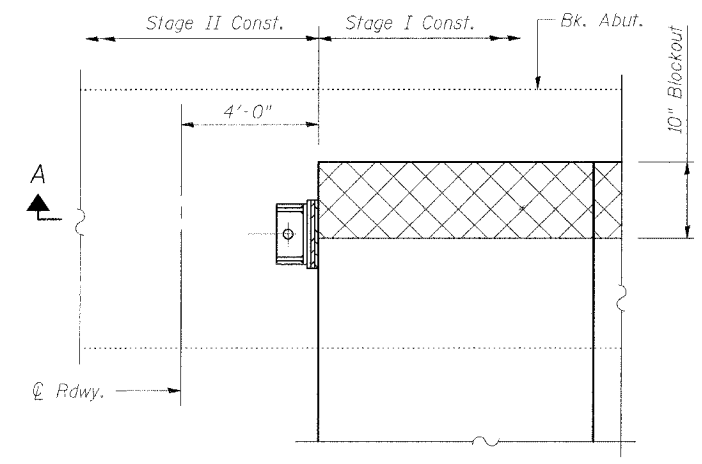


SECTION A-A

*1" x 12" Galv. anchor bolt with 2 1/2" x 2 1/2" x 5/16" P washer under nut.

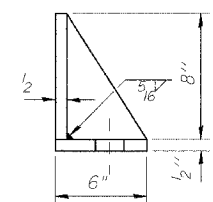
*Drill and Epoxy grout in accordance with Art. 584 of the Standard Specs.

Notes:
After block-outs are poured and cured the retainer angles shall be removed.*
Cost of side retainer and accessories are included with:
PPC Deck Beams (21").



PLAN

(Showing South Abutment)
(North Abutment similar)



SIDE RETAINER

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

Note:
Hatched areas indicate Removal of Existing Superstructures.
All cross-sections are looking South.
All dimensions are at right angles to \bar{C} Roadway.
For quantity of Temporary Concrete Barrier, see Roadway Plans.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGE CONSTRUCTION DETAILS

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. HORIZ.
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

COMPUTER FILE NO.
SN053-0148_STG
PROJECT 03236 W0-11
12/16/05-MML

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
1471 733-4414, 1471 733-1211, P.O. BOX 1000, SPRINGFIELD, ILLINOIS 62702

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PLOT TIME = 10:41:23 AM
OPERATOR = michellel

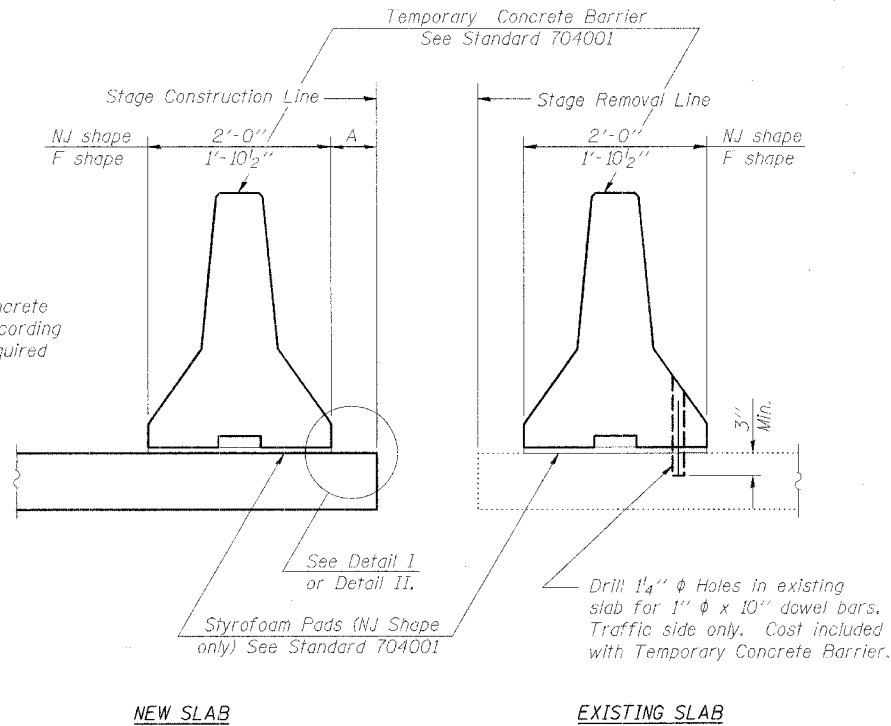
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAP 68	105 BR-1	LIVINGSTON	45	14
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Contract #66566

SHEET NO. 3
14 SHEETS

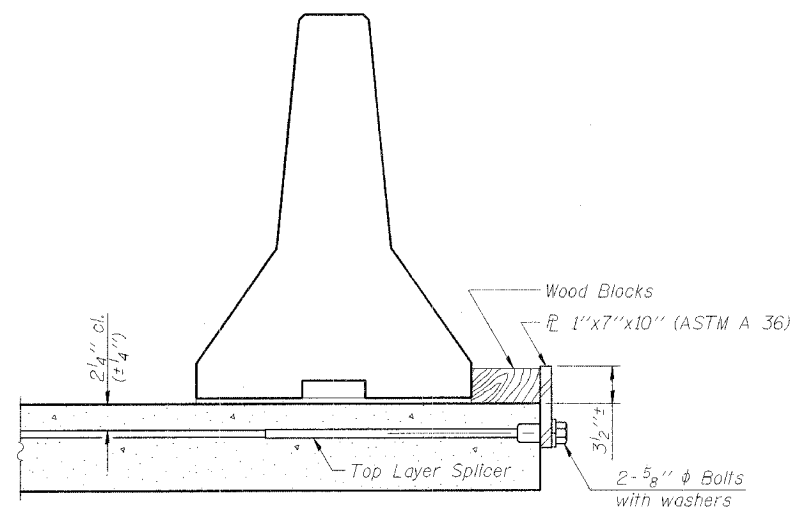
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB

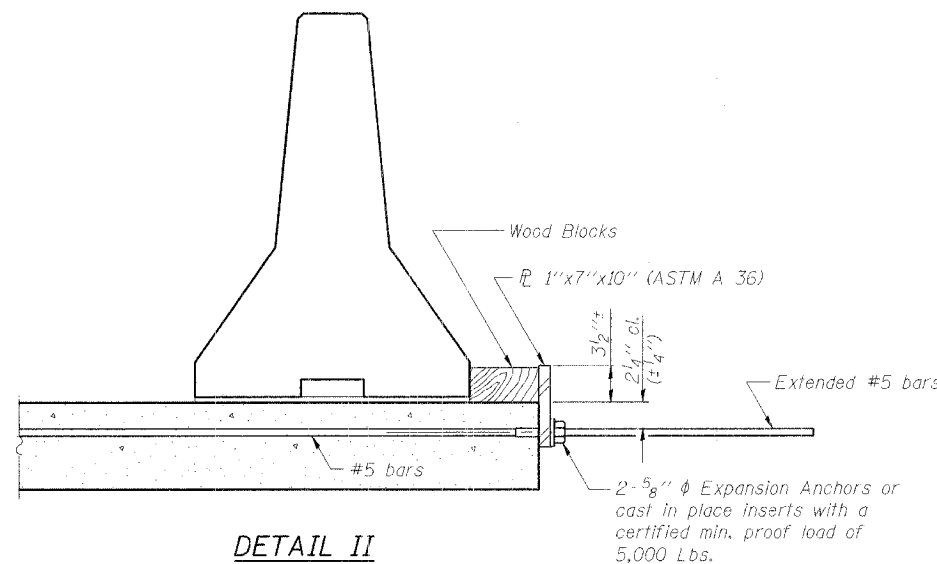
NOTES

- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} 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{L} 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.



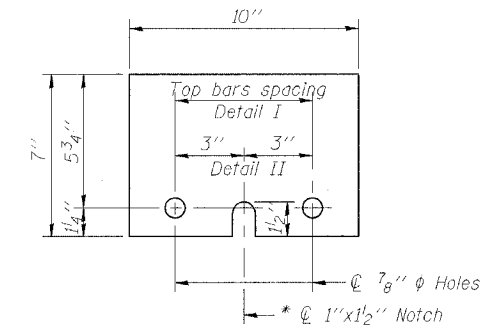
DETAIL I

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.



\bar{L} 1"x7"x10"
* Required only with Detail II

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. HORIZ.
DATE: 9/6/05
DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

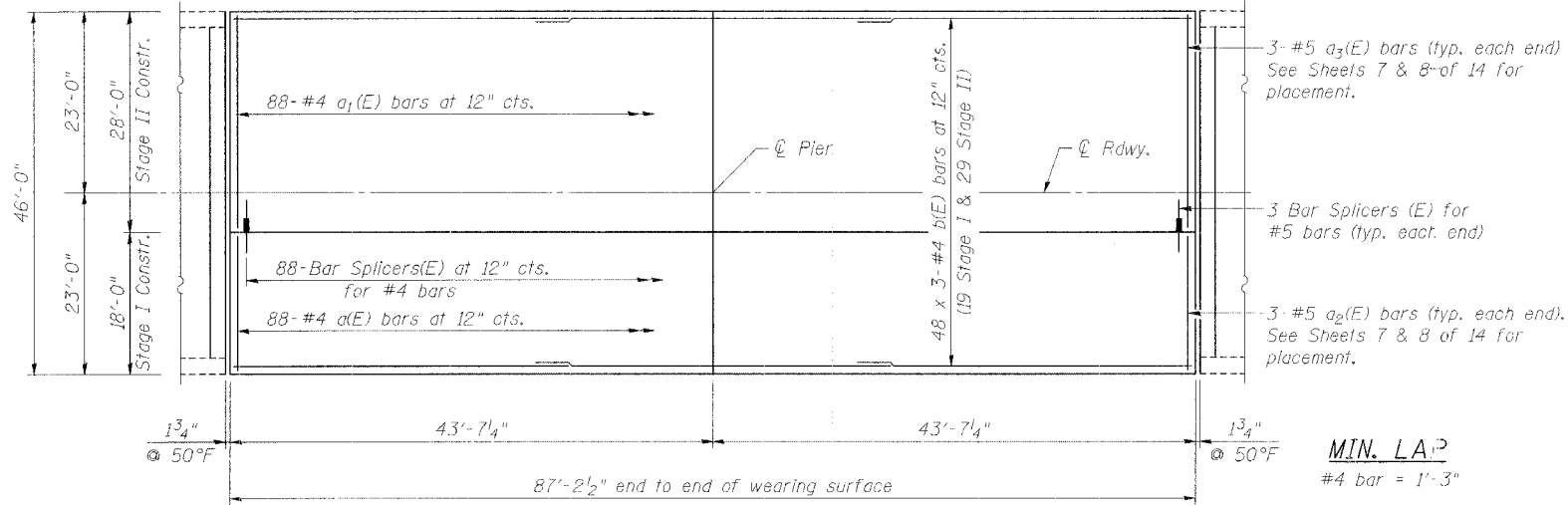
GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
PROFESSIONAL DESIGN FIRM AND ARCHITECTS
1217 1/2 S. 4TH ST., SUITE 200, CHICAGO, ILL. 60607
TEL: 773-284-1200 FAX: 773-287-8111
COMPUTER FILE NO. SN053-0148.TCB
PROJECT 03236 WO-11
12/16/05-MML

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PLOT TIME = 10:41:25 AM
OPERATOR = michellel

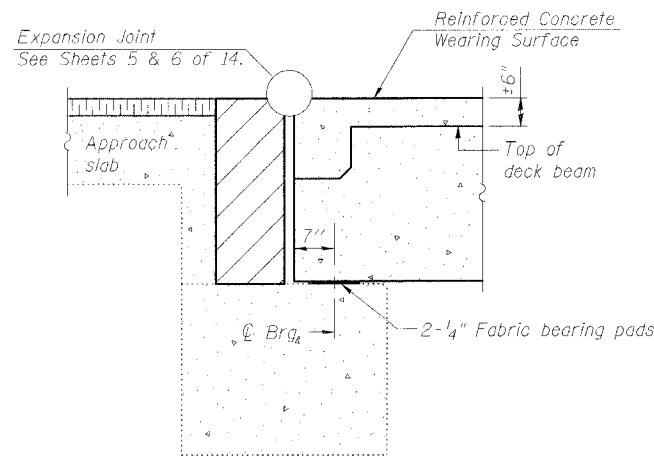
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAP 68	SECTION 105 BR-1	COUNTY LIVINGSTON	TOTAL SHEETS 45	SHEET NO. 15	SHEET NO. 4 14 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

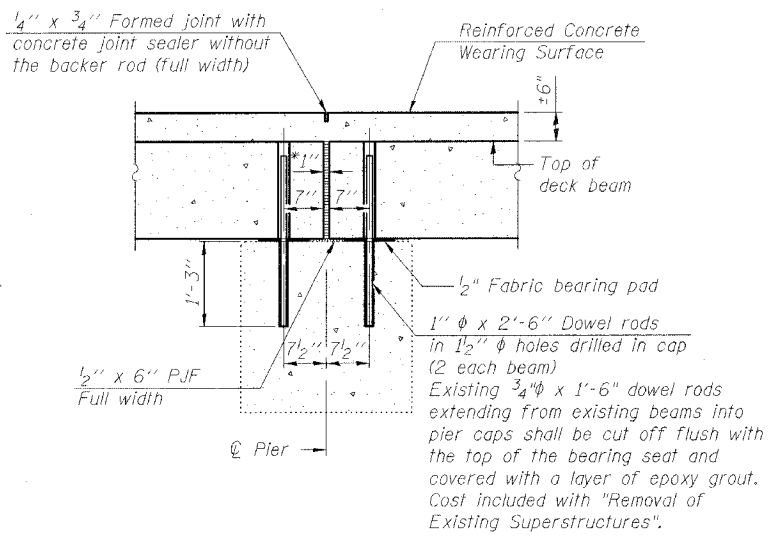
Contract #66566



REINFORCED CONCRETE WEARING SURFACE PLAN



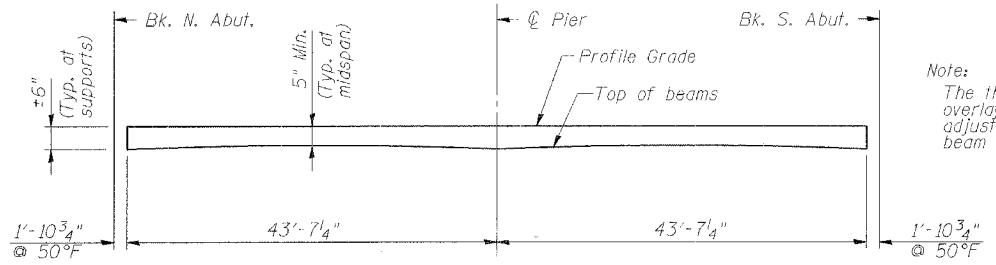
SECTION THRU ABUTMENTS



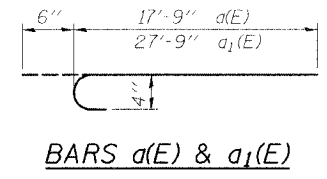
SECTION THRU FIXED PIER

Notes:
Hatched area to be poured after concrete wearing surface is in place.
See sheets 7 of 14 for bearing pad details.
For approach slab grade adjustment, see Roadway Plans.
After beams have been erected, holes shall be drilled into pier cap and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure 24 hrs. prior to grouting the shear keys.

* 1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.



REINFORCED CONCRETE WEARING SURFACE PROFILE

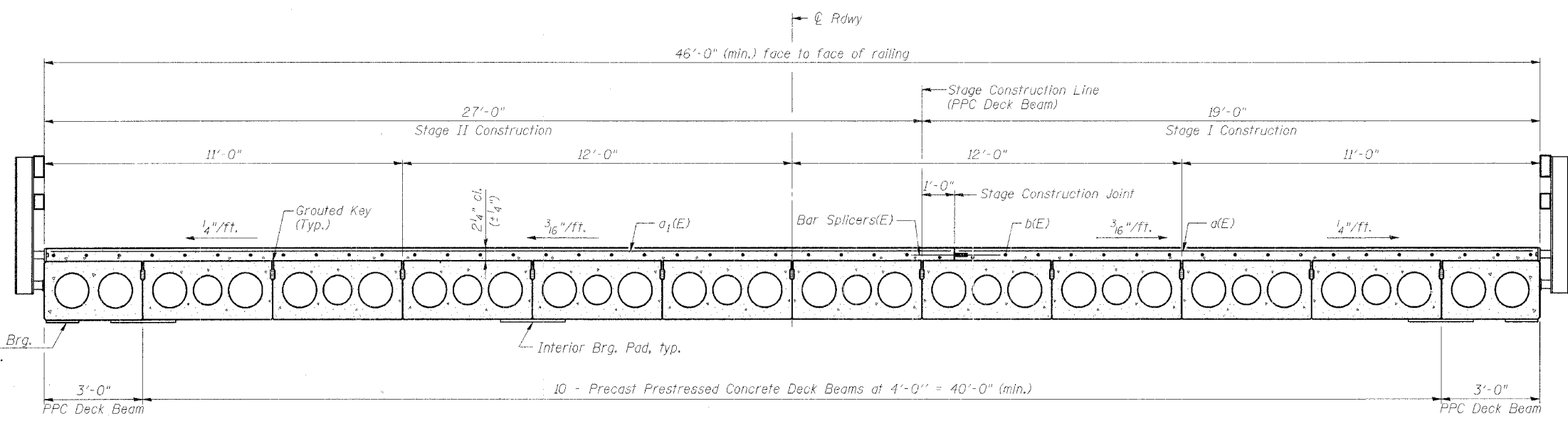


BARS a(E) & a1(E)

Note:
The thickness of the concrete overlay varies as required to adjust for the profile grade and beam camber.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	88	#4	18'-3"	U
a1(E)	88	#4	28'-3"	U
a2(E)	6	#5	17'-9"	—
a3(E)	6	#5	27'-9"	—
b(E)	144	#4	29'-10"	—
Concrete Wearing Surface, 5"				Sq. Yd. 446
Reinforcement Bars (Epoxy Coated)				Pound 5890



CROSS SECTION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. _____
HORIZ. _____
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

COMPUTER FILE NO.
SN053-0148.SS1
PROJECT 03236 WO-11
12/16/05-MML

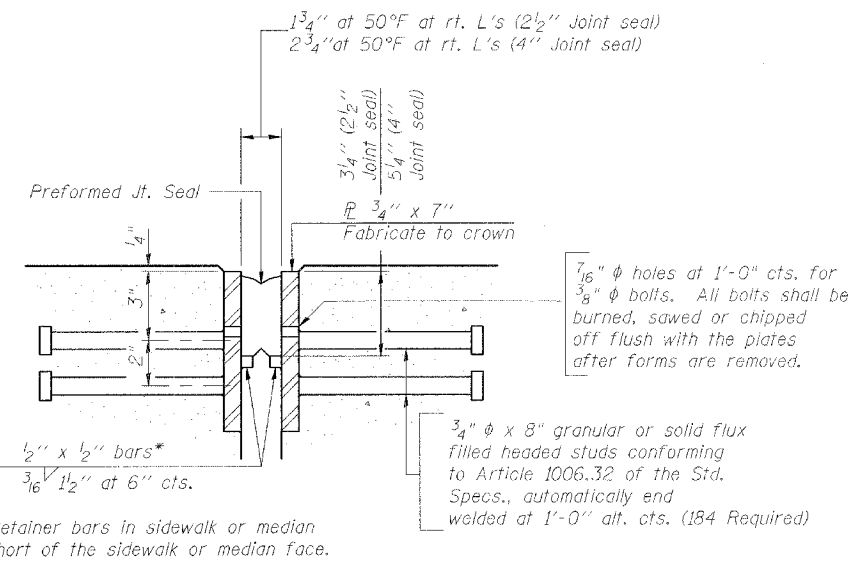
GREENE & BRADFORD, INC.
OF SPRINGFIELD
REGISTERED PROFESSIONAL ENGINEERS
PROFESSIONAL DESIGN FIRM NO. 0408
1201 W. MONROE ST., SPRINGFIELD, ILL. 62761
TEL: 217-399-4444 FAX: 217-399-4444

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PLOT TIME = 12/16/2005 10:11:11 AM
OPERATOR = mitchell

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAP 68	SECTION 105 BR-1	COUNTY LIVINGSTON	TOTAL SHEETS 45	SHEET NO. 16	SHEET NO. 5 14 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

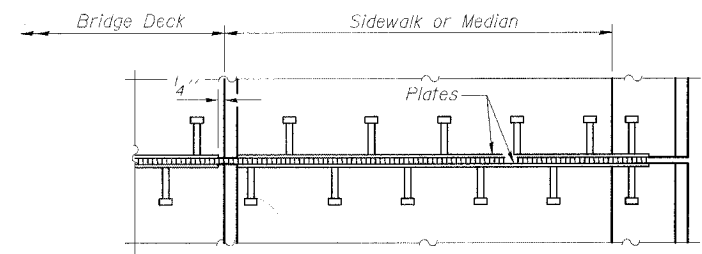
Contract #66566



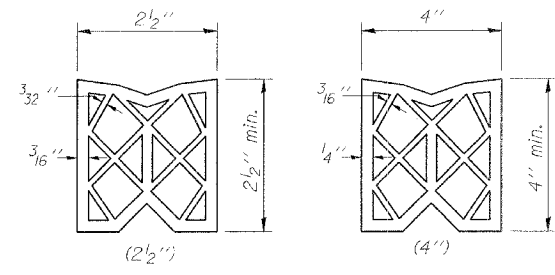
SECTION THRU EXPANSION JOINT
(2 1/2" and 4" joint seals)

Design Movement	Required Preformed Joint Seal Size	Required Strip Seal Rated movement
1"	2 1/2"	1"
1 5/8"	4"	2"

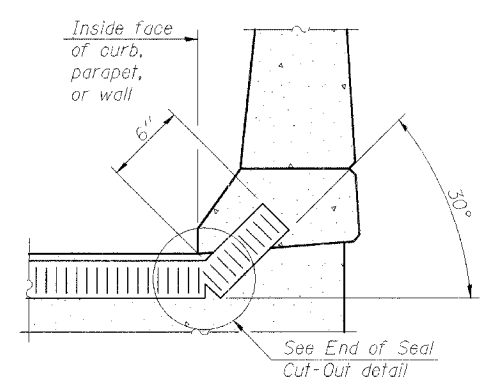
GENERAL NOTES
Furnish steel plates in segments of 20 feet maximum length. Maximum space between installed segments shall be 3/16". Seal space with silicone sealant suitable for structural steel.



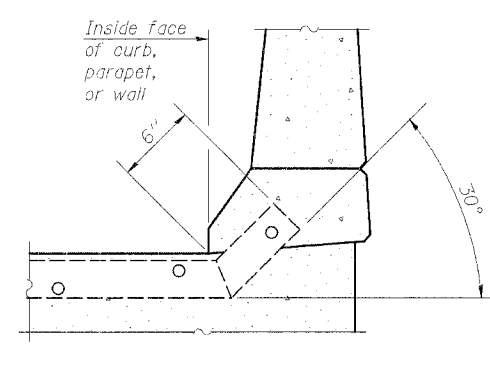
PLAN AT SIDEWALK OR MEDIAN



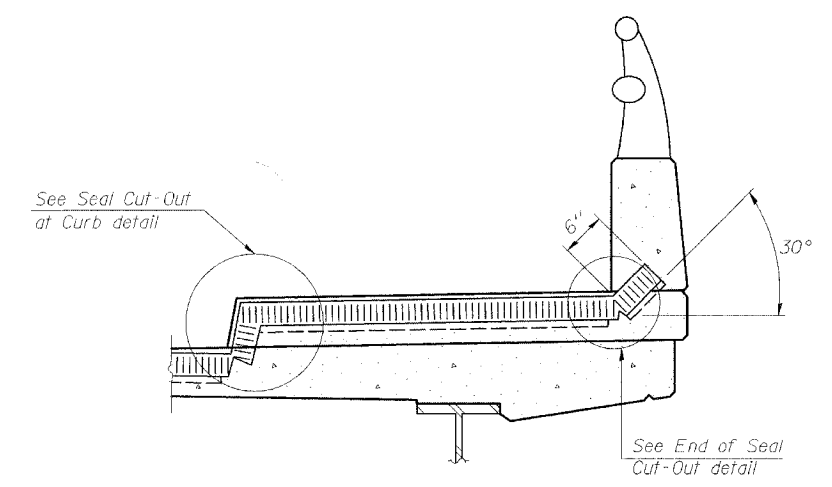
PREFORMED JOINT SEAL



AT CURB, PARAPET, OR WALL
(Showing seal)



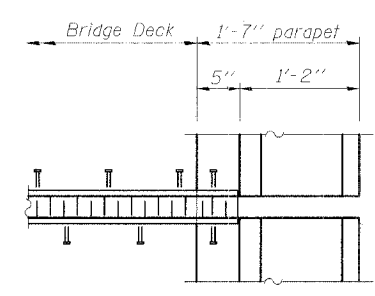
AT CURB, PARAPET, OR WALL
(Showing plate)



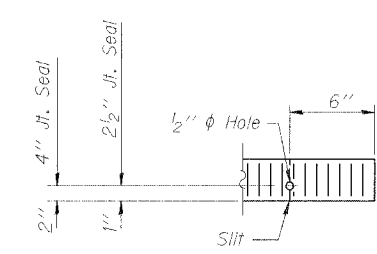
AT SIDEWALK OR MEDIAN*
(Showing plate and seal)

* 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.

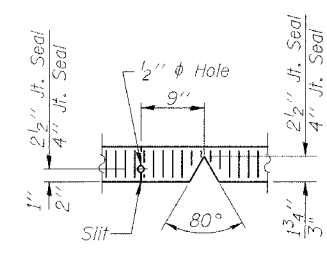
TYPICAL END TREATMENTS



PLAN AT PARAPET



END OF SEAL CUT-OUT



SEAL CUT-OUT AT CURB

BILL OF MATERIAL

Item	Unit	Total
Bridge Joint System (Expansion), 1"	Foot	92

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE JOINT SYSTEM-EXPANSION
(PREFORMED JOINT SEAL)
FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. _____
HORIZ. _____
DATE: 9/6/05
DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO
COMPUTER FILE NO. SN053-0148_EJ1
PROJECT 03236 WO-11
12/16/05-MML

REVISIONS	
NAME	DATE

GREENE & BRADFORD, INC.
OF SPRINGFIELD
CONSULTING ENGINEERS
REGISTERED PROFESSIONAL ENGINEERS
PROFESSIONAL ENGINEER REG. NO. 048-1097
PROFESSIONAL SURVEYOR REG. NO. 048-1097
1217 7th Street, Springfield, Illinois 62761-1097
TEL: 217-789-8844, 217-789-8227 FAX: 217-789-8844

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OPERATOR = michiel

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
FAP 68	105 BR-1	LIVINGSTON	45	17	14 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

Contract #66566

GENERAL NOTES

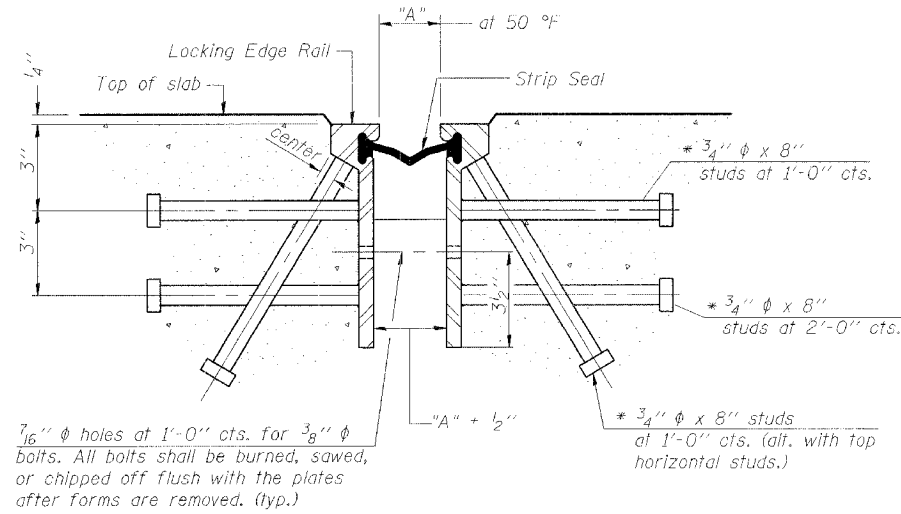
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

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.

Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

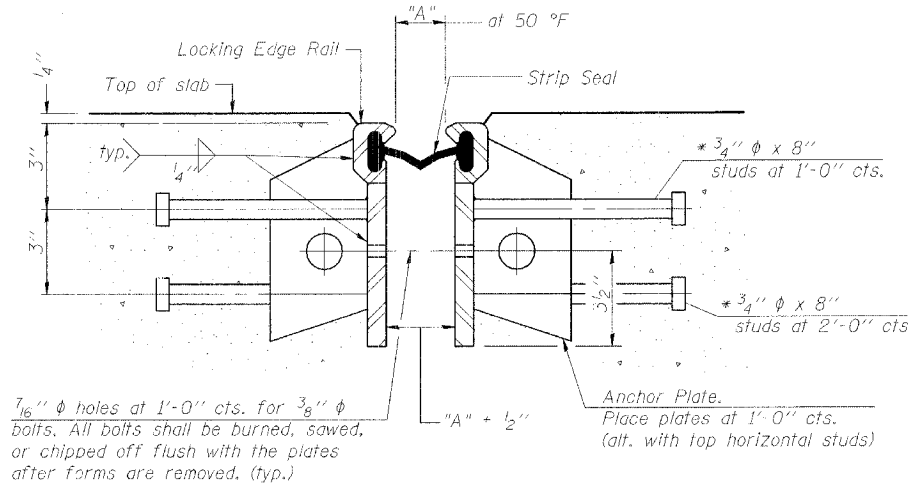
The manufacturer's recommended installation methods shall be followed.

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.



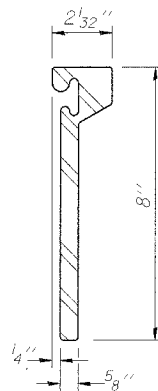
SECTION THRU ROLLED RAIL EXP. JOINT
(460 Studs Required)

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

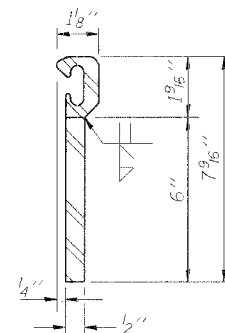


SECTION THRU WELDED RAIL EXP. JOINT
(284 Studs Required)
(176 Anchor Plates Required)

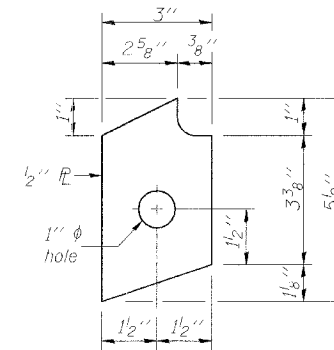
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically and welded.



ROLLED (EXTRUDED) RAIL

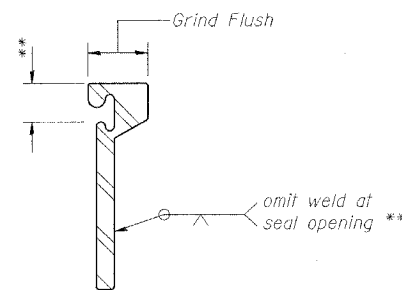


WELDED RAIL



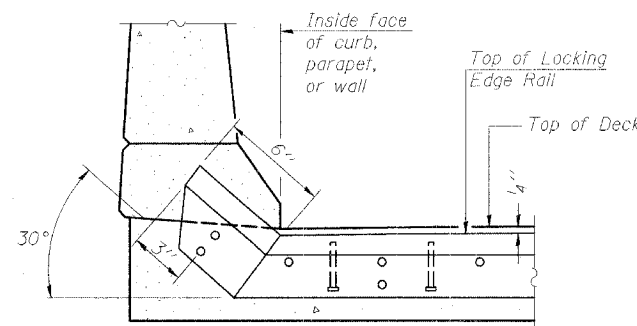
ANCHOR PLATE
(for welded rail)

LOCKING EDGE RAILS

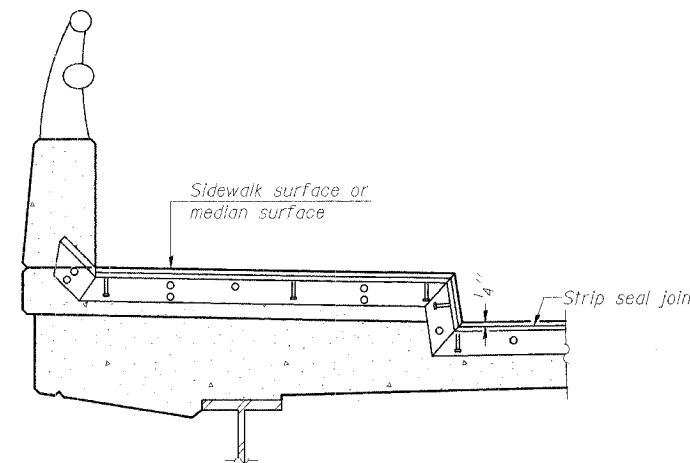


LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.



AT CURB, PARAPET, OR WALL



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.

TYPICAL END TREATMENTS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE JOINT SYSTEM-EXPANSION
(ALTERNATE-STRIP SEAL)

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT.
HORIZ.
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

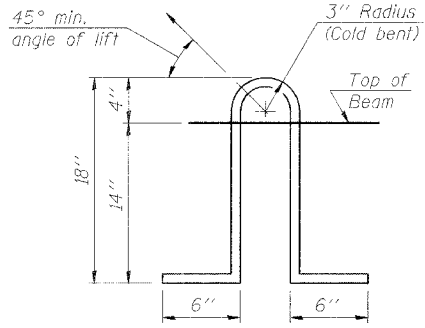
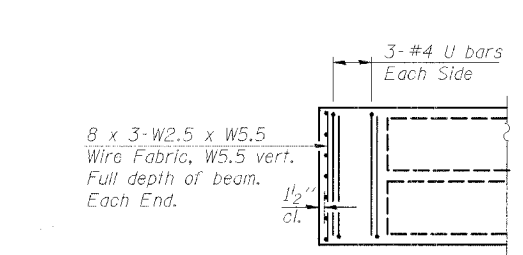
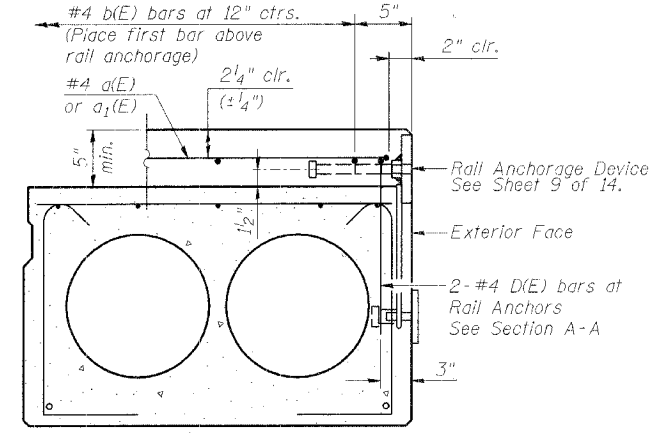
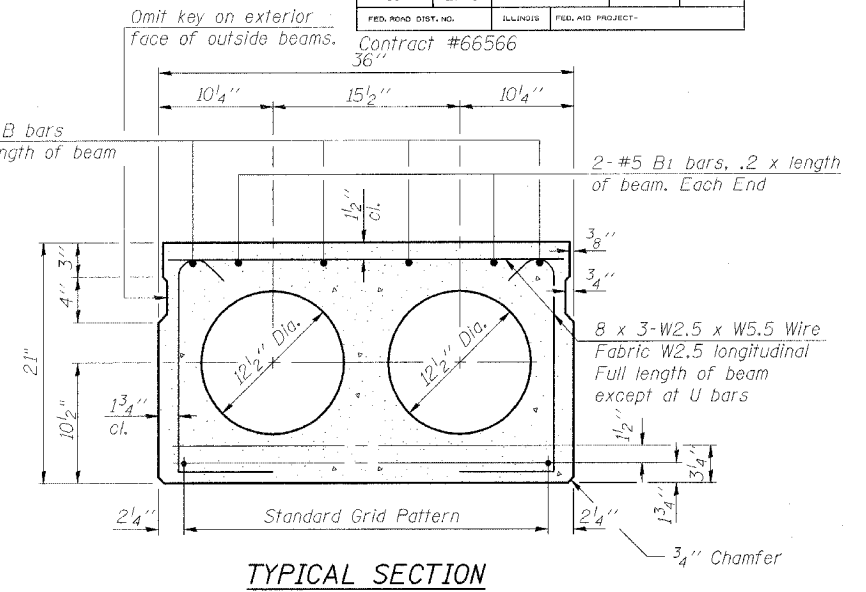
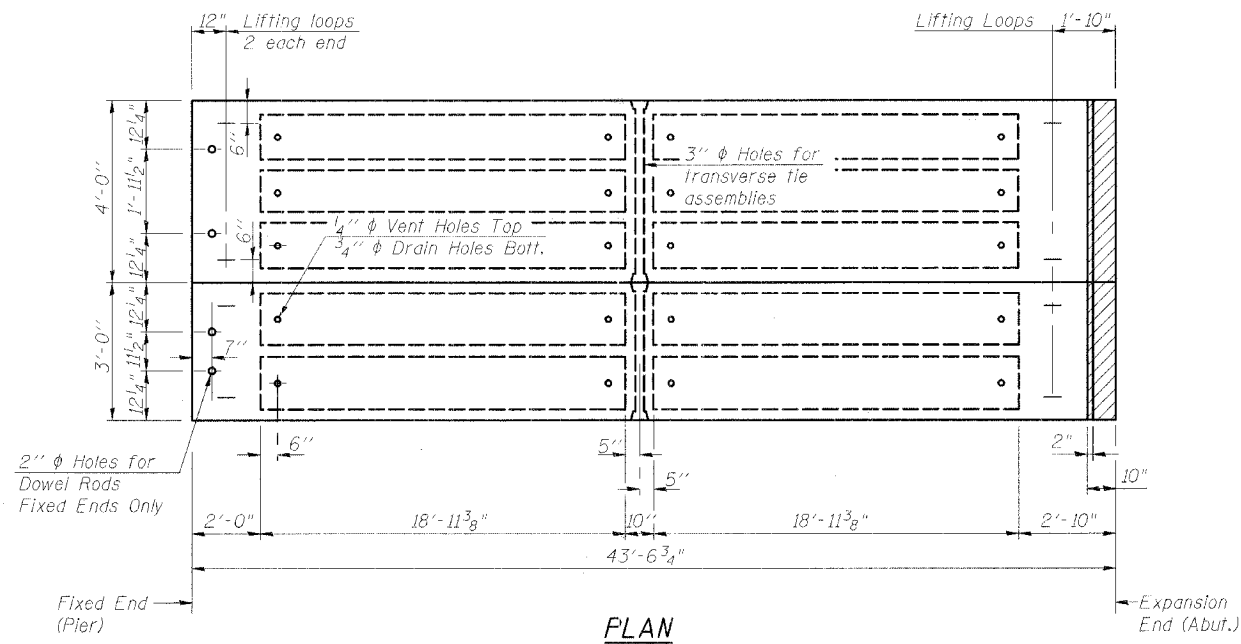
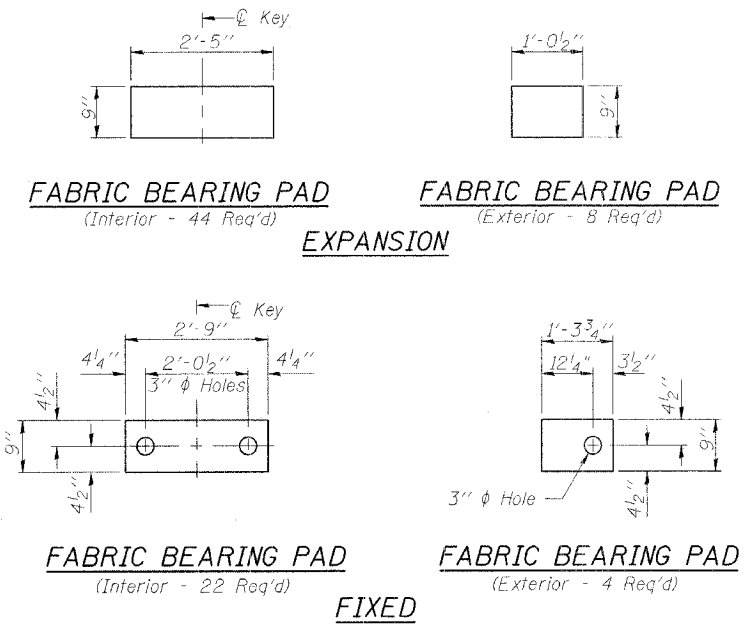
GREENE & BRADFORD, INC. OF SPRINGFIELD	COMPUTER FILE NO. SN053-0148_EJ2
PROJECT 03236 W0-11	12/16/05-MML

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 68	105 BR-1	LIVINGSTON	45	18
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
		Contract #66566		

SHEET NO. 7
14 SHEETS



NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-1/2" diameter 270 ksi strands, as shown.

The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

Non prestressing steel shall conform to AASHTO M-31 or M-322 Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

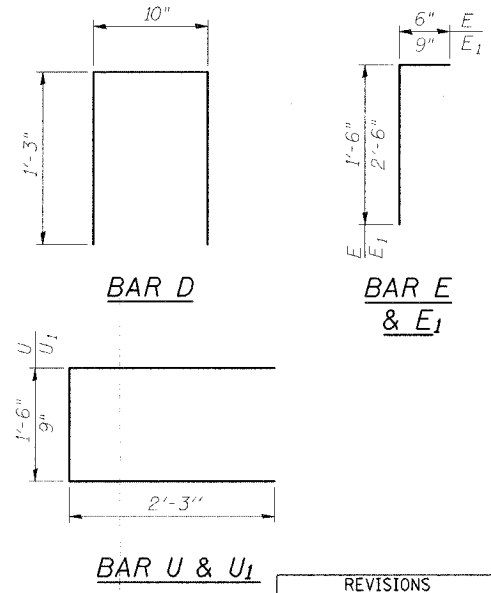
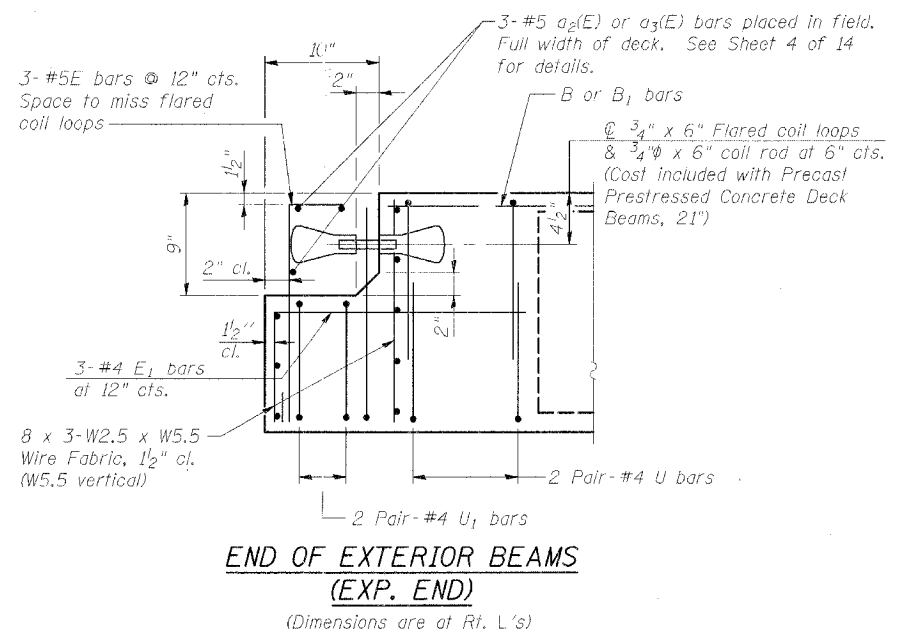
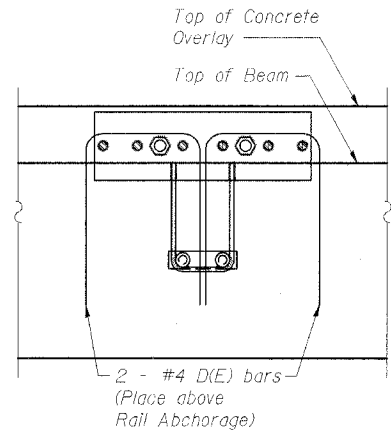
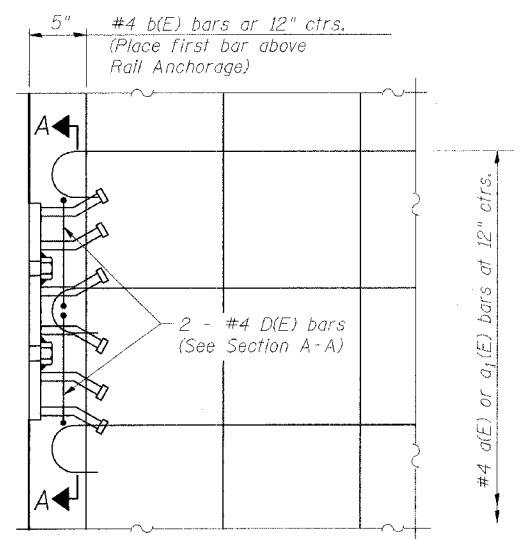
Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

Required Release Strength, f'ci, shall be 4,000 p.s.i.

SECTION THRU EXTERIOR BEAMS AT RAIL ANCHORAGE

See Section Thru Interior Beams for strand pattern, dimensions and bar call outs.

The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.



BILL OF MATERIAL EXTERIOR BEAMS

Bar	No.	Size	Length	Shape
Precast Prestressed Conc. Deck Bms.	21	Sq. Ft.	523	

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. DATE: 9/6/05
DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO
COMPUTER FILE NO. SN053-0148.SS2
PROJECT 03236 WO-11
12/16/05-MML

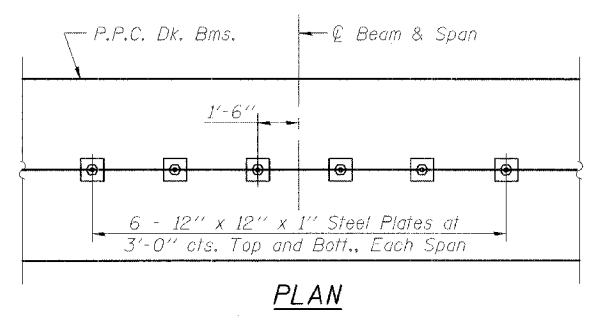
REVISIONS	
NAME	DATE



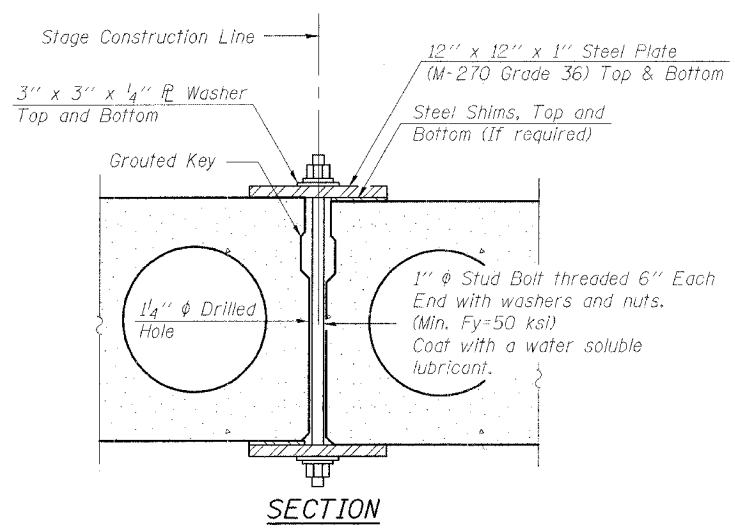
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

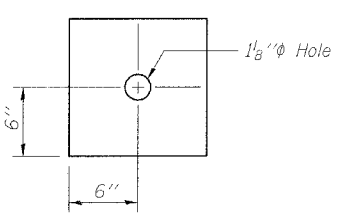
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FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	



PLAN



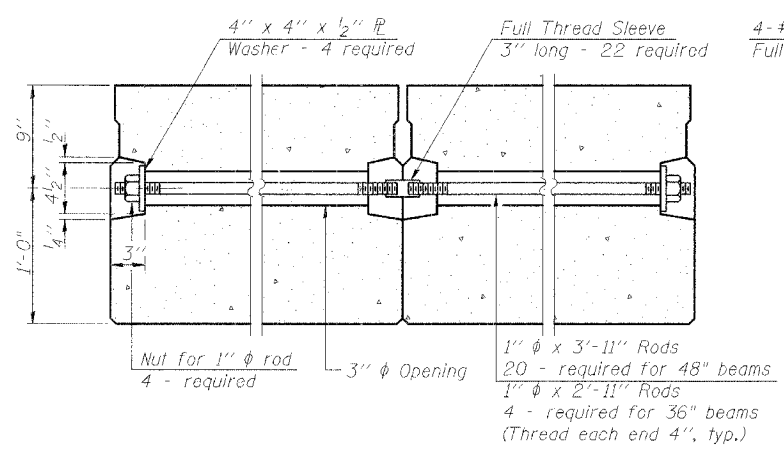
SECTION



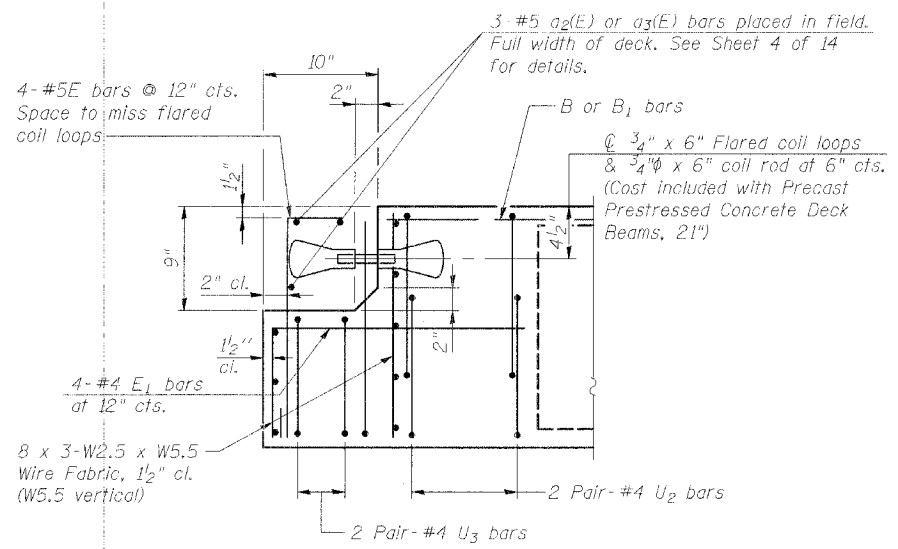
CLAMPING PLATE

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

See Special Provisions for Stage Construction of Precast Prestressed Concrete Deck Beams.
Cost included with Precast Prestressed Concrete Deck Beams, 21".
See Stage Construction Details for traffic lanes.



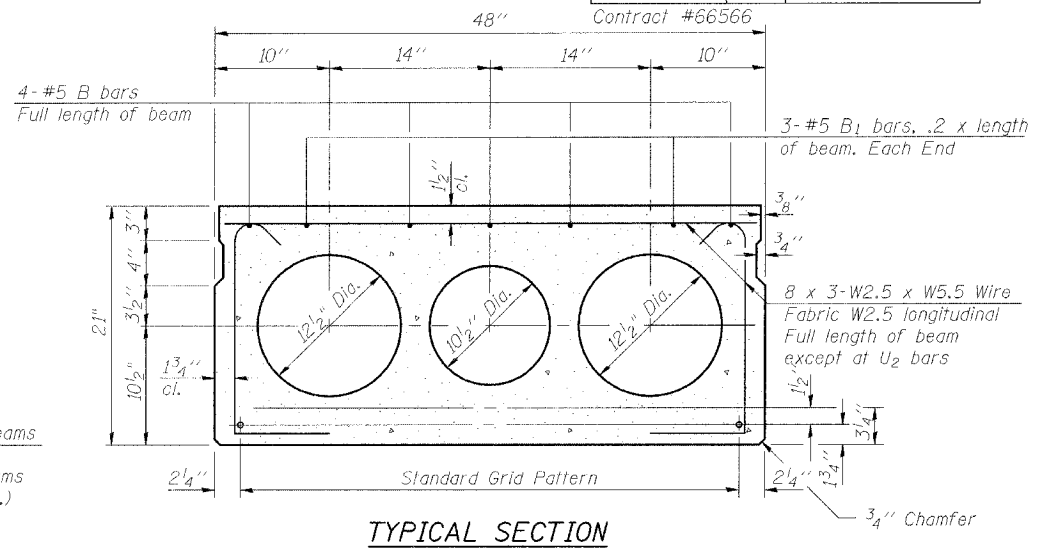
TYPICAL TRANSVERSE TIE ASSEMBLY



END OF INTERIOR BEAMS
(EXP. END)

(Dimensions are at Rt. L's)

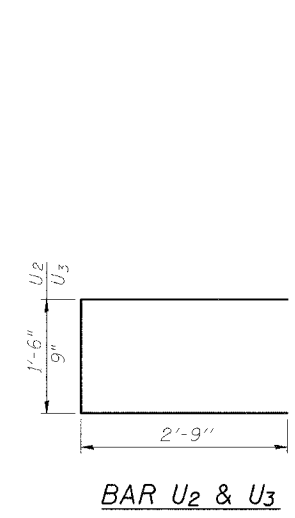
Note:
Work this sheet with Sheet 7 of 14.



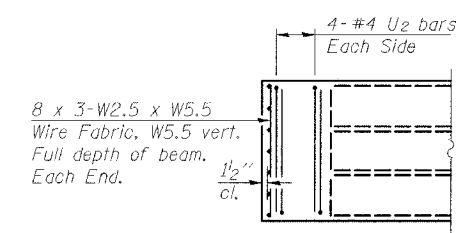
TYPICAL SECTION

14 - 1/2" Strands, Each Strand Stressed to 30,900 Lbs.
8 - Strands 1 3/4" up, 6 - Strands 3/4" up

Note:
Place strands symmetrically about centerline of beam.



BAR U2 & U3



END PLAN (INTERIOR BEAMS)
(Fixed)

BILL OF MATERIAL
INTERIOR BEAMS

Bar	No.	Size	Length	Shape
Precast Prestressed Conc. Deck Bms. (21")			Sq. Ft.	3485

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. DATE: 9/6/05
DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

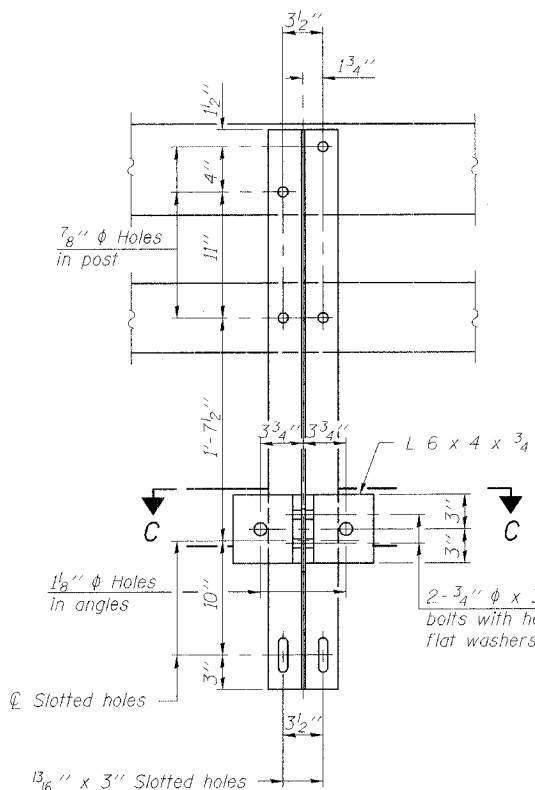
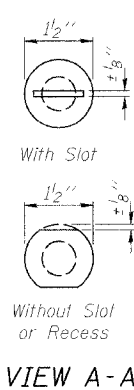
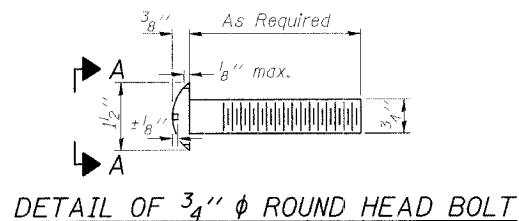
GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
COMPUTER FILE NO. SN053-0148-SS3
PROJECT 03236 W0-11
12/16/05-MML

REVISIONS	
NAME	DATE

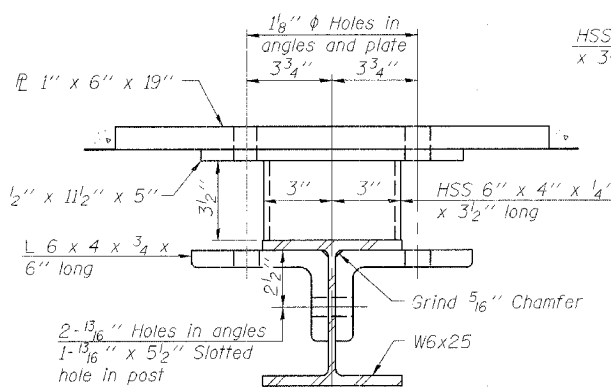
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

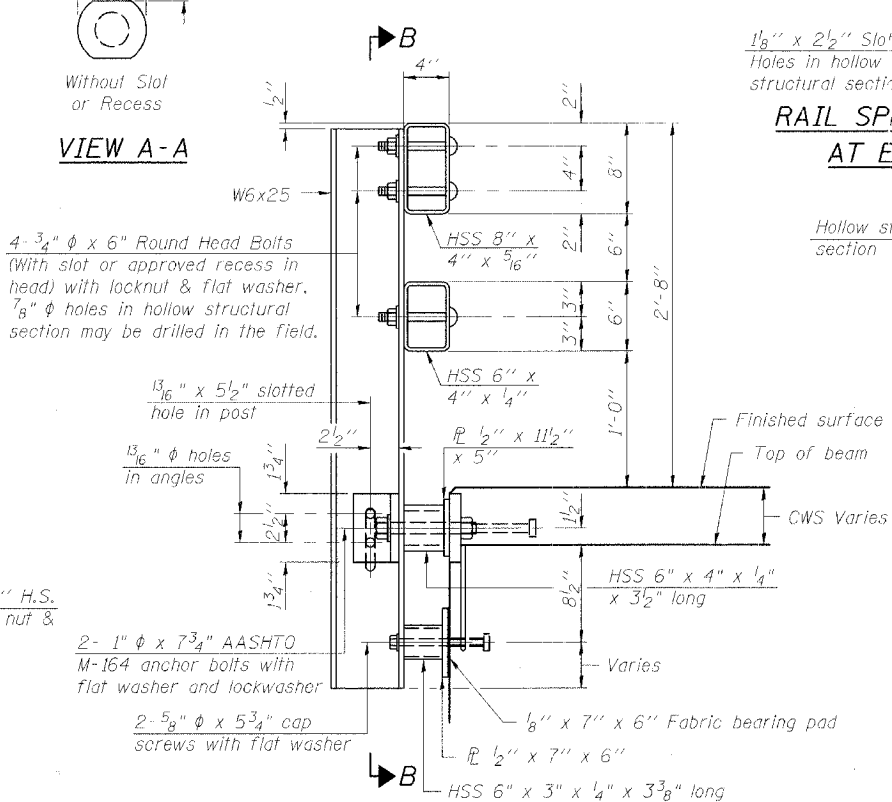
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9 14 SHEETS
FAP 68	105 BR-1	LIVINGSTON	45	20	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			
Contract #66566					



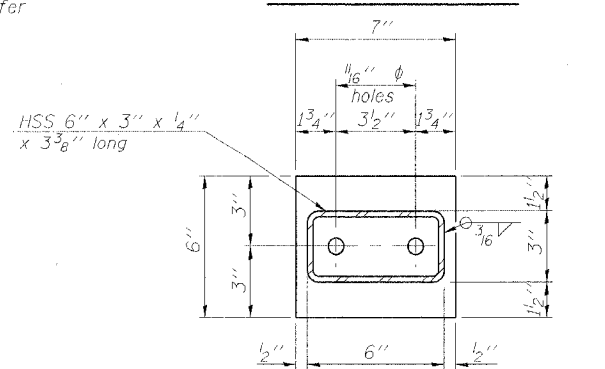
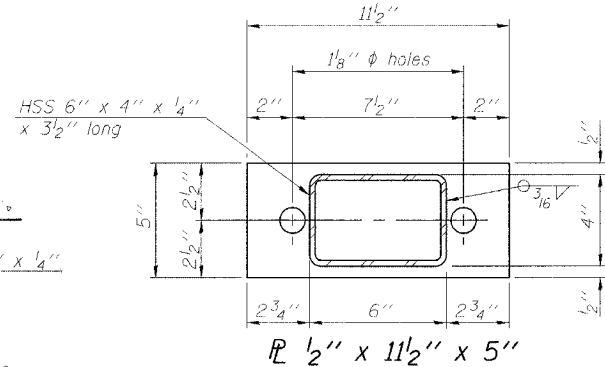
SECTION B-B



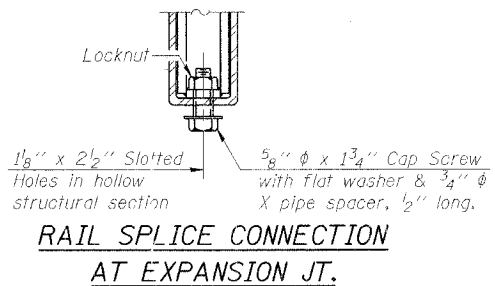
SECTION C-C



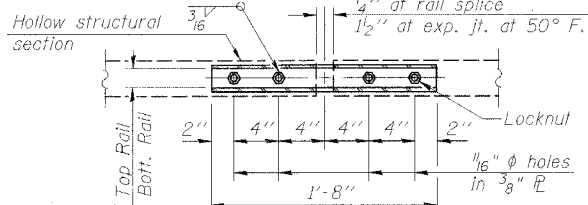
SECTION AT RAIL POST



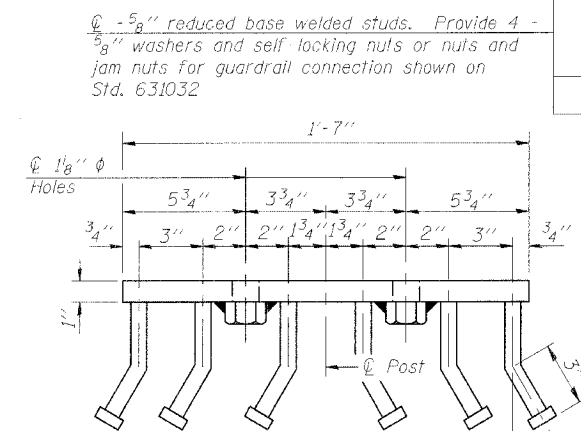
SECTION AT RAIL POST



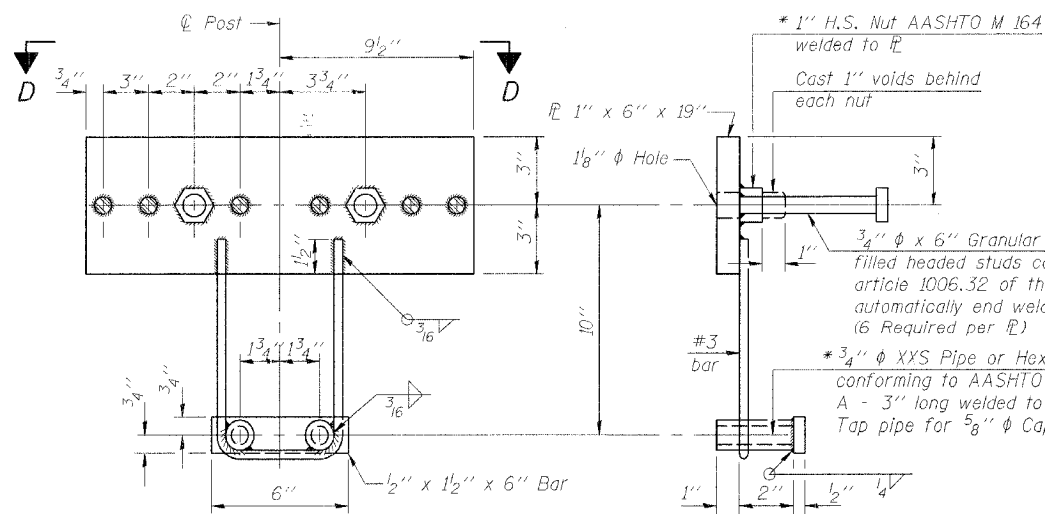
RAIL SPLICE CONNECTION
AT EXPANSION JT.



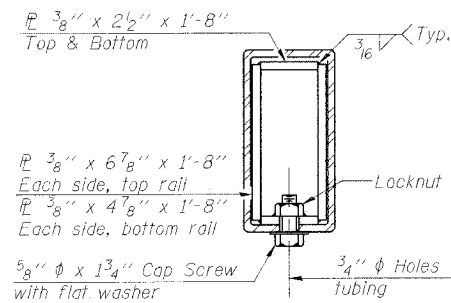
PLAN-BOTT. SPLICE TYPICAL



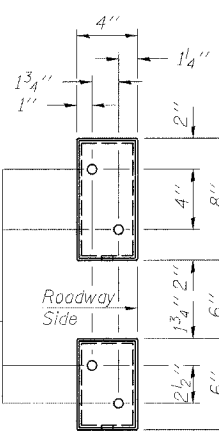
VIEW D-D



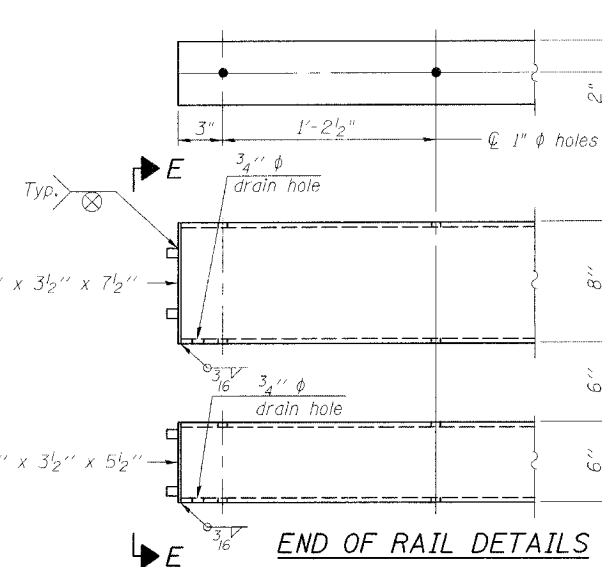
ANCHOR DEVICE



SECTION AT RAIL SPLICE



VIEW E-E



END OF RAIL DETAILS

NOTES

- Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.
- All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50.
- Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.
- All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.
- All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.
- Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Bridge Rail, Type SM.
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
- For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Bridge Rail, Type SM.
- The 3/4" high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(F)(2) of the Standard Specifications. The 1" high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" cap screws in bottom of posts shall be tightened to a snug fit only.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail, Type SM	Foot	215

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPE SM STEEL BRIDGE RAIL
SIDE MOUNTED WITH CONCRETE
WEARING SURFACE

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1 LIVINGSTON COUNTY
STATION 586+62 S.N. 053-0148

SCALE: VERT. HORIZ. DATE: 9/6/05 DRAWN BY: LANDREY DESIGNED BY: SANFORD CHECKED BY: TRELLO

GREENE & BRADFORD, INC. OF SPRINGFIELD CONSULTING ENGINEERS PROJECT NO. 053-0148-0013 CONTRACT NO. 66566 DRAWN BY: J. L. BRADY

COMPUTER FILE NO. SN053-0148-RL PROJECT 03236 WO-11 12/16/05-MML

REVISIONS	
NAME	DATE

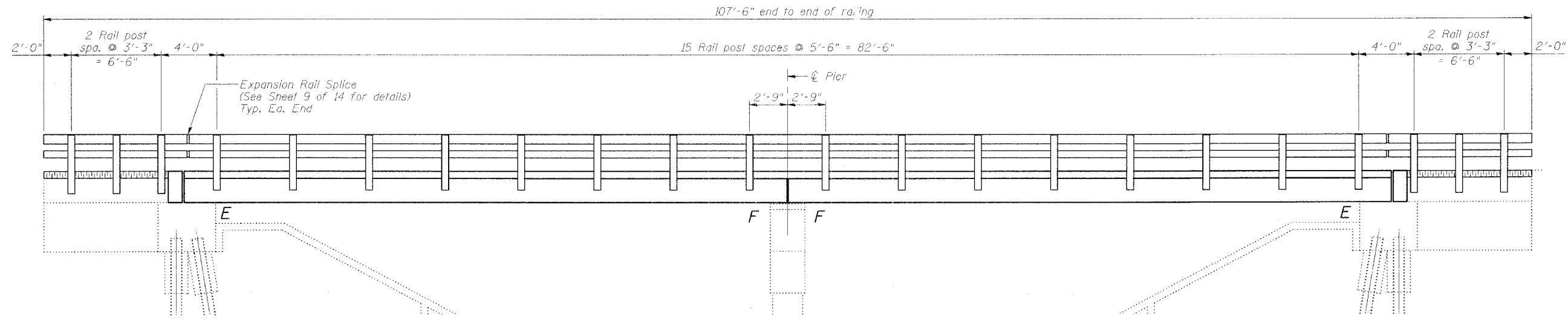
* Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

R-34CWS 10-28-05 (6'-3" Maximum Post Spacing) (5" minimum to 7 1/2" maximum CWS thickness)

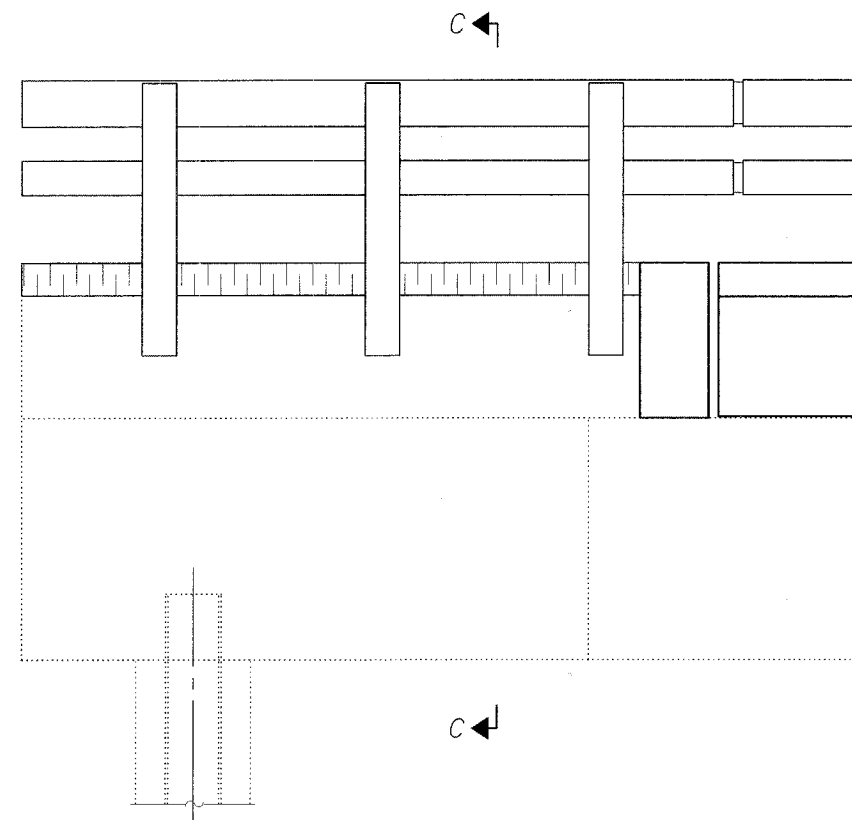
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PLOT TIME = 12:46:05
OPERATOR = mfcbralle

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

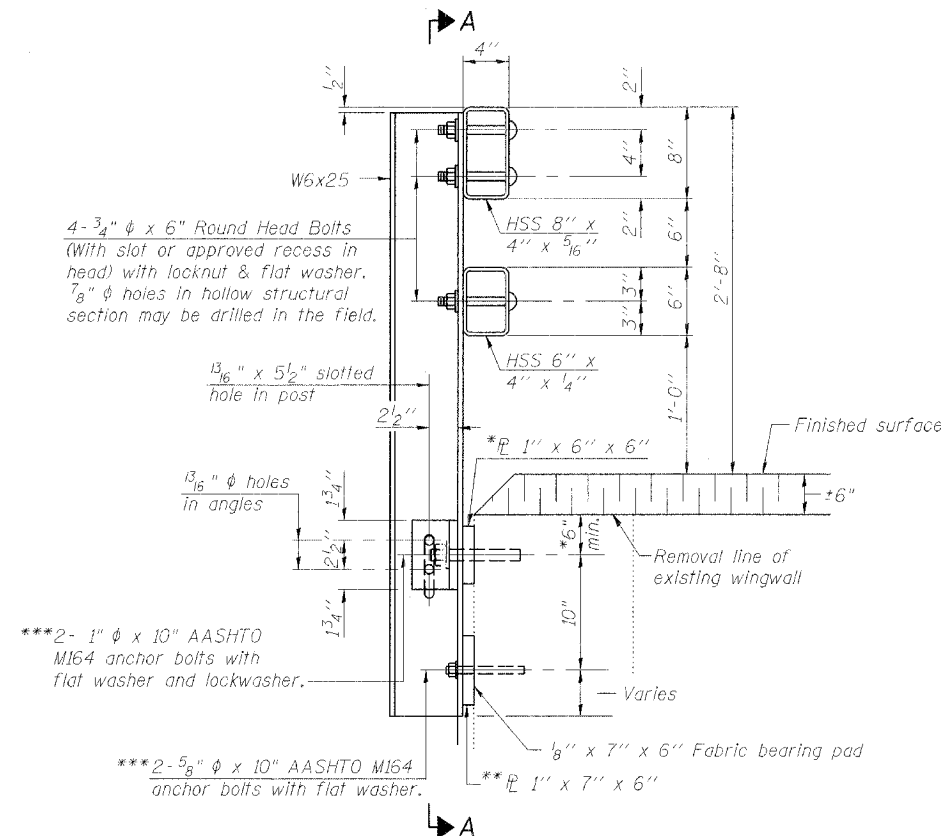
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10 14 SHEETS
FAP 68	105 BR-1	LIVINGSTON	45	21	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	Contract #66566		



ELEVATION



WINGWALL ELEVATION



SECTION AT RAIL POST

Note:
For Section A-A, see Sheet 9 of 14.
Work this sheet with Sheet 9 of 14.

- *W6x25 rail posts may need to be longer than posts attached to deck beams to ensure minimum dimension.
- **Provide steel shim plates as required to ensure face of rails are flush with rail on deck beams. Cost included with "Steel Bridge Rail, Type SM".
- ***Drill and epoxy grout in accordance with Article 584 of the Standard Specs. Cost included in Steel Bridge Rail, Type SM.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
RAIL DETAILS
FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. _____
HORIZ. _____
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

COMPUTER FILE NO.
SN053-0148_RLD
PROJECT 03236 WO-11
12/16/05-MML

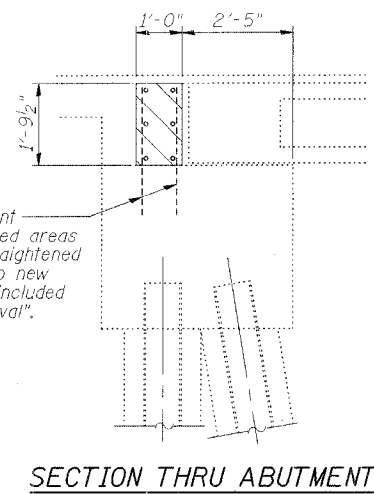
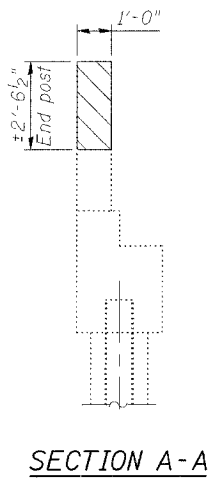
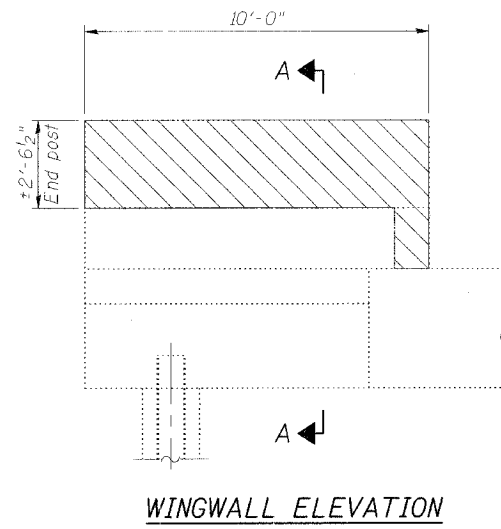
GREENE & BRADFORD, INC.
OF SPRINGFIELD
REGISTERED PROFESSIONAL ENGINEERS
AND ARCHITECTS
1871 N.E. 88th, SUITE 700, OKLAHOMA CITY, OKLAHOMA 73120
5811 N.E. 88th, SUITE 700, OKLAHOMA CITY, OKLAHOMA 73120

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OPERATOR = michelle

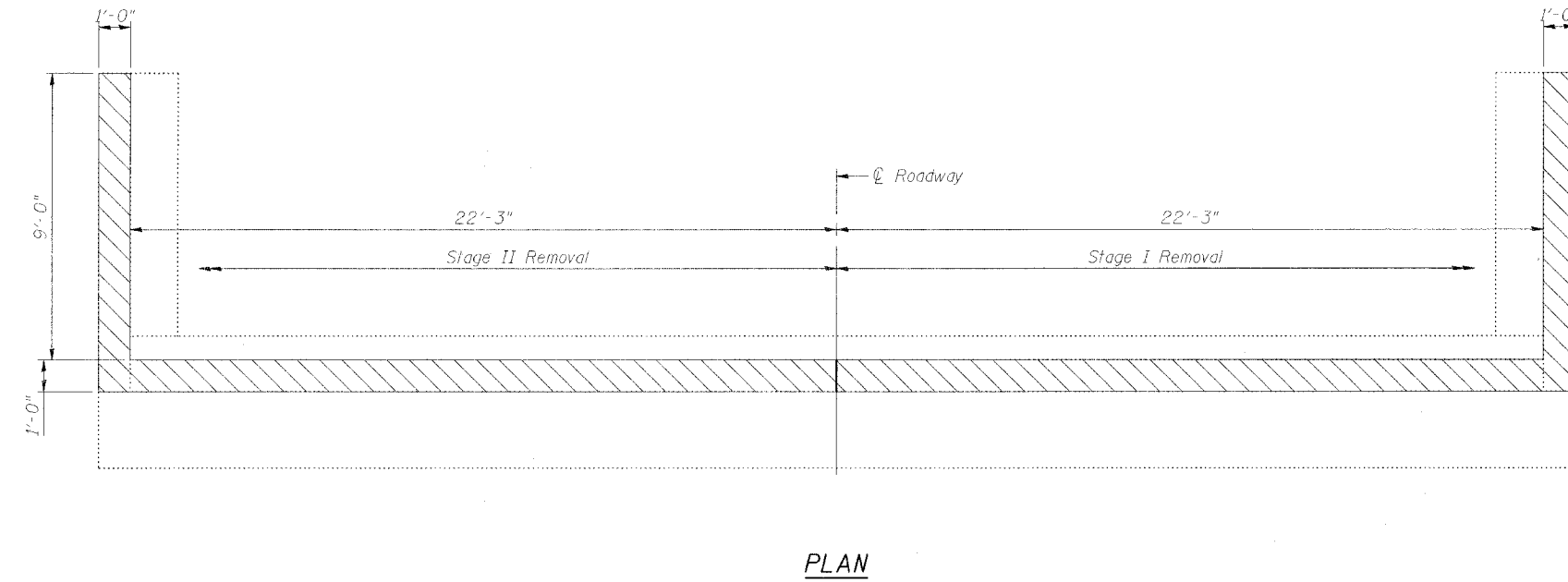
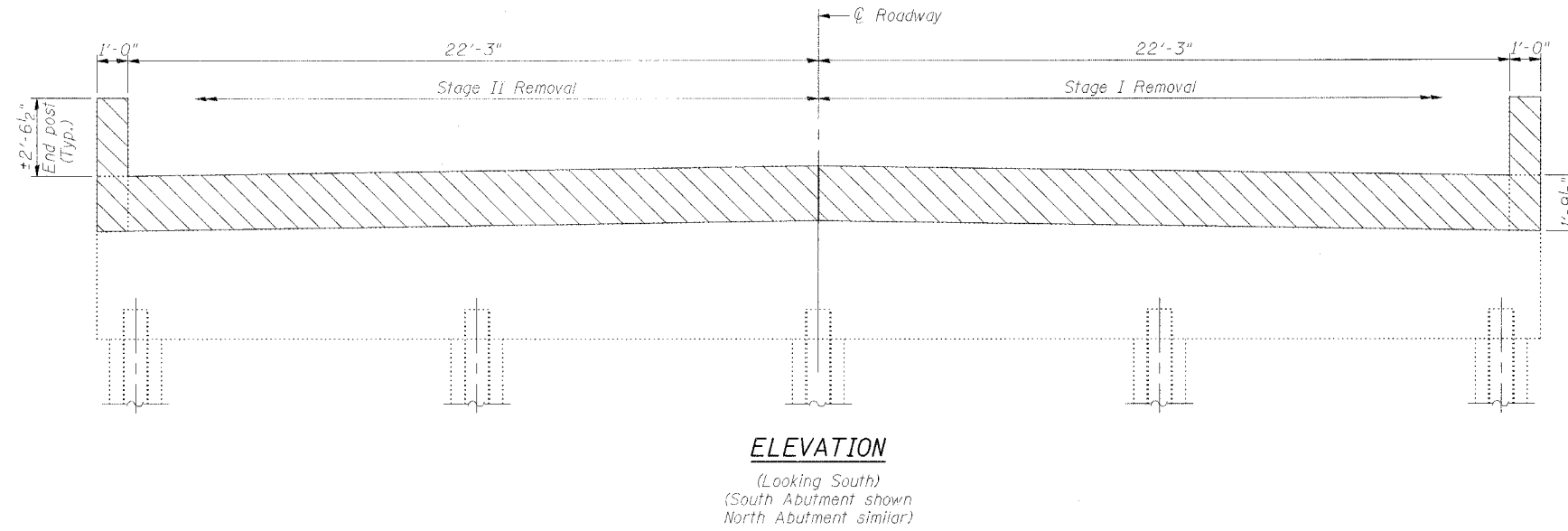
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11 14 SHEETS
FAP 68	105 BR-1	LIVINGSTON	45	22	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

Contract #66566



Existing reinforcement extending into removed areas shall be cleaned, straightened and incorporated into new construction. Cost included with "Concrete Removal".



LEGEND
Indicates Concrete Removal

ILLINOIS DEPARTMENT OF TRANSPORTATION
CONCRETE REMOVAL DETAILS

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. HORIZ.
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

COMPUTER FILE NO.
SN053-0148.REM
PROJECT 03236 WO-11
12/16/05-MML

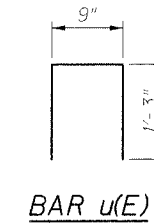
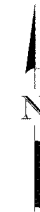
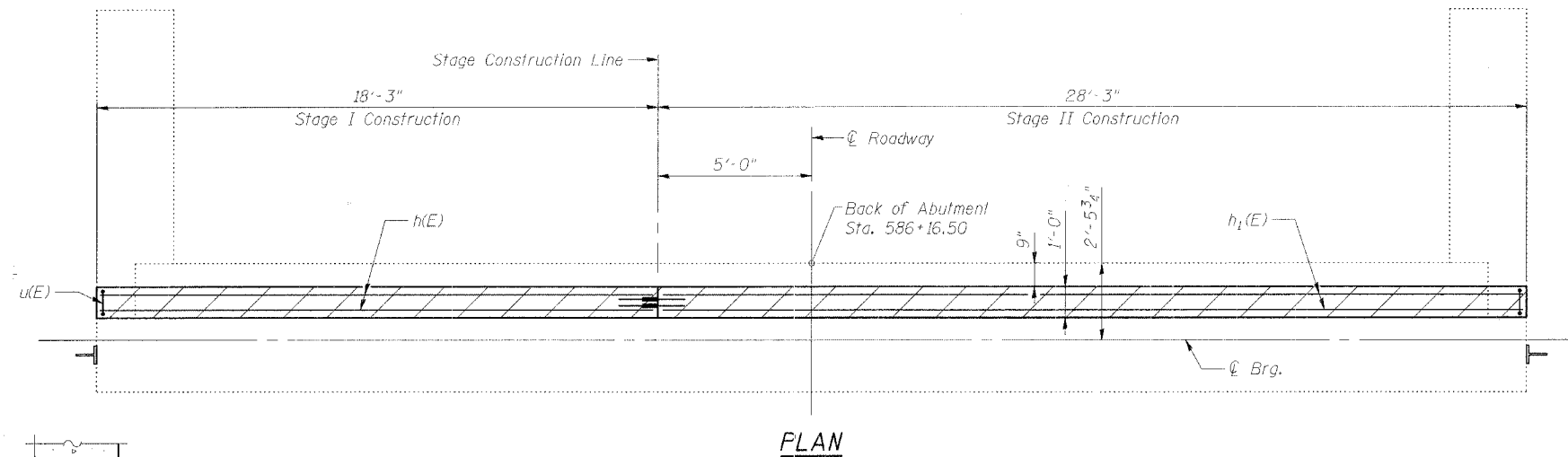
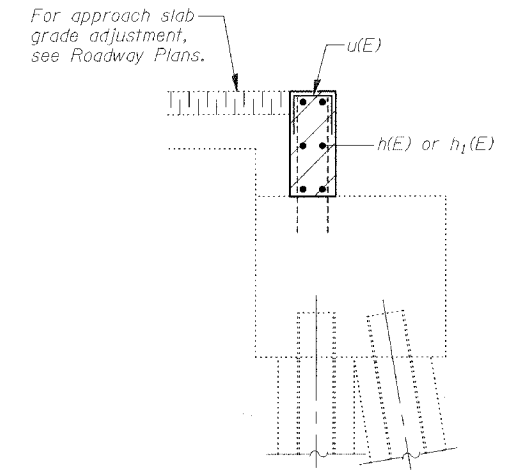
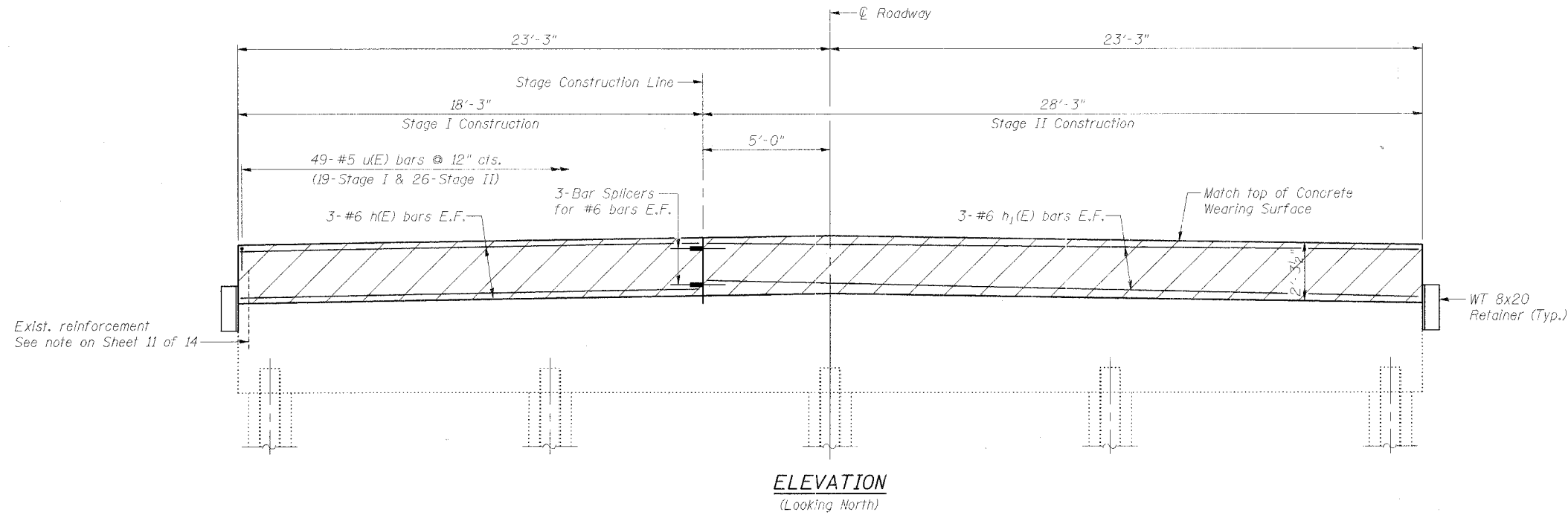
REVISIONS	
NAME	DATE

GREEN & BRADFORD, INC.
CONSULTING ENGINEERS
PROFESSIONAL ENGINEERS
OFFICE: 1000 N. WASHINGTON ST., SUITE 200
MADISON, IL 61701-1001 TEL: 618-261-1000 FAX: 618-261-1001

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OPERATOR = michellel

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12
FAP 68	105 BR-1	LIVINGSTON	45	23	14 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	Contract #66566		

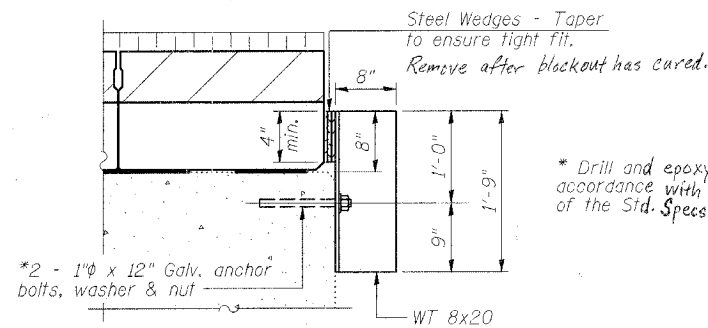
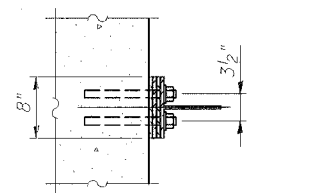


**BILL OF MATERIAL
ONE ABUTMENT**

Bar	No.	Size	Length	Shape	
h(E)	6	#6	18'-0"	—	
h ₁ (E)	6	#6	28'-0"	—	
u(E)	98	#5	3'-3"	□	
Concrete Structures				Cu. Yd.	3.7
Reinforcement Bars, Epoxy Coated				Pound	1830
Concrete Removal				Cu. Yd.	5.5

Reinforcement designated (E) shall be epoxy coated.

Note:
Hatched area shall be poured after concrete wearing surface is in place.
Retainer and shims shall be in-place prior to grouting of the shear keys.
After blockouts are poured and cured the retainer shall be removed.
Anchor bolts may be left in place.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT.
HORIZ.
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
PROFESSIONAL GEOTECHNICAL ENGINEERS
PROFESSIONAL CIVIL ENGINEERS
PROFESSIONAL ELECTRICAL ENGINEERS
PROFESSIONAL MECHANICAL ENGINEERS
PROFESSIONAL CHEMICAL ENGINEERS
PROFESSIONAL INDUSTRIAL ENGINEERS
PROFESSIONAL AERONAUTICAL ENGINEERS
PROFESSIONAL METALLURGICAL ENGINEERS
PROFESSIONAL NUCLEAR ENGINEERS
PROFESSIONAL PETROLEUM ENGINEERS
PROFESSIONAL TRANSPORTATION ENGINEERS
PROFESSIONAL ENVIRONMENTAL ENGINEERS
PROFESSIONAL MARINE ENGINEERS
PROFESSIONAL AGRICULTURAL ENGINEERS
PROFESSIONAL FORESTRY ENGINEERS
PROFESSIONAL MINING ENGINEERS
PROFESSIONAL METALS ENGINEERS
PROFESSIONAL POLYMER ENGINEERS
PROFESSIONAL RADIATION ENGINEERS
PROFESSIONAL THERMAL ENGINEERS
PROFESSIONAL WIND ENGINEERS
PROFESSIONAL OCEANOGRAPHIC ENGINEERS
PROFESSIONAL POLYMER ENGINEERS
PROFESSIONAL METALS ENGINEERS
PROFESSIONAL RADIATION ENGINEERS
PROFESSIONAL THERMAL ENGINEERS
PROFESSIONAL WIND ENGINEERS
PROFESSIONAL OCEANOGRAPHIC ENGINEERS

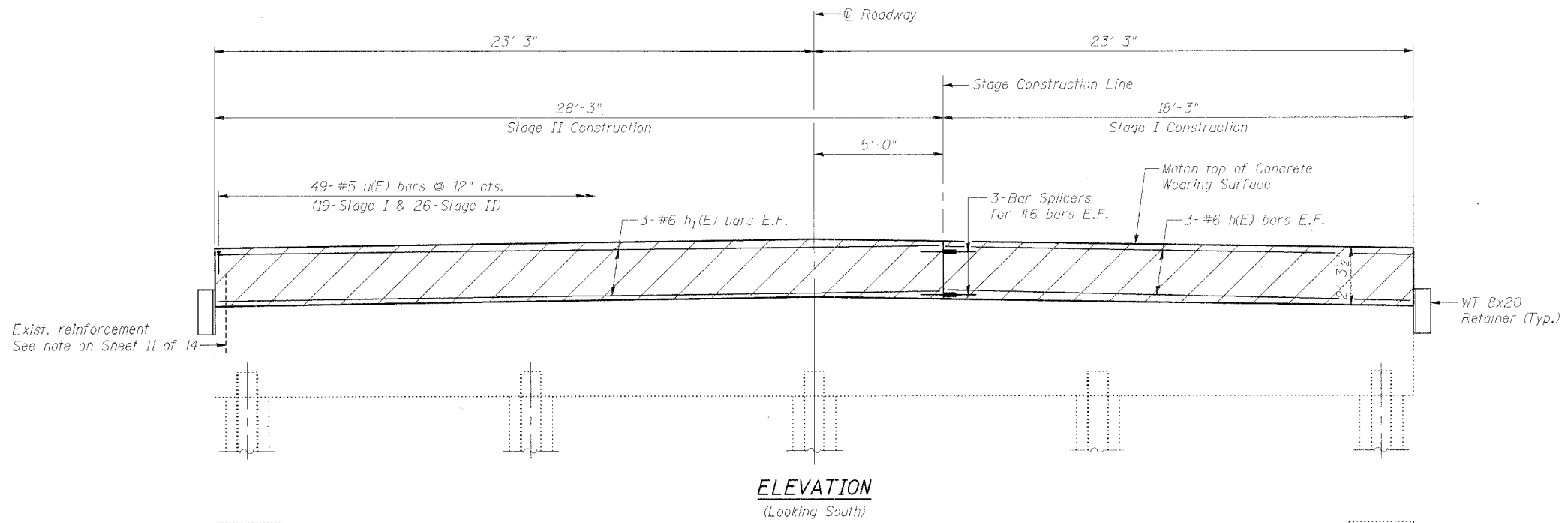
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PROJECT 03236 WO-11
12/16/05-MML

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OPERATOR = michaell

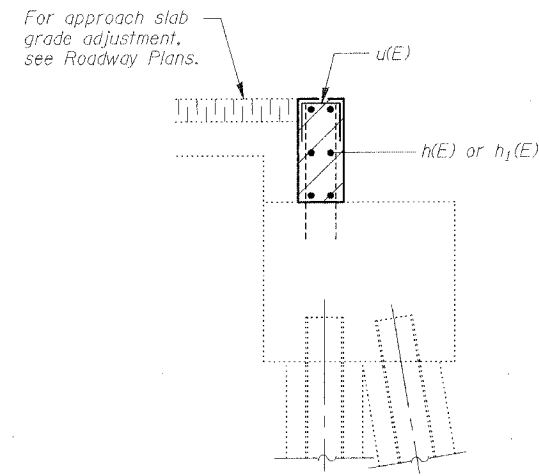
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13
FAP 68	105 BR-1	LIVINGSTON	45	24	14 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

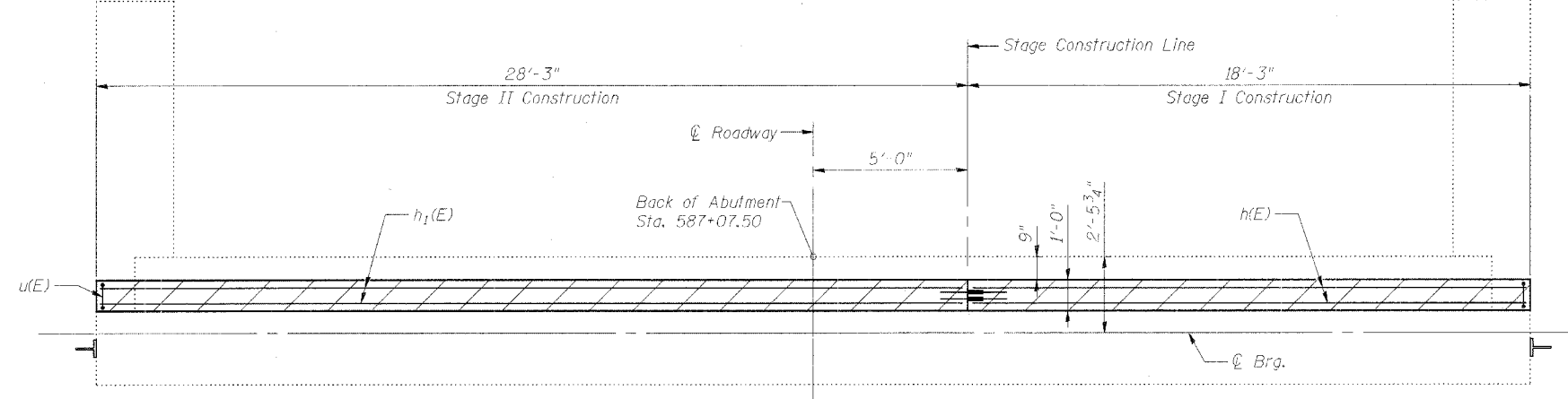
Contract #66566



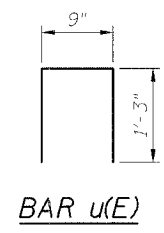
ELEVATION
(Looking South)



SECTION THRU ABUTMENT



PLAN

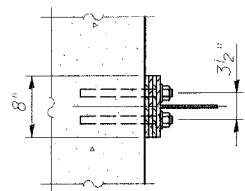


BAR u(E)

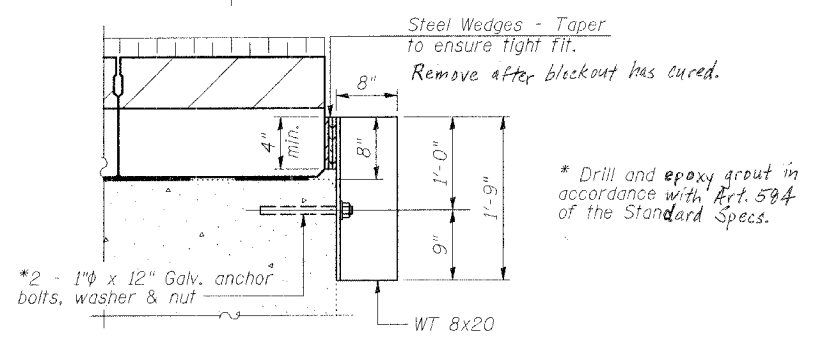
**BILL OF MATERIAL
ONE ABUTMENT**

Bar	No.	Size	Length	Shape
h(E)	6	#6	18'-0"	—
h1(E)	6	#6	28'-0"	—
u(E)	49	#5	3'-3"	□
Concrete Structures			Cu. Yd.	3.7
Reinforcement Bars, Epoxy Coated			Pound	18.30
Concrete Removal			Cu. Yd.	5.5

Reinforcement designated (E) shall be epoxy coated.



RETAINER DETAIL



ILLINOIS DEPARTMENT OF TRANSPORTATION
SOUTH ABUTMENT
FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

REVISIONS	
NAME	DATE

SCALE: VERT. _____
HORIZ. _____
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

COMPUTER FILE NO.
SN053-0148.SAB
PROJECT 03236 WO-11
12/16/05-MML

GREENE & BRADFORD, INC.
OF SPRINGFIELD
REGISTERED PROFESSIONAL ENGINEERS
PROFESSIONAL ENGINEER LICENSE NO. 0198
PROFESSIONAL & STRUCTURAL ENGINEERING CORPORATION
200-10-BMIL, 200-700-A207, P.O. Box 11000, Springfield, Illinois 62711

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OPERATOR = mitchell

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAP 68	SECTION 105 BR-1	COUNTY LIVINGSTON	TOTAL SHEETS 45	SHEET NO. 25
FED. PROJ. DIST. NO.		ILLINOIS	FED. AID PROJECT	

Contract #66566

SHEET NO. 14
14 SHEETS

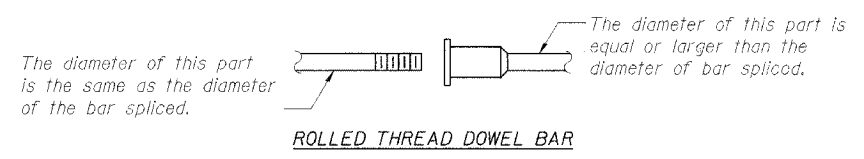
NOTES

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:

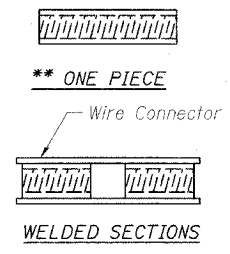
- Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s_{allow}} \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	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."

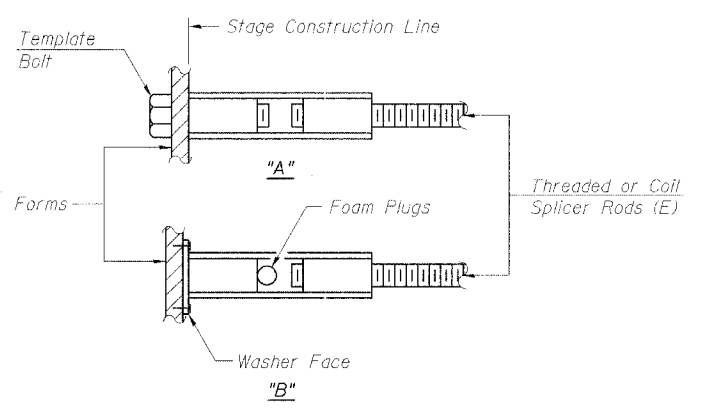


ROLLED THREAD DOWEL BAR



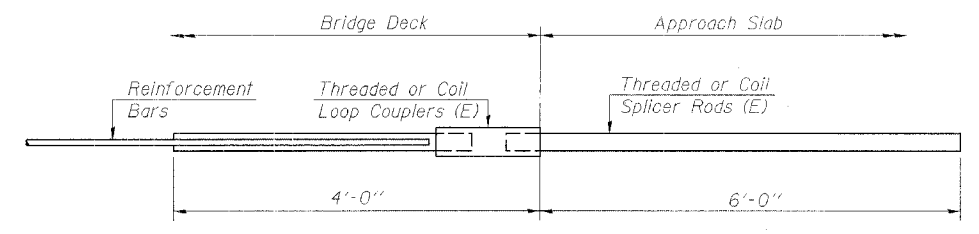
BAR SPLICER ASSEMBLY ALTERNATIVES

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



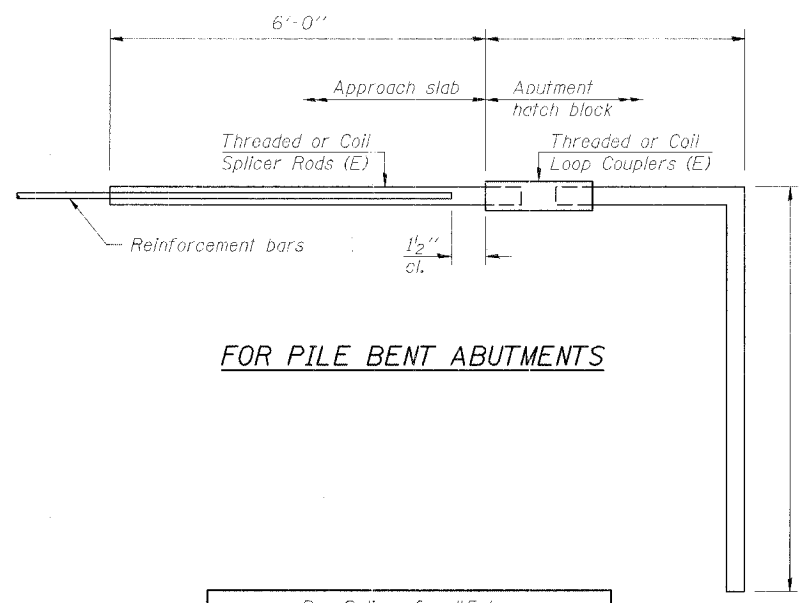
INSTALLATION AND SETTING METHODS

"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.



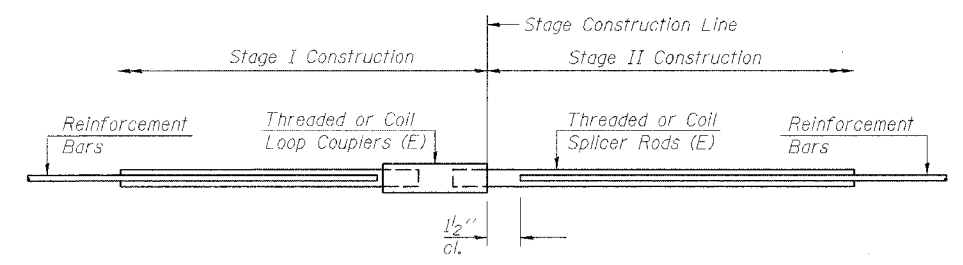
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



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 =



STANDARD

Bar Size	No. Assemblies Required	Location
#4	88	Wearing Surface
#5	6	Wearing Surface
#6	12	Abutments

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT. _____
HORIZ. _____
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
OF SPRINGFIELD

COMPUTER FILE NO.
SN053-0148.BSD
PROJECT 03236 W0-11
12/16/05-MML

REVISIONS	
NAME	DATE

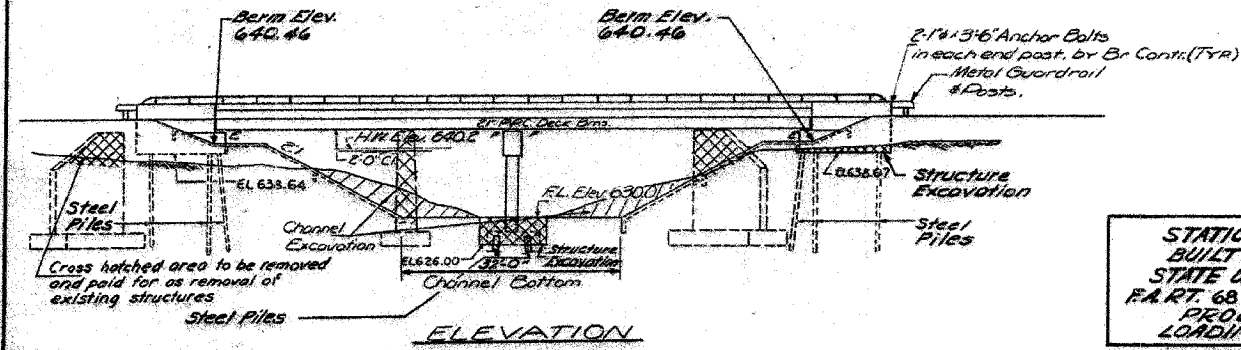
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OPERATOR = michellel

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	26
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE	ISSUED	BY	NO.	REV.	SHEET NO. /
10/25/05	10/25/05	LIVINGSTON	81	39	7 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

B.M. Chiseled Square in N.E. Wingwall Bridge 14' Lt.
Sta 586+02 Elev. 641.70
Existing Structure: Built as SBI 118, Sec. 105B Sta 586+52
in 1928 Superstr. RC thru Girder Substr. RC Abutts &
Solid Pier. Contractor shall remove existing
structure after completion of run-around.
No Salvage.



STATION 586+62
BUILT 197 BY
STATE OF ILLINOIS
F.A.R.T. 68 SEC. 105-BR-1
PROJ. F-68(14)
LOADING HS-20
NAME PLATE
(See Std. 2113)

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown
All structural steel shall be shop painted with 2 coats of basic lead silico chromate paint.
Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq. ft.
Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.
The Contractor shall drive 2 steel test piles in a permanent location, 1 each at North Abut. and pier, as directed by the Engineer before ordering the remainder of piles.
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.
The concrete rail section above top of the D.B. shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail concrete.
The top surface of the beams shall be finished in accordance with Art. 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

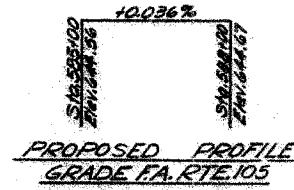
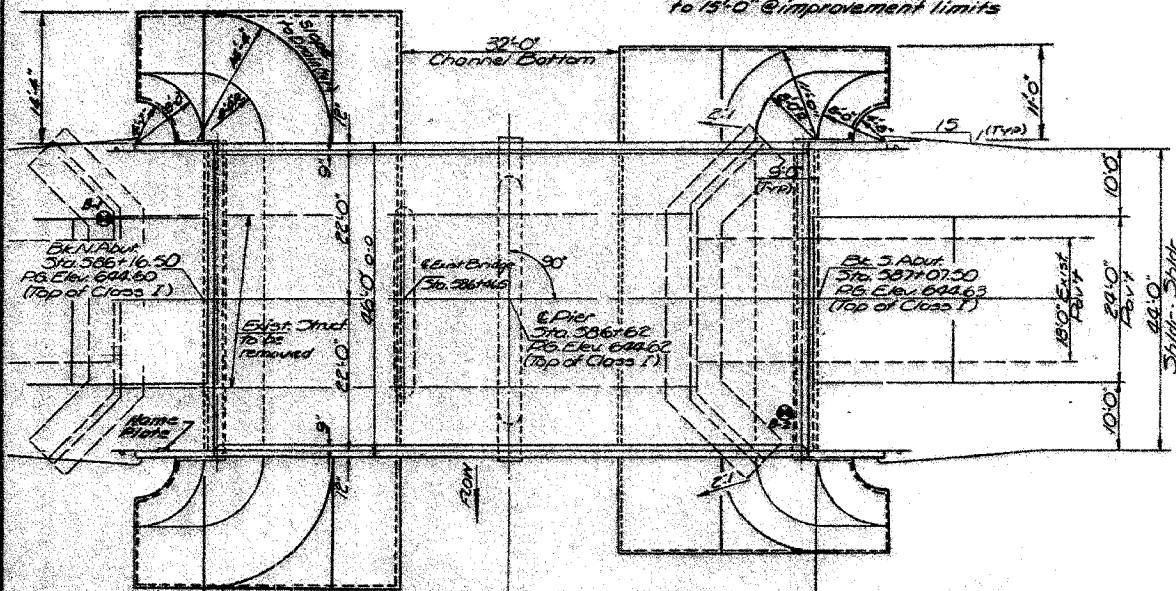
TOTAL BILL OF MATERIAL

ITEM	Unit	Super	Sub	Total
Channel Excavation	Cu. Yds.		600	600
Bituminous concrete Surface Course, Class I	Tons	45		45
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yds.		60	60
Protective Coat	Sq. Yds.	81		81
Class X Concrete	Cu. Yds.	21.3	130.1	151.6
Precast Prestressed Conc. Deck Beams (21')	Sq. Ft.	4008		4008
Structural Steel	Lbs.	6160		6160
Aluminum Rolling	Lin. Ft.	211		211
Reinforcement Bars	Lbs.	2800	9700	12500
Steel Piles HP 10x42	Lin. Ft.		1160	1160
Test Pile Steel HP 10x42	Each		2	2
Name Plates	Each		1	1
Slope Wall 6"	Sq. Yds.	610		610
Preformed Joint Sealer 2 1/2"	Lin. Ft.	92		92
Waterproofing Membrane System	Sq. Yds.	414		414
Portland Cement Mortar Faring Course	Ln. Ft.	958		958

* Bit. Surfacing Quantity is from end to end of D.B. Bms.
** See Special Provisions.

Limits for channel improvement 60' upstream and 125' downstream from existing transition point of Channel. From 22'0" @ structure to 15'0" @ improvement limits

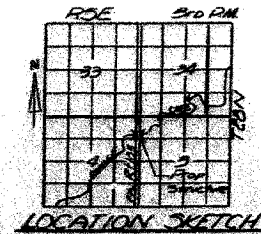
Note: for Borings see the Proposal.



PROPOSED PROFILE
GRADE F.A. RTE 105

WATERWAY INFORMATION

Drainage Area: 20.50 Miles
Present Opening: 440 Sq. Ft.
Road Opening: 500 Sq. Ft.
Prop. Opening: 500 Sq. Ft.
Q100: 2512 cfs
Created Head: .025'



PROJECT F-68(14)
GENERAL PLAN and ELEVATION
F.A. RTE 105 over WOLF CREEK
F.A. RTE 105 SEC. 105-BR-1
LIVINGSTON COUNTY
STATION 586+62.00

DESIGNED	J. J. Hurd
CHECKED	G.E.O.
DATE	October 24, 1974
DESIGNED	Ferrando
CHECKED	G.E.O.

DESIGN STRESSES	
FIELD UNITS	PRESTRESSED UNITS
$f_c = 1400$ psi (Parapet Curbs)	$f_c = 5000$ psi
$f_c = 20000$ psi (Pier)	$f_c = 4000$ psi
$f_s = 15$ psi (Figs.)	$f_s = 170000$ psi (1/2" Strands)
$p = 10$	$f_s = 183000$ psi (1/2" Strands)
Allow for 25% Safety for Fat. W.S.	
LOADING HS-20-44	



FOR INFORMATION ONLY

PLT DATE = 12/21/2005
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OPERATOR = mcm114

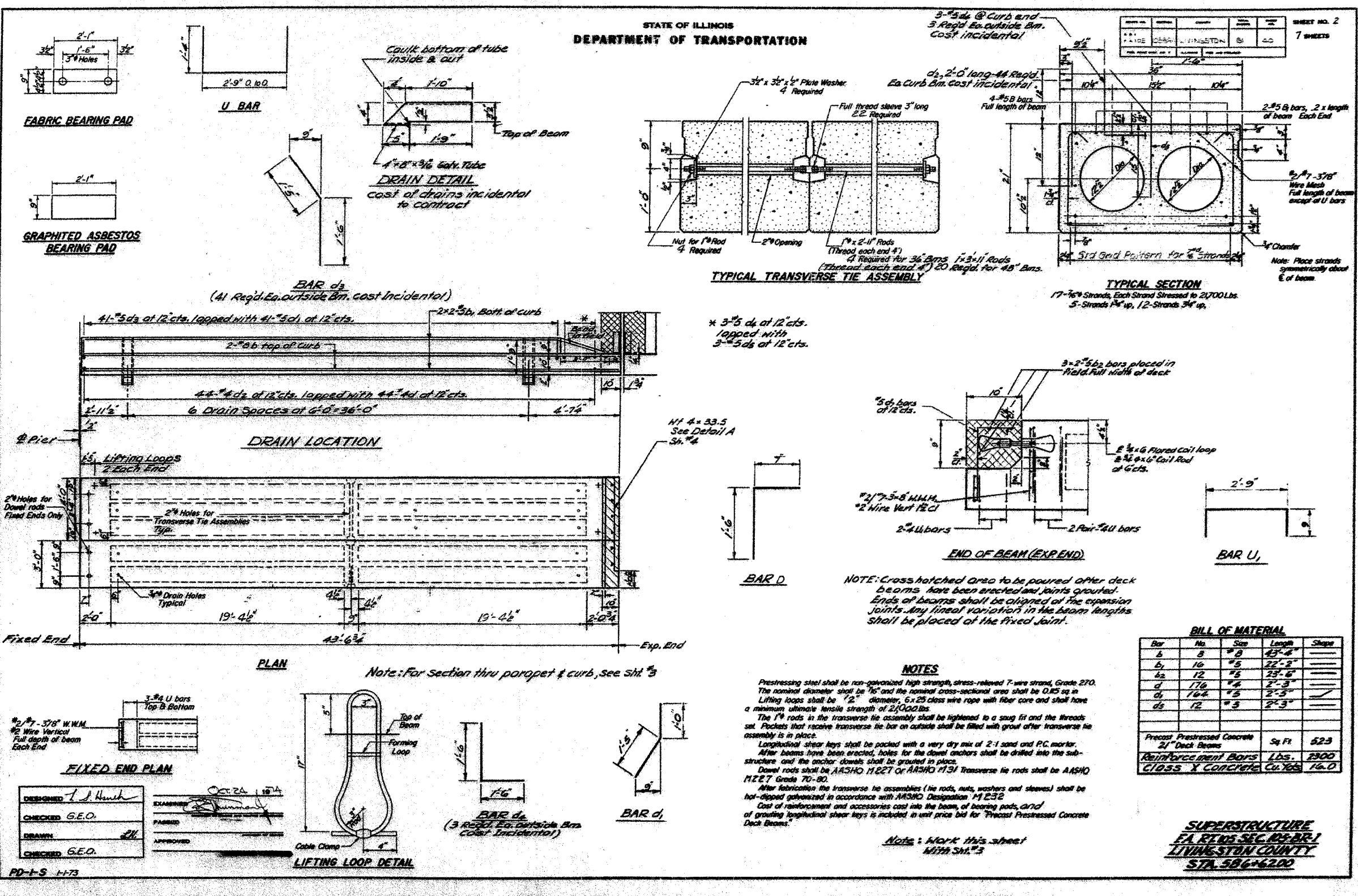
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE PLANS
FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY
SCALE: VERT. DATE: 11/15/05
DRAWN BY: SUTHEARD
CHECKED BY: BOTT
GREENE & BRADFORD, INC.
COMPUTER FILE NO. 03236.W011.EPLN
PROJECT 03236 W011 11/15/05 - MDS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SHEET NO. 2
7 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SUPERSTRUCTURE
EA. RING SEC. 105 BR-1
LIVINGSTON COUNTY
STA. 586+620

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE PLANS
FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

REVISIONS

NAME	DATE

SCALE: VERT. HORIZ.
DATE: 11/15/05
DRAWN BY: SUTHEARD
CHECKED BY: BOTT
GREENE & BRADFORD, INC.
OF SPRINGFIELD
CONSULTING ENGINEERS
PROFESSIONAL ENGINEERS
REGISTERED IN ILLINOIS
ILL. REG. NO. 021-0000000-0000
OPERATORS: J. J. HENSCH, J. J. HENSCH, J. J. HENSCH
COMPUTER FILE NO. 03236.W011.EPLN
PROJECT 03236 W011
11/15/05 - MDS

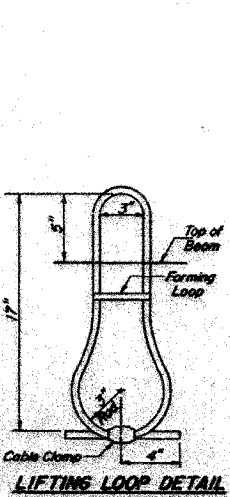
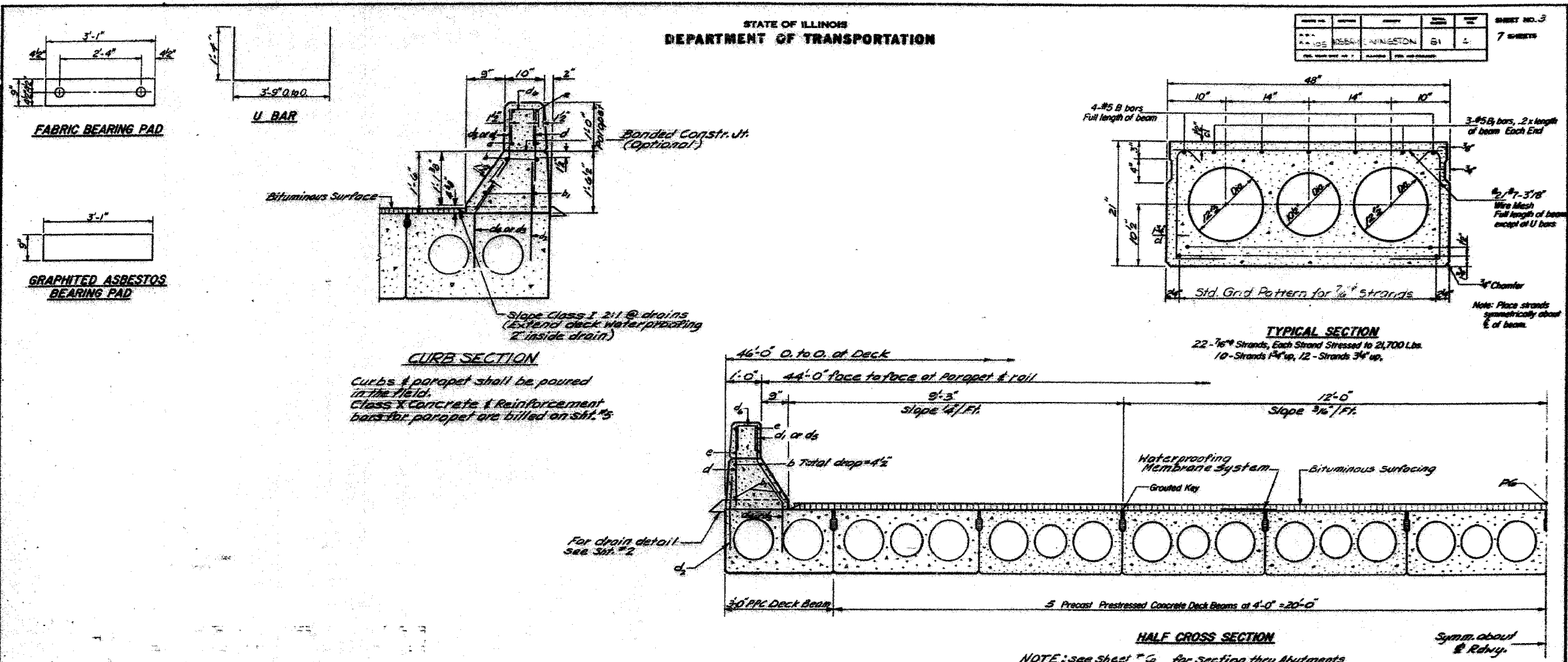
FOR INFORMATION ONLY

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OPERATOR = michael

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	28
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
66-105	BRIDGE LIVINGSTON	61	7



FIXED END PLAN
For detail of Exp. end see sheet #2

DESIGNED: J. H. Hume
CHECKED: G.E.O.
DRAWN: J.H.
CHECKED: G.E.O.

EXAMINED: [Signature]
DATE: OCT 24 1974
APPROVED: [Signature]

PD-2-S 11-73

NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 7/16" and the nominal cross-sectional area shall be 0.85 sq. in. Lifting loops shall be 3/8" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33000 lbs. The 1/4" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Longitudinal shear keys shall be packed with a very dry mix of 2-1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the substructure and the anchor dowels shall be grouted in place. Dowel rods shall be AASHTO M227 or AASHTO M13. Transverse tie rods shall be AASHTO M227, Grade 70-80. After fabrication the transverse tie assemblies (tie rods, nuts, washers and sleeves) shall be hot-dipped galvanized in accordance with AASHTO Designation M129E. Cost of reinforcement and accessories cast into the beam, of bearing pads, and of grouting longitudinal shear keys is included in unit price bid for Precast Prestressed Concrete Deck Beams.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
Precast Prestressed Concrete		Sq Ft	3485	
21" Deck Beams				

SUPERSTRUCTURE
E.A. RITNER SOC. CO. BR. 1
LIVINGSTON COUNTY
STA. 506+62.00

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE PLANS
FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT. HORIZ.
DATE: 11/15/05

DRAWN BY: SUTHEARD
CHECKED BY: BOTT

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
OF SPRINGFIELD

COMPUTER FILE NO.
03236.W011.EPLN
PROJECT 03236 W011
11/15/05 - MDS

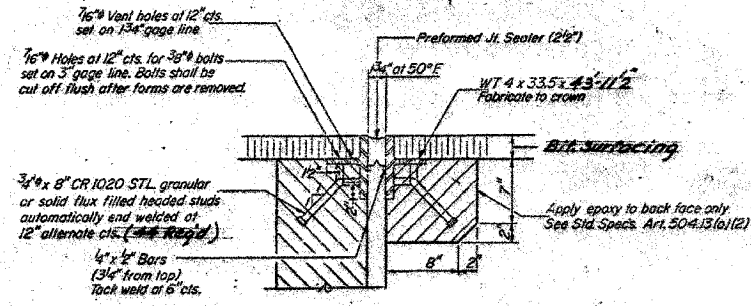
FOR INFORMATION ONLY

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USER: JHUMES
REFERENCE: 03236 / IN.
OPERATOR: michella

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	29
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

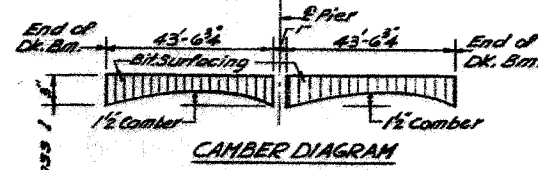
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

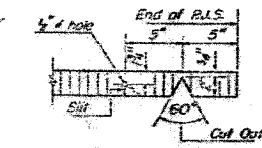


DETAIL "A"

NOTE: Dimensions are at right angles.
Hatched areas to be poured after beams have been erected and joints grouted.
Ends of beams shall be aligned at the expansion joints. Any lineal variation in the beam lengths shall be placed at the fixed joint.
See End of Beam Detail for reinforcement.

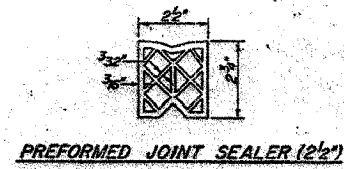


CAMBER DIAGRAM

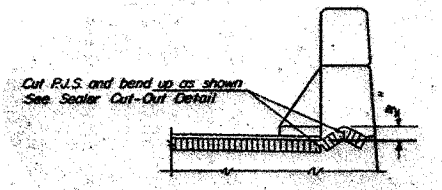


SEALER CUT-OUT DETAIL

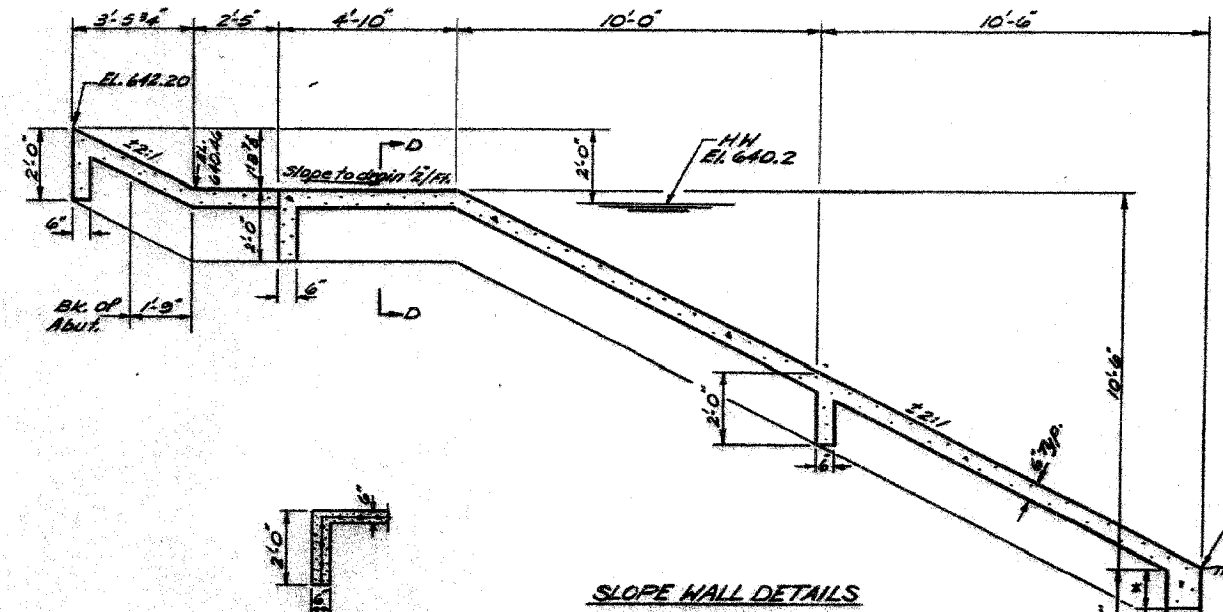
For Waterproofing Membrane System
See Special Provisions



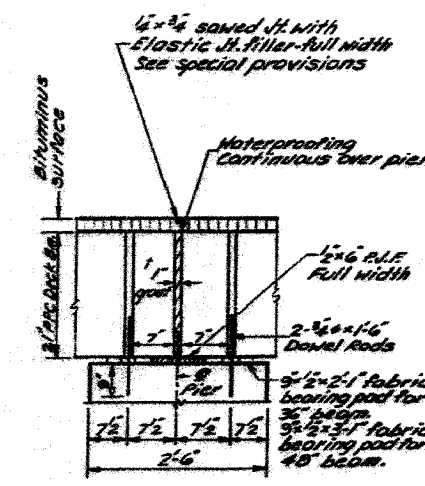
PREFORMED JOINT SEALER (2 1/2")



END OF SEALER TREATMENT

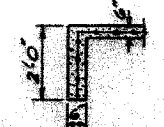


SLOPE WALL DETAILS



SECTION THRU PIER

1' Joint shall be packed with a very dry mix of 2:1 sand and PC mortar. This dimension may vary plus or minus to accommodate tolerance in beam lengths.



SECTION D-D

* 10' Min. on existing pier

GENERAL DETAILS
LA REVISED 10/26/61
LIVINGSTON COUNTY
STA. 506+46.00

DESIGNED	J. S. Hauer	EXAMINED	[Signature]
CHECKED	G.E.O.	DRAWN	[Signature]
CHECKED	G.E.O.	DATE	OCT 24 1974

FOR INFORMATION ONLY

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE PLANS
FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT. _____
HORIZ. _____
DATE: 11/15/05

DRAWN BY: SUTHEARD
CHECKED BY: BOTT

GREENE & BRADFORD, INC.
OF SPRINGFIELD

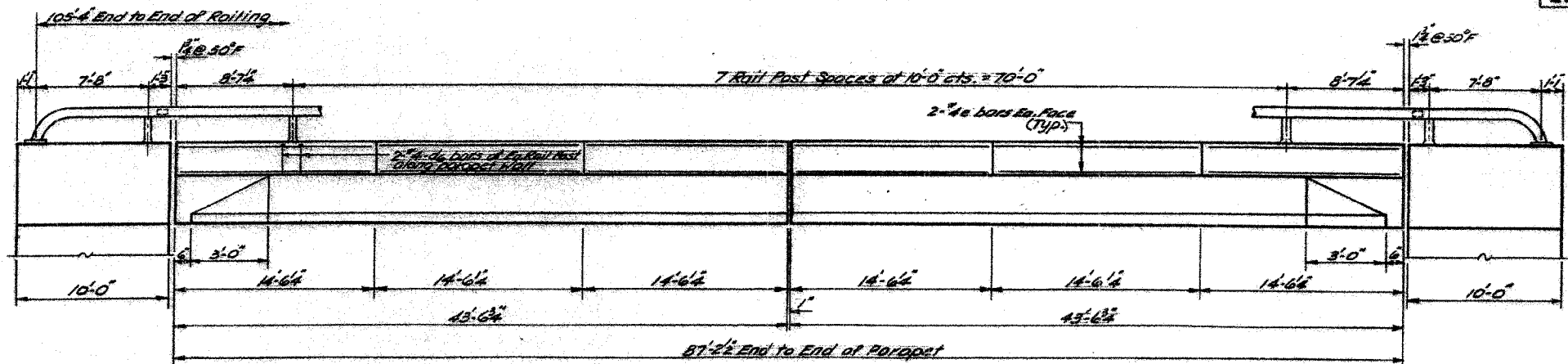
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03236.W011.EPLN
PROJECT 03236 W011
11/15/05 - MDS

PLOT DATE = 12/21/2005
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OPERATOR = mch011e

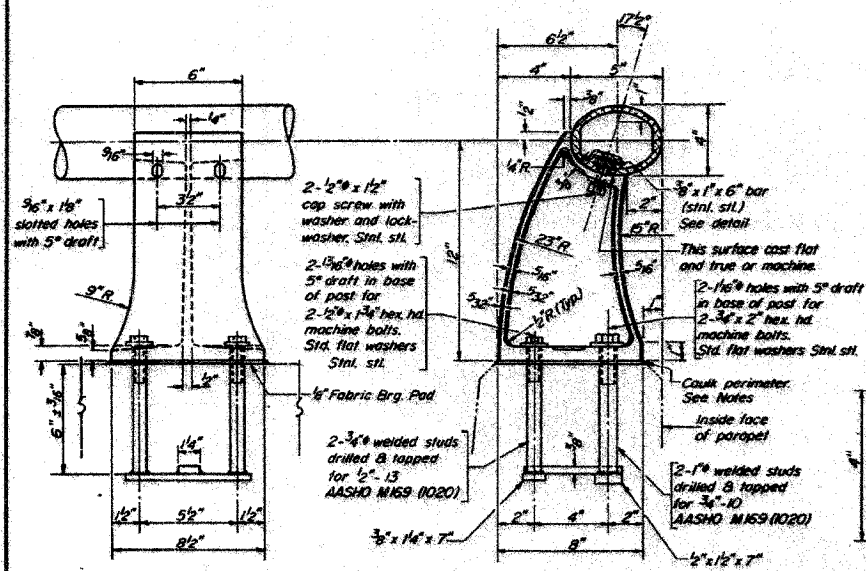
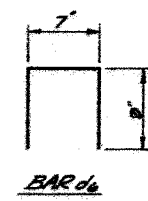
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68	105 BR-1	LIVINGSTON	45	30
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

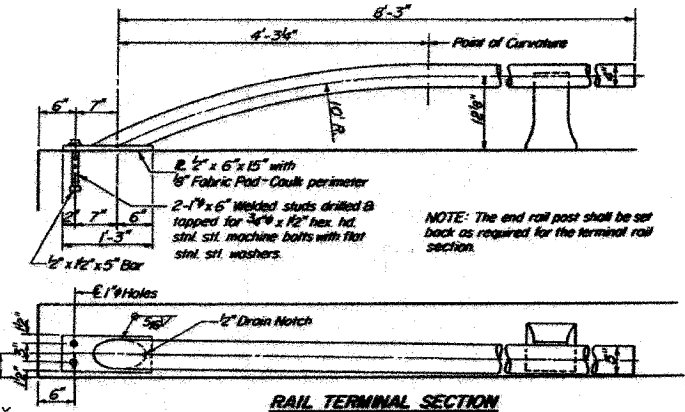
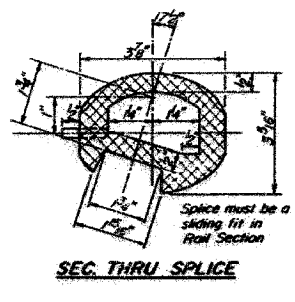
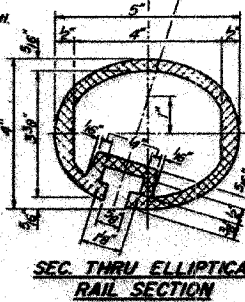
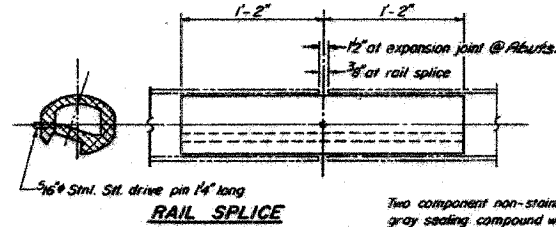
DESIGNED	CHECKED	DRAWN	DATE
			11/15/05



PARAPET & HANDRAIL ELEVATION



RAIL POST DETAILS



Two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer.

* Preformed Cork Joint Filler (In accordance with Articles 715.07 or 715.08) Cast incidental.

PARAPET JOINT DETAIL

NOTES

* 1/2" @ Parapet Jts. + 1" @ Pier (Full depth)

Stainless steel machine bolts or cap screws shall be in accordance with Article 710.37(a) of the Standard Specifications except the tensile strength requirement shall be modified to 100,000 psi.

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2500 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pod shall have same dimensions as base of post.

Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

PARAPETS & RAILS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e	48	1/2"	16'-3"	
d6	32	1/2"	2'-7"	
Reinforcement Bars 1 lbs. 500				
Class X Concrete Cu Wts. 5.5				
Aluminum Fining Lm Ft 217				

ALUMINUM RAILING
EL RENEE SEC 105 BR-1
LIVINGSTON COUNTY
STA 586+62.00

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE PLANS
FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

REVISIONS	NAME	DATE

SCALE: VERT. HORIZ. DATE: 11/15/05

DRAWN BY: SUTHEARD
CHECKED BY: BOTT

COMPUTER FILE NO. 03236.W011EPLN
PROJECT 03236 W011
11/15/05 - MDS



FOR INFORMATION ONLY

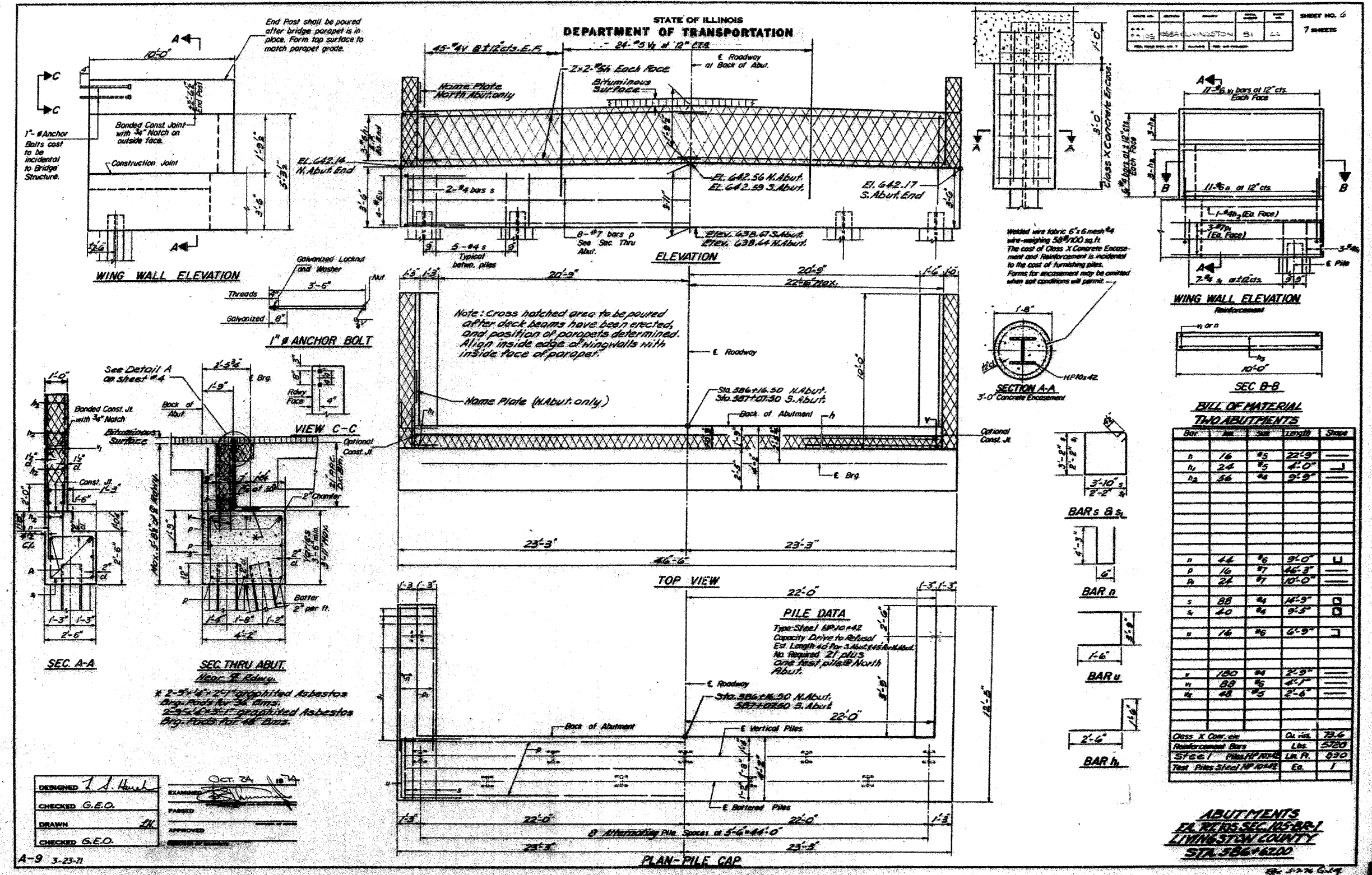
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 PLO. NUMBER = 11/15/05
 REFERENCE = REF.
 OPERATOR = michellai

DESIGNED: L. J. Houch
CHECKED: G.E.O.
DRAWN: [Signature]
CHECKED: G.E.O.

DATE: OCT 20 10 24

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	31
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET NO. 7
7 SHEETS



FOR INFORMATION ONLY

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE PLANS
FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT.
HORIZ.
DATE: 11/15/05

DRAWN BY: SUTHEARD
CHECKED BY: BOTT

COMPUTER FILE NO.
03236_W011.EPLN
PROJECT 03236 W011
11/15/05 - MDS

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
1000 W. MONROE ST., SUITE 100
MORRIS, ILLINOIS 62452
PHONE: 618.261.1111 FAX: 618.261.1112
WWW.GREENE-AND-BRADFORD.COM

DATE = 12/21/05
FILE NAME = 03236_W011.dwg
PLOT SCALE = 50.0000000
REFERENCE = REF.
OPERATOR = michelle

DESIGNED: J. L. Hunk
OCT 24 2004

CHECKED: G.E.O.	EXAMINED: [Signature]
DRAWN: JH	PASSED: [Signature]
CHECKED: G.E.O.	APPROVED: [Signature]

A-9 3-23-71

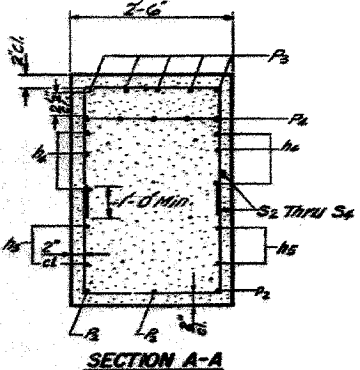
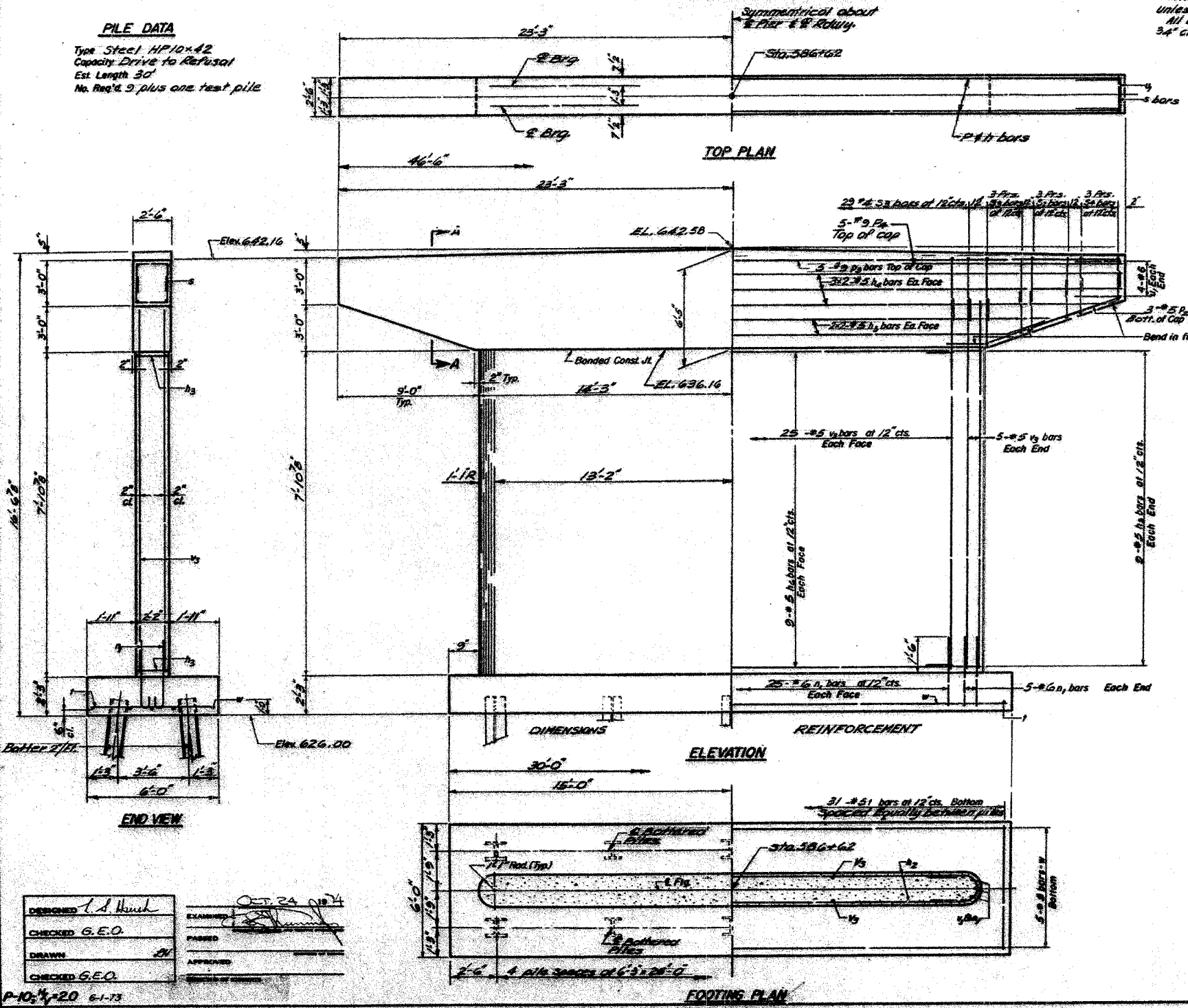
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68	105 BR-1	LIVINGSTON	45	32
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOTE:
Place reinforcement in footing to miss piles.
Minimum bar laps = 24 dia unless otherwise noted.
All edges shall have standard 3/4" chamfers except as noted.

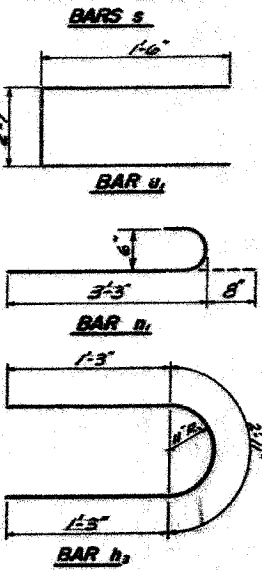
DESIGNER	DATE	SCALE	SHEET NO.	TOTAL SHEETS
W. L. LIVINGSTON	81	LS	7	7

PILE DATA
Type: Steel HP 10x42
Capacity: Drive to Refusal
Est. Length: 30'
No. Req'd: 3 plus one test pile



A & B DIMENSIONS

Bar	A	B
S1	2'-2"	2'-9"
S2	2'-2"	3'-9"
S3	2'-2"	2'-3"



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
S1	60	#6	3'-11"	U
S2	6	#5	10'-6"	U
S3	5	#9	16'-3"	U
S4	3	#9	13'-0"	U
U1	12	#4	7'-8"	U
U2	61	#4	3'-8"	U
U3	12	#4	6'-8"	U
D1	31	#5	5'-9"	U
D2	8	#6	5'-1"	U
D3	60	#5	11'-6"	U
D4	5	#5	25'-9"	U

Class X Concrete Co. No. 56.5
Reinforcement Bar: Lbs. 3980
Test Pile Steel Area Each: 7
Steel Pile HP 10x42 Zmax: 270

PIER
EA. REINFORCING BAR
LIVINGSTON COUNTY
STA. 586+62.00

DESIGNED: C. J. Hinch	EXAMINED: [Signature]
CHECKED: G.E.O.	PASSED: [Signature]
DRAWN: [Signature]	APPROVED: [Signature]
CHECKED: G.E.O.	DATE: OCT 24 1974

FOR INFORMATION ONLY

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING BRIDGE PLANS
FAP ROUTE 68 (IL RTE. 23)
SECTION 105 BR-1
LIVINGSTON COUNTY

SCALE: VERT. _____
HORIZ. _____
DATE: 11/15/05

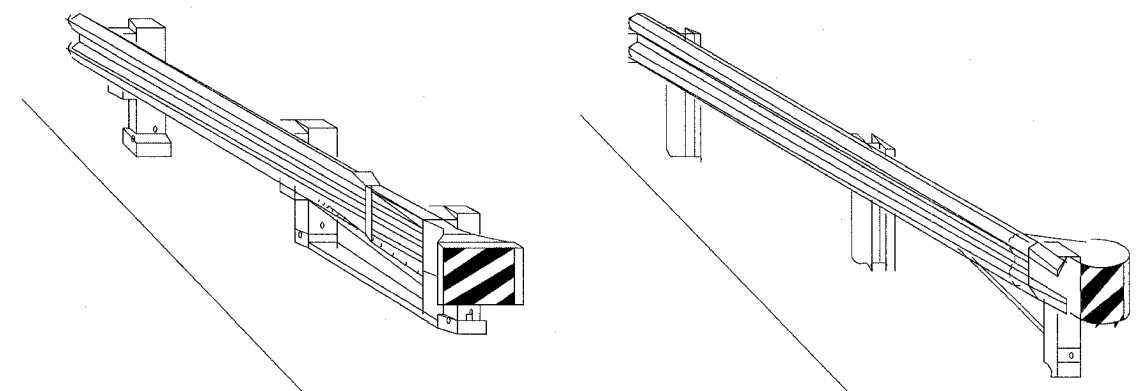
DRAWN BY: SUTHEARD
CHECKED BY: BOTT

GREENE & BRADFORD, INC.
OF SPRINGFIELD
ENGINEERS AND ARCHITECTS
200 EAST MAIN STREET
SPRINGFIELD, ILLINOIS 62761
PH: 217-223-1111 FAX: 217-223-1112

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PROJECT 03236 W011
11/15/05 - MDS

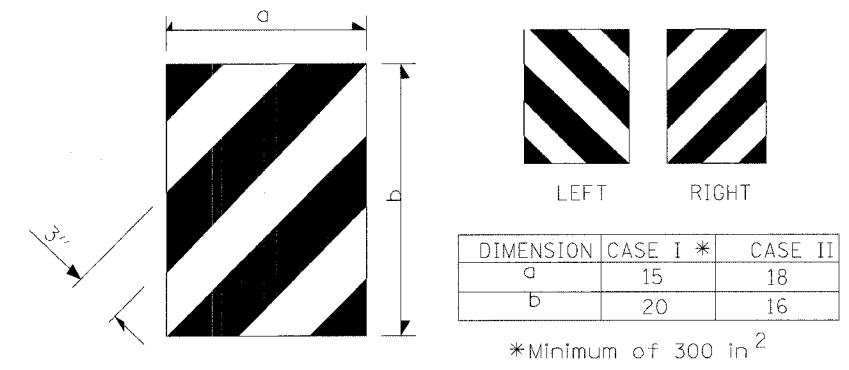
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OPERATOR: [Name]

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	33
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



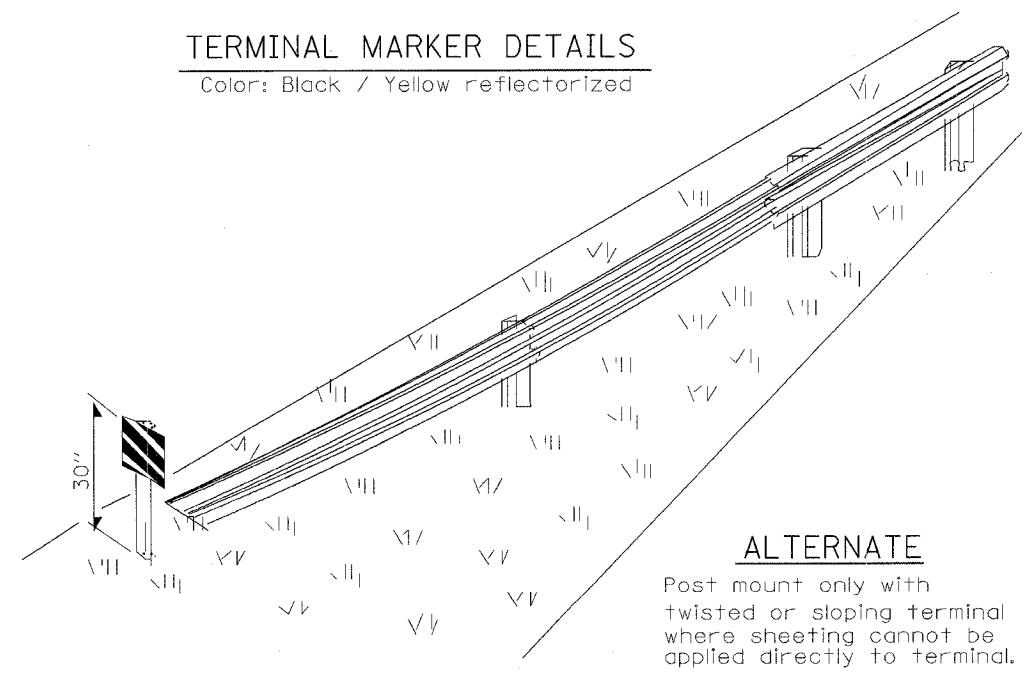
CASE I

CASE II



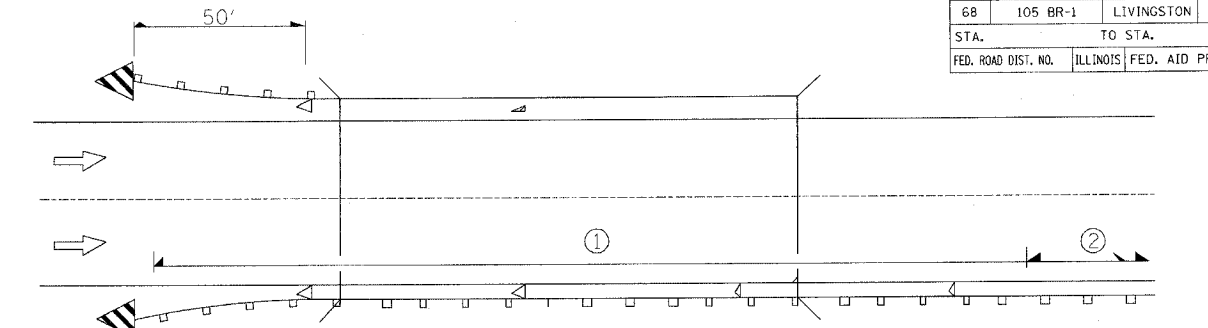
TERMINAL MARKER DETAILS

Color: Black / Yellow reflectorized



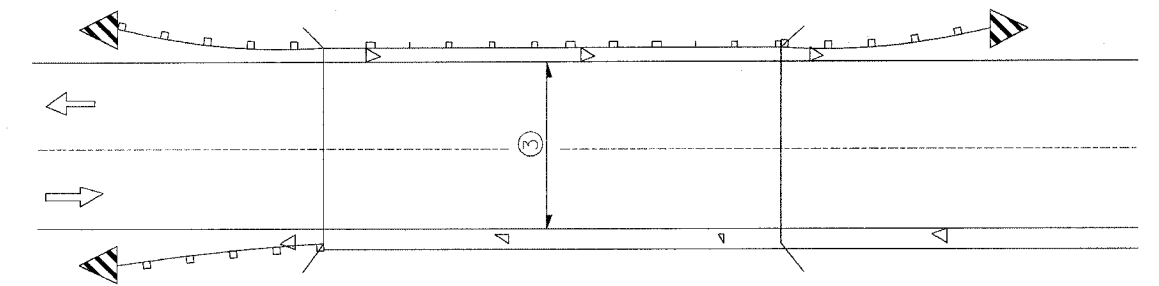
ALTERNATE

Post mount only with twisted or sloping terminal where sheeting cannot be applied directly to terminal.



① Spacing 80 ft max. for first 400 ft or curve spacing shown in Standard 635001, whichever is less (min. 4 reflectors regardless of length).
 ② After 400 ft, transition to normal delineator spacing shown in Standard 635001, and continue as required.

ONE-WAY TRAFFIC

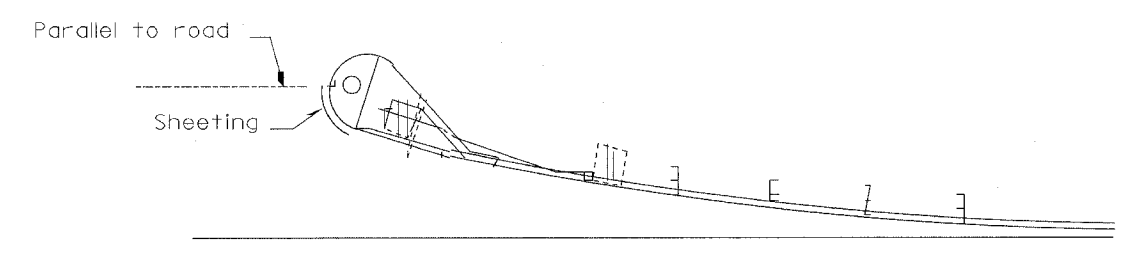


③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the pavement is less than 24" wider than the pavement approaching the bridge.

- ◁ Monodirectional silver
- ◁ Monodirectional amber
- ◁ Terminal Marker - Black/Yellow Left or Right as appropriate

TWO-WAY TRAFFIC

GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS



SHEETING POSITION: CASE II

635-1

PLOT DATE = 12/21/2005
 FILE NAME = J:\03236\w011\Drawings\03236.W011.DET.dgn
 PLOT SCALE = 50.000000 / 1 IN.
 REFERENCE = .REF.
 OPERATOR = mch114

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS
 FAP ROUTE 68 (IL RTE. 23)
 SECTION 105 BR-1
 LIVINGSTON COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE: _____

DRAWN BY: BISHOP
 CHECKED BY: BOTT

COMPUTER FILE NO. 03236.W011.DET
 PROJECT 03236 MDS
 11/15/05 - MDS

GREENE & BRADFORD, INC.
 OF SPRINGFIELD
 REGISTERED PROFESSIONAL ENGINEERS
 PROFESSIONAL ENGINEERING COMPANY
 1015 S. WASHINGTON ST., SPRINGFIELD, ILL. 62760
 (618) 233-2222 FAX (618) 233-2222

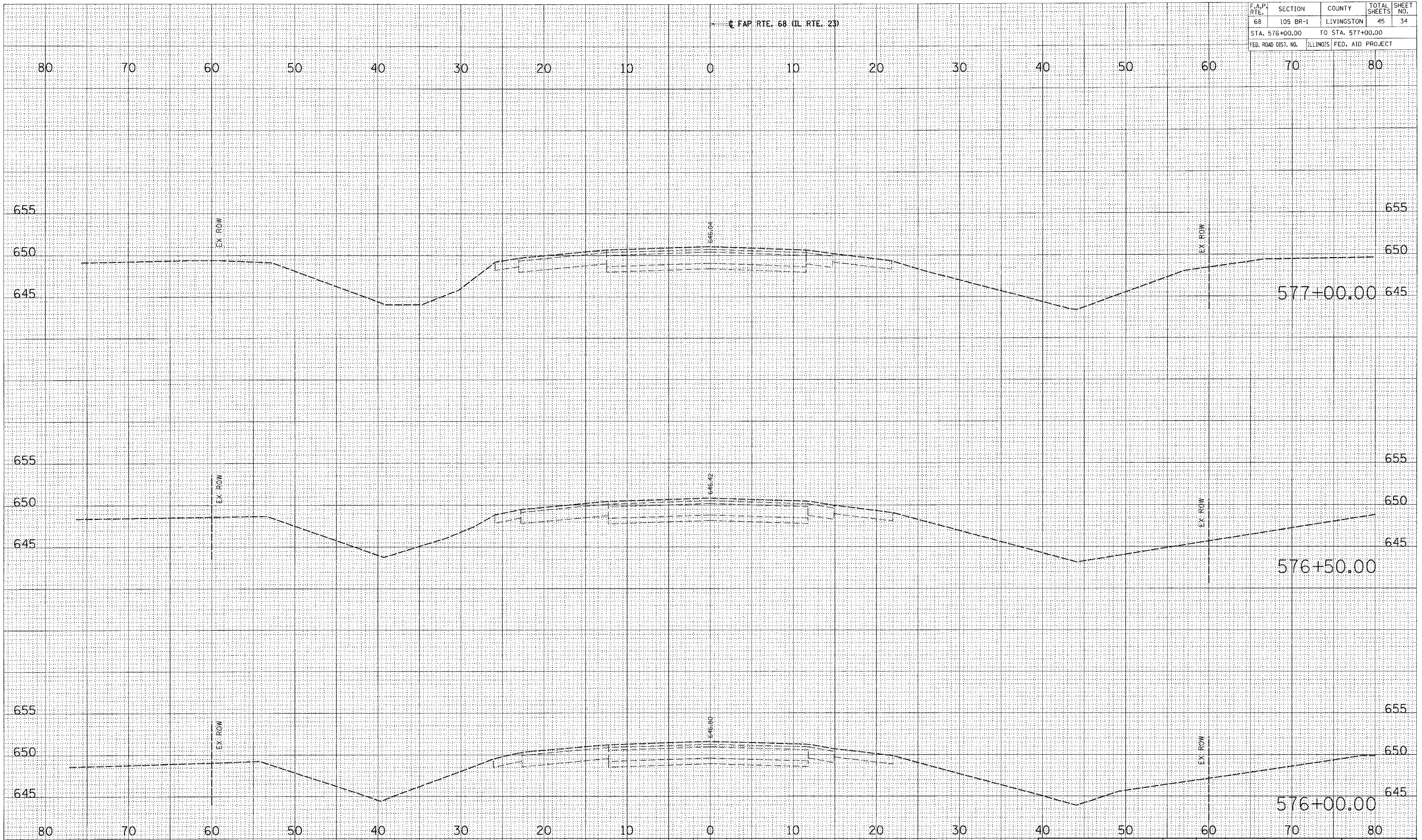
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	34
STA. 576+00.00		TO STA. 577+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

C FAP RTE. 68 (IL RTE. 23)

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

PLOT DATE = 12/21/2005
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REVISION	DATE	BY

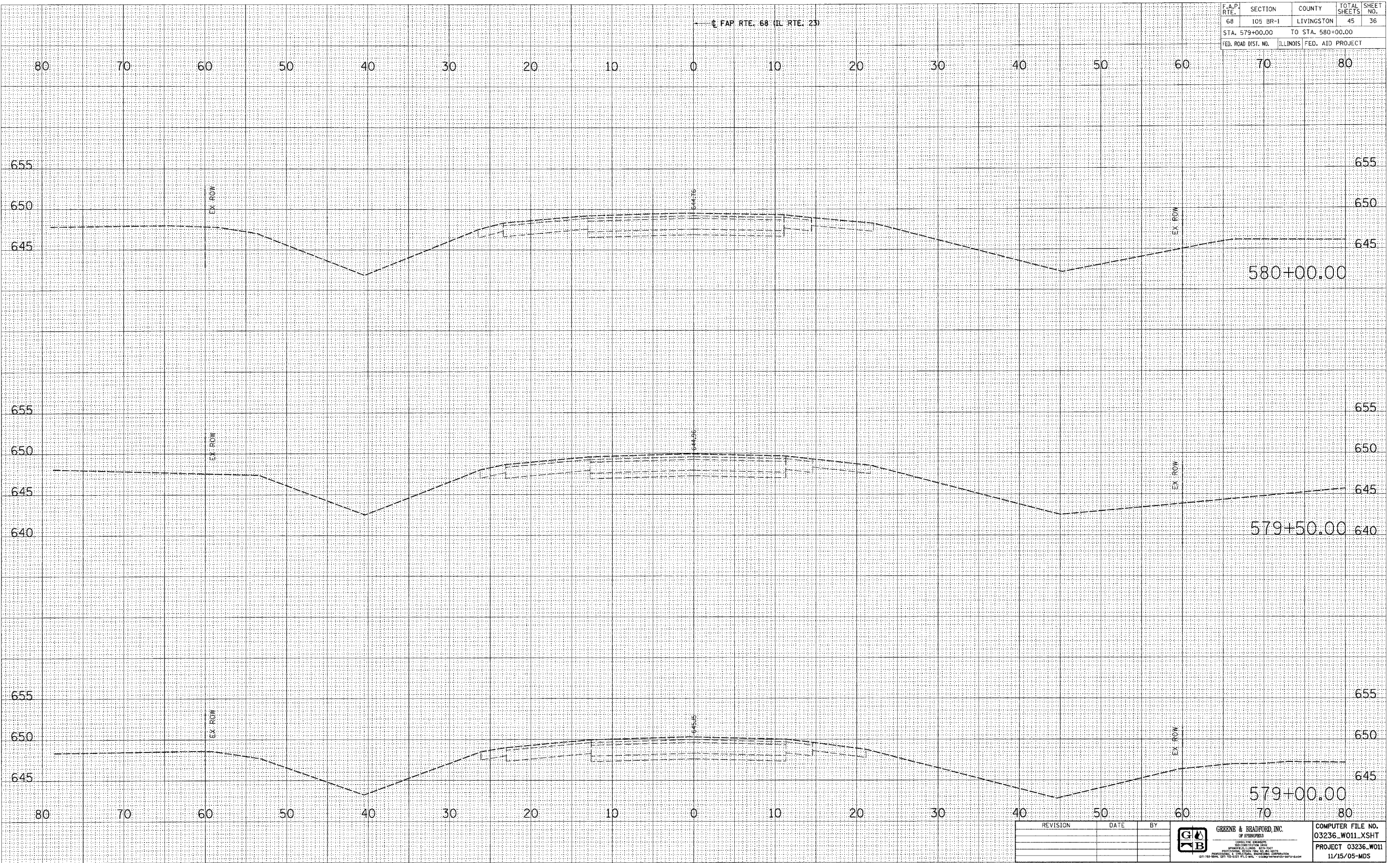

GREEN & BRADFORD, INC.
 OF SPRINGFIELD
 CONSULTING ENGINEERS
 1000 W. WASHINGTON ST.
 SPRINGFIELD, ILLINOIS 62760
 PHONE: 217-223-1111 FAX: 217-223-1112
 WWW: WWW.GREEN-AND-BRADFORD.COM

COMPUTER FILE NO.
 03236_W011_XSHT
 PROJECT 03236_W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	36
STA. 579+00.00		TO STA. 580+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

FAP RTE. 68 (IL RTE. 23)



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

ORIGINAL SURVEY	DATE
PLOTTED	BY
NOTE BOOK	
AREAS CHECKED	
NO.	

PLOT DATE = 12/27/2005
 PLOT SCALE = 5/8" = 1' / IN.
 REFERENCE = REF.
 OPERATOR = mjh@mls1

REVISION	DATE	BY

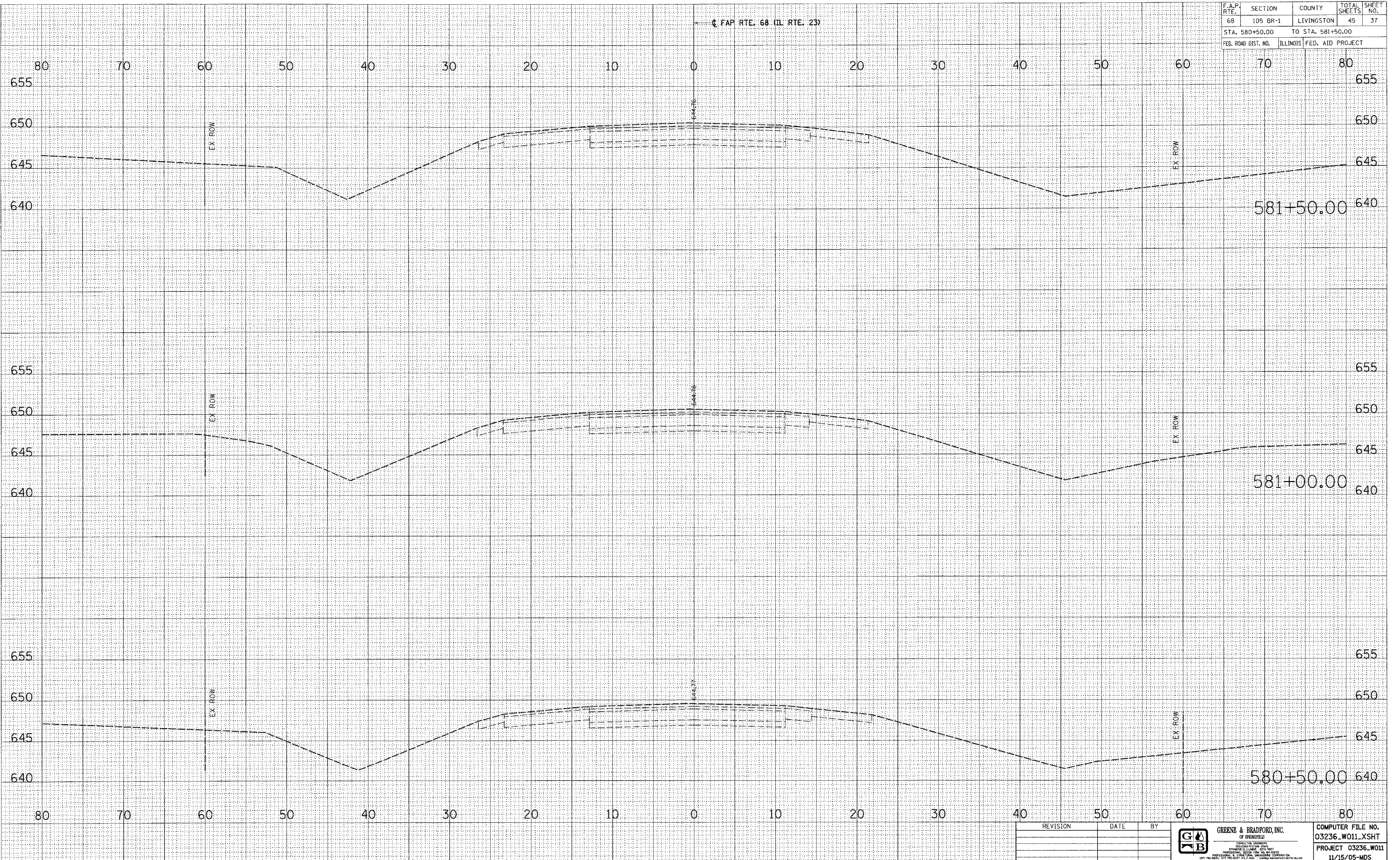


COMPUTER FILE NO.
 03236_W011_XSHT
 PROJECT 03236.W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	37
STA. 580+50.00		TO STA. 581+50.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

(FAP RTE. 68 (IL RTE. 23))



FINAL SURVEY NOTE BOOK NO.	DATE
BY	
SUPERVISOR	
PLOTTED	
TEMP. A'	
AREAS CHECKED	
BY	

ORIGINAL SURVEY NOTE BOOK NO.	DATE
BY	
SUPERVISOR	
PLOTTED	
TEMP. A'	
AREAS CHECKED	
BY	

PLOT DATE = 12/21/2005
 PLOT NAME = 03236.W011.XSHT
 PLOT SCALE = 5/8" = 1' IN.
 REFERENCE = REF.
 OPERATOR = mehal1e1

REVISION	DATE	BY

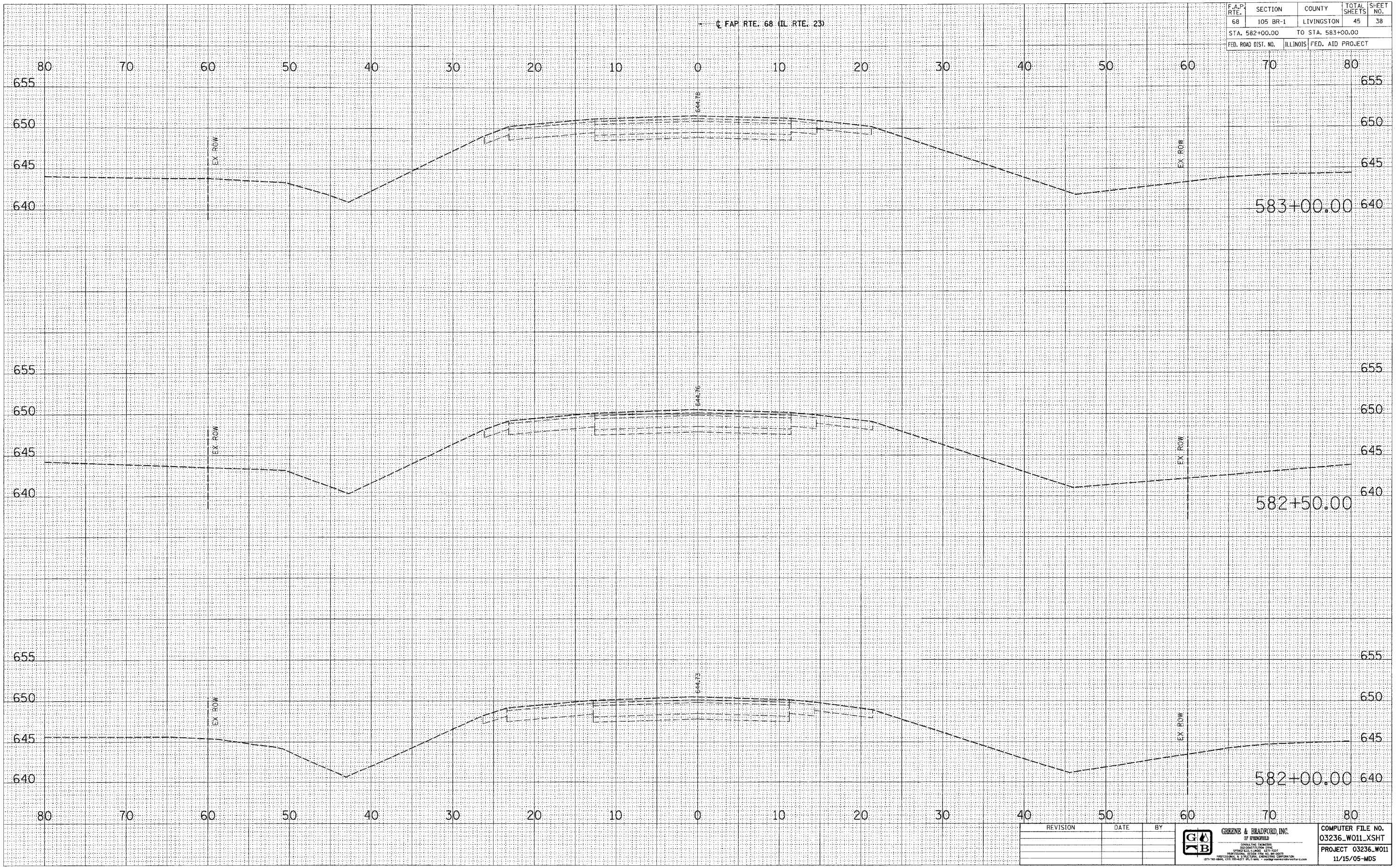
GREENE & BRADFORD, INC.
 OF SPRINGFIELD
 1115 S. WASHINGTON ST.
 SPRINGFIELD, ILLINOIS 62761
 PHONE: 217-223-1100 FAX: 217-223-1101
 WWW: WWW.GREENE-AND-BRADFORD.COM

COMPUTER FILE NO.
 03236.W011.XSHT
 PROJECT 03236.W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	38
STA. 582+00.00		TO STA. 583+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FAP RTE. 68 (IL RTE. 23)



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

ORIGINAL	SURVEYED	DATE
SHEET	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

PLOT DATE = 12/21/2005
 FILE NAME = J:\03236\03236_W011_XSHT.dwg
 PLOT SCALE = 5/8" = 1' IN.
 REFERENCE = REF.
 OPERATOR = mchenhall

REVISION	DATE	BY

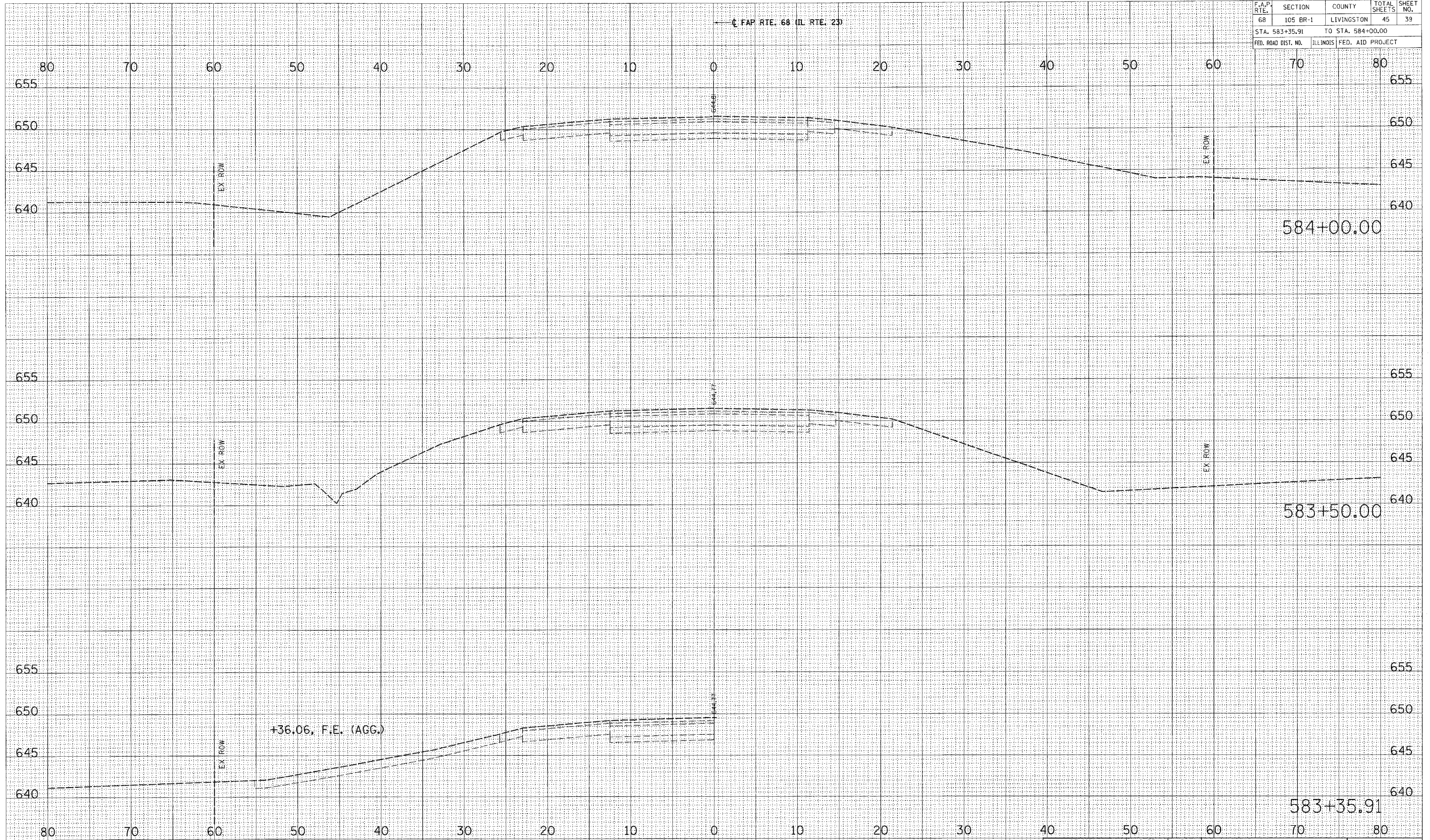
GREENB & BRADFORD, INC.
 OF SPRINGFIELD
 CONSULTING ENGINEERS
 300 WESTFIELD DRIVE
 SPRINGFIELD, ILLINOIS 62702
 PHONE: (217) 223-8800 FAX: (217) 223-8801
 WWW: WWW.GREENBANDBRADFORD.COM

COMPUTER FILE NO.
 03236_W011_XSHT
 PROJECT 03236_W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	39
STA. 583+35.91		TO STA. 584+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

C FAP RTE. 68 (IL RTE. 23)



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

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

PLOT DATE = 12/21/2005
 PLOT NAME = 03236_W011.XSHT
 PLOT SCALE = 1" = 40.00' / IN.
 REFERENCE = 'REF'
 OPERATOR = michelle

REVISION	DATE	BY



COMPUTER FILE NO.
 03236_W011.XSHT
 PROJECT 03236.W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

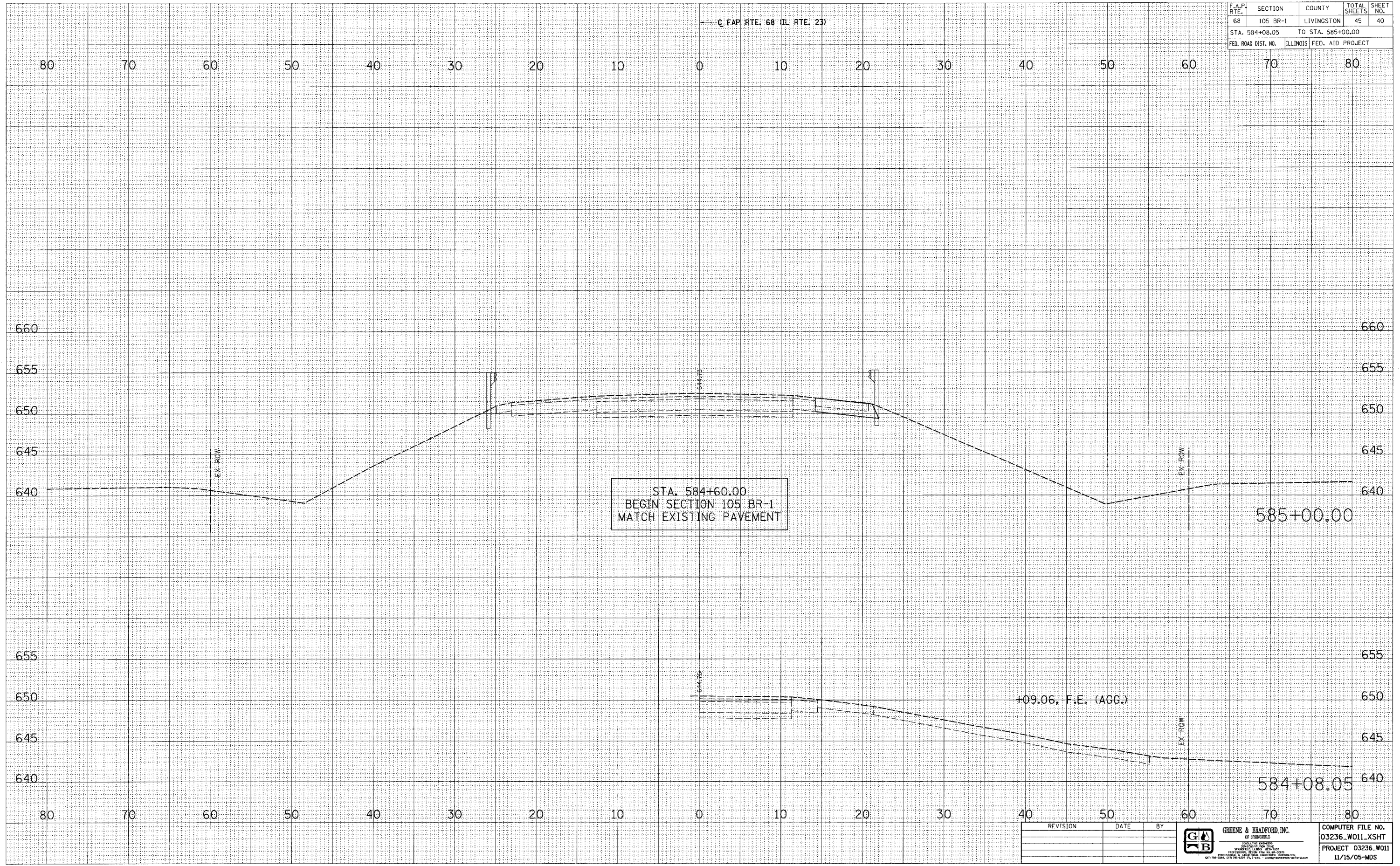
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	40
STA. 584+08.05		TO STA. 585+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

C FAP RTE. 68 (IL RTE. 23)

FINAL SURVEY	DATE
NO. _____	_____
BY _____	
REVISIONS	
PLOTTED	
TEMP. /	
AREAS	
CHECKED	

ORIGINAL SURVEY	DATE
NO. _____	_____
BY _____	
REVISIONS	
PLOTTED	
TEMP. /	
AREAS	
CHECKED	

PLAT DATE = 12/21/2005
 FILE NAME = C:\pwworking\66566\03236.W011.XSHT
 PLOT SCALE = 5/8" = 1' / IN.
 REFERENCE = REF.
 OPERATOR = mche11a1



REVISION	DATE	BY



COMPUTER FILE NO.
 03236_W011_XSHT
 PROJECT 03236.W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

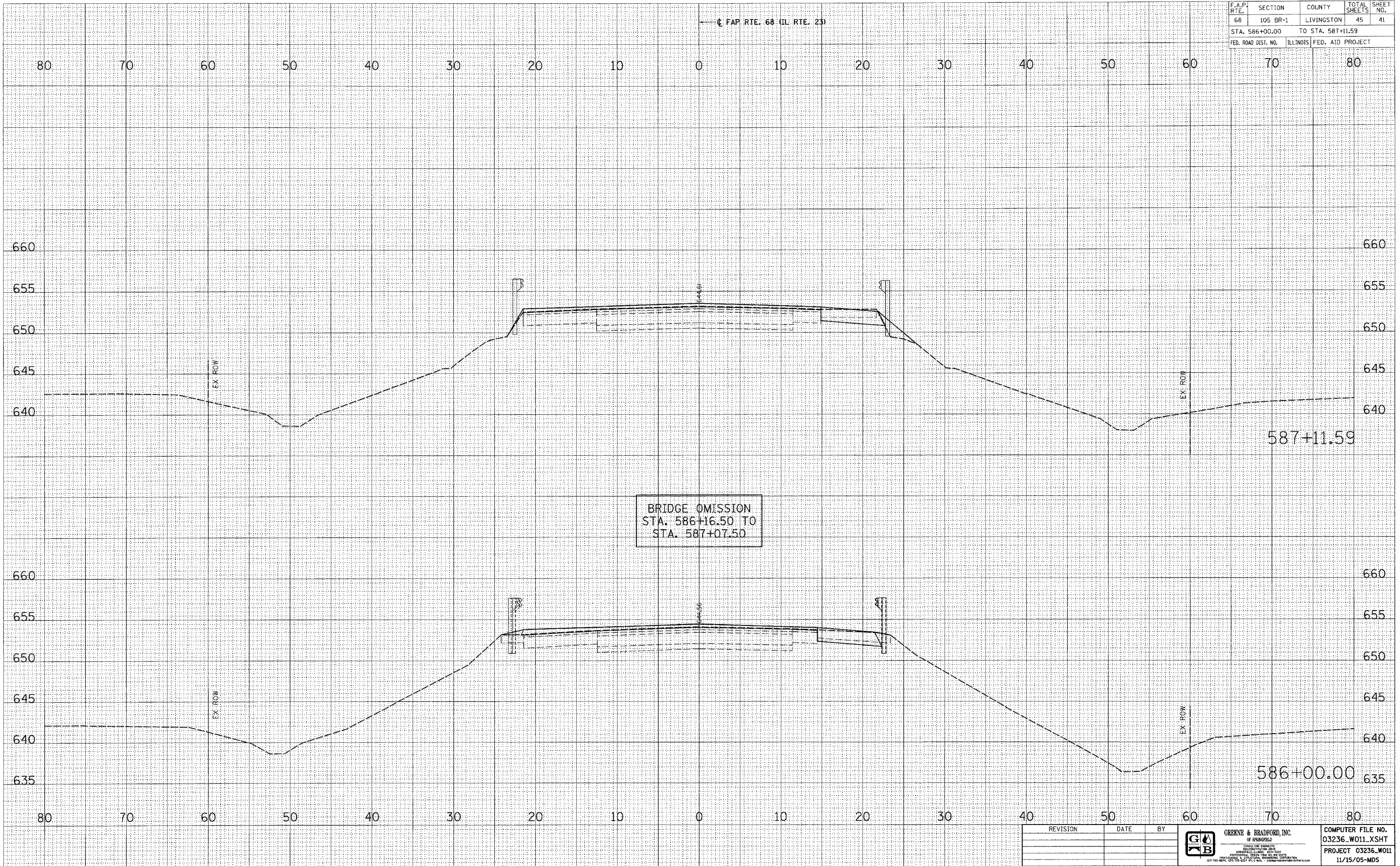
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	41
STA. 586+00.00		TO STA. 587+11.59		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

(FAP RTE. 68 (IL RTE. 23))

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMP. PLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMP. PLATE	
	AREAS CHECKED	

PLOT DATE = 12/21/2005
 FILE NAME = J:\03236\011\03236_W011.XSHT
 PLOT SCALE = 5/8" = 1' IN.
 REFERENCE = REF.
 OPERATOR = mchelle1



REVISION	DATE	BY


GREENE & BRADFORD, INC.
 OF SPRINGFIELD
 CONSULTING ENGINEERS
 1000 W. MONROE ST.
 SPRINGFIELD, ILL. 62761-1000
 (217) 522-1111 • FAX (217) 522-1112 • WWW.GREENEANDBRADFORD.COM

COMPUTER FILE NO.
 03236_W011.XSHT
 PROJECT 03236_W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

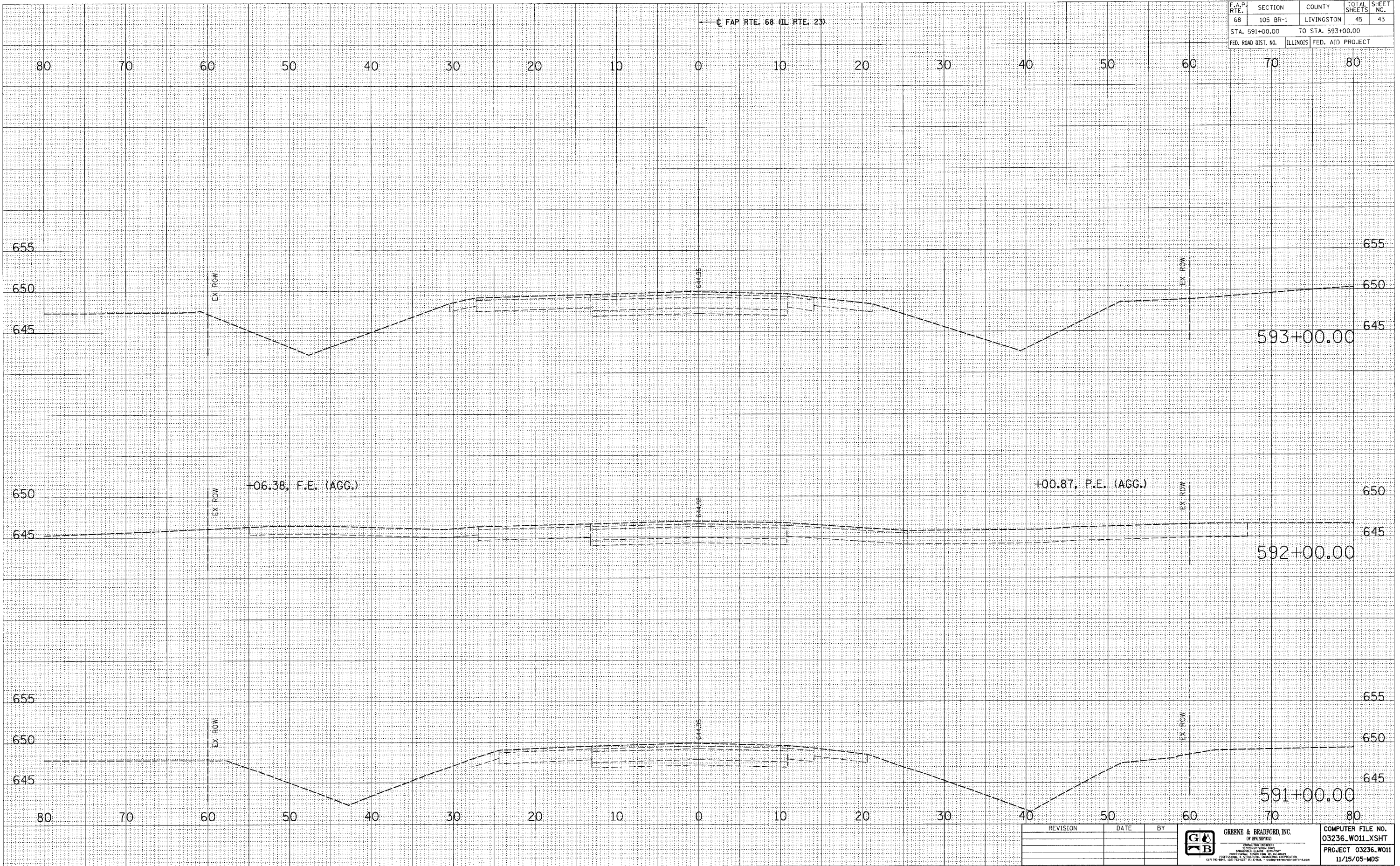
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	43
STA. 591+00.00		TO STA. 593+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

C FAP RTE. 68 (IL RTE. 23)

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	AREAS CHECKED	

PLOT DATE = 12/21/2005
 FILE NAME = J:\03236\work\dwg\03236.W011.XSHT
 PLOT SCALE = 5/8" = 1' IN.
 OPERATOR = mch11e



REVISION	DATE	BY

GREENE & BRADFORD, INC.
 OF SPRINGFIELD
 CONSULTING ENGINEERS
 1211 W. WASHINGTON ST., 11TH FLOOR
 SPRINGFIELD, ILLINOIS 62760-4444
 TEL: 217-223-8800 FAX: 217-223-8801
 WWW.GREENE-AND-BRADFORD.COM

COMPUTER FILE NO.
 03236_W011.XSHT
 PROJECT 03236_W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE

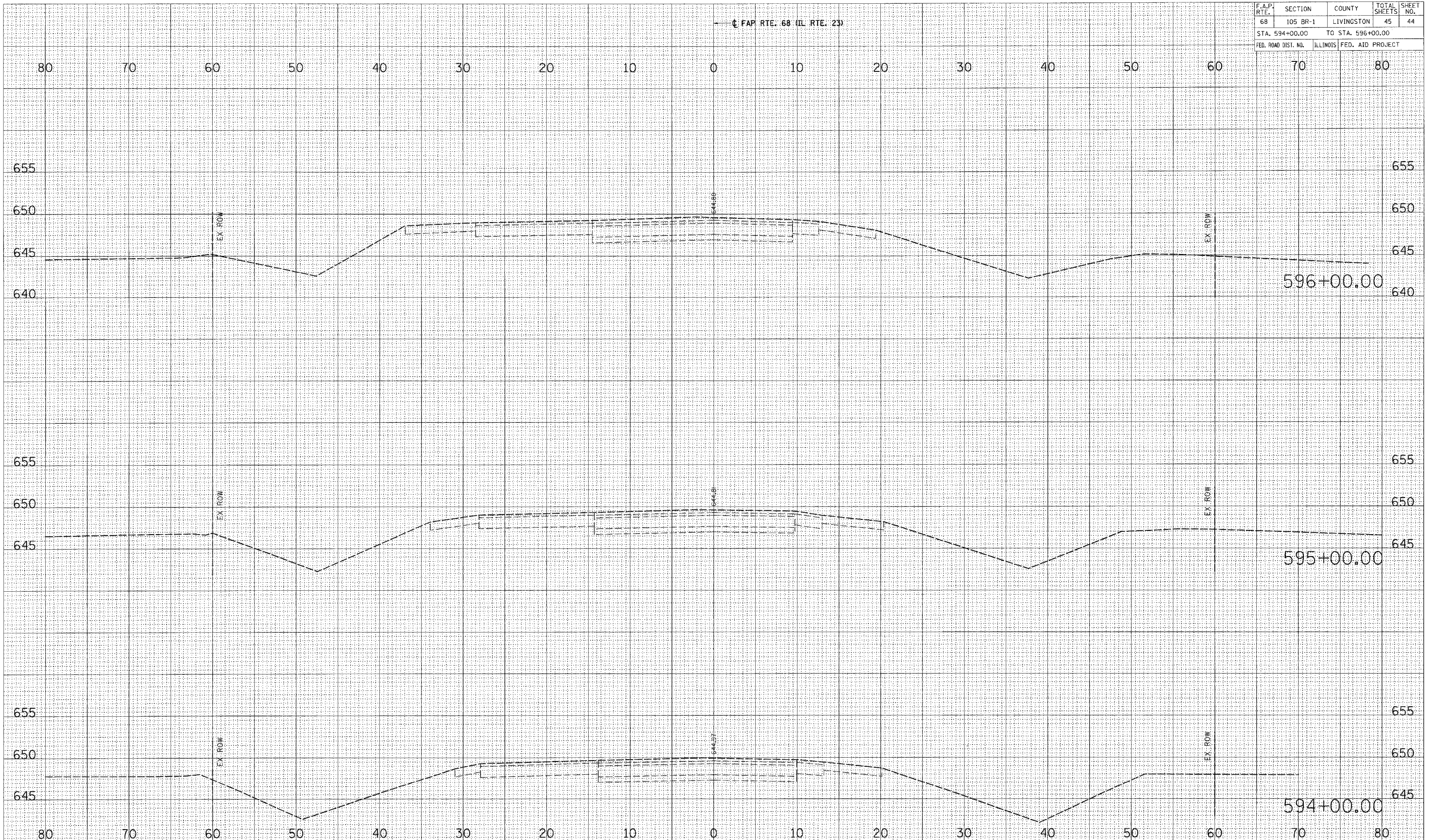
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	44
STA. 594+00.00		TO STA. 596+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

← FAP RTE. 68 (IL RTE. 23)

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

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

PLOT DATE = 12/21/2005
 FILE NAME = J:\03236\011\Drawings\03236_W011_XSHT.dwg
 PLOT SCALE = 5/8" = 1' / IN.
 REFERENCE = REF-1
 OPERATOR = mshah141



REVISION	DATE	BY

	GREENE & BRADFORD, INC. OF SPRINGFIELD CONSULTING ENGINEERS 5500 CHERRYWOOD DRIVE SPRINGFIELD, ILLINOIS 62711 PROFESSIONAL ENGINEERING REG. NO. 0218 LICENSE NO. 1-1717-01, E-0116	COMPUTER FILE NO. 03236_W011_XSHT PROJECT 03236_W011 11/15/05-MDS
	ILLINOIS PROFESSIONAL ENGINEERING BOARD LICENSE NO. 1-1717-01, E-0116	

CROSS SECTIONS - MAINLINE

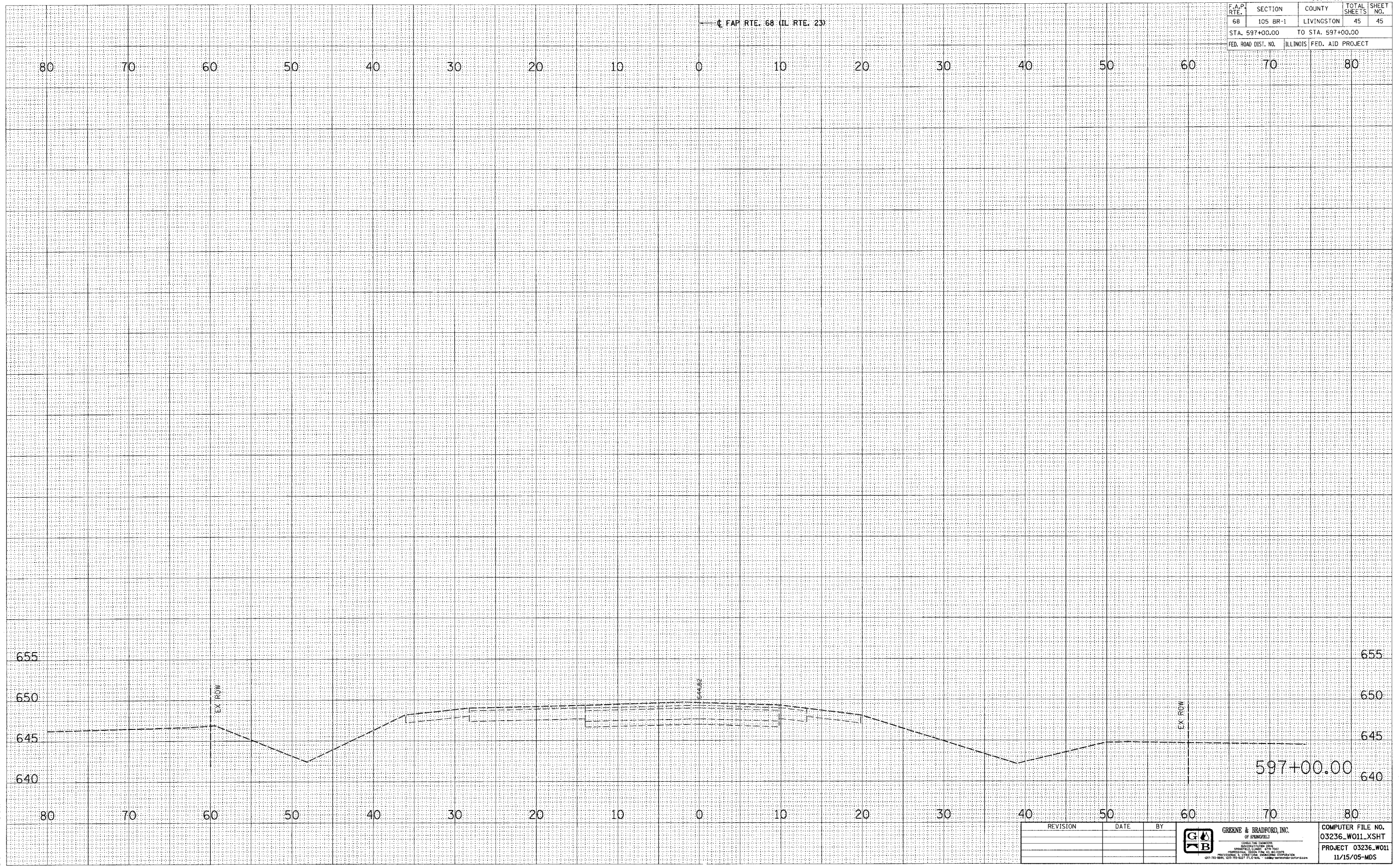
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	105 BR-1	LIVINGSTON	45	45
STA. 597+00.00		TO STA. 597+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

← FAP RTE. 68 (IL RTE. 23)

FINAL SURVEY NOTE BOOK NO.	DATE
CHECKED BY	DATE
PLotted	DATE
AREAS CHECKED	DATE

ORIGINAL SURVEY NOTE BOOK NO.	DATE
CHECKED BY	DATE
PLotted	DATE
AREAS CHECKED	DATE

PLOT DATE = 12/21/2005
 PLOT SCALE = 5/8" = 1' IN.
 REFERENCE = REF.
 OPERATOR = michael



REVISION	DATE	BY

GREENE & BRADFORD, INC.
 OF BIRMINGHAM
 CIVIL ENGINEERS
 1115 1/2 AVENUE SOUTH
 BIRMINGHAM, ALABAMA 35203
 (205) 944-1111

COMPUTER FILE NO.
 03236_W011_XSHT
 PROJECT 03236_W011
 11/15/05-MDS

CROSS SECTIONS - MAINLINE