

PROJECT ENGINEER: REBECCA MARRUFFO

SENIOR SQUAD LEADER: JENNIFER LUBBS (815)-284-5958

FOR INDEX OF SHEETS, SEE SHEET NO.

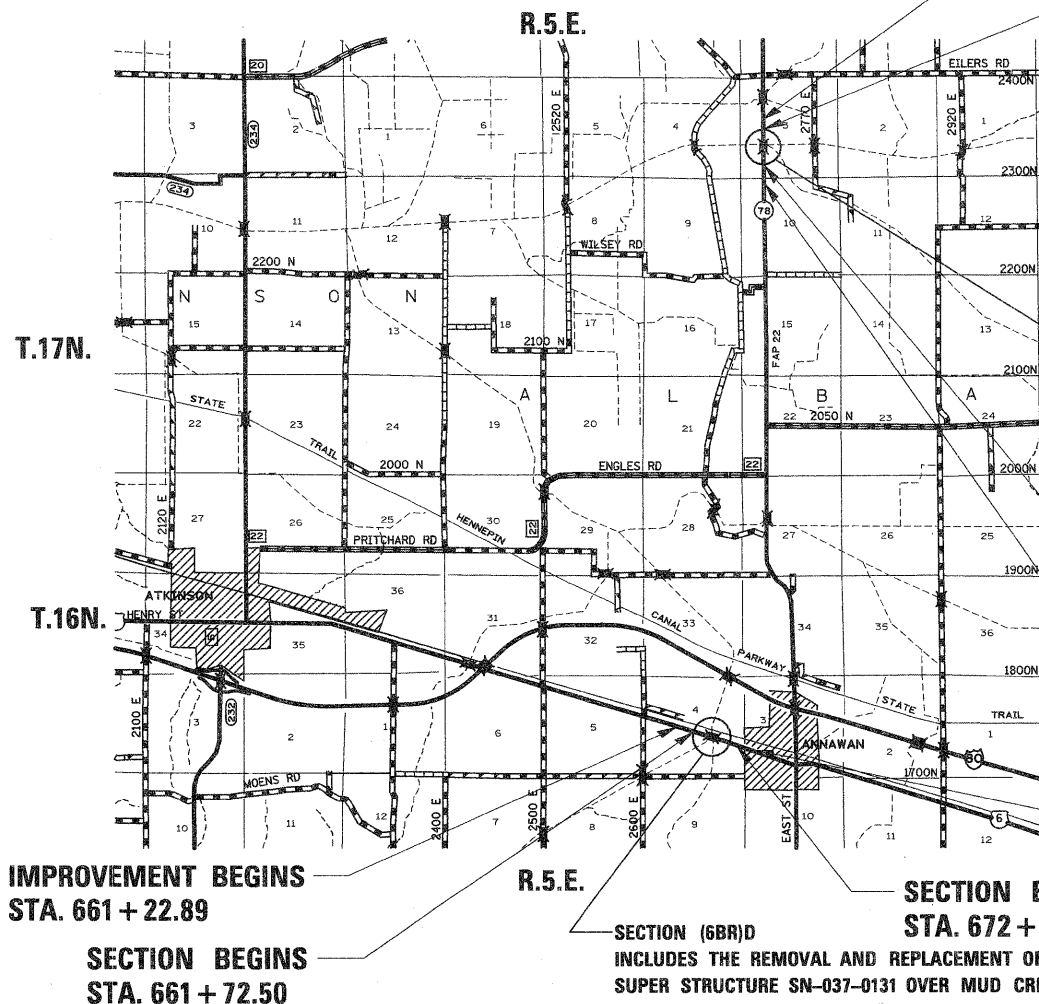
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.P. ROUTE 22 (IL 78)  
F.A.S. ROUTE 1247 (US 6)  
SECTION (125BR-1)D, (6BR)D  
PROJECT BHF-BHS-0005(561)  
HENRY COUNTY  
C-92-113-07

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 64D10	
* FAP 22 & FAS 1247 ** (125BR-1)D & (6BR)D				

D-92-050-07



IMPROVEMENT ENDS  
STA. 886 + 35

SECTION ENDS  
STA. 884 + 34.50

SECTION (125BR-1)D  
INCLUDES THE REMOVAL AND REPLACEMENT OF THE EXISTING  
SUPER STRUCTURE SN-037-0129 OVER GREEN RIVER. STA. 882 + 75

SECTION BEGINS  
STA. 881 + 01

IMPROVEMENT BEGINS  
STA. 878 + 82.50

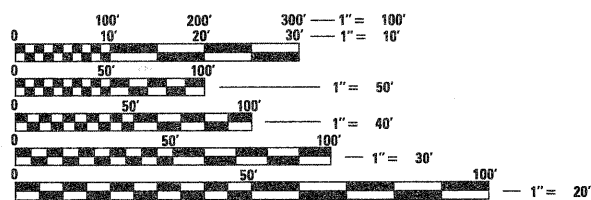
IMPROVEMENT ENDS  
STA. 672 + 50

SECTION ENDS  
STA. 672 + 00

SECTION (6BR)D  
INCLUDES THE REMOVAL AND REPLACEMENT OF THE EXISTING  
SUPER STRUCTURE SN-037-0131 OVER MUD CREEK. STA. 666 + 71.

IMPROVEMENT BEGINS  
STA. 661 + 22.89

SECTION BEGINS  
STA. 661 + 72.50



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

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

ALBA TOWNSHIP SECTION - 3  
ANNAWAN TOWNSHIP SECTION - 4

IL 78

NET LENGTH OF PROJECT = 333.5 LIN. FEET = 0.06 MILES  
GROSS LENGTH OF PROJECT = 333.5 LIN. FEET = 0.06 MILES

US 6

NET LENGTH OF PROJECT = 1027.5 LIN. FEET = 0.19 MILES  
GROSS LENGTH OF PROJECT = 1027.5 LIN. FEET = 0.19 MILES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED December 3, 2007

Henry F. Ryan  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 1, 2008

Eric E. Harsh  
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

February 1, 2008

Christine M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

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420401-06	Bridge Approach Pavement
420701-02	Pavement Fabric
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482011-03	HMA Shld. Strips/Shld. with Resurfacing or Widening and Resurfacing Projects
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630201-05	PCC/HMA Stabilization at Steel Plate Beam Guardrail
630301-04	Shoulder Widening for Type 1 (Special) Guardrail Terminals
631032-03	Traffic Barrier Terminal, Type 6A
635001	Deliniators
635006-02	Reflector and Terminal Marker Placement
635011-01	Reflector Marker and Mounting Details
667101	Permanent Survey Markers
701006-02	Off-Road Operations, 2L, 2W, 4.5m (15') to 600mm (24") From Pavement Edge
701011-01	Off-Road Moving Operations, 2L, 2W, Day Only
<b>701201-02</b>	<b>Lane Closure, 2L, 2W, Day Only, For speeds <math>\geq</math> 45 MPH</b>
701301-02	Lane Closure, 2L, 2W, Short Time Operations
701311-02	Lane Closure, 2L, 2W Moving Operations - Day Only
701321-09	Lane Closure, 2L, 2W Bridge Repair with Barrier
701901	Traffic Control Devices
704001-04	Temporary Concrete Barrier
720011	Metal Posts for Signs, Markers & Deliniators
728001	Telescoping Steel Sign Support
729001	Applications of Types A & B Metal Posts (For Signs & Markers)
780001-01	Typical Pavement Markings
781001-02	Typical Applications Raised Reflective Pavement Markers
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886006	Typical Layout for Detection Loops
000001-05	Standard Symbols, Abbreviations and Patterns
001001-01	Areas of Reinforcement Bars
001006	Decimal of an Inch and of a Foot

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FAS	FAP	FAS	FAP
				I-000	I-000	X-081-2A	X-081-2A
				ROADWAY US 6 SN 037-0131	ROADWAY IL 78 SN 037-0129	BRIDGE US 6 SN 037-0131	BRIDGE IL 78 SN 037-0129
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
20200100	EARTH EXCAVATION	CU YD	276.8	122.4	154.4		
20400800	FURNISHED EXCAVATION	CU YD	24.9		24.9		
28000400	PERIMETER EROSION BARRIER	FOOT	379		379		
28100105	STONE RIPRAP, CLASS A3	SQ YD	18		18		
28200200	FILTER FABRIC	SQ YD	18		18		
35101400	AGGREGATE BASE COURSE, TYPE B	TON	178		178		
40600525	LEVELING BINDER (HAND METHOD), N50	TON	5	2.5	2.5		
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	178	156	22		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	192	192			
40600990	TEMPORARY RAMP	SQ YD	178	89	89		
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	635	420	215		
42001300	PROTECTIVE COAT	SQ YD	1137			625	512
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	267	267			
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	170		170		
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	160	89	71		
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	534		534		
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	920	920			
44000700	APPROACH SLAB REMOVAL	SQ YD	457	324	133		
44200956	CLASS B PATCHES, TYPE II, 9 INCH	SQ YD	16	16			
44200964	CLASS B PATCHES, TYPE IV, 9 INCH	SQ YD	243	243			

\* SPECIALTY ITEMS

\* FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1)D & (6BR)D

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		CHECKED -	REVISED -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	3
		CONTRACT NO. C410		

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FAS	FAP	FAS	FAP
				I-000	I-000	X-081-2A	X-081-2A
				ROADWAY US 6 SN 037-0131	ROADWAY IL 78 SN 037-0129	BRIDGE US 6 SN 037-0131	BRIDGE IL 78 SN 037-0129
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
44213100	PAVEMENT FABRIC	SQ YD	243	243			
44213200	SAW CUTS	FOOT	868	868			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	105	85	20		
48203100	HOT-MIX ASPHALT SHOULDERS	TON	642	295	347		
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	2			1	1
50102400	CONCRETE REMOVAL	CU YD	8.3			4.0	4.3
50300225	CONCRETE STRUCTURES	CU YD	9.3			5.2	4.1
50300260	BRIDGE DECK GROOVING	SQ YD	1079			583	496
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	5434			2975	2459
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	4535			2529	2006
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	16200			9040	7160
50800515	BAR SPLICERS	EACH	297			144	153
50901050	STEEL RAILING, TYPE SM	FOOT	648			269	379
51500100	NAME PLATES	EACH	2			1	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	106			42	64
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	387.5	312.5	75		
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	8	4	4		
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2			
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	6	2	4		
63200310	GUARDRAIL REMOVAL	FOOT	1065	608	457		

\* SPECIALTY ITEMS



CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FAS I-000	FAP I-000	FAS X-081-2A	FAP X-081-2A
				ROADWAY US 6 SN 037-0131 80% FED 20% STATE	ROADWAY IL 78 SN 037-0129 80% FED 20% STATE	BRIDGE US 6 SN 037-0131 80% FED 20% STATE	BRIDGE IL 78 SN 037-0129 80% FED 20% STATE
63500105	DELINEATORS	EACH	8	4	4		
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	4	2	2		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3		
67100100	MOBILIZATION	L SUM	1			0.5	0.5
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	2	1	1		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1			0.5	0.5
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	4	4			
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	1	1		
70106700	TEMPORARY RUMBLE STRIP	EACH	12	6	6		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1315	1015	300		
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	2211	760	1451		
70300570	PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	48	24	24		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	<b>3234.3</b>	<b>1536.5</b>	<b>1697.8</b>		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1407	700	707		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1382	675	707		
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	9994	7326	2668		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	18	14	4		
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	32	16	16		
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	4	4		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	463	253	210		
X0324744	REMOVAL OF EXISTING PRECAST CONCRETE UNITS	SQ FT	359				359
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	2			2	
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	792			557	235

\* SPECIALTY ITEMS

• FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1D & (6BR)D

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	CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	HENRY	80	5
CONTRACT NO. 64D10				

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FAS	FAP	FAS	FAP
				I-000	I-000	X-081-2A	X-081-2A
				ROADWAY	ROADWAY	BRIDGE	BRIDGE
				US 6	IL 78	US 6	IL 78
				SN 037-0131	SN 037-0129	SN 037-0131	SN 037-0129
				80% FED	80% FED	80% FED	80% FED
				20% STATE	20% STATE	20% STATE	20% STATE
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	1110			613	497
X7030100	WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III	FOOT	4048	2016	2032		
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	46			14	32
Z0013798	CONSTRUCTION LAYOUT	L SUM	1			0.5	0.5
Z0017202	DOWEL BARS 1 1/2"	EACH	100	100			
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	4	2	2		
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	4	2	2		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1			1	
Z0075300	TIE BARS	EACH	60	60			
Z0028415	GEOTECHNICAL REINFORCEMENT	SQ YD	259	259			
Z0028700	GRANULAR SUBGRADE REPLACEMENT	CU YD	43	43			

\* SPECIALTY ITEMS

# GENERAL NOTES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 22 (IL 78) & FAS 1247 (US 6)	(125BR-1)D & (6BR)D	Henry	80	7
FED ROAD DIST. NO.	ILLINOIS	PROJECT		
Contract #64D10				

It is estimated that 24.9 cubic yards of earth will be hauled to the job from outside the project limits. A shrinkage factor of 25% has been used.

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. This work will be included in the contract unit price per Cubic Meter (Cubic Yard) for EARTH EXCAVATION.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of EARTH EXCAVATION.

Mulch Method II shall be applied over all seeded areas. This shall be included in the cost of the EARTH EXCAVATION.

Except for the top 75 mm (3"), all aggregate bases and subbases 300 mm (12") in thickness shall be constructed of aggregate gradation CA-2. If the specified thickness exceeds 300 mm (12"), the bases or subbases shall be constructed of topsize 150 mm (6") breaker-run crushed stone with 70% to 90% by weight, passing the 4" sieve and 15% to 40% by weight, passing the 50 mm (2") size sieve, except for the top 75 mm (3"). The breaker-run crushed stone shall be reasonably uniformly graded from coarse to fine and be taken from a quarry ledge capable of producing Class "D" quality aggregate. The top 75 mm (3") shall be gradation CA-6 or CA-10 regardless of thickness. The water necessary to achieve compaction in all but the top 75 mm (3") layer may be added after the subbase or base course is placed on the grade.

When laying out for patching, the minimum distance between new patches (saw cut to saw cut) shall be 4.6 m (15 feet). When patch spacing is less than 4.6 m (15 feet), the pavement between patches shall also be removed and replaced.

All mandatory joint sealing for Class B patches as shown on the plans will not be measured for payment. Optional sawing of the joint for the sealant reservoir will not be measured for payment.

For all concrete patching that will not be resurfaced, the concrete shall be struck off flush with the existing pavement surface at each end of the patch.

The Engineer reserves the right to check all patches for smoothness by the use of a 10' rolling straight edge set to a 3/16" tolerance in the wheel paths. Any patch areas higher than 3/16" must be ground smooth with an approved grinding device consisting of multiple saws. The use of bushhammer or other impact devices will not be permitted. Any patch with depressions greater than 3/16" shall be repaired in a manner approved by the Engineer.

The mandatory saw cuts for pavement patching are:

**Class B Patch:** Cut two transverse saw cuts outlining the patch and one transverse pressure relief saw cut. The longitudinal edges of the patch shall be cut full depth. When the patch is adjacent to a pcc shoulder, two saw cuts along the shoulder will be required.

The mandatory saw cuts will be paid for at the contract unit price per Meter (Foot) for SAW CUTS.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Mainline Surface Course	Top Shoulder	Bottom Shoulder	Level Binder
PG:	PG 64-22	PG 58-22	PG 58-22	PG 64-22
Design Air Voids	4.0 @ N50	3 @ N50	2 @ N50	4 @ N50
Mixture Composition (Gradation Mixture)	IL 9.5 or 12.5	IL 9.5 or 12.5	BAM	IL 9.5
Friction Aggregate	C	C	N/A	N/A
20 Year ESAL	2.2	N/A	N/A	2.2

The Contractor will be required to furnish 140 mm (5 1/2") high brass stencils as approved by the Engineer and install stationing at 250' intervals. Stationing shall be placed on both lanes of 2-lane highways and on the outside lanes in both directions on 4-lane highways. The stations shall be placed 150 mm (6") inside the pavement marking edge so they can be read from the shoulder. This work will be included in the cost of the final pavement surface.

Bituminous and Aggregate prime coat shall be placed in accordance with Section 406 of the Standard Specifications. The cost of the prime coats shall be included in the contract unit price per metric ton (ton) for LEVELING BINDER (MACHINE METHOD) of the type specified.

These structures will retain the same numbers: 037-0129 for IL 78 over Green River & 037-0131 for US 6 over Mud Creek.

The contractor shall submit four copies of the required shop drawings for review and approval to the Bureau of Bridges and Structures, 2300 South Dirksen Parkway, Springfield, IL 62764. After approval of initial submittal, the contractor shall submit one set of shop drawings to Dave Lippert, Engineer of Materials, 126 East Ash Street, Springfield, IL 62706, and eight (8) sets of shop drawings to be distributed to:

District 2 District Engineer (1)  
Fabricator (1)  
Contractor (2)  
Resident Engineer (2)  
District 2 Bureau of Materials (2)

The additional thickness of proposed pavement required to match the bridge approach pavement, shown in Standard 420401, shall be included in the cost of the proposed pavement and not paid for separately.

Bridge flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.

Embankment quantities for the construction of the Traffic Barrier Terminals as shown in the plans are included in quantities for Earth Excavation, Tangent & Flared.

The Contractor shall supply the Resident Engineer with the manufacturer's installation requirements for the type of Steel Plate Beam Guardrail Terminal Type 1 Special (Tangent) or Steel Plate Beam Guardrail Terminal Type I Special (Flared).

One 16d galvanized nail shall be used to toe nail the wood block out to the wood post on all Traffic Barrier Terminal Type I Specials.

Delineators shall be installed as shown in Standard 635001, except that the post shall be rotated 180° and only metal-backed delineators shall be permitted.

# GENERAL NOTES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 22 (IL 78) & FAS 1247 (US 6)	(125BR-1)D & (6BR)D	Henry	80	8
FED ROAD DIST. NO.	ILLINOIS	PROJECT		
Contract #64D10				

Delineators shall be placed at the ends of approach guardrail terminal sections, and at each headwall or end section of AR Culverts. This work will be paid for at the contract unit price each for DELINEATORS.

Removal of the bridge rail on the IL 78 bridge and removal of parapet on the US 6 bridge shall be included under the contract unit price Each for REMOVAL OF EXISTING SUPERSTRUCTURES.

Pavement Marking shall be done according to Standard 780001.

PERMANENT SURVEY MARKERS, TYPE II, shall be set at intervals of 1.6 Km (1 mile) or as directed by the Engineer. Bridge or culvert projects shall have one survey marker placed near the structure. Estimated: 4 Each.

Permanent Survey Markers, Type II shall be cast-in-place as shown on Highway Standard 667101.

The Contractor shall submit to the Engineer a description of location, elevation, and coordinates for each permanent survey marker. The Engineer shall submit this information to the Survey Crew.

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 hours 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:

Geneseo Telephone Co.  
Frontier/Citizens  
MCI World Com

Ameren IP  
Mediacom

CADD data will be available to Contractors and Consultants working on this project. This information will be provided upon request as MicroStation CADD files and Geopak coordinate geometry files ONLY. If data is required in other formats it will be your responsibility to make these conversions. If any discrepancy or inconsistency arises between the electronic data and the information on the hard copy, the information on the hard copy should be used. Contact the District's Project Engineer to request these files.

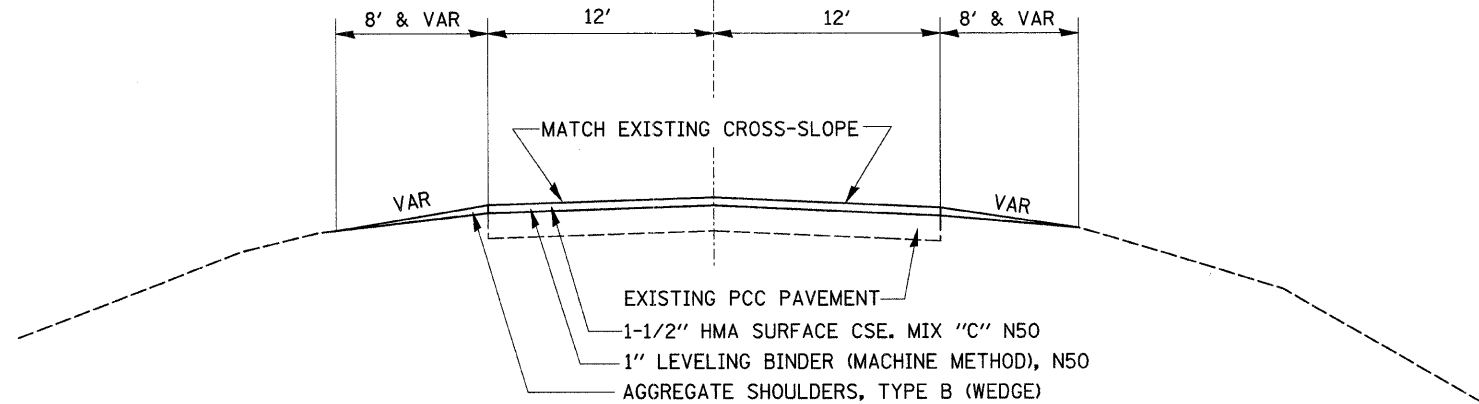
All shoulder and ditch work on the north side of US 6 shall be completed with all equipment on the pavement and/or bituminous shoulder. This work shall be completed so no equipment will encroach on the IAIS Railroad ROW.

## COMMITMENTS

1. All work on the structures on US 6 over Mud Creek & IL 78 over Green River, shall be performed from the existing deck and no work shall take place below the existing structure on the ground nor in the creek bed.
2. No tree shall be removed.
3. No materials shall be placed below the structure.

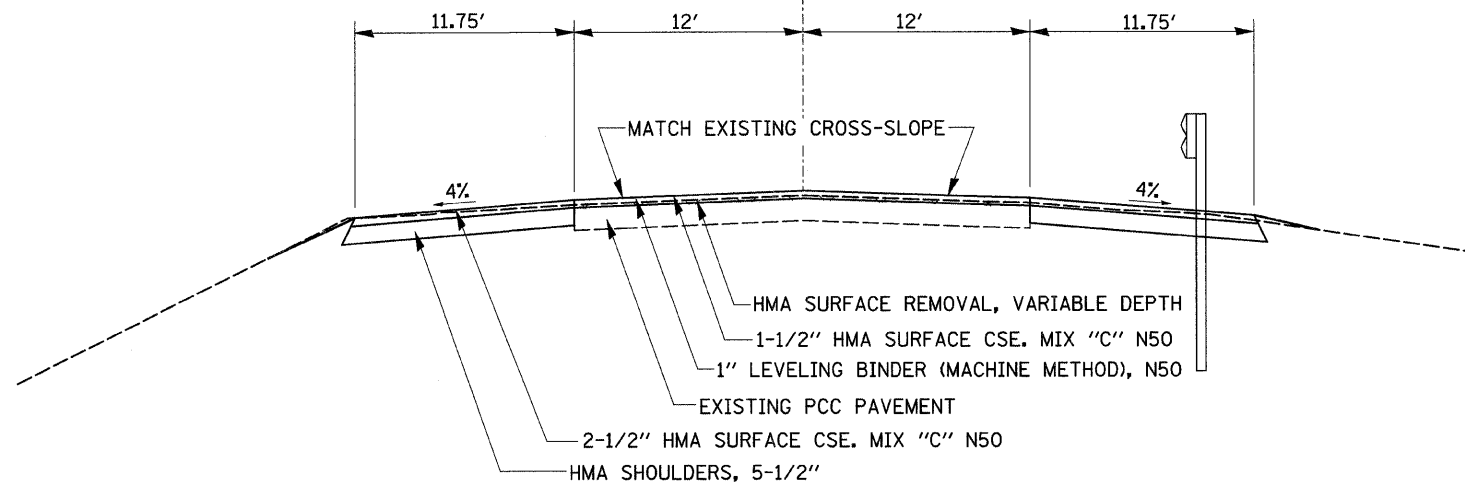
STA 661+72.50 - 663+00.01

CL US 6



STA 663+00.01 - 664+60.60

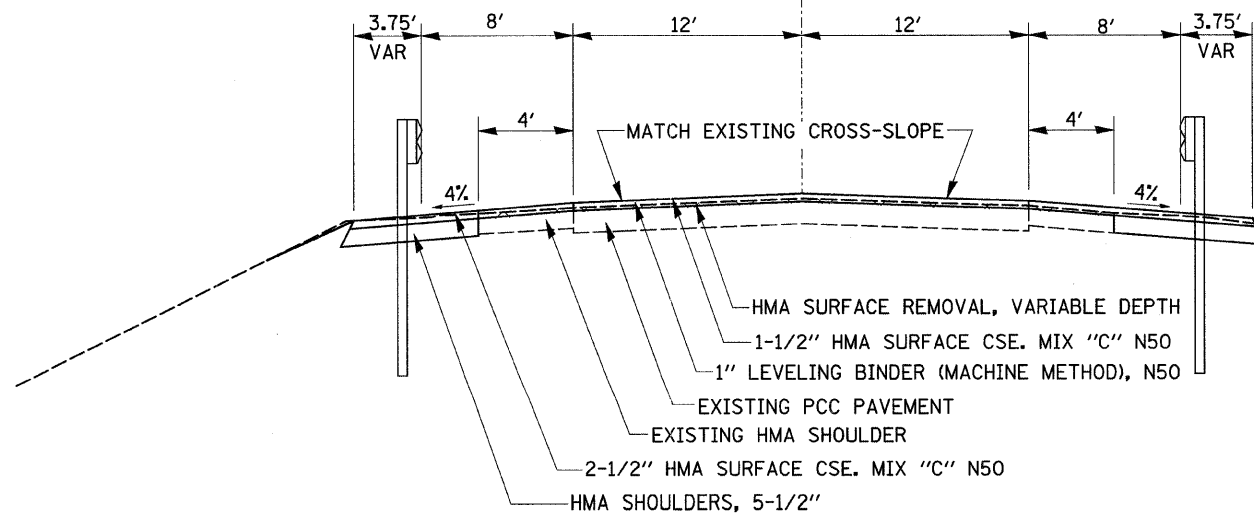
CL US 6



STA 664+60.60 - 665+63.20

STA 667+75.20 - 668+80.76

CL US 6



HOT-MIX ASPHALT/BITUMINOUS APPLICATION RATES:  
 ALL HOT-MIX ASPHALT MIXTURES: (112 LB/SY/IN)  
 BITUMINOUS MATERIAL (PRIME COAT): 0.000286 TON/SQ YD  
 AGGREGATE (PRIME COAT): 0.0015 TON/SQ YD

• FAP 22 (IL 78) & FAS 1247 (US 6) •• (125BR-1D) & (6BR)D

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	PLOT DATE = Wed Nov 28 14:01:46 2007	DATE -	REVISED -

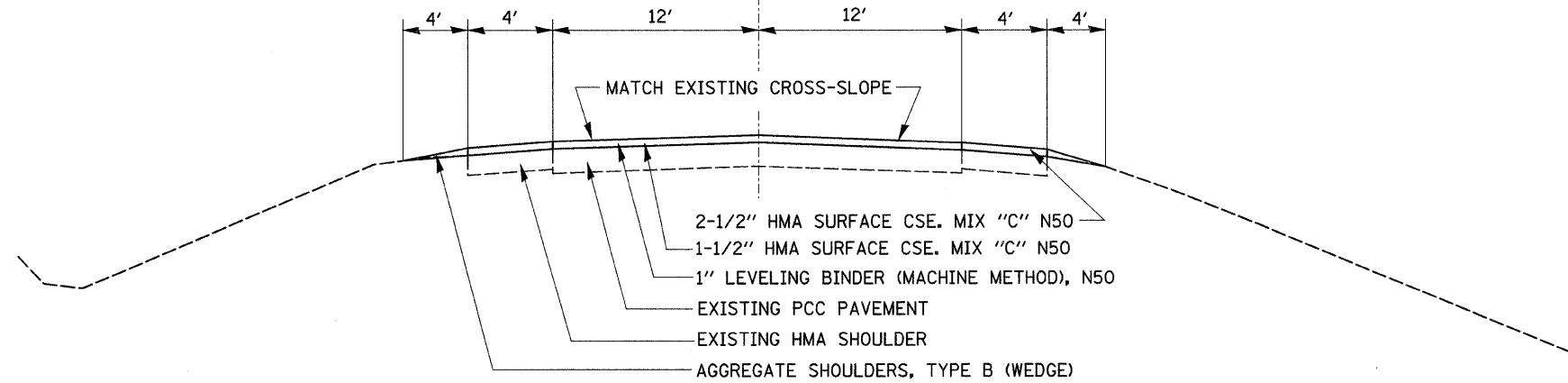
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	9
CONTRACT NO. 64D10				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

STA 670+59.02 - 672+00.00

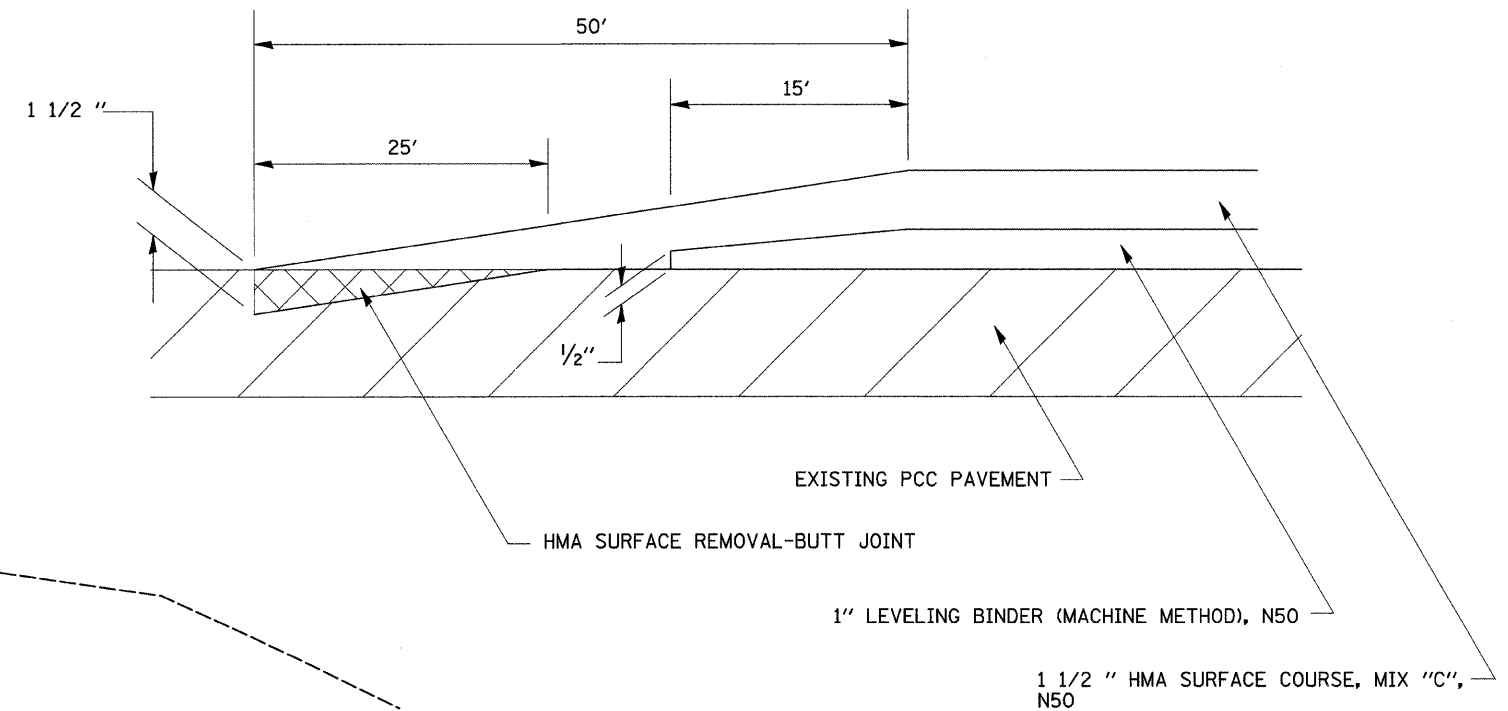
US 6



STA 661+22.89 - 661+72.89

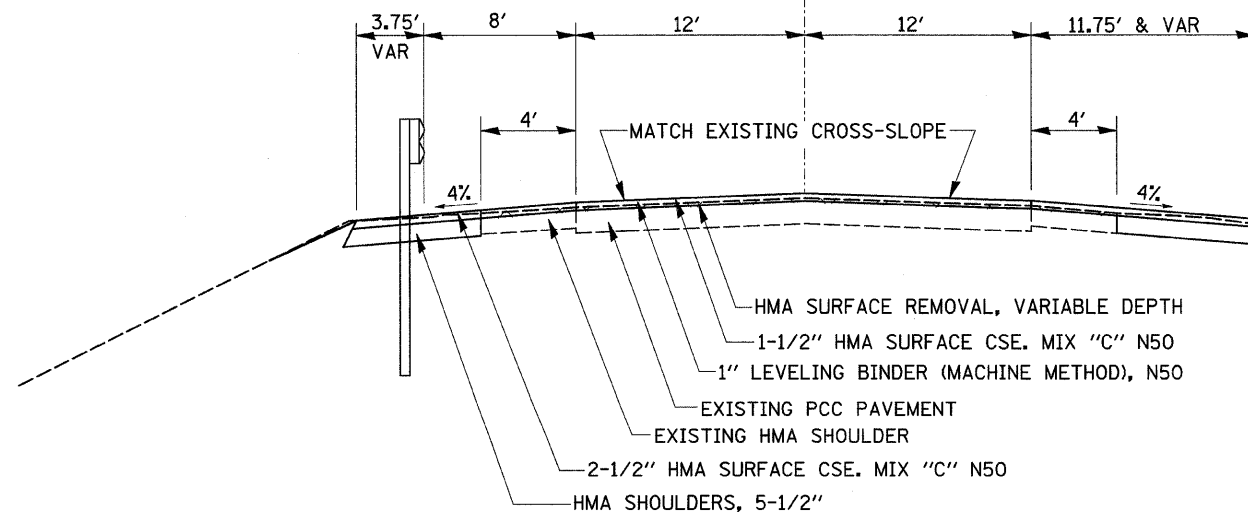
STA 672+00 - 672+50

TYPICAL TAPER



STA 668+80.76 - 670+59.09

US 6



HOT-MIX ASPHALT/BITUMINOUS APPLICATION RATES:  
 ALL HOT-MIX ASPHALT MIXTURES: (112 LB/SY/IN)  
 BITUMINOUS MATERIAL (PRIME COAT): 0.000286 TON/SQ YD  
 AGGREGATE (PRIME COAT): 0.0015 TON/SQ YD

FAP 22 (IL 78) & FAS 1247 (US 6) (125BR-1D & 6BR)D

FILE NAME = c:\projects\p285087\d85087typ.dgn	USER NAME = grantpm	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 48.0349' / IN.	CHECKED -	REVISED -
	PLOT DATE = Wed Nov 28 14:01:46 2007	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

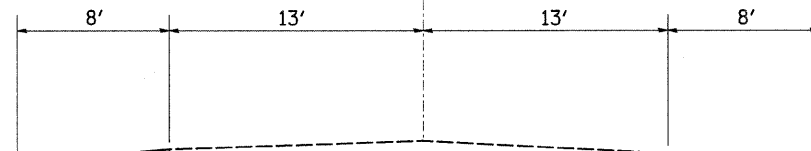
TYPICAL SECTIONS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	10
CONTRACT NO. 64D10				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

STA 878+82.50 - 879+96.56  
 STA 885+46.55 - 886+35

CL IL 78

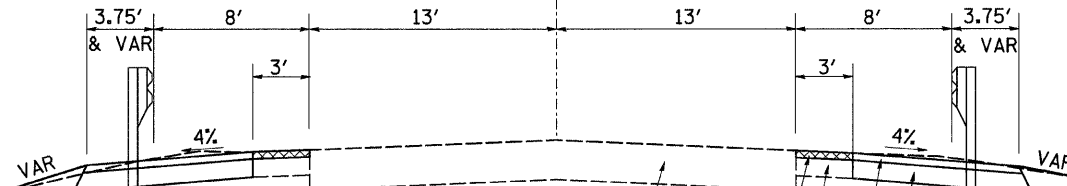


EXISTING PAVEMENT  
 2-1/2" HMA SURFACE CSE. MIX "C" N50  
 HMA SHOULDERS, 5-1/2"

1:4

STA 879+96.56 - 881+01.12  
 STA 883+34.55 - 885+46.55

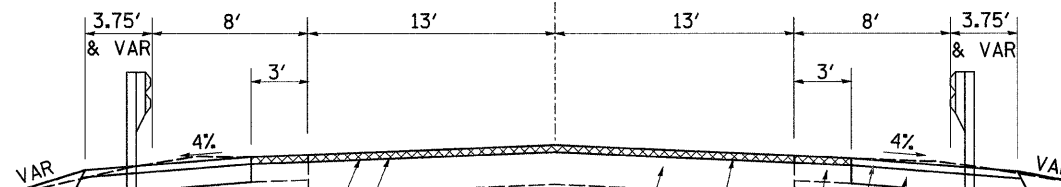
CL IL 78



EXISTING PAVEMENT  
 HMA SURF. REMOVAL, 2 1/2"  
 EXISTING HMA SHOULDER  
 2-1/2" HMA SURFACE CSE. MIX "C" N50  
 HMA SHOULDERS, 5-1/2"

STA 881+01.12 - 881+63.23  
 STA 883+72.31 - 884+34.55

CL IL 78



EXISTING PAVEMENT  
 HMA SURF. REMOVAL, 2 1/2"  
 EXISTING HMA SHOULDER  
 1-1/2" HMA SURFACE CSE. MIX "C" N50  
 1" LEVELING BINDER (MACHINE METHOD), N50  
 2-1/2" HMA SURFACE CSE. MIX "C" N50  
 HMA SHOULDERS, 5-1/2"

HOT-MIX ASPHALT/BITUMINOUS APPLICATION RATES:  
 ALL HOT-MIX ASPHALT MIXTURES: (112 LB/SY/IN)  
 BITUMINOUS MATERIAL (PRIME COAT): 0.000286 TON/SQ YD  
 AGGREGATE (PRIME COAT): 0.0015 TON/SQ YD

• FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1D & (6BR)D

FILE NAME = c:\proj\jeota\p205007\d05007.tpp.dgn	USER NAME = grantpm	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 48.0349' / IN.	CHECKED -	REVISED -
	PLOT DATE = Wed Nov 28 14:01:46 2007	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	11
CONTRACT NO. 64D10				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



20200100	EARTH EXCAVATION									
	Location									
	Sta.									
	US 6									
	661+23.0	-	672+50.0	LT & RT						
	IL 78									
	879+61.0	-	885+52.0	LT & RT						
	US 6 Total=				122.4					
	IL 78 Total=				154.4					
	Grand Total=				276.8					

Remarks

20400800	FURNISHED EXCAVATION									
	Location									
	Sta.									
	IL 78									
	879+61.0	-	885+52.0	LT & RT						
	IL 78 Total=				24.9					
	Grand Total=				24.9					

Remarks

28000400	PERIMETER EROSION BARRIER									
	Location									
	Sta.									
	IL 78									
	879+50.0	-	881+50.0							
	884+50.0	-	886+00.0							
	IL 78 Total=				379.0					
	Grand Total=				379.0					

Remarks

28100105	STONE RIPRAP, CLASS A3									
	Location									
	Sta.									
	IL 78									
	885+47.5			LT						
	IL 78 Total=				18.3		11' x 15'			
	Grand Total=				18.3					

Remarks

28200200	FILTER FABRIC									
	Location									
	Sta.									
	IL 78									
	885+47.5			LT						
	IL 78 Total=				18.3		11' x 15'			
	Grand Total=				18.3					

Remarks

35101400	AGGREGATE BASE COURSE, TYPE B									
	Location									
	Sta.									
	IL 78									
	879+90.0			RT						
	880+70.0			LT						
	884+80.0			RT						
	885+10.0			LT						
	IL 78 Total=				178.0					
	Grand Total=				178.0					

IF NEEDED  
FE for access to Green River Special Drainage District dike - apron only  
FE for access to Green River Special Drainage District dike - apron only  
FE for access to Green River Special Drainage District dike - apron only  
FE for access to Green River Special Drainage District dike - apron only

Remarks

40600525	LEVELING BINDER (HAND METHOD), N50									
	Location									
	Sta.									
	Entire Job									
	ION									
	US 6 & IL 78 Total=				5					
	Grand Total=				5					

Remarks

40600990	TEMPORARY RAMP									
	Location									
	Sta.									
	US 6									
	661+23.0				22.2		8.33' x 24'			
	665+63.2				22.2		8.33' x 24'			
	667+75.2				22.2		8.33' x 24'			
	672+50.0				22.2		8.33' x 24'			
	US 6 Total=				88.9					
	IL 78									
	881+01.1				22.2		8.33' x 24'			
	881+73.2				22.2		8.33' x 24'			
	883+62.3				22.2		8.33' x 24'			
	884+34.5				22.2		8.33' x 24'			
	IL 78 Total=				88.9					
	Grand Total=				177.8					

Remarks

42001165	BRIDGE APPROACH PAVEMENT									
	Location									
	Sta.									
	US 6									
	665+73.2	-	666+03.2			133.3	30' x 40'			
	667+35.2	-	667+65.2			133.3	30' x 40'			
	US 6 Total=					266.7				
	Grand Total=					266.7				

Remarks

42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)									
	Location									
	Sta.									
	IL 78									
	881+73.2	-	881+97.1			85.0	23.91' x 32'	See Special Provision and detail in Bridge Plans		
	883+38.4	-	883+62.3			85.0	23.91' x 32'	See Special Provision and detail in Bridge Plans		
	IL 78 Total=					170.1				
	Grand Total=					170.1				

Remarks

42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)									
	Location									
	Sta.									
	US 6									
	665+63.2	-	665+73.2			44.4	40' x 10'			
	667+65.2	-	667+75.2			44.4	40' x 10'			
	US 6 Total=					88.9				
	IL 78									
	881+63.2	-	881+73.2			35.6	40' x 10'			
	883+62.3	-	883+72.3			35.6	40' x 10'			
	IL 78 Total=					71.1				
	Grand Total=					160.0				

Remarks

44000700	APPROACH SLAB REMOVAL									
	Location									
	Sta.									
	US 6									
	665+63.2	-	666+03.2			162.8				
	667+35.2	-	667+75.2			160.8				
	US 6 Total=					323.5				
	IL 78									
	881+73.2	-	881+97.1			66.4	23.91' x 25' (3.5' beam on each side removed separate)			
	883+38.4	-	883+62.3			66.4	23.91' x 25' (3.5' beam on each side removed separate)			
	IL 78 Total=					132.9				
	Grand Total=					456.4				

Remarks

48101200	AGGREGATE SHOULDERS, TYPE B									
	Location									
	Sta.									
	US 6									
	661+23.3	-	661+73.4	LT	4' to 7'	6.1	Wedge - Figured at 3 1/2" for entire width			
	661+23.3	-	661+73.4	RT	4'	4.4	Wedge - Figured at 3 1/2" for entire width			
	661+73.4	-	663+00.0	LT	8'	22.4	Wedge - Figured at 3 1/2" for entire width			
	661+73.4	-	662+00.0	RT	4' to 5'	2.7	Wedge - Figured at 3 1/2" for entire width			
	662+00.0	-	662+18.9	RT	5' to 6'	2.3	Wedge - Figured at 3 1/2" for entire width			
	662+18.9	-	662+50.0	RT	6' to 8'	4.8	Wedge - Figured at 3 1/2" for entire width			
	662+50.0	-	663+00.0	RT	8'	8.9	Wedge - Figured at 3 1/2" for entire width			
	670+59.1	-	672+50.0	LT	4'	16.9	Wedge - Figured at 3 1/2" for entire width			
	670+59.1	-	672+50.0	RT	4'	16.9	Wedge - Figured at 3 1/2" for entire width			
	US 6 Total=					85.4				
	IL 78									
	Entire IL 78 Project					20.0	Wedge - If needed			
	IL 78 Total=					20.0				
	Grand Total=					105.4				

Remarks

63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A									
	Location									
	Sta.									
	US 6									
	664+45.0	-	665+57.5	RT		112.5				
	665+20.0	-	665+57.5	LT		37.5				
	667+80.9	-	668+18.4	RT		37.5				
	667+80.9	-	669+05.9	LT		125.0				
	US 6 Total=					312.5				
	IL 78									
	880+90.1	-	881+27.6	RT		37.5				
	884+08.1	-	884+45.6	LT		37.5				
	IL 78 Total=					75.0				
	Grand Total=					387.5				

Remarks

FILE NAME =	USER NAME = grantpm	DESIGNED -	REVISED -
ct\projects\p205007\d05007crr.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE:	SHEET NO.	OF	SHEETS
	STA.	TO	STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	12
CONTRACT NO. 64D10				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

\* FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1)D & (6BR)D

63100087 TRAFFIC BARRIER TERMINAL, TYPE 6A

Location	Sta.	EACH	Remarks
<b>US 6</b>			
665+57.5	- 666+03.2	RT	1
665+57.5	- 666+03.2	LT	1
667+35.2	- 667+80.9	RT	1
667+35.2	- 667+80.9	LT	1
		<b>US 6 Total =</b>	<b>4</b>
<b>IL 78</b>			
881+27.6	- 881+73.3	RT	1
881+27.6	- 881+73.3	LT	1
883+62.4	- 884+08.1	RT	1
883+62.4	- 884+08.1	LT	1
		<b>IL 78 Total =</b>	<b>4</b>
		<b>Grand Total =</b>	<b>8</b>

63100167 TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

Location	Sta.	EACH	Remarks
<b>US 6</b>			
664+70.0	- 665+20.0	LT	1
669+05.9	- 669+55.9	LT	1
		<b>US 6 Total =</b>	<b>2</b>
		<b>Grand Total =</b>	<b>2</b>

63100169 TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)

Location	Sta.	EACH	Remarks
<b>US 6</b>			
663+95.0	- 664+45.0	RT	1
668+18.4	- 668+68.4	RT	1
		<b>US 6 Total =</b>	<b>2</b>
<b>IL 78</b>			
880+40.1	- 880+90.1	RT	1
880+77.6	- 881+27.6	LT	1
884+08.1	- 884+58.1	RT	1
884+45.6	- 884+95.6	LT	1
		<b>IL 78 Total =</b>	<b>4</b>
		<b>Grand Total =</b>	<b>6</b>

63200310 GUARDRAIL REMOVAL

Location	Sta.	EQUI	Remarks
<b>US 6</b>			
664+19.5	- 666+03.2	RT	183.7
664+94.4	- 666+03.2	LT	108.1
667+35.3	- 668+43.4	RT	108.4
667+35.3	- 669+42.4	LT	207.6
		<b>US 6 Total =</b>	<b>607.7</b>
<b>IL 78</b>			
880+32.9	- 881+73.3	RT	139.5
880+71.2	- 881+73.3	LT	101.8
883+62.3	- 884+39.5	RT	76.7
883+62.3	- 885+02.3	LT	139.4
		<b>IL 78 Total =</b>	<b>457.3</b>
		<b>Grand Total =</b>	<b>1065.1</b>

63500105 DELINEATORS

Location	Sta.	EACH	Remarks
<b>US 6</b>			
663+95.0		RT	1
664+70.0		LT	1
668+70.2		RT	1
669+57.7		LT	1
		<b>US 6 Total =</b>	<b>4</b>
<b>IL 78</b>			
880+40.1		RT	1
880+77.6		LT	1
884+58.1		RT	1
884+95.6		LT	1
		<b>IL 78 Total =</b>	<b>4</b>
		<b>Grand Total =</b>	<b>8</b>

66700305 PERMANENT SURVEY MARKERS, TYPE II

Location	Sta.	Offset	EACH	Remarks
<b>US 6 &amp; IL 78 Total =</b>				<b>4</b>
<b>Grand Total =</b>				<b>4</b>

70106700 TEMPORARY RUMBLE STRIP

Location	Sta.	EACH	Remarks
<b>US 6</b>			
644+35.6			1
649+35.6			1
654+35.6			1
679+13.0			1
684+13.0			1
689+13.0			1
		<b>US 6 Total =</b>	<b>6</b>
<b>IL 78</b>			
860+11.6			1
865+11.6			1
870+11.6			1
895+00.7			1
900+00.7			1
905+00.7			1
		<b>IL 78 Total =</b>	<b>6</b>
		<b>Grand Total =</b>	<b>12</b>

70300100 SHORT-TERM PAVEMENT MARKING

Location	Sta.	to	Sta.	EQUI	Remarks
<b>US 6</b>					
661+22.9	-	672+50.0	LT	338.1	CL skip dash - Yellow (3 applications)
661+22.9	-	672+50.0	LT	338.1	White Edge Line (3 applications)
661+22.9	-	672+50.0	RT	338.1	White Edge Line (3 applications)
				<b>US 6 Total =</b>	<b>1014.4</b>
<b>IL 78</b>					
881+01.1	-	884+34.5	LT	100.0	CL solid stripe - Yellow (3 applications)
881+01.1	-	884+34.5	LT	100.0	White Edge Line (3 applications)
881+01.1	-	884+34.5	RT	100.0	White Edge Line (3 applications)
				<b>IL 78 Total =</b>	<b>300.1</b>
				<b>Grand Total =</b>	<b>1314.5</b>

70300520 PAVEMENT MARKING TAPE, TYPE III 4"

Location	Sta.	EQUI	Remarks
<b>US 6</b>			
662+99.1	- 670+59.1		760.0
		<b>US 6 Total =</b>	<b>760.0</b>
<b>IL 78</b>			
878+91.3	- 886+20.0		728.8
878+92.5	- 886+15.0		722.5
		<b>IL 78 Total =</b>	<b>1451.3</b>
		<b>Grand Total =</b>	<b>2211.2</b>

70300570 PAVEMENT MARKING TAPE, TYPE III 24"

Location	Sta.	EQUI	Remarks
<b>US 6</b>			
661+35.6			12.0
672+12.0			12.0
		<b>US 6 Total =</b>	<b>24.0</b>
<b>IL 78</b>			
877+11.6			12.0
888+00.7			12.0
		<b>IL 78 Total =</b>	<b>24.0</b>
		<b>Grand Total =</b>	<b>48.0</b>

70301000 WORK ZONE PAVEMENT MARKING REMOVAL

Location	Sta.	EQUI	Remarks
<b>US 6</b>			
661+33.0	- 672+14.0		450.4
661+46.0	- 671+52.0		336.0
662+99.1	- 670+59.1		253.3
661+96.0	- 672+02.0		336.0
661+35.6			24.0
672+12.0			24.0
661+22.9	- 672+50.0	LT	37.6
661+22.9	- 672+50.0	LT	37.6
661+22.9	- 672+50.0	RT	37.6
		<b>US 6 Total =</b>	<b>1536.5</b>
<b>IL 78</b>			
877+10.0	- 888+03.0		455.4
878+91.3	- 886+20.0		242.9
878+92.5	- 886+15.0		240.8
877+76.8	- 887+90.6		338.7
877+21.7	- 887+34.9		338.7
877+11.6			24.0
888+00.7			24.0
881+01.1	- 884+34.5	LT	11.1
881+01.1	- 884+34.5	LT	11.1
881+01.1	- 884+34.5	RT	11.1
		<b>IL 78 Total =</b>	<b>1697.8</b>
		<b>Grand Total =</b>	<b>3234.3</b>

\* FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1)D & (6BR)D

FILE NAME =	USER NAME = grantpin	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SCHEDULE OF QUANTITIES</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\projects\p205207\d05007.dgn		DRAWN -	REVISED -					HENRY	80	13	
		CHECKED -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 64D10		
		DATE -	REVISED -						ILLINOIS FED. AID PROJECT		

70400100 TEMPORARY CONCRETE BARRIER		Location		EQOI	Remarks
US 6	Sta.	to	Sta.		
663+15.0	-	670+10.0		700.0	Stage I
US 6 Total =				700.0	
IL 78	879+03.4	-	886+09.5	707.0	Stage I
IL 78 Total =				707.0	
Grand Total =				1407.0	

70400200 RELOCATE TEMPORARY CONCRETE BARRIER		Location		EQOI	Remarks
US 6	Sta.	to	Sta.		
663+31.0	-	669+94.0		675.0	Stage II
US 6 Total =				675.0	
IL 78	879+03.4	-	886+09.5	707.0	Stage II
IL 78 Total =				707.0	
Grand Total =				1382.0	

78001110 PAINT PAVEMENT MARKING - LINE 4"		Location		EQOI	Remarks
US 6	Sta.	to	Sta.		
661+22.9	-	666+03.2	LT	240.2	CL skip dash - Yellow (2 coats)
661+22.9	-	666+03.2	RT	960.6	CL solid stripe - Yellow (2 coats)
666+03.2	-	672+50.0	RT	323.4	CL skip dash - Yellow (2 coats)
666+03.2	-	672+50.0	LT	1293.6	CL solid stripe - Yellow (2 coats)
661+22.9	-	672+50.0	LT	2254.2	White Edge Line (2 coats)
661+22.9	-	672+50.0	RT	2254.2	White Edge Line (2 coats)
US 6 Total =				7326.2	
IL 78	881+01.1	-	884+34.5	666.9	CL solid stripe - Yellow (2 coats)
881+01.1	-	884+34.5	RT	666.9	CL solid stripe - Yellow (2 coats)
881+01.1	-	884+34.5	LT	666.9	White Edge Line (2 coats)
881+01.1	-	884+34.5	RT	666.9	White Edge Line (2 coats)
IL 78 Total =				2667.4	
Grand Total =				9993.6	

78100100 RAISED REFLECTIVE PAVEMENT MARKER		Location		EACH	Remarks
US 6	Sta.	to	Sta.		
661+22.9	-	672+50.0	Median	14	Two-way Amber
US 6 Total =				14	
IL 78	881+01.1	-	884+34.5	4	Two-way Amber
IL 78 Total =				4	
Grand Total =				18	

78200410 GUARDRAIL MARKERS, TYPE A		Location		EACH	Remarks
US 6	Sta.	to	Sta.		
664+45.0	-	668+18.4	RT	8	
665+20.0	-	669+05.9	LT	8	
US 6 Total =				16	
IL 78	880+90.1	-	884+08.1	8	
881+27.6	-	884+45.6	LT	8	
IL 78 Total =				16	
Grand Total =				32	

78201000 TERMINAL MARKER - DIRECT APPLIED		Location		EACH	Remarks
US 6	Sta.	to	Sta.		
663+95.0			RT	1	
664+70.0			LT	1	
668+70.2			RT	1	
669+57.7			LT	1	
US 6 Total =				4	
IL 78	880+40.1		RT	1	
880+77.6			LT	1	
884+58.1			RT	1	
884+95.6			LT	1	
IL 78 Total =				4	
Grand Total =				8	

78300100 PAVEMENT MARKING REMOVAL		Location		SO FI	Remarks
US 6	Sta.	to	Sta.		
662+99.1	-	670+59.1		253.3	Stage II
US 6 Total =				253.3	
IL 78	879+39.5	-	885+68.0	209.5	Stage II
IL 78 Total =				209.5	
Grand Total =				462.8	

X7030100 WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III		Location		EQOI	Remarks
US 6	Sta.	to	Sta.		
661+46.0	-	671+52.0		1008.0	Stage I - Inside
661+96.0	-	672+02.0		1008.0	Stage II - Inside
US 6 Total =				2016.0	
IL 78	877+76.8	-	887+90.6	1016.0	Stage I - Inside
877+21.7	-	887+34.9		1016.0	Stage II - Inside
IL 78 Total =				2032.0	
Grand Total =				4048.0	

Z0030250 IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3		Location		EACH	Remarks
US 6	Sta.	to	Sta.		
663+14.7			RT	1	
670+10.0			RT	1	
US 6 Total =				2	
IL 78	879+03.4		LT	1	
886+09.5			LT	1	
IL 78 Total =				2	
Grand Total =				4	

Z0030350 IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3		Location		EACH	Remarks
US 6	Sta.	to	Sta.		
663+30.6			LT	1	
669+94.3			LT	1	
US 6 Total =				2	
IL 78	879+03.4		RT	1	
886+09.5			RT	1	
IL 78 Total =				2	
Grand Total =				4	

\* FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1)D & (6BR)D

FILE NAME =	USER NAME = grantpm	DESIGNED -	REVISED -
c:\projects\p205007\d05007cwr.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	14
CONTRACT NO. 64D10			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

STATIONING	REMARKS	H.M.A.		H.M.A. AREA		THICKNESS			BIT PRIME TON	AGG. PRIME TON	H.M.A. SURF	LEV.	H.M.A.	H.M.A.	
		LENGTH FEET	WIDTH FEET	SQ. FT.	SQ. YD.	SURFACE INCH	LEVEL BINDER INCH	HMA SHLDR INCH			REM, 2.5" SQ YD	BIND. (M.M.) N50 TON	SURF. CSE. MIX "C", N50 TON	SHOULDERS TON	
IL 78 - Mainline															
881+01 - 881+50		48.9	25.0	1222.02	135.78	1.5	1		0.08	0.19	135.78	9.50	11.41		
881+63 - 881+73	Appr. Pav. Conn.	10.0	32.0	320.00	35.56										
881+73 - 881+97	Appr. Pav.	23.9	32.0	765.38	85.04										
881+97 - 883+38	Bridge	141.2	32.0	4519.71	502.19										
883+38 - 883+62	Appr. Pav.	23.9	32.0	765.38	85.04										
883+62 - 883+72	Appr. Pav. Conn.	10.0	32.0	320.00	35.56										
883+72 - 884+35		62.2	25.0	1556.05	172.89	1.5	1		0.10	0.25	172.89	12.10	14.52		
IL 78 - Shoulders															
LT															
878+83 - 879+97		114.1	8	912.44	101.38	2.5		5.5					14.19	31.23	
879+97 - 880+43	Grind 2.5" off existing shoulder	46.0	8	368.02	40.89	2.5		5.5			15.33		5.72	7.87	
880+43 - 880+65	Grind 2.5" off existing shoulder	22.8	8 - 18	295.80	32.87	2.5		5.5			7.58		4.60	7.79	
880+65 - 880+90	Grind 2.5" off existing shoulder	25.0	18	450.00	50.00	2.5		5.5			8.33		7.00	12.83	
880+90 - 881+15	Grind 2.5" off existing shoulder	25.0	18 - 11.75	371.18	41.24	2.5		5.5			8.32		5.77	10.14	
881+15 - 881+63	Grind 2.5" off existing shoulder	48.1	11.75	564.80	62.76	2.5		5.5			16.02		8.79	14.39	
881+63 - 881+73		10.0	8	80.00	8.89	2.5		5.5					1.24	2.74	
Bridge															
883+62 - 883+72		10.0	8	80.00	8.89	2.5		5.5					1.24	2.74	
883+72 - 884+58	Grind 2.5" off existing shoulder	85.9	11.75	1009.78	112.20	2.5		5.5			28.65		15.71	25.73	
884+58 - 884+83	Grind 2.5" off existing shoulder	25.0	11.75 - 18	372.59	41.40	2.5		5.5			8.35		5.80	10.18	
884+83 - 885+08	Grind 2.5" off existing shoulder	25.0	18	450.02	50.00	2.5		5.5			8.33		7.00	12.83	
885+08 - 885+31	Grind 2.5" off existing shoulder	22.4	18 - 8	291.62	32.40	2.5		5.5			7.48		4.54	7.68	
885+31 - 885+47	Grind 2.5" off existing shoulder	15.8	8	126.22	14.02	2.5		5.5			5.26		1.96	2.70	
885+47 - 886+35		88.5	8	707.62	78.62	2.5		5.5					11.01	24.22	
RT															
878+83 - 879+97		114.3	8	914.18	101.58	2.5		5.5					14.22	31.29	
879+97 - 880+07	Grind 2.5" off existing shoulder	10.6	8	84.48	9.39	2.5		5.5			3.52		1.31	1.81	
880+07 - 880+30	Grind 2.5" off existing shoulder	22.4	8 - 18	291.55	32.39	2.5		5.5			7.48		4.54	7.68	
880+30 - 880+55	Grind 2.5" off existing shoulder	25.0	18	450.02	50.00	2.5		5.5			8.33		7.00	12.83	
880+55 - 880+79	Grind 2.5" off existing shoulder	24.5	18 - 11.75	363.99	40.44	2.5		5.5			8.16		5.66	9.94	
880+79 - 881+63	Grind 2.5" off existing shoulder	83.9	11.75	986.31	109.59	2.5		5.5			27.98		15.34	25.14	
881+63 - 881+73		10.0	8	80.00	8.89	2.5		5.5					1.24	2.74	
Bridge															
883+62 - 883+72		10.0	8	80.00	8.89	2.5		5.5					1.24	2.74	
883+72 - 884+20	Grind 2.5" off existing shoulder	48.1	11.75	564.75	62.75	2.5		5.5			16.02		8.79	14.39	
884+20 - 884+45	Grind 2.5" off existing shoulder	25.0	11.75 - 18	371.19	41.24	2.5		5.5			8.32		5.77	10.14	
884+45 - 884+70	Grind 2.5" off existing shoulder	25.0	18	450.00	50.00	2.5		5.5			8.33		7.00	12.83	
884+70 - 884+93	Grind 2.5" off existing shoulder	23.1	18 - 8	299.91	33.32	2.5		5.5			7.69		4.67	7.90	
884+93 - 885+40	Grind 2.5" off existing shoulder	46.6	8	373.14	41.46	2.5		5.5			15.55		5.80	7.98	
885+40 - 886+35		95.0	8	760.00	84.44	2.5		5.5					11.82	26.01	
GRAND TOTALS									0.18	0.44	533.71	21.61	214.92	346.48	

\* ADDITIONAL QUANTITIES ON US 6 BITUMINOUS SCHEDULE

\* FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1)D & (6BR)D

FILE NAME = c:\projects\p205007\d05007cwr.dgn	USER NAME = grantpm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BITUMINOUS SCHEDULE</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 1250.0000' / IN.	DRAWN -	REVISED -	HENRY			80	15			
PLOT DATE = Wed Nov 28 14:07:15 2007	CHECKED -	REVISED -	CONTRACT NO. 64D10							
DATE -	REVISED -	SCALE:	SHEET NO.			OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

STATIONING	REMARKS	H.M.A.		H.M.A. AREA		SURFACE INCH	THICKNESS		BIT PRIME TON	AGG. PRIME TON	H.M.A. SURF	H.M.A. SURF	LEV.	H.M.A.	H.M.A.
		LENGTH FEET	WIDTH FEET	SQ. FT.	SQ. YD.		LEVEL BINDER INCH	HMA SHLDR INCH			REM - BUTT JOINT SQ YD	REM - VAR DEPTH SQ YD	BIND. (M.M.) N50 TON	SURF. CSE. MIX "C", N50 TON	SHOULDERS TON
US 6 - Mainline															
661+23 - 661+73	Butt Joint	50.0	27.0	1350.00	150.00	Var - 1.5	Var - 1		0.09	0.21			1.68	11.39	
661+73 - 662+19		46.0	26 - 24	1149.25	127.69	1.5	1		0.07	0.18			8.94	10.73	
662+19 - 665+63		344.3	24.0	8264.16	918.24	1.5	1		0.53	1.31			64.28	77.13	
665+63 - 665+73	Appr. Pav. Conn.	10.0	41.2	412.00	45.78										
665+73 - 666+03	Appr. Pav.	30.0	41.2	1236.00	137.33										
666+03 - 667+35	Bridge	132.0	41.0	5411.59	601.29										
667+35 - 667+65	Appr. Pav.	30.0	40.6	1218.00	135.33										
667+65 - 667+75	Appr. Pav. Conn.	10.0	40.6	406.00	45.11										
667+75 - 672+00		424.8	24.0	10195.44	1132.83	1.5	1		0.65	1.62			79.30	95.16	
672+00 - 672+50	Butt Joint	50.0	24.0	1200.00	133.33	Var - 1.5	Var - 1		0.08	0.19			1.68	11.39	
US 6 - Shoulders															
LT															
663+00 - 664+36		136.1	8	1088.72	120.97	2.5		5.5						16.94	37.26
664+36 - 664+61		24.5	8 - 11.75	244.80	27.20	2.5		5.5						3.81	8.38
664+61 - 665+63	Just Surface on old approach	102.4	4.4	450.69	50.08	2.5								7.01	
664+61 - 665+63		102.4	7.35	752.86	83.65	2.5		5.5						11.71	25.76
Bridge															
667+75 - 668+78	Just Surface on old approach	103.2	5.25	541.75	60.19	2.5								8.43	
667+75 - 668+78		103.2	6.5	670.74	74.53	2.5		5.5						10.43	22.95
668+78 - 669+66	Just Surface on existing shldr	87.6	4.5	394.15	43.79	2.5								6.13	
668+78 - 669+66		87.6	7.25	635.03	70.56	2.5		5.5						9.88	21.73
669+66 - 670+59	Just Surface on existing shldr	93.3	4.5	419.89	46.65	2.5								6.53	
669+66 - 670+59		93.3	7.25 - 3.5	501.54	55.73	2.5		5.5						7.80	17.16
670+59 - 672+50	Just Surface on existing shldr	190.9	5	954.55	106.06	2.5								14.85	
RT															
663+00 - 663+60		60.1	8	481.20	53.47			5.5						7.49	16.47
663+60 - 663+83		22.5	8 - 18.25	294.66	32.74			5.5						4.58	10.08
663+83 - 664+08		25.0	18.25	456.25	50.69			5.5						7.10	15.61
664+08 - 664+33		25.0	18.25 - 11.75	375.45	41.72			5.5						5.84	12.85
664+33 - 664+61		28.1	11.75	329.82	36.65			5.5						5.13	11.29
664+61 - 665+63	Just Surface on old approach	102.3	4.2	429.66	47.74									6.68	
664+61 - 665+63		102.3	7.55	772.37	85.82			5.5 - 8**						12.01	32.44
Bridge															
667+75 - 668+31	Just Surface on old approach	55.8	4.5	250.92	27.88									3.90	
667+75 - 668+31		55.8	7.55	420.99	46.78			5.5 - 8**						6.55	17.68
668+31 - 668+56	Just Surface on old approach	25.0	4.5	112.50	12.50									1.75	
668+31 - 668+56		25.0	7.55 - 13.5	263.13	29.24			5.5						4.09	9.00
668+56 - 668+81	Just Surface on old approach	25.0	4.5	112.50	12.50									1.75	
668+56 - 668+81		25.0	13.5	337.50	37.50			5.5						5.25	11.55
668+81 - 669+03	Just Surface on existing shldr	22.5	4.5	101.03	11.23									1.57	
668+81 - 669+03		22.5	13.5 - 3.5	190.83	21.20			5.5						2.97	6.53
669+03 - 670+59	Just Surface on existing shldr	155.9	4.5	701.41	77.93									10.91	
669+03 - 670+59		155.9	3.5	545.54	60.62			5.5						8.49	18.67
670+59 - 672+50	Just Surface on existing shldr	190.9	5	954.60	106.07									14.85	
US 6 - Mainline surface removal															
661+23 - 661+48	Butt Joint	25.0	36	900.00	100.00						100.00				
672+25 - 672+50	Butt Joint	25.0	33	825.00	91.67						91.67				
664+61 - 665+63	Old wedge - ML Existing shldr & new S shldr	102.6	40.25	4130.86	458.98							458.98			
667+75 - 668+78	Old wedge - ML Existing shldr & new S shldr	103.0	40.25	4145.75	460.64							460.64			
GRAND TOTALS									1.41	3.52	191.67	919.62	155.87	420.22	295.43

\* ADDITIONAL QUANTITIES ON IL 78 BITUMINOUS SCHEDULE

\*\* BUILD UP SHOULDER FROM 5.5" TO 8" DURING STAGE 1 (FOR TRAFFIC TO DRIVE ON DURING STAGE 2).

THIS AREA WILL BE GROUND OFF FROM 0" TO 2.5" AFTER STAGE 2 IS COMPLETE (IN ORDER TO PLACE SURFACE ON SHOULDER).

\* FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1D) & (6BR1D)

FILE NAME = c:\projects\p205007\d05007cwr.dgn	USER NAME = grantpm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BITUMINOUS SCHEDULE</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 1250.0000' / IN.	CHECKED -	REVISED -	*			**	HENRY	80	16	
PLOT DATE = Wed Nov 28 14:07:15 2007	DATE -	REVISED -	CONTRACT NO. 64D10			ILLINOIS FED. AID PROJECT				
SCALE:		SHEET NO. OF SHEETS STA. TO STA.				FED. ROAD DIST. NO.				

FEET LANE WIDTH 12

STATION	LENGTH OF		44200956		44200964		44213200	44213100	Z0017202	Z0075300	Z0028415	Z0028700
	PATCH		CLASS B PATCHES		CLASS B PATCHES		SAW CUTS	PAV. FABRIC	DOWEL BARS	TIE BARS	GEO. REINF.	GRAN. SUBG. REPL.
	LT LANE	RT LANE	TYPE II, 9"		TYPE IV, 9"							
	FT.	FT.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	FT.	SQ. YD.	EACH	EACH	SQ. YD.	CU. YD.
662+31	6	6	8.0	8.0			120.0		20.0		16.0	2.7
662+73	23	23			30.7	30.7	188.0	61.3	20.0	15.0	61.3	10.2
663+22	21	21			28.0	28.0	180.0	56.0	20.0	14.0	56.0	9.3
663+77	26	26			34.7	34.7	200.0	69.3	20.0	17.0	69.3	11.6
664+27	21	21			28.0	28.0	180.0	56.0	20.0	14.0	56.0	9.3
TOTAL			8.0	8.0	121.3	121.3	868.0	242.7	100.0	60.0	258.7	43.1
GRAND TOTAL			16.0		242.7							

• FAP 22 (IL 78) & FAS 1247 (US 6) •• (125BR-1)D & (6BR)D

# HORIZONTAL & VERTICAL CONTROL

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
.	.	HENRY	80	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

\* FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1D) & (6BRD)

Chain RTE78 contains:  
3 CUR 240 CUR 250 CUR 260 CUR 270 4

Beginning chain RTE78 description

Point 3 N 1,722,818.6068 E 2,368,441.1452 Sta 552+87.5900

Course from 3 to PC 240 359° 29' 34.0350" Dist 711.8061'

Curve Data

**Curve 240**  
P.I. Station 561+99.6916 N 1,723,730.6727 E 2,368,433.0709  
Delta = 2° 00' 10.0920" (LT)  
Degree = 0° 30' 00.0464"  
Tangent = 200.2956'  
Length = 400.5503'  
Radius = 11,458.8606'  
External = 1.7504'  
Long Chord = 400.5300'  
Mid. Ord. = 1.7501'  
P.C. Station 559+99.3961 N 1,723,530.3850 E 2,368,434.8440  
P.T. Station 563+99.9464 N 1,723,930.7761 E 2,368,424.2991  
C.C. N 1,723,428.9464 E 2,356,976.4324

Curve Data

**Curve 250**  
P.I. Station 566+00.2420 N 1,724,130.8795 E 2,368,415.5274  
Delta = 2° 00' 10.0916" (RT)  
Degree = 0° 30' 00.0463"  
Tangent = 200.2956'  
Length = 400.5503'  
Radius = 11,458.8612'  
External = 1.7504'  
Long Chord = 400.5300'  
Mid. Ord. = 1.7501'  
P.C. Station 563+99.9464 N 1,723,930.7761 E 2,368,424.2992  
P.T. Station 568+00.4968 N 1,724,331.1672 E 2,368,413.7543  
C.C. N 1,724,432.6058 E 2,379,872.1665

Course from PT 250 to PC 260 359° 29' 34.0337" Dist 6,507.9276'

Curve Data

**Curve 260**  
P.I. Station 640+84.7244 N 1,731,615.1094 E 2,368,349.2712  
Delta = 44° 13' 50.0740" (LT)  
Degree = 2° 59' 57.3167"  
Tangent = 776.3000'  
Length = 1,474.7189'  
Radius = 1,910.3340'  
External = 151.7081'  
Long Chord = 1,438.3725'  
Mid. Ord. = 140.5467'  
P.C. Station 633+08.4243 N 1,730,838.8398 E 2,368,356.1434  
P.T. Station 647+83.1433 N 1,732,166.5427 E 2,367,802.8620  
C.C. N 1,730,821.9286 E 2,366,445.8843

Course from PT 260 to PC 270 315° 15' 43.9539" Dist 286.9438'

Curve Data

**Curve 270**  
P.I. Station 658+47.7481 N 1,732,922.7692 E 2,367,053.5257  
Delta = 44° 18' 38.0037" (RT)  
Degree = 2° 59' 59.9959"  
Tangent = 777.6610'  
Length = 1,477.0191'  
Radius = 1,909.8600'  
External = 152.2559'  
Long Chord = 1,440.4852'  
Mid. Ord. = 141.0141'  
P.C. Station 650+70.0871 N 1,732,370.3691 E 2,367,600.8928  
P.T. Station 665+47.1062 N 1,733,700.4086 E 2,367,047.7269  
C.C. N 1,733,714.6497 E 2,368,957.5339

Course from PT 270 to 4 359° 34' 21.9492" Dist 23,049.3221'

Point 4 N 1,756,749.0899 E 2,366,875.8571 Sta 895+96.4283

Ending chain RTE78 description

Chain RTE6 contains:  
1 CUR 200 CUR 210 CUR 220 CUR 230 2

Beginning chain RTE6 description

Point 1 N 1,724,677.1425 E 2,362,569.8999 Sta 650+00.0000

Course from 1 to PC 200 106° 33' 32.2854" Dist 3,199.8228'

Curve Data

**Curve 200**  
P.I. Station 683+48.9028 N 1,723,722.6985 E 2,365,779.9134  
Delta = 17° 35' 29.9930" (RT)  
Degree = 5° 56' 48.7199"  
Tangent = 149.0800'  
Length = 295.8140'  
Radius = 963.4617'  
External = 11.4656'  
Long Chord = 294.6535'  
Mid. Ord. = 11.3308'  
P.C. Station 681+99.8228 N 1,723,765.1866 E 2,365,637.0162  
P.T. Station 684+95.6368 N 1,723,639.0094 E 2,365,903.2867  
C.C. N 1,722,841.6827 E 2,365,362.4276

Course from PT 200 to PC 210 124° 09' 02.2475" Dist 104.5427'

Curve Data

**Curve 210**  
P.I. Station 687+56.3195 N 1,723,492.6698 E 2,366,119.0184  
Delta = 18° 22' 55.0189" (LT)  
Degree = 5° 56' 14.5739"  
Tangent = 156.1400'  
Length = 309.5969'  
Radius = 965.0008'  
External = 12.5504'  
Long Chord = 308.2708'  
Mid. Ord. = 12.3892'  
P.C. Station 686+00.1795 N 1,723,580.3222 E 2,365,989.8025  
P.T. Station 689+09.7764 N 1,723,450.2380 E 2,366,269.2824  
C.C. N 1,724,378.9226 E 2,366,531.5256

Course from PT 210 to PC 220 105° 46' 07.2910" Dist 625.4703'

Curve Data

**Curve 220**  
P.I. Station 696+70.2087 N 1,723,243.5872 E 2,367,001.0971  
Delta = 0° 55' 57.1456" (RT)  
Degree = 0° 20' 43.7649"  
Tangent = 134.9620'  
Length = 269.9180'  
Radius = 16,583.9065'  
External = 0.5492'  
Long Chord = 269.9150'  
Mid. Ord. = 0.5491'  
P.C. Station 695+35.2467 N 1,723,280.2637 E 2,366,871.2142  
P.T. Station 698+05.1648 N 1,723,204.8017 E 2,367,130.3659  
C.C. N 1,707,320.4655 E 2,362,364.4642

Course from PT 220 to PC 230 106° 42' 04.4451" Dist 1,234.2338'

Curve Data

**Curve 230**  
P.I. Station 711+89.9976 N 1,722,806.8268 E 2,368,456.7814  
Delta = 13° 18' 20.2155" (LT)  
Degree = 4° 26' 15.0890"  
Tangent = 150.5990'  
Length = 299.8432'  
Radius = 1,291.1653'  
External = 8.7531'  
Long Chord = 299.1699'  
Mid. Ord. = 8.6942'  
P.C. Station 710+39.3986 N 1,722,850.1061 E 2,368,312.5352  
P.T. Station 713+39.2418 N 1,722,797.9068 E 2,368,607.1160  
C.C. N 1,724,086.8053 E 2,368,683.5917

Course from PT 230 to 2 93° 23' 44.1844" Dist 133.8433'

Point 2 N 1,722,789.9793 E 2,368,740.7243 Sta 714+73.0851

Ending chain RTE6 description

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
100	1724033.8678	2364651.7762	624.7250	RTE6	671+78.8690	23.2572' RT	GPS CONTROL POINT, PIN
101	1723880.2042	2365172.6701	624.9410	RTE6	677+21.9543	22.0921' RT	GPS CONTROL POINT, PIN
104	1754871.8749	2366911.2282	613.3143	RTE78	877+19.0018	21.3725' RT	GPS CONTROL POINT, PIN
105	1755971.6140	2366859.6852	613.3824	RTE78	888+19.0946	21.9688' LT	GPS CONTROL POINT, PIN

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
119	1755341.9738	2366990.7535	618.4200	RTE78	881+88.4946	104.4009' RT	TRAVERSE STATION, PIN
120	1755332.0919	2366777.5674	618.9700	RTE78	881+80.2026	108.853' LT	TRAVERSE STATION, PIN
121	1755505.4317	2366853.2695	617.8600	RTE78	883+52.9731	31.8604' LT	TRAVERSE STATION, PIN
122	1755506.1828	2366943.4341	618.3900	RTE78	883+53.0519	58.3072' RT	TRAVERSE STATION, PIN
125	1724176.0562	2364069.4337	631.4400	RTE6	665+80.1541	52.9346' RT	GPS CONTROL POINT, PIN
126	1724203.8806	2364257.3403	632.0900	RTE6	667+52.3376	27.2896' LT	GPS CONTROL POINT, PIN

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
416	1755347.8785	2366902.4832	615.9406	RTE78	881+95.0573	16.1771' RT	ABUTMENT, CHISELED SQUARE
424	1724239.5597	2364113.2439	635.1800	RTE6	666+04.0487	20.4212' LT	NGS MONUMENT, DISK

POINT	CHAIN	STATION	OFFSET	DESCRIPTION
500	RTE6	671+52.9337	72.7349' RT	SHOULDER, PIN
501	RTE6	671+78.3036	72.3696' RT	SHOULDER, PIN
502	RTE6	672+23.5824	73.2356' RT	POWER POLE, PK NAIL
503	RTE6	676+92.4904	71.3035' RT	SHOULDER, PIN
504	RTE6	677+19.0432	73.91' RT	POWER POLE, PK NAIL
505	RTE6	677+48.3334	70.962' RT	SHOULDER, PIN
551	RTE78	876+93.3693	45.5389' RT	SHOULDER, PIN
552	RTE78	877+21.3609	46.4476' RT	POWER POLE, PK NAIL
553	RTE78	877+48.6621	45.8375' RT	SHOULDER, PIN
554	RTE78	887+89.0174	52.3602' LT	SHOULDER, PIN
555	RTE78	888+19.3794	51.9975' LT	SHOULDER, PIN
556	RTE78	888+48.4820	52.2086' LT	SHOULDER, PIN

CHAIN	CURVE	PI	CC	PC	PT
RTE6	200	200	201	202	203
RTE6	210	210	211	212	213
RTE6	220	220	221	222	223
RTE6	230	230	231	232	233
RTE78	240	240	241	242	243
RTE78	250	250	251	252	253
RTE78	260	260	261	262	263
RTE78	270	270	271	272	273

PLOT DATE = Wed Nov 28 14:06:52 2007  
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 USER NAME = jgibson

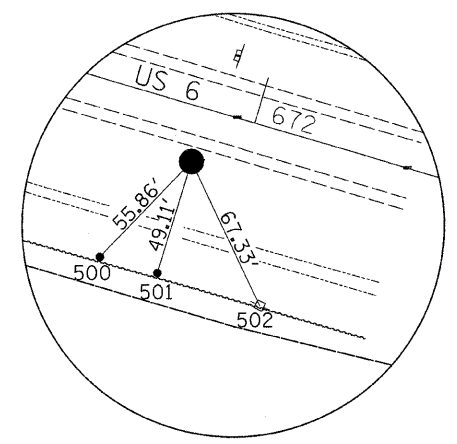
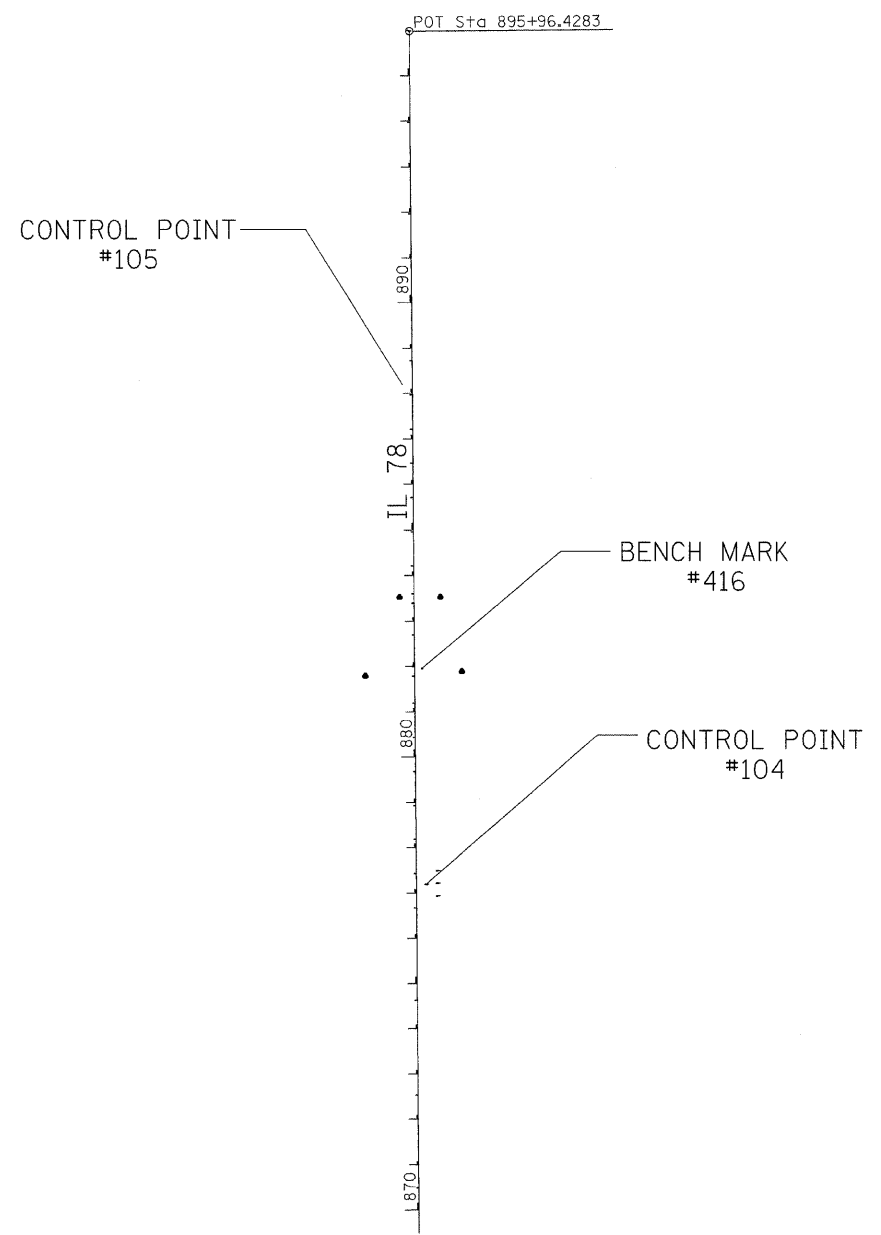
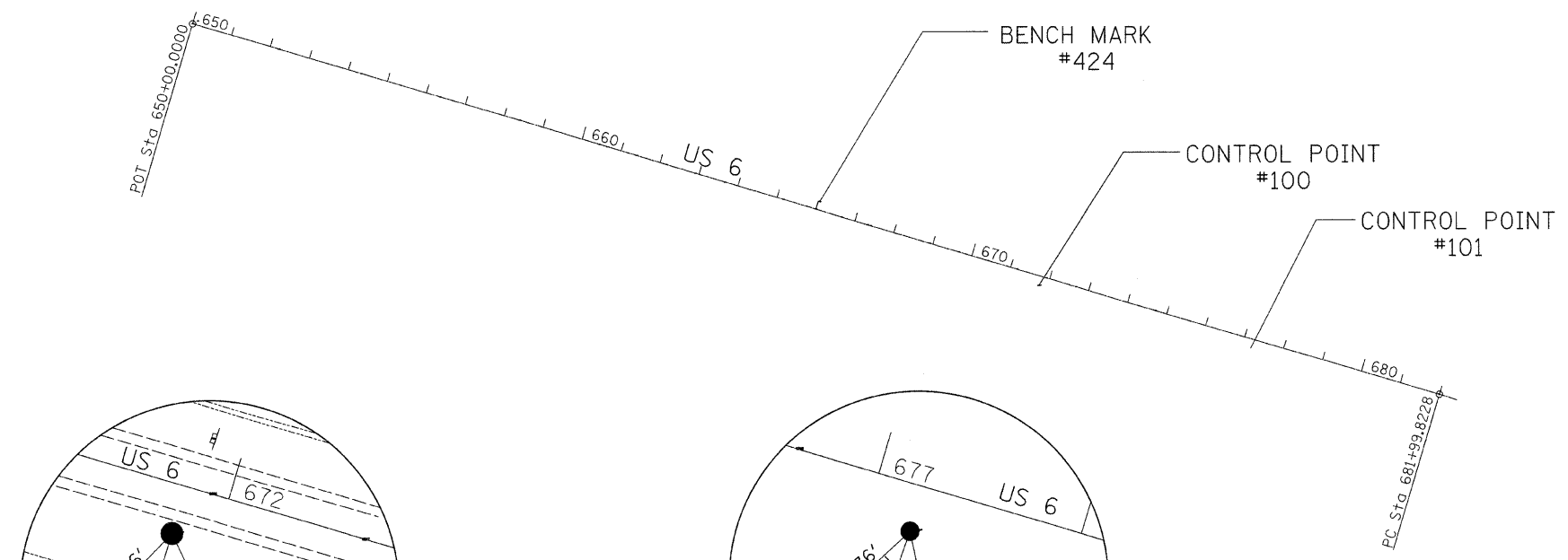


# HORIZONTAL & VERTICAL CONTROL

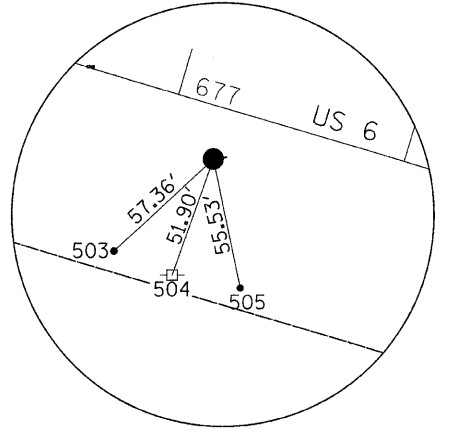


CONTRACT NO. 64D10				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
.	.	HENRY	80	19
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

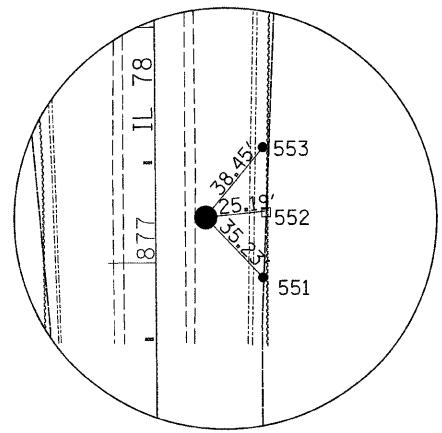
• FAP 22 (IL 78) & FAS 1247 (US 6) •• (125BR-1D) & (6BRD)



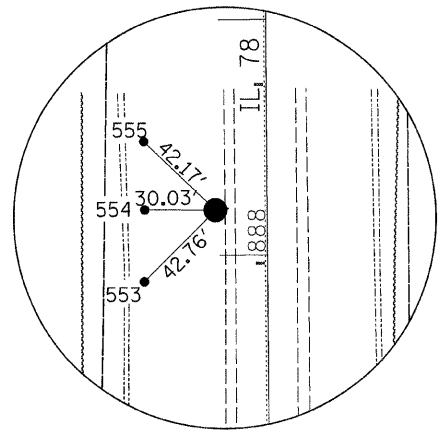
HORIZONTAL CONTROL  
POINT NO. 100



HORIZONTAL CONTROL  
POINT NO. 101



HORIZONTAL CONTROL  
POINT NO. 104



HORIZONTAL CONTROL  
POINT NO. 105

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 USER NAME = grantgm









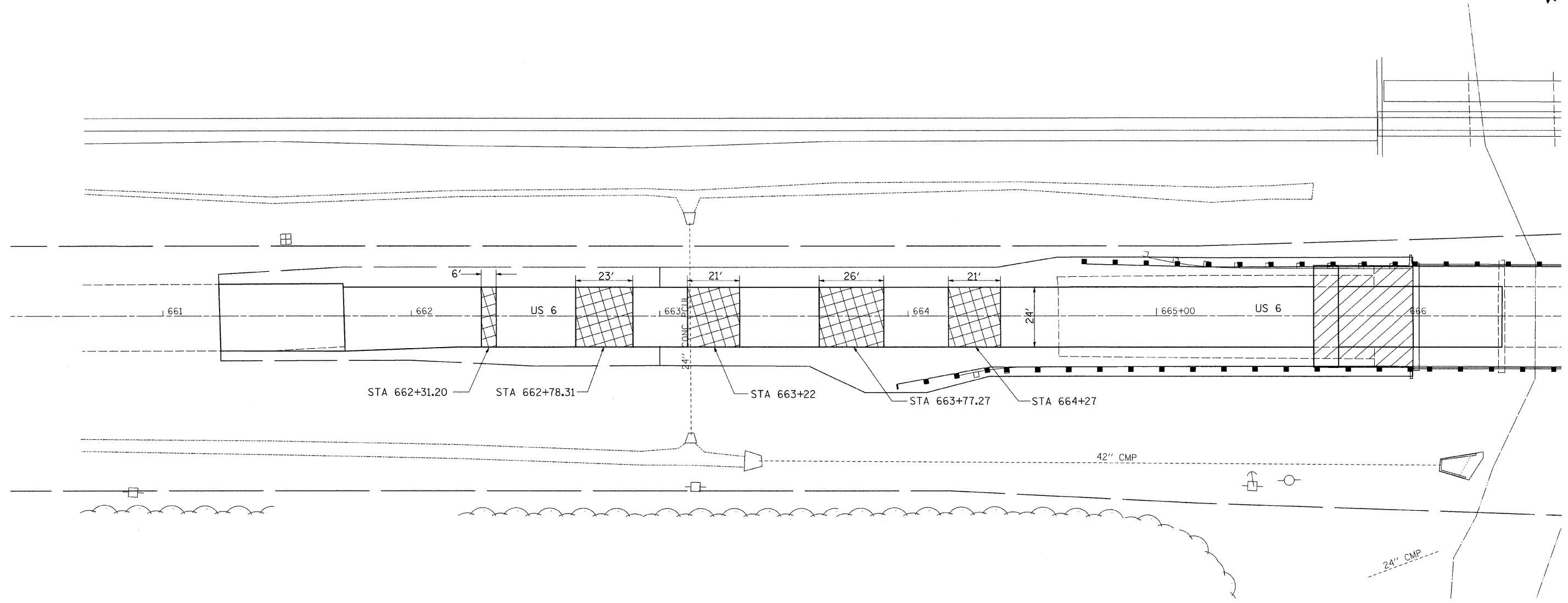


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	24

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

- \* FAP 22 (IL 78) & FAS 1247 (US 6)
- \*\* (125BR-1)D & (6BR)D

# PATCHING DETAIL



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 USER NAME = grantbm

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SCALE: VERT. / HORIZ. / DATE

DRAWN BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_

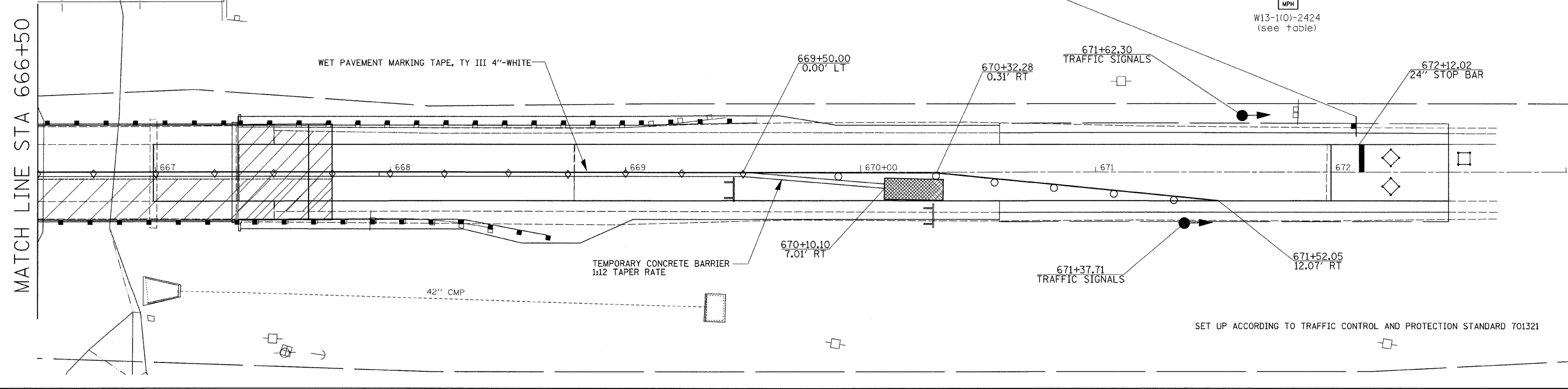
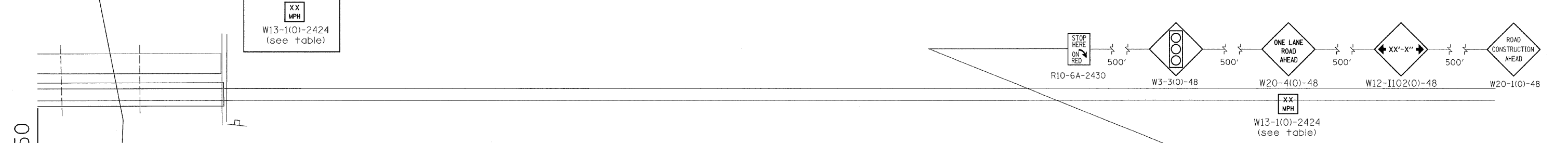
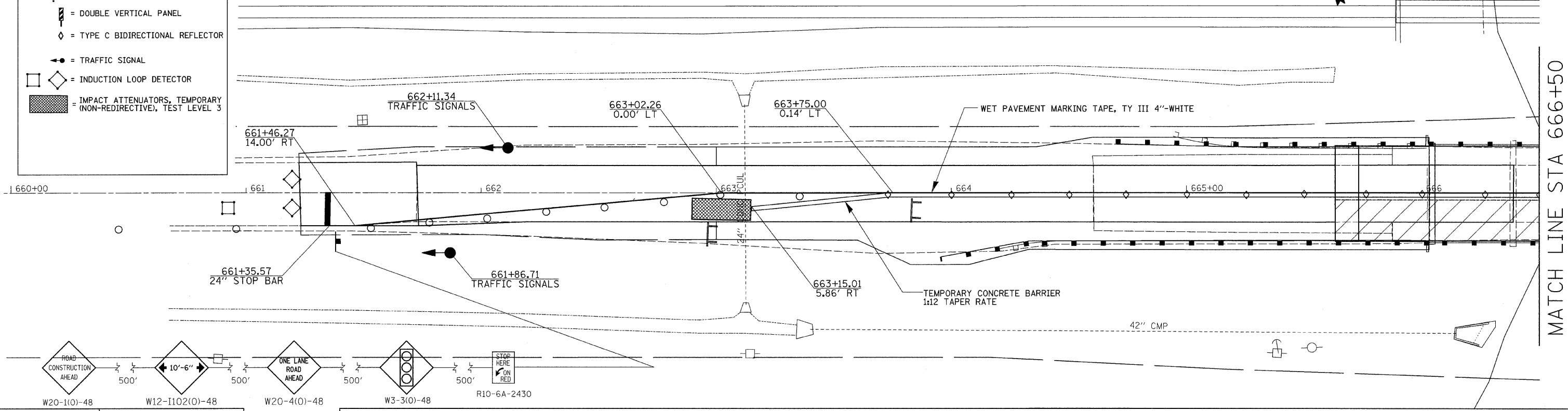
## US 6 PATCHING DETAIL

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* FAP 22 (IL 78) & FAS 1247 (US 6)				
** (25BR-1)D & (6BR)D				

# STAGE 1



- = WORK AREA
- = SIGN
- = TYPE III BARRICADE
- = DOUBLE VERTICAL PANEL
- = TYPE C BIDIRECTIONAL REFLECTOR
- = TRAFFIC SIGNAL
- = INDUCTION LOOP DETECTOR
- = IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3



SET UP ACCORDING TO TRAFFIC CONTROL AND PROTECTION STANDARD 701321

## STAGING DETAILS FOR US 6 OVER MUD CREEK

PLOT DATE = Wed Nov 28 14:01:12 2007  
 FILE NAME = s:\projects\64d10\stage1\stage1.dgn  
 PLOT SCALE = 20.00000 / 1 in.  
 USER NAME = granton

MATCH LINE STA 666+50

MATCH LINE STA 666+50



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	HENRY	80	26

STA.	TO STA.

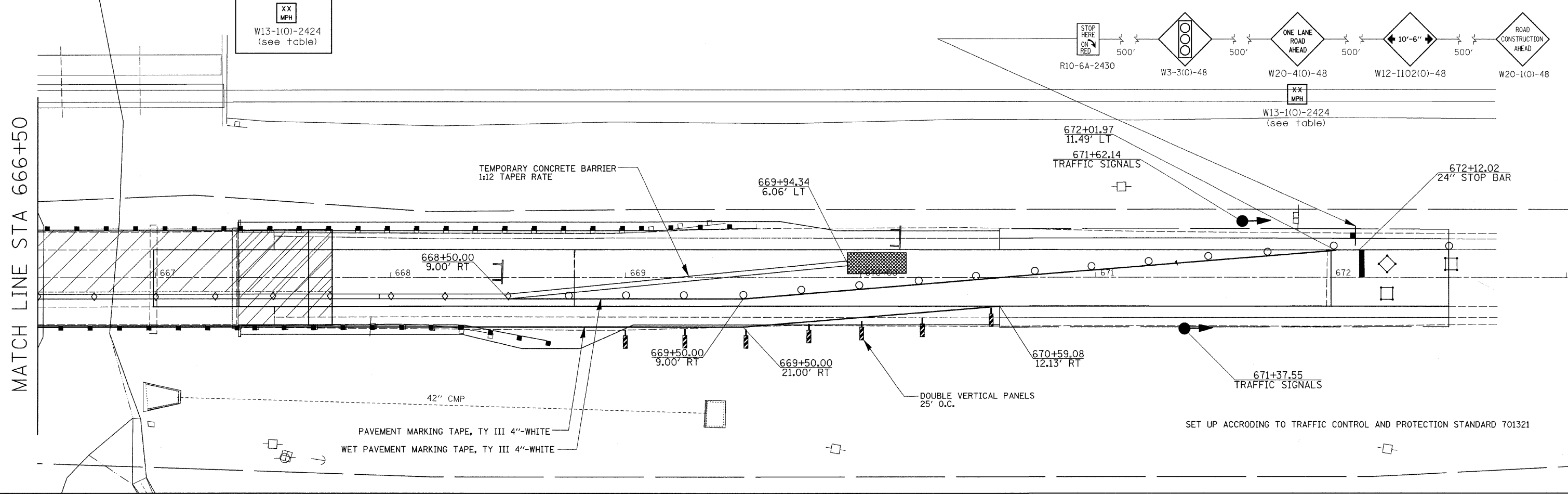
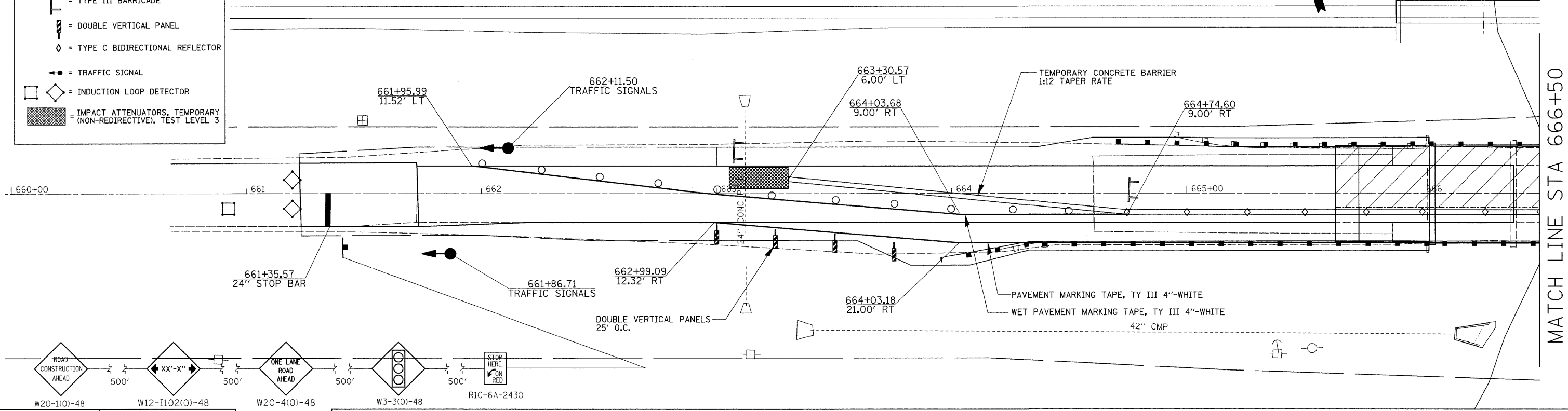
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT  
 • FAP 22 (IL 78) & FAS 1247 (US 6)  
 •• (125BR-1D & 6BR1D)

# STAGE 2



**LEGEND**

- = WORK AREA
- = SIGN
- = TYPE III BARRICADE
- = DOUBLE VERTICAL PANEL
- = TYPE C BIDIRECTIONAL REFLECTOR
- = TRAFFIC SIGNAL
- = INDUCTION LOOP DETECTOR
- = IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3



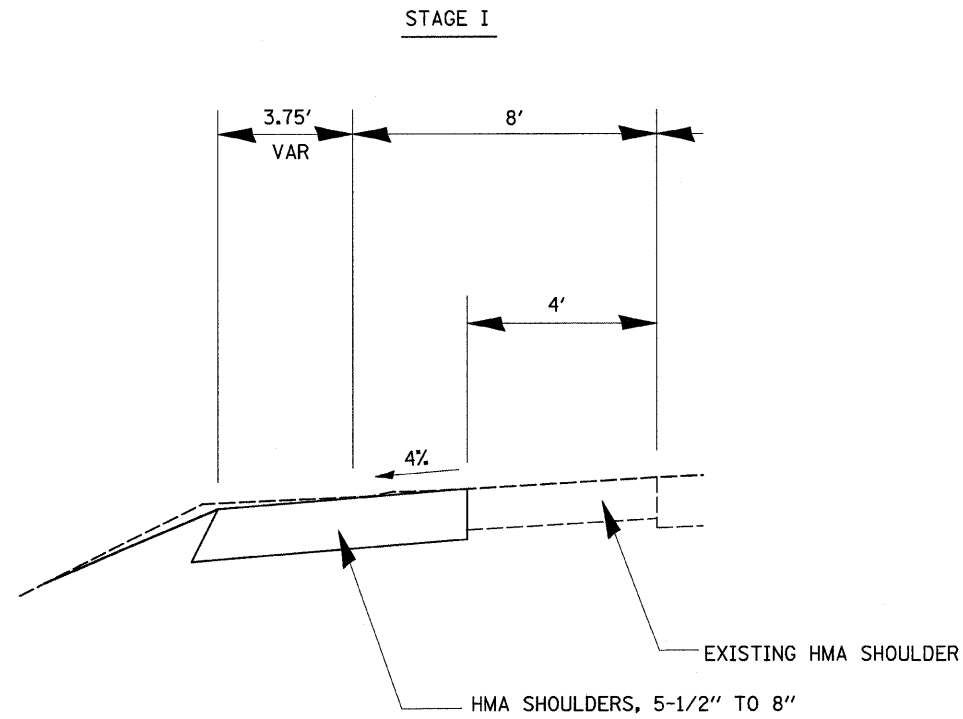
MATCH LINE STA 666+50

MATCH LINE STA 666+50

PLOT DATE = 11-1 Nov 20 14:01:22 2007  
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 USER NAME = gmartin

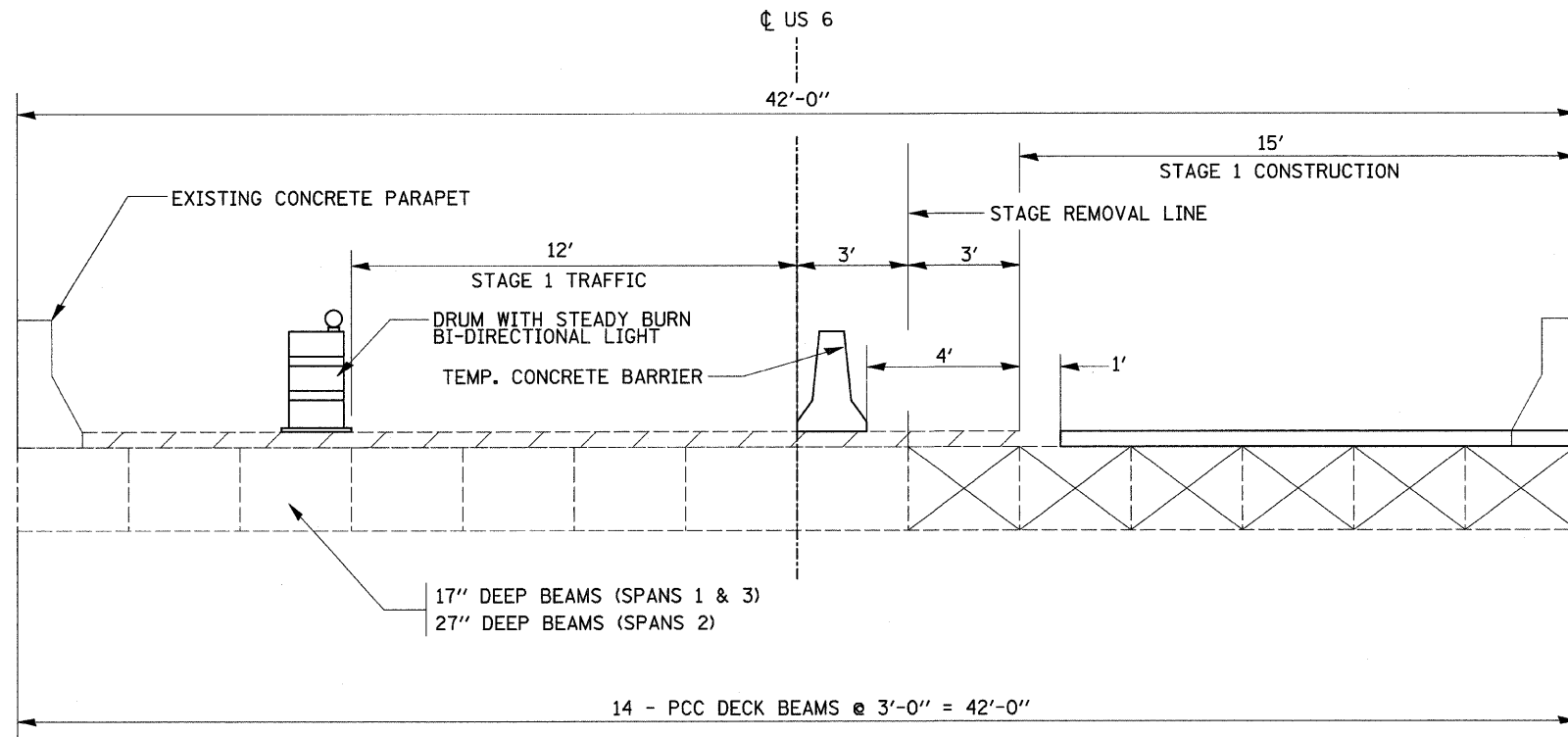
# US 6 OVER MUD CREEK

## STAGE I

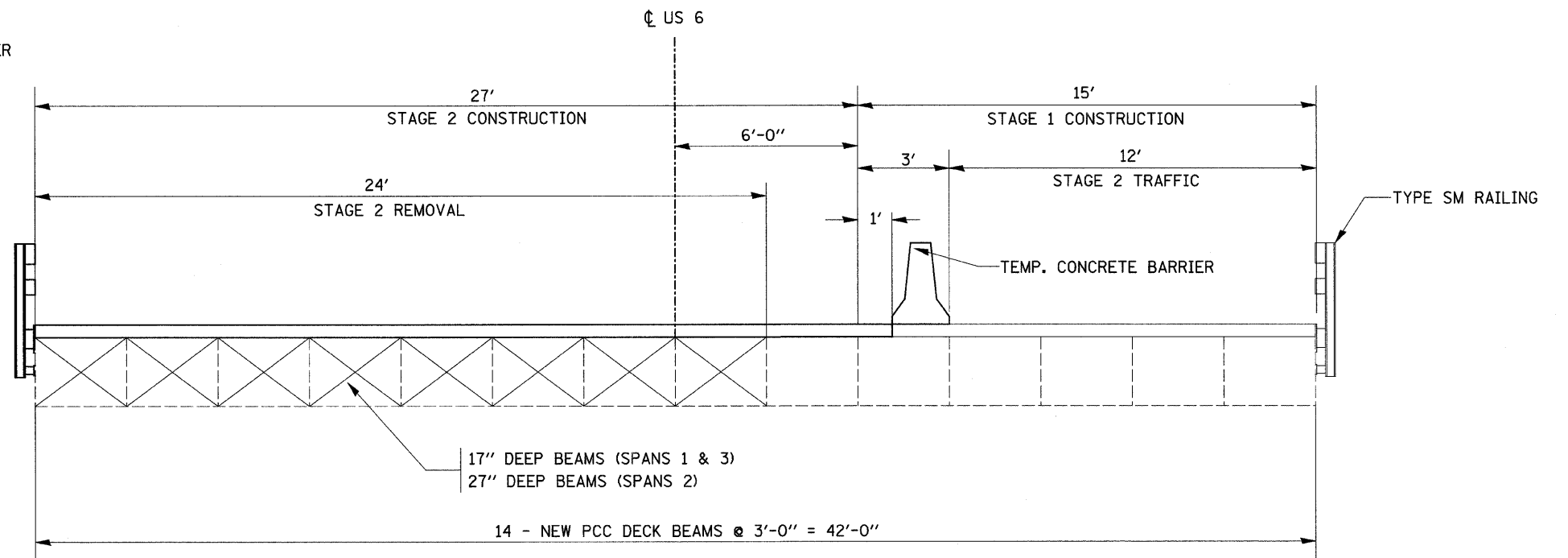


NOTE: FOR SHOULDER BUILD 5.5" AT STATION 663+00 AND 667+50 TO 8" AT STATION 665+87 AND 670+59

NOTE: AFTER STAGE II GRIND OFF SHOULDER  
 0" @ STATION 664+61 TO 2 1/2" @ STATION 665+87  
 0" @ STATION 667+50 TO 2 1/2" @ STATION 668+78



## STAGE II



FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1D & (6BR)D

FILE NAME = c:\projects\p205007\d05007.tpp.dgn	USER NAME = grantpm	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 48.0349' / IN.	CHECKED -	REVISED -
	PLOT DATE = Wed Nov 28 14:01:46 2007	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	27
CONTRACT NO. 64D10				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
.	..	HENRY	80	28

STA. TO STA.

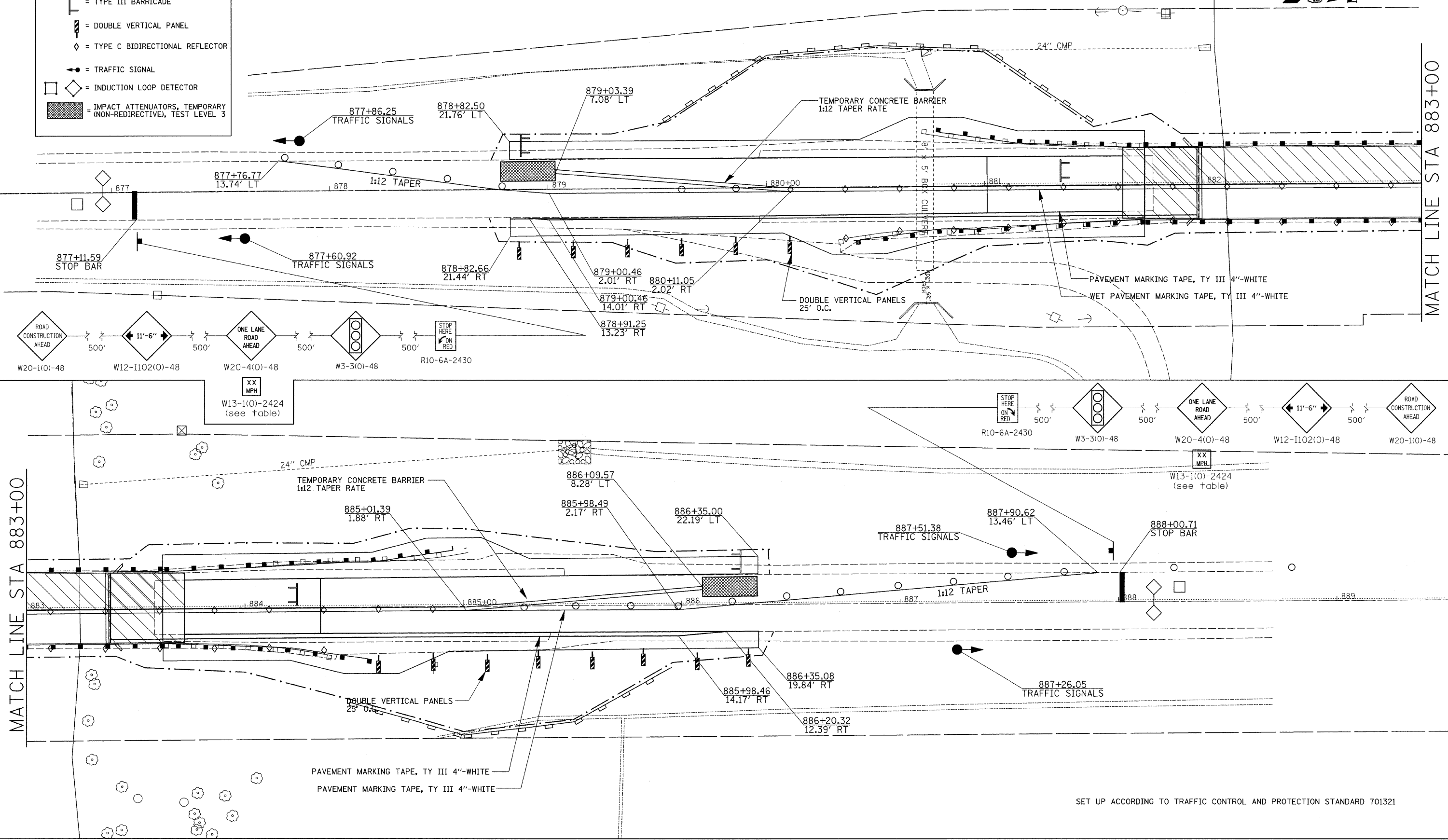
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT  
 \* FAP 22 (IL 78) & FAS 1247 (US 6)  
 \*\* (125BR-1D) & (6BR1D)



# STAGE 1

**LEGEND**

- = WORK AREA
- = SIGN
- = TYPE III BARRICADE
- = DOUBLE VERTICAL PANEL
- = TYPE C BIDIRECTIONAL REFLECTOR
- = TRAFFIC SIGNAL
- = INDUCTION LOOP DETECTOR
- = IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3



SET UP ACCORDING TO TRAFFIC CONTROL AND PROTECTION STANDARD 701321

## STAGING DETAILS FOR IL 78 OVER GREEN RIVER

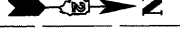
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 USER NAME = grantgm

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
.	..	HENRY	80	29

STA. TO STA.

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

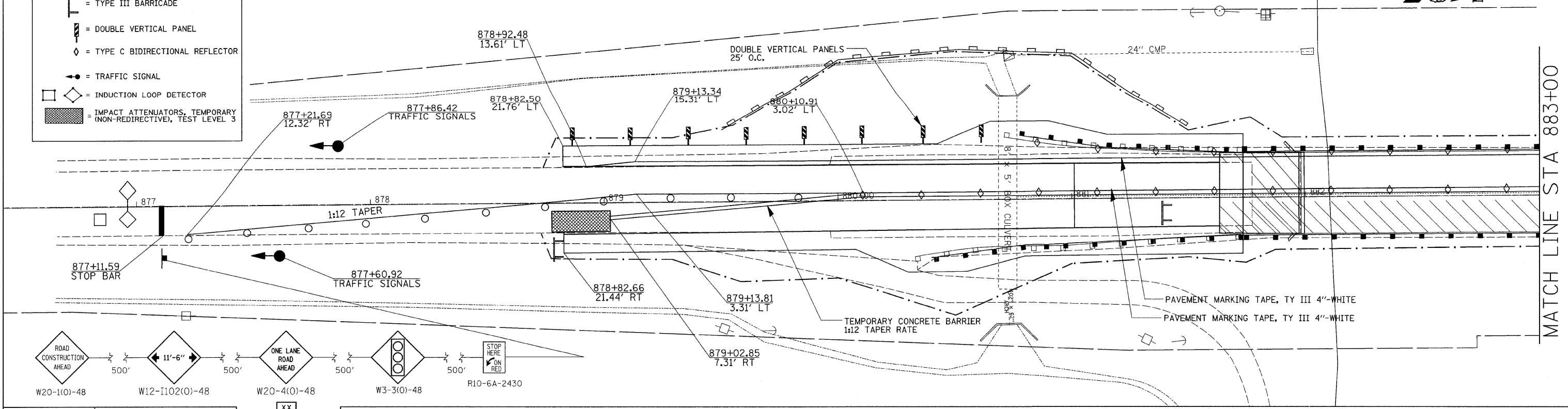
\* FAP 22 (IL 78) & FAS 1247 (US 6)  
\*\* (125BR-1)D & (6BR)D



# STAGE 2

**LEGEND**

- = WORK AREA
- = SIGN
- = TYPE III BARRICADE
- = DOUBLE VERTICAL PANEL
- = TYPE C BIDIRECTIONAL REFLECTOR
- = TRAFFIC SIGNAL
- = INDUCTION LOOP DETECTOR
- = IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3



MATCH LINE STA 883+00

MATCH LINE STA 883+00

PLOT DATE = 14-Jul-2011 14:01:11 2987  
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 PLOT SCALE = 20.00000 / 1.00000  
 USER NAME = graham

SET UP ACCORDING TO TRAFFIC CONTROL AND PROTECTION STANDARD 701321

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

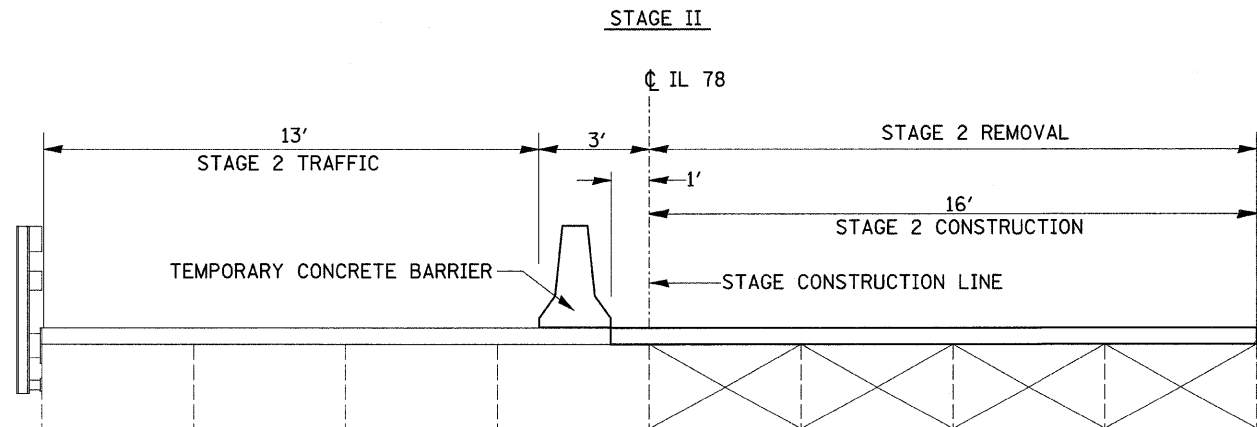
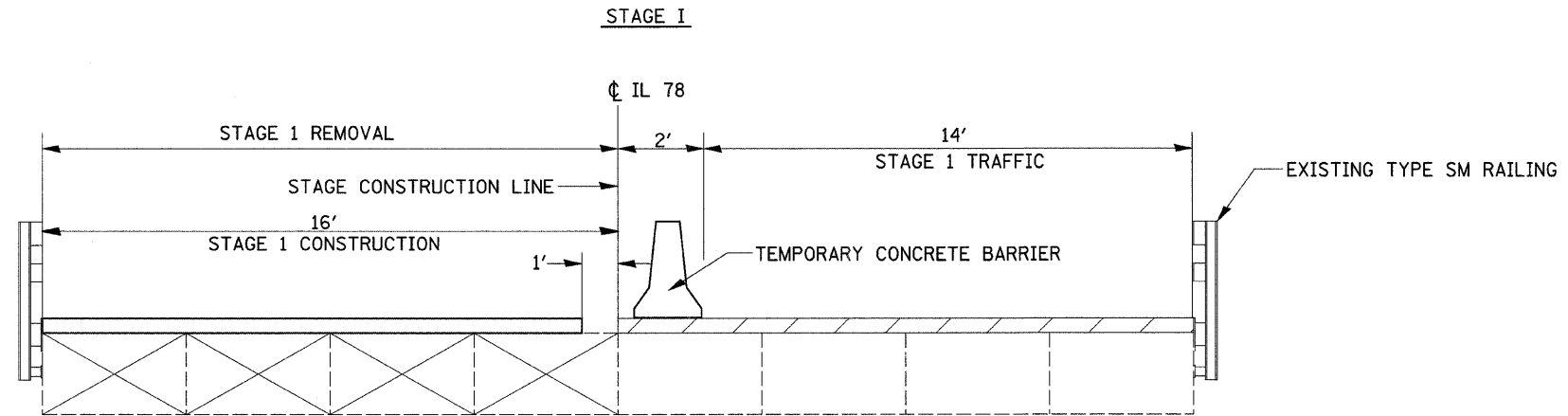
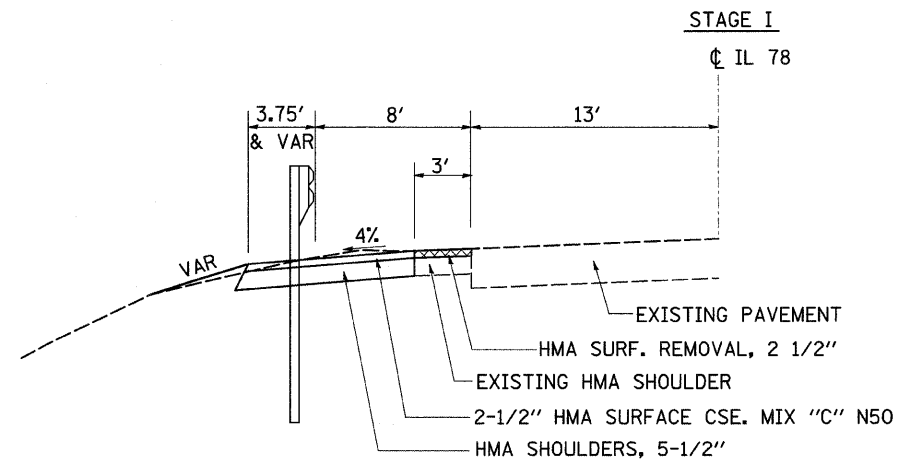
SCALE: VERT. HORIZ.  
DATE

DRAWN BY  
CHECKED BY

## STAGING DETAILS FOR IL 78 OVER GREEN RIVER

# IL 78 OVER GREEN RIVER

STA 883+39.50 - 885+68.00



• FAP 22 (IL 78) & FAS 1247 (US 6) •• (125BR-1)D & (6BR)D

FILE NAME = c:\projects\p285007\d85007.tyo.dgn	USER NAME = grantpm	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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	PLOT DATE = Wed Nov 28 14:01:46 2007	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	30
CONTRACT NO. 64D10				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BM: Brass Disk W190 on top of parapet on NW corner bridge  
Str #037-0131, Sta 666+04.05, Elev. 635.18

**EXISTING STRUCTURE:**

The original structure, SN 037-0053, built in 1921 as SBI Rt. 7, Sec 6-B, 6B-I-1, was replaced in 1980 with PPC Deck Beams and new substructure, SN 037-0131 built as FA Rt 8, Sec 6BR, Sta 666+69.05. The existing three span bridge is 134'-4 1/2" back to back abutments and the existing deck is 42'-0" out to out. The substructure consists of open type abutments and two solid stem pile bent piers.

The existing superstructure is to be replaced with PPC Deck Beams and 5" (Min) Concrete Wearing Surface.

Traffic shall be maintained by utilizing stage construction.

No salvage

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1247	*	HENRY	80	31

SHEET NO. 1  
OF 16 SHEETS

\* (6BR)D CONTRACT NO. 64D10

**GENERAL NOTES**

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

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

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

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for new profile grade and beam camber.

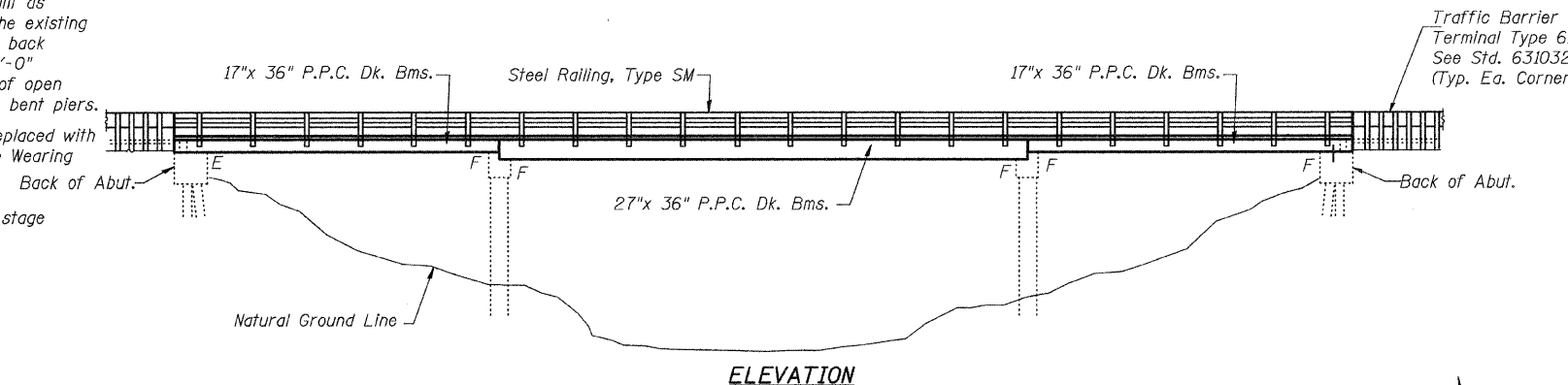
The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

Repair of the substructure shall be completed prior to placement of the new deck beams.

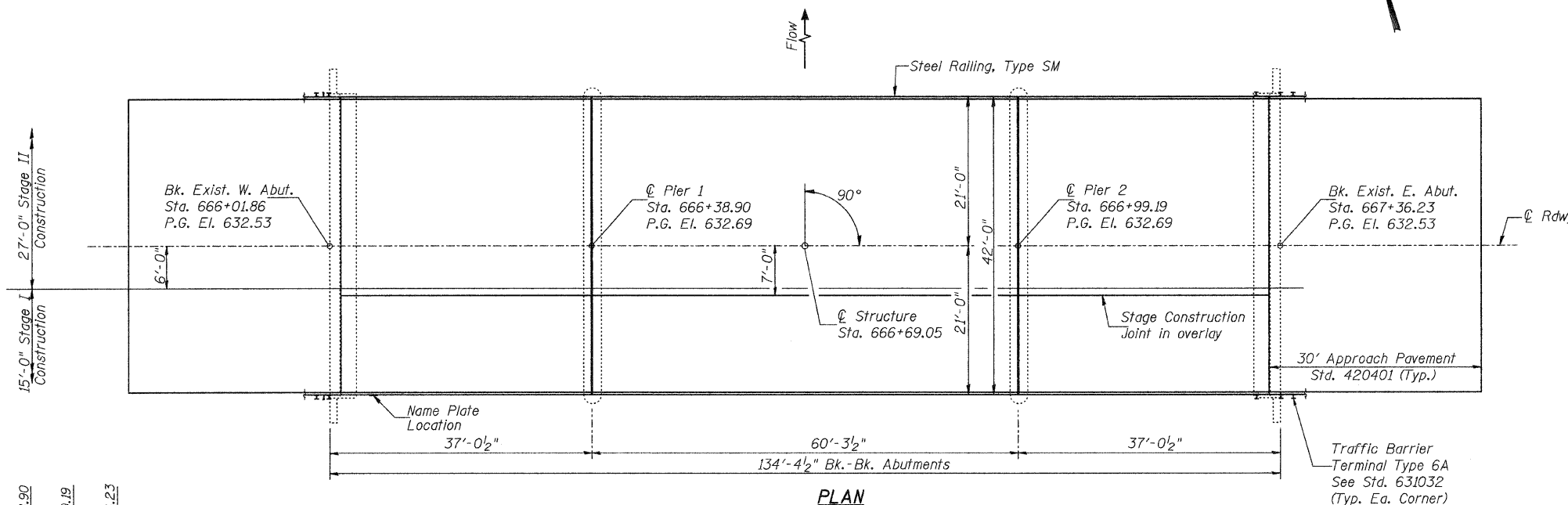
If the Contractor's procedure for existing beam removal or placement of new beams involves placement of heavy equipment on the new or existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Superstructures.

Reinforcement bars designated (E) shall be epoxy coated.

Protective Coat shall be applied to the top and edges of the concrete wearing surface.



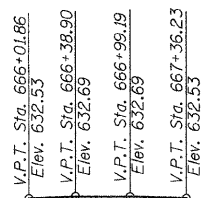
**ELEVATION**



**PLAN**

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub.	Total
Removal of Existing Superstructures	Each	1	-	1
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2,975	-	2,975
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2,529	-	2,529
Protective Coat	Sq. Yd.	625	-	625
Reinforcement Bars, Epoxy Coated	Pound	7,750	1,290	9,040
Steel Railing, Type SM	Foot	269	-	269
Concrete Wearing Surface, 5"	Sq. Yd.	613	-	613
Bridge Deck Grooving	Sq. Yd.	583	-	583
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	-	557	557
Structural Repair of Concrete (Depth greater than 5")	Sq. Ft.	-	2	2
Name Plates	Each	1	-	1
Bar Splicers	Each	132	12	144
Asbestos Bearing Pad Removal	Each	14	-	14
Concrete Structures	Cu. Yd.	-	5.2	5.2
Concrete Removal	Cu. Yd.	-	4.0	4.0
Preformed Joint Strip Seal	Foot	42	-	42



**PROFILE GRADE**

STATION 666+69.05  
REBUILT 200 BY  
STATE OF ILLINOIS  
F.A.S. 1247 SEC. (6BR)D  
LOADING HS20  
STRUCTURE NO. 037-0131

**NAME PLATE**  
See Std. 515001

Attach new name plate to back side of 8" rail element. Clean and re-locate existing name plate adjacent to new name plate. Cost included in the cost of "Name Plates".

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

**LOADING HS20-44**  
Allow 50#/Sq. Ft. future wearing surface  
**DESIGN SPECIFICATIONS**  
2002 AASHTO

**DESIGN STRESSES**  
**FIELD UNITS**

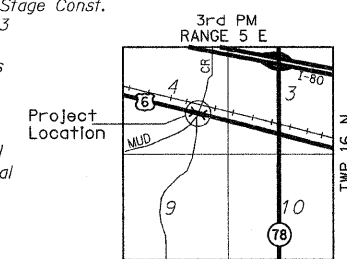
$f'_c = 3,500$  p.s.i.  
 $f'_c = 5,000$  p.s.i. (Concrete Wearing Surface)  
 $f_y = 60,000$  p.s.i. (Reinforcement)

**PRECAST PRESTRESSED UNITS**

$f'_c = 5,000$  p.s.i.  
 $f'_{ci} = 4,000$  p.s.i.  
 $f'_s = 270,000$  p.s.i. (1/2"  $\phi$  low relaxation strands)  
 $f'_{si} = 201,960$  p.s.i. (1/2"  $\phi$  low relaxation strands)

**INDEX OF SHEETS**

- General Plan
- Stage Construction Details
- Temporary Concrete Barrier For Stage Const.
- Deck Beam Details - Spans 1 & 3
- Deck Beam Details - Span 2
- Overlay Details & Typical Sections
- Preformed Joint Strip Seal
- Steel Railing, Type SM
- Superstructure Details
- W. Abut Repairs & Conc. Removal
- E. Abut Repairs & Conc. Removal
- Pier 1 Repairs
- Pier 2 Repairs
- Abutment Details
- Pier Details
- Bar Splicer Assembly Details



**LOCATION SKETCH**

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



*James D. Hamilton*  
9/15/07  
Expires 11/30/08

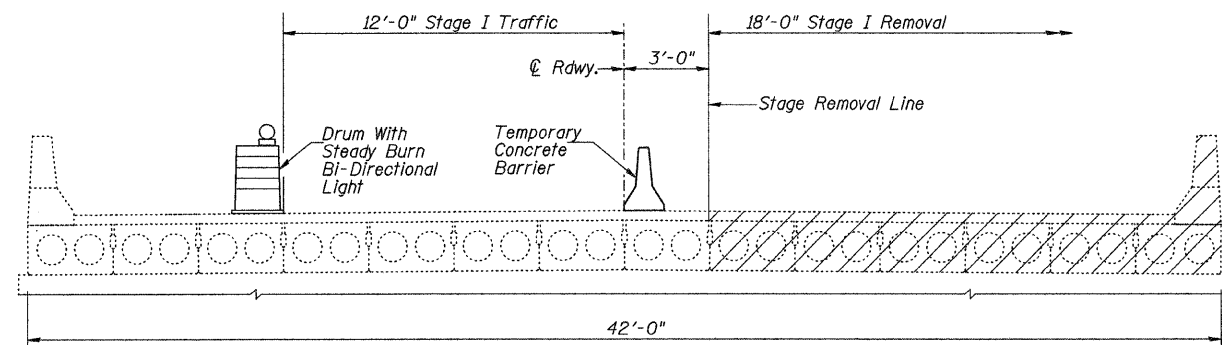
**GENERAL PLAN**  
**F.A.S. 1247 (U.S. ROUTE 6)**  
**OVER MUD CREEK**  
**SECTION (6BR)D**  
**HENRY COUNTY**  
**STATION 666+69.05**  
**STR. NO. 037-0131**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: \_\_\_\_\_ Date: \_\_\_\_\_

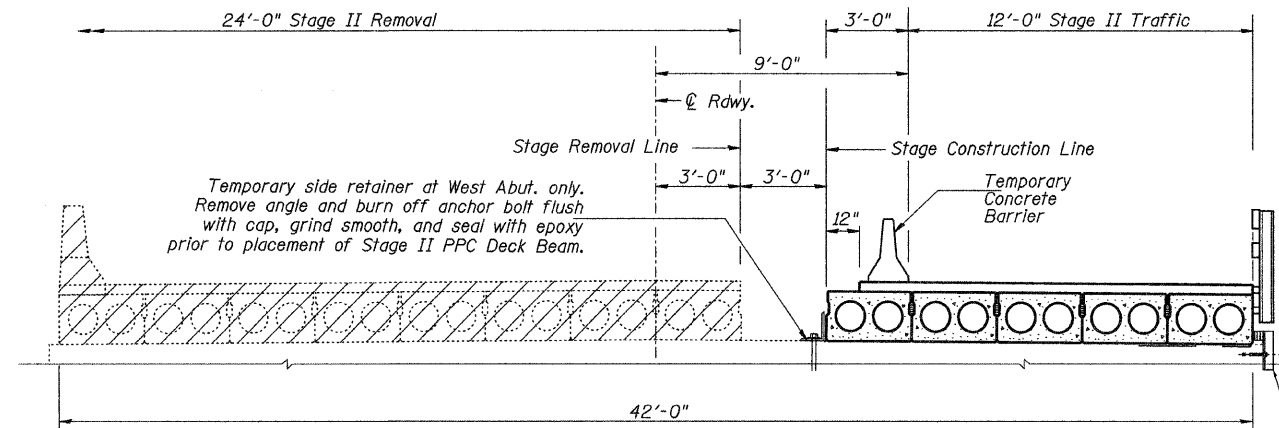
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1247	*	HENRY	80	32
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 2  
of 16 SHEETS

\* (6BRD) CONTRACT NO. 64D10

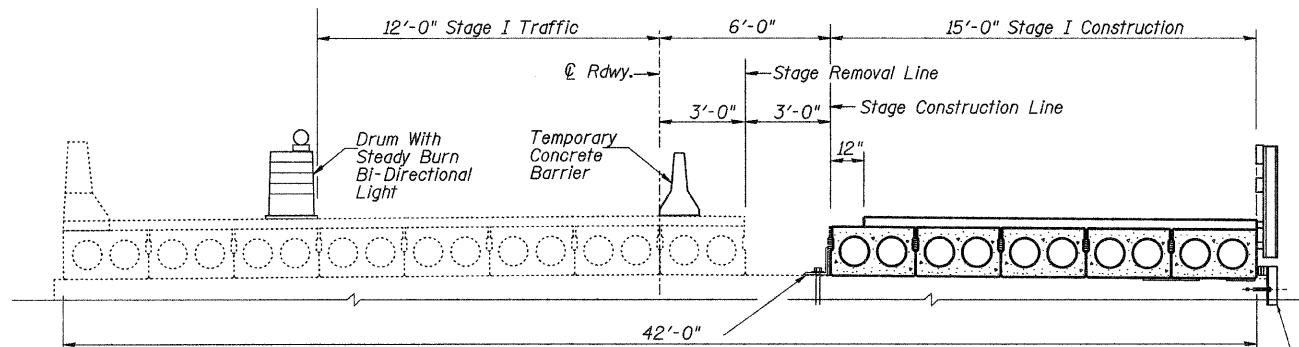


STAGE I REMOVAL



STAGE II REMOVAL

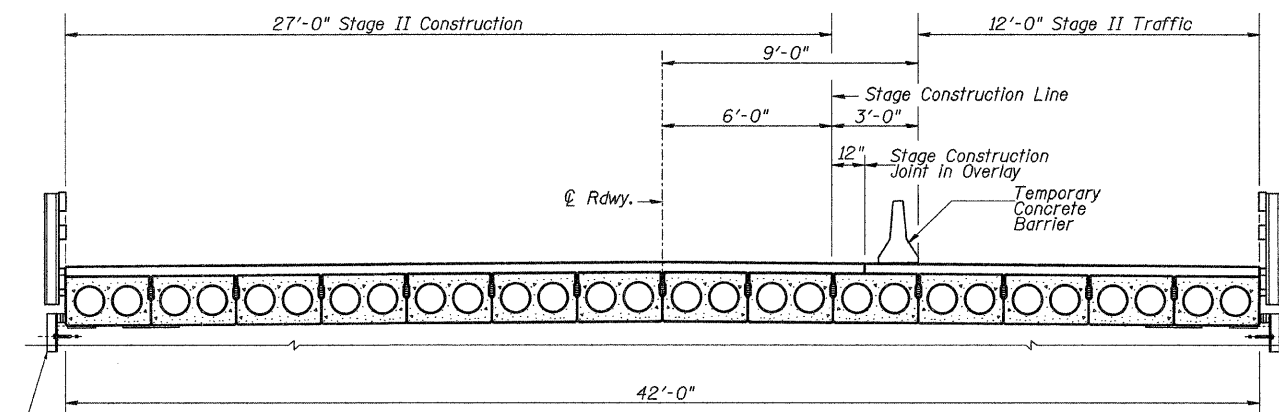
Permanent Side Retainer @ W. Abut.  
(See Sheet 14 of 16 for details)



STAGE I CONSTRUCTION

Temporary side retainer at West Abut. only. Remove angle and burn off anchor bolt flush with cap, grind smooth, and seal with epoxy prior to placement of Stage II PPC Deck Beam.

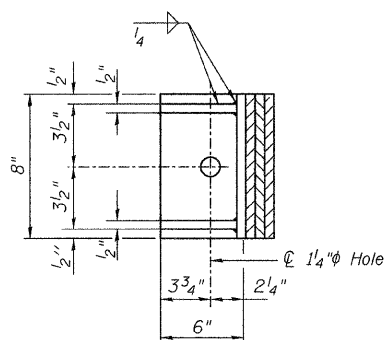
Permanent Side Retainer @ W. Abut.  
(See Sheet 14 of 16 for details)



STAGE II CONSTRUCTION

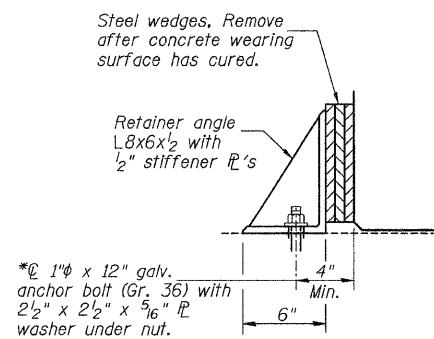
Permanent Side Retainer @ W. Abut.  
(See Sheet 14 of 16 for details)

Permanent Side Retainer @ W. Abut.  
(See Sheet 14 of 16 for details)



TEMPORARY RETAINER ANGLE PLAN

The retainers and hardware shall be galvanized after shop fabrication accordance to AASHTO M111 ASTM 385.



TEMPORARY RETAINER ANGLE ELEVATION

\*Anchor bolts or approved threaded rod may be placed in drilled holes and grouted in place. Cost of retainers, accessories, and galvanizing are included with Precast Prestressed Concrete Deck Beams.

Notes:

All cross-sections are looking East.  
Hatched area indicates Removal of Existing Superstructure.  
For Temporary Concrete Barrier Details see sheet 3 of 16.  
See Roadway Plans for quantity of Temporary Concrete Barrier.  
Cost of Drum with Steady Burn Bi-Directional Light included in traffic control.  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

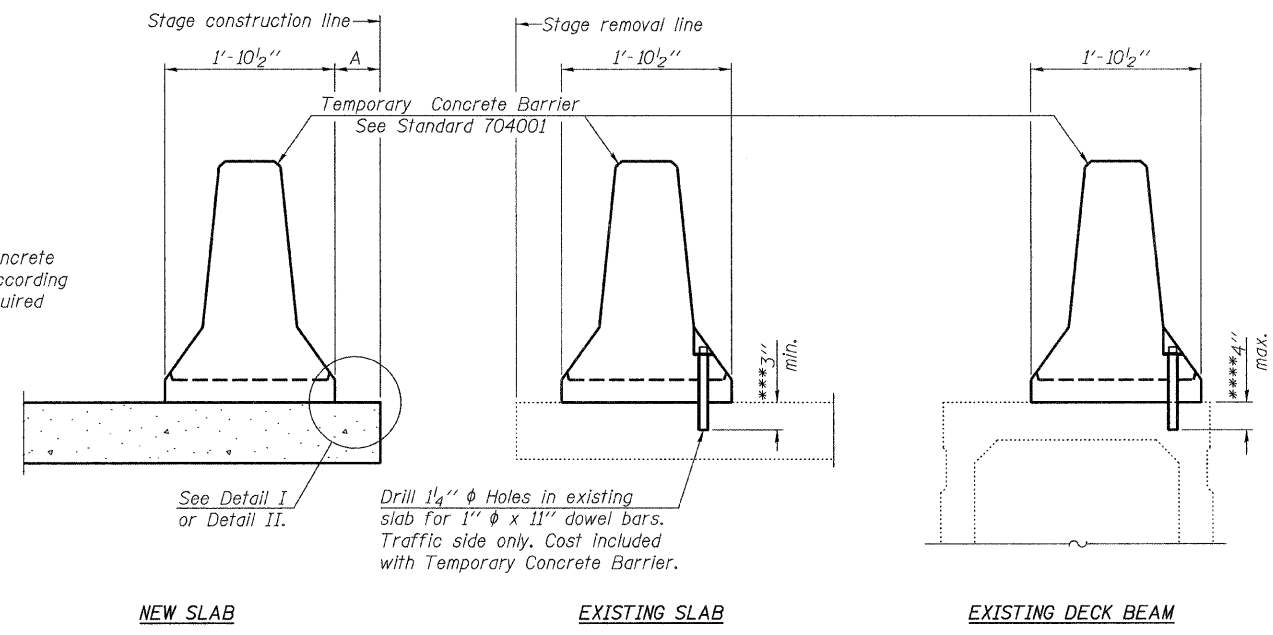
DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

STAGE CONSTRUCTION DETAILS  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BRD)  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: Date:



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



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

**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

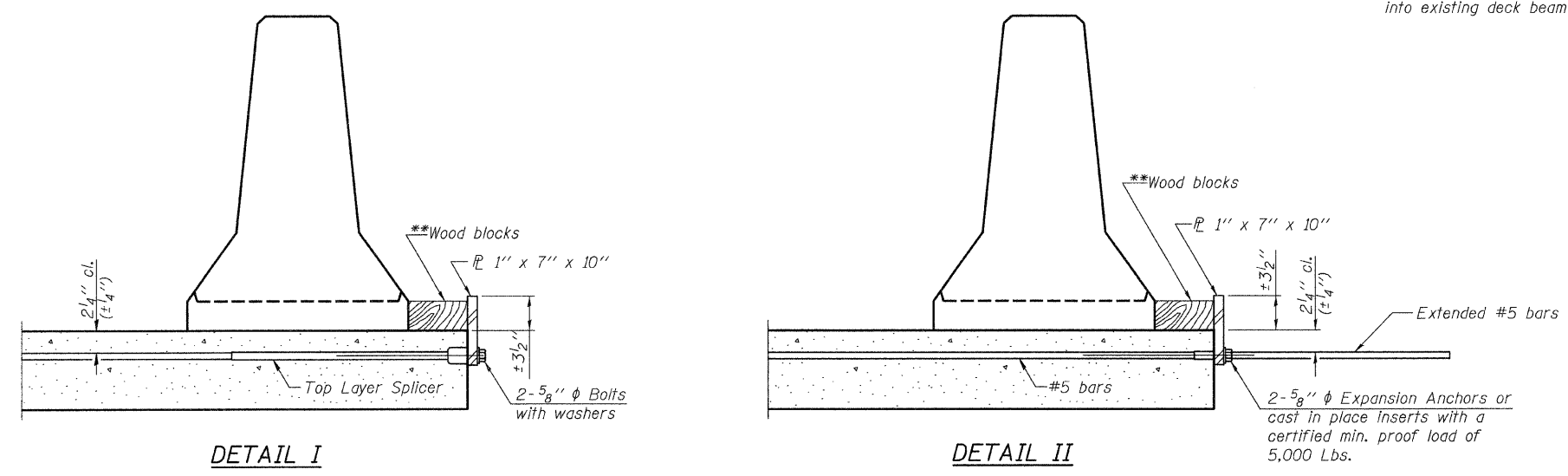
**Detail I - With Bar Splicer or Couplers:**  
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

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

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

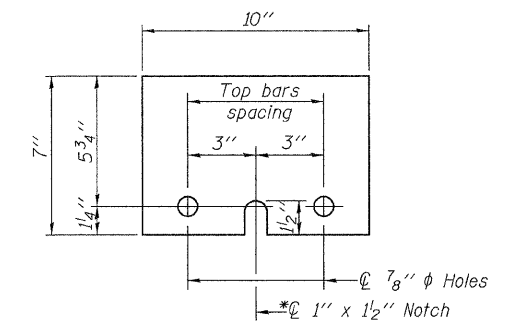
\*\*\*Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

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



**DETAIL I**

**DETAIL II**



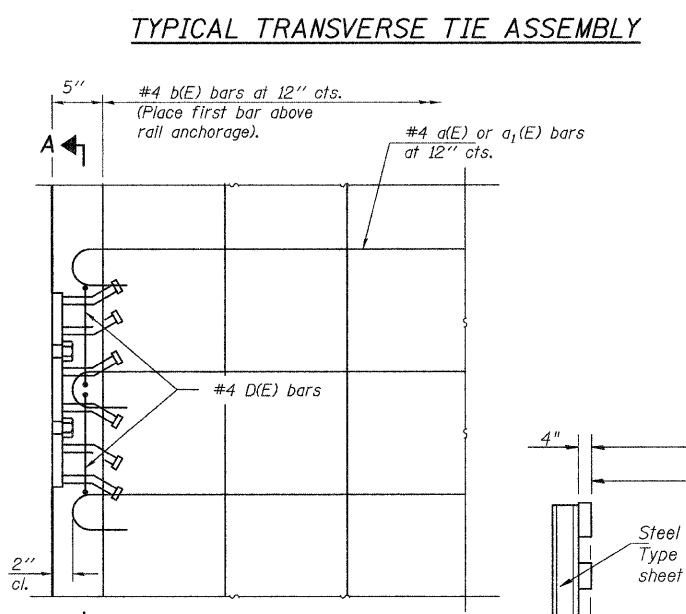
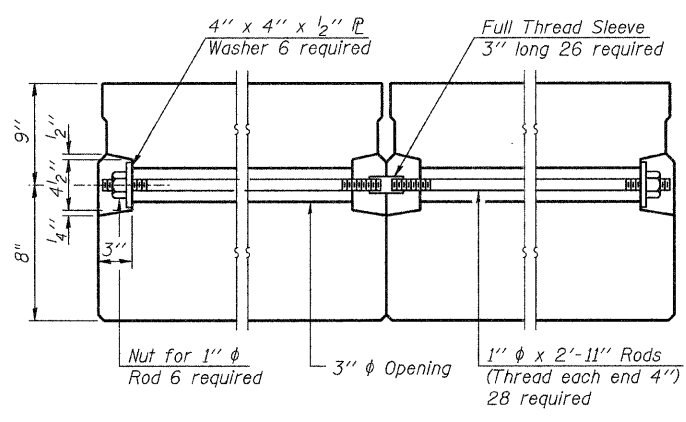
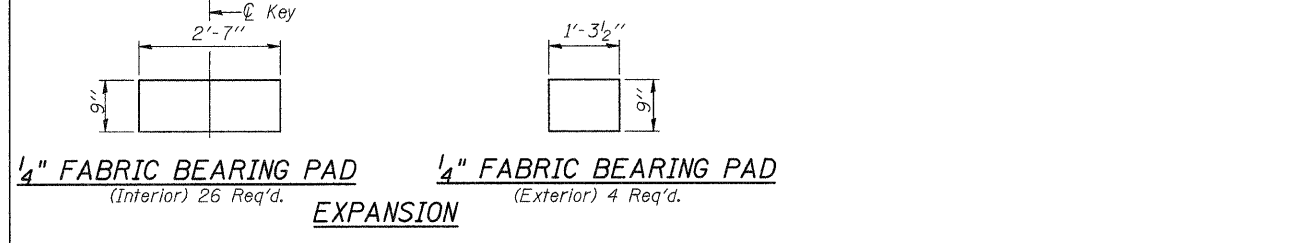
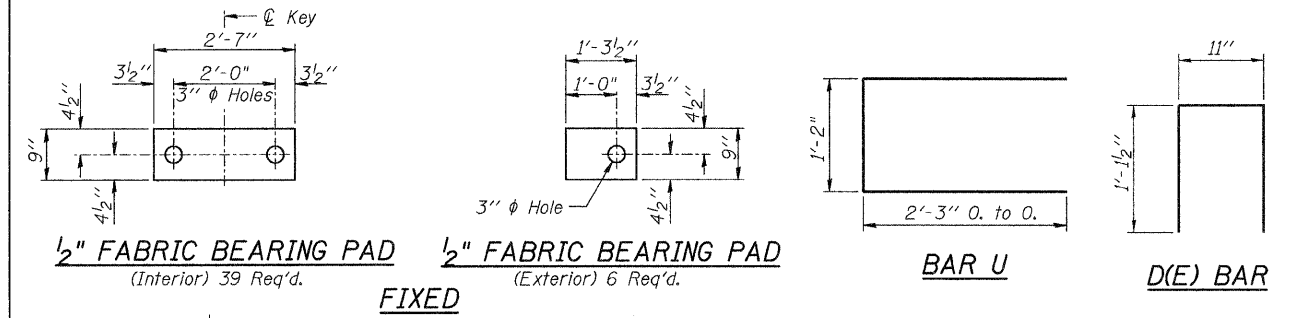
**STEEL RETAINER PL 1" x 7" x 10"**  
\* Required only with Detail II

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

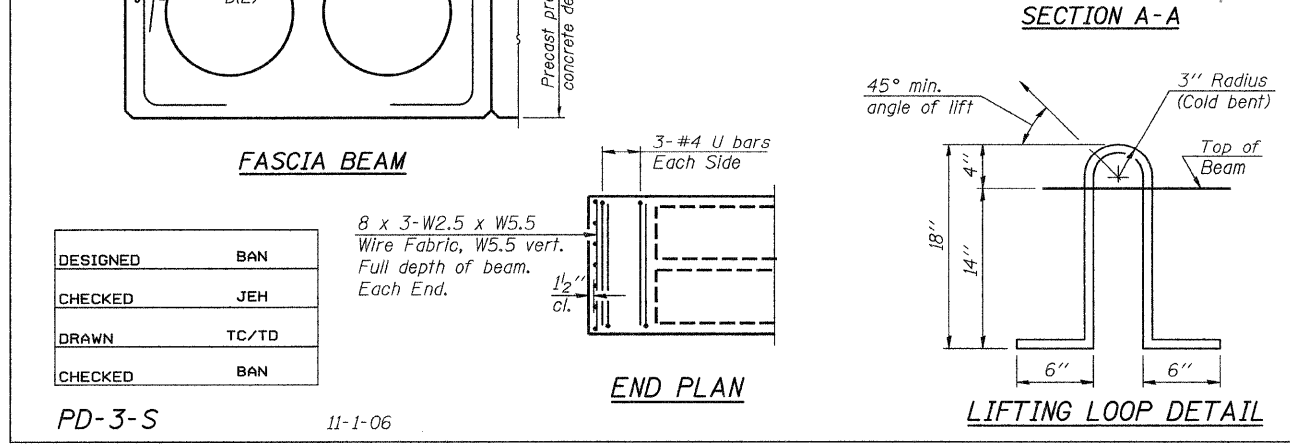
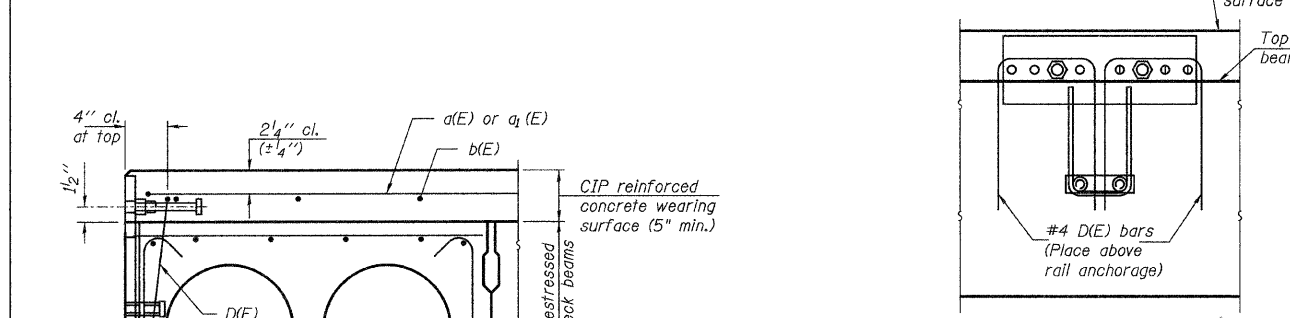
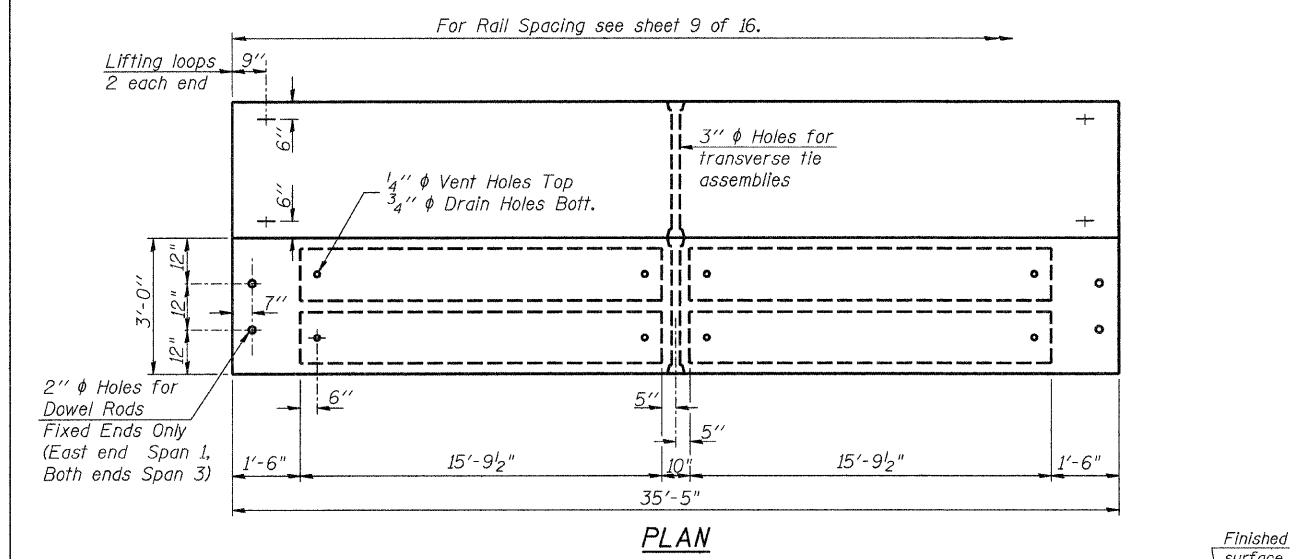
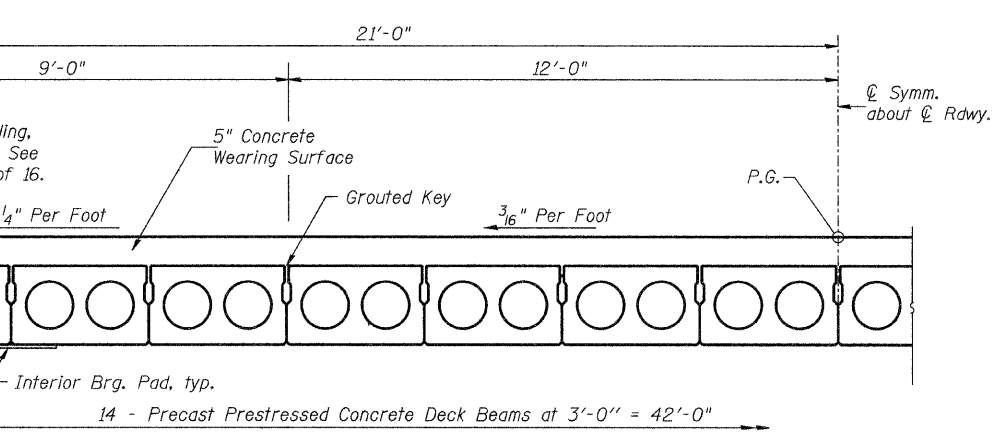
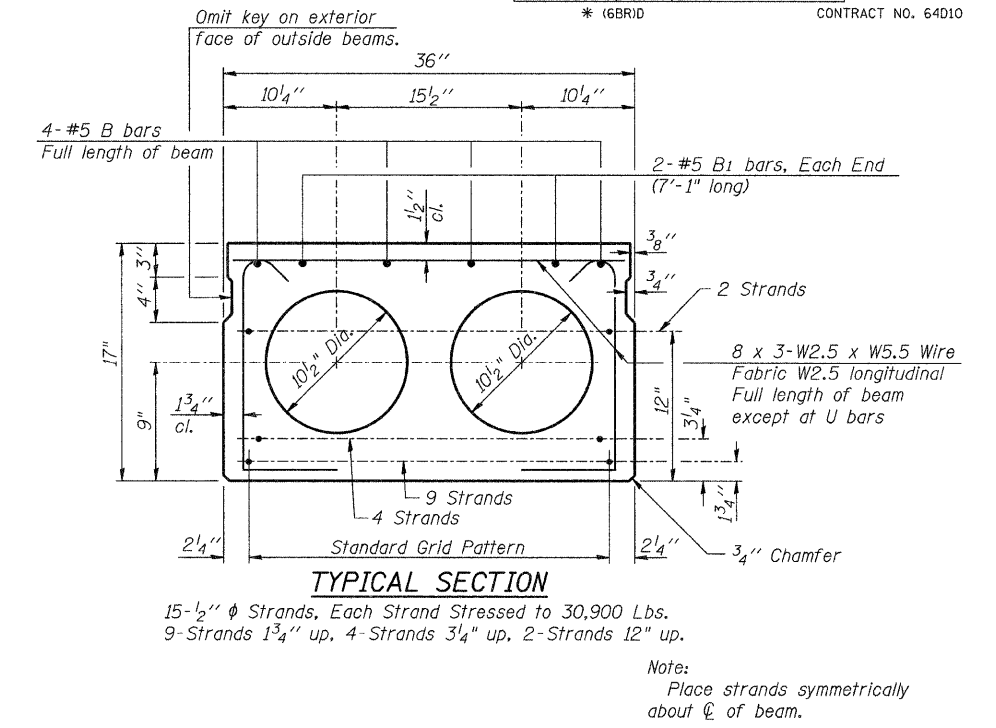
DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

**TEMPORARY CONCRETE BARRIER  
FOR STAGE CONSTRUCTION  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev:                      Date:



Rail anchorage shall be cast in PPC Deck beams. See typical section for dimensions, strand pattern and bar callouts not shown.  
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.



DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

8 x 3-W2.5 x W5.5 Wire Fabric, W5.5 vert. Full depth of beam. Each End.

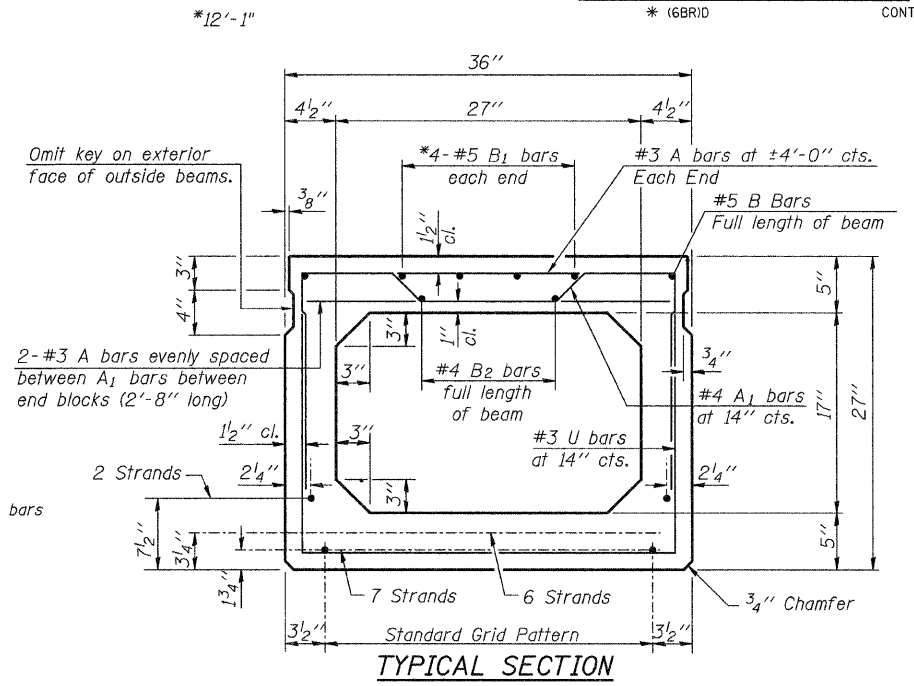
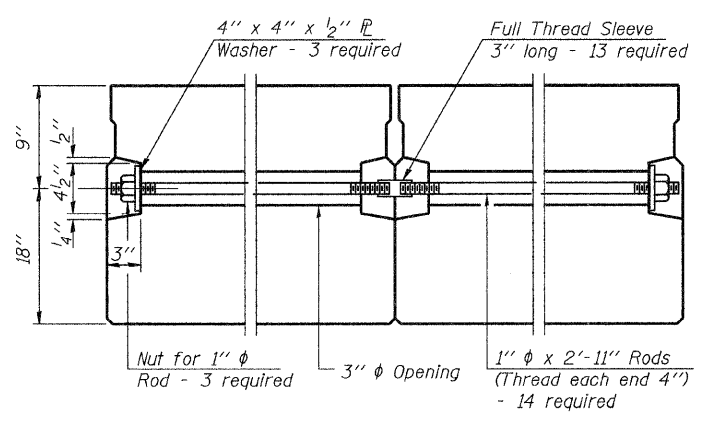
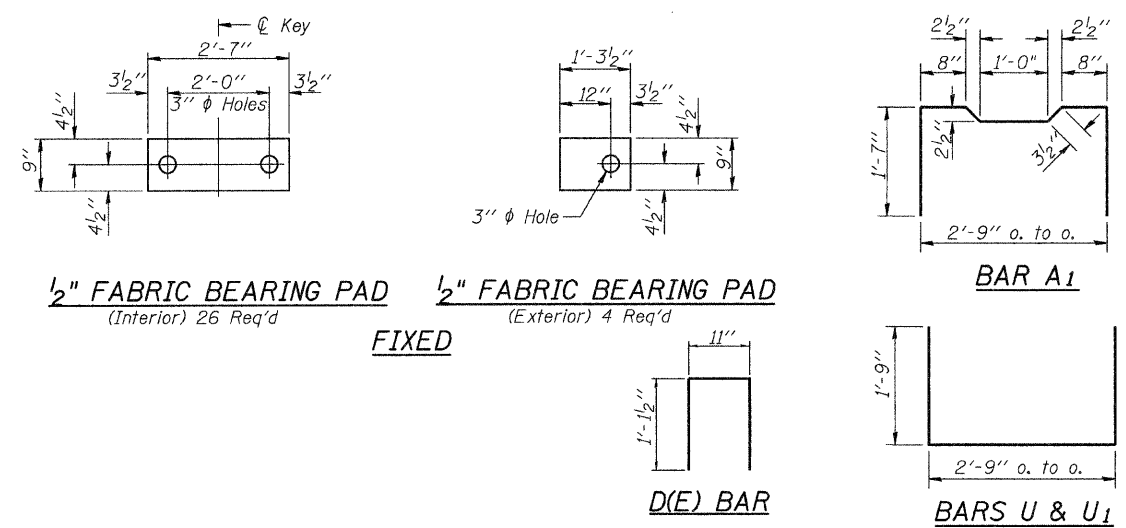
**NOTES**

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" φ-270 ksi strands, as shown.  
The 1" φ 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 ASTM A 706 (IL MOD), 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, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.  
Required Release Strength, f'ci, shall be 4,000 p.s.i.  
Rail post anchor devices shall be cast into outside face of exterior beams as specified elsewhere.

**BILL OF MATERIAL**

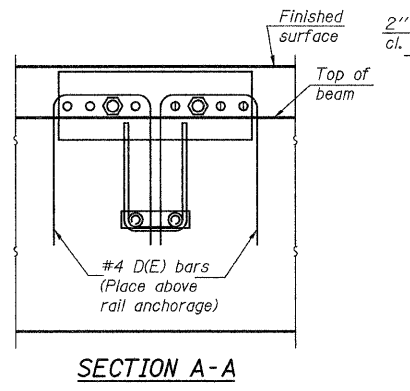
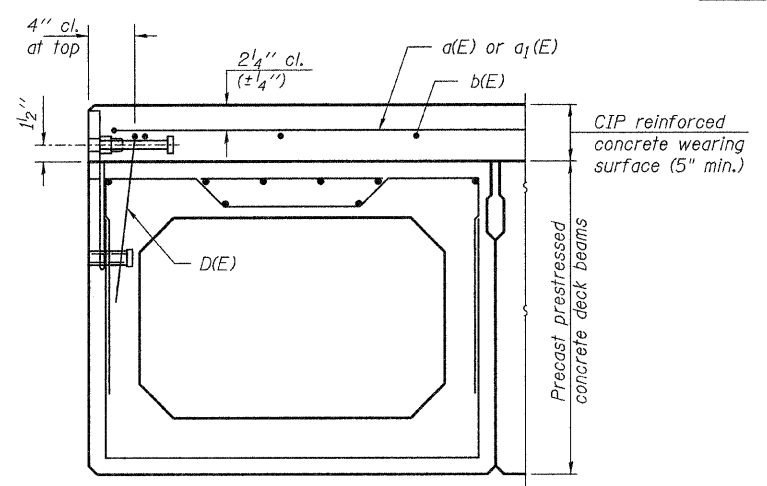
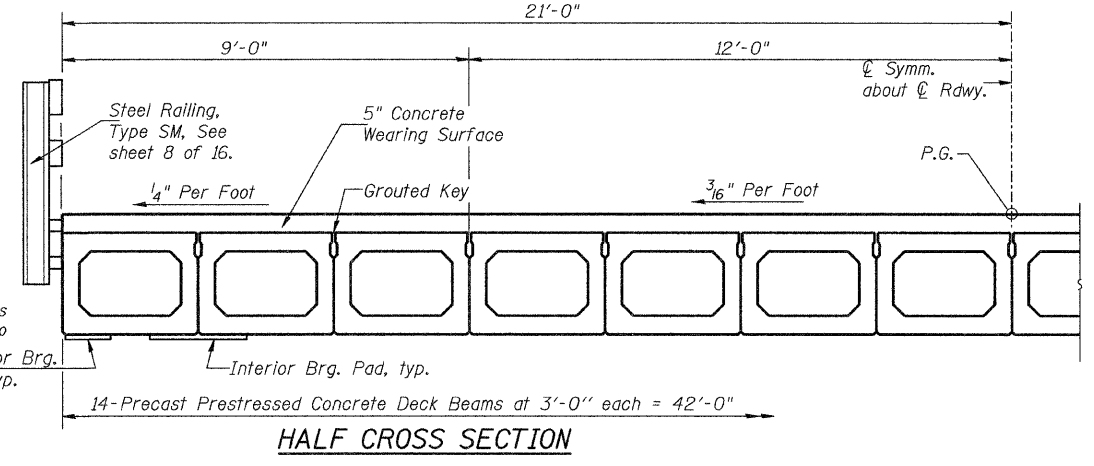
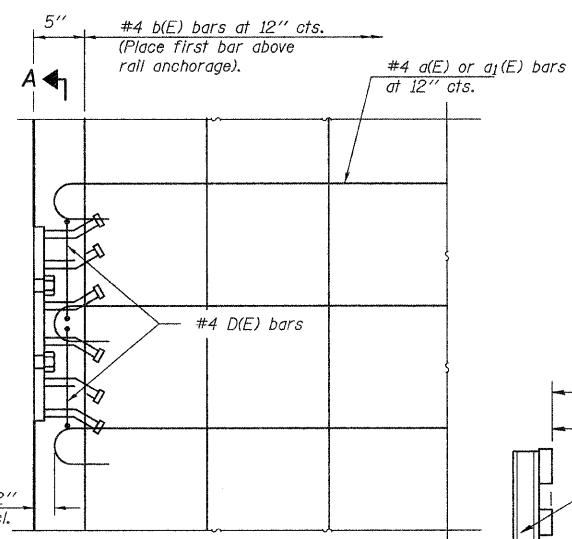
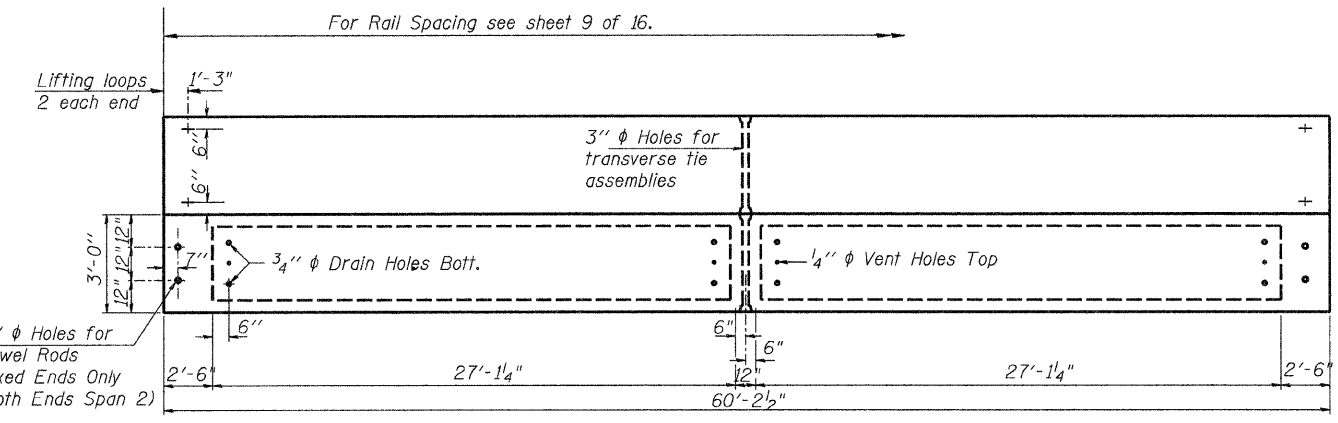
Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms. (17" Depth)	Sq. Ft.	2,975

**DECK BEAM DETAILS - SPANS 1 & 3**  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131



15 - 1/2" φ Strands, Each Strand Stressed to 30,900 Lbs.  
7 - Strands 1 3/4" up, 6 - Strands 3/4" up  
2 - Strands 7/2" up

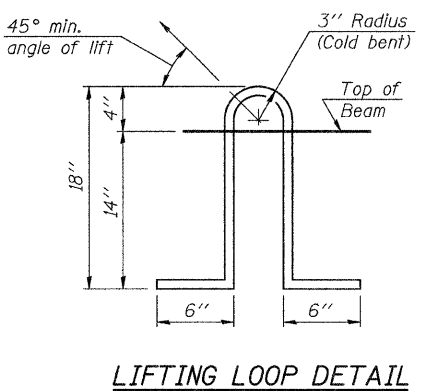
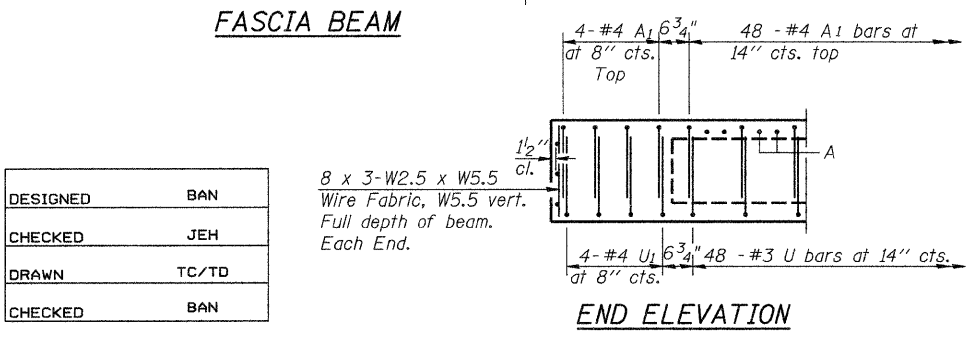
Note:  
Place strands symmetrically about C of beam.



**PLAN AT RAIL ANCHOR**

Rail anchorage shall be cast in PPC Deck beams. See typical section for dimensions, strand pattern and bar callouts not shown.

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.



**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" φ-270 ksi strands, as shown.

The 1" φ 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 ASTM A 706 (IL MOD), 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, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

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

Rail post anchor devices shall be cast into outside face of exterior beams as specified elsewhere.

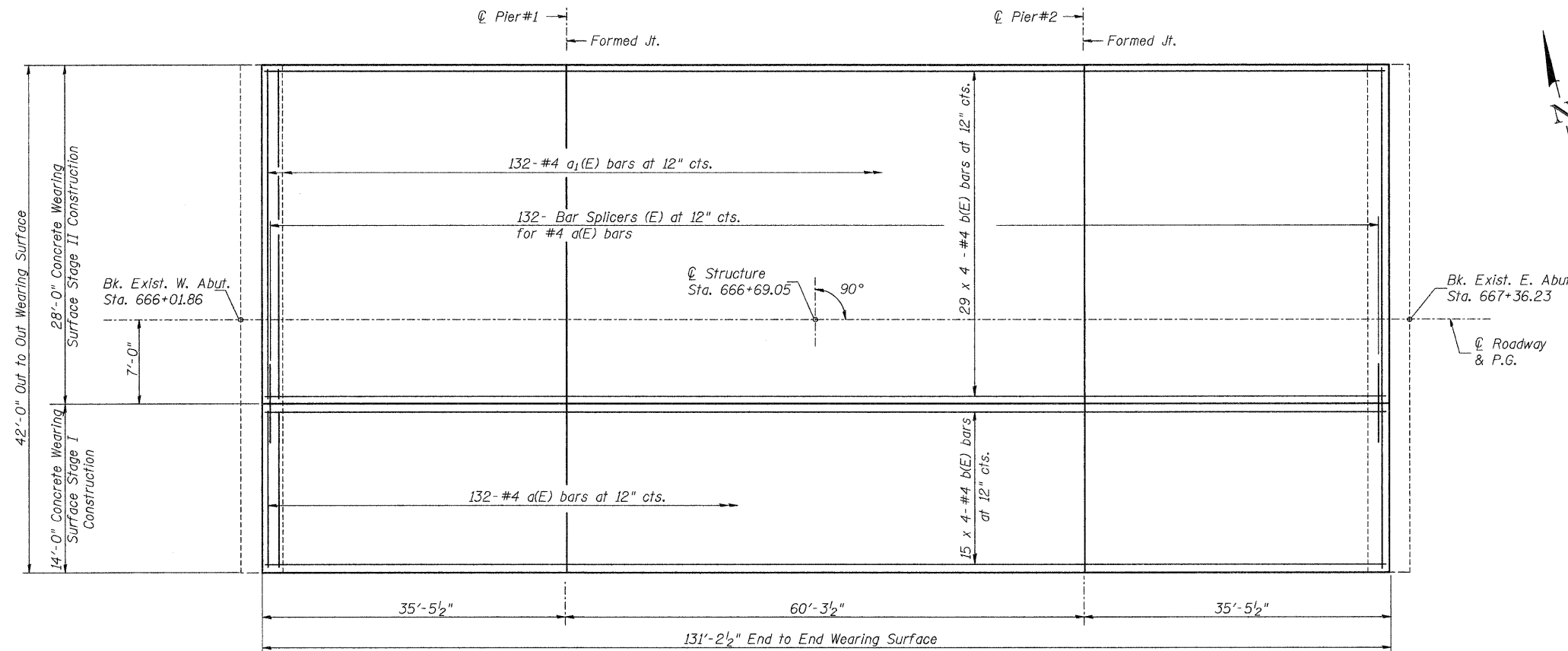
**BILL OF MATERIAL**

Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms. (27" Depth)	Sq. Ft.	2,529

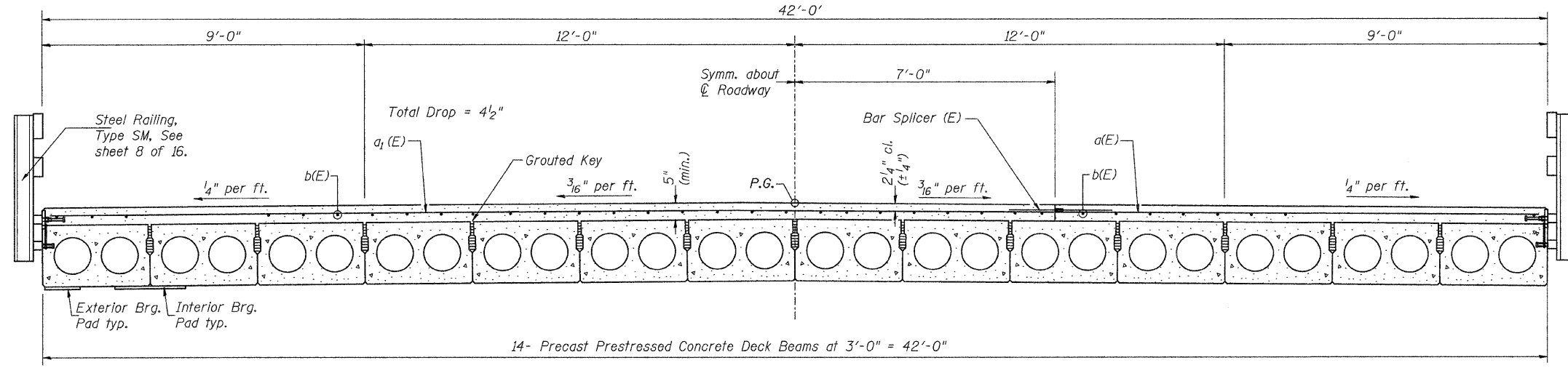
**DECK BEAM DETAILS - SPAN 2**  
**F.A.S. 1247 (U.S. ROUTE 6)**  
**OVER MUD CREEK**  
**SECTION (GBR)D**  
**HENRY COUNTY**  
**STATION 666+69.05**  
**STR. NO. 037-0131**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: \_\_\_\_\_ Date: \_\_\_\_\_

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

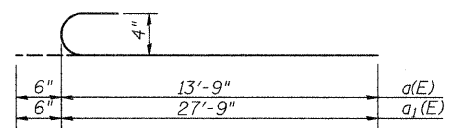


**PLAN  
CONCRETE WEARING SURFACE**



**CROSS SECTION  
Looking East**

**MIN. BAR LAP**  
#4 Bar = 1'-8"



**BARS a(E) & a1(E)**

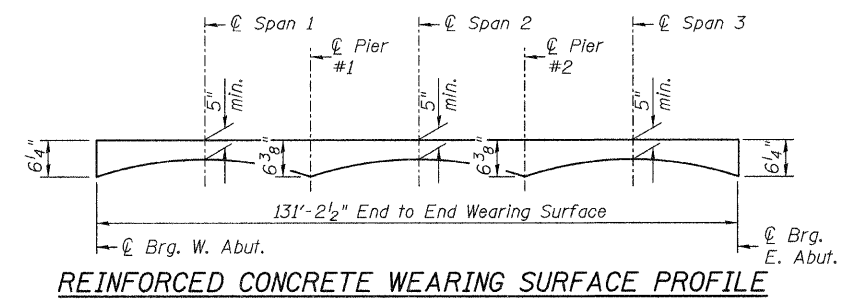
**SUPERSTRUCTURE  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a(E)	132	#4	14'-3"	C	
a1(E)	132	#4	28'-3"	C	
b(E)	176	#4	34'-0"	—	
Reinforcement Bars, Epoxy Coated				Lbs.	7,750
Concrete Wearing Surface, 5"				Sq. Yds.	613
Bar Splicers				Each	132

For details of Bar Splicers, see sheet 16 of 16.  
Bars indicated thus 1 x 2 - #4 etc. indicates 1 line of bars with 2 lengths per line.  
For Formed Joint Details, see sheet 9 of 16.

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

Notes:  
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.  
See sheet 4 & 5 of 16 for bearing pad details.



**REINFORCED CONCRETE WEARING SURFACE PROFILE**

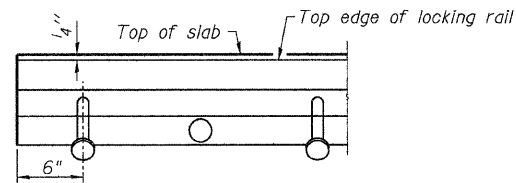
**OVERLAY DETAILS &  
TYPICAL SECTION**  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: \_\_\_\_\_ Date: \_\_\_\_\_

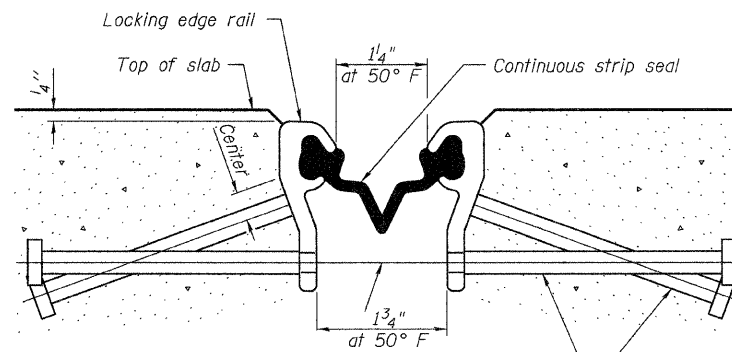
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1247	*	HENRY	80	37
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT		

SHEET NO. 7  
of 16 SHEETS

\* (6BR)D CONTRACT NO. 64D10



TYPICAL END TREATMENT



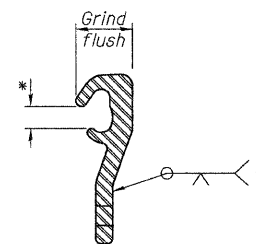
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Place 1/2"  $\phi$  x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" int. cts. (84 req'd)

SECTION THRU STRIP SEAL JOINT FOR OVERLAY OVER DECK BEAMS



LOCKING EDGE RAIL



LOCKING EDGE RAIL SPLICE

**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.

The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

**BILL OF MATERIAL**

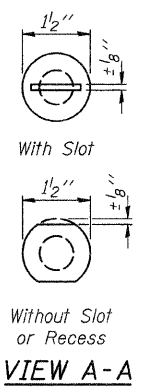
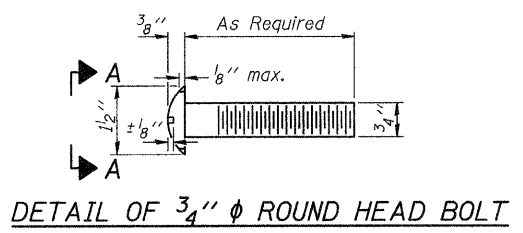
Item	Unit	Quantity
Preformed Joint Strip Seal	Foot	42

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

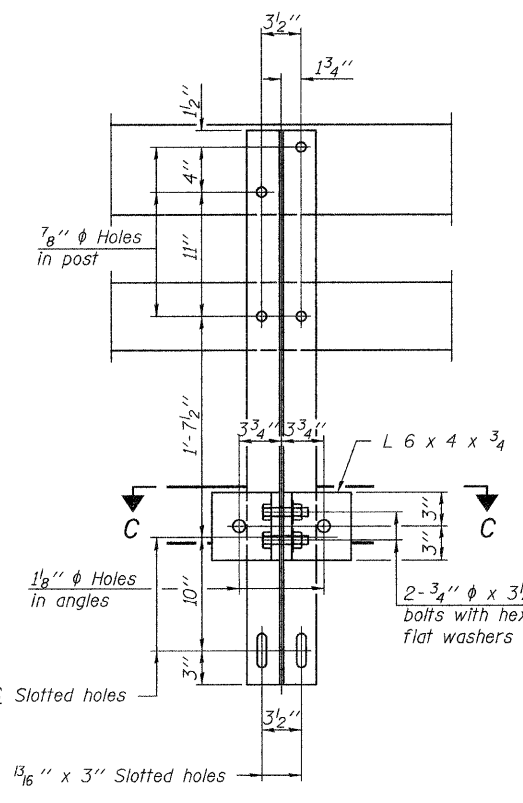
PREFORMED JOINT STRIP SEAL  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_

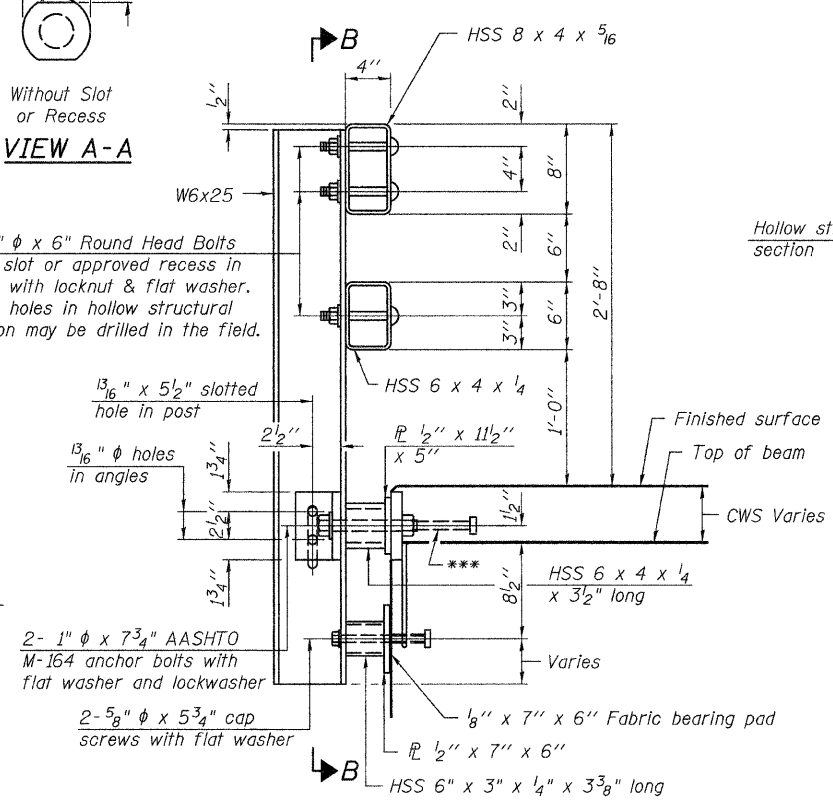


FOR RAIL POST SPACING SEE SH.#9 OF 16

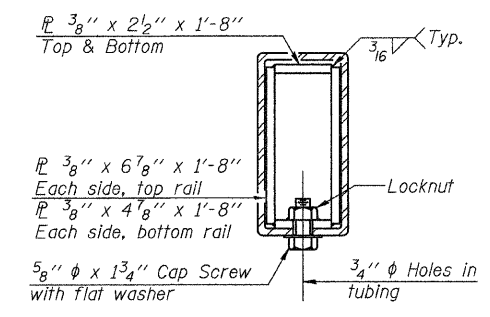


4- 3/4"  $\phi$  x 6" Round Head Bolts  
(With slot or approved recess in head) with locknut & flat washer.  
7/8"  $\phi$  holes in hollow structural section may be drilled in the field.

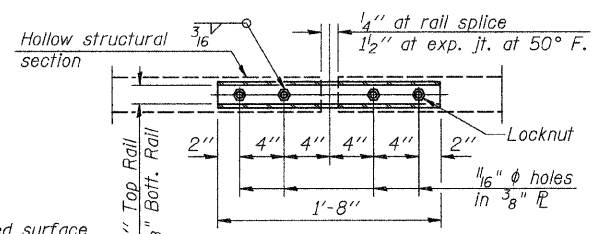
VIEW A-A



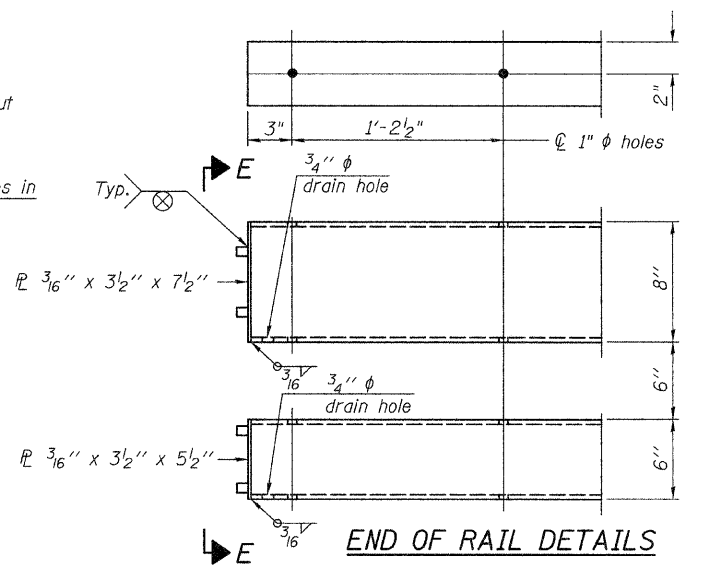
SECTION AT RAIL POST



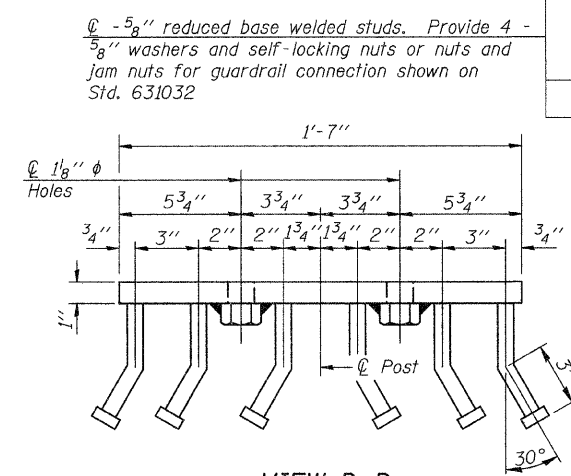
SECTION AT RAIL SPLICE



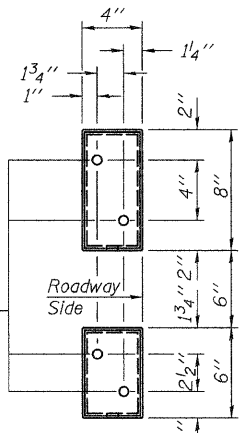
PLAN-BOTT. SPLICE TYPICAL



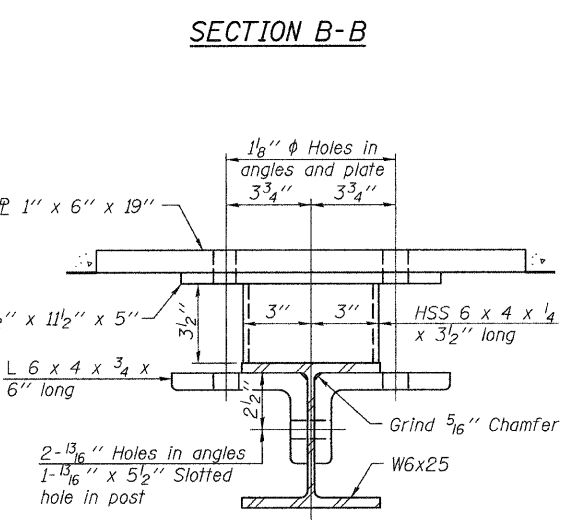
END OF RAIL DETAILS



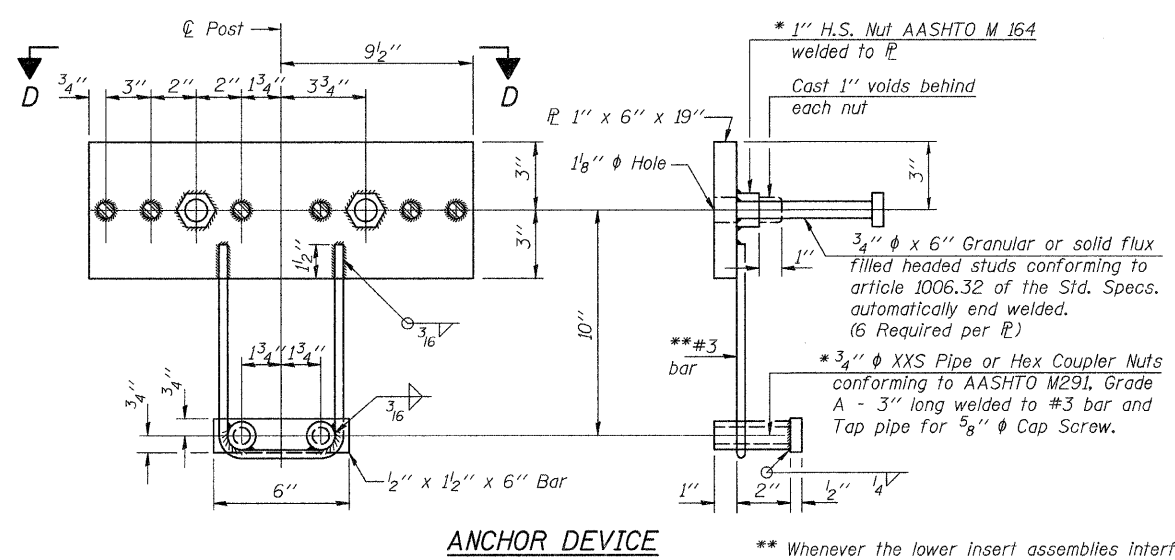
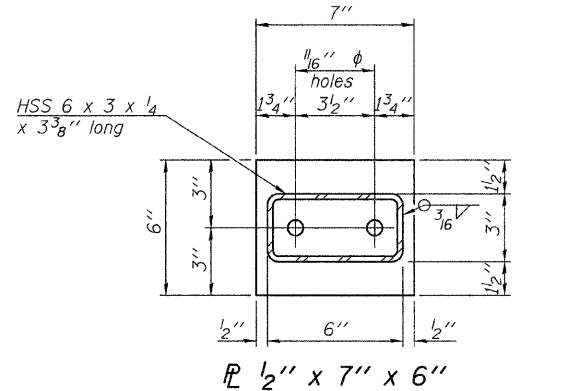
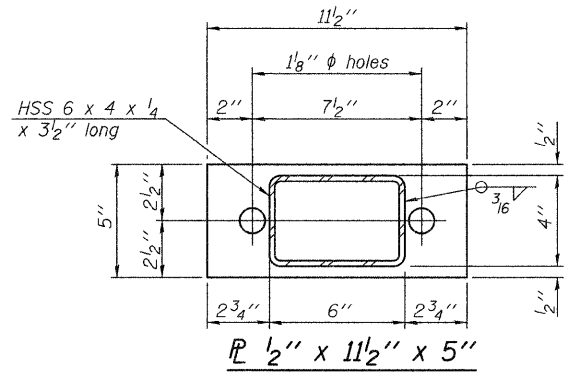
VIEW D-D



VIEW E-E



SECTION C-C



ANCHOR DEVICE

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

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	269

**STEEL RAILING, TYPE SM  
WITH CONCRETE WEARING SURFACE**  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: \_\_\_\_\_ Date: \_\_\_\_\_

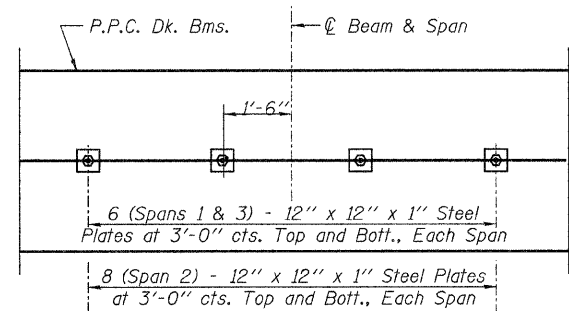
DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

\* Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.  
\*\* Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

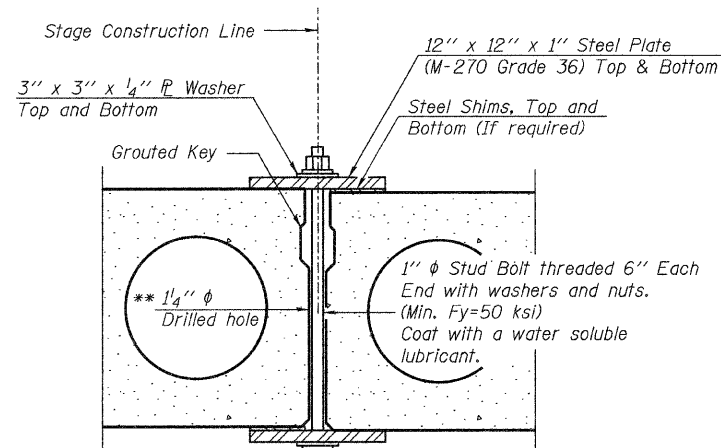
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1247	*	HENRY	80	39
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

SHEET NO. 9  
OF 16 SHEETS

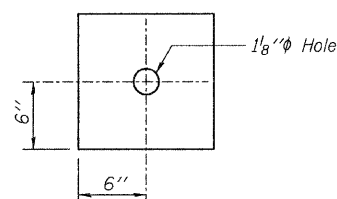
\* (6BR)D CONTRACT NO. 64D10



PLAN



SECTION



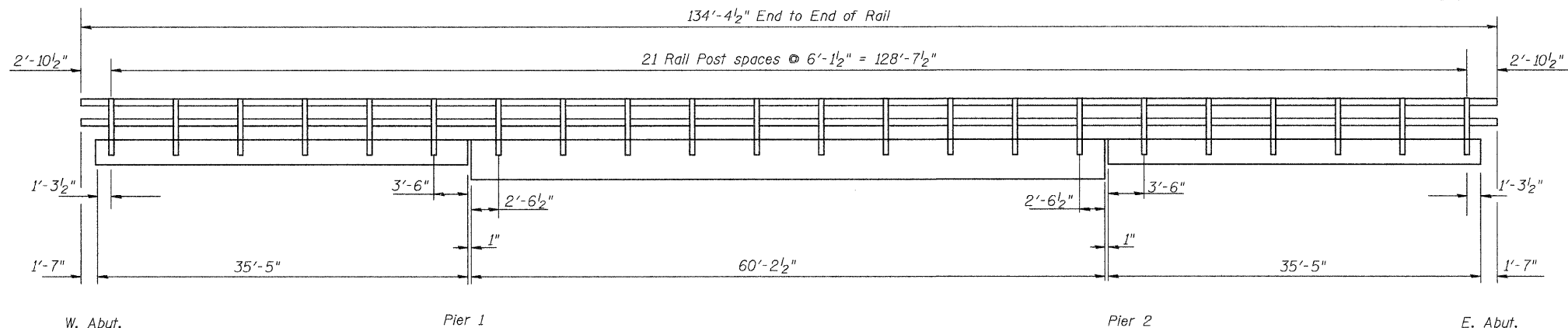
CLAMPING PLATE

**SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.**

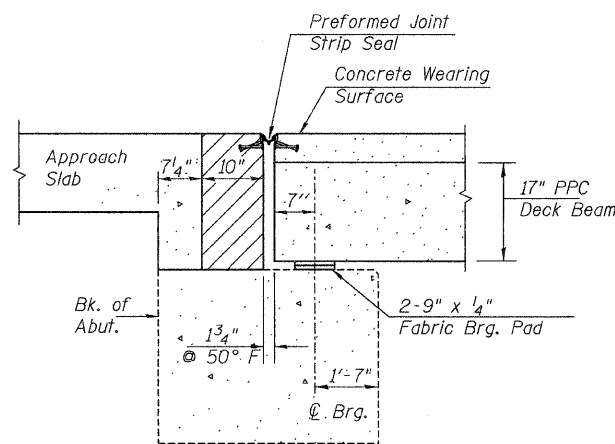
Cost included with Precast Prestressed Concrete Deck Beams.  
See Stage Construction Details for traffic lanes.  
Stage Construction of Precast Prestressed concrete deck beams shall be according to Article 504.06(d) of the Standard Specifications.

\*\* As an alternate to the drilled holes, the Contractor may request the Fabricator to cast 2" diameter semi-circular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts. If the Contractor elects to use this alternate, the details shall be identified on the shop drawings.

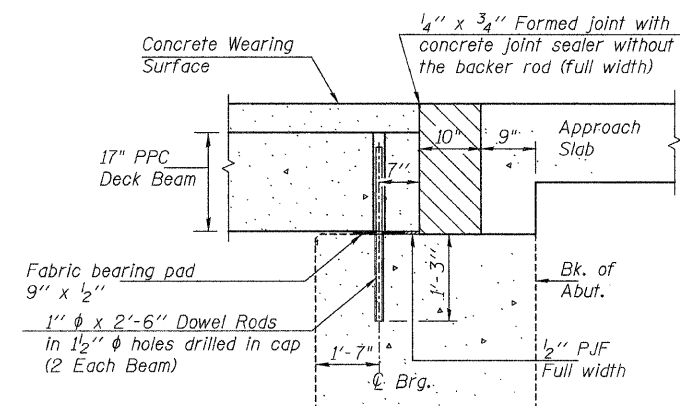
DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN



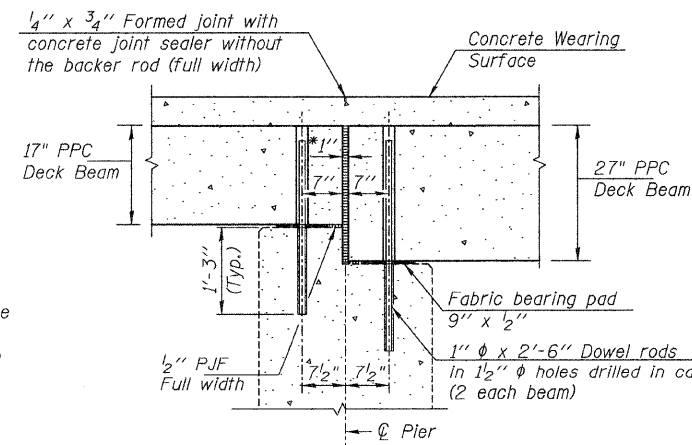
RAIL POST SPACING



SECTION THRU WEST ABUTMENT



SECTION THRU EAST ABUTMENT



SECTION THRU PIERS

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

Note:  
Hatched area to be poured after concrete wearing surface is in place.  
After beams have been erected, holes shall be drilled into substructure 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 of the shear keys

**SUPERSTRUCTURE DETAILS**  
**F.A.S. 1247 (U.S. ROUTE 6)**  
**OVER MUD CREEK**  
**SECTION (6BR)D**  
**HENRY COUNTY**  
**STATION 666+69.05**  
**STR. NO. 037-0131**

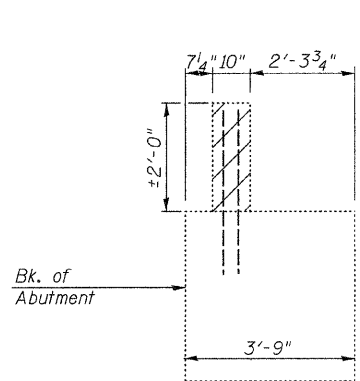
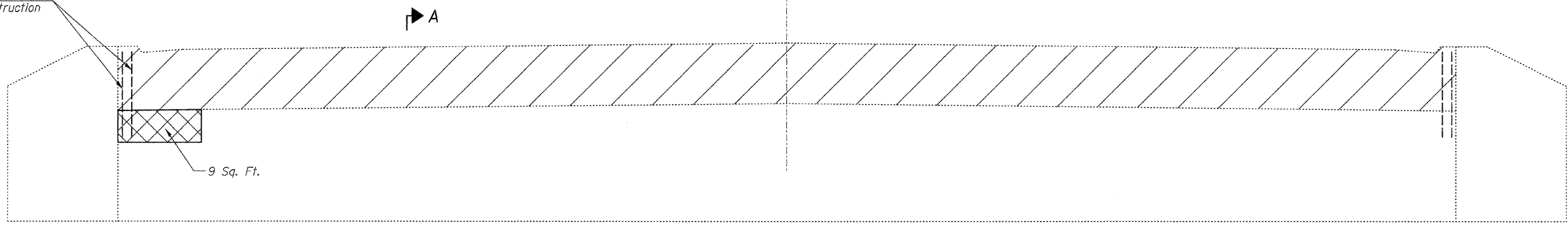
HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: Date:



℄ West Abutment & ℄ Roadway

\*Clean & incorporate existing vertical bars into new construction

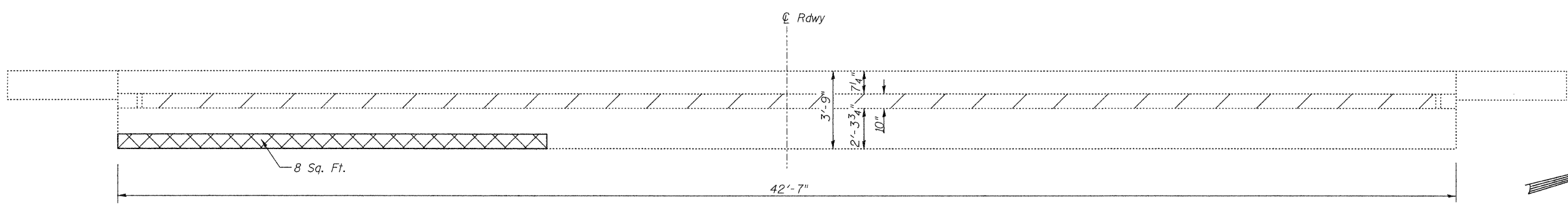


SEC. A-A

ELEVATION  
(Looking West)

**BILL OF MATERIAL**

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	2.0
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	17



PLAN

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5")
- Concrete Removal

\* Existing reinforcement bars extending into new construction shall be cleaned, straightened and incorporated in to the new construction.  
Cost to be included with Concrete Removal.

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

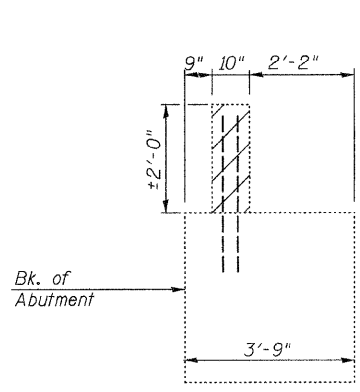
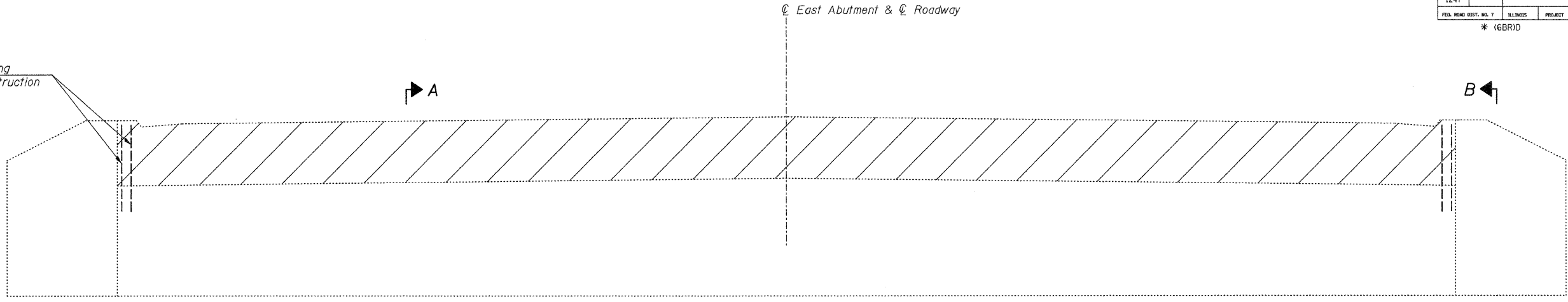
**WEST ABUTMENT REPAIRS  
AND CONCRETE REMOVAL  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_

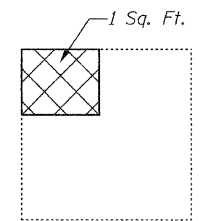


\*Clean & incorporate existing vertical bars into new construction



**SEC. A-A**

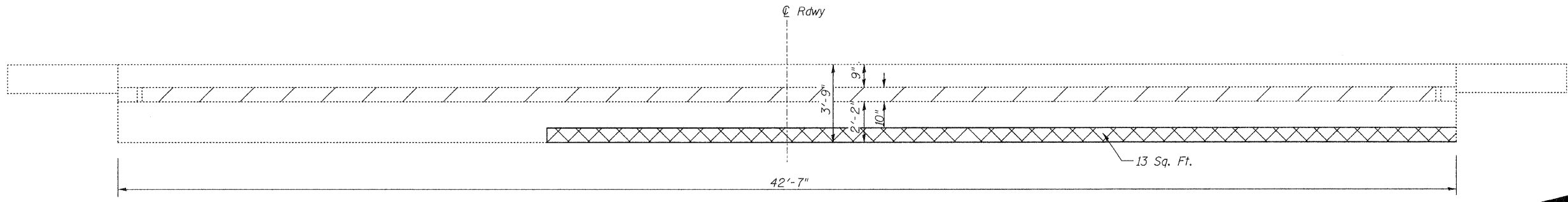
**ELEVATION**  
(Looking East)



**SEC. B-B**

**BILL OF MATERIAL**

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	2.0
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	14



**PLAN**

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5")
- Concrete Removal

\* Existing reinforcement bars extending into new construction shall be cleaned, straightened and incorporated in to the new construction. Cost to be included with Concrete Removal.

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

**EAST ABUTMENT REPAIRS  
AND CONCRETE REMOVAL**  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131

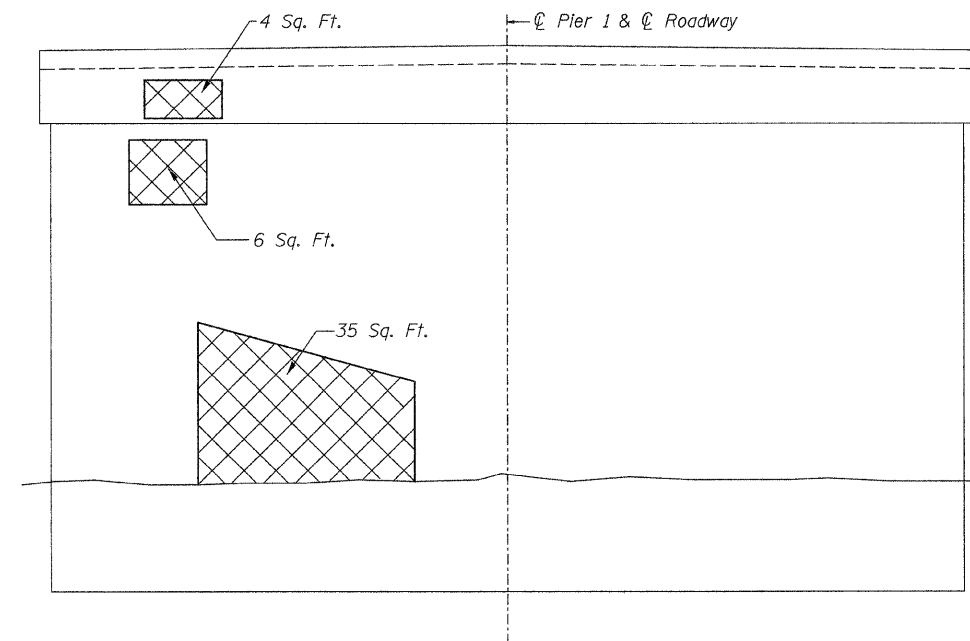
HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1247	*	HENRY	80	42
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 12  
of 16 SHEETS

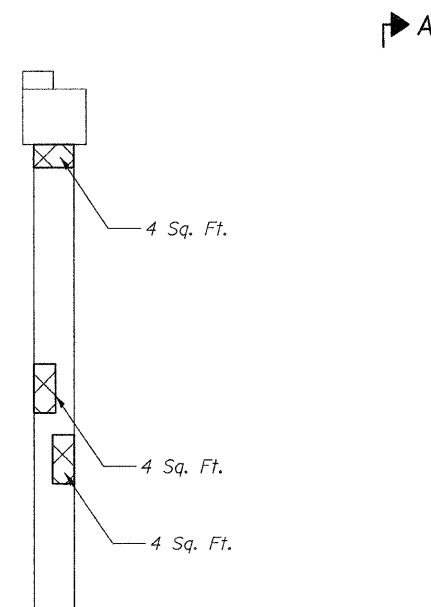
\* (6BR/D) CONTRACT NO. 64D10



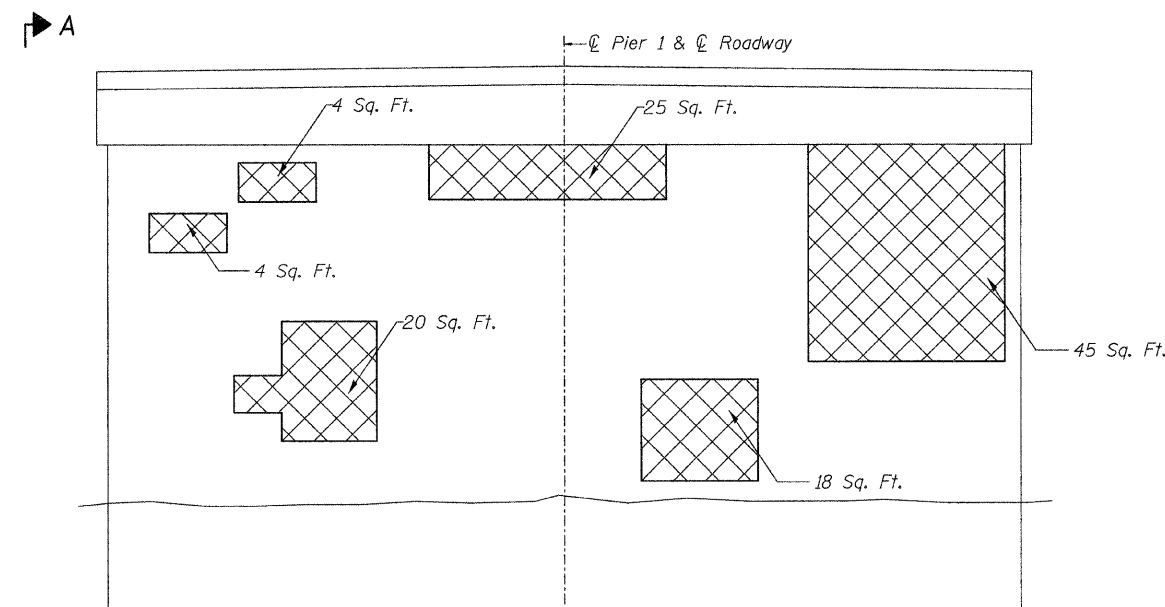
**WEST FACE**  
(Looking East)

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	173




**VIEW A-A**



**EAST FACE**  
(Looking West)

**LEGEND**

 Structural Repair of Concrete (Depth equal to or less than 5")

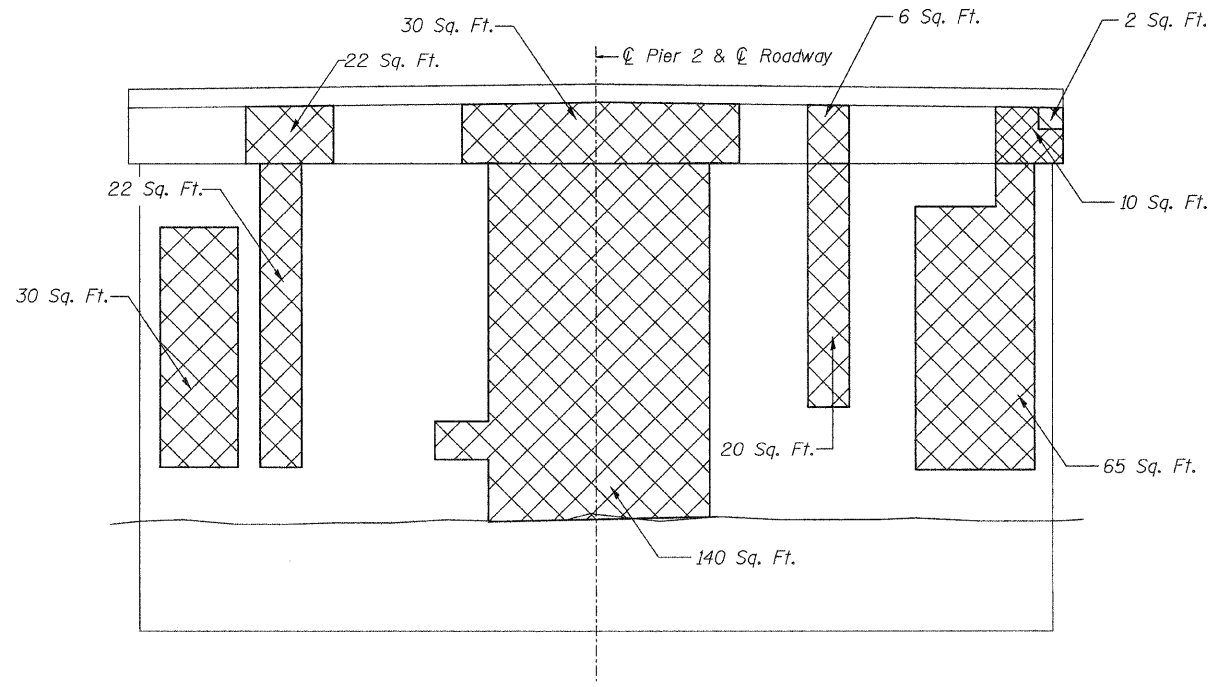
DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

**PIER 1 REPAIRS**  
**F.A.S. 1247 (U.S. ROUTE 6)**  
**OVER MUD CREEK**  
**SECTION (6BR/D)**  
**HENRY COUNTY**  
**STATION 666+69.05**  
**STR. NO. 037-0131**

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HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_



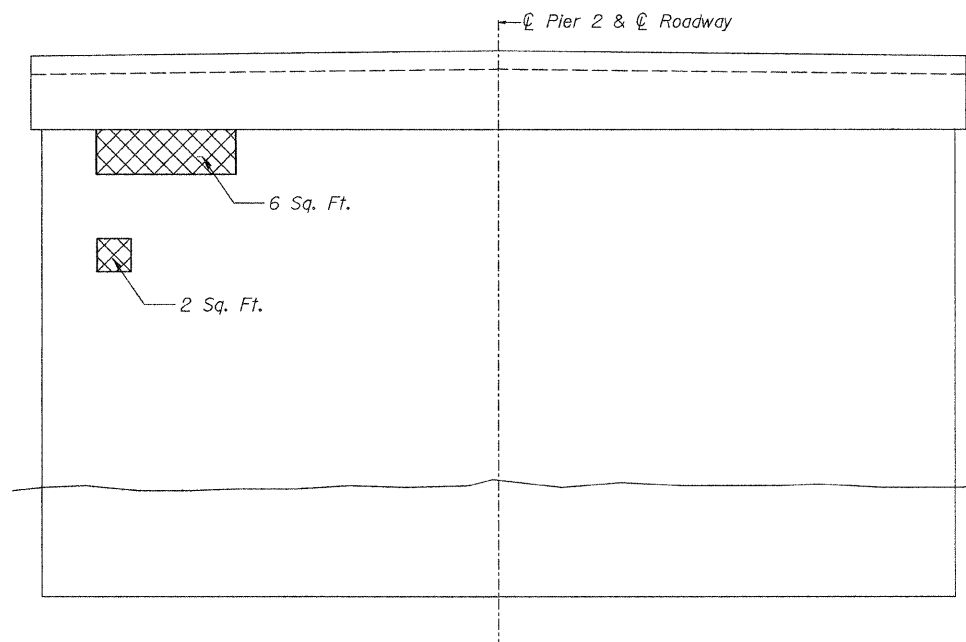
**WEST FACE**  
(Looking East)

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	353
Structural Repair of Concrete (Depth greater than 5")	Sq. Ft.	2

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5")
- Structural Repair of Concrete (Depth greater than 5")

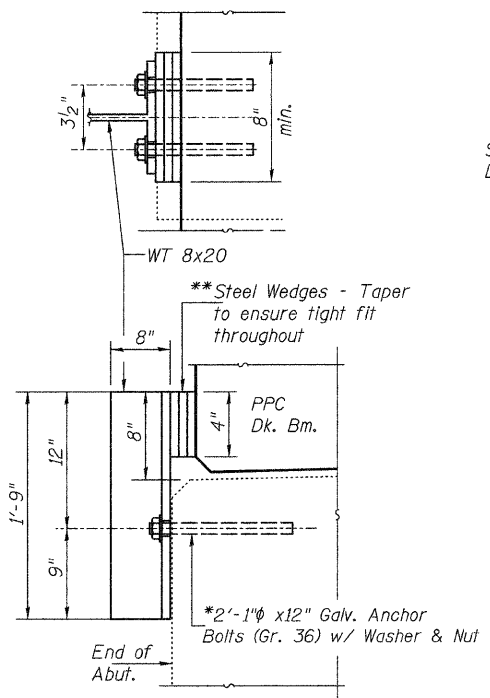


**EAST FACE**  
(Looking West)

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

**PIER 2 REPAIRS**  
**F.A.S. 1247 (U.S. ROUTE 6)**  
**OVER MUD CREEK**  
**SECTION (6BR)D**  
**HENRY COUNTY**  
**STATION 666+69.05**  
**STR. NO. 037-0131**

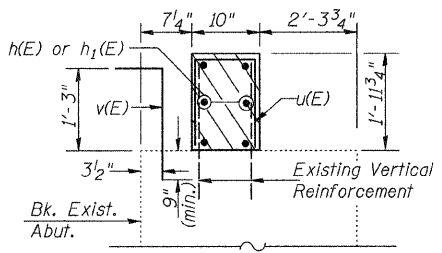
HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS  
 Rev: \_\_\_\_\_ Date: \_\_\_\_\_



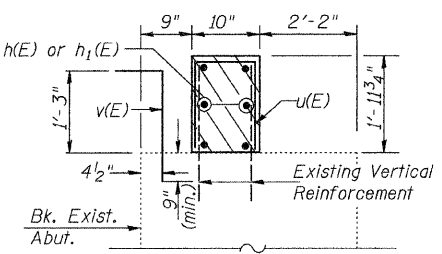
**RETAINER DETAIL**

\* Anchor bolts will be approved threaded rod placed in drilled holes and grouted in place. Cost of retainer and accessories are included with Precast Prestressed Concrete Deck Beams.

\*\* Remove steel wedges after Concrete Wearing Surface has cured.



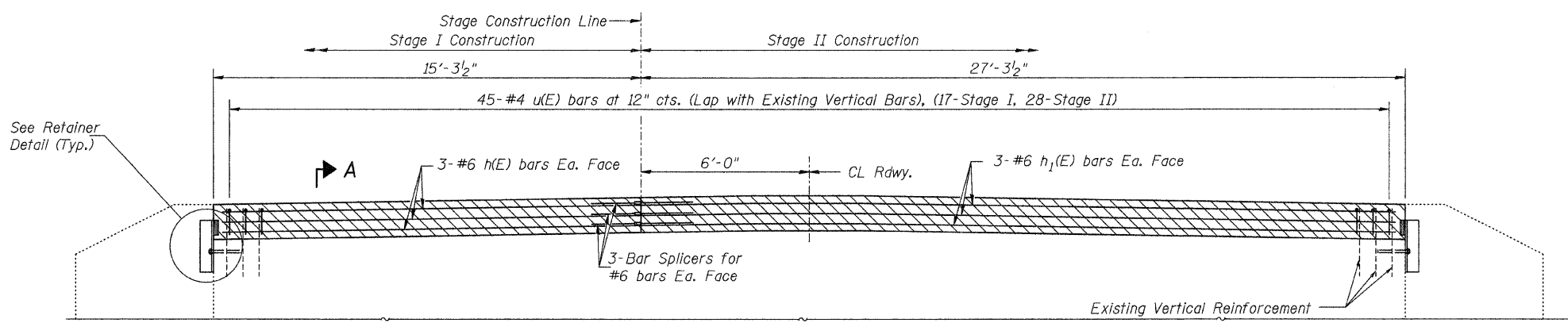
**SECTION A-A**



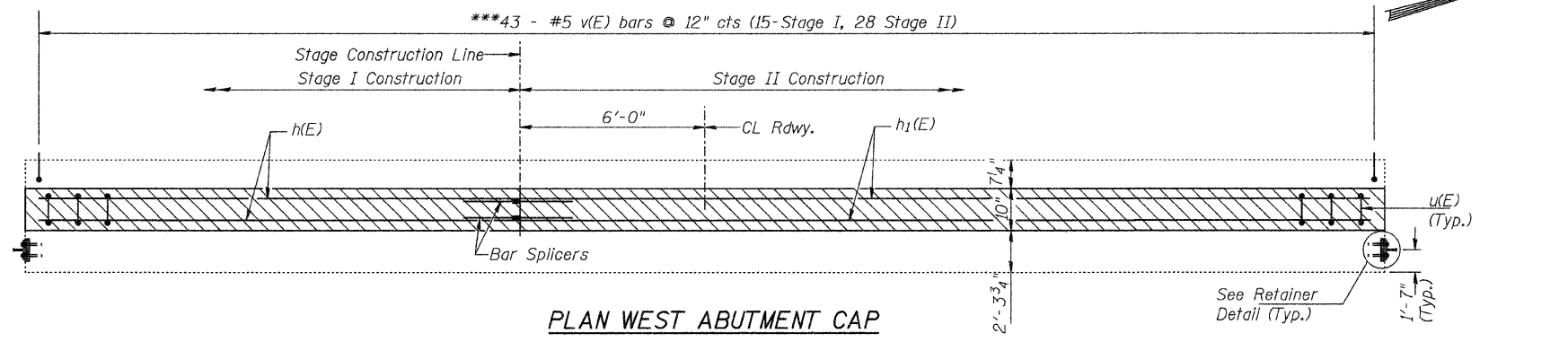
**SECTION B-B**

\*\*\*Epoxy Grout v(E) bars into drilled holes according to Section 584 of the Standard Specifications.

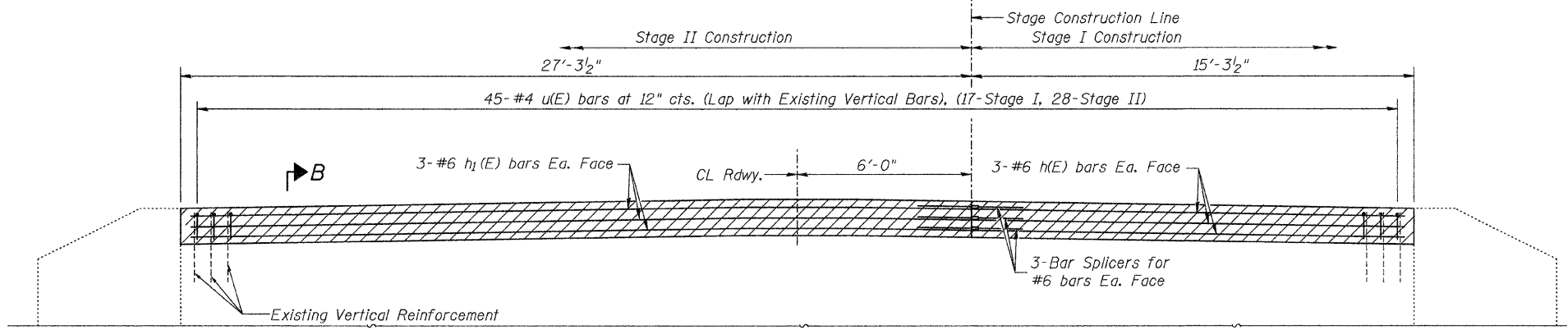
DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN



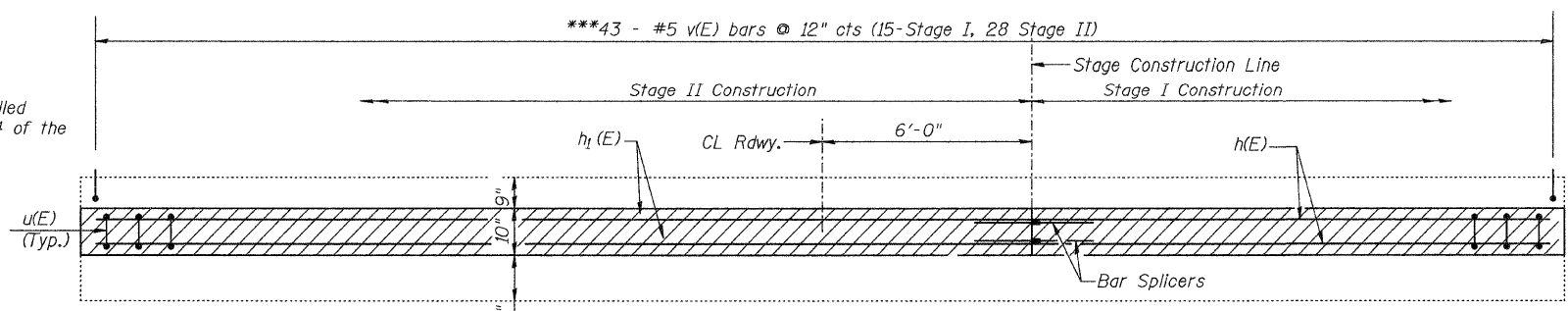
**ELEVATION WEST ABUTMENT CAP**  
(Looking West)



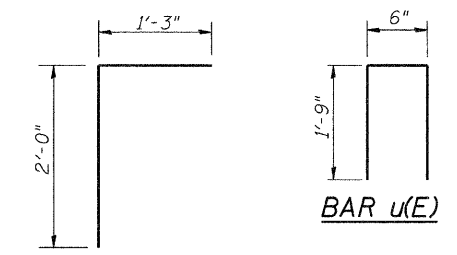
**PLAN WEST ABUTMENT CAP**



**ELEVATION EAST ABUTMENT CAP**  
(Looking East)



**PLAN EAST ABUTMENT CAP**



**BAR v(E)**

**MIN. BAR LAP**  
#4 = 1'-4"

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	12	#6	15'-0"	—
h1(E)	12	#6	27'-0"	—
u(E)	90	#4	4'-0"	Π
v(E)	86	#5	3'-3"	Γ
			Cu. Yd.	5.2
			Pound	1,290
			Each	12

Notes:  
Existing reinforcement bars extending into new construction shall be cleaned, straightened and incorporated into the new construction. Cost to be included with Concrete Removal.  
Hatched area shall be poured after Concrete Wearing surface on PPC Deck Beams is in place and cured.  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.  
See Sht 2 of 16 for additional anchor bolt notes.

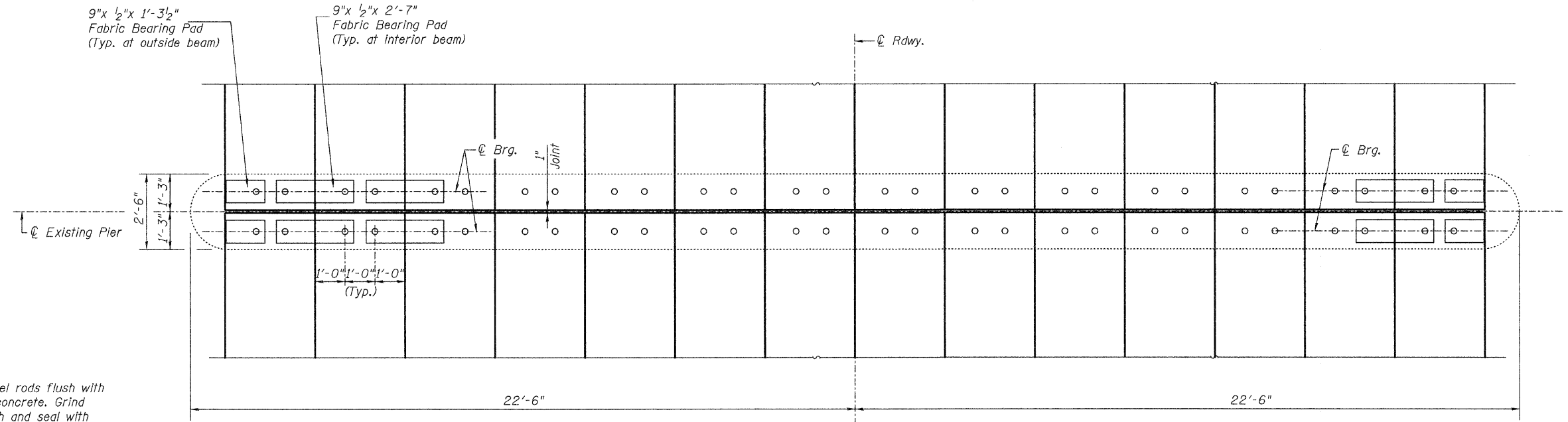
**ABUTMENT DETAILS**  
**F.A.S. 1247 (U.S. ROUTE 6)**  
**OVER MUD CREEK**  
**SECTION (6BR)D**  
**HENRY COUNTY**  
**STATION 666+69.05**  
**STR. NO. 037-0131**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

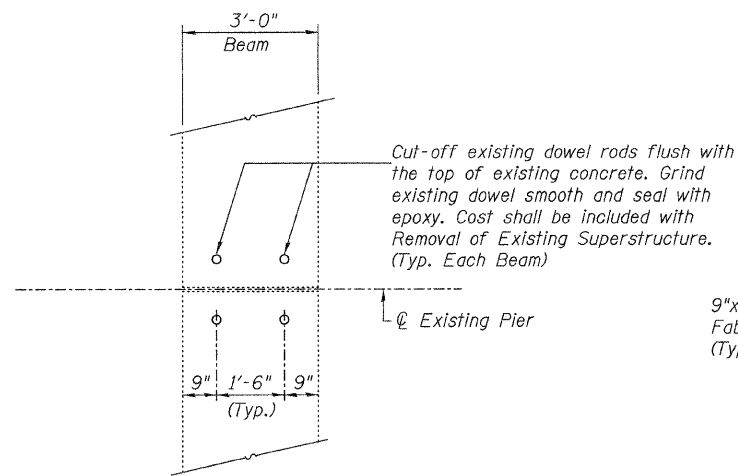
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1247	*	HENRY	80	45
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 15  
of 16 SHEETS

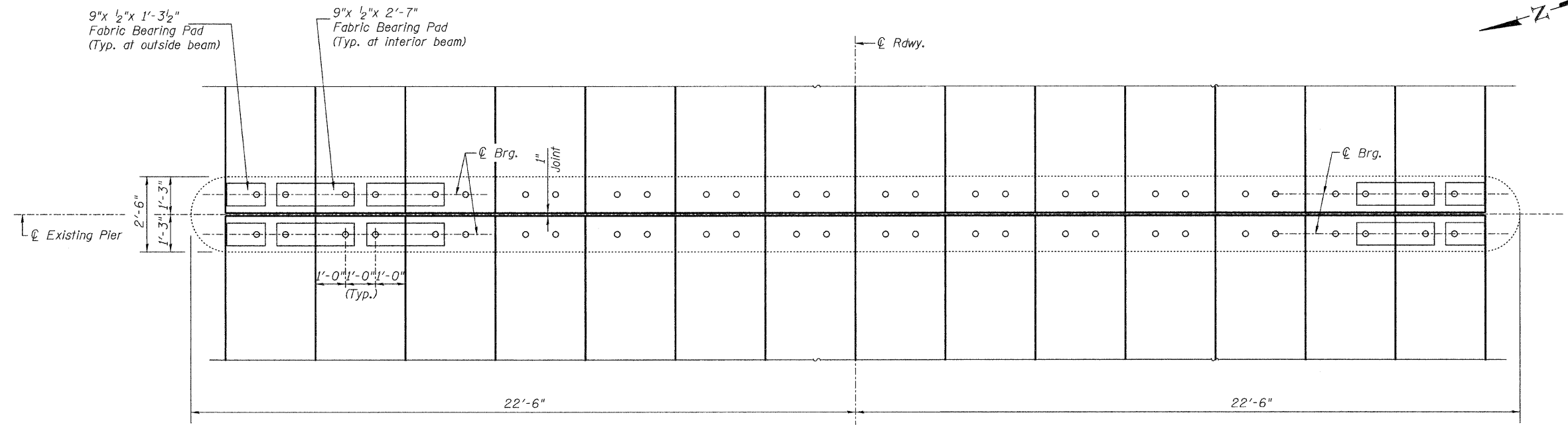
\* (6BR)D CONTRACT NO. 64D10



PLAN - PIER 2



PLAN - EXISTING BEAMS  
AT PIERS



PLAN - PIER 1

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

PIER DETAILS  
F.A.S. 1247 (U.S. ROUTE 6)  
OVER MUD CREEK  
SECTION (6BR)D  
HENRY COUNTY  
STATION 666+69.05  
STR. NO. 037-0131

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: Date:

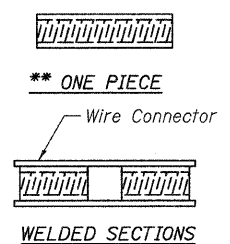
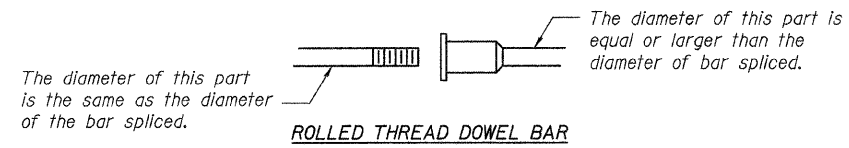
**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
- ② Minimum \*Pull-out Strength (Tension in kips) =  $0.66 \times f_y \times A_t$

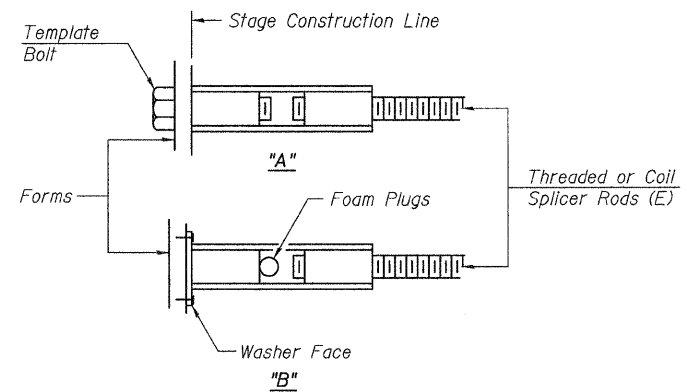
Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
 \* = 28 day concrete

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



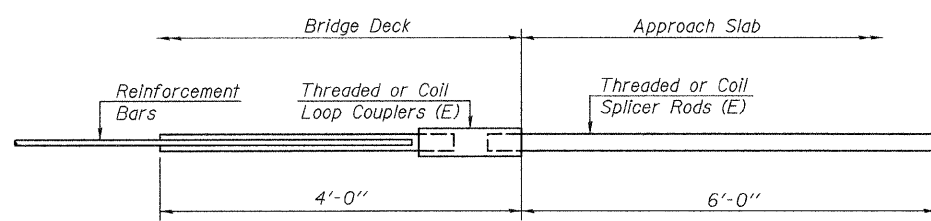
**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



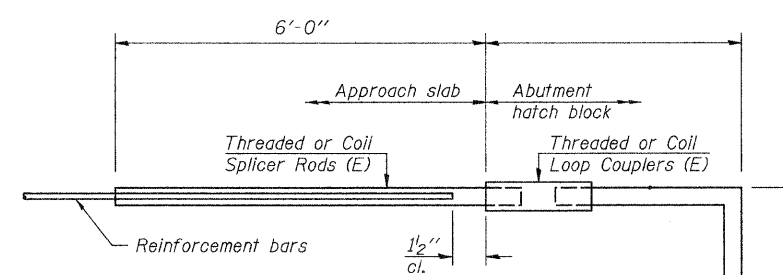
**INSTALLATION AND SETTING METHODS**

"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.



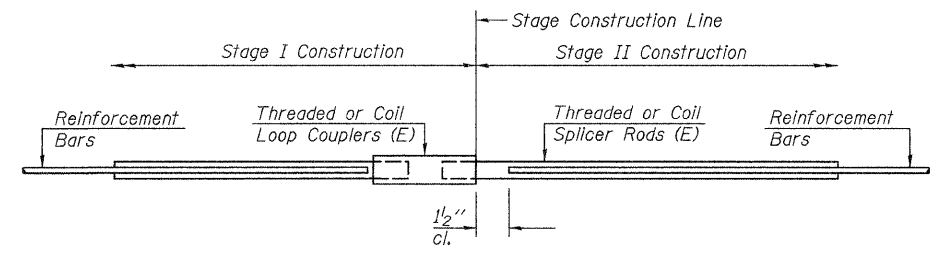
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

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



**FOR STUB ABUTMENTS**

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



**STANDARD**

Bar Size	No. Assemblies Required	Location
#4	132	Conc. wear. Surf.
#6	12	Abutments

DESIGNED	BAN
CHECKED	JEH
DRAWN	TC/TD
CHECKED	BAN

**BAR SPLICER ASSEMBLY DETAILS**  
 F.A.S. 1247 (U.S. ROUTE 6)  
 OVER MUD CREEK  
 SECTION (6BR)D  
 HENRY COUNTY  
 STATION 666+69.05  
 STR. NO. 037-0131

HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS  
 Rev: \_\_\_\_\_ Date: \_\_\_\_\_

BM: Chiseled Square in southeast corner of South Abutment Str. #037-0129  
Sta. 881+95.06, 16.17' Rt. El. 615.94

**EXISTING STRUCTURE:**

The original structure, SN 037-0061, was a single span thru truss built in 1930 as Sec. 125-BC, SBI Rt. 78, was rebuilt in 1979 as a 3-span PPC Deck Beam structure, SN 037-0129, built as FA Rte. 22, Sec. 125 BR-1, Sta. 690+05.00. The existing 3-span structure is 143'-4" back to back of abutments and the existing deck is 32'-0" out to out. The substructure consists of concrete closed abutments and two solid stem pile bent piers.

The existing superstructure is to be replaced with PPC Deck Beams and 5" (Min.) Concrete wearing Surface.

Traffic shall be maintained by utilizing stage construction.

No Salvage.

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 22	*	HENRY	80	47
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT	CONTRACT NO. 64010	
*(125BR-1D)				

**GENERAL NOTES**

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

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

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

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for new profile grade and beam camber.

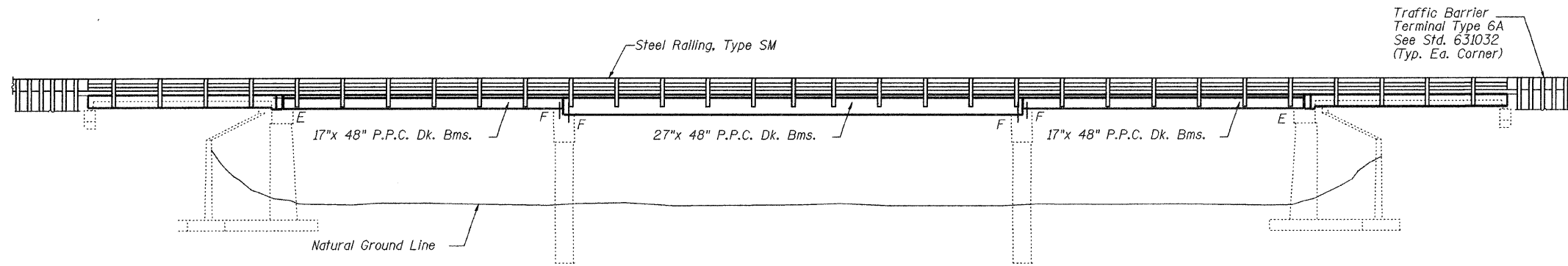
The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

Repair of the substructure shall be completed prior to placement of the new deck beams.

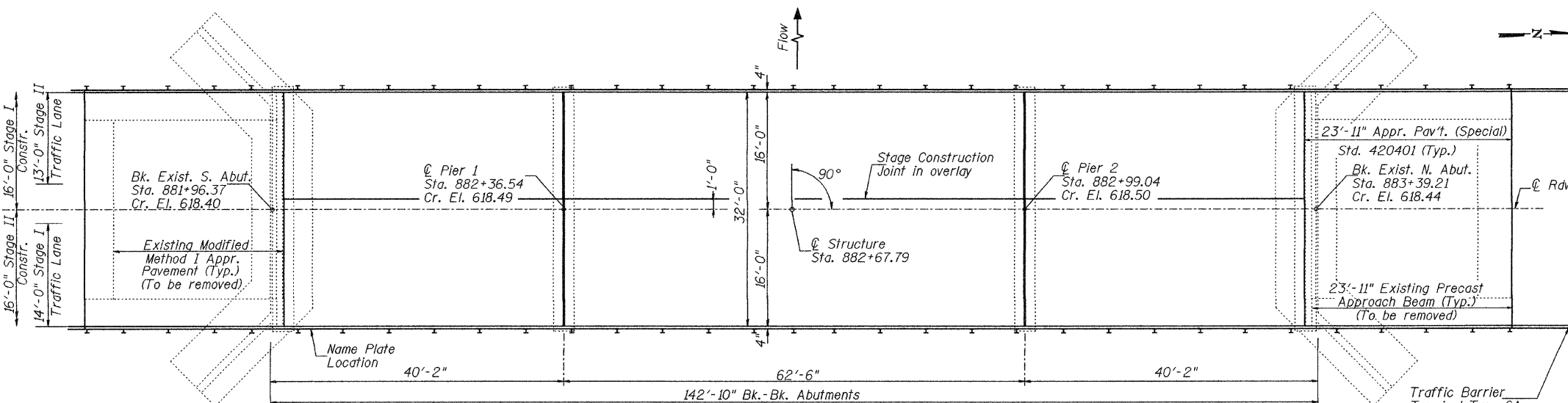
If the Contractor's procedures for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on the new deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying structural adequacy of the beams for the proposed loads. Cost included with existing superstructures.

Reinforcement bars designated (E) shall be epoxy coated.

Protective Coat shall be applied to the top and edges of the concrete wearing surface.



**ELEVATION**



**PLAN**

NOTE:  
See Roadway plans for profile grade information.

V.P.T. Sta. 881+96.37 Elev. 618.40	V.P.T. Sta. 882+36.54 Elev. 618.49	V.P.T. Sta. 882+99.04 Elev. 618.50	V.P.T. Sta. 883+39.21 Elev. 618.44
---------------------------------------	---------------------------------------	---------------------------------------	---------------------------------------

**PROFILE GRADE**

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

STATION 882+67.79  
REBUILT 200 BY  
STATE OF ILLINOIS  
F.A.P. RT. 22 SEC. (125BR-1D)  
LOADING HS20  
STRUCTURE NO. 037-0129

**NAME PLATE**  
See Std. 515001

Attach new name plate to back side of 8" rail element. Clean and re-locate existing name plate adjacent to new name plate. Cost included in the cost of "Name Plates".

**LOADING HS20-44**  
Allow 50#/sq. ft. future wearing surface.

**DESIGN SPECIFICATIONS**  
2002 AASHTO

**DESIGN STRESSES**  
FIELD UNITS

$f'_c = 3,500$  p.s.i.  
 $f'_c = 5,000$  p.s.i. (Concrete Wearing Surface)  
 $f_y = 60,000$  p.s.i. (Reinforcement)

**PRECAST PRESTRESSED UNITS**

$f'_c = 5,000$  p.s.i.  
 $f'_{ci} = 4,000$  p.s.i.  
 $f'_s = 270,000$  p.s.i. ( $\frac{1}{2}$ "  $\phi$  low relaxation strands)  
 $f'_{si} = 201,960$  p.s.i. ( $\frac{1}{2}$ "  $\phi$  low relaxation strands)

**INDEX TO SHEETS**

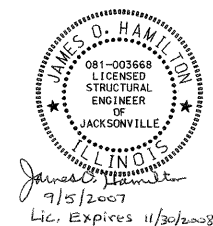
- General Plan
- Stage Construction Details
- Temporary Concrete Barrier For Stage Construction
- Deck Beam Details - Spans 1 & 3
- Deck Beams Details - Span 2
- Overlay Details & Typical Section
- Preformed Joint Strip Seal
- Steel Railing, Type SM
- Superstructure Details
- Abutment Repairs & Concrete Removal
- Pier 1 Repairs
- Pier 2 Repairs
- Abutment Details
- Pier Details
- Bar Splicer Assembly Details

**TOTAL BILL OF MATERIAL**

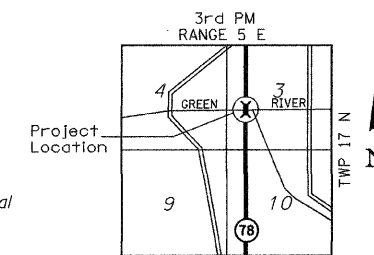
Item	Unit	Super	Sub.	Total
Removal of Existing Superstructures	Each	1	-	1
Removal of Existing Precast Concrete Units	Sq. Ft.	359	-	359
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2,459	-	2,459
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2,006	-	2,006
Protective Coat	Sq. Yd.	512	-	512
Reinforcement Bars, Epoxy Coated	Pound	6,350	810	7,160
Steel Railing, Type SM	Foot	379	-	379
Concrete Wearing Surface, 5"	Sq. Yd.	497	-	497
Bridge Deck Grooving	Sq. Yd.	496	-	496
Structural Repair of Concrete (Depth equal to or less than 5 in)	Sq. Ft.	-	235	235
Name Plates	Each	1	-	1
Bar Splicers	Each	141	12	153
Asbestos Bearing Pad Removal	Each	32	-	32
Concrete Structures	Cu. Yd.	4.1	-	4.1
Concrete Removal	Cu. Yd.	4.3	-	4.3
Preformed Joint Strip Seal	Foot	64	-	64

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

*Rachel E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES



*James D. Hamilton*  
9/5/2007  
Lic. Expires 11/30/2008



**LOCATION SKETCH**

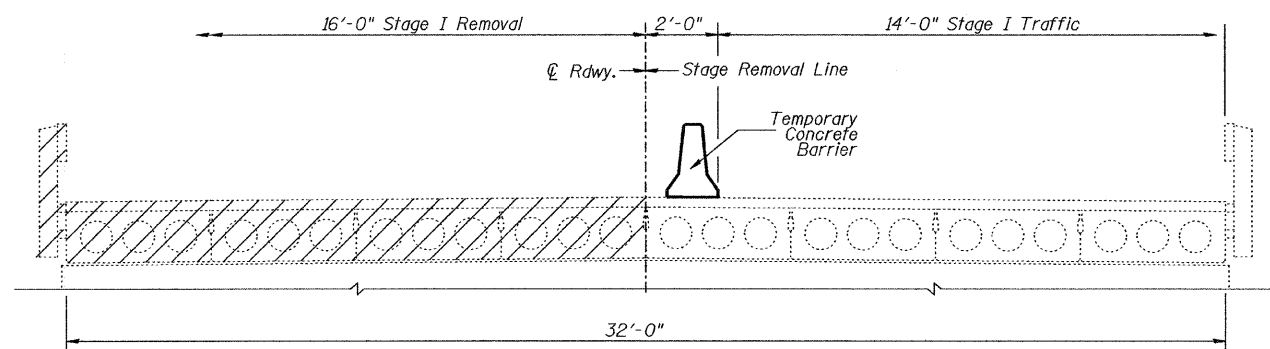
**GENERAL PLAN**  
FAP 22 (ILLINOIS ROUTE 78)  
OVER GREEN RIVER  
SEC. (125BR-1D)  
HENRY COUNTY  
STATION 882+67.79  
STR. NO. 037-0129

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: \_\_\_\_\_ Date: \_\_\_\_\_

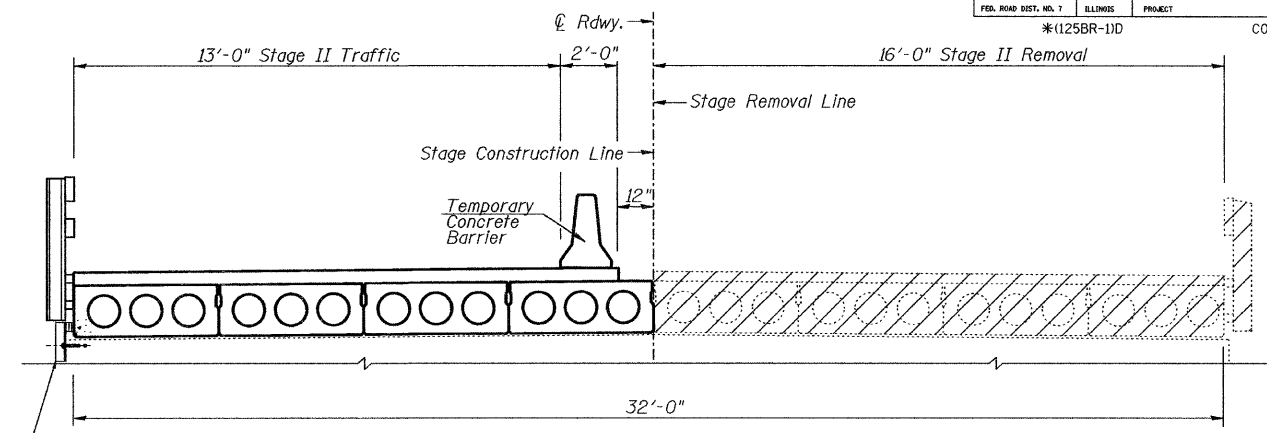
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 22	*	HENRY	80	48
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	* (125BR-11D)	

SHEET NO. 2  
OF 15 SHEETS

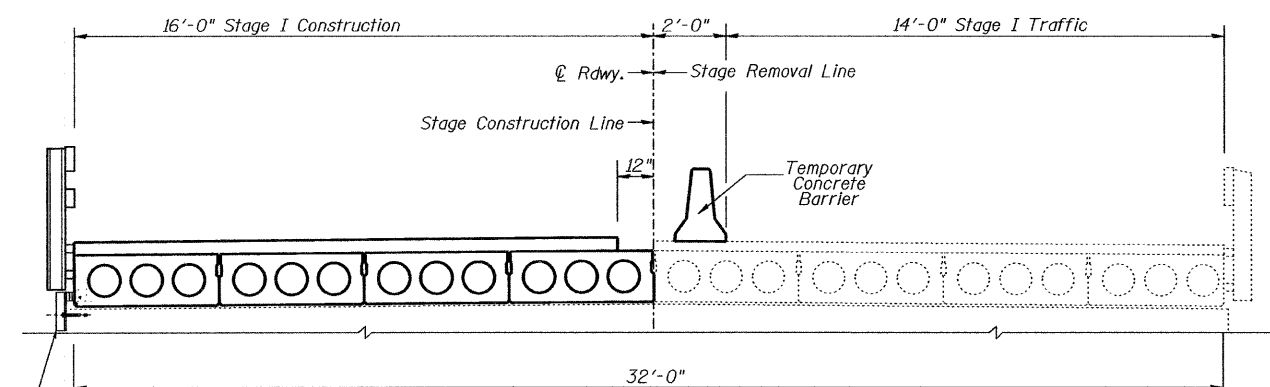
CONTRACT NO. 64D10



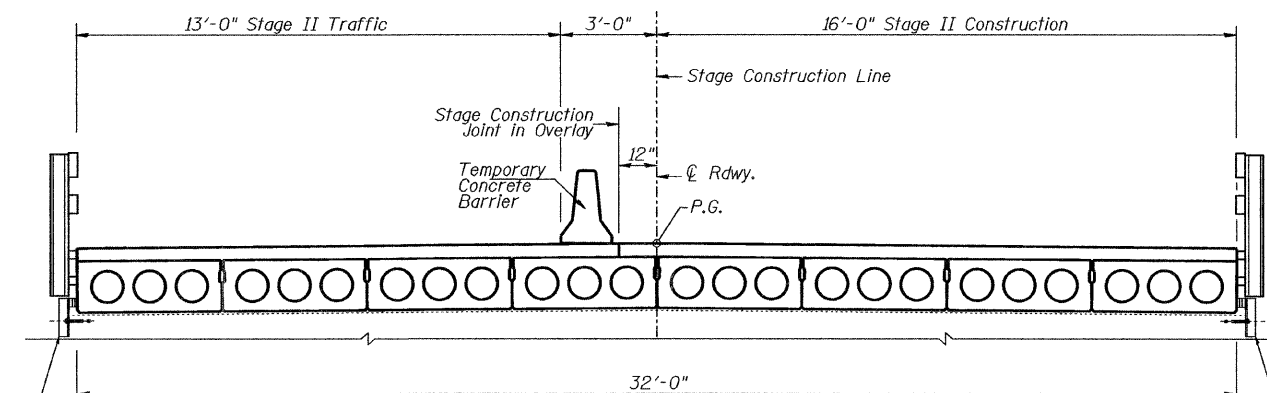
**STAGE I REMOVAL**



**STAGE II REMOVAL**



**STAGE I CONSTRUCTION**

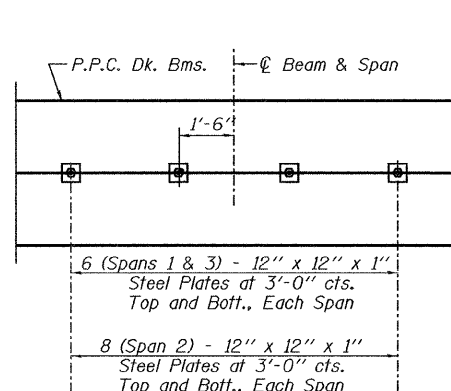


**STAGE II CONSTRUCTION**

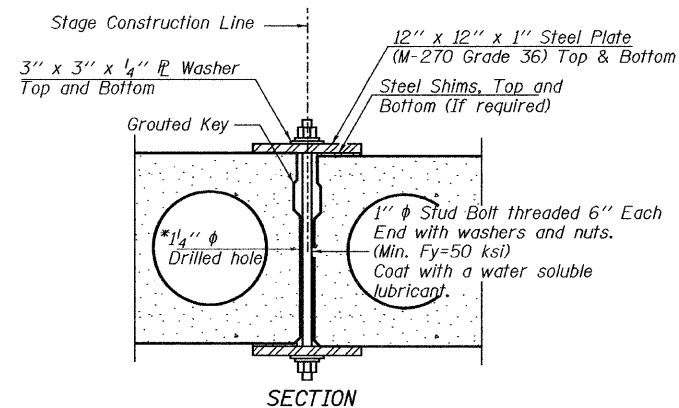
Permanent Side Retainers & Abutments (See Sheet 13 of 15 for details)

Permanent Side Retainers & Abutments (See Sheet 13 of 15 for details)

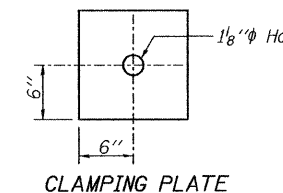
Permanent Side Retainers & Abutments (See Sheet 13 of 15 for details)



**PLAN**



**SECTION**



**CLAMPING PLATE**

**Notes:**  
All cross-sections are looking North. Hatched area indicates Removal of Existing Superstructure.  
For Temporary Concrete Barrier Details see sheet 3 of 15.  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

**SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.**

Cost included with Precast Prestressed Concrete Deck Beams.

See Stage Construction Details for traffic lanes.

Stage Construction of Precast Prestressed concrete deck beams shall be according to Article 504.06(d) of the Standard Specifications.

\* As an alternate to the drilled holes, the Contractor may request the Fabricator to cast 2" diameter semi-circular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts. If the Contractor elects to use this alternate, the details shall be identified on the shop drawings.

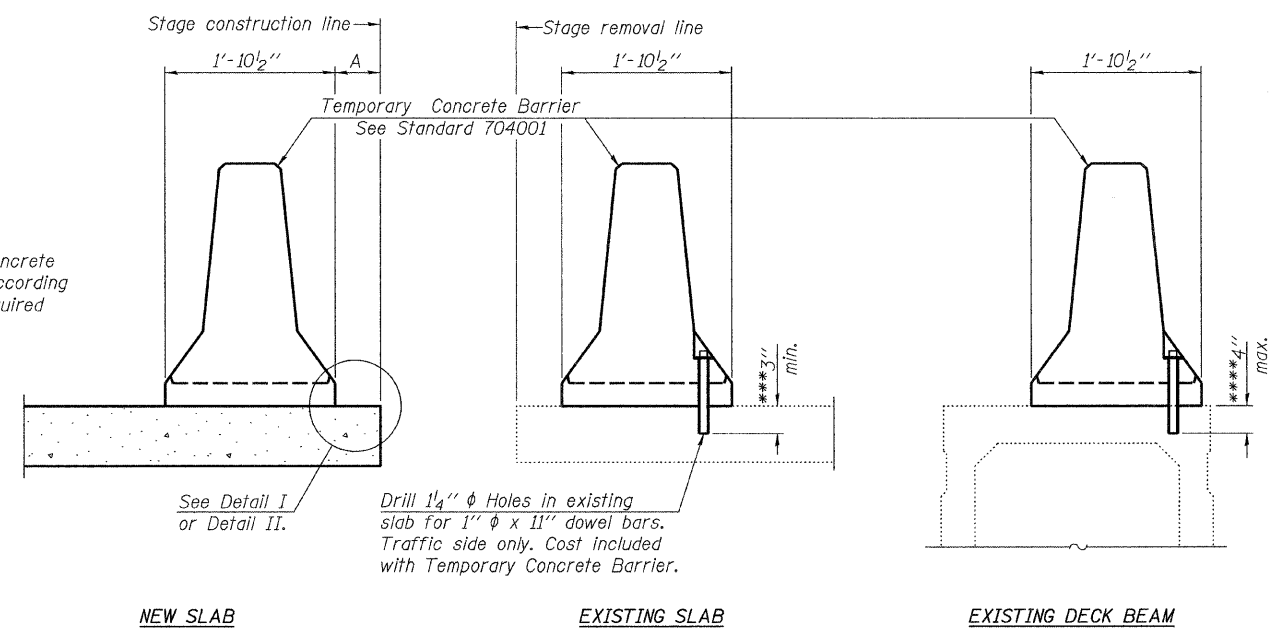
DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

**STAGE CONSTRUCTION DETAILS**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-11D)**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

**HUTCHISON ENGINEERING, INC.**  
**JACKSONVILLE, ILLINOIS**

Rev: \_\_\_\_\_ Date: \_\_\_\_\_





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

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

**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

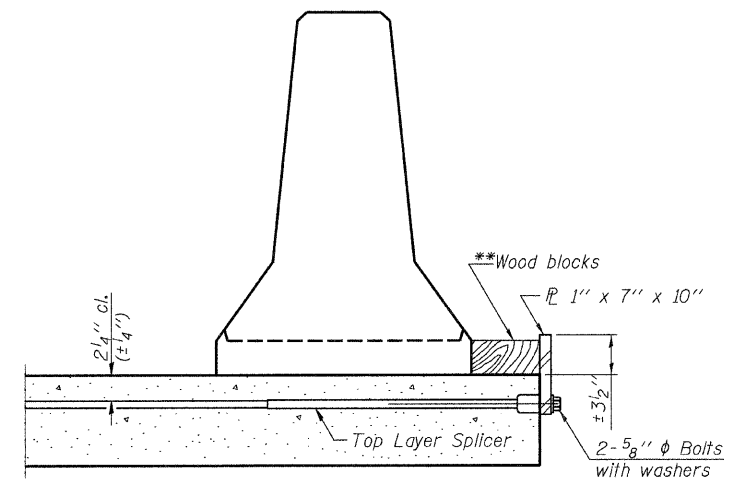
**Detail I - With Bar Splicer or Couplers:**  
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

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

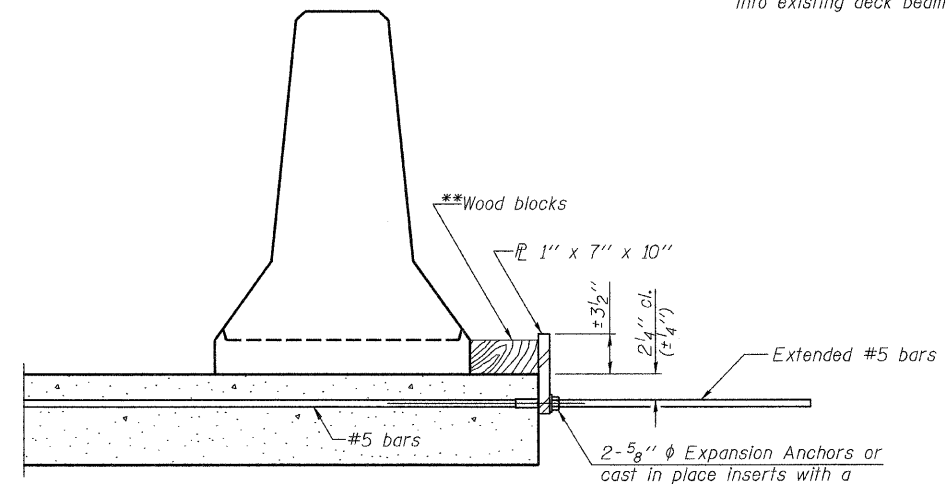
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

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

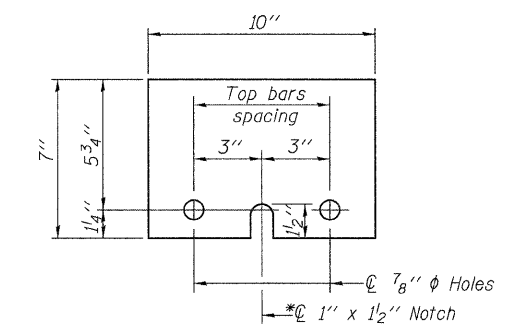


**DETAIL I**



**DETAIL II**

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

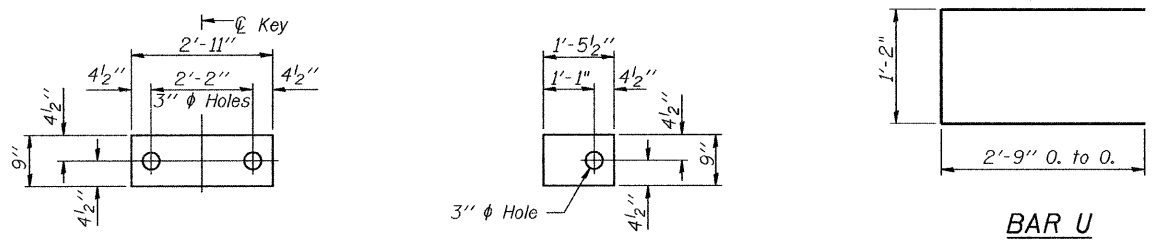


**STEEL RETAINER PL 1" x 7" x 10"**  
\* Required only with Detail II

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-1)D**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

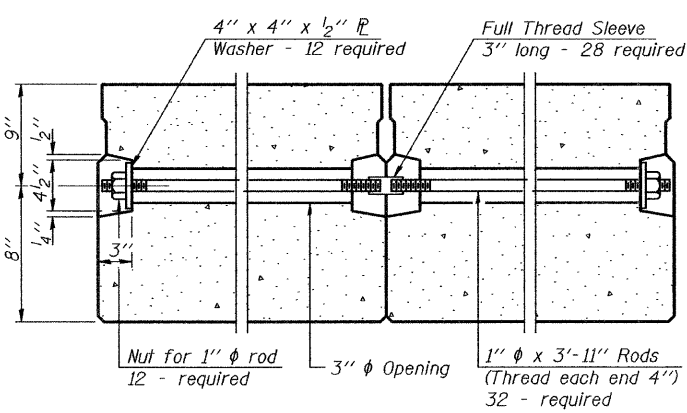
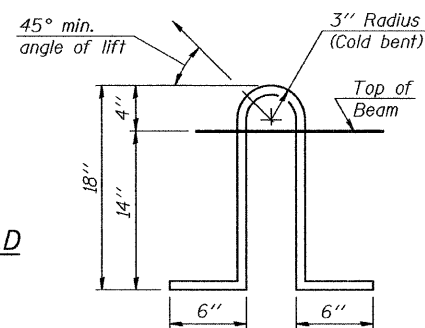
HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS  
 Rev:                      Date:



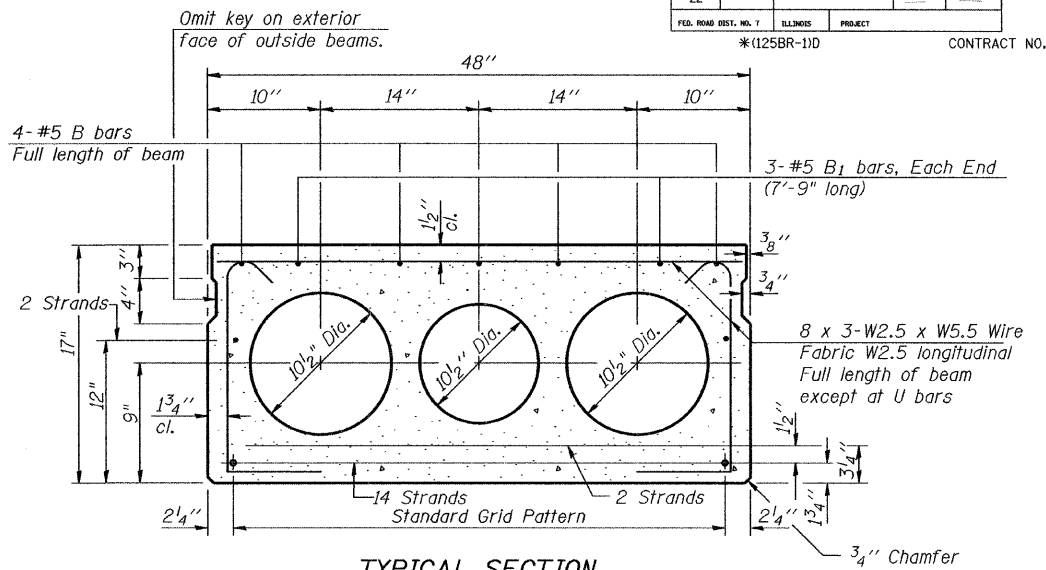
**1/2" FABRIC BEARING PAD**  
(Interior) (14 Req'd) **FIXED**  
(Exterior) (4 Req'd.)



**1/4" FABRIC BEARING PAD**  
(Interior) (28 Req'd) **EXPANSION**  
(Exterior) (8 Req'd.)



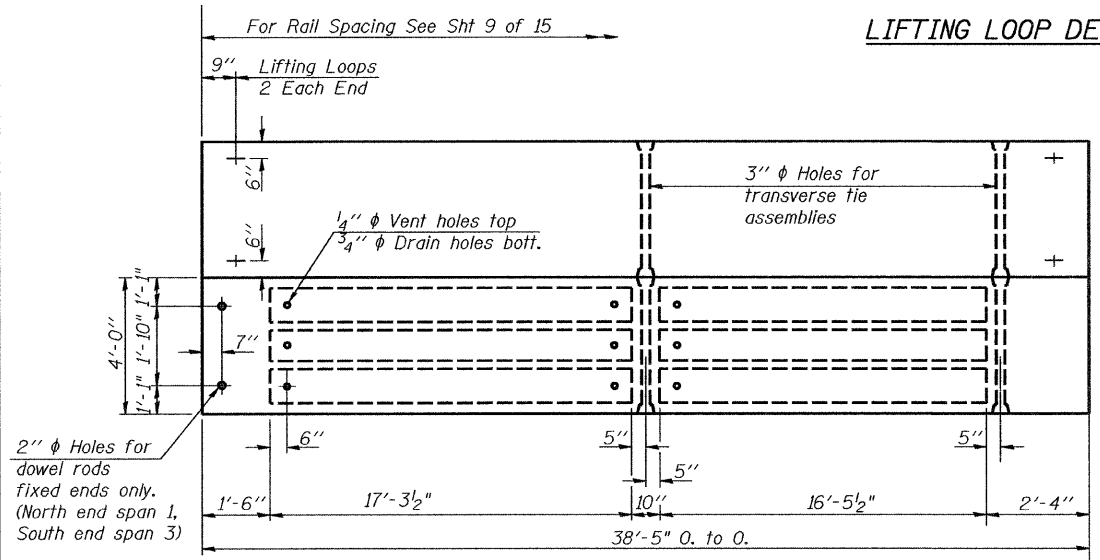
**TYPICAL TRANSVERSE TIE ASSEMBLY**



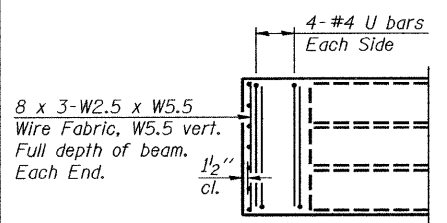
**TYPICAL SECTION**

18-1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
14-Strands 1 3/4" up, 2-Strands 3/4" up, 2-Strands 12" up

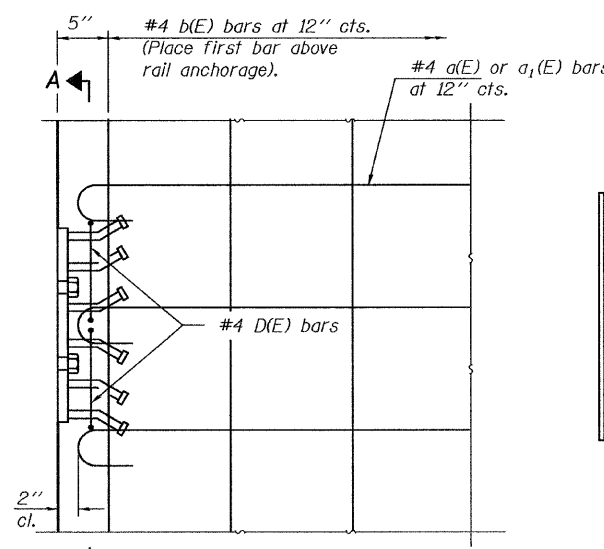
Note:  
Place strands symmetrically about  $\phi$  of beam.



**PLAN**

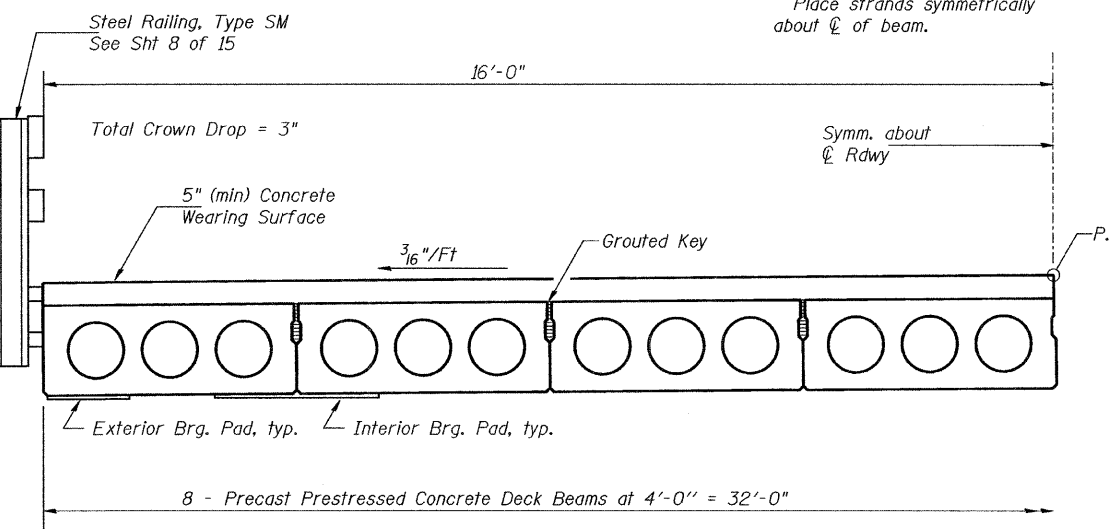


**END PLAN**



**PLAN AT RAIL ANCHOR**

Rail anchorage shall be cast in PPC Deck beams. See typical section for dimensions, strand pattern and bar callouts not shown. 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.



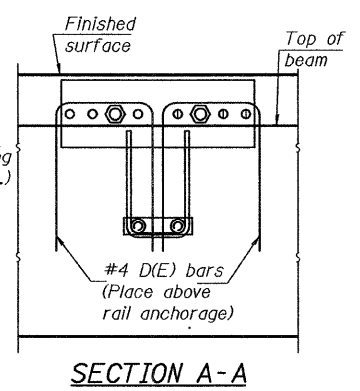
**HALF CROSS SECTION**

**BILL OF MATERIAL**

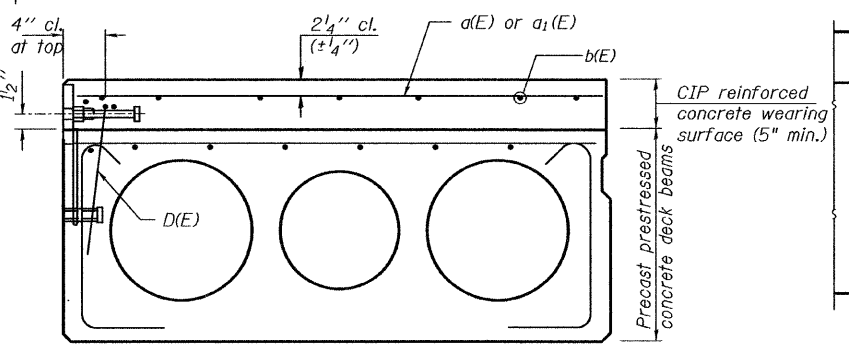
Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms. (17" Depth)	Sq. Ft.	2,459

**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"  $\phi$  -270 ksi strands, as shown. The 1"  $\phi$  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 ASTM A 706 (IL MOD), 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, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i. Rail Post Anchor devices shall be cast into outside face of exterior beams as specified elsewhere.



**SECTION A-A**

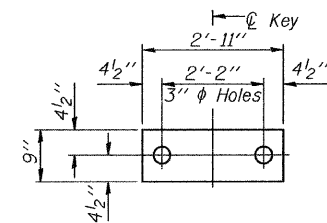


**FASCIA BEAM**

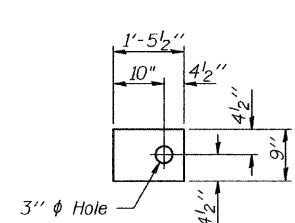
DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

**DECK BEAM DETAILS**  
**SPANS 1 & 3**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-1D)**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**  
**HUTCHISON ENGINEERING, INC.**  
**JACKSONVILLE, ILLINOIS**

Rev: \_\_\_\_\_ Date: \_\_\_\_\_

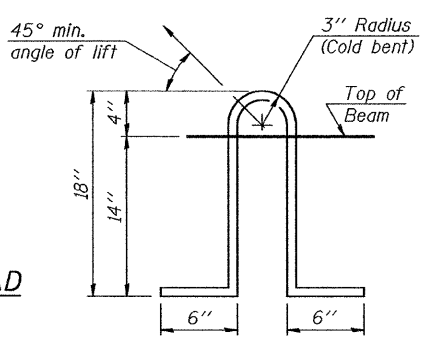


**1/2" FABRIC BEARING PAD**  
(Interior)  
(14 Req'd)

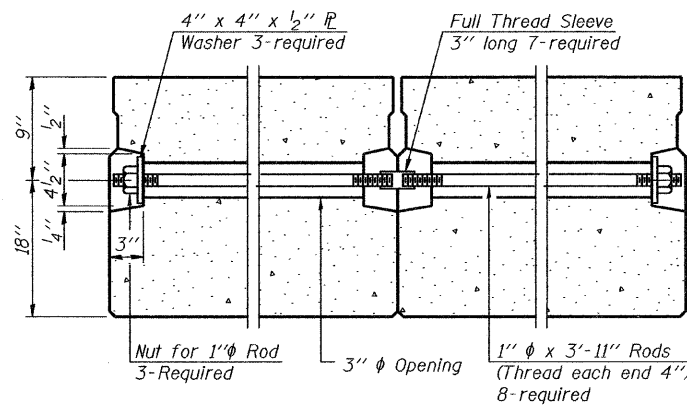


**1/2" FABRIC BEARING PAD**  
(Exterior)  
(4 Req'd.)

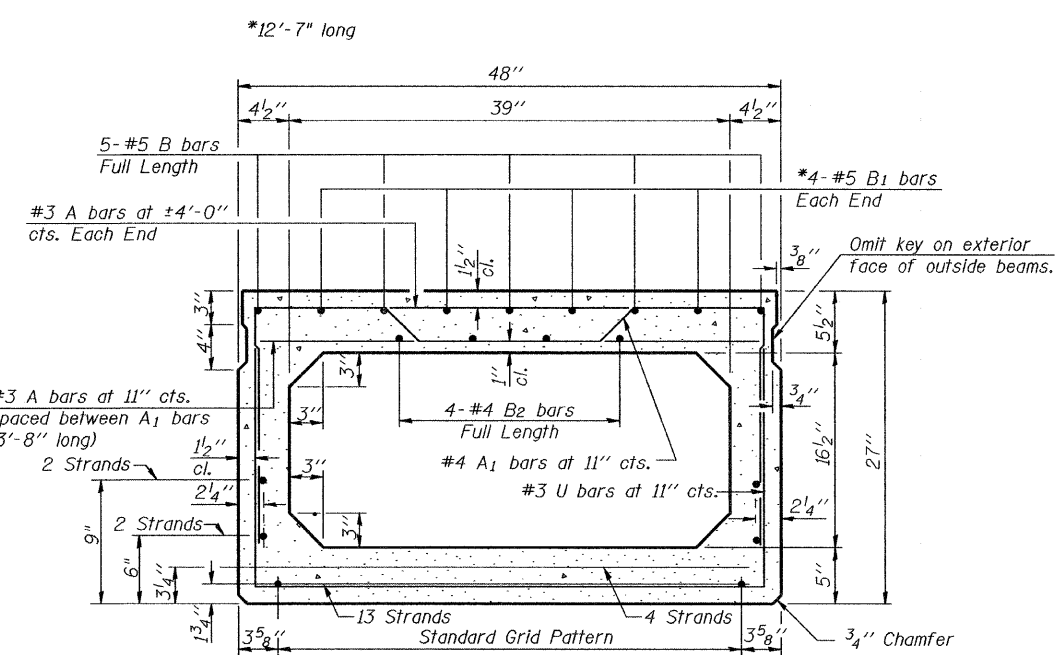
**FIXED**



**LIFTING LOOP DETAIL**



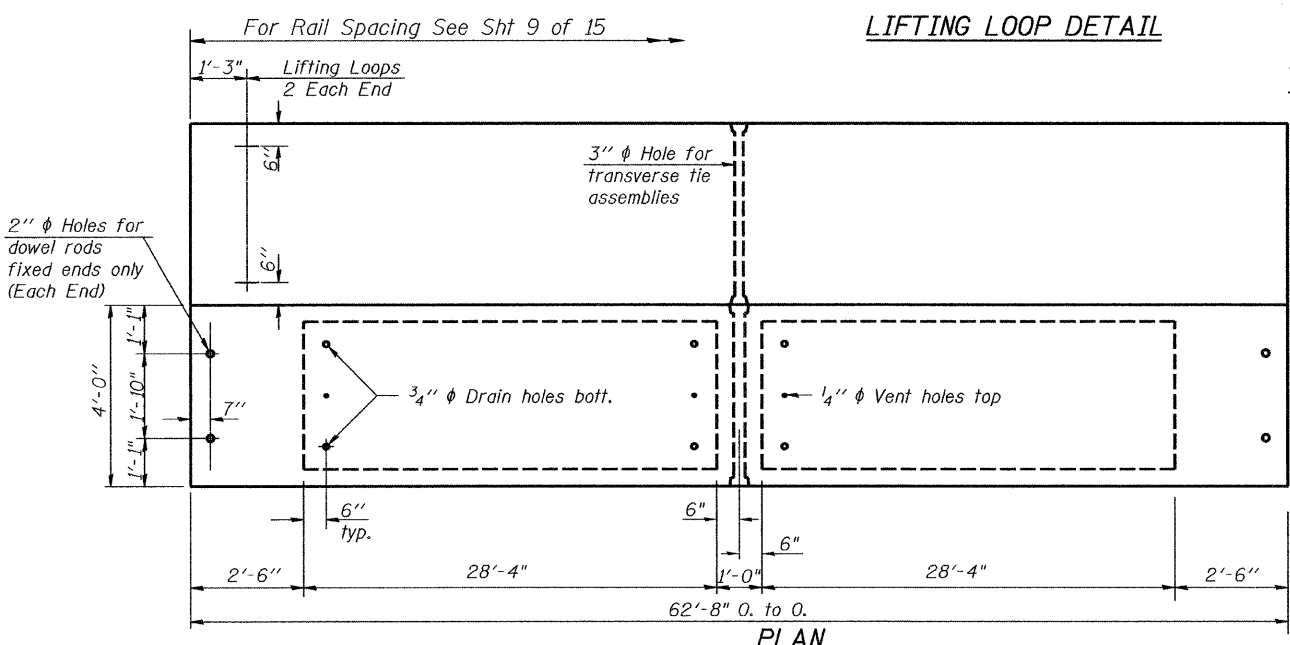
**TYPICAL TRANSVERSE TIE ASSEMBLY**



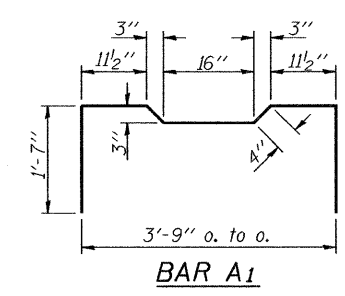
**TYPICAL SECTION**

21-1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
13-Strands 1 3/4" up, 4-Strands 3 1/4" up, 2-Strands 6" up, 2-Strands 9" up

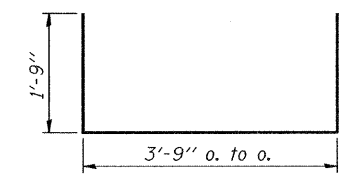
Note:  
Place strands symmetrically about  $\phi$  of beam.



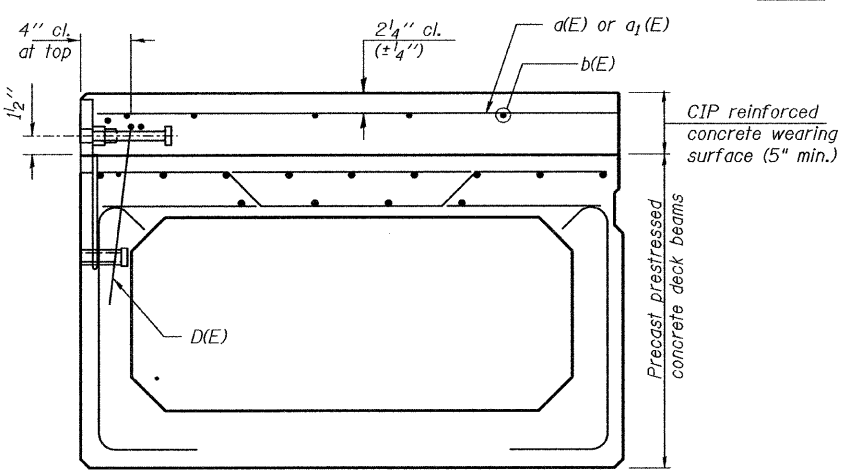
**PLAN**



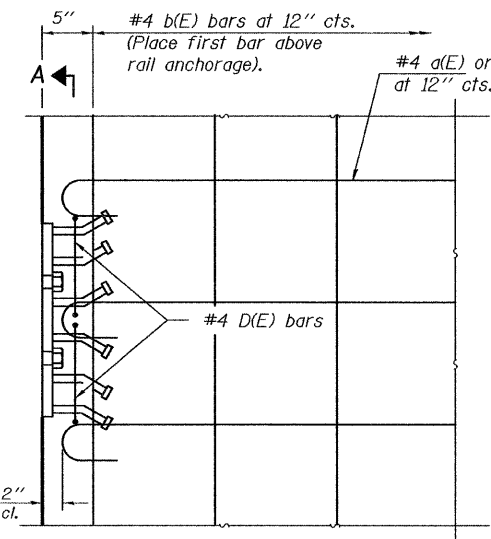
**BAR A1**



**BARS U & U1**

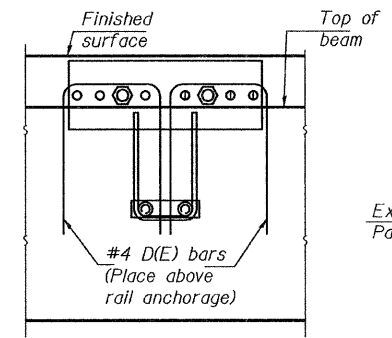


**TYPICAL SECTION**



**PLAN AT RAIL ANCHOR**

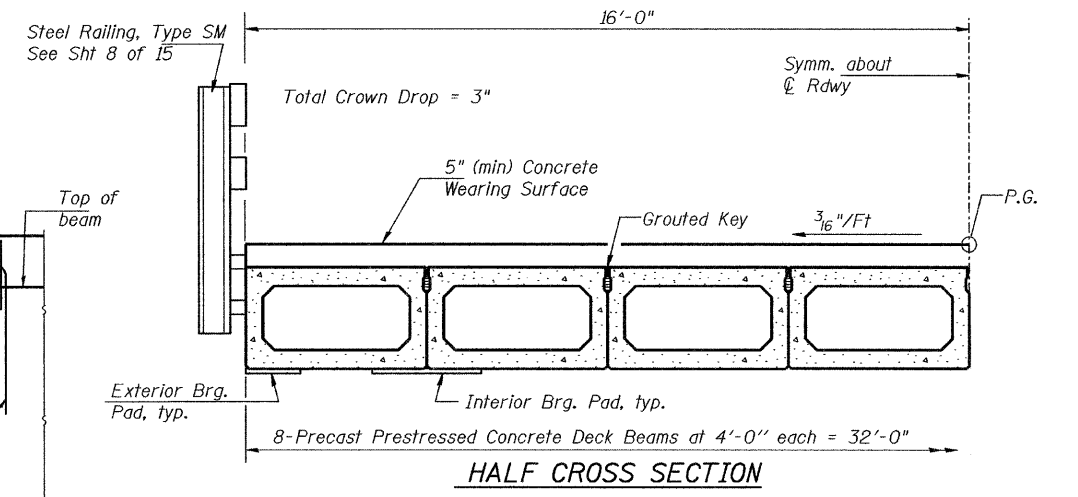
Rail anchorage shall be cast in PPC Deck beams. See typical section for dimensions, strand pattern and bar callouts not shown.  
Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.



**SECTION A-A**

**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 3-1/2"  $\phi$ -270 ksi strands, as shown.  
The 1"  $\phi$  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 ASTM A 706 (IL MOD), 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, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.  
Required Release Strength, f'ci, shall be 4,000 p.s.i.  
Rail Post Anchor devices shall be cast into outside face of exterior beams as specified elsewhere.



**HALF CROSS SECTION**

**BILL OF MATERIAL**

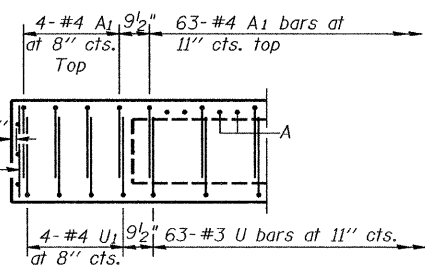
Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms. (27" Depth)	Sq. Ft.	2,006

**DECK BEAM DETAILS SPAN 2  
FAP 22 (ILLINOIS ROUTE 78)  
OVER GREEN RIVER  
SEC. (125BR-1/D)  
HENRY COUNTY  
STATION 882+67.79  
STR. NO. 037-0129**

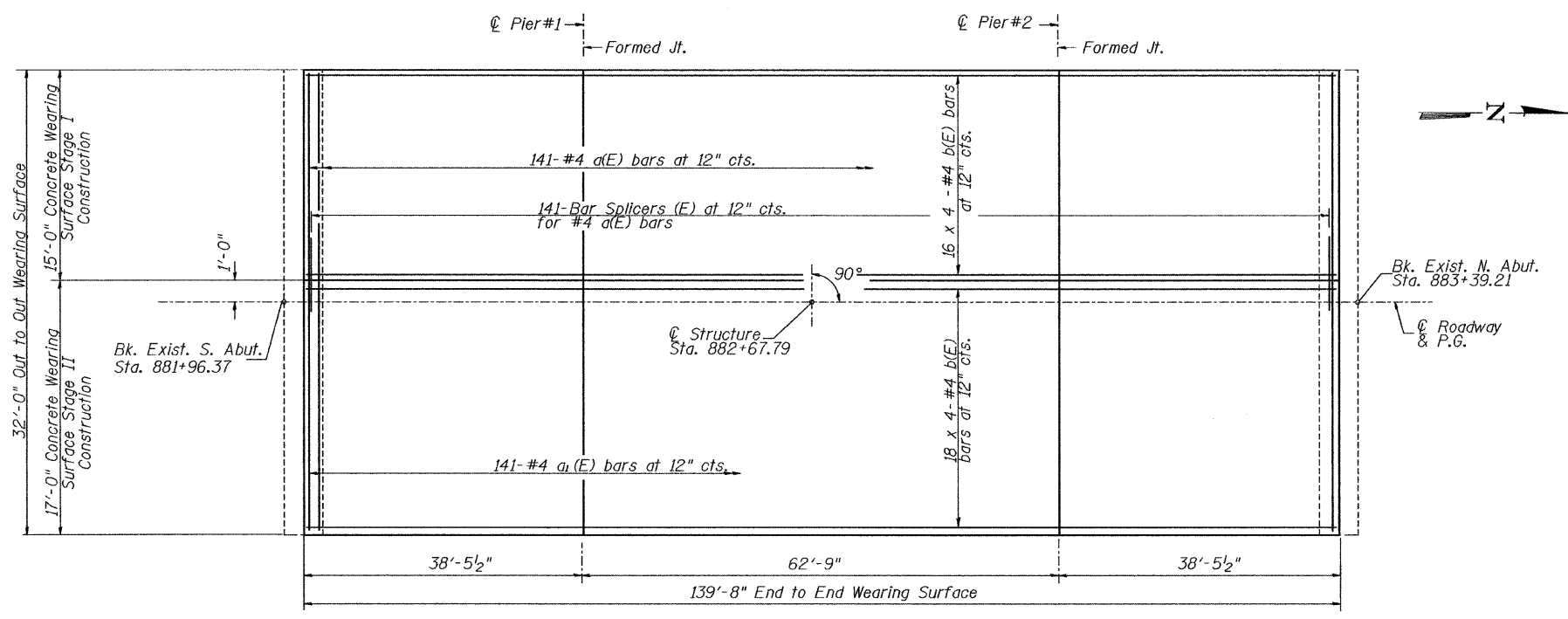
HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS  
Rev: \_\_\_\_\_ Date: \_\_\_\_\_

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

8 x 3-W2.5 x W5.5  
Wire Fabric, W5.5 vert.  
Full depth of beam.  
Each End.

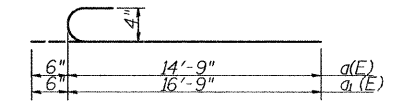


**END ELEVATION**

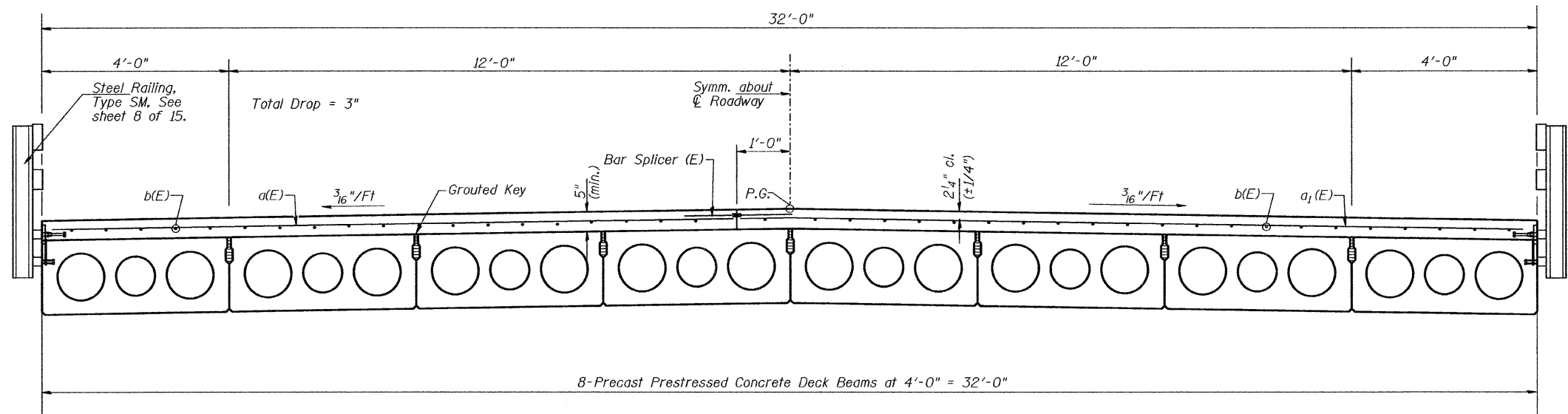


**PLAN**  
**CONCRETE WEARING SURFACE**

**MIN. BAR LAP**  
#4 Bar = 1'-8"



**BARS a(E) & a1(E)**

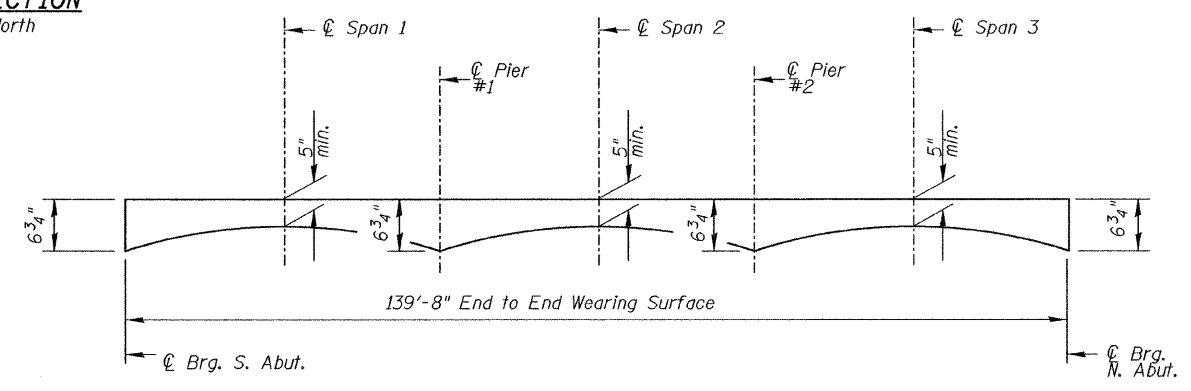


**CROSS SECTION**  
Looking North

**SUPERSTRUCTURE**  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a(E)	141	#4	15'-3"	C	
a1(E)	141	#4	17'-3"	C	
b(E)	136	#4	36'-2"	—	
Reinforcement Bars, Epoxy Coated				Lbs.	6,350
Concrete Wearing Surface, 5"				Sq. Yds.	497
Bar Splicers				Each	141

For details of Bar Splicers, see sheet 15 of 15.  
Bars indicated thus 1 x 2 - #4 etc. indicates 1 line of bars with 2 lengths per line.  
For Formed Joint Details, see sheet 9 of 15.



**REINFORCED CONCRETE WEARING SURFACE PROFILE**

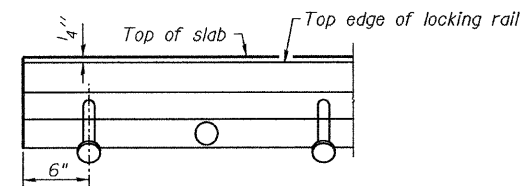
**Notes :**  
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.  
See sheet 4 & 5 of 15 for bearing pad details.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

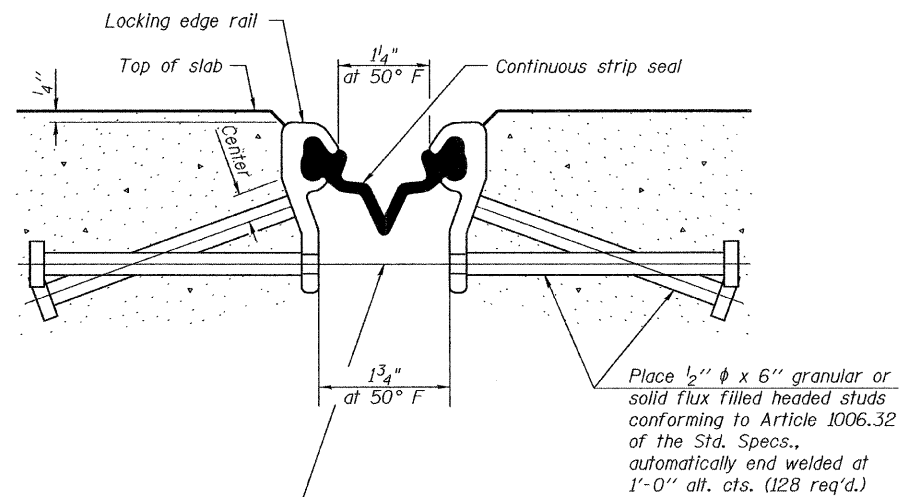
**OVERLAY DETAILS & TYPICAL SECTION**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-1D)**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_



**TYPICAL END TREATMENT**



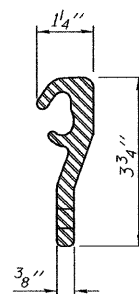
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU STRIP SEAL JOINT  
FOR OVERLAY OVER DECK BEAMS**

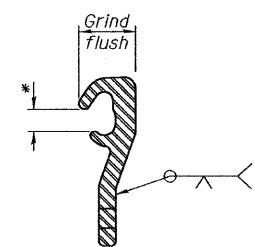
**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.  
 The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.  
 The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.  
 The manufacturer's recommended installation methods shall be followed.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Preformed Joint Strip Seal	Foot	64



**LOCKING EDGE RAIL**



**LOCKING EDGE RAIL SPLICE**

\* Omit weld at seal opening.

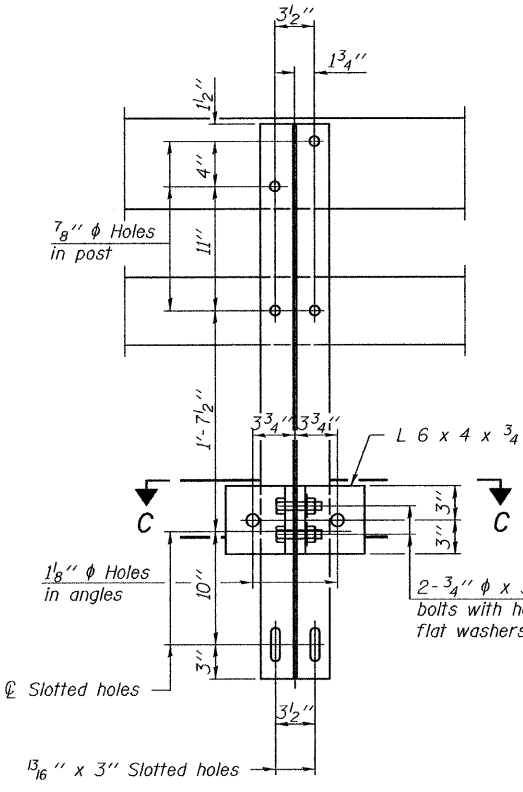
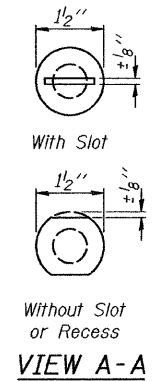
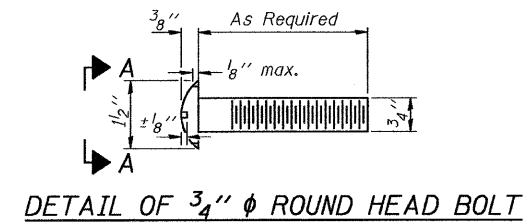
DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

**PREFORMED JOINT STRIP SEAL  
 FAP 22 (ILLINOIS ROUTE 78)  
 OVER GREEN RIVER  
 SEC. (125BR-1)D  
 HENRY COUNTY  
 STATION 882+67.79  
 STR. NO. 037-0129**

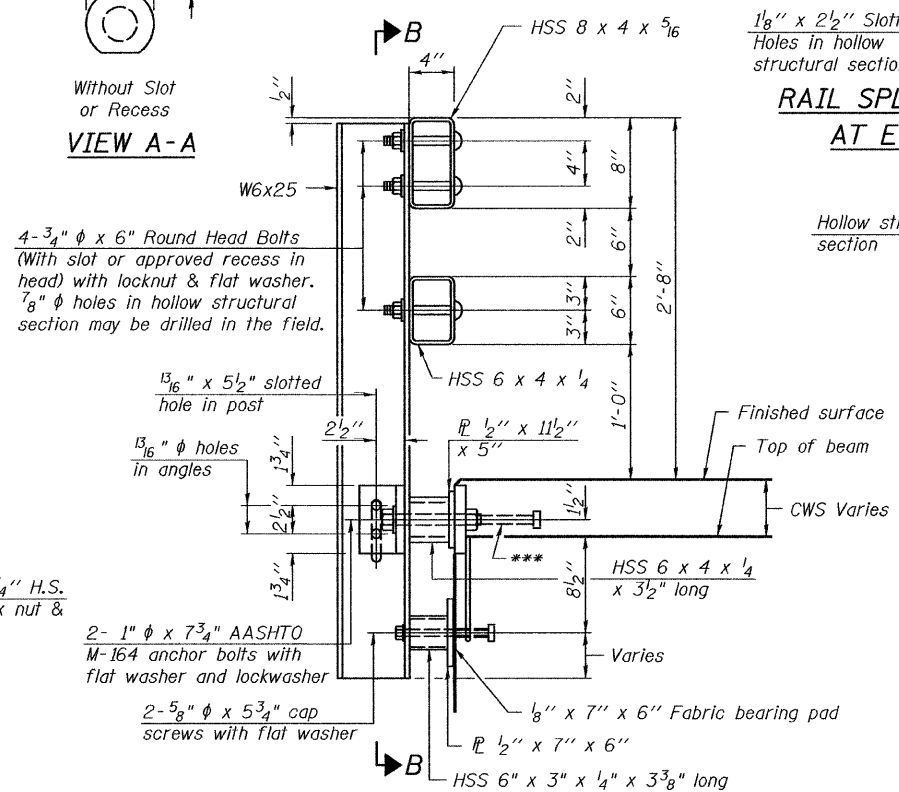
HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_

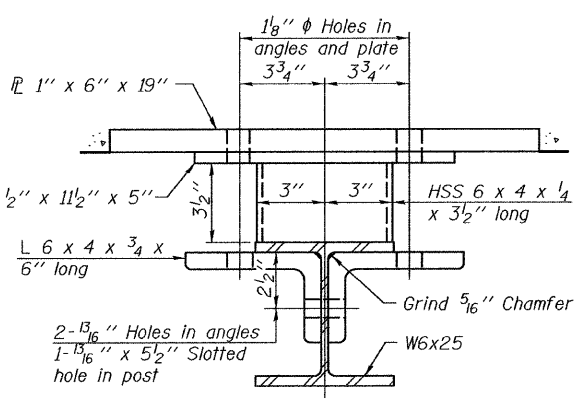
FOR RAIL POST SPACING SEE SH.#9 OF 15



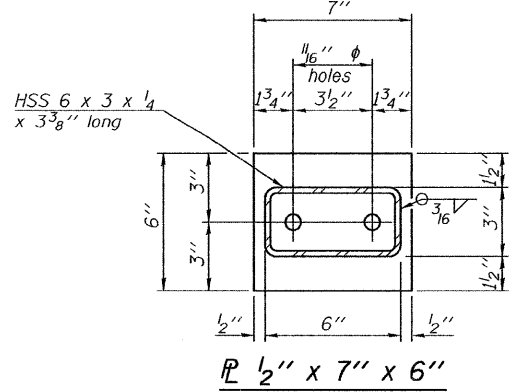
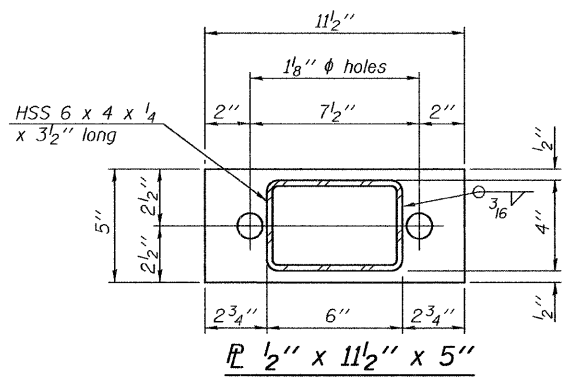
SECTION B-B



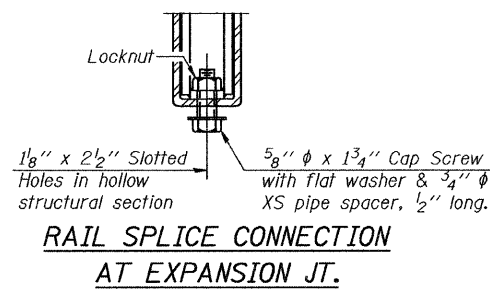
SECTION AT RAIL POST



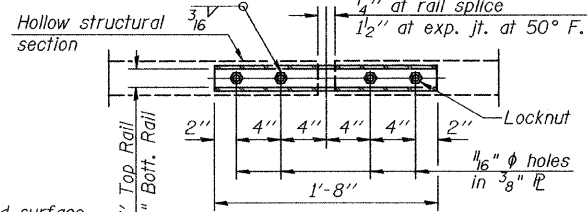
SECTION C-C



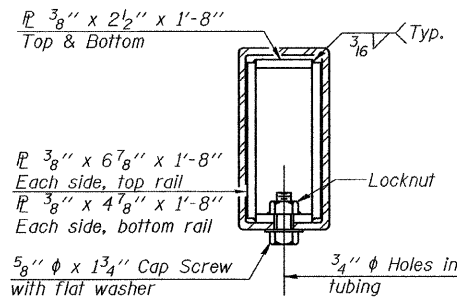
VIEW E-E



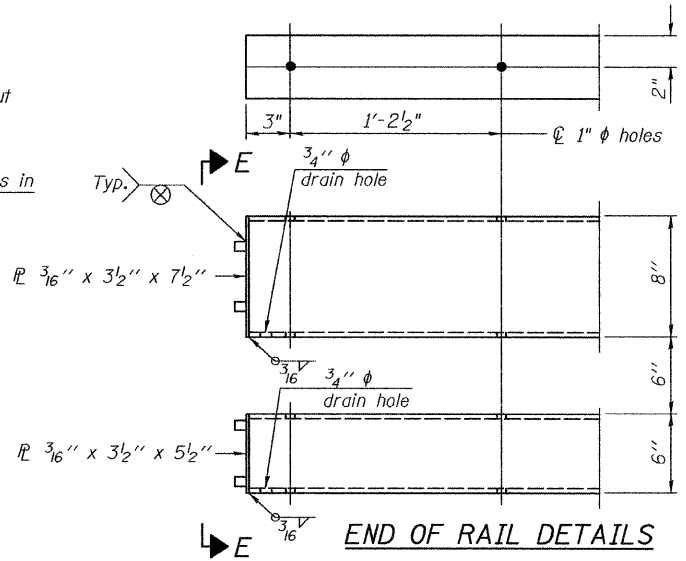
RAIL SPLICE CONNECTION AT EXPANSION JT.



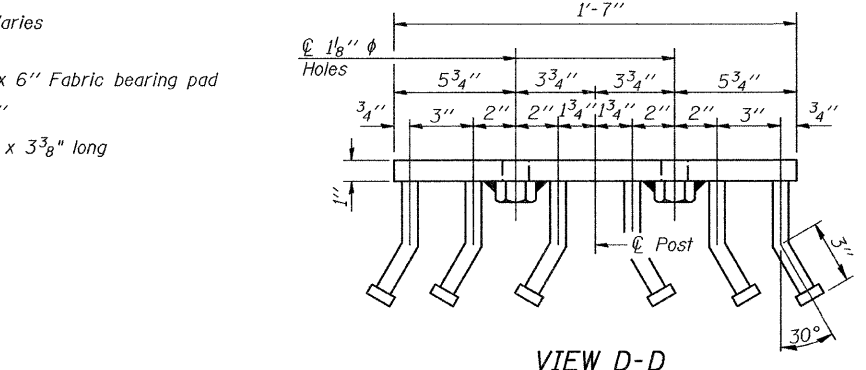
PLAN-BOTT. SPLICE R TYPICAL



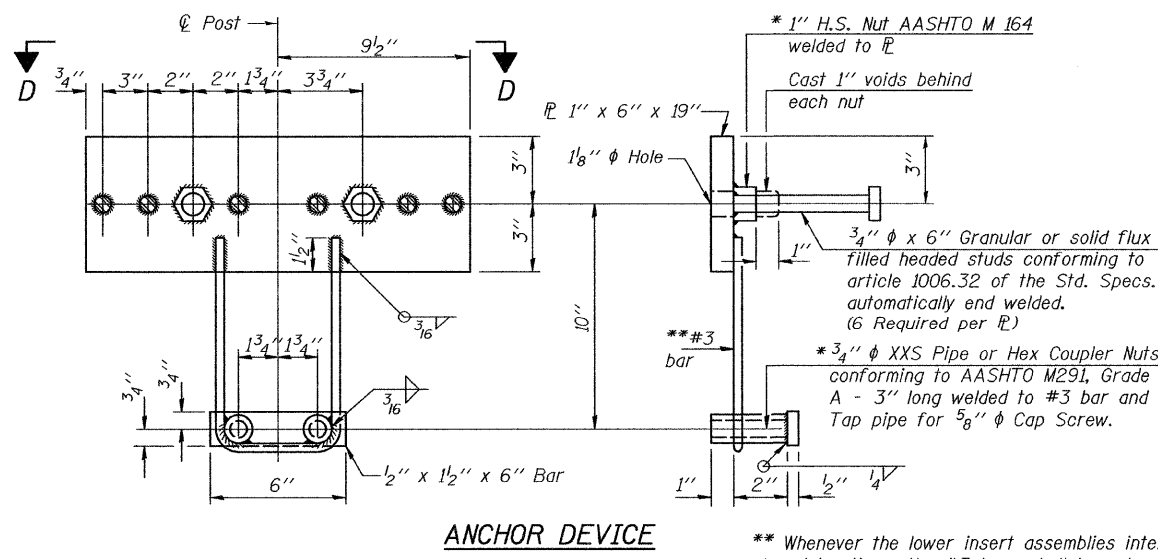
SECTION AT RAIL SPLICE



END OF RAIL DETAILS



VIEW D-D



ANCHOR DEVICE

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

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	379

STEEL RAILING, TYPE SM WITH CONCRETE WEARING SURFACE  
 FAP 22 (ILLINOIS ROUTE 78)  
 OVER GREEN RIVER  
 SEC. (125BR-11D)  
 HENRY COUNTY  
 STATION 882+67.79  
 STR. NO. 037-0129

HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

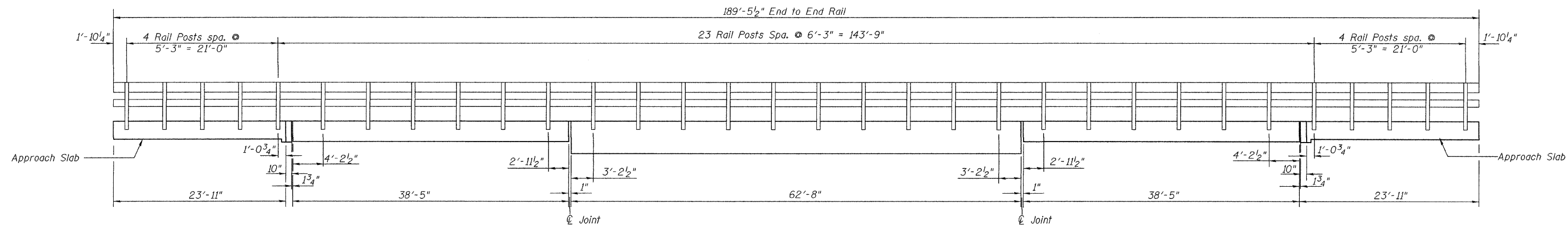
R-34CWS

11-1-06 (6'-3" Maximum Post Spacing) (5" minimum to 7 1/8" maximum CWS thickness)

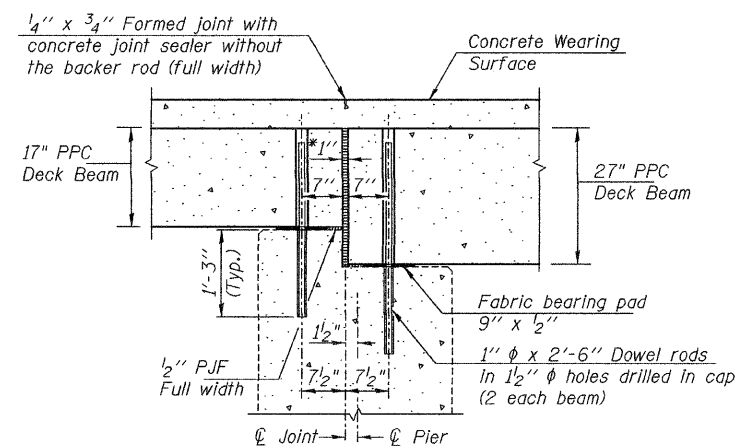
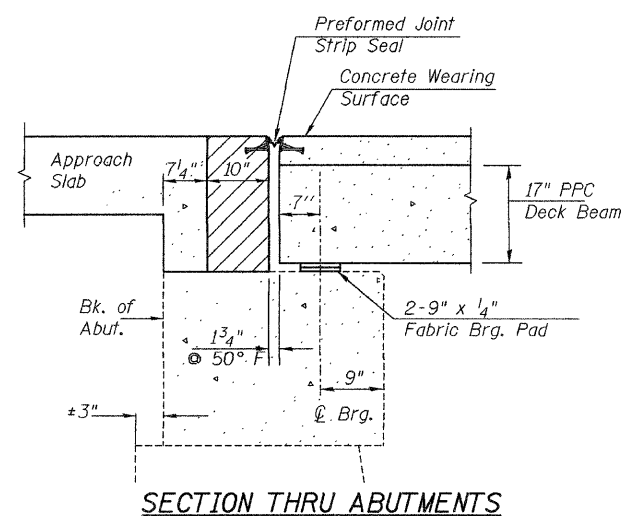
\* Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.  
 \*\* Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 22	*	HENRY	80	55
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	
		*(125BR-110)		CONTRACT NO. 64D10

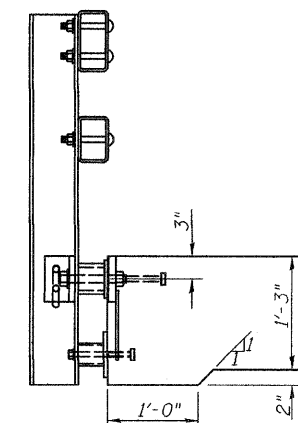
SHEET NO. 9  
OF 15 SHEETS



**RAIL POST SPACING**



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



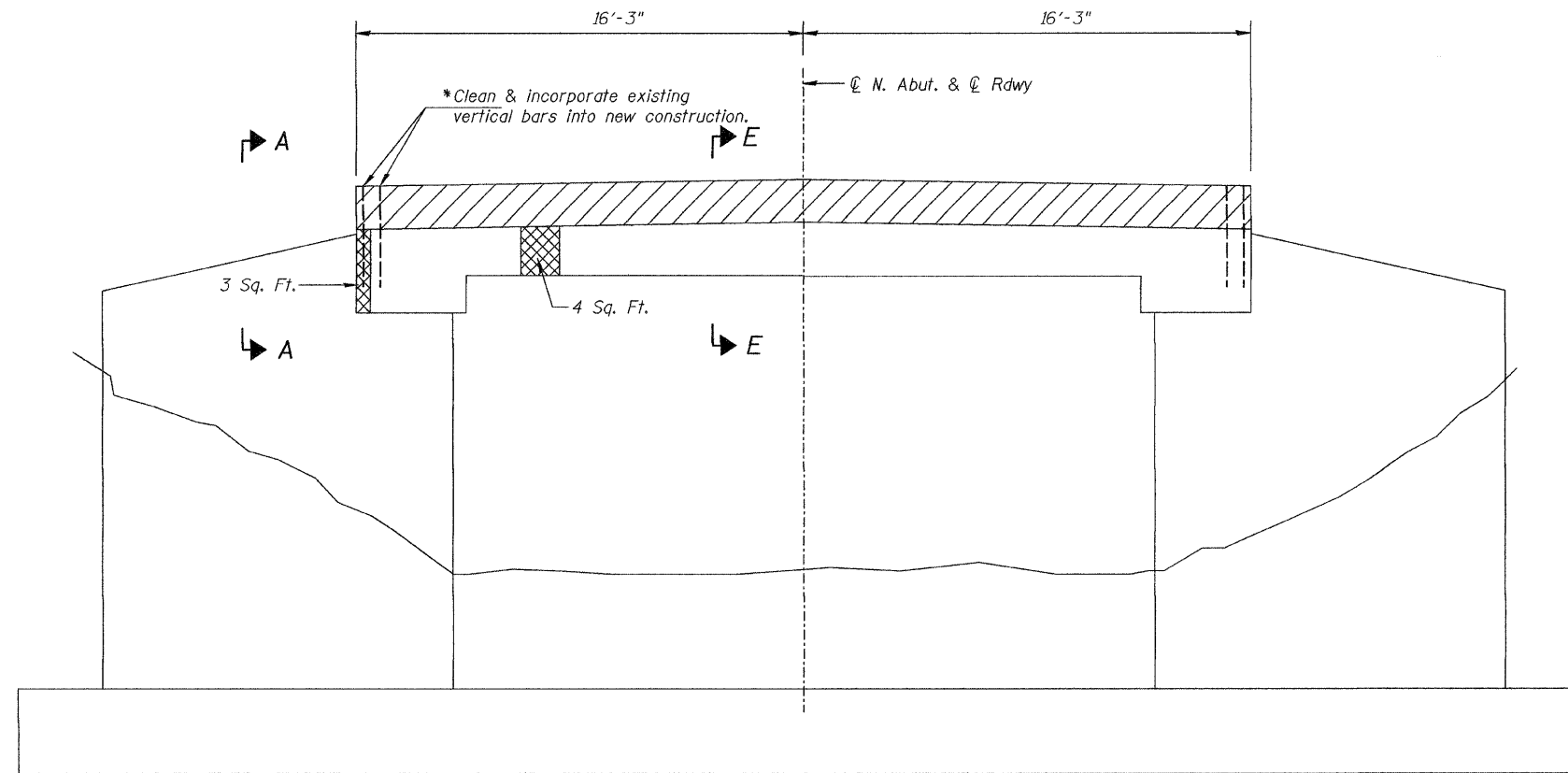
See Sheet 8 of 15 for Rail Post Anchor Details  
See Std. 420401 for additional Bridge Approach Pavement Details.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

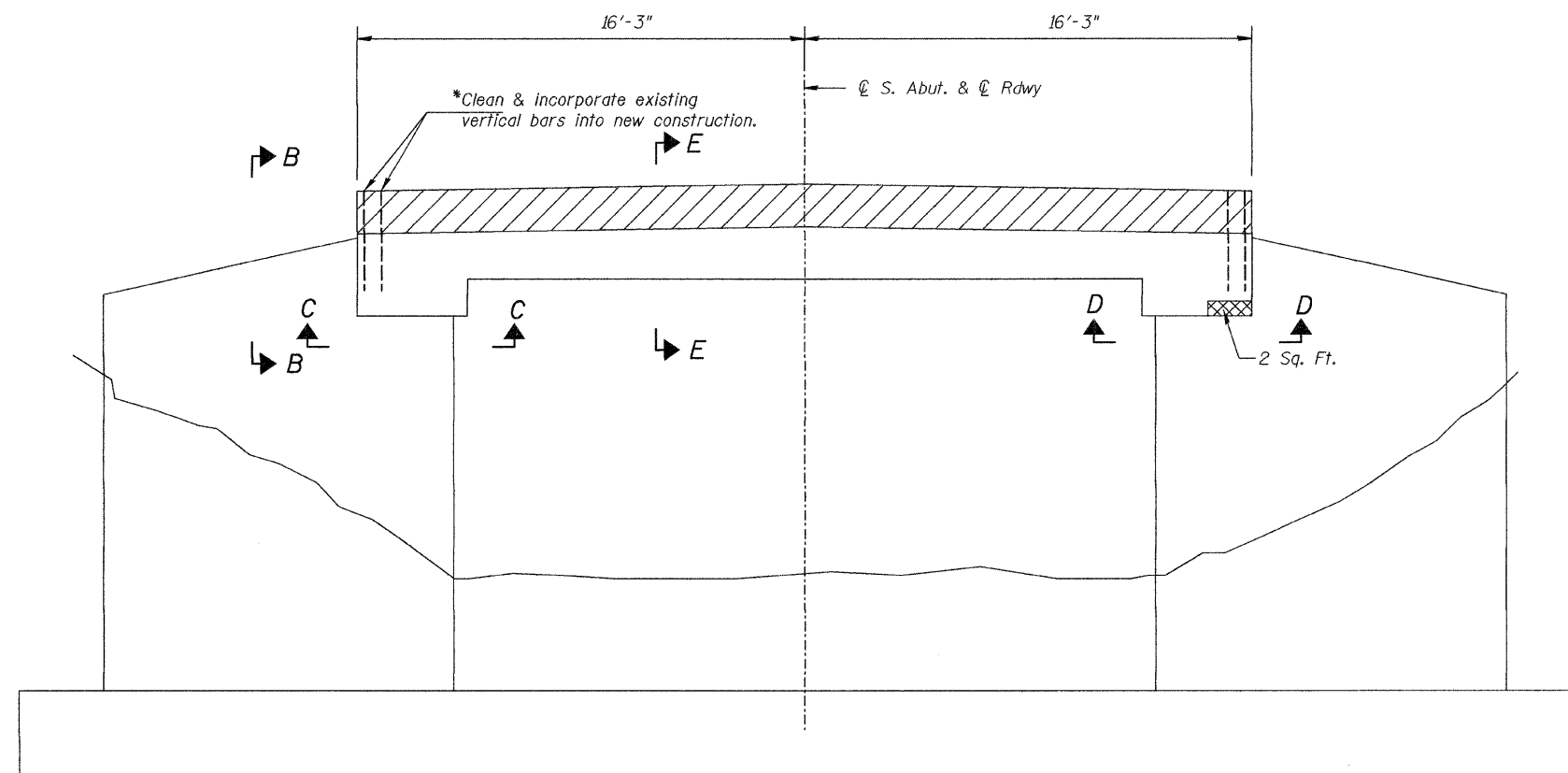
**SUPERSTRUCTURE DETAILS**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-110)**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

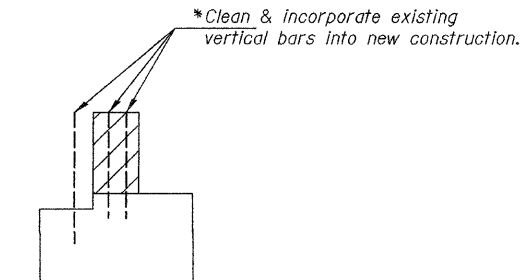
Rev: Date:



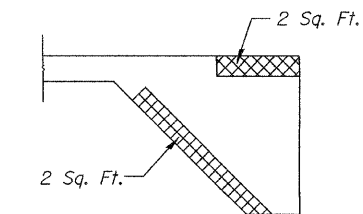
**NORTH ABUTMENT**  
(Looking North)



**SOUTH ABUTMENT**  
(Looking South)



**SECTION E-E**



**VIEW D-D**

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5")
- Concrete Removal

**BILL OF MATERIAL**

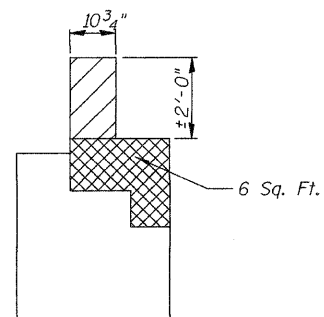
Item	Unit	Quantity
Concrete Removal	Cu. Yd.	4.3
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	29

**ABUTMENT REPAIRS AND  
CONCRETE REMOVAL  
FAP 22 (ILLINOIS ROUTE 78)  
OVER GREEN RIVER  
SEC. (125BR-1)D  
HENRY COUNTY  
STATION 882+67.79  
STR. NO. 037-0129**

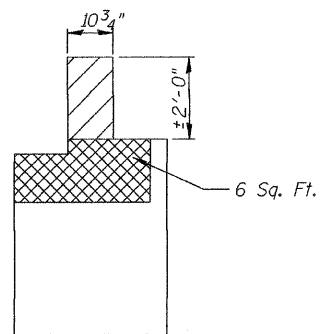
HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev:      Date:

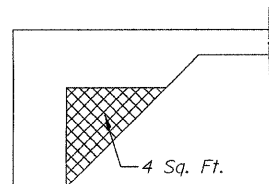
\* Existing reinforced bars extending into new construction shall be cleaned, straightened and incorporated into the new construction. Cost to be included with Concrete Removal.



**VIEW A-A**



**VIEW B-B**



**VIEW C-C**

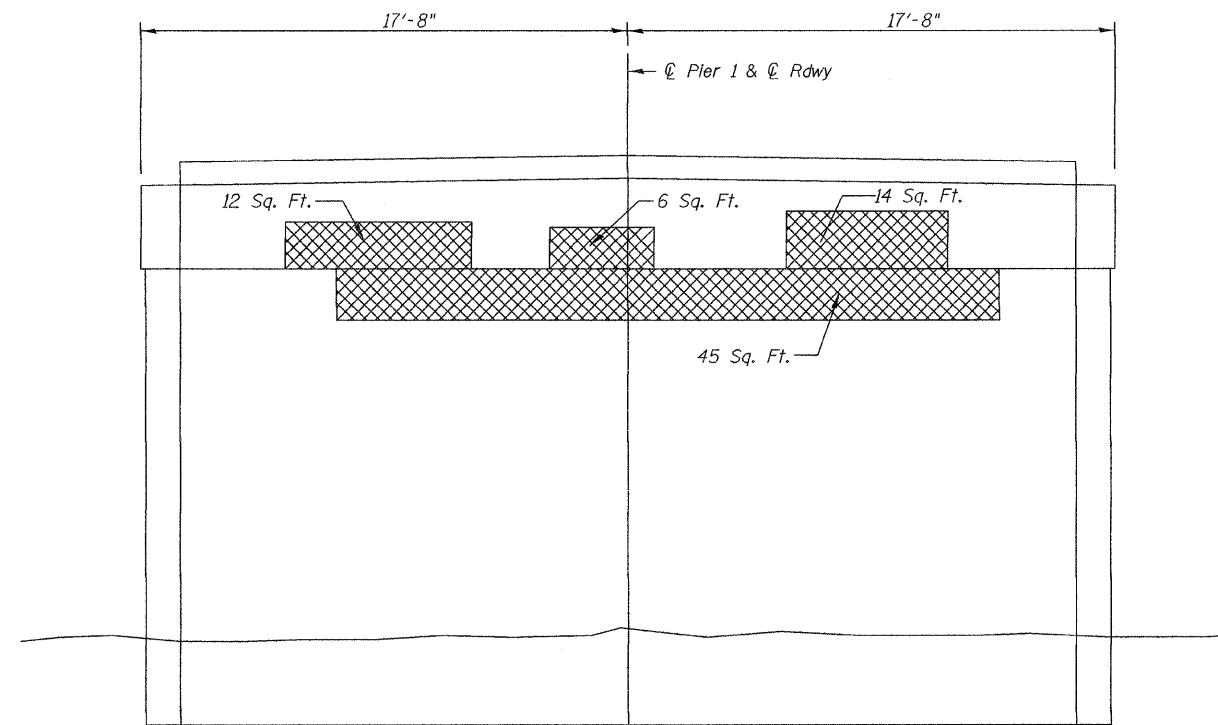
DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN



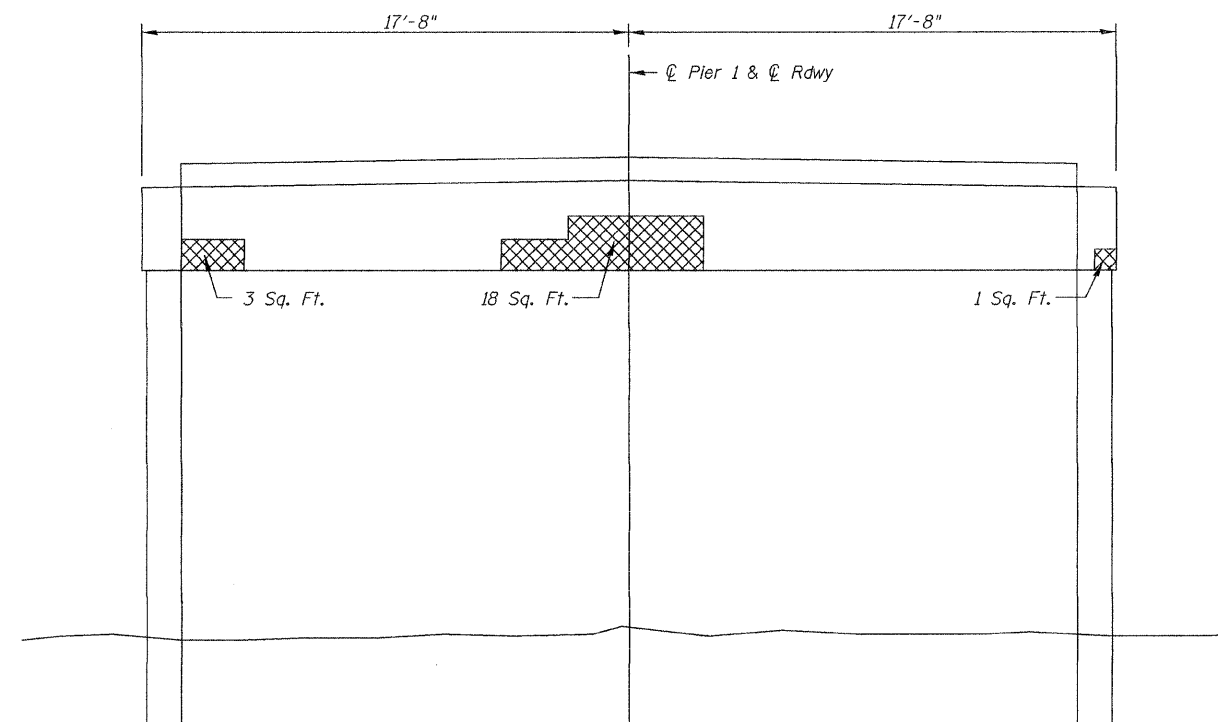
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 22	*	HENRY	80	57
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 11  
OF 15 SHEETS

\*(125BR-1)D CONTRACT NO. 64010




**SOUTH PIER LOOKING SOUTH**  
(North Face)



**SOUTH PIER LOOKING NORTH**  
(South Face)

**LEGEND**

 Structural Repair of Concrete  
(Depth equal to or less than 5")

**BILL OF MATERIAL**

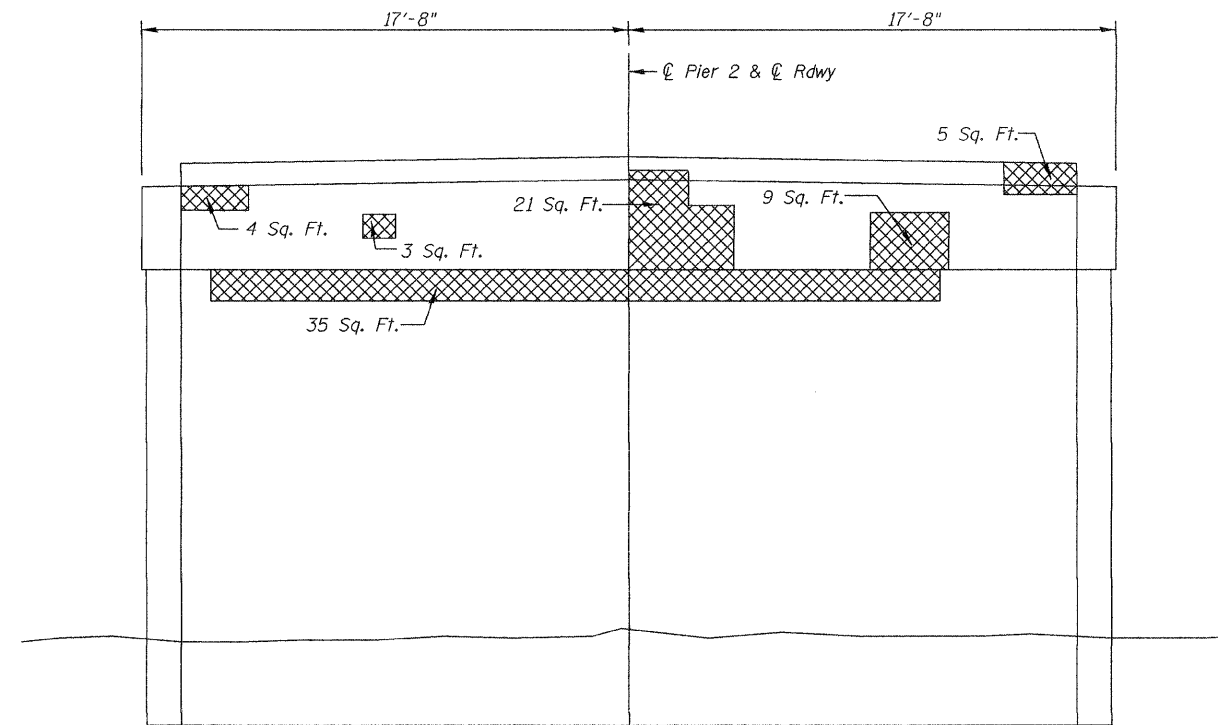
Item	Unit	Quantity
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	99

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

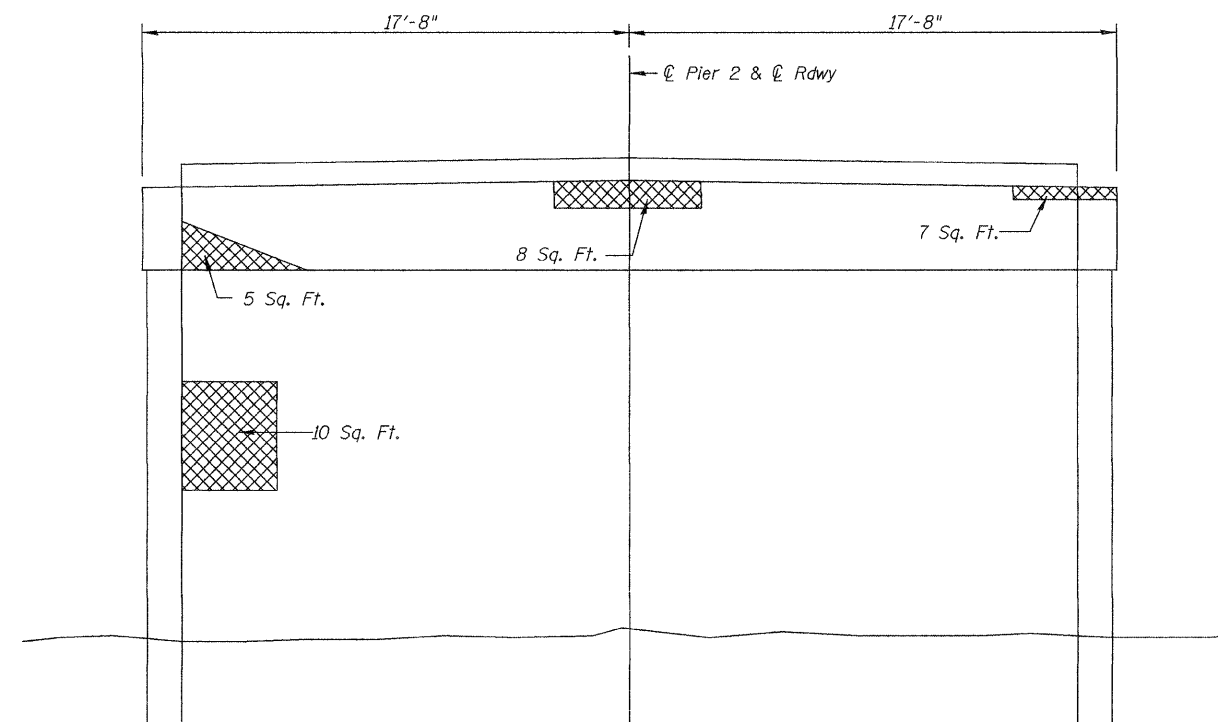
**PIER 1 REPAIRS**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-1)D**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_



**NORTH PIER LOOKING SOUTH**  
(North Face)



**NORTH PIER LOOKING NORTH**  
(South Face)

**LEGEND**

Structural Repair of Concrete  
(Depth equal to or less than 5")

**BILL OF MATERIAL**

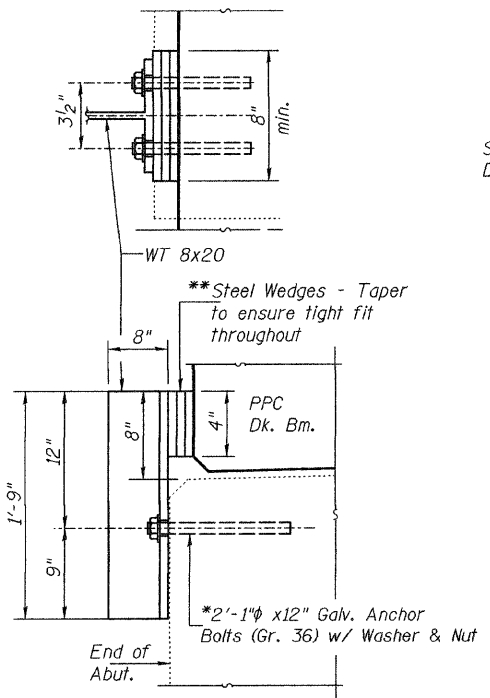
Item	Unit	Quantity
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	107

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

**PIER 2 REPAIRS**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-1)D**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

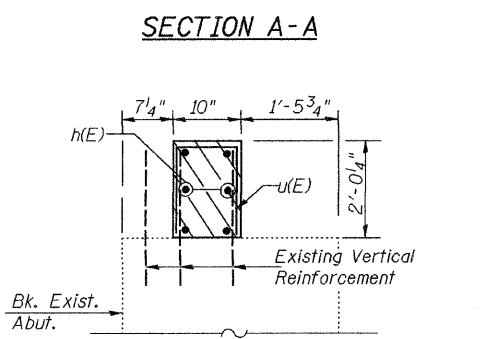
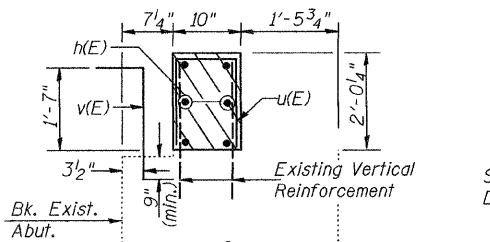
HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_



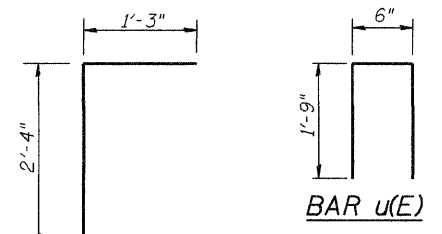
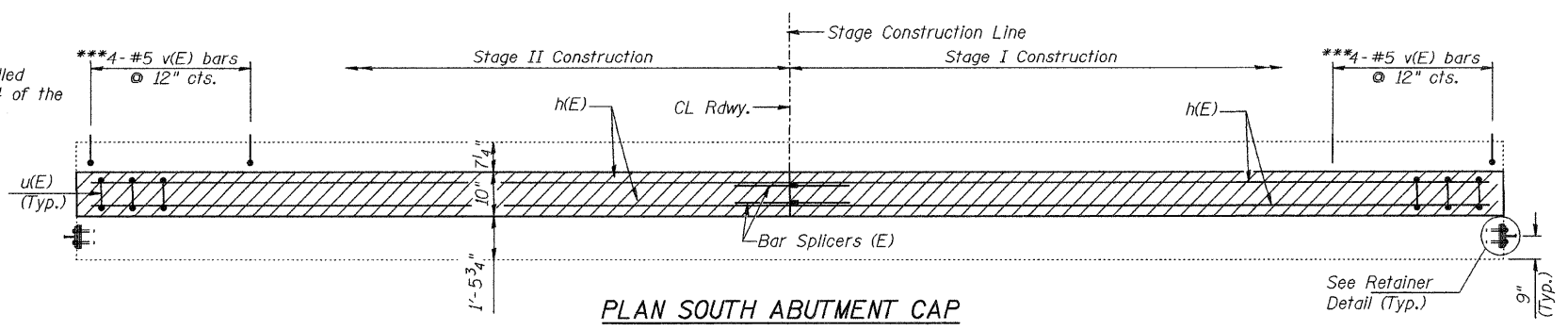
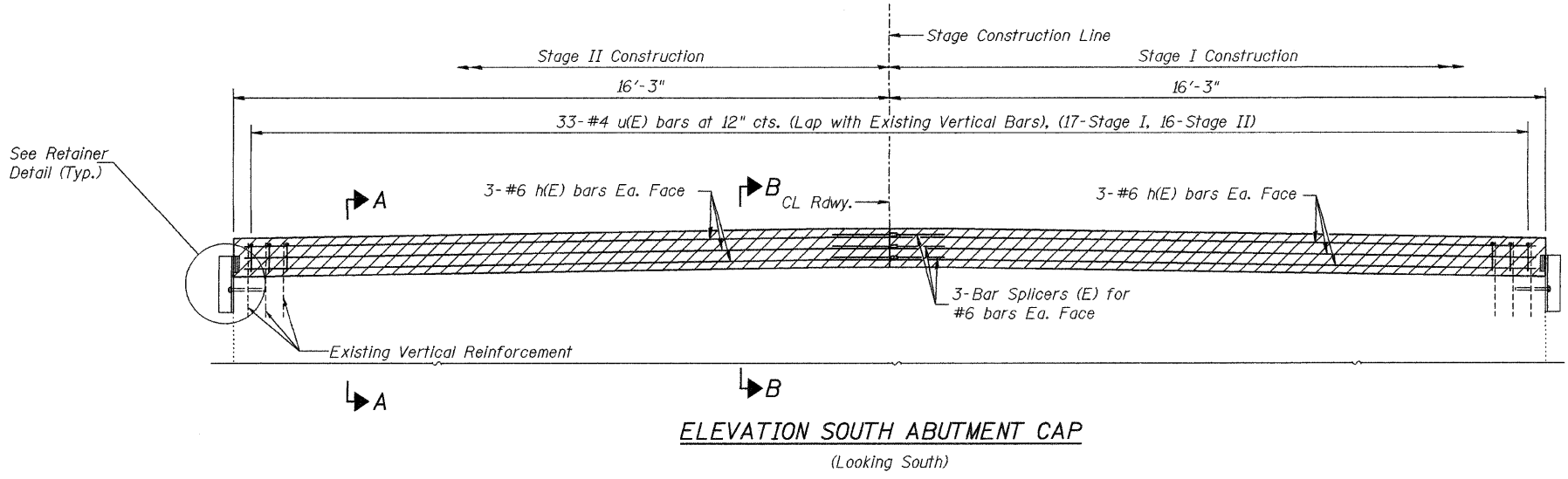
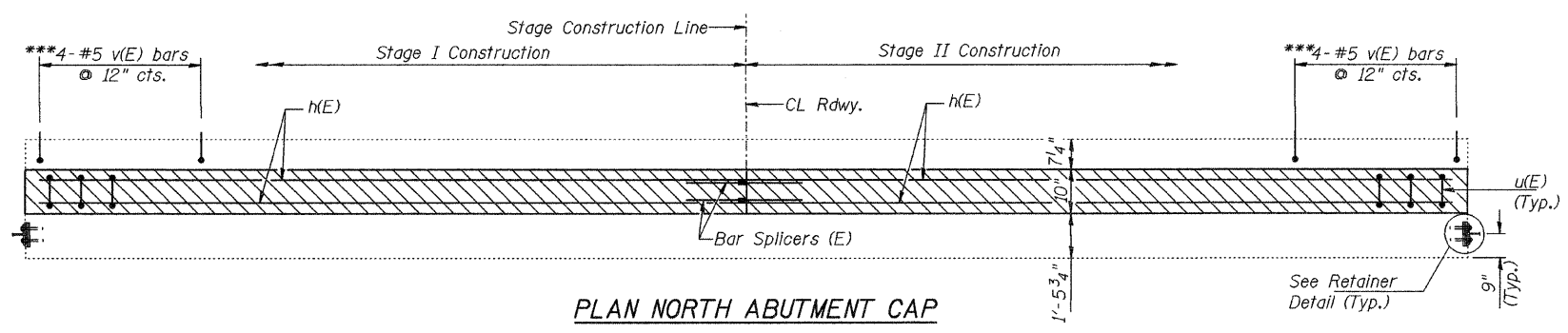
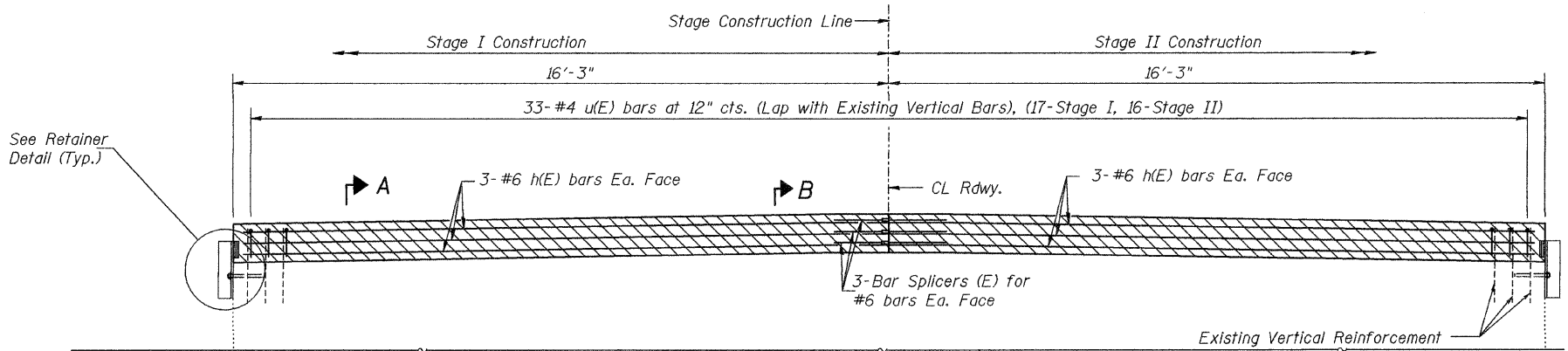
\* Anchor bolts will be approved threaded rod placed in drilled holes and grouted in place. Cost of retainer and accessories are included with Precast Prestressed Concrete Deck Beams.

\*\* Remove steel wedges after Concrete Wearing Surface has cured.



\*\*\*Epoxy Grout v(E) bars into drilled holes according to Section 584 of the Standard Specifications.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN



**MIN. BAR LAP**  
#4 = 1'-4"

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	24	#6	16'-0"	—
u(E)	66	#4	4'-0"	□
v(E)	16	#5	3'-7"	┌
Concrete Structures			Cu. Yd.	4.1
Reinforcement Bars, Epoxy Coated			Pound	810
Bar Splicers			Each	12

Notes:

Existing reinforcement bars extending into new construction shall be cleaned, straightened and incorporated into the new construction. Cost to be included with Concrete Removal.

Hatched area shall be poured after Concrete Wearing surface on PPC Deck Beams is in place and cured.

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

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

**ABUTMENT DETAILS**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-11D)**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

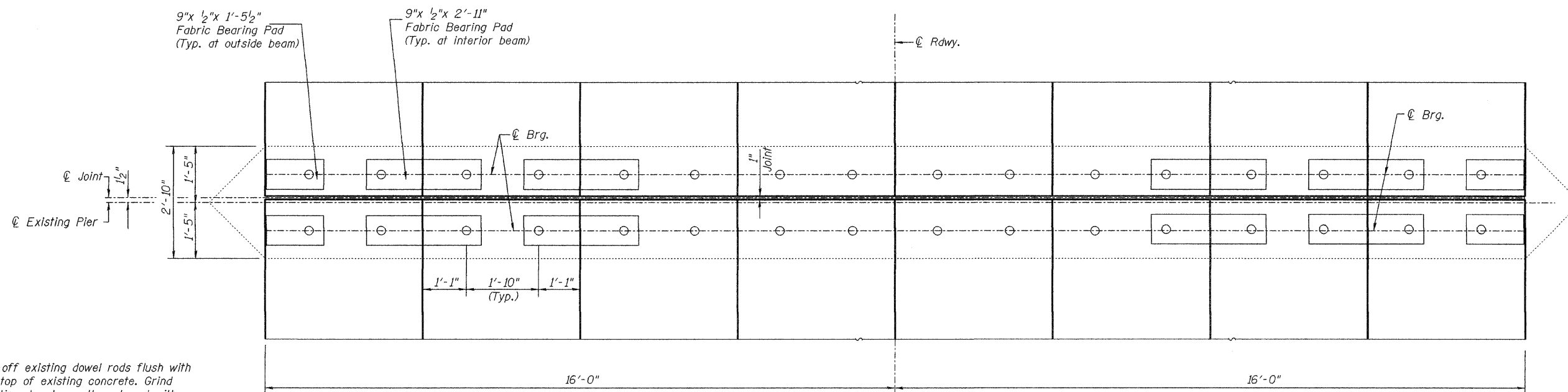
HUTCHISON ENGINEERING, INC.  
JACKSONVILLE, ILLINOIS

Rev: \_\_\_\_\_ Date: \_\_\_\_\_

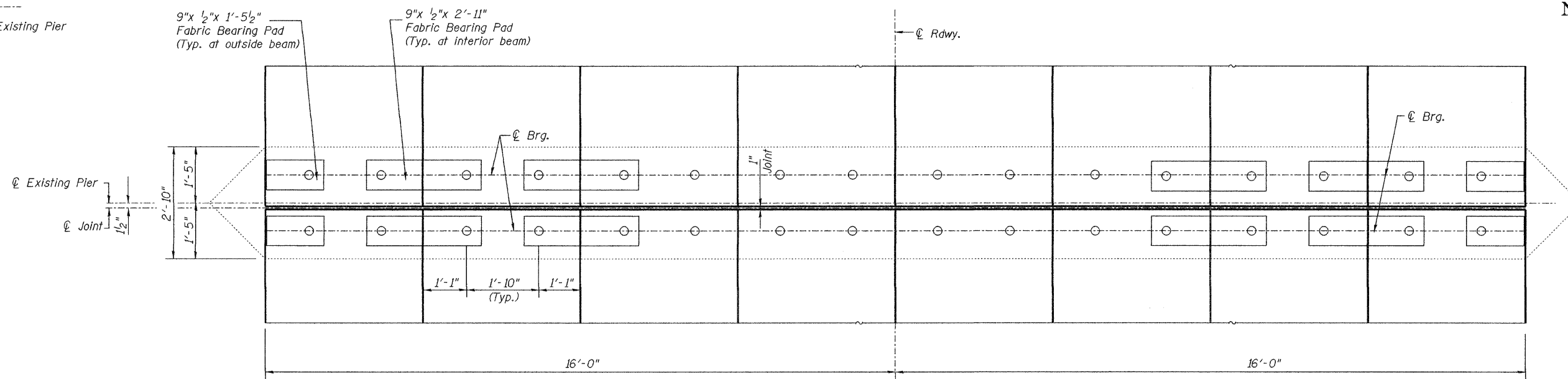
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 22	*	HENRY	80	60
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 14  
of 15 SHEETS

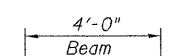
\*125BR-11D CONTRACT NO. 64D10



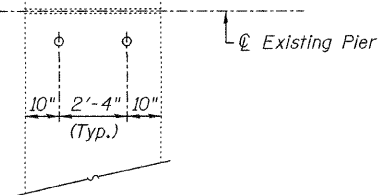
PLAN - PIER 2



PLAN - PIER 1



Cut-off existing dowel rods flush with the top of existing concrete. Grind existing dowel smooth and seal with epoxy. Cost shall be included with Removal of Existing Superstructure. (Typ. Each Beam)



PLAN - EXISTING BEAMS AT PIERS

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

**PIER DETAILS**  
**FAP 22 (ILLINOIS ROUTE 78)**  
**OVER GREEN RIVER**  
**SEC. (125BR-11D)**  
**HENRY COUNTY**  
**STATION 882+67.79**  
**STR. NO. 037-0129**

HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS

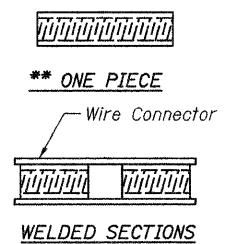
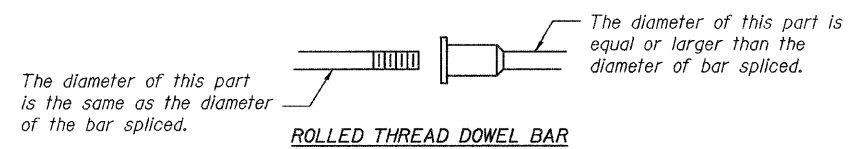
Rev: \_\_\_\_\_ Date: \_\_\_\_\_

**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

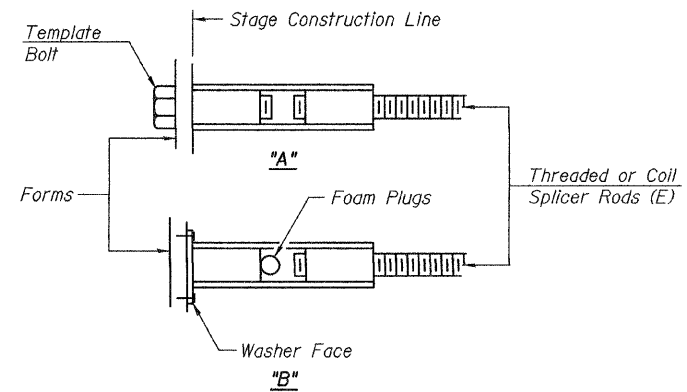
- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
  - ② Minimum \*Pull-out Strength =  $0.66 \times f_y \times A_t$  (Tension in kips)
- Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
 \* = 28 day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

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



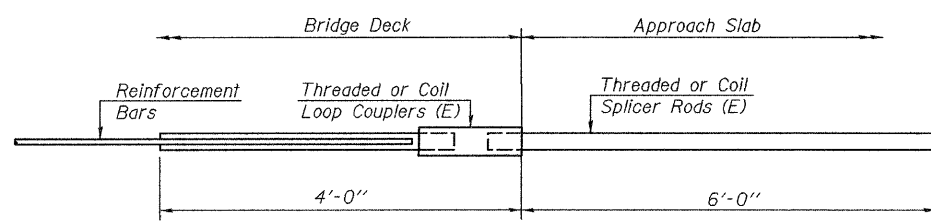
**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



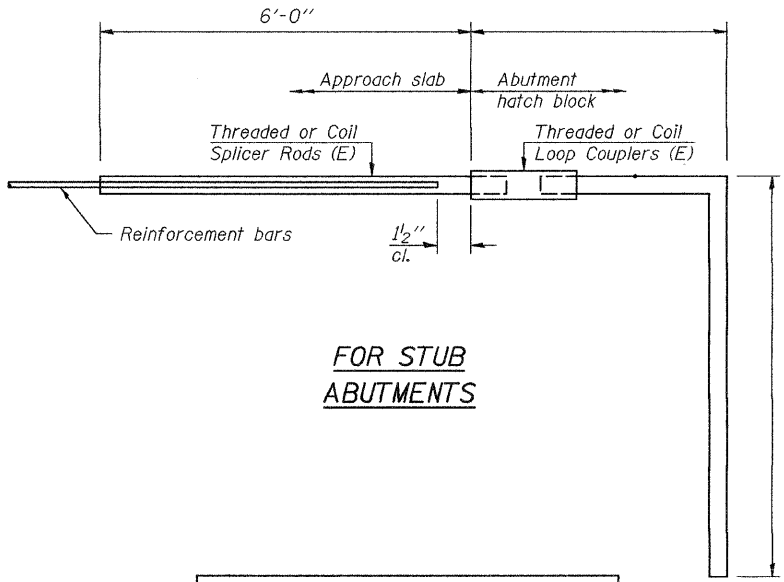
**INSTALLATION AND SETTING METHODS**

"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.



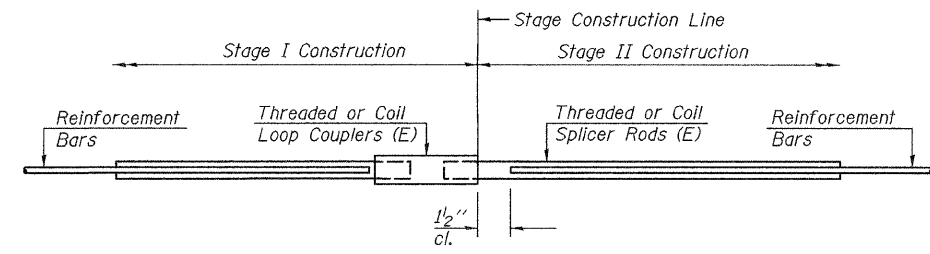
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

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



**FOR STUB ABUTMENTS**

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



**STANDARD**

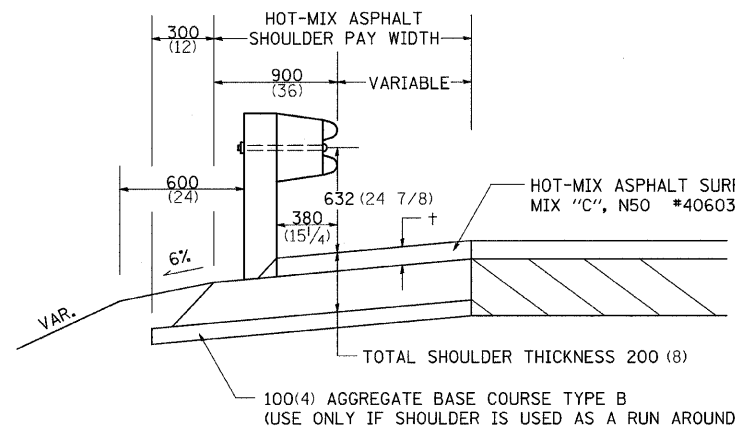
Bar Size	No. Assemblies Required	Location
#4	141	Conc. Wear. Surf.
#6	12	Abutments

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

**BAR SPLICER ASSEMBLY DETAILS**  
 FAP 22 (ILLINOIS ROUTE 78)  
 OVER GREEN RIVER  
 SEC. (125BR-1)D  
 HENRY COUNTY  
 STATION 882+67.79  
 STR. NO. 037-0129

HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS  
 Rev: \_\_\_\_\_ Date: \_\_\_\_\_

# DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL



† = SEE TYPICAL SECTIONS FOR THICKNESS

### GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

THE HEIGHT OF THE GUARD RAIL SHALL BE SET 632 (24 7/8) FROM THE FINISHED SURFACE.

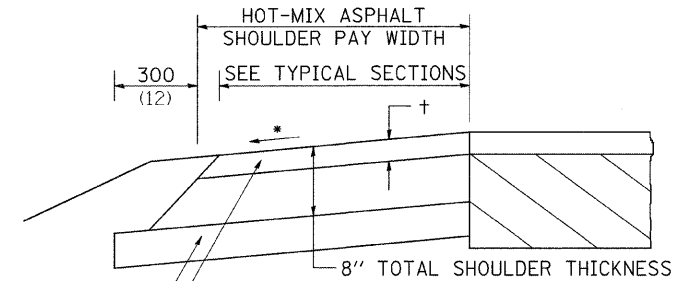
THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C", N50 AND SQUARE METER (SQUARE YARD) FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL 23.4

# HOT-MIX ASPHALT SHOULDER



HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310

100 (4) AGGREGATE BASE COURSE TYPE B (USE ONLY IF SHOULDER IS USED AS A RUN AROUND)

† = SEE TYPICAL SECTIONS FOR THICKNESS

### GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

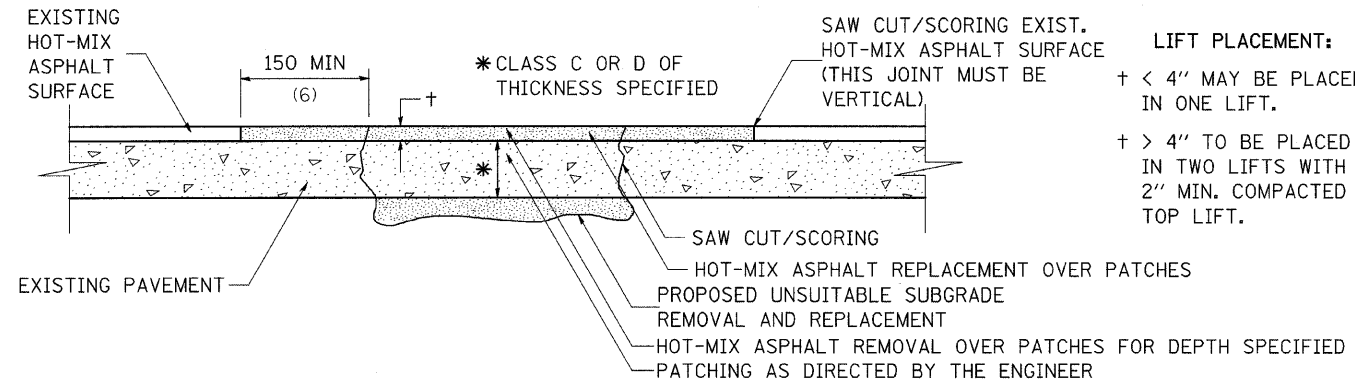
\* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

HOT-MIX ASPHALT SHOULDER 23.4a

# PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT



### LIFT PLACEMENT:

† < 4" MAY BE PLACED IN ONE LIFT.

† > 4" TO BE PLACED IN TWO LIFTS WITH 2" MIN. COMPACTED TOP LIFT.

### SEQUENCE OF CONSTRUCTION:

1. REMOVE THE EXISTING HOT-MIX ASPHALT SURFACE.
2. RESIDENT ENGINEER WILL DETERMINE IF LOCATION IS TO BE PATCHED OR TO ONLY REPLACE HOT-MIX ASPHALT SURFACE.
3. REMOVE AND REPLACE FULL DEPTH PATCHES AT LOCATIONS DIRECTED BY THE ENGINEER.
4. REPLACE HOT-MIX ASPHALT SURFACE OVER FULL DEPTH PATCHES AND AT LOCATIONS OF HOT-MIX ASPHALT SURFACE REMOVAL.

### GENERAL NOTES:

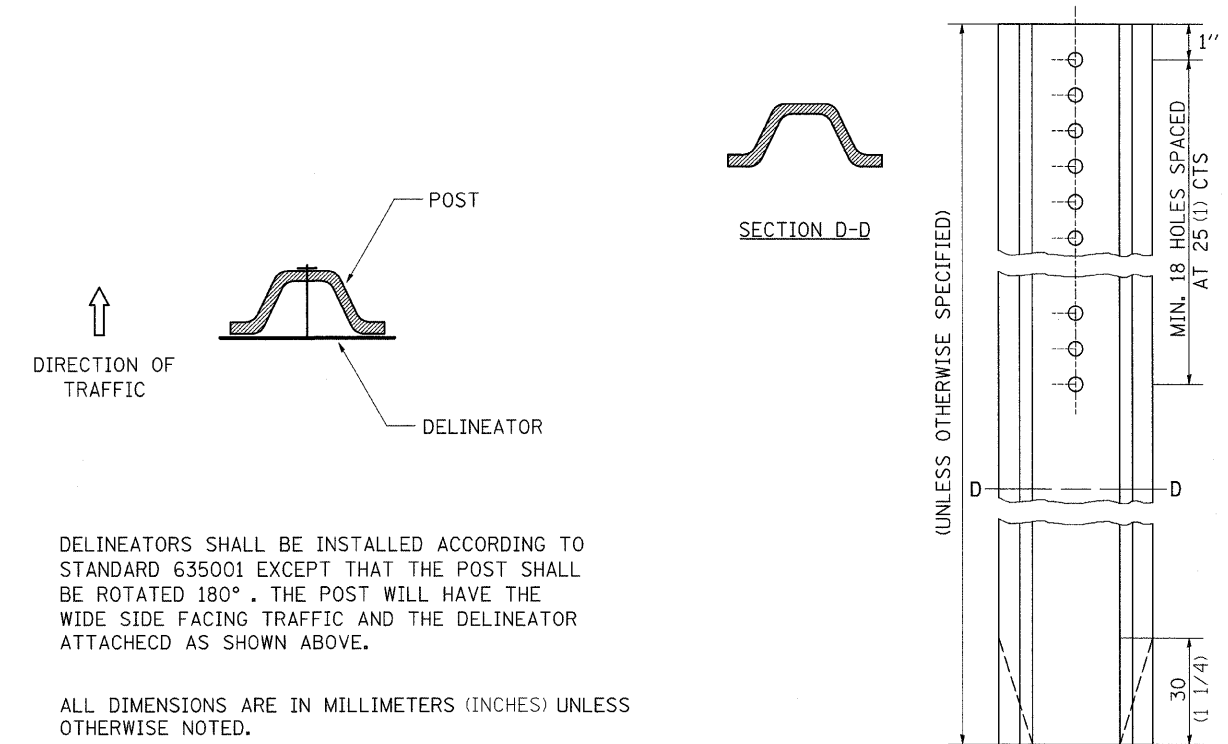
1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 300 (12) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR BASIS OF PAYMENT: SEE THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT 32.4

# DELINEATOR AND POST ORIENTATION



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

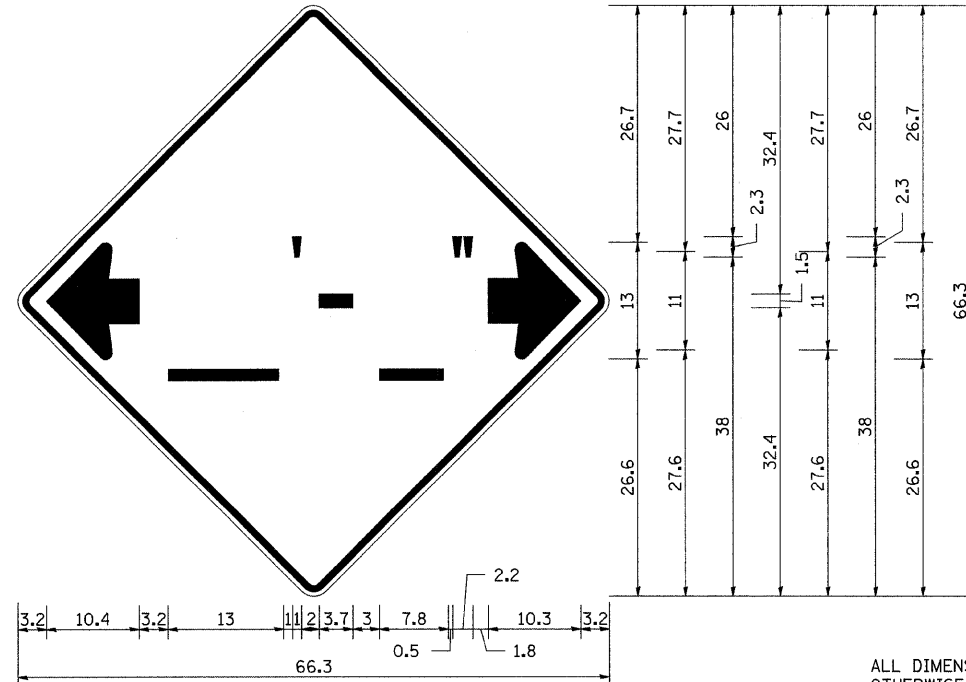
• FAP 22 (IL 78) & FAS 1247 (US 6) •• (125BR-1)D & (6BR)D

REVISED - 11-01-07	REVISED -	REVISED -	REVISED -	REVISED -	SCALE: 48.0349 / IN	SHEET NO. OF SHEETS	STA. TO STA.	REGION 2 / DISTRICT 2 STANDARD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
											HENRY	80	62
												CONTRACT NO. 64D10	
												ILLINOIS FED. AID PROJECT	

PLOT DATE = Wed Nov 28 13:43:36 2007

DELINEATOR AND POST ORIENTATION 37.4

# INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



**NOTES**  
 W12-2 - Horizontal Clearance Sign  
 48.0" across sides, 1.9" Radius,  
 0.8" Border, 0.5" Indent, Black on  
 Orange; Standard Arrow Custom  
 10.4" X 8.1" 180° Black 11 Inch  
 D Series Lettering; Standard Arrow  
 Custom 10.4" X 8.1" 0°

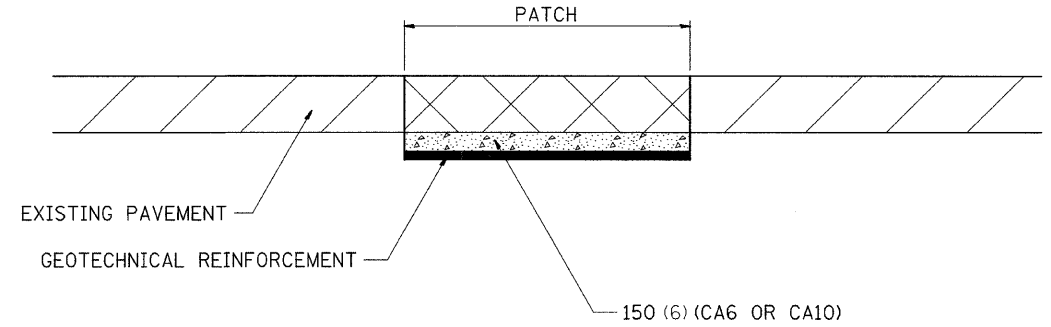
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

REVISED - 6-29-05

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES) 39.4

# SUBGRADE REPLACEMENT



**NOTES:**  
 THE CA 6 OR CA 10 SHALL BE COMPACTED IN A MANNER APPROVED BY THE ENGINEER. IF THE MOISTURE CONTENT OF THE MATERIAL IS SUCH THAT COMPACTION SATISFACTORY TO THE ENGINEER CANNOT BE OBTAINED, SUFFICIENT WATER SHALL BE ADDED SO THAT SATISFACTORY COMPACTION CAN BE OBTAINED.

THE GEOTECHNICAL REINFORCEMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ YD FOR GEOTECHNICAL REINFORCEMENT

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

SUBGRADE REPLACEMENT 97.4

# STOP LINE SIGN FOR TEMPORARY SIGNALS



SIZE: 600(24) x 600(24)  
 100(4) CAPITAL LETTERS - BLACK  
 13 (1/2) BORDER - BLACK  
 WHITE REFLECTIVE - TYPE AP  
 HIGH INTENSITY PRISMATIC SHEETING

**GENERAL NOTE:**

THIS SIGN SHALL BE INSTALLED AT THE STOP LINE AS DIRECTED BY ENGINEER.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

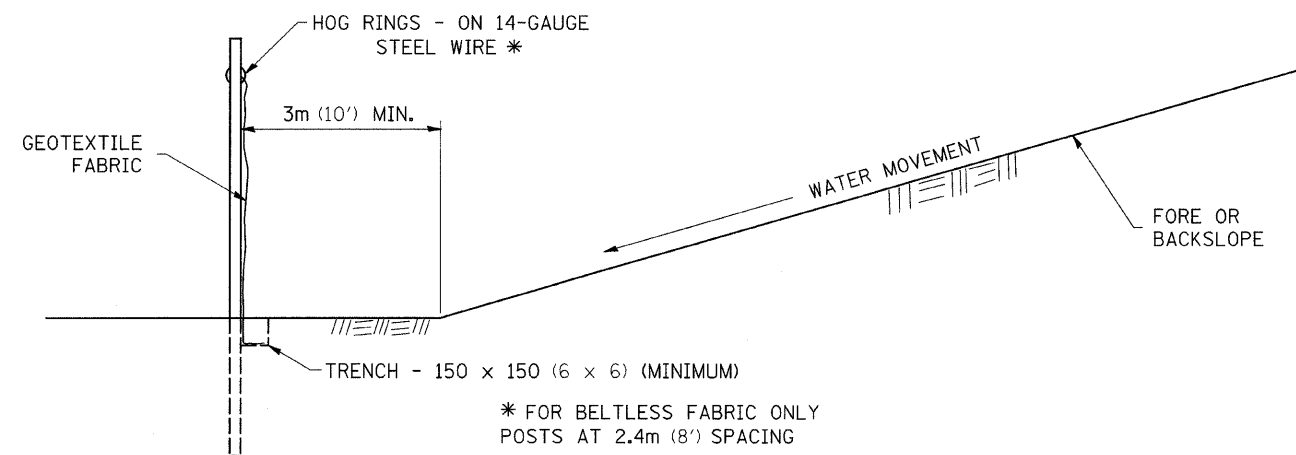
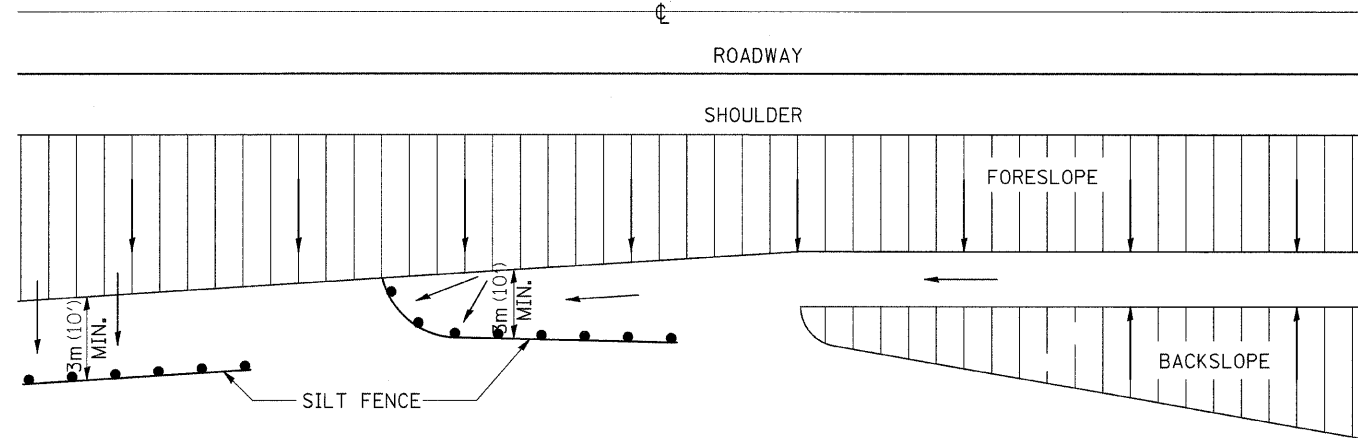
REVISED - 1-22-07

STOP LINE SIGN FOR TEMPORARY SIGNALS 99.4

FAP 22 (IL 78) & FAS 1247 (US 6) \*\* (125BR-1D) & (6BR)D

REVISED -	REGION 2 / DISTRICT 2 STANDARD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -		*	**	HENRY	80	63	
REVISED -		SCALE: 48.8349' / IN			SHEET NO. OF SHEETS		STA. TO STA.
REVISED -		CONTRACT NO. 64D10			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

# EROSION CONTROL DETAILS FOR SILT FENCE

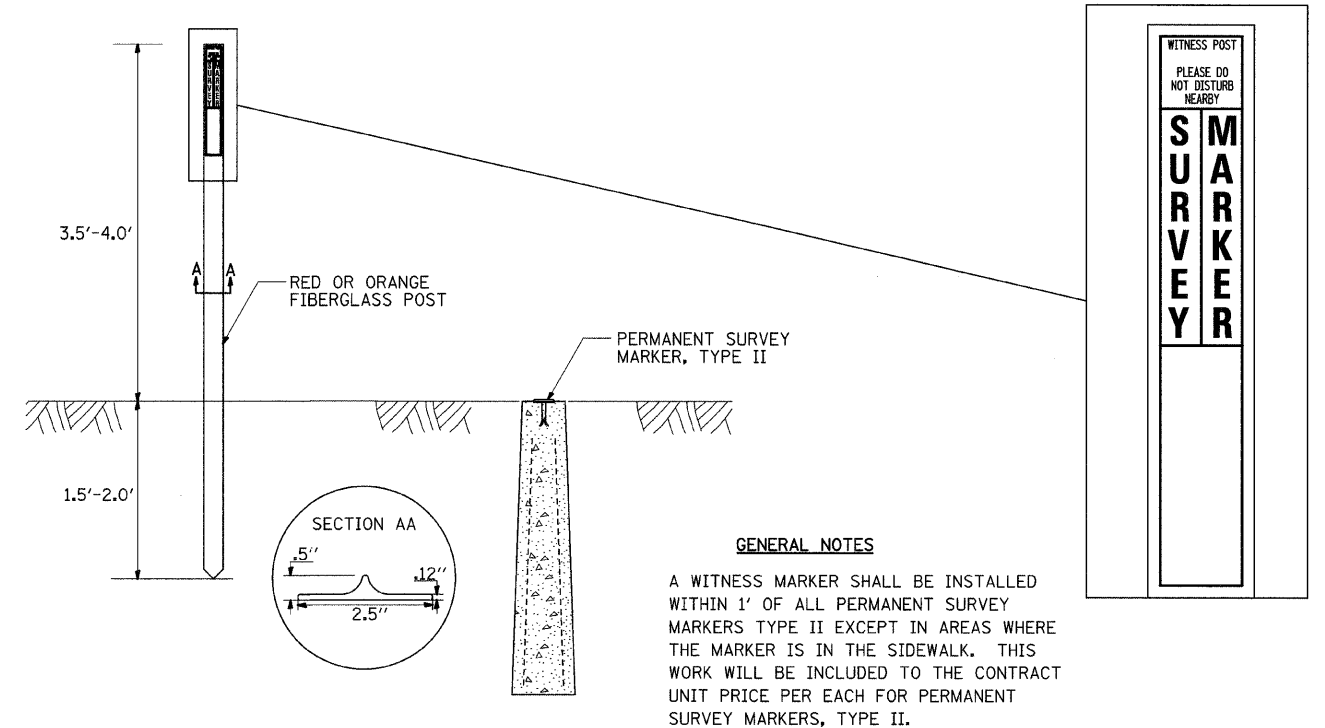


DETAILS OF SILT FENCE

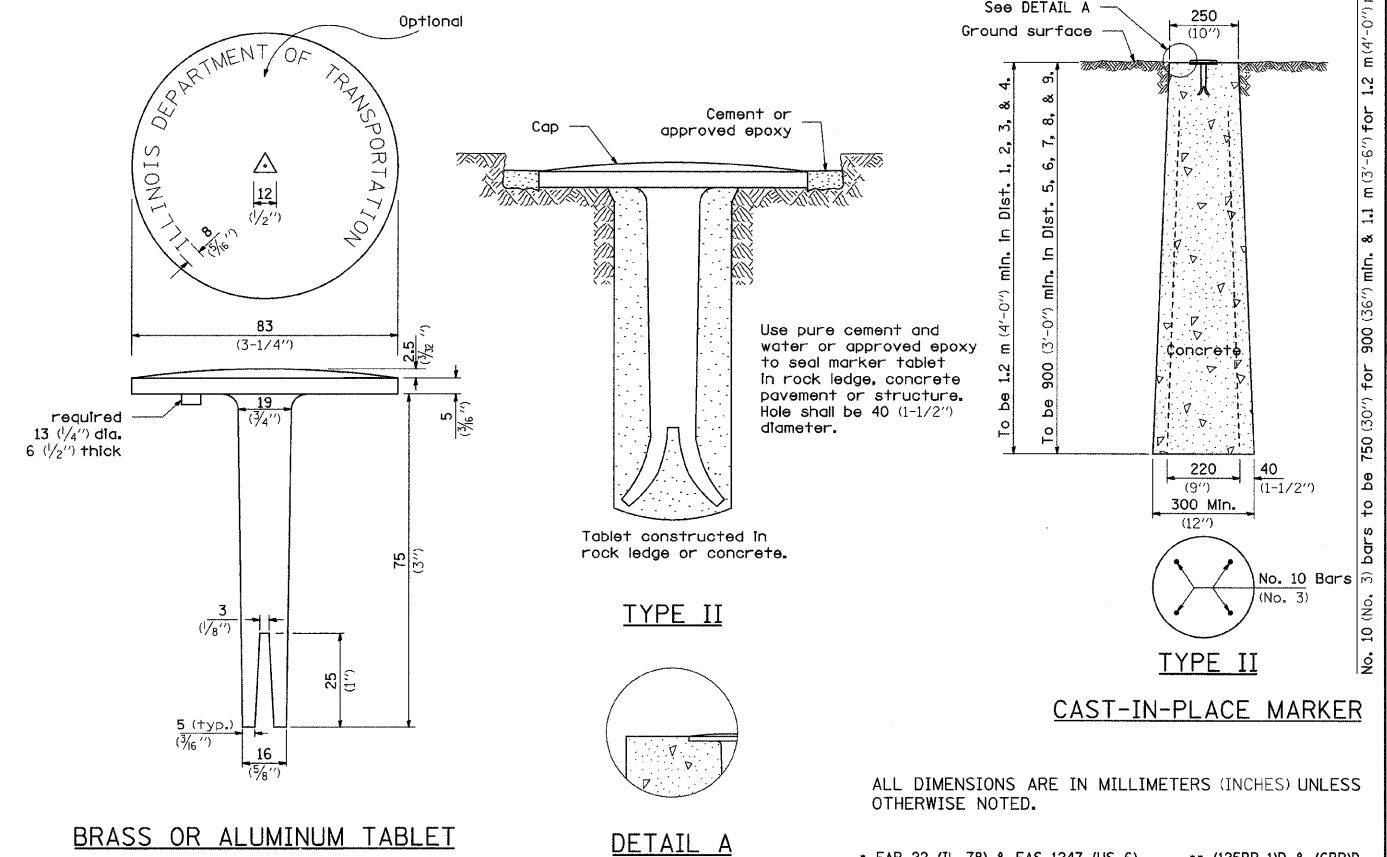
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 10-22-01

# WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



# PERMANENT SURVEY MARKERS, TYPE II



BRASS OR ALUMINUM TABLET

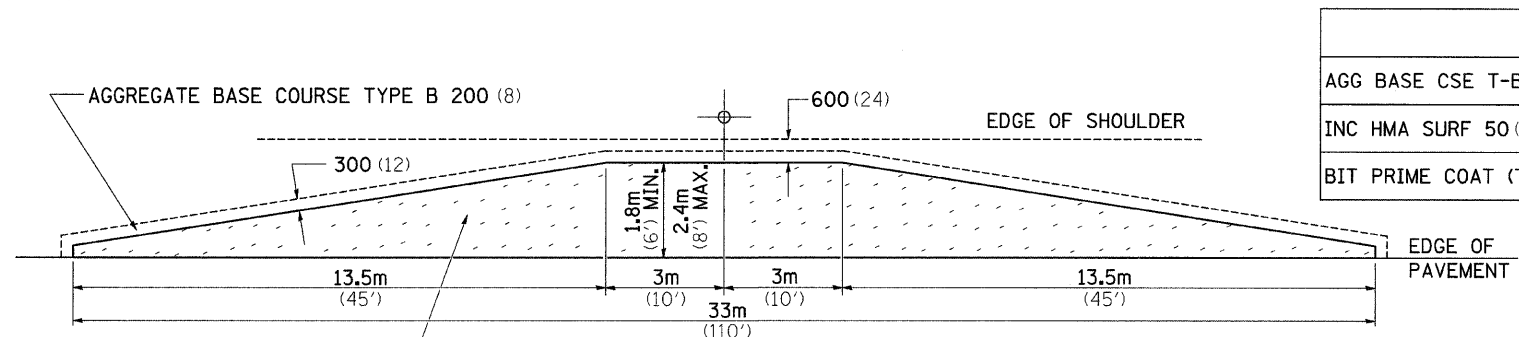
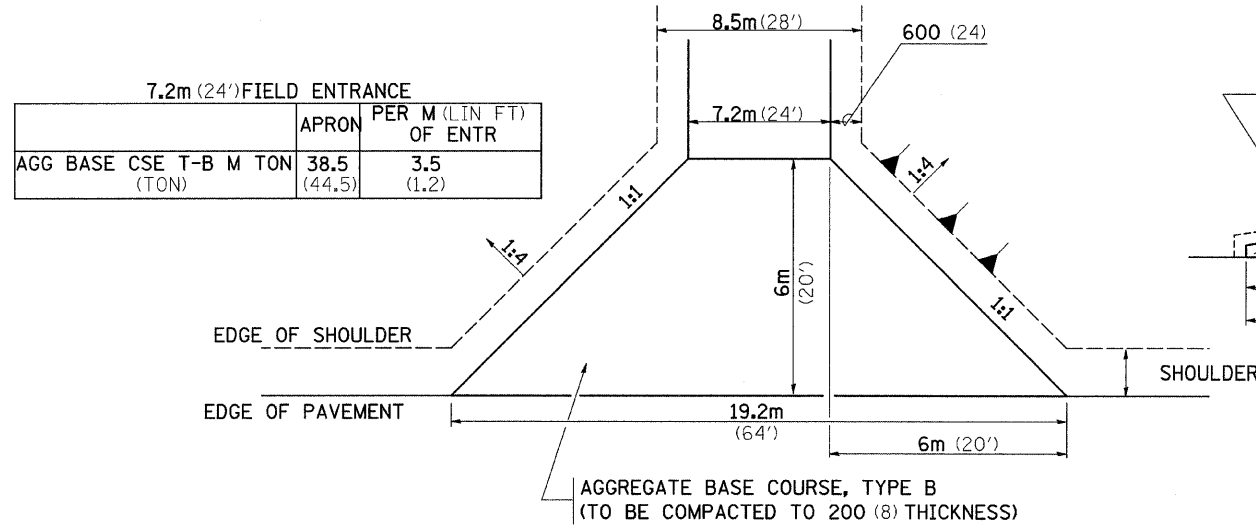
DETAIL A

CAST-IN-PLACE MARKER

REVISED - 6-26-06	REGION 2 / DISTRICT 2 STANDARD		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -			.	..	HENRY	80	64
REVISED -					CONTRACT NO. 64D10		
REVISED -	SCALE: 48.0349' / IN	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

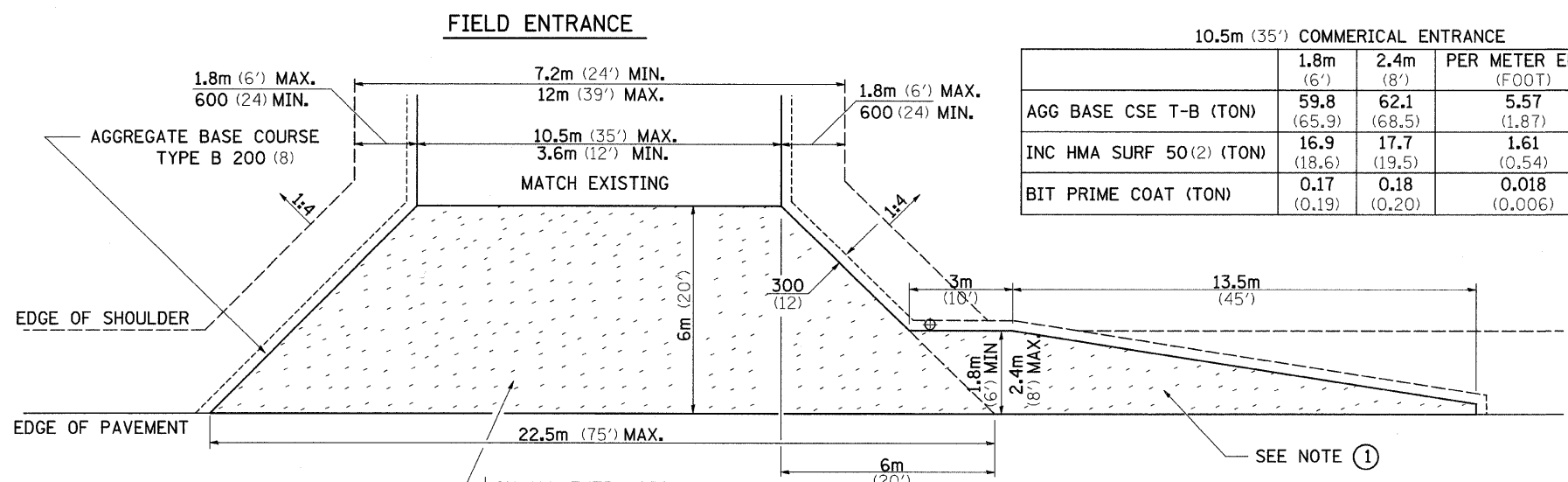


# HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS

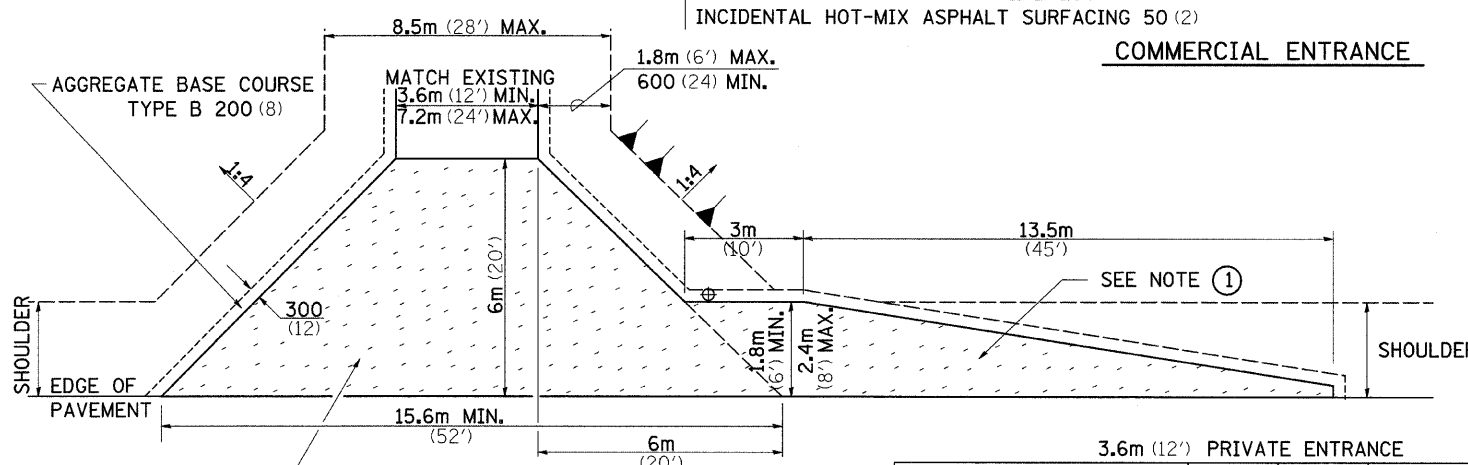


	1.8m (6')	2.4m (8')
AGG BASE CSE T-B (TON)	22.2 (24.5)	28.2 (31.1)
INC HMA SURF 50 (2) (TON)	5.3 (5.8)	7.1 (7.8)
BIT PRIME COAT (TON)	0.05 (0.06)	0.07 (0.08)

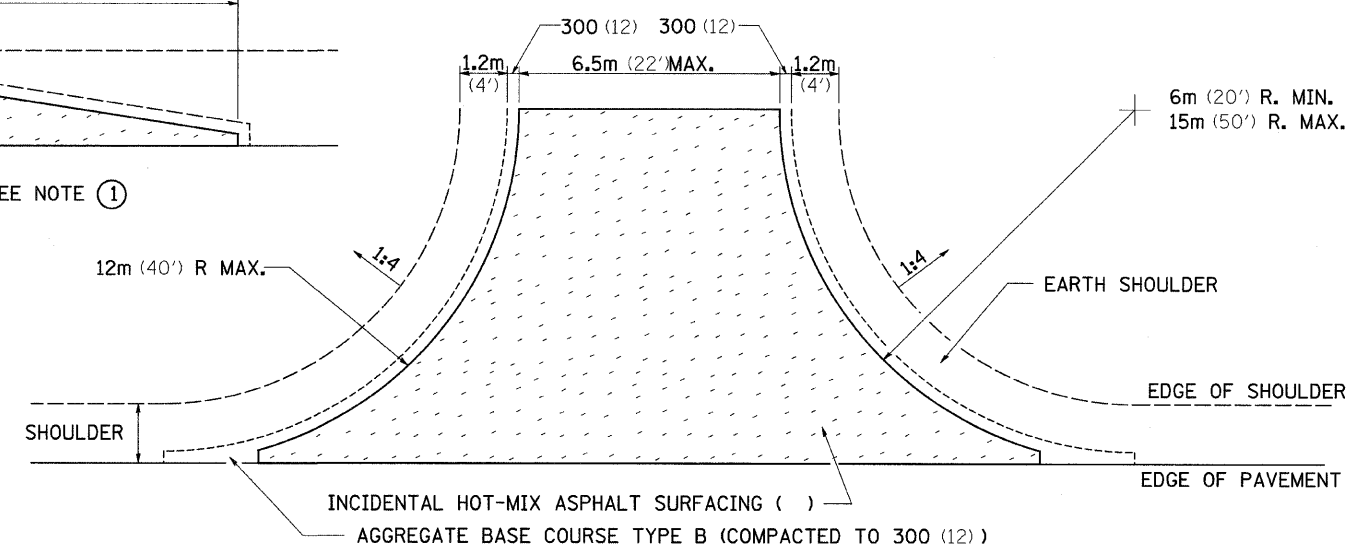
- NOTE**
- TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
  - ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
  - FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
  - QUANTITIES ARE CALCULATED WITH 1' BITUMINOUS SHOULDER IN PLACE. AGGREGATE QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
  - EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE CONSIDERED INCIDENTAL TO THE AGGREGATE BASE COURSE.
  - ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



	1.8m (6')	2.4m (8')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	59.8 (65.9)	62.1 (68.5)	5.57 (1.87)
INC HMA SURF 50 (2) (TON)	16.9 (18.6)	17.7 (19.5)	1.61 (0.54)
BIT PRIME COAT (TON)	0.17 (0.19)	0.18 (0.20)	0.018 (0.006)



	1.8m (6')	2.4m (8')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	39.7 (43.8)	42.0 (46.3)	2.11 (0.71)
INC HMA SURF 50 (2) (TON)	10.7 (11.8)	11.5 (12.7)	0.57 (0.19)
BIT PRIME COAT (TON)	0.11 (0.12)	0.18 (0.13)	0.006 (0.002)



	6m RADIUS (20')		9m RADIUS (30')		12m RADIUS (40')				
	5.5m (18')	6m (20')	6.5m (22')	5.5m (18')	6m (20')	6.5m (22')	5.5m (18')	6m (20')	6.5m (22')
AGG BASE CSE T-B (TON)	40.9 (45.1)	43.7 (48.2)	46.4 (51.2)	70.3 (77.5)	74.4 (82.0)	78.6 (86.6)	105.5 (116.3)	111.0 (122.4)	116.6 (128.5)
INC HMA SURF AT 25 (1) (TON)	3 (3.3)	3.3 (3.6)	3.4 (3.8)	5.3 (5.8)	5.5 (6.1)	5.9 (6.5)	8.0 (8.8)	8.4 (9.3)	9.0 (9.9)
BIT PRIME COAT (TON)	0.07 (0.08)	0.08 (0.09)	0.10 (0.10)	0.14 (0.15)	0.15 (0.16)	0.15 (0.17)	0.20 (0.22)	0.22 (0.24)	0.23 (0.25)

NOTE: USE 50 (2) INC. HMA SURF. ON EXISTING RETURNS

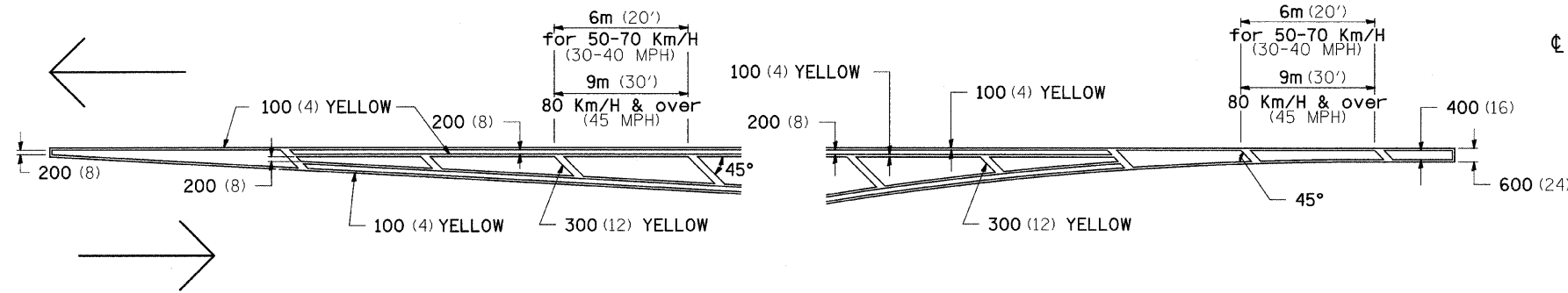
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	PLOT SCALE = 48.0349' / IN.	CHECKED -	REVISED -
	PLOT DATE = Wed Nov 28 13:43:37 2007	DATE -	REVISED -

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

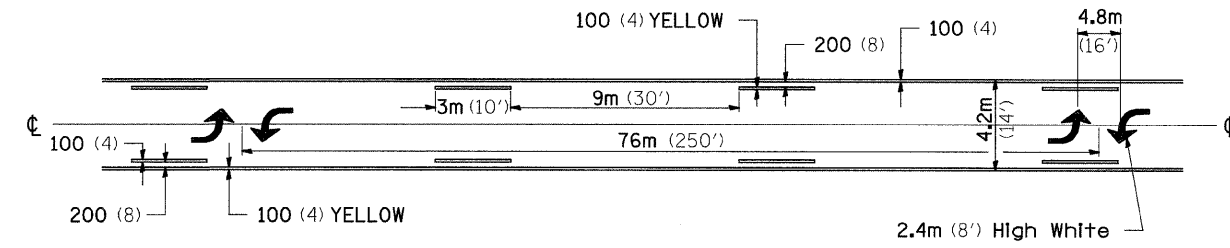
REGION 2 / DISTRICT 2 STANDARD				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: SHEET NO. OF SHEETS STA. TO STA.				*	**	HENRY	80	65
				FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT		CONTRACT NO. 64D10		

# TYPICAL PAVEMENT MARKINGS

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

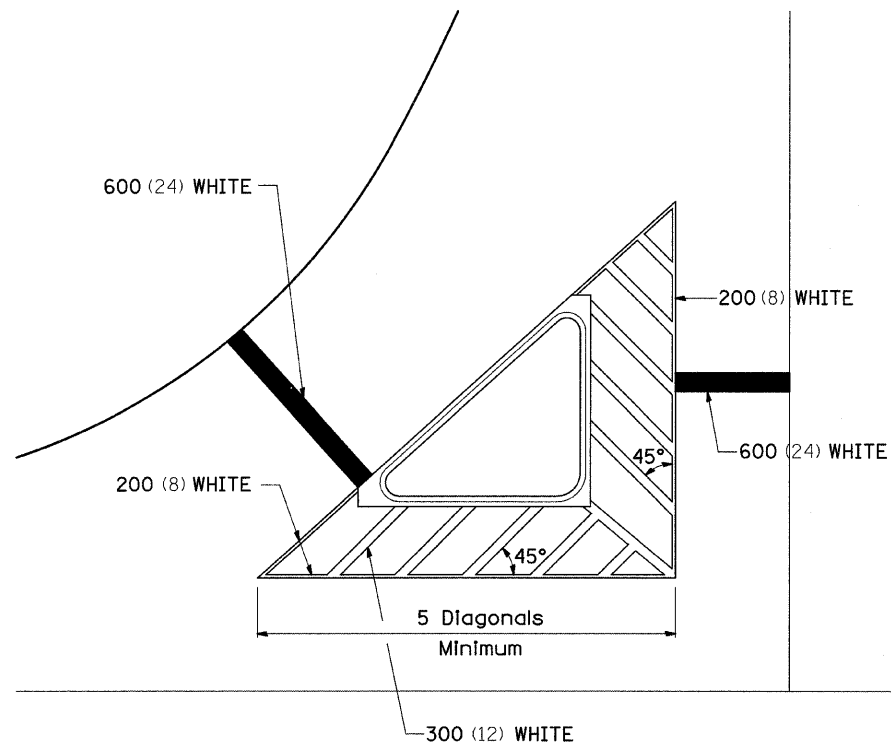


## MEDIAN PAVEMENT MARKING

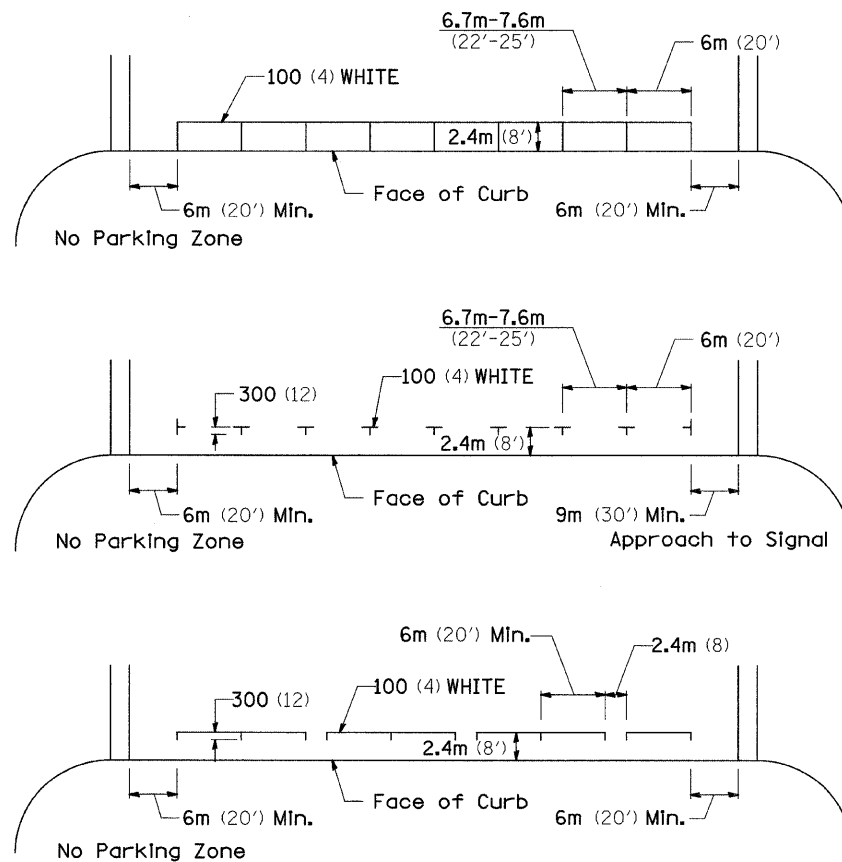


\*\* ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

## TYPICAL ISLAND OFFSET SHOULDER WIDTH

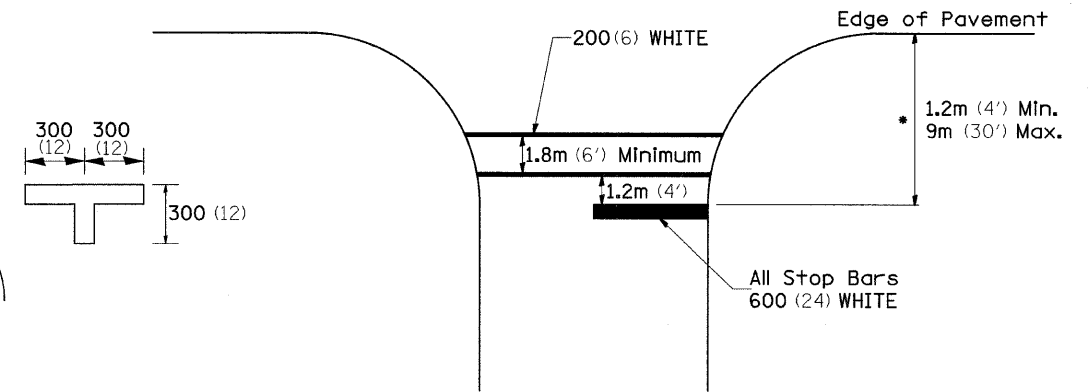


## TYPICAL PARKING SPACING



## STANDARD CROSSWALK MARKING

See Schedules for Locations



\* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME = c:\projects\p205007\d05007sp1.dgn	USER NAME = grntpm	DESIGNED - DRAWN -	REVISED - REVISED -
	PLOT SCALE = 48.0349 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = Wed Nov 28 13:43:37 2007	DATE -	REVISED -

DESIGNED -  
DRAWN -  
CHECKED -  
DATE -

REVISED - 7-20-06  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

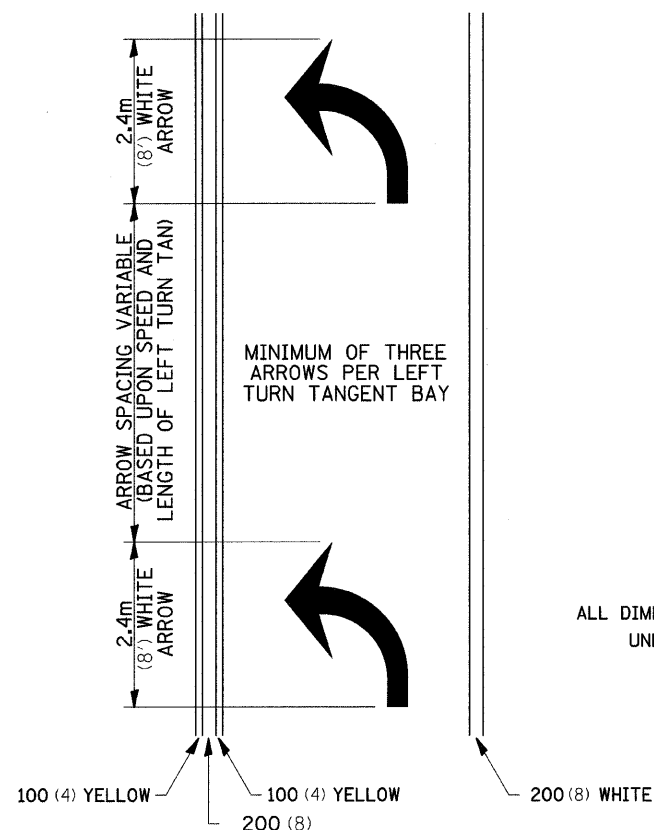
**REGION 2 / DISTRICT 2 STANDARD**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	HENRY	80	66
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 64D10	

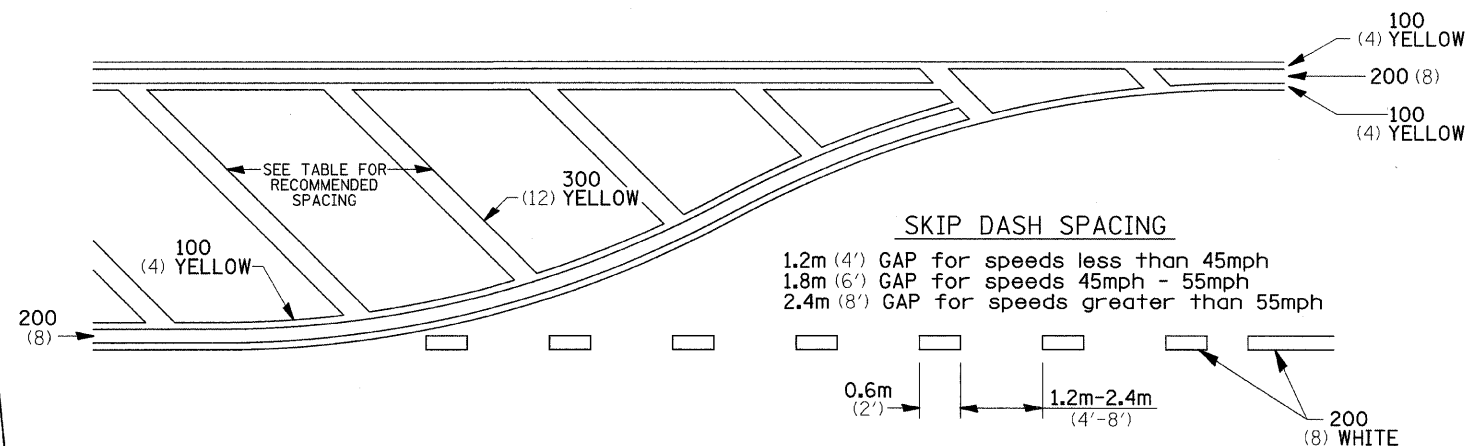
# TYPICAL PAVEMENT MARKINGS

## ARROW LAYOUT



12.2m  
6 at (40') O.C.  
APPROACH SIDE ONLY

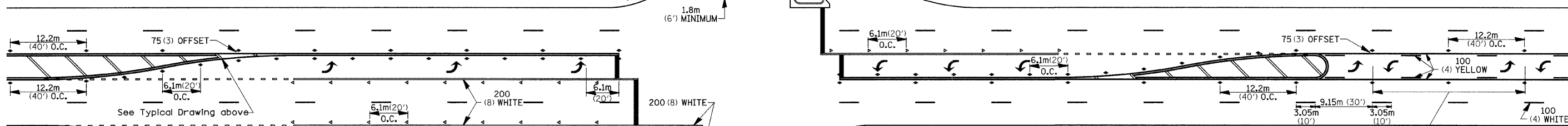
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



## RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

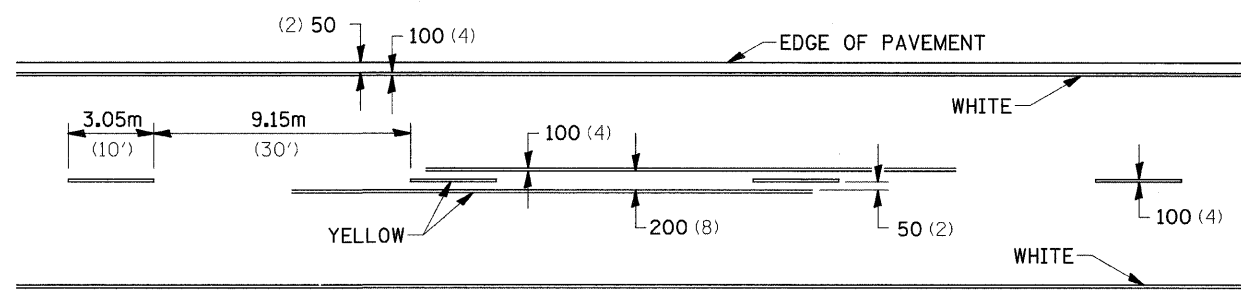
Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 50km/H (30MPH)	15.3m (50')	4.53m (15')	3.05m (10')
50-60km/H (30-40MPH)	22.9m (75')	6.1m (20')	4.53m (15')
70km/H (45MPH) & over	22.9m (75')	9.05m (30')	6.1m (20')

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



MINIMUM OF TWO PAIRS OF ARROWS. ADDITIONAL PAIRS EVERY 200'-300'.

## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



## SYMBOLS

See Typical Drawing above

12.2m (40') O.C. APPROACH SIDE ONLY

\* REDUCE TO 12.2m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15km/H (10MPH) LOWER THAN POSTED SPEEDS.

\*\* USE DOUBLE MARKERS WHEN ADT ≥ 25,000

## MULTI-LANE / UNDIVIDED

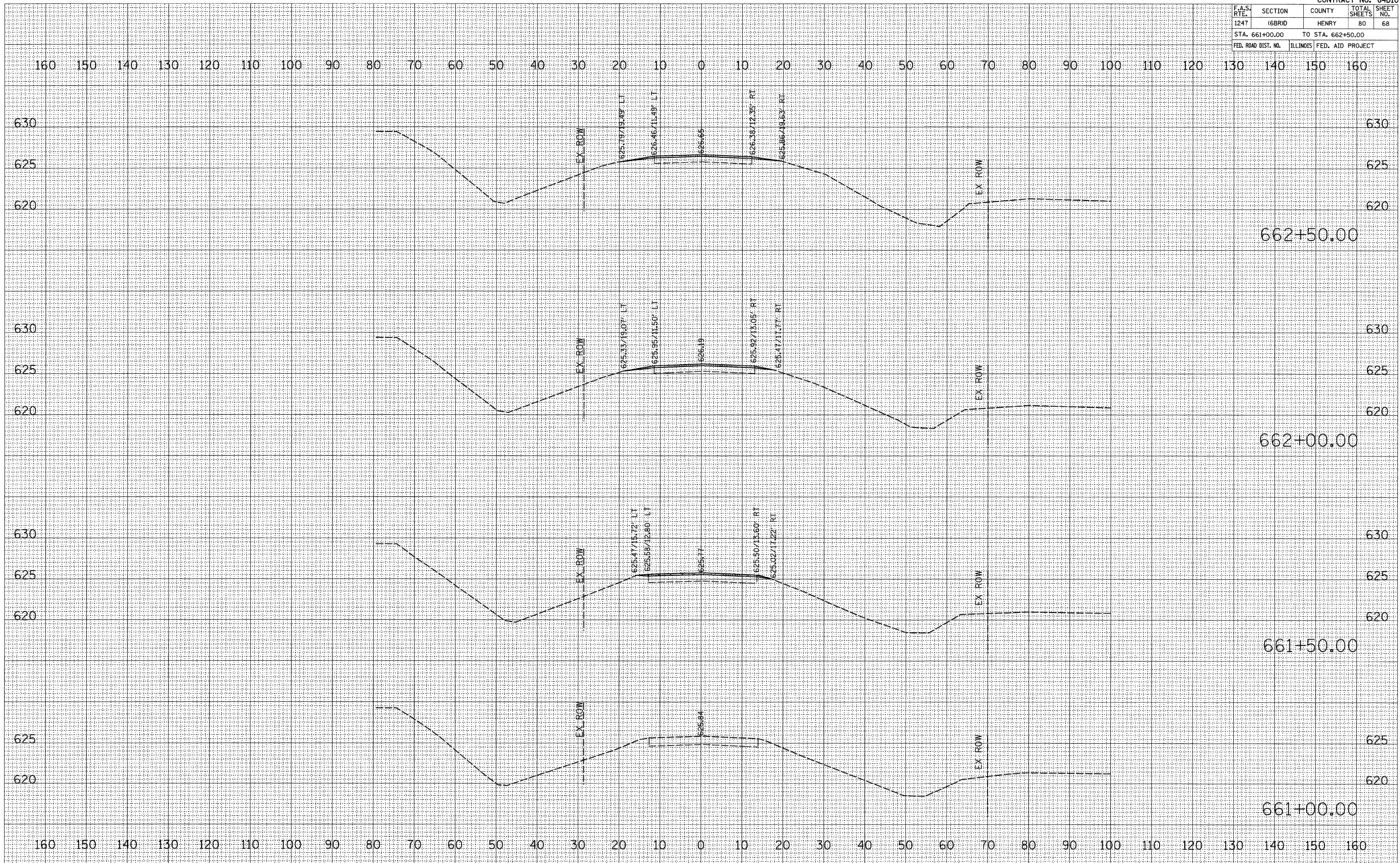
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		CHECKED -	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 64D10
		DATE -	REVISED -							

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1247	(6BR)D	HENRY	80	68
STA. 661+00.00		TO STA. 662+50.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY NO.	DATE

ORIGINAL SURVEY NO.	DATE

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 USER = graham



US 6 X-SECTIONS

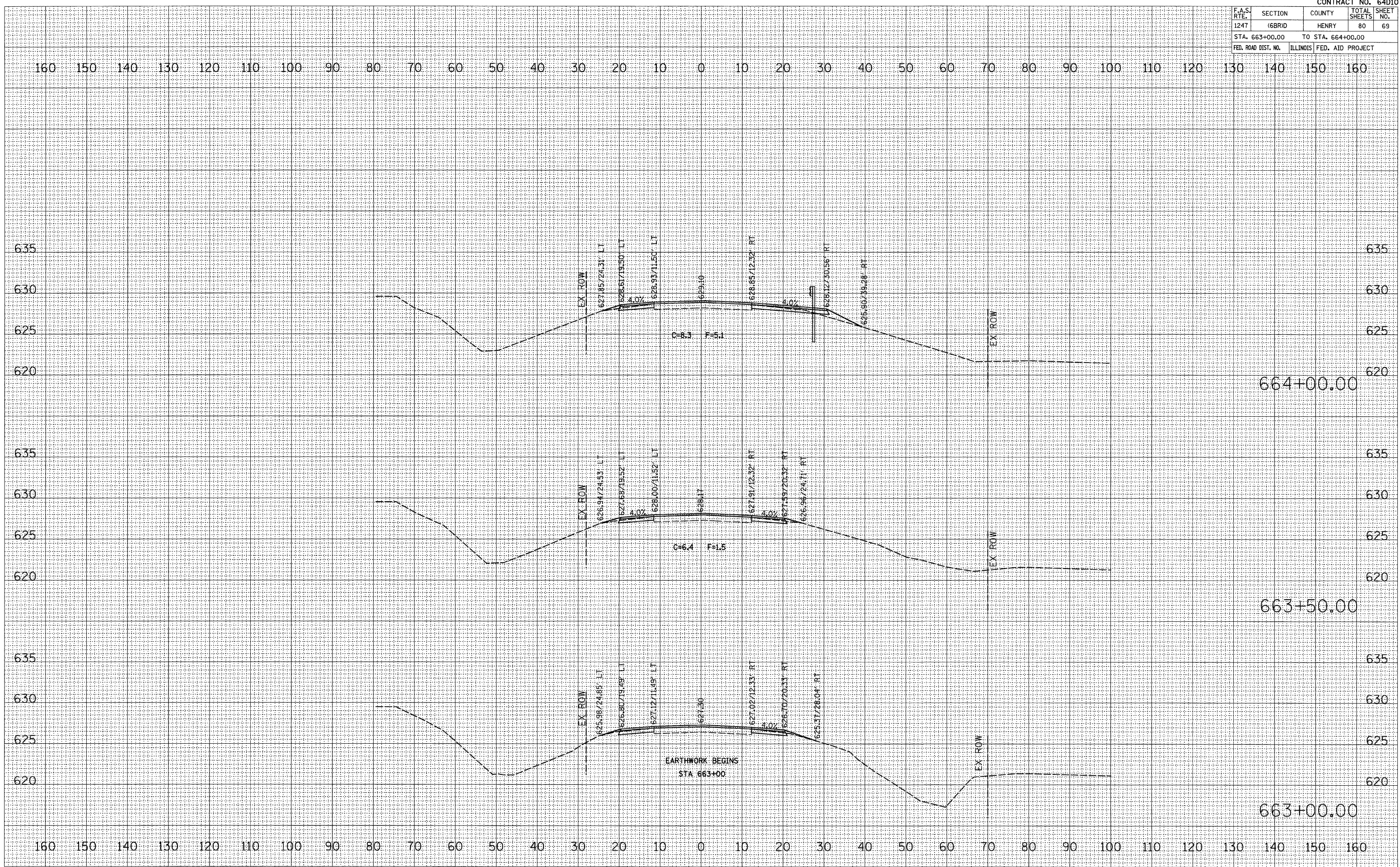


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1247	(6BR)D	HENRY	80	69
STA. 663+00.00		TO STA. 664+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

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 USER NAME = grantgm



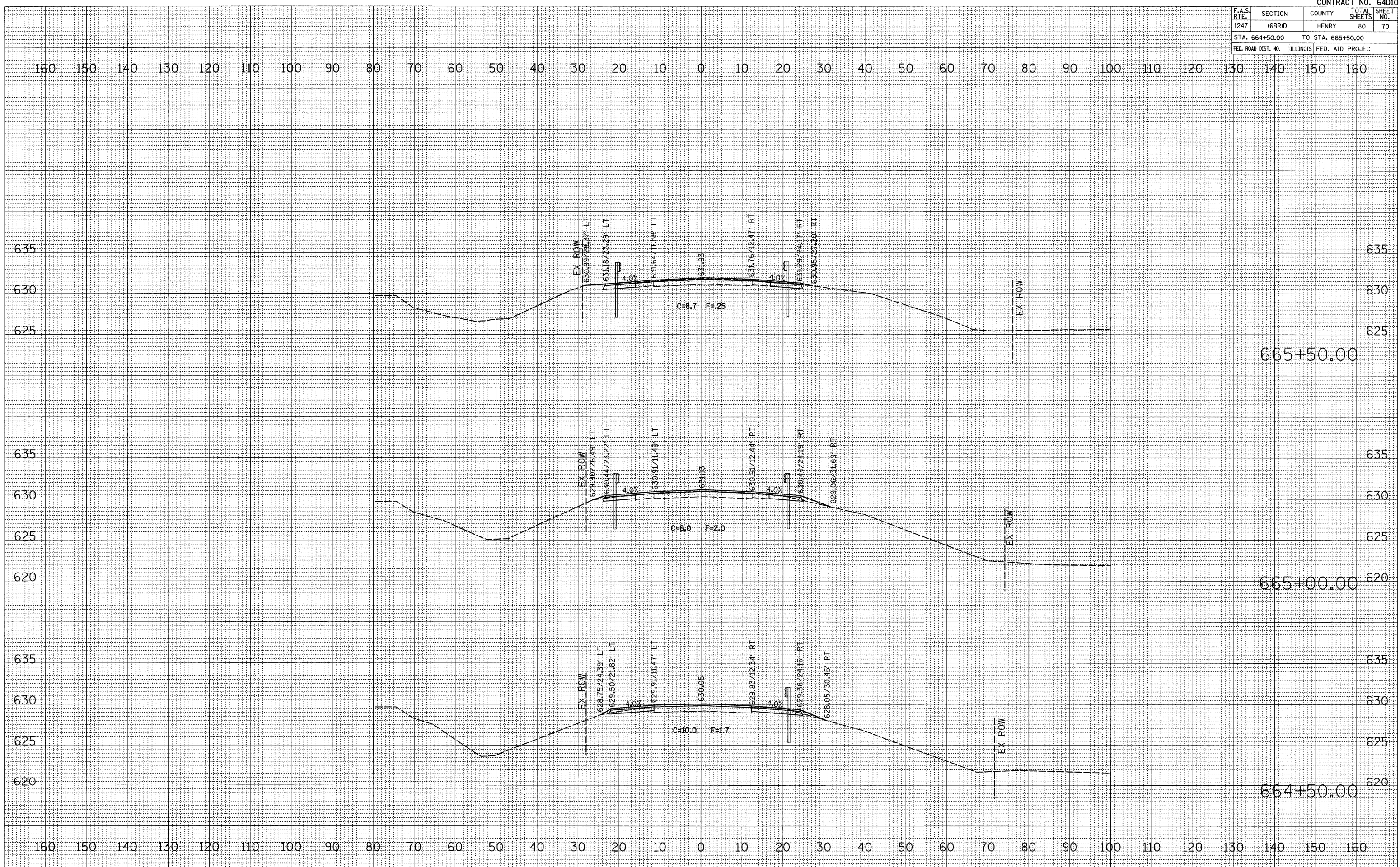


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1247	(6BRID)	HENRY	80	70
STA. 664+50.00		TO STA. 665+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

PLOT DATE = Wed Nov 28 13:35:53 2007  
 PLOT SCALE = 1" = 40' (User: ggrant)  
 PLOT USER = ggrant



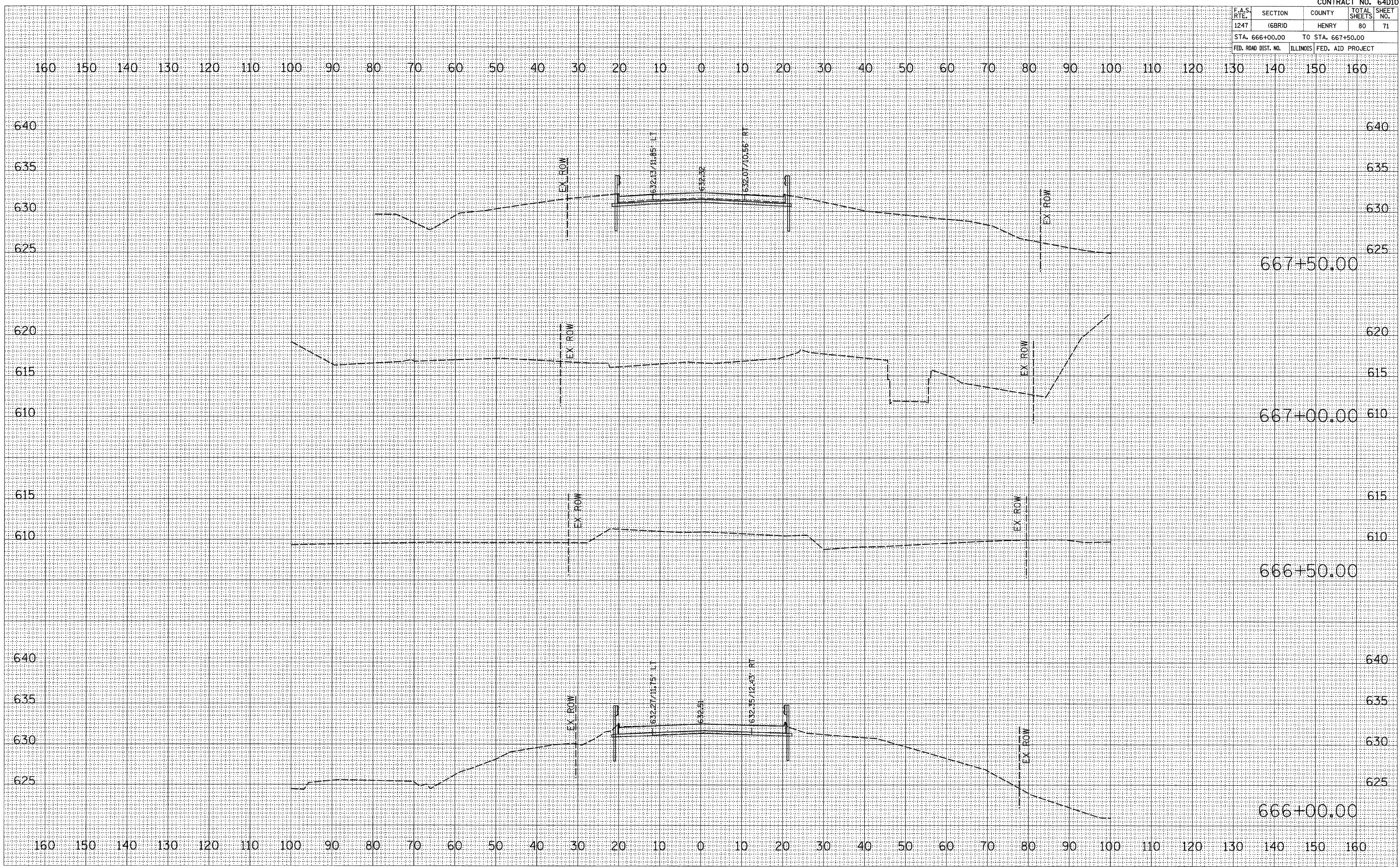


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1247	(6BR)D	HENRY	80	71
STA. 666+00.00		TO STA. 667+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

PLOT DATE = Wed Nov 28 13:39:53 2007  
 PLOT SCALE = 1"=40'  
 USER NAME = grantgm



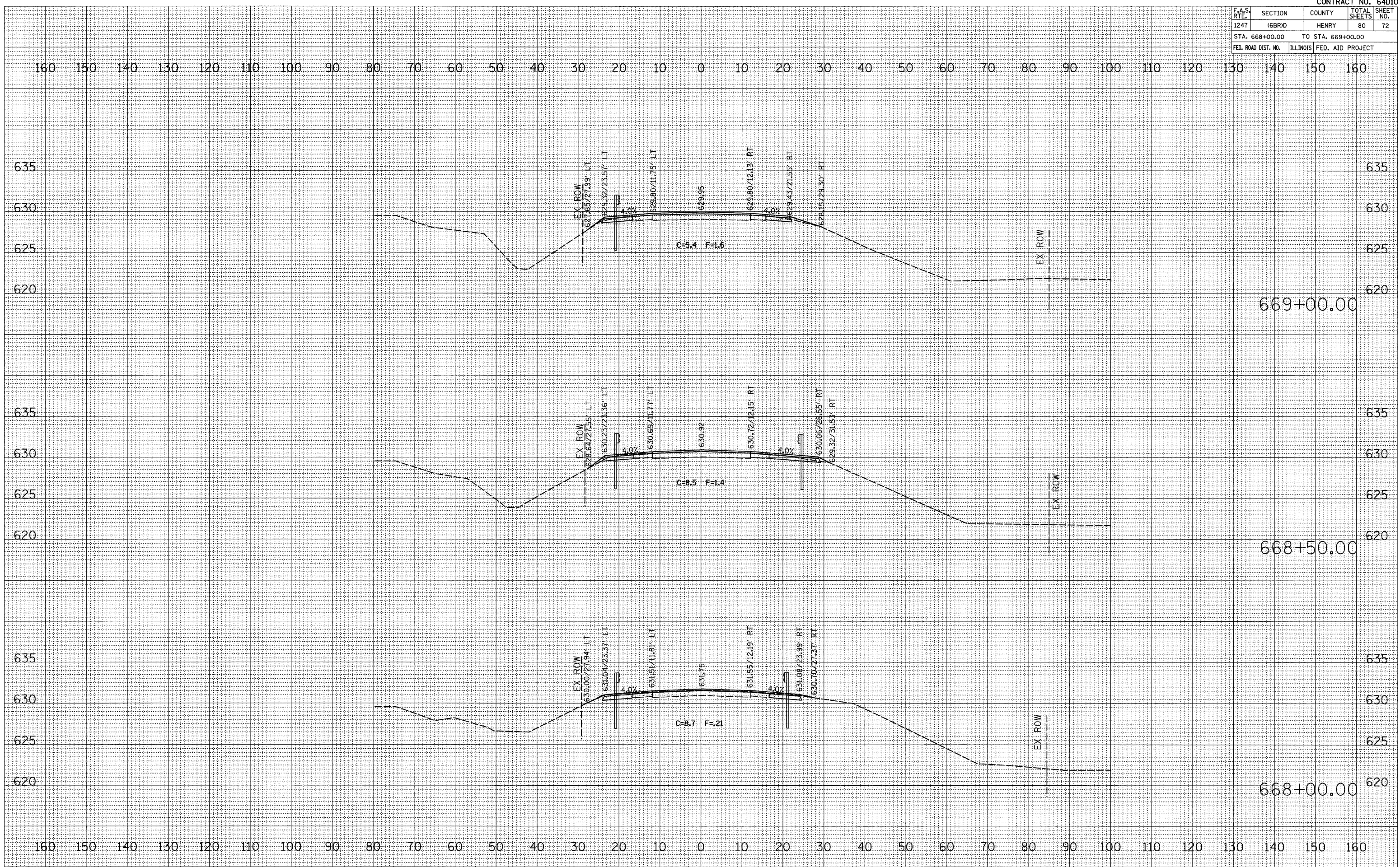


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1247	(6BRD)	HENRY	80	72
STA. 668+00.00		TO STA. 669+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

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 USER = ggrant  
 USER NAME = ggrant



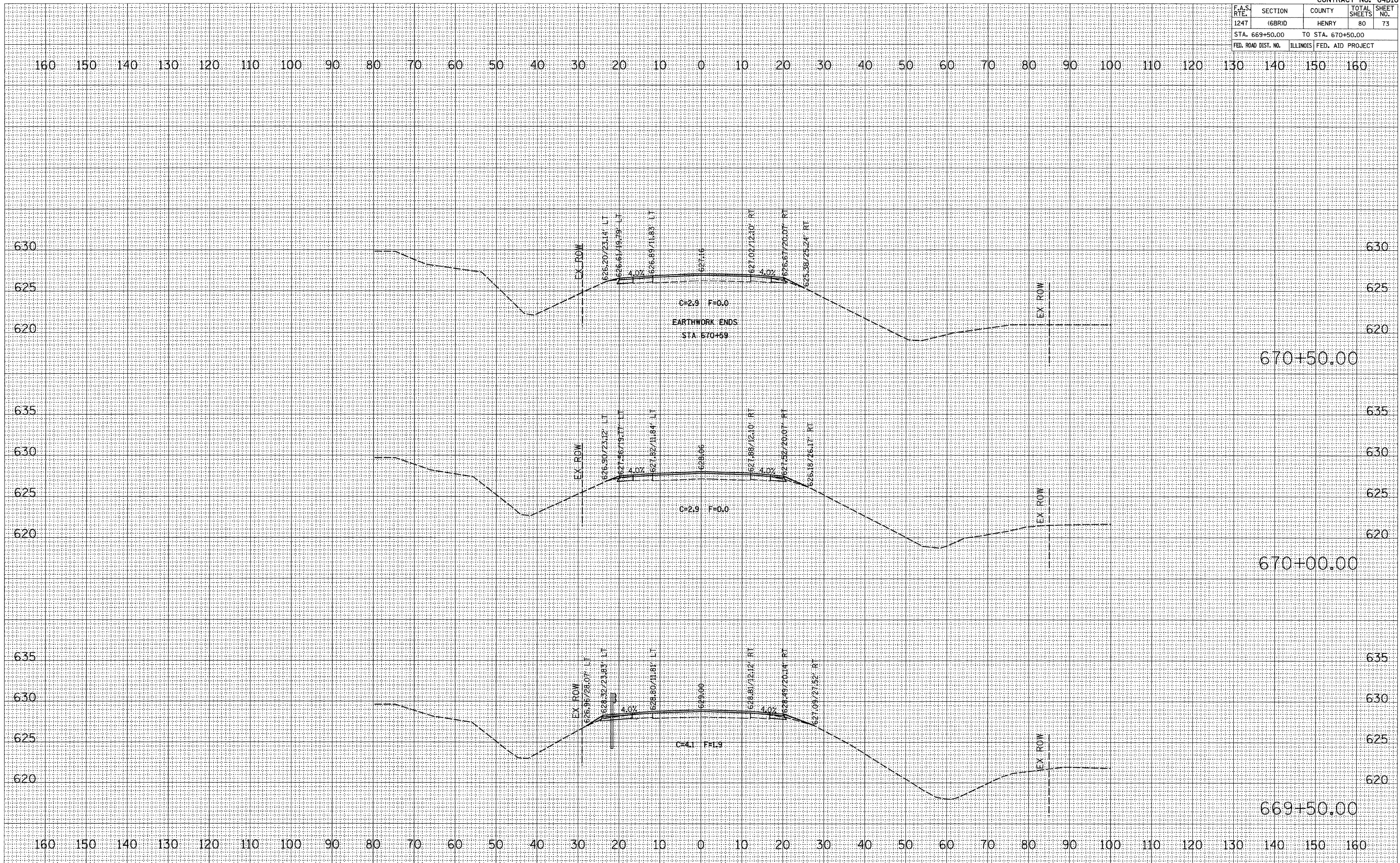


CONTRACT NO. 64D10			
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS
1247	(6BR)D	HENRY	80
STA. 669+50.00		TO STA. 670+50.00	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	

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

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

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**US 6 X-SECTIONS**

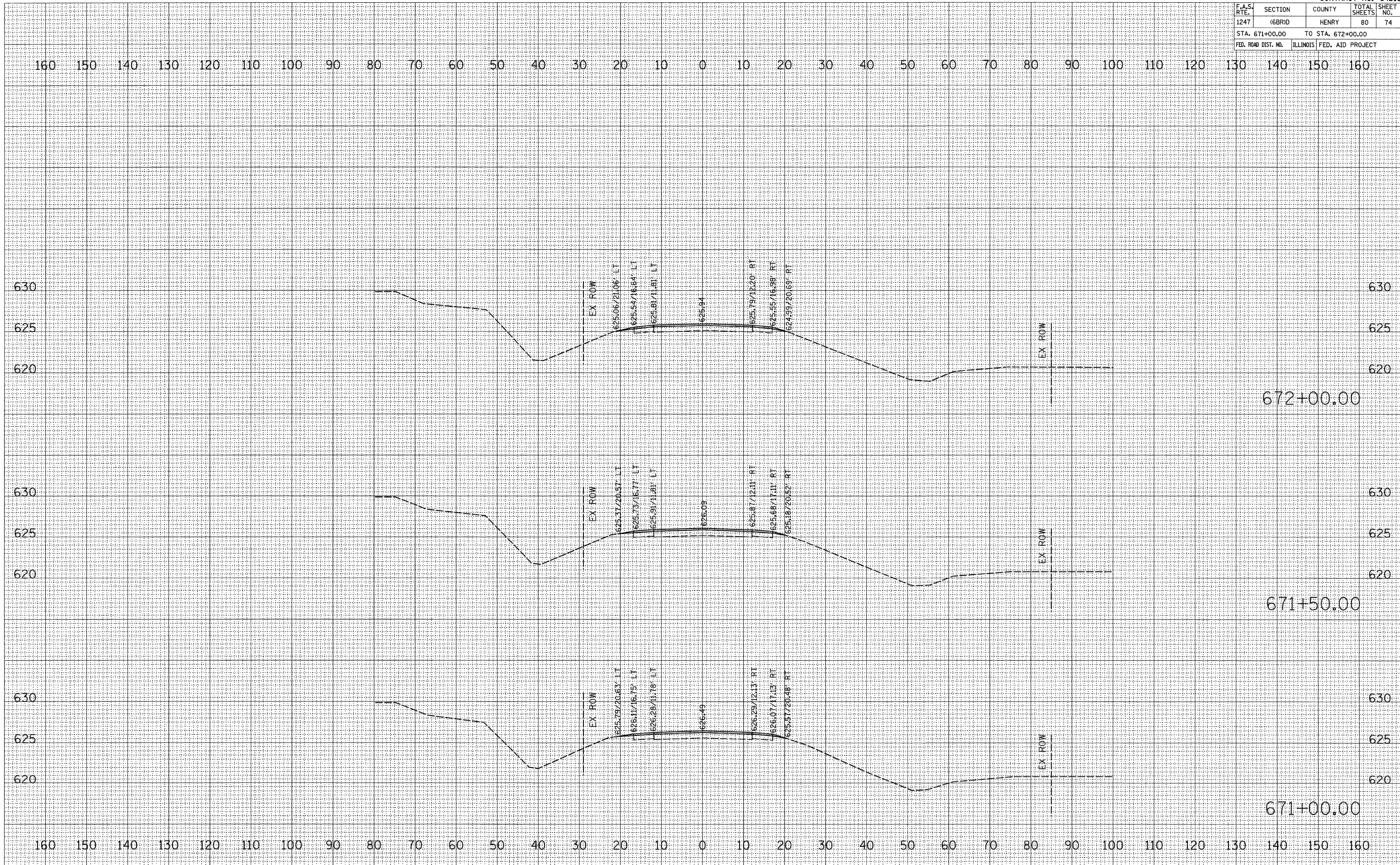


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1247	(6BRD)	HENRY	80	74
STA. 671+00.00		TO STA. 672+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

PLOT DATE = Wed Nov 28 13:35:54 2007  
FILE NAME = c:\work\proj\64d10\64d1074.dwg  
USER NAME = grantzsm





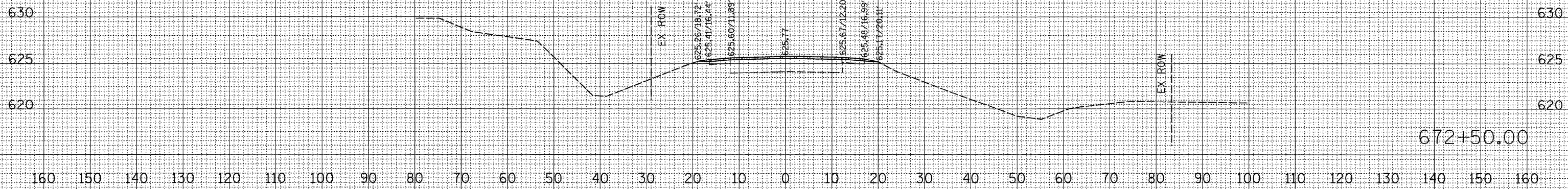
CONTRACT NO. 64D10				
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1247	(6BR)D	HENRY	80	75
STA. 672+50.00		TO STA. 672+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

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

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

PLOT DATE = Wed Nov 28 13:39:45 2007  
 FILE NAME = c:\pwork\64d10\64d1075.dwg  
 FILE SIZE = 104768 bytes  
 USER NAME = gregg



672+50.00



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(125BR-1)D	HENRY	80	76
STA. 878+00.00		TO STA. 879+50.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

DATE	BY

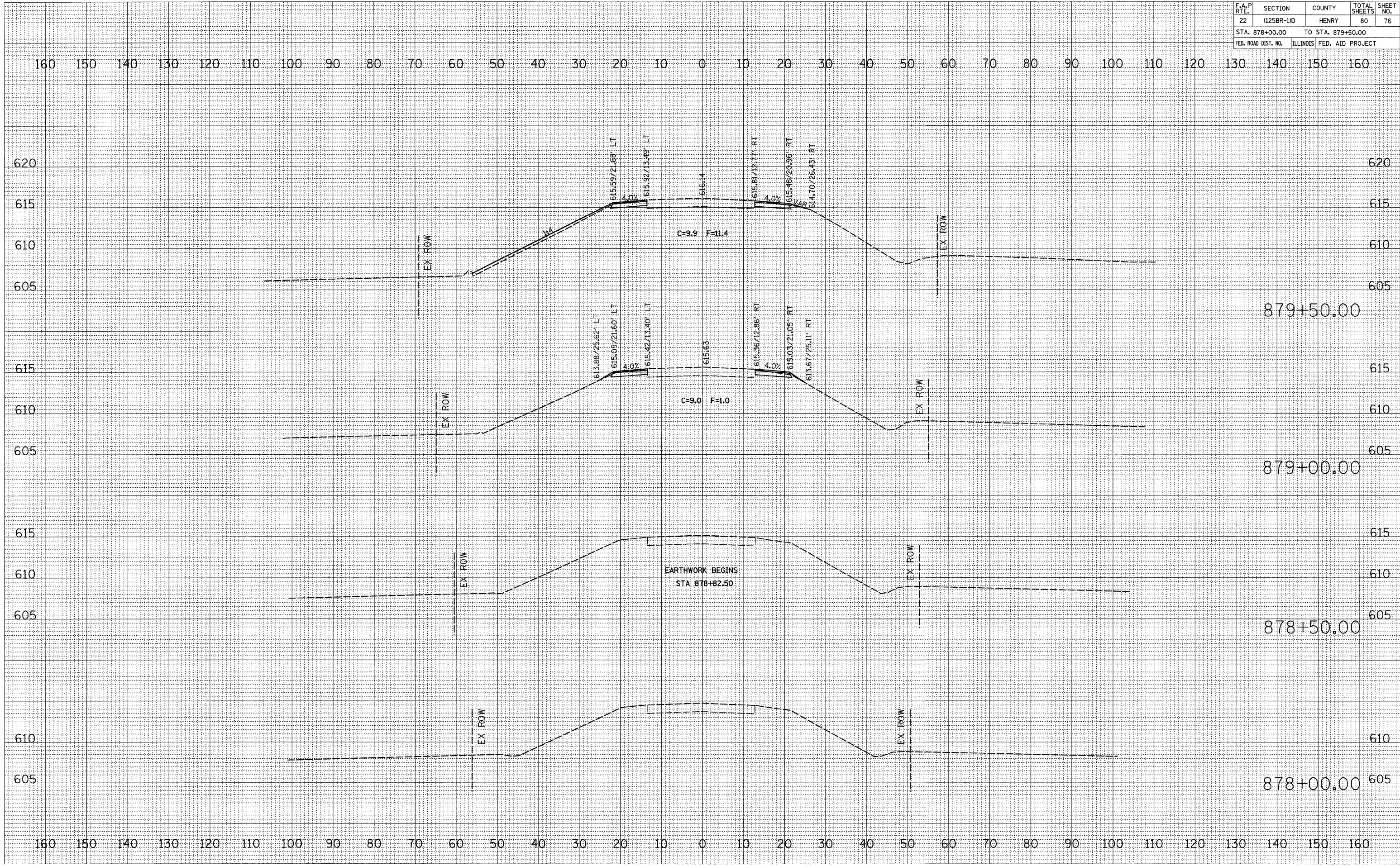
NO.	USER NAME	DATE

DATE	BY

NO.	USER NAME	DATE

PLOT DATE = Wed Nov 28 13:35:52 2007  
 FILE NAME = c:\p\projects\125BR07\c64d10\76.dwg  
 USER NAME = grantgm



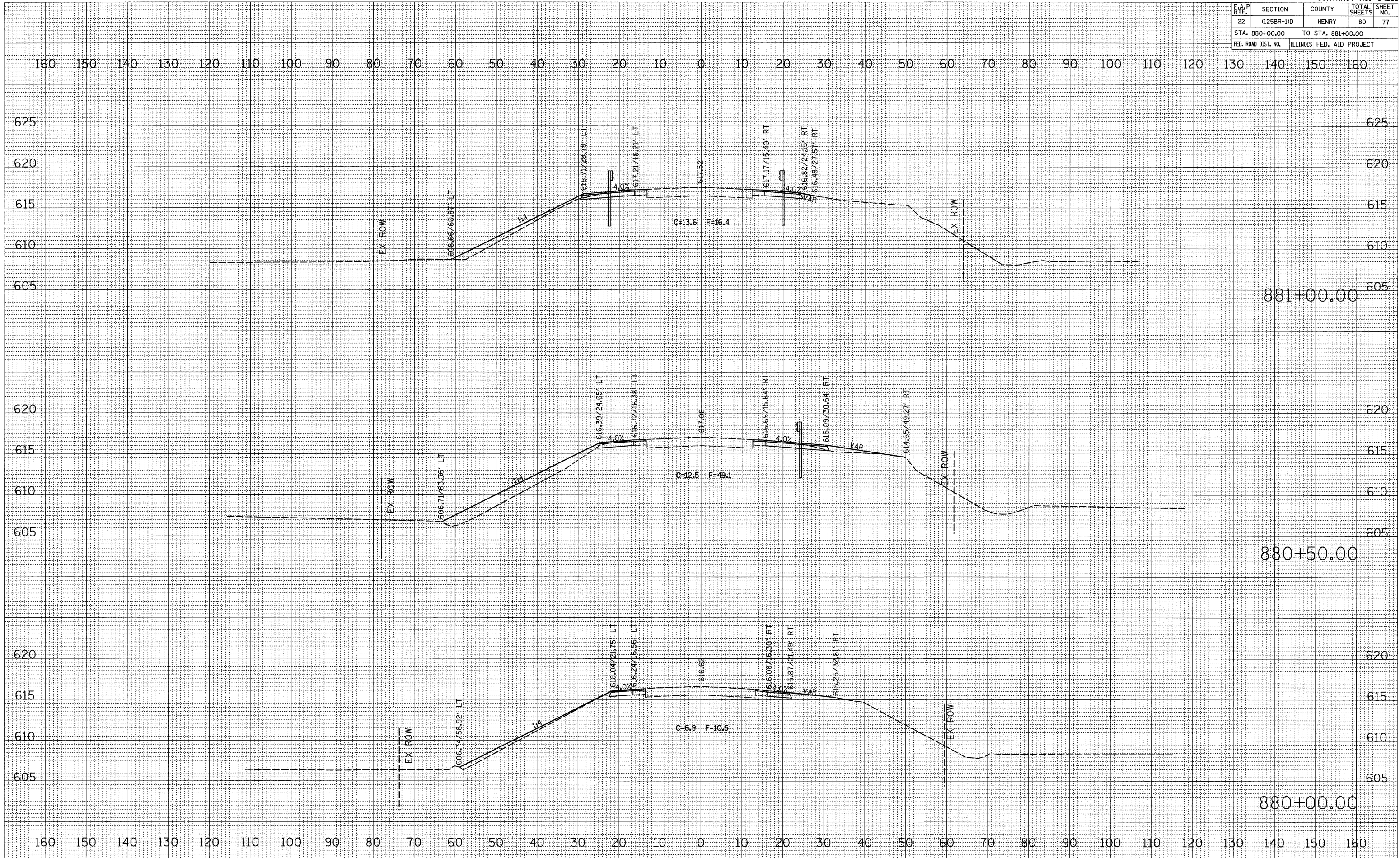


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(125BR-1D)	HENRY	80	77
STA. 880+00.00		TO STA. 881+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

PLOT DATE = Wed Nov 28 13:39:52 2007  
 PLOT SCALE = 1" = 40' (horizontal) / 1" = 20' (vertical)  
 PLOT USER = grantm



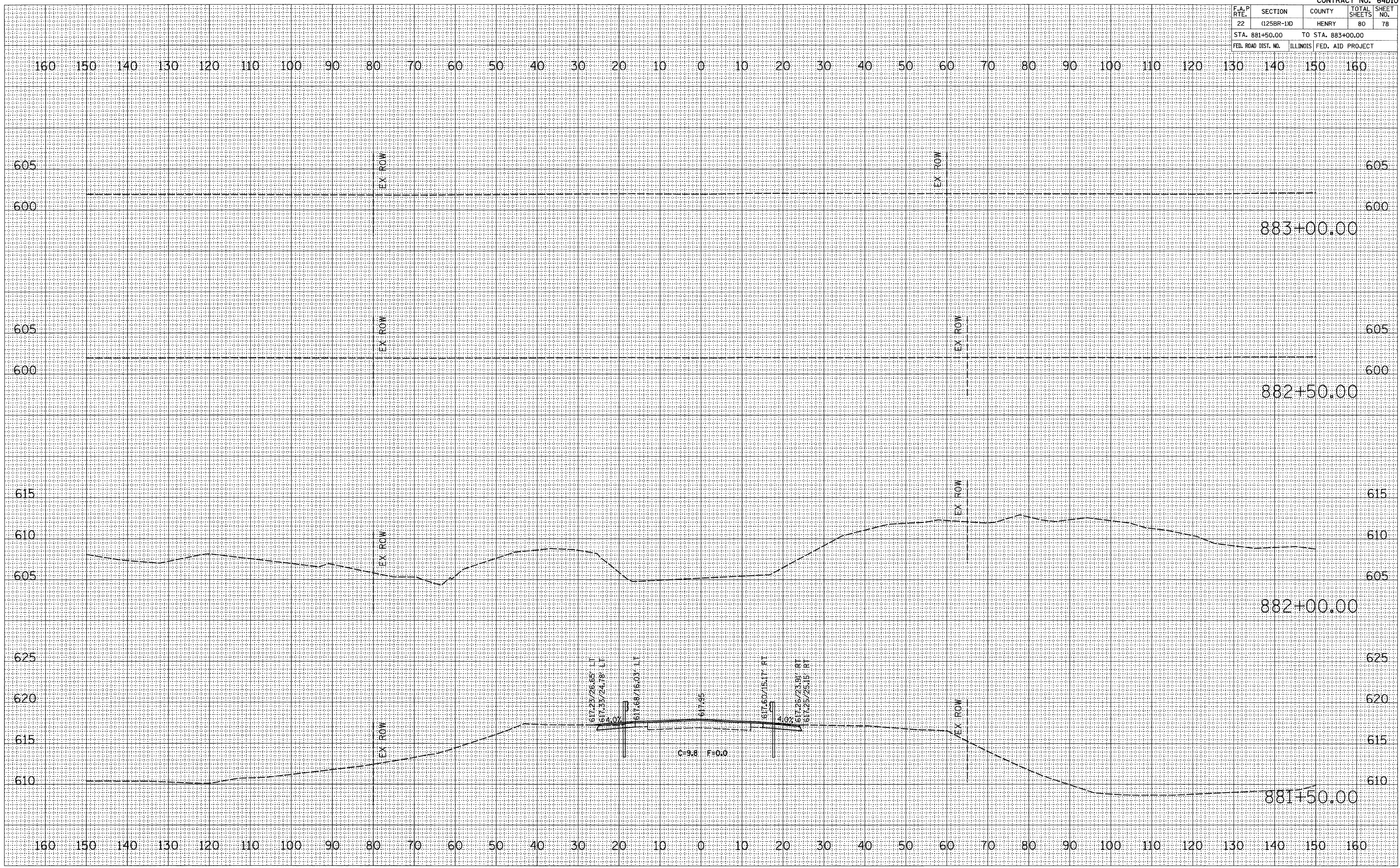


CONTRACT NO. 64D10				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(125BR-1D)	HENRY	80	78
STA. 881+50.00		TO STA. 883+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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

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

PLOT DATE = Wed Nov 28 13:09:52 2007  
 FILE NAME = c:\pwork\proj\64d10\64d1078.dwg  
 USER NAME = gregtp





F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(125BR-1D)	HENRY	80	79
STA. 883+50.00		TO STA. 884+50.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

DATE	BY	SURVEYED	PLOTTED	TEMPERATURE	AREAS CHECKED

DATE	BY	SURVEYED	PLOTTED	TEMPERATURE	AREAS CHECKED

PLOT DATE = Wed Nov 28 13:39:52 2007  
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