INDEX OF SHEETS

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3 SUMMARY OF QUANTITIES
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5 039-0036 DETOUR SIGNING
6 039-0036 PLAN AND ELEVATION
7-8 039-0036 BEAM DETAILS
9 039-0009 PLAN AND ELEVATION, REPAIR DETAILS
10 039-0009 REPAIR DETAILS

STATE OF ILLINOIS

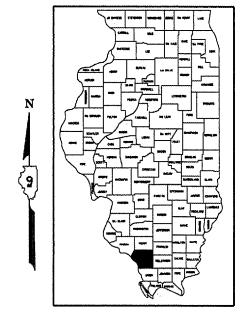
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS DISTRICT NINE

FAU ROUTE 9669 (IL 127) FAP ROUTE 42 (IL 13 & 127) SECTION 13I-1,(12-2)I-1 C-99-016-08 JACKSON COUNTY FAP 42 - JACKSON 10 1

*131-1, (12-2)1-1 CONTRACT NO. 78036



<u>STANDARDS</u>

701201-02

LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH

701901 TRAFFIC CONTROL DEVICES

B.L.R. 22-5 2L. 2W. RURAL TRAFFIC - ROAD CLOSED TO THRU TRAFFIC

SN: 039-0036
MURPHYSBORO TOWNSHIP
2005 ADT = 7000
INVENTORY RATING HS 16.9
OPERATING RATING HS 27.9

SN: 039-0009
SOMERSET TOWNSHIP
2005 ADT = 4800
INVENTORY RATING HS 11.7
OPERATING RATING HS 18.5

IMPROVEMENT LOCATION
S.N. 039-0009

IMPROVEMENT LOCATION

GORHAM

CARBONDALE

IMPROVEMENT LOCATION
S.N. 039-0036

MAP NOT TO SCALE

PLAN DRAWINGS ARE NOT TO SCALE.

J.U.L.I.E.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

CONTRACT NO. 78036

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

TESTIGATY

20 08

Cric E. Harry

Jebruary

20 08

Christian

Christian

Director Of Highways, Chief Engineer

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CENTREX: 782-4554

FENGINEER: CASEY N. TECKENBROCK PHONE: (618

ROUTE NO. BESTIC		600	RITY	TOTAL	OF NEXT	
FAP 42 FAU 9669	•	JACKSON		10	2	
PEG. ROAD DIET, NO. 7		ILLINOIS	PEO. AIU PRO	шст-		

*13I-1, (12-2)I-1 CONTRACT NO. 78036

GENERAL NOTES

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

THE DIMENSIONS BETWEEN SIGNS MAY BE MODIFIED SLIGHTLY SO AS TO AVOID CONFLICTS WITH EXISTING SIDEROADS, COMMERCIAL ENTRANCES, AND PRIVATE ENTRANCES. THE BUREAU OF OPERATIONS SHOULD APPROVE FINAL PLACEMENT OF TRAFFIC CONTROL SIGNING.

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

ALL HOT-MIX ASPHALT

2.016 TONS/CU. YD.

The cost of detour signing is included in the cost of Traffic Control and Protection Standard BLR 22, and will not be paid for separately.

Prepared By:	Dum Heammy
	DISTRICT OPERATIONS ENGINEER '
Examined By:	Nam Clarton
	ASSISTANT REGIONAL ENGINEER
Examined By:	James Trais Emery
	DISTRICT LAND ACQUISITION ENGINEER
Examined By:	Carrie Nelsen
	DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By:	the Beanfiewica
_	DISTRICT STUDIËS & PHANS ENGINEER
Examined By:	Just Lin
	DISTRICT CONSTRUCTION ENGINEER
Examined By:	Buce w Postos
	DISTRICT MATERIALS ENGINEER
Examined By:	A Swother
·	DISTRICT PROJECT IMPLEMENTATION ENGINEER
Approved By:	Man Chamie
•	DEPUTY DIRECTOR OF HIGHWAYS.
	REGION 5 ENGINEER
	Der 6 2007
	0110

ROUTE NO.	MECTION	COLMITY		MATOY.	WHERT NO.
FAP 42 FAU 9669	*	JACK	SON	10	3
PED, ROAD DIST.	PED, ROAD DIST, NO. 7		PED. AID PRO	MICT-	

*13I-1, (12-2)I-1 CONTRACT NO. 78036

SUMMARY OF QUANTITIES

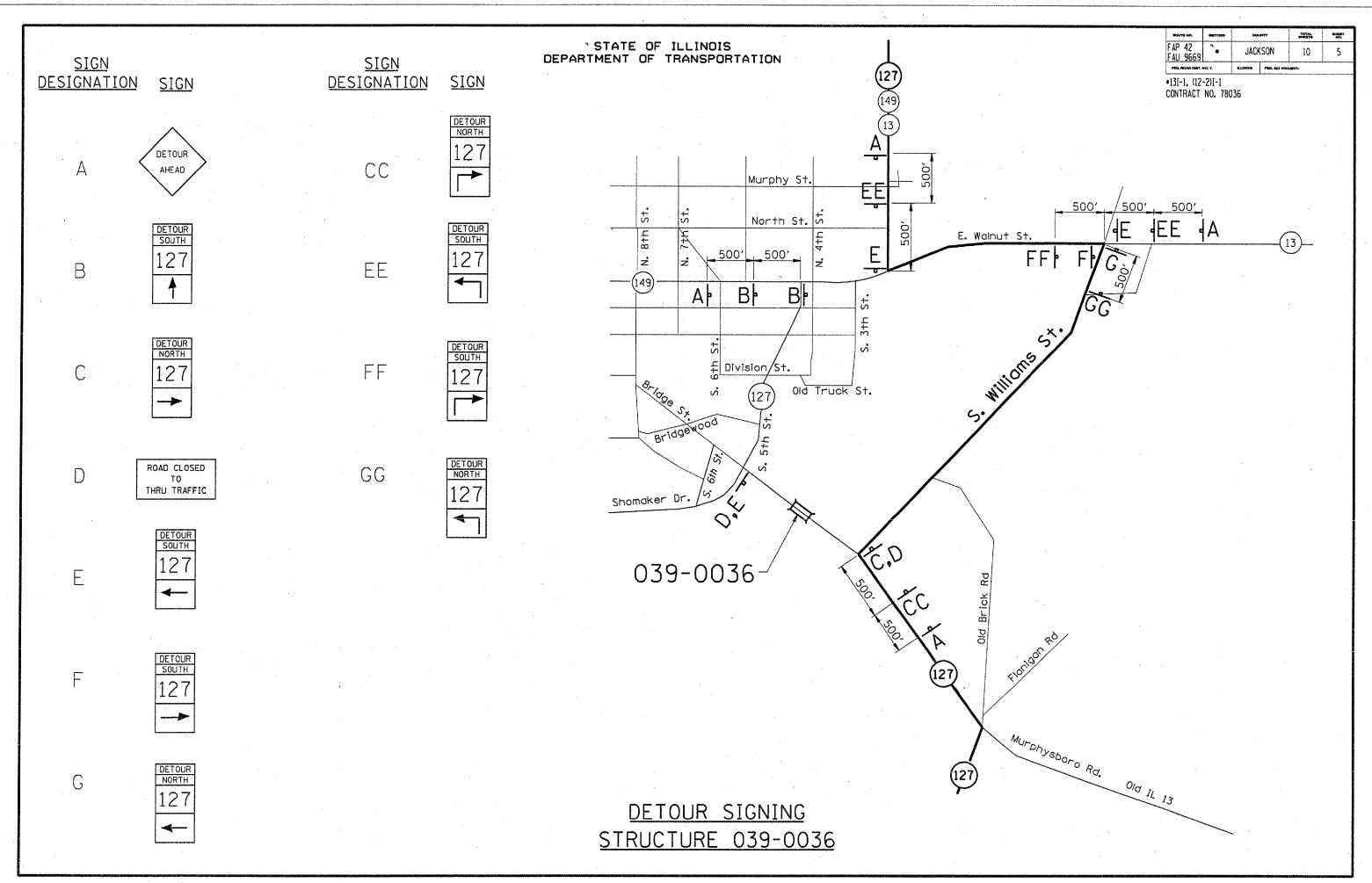
				FAP 42	FAU 9669
				QUANTITY	
.00% STATE	SFTY-2A		TOTAL	RURAL	URBAN
CODE NO.	ITEM DESCRIPTION	UNIT	QUANTITY	039-0009	039-0036
40603345	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	4.2		4.2
44001005	HOT-MIX ASPHALT SURFACE REMOVAL	SQ YD	11.3		11.3
50102400	CONCRETE REMOVAL	CU. YD	3.7		3.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	3,9		3.9
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	354		354
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	19920	19600	320
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	190		190
X0325806	WATERPROOFING MEMBRANE SYSTEM	SQ_FT_	392.8		392.8
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	202.3		202.3
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	2	2
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70101835	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22	L SUM	1		1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	3	1	2
X0323076	SILICONE JOINT SEALER, 13/4"	FOOT	117		117
X0320047	REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS	SQ. FT	364		364

ACUTE NO.	SECTION	cou	RTY	TOTAL.	SP-MINIT NO.
FAP 42 FAU 9669	•	JACK	(SON	10	4
PEO. ROAD DIST. 1	PED. ROAD DIST. NO. 7		PED. AID PRO	VIECT-	

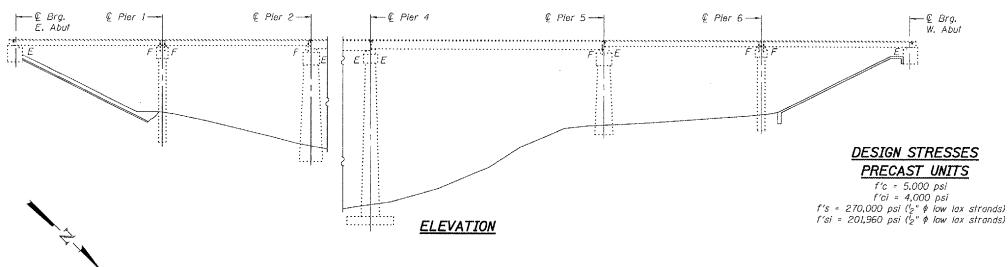
*131-1, (12-2)I-1 CONTRACT NO. 78036

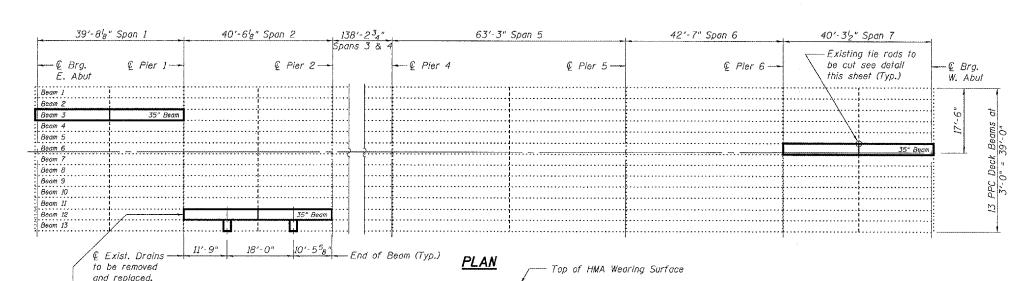
<u>039-0036</u> BITUMINOUS MIX DESIGN

LOCATION:	HOT-MIX ASPHALT SURFACE COURSE
MIXTURE USE(S):	HOT-MIX ASPHALT SURFACE COURSE, MIX D. N90
AC/PG:	PG64-22
RAP % (MAX):	10
DESIGN AIR VOIDS:	4.0%, 90 GYRATION DESIGN
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL - 9.5 mm OR IL 12.5 mm
FRICTION AGGREGATE:	D SURFACE



Rev. 12/11/07 RKG





14"-

40′-2⁵8″ Span 1 & 2

40'-10" Span 7

-End of Beam

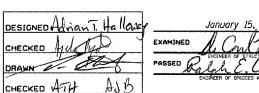
Top of Beam

to Remain

filled with non-shrink grout. HMAWaterproofing Membrane Removal Line System Removal Line Lap Waterproofing Existing HMA Surf. New Waterproofina Membrane System Existing Waterproofing

-1" Joint in sidewalk to be

WATERPROOFING TREATMENT



Membrane System

January 15, 2008

ANTICIPATED INITIAL CAMBER DIAGRAM TE OF 081-004625 STRUCTURA Expires: November 30, 2008

Max. <u>Co</u>ncrete Removal 6 locations. Existing Beam Existing Beam To be removed. Cut lines of existing tie rods.

BEAM REMOVAL DETAIL AT TRANSVERSE TIES

ROUTE NO.	SECTION	900	MIY	TOTAL SHEETS	SHEET NO.	SHE
		Jock	son	10	6	3
FEO. RONG 0197	NO. 7	1L, INCIS	PEO. A10 PR	OJECT-		

EET NO. SHEETS

GENERAL NOTES

Contract Number: 78036

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

The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractors responsibility to account for the condition of the beams when developing construction procedures.

Any damage done to the bridge during beam removal shall be repaird by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.

The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

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.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

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

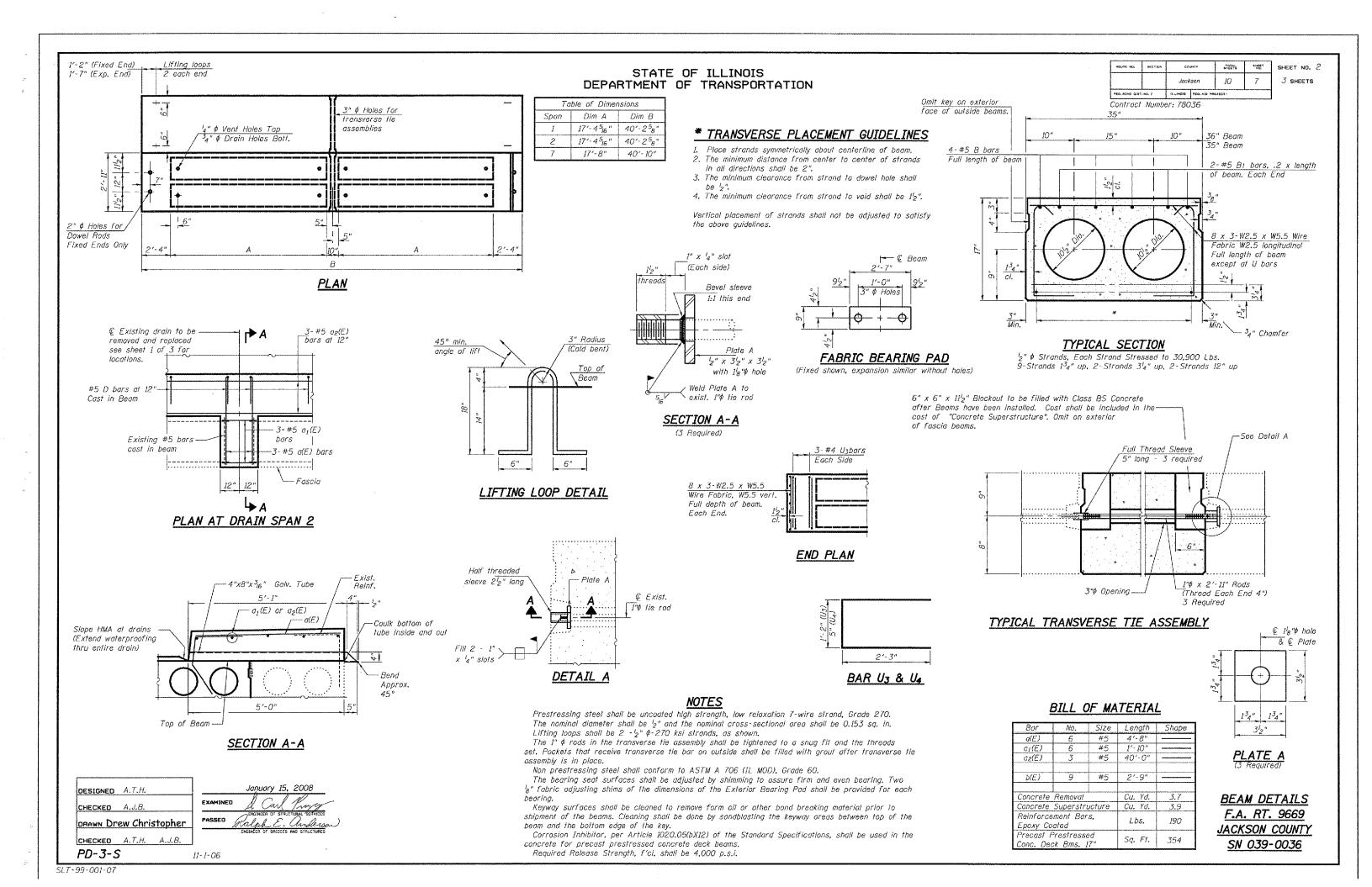
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified), See Special Provisions.

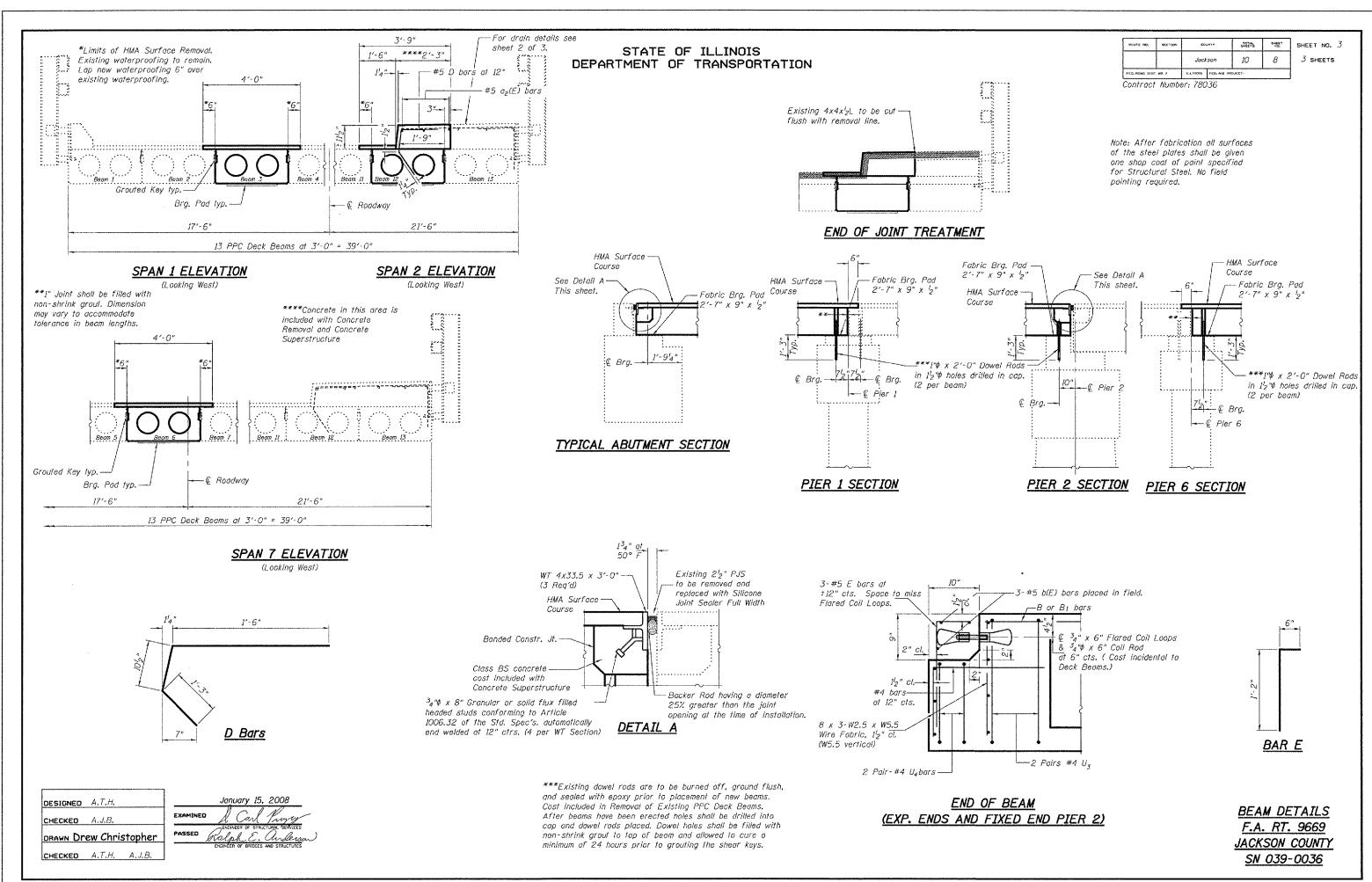
Reinforcement bars designated (E) shall be epoxy coated.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sg. Ft.	364
Concrete Removal	Cu. Yd.	3.7
Hot Mix Asphalt Surface Removal	Sg. Yd.	11.3
PPC Deck Beams 17" Depth	Sq. Ft.	354
Concrete Superstructure	Cu. Ft.	3.9
Hotmix Asphalt Surface Course Mix "D" N90	Ton	4.2
Waterproofing Membrane System	Sq. Ft.	392.8
PC Mortar Fairing Course	Foot	202.3
Furnishing and Erecting Structural Steel	Pound	320
Reinforcement Bars, Epoxy Coated	Pound	190
Silicone Joint Sealer, 1^{3}_{4} "	Foot	117

PLAN AND ELEVATION F.A. RT. 9669 JACKSON COUNTY SN 039-0036





DESIGNED CMV
CHECKED SDS
DRAWN DLH
CHECKED CMV



3'-6"

3'-0"

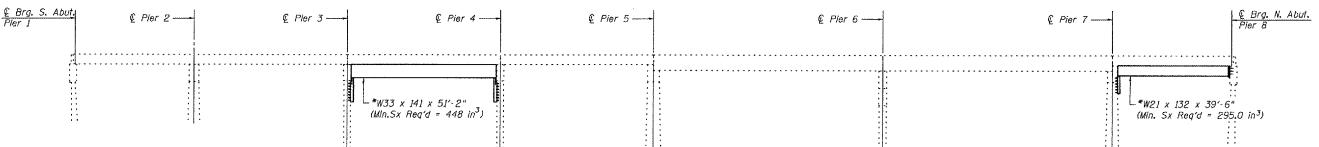
1316 " holes for

TRANSVERSE TIE P

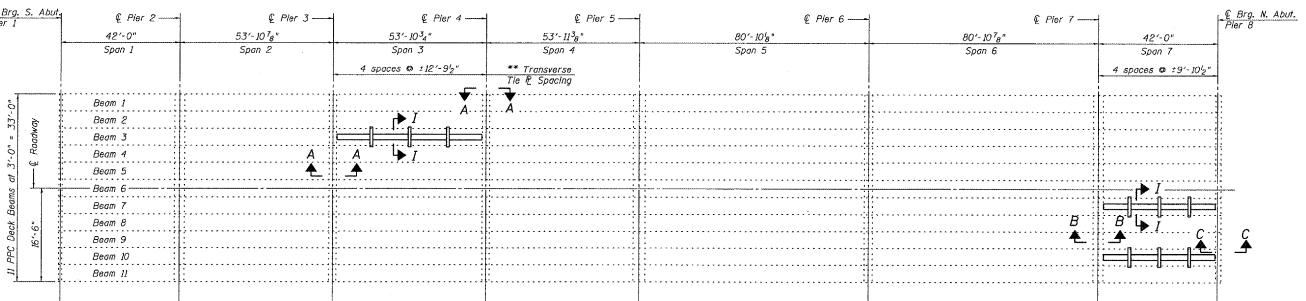
³₄"¢ threaded rods

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

Contract # 78036



ELEVATION



PLAN

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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.

See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods: Min. embedment 9".

The cost of epoxy grouted threaded rods shall be included with Furnishing and Erecting Structural Steel.

The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractors responsibility to account for the condition of the beams when developing construction procedures.

If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	19,600

Contractor has the option of using used steel. See Special Provision.

GENERAL PLAN AND ELEVATION

REPAIR DETAILS

IL RTE 13 & IL RTE 127

OVER BEAUCOUP CREEK

JACKSON COUNTY

S.N. 039-0009

