CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

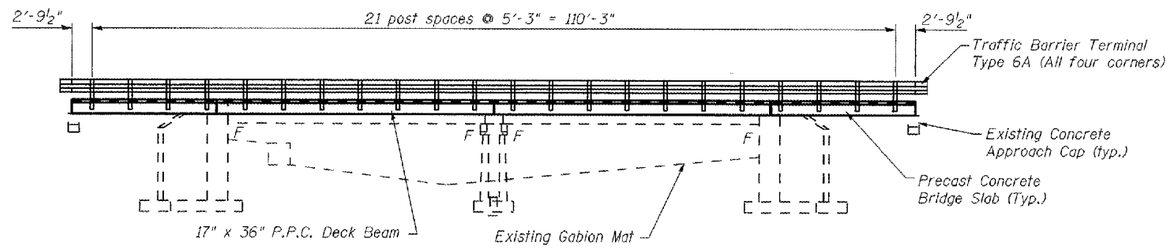
SHEET 1 OF 12 SHEETS

Benchwork: TBM #199. Chiseled Square on west end of south concrete headwall southwest quad of US67 and TR1050N. Elevation 625.926

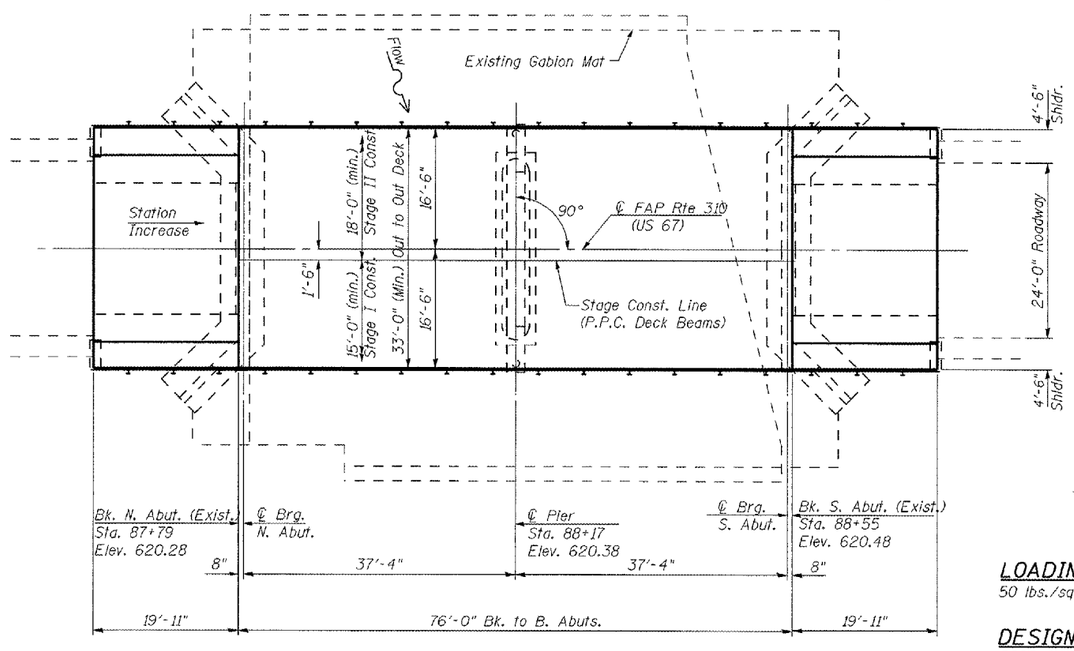
Existing Structure: S.N. 055-0005. Built as S.B.I. Rte. 3, Section 39B at Sta. 88+17 in 1923. The existing PPC Deck Beams shall be removed and replaced. Superstructure removal shall be 33'-2" wide by 76'-0" long. Existing gabions in channel to remain.

Traffic to be maintained using stage construction. One lane is to remain open at all times.

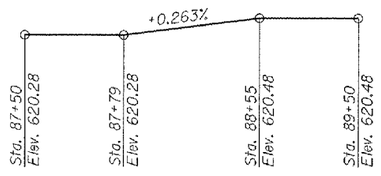
No salvage.



ELEVATION



PLAN



PROFILE GRADE
(Along ℄ Roadway)

STATION 88+17
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 310 SEC. (39B)1
F.A.P. PROJ.
LOADING HS20-44
STR. NO. 055-0005

NAME PLATE
See Std. 515001

Attach new name plate to the backside of 8" rail element. Existing Name Plate shall be removed, cleaned and relocated adjacent to new Name Plate. Cost included with Name Plates.

GENERAL NOTES

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

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation or a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

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

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

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of heavy equipment on new beams, 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 the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Superstructure.

No instream work will be allowed on this project.

Repairs of abutments and pier shall be completed prior to placement of the new beams.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Structures	Cu. Yd.		0.4	0.4
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2500		2500
Reinforcement Bars, Epoxy Coated	Pound	5310	30	5340
Steel Railing, Type SM	Foot	232		232
Name Plates	Each		1	1
Asbestos Bearing Pad Removal	Each		52	52
Epoxy Crack Injection	Foot		19	19
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.		49	49
Bridge Deck Grooving	Sq. Yd.	399		399
Protective Coat	Sq. Yd.	425		425
Concrete Wearing Surface, 5"	Sq. Yd.	425		425
Expansion Bolts ¾" ϕ	Each		16	16
Bar Splicers	Each	117		117

LOADING HS 20-44
50 lbs./sq. ft. allowance for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications 17th Edition

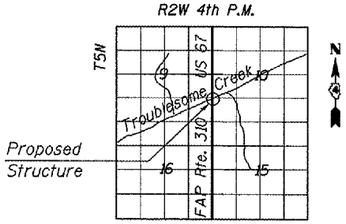
DESIGN STRESSES

FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" ϕ low lax strands)
f'si = 201,960 psi (1/2" ϕ low lax strands)

PRECAST CONCRETE UNITS
f'c = 4,500 psi
fy = 60,000 psi (Reinforcement)

APPROVED
For Structural Adequacy Only
Ralph E. Anderson
Engineer of Bridges & Structures



LOCATION SKETCH

MARTIN J. SILVESTER
081-004873
LICENSED STRUCTURAL ENGINEER
OF ILLINOIS

01-22-08

MARTIN J. SILVESTER
STRUCTURAL ENGINEER
LICENSE EXP. DATE 11-30-08

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)1
McDONOUGH COUNTY STR. 055-0005

SCALE: N.T.S. DRAWN BY RWH
DATE DEC 2007 CHECKED BY MJS

TUG PROJ.* 3107812-01 4:12:43 PM
PLOT DATE = 1/21/2008
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THE UPCHURCH GROUP, INC.