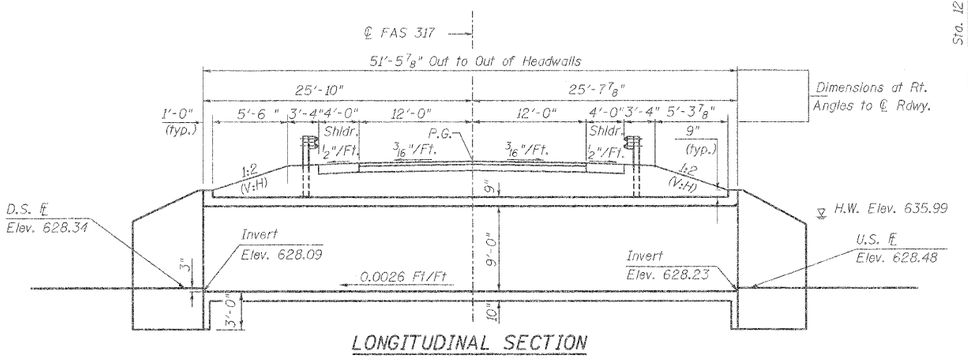
B.M. Top of N.W. Wingwall
Chis. Sq. Elev. 641.724

Existing Structure No. 038-0040 built as SBI Rte 25 Sec. 36 BY in 1952 is a two span continuous bridge with an 11" R.C. Slab. 43'-0" bk. to bk. abutments, 2 Spans @ 20'-0" with closed abutments. 35'-0" f. to f. of curb and 38'-4" o. to o. of deck.
Structure to be replaced with a triple box culvert.
Traffic to be maintained utilizing stage construction

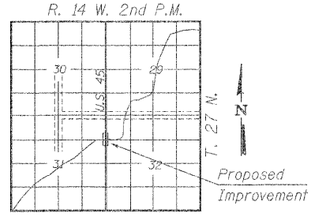
No Salvage



LONGITUDINAL SECTION

PROFILE GRADE FAS 317

(along ℄ roadway)



LOCATION SKETCH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 317	36-BR	IROQUOIS	21	9
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
10 SHEETS

CONTRACT NO. 66171

GENERAL NOTES

~~Reinforcement bars shall conform to the requirements of AASHTO M31, or M322 Grade 60.~~

Exposed edges shall be beveled 3/4" unless otherwise noted.

For backfilling and embankment, see Standard Specifications.

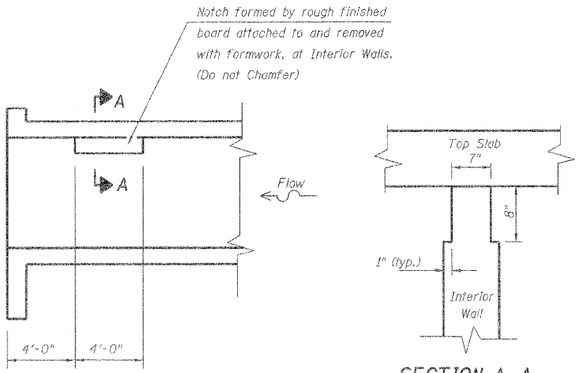
The precast concrete alternate will not be allowed.

Saw cut existing abutments and piers at stage removal line before removing the existing structures.

The Contractor shall excavate behind the existing abutment walls prior to removal of the exisiting superstructure. Cost included with Removal of Existing Structures.

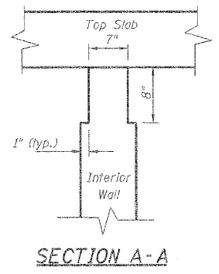
All construction joints shall be bonded.

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



LONGITUDINAL SECTION
PHOEBE NESTING
SIDE DETAILS

@ D.S. side only



SECTION A-A

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Reinforcement Bars	Pounds	31,640
Removal of Existing Structures	Each	1
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	174.7
Bar Splicers	Each	154
Temporary Sheet Piling	Sq. Ft.	1,105
* Geotextile Retaining Wall	~~Sq. Yd.~~ Sq. Ft.	~~10.5~~ 94
Steel Plate Beam Guardrail Attached to Structures	Foot	75

* See Special Provisions.

DESIGN SPECIFICATIONS

1996 AASHTO with 1997 thru 2002 Interims

LOADING HS20-44

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

DESIGN STRESSES

f'_c = 3,500 psi (Concrete)

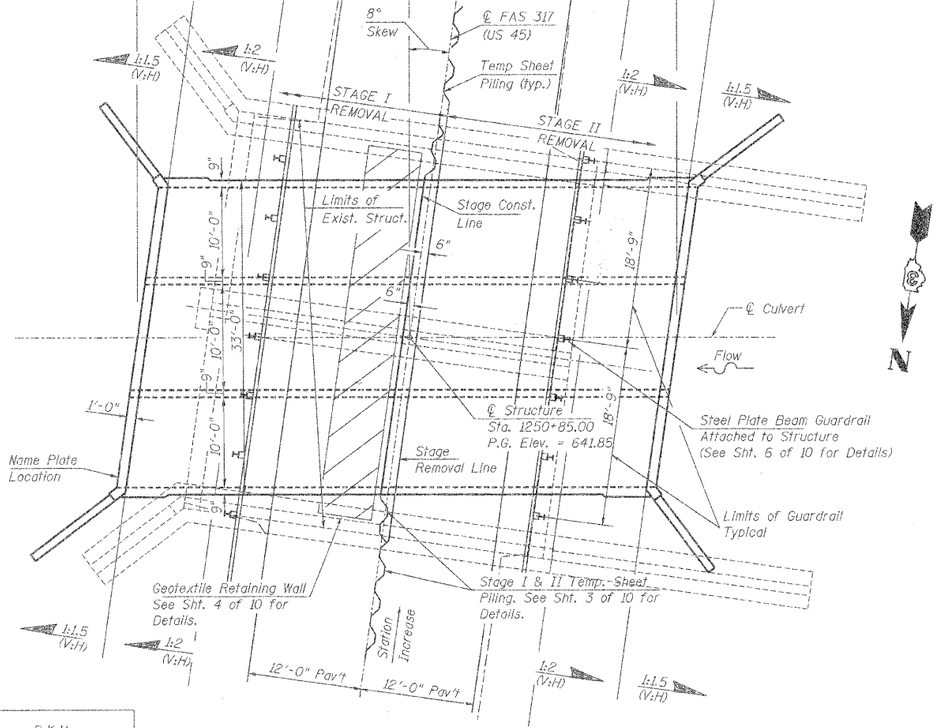
f_y = 60,000 psi (Reinforcement)

WATERWAY INFORMATION

Drainage Area = 2.8 sq. mi. Low Grade Elev. 641.85 @ Sta. 1250+85.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	*Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	386	180	232	635.99	0.0	0.07	635.99	636.06
Base	100	434	191	239	636.22	0.0	0.10	636.22	636.32
Overtopping	NA								
Max. Calc.	500	544	208	252	636.65	0.03	0.10	636.68	636.75

* Upstream face of culvert



PLAN

DESIGNED	R.K.M.
CHECKED	M.E.B.
DRAWN	J.T.C.
CHECKED	M.E.B.

STATION 1250+85.00
BUILT 20____ BY
STATE OF ILLINOIS
F.A.S. RTE. 317 SEC. 36-BR
LOADING HS20
STR. NO. 038-2015

NAME PLATE
See Std. 515001

STATE OF ILLINOIS
RAVI K. MATHUR
81-4354
SPRINGFIELD, IL
LICENSED STRUCTURAL ENGINEER

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TSD)
ENGINEER OF BRIDGES AND STRUCTURES

Ravi K. Mathur 5/5/05
ILLINOIS STRUCTURAL NO. 081-004354 EXPIRES 11/30/2006

GENERAL PLAN & ELEVATION
F.A.S. 317 (U.S. RTE 45) OVER
TRIBUTARY TO SPRING CREEK
SECTION 36-BR
IROQUOIS COUNTY
STATION 1250+85.00
STRUCTURE NO. 038-2015

RC ENGINEERS, LTD.
CONSULTING ENGINEERS - SPRINGFIELD, ILLINOIS

98-76/038-2015/tgp3e.dgn