STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED

FEB 23 2005

AS A BASIS FOR PREPARATION OF DETAILED PLANS

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 3603	68 B-1	Cook	18	11

STRUCTURE DESCRIPTION

Existing Structure: S.N. 016-0793, two-span continuous steel multi-girder bridge built in 1920. In 1968 the superstructure was replaced with salvaged steel beams.
The face-to-face roadway width is 24'-3" with no shoulder or sidewalk, and out-to-out structure width is 27'-2".
The overall length of the bridge is 66 feet long.

Chicago Heights Road will be closed during construction. Local traffic will be diverted to the surrounding streets using a detour route.

No salvage.

Bench Marks: At the control point PK nail located in asphalt entrance in front of gate near brick building of Pumping Station. Sta. 15+09.27 LT Elev. 623.71.

HIGHWAY CLASSIFICATION

F.A.U. Route 3603 Chicago Heights Road
Functional Class: Minor Urban Arterial
ADT: 5130 (2002); 8600 (2021)
DHV: 410 (2002) ADTT: 36.8%
Posted/Design Speed: 35/45 m.p.h. N.B.
Posted/Design Speed: 45/45 m.p.h. S.B.

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO (17th Ed.)

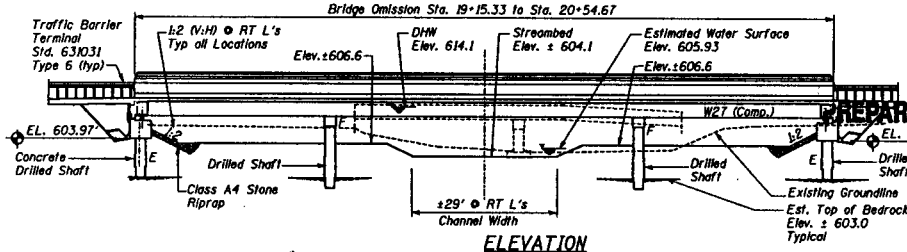
DESIGN STRESSES

FIELD UNITS

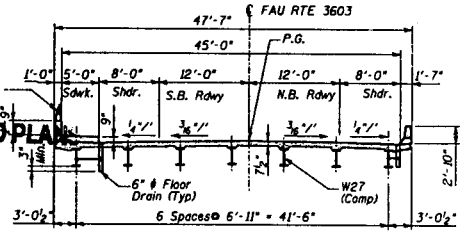
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (W270, GR50W)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04
Site Coefficient (S) = 1.0

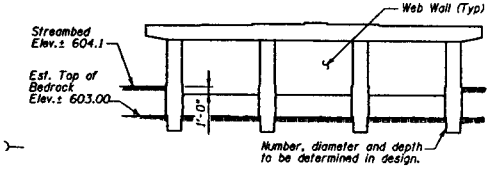


ELEVATION



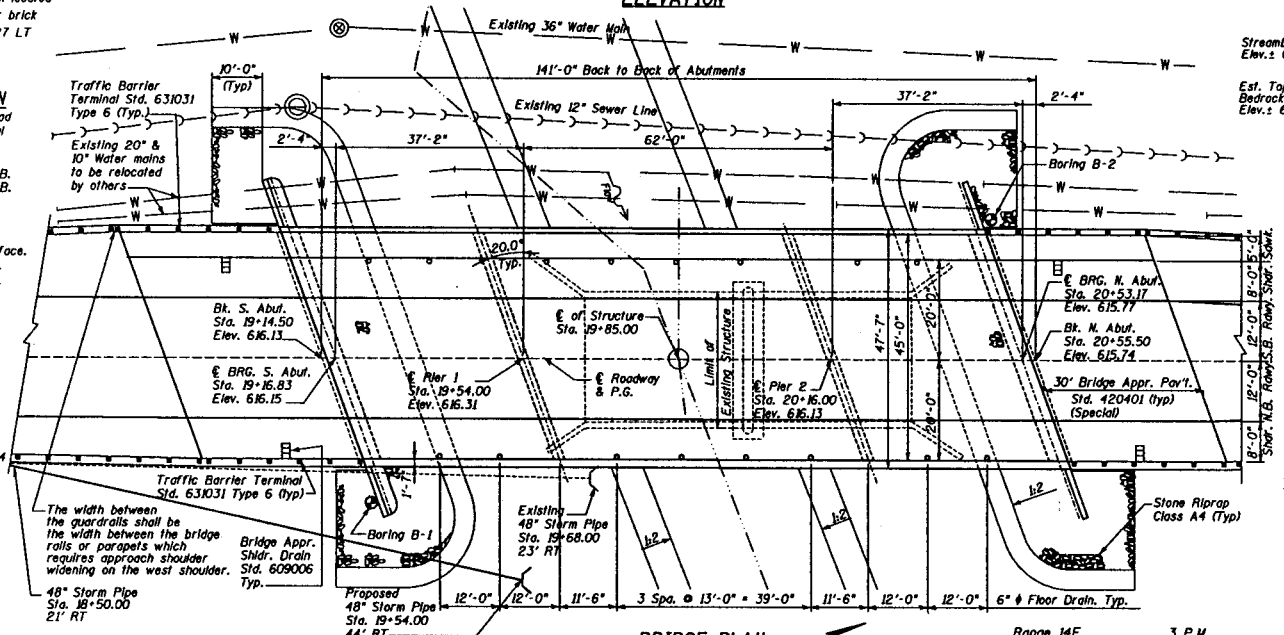
CROSS SECTION

(Looking North)

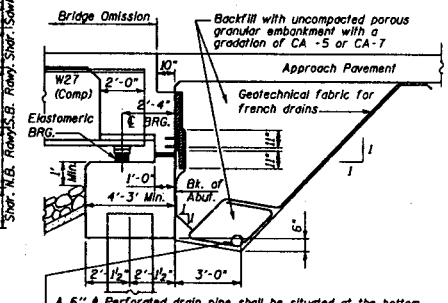


PIER SKETCH

(Looking North)



BRIDGE PLAN



A 6" ϕ Perforated drain pipe shall be situated at the bottom of an approximate 2x2 area of porous granular embankment. The 2x2 area shall be wrapped completely in geotechnical fabric for french drains. pipe parallel with the cap until intersecting with the sideslope. Pipes shall drain onto concrete headwalls (Article 601.05 of the Std. Specifications)

SECTION THRU SEMI-INTEGRAL ABUTMENT

Horiz. Dim. @ RT L's

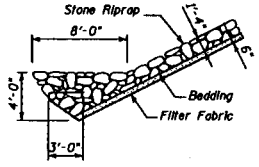
WATERWAY INFORMATION

Drainage Area = 25.7 sq. mi. Low Grade Elev.= 611.00 @ Sta. 26+00

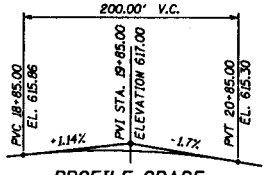
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Not. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater EL Exist.	Headwater EL Prop.
	10	1710	304	582	612.2	0.5	0.2	612.7	612.4
Design	50	2325	304	582	614.1	0.3	0.2	614.4	614.3
Base	100	2750	304	582	614.8	0.3	0.2	615.1	615.0
Overtopping	<10 yr	-	-	-	-	-	-	-	-
Max. Calc.	500	3750	304	582	615.2	0.4	0.3	615.6	615.5

DESIGNED	R.J.B.
CHECKED	I.J.K.
DRAWN	M.P.S.
CHECKED	I.J.K.

02-03-05 TSBJ

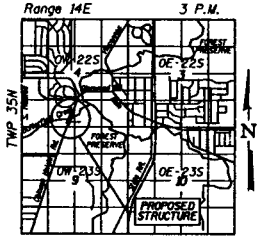


STONE RIPRAP ANCHOR DETAIL



PROFILE GRADE

ALONG ℄ ROADWAY



LOCATION SKETCH

GENERAL PLAN
CHICAGO HEIGHTS ROAD OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 3603
SECTION 68 B-1
COOK COUNTY
STATION 19+85.00
STRUCTURE No. 016-2829