

Bench Mark: Chiseled "□" N.E. corner of bridge 6' Left Station 686+19, Elev. 388.49

Existing Structure: 033-0032 Built 1928 under Section 102-B. The existing structure is a single span reinforced concrete slab bridge on pile supported closed abutments. Back to Back of abutment length is 22'-0". The contractor shall remove and replace it with a 9'x11'-6" triple barrel box culvert. Traffic to be maintained utilizing stage construction.

No salvage

Note: Precast alternate not allowed

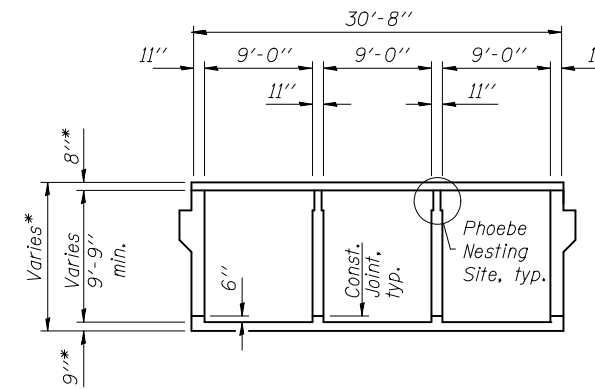
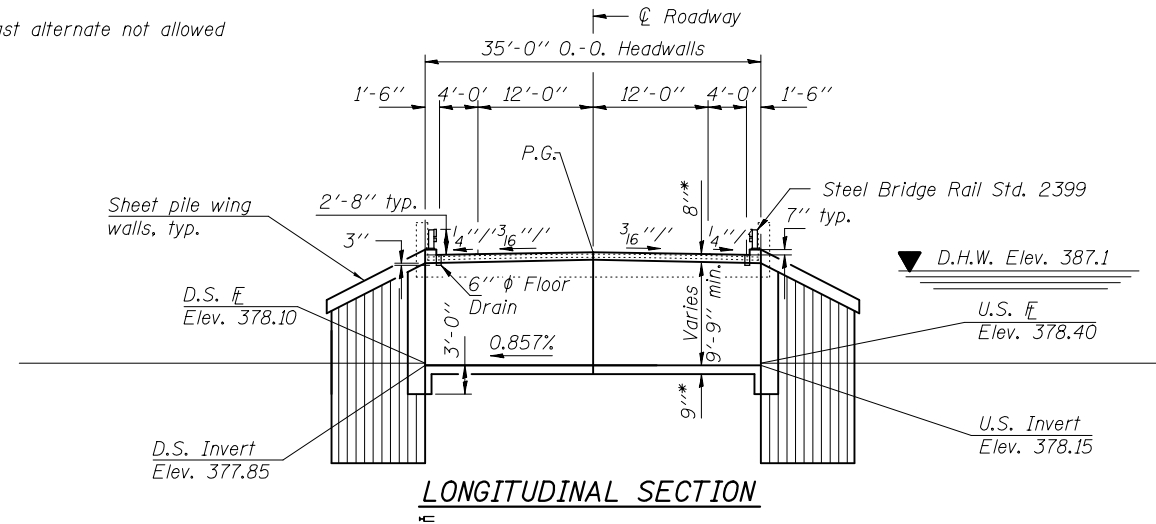
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	D.S. Invert	U.S. Invert
	374.85	375.15

WATERWAY INFORMATION

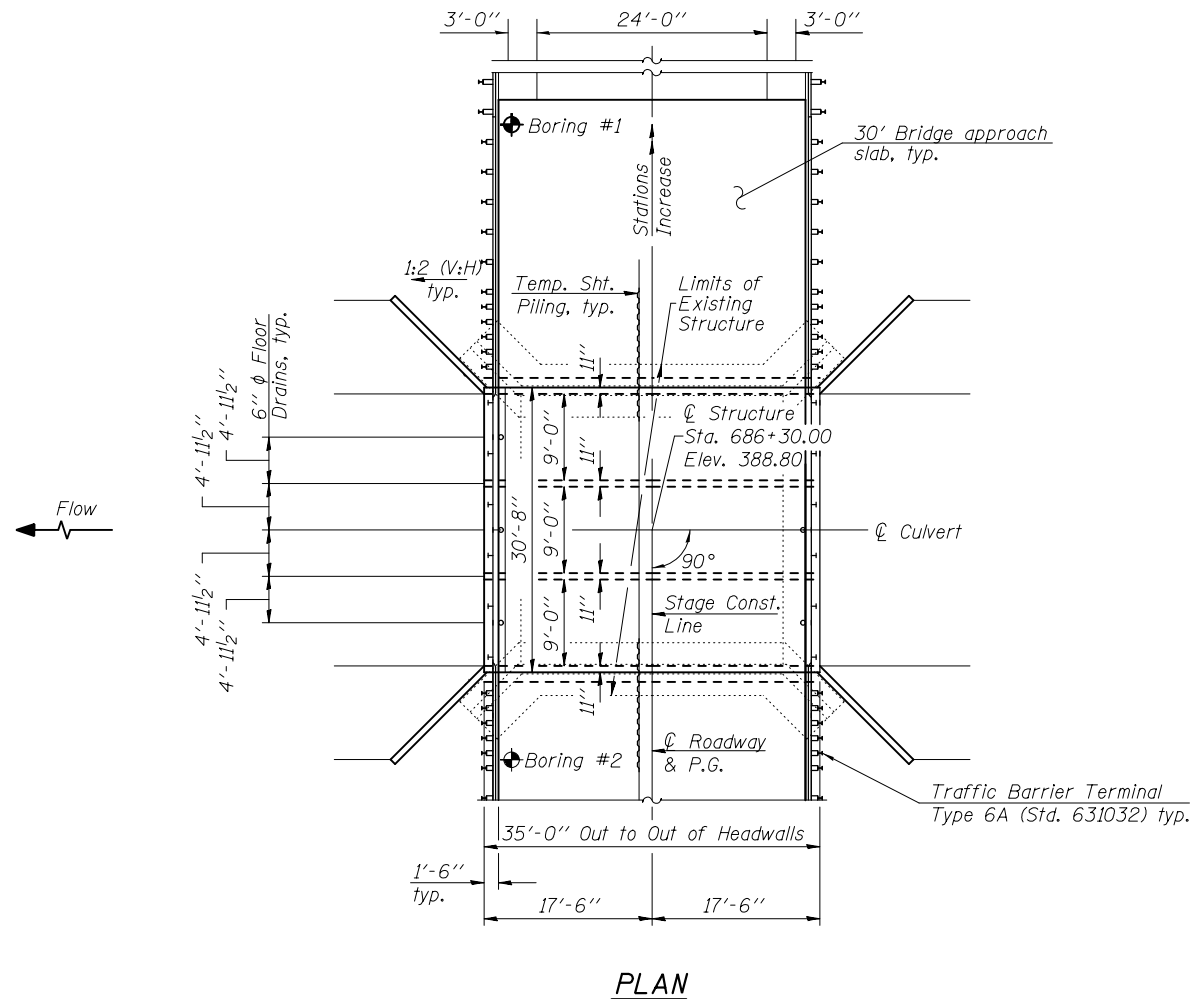
Drainage Area = 0.80 sq. mi. Low Grade Elev. 388.6(E) 388.7(P) @ Sta. 687+60

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.			Headwater El.	
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	50	510	136	235	387.1	0.3	0.1	387.4	387.2
Base	100	590	136	243	387.7	0.4	0.2	388.1	387.9
Ex. Overtop	230	650	136	-	388.2	0.4	-	388.6	-
Pr. Overtop	350	705	-	243	388.5	-	0.2	-	388.7

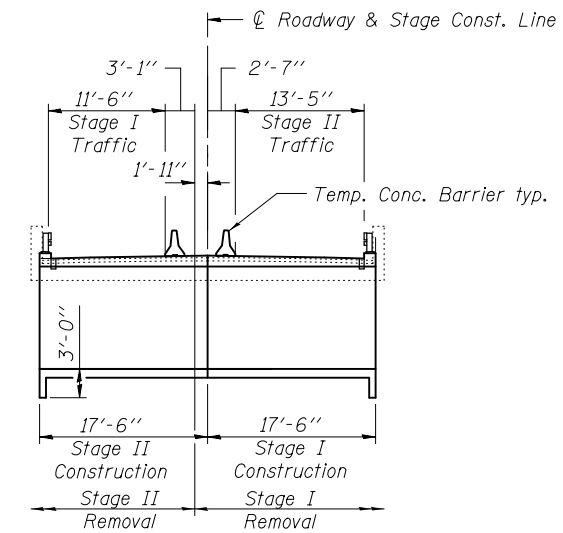


SECTION THRU BARREL

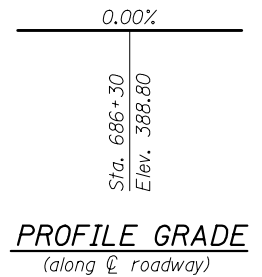
(*slab thickness may be refined in final design)



PLAN



STAGE CONSTRUCTION SKETCH



PROFILE GRADE

(along centerline roadway)

HIGHWAY CLASSIFICATION

F.A.P. Rte. 776 - Il. Rte. 242
 Functional Class: Rural Minor Arterial
 ADT: 1,300 (1999); 1,689 (2020)
 DHV: 162
 Design Speed: 55 m.p.h.
 Posted Speed: 55 m.p.h.

LOADING HS20-44

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

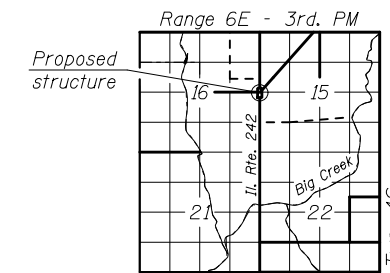
DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 242 OVER
UNNAMED CREEK
F.A.P. RTE. 776 - SEC. 102B-5
HAMILTON COUNTY
STATION 686+30.00
STRUCTURE NO. 033-2008

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE =	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
776	102B-5	HAMILTON		
				CONTRACT NO. 12345

ILLINOIS FED. AID PROJECT