Benchmark: Chiseled square on NE wingwall, SN 059-0046, Elevation 645.02

Existing Structure: SN 059-0046 built in 1920 as a single span, concrete slab structure with closed abutments, 18'-0" bk. to bk. abutments and 30'-0" o.o. deck. Road will be closed during construction

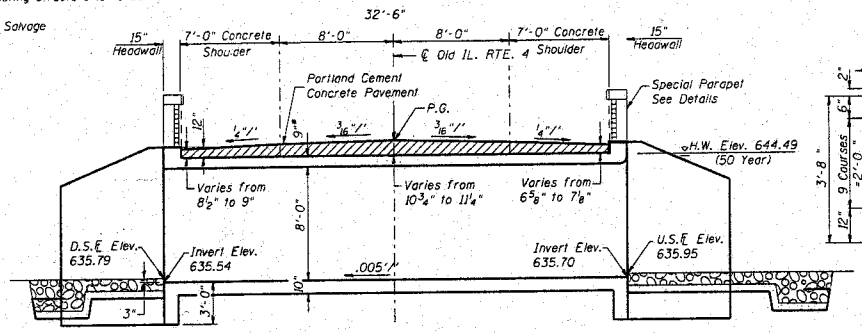
Existing structure is to be removed and replaced.

No Salvage

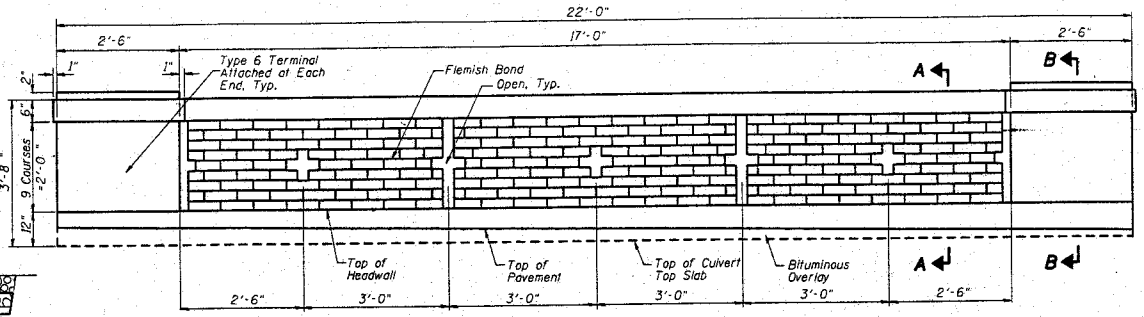
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 4 OLD IL 4	(L-15D)B	Macoupin	17	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
1 SHEETS

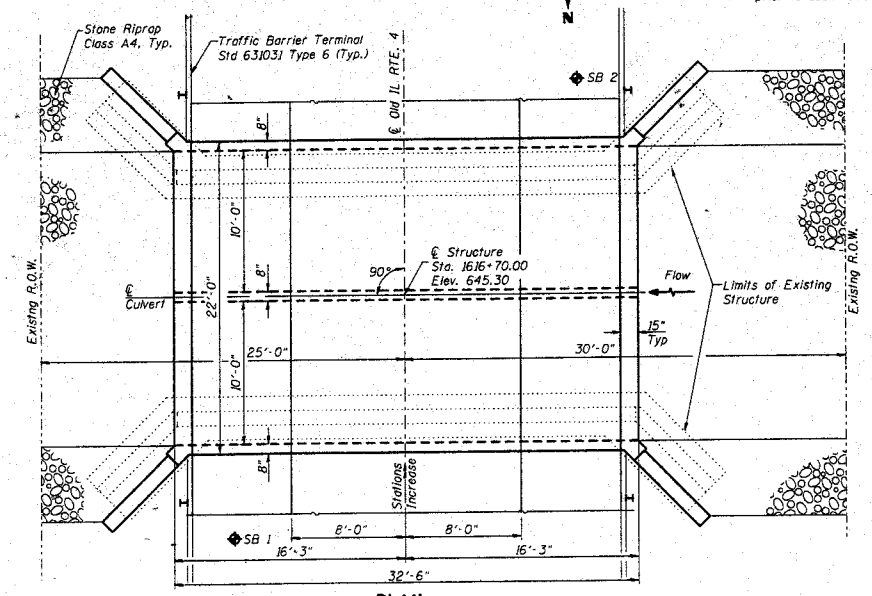


LONGITUDINAL SECTION

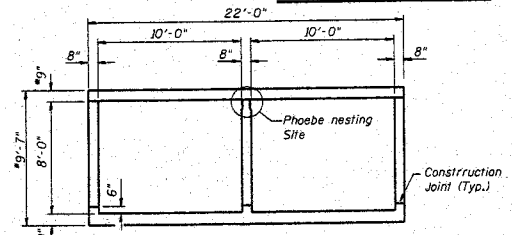


ELEVATION - PARAPET

Notes:
Precast alternate is not allowed.
Excavation behind existing abutment may be necessary prior to deck removal.

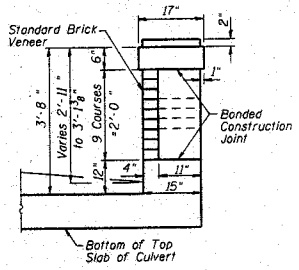


PLAN

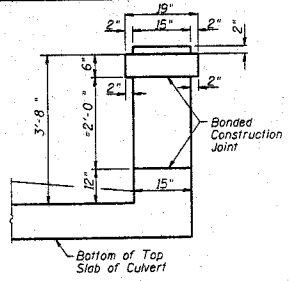


SECTION THRU BARREL

* Slab thickness may be refined in final design.



SECTION A-A THRU PARAPET

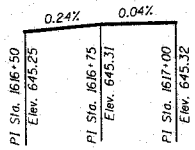


SECTION B-B THRU PARAPET

APPROVED

JUN 06 2003

AS A BASIS FOR
PREPARATION OF DETAILED PLANS



PROFILE GRADE

Along ℄ Roadway

HIGHWAY CLASSIFICATION

SBI Rte. 4 - Old Ill. Rte. 4
Functional Class: Minor Collector
ADT: 275 (1995); 350 (2022)

Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.

LOADING HS20-44

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

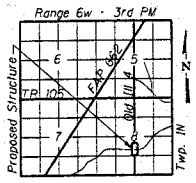
DESIGN SPECIFICATIONS

1996 AASHTO with 1997, 1998, 1999, 2000, 2002 Interims

DESIGN STRESSES

FIELD UNITS

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



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 3.35 mi² Low Grade Elev. 645.01 ft @ Sta. 1616+61

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	980	114	160	644.49	2.0	0.5	646.48	645.01
Base	100	1121	114	160	644.77	2.3	0.8	647.02	645.55
Overtopping									
Max. Calc.	500	1455	114	160	645.32	2.6	1.3	647.88	646.59

DESIGNED	J. BENNETT
CHECKED	M. HOOK
DRAWN	L. ROSE
CHECKED	J. BENNETT

GENERAL PLAN
OLD IL ROUTE 4 OVER
SHEARLES BRANCH TRIBUTARY
SBI ROUTE 4 - SECTION (L-15D)B
MACOUPIN COUNTY
STATION 1616+70
STRUCTURE NO. 059-2502