APPROVED

APR 2 2 2002

AS A BASIS FOR PREPARATION OF DETAILED PLANS

Sheet 1 of 1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

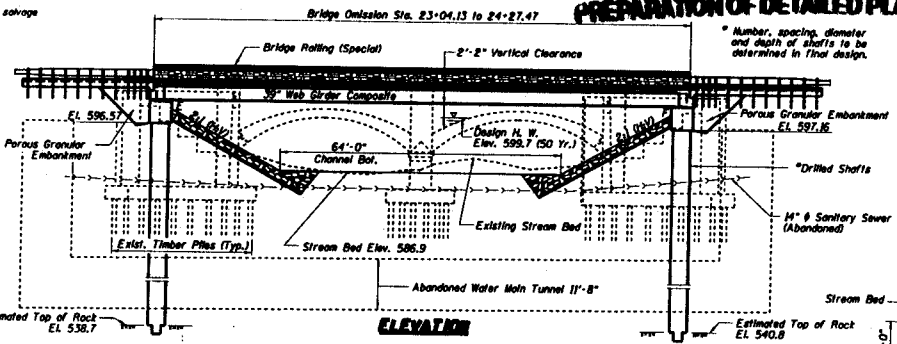
Bench Mark

Chisled square on top of the wingwall at the south east corner of the Cicero Avenue Bridge over the North Branch of the Chicago River. Elev. 605.37

Existing Structure

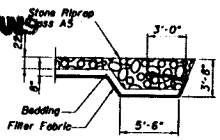
S.N. 016-0653 built as S.B.I Route 57 Sec. 57B-NRW3 in 1935. The existing bridge has two simple spans which consist of a PCC wearing surface and reinforced concrete tee beams. The existing deck is 76'-0" wide and 86'-0" long. The existing structure is to be removed and replaced. Traffic to be maintained utilizing stage construction.

No salvage

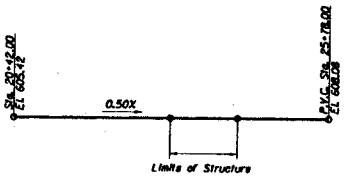


ELEVATION

* Number, spacing, diameter and depth of shafts to be determined in final design.

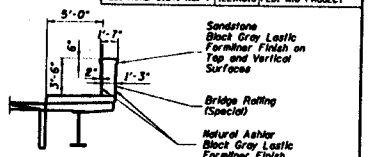


RIPRAP FLANK DETAIL

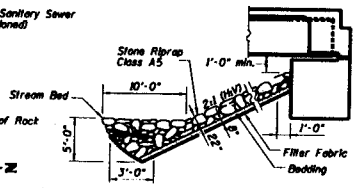


PROPOSED PROFILE GRADE

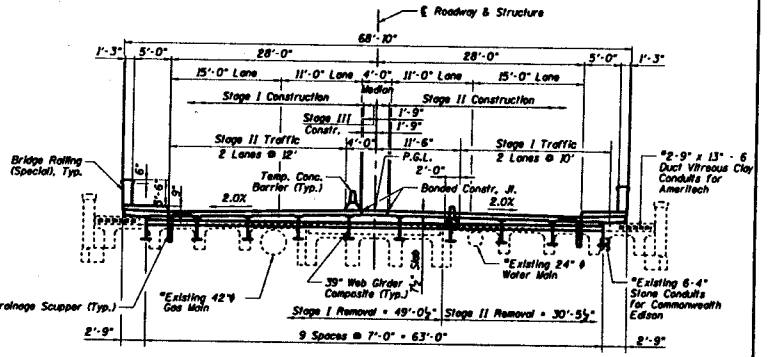
(Along PGL Roadway)



PARAPET DETAIL



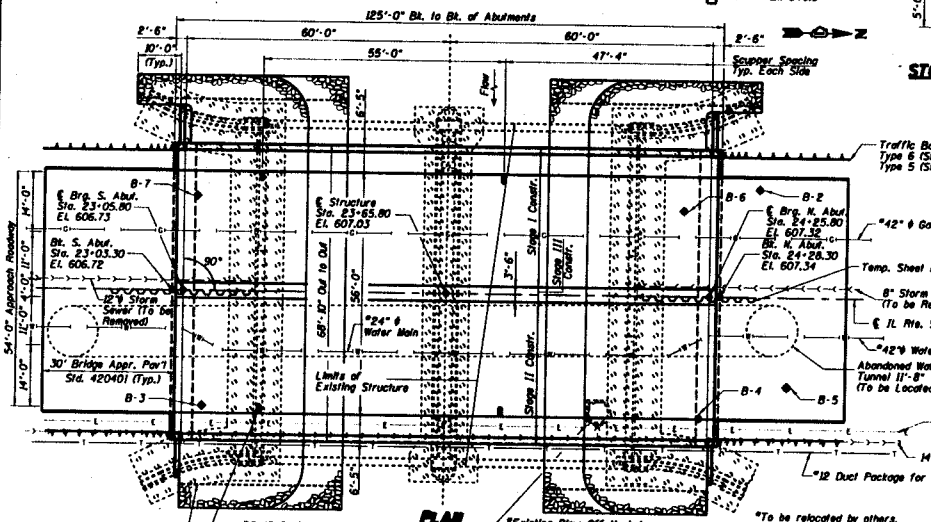
STONE RIPRAP ANCHOR DETAIL



CROSS SECTION

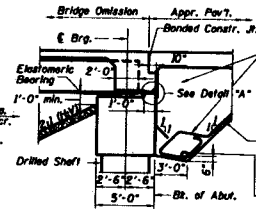
(Looking North)

*To be relocated by others.



PLAN

*To be relocated by others.

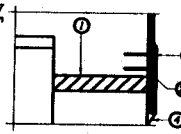


Backfill with uncompacted porous granular embankment with a gradation of CA-5 or CA-7 by Bridge Contractor after superstructure is in place. Limits shall be 1'-0" from the end of each wingwall.

Geotechnical Fabric for French Drains.

A 6" ϕ perforated drain pipe shall be situated at the bottom of an approximate 2'x2' area of porous granular embankment. The 2'x2' area shall be wrapped completely in geotechnical fabric for french drains. Extend pipe parallel with the cap until intersecting with the sideslope.

SEC. AT SOUTH ABUTMENT

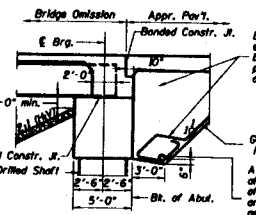


DETAIL "A"

1. 2" Preformed Joint Filler (Section 1051 of the Standard Specifications) bonded to abutment cap with approved adhesive (full width of cap)
2. ½" thick Reinforced Elastomeric Neoprene Mat attached to the abutment cap using a ⅜"x5" steel plate (full width of cap) and ½" ϕ studs with nuts and washers at 12" cts.
3. 2" Preformed Joint Filler (Section 1051 of the Standard Specifications) bonded to superstructure (full width of cap)
4. Geocomposite Wall Drain (full width of cap)

HIGHWAY CLASSIFICATION

FAP ROUTE 350 - IL Route 50 (Cicero Avenue)
ADT: 17,544 (1999), 24,000 (2020)
Functional Class: Other Principal Arterial
Design Speed: 35 mph (Posted)



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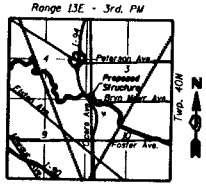
SEC. AT NORTH ABUTMENT

WATERWAY INFORMATION

DRAINAGE AREA = 112.3 Sq. Mi. PROPOSED LOW GRADE ELEV. = 605.4 @ Sta. 20+42

FLOOD	FREQ. YR.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E. Ft.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	2318	620	908	597.7	0.3	0.2	598.0	597.9
DESIGN	50	3510	636	1131	599.7	0.9	0.4	600.6	600.1
BASE	100	4080	636	1257	600.8	1.3	0.5	602.1	601.3
OVERTOPPING	420	5180	636	-	603.4	2.1	-	605.5	-
MAX. CALC.	500	5460	-	1427	603.5	-	0.8	-	604.3



LOCATION SKETCH

*To be relocated by others.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (M270 Grade 50W)

LOADING HS20-44

Allowance for Future Wearing Surface = 50 lb/ft²

DESIGN SPECIFICATIONS

1996 AASHTO Standard Specifications for Highway Bridges and 1997-2000 Interims

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.0

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
FAP 350 IL Rt. 50 (CICERO AVE.) OVER NORTH BRANCH OF THE CHICAGO RIVER
PUBLIC WATERS
COOK COUNTY STATION 23+65.80
SECTION 57B-NRW-3
STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
DATE: 3/25/02 CHECKED BY: R. Clinton