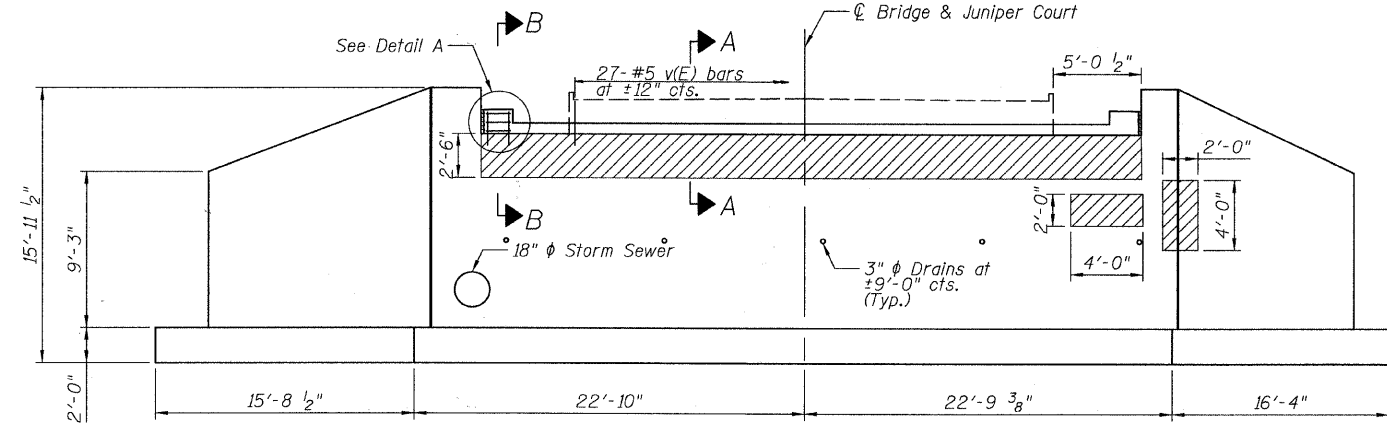
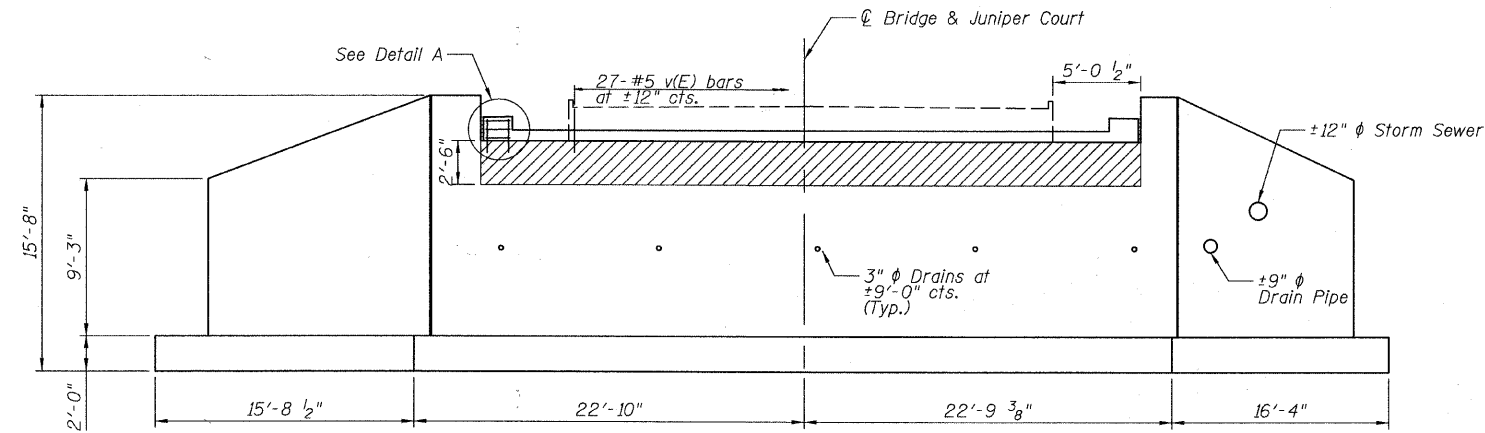


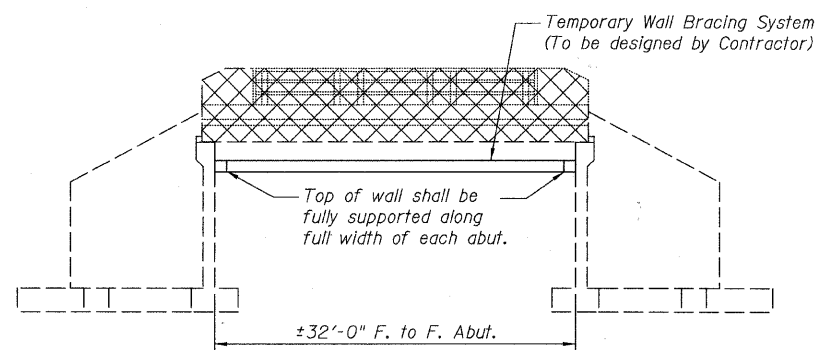
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SOUTH ABUTMENT
(Looking South)



NORTH ABUTMENT
(Looking North)



TEMPORARY WALL BRACING SYSTEM

**ABUTMENTS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	8	#5	1'-5"	—
v(E)	66	#5	5'-1"	—
v ₁ (E)	8	#5	2'-1"	—
* Reinforcement Bars, Epoxy Coated		Pound		380
* Concrete Removal		Cu. Yd.		0.8
* Structural Repair of Concrete (<=5")		Sq. Ft.		196
* Temporary Wall Bracing System		L. Sum		1

* See Special Provisions

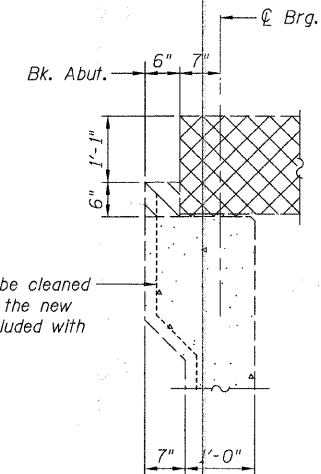
Notes:
Prior to removing the existing superstructure, a temporary wall bracing system shall be installed to brace each abutment wall to resist potential overturning. The Contractor shall submit a temporary support system design including plan details and calculations for review and acceptance by the Engineer. See Special Provisions.
Existing reinforcement bars that have been cut and/or damaged during repair operations shall be supplemented by new in kind reinforcing bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. A mechanical bar splicer shall be used when it is not feasible to provide the minimum bar lap. No welding of bars shall be performed. See Special Provisions.
All construction joints shall be bonded unless otherwise noted.

DESIGNED L. LAWS
CHECKED J. BUCHOLC
DRAWN L. LAWS
CHECKED J. BUCHOLC

LEGEND

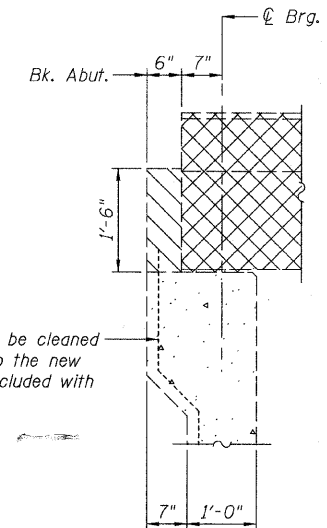
- Removal of Existing Substructure
- Concrete Removal
- Structural Repair of Concrete
Depth equal to or less than 5"

Exist. #5 bars shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.



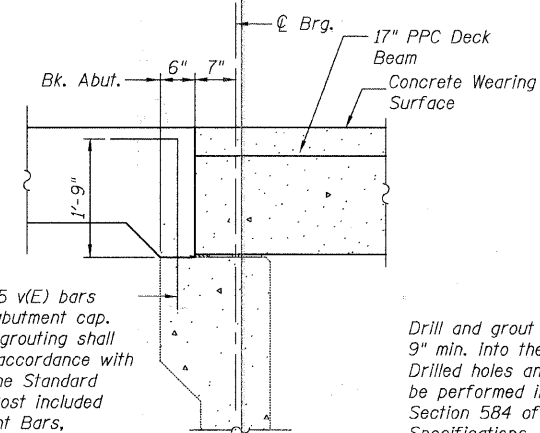
SECTION A-A
(Showing Removal)

Exist. #5 bars shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.



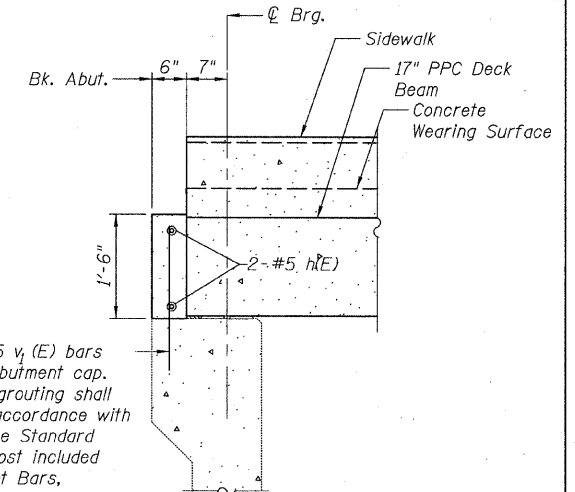
SECTION B-B
(Showing Removal)

Drill and grout #5 v(E) bars 9" min. into the abutment cap. Drilled holes and grouting shall be performed in accordance with Section 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.



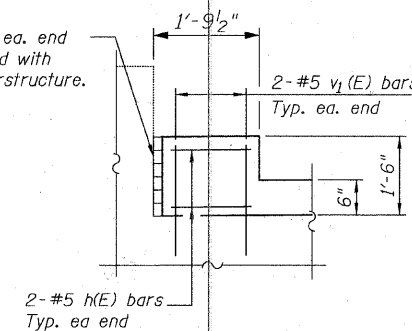
SECTION A-A

Drill and grout #5 v₁(E) bars 9" min. into the abutment cap. Drilled holes and grouting shall be performed in accordance with Section 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.

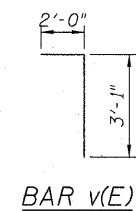


SECTION B-B

1#2" PJF typ. ea. end
Cost is included with Concrete Superstructure.

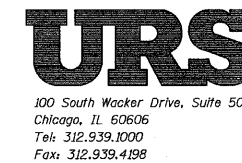


DETAIL A



BAR v(E)

SUBSTRUCTURE REPAIRS & DETAILS
STRUCTURE NO. 049-6153



SHEET NO. 7	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		09-00084-00-BR	LAKE	16	13
10 SHEETS	CONTRACT NO. 63587				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					