

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. R. 846	4-RB	WILL	87	42
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

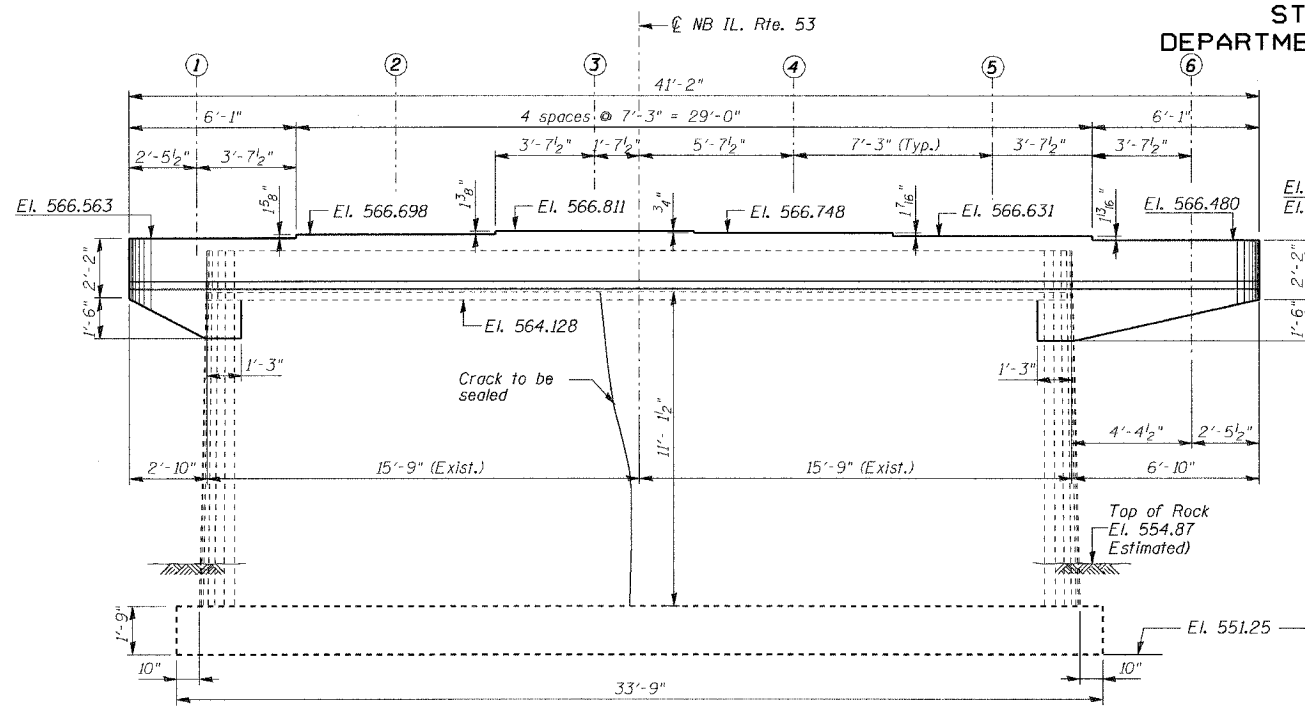
SHEET NO. S14  
SHEETS S20

CONTRACT NO. 62269

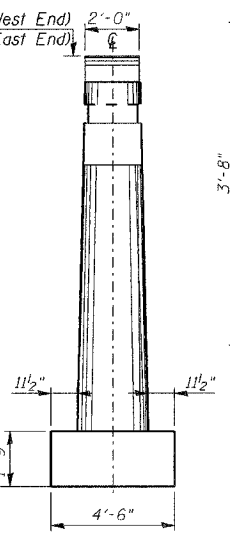
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_{50}(E)$	8	#6	21'-10"	
$h_{51}(E)$	4	#6	23'-5"	
$h_{52}(E)$	4	#6	8'-11"	
$h_{53}(E)$	4	#6	5'-1"	
$h_{54}(E)$	2	#6	5'-7"	
$h_{55}(E)$	2	#6	4'-3"	
$h_{56}(E)$	8	#6	2'-4"	
$p_{50}(E)$	12	#9	25'-4"	
$p_{51}(E)$	8	#9	22'-8"	
$s_{50}(E)$	96	#4	7'-3"	
$u_{50}(E)$	16	#4	5'-9"	
$u_{51}(E)$	6	#4	7'-8"	
$u_{52}(E)$	23	#4	3'-8"	
Reinforcement Bars, Epoxy Coated	Pound		2870	
Concrete Structures	Cu. Yd.		8.6	
Structural Repair of Concrete (Depth Equal To or Less Than 5")	SO FT		1.0	
Epoxy Crack Injection	Foot		23.0	

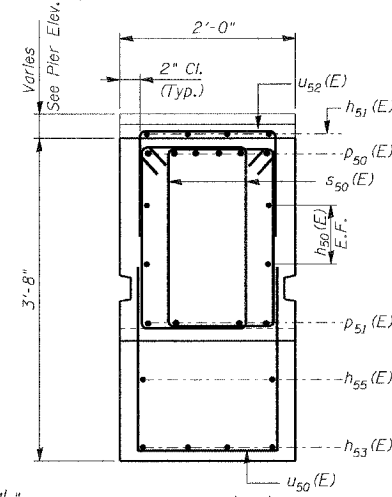
Reinforcement Bars designated (E) shall be epoxy coated.  
Cast steps monolithically with cap.  
Space cap reinforcement to miss anchor bolts.



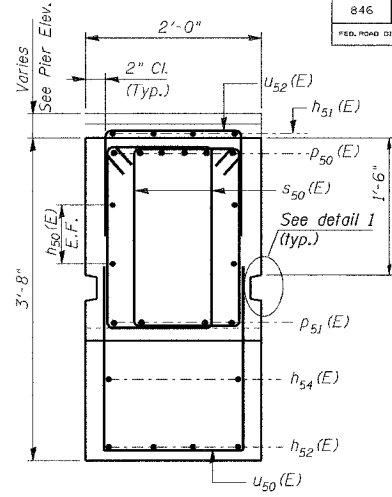
**ELEVATION**  
(SOUTH FACE OF PIER NO. 1)  
(LOOKING NORTH)



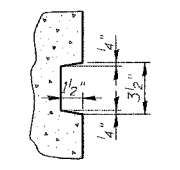
**END ELEVATION**



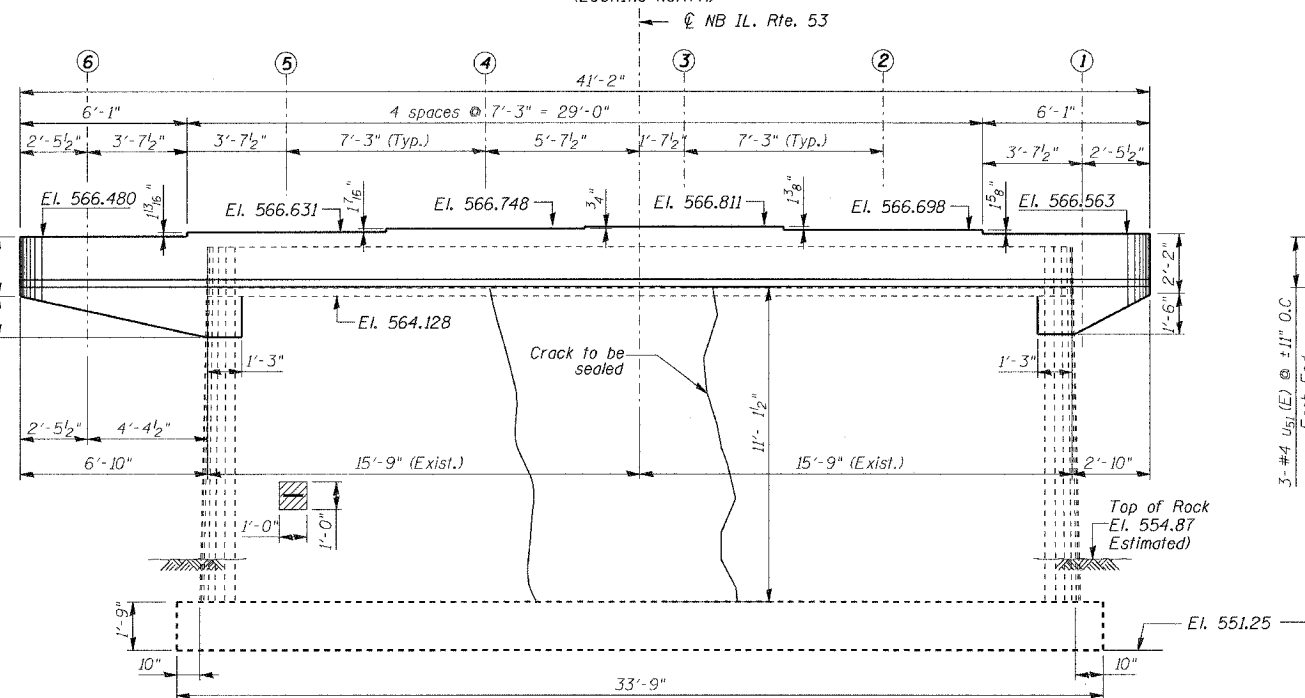
**SECTION A-A**



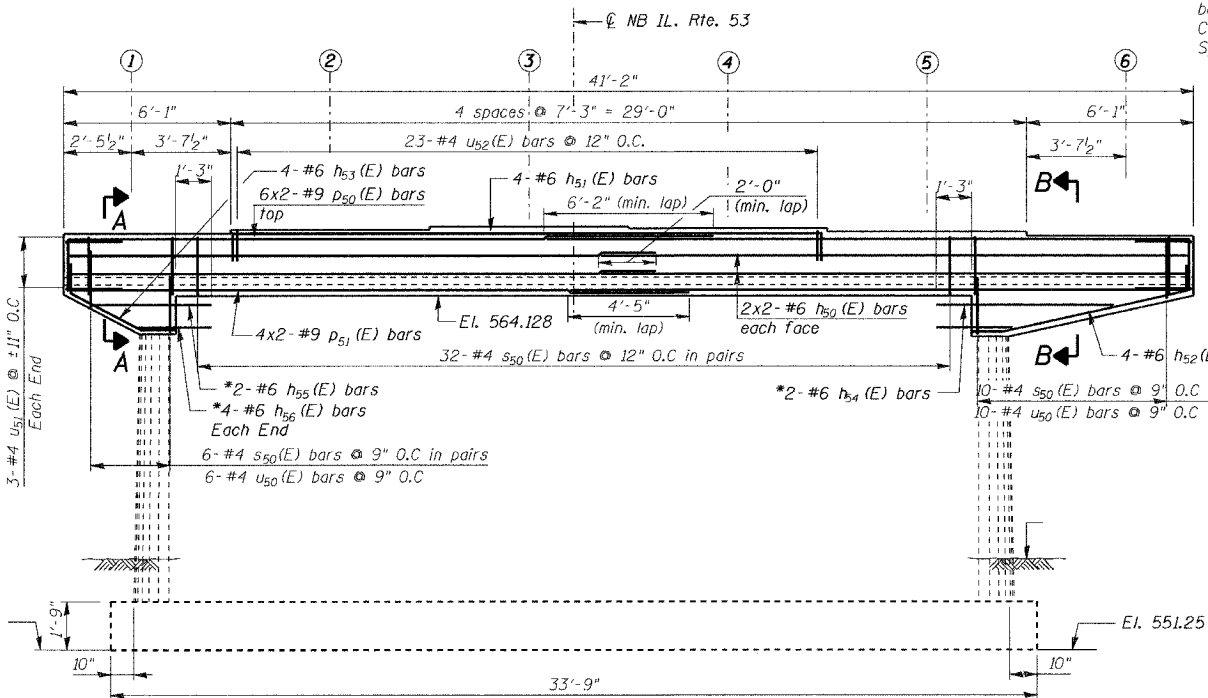
**SECTION B-B**



**DETAIL 1**  
(ORNAMENTAL GROOVE)

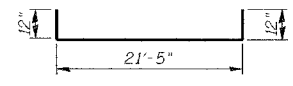


**ELEVATION**  
(NORTH FACE OF PIER NO. 1)  
(LOOKING SOUTH)

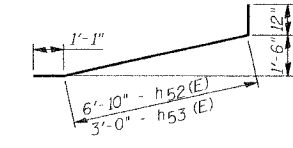


**ELEVATION**  
(LOOKING NORTH)  
(SHOWING REINFORCEMENT ONLY)

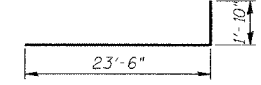
\* Drill and grout #6  $h_{54}(E)$ ,  $h_{55}(E)$  and  $h_{56}(E)$  bars in 1" dia. x 15" min. drilled holes according to Article 584 of the Standard Specifications.



**BAR  $h_{51}(E)$**



**BARS  $h_{52}(E)$ ,  $h_{53}(E)$**

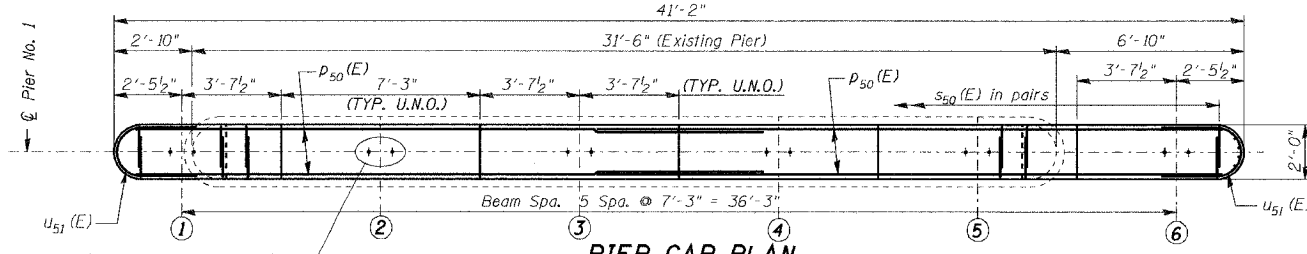


**BAR  $p_{50}(E)$**

**LEGEND:**

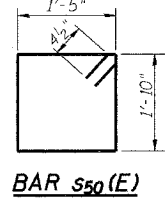
- Hairline crack (crack < 1/16" wide) Not to be sealed Unless Noted Otherwise
- Spall with exposed rebar

DESIGNED	NDS/GMK
CHECKED	MTP/SMK/GBC
DRAWN	NDS/DCB
CHECKED	SMK/GBC

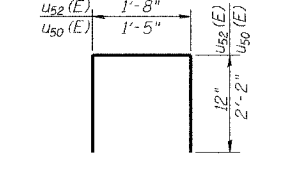


**PIER CAP PLAN**  
(LOOKING NORTH)

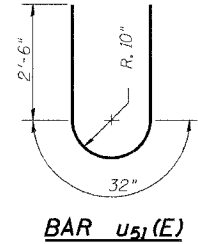
For Anchor layout and details see sheet S9 (typ.)



**BAR  $s_{50}(E)$**



**BARS  $u_{50}(E)$  and  $u_{52}(E)$**



**BAR  $u_{51}(E)$**

ILLINOIS DEPARTMENT OF TRANSPORTATION

**PIER NO. 1  
REPAIRS & EXTENSION**

FAP 846  
NB IL. ROUTE 53 OVER PRAIRIE CREEK  
STATION 1305+00 SECTION 4-RB  
WILL COUNTY

STRUCTURE NO. 099-0090

SCALE: NONE  
DATE: AUGUST 2007

**DETA ENGINEERING INC.**  
CONSULTING ENGINEERS, CHICAGO, ILLINOIS