

Bench Mark: Chiseled "□" top of N.E. wingwall S.N. 097-0031. Elev. 384.69

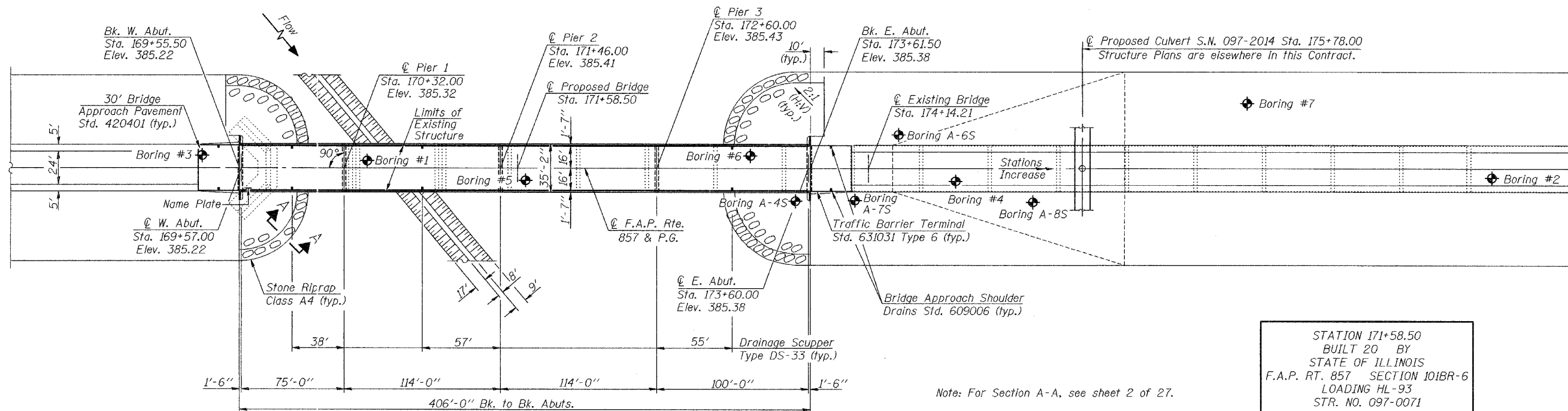
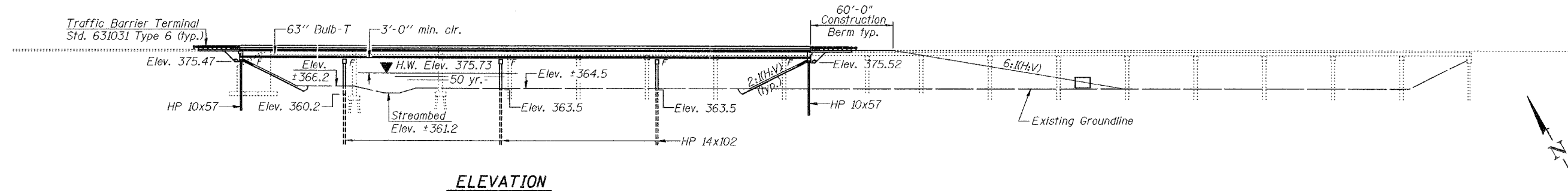
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 857	101BR-6	WHITE	100	20
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

Contract #98960

Existing Structure: S.N. 097-0031 built in 1932 as S.B.I. Route 139, Section 101-B, at Sta. 174+14.21. Super and substructure widened in 1978 as F.A. Route 857, Sec. 101BR-1. Structure consists of 2 spans of PPC deck beams (Spans 1 & 2) & 15 spans of reinf. conc. deck on steel beams (spans 3 thru 17) supported by closed (W) & spill thru pile bent (E) abutments & solid pile (1 & 2) & open conc. pile bent (3 thru 16) piers. 878'-4<sup>3</sup>/<sub>4</sub>" bk.-bk. abuts. 33'-0" O.-O. deck. Structure to be removed and replaced. Traffic to be maintained on temporary run-around on north side of existing bridge during construction.

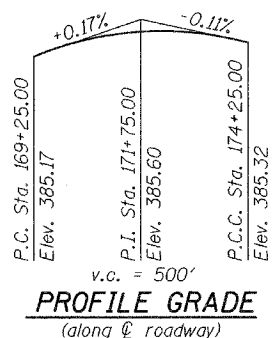
No salvage



STATION 171+58.50  
BUILT 20 BY  
STATE OF ILLINOIS  
F.A.P. RT. 857 SECTION 101BR-6  
LOADING HL-93  
STR. NO. 097-0071

**NAME PLATE**  
See Std. 515001

Note: For Section A-A, see sheet 2 of 27.



Note: "Contractor shall wait 70 days after completion of embankment placement before driving piles".

**LOADING HL-93**  
Allow 50#/sq. ft. for future wearing surface.

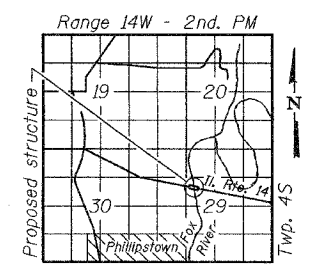
**DESIGN SPECIFICATIONS**  
1998 AASHTO LRFD Bridge Design Specification with 1999 thru 2003 Interims

**DESIGN STRESSES**

- FIELD UNITS**
- $f'_c = 3,500$  psi
  - $f_y = 60,000$  psi (reinforcement)
- PRECAST PRESTRESSED UNITS**
- $f'_c = 7,000$  psi
  - $f'_a = 5,000$  psi
  - $f'_s = 270,000$  psi ( $\frac{1}{2}$ " low lax. strands)
  - $f_{si} = 201,960$  psi ( $\frac{1}{2}$ " low lax strands)

**SEISMIC DATA**

- Seismic Performance Zone = 2
- Bedrock Acceleration Coefficient (A) = 9.5%
- Site Coefficient (S) = 1.2



**GENERAL PLAN & ELEVATION**  
**ILLINOIS ROUTE 14 OVER**  
**FOX RIVER**  
**F.A.P. ROUTE 857 - SECTION 101BR-6**  
**WHITE COUNTY**  
**STATION 171+58.50**  
**STRUCTURE NO. 097-0071**

**WATERWAY INFORMATION**

Drainage Area = 29400.0 sq. mi. P. Low Grade Elev. 385.1 ft. Sta. 169+50 E. Low Grade Elev. 385.1 ft. Sta. 169+50

Flood	Freq. Yr.	Q		Nat. Head - Ft.	Headwater El.				
		C.F.S. Exist.	Prop.		Exist. Prop.	Exist. Prop.			
Design	50	8,284	8765	3789	375.7	0.2	0.3	375.9	376.0
Base	100	9,381	9460	4109	376.6	0.3	0.3	376.9	376.9
Overtopping									
Max. Calc.	500	10,424	10021	4370	377.3	0.3	0.4	377.6	377.7

DESIGNED *William A. Pevora*  
CHECKED *William A. Pevora / Fossella*

DRAWN **R. Sommer**  
CHECKED *William A. Pevora / Fossella*

December 4, 2006

EXAMINED *Thomas J. ...*  
PASSED *Robert E. ...*



EXPIRES 11-30-2008