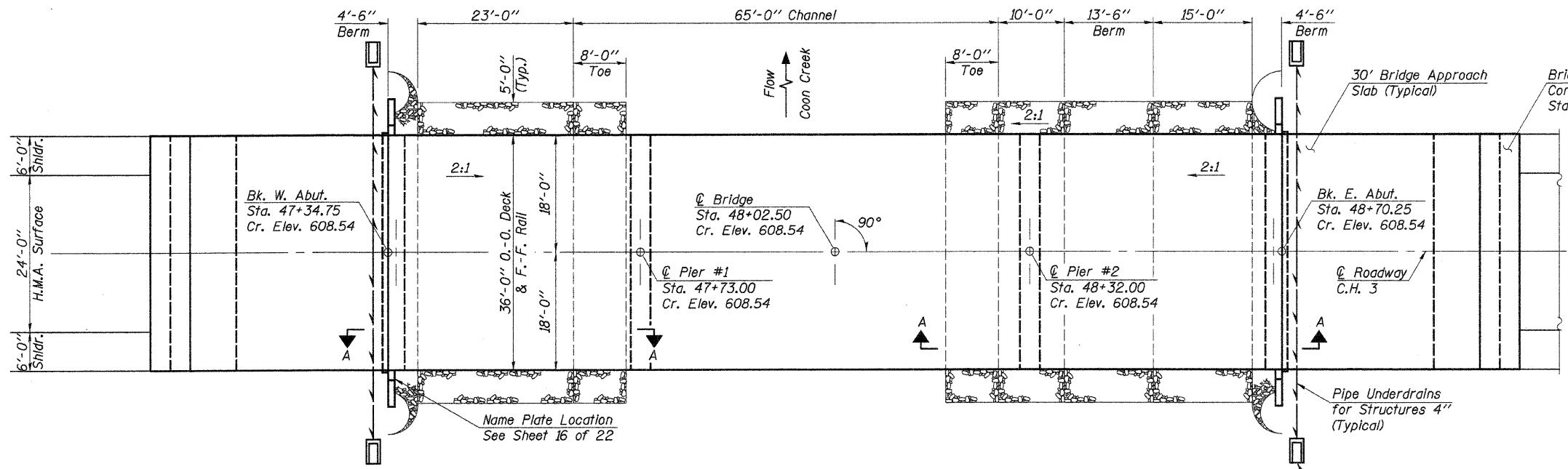
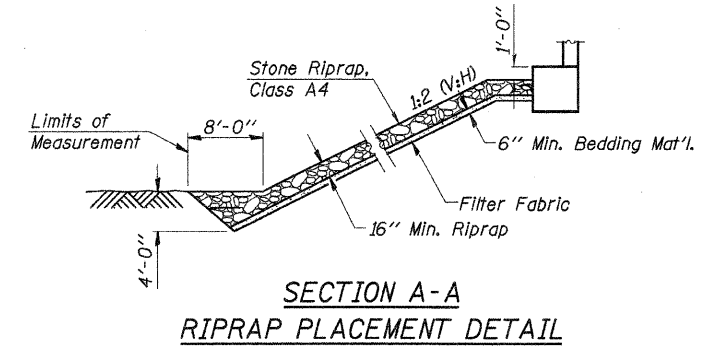
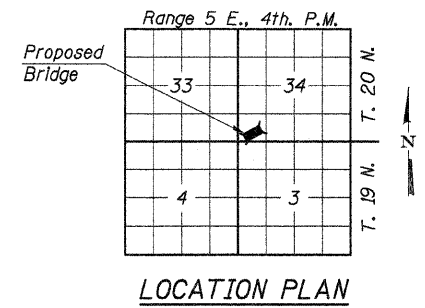
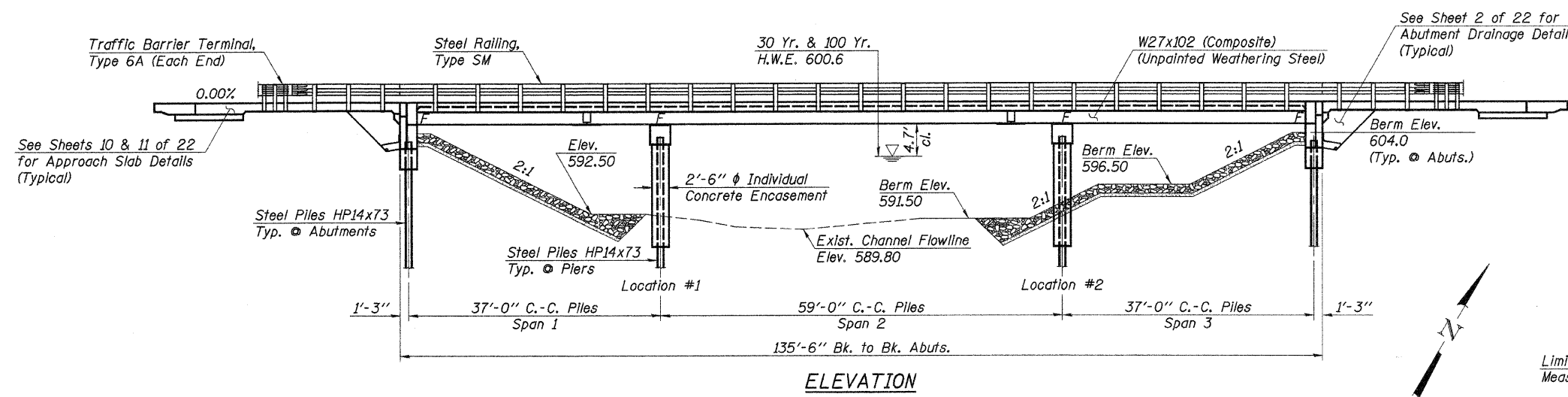


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 3	07-00188-00-BR	WHITESIDE	32	6

Sheet 1 of 22 Contract No. 85465



**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elev. (Ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	598.6	583.0	583.0	598.6

Construction Permits:  
The IDNR-DOWR has issued Permit No. DS 2009019, for the construction of this project.

**WATERWAY INFORMATION**

DESIGNED -	A.L.S.
CHECKED -	A.R.K. & J.A.M.
DRAWN -	S.A.P.
CHECKED -	A.R.K.

Drainage Area	102.71 Sq. Mi.
Existing Opening (30 Yr.)	505 Sq. Ft.
Required Opening (30 Yr.)	807 Sq. Ft.
Proposed Opening (30 Yr.)	807 Sq. Ft.
Design Discharge (30 Yr.)	2,554 C.F.S.
Created Head (30 Yr.)	0.2 Ft.
100 Year Discharge	3,128 C.F.S.
100 Yr. Created Head	0.2 Ft.

**SEISMIC DATA**  
Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.084g  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.136g  
Soil Site Class = D

**DESIGN STRESSES**

$f'_c = 3,500$  p.s.i. (Concrete -- Field Units)  
 $f_y = 60,000$  p.s.i. (Reinf. Bars -- Field Units)  
 $f_y = 50,000$  p.s.i. (Structural Steel, M270W Gr. 50)  
 $n = 8.5$  (Concrete)  
LOADING HL-93  
Design Specifications: 2007 AASHTO LRFD  
50#/Sq. Ft. included in dead load for future wearing surface.

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO LRFD Bridge Design Specifications'."

John A. Morris  
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/10) 8/20/09



**INDEX OF SHEETS**

1. General Plan and Elevation
2. General Notes, Bill of Materials & Miscellaneous Details
- 3.-5. Top of Slab Elevations
- 6.-7. Top of Approach Slab Elevations
- 8.-9. Superstructure
- 10.-11. Bridge Approach Slab Details
12. Steel Railing, Type SM
- 13.-14. Structural Steel
15. Bearing Details
- 16.-17. Abutments
18. Piers
19. Steel Pile Details
20. Bar Splicers
21. Cantilever Forming Brackets
22. Existing Structure Information

**GENERAL PLAN & ELEVATION**  
**SECTION 07-00188-00-BR**  
**COUNTY HIGHWAY 3**  
**WHITESIDE COUNTY**  
**STA. 48+02.50**