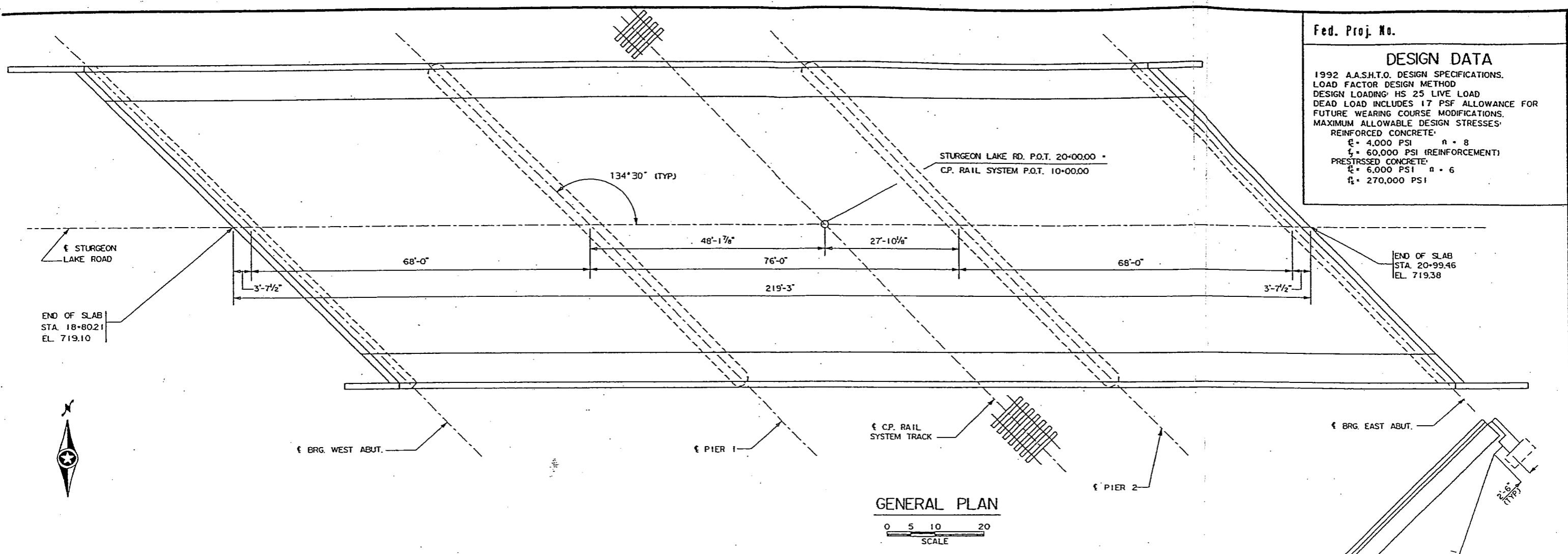


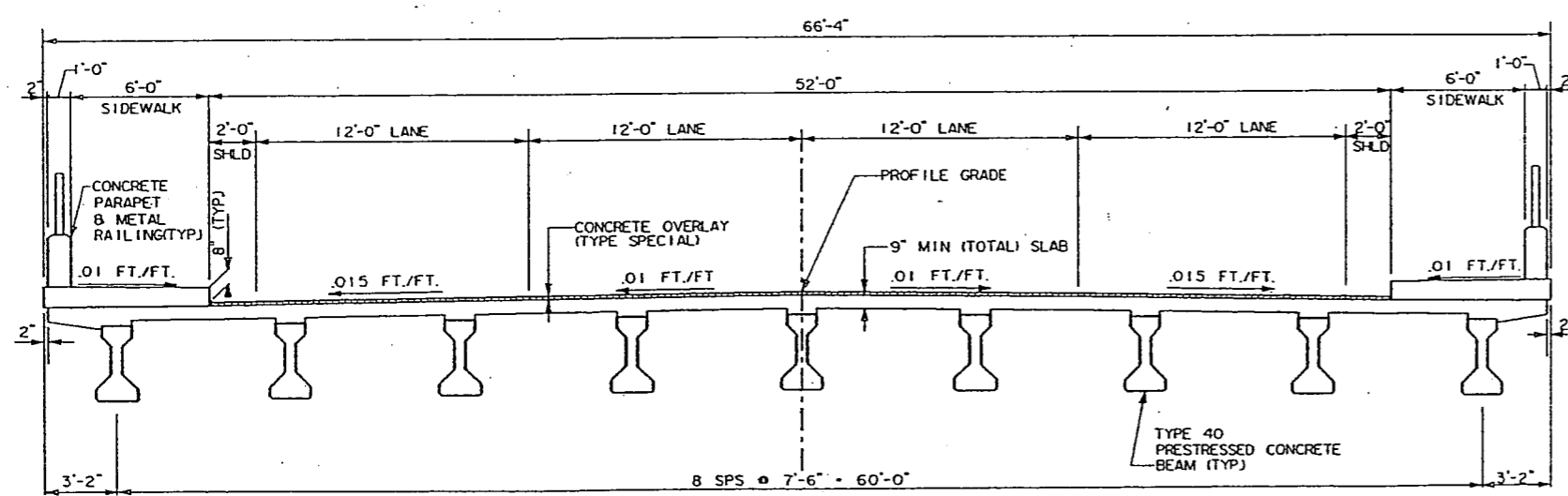
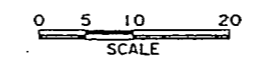
Fed. Proj. No.

DESIGN DATA

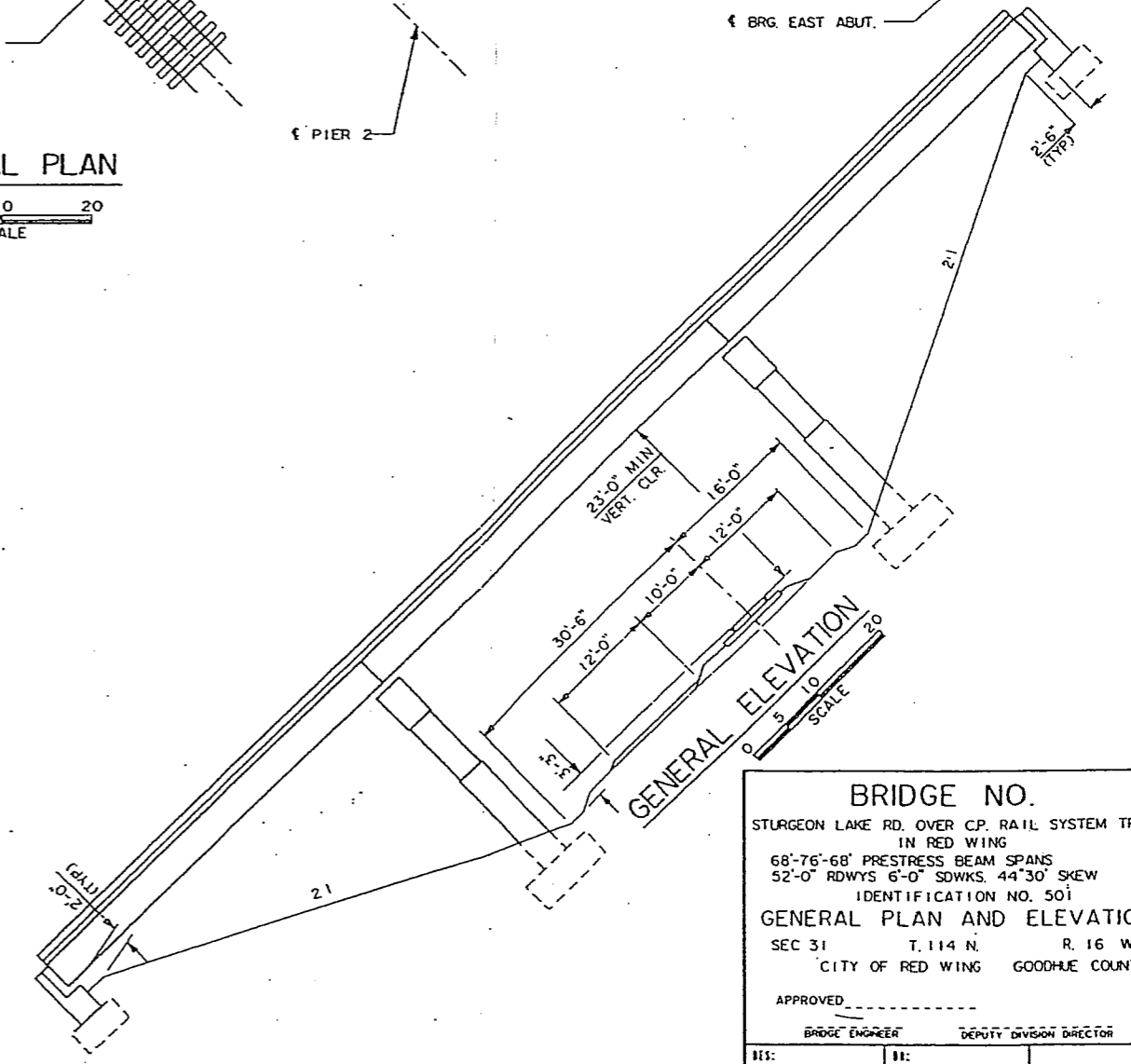
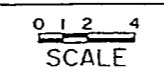
1992 A.A.S.H.T.O. DESIGN SPECIFICATIONS.
 LOAD FACTOR DESIGN METHOD
 DESIGN LOADING HS 25 LIVE LOAD
 DEAD LOAD INCLUDES 17 PSF ALLOWANCE FOR
 FUTURE WEARING COURSE MODIFICATIONS.
 MAXIMUM ALLOWABLE DESIGN STRESSES:
 REINFORCED CONCRETE:
 $f_c = 4,000$ PSI $n = 8$
 $f_s = 60,000$ PSI (REINFORCEMENT)
 PRESTRESSED CONCRETE:
 $f_c = 6,000$ PSI $n = 6$
 $f_s = 270,000$ PSI



GENERAL PLAN



TYPICAL SECTION

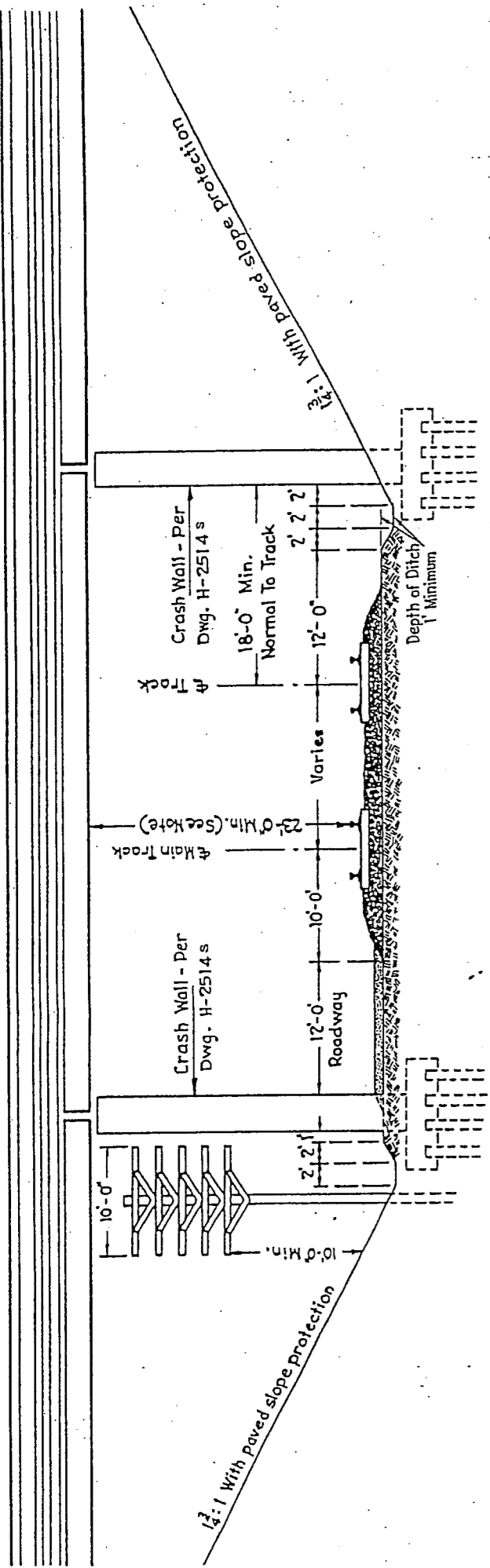


GENERAL ELEVATION

BRIDGE NO.
 STURGEON LAKE RD. OVER CP. RAIL SYSTEM TRACK
 IN RED WING
 68'-76'-68' PRESTRESS BEAM SPANS
 52'-0" RDWYS 6'-0" SDWKS 44°30' SKEW
 IDENTIFICATION NO. 501
GENERAL PLAN AND ELEVATION
 SEC 31 T. 114 N. R. 16 W.
 CITY OF RED WING GOODHUE COUNTY

APPROVED _____
 BRIDGE ENGINEER DEPUTY DIVISION DIRECTOR

DES: _____
 CHK: _____



C. M. ST. P. & P. R. R.

TYPICAL CLEARANCES
AT
HIGHWAY OVERPASS STRUCTURES

CORRECTED: *[Signature]*
ASST. CHIEF ENGR.-STRUCT.

CORRECT: *[Signature]*
ASST. CHIEF ENGR.-TYCC.

APPROVED: *[Signature]*
VICE PRES.-CHIEF ENGR.

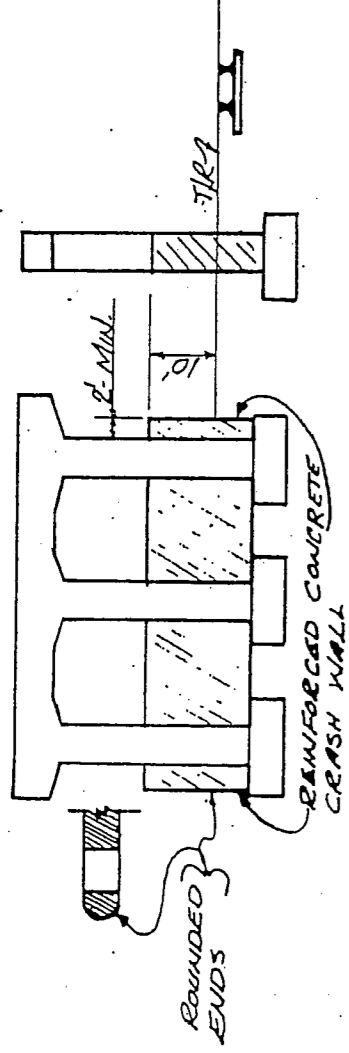
M.O.W. 754

NOTES:

- Drainage Ditches Shown Are Minimum Section. Local Drainage Conditions May Require a Larger Ditch Or Deeper Flow Line, And Erosion Protection.
- No Drainage Shall Be Discharged From Highway onto Railroad Roadbed.
- Vertical Clearance Will Be Increased Where Necessary to Provide For Trolley In Electrified Territory.

APRIL 16, 1968
REV. MAR. 15, 1974

FIGURE 3



PIERS SUPPORTING HIGHWAY & RAILWAY BRIDGES OVER MILWAUKEE RAILROAD TRACKS SHALL BE PROTECTED BY A CRASH WALL, EXTENDING FROM THE TOP OF FOOTING TO A HEIGHT OF 10' ABOVE TOP OF RAIL. THE PIERS ADJACENT TO TRACKS MUST CONTAIN THREE OR MORE COLUMNS. THE CRASH WALL SHALL BE AT LEAST 1'-6" THICK OR AS THICK AS THE COLUMNS AND CONNECTED TO THEM. IT SHALL ALSO BE FLUSH WITH THE FACE OF THE COLUMNS ADJACENT TO THE TRACK AND HAVE ROUNDED ENDS AS SHOWN. THIS PROTECTION MUST BE PROVIDED UNLESS WRITTEN AUTHORITY TO ELIMINATE CRASH WALL PROTECTION IS OBTAINED FROM THE CHIEF ENGINEER.

BLUE LINE PRINTS AVAILABLE
IN X-File No 33718.

○ of ○
A-316 B
P-156
A.F.E.

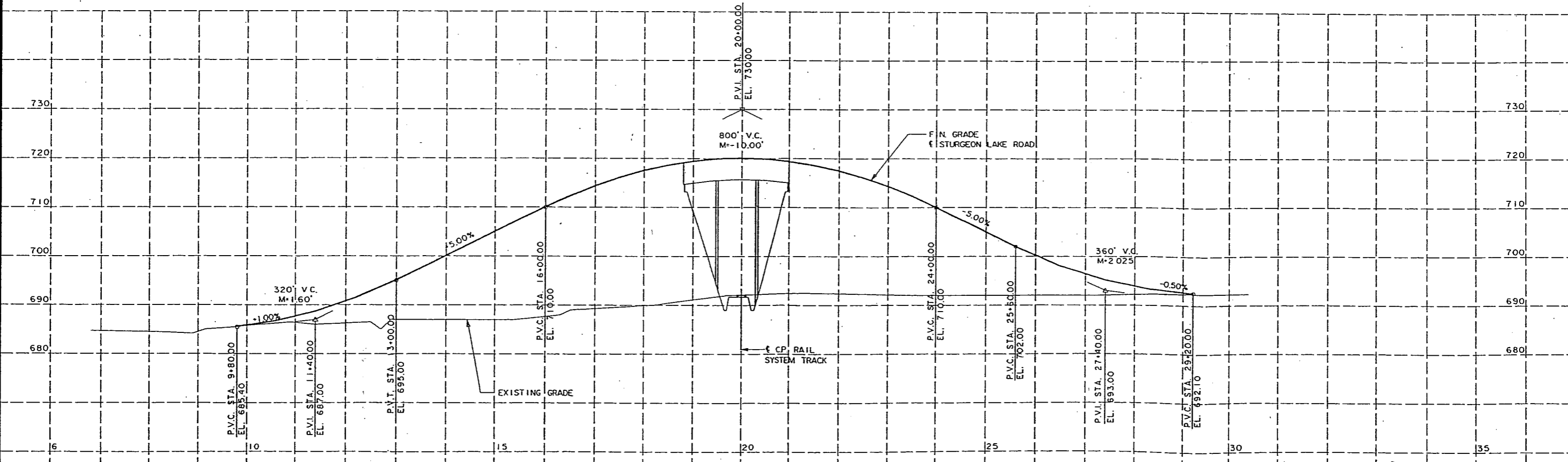
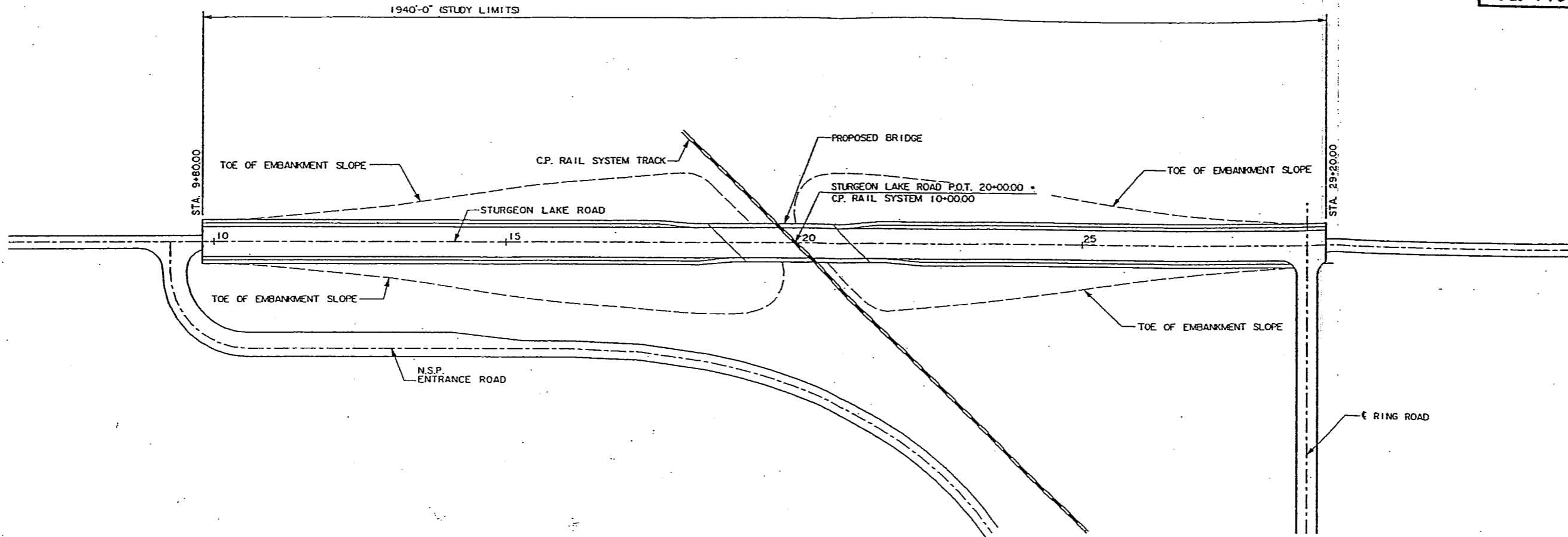
CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC RAILROAD

MINIMUM DIMENSIONS
FOR CRASH WALLS

Chicago, 3-4-69 Drawing H-25/45
Approved: *C. H. Smith*
Vice President
A. S. [Signature] Chief Engineer

Revision	Date	By
Designed By: <i>B.A. G. S. M.</i>		
Design Checked By: <i>R. H. K. L. A. S.</i>		
Connect:		

FIGURE 4



PLAN AND PROFILE

State Proj. No.

FIGURE 5

