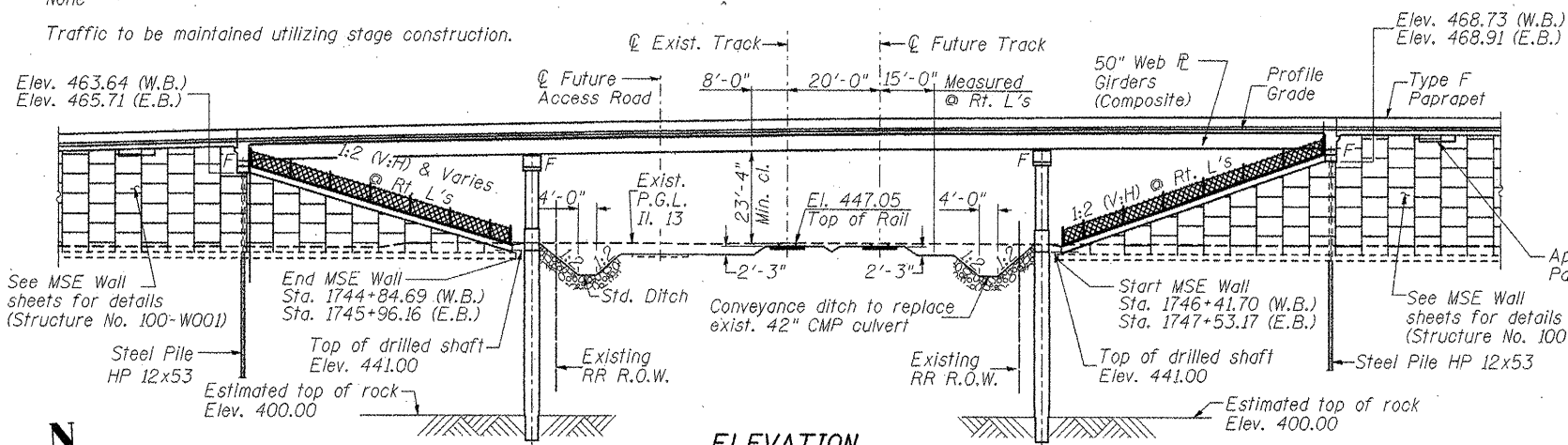


Benchmark #18: Sta. 1735+10.91 +/-, 72.25 +/- right (IL Route 13).
 Cut square on the East corner of a traffic signal handhole rim, on the island in the SW quad of Rte. 13 and Skyline Drive, 37' right of the centerline of Rte. 13 EBL @ Sta. 735+13
 Elev. 439.099

Benchmark #19: Sta. 1763+29.58 +/-, 53.73 +/- right (IL Route 13).
 Cut square in the concrete FDN of a combination mast arm assembly SE quad of IL Rte 13 EBL and Sinclair Dr. 20' South of the centerline of Rte. 13 EBL.
 Elev. 448.329

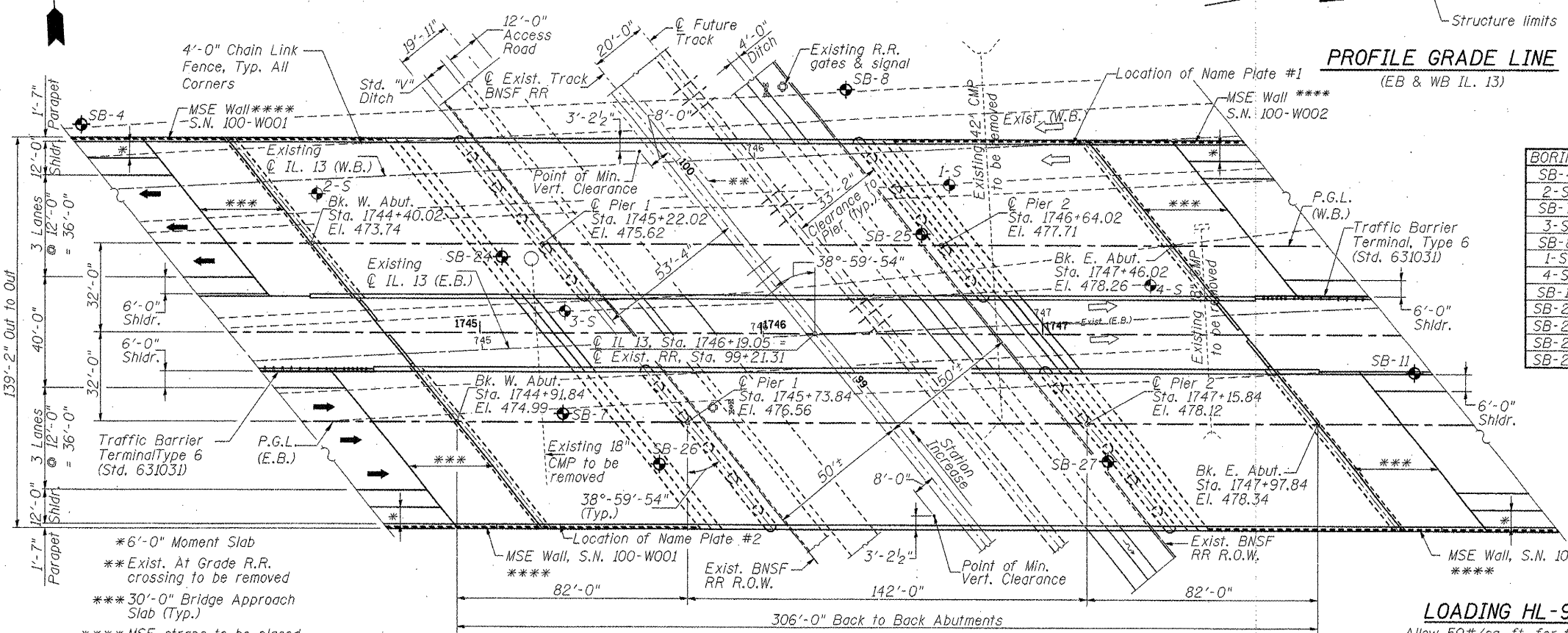
Existing Structure:
 None

Traffic to be maintained utilizing stage construction.



ELEVATION
 (Looking North)

Note: No freefall drains will be permitted in the span over the tracks or within 10'-0" cross arms of a railroad pole line.



DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interim Revisions
 2009 AASHTO Guide Specifications for LRFD Seismic Bridge Design with 2010 Interim Revisions

PLAN

DESIGN STRESSES

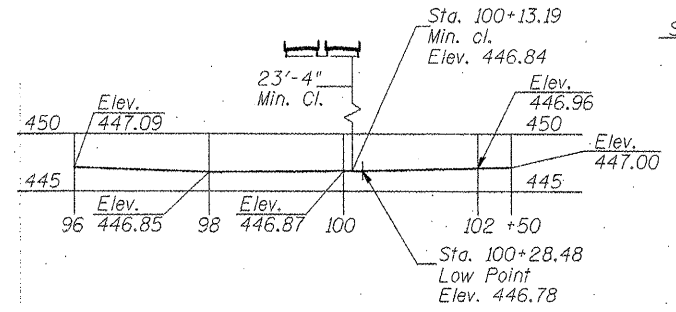
FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50)
 $f_y = 36,000$ psi (M270 Grade 36)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

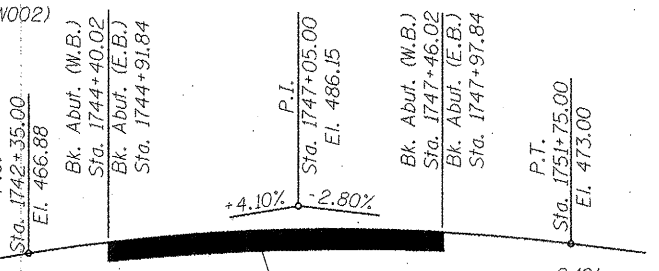
SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_{d1}) = 0.275 g
 Design Spectral Acceleration at 0.2 sec. (S_{d5}) = 0.754g
 Soil Site Class = C



EXISTING PROFILE GRADE - BNSF RR

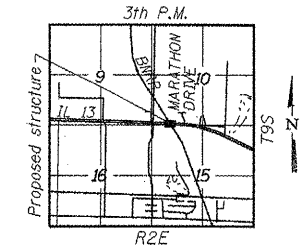
(Looking West)
 The BNSF mile marker at Marion is 178.9.



PROFILE GRADE LINE
 (EB & WB IL. 13)

BORINGS

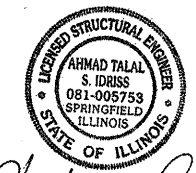
BORING	LOCATION
SB-4	1743+57, 74' Lt.
2-S	1744+49, 42' Lt.
SB-7	1745+30, 29' Rt.
3-S	1745+30, 8' Lt.
SB-8	1746+30, 88' Lt.
1-S	1746+67, 53' Lt.
4-S	1747+41, 19' Lt.
SB-11	1748+33, 13' Rt.
SB-24	1745+08, 27' Lt.
SB-25	1746+57, 36' Lt.
SB-26	1745+64, 47' Rt.
SB-27	1747+23, 46' Rt.



LOCATION SKETCH

APPROVED
 For Structural Adequacy Only

Scott P. ...
 Engineer of Bridges & Structures



Ahmad T. Idriss
 Ahmad T. Idriss, P.E., S.E.
 Illinois Licensed Structural Engineer
 License Number: 081-005753
 Expiration Date: November 30, 2012



USER NAME = Gary Davis	DESIGNED - MCC	REVISED -
	CHECKED - ATI	REVISED -
PLOT SCALE =	DRAWN - GLD	REVISED -
PLOT DATE = 12/7/2011	CHECKED - ATI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 100-0093 (W.B.) & 100-0094 (E.B.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(IX-1)VB-1	WILLIAMSON	367	167
			CONTRACT NO. 98859	
ILLINOIS FED. AID PROJECT				

SHEET NO. S-1 OF S-41 SHEETS