

Bench Mark: Chsd "□" in NE wingwall of bridge on Business Loop 55, Elev. 561.89.

Existing Structure: S.N. 054-0005 was built in 1942 as F.A. Route 5 at Salt Creek, 0.3 miles southwest of Lincoln. In 1963, S.N. 054-0005 had partial parapet repair. In 1975, the structure was widened and the deck was replaced. Existing structure consists of fifteen spans, 724' long, 67' wide out-to-out. The substructure consist of precast pile bent piers and solid stem piers supported by timber piles. Structure carries BL-55 over Salt Creek and sits on a horizontal curve and is generally well aligned with the creek. The existing pavement is four 12' lanes separated by barrier and median with variable shoulders including curb and gutter. Roadway will be closed during construction.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
F.A.U. 7706	23(B)-1	LOGAN	179	85
FED. ROAD DIST. NO. 7	BL-55	FED. AID PROJECT-		

Contract #72789

INDEX OF SHEETS

1. General Plan
2. General Data
3. Footing Layout
- 4.-11. Top of Slab Elevations
- 12.-13. Top of Approach Pavement Elevations
- 14.-16. Superstructure
- 17.-18. Superstructure Details
19. Bridge Approach Slab
20. Bridge Approach Slab Details
- 21.-24. Expansion Joint Details
25. Drainage Scupper Details
26. Structural Steel
- 27.-29. Structural Steel Details
- 30.-32. Bearing Details
33. North Abutment
34. South Abutment
- 35.-36. Abutment Details
37. Pier 1
38. Pier 1 Details
39. Pier 2
40. Pier 2 Details
41. Pier 3
42. Pier 3 Details
43. Pier 4
44. Pier 4 Details
45. Steel H-Pile Details
46. Bar Splicer Assembly Details
- 47.-52. Boring Logs

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS

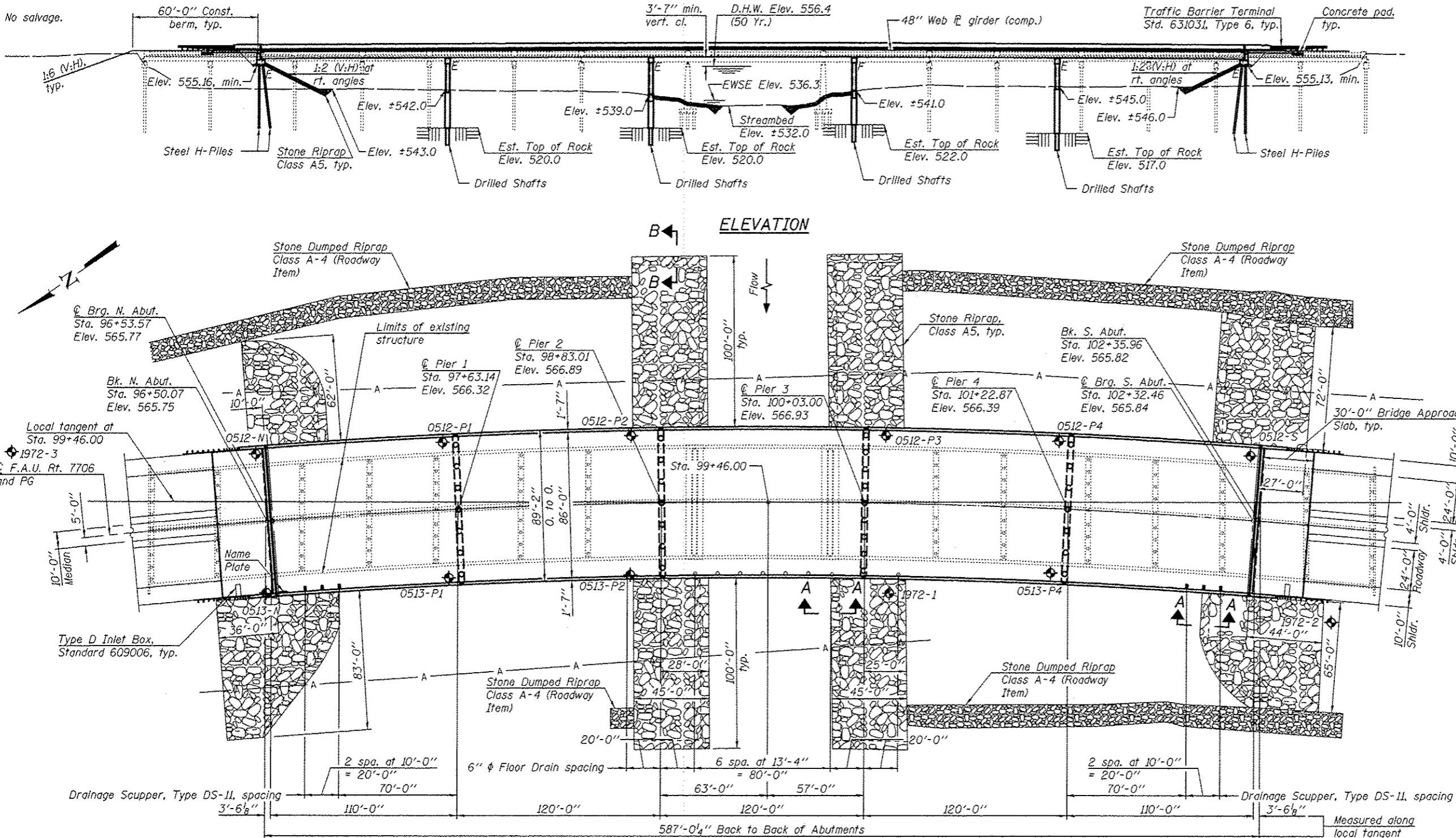
- f'c = 3,500 psi
- fy = 60,000 psi (Reinforcement)
- fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA

- Seismic Performance Zone (SPZ) = 1
- Bedrock Acceleration Coefficient (A) = 0.045g
- Site Coefficient (S) = 1.0



LOCATION SKETCH



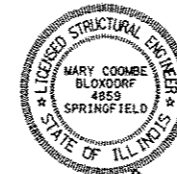
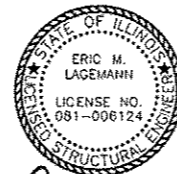
STATION 99+46.00  
BUILT 201 BY  
STATE OF ILLINOIS  
F.A.U. RT. 7706 - SEC. 23(B)-1  
LOADING HL-93  
STR. NO. 054-0512

NAME PLATE  
See Std. 515001

APPROVED  
For Structural Adequacy Only

*Eric Lagemann*  
Engineer of Bridges & Structures

PLAN



*Eric Lagemann 6/21/13*  
*Mary Coombe Blokdrup*  
Expires 11/30/2014  
Expires 11/30/2014  
Sheets 1 thru 32  
Sheets 33 thru 44

HORNER &  
SHIFRIN, INC.  
ENGINEERS

GENERAL PLAN  
BL-55 OVER SALT CREEK  
F.A.U. ROUTE 7706 - SECTION 23(B)-1  
LOGAN COUNTY  
STATION 99+46.00  
STRUCTURE NO. 054-0512

Note: © bearing at abutments and © piers are radial to © F.A.U. Route 7706.

DESIGNED	JJD
CHECKED	EML
DRAWN	JJD
CHECKED	EML