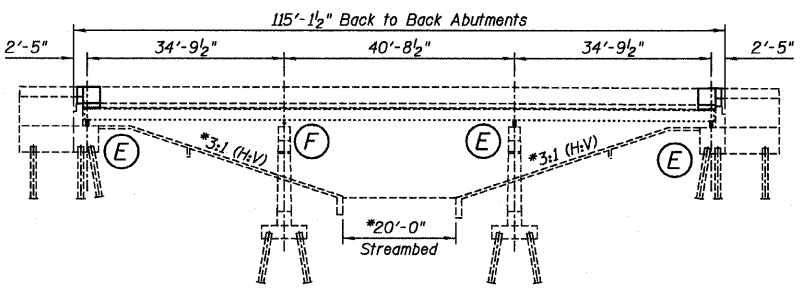


SEE SHEET B2 FOR INDEX TO SHEETS

**SCOPE OF WORK**

- 1.) Maintain two lanes of traffic in each direction according to Stage Construction cross sections.
- 2.) Remove and close the longitudinal expansion joints.
- 3.) Remove and replace the transverse expansion joints with Preformed Joint Strip Seal.
- 4.) Clean the bearing seats at the abutments and Pier No. 2.
- 5.) Jack and remove the existing bearings at the abutments and Pier No. 2.
- 6.) Install elastomeric bearings with steel extensions at the abutments and Pier No. 2.
- 7.) Clean and paint each beam end, along with the end diaphragms.
- 8.) Remove and replace the diaphragms indicated on the plans.
- 9.) Formed concrete repair of all areas indicated on the plans.
- 10.) Plug Existing Deck Drains as indicated on the plans.
- 11.) Partial Deck Slab Repair of all areas indicated on the plans.
- 12.) Remove the bituminous wearing surface and hydro-scarify the deck.
- 13.) Install a Microsilica Concrete Overlay.
- 14.) Perform Channel Excavation as indicated on the plans.
- 15.) Fill eroded areas with Stone Riprap, Class A3 as indicated on the plans.

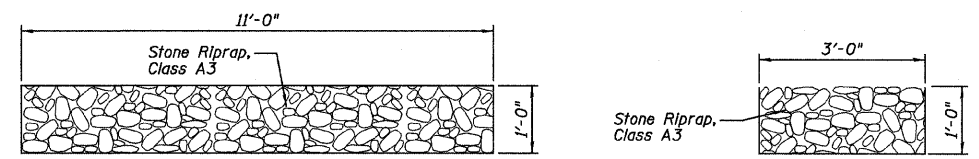
Existing Structure: Structures No. 082-0169 (E.B.) and 082-0170 (W.B.), built in 1968 as Section 82-4B and widened in 1980 as Section 82-4BY. The dual superstructures consist of continuous three span non-composite rolled beam bridges with 7 1/2" concrete slabs and 1 1/2" bituminous overlay. The dual substructures consist of concrete stub abutments supported by concrete piles and solid wall piers supported by timber piles. The back-to-back of abutment dimension measures 115'-1 1/2" and the out-to-out of deck measures 137'-7 5/8" to 141'-2 3/8" (E.B.) and 104'-6 3/4" to 108'-5 1/4" (W.B.). The span lengths (CL bearing to CL bearing) are 34'-9 1/2", 40'-8 1/2", and 34'-9 1/2". The skew angle is 11°2'0" right forward. Two lanes of traffic will be maintained on each bridge utilizing stage construction.



**ELEVATION**  
\*Horizontal dimensions @ Rt. L's

CURVE DATA: (Curve No. B-2, E.B. F.A.I. 64)	CURVE DATA: (Curve No. A-2, W.B. F.A.I. 64)	CURVE DATA: (Curve No. 2, @ F.A.I. 64)	CURVE DATA: (Curve No. 61, Ramp C)	CURVE DATA: (Curve No. 60)
PI STA. = 262+13.98 Δ = 17° 35' 25.76" D = 01° 29' 15" R = 3851.72' T = 595.95' L = 1182.524' P.C. STA = 256+18.03 P.T. STA = 268+00.55	PI STA. = 262+23.15 Δ = 17° 35' 25.76" D = 01° 30' 45.6" R = 3787.72' T = 586.048' L = 1162.875' P.C. STA = 256+37.10 P.T. STA = 267+99.98	PI STA. = 262+18.56 Δ = 17° 35' 25.76" D = 01° 30' 00" R = 3819.72' T = 590.999' L = 1172.70' P.C. STA = 256+27.56 P.T. STA = 268+00.26	PI STA. = 11+07.78 Δ = 65° 30' 12" D = 10° 56' 55" R = 523.32' T = 336.63' L = 598.28' P.C. STA = 7+71.15 = 266+87.06	PI STA. = 3+36.58 Δ = 10° 51' 25" D = 01° 37' 04" R = 3541.92' T = 336.58' L = 671.15'

**CURVE DATA:**  
(Curve No. 15)  
PI STA. = 264+31.93  
Δ = 08° 24' 38"  
D = 01° 59' 41"  
R = 2872.51'  
T = 211.21'  
L = 421.66'



**STONE RIPRAP, CLASS A3 DETAILS**

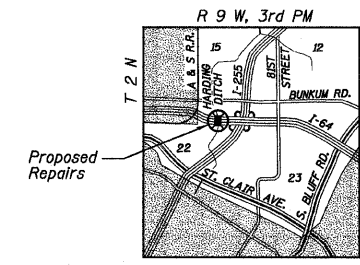
**LOADING HS20-44 & ALTERNATE**  
Original and 1980 Construction  
Allow 25#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**  
1980 Construction  
1977 AASHTO and 1978 Interim Specifications

**DESIGN STRESSES**  
Original Construction  
f<sub>c</sub> = 1,400 psi (Super & Sub)  
f<sub>s</sub> = 20,000 psi (Reinforcement)  
f<sub>s</sub> = 20,000 psi (Structural Steel)  
V<sub>o</sub> = 75 psi (Footings)  
1980 Construction  
f'<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)  
f<sub>s</sub> = 20,000 psi (Structural Steel)  
Field Units  
f'<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)  
f<sub>s</sub> = 36,000 psi (Structural Steel)

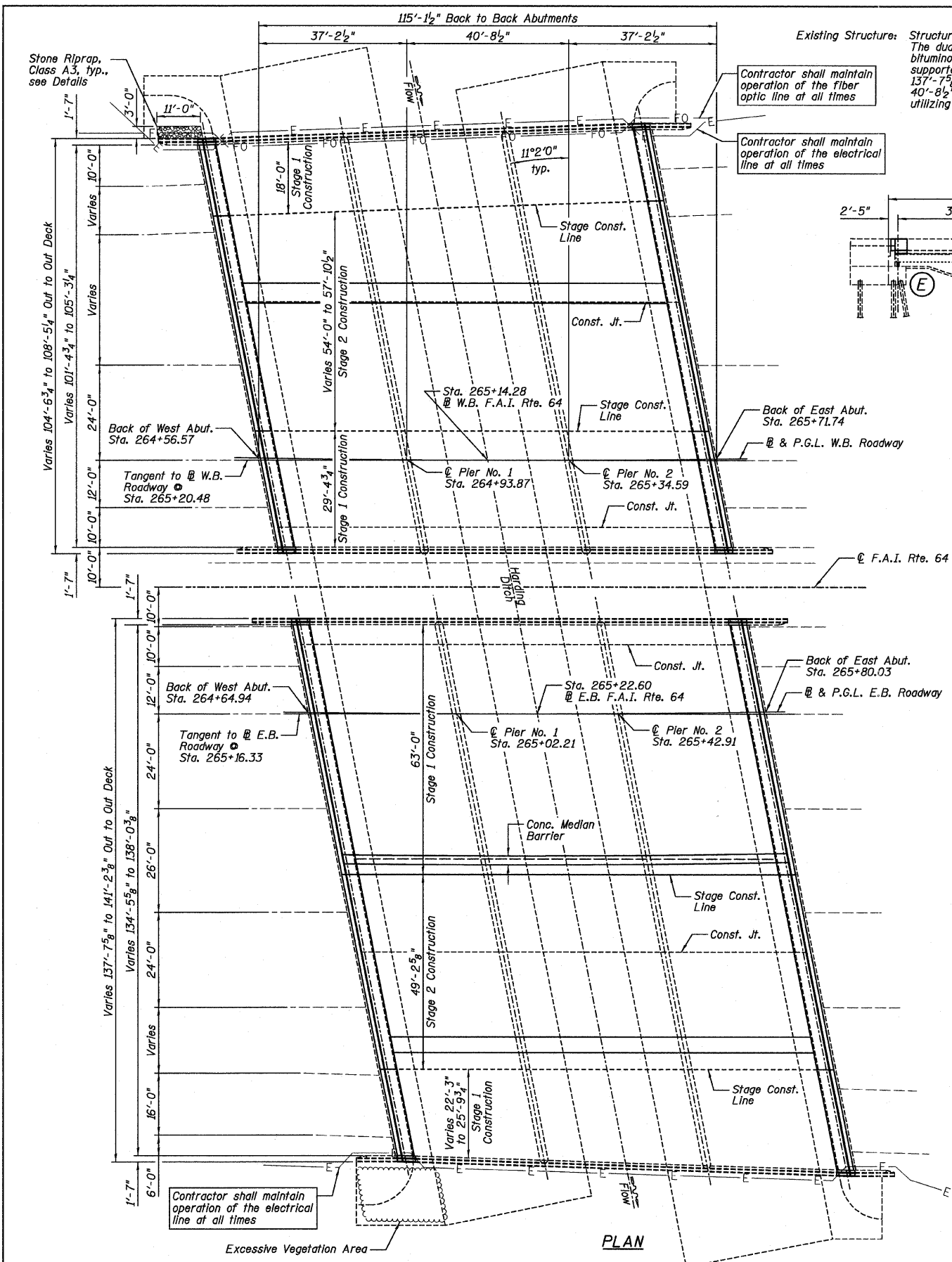


Joseph M. Lowrance  
Date 12-05-11  
JOSEPH M. LOWRANCE  
ILLINOIS STRUCTURAL ENGINEER  
NO. 081-006446  
Exp. Date 11/30/12



**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION**  
**INTERSTATE 64 OVER HARDING DITCH**  
**F.A.I. ROUTE 64 - SEC 82-(3,4)RS**  
**ST. CLAIR COUNTY**  
**STATION 265+14.28 (E.B.)**  
**STATION 265+22.60 (W.B.)**  
**STRUCTURE NO. 082-0169 (E.B.)**  
**STRUCTURE NO. 082-0170 (W.B.)**



**PLAN**

**Farnsworth**  
GROUP, INC.  
2709 McGraw Drive  
Bloomington, Illinois 61704  
306663-8436, 306663-1571 fax

DESIGNED - JCZ	REVISOR
CHECKED - JML	REVISOR
DRAWN - DJM/JWK	REVISOR
CHECKED - MSW	REVISOR

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SHEET NO. B1 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-(3,4)RS	ST. CLAIR	167	122
				CONTRACT NO. 76415
ILLINOIS FED. AID PROJECT				