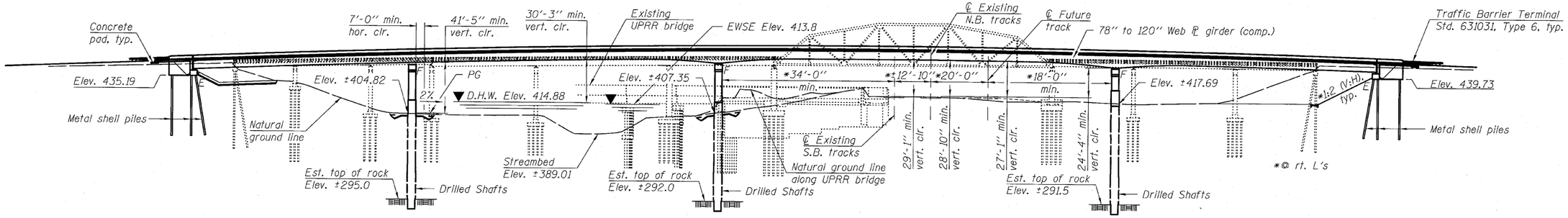
Benchmark: NAVD 88 - Steel rod in casing located 0.1 miles Northeast of the intersection of IL Rte. 3 and the UPRR on top of the North levee at the East end of the Northeast headwall for the canal floodgate. Elev. 430.35.

Existing Structure: S.N. 082-0030 was built in 1954 as F.A. Rte. 4 Sec. 64-1-VB, D, E & F at Sta. 281+07.13. In 1987, under Sec. 64-1VB1, the deck on the truss span was replaced with patching done on the remaining deck. The expansion joints were replaced and a new retrofit steel rail was installed. The top 1½" of the deck was scarified and replaced with a 3" plasticized high density concrete overlay. The existing structure consists of one 3 span continuous WF beam unit, one 3 span continuous ℄ girder unit, one through truss and one 3 span continuous WF beam unit. The substructure consists of pile bent stub abutments with pile supported piers. The bk. to bk. abutments dimension is 902'-9½" while the O.-O. width measures 56'-4". The road will be closed during construction.

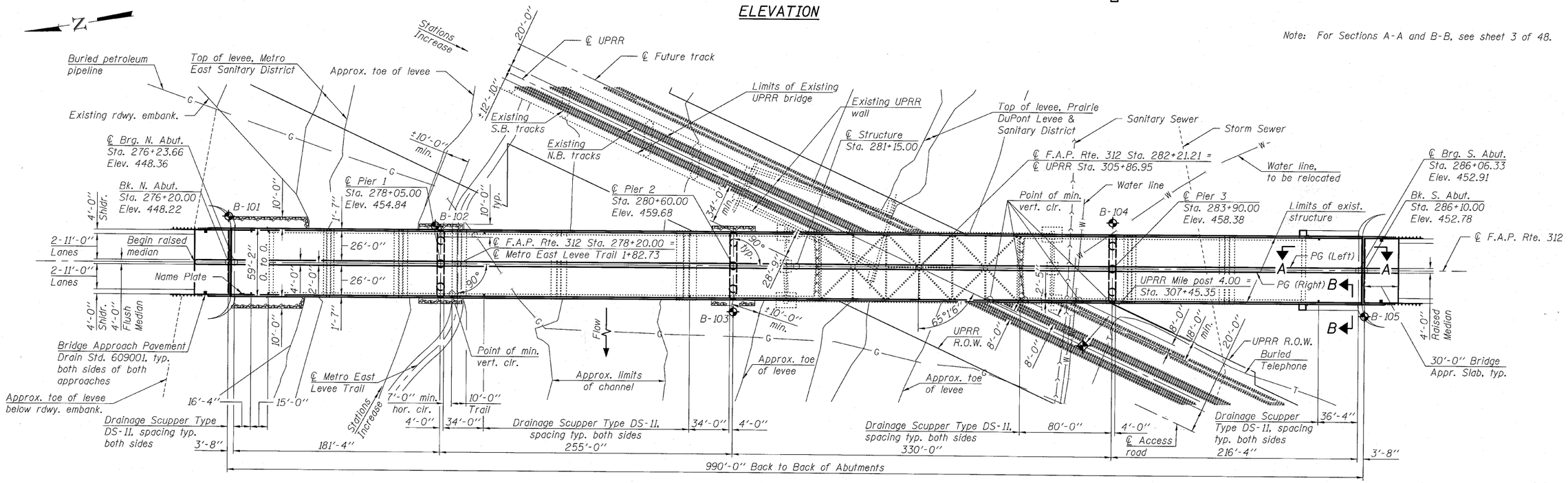
No Salvage.

# STATE OF ILLINOIS
# DEPARTMENT OF TRANSPORTATION




## ELEVATION

Note: For Sections A-A and B-B, see sheet 3 of 48.




## PLAN

**APPROVED**
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TJD)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
ERIC M. LAGEMANN
LICENSE NO. 081-006124
LICENSED STRUCTURAL ENGINEER

Eric Lagemann 8/5/2010
License Expires 11/30/2010

## LOADING HL-93

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

## DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 and 2009 Interims

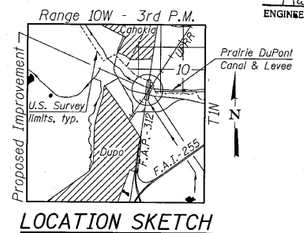
## DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

## SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec ($S_{D1}$) = 0.24g
Design Spectral Acceleration at 0.2 sec ($S_{DS}$) = 0.53g
Soil Site Class = D




## LOCATION SKETCH

| | |
|---|---|
| DESIGNED | EML |
| CHECKED | KAK |
| DRAWN | EML |
| CHECKED | JJD |

HORNER & SHIFRIN, INC.
ENGINEERS

## GENERAL PLAN & ELEVATION
## ILLINOIS ROUTE 3 OVER UPRR AND PRAIRIE DUPONT DRAINAGE CANAL
## F.A.P. RTE. 312 - SEC. 64-1VBR
## ST. CLAIR COUNTY
## STATION 281+15.00
## STRUCTURE NO. 082-0038

| SHEET NO. 1 | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|---|
| 48 SHEETS | 312 | 64-1VBR | ST. CLAIR | 259 | 53 |
| | | | CONTRACT NO. 76882 | | |
| | | | ILLINOIS FED. AID PROJECT | | |