

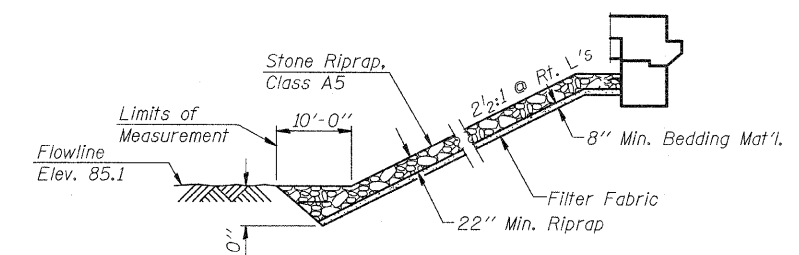
ELEVATION

PROFILE GRADE
(Along & Roadway)

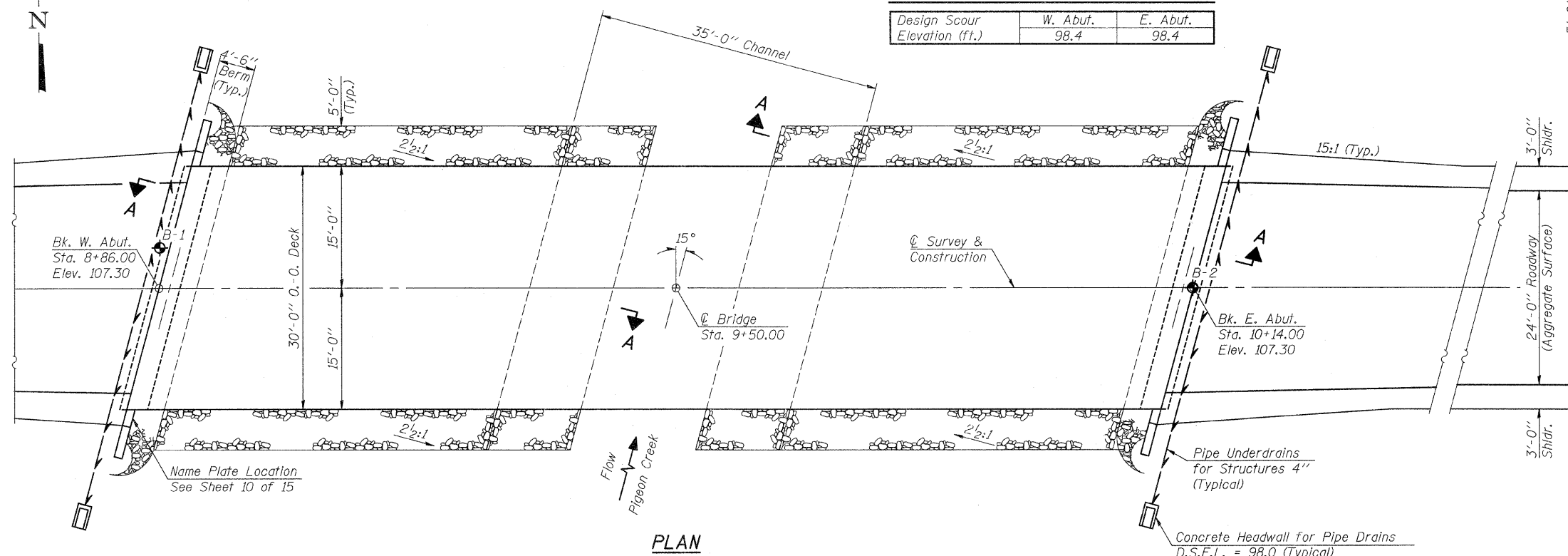
LOCATION PLAN

DESIGN SCOUR ELEVATION TABLE

| Design Scour Elevation (ft.) | W. Abut. | E. Abut. |
|------------------------------|----------|----------|
| | 98.4 | 98.4 |



SECTION A-A
RIPRAP PLACEMENT DETAIL



PLAN

INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes, Bill of Materials & Miscellaneous Details
- 3.-4. Top of Slab Elevations
5. Superstructure Details
6. Diaphragm Details
7. Steel Railing, Type S-1
- 8.-9. Structural Steel Details
10. Abutments
11. Steel Pile Details
- 12.-15. Soil Boring Logs

WATERWAY INFORMATION

| | |
|---------------------------|---------------|
| Drainage Area | 30.23 Sq. Mi. |
| Existing Opening (15 Yr.) | 709 Sq. Ft. |
| Required Opening (15 Yr.) | 1,012 Sq. Ft. |
| Proposed Opening (15 Yr.) | 1,012 Sq. Ft. |
| Design Discharge (15 Yr.) | 3,810 C.F.S. |
| Created Head (15 Yr.) | 0.2 Ft. |
| 100 Year Discharge | 6,400 C.F.S. |
| 100 Yr. Created Head | 0.3 Ft. |

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.117g
 Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.191g
 Soil Site Class = D

DESIGN STRESSES

f'_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)
 f_y = 50,000 psi (M270 Grade 50W)

DESIGN SPECIFICATIONS

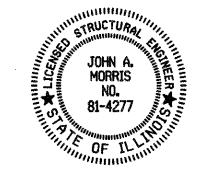
2010 AASHTO LRFD Bridge Design Specifications

LOADING HL-93

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

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO LRFD Bridge Design Specifications'."

John A. Morris 2/13/12
 ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/12)



GENERAL PLAN & ELEVATION

T.R. 351

SECTION 08-22102-01-BR

IROQUOIS COUNTY

STATION 9+50.00

S.N. 038-5157

| | | | | | | | | | | | |
|----------------------------|--------------------|-------------------|-----------|--|--|-------------------------------------|----------------|----------|--------------|-----------|--|
| FILE NAME = 11-137_GPE.DGN | USER NAME = S.A.P. | DESIGNED - A.R.K. | REVISED - | FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL | GENERAL PLAN & ELEVATION S.N. 038-5157 SHEET NO. 1 OF 15 SHEETS | TWP. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| PLOT SCALE = XXX | DRAWN - S.A.P. | CHECKED - R.E.A. | REVISED - | | | 351 | 08-22102-01-BR | IROQUOIS | 25 | 4 | |
| PLOT DATE = 01/04/12 | CHECKED - A.R.K. | DRAWN - S.A.P. | REVISED - | | | CONTRACT NO. 87493 | | | | | |
| | | | | | | ILLINOIS PIGEON GROVE ROAD DISTRICT | | | | | |