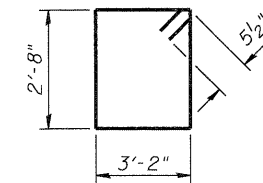
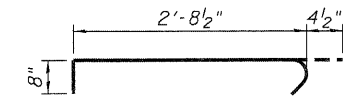


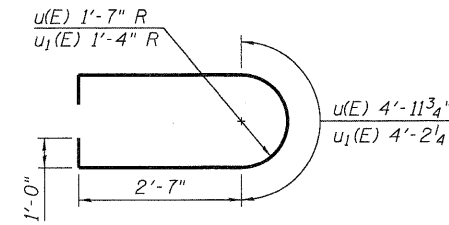
**TOP PLAN**



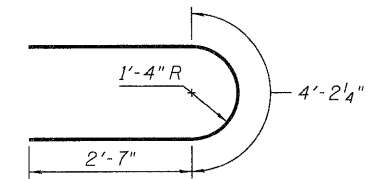
**BAR s(E)**



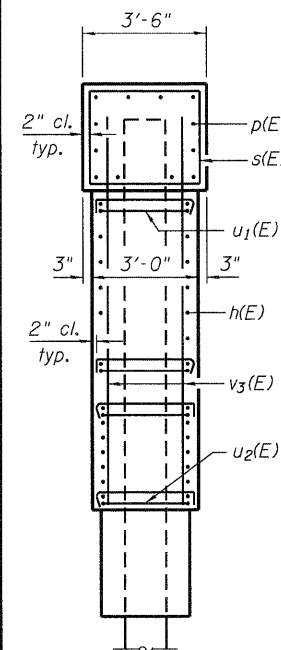
**BAR s1(E)**



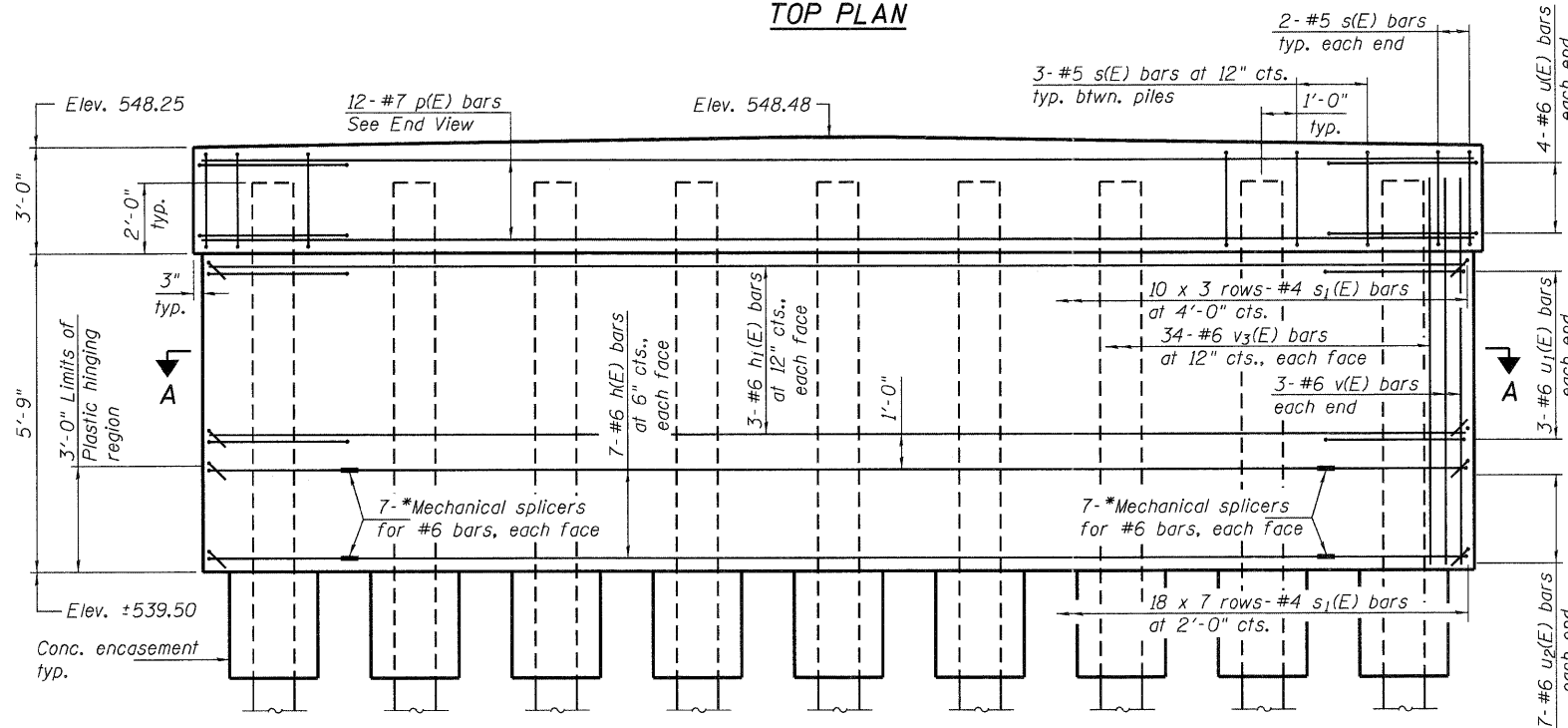
**BARS u(E) & u1(E)**



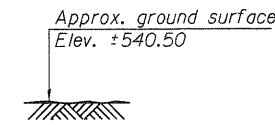
**BARS u2(E)**



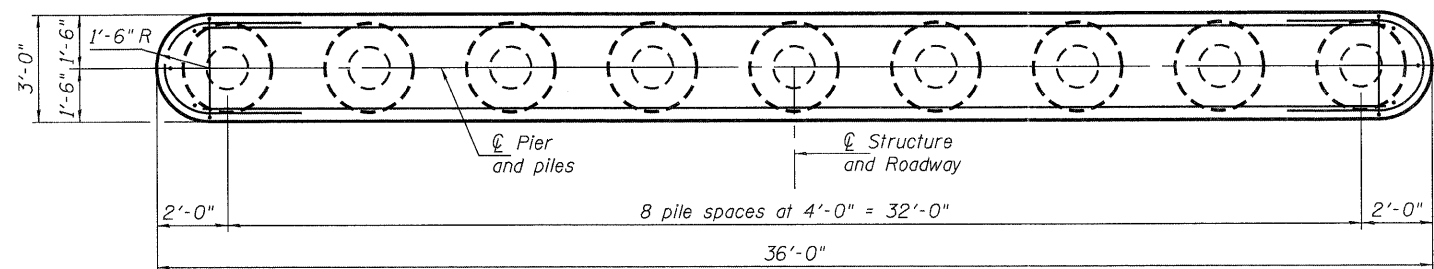
**END VIEW**



**ELEVATION**



\* As an alternate to the Mechanical splicers shown, the Contractor may provide shop welded splices in accordance with AWS D1.4.



**SECTION A-A**

**PILE DATA**

Type: Metal Shell - 14"  $\phi$  x 0.312" walls  
 Nominal Required Bearing: 386 kips  
 Factored Resistance Available: 198 kips  
 Est. Length: 72 ft.  
 No. Production Piles: 8  
 No. Test Piles: 1

**PIER 2  
BILL OF MATERIAL**

| Bar                                       | No. | Size    | Length  | Shape |
|---|-----|---------|---------|-------|
| h(E)                                      | 14  | #6      | 27'-10" | —     |
| h1(E)                                     | 6   | #6      | 33'-0"  | —     |
| p(E)                                      | 12  | #7      | 33'-0"  | —     |
| s(E)                                      | 28  | #5      | 12'-7"  | □     |
| s1(E)                                     | 156 | #4      | 3'-9"   | U     |
| u(E)                                      | 8   | #6      | 12'-2"  | U     |
| u1(E)                                     | 6   | #6      | 11'-5"  | U     |
| u2(E)                                     | 14  | #6      | 9'-5"   | U     |
| v3(E)                                     | 74  | #6      | 7'-7"   | —     |
| Structure Excavation                      |     | Cu. Yd. | 10      |       |
| Concrete Structures                       |     | Cu. Yd. | 31.1    |       |
| Concrete Encasement                       |     | Cu. Yd. | 2.9     |       |
| Reinforcement Bars, Epoxy Coated          |     | Pound   | 3,740   |       |
| Furnishing Metal Shell Piles 14" x 0.312" |     | Foot    | 576     |       |
| Driving Piles                             |     | Foot    | 576     |       |
| Test Pile Metal Shells                    |     | Each    | 1       |       |
| Mechanical Splicers                       |     | Each    | 28      |       |

|                           |                   |           |
|---------------------------|-------------------|-----------|
| USER NAME = dheber1mg     | DESIGNED - TJZ    | REVISED - |
| FILE NAME = D6.SN0848.dgn | CHECKED - SDS     | REVISED - |
| PLOT DATE = 9/7/2011      | DRAWN - DLH       | REVISED - |
| PLOT TIME = 11:11:34 AM   | CHECKED - TJZ/SDS | REVISED - |

**WHKS & CO.**  
 ENGINEERING  
 7018 KINGSMILL CT.,  
 SPRINGFIELD, IL  
 (217) 483-9457  
 DESIGN FIRM #184001036

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PIER 2  
STRUCTURE NO. 084-0480**

SHEET NO. 8 OF 11 SHEETS

| F.A.S. RTE.               | SECTION        | COUNTY   | TOTAL SHEETS | SHEET NO.                 |
|---------------------------|----------------|----------|--------------|---------------------------|
| 556                       | 08-00119-04-BR | SANGAMON | 25           | 15                        |
|                           |                |          |              | <b>CONTRACT NO. 93556</b> |
| ILLINOIS FED. AID PROJECT |                |          |              |                           |