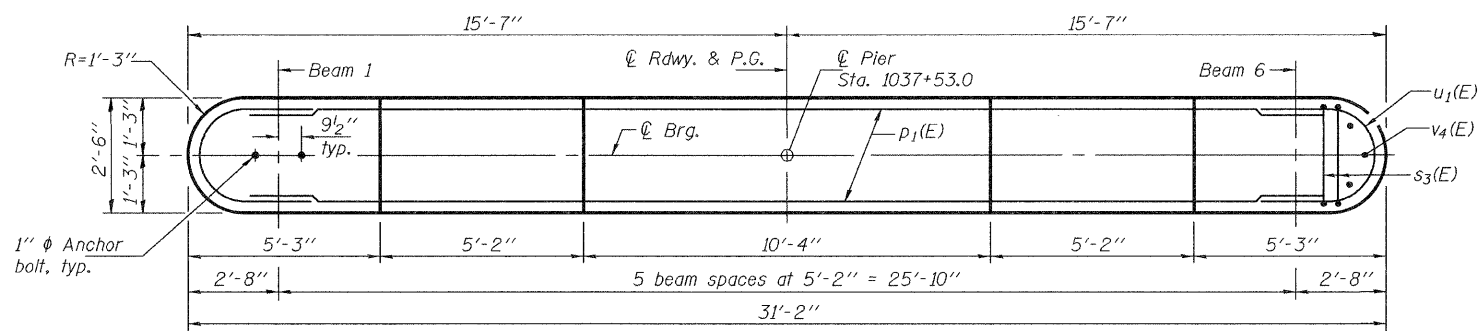


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

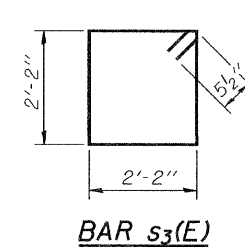
Notes: Space reinforcement in cap to miss anchor bolts.  
Pour steps monolithically with cap.  
For details of piles, see sheet 18 of 22.

**PILE DATA**

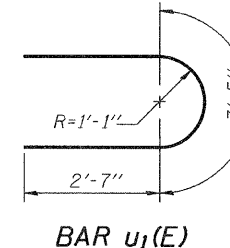
Type: Steel HP14x73 with Pile Shoes  
Nominal Required Bearing: 551 Kips  
Factored Resistance Available: 200 Kips  
Est. Length: 86'  
No. Production Piles: 5  
No. Test Piles: 1



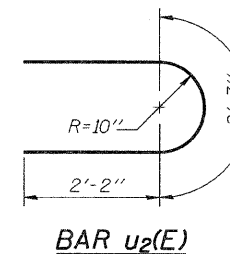
**TOP PLAN**



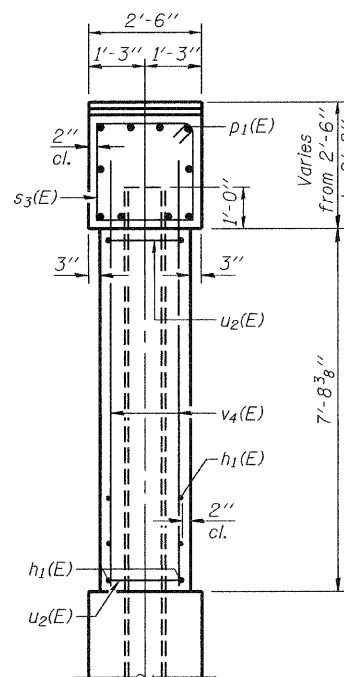
**BAR s3(E)**



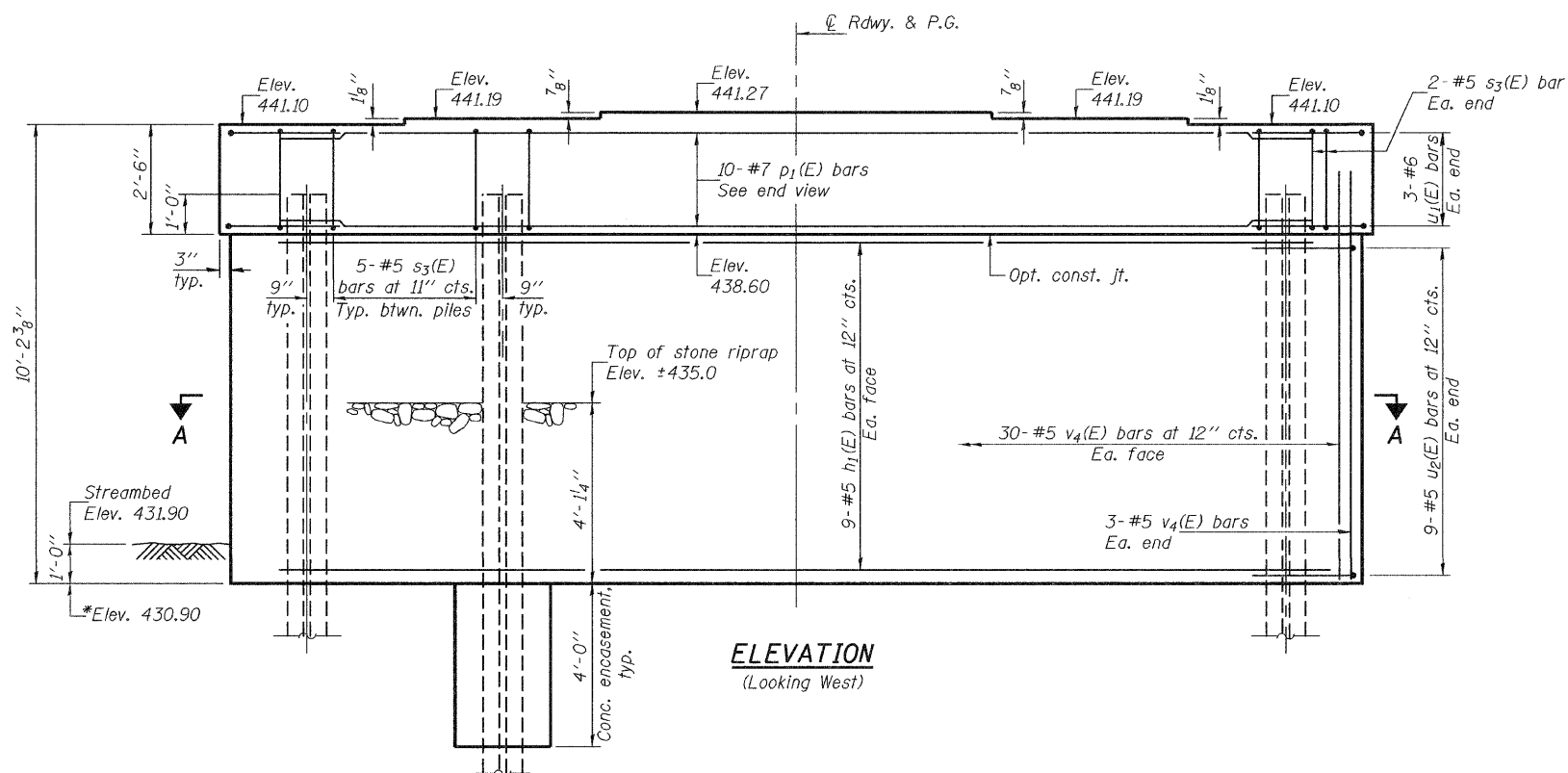
**BAR u1(E)**



**BAR u2(E)**



**END VIEW**

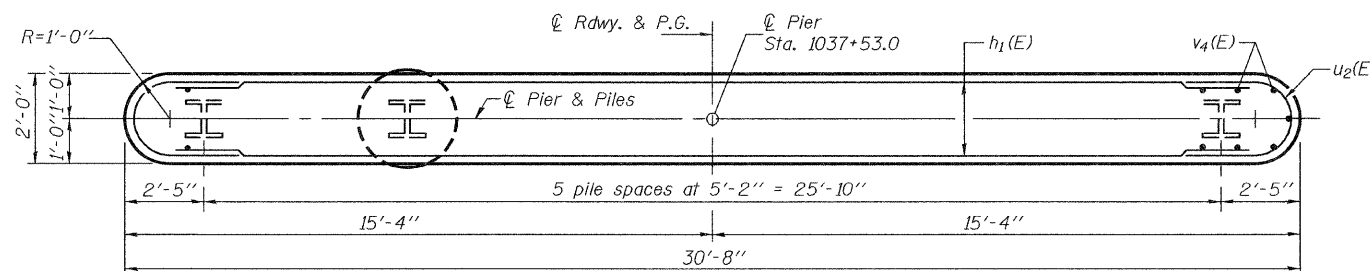


**ELEVATION**  
(Looking West)

**BILL OF MATERIAL**

| Bar  | No. | Size    | Length | Shape |
|--|-----|---------|--------|-------|
| h1(E)  | 18  | #5      | 28'-8" | —     |
| p1(E)  | 10  | #7      | 28'-8" | —     |
| s3(E)  | 29  | #5      | 9'-7"  | □     |
| u1(E)  | 6   | #6      | 8'-7"  | U     |
| u2(E)  | 18  | #5      | 6'-11" | U     |
| v4(E)  | 66  | #5      | 9'-6"  | —     |
| Structure Excavation                                   |     | Cu. Yd. | 18     |       |
| Concrete Structures                                    |     | Cu. Yd. | 24.6   |       |
| Reinforcement Bars, Epoxy Coated                       |     | Pound   | 2280   |       |
| Furnishing Steel Piles, HP14x73                        |     | Foot    | 430    |       |
| Driving Piles  |     | Foot    | 430    |       |
| Test Pile, HP14x73                                     |     | Each    | 1      |       |
| Pile Shoes   |     | Each    | 6      |       |
| Concrete Encasement                                    |     | Cu. Yd. | 4.4    |       |
| Underwater Structure Excavation Protection, Location 1 |     | Each    | 1      |       |
| Anchor Bolts, 1" φ                                     |     | Each    | 12     |       |

\* Forms shall be placed below Elev. 430.90 after excavation for pier wall. Reinforcement may be placed and concrete encasement shall be poured underwater into forms. If a portion of the pier wall is underwater, concrete shall be tremied underwater into forms according to Art. 503.08 of the Std. Spec's. Concrete shall be tremied to an elevation 1'-0" above the water level at the time of construction.



**SECTION A-A**

DESIGNED Phillip R. Litchfield  
CHECKED Ray Ahanchi  
DRAWN Gregory D. Farmer  
CHECKED PRL/GRA/JDE

EXAMINED Thomas J. Demagala  
PASSED Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

**PIER**  
**STRUCTURE NO. 013-0040**

| SHEET NO.                                     | S.B.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|---------|--------|--------------|-----------|
| 15  | 12          | 10B-1   | CLAY   | 39           | 27        |
| 22 SHEETS                                     |             |         |        |              |           |
| CONTRACT NO. 74004                            |             |         |        |              |           |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |             |         |        |              |           |