

**Notes:**

Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 22 of 26.  
 Concrete Sealer shall be applied to traffic faces of pier cap, crashwall, columns and top of crashwall within 10 feet of shoulder.

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

51'-0"

5 beam spaces at 9'-2 7/8" (-) = 46'-2 1/4"

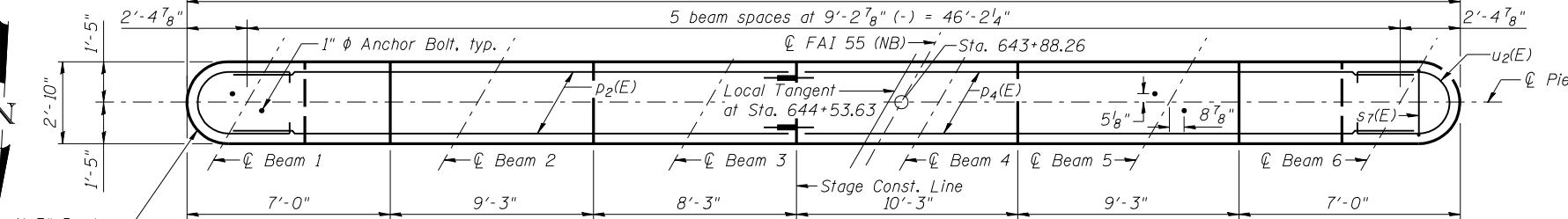
CL FAI 55 (NB) Sta. 643+88.26

Local Tangent at Sta. 644+53.63

CL Pier

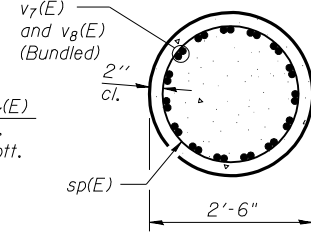
**PILE DATA**

Type: Steel HP 12x63  
 Nominal Required Bearing: 425 kip  
 Factored Resistance Available: 234 kip  
 Est. Length: 38 ft.  
 No. Production Piles: 26  
 No. Test Piles: 1



**TOP PLAN**

**BARS n(E), n1(E) & n2(E)**



**SEC. B-B**

**BILL OF MATERIAL**

| Bar                              | No.     | Size | Length  | Shape |
|----------------------------------|---------|------|---------|-------|
| h4(E)                            | 20      | #5   | 17'-6"  | —     |
| h5(E)                            | 20      | #5   | 19'-6"  | —     |
| h6(E)                            | 4       | #6   | 23'-0"  | —     |
| h7(E)                            | 4       | #6   | 25'-0"  | —     |
| h8(E)                            | 4       | #6   | 5'-6"   | —     |
| h9(E)                            | 4       | #6   | 17'-6"  | —     |
| h10(E)                           | 4       | #6   | 9'-11"  | —     |
| n(E)                             | 6       | #6   | 7'-3"   | U     |
| n1(E)                            | 60      | #8   | 5'-0"   | U     |
| n2(E)                            | 60      | #8   | 7'-0"   | U     |
| p2(E)                            | 10      | #10  | 23'-0"  | —     |
| p3(E)                            | 5       | #8   | 18'-10" | —     |
| p4(E)                            | 10      | #10  | 25'-0"  | —     |
| p5(E)                            | 5       | #8   | 20'-10" | —     |
| p6(E)                            | 10      | #6   | 4'-4"   | —     |
| s5(E)                            | 48      | #6   | 15'-8"  | U     |
| s6(E)                            | 48      | #6   | 19'-0"  | U     |
| s7(E)                            | 48      | #6   | 6'-10"  | U     |
| s8(E)                            | 12      | #6   | 8'-4"   | U     |
| s9(E)                            | 71      | #6   | 12'-2"  | U     |
| s10(E)                           | 33      | #5   | 7'-6"   | U     |
| s11(E)                           | 88      | #4   | 3'-3"   | U     |
| sp(E)                            | 4       | #4   | 8'-6"   | W     |
| t1(E)                            | 52      | #7   | 9'-8"   | —     |
| u1(E)                            | 18      | #5   | 10'-4"  | U     |
| u2(E)                            | 9       | #6   | 10'-8"  | U     |
| v6(E)                            | 6       | #6   | 8'-3"   | —     |
| v7(E)                            | 60      | #8   | 7'-0"   | U     |
| v8(E)                            | 60      | #8   | 5'-0"   | U     |
| w2(E)                            | 10      | #5   | 19'-2"  | —     |
| w3(E)                            | 10      | #5   | 21'-2"  | —     |
| Structure Excavation             | Cu. Yd. |      | 180     |       |
| Concrete Structures              | Cu. Yd. |      | 104.8   |       |
| Reinforcement Bars, Epoxy Coated | Pound   |      | 15,160  |       |
| Furnishing Steel Piles HP 12x63  | Foot    |      | 988     |       |
| Driving Piles                    | Foot    |      | 988     |       |
| Test Pile Steel HP 12x63         | Each    |      | 1       |       |
| Concrete Sealer                  | Sq. Ft. |      | 372     |       |

\*\*\*

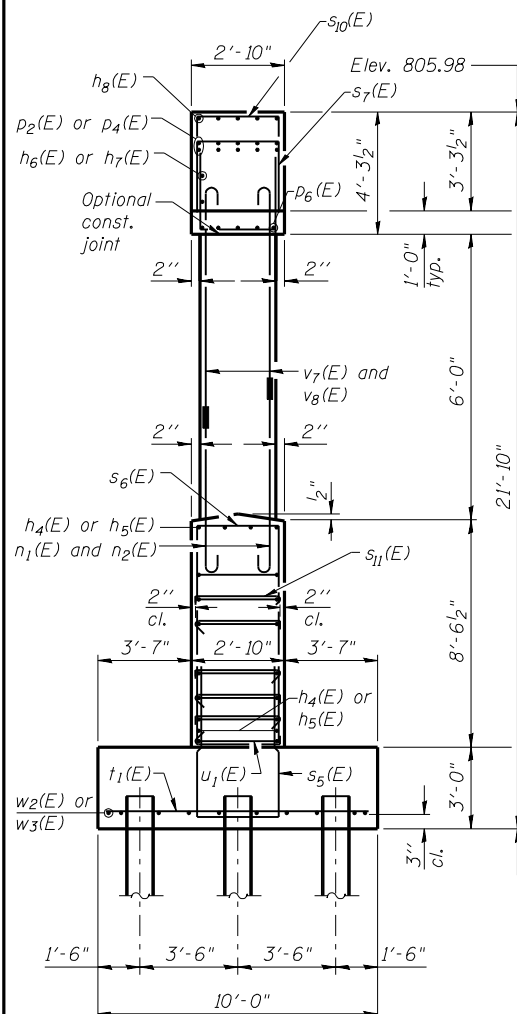
\*\*\*

\*\*\*\*

\*\*\*

\*\*\*

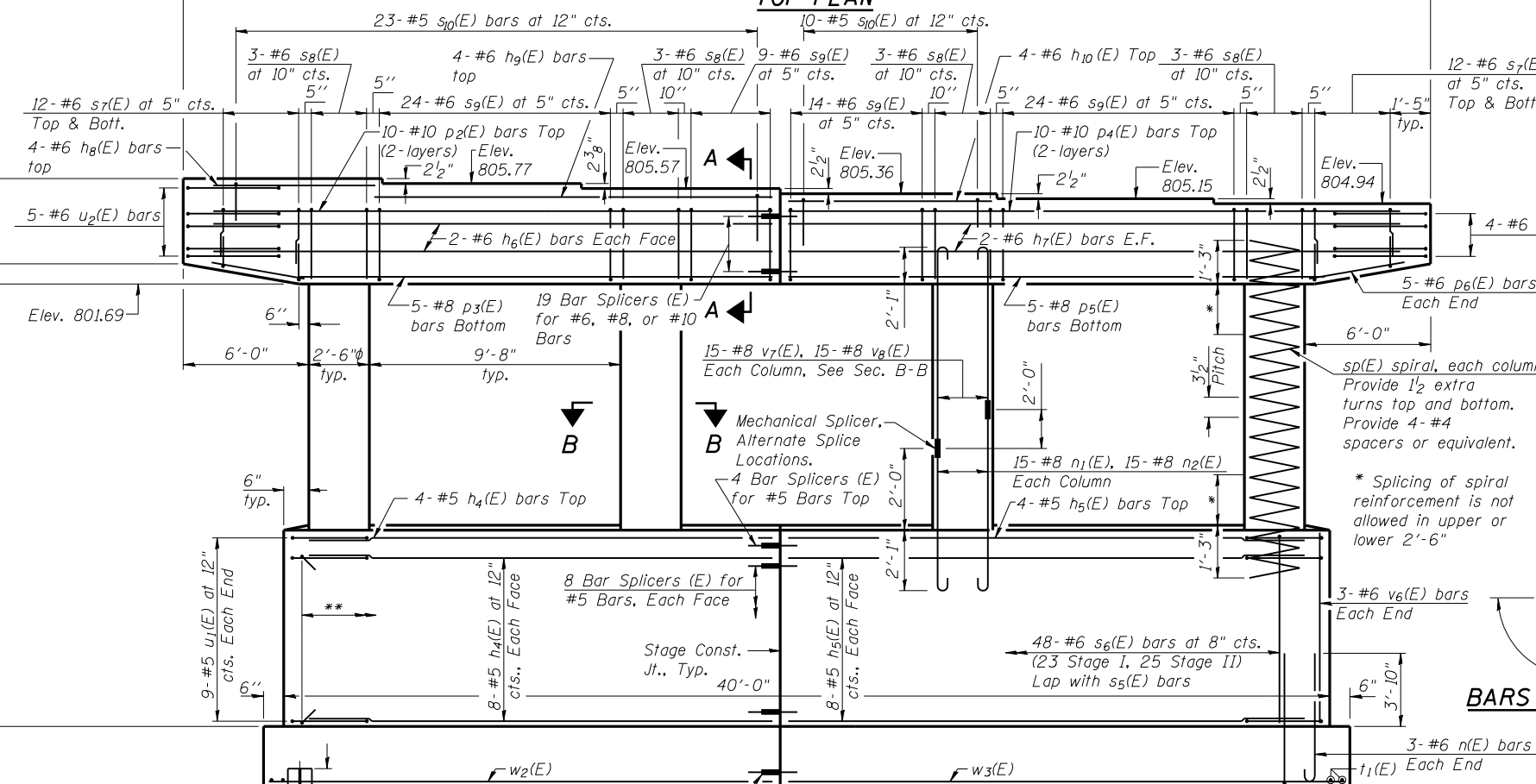
\*\*\*\*Length is height of spiral.



**END VIEW**

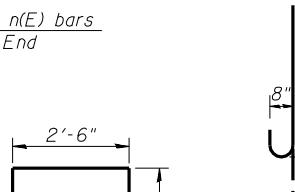
\*\* 88-#4 s11(E) bars at 4'-0" cts. max. (40 Stage I, 48 Stage II). Hook With h4(E) and h5(E) bars

\*\*\* As an alternative construction sequence, the contractor may choose to eliminate the v7(E) and v8(E) bars and mechanical splices in the columns by adjusting the length of the n1(E) and n2(E) bars up to the required height in the pier cap.



**ELEVATION**  
(Looking South)

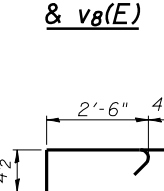
**BARS u1(E) & u2(E)**



**BARS s5(E) THRU s10(E)**

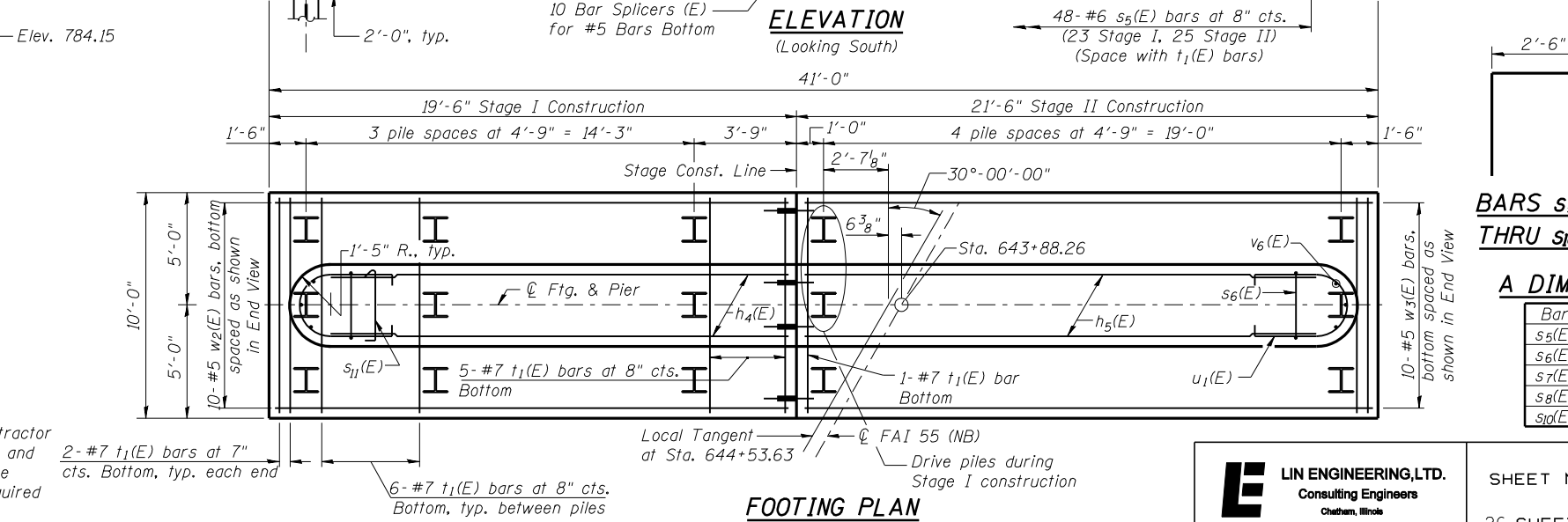
| Bar    | A      |
|--------|--------|
| s5(E)  | 6'-7"  |
| s6(E)  | 8'-3"  |
| s7(E)  | 2'-2"  |
| s8(E)  | 2'-11" |
| s10(E) | 2'-6"  |

**BARS v7(E) & v8(E)**



**BAR s11(E)**

**A DIMENSIONS**



**FOOTING PLAN**

**PIER 1 DETAILS  
 STRUCTURE NO. 057-0249**

**LIN ENGINEERING, LTD.**  
 Consulting Engineers  
 Chatham, Illinois

Designed By: ADB  
 Checked By: MTH  
 Date: April, 2010

Drawn By: RH

SHEET NO. 19  
 26 SHEETS

| F.A.I. RTE. | SECTION      | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|--------------|--------|--------------|-----------|
| 55          | (57-7HB-2)BR | MCLEAN | 153          | 96        |

CONTRACT NO. 70520

ILLINOIS FED. AID PROJECT