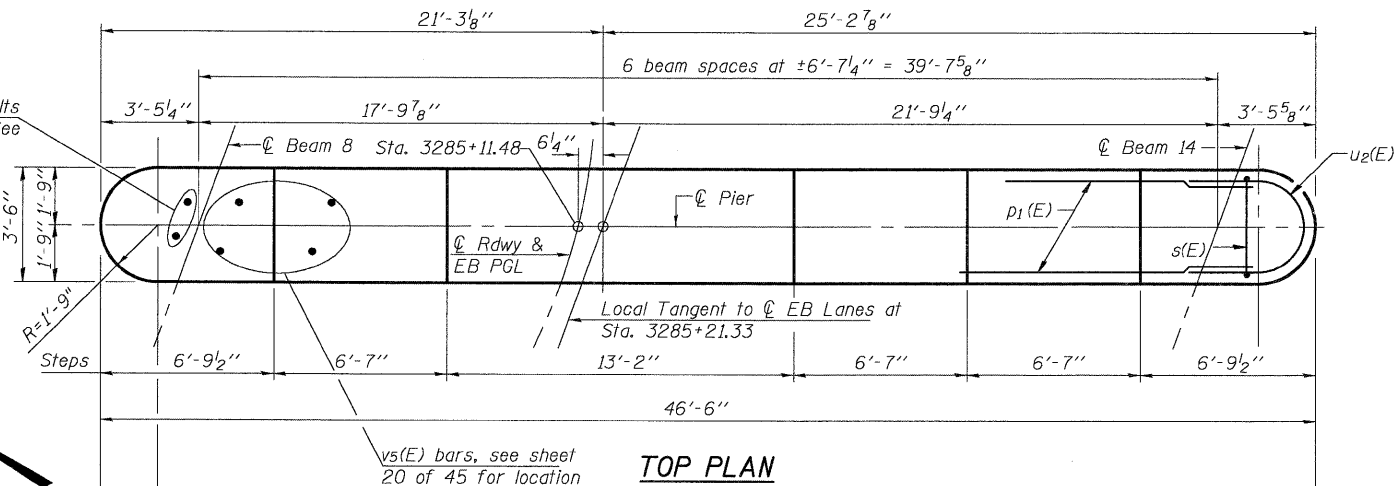
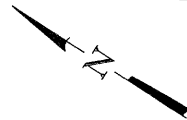
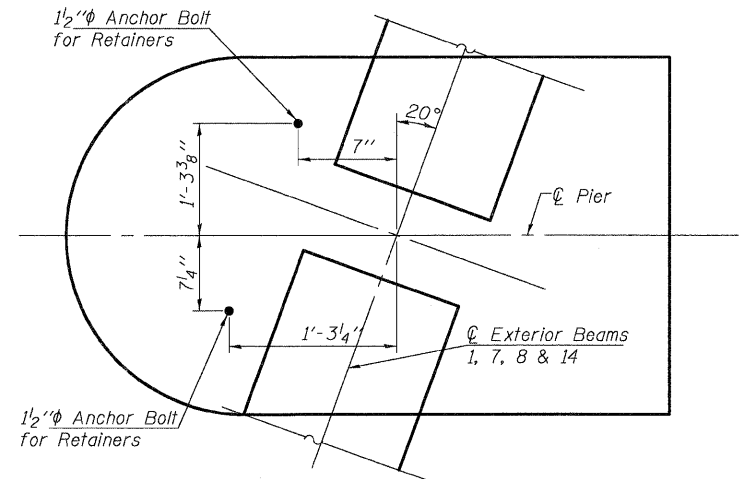


Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 38 of 45.

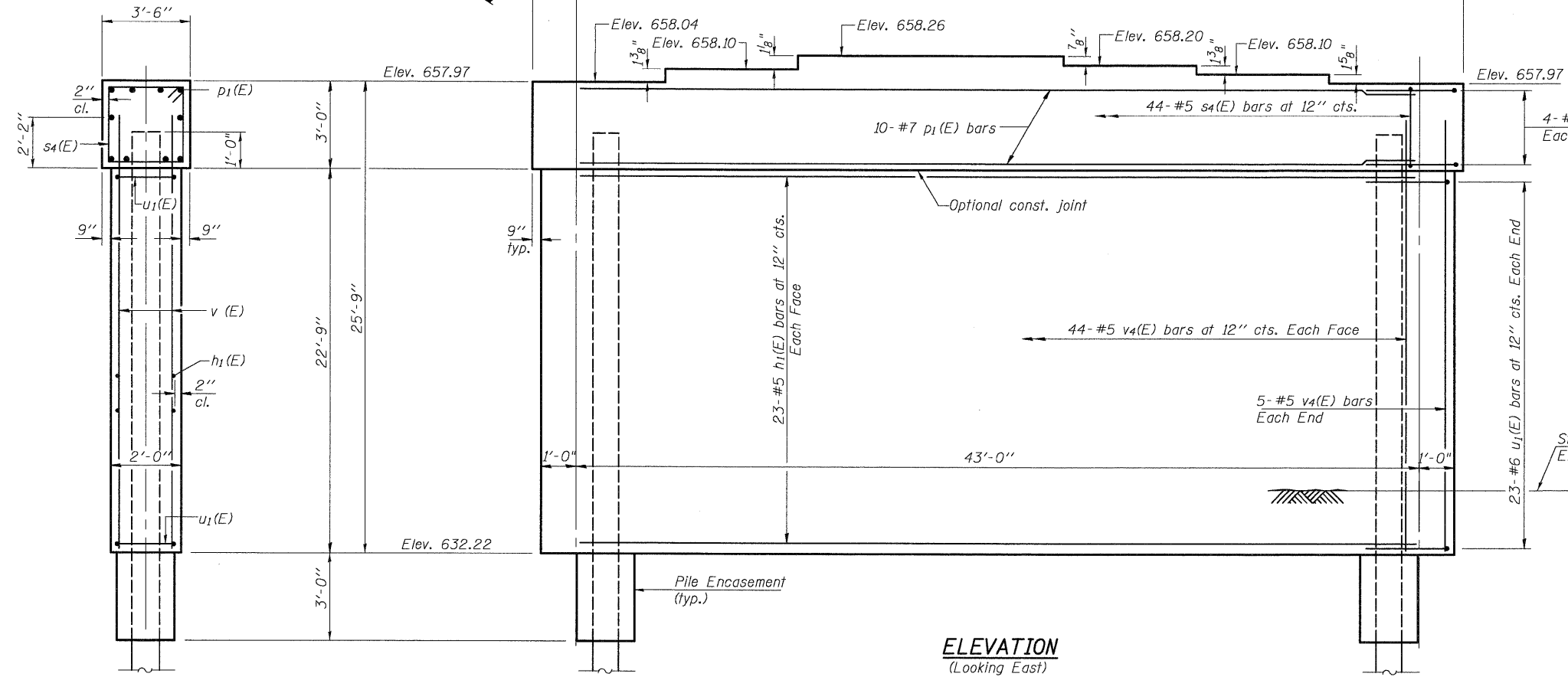
1/2"φ Anchor Bolts  
 for Retainers. See  
 Detail this sheet  
 for location



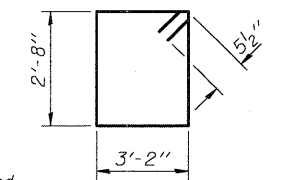
TOP PLAN



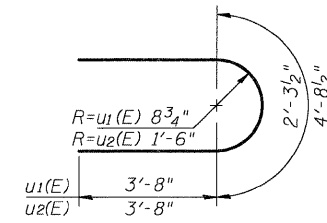
ANCHOR BOLT LOCATION DETAIL



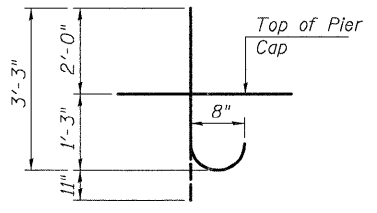
ELEVATION  
 (Looking East)



BAR s4(E)



BARS u1(E) & u2(E)



BAR v5(E)

BILL OF MATERIAL

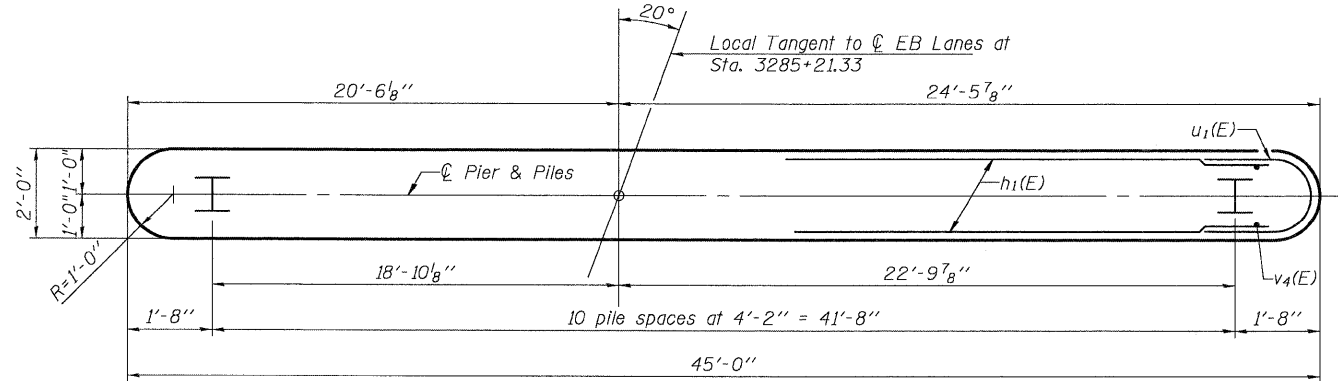
| Bar                              | No. | Size | Length  | Shape |
|----------------------------------|-----|------|---------|-------|
| h1(E)                            | 46  | #5   | 43'-0"  | —     |
| p1(E)                            | 10  | #7   | 43'-0"  | —     |
| s4(E)                            | 44  | #5   | 12'-7"  | □     |
| u1(E)                            | 46  | #6   | 9'-8"   | U     |
| u2(E)                            | 8   | #6   | 12'-1"  | U     |
| v4(E)                            | 98  | #5   | 24'-11" | —     |
| v5(E)                            | 36  | #8   | 4'-2"   | U     |
| Concrete Structures              |     |      | Cu. Yd. | 94.0  |
| Reinforcement Bars, Epoxy Coated |     |      | Pound   | 7280  |
| Furnishing Steel Piles, HP12x53  |     |      | Foot    | 760   |
| Driving Piles                    |     |      | Foot    | 760   |
| Test Pile, Steel HP12x53         |     |      | Each    | 1     |
| Underwater Structure Excavation  |     |      | Each    | 1     |
| Protection-Location 3            |     |      |         |       |
| Concrete Encasement              |     |      | Cu. Yd. | 3.8   |

PILE DATA

Type: Steel HP12 x 53  
 Nominal Required Bearing: 315 kip  
 Allowable Resistance Available: 105 kip  
 Est. Length: 76 ft.  
 No. Production Piles: 10  
 No. Test Piles: 1

NOTE

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



PLAN

**CB** Coombe-Bloxdorf P.C.  
 - CIVIL ENGINEERS -  
 - STRUCTURAL ENGINEERS -  
 - LAND SURVEYORS -  
 Design Firm License No. 184-002703

|             |         |
|-------------|---------|
| PROJECT NO. | 05061   |
| SCALE       |         |
| DATE        | 8/05/09 |
| DESIGN BY   | RM/MCB  |
| DRAWN BY    | TFG     |
| CHECKED BY  | MCB     |

|   |         |        |              |           |
|---|---------|--------|--------------|-----------|
| F.A.I. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 80  | *       | BUREAU | 344          | 189       |
| CONTRACT NO. 66908                              |         |        |              |           |
| FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT |         |        |              |           |

\*06-[7BR & BR-1, TVB-M, 6BR & 6, 7 RS-1 & I]

PLOT DATE = 09/06/2009  
 FILE NAME = \\0606172-0172-66908-036-pa-1-pier-1-eb.dgn  
 USER NAME = CFC