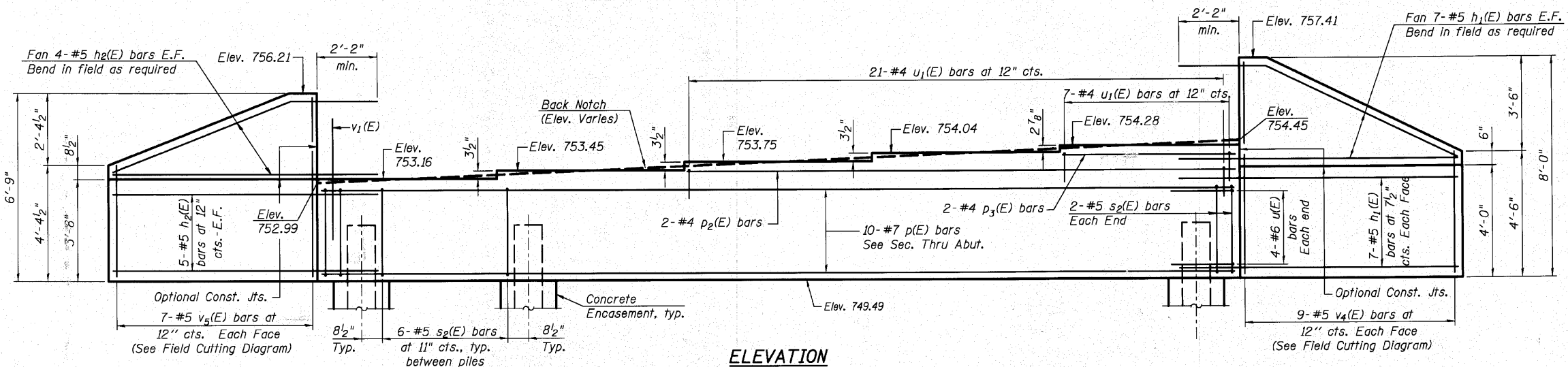
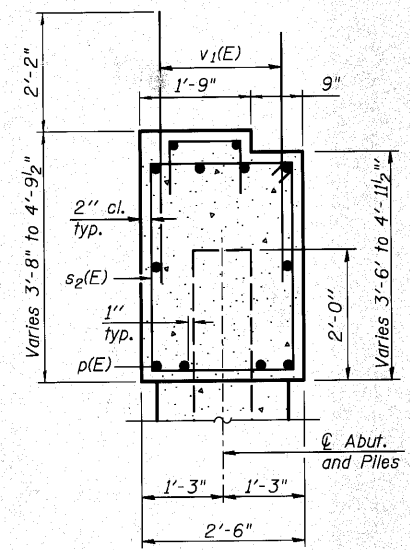


Notes:  
Four steps monolithically with cap.



**ELEVATION**



**SEC. THRU ABUT.**

**BILL OF MATERIAL**

| Bar                              | No.     | Size  | Length  | Shape |
|----------------------------------|---------|-------|---------|-------|
| h <sub>1</sub> (E)               | 28      | #5    | 10'-0"  |       |
| h <sub>2</sub> (E)               | 18      | #5    | 7'-9"   |       |
| p(E)                             | 10      | #7    | 32'-10" |       |
| p <sub>2</sub> (E)               | 2       | #4    | 19'-8"  |       |
| p <sub>3</sub> (E)               | 2       | #4    | 6'-2"   |       |
| s <sub>2</sub> (E)               | 34      | #5    | 11'-7"  | □     |
| u(E)                             | 8       | #6    | 8'-1"   | □     |
| u <sub>1</sub> (E)               | 28      | #4    | 3'-6"   | □     |
| v <sub>1</sub> (E)               | 64      | #5    | 4'-4"   |       |
| v <sub>4</sub> (E)               | 9       | #5    | 11'-10" |       |
| v <sub>5</sub> (E)               | 7       | #5    | 10'-5"  |       |
| Structure Excavation             | Cu. Yd. | 94    |         |       |
| Concrete Structures              | Cu. Yd. | 15.9  |         |       |
| Concrete Encasement              | Cu. Yd. | 2.1   |         |       |
| Reinforcement Bars, Epoxy Coated | Pound   | 2,190 |         |       |
| Furnishing Steel Piles, HP 12x53 | Foot    | 175   |         |       |
| Driving Piles                    | Foot    | 175   |         |       |
| Test Pile Steel, HP 12x53        | Each    | 1     |         |       |
| Pile Shoes                       | Each    | 6     |         |       |

For details of piles and Concrete Encasement, see Sheet 18 of 21.

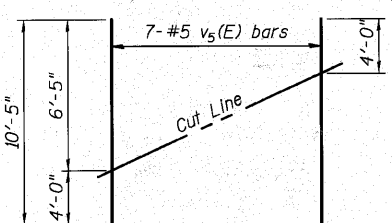
E.F. refers to each face.

**EAST ABUTMENT DETAILS  
STRUCTURE NO. 045-3020**

**PILE DATA**

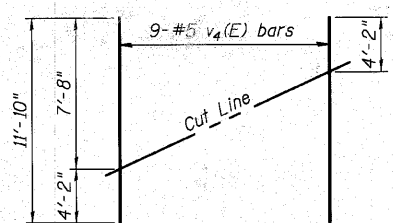
Type: HP 12x53 w/ Pile Shoes  
Nominal Required Bearing: 419 kips  
Factored Resistance Available: 209 kips  
Est. Length: 35'  
No. Production Piles: 5  
No. Test Piles: 1

|                |
|----------------|
| DESIGNED - DLS |
| CHECKED - AEU  |
| DRAWN - MLH    |
| CHECKED - DLS  |



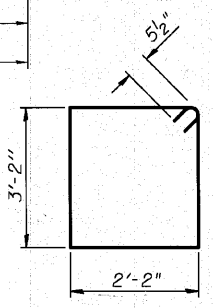
**FIELD CUTTING DIAGRAM**

Order v<sub>5</sub>(E) full length. Cut as shown and use remainder of bars in opposite face.

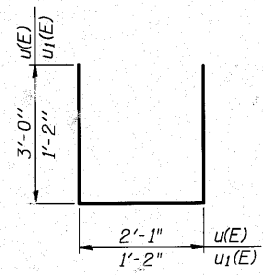


**FIELD CUTTING DIAGRAM**

Order v<sub>4</sub>(E) full length. Cut as shown and use remainder of bars in opposite face.



**BAR s<sub>2</sub>(E)**



**BARS u(E) & u<sub>1</sub>(E)**

**WBK** WILLS BURKE KELSEY ASSOCIATES LTD.  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174  
(830) 443-7755

|                               |        |                |                  |              |           |
|-------------------------------|--------|----------------|------------------|--------------|-----------|
| SHEET NO. 16<br><br>21 SHEETS | F.A.U. | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                               | 2332   | 03-14185-02-BR | KANE             | 73           | 40        |
| CONTRACT NO. 63521            |        |                |                  |              |           |
| FED. ROAD DIST. NO.           |        | ILLINOIS       | FED. AID PROJECT |              |           |

FILE NAME = P:\DRIBEL WEST Projects\045-3020\045-3020-02-02\045-3020-02-02-01.dwg