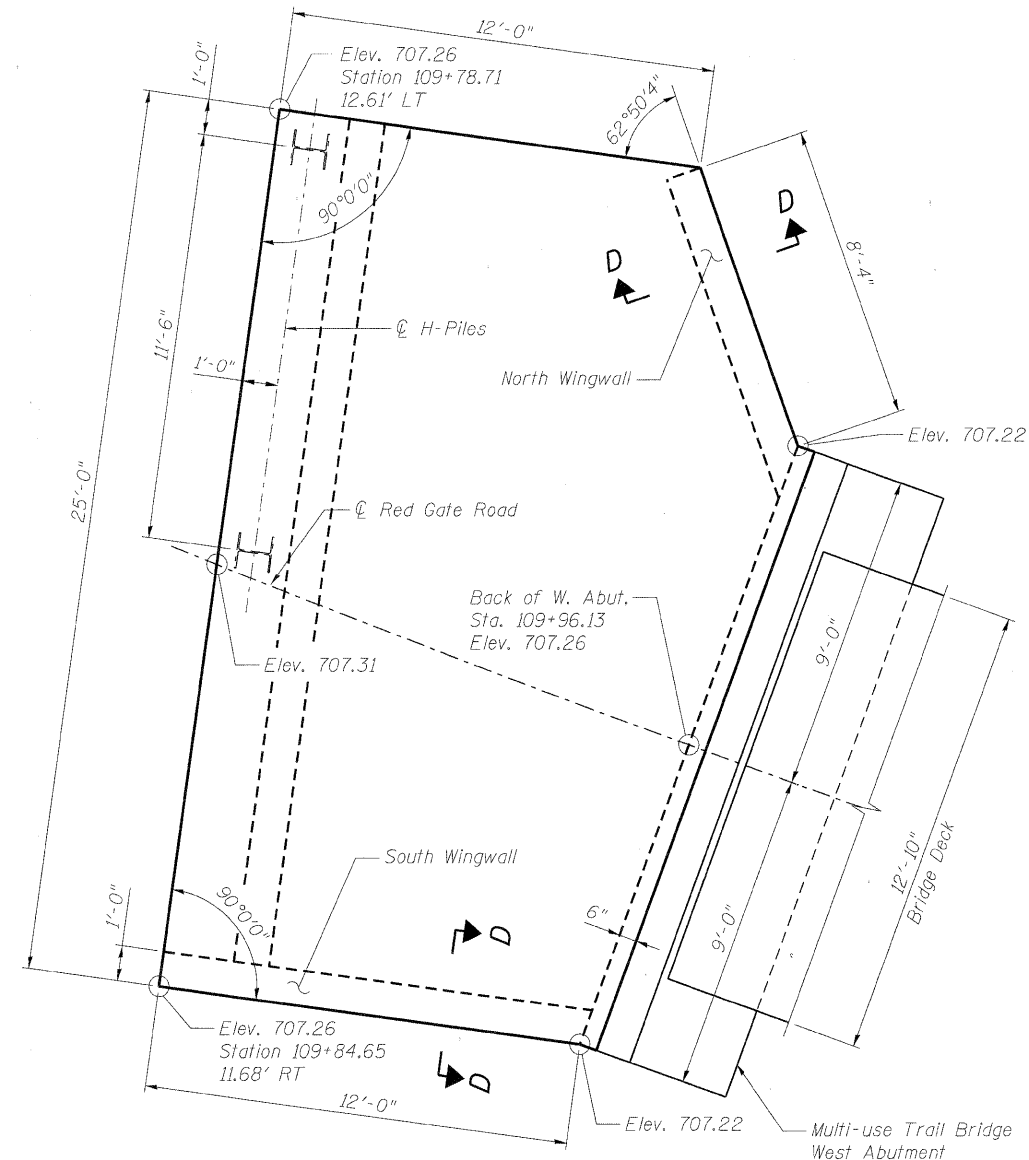


**BILL OF MATERIAL**

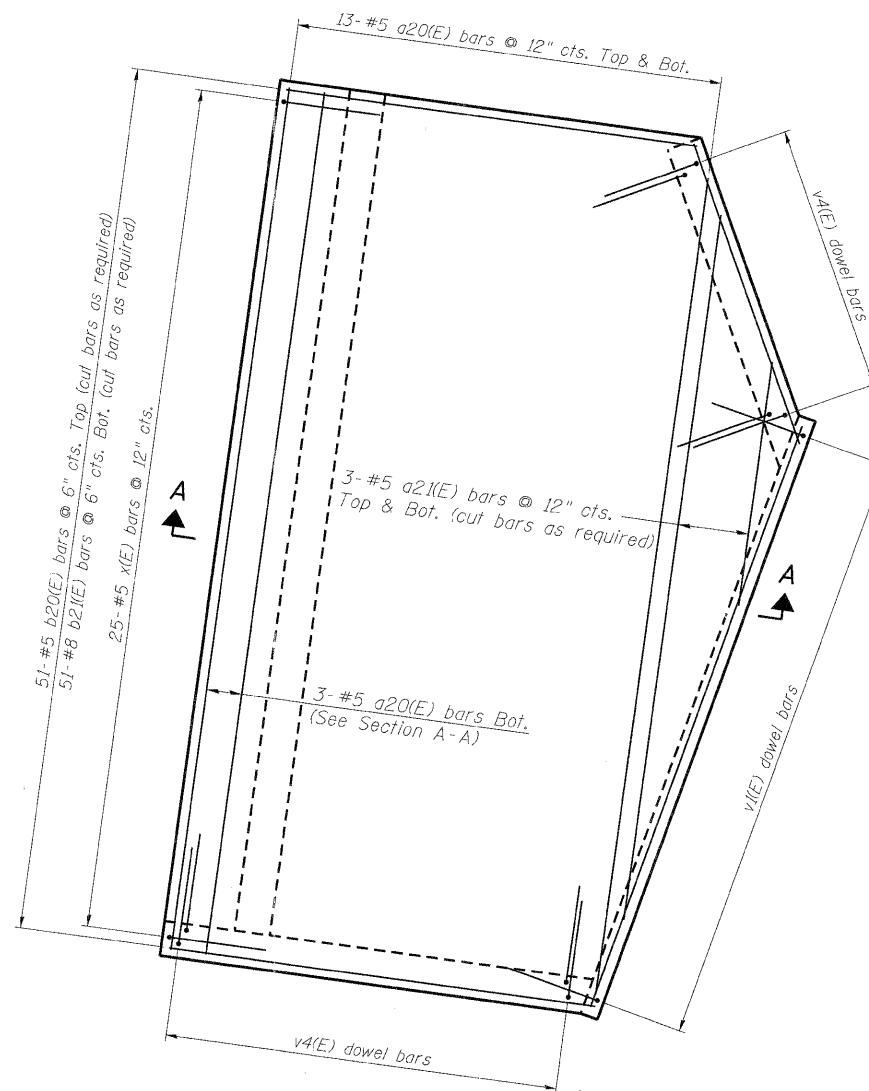
| Bar                              | No. | Size | Length | Shape   |       |
|----------------------------------|-----|------|--------|---------|-------|
| a20(E)                           | 29  | #5   | 24'-8" | —       |       |
| a21(E)                           | 6   | #5   | 20'-2" | —       |       |
| b20(E)                           | 51  | #5   | 15'-8" | —       |       |
| b21(E)                           | 51  | #8   | 15'-8" | —       |       |
| x(E)                             | 25  | #5   | 7'-1"  | ⌒       |       |
| Concrete Superstructure          |     |      |        | Cu. Yd. | 15.6  |
| Reinforcement Bars, Epoxy Coated |     |      |        | Pound   | 4,100 |
| Furnishing Steel Piles, HP12x53  |     |      |        | Foot    | 40    |
| Driving Piles                    |     |      |        | Foot    | 40    |
| Pile Shoes                       |     |      |        | Each    | 2     |
| Protective Coat                  |     |      |        | Sq. Yd. | 39    |

**PILE DATA**

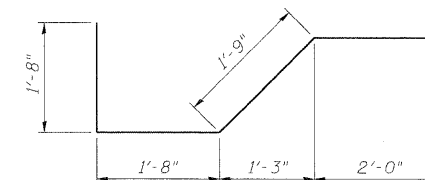
Type: HP12x53 with pile shoes  
 Nominal Required Bearing: 100 kips  
 Factored Resistance Available: 55 kips  
 Est. Length: 20 feet  
 No. Production Piles: 2  
 No. Test Piles: 0



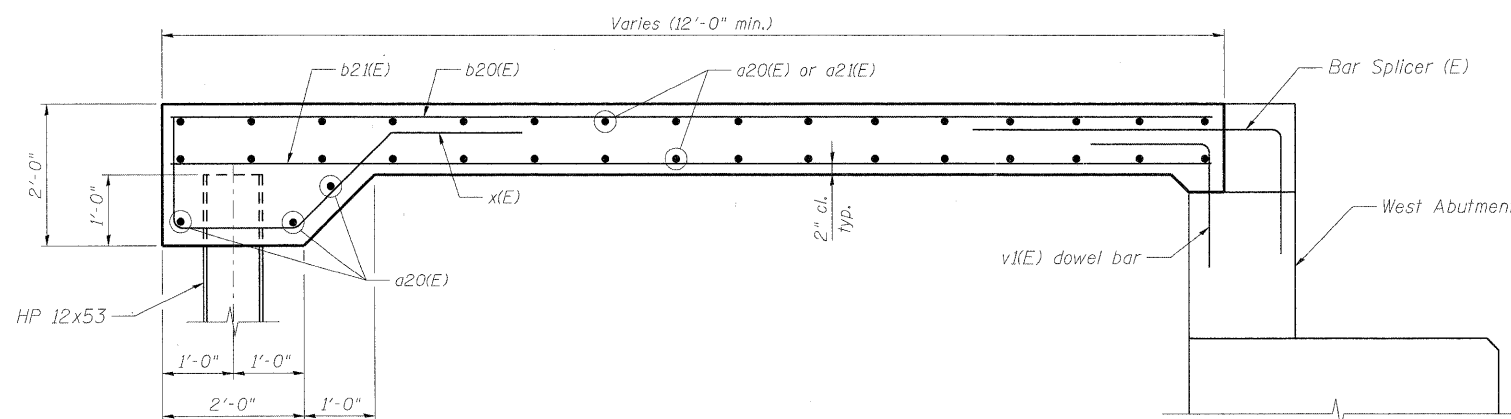
**WEST APPROACH SLAB**



**WEST APPROACH SLAB - REINFORCEMENT**



**BAR x(E)**



**SECTION A-A**

**NOTES:**

1. Bar Splicers (E), v1(E) and v4(E) dowel bars billed on West Abutment Details sheets.
2. See sheet SM17 for Section D-D.
3. Cut a20(E), a21(E) and b20(E) bars in field to fit as required.
4. Stations and offsets measured from  $\varnothing$  Red Gate Road.

**benesch**  
 engineers - scientists - planners  
 Alfred Benesch & Company  
 205 North Michigan Avenue, Suite 2400  
 Chicago, Illinois 60601  
 312-565-0450 Job No. 10092

|  |                        |                |           |
|--|------------------------|----------------|-----------|
| FILE NAME = 0456020_19_WAbutApproach.dgn | USER NAME = akeeschall | DESIGNED - JLS | REVISED - |
| PLOT SCALE =                             | PLOT DATE = 11/10/2011 | CHECKED - AJK  | REVISED - |
|  |                        | DRAWN - RMG    | REVISED - |
|  |                        | CHECKED - AJK  | REVISED - |



**CITY OF ST. CHARLES**

**WEST APPROACH SLAB DETAILS**  
**STRUCTURE NO. 045-6020 MULTI-USE TRAIL BRIDGE OVER FOX RIVER**

SHEET NO. SM19 OF SM19 SHEETS

|                           |                |        |              |           |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.I. RTE.               | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|                           | 04-00092-00-BR | KANE   | 440          | 297       |
| CONTRACT NO. 63650        |                |        |              |           |
| ILLINOIS FED. AID PROJECT |                |        |              |           |