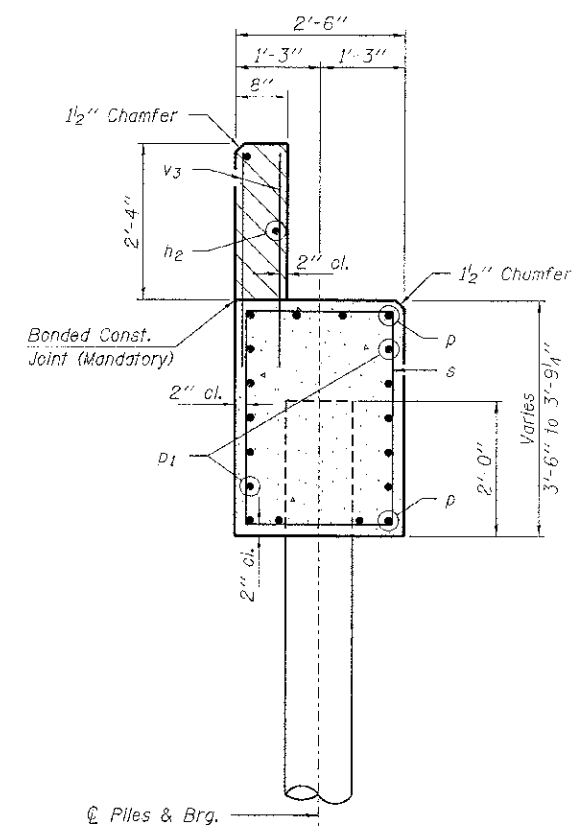
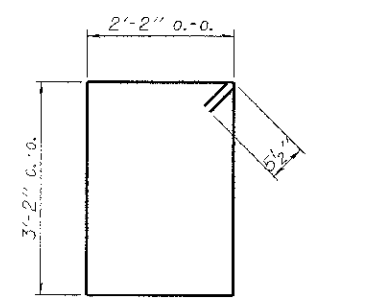


**PLAN**

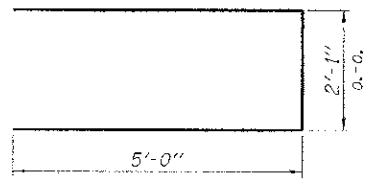


**SECTION A-A**

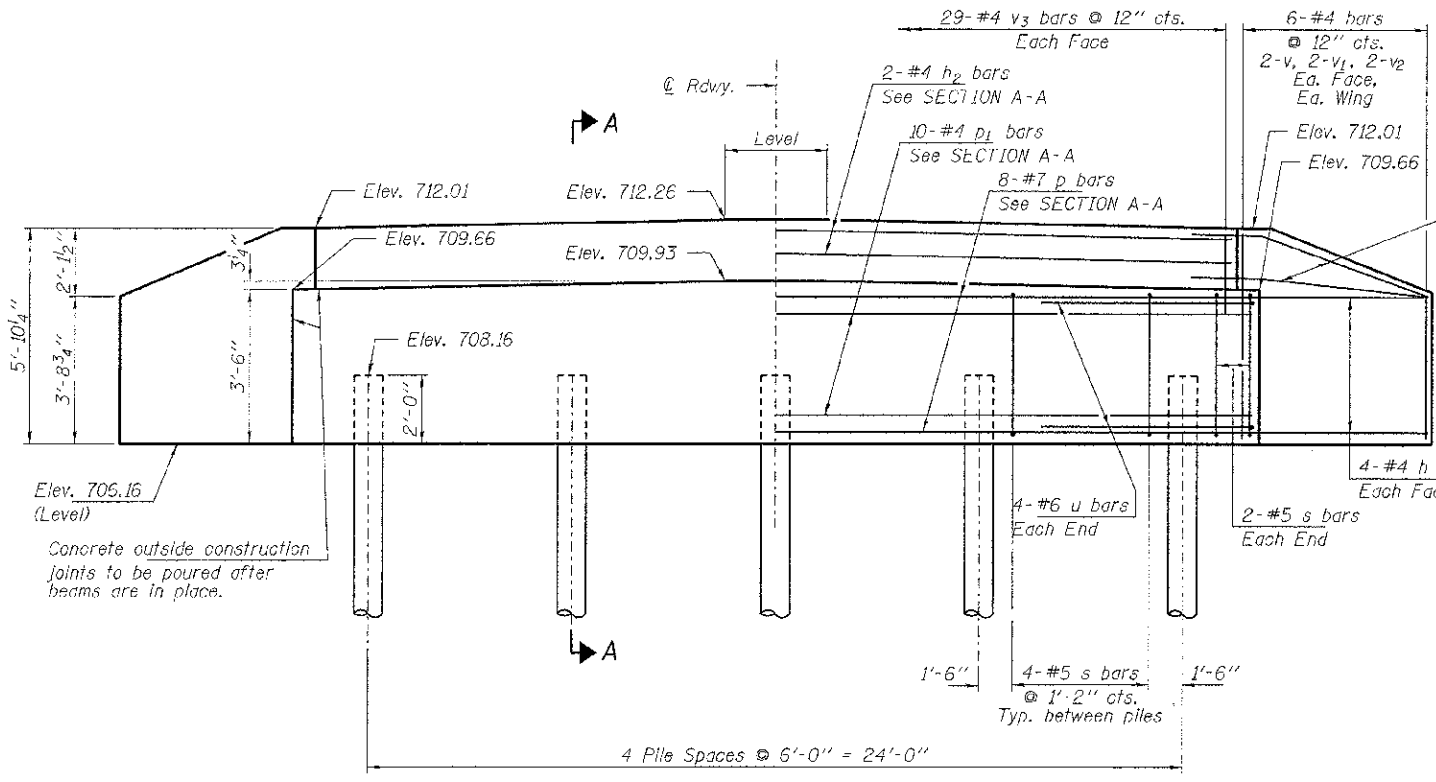
Hatched area to be poured after beams are in place.



**BAR s**



**BAR u**



**ELEVATION**  
(Looking North)

Note: Extend h bars into abutment cap.

For 2-#4 h bars (S.F.)  
For 2-#4 h1 bars (F.F.)  
Each Wing  
Bend in field.

**PILE DATA**

Type: Metal Shells 12"x.25"  
No. Req'd. (N. Abut.) 5  
Factored Resistance Available (Rf) 165 Kips/Pile  
Nominal Required Bearing (Rn) 300 Kips/Pile  
Est. Length 30 Ft/Pile

**BILL OF MATERIAL - N. ABUT.**

| BAR                        | NO. | SIZE | LENGTH  | SHAPE |
|----------------------------|-----|------|---------|-------|
| h                          | 20  | #4   | 6'-6"   | —     |
| h1                         | 4   | #4   | 5'-0"   | —     |
| h2                         | 2   | #4   | 28'-2"  | —     |
| p                          | 8   | #7   | 28'-2"  | —     |
| p1                         | 10  | #4   | 28'-2"  | —     |
| s                          | 20  | #5   | 11'-7"  | □     |
| u                          | 8   | #6   | 12'-1"  | —     |
| v                          | 8   | #4   | 5'-5"   | —     |
| v1                         | 8   | #4   | 4'-5"   | —     |
| v2                         | 8   | #4   | 3'-5"   | —     |
| v3                         | 5   | #4   | 3'-2"   | —     |
| Concrete Structures        |     |      | Cu. Yd. | 12.7  |
| Reinforcement Bars         |     |      | Pound   | 1,370 |
| Metal Shell Piles 12"x.25" |     |      | Foot    | 150   |

|  |                        |                   |           |
|--|------------------------|-------------------|-----------|
| FILE NAME = 110215   | USER NAME =            | DESIGNED - S.W.M. | REVISED - |
| HAMPTON, LENZINI AND RENWICK, INC.                               |                        | CHECKED - D.A.B.  | REVISED - |
| 3001 SPRINGFIELD DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62705 | PLOT SCALE =           | DRAWN - R.D.H.    | REVISED - |
| ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS/PE/SE CORP. 84-00099     | PLOT DATE = 12/26/2012 | CHECKED - D.A.B.  | REVISED - |

**STATE OF ILLINOIS**  
**LIVINGSTON COUNTY HIGHWAY DEPARTMENT**

**NORTH ABUTMENT**  
**STRUCTURE NO. 053-4202**  
SHEET NO. 7 OF 10 SHEETS

|                           |         |                    |                 |
|---------------------------|---------|--------------------|-----------------|
| T.R.                      | SECTION | COUNTY             | TOTAL SHEET NO. |
| 248A                      |         | LIVINGSTON         | 19              |
| FORREST / CHATSWORTH R.D. |         | CONTRACT NO. 87538 |                 |
| ILLINOIS FED. AID PROJECT |         |                    |                 |

10-11103-03-BR / 10-06124-00-BR