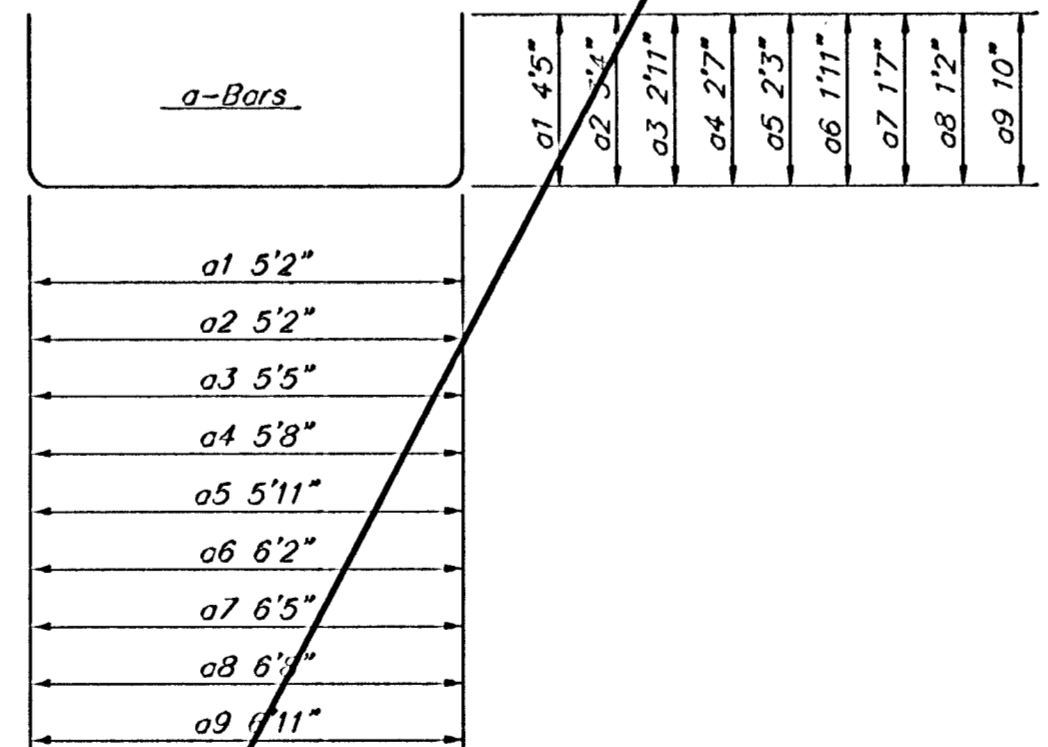
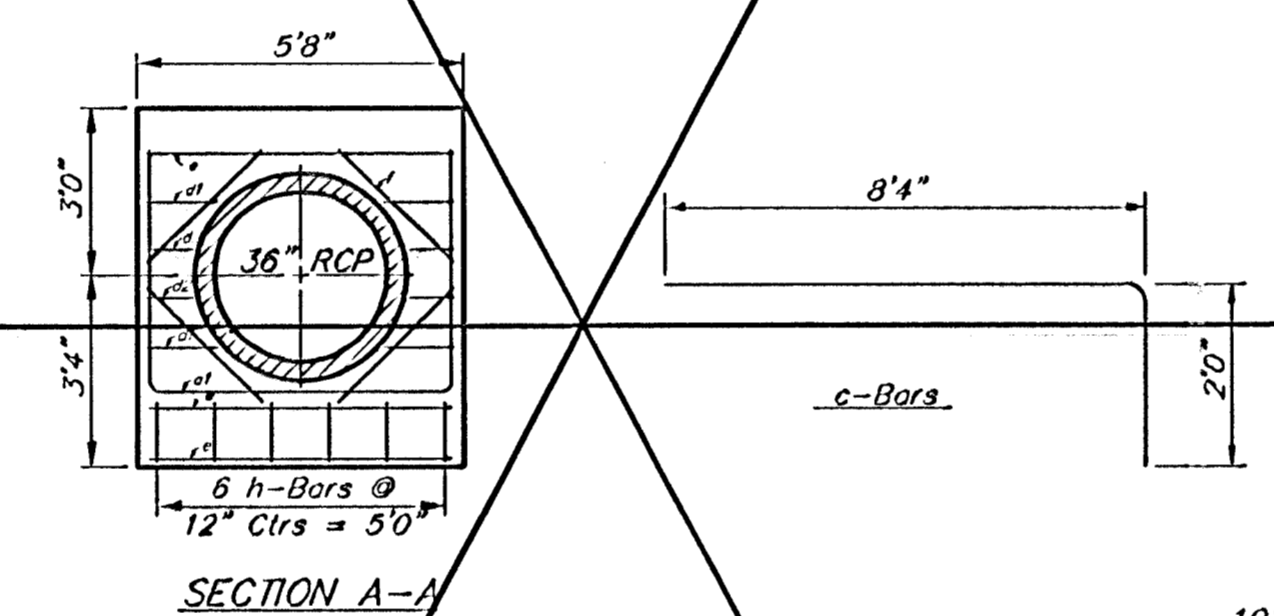
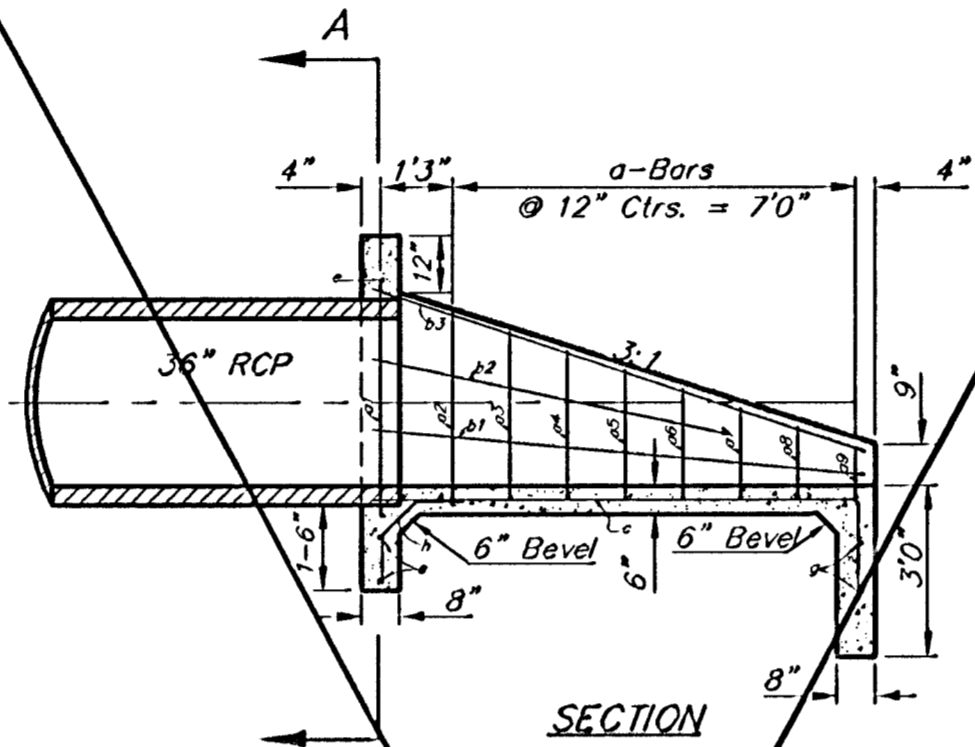
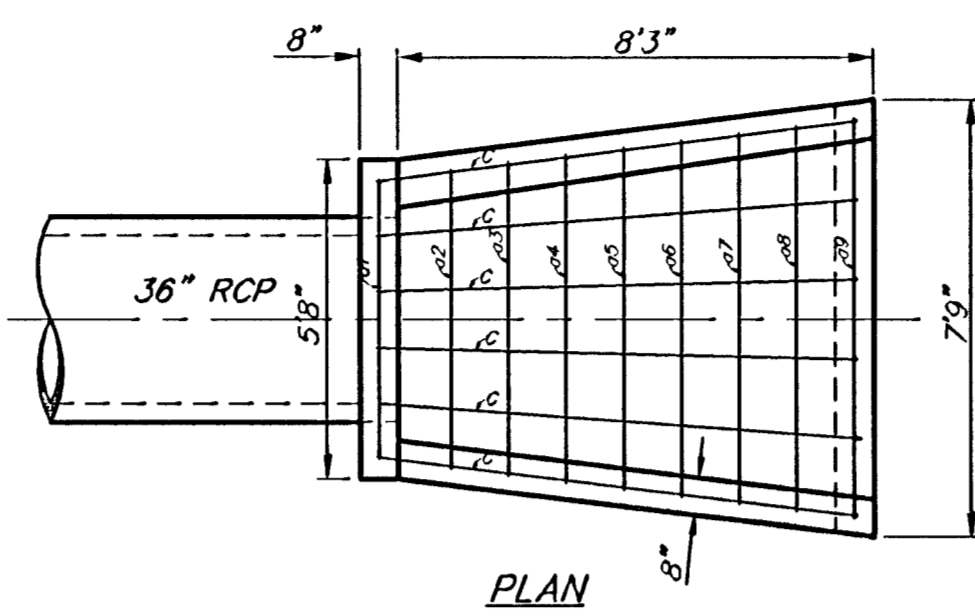


REBAR SCHEDULE

| Bar         | Shape | No. | Length     | Weight |
|-------------|-------|-----|------------|--------|
| a1          | [ ]   | 1   | 7.2"       | 4.79   |
| a2          | [ ]   | 1   | 6.1"       | 4.06   |
| a3          | [ ]   | 1   | 5.8"       | 3.79   |
| a4          | [ ]   | 1   | 5.3"       | 3.51   |
| a5          | [ ]   | 1   | 5.0"       | 3.34   |
| b           | [ ]   | 2   | 4.0"       | 5.34   |
| c           | [ ]   | 5   | 5.6"       | 18.37  |
| d           | [ ]   | 1   | 4.0"       | 2.67   |
| e           | [ ]   | 1   | 3.2"       | 2.12   |
| Total Rebar |       |     | 47.99 Lbs. |        |
| Concrete    |       |     | 0.91 C.Y.  |        |

A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall  
 \* Field Bend or Cut Reinforcing as Required for Clearance.  
 All Concrete Reinforcement to be #4 Rebar  
 All Rebar to Have Min. of 1 1/2" Conc. Cover

HEADWALL FOR 18" RCP

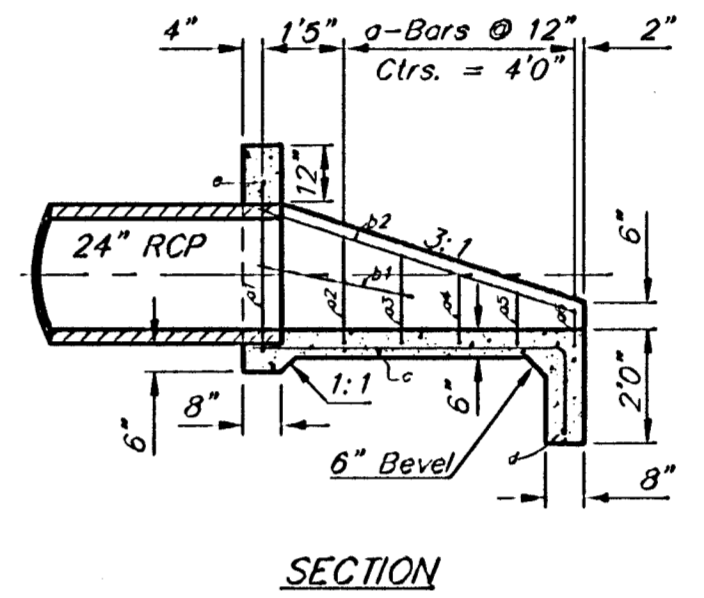
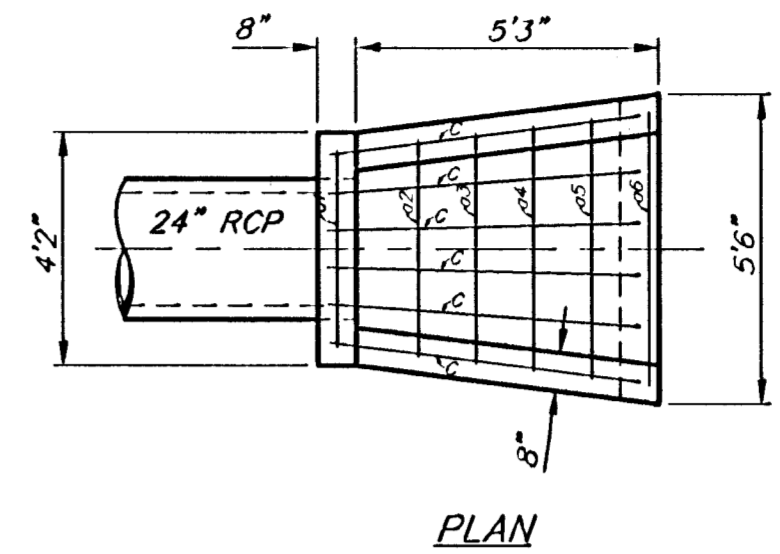


REBAR SCHEDULE

| Bar         | Shape | No. | Length      | Weight |
|-------------|-------|-----|-------------|--------|
| a1          | [ ]   | 1   | 14.0"       | 9.35   |
| a2          | [ ]   | 1   | 11.0"       | 7.90   |
| a3          | [ ]   | 1   | 11.3"       | 7.52   |
| a4          | [ ]   | 1   | 10.0"       | 7.24   |
| a5          | [ ]   | 1   | 10.5"       | 6.96   |
| a6          | [ ]   | 1   | 10.0"       | 6.68   |
| a7          | [ ]   | 1   | 9.7"        | 6.40   |
| a8          | [ ]   | 1   | 3.0"        | 6.01   |
| a9          | [ ]   | 1   | 8.8"        | 5.73   |
| b1          | [ ]   | 2   | 8.5"        | 11.24  |
| b2          | [ ]   | 2   | 4.7"        | 6.12   |
| b3          | [ ]   | 2   | 9.0"        | 12.02  |
| c           | [ ]   | 6   | 10.4"       | 41.42  |
| d1          | [ ]   | 4   | 7.6"        | 4.01   |
| d2          | [ ]   | 4   | 10"         | 2.23   |
| e           | [ ]   | 3   | 5.4"        | 10.69  |
| f           | [ ]   | 4   | 3.0"        | 8.02   |
| g           | [ ]   | 2   | 7.0"        | 9.36   |
| h           | [ ]   | 6   | 2.6"        | 10.02  |
| Total Rebar |       |     | 178.91 Lbs. |        |
| Concrete    |       |     | 3.20 C.Y.   |        |

A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall  
 \* Field Bend or Cut Reinforcing as Required for Clearance.  
 All Concrete Reinforcement to be #4 Rebar  
 All Rebar to Have Min. of 1 1/2" Conc. Cover

HEADWALL FOR 36" RCP



REBAR SCHEDULE

| Bar         | Shape | No. | Length     | Weight |
|-------------|-------|-----|------------|--------|
| a1          | [ ]   | 1   | 9.5"       | 6.29   |
| a2          | [ ]   | 1   | 7.7"       | 5.07   |
| a3          | [ ]   | 1   | 7.2"       | 4.79   |
| a4          | [ ]   | 1   | 6.9"       | 4.51   |
| a5          | [ ]   | 1   | 6.4"       | 4.23   |
| a6          | [ ]   | 1   | 6.1"       | 4.06   |
| b1          | [ ]   | 2   | 2.9"       | 3.67   |
| b2          | [ ]   | 2   | 5.0"       | 7.79   |
| c           | [ ]   | 6   | 6.1"       | 27.72  |
| d           | [ ]   | 1   | 5.0"       | 3.37   |
| e           | [ ]   | 1   | 3.0"       | 2.56   |
| Total Rebar |       |     | 74.03 Lbs. |        |
| Concrete    |       |     | 1.40 C.Y.  |        |

A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall  
 \* Field Bend or Cut Reinforcing as Required for Clearance.  
 All Concrete Reinforcement to be #4 Rebar  
 All Rebar to Have Min. of 1 1/2" Conc. Cover

HEADWALL FOR 24" RCP

- GENERAL NOTES
- ALL PIPES SHALL BE FLUSH CUT PRIOR TO BEING CAST INTO CONCRETE HEADWALL
  - CONCRETE USED IN HEADWALL CONSTRUCTION SHALL BE SAME AS PER CITY STANDARD PAVING MIX EXCEPT THAT IT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
  - ALL EXPOSED EDGES SHALL BE BEVELED 1/2".
  - REINFORCING STEEL SHALL COMPLY TO A.S.T.M. DESIGNATION A615 GRADE 60. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BAR UNLESS OTHERWISE NOTED.
  - THE "REIN. CONC. HEADWALL" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH IN PLACE WHICH SHALL INCLUDE ALL LABOR, MATERIALS, EXCAVATION, CONCRETE, REINFORCING STEEL AND ALL OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK. MATERIAL QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

**Baughman** **Headwall Details**

Baughman Company, P.A. 318 Ellis St. Wilkes, KS 67111 P 316-263-7211 F 316-262-0149  
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER: 412-84126  
 DESIGN: Staff  
 DRAWN: Staff  
 DATE: 02/05  
 APPROVED: Staff  
 SCALE: NONE  
 SHEET: 16 OF 24

Details/Sever/Headwall 0407-E968