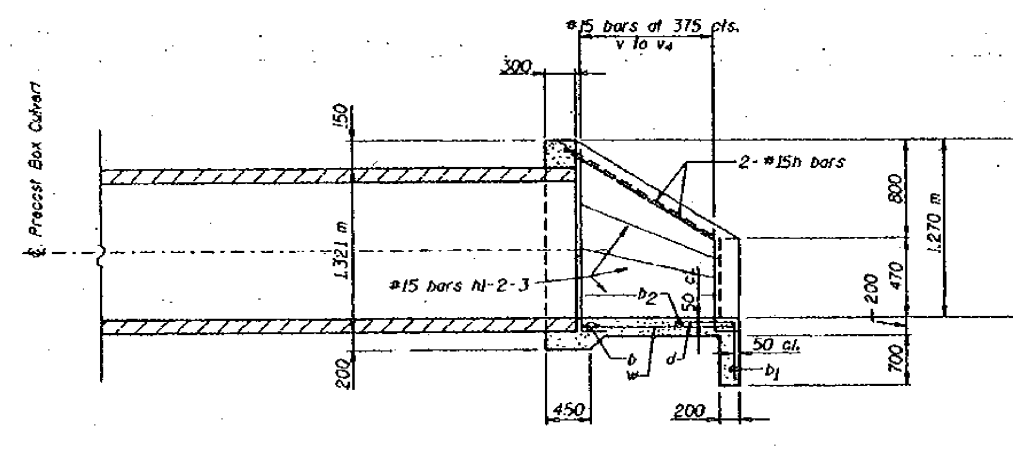


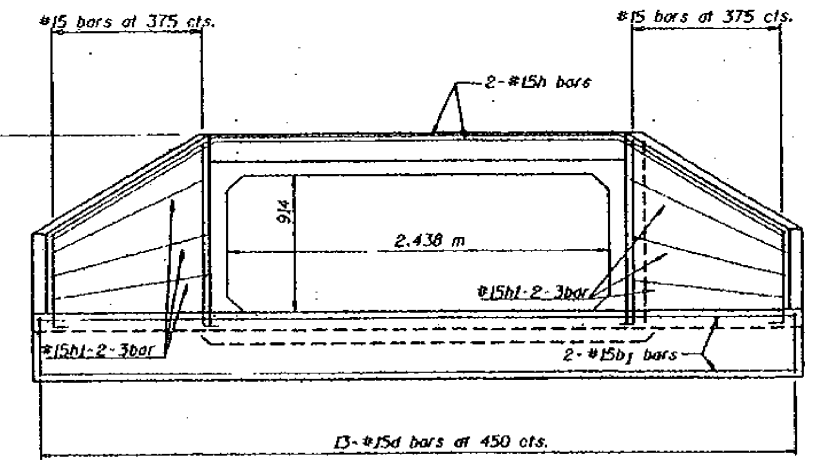
|                    |         |          |              |           |
|--------------------|---------|----------|--------------|-----------|
| ROUTE NO.          | SECTION | COUNTY   | TOTAL SHEETS | SHEET NO. |
| FAP 323            | *       | **       | 188          | 50B       |
| STA.               |         | TO STA.  |              |           |
| FED. RD. DIST. NO. |         | ILLINOIS | PROJECT      |           |

▲ (145, 146) RS-2 & 147 RS-4  
 \*\* DOUGLAS & EDGAR

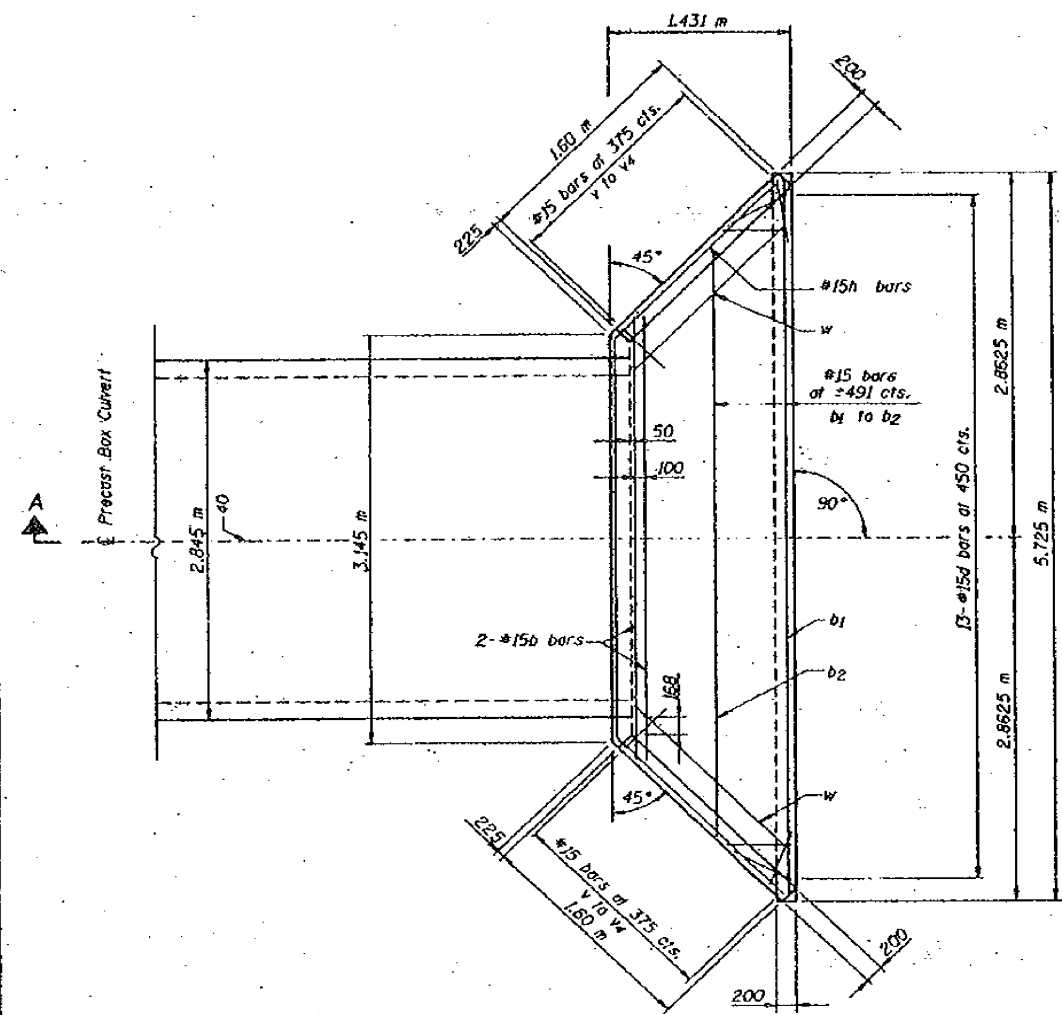
**NOTES**  
 All bars shall be round and shall conform to the requirements of Art. 1006.10 of the Standard Specifications.  
 Class SI Concrete Headwalls shall be used throughout.  
 Build tops of headwalls parallel to grade line.  
 The Precast Concrete Box Culvert Sections shall conform to the requirements of AASHTO M259.  
 All dimensions are in millimeters (mm) unless otherwise noted.



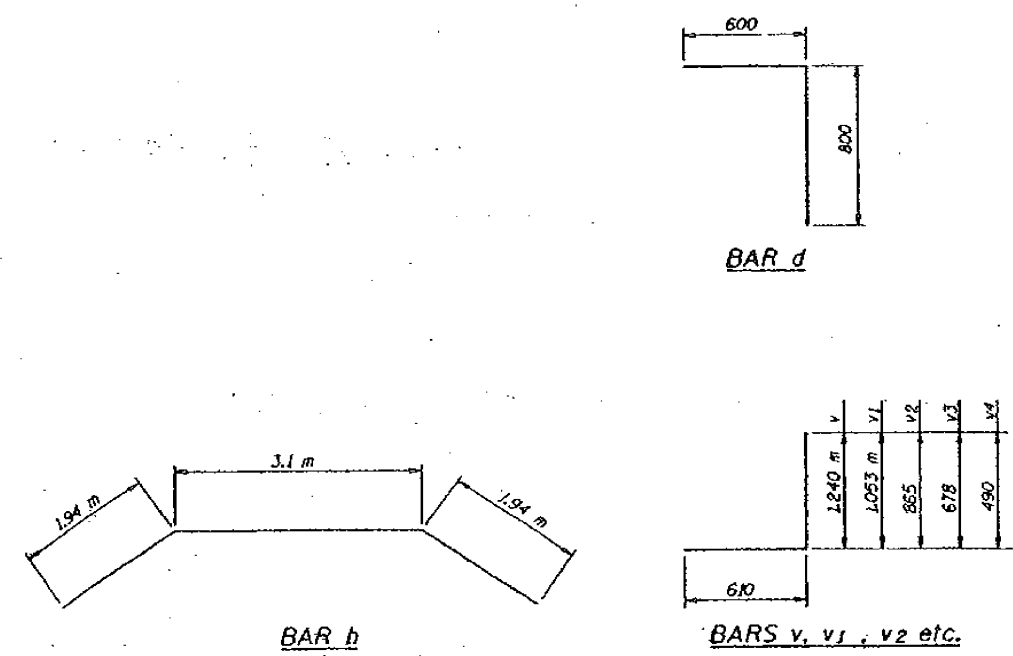
SECTION A-A



END VIEW



PLAN



**BILL OF MATERIAL (ONE HEADWALL)**

| Bar                     | No. | Size | Length (m) | Shape |
|-------------------------|-----|------|------------|-------|
| b                       | 2   | #15  | 3.75       | —     |
| b1                      | 2   | #15  | 5.625      | —     |
| b2                      | 1   | #15  | 4.728      | —     |
| d                       | 13  | #15  | 1.40       | ⌒     |
| h                       | 2   | #15  | 6.38       | ⌒     |
| h1                      | 2   | #15  | 1.602      | —     |
| h2                      | 2   | #15  | 1.546      | —     |
| h3                      | 2   | #15  | 1.512      | —     |
| v                       | 4   | #15  | 1.85       | ⌒     |
| v1                      | 2   | #15  | 1.663      | ⌒     |
| v2                      | 2   | #15  | 1.475      | ⌒     |
| v3                      | 4   | #15  | 1.288      | ⌒     |
| v4                      | 2   | #15  | 1.10       | ⌒     |
| w                       | 2   | #15  | 1.458      | —     |
| Reinforcement Bars      |     |      | kg         | 136   |
| Class SI Conc Headwalls |     |      | Cu. m      | 3.0   |

FOR INFORMATION ONLY

BOX CULVERT END SECTIONS (CAST IN PLACE)  
 STA. 32+455.914, 34+083.786 0° SKEW

**REINFORCED CONCRETE HEADWALL DETAILS**

|           |                                                                           |                                                  |
|-----------|---------------------------------------------------------------------------|--------------------------------------------------|
| REVISIONS | STATE OF ILLINOIS<br>DEPARTMENT OF TRANSPORTATION<br>DIVISION OF HIGHWAYS | DRAWN BY: AJL<br>K.E.B. 12-99<br>CHECKED BY: AJL |
| 1         |                                                                           | DWG NUMBER                                       |
| 2         |                                                                           | PROJECT NO.                                      |
| 3         |                                                                           | SHEET NO.                                        |
| 4         |                                                                           |                                                  |
| 5         |                                                                           |                                                  |
| 6         |                                                                           |                                                  |
| 7         |                                                                           |                                                  |
| 8         |                                                                           |                                                  |
| 9         |                                                                           |                                                  |
| 10        |                                                                           |                                                  |
| 11        |                                                                           |                                                  |
| 12        |                                                                           |                                                  |

|                                          |                            |                |           |
|------------------------------------------|----------------------------|----------------|-----------|
| FILE NAME =                              | USER NAME = bucklesJJ      | DESIGNED - RLA | REVISED - |
| ct:\pwork\p\WIDOT\BUCKLESJJ\d0134382.DWG | 70696-shd-details.dgn      | DRAWN - RLA    | REVISED - |
|                                          | PLOT SCALE = 40.0000 / IN. | CHECKED - JMS  | REVISED - |
|                                          | PLOT DATE = 3/22/2010      | DATE - 11/4/09 | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                                        |                         |      |         |
|----------------------------------------|-------------------------|------|---------|
| AS BUILT PLANS<br>FOR INFORMATION ONLY |                         |      |         |
| SCALE: N/A                             | SHEET NO. 2 OF 5 SHEETS | STA. | TO STA. |

|                           |             |         |              |           |
|---------------------------|-------------|---------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY  | TOTAL SHEETS | SHEET NO. |
| 323                       | (145,146)CR | DOUGLAS | 36           | 16        |
| CONTRACT NO. 70696        |             |         |              |           |
| ILLINOIS FED. AID PROJECT |             |         |              |           |