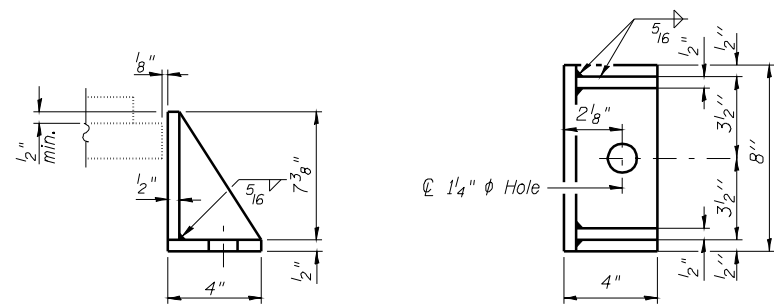
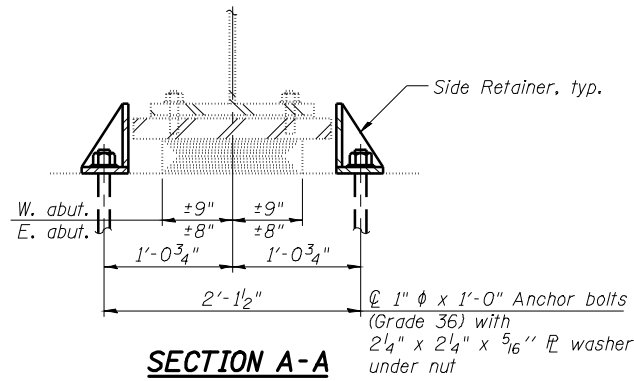


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**SIDE RETAINER**

(No. Req'd = 12)  
Equivalent rolled angle with stiffeners  
will be allowed in lieu of welded plates.



**SECTION A-A**

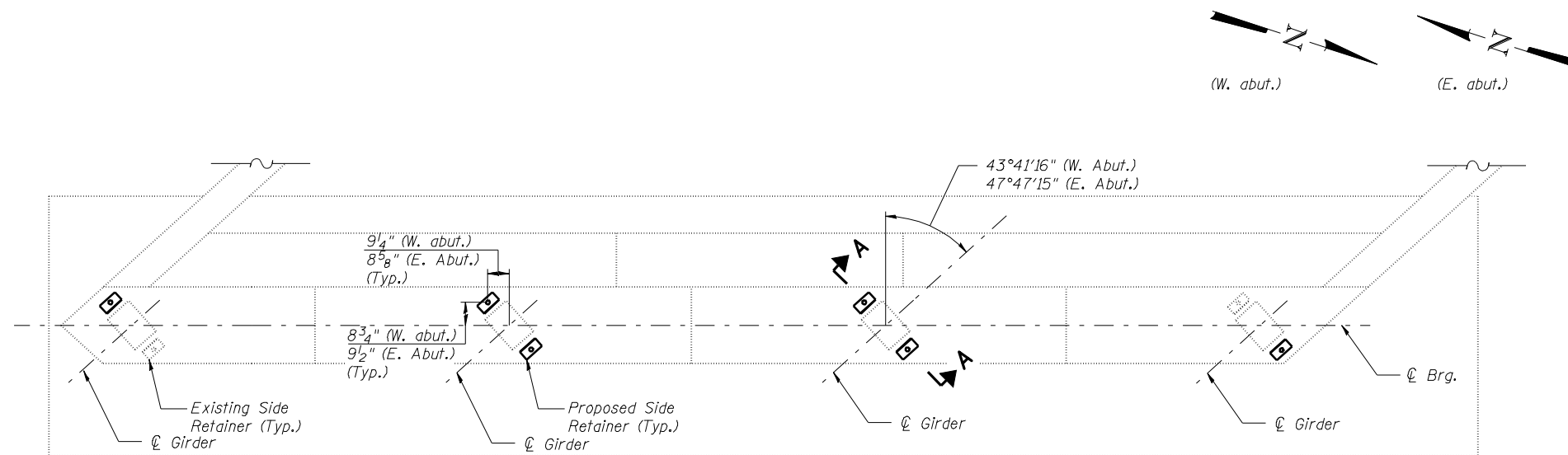
Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers shall be galvanized in accordance with AASHTO M111 or M232 as applicable.

Side retainers shall be included in the cost of Furnishing and Erecting Structural Steel.



**PLAN**

**BILL OF MATERIAL**

| Item                                     | Unit  | Total |
|--|-------|-------|
| Furnishing and Erecting Structural Steel | Pound | 200   |
| Anchor Bolts, 1"                         | Each  | 12    |

**SIDE RETAINER DETAILS  
STRUCTURE NO. 001-0061**

|   |             |   |         |        |              |           |  |
|---|-------------|---|---------|--------|--------------|-----------|--|
| <p>LIN ENGINEERING, LTD.<br/>Consulting Engineers<br/>Chatham, Illinois</p> | SHEET NO. 6 | F.A.I. RTE.                                   | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |  |
|   | 6 SHEETS    | 172   | 1-5HB   | ADAMS  | 165          | 157       |  |
|   |             | CONTRACT NO. 72A09                            |         |        |              |           |  |
|   |             | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |         |        |              |           |  |

Designed By: ESH  
Checked By: MTH  
Date: 11/2009

Drawn By: ESH  
File: 001-0061.dgn