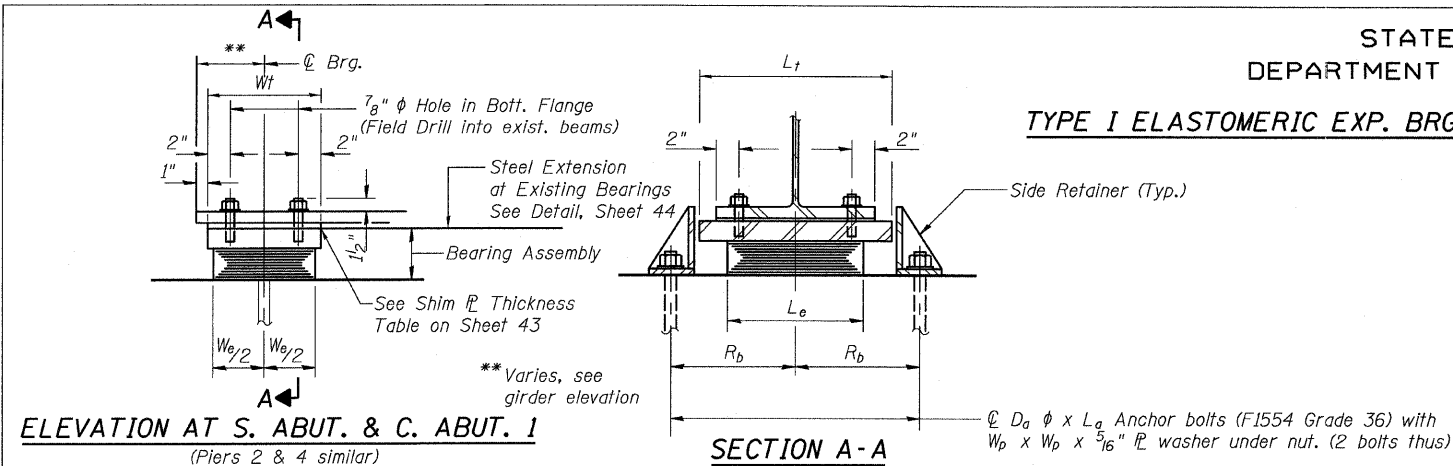
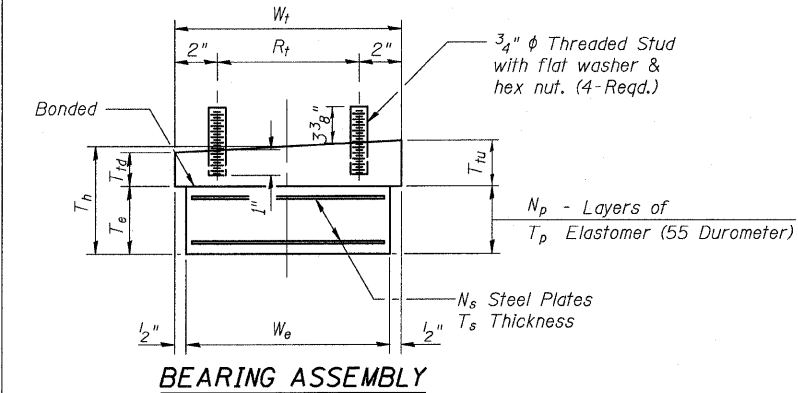


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

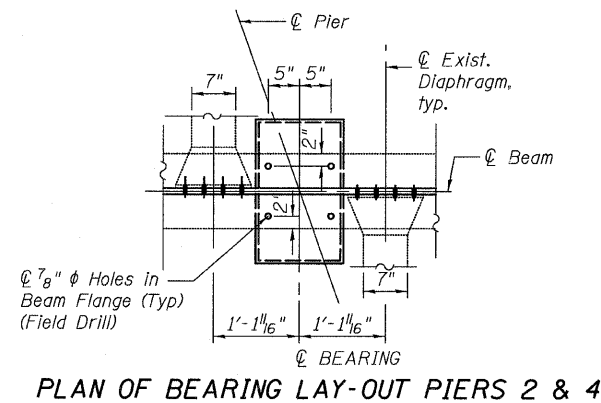
TYPE I ELASTOMERIC EXP. BRG.



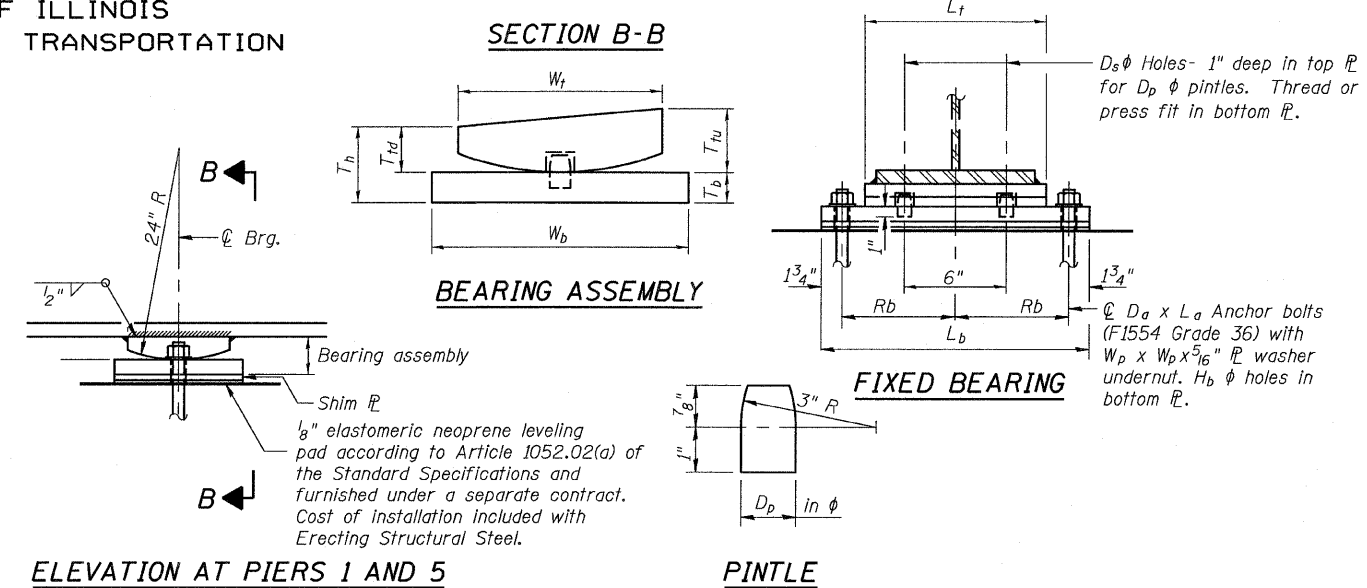
ELEVATION AT S. ABUT. & C. ABUT. 1
(Piers 2 & 4 similar)



BEARING ASSEMBLY
Note: Shim plates shall not be placed under Bearing Assembly.



PLAN OF BEARING LAY-OUT PIERS 2 & 4

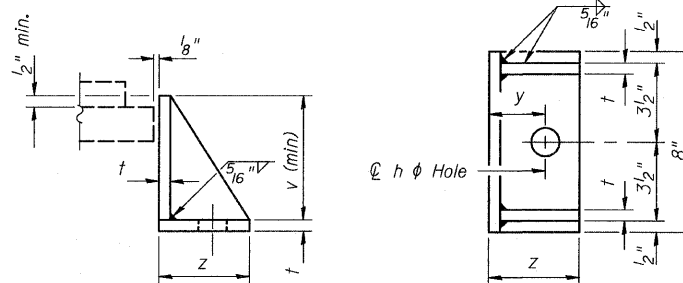


ELEVATION AT PIERS 1 AND 5

BEARING ASSEMBLY

FIXED BEARING

PINTLE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

| Item | Unit | Total |
|---|------|-------|
| Erecting Elastomeric Bearing Assembly, Type I | Each | 82 |
| Anchor Bolts, 1" | Each | 176 |

*Anchor bolts for type I and fixed bearings

BEARING DIMENSION TABLE

(For Details of Type II Bearings and for Shim Plate Thickness Table, See Sheet 43)

| Bearing Location | Beams | Type | No. Req'd. | Tn* (in.) | Elastomer | | | | | Top Plate | | | | | Bottom Plate | | | Anchor Bolts | | | Pintles | | Side Retainers | | | | | | | | |
|---------------------|------------------|------|------------|-----------|-----------|----------|----------|----------|----|-----------|----|----------|----------|-----------|--------------|----------|----------|--------------|----------|----------|----------|----------|----------------|----------|----------|----------|---------|---------|---------|---------|---------|
| | | | | | We (in.) | Le (in.) | Te (in.) | Tp (in.) | Np | Ts (in.) | Ns | Wt (in.) | Lf (in.) | Ttd (in.) | Ttu (in.) | Rt (in.) | Wb (in.) | Lb (in.) | Tb (in.) | Da (in.) | La (in.) | Rb (in.) | Hb (in.) | Wp (in.) | Dp (in.) | Ds (in.) | y (in.) | z (in.) | t (in.) | h (in.) | v (in.) |
| South Abutment | 1 THRU 16 | I | 16 | 3 1/16 | 9 | 12 | 2 1/4 | 3/8 | 5 | 3/32 | 4 | 10 | 14 | 1 1/2 | 1 1/8 | 6 | - | - | - | 1 | 12 | 9 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 4 |
| South Abutment | SG1,SG2,SG3 | I | 3 | 3 1/16 | 9 | 12 | 2 1/4 | 3/8 | 5 | 3/32 | 4 | 10 | 14 | 1 1/2 | 1 1/8 | 6 | - | - | - | 1 | 12 | 9 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 4 |
| Pier 1 | | Fix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier 1 | SG1,SG2,SG3 | Fix | 3 | | | | | | | | | 9 | 13 3/4 | 1 | 1 3/8 | | 9 1/8 | 21 | 1 3/8 | 1 | 12 | 8 3/4 | 1 1/2 | 2 1/4 | 1 1/4 | 1 3/8 | | | | | |
| Piers 2 | 1 THRU 16 | I | 16 | 5 5/16 | 13 | 20 | 3 1/6 | 5/8 | 4 | 3/16 | 3 | 14 | 22 | 2 1/4 | 2 1/4 | 10 | - | - | - | 1 | 12 | 13 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| Piers 2 | SG1,SG2,SG3 | I | 3 | 5 5/16 | 13 | 20 | 3 1/6 | 5/8 | 4 | 3/16 | 3 | 14 | 22 | 2 1/4 | 2 1/4 | 10 | - | - | - | 1 | 12 | 13 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| S. Brgs. Pier 3 | 1 THRU 16 | II | 16 | 6 15/16 | 9 | 12 | 4 1/6 | 3/8 | 7 | 3/32 | 6 | 10 | 14 | 1 1/2 | 1 1/8 | 6 | 10 | 22 1/4 | 1 | 1 | 12 | 9 1/4 | 1 1/2 | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| S. Brgs. Pier 3 | SG1,SG2,SG3 | II | 3 | 6 15/16 | 9 | 12 | 4 1/6 | 3/8 | 7 | 3/32 | 6 | 10 | 14 | 1 1/2 | 1 1/8 | 6 | 10 | 22 1/4 | 1 | 1 | 12 | 9 1/4 | 1 1/2 | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| N. Brgs. Pier 3 | 1 THRU 16 | II | 16 | 6 15/16 | 9 | 12 | 4 1/6 | 3/8 | 7 | 3/32 | 6 | 10 | 14 | 1 1/2 | 1 1/8 | 6 | 10 | 22 1/4 | 1 | 1 | 12 | 9 1/4 | 1 1/2 | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| N. Brgs. Pier 3 | SG4,SG8,SG9 | II | 3 | 6 15/16 | 9 | 12 | 4 1/6 | 3/8 | 7 | 3/32 | 6 | 10 | 14 | 1 1/2 | 1 1/8 | 6 | 10 | 22 1/4 | 1 | 1 | 12 | 9 1/4 | 1 1/2 | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| Pier 4 | 1 THRU 16 | I | 16 | 5 5/16 | 13 | 20 | 3 1/6 | 5/8 | 4 | 3/16 | 3 | 14 | 22 | 2 1/4 | 2 1/4 | 10 | - | - | - | 1 | 12 | 13 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| Pier 4 | SG4,SG8,SG9 | I | 3 | 5 5/16 | 13 | 20 | 3 1/6 | 5/8 | 4 | 3/16 | 3 | 14 | 22 | 2 1/4 | 2 1/4 | 10 | - | - | - | 1 | 12 | 13 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 6 |
| Pier 5 | | Fix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier 5 | SG4,SG8,SG9 | Fix | 3 | | | | | | | | | 9 | 13 3/4 | 1 1/4 | 1 1/2 | | 11 1/8 | 21 | 1 3/4 | 1 | 12 | 8 3/4 | 1 1/2 | 2 1/4 | 1 1/4 | 1 3/8 | | | | | |
| C. Abut. S. Bearing | 1 THRU 16 | I | 16 | 3 7/8 | 9 | 12 | 2 1/4 | 3/8 | 5 | 3/32 | 4 | 10 | 14 | 1 1/2 | 1 3/4 | 6 | - | - | - | 1 | 12 | 9 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 4 |
| C. Abut. S. Bearing | SG4,SG8,SG9 | I | 3 | 4 3/16 | 10 | 14 | 2 1/6 | 1/16 | 5 | 3/8 | 4 | 11 | 16 | 1 3/4 | 2 | 7 | - | - | - | 1 | 12 | 10 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 4 |
| C. Abut. S. Bearing | SG5,6,7,10,11,12 | I | 6 | 3 3/8 | 7 | 12 | 1 3/4 | 3/8 | 4 | 3/32 | 3 | 8 | 14 | 1 1/2 | 1 3/4 | 4 | - | - | - | 1 | 12 | 9 1/4 | - | 2 1/4 | - | - | 2 1/8 | 4 | 1/2 | 1 1/4 | 4 |

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.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers and other steel members required for the bearing assembly are furnished under a separate contract. Installation of these items are included in the cost of Erecting Elastomeric Bearing Assembly, Type I.
The Structural Steel plates of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50.
Two 1/2" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on the bearing details.

ELASTOMERIC BEARINGS
TYPE I
STRUCTURE NO. 016-3241

| | | | | | | | | | | |
|---------------------|-------------------|-----------|------|--------------|---|--------------------|--------|--------------|-----------|--|
| TYLIN INTERNATIONAL | DESIGNED - JMA | REVISIONS | | SHEET NO. 42 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| | CHECKED - AMD, | NAME | DATE | | 55 | 0711.2R & 1011.IBR | COOK | 741 | 295 | |
| | DRAWN - JMA | | | | 71 SHEETS | CONTRACT NO. 60999 | | | | |
| | CHECKED - AMD, | | | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | | |
| | DATE - 03/25/2011 | | | | | | | | | |

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