

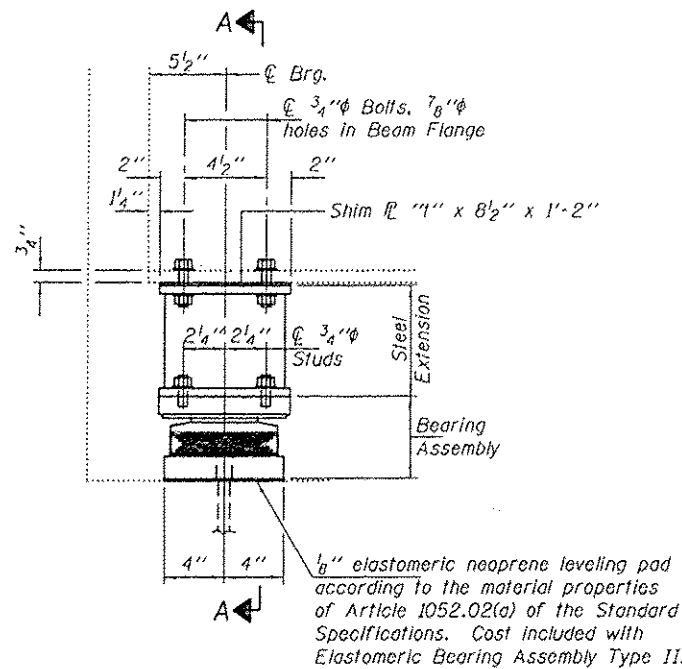
| SUMMARY OF QUANTITIES | | | 90% FED. 10% STATE | CONSTRUCTION TYPE CODE | | |
|-----------------------|---|--------|-----------------------|------------------------|------------------|------|
| CODE NO | ITEM | UNIT | TOTAL QUANTITIES | CLAY COUNTY | EFFINGHAM COUNTY | |
| | | | | 0004 | 0004 | 0014 |
| * 63000001 | STEEL PLATE BEAM GUARD RAIL, TYPE A, FOOT POSTS | 6 FOOT | 1700 | 162.5 | 1537.5 | |
| * 63100045 | TRAFFIC BARRIER TERMINAL, TYPE 2 | EACH | 1 | | 1 | |
| * 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 11 | | 11 | |
| * 63100089 | TRAFFIC BARRIER TERMINAL, TYPE 6B | EACH | 3 | 1 | 2 | |
| * 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 15 | 1 | 14 | |
| 63200310 | GUARDRAIL REMOVAL | FOOT | 2646 | 369 | 2277 | |
| 63500105 | DELINEATORS | EACH | 174 | 4 | 170 | |
| 64200116 | SHOULDER RUMBLE STRIPS, 16 INCH | FOOT | 82336 | 3602 | 78734 | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 10 | 2 | 8 | |
| 67100100 | MOBILIZATION | L SUM | 1 | 0.25 | 0.75 | |
| 70100207 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 | EACH | 4 | 1 | 2 | 1 |
| 70100420 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701411 | EACH | 4 | | 4 | |

| SUMMARY OF QUANTITIES | | | 90% FED. 10% STATE | CONSTRUCTION TYPE CODE | | |
|-----------------------|--|--------|-----------------------|------------------------|------------------|------|
| CODE NO | ITEM | UNIT | TOTAL QUANTITIES | CLAY COUNTY | EFFINGHAM COUNTY | |
| | | | | 0004 | 0004 | 0014 |
| 70100450 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 | L SUM | 1 | 0.35 | 0.65 | |
| 70100700 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701406 | L SUM | 1 | 0.35 | 0.65 | |
| 70100800 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 | L SUM | 1 | 0.35 | 0.65 | |
| 70100825 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701456 | L SUM | 1 | | 1 | |
| 70103815 | TRAFFIC CONTROL SURVEILLANCE | CAL DA | 10 | 2 | 8 | |
| 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 18226 | 793 | 17433 | |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 88130 | 3602 | 84528 | |
| 70300250 | TEMPORARY PAVEMENT MARKING - LINE 8" | FOOT | 1535 | | 1535 | |
| 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12" | FOOT | 68 | | 68 | |
| 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24" | FOOT | 33 | | 33 | |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SO FT | 31835 | 1267 | 30568 | |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 3094 | 872 | 1356 | 866 |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 3094 | 872 | 1356 | 866 |

17

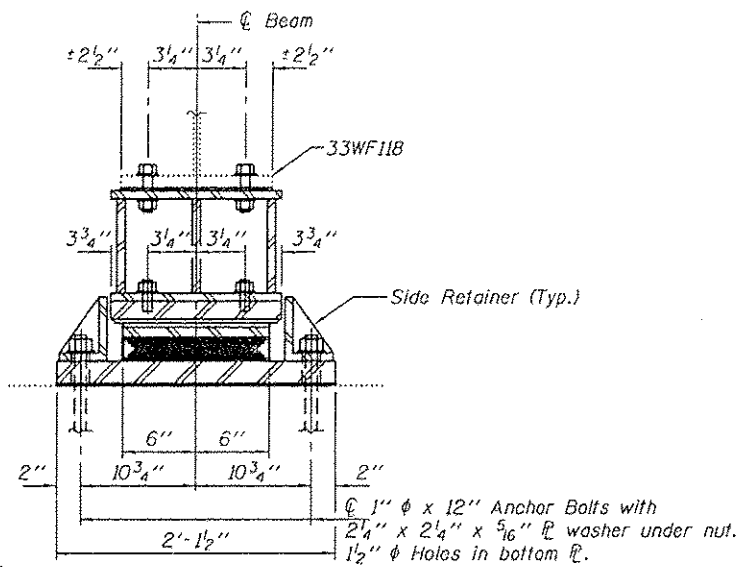
*SPECIALTY ITEM Δ REVISED 12-5-13

| | | | | | | | | | | | |
|---------------------------------------|-------------------------------|------------|-----------|---|-----------------------|-------------------------|----------------|---------|---------------------------|-----------------|--------------|
| FILE NAME = | USER NAME = teasleych | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SUMMARY OF QUANTITIES | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| c:\pwwork\pwwork\teasleych\0101550\17 | 450-shi-soq.dgn | DRAWN - | REVISED - | | SCALE: NA | SHEET NO. 3 OF 5 SHEETS | STA. | TO STA. | ILLINOIS FED. AID PROJECT | 84 | 6 |
| | PLOT SCALE = 100.0000 / 1 in. | CHECKED - | REVISED - | | | | | | CONTRACT NO. 74450 | | |
| | PLOT DATE = 10/10/2012 | DATE - | REVISED - | | | | | | | | |



ELEVATION AT ABUTMENTS

TYPE II TFE ELASTOMERIC EXP. BRG.

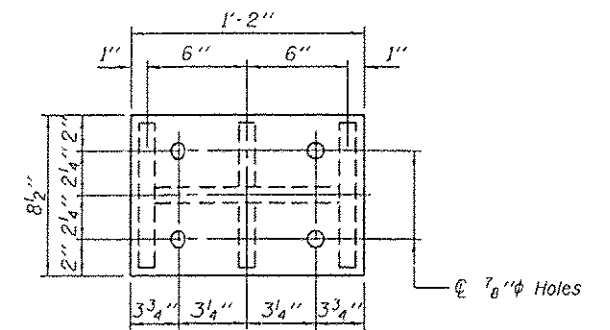


SECTION A-A

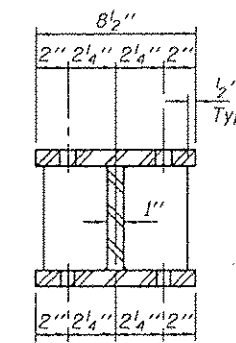
BEAM REACTIONS

| | | |
|-----------|-----|------|
| RE | (K) | 19.0 |
| RL | (K) | 32.2 |
| Imp. | (K) | 9.2 |
| R (Total) | (K) | 60.4 |

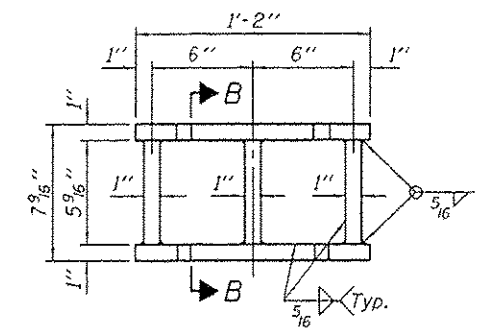
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 25 Tons.
 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 for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



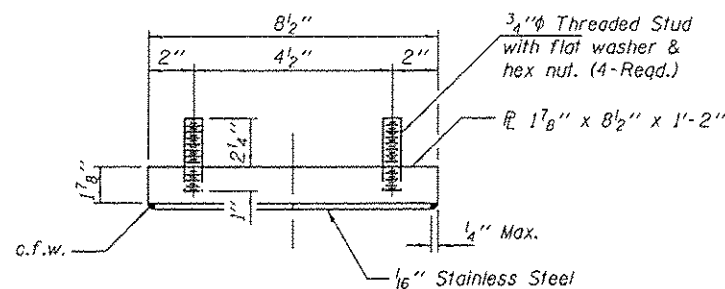
PLAN TOP AND BOTTOM PLATE



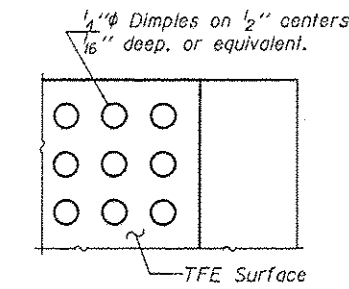
SECTION B-B



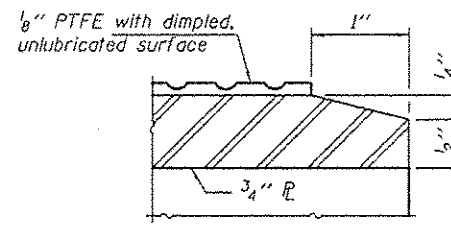
STEEL EXTENSION DETAIL



TOP BEARING ASSEMBLY



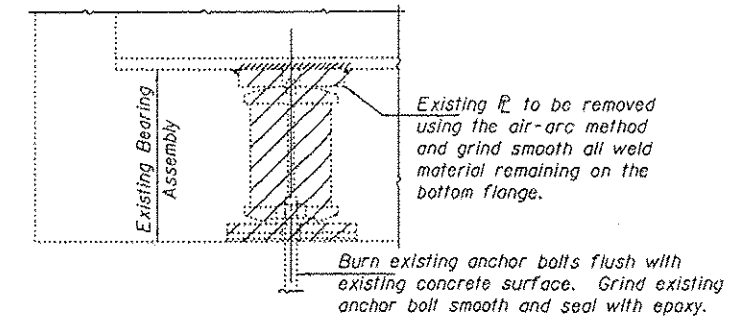
PLAN-PTFE SURFACE



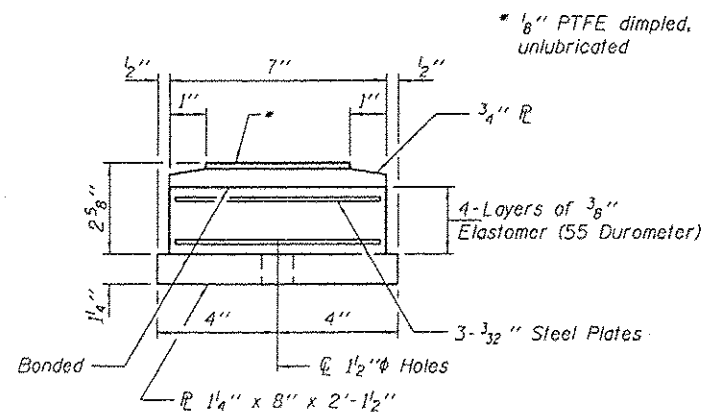
SECTION THRU PTFE

SHIM PLATE "4"

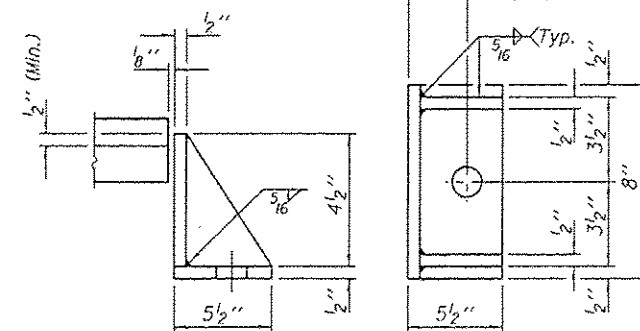
| Beam | t |
|------|-------|
| 1 | 0 |
| 2 | 0 |
| 3 | 0 |
| 4 | 1/16" |
| 5 | 9/16" |
| 6 | 9/16" |
| 7 | 0 |



EXISTING BEARING REMOVAL DETAIL

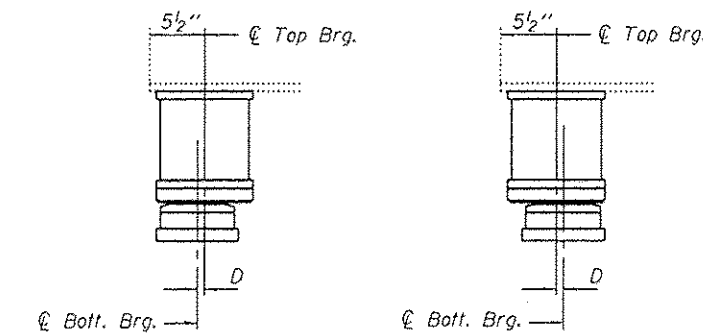


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

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



SETTING ANCHOR BOLTS AT EXP. BRG.

BELOW 50° F. (Move bott. brg. away from fixed brg.)
 ABOVE 50° F. (Move bott. brg. toward fixed brg.)
 D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

| Item | Unit | Total |
|--|-------|-------|
| Elastomeric Bearing Assembly, Type II | Each | 14 |
| Jack and Remove Existing Bearings | Each | 14 |
| Furnishing and Erecting Structural Steel | Pound | 1740 |
| Anchor Bolts 1"φ | Each | 28 |

** Effingham & Clay Counties

TYII/REPS 12-03-2008

| | |
|-------------------------|----------|
| DESIGNED - DAB | EXAMINED |
| CHECKED - ATH | PASSED |
| DRAWN - Kyle M. Stoffon | |
| CHECKED - DAB ATH | |

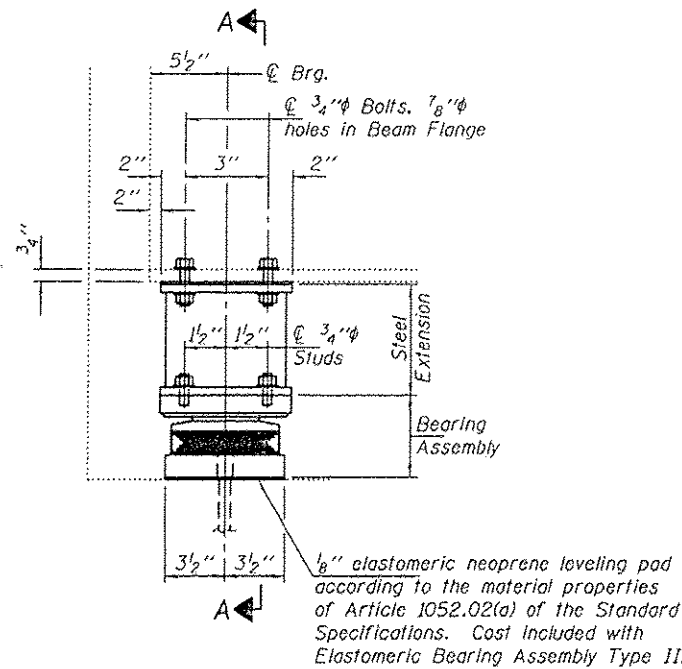
| | |
|---|---------|
| DATE - MAY 23, 2013 | REVISOR |
| ACTING ENGINEER OF STRUCTURAL SERVICES | REVISOR |
| ACTING ENGINEER OF BRIDGES AND STRUCTURES | REVISOR |
| REVISION 6-5-13 | |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING REPLACEMENT DETAILS AT ABUTMENTS
 SN 025-0068 (S.B.)

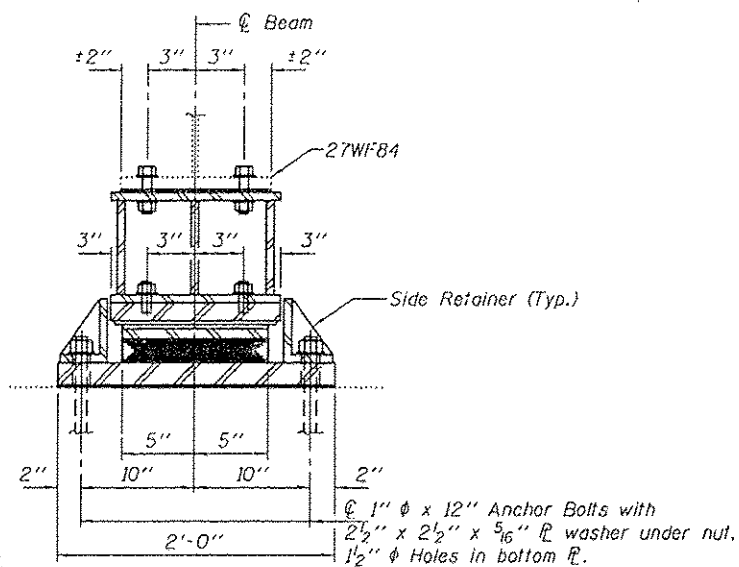
SHEET NO. 1 OF 22 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------------------------|--------|---------------------------|-----------|
| 57 | (25-6-1)RS-8 & (13-1)RS-2 | ** | 84 | 63 |
| CONTRACT NO. 74450 | | | ILLINOIS FED. AID PROJECT | |



ELEVATION AT ABUTMENTS

TYPE II TFE ELASTOMERIC EXP. BRG.

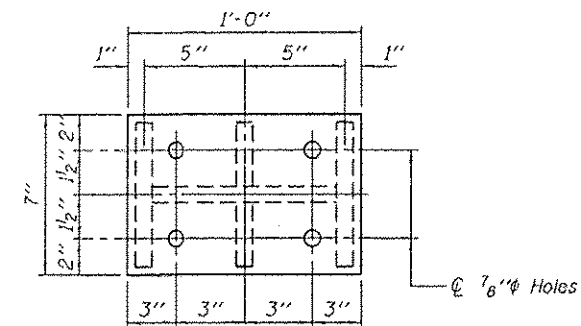


SECTION A-A

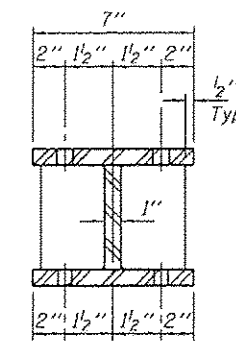
BEAM REACTIONS

| | | |
|----------------|-----|------|
| R _P | (K) | 11.4 |
| R _L | (K) | 28.5 |
| Imp. | (K) | 8.6 |
| R (Total) | (K) | 48.5 |

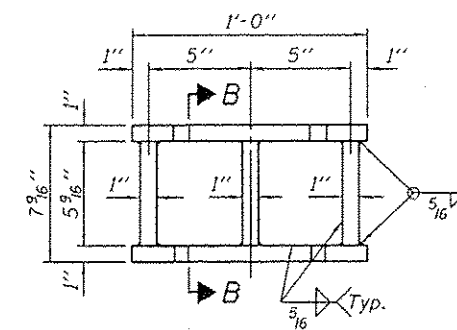
Notes:
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 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. Jack capacity = 25 Tons.
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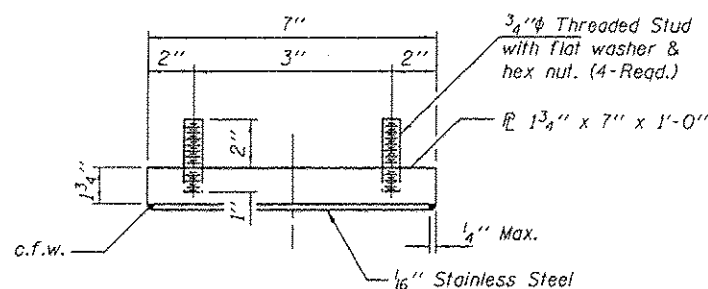
PLAN TOP AND BOTTOM PLATE



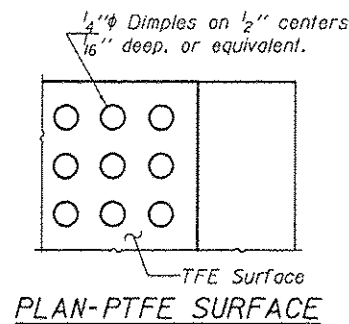
SECTION B-B



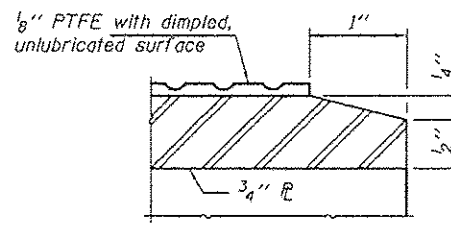
STEEL EXTENSION DETAIL



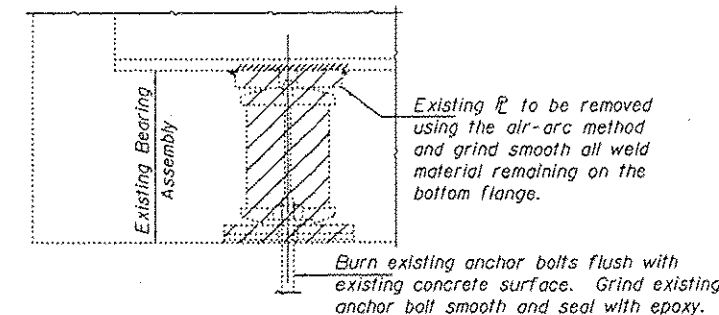
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

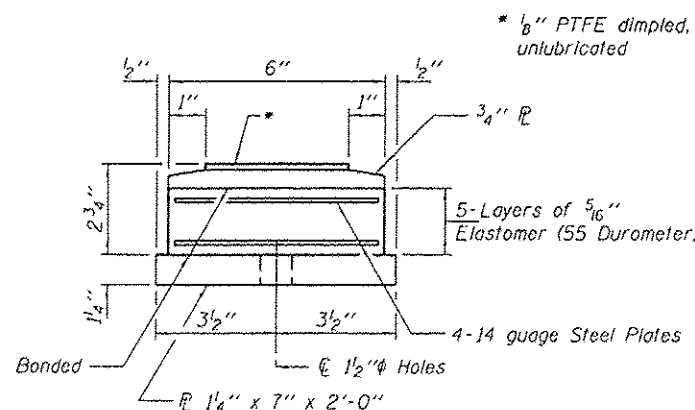


SECTION THRU PTFE

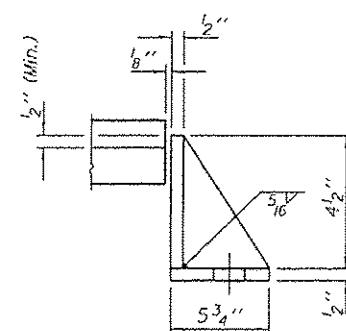


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

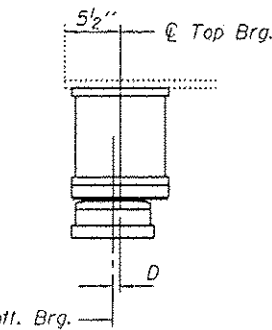
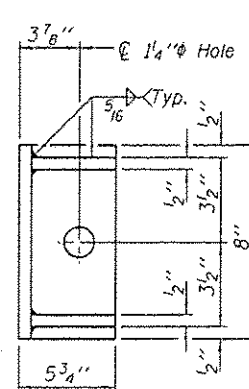


BOTTOM BEARING ASSEMBLY

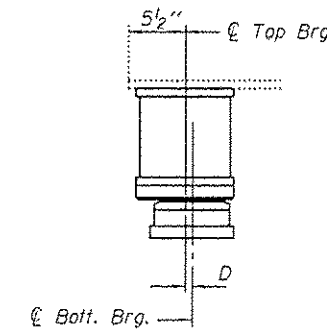


SIDE RETAINER

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



BELOW 50° F. (Move bott. brg. away from fixed brg.)



SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL

| Item | Unit | Total |
|--|-------|-------|
| Elastomeric Bearing Assembly, Type II | Each | 14 |
| Jack and Remove Existing Bearings | Each | 14 |
| Furnishing and Erecting Structural Steel | Pound | 1270 |
| Anchor Bolts 1" φ | Each | 28 |

** Effingham & Clay Counties

TYII/REPS 12-03-2008

| | |
|-------------------------|----------|
| DESIGNED - DAB | EXAMINED |
| CHECKED - ATH | PASSED |
| DRAWN - Kyle M. Steffon | |
| CHECKED - DAB ATH | |

| | |
|------------------------|---|
| DATE - MAY 23, 2013 | ACTING ENGINEER OF STRUCTURAL SERVICES |
| REVISION SHEET 16-5-13 | ACTING ENGINEER OF BRIDGES AND STRUCTURES |

| | |
|---------------------|------------------------|
| DATE - MAY 23, 2013 | REVISION SHEET 16-5-13 |
|---------------------|------------------------|

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING REPLACEMENT DETAILS AT ABUTMENTS
 SN 025-0070 (S.B.)

SHEET NO. 18 OF 22 SHEETS

| | | | | |
|---------------------------|---------------------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 57 | 125-6-11RS-8 & (13-11RS-2 | ** | 84 | 74 |
| CONTRACT NO. 74450 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |