

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

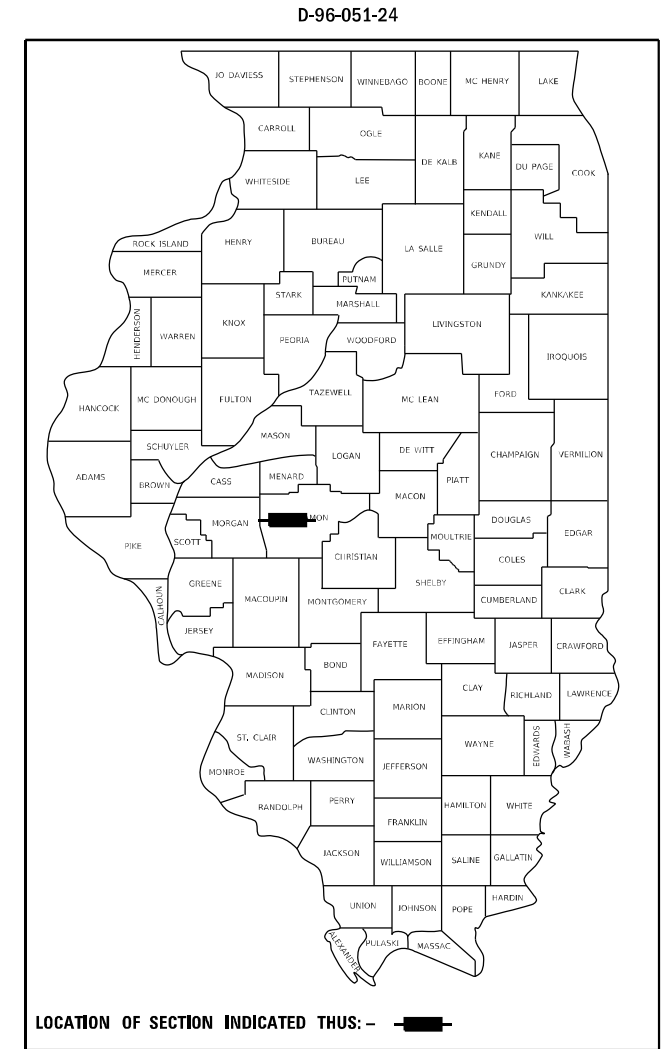
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BRR	SANGAMON	7	1
		ILLINOIS	CONTRACT NO. 72744	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**PROPOSED  
CONTRACT MAINTENANCE**

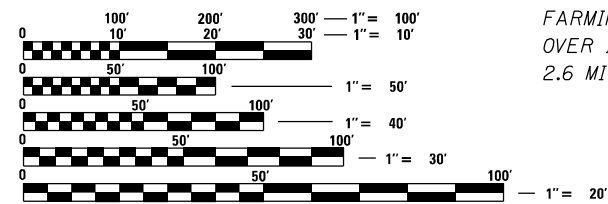
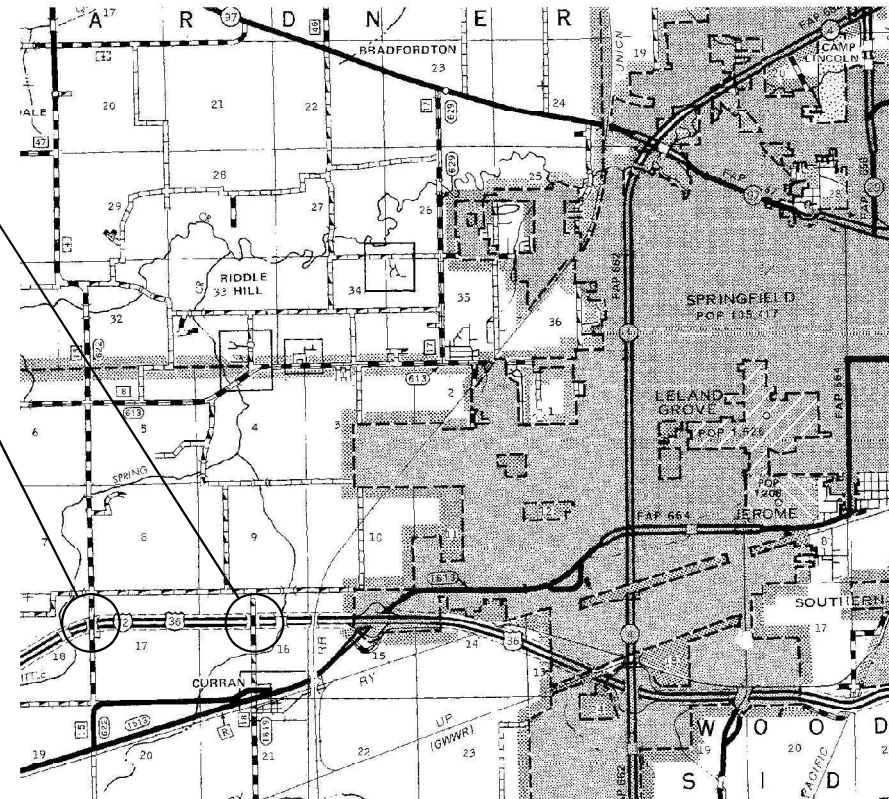
**FAI ROUTE 72 (I-72)  
SECTION (84-9-2HB-3)BRR  
PROJECT (STATE ONLY)  
BRIDGE BEARING REPLACEMENT  
SANGAMON COUNTY**

C-96-072-24



LOCATION #2  
SN 084-0146  
CURRAN RD  
OVER I-72  
1.1 MI W WABASH AVE

LOCATION #1  
SN 084-0145  
FARMINGDALE RD  
OVER I-72  
2.6 MI W WABASH AVE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY - (217) 785-9290

GROSS LENGTH = XXX FT. = X.XX MILE  
NET LENGTH = XXX FT. = X.XX MILE

CONTRACT NO. 72744

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 9 2024

*Jeff P. Meyer*  
REGIONAL ENGINEER

June 28, 2024  
*John A. Eck*  
ENGINEER OF DESIGN AND ENVIRONMENT

June 28, 2024  
*Stephen M. Smith*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-5 SN 084-0145 BRIDGE PLANS
- 6-7 SN 084-0146 BRIDGE PLANS

STANDARDS

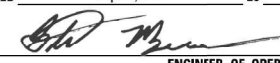
- 000001-08
- 001001-02
- 001006
- 701001-02
- 701006-05
- 701101-05
- 701106-02
- 701201-05
- 701901-09

GENERAL NOTES:

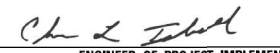
THE CONTRACTOR SHALL CORRECT ELEVATION DIFFERENCES IN THE PROFILE GRADE ACROSS THE EXISTING EXPANSION JOINTS AT THE ENDS OF THE DECK. THIS SHALL BE ACCOMPLISHED BY ADDING SHIM PLATES AT LOCATIONS SHOWN ON THE PLANS. NO MORE THAN 2 SHIM PLATES SHALL BE ADDED TO EACH BEARING LOCATION. HOWEVER, THE CONTRACTOR IS ENCOURAGED TO USE THE MINIMAL NUMBER OF SHIMS AT EACH LOCATION AND MINIMUM SHIM THICKNESS SHALL BE 1/8". THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING DIMENSIONS AND PROPOSE ALL VERTICAL ADJUSTMENTS TO THE ENGINEER PRIOR TO ORDERING THE EXTRA SHIMS. THE ALLOWABLE ELEVATION TOLERANCES BETWEEN THE TWO SIDES OF THE EXPANSION JOINTS SHALL BE ±1/4". RECORDING ACCURATE MEASUREMENTS AND ORDERING PROPERLY SIZED BEARING EXTENSIONS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
DISTRICT 6**

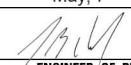
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EXAMINED April, 24 2024  
  
 ENGINEER OF OPERATIONS

---

EXAMINED April, 24 2024  
  
 ENGINEER OF PROJECT IMPLEMENTATION

---

EXAMINED May, 7 2024  
  
 ENGINEER OF PROGRAM DEVELOPMENT

MODEL: D:\p\h\l  
 FILE NAME: S:\Addresses\Bridges\Bridges\_CAD\72744 - 084-0145 & 0146\Bridges\Bridges.dgn

USER NAME = Brandon.Dudley	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/9/2024	DATE -	REVISED -

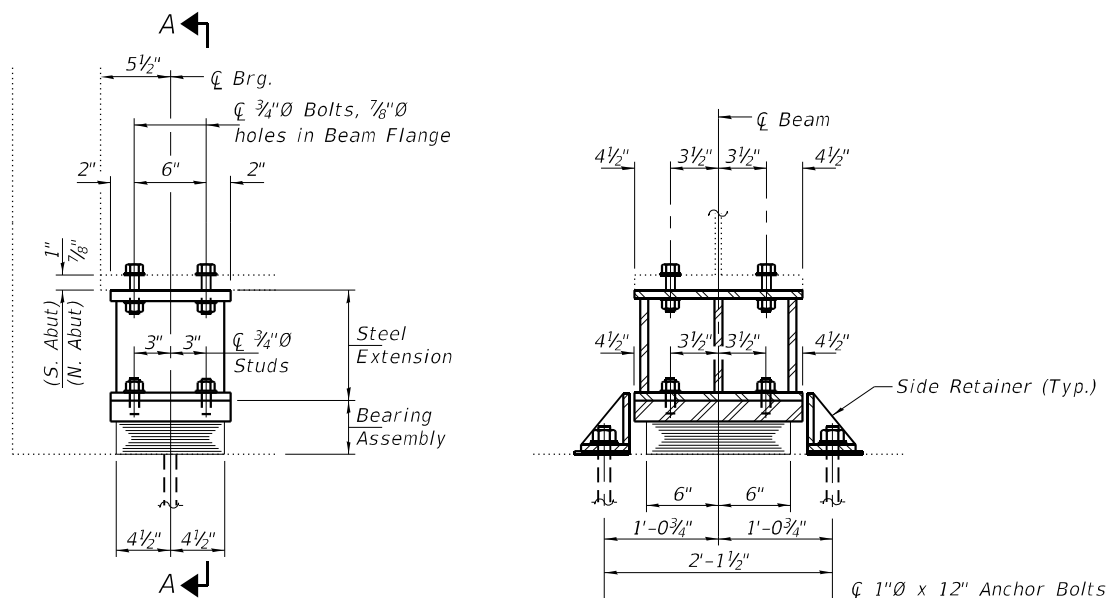
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STANDARDS,  
GENERAL NOTES, & SIGNATURES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BRR	SANGAMON	7	2
CONTRACT NO. 72744				
ILLINOIS FED. AID PROJECT				





ELEVATION AT BOTH ABUTMENT'S

SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts 3/4"ø, holes 13/16"ø, unless otherwise noted.

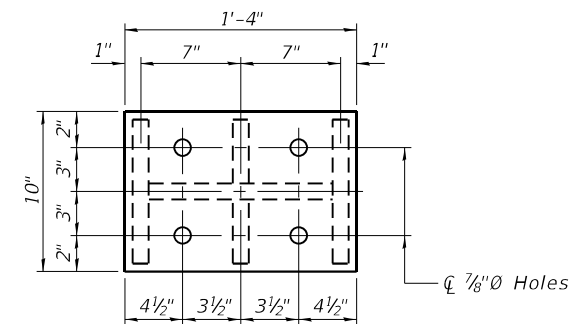
Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

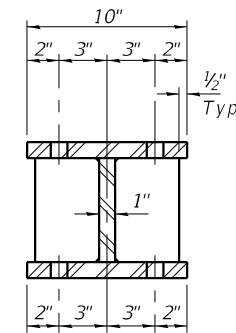
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures", and the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

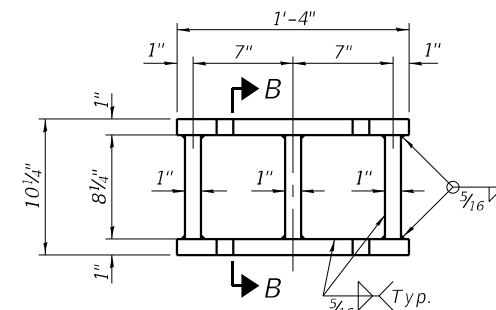
All new structural steel and bearing assemblies shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".



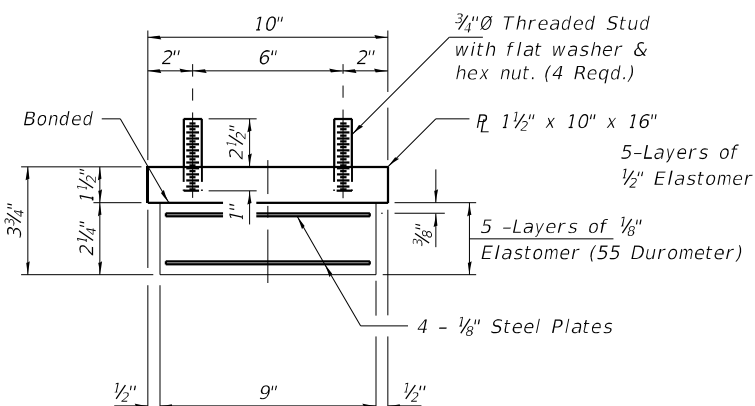
PLAN TOP AND BOTTOM PLATE



SECTION B-B

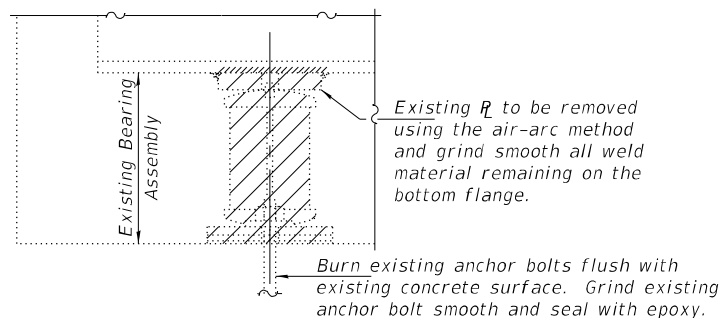


STEEL EXTENSION DETAIL



BEARING ASSEMBLY

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



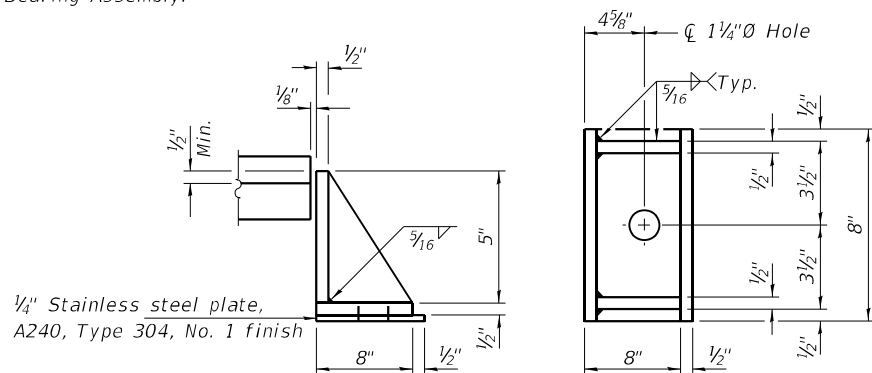
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BEAM REACTIONS

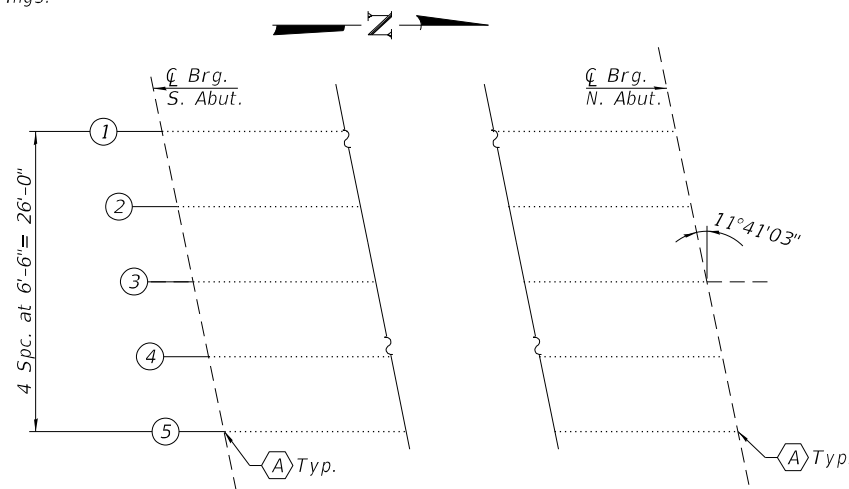
R <sub>ℓ</sub>	(K)	48.2
R <sub>t</sub>	(K)	28.7
Imp.	(K)	6.2
R (Total)	(K)	83.1

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. Adjustment must account for deck heave due to pack rust (if present).  
Min. jack capacity = 50 Tons.  
Anchor bolts shall be ASTM F1554 (Grade 55) all-thread. 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.  
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



SIDE RETAINER

(16 Required)  
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PARTIAL FRAMING PLAN

(A) - Bearing Removal and Replacement.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Jack and Remove Existing Bearings	Each	10
Elastomeric Bearing Assembly, Type I	Each	10
Furnishing and Erecting Structural Steel	Pound	1890
Anchor Bolts, 1"ø	Each	20

All Steel to be galvanized.



EXPIRES 11-30-2024

DESIGNED - Victor H. Veliz  
CHECKED - Adrian T. Hallaway  
DRAWN - Venkat Ramana Reddy  
CHECKED - VHV ATH

EXAMINED  
PASSED  
ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES

DATE - JUNE 27, 2024  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

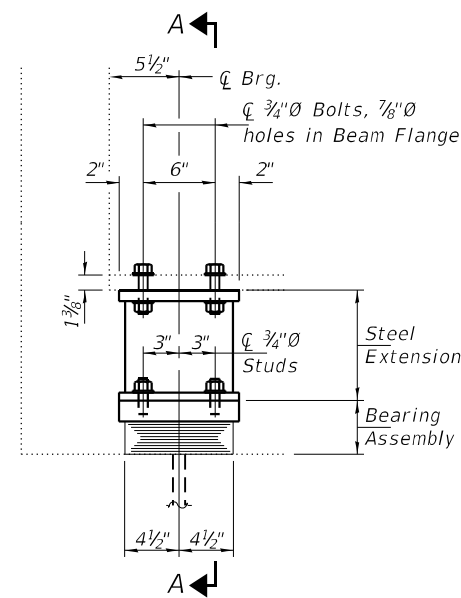
BEARING DETAILS  
FARMINGDALE ROAD/CH 15 OVER I-72 / US 36  
SN 084 - 0145

SHEET NO. 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BRR	SANGAMON	7	4
CONTRACT NO. 72744				
ILLINOIS FED. AID PROJECT				

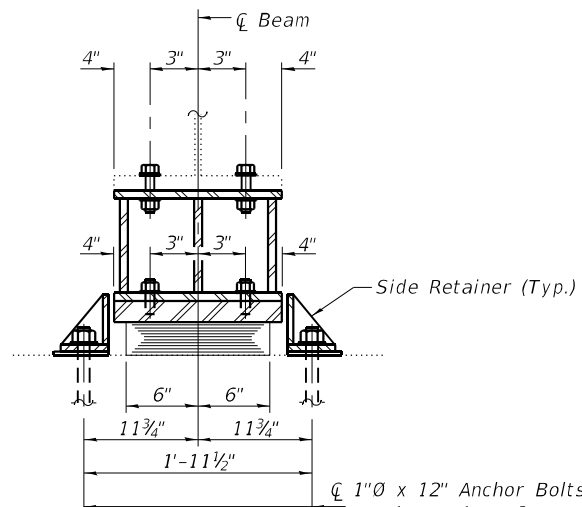
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DESIGNED - VHV	EXAMINED	DATE - JUNE 27, 2024	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BLANK SHEET SN 084 - 0145	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ATH	PASSED  ENGINEER OF BRIDGES AND STRUCTURES	REVISED -			72	(84-9-2HB-3)BRR	SANGAMON	7	5
DRAWN - Venkat Ramana Reddy		REVISED -			CONTRACT NO. 72744				
CHECKED - VHV ATH					ILLINOIS FED. AID PROJECT				
					SHEET NO. 2 OF 2 SHEETS				



ELEVATION AT BOTH ABUTMENT'S

TYPE I ELASTOMERIC EXP. BRG.



SECTION A-A

Side Retainer (Typ.)  
 1" x 12" Anchor Bolts with 2 1/4" x 2 1/4" x 5/16" R washer under nut.

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts 3/4"Ø, holes 13/16"Ø, unless otherwise noted.

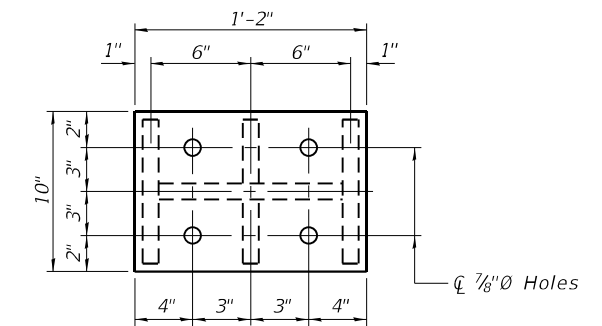
Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

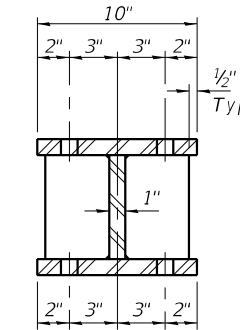
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures", and the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

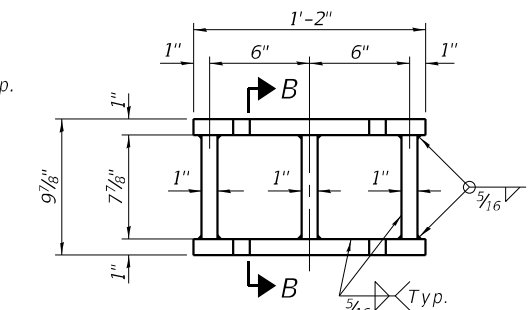
All new structural steel and bearing assemblies shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".



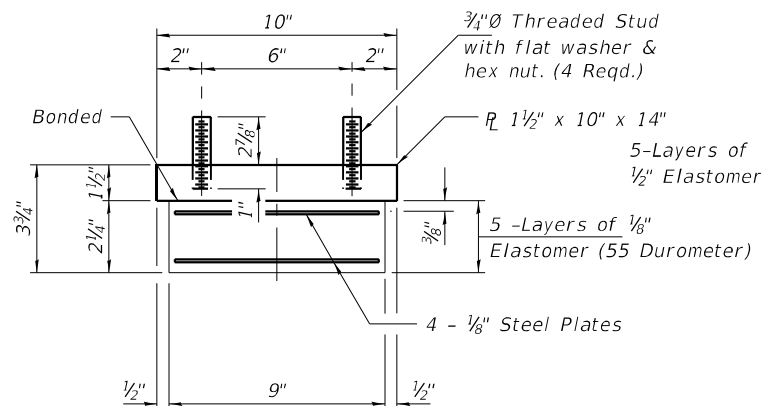
PLAN TOP AND BOTTOM PLATE



SECTION B-B

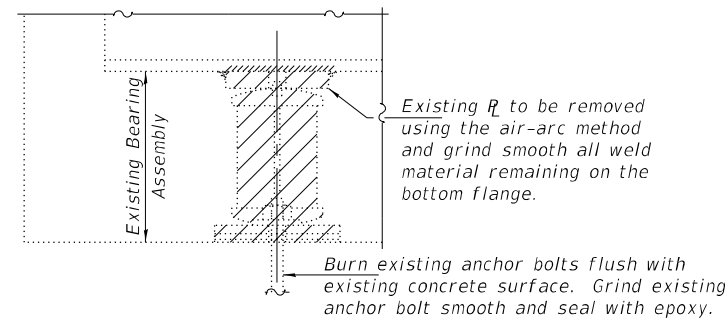


STEEL EXTENSION DETAIL



BEARING ASSEMBLY

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



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BEAM REACTIONS

R <sub>L</sub>	(K)	51.33
R <sub>T</sub>	(K)	34.71
Imp.	(K)	7.63
R (Total)	(K)	93.67

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.

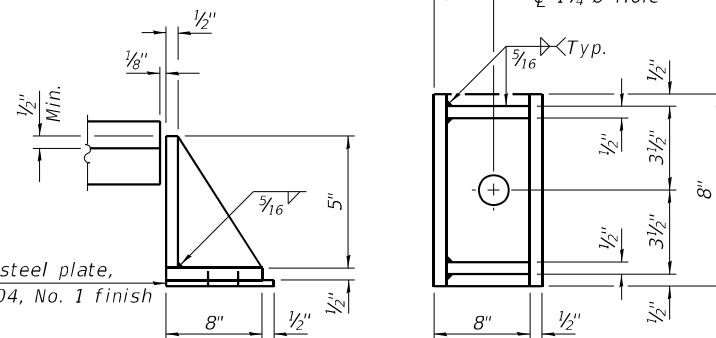
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 55 Tons.

Anchor bolts shall be ASTM F1554 (Grade 55) all-thread. 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.

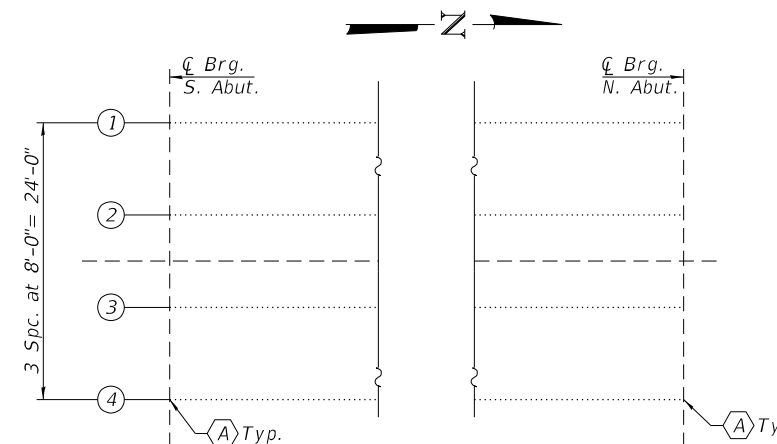
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



SIDE RETAINER

(16 Required)

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



PARTIAL FRAMING PLAN

(A) - Bearing Removal and Replacement.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Jack and Remove Existing Bearings	Each	8
Elastomeric Bearing Assembly, Type I	Each	8
Furnishing and Erecting Structural Steel	Pound	1340
Anchor Bolts, 1"Ø	Each	16

All Steel to be galvanized.



EXPIRES 11-30-2024

DESIGNED - Victor H. Veliz	EXAMINED - [Signature]	DATE - JUNE 27, 2024
CHECKED - Adrian T. Halloway	ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Venkat Ramana Reddy	PASSED - [Signature]	REVISD -
CHECKED - VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES	REVISD -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS  
 CURRAN ROAD (TR 156) OVER I-72 / US 36  
 SN 084-0146

SHEET NO. 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BRR	SANGAMON	7	6
			CONTRACT NO. 72744	
ILLINOIS FED. AID PROJECT				

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DESIGNED - VHV	EXAMINED	DATE - JUNE 27, 2024	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>BLANK SHEET</b> <b>SN 084 - 0146</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ATH	 ENGINEER OF BRIDGES AND STRUCTURES	REVISD -			72	(84-9-2HB-3)BRR	SANGAMON	7	7
DRAWN - Venkat Ramana Reddy		REVISD -			CONTRACT NO. 72744				
CHECKED - VHV ATH		ENGINEER OF STRUCTURAL SERVICES			REVISD -	ILLINOIS FED. AID PROJECT			
SHEET NO. 2 OF 2 SHEETS									