STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

D-96-021-22

 F.A.I. SECTION
 COUNTY SHEET SHEETS NO.

 72
 (69-8VB)BRR
 MORGAN
 5
 1

 ILLINOIS CONTRACT NO. 72N44

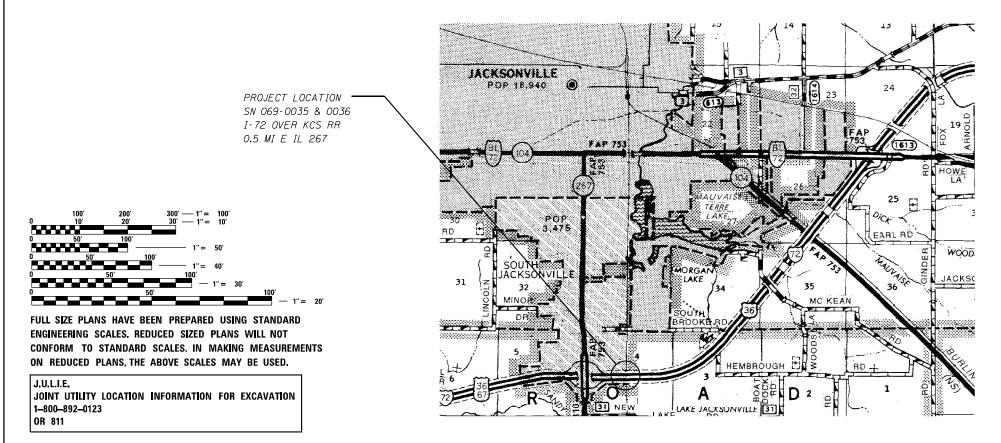
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED CONTRACT MAINTENANCE

FAI ROUTE 72 (I-72)
SECTION (69-8VB)BRR
PROJECT (STATE ONLY)
BRIDGE BEARING REPLACEMENT
MORGAN COUNTY

C-96-025-22





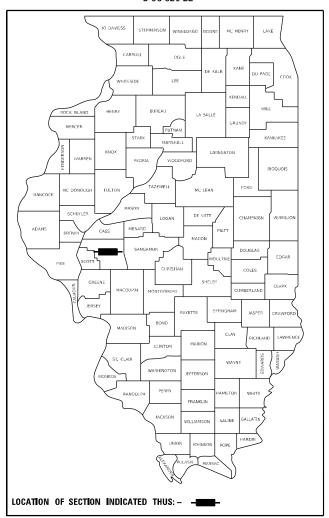
BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY - (217) 785-9290

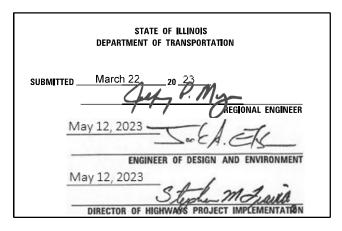
GROSS LENGTH = 151 FT. = 0.03 MILE

NET LENGTH = 151 FT. = 0.03 MILE

CONTRACT NO. 72N44

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INDEX OF SHEETS STANDARDS

1 COVER SHEET
2 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES

2 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES 3 SUMMARY OF QUANTITIES

4-5 SN 069-0035 & 0036 BRIDGE PLANS

000001-08 001001-02 001006 701101-05 701106-02 701400-11 701401-13 701411-09 701901-08

GENERAL NOTES:

ALL WORK ASSOCIATED WITH THIS CONTRACT IS TO TAKE PLACE AT THE BRIDGE ABUTMENTS. THE CONTRACTOR SHALL NOT INTRUDE UPON RR ROW AND SHALL NOT COME WITHIN 20' OF THE TRACKS.

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						
EXAMINED	March, 17 March ENGINI					
	March, 21	d				
EXAMINED	March, 21	20 23				

USER NAME = Brandon.Dudley	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	ı
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	ı
PLOT DATE = 3/22/2023	DATE -	REVISED -	i

SCALE:

INDEX OF SHEETS, STANDARDS,					F.A.I. RTE.	SEC ⁻	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
	GENERAL NOTES. & SIGNATURES				72	(69-8V	(69-8VB)BRR		MORGAN	5	2	
	GLIVENAL IVOTES, & SIGNATURES									CONTRACT	NO. 72	2N44
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0-02178-6002 SN 069-0035/0036

100% STATE

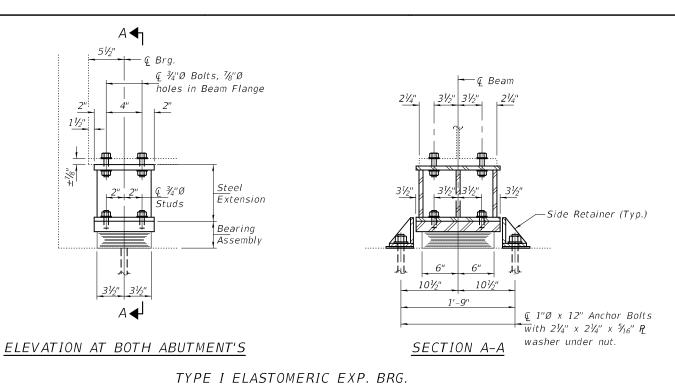
				100/2 37472
2025				BRIDGE/URBAN
CODE	ITEM	LINITT	TOTAL	0013
NO.	ITEM	UNIT	QUANTITY	MORGAN
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	3440	3440
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24	24
52100520	ANCHOR BOLTS, 1"	EACH	48	48
67100100	MOBILIZATION	L SUM	1	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1	1
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGNS	CAL DAY	14	14
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	24	24
_				
_				

REV. - MS

USER NAME = Brandon.Dudley	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/22/2023	DATE -	REVISED -

STATE	OF ILLINOIS	
DEPARTMENT (OF TRANSPORTATION	l

						RTE.	SECTION	COUNTY	SHEETS	
		SUMMARY	OF QU	ANTITIES	5	72	(69-8VB)BRR	MORGAN	5	3
								CONTRACT	Г NO. 7	2N4
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				



BEAM REACTIONS

		W. Abut.	E. Abut.
R₽	(K)	22.8	22.8
R Ł	(K)	35.6	35.6
Imp.	(K)	10.3	10.3
R (Total)	(K)	68.7	68.7

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.

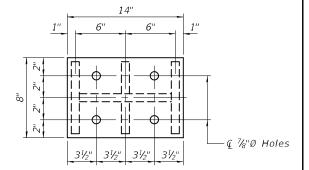
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 35 Tons.

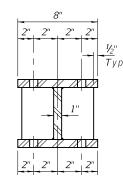
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of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

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.

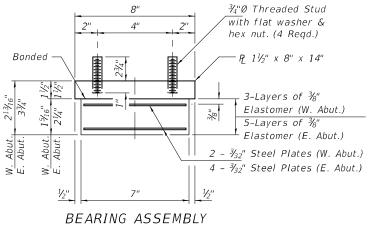


PLAN TOP AND BOTTOM PLATE

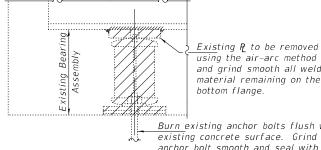


SECTION B-B

STEEL EXTENSION DETAIL



Shim plates shall not be placed under Bearing Assembly.



- Ç 1¼"Ø Hole

-(+)

SIDE RETAINER

(48 Required) Equivalent rolled angle with stiffeners

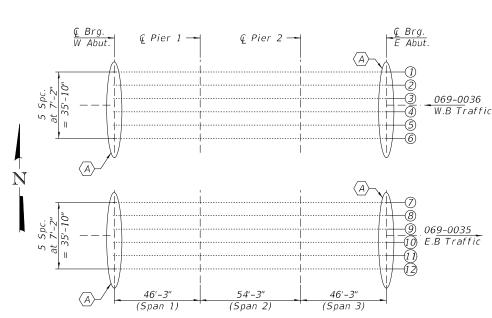
will be allowed in lieu of welded plates.

using the air-arc method and grind smooth all weld material remaining on the bottom flange.

Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy.

EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



GENERAL NOTES

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

Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ "Ø, open holes $\frac{13}{16}$ "Ø, unless otherwise noted.

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.

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

PARTIAL FRAMING PLAN

 $\langle A \rangle$ - Bearing Removal and Replacement.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Jack and Remove Existing Bearings	Each	24
Elastomeric Bearing Assembly, Type I	Each	24
Furnishing and Erecting Structural Steel	Pound	3440
Anchor Bolts, 1"Ø	Each	48



EXPIRES 11-30-2024

DESIGNED - Adrian T. Halloway			DATE -	MAY 11, 2023
CHECKED - Stephen M. Ryan		1 1 4 4	_	111, 2020
DRAWN - Venkat Ramana Reddy	PASSED	Jagn F. Arhiff	REVISED	-
CHECKED - ATH SMR		ENGINEER OF BRIDGES AND STRUCTURES	REVISED	-

1/4" Stainless steel plate,

A240, Type 304, No. 1 finish

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BEARING DETAILS FAI 72 (I-72) OVER KCSS RAILROAD SN 069-0035 (EB) & 0036 (WB) SHEET NO. 1 OF 1 SHEETS

SECTION COUNTY MORGAN 5 4 D6 Bridge Repairs 2023 CONTRACT NO. 72N44

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DESIGNED - ATH			DATE - MAY 11, 2023	CTATE OF U. INIOIC	BLANK SHEET	F.A.I RTE	SECTION	COUNTY	TOTAL SHEET NO.
CHECKED - SMR DRAWN - Venkat Ramana Reddy	PASSED	Jayne F. Jeff	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 069-0035 (EB) & 0036 (WB)	72	D6 Bridge Repairs 2023	MORGAN CONTRAC	5 5 CT NO. 72N44
CHECKED - ATH SMR	1	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -		SHEET NO. 1 OF 1 SHEETS		ILLINOIS FED. AI	D PROJECT	