FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

A.I. SECTION COUNTY TOTAL SHEET SHEE

D-96-079-20

PROPOSED CONTRACT MAINTENANCE

C-96-109-20

FAI ROUTE 55 (I-55)
SECTION (54-4) BRR-1, BJR-2
PROJECT (STATE ONLY)
BRIDGE BEARING REPLACEMENT
LOGAN COUNTY

PROJECT LOCATION SN 054-0059 CH 2 OVER I-55 3.1 MI E OF I-155

0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' — 100' — 1"= 30'
0 50' — 1"= 20'

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.

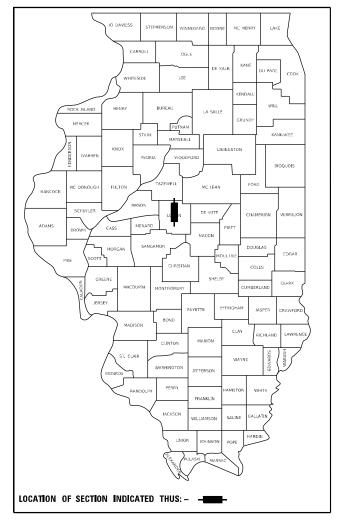
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123
OR 811

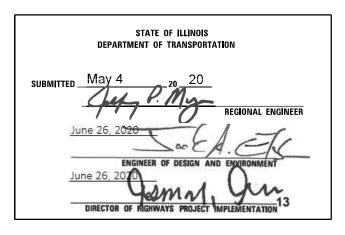
BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY - (217) 785-9290

GROSS LENGTH = 252 FT. = 0.05 MILE NET LENGTH = 252 FT. = 0.05 MILE

CONTRACT NO. 72M11

 \circ





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REV. - MS

 INDEX OF SHEETS
 STANDARDS

 1
 COVER SHEET
 000001-07

 2
 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES
 001001-02

 3
 SUMMARY OF QUANTITIES
 001006

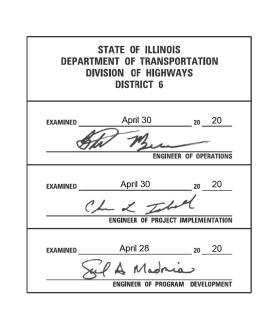
 4-6
 SN 054-0059 BRIDGE PLANS
 701001-02

 701006-05
 701101-05

 701106-02
 701201-05

 701301-04
 701301-04

GENERAL NOTES:



USER NAME = dudleybm	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	ĺ
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	ĺ
PLOT DATE = 5/5/2020	DATE -	REVISED -	i

STATE OF	ILLINOIS
DEPARTMENT OF 7	TRANSPORTATION

SCALE:

701901-08

	INDEX, STANDARDS, GENERAL NOTES,					F.A.I. RTE			COUNTY	TOTAL SHEETS	SHEET NO.	
	& SIGNATURES				55	(54-4) BRR-1, BJR-2			LOGAN	6	2	
									CONTRACT	NO. 72	2M11	
	SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

NAME: \\Central\\d6\OPERATIONS\\Bridges\\Bridgeplans_CAD\\\

0-02175-6005 SN 054-0059

100% STATE

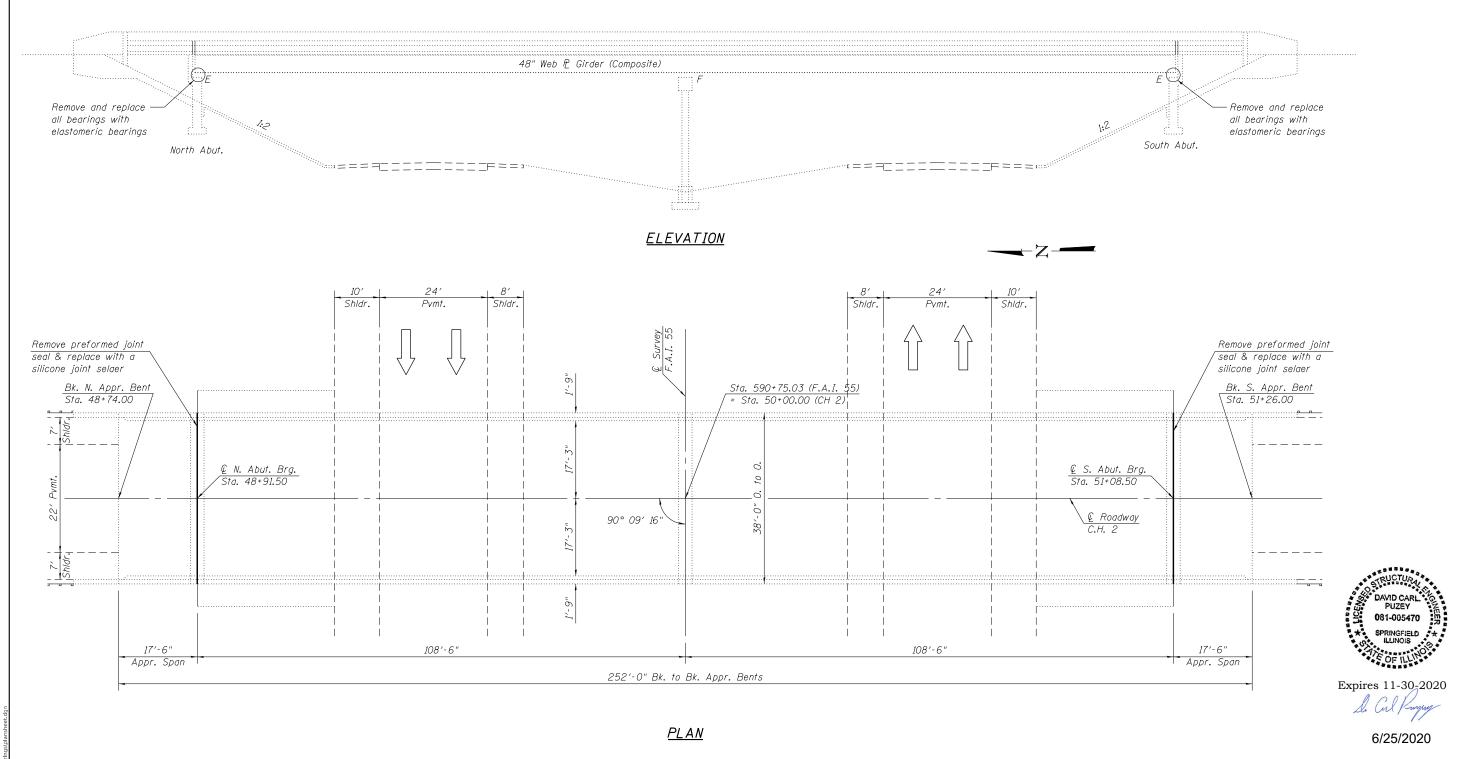
				BRIDGE/RURAL
CODE	ITEM	LINIT	TOTAL	0047
NO.	ITEM	UNIT	QUANTITY	LOGAN
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	2004	2004
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	10	10
52100520	ANCHOR BOLTS, 1"	EACH	20	20
32100320	Alterior Bollo, 1	LACIT	20	20
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	10	10
20001033	OACK AND NEWOVE EXISTING BEAKINGS	LACIT	10	10
Z0021914	SILICONE JOINT SEALER, 2.75"	FOOT	73	73

USER NAME = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/5/2020	DATE -	REVISED -

SCALE:

	SUMMARY OF QUANTITIES						SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							(54-4) BRR-1, BJR-2	LOGAN	6	3
								CONTRACT	NO. 72	2M11
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

\\Central\d6\OPERATIONS\Bridges\Bridgeplans_CAD\72M11



STRUCTURE GENERAL NOTES:

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS 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 THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 36 UNLESS OTHERWISE NOTED.

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 ASSEMBLIES SHALL BE HOT-DIP GALVANIZED. SEE SPECIAL PROVISIONS FOR "HOT DIP GALVANIZING FOR STRUCTURAL STEEL".

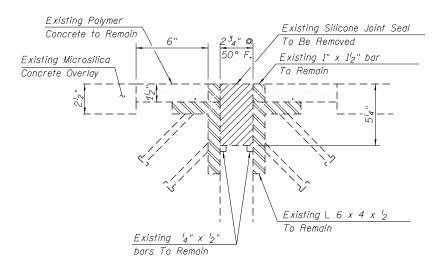
TOTAL BILL OF MATERIAL (054-0059)

ITEM	UNIT	QUANTITY
Silicone Joint Sealer 2-3/4"	Foot	73
Elastomeric Bearing Assembly, Type I	Each	10
Jack and Remove Existing Bearings	Each	10
Furnishing and Erecting Structural Steel	Pound	2004
Anchor Bolts, 1" Ø	Each	20

USER NAME = dudleybm	DESIGNED -	BRANDON DUDLEY	REVISED -
	DRAWN -	BRANDON DUDLEY	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	JASON JONES	REVISED -
PLOT DATE = 5/5/2020	DATE -		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| SHEET 1 OF 3 SHEET STA. TO STA. | SECTION | SCOUNTY | SHEET | STA. | SECTION | SCOUNTY | SHEET | STA. | SECTION | SHEET | SHEET | SHEET | SECTION | SHEET | SHEET | SHEET | SECTION | SHEET | SHE



Proposed Backer Rod having a diameter 25% greater than joint opening at time of installation

Existing Polymer
Concrete Nosing

Proposed Joint Sealer

Proposed Backer Rod

SECTION AT PARAPET

TYPICAL EXISTING JOINT CROSS SECTION

TYPICAL PROPOSED JOINT CROSS SECTION

38'-0" 0. to 0. Deck 1'-9" 6'-3" 11'-0" 6'-3" 1'-9" 4 Spaces ● 8'-0" = 32'-0" 3'-0"

NOTES:

- THE COST OF REMOVING AND DISPOSING OF EXISTING JOINT SEAL MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR SILICONE JOINT SEALER.

TYPICAL EXISTING CROSS SECTION

(Looking South)

JOINT REPAIR BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Silicone Joint Sealer 2-3/4"	Foot	73

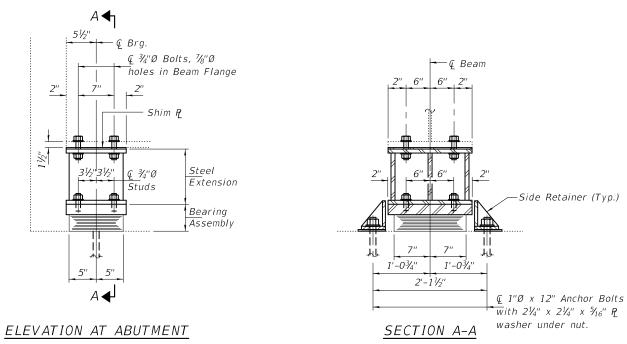
USER NAME = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 5/5/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

						F.A.I. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
SN 054-0059					55	(54-4) BRR	R-1, BJR-	-2	LOGAN	6	5	
		JI	u 034-00	JJ						CONTRACT	NO. 72	2M11
ALE:	SHEET 2	OF 3	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

- 0540059 bearings/plansneer.dgn

FILE NAME: \\Central\d6\OPERATIONS\B



TYPE I ELASTOMERIC EXP. BRG.



R₽	(K)	61.3
R Ł	(K)	46.9
Imp.	(K)	10.0
R (Total)	(K)	118.2

BEAM REACTIONS

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.

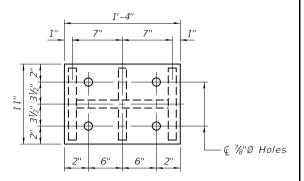
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 70 Tons.

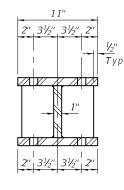
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of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

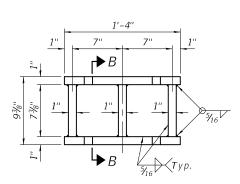
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

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



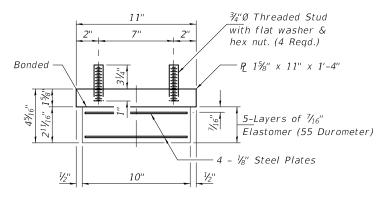
PLAN TOP AND BOTTOM PLATE





SECETION B-B

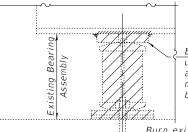
STEEL EXTENSION DETAIL



BEARING ASSEMBLY

Note

Shim plates shall not be placed under Bearing Assembly.

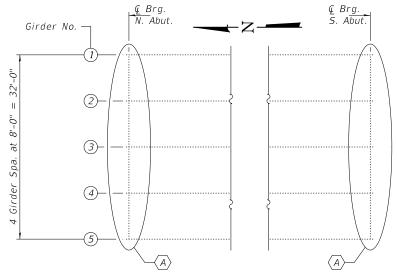


Existing P to be removed using the air-arc method and grind smooth all weld material remaining on the bottom flange.

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.



PARTIAL FRAMING PLAN

 $\langle A \rangle$ - Bearing Replacement

$\frac{1}{2}$ $\frac{1}$

SIDE RETAINER

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

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	10
Jack and Remove Existing Bearings	Each	10
Furnishing and Erecting Structural Steel	Pound	2004
Anchor Bolts, 1"Ø	Each	20

TYI/REPS 5-17-2018

DESIGNED - CCC	EXAMINED	I most of And at	DATE -	JUNE 25, 2020
CHECKED - JSB		ENGINEER OF STRUCTURAL SERVICES		
DRAWN - daburdell	PASSED	d. Carl Prayey	REVISED	-
CHECKED - CCC JSB		ENGINEER OF BRIDGES AND STRUCTURES	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS - ABUTMENTS SN 054-0059 SHEET NO. 1 OF 1 SHEETS
 F.A.I. RTE.
 SECTION
 COUNTY SHEETS
 TOTAL NO.
 SHEETS NO.

 55
 (54-4) BRR-1, BJR-2
 LOGAN
 6
 6

 CONTRACT NO. 72M11