

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

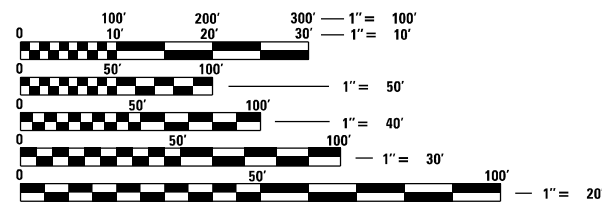
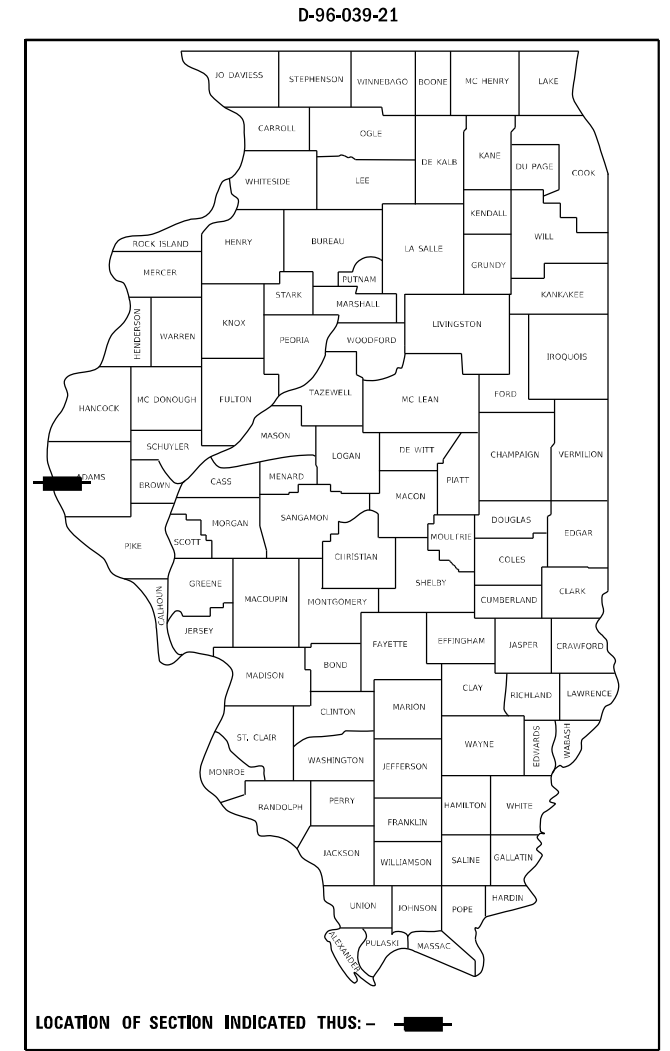
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	(1-6) BRR	ADAMS	6	1
		ILLINOIS	CONTRACT NO. 72M88	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED CONTRACT MAINTENANCE

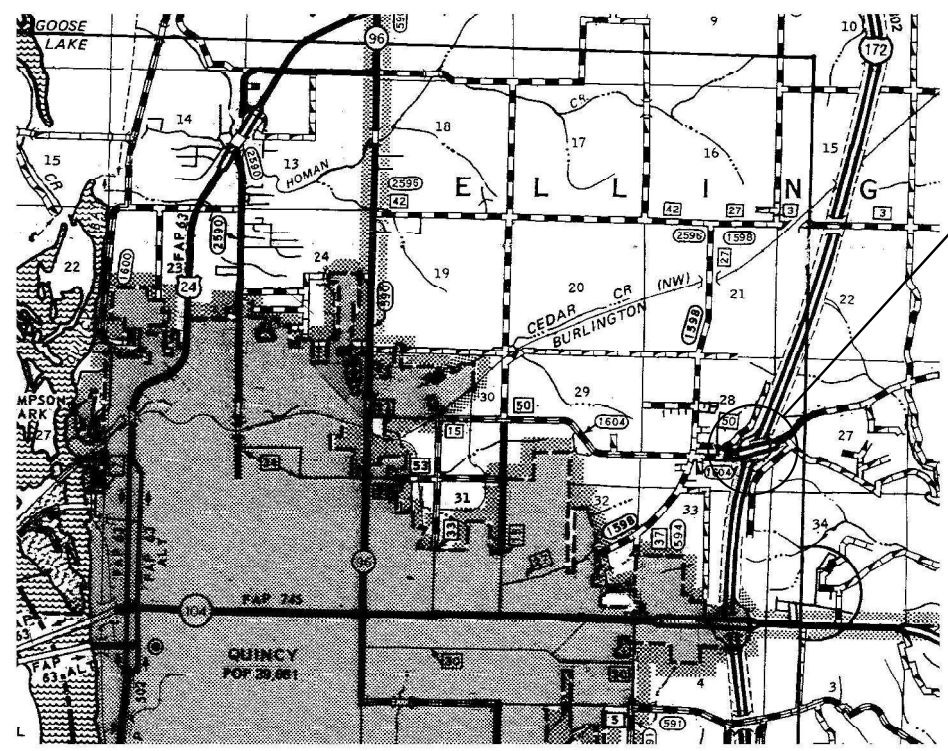
FAI ROUTE 172 (I-172)
SECTION (1-6) BRR
PROJECT (STATE ONLY)
BRIDGE BEARING REPLACEMENT
ADAMS COUNTY

C-96-110-21



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 EXCAVATORS
1-800-892-0123
OR 811



PROJECT LOCATION
SN 001-0048
COLUMBUS RD OVER I-172
JUST EAST OF QUINCY

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

GROSS LENGTH = 347 FT. = 0.07 MILE
NET LENGTH = 347 FT. = 0.07 MILE

CONTRACT NO. 72M88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 24, 2021

[Signature]
REGIONAL ENGINEER

May 7, 2021
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 7, 2021
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS


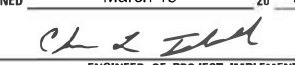
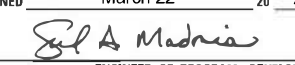
INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-6 SN 001-0048 BRIDGE PLANS

STANDARDS

- 000001-08
- 001001-02
- 001006
- 701001-02
- 701006-05
- 701101-05
- 701106-02
- 701201-05
- 701301-04
- 701901-08

GENERAL NOTES:

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6	
EXAMINED	March 15, 20 21
 ENGINEER OF OPERATIONS	
EXAMINED	March 15, 20 21
 ENGINEER OF PROJECT IMPLEMENTATION	
EXAMINED	March 22, 20 21
 ENGINEER OF PROGRAM DEVELOPMENT	

MODEL: Default
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REV. - MS

	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, GENERAL NOTES, STANDARDS, & SIGNATURES			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
		DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	172	(1-6) BRR	ADAMS	6	2
	PLOT SCALE = 100.0000" / in.	CHECKED -	REVISED -		CONTRACT NO. 72M88										
	PLOT DATE = 3/23/2021	DATE -	REVISED -		ILLINOIS FED. AID PROJECT										

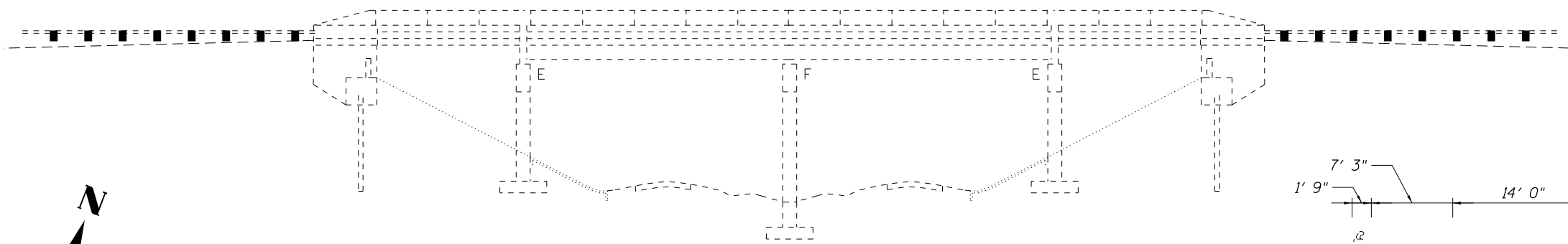
0-02176-6007
 SN 001-0048
 100% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE/URBAN
				0047 ADAMS
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5400	5400
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	18	18
52100520	ANCHOR BOLTS, 1"	EACH	36	36
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	18	18
Z0001905	STRUCTURAL STEEL REPAIR	POUND	230	230

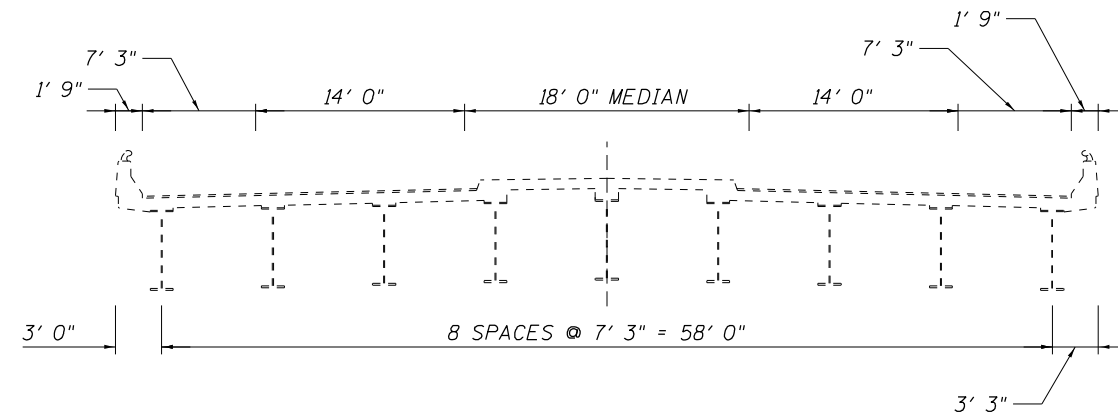
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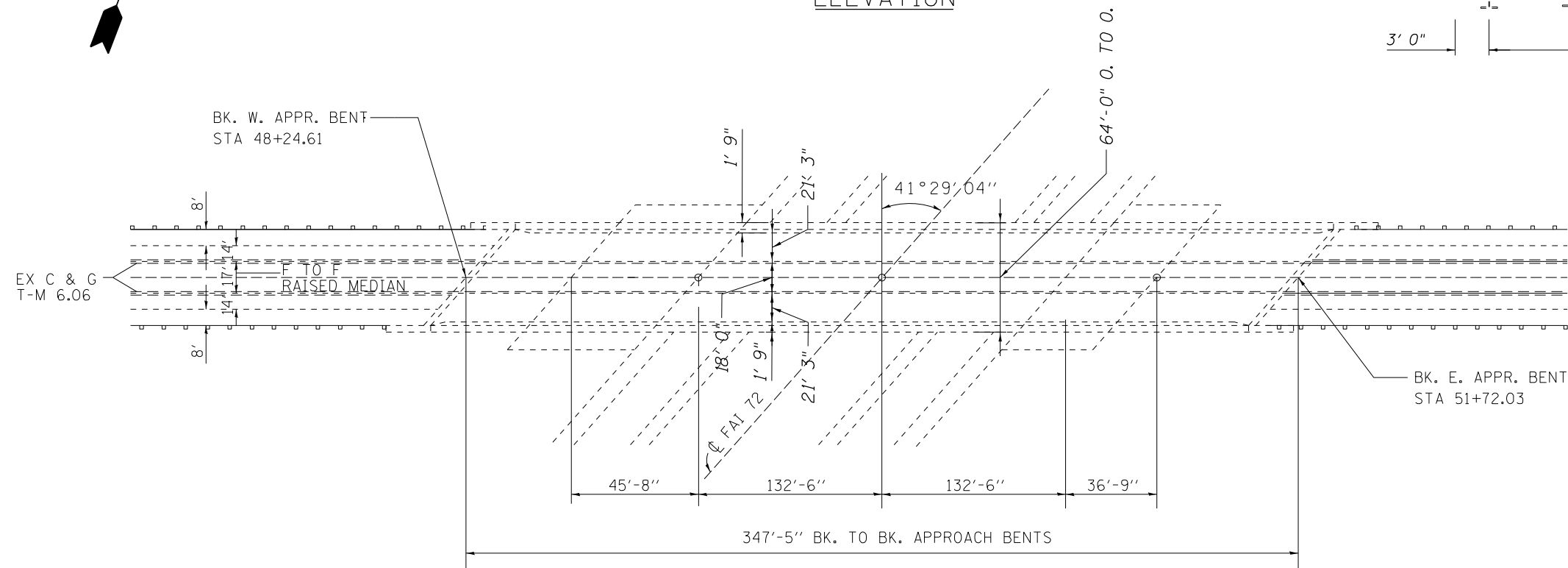
USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES					F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -		172	(1-6) BRR	ADAMS	6	3					
PLOT DATE = 3/23/2021	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.					CONTRACT NO. 72M88				
	DATE -	REVISED -		ILLINOIS FED. AID PROJECT									



ELEVATION



CROSS SECTION



PLAN



Expires 11-30-2022

David Carl Puzey

05/03/2021

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 (001-0048)

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	230
Elastomeric Bearing Assembly, Type I	Each	18
Jack and Remove Existing Bearings	Each	18
Furnishing and Erecting Structural Steel	Pound	5400
Anchor Bolts, 1" φ	Each	36

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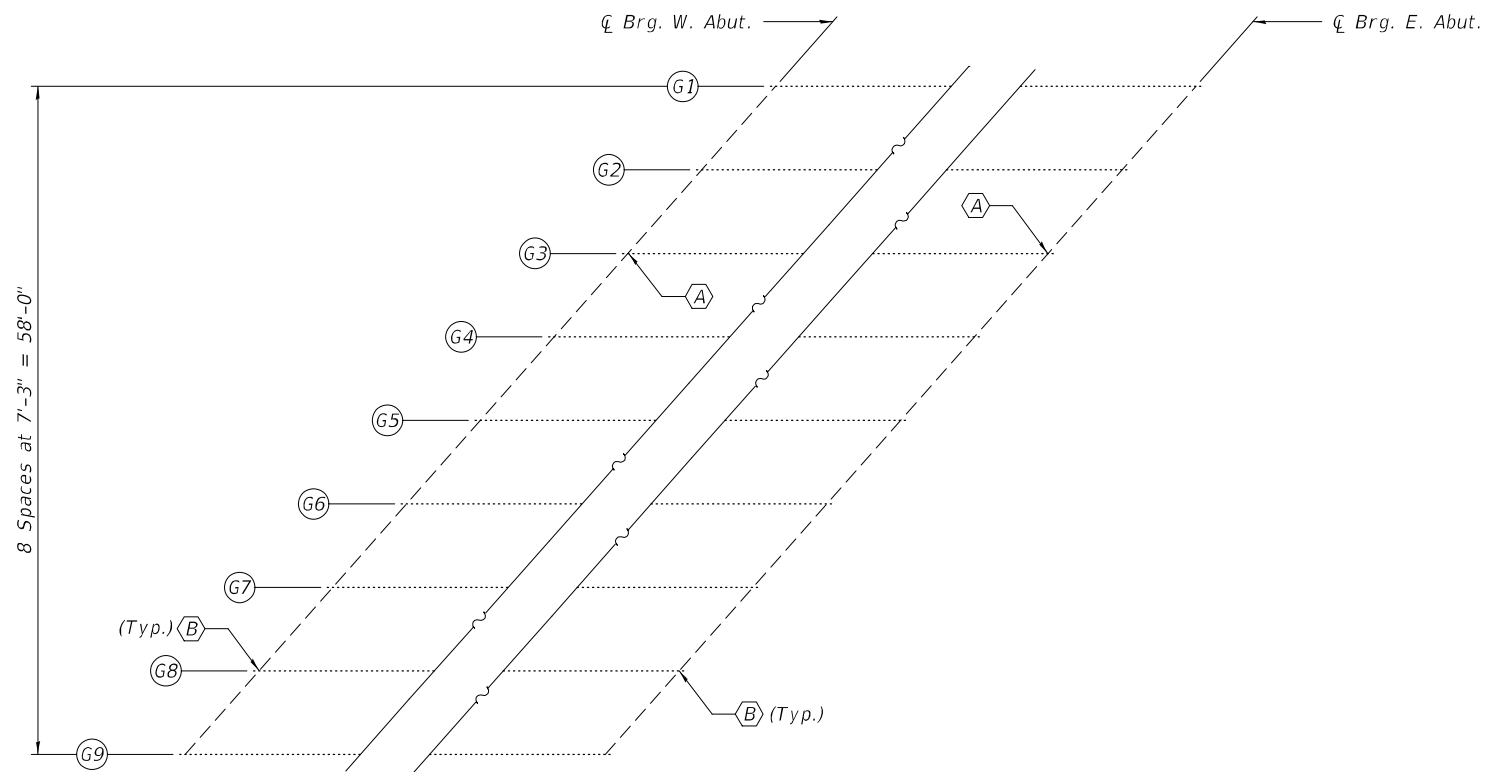
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PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/23/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE PLAN & ELEVATION
SN 001-0048**

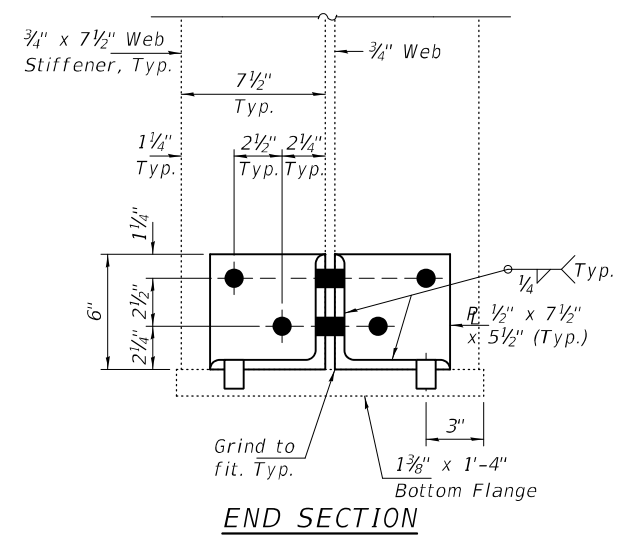
SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	(1-6) BRR	ADAMS	6	4
CONTRACT NO. 72M88			ILLINOIS FED. AID PROJECT	



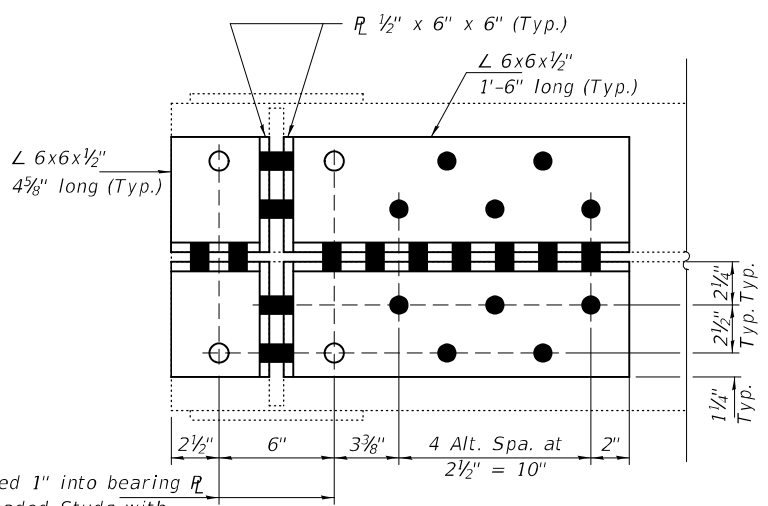
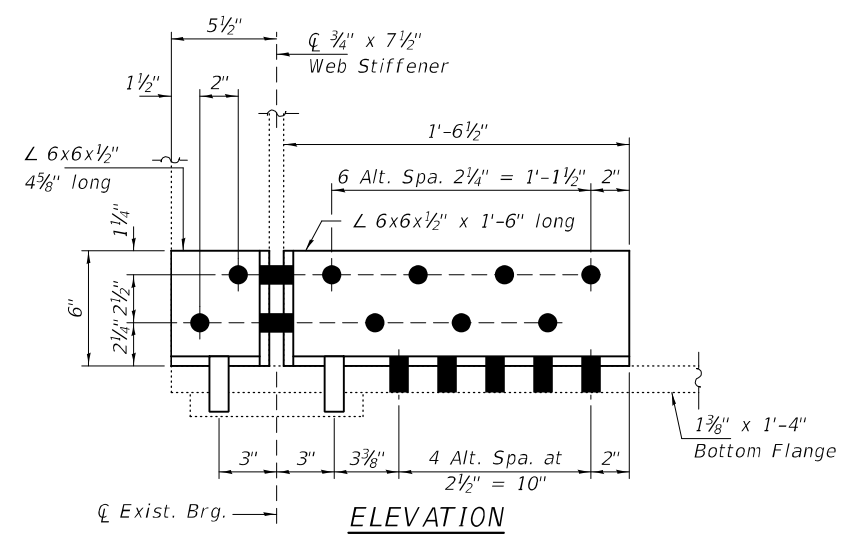
PARTIAL FRAMING PLAN

- ⬡ - Girder end repair
- ⬢ - Bearing removal and replacement (Both Abutments)



BOLT HOLE LEGEND

- - Field drill using new steel as template.



PLAN

NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
 Fasteners shall be high strength bolts. Bolts 3/4"Ø, open holes 1 3/16"Ø, unless otherwise noted.
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	230

EXPIRES 11-30-2022

DESIGNED - Stephen M. Ryan
 CHECKED - Adrian T. Hallaway
 DRAWN - daburdell
 CHECKED - SMR ATH

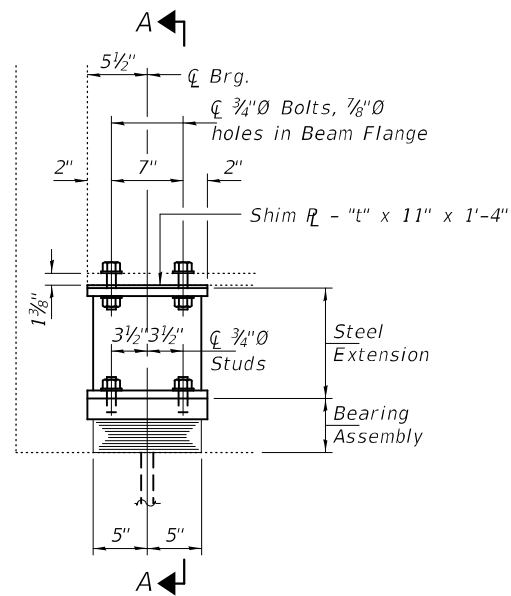
EXAMINED _____
 ENGINEER OF STRUCTURAL SERVICES
 PASSED _____
 ENGINEER OF BRIDGES AND STRUCTURES

DATE - MAY 3, 2021
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

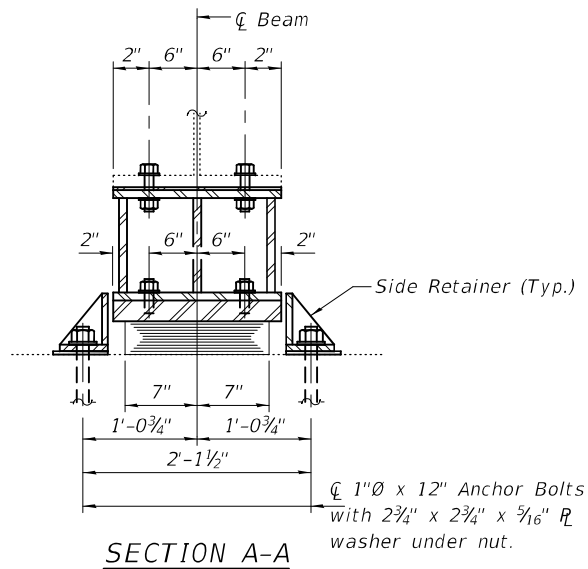
REPAIR DETAILS
 FAS 1604 OVER FAI 172
 SN 001-0048
 SHEET NO. 1 OF 2 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1604	(1-6) BRR	ADAMS	6	5
ILLINOIS			FED. AID PROJECT	



ELEVATION AT ABUTMENT

TYPE I ELASTOMERIC EXP. BRG.

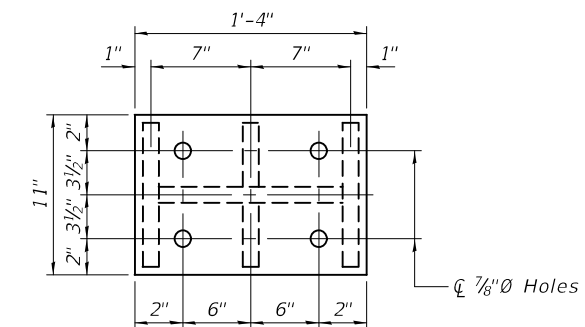


SECTION A-A

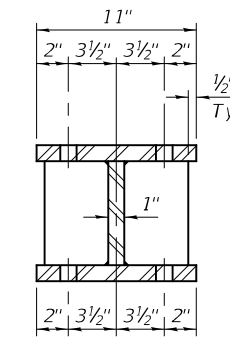
BEAM REACTIONS

R _φ	(K)	62.5
R _L	(K)	45.5
Imp.	(K)	8.8
R (Total)	(K)	116.8

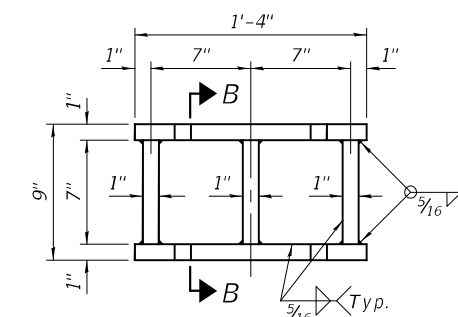
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, 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 = 67 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.



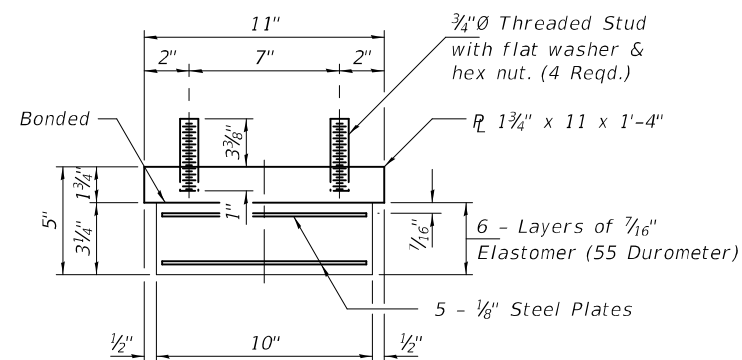
PLAN TOP AND BOTTOM PLATE



SECTION B-B



STEEL EXTENSION DETAIL

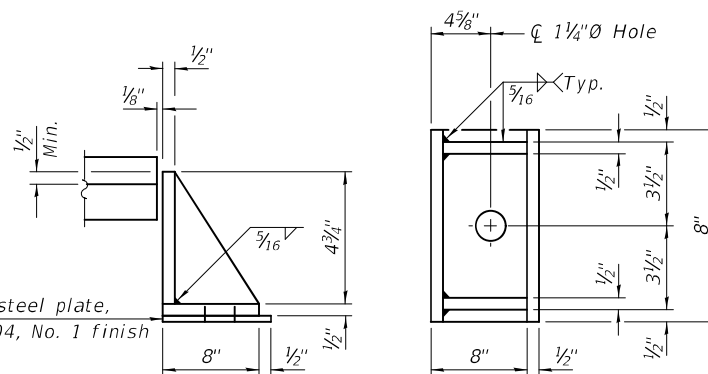


BEARING ASSEMBLY

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

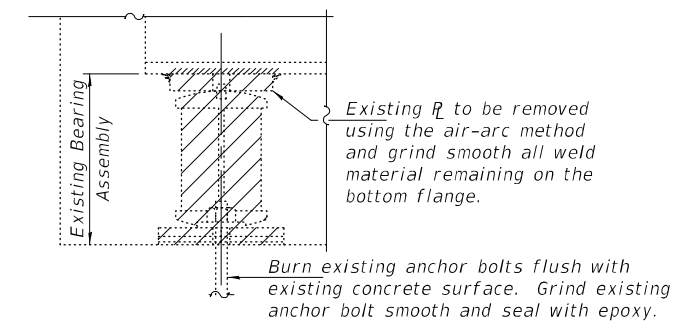
SHIM PLATES

East Abutment	
Location	Thickness "t"
G5	3/4"
G6	3/8"
G8	3/4"



SIDE RETAINER

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



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	18
Jack and Remove Existing Bearings	Each	18
Furnishing and Erecting Structural Steel	Pound	3480
Anchor Bolts, 1"Ø	Each	36

TYI/REPS 5-17-2018