

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	1
		ILLINOIS	CONTRACT NO. 72M47	

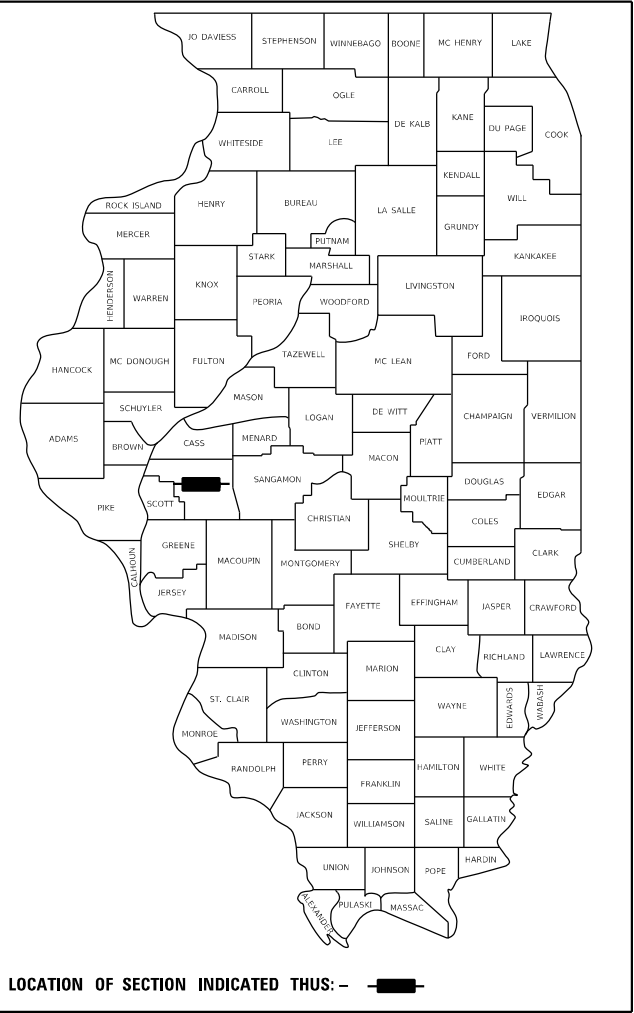
D-96-117-20

FOR INDEX OF SHEETS, SEE SHEET NO.2

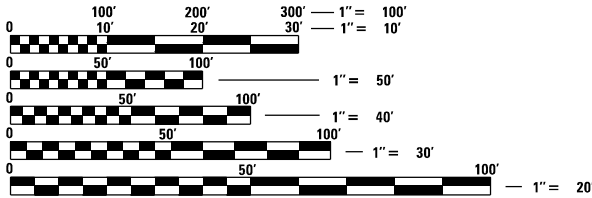
PROPOSED
CONTRACT MAINTENANCE

FAI ROUTE 72 (I-72)
SECTION (69-6&7)BRR(69-8)BRR&BJR-1,SLP
PROJECT (STATE ONLY)
BRIDGE REPAIRS
MORGAN COUNTY

C-96-148-20

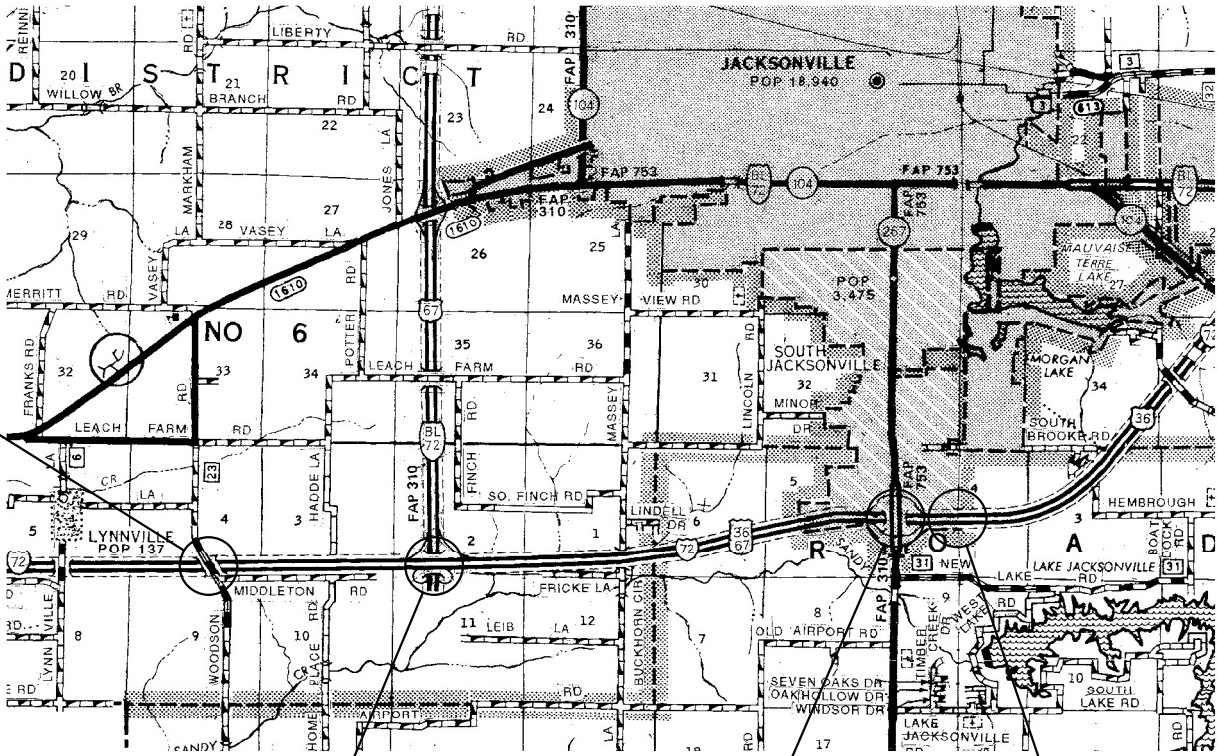


SN 069-0054
CH 23 OVER I-72
0.7 MI W US 67



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



SN 069-0055 & 0056
I-72 OVER US 67
@ US 67 INTERCHANGE

SN 069-0034
IL 267 OVER I-72
@ IL 267 INTERCHANGE

SN 069-0035 & 0036
I-72 OVER ICG RR
0.5 MI EAST OF IL 267

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

GROSS LENGTH = 4.79 MILE

CONTRACT NO. 72M47

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 12, 2020

[Signature] REGIONAL ENGINEER

October 2, 2020

[Signature] ENGINEER OF DESIGN AND ENVIRONMENT

October 2, 2020

[Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1COVER SHEET
- 2INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES
- 3-4SUMMARY OF QUANTITIES
- 5-8SN 069-0034 BRIDGE PLANS
- 9-12SN 069-0035 & 0036 BRIDGE PLANS
- 13-14SN 069-0054 BRIDGE PLANS
- 15-19SN 069-0055 & 0056 BRIDGE PLANS

GENERAL NOTES:

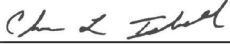
STANDARDS

- 000001-07
- 001001-02
- 001006
- 701001-02
- 701006-05
- 701101-05
- 701106-02
- 701201-05
- 701400-09
- 701401-12
- 701411-09
- 701901-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6

EXAMINEDAugust 62020

ENGINEER OF OPERATIONS

EXAMINEDAugust 42020

ENGINEER OF PROJECT IMPLEMENTATION

EXAMINEDAugust 42020

ENGINEER OF PROGRAM DEVELOPMENT

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		DRAWN -	REVISED -							72	69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	2
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	PLOT DATE = 8/13/2020	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS	FED. AID PROJECT	

					0-02175-6023	0-02175-6023	0-02175-6023	0-02175-6023	0-02175-6023	0-02175-6023
					SN 069-0034	SN 069-0035	SN 069-0036	SN 069-0054	SN 069-0055	SN 069-0056
					100% STATE	100% STATE	100% STATE	100% STATE	100% STATE	100% STATE
					BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE
					0047	0047	0047	0047	0047	0047
					MORGAN	MORGAN	MORGAN	MORGAN	MORGAN	MORGAN
21400100	GRADING AND SHAPING DITCHES	FOOT	900	0	450	450	0	0	0	
28100805	STONE DUMPED RIPRAP, CLASS A3	TON	30	30	0	0	0	0	0	
50102400	CONCRETE REMOVAL	CU YD	3.4	0	0	0	0	1.7	1.7	
50104650	SLOPE WALL REMOVAL	SQ YD	196	0	96	100	0	0	0	
50300225	CONCRETE STRUCTURES	CU YD	2.1	0	2.1	0	0	0	0	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	11060	4360	0	0	0	3350	3350	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	380	0	380	0	0	0	0	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	46	18	0	0	0	14	14	
52100520	ANCHOR BOLTS, 1"	EACH	92	36	0	0	0	28	28	
59300100	CONTROLLED LOW STRENGTH MATERIAL	CU YD	65	0	30	35	0	0	0	
67100100	MOBILIZATION	L SUM	1	0.16	0.17	0.17	0.16	0.17	0.17	
70100420	TRAFFIC CONTROL AND PROTECTION , STANDARD 701411	EACH	5	0	1	0	0	2	2	
70100450	TRAFFIC CONTROL AND PROTECTION , STANDARD 701201	L SUM	1	1	0	0	0	0	0	
70100800	TRAFFIC CONTROL AND PROTECTION , STANDARD 701401	L SUM	1	0.16	0.17	0.17	0.16	0.17	0.17	

REV. - MS

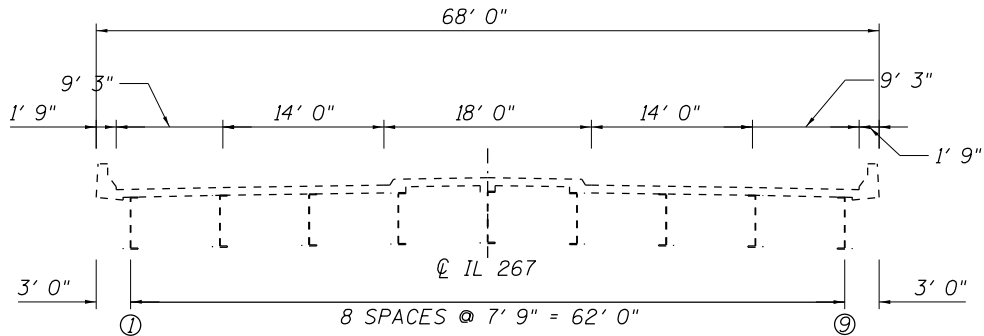
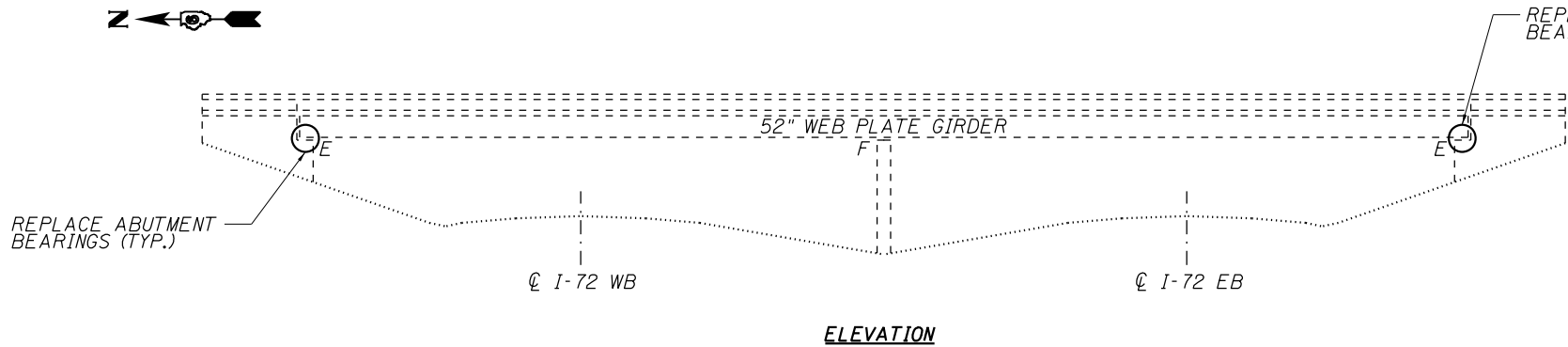
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	DRAWN -	REVISED -						72	(69-6&7)BRR(69-8)BR&BJR-1,SLP	MORGAN	19	3
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	PLOT DATE = 8/13/2020	DATE -		REVISED -	ILLINOIS FED. AID PROJECT							

REV. - MS

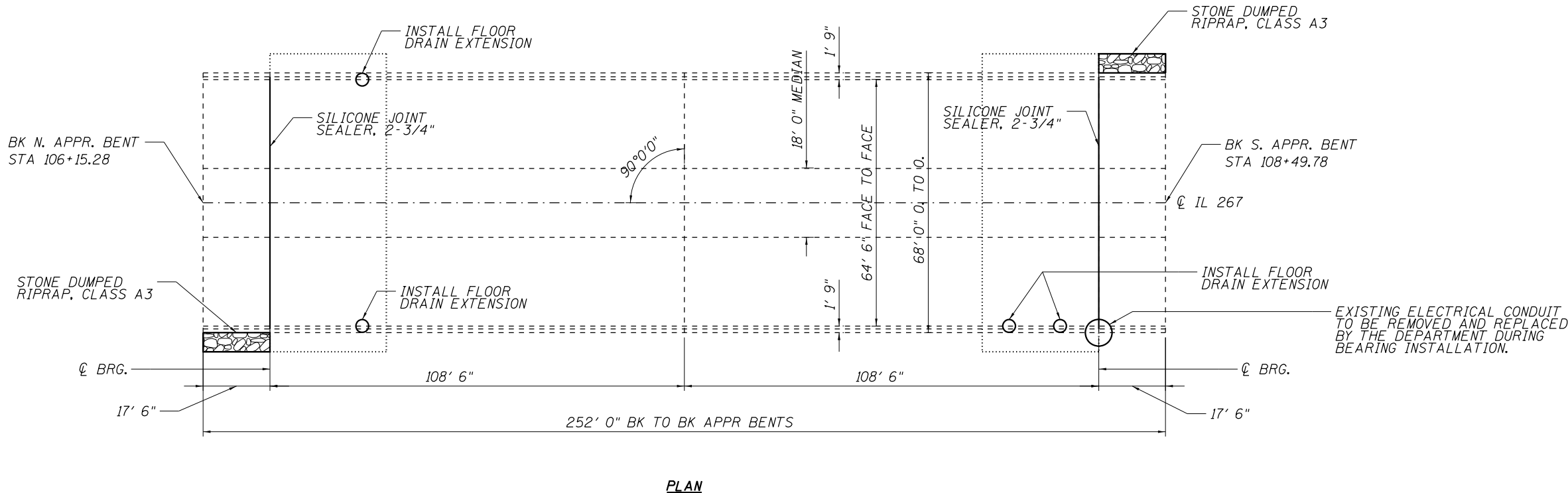
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	DRAWN -	REVISED -							72	(69-6&7)BRR(69-8)BRR&B/R-1,SLP	MORGAN	19	3
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PLOT DATE = 8/13/2020	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.				

[illegible]

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	DRAWN -	REVISED -					72	69-6&7)BRR(69-8)BRR&8)R-1,SLP	MORGAN	19	4
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PLOT DATE = 8/13/2020	DATE -	REVISED -		SCALE:	SHEET OF SHEETS	STA. TO STA.					



CROSS SECTION
(LOOKING SOUTH)



Expires 11-30-2020
9/22/2020

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".

SILICONE JOINT SEALER SHALL NOT BE INSTALLED UNTIL ALL BEARING REPLACEMENTS ARE COMPLETED.

EXISTING ELECTRICAL CONDUIT AT THE SOUTH ABUTMENT SHALL BE REMOVED AND REPLACED BY THE DEPARTMENT TO FACILITATE BEARING INSTALLATION. THE ENGINEER SHALL NOTIFY DISTRICT 6 OPERATIONS TO SCHEDULE CONDUIT WORK.

TOTAL BILL OF MATERIAL (069-0034)

ITEM	UNIT	QUANTITY
Silicone Joint Sealer 2.75"	Foot	132
Elastomeric Bearing Assembly, Type I	Each	18
Jack and Remove Existing Bearings	Each	18
Furnishing and Erecting Structural Steel	Pound	4360
Anchor Bolts, 1" ϕ	Each	36
Floor Drain Extension	Each	4
Structural Repair of Concrete (Depth = or < 5")	Sq. Ft.	147
Stone Dumped Riprap, Class A3	Ton	30

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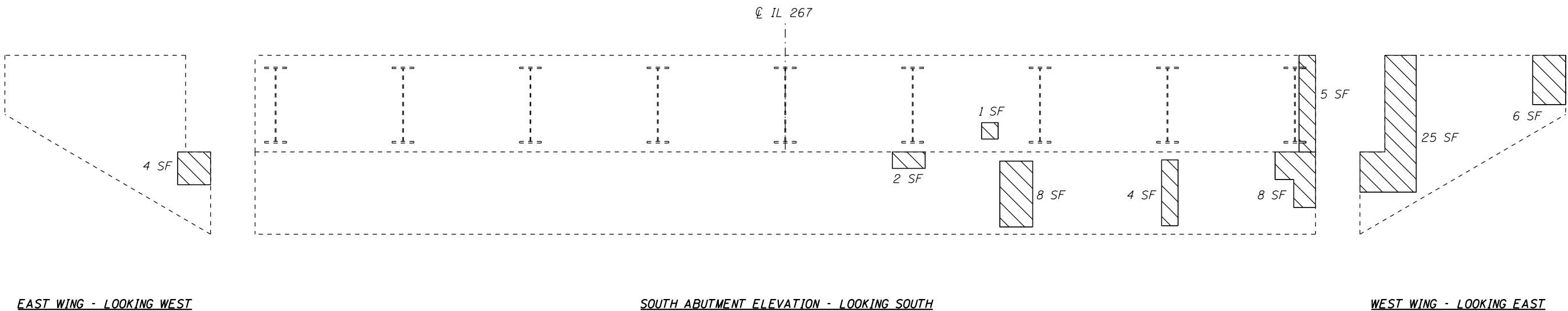
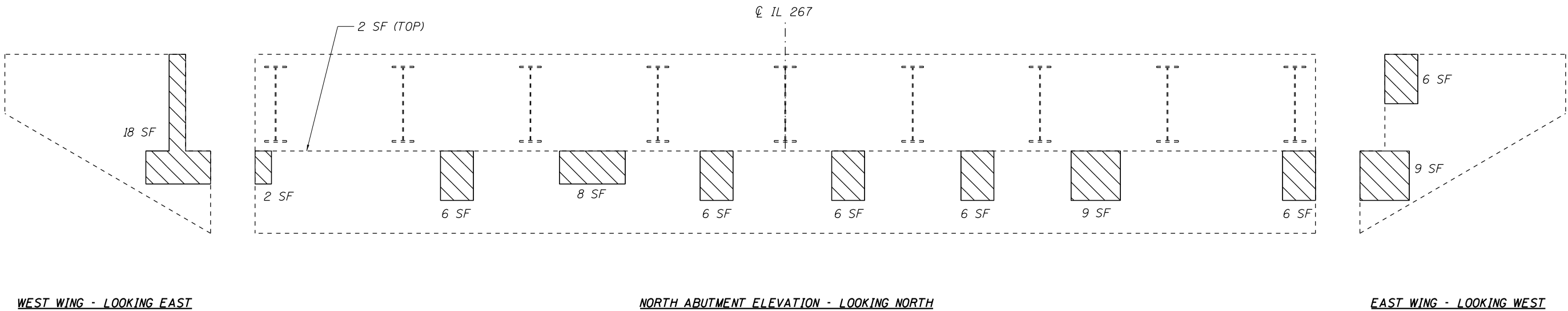
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PLOT DATE = 9/21/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE PLAN & ELEVATION
SN 069-0034

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	5
				CONTRACT NO. 72M47
		ILLINOIS	FED. AID PROJECT	



 STRUCTURAL REPAIR
OF CONCRETE AREAS

SUBSTRUCTURE REPAIR (069-0034)

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth < or = 5")	Sq. Ft.	147

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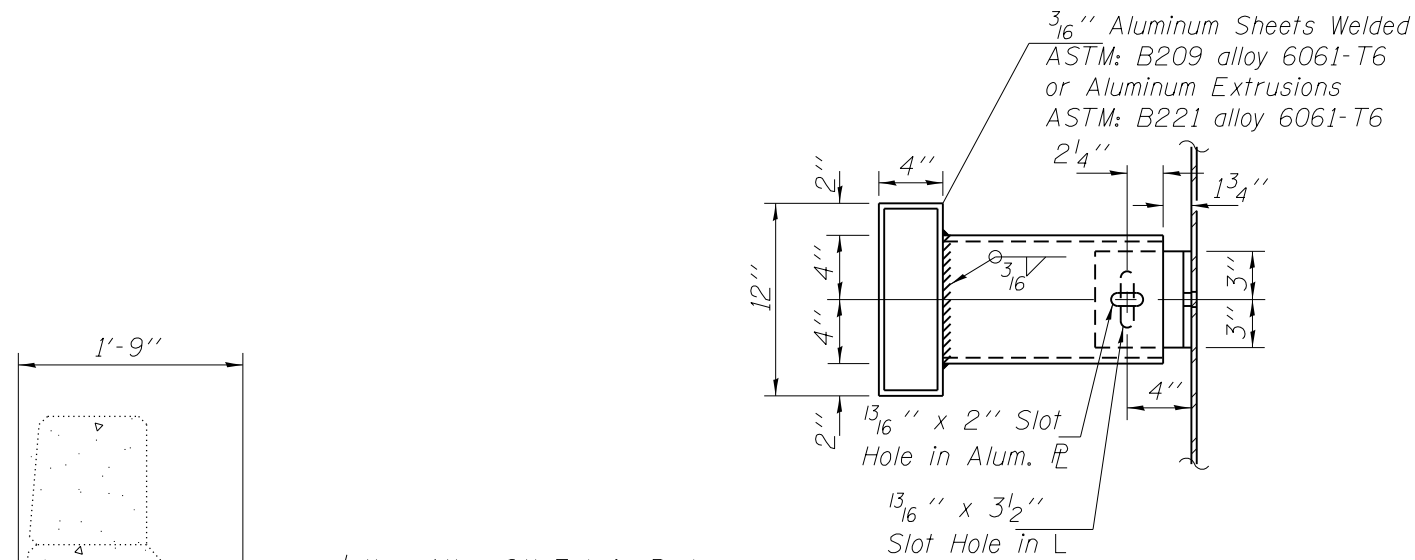
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

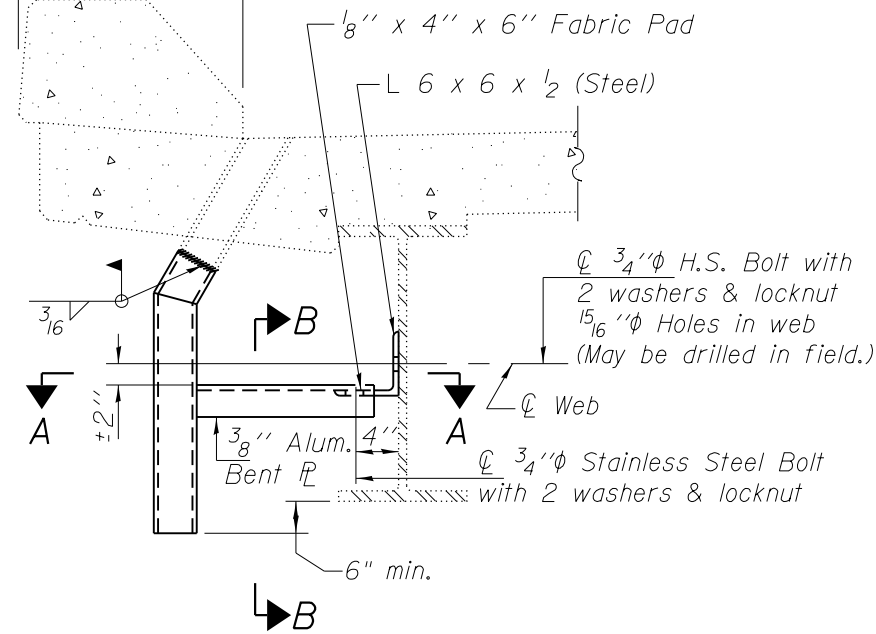
SUBSTRUCTURE REPAIR DETAILS
SN 069-0034

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

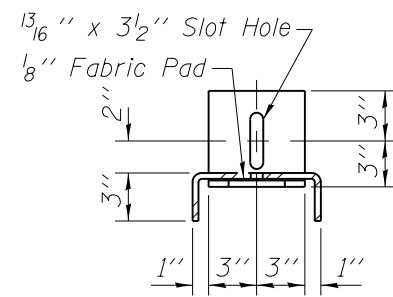
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72	69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	6
CONTRACT NO. 72M47				
ILLINOIS			FED. AID PROJECT	



SECTION A-A



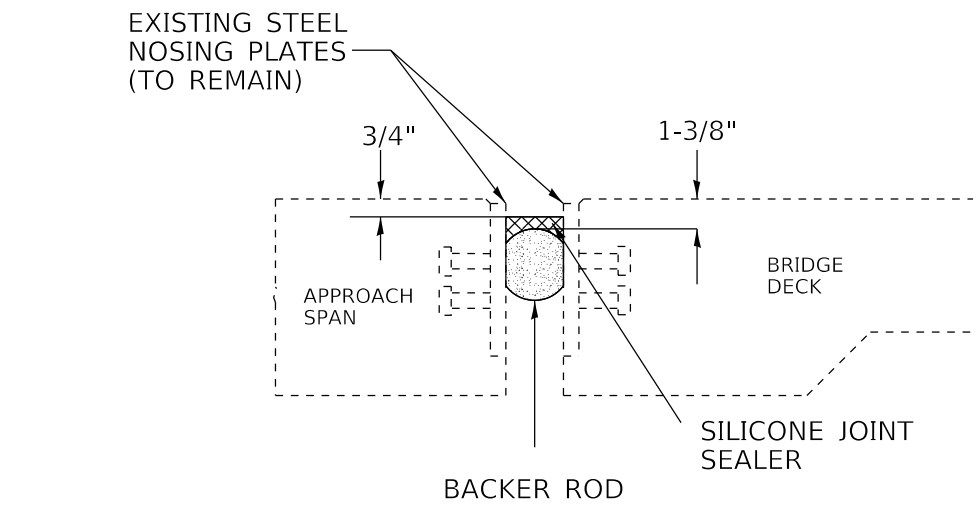
SECTION AT DRAIN



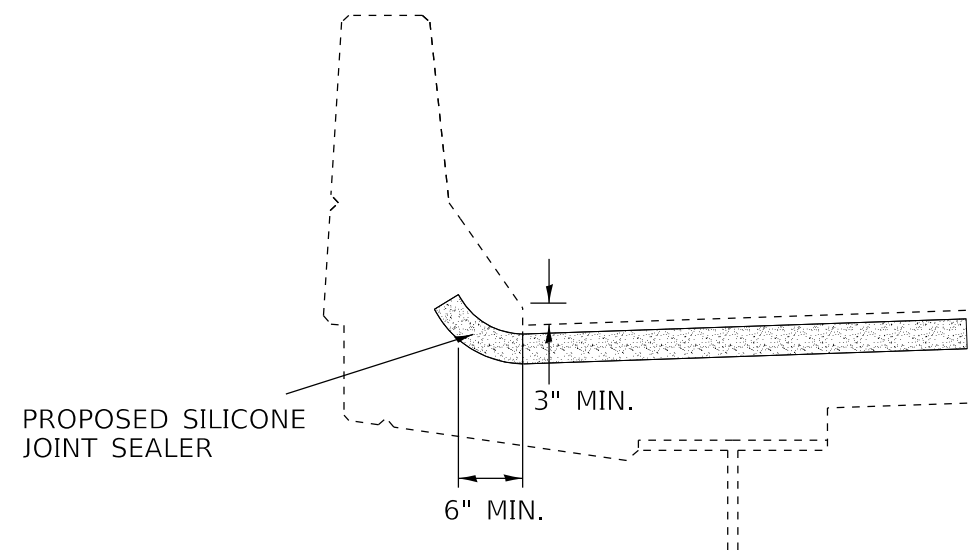
SECTION B-B

FLOOR DRAIN REPAIR (069-0034)

ITEM	UNIT	QUANTITY
Floor Drain Extensions	Each	4



ABUTMENT JOINT CROSS SECTION:
SILICONE JOINT SEALER, 2-3/4"



TYPICAL PARAPET CROSS SECTION:
SILICONE JOINT SEALER END TREATMENT

NOTES:

- JOINT WIDTHS SPECIFIED IN PLANS ARE AT 50° F. THE CONTRACTOR SHALL INSTALL BACKER ROD HAVING A DIAMETER 25% GREATER THAN THE JOINT OPENING AT THE TIME OF INSTALLATION.
- THE COST OF REMOVING AND DISPOSING OF EXISTING JOINT SEAL MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR SILICONE JOINT SEALER.

JOINT REPAIR (069-0034)

ITEM	UNIT	QUANTITY
Silicone Joint Sealer 2-3/4"	Foot	132

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
SN 069-0034

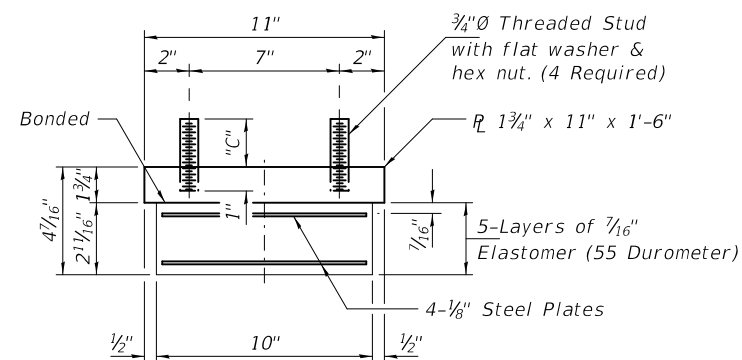
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72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	7
CONTRACT NO. 72M47				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

ELEVATION AT ABUTMENT

SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

(See Table for Dimension "C")

Note:

Shim plates shall not be placed under Bearing Assembly.

BEAM REACTIONS

$R_{\mathcal{P}}$	(K)	64.4
$R_{\mathcal{L}}$	(K)	45.2
$Imp.$	(K)	9.7
R (Total)	(K)	119.3

Notes:

Cross Frame 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 = 69 Tons.

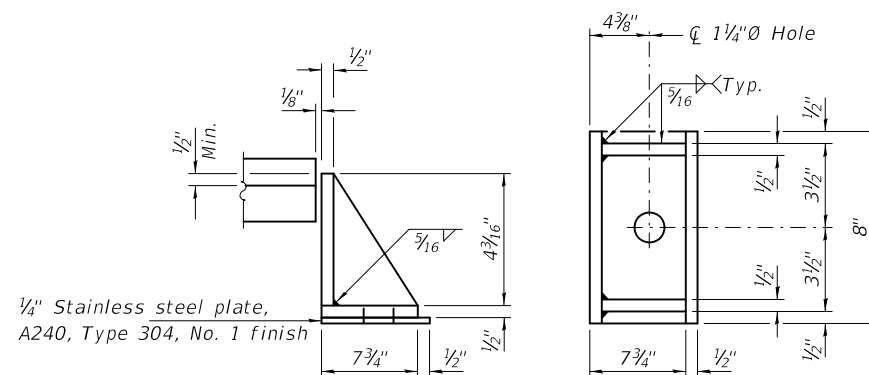
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 ($F_y=36\text{ksi}$). The corresponding specified grade of AASHTO M314 anchor bolts may be used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

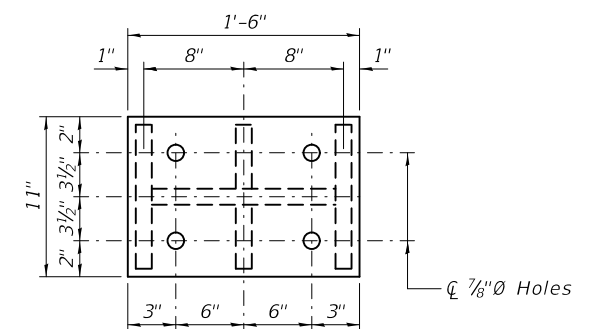
TABLE OF DIMENSIONS

NORTH ABUTMENT					SOUTH ABUTMENT				
Girder	"A"	"B"	"C"	"t"	Girder	"A"	"B"	"C"	"t"
1	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3 $\frac{1}{4}$ "	$\frac{1}{2}$ "	1	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3"	$\frac{1}{4}$ "
2	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	2 $\frac{7}{8}$ "	$\frac{3}{8}$ "	2	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	2 $\frac{3}{4}$ "	0"
3	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	3"	$\frac{1}{4}$ "	3	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3 $\frac{1}{4}$ "	$\frac{1}{2}$ "
4	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	2 $\frac{7}{8}$ "	$\frac{1}{8}$ "	4	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3"	$\frac{1}{4}$ "
5	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	2 $\frac{3}{4}$ "	0"	5	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	2 $\frac{3}{4}$ "	0"
6	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	2 $\frac{7}{8}$ "	$\frac{3}{8}$ "	6	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3 $\frac{1}{8}$ "	$\frac{3}{8}$ "
7	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	2 $\frac{7}{8}$ "	$\frac{1}{8}$ "	7	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3 $\frac{1}{8}$ "	$\frac{3}{8}$ "
8	11 $\frac{1}{16}$ "	9 $\frac{1}{16}$ "	3"	$\frac{1}{4}$ "	8	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3 $\frac{3}{8}$ "	$\frac{5}{8}$ "
9	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	3 $\frac{3}{8}$ "	$\frac{5}{8}$ "	9	10 $\frac{1}{16}$ "	8 $\frac{1}{16}$ "	2 $\frac{3}{4}$ "	0"

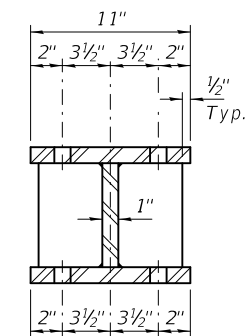


SIDE RETAINER

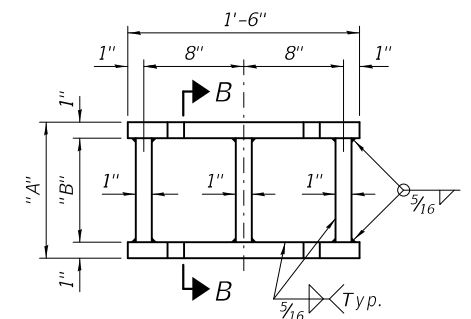
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN TOP AND BOTTOM PLATE

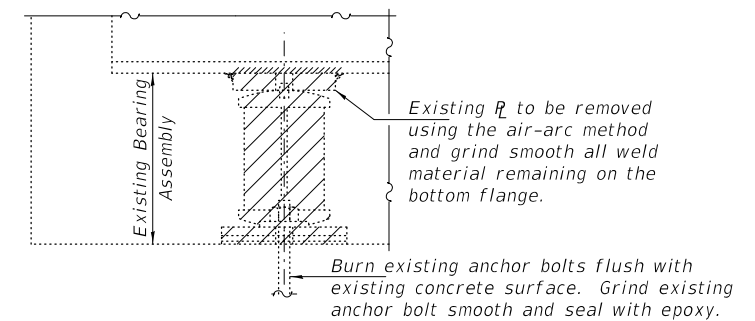


SECTION B-B



STEEL EXTENSION DETAIL

(See Table for Dimensions "A" & "B")

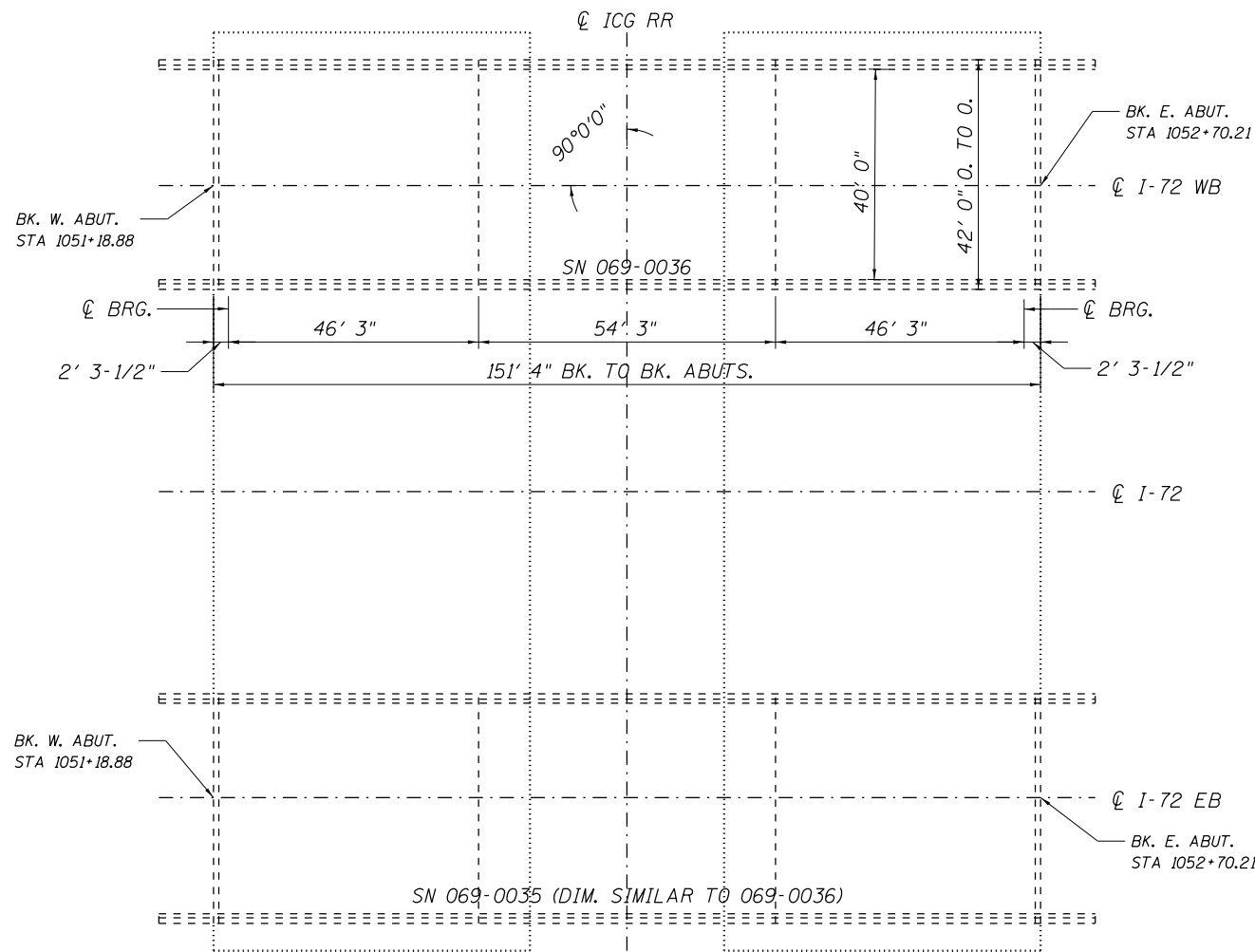


EXISTING BEARING REMOVAL DETAIL

*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 Anchor Bolts, 1"Ø	Pound	4360
	Each	36



The diagram consists of two parts: an elevation view at the top and a plan view at the bottom.

Elevation View: Shows a cross-section of a bridge with a central span and two side spans. The central span is labeled "ICG RR" (Interlocking Concrete Girder Railroad) and has a centerline "CL ICG RR". The side spans are labeled "W33x130" (Wide Flange Steel Beam). The bridge is supported by piers labeled "E" and "F". The bridge deck is shown with a top flange and a bottom flange. The bridge is shown in a perspective view, with the top flange and bottom flange visible.

Plan View: Shows the bridge from above, with dimensions in feet and inches. The total length of the bridge is 42' 0". The bridge is divided into three sections: a left section of 12' 0", a central section of 12' 0", and a right section of 9' 3". The bridge is supported by piers labeled "E" and "F". The bridge deck is shown with a top flange and a bottom flange. The bridge is shown in a perspective view, with the top flange and bottom flange visible.

TOTAL BILL OF MATERIAL (069-0035 & 0036)

ITEM	UNIT	QUANTITY
Slope Wall Removal	Sq. Yd.	196
Slope Wall, Special	Sq. Yd.	196
Controlled Low Strength Material	Cu. Yd.	65
Structural Repair of Concrete (Depth = or < 5")	Sq. Ft.	65
Concrete Structures	Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated	Pound	380
Temporary Shoring and Cribbing	Each	1
Grading and Shaping Ditches	Foot	900

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.

THE EASTBOUND PASSING LANE OF I-72 SHALL BE CLOSED FOR THE DURATION OF THE COLUMN REPAIR WORK ON SN 069-0035.

USER NAME = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/13/2020	DATE -	REVISED -

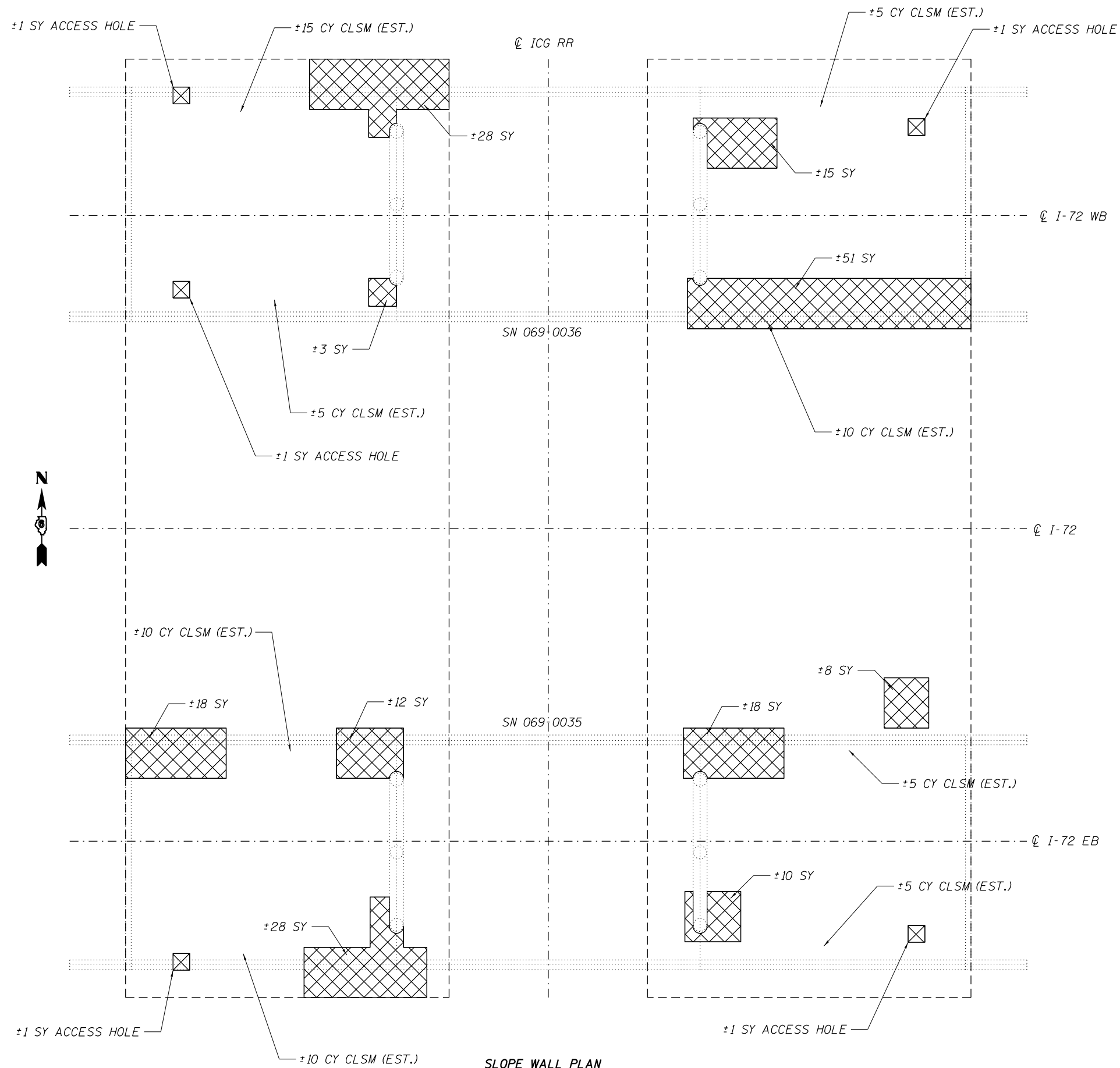
BRIDGE PLAN & ELEVATION
SN 069-0035 & 0036

SCALE:	SHEET 1	OF 4	SHEETS	STA.	TO STA.
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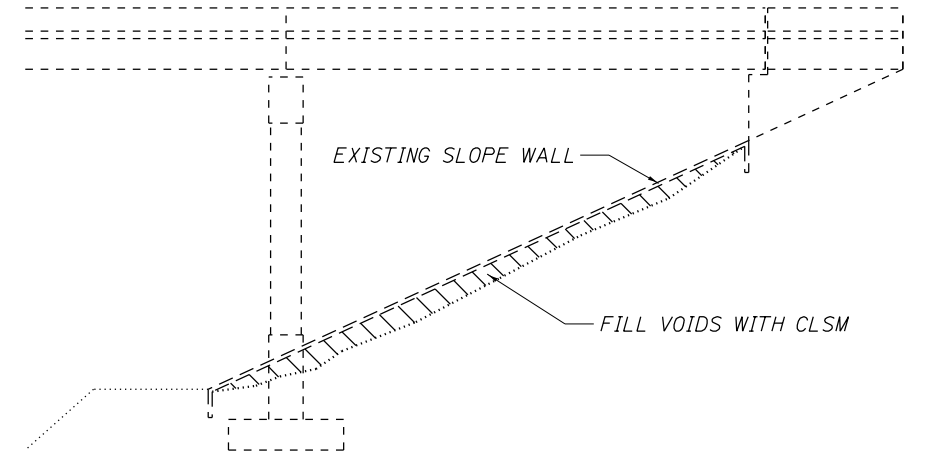
F.A.I. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
72	[69-6&7]BRR(69-8)BRR&BJR-1,SLP		MORGAN	19	9
			CONTRACT NO. 72M47		
		ILLINOIS	FED. AID PROJECT		

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SLOPE WALL PLAN



TYPICAL VOID ELEVATION



SLOPE WALL REPAIRS (069-0035 & 0036)

ITEM	UNIT	QUANTITY
Slope Wall Removal	Sq. Yd.	196
Slope Wall, Special	Sq. Yd.	196
Controlled Low Strength Material	Cu. Yd.	65

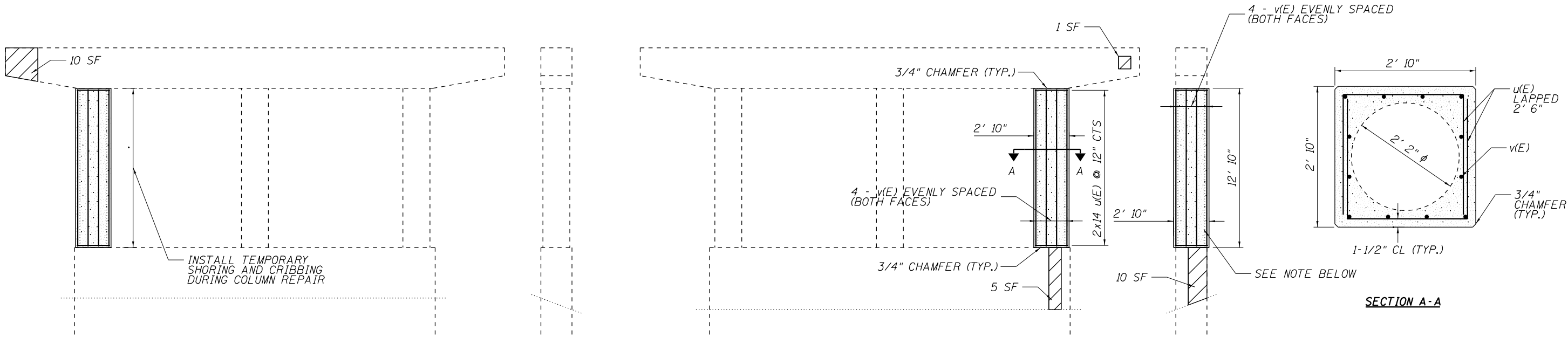
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

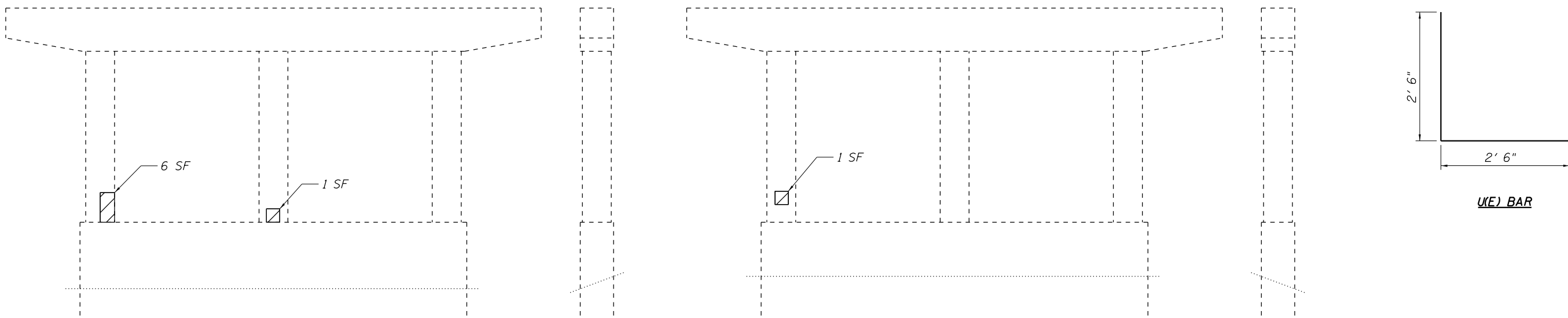
**SLOPE WALL REPAIR DETAILS
SN 069-0035 & 0036**

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	10
CONTRACT NO. 72M47				
ILLINOIS FED. AID PROJECT				



WEST PIER - WEST FACE WEST PIER - SOUTH END WEST PIER - EAST FACE WEST PIER - NORTH END



EAST PIER - WEST FACE EAST PIER - SOUTH END EAST PIER - EAST FACE EAST PIER - NORTH END



NOTE: REMOVAL OF UNSOUND CONCRETE, SURFACE PREPARATION, AND REINFORCEMENT PREPARATION ON THE COLUMN TO BE ENCASED SHALL CONFORM TO THE SPECIAL PROVISION FOR STRUCTURAL REPAIR OF CONCRETE.

COLUMN REPAIR REINFORCING				
BAR	#	SIZE	LENGTH	SHAPE
v(E)	12	#5	12' 6"	—
u(E)	28	#5	7' 6"	⌊

BEAM REACTION TABLE AT TEMPORARY SHORING (SEE SPECIAL PROVISIONS)	
DEAD LOAD	72.0 KIPS
LIVE LOAD	44.28 KIPS
IMPACT	12.84 KIPS
TOTAL	129.12 KIPS

SUBSTRUCTURE REPAIRS (069-0035)		UNIT	QUANTITY
Structural Repair of Concrete (Depth = or < 5')		Sq. Ft.	34
Concrete Structures		Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated		Pound	380
Temporary Shoring and Cribbing		Each	1

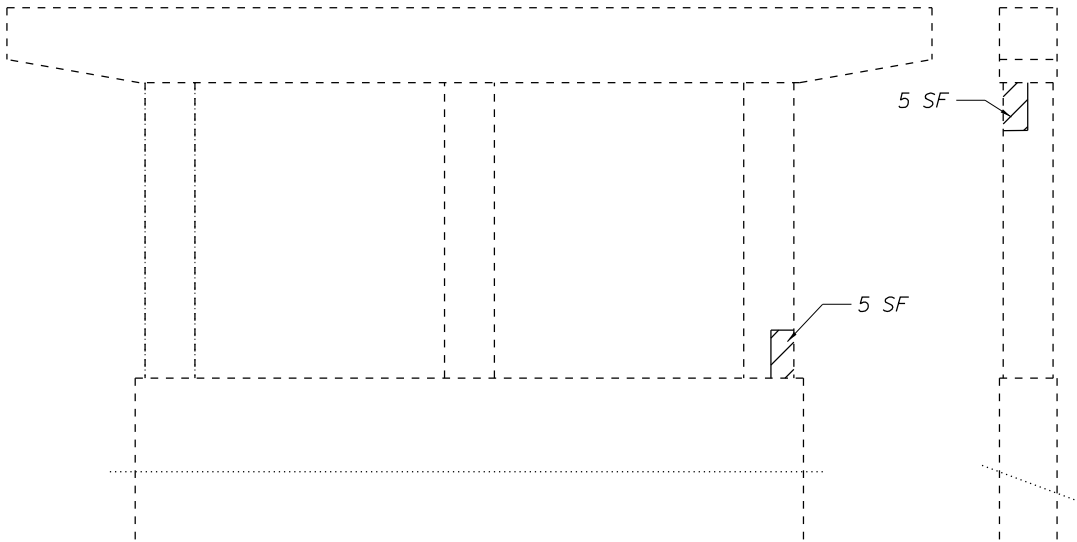
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR DETAILS SN 069-0035			
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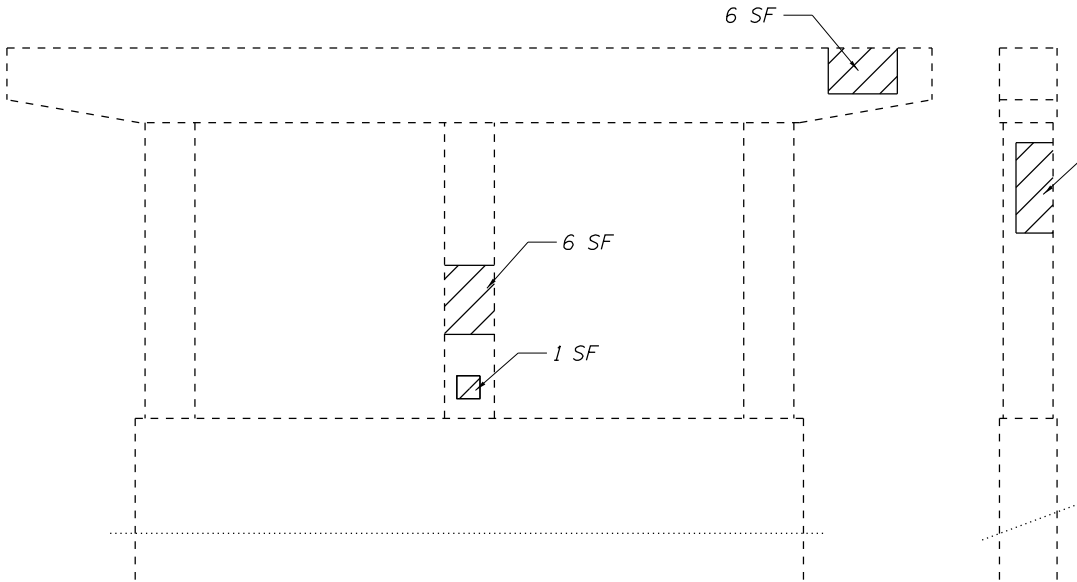
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72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	11
				CONTRACT NO. 72M47
		ILLINOIS	FED. AID PROJECT	



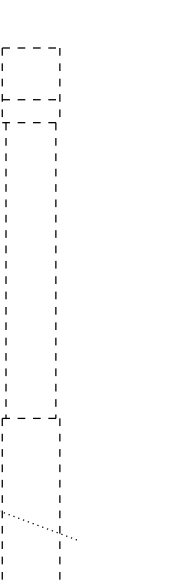
WEST PIER - WEST FACE



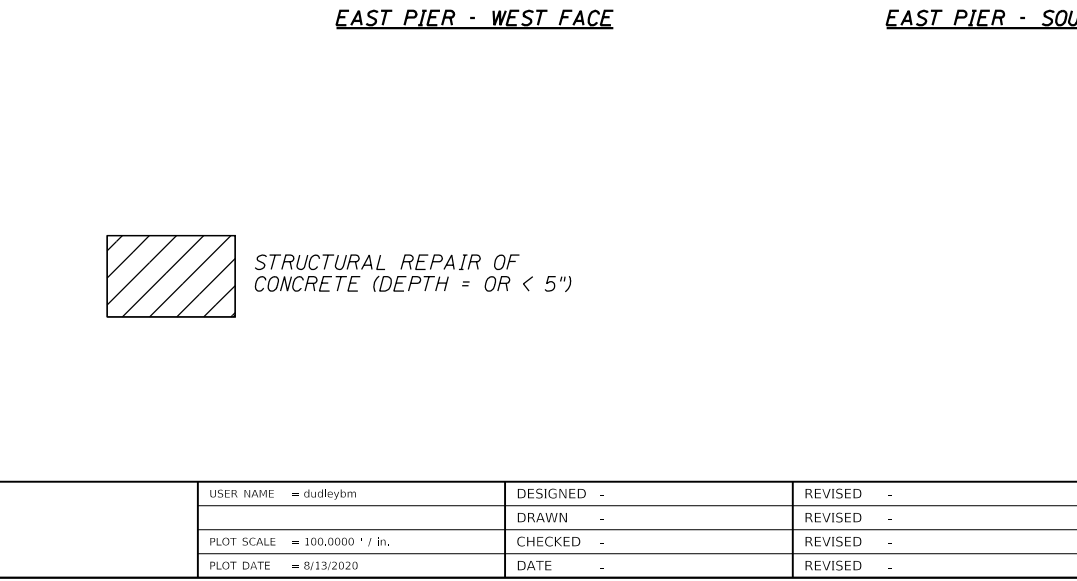
WEST PIER - SOUTH END



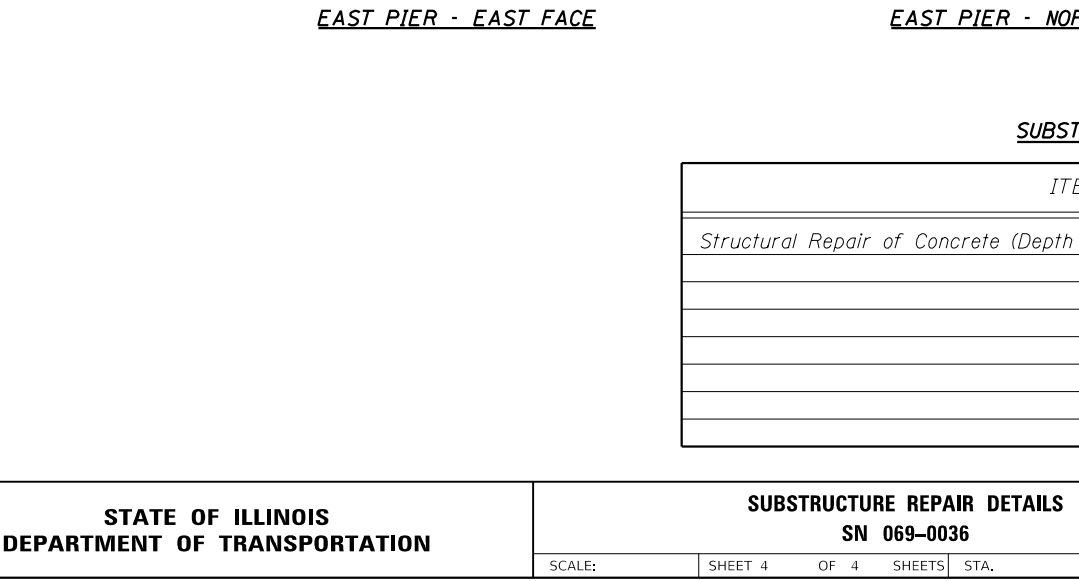
WEST PIER - EAST FACE



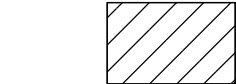
WEST PIER - NORTH END



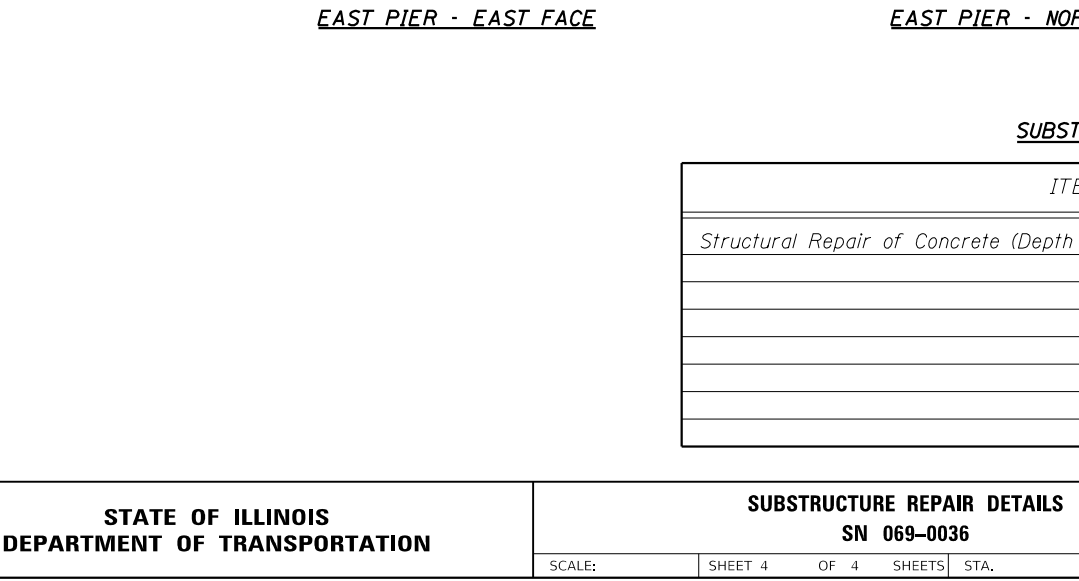
EAST PIER - WEST FACE



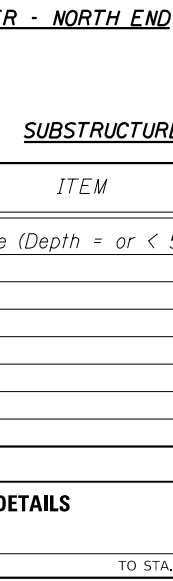
EAST PIER - SOUTH END



STRUCTURAL REPAIR OF
CONCRETE (DEPTH = OR < 5")



EAST PIER - EAST FACE



EAST PIER - NORTH END

SUBSTRUCTURE REPAIRS (069-0036)

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth = or < 5")	Sq. Ft.	31

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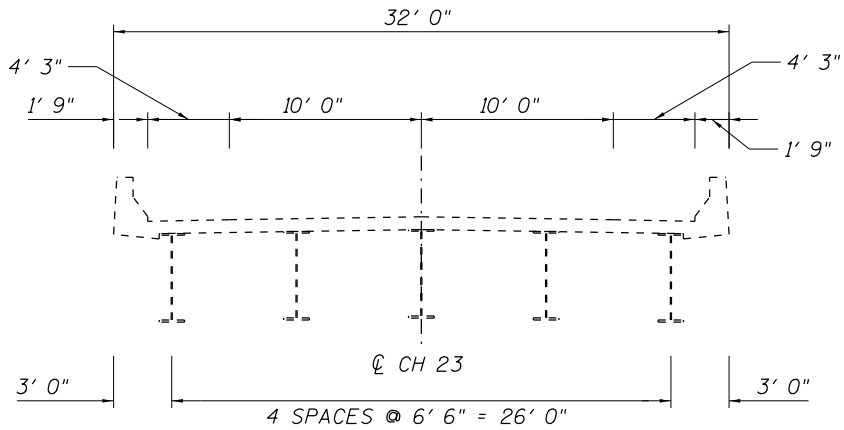
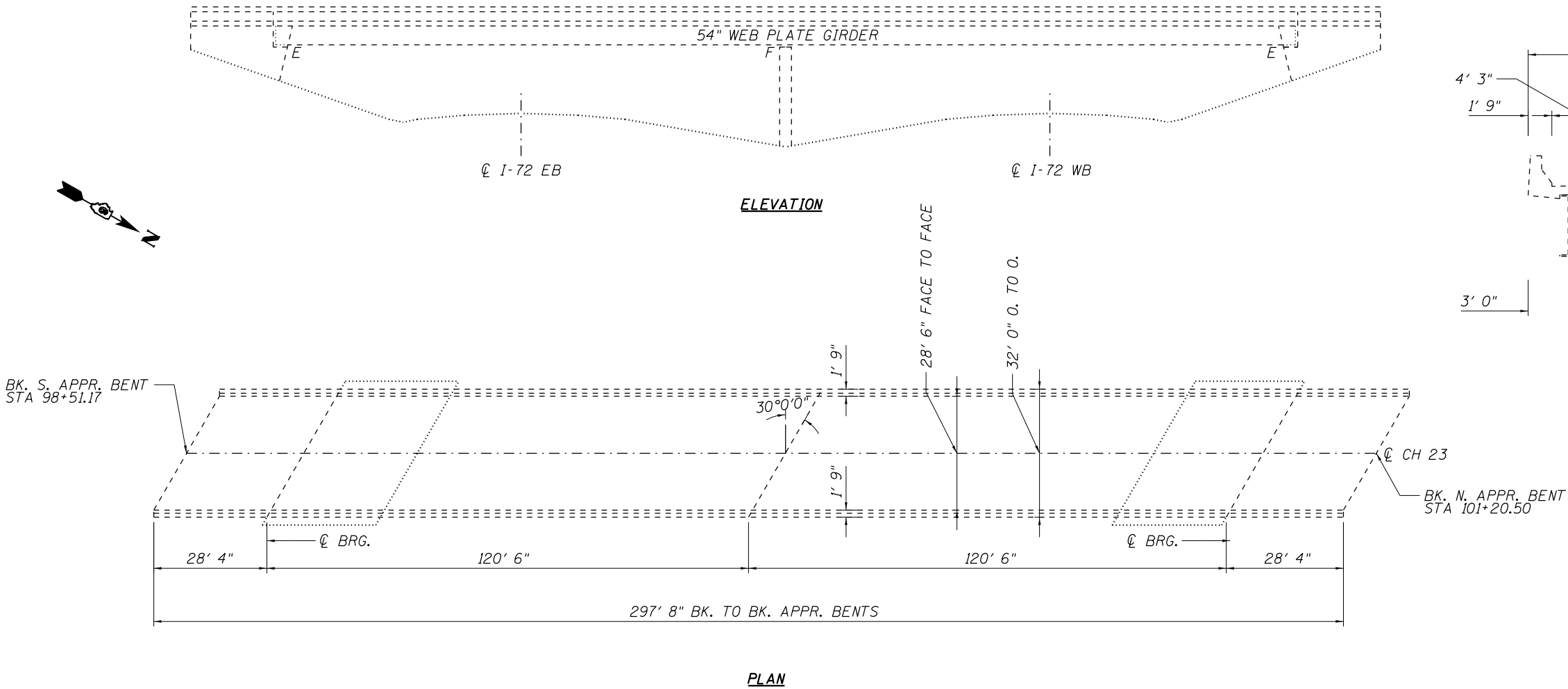
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PLOT DATE = 8/13/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR DETAILS SN 069-0036			
SCALE:	SHEET 4	OF 4 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	12
				CONTRACT NO. 72M47
				ILLINOIS FED. AID PROJECT

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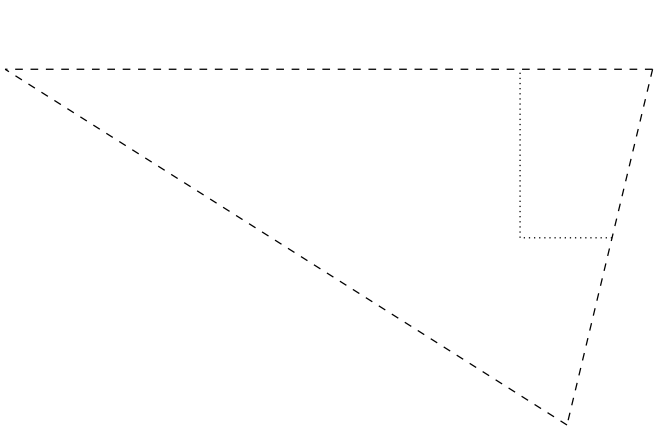
TOTAL BILL OF MATERIAL (069-0054)

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth = or < 5")	Sq. Ft.	167

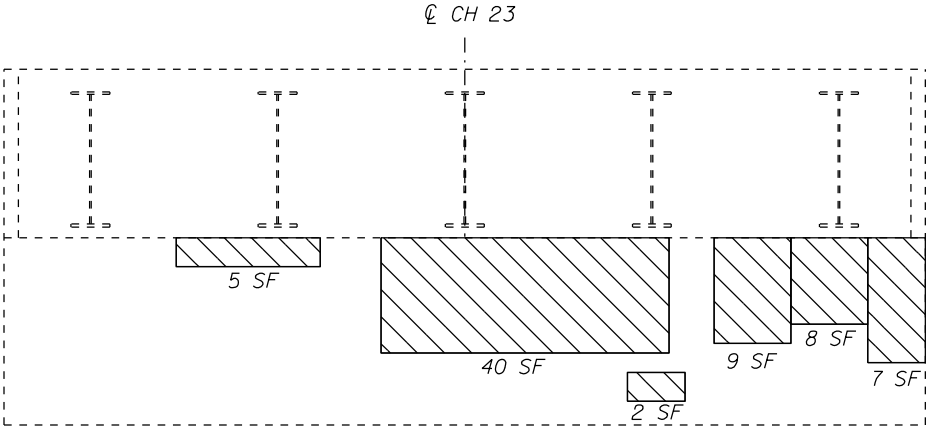
STRUCTURE GENERAL NOTES:

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.

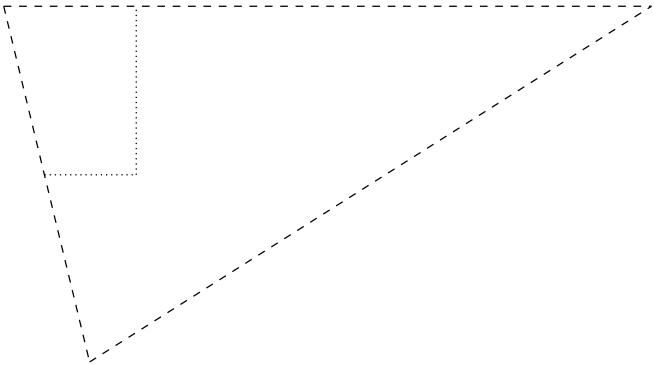
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	PLOT DATE = 8/13/2020	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
SCALE:		SHEET 1	OF 2	SHEETS	STA.	TO STA.					



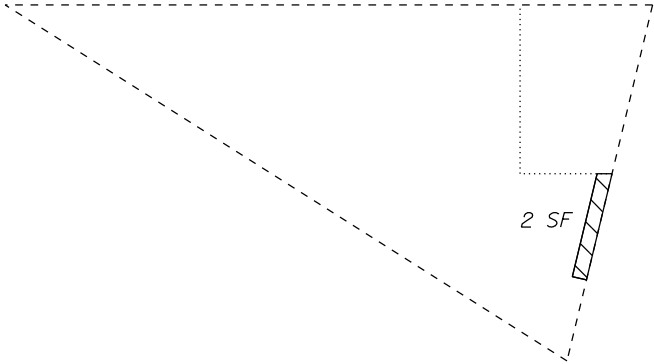
EAST WING - LOOKING WEST



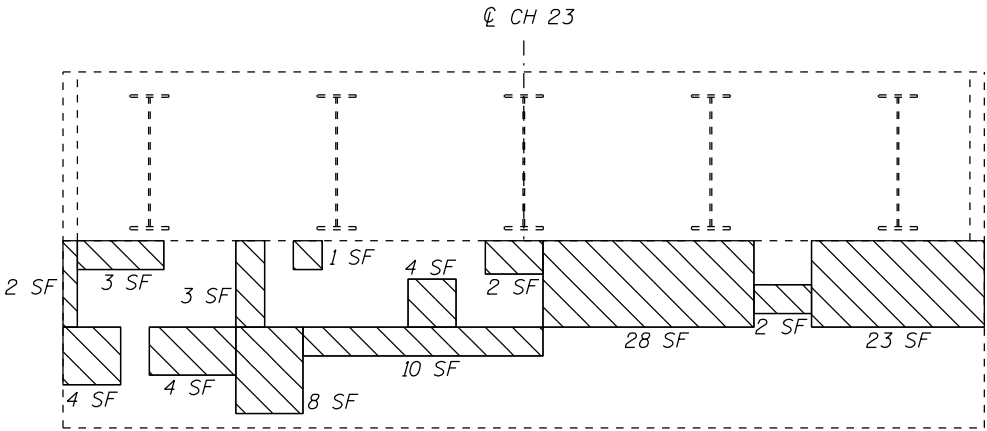
SOUTH ABUTMENT ELEVATION - LOOKING SOUTH



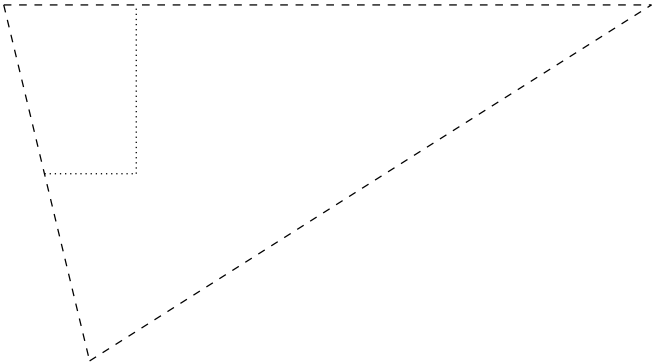
WEST WING - LOOKING EAST



WEST WING - LOOKING EAST



NORTH ABUTMENT ELEVATION - LOOKING NORTH



EAST WING - LOOKING WEST

SUBSTRUCTURE REPAIR (069-0054)

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth = or < 5")	Sq. Ft.	167

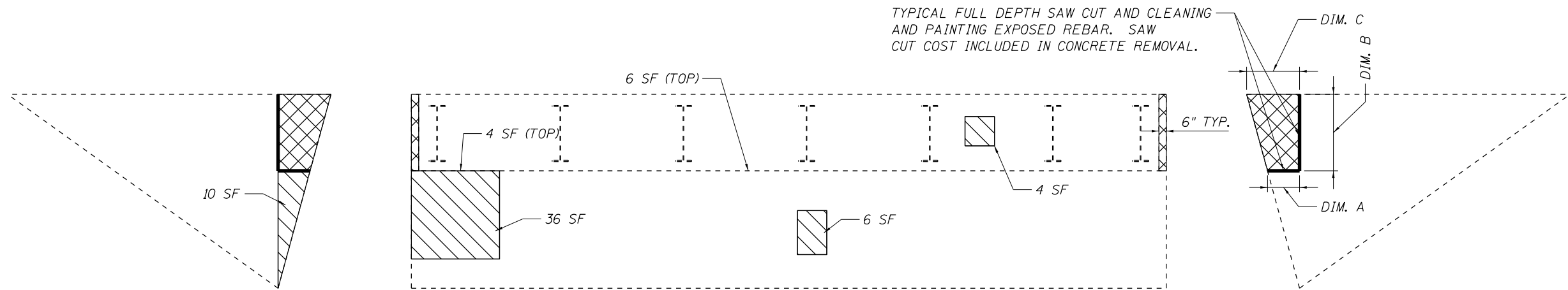
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR DETAILS			
SN 069-0054			
SCALE:	SHEET 2	OF 2 SHEETS	STA. TO STA.

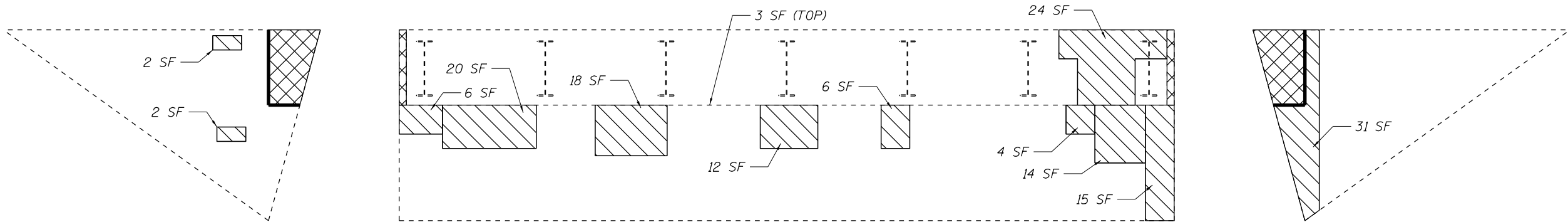
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72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	14
				CONTRACT NO. 72M47
				ILLINOIS FED. AID PROJECT



SOUTH WING - LOOKING NORTH

WEST ABUTMENT ELEVATION - LOOKING WEST

NORTH WING - LOOKING SOUTH



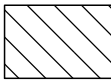
NORTH WING - LOOKING SOUTH

EAST ABUTMENT ELEVATION - LOOKING EAST

SOUTH WING - LOOKING NORTH

NOTE: REMOVED CONCRETE SHALL NOT BE REPLACED.

ABUT.	DIM A (FT)	DIM B (FT)	DIM C (FT)	CONC. REM. (CY)	CLEAN & PAINT EXPOSED REBAR (SF)
NW	3.75	4.91	5.32	0.41	4.33
SW	3.75	4.88	5.31	0.41	4.31
NE	3.75	4.96	5.34	0.42	4.35
SE	3.75	4.85	5.30	0.41	4.30
			TOTALS	1.65	17.30



STRUCTURAL REPAIR
OF CONCRETE AREAS



CONCRETE REMOVAL AREAS

SUBSTRUCTURE REPAIRS (069-0055)

ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	1.7
Cleaning and Painting Exposed Rebar	Sq Ft	18
Structural Repair of Concrete (Depth = or < 5")	Sq Ft	223

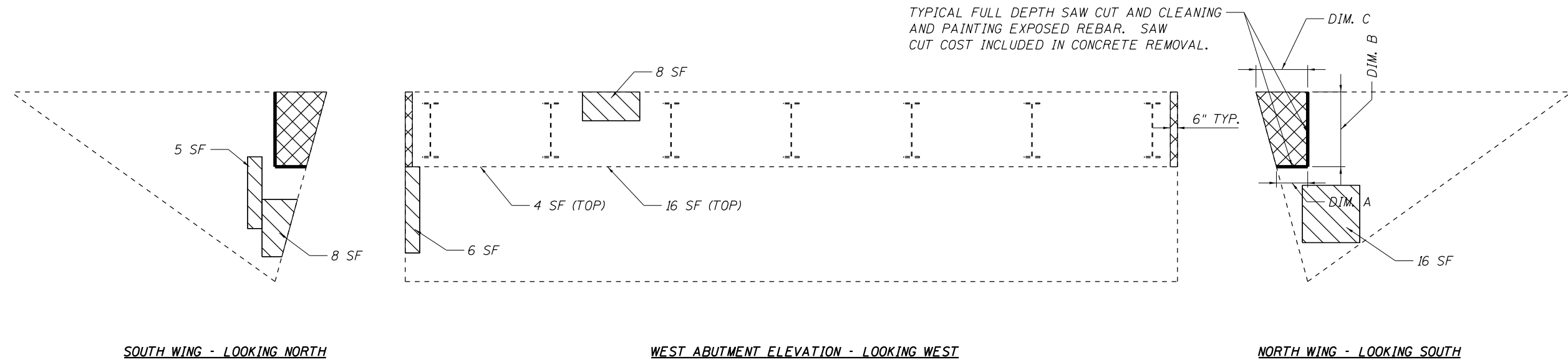
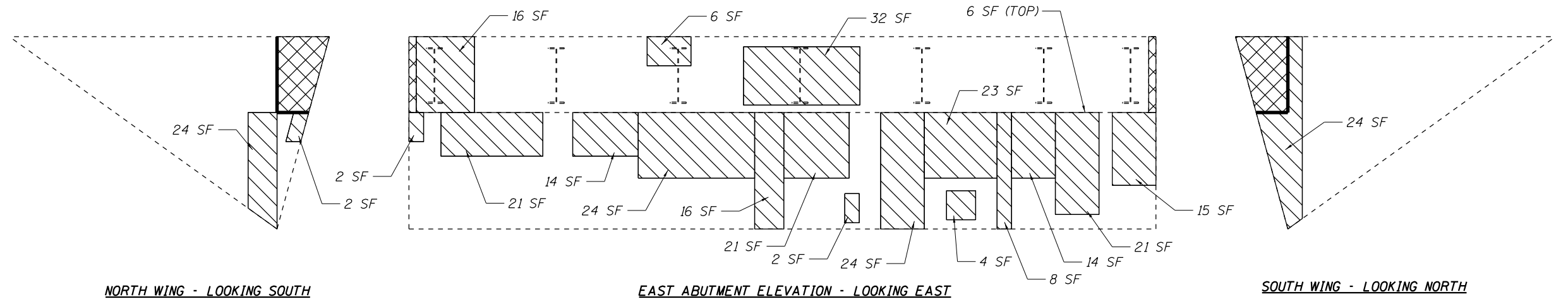
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PLOT DATE = 8/13/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

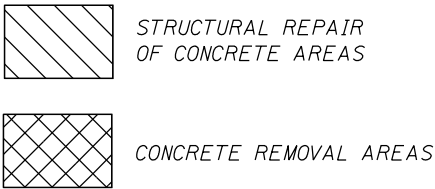
SUBSTRUCTURE REPAIR DETAILS SN 069-0055			
SCALE:	SHEET 2	OF 5 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	16
				CONTRACT NO. 72M47
				ILLINOIS FED. AID PROJECT



NOTE: REMOVED CONCRETE SHALL NOT BE REPLACED.

ABUT.	DIM A (FT)	DIM B (FT)	DIM C (FT)	CONC. REM. (CY)	CLEAN & PAINT EXPOSED REBAR (SF)
NW	3.75	5.04	5.36	0.43	4.40
SW	3.75	4.90	5.32	0.41	4.33
NE	3.75	4.96	5.34	0.42	4.35
SE	3.75	4.87	5.31	0.41	4.31
			TOTALS	1.66	17.39



SUBSTRUCTURE REPAIRS (069-0056)

ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	1.7
Cleaning and Painting Exposed Rebar	Sq Ft	18
Structural Repair of Concrete (Depth = or < 5")	Sq Ft	382

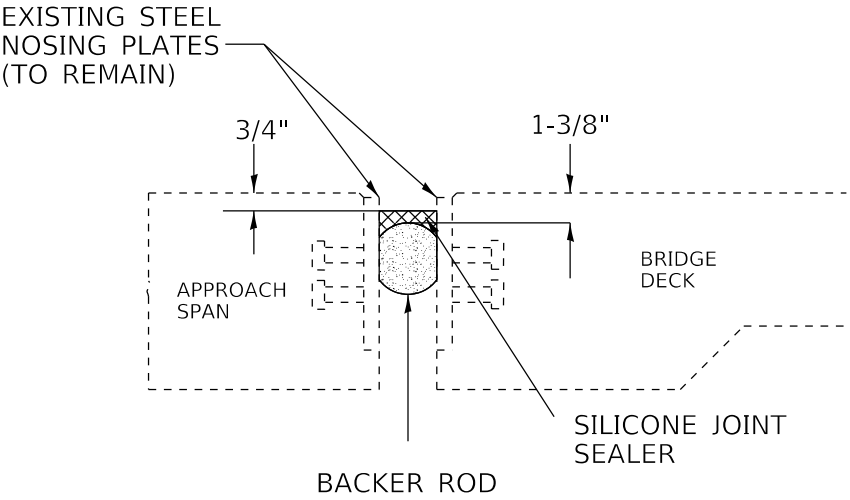
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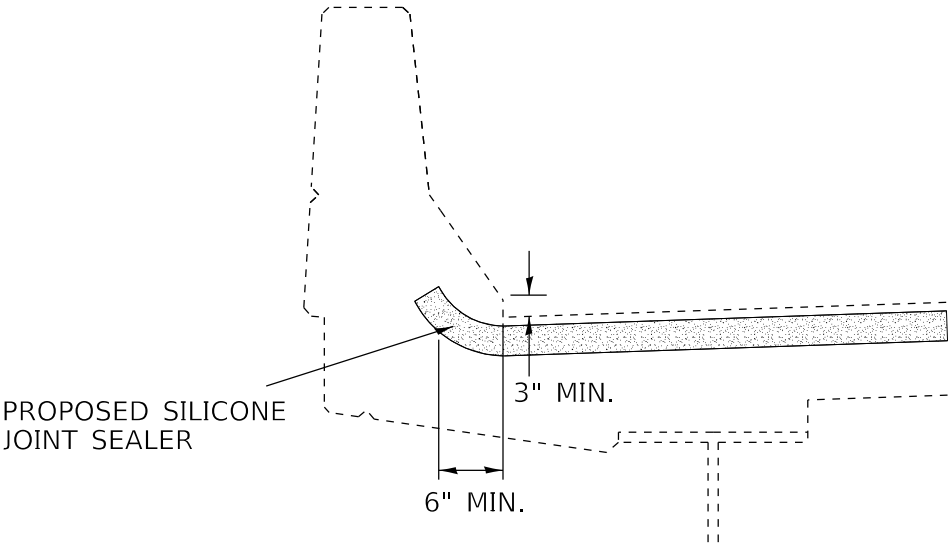
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR DETAILS SN 069-0056			
SCALE:	SHEET 3	OF 5 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	17
				CONTRACT NO. 72M47
				ILLINOIS FED. AID PROJECT



ABUTMENT JOINT CROSS SECTION:
SILICONE JOINT SEALER, 2-3/4"



TYPICAL PARAPET CROSS SECTION:
SILICONE JOINT SEALER END TREATMENT

NOTES:

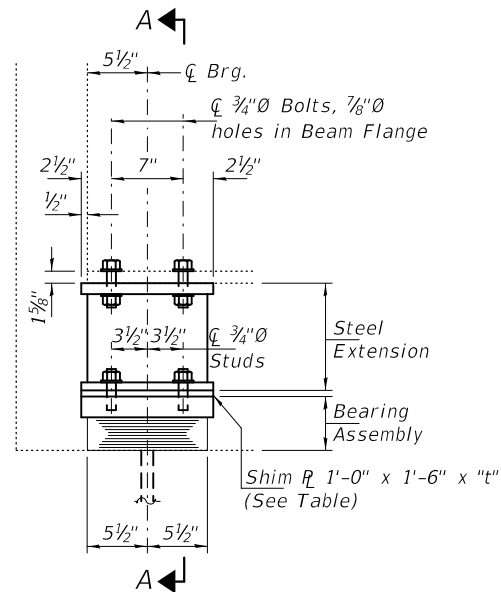
- JOINT WIDTHS SPECIFIED IN PLANS ARE AT 50° F. THE CONTRACTOR SHALL INSTALL BACKER ROD HAVING A DIAMETER 25% GREATER THAN THE JOINT OPENING AT THE TIME OF INSTALLATION.
- THE COST OF REMOVING AND DISPOSING OF EXISTING JOINT SEAL MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR SILICONE JOINT SEALER.

JOINT REPAIR (069-0055 & 0056)

ITEM	UNIT	QUANTITY
Silicone Joint Sealer 2-1/2"	Foot	220

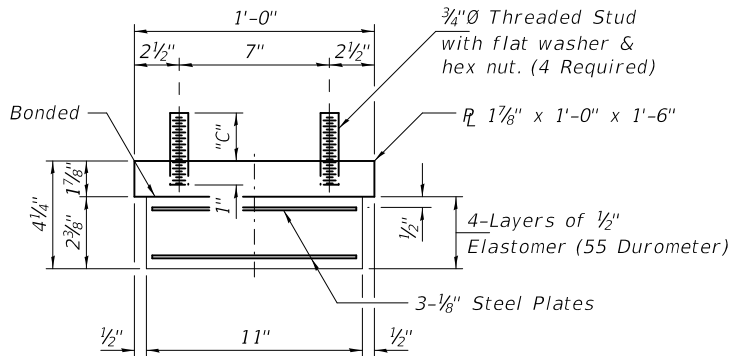
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		DRAWN -	REVISED -				72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	18
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -				CONTRACT NO. 72M47				
	PLOT DATE = 8/13/2020	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
SCALE:		SHEET 4 OF 5 SHEETS		STA.		TO STA.					



ELEVATION AT ABUTMENT

TYPE I ELASTOMERIC EXP. BRG.

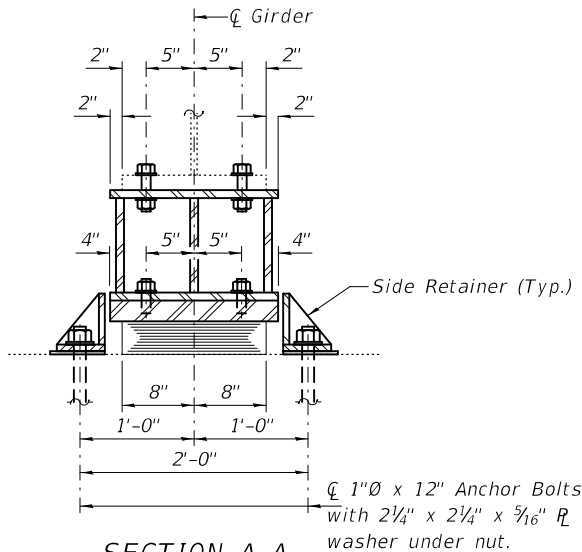


BEARING ASSEMBLY

(See Table for Dimension "C")

Note:

Shim plates shall not be placed under Bearing Assembly.



SECTION A-A

BEAM REACTIONS

R _L	(K)	66.6
R _T	(K)	53.2
Imp.	(K)	11.6
R (Total)	(K)	131.4

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.

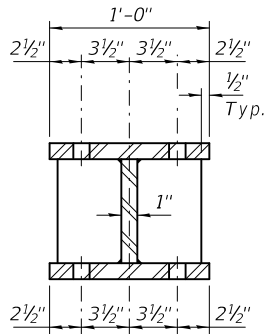
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 75 Tons.

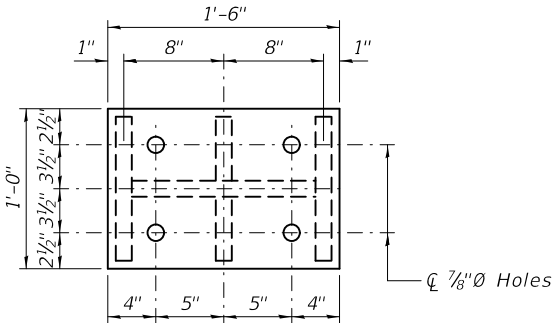
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of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

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

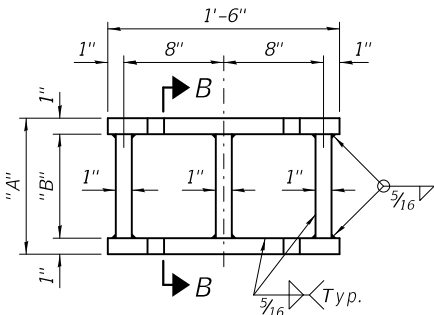
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



SECTION B-B



PLAN TOP AND BOTTOM PLATE



STEEL EXTENSION DETAIL

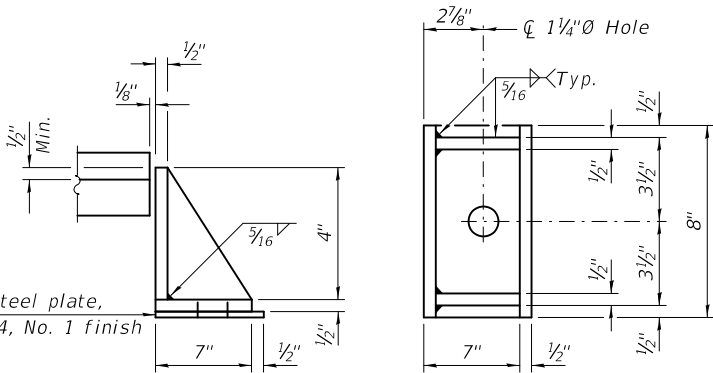
(See Table for Dimensions "A" & "B")

TABLE OF DIMENSIONS - SN 069-0055 (W.B.)

EAST ABUTMENT					WEST ABUTMENT				
Girder	"A"	"B"	"C"	"t"	Girder	"A"	"B"	"C"	"t"
1	9 1/8"	7 1/8"	3 3/8"	5/8"	1	9 1/8"	7 1/8"	3"	1/4"
2	9 7/8"	7 7/8"	2 3/4"	0"	2	9 1/8"	7 1/8"	3"	1/4"
3	9 7/8"	7 7/8"	3 1/8"	3/8"	3	9 7/8"	7 7/8"	3"	1/4"
4	9 7/8"	7 7/8"	2 3/4"	0"	4	9 7/8"	7 7/8"	3 3/8"	5/8"
5	9 7/8"	7 7/8"	2 7/8"	1/8"	5	9 7/8"	7 7/8"	2 3/4"	0"
6	9 7/8"	7 7/8"	2 7/8"	1/8"	6	9 7/8"	7 7/8"	2 3/4"	0"
7	9 1/8"	7 1/8"	3 1/8"	3/8"	7	9 1/8"	7 1/8"	2 3/4"	0"

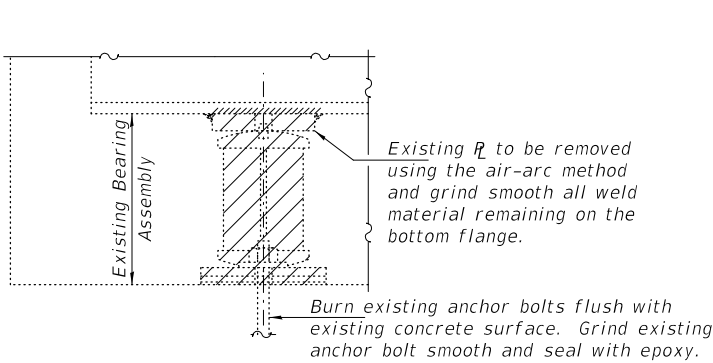
TABLE OF DIMENSIONS - SN 069-0056 (E.B.)

EAST ABUTMENT					WEST ABUTMENT				
Girder	"A"	"B"	"C"	"t"	Girder	"A"	"B"	"C"	"t"
1	9 1/8"	7 1/8"	2 7/8"	1/8"	1	9 1/8"	7 1/8"	2 3/4"	0"
2	9 7/8"	7 7/8"	3 1/4"	1/2"	2	9 1/8"	7 1/8"	3 1/4"	1/2"
3	9 7/8"	7 7/8"	2 7/8"	1/8"	3	9 1/8"	7 7/8"	3"	1/4"
4	9 1/8"	7 1/8"	3 1/8"	3/8"	4	9 1/8"	7 1/8"	3 1/4"	1/4"
5	9 7/8"	7 7/8"	2 7/8"	1/8"	5	9 1/8"	7 7/8"	3 1/8"	3/8"
6	9 1/8"	7 1/8"	3 1/8"	3/8"	6	9 1/8"	7 1/8"	3 1/8"	3/8"
7	9 1/8"	7 1/8"	3 1/4"	1/2"	7	9 1/8"	7 1/8"	2 7/8"	1/8"



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	28
Jack and Remove Existing Bearings	Each	28
Furnishing and Erecting Structural Steel	Pound	6700
Anchor Bolts, 1"Ø	Each	56

Expires: November 30, 2020
Seal applies to this sheet only.

DESIGNED - JEFFREY S. BURKE	EXAMINED	DATE - SEPTEMBER 22, 2020	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING REPLACEMENT DETAILS SN 069-0055 (W.B.) & -0056 (E.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - CHI-CHEUNG CHAU	ENGINEER OF STRUCTURAL SERVICES				72	(69-6&7)BRR(69-8)BRR&BJR-1,SLP	MORGAN	19	19
DRAWN - STEFFEN	PASSED	REVISED -			CONTRACT NO. 72M47				
CHECKED - JSB CCC	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -			SHEET NO. 5 OF 5 SHEETS				
					ILLINOIS FED. AID PROJECT				