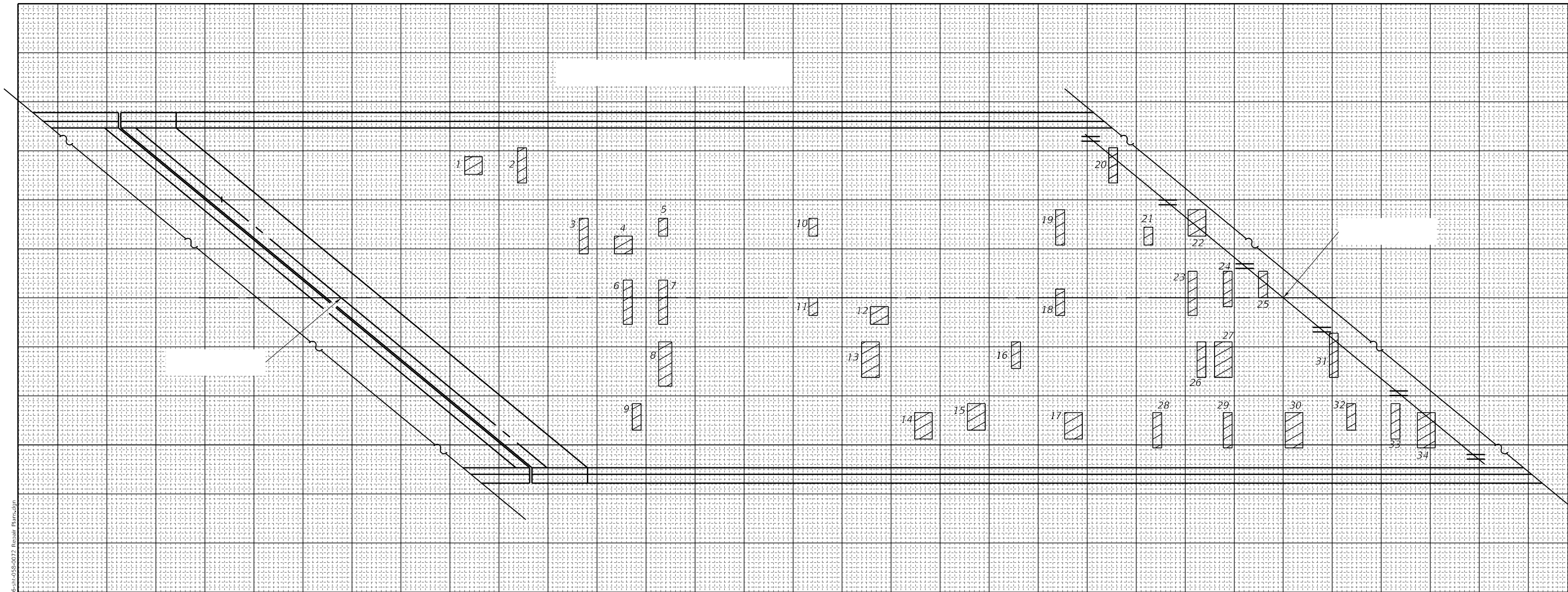


MODEL: Default  
FILE NAME: p:\1110-pw-bentley.com\FW\DOT\Documents\DOT-Offices\District 7\Projects\74996\CAD\at\CAD-sheets\0774996-sh-058-0072 Repair Plans.dgn



PATCH	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
1	2.0	2.0	0.4	
2	1.0	4.0	0.4	
3	1.0	4.0	0.4	
4	2.0	2.0	0.4	
5	1.0	2.0	0.2	
6	1.0	5.0	0.6	
7	1.0	5.0	0.6	
8	1.5	5.0		0.8
9	1.0	3.0	0.3	
10	1.0	2.0	0.2	
11	1.0	2.0	0.2	
12	2.0	2.0	0.4	
13	2.0	4.0		0.9
14	2.0	3.0		0.7
15	2.0	3.0		0.7
16	1.0	3.0	0.3	

PATCH	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
17	2.0	3.0		0.7
18	1.0	3.0	0.3	
19	1.0	4.0	0.4	
20	1.0	4.0	0.4	
21	1.0	2.0	0.2	
22	2.0	3.0		0.7
23	1.0	5.0	0.6	
24	1.0	4.0	0.4	
25	1.0	3.0	0.3	
26	1.0	4.0	0.4	
27	2.0	4.0		0.9
28	1.0	4.0	0.4	
29	1.0	4.0	0.4	
30	2.0	4.0		0.9
31	1.0	5.0	0.6	
32	1.0	3.0	0.3	

PATCH	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
33	1.0	4.0	0.4	
34	2.0	4.0		0.9
TOTALS			10.1	7.1
ROUND TO:			11	8

THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: 06-23-2019  
SURVEY BY: DPM & TMW  
METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES  
DECK SLAB REPAIR (FULL DEPTH, TYPE I) = 11 SQ YD  
DECK SLAB REPAIR (FULL DEPTH, TYPE II) = 8 SQ YD

REVISED SHEET 10-12-2021

	USER NAME = steffenmk	DESIGNED - T. Walk	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE DECK PATCHING, SOUTH ½ BRIDGE DECK				F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - T. Walk	REVISED -		SN. 058-0072				72	D7 BRIDGE REPAIRS 2022-2	MACON	15	10
	PLOT SCALE = 100,0000 ' / in.	CHECKED - D. Macklin	REVISED -						CONTRACT NO. 74996				
	PLOT DATE = 8/17/2021	DATE - August 2020	REVISED -		SCALE:				SHEET 7	OF 12	SHEETS	STA.	TO STA.
										ILLINOIS	FED. AID PROJECT		

ELEVATION AT ABUTMENT

TYPE I ELASTOMERIC EXP. BRG.

## BEARING ASSEMBLY

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

SECTION A-A

EXISTING BEARING REMOVAL DETAIL

*Cost included with Jack and  
Remove Existing Bearings.*

*SIDE RETAINER*

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

## BEAM REACTIONS

$R_{\mathcal{P}}$	(K)	77.0
$R_{\mathcal{L}}$	(K)	44.8
$Imp.$	(K)	8.1
$R$ (Total)	(K)	129.9

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 = 78 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.

New bearing plates, steel extensions, shim plates, side retainers, anchor bolts, connection bolts, nuts and washers shall be hot dip galvanized according to Special Provision "Hot Dip Galvanizing for Structural Steel".

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

PLAN TOP AND BOTTOM PLATE

SECTION B-B

### STEEL EXTENSION DETAIL

PARTIAL FRAMING PLAN

 - *Bearing Replacement*

### BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	2880
Anchor Bolts, 1"Ø	Each	24

1 REVISED SHEET 10-12-2021

TYI/REPS 5-17-2018

DESIGNED - Victor H. Veliz	<div> <div>    TIMOTHY A. DEGROOT  ENGINEER OF STRUCTURAL SERVICES </div> <div> DATE - SEPTEMBER 27, 2021 </div> </div>	<div> <div> STATE OF ILLINOIS  DEPARTMENT OF TRANSPORTATION </div> </div>	<div> <div> BEARING DETAILS  SN 058-0072 </div> </div>	F.A.I. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - Chi-Cheung Chau				<div> <div>    DAVID HURDELL  ENGINEER OF BRIDGES AND STRUCTURES </div> <div> REVISED -  REVISED - </div> </div>	D7 BRIDGE REPAIRS 2022-2	MACON	15	13
DRAWN - dhaburdell					CONTRACT NO. 74996			
CHECKED - VHV CCC					SHEET NO. 10 OF 12 SHEETS			