

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3B)BP	LOGAN	14	1
		ILLINOIS	CONTRACT NO. 72N04	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

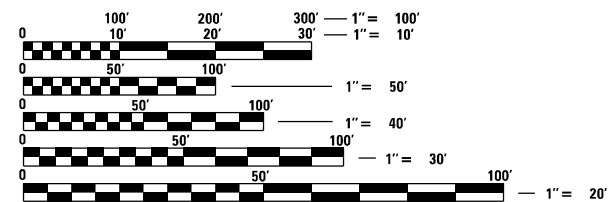
**PROPOSED
HIGHWAY PLANS**

**FAI ROUTE 55 (I-55)
SECTION (54-3B)BP
PROJECT NHPP-Y8WW(854)
BRIDGE PAINTING
LOGAN COUNTY**

C-96-130-21

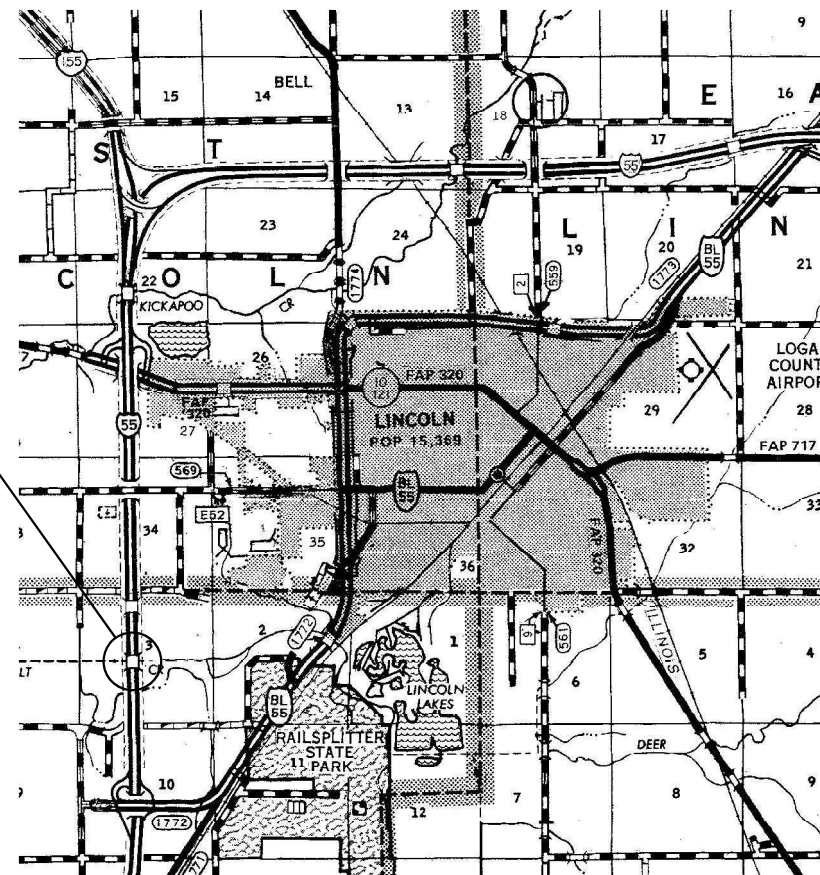


LOCATION #1 & #2
SN 054-0041 (SB) & 0042 (NB)
I-55 OVER SALT CREEK
2.2 MI S. IL 10



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

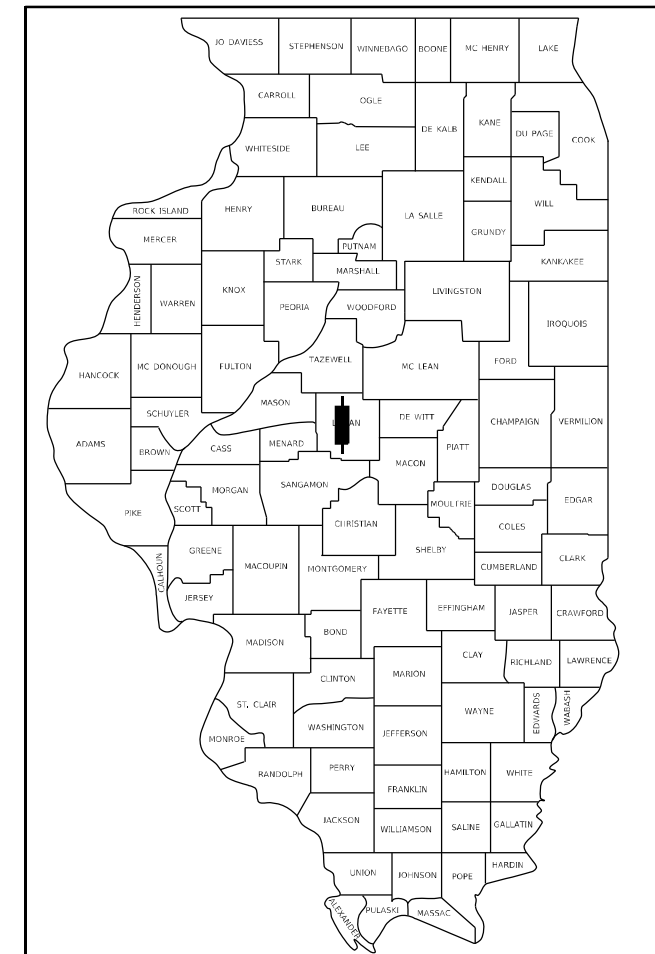


GROSS LENGTH = 675 FT. = 0.13 MILE
NET LENGTH = 675 FT. = 0.13 MILE

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

CONTRACT NO. 72N04

D-96-057-21



LOCATION OF SECTION INDICATED THIS: - [black rectangle]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 4, 2021
Anthony P. Mox REGIONAL ENGINEER
October 1, 2021
[Signature] ENGINEER OF DESIGN AND ENVIRONMENT
October 1, 2021
Stephen M. Lewis DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 2

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS


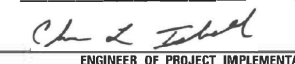
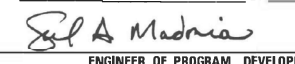
1	COVER SHEET
2	INDEX, STANDARDS, GENERAL NOTES, & SIGNATURES
3	SUMMARY OF QUANTITIES
4	TRAFFIC STAGING PLAN
5-14	EXISTING BRIDGE PLANS, SN 054-0041 & 0042

HIGHWAY STANDARDS

000001-08
001006
701101-05
701106-02
701400-10
701402-12
701901-08
704001-08
782006-01

GENERAL NOTES:

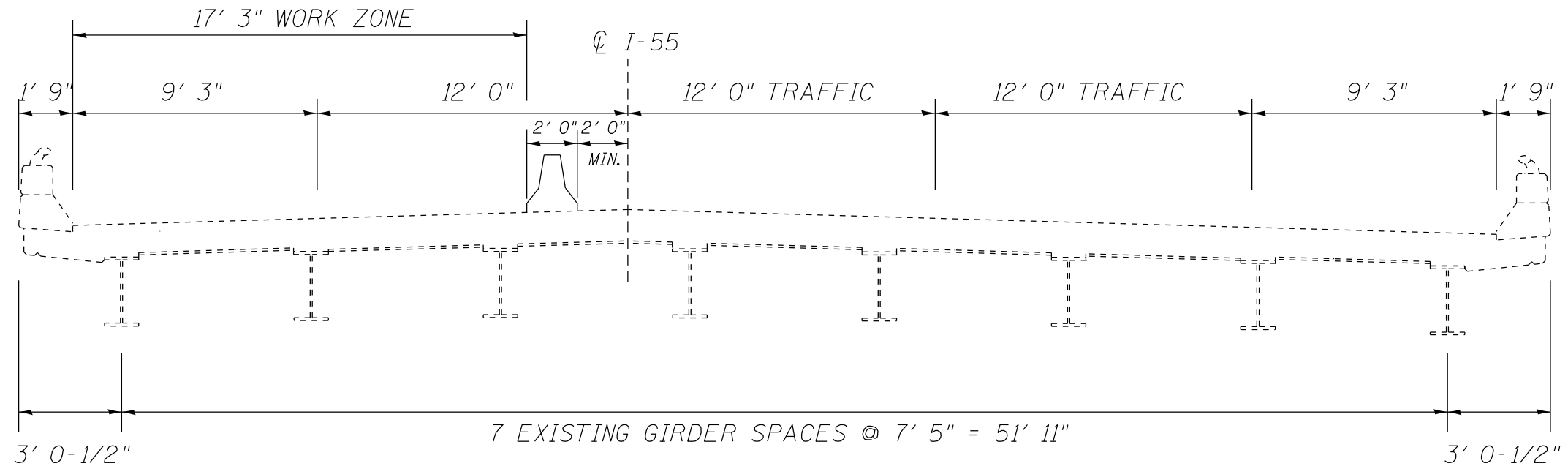
1. WORK SHALL CONSIST OF BLASTING AND PAINTING STRUCTURAL STEEL AT LOCATIONS DESCRIBED IN THE SPECIAL PROVISIONS. CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL AREAS TO BE PAINTED SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING PER SSPC SP 10. ALL EXISTING STEEL CLEANED SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COATS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISIONS.
2. THE USE OF AIR MONITORS WILL BE REQUIRED AT LOCATIONS AS CALLED OUT IN THE SPECIAL PROVISIONS.
3. THE SSPC-QP-1 AND SSPC-QP2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED.
4. CARE SHALL BE TAKEN NOT TO DAMAGE RUBBER BEARING OR JOINT COMPONENTS DURING BLASTING AND CLEANING OPERATIONS. ANY DAMAGE TO THESE COMPONENTS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. RUBBER COMPONENTS SHALL NOT BE PAINTED.
5. UPON COMPLETION OF PAINTING OPERATIONS, THE CONTRACTOR SHALL REMOVE ALL DEBRIS FROM PIER OR ABUTMENT CAPS UPON WHICH PAINTING OPERATIONS TOOK PLACE. FINAL CLEANUP SHALL BE CONSIDERED INCIDENTAL TO THE PAINT PAY ITEM FOR THE RESPECTIVE LOCATION. THE ENGINEER SHALL HAVE THE RIGHT TO WITHOLD PAYMENT UNTIL SATISFACTORY CLEANUP IS ACHIEVED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6	
EXAMINED	July 26 20 21
	
ENGINEER OF OPERATIONS	
EXAMINED	July 26 20 21
	
ENGINEER OF PROJECT IMPLEMENTATION	
EXAMINED	August 3 20 21
	
ENGINEER OF PROGRAM DEVELOPMENT	

REV. - MS

MODEL: Default
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USER NAME = dudleybrm PLOT SCALE = 100.0000" / in. PLOT DATE = 8/4/2021	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED + REVISED +	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STANDARDS, GENERAL NOTES, & SIGNATURES	F.A.I. RTE. 55 SECTION (54-3B)BP COUNTY LOGAN TOTAL SHEETS 14 SHEET NO. 2 CONTRACT NO. 72N04 ILLINOIS FED. AID PROJECT
			SCALE:	SHEET OF SHEETS STA.	TO STA.



TYPICAL BRIDGE CROSS SECTION
(LOOKING IN DIRECTION OF TRAFFIC)

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	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/4/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC STAGING PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

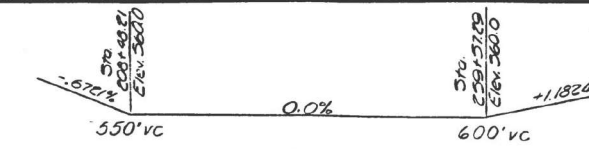
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3B)BP	LOGAN	14	4
CONTRACT NO. 72N04				
ILLINOIS FED. AID PROJECT				

B.M. 14-6" Boot Spike in Hackberry 530' Left Sta. E31+13 Elev. 543.53

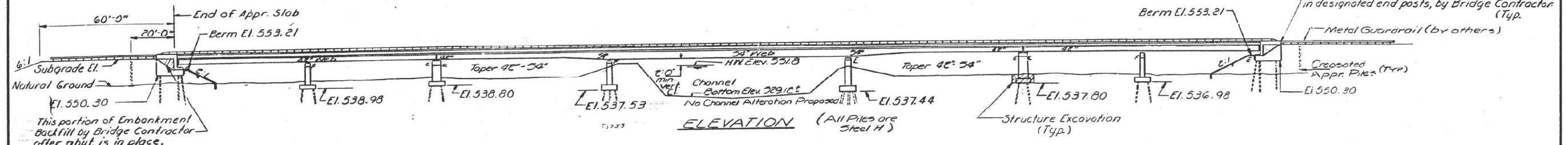
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-55	#	LOGAN	113	19
SHEET NO. 1 26 SHEETS				

APPROACH PILE DATA
Type: Creosoted
Est. Length: 23'
No. Req'd: 32



**PROFILE
FAI RTE 55**



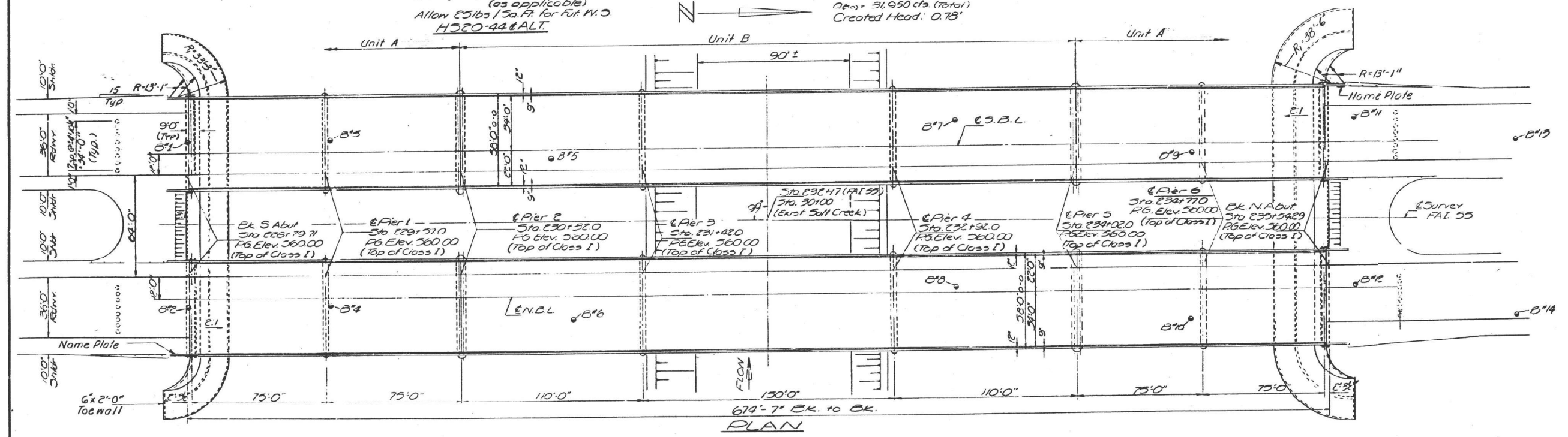
This portion of Embankment Backfill by Bridge Contractor offer abut. is in place.

DESIGN STRESSES

$f_c = 1400$ psi. (Sub, Curb, Parapet)
 $f_c = 1000$ psi. (Super Slab)
 $f_s = 20000$ psi. (Reinf.) (Struct. A 36)
 $f_s = 27000$ psi. (Bearing assembly @ Piers 3 & 4 only A588 steel)
 $w_c = 75$ psi. (Ftg.)
 $n = 10$
Design Specifications 1969 AASHTO (as applicable)
Allow 25 lbs / Sq. Ft. for Foot W. C.
H20-44 & ALT

WATERWAY INFORMATION

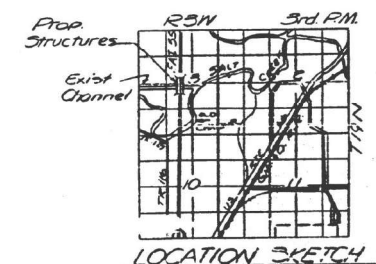
Drainage Area: (Total) = 81/2 Sq. Miles (Main & Over flow Structures)
Character:
Required Opening: 6580 Sq. Ft.
Proposed Opening: (Main Structure 6580 Sq. Ft.)
(Overflow Structure 1155 Sq. Ft.)
Rem: 31,950 cfs. (total)
Created Head: 0.78'



STATION 232+17
BUILT BY
STATE OF ILLINOIS
F.A.I. RT. 55 SEC. 54-3B
F.A. PROJ. I-55-4(88)
LOADING H20 & ALT

NAME PLATE
See Std. 2113

DESIGNED	A. Y. Hanyyat	EXAMINED	Richard H. Hollerman
CHECKED	J. M. Pate	PASSED	Richard H. Hollerman
DRAWN	Ferrando	APPROVED	Richard H. Hollerman
CHECKED	J. M. P.		



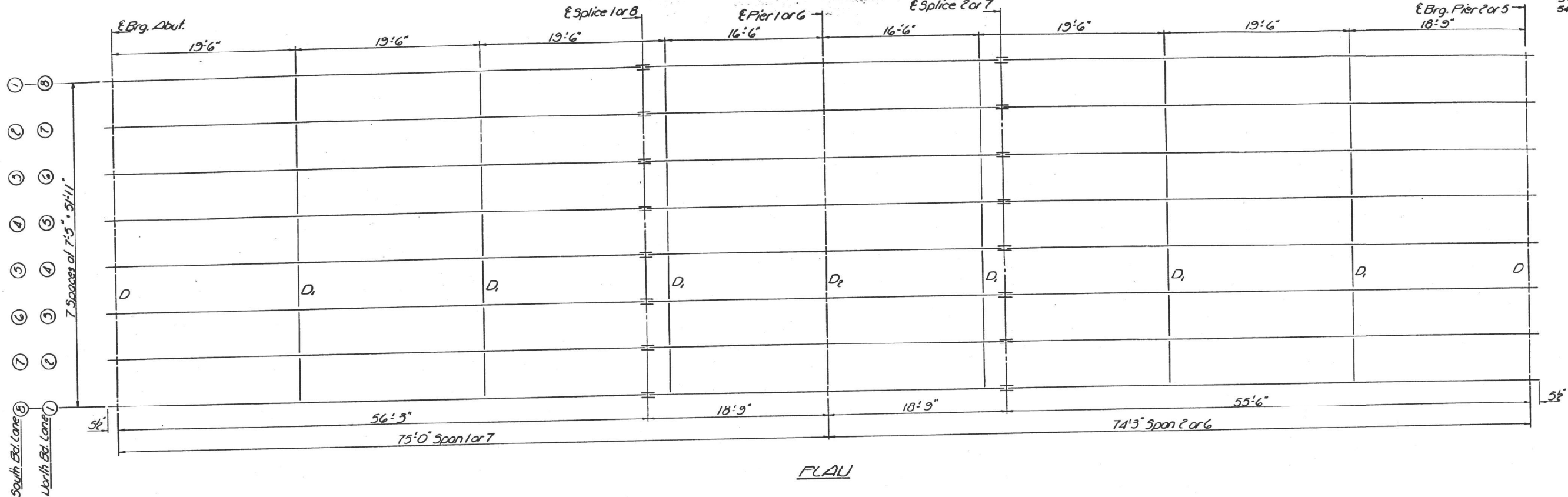
PROJ I-55-4(88) 123
GENERAL PLAN and ELEVATION
FAI 55 over SALT CREEK
FAI RTE 55 SEC 54-3B
LOGAN COUNTY
STA. E32+17.00

MODEL Path: C:\OPERATIONS\Bridges\Bridges\CD\072N04 - 0540041 & 0042 path\substructure.dgn

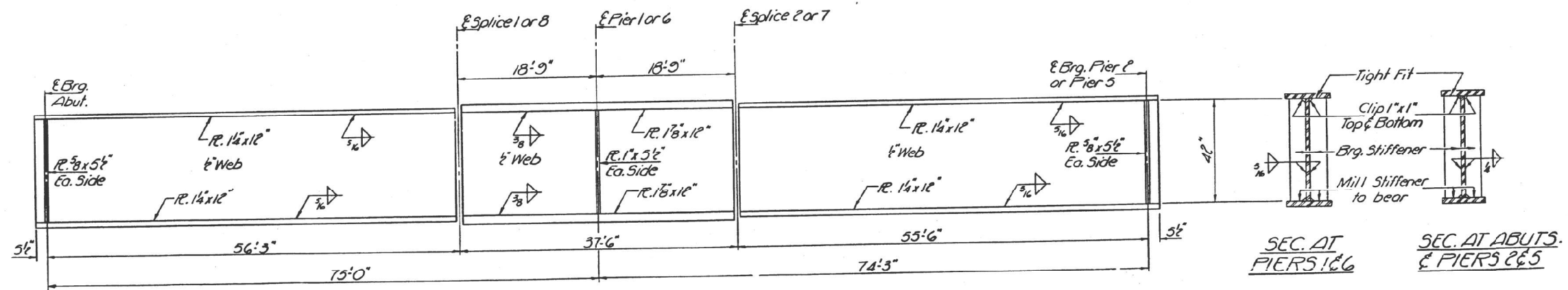
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PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -							CONTRACT NO. 72N04
PLOT DATE = 8/4/2021	CHECKED -	REVISED -							ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

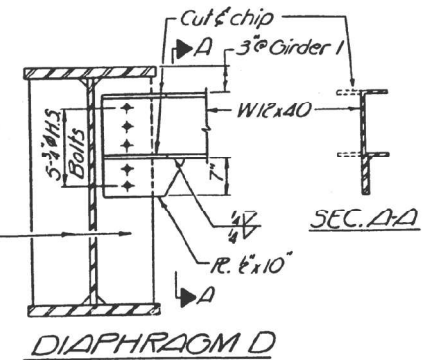
DESIGN NO.	SECTION	SHEETS	NO.
F.A.I. 55	+	LOGAN 113	31
26 SHEETS			
# 54-3A, 54-3B, 54-3B-2, 54-3B-1			



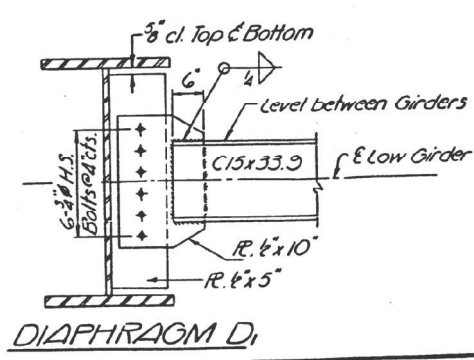
PLAN



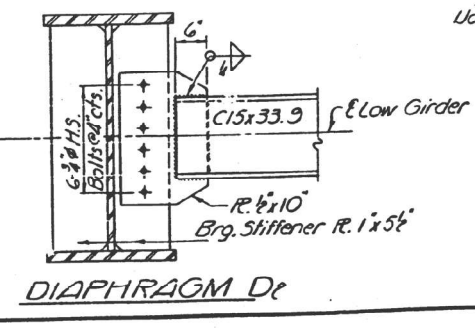
GIRDER ELEVATION



DIAPHRAGM D



DIAPHRAGM D1



DIAPHRAGM D2

Note: For splice details see sh #15.

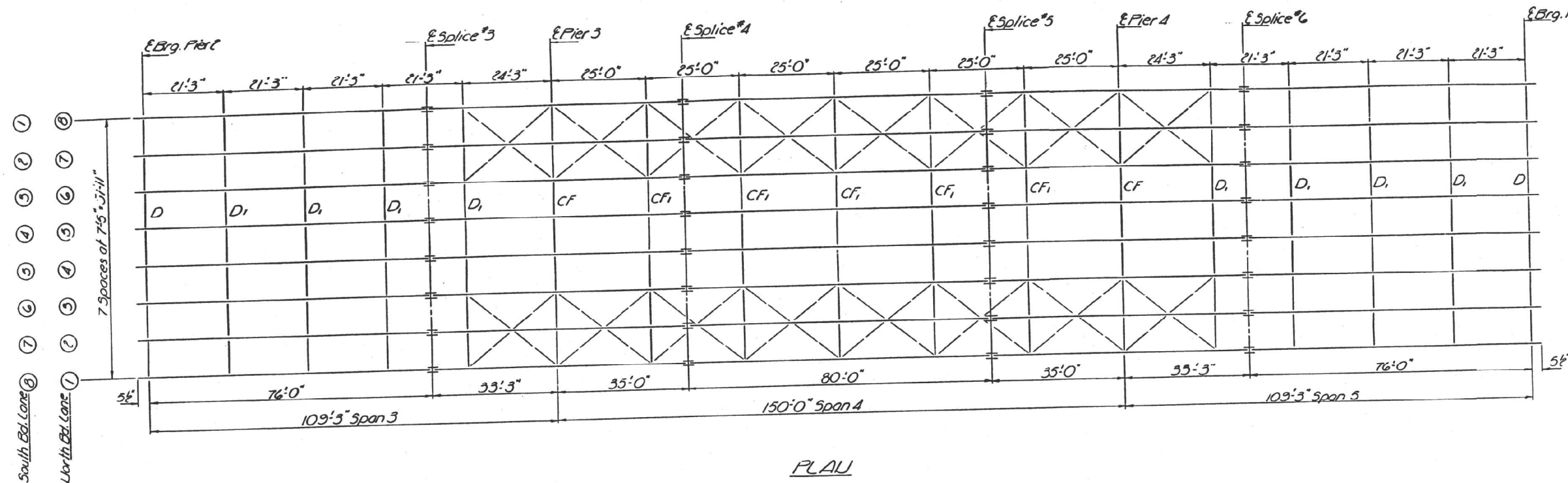
DESIGNED	A. Y. KAAYAT
CHECKED	J. m. P. r. e. l.
DRAWN	J. D.
CHECKED	J. m. P.

EXAMINED	1977
PASSED	W. E. Daumann
PROJECT	Richard E. Holterman

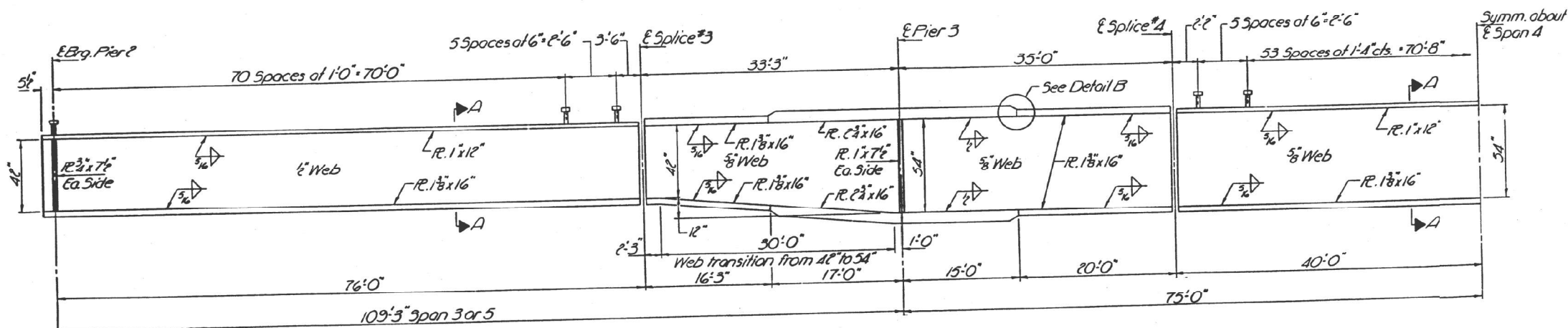
UJITA
STRUCTURAL STEEL
F.A.I. RT. 55 SEC. 54-3B
LOGAN COUNTY
STA. 232+7.00

MODEL: Defult
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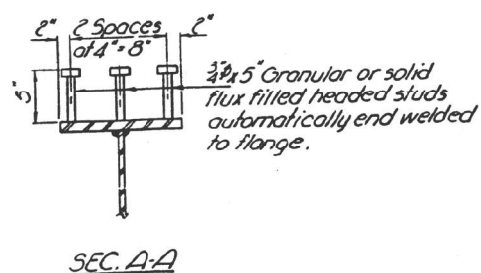
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PLOT SCALE = 100,0000' / in.	CHECKED -	REVISD -	SCALE:	SHEET OF SHEETS	STA.	TO STA.	CONTRACT NO. 72N04		
PLOT DATE = 8/4/2021	DATE -	REVISD -				ILLINOIS FED. AID PROJECT			



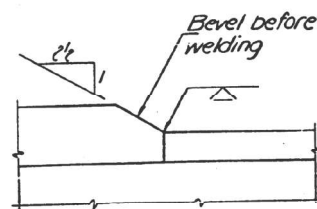
PLAN



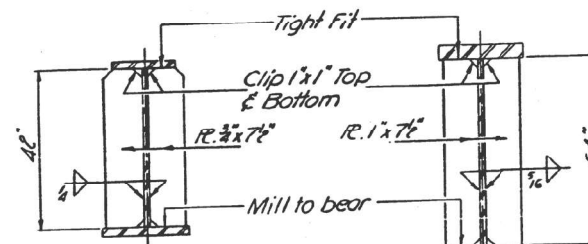
GIRDER ELEVATION



SEC. A-A



DETAIL B



AT PIERS 3 & 5

AT PIERS 3 & 4

BEARING STIFFENERS

Note:
For details of D & D, see sh. 12.
For details of CF, CF1, & splices #3 thru #6 see sh. 15.
For lateral bracing detail see sh. 15.

UNIT B
STRUCTURAL STEEL
F.A.I. RT. 55 SEC. 54-3B
LOGAN COUNTY
STA. 232+17.00

DESIGNED	A. X. KHAYYAT
CHECKED	J. M. Patel
DRAWN	J. D.
CHECKED	J. M. P.

APPROVED
Richard A. Goltzman

MODEL Path: C:\OPERATIONS\Bridges\Bridges\CD\72N04 - 0540041 & 0042 path\substruct.dgn

USER NAME = dudleybm	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/4/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

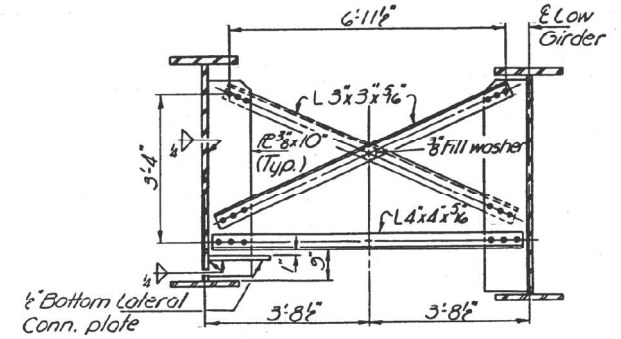
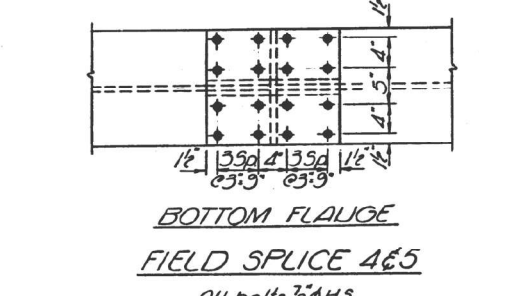
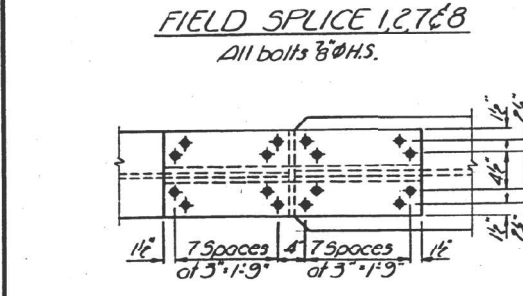
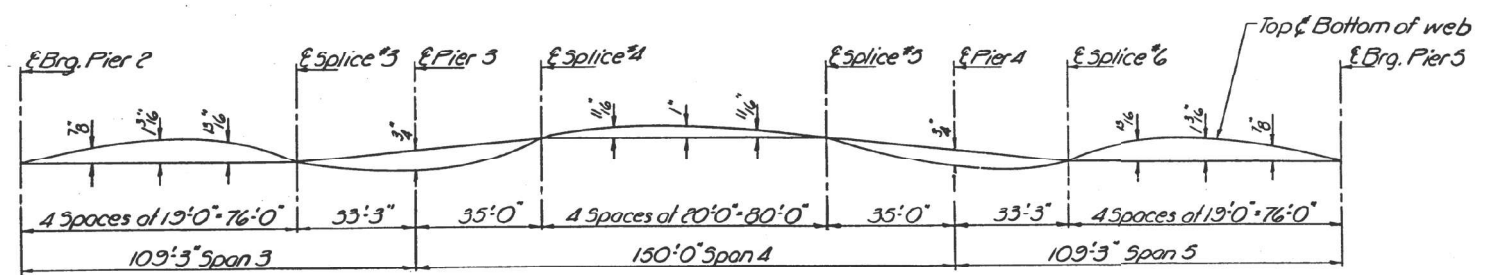
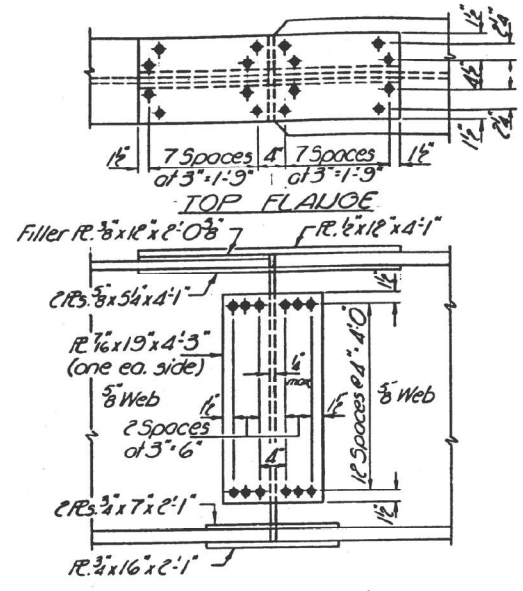
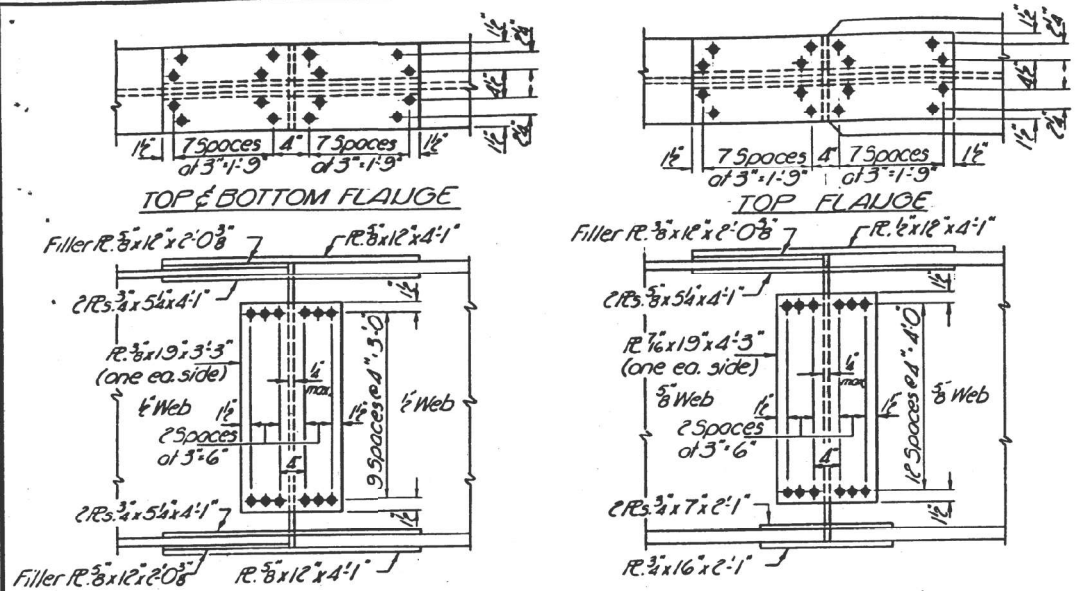
EXISTING BRIDGE PLANS, SN 054-0041 & 0042
(FOR INFORMATION ONLY)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3B)BP	LOGAN	14	7
CONTRACT NO. 72N04				
ILLINOIS FED. AID PROJECT				

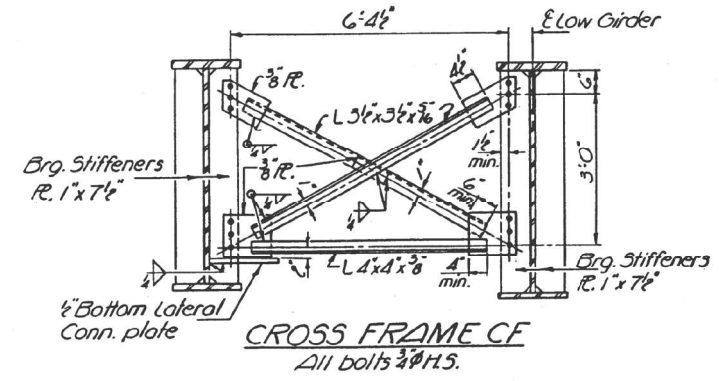
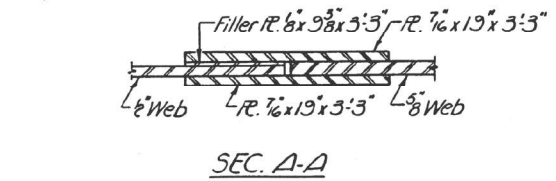
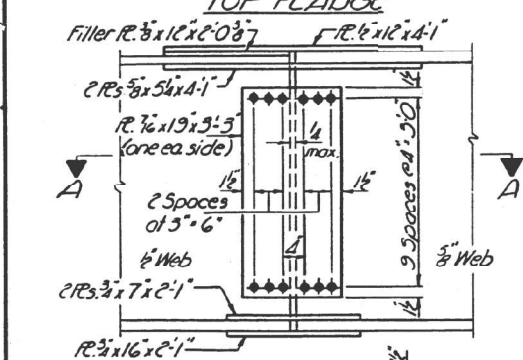
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	#	LOGAN	113	33
SHEETS 26				
* 54-3A, 54-3B, 54-3B-2, 54-3B-1				



NORTH & SOUTH BD. LINES
*** TOP OF WEB ELEVATIONS**

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8
Unit A	558.56	558.72	558.87	559.01	559.13	559.09	558.97	558.81
Unit B	558.56	558.72	558.87	559.01	559.13	559.09	558.97	558.81



UNIT A

INTERIOR GIRDER MOMENT TABLE

	0.4 Span Pier 1 & 6
I_s (in ⁴)	17180.1
I_c (in ⁴)	1408
M_e (k)	512.81
M_i (k)	566.30
Imp. (k)	141.58
M_{total} (k)	1220.69
I_s (ksi)	19.04

UNIT B

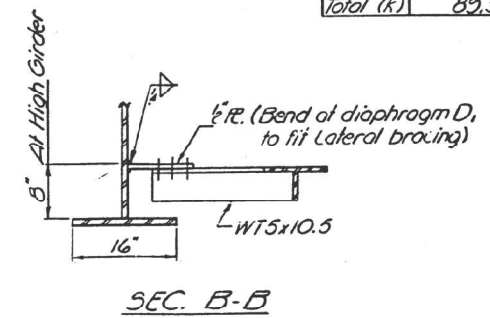
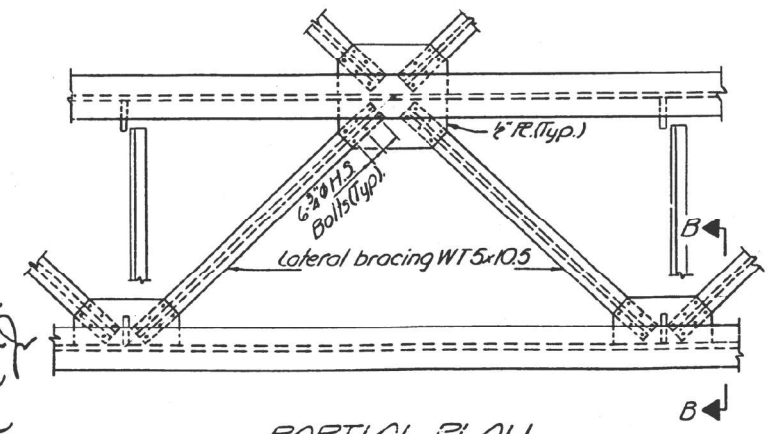
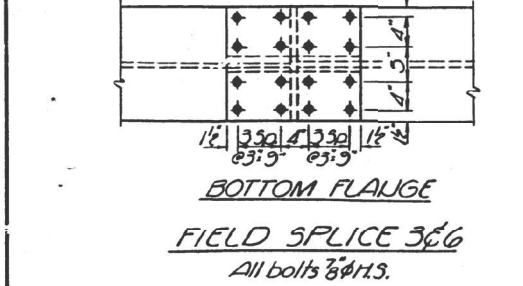
INTERIOR GIRDER MOMENT TABLE

	0.4 Span Pier 1 & 6	0.5 Span Pier 3 & 4
I_s (in ⁴)	18113.1	32955.9
I_c (in ⁴)	46390.5	18667.8
M_e (k)	984.9	1360.4
M_i (k)	1313.9	1839.6
Imp. (k)	1.015	1.074
M_e (k)	587.99	856.39
I_s (ksi)	7.16	7.35
I_c (ksi)	3.99	3.99
M_s (k)	293.88	428.20
M_i (k)	888.93	1150.75
M_{Imp} (k)	189.34	209.44
Total (k)	1372.15	1788.39
I_s (total) (ksi)	19.69	19.22
VR (k)	59.65	54.7

INTERIOR GIRDER REACTION TABLE

	Unit A	Unit B
R_e (k)	38.21	134.39
R_i (k)	40.93	58.78
Imp. (k)	10.23	14.70
Total (k)	89.37	207.87

I_s and S_s are the moment of inertia and section modulus of the steel section.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing I_s .
VR is the maximum \pm impact shear range.



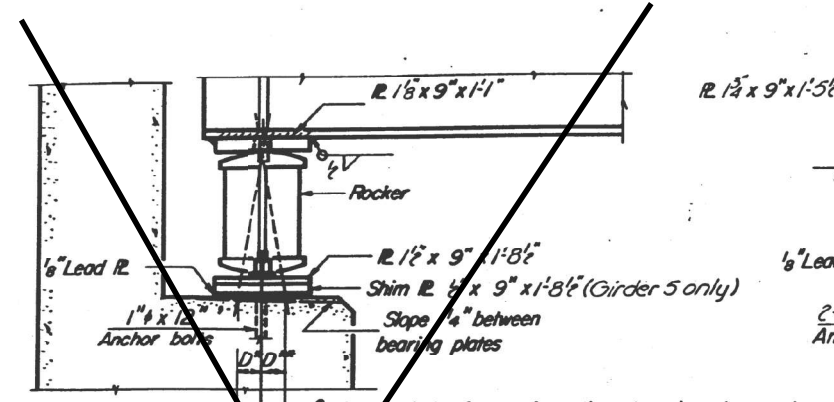
STRUCTURAL STEEL DETAILS
F.A.I. RT. 55 SEC. 54-3B
LOGAN COUNTY
STA. 232+17.00

DESIGNED A. J. HAARJAT	EXAMINED
CHECKED J. M. Patel	PASSED
DRAWN J.D.	Checked H. Holterman
CHECKED J. M. P.	

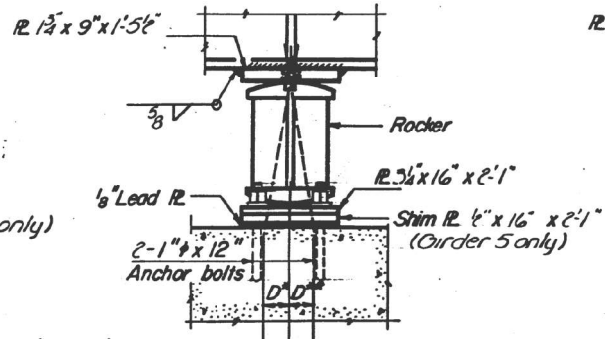
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

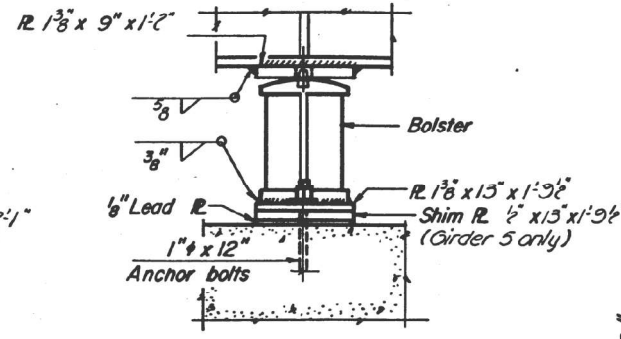
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
54-3A	54-3B	LOGAN	113	34
SHEETS 26				



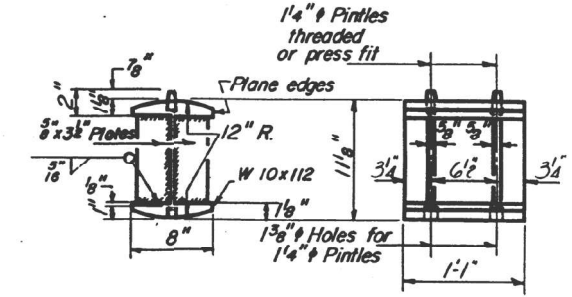
SECTION



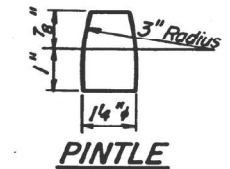
ELEVATION



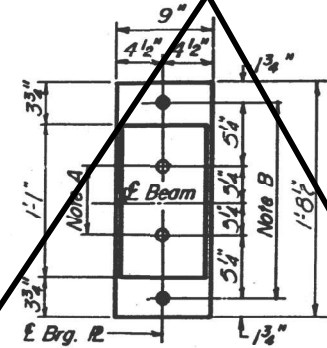
ELEVATION



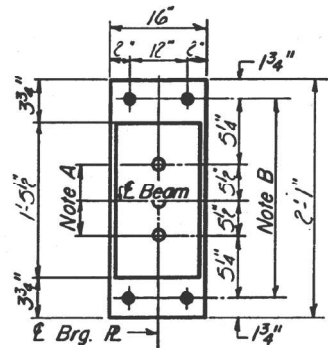
ROCKER
(Abutments & Piers 2&5 Unit A)



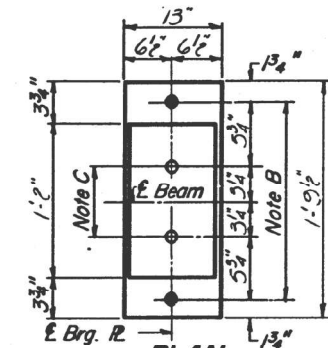
PINTLE



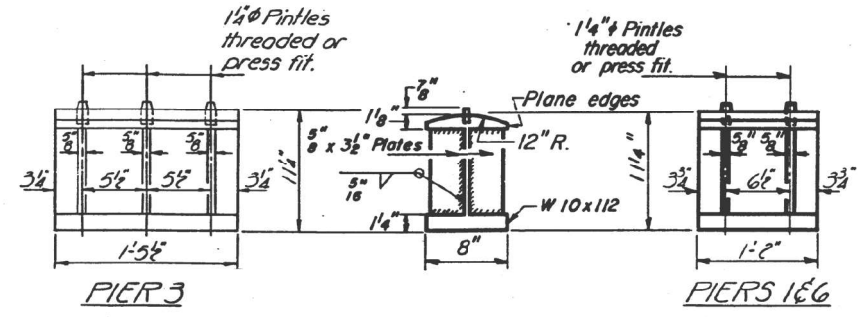
PLAN
AT ABUTMENTS



PLAN
AT PIER 4



PLAN
AT PIER 5



PIER 3

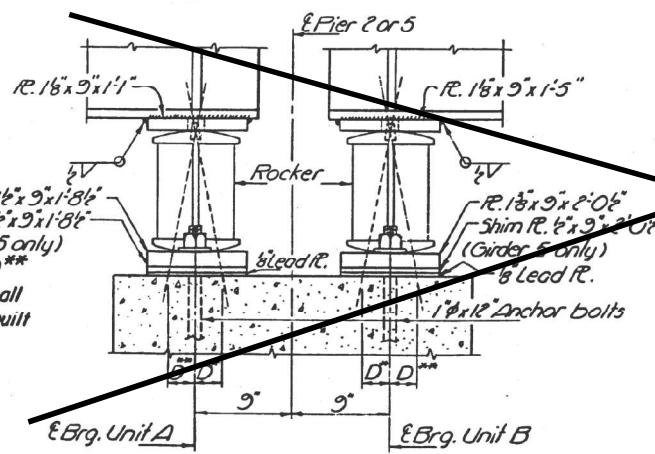
BOLSTER

PIERS 1&6

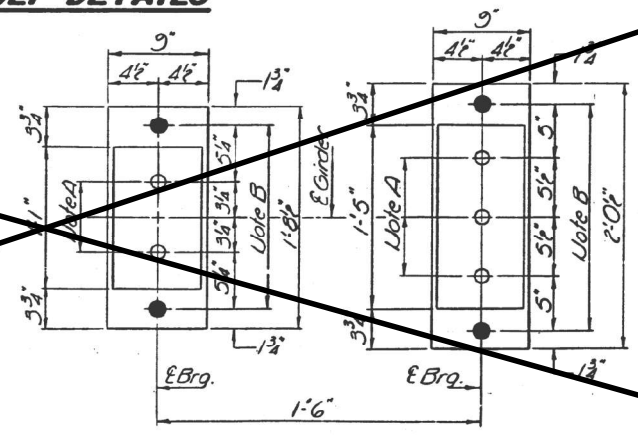
NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
- D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.
- b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

BEARING ASSEMBLY DETAILS

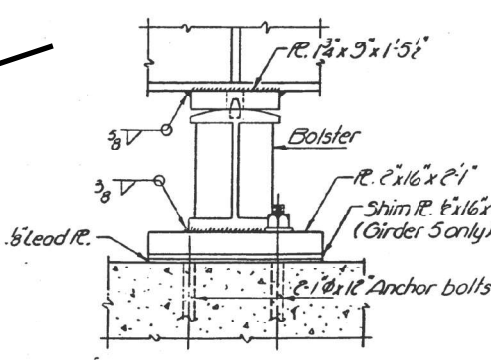


ELEVATION



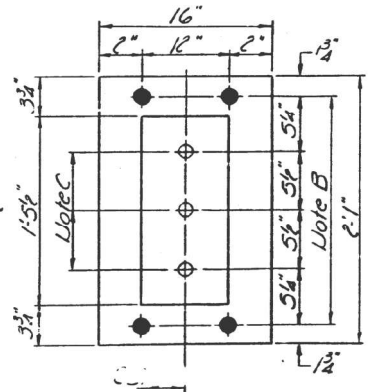
PLAN

AT PIERS 2&5



ELEVATION

AT PIER 3



PLAN

DESIGNED	A. I. Haavyyat
CHECKED	J. m. Patel
J.D.	
DRAWN	
CHECKED	J. m. P.

EXAMINED
PASSED
Richard H. Holterman

Note:
Use A36 Steel for Bearing assemblies at Abutments and Piers 1, 2, 5 & 6.
Use A588 Steel for Bearing assemblies at Piers 3 & 4.

I-2-E 9-1-65, 8-1-70

BEARINGS
E.I. RT. 55 SEC. 54-3B
LOGAN COUNTY
STA. 232+17.00

MODEL: P:\dtd\... FILE NAME: C:\OPERATIONS\Bridges\Bridges\..._0510041 & 0042_pdm\subcontract.dwg

USER NAME = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/4/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

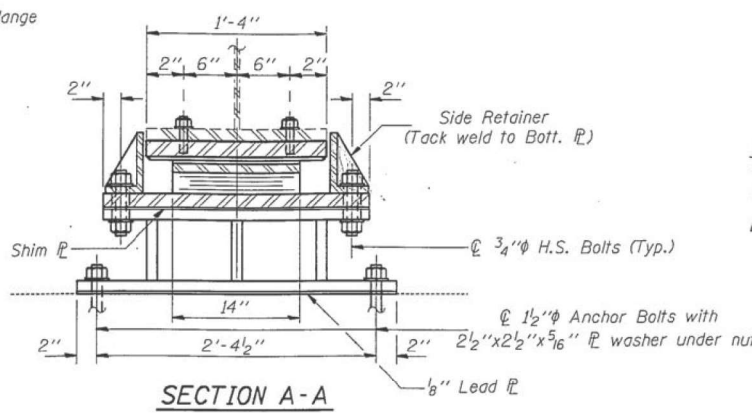
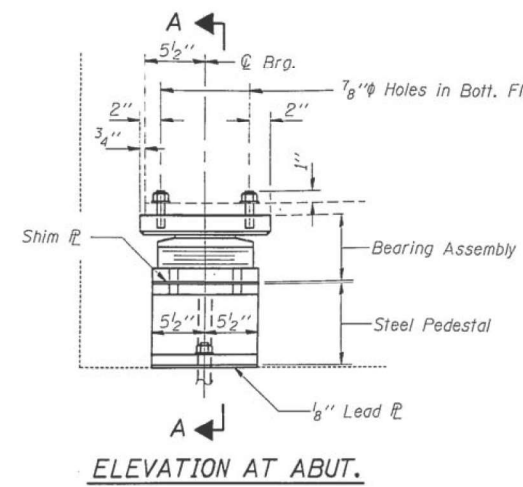
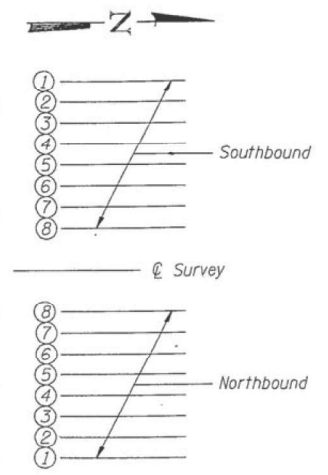
EXISTING BRIDGE PLANS, SN 054-0041 & 0042
(FOR INFORMATION ONLY)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3B)BP	LOGAN	14	9
CONTRACT NO. 72N04				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
54-3RS	LOGAN	52	45	
ILLINOIS FED. AID PROJECT -				
X54-3RS p 54-(38,38-2,3 HV8) I				



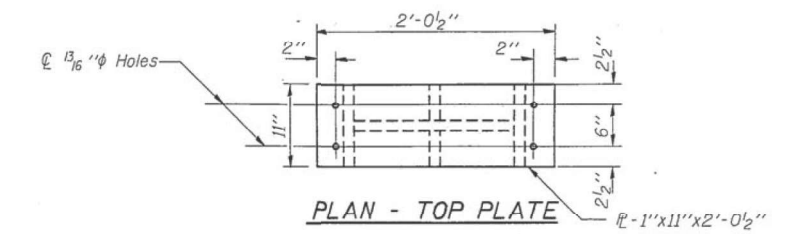
Notes: Burn off existing anchor bolts flush with existing concrete surface. Grind smooth and seal with epoxy. See sheet # for new anchor bolt details.

BEAM LAYOUT

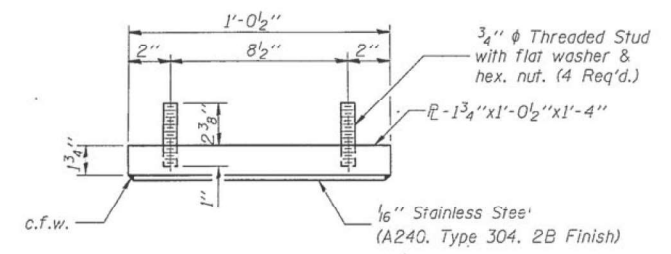
ELEVATION AT ABUT.

SECTION A-A

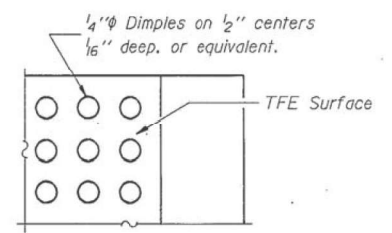
TYPE II TFE ELASTOMERIC EXP. BRG.



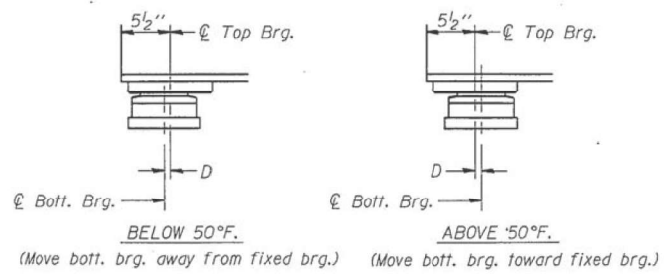
PLAN - TOP PLATE



TOP BEARING ASSEMBLY

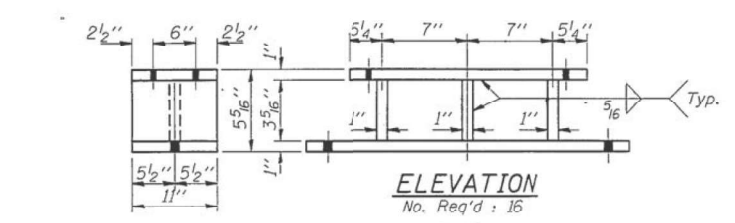


PLAN-TFE SURFACE

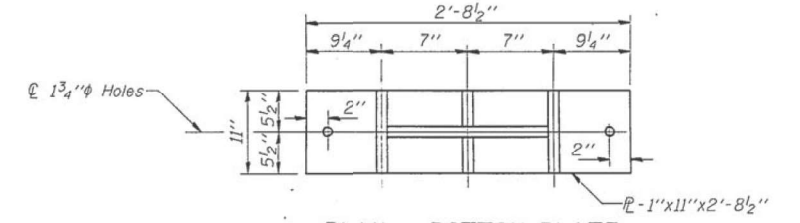


SETTING ANCHOR BOLTS AT EXP. BRG.

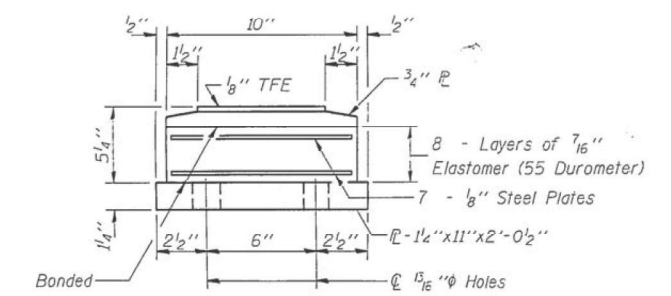
D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



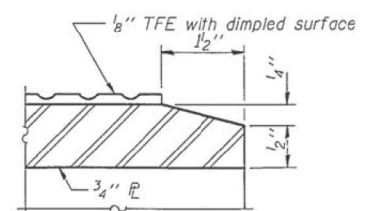
ELEVATION



PLAN - BOTTOM PLATE



BOTTOM BEARING ASSEMBLY

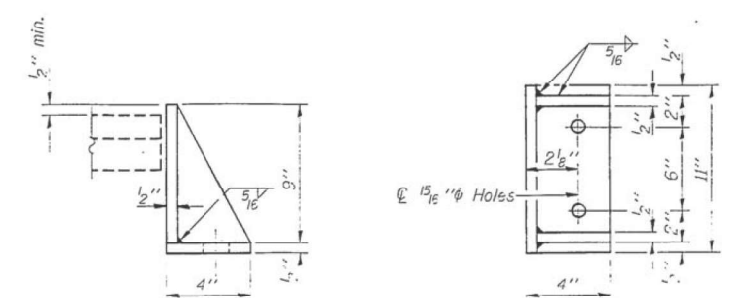


SECTION THRU TFE

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Note: 1/2" x 11" x 2'-0 1/2" shim plate required for Girder 5.



SIDE RETAINER

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

Note: New steel pedestals, side retainers and anchor bolts are included in "Furn. and Erect. Structural Steel".

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	16
Furnishing and Erecting Structural Steel	Lbs.	5100

BEAM REACTIONS

Live Load	43.3 k
Dead Load	51.1 k
Impact	9.2 k

DESIGNED R. Brunette	EXAMINED
CHECKED Kenneth Patton	ENGINEER OF STRUCTURAL DEPT.
DRAWN r.b. carbonell	PASSED
CHECKED RAB	ENGINEER OF BRIDGES AND STR. DEPT.
	APPROVED
	DIRECTOR OF HIGHWAYS

I-2-E2 12-1-83

ELASTOMERIC BEARINGS - PIER 5/ SPAN 5

FAI ROUTE 55

SECTION 54 - 3RS

LOGAN COUNTY

(SN 054 - 0041, 42)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 054-0041 & 0042
(FOR INFORMATION ONLY)

USER NAME = dudleybm	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/4/2021	CHECKED -	REVISED -
	DATE -	REVISED -

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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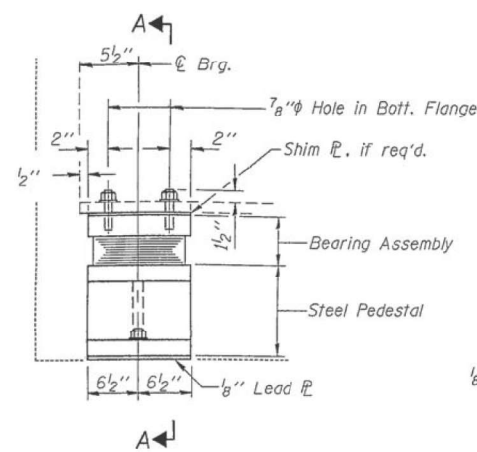
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-38)BP	LOGAN	14	10
CONTRACT NO. 72N04				
ILLINOIS FED. AID PROJECT				

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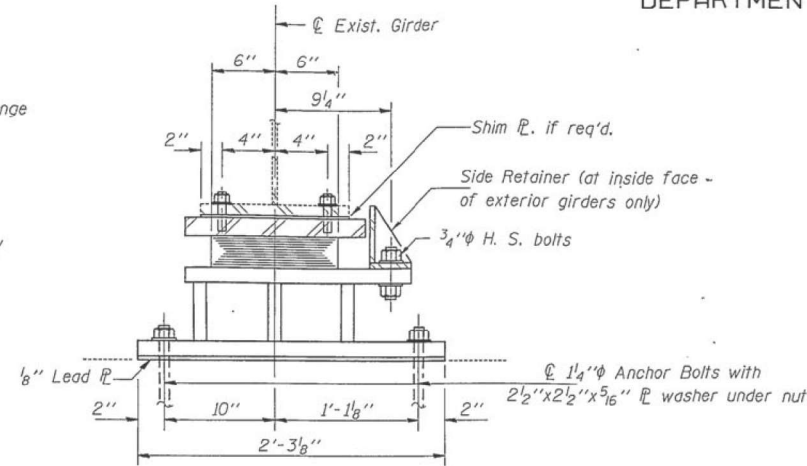
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJ. NO.	SECTION	COUNT	TOTAL SHEETS	SHEET NO.
55	54-3RS	LOGAN	52	47
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

SHEET NO. SHEETS



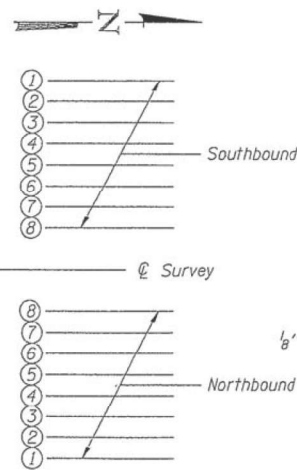
ELEVATION AT ABUT.



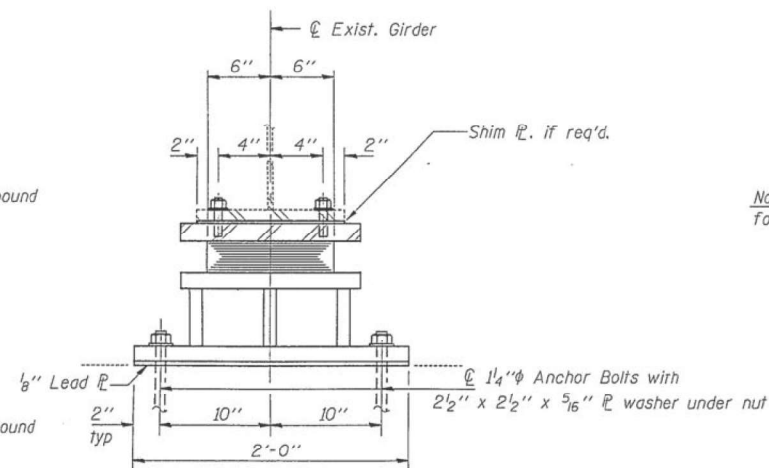
SECTION A-A
(Showing Exterior Girder)

TYPE I ELASTOMERIC EXP. BRG.

Notes: Burn off existing anchor bolts flush with existing concrete surface. Grind smooth and seal with epoxy. See sheet # for new anchor bolt details.

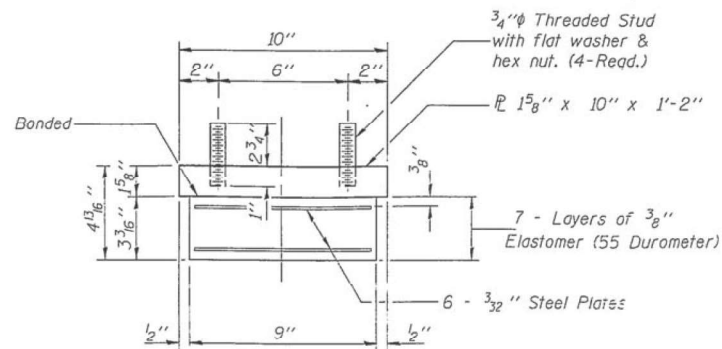


BEAM LAYOUT



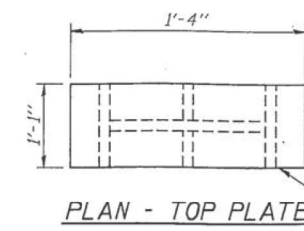
SECTION A-A
(Showing Interior Girder)

Note: 1/2 x 10 x 1'-0" shim plate required for Girder 5.

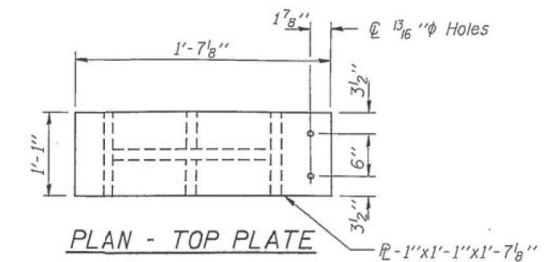


BEARING ASSEMBLY

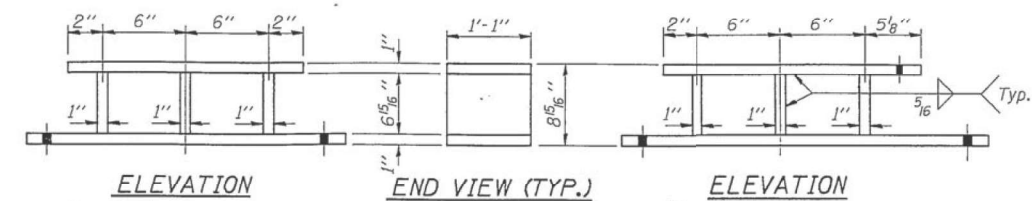
Note: Shim plates shall not be placed under Bearing Assembly.



PLAN - TOP PLATE



PLAN - TOP PLATE



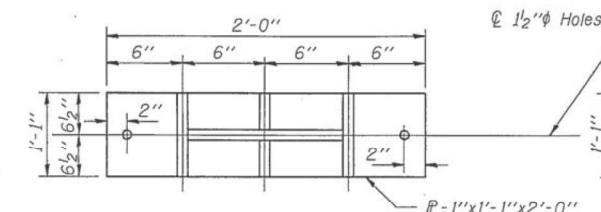
ELEVATION

(Showing Interior Pedestal)
No. Req'd : 48

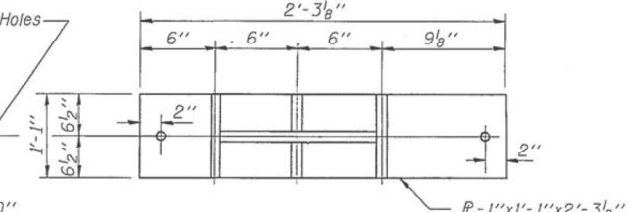
END VIEW (TYP.)

ELEVATION

(Showing Exterior Pedestal)
No. Req'd : 16



PLAN - BOTTOM PLATE



PLAN - BOTTOM PLATE

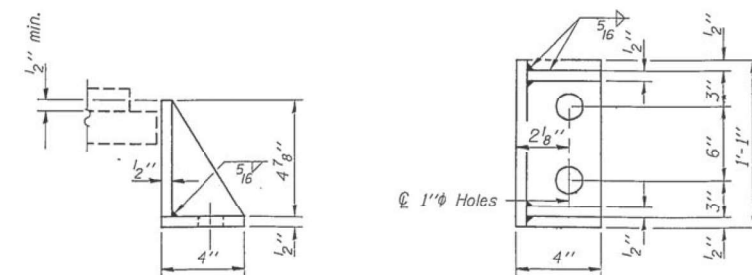
BEAM REACTIONS

Live Load	40.9 k
Dead Load	38.2 k
Impact	10.2 k

Note: New steel pedestals, side retainers and anchor bolts are included in "Furn. and Erect. Structural Steel".

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	64
Furnishing and Erecting Structural Steel	Lbs.	18440



SIDE RETAINER

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

DESIGNED	R. Brunette	EXAMINED	
CHECKED	Wendell Patton	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN	r. b. carbonell	APPROVED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	RAB		DIRECTOR OF HIGHWAYS

I-2-E1 12-1-83

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

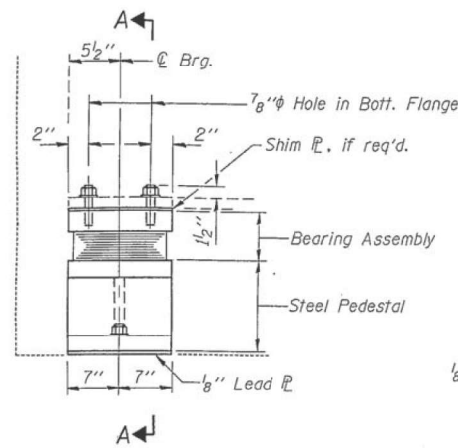
EXISTING BRIDGE PLANS, SN 054-0041 & 0042
(FOR INFORMATION ONLY)

SCALE: SHEET OF SHEETS STA. TO STA.

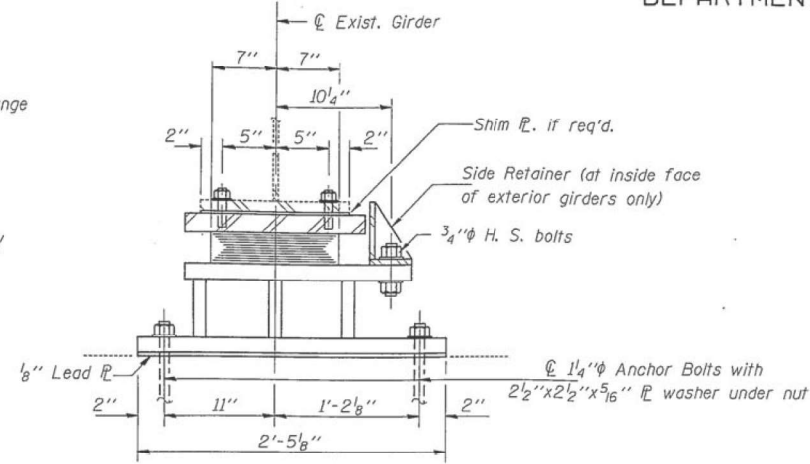
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3B)BP	LOGAN	14	12
			CONTRACT NO. 72N04	
		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
55	54-3RS	LOGAN	52	48
F.A.I. PROJECT		ILLINOIS FED. AID PROJECT		



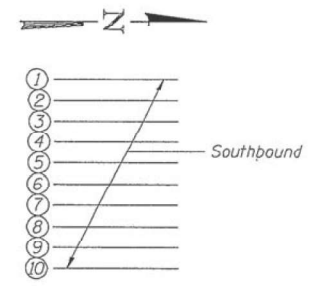
ELEVATION AT ABUT.



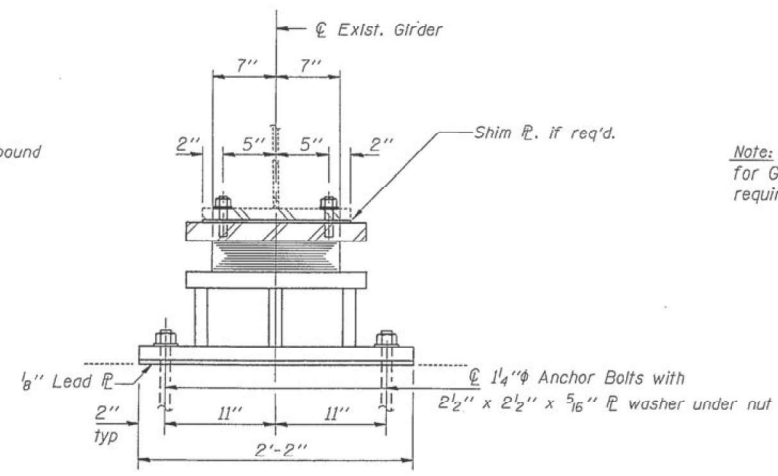
SECTION A-A
(Showing Exterior Girder)

TYPE I ELASTOMERIC EXP. BRG.

Notes: Burn off existing anchor bolts flush with existing concrete surface. Grind smooth and seal with epoxy. See sheet # for new anchor bolt details.

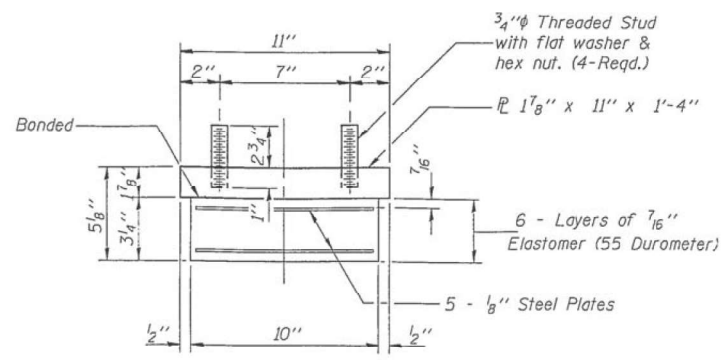


BEAM LAYOUT



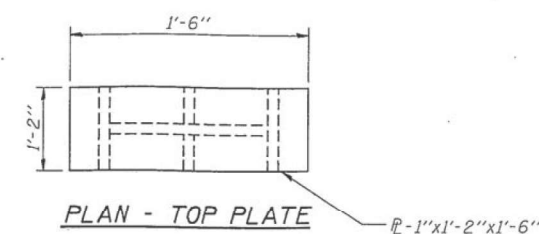
SECTION A-A
(Showing Interior Girder)

Note: 1/2" x 11" x 1'-2" shim plate required for Girder 7 & 5/8" x 11" x 1'-2" shim plate required for Girder 8.

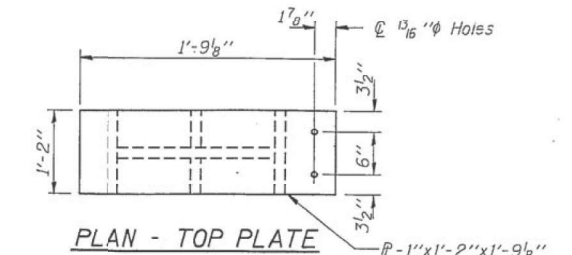


BEARING ASSEMBLY

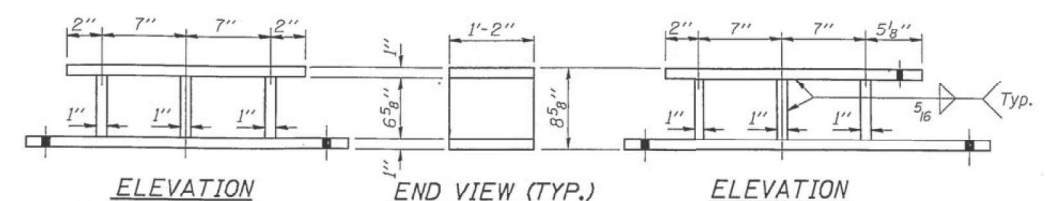
Note: Shim plates shall not be placed under Bearing Assembly.



PLAN - TOP PLATE



PLAN - TOP PLATE



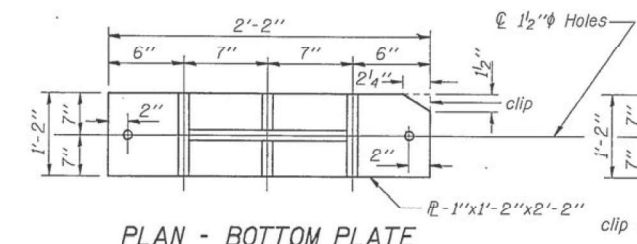
ELEVATION

(Showing Interior Pedestal)
No. Req'd : 15

END VIEW (TYP.)

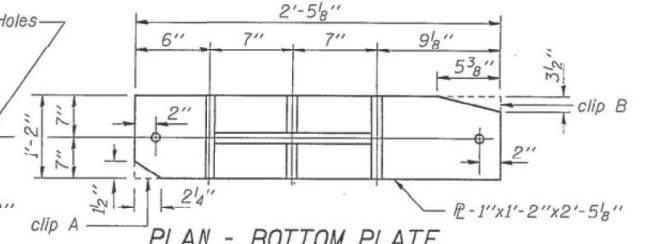
ELEVATION

(Showing Exterior Pedestal)
No. Req'd : 4



PLAN - BOTTOM PLATE

Note: Fabricate all interior pedestals with clip as shown.



PLAN - BOTTOM PLATE

Note: Fabricate 2 pedestals with Clip A and 2 with Clip B. (exterior only)

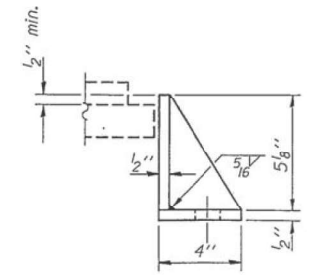
BEAM REACTIONS

Live Load	42.4 k
Dead Load	50.9 k
Impact	9.8 k

Note: New steel pedestals, side retainers and anchor bolts are included in "Furn. and Erect. Structural Steel".

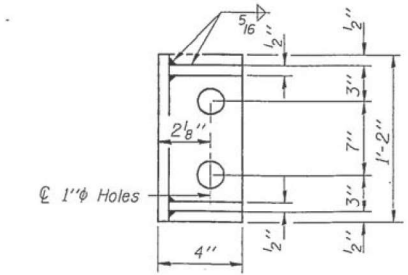
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	19
Furnishing and Erecting Structural Steel	Lbs.	6235



SIDE RETAINER

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



DESIGNED	R. Brunette	EXAMINED	
CHECKED	Kenneth Patton	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN	r. b. carbonell	APPROVED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	RAB VAB		DIRECTOR OF HIGHWAYS

I-2-E1 12-1-83

ELASTOMERIC BEARINGS - N. ABUT.
FAI ROUTE 55
SECTION 54 - 3RS
LOGAN COUNTY

(SN 054 - 0046, 47)

MODEL Path: C:\OPERATIONS\Bridges\Bridges\CD\072N04 - 0540041 & 0042 path\substructure.dgn

USER NAME = dudleybm	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/4/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

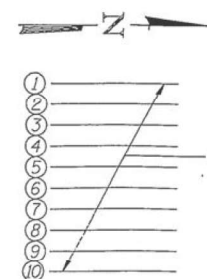
EXISTING BRIDGE PLANS, SN 054-0041 & 0042
(FOR INFORMATION ONLY)

SCALE: SHEET OF SHEETS STA. TO STA.

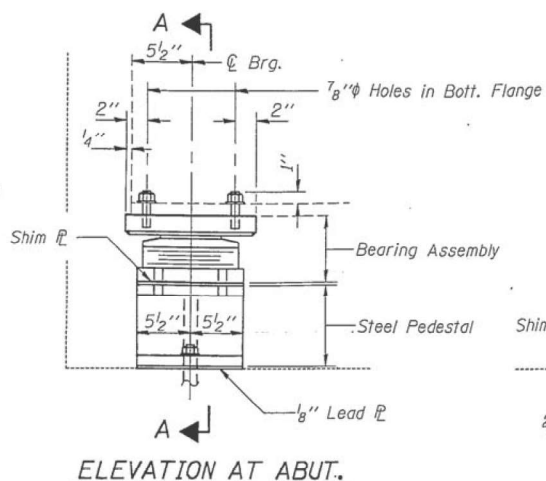
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3B)BP	LOGAN	14	13
			CONTRACT NO. 72N04	
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
55	54-3RS	LOGAN	52	49	
F.A.I. DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

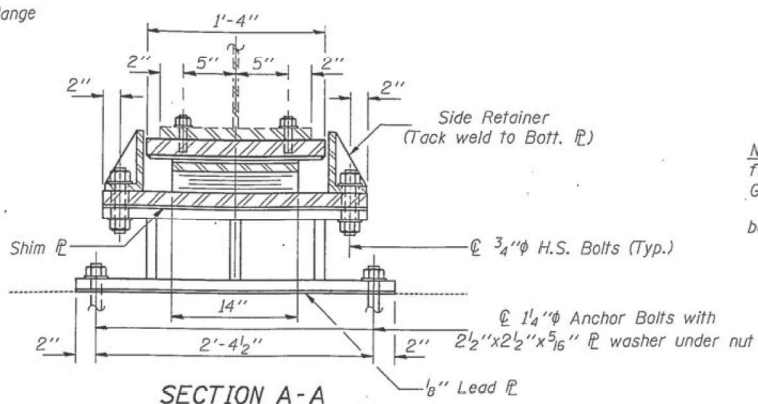


BEAM LAYOUT



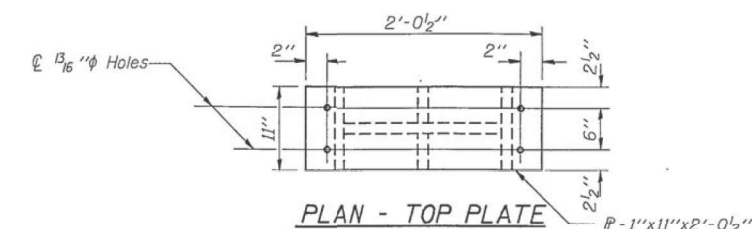
ELEVATION AT ABUT.

TYPE II TFE ELASTOMERIC EXP. BRG.

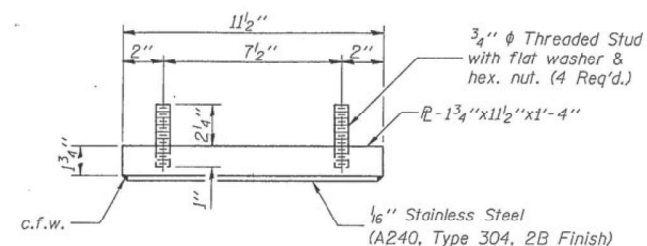


SECTION A-A

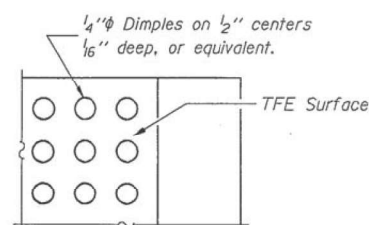
Notes: Burn off existing anchor bolts flush with existing concrete surface. Grind smooth and seal with epoxy. See sheet # for new anchor bolt details.



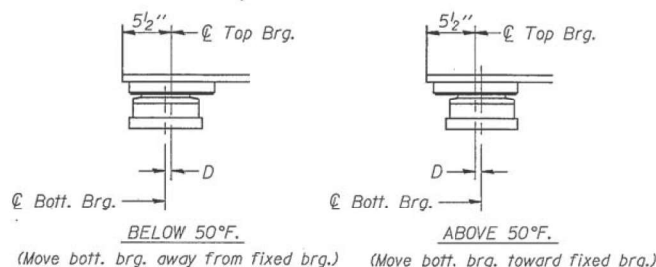
PLAN - TOP PLATE



TOP BEARING ASSEMBLY



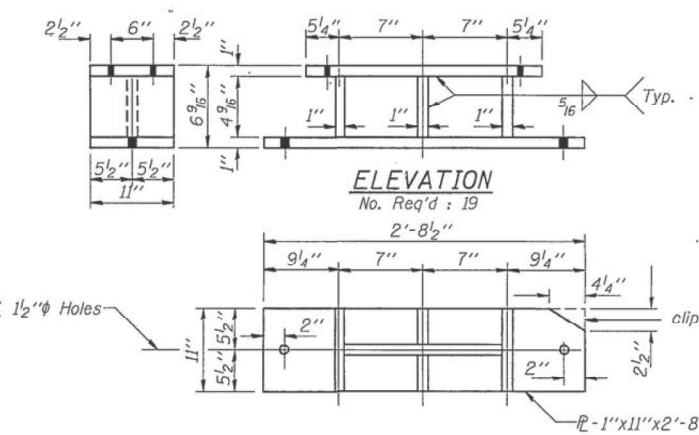
PLAN-TFE SURFACE



SETTING ANCHOR BOLTS AT EXP. BRG.

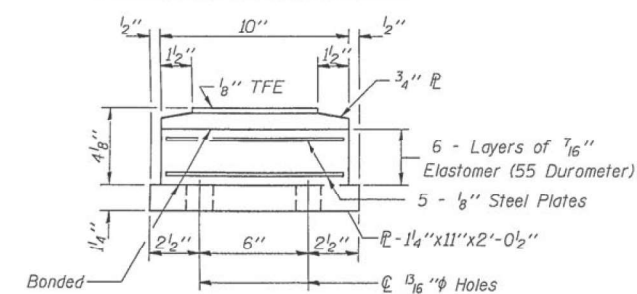
D = 1/8 inch per each 100 feet of expansion for every 15 degree Fahrenheit change from the normal temperature of 50 degrees Fahrenheit.

Note: 1/4 inch x 11 inch x 2'-2 1/2 inch shim plate required for Girder 7.

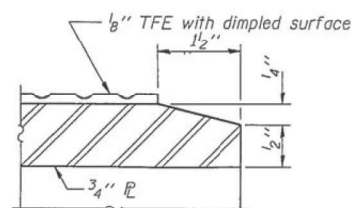


ELEVATION

PLAN - BOTTOM PLATE



BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

Note: The 1/8 inch TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8 inch TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

BEAM REACTIONS

Live Load	42.4 k
Dead Load	50.9 k
Impact	9.8 k

DESIGNED	R. Brunette	EXAMINED	19
CHECKED	Hornth Patten	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN	r.b. carbonell	APPROVED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	RAB		DIRECTOR OF HIGHWAYS

I-2-E2 12-1-83

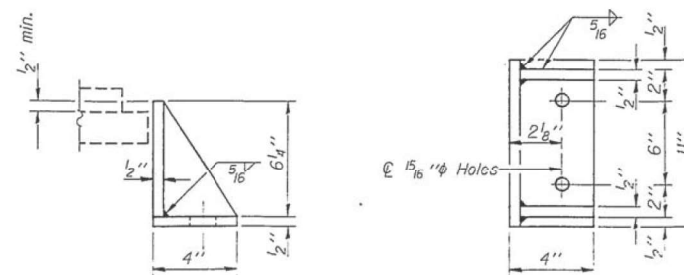
Note: New steel pedestals, side retainers and anchor bolts are included in "Furn. and Erect. Structural Steel".

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	19
Furnishing and Erecting Structural Steel	Lbs.	6300

ELASTOMERIC BEARINGS - S. ABUT.
FAI ROUTE 55
SECTION 54 - 3RS
LOGAN COUNTY

(SN 054 - 0046. 47)



SIDE RETAINER

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 054-0041 & 0042
(FOR INFORMATION ONLY)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3B)BP	LOGAN	14	14
CONTRACT NO. 72N04				
ILLINOIS FED. AID PROJECT				