

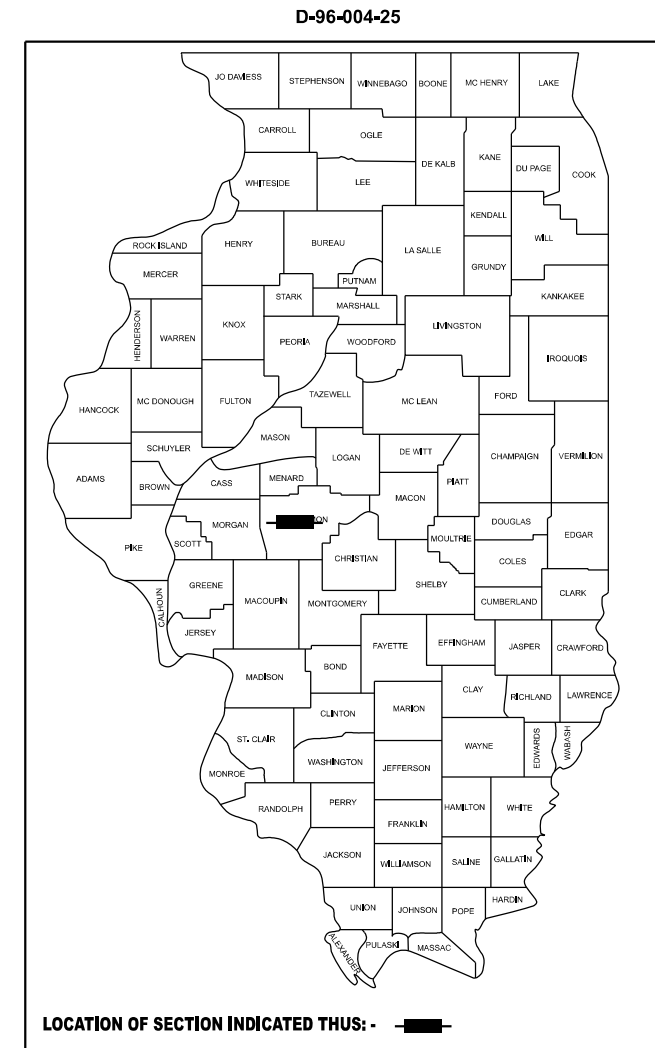
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BP	SANGAMON	7	1
		ILLINOIS	CONTRACT NO. 72651	

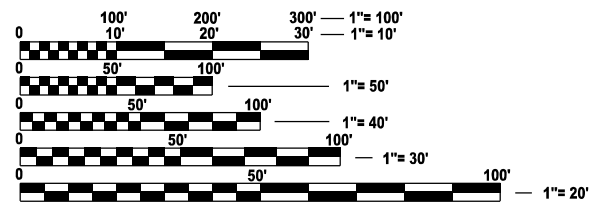
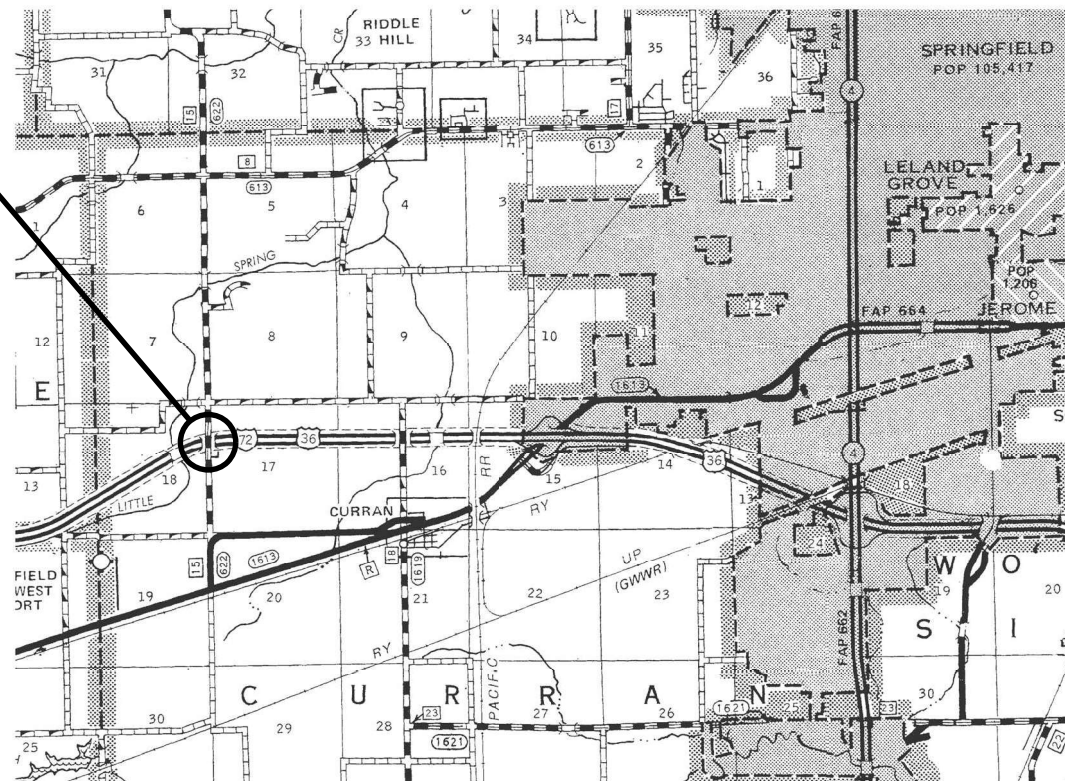
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

FAI ROUTE 72 (I-72)
SECTION (84-9-2HB-3)BP
PROJECT NHPP-7JDP(988)
BRIDGE PAINTING
SANGAMON COUNTY
C-96-024-25



PROJECT LOCATION:
SN 084-0145
FARMINGDALE RD OVER I-72
2.6 MI W WABASH AVE. INT.



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

PROJECT ENGINEER: BRANDON DUDLEY - (217-785-9290)
PROJECT MANAGER

GROSS LENGTH = 247 FT. = 0.05 MILE
NET LENGTH = 247 FT. = 0.05 MILE

CONTRACT NO. 72651

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 10 20 24

John P. Meyer
REGIONAL ENGINEER

January 31 20 25
Scott A. Etkin
ENGINEER OF DESIGN AND ENVIRONMENT

January 31 20 25
Gregory J. ...
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

HIGHWAY STANDARDS




INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX, STANDARDS, GENERAL NOTES, & SIGNATURES
- 3 SUMMARY OF QUANTITIES
- 4-7 EXISTING BRIDGE PLANS, SN 084-0145

- 000001-08
- 001006
- 701101-05
- 701106-02
- 701400-12
- 701402-12
- 701901-10
- 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 INCLUDED IN THE COST OF THE PAINT PAY ITEM FOR THE RESPECTIVE LOCATION. THE ENGINEER SHALL HAVE THE RIGHT TO WITHHOLD PAYMENT UNTIL SATISFACTORY CLEANUP IS ACHIEVED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6	
EXAMINED	December 10, 20 24
 ENGINEER OF OPERATIONS	
EXAMINED	December 9, 20 24
 ENGINEER OF PROJECT IMPLEMENTATION	
EXAMINED	December 11, 20 24
 ENGINEER OF PROGRAM DEVELOPMENT	

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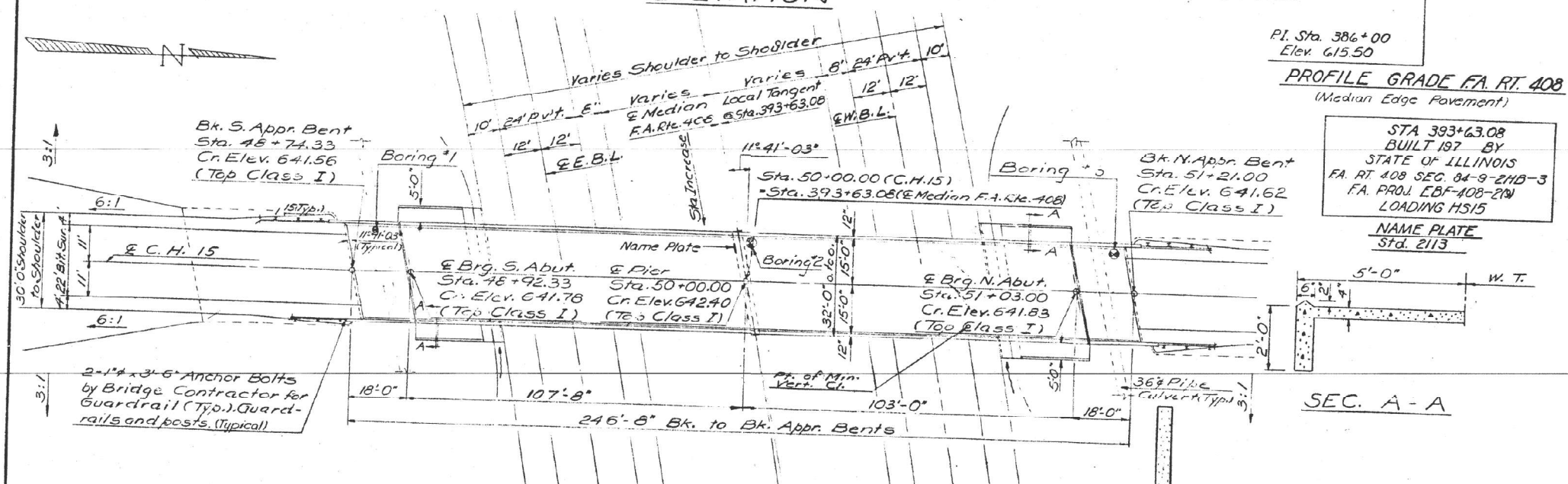
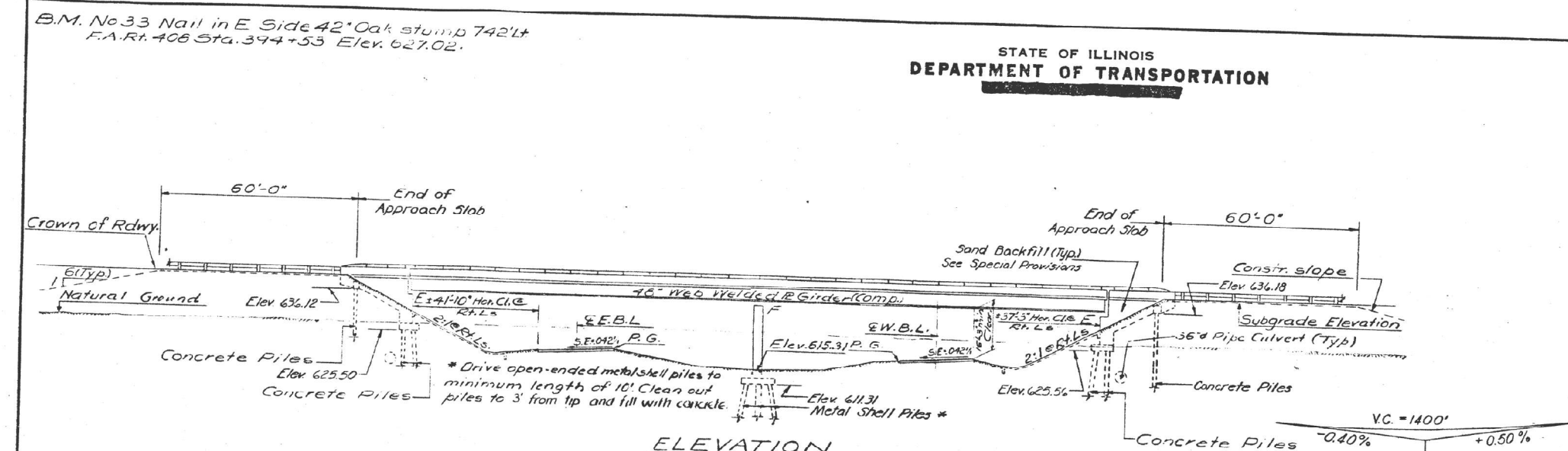
	USER NAME = brandon.dudley	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS GENERAL NOTES, & SIGNATURES	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -			72	(84-9-2HB-3)BP	SANGAMON	7	2	
		CHECKED -	REVISED -			CONTRACT NO. 72651					
	PLOT DATE = 10/21/2024	DATE -	REVISED -			SCALE:	SHEET 2	OF 1	SHEETS	STA.	TO STA.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
408	84-9-2 118-3	SANGAMON	34	13
SHEET NO. 1 12 SHEETS				

GENERAL NOTES

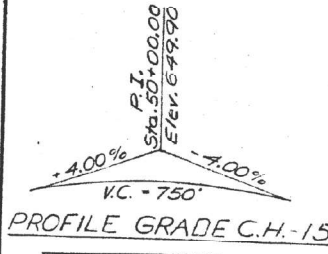
All reinforcement bars shall be lapped 2d diameters unless otherwise shown.
Fasteners shall be high strength bolts Bolts 7/8"; open holes 1/4" unless otherwise noted.
Calculated weight of Structural Steel = 213,850 lbs.
The basic lead silica chromate paint system shall be used for shop and field painting of Structural Steel.
Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before bolting diaphragms over supports.
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh weighing 50" per 100 sq. ft.
The Contractor shall drive one metal shell test pile at the pier and two concrete test piles - 1 each of the North Abutment and the South Approach Bent - as directed by the Engineer before ordering the remainder of the piles.
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
Protective Coat shall not be applied to surfaces to which Coal Tar Interlayer Protective Coat is applied.
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8". Adjustment shall be made either by grinding the surface or by shimming the bearing.
Two 1/2" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.



CURVE DATA (F.A. RTE. 408)

Note: Transition from 66' to 70' Median
(E.B.) Sta. 376+07.21 to 406+12.78
(W.B.) Sta. 376+07.21 to 405+45.25

Curve Data	Curve Data E.B.L.	Curve Data W.B.L.
P.I. Sta. 391+27.27	P.I. Sta. 391+23.96	P.I. Sta. 391+30.57
Δ = 29°-43'-00"	Δ = 29°-43'-00"	Δ = 29°-43'-00"
D = 1°-00'-00"	D = 1°-00'-07.8"	D = 0°-59'-52.2"
T = 1,520.06'	T = 1,516.77'	T = 1,523.36'
R = 5,729.58'	R = 5,717.17'	R = 5,742.01'
L = 2,971.67'	L = 2,965.24'	L = 2,978.12'
E = 196.21'	E = 197.78'	E = 196.64'
S.E. = 0.042 1/ft	S.E. = 0.042 1/ft	S.E. = 0.042 1/ft
S.E. Attained Sta. 374+47.21 to Sta. 376+57.21	S.E. Attained Sta. 374+47.21 to Sta. 376+57.21	S.E. Attained Sta. 374+47.21 to Sta. 376+57.21
S.E. Removed Sta. 401+65.25 to Sta. 407+C.S.25	S.E. Removed Sta. 401+65.25 to Sta. 407+C.S.25	S.E. Removed Sta. 401+65.25 to Sta. 407+C.S.25
P.C. = 56' Lt. Sta. 376+07.21	P.C. = 56' Lt. Sta. 376+07.21	P.C. = 56' Rt. Sta. 376+07.21
P.T. = 47' Rt. Sta. 406+12.78	P.T. = 47' Rt. Sta. 406+12.78	P.T. = 47' Rt. Sta. 406+12.78



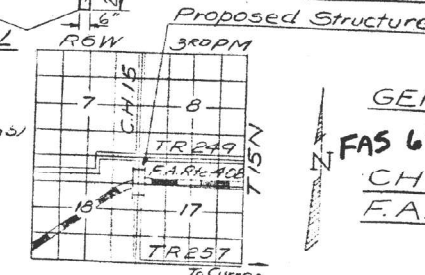
DESIGNED	Calvin Strain
CHECKED	Sul Antain
DRAWN	C.E. Wilkins
CHECKED	SF

EXAMINED
PASSED
APPROVED

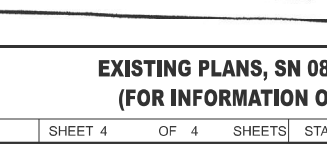
DESIGN STRESSES

fc = 1200 psi (Deck slab - main spans)
fc = 1400 psi (Curb, Parapet, Sub. & Appr. slab)
fs = 20000 psi (Reinf.)
fs = 20000 psi (Struct.)
vc = 75 psi (Figs)
n = 10

Loading HS15-44
Allow 25' p' for future wearing surface



LOCATION SKETCH



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bit. Concrete Surface Course, C.I. I	Tons	63		63
Coal Tar Inter. Protective Coat	Sq. Yds	793		793
Protective Coat	Sq. Yds	190		190
Structure Excavation	Cu. Yds		85	85
Class X Concrete	Cu. Yds	239.7	169.7	409.4
Structural Steel	L.S.			L.S.
Stud Shear Connectors	Each	1320		1320
Aluminum Railing	Lin. Ft.	508		508
Reinforcement Bars	Lbs	54,360	10,000	73,240
Metal Shell Piles 12" φ	Lin. Ft.		140	140
Concrete Piles	Lin. Ft.		764	764
Test Piles (Concrete)	Each		2	2
Test Piles (Metal Shell)	Each		1	1
Slope wall (d')	Sq. Yds		379	379
Preformed Joint Sealer	Lin. Ft.	65		65
Sand Backfill	Cu. Yds		140	140
Name Plates	Each		1	1

GENERAL PLAN & ELEVATION

FAS 622 PROJ: EBF-408-2(9)
CH 15 OVER F.A. RTE 408
F.A. RTE. 408 SECTION 84-9-2HB-3
SANGAMON CO.
STA. 393+63.08 (F.A. RTE. 408)
STA. 50+00.00 (C.H. 15)

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USER NAME = brandon.dudley	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 10/21/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

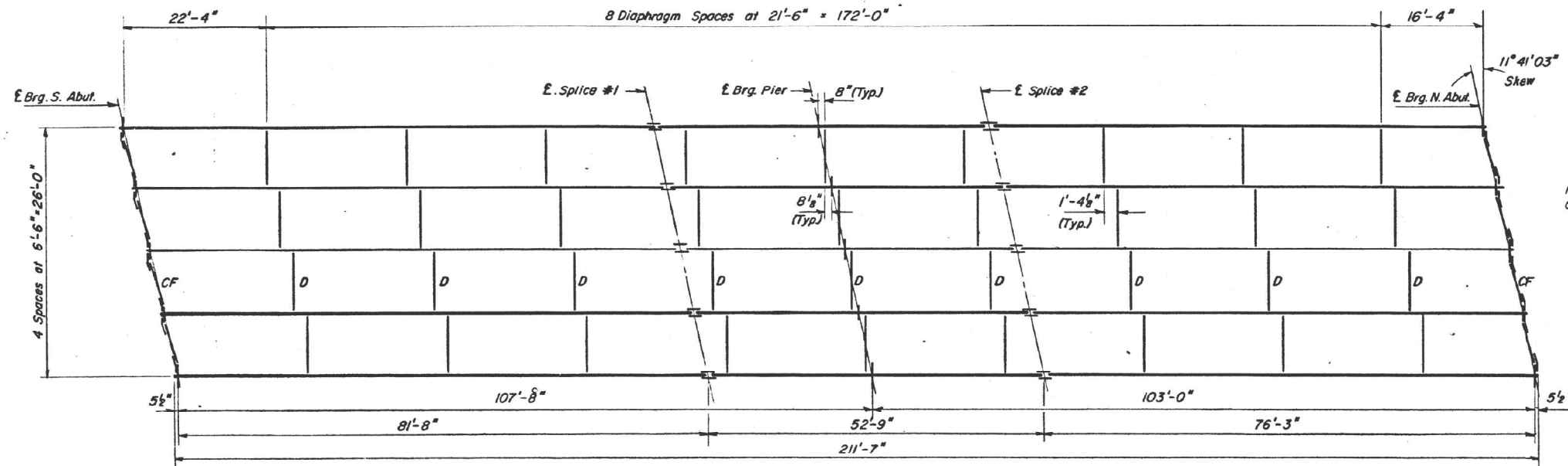
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(FOR INFORMATION ONLY)

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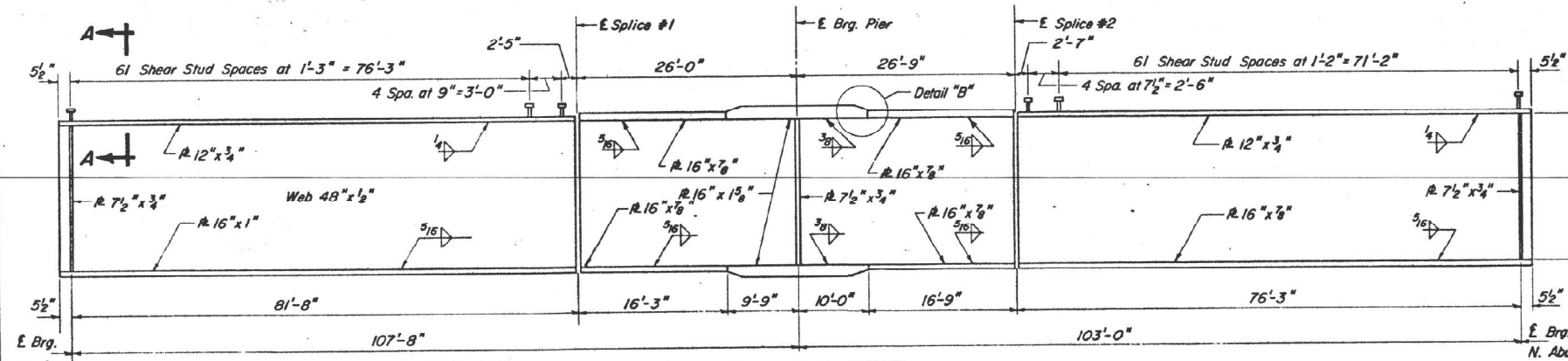
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72	(84-9-2HB-3)BP	SANGAMON	7	4
CONTRACT NO. 72651				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

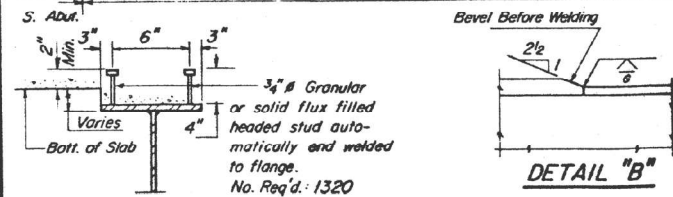
ADDITIONAL SHEETS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5
408	84-9-2 HB-3	SANGAMON	39	17	12 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



FRAMING PLAN



GIRDER ELEVATION



SECTION A-A

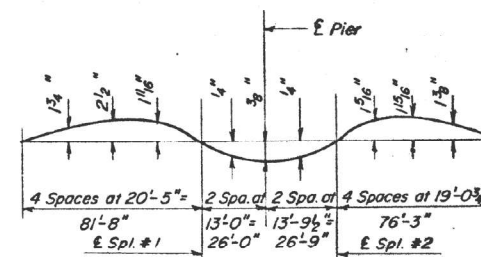
DESIGNED	Calvin Strain
CHECKED	Sal Zeman
DRAWN	P. Barnett
CHECKED	SC

G-1 3-29-71

TOP OF WEB ELEVATIONS

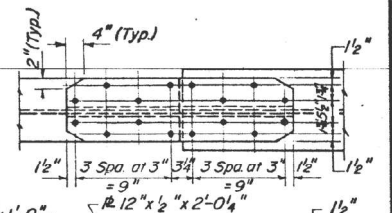
Girder	E. Brg. S. Abut.	E. Brg. Spl. #1	E. Brg. Pier	E. Brg. Spl. #2	E. Brg. N. Abut.
1	640.72	641.33	641.30	641.33	640.84
2	640.85	641.45	641.41	641.43	640.93
3	640.97	641.55	641.51	641.53	641.02
4	640.88	641.45	641.41	641.43	640.91
5	640.79	641.35	641.30	641.31	640.78

Note: The above elevations are for fabrication only.
Elevations at Splices have been adjusted for camber.



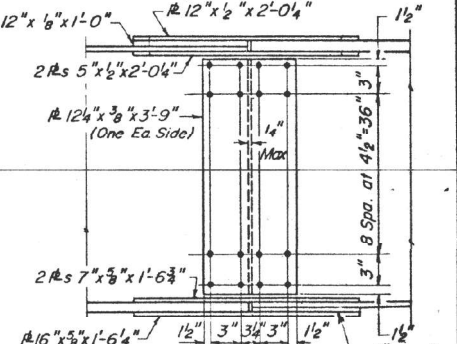
CAMBER DIAGRAM

Note: Clip outside corners of Top & Bottom Splice and Filler Plates for top flange splice as shown.



SECTION AT PIER

SECTION AT ABUTMENT



FIELD SPLICE DETAIL

STRUCTURAL STEEL
F.A. RT. 408 SEC. 84-9-2HB-3
SANGAMON COUNTY
STA. 393+63.08

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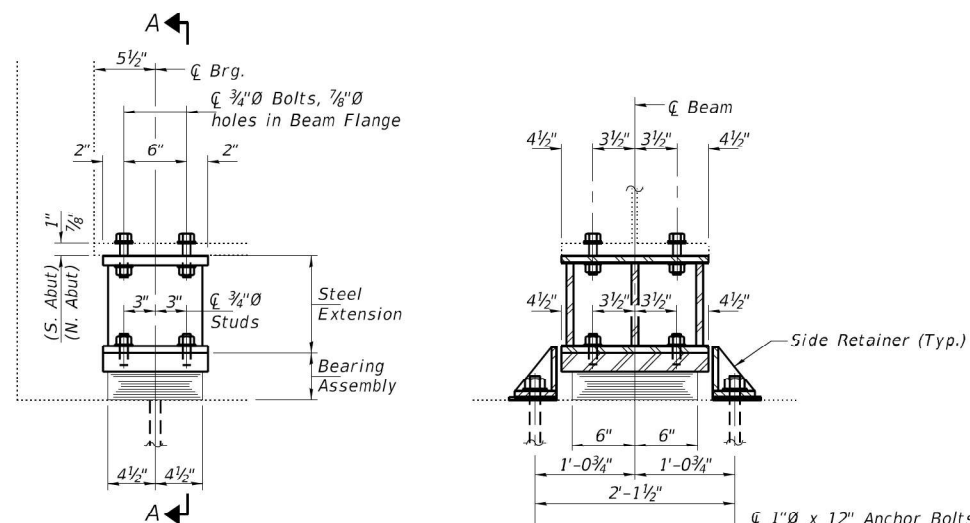
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		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 10/21/2024	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS, SN 084-0145
(FOR INFORMATION ONLY)

SCALE: SHEET 5 OF 4 SHEETS STA. TO STA.

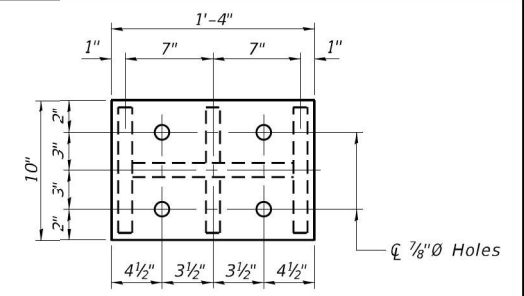
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BP	SANGAMON	7	5
CONTRACT NO. 72651				
ILLINOIS FED. AID PROJECT				



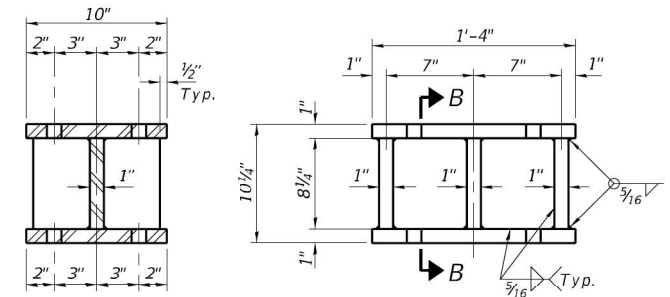
ELEVATION AT BOTH ABUTMENT'S
SECTION A-A
TYPE I ELASTOMERIC EXP. BRG.

GENERAL NOTES

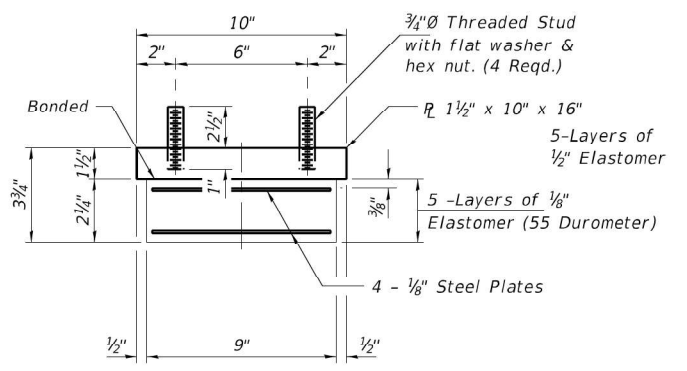
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
 Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts 3/4", holes 13/16", unless otherwise noted.
 Plan dimensions and details relative to the existing structure have been taken from existing plans and 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
 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", and the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.
 All new structural steel and bearing assemblies shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".



PLAN TOP AND BOTTOM PLATE

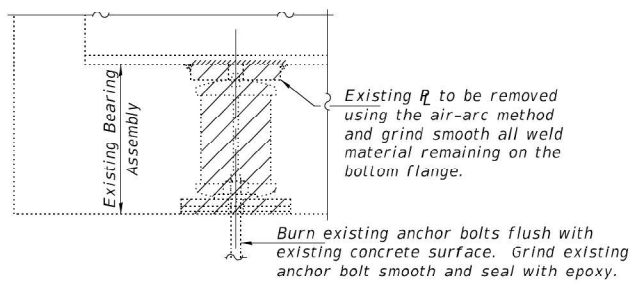


SECTION B-B
STEEL EXTENSION DETAIL



BEARING ASSEMBLY

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



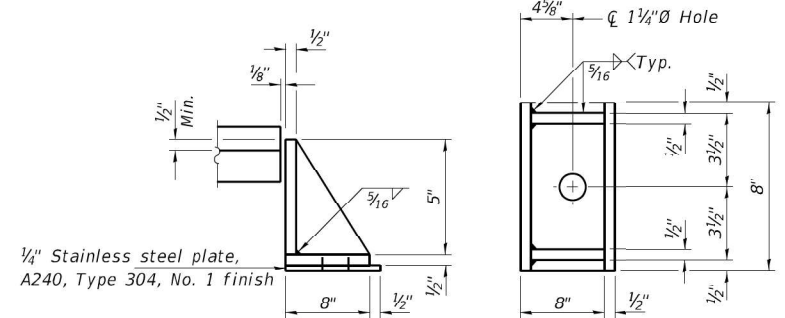
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BEAM REACTIONS

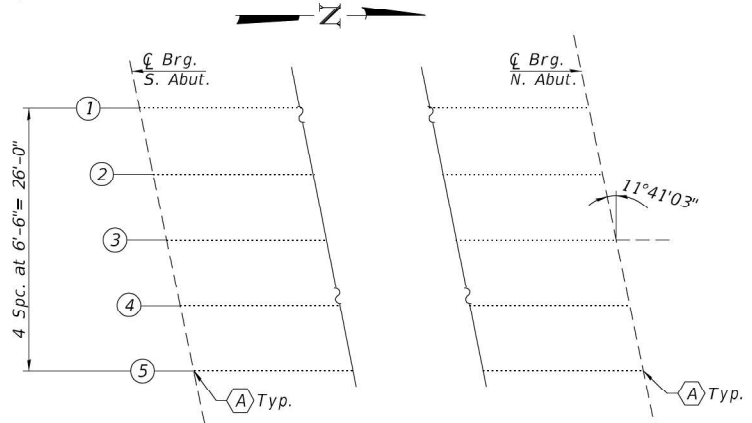
R _P	(K)	48.2
R _L	(K)	28.7
Imp.	(K)	6.2
R (Total)	(K)	83.1

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 = 50 Tons.
 Anchor bolts shall be ASTM F1554 (Grade 55) all-thread. 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.



SIDE RETAINER

(16 Required)
 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PARTIAL FRAMING PLAN

(A) - Bearing Removal and Replacement.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Jack and Remove Existing Bearings	Each	10
Elastomeric Bearing Assembly, Type I	Each	10
Furnishing and Erecting Structural Steel	Pound	1890
Anchor Bolts, 1"Ø	Each	20

All Steel to be galvanized.



EXPIRES 11-30-2024

DESIGNED - Victor H. Veliz	EXAMINED	DATE - JUNE 27, 2024
CHECKED - Adrian T. Halloway	PASSED	REVISOR -
DRAWN - Venkat Ramana Reddy		REVISOR -
CHECKED - VHV ATH		

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
 FARMINGDALE ROAD/CH 15 OVER I-72 / US 36
 SN 084 - 0145
 SHEET NO. 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BRR	SANGAMON	7	4

CONTRACT NO. 72744
 ILLINOIS FED. AID PROJECT

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	DRAWN -	REVISOR -
	CHECKED -	REVISOR -
PLOT DATE = 10/21/2024	DATE -	REVISOR -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS, SN 084-0145
 (FOR INFORMATION ONLY)

SCALE: SHEET 7 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-2HB-3)BP	SANGAMON	7	7

CONTRACT NO. 72651
 ILLINOIS FED. AID PROJECT