

1-18-2013 LETTING ITEM 061

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

VARIOUS ROUTES
SECTION D9 BRIDGE PAINTING 2013-1

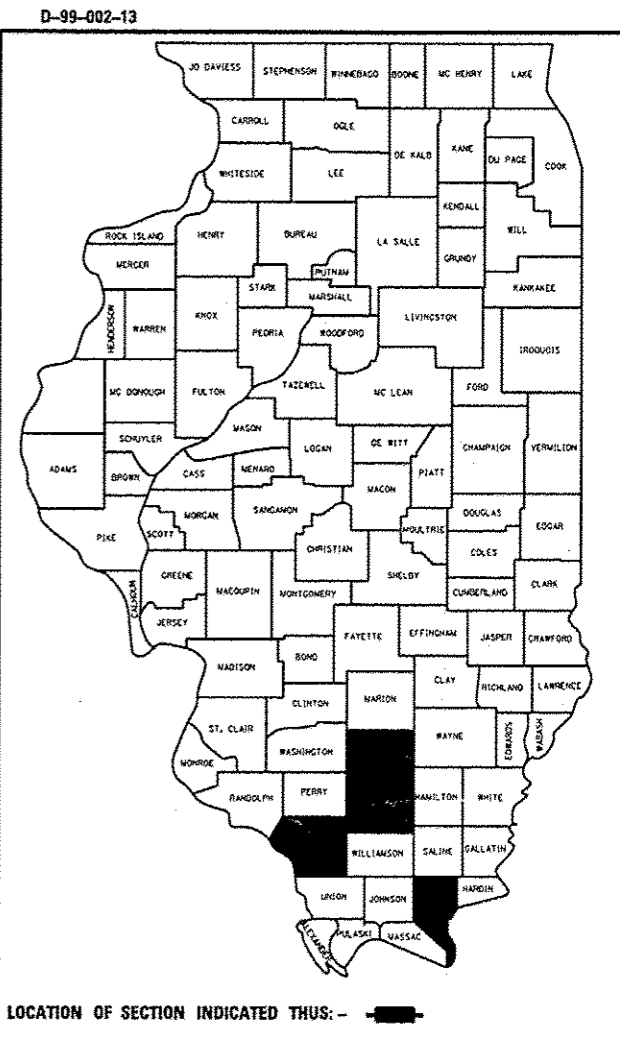
BRIDGE PAINTING
VARIOUS COUNTIES

C-99-002-13

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	1
			CONTRACT NO. 78341	

* 33-3=30

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

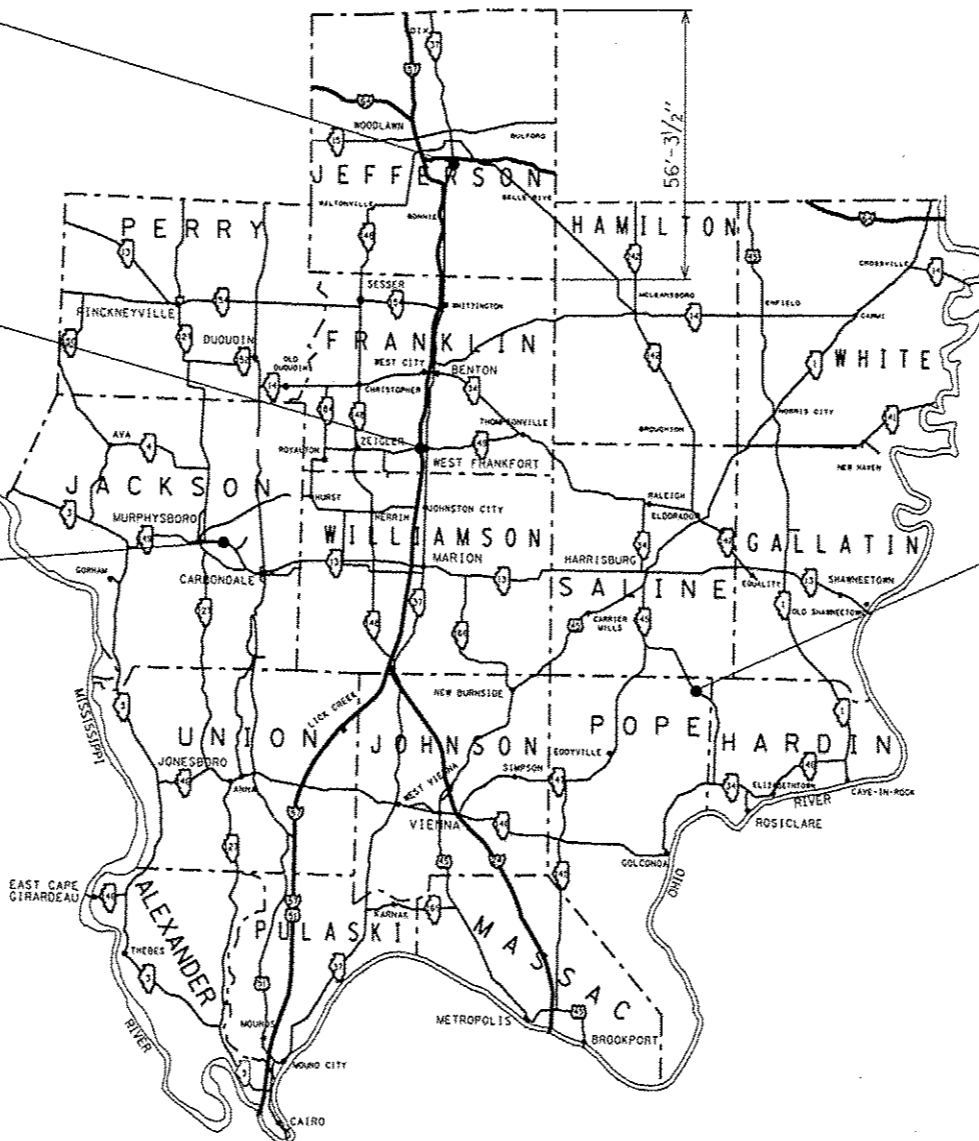


BRIDGE NO. 3
STRUCTURE NO. 041-0032
FAS-2869 (ILL-37)
OVER CASEY FORK

BRIDGE NO. 1
STRUCTURE NO. 028-0039
FAP-0873 (ILL-149)
OVER INTERSTATE 57

BRIDGE NO. 2
STRUCTURE NO. 039-0050
FAP-0331 (ILL-13 WB)
OVER MUD CREEK

BRIDGE NO. 4
STRUCTURE NO. 076-0001
FAP-0778 (ILL-34)
OVER GIBBONS CREEK



J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER David Piche
DESIGNER Rita Gautney

CONTRACT NO. 78341

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct 25 20 12

Chris Amman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 7 20 12
John D. Baranzelli, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

Dec 7 20 12
William R. Freyer
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS, SIGNATURES, GENERAL NOTES
3, 4	SUMMARY OF QUANTITIES
5	SN 028-0039 LOCATION, NOTES
6	PORTABLE TEMPORARY BARRIER SYSTEM
7-11	SN 028-0039 STRUCTURE INFORMATION
12	SN 039-0050 LOCATION, NOTES
13-16	SN 039-0050 STRUCTURE INFORMATION
17	SN 041-0032 LOCATION, NOTES
18-26	SN 041-0032 STRUCTURE INFORMATION
27	SN 076-0001 LOCATION, NOTES
*28-33	SN 076-0001 STRUCTURE INFORMATION

* SHEETS 31 THRU 33 HAVE BEEN DELETED

EXTRA TRAFFIC CONTROL DEVICES MAY BE REQUIRED TO CHANNEL TRAFFIC AT COMMERCIAL AND/OR PRIVATE ENTRANCES AS DIRECTED BY THE ENGINEER. ALL TRAFFIC CONTROL DEVICES ARE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION STANDARD USED AT THE SITE, AND WILL NOT BE PAID FOR SEPARATELY.

THE EXISTING STEEL COATINGS CONTAIN LEAD. THE CONTRACTOR SHOULD TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

THE CONTRACTOR IS REQUIRED TO BE SSPC OP1 AND SSPC OP2 CERTIFIED.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE 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.

TRAFFIC CONTROL SIGNS SHALL BE PLACED SO THAT THEY DO NOT INTERFERE WITH EXISTING SIGNS OR FLASHING BEACONS. THE DIMENSIONS BETWEEN SIGNS MAY BE MODIFIED SLIGHTLY SO AS TO AVOID CONFLICTS WITH EXISTING SIDE ROADS, COMMERCIAL ENTRANCES, AND PRIVATE ENTRANCES. THE BUREAU OF OPERATIONS SHOULD APPROVE FINAL PLACEMENT OF TRAFFIC CONTROL SIGNING.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.

THE QUANTITY FOR RELOCATE PORTABLE TEMPORARY BARRIER SYSTEM IS BASED ON RELOCATING THE BARRIER THREE TIMES. ANY PAYMENT FOR ADDITIONAL RELOCATION WILL BE MADE ACCORDING TO ARTICLE 104.02 OF THE STANDARD SPECIFICATIONS.

COMMITMENTS: NONE AS OF OCT. 19, 2012

STANDARDS

701201-04	LANE CLOSURE, 2L, 2W, DAY-ONLY
701400-06	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-09	LANE CLOSURE, FREEWAY/EXPRESSWAY WITH BARRIER
701411-08	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701422-05	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701901-03	TRAFFIC CONTROL DEVICES

Prepared By:	<i>Joe Zdaniewicz</i> DISTRICT STUDIES & PLANS ENGINEER
Examined By:	<i>James E. ...</i> DISTRICT LAND ACQUISITION ENGINEER
Examined By:	<i>Carrie Nelson</i> DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By:	<i>Karl ...</i> DISTRICT OPERATIONS ENGINEER
Examined By:	<i>K.R. ...</i> DISTRICT PROJECT IMPLEMENTATION ENGINEER
Examined By:	<i>Douglas ...</i> DISTRICT CONSTRUCTION ENGINEER
Examined By:	<i>Eric ...</i> DISTRICT MATERIALS ENGINEER
Approved By:	<i>Omer Osmani</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER
	DATE: <u>Oct 25</u> 2012

FILE NAME *	USER NAME *	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		INDEX OF SHEETS, STANDARDS, GENERAL NOTES		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwork\p\dot\goutneyrk\d0319666\78	goutneyrk	DRAWN -	REVISED -					VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	2
#MODELNAME#		CHECKED -	REVISED -			SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____						CONTRACT NO. 78341
		DATE -	REVISED -									ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES

VARIOUS			
CONSTRUCTION TYPE: 0014			
100% STATE			
URBAN	URBAN	RURAL	RURAL
I-57	IL 13 WB	IL 37	IL 34
FRANKLIN	JACKSON	JEFFERSON	POPE
028-0039	039-0050	041-0032	076-0001

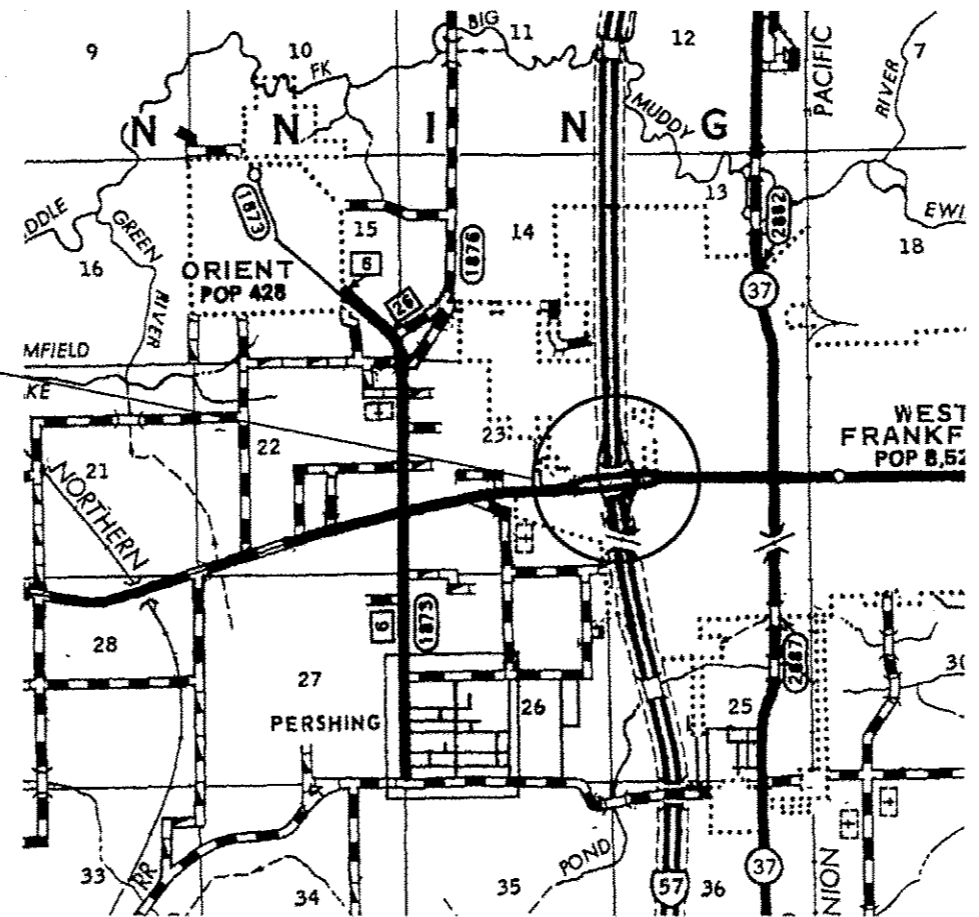
CODE NO.	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	FRANKLIN 028-0039	JACKSON 039-0050	JEFFERSON 041-0032	POPE 076-0001
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	1.5	0.5	0.5	0.5
67100100	MOBILIZATION	L SUM	1	0.25	0.25	0.25	0.25
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	1	1			
70100315	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	EACH	1		1		
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	2	2			
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1			0.5	0.5
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	5	2	1	1	1
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1			
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1		1		
Z0007103	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1			1	
Z0007104	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L SUM	1				1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1			
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1		1		
Z0010503	CLEANING AND PAINTING STEEL BRIDGE NO. 3	L SUM	1			1	

SUMMARY OF QUANTITIES

VARIOUS			
CONSTRUCTION TYPE: 0014			
100% STATE			
URBAN	URBAN	RURAL	RURAL
I-57	IL 13 WB	IL 37	IL 34
FRANKLIN	JACKSON	JEFFERSON	POPE
028-0039	039-0050	041-0032	076-0001
			1
	267		
	801		

CODE NO.	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
Z0010504	CLEANING AND PAINTING STEEL BRIDGE NO. 4	L SUM	1
Z0052398	PORTABLE TEMPORARY BARRIER SYSTEM	FOOT	267
Z0052399	RELOCATE PORTABLE TEMPORARY BARRIER SYSTEM	FOOT	801

BRIDGE NO. 1
SN. 028-0039
2011 ADT: 14500
12% TRUCKS
INVENTORY RATING: 35.6
OPERATING RATING: 55.0
DENNING TOWNSHIP



FRANKLIN COUNTY

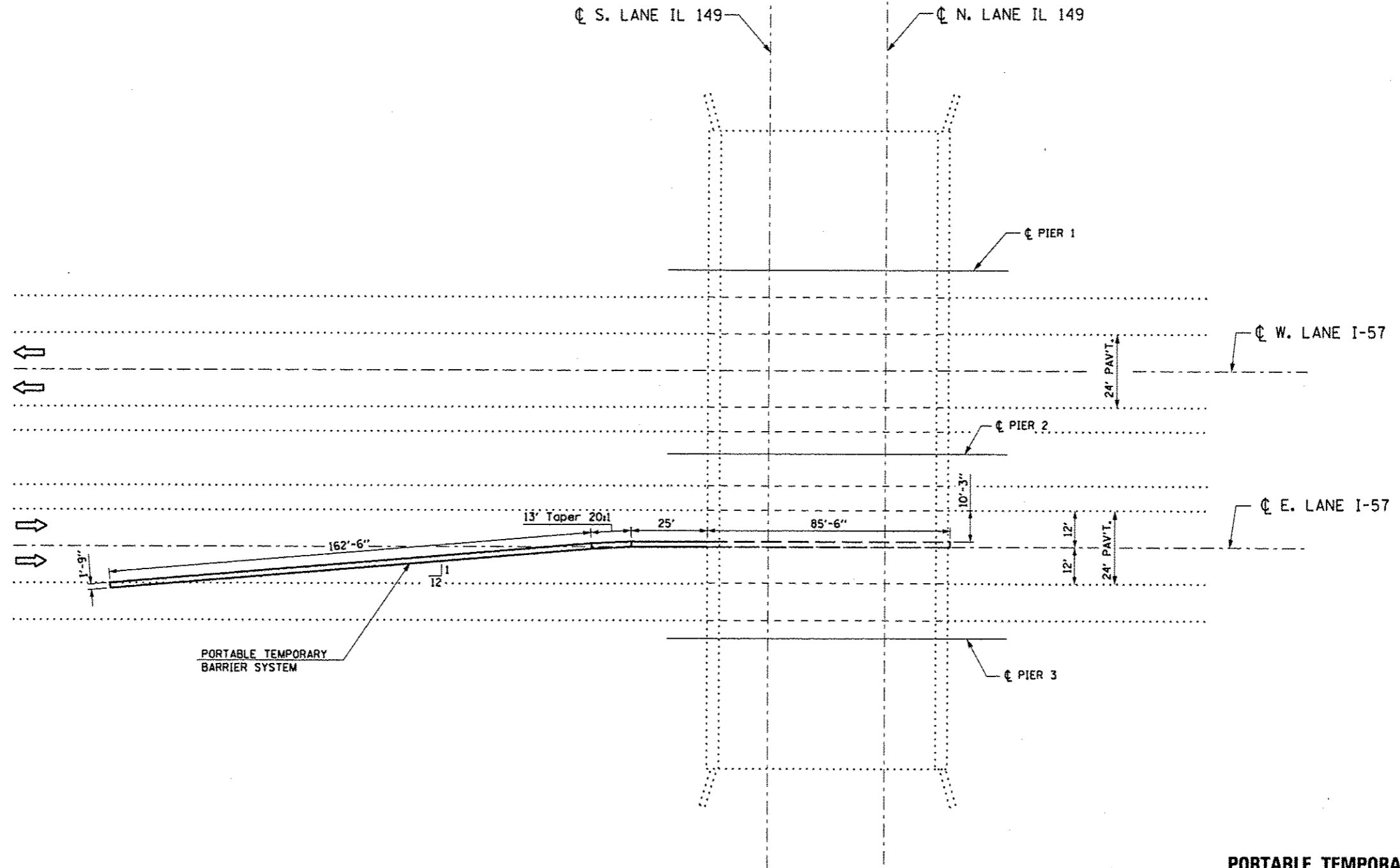
NOTES

CLEANING AND PAINTING OF ALL EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES" AND "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES". ALL EXISTING STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING - SSPC-SP10 AND PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR THE EXTERIOR SURFACES AND BOTTOM OF THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN, MUNSELL NO. 7.5G 4/8.

A MINIMUM OF FOUR AIR MONITORS ARE REQUIRED TO MONITOR ABRASIVE BLASTING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISION "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 028-0039 IL 149 OVER I-57 TRAFFIC CONTROL AT ENTRANCE RAMP	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\gautneyrk\d8319666\7841-sht-plan.dgn	PLOT SCALE * 48.0000' / in.	DRAWN -	REVISED -			VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	5	
#MODELNAME*	PLOT DATE * 10/17/2012	CHECKED -	REVISED -			CONTRACT NO. 78341					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

NOTE: SEE TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 FOR DETAILS NOT SHOWN.
SEE SPECIAL PROVISIONS "PORTABLE TEMPORARY BARRIER SYSTEM" AND "LANE RENTAL".



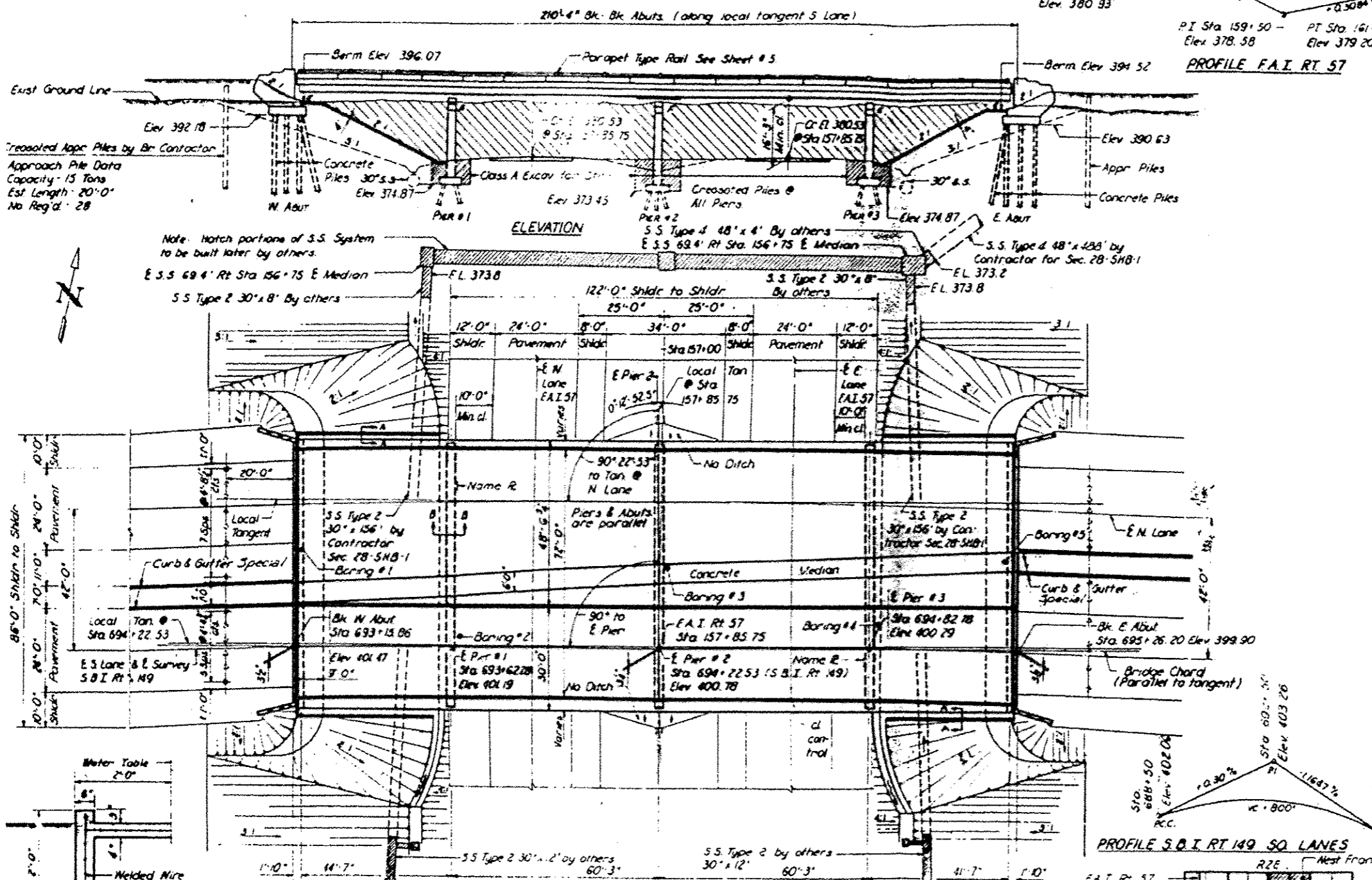
**PORTABLE TEMPORARY BARRIER SYSTEM
TYPICAL PLACEMENT**

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 028-0039	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\gautneyrk\08319665\78	41-ah1-plen.dgn	DRAWN -	REVISD -		IL 149 OVER I-57	VAR	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	6	
#MODELNAME*	PLOT SCALE * 48.0000 1/16"	CHECKED -	REVISD -		SCALE: _____	SHEET _____	OF _____	SHEETS	STA. _____	TO STA. _____	CONTRACT NO. 78341
	PLOT DATE * 12/22/2012	DATE -	REVISD -								ILLINOIS FED. AID PROJECT

B.M. R.R. Spike in P.P. 28 Ft. R.I. S.B.I. Rt. 149
Sta 70+35 Elev 395.55

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT	FRANKLIN	100	34	13
SHEET NO.				1



PROFILE F.A.I. RT 57
P.C. 157+50 Elev 380.93
P.T. Sta 159+50 Elev 378.58
P.T. Sta 161+50 Elev 379.20

GENERAL NOTES

Class X Concrete shall be used throughout. Coarser aggregate which is to be used in parapet handrails and end posts must be absolutely free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh #4 wires, weighing 58# per 100 Sq. Ft.

Rivets 3/4" dia, open holes 1/2" dia, unless noted.

Structural Steel shall conform to ASTM specifications designation A-7.

All bolsters, rockers, bearing plates, lead plates, shim plates, pinies and anchor bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in quantity of Structural Steel. Est. Wt. 17950#.

Anchor bolts shall be set before riveting diaphragms over supports.

Expansion guards shall be fabricated and erected in accordance with Article 51.13(d) of the Standard Specifications.

Expansion guards are included in quantity of Structural Steel Est. Wt. 3580#.

Except as otherwise provided, all Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 inclusive of the Standard Specifications.

All outside faces of vertical legs of angles in expansion guards shall be given two shop coats of red lead paint.

All paint shall be furnished & applied by Contractor involved.

The Contractor shall drive one concrete test pile at the West Abutment in a permanent location and one timber test pile in the vicinity of Pier 3 as directed by the Engineer before ordering the remainder of Piles.

Permanent forms will not be permitted in forming the concrete floor.

TOTAL BILL OF MATERIAL
SEC 28-5HB-1

Item	Unit	Super	Sub	Total
Class A Excavation for Str.	Cu Yds		620	620
Class X Concrete	Cu Yds	468.2	527.7	995.9
Erecting Structural Steel	Lbs	433,570		433,570
Aluminum Handrail	Lbs	416		416
Reinforcement Bars	Lbs	104,070	45,500	149,570
Crested Piles	Each		3385	3385
Test Piles (Timber)	Each		1	1
Concrete Piles	Lbs		2025	2025
Test Piles (Concrete)	Each		1	1
Name Plates	Each		2	2
Slope Wall 4"	Sq Yds		870	870
Protection	Sq Yds	196		196

* Includes slope wall excavation.

TOTAL BILL OF MATERIAL
SEC 28-5HF-1

Furnishing Structural Steel	Lbs	433,570
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FOR INFORMATION ONLY
GENERAL PLAN AND ELEVATION
PROJECT I-57-2(40)164
S.B.I. RT 149 OVER
F.A.I. RT 57 SEC 28-5HB-1
FRANKLIN COUNTY
STA 157+85.75

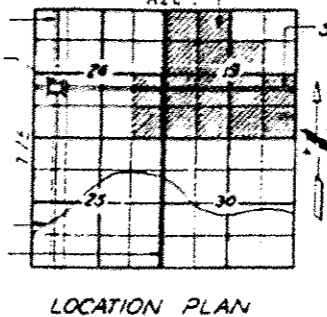
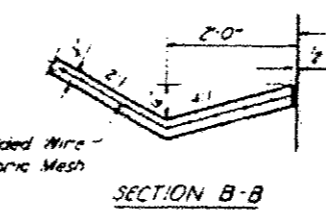
DESIGNED: *[Signature]*
CHECKED: *[Signature]*
DRAWN: E.S.
CHECKED: F.K.J.

DESIGN STRESSES
F_c = 1,400 p.s.i. Super & Sub
F_c = 75 p.s.i. Footing
F_s = 20,000 p.s.i. Reinf
F_s = 18,000 p.s.i. Str. Jc.
γ = 10 Max All 6" dia

LOADING H20 · S16 · 44

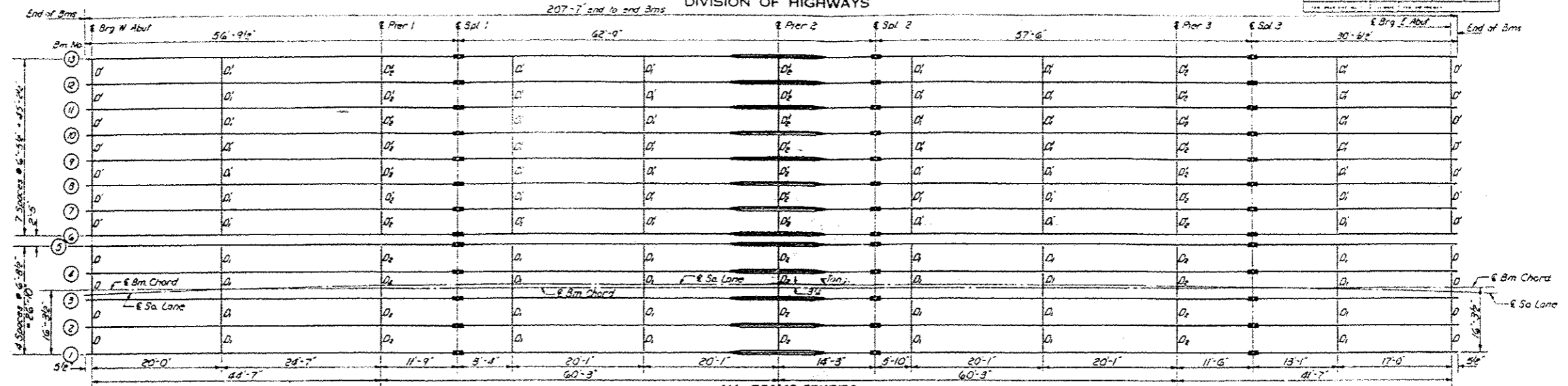
CURVE DATA
F.A.I. RT 57
R = 8° 31' 00"
D = 0° 24' 00"
L = 323.97
T = 219.17
E = 066.55
E = 39.55

3 Lanes
CURVE DATA
S.B.I. RT 149
J = 3° 13' 07"
D = 0° 34'
L = 567.86'
T = 284.00'
R = 10,111.06

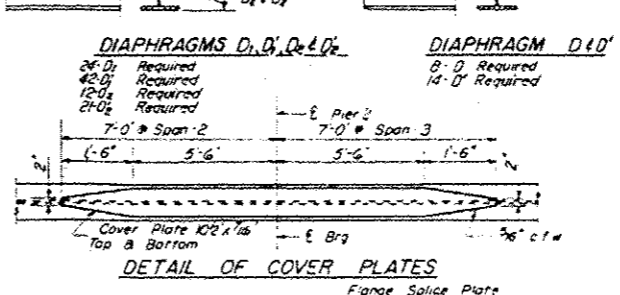
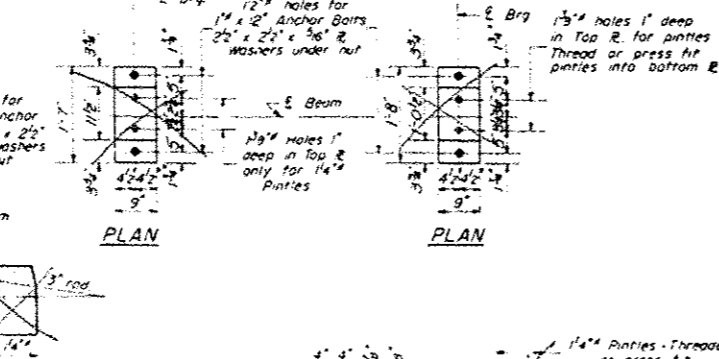
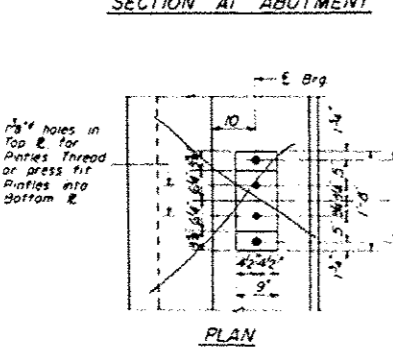
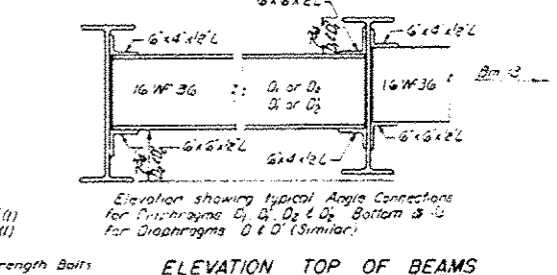
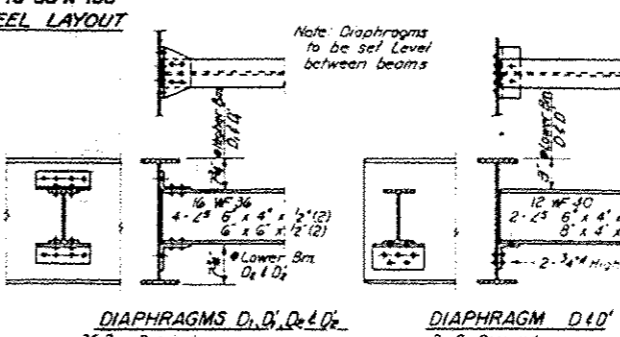
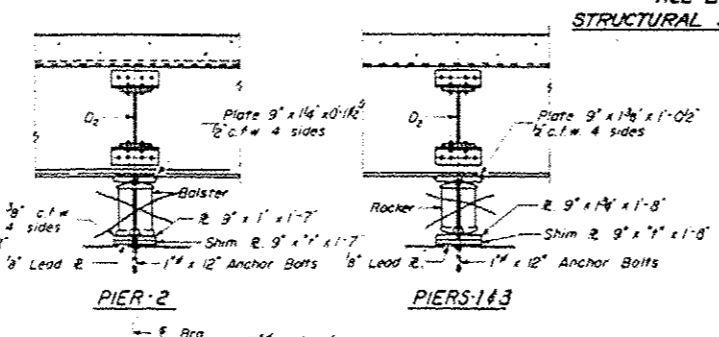
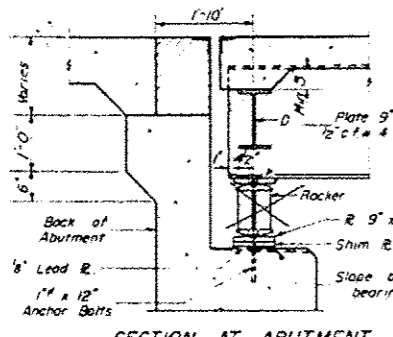


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

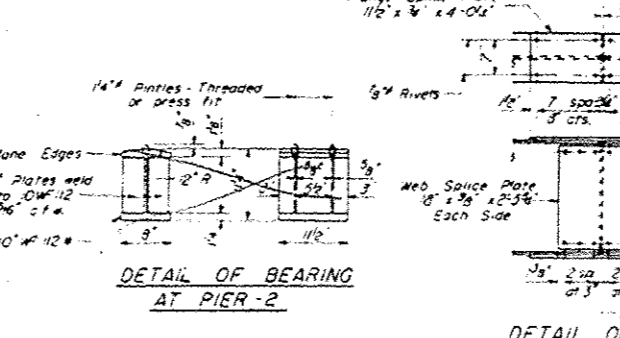
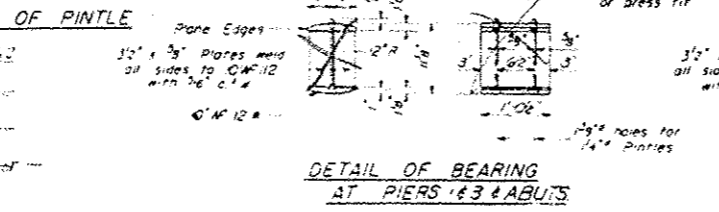
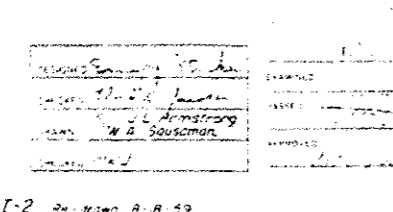
SN 028-0039
IL 149 OVER I-57
FRANKLIN COUNTY
STA. 157+95.75



ALL BEAMS 33WF130
STRUCTURAL STEEL LAYOUT



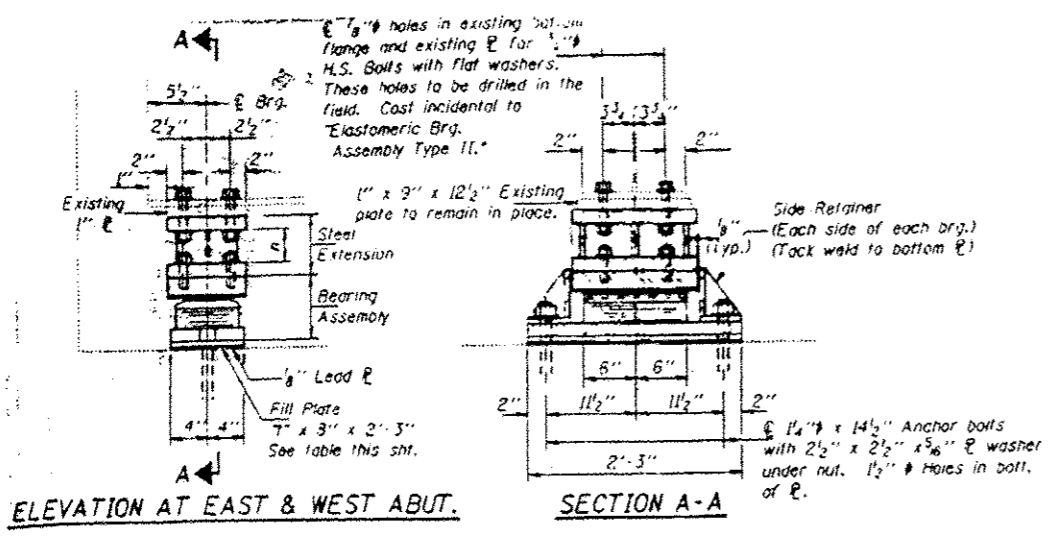
Location	6 Brg W. Abut	6 Brg Pier 1	6 Spl 1	6 Brg Pier 2	6 Spl 2	6 Brg Pier 3	6 Spl 3	6 Brg E. Abut
1	40058	40025	40017	39981	39970	39933	39924	39903
2	40071	40038	40030	39994	39983	39946	39937	39916
3	40085	40052	40044	40008	39997	39960	39951	39930
4	40098	40065	40057	40021	40010	39973	39964	39943
5	40111	40078	40070	40034	40023	39986	39977	39956
6	40116	40083	40075	40039	40028	39991	39982	39961
7	40129	40096	40088	40052	40041	40004	39995	39974
8	40142	40109	40101	40065	40054	40017	40008	39987
9	40155	40122	40114	40078	40067	40030	40021	40000
10	40168	40135	40127	40091	40080	40043	40034	40013
11	40181	40148	40140	40104	40093	40056	40047	40026
12	40194	40161	40153	40117	40106	40069	40060	40039
13	40206	40173	40165	40129	40118	40081	40072	40051



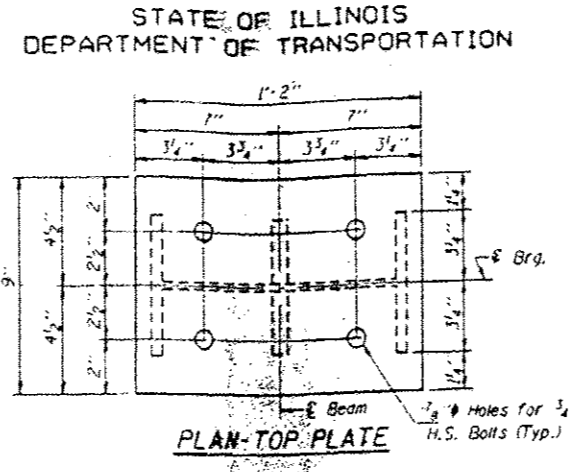
FOR INFORMATION ONLY

STRUCTURAL STEEL
S.B.I. RT 149 OVER I-57
I-57 SEC. 28-5H(C.B.F.)
FRANKLIN COUNTY
STA. 157+95.75

I-2 20' Span 8-8 59



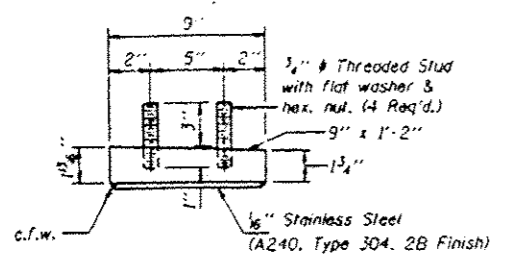
TYPE II TFE ELASTOMERIC EXP. BRG.



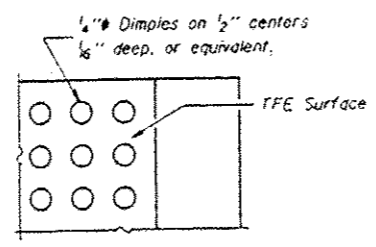
PLAN-TOP PLATE

INTERIOR BEAM MOMENT TABLE

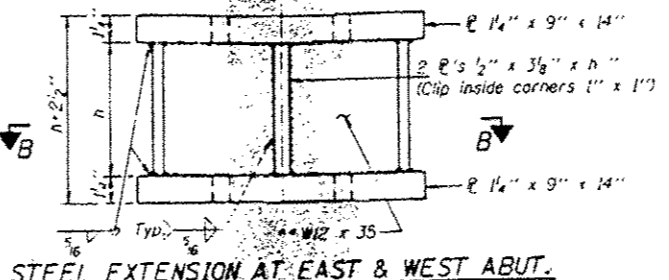
	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	.5 Span 3	Pier 3	0.6 Sp. 4
I_s (in ⁴)	6710	6710	6710	7861	6710	6710	6710
S_s (in ³)	406	406	406	547	406	406	406
W (K/ft.)	1.084	1.084	1.084	1.084	1.084	1.084	1.084
M_R (K)	148.1	291.0	160.5	371.7	167.4	277.3	114.0
M_L (K)	262.3	231.5	299.0	267.5	297.0	225.4	238.6
M (Imp) (K)	77.6	64.9	80.7	72.3	90.3	63.2	71.6
M (Total) (K)	482.5	587.4	540.2	711.5	544.7	565.9	424.2
T_s (K.S.F.)	4.2	7.4	16.0	15.6	16.1	16.7	12.5



TOP BEARING ASSEMBLY



PLAN-TFE SURFACE

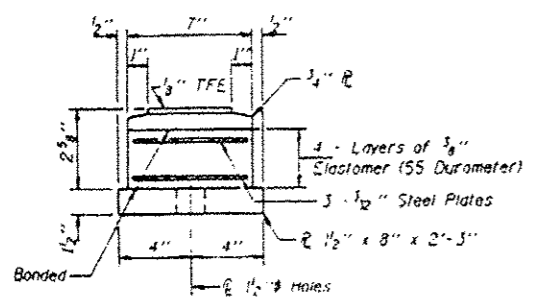


STEEL EXTENSION AT EAST & WEST ABUT.

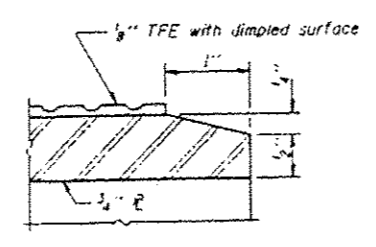
INTERIOR BEAM REACTION TABLE

	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
R_R (K)	17.6	62.0	68.2	60.3	15.9
R_L (K)	33.0	41.6	42.0	41.6	32.4
R (Imp) (K)	9.7	11.6	11.3	11.6	9.7
R (Total) (K)	60.3	115.2	121.5	113.5	58.0

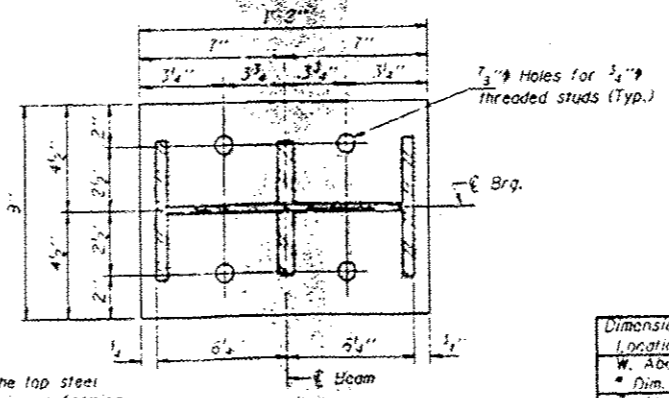
Service Load Values
 I_s and S_s are the moment of inertia and section modulus of the steel section used in computing T_s (Total).
 W is the maximum live load + impact shear range in span.
 f_s is the sum of the stresses due to $M_R + M_L + I$.
 M_R Moment due to Dead Loads on non-composite section.
 M_L Moment due to Live Loads on non-composite section.
 I - Live Load Impact.



BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

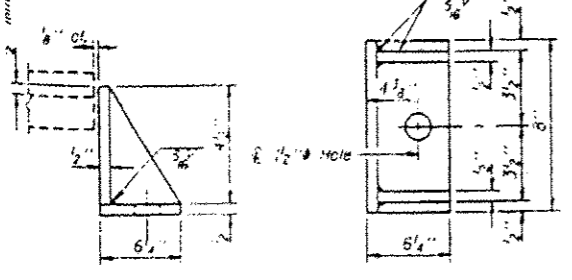


SECTION B-B

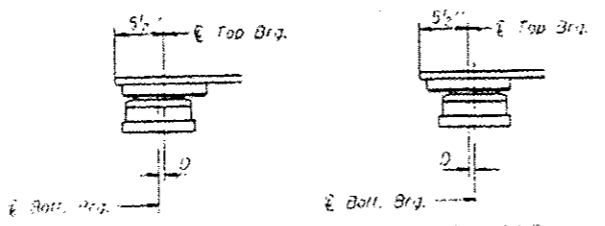
Dimension/Location	Dim. #1	2	3	4	5	6	7	8	9	10	11	12	Dim. #3
W. Abut.	3 3/8	1/8	1/8	0	1/4	1/8	1/8	1/8	5/16	1/4	1/4	1/4	1/4
E. Abut.	1/8	1/8	1/8	1/8	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4

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.



SIDE RETAINER



SETTING ANCHOR BOLTS AT EXP. BRG.

* Based on the existing seat elevations shown on sheet #12 of 23. The Contractor shall verify these Elev. and make adjustments if necessary. Cast incidental.
 *** See Int. #12 of 23 for Jack and Remove Existing Bearing Procedure and Location.
 For anchor bolt installation details see sheet #15 of 23. Existing anchor bolts which are not under side retainer shall be covered with 1/2" thick layer of cement mortar. Cast incidental to Jack and Remove Existing Bearing.
 For anchor bolt location see sheet #16 and #17 of 23.

DESIGNED: Michael J. ...
 CHECKED: Sharron ...
 DRAWN: Sharron ...
 CHECKED: SA ...
 EXAMINED: ...
 PASSED: ...
 DATE: June 13, 1994

	n
W. Abut.	3 1/8
E. Abut.	5 3/8

FOR INFORMATION ONLY

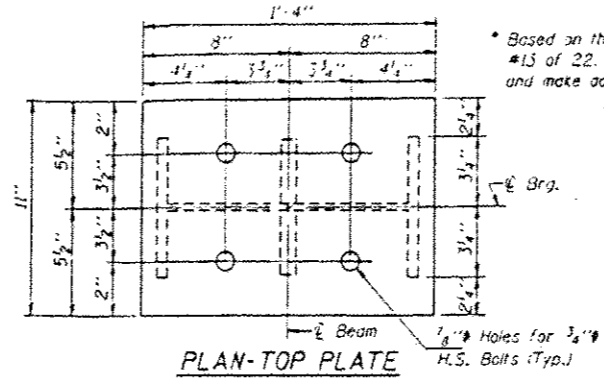
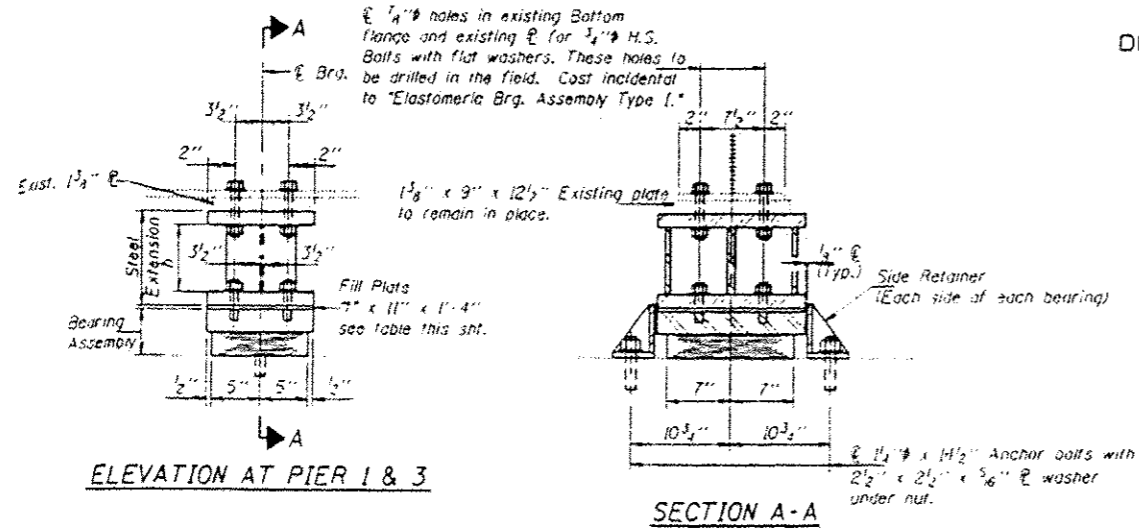
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	25
Jack and Remove Existing Bearings	Each	25

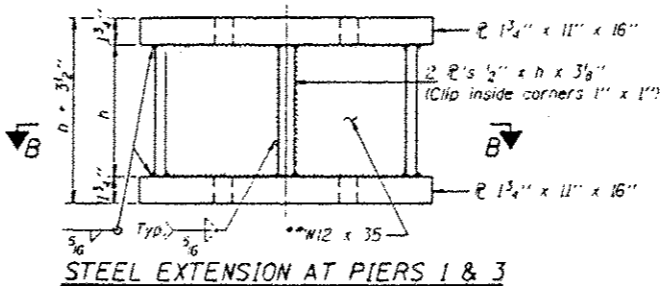
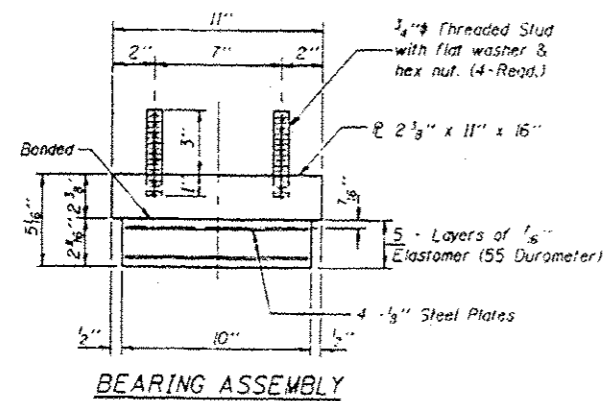
EAST & WEST ABUTMENT BEARING DETAILS
 F.A.I. RT. 57 SEC. (28-5HB-1)D
 FRANKLIN COUNTY
 STATION 157-85.75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	DATE	SCALE	SHEET NO.
F.A.I. 57	*	FRANKLIN	122	106
SHEET NO. 13				23 SHEETS
* 28(4B-2, 3HB-1, 5HB-1)D				

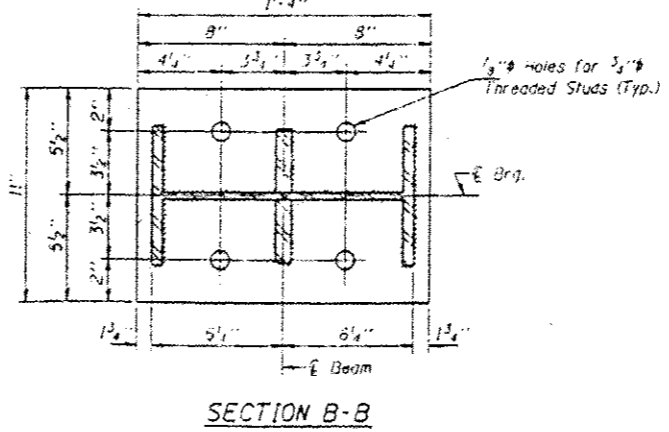


* Based on the existing seat elevations shown on sheet #13 of 22. The Contractor shall verify these thicknesses and make adjustments if necessary. Cost Incidental.

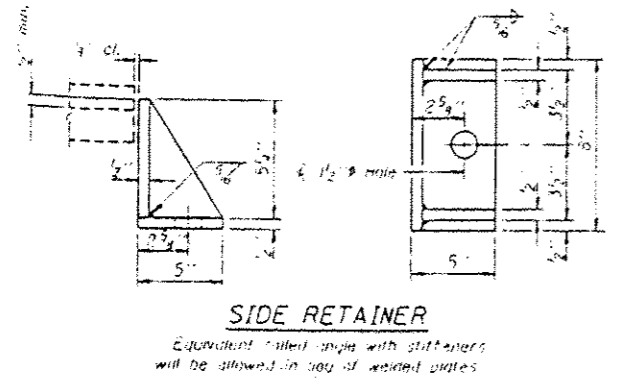


Dimension/Location	Dim. #1	2	3	4	5	6	7	8	9	10	11	12	Dim. #13
PIER 1	8"	16"	0	0	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	0	1/8"	1/8"
PIER 3	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	0	1/8"	0

** Equivalent welded plates will be allowed in lieu of W12 x 35 section.



	h
PIER 1	4 5/8"
PIER 3	5"



Notes: For anchor bolt installation details see sheet #13 of 23. See sheet #14 of 23 for Jack and Remove Existing Bearing Procedure and location. Existing anchor bolts which are not under side retainer shall be covered with 1/2" thick cover if without nut. Cost is incidental to Jack and Remove Existing Bearing. All plates shall not be placed under bearing assembly.

DESIGNED: Michael J. Stobben
CHECKED: Shane Summer
DRAWN: Shane Summer
CHECKED: J.A. [Signature]

ESTIMATED: [Signature]
APPROVED: [Signature]

DATE: June 13, 2014

BILL OF MATERIAL

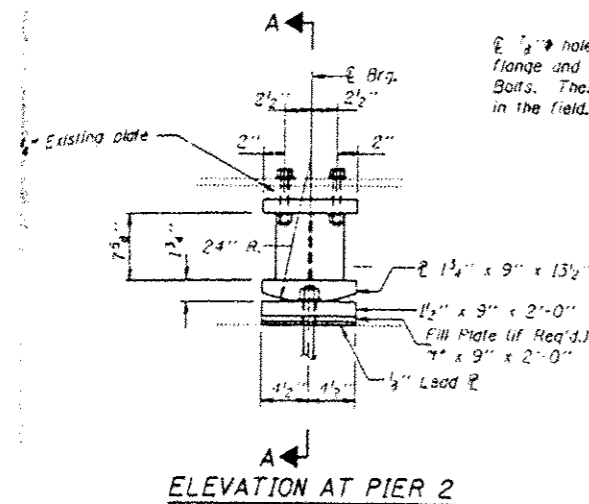
Item	Unit	Quantity
Elastomeric Bearing Assembly Type I	Each	26
Jack and Remove Existing Bearings	Each	26

FOR INFORMATION ONLY

PIER 1 AND PIER 3
BEARING DETAILS
F.A.I. RT. 57 SEC. (28-5HB-1)D
FRANKLIN COUNTY
STATION 157+85.75

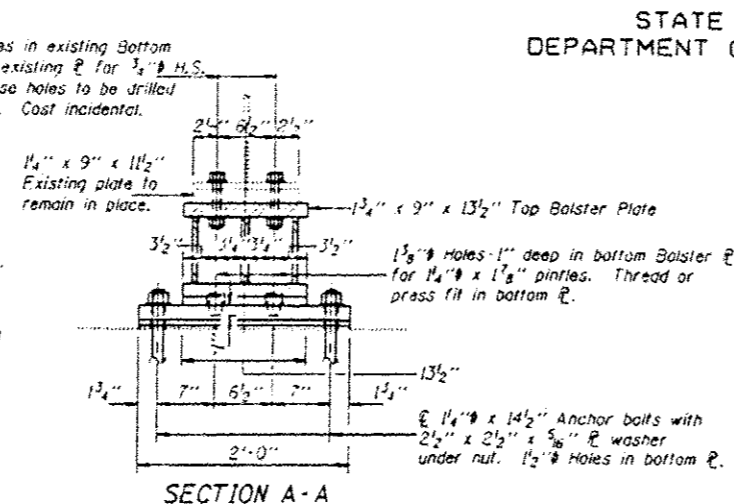
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	*	FRANKLIN	122	107
SHEET NO. 14				
23 SHEETS				
* 28C1HB-2, 3HB-1, 5HB-1) D				



ELEVATION AT PIER 2

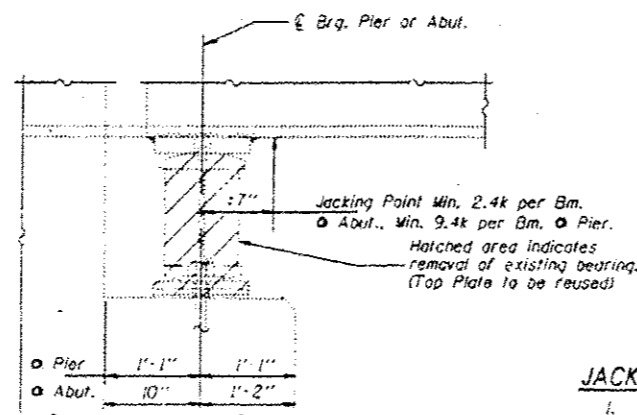
FIXED BEARING



SECTION A-A

EXISTING SEAT ELEVATIONS

Location	W. Abut.	Pier #1	Pier #2	Pier #3	E. Abut.
Beam #1	397.93	397.47	397.04	396.55	396.35
Beam #2	397.80	397.34	396.91	396.42	396.22
Beam #3	397.68	397.22	396.79	396.30	396.10
Beam #4	397.55	397.09	396.66	396.17	395.97
Beam #5	397.40	396.94	396.51	396.02	395.82
Beam #6	397.28	396.82	396.39	395.90	395.70
Beam #7	397.15	396.69	396.26	395.77	395.57
Beam #8	397.03	396.57	396.14	395.65	395.45
Beam #9	396.97	396.51	396.08	395.59	395.39
Beam #10	396.84	396.38	395.95	395.46	395.26
Beam #11	396.72	396.26	395.83	395.34	395.14
Beam #12	396.57	396.11	395.68	395.19	394.99
Beam #13	396.45	395.99	395.56	395.07	394.87



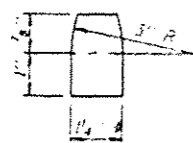
JACK AND REMOVE EXISTING BEARINGS

(Dimensions are at RL 1'3")

Notes:

The maximum dead load reaction with the deck removed per bearing at each abutment is 2.4 kips and at each Pier is 9.4 kips. Bearing removal and replacement shall be completed before new deck is poured.

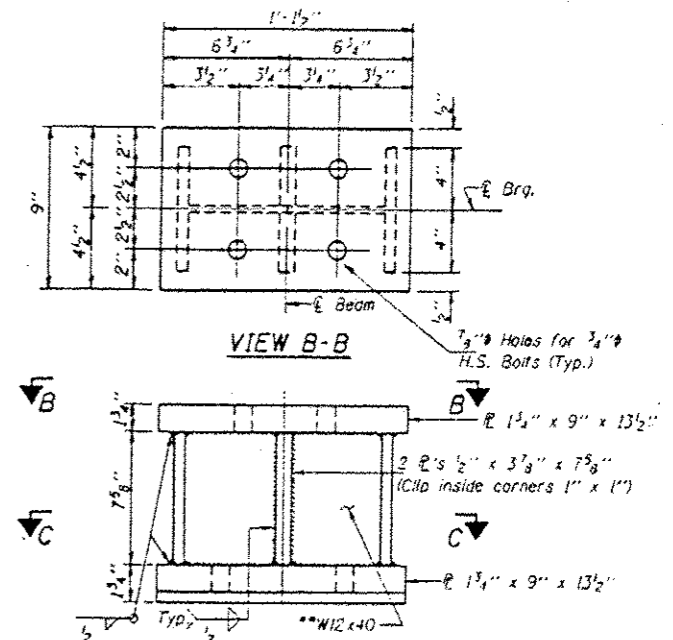
For anchor bolt installation details see sheet #15 of 23. Existing anchor bolts which are not under side retainer shall be covered with a 2" thick layer of cement mortar. Cost incidental to "Jack and Remove Existing Bearings." For anchor bolt Location see Sheets #16 and #17 of 23.



PINTLE

JACK AND REMOVE EXISTING BEARING PROCEDURE

- The Contractor shall submit for approval by the Engineer, plans for jacking prior to commencing any work at the bearings. Min. jack capacity = 2.4K at each beam at abutments and 9.4K at each beam at Piers without concrete deck. Jack Capacity = 10 Tons.
- Jacking and removing existing bearings shall be done after deck removal is completed and before the new deck is poured.
- Jacking shall be limited to a maximum of 1/4" lift.
- The existing anchor bolts shall be removed by cutting off flush and grind smooth with the bridge seat. The rockers and bottom plates at piers shall be removed leaving the existing top plate intact. The existing holes shall be filled with concrete and new holes drilled at locations specified. The bottom flange area of the beam and existing top plate shall be cleaned and painted as required and as specified for structural steel prior to placing the new bearings.
- The new Elastomeric bearings and steel extensions shall be placed and the jacks shall be lowered before the new deck is poured.



VIEW B-B

STEEL EXTENSION AT PIER 2

** Equivalent welded plates will be allowed in lieu of W12x40 section.

SECTION C-C

BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	13

FOR INFORMATION ONLY

PIER 2
BEARING DETAILS
F.A.I. RT. 57 SEC. (28-5HB-1) D
FRANKLIN COUNTY
STATION 157+85.75

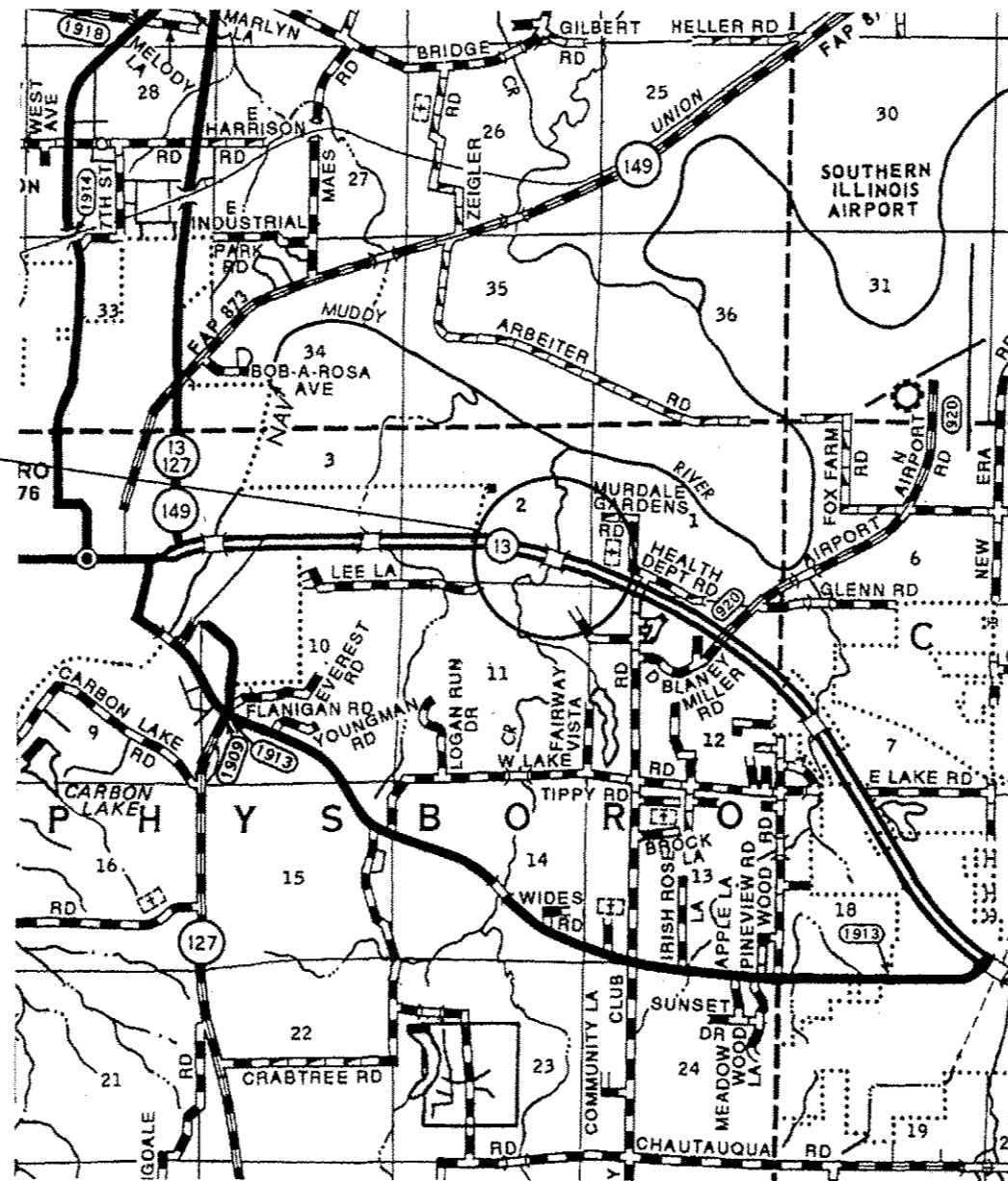
DESIGNED: Michael J. Johnson
CHECKED: Steve Aker
DRAWN: Shawn Summer
EXAMINED: [Signature]
PASSED: [Signature]

DATE: June 13, 1994

Dimension Location	Dim. #1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	Bm. #13
* Dim. "	0	3	0	0	2	6	3	6	1	9	6	1	6

* Based on the existing seat elevations shown in table on this sheet. The contractor shall verify these thicknesses and make adjustments if necessary. Cost incidental.

BRIDGE NO. 2
SN. 039-0050
2011 ADT: 16200
8% TRUCKS
INVENTORY RATING: 20.6
OPERATING RATING: 36.7
MURPHYSBORO TOWNSHIP

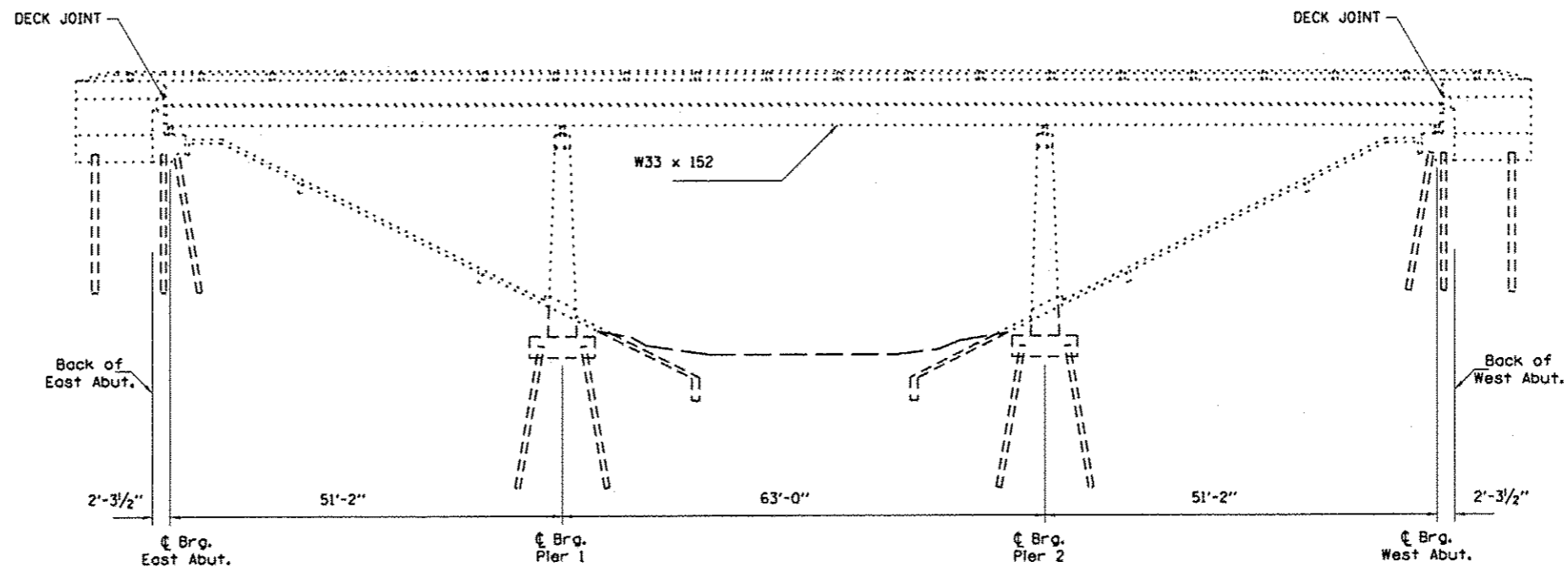


JACKSON COUNTY

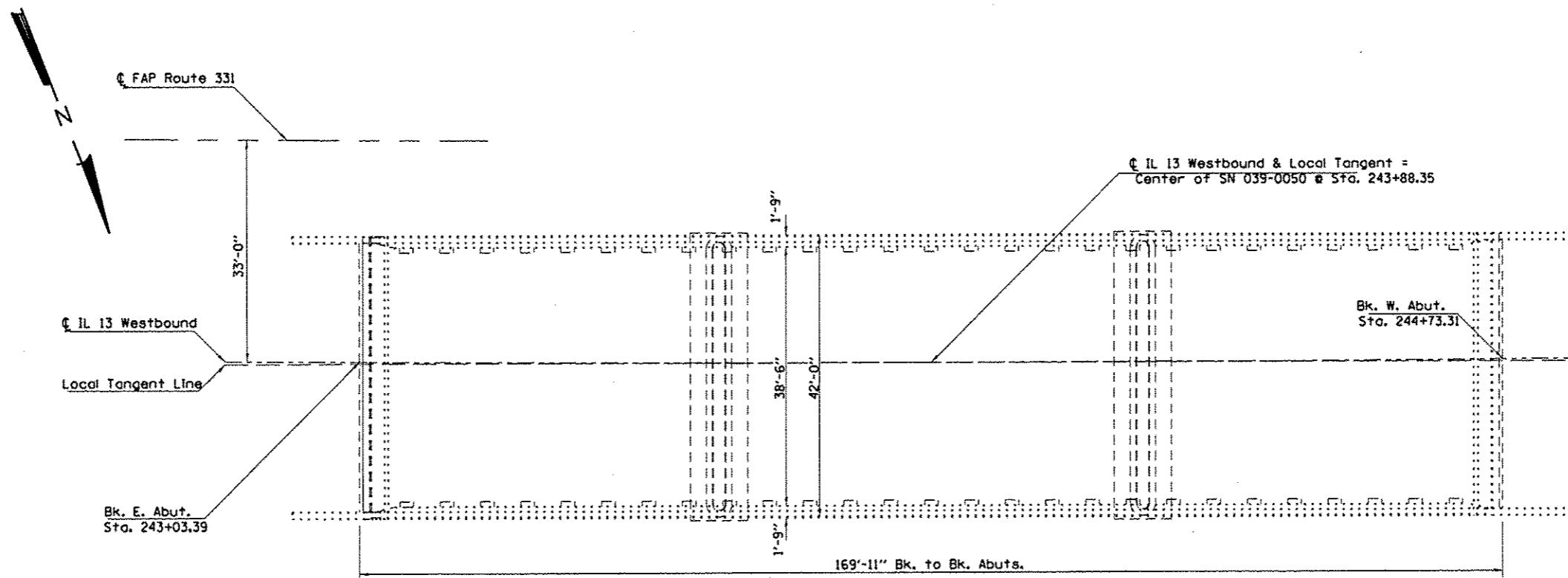
NOTES

CLEANING AND PAINTING OF THE DESIGNATED EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES" AND "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES", ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN 5 FEET (MEASURED ALONG THE BEAM) OF EITHER SIDE OF DECK JOINTS AND THE EXTERIOR SURFACES AND BOTTOM OF THE BOTTOM FLANGE OF THE FULL LENGTH OF FASCIA BEAMS SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING - SSPC-SP10. THE AREAS CLEANED PER NEAR WHITE BLAST CLEANING SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR INTERIOR STEEL SURFACES SHALL BE GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR EXTERIOR STEEL SURFACES OF FASCIA BEAMS SHALL BE INTERSTATE GREEN, MUNSELL NO. 7.5G 1/2.

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 039-0050 IL 13 WB OVER MUD CREEK		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
ca:\pwork\p1dot\gautneyrk\d0319666\78	41-ahr-plan.dgn	DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	12
#MODELNAME*	PLOT SCALE * 48.8835 / in.	CHECKED -	REVISED -		CONTRACT NO. 78341										
	PLOT DATE * 10/16/2012	DATE -	REVISED -		<small>ILLINOIS FED. AID PROJECT</small>										

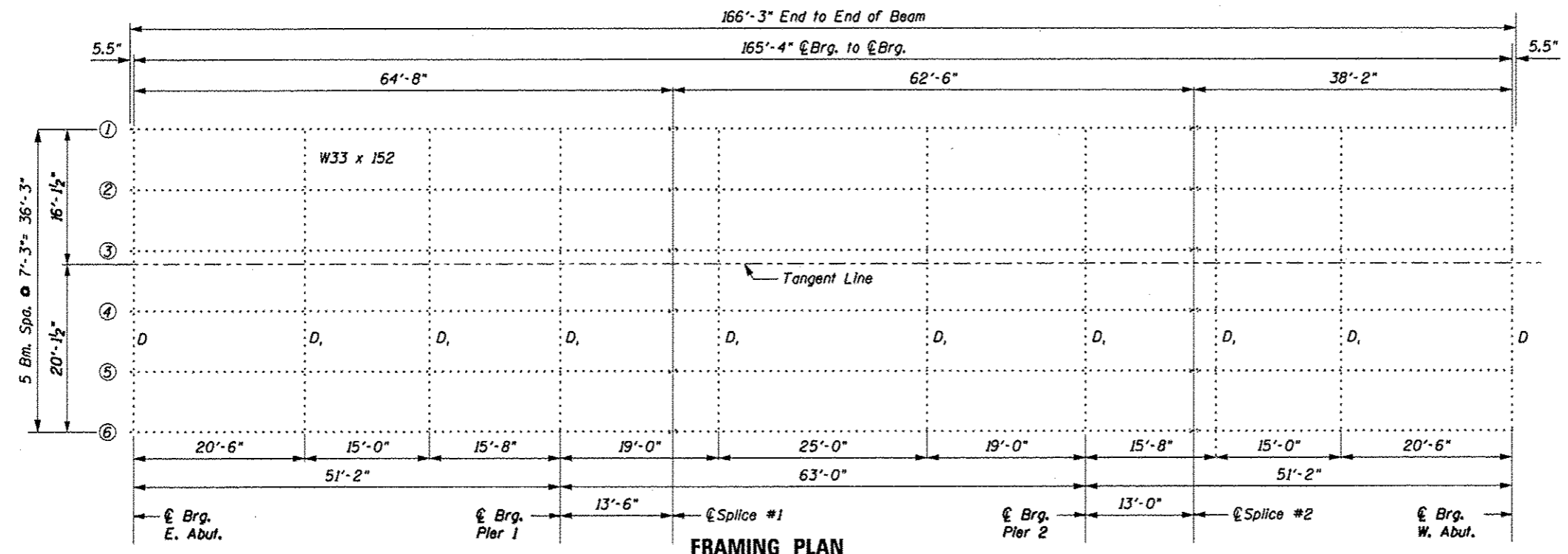


ELEVATION

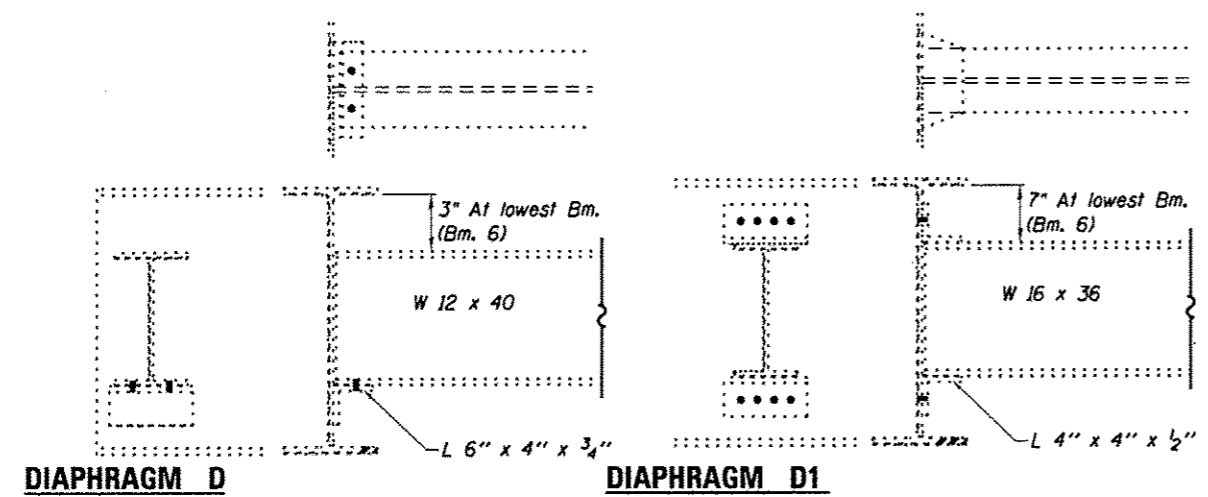


PLAN

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 039-0050 IL 13 WB OVER MUD CREEK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
at:\pwork\pwork\gautneyrk\0319666\78	41-shr-plan.dgn	DRAWN -	REVISED -			VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	13
	PLOT SCALE * 48.0035' / in.	CHECKED -	REVISED -			CONTRACT NO. 78341			ILLINOIS FED. AID PROJECT	
#MODELNAME*	PLOT DATE * 10/16/2012	DATE -	REVISED -			SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____		

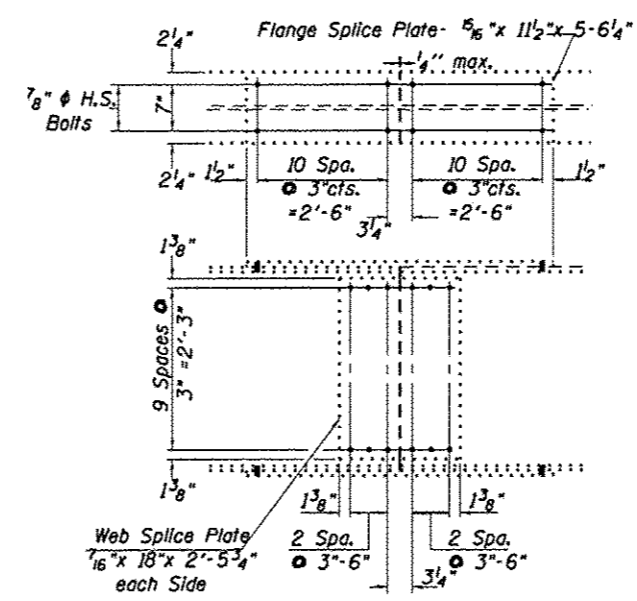


FRAMING PLAN

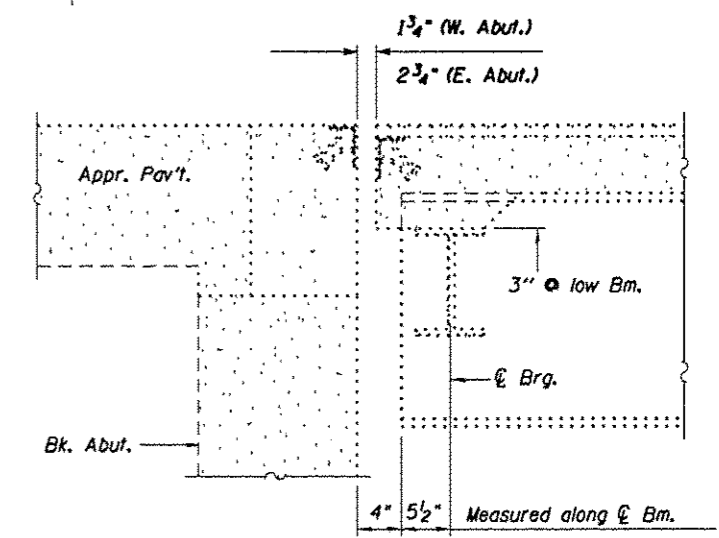


DIAPHRAGM D

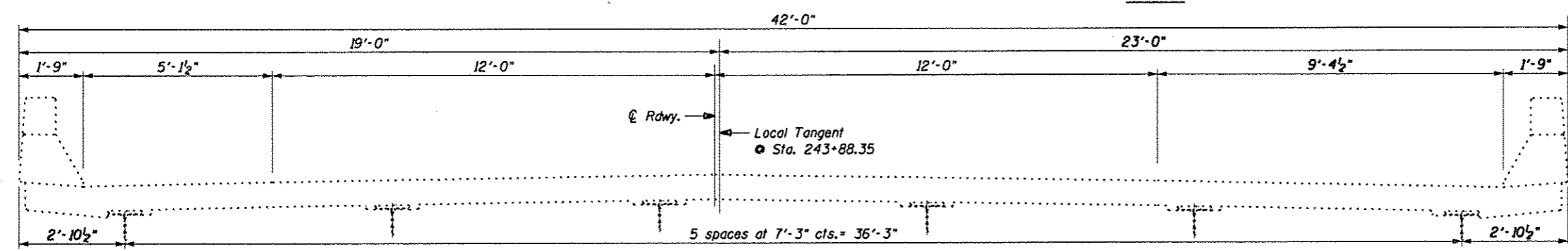
DIAPHRAGM D1



SPLICE



SECTION THRU ABUTMENT

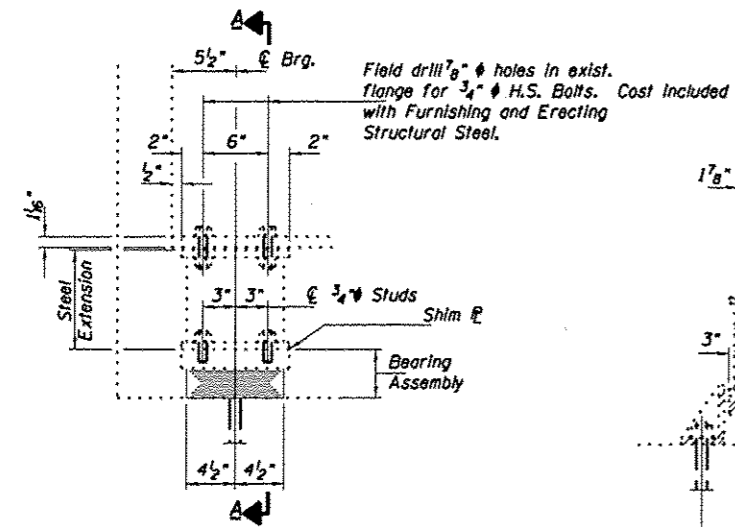


CROSS SECTION (LOOKING WEST)

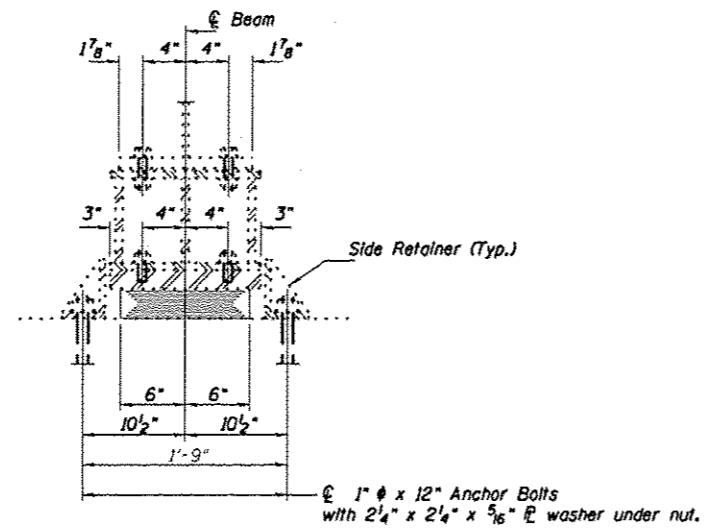
FOR INFORMATION ONLY
ILL 13 W.B. OVER MUD CREEK
JACKSON COUNTY
SN 039-0050

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 039-0050 ILL 13 WB OVER MUD CREEK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwworking\p1dot\gautneyrk\d0319666\7841-shr-plendgn	DRAWN -	REVISED -	VAR.			D9 BRIDGE PARTING 2013-1	VARIOUS	33	14	
PLOT SCALE * 40.0035 1 / in.	CHECKED -	REVISED -	CONTRACT NO. 78341							
PLOT DATE * 10/16/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
#MODELNAME*				SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____				

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

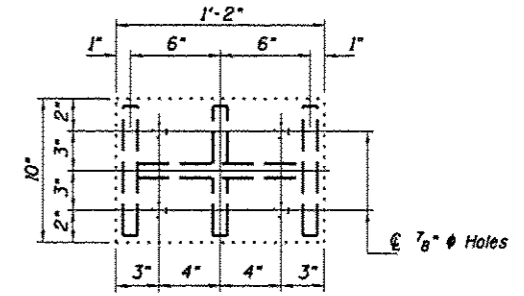


ELEVATION AT ABUTMENT

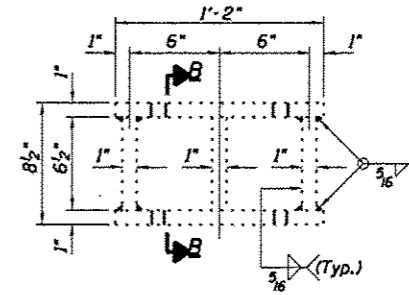


SECTION A-A

Notes:
 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.
 Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
 The minimum jack capacity required is 50 Tons.
 Existing diaphragm removal and reinstallation may be required to facilitate drilling holes, cost to be included with "Jack and Remove Existing Bearings".
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade - 50.
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
 New steel extensions, connection bolts and Shim R's are included in "Furnishing and Erecting Structural Steel".

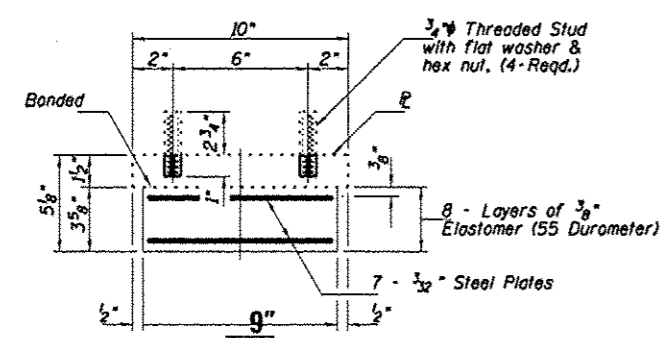


PLAN TOP AND BOTTOM PLATE



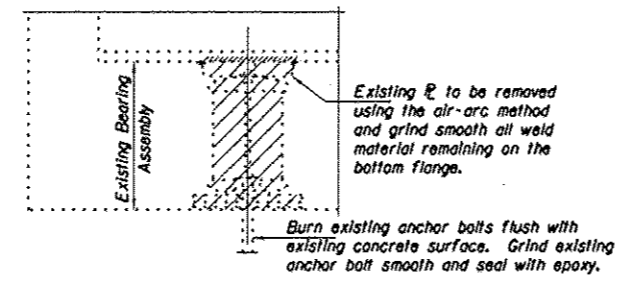
STEEL EXTENSION DETAIL

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

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

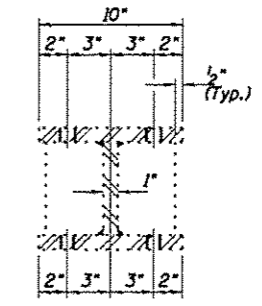


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BEAM REACTIONS

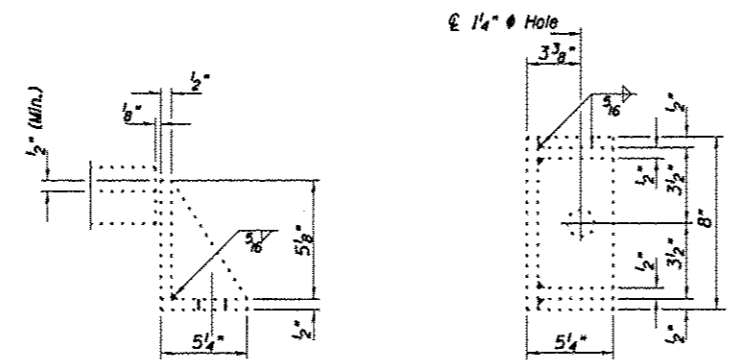
R _l	(K)	23.8
R _r	(K)	37
Imp.	(K)	10
R (Total)	(K)	70.8



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Jack and Remove Existing Bearings	Each	6
Anchor Bolts, 1"	Each	12



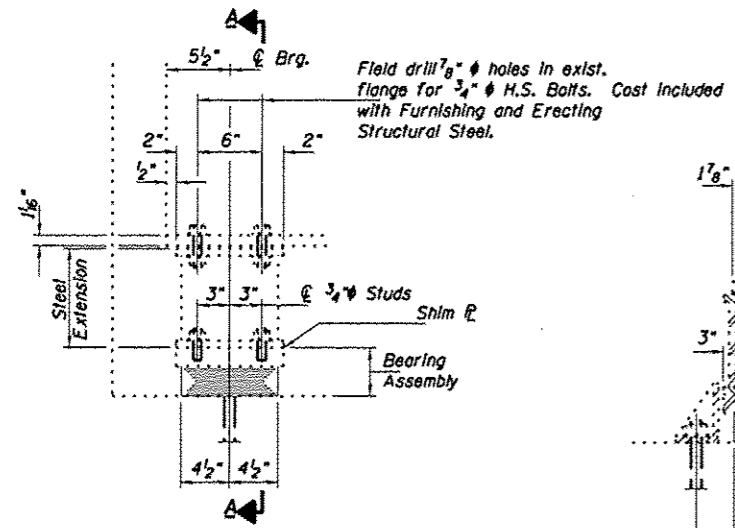
SIDE RETAINER

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

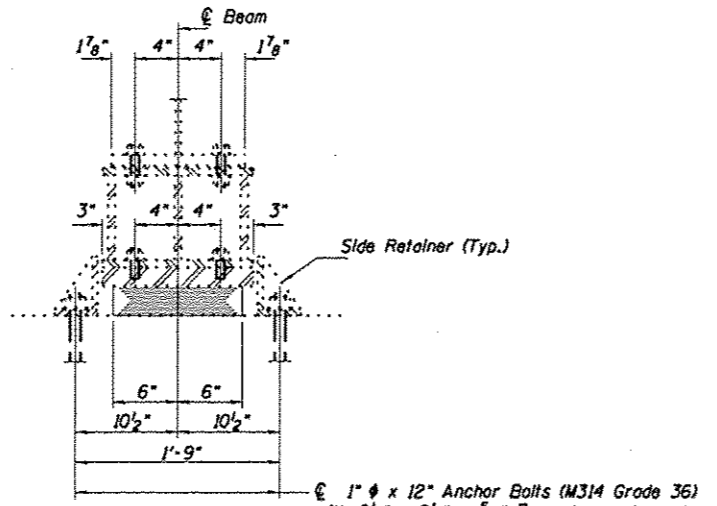
FOR INFORMATION ONLY
BEARING DETAILS - EAST ABUTMENT
ILL 13 W.B. OVER MUD CREEK
JACKSON COUNTY
SN 039-0050

BRIDGE REPAIRS FOR SN 039-0050

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

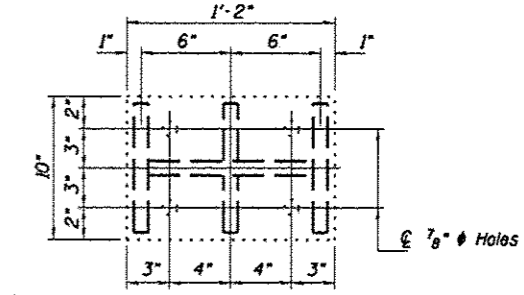


ELEVATION AT ABUTMENT

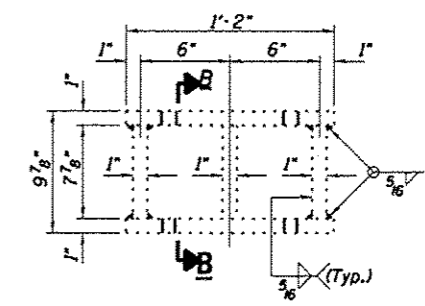


SECTION A-A

Notes:
 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.
 Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
 The minimum jack capacity required is 50 Tons.
 Existing diaphragm removal and reinstallation may be required to facilitate drilling holes, cost to be included with "Jack and Remove Existing Bearings".
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade - 50.
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
 New steel extensions, connection bolts and Shim P's are included in "Furnishing and Erecting Structural Steel".

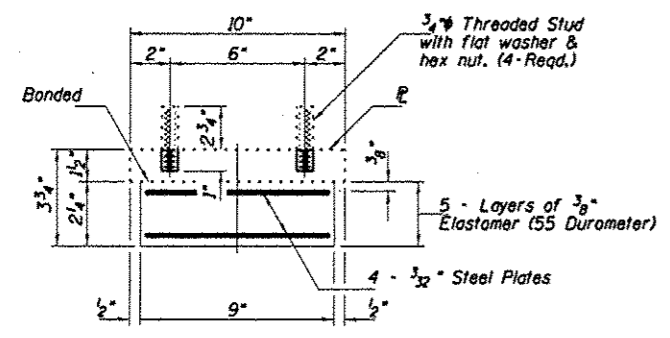


PLAN TOP AND BOTTOM PLATE



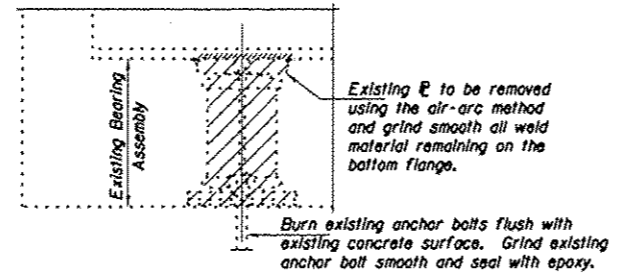
STEEL EXTENSION DETAIL

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

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



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

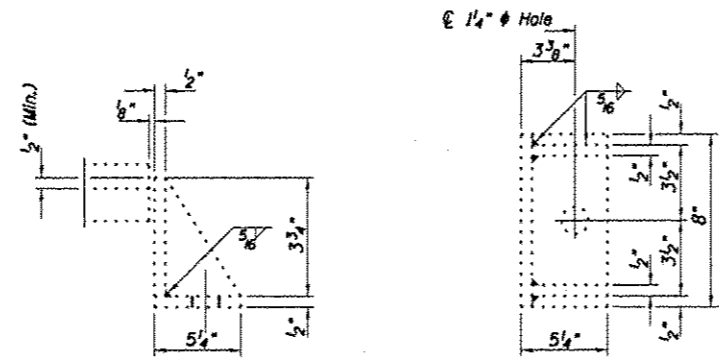
BEAM REACTIONS

R _P	(K)	23.8
R _L	(K)	37
Imp.	(K)	10
R (Total)	(K)	70.8

SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Jack and Remove Existing Bearings	Each	6
Anchor Bolts, 1"	Each	12



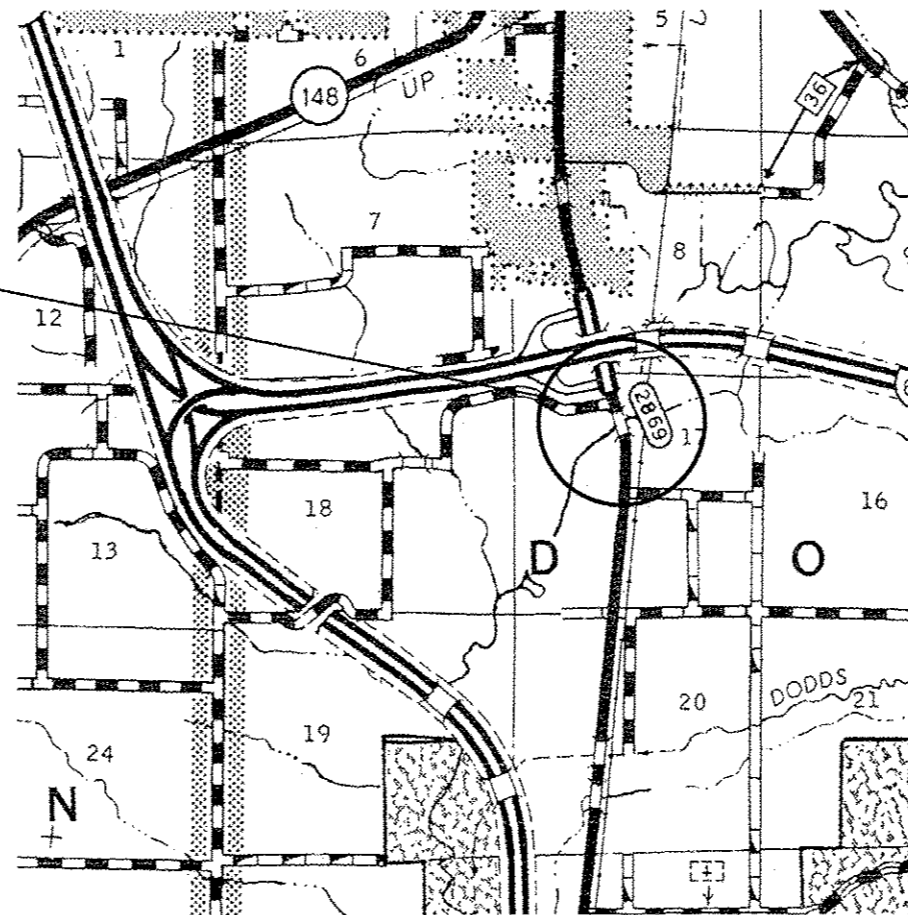
SIDE RETAINER

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

FOR INFORMATION ONLY
 BEARING DETAILS - WEST ABUTMENT
 ILL 13 WB OVER MUD CREEK
 JACKSON COUNTY
 SN 039-0050

BRIDGE REPAIRS FOR SN 039-0050

BRIDGE NO. 3
SN. 041-0032
2011 ADT: 4400
11% TRUCKS
INVENTORY RATING: 25.6
OPERATING RATING: 42.8
DODDS TOWNSHIP

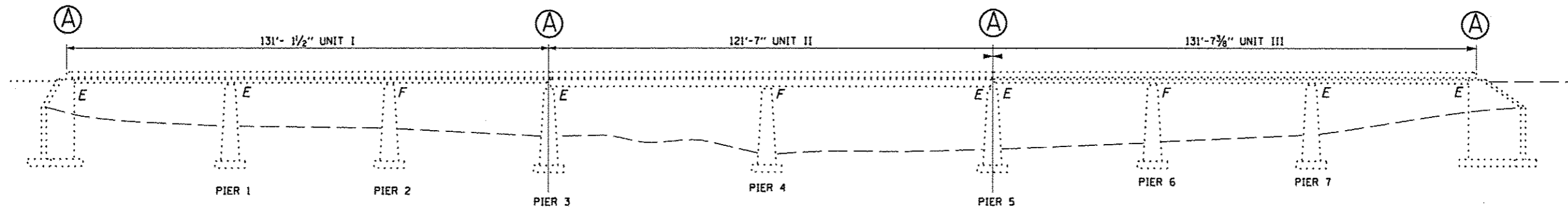


JEFFERSON COUNTY

NOTES

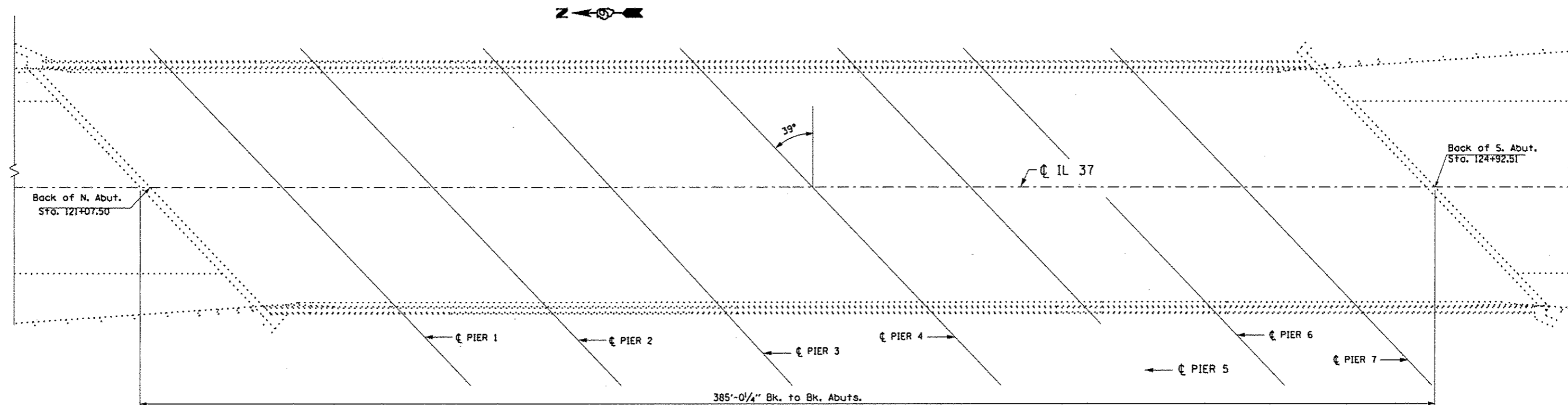
CLEANING AND PAINTING OF THE DESIGNATED EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES" AND "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES". ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN 5 FEET (MEASURED ALONG THE BEAM) OF EITHER SIDE OF DECK JOINTS AND THE EXTERIOR SURFACES AND BOTTOM OF THE BOTTOM FLANGE OF THE FULL LENGTH OF FASCIA BEAMS SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING - SSPC-SP10. THE AREAS CLEANED PER NEAR WHITE BLAST CLEANING SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR INTERIOR STEEL SURFACES SHALL BE GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR EXTERIOR STEEL SURFACES OF FASCIA BEAMS SHALL BE INTERSTATE GREEN, MUNSELL NO. 7.5G 1/2.

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 041-0032 IL 37 OVER CASEY FORK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\gautneyrk\d0319666178	41-shs-plan.dgn	DRAWN -	REVISED -			VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	17	
	PLOT SCALE * 48.0035' / in.	CHECKED -	REVISED -			CONTRACT NO. 78341		ILLINOIS FED. AID PROJECT			
#MODELNAME*	PLOT DATE * 10/16/2012	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.



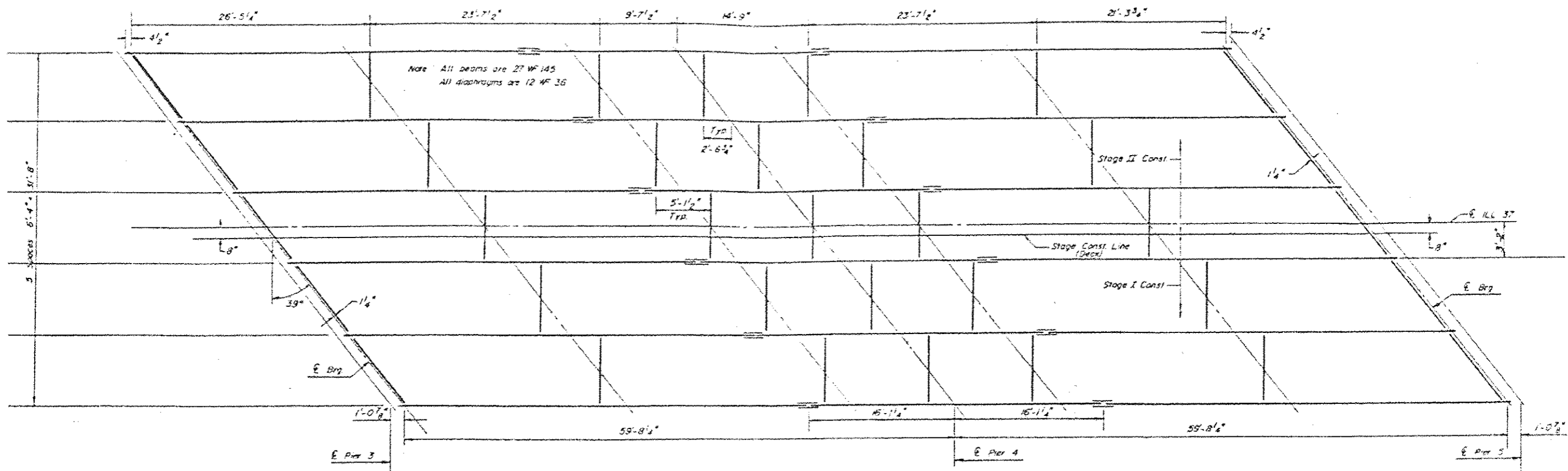
ELEVATION

Ⓐ DECK JOINTS

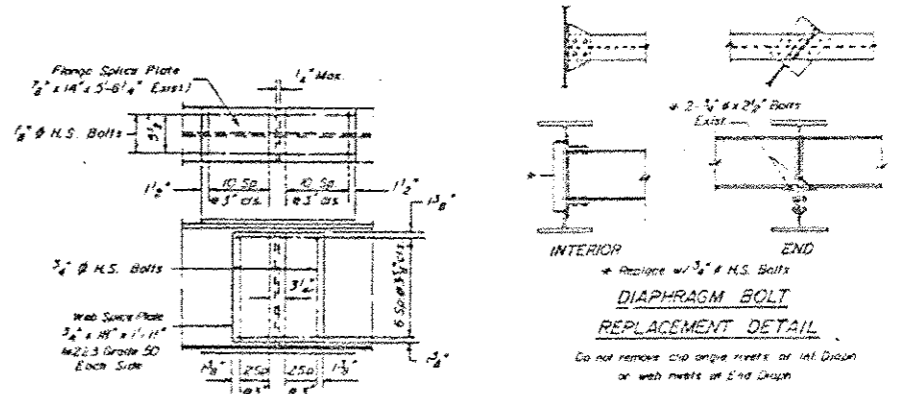
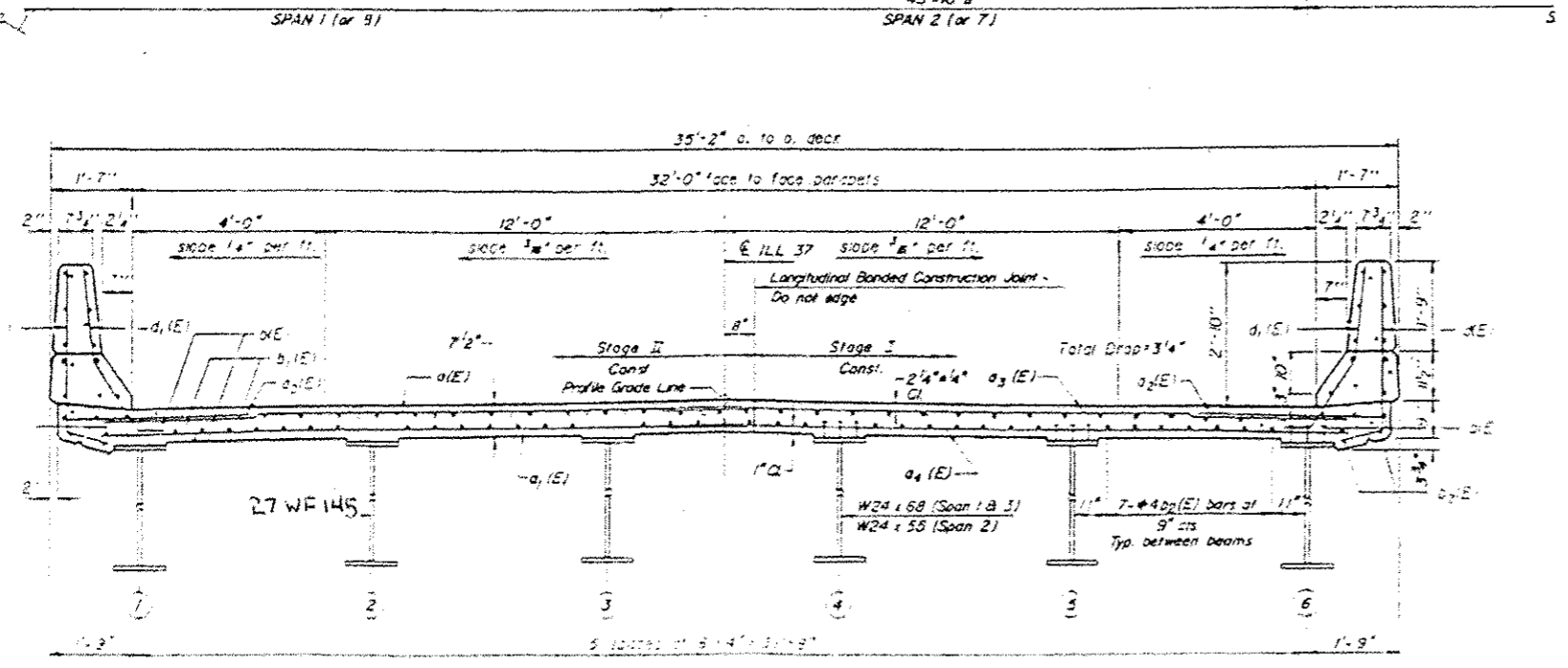


PLAN

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 041-0032 IL 37 OVER CASEY FORK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
al\pv_work\pdsdot\gautneyrk\108319566\7841-sht-plan.dgn	PLT SCALE * 40.0035' / in.	DRAWN -	REVISED -			VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	18	
MODELNAME*	PLT DATE * 10/16/2012	CHECKED -	REVISED -			SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT			
		DATE -	REVISED -			CONTRACT NO. 78341					



FRAMING PLAN UNIT II
 (Remove & Re-erect Structural Steel - See Special Provisions.)

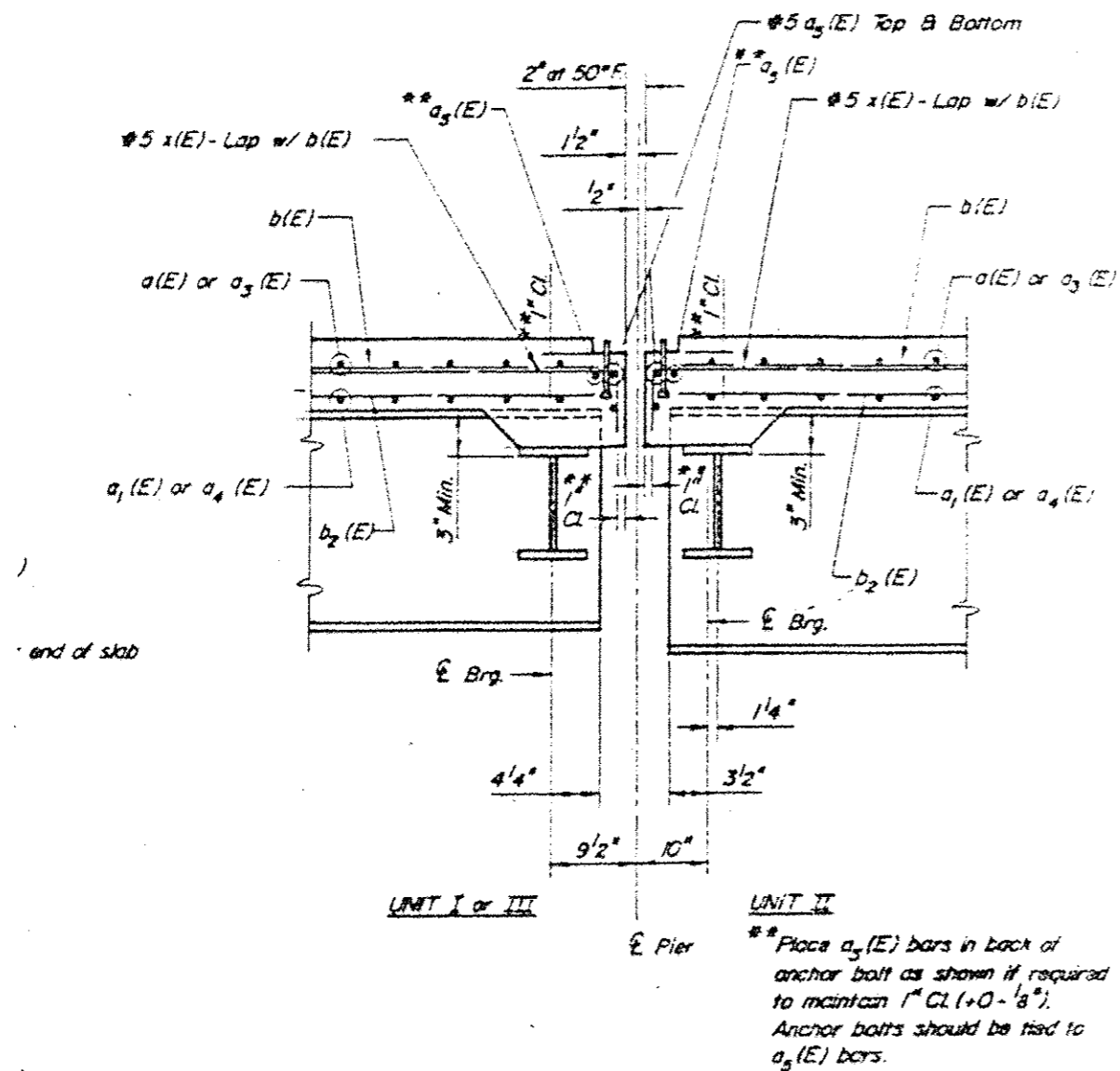


DETAIL OF SPLICE

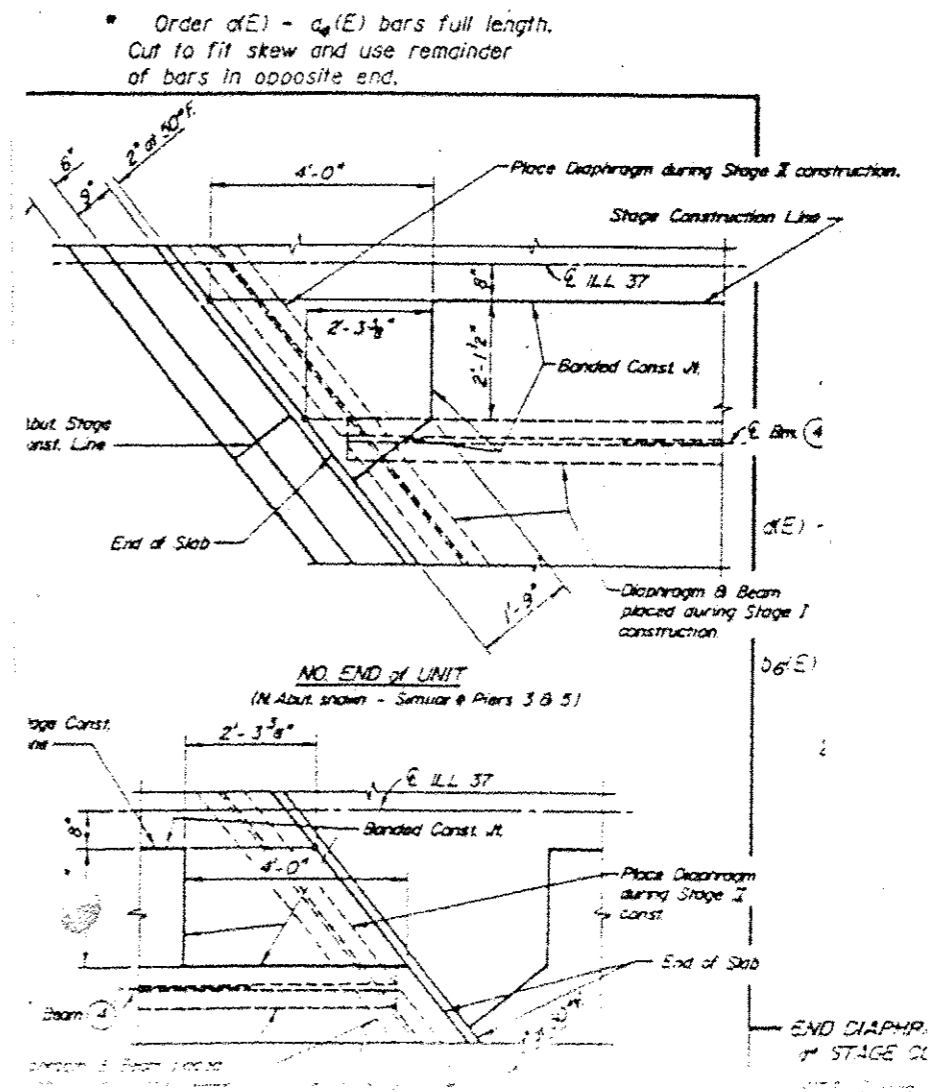
UNIT II
STRUCTURAL STEEL
 EAS RTE 2849 SECTION 182-
 JEFFERSON COUNTY
 STATION 182+00

FOR INFORMATION ONLY

FILE NAME: c:\p4\work\bridge\gautneyrk\d031966578	USER NAME: gautneyrk	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 041-0032	RTE: 09	SECTION: BRIDGE PAINTING 2015-1	COUNTY: VARIOUS	TOTAL SHEETS: 33	SHEET NO.: 19	
41-shr\plan\dn	41-shr\plan\dn	DRAWN: -	REVISED: -		IL 37 OVER CASEY FORK	VAR.:					
PLOT SCALE: 48,000 / 1 in.		CHECKED: -	REVISED: -		SCALE: _____ SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 78341				
PLOT DATE: 10/17/2012		DATE: -	REVISED: -		(ILLINOIS) FED. AID PROJECT						

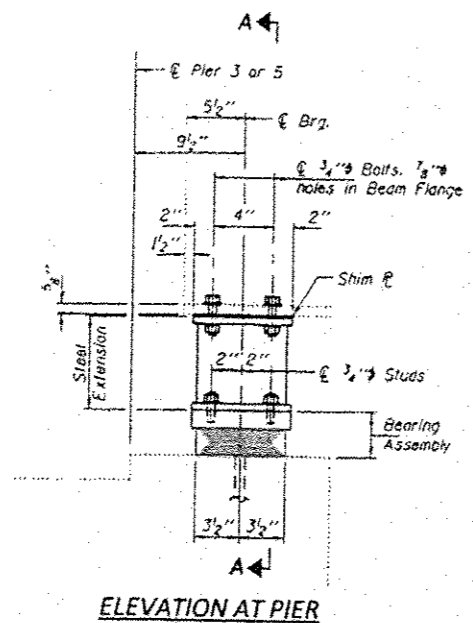


SECTION A-A
(See Sheet 9 for Exp. Device Details)

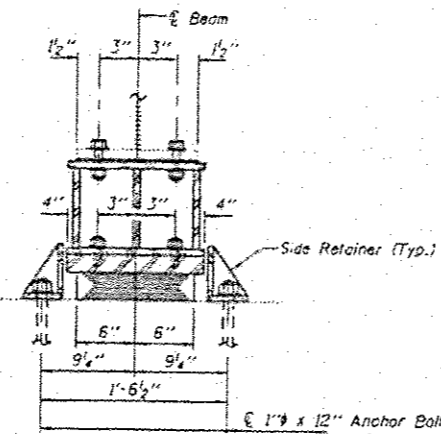


FOR INFORMATION ONLY

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 041-0032	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pedit\gautneyrk\d0319566\78	41-ahp-plan.dgn	DRAWN -	REVISED -		IL 37 OVER CASEY FORK	VAR. D9 BRIDGE PAINTING 2013-1	VARIOUS	VARIOUS	33	20
MODELNAME *	PLOT SCALE = 48.0000' / in.	CHECKED -	REVISED -		SCALE: _____ SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT		CONTRACT NO. 78341	
	PLOT DATE = 10/11/2012	DATE -	REVISED -							



ELEVATION AT PIER



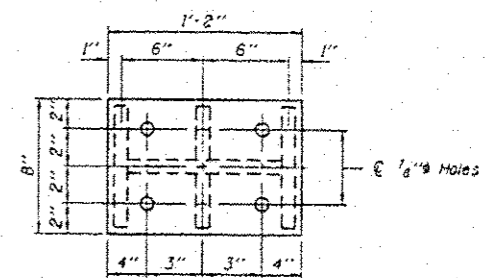
SECTION A-A

1" x 12" Anchor Bolts with 2 1/4" x 2 1/4" x 5/16" P washer under nut.

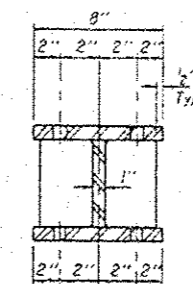
BEAM REACTIONS

R ₂	(K)	19.2
R ₁	(K)	31.4
Imp.	(K)	9.3
R (Total)	(K)	59.9

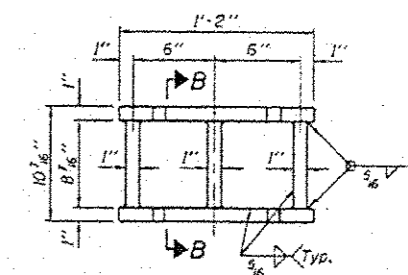
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. Jack capacity = 35 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.
 Anchor bolts of fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications. Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type 1.



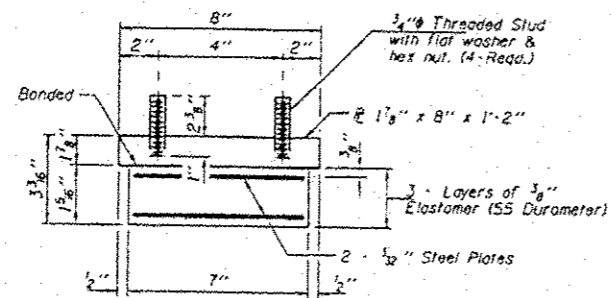
PLAN TOP AND BOTTOM PLATE



SECTION B-B

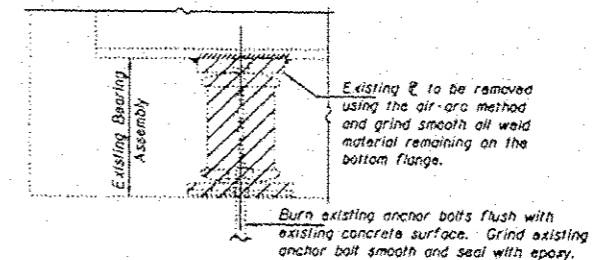


STEEL EXTENSION DETAIL



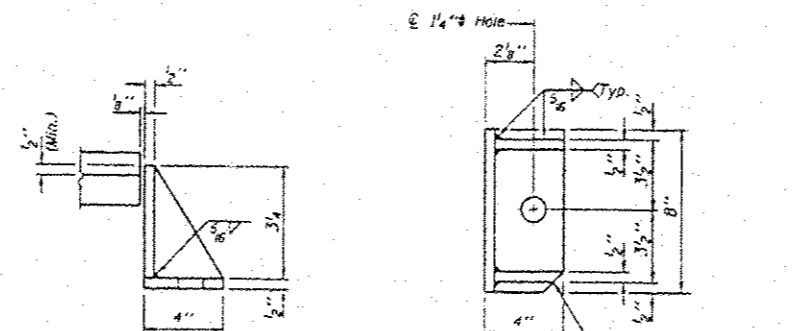
BEARING ASSEMBLY

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



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



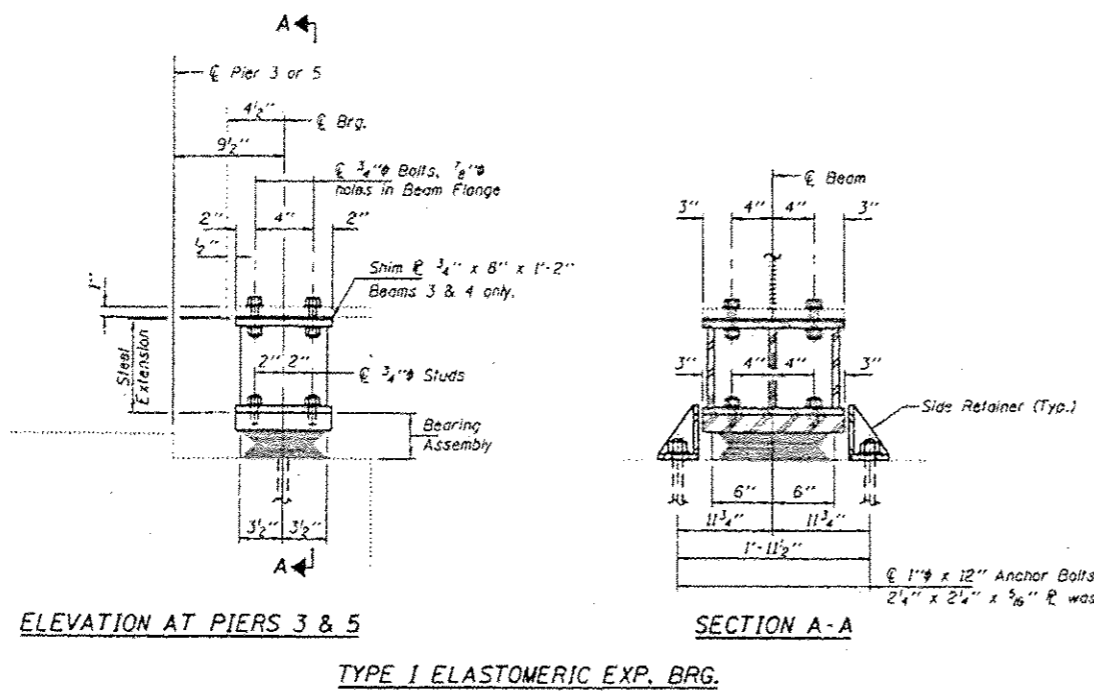
SIDE RETAINER

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

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type 1	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	1680
Anchor Bolts 1\"/>		

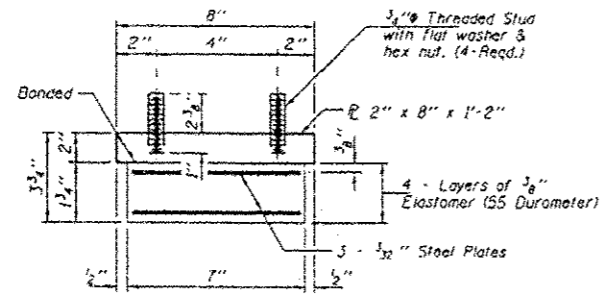
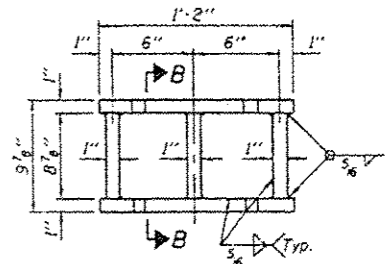
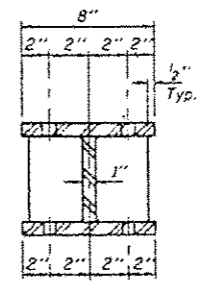
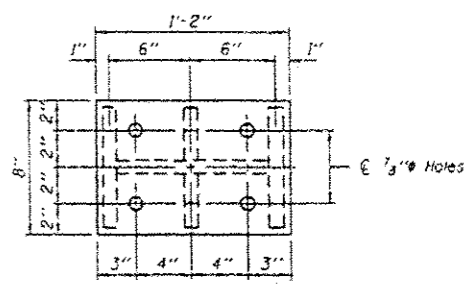
FOR INFORMATION ONLY



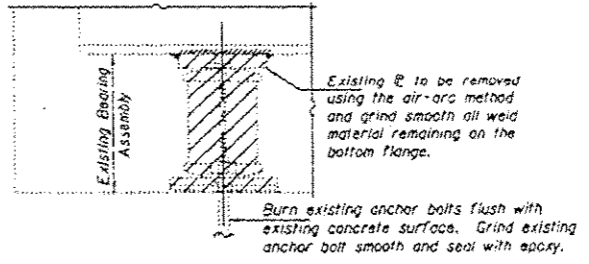
BEAM REACTIONS

R _p	(K)	25.7
R _t	(K)	33.9
Imp.	(K)	9.2
R (Total)	(K)	68.8

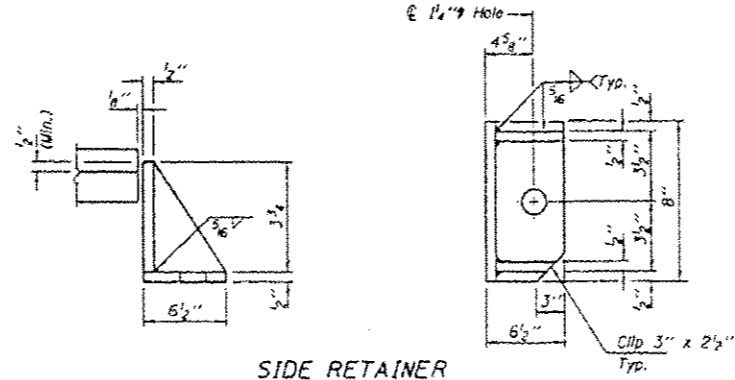
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 40 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.
 Anchor bolts of fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



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



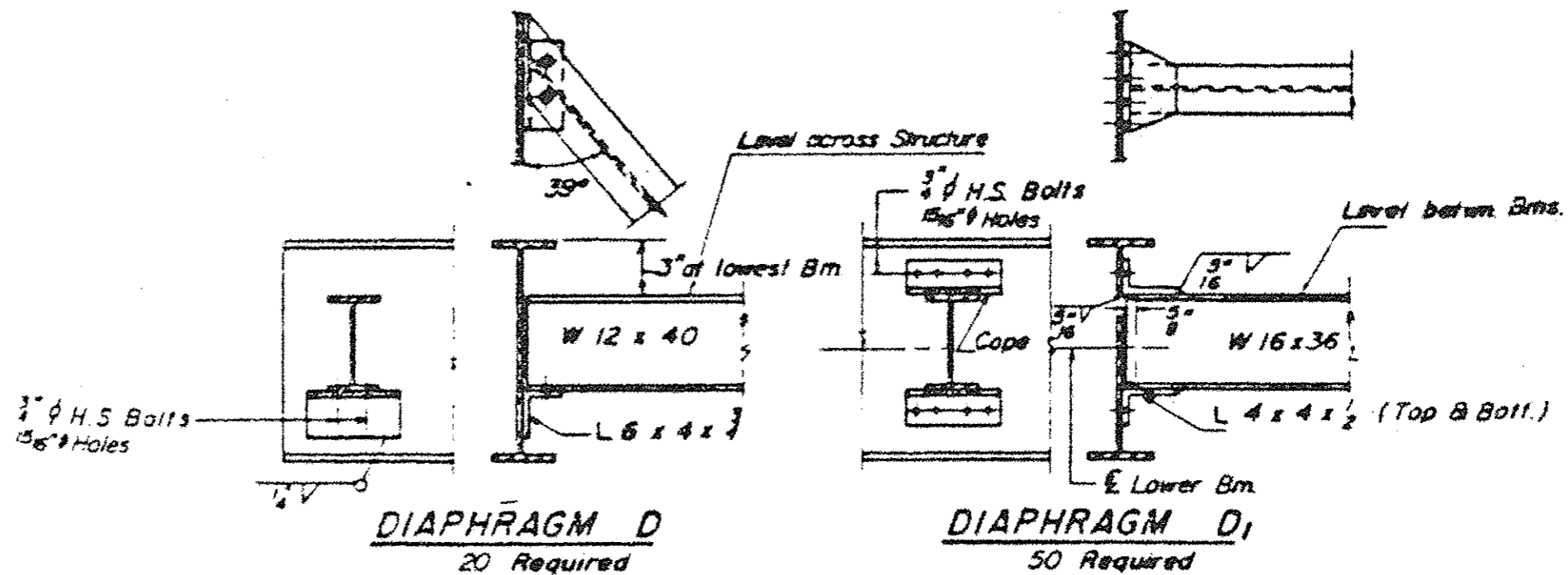
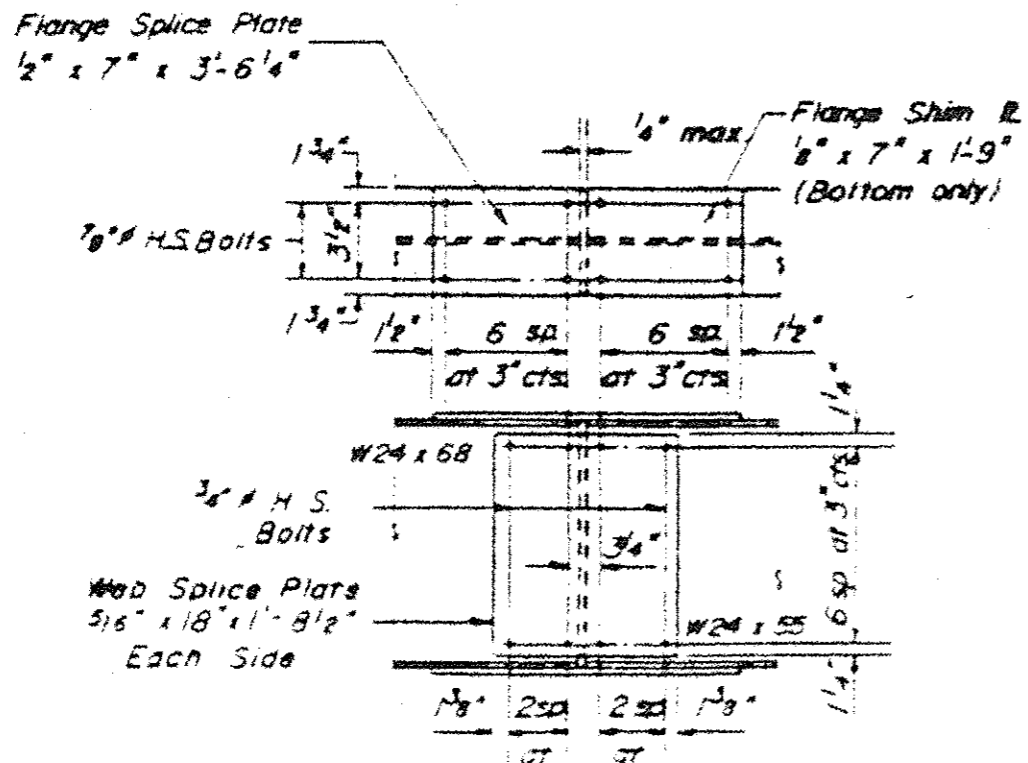
Cost included with Jack and Remove Existing Bearings.



BILL OF MATERIAL

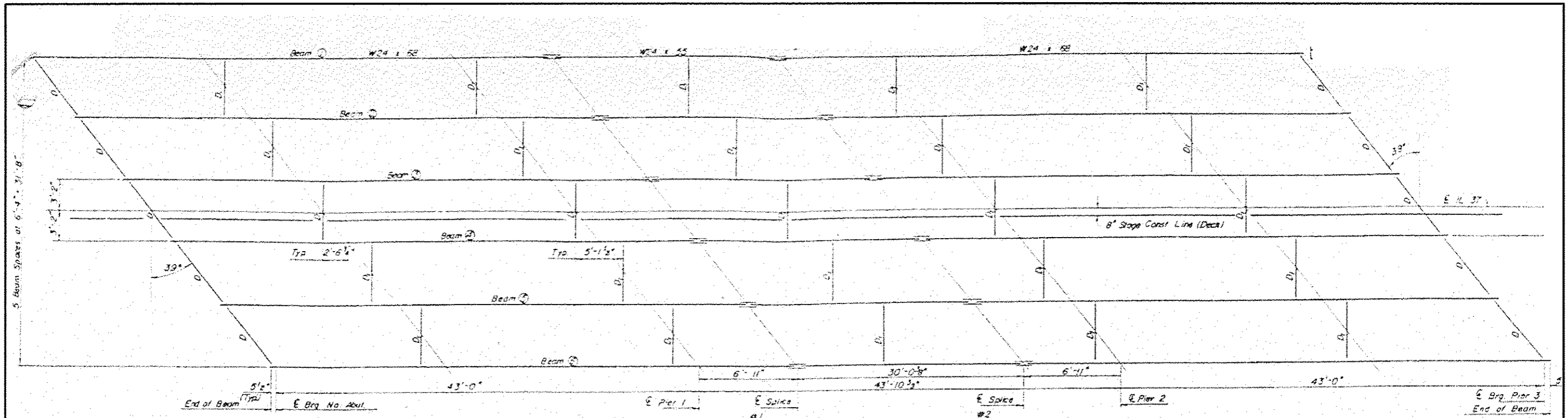
Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	1620
Anchor Bolts 1 1/2"	Each	24

FOR INFORMATION ONLY

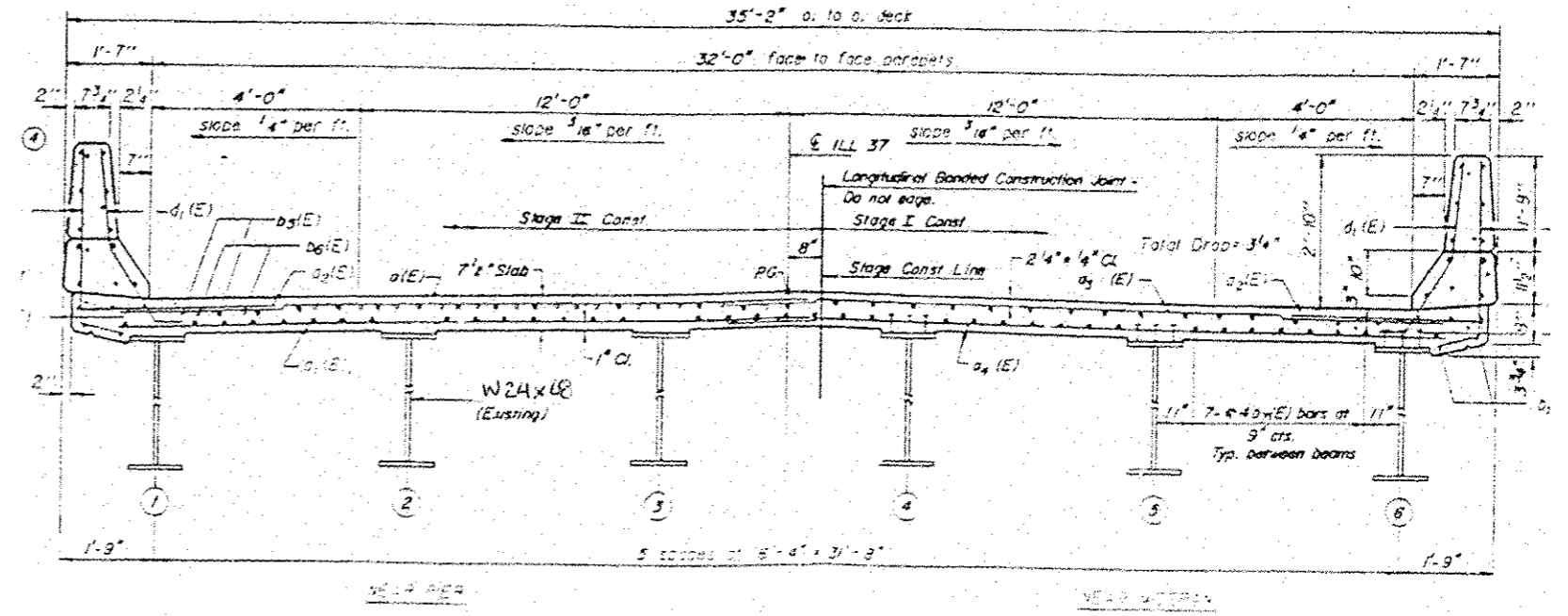
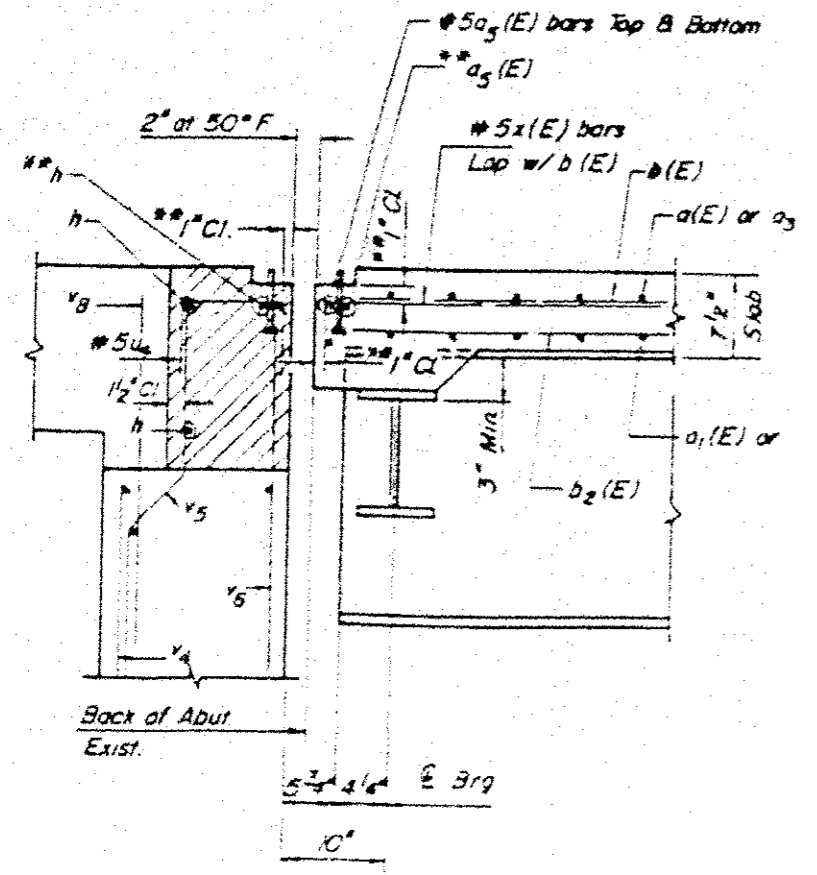


FOR INFORMATION ONLY

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 041-0032 IL 37 OVER CASEY FORK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\gautneyrk\d8319666\78	41-shc-plan.dgn	DRAWN -	REVISED -			VAR. D9 BRIDGE PAINTING 2013-1	VARIOUS	ILLINOIS	33	23	
	PLOT SCALE * 40,0000 1/1 in.	CHECKED -	REVISED -			CONTRACT NO. 78341		ILLINOIS FED. AID PROJECT			
#MODELNAME*	PLOT DATE * 10/11/2012	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

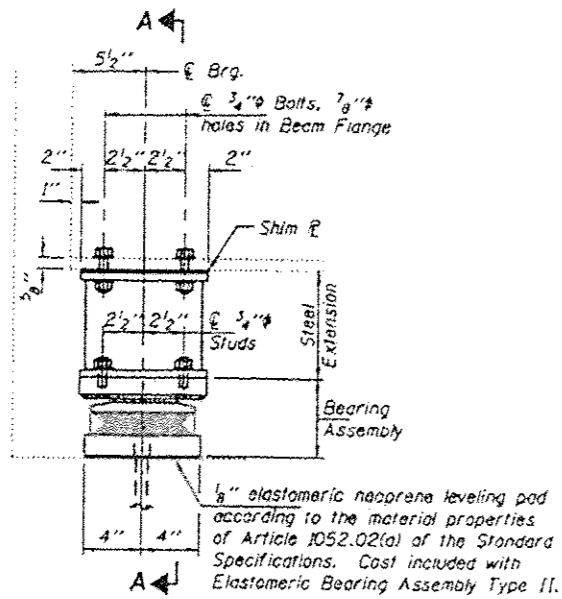


FRAMING PLAN-UNIT I
(Unit Similar)

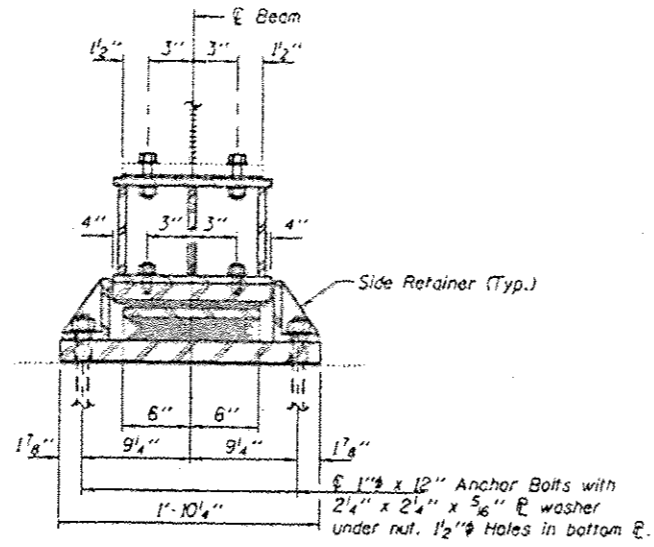


FOR INFORMATION ONLY

FILE NAME -	USER NAME - gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 041-0032 ILL 37 OVER CASEY FORK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\gautneyrk\d2319565\7841-sht-plot.dgn	PLOT SCALE - 48,0000 1/ in.	DRAWN -	REVISED -			VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	24	
#MODELNAME*	PLOT DATE - 11/19/2012	CHECKED -	REVISED -			CONTRACT NO. 78341					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

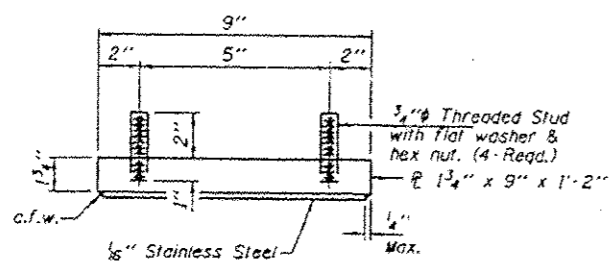


ELEVATION AT ABUTMENT

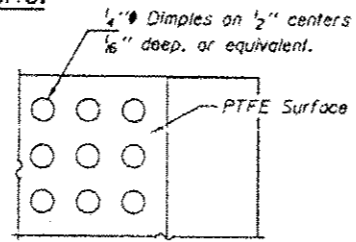


SECTION A-A

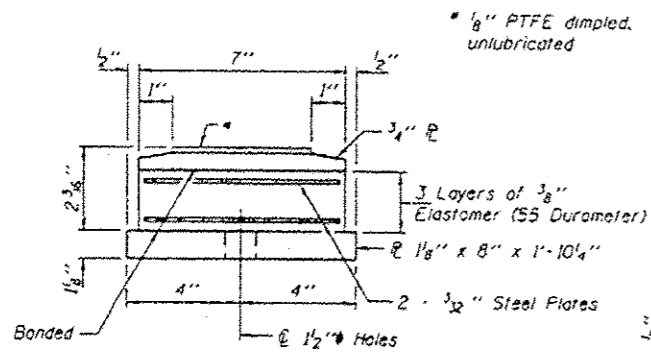
TYPE II TFE ELASTOMERIC EXP. BRG.



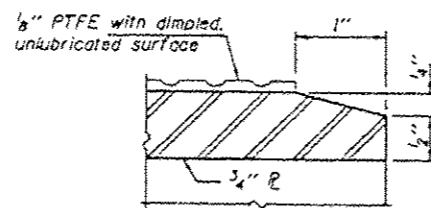
TOP BEARING ASSEMBLY



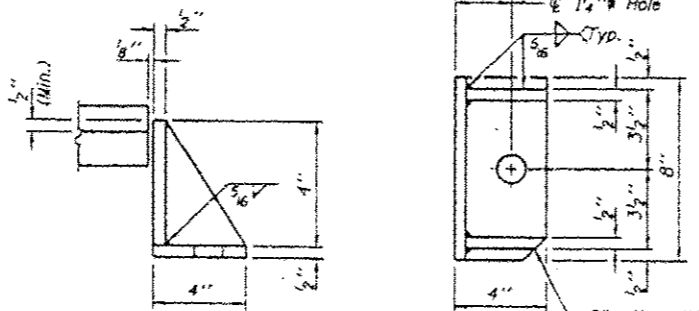
PLAN-PTFE SURFACE



BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE



SIDE RETAINER

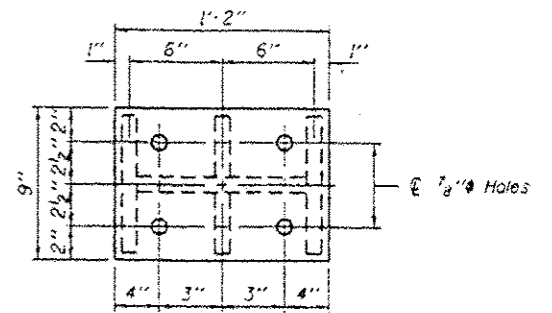
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BEAM REACTIONS

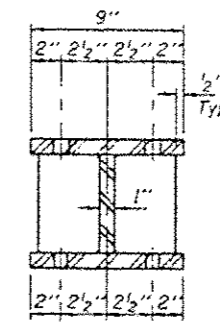
RP	19.2
R ₁	31.4
Imp.	9.3
R (Total)	59.9

Notes:

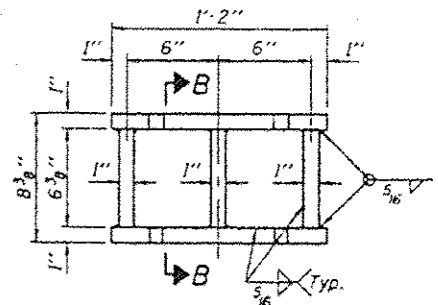
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 35 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=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts of fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE 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" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



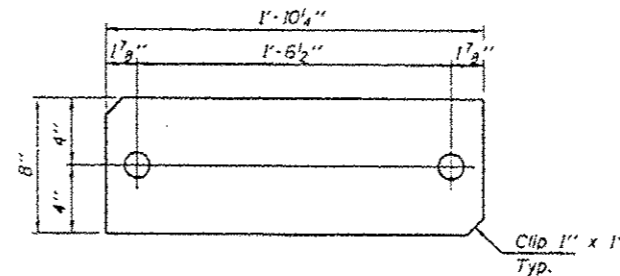
PLAN TOP AND BOTTOM PLATE



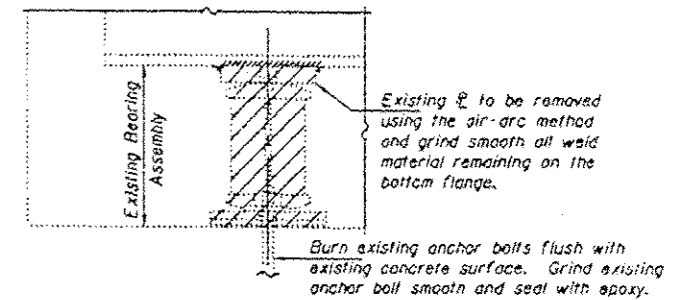
SECTION B-B



STEEL EXTENSION DETAIL

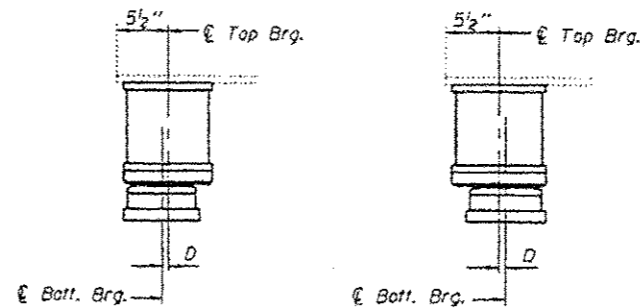


PLAN BOTTOM BEARING PLATE



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



BELOW 50°F.

(Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

ABOVE 50°F.

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.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	1620
Anchor Bolts 1"	Each	24

FOR INFORMATION ONLY

FILE NAME *
 USER NAME * gautneyrk
 DRAWN -
 CHECKED -
 PLOT SCALE = 40.0000' / 1" =
 PLOT DATE = 10/11/2012

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

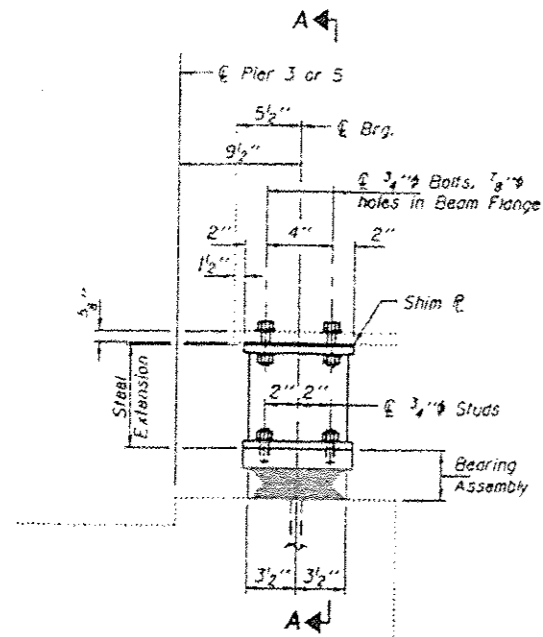
REVISED -
 REVISED -
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 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SN 041-0032
 IL 37 OVER CASEY FORK

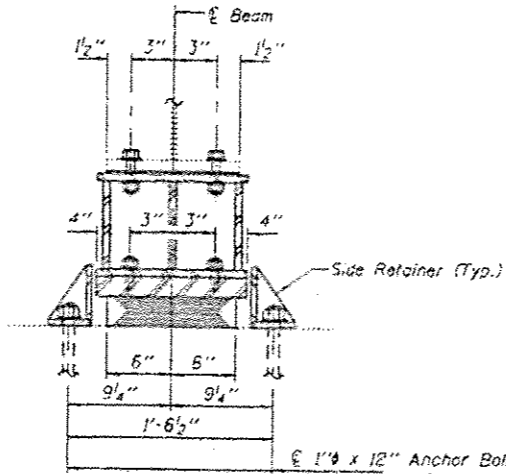
SCALE: 1" = 4'-0"
 SHEET 33 OF 25 SHEETS
 STA. TO STA.

RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.
 VAR. D9 BRIDGE PAINTING 2013- VARIOUS 33 25
 CONTRACT NO. 78341
 ILLINOIS FED. AID PROJECT



ELEVATION AT PIER

TYPE I ELASTOMERIC EXP. BRG.



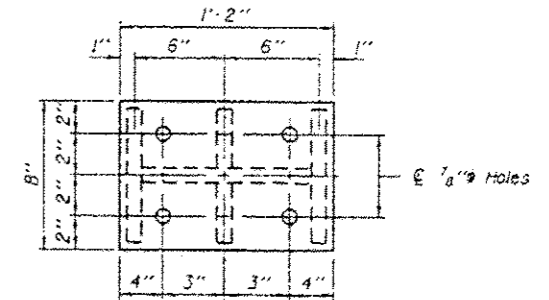
SECTION A-A

1" x 12" Anchor Bolts with 2 1/4" x 2 1/4" x 5/8" R washer under nut.

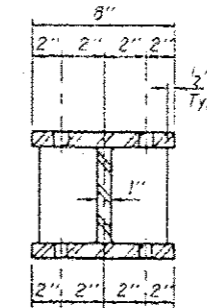
BEAM REACTIONS

R ₂	(K)	18.2
R ₁	(K)	31.4
Imp.	(K)	9.3
R (Total)	(K)	59.9

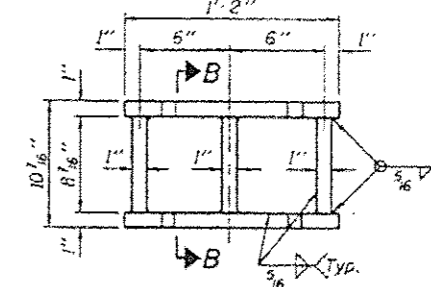
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 35 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.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



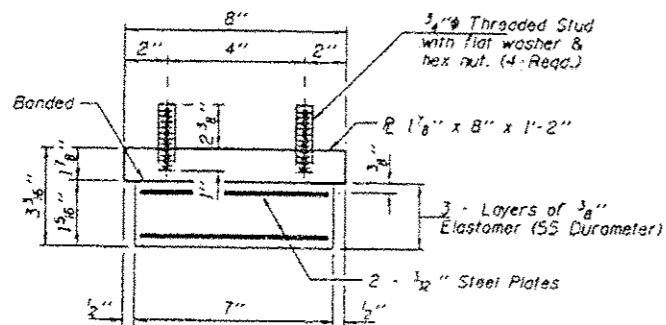
PLAN TOP AND BOTTOM PLATE



SECTION B-B

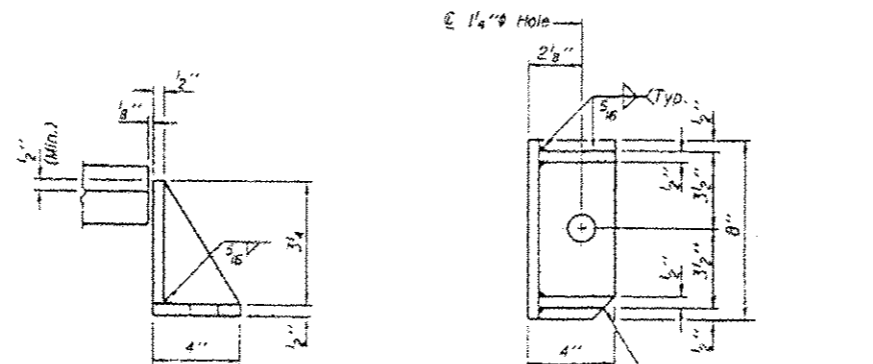


STEEL EXTENSION DETAIL



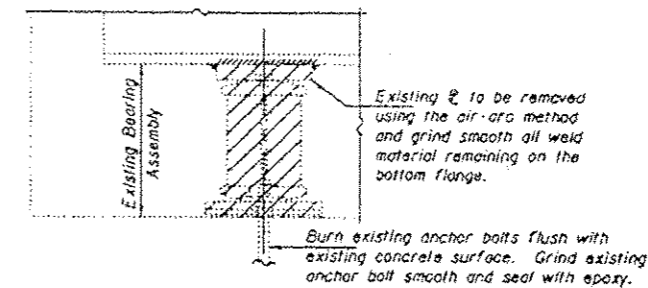
BEARING ASSEMBLY

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



SIDE RETAINER

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



EXISTING BEARING REMOVAL DETAIL

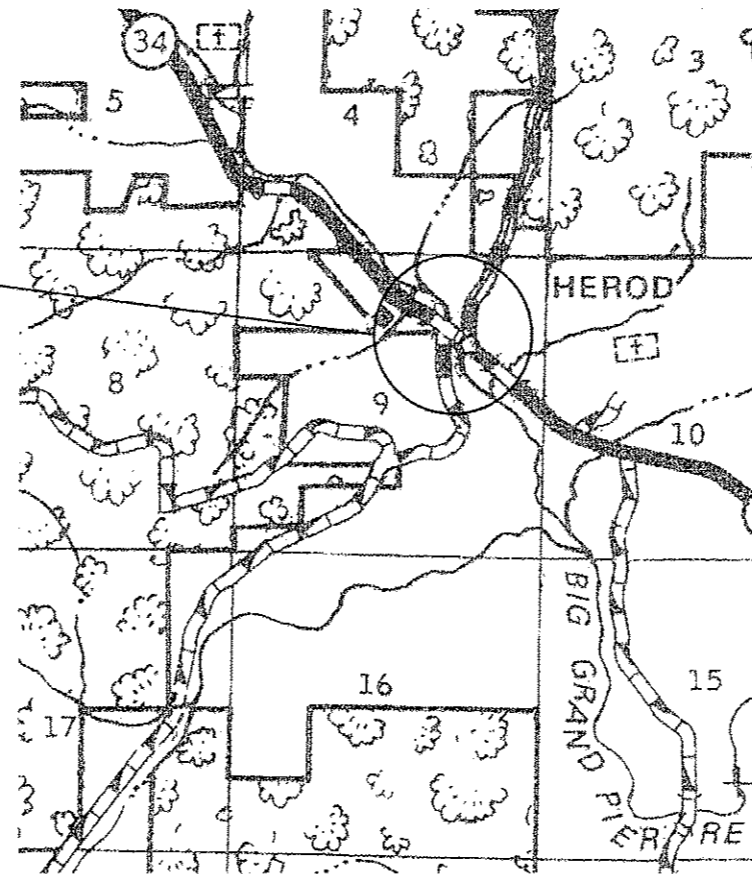
Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	1680
Anchor Bolts 1"	Each	24

FOR INFORMATION ONLY

BRIDGE NO. 4
SN. 076-0001
2011 ADT: 2850
19% TRUCKS
INVENTORY RATING: 25.1
OPERATING RATING: 41.9
COUNTY ROAD DISTRICT #02



POPE COUNTY

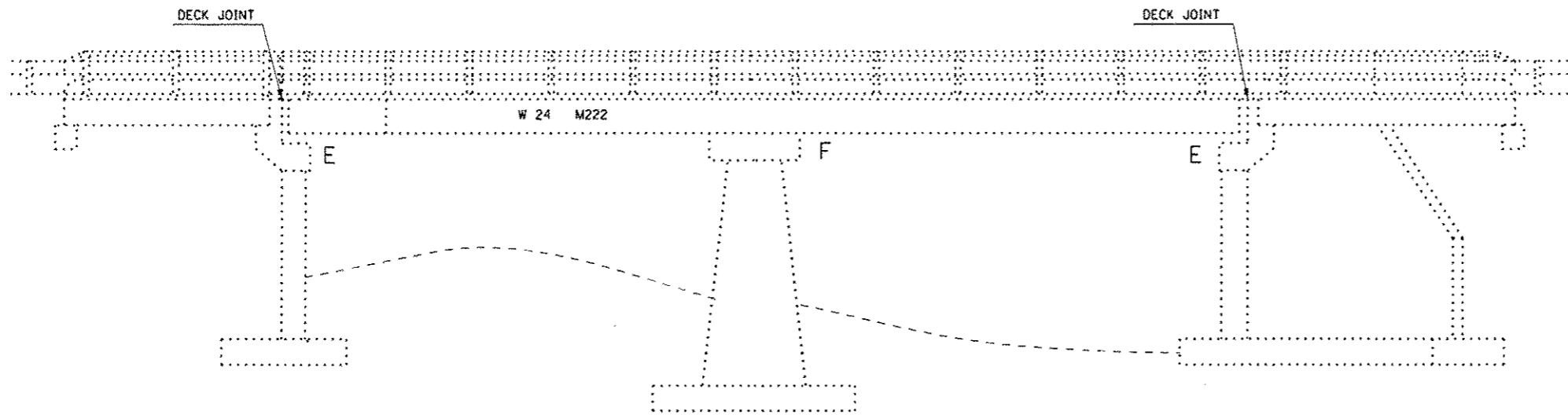
NOTES

CLEANING AND PAINTING OF THE DESIGNATED EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN 6 FEET (MEASURED ALONG THE BEAM) OF EITHER SIDE OF DECK JOINTS AND THE EXTERIOR SURFACES AND BOTTOM OF THE BOTTOM FLANGE OF THE FULL LENGTH OF FASCIA BEAMS SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING - SSPC-SPI0. THE AREAS CLEANED PER NEAR WHITE BLAST CLEANING SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR INTERIOR STEEL SURFACES SHALL BE GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR EXTERIOR STEEL SURFACES OF FASCIA BEAMS SHALL BE REDDISH BROWN, MUNSELL NO. 2.5YR 3/4.

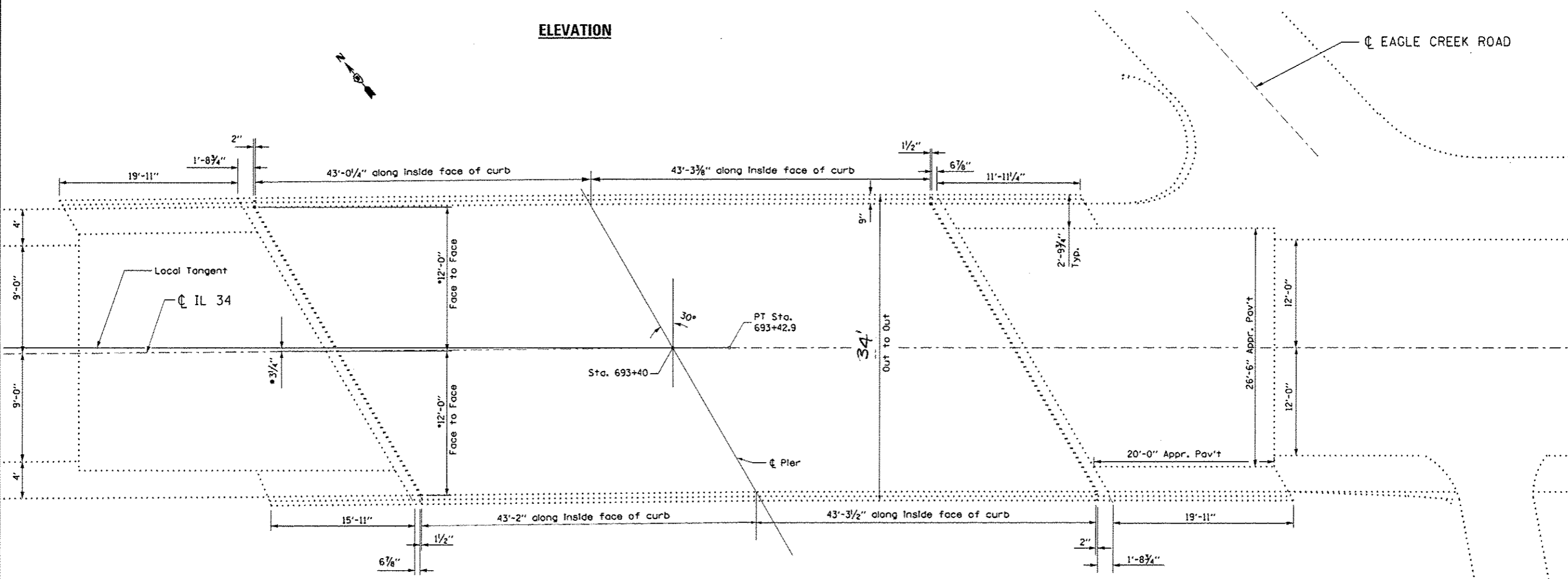
STRUCTURAL STEEL NEAR THE DECK JOINTS HAS AN EXISTING PAINT COATING, AND THE REMAINDER IS WEATHERING STEEL WITH NO EXISTING COATING. CONTAINMENT AND DISPOSAL OF CLEANING RESIDUES FROM THE PAINTED STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES". CONTAINMENT AND DISPOSAL OF CLEANING RESIDUES FROM THE UNPAINTED PORTION OF FASCIA BEAMS SHALL BE IN ACCORDANCE WITH EITHER THE SPECIAL PROVISION "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" OR THE SPECIAL PROVISION "CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES", AT THE CONTRACTOR'S OPTION.

A MINIMUM OF THREE AIR MONITORS ARE REQUIRED TO MONITOR ABRASIVE BLASTING OPERATIONS AT THIS SITE.

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 076-0001 IL 34 OVER GIBBONS CREEK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
g:\p\work\p\p\p\gautneyrk\00319688\78	41-shs-plan.dgn	DRAWN -	REVISED -			VAR.	D9 BRIDGE PAINTING 2013-1	VARIOUS	33	27	
PLT SCALE * 40.0026 1 / in.	CHECKED -	REVISED -	SCALE: _____			SHEET _____	OF _____	SHEETS	STA. _____	TO STA. _____	CONTRACT NO. 78341
PLT DATE * 12/17/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								



ELEVATION

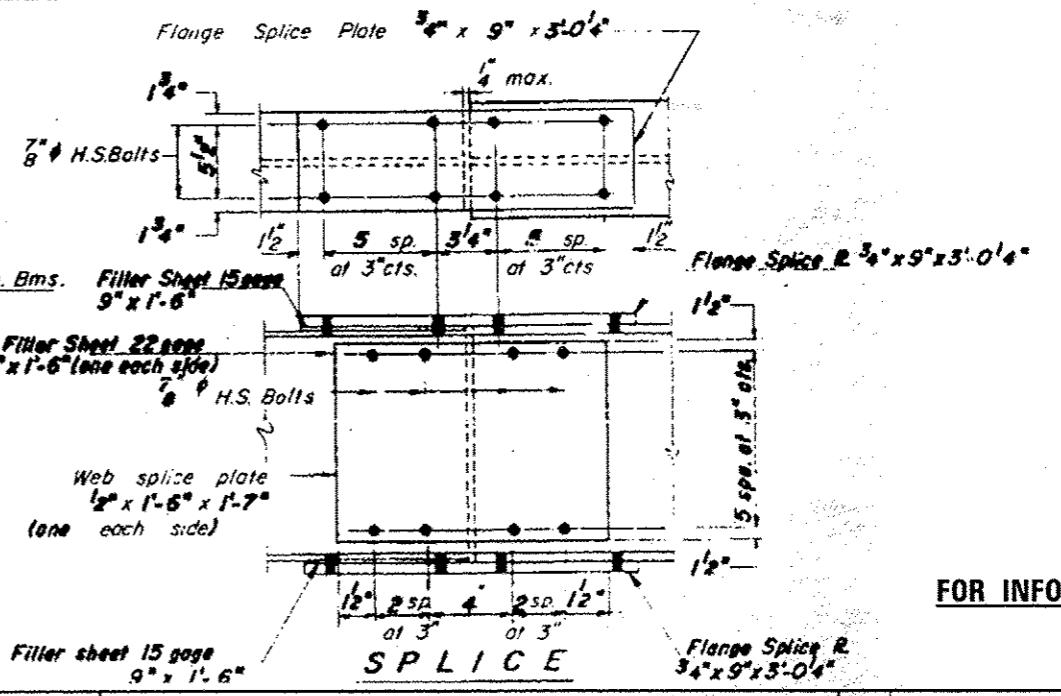
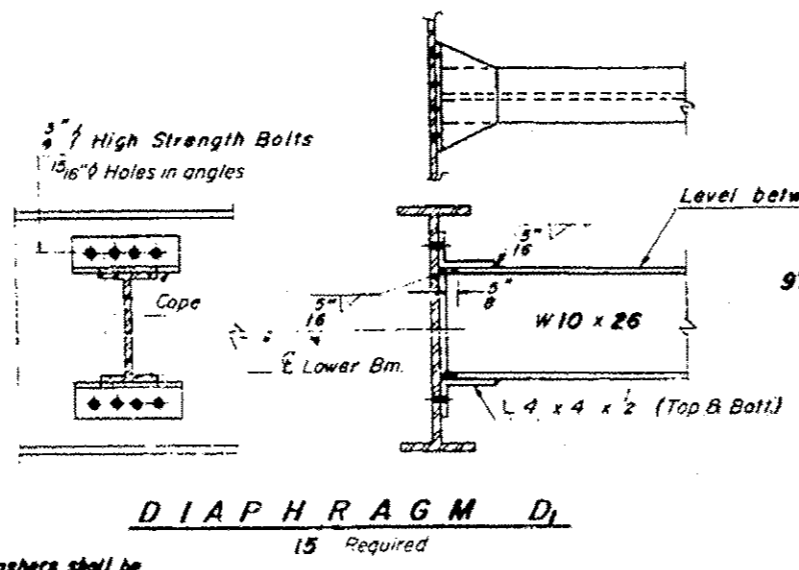
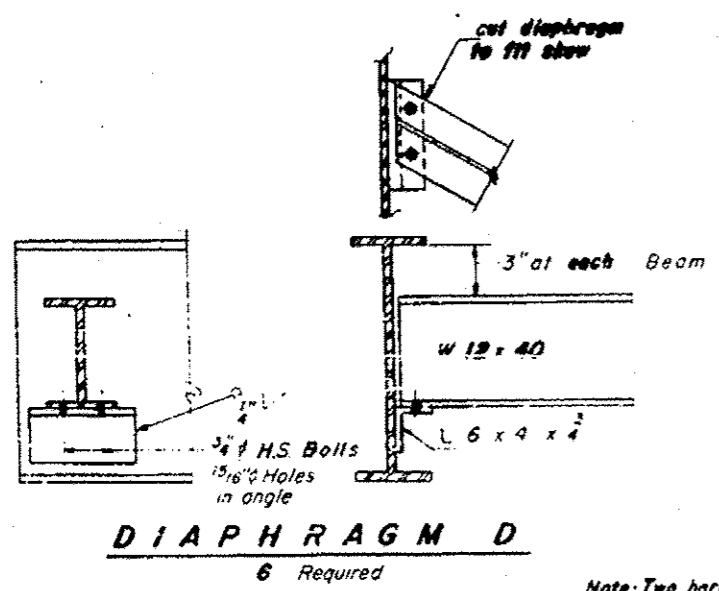
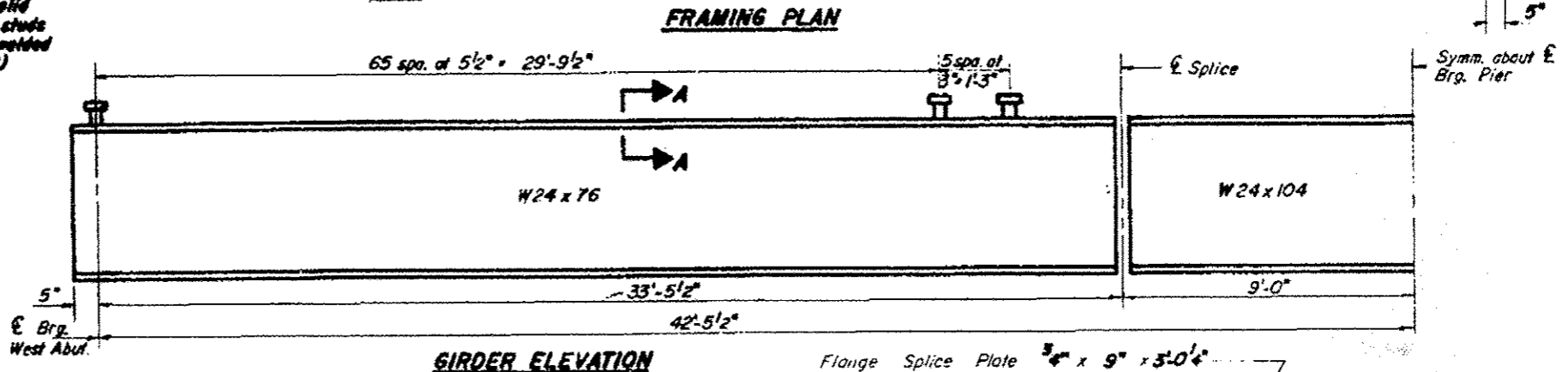
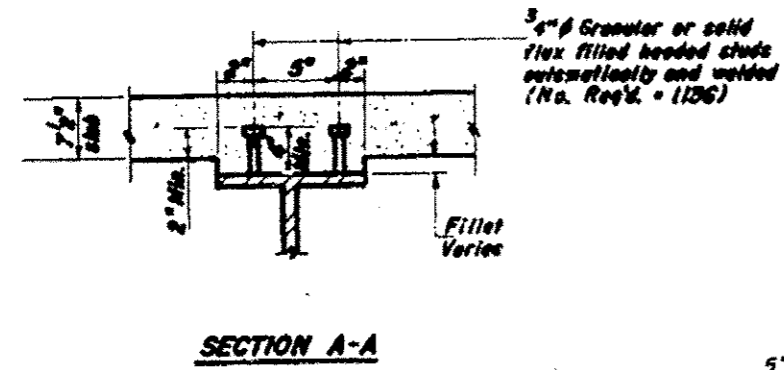
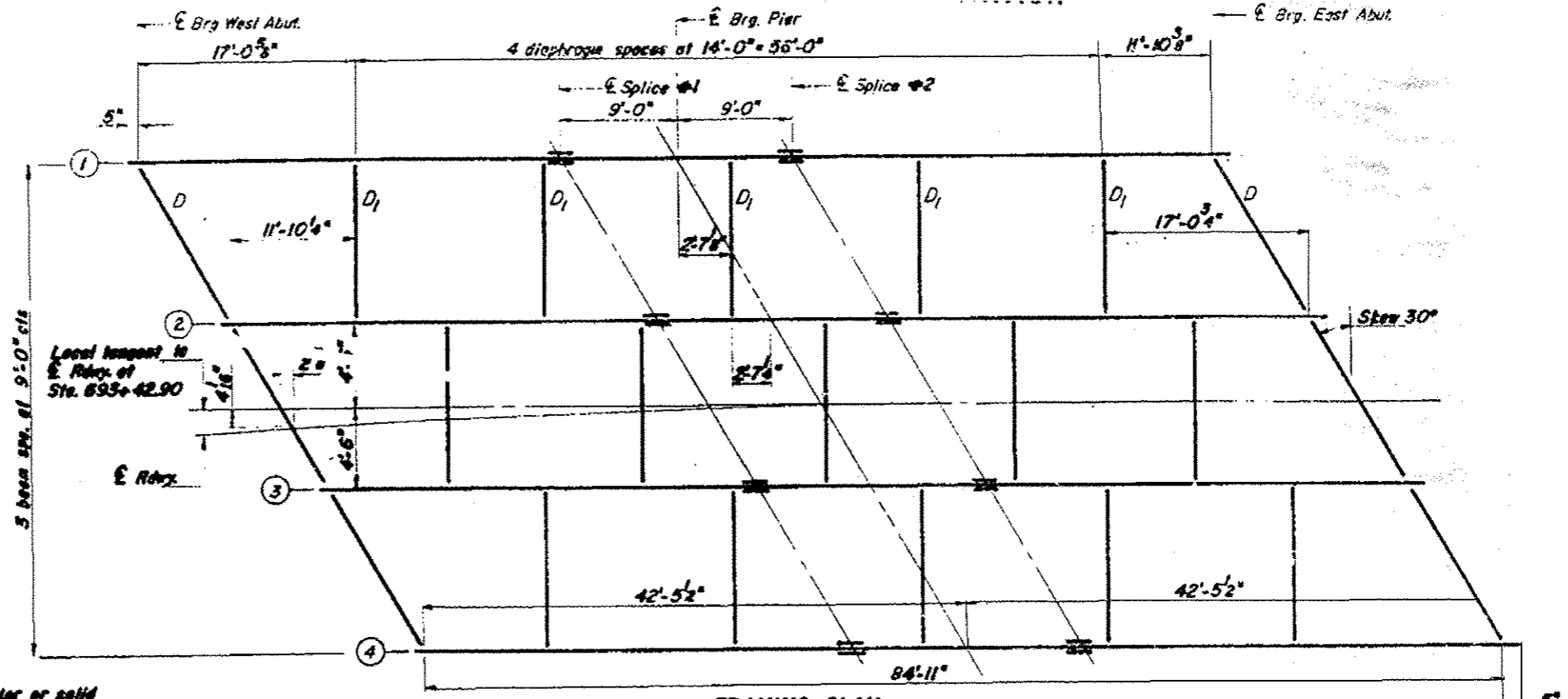


PLAN

• Dimension at end of slab

Private Entrance

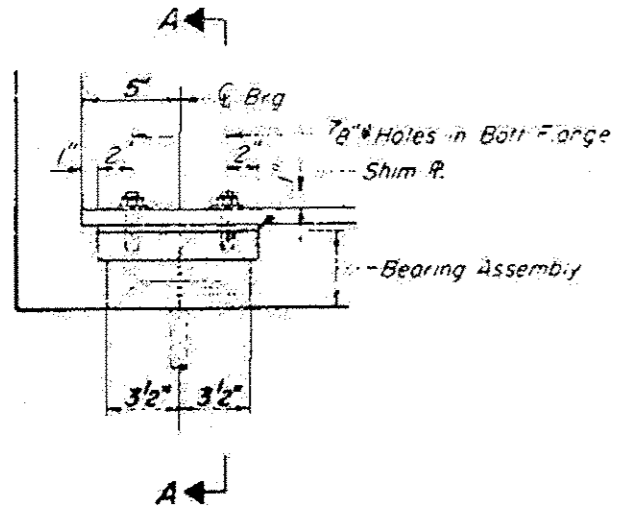
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DIR: \\pwr-wrk\pando\gautneyrk\0319666\78	11-shs-plan.dgn	DRAWN -	REVISD -			VAR.	D8 BRIDGE PAINTING 2013-1	VARIOUS	33	28
PLOT SCALE : 48,000/33 1/2 in.	CHECKED -	REVISD -	CONTRACT NO. 78341							
PLOT DATE : 10/17/2012	DATE -	REVISD -	ILLINOIS FED. AID PROJECT							
#MODELNAME*				SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____				



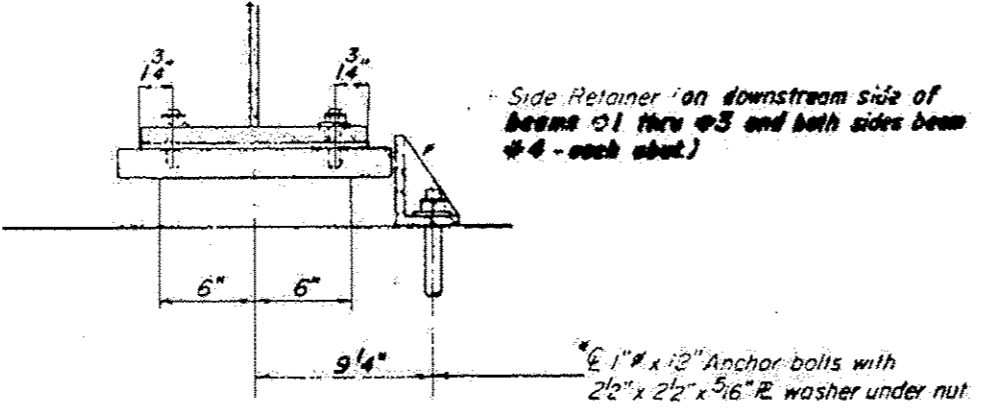
FOR INFORMATION ONLY

Note: Two hardened washers shall be required over each 1 5/16" holes in angles.

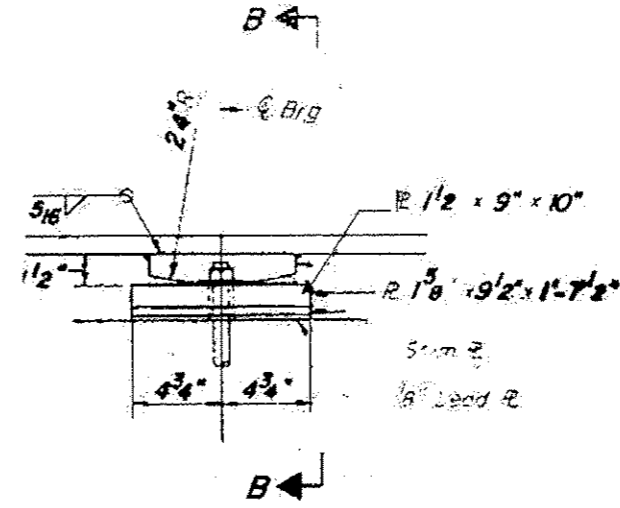
FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 076-0001 IL 34 OVER GIBBONS CREEK	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01:\pwork\p\dot\gautneyrk\10319666\178	41-shs-plan.dgn	DRAWN -	REVISED -			VAR. D9 BRIDGE PAINTING 2013-	VARIOUS	33	29	
MODELNAME*	PLOT SCALE * 40,0000 1/ in.	CHECKED -	REVISED -			CONTRACT NO. 78341		ILLINOIS FED. AID PROJECT		
	PLOT DATE * 10/11/2012	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.



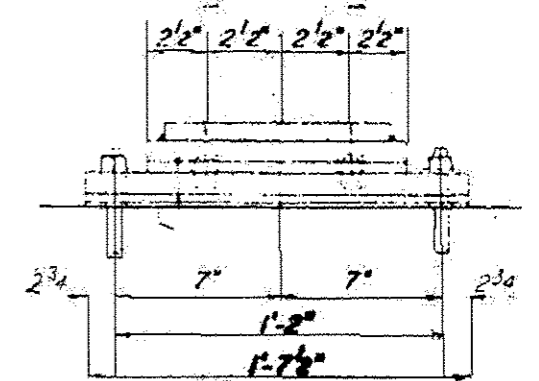
SECTION AT ABUT.



SECTION A-A



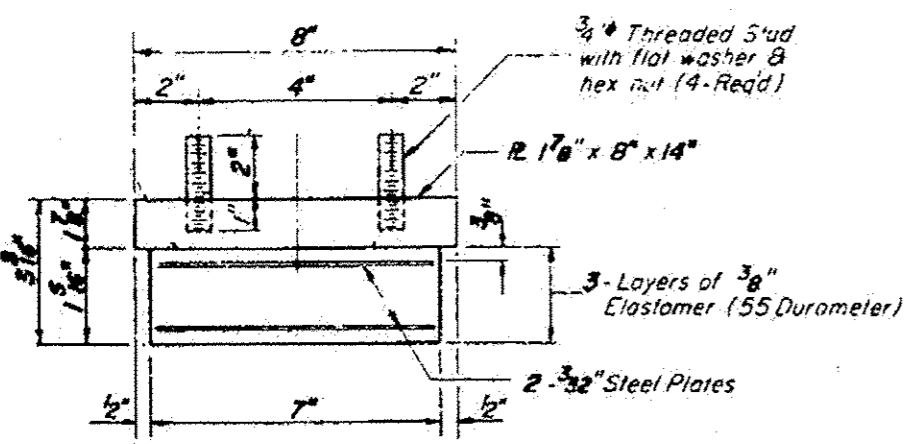
ELEVATION AT PIER



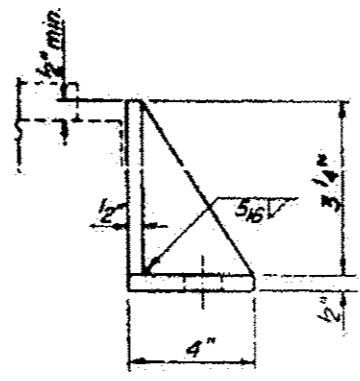
SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.

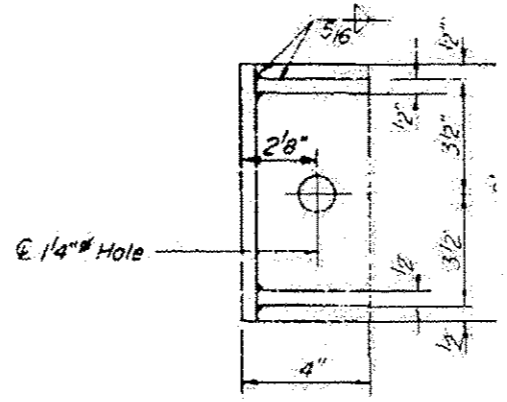
FIXED BEARING



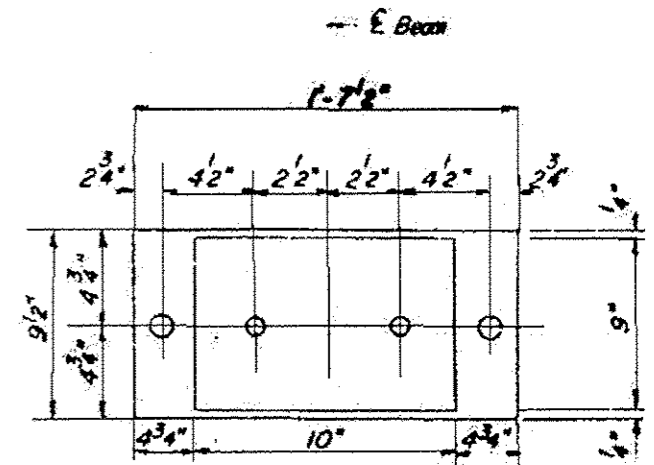
BEARING ASSEMBLY



SIDE RETAINER
(No. Req'd = 10)

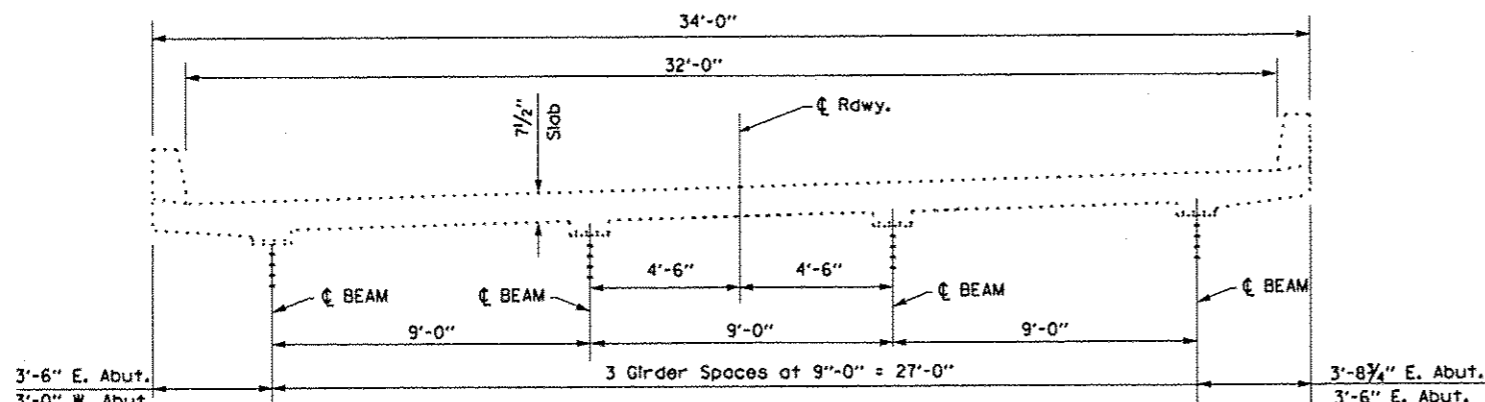


PINTLE



PLAN

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



DECK CROSS SECTION

FOR INFORMATION ONLY

FILE NAME *	USER NAME * gautneyrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 076-0001	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
o:\p\work\p\p\gautneyrk\08319666\78	41-shr-plan.dgn	DRAWN -	REVISED -		IL 34 OVER GIBBONS CREEK	VAR. D9 BRIDGE PAINTING 2013-	VARIOUS	33	30	
PLOT SCALE * 48,0000 / in.		CHECKED -	REVISED -		SCALE: _____				CONTRACT NO. 78341	
PLOT DATE * 10/11/2012		DATE -	REVISED -		SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT			