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- 11.-13. REPAIR DETAILS (SN 090-0105)
- 14.-15. REPAIR DETAILS (SN 090-0119)

LIST OF STANDARDS

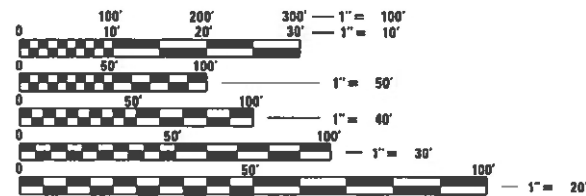
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001006	701316-13
701001-02	701426-09
701006-05	701428-01
701011-04	701901-08
701106-02	704001-08
701101-05	782006-01

DESIGN DESIGNATION

I-474	I-74
INTERSTATE	INTERSTATE
AADT = 16,000	AADT = 41,300
S.U. = 5.63%	S.U. = 4.60%
M.U. = 17.81%	M.U. = 8.72%
POSTED SPEED = 70 MPH	POSTED SPEED = 70 MPH

COLE ST.	SPRINGFIELD RD.
MAJOR COLLECTOR	MINOR ARTERIAL
AADT = 2,900	AADT = 5,350
POSTED SPEED = 35 MPH	POSTED SPEED = 40 MPH

I-474 EB TO I-74 WB
INTERSTATE
AADT = 500
POSTED SPEED = 70 MPH



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: NICOLE FAYANT - (309) 671 3454
PROJECT MANAGER: TRAVIS WALLENFANG - (309) 671-3474
CATALOG NO. 036255-00D
CONTRACT NO. 68G68

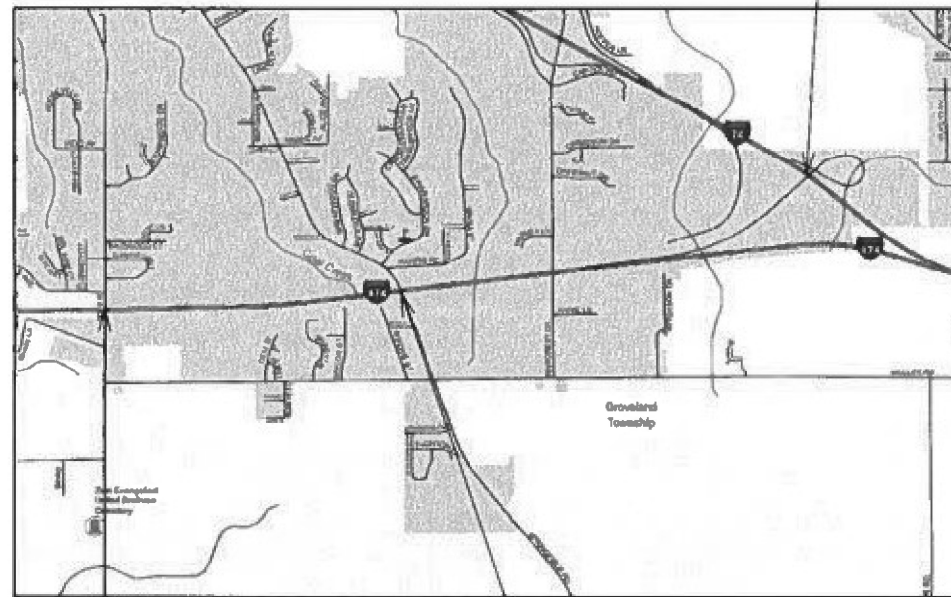
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PROPOSED
HIGHWAY PLANS**

FAI ROUTES 474 & 74 (I 474 & I 74)
SECTION: 90[7(HB-1, HB, HB-5)]BRR
PROJECT: NA
BRIDGE REPAIR
TAZEWELL COUNTY

C-94-092-21

SN 090-0119
(EB I-474 RAMP TO WB I-74)



SN 090-0105
(COLE STREET OVER I 474)

SN 090-0104
(SPRINGFIELD RD OVER I 474)



GROSS LENGTH = n/a
NET LENGTH = n/a

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474/74	90[7(HB-1, HB, HB-5)]BRR	TAZEWELL	15	1
ILLINOIS			CONTRACT NO. 68G68	

D-94-070-21



PROJECT DESCRIPTION

Bridge repairs to SN 090-0104 Springfield Rd and SN 090-0105 Cole St over I-474; and SN 090-0119 EB I-474 over WB I-74.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Dec 22 2021
Rensel A Garnett RSO
REGIONAL ENGINEER

February 4 2022
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

February 4 2022
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

COMMITMENTS

No commitments have been made for this project.

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

The required environmental resource documentation shall include the following:

- * BDE Form 2289 (Borrow Site Review)
- * BDE Form 2290 (Waste/Use Area Review)
- * A location map showing the size limits and location of the use area
- * Color photographs depicting the use area
- * Borrow Area Entry Agreement form – D4 PI0101

Prior to any waste materials being removed from the construction site the required environmental resource surveys shall be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

Please note that a minimum of four weeks shall be allowed for the District to obtain the required waste site environmental clearances and six weeks for the required borrow site environmental clearances.

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PLOT DATE = 12/22/2021	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

COMMITMENTS AND GENERAL NOTES			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90[7(HB-1,HB,HB-5)]BRR	TAZEWELL	15	2
CONTRACT NO. 68G68				
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				URBAN	TAZEWELL 100% STATE BRIDGE	TAZEWELL 100% STATE BRIDGE	TAZEWELL 100% STATE BRIDGE
					0013	0013	0013
					S.N. 090-0104	S.N. 090-0105	S.N. 090-0119
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5750	2810	2860	80	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	26	14	12		
52100520	ANCHOR BOLTS, 1"	EACH	52	28	24		
67100100	MOBILIZATION	L SUM	1	1			
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	1	1		
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	6	6		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	30	30			
70400100	TEMPORARY CONCRETE BARRIER	FOOT	600	300	300		
70600251	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	2	2		
X7010200	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316 (SPECIAL)	EACH	2	1	1		
X7010218	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	4	2	2		
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	26	14	12		
Z0001905	STRUCTURAL STEEL REPAIR	POUND	1100	0	550	550	

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	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90[7(HB-1,HB,HB-5)]BRR	TAZEWELL	15	3
			CONTRACT NO. 68G68	
ILLINOIS FED. AID PROJECT				

MOBILIZATION	
LOCATION	L SUM
JOBSITE	1

See Structural Repair Sheets for repair quantity schedules

CHANGEABLE MESSAGE SIGN	
LOCATION	CAL DAYS
I-474	6
I-74	9
Springfield Rd	6
Cole St	6
I-474 EB Ramp	3
TOTAL	30

*Assumes 1 board per direction of traffic 3 days in advance of work at each location

TRAFFIC CONTROL & PROTECTION							
LOCATION	TC&P, (SPECIAL) (EACH)	TC&P STD 701316, (SPECIAL) (EACH)	TEMP BRIDGE TRAFFIC SIGNALS (EACH)	TEMP RUMBLE STRIPS (EACH)	TEMP. CONC. BARRIER* (FT)	IMP ATTN TEMP NRN TL3* (EACH)	TC&P STD 701101** (EACH)
SN 090-0104							
N. Abutment	1				150	1	
S. Abutment	1				150	1	
Springfield Rd		1	1	6			
SN 090-0105							
N. Abutment	1				150	1	
S. Abutment	1				150	1	
Cole St.		1	1	6			
SN 090-0119							
N. Abutment							1
Pier #1							1
Pier #2							1
TOTAL	4	2	2	12	600	4	3

*Existing pay items shall cover both new installations and relocations (if performed)

**Not measured for payment

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





STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90[7(HB-1,HB,HB-5)]BRR	TAZEWELL	15	4
CONTRACT NO. 68G68				
ILLINOIS FED. AID PROJECT				



LEGEND

-  TEMPORARY TRAFFIC SIGNAL
-  SIGN
-  WHITE TEMPORARY PAVEMENT MARKING
-  ADVANCED SIGN SPACING AND TEMPORARY RUMBLE STRIPS ACCORDING TO TC&P 701316
-  STAGE 1 CONSTRUCTION EDGE DRUMS
-  STAGE 2 CONSTRUCTION EDGE DRUMS
-  TC&P, SPECIAL (Sheet 7)
-  DRUMS WITH STEADY BURNING BI-DIRECTIONAL LIGHTS AT 25' CTS.

NOTES:

Temporary Pavement markings shall be Type III or IV Tape. Cost of temporary pavement markings, covering of conflicting markings, and removal of temporary markings shall be inclusive of the existing traffic control standards.

For any work on the bridge deck that is anticipated to have workers on the deck for more than 24 hours (cumulative), one truck mounted attenuator shall be placed in the closed lane in advance fo the workers during working hours. Cost shall be inclusive of the existing traffic control standards.

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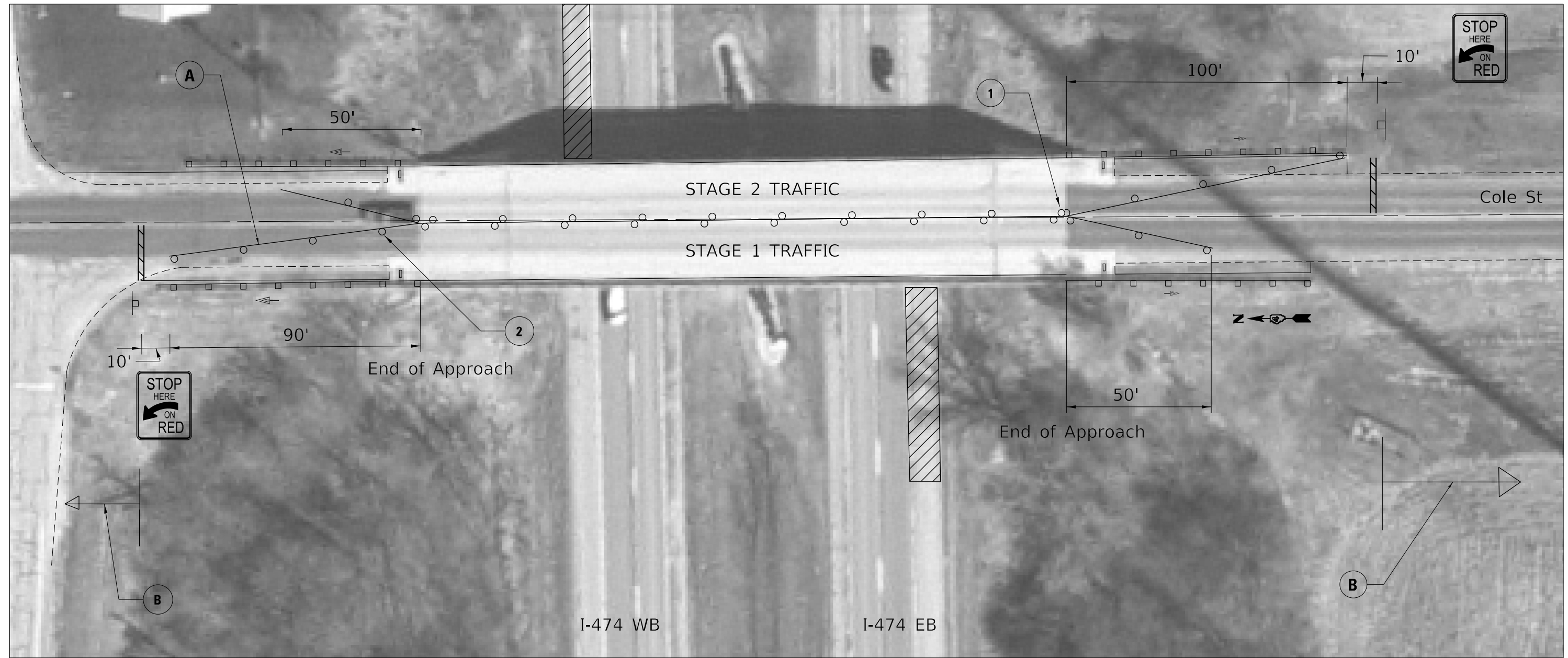
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN – TC&P STD 701316 SPECIAL
SN 090-0104 (SPRINGFIELD RD)**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90[7(HB-1,HB,HB-5)]BRR	TAZEWELL	15	5
ILLINOIS			FED. AID PROJECT	

CONTRACT NO. 68G68



LEGEND

TEMPORARY TRAFFIC SIGNAL

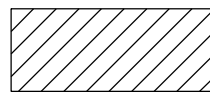
SIGN

WHITE TEMPORARY PAVEMENT MARKING

ADVANCED SIGN SPACING AND TEMPORARY RUMBLE STRIPS ACCORDING TO TC&P 701316

STAGE 1 CONSTRUCTION EDGE DRUMS

STAGE 2 CONSTRUCTION EDGE DRUMS



TC&P 701101 SPECIAL (Sheet 7)



DRUMS WITH STEADY BURNING BI-DIRECTIONAL LIGHTS AT 25' CTS.

NOTES:

Temporary Pavement markings shall be Type III or IV Tape. Cost of temporary pavement markings, covering of conflicting markings, and removal of temporary markings shall be inclusive of the existing traffic control standards.

For any work on the bridge deck that is anticipated to have workers on the deck for more than 24 hours (cumulative), one truck mounted attenuator shall be placed in the closed lane in advance for the workers during working hours. Cost shall be inclusive of the existing traffic control standards.

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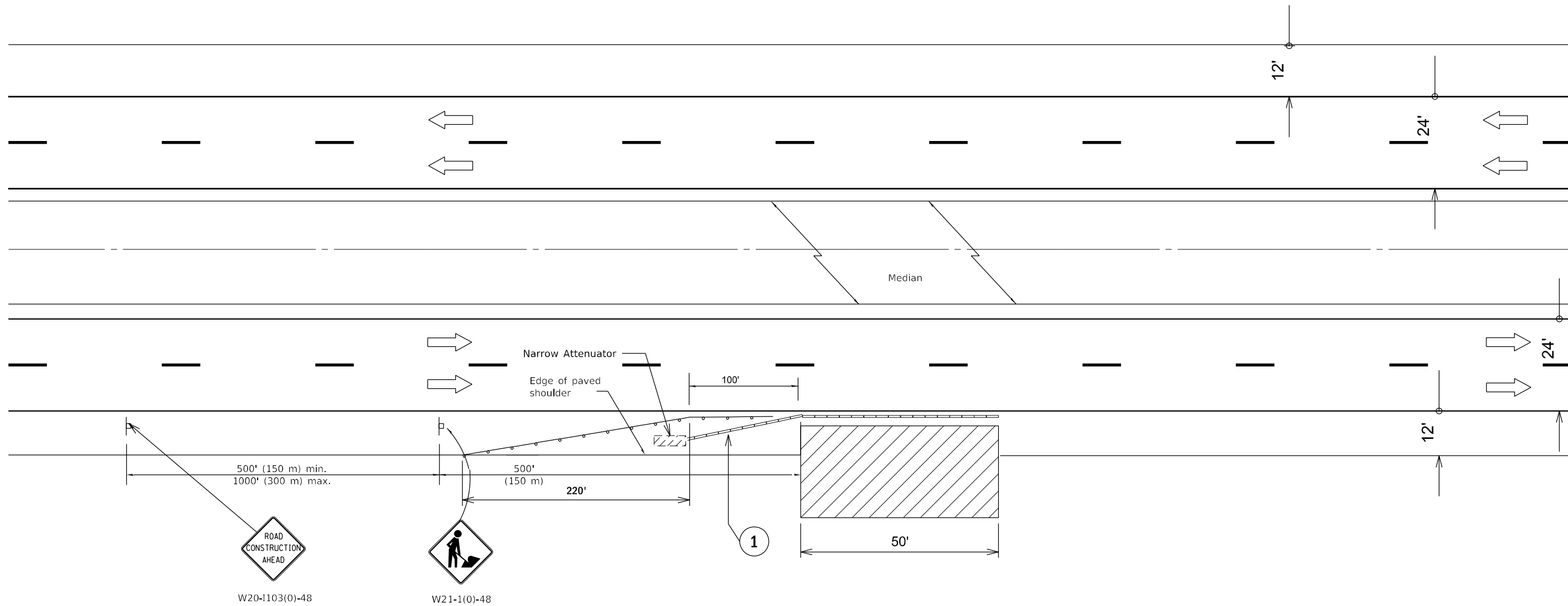
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN - TC&P STD 701316 SPECIAL
SN 090-0105 (COLE ST)

SCALE: SHEET OF SHEETS STA. TO STA.

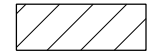


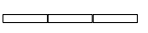
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 68G68	

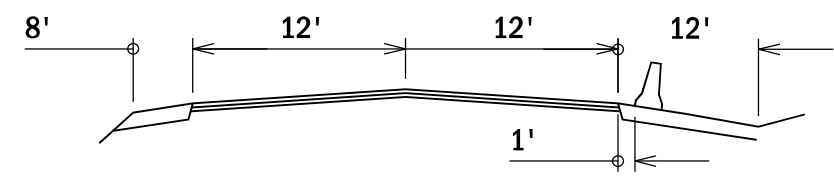
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1 Barrier wall reflectors at 25' cts.
 See Standards 704001 & 782006

SYMBOLS

-  WORK AREA
-  SIGN
-  DRUMS WITH STEADY BURNING LIGHTS AT 25' CTS.
-  TEMP. CONC. BARRIER



BARRIER WALL OFFSET

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	DATE -	REVISED -

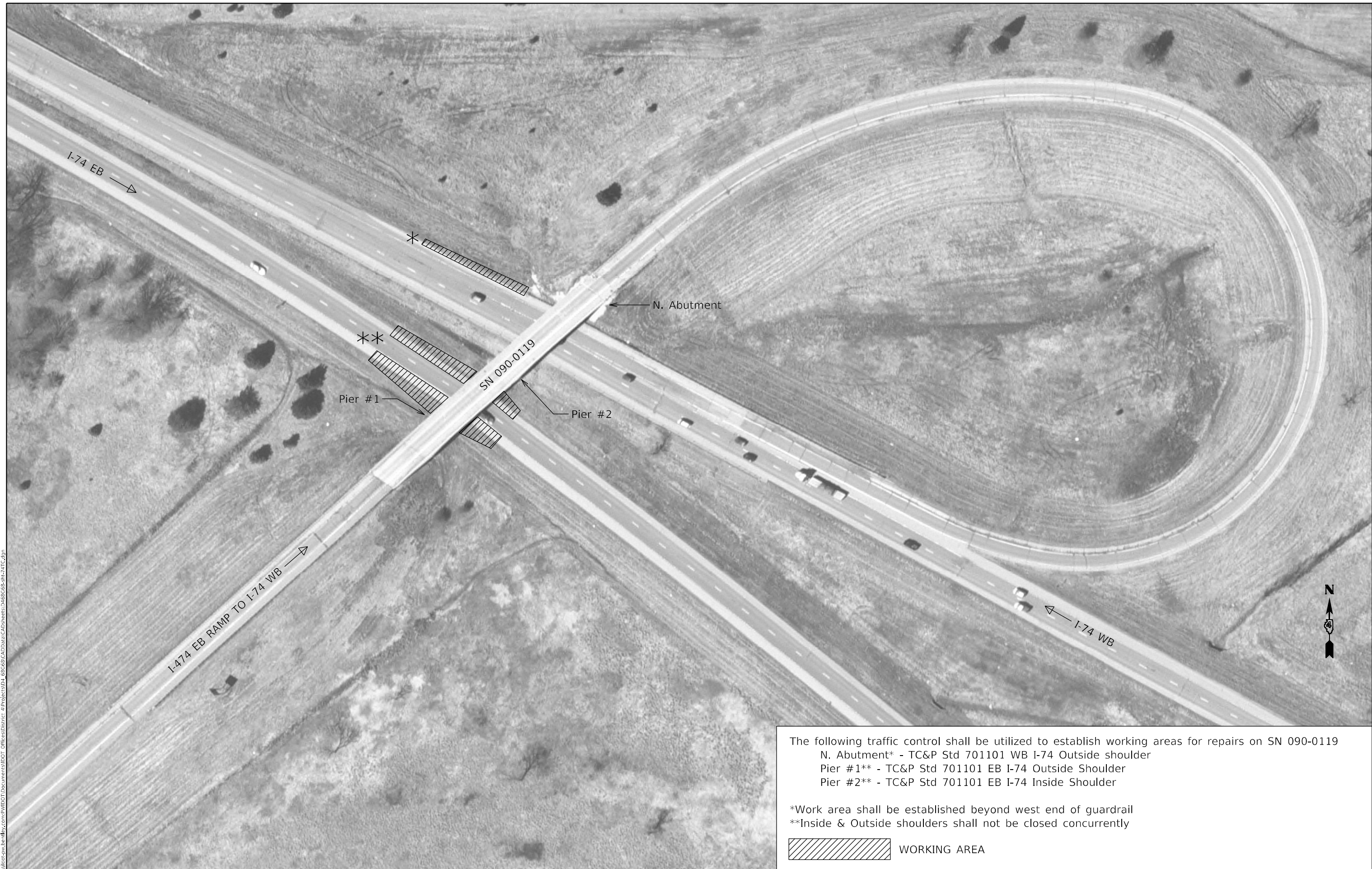
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN - DETAIL
 TRAFFIC CONTROL & PROTECTION, (SPECIAL)

SCALE: SHEET OF SHEETS STA. TO STA.


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68G68				
ILLINOIS FED. AID PROJECT				

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The following traffic control shall be utilized to establish working areas for repairs on SN 090-0119
 N. Abutment* - TC&P Std 701101 WB I-74 Outside shoulder
 Pier #1** - TC&P Std 701101 EB I-74 Outside Shoulder
 Pier #2** - TC&P Std 701101 EB I-74 Inside Shoulder

*Work area shall be established beyond west end of guardrail
 **Inside & Outside shoulders shall not be closed concurrently

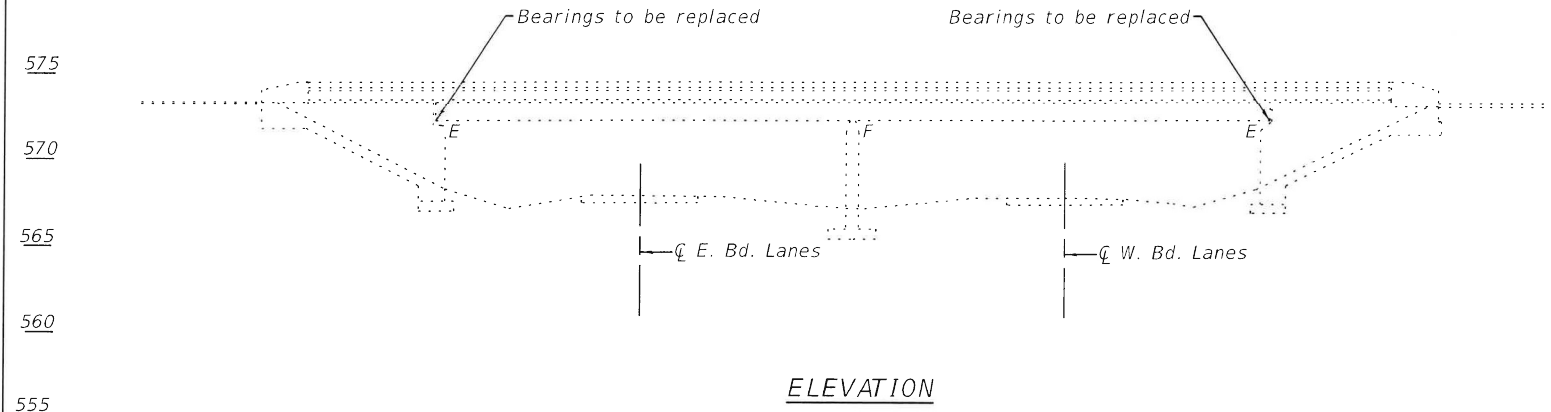
 WORKING AREA

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	CHECKED - DATE -	REVISED - REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	CONTRACT NO. 68G68 ILLINOIS FED. AID PROJECT							

Benchmark:
North Cap Bolt of Fire Hydrant 27' Rt Sta. 15+48 Elev. 739.20.
Existing Structure No. 090-0104

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	2,810
Elastomeric Bearing Assembly, Type 1	Each	14
Anchor Bolts, 1" Ø	Each	28
Jack and Remove Existing Bearings	Each	14



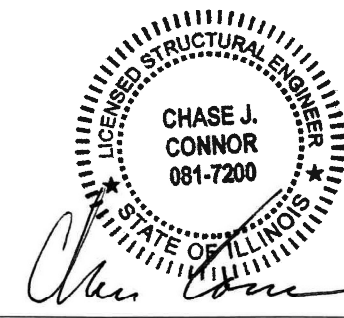
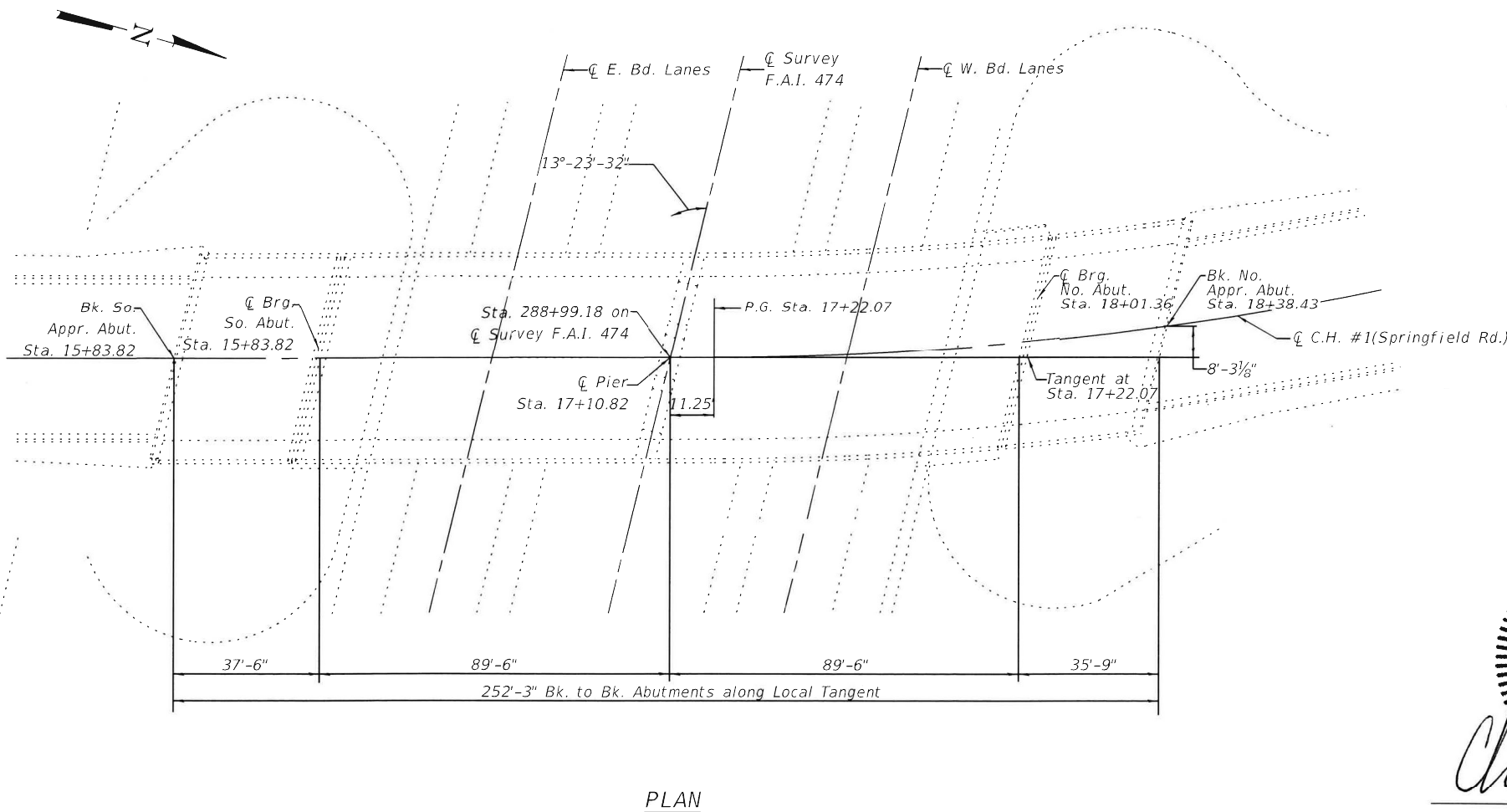
INDEX OF SHEETS

1. General Plan and Elevation
2. Bearing Details

GENERAL NOTES

Contractor shall field verify the new bearing height based on the existing deck either rising or settling due to the corroded rocker beams. Adjustments may be necessary to ensure the existing expansion joint is even on both sides after bearing replacement has commenced.

All new structural steel, bearing assemblies, steel extensions, shim plates, side retainers, anchor bolts, nuts and washers, etc. shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".



Date: 12/22/21

CHASE J. CONNOR, P.E., S.E.
ILLINOIS STRUCTURAL NO. 7200
EXPIRES: NOVEMBER 30, 2022

BRIDGE REPAIRS
C.H. 1 (SPRINGFIELD RD.)
OVER F.A.I. RTE. 474
STATION 99.18
STRUCTURE NO. 090-0104

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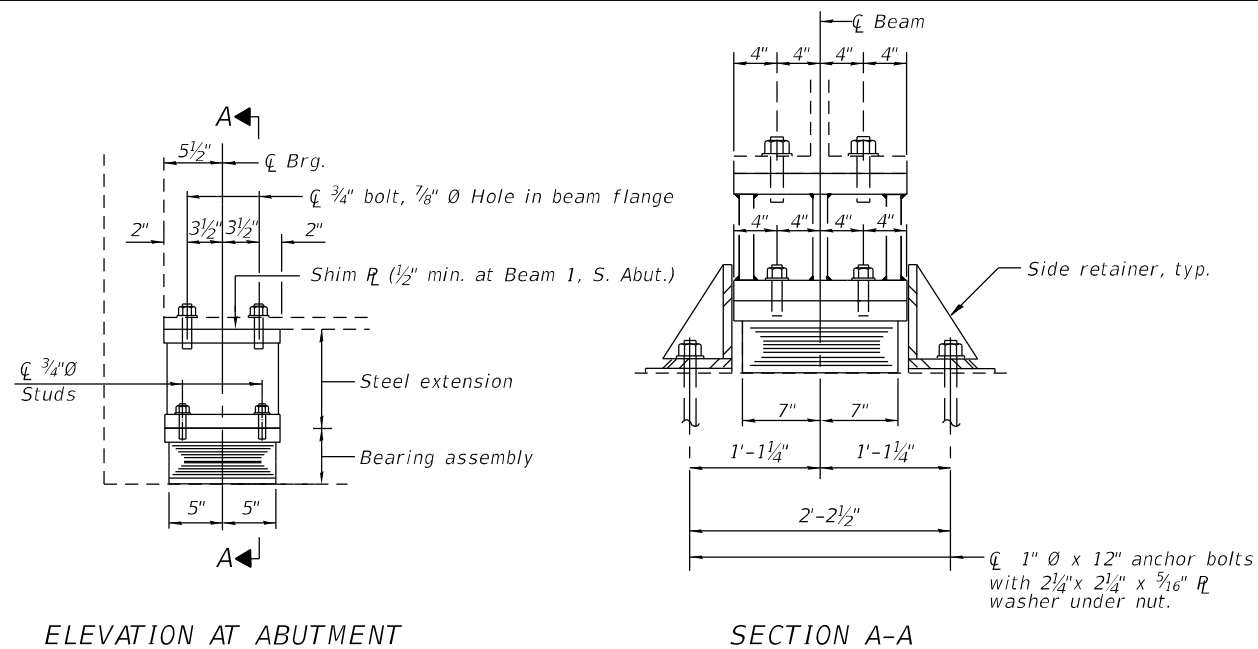
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PROFESSIONAL DESIGN NUMBER: 184-000298
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 217.532.3959
JOB NO. 192-3231

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 090-0104
SHEET 1 OF 2 SHEETS

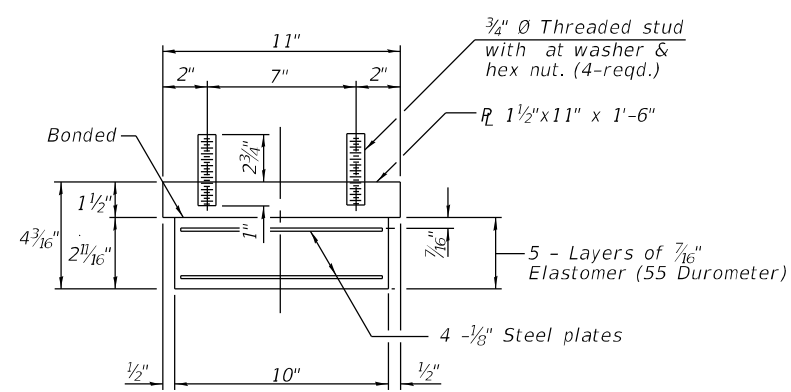
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474	90-7HB-1	TAZEWELL	15	9
CONTRACT NO. 68G68			ILLINOIS FED. AID PROJECT	



ELEVATION AT ABUTMENT

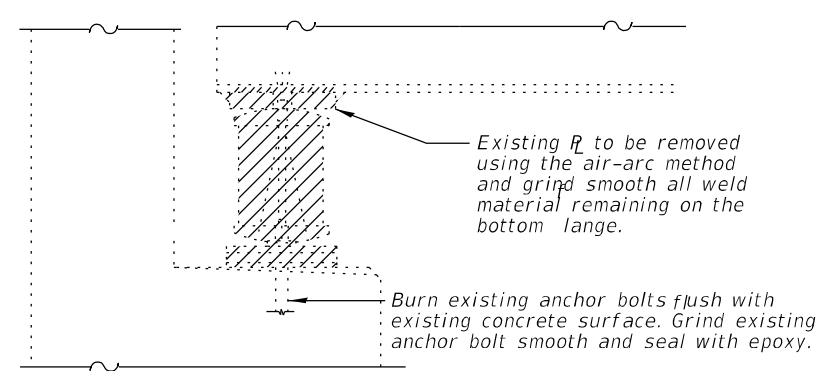
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



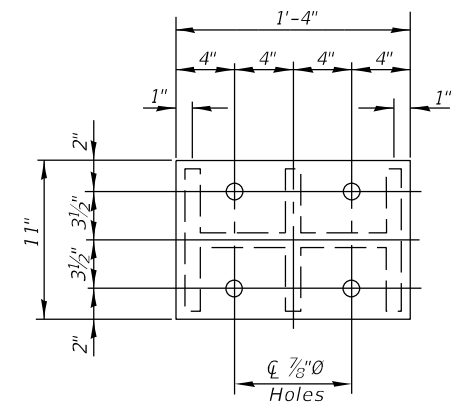
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.

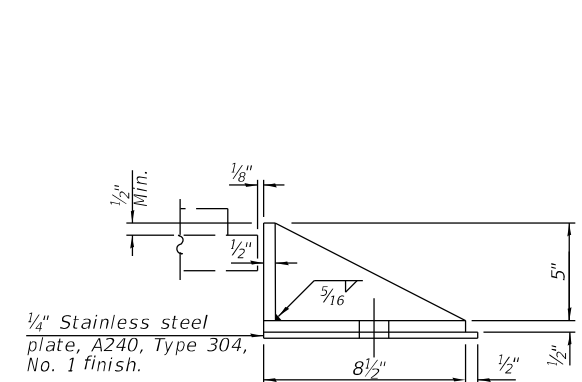


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

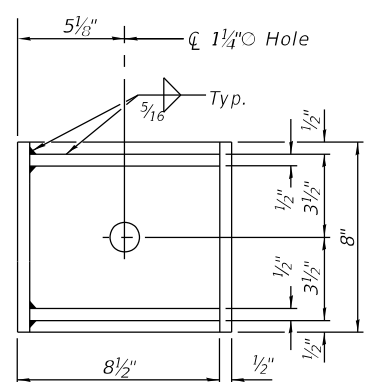


PLAN TOP AND BOTTOM PLATE



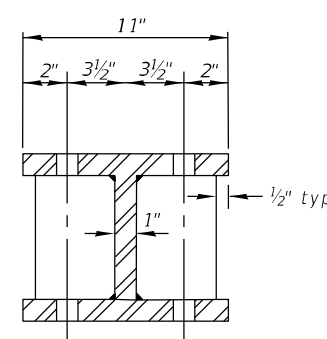
SIDE RETAINER

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

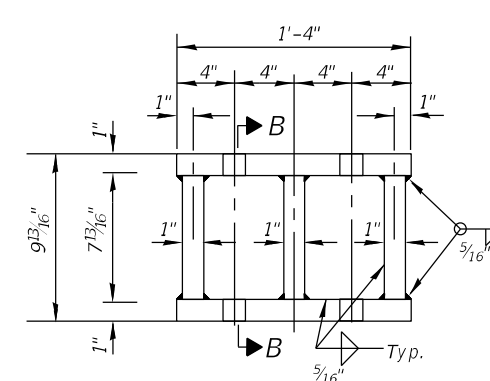


BEAM REACTIONS

R ϕ	(k)	33.5
R S ϕ	(k)	7.5
R t	(k)	45.8
Imp.	(k)	10.7
R (Total)	(k)	97.5



SECTION B-B



STEEL EXTENSION DETAIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	2810
Elastomeric Bearing Assembly, Type I	Each	14
Anchor Bolts 1" ϕ	Each	28
Jack and Remove Existing Bearings	Each	14

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HR
Hurst-Rosche, Inc.
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 217.532.3959
JOB NO. 192-3231

USER NAME =	DESIGNED - CJC	REVISED -
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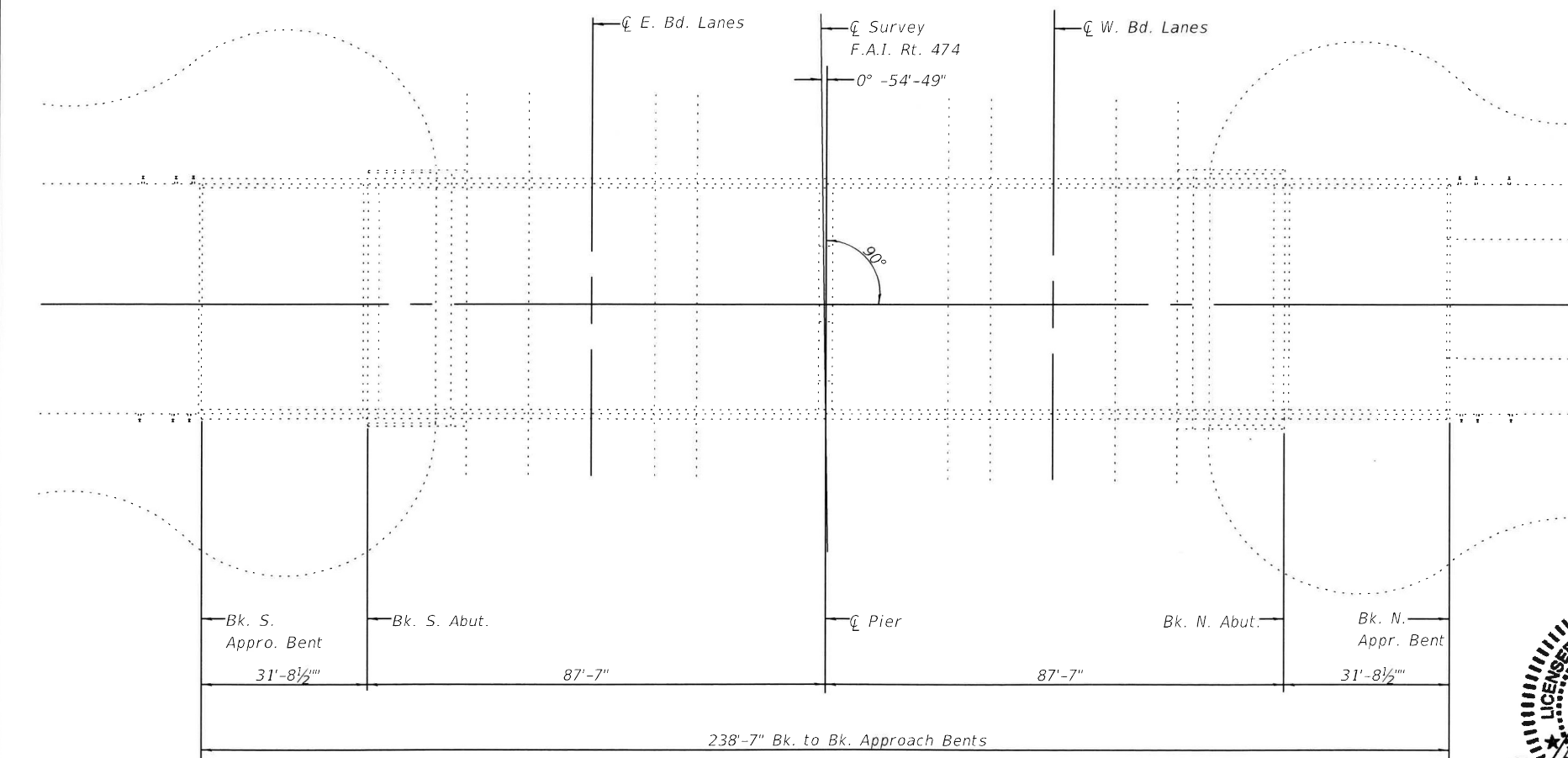
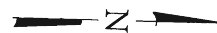
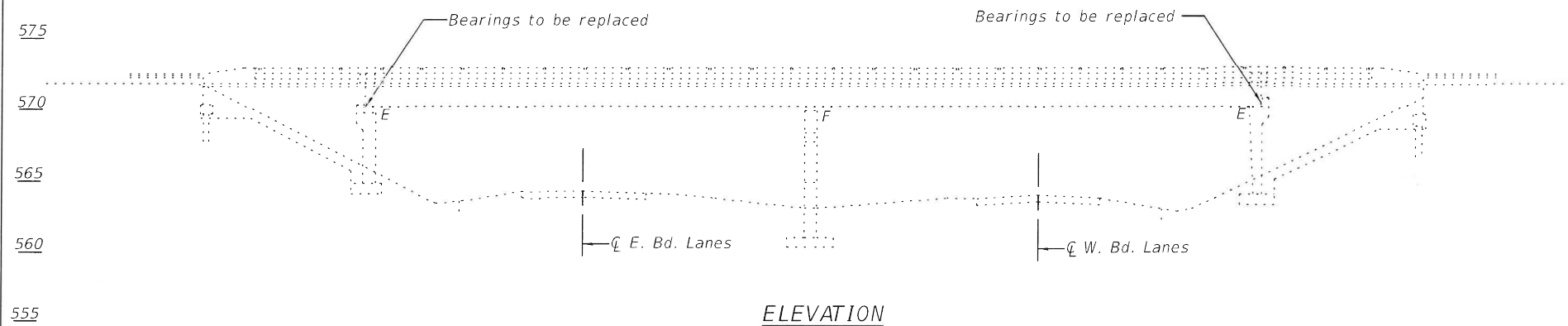
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BEARING DETAILS
STRUCTURE NO. 090-0104**

SHEET 2 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90-7B-1	TAZEWELL	15	10
CONTRACT NO. 68G68				
ILLINOIS FED. AID PROJECT				

Benchmark:
Top NW (Westernmost) wingwall of bridge Elevation 572.49
Existing Structure No. 090-0105



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Elastomeric Bearing, Assembly, Type I	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	2,860
Anchor Bolts, 1"	Each	24
Structural Steel Repair	Pound	550

INDEX OF SHEETS

1. General Plan and Elevation
2. Bearing Details
3. Framing Plan and Girder Repair Details

GENERAL NOTES

Contractor shall field verify the new bearing heights based on the existing deck either rising or settling due to the corroded rocker beams. Adjustments may be necessary to ensure the existing expansions joint is even on both sides after bearing replacement has commenced.

All new structural steel, bearing assemblies, steel extensions, shim plates, side retainers, anchor bolts, nuts and washers, etc. shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

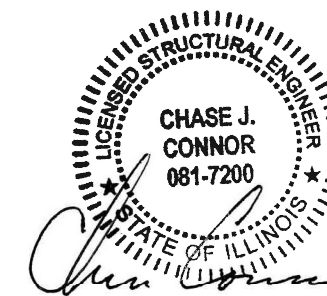
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based 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 in 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.



Date: 12/22/21

CHASE J. CONNOR, P.E., S.E.
ILLINOIS STRUCTURAL NO. 7200
EXPIRES: NOVEMBER 30, 2022

BRIDGE REPAIRS
COLE ST.
OVER F.A.I. RTE. 474
TAZEWELL COUNTY
STATION 236+98.77
STRUCTURE NO. 090-0105

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HR Hurst-Rosche, Inc.
PROFESSIONAL DESIGN NUMBER: 184-00204
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 217.532.3959
JOB NO. 192-3231

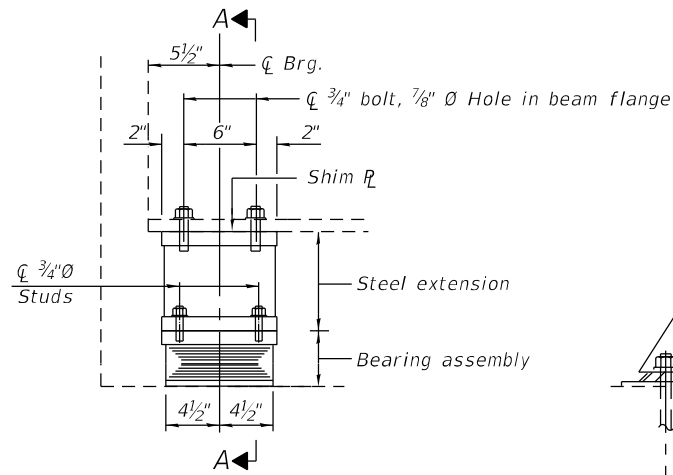
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

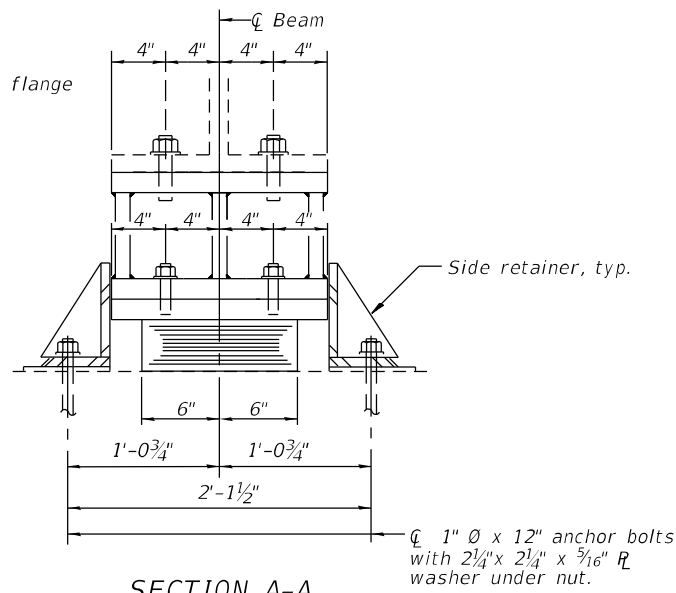
GENERAL PLAN & ELEVATION
STRUCTURE NO. 090-0105

SHEET 1 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90-7HB	TAZEWELL	15	11
			CONTRACT NO. 68G68	
ILLINOIS FED. AID PROJECT				



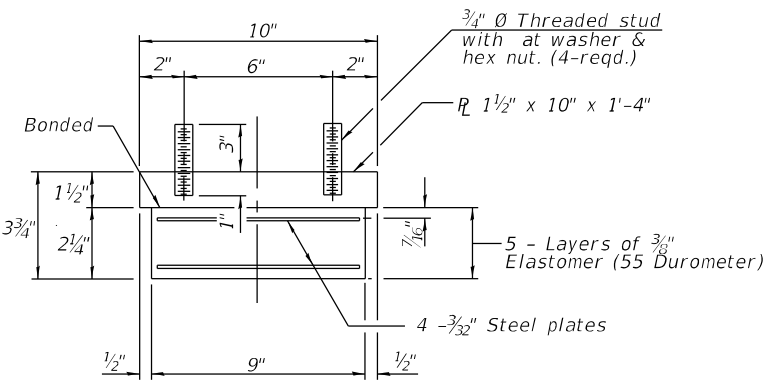
ELEVATION AT ABUTMENT



SECTION A-A

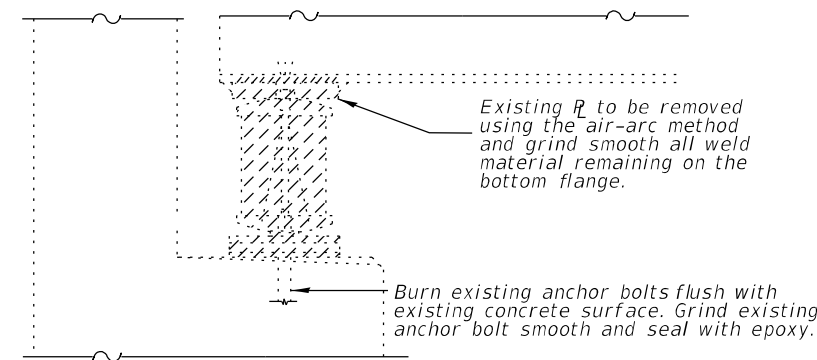
TYPE I ELASTOMERIC EXP. BRG.

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.
 Diaphragms should not be used as load-carrying members in the jacking and cribbing system, unless notified otherwise by Engineer.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type 1.
 The contractor shall correct elevation differences in the profile grade across the existing expansion joints at the ends of the deck. This shall be accomplished by adding shim plates at location shown on the plans. No more than two shim plates shall be added to each bearing location. The contractor shall field verify the existing dimensions and propose all vertical adjustments to the engineer prior to ordering the extra shims. The allowable elevation tolerances between the two sides of the expansion joints shall be ±1/4". Recording accurate measurements and ordering properly sized shims shall be the sole responsibility of the contractor.



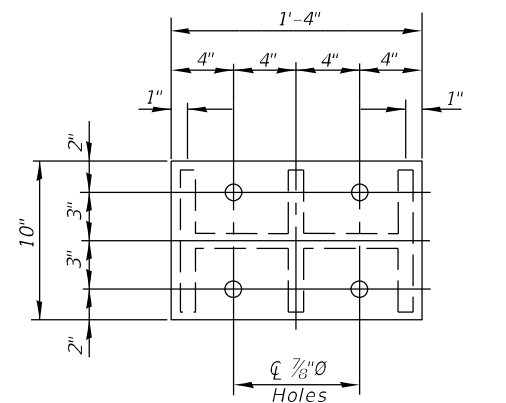
BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under bearing assembly.

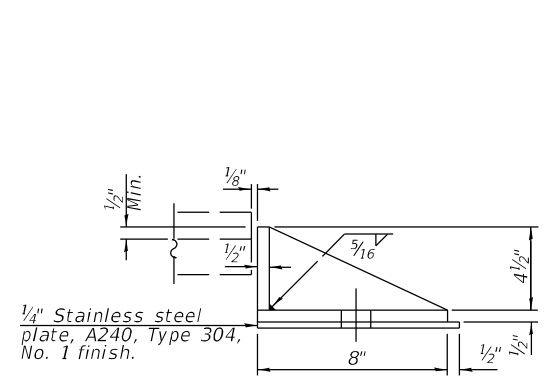


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

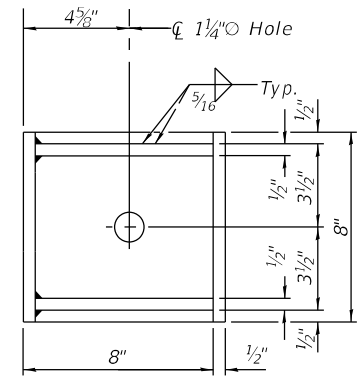


PLAN TOP AND BOTTOM PLATE



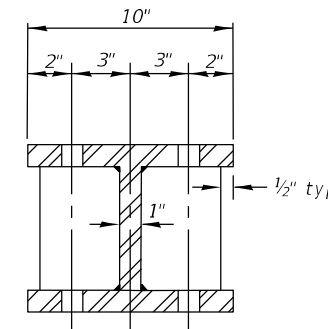
SIDE RETAINER

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

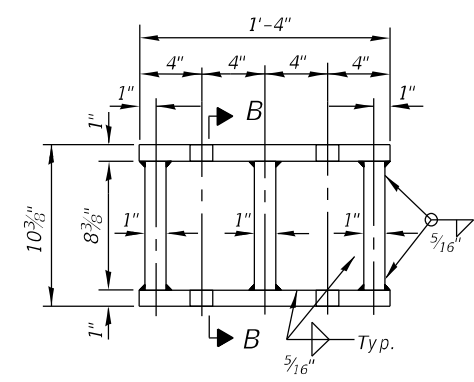


BEAM REACTIONS

R $\bar{\phi}$	(k)	31.1
R S $\bar{\phi}$	(k)	10.3
R \bar{t}	(k)	37.9
Imp.	(k)	8.9
R (Total)	(k)	88.2



SECTION B-B



STEEL EXTENSION DETAIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	2,500
Elastomeric Bearing Assembly, Type I	Each	12
Anchor Bolts 1" $\bar{\phi}$	Each	24
Jack and Remove Existing Bearings	Each	12

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HR
 Hurst-Rosche, Inc.
 1400 E. TREMONT ST.
 HILLSBORO, IL
 PH: 217.532.3959
 JOB NO. 192-3231

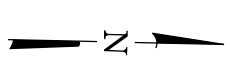
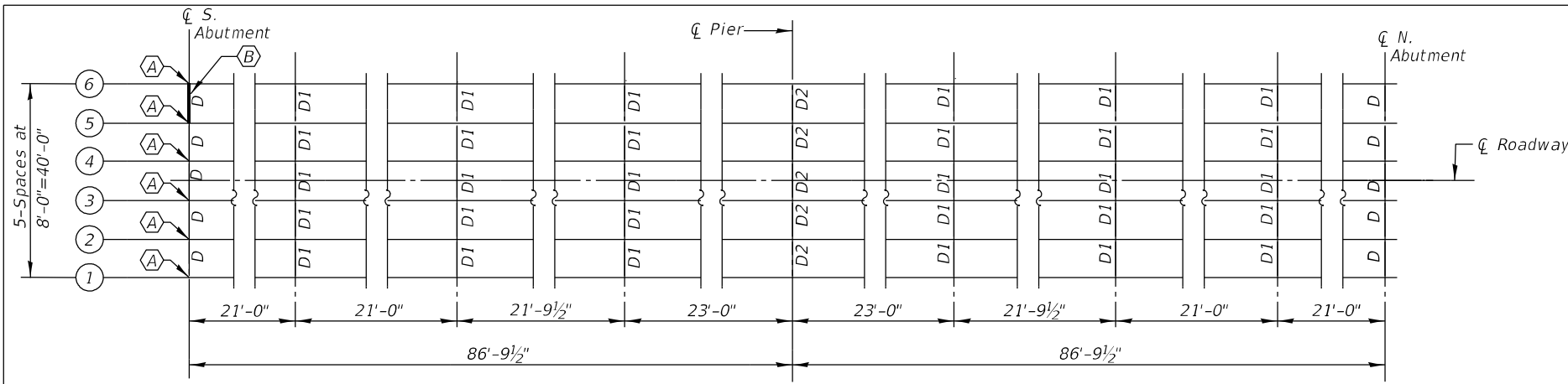
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

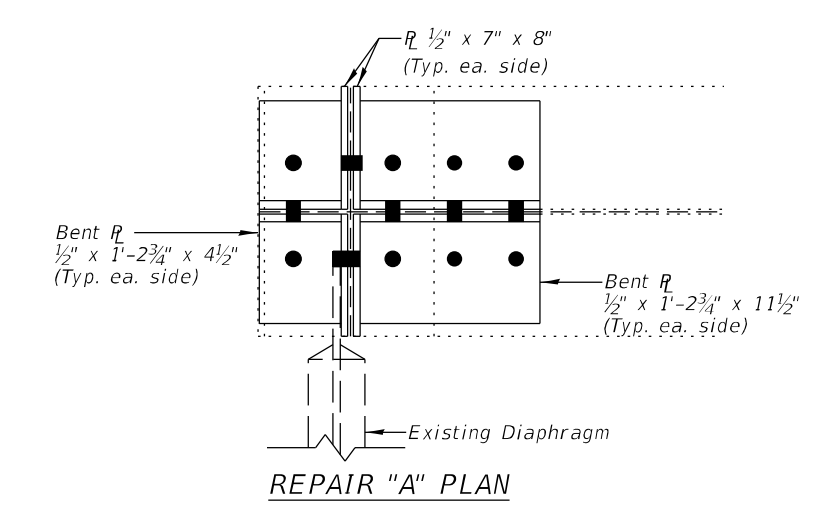
BEARING DETAILS
 STRUCTURE NO. 090-0105

SHEET 2 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90-7HB	TAZEWELL	15	12
CONTRACT NO. 68G68				
ILLINOIS FED. AID PROJECT				



EXISTING FRAMING PLAN
 (A) Beam End Repair (6 Locations)
 (B) Diaphragm Replacement (1 Location)

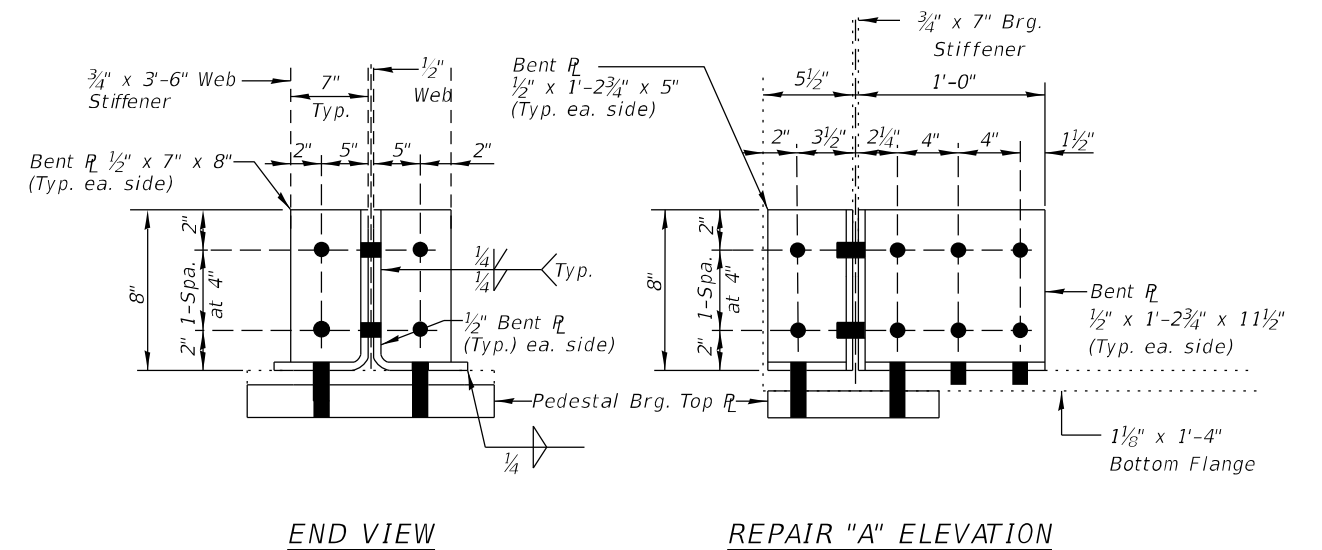


BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	360
Structural Steel Repair	Pound	550

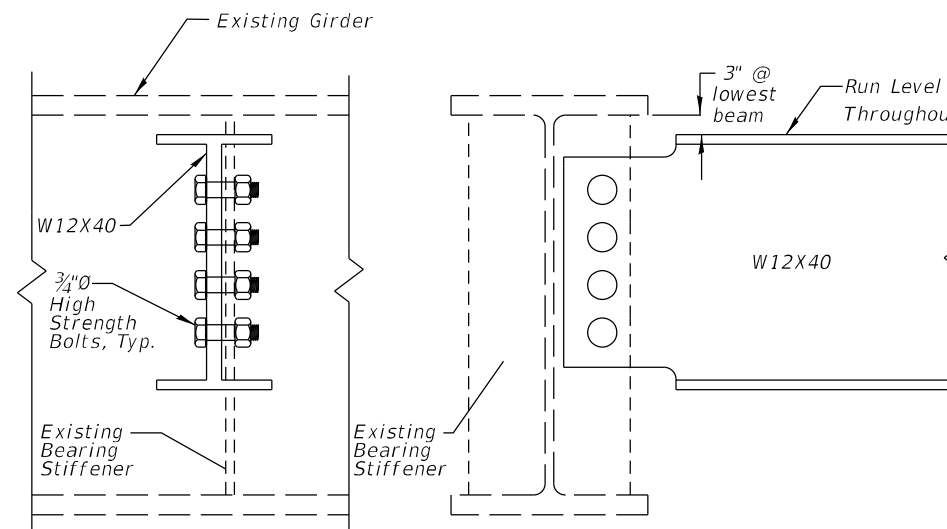
BOLT HOLE LEGEND

- Field drill using hole in existing steel as template.
- Field drill using holes in new steel as template.

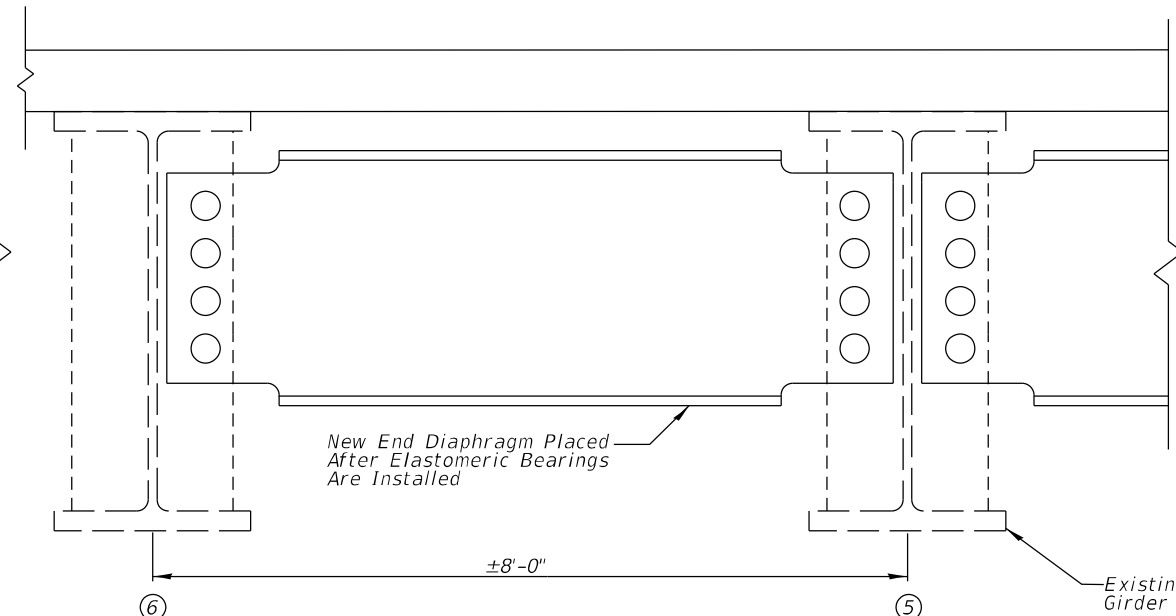


NOTES

New steel diaphragm and angles shall be paid for as Furnishing and Erecting Structural Steel.
 Beam Repair plates shall be paid for as Structural Steel Repair.
 New steel diaphragm, angles, and new plates for beam repair shall be hot dipped galvanized.
 Field drill holes in vertical legs of new clip angles and corresponding holes in the repair plates using existing holes as template.
 Field drill in existing steel using holes in new steel as template at all other locations.
 Fasteners shall be high strength bolts. Bolts 3/4"Ø, open holes 13/16"Ø, unless otherwise noted.



NEW END DIAPHRAGM
(1 required)



DIAPHRAGM REPLACEMENT DETAIL
(Looking north)

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HR
 Hurst-Rosche, Inc.
 1400 E. TREMONT ST.
 HILLSBORO, IL
 PH: 217.532.3959
 JOB NO. 192-3231

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND GIRDER REPAIR DETAILS
STRUCTURE NO. 090-0105

SHEET 3 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90-7HB	TAZEWELL	15	13
CONTRACT NO. 68G68				
ILLINOIS FED. AID PROJECT				

Benchmark:
T.M.B. #102 chisled "X" on South headwall at Station 423±
of eastbound lane FAP Rte. 24 Elevation 724.029.

Existing Structure No. 090-0119:

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	80
Structural Steel Repair	Pound	550

INDEX OF SHEETS

1. General Plan and Elevation
2. Framing Plan and Girder Repair Details

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

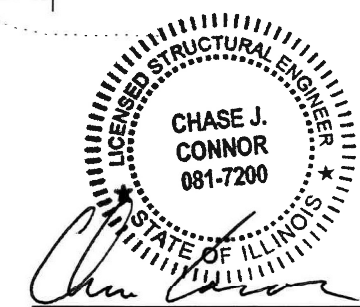
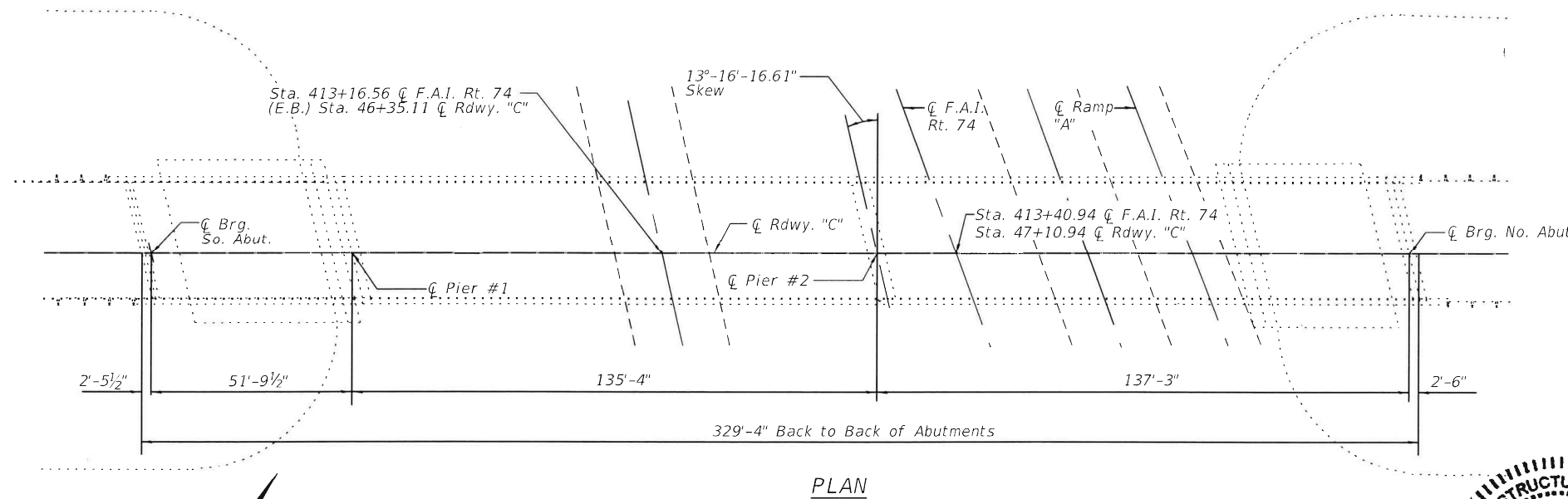
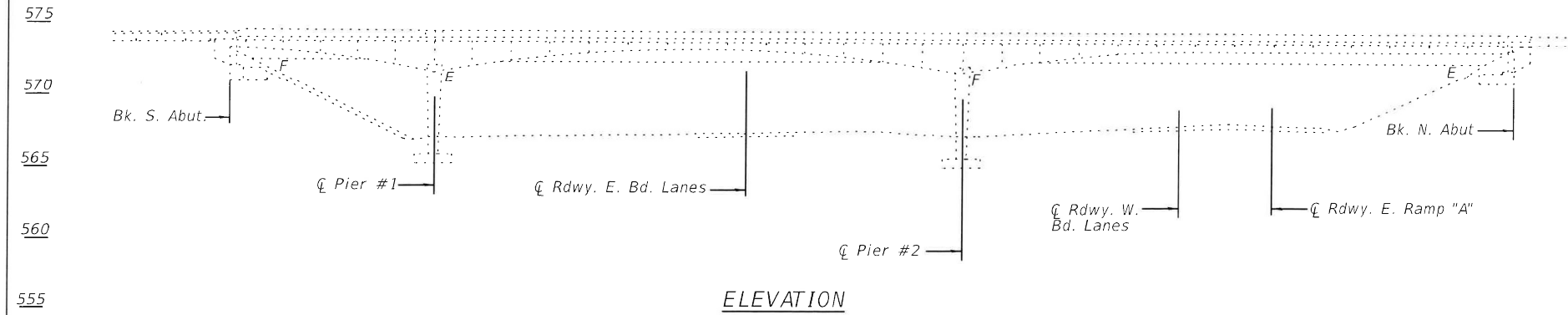
All structural steel shall conform to AASHTO Classification M-270 Gr. 36 unless otherwise noted.

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 Structural Steel Repair.

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 Provisions "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

The existing structural steel coating contains lead. The contractor shall take appropriate precautions to deal with presence of lead on this project.

New structural steel, connection bolts, nuts and washers shall be hot dip galvanized according to Special Provision "Hot Dip Galvanizing for Structural Steel".



Date: 12/22/21

CHASE J. CONNOR, P.E., S.E.
ILLINOIS STRUCTURAL NO. 7200
EXPIRES: NOVEMBER 30, 2022

BRIDGE REPAIRS
F.A.I. RTE. 474
OVER F.A.I. RTE. 74
TAZEWELL COUNTY
STATION 413+40.94
STRUCTURE NO. 090-0119

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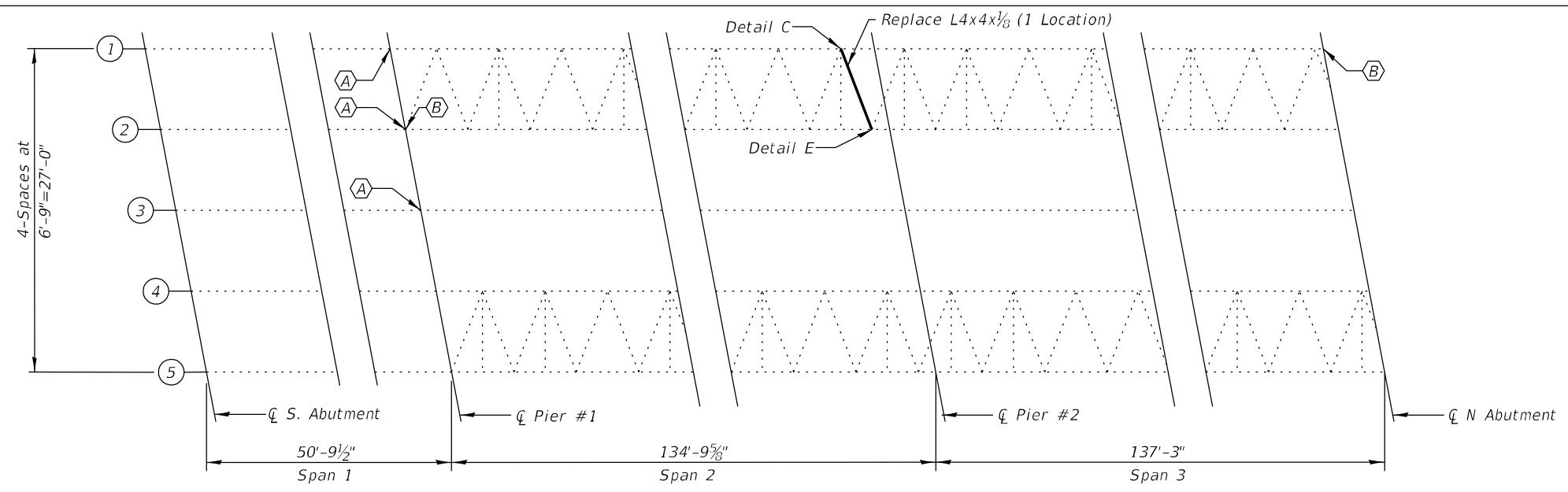
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PROFESSIONAL DESIGN NUMBER: 14-000291
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 217.532.3959
JOB NO. 192-3231

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 090-0119
SHEET 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90-7HB-5	TAZEWELL	15	14
CONTRACT NO. 68G68			ILLINOIS FED. AID PROJECT	



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	80
Structural Steel Repair	Pound	550

NOTES

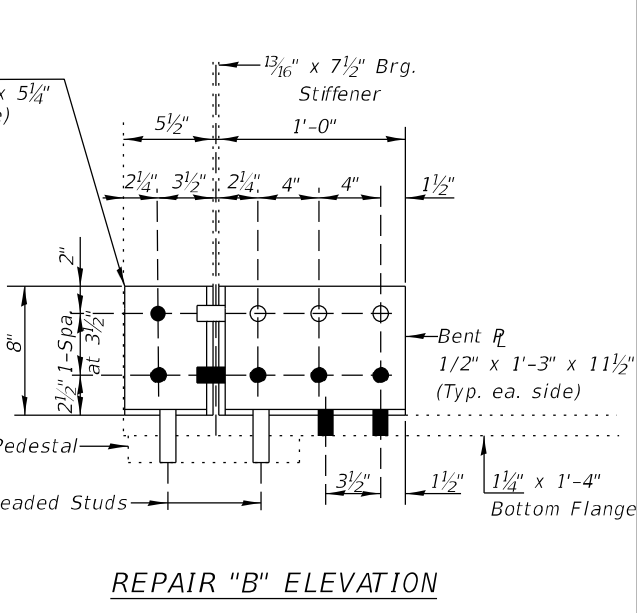
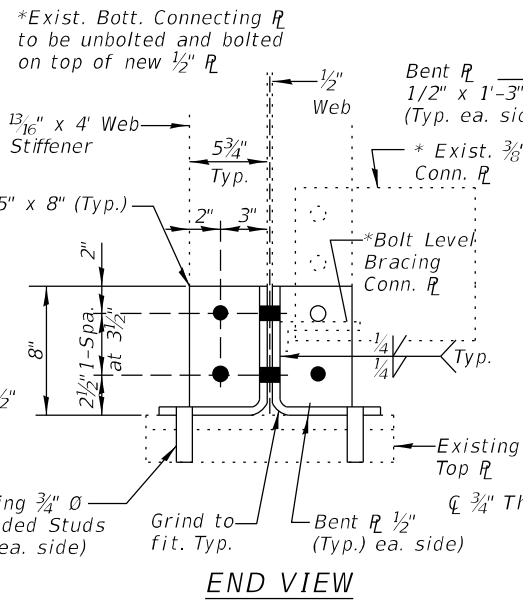
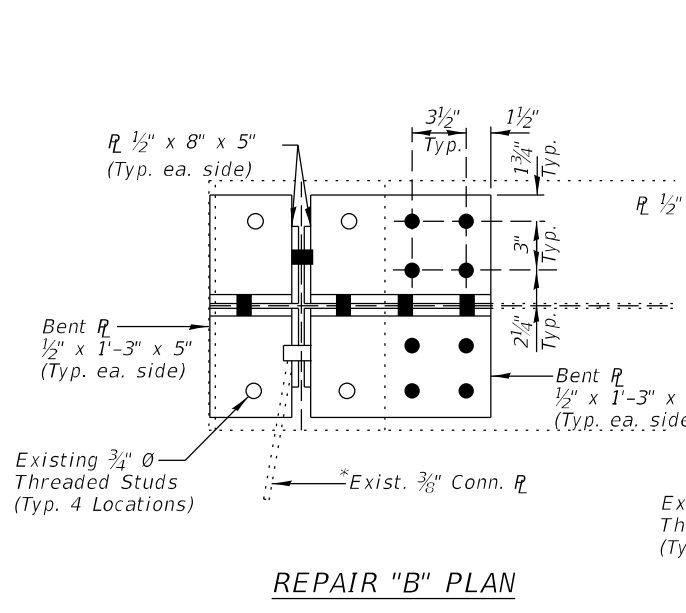
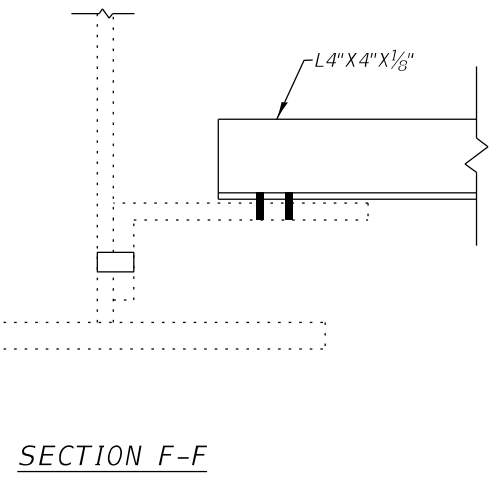
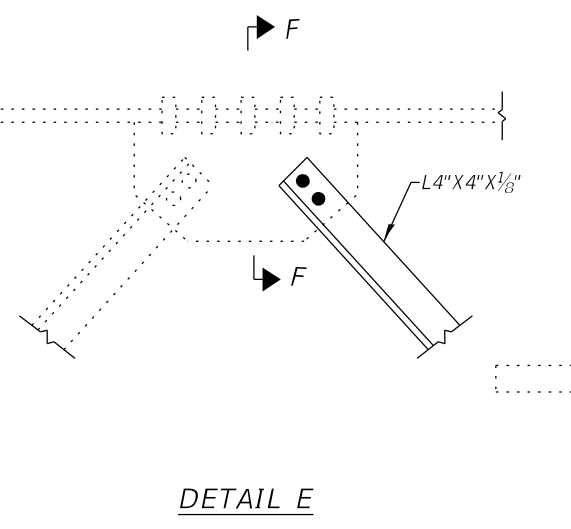
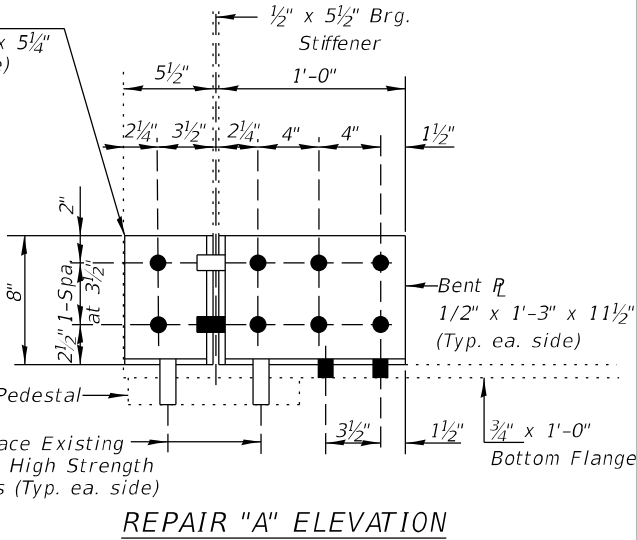
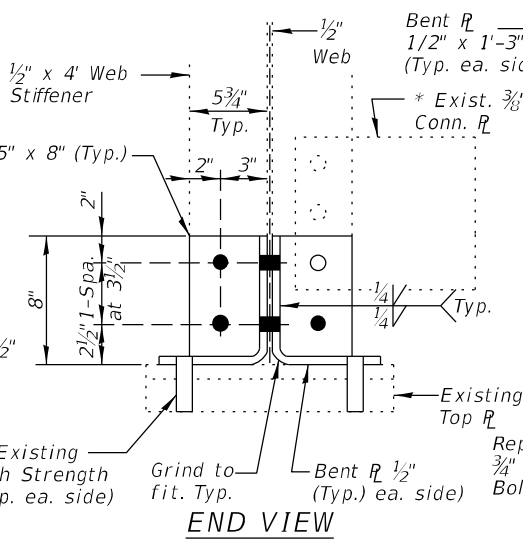
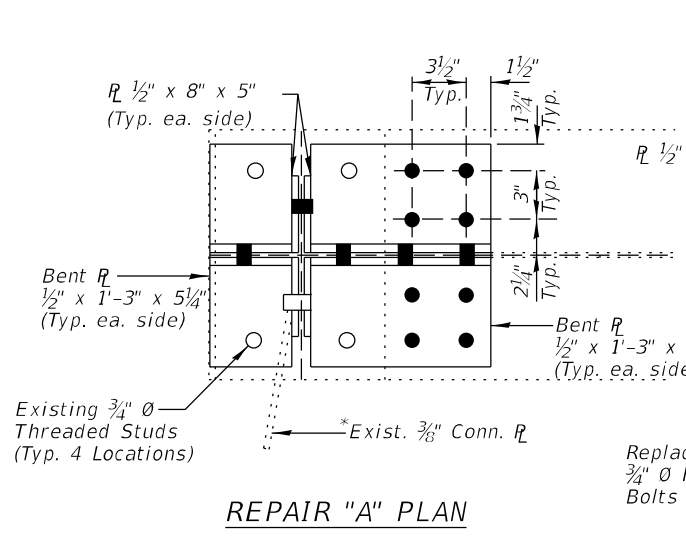
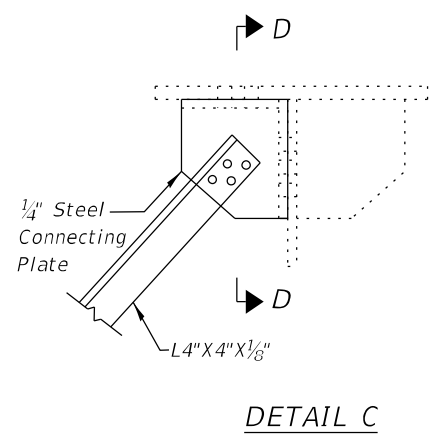
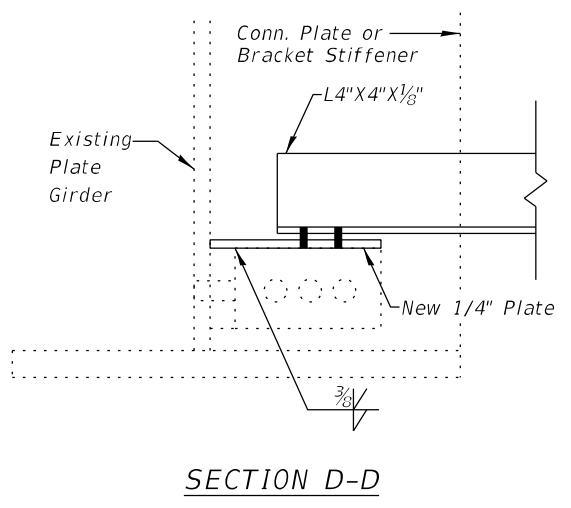
Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ " \varnothing , open holes $\frac{13}{16}$ " \varnothing , unless otherwise noted.

BOLT HOLE LEGEND

○ Field drill using hole in existing steel as template.
● Field drill using holes in new steel as template.

EXISTING FRAMING PLAN

- Ⓐ Beam End Repair (3 Locations)
- Ⓑ Beam End Repair (2 Locations)



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HR
Hurst-Rosche, Inc.
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 217.532.3959
JOB NO. 192-3231

USER NAME =	DESIGNED - CJC	REVISED -
PLOT SCALE =	CHECKED - X	REVISED -
PLOT DATE =	DRAWN - BP	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN AND GIRDER REPAIR DETAILS
STRUCTURE NO. 090-0119**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	90-7HB-5	TAZEWELL	15	16
CONTRACT NO. 68G68				
ILLINOIS FED. AID PROJECT				