

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	1

ILLINOIS CONTRACT NO. 78815

FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-5

PROPOSED HIGHWAY PLANS

F.A.I. ROUTE 64 (I-64)
SECTION D9 BRIDGE DECK REPAIR 2020-1
PROJECT NHPP-T948(440)
DECK REPAIRS
WHITE COUNTY

C-99-090-20

TRAFFIC DATA

2019 ADT = 12,700 (TWO WAY)
36 % TRUCKS

TOWNSHIP

BURNT PRAIRIE

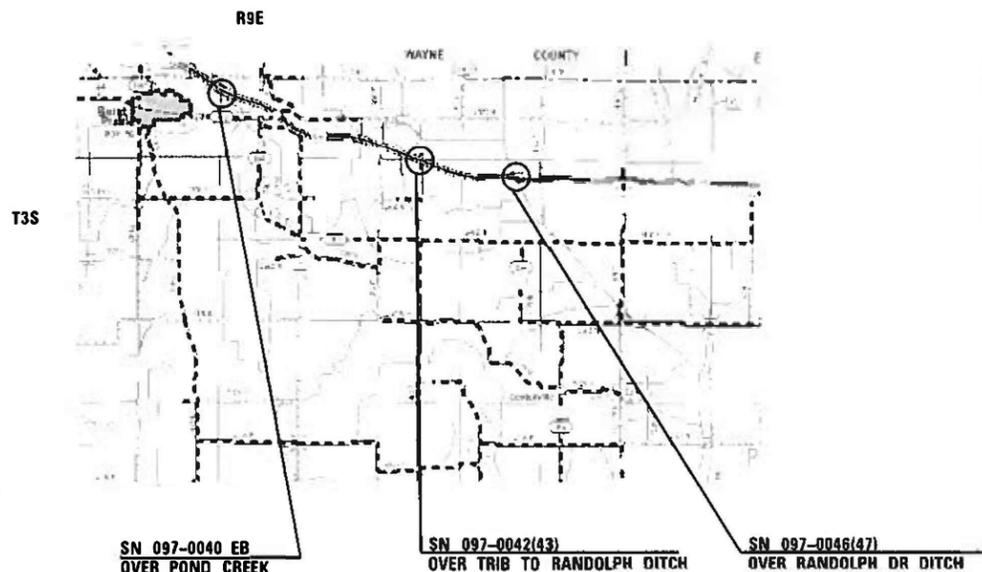
COORDINATE SYSTEM : ILLINOIS COORDINATE SYSTEM, EAST ZONE

POSTED SPEED : 70 MPH

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-392-0123
OR 811

PROJECT ENGINEER: MIKE STEPHENSON
PROJECT DESIGNER: AUSTIN HENK

CONTRACT NO. 78815



GROSS LENGTH = 430 FT. = 0.08 MILES
NET LENGTH = 430 FT. = 0.08 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 10-08-2020

[Signature]

REGION FIVE ENGINEER

December 4, 2020

[Signature]

ENGINEER OF DESIGN AND ENVIRONMENT

December 4, 2020

[Signature]

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

CONCRETE REMOVAL QUANTITIES ARE BASED ON A SURVEY DATED 9/1/2020. THE FINAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER AND MARKED ON THE AS-BUILT PLANS.

COMMITMENTS: NONE

INDEX OF SHEETS

1	COVER SHEET
2	SIGNATURES
3	GENERAL NOTES, INDEX OF SHEETS, AND STANDARDS
4-5	SUMMARY OF QUANTITIES
6	GENERAL PLAN & ELEVATION SN 097-0040
7-8	STAGING DETAILS SN 097-0040
9-11	JOINT RECONSTRUCTION SN 097-0040
12	DIAPHRAGM REPLACEMENT SN 097-0040
13	DRAIN DETAILS SN 097-0040
14	SUBSTRUCTURE REPAIRS SN 097-0040
15	WIDE LOAD SIGNING PLAN
16	GENERAL PLAN & ELEVATION SN 097-0042(43)
17-19	STAGING DETAILS SN 097-0042(43)
20-21	RAIL REMOVAL & REPLACEMENT DETAILS SN 097-0042(43)
22	POLYMER MORTAR DETAILS SN 097-0042(43)
23	GENERAL PLAN & ELEVATION SN 097-0046(47)
24-26	STAGING DETAILS SN 097-0046(47)
27-28	RAIL REMOVAL & REPLACEMENT DETAILS SN 097-0046(47)
29	POLYMER MORTAR DETAILS SN 097-0046(47)

STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701101-05	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-10	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-12	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

REV. - MS

MODEL: Default
 FILE NAME: p:\highwayroom.dwg
 ILLINOIS.GOV.PWD\DOT\Documents\DOT_Offices\District_9\Projects\78815\CADData\CAD\Sheets\097\78815_Sheets.dgn

USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, GENERAL NOTES, STANDARDS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	

SUMMARY OF QUANTITIES

0047

COUNTY:	WHITE	WHITE	WHITE
ROUTE:	FAI 64	FAI 64	FAI 64
FUNDING:	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE
LOCATION:	RURAL	RURAL	RURAL

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	STRUCTURE	STRUCTURE	STRUCTURE
				097-0040	097-0042(43)	097-0046(47)
50102400	CONCRETE REMOVAL	CU YD	29.2	11.8	4.6	12.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	11.8	11.8	0	0
50300300	PROTECTIVE COAT	SQ YD	1,874	596	298	980
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,740	1,740	0	0
50800515	BAR SPLICERS	EACH	24	24	0	0
50900200	STEEL RAILING, TYPE 2399	FOOT	572	0	132	440
52000110	PREFORMED JOINT STRIP SEAL	FOOT	90	90	0	0
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	8	0	4	4
63200310	GUARDRAIL REMOVAL	FOOT	288	0	144	144
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	1	1	1
67100100	MOBILIZATION	L SUM	1	0.33	0.33	0.34
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	5	1	2	2

* SPECIALTY ITEM

MODEL: Default
FILE: Model: P:\pub\baronm.d\at\links\gov\PI\DOT\Documents\DOT_Offices\Dir\dtc_9\Projects\78815\CAAD\BADA\CAD\Sheet\09778815-Sheets.dgn

USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	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.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	

SUMMARY OF QUANTITIES - CONT

0047

COUNTY:	WHITE	WHITE	WHITE
ROUTE:	FAI 64	FAI 64	FAI 64
FUNDING:	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE
LOCATION:	RURAL	RURAL	RURAL

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	STRUCTURE	STRUCTURE	STRUCTURE
				097-0040	097-0042(43)	097-0046(47)
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	84	28	28	28
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,500	375	475	650
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,350	350	400	600
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	5	1	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	5	1	2	2
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	448	54	106	288
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	350	350	0	0
Z0001905	STRUCTURAL STEEL REPAIR	POUND	350	350	0	0
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	14	14	0	0
Z0015595	DECK DRAIN EXTENSIONS	EACH	10	10	0	0
Z0012169	BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 3 1/8 INCHES	SQ YD	1,874	596	298	980
Z0012151	BRIDGE DECK SCARIFICATION 3 1/8"	SQ YD	1,874	596	298	980

REV. - MS

MODEL: Default
 FILE: M:\GIS\Projects\GIS\Projects\DOT\Office\DOT\Documents\DOT\Office\DOT\78815\CADD\Sheet\09778815-Sheets.dgn

GENERAL NOTES

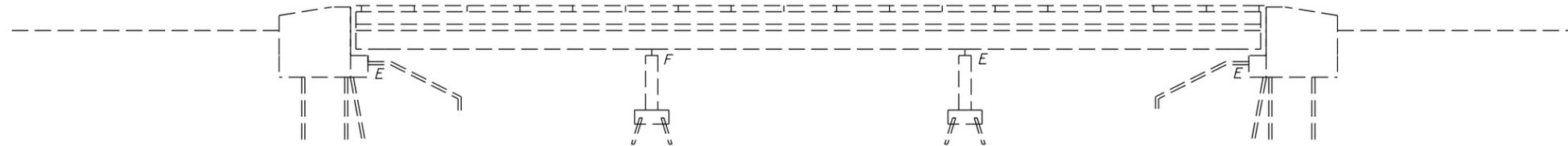
Reinforcement bars designated (E) shall be epoxy coated.

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 materials. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

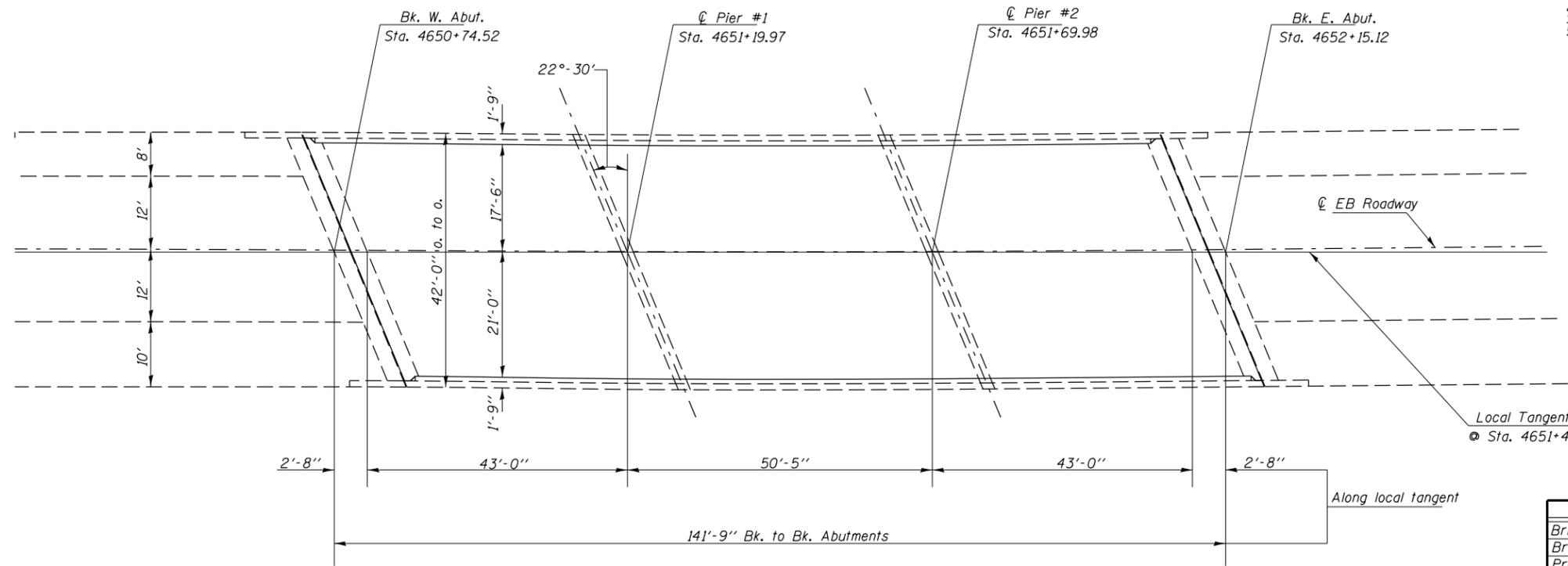
Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during the concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included in Concrete Removal.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.



ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Scarification 3/8"	Sq. Yd.	596
Bridge Deck Microsilica Concrete Overlay 3/8"	Sq. Yd.	596
Protective Coat	Sq. Yd.	596
Reinforcement Bars, Epoxy Coated	Pound	1740
Preformed Joint Strip Seal	Foot	90
Bar Splicers	Each	24
Structural Steel Removal	Pound	350
Structural Steel Repair	Pound	350
Deck Drain Extensions	Each	10
Structural Repair of Concrete < 5"	Sq. Ft.	14
Polymer Modified Portland Cement Mortar	Sq. Ft.	54
Concrete Removal	Cu. Yd.	11.8
Concrete Superstructure	Cu. Yd.	11.8

SCOPE OF WORK

- Set up TC&P Standard 701402
- Install Temporary Concrete Barrier
- Bridge Deck Scarification 3/8"
- Concrete Removal
- Preformed Joint Strip Seal
- Concrete Superstructure
- Bridge Deck Microsilica Concrete Overlay 3/8"
- Apply Protective Coat
- Deck Drain Extensions
- Polymer Modified Portland Cement Mortar
- Structural Repair of Concrete < 5"
- Structural Steel Removal
- Structural Steel Repair



Expires 11-30-2022
David Carl Puzey
 12/3/2020

EXISTING DESIGN STRESSES

$f_c = 1,400$ psi Super & Sub
 $f_s = 20,000$ psi Reinf.

NEW DESIGN STRESSES

$f_c = 3,500$ psi (Substructure)
 $f_c = 4,000$ psi (Superstructure)
 $f_s = 60,000$ psi (Reinforcement)

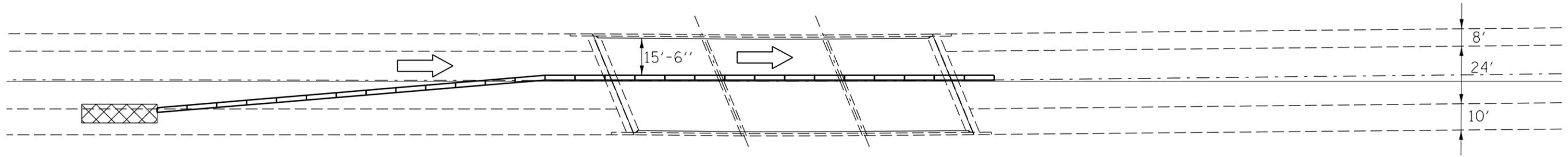
**DECK REPAIR
 I-64 (FAI 64) EB
 OVER POND CREEK
 WHITE COUNTY
 D9 BRIDGE DECK REPAIR 2020-1
 SN 097-0040**

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

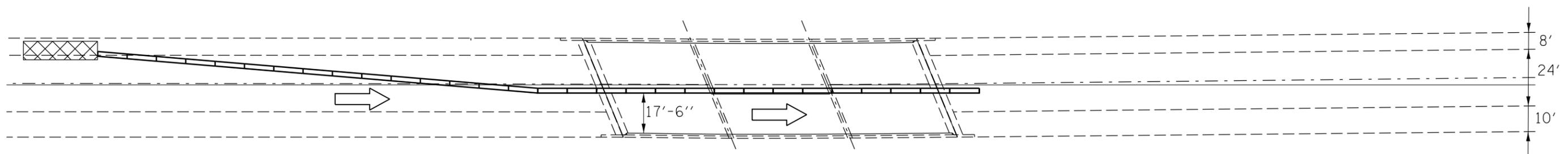
**SN 097-0040
 GENERAL PLAN & ELEVATION**

SCALE: SHEET 1 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	6
CONTRACT NO. 78815			ILLINOIS FED. AID PROJECT	



STAGE I TRAFFIC



STAGE II TRAFFIC



LEGEND

 Impact Attenuator

MODEL: Default
 FILE: \\nas101.psu.edu\pub\baronm\dat\illinois\gov\PIU\DOT\Documents\DOT_Offices\District_9\Projects\78815\CAAD\Drawings\9778815-Sheets.dgn

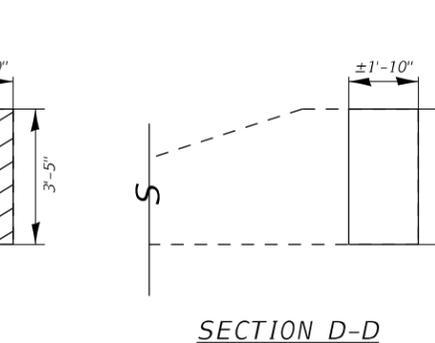
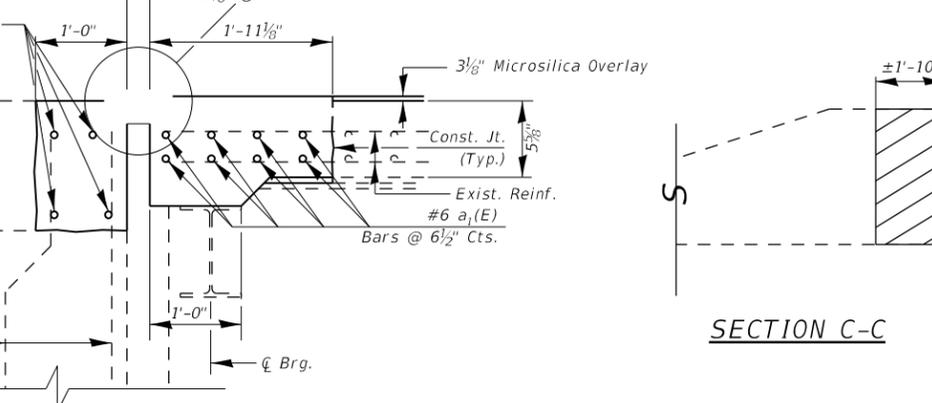
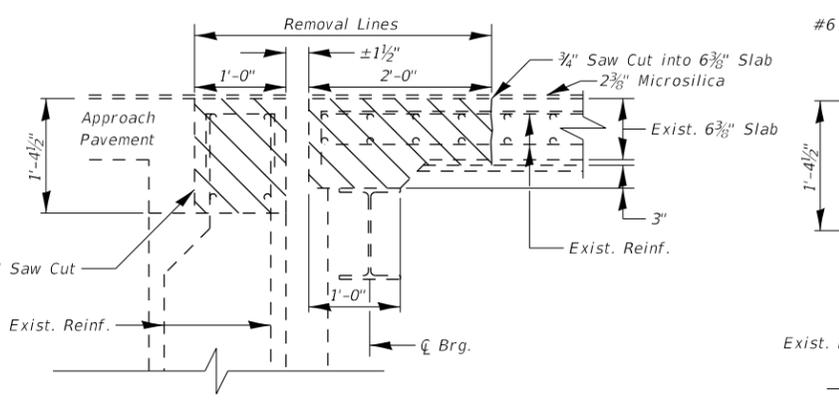
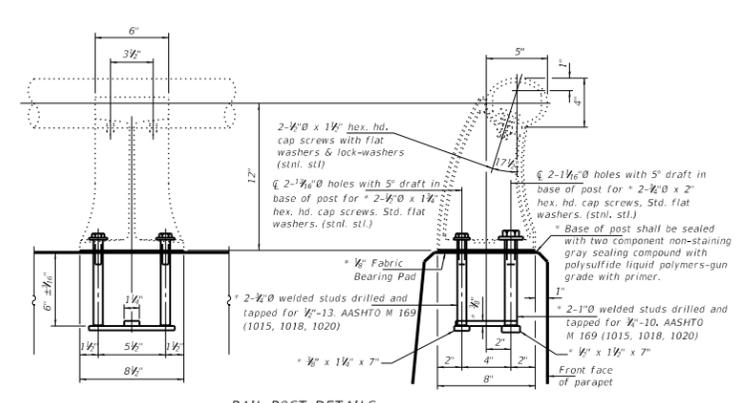
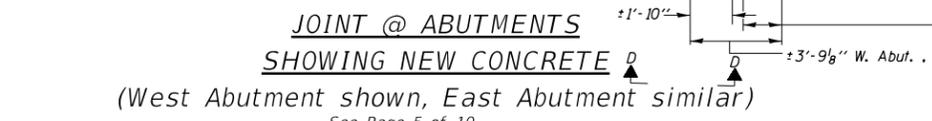
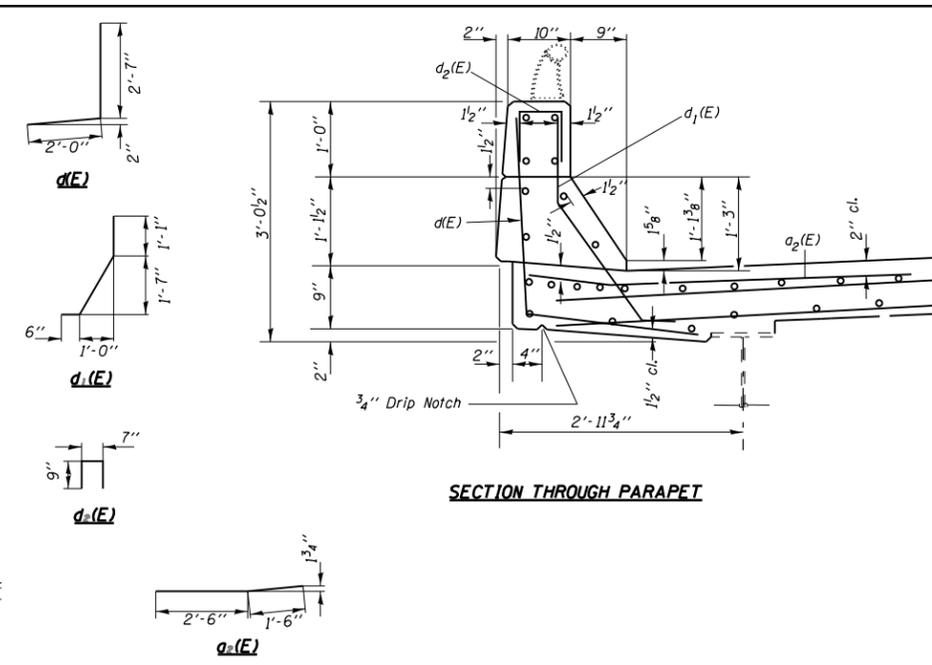
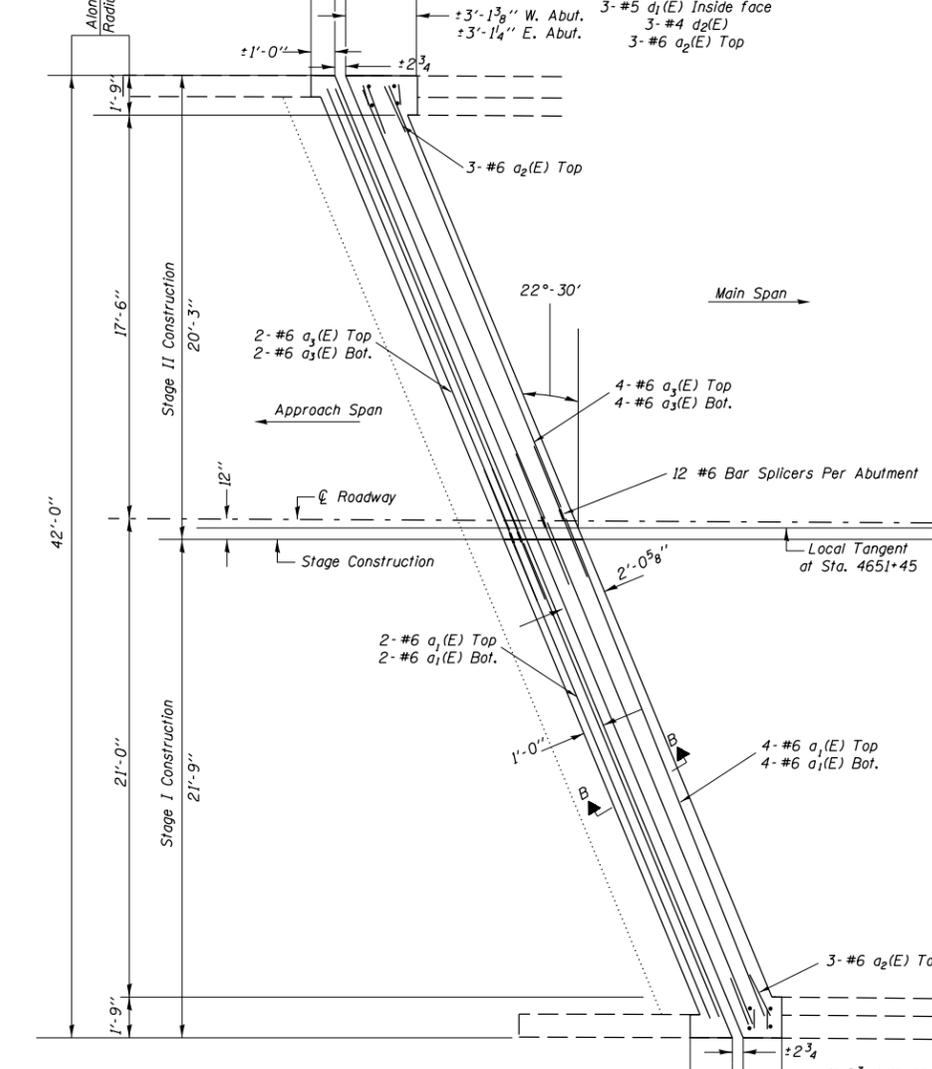
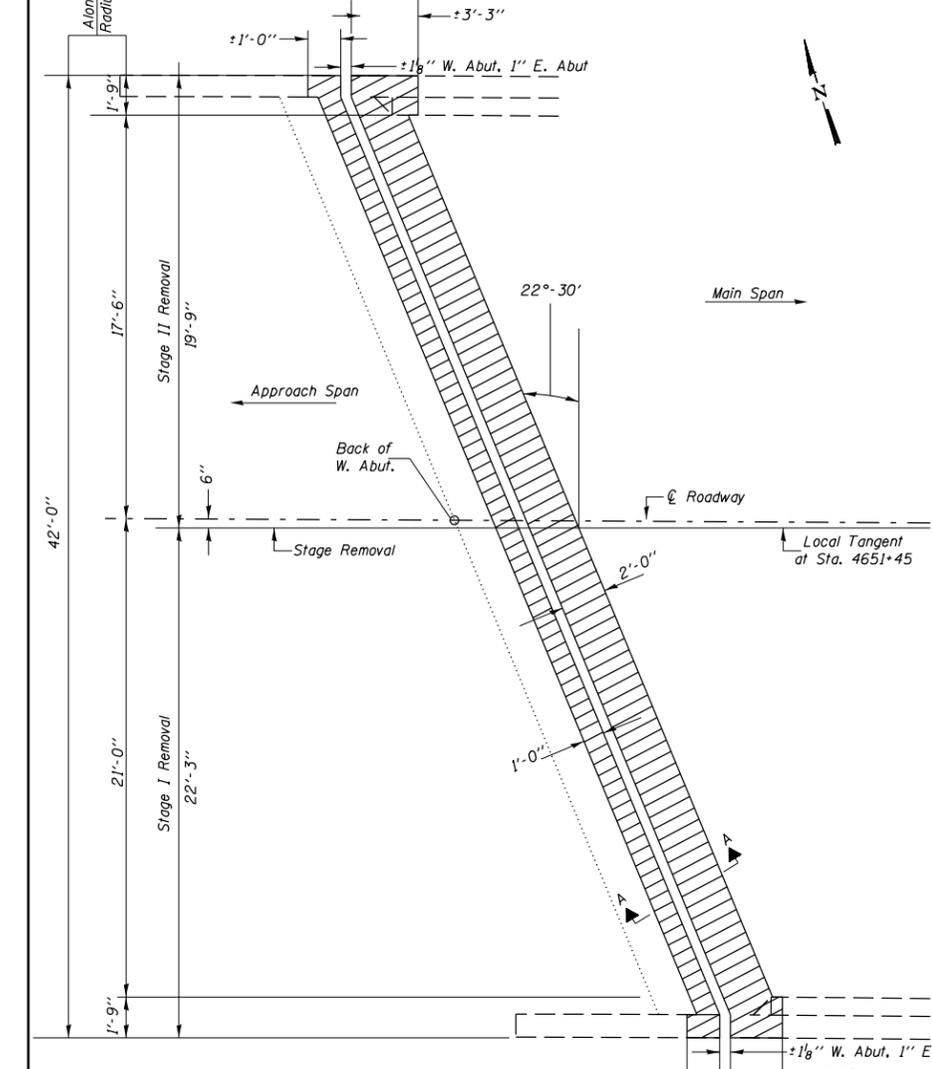
USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 44.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SN 097-0040
STAGE CONSTRUCTION DETAILS**

SCALE: SHEET 3 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	



Note: Dimensions are based on a rolled rail strip joint. If the Contractor elects to use welded rail strip seal joint deck dimensions may require adjustments to satisfy the details on sheet 5 of 10.

BILL OF MATERIAL (BOTH ABUTS)

Bar	No.	Size	Length	Shape
a ₁ (E)	24	#6	22'-6"	—
a ₂ (E)	12	#6	4'-0"	—
a ₃ (E)	24	#6	20'-10"	—
d(E)	12	#4	4'-7"	J
d ₁ (E)	12	#5	3'-5"	J
d ₂ (E)	12	#4	2'-1"	□
Bar Splicer	Each		24	
Concrete Superstructure	Cu. Yd.		11.8	
Concrete Removal	Cu. Yd.		11.8	
Reinforcement Bars, Epoxy Coated	Pound		1740	

MODEL: Default
FILE: Abutment_ParapetReinforcement.DWG
PROJECT: 88815-CADD-Data-CAD-Details-D9778815-Sheets.dgn
OFFICE: 88815-CADD-Data-CAD-Details-D9778815-Sheets.dgn

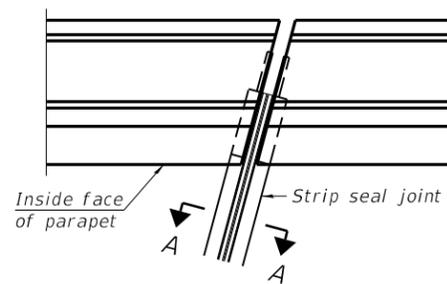
USER NAME = henkas	DESIGNED - ASH	REVISED -
PLOT SCALE = 8,000.0' / in.	DRAWN - ASH	REVISED -
PLOT DATE = 11/17/2020	CHECKED - MAS	REVISED -
	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**JOINT RECONSTRUCTION DETAILS
SN 097-0040**

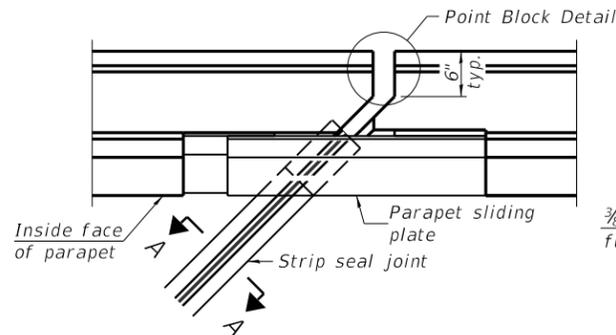
SCALE: SHEET 4 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	9
CONTRACT NO. 78815			ILLINOIS FED. AID PROJECT	

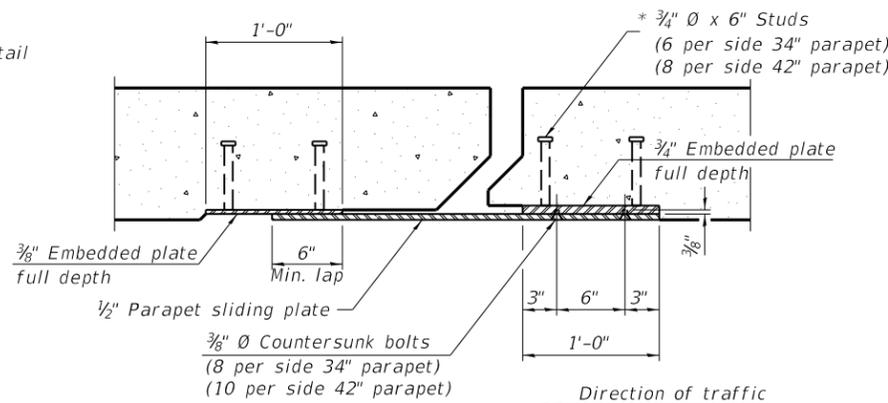


FOR SKEWS $\leq 30^\circ$

PLAN AT PARAPET



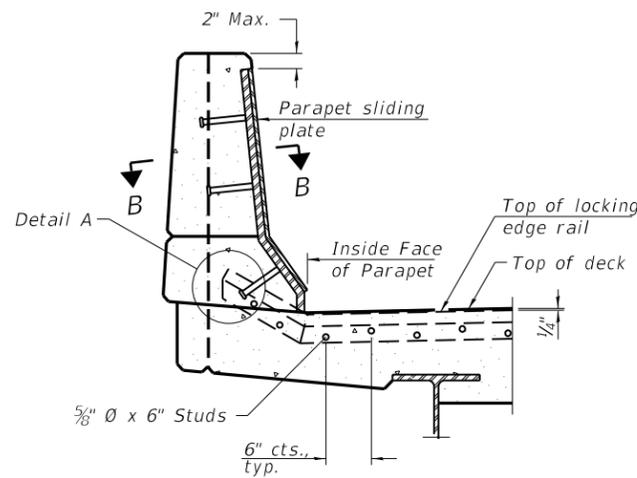
FOR SKEWS $> 30^\circ$



SECTION B-B

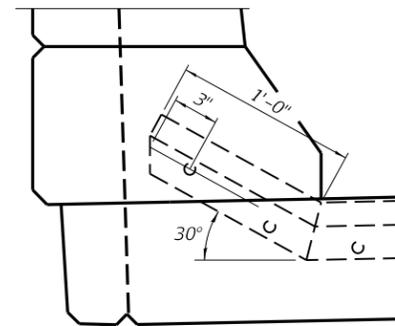
Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4 inch. The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed.
 The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 The Maximum space between locking edge rail segments shall be 3/16 inch and sealed with a suitable sealant; however, any rail joint within 10 feet measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.
 Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.
 34 inch F-shape barrier shown, 42 inch F-shape similar as noted.
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. Such adjustments shall be at no additional cost to the State.

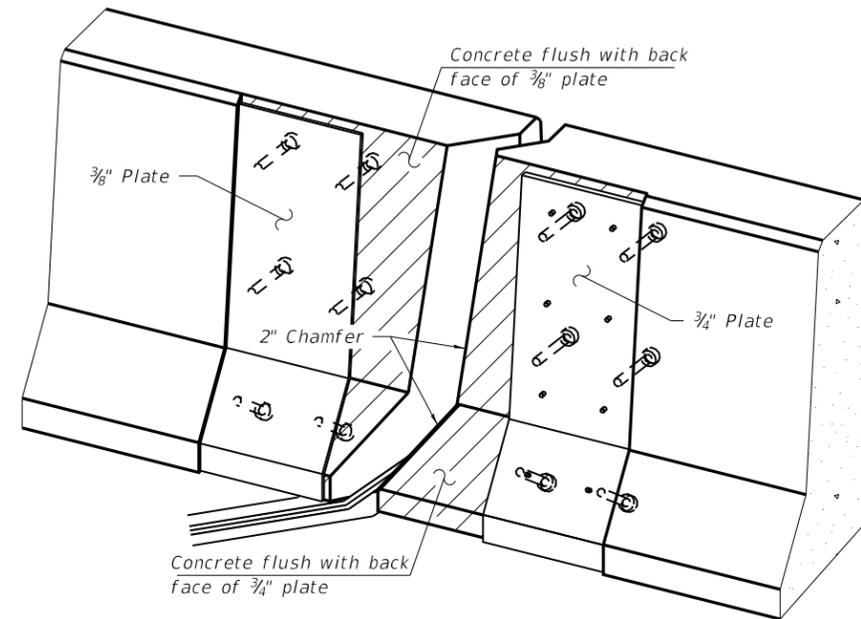


ELEVATION AT PARAPET

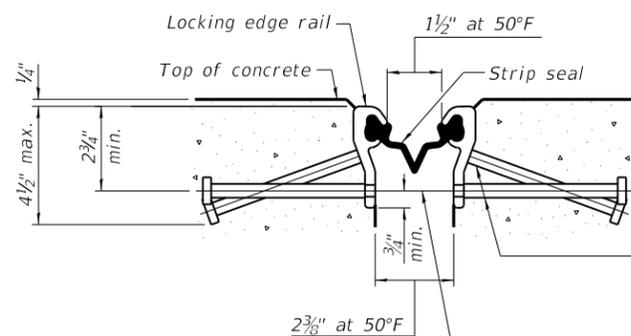
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A
(Abutments)



TRIMETRIC VIEW
(Showing embedded plates only)



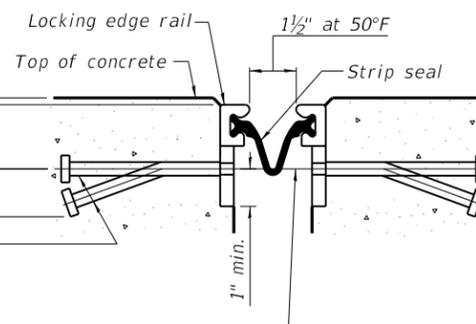
SHOWING ROLLED RAIL JOINT

* 5/8 inch diameter x 6 inch studs @ 6 inch cts. (alternate angled/bent studs with horizontal studs)

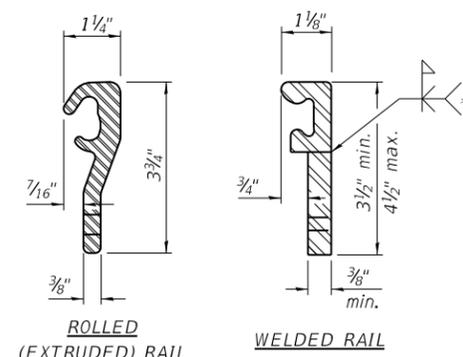
3/8 inch diameter threaded rods in 7/16 inch diameter holes at ± 4 -0 inch cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

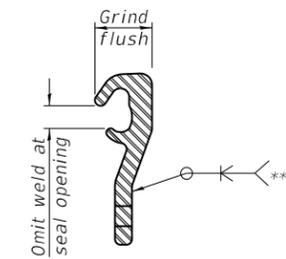


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	90

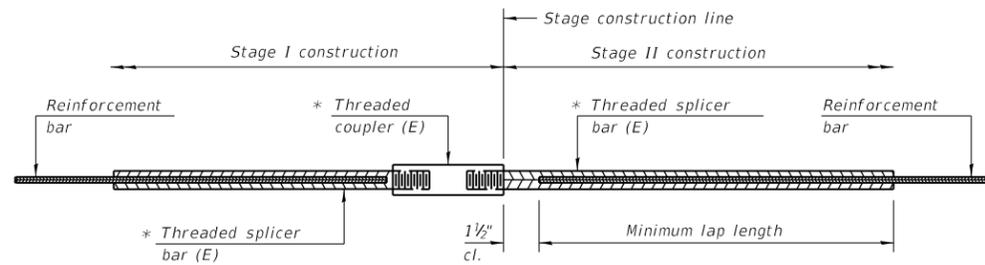
MODEL: Default
 FILE: \\hpc\pub\hpcroom\dat\illinois\poc\p\WIDDOT\Documents\DOT - Offices\District 9\Projects\78815\CADD\Drawings\09778815-Sheets.dgn

USER NAME = HENKAS	DESIGNED - ASH	REVISED -
PLOT SCALE = 55.0000 ' / in.	DRAWN - ASH	REVISED -
PLOT DATE = 10/2/2020	CHECKED - MAS	REVISED -
	DATE - 9/8/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL DETAILS			
SN 097-0040			
SCALE:	SHEET 5	OF 10 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	09 BRIDGE DECK REPAIR 2020-1	WHITE	29	10
CONTRACT NO. 78815				
ILLINOIS FED. AID PROJECT				

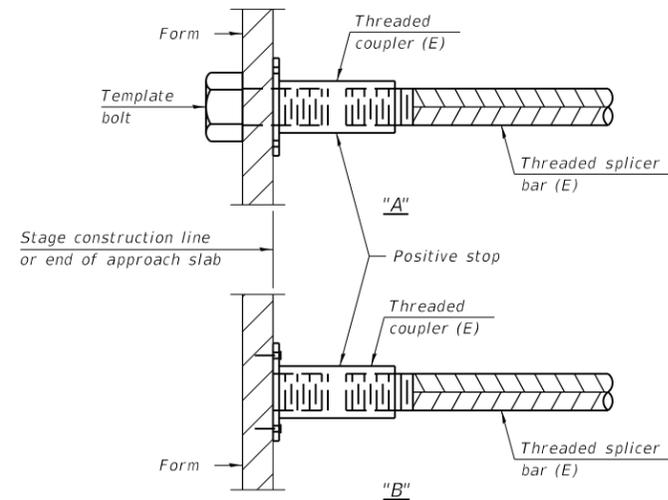


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

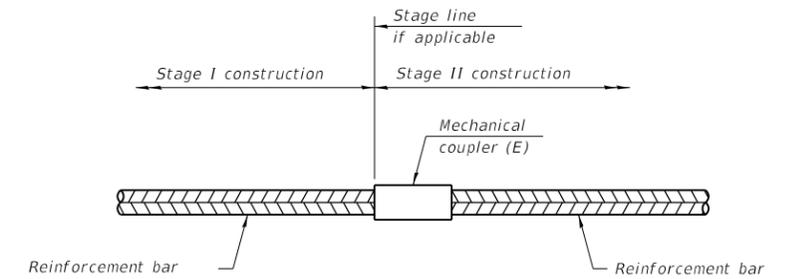
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#6	24	3'-0"



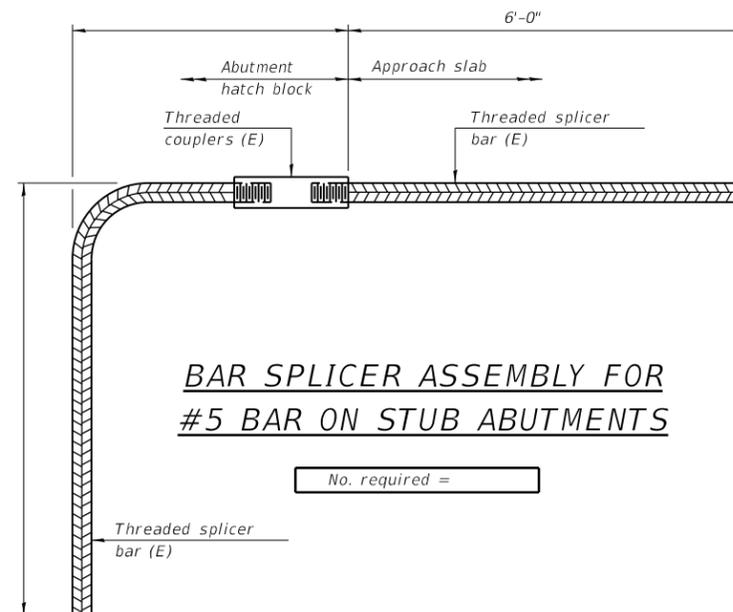
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY DETAILS
I 64 OVER POND CREEK
F.A.I. 64 - D9 BRIDGE DECK REPAIR 2020-1
WHITE COUNTY
STRUCTURE NO. 097-0040

BSD-1 2-17-2017

MODEL: Default
 FILE: \\hpc101\pub\hpc\room\dat\illinois\p\w\DOT\Documents\DOT_Offices\Illinet\9\Projects\78815\CAAD\Drawings\09778815-Sheets.dgn

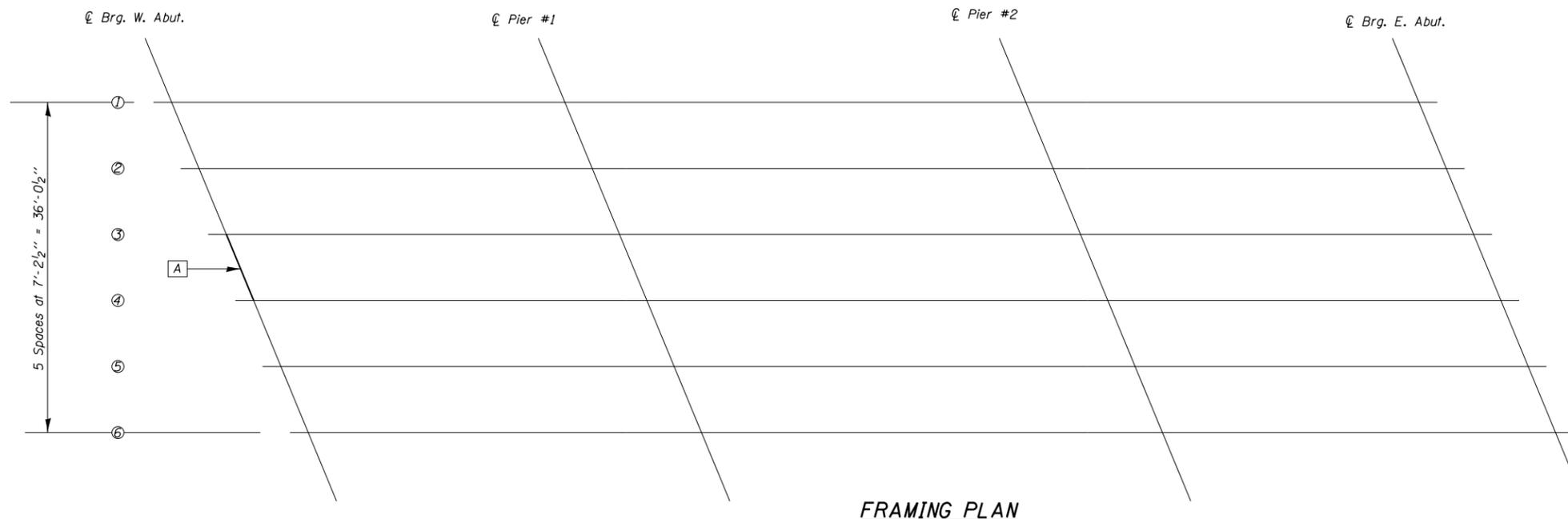
USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

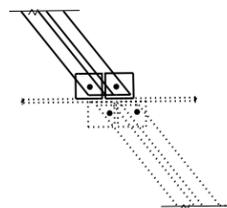
BAR SPLICER ASSEMBLY DETAILS
SN 097-0040

SCALE: SHEET 6 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	11
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	



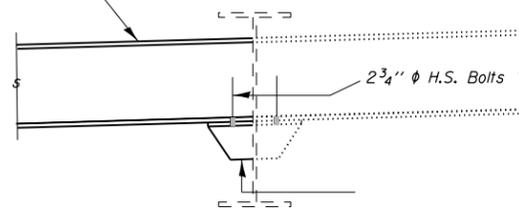
FRAMING PLAN



PLAN OF DIAPHRAGM R&R

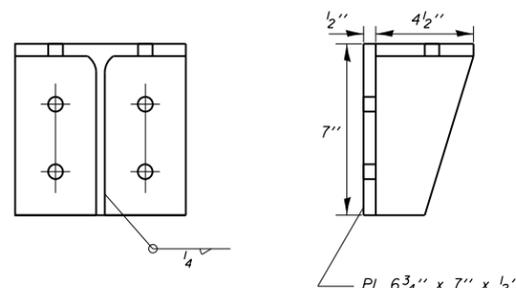
A - Remove and replace diaphragm and stool bracket.

New W12x40x7'-2 1/2"
Diaphragm Typ. between
beams (1 Required)



DIAPHRAGM

Stool shall be cut from W14x38



Holes shall be 1 3/16" diameter for 3/4" diameter high strength bolts. Holes shall be field drilled.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Removal	Pound	350
Structural Steel Repair	Pound	350

DIAPHRAGM DETAIL
F.A.I. RT. 64 (I-64)
SEC. D9 BRIDGE DECK REPAIR 2020-1
WHITE COUNTY
STRUCTURE NO. 097-0040

MODEL: Default
 FILE: Abutment_Plan.dwg
 PROJECT: 78815-CA00DataCAD:sheets/D9/78815-Sheets.dwg

USER NAME = HENKAS	DESIGNED - ASH	REVISED -
PLOT SCALE = 16.0000 ' / in.	DRAWN - ASH	REVISED -
PLOT DATE = 12/2/2020	CHECKED - MAS	REVISED -
	DATE - 9/8/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 097-0040
DIAPHRAGM REMOVAL & REPLACEMENT DETAIL

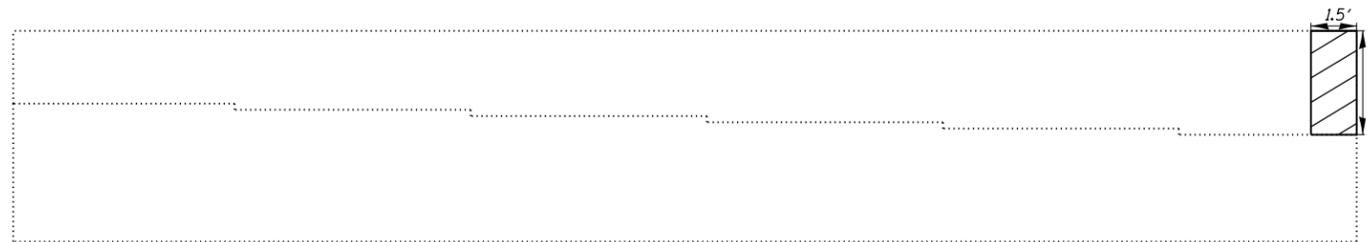
SCALE: SHEET 7 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	12
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	



EAST ABUTMENT

 Structural Repair of Concrete $\leq 5''$



WEST ABUTMENT

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth ≤ 5 Inches)	Sq. Ft.	14

MODEL: Default
FILE: hmk\c:\pub\hmkroom\data\illinois\pww\DOT\Documents\DOT_Offices\District_9\Projects\78815\CADD\data\CAD\Sheets\09778815-Sheets.dgn

USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 6.0000' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

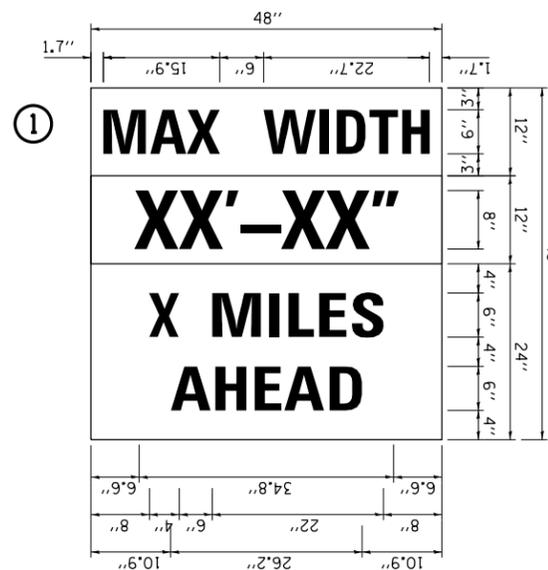
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT SUBSTRUCTURE REPAIRS
SN 097-0040**

SCALE: SHEET 9 OF 10 SHEETS STA. TO STA.

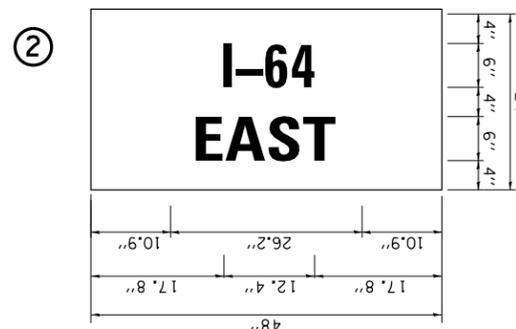
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	14
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	

SIGN LEGEND

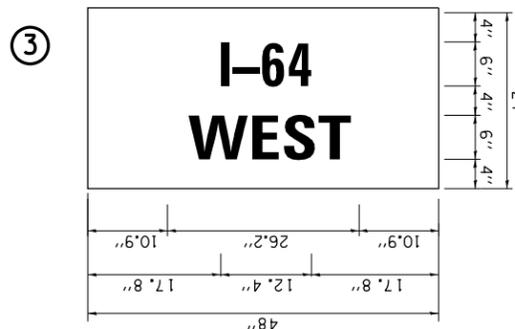


W12-I103

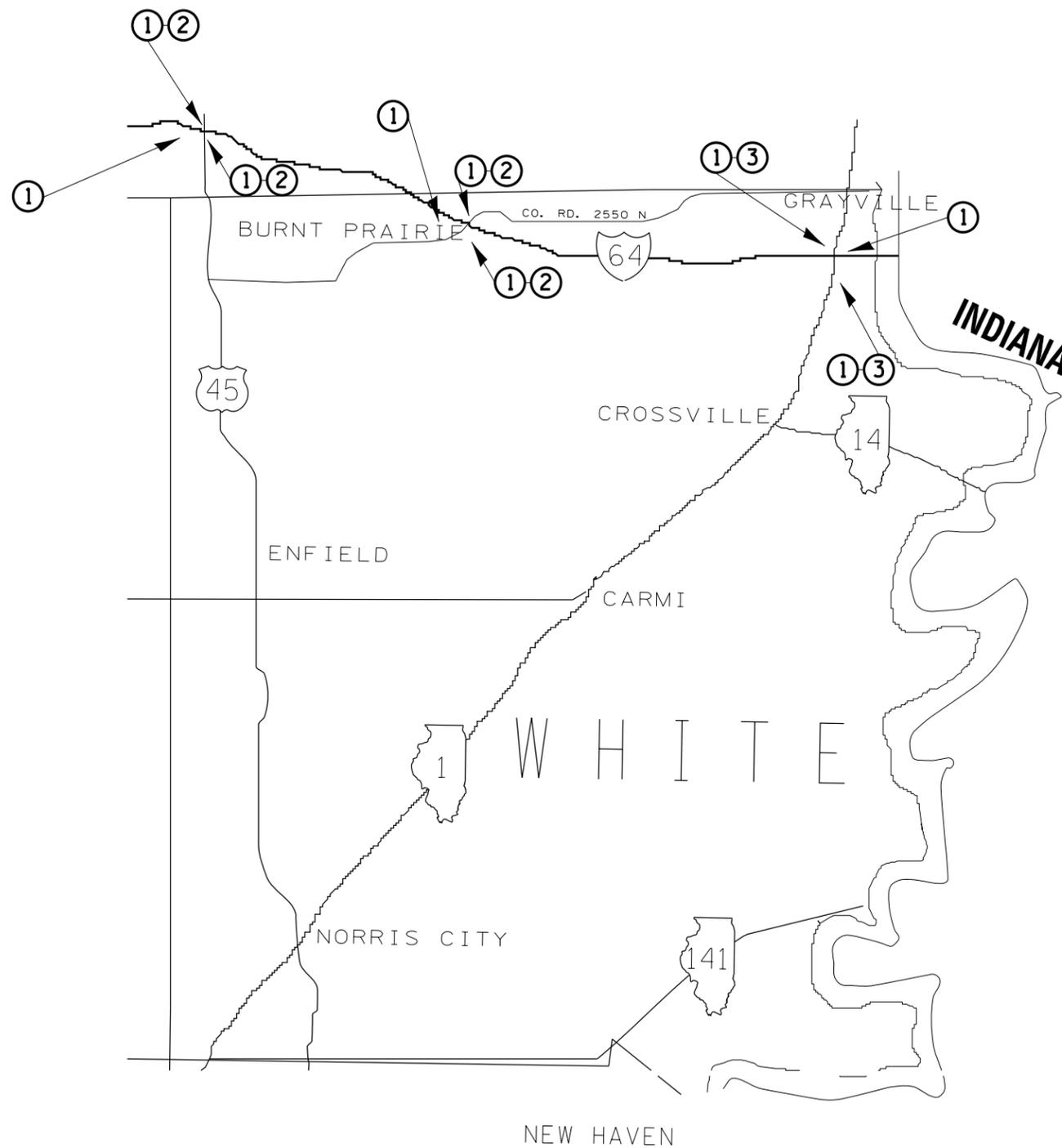
W12-I103 (WIDTH IS 8D);
 NO BORDER, BLACK ON WHITE;
 "MAX WIDTH" D;
 NO BORDER, BLACK ON ORANGE;
 "XX'-XX'' D;
 NO BORDER, BLACK ON WHITE;
 "X MILES" D; "AHEAD" D



NO BORDER, BLACK ON WHITE;
 "I-24" D;
 NO BORDER, BLACK ON WHITE;
 "EAST" D



NO BORDER, BLACK ON WHITE;
 "I-24" D;
 NO BORDER, BLACK ON WHITE;
 "WEST" D



WIDE LOAD SIGNING PLAN

DETOUR NOTES:

- THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATIONS AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE POST MOUNTED.

THE ABOVE NOTED WORK, INCLUDING SIGNS, POSTS, HARDWARE AND LABOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 AND NO OTHER COMPENSATION WILL BE ALLOWED.

FOR SN 097-0040 THE WIDTH SHOWN ON THE W12-I103 SIGN SHALL BE 14'-0" FOR STAGE I AS DIRECTED BY THE ENGINEER. FOR SN 097-0042(43) THE WIDTH SHOWN ON THE W12-I103 SIGN SHALL BE 15'-0" FOR STAGE II AS DIRECTED BY THE ENGINEER. FOR SN 097-0046(47) THE WIDTH SHOWN ON THE W12-I103 SIGN SHALL BE 14'-0" FOR STAGE II AS DIRECTED BY THE ENGINEER THE "X" MILES AHEAD WILL BE DETERMINED BY THE ENGINEER.

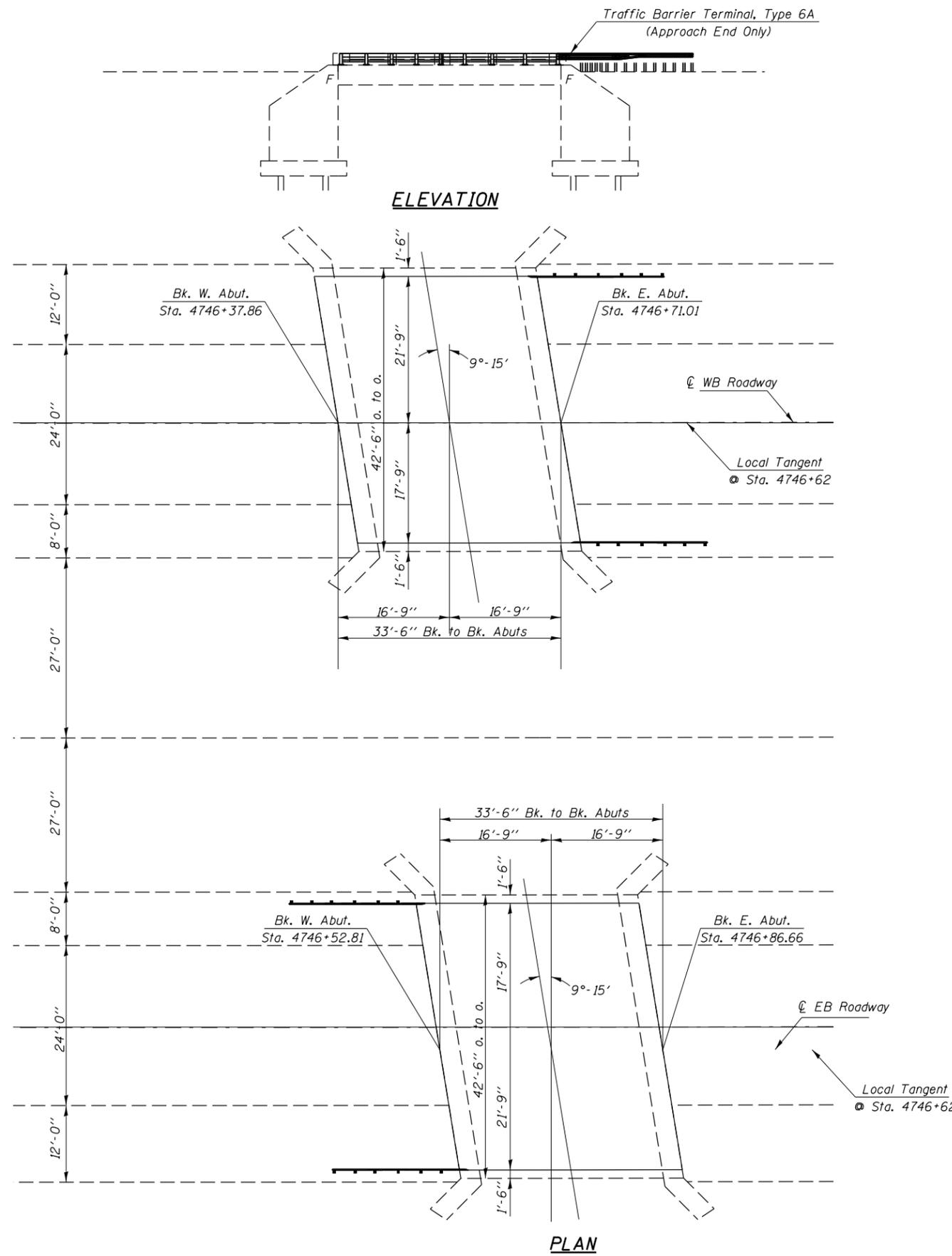
FILE NAME =	USER NAME = HENKAS	DESIGNED - ASH	REVISED -
pw:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 9\Projects\78815\CDRAW\CADsheets\158815-Sheets.dgn		CHECKED - MAS	REVISED -
PLOT SCALE = 200.0000' / in.		DATE - 9/17/2020	REVISED -
PLOT DATE = 10/2/2020			

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

WIDE LOAD SIGNING PLAN

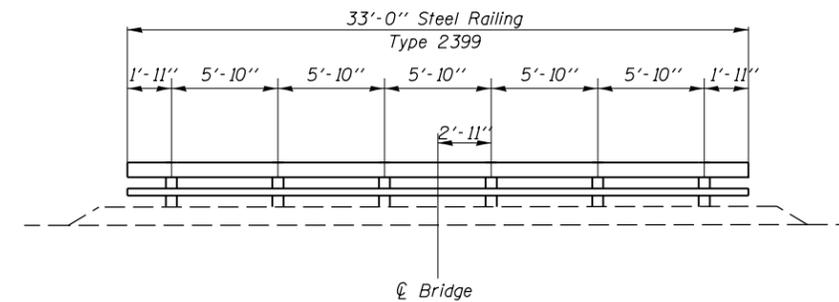
SCALE: SHEET 10 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	15
CONTRACT NO. 78815				
ILLINOIS FED. AID PROJECT				



GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 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 materials. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during the concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included in Concrete Removal.



INSIDE ELEVATION OF NORTH RAILING
(South Railing Similar)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Scarification 3/8"	Sq. Yd.	298
Bridge Deck Microsilica Concrete Overlay 3/8"	Sq. Yd.	298
Protective Coat	Sq. Yd.	298
Polymer Modified Portland Cement Mortar	Sq. Ft.	106
Traffic Barrier Terminal Type 6A	Each	4
Steel Railing, Type 2399	Foot	132
Concrete Removal	Cu. Yd.	4.6
Guardrail Removal	Foot	144



Expires 11-30-2022
David Carl Puzey
 12/3/2020

EXISTING DESIGN STRESSES

$f_c = 1,000$ psi Sub
 $f_c = 14,000$ psi Super
 $f_s = 20,000$ psi Reinf.

SCOPE OF WORK

- Set up TC&P Standard 701402
- Install Temporary Concrete Barrier
- Bridge Deck Scarification 3/8"
- Bridge Deck Microsilica Concrete Overlay 3/8"
- Apply Protective Coat
- Concrete Removal
- Install Steel Railing, Type 2399
- Guardrail Removal
- Install Traffic Barrier Terminals Type 6A
- Polymer Modified Portland Cement Mortar

DECK REPAIR
I-64 (FAI 64)
OVER TRIB TO RANDOLPH DITCH
WHITE COUNTY
D9 BRIDGE DECK REPAIR 2020-1
SN 097-0042(43)

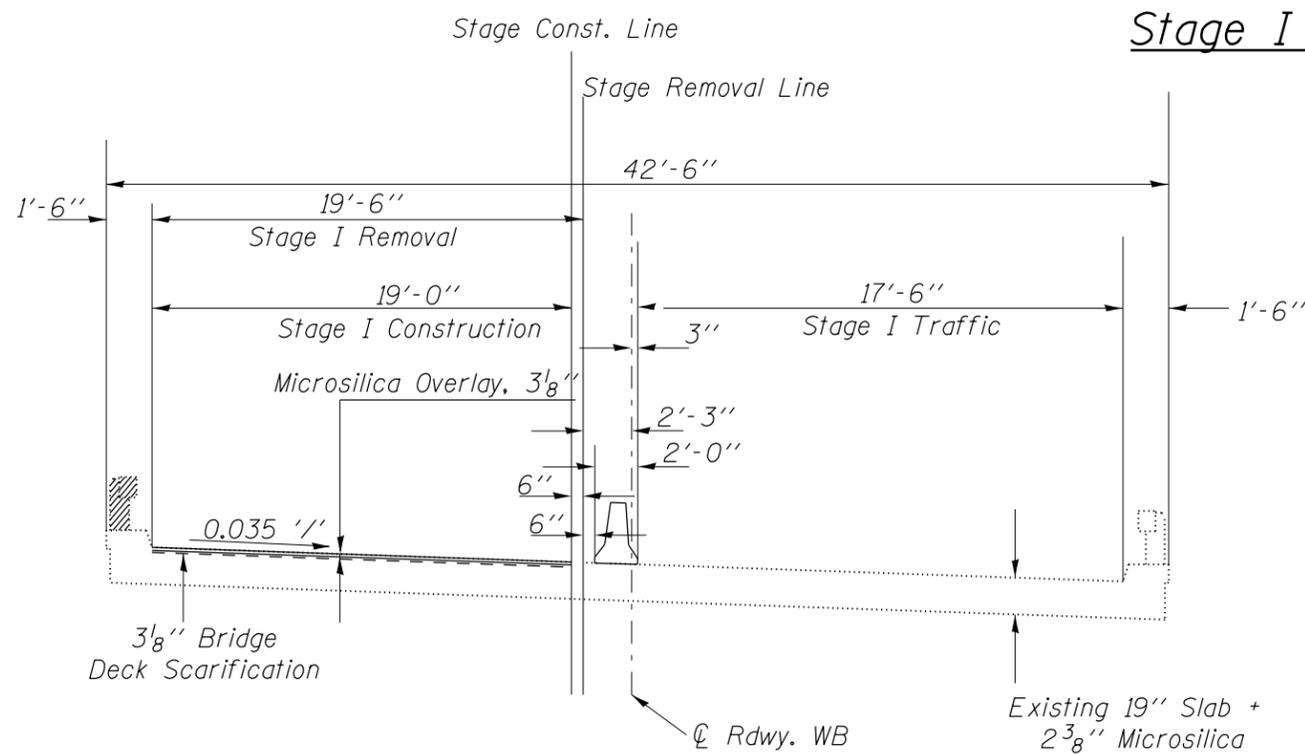
MODEL: Default
 FILE: hmkas_0970042.dwg
 PROJECT: 970042
 OFFICE: D97815
 SHEET: 15

USER NAME = hmkas	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 11/17/2020	DATE - 9/8/2020	REVISED -

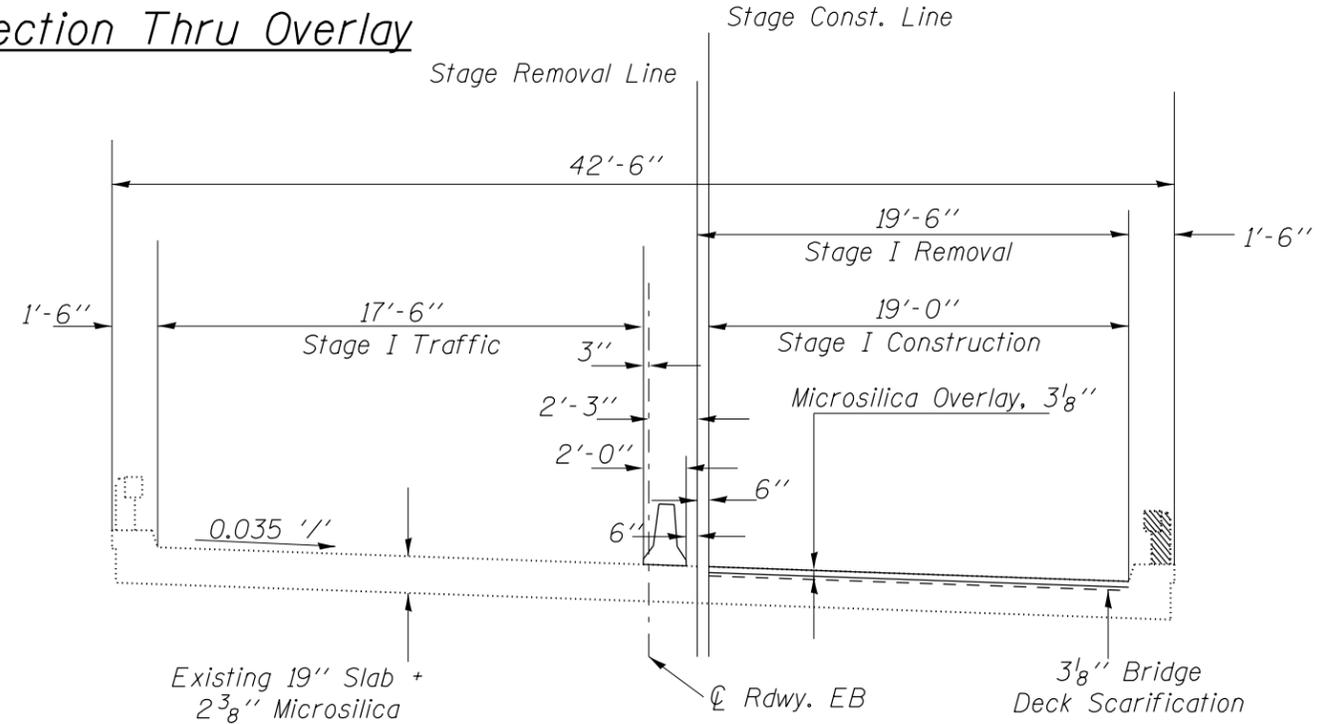
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 097-0042(43)	
GENERAL PLAN & ELEVATION	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	16
CONTRACT NO. 78815				
ILLINOIS FED. AID PROJECT				



SN 097-0043

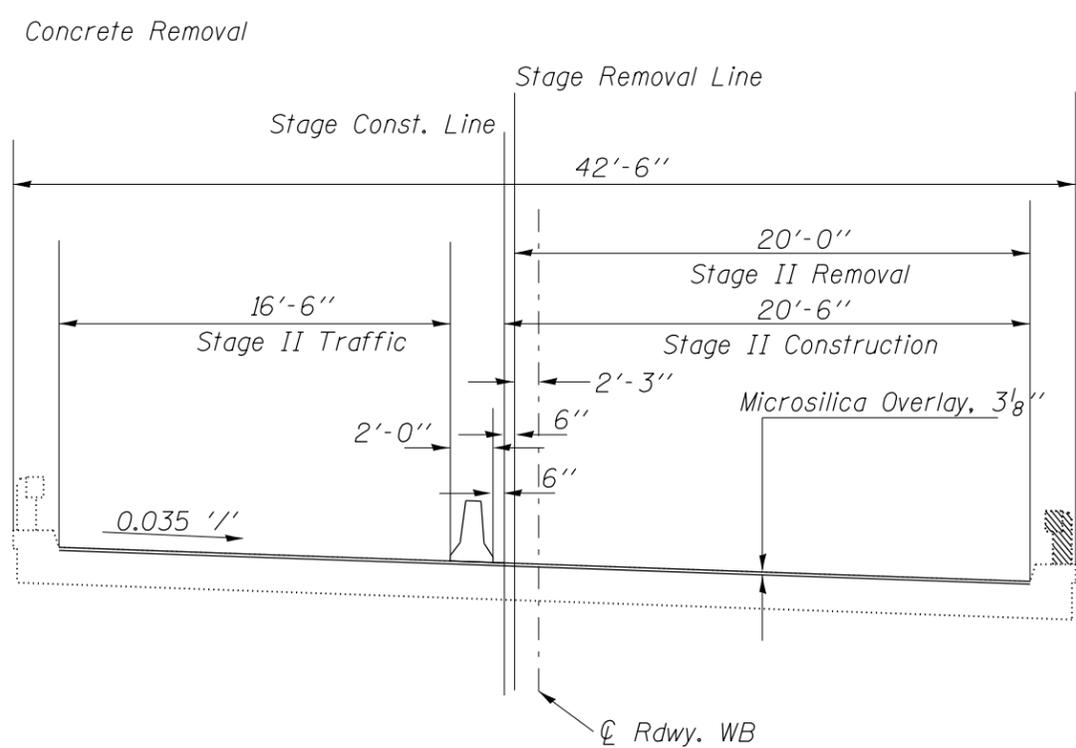


SN 097-0042

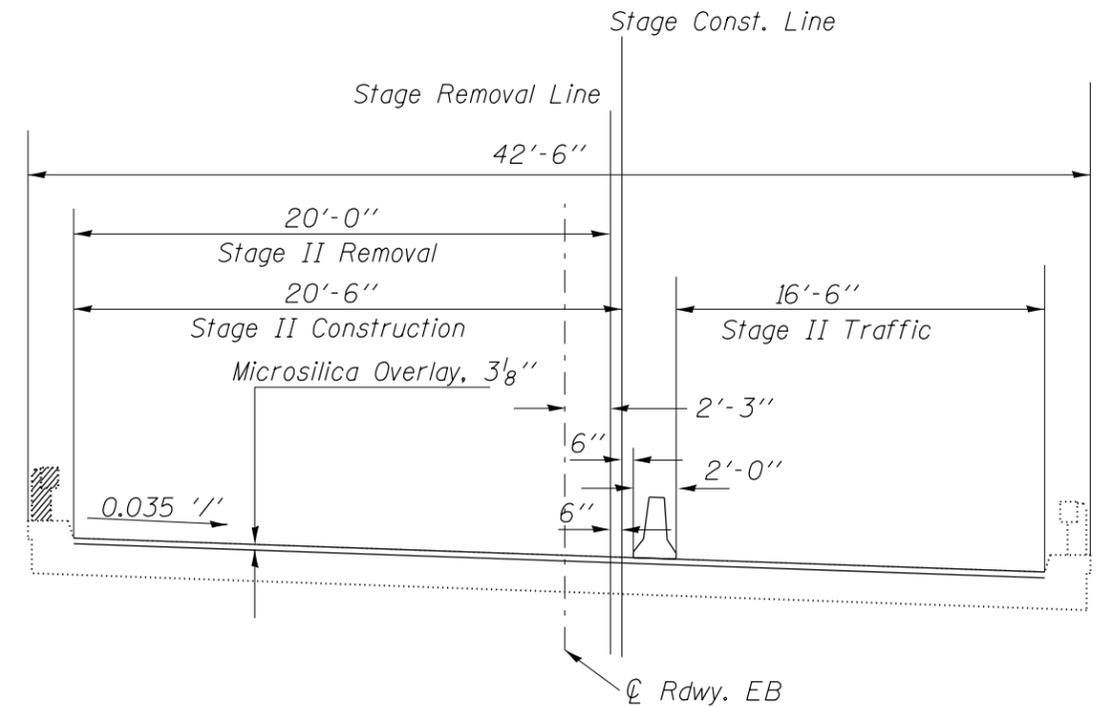
LEGEND:

Concrete Removal

Stage II Typical Section Thru Overlay



SN 097-0043



SN 097-0042

All Sections Looking East

MODEL: Default
FILE: h:\mhc\p\pub\haronom.dwg
PROJECT: 78815-CAAD\Drawings\DOT - Office\Drawings\9\Projects\78815-CAAD\Drawings\DOT - Office\Drawings\9\Projects\78815-Sheets.dwg

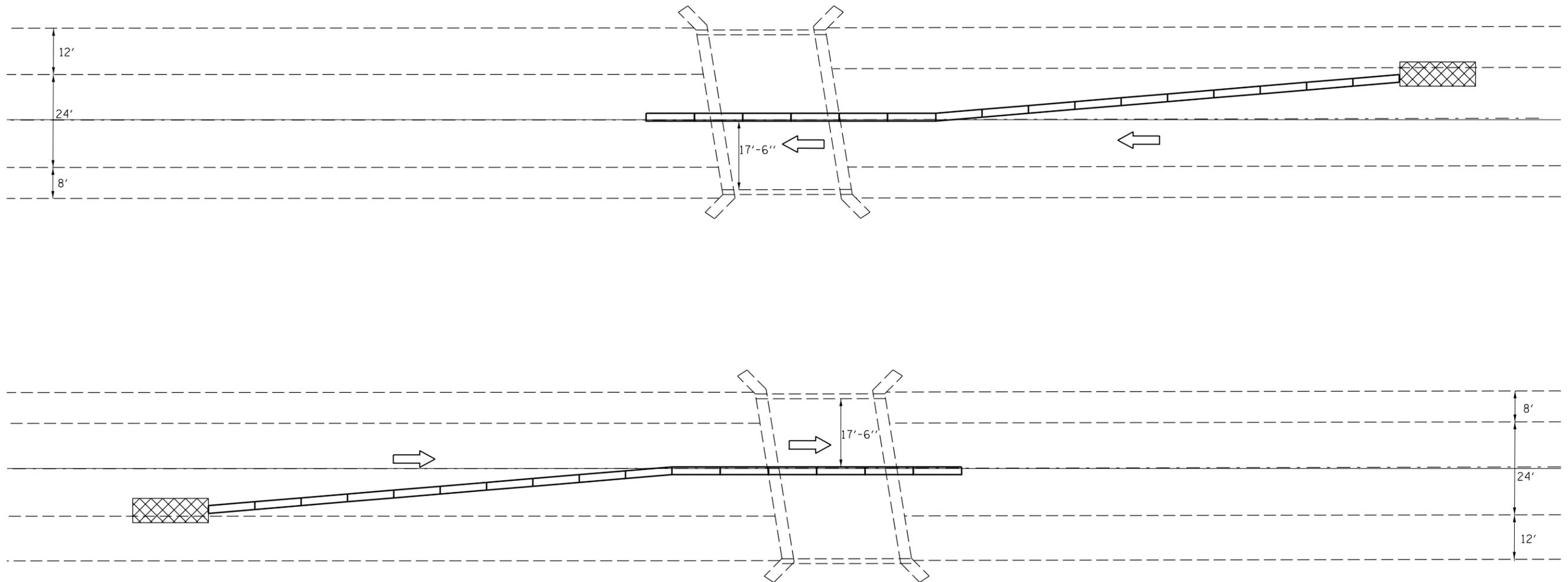
USER NAME = henkas	DESIGNED - ASH	REVISED -
DRAWN - ASH	REVISIONS -	
PLOT SCALE = 12.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 11/17/2020	DATE - 9/8/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION STAGING
SN 097-0042(43)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	17
CONTRACT NO. 78815				
ILLINOIS FED. AID PROJECT				



LEGEND

 Impact Attenuator

Stage I Traffic

MODEL: Default
 FILE: \\nas101.psu.edu\pub\baronm.d\at\illinois.gov\PI\DOT\Documents\DOT_Offices\District 9\Projects\78815\CAAD\Drawings\78815-Sheets.dgn

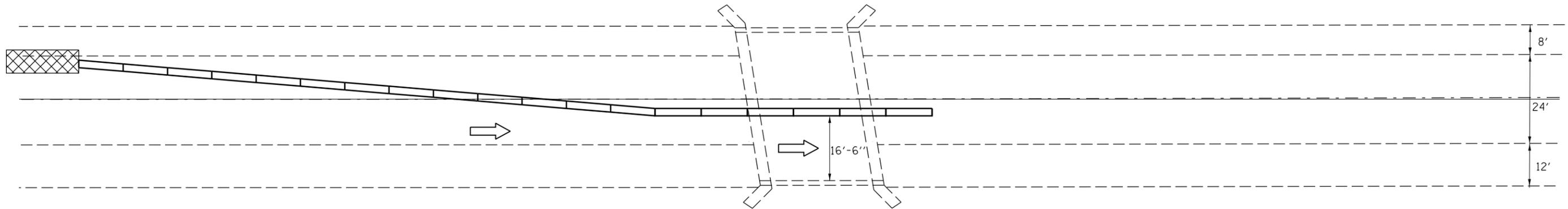
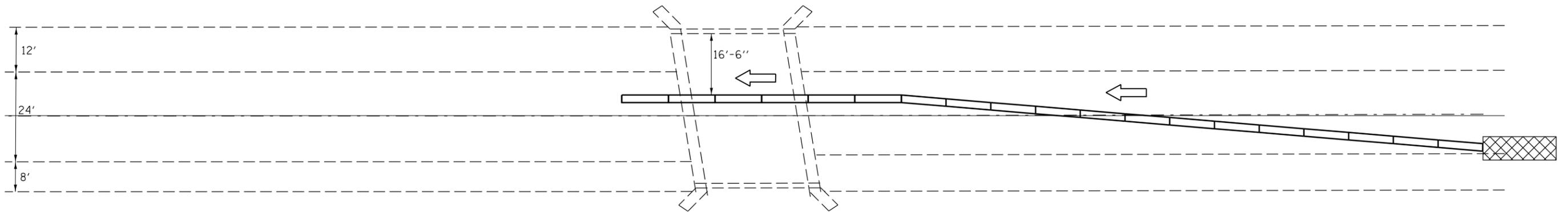
USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 60.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SN 097-0042(43)
STAGE I**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	18
ILLINOIS			FED. AID PROJECT	
CONTRACT NO. 78815				



LEGEND

 Impact Attenuator

Stage II Traffic

MODEL: Default
 FILE: h:\mhc\p\suplansroom\dat\illinois.gov\PIWDOT\Documents\DOT_Offices\District_9\Projects\78815\CAAD\Drawings\DOT_78815_Sheets.dgn

USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 60.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SN 097-0042(43)
STAGE II**

SCALE: SHEET OF SHEETS STA. TO STA.

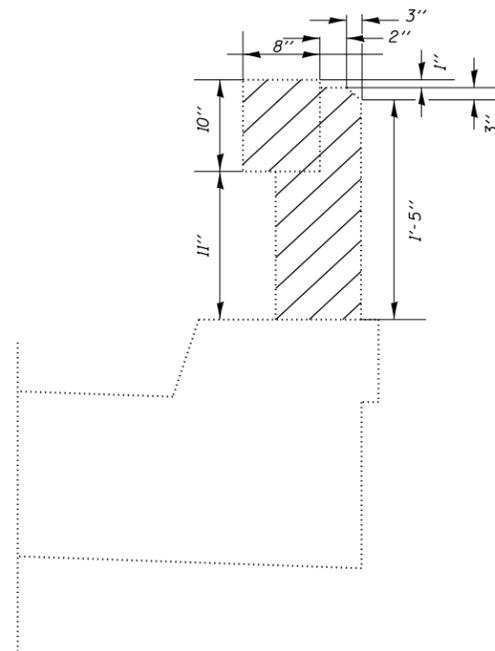
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	19
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	



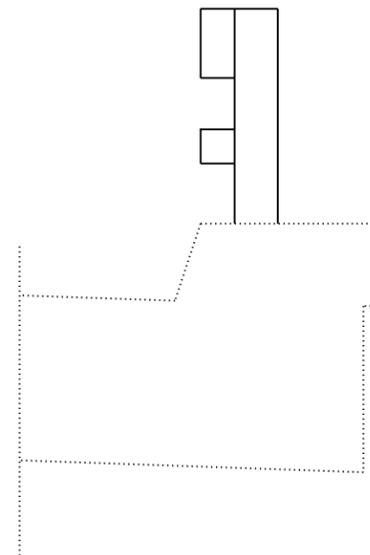
Note: The existing concrete railing shall be removed in such a manner as to leave the remaining structure undamaged and in proper condition for the use contemplated. Any damage to the portions remaining in service shall be repaired. Repairs shall be made as directed by the Engineer. Cost incidental to Concrete Removal.

Prior to partial removal of any concrete structure, a 3/4" deep saw cut shall be made along all boundaries of removal areas adjacent to areas to remain in place.

Where projecting bars are not to extend into the new construction, they shall be cut off flush with the surface to which the old concrete has been removed.



EXISTING CURB MOUNTED RAIL



PROPOSED CURB MOUNTED RAIL

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	4.6

MODEL: Default
 FILE: \\nas01c.psu.edu\pub\harcross\dat\illinois\gov\PI\DOT\Documents\DOT_Offices\District_9\Projects\78815\CADD\DATA\CAD\Drawings\9778815-Sheets.dgn

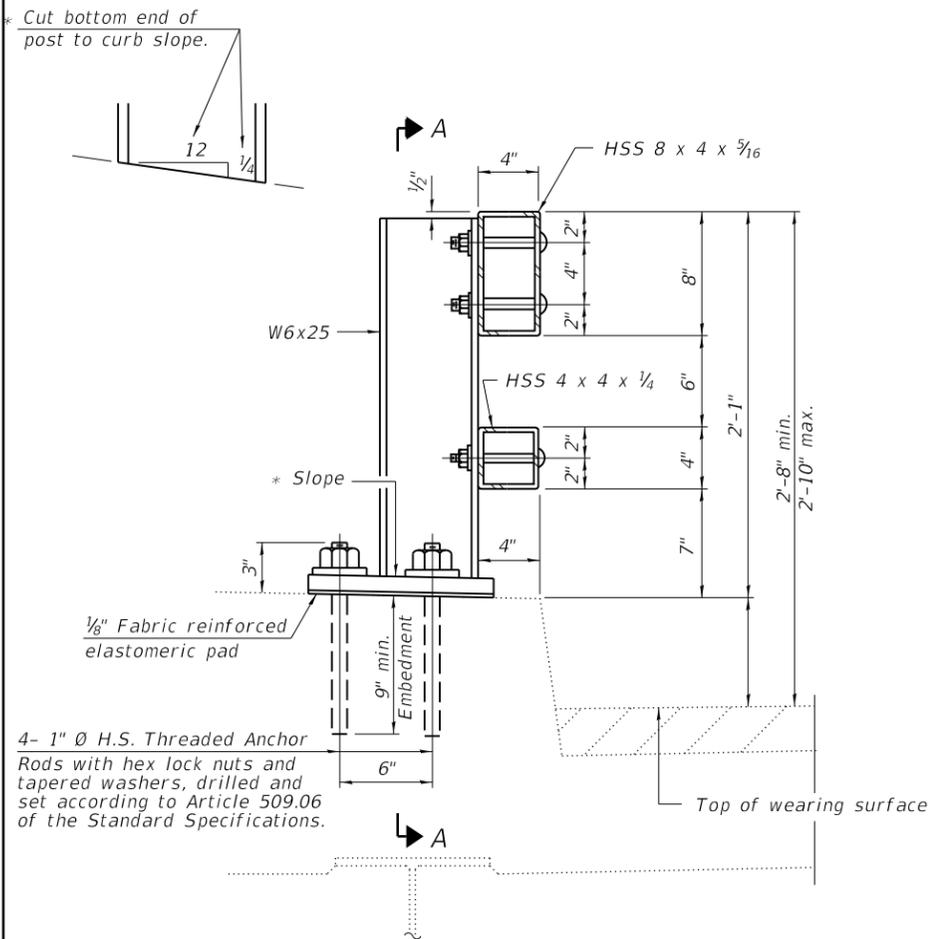
USER NAME = henkas	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 6.0000' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 11/17/2020	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

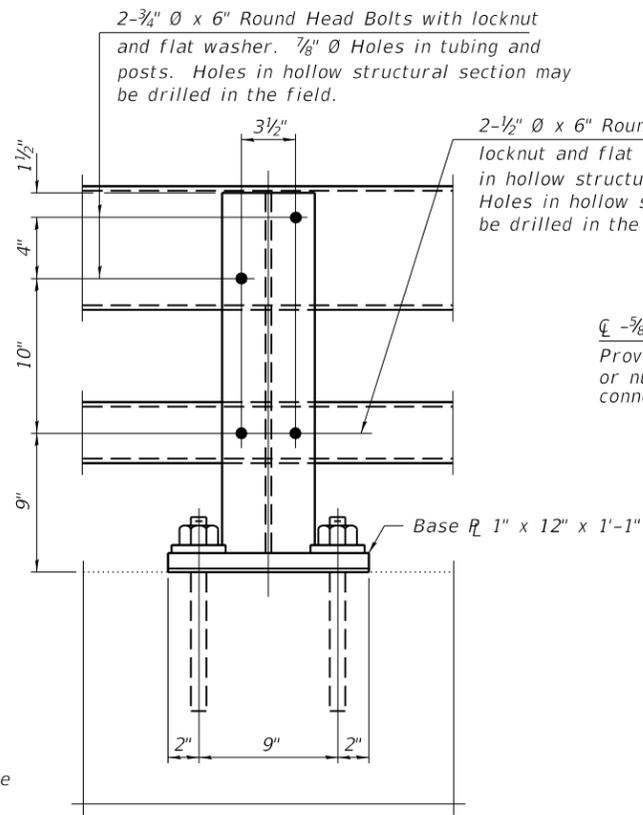
**RAIL REMOVAL & REPLACEMENT
SN 097-0042(43)**

SCALE: SHEET 9 OF 10 SHEETS STA. TO STA.

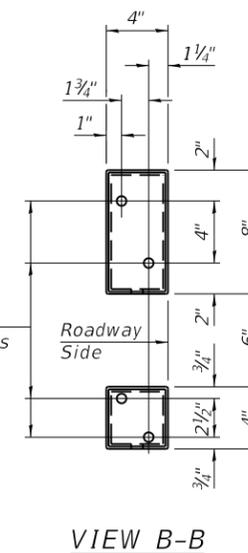
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	20
CONTRACT NO. 78815			ILLINOIS FED. AID PROJECT	



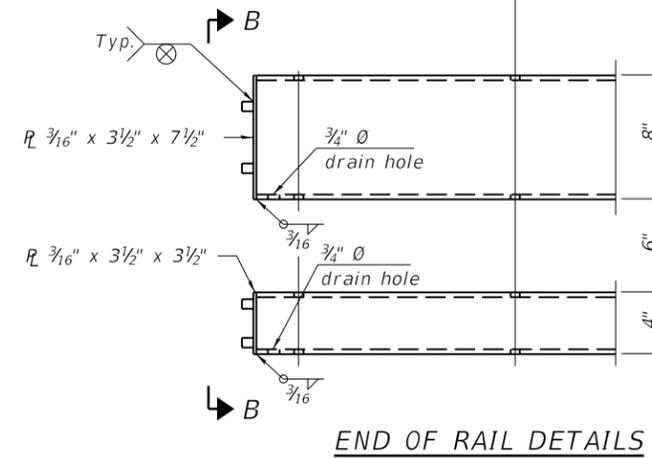
SECTION AT RAIL POST



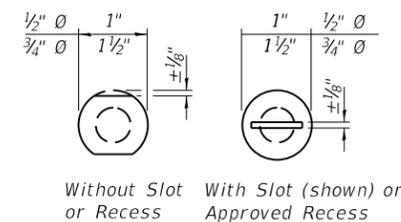
SECTION A-A



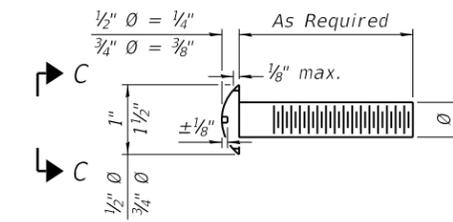
VIEW B-B



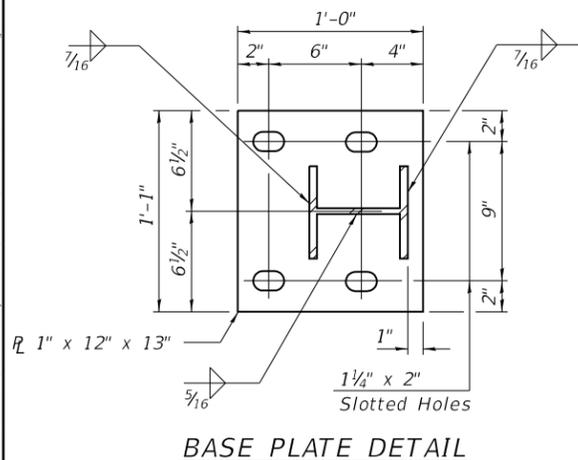
END OF RAIL DETAILS



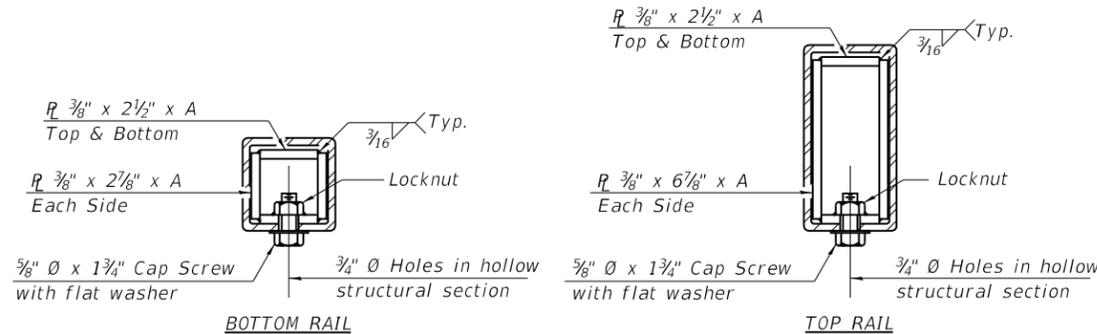
VIEW C-C



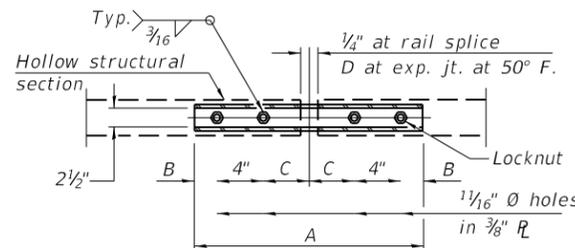
DETAIL OF 1/2" Ø & 3/4" Ø ROUND HEAD BOLTS



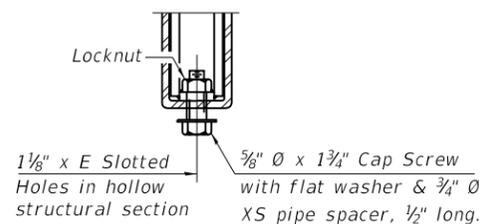
BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

Notes:
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	132

NHCRP 350 Test Level	4
Max Post Spacing (ft)	6'-3"
Railing Weight (plf)	70
Railing Require CVN	yes

R-31 2-17-2017

USER NAME = henkas	DESIGNED - ASH	REVISED -
PLOT SCALE = 0.2000' / in.	DRAWN - ASH	REVISED -
PLOT DATE = 11/17/2020	CHECKED - MAS	REVISED -
	DATE - 9/8/2020	REVISED -

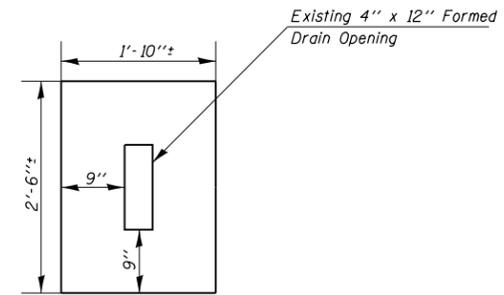
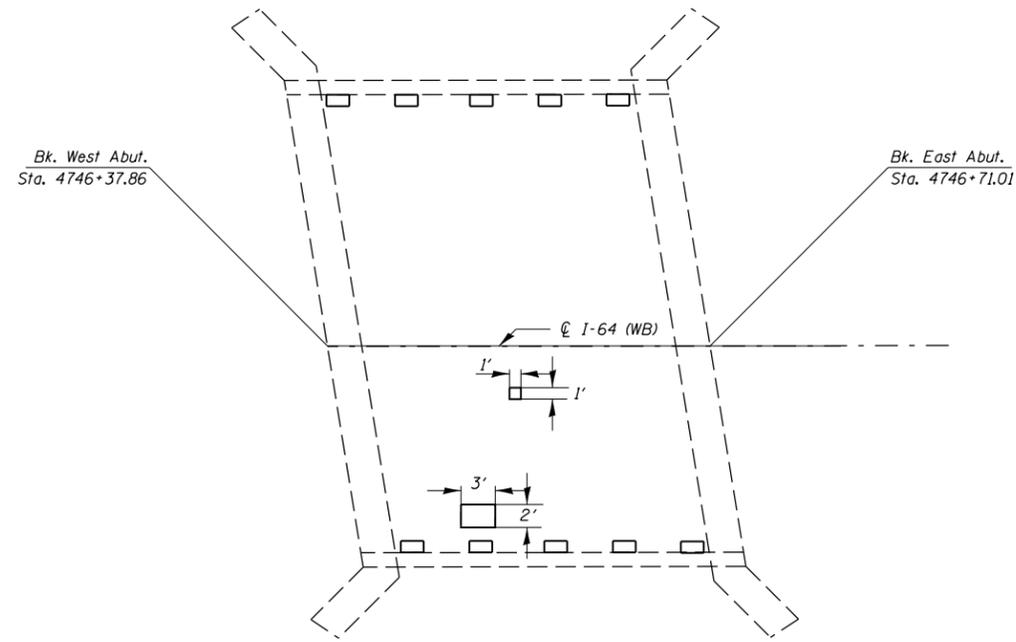
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE 2399
 STRUCTURE NO. 097-0042(43)

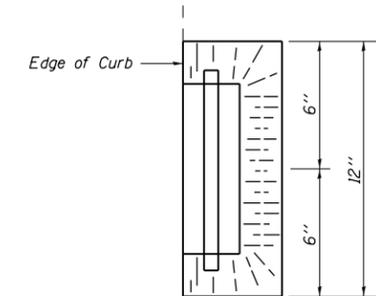
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	21
CONTRACT NO. 78815				
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE: Model: RailingType2399.rvt
 PROJECT: 78815
 SHEET: 21
 DATE: 11/17/2020
 USER: henkas

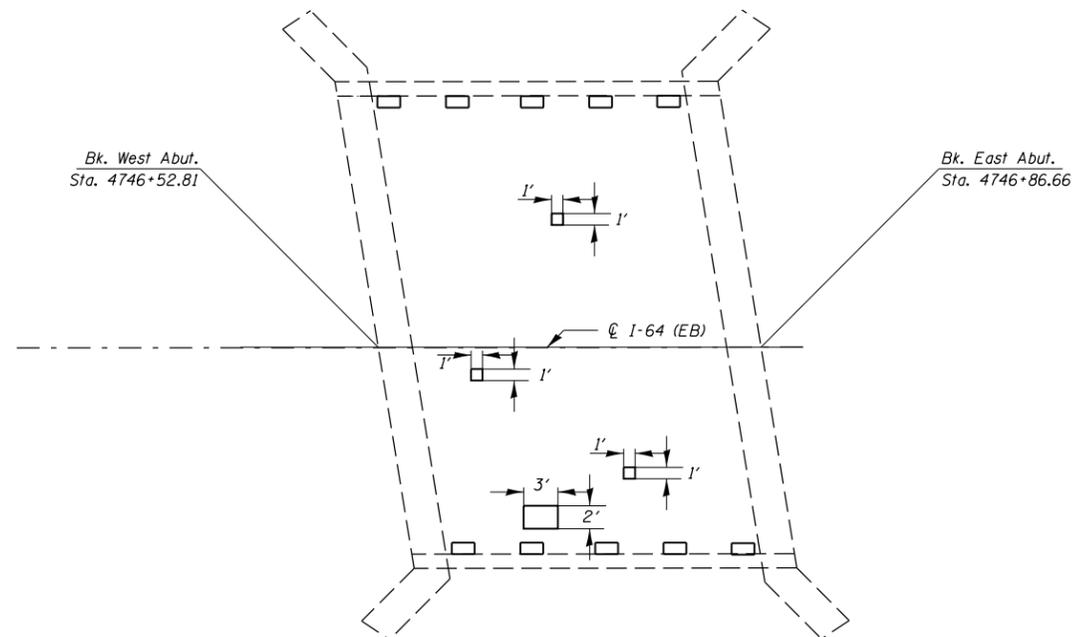


POLYMER MODIFIED PORTLAND CEMENT MORTAR DETAIL @ UNDERSIDE OF DECK AT DRAINS
20 Locations



TOP PLAN
Slope Overlay at Drains

Polymer Modified Portland Cement Mortar



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Polymer Modified Portland Cement Mortar	Sq. Ft.	106

POLYMER MORTAR DETAILS
F.A.I. RT. 64 (I-64)
SEC. D9 BRIDGE DECK REPAIR 2020-1
WHITE COUNTY
STRUCTURE NO. 097-0042(43)



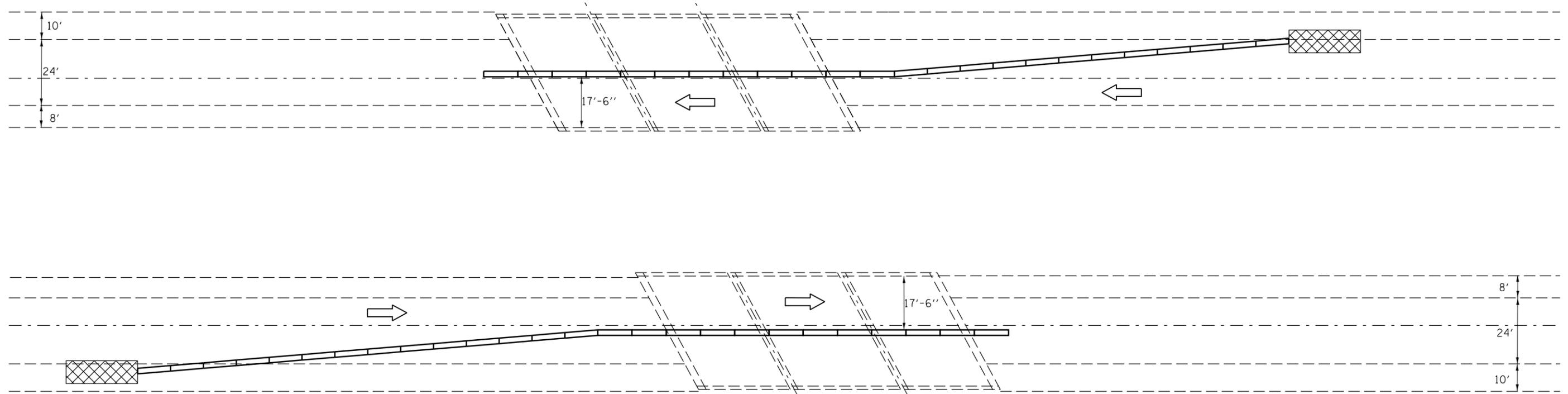
MODEL: Default
FILE: A:\mhc\p\pub\haronom.dwg
PROJECT: 78815-CAAD\Drawings\DOT-Office\Drawings\9-Projects\78815-CAAD\Drawings\DOT-Office\Drawings\9-Projects\78815-Sheets.dgn

USER NAME = henkas	DESIGNED - ASH	REVISED -
PLOT SCALE = 16.0000' / in.	DRAWN - ASH	REVISED -
PLOT DATE = 11/17/2020	CHECKED - MAS	REVISED -
	DATE - 9/8/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 097-0042(43)
POLYMER MORTAR DETAILS
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	22
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	



Stage I Traffic

LEGEND

 Impact Attenuator

MODEL: Default
 FILE: \\nas101.pw.state.il.us\pub\harcourt\dot\Documents\DOT_Offices\District 9\Projects\78815\CAAD\Drawings\78815-Sheets.dgn

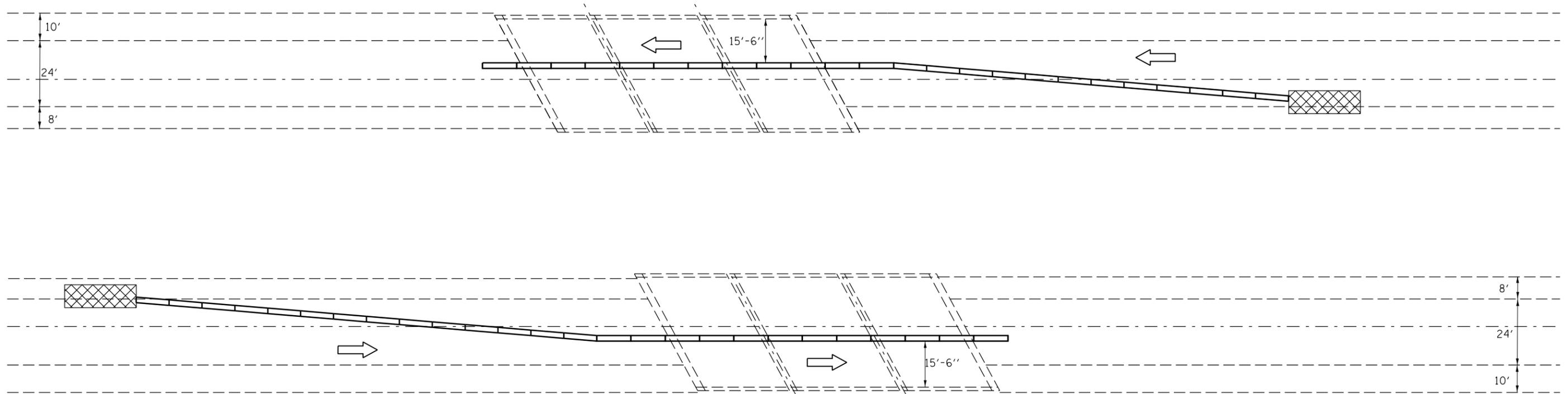
USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 60.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SN 097-0046(47)
STAGE I**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	25
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	



LEGEND

 Impact Attenuator

Stage II Traffic

MODEL: Default
 FILE: \\nas101.pw.state.il.us\pub\hennas\dot\Documents\DOT_Offices\District 9\Projects\78815\CAAD\Drawings\78815-Sheets.dgn

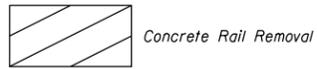
USER NAME = HENKAS	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 60.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 10/2/2020	DATE - 9/8/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SN 097-0046(47)
STAGE II**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	26
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	

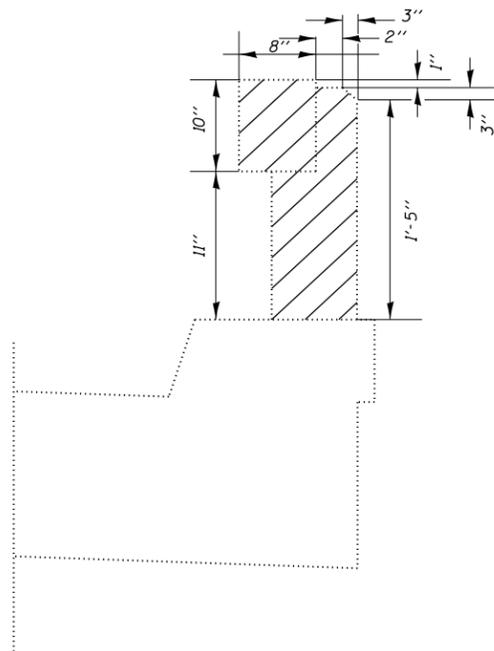


Note: The existing concrete railing shall be removed in such a manner as to leave the remaining structure undamaged and in proper condition for the use contemplated. Any damage to the portions remaining in service shall be repaired. Repairs shall be made as directed by the Engineer. Cost incidental to Concrete Removal.

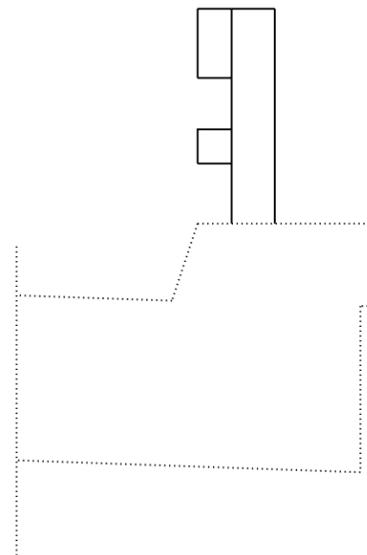
Prior to partial removal of any concrete structure, a 3/4" deep saw cut shall be made along all boundaries of removal areas adjacent to areas to remain in place.

Where projecting bars are not to extend into the new construction, they shall be cut off flush with the surface to which the old concrete has been removed.

There is 26' of existing curb mounted rail missing from the north rail of SN 097-0047(WB). This missing section of rail is not included in the quantity of Concrete Removal.



EXISTING CURB MOUNTED RAIL



PROPOSED CURB MOUNTED RAIL

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	12.8

MODEL: Default
 FILE: h:\mhc\p\pub\harcam\dat\illinois\gov\p\w\DOT\Documents\DOT_Offices\District_9\Projects\78815\CADD\DATA\CAD\Sheets\09778815-Sheets.dgn

USER NAME = henkas	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 6.0000' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 11/17/2020	DATE - 9/8/2020	REVISED -

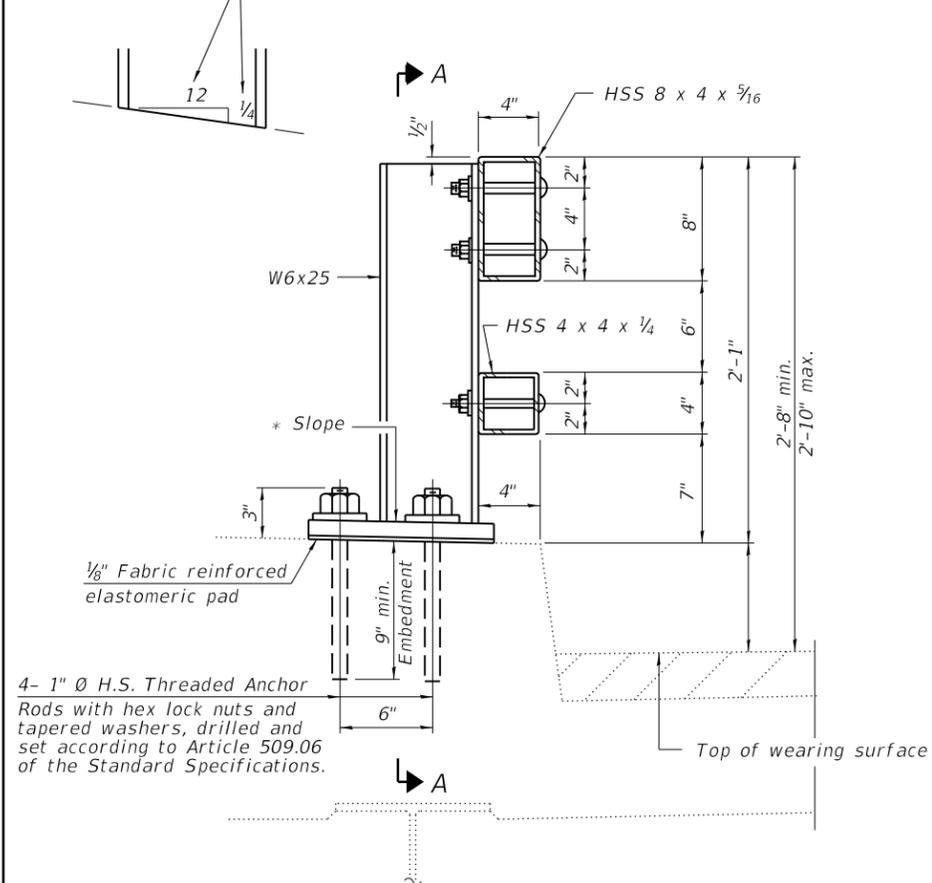
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**RAIL REMOVAL & REPLACEMENT
SN 097-0046(47)**

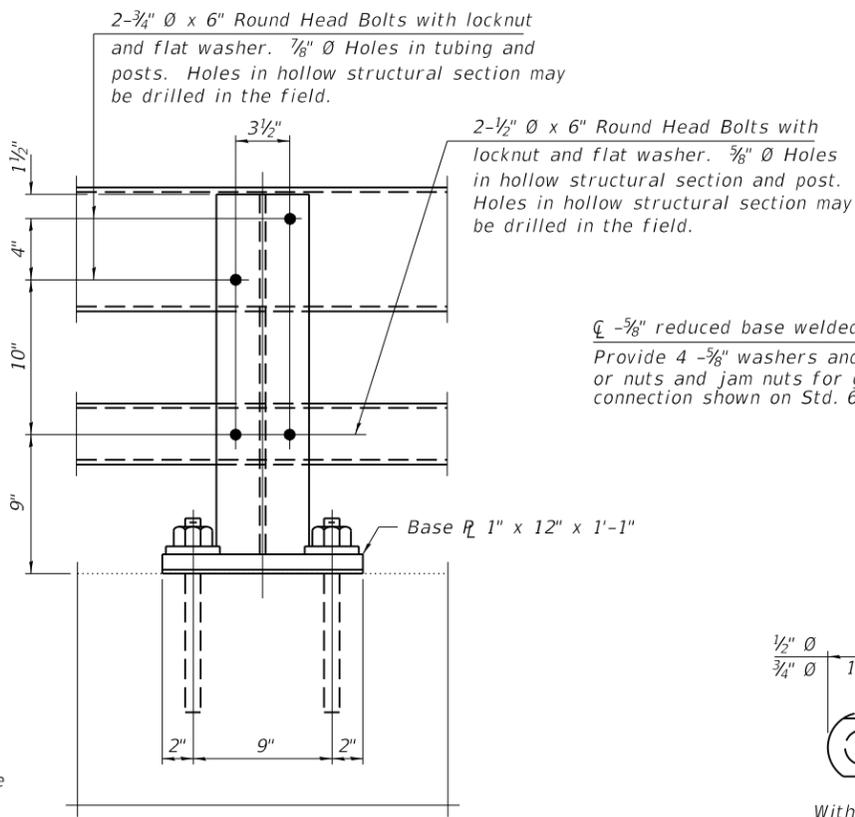
SCALE: SHEET 9 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	27
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78815	

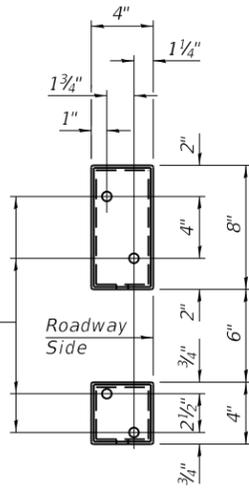
* Cut bottom end of post to curb slope.



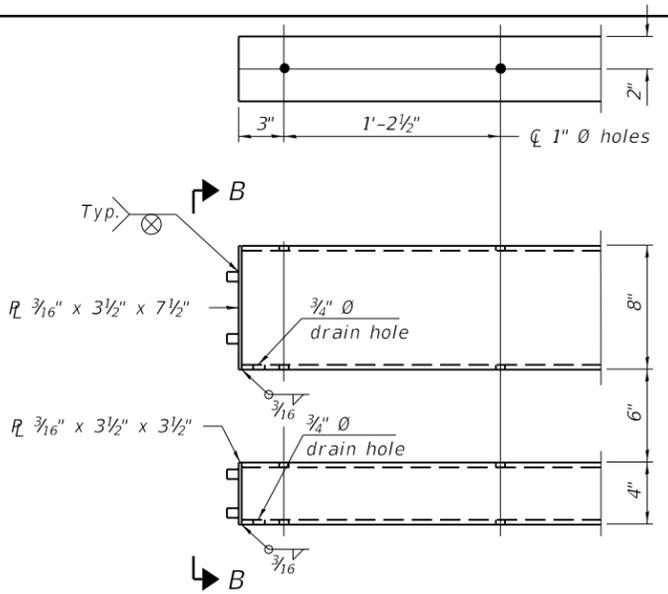
SECTION AT RAIL POST



SECTION A-A



VIEW B-B



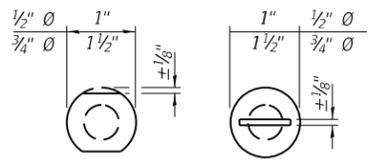
END OF RAIL DETAILS

4- 1" Ø H.S. Threaded Anchor Rods with hex lock nuts and tapered washers, drilled and set according to Article 509.06 of the Standard Specifications.

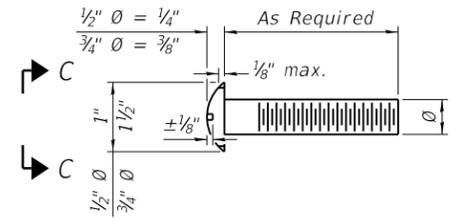
2-3/4" Ø x 6" Round Head Bolts with locknut and flat washer. 7/8" Ø Holes in tubing and posts. Holes in hollow structural section may be drilled in the field.

2-1/2" Ø x 6" Round Head Bolts with locknut and flat washer. 5/8" Ø Holes in hollow structural section and post. Holes in hollow structural section may be drilled in the field.

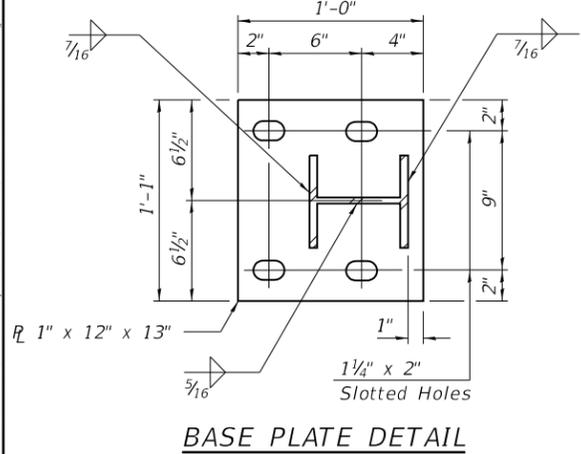
4 - 5/8" reduced base welded studs. Provide 4 - 5/8" washers and lock nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.



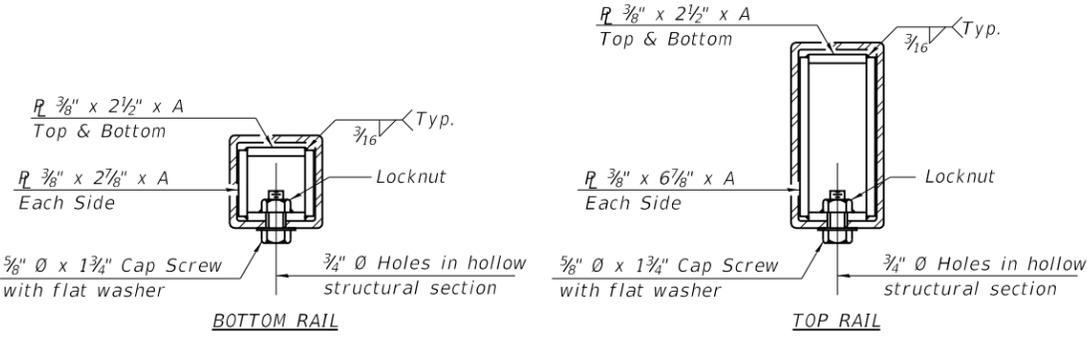
VIEW C-C



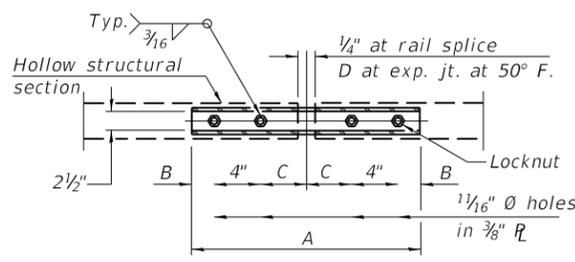
DETAIL OF 1/2" Ø & 3/4" Ø ROUND HEAD BOLTS



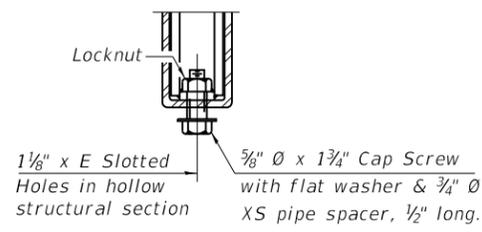
BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

Notes:
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	440

MODEL: Default FILE: \\p1ubharoom.dia.allnck.soc\PWD\DOT\Documents\DOT - Offices\Illin\9\Projects\78815\CADD\DATA\CAD\Sheet\09778815-Sheets.dgn

NHCRP 350 Test Level	4
Max Post Spacing (ft)	6'-3"
Railing Weight (plf)	70
Railing Require CVN	yes

R-31 2-17-2017

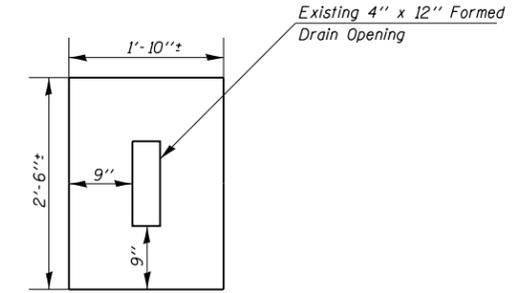
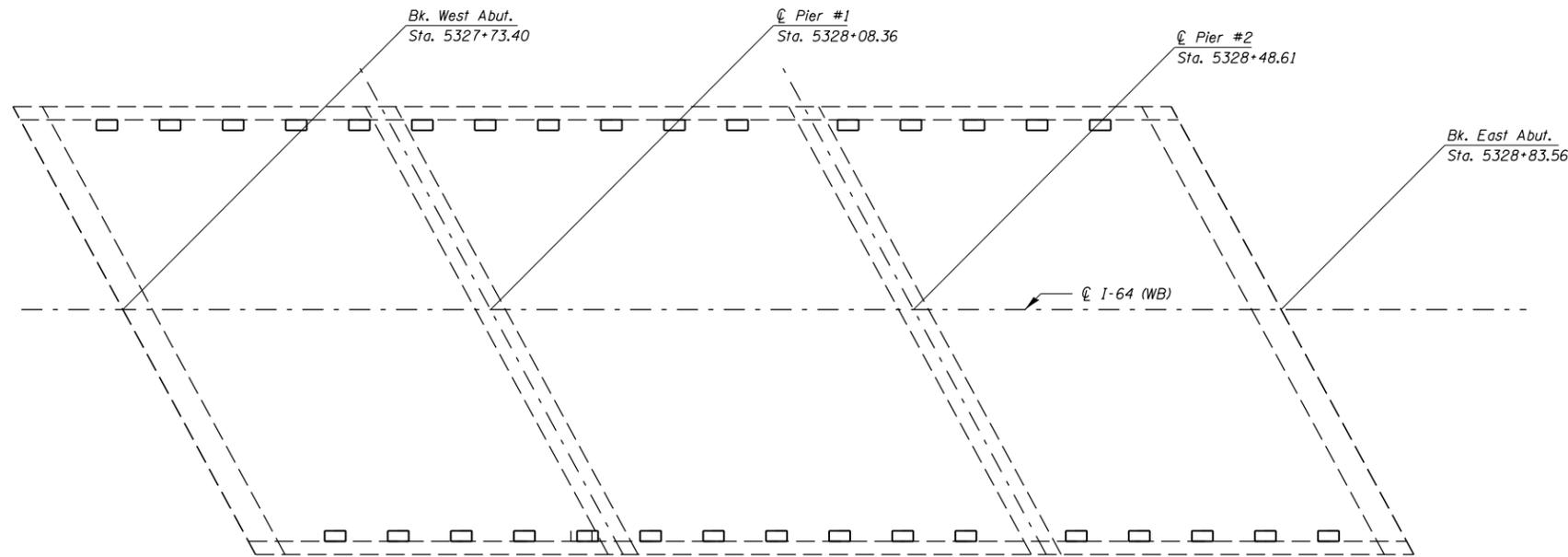
USER NAME = HENKAS	DESIGNED - ASH	REVISED -
PLOT SCALE = 0.2000' / in.	DRAWN - ASH	REVISED -
PLOT DATE = 10/2/2020	CHECKED - MAS	REVISED -
	DATE - 9/8/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

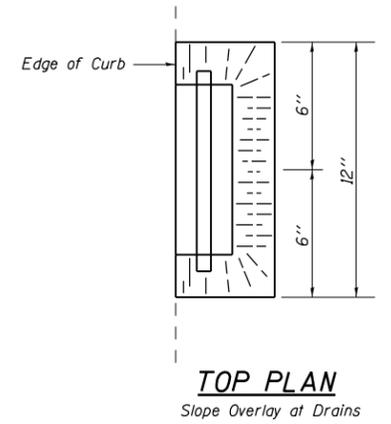
STEEL RAILING, TYPE 2399
STRUCTURE NO. 097-0046(47)

SCALE: SHEET OF SHEETS STA. TO STA.

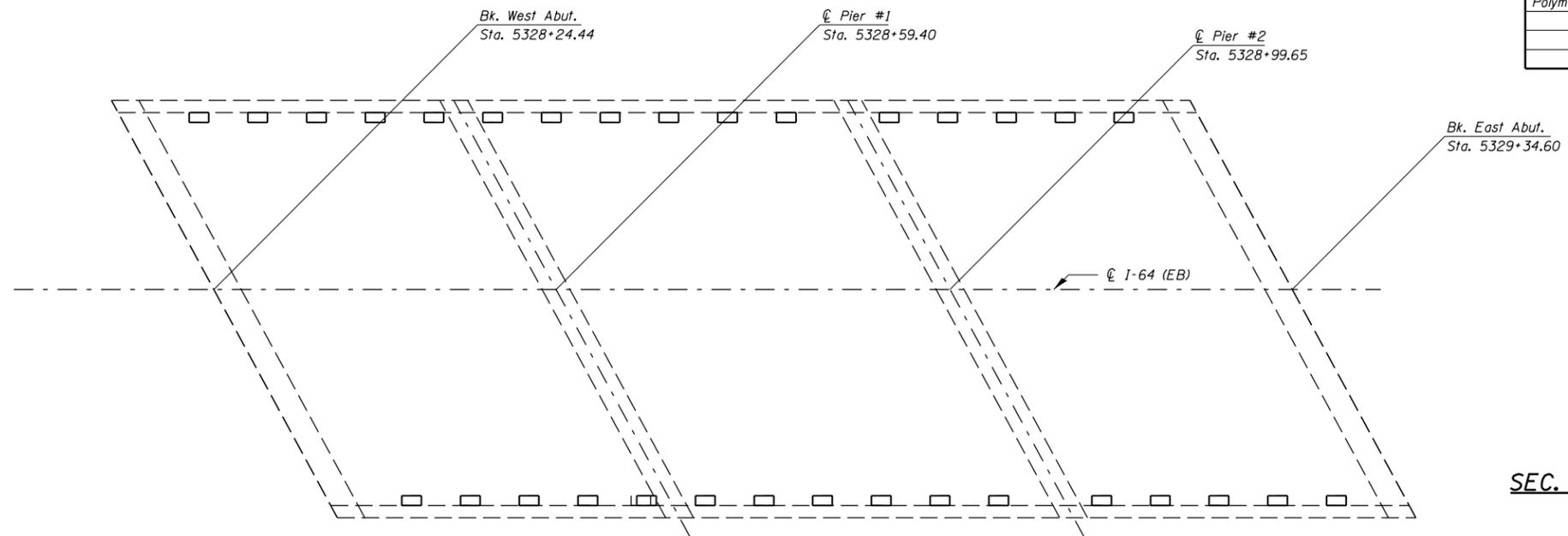
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	28
CONTRACT NO. 78815				
ILLINOIS FED. AID PROJECT				



**POLYMER MODIFIED PORTLAND
CEMENT MORTAR DETAIL @
UNDERSIDE OF DECK AT DRAINS**
64 Locations



Polymer Modified Portland Cement Mortar



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Polymer Modified Portland Cement Mortar	Sq. Ft.	288

**POLYMER MORTAR DETAILS
F.A.I. RT. 64 (I-64)
SEC. D9 BRIDGE DECK REPAIR 2020-1
WHITE COUNTY
STRUCTURE NO. 097-0046(47)**

MODEL: Default
FILE: hmkas_20200815_09071001\Documents\DOT_Offices\Drawings\9\Projects\78815\CADD\Drawings\978815-Sheets.dgn

USER NAME = hmkas	DESIGNED - ASH	REVISED -
DRAWN - ASH	CHECKED - MAS	REVISED -
PLOT SCALE = 16.0000' / in.	DATE - 9/8/2020	REVISED -
PLOT DATE = 11/17/2020		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SN 097-0046(47) POLYMER MORTAR DETAILS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	D9 BRIDGE DECK REPAIR 2020-1	WHITE	29	29
CONTRACT NO. 78815				
ILLINOIS FED. AID PROJECT				