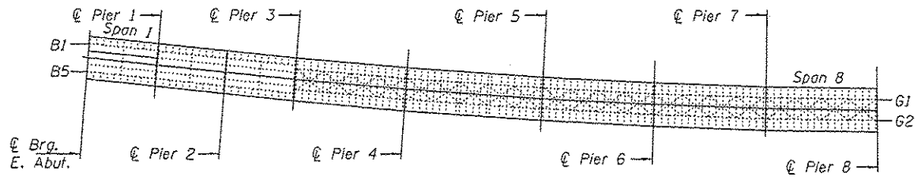
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	50% ILLINOIS 50% MISSOURI 80% FED 20% STATE PPS 6-61750-0400 CONSTR. CODE 0014 BRIDGE S.N. 001-0019
50102400	CONCRETE REMOVAL	CU YD	10.7	10.7
~~50157300~~	~~PROTECTIVE SHIELD~~	~~SQ YD~~	~~66~~	~~66~~ △3
50300255	CONCRETE SUPERSTRUCTURE	CU YD	10.7	10.7
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2350	2350
52000230	FINGER PLATE EXPANSION JOINT, 9"	FOOT	50	50
52000600	FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	50	50
52100520	ANCHOR BOLTS, 1"	EACH	17	17
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8
67100100	MOBILIZATION	LSUM	1	1
70100315	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	EACH	2	2
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	24	24
78300100	PAVEMENT MARKING REMOVAL	SQ FT	500	500
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1
Z0001905	STRUCTURAL STEEL REPAIR	POUND	43,860	43,860 △3
~~Z0007112~~	~~CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES~~	~~LSUM~~	~~1~~	~~1~~ △3
ø Z0076600	TRAINEES	HOUR	1000	1000
~~Z0010501~~	~~CLEANING AND PAINTING STEEL BRIDGE NO. 1~~	~~LSUM~~	~~1~~	~~1~~ △3
ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1000	1000
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	LSUM	1	1

ø 0042

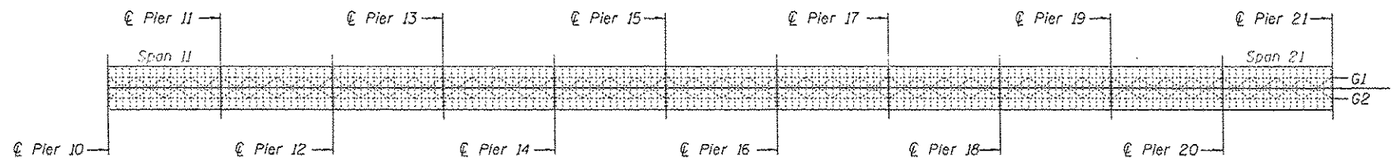
△3 REVISED 12-28-15

FILE NAME : pw:\\IL084EBID(INTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 6\Projects\0672H65\CADData\CADsheets\0672H65-sht-S00.dgn Default	USER NAME = sparksgw PLOT SCALE = 100.0000 ' / in. PLOT DATE = 8/17/2015	DESIGNED - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES SCALE: SHEET OF SHEETS STA. TO STA.	F.A.P. RTE. 63	SECTION (1ZB)I-7	COUNTY ADAMS	TOTAL SHEETS 45	SHEET NO. 3
						CONTRACT NO. 72H65				
						ILLINOIS FED. AID PROJECT				

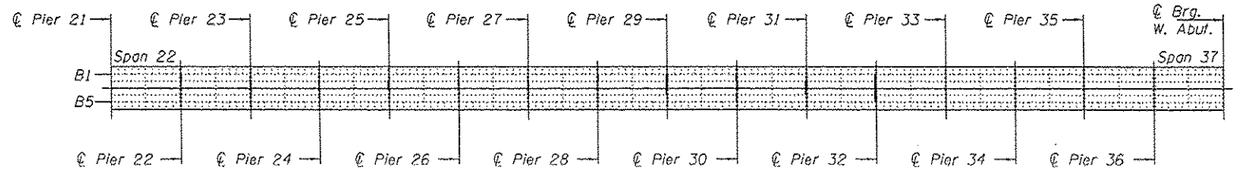


PLAN EAST APPROACH
(Spans 1-8)

N



PLAN WEST APPROACH
(Spans 11-21)



PLAN WEST APPROACH
(Spans 22-37)

GENERAL NOTES

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

Fasteners shall be high strength bolts. Bolts $^{7}/_{8}$"ϕ. open holes $^{15}/_{16}$"ϕ. unless otherwise noted.

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 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.

Finger Plate Expansion Joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

Tapered shims shall be added under the stools, as required by the Engineer, to make a smooth finger joint. Cost shall be included with Finger Plate Expansion Joint.

The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

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

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the GBSP "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

All new structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300. Type 1. Cost included with Structural Steel Repair.

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 concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The contractor shall ensure that no damage is done to any material that is to remain. Any damage is to be repaired, at the cost of the contractor, to the satisfaction of the engineer.

3 2

The Contractor is required to provide Structural Assessment Report(s) for the proposed work. See Special Provision.

The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Highway Bridges (Complex), for preparation of the Structural Assessment Report(s). Contractor's pre-approval shall not be applicable for this project. See Special Provision.

CURRENT RATINGS ON FILE FOR EXISTING STRUCTURE:
Inventory: HS 0.57
Operating: HS 0.994
Live Load Restrictions: Legal Loads only

1

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractors equipment.

The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available on request as noted in the Special Provisions.

Truss member and gusset plate repairs are to be completed under reduced bridge live loads. Individual truss member and gusset plate repairs shall be completed when stage traffic is on the opposite side of the bridge with respect to the repair location.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	10.7
Concrete Superstructure	Cu. Yd.	10.7
3 Structural Steel Repair	Pound	43860
Fabric Reinforced Elastomeric Trough	Foot	50
Finger Plate Expansion Joint,	Foot	50
Reinforcement Bars, Epoxy Coated	Pound	2350
Anchor Bolts, 1"	Each	17
3		

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD
ILLINOIS
STATE OF ILLINOIS

EXPIRES 11-30-2016

3 12/1/2015 VHV

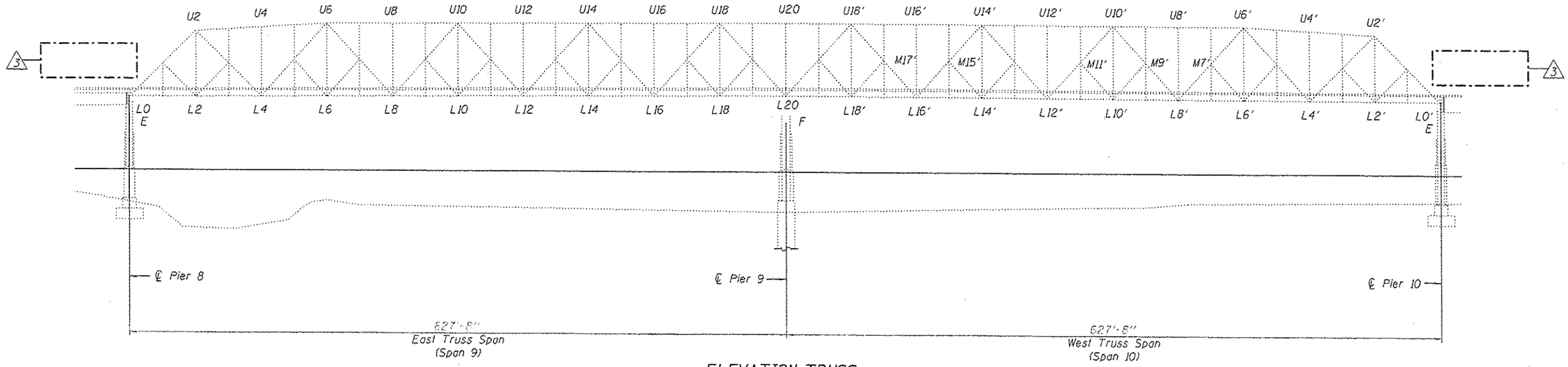
DESIGNED		DATE	OCTOBER 1, 2015
CHECKED			
DRAWN	baliva	REVISED 1	10/15/2015 VHV
CHECKED	VHV	REVISED 2	10/29/2015 VHV

PASSED
ACTING ENGINEER OF BRIDGES AND STRUCTURES

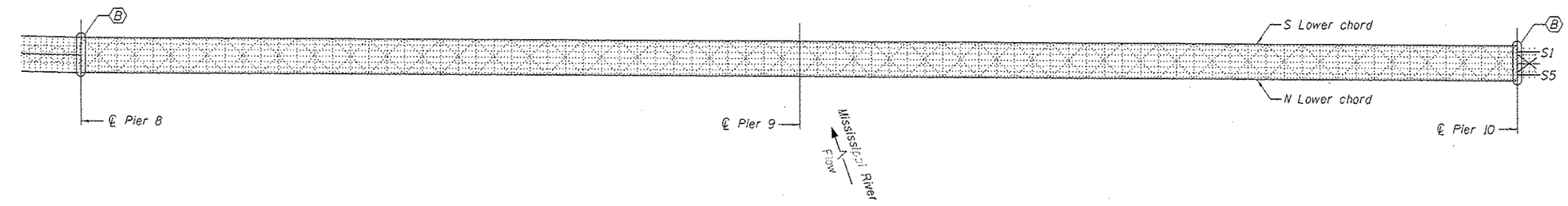
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN APPROACH SPANS
FAP 63 (US 24) OVER THE MISSISSIPPI RIVER
SN 001-0019
SHEET NO. 1 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	112B1-1	ADAMS	45	4
		CONTRACT NO. 72H65		
		ILLINOIS FED. AID PROJECT		



ELEVATION TRUSS



PLAN TRUSS

(B) - Remove Neoprene Exp. Jt. & Install Finger ℄ Exp. Jt.

DESIGNED VHV	PASSED	DATE OCTOBER 1, 2015	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND ELEVATION TRUSS SPANS FAP 63 (US 24) OVER THE MISSISSIPPI RIVER SN 001-0019	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED DAB		REVISED 3 12/1/2015 VHV			63	(12B)I-T	ADAMS	45	5
DRAWN Summer/baliva	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 2 OF 24 SHEETS			CONTRACT NO. 72H65		
CHECKED VHV DAB							ILLINOIS FED. AID PROJECT		

(Spans 9 & 10)

Item No.	Location	Sheet No.
537 A	Span 9, Stringer 1, Panel 1. Strengthen stringer.	19
537 B	Span 9, Stringer 5, Panel 4. Strengthen stringer.	19
537 C	Span 9, Stringer 1, Panel 5. Strengthen stringer.	19
537 D	Span 9, Stringer 5, Panel 5. Strengthen stringer.	19
537 E	Span 9, Stringer 1, Panel 6. Strengthen stringer.	19
537 F	Span 9, Stringer 1, Panel 10. Strengthen stringer.	19
537 G	Span 9, Stringer 1, Panel 13. Strengthen stringer.	19
537 H	Span 9, Stringer 1, Panel 16 Strengthen stringer.	19
537 I	Span 9, Stringer 1, Panel 17. Strengthen stringer.	19
537 J	Span 9, Stringer 1, Panel 18. Strengthen stringer.	19
537 K	Span 9, Stringer 1, Panel 20. Strengthen stringer.	19
537 L	Span 10, Stringer 1, Panel 20'. Strengthen stringer.	19
537 M	Span 10, Stringer 1, Panel 18'. Strengthen stringer.	19
443	Span 9, Stringer 1, Panel 11. Repair cracked connection angle at FB 10.	19

FASTENER REPAIRS

Item No.	Location	Total Missing
331	Span 9, Member U7S-U7N at U7S.	12
539	Span 9, Member L0S-U1S at L0S.	1
540	Span 9, Stringer S1 at FB 0, Panel 1.	1
541	Span 9, Stringer S3 at FB 0, Panel 1.	1
542	Span 9, Stringer S4 at FB 0, Panel 1.	1
590	Span 9, Stringer S5. Drain connection on panel 16.	1
629	Span 10, Member L12'N-M11'N at L12'N.	3
634	Span 10, Stringer S1, 2 ft. and 10 ft. from FB 10', Panel 10'.	2
644	Span 10, Stringer S5, 3 ft. from FB 4', Panel 4'.	1
458	Span 11, FB 13 at Girder G2 connection.	4
390	Span 13, FB 3 at Girder G1.	4
282	Span 13, FB 5 at Girders G1 and G2.	3
286	Span 14, FB 7 at Girder G1.	3
718	Span 17, Girder G2 at Pier 16. Flange to sole plate.	2
665	Span 21, North side of Girder G1 at Pier 21.	2
407	Span 22, diaphragm, beam B1 at Pier 21.	1
		2

MISSING GUARDRAIL BOLTS

Actual location & bolt size to be determined in the field. See Detail A.

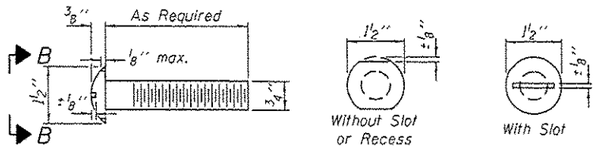
Span	Member	Location	Total Missing
4	S. Rail	17' West of P3.	1
5	S. Rail	18' West of P4.	1
6	S. Rail	40' East of P6.	2
8	S. Rail	1' East of P8.	1
9	N. Rail	10' & 20' West of P.P. 4.	2
9	S. Rail	3' West of P.P. 4.	2
9	N. Rail	9' East of P.P. 5.	1
9	S. Rail	3' East of P.P. 8.	1
9	N. Rail	3' West of P.P. 10.	1
9	S. Rail	3' East of P.P. 11.	1
9	S. Rail	15' East of P.P. 12.	1
9	S. Rail	3' East of P.P. 13.	1
9	S. Rail	10' East of P.P. 15.	2
9	S. Rail	3' East of P.P. 15.	2
10	S. Rail	3' East of P.P. 13'.	2
10	N. Rail	3' West of P.P. 13'.	1
10	S. Rail	4' West of P.P. 13'.	2
10	S. Rail	10' West of P.P. 13'.	2
10	S. Rail	10' West of P.P. 10'.	2
10	S. Rail	3' West of P.P. 9'.	2
10	S. Rail	4' East of P.P. 8'.	1
10	S. Rail	3' East of P.P. 7'.	1
10	S. Rail	3' West of P.P. 7'.	2
10	S. Rail	10' West of P.P. 7'.	2
10	S. Rail	10' West of P.P. 6'.	1
10	S. Rail	3' East of P.P. 5'.	1
10	S. Rail	3' West of P.P. 5'.	2
10	S. Rail	16' East of P.P. 3'.	1
10	S. Rail	10' East of P.P. 3'.	4
10	S. Rail	3' East of P.P. 3'.	1
10	S. Rail	3' West of P.P. 1'.	1
11	N. Rail	3' West of P10.	2
14	S. Rail	32' West of P13.	1
14	N. Rail	42' East of P14.	2
16	S. Rail	21' East of P16.	1
16	N. Rail	10' East of P16.	1
16	N. Rail	2' East of P16.	2
17	N. Rail	2' West of P16.	2
19	S. Rail	45' East of P19.	1
19	S. Rail	15' East of P19.	1
20	S. Rail	30' West of P19.	1
25	S. Rail	3' West of P24.	1
26	S. Rail	10' East of P27.	2
27	S. Rail	10' East of P28.	1
31	S. Rail	19' East of P31.	1
31	S. Rail	3' East of P31.	2
32	S. Rail	3' West of P31.	2
32	S. Rail	10' West of P31.	2
32	S. Rail	19' East of P32.	1
32	S. Rail	3' West of P32.	1
36	N. Rail	10' West of P35.	2
37	S. Rail	17' East of West Abut.	3

NOTE:
All Item Nos. are based on the 2015 NBIS Inspection Report.

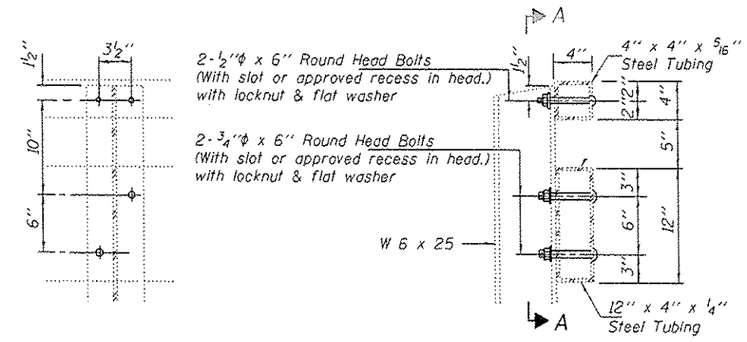
BEAM REPAIRS

(Spans 1-3 & 22-37)

Item No.	Location	Sheet No.
426	Span 2, Beam B1. Strengthen beam.	20
495	Span 22, Beam B1. Strengthen beam.	24
408	Span 23, Beam B1. Strengthen beam.	21
150	Span 24, Beam B1. Strengthen beam end.	22
409	Span 24, Beam B1. Strengthen beam.	21
411	Span 25, Beam B1. Strengthen beam.	21
297	Span 26, Beam B5. Strengthen beam.	22
499	Span 26, Beam B1. Strengthen beam.	20
504	Span 27, Beam B1. Strengthen beam.	24
414	Span 28, Beam B1. Strengthen beam.	23
417	Span 29, Beam B1. Strengthen beam.	23
418	Span 29, Beam B1. Strengthen beam.	24
720	Span 29, Beam B5. Strengthen beam.	20
419	Span 30, Beam B1. Strengthen beam.	24
99	Span 31, Beam B1. Strengthen beam.	22
420	Span 31, Beam B5. Strengthen beam.	20
301	Span 32, Beam B1. Strengthen beam.	20
302	Span 32, Beam B5. Strengthen beam.	22
514	Span 33, Beam B1. Strengthen beam.	23
515	Span 33, Beam B5. Strengthen beam.	22
421	Span 34, Beam B1. Strengthen beam.	24
422	Span 34, Beam B5. Strengthen beam.	23
303	Span 35, Beam B1. Strengthen beam.	23
304	Span 35, Beam B5. Strengthen beam.	20
305	Span 36, Beam B5. Strengthen beam.	24
306	Span 37, Beam B5. Strengthen beam.	20



VIEW B-B
ROUND HEAD BOLT

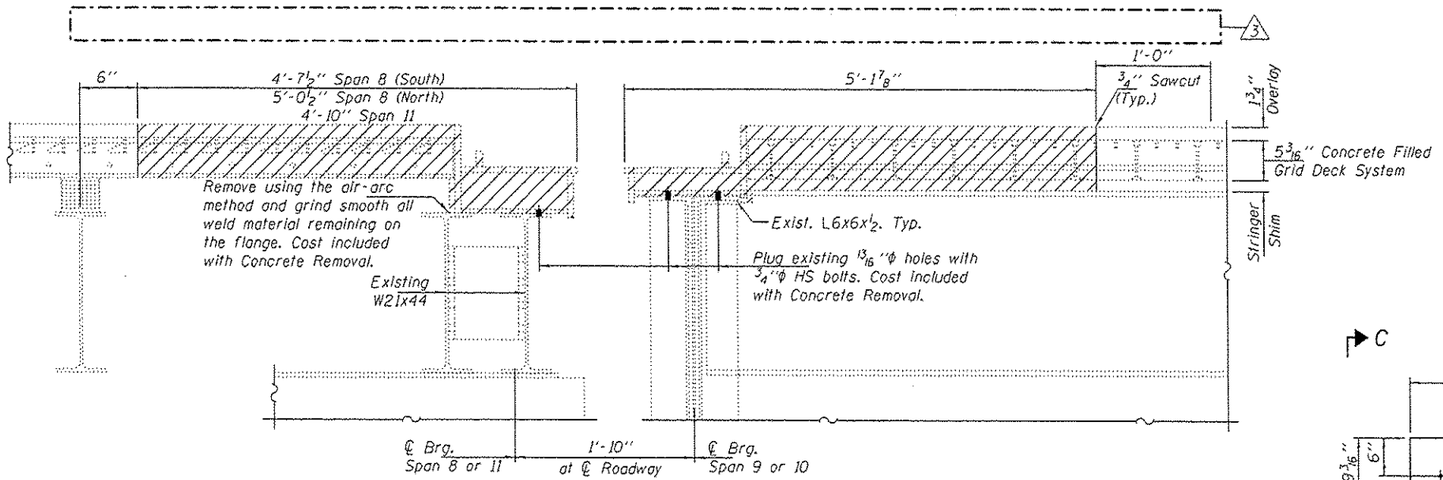


SECTION A-A ELEVATION

DETAIL A

Bolts and nuts shall conform to the requirements of ASTM designation A 307.
All bolts, nuts, washers and lock washers shall be galvanized according to AASHTO M 232.

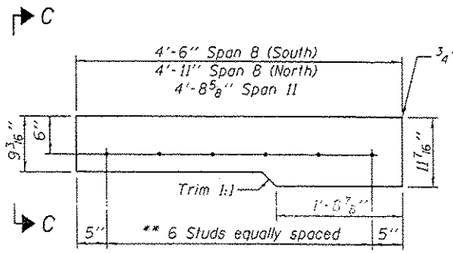
DESIGNED VHV	PASSED	DATE OCTOBER 1, 2015	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCOPE OF WORK SN 001-0019	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED DAB	A. Carl Ruyer	REVISED 3 12/1/2015 VHV			63	112BH-T	ADAMS	45	7
DRAWN baliva	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 4 OF 24 SHEETS			CONTRACT NO. 72H65		
CHECKED VHV DAB							ILLINOIS FED. AID PROJECT		



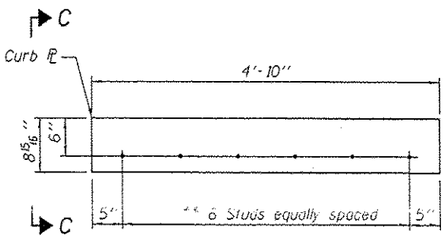
SECTION A-A

Hatched areas indicate Concrete Removal

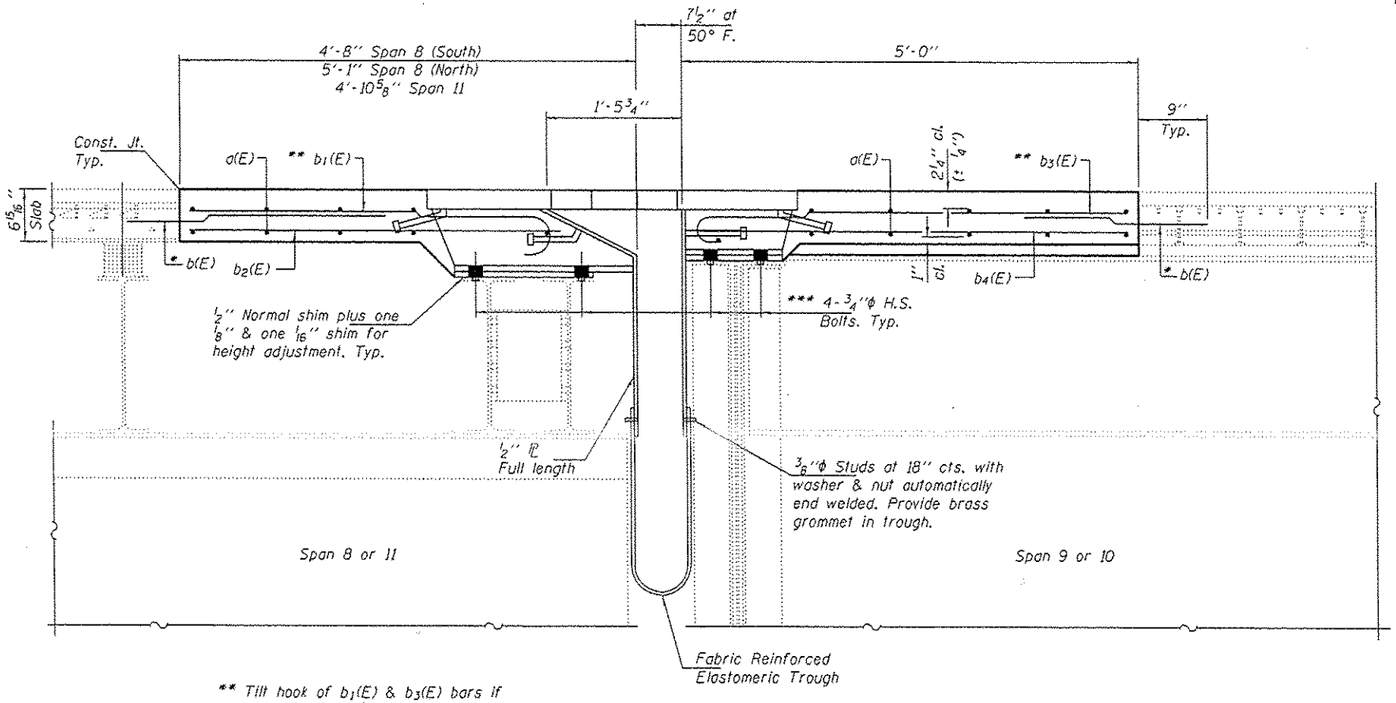
Note:
The contractor must ensure that no damage is done to the existing grid to remain and the supporting stringers during removal operations. Any damage shall be repaired, to the satisfaction of the engineer, at the contractor's expense.



CURB PLATE A



CURB PLATE B

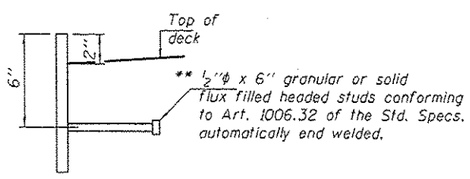


** Tilt hook of $b_1(E)$ & $b_3(E)$ bars if necessary for 1½" min. cl.

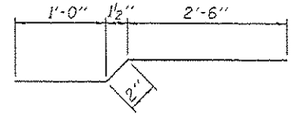
SECTION B-B

*** With nut & 3" x 3" x ⅜" square washer at each bolt. 2"ϕ holes in stool flange. Field drill ⅞"ϕ holes in existing beam flanges.

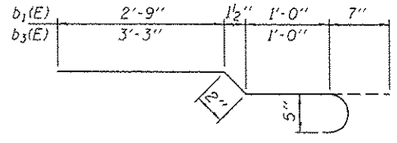
* Epoxy grout b(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.



VIEW C-C



BAR b(E)

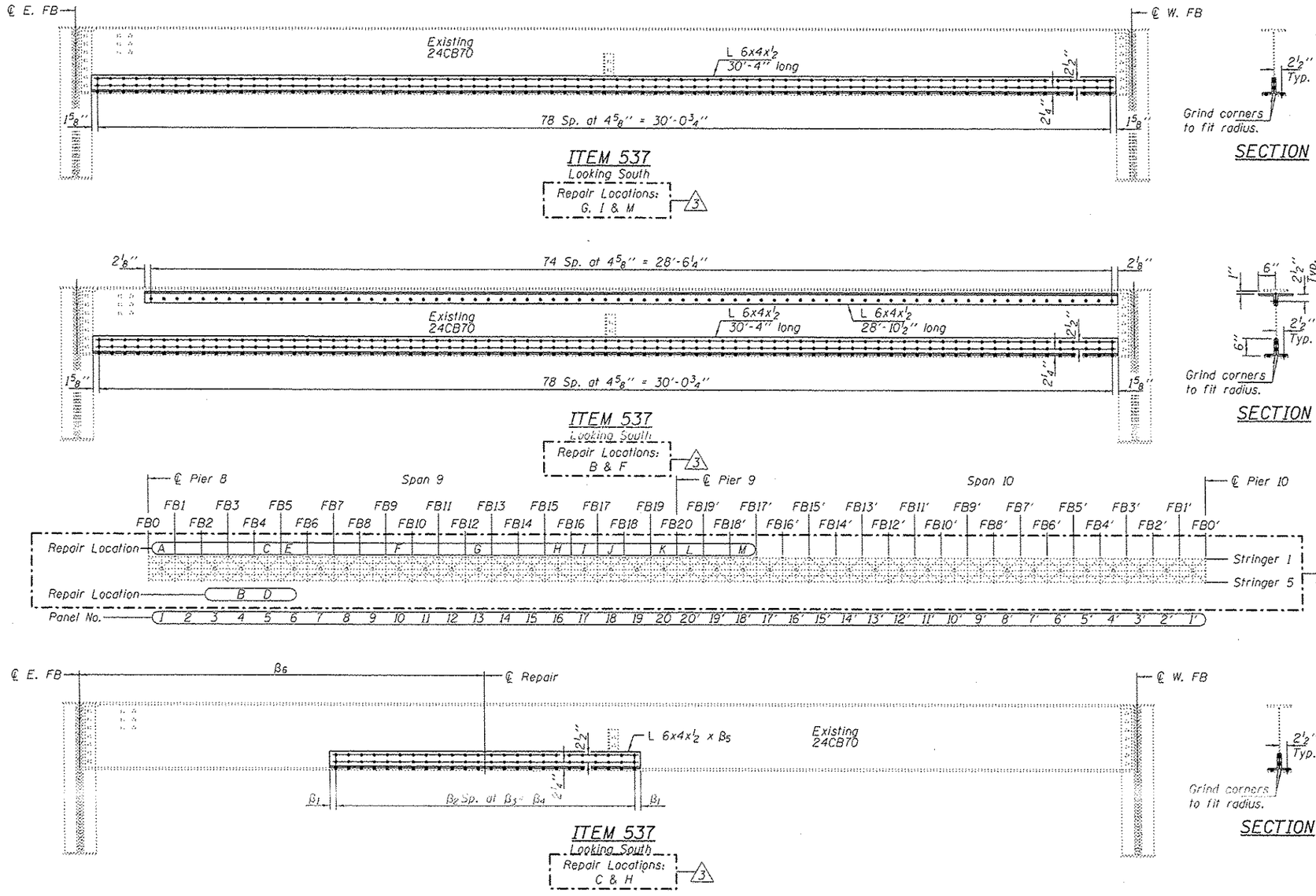


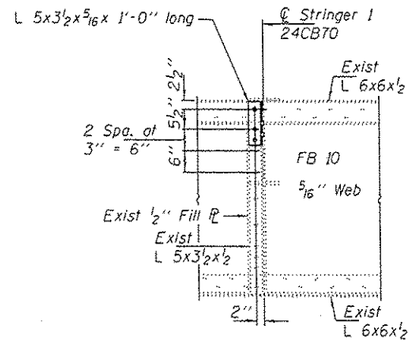
BARS $b_1(E)$ & $b_3(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	40	#5	24'-4"	
b(E)	100	#5	3'-8"	
$b_1(E)$	50	#5	4'-6"	
$b_2(E)$	50	#5	4'-0"	
$b_3(E)$	50	#5	5'-0"	
$b_4(E)$	50	#5	4'-8"	
Concrete Removal			Cu. Yd.	10.7
Concrete Superstructure			Cu. Yd.	10.7
Reinforcement Bars, Epoxy Coated			Lbs.	2350

DESIGNED ATH	PASSED	DATE OCTOBER 1, 2015	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONCRETE REMOVAL AND REPLACEMENT DETAILS SN 001-0019	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED VHV		REVISED 3 12/1/2015 VHV			63	4IZB31-T	ADAMS	45	13
DRAWN Summer/baliva	A. Carl Purvis	REVISED					CONTRACT NO. 72H65		
CHECKED ATH VHV	ACTING ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 10 OF 24 SHEETS			ILLINOIS FED. AID PROJECT		





ITEM 443
(Stringer 1, Panel 11, FB 10)

BOLT HOLE LEGEND

- ● - Holes to be shop drilled.
- ○ - Holes to be field drilled using existing holes as template.

Repair Location	L Length β5	β1	β2	β3	β4	β6
* A	11'-0"	1⅞"	27	4¾"	10'-8¼"	16'-4½"
** A	2'-0"	2"	4	5"	1'-8"	20'-4½"
C	11'-0"	1⅞"	27	4¾"	10'-8¼"	10'-0"
D	11'-0"	1⅞"	27	4¾"	10'-8¼"	20'-0"
E	4'-0"	1½"	9	5"	3'-9"	7'-6"
H	5'-0"	2½"	11	5"	4'-7"	20'-4½"
J	7'-0"	2"	16	5"	6'-8"	19'-4½"
K	4'-6"	2"	10	5"	4'-2"	19'-7½"
L	2'-6"	2½"	5	5"	2'-1"	20'-7½"

Note: All dimensions are typical except as noted.

* Bottom angles.
** Top angles.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	11630

DESIGNED	VHV
CHECKED	DAB
DRAWN	baliva
CHECKED	VHV DAB

PASSED — ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE OCTOBER 1, 2015

REVISED 3 12/1/2015 VHV

REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRINGER REPAIR DETAILS SPANS 9 & 10
SN 001-0019

SHEET NO. 19 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	112BR-T	ADAMS	45	22
		CONTRACT NO. 72H65		
		ILLINOIS FED. AID PROJECT		