

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

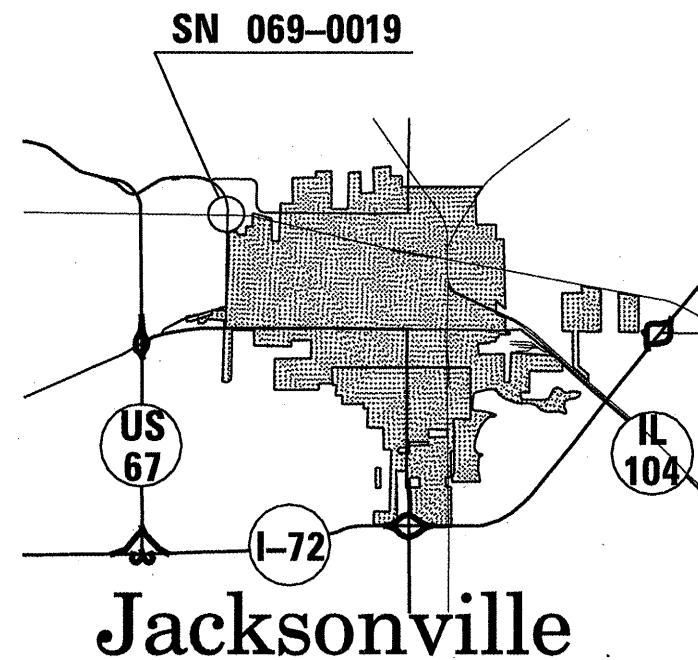
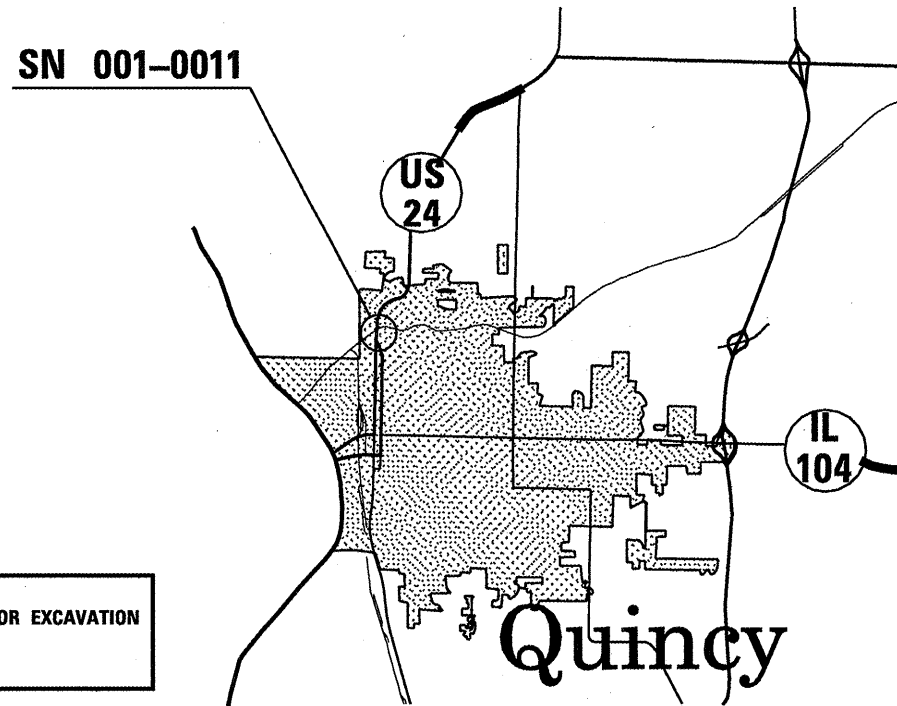
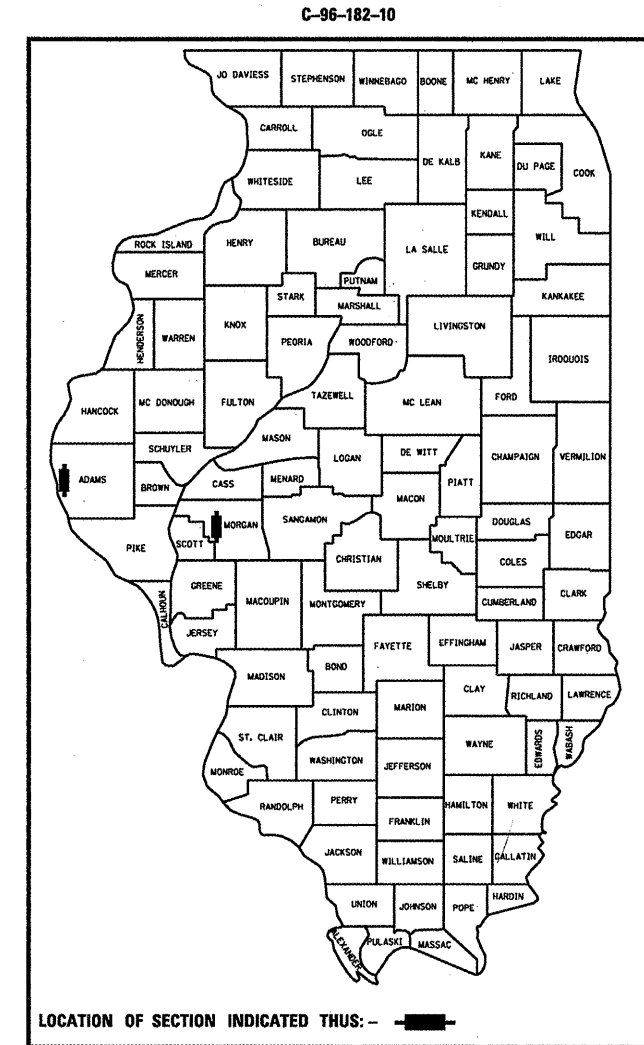
**PROPOSED
 HIGHWAY PLANS**

FAP RTE 63 (US 24) & FAP 310 (IL 104)
 SECTION D6 REHAB BDGE PAINTING 2010-1

BRIDGE PAINTING
 ADAMS & MORGAN COUNTIES
 C-96-182-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63&310	D6 BDGE PAINTING 2010-1	ADAMS,MORGAN	13	1
FED. ROAD DIST. NO. 6		ILLINOIS	CONTRACT NO. 72D51	



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

D6 BRIDGE MAINTENANCE ENGINEER -
 STEVE BERAN (217) 785-9290
 D6 BRIDGE INSPECTION ENGINEER -
 DAVE COPENBARGER (217) 785-5306

CONTRACT NO. 72D51

NET LENGTH = 574 FT. = 0.11 MILE

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED January 21, 2010
Reg. E. Dush
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 19, 2010
Scott E. Still P.E. RD
 ACTING ENGINEER OF DESIGN AND ENVIRONMENT

March 19, 2010
Christine M. Reed RD
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

INDEX OF SHEETS:

- 1 COVER SHEET
- 2 INDEX, HIGHWAY STANDARDS, & GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-10 EXISTING PLANS, SN 001-0011
- 11-13 EXISTING PLANS, SN 069-0019

STANDARDS

- 701001-02
- 701006-03
- 701201-03
- 701501-05
- 701901-01
- BLR21-8

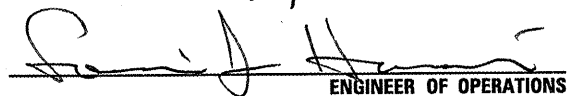
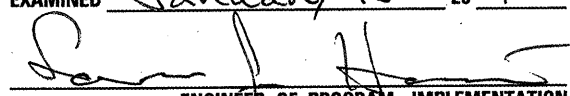
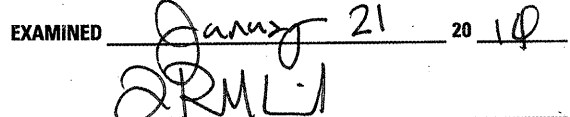
GENERAL NOTES:

STRUCTURE NO 1 - SN 001-0011 US 24 OVER CEDAR CREEK AND BURLINGTON NORTHERN RR IN QUINCY
CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED
IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES".
ALL EXISTING STEEL, EXCEPT THE SPAN OVER THE RR, SHALL BE CLEANED PER NEAR
WHITE BLAST CLEANING - SSPC-SP10. THE SPAN OVER THE RR WILL HAVE ONLY THE BOTTOM
AND OUTSIDE OF THE FASCIA BEAMS AND ALL EXISTING STEEL 5' FROM THE BEAM ENDS CLEANED AND PAINTED.
THE STEEL OVER THE RR SHALL BE CLEANED PER SSPC SP15, COMMERCIAL POWER TOOL CLEANING.
ALL EXISTING STEEL SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT
SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT SHALL BE GRAY, MUNSELL NO 5B 7/1.

STRUCTURE NO 2 - SN 069-0019 IL 104 OVER THE NORFOLK SOUTHERN RAILROAD NORTHWEST OF JACKSONVILLE.
CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED
IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES".
ALL EXISTING STEEL 5' FROM THE ABUTMENTS AND THE BOTTOM AND EXTERIOR OF THE FASCIA BEAMS
SHALL BE CLEANED PER SSPC SP15, COMMERCIAL POWER TOOL CLEANING.
ALL EXISTING STEEL CLEANED SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT
SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT SHALL BE GRAY, MUNSELL NO 5B 7/1.

THE SSPC-QP-1 AND SSPC-QP2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED
FOR THESE BRIDGES.

THE USE OF AIR MONITORS WILL BE REQUIRED AT STRUCTURE NUMBER 1.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6	
EXAMINED	January 15 20 10  ENGINEER OF OPERATIONS
EXAMINED	January 15 20 10  ENGINEER OF PROGRAM IMPLEMENTATION
EXAMINED	January 21 20 10  ENGINEER OF PROGRAM DEVELOPMENT

INDEX, STANDARDS, & NOTES
FAP 63 (US 24) & 310 (IL 104)
D6REHAB BDGE PAINTING 2010-1
ADAMS & MORGAN COUNTIES

SUMMARY OF QUANTITIES

URBAN

CODE NO.	ITEM	UNIT	100% STATE	100% STATE	100% STATE
			US 24	IL 104	SFTY-2A
			ADAMS QTY	MORGAN QTY	TOTAL QTY
50600600	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1		1
50600700	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM		1	1
50606401	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1		1
50606402	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM		1	1
67100100	MOBILIZATION	L SUM	0.5	0.5	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM		1	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1		1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1		1
20048665	RAILROAD PROTECTION LIABILITY INSURANCE	L SUM	1		1

QUANTITIES
 FAP 63 (US 24) & 310 (IL 104)
 D6REHAB BDGE PAINTING 2010-1
 ADAMS & MORGAN COUNTIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 63	ADAMS	211	103
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJ.	
(78-3VHBR)			

CONTRACT: 72D51
SHEET 4 OF 13

Bench Marks: 3342-3 - Chiseled ∇ on top inside corner of west walkway
 S.W. cor. of structure 001-0011, Elev. 174.413
 3342-4 - Chiseled ∇ on top inside corner of walkway
 N.E. cor. of structure 001-0011, Elev. 170.213
 Existing Structure: No. 001-0011, Built in 1968 as F.A. Rte. 36, Sec. 78-3VHBR
 The Superstructure consists of a 177.8 mm P.C. Deck, 131.102m long
 x 9.235m wide supported on 2 main spans of continuous welded plate
 girders and 3 spans of wide flange beams, 2 of which are continuous.
 Beams are supported by 4 hammerhead piers and 2 pile bent abutments.
 Traffic to be maintained during the rehabilitation by stage construction.

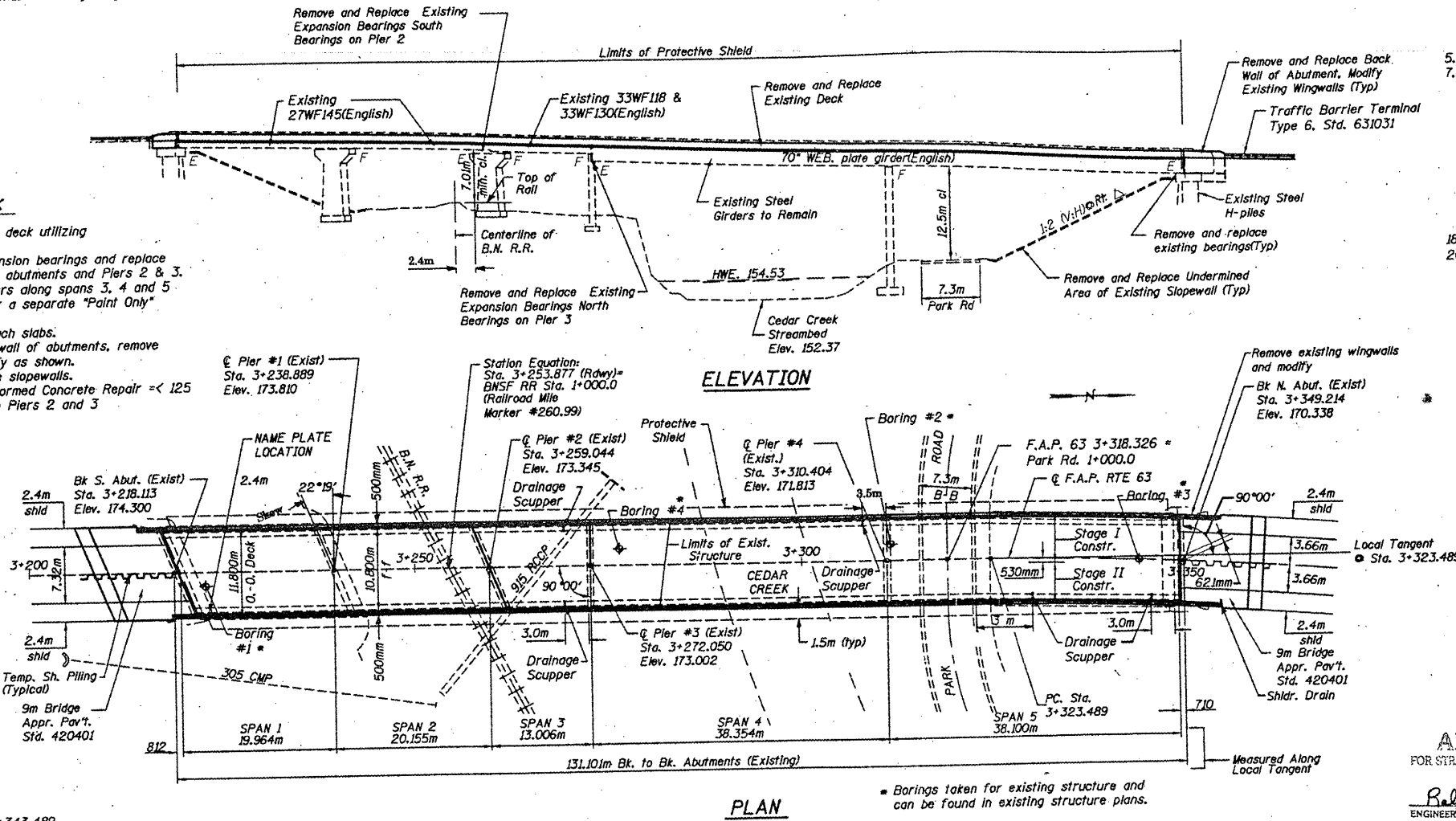
Salvage: None

Index of Bridge Plans

1. General Plan and Elevation
2. General Notes, Total Bill of Materials, Slopewall Repair Detail
3. Stage Construction Details
4. Abutment Removal Details
- 5.-6. Top of Slab Elevations-Spans 1, 2 and 3
- 7.-8. Top of Slab Elevations-Spans 4 and 5
9. Deck Plan and Cross Section-Spans 1, 2 and 3
10. Deck Plan and Cross Section-Spans 4 and 5
11. Superstructure Details
12. Expansion Joint Details
13. Continuous Seal Type Neoprene Expansion Joints
14. Structural Steel Details-Spans 1, 2 and 3
15. Structural Steel Details-Spans 4 and 5
16. Beam Moment Tables and Structural Details
17. Type I Elastomeric Expansion Bearings
- 18.-19. South Abutment Modification details
- 20.-21. North Abutment Modification details
22. Pier #2 Repair and Modification Details
23. Pier #3 Repair and Modification Details
24. Anchor Bolt Details for Bearings
25. Bar Splicer Assembly Details
26. Steel Drainage Scupper
27. Alternate - Cast Iron Drainage Scupper
28. Temporary Concrete Barrier
29. Temporary Bridge Rail

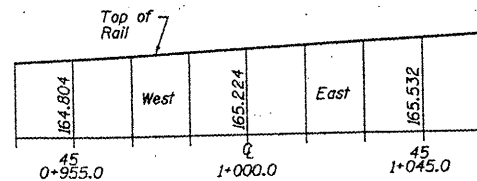
Scope of Work

1. Remove and replace existing deck utilizing stage construction.
2. Remove existing steel expansion bearings and replace with elastomeric bearings at abutments and Piers 2 & 3.
3. Install stud Shear connectors along spans 3, 4 and 5
4. Cleaning and Painting under a separate "Paint Only" contract.
5. Remove and replace approach slabs.
6. Remove and Replace back wall of abutments, remove existing wingwalls and modify as shown.
7. Repair undermined concrete slopewalls.
8. Repair substructure with Formed Concrete Repair = < 125 and Epoxy Crack Sealing on Piers 2 and 3

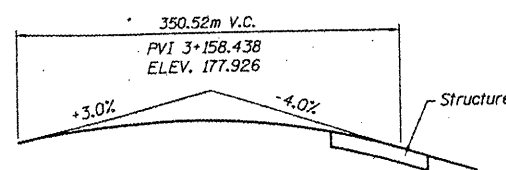


CURVE DATA

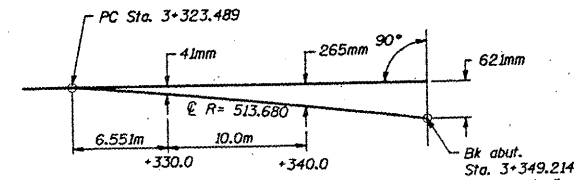
PI Sta. 3+618.759
 $\Delta = 59^\circ 46' 54''$ (RT)
 T = 295.270m
 R = 513.680m
 L = 535.967m
 E = 78.816m
 PC Sta. 3+323.489
 PT Sta. 3+859.456
 SE = 5.7%
 SE Attained Sta. 3+283.489 to Sta. 3+343.489
 Vertical Transition @
 0 to 40mm Sta. 3+283.489
 to Sta. 3+343.489



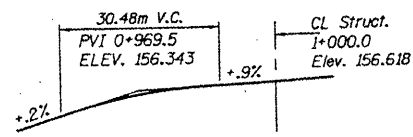
PROFILE GRADE - B.N. R.R.



PROFILE GRADE - FAP 63



LOCAL TANGENT OFFSET SKETCH



PROFILE GRADE - PARK RD.

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient(A) = .04g
 Site Coefficient (S) = 1.0

DESIGN SPECIFICATIONS

1996 AASHTO with 1997 & 1998 Interim

LOADING MS18

No allowance for future wearing surface

DESIGN STRESSES

NEW CONSTRUCTION

$f'_c = 24$ MPa
 $f_y = 400$ MPa (REINF)
 $f_y = 250$ MPa (Structural Steel M270 M, Grade 250)

EXISTING STRUCTURE

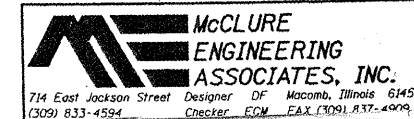
$f_y = 250$ MPa Struct. Steel

STATION 3+283.664
 REBUILT 200_ BY
 STATE OF ILLINOIS
 F.A.P. RTE 63 US RTE 24
 SECTION (78-3VHBR)
 PROJECT NO. F-63 (56)
 LOADING MS18
 STR. NO. 001-0011

NAME PLATE

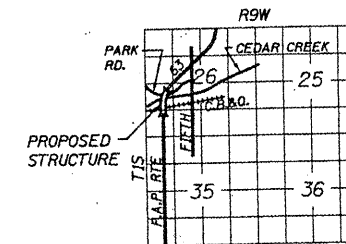
See Std. 515001

Existing nameplate to be cleaned
 and relocated next to new
 nameplate. Cost included with
 nameplate.



APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

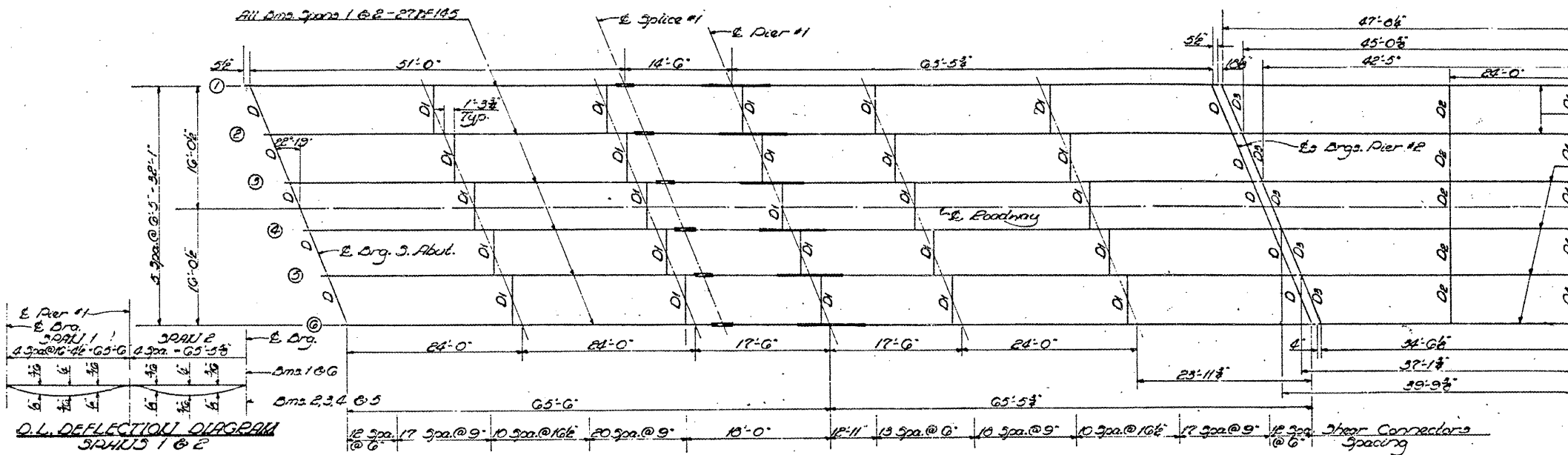
Signature: *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES



LOCATION PLAN

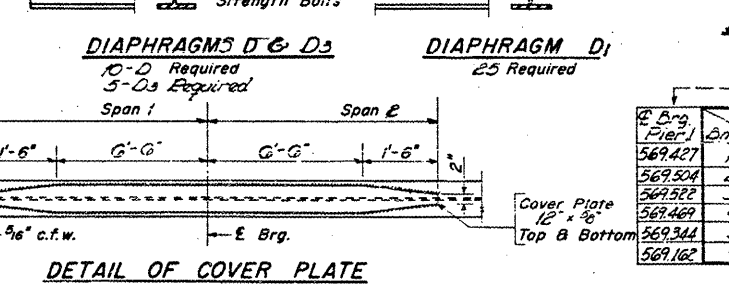
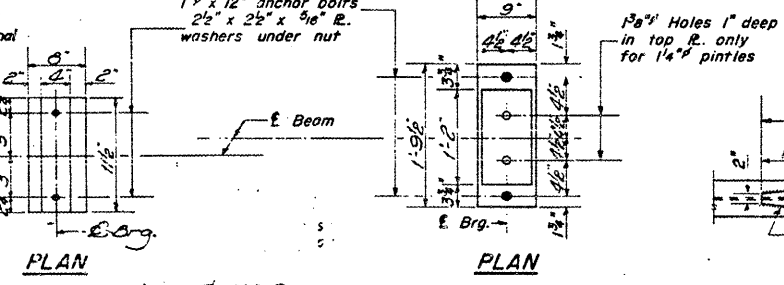
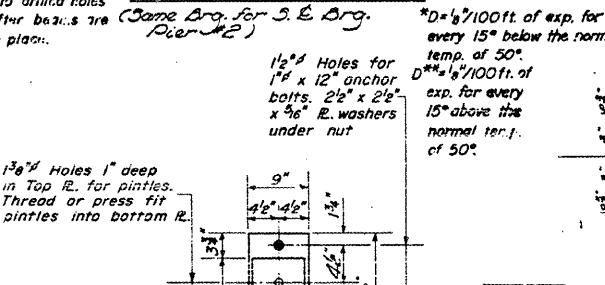
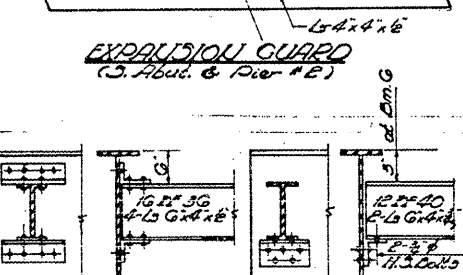
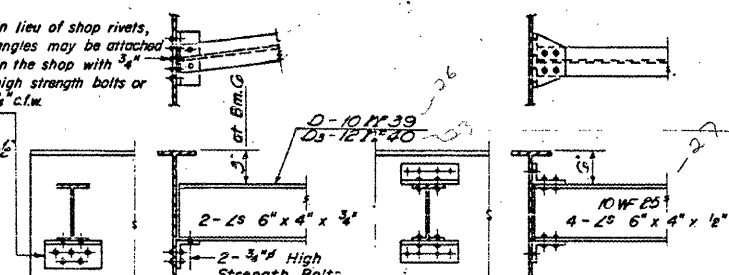
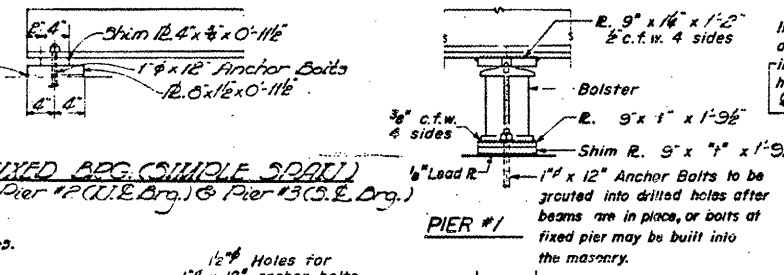
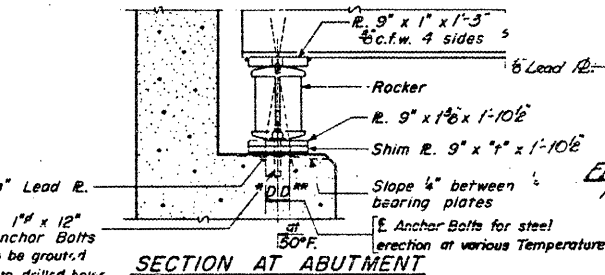
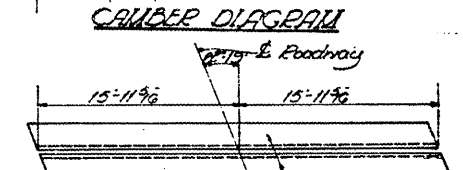
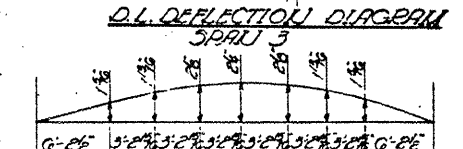
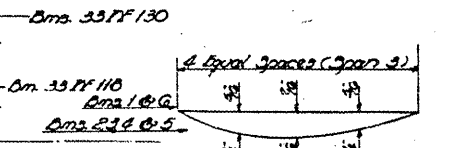
EXISTING PLANS, SN 001-0011
 FAP 63 (US 24) & 310 (IL 104)
 D6REHAB BDGE PAINTING 2010-1
 ADAMS & MORGAN COUNTIES

FOR INFORMATION ONLY

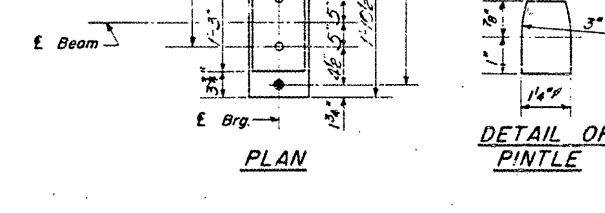


BILL OF MATERIAL

Item	Unit	Quantity
Structural Steel	Lbs.	170,940

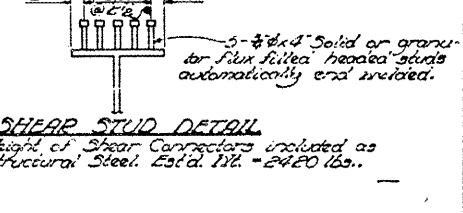
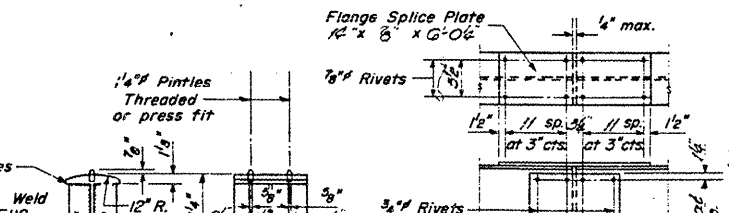


Loc.	Loc. E. Drg.	E. Splice	E. Drg.	S.E. Drg.	S.E. Drg.	S.E. Drg.	S.E. Drg.	S.E. Drg.
569427	1	570700	569700	569700	569700	569700	569700	569700
569504	2	570000	569000	569000	569000	569000	569000	569000
569522	3	570000	569000	569000	569000	569000	569000	569000
569469	4	570000	569000	569000	569000	569000	569000	569000
569344	5	570000	569000	569000	569000	569000	569000	569000
569162	6	570000	569000	569000	569000	569000	569000	569000

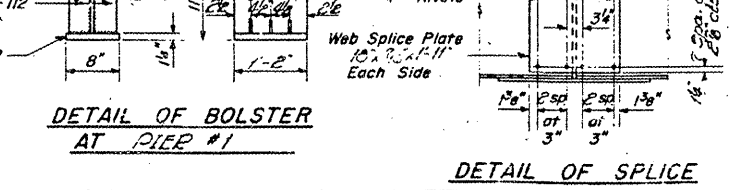
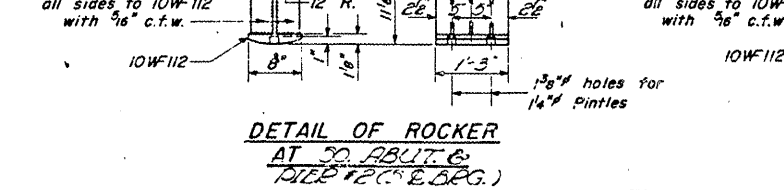


Shim R. Dimensions

Loc.	Dim.	1	2	3	4	5	6
Abut.		0	3/8	3/8	0	0	0
Pier #1		0	3/8	0	3/8	0	0
S.E. Drg. Pier #2		0	3/8	0	3/8	0	0



DESIGNED *Bahony Farski*
CHECKED *R.A.H.*
DRAWN *R. W. A. Sausman Jr.*
APPROVED *[Signature]*

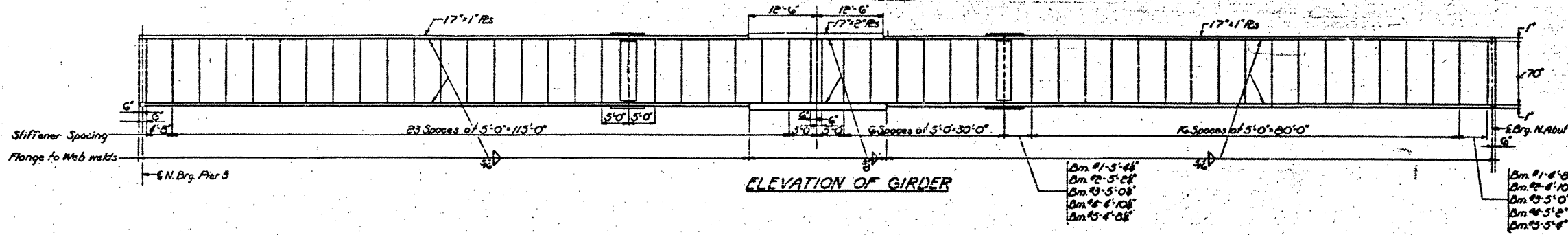


SPANS 1, 2 & 3
STRUCTURAL STEEL
E.A.P. 36 OVER CEDAR CREEK
& C.B. & G. R.R.
SEC. 78-3VHB
ADAMS COUNTY
STA. 199 + 36.00

I-2-C 7-2-62 Rev 11-9-62 Rev 9-15-63 Rev 12-10-63

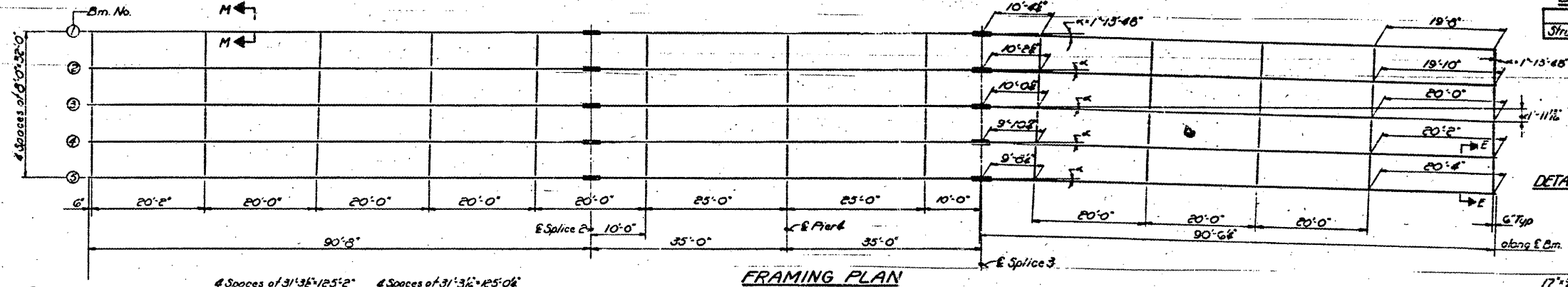
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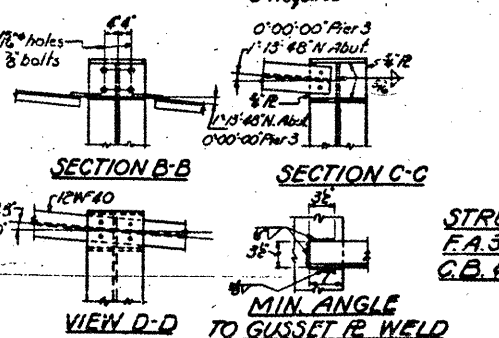
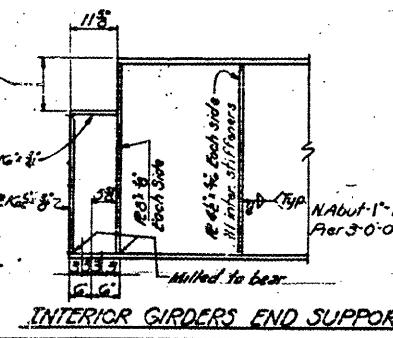
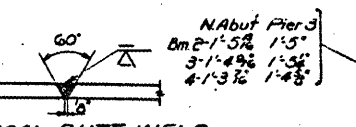
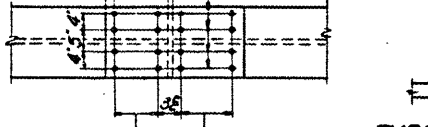
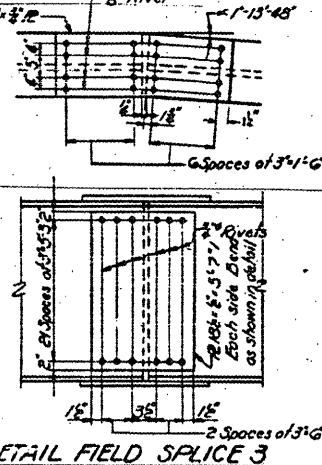
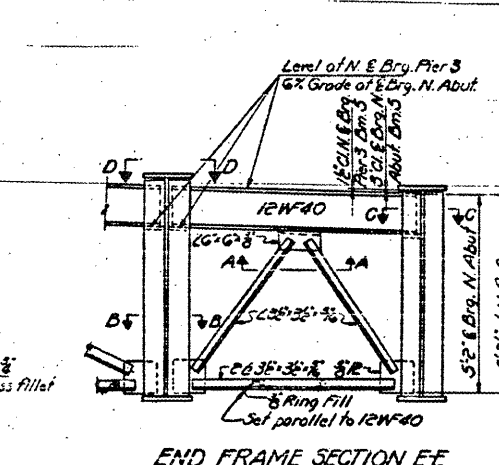
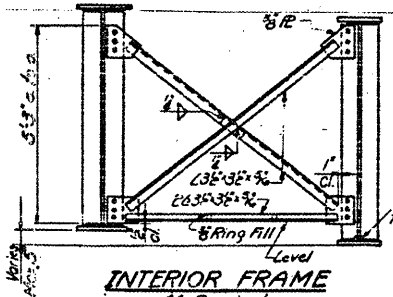
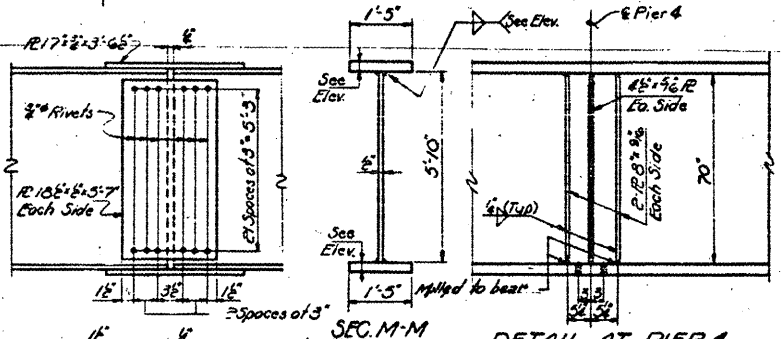
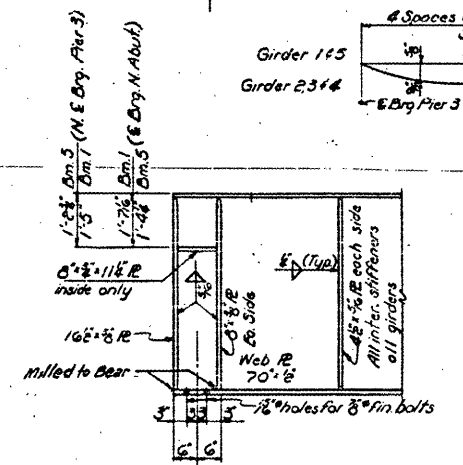
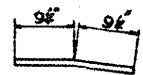


BILL OF MATERIAL

Item	Unit	Quantity
Structural Steel	Lbs	358,060

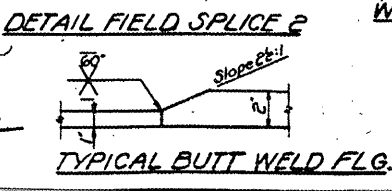


DETAIL WEB SPLICE PLATE



DESIGNED *Robbery Jurski*
CHECKED *A. Tahl. m.*
DRAWN *B. Jurski*
CHECKED *B. J. A.V.M.*

EXAMINED *H. B. ...*
PERMITS *...*
APPROVED *...*



TOP OF GIRDER ELEVATIONS

Girder	Pier 3	Splice 2	Pier 4	Splice 3	N. Abut
1	566.645	564.241	563.249	562.257	561.265
2	566.645	564.241	563.249	562.257	561.265
3	566.645	564.241	563.249	562.257	561.265
4	566.645	564.241	563.249	562.257	561.265
5	566.645	564.241	563.249	562.257	561.265

STRUCTURAL STEEL SPANS 415
F.A.36 OVER CEDAR CREEK &
G.B.F.O.R.R. SEC. 78-3VNB
ADAMS COUNTY
STA. 199+36+00

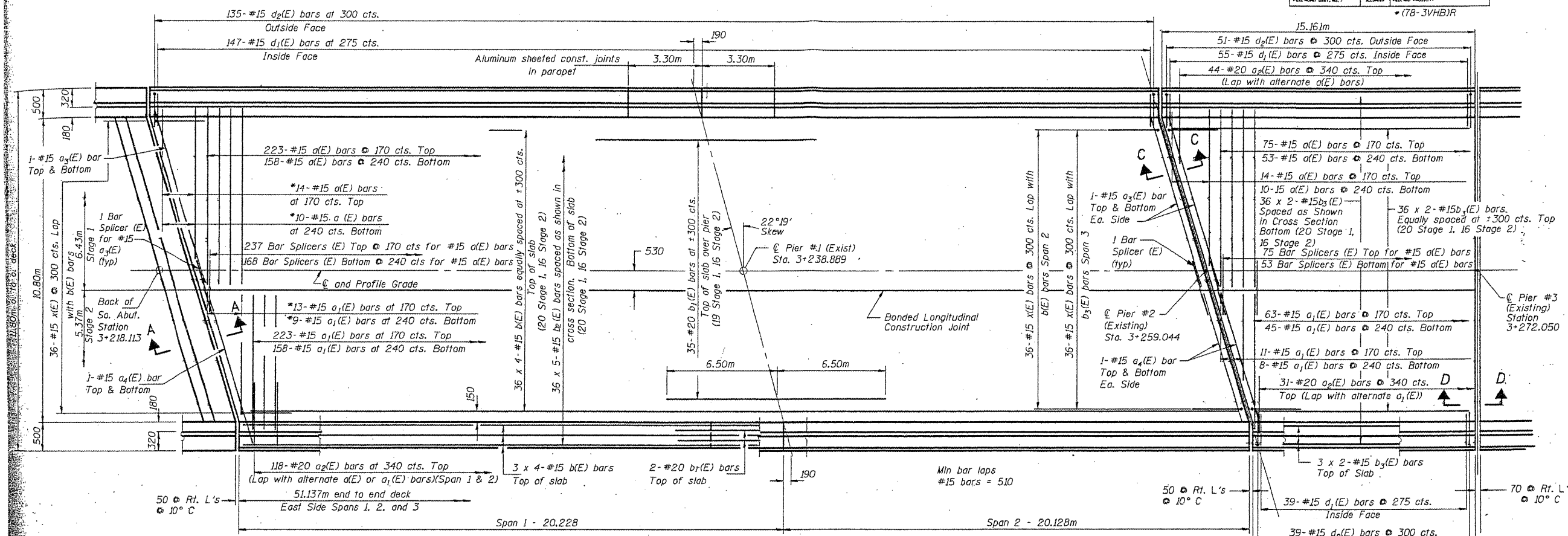
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DEPARTMENT OF TRANSPORTATION

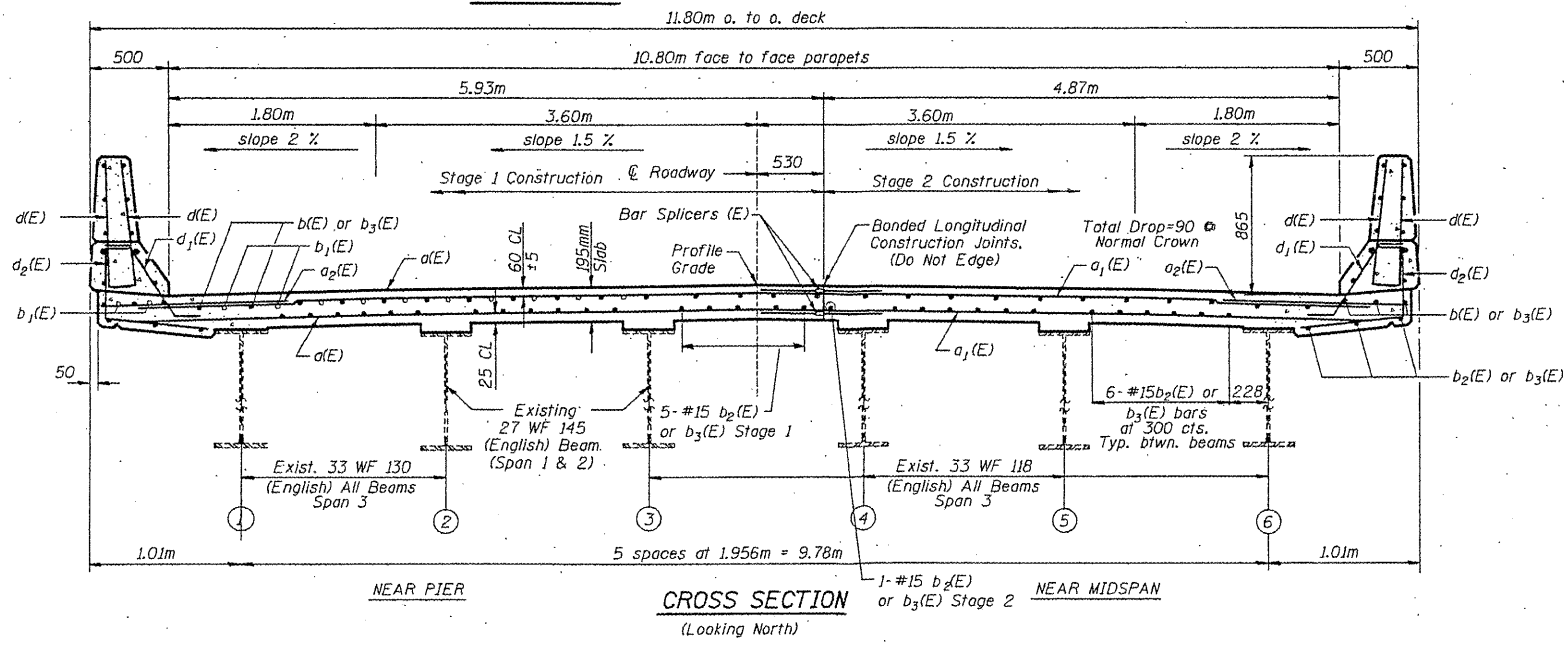
ROUTE NO.	SECTION	COUNTY	POST MILE	SHEET NO.
63	*	ADAMS	211	111
29 SHEETS				
* (78-3VHB)R				

CONTRACT: 72D51
SHEET 7 OF 13



HALF PLAN

Order a₁(E) & a₃(E) bars full length. Cut to fit skew and use remainder of bars in opposite end (Spans 1 & 2).



Notes: See Sheet #11 of 29 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet #11 of 29 for parapet reinforcement.
All dimensions are in millimeters (mm) except as noted.
See Sheet #12 of 29 for Sections A-A, C-C AND D-D
See Sheet #1 of 29 for drainage scupper locations
Cut reinforcement to clear drainage scuppers

DECK PLAN AND CROSS SECTION
SPANS 1,2 AND 3
F.A.P. RTE 63 US RTE 24/N. 3RD ST.
OVER CEDAR CREEK
B. N. RAILROAD AND PARK ROAD
SECTION (78-3VHB)R
ADAMS COUNTY
STA. 3+283.664
STRUCTURE NO. 001-0011

DESIGNED	AG
CHECKED	DAF
DRAWN	BJB
CHECKED	ECM

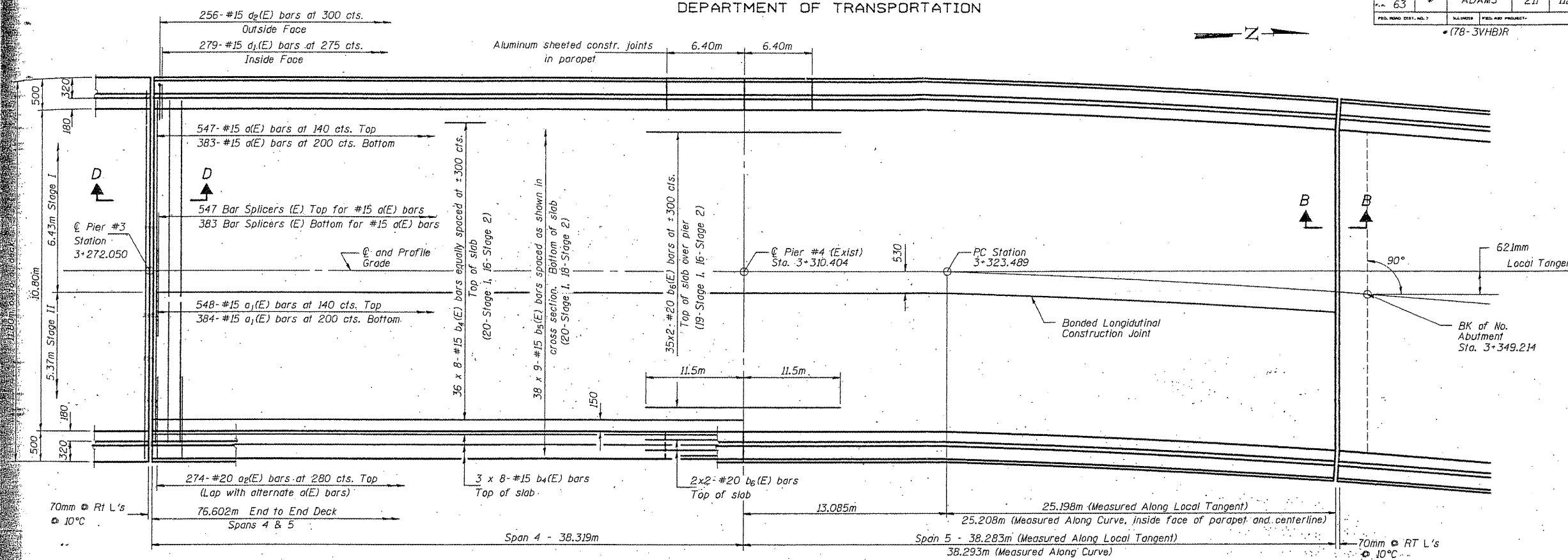
FOR INFORMATION ONLY

EXISTING PLANS, SN 001-0011
FAP 63 (US 24) & 310 (IL 104)
D6REHAB BDGE PAINTING 2010-1
ADAMS & MORGAN COUNTIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

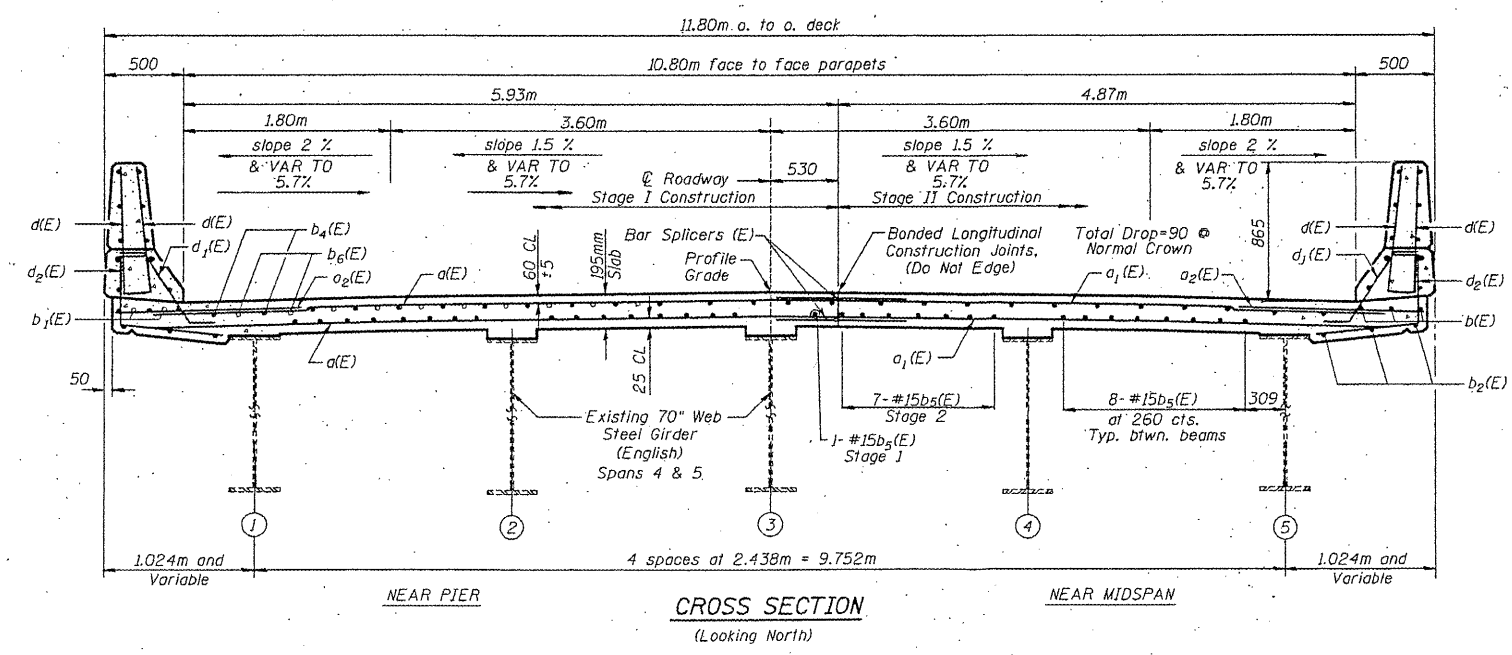
ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
63	*	ADAMS	211	112
FED. PROJ. DIST. NO. 7				
FED. PROJ. NO. PROJECT				
*(78-3VHB)R				

CONTRACT: 72D51
SHEET 8 OF 13



HALF PLAN

Min. Bar Laps
#15 bars = 510



CROSS SECTION
(Looking North)

Notes: See Sheet #11 of 29 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet #11 of 29 for parapet reinforcement.
All dimensions are in millimeters (mm) except as noted.
See Sheet #12 of 29 for Sections B-B and D-D.
See Sheet #1 of 29 for drainage sump locations. Cut reinforcement to clear drainage scupper.

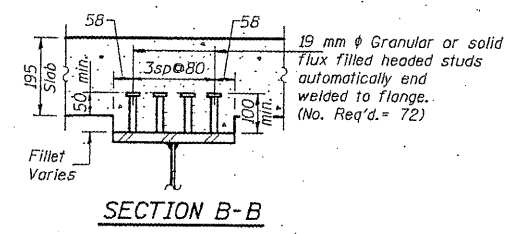
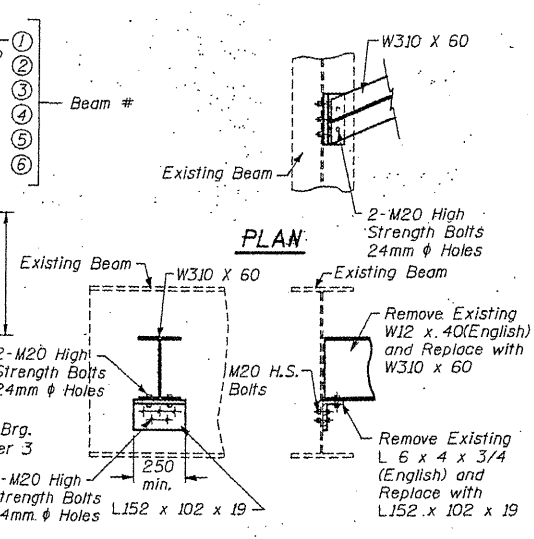
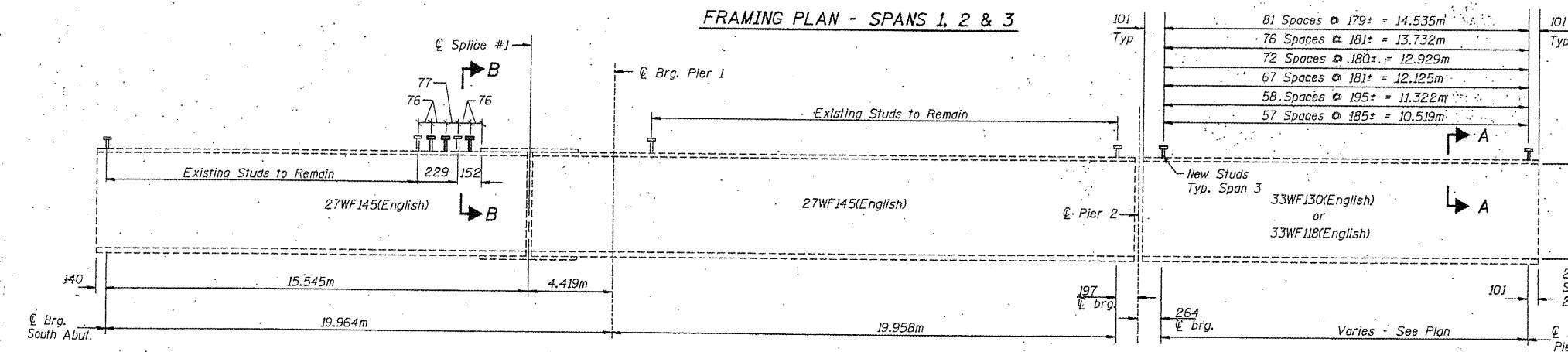
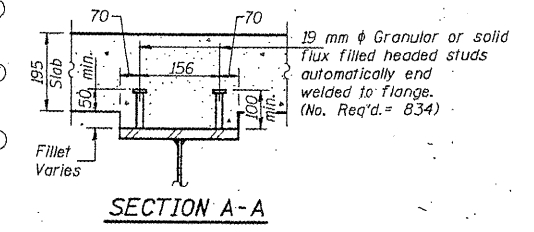
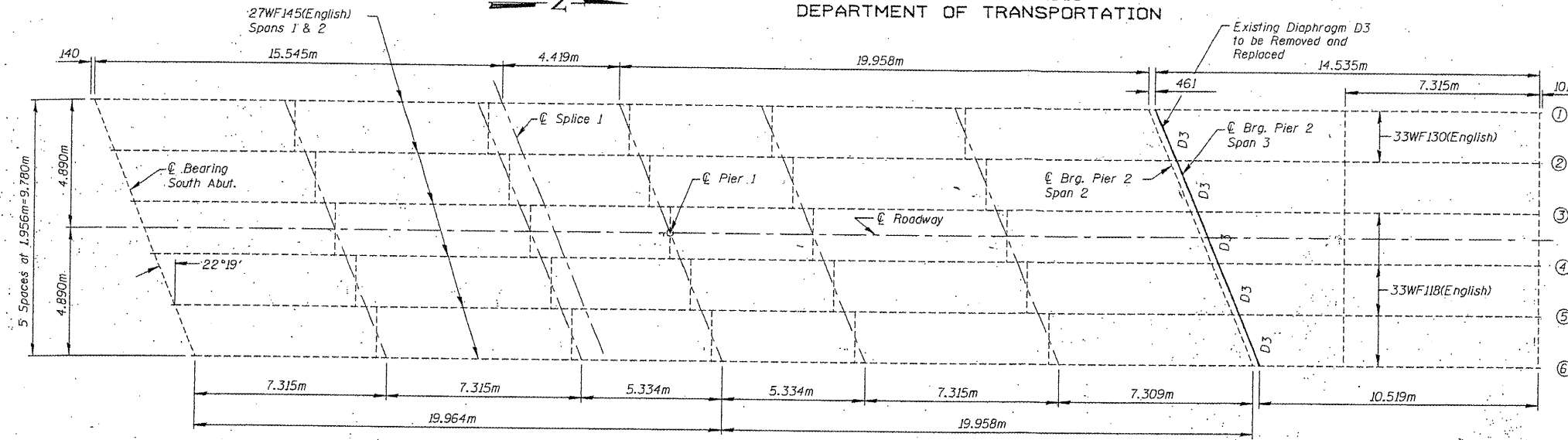
DECK PLAN AND CROSS SECTION
SPANS 4 AND 5
F.A.P. RTE 63 US RTE 24/N. 3RD ST.
OVER CEDAR CREEK
B. N. RAILROAD AND PARK ROAD
SECTION (78-3VHB)R
ADAMS COUNTY
STA. 3+283.664
STRUCTURE NO. 001-0011

DESIGNED	AG
CHECKED	DAF
DRAWN	BJB
CHECKED	ECM

FOR INFORMATION ONLY

EXISTING PLANS, SN 001-0011
FAP 63 (US 24) & 310 (IL 104)
D6REHAB BDGE PAINTING 2010-1
ADAMS & MORGAN COUNTIES

PROJECT NO.	DISTRICT	COUNTY	SHEET NO.	TOTAL SHEETS
63	*	ADAMS	211	116
F.A.P. DIST. NO. 1		ILLINOIS	FED. AID PROJECT NO.	
* (78-3VHB)R				



NOTES:

- Replace Stud Shear Connectors damaged during removal of existing concrete deck. Cost to be included in the contract unit price for Removal of Existing Concrete Deck.
- The cost for removal of existing structural steel to be included in the contract unit price for F & E Structural Steel.
- Use the existing holes on the web of the existing beam to field drill holes in the new angles.
- Cost of field drilling is included with the cost of F & E Structural Steel.

Item	Unit	Total
F & E Structural Steel	kg	705

DESIGNED	AG
CHECKED	DAF
DRAWN	BJB
CHECKED	ECM

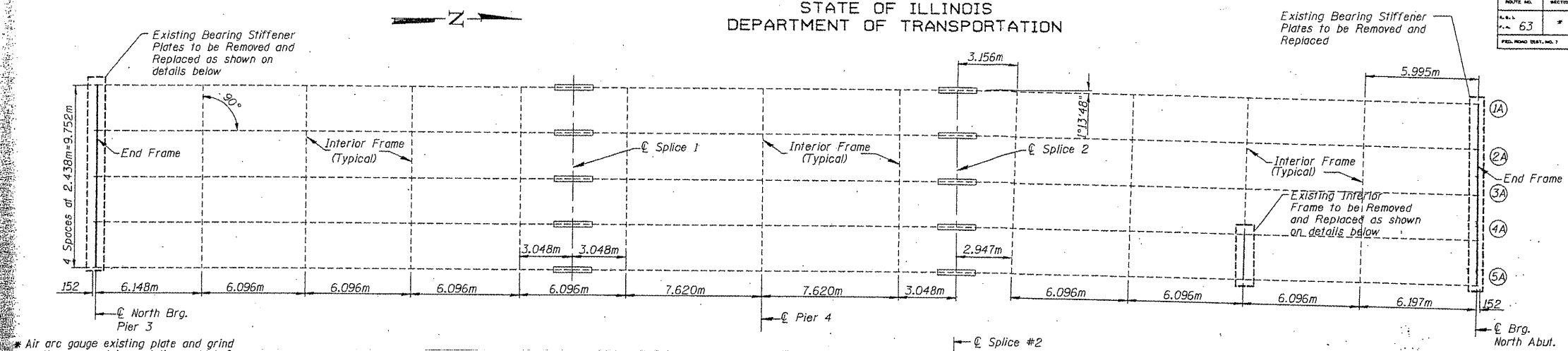
STRUCTURAL STEEL DETAILS
SPANS 1, 2, AND 3
F.A.P. RTE 63 US RTE 24/N. 3RD ST.
OVER CEDAR CREEK
B. N. RAILROAD AND PARK ROAD
SECTION (78-3VHB)R
ADAMS COUNTY
STA. 3+283.664
STRUCTURE NO. 001-0011

FOR INFORMATION ONLY

EXISTING PLANS, SN 001-0011
FAP 63 (US 24) & 310 (IL 104)
D6REHAB BDGE PAINTING 2010-1
ADAMS & MORGAN COUNTIES

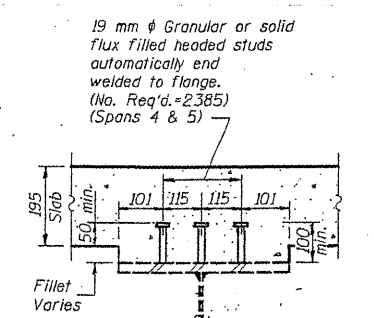
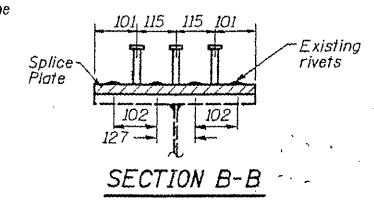
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	DISTRICT	DATE	SHEET	SHEET NO. 15 29 SHEETS
63	F	ADAMS	2/11	117	
PROJECT NO. 78-3VHB)R					

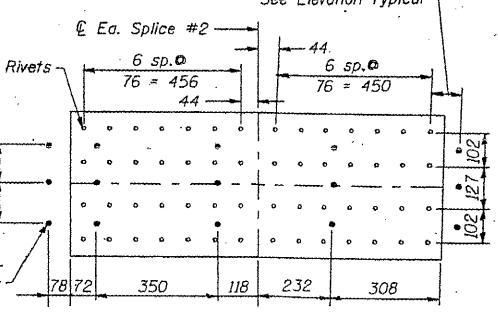
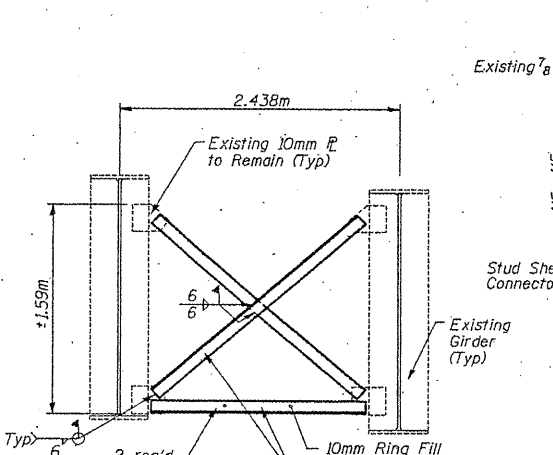
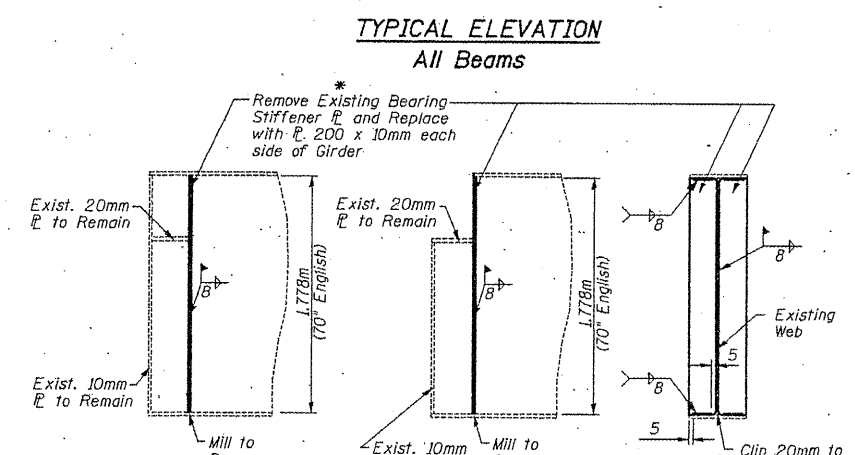
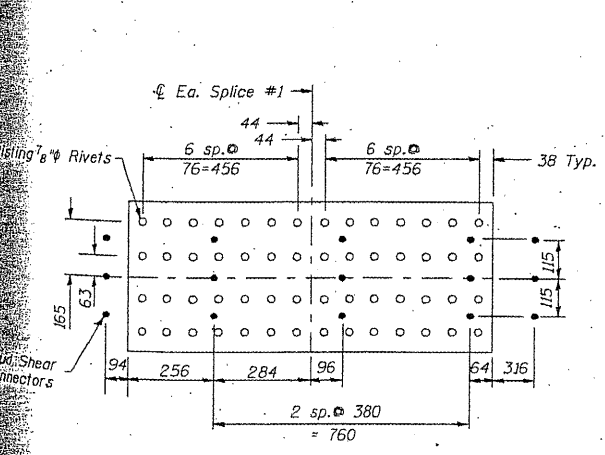
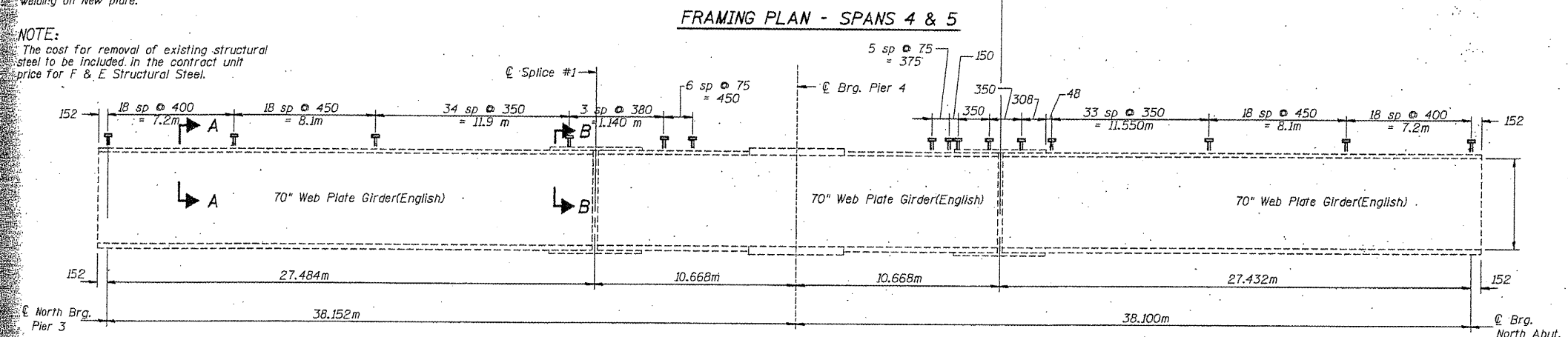


* Air arc gouge existing plate and grind smooth any remaining existing weld before welding on New plate.

NOTE:
The cost for removal of existing structural steel to be included in the contract unit price for F & E Structural Steel.



Item	Unit	Total
F & E Structural Steel	kg	734



STUD SHEAR CONNECTORS PLAN AT SPLICES PLATE #2

STRUCTURAL STEEL DETAILS
SPANS 4 & 5
F.A.P. RTE 63 US RTE 24/N. 3RD ST.
OVER CEDAR CREEK
B. N. RAILROAD AND PARK ROAD
SECTION (78-3VHB)R
ADAMS COUNTY
STA. 3+283.664
STRUCTURE NO. 001-0011

FOR INFORMATION ONLY

EXISTING PLANS, SN 001-0011
FAP 63 (US 24) & 310 (IL 104)
D6REHAB BDGE PAINTING 2010-1
ADAMS & MORGAN COUNTIES

Bench Mark: Chiseled "□" NW handrail S.N. 069-0019 Sta. 29+196.97, 5.75 m Rt. Elev. = 195.378

Existing Structure: S.N. 069-0019 Built 1961 as F.A. Rte. 92, Sec. 69WB. Existing structure consists of 3 span reinforced conc. deck on continuous steel WF stringers supported by pile bent spill-thru abuts. and pile supported hammerhead piers. 43.891 m Bk.-Bk. abuts., 10.871 m O.-O. deck. Concrete deck to be removed and replaced.

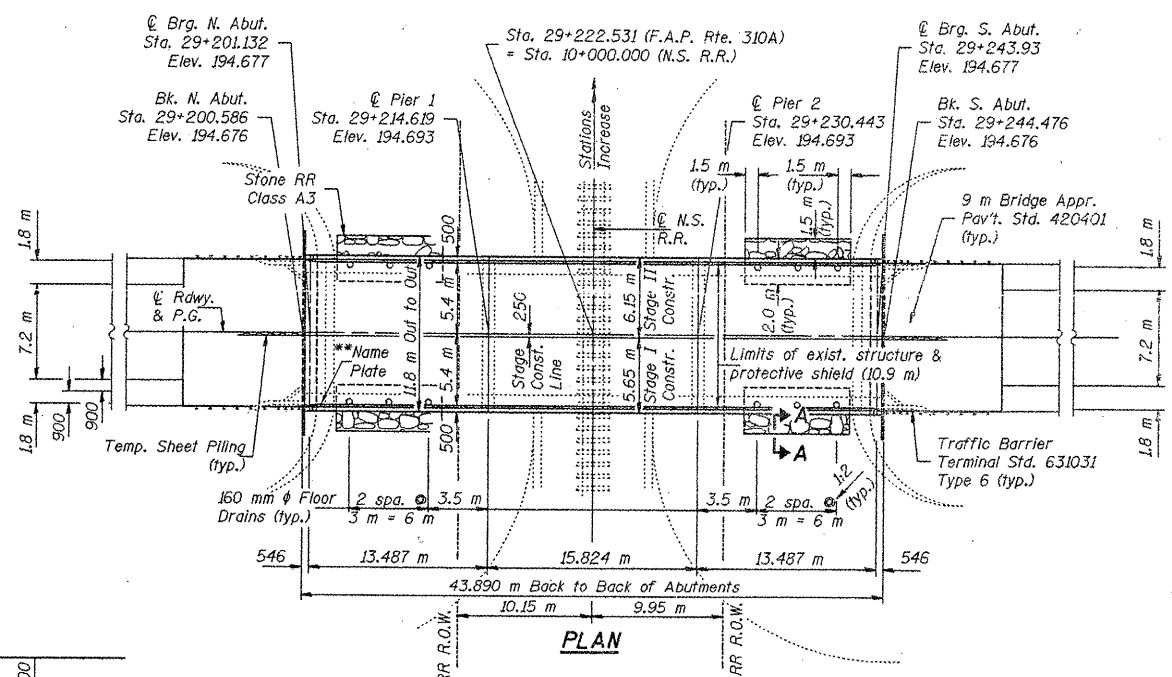
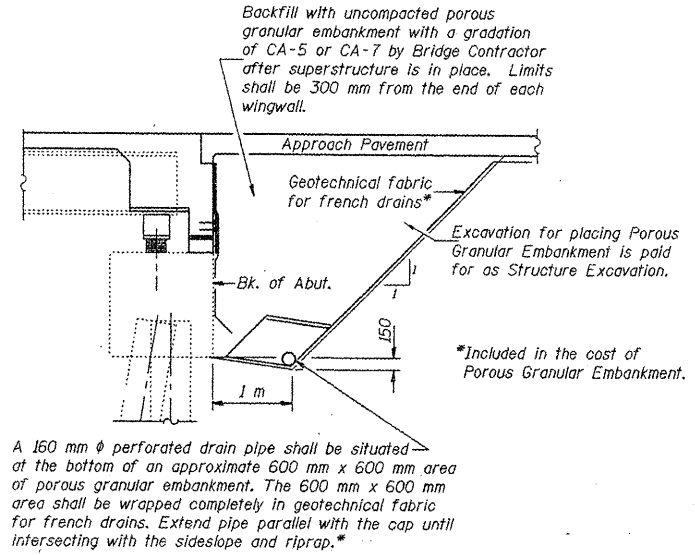
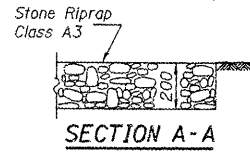
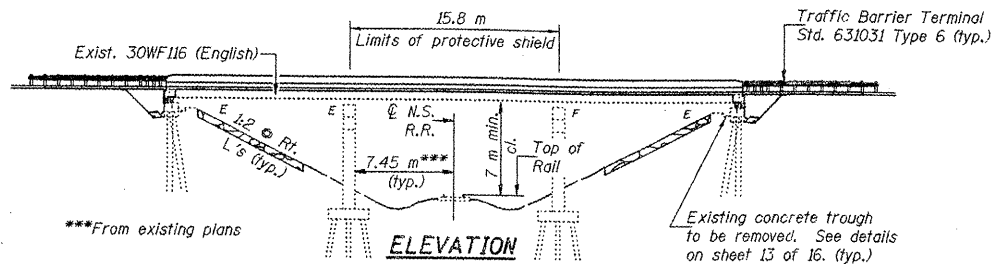
Traffic to be maintained using stage construction.

No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAP 310A	69VBR	MORGAN	321	137
FED. ROAD DIST. NO. 7	PLAN	FED. AID PROJECT		

SHEET NO. 1
16 SHEETS



STATION 29+222.531
REBUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 310A SEC. 69VBR
PROJECT ACI-ACRHP-0009(3CS)
LOADING MS18
STRUCTURE NO. 069-0019

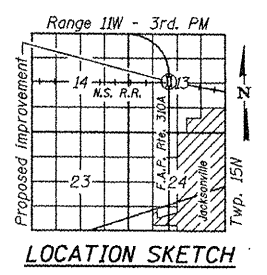
****NAME PLATE**
See Std. 515001
** Existing name plate to be cleaned and relocated next to the new name plate. Cost included with Name Plates.

LOADING MS18
Allow 1.2 kN/m² for future wearing surface.
DESIGN SPECIFICATIONS
1996 AASHTO with 1997, 1998 & 1999 Interims
1995 Seismic Retrofitting Guidelines for Highway Bridges FHWA/RD-94/052

DESIGN STRESSES
FIELD UNITS
New Construction
f_c = 24 MPa
f_y = 400 MPa (reinforcement)
f_y = 250 MPa (structural steel)
AASHTO II 270M, Gr. 250.
Existing Construction (English)
f_c = 1,000 psi (substructure)
f_s = 18,000 psi (structural steel)
f_s = 20,000 psi (reinforcement)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.8%
Site Coefficient (S) = 1.2

CURVE DATA
@ FAP Rte. 310A
P.I. Sta. = 28+749.203
Δ = 90°-08'-47"
D = 7°-38'-54"
R = 749.142 m
T = 751.059 m
L = 1178.664 m
E = 311.661 m
S.E. = 4.00%
P.C. Sta. = 27+998.145
P.T. Sta. = 29+176.809
S.E. Removed Sta. 29+160.139 (Full S.E.)
to Sta. 29+241.439 (Normal Crown)



GENERAL PLAN
ILLINOIS RT. 104/U.S. 67 OVER
NORFOLK SOUTHERN RAILROAD
F.A.P. RT 310A - SECTION 69VBR
MORGAN COUNTY
STATION 29+222.531
STRUCTURE NO. 069-0019

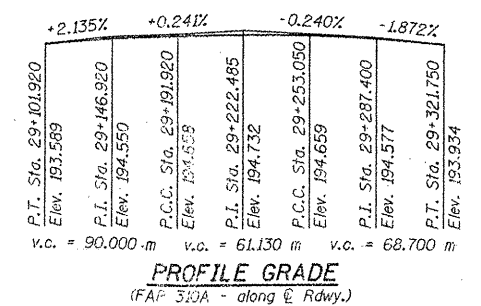
PROFILE GRADE
(NSRR - Top of Rail)

DESIGNED	W. J. Burke
CHECKED	C. M. Eng
DRAWN	n.f. parsons
CHECKED	JSB/CPAE

EXAMINED
MAY 10, 2002
PASSED
Ralph E. Anderson
PROFESSOR OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2002

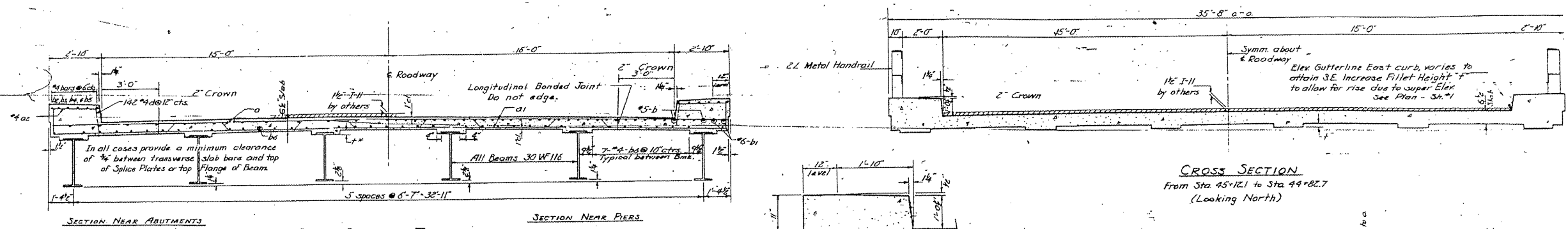


PROFILE GRADE
(FAP 310A - along @ Rdwy.)

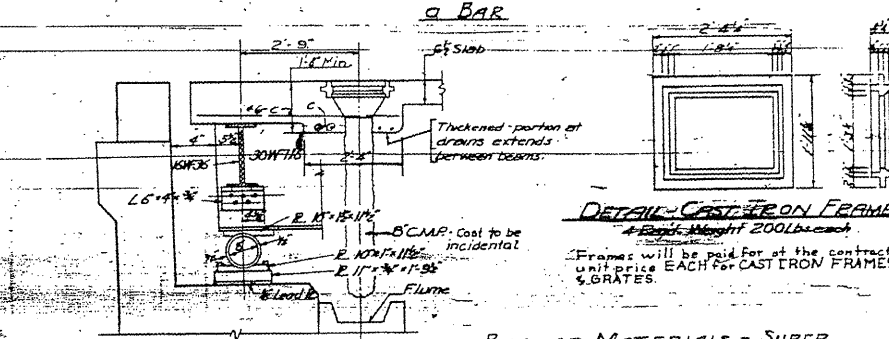
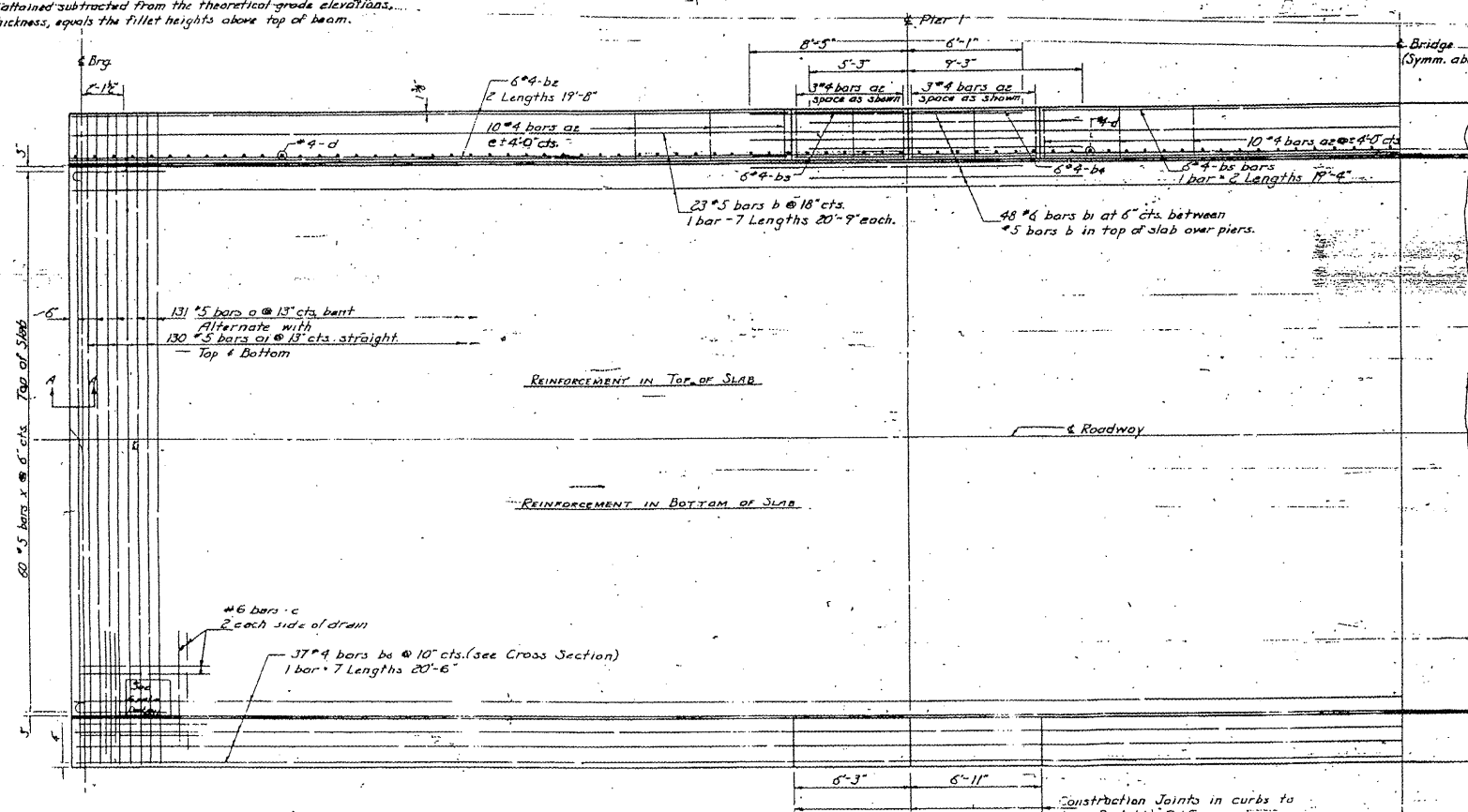
FOR INFORMATION ONLY

EXISTING PLANS, SN 069-0019
FAP 63 (US 24) & 310 (IL 104)
D6REHAB BDGE PAINTING 2010-1
ADAMS & MORGAN COUNTIES

DATE	BY	NO.	REV.
12	Morgan	12	5



Method of Determining Fillet Heights - F
After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 ft. From these elevations subtract the increment of deflection for these points, determined from the D.L. deflection diagram. The elevations so obtained subtracted from the theoretical grade elevations, minus floor thickness, equals the fillet heights above top of beam.



BILL OF MATERIALS - SUPER

Bar	No.	Size	Length	Shape
a	131	#5	39'-11"	
a1	260	#5	35'-8"	
ae	84	#4	8'-6"	
b	181	#5	20'-9"	
bi	96	#6	18'-6"	
be	48	#4	19'-8"	
bs	24	#4	6'-0"	
bc	24	#4	4'-7"	
bd	24	#4	19'-8"	
bd	259	#4	20'-6"	
c	32	#4	4'-4"	
d	284	#4	7'-1"	
x	120	#5	3'-10"	C

Class X Concrete	Cu. Yds.	140.5
Reinforcement Bars	Lbs.	26130
Structural Steel	Lbs.	124780

DESIGNED: *Ronald C. L. H.*
CHECKED: *W. J. Hill*
DRAWN: *F. Tiley*
CHECKED: *J. G. H.*

NOV. 22, 1957
EXAMINED: *J. W. Romine*
PASSED: *E. J. Paul*
APPROVED: *R. R. B. [Signature]*

HALF PLAN

DETAIL - CAST IRON GRATE
4 Reg'd. 115 lbs each
Grates will be paid for at the contract unit price EACH for CAST IRON FRAMES & GRATES.

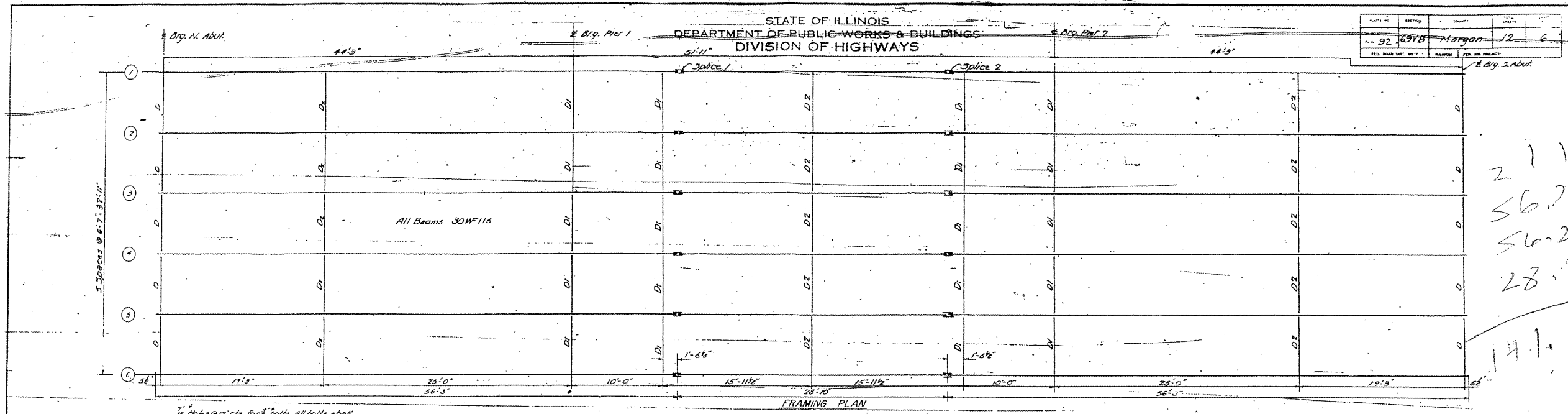
SUPERSTRUCTURE
F.A. RT. 92 - SEC. 69VB
BRIDGE OVER ABASH R.R.
MORGAN COUNTY
STA. 45+54.7

FOR INFORMATION ONLY

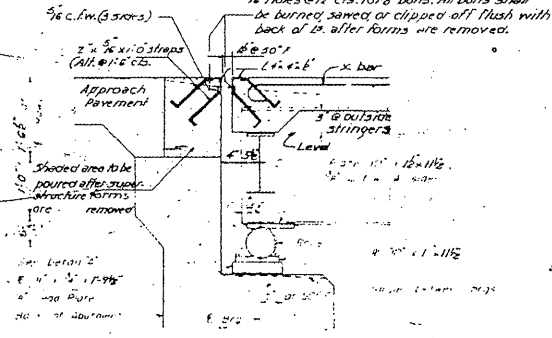
EXISTING PLANS, SN 069-0019
FAP 63 (US 24) & 310 (IL 104)
D6REHAB BDGE PAINTING 2010-1
ADAMS & MORGAN COUNTIES

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

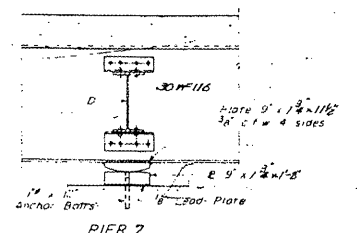
DATE	REVISION	BY	CHKD.
12-6-57	92	Morgan	JL



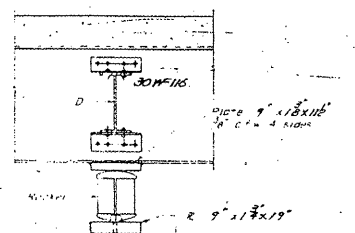
211
56.75
56.25
28.82
141.3²



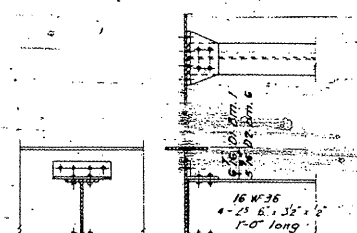
SECTION AT ABUTMENT



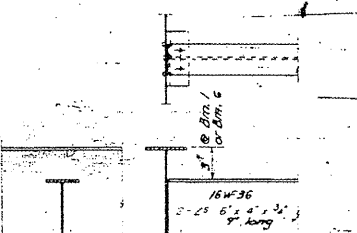
PIER 2



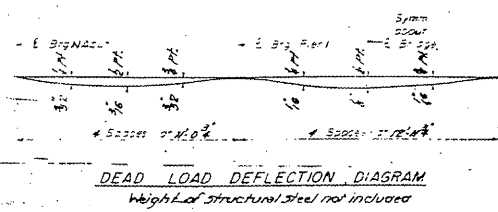
PIER 1



DIAPHRAGM D1 & D2



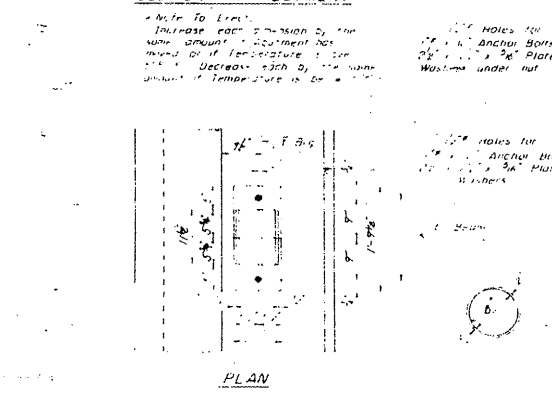
DIAPHRAGM D



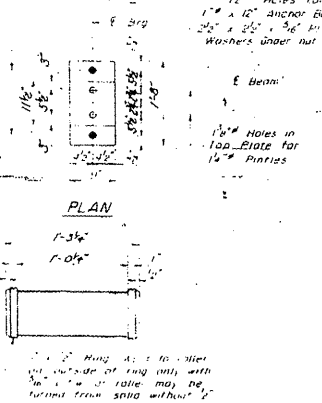
DEAD LOAD DEFLECTION DIAGRAM
Height of structural steel not included

ELEVATION TOP OF BEAMS

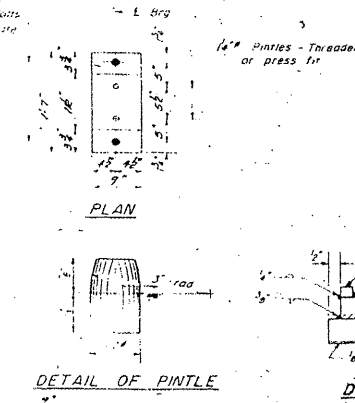
Beam	At Abut.	Splice 1	Splice 2	At Pier
1	638.16	638.27	638.35	638.16
2	638.27	638.31	638.31	638.27
3	638.35	638.38	638.38	638.35
4	638.35	638.38	638.38	638.35
5	638.27	638.31	638.31	638.27
6	638.16	638.27	638.27	638.16



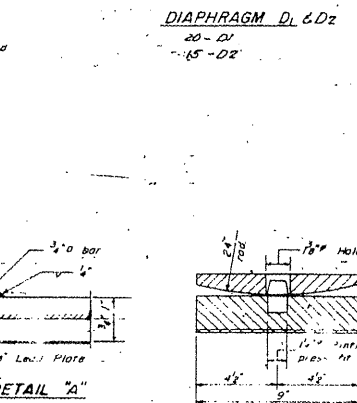
PLAN



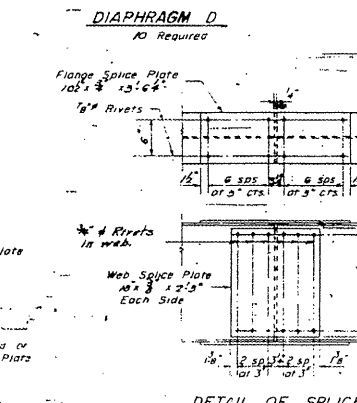
PLAN



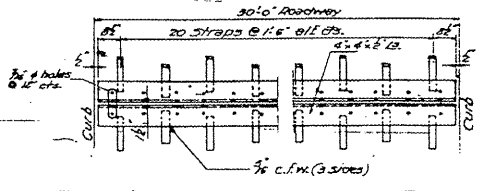
DETAIL OF PINTLE



DETAIL "A"



DETAIL OF BEARING AT PIER 2



PLAN OF EXPANSION GUARD



STRAP DETAIL

DESIGNED BY: C. P. B.
CHECKED BY: Douglas H. Smith
APPROVED BY: [Signature]
DATE: Nov. 22, 1957

ROLLER DETAIL showing a cross-section of the roller. It details the 1/2 inch pin and the 1/2 inch plate. Notes specify the use of 1/2 inch pin and 1/2 inch plate.

DETAIL OF BEARING AT PIER 1 showing a cross-section of the bearing. It details the 1/2 inch pin and the 1/2 inch plate. Notes specify the use of 1/2 inch pin and 1/2 inch plate.

DETAIL OF BEARING AT PIER 1 showing a cross-section of the bearing. It details the 1/2 inch pin and the 1/2 inch plate. Notes specify the use of 1/2 inch pin and 1/2 inch plate.

STRUCTURAL STEEL DETAILS
PART 92 - SEC. 69-V-5
BRIDGE OVER WABASH R.R.
MORGAN COUNTY
STA. 45+54.7

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