

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 19 + 1 = 20 TOTAL SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	1
ILLINOIS			CONTRACT NO. 78711	

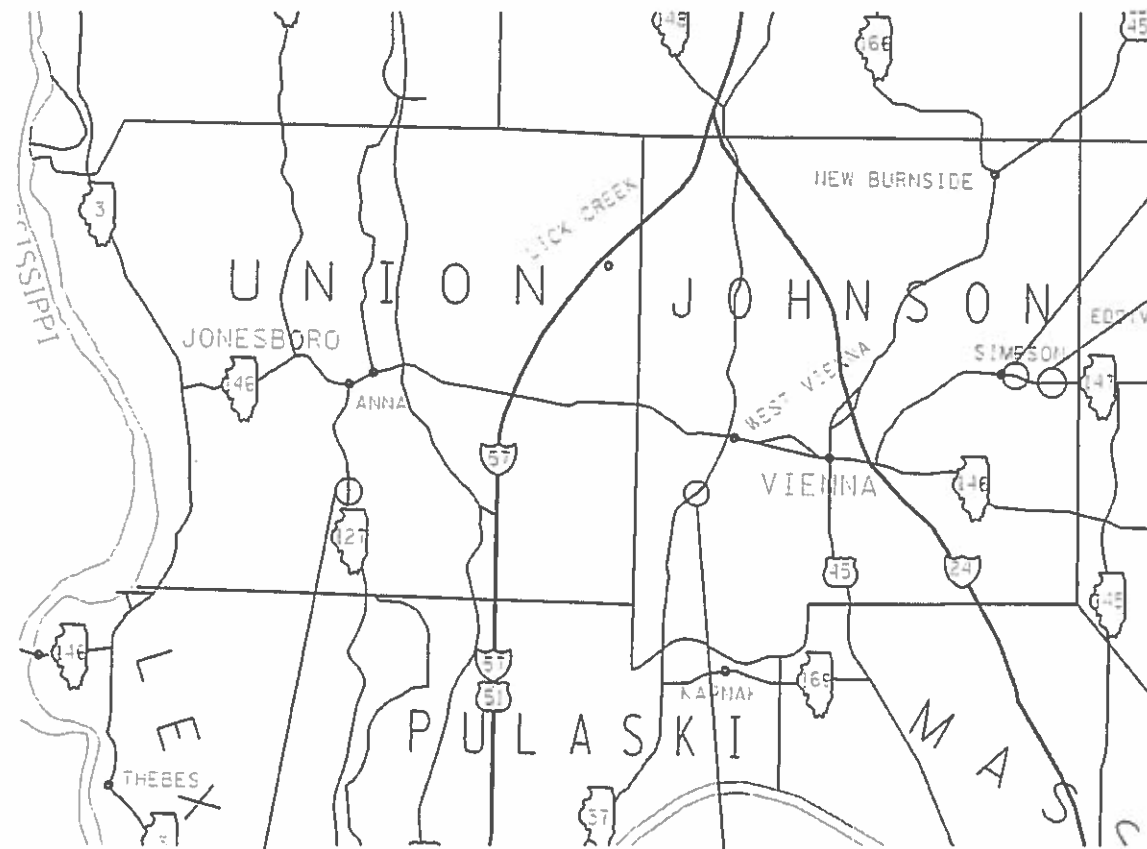
D-99-020-19



PROPOSED
HIGHWAY PLANS

VARIOUS ROUTES
SECTION D9 BRIDGE PAINT 2019-3
PROJECT STP-39SJ(334)
JOHNSON & UNION COUNTY

C-99-040-19



BRIDGE NO. 1
SN. 044-0025
OVER CEDAR CREEK

BRIDGE NO. 2
SN. 044-0027
OVER BAY CREEK

BRIDGE NO. 4
SN. 091-0064
OVER LINGLE CREEK

BRIDGE NO. 3
SN. 044-0011
OVER CACHE RIVER

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

BRIDGE NO. 1

SN. 044-0025
IL 147 2017 ADT=625, 20% TRUCKS
TOWNSHIP-CO UNIT ROAD DIST
POSTED SPEED: 55 MPH

BRIDGE NO. 2

SN. 044-0027
IL 147 2017 ADT=450, 17% TRUCKS
TOWNSHIP-CO UNIT ROAD DIST
POSTED SPEED: 55 MPH

BRIDGE NO. 3

SN. 044-0011
IL 37 2017 ADT=1850, 12% TRUCKS
TOWNSHIP-CO UNIT ROAD DIST
POSTED SPEED: 55 MPH

BRIDGE NO. 4

SN. 091-0064
IL 127 2017 ADT=1100, 10% TRUCKS
TOWNSHIP-CO UNIT ROAD DIST
POSTED SPEED: 55 MPH

DESIGN DESIGNATION : N/A

COORDINATE SYSTEM : N/A

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

PROJECT ENGINEER: DAVID PICHE
PROJECT DESIGNER: AUSTIN HENK

CONTRACT NO. 78711

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 05-06 20 19
[Signature]
REGION FIVE ENGINEER

May 10 20 19
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 10 20 19
[Signature]
DIRECTOR OF HIGHWAYS, PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES

0047

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	JOHNSON CO			UNION CO
				COUNTY:			
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
LOCATION:				BRIDGE NO. 1	BRIDGE NO. 2	BRIDGE NO. 3	BRIDGE NO. 4
				044-0025	044-0027	044-0011	091-0064
67000400	ENGINEERS FIELD OFFICE, TYPE A	CAL MO	3	0.5	0.5	1	1
67100100	MOBILIZATION	LSUM	1	0.25	0.25	0.25	0.25
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	0.25	0.25	0.25	0.25
70107025	CHANGEABLE MESSAGE SIGN	CAL DAY	112	28	28	28	28
X5060601	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 1	LSUM	1	1			
X5060602	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 2	LSUM	1		1		
X5060603	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 3	LSUM	1			1	
X5060604	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 4	LSUM	1				1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	LSUM	1	1			
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	LSUM	1		1		
Z0010503	CLEANING AND PAINTING STEEL BRIDGE NO. 3	LSUM	1			1	
Z0010504	CLEANING AND PAINTING STEEL BRIDGE NO. 4	LSUM	1				1

MODEL: Default
 FILE NAME: P:\1110848\BID\NTEG Illinois gov\PWID\DOT\Documents\DOT Office\District 9\Projects\78711\CADD\Data\CAD\Sheets\078711_Sheets.dgn

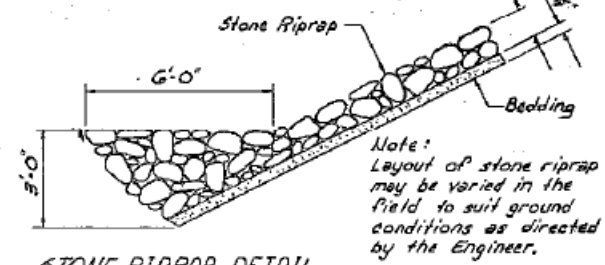
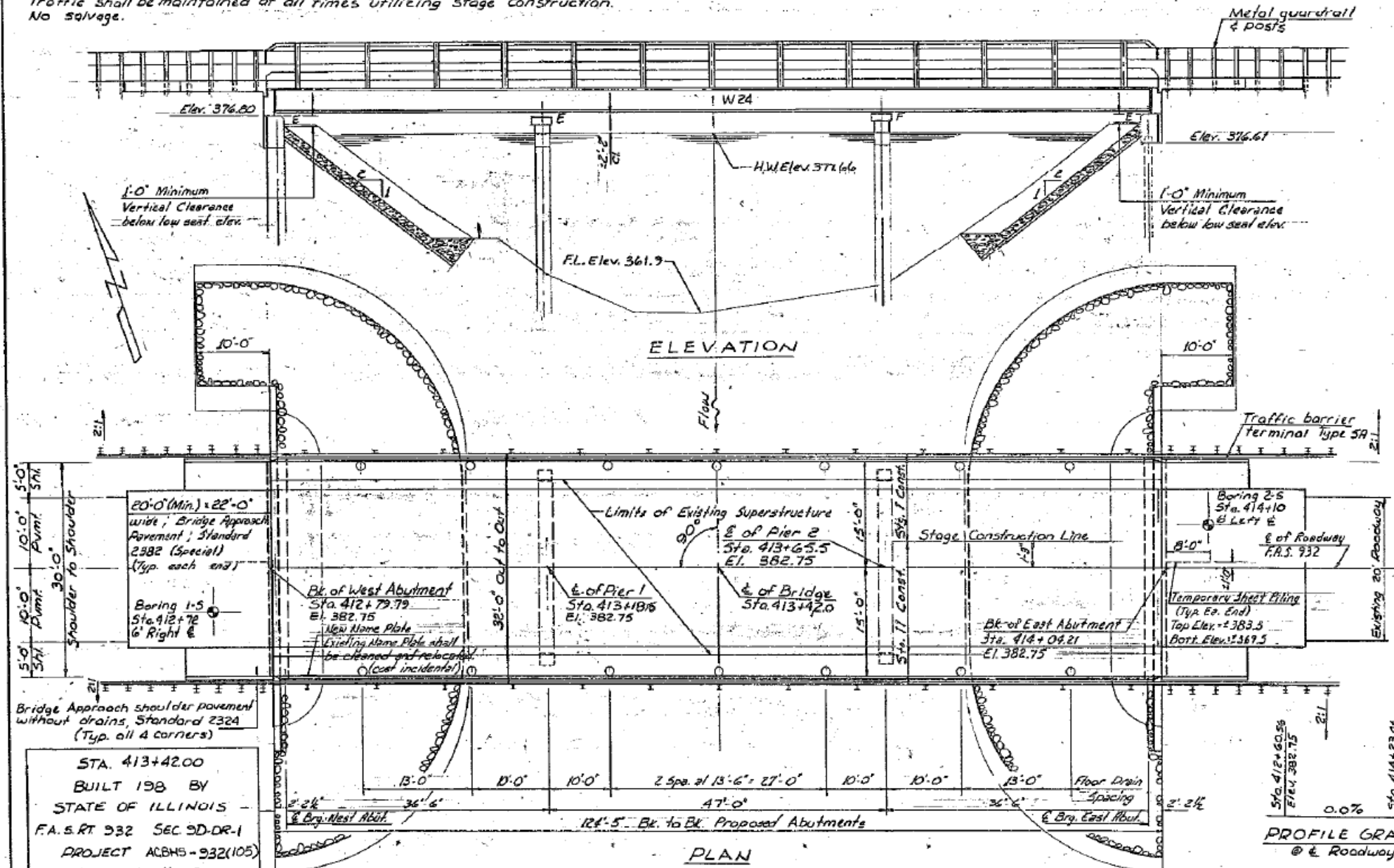
REV. - MS

USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -	VAR					D9 BRIDGE PAINT 2019-3	VARIOUS	19	3	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT				
PLOT DATE = 2/26/2019	DATE -	REVISED -		CONTRACT NO. 78711							

FOR INFORMATION ONLY 044-0025

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. OF SHEETS
F.A.S. 932	9D-DR-1	JOHNSON	25	10	16
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BH-5-9321			

B.M.: \square Cut in top of North end of West Abutment, 15.0' Lt. of Sta. 412+81, Elev. 382.39
 Exist Structure: #044-0025 Built in 1937 as F.A. Rte. 163, Section 9D.
 The existing structure is a 12'-10" Bk. to Bk. of abutment, three-span, R.C. Slab on I-Beam supported on open R.C. abutments and piers, with a 22.0' roadway width deck.
 The Contractor shall remove the existing superstructure, and replace with 7 $\frac{1}{2}$ " R.C. Deck on 24" WF Beams. The existing abutments and piers will be widened and modified.
 Traffic shall be maintained at all times utilizing stage construction.
 No salvage.



GENERAL NOTES

See Proposal for Boring Data.
 Fasteners shall be high strength bolts. Bolts 3/4" ϕ , open holes 13/16" ϕ , bolts 7/8" ϕ , open holes 15/16" ϕ , unless otherwise noted.
 Calculated weight of Structural Steel = 51,900 lbs. #223, Gr 50 and 10,700 lbs. #183.
 The Zinc-silicate and vinyl paint system shall be used for shop and field painting of Structural Steel except where otherwise noted.
 Field welding of construction accessories shall not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the top supports. Field welding in other areas will be permitted only when approved by the Engineer.
 Anchor bolts shall be set before bolting diaphragms over supports.
 The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These Components are the wide flange beams and all splice plate material of the wide flange beams.
 Reinforcement bars shall conform to the requirements of AASHTO #31, #42 or #55, Grade 60.
 Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
 Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,000 lb., and 3/4" ϕ x 6" hooked bolts.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		6.8	6.8
Structure Excavation	Cu. Yd.		48	48
Floor Drains	Each	14		14
Protective Coat	Sq. Yd.	460		460
Cut & Concrete	Cu. Yd.	109.4	27.7	137.1
Structural Steel	L. SFTS.			3180
Reinforcement Bars	Pounds		3150	3150
Reinforcement Bars (Epoxy Coated)	Pounds	21,970		21,970
Steel Piles, HP 10 x 45	Lin. Ft.		86	86
Name Plates	Each	1		1
Stone Riprap	Ton		340	340
Slope Wall Removal	Sq. Yd.		400	400
Temporary Bridge Rail	Lin. Ft.	162		162
Temporary Concrete Barrier	Lin. Ft.	170		170
Preformed Joint Seal 2 $\frac{1}{2}$ "	Ln.Ft.	66		66
Elastomeric Bearing, Type 2	Each	18		18
Steel Rolling Type 1-1	Lin. Ft.	243		243
Temporary Sheet Piling	Sq. Ft.		224	224
Expansion Bolts, 3/4" ϕ	Each		50	50

STA. 413+42.00
 BUILT 1938 BY
 STATE OF ILLINOIS -
 F.A. S. RT. 932 SEC. 9D-DR-1
 PROJECT ACBMS-932(105)
 LOADING HS 20
 STR. NO. 044-0025

NAME PLATE
 (See Std. 2113)

DESIGNED L. Schnepf
 CHECKED H.E. Hughes
 DRAWN R. Doubach
 CHECKED L. Schnepf

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 James J. Kayburn
 Engineer of Bridges

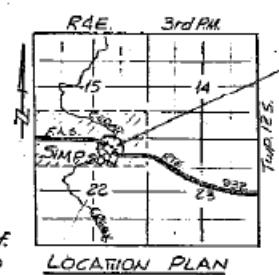
WATERWAY INFORMATION

Drainage Area 2167 Sq. Mi. Low Grade Elev. 381.17 @ Sta. 423+56

Flood	FREQ. Yr.	Q		Nat. Head-Ft.	Head-Ft.		Headwater El.						
		Opening Sq.Ft.	Opening C.F.S.		Exist. Prop.	Prop.							
Main Channel	30	5740	1023	1116	371.66	0.93	0.97	378.59	378.63				
										Overflow	570	90	72
										Total	6310	1183	1188
Main Channel	100	7560	1258	1281	379.73	1.27	1.31	380.40	380.44				
										Overflow	666	90	72
										Total	8226	1348	1353
Max. Base Design	500	9986	1270	1293	380.78	1.50	1.56	382.23	382.29				
										Overflow	715	90	72
										Total	10701	1360	1365

DESIGN STRESSES
 $f'_c = 3500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel)
 M223 Gr 50
 $f_y = 36,000$ psi #183
 LOADING HS20-44

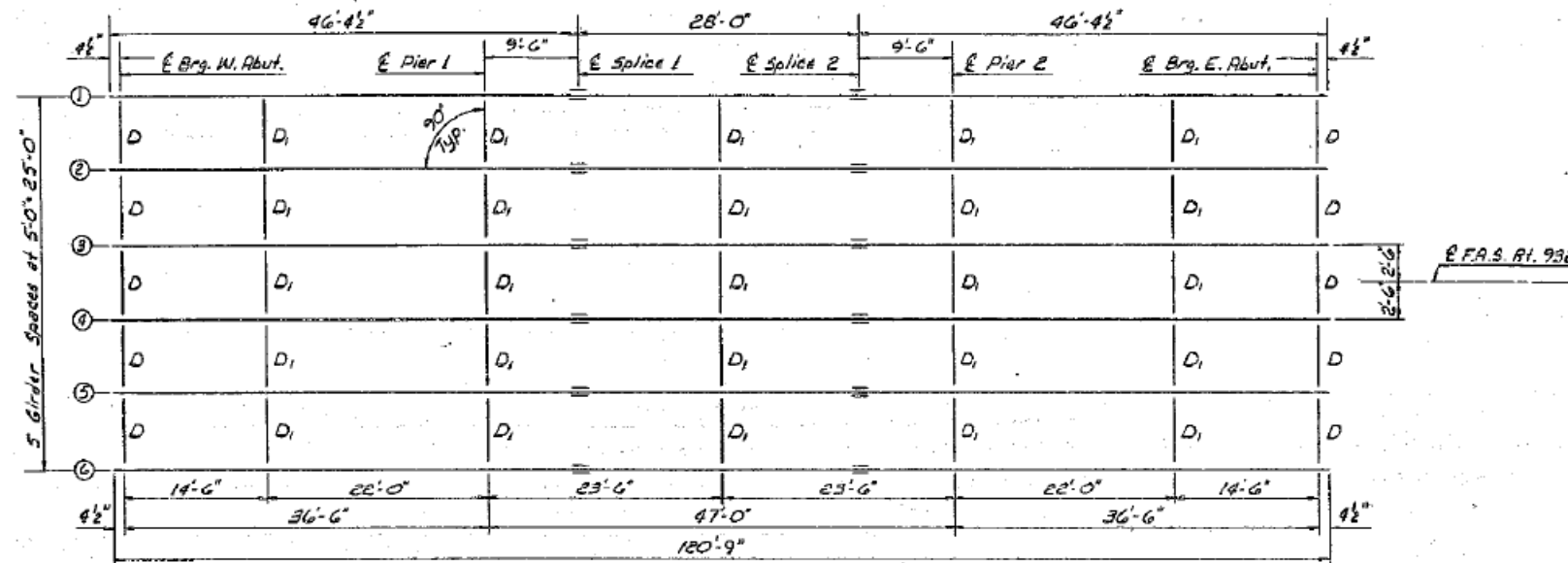
Allow 25 $\frac{1}{2}$ " /sq.ft. for future wearing surf.
 Design Specifications: 1983 AASHTO and 1984 and 1985 Interim specifications.



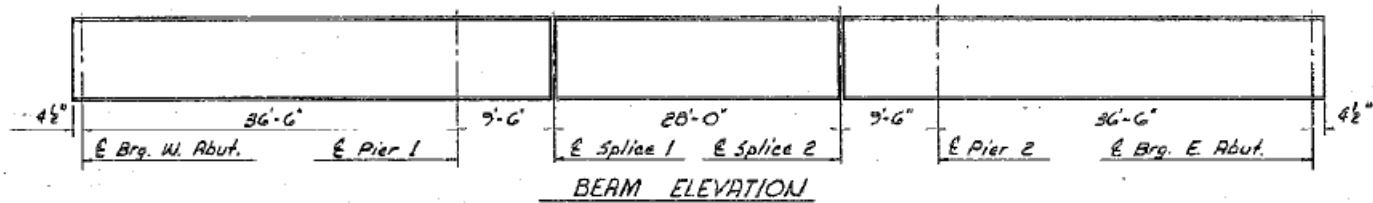
GENERAL PLAN
 ILL. RTE. 147 OVER
 CEDAR CREEK
 F.A. S. RTE. 932 SEC. 9D-DR-1
 JOHNSON COUNTY
 STA. 413+42

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9
F.R.S. 932	DR. 1	JOHNSON	25	18	16 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT: CH-5-932()		



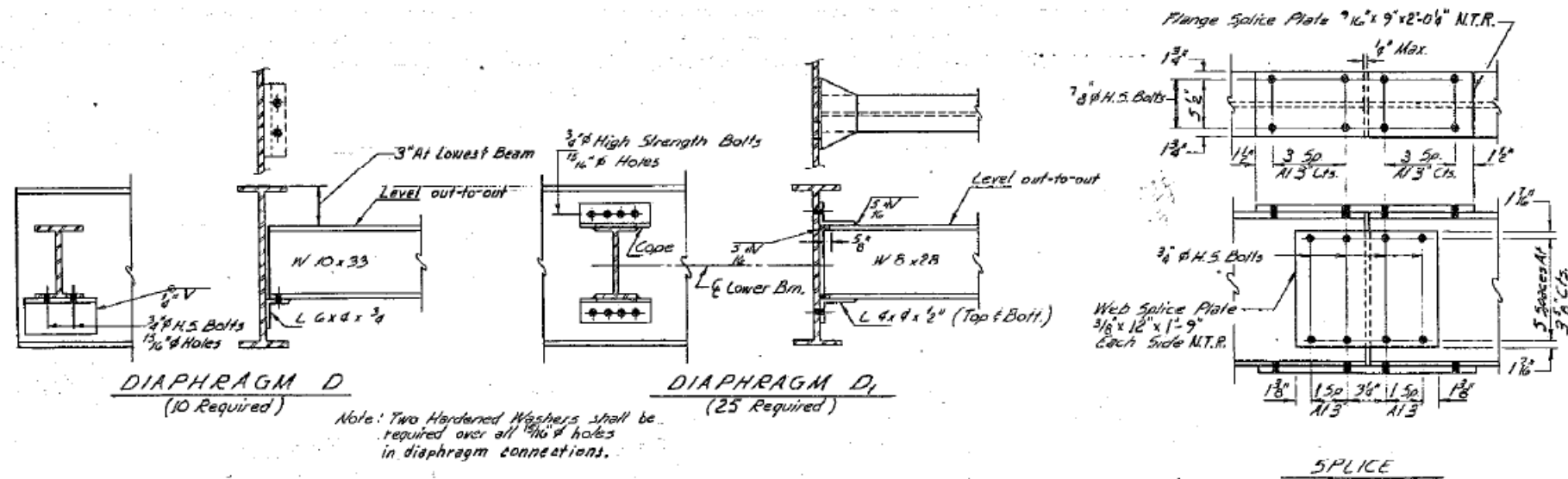
FRAMING PLAN
All Beams W24x68 N.T.R.



BEAM ELEVATION

	0.5 Span 1	Pier	0.5 Span 2
I_s (in ⁴)	1830	1830	1830
S_s (in ³)	154	154	154
P (k/ft)	0.833	0.833	0.833
M_D (k)	74	148	82
M_L (k)	141	118	154
M_{Imp} (k)	42	35	45
$S_s(M+I)$ (k)	315	255	332
M_a (k)	495	524	538
f_s (ksi)	5.8	11.5	6.4
$f_s(Overload)$ (ksi)	23.8	19.9	25.9
$f_s(Total)$ (ksi)	29.6	31.4	32.3

Non-compact section
 M_a (Applied Moment) = $1.3 [M_D + \frac{1}{3}(M_L + I)]$
 I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (Total and Overload).
 f_s (Total) is the sum of the stresses due to $1.3[M_D + \frac{1}{3}(M_L + I)]$
 f_s (Overload) is the sum of the stresses due to $M_L + \frac{1}{3}(M_L + I)$
 M_D - Moment due to dead loads on non-composite section.
 M_L - Moment due to live load on non-composite section.
 I - Live Load Impact.



	Abut.	Pier
R_D (k)	11.2	38.9
R_L (k)	27.5	34.2
R_{Imp} (k)	8.3	10.2
$R(Total)$ (k)	47.0	83.3

TOP OF FLANGE ELEVATIONS TABLE
 *** (Before any deflection)

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
Brg. W. Abut.	381.80	381.89	381.97	381.97	381.89	381.80
Brg. Pier 1	381.80	381.89	381.97	381.97	381.89	381.80
Splice No. 1	381.80	381.89	381.97	381.97	381.89	381.80
Splice No. 2	381.80	381.89	381.97	381.97	381.89	381.80
Brg. Pier 2	381.80	381.89	381.97	381.97	381.89	381.80
Brg. E. Abut.	381.80	381.89	381.97	381.97	381.89	381.80

**** For Fabrication Only

DESIGNED	L. Schnepf
CHECKED	H. E. Hughes
DRAWN	M. Luechtefeld
CHECKED	K. Kraus

FOR INFORMATION ONLY 044-0025

Note: All Beams And Beam Splice Plates shall be AASHTO M-223 Steel, Grade 50.
 N.T.R. designates Notch Toughness Requirement.

STRUCTURAL STEEL
 F.R.S. RT. 932 SEC. 9D-DR-1
 JOHNSON COUNTY
 STATION 413+42

MODEL: Defaut
 FILE: \\mspc01\paul\BIBENDITEC\Illinois\gov\pww\DOT\Documents\1007\Projects\93711\ICDD\DATA\CAD\93711\Sheets\044-0025.dwg
 OFFICE: D:\1007\Projects\93711\ICDD\DATA\CAD\93711\Sheets\044-0025.dwg
 PROJECT: 93711

USER NAME = henkas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 2/26/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

044-0025

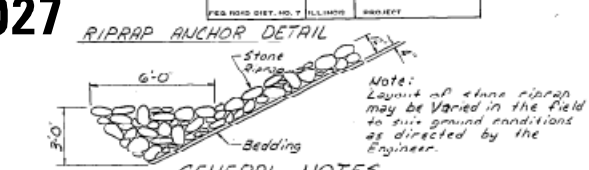
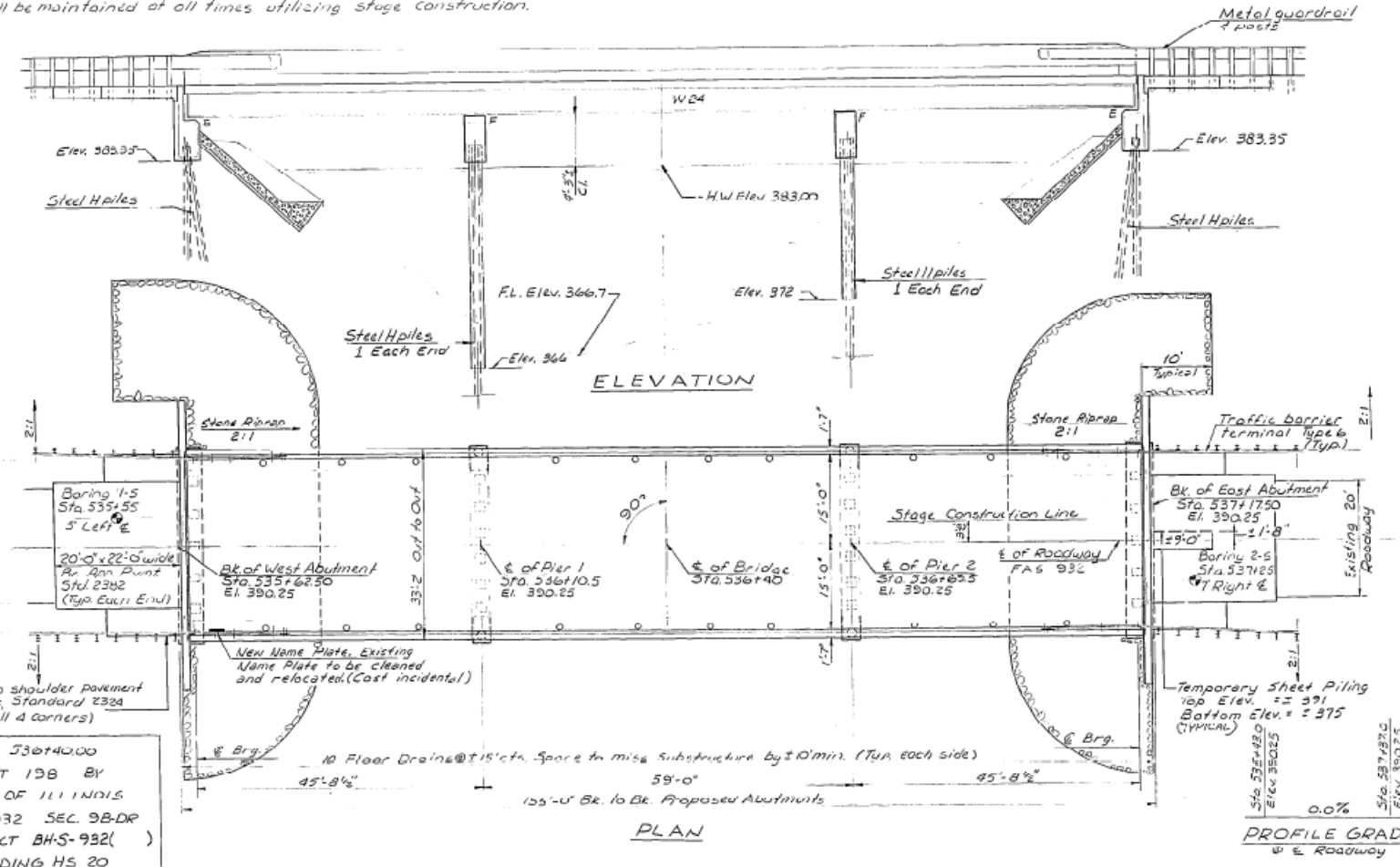
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	5
			CONTRACT NO. 78711	
		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FOR INFORMATION ONLY 044-0027

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / SHEETS
FA 932	D9	JOHNSON	23	10	14

Dist. of Cut in Top of North End of West Abutment, 15'-0" at Sta. 535+64 Elev. 389.95
 Exist. Structure: "044-0027, Built in 1938 as SA, Rte. 346A, Section 9B (9B-DR).
 The existing structure is a 152'-0" B.L. of abutment three span continuous RC Deck on WF Beam Bridge supported on open RC abutments and piers with a 22'-0" roadway width deck.
 The Contractor shall remove the existing superstructure, and replace with 7'-6" RC Deck on 24" I.F. Beams. The existing abutments and piers will be widened and modified.
 Traffic shall be maintained at all times utilizing stage construction.
 No salvage.



GENERAL NOTES

See Proposal for Boring Data.

Fasteners shall be high strength bolts. Bolts 3/4" Ø, open holes 13/16" Ø, unless otherwise noted.

Calculated weight of Structural Steel = 83,499 lbs. M223, Grade 50 and 10,617 lbs. M183.

The Zinc-silicate and vinyl paint system shall be used for shop and field painting of Structural Steel except where otherwise noted.

Field welding of construction accessories will not be permitted in the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting diaphragm over supports.

The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M223, Grade 50.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material of the wide flange beams.

Reinforcement bars shall conform to the requirements of AASHTO M31 or M53 Grade 60.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to normal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Contractor shall drive 1-10" X 42 steel test pile in a permanent location at Pier 2 as directed by the Engineer before entering the remainder of the piling.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. The 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates for the work.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUBS.	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu.Yd.		32.2	32.2
Structure Excavation	Cu.Yd.		40	40
Floor Drains	Each	20		20
Protective Coat	Sq.Yd.	642		642
Class X Concrete	Cu.Yd.	160.0	67.6	227.6
Structural Steel	L.Sum		1	1
Stud Shear Connectors	Each	870		870
Reinforcement Bars	Pound	4130		4130
Reinforcement Bars (epoxy Coated)	Pound	3940		3940
SPR1 PILES HP 10X42	Unit		354	354
TEST PILE STEEL HP 10X42	Each		1	1
Class X Concrete Encasement	Cu.Yd.		5.0	5.0
Name Plates	Each		1	1
Temporary Bridge Rail	Lin.Ft.	350		350
Preformed Joint Seal 2 1/2"	Lin.Ft.	66		66
Elastomeric Bearing, Type 2	Each	10		10
Epoxy Mortar Repair	Cu.Ft.		0.4	0.4
Stone Riprap	ton		295	295
Slope Wall Removal	Sq.Yd.		248	248
Temporary Sheet Piling	Sq.Ft.		288	288

WATERWAY INFORMATION

Drainage Area 35.6 Sq.Mi. Low Grade Elev. 389.7 @ Sta. 535+00

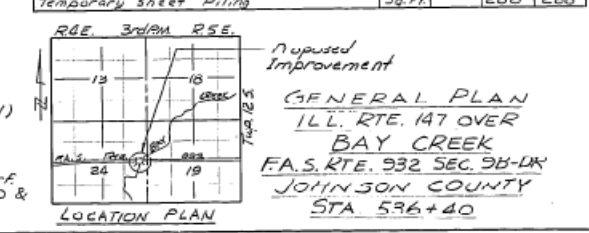
Flood	Freq. Yr.	Q C.F.S.	Opening	Surf. Ft.	Not. H.W.E.	Head. Ft. Exist. Prop.	Headwater El. Exist. Prop.
Main Channel	30	3272	1129	1129	383.00	0.28	383.3
Overflow	30	328	222	34			383.4
Total		3600	1351	1163			
Main Channel	100	4070	1223	1223	383.75	0.39	384.1
Overflow	100	622	278	42			384.3
Total		4700	1501	1265			
Main Channel	500	8148	1219	1519	384.72	0.53	385.3
Overflow	500	1052	356	51			385.5
Total		6200	1705	1400			

DESIGN STRESSES

$f'_c = 3500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural M223 Grade 50 Steel)
 $f_y = 36,000$ psi (Structural M183 Steel)

LOADING HS20-44

Allow 25% / sq.ft. for future wearing surf.
 Design Specifications: 1983 AASHTO & 1984, 1985 interim specifications.



STA. 536+4000
 BUILT 198 BY
 STATE OF ILLINOIS
 F.A.S.R.T.E. 932 SEC. 9B-DR
 F.A. PROJECT BHS-932
 LOADING HS 20
 STR. NO. 044-0027

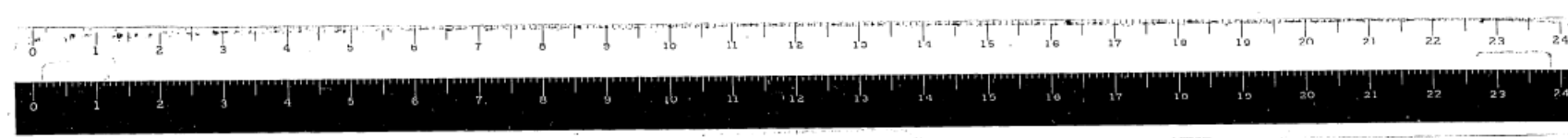
NAME PLATE
 (See Std. 213)

DESIGNED L. Schnepf
 CHECKED H.E. Hughes
 DRAWN R. Daubach
 CHECKED L. Schnepf



APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

James J. Pfeiffer



BAD COPY

S.M.: P.D. Spike in Nth Ash 40' So. Cache River Bridge, 3.5' L. Pk. 37, 0.6 mi. So. 37th & 126 Intersection, Elev. 365.23

Existing structure of cast-iron built as C.C. Rte. 126, Sp. 119.26, to Sp. 1209.00 in 1921. The existing superstructure with pipe bents and solid, pipe piers shall be widened and repaired to accommodate a new widened superstructure. Two new pipe bent encasement piers shall be built in the truss spans. The existing superstructure shall be removed and a new 5 span continuous and two (2) new 2 span continuous built. The 5 span continuous shall have 2 bearing, one br. over each pier. The 2 span continuous shall have 5 brms. Traffic shall be detoured during reconstruction. The bridge plans shall include the temporary abutments for the relocated 150' truss, plus the additional 50' span to complete the temporary detour bridge.

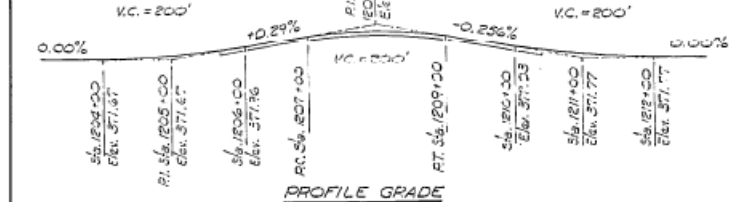
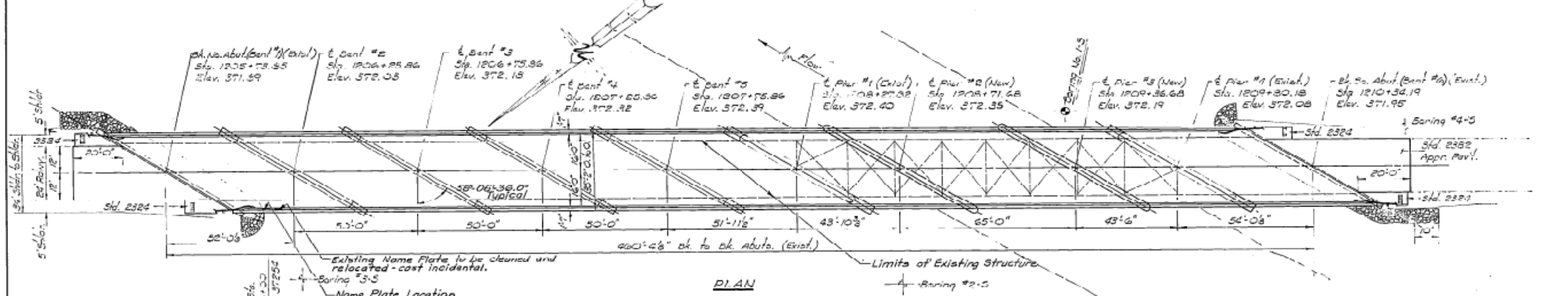
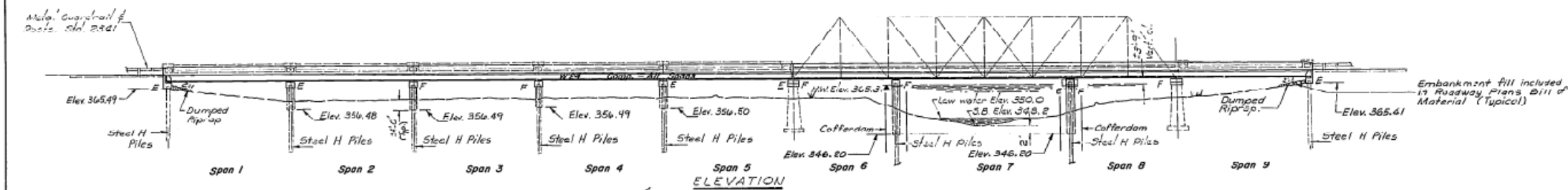
No detours.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY 044-0011

PROJECT NO.	SECTION	DISTRICT	SHEET NO.	TOTAL SHEETS
115BC BR	Johnson	51	17	35

For General Notes and Total Bill of Materials, see Sheet # 2.
For Temporary Bridge Plans, see Sheets #30 thru #35.



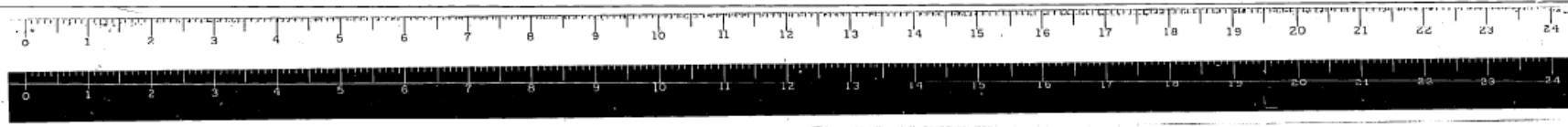
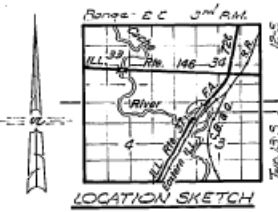
LOADING HS 20-44
(New Construction only)
Design Specifications: 1977 AASHTO; 1976 through 1983 Interim Specifications.

DESIGN STRESSES
(New Construction)
F_t = 3,500 psi
F_y = 50,000 psi (Reinforcement)
F_y = 50,000 psi (Structural)
(AASHTO M 222)

DESIGNED	Paul S. M. Conway
CHECKED	Chhayanil P. Patel
DRAWN	E. Vern Taylor
CHECKED	P.S.M. C.R.P.

APPROVED
April 17, 2019
DIRECTOR OF HIGHWAYS

WATERWAY INFORMATION		Drainage Area 136 sq. mi.		Low Grade Elev. 370.3'		@ Sta. 1215+50	
Flood	Freq. Q	Opening Sq. Ft.	Max. H.W.E. Exist.	Max. H.W.E. Prop.	Max. H.W.E. Exist.	Max. H.W.E. Prop.	Max. H.W.E. Prop.
Design	50 7597	1834	1834	365.3	1.08	1.08	366.50
Base	100 8594	1926	1926	365.7	1.22	1.22	366.92
Overlapping							
Max. Calc.	500 10836	2086	2086	366.4	1.87	1.87	368.27



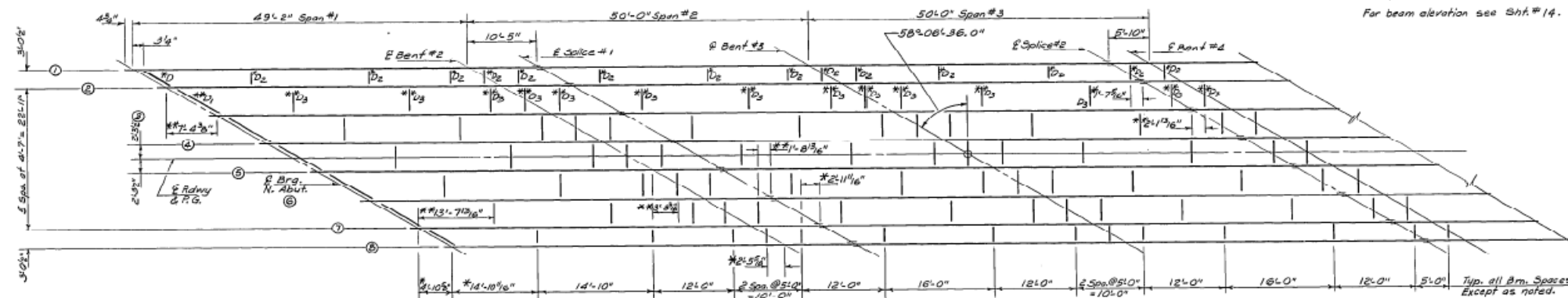
MODEL: Default FILE: \\nas0101\pub\BUREAU\INTEC\Illinois\govt\PIVDOT\Documents\DOT Office\District 9\Projects\8711\ICDD\Bridges\CAD\Drawings\8711-Sheets.dgn

USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	044-0011	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -			VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	10		
PLOT DATE = 2/26/2019	CHECKED -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
	DATE -	REVISED -									

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

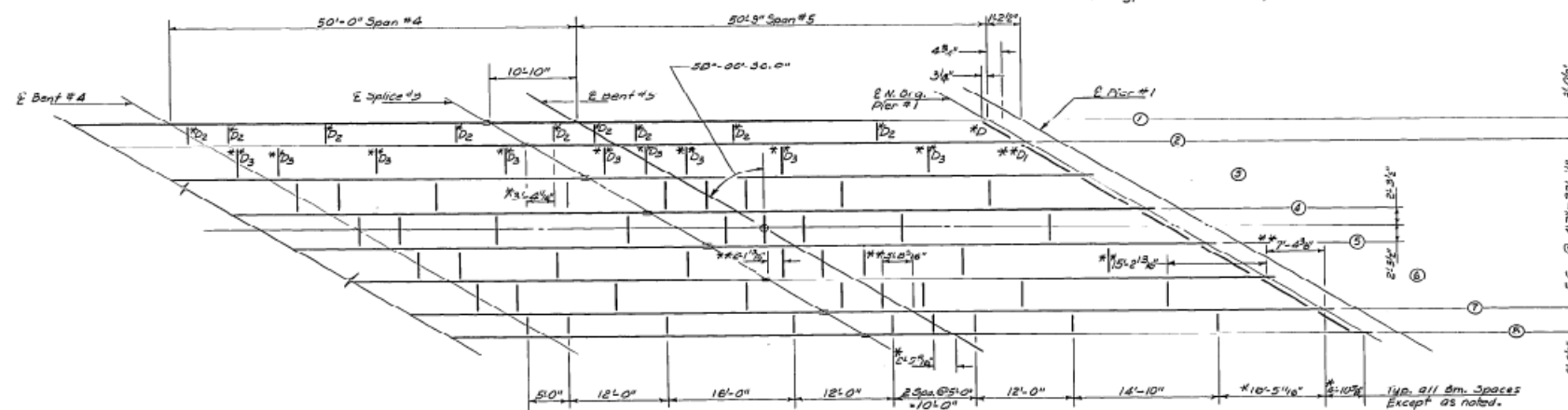
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1			28	12

Notes:
Work this sheet with Sheet #13.
For diaphragm details see Sht. #16.
For splice details see Sht. #15.
For beam elevation see Sht. #14.



FRAMING PLAN - SPANS #1 THRU #3
(All Beams are W24x62)

* Typ. Exterior Bm. Spaces
** Typ. Interior Bm. Spaces



FRAMING PLAN - SPANS #4 AND #5
(All Beams are W24x62)

DESIGNED: Paul S. McCann
CHECKED: Chhaganlal P. Pillai
DRAWN: E. Vern Taylor
CHECKED: DSM & C.P.P.

APPROVED: James J. [Signature]
Cable [Signature]

FOR INFORMATION ONLY 044-0011

STRUCTURAL STEEL
F.A. RTE. 726 SEC. 115BC-BR
JOHNSON COUNTY
STA. 1209+00.00



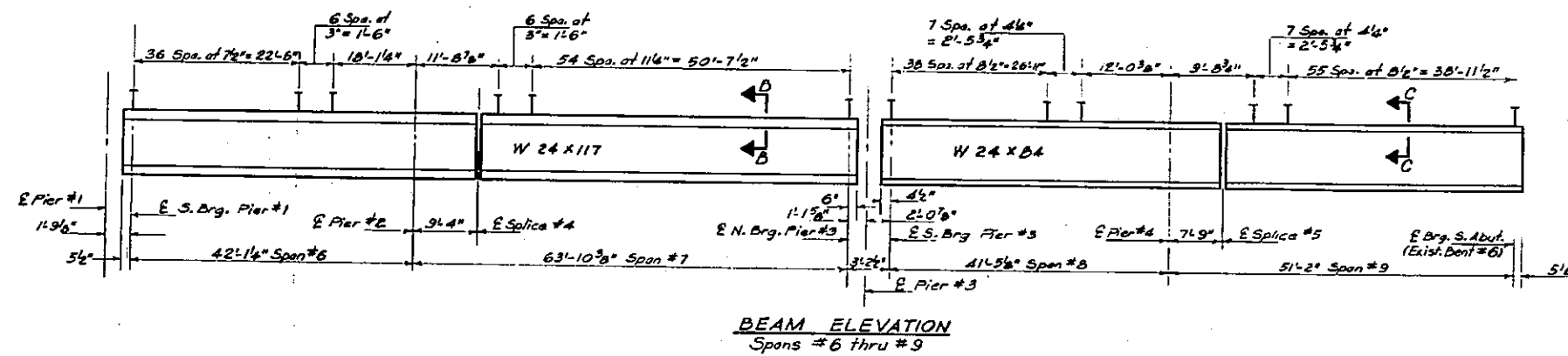
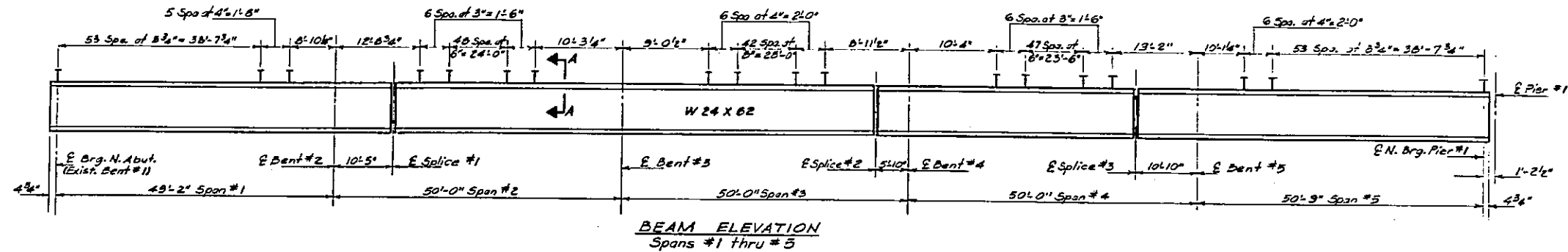
MODEL: Default
FILE: \\nas01.cpe.uiuc.edu\BARDEN\ITC\Illinois\gov\PIVDOT\Documents\DOT Offices\District 9\Projects\78711\CADD\Struct\044\044-0011-Sheets.dgn

USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	044-0011	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -			VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	11	
PLOT DATE = 2/26/2019	CHECKED -	REVISED -			CONTRACT NO. 78711					
	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO

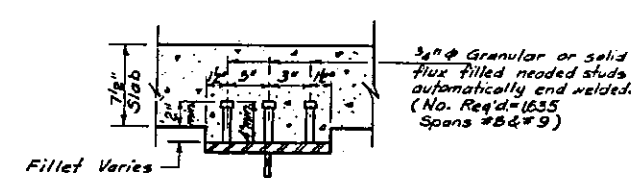
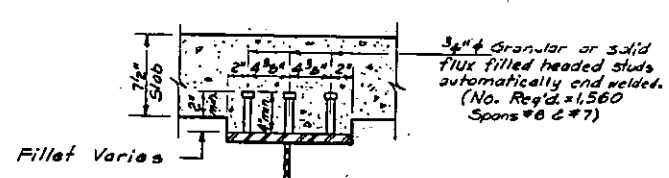
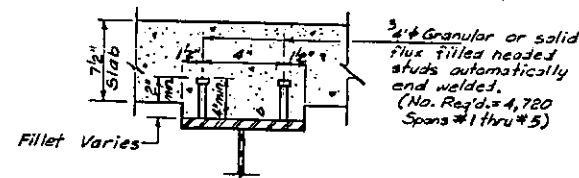
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		30	14

35 SHEETS



Notes:
For splice details see Sht. #15.

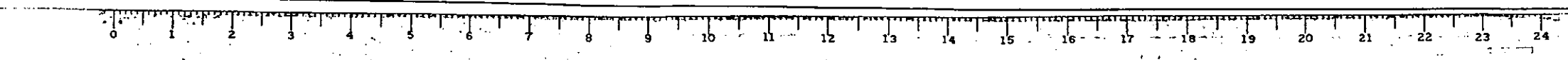


DESIGNED Paul S. McConny
CHECKED Chhaganlal P. Patel
DRAWN E. Vern Taylor
CHECKED P.S.M.C. C.P.P.

APR 17 1984
EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]

FOR INFORMATION ONLY 044-0011

STRUCTURAL STEEL
F.A. RTE. 726 SEC. 115 BC-BR
JOHNSON COUNTY
STA. 1209+00.00

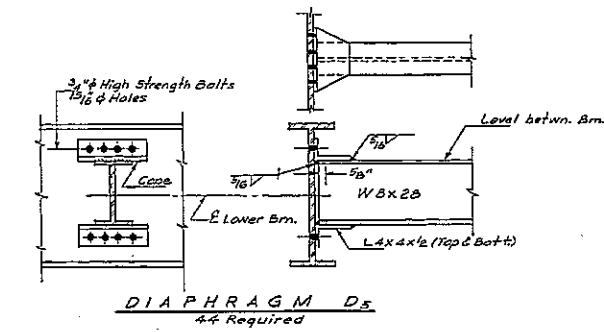
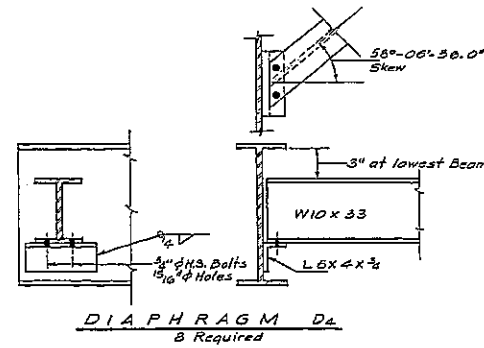
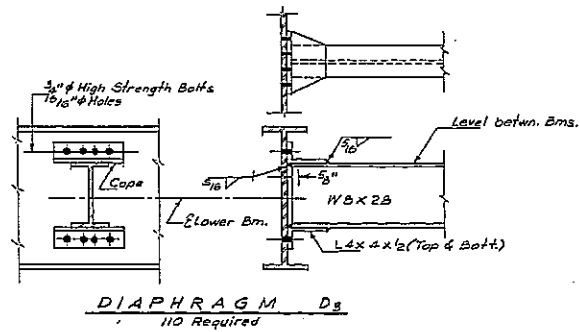
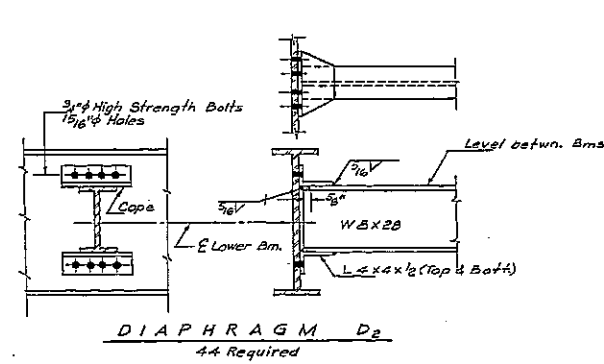
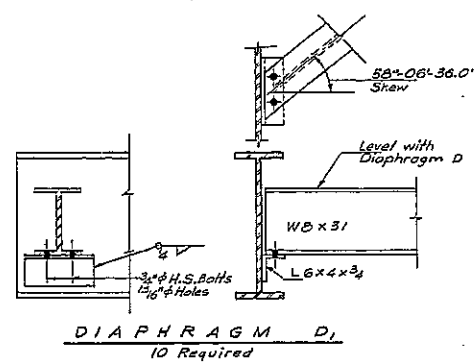
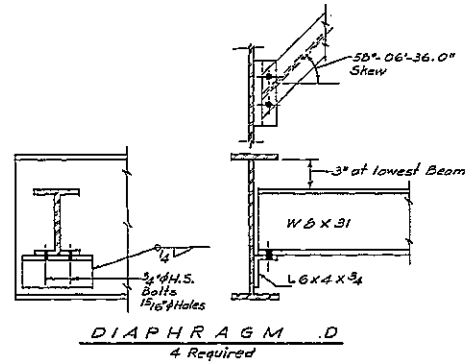


USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	044-0011	SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____	F.A. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
PLOT SCALE = 100.0000 / 1 in.	DRAWN -	REVISED -				VAR =	D9 BRIDGE PAINT 2019-3	VARIOUS	19	12a
PLOT DATE = 4/26/2019	CHECKED -	REVISED -				CONTRACT NO. 78711				
	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				

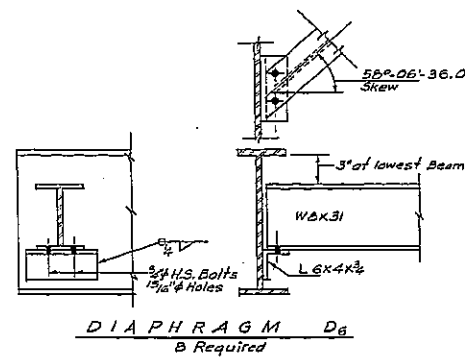
MODEL: D:\mfr\... FILE NAME: p:\w\abamcom.doi\illinois.gov\FWID\DOT\Documents\DOT_Offices\District_9\Projects\1578711\CA02\barca\CAD\sheet\0378711_Sheets.dwg

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	DESIGN	DATE	NO.	SHEET NO. 16
3/21			32	35 SHEETS



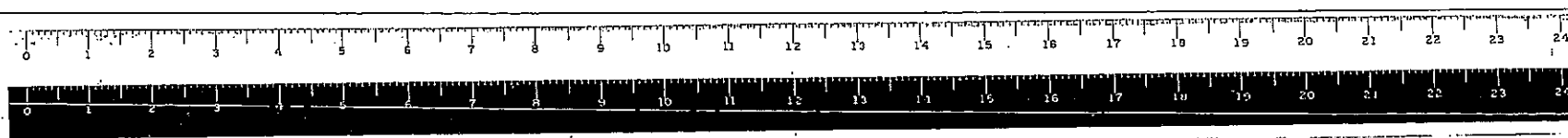
Notes:
Two hardened washers shall be required over all 1 1/8" holes.



FOR INFORMATION ONLY 044-0011

DESIGNED Paul S. M. Green	APR 17 1984	EXAMINED [Signature]
CHECKED Chhaganlal P. Patel		PASSED [Signature]
DRAWN E. Vern Taylor		APPROVED [Signature]
CHECKED R.S.M. C.P.P.		DIRECTOR OF HIGHWAYS

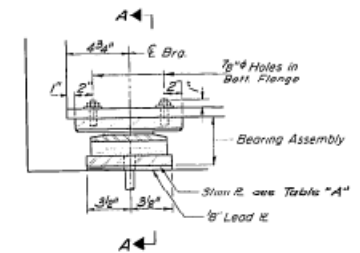
STRUCTURAL STEEL
F.A. RTE. 726 SEC. 115 BC-BR
JOHNSON COUNTY
STA. 1209+00.00



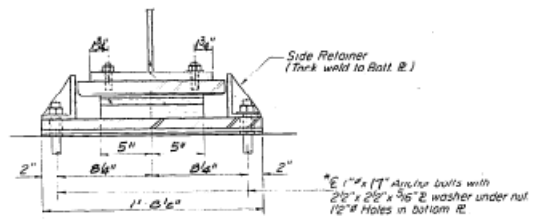
USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	044-0011	SCALE: SHEET OF SHEETS STA. TO STA.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -	VAR. D9 BRIDGE PAINT 2019-3				VARIOUS	19	13		
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -				CONTRACT NO. 78711				
PLOT DATE = 2/15/2019	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

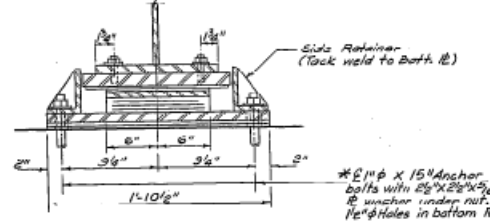
SHEET NO. 18
35 SHEETS



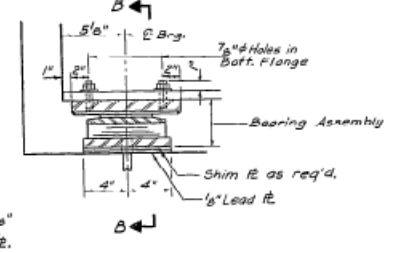
SECTION AT ABUT.
TYPE II TFE ELASTOMERIC EXP. BRG.
(N. Abut. & (N. Brg. Pier #1))



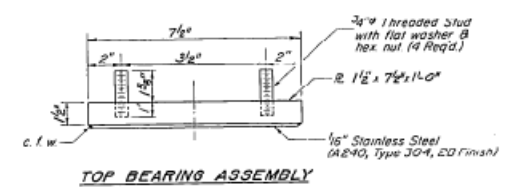
SECTION A-A



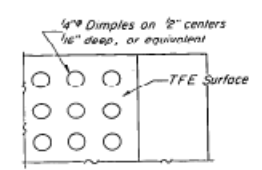
SECTION B-B
TYPE II TFE ELASTOMERIC EXP. BRG.
(S. ABUT.)



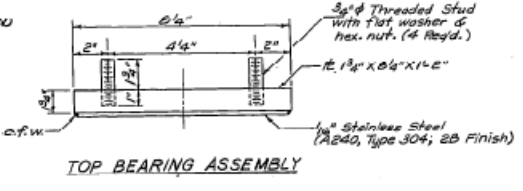
SECTION AT ABUT.



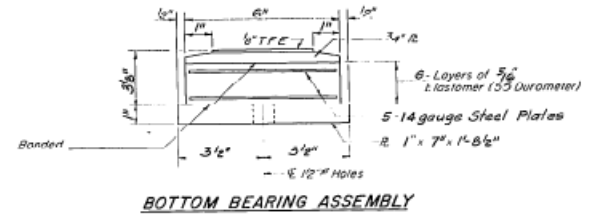
TOP BEARING ASSEMBLY



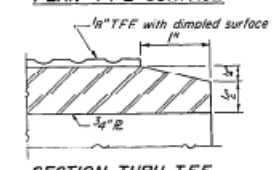
PLAN-TFE SURFACE



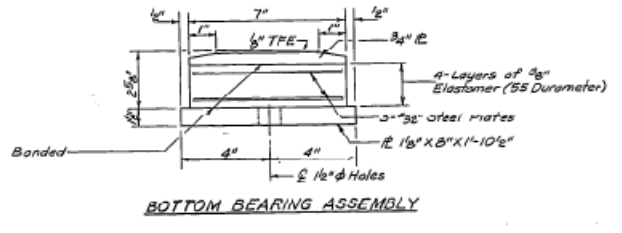
TOP BEARING ASSEMBLY



BOTTOM BEARING ASSEMBLY

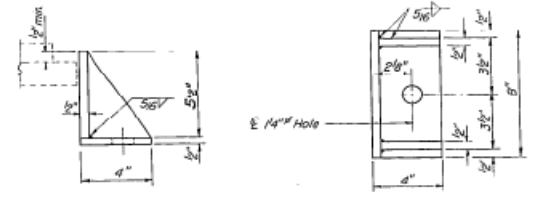


SECTION THRU TFE



BOTTOM BEARING ASSEMBLY

Note: The 1/4" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces. Bonding of 1/4" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



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

DESIGNED: Paul S. 7/11/79
CHECKED: Chaganah P. Patel
DRAWN: E. Vern Taylor
CHECKED: P.S.M. & C.P.P.
APPROVED: [Signature]
DIRECTOR OF HIGHWAYS

I-2-E-2 4-1-79

TABLE "A"

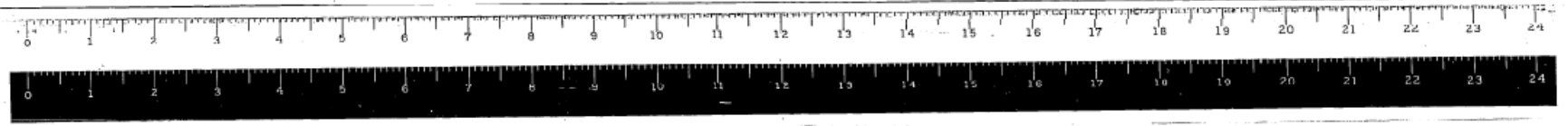
	Shim R. thk. N. Abut.	Shim R. thk. N. Brg. Pier #1
Beam # 2	3/8"	3/8"
Beam # 3	1/2"	---
Beam # 4	2 1/4"	---
Beam # 5	3"	---
Beam # 6	2 1/8"	---
Beam # 7	1 3/4"	7/8"

BILL OF MATERIAL

Item	Unit	Quantity
Elastomeric Bearing Assembly Type II	Each	21

FOR INFORMATION ONLY 044-0011

BEARING DETAILS
F.A. RTE. 726 SEC. 115DC-BR
JOHNSON COUNTY
STA. 1209+00.00



MODEL: Default
FILE: \\hpccr\public\BAREID\INTEC\Illinois\gov\pww\DOT\Documents\DOT\Office\Director\9\Projects\8711\IC\DD\DATA\CAD\Drawings\8711\Sheets.dgn

USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	044-0011	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -			VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	15	
PLOT DATE = 2/26/2019	CHECKED -	REVISED -			CONTRACT NO. 78711					
	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE NO.	SECTION	COUNT	TOTAL SHEETS	SHEET NO.
...	35	19

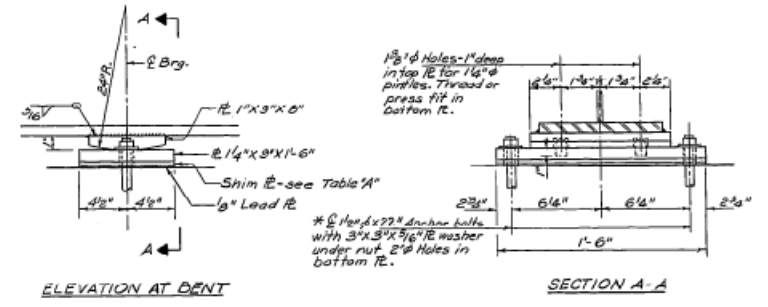
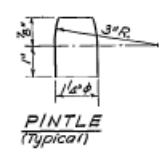
TABLE "A"

Beam #	Shim # thk. Bent #3	Shim # thk. Bent #4
Beam #2	7/8"	7/8"
Beam #3	2"	2"
Beam #4	3/8"	3"
Beam #5	5/8"	5/8"
Beam #6	2 5/8"	2 1/2"
Beam #7	2"	1 3/4"

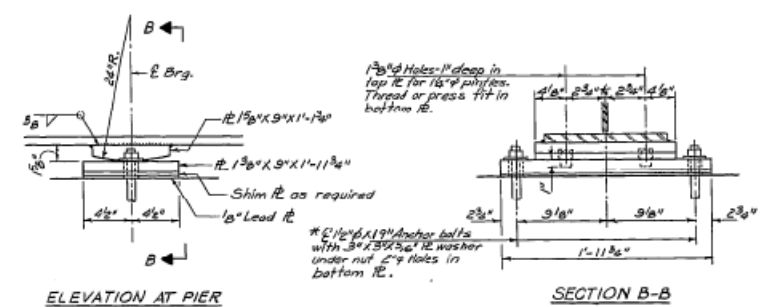
TABLE "B"

Beam #	Shim # thk. S. Brg. Pier #1	Shim # thk. S. Brg. Pier #3
Beam 1a	2 1/8"	3 1/8"
Beam 2a	3"	3 1/4"
Beam 3a	3 5/8"	3 1/2"
Beam 4a	3 1/8"	3 1/4"
Beam 5a	3 1/8"	3 1/8"

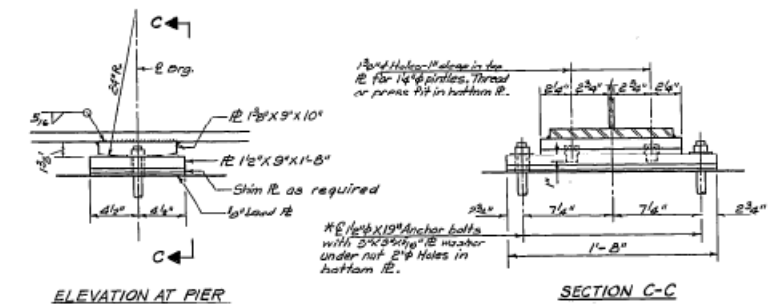
FOR INFORMATION ONLY 044-0011



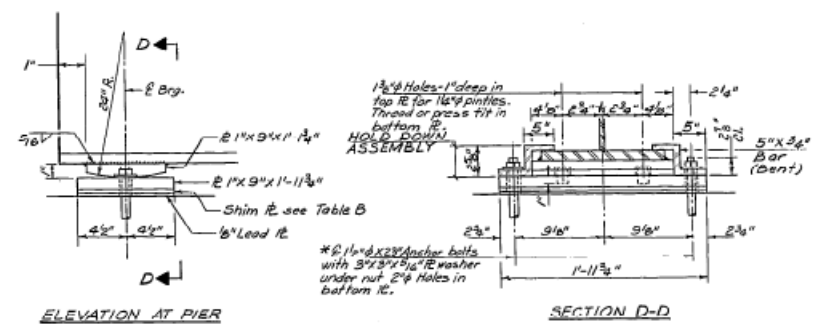
FIXED BEARING
BENT #3 & BENT #4



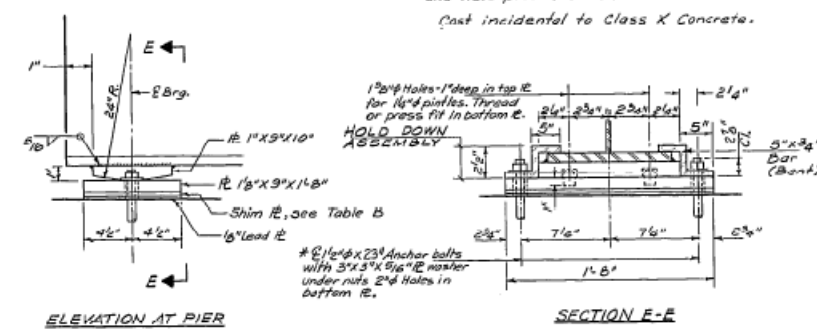
FIXED BEARING
PIER #2



FIXED BEARING
PIER #4



FIXED BEARING
S. BRG. PIER #1



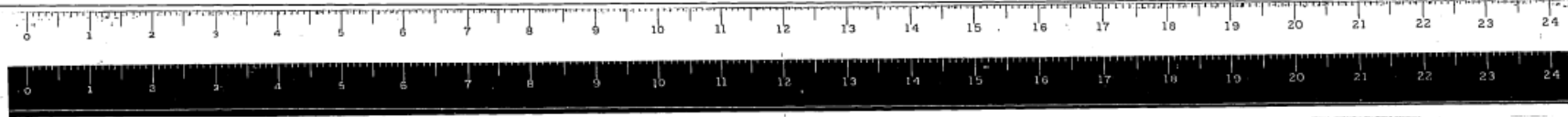
FIXED BEARING
S. BRG. PIER #3

Note:
Beams shall be held down at S. Brg. of Piers #1 & #3 if the deck pour is commenced in spans #7 or #9. After pouring is completed the Hold Down Assembly shall be removed and nuts placed on anchor bolts. Cast incidental to Class X Concrete.

*Anchor bolts may be built into the masonry. See sheet #20 for drilled anchor bolt details.

BEARING DETAILS
F.A. RTE. 128 SEC. 115 BC-BR
JOHNSON COUNTY
STA. 1209+00.00

DESIGNED Paul S. McLean	EXAMINED [Signature]
CHECKED Chhaganlal D. Patil	PASSED [Signature]
DRAWN E. Vern Taylor	APPROVED [Signature]
CHECKED P.S.M. C.P.D.	ENGINEER OF BRIDGES AND STRUCTURES



MODEL: Default FILE: \\msbpc-p01\ILBAREID\NTEC\Illinois\gov\pww\DOT\Documents\DOT_Offices\District 9\Projects\8711\ICDD\Bridges\CAD\Drawings\8711-Sheets.dgn

USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	044-0011	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -			VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	16
PLOT DATE = 2/26/2019	CHECKED -	REVISED -			SCALE:				CONTRACT NO. 78711
	DATE -	REVISED -			SHEET	OF	SHEETS	STA.	TO STA.
							ILLINOIS	FED. AID PROJECT	

S.M.: USGS San 1405-550, Elev. 550.51, 51' x 1/4" Sta. 371105.

Existing Structure: #091-0064 25'-0" wide by 103'-0" long. Built as R.A. Rte. 197, Sta. 16 B, of Sta. 386+65 in 1957. The existing 3 span R.C. Slab on steel I Beams, superstructure with Timber Pile Bents substructure shall be removed using stage construction so as to maintain one way traffic during the construction of a new structure.

As shown

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

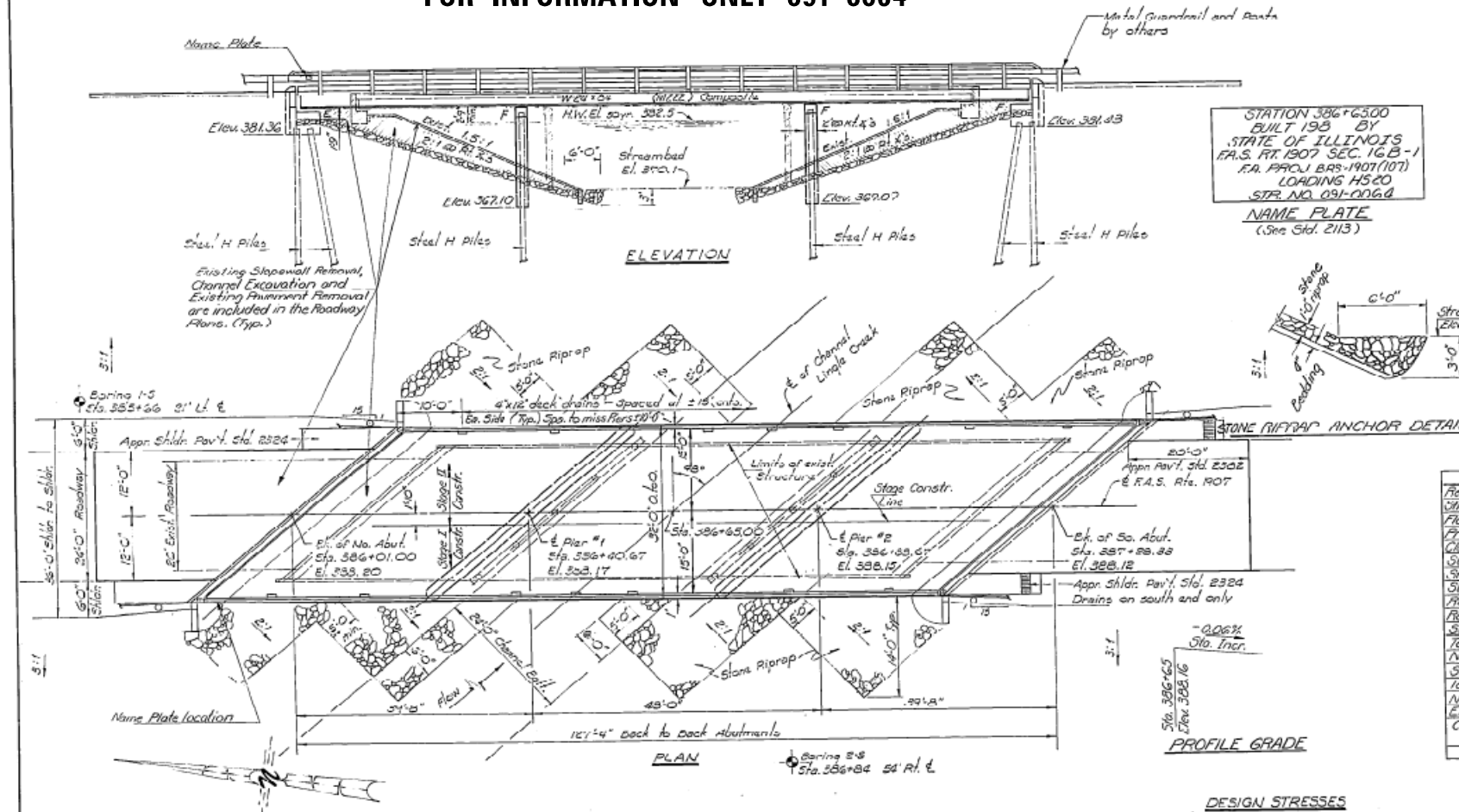
PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
107 168-1	UNION	33	18

SHEET NO. 1
OF SHEETS

FOR INFORMATION ONLY 091-0064

GENERAL NOTES

See Proposal for Bidding Data.
Fasteners shall be high strength bolts (AASHTO M 164, Type 3.)
Bolts 3/4", open holes 5/8", unless otherwise noted.
Calculated weight of Structural Steel = 31,490
All structural steel shall be AASHTO M 222.
The Zinc-silicate and vinyl paint system shall be used for shop and field painting of Structural Steel except where otherwise noted.
AASHTO M 222 structural steel shall not be painted except, that for a distance of three times the depth of the beams (but not exceeding 10 feet) each way from deck joints, the AASHTO M 222 structural steel shall be cleaned and given one coat of the Zinc-silicate primer and a dark maroon vinyl finish coat. Both coats may be applied in the shop with spot painting only in the field.
Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before bolting diaphragms over supports. Layout of Stone Riprap may be varied in the field to suit ground conditions as directed by the Engineer.
The contractor shall drive two steel 11" x 10" x 42 foot piles, one each, in a permanent location at North Abutment and Pier 2 as directed by the Engineer before ordering the remainder of piles.
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 3/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/2" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, shims of the dimensions of top plate shall be provided and placed as detailed.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate materials.
The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 222.
Reinforcement bars shall conform to the requirements of AASHTO M 31 or M-53 Grade 60.



STATION 386+65.00
BUILT 1957 BY
STATE OF ILLINOIS
F.A.S. Rte. 197 SEC. 16B-1
R.A. PROJ. BR-1907(107)
LOADING HS 20
STR. NO. 091-0064
NAME PLATE
(See Std. 2113)

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Structures	Each			178
Structure Excavation	Cu. Yd.		178	178
Floor Drains	Each	14		14
Protective Coat	Sq. Yd.	465		465
Class X Concrete	Cu. Yd.	116.9	69.4	186.3
Structural Steel	Lumpsum	1		1
Steel Shear Connectors	Each	1592		1592
Steel Railings, Type T-1	Lin. Ft.	250		250
Reinforcement Bars	Pound	30,110	10,460	40,570
Reinforcement Bars (Epoxy Coated)	Pound		30,110	30,110
Steel Piles HP 10x42	Each		1981	1981
Test Pile Steel HP 10x42	Each		1	1
Name Plates	Each		1	1
Stone Riprap	Ton		411	411
Temporary Bridge Pile	Lin. Ft.	205		205
Neoprene Expansion Joint 2"	Lin. Ft.	47		47
Elastomeric Bearing Assembly, Type I	Each	4		4
Class X Concrete Encasement	Cu. Yd.		14.2	14.2

WATERWAY INFORMATION

Drainage Area = 6.46 sq. mi. Low Grade Elev. 386.50 @ Sta. 347+00

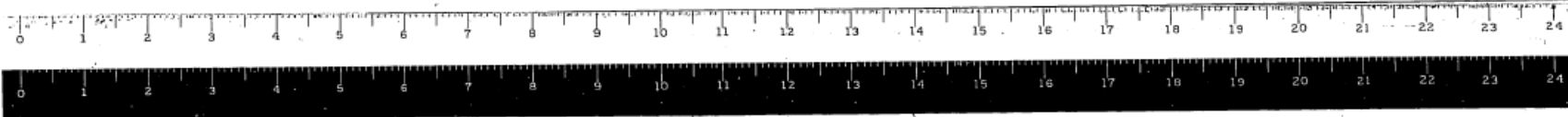
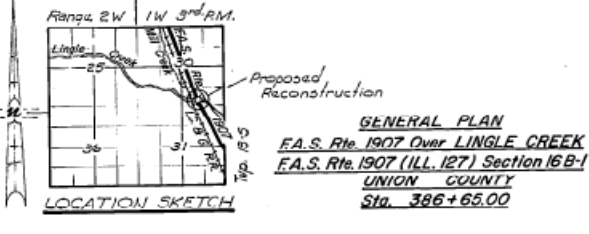
Flood	Reg. Yr.	Q	Opposing Sq. Ft.	Dist. C.F.S.	Head - Ft.	Head - Ft.	Headwater El.	Headwater El.
			Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.
Design	50	3599	452	562	382.5	4.05	3.73	383.35
Beam	100	4152	476	578	382.9	1.18	3.42	384.08
Overlapping								
Max. Calc.	500	5466	513	635	383.3	2.68	2.12	386.38

DESIGNED Rick Brunette
CHECKED L. Kidel
DRAWN J.R.B.
CHECKED L.K. DJR

EXAMINED August 3, 1994
PASSED
APPROVED

DESIGN STRESSES
F_c = 3,500 psi
F_y = 60,000 psi (Reinforcement)
F_y = 50,000 psi (Structural) AASHTO M 222

LOADING HS 20-1A
Allow 25% def. for future wearing surface.
Design Specifications: 1977 AASHTO; 1978 thru 1983 Interim Specifications.



BAD COPY

MODEL: Default
FILE: \\p01\p01\BAREID\IDT\Illinois\gov\p01\DOT\Documents\IDT\091-0064\CADD\091-0064\091-0064-18-111-Sheets.dwg

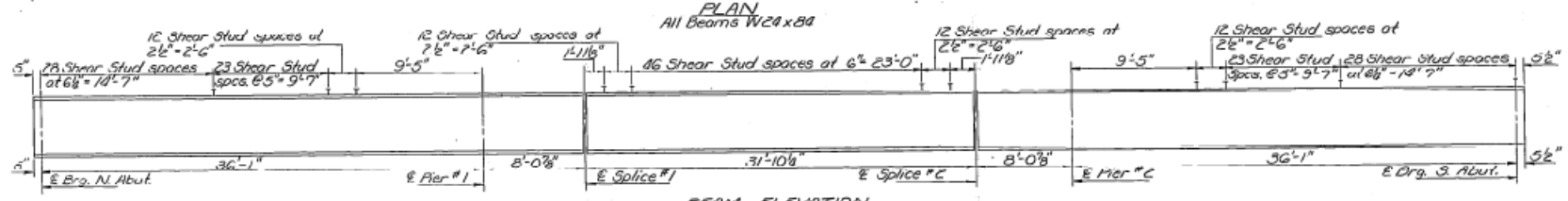
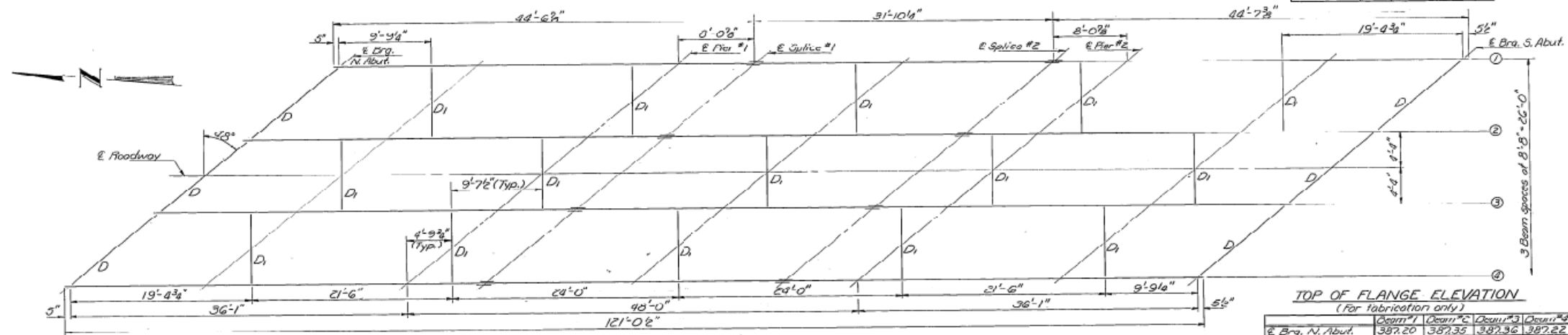
USER NAME = henkas	DESIGNED -	REVISED -	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -	VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	17
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 78711				
PLOT DATE = 2/26/2019	DATE -	REVISED -	SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS	FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

091-0064

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
16B-1	UNION	33	27	16 SHEETS



TOP OF FLANGE ELEVATION
(For fabrication only)

	Beam #1	Beam #2	Beam #3	Beam #4
E Brg. N. Abut.	387.20	387.35	387.36	387.22
E Pier #1	387.18	387.33	387.34	387.20
E Splice #1	387.18	387.33	387.33	387.19
E Splice #2	387.16	387.31	387.32	387.17
E Pier #2	387.15	387.30	387.31	387.17
E Brg. S. Abut.	387.13	387.28	387.29	387.15

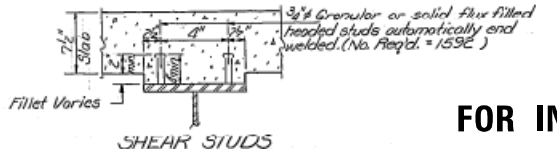
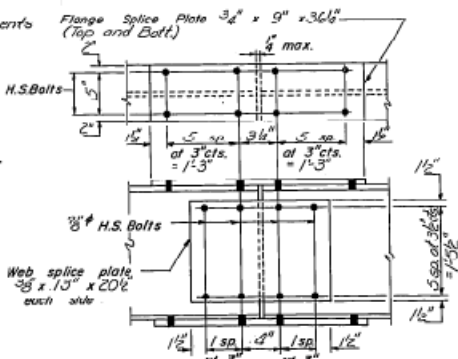
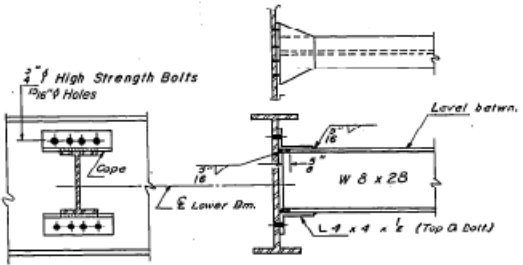
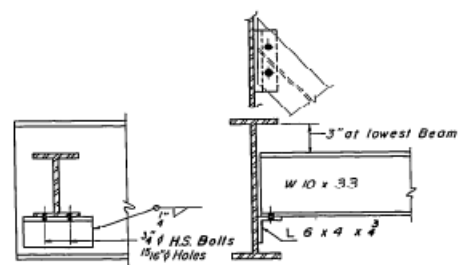
INTERIOR BEAM MOMENT TABLE

	Span 1 or Span 2	Pier 1 or Span 2	Span 2
I_x	(in ⁴) 2370	2370	2370
I_y	(in ⁴) 72.94	72.94	72.94
S_x	(in ³) 196.0	196.0	196.0
S_y	(in ³) 306.1	306.1	306.1
I_p	(in ⁴) 924	924	924
M_R	(K) 103.22	220.05	125.89
I_s non-comp (ksi)	6.31	—	1.71
S_E	(in ³) .301	.301	.301
$M_s E$	(K) 40.66	34.03	58.66
M_E	(K) 567.63	327.39	712.07
M Imp.	(K) 770.29	96.59	206.51
Total	(K) 778.35	693.06	977.64
I_s comp (in ⁴)	30.92	—	32.51
I_s Total	(ksi) 36.83	42.74	46.02
V_R	(K) 69.03	—	49.32

INTERIOR BEAM REACTION TABLE

	Abut.	Piers
R_E	(K) 16.5	12.3
R_I	(K) 40.6	51.1
Imp.	(K) 12.2	15.3
R Total	(K) 69.3	123.9

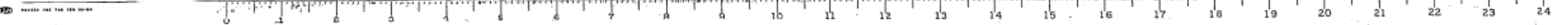
I_x and S_x are the moment of inertia and section modulus of the steel section used in computing I_s Total.
 I_y and S_y are the moment of inertia and section modulus of the composite section used in computing I_s Total.
 V_R is the maximum I_s Impact shear range in span.
 The load factor $(1.3)[I_x + S_E + S_I(\text{Imp.})]$ is included for computing moments and stresses.



DESIGNED Rick Brunetta
 CHECKED L. Kidd
 DRAWN Joe Sutherland
 CHECKED L.K.
 EXAMINED August 3 1980
 APPROVED [Signature]
 DIRECTOR OF HIGHWAYS

FOR INFORMATION ONLY 091-0064

STRUCTURAL STEEL
 F.A.S. RT. 1907 SEC. 16B-1
 UNION COUNTY
 STATION 386+65.00



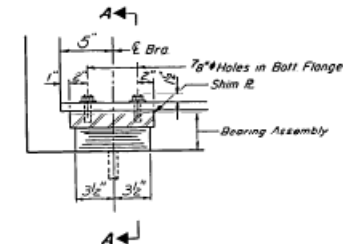
BAD COPY

MODEL: Default FILE: \\nas101\p01\BARDEN\ITC\Illinois\gov\p01\DOT\Documents\DOT Office\Director 9\Projects\8711\IC\Draws\CAD\Draws\0910064\0910064.dwg

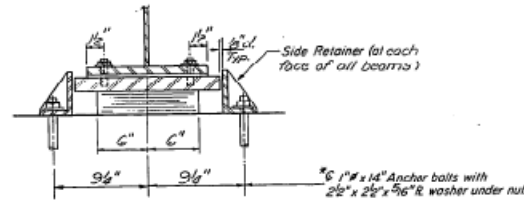
USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	091-0064	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -			VAR	D9 BRIDGE PAINT 2019-3	VARIOUS	19	18
PLOT DATE = 2/26/2019	CHECKED -	REVISED -			CONTRACT NO. 78711				
	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

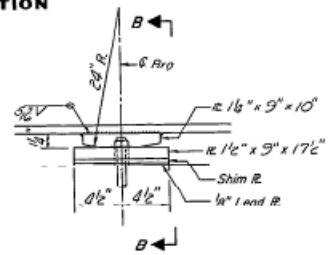
NOTE NO.	SECTION	QUANTITY	UNITS	NO.	SHEET NO. //
1	16B-1	UNION	33	28	16 SHEETS
PER UNIT COST \$					PER SHEET COST



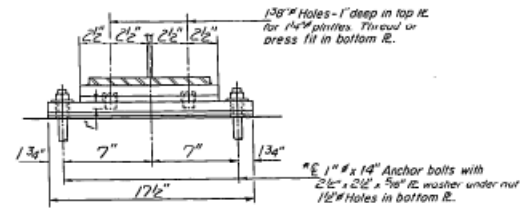
SECTION AT NO. ABUT.
TYPE I ELASTOMERIC EXP. BRG.



SECTION A-A

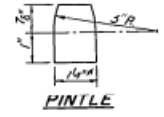


ELEVATION AT PIERS
FIXED BEARING

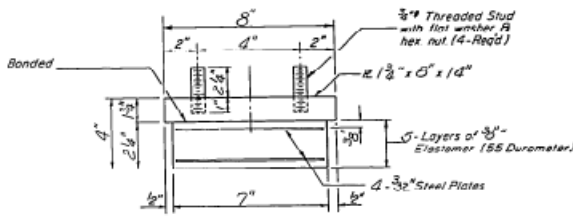


SECTION B-B

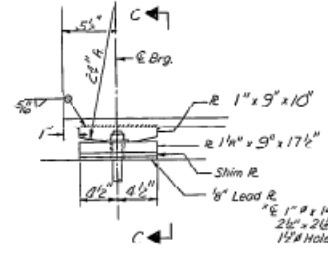
Note: After girders have been erected holes in expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts of fixed bearings may be built into the masonry. See sheet #12 for Anchor Bolt details.



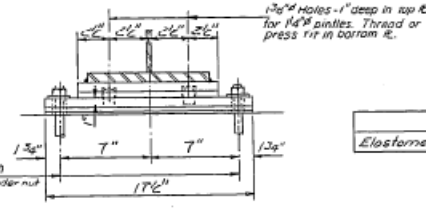
PINTLE



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



SECTION AT SO. ABUT.

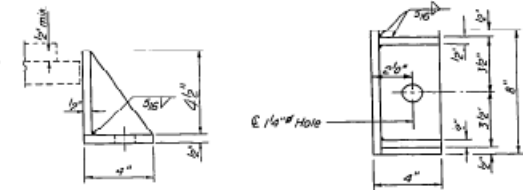


SECTION C-C

FIXED BEARING

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	4



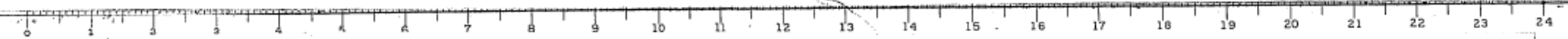
SIDE RETAINER
Equivalent rolled angle with stiffeners will be utilized in lieu of welded plates.

DESIGNED	Rick Brunette	EXAMINED	August 3 1980
CHECKED	L. Kicht	PASSED	[Signature]
DRAWN	Joe Sutherland	APPROVED	[Signature]
CHECKED	L. K.	SPECTOR OF HIGHWAYS	

I-2-EI 8-30-80

FOR INFORMATION ONLY 091-0064

BEARING DETAILS
F.A.S. RT 1907 SEC 16B-1
UNION COUNTY
STATION 386+65.00



BAD COPY

MODEL: Default FILE: \\nas01c:\pub\BAREID\NITEC\Illinois\gov\PIVDOT\Document\DOT\Office\Director\910\proj\091\091\11\CADData\CAD\sheet\091\09111\Sheet.dwg

USER NAME = henkas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	091-0064	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
PLOT DATE = 2/26/2019	CHECKED -	REVISED -			ILLINOIS	FED. AID PROJECT					
	DATE -	REVISED -			CONTRACT NO. 78711						