

47

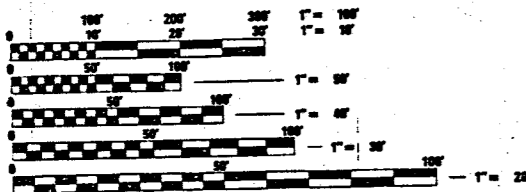
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- 3. SUMMARY OF QUANTITIES
- GENERAL NOTES
- TRAFFIC CONTROL PLAN
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- 8-11. U.S. 20 OVER ST. CHARLES ST. PLAN SHEETS
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- 48. TEMPORARY INFORMATION SIGNING FOR LANE CLOSURES DETAIL
- 49. DISTRICT ONE FREEWAY STANDARD - ONE LANE CLOSURE
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- 51. TRAFFIC CONTROL DETAILS FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

STATE STANDARDS

701401	701406	701411
701601-01	701606-01	701801-01
	702001	

THIS IMPROVEMENT IS LOCATED IN THE MUNICIPALITIES OF ELGIN, SUMMIT, ITASCA, CHICAGO AND UNINCORPORATED WILL COUNTY.



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

VARIOUS DISTRICT ONE
SECTION: 1995-1131

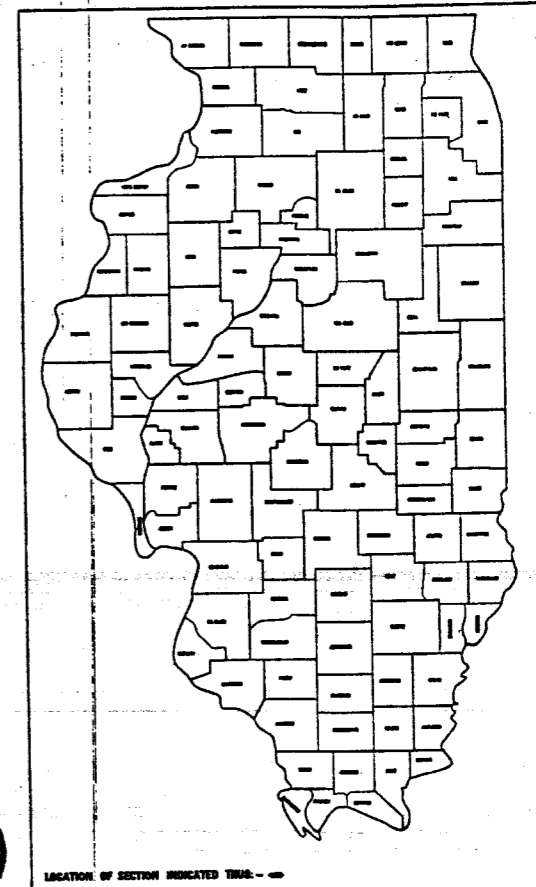
- Bea - at r/sh/str/ing*
1. U.S. 20 OVER IL. 25 (SN:045-0007)
 2. U.S. 20 OVER ~~ST. CHARLES ST (SN:045-0006)~~
 3. U.S. 20 OVER McLEAN BLVD. (SN:045-0003 EB, 045-0002 WB)
 4. IL. 43 OVER I-55 (SN:016-0316)
 5. THORNDALE AVE. OVER I-290 (SN:022-0108)
 6. 111th ST. OVER I-94 (BISHOP FORD) (SN:016-0992)
 7. 115th ST. OVER I-94 (BISHOP FORD) (SN:016-2042 EB, 016-2043 WB)
 8. I-80 OVER I-55 (SN:099-0044 EB, 099-0045 WB)
 - + 9. IL. 171 SB RAMP TO I-55 (SN:016-1026)

BRIDGE PIN & LINK CONNECTORS
VARIOUS COUNTIES
C-91-166-95

FOR LOCATION MAPS,
SEE PLAN SHEET NO. 2

F.A.P.	SECTION	COUNTY	TOTAL SHEETS
VAR.	1995-1131	VAR.	51

D-91-166-95



LOCATION OF SECTION INDICATED TRUE -- --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 29, 98

EXAMINED John L. ...

PASSED August 14, 98
Bill ...

APPROVED August 14, 98
James D. ...

PRINTED BY AUTHORITY OF THE
STATE OF ILLINOIS

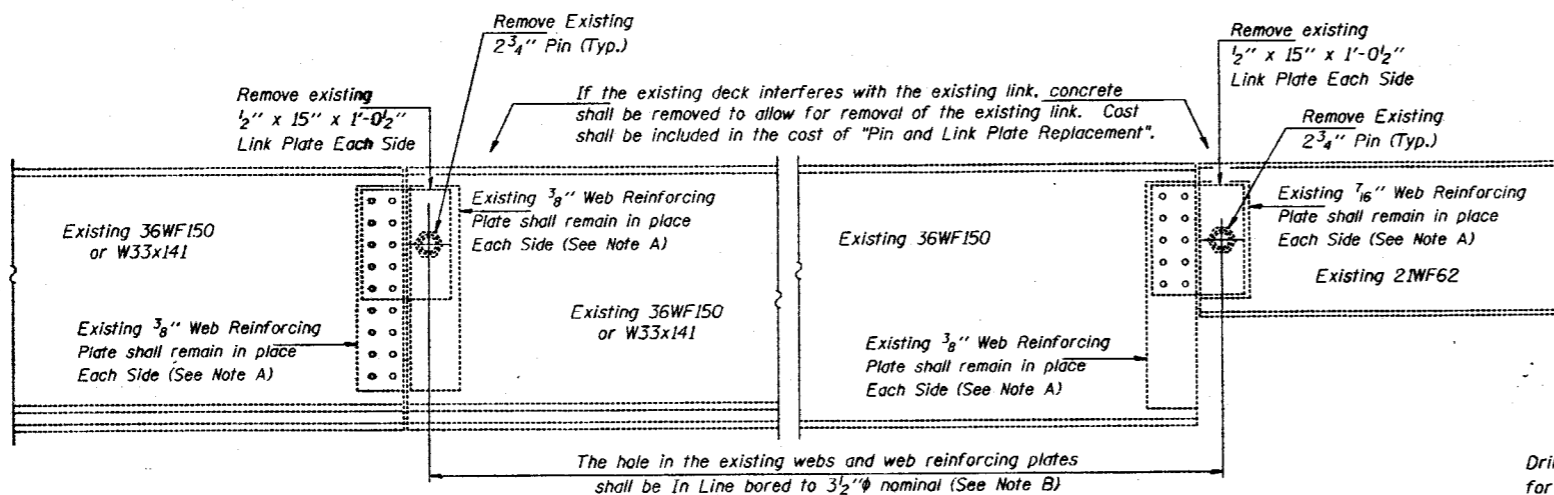
FOR UTILITY INFORMATION
CALL J.U.L.I.E. 1-800-892-0123
C.U.A.N. (312)-744-7000

DISTRICT ONE - BUREAU OF MAINTENANCE, K. ANTONSON
MAINTENANCE DESIGN ENGINEER, B. EPINO / K. BELGRAVE (847) 705-4188

CONTRACT NO. 82943

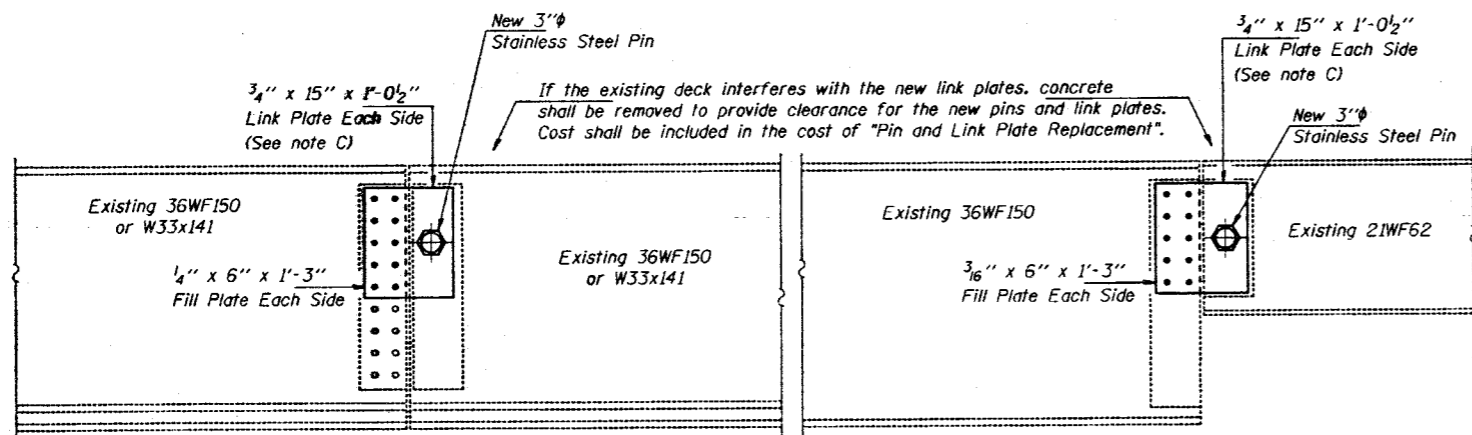
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	DISTRICT	COUNTY	SHEET NO.	SHEET NO. 1
F.A. 426		KANE	51	8
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT		4 SHEETS



ELEVATION AT EXISTING PIN ASSEMBLY
FOR BEAMS 1, 2, 14 & 15

ELEVATION AT EXISTING PIN ASSEMBLY
FOR BEAMS 3 THRU 13

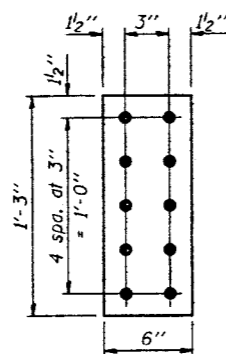


ELEVATION AT NEW PIN ASSEMBLY
FOR BEAMS 1, 2, 14 & 15

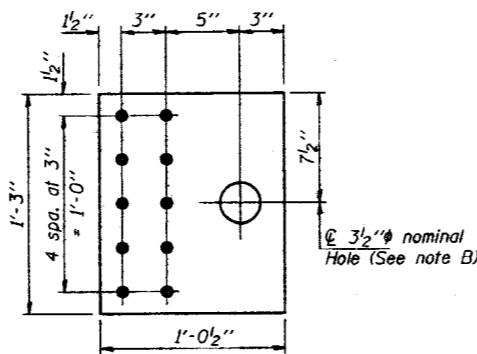
ELEVATION AT NEW PIN ASSEMBLY
FOR BEAMS 3 THRU 13

MAXIMUM REACTIONS AT PIN

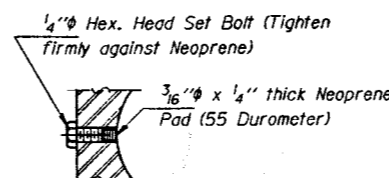
RP	(K)	11.5
Rt	(K)	23.8
Imp.	(K)	7.1
R (Total)	(K)	42.4



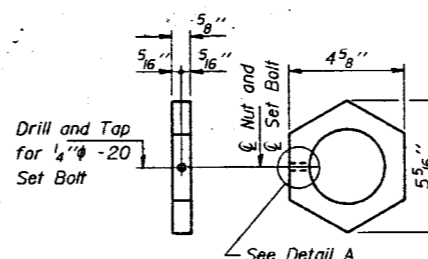
FILL PLATE DETAIL
(16 Required 1/4 inch x 6 inch x 1'-3 inch)
(44 Required 3/16 inch x 6 inch x 1'-3 inch)



LINK PLATE DETAIL
(60 Required)



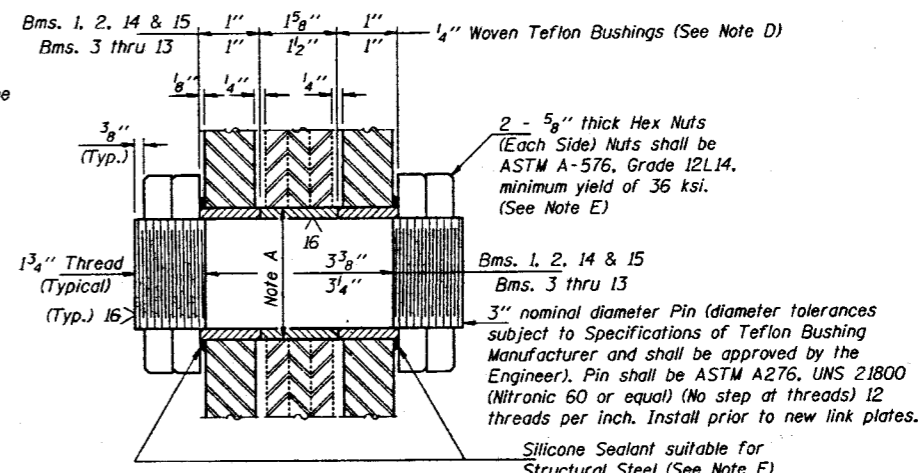
DETAIL A
Set Bolts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.



EXTERIOR NUT DETAIL
(60 Required)



INTERIOR NUT DETAIL
(60 Required)



SECTION THRU PIN
(8 Required 3 inch x 6 7/8 inch Bms. 1, 2, 14 & 15)
(22 Required 3 inch x 6 3/4 inch Bms. 3 thru 13)

NOTES

- All new structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
- Fasteners shall be high strength bolts. Bolts 3/4 inch, open holes 13/16 inch, unless otherwise noted.
- The Contractor shall provide support and/or shoring systems for the beam in the area of existing pin and link plate replacement. See Special Provision "Temporary Support System."
- The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. See Special Provisions "Cleaning and Painting New Metal Structures". Cost shall be included in the cost of "Pin and Link Plate Replacement".
- Existing Structural steel shall be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures". Cost shall be included in the cost of "Pin and Link Plate Replacement."
- All existing steel surfaces behind link plates shall be cleaned and primed before installation of new link plates. Cost shall be included in the cost of "Pin and Link Plate Replacement."
- 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, except the pin diameters, 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 Pins and Link Plates shall conform to the minimum Charpy V-Notch Toughness of 25 ft.-lbs. at 40° F.
- The pins, link plates, bushings, nuts, Set Bolts, Neoprene Pad, silicone sealant, fill plates and high strength bolts are the items included in "Pin and Link Plate Replacement".

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Support System	Each	30
Pin and Link Plate Replacement	Each	30

- Note B:
Bore diameter for bushing in link plate, existing webs and web reinforcement plates shall correspond to bushing manufacturer's allowable tolerances for proper functioning. Hole diameter may be adjusted to allow use of stock bushings.
- Note C:
Inside face of new link plates shall receive first field coat in shop. The primer shall pass the M.E.K. Rub Test before the first field coat is applied.
- Note D:
Actual bushing thickness per manufacturer's specifications, 1/4 inch is approximate. Bushings shall be a self lubricating filament wound epoxy matrix backed Duralon Bearing, metal backed Fiber Glide Bearing or equivalent. No primer or grease shall be allowed on bushings. Bushings shall be suitable for dynamic loads of 20,000 psi.
- Note E:
Tighten inside nuts to bring all bushings into firm contact, then back off 1/4 turn and tighten outer nuts.
- Note F:
Apply 3/8 inch bead to face of the web reinforcing plates approximately 1/2 inch from bushing immediately before installing new link plates. Place sealant around nuts after installation. Sealant shall be suitable for prolonged exterior exposure without losing flexibility or adhesion to painted steel surfaces. Proposed products shall be subject to Department's acceptance based on documented testing or other evidence.

PIN AND LINK PLATE REPLACEMENT
F.A. RT. 426 SEC. 8R-HB-5
KANE COUNTY
STA. 218+04.95
STR. No. 045-0006

DESIGNED	Paul Summer
CHECKED	Victor H. Veisz
DRAWN	Paul Summer
CHECKED	VHV

EXAMINED	John E. ...	AUGUST 5, 1998
PASSED

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
426	KANE	51	9
STA.	TO STA.	PROJECT	

SHEET NO 2 OF 4 SHEETS

- Original Construction Boring Locations.
- 1985 Reconstruction Boring Locations.

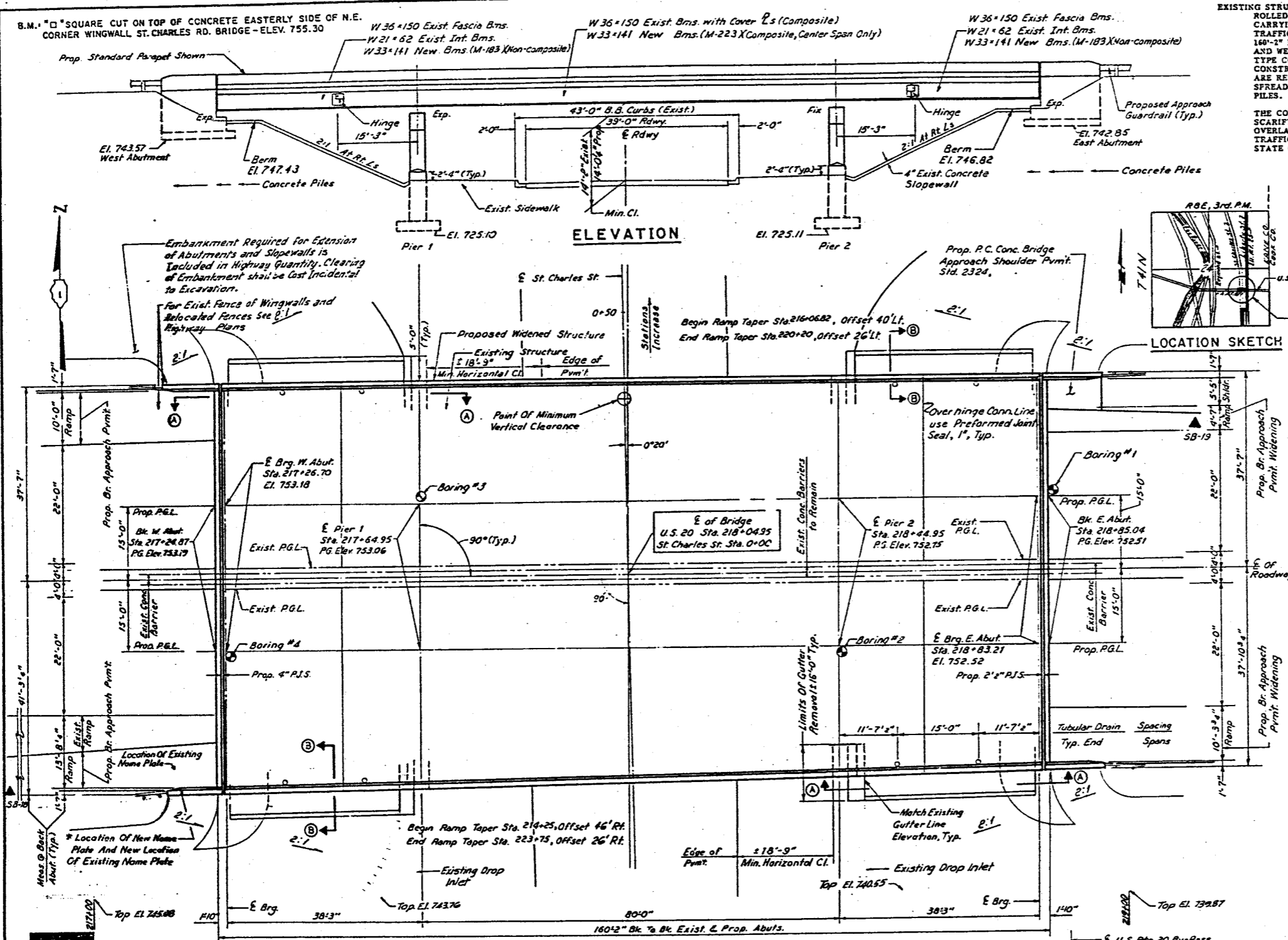
NOTE:
See Sheet #2 for Section A-A & B-B

EXISTING STRUCTURE DATA: THE EXISTING THREE SPAN HINGED ROLLED BEAM STRUCTURE WAS CONSTRUCTED IN 1958 CARRYING TWO LANES IN EACH DIRECTION OF U.S. ROUTE 20 TRAFFIC OVER ST. CHARLES STREET. THE STRUCTURE IS 160'-2" LONG WITH A VARIABLE ROADWAY WIDTH. THE EAST AND WESTBOUND TRAFFIC IS SEPARATED BY A NEW JERSEY TYPE CONCRETE BARRIER WALL MEDIAN WHICH WAS CONSTRUCTED IN 1979. THE DECKS AND SUBSTRUCTURES ARE REINFORCED CONCRETE. THE PIERS ARE SUPPORTED ON SPREAD FOOTINGS, AND THE ABUTMENTS ARE SUPPORTED ON PILES.

THE CONTRACTOR SHALL WIDEN THE EXISTING STRUCTURE, SCARIFY THE EXISTING DECK AND APPLY A CONCRETE OVERLAY OVER THE EXISTING DECK. TWO LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES UTILIZING STATE CONSTRUCTION. NO SALVAGE.

STA. 218+04.95
WIDENED 198 BY
STATE OF ILLINOIS
F.A.T. 6(S)S(L) SEC. 8R-HB-5 (86)
F.A. PROJ. EL. 12-1-19
LOADING HS20
STR. NO. 045-0006

See Standard 213
See Plan for locations of new and existing Name Plates.



FOR INFORMATION ONLY

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
James J. Paulsen
Director of Analysis and Structures

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION

REVISIONS	
NAME	DATE
Revised Profile Grade	3/31/85
Revised Profiles	2/3/86

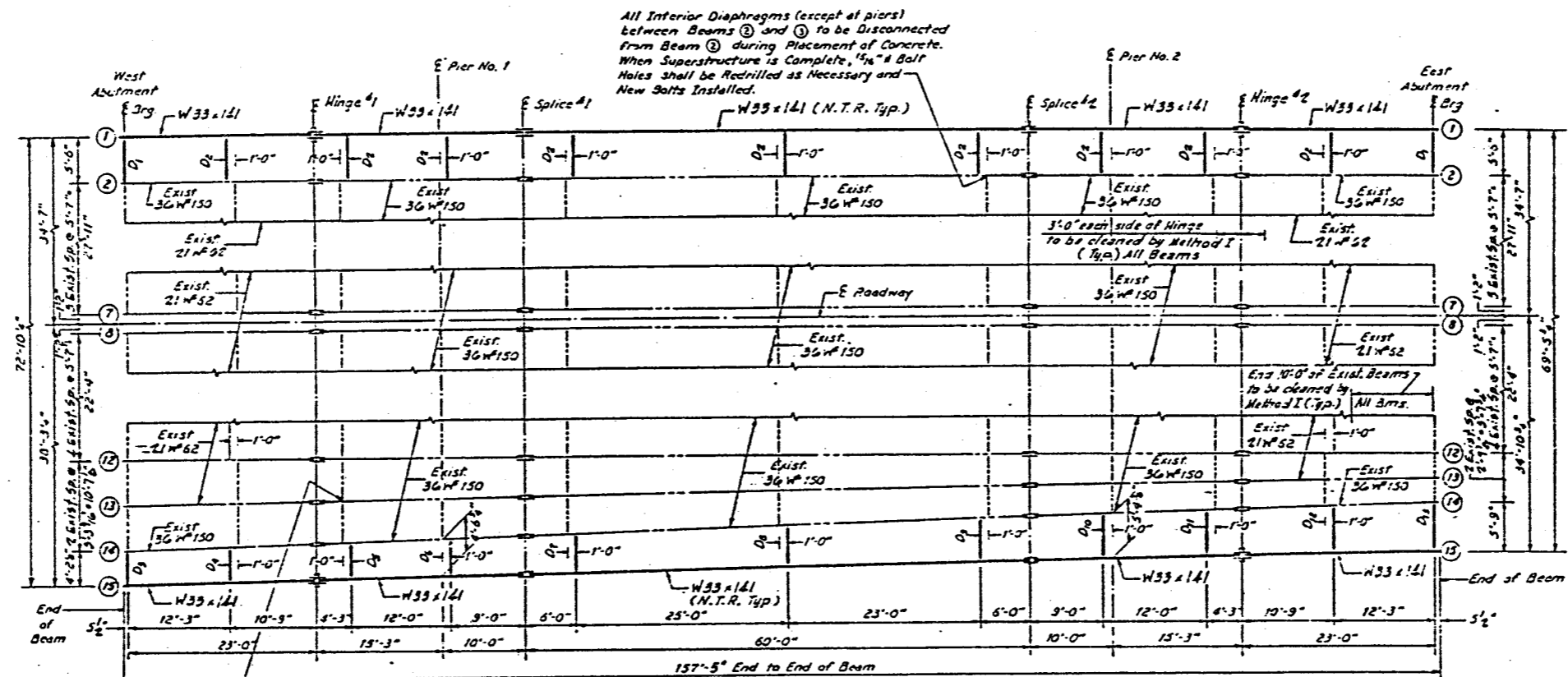
U.S. ROUTE 20 BY-PASS (F.A.P. 426) OVER
ST. CHARLES STREET
SECTION 8R-HB-5 (86)
KANE COUNTY
STATION 218+04.95
STR. NO. 045-0006

Baker Engineers
DESIGNED: P. Wood
CHECKED: J. Owen
DRAWN: R. Spatzman
CHECKED: J. Owen



Signed *John H. Owen* Date 3-4-86
John H. Owen, SE, ILL Reg No 81-3361

PROFILE-U.S. RT. 20 BY-PASS
PROFILE-ST. CHARLES STREET



EXISTING INTERIOR BEAM MOMENT TABLE

	0.3 Sp. 1 or 0.7 Sp. 3	Pier 1 and 2	0.5 Sp. 2
I _g (in ⁴)	1330	9260	12602
I _c (in ⁴)			22529
S _g (in ³)	127	502	657
S _c (in ³)			654
e (ft)	0.387	1.093	4.011
M _E (k)	74.2	297.74	477.66
Factorial (k)	7.01	7.09	8.39
S ₂ (in ³)			0.216
M _{s2} (k)			109.33
M _s (k)	93.2	335.2	592.6
M _{top} (k)	76.7	405	121.7
TOTAL (k)	171.2	475.7	642.13
Factorial (k)			11.70
Factorial (k)	18.5	17.2	20.3
VR (k)			37.1

NEW EXTERIOR BEAM MOMENT TABLE

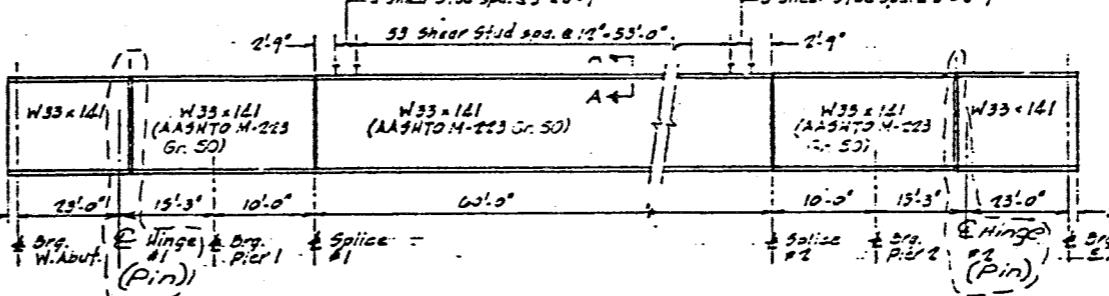
	0.3 Sp. 1 or 0.7 Sp. 3	Pier 1 and 2	0.5 Sp. 2
I _g (in ⁴)	755	750	750
I _c (in ⁴)			1577
S _g (in ³)	225	225	225
S _c (in ³)			625
e (ft)	0.367	0.367	0.783
M _E (k)	64.0	252.0	345.1
Factorial (k)	1.7	7.6	10.7
S ₂ (in ³)			0.176
M _{s2} (k)			89.4
M _s (k)	93.2	335.2	592.6
M _{top} (k)	76.7	405	121.7
TOTAL (k)	171.2	475.7	642.13
Factorial (k)			15.3
Factorial (k)	4.97	18.96	26.0
VR (k)			37.1

INTERIOR BEAM REACTION TABLE

	0.3 Sp. 1 or 0.7 Sp. 3	Pier 1 and 2
R ₂ (k)	11.37	72.31
R ₄ (k)	21.8	30.2
Sum (k)	5.6	10.2
TOTAL (k)	33.8	121.1

S_g and S_c are the moment of inertia and section modulus of the steel section used in computing I_{total}.
I_c and S_c are the moment of inertia and section modulus of the composite section used in computing I_{total}.
VR is the maximum V_u in impact shear range in span.

FRAMING PLAN



BEAM ELEVATION (Beam No's 1 & 15)
See Sheet No. 2 for Notch Toughness Requirements (N.T.R.)

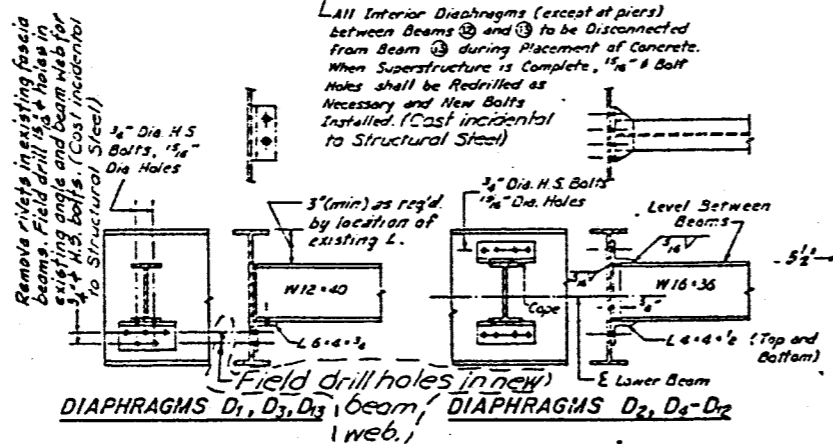
**** Web & Flange Splice Plate Material shall be AASHTO M-223 Gr. 50.**

TOP OF FLANGE ELEVATIONS (BEFORE ANY DEFLECTION)*

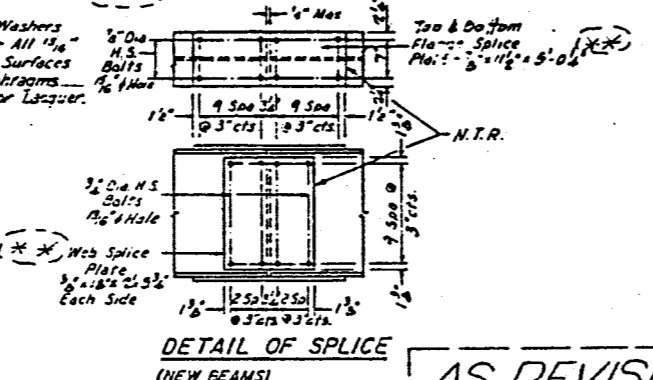
LOC. BEAM	E. Brg. W. Abut.	E. Hinge No. 1	E. Brg. Pier 1	E. Splice No. 1	E. Splice No. 2	E. Brg. Pier 2	E. Hinge No. 2	E. Brg. E. Abut.
1	752.17	752.07	752.00	751.75	751.71	751.07	751.61	751.49
15	752.12	752.02	751.95	751.71	751.71	751.57	751.61	751.51

* FOR FABRICATION ONLY

DIAPHR. NO.	E TO E BM
D ₁ , D ₂	5'-6"
D ₃	4'-2 1/2"
D ₄	4'-3 1/2"
D ₅	4'-5 1/2"
D ₆	4'-6 1/2"
D ₇	4'-8 1/2"
D ₈	5'-11 1/2"
D ₉	5'-2 1/2"
D ₁₀	5'-4 1/2"
D ₁₁	5'-5 1/2"
D ₁₂	5'-7 1/2"
D ₁₃	5'-3"



NOTE: Two Hardened Washers Shall be Required Over All 1/4" Dia. Holes. All Contact Surfaces of Joints for the Diaphragms Shall be Free of Paint or Lacquer.



AS REVISED

FOR INFORMATION ONLY

SECTION A-A

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL

U.S. ROUTE 20 BY-PASS (F.A.P. 426) OVER ST. CHARLES STREET SECTION BR-4B-5(36) KANE COUNTY STATION 213+0.35 STR. NO. 045-0006

REVISIONS

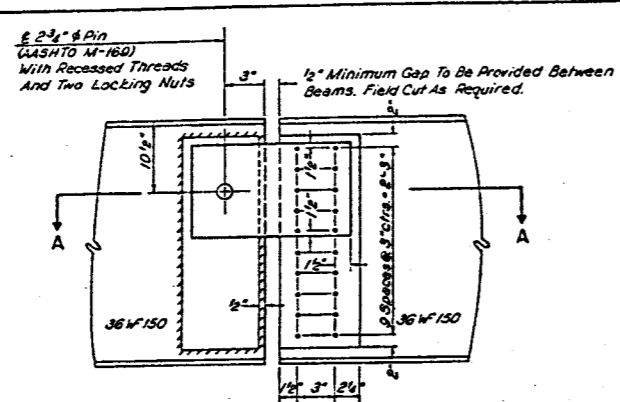
NAME	DATE

Baker Engineers
DESIGNED M. Ryan
CHECKED J. Owen
DRAWN J. Chalakis
CHECKED M. Ryan

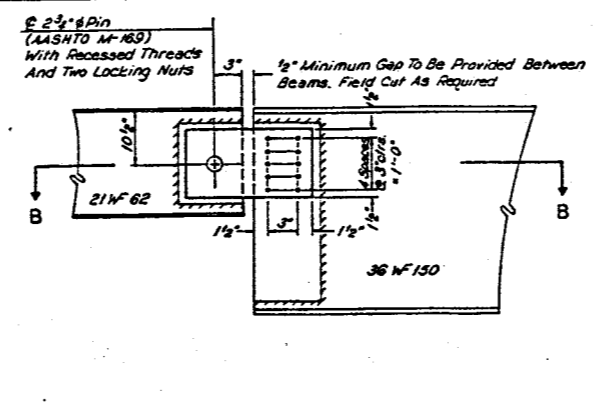
As Revised 3-10-87

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
425	KANE	57	11
TO STA		FED AID PROJECT	

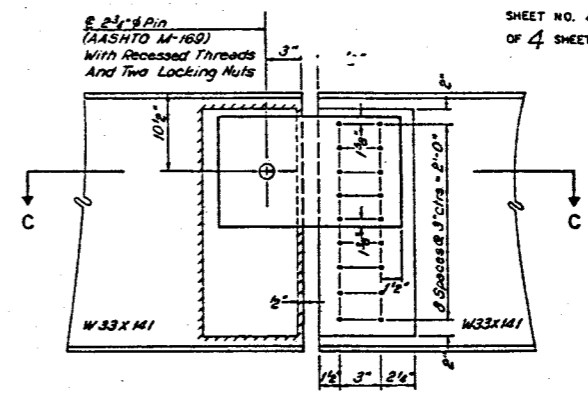
SHEET NO. 4
OF 4 SHEETS



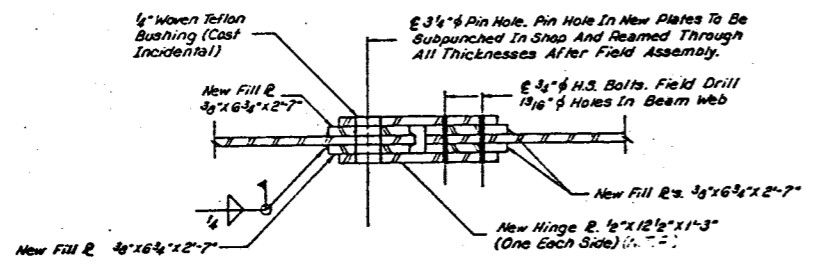
HINGE DETAIL EXISTING FASCIA BEAM



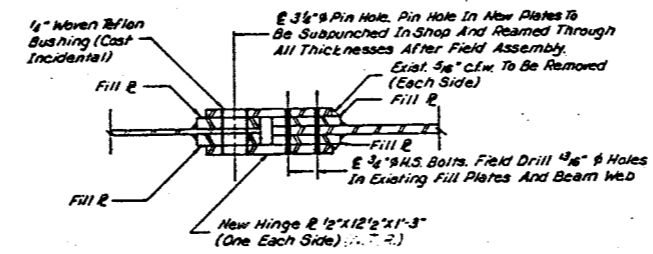
HINGE DETAIL EXISTING INTERIOR BEAM



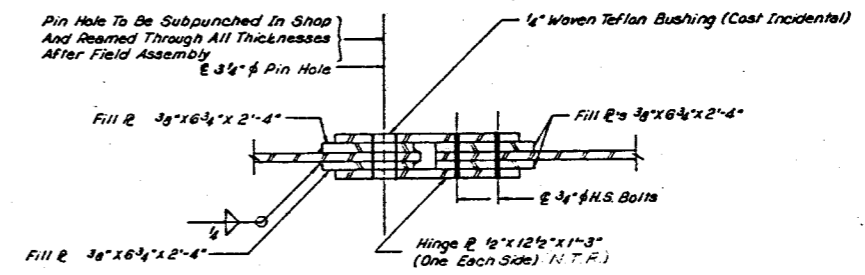
HINGE DETAIL NEW FASCIA BEAM
(N.T.F.)



SECTION A-A



SECTION B-B



SECTION C-C

- NOTES:**
- ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M-148 UNLESS OTHERWISE NOTED.
 - BUSHINGS TO BE SELF LUBRICATING FILAMENT WOUND EPOXY MATRIX BACKED GAR-FIL BEARING OR METAL BACKED FIBER GLIDE BEARING OR EQUIVALENT.
 - SUGGESTED SEQUENCE OF CONSTRUCTION FOR HINGE REPLACEMENT:
 - REMOVE PORTIONS OF CONCRETE DECK SHOWN ON SHEET 3
 - ERECT FALSEWORK TO SUPPORT BEAMS IN SPANS 1 AND 2. FALSEWORK SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 507.04 OF THE STANDARD SPECIFICATIONS. THE COST SHALL BE INCIDENTAL TO FURNISHING AND ERECTING STRUCTURAL STEEL. SEE SPECIAL PROVISIONS.
 - REMOVE EXISTING PINS AND BEAM HINGE CONNECTION PLATES. REMOVE FILL PLATES ALSO AT EXISTING FASCIA BEAMS ONLY.
 - CLEAN BEAMS - SEE NOTE NO. 4.
 - FIELD DRILL BOLT HOLES IN EXISTING BEAM WEBS AND EXISTING INTERIOR BEAM FILL PLATES. INSTALL BOLTS FINGER TIGHT. ADJUST PLATES INTO PROPER POSITION FOR PIN. FULLY TORQUE HIGH STRENGTH BOLTS. REAM PIN HOLE THROUGH BEAM WEB AND PLATES. INSTALL PIN ASSEMBLY. BURR THREADS.
 - REMOVE FALSEWORK.
 - CLEAN AND PAINT ALL STRUCTURAL METALS. ALL EXISTING STRUCTURAL METALS SHALL BE CLEANED USING METHOD II, WITH THE EXCEPTION OF THE FOLLOWING WHICH SHALL BE CLEANED BY METHOD I: THE END 10 FT. OF EACH BEAM AT THE ABUTMENTS, THE END DIAPHRAGMS, THE EXISTING BEAMS FOR A DISTANCE OF 3 FT. EACH SIDE OF THE HINGE CONNECTIONS AFTER THE CONNECTIONS ARE DISASSEMBLED, AND THE BEARINGS AT PIER 2. FOLLOWING REMOVAL OF THE CONCRETE DECK IN THE DESIGNATED AREAS, THE TOP FLANGES OF THE BEAMS, SPLICES, AND END DIAPHRAGMS SHALL BE CLEANED USING METHOD II. THE METAL THUS EXPOSED SHALL BE FIELD PRIMED PRIOR TO FORMING THE NEW DECK. SEE SPECIAL PROVISIONS FOR CLEANING AND PAINTING STEEL STRUCTURES.



DESIGNED	M.J.R.
CHECKED	J.H.O.
DRAWN	J.S.C.
CHECKED	J.H.O.

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

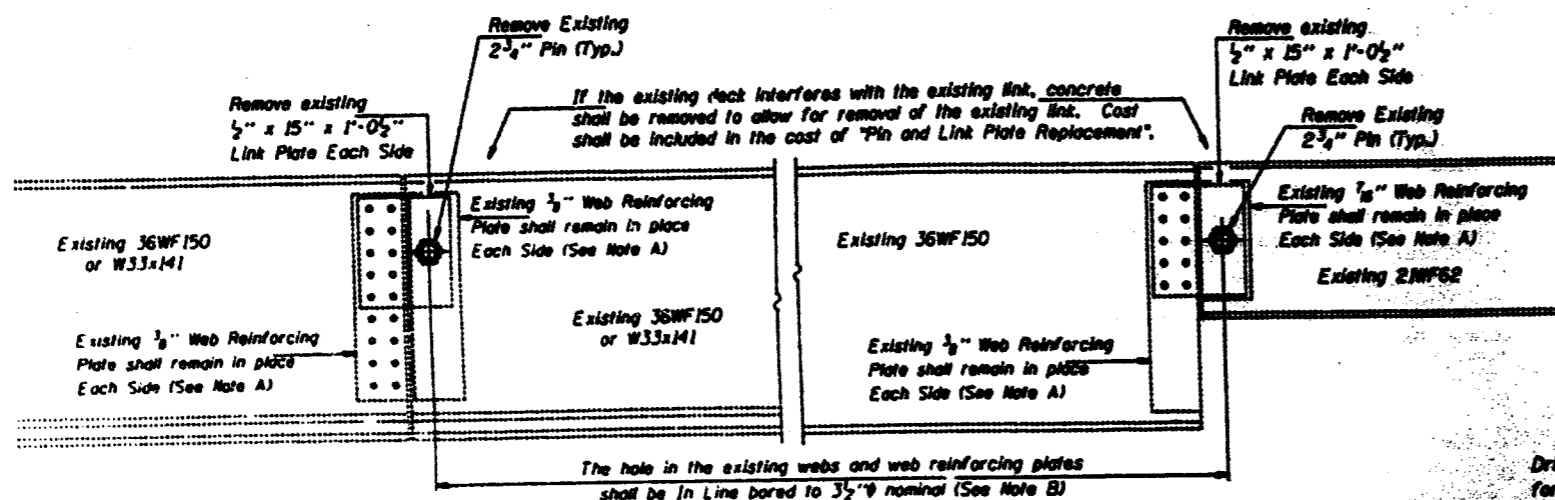
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS

U.S. ROUTE 20 BY-PASS (F.A.P. 426) OVER
ST. CHARLES STREET
SECTION 8R-HB-5(36)
KANE COUNTY
STATION 218+04.95
STR. NO. 045-0006

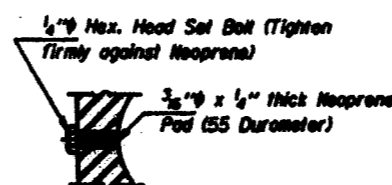
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DATE	DESIGN	GROUP	JOB	SHEET	SHEET NO. 1 4 SHEETS
F.A. 428		RARE	5/	B	
REVISED DATE	BY	BY	BY	BY	

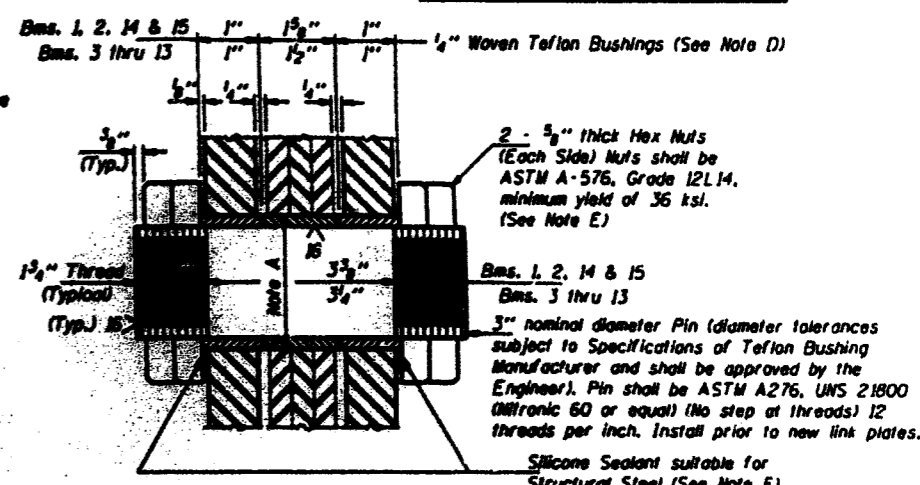
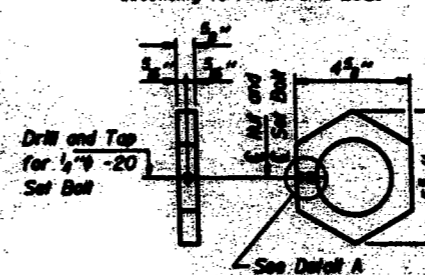


**ELEVATION AT EXISTING PIN ASSEMBLY
FOR BEAMS 1, 2, 4 & 15**

**ELEVATION AT EXISTING PIN ASSEMBLY
FOR BEAMS 3 THRU 13**



DETAIL A
Set Bolts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.



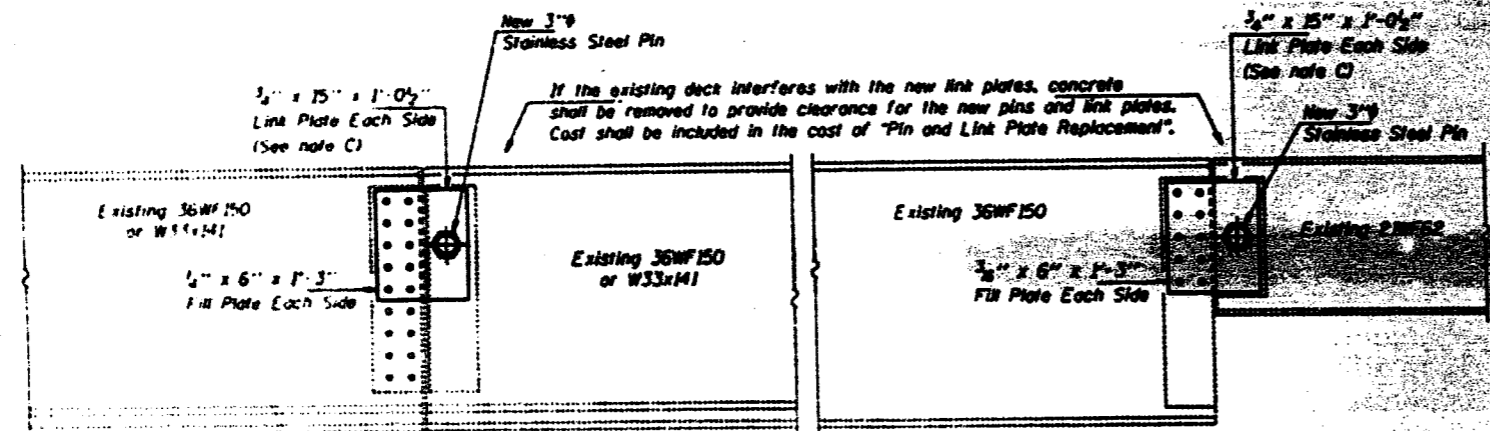
SECTION THRU PIN
(8 Required 3" x 6 1/2" Bms. 1, 2, 4 & 15)
(22 Required 3" x 6 3/4" Bms. 3 thru 13)

NOTES

- All new structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
- Fasteners shall be high strength bolts. Bolts 3/4", open holes 9/16".
- The Contractor shall provide support and/or shoring systems for the beam in the area of existing pin and link plate replacement. See Special Provision "Temporary Support System."
- The zinc rich primer/acrylic/acrylic paint system shall be used for steel and field painting of new structural steel except where otherwise noted. The name of the acrylic flash coat shall be Interstate Green, Munsell No. 750 4/2. See Special Provision "Cleaning and Painting New Metal Structures". Cost shall be included in the cost of "Pin and Link Plate Replacement."
- Existing structural steel shall be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures". Cost shall be included in the cost of "Pin and Link Plate Replacement."
- All existing steel surfaces behind link plates shall be cleaned and primed prior to installation of new link plates. Cost shall be included in the cost of "Pin and Link Plate Replacement."
- Pin 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, except pin diameters, 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 Pins and Link Plates shall conform to the minimum Charpy V-Notch Temperature of 25 ft.-lbs. at 40° F.
- The pins, link plates, bushings, nuts, Set Bolts, Neoprene Pod, silicone sealant, fill plates and high strength bolts are the items included in "Pin and Link Plate Replacement."

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Support System	Each	30
Pin and Link Plate Replacement	Each	30

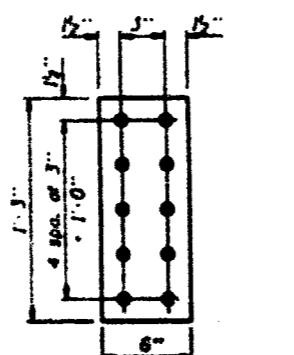


**ELEVATION AT NEW PIN ASSEMBLY
FOR BEAMS 1, 2, 4 & 15**

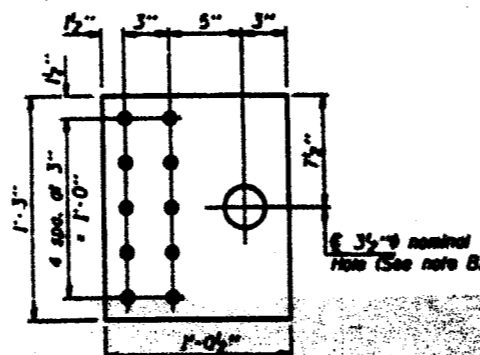
**ELEVATION AT NEW PIN ASSEMBLY
FOR BEAMS 3 THRU 13**

MAXIMUM REACTIONS AT PIN

R2	(K)	11.5
R1	(K)	23.8
Imp.	(K)	7.1
H (T-200)	(K)	42.4



FILL PLATE DETAIL
(25 Required 1/4" x 6" x 1.3")
(44 Required 3/8" x 6" x 1.3")

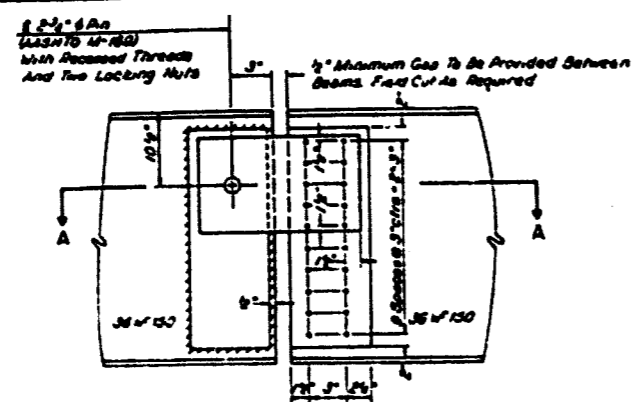


LINK PLATE DETAIL
(20 Required)

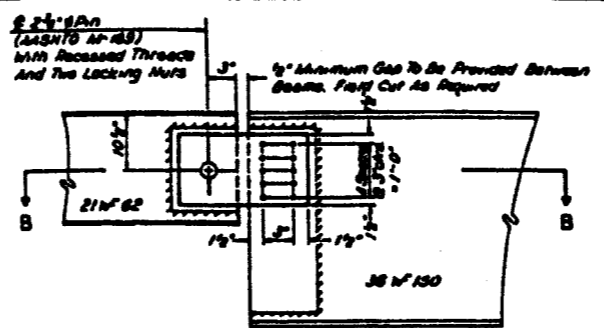
DESIGNED: [Signature] AUGUST 5, 1990
 CHECKED: Verne H. Vozz
 DRAWN: Paul Summers
 APPROVED: [Signature]

- Note A:** Existing webs shall be inspected for cracks, holes, and other deficiencies. All deficiencies shall be repaired before construction. Repairs shall be inspected and approved by the Engineer. Structures for further disposition. Clean and prime before installing new link plates.
- Note B:** Bore diameter for bushing in link plate, existing webs and web reinforcement plates shall correspond to bushing manufacturer's allowable tolerances for proper functioning. Hole diameter may be adjusted to clear use of steel bushings.
- Note C:** Inside face of new link plates shall receive first field coat in shop. The primer shall pass the M.E.K. Rub Test before the first field coat is applied.
- Note D:** Actual bushing thickness per manufacturer's specifications. 1/4" is approximate. Bushings shall be a self-lubricating filament wound epoxy matrix backed Duroton Bearing, fiber backed Fiber Gide Bearing or equivalent. No primer or grease shall be allowed on bushings. Bushings shall be suitable for dynamic loads of 20,000 psi.
- Note E:** Tighten bolts into the face of bushings into firm contact. Do not back off to loose and tighten again.
- Note F:** Apply 1/4" bead to face of the web reinforcing plates approximately 1/2" from bushing inward. Y before installing new link plates. Place primer around nuts after installation. Primer shall be suitable for priming surface exposed without being flammable or otherwise hazardous and surface prepared products shall be subject to Department's acceptance based on documented testing or other evidence.

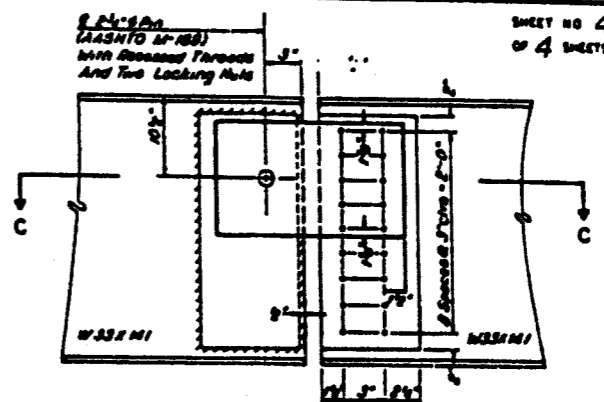
FOR ADDITIONAL REPLACEMENT
 F.A. 428 - SEC. 92-10-5
 SALES
 ST. LOUIS, MO.



HINGE DETAIL EXISTING FASCIA BEAM



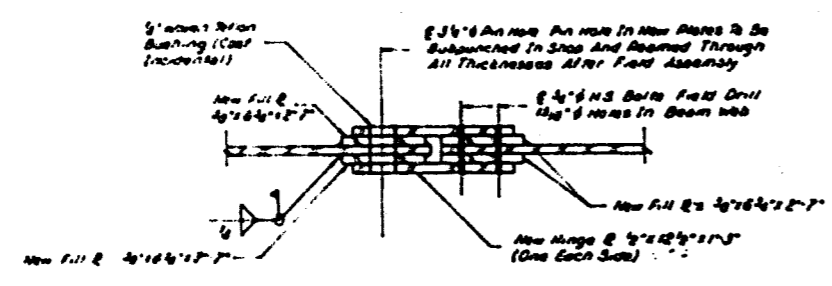
HINGE DETAIL EXISTING INTERIOR BEAM



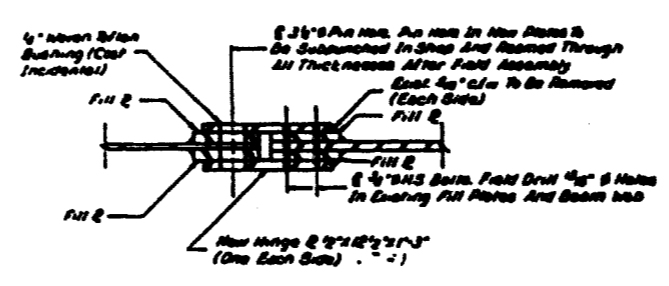
HINGE DETAIL NEW FASCIA BEAM (N.F.R.)

SHEET NO 4
OF 4 SHEETS

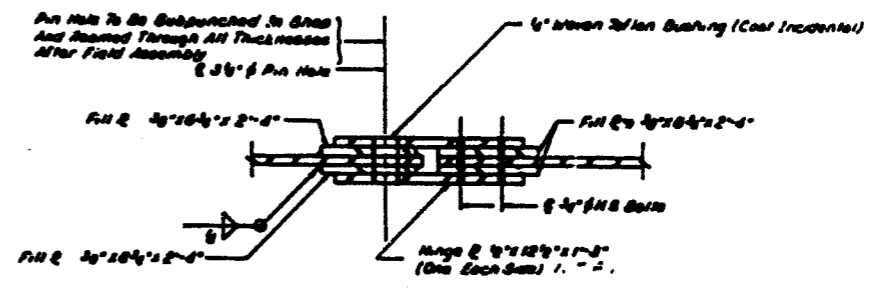
NO.	SECTION	COUNTY	DATE	BY
025		KANE	5/7	JJ
100 ROAD DIST NO. 1				



SECTION A-A



SECTION B-B



SECTION C-C

- NOTES:**
- ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO A-158 UNLESS OTHERWISE NOTED.
 - BEARINGS TO BE SELF-LUBRICATING FILAMENT WOUND EPOXY MATRIX BACKED CAR-FIL BEARING OR METAL BACKED FIBER GLIDE BEARING OR EQUIVALENT.
 - SUGGESTED SEQUENCE OF CONSTRUCTION FOR HINGE REPLACEMENT:
 - REMOVE PORTIONS OF CONCRETE BACK BEHIND OR BEYOND SHEET 3.
 - ERECT FALSEWORK TO SUPPORT BEAMS IN SPANS 1 AND 2. FALSEWORK SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 107.03 OF THE STANDARD SPECIFICATIONS. THE CRUT SHALL BE INCIDENTAL TO FORMWORKING AND ERECTING STRUCTURAL STEEL. SEE SPECIAL PROVISIONS.
 - REMOVE EXISTING FINS AND BEAM BEARING CONNECTION PLATES. REMOVE FILL PLATES ALSO AT EXISTING FASCIA BEAMS ONLY.
 - CLEAN BEAMS - SEE NOTE NO. 6.
 - FIELD BOLT BOLT BOLDS IN EXISTING BEAM WEBS AND EXISTING INTERIOR BEAM FILL PLATES. INSTALL BOLT FINGER TIGHT, ADJUST PLATES INTO PROPER POSITION FOR FIN. FULLY TORQUE BEAM STRENGTH BOLTS. BEAM PIN HOLE THROUGH BEAM WEB AND PLATE. INSTALL FIN ASSEMBLY. DURE TURNAGE.
 - REMOVE FALSEWORK.
 - CLEAN AND PAINT ALL STRUCTURAL DETAILS. ALL EXISTING STRUCTURAL DETAILS SHALL BE CLEANED USING METHOD 11, WITH THE EXCEPTION OF THE FOLLOWING WHICH SHALL BE CLEANED BY METHOD 1: THE END 5 FT. OF EACH BEAM AT THE APPROPTS. THE END DIAPHRAGMS, THE EXISTING BEAMS FOR A DISTANCE OF 3 FT. EACH SIDE OF THE HINGE CONNECTIONS AFTER THE CONNECTIONS ARE DEMONSTRATED, AND THE BEARINGS AT PIER 2. FOLLOWING REMOVAL OF THE CONCRETE BACK IN THE DESIGNATED AREAS, THE TOP FLANGES OF THE BEAMS, SPICES, AND END DIAPHRAGMS SHALL BE CLEANED USING METHOD 11. THE METAL TO BE EXPOSED SHALL BE FIELD PAVED FROM TO FORMING THE NEW DECK. SEE SPECIAL PROVISIONS FOR CLEANING AND PAINTING STEEL STRUCTURES.

DESIGNED	MJA
CHECKED	JND
APPROVED	BOG
DATE	JND

FOR INFORMATION ONLY

REVISIONS	
NO.	DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS

US ROUTE 20 BY-PASS (P.A. 426) OVER
ST CHARLES STREET
SECTION 02-105-5(6)
KANE COUNTY
STATION 20+04.96
SPL. NO. 045-0006