

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL-AID B.R.R. PROGRAM

WAYNE COUNTY
SECTION 03-01111-00-BR
ARRINGTON ROAD DISTRICT
STRUCTURE NO. 096-3438
PROJECT NO. BROS-191(46)
JOB NO. C-97-013-05
TR 515

INDEX OF SHEETS

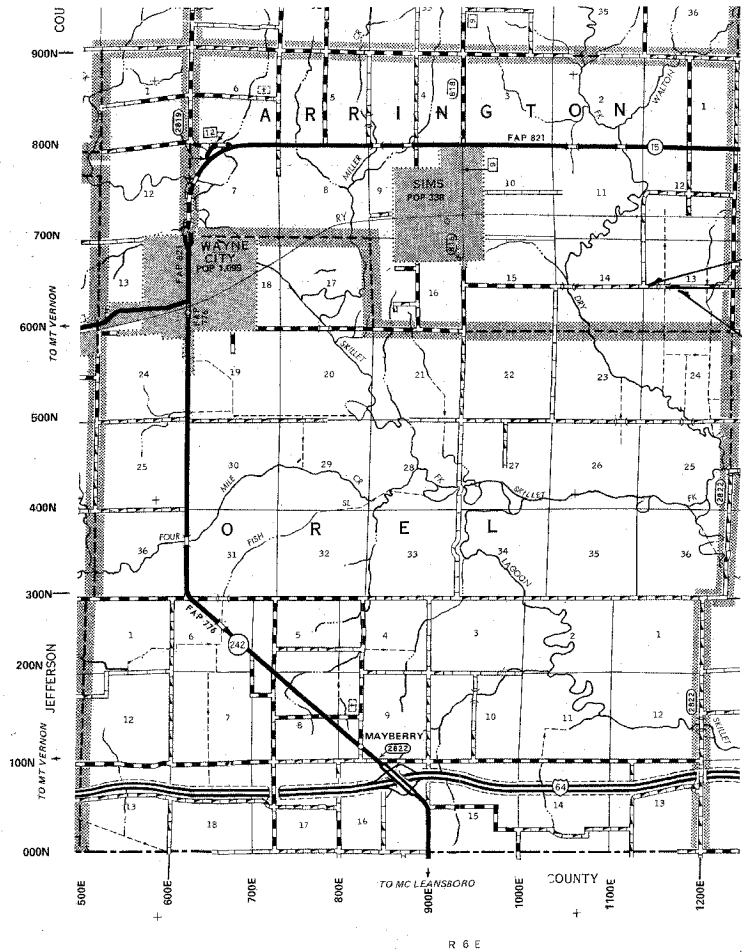
- 1 COVER SHEET
- 2 PLAN & PROFILE
- 3 CROSS SECTIONS
- 4-11 BRIDGE PLANS

STANDARDS: 280001-02 - EROSION CONTROL
(SEE PROPOSAL) 702001-05 - TRAFFIC
BLR 21-6 - TRAFFIC
BLR 22-4 - TRAFFIC

SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEMS	X080-2A CODE NO.
0.4	ACRE	TREE REMOVAL, ACRES	20100500
346	CU YD	EARTH EXCAVATION	20200100
187	CU YD	CHANNEL EXCAVATION	20300100
420	CU YD	FURNISHED EXCAVATION	20400800
0.4	ACRE	SEEDING, CLASS 2 (SPECIAL)	25001000
4	EACH	TEMPORARY DITCH CHECKS	28000300
56	FOOT	PERIMETER EROSION BARRIER	28000400
88	TON	STONE DUMPED RIPRAP, CLASS A4	28100807
60	TON	STONE RIPRAP DITCH	28102600
405	TON	AGGREGATE BASE COURSE, TYPE B	35101400
1	EACH	REMOVAL OF EXISTING STRUCTURES	50100100
18.2	CU YD	CONCRETE STRUCTURES	50300225
1440	SQ FT	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	50400505
1980	POUND	REINFORCEMENT BARS	50800105
120	FOOT	STEEL RAILING, TYPE S1	50900205
324	FOOT	FURNISHING STEEL PILES HP 10X42	51201400
324	FOOT	DRIVING STEEL PILES	51202700
2	EACH	TEST PILE STEEL HP 10X42	51203400
2.06	CU YD	CONCRETE ENCASMENT	51204315
1	EACH	NAME PLATES	51500100
1	L SUM	TRAFFIC CONTROL AND PROTECTION	70101700

PLAN 1 INCH = 50 FEET
PROFILE HORZ. 1 INCH = 50 FEET
PROFILE VERT. 1 INCH = 10 FEET
CROSS SECTION 1 INCH = 5 FEET



SECTION 03-01111-00-BR
BEGINS STA. 1+00

STA. 4+06 - STANDARD BRIDGE DESIGN.
PROPOSED PRECAST PRESTRESSED CONCRETE
DECK BEAM BRIDGE WITH PILE BENT SPILL-THRU
ABUTMENTS PILE BENT PIERS.
1 SPAN @ 60', 24' RDWY., SKEW = 0'
EXIST. STR. NO. 096-3188
PROP. STR. NO. 096-3438

SECTION 03-01111-00-BR
ENDS STA. 7+00

FUNCTIONAL CLASS: LOCAL ROAD
ADT = 50

LOCATION MAP

APPROXIMATE SCALE: 1 INCH = 1 MILE
NET LENGTH = 600 L.F. = 0.114 MILES

THE ACCEPTANCE OF THIS PROJECT IS BASED
ON A MINIMUM DESIGN CRITERIA FOR A
FEDERAL-AID BRRP TYPE IMPROVEMENT
ON THE COUNTY HIGHWAY SYSTEM.
Maurice E. Kaul
DISTRICT ENGINEER OF LOCAL ROADS & STREETS

TOLL FREE JOINT UTILITY LOCATING
INFORMATION FOR EXCAVATORS (J.U.L.I.E.)
TELEPHONE NO. 1-800-892-0123

CONTRACT NO. 95417

PROFESSIONAL DESIGN FIRM #184-000832

Michael J. ... 11-16-04
ILLINOIS REGISTERED PROFESSIONAL ENGINEER # 31350
LICENSE EXPIRES NOVEMBER 30, 2005

APPROVED 11-10, 2005

Arthur J. ...
LOCAL AGENCY REPRESENTATIVE

PASSED 4/4, 2005

Maurice E. Kaul
DISTRICT ENGINEER OF LOCAL ROADS & STREETS

APPROVED 4/4, 2005

Arthur J. ...
DEPUTY DIRECTOR OF HIGHWAYS
REGION FOUR ENGINEER

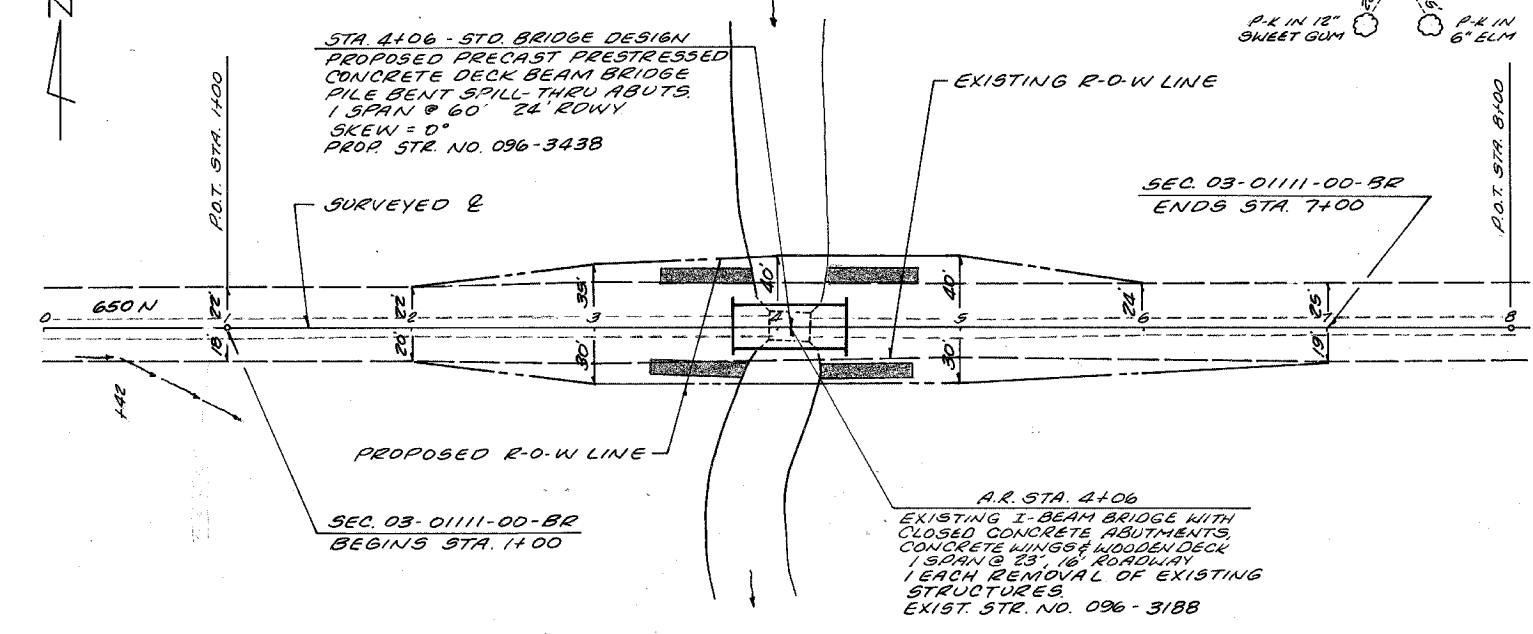
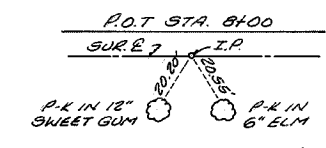
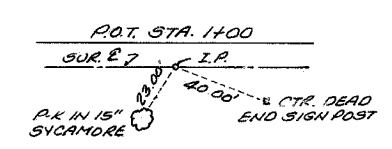
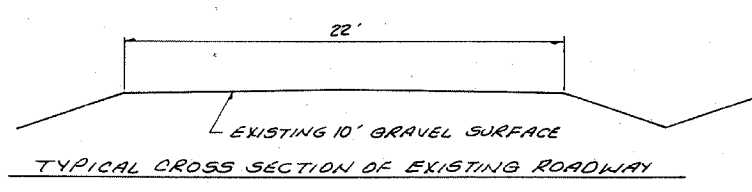
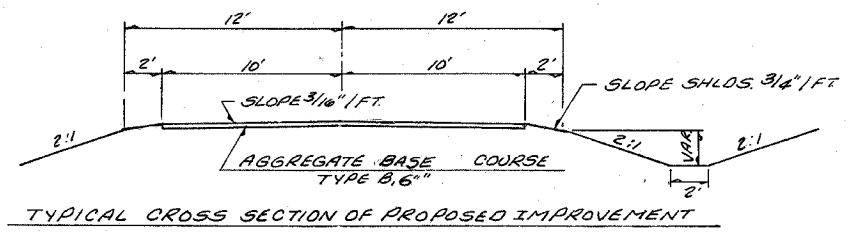
F.A.S. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
03-0111-00-BR	WAYNE	17	2	
STA. 0+00	TO STA. 8+00			
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

ELDON LONG PARCEL NO. 2

FARM LAND DEVELOPMENT PARCEL NO. 1

ELDON LONG PARCEL NO. 2

DWIGHT LEGG PARCEL NO. 3



EARTHWORK SCHEDULE

EARTH EXCAVATION	=	346 CU. YD.
EARTH EXCAVATION ADJUSTED 25%	=	260 CU. YD.
CHANNEL EXCAVATION	=	187 CU. YD.
CHANNEL EXCAVATION ADJUSTED 25%	=	140 CU. YD.
EMBANKMENT	=	820 CU. YD.
FURNISHED EXCAVATION	=	420 CU. YD.

STONE RIPRAP DITCH
 RT. STA. 3+30 - 3+80 = 15 TON
 LT. STA. 3+35 - 3+85 = 15 "
 RT. STA. 4+22 - 4+72 = 15 "
 LT. STA. 4+27 - 4+77 = 15 "
 TOTAL = 60 TON

PERIMETER EROSION BARRIER
 12 FOOT @ EACH CORNER OF BRIDGE @ TDE OF CHANNEL
 SLOPE = 56 FOOT

TEMPORARY DITCH CHECKS
 LT. & RT. STA. 3+50 = 2 EACH
 LT. & RT. STA. 4+50 = 2 EACH
 TOTAL = 4 EACH

B.M. #1 ELEV. 392.09
 NEW IN 15" SYCAMORE
 21' RT. STA. 0+89

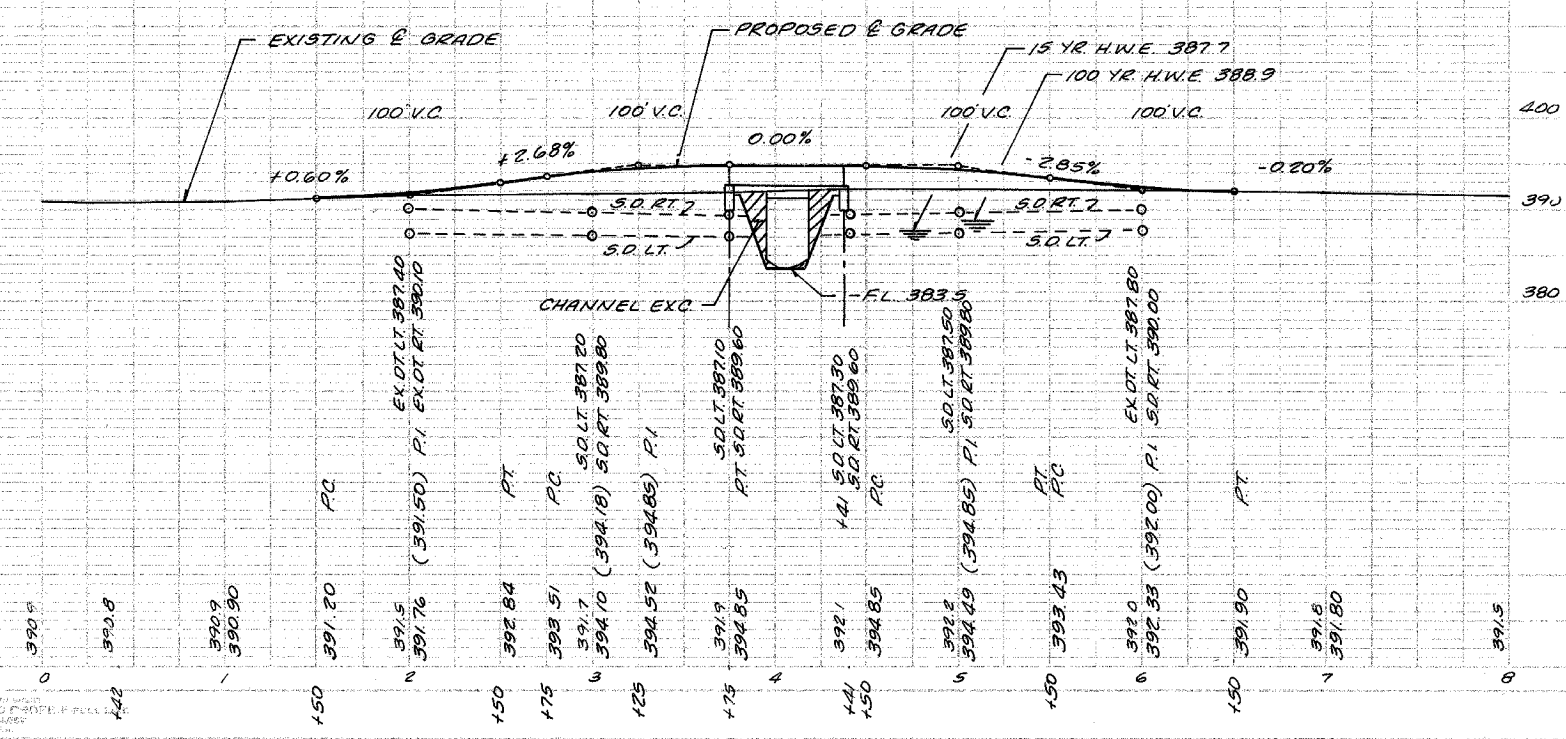
TREE REMOVAL, ACRES
 RT. STA. 2+0 - 7+0 = 0.3 ACRES
 LT. STA. 4+26 - 6+0 = 0.1 ACRES
 TOTAL = 0.4 ACRES

CONSTRUCT TRANSITION
 FROM EXIST. ROWY TO PROP. 24' ROWY.
 STA. 1+00 TO STA. 1+50
 STA. 6+50 TO STA. 7+00
 QUANTITIES INCLUDED IN THOSE LISTED.

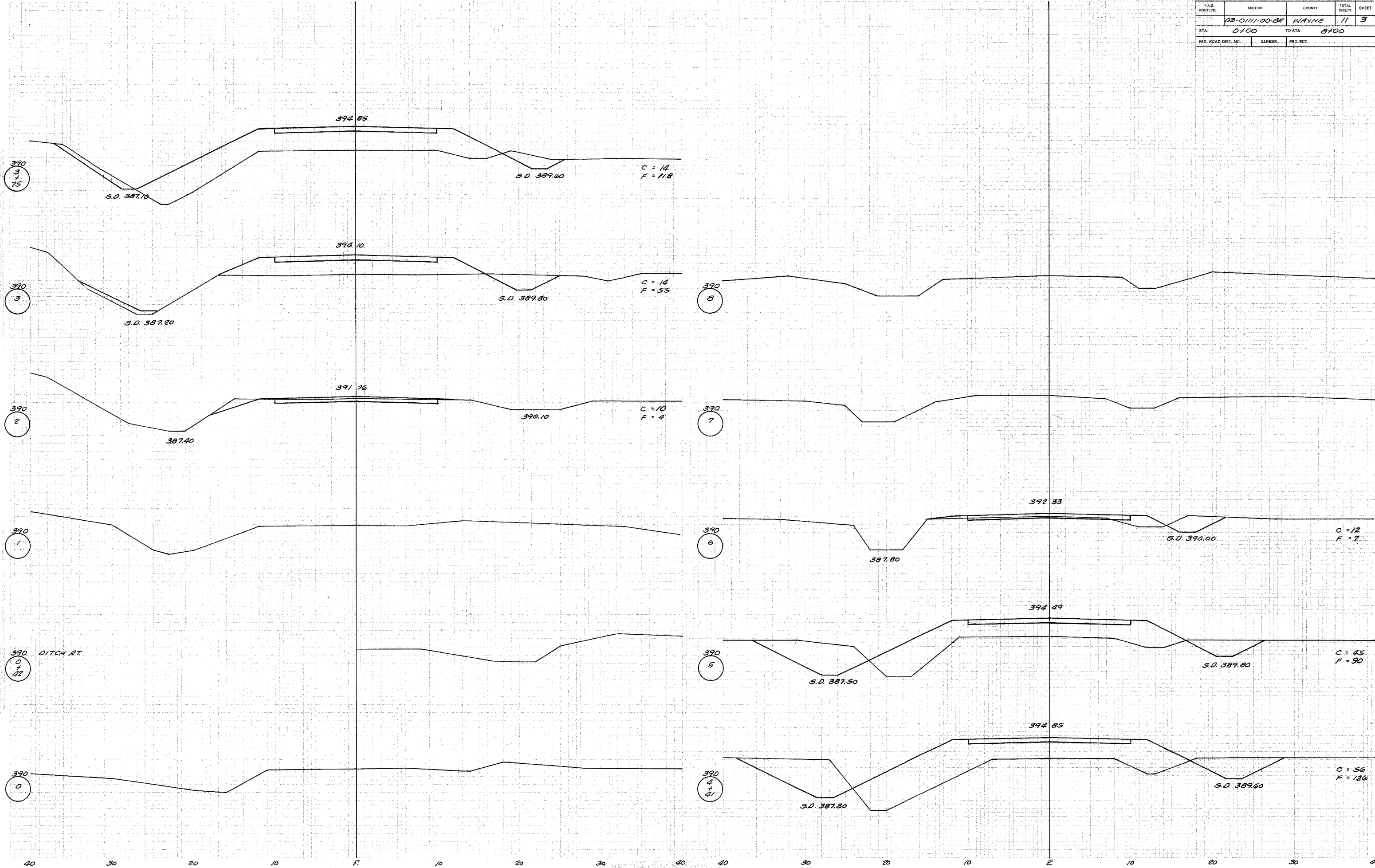
SEEDING, CLASS 2 (SPECIAL)
 STA. 1+00 - 7+00 = 0.4 ACRES

B.M. #2 ELEV. 392.76
 NEW IN 12" SWEET GUM
 16' RT. STA. 7+89

UTILITIES : NONE



STATE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
03-0111-00-80		WAYNE	11	3
STA. 0+00	TO STA. 0+00			
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



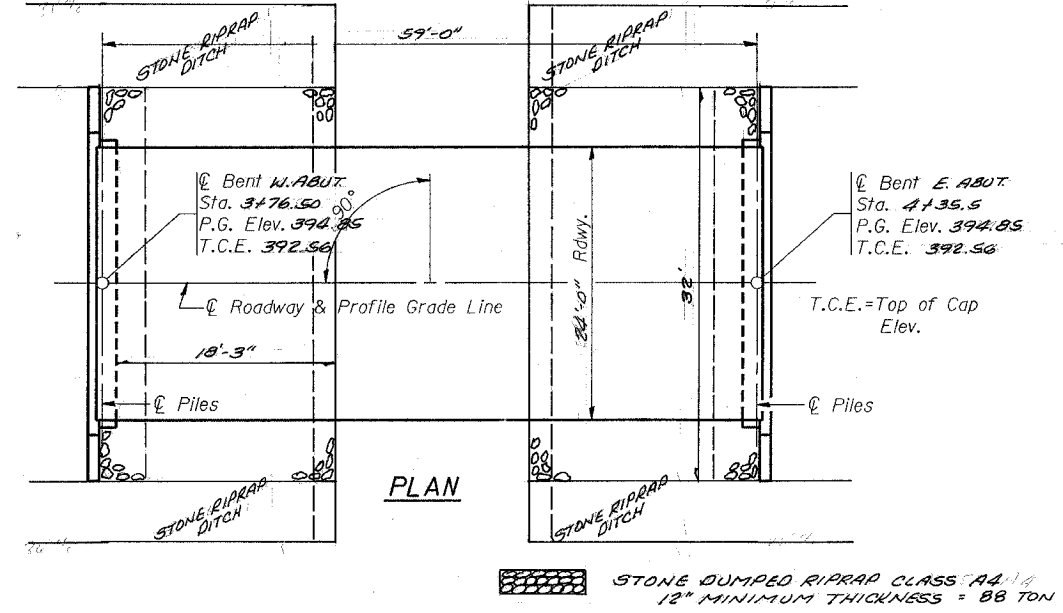
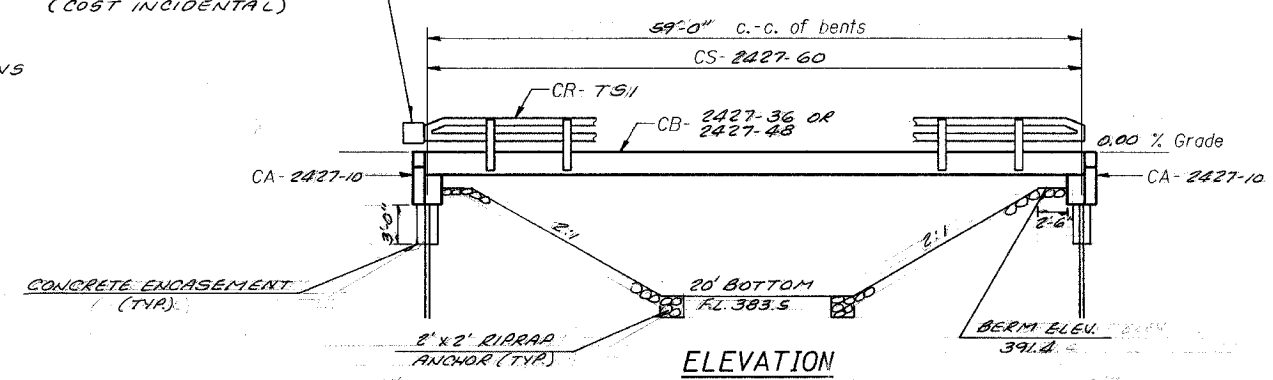
F.A.R. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
03-0111-00-BR	WAYNE	11	4	
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

B.M. - SEE PLAN-PROFILE

Existing Structure - SEE PLAN-PROFILE

Salvage - SEE SPEC. PROVISIONS

PROVIDE CURLED END SECTION @ EACH CORNER OF BRIDGE (COST INCIDENTAL)



STONE DUMPED RIPRAP CLASS AA-1.6
12" MINIMUM THICKNESS = 88 TON

GENERAL NOTES

- The Contractor shall drive 2 test piles, as specified, in a permanent location as directed by the Engineer before ordering the remaining piles.
- See Special Provisions for boring logs.
- A Calcium Nitrite Corrosion inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	Each				1
Bituminous Concrete Surface Course, Class I-	-Ton-				
Waterproofing Membrane System	-Sq. Yd-				
Concrete Structures	Cu. Yd.			18.2	18.2
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1440			1440
Steel Bridge Rail, Type SM	-Foot-				
Steel Railing, Type S-1	Foot	120			120
Reinforcement Bars	Pound			1980	1980
Furnishing STEEL PILES HP 10x42	Foot			324	324
Driving STEEL PILES	Foot			324	324
Test Piles STEEL HP 10x42	Each			2	2
Name Plates	Each				1
Class 5+ Concrete Encasement	Cu. Yd.			2.06	2.06
STONE DUMPED RIPRAP CLASS AA	TON				88

NOTE:
The Article or Section numbers referencing the Standard Specifications for Road and Bridge Construction as shown on the standard bridge plan sheets included with the contract plans should be interpreted as referring to the current edition of the Standard Specification (Adopted January 1, 2002) as shown in the "Article/Section No. Reference Table".

ARTICLE/SECTION NO.	REFERENCE TABLE
Previous No.	Current No.
504.06	504.06
505.04	505.04
706.05	1006.05
706.32	1006.32
760.07	1060.07
STD. 2340	631026

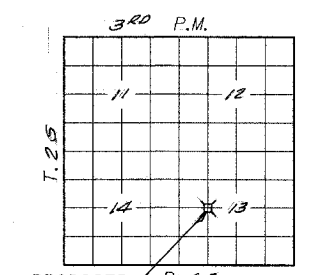
PILE DATA (2-ABUTS.)

Type HP 10x42
Capacity REFUSAL Tons
Estimated Length 54 Feet
Number Required 8 (Includes 2 Test Pile located in EACH ABUT.)

STATION 4+06
SEC. 03-0111-00-BR BUILT 200
WAYNE COUNTY
LOADING HS20
STR. NO. 096-3438

LETTERING FOR NAME PLATE

Locate Name Plate at S.W. COR. OF BRIDGE
Corner of Bridge (See Std. CN)



LOCATION SKETCH

INDEX OF SHEETS

- General Plan & Elevation
- Standard CS - 2427-60
- Standard CB - 2427-36
- Standard CB - 2427-48
- Standard CA - 2427-10
- Standard CR - TS1
- Standard CN
- Standard CK - 1
- Standard

WATERWAY INFORMATION

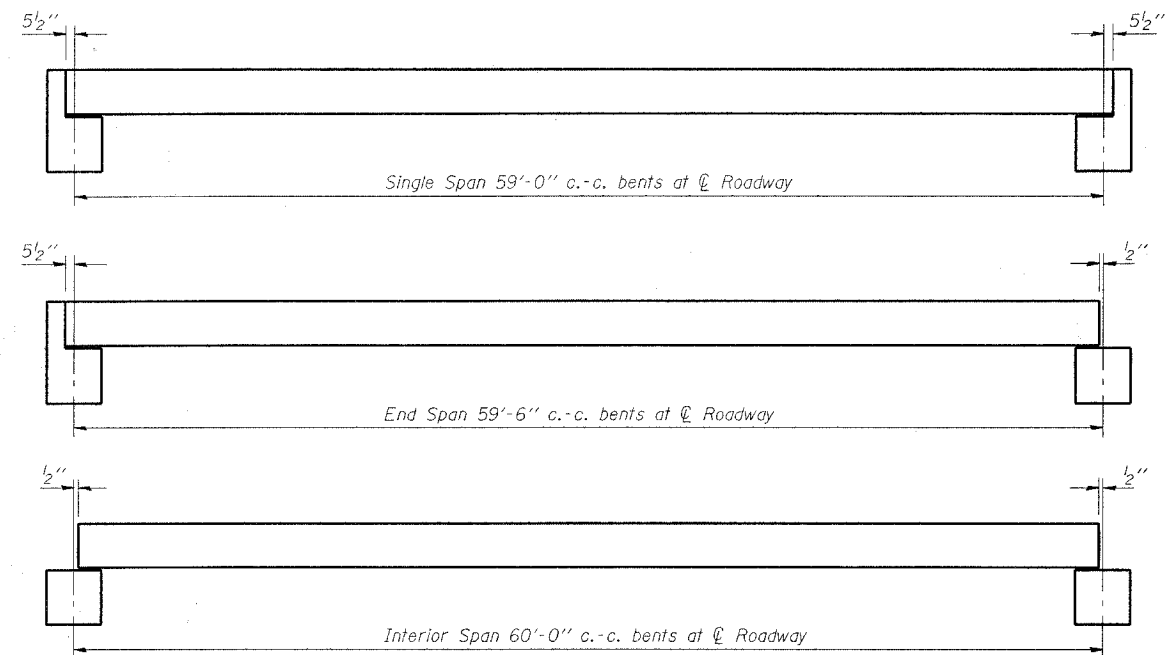
Drainage Area = 0.55 SQ. MI. Low Grade Elev. = 390.8 @ Sta. 0+42

Flood	Freq. Yr.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
		Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	15	231	387.7	387.7	0	0	387.7	387.7
Base	100	373	388.9	388.9	0.1	0	389.0	388.9
Overtopping								
Max. Calc.	500							

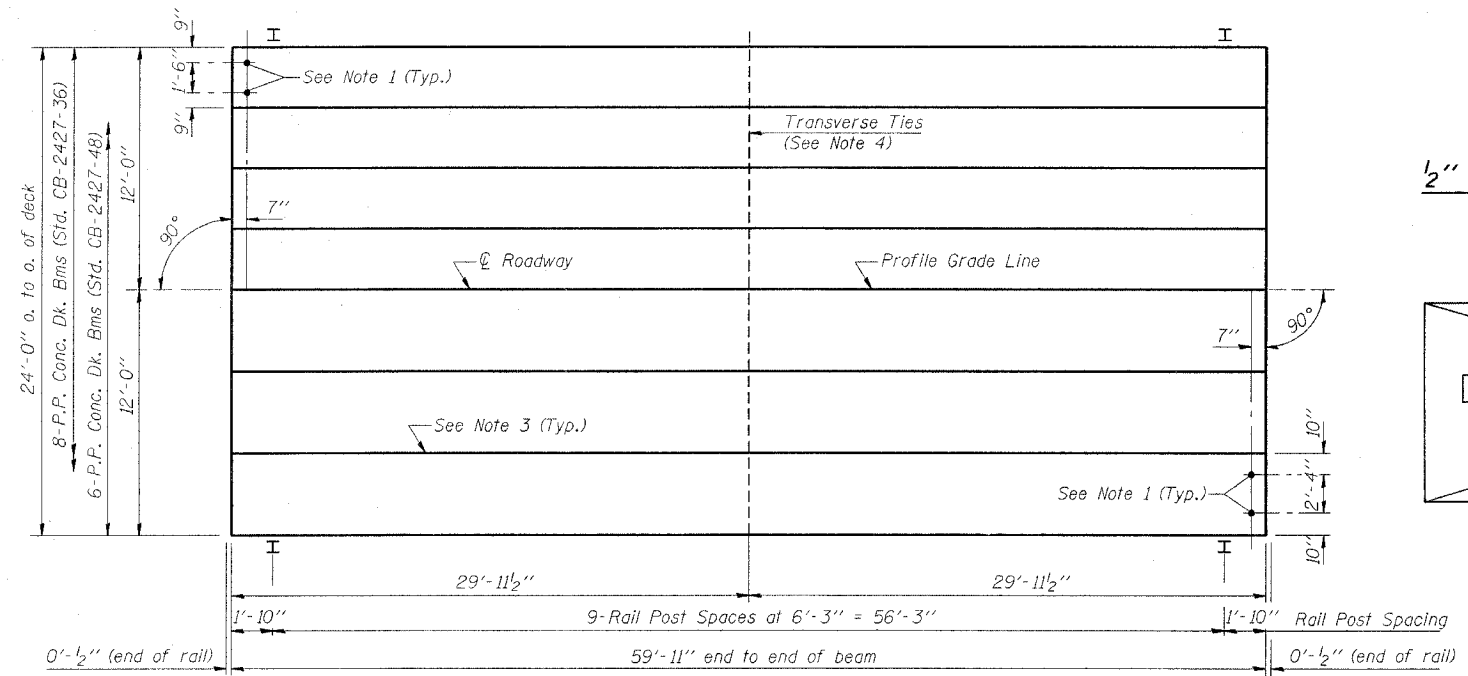
DESIGN SPECIFICATIONS

1992 AASHTO, 1993 & 1994 Interims
HS20-44 Loading. Load Factor Design.

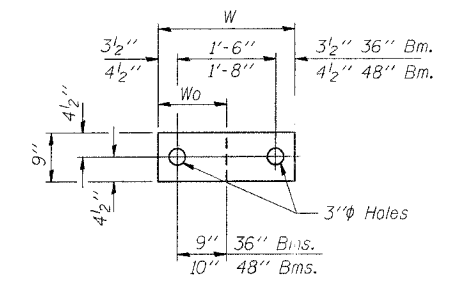
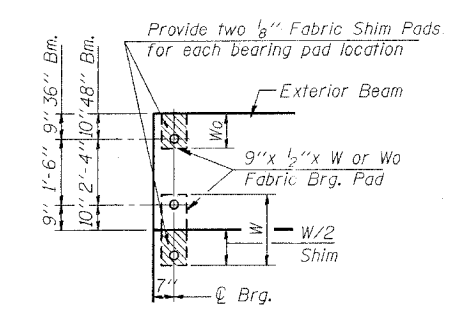
GENERAL PLAN & ELEVATION
TR ROUTE 515
OVER TRIBUTARY TO DRY FORK
SECTION 03-0111-00-BR
WAYNE COUNTY
STATION 4+06



TYPICAL ELEVATIONS

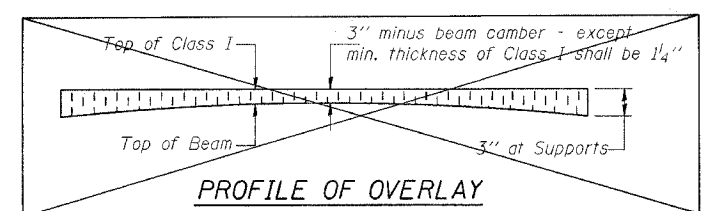


PLAN

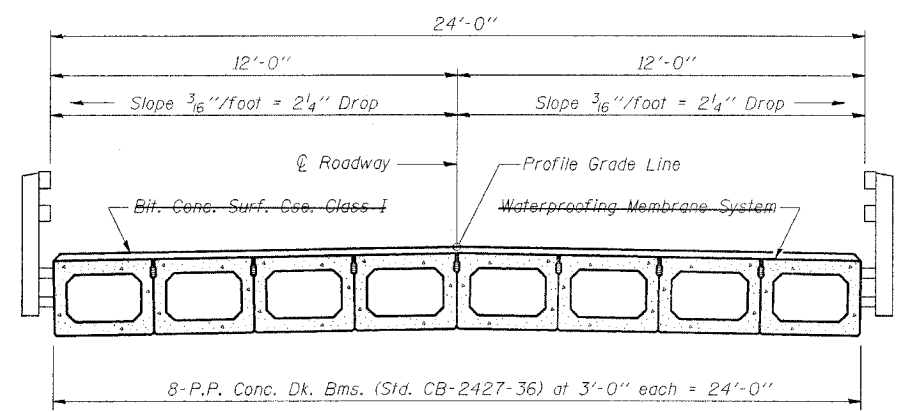


Beam	W	Wo
36"	2'-1"	1'-0 1/2"
48"	2'-5"	1'-2 1/2"

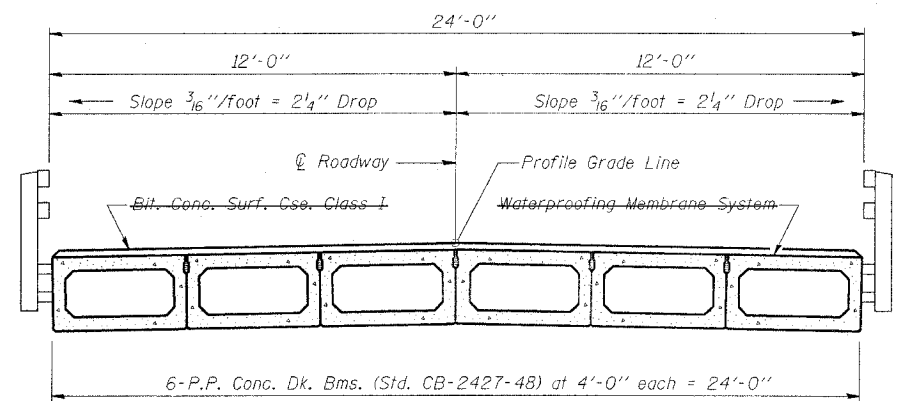
1/2" FABRIC BRG. PAD DETAILS



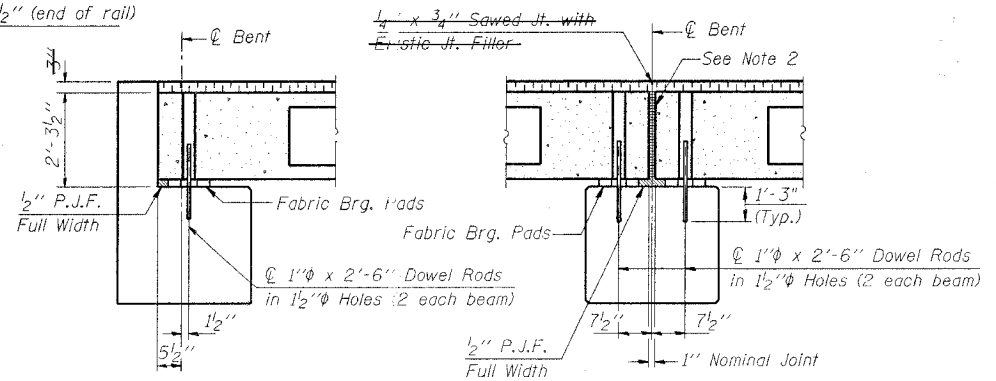
PROFILE OF OVERLAY



CROSS SECTION



CROSS SECTION



SECTION AT ABUTS.

SECTION AT PIERS

QUANTITIES FOR ONE SPAN

P.P. Conc. Dk. Bm. 27" Dp.	1440 Sq. Ft.
Steel Railing	120 Ft.
Bit. Conc. Surf. Cse. Class I	18.8 Tons
Waterproofing Membrane System	160.0 Sq. Yds.

NOTES

1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
2. Nominal 1" joint of centerline Pier shall be filled with non-shrink grout.
3. Longitudinal keys shall be grouted with non-shrink grout.
4. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar outside shall be filled with grout after transverse tie assembly is in place.

Illinois Department of Transportation

PASSED NOVEMBER 1, 1995

Ralph E. Anderson
Engineer of Bridge Design

APPROVED NOVEMBER 1, 1995

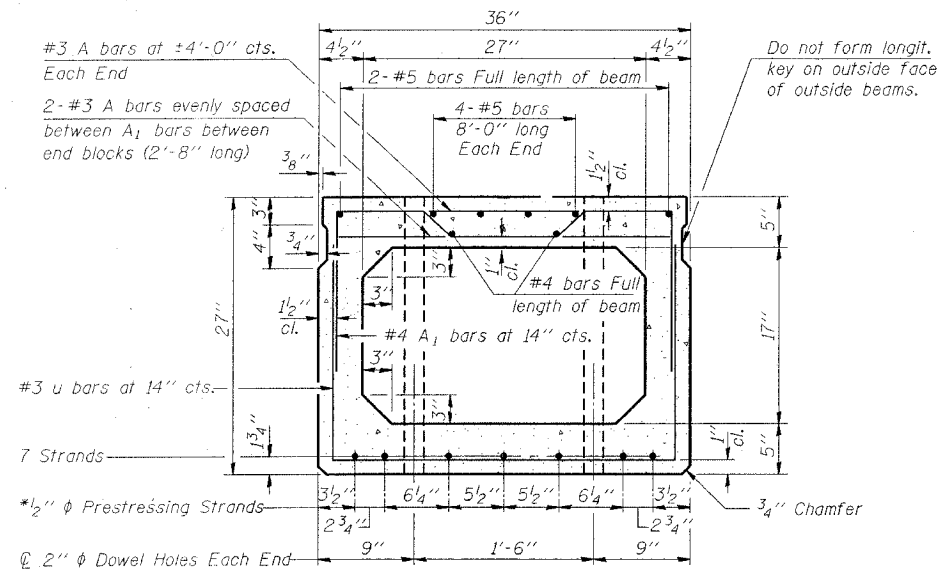
Ralph E. Anderson
Engineer of Bridges and Structures

ISSUED 11-8

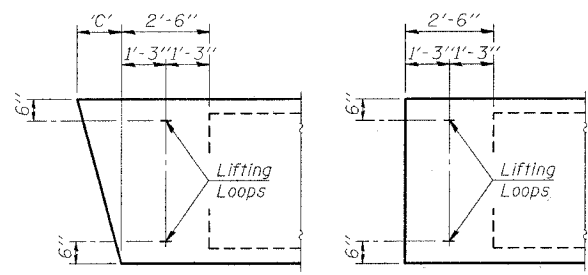
**P.P.C. DECK BEAM
SUPERSTRUCTURE**

24' RDWY.	27" BMS.	60' SPAN	0° SKEW
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STANDARD CS-2427-60

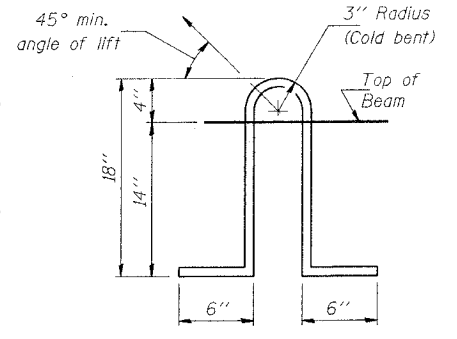


CROSS SECTION
(40' SPAN)



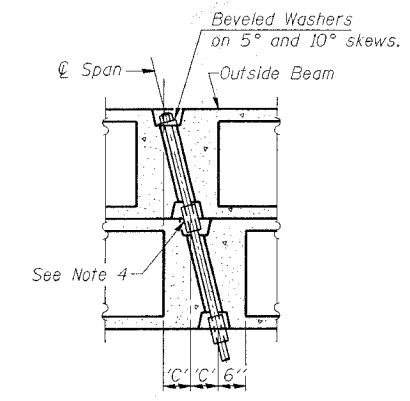
END BLOCK DETAILS

Each beam shall have four Lifting Loops, two at each end of beam cast in locations shown above. Loops shall be burned off after beams have been erected.

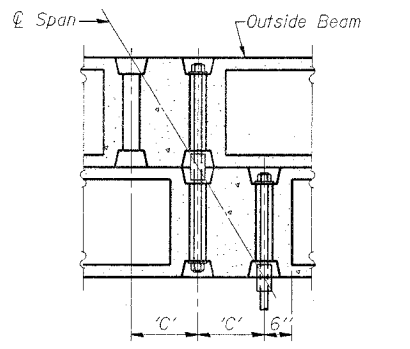


LIFTING LOOP DETAIL

Lifting loops shall be 2, 1/2 inch phi - 270 ksi strands, as shown. Alternate approved lifting devices are also acceptable.



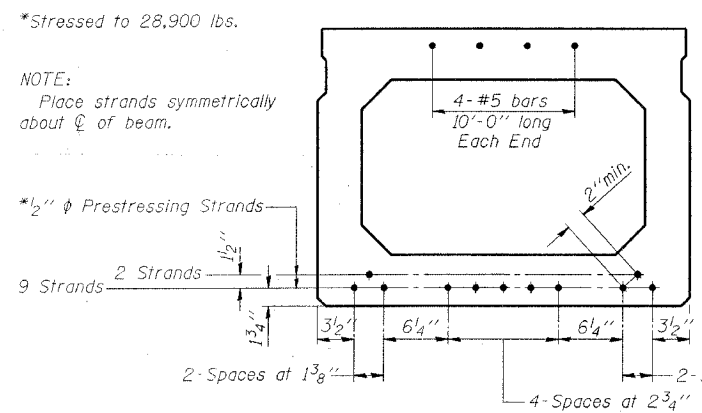
PARTIAL PLAN TRANSVERSE TIE ASSEMBLY
(D=0°, 5° and 10°)



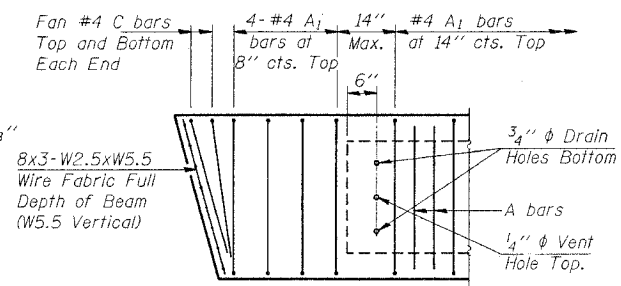
PARTIAL PLAN TRANSVERSE TIE ASSEMBLY
(D=15°, 20°, 25° and 30°)

DIMENSION 'C'

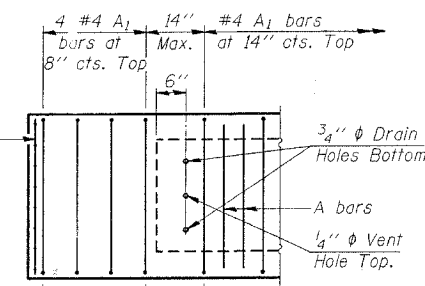
Skew Angle 'D'	0°	5°	10°	15°	20°	25°	30°
Dimension 'C' (Inches)	0	3/8	6/8	9/8	13/8	16 3/4	20 3/4



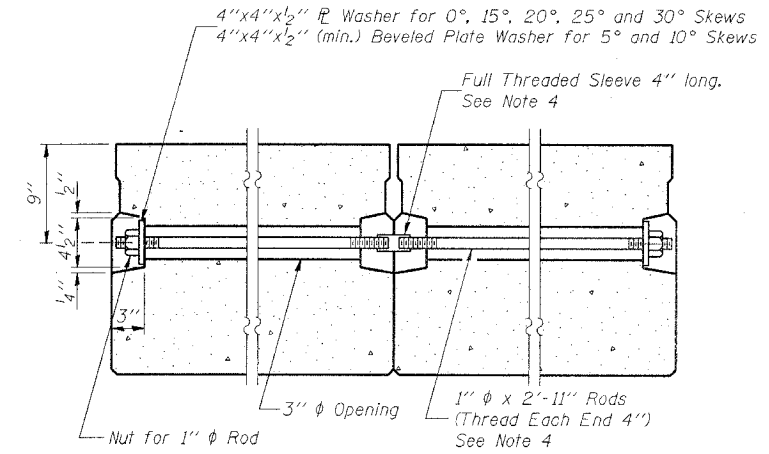
CROSS SECTION
(50' SPAN)



END REINFORCEMENT
(SKEWED)



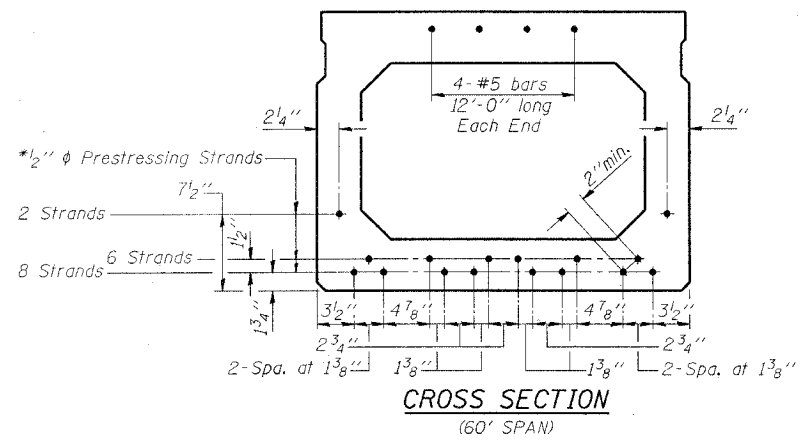
END REINFORCEMENT
(RIGHT ANGLE)



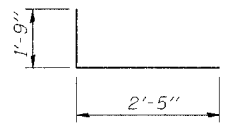
SECTION ALONG TRANSVERSE TIE ASSEMBLY
(REQUIRED FOR 50' & 60' SPANS ONLY)

NOTES

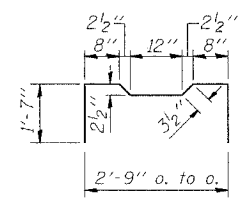
1. Prestressing steel shall be uncoated high strength, stress relieved 7-wire strand, Grade 270.
2. The nominal diameter shall be 1/2 inch and the nominal cross-sectional area shall be 0.153 square inches.
3. Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53, Grade 60.
4. On 0°, 5° and 10° skew, alternate approved transverse tie rods of increased segmental length are acceptable.
5. Rail Post anchor devices shall be cast into outside beam as elsewhere specified.
6. When Waterproofing Membrane System is specified, the top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4 inch.
7. Low relaxation strands may be substituted for the stress relieved strands. The initial prestressing force applied to each strand shall be the same as for the stress relieved strands (28,900 lbs.).
8. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.



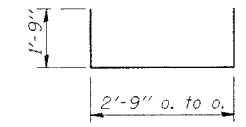
CROSS SECTION
(60' SPAN)



BAR C**



BAR A1



BARS U & U1

DESIGN STRESSES

$f_c = 5,000$ p.s.i.
 f_{ci} = (See Required Release Strength Table)
 $f_s = 270,000$ p.s.i. (1/2 inch phi Strand)
 $f_{si} = 189,000$ p.s.i. (1/2 inch phi Strand)
 $f_y = 60,000$ p.s.i.

REQUIRED RELEASE STRENGTH

Span	f_{ci} (psi)
40'	4,000
50'	4,000
60'	4,000

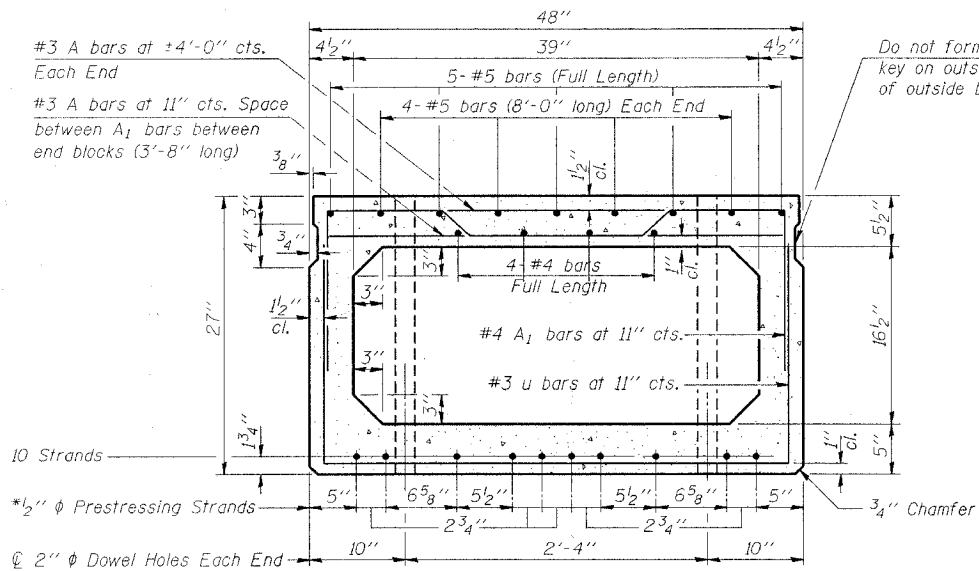
NOTE:
 The std. reinf. shown on the 40' span cross section is typical for all spans, except as shown.

**NOTE:
 The following number of C bars shall be used:
 Skew No.
 5° and 10° — 1
 15° and 20° — 2
 25° and 30° — 3

Illinois Department of Transportation
 PASSED NOVEMBER 1, 1995
 Raj D. Kappur
 Engineer of Bridge Design
 APPROVED NOVEMBER 1, 1995
 Ralph E. Anderson
 Engineer of Bridges and Structures

P.P.C. DECK BEAM DETAILS
 24' ROADWAY | 27" x 36" BEAMS
 STANDARD CB-2427-36

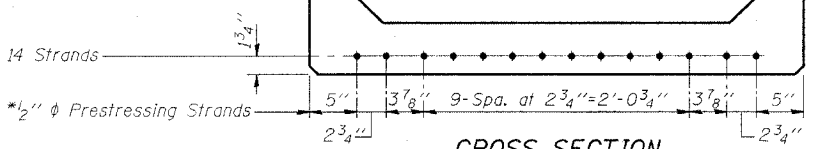
SEC.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
03-0111-00-88	WAYNE	11	7	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO.		



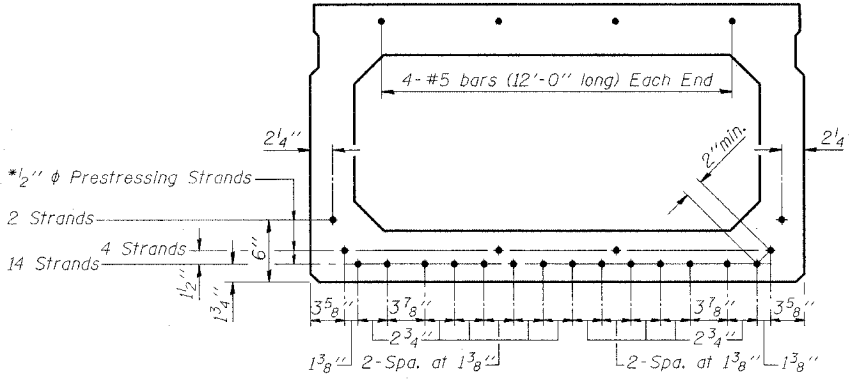
CROSS SECTION
(40' SPAN)

*Stressed to 28,900 lbs.

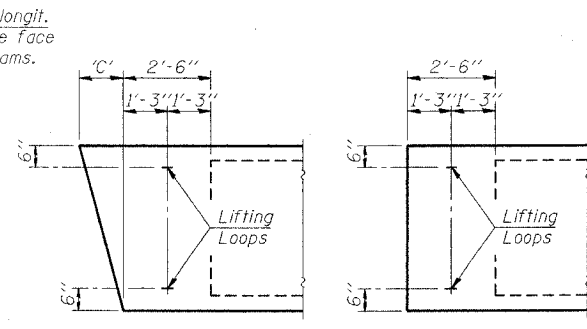
NOTE:
Place strands symmetrically about centerline of beam.



CROSS SECTION
(50' SPAN)

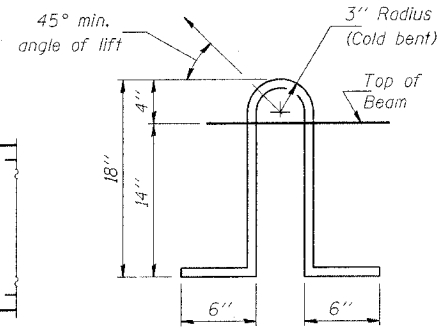


CROSS SECTION
(60' SPAN)

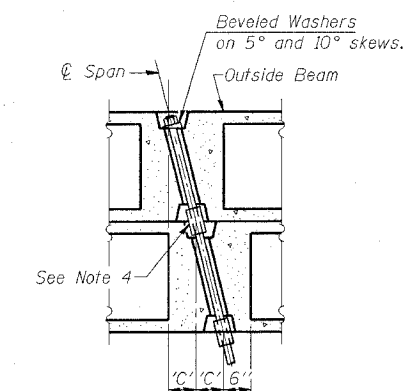


END BLOCK DETAILS

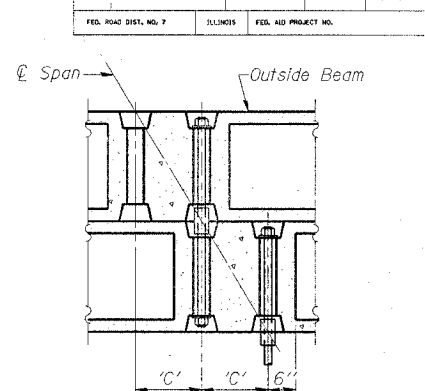
Each beam shall have four Lifting Loops, two at each end of beam cast in locations shown above. Loops shall be burned off after beams have been erected.



LIFTING LOOP DETAIL



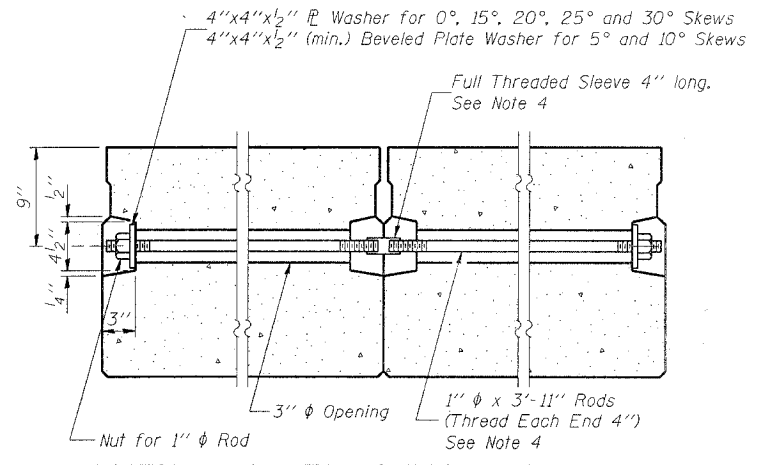
PARTIAL PLAN TRANSVERSE TIE ASSEMBLY
(D=0°, 5° and 10°)



PARTIAL PLAN TRANSVERSE TIE ASSEMBLY
(D=15°, 20°, 25° and 30°)

DIMENSION 'C'

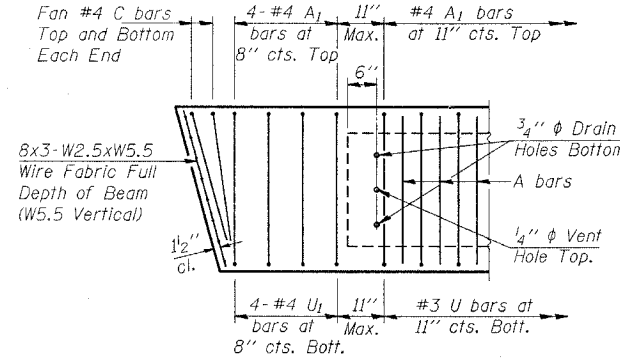
Skew Angle 'D'	0°	5°	10°	15°	20°	25°	30°
Dimension 'C' (Inches)	0	4 1/4	8 1/2	12 3/8	17 1/2	22 3/8	27 3/4



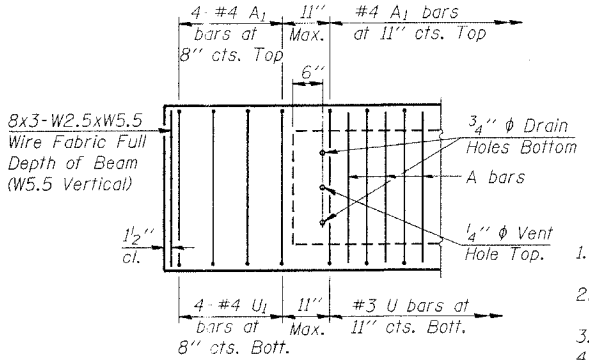
SECTION ALONG TRANSVERSE TIE ASSEMBLY
(REQUIRED FOR 50' & 60' SPANS ONLY)

NOTES

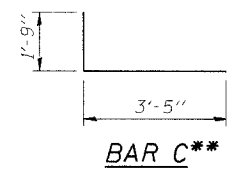
1. Prestressing steel shall be uncoated high strength, stress relieved 7-wire strand, Grade 270.
2. The nominal diameter shall be 1/2 inch and the nominal cross-sectional area shall be 0.153 square inches.
3. Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53, Grade 60.
4. On 0°, 5° and 10° skews, alternate approved transverse tie rods of increased segmental length are acceptable.
5. Rail Post anchor devices shall be cast into outside beam as elsewhere specified.
6. When Waterproofing Membrane System is specified, the top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4 inch.
7. Low relaxation strands may be substituted for the stress relieved strands. The initial prestressing force applied to each strand shall be the same as for the stress relieved strands (28,900 lbs.).
8. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.



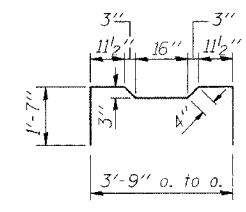
END REINFORCEMENT
(SKEWED)



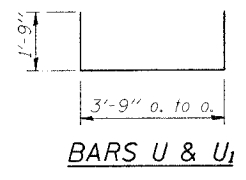
END REINFORCEMENT
(RIGHT ANGLE)



BAR C**



BAR A1



BARS U & U1

DESIGN STRESSES

$f'_c = 5,000$ p.s.i.
 $f'_ci =$ (See Required Release Strength Table)
 $f'_s = 270,000$ p.s.i. (1/2 inch Strand)
 $f_{sl} = 189,000$ p.s.i. (1/2 inch Strand)
 $f_y = 60,000$ p.s.i.

REQUIRED RELEASE STRENGTH

Span	f'_{ci} (psi)
40'	4,000
50'	4,000
60'	4,000

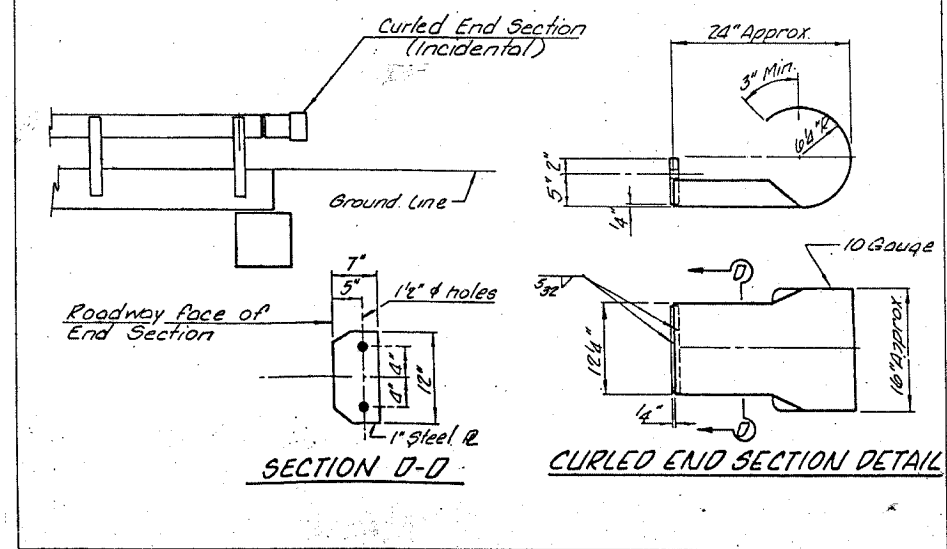
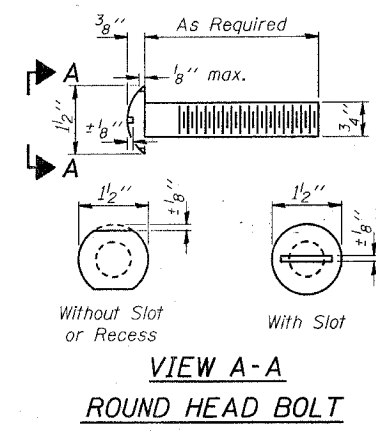
Illinois Department of Transportation
 PASSED NOVEMBER 1, 1995
 Eng. J. Kasper
 Engineer of Bridge Design
 APPROVED NOVEMBER 1, 1995
 Ralph E. Anderson
 Engineer of Bridges and Structures

NOTE
The std. reinf. shown on the 40' span cross section is typical for all spans, except as shown.

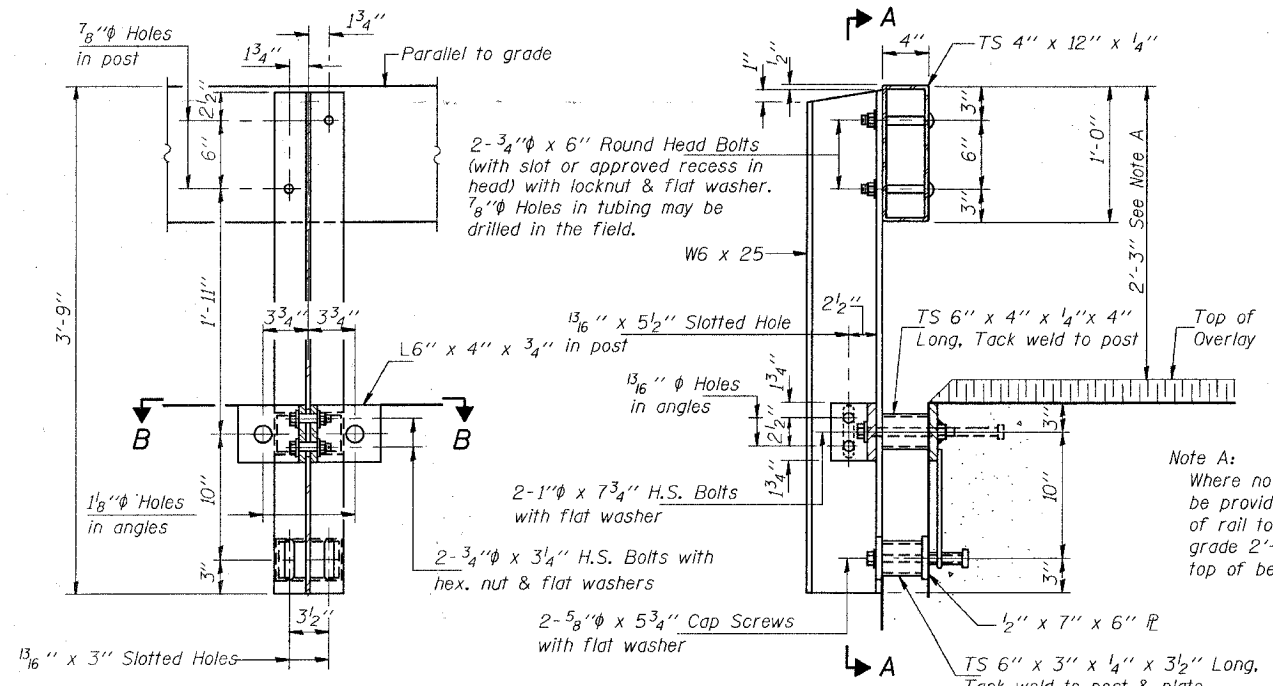
**NOTE:
The following number of C bars shall be used:
 Skew No.
 5° and 10° — 1
 15° and 20° — 2
 25° and 30° — 3

P.P.C. DECK BEAM DETAILS
 24' ROADWAY 27" x 48" BEAMS
 STANDARD CB-2427-48

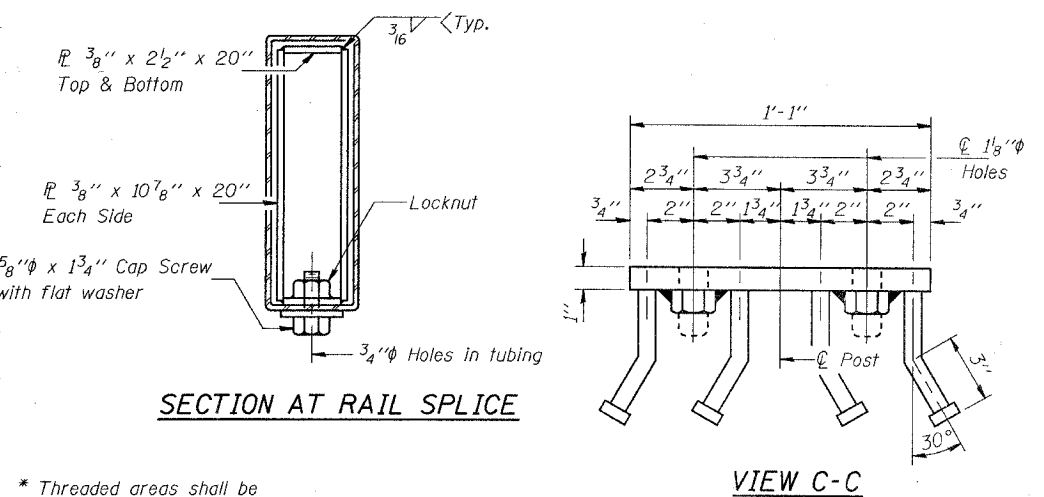
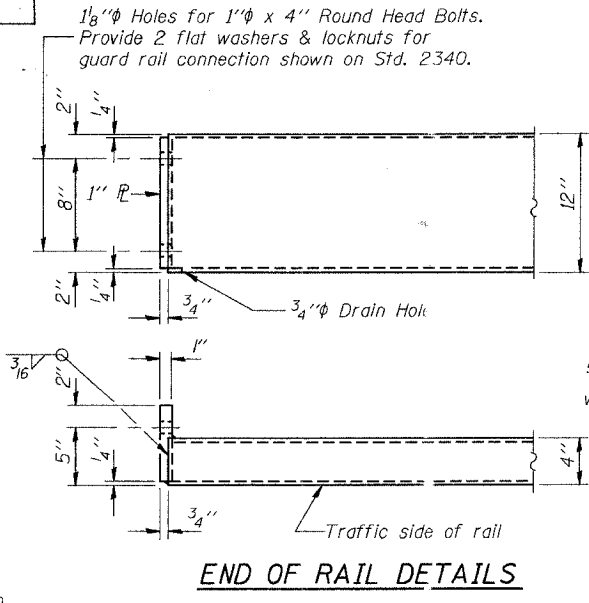
Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft.-lbs. at 0° F.
 All other steel shapes and plates shall conform to the requirements of AASHTO M-270 Grade 36 except posts and angles shall conform to AASHTO M-270 Grade 50.
 Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A-307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M-164.
 All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with AASHTO M-232.
 All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with AASHTO M-111 and ASTM A-385. Galvanized rail shall not be painted.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing, Type S-1.
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 The 1/2" x 7" x 6" plates that come in contact with concrete shall receive two coats of asphalt paint conforming to Section 760.07 Type II or place 1/8" fabric bearing pads between the plates and concrete.
 The 3/4" high strength bolts used to connect the 6" x 4" x 3/4" angles to the post shall be tightened in accordance with Article 505.04 (f) (3) of the Standard Specifications. The 1" high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" cap screws in bottom of posts shall be tightened to a snug fit only.
 The maximum allowable rail post spacing shall be 10'-6". The rail post spacing shown elsewhere in the plans is based on the allowable spacing for another type of rail. When this type of rail is used, the number of posts may be decreased and the post spacing increased to provide equal post spaces of 10'-6" or less.



1/8" Holes for 1" x 4" Round Head Bolts. Provide 2 flat washers & locknuts for guard rail connection shown on Std. 2340.

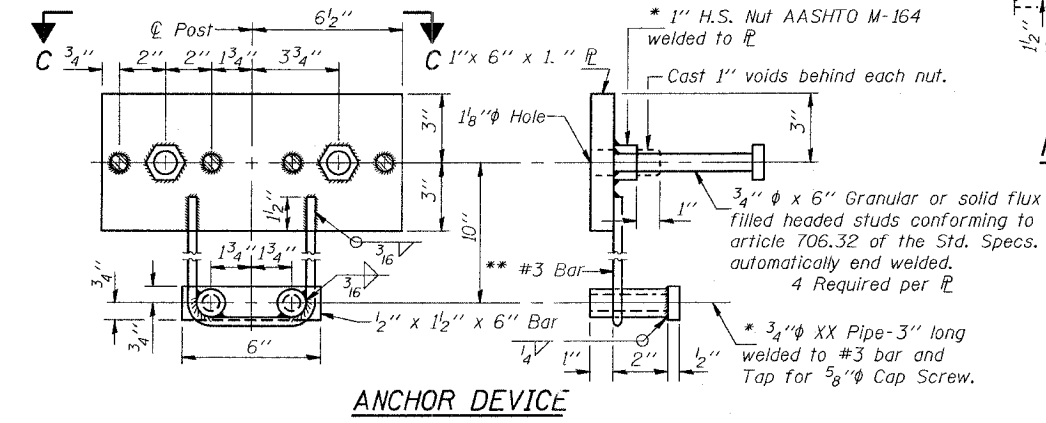
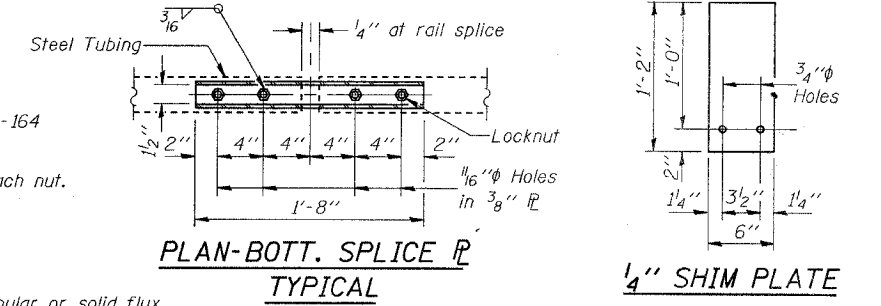


Note A: Where no overlay is to be provided adjust top of rail to lay parallel to grade 2'-5" max. above top of beam.



* Threaded areas shall be plugged or blocked off during casting of beam.

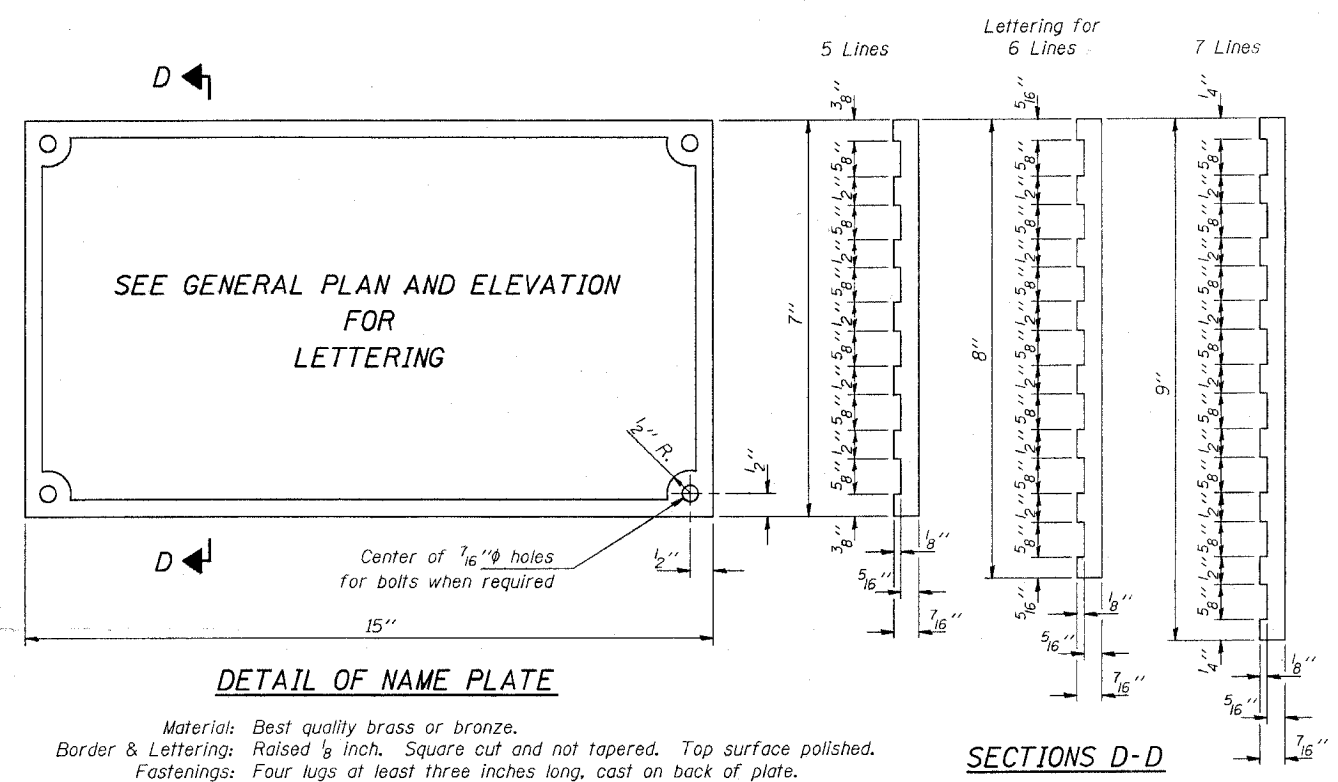
** Whenever the lower insert assembly interferes with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".



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STEEL RAILING, TYPE S-1
STANDARD CR-TS1

95417

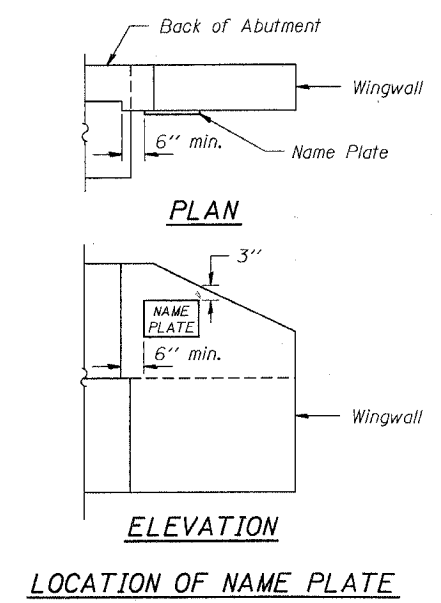


SEE GENERAL PLAN AND ELEVATION FOR LETTERING

DETAIL OF NAME PLATE

Material: Best quality brass or bronze.
 Border & Lettering: Raised 1/8 inch. Square cut and not tapered. Top surface polished.
 Fastenings: Four lugs at least three inches long, cast on back of plate.

SECTIONS D-D



LOCATION OF NAME PLATE

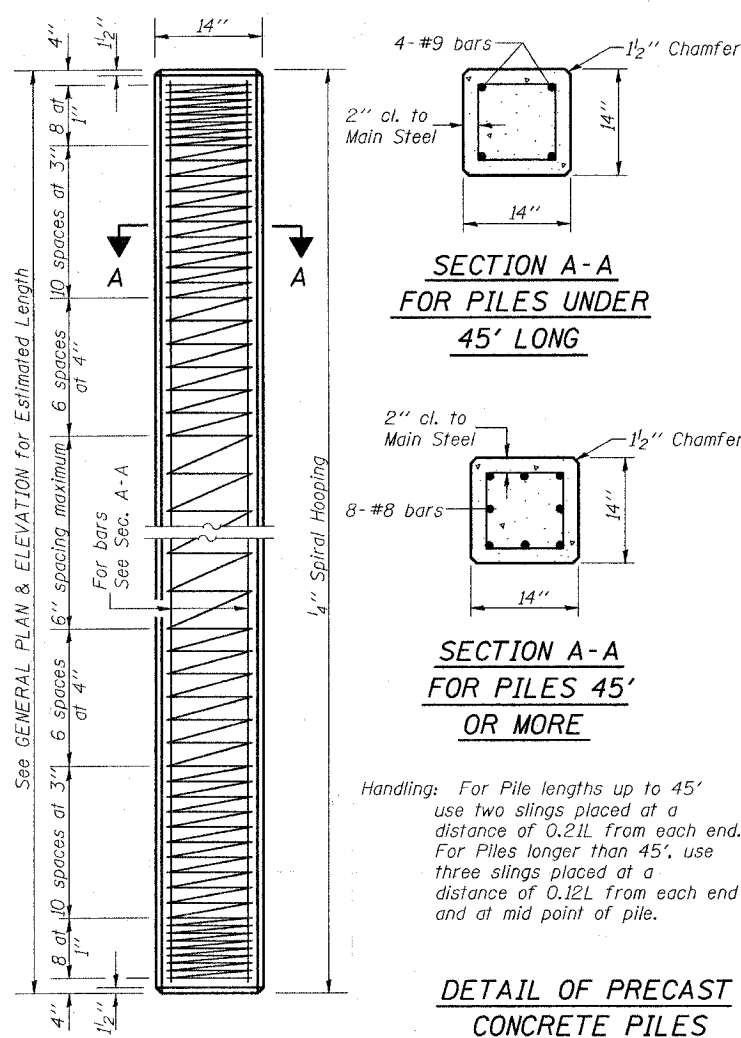
Illinois Department of Transportation	
PASSED November 1, 1995 <i>Prof. J. Kasper</i> Engineer of Bridge Design	
APPROVED November 1, 1995 <i>Ralph E. Anderson</i> Engineer of Bridges and Structures	
ISSUED 1-1-95	

NAME PLATE
STANDARD CN

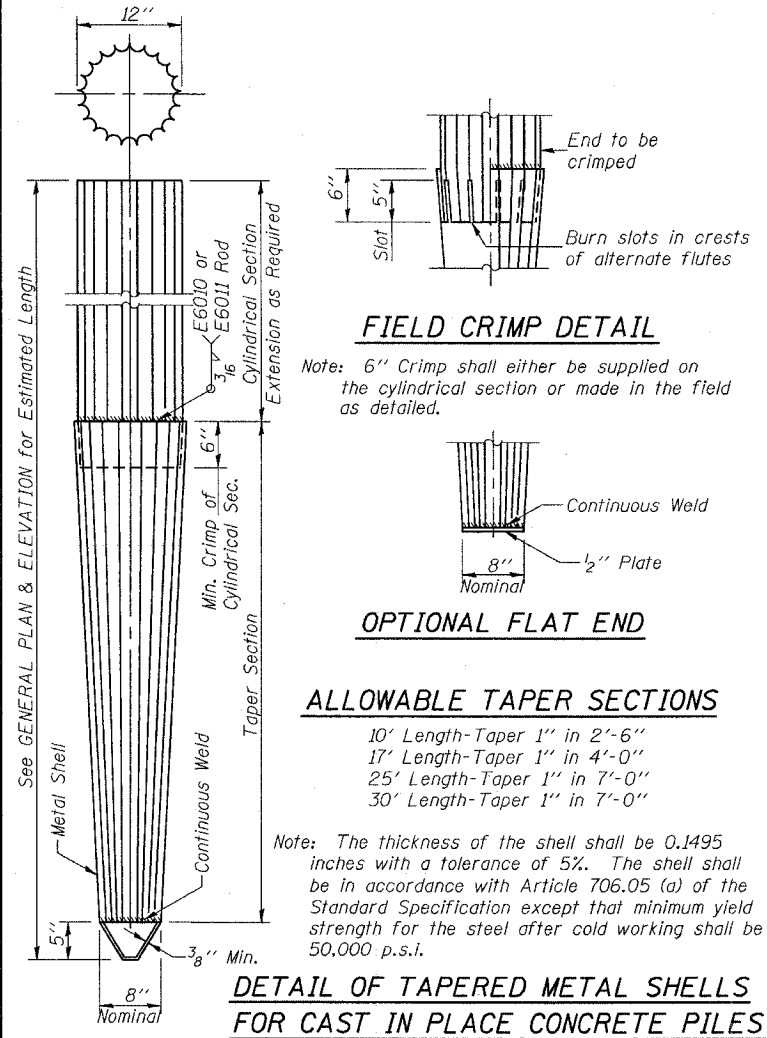
Reinforcement cage shall be omitted when ~~Class ST~~ Concrete Encasement is provided.

95477

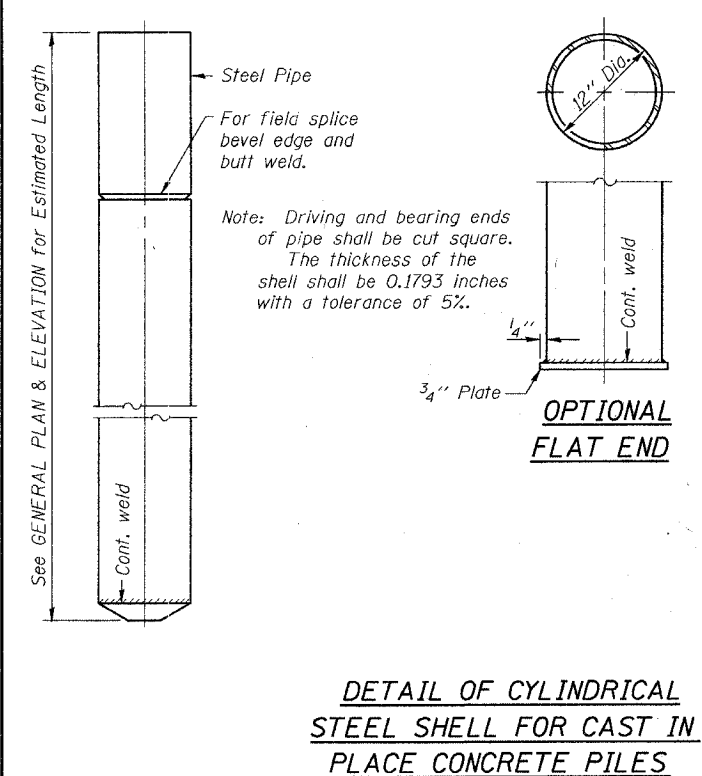
The cost of Reinforcement is incidental to the Cost of Furnishing Piles.



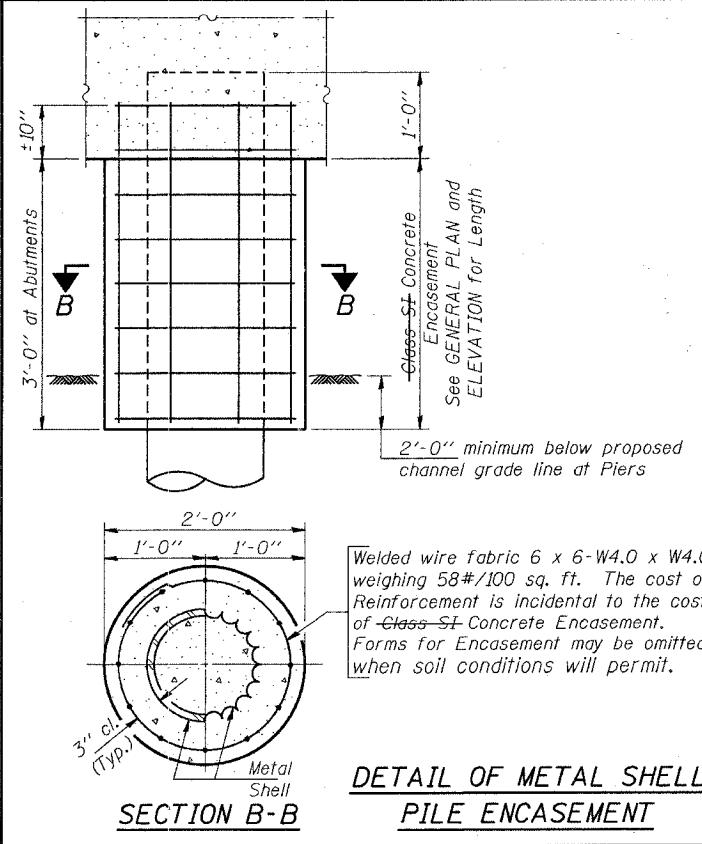
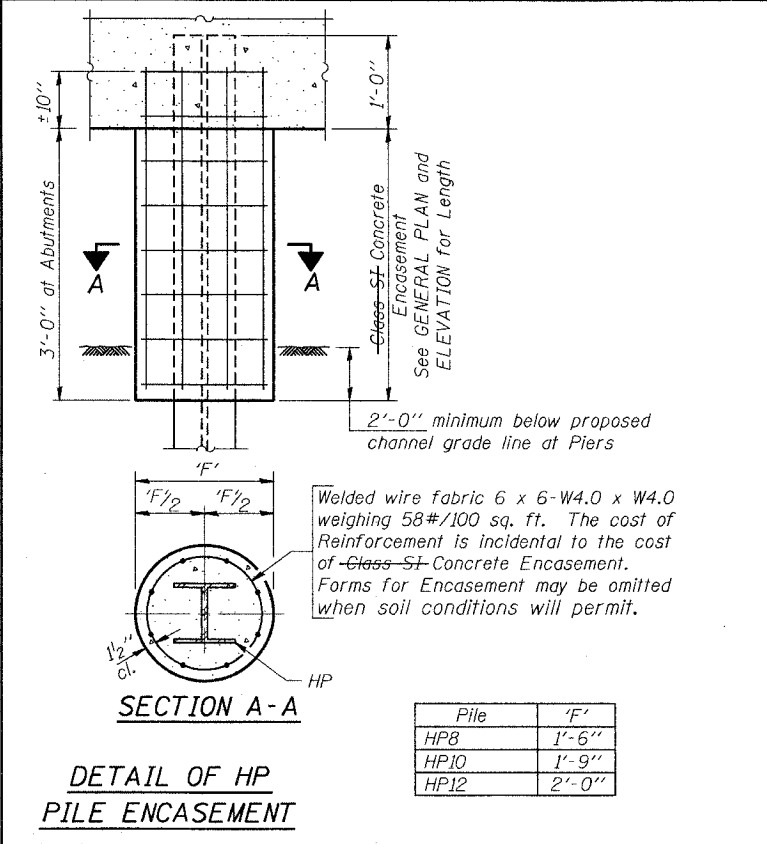
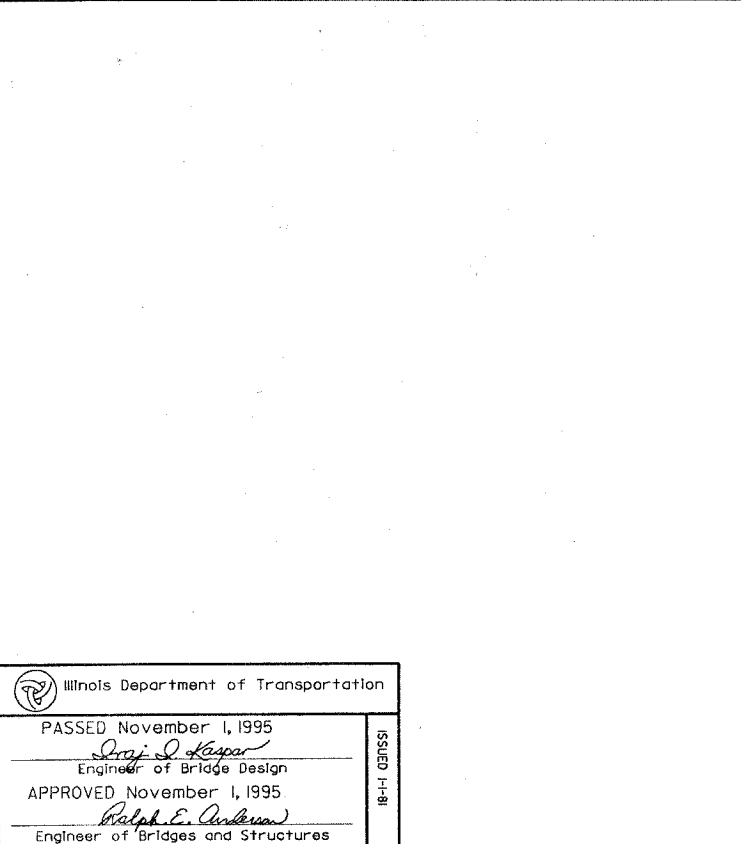
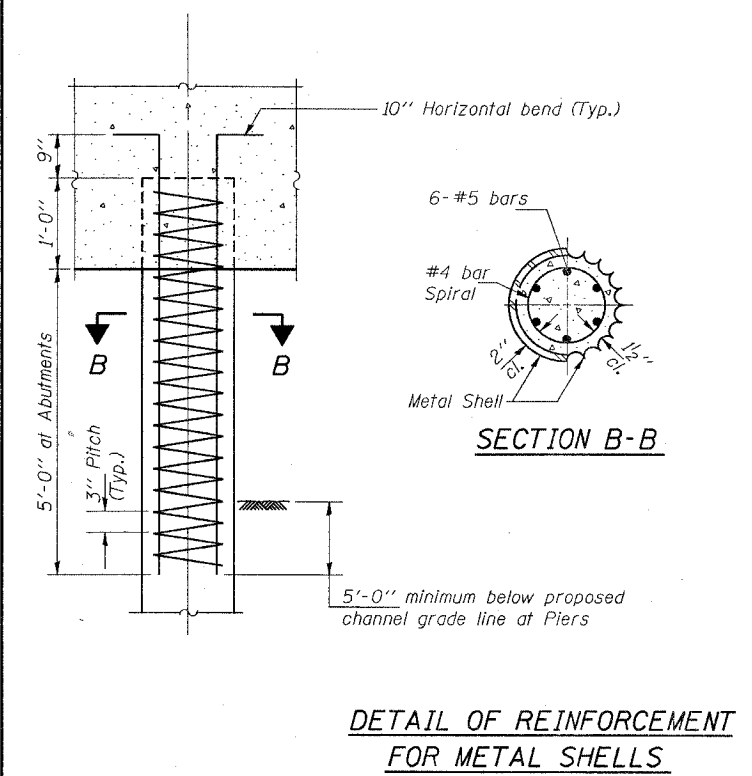
Handling: For Pile lengths up to 45' use two slings placed at a distance of 0.2L from each end. For Piles longer than 45', use three slings placed at a distance of 0.12L from each end and at mid point of pile.



Note: The thickness of the shell shall be 0.1495 inches with a tolerance of 5%. The shell shall be in accordance with Article 706.05 (a) of the Standard Specification except that minimum yield strength for the steel after cold working shall be 50,000 p.s.i.



Note: Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 0.1793 inches with a tolerance of 5%.



QUANTITIES/LIN. FT. OF ENCASEMENT (STEEL PILES)

Pile Size	Item	Quantity
HP8	Class ST Concrete Encasement	0.063 C.Y.
HP10	Class ST Concrete Encasement	0.086 C.Y.
HP12	Class ST Concrete Encasement	0.112 C.Y.

(METAL SHELL PILES)

Pile Size	Item	Quantity
12" Dia.	Class ST Concrete Encasement	0.087 C.Y.

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PILE DETAILS
 STANDARD CX-1