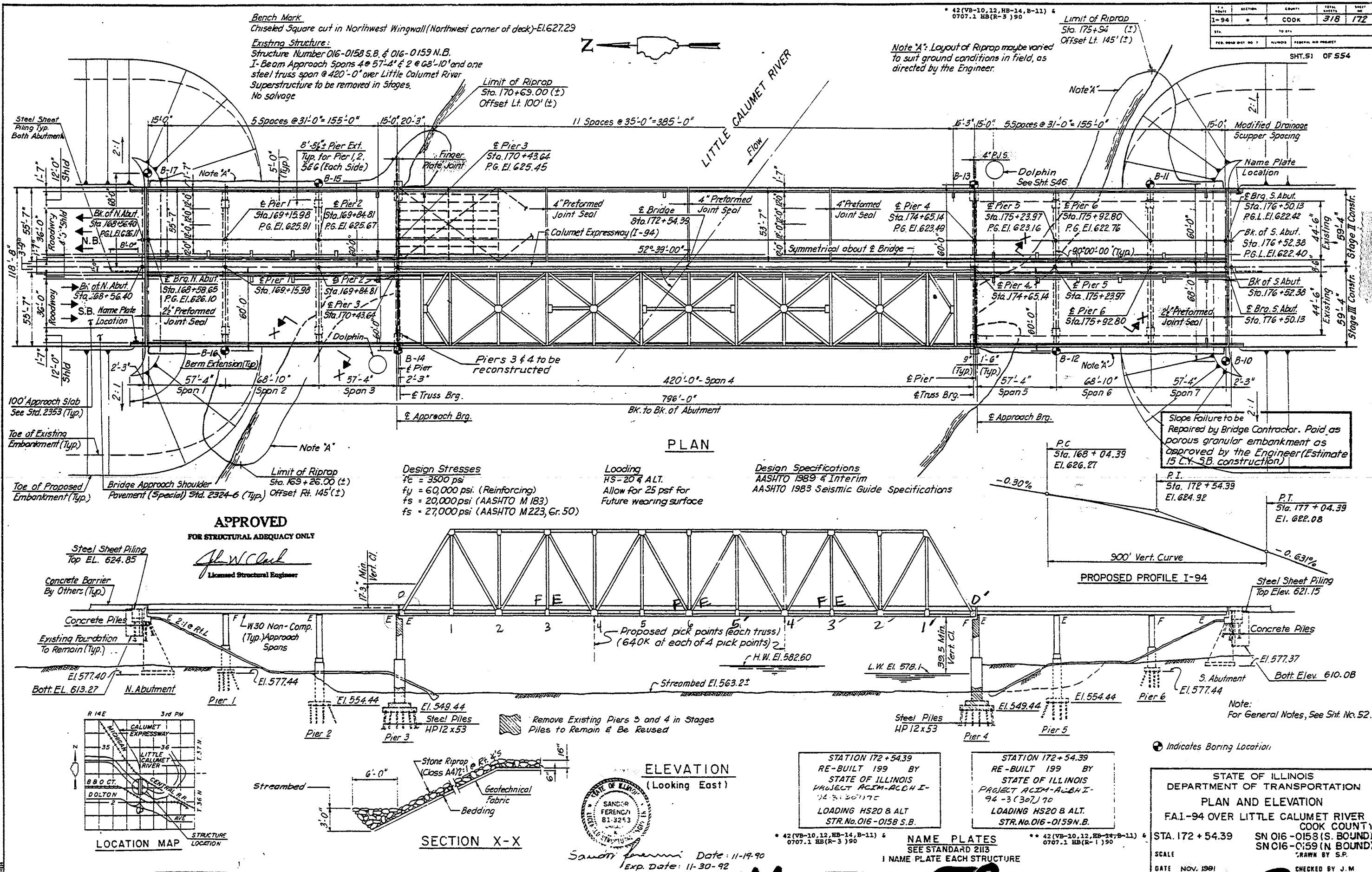




016-0158-0159

GENERAL NOTES:

SEE PLANS FOR BORING DATA.

FASTENERS SHALL BE HIGH STRENGTH BOLTS 3/4" DIAMETER, OPEN HOLES 13/16" DIAMETER, UNLESS OTHERWISE NOTED.

	N.B. TRUSS	M183	M223	TOTALS
CALCULATED WEIGHT OF STRUCTURAL STEEL IN LBS.:	1,013,037	1,502,957	2,515,994	
	582,246	3,876	586,122	
	1,595,283	1,506,833	3,102,116	

ROADWAY EXPANSION GUARDS SHALL BE ASSEMBLED IN THE PROPER POSITION WITH THE ENDS IN PLACE AND SHALL BE LEFT ASSEMBLED FOR SHOP INSPECTION.

THE ROADWAY EXPANSION PLATES SHALL BE FLAME CUT AS PROVIDED IN ARTICLE 507.04(1) OF THE STANDARD SPECIFICATIONS.

THE ZINC-SILICATE AND VINYL PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL, EXCEPT WHERE OTHERWISE NOTED. THE COLOR OF THE FINAL FINISH COAT SHALL BE 10YR 7/1 LIGHT GREY FOR BOTH INTERIOR & EXTERIOR STRUCTURAL STEEL WORK.

EXPANSION JOINT PLATES AND ATTACHED BARS SHALL BE SHOP PAINTED WITH THE ZINC-SILICATE PRIMER.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO TRUSS MEMBERS, THE BOTTOM FLANGE OF BEAMS OR GIRDERS 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 AND/OR ERECTING TRUSSES 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 AS FOLLOWS:

- TENSION FLANGES, WEB AND ALL SPLICE MATERIAL OF THE STEEL GIRDERS OR WIDE FLANGE BEAMS.
- TRUSS VERTICALS (HANGERS) IN TENSION.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.

LAYOUT OF SLOPE PROTECTION SYSTEM MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

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 THE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION OR A CHANGE IN THE SCOPE OF THE WORK.

EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,000 LBS., AND 3/4" DIAMETER X 12" HOOKED BOLTS.

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. (FOR TYPE I ELASTOMERIC BEARINGS, SHIMS OF THE DIMENSIONS OF THE TOP PLATE SHALL BE PROVIDED AND PLACED AS DETAILED).

THE CONTRACTOR SHALL DRIVE TWO 14" Ø METAL SHELL TEST PILES IN A PERMANENT LOCATION, ONE AT EAST END OF EACH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES. LIKEWISE, THE CONTRACTOR SHALL DRIVE TWO HP 12X53 TEST PILES IN PERMANENT LOCATIONS AT THE EAST AND WEST END OF EACH PIER AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF HP 12X53 PILES.

THE INFORMATION SHOWN FOR THE TEMPORARY SHEET PILING IS ESTIMATED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A DESIGN OF THE TEMPORARY SHEET PILING AND ASSOCIATED MEMBERS, IF REQUIRED, SUBJECT TO THE APPROVAL OF THE ENGINEER.

CONCRETE PILES AT ABUTMENTS SHALL BE DRIVEN IN HOLES PRECORED THROUGH THE EMBANKMENT IN ACCORDANCE WITH ARTICLE 513.08(C) OF THE STANDARD SPECIFICATIONS.

FOR ADDITIONAL DESIGN NOTES FOR TRUSS BRIDGE SEE SHT. S20.

THE TENSION MEMBERS AND MEMBER COMPONENTS WHOSE FAILURE WOULD BE EXPECTED TO RESULT IN COLLAPSE OF THE BRIDGE SHALL CONFORM TO THE BASE METAL CHARTER V. NOTCH REQUIREMENTS FOR FRACTURE CRITICAL MEMBERS ZONE 2. THESE MEMBERS OR MEMBER COMPONENTS ARE:

TRUSS BOTTOM CHORD PLATES, TENSION DIAGONAL PLATES, BOTTOM CHORD AND TENSION DIAGONAL'S SPLICE PLATES AND GUSSET PLATES U₁, U₂, U₃, U₄, U₅, U₆, U₇, L₂, L₃, L₄, L₅ AND L₆.

- * 240 SQ. FT. ABUTMENTS EACH BRIDGE
- 640 SQ. FT. PIER 3 & 4 EACH BRIDGE
- ** INCLUDES DECK SURFACE

SUMMARY OF BILL OF MATERIAL

ITEM	UNIT OF MEASURE	CONSTRUCTION STAGE II (NB)			CONSTRUCTION STAGE III (SB)			BRIDGE TOTAL
		SUB-STRUCTURE	SUPER-STRUCTURE	SUBTOTAL	SUB-STRUCTURE	SUPER-STRUCTURE	SUBTOTAL	
REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	—	—	1	—	—	1	2
CONCRETE REMOVAL	CU.YD.	1907.7	—	1907.7	1910.8	—	1910.8	3759.2
STRUCTURE EXCAVATION	CU.YD.	325	—	325	347	—	347	672.1
FURNISHING METAL PILE SHELLS 14"	LN.FT.	242	—	242	242	—	242	484
DRIVING AND FILLING SHELLS	LN.FT.	242	—	242	242	—	242	484
TEST PILE METAL SHELLS	EACH	2	—	2	2	—	2	4
FURNISHING STEEL PILES, HP12X53	LN.FT.	2910	—	2910	2910	—	2910	5820
DRIVING STEEL PILES	LN.FT.	2910	—	2910	2910	—	2910	5820
TEST PILE, STEEL HP12X53	EACH	6	—	6	6	—	6	12
FURNISHING CREOSOTED PILES OVER 38 FT.	LN.FT.	45	—	45	45	—	45	90
DRIVING TIMBER PILES	LN.FT.	45	—	45	45	—	45	90
TREATED TIMBER	F.B.M.	8150	—	8150	8150	—	8150	16,300
STEEL SHEET PILING (SPECIAL)	SQ.FT.	2770	—	2770	2840	—	2840	5540
STEEL SHEET PILING	SQ.FT.	204	—	204	—	—	—	204
COFFERDAM EXCAVATION	CU.YD.	2375	—	2375	3567	—	3567	5942
STONE RIPRAP CL. A 4	SQ.YD.	2900	—	2900	2900	—	2900	5800
FILTER FABRIC FOR USE WITH RIPRAP	SQ.YD.	2900	—	2900	2900	—	2900	5800
NAVIGATION LIGHTING SYSTEM	L.SUM	—	1	1	—	1	1	2
TRUSS BRIDGE GROUNDING SYSTEM	L.SUM	—	1	1	—	1	1	2
TEMPORARY SHEET PILING	SQ.FT.	5000	—	5000	5000	—	5000	10,000
REINFORCED NEOPRENE EXPANSION JOINT TREATMENT	LN.FT.	—	64	64	—	64	64	128
CLASS X CONCRETE	CU.YD.	2713.9	—	2713.9	2762.9	—	2762.9	5476.8
CLASS X CONCRETE SUPERSTRUCTURE	CU.YD.	—	1287.3	1287.3	—	1287.3	1287.3	2574.6
REINFORCEMENT BARS	LBS.	66,690	—	66,690	65,770	—	65,770	132,460
REINFORCEMENT BARS, EPOXY COATED	LBS.	287,400	321,040	608,440	296,365	321,040	617,405	1,225,845
POROUS GRANULAR EMBANKMENT	CU.YD.	64.4	—	64.4	79.4	—	79.4	143.8
EXPANSION BOLTS 3/4" INCH	EACH	627	—	627	577	—	577	1204
BOLTS EMBEDDED IN CONCRETE, 1" INCH	EACH	180	—	180	180	—	180	360
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	—	56	56	—	56	56	112
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	—	16	16	—	16	16	32
PREFORMED JT. SEAL 2 1/2"	LN.FT.	—	111.3	111.3	—	111.3	111.3	222.6
PREFORMED JT. SEAL 4"	LN.FT.	—	222.6	222.6	—	222.6	222.6	445.2
PROTECTIVE COAT	SQ.YD.	—	5377	5377	—	5377	5377	10,754
FURNISHING & ERECTING STRUCTURAL STEEL (SPECIAL)	L.SUM	—	1	1	—	1	1	2
DRAINAGE SCURPER SPECIAL	EACH	—	28	28	—	28	28	56
PROTECTIVE SHIELD	SQ.YD.	—	2940	2940	—	2940	2940	5880
INSTALL AND REMOVE TEMPORARY CONCRETE BARRIER	UNIT	—	—	—	80	—	80	80
NAME PLATES	EACH	—	1	1	—	1	1	2
EPOXY CRACK SEALING	LN.FT.	171	—	171	150	—	150	321
EPOXY MORTAR REPAIR	CU.FT.	4.1	—	4.1	4.8	—	4.8	8.9
MAINTENANCE OF NAVIGATION	L.SUM	—	1	1	—	1	1	2
BRIDGE SEAT SEALER	L.SUM	0.41	—	0.41	0.41	—	0.41	0.82
DOLPHIN EXCAVATION	CU.YD.	48.0	—	48.0	50.0	—	50.0	98.0
EPOXY GROUTED REINFORCEMENT BARS	EACH	260	—	260	420	—	420	520
REMOVING & ERECTING STRUCTURAL STEEL (APPROACH SPANS)	LN.FT.	—	420	420	—	—	—	420
REMOVING & ERECTING STRUCTURAL STEEL (PIER 2)	LBS.	—	—	—	94,000	—	94,000	94,000
BRIDGE DECK GROOVING	SQ.YD.	—	4608	4608	—	4608	4608	9216
FORMED CONCRETE REPAIR (DEPTH ≤ 5")	SQ.FT.	180	—	180	39	—	39	244
FORMED CONCRETE REPAIR (DEPTH > 5")	SQ.FT.	151	—	151	14	—	14	165
COFFERDAM (PIER 2)	EACH	1	—	1	—	—	—	2
COFFERDAM (PIER 3)	EACH	1	—	1	—	—	—	2
COFFERDAM (PIER 4)	EACH	1	—	1	—	—	—	2
COFFERDAM (PIER 5)	EACH	1	—	1	—	—	—	2
FURNISHING & ERECTING STRUCTURAL STEEL (APPROACH SPANS)	L.SUM	—	0.64	0.64	—	0.74	0.74	1.38
FLOATING BEARING, GUIDED EXPANSION 1800 KIPS	EACH	—	2	2	—	2	2	4
FLOATING BEARING, FIXED 1800 KIPS	EACH	—	2	2	—	2	2	4

* 42 (VB-10,12,HB-14,B-11) & 0707.1 HB(R-3) 90

DATE	BY	CHECKED	DATE	BY
1-94	R	CCOK	3/8	173
FILE NO.	PROJECT NO.	REVISION	DATE	BY

Sheet S2 of S54

SUMMARY OF BILL OF MATERIAL (CONTINUATION)

ITEM	UNIT OF MEASURE	SUPERSTRUCTURE
BIRD SCREENS	L. SUM	1
SEALANT FOR BOX SECTIONS	L. SUM	1

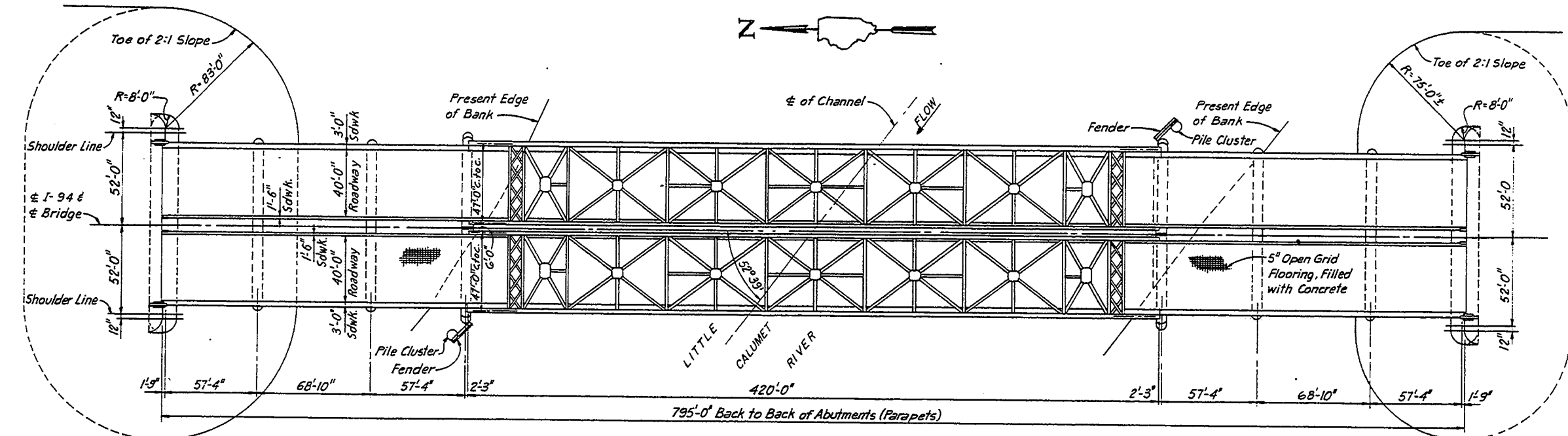
(Included in Roadway Summary of Quantities Column)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
GENERAL NOTES & SUMMARY
OF QUANTITIES
FA.I-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172+54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991, REV. 6/92
DRAWN BY
CHECKED BY WFT

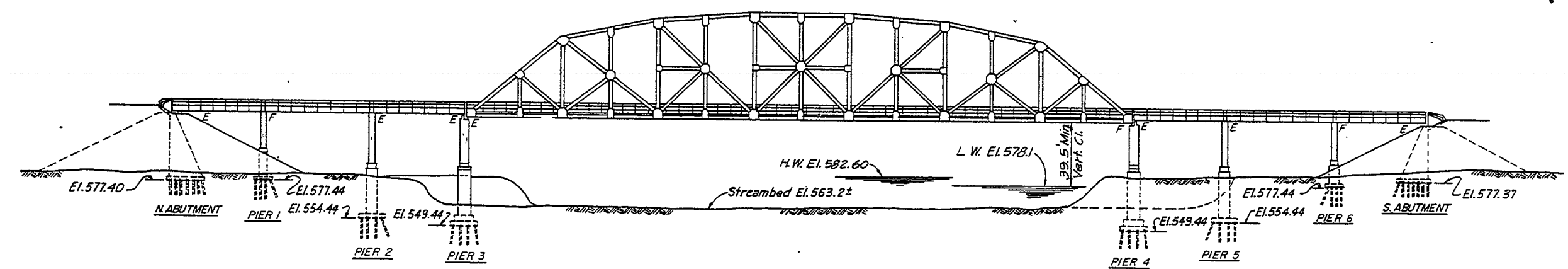
* 42(VB-10, 12, HB-14, B-11) &
0707.1 HB(R-3) 90

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	B	COOK	318	174
STA.	TO STA.			
FED. ROAD DIST. NO. 1	NAME	FEDERAL AID PROJECT		

SHT. 33 OF 554



PLAN



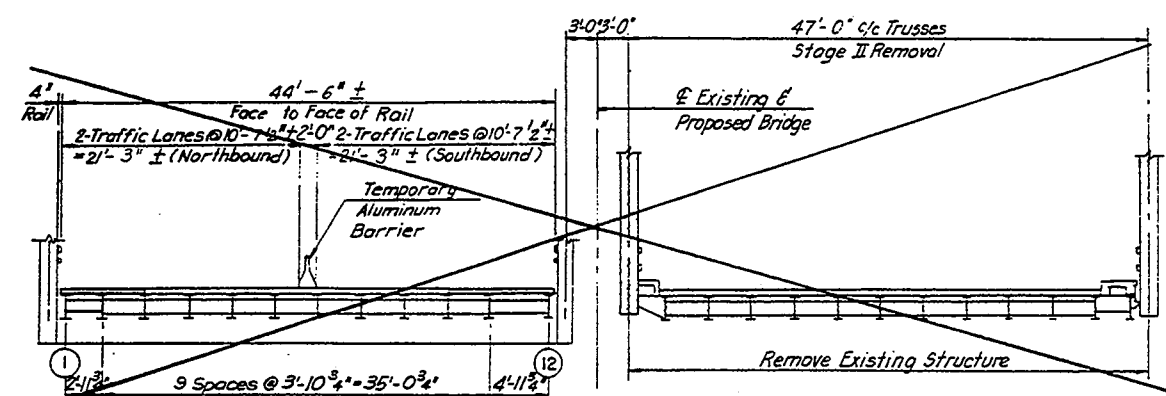
ELEVATION

NOTE:
For Existing Structure Reference Drawing
See Little Calumet River Bridge F.A.
Project J-I-246 (1) Rt. FA-122, Sec. 42B-11,
42E-11 & 42P-11 File 4089 Sheets 1 thru 27

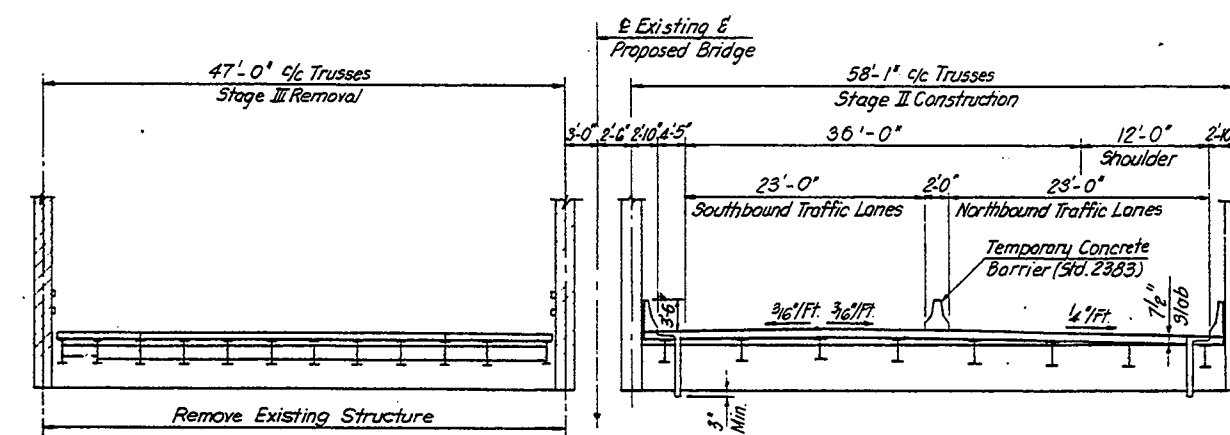
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
EXISTING STRUCTURE
FA.I-94 OVER LITTLE CALUMET RIVER
COOK COUNTY

STA. 172 + 54.39
SCALE
DATE NOV. 1990

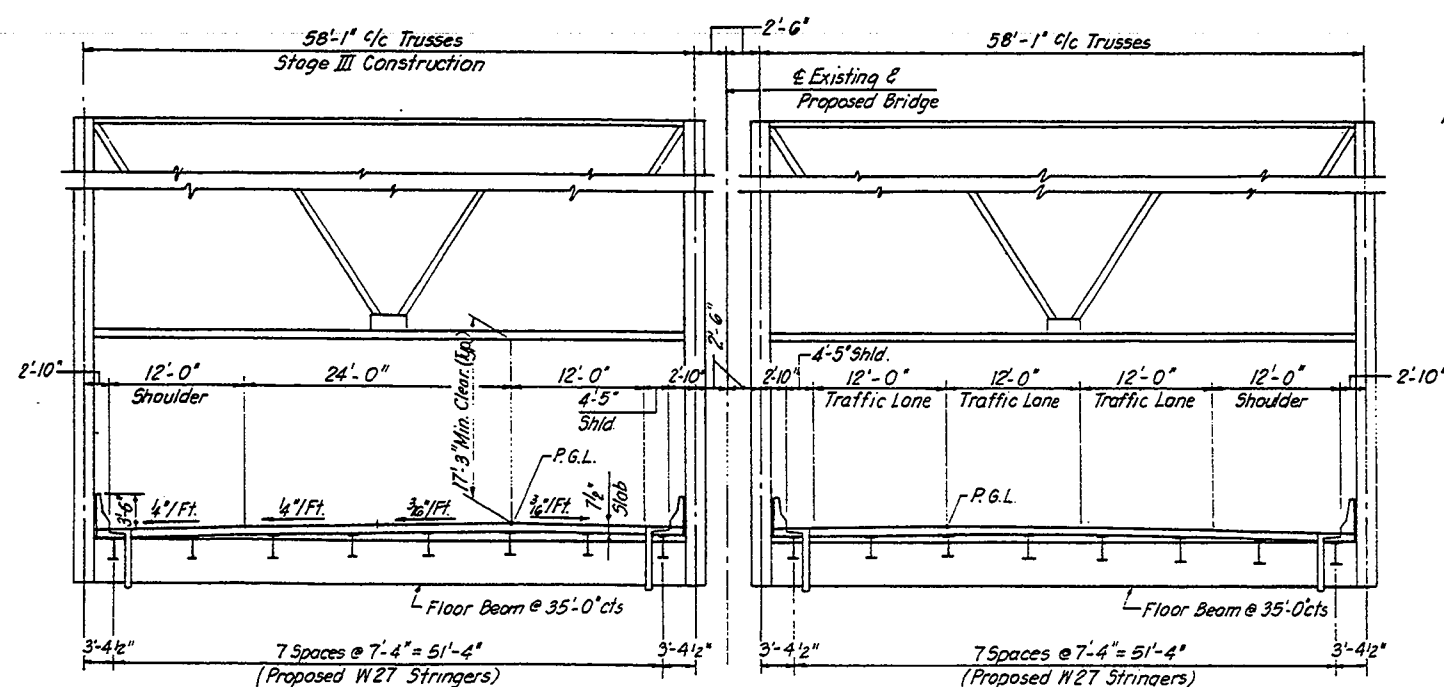
SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
DRAWN BY P.G.
CHECKED BY J.M.



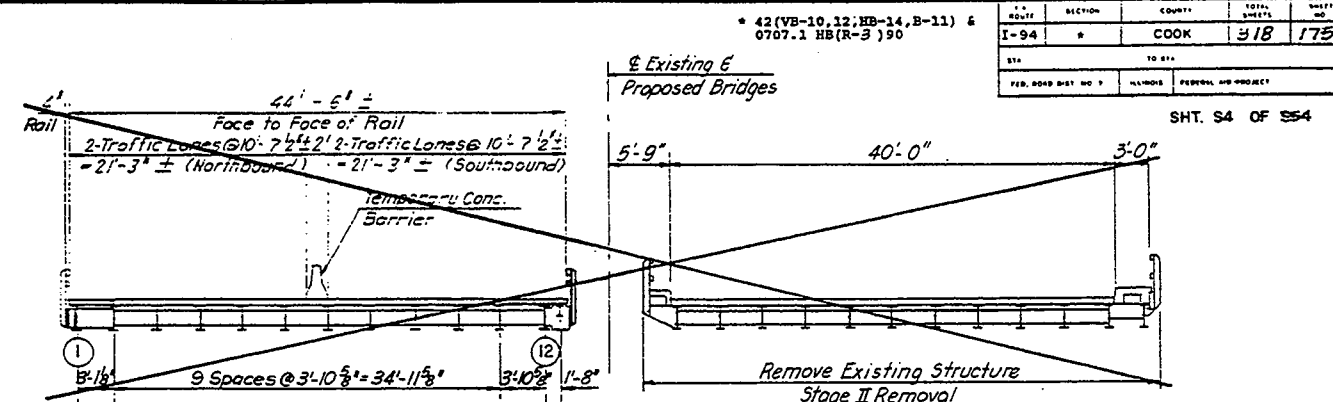
STAGE II - TRUSS SPAN
(LOOKING NORTH)



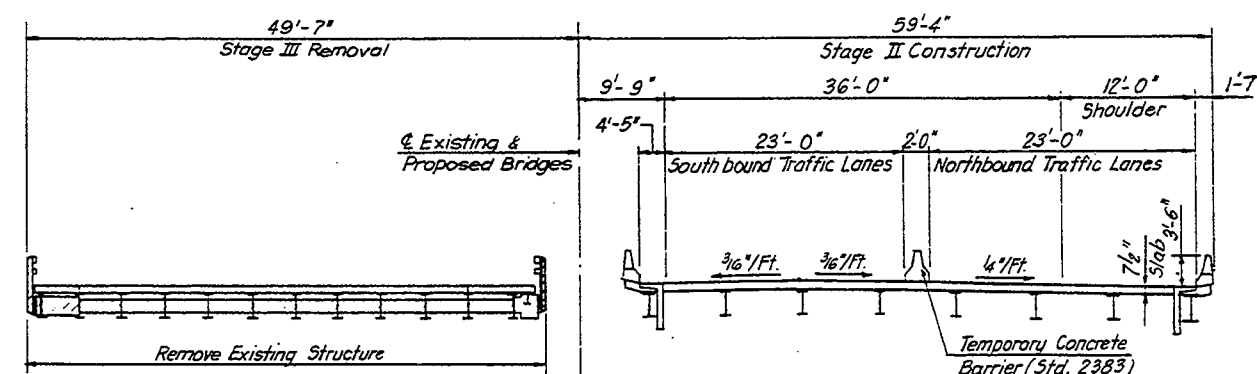
STAGE III - TRUSS SPAN
(LOOKING NORTH)



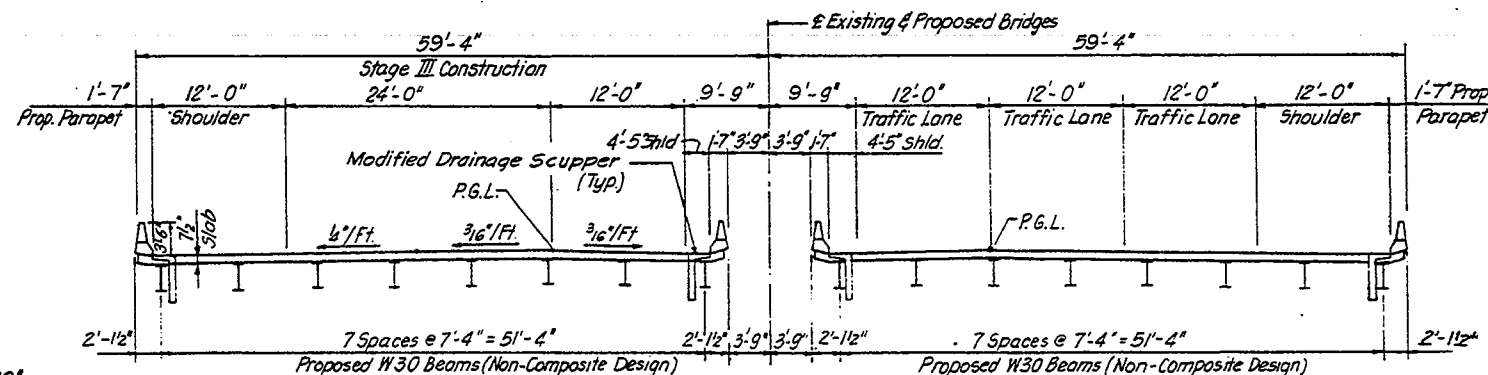
FINAL CROSS SECTION - TRUSS SPANS
(LOOKING NORTH AT FRONT PORTAL)



STAGE II - APPROACH SPANS
(LOOKING NORTH)



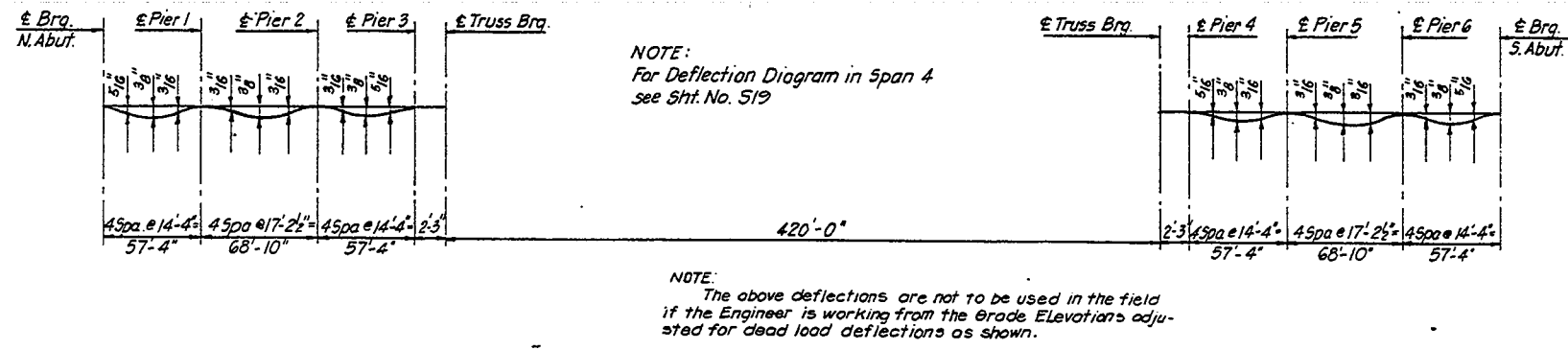
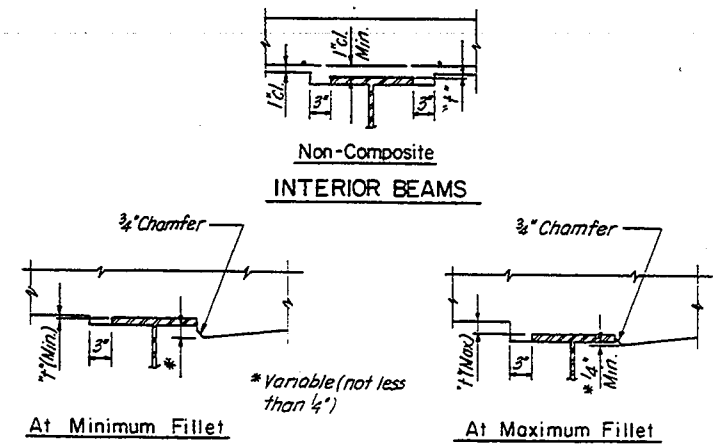
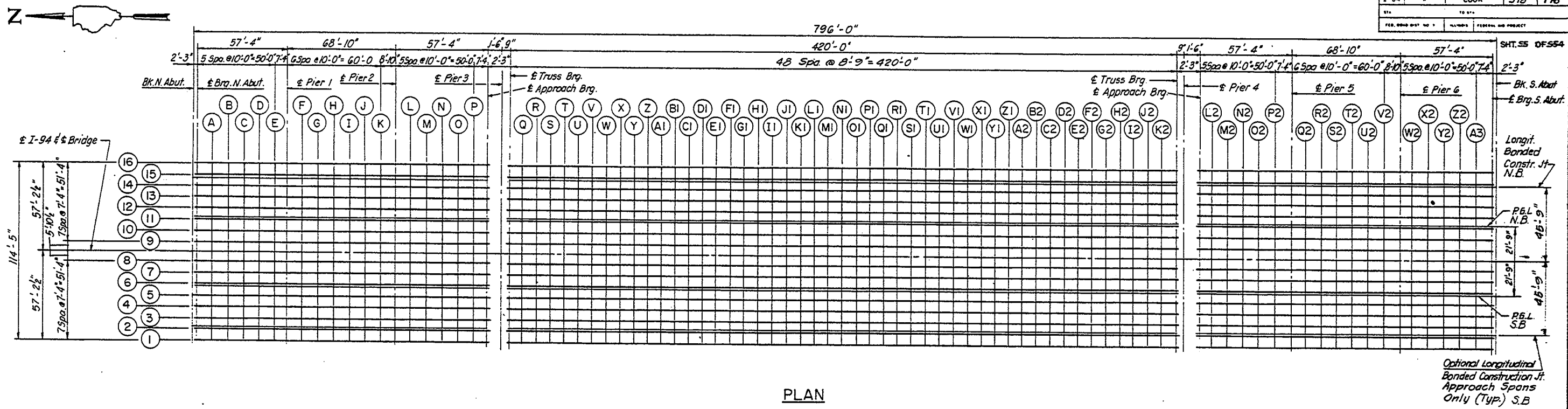
STAGE III - APPROACH SPANS
(LOOKING NORTH)



FINAL CROSS SECTION - APPROACH SPANS
(LOOKING NORTH)

LEGEND
Remove Existing Structure

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
CONSTRUCTION STAGING
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY S.P.
CHECKED BY J.M.



FILLET HEIGHTS

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above these elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" minus slab thickness, equal the fillet heights "t" above top flanges of beams.

STRINGERS No. 1 & 16				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	35.458	625.433	625.433
Q BRC. N. ABUT.	16858.65	35.458	625.426	625.426
A	16868.65	35.458	625.394	625.412
B	16878.65	35.458	625.361	625.390
C	16888.65	35.458	625.328	625.358
D	16898.65	35.458	625.295	625.325
E	16908.65	35.458	625.261	625.286
Q PIER 1	16915.98	35.458	625.236	625.236
F	16925.98	35.458	625.202	625.209
G	16935.98	35.458	625.167	625.186
H	16945.98	35.458	625.132	625.159
I	16955.98	35.458	625.097	625.124
J	16965.98	35.458	625.061	625.078
K	16975.98	35.458	625.025	625.030
Q PIER 2	16984.81	35.458	624.993	624.993
L	16994.81	35.458	624.956	624.964
M	17004.81	35.458	624.915	624.941
N	17014.81	35.458	624.831	624.910
O	17024.81	35.458	624.843	624.870
P	17034.81	35.458	624.805	624.815
Q APP. BRC. PIER 3	17042.14	35.458	624.777	624.777

STRINGERS No. 4 & 13				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	13.458	625.801	625.801
Q BRC. N. ABUT.	16858.65	13.458	625.884	625.884
A	16868.65	13.458	625.852	625.870
B	16878.65	13.458	625.819	625.848
C	16888.65	13.458	625.786	625.814
D	16898.65	13.458	625.753	625.771
E	16908.65	13.458	625.719	625.724
Q PIER 1	16915.98	13.458	625.694	625.694
F	16925.98	13.458	625.660	625.667
G	16935.98	13.458	625.625	625.644
H	16945.98	13.458	625.590	625.617
I	16955.98	13.458	625.555	625.582
J	16965.98	13.458	625.515	625.526
K	16975.98	13.458	625.483	625.488
Q PIER 2	16984.81	13.458	625.451	625.451
L	16994.81	13.458	625.414	625.422
M	17004.81	13.458	625.377	625.399
N	17014.81	13.458	625.339	625.369
O	17024.81	13.458	625.301	625.328
P	17034.81	13.458	625.263	625.277
Q APP. BRC. PIER 3	17042.14	13.458	625.235	625.235

STRINGERS No. 2 & 15				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	28.125	625.586	625.586
Q BRC. N. ABUT.	16858.65	28.125	625.579	625.579
A	16868.65	28.125	625.547	625.565
B	16878.65	28.125	625.514	625.543
C	16888.65	28.125	625.481	625.509
D	16898.65	28.125	625.448	625.466
E	16908.65	28.125	625.414	625.419
Q PIER 1	16915.98	28.125	625.389	625.389
F	16925.98	28.125	625.355	625.362
G	16935.98	28.125	625.320	625.339
H	16945.98	28.125	625.285	625.312
I	16955.98	28.125	625.250	625.277
J	16965.98	28.125	625.214	625.231
K	16975.98	28.125	625.178	625.183
Q PIER 2	16984.81	28.125	625.146	625.146
L	16994.81	28.125	625.109	625.117
M	17004.81	28.125	625.072	625.094
N	17014.81	28.125	625.034	625.064
O	17024.81	28.125	624.996	625.023
P	17034.81	28.125	624.958	624.972
Q APP. BRC. PIER 3	17042.14	28.125	624.930	624.930

STRINGERS No. 5 & 12				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	6.125	626.013	626.013
Q BRC. N. ABUT.	16858.65	6.125	626.006	626.006
A	16868.65	6.125	625.974	625.992
B	16878.65	6.125	625.941	625.970
C	16888.65	6.125	625.908	625.936
D	16898.65	6.125	625.875	625.903
E	16908.65	6.125	625.841	625.866
Q PIER 1	16915.98	6.125	625.816	625.816
F	16925.98	6.125	625.782	625.789
G	16935.98	6.125	625.747	625.766
H	16945.98	6.125	625.712	625.729
I	16955.98	6.125	625.677	625.704
J	16965.98	6.125	625.641	625.658
K	16975.98	6.125	625.605	625.610
Q PIER 2	16984.81	6.125	625.573	625.573
L	16994.81	6.125	625.536	625.544
M	17004.81	6.125	625.499	625.521
N	17014.81	6.125	625.461	625.481
O	17024.81	6.125	625.423	625.450
P	17034.81	6.125	625.385	625.399
Q APP. BRC. PIER 3	17042.14	6.125	625.357	625.357

STRINGERS No. 7 & 10				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	-8.540	625.975	625.975
Q BRC. N. ABUT.	16858.65	-8.540	625.968	625.968
A	16868.65	-8.540	625.936	625.954
B	16878.65	-8.540	625.903	625.932
C	16888.65	-8.540	625.870	625.899
D	16898.65	-8.540	625.837	625.865
E	16908.65	-8.540	625.803	625.830
Q PIER 1	16915.98	-8.540	625.778	625.778
F	16925.98	-8.540	625.744	625.751
G	16935.98	-8.540	625.709	625.728
H	16945.98	-8.540	625.674	625.701
I	16955.98	-8.540	625.639	625.668
J	16965.98	-8.540	625.603	625.632
K	16975.98	-8.540	625.567	625.592
Q PIER 2	16984.81	-8.540	625.535	625.535
L	16994.81	-8.540	625.498	625.506
M	17004.81	-8.540	625.461	625.483
N	17014.81	-8.540	625.423	625.453
O	17024.81	-8.540	625.385	625.412
P	17034.81	-8.540	625.347	625.381
Q APP. BRC. PIER 3	17042.14	-8.540	625.319	625.319

CONSTRUCTION JOINT				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	24.000	625.672	625.672
Q BRC. N. ABUT.	16858.65	24.000	625.664	625.664
A	16868.65	24.000	625.632	625.651
B	16878.65	24.000	625.600	625.630
C	16888.65	24.000	625.567	625.596
D	16898.65	24.000	625.533	625.552
E	16908.65	24.000	625.500	625.505
Q PIER 1	16915.98	24.000	625.475	625.475
F	16925.98	24.000	625.441	625.447
G	16935.98	24.000	625.406	625.425
H	16945.98	24.000	625.371	625.399
I	16955.98	24.000	625.335	625.362
J	16965.98	24.000	625.300	625.318
K	16975.98	24.000	625.264	625.269
Q PIER 2	16984.81	24.000	625.231	625.231
L	16994.81	24.000	625.195	625.203
M	17004.81	24.000	625.157	625.180
N	17014.81	24.000	625.120	625.151
O	17024.81	24.000	625.082	625.110
P	17034.81	24.000	625.044	625.058
Q APP. BRC. PIER 3	17042.14	24.000	625.015	625.015

P. G. L.				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	0.000	626.109	626.109
Q BRC. N. ABUT.	16858.65	0.000	626.102	626.102
A	16868.65	0.000	626.070	626.085
B	16878.65	0.000	626.037	626.066
C	16888.65	0.000	626.004	626.033
D	16898.65	0.000	625.971	625.989
E	16908.65	0.000	625.937	625.942
Q PIER 1	16915.98	0.000	625.912	625.912
F	16925.98	0.000	625.878	625.885
G	16935.98	0.000	625.843	625.862
H	16945.98	0.000	625.808	625.835
I	16955.98	0.000	625.773	625.800
J	16965.98	0.000	625.737	625.754
K	16975.98	0.000	625.701	625.706
Q PIER 2	16984.81	0.000	625.669	625.669
L	16994.81	0.000	625.632	625.640
M	17004.81	0.000	625.595	625.617
N	17014.81	0.000	625.557	625.587
O	17024.81	0.000	625.519	625.548
P	17034.81	0.000	625.481	625.495
Q APP. BRC. PIER 3	17042.14	0.000	625.453	625.453

STRINGERS No. 8 & 9				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	-15.875	625.861	625.861
Q BRC. N. ABUT.	16858.65	-15.875	625.854	625.854
A	16868.65	-15.875	625.822	625.840
B	16878.65	-15.875	625.789	625.818
C	16888.65	-15.875	625.756	625.785
D	16898.65	-15.875	625.722	625.741
E	16908.65	-15.875	625.689	625.694
Q PIER 1	16915.98	-15.875	625.664	625.664
F	16925.98	-15.875	625.630	625.637
G	16935.98	-15.875	625.595	625.614
H	16945.98	-15.875	625.560	625.587
I	16955.98	-15.875	625.525	625.552
J	16965.98	-15.875	625.489	625.509
K	16975.98	-15.875	625.453	625.458
Q PIER 2	16984.81	-15.875	625.421	625.421
L	16994.81	-15.875	625.384	625.392
M	17004.81	-15.875	625.347	625.369
N	17014.81	-15.875	625.309	625.339
O	17024.81	-15.875	625.271	625.298
P	17034.81	-15.875	625.233	625.247
Q APP. BRC. PIER 3	17042.14	-15.875	625.205	625.205

* 42(VB-10,12,HB-14,B-11) &
0707.1 HB(R-3) 90

SECTION	COUNT	TOTAL	DATE
1-94	COOK	318	177
DATE	TO DATE		
PER ROAD DIST NO. 7	METHODS	FEDERAL AID PROJECT	

SHT. NO. S6 OF S54

STRINGERS No. 3 & 14				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BK. NORTH ABUT.	16856.40	20.792	625.738	625.738
Q BRC. N. ABUT.	16858.65	20.792	625.731	625.731
A	16868.65	20.792	625.699	625.717
B	16878.65	20.792	625.666	625.695
C	16888.65	20.792	625.633	625.662
D	16898.65	20.792	625.600	625.612
E	16908.65	20.792	625.566	625.571
Q PIER 1	16915.98	20.792	625.541	625.541
F	16925.98	20.792	625.507	625.514
G	16935.98	20.792	625.472	625.491
H	16945.98	20.792	625.437	625.464
I	16955.98	20.792	625.402	625.429
J	16965.98	20.792	625.366	625.383
K	16975.98	20.792	625.330	625.325
Q PIER 2	16984.81	20.792	625.296	625.298
L	16994.81	20.792	625.261	625.265
M	17004.81	20.792	625.224	625.246
N	17014.81	20.792	625.186	625.215
O	17024.81	20.792	625.148	625.175
P	17034.81	20.792	625.110	625.124
Q APP. BRC. PIER 3	17042.14	20.792	625.082	625.082

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	COOK	318	178
FILED BY	DATE	BY	DATE
FILED BY	DATE	BY	DATE

SHT.57 OF 554

STRINGERS No. 1 & 16				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
€ TRUSS BRG. PIER No.3	17044.39	35.458	624.768	624.773
Q	17053.14	35.458	624.734	624.780
R	17061.89	35.458	624.700	624.776
S	17070.64	35.458	624.665	624.757
T	17079.39	35.458	624.630	624.727
U	17088.14	35.458	624.595	624.726
V	17096.89	35.458	624.559	624.714
W	17105.64	35.458	624.523	624.687
Y	17114.39	35.458	624.487	624.648
Y	17123.14	35.458	624.451	624.646
Z	17131.89	35.458	624.414	624.632
A1	17140.64	35.458	624.377	624.602
B1	17149.39	35.458	624.340	624.563
C1	17158.14	35.458	624.303	624.553
D1	17166.89	35.458	624.265	624.532
E1	17175.64	35.458	624.227	624.497
F1	17184.39	35.458	624.188	624.450
G1	17193.14	35.458	624.150	624.438
H1	17201.89	35.458	624.111	624.415
I1	17210.64	35.458	624.072	624.377
J1	17219.39	35.458	624.032	624.327
K1	17228.14	35.458	623.992	624.307
L1	17236.89	35.458	623.952	624.275
M1	17245.64	35.458	623.912	624.228
N1	17254.39	35.458	623.871	624.169
O1	17263.14	35.458	623.831	624.146
P1	17271.89	35.458	623.789	624.112
Q1	17280.64	35.458	623.748	624.062
R1	17289.39	35.458	623.706	624.001
S1	17298.14	35.458	623.664	623.969
T1	17306.89	35.458	623.622	623.926
U1	17315.64	35.458	623.579	623.868
V1	17324.39	35.458	623.537	623.798
W1	17333.14	35.458	623.494	623.764
X1	17341.89	35.458	623.450	623.718
Y1	17350.64	35.458	623.406	623.657
Z1	17359.39	35.458	623.362	623.585
A2	17368.14	35.458	623.318	623.543
B2	17376.89	35.458	623.274	623.491
C2	17385.64	35.458	623.229	623.424
D2	17394.39	35.458	623.184	623.345
E2	17403.14	35.458	623.138	623.302
F2	17411.89	35.458	623.093	623.248
G2	17420.64	35.458	623.047	623.178
H2	17429.39	35.458	623.000	623.098
I2	17438.14	35.458	622.954	623.046
J2	17446.89	35.458	622.907	622.984
K2	17455.64	35.458	622.860	622.906
€ TRUSS BRG. PIER No.4	17464.39	35.458	622.813	622.818

STRINGERS No. 2 & 15				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
€ TRUSS BRG. PIER No.3	17044.39	28.125	624.921	624.937
Q	17053.14	28.125	624.887	624.947
R	17061.89	28.125	624.853	624.946
S	17070.64	28.125	624.818	624.929
T	17079.39	28.125	624.783	624.900
U	17088.14	28.125	624.748	624.899
V	17096.89	28.125	624.712	624.887
W	17105.64	28.125	624.676	624.860
X	17114.39	28.125	624.640	624.821
Y	17123.14	28.125	624.604	624.819
Z	17131.89	28.125	624.567	624.805
A1	17140.64	28.125	624.530	624.775
B1	17149.39	28.125	624.493	624.736
C1	17158.14	28.125	624.456	624.726
D1	17166.89	28.125	624.418	624.705
E1	17175.64	28.125	624.380	624.670
F1	17184.39	28.125	624.341	624.623
G1	17193.14	28.125	624.303	624.611
H1	17201.89	28.125	624.264	624.588
I1	17210.64	28.125	624.225	624.550
J1	17219.39	28.125	624.185	624.500
K1	17228.14	28.125	624.145	624.480
L1	17236.89	28.125	624.105	624.448
M1	17245.64	28.125	624.065	624.401
N1	17254.39	28.125	624.025	624.342
O1	17263.14	28.125	623.984	624.319
P1	17271.89	28.125	623.942	624.285
Q1	17280.64	28.125	623.901	624.235
R1	17289.39	28.125	623.859	624.174
S1	17298.14	28.125	623.817	624.142
T1	17306.89	28.125	623.775	624.099
U1	17315.64	28.125	623.732	624.041
V1	17324.39	28.125	623.690	623.971
W1	17333.14	28.125	623.647	623.936
X1	17341.89	28.125	623.603	623.891
Y1	17350.64	28.125	623.559	623.830
Z1	17359.39	28.125	623.515	623.758
A2	17368.14	28.125	623.471	623.716
B2	17376.89	28.125	623.427	623.664
C2	17385.64	28.125	623.382	623.597
D2	17394.39	28.125	623.337	623.518
E2	17403.14	28.125	623.291	623.475
F2	17411.89	28.125	623.246	623.421
G2	17420.64	28.125	623.200	623.351
H2	17429.39	28.125	623.153	623.271
I2	17438.14	28.125	623.107	623.218
J2	17446.89	28.125	623.060	623.153
K2	17455.64	28.125	623.013	623.073
€ TRUSS BRG. PIER No.4	17464.39	28.125	622.966	622.982

STRINGERS No. 3 & 14				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
€ TRUSS BRG. PIER No.3	17044.39	20.792	625.073	625.096
Q	17053.14	20.792	625.039	625.108
R	17061.89	20.792	625.005	625.109
S	17070.64	20.792	624.970	625.094
T	17079.39	20.792	624.935	625.065
U	17088.14	20.792	624.900	625.064
V	17096.89	20.792	624.864	625.052
W	17105.64	20.792	624.828	625.024
X	17114.39	20.792	624.792	624.986
Y	17123.14	20.792	624.756	624.983
Z	17131.89	20.792	624.719	624.969
A1	17140.64	20.792	624.682	624.940
B1	17149.39	20.792	624.645	624.900
C1	17158.14	20.792	624.608	624.891
D1	17166.89	20.792	624.570	624.870
E1	17175.64	20.792	624.532	624.834
F1	17184.39	20.792	624.493	624.788
G1	17193.14	20.792	624.455	624.776
H1	17201.89	20.792	624.416	624.753
I1	17210.64	20.792	624.377	624.714
J1	17219.39	20.792	624.337	624.665
K1	17228.14	20.792	624.298	624.644
L1	17236.89	20.792	624.257	624.612
M1	17245.64	20.792	624.217	624.565
N1	17254.39	20.792	624.177	624.507
O1	17263.14	20.792	624.136	624.484
P1	17271.89	20.792	624.095	624.449
Q1	17280.64	20.792	624.053	624.400
R1	17289.39	20.792	624.011	624.339
S1	17298.14	20.792	623.969	624.307
T1	17306.89	20.792	623.927	624.264
U1	17315.64	20.792	623.884	624.205
V1	17324.39	20.792	623.842	624.136
W1	17333.14	20.792	623.798	624.101
X1	17341.89	20.792	623.755	624.055
Y1	17350.64	20.792	623.711	623.995
Z1	17359.39	20.792	623.667	623.922
A2	17368.14	20.792	623.623	623.881
B2	17376.89	20.792	623.579	623.829
C2	17385.64	20.792	623.534	623.761
D2	17394.39	20.792	623.489	623.682
E2	17403.14	20.792	623.443	623.635
F2	17411.89	20.792	623.398	623.585
G2	17420.64	20.792	623.352	623.516
H2	17429.39	20.792	623.305	623.435
I2	17438.14	20.792	623.259	623.383
J2	17446.89	20.792	623.212	623.316
K2	17455.64	20.792	623.165	623.234
€ TRUSS BRG. PIER No.4	17464.39	20.792	623.118	623.141

NOTE:

OFFSETS ARE GIVEN FROM PCL LOOKING UP STATION FOR STRINGER NOS. 1 THROUGH 8, AND LOOKING DOWN STATION FOR STRINGER NOS. 9 THROUGH 16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS - III
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172+54.39 SN 016-0158 (S.BOUND)
SN 016-0159 (N.BOUND)
SCALE
DATE NOV. 1991
DRAWN BY
CHECKED BY

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	COOK	318	179
DATE	TO DATE		
FED. ROAD DIST. NO. 1	ALWAYS	GENERAL AND PROJECT	

SHT. 58 OF 554

STRINGERS No. 4 & 13				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Q TRUSS BRG. PIER No.3	17044.39	13.458	625.226	625.254
Q	17053.14	13.458	625.192	625.266
R	17061.89	13.458	625.158	625.268
S	17070.64	13.458	625.123	625.254
T	17079.39	13.458	625.088	625.230
U	17088.14	13.458	625.053	625.228
V	17096.89	13.458	625.017	625.216
W	17105.64	13.458	624.981	625.189
X	17114.39	13.458	624.945	625.150
Y	17123.14	13.458	624.909	625.148
Z	17131.89	13.458	624.872	625.134
A1	17140.64	13.458	624.835	625.104
B1	17149.39	13.458	624.798	625.065
C1	17158.14	13.458	624.761	625.056
D1	17166.89	13.458	624.723	625.034
E1	17175.64	13.458	624.685	624.999
F1	17184.39	13.458	624.646	624.952
G1	17193.14	13.458	624.608	624.940
H1	17201.89	13.458	624.569	624.917
I1	17210.64	13.458	624.530	624.879
J1	17219.39	13.458	624.490	624.829
K1	17228.14	13.458	624.450	624.809
L1	17236.89	13.458	624.410	624.777
M1	17245.64	13.458	624.370	624.730
N1	17254.39	13.458	624.329	624.671
O1	17263.14	13.458	624.289	624.649
P1	17271.89	13.458	624.247	624.614
Q1	17280.64	13.458	624.206	624.564
R1	17289.39	13.458	624.164	624.504
S1	17298.14	13.458	624.122	624.471
T1	17306.89	13.458	624.080	624.428
U1	17315.64	13.458	624.037	624.370
V1	17324.39	13.458	623.995	624.300
W1	17333.14	13.458	623.952	624.266
X1	17341.89	13.458	623.908	624.220
Y1	17350.64	13.458	623.864	624.159
Z1	17359.39	13.458	623.820	624.087
A2	17368.14	13.458	623.776	624.045
B2	17376.89	13.458	623.732	623.993
C2	17385.64	13.458	623.687	623.926
D2	17394.39	13.458	623.642	623.847
E2	17403.14	13.458	623.596	623.804
F2	17411.89	13.458	623.551	623.750
G2	17420.64	13.458	623.505	623.681
H2	17429.39	13.458	623.458	623.600
I2	17438.14	13.458	623.412	623.543
J2	17446.89	13.458	623.365	623.475
K2	17455.64	13.458	623.318	623.392
Q TRUSS BRG. PIER No.4	17464.39	13.458	623.271	623.298

STRINGERS No. 5 & 12				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Q TRUSS BRG. PIER No.3	17044.39	6.125	625.348	625.376
Q	17053.14	6.125	625.314	625.388
R	17061.89	6.125	625.280	625.390
S	17070.64	6.125	625.245	625.376
T	17079.39	6.125	625.210	625.352
U	17088.14	6.125	625.175	625.350
V	17096.89	6.125	625.139	625.338
W	17105.64	6.125	625.103	625.311
X	17114.39	6.125	625.067	625.272
Y	17123.14	6.125	625.031	625.270
Z	17131.89	6.125	624.994	625.256
A1	17140.64	6.125	624.957	625.226
B1	17149.39	6.125	624.920	625.187
C1	17158.14	6.125	624.883	625.178
D1	17166.89	6.125	624.845	625.156
E1	17175.64	6.125	624.807	625.121
F1	17184.39	6.125	624.768	625.074
G1	17193.14	6.125	624.730	625.062
H1	17201.89	6.125	624.691	625.039
I1	17210.64	6.125	624.652	625.001
J1	17219.39	6.125	624.612	624.951
K1	17228.14	6.125	624.572	624.931
L1	17236.89	6.125	624.532	624.899
M1	17245.64	6.125	624.492	624.858
N1	17254.39	6.125	624.452	624.793
O1	17263.14	6.125	624.411	624.771
P1	17271.89	6.125	624.369	624.736
Q1	17280.64	6.125	624.328	624.686
R1	17289.39	6.125	624.286	624.626
S1	17298.14	6.125	624.244	624.593
T1	17306.89	6.125	624.202	624.550
U1	17315.64	6.125	624.159	624.492
V1	17324.39	6.125	624.117	624.422
W1	17333.14	6.125	624.074	624.388
X1	17341.89	6.125	624.030	624.342
Y1	17350.64	6.125	623.986	624.281
Z1	17359.39	6.125	623.942	624.209
A2	17368.14	6.125	623.898	624.167
B2	17376.89	6.125	623.854	624.115
C2	17385.64	6.125	623.809	624.048
D2	17394.39	6.125	623.764	623.969
E2	17403.14	6.125	623.718	623.926
F2	17411.89	6.125	623.673	623.872
G2	17420.64	6.125	623.627	623.803
H2	17429.39	6.125	623.580	623.722
I2	17438.14	6.125	623.534	623.665
J2	17446.89	6.125	623.487	623.597
K2	17455.64	6.125	623.440	623.514
Q TRUSS BRG. PIER No.4	17464.39	6.125	623.393	623.420

P G L				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Q TRUSS BRG. PIER No.3	17044.39	0.000	625.444	625.468
Q	17053.14	0.000	625.410	625.480
R	17061.89	0.000	625.376	625.481
S	17070.64	0.000	625.341	625.466
T	17079.39	0.000	625.306	625.440
U	17088.14	0.000	625.271	625.439
V	17096.89	0.000	625.235	625.427
W	17105.64	0.000	625.199	625.399
X	17114.39	0.000	625.163	625.361
Y	17123.14	0.000	625.127	625.359
Z	17131.89	0.000	625.090	625.344
A1	17140.64	0.000	625.053	625.315
B1	17149.39	0.000	625.016	625.275
C1	17158.14	0.000	624.979	625.266
D1	17166.89	0.000	624.941	625.245
E1	17175.64	0.000	624.903	625.209
F1	17184.39	0.000	624.864	625.163
G1	17193.14	0.000	624.826	625.151
H1	17201.89	0.000	624.787	625.128
I1	17210.64	0.000	624.748	625.089
J1	17219.39	0.000	624.708	625.040
K1	17228.14	0.000	624.668	625.019
L1	17236.89	0.000	624.628	624.988
M1	17245.64	0.000	624.588	624.941
N1	17254.39	0.000	624.548	624.882
O1	17263.14	0.000	624.507	624.859
P1	17271.89	0.000	624.465	624.825
Q1	17280.64	0.000	624.424	624.775
R1	17289.39	0.000	624.382	624.714
S1	17298.14	0.000	624.340	624.682
T1	17306.89	0.000	624.298	624.639
U1	17315.64	0.000	624.255	624.580
V1	17324.39	0.000	624.213	624.511
W1	17333.14	0.000	624.170	624.476
X1	17341.89	0.000	624.126	624.430
Y1	17350.64	0.000	624.082	624.370
Z1	17359.39	0.000	624.038	624.298
A2	17368.14	0.000	623.994	624.256
B2	17376.89	0.000	623.950	624.204
C2	17385.64	0.000	623.905	624.137
D2	17394.39	0.000	623.860	624.057
E2	17403.14	0.000	623.814	624.014
F2	17411.89	0.000	623.769	623.960
G2	17420.64	0.000	623.723	623.891
H2	17429.39	0.000	623.676	623.811
I2	17438.14	0.000	623.630	623.755
J2	17446.89	0.000	623.583	623.688
K2	17455.64	0.000	623.536	623.606
Q TRUSS BRG. PIER No.4	17464.39	0.000	623.489	623.513

NOTE:

OFFSETS ARE GIVEN FROM PGL LOOKING UP STATION FOR STRINGER NOS. 1 THROUGH 8, AND LOOKING DOWN STATION FOR STRINGER NOS. 9 THROUGH 16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS - IV
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S.BOUND)
SN 016-0159 (N.BOUND)
SCALE
DATE NOV 1991
DRAWN BY
CHECKED BY

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	COOK	318	180
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ALINDS	FEDERAL AID PROJECT	

SHT.59 OF 554

STRINGERS No. 6 & 11				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
€ TRUSS BRG. PIER No.3	17044.39	-1.208	625.425	625.448
Q	17053.14	-1.208	625.391	625.460
R	17061.89	-1.208	625.357	625.461
S	17070.64	-1.208	625.322	625.446
T	17079.39	-1.208	625.287	625.417
U	17088.14	-1.208	625.252	625.416
V	17096.89	-1.208	625.216	625.404
W	17105.64	-1.208	625.180	625.376
X	17114.39	-1.208	625.144	625.338
Y	17123.14	-1.208	625.108	625.335
Z	17131.89	-1.208	625.071	625.321
A1	17140.64	-1.208	625.034	625.292
B1	17149.39	-1.208	624.997	625.252
C1	17158.14	-1.208	624.960	625.243
D1	17166.89	-1.208	624.922	625.222
E1	17175.64	-1.208	624.884	625.186
F1	17184.39	-1.208	624.845	625.140
G1	17193.14	-1.208	624.807	625.128
H1	17201.89	-1.208	624.768	625.105
I1	17210.64	-1.208	624.729	625.066
J1	17219.39	-1.208	624.689	625.017
K1	17228.14	-1.208	624.649	624.996
L1	17236.89	-1.208	624.609	624.964
M1	17245.64	-1.208	624.569	624.917
N1	17254.39	-1.208	624.528	624.858
O1	17263.14	-1.208	624.488	624.836
P1	17271.89	-1.208	624.446	624.801
Q1	17280.64	-1.208	624.405	624.752
R1	17289.39	-1.208	624.363	624.691
S1	17298.14	-1.208	624.321	624.659
T1	17306.89	-1.208	624.279	624.616
U1	17315.64	-1.208	624.236	624.557
V1	17324.39	-1.208	624.194	624.488
W1	17333.14	-1.208	624.151	624.453
X1	17341.89	-1.208	624.107	624.407
Y1	17350.64	-1.208	624.063	624.347
Z1	17359.39	-1.208	624.019	624.274
A2	17368.14	-1.208	623.975	624.233
B2	17376.89	-1.208	623.931	624.181
C2	17385.64	-1.208	623.886	624.113
D2	17394.39	-1.208	623.841	624.034
E2	17403.14	-1.208	623.795	623.991
F2	17411.89	-1.208	623.750	623.937
G2	17420.64	-1.208	623.704	623.868
H2	17429.39	-1.208	623.658	623.788
I2	17438.14	-1.208	623.611	623.735
J2	17446.89	-1.208	623.564	623.668
K2	17455.64	-1.208	623.517	623.586
€ TRUSS BRG. PIER No.4	17464.39	-1.208	623.470	623.493

STRINGERS No. 7 & 10				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
€ TRUSS BRG. PIER No.3	17044.39	-8.540	625.310	625.326
Q	17053.14	-8.540	625.276	625.336
R	17061.89	-8.540	625.242	625.335
S	17070.64	-8.540	625.207	625.318
T	17079.39	-8.540	625.172	625.289
U	17088.14	-8.540	625.137	625.288
V	17096.89	-8.540	625.101	625.276
W	17105.64	-8.540	625.065	625.249
X	17114.39	-8.540	625.029	625.210
Y	17123.14	-8.540	624.993	625.208
Z	17131.89	-8.540	624.958	625.194
A1	17140.64	-8.540	624.919	625.164
B1	17149.39	-8.540	624.882	625.125
C1	17158.14	-8.540	624.845	625.115
D1	17166.89	-8.540	624.807	625.094
E1	17175.64	-8.540	624.769	625.059
F1	17184.39	-8.540	624.730	625.012
G1	17193.14	-8.540	624.692	625.000
H1	17201.89	-8.540	624.653	624.977
I1	17210.64	-8.540	624.614	624.939
J1	17219.39	-8.540	624.574	624.889
K1	17228.14	-8.540	624.534	624.869
L1	17236.89	-8.540	624.494	624.837
M1	17245.64	-8.540	624.454	624.790
N1	17254.39	-8.540	624.413	624.731
O1	17263.14	-8.540	624.373	624.708
P1	17271.89	-8.540	624.331	624.674
Q1	17280.64	-8.540	624.290	624.624
R1	17289.39	-8.540	624.248	624.563
S1	17298.14	-8.540	624.206	624.531
T1	17306.89	-8.540	624.164	624.488
U1	17315.64	-8.540	624.121	624.430
V1	17324.39	-8.540	624.079	624.360
W1	17333.14	-8.540	624.036	624.326
X1	17341.89	-8.540	623.992	624.280
Y1	17350.64	-8.540	623.948	624.219
Z1	17359.39	-8.540	623.904	624.147
A2	17368.14	-8.540	623.860	624.105
B2	17376.89	-8.540	623.816	624.053
C2	17385.64	-8.540	623.771	623.986
D2	17394.39	-8.540	623.726	623.907
E2	17403.14	-8.540	623.680	623.864
F2	17411.89	-8.540	623.635	623.810
G2	17420.64	-8.540	623.589	623.740
H2	17429.39	-8.540	623.543	623.660
I2	17438.14	-8.540	623.496	623.607
J2	17446.89	-8.540	623.449	623.542
K2	17455.64	-8.540	623.402	623.462
€ TRUSS BRG. PIER No.4	17464.39	-8.540	623.355	623.371

STRINGERS No. 8 & 9				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
€ TRUSS BRG. PIER No.3	17044.39	-15.875	625.196	625.201
Q	17053.14	-15.875	625.162	625.208
R	17061.89	-15.875	625.128	625.204
S	17070.64	-15.875	625.093	625.185
T	17079.39	-15.875	625.058	625.155
U	17088.14	-15.875	625.023	625.154
V	17096.89	-15.875	624.987	625.142
W	17105.64	-15.875	624.951	625.115
X	17114.39	-15.875	624.915	625.076
Y	17123.14	-15.875	624.879	625.074
Z	17131.89	-15.875	624.842	625.060
A1	17140.64	-15.875	624.805	625.030
B1	17149.39	-15.875	624.768	624.991
C1	17158.14	-15.875	624.731	624.981
D1	17166.89	-15.875	624.693	624.960
E1	17175.64	-15.875	624.655	624.925
F1	17184.39	-15.875	624.616	624.878
G1	17193.14	-15.875	624.578	624.866
H1	17201.89	-15.875	624.539	624.843
I1	17210.64	-15.875	624.500	624.805
J1	17219.39	-15.875	624.460	624.755
K1	17228.14	-15.875	624.421	624.735
L1	17236.89	-15.875	624.380	624.703
M1	17245.64	-15.875	624.340	624.656
N1	17254.39	-15.875	624.300	624.597
O1	17263.14	-15.875	624.259	624.574
P1	17271.89	-15.875	624.217	624.540
Q1	17280.64	-15.875	624.176	624.490
R1	17289.39	-15.875	624.134	624.429
S1	17298.14	-15.875	624.092	624.397
T1	17306.89	-15.875	624.050	624.354
U1	17315.64	-15.875	624.007	624.296
V1	17324.39	-15.875	623.965	624.226
W1	17333.14	-15.875	623.922	624.192
X1	17341.89	-15.875	623.878	624.146
Y1	17350.64	-15.875	623.834	624.085
Z1	17359.39	-15.875	623.790	624.013
A2	17368.14	-15.875	623.746	623.971
B2	17376.89	-15.875	623.702	623.919
C2	17385.64	-15.875	623.657	623.852
D2	17394.39	-15.875	623.612	623.773
E2	17403.14	-15.875	623.566	623.730
F2	17411.89	-15.875	623.521	623.676
G2	17420.64	-15.875	623.475	623.606
H2	17429.39	-15.875	623.428	623.526
I2	17438.14	-15.875	623.382	623.475
J2	17446.89	-15.875	623.335	623.412
K2	17455.64	-15.875	623.288	623.334
€ TRUSS BRG. PIER No.4	17464.39	-15.875	623.241	623.246

NOTE:

OFFSETS ARE GIVEN FROM PCL LOOKING UP STATION FOR STRINGER NOS. 1 THROUGH 8, AND LOOKING DOWN STATION FOR STRINGER NOS. 9 THROUGH 16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS - V
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S.BOUND)
SN 016-0159 (N.BOUND)
SCALE
DATE NOV. 1991
DRAWN BY
CHECKED BY

* 42 (VB-10, 12, HB-14, B-11) &
0707.1 HB(R-3) 90

DATE	REVISED	COUNT	TOTAL	DATE
1-94	8	COOK	318	181
SH	TO SH			
FOR ROAD DIST. NO. 1 - ILLINOIS FEDERAL HIGHWAY PROJECT				

SHT. S10 OF S54

STRINGERS No. 1 & 16				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	35.458	622.801	622.801
L2	17476.64	35.458	622.746	622.764
M2	17486.64	35.458	622.691	622.720
N2	17496.64	35.458	622.636	622.664
O2	17506.64	35.458	622.580	622.598
P2	17516.64	35.458	622.524	622.529
PIER 5	17523.97	35.458	622.483	622.483
Q2	17533.97	35.458	622.426	622.433
R2	17543.97	35.458	622.369	622.387
S2	17553.97	35.458	622.312	622.338
T2	17563.97	35.458	622.254	622.281
U2	17573.97	35.458	622.196	622.212
V2	17583.97	35.458	622.137	622.142
PIER 6	17592.80	35.458	622.085	622.085
W2	17602.80	35.458	622.026	622.035
X2	17612.80	35.458	621.967	621.988
Y2	17622.80	35.458	621.907	621.936
Z2	17632.80	35.458	621.846	621.873
A3	17642.80	35.458	621.786	621.800
BRG. S. ABUT.	17650.13	35.458	621.741	621.741
BR. SOUTH ABUT.	17652.38	35.458	621.727	621.727

STRINGERS No. 4 & 13				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	13.458	623.255	623.255
L2	17476.64	13.458	623.204	623.222
M2	17486.64	13.458	623.149	623.178
N2	17496.64	13.458	623.094	623.122
O2	17506.64	13.458	623.038	623.056
P2	17516.64	13.458	622.982	622.987
PIER 5	17523.97	13.458	622.941	622.941
Q2	17533.97	13.458	622.884	622.891
R2	17543.97	13.458	622.827	622.845
S2	17553.97	13.458	622.770	622.796
T2	17563.97	13.458	622.712	622.739
U2	17573.97	13.458	622.654	622.671
V2	17583.97	13.458	622.595	622.600
PIER 6	17592.80	13.458	622.543	622.543
W2	17602.80	13.458	622.484	622.493
X2	17612.80	13.458	622.425	622.446
Y2	17622.80	13.458	622.365	622.394
Z2	17632.80	13.458	622.304	622.331
A3	17642.80	13.458	622.244	622.258
BRG. S. ABUT.	17650.13	13.458	622.199	622.199
BR. SOUTH ABUT.	17652.38	13.458	622.185	622.185

STRINGERS No. 2 & 15				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	28.125	622.954	622.954
L2	17476.64	28.125	622.899	622.917
M2	17486.64	28.125	622.844	622.873
N2	17496.64	28.125	622.789	622.817
O2	17506.64	28.125	622.732	622.751
P2	17516.64	28.125	622.677	622.682
PIER 5	17523.97	28.125	622.636	622.636
Q2	17533.97	28.125	622.579	622.586
R2	17543.97	28.125	622.522	622.540
S2	17553.97	28.125	622.465	622.491
T2	17563.97	28.125	622.407	622.434
U2	17573.97	28.125	622.349	622.366
V2	17583.97	28.125	622.290	622.295
PIER 6	17592.80	28.125	622.238	622.238
W2	17602.80	28.125	622.179	622.188
X2	17612.80	28.125	622.120	622.141
Y2	17622.80	28.125	622.060	622.089
Z2	17632.80	28.125	621.999	622.026
A3	17642.80	28.125	621.939	621.953
BRG. S. ABUT.	17650.13	28.125	621.894	621.894
BR. SOUTH ABUT.	17652.38	28.125	621.880	621.880

STRINGERS No. 5 & 12				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	6.125	623.381	623.381
L2	17476.64	6.125	623.325	623.344
M2	17486.64	6.125	623.271	623.300
N2	17496.64	6.125	623.216	623.244
O2	17506.64	6.125	623.160	623.178
P2	17516.64	6.125	623.104	623.109
PIER 5	17523.97	6.125	623.063	623.063
Q2	17533.97	6.125	623.006	623.013
R2	17543.97	6.125	622.949	622.967
S2	17553.97	6.125	622.892	622.918
T2	17563.97	6.125	622.834	622.861
U2	17573.97	6.125	622.776	622.793
V2	17583.97	6.125	622.717	622.722
PIER 6	17592.80	6.125	622.665	622.665
W2	17602.80	6.125	622.606	622.615
X2	17612.80	6.125	622.547	622.568
Y2	17622.80	6.125	622.487	622.516
Z2	17632.80	6.125	622.426	622.453
A3	17642.80	6.125	622.366	622.380
BRG. S. ABUT.	17650.13	6.125	622.321	622.321
BR. SOUTH ABUT.	17652.38	6.125	622.307	622.307

STRINGERS No. 7 & 10				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	-8.540	623.343	623.343
L2	17476.64	-8.540	623.286	623.306
M2	17486.64	-8.540	623.229	623.282
N2	17496.64	-8.540	623.172	623.206
O2	17506.64	-8.540	623.112	623.140
P2	17516.64	-8.540	623.056	623.071
PIER 5	17523.97	-8.540	623.025	623.025
Q2	17533.97	-8.540	622.966	622.975
R2	17543.97	-8.540	622.911	622.929
S2	17553.97	-8.540	622.854	622.860
T2	17563.97	-8.540	622.796	622.823
U2	17573.97	-8.540	622.738	622.754
V2	17583.97	-8.540	622.679	622.684
PIER 6	17592.80	-8.540	622.627	622.627
W2	17602.80	-8.540	622.568	622.577
X2	17612.80	-8.540	622.509	622.530
Y2	17622.80	-8.540	622.449	622.478
Z2	17632.80	-8.540	622.388	622.415
A3	17642.80	-8.540	622.328	622.352
BRG. S. ABUT.	17650.13	-8.540	622.283	622.283
BR. SOUTH ABUT.	17652.38	-8.540	622.269	622.269

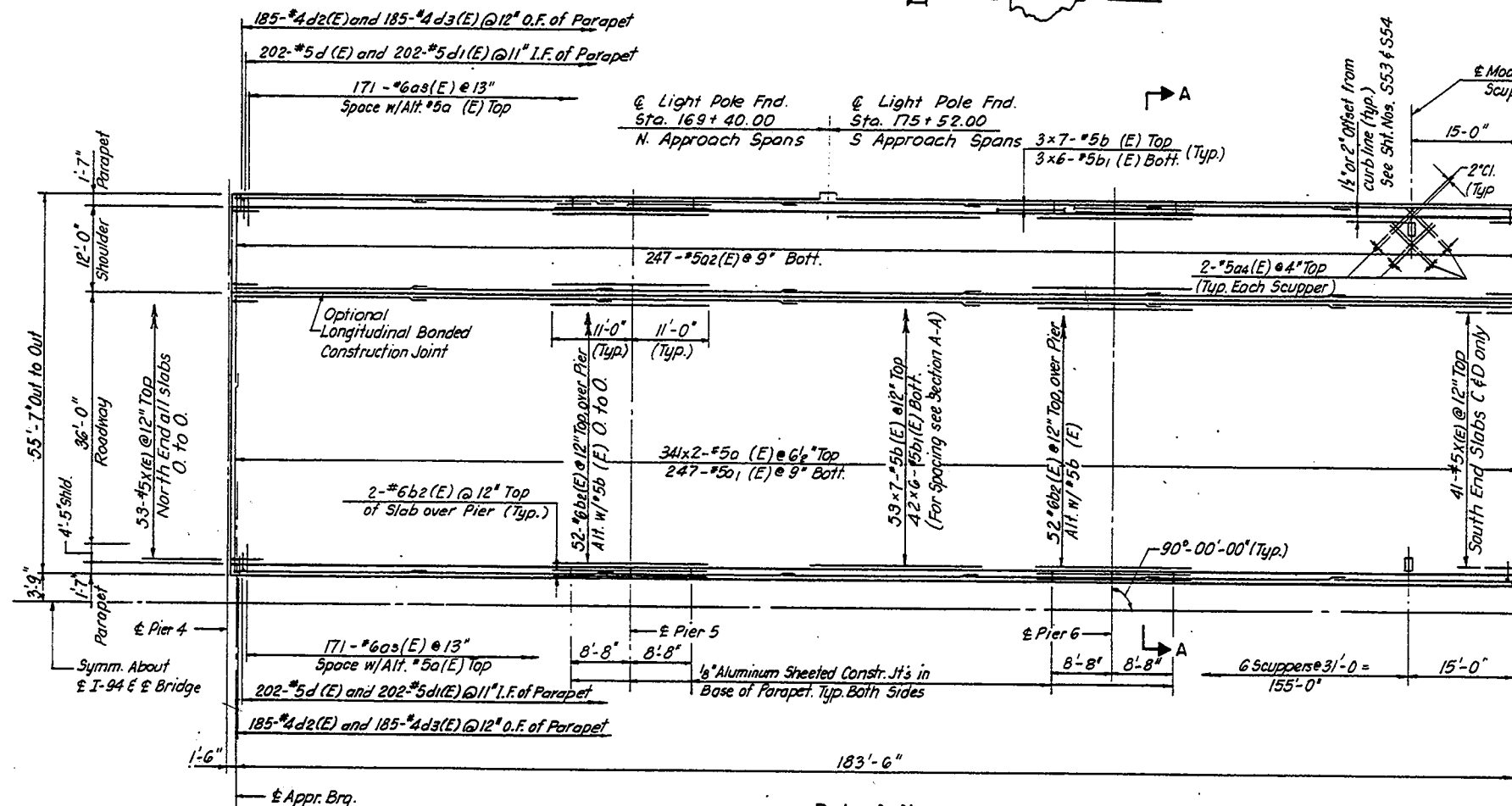
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LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	24.000	623.039	623.039
L2	17476.64	24.000	622.98	623.004
M2	17486.64	24.000	622.93	622.980
N2	17496.64	24.000	622.87	622.904
O2	17506.64	24.000	622.81	622.839
P2	17516.64	24.000	622.76	622.768
PIER 5	17523.97	24.000	622.721	622.721
Q2	17533.97	24.000	622.665	622.671
R2	17543.97	24.000	622.608	622.627
S2	17553.97	24.000	622.550	622.578
T2	17563.97	24.000	622.492	622.519
U2	17573.97	24.000	622.434	622.452
V2	17583.97	24.000	622.376	622.391
PIER 6	17592.80	24.000	622.324	622.324
W2	17602.80	24.000	622.265	622.273
X2	17612.80	24.000	622.205	622.228
Y2	17622.80	24.000	622.145	622.176
Z2	17632.80	24.000	622.085	622.113
A3	17642.80	24.000	622.024	622.039
BRG. S. ABUT.	17650.13	24.000	621.980	621.980
BR. SOUTH ABUT.	17652.38	24.000	621.966	621.966

P. G. L.				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	0.000	623.477	623.477
L2	17476.64	0.000	623.422	623.440
M2	17486.64	0.000	623.367	623.396
N2	17496.64	0.000	623.312	623.340
O2	17506.64	0.000	623.256	623.274
P2	17516.64	0.000	623.200	623.205
PIER 5	17523.97	0.000	623.155	623.155
Q2	17533.97	0.000	623.102	623.108
R2	17543.97	0.000	623.045	623.063
S2	17553.97	0.000	622.988	623.014
T2	17563.97	0.000	622.930	622.957
U2	17573.97	0.000	622.872	622.889
V2	17583.97	0.000	622.813	622.818
PIER 6	17592.80	0.000	622.761	622.761
W2	17602.80	0.000	622.702	622.711
X2	17612.80	0.000	622.643	622.664
Y2	17622.80	0.000	622.583	622.612
Z2	17632.80	0.000	622.522	622.549
A3	17642.80	0.000	622.462	622.478
BRG. S. ABUT.	17650.13	0.000	622.417	622.417
BR. SOUTH ABUT.	17652.38	0.000	622.403	622.403

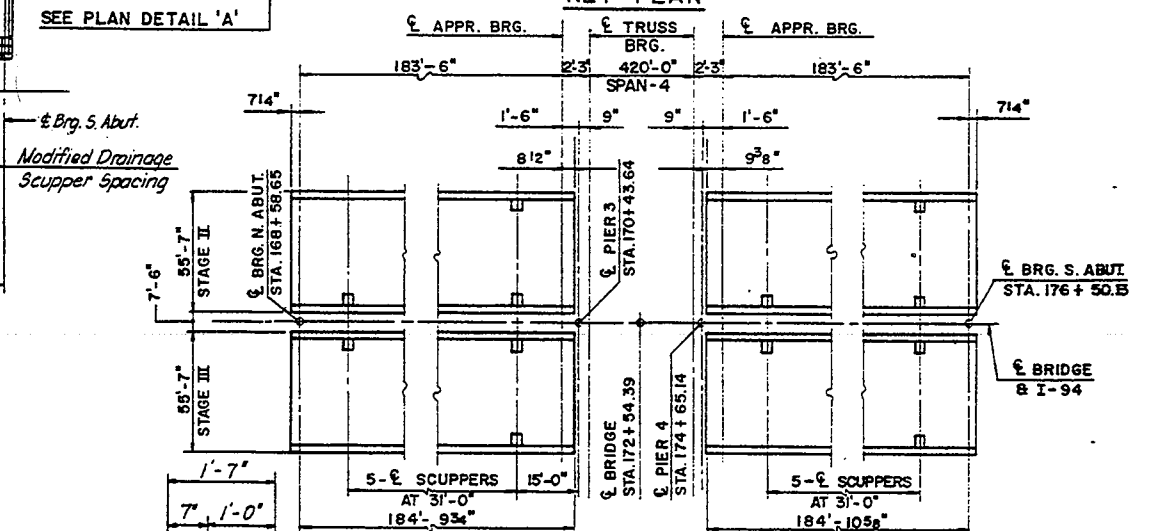
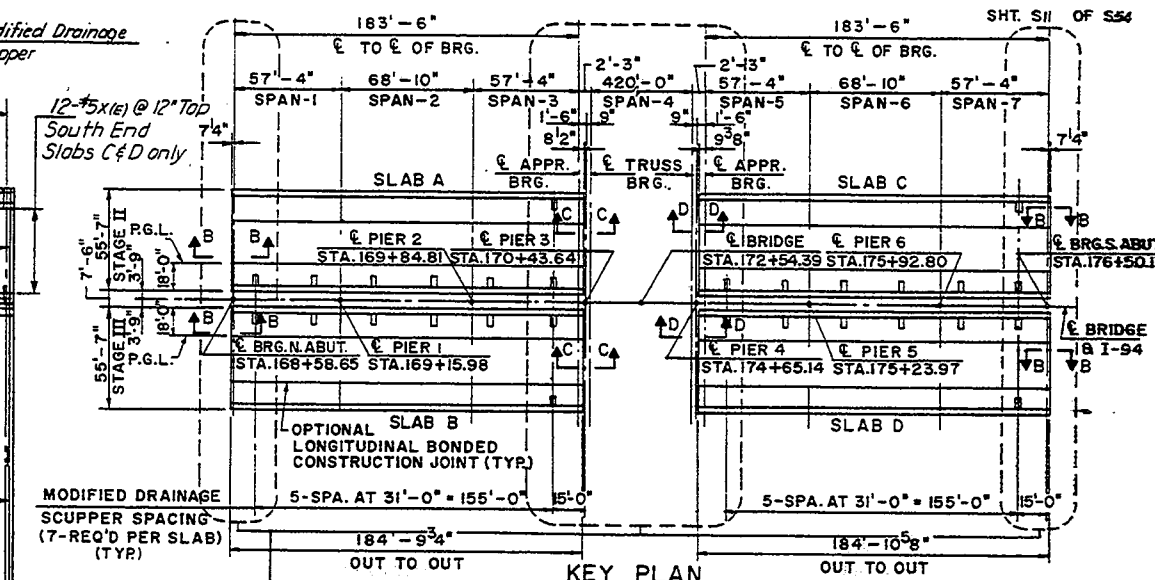
STRINGERS No. 8 & 9				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
APP. BRG. PIER 4	17466.64	-15.875	623.229	623.229
L2	17476.64	-15.875	623.174	623.192
M2	17486.64	-15.875	623.119	623.148
N2	17496.64	-15.875	623.064	623.092
O2	17506.64	-15.875	623.008	623.026
P2	17516.64	-15.875	622.952	622.957
PIER 5	17523.97	-15.875	622.911	622.911
Q2	17533.97	-15.875	622.854	622.861
R2	17543.97	-15.875	622.797	622.815
S2	17553.97	-15.875	622.740	622.756
T2	17563.97	-15.875	622.682	622.709
U2	17573.97	-15.875	622.624	622.641
V2	17583.97	-15.875	622.565	622.570
PIER 6	17592.80	-15.875	622.510	622.510
W2	17602.80	-15.875	622.454	622.463
X2	17612.80	-15.875	622.395	622.416
Y2	17622.80	-15.875	622.335	622.364
Z2	17632.80	-15.875	622.274	622.301
A3	17642.80	-15.875	622.214	622.228
BRG. S. ABUT.	17650.13	-15.875	622.165	622.165
BR. SOUTH ABUT.	17652.38	-15.875	622.155	622.155

STRINGERS No. 3 & 14				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
€ APP. BRG. PIER 4	17466.64	20.792	623.106	623.106
L2	17476.64	20.792	623.051	623.069
M2	17486.64	20.792	622.996	623.025
N2	17496.64	20.792	622.941	622.969
O2	17506.64	20.792	622.885	622.903
P2	17516.64	20.792	622.829	622.834
€ PIER 5	17523.97	20.792	622.788	622.788
Q2	17533.97	20.792	622.731	622.738
R2	17543.97	20.792	622.674	622.682
S2	17553.97	20.792	622.617	622.643
T2	17563.97	20.792	622.559	622.586
U2	17573.97	20.792	622.501	622.518
V2	17583.97	20.792	622.442	622.447
€ PIER 6	17592.80	20.792	622.350	622.390
W2	17602.80	20.792	622.231	622.340
X2	17612.80	20.792	622.372	622.293
Y2	17622.80	20.792	622.212	622.241
Z2	17632.80	20.792	622.151	622.178
A3	17642.80	20.792	622.091	622.105
€ BRG. S. ABUT.	17650.13	20.792	622.046	622.046
BK. SOUTH ABUT.	17652.38	20.792	622.032	622.032

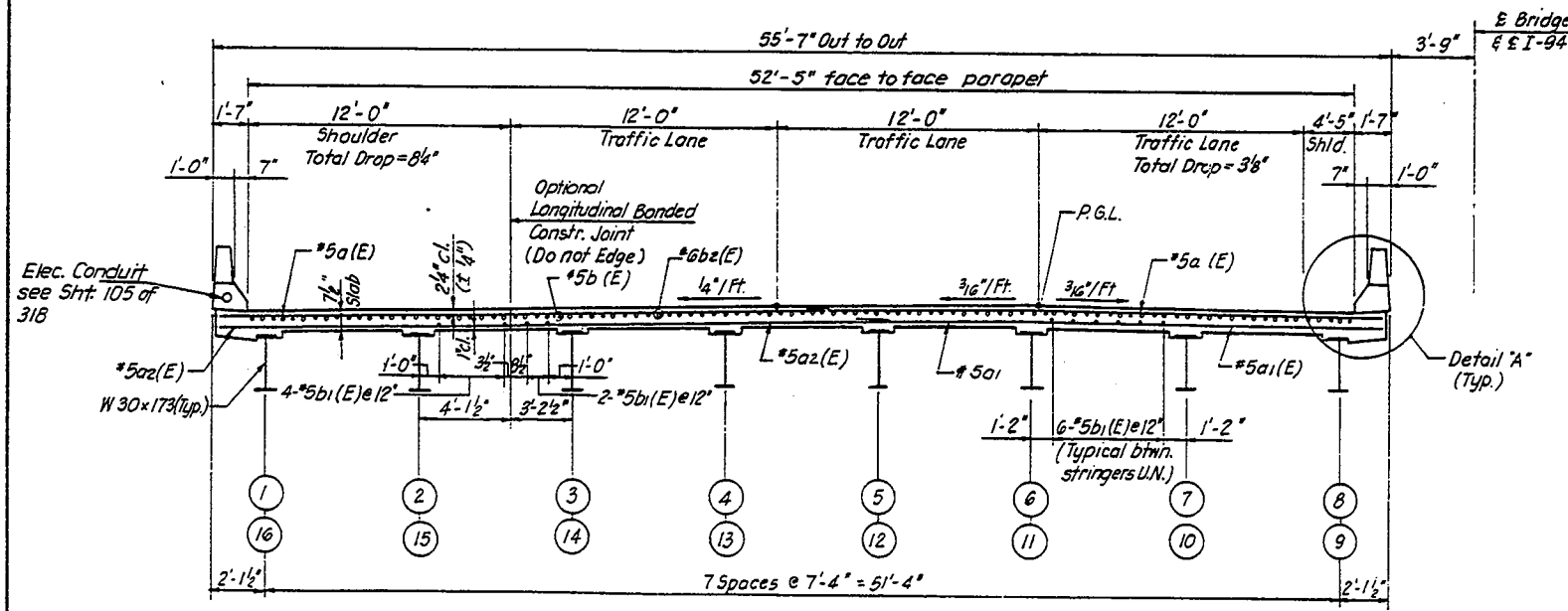
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	COOK	318	182
DATE	NOV. 1991		



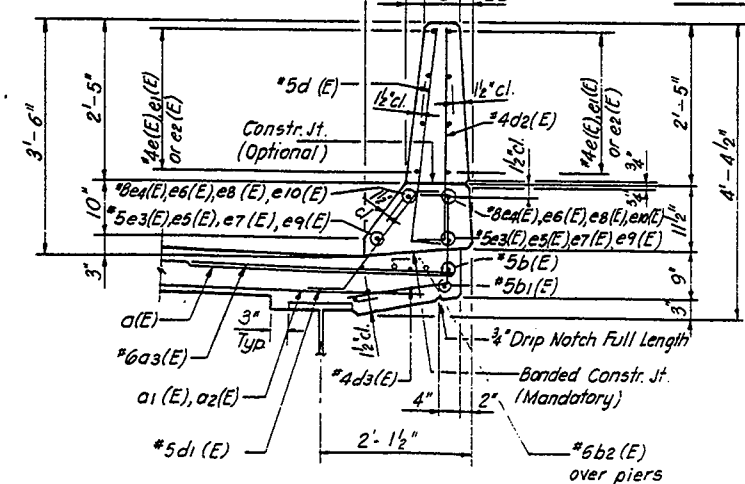
PLAN
(Slab C Shown, Slab A, B & D Similar U.N.)
See Key Plan



PLAN DETAIL 'A'



SECTION A-A
S.B. Looking North
N.B. Looking South

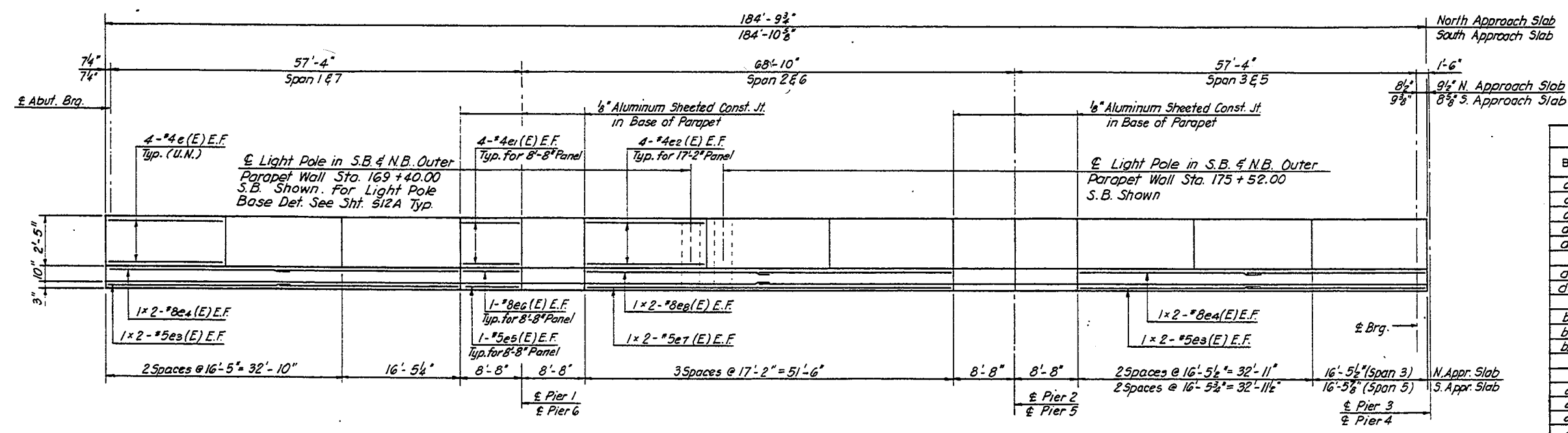


DETAIL A

Notes:
Reinforcement Bars designated (E) shall be Epoxy Coated.
Bars indicated thus 20x3-#5 etc. indicates 20 lines of Bars with 3 lengths per line.
For Sections B-B, C-C & D-D See Sht. No. S-12
For modified Drainage Scupper Det. see Sht. No. S-53 and S-54.
For Parapet Details and Bill of Materials see Sht. No. S-12.
Minimum Lap for #5 Bars = 2'-2"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DECK DETAILS I
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172+54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY S.P.
CHECKED BY J.M.

SECTION	COUNT	TOTAL	SHEET
I-94	COOK	318	183
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ALWAYS	FEDERAL GOVERNMENT	

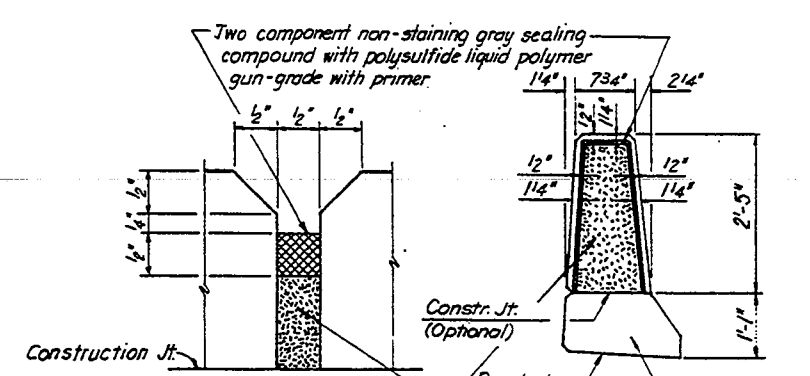


INSIDE FACE OF PARAPET WALL ELEVATION

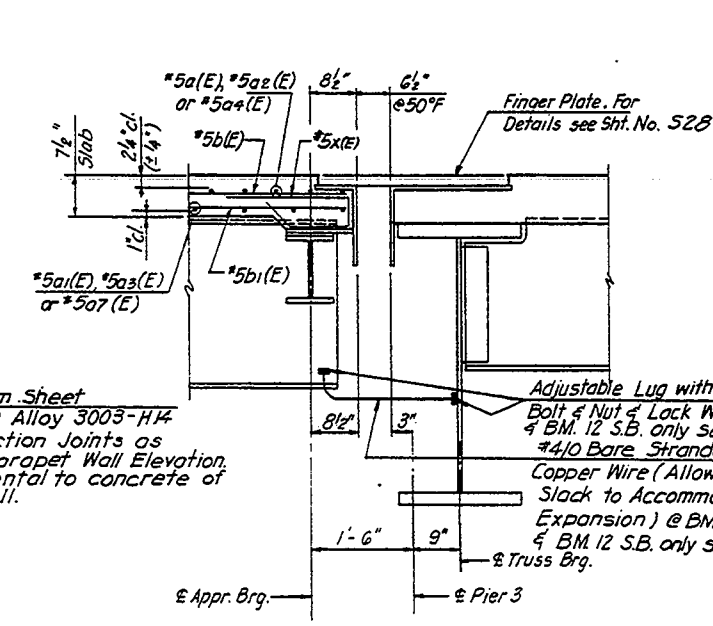
BILL OF MATERIAL						
BAR	TOTAL NO.	CONSTR. STAGES	SIZE	LENGTH	SHAPE	
a(E)	2728	1364	#5	28'-6"	—	
a1(E)	988	494	#5	32'-3"	—	
a2(E)	988	494	#5	24'-9"	—	
a3(E)	1368	684	#6	4'-0"	—	
a4(E)	224	112	#5	4'-0"	—	
d4(E)	24	12	#6	8'-11"	—	
d5(E)	12	6	#6	5'-11"	—	
b(E)	1652	826	#5	28'-3"	—	
b1(E)	1152	576	#5	32'-8"	—	
b2(E)	448	224	#6	22'-0"	—	
d(E)	1616	808	#5	3'-8"	—	
d1(E)	1616	808	#5	2'-7"	—	
d2(E)	1480	740	#4	3'-8"	—	
d3(E)	1480	740	#4	3'-5"	—	
x(E)	318	159	#5	5'-9"	—	
e(E)	384	192	#4	16'-1"	—	
e1(E)	256	128	#4	8'-3"	—	
e2(E)	192	96	#4	16'-11"	—	
e3(E)	64	32	#4	25'-7"	—	
e4(E)	64	32	#8	26'-9"	—	
e5(E)	64	32	#5	8'-4"	—	
e6(E)	64	32	#8	8'-4"	—	
e7(E)	32	16	#5	26'-10"	—	
e8(E)	32	16	#8	27'-9"	—	
ITEM	UNIT	TOTAL	CONSTR. STAGE			
Reinf. Bars (Epoxy Coated)	Lbs.	290,200	145,100	145,100		
Class X Concrete Superstructure	C.Y.	1,203.4	602.7	602.7		
Drainage Scupper Special	Each	28	14	14		
** Protective Coat	S.Y.	5046	2523	2523		

* Quantities are for both North & South Approach Spans.
** Includes Deck Slab Area and End Posts.

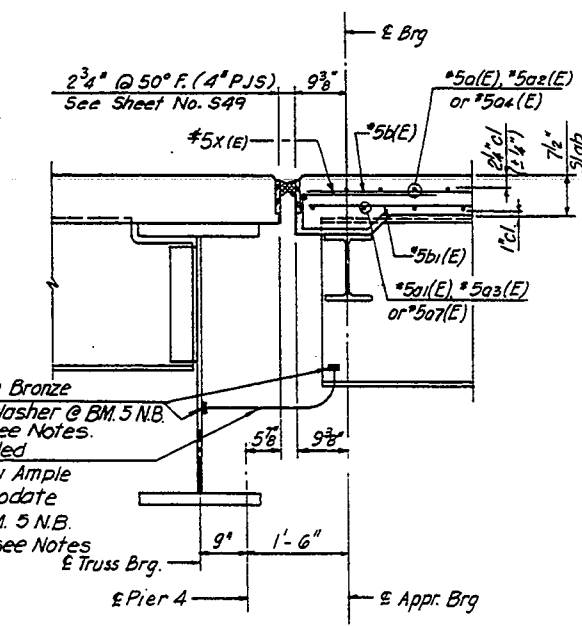
NOTES:
Reinforcement bars designated (E) shall be Epoxy Coated.
Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.
Min. Splice Lengths #5 Bar: 2'-2", #8 Bar 4'-3"
For Light Pole & Parapet Base Details, see Sht. S12A.
Bonding of Beam 5 N.B. and Beam 12 S.B. to end floor Beams @ Pier 3 & 4. See Spec. Provision for Truss Bridge Grounding System.



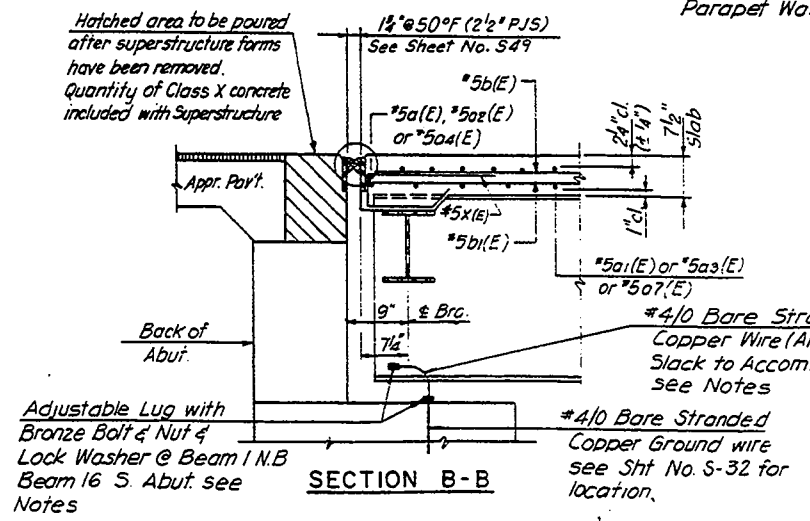
PARAPET JOINTS DETAIL



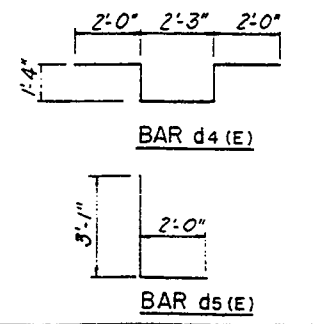
SECTION C-C

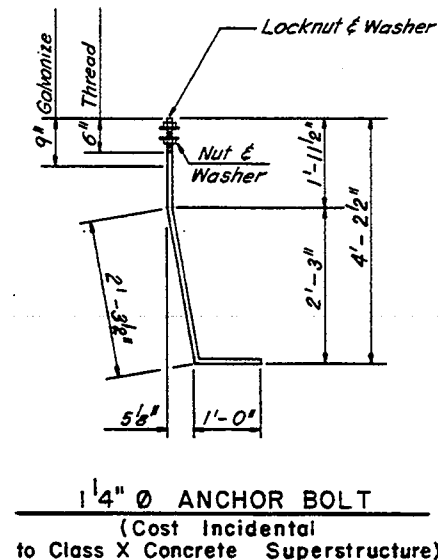
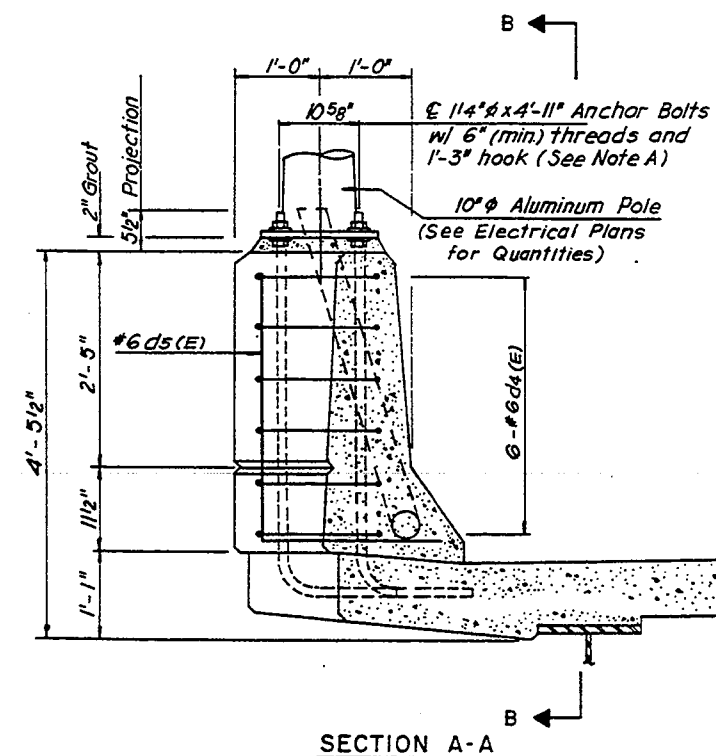
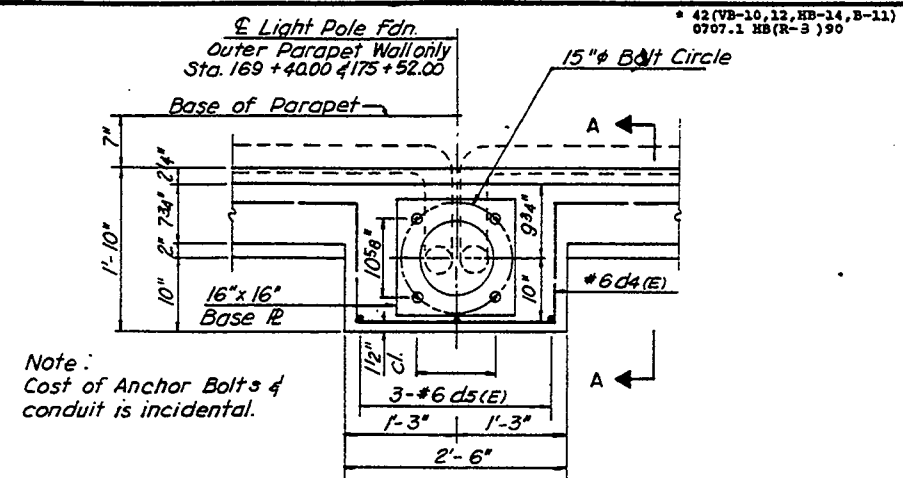
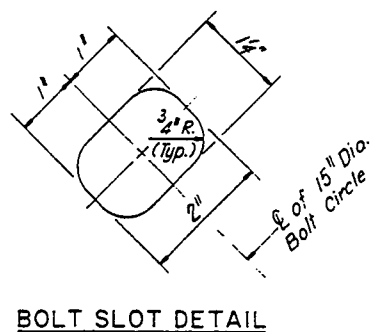
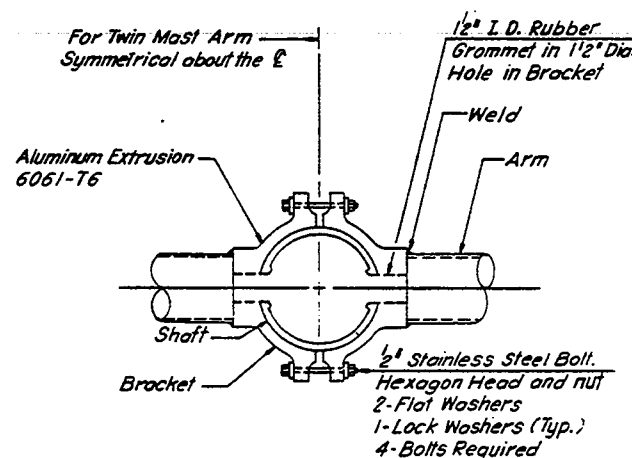
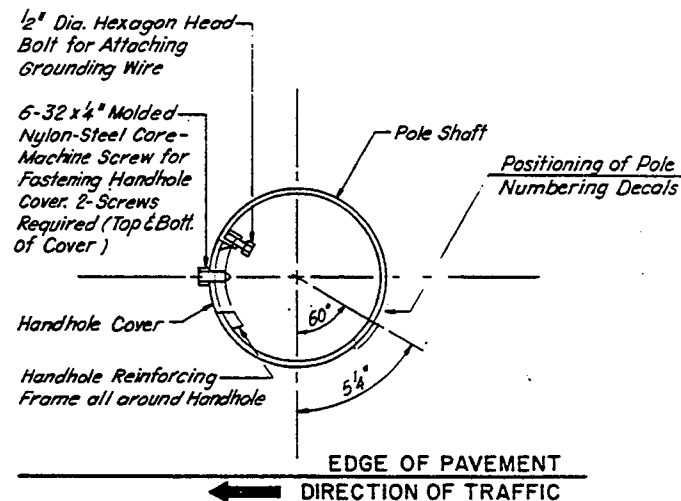
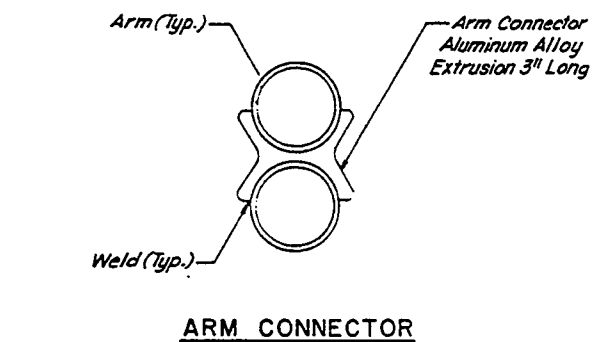
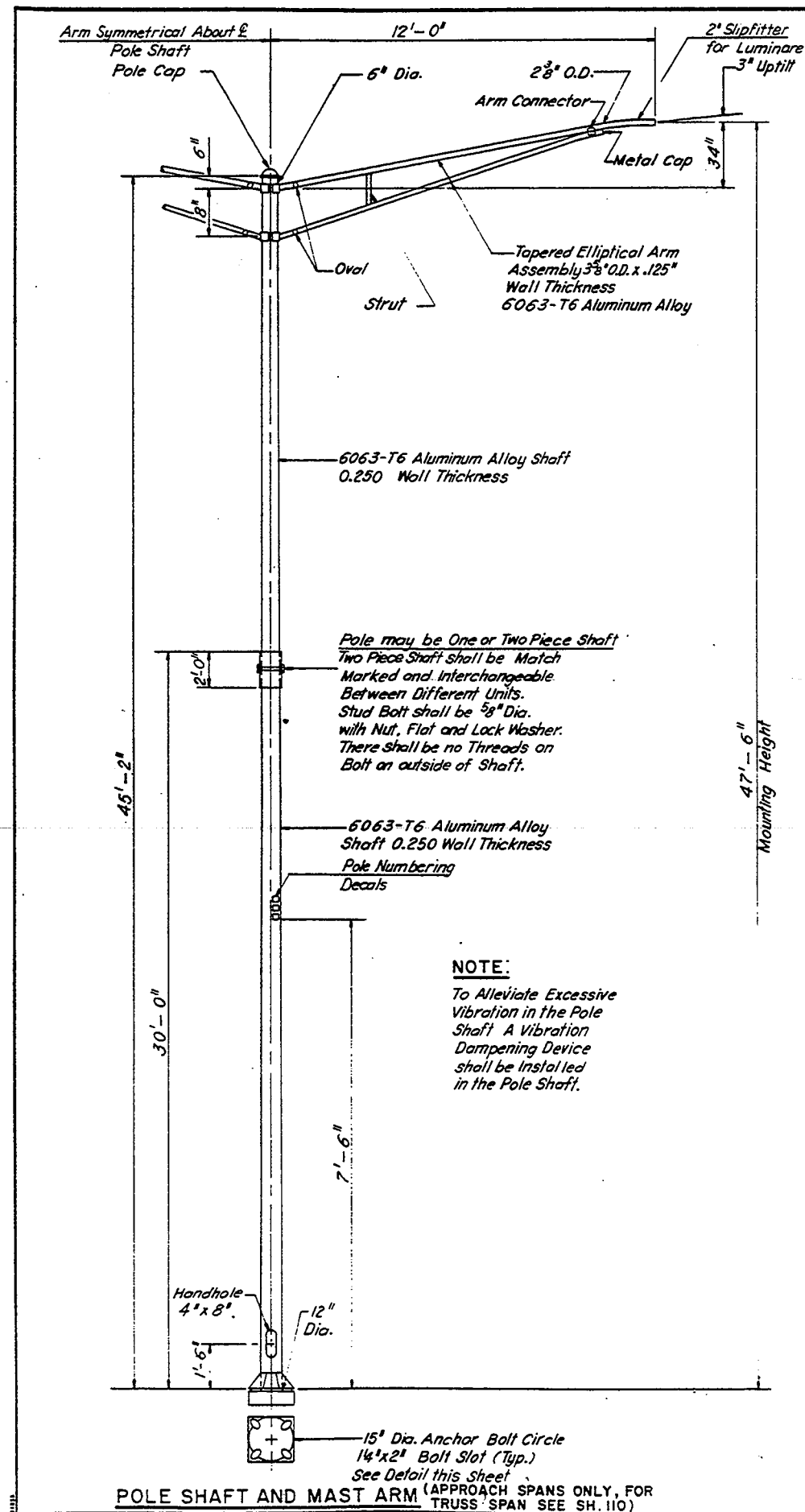


SECTION D-D

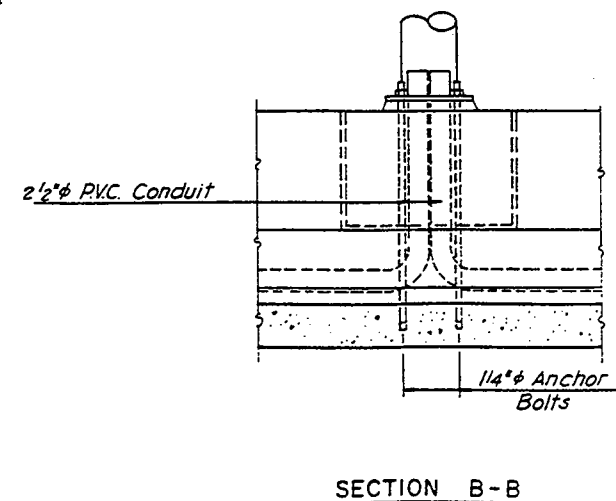


SECTION B-B





Note A: Provide 2 flat washers, 1 regular nut and 1 locknut for each bolt. All nuts and washers must be galvanized.



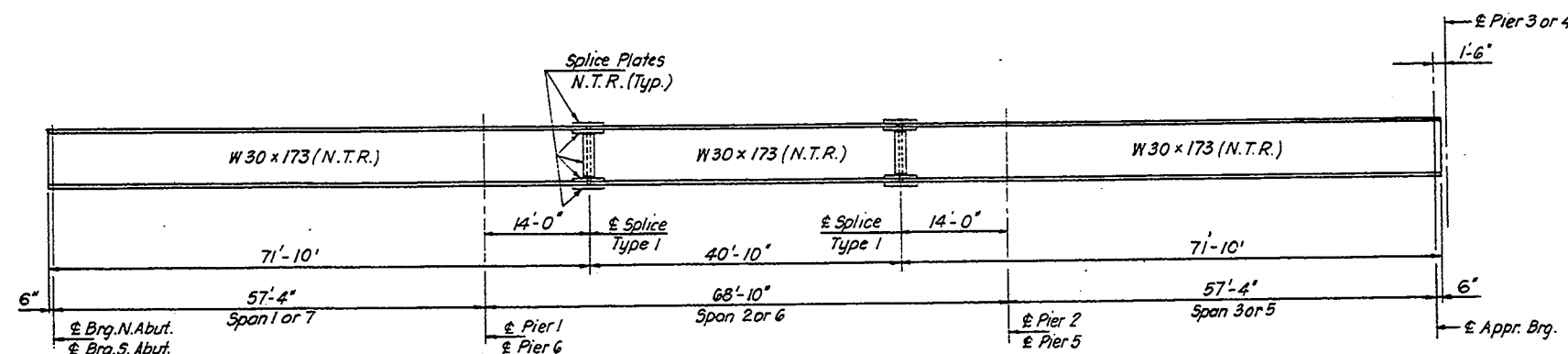
See Sh. 105 of 318 for Locations of Electrical Conduits in Parapets and Conduit Details. Cost of Conduit and Expansion/Deflection Couplings is Incidental to Cost of Class X Concrete Superstructure

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
LIGHT POLE & PARAPET BASE DETAILS
F.A.I-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY I.M.G.
CHECKED BY L.M.

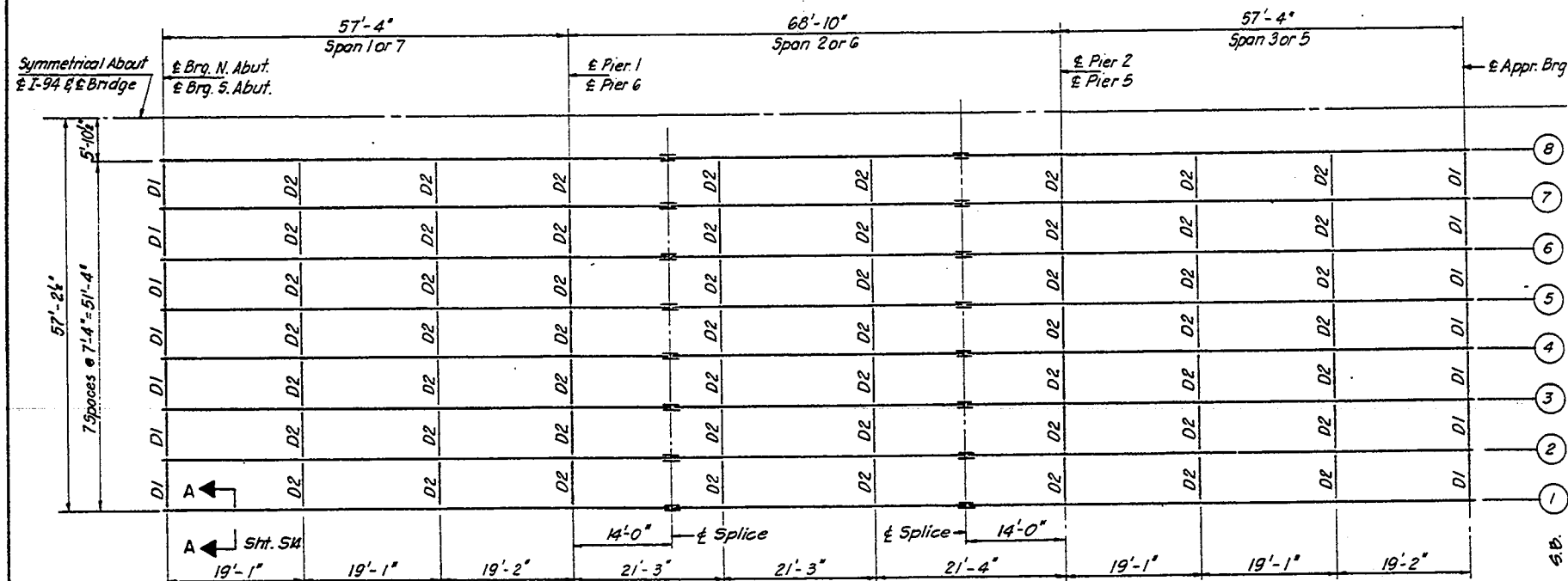
SECTION	EDITION	TOTAL SHEETS	SHEET NO.
I-94	0	COOK	318 185
STA.	TO STA.	ILLINOIS	FEDERAL AID PROJECT
FED ROAD DIST NO. 1	ILLINOIS	FEDERAL AID PROJECT	

SHT. 313 OF 354

Paint System - Gr. - 09/93
Shop applied Zinc Silicate
Applied Vinyl paint system



BEAM ELEVATION



FRAMING PLAN

S.B. Shown

* For Fabrication Only.

TOP OF BEAM ELEVATIONS *																
LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Br. N. Abut.	624.759	624.912	625.064	625.271	625.339	625.416	625.301	625.187	625.187	625.301	625.416	625.339	625.217	625.064	624.912	624.759
Pier 1	624.526	624.679	624.831	624.984	625.106	625.183	625.068	624.954	624.954	625.068	625.183	625.106	624.984	624.831	624.679	624.526
Splice 1	624.469	624.622	624.774	624.927	625.049	625.126	625.011	624.897	624.897	625.011	625.126	625.049	624.927	624.774	624.622	624.469
Splice 2	624.325	624.478	624.630	624.783	624.905	624.982	624.867	624.753	624.753	624.867	624.982	624.905	624.783	624.630	624.478	624.325
Pier 2	624.283	624.436	624.588	624.741	624.863	624.940	624.825	624.711	624.711	624.825	624.940	624.863	624.741	624.588	624.436	624.283
N. Approach Brg.	624.110	624.263	624.415	624.568	624.690	624.767	624.652	624.538	624.538	624.652	624.767	624.690	624.568	624.415	624.263	624.110
S. Approach Brg.	622.134	622.287	622.439	622.592	622.714	622.791	622.676	622.562	622.562	622.676	622.791	622.714	622.592	622.439	622.287	622.134
Pier 5	621.773	621.926	622.078	622.231	622.353	622.430	622.315	622.201	622.201	622.315	622.430	622.353	622.231	622.078	621.926	621.773
Splice 3	621.685	621.838	621.990	622.143	622.265	622.342	622.227	622.113	622.113	622.227	622.342	622.265	622.143	621.990	621.838	621.685
Splice 4	621.449	621.602	621.754	621.907	622.029	622.106	621.991	621.877	621.877	621.991	622.106	622.029	621.907	621.754	621.602	621.449
Pier 6	621.375	621.528	621.680	621.833	621.955	622.032	621.917	621.803	621.803	621.917	622.032	621.955	621.833	621.680	621.528	621.375
Br. S. Abut.	621.074	621.227	621.379	621.532	621.654	621.731	621.616	621.502	621.502	621.616	621.731	621.654	621.532	621.379	621.227	621.074

INTERIOR BEAM REACTION TABLE		
	ABUTMENT, PIER 3 & 4	PIER 1, 2, 5 & 6
R _φ (K)	28.2	91.0
R _h (K)	43.6	54.0
IMP (K)	11.8	14.6
R _{TOT} (K)	83.6	159.6

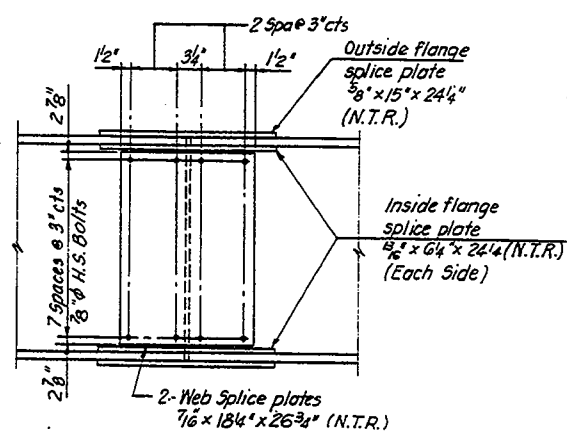
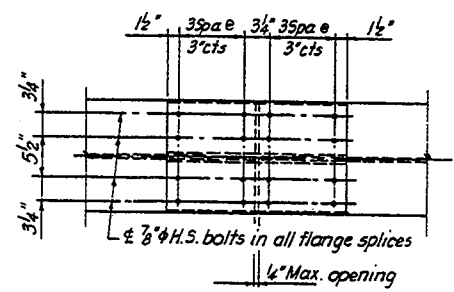
INTERIOR BEAM MOMENT TABLE			
	0.4 SPAN 1, 3, 5 & 7	PIER 1, 2, 5 & 6	0.5 SPAN 2 & 6
I _s (in ⁴)	8,200	8,200	8,200
S _s (in ³)	539	539	539
E (K/1)	1.25	1.25	1.25
M _φ (K)	304.4	499.5	249.1
M _h (K)	407.3	329.2	397.5
M _{IMP} (K)	110	88.9	103.3
M _{TOT} (K)	821.7	917.6	749.9
I _s (K.s.i.)	18.29	20.42	16.69

Notes:

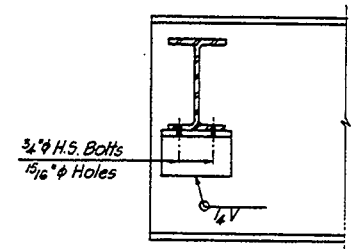
I_s and S_s are the moment of inertia and Section Modulus of the steel section used in computing f_s Total.
V_r is the maximum L + Impact Shear range in Span.
For Splice Type 1 and Diaphragm Details See Sht. No. 314.
For Bearing Details See Sht. No. 315 & 316.
N.T.R. Indicates the Notch Toughness Requirements for Zone-2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
STEEL DETAILS I
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY S.P.
CHECKED BY J.M.

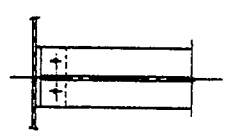
SECTION	COUNT	TOTAL SHEETS	SHEET NO.
I-94	COOK	318	186
SHT. 514 OF 554			



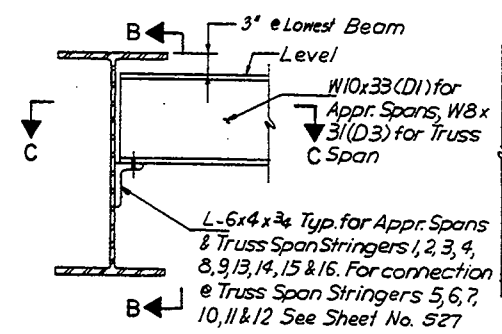
SPLICE TYPE I



SECTION B-B

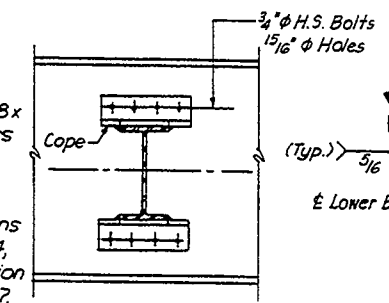


SECTION C-C

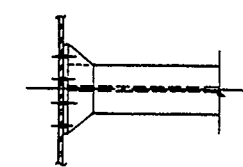


SECTION A-A

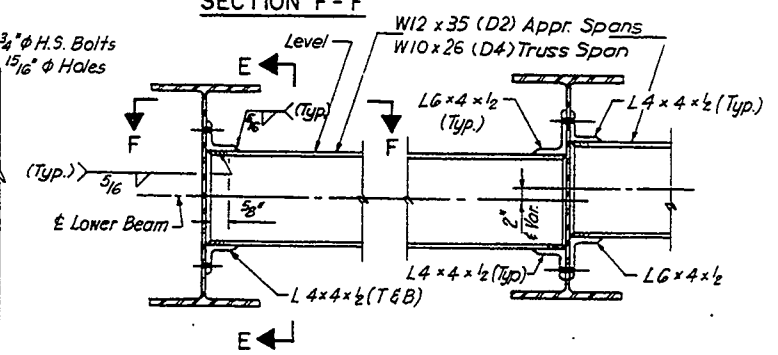
Note:
Two Hardened washers shall be
required over all 15/16\"/>



SECTION E-E



SECTION F-F



SECTION D-D

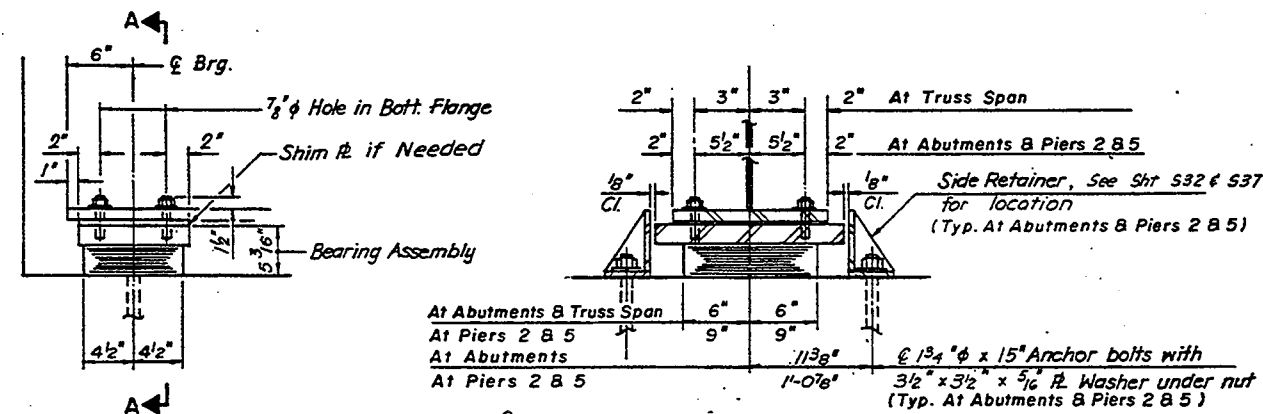
END DIAPHRAGM
D1 (W10 x 33) APPROACH SPANS
D3 (W8 x 31) TRUSS SPAN
NO. REQUIRED D1 = 56, D3 = 42
↑
Total for NB & SB structures!
(÷ 2)

INTERIOR DIAPHRAGM
D2 (W12 x 35) APPROACH SPANS
D4 (W10 x 26) TRUSS SPAN
NO. REQUIRED D2 = 224, D4 = 168

NOTES:
N.T.R. Indicates Supplemental Requirements
for Notch Toughness Zone 2.
Work this Drawing with Sheet Nos. 513 & 519

PROJECT	SHEET	DATE	BY	CHECKED
FAI-94	157	3/8	COOK	
STA.	TO STA.	NO.	NAME	PROJECT

SHT. 157 OF 154



ELEVATION AT ABUT. 32 REQUIRED

SECTION A-A

ELEVATION AT PIER 2 & 5 32 REQUIRED

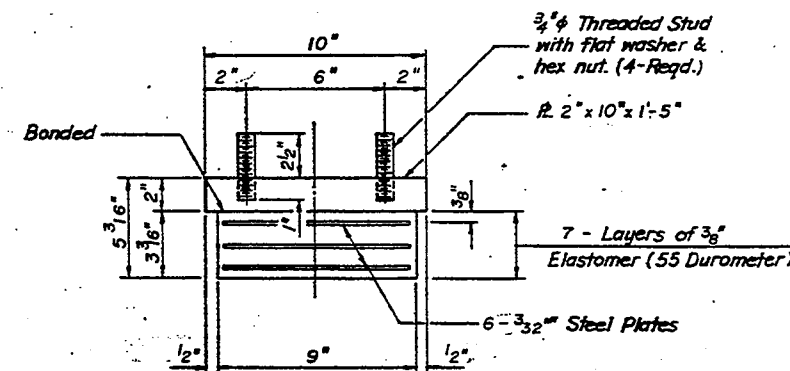
TRUSS SPAN - STRINGER BEARING 48 REQUIRED

both Trusses OK.
16 - 1 Truss

16 - 1 Truss OK

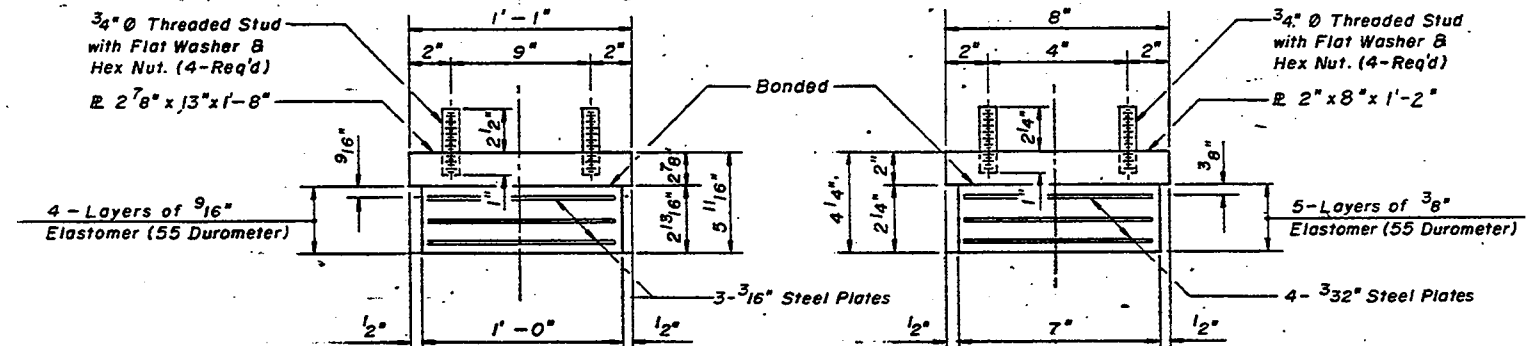
24 - 1 Truss

I count 32/truss = 64 total!?



BEARING ASSEMBLY AT ABUTMENTS

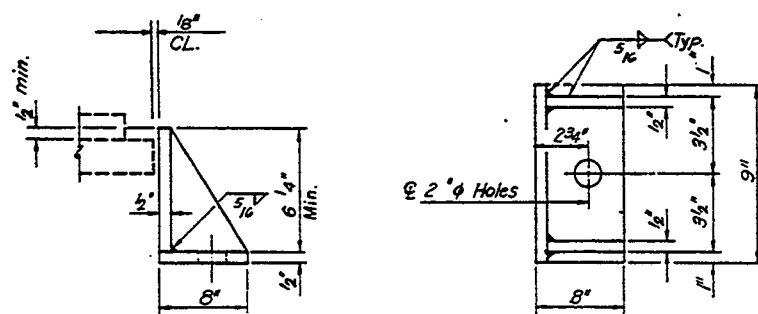
Note: Shim plates shall not be placed under Bearing Assembly.



BEARING ASSEMBLY AT PIER 2 & 5

BEARING ASSEMBLY AT TRUSS SPAN

Piers 3 3/4? 16/ Truss 32 total



SIDE RETAINER AT ABUTMENTS & PIERS 2 & 5
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

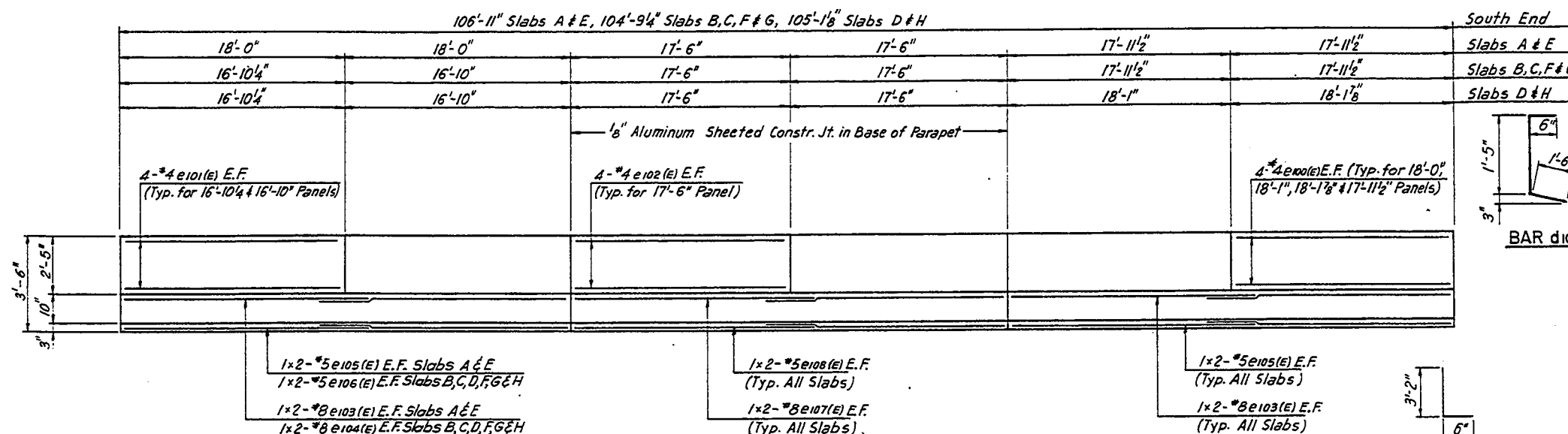
NOTE All Bearings on this Sheet are Elastomeric, Type I.

BILL OF MATERIAL

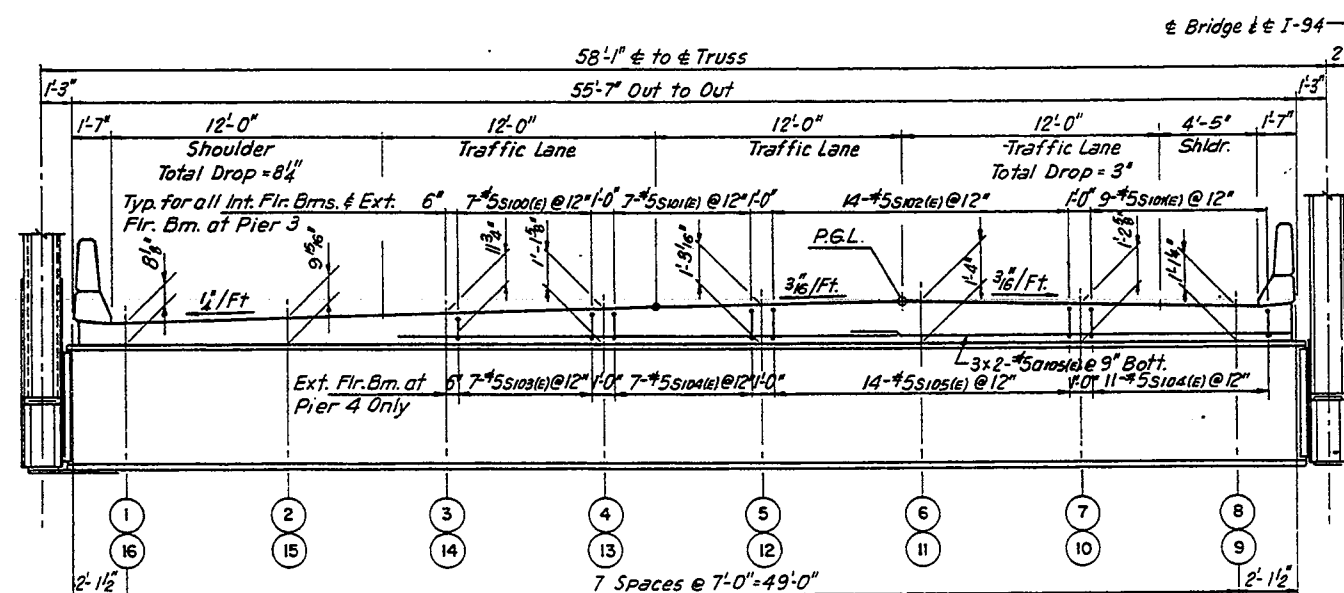
ITEM	UNIT	TOTAL
Elastomeric Bearing Assembly Type I	Each	112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
STEEL DETAILS III
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172+54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY S.P.
CHECKED BY J.M.

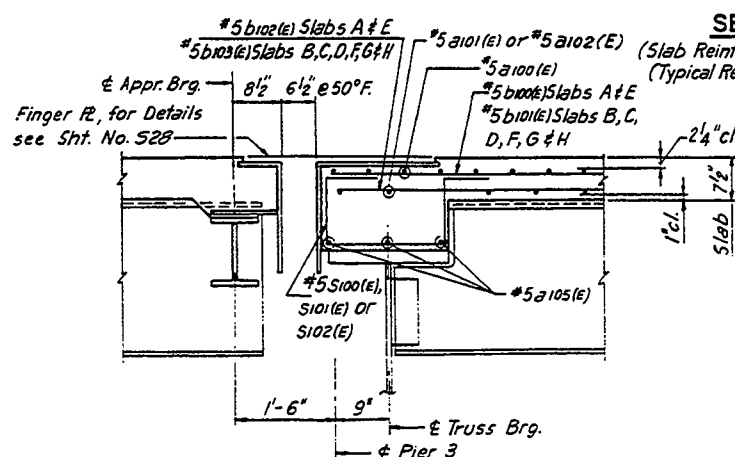
SECTION	COUNT	TOTAL	UNIT
1-94	COOK	318	190



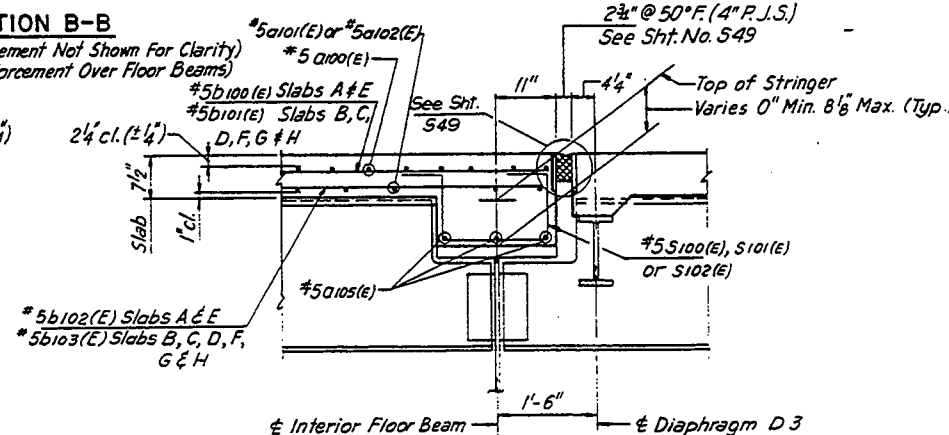
INSIDE FACE OF PARAPET WALL ELEVATION



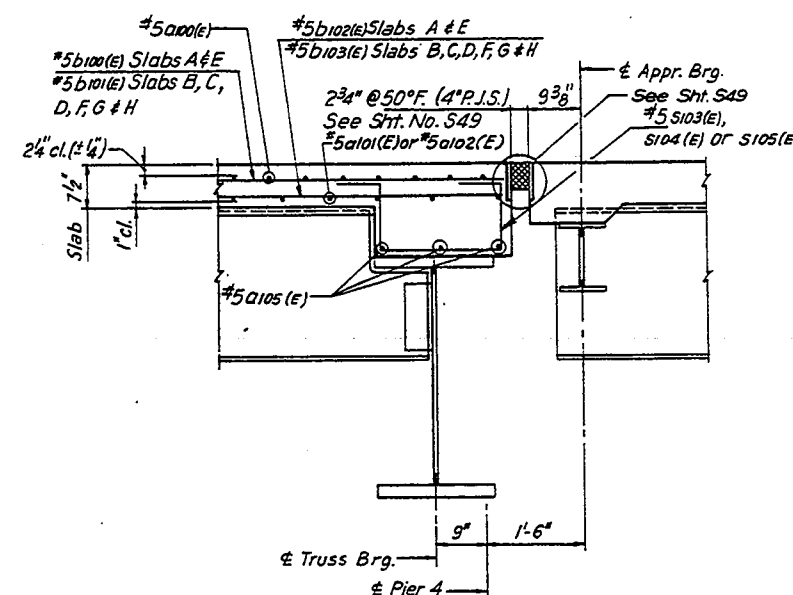
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

BILL OF MATERIAL

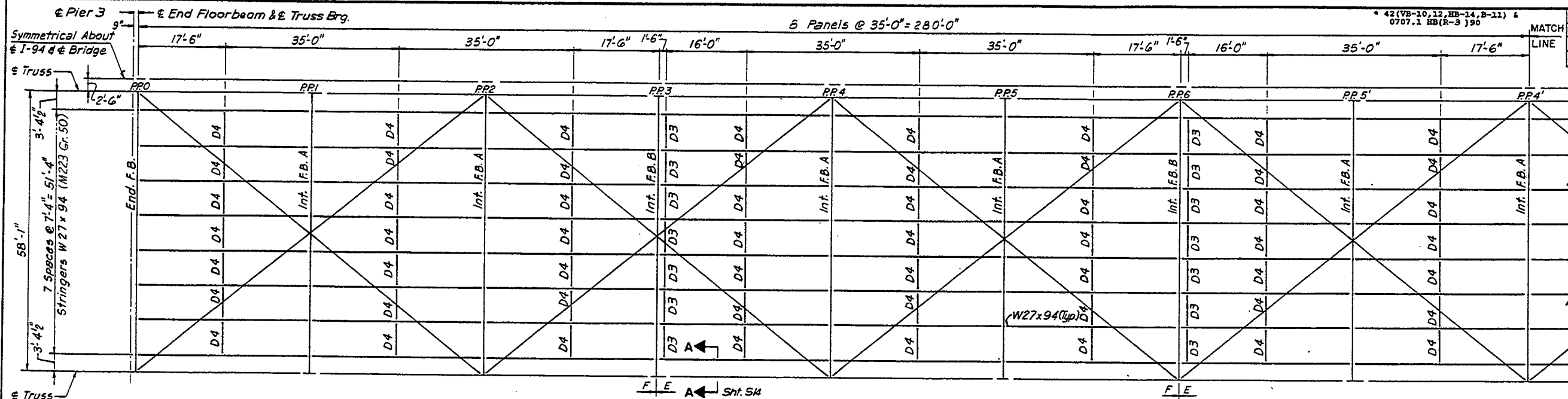
BAR	TOTAL NO.	CONSTR. STAGE	SIZE	LENGTH	SHAPE
A100(E)	3116	1558	1558	#5	28'-7"
A101(E)	1126	563	563	#5	31'-1"
A102(E)	1126	563	563	#5	26'-1"
A103(E)	1560	780	780	#6	4'-0"
A104(E)	224	112	112	#5	4'-0"
A105(E)	156	78	78	#5	20'-6"
B100(E)	472	236	236	#5	28'-4"
B101(E)	1416	708	708	#5	27'-11"
B102(E)	600	300	300	#5	23'-11"
B103(E)	1800	900	900	#5	22'-9"
B104(E)	896	448	448	#6	14'-0"
D100(E)	1848	924	924	#5	3'-8"
D101(E)	1848	924	924	#5	2'-7"
D102(E)	1688	844	844	#4	3'-8"
D103(E)	1688	844	844	#4	3'-5"
E100(E)	320	160	160	#4	17'-8"
E101(E)	192	96	96	#4	16'-6"
E102(E)	256	128	128	#4	17'-2"
E103(E)	80	40	40	#8	20'-0"
E104(E)	48	24	24	#8	18'-10"
E105(E)	80	40	40	#5	19'-0"
E106(E)	48	24	24	#5	17'-9"
E107(E)	64	32	32	#8	19'-6"
E108(E)	64	32	32	#5	18'-5"
S100(E)	168	84	84	#5	3'-10"
S101(E)	432	216	216	#5	4'-2"
S102(E)	336	168	168	#5	4'-4"
S103(E)	14	7	7	#5	4'-2"
S104(E)	36	18	18	#5	4'-6"
S105(E)	28	14	14	#5	4'-8"
ITEM	UNIT	TOTAL	CONSTR. STAGES	II	III
Reinf. Bars (Epoxy Coated)	Lbs	351,880	175,940	175,940	
Class X Concrete Superstruc.	C.Y.	1,369.2	684.6	684.6	
Drainage Scupper Special	Each	28	14	14	
* Protective Coat	S.Y.	5,708	2,854	2,854	

* Includes Deck Slab Area

NOTES:

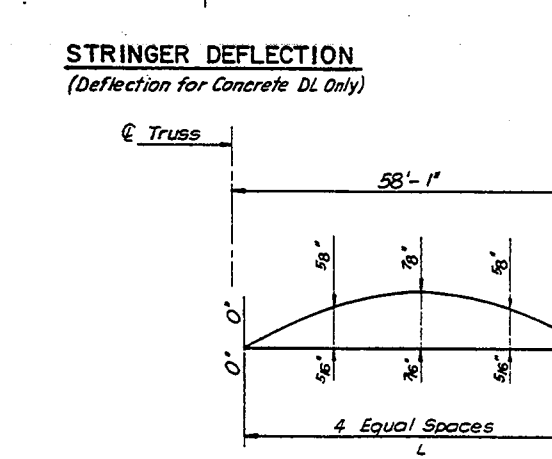
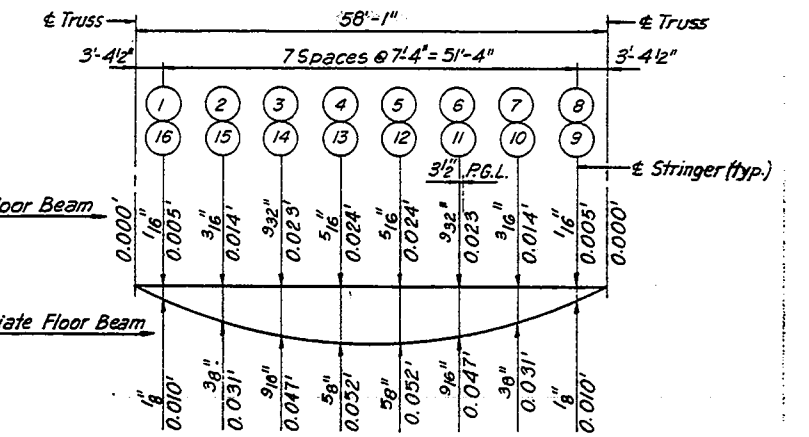
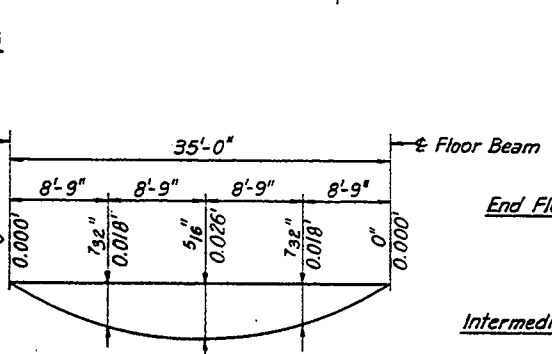
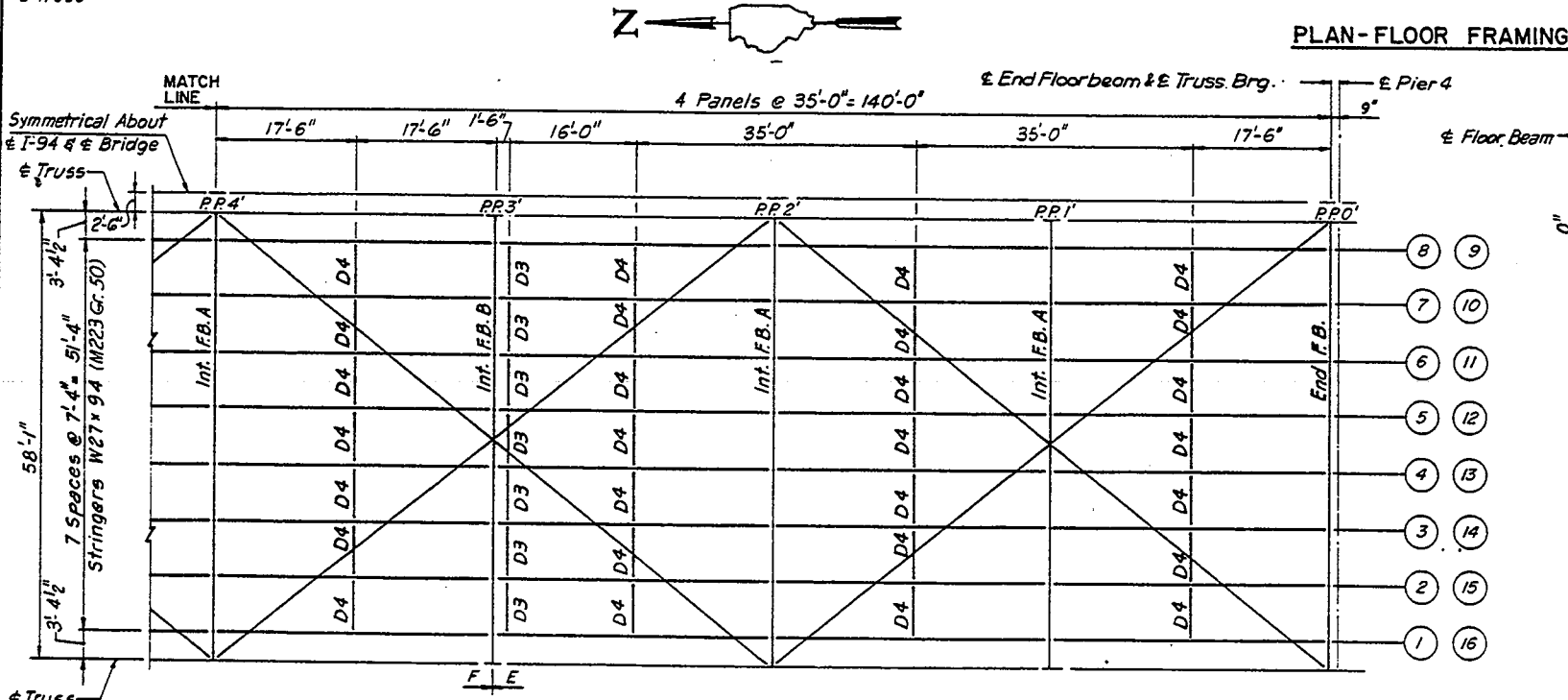
Reinforcement bars designated (E) shall be Epoxy Coated. Bars indicated thus 1x2-#5 etc. indicates 1 Line of Bars with 2 Lengths per Line. For Parapet Joint Details see Sht. No. S12. Work this Sheet with Sheet No. S17.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS SPAN-DECK DETAILS - II
FA.I-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE DRAWN BY P.G.
DATE NOV. 1991 CHECKED BY J.M.



DATE	SECTION	COUNTY	1011	SHEET
I-94	8	COOK	318	191
PER ROAD DIST. NO. 7	ILLINOIS	FEDERAL AID PROJECT		

SHT. 519 OF 554



LOCATION	STEEL DL ONLY	(STEEL+CONC) DL ***
P.P. 0	624.105	624.105
P.P. 1	624.056	623.962
P.P. 2	623.982	623.819
P.P. 3	623.902	623.677
P.P. 4	623.793	623.520
P.P. 5	623.673	623.364
P.P. 6	623.517	623.204
P.P. 5'	623.347	623.038
P.P. 4'	623.142	622.869
P.P. 3'	622.924	622.694
P.P. 2'	622.679	622.516
P.P. 1'	622.426	622.332
P.P. 0'	622.150	622.150

ITEM	TRUSS SPAN-MOMENT TABLE			
	BEAM	STRINGER AT 0.5 L	INTERMEDIATE FLOOR BEAM AT 0.5 L	END FLOOR BEAM AT 0.5 L AT 0.07 L *
1 (IN4)	3270	55,757	54,772	64,911
DL (K/1)	1.2	6.4	3.4	34 ^{K/1} /1270 ^K
MDL (I-K)	184	2510	1333	27/5080
MLL (I-K)	240	1558	1469	—
MI (I-K)	72	467	441	—
MTOT (I-K)	496	4535	3243	5107
Is (Ksi)	24.5	24.4	17.8	23.6

ITEM	TRUSS SPAN-REACTION TABLE		
	BEAM	STRINGER REACTION AT FLOOR BM.	INTER. FLR. BM. AT BOTH INT. & EXT. TRUSSES
RDL (K)	21	187	96/1365 *
RLL (K)	35	102	95
RIMP (K)	11	31	28
RTOT (K)	67	320	219/1365

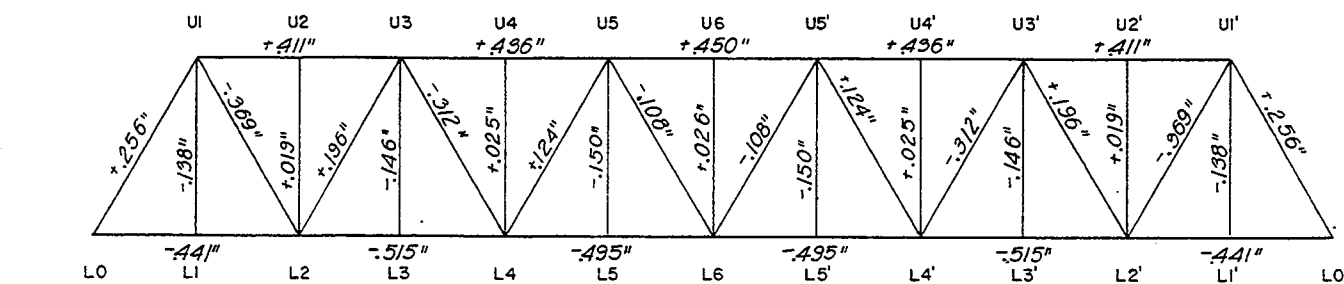
** For Point A, See Sect. AA on Sht. No. 520
 *** Includes parapets
 * Jacking Load Case, Jack Locations 0.07 L = 4'-0" from E Trusses.
 $F_B = 1.5 \times F_B = 1.5 \times 20 = 30$ Ksi (AASHTO-10.30.5)

NOTES:
 For Floorbeam & Stringer Connection Details See Sheet. No. 527
 For Lateral Bracing Details see Sheet. No. 526
 For Diaphragms D3 & D4 see Sheet. No. 514

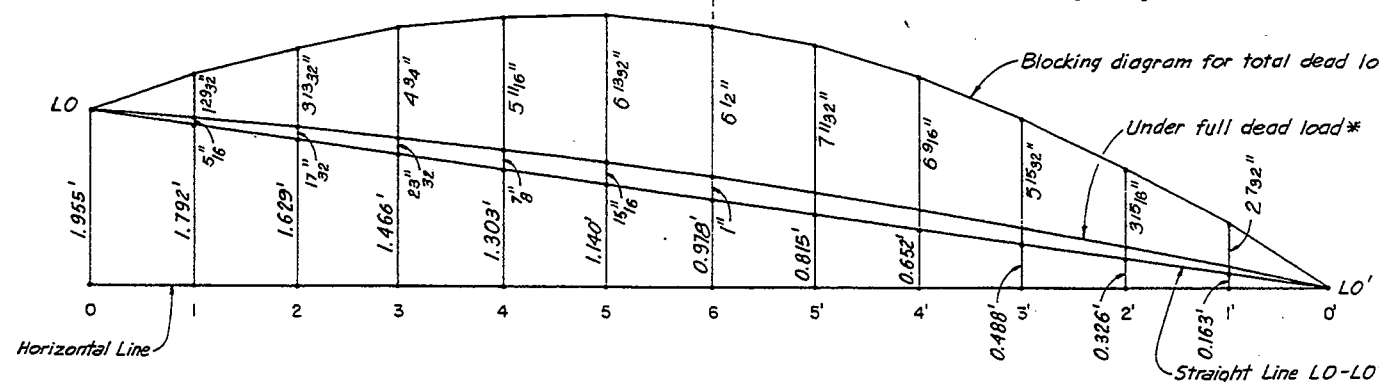
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 TRUSS-FLOOR FRAMING PLAN
 FAI-94 OVER LITTLE CALUMET RIVER
 COOK COUNTY
 STA. 172 + 54.39 SN 016-0158 (S. BOUND)
 SN 016-0159 (N. BOUND)
 SCALE
 DATE NOV. 1991
 DRAWN BY P.G.
 CHECKED BY J.M.

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	COOK	3/8	192
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT	

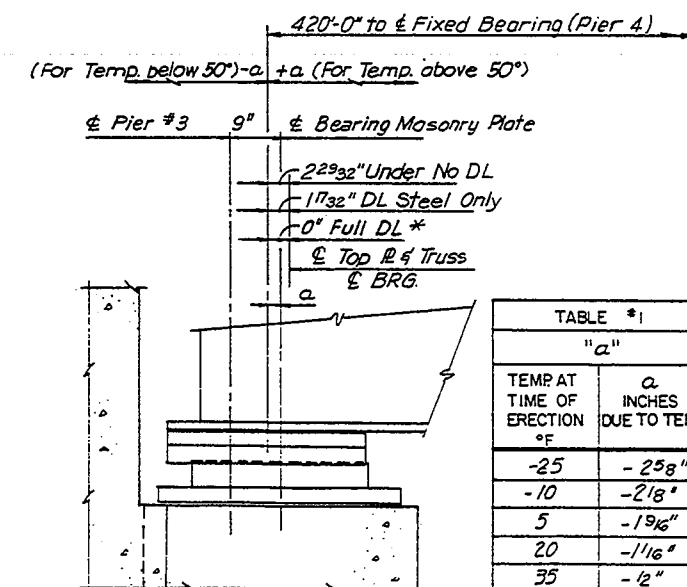
SHT. S20 OF S54



NOTE: Lengths of members to be computed for geometric shape of Truss. Corrections indicated above are to be applied to these lengths. (+ Indicates Lengthening, and - Indicates Shortening).



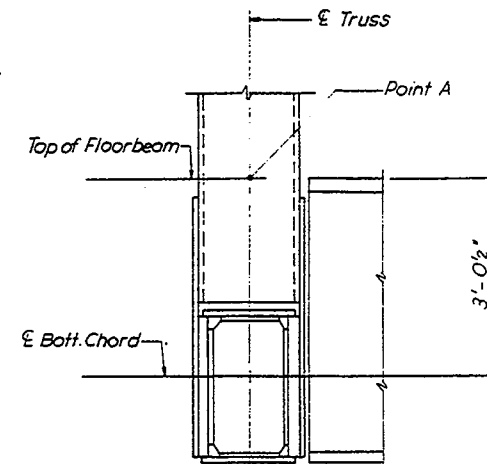
DEAD LOAD CAMBER DIAGRAMS



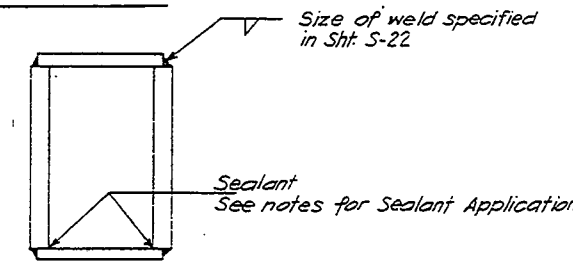
SHOE SETTINGS AT 50°F

NOTE: Adjust the masonry plate setting shown by the "a" dimension for temperature at the time of erection as provided in table #1, after adjusting it by the camber effect (117/32") due to D.L. steel only. *Excluding Future Wearing Surface (FWS) Adjust the masonry plate setting shown by the camber effect (117/32") due to D.L. steel only.

TABLE #1	
TEMP AT TIME OF ERECTION °F	"a" INCHES DUE TO TEMP
-25	-258"
-10	-218"
5	-196"
20	-116"
35	-12"
50	0
65	12"
80	116"
95	196"
110	218"
125	258"



SECTION A-A



TYPICAL BOX CROSS-SECTION

Notes for suggested Sequence for Fabrication and Sealant Application:

1. Weld the Bottom Cover Plate in place.
2. Apply the Sealant to the bottom Seams.
3. Weld the top cover Plate in Place.

If fabricator wishes to assembly box section completely prior to adding sealant, He or She shall submit proposed method for applying sealant thru holes in bottom of Cover Plate.

TRUSS SPAN NOTES

DESIGN LOADINGS: HS20-44 & ALTERNATE. IMPACT AS A PERCENT OF LIVE LOAD IS AS FOLLOWS:

TRUSS CHORDS (TOP & BOTTOM)	9.2%	
TRUSS VERTICALS (HANGERS)	28.6	
STRINGERS	30.0	
FLOOR BEAMS	27.3	
<u>DIAGONAL</u>	<u>FOR TENSION</u>	<u>FOR COMPRESSION</u>
L0-U1	-	9.2%
L2-U1	9.9%	30.0
L2-U3	24.7	10.7
L4-U3	11.6	21.0
L4-U5	18.0	12.7
L6-U5	14.2	15.8

UNIT STRESSES: AS GIVEN IN THE A.A.S.H.T.O. 1989 STANDARD SPECIFICATIONS, ARTICLE 10.32 (SERVICE LOAD DESIGN METHOD).

LOCAL BUCKLING REQUIREMENTS: ELEMENTS OF COMPRESSION MEMBERS SHALL BE LIMITED TO B/T RATIOS IN A.A.S.H.T.O. 1989 STANDARD SPECIFICATIONS, ARTICLE 10.35.2.3

CONNECTIONS: ALL CONNECTIONS ARE TO BE MADE WITH 7/8" #164 H.S. BOLTS UNLESS OTHERWISE SHOWN OR NOTED. SHOP AND FIELD CONNECTIONS MAY BE INTERCHANGED.

FOR TYPICAL WELD DETAILS SEE SHT. NO. S22

SHOP SPICES: OPTIONAL FULL PENETRATION BUTT WELD SPICES WILL BE PERMITTED ONLY IN PLATES OF TRUSS MEMBERS OVER 40 FEET LONG, AND ONLY ONE SPICE WILL BE PERMITTED IN EACH PLATE. A WEB OR COVER PLATE SHALL NOT BE SPICED CLOSER THAN 6'-0" FROM THE SPICE IN ITS COMPANION WEB OR COVER PLATE. COVER PLATES AND WEB PLATES SHALL BE SPICED 3'-0" MINIMUM FROM ADJACENT WEB OR COVER PLATE SPICE. COVER PLATE SPICES SHALL BE LOCATED IN THE MIDDLE HALF OF THE SPACE BETWEEN PERFORATIONS.

NET SECTION: IN ORDER TO MAINTAIN THE MINIMUM NET SECTION IN TENSION MEMBERS AND THEIR CONNECTIONS, THE NUMBER OF ROWS OF BOLTS SHOWN CANNOT BE INCREASED. THE NUMBER OF BOLTS PER ROW CAN BE VARIED PROVIDED SYMMETRY OF THE CONNECTION/SPICE IS MAINTAINED.

PERFORATED PLATES: PROVIDE 8" X 16" ACCESS HOLES IN BOTTOM COVER PLATES OF ALL CHORD BOX MEMBERS, EXCEPT AS OTHERWISE SHOWN OR NOTED ON DRAWINGS. ALL PERFORATIONS SHALL BE SPACED AT 3'-0" CENTERS UNLESS OTHERWISE SHOWN. PERFORATIONS IN TRUSS DIAGONALS AND PORTAL BRACING SHALL BE AS SHOWN OR NOTED ON THE DRAWINGS.

CAMBER: TRUSSES SHALL BE CAMBERED FOR THE DESIGN DEAD LOAD AND VERTICAL CURVE.

ERECTION: BEFORE ORDERING MATERIAL THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, COMPLETE PLANS SHOWING THE METHOD OF ERECTION HE PROPOSES TO USE, AND SHOWING ERECTION STRESSES IN ALL TRUSS MEMBERS. ERECTION STRESSES SHALL BE COMPOSED OF THE DEAD LOAD STRESS OF THE STRUCTURE AND ERECTION EQUIPMENT PLUS THE STRESS OF A 75 POUND PER SQUARE FOOT WIND ON THE STRUCTURE, AS DEFINED IN THE A.A.S.H.T.O. STANDARD SPECIFICATIONS. ERECTION STRESSES SHALL NOT EXCEED THE NORMAL UNIT STRESSES BY MORE THAN 25%. NO PAYMENT WILL BE MADE FOR ANY EXTRA MATERIAL REQUIRED DUE TO ERECTION CONDITIONS.

JACKING PROVISIONS: PROVISIONS HAVE BEEN MADE FOR JACKING THE FULL DEAD LOAD AT L0 AND L9.

SEE SHEET S2 FOR GENERAL NOTES.

(*) DL of Steel, Concrete only

TRUSS REACTIONS

D.L.	1,461 k
L.L.	285.7 k
I	25.7 k
Total	1,772.4 k

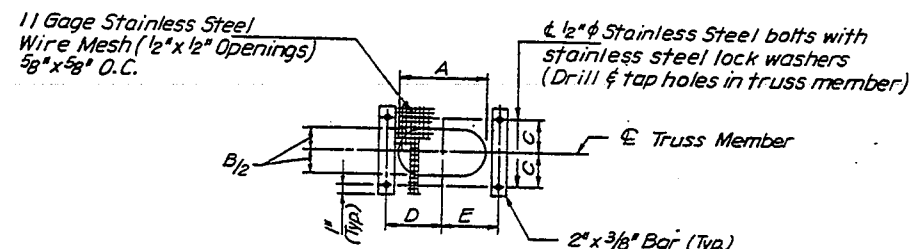
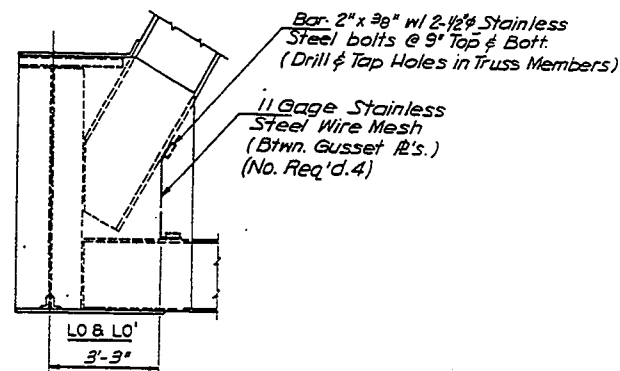
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS CAMBER DIAGRAMS & NOTES
FA.I-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SCALE SN 016-0159 (N. BOUND)
DATE NOV. 1991
DRAWN BY P.G.
CHECKED BY J.M.

TABLE OF TRUSS MEMBERS AND STRESSES															
Member	Dead Load	Live Load	Impact	Wind Load on Structure T or C	3W + WL	Design Stresses			Area Furnished		L/r	Material			
	DL	LL	I	W		Group I	Group II	Group III	Eff. Gr. ^(*)	Net		Type	Make-up **		
Top Chord	U1U2	1411 c	267 c	25 c	114 c/T	—	1703 c	1525 c	—	90	90	38.3	M223/6r30	2 R's 1 1/2" x 25 1/2" 2 Cover R's 3/4" x 17 1/2"	
	U2U3	1411 c	267 c	25 c	114 c/T	—	1703 c	1525 c	—	90	90	38.3		Same as U1U2	
	U3U4	2260 c	427 c	39 c	171 c/114 T	—	2726 c	2431 c	—	136	136	40.3		2 R's 2 1/4" x 24" 2 Cover R's 1 1/2" x 17 1/2"	
	U4U5	2260 c	427 c	39 c	171 c/114 T	—	2726 c	2431 c	—	136	136	40.3		Same as U3U4	
	U5U6	2541 c	480 c	45 c	163 c/179 T	—	3066 c	2704 c	—	148	148	41.7		2 R's 2 1/2" x 24" 2 Cover R's 1 1/2" x 17 1/2"	
Bottom Chord	L0 L1	775 T	147 T	14 T	232 c/T	92 c/T	936 T	1007 T	1028 T	46	43	—		2 R's 3/4" x 20 1/4" 2 Cover R's 3/8" x 17 1/2"	F.C.M.
	L1 L2	775 T	147 T	14 T	232 c/T	92 c/T	936 T	1007 T	1028 T	46	43	—		Same as L0 L1	
	L2 L3	1907 T	361 T	33 T	372 c/232 T	147 c/92 T	2301 T	2139 T	2393 T	97	90	—		2 R's 1 1/2" x 25 1/2" 2 Cover R's 3/4" x 17 1/2"	F.C.M.
	L3 L4	1907 T	361 T	33 T	372 c/232 T	147 c/92 T	2301 T	2139 T	2393 T	97	90	—		Same as L2 L3	
	L4 L5	2472 T	466 T	44 T	418 c/372 T	165 c/147 T	2982 T	2844 T	3129 T	131	122	—		2 R's 2 1/4" x 25" 2 Cover R's 1 1/2" x 17 1/2"	F.C.M.
	L5 L6	2472 T	466 T	44 T	418 c/372 T	165 c/147 T	2982 T	2844 T	3129 T	131	122	—		Same as L4 L5	
Diagonals	L0U1	1537 c	307 c	28 c	—	—	1872 c	—	—	156	156	80.6	M223/6r30	2 R's 2 1/2" x 27" 2 Cover R's 1 1/2" x 17 1/2"	
	L2U1	1263 T	256 T/10 c	26 T/3 c	—	—	1545 T	—	—	89	80	—	M183/6r36	1 R 3/4" x 14 1/2" 2 R's 1 1/2" x 21"	F.C.M.
	L2U3	985 c	22 T/213 c	6 T/23 c	—	—	1221 c	—	—	131	131	100.3		2 R's 2 1/4" x 25" 2 Cover R's 1 1/2" x 17 1/2"	
	L4U3	702 T	173 T/34 c	20 T/8 c	—	—	895 T	—	—	59	52	—		1 R 3/8" x 16" 2 R's 1 1/2" x 21"	F.C.M.
	L4U5	420 c	52 T/136 c	11 T/18 c	—	—	574 c	—	—	88	88	119.4		2 R's 1 1/2" x 19 1/2" 2 Cover R's 3/8" x 17 1/2"	
	L6U5	138 T	104 T/75 c	15 T/13 c	—	—	257 T	—	—	33	32	—		1 R 3/8" x 17" 2 R's 3/4" x 18"	F.C.M.
Verticals	L1U1	179 T	101 T	26 T	—	—	306 T	—	—	28	27	—		1 R 3/8" x 17" 2 R's 3/4" x 15"	N.T.R.
	L2U2	24 c	—	—	—	—	24 c	—	—	31	31	115.9		1 R 3/8" x 17 1/2" 2 MC 18 x 42.7	
	L3U3	188 T	101 T	26 T	—	—	315 T	—	—	28	27	—		Same as L1U1	
	L4U4	31 c	—	—	—	—	31 c	—	—	31	31	115.9		Same as L2U2	
	L5U5	192 T	101 T	26 T	—	—	319 T	—	—	28	27	—		Same as L1U1	
	L6U6	33 c	—	—	—	—	33 c	—	—	31	31	115.9	M183/6r36	Same as L2U2	

Stresses are given in kips.
C = Compression, T = Tension.
WL = Wind on Live Load.

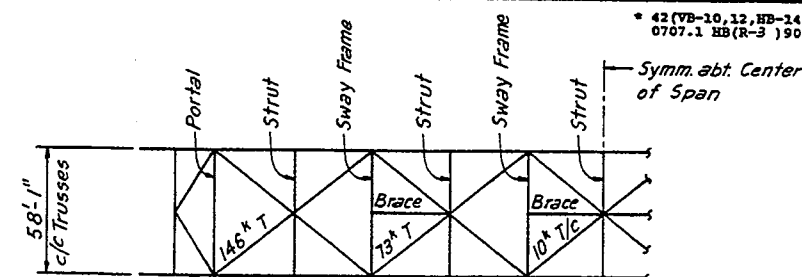
Allowable Stresses For Combination Of Loadings.
Group I = DL + LL + I = 100% normal unit stress.
Group II = DL + W = 125% normal unit stress.
Group III = DL + LL + I + 3W + WL = 125% normal unit stress.

* Effective Gross Area as defined in Note 1 to AASHTO Table 10.32.1A
** All truss detail material to be used for splice plates, gusset plates, fills, shims, connection angles and diaphragms is to be AASHTO M183 unless noted on Shit. Nos. S22 thru S26.



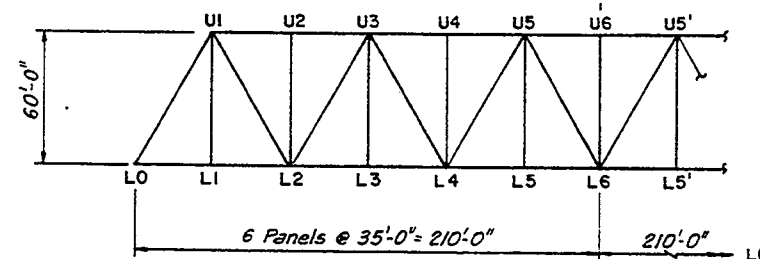
BIRD SCREEN DATA						
HANDHOLE TYPE	HANDHOLE SIZE		C	D	E	NO. REQ'd.
	A	B				
A	16"	8"	5"	9 1/8"	9 1/8"	680
B	11"	5 1/2"	2 1/2"	5 3/8"	5 3/8"	84
C	12"	6"	4 1/8"	6 7/8"	6 7/8"	4
D	6"	6"	4 1/8"	4 1/8"	4 1/8"	8

BIRD SCREEN DETAIL

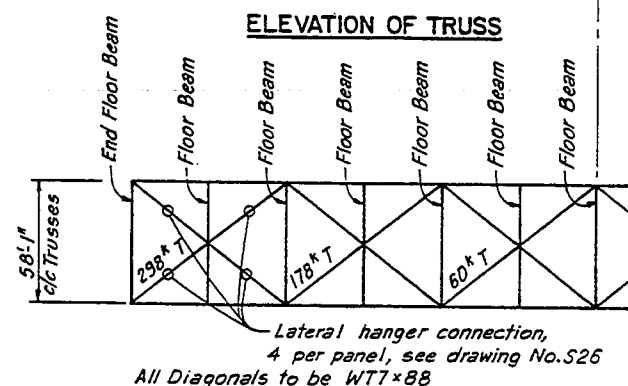


All Diagonals to be W27x84
All Struts to be W27x114
All Braces to be W27x84

PLAN OF TOP LATERALS

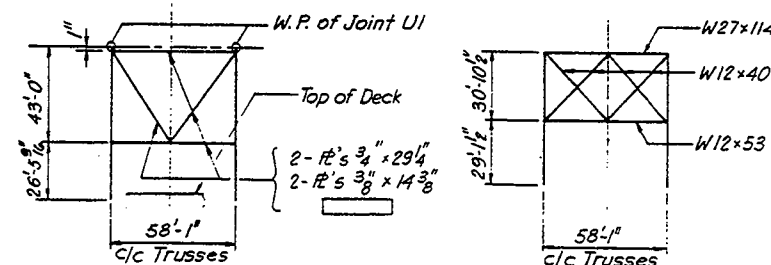


NOTE:
Dimensions of Truss shown are for the final geometric shape after calculated dead load deflection has occurred.
Chord members to be straight between splice points.
Camber diagram is shown on drawing No. S20



Lateral hanger connection, 4 per panel, see drawing No. S26
All Diagonals to be W77x88

PLAN OF BOTTOM LATERALS



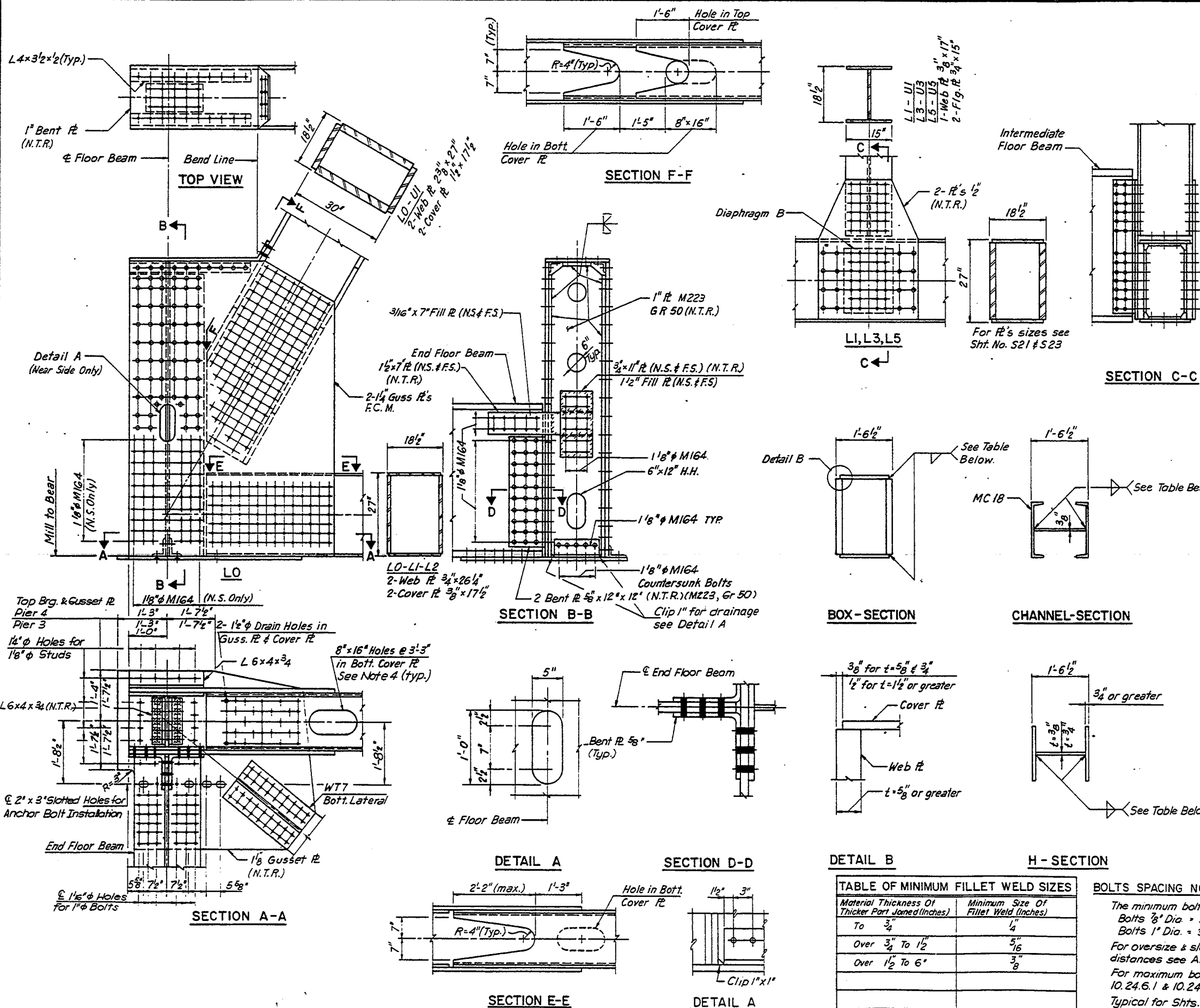
PORTAL LO-U1

SWAY FRAME U3 & U5

ELEVATION OF PORTAL AND SWAY FRAMES

- NOTES:
1. N.T.R. Indicates Supplemental Requirements for Notch Toughness Zone 2.
 2. Work this Drawing with Sheet Nos. S20 and S22 thru S26.
 3. F.C.M. Indicates Base Metal Charpy V-Notch requirements for Fracture critical Members Zone 2.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS - STRESS SHEET
FA.1-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE DRAWN BY P.G.
DATE NOV. 1991 CHECKED BY J.M.



NOTES:

1. F.C.M. indicates Base Metal Charpy V-Notch requirements for Fracture Critical Members Zone 2.
2. Work this Drawing with Sht. Nos S20 thru S27 and S29
3. N.T.R. Indicates Supplemental Requirements for Notch Toughness Zone 2.
4. All holes in cover or web plates shall be provided with Bird Screen, except for interior diagonal box sections.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS-DETAILS - L0, L1, L3, L5
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY

STA. 172 + 54.39

SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)

SCALE

DATE NOV. 99

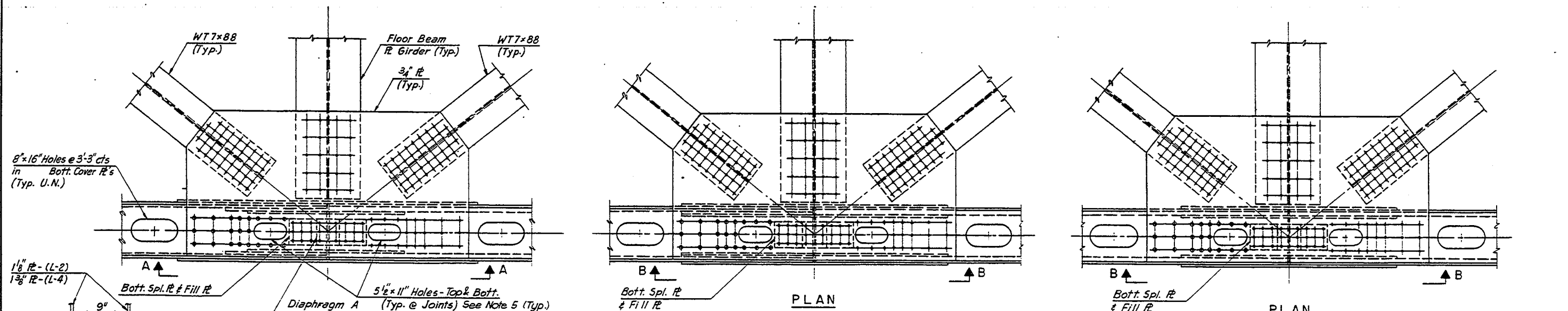
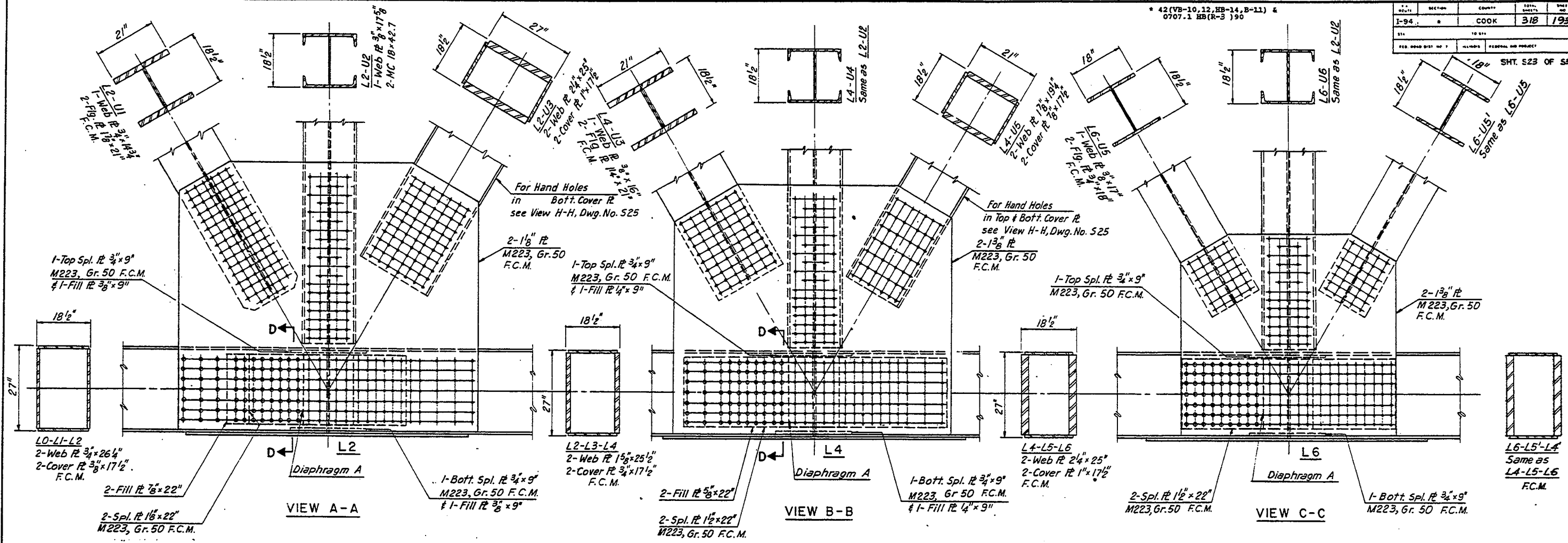
DRAWN BY P.G.

CHECKED BY J.M.

* 42 (VB-10, 12, HB-14, B-11) &
0707.1 HB(R-3) 90

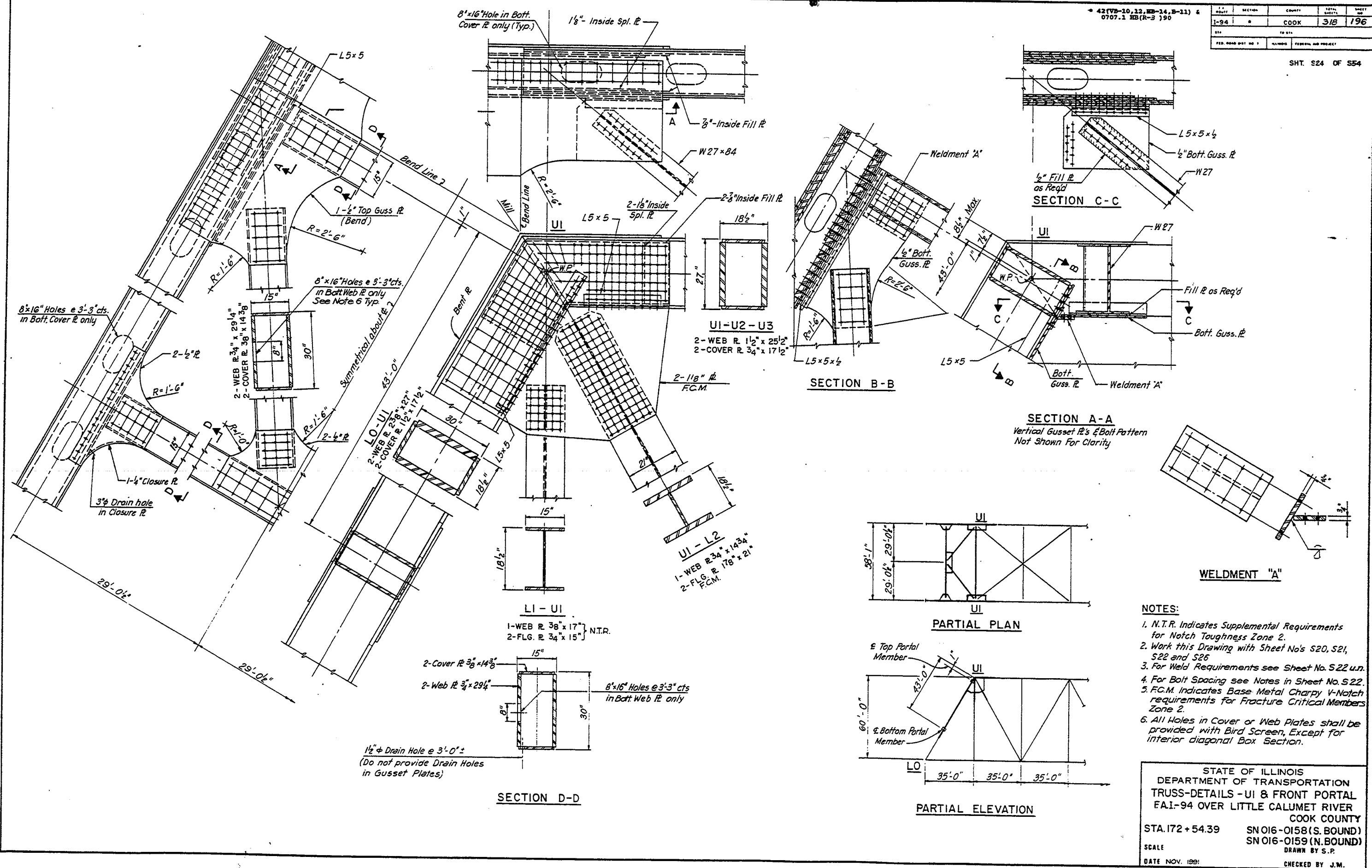
SECTION	COUNT	TOTAL	SHEET
L-94	8	COOK	318 195
STA.	10 STA.	FEDERAL AID PROJECT	
SEE DRAW DIST NO. 7	ILLINOIS	FEDERAL AID PROJECT	

SHT. 523 OF 554



- NOTES:
- 1- F.C.M. indicates Base Metal Charpy V-Notch requirements for Fracture Critical Members Zone 2
 - 2- Work this Drawing with Sheet No's 520, 521, 522 and 524 thru 527.
 - 3- For Weld Requirements see Sheet No. 522 u.n.
 - 4- For Bolt Spacing see Notes in Sheet No. 522.
 - 5- All Holes in Cover Plates shall be provided with Bird Screen, except for interior diagonal box sections.

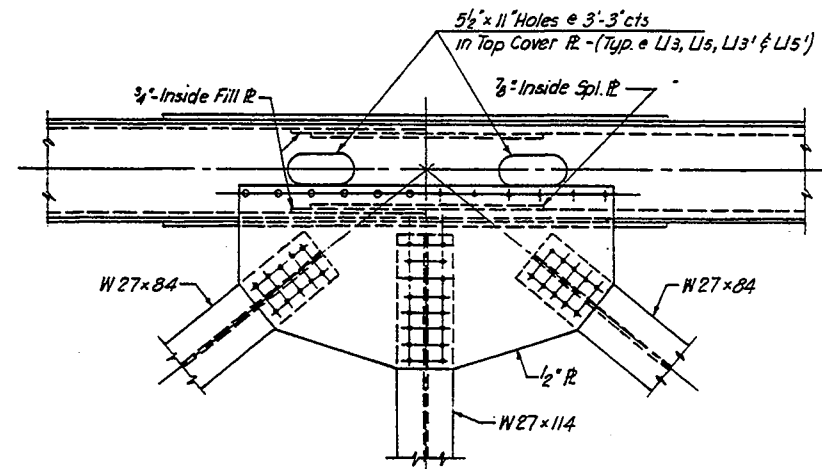
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS-DETAILS L2, L4, L6
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S.BOUND)
SN 016-0159 (N.BOUND)
SCALE
DATE NOV. 1991
DRAWN BY P.G.
CHECKED BY J.M.



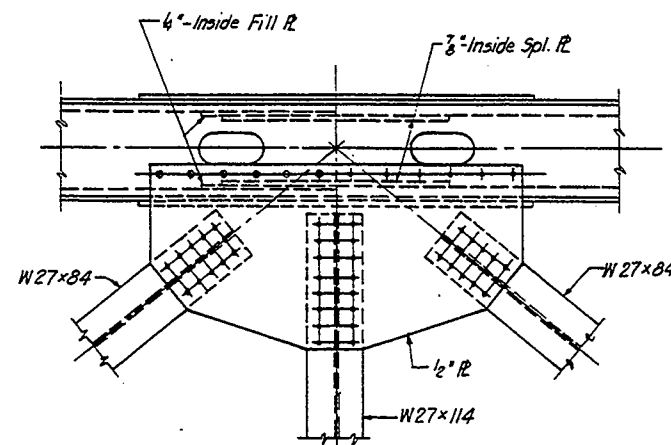
116
2/11

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-94	COOK	318	197
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT	

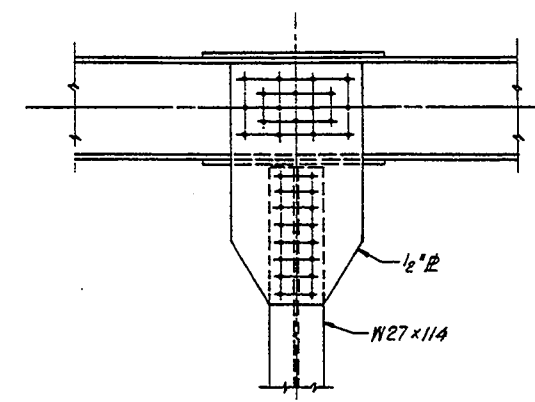
SHT. S25 OF S54



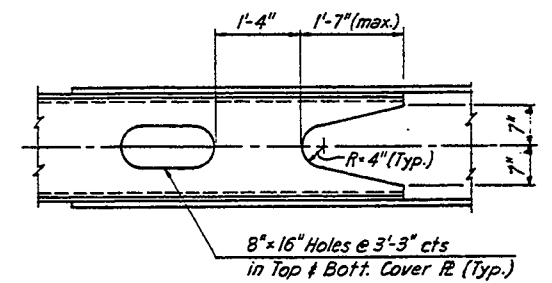
VIEW A-A



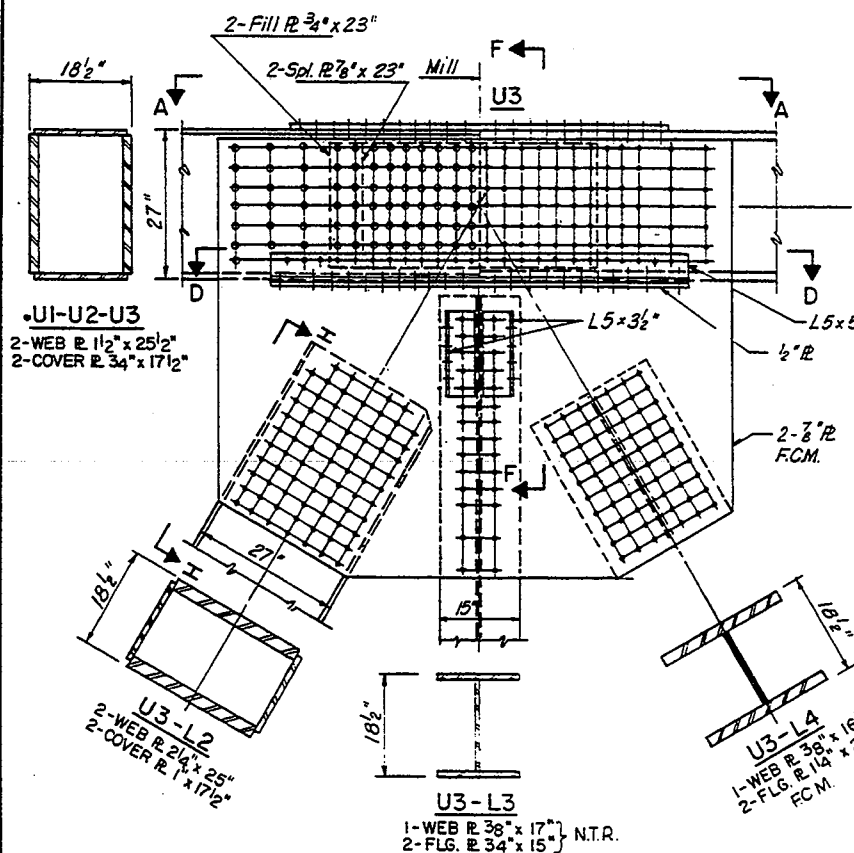
VIEW B-B



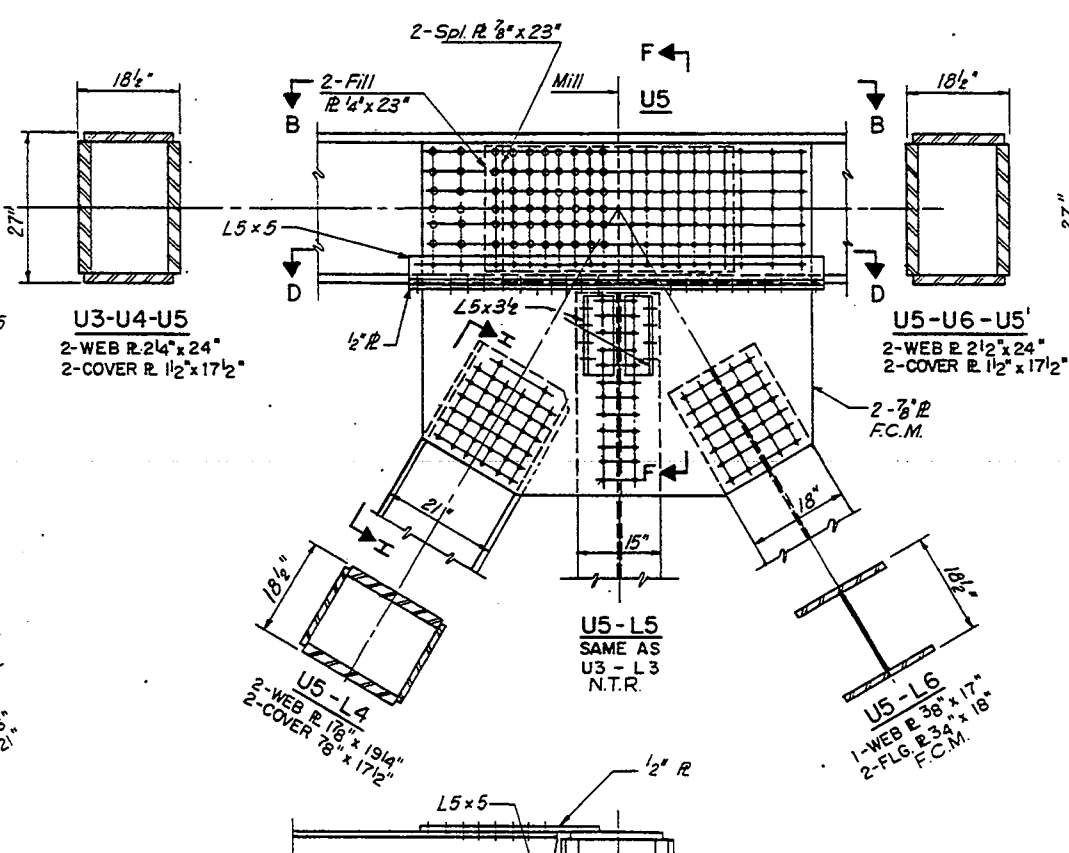
VIEW C-C



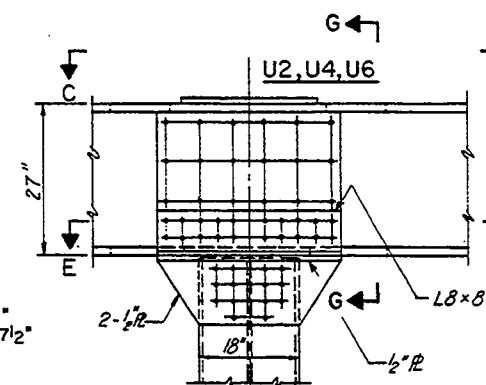
VIEW H-H



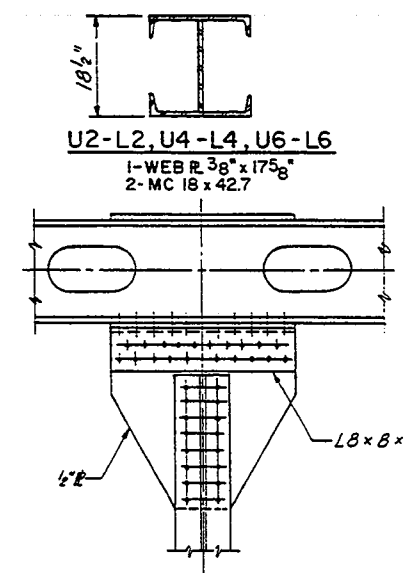
SECTION D-D



SECTION F-F



SECTION G-G



SECTION E-E

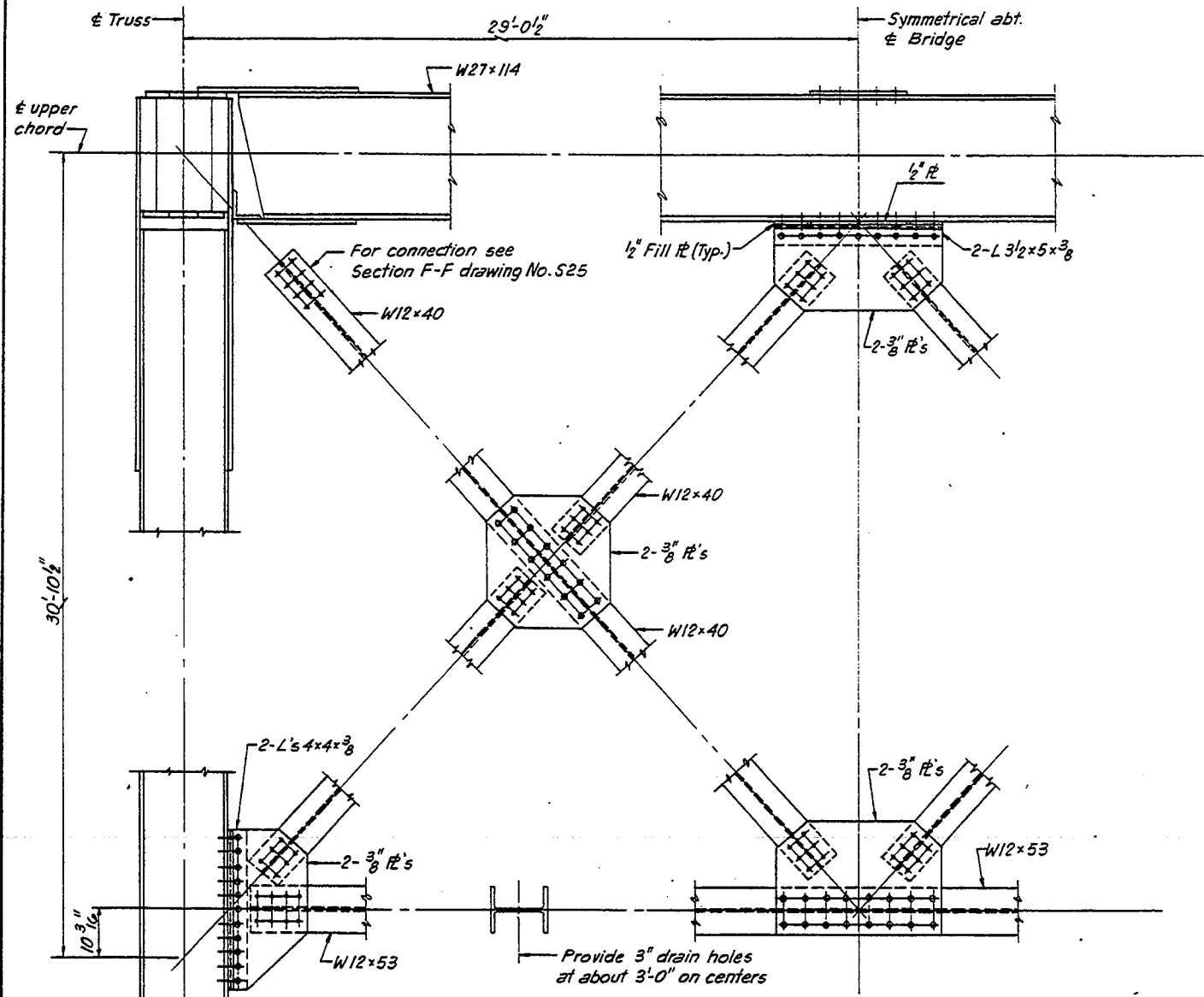
NOTES:

1. N.T.R. Indicates Supplemental Requirements for Notch Toughness Zone 2.
2. Work this Drawing with Sheet Nos S20 thru S26
3. For Weld Requirements see Sheet No. S22 U.N.
4. For Bolt Spacing see Sheet No. S22.
5. F.C.M. Indicates Base Metal Charpy V-Notch requirements for Fracture critical Members Zone 2.
6. All holes in Cover Plates shall be provided with Bird Screen, except for interior diagonal box section.

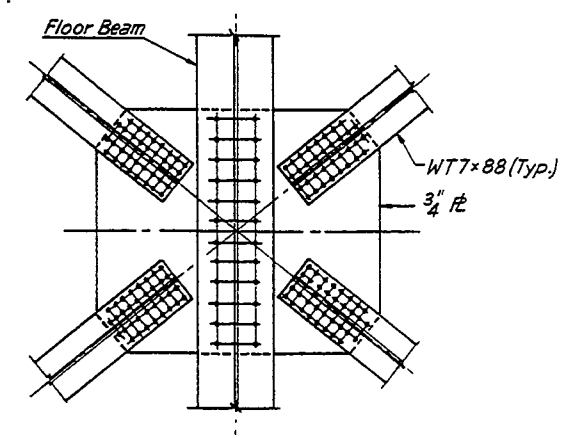
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS-DETAILS U2,U3,U4,U5&U6
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA 172+54.39 SN 016-0158 (S.BOUND)
SN 016-0159 (N.BOUND)
SCALE
DATE NOV. 1991
DRAWN BY S.P.
CHECKED BY J.M.

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-94		COOK	318	198
STA.	TO STA.	FEDERAL AID PROJECT		
PER ROAD DIST. NO. 1	IN LOTS	FEDERAL AID PROJECT		

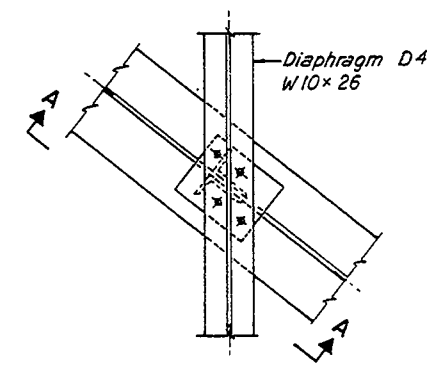
SHT. S26 OF S24



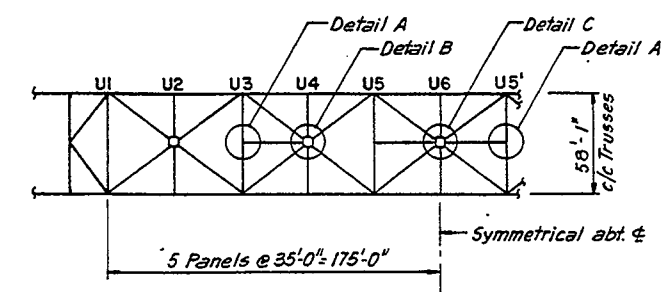
SWAY FRAME AT U3
SWAY FRAME AT U5, U5' AND U3' SIMILAR



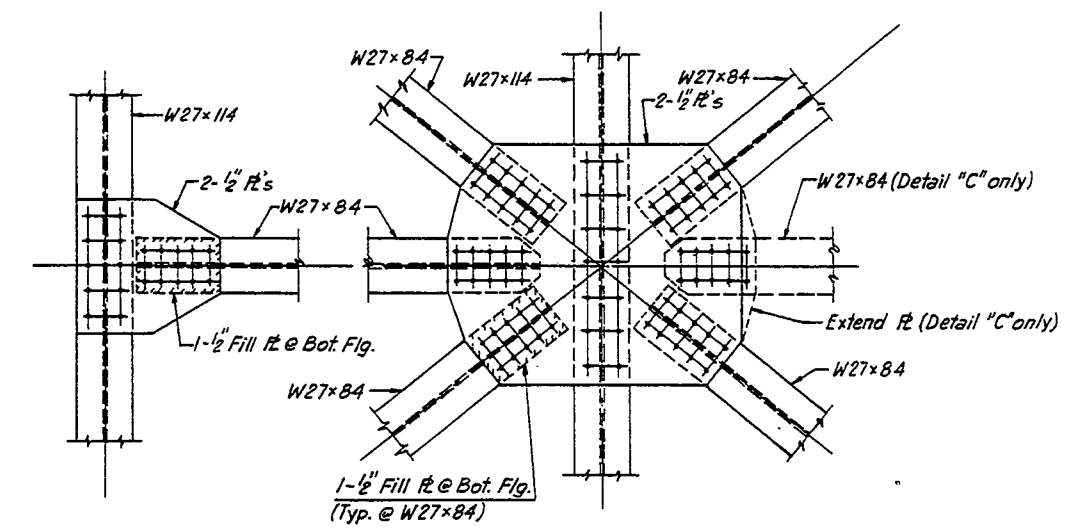
DETAIL D



DETAIL E

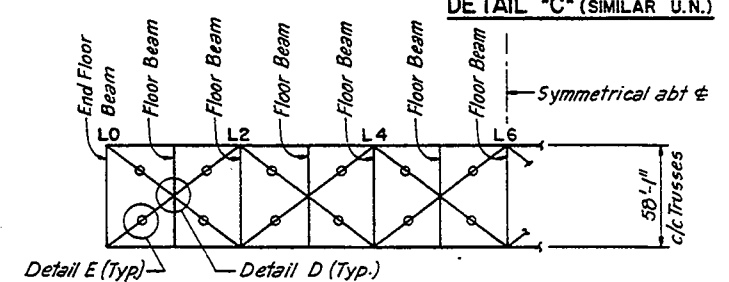


PLAN OF TOP LATERALS

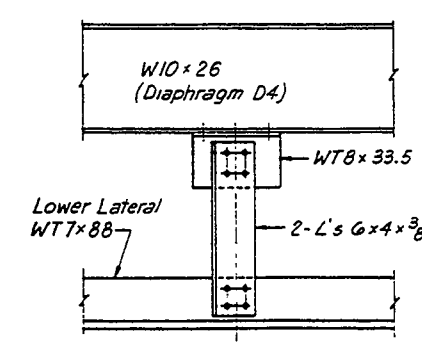


DETAIL A

DETAIL B
DETAIL "C" (SIMILAR U.N.)



PLAN OF BOTTOM LATERALS



SECTION A-A

- NOTE:**
1. Work this Drawing with Sheet No's S21 thru S25.
 2. For Weld Requirements see Sheet No. S22 U.N.
 3. For Bolt Spacing see Sheet No. S22.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS-SWAY FRAMES & BRACING
FA.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1990
DRAWN BY P.G.
CHECKED BY J.M.

Truss
in Lines L2, L4, L6.

* 42 (VB-10, 12, BB-14, B-11) &
0707-1 HB(R-3) 90

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-94	COOK	318	199
FED. ROAD DIST. NO. 3			
FEDERAL AID PROJECT			

SHT. S27 OF S54

SECTION G-G

SECTION A-A SECTION D-D

INTERMEDIATE FLOOR BEAM - "A"

SECTION C-C

INTERMEDIATE FLOOR BEAM - "B"

SECTION B-B

END FLOOR BEAM

Stringer #	3	14	4	13	5	12	6	11
Offset "D"	3'5"	5'2"	6'5"	7'8"				

NOTES:

For Fillet weld sizes not shown. See Sht. No. S22. N.T.R. Indicates Supplemental Requirements for Notch Toughness Zone-2. Work this Drawing with Sht. Nos. 322 & S23. For Diaphragm details See Sht. No. S14. For Weld Requirements see Sht. No. S22 U.N. For Bolt Spacing see Sht. No. S22.

**Provide double nuts for connection to stringer 1-hex nut, hand tighten & 1-lock nut

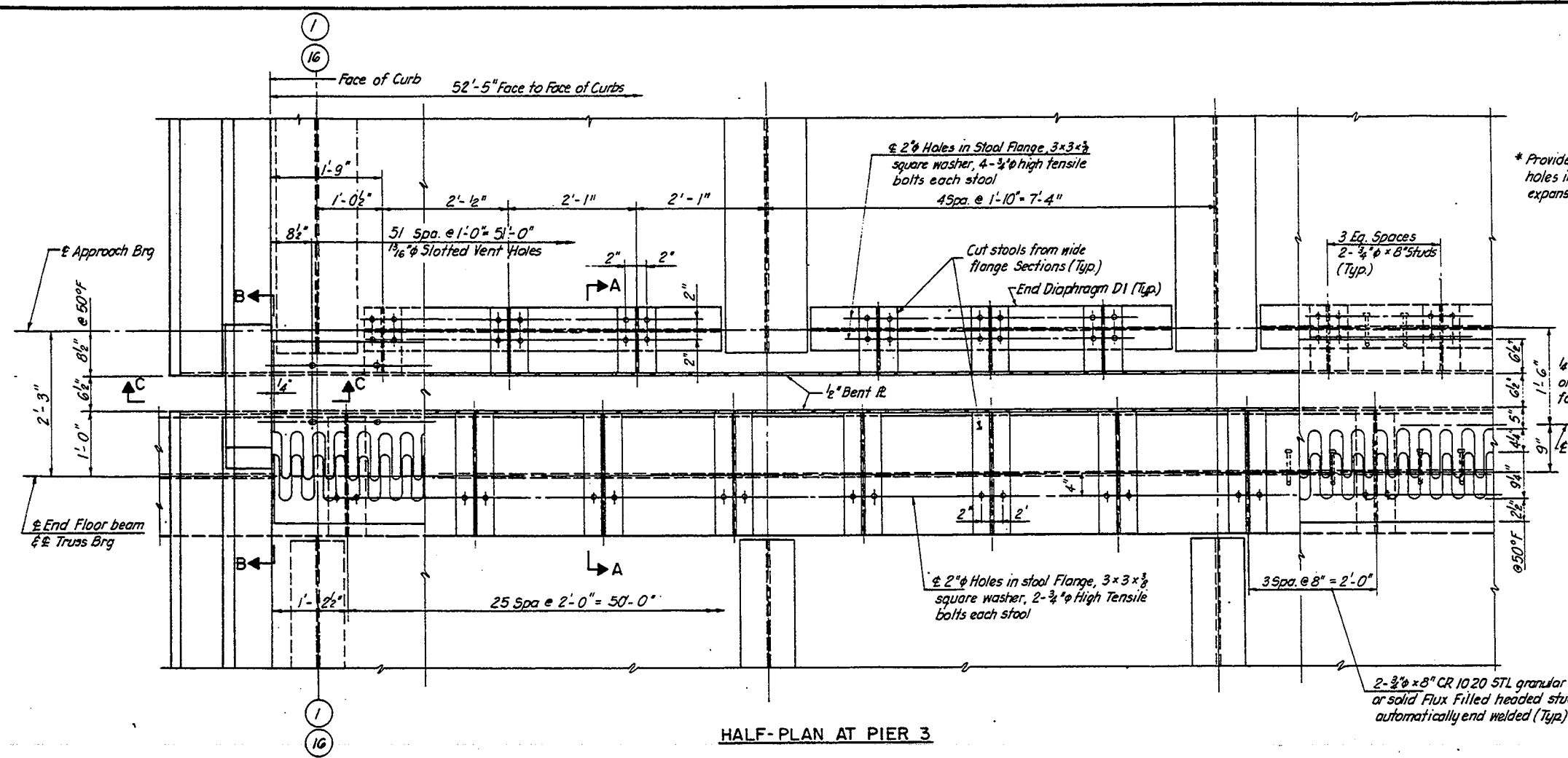
Note: Provide two washers over all slotted holes for stringer connections.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS FLOOR BEAMS & STRINGER CONN.
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY P.G.
CHECKED BY J.M.

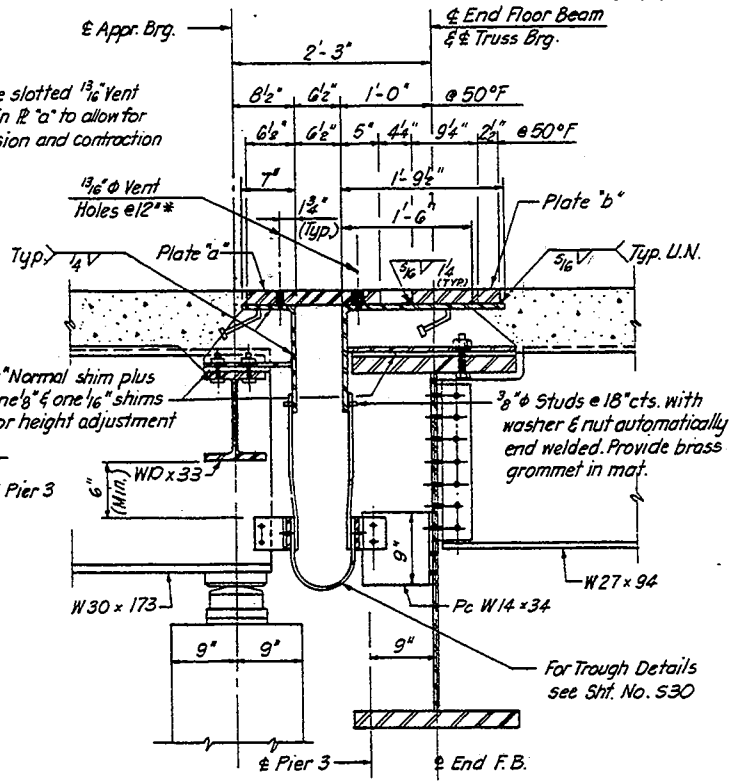
* 42 (VB-10, 12, HB-14, B-11) &
0707.1 HB(R-S) 90

SECTION	COUNT	TOTAL SHEETS	SHEET NO.
I-94	6	318	200
STA.	TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FEDERAL AID PROJECT	

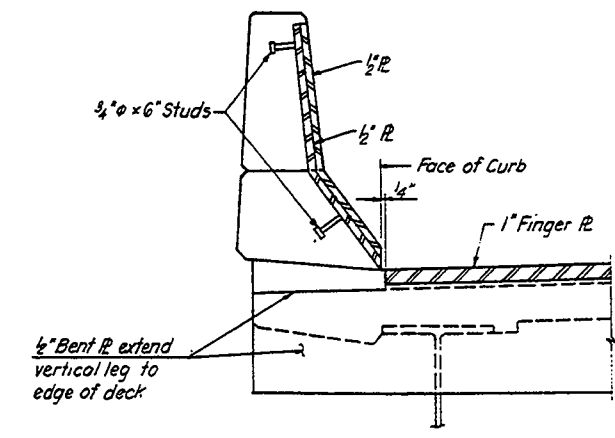
SHT. S28 OF S54



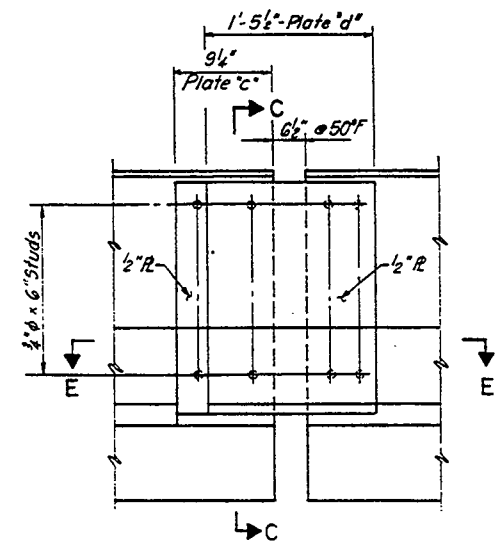
HALF-PLAN AT PIER 3



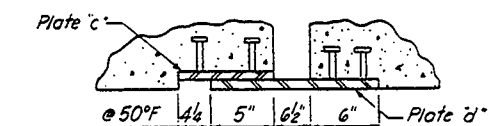
SECTION A-A



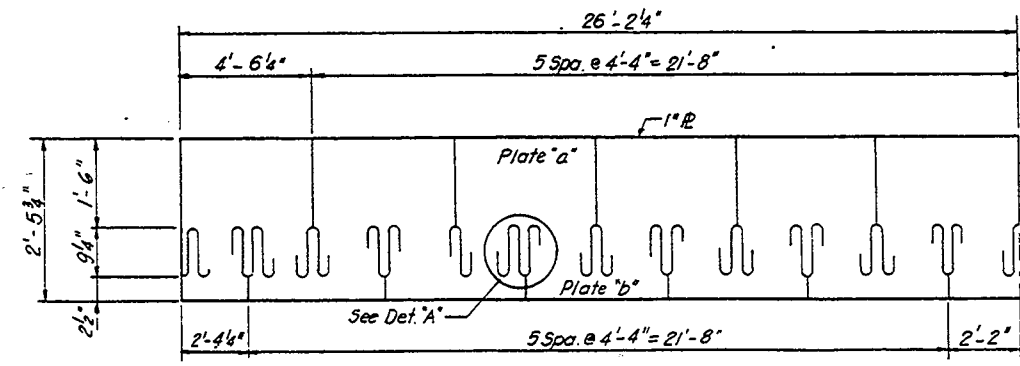
SECTION C-C



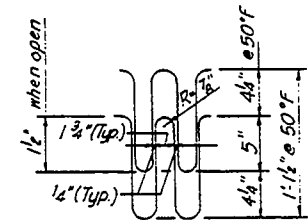
SECTION B-B



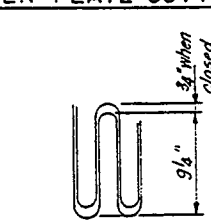
SECTION E-E



FINGER PLATE CUTTING DIAGRAM

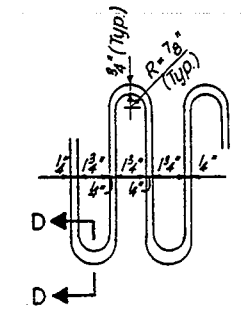


AT NORMAL TEMPERATURE

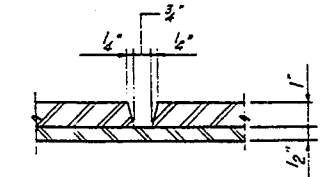


AT CLOSED POSITION

FINGER DETAILS
Temperature Range = -30°F to 130°F with 50°F = Normal
Coeff of Linear Expansion = .0000065 ft. per ft. per degree



DETAIL "A"

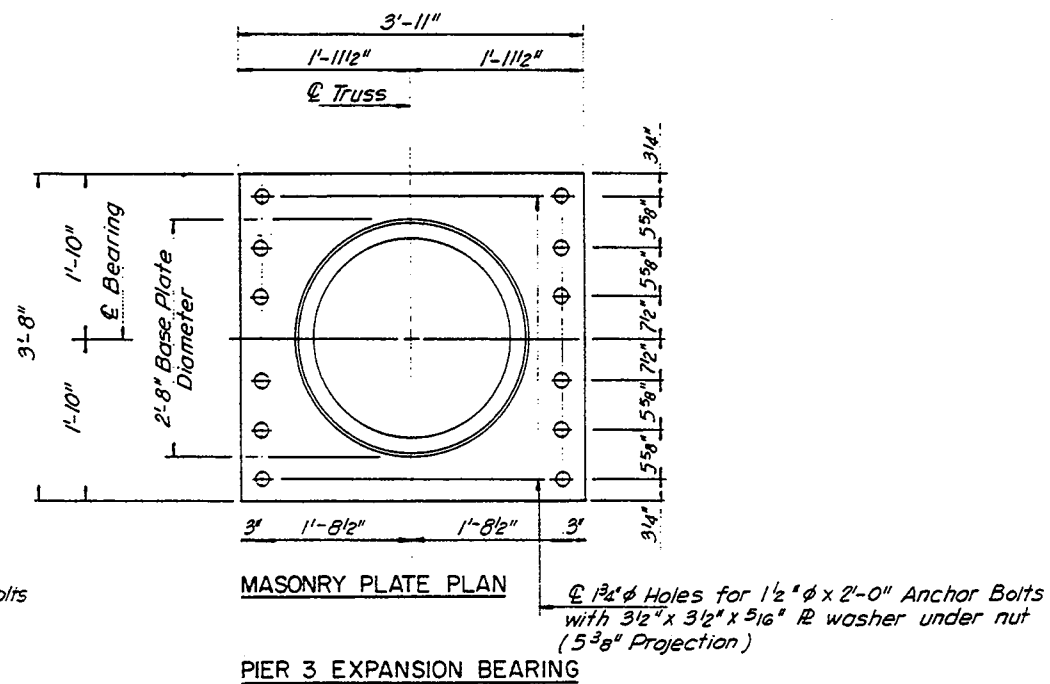
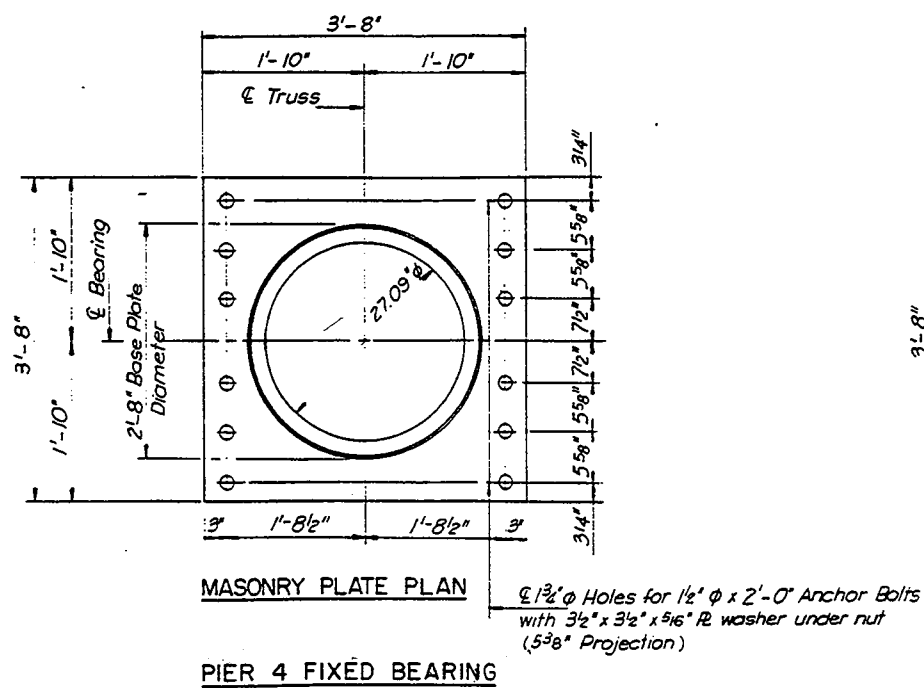
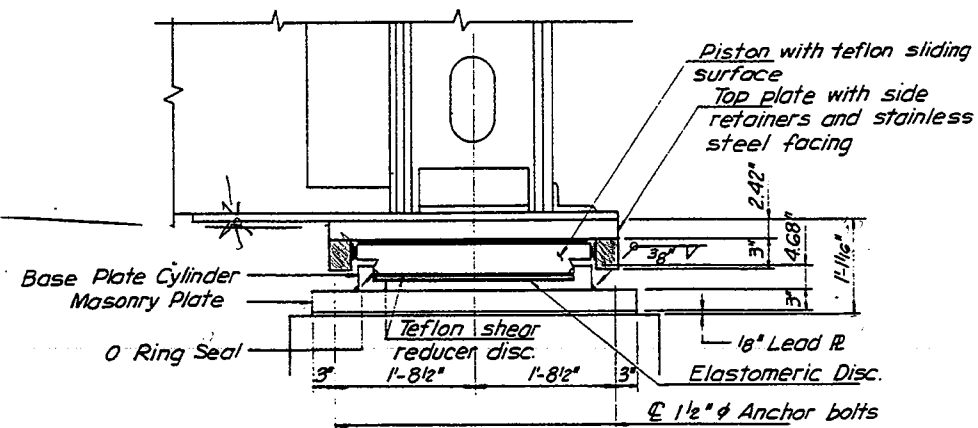
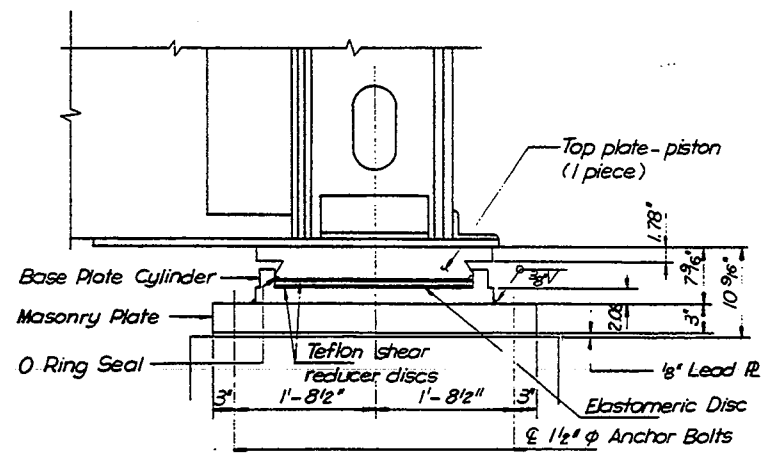
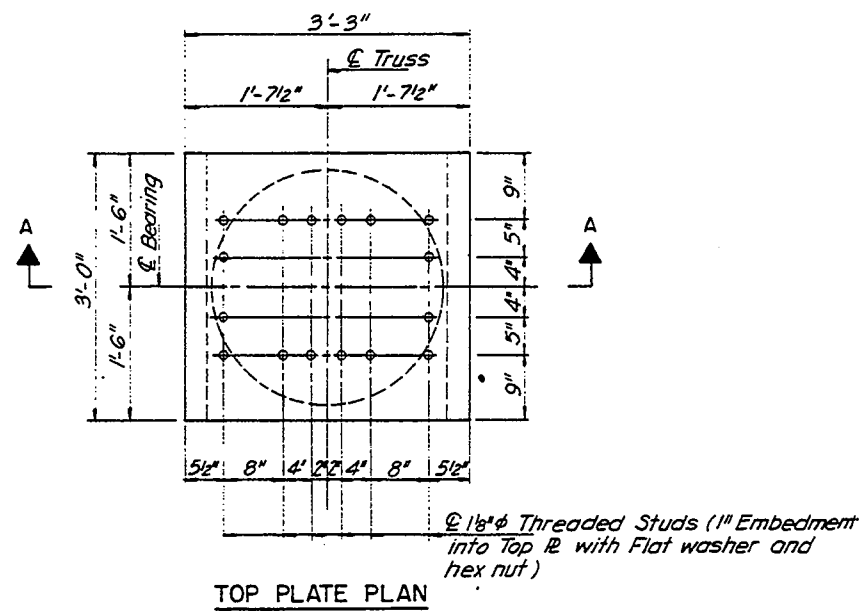
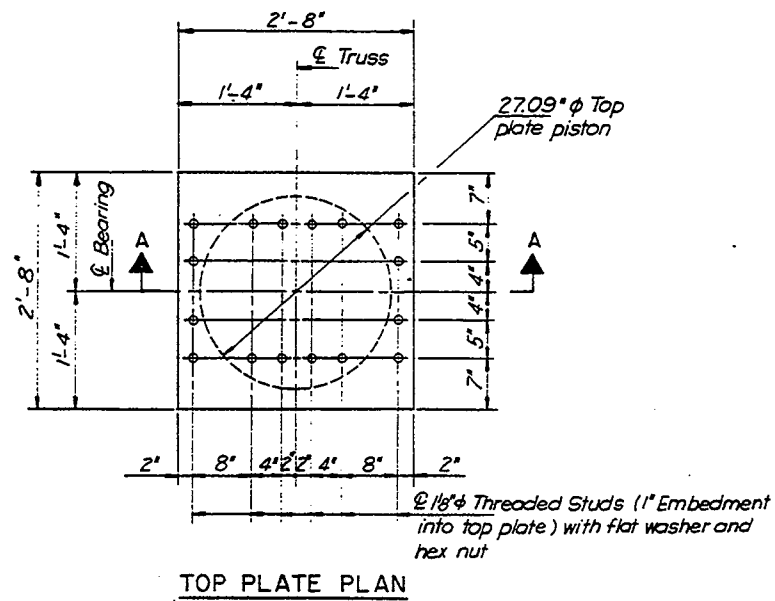


SECTION D-D

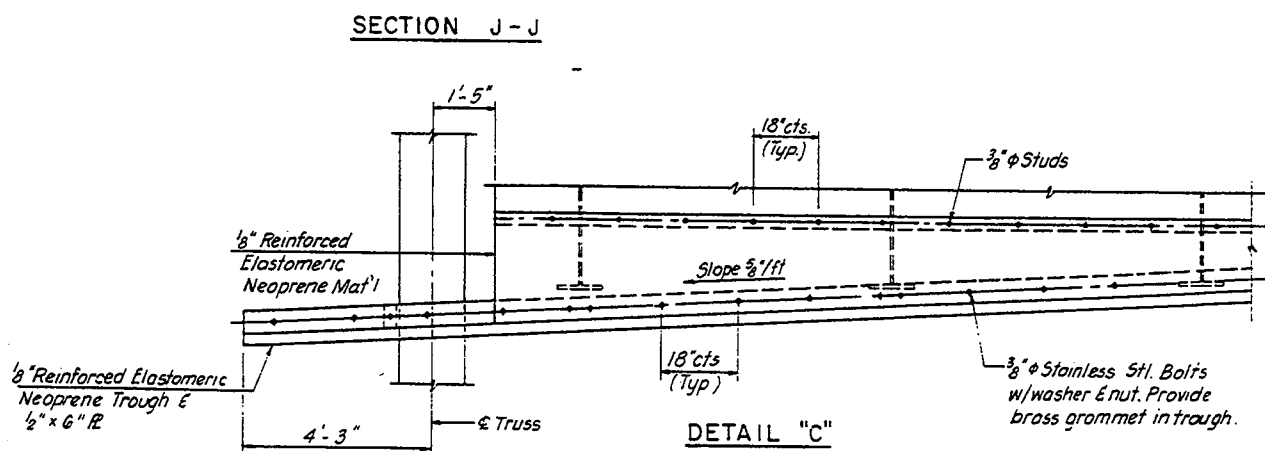
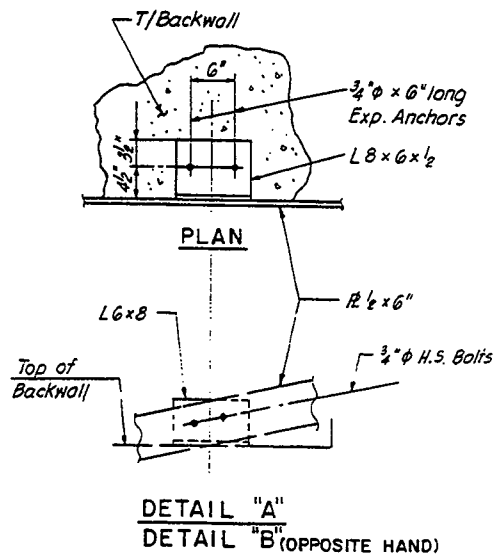
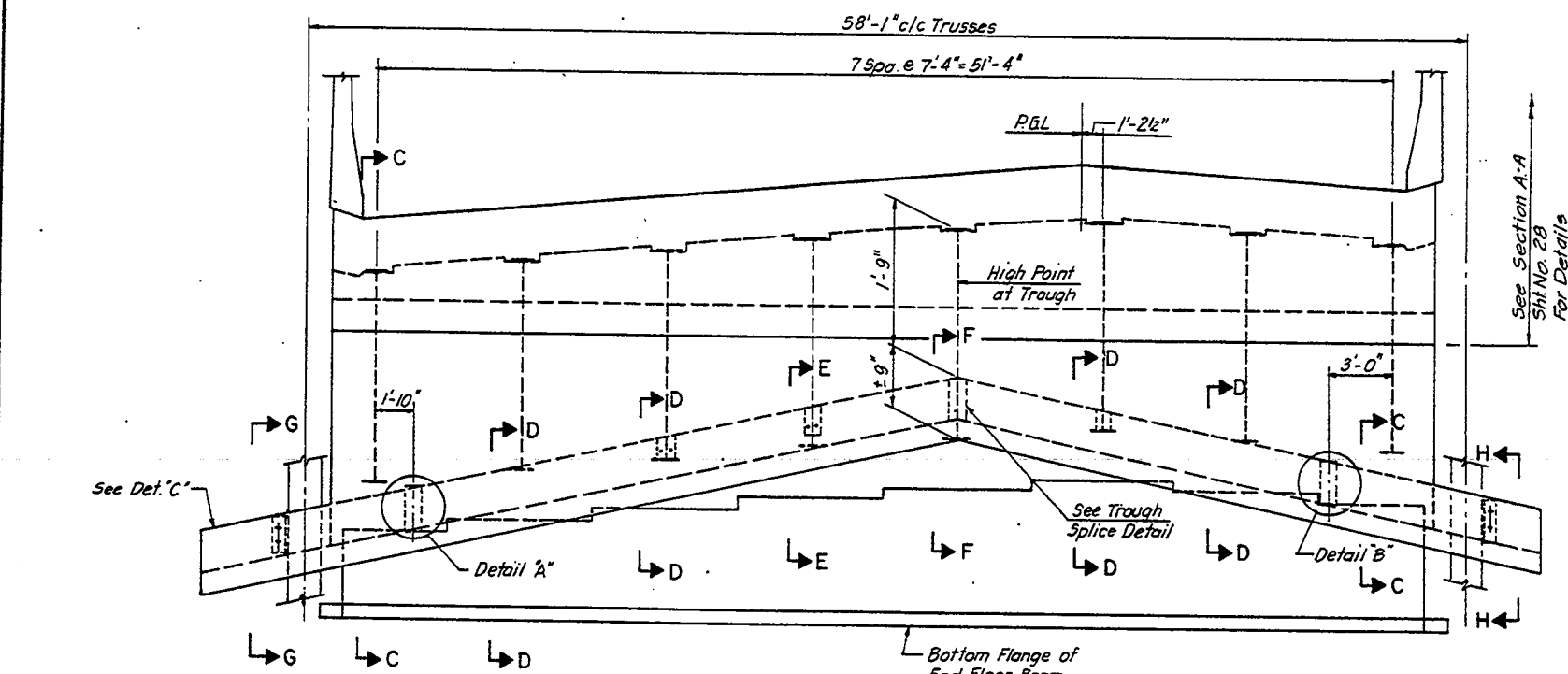
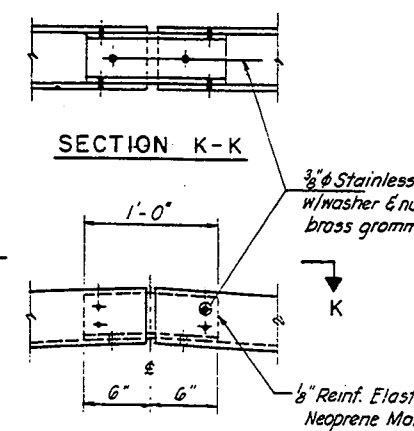
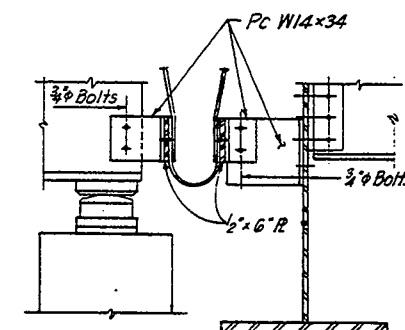
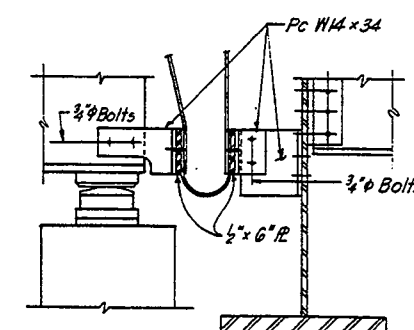
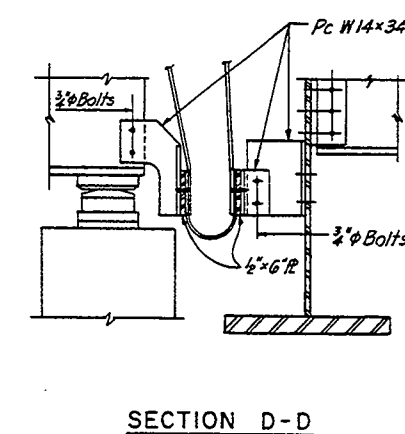
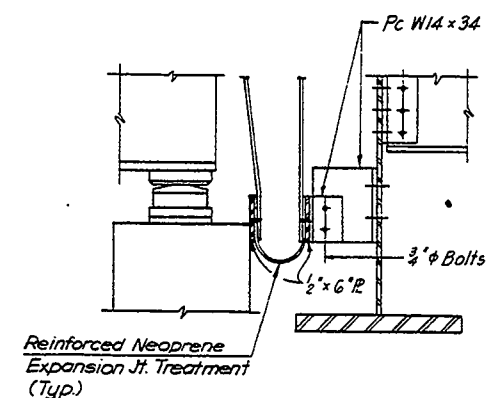
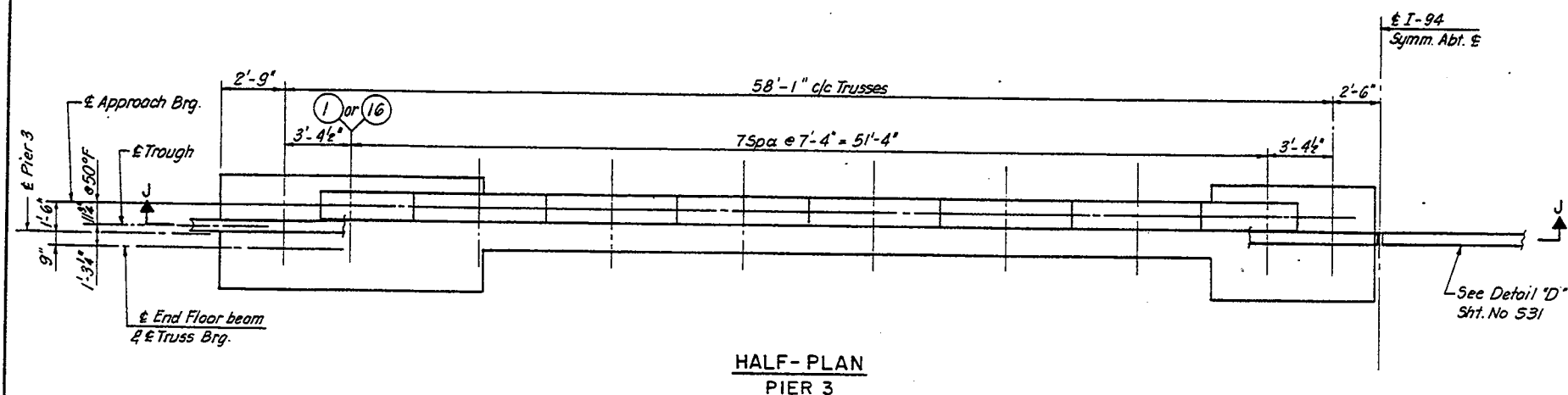
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FINGER PLATE DETAILS
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY S.P.
CHECKED BY J.M.

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-94	*	COOK	318	201
STA.	TO STA.	PROJECT		
FED. ROAD DIST. NO. 1	ALLOYS	FEDERAL AID PROJECT		

SHT. S29 OF S54



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS SPAN FLOATING BEARINGS
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY MT & CM
CHECKED BY LM



Notes:
For Sections G-G & H-H see Sht. No. 531
Trough Support Brackets, Nuts and Bolts
shall be Hot Dipped Galvanized.

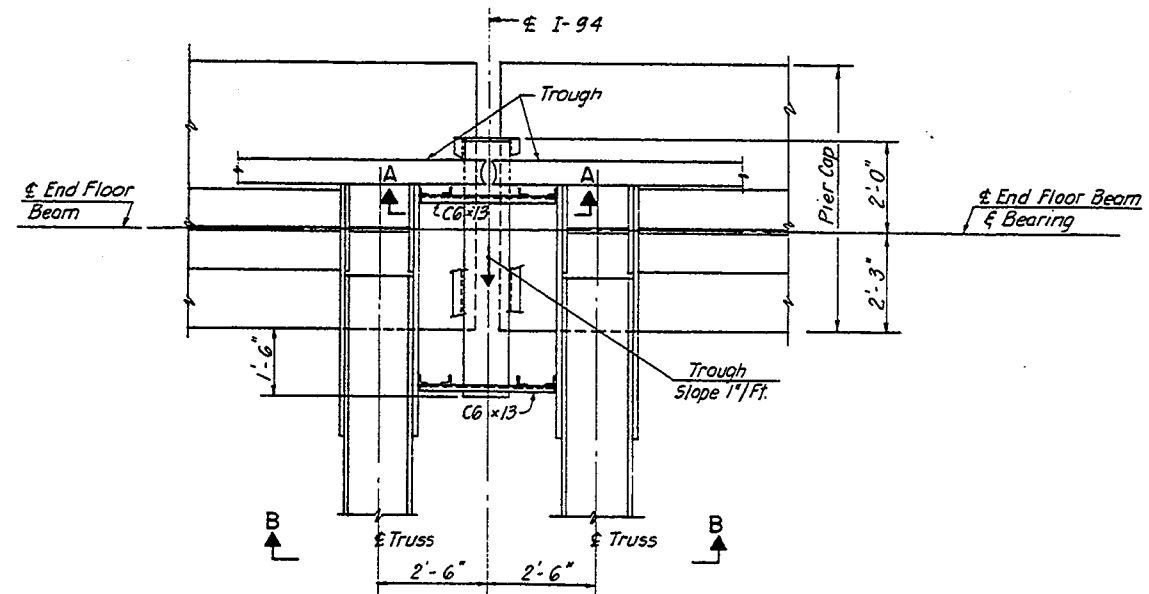
BILL OF MATERIAL			
ITEM	UNIT	CONSTR. STAGES	
		II	III
<i>Reinforced Neoprene</i>			
<i>Expansion Joint Treatment</i>	L.F.	64	64

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS SPAN TROUGH DETAILS - I
FA.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE DRAWN BY S.P.
DATE NOV. 1991 CHECKED BY J.M.

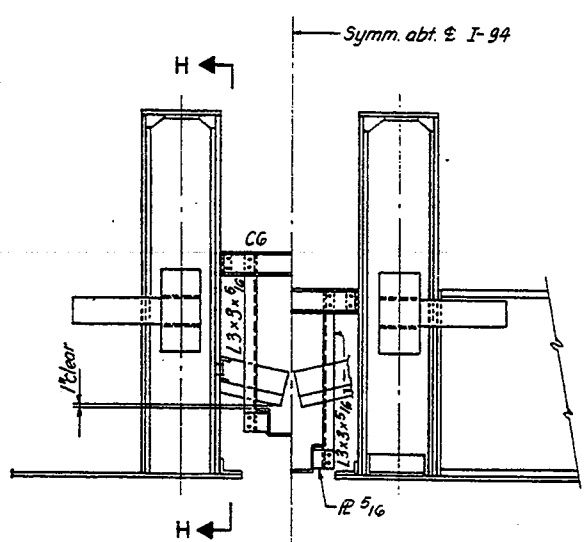
• 42 (VB-10, 12, HB-14, B-11) &
0707.1 HB(R-3) 190

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	*	COOK	312	203
STA.	TO STA.			
PER. ROAD DIST. NO. 1	ILLINOIS	PERSONAL AND PROJECT		

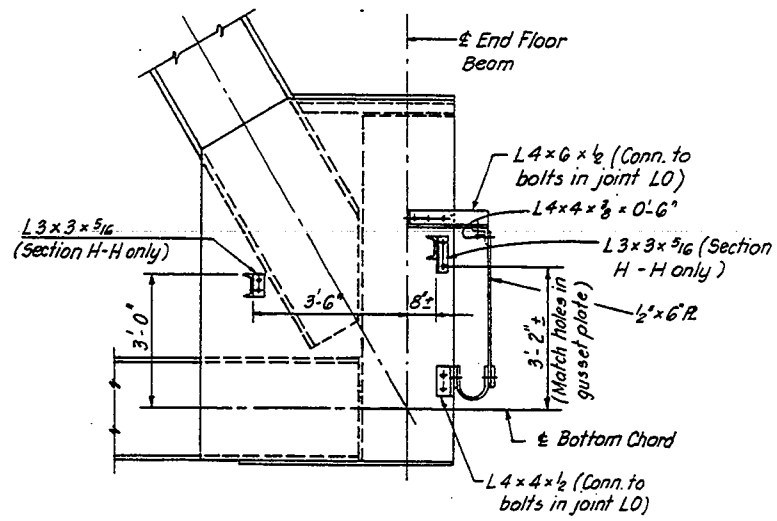
SHT. 537 OF 554



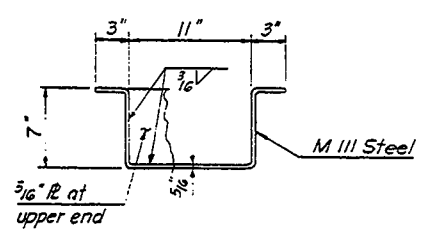
PLAN
DETAIL "D"



SECTION A-A SECTION B-B



SECTION H-H
SECTION G-G (OPPOSITE HAND &
SIMILAR U.N.)

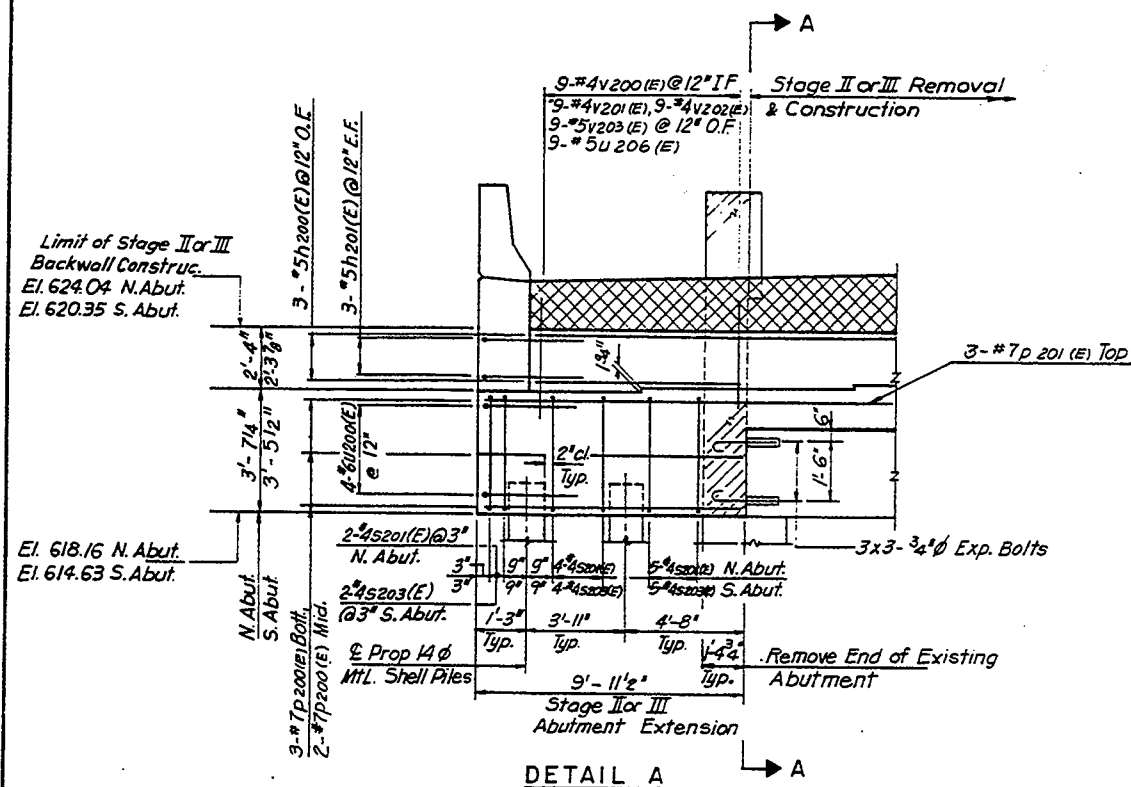


GUTTER DETAIL
(N.T.S.)

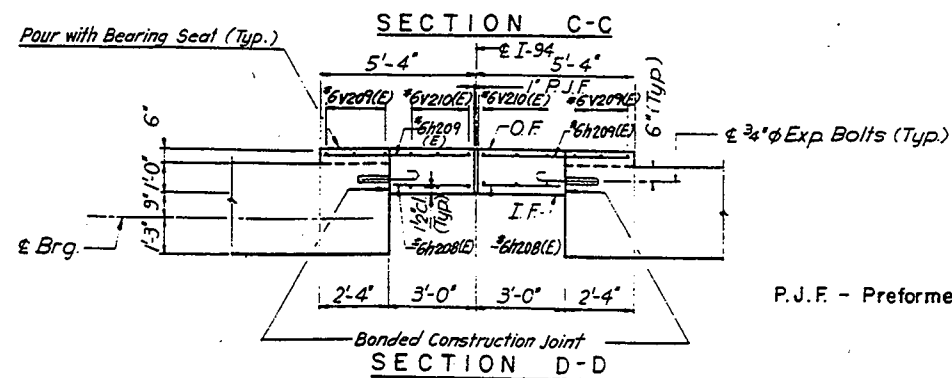
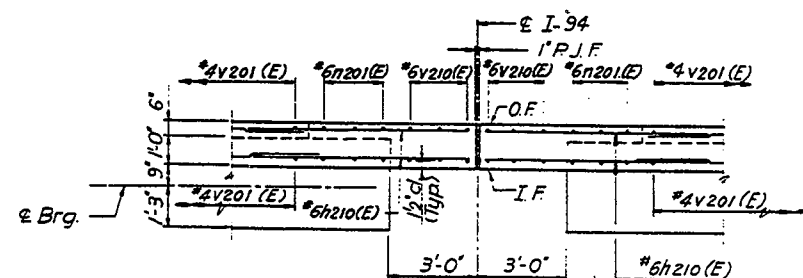
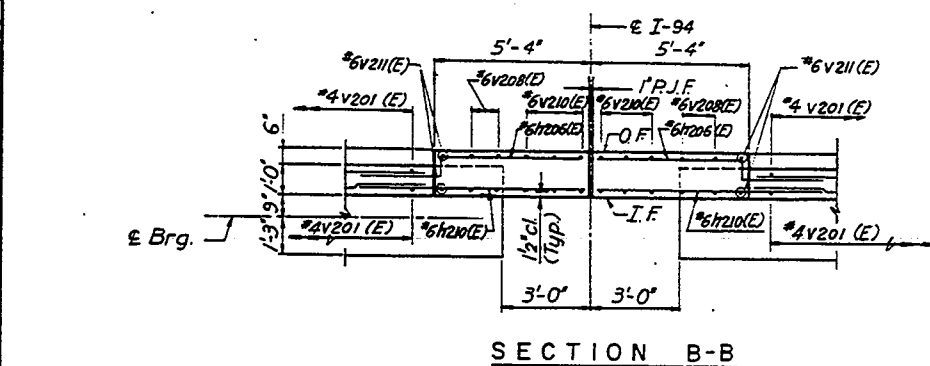
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRUSS SPAN TROUGH DETAILS-II
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE DRAWN BY S.P.
DATE NOV. 1981 CHECKED BY J.M.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
I-94	A	COOK	318	206
Sta		TO Sta		
FED. ROAD DIST. NO 1		ALIMONS	FEDERAL AID PROJECT	

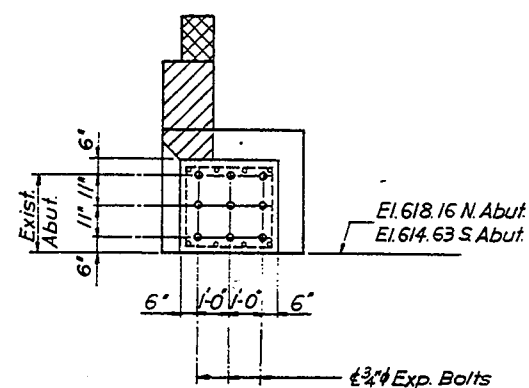
SHT. S34 OF S54



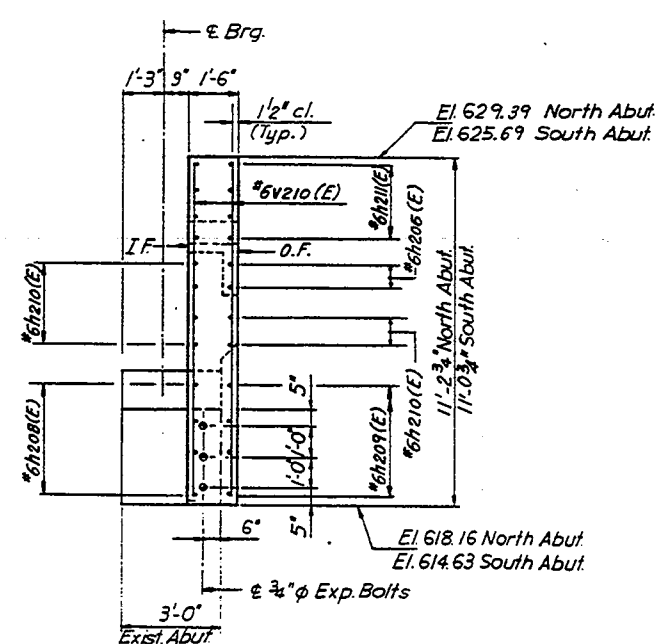
DETAIL A



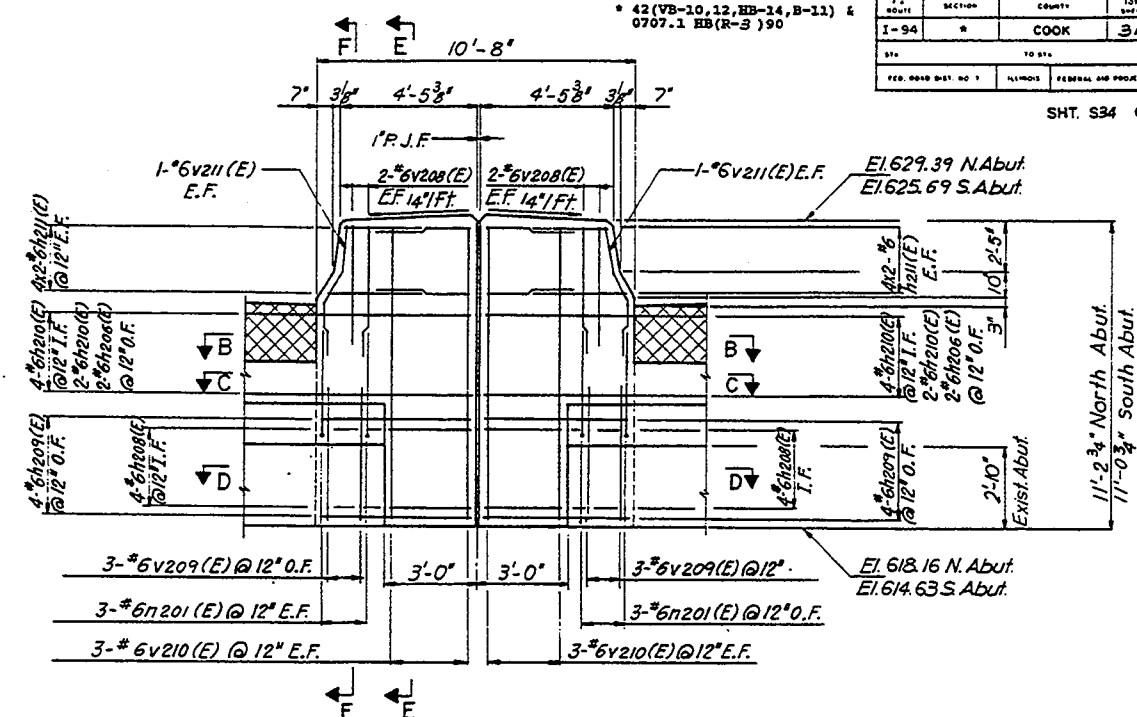
P.J.F. - Preformed Joint Filler



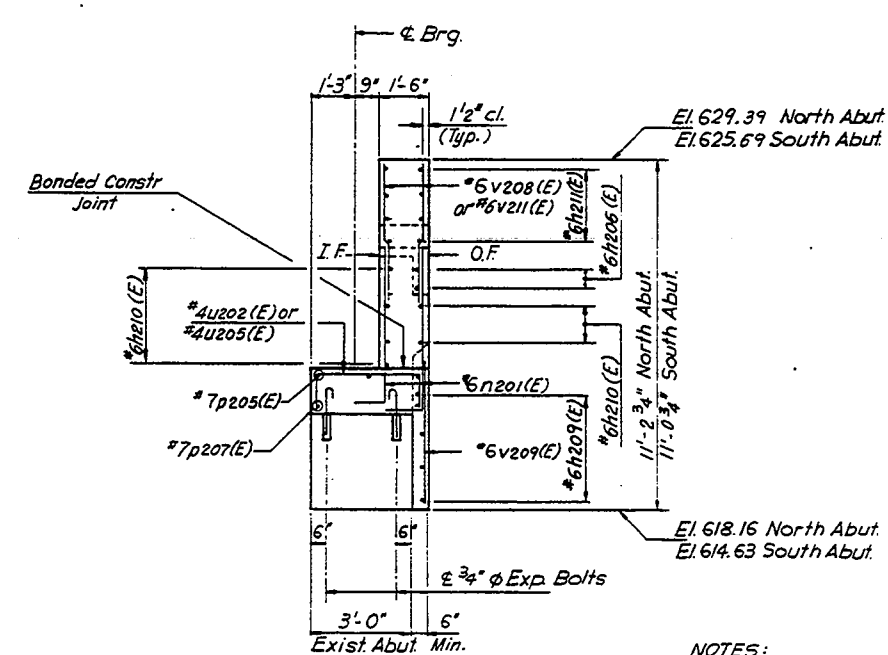
SECTION A-A



SECTION E-E



DETAIL B

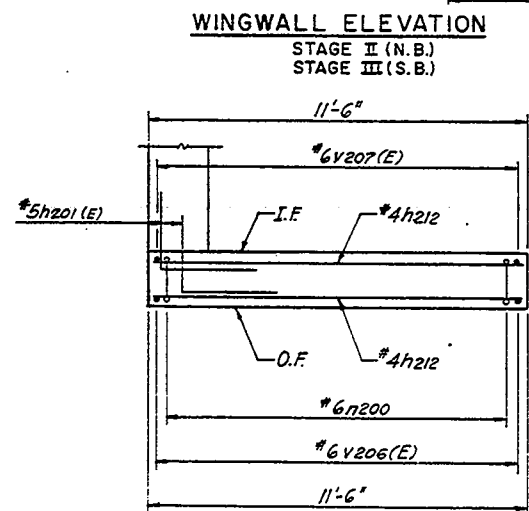
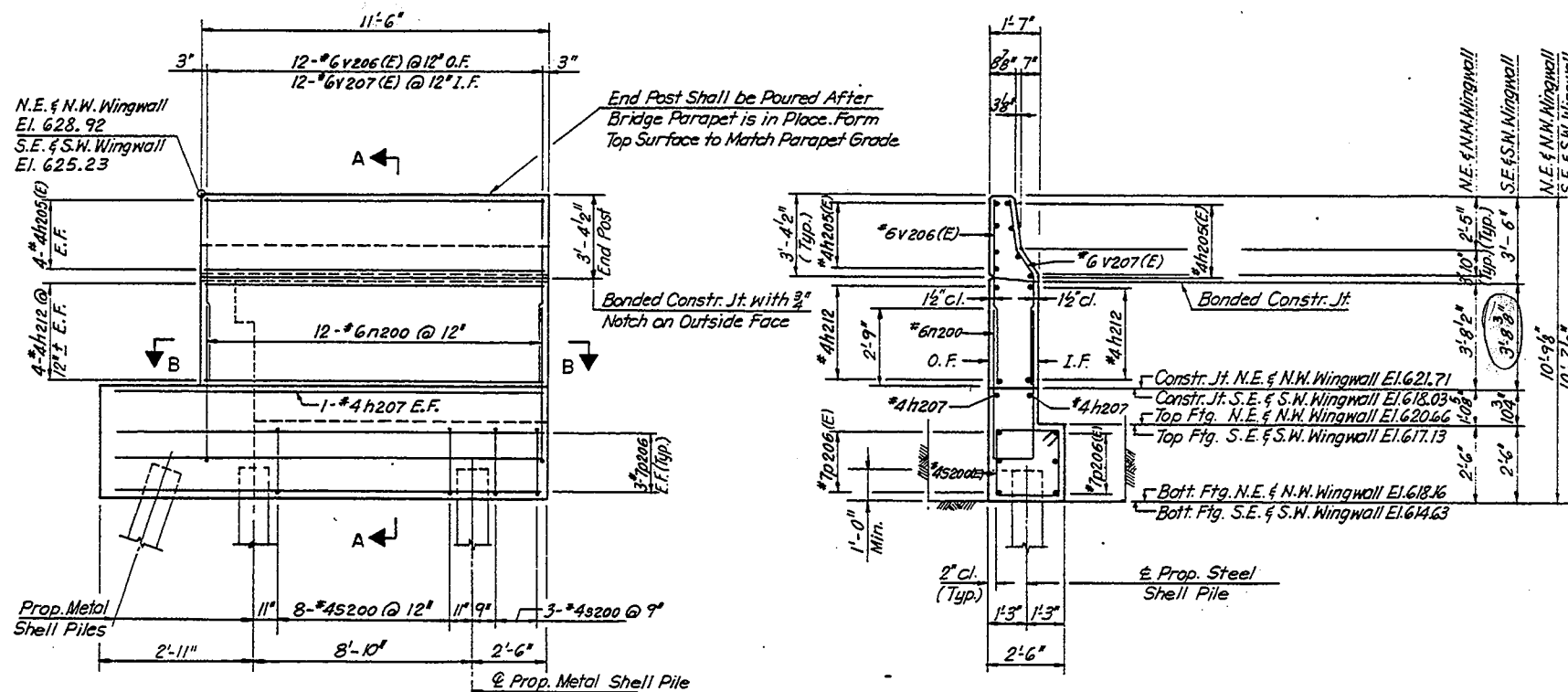


SECTION F-F

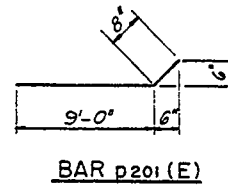
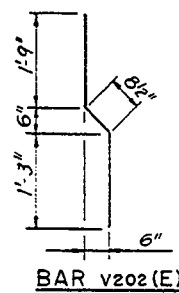
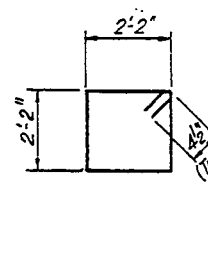
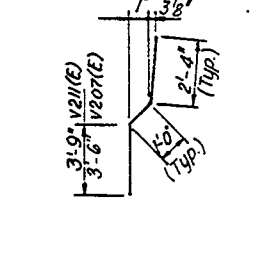
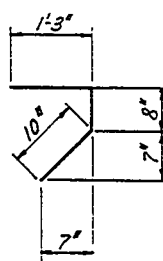
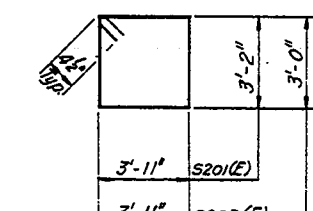
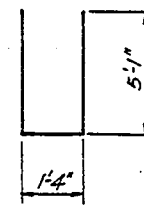
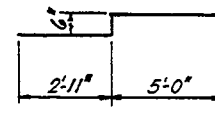
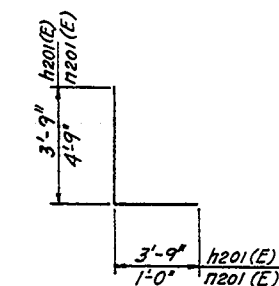
NOTES:

IF indicates Inside Face
OF indicates Outside Face
E.F indicates Each Face

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
NORTH & SOUTH ABUTMENT DETAILS III
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
 SN 016-0159 (N. BOUND)
SCALE DRAWN BY M.T.
DATE NOV. 1991 CHECKED BY J.M.



BAR	A	B
U200(E)	3'-11"	2'-7"
U201(E)	2'-8"	7"
U202(E)	2'-8"	11"
U203(E)	2'-8"	1'-1"
U204(E)	2'-8"	5"
U205(E)	2'-8"	9"
U206(E)	9"	7"



ITEM	UNIT	TOTAL NO.		CONSTRUCTION STAGES	
		N.ABUT.	S.ABUT.	II	III
Structure Excavation	C.Y.	124.4	124.4	124.4	124.4
Porous Granular Embankment	C.Y.	64.4	64.4	64.4	64.4
Concrete Removal	C.Y.	27.9	27.9	27.9	27.9
Class X Concrete	C.Y.	55	52.6	53.8	53.8
Furnishing Metal Pile Shells	L.F.	256	228	242	242
Driving & Filling Shells	L.F.	256	228	242	242
Test Piles, Metal Shell	Each	2	2	2	2
Expansion Bolts, 3/4"	Each	142	142	142	142
Reinforcement Bars Epoxy Coated	Lbs.	7340	7320	7330	7330

NOTES:
I.F. indicates Inside Face
O.F. indicates Outside Face
E.F. indicates Each Face

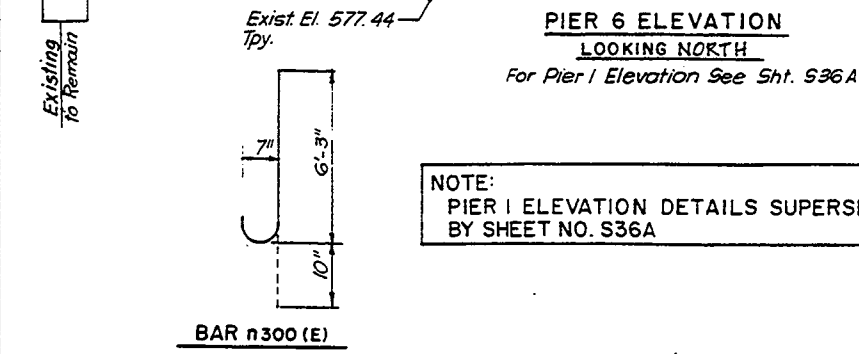
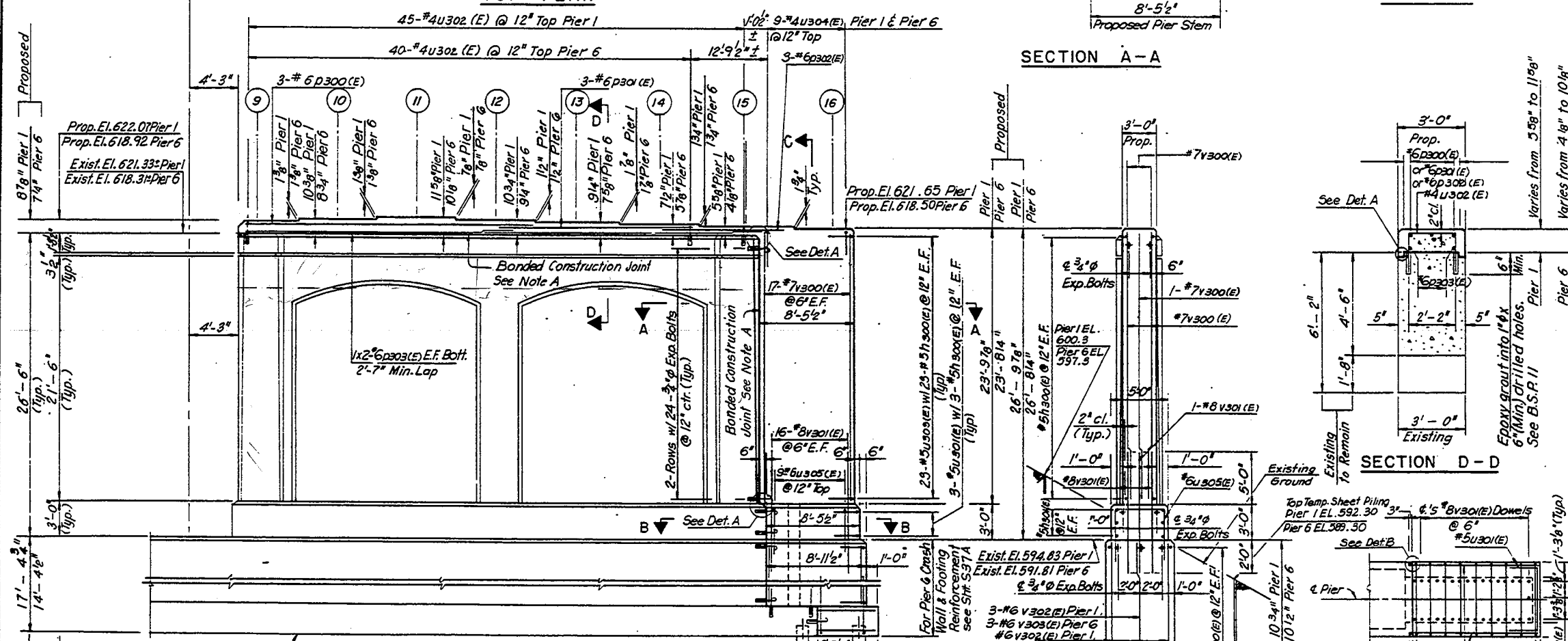
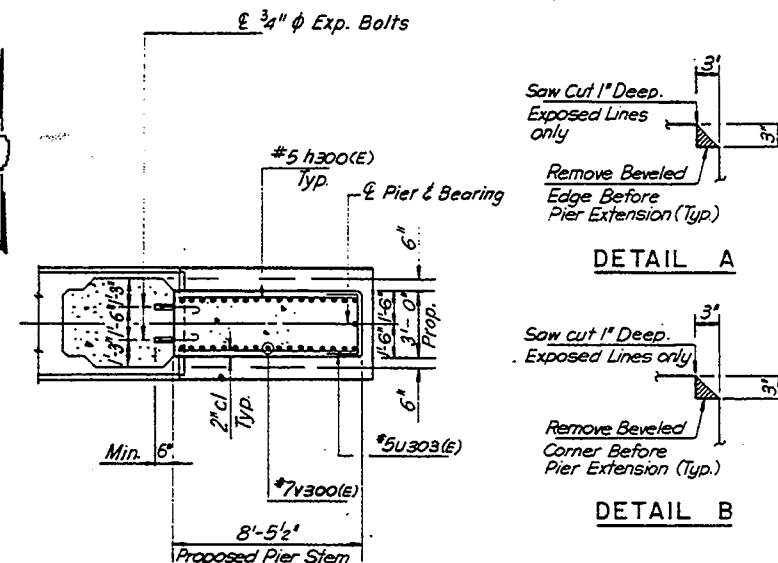
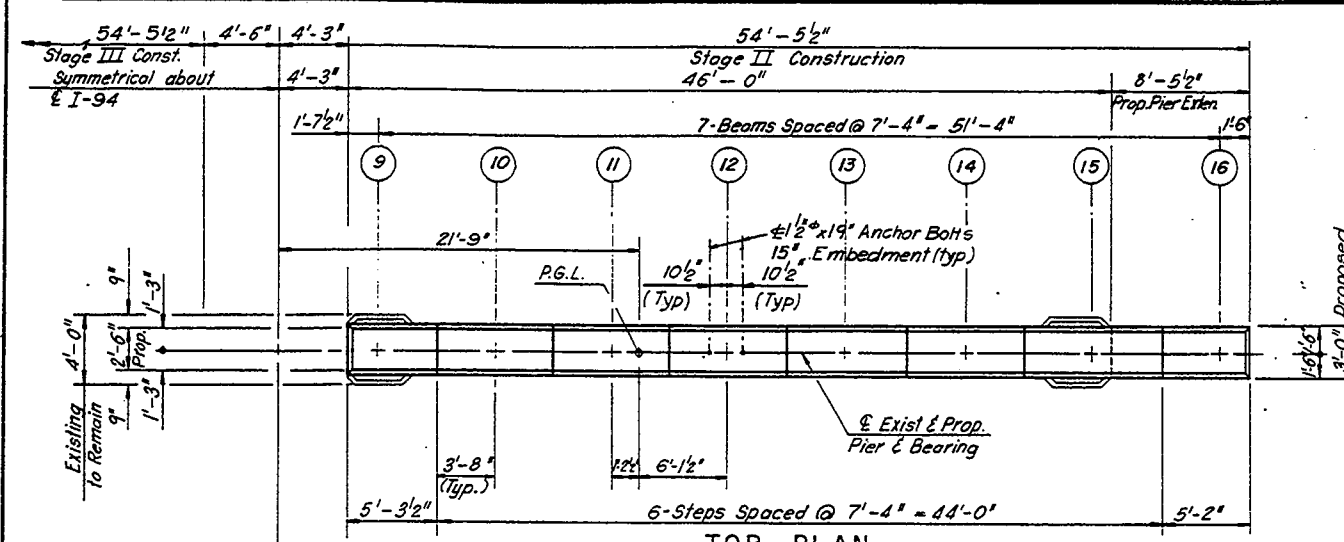
BILL OF MATERIAL							
BAR	TOTAL NO.		CONSTRUCTION STAGES		SIZE	LENGTH	SHAPE
	N.ABUT.	S.ABUT.	II	III			
h200(E)	12	12	12	12	#5	9'-0"	—
h201(E)	12	12	12	12	#5	7'-6"	L
h202(E)	16	16	16	16	#5	22'-11"	—
h203(E)	4	4	4	4	#5	28'-0"	—
h204(E)	16	16	16	16	#6	26'-4"	—
h205(E)	16	16	16	16	#4	11'-2"	—
h206(E)	4	4	4	4	#6	8'-5"	J
h207(E)	4	4	4	4	#4	14'-0"	—
h208(E)	8	8	8	8	#6	2'-8"	—
h209(E)	8	8	8	8	#6	5'-0"	—
h210(E)	12	12	12	12	#6	7'-11"	—
h211(E)	32	32	32	32	#6	3'-10"	—
h212(E)	16	16	16	16	#4	11'-2"	—
n200(E)	24	24	24	24	#6	11'-6"	J
n201(E)	12	12	12	12	#6	5'-9"	L
p200(E)	16	16	16	16	#7	9'-8"	—
p201(E)	6	6	6	6	#7	9'-8"	—
p202(E)	6	6	6	6	#7	15'-0"	—
p203(E)	6	6	6	6	#7	17'-3"	—
p204(E)	6	6	6	6	#7	6'-8"	—
p205(E)	6	6	6	6	#7	16'-9"	—
p206(E)	12	12	12	12	#7	14'-0"	—
p207(E)	8	8	8	8	#7	24'-7"	—
s200(E)	22	22	22	22	#4	9'-5"	□
s201(E)	22	—	11	11	#4	14'-11"	□
s203(E)	—	22	11	11	#4	14'-7"	□
u200(E)	8	8	8	8	#6	9'-1"	□
u201(E)	22	—	11	11	#4	3'-10"	□
u202(E)	60	16	38	38	#4	4'-6"	□
u203(E)	16	—	8	8	#4	4'-10"	□
u204(E)	—	22	11	11	#4	3'-6"	□
u205(E)	—	60	30	30	#4	4'-2"	□
u206(E)	108	108	108	108	#5	1'-11"	□
v200(E)	18	18	18	18	#4	4'-10"	—
v201(E)	198	198	198	198	#4	4'-1"	—
v202(E)	18	18	18	18	#4	3'-9"	J
v203(E)	108	108	108	108	#5	2'-0"	—
v205(E)	90	90	90	90	#4	2'-9"	J
v206(E)	24	24	24	24	#6	6'-10"	—
v207(E)	24	24	24	24	#6	6'-10"	J
v208(E)	8	8	8	8	#6	6'-7"	—
v209(E)	6	6	6	6	#6	7'-0"	—
v210(E)	12	12	12	12	#6	10'-9"	—
v211(E)	4	4	4	4	#6	6'-11"	J

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
NORTH & SOUTH ABUTMENT DETAILS IV
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 +54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY B.A.
CHECKED BY J.M.

* 42 (VB-10, 12, HB-14, B-11) &
0707.1 HB(R-3) 190

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-94	COOK	318	2084
DATE	BY	DATE	BY
REV. 0000 05/1/01	ALWAYS	REV. 0000 05/1/01	ALWAYS

SHT. S36 OF S34



NOTE:
PIER 1 ELEVATION DETAILS SUPERSEDED
BY SHEET NO. S36A

BAR	A	B
U300	5'-8"	2'-0"
U301	4'-8"	3'-2"
U302	2'-3"	1'-4"
U303	2'-8"	1'-4"
U304	2'-8"	1'-4"
U305	4'-8"	4'-10"

BARS U300(E) THRU U305(E)

SECTION C-C

@ 13'-3 1/4" Expansion Bolts

TABLE OF SEAT ELEVATIONS																
BEAM NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PIER 1	621.65	621.80	621.95	622.10	622.25	622.30	622.19	622.07	622.07	622.19	622.30	622.23	622.10	621.95	621.80	621.65
PIER 6	618.50	618.65	618.80	618.95	619.08	619.15	619.04	618.92	618.92	619.04	619.15	619.08	618.95	618.80	618.65	618.50

TABLE OF SEAT ELEVATIONS

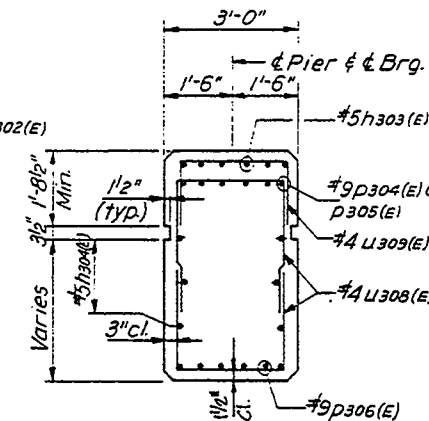
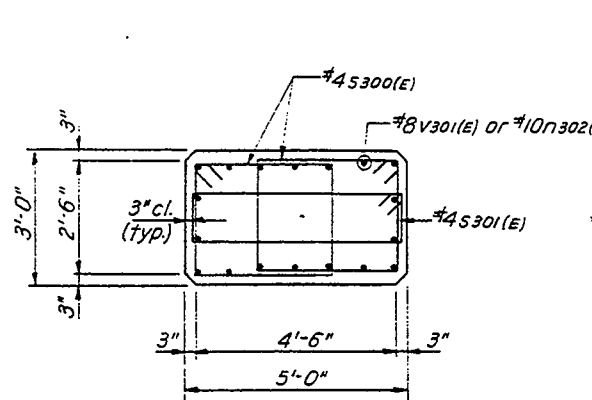
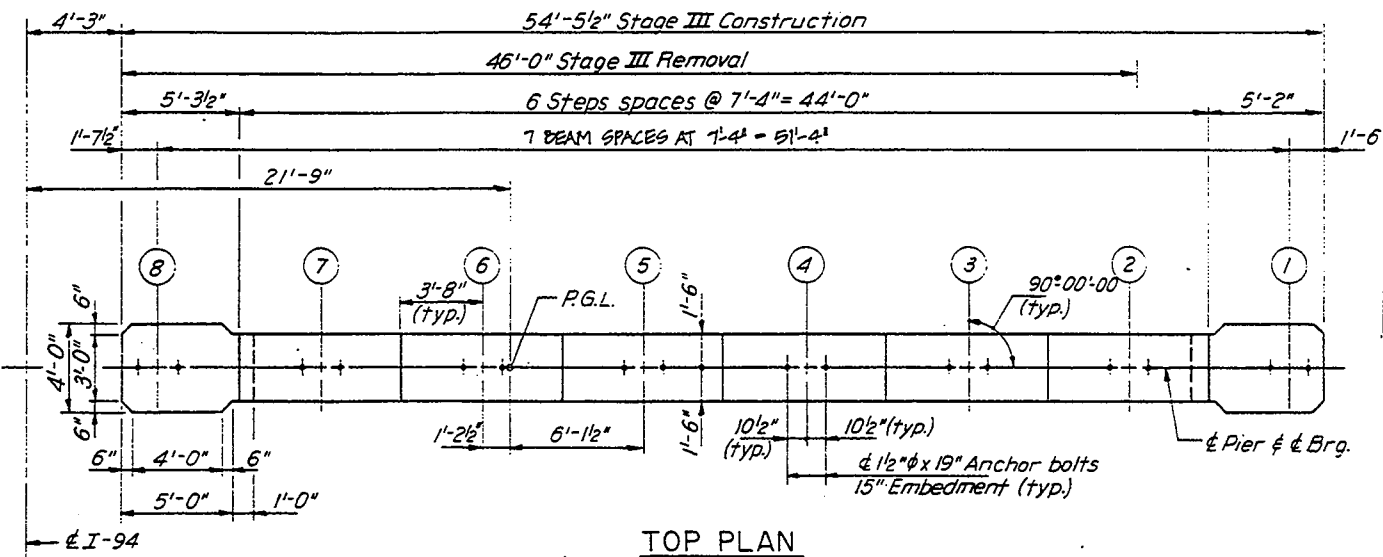
BILL OF MATERIAL							
BAR	PIER NO.		CONST. STAGES		SIZE	LENGTH	SHAPE
	PIER 1	PIER 6	II	III			
n300(E)	26	26	13	13	#7	7'-1"	
n301(E)	12	12	6	6	#7	4'-6"	
p300(E)	6	6	3	3	#6	27'-8"	
p301(E)	6	6	3	3	#6	16'-0"	
p302(E)	6	6	3	3	#6	12'-3"	
p303(E)	8	8	4	4	#6	24'-4"	
h300(E)	104	104	52	52	#5	8'-0"	
h301(E)	60	48	24	24	#5	8'-6"	
t300	12	12	6	6	#7	14'-0"	
t301	12	12	6	6	#5	11'-6"	
w300	30	30	15	15	#5	5'-2"	
u300(E)	30	24	12	12	#5	9'-8"	
u301(E)	6	6	3	3	#5	11'-0"	
u302(E)	90	80	40	40	#4	4'-11"	
u303(E)	46	46	23	23	#5	5'-4"	
u304(E)	18	18	9	9	#4	5'-4"	
u305(E)	18	18	9	9	#6	14'-4"	
v300(E)	70	70	35	35	#7	23'-0"	
v301(E)	66	66	33	33	#8	10'-0"	
v303(E)	—	42	21	21	#6	11'-7"	

ITEM	UNIT	TOTAL PIER 1	TOTAL PIER 6	CONST. STAGES
Reinforcement Bars	Lbs.	590	650	325
Class X Concrete	Cu. Yd.	126.6	114.6	57.3
Expansion Bolts, 3/4"	Each	218	200	100
Reinf. Bars Epoxy Coated	Lbs.	10,230	9650	4825
Structure Excavation	Cu. Yd.	878	2438	122.9
Concrete Removal	Cu. Yd.	86	70	3.5
Furnishing Steel Piles	H.P. 12X53	240	240	120
Driving Steel Piles	Lin. Ft.	340	240	120
Test Pile, Steel H.P. 12X53	Each	2	2	1
Epoxy Grouted Reinf. Bars	Each	180	172	86
Temporary Sheet Piling	Sq. Ft.	5,430	4,570	2285

Note A:
Remove all Deteriorated Concrete, Thoroughly Clean and Roughen Existing Concrete.
The Reinforcement Bar Dowels from Remove Concrete Areas shall be cleaned, cut to fit and incorporated into New Concrete.

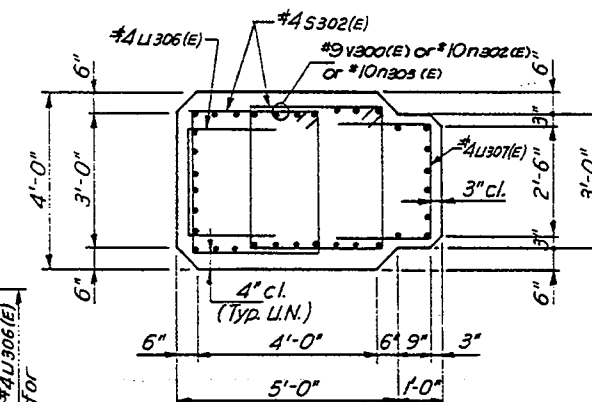
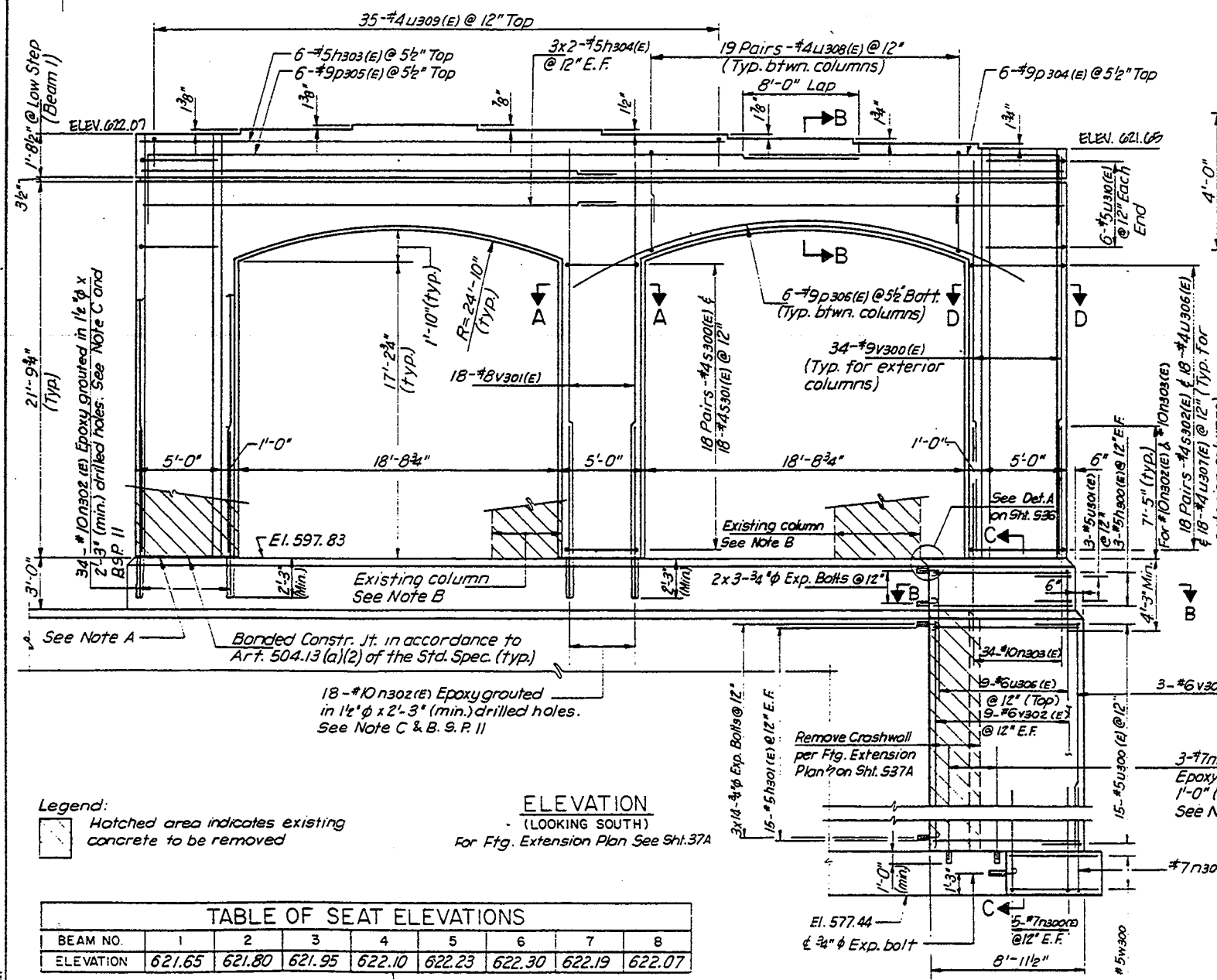
Notes:
All Exposed Edges shall have a 3/4" Chamfer Unless Noted.
Bars indicated thus 1X2 #6 etc. Indicates 1 line of Bars with 2 Lengths per line.
For Anchor Bolt Details See Sht. No. S 52
For Footing Extension Plan see Sht. No. S37A

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PIERS 1 & 6 DETAILS
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172+54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991, REV. 6/92
DRAWN BY: IMG
CHECKED BY: J.H.

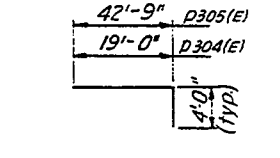
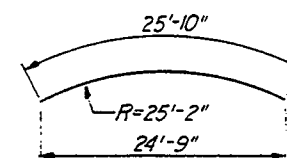


SECTION A-A

SECTION B-B



SECTION D-D



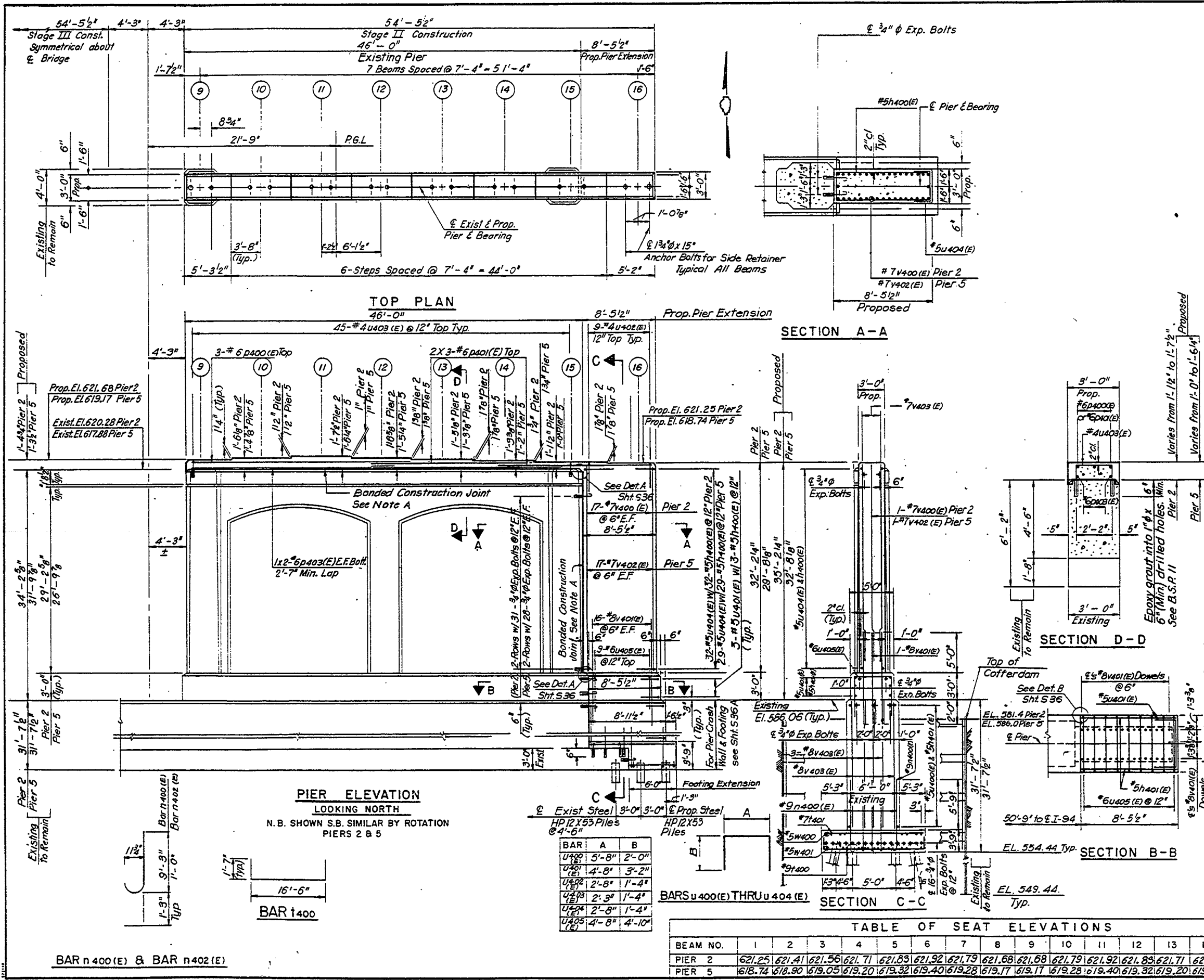
BAR t300

BAR n300(E)

BAR	STAGE III NO.	SIZE	LENGTH	SHAPE
h300(E)	6	#5	8'-0"	—
h301(E)	30	#5	8'-6"	—
h302(E)	6	#5	34'-2"	—
h304(E)	12	#5	28'-2"	—
n300(E)	10	#7	7'-1"	—
n301(E)	6	#7	4'-6"	—
n302(E)	52	#10	9'-8"	—
n303(E)	34	#10	11'-8"	—
p304(E)	6	#9	23'-0"	—
p305(E)	6	#9	46'-9"	—
p306(E)	12	#9	25'-10"	—
s300(E)	36	#4	11'-11"	—
s301(E)	18	#4	11'-7"	—
s302(E)	72	#4	13'-7"	—
u300(E)	15	#5	9'-8"	—
u301(E)	3	#5	11'-0"	—
u305(E)	9	#6	14'-4"	—
u306(E)	36	#4	7'-6"	—
u307(E)	36	#4	6'-8"	—
u308(E)	76	#4	10'-0"	—
u309(E)	35	#4	5'-6"	—
u310(E)	12	#5	12'-2"	—
v300(E)	68	#9	23'-6"	—
v301(E)	18	#8	23'-6"	—
v302(E)	21	#6	14'-7"	—
w300	15	#5	5'-2"	—
t300	6	#7	14'-0"	—
t301	6	#5	11'-6"	—
Reinforcement Bars		Lbs.	330	
Class X Concrete		Cu. Yd.	114.1	
Expansion Bolts, 3/4"φ		Each	61	
Reinf. Bars (Epoxy Coated)		Lbs.	17050	
Structure Excavation		Cu. Yd.	139	
Concrete Removal		Cu. Yd.	63.6	
Furnishing Steel Piles HP 12x53		Lin. Ft.	120	
Driving Steel Piles		Lin. Ft.	120	
Test Pile, Steel HP 12x53		Each	1	
Epoxy Grouted Reinf. Bars		Each	58	
Temporary Sheet Piling		Sq. Ft.	2715	

- Notes:
1. Space reinforcement in cap to miss anchor bolts.
 2. Pour steps monolithically with cap.
 3. All edges shall have standard 3/4" chamfers unless noted.
 4. Reinforcement bars designated (E) shall be epoxy coated.
 5. Bars indicated thus 3x2-#5 etc., indicates 3 lines of bars with 2 lengths per line.
 6. Minimum bar lap for #5 bars = 2'-2"
 7. See Sht. S52 of S54 for Anchor Bolt Details.
 8. Work this sheet with Sht's S36 & S37A.
 9. For Section B-B and C-C see Sht. S36

BEAM NO.	1	2	3	4	5	6	7	8
ELEVATION	621.65	621.80	621.95	622.10	622.23	622.30	622.19	622.07



BILL OF MATERIAL

BAR	PIER NO.	CONST. STAGES	SIZE	LENGTH	SHAPE
n400(E)	30	30	30	30	#9 10'-6"
n401(E)	16	16	16	16	#9 6'-3"
n402(E)	80	80	80	80	#9 2'-3"
p400(E)	6	6	6	6	#6 28'-8"
p401(E)	12	12	12	12	#6 18'-0"
p403(E)	8	8	8	8	#6 27'-4"
h400(E)	134	122	128	128	#5 8'-0"
h401(E)	112	112	112	112	#5 8'-6"
t400	14	14	14	14	#9 19'-8"
t401	20	20	20	20	#7 16'-0"
w400	16	16	16	16	#5 10'-2"
w401	28	28	28	28	#5 5'-6"
u400(E)	56	56	56	56	#5 9'-8"
u401(E)	6	6	6	6	#5 11'-0"
u402(E)	18	18	18	18	#4 5'-4"
u403(E)	90	90	90	90	#4 4'-11"
u404(E)	64	58	61	61	#5 5'-4"
u405(E)	18	18	18	18	#6 14'-4"
v400(E)	70	35	35	35	#7 31'-8"
v401(E)	66	66	66	66	#8 10'-0"
v402(E)	70	35	35	35	#7 29'-2"
v403(E)	50	50	50	50	#8 27'-6"

ITEM	UNIT	TOTAL	PIER 2	PIER 5	CONST. STAGE
Cofferdam	Each	2	2	2	2
Reinforcement Bars	Lbs.	1920	1920	1920	1920
Class "X" Concrete	Cu. Yd.	214	208	211	211
Expansion Bolts, 3/4"	Each	280	268	274	274
Reinf. Bars Epoxy Coated	Lbs.	16,750	16,260	16,505	16,505
Concrete Removal	Cu. Yd.	15.8	15.8	15.8	15.8
Furnishing Steel Piles	Lin. Ft.	420	420	420	420
HP 12X23	Lin. Ft.	420	420	420	420
Driving Steel Piles	Each	2	2	2	2
Test Piles, Steel HP 12X53	Each	2	2	2	2
Epoxy Grouted Reinf. Bars	Each	276	276	276	276
Cofferdam Excavation	Cu. Yd.	235	235	235	235

Note A: Remove all deteriorated concrete thoroughly clean and roughen existing concrete. The Reinforcement Bar Dowels from Removed Concrete Areas shall be cleaned, cut to fit and incorporated into New Concrete.

NOTES:
All Exposed Edges shall have a 3/4" Chamfer Unless Noted.
Bars indicated thus 1X2-#6 etc. Indicates 1 line of bars with 2 lengths per line.
For Anchor Bolt Details See Sht. No. 552

TABLE OF SEAT ELEVATIONS

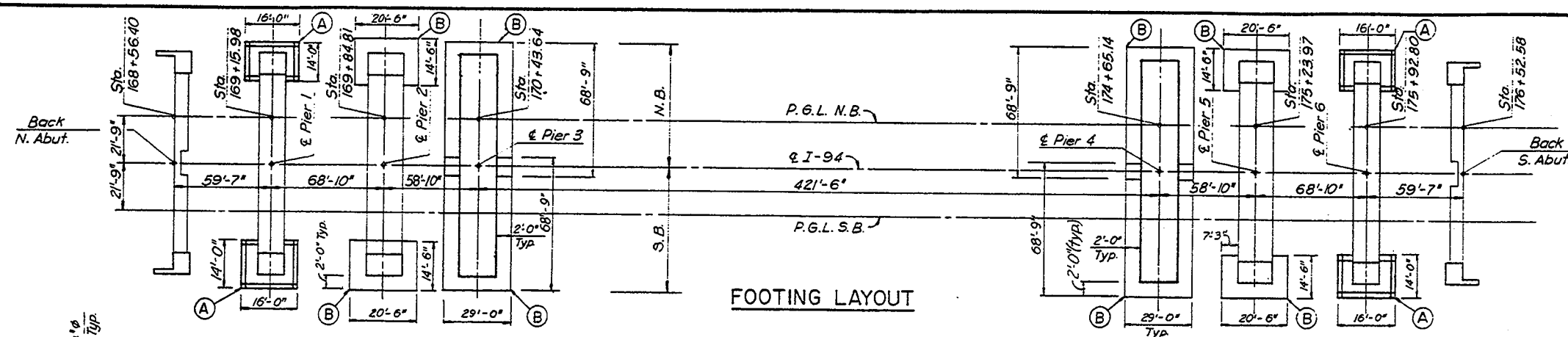
BEAM NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PIER 2	621.25	621.41	621.56	621.71	621.83	621.92	621.79	621.68	621.68	621.79	621.92	621.83	621.71	621.56	621.41	621.25
PIER 5	618.74	618.90	619.05	619.20	619.32	619.40	619.28	619.17	619.17	619.28	619.40	619.32	619.20	619.05	618.90	618.74

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PIERS 2 & 5 DETAILS
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172+54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY: IMG
CHECKED BY: J.M.

* 42 (VB-10, 12, HB-14, B-11) &
0707.1 HB(R-3) 90

SECTION	COUNT	TOTAL	UNIT
1-94	COOK	318	210
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT	

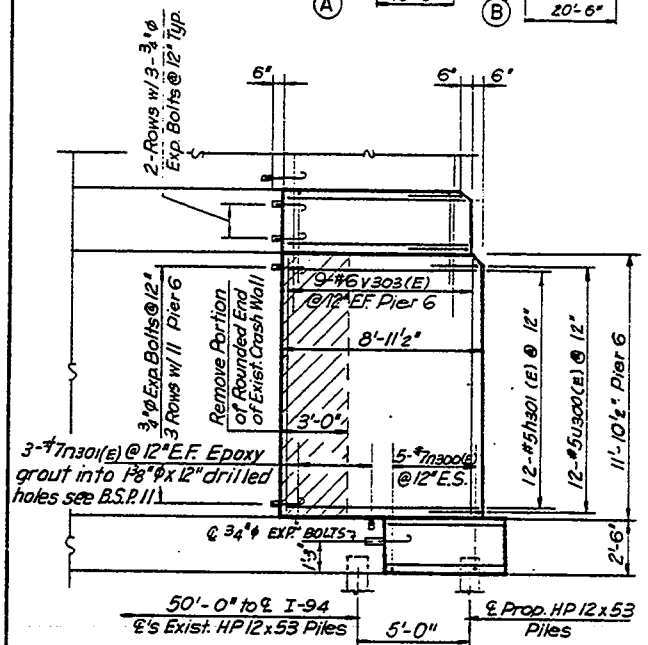
SHT. S37A OF S54



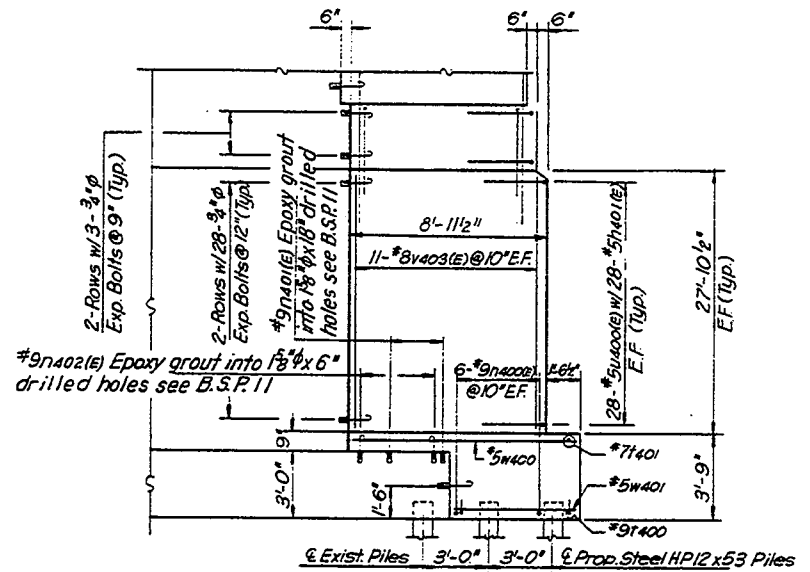
FOOTING LAYOUT

LEGEND:

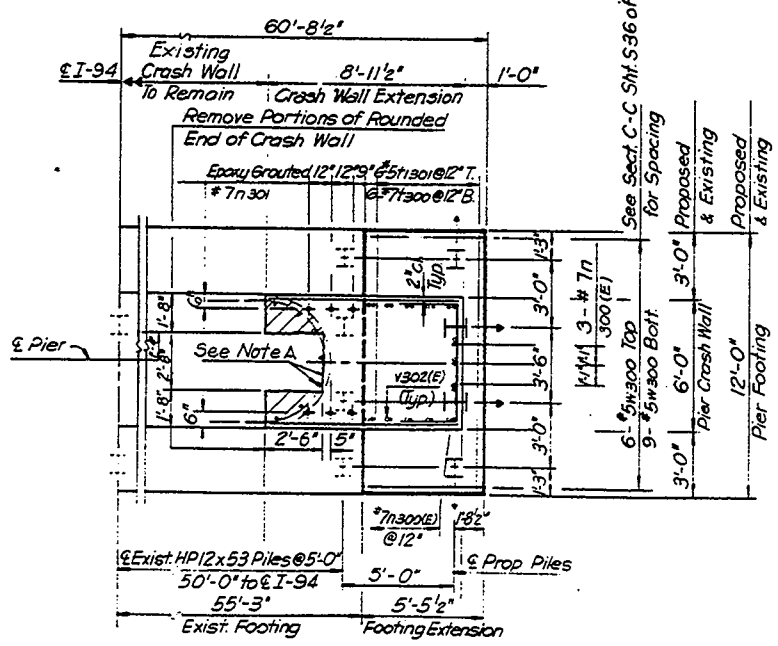
- (A) Temporary Sheet Piling Piers 1 and 6
- (B) Cofferdam Piers 2, 3, 4 and 5



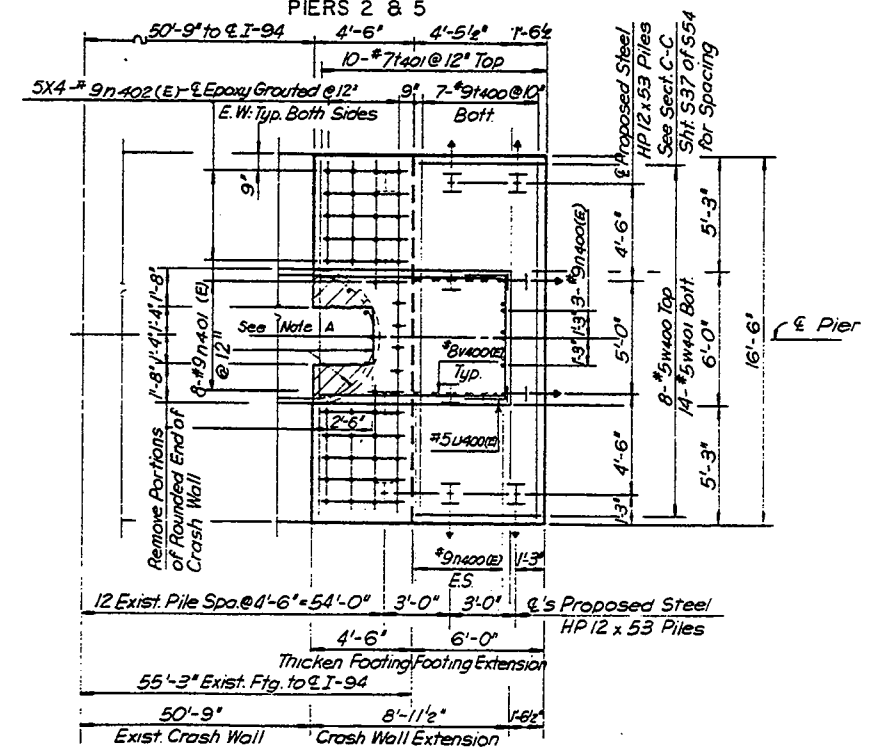
CRASH WALL EXTENSION - ELEVATION
PIER 6



CRASH WALL EXTENSION - ELEVATION
PIERS 2 & 5



FOOTING EXTENSION - PLAN
PIERS 1 & 6



FOOTING EXTENSION - PLAN
PIERS 2 & 5

Pile Data:

Type: HP 12 X 53
Capacity: 50 Ton
EST. Length: 40 ft for Pier 1 & 6; 30 ft for Pier 2 & 5
No. Reqd: 8 for Pier 1 (Includes 2 Test Pile)
8 for Pier 6 (Includes 2 Test Pile)
16 for Pier 2 (Includes 2 Test Pile)
16 for Pier 5 (Includes 2 Test Pile)

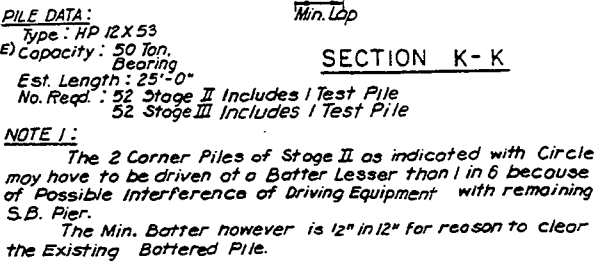
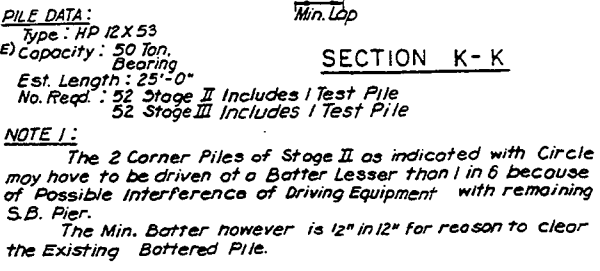
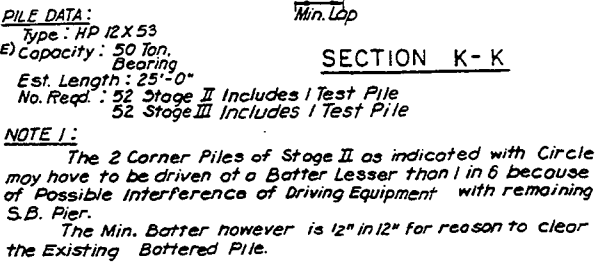
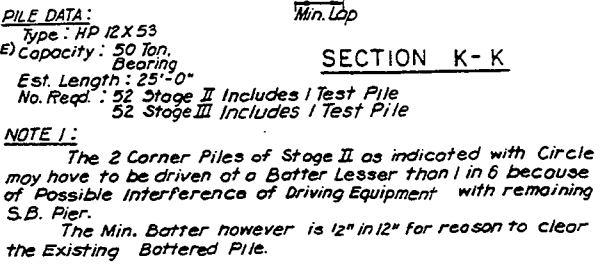
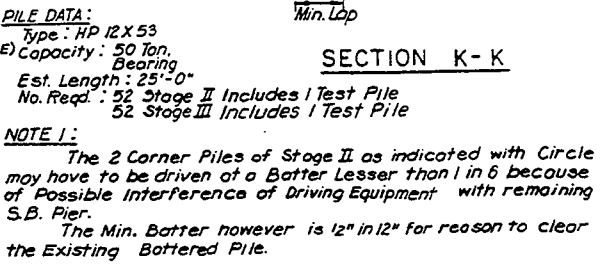
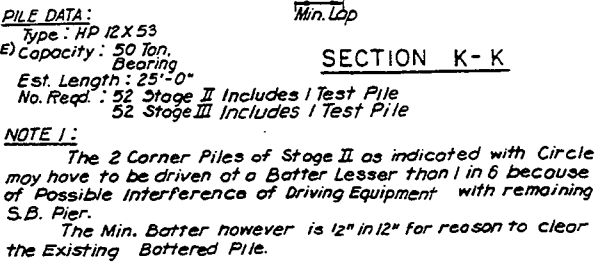
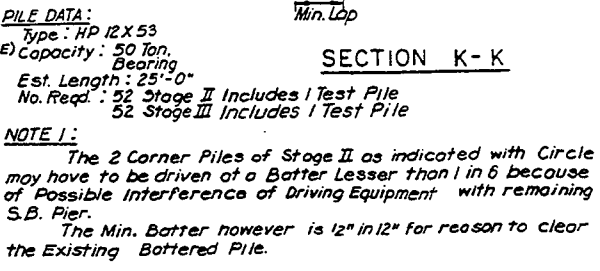
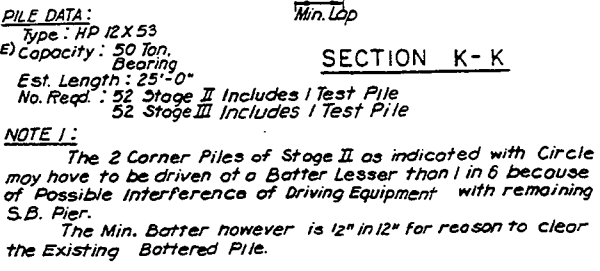
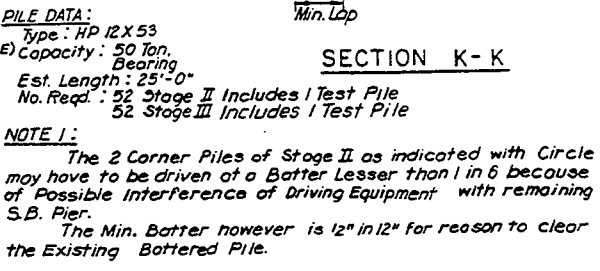
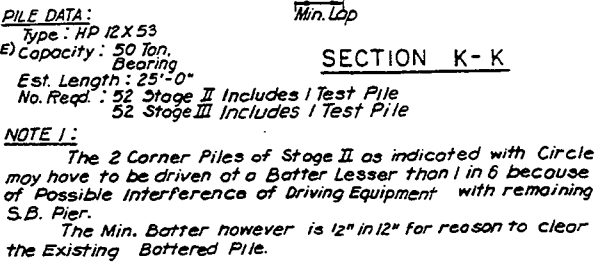
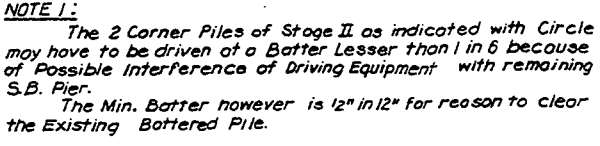
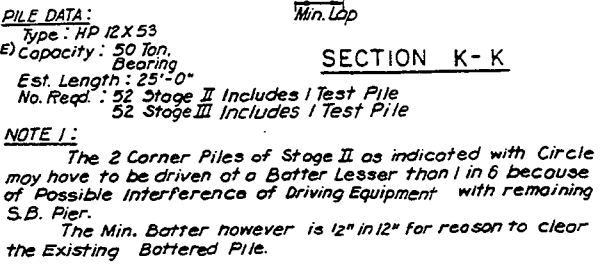
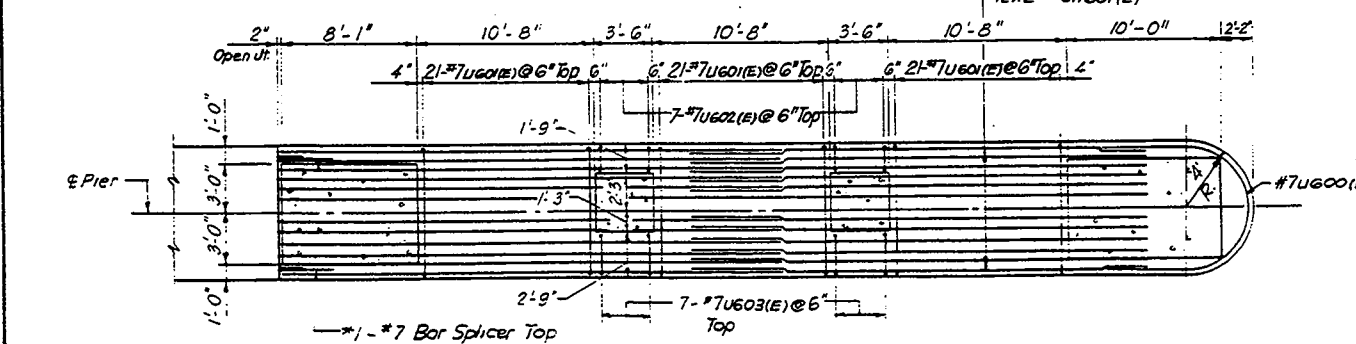
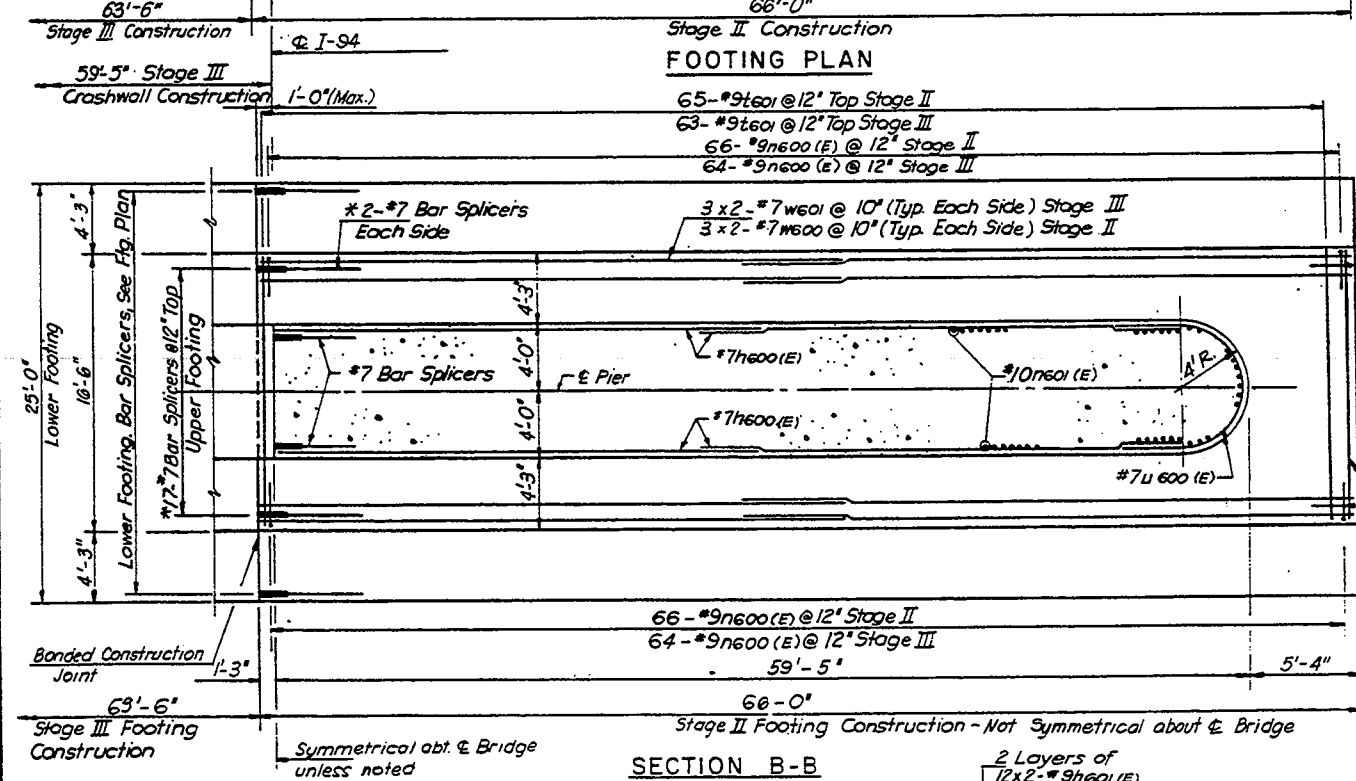
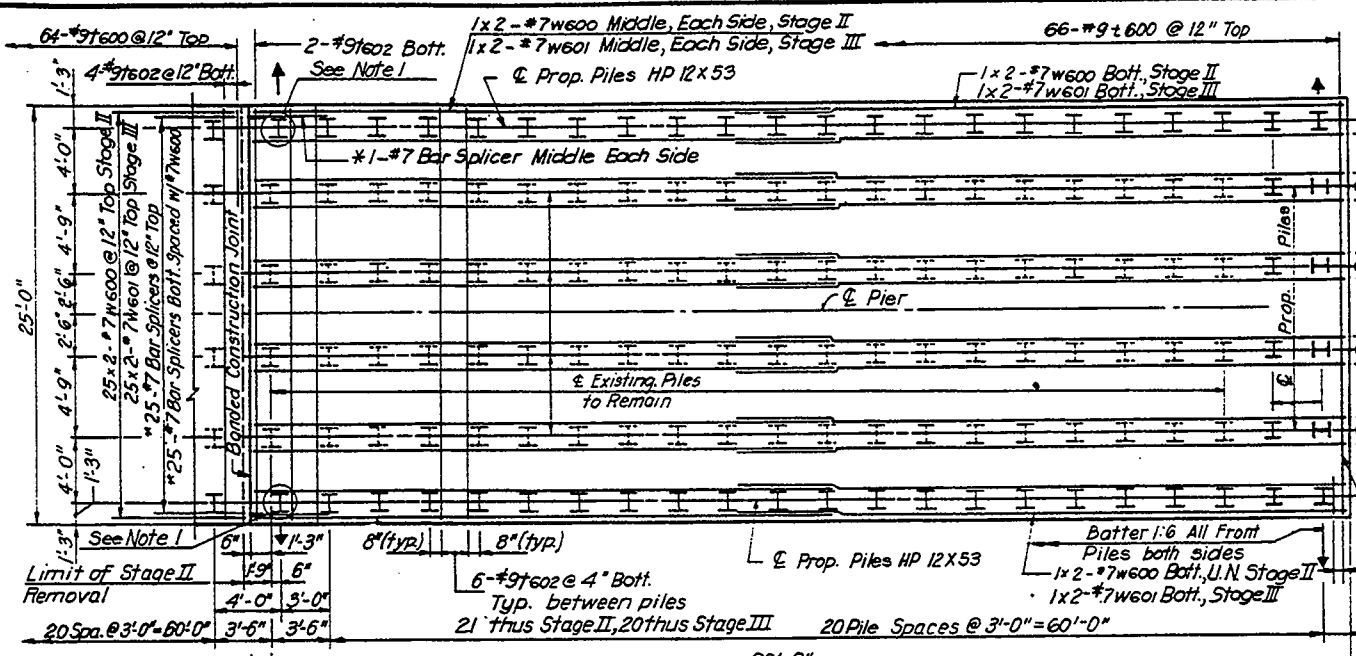
NOTE A:

Remove all Deteriorated Concrete, Thoroughly Clean and Roughen Existing Concrete.
The Reinforcement Bar Dowels from Removed Concrete Areas shall be cleaned, and Incorporated into New Concrete.

All Exposed Edges shall have a 3/4" Chamfer unless Noted.
Bars indicated thus 1X2 #6 etc. indicates 1 Line of Bars with 2 lengths per line.
For Anchor Bolt Details See Sht. No. S 52.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PIERS 186 AND 285 DETAILS FAI-94 OVER LITTLE CALUMET RIVER COOK COUNTY	
STA. 172 + 54.39	SN 016-0158 (S.BOUND) SN 016-0159 (N.BOUND)
SCALE	DRAWN BY S.P.
DATE NOV. 1991, REV. 6/92	CHECKED BY J.M.

NAME	SECTION	COUNTY	STATE	SHEET NO.
I-94	A	COOK	518	214
SHEET		TO SHEET		
FOR ROAD DIST NO. 1		ALLIANCE	PERMANENT AND PROJECT	

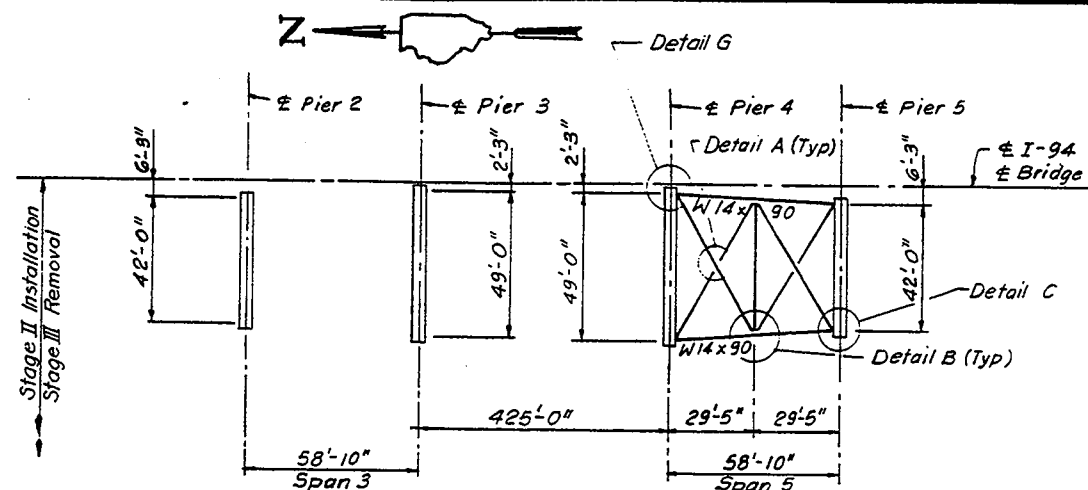


Note:
Work this sheet with Sht. No. 540
Min. Splice Lengths:
#7 Bar: 3'-5"
#9 Bar: 5'-9"

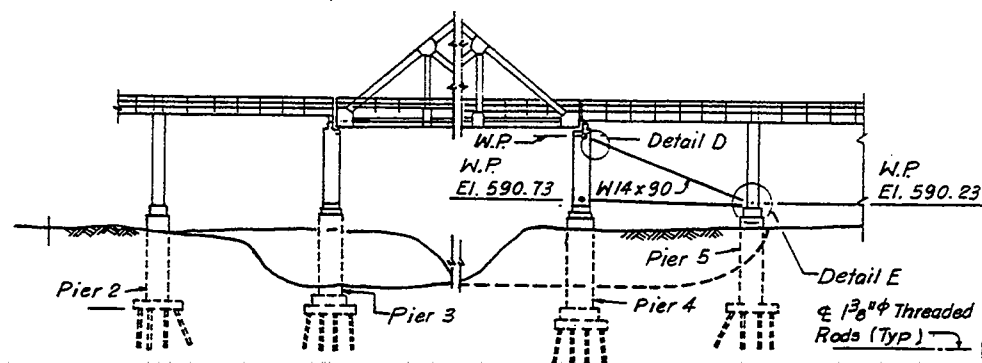
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PIER 4 DETAILS-II
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA.172 + 54.39 SN 016-0158 (S.BOUND)
SN 016-0159 (N.BOUND)
SCALE DRAWN BY S.P.
DATE NOV. 1991 CHECKED BY J.M.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94		COOK	318	215
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		

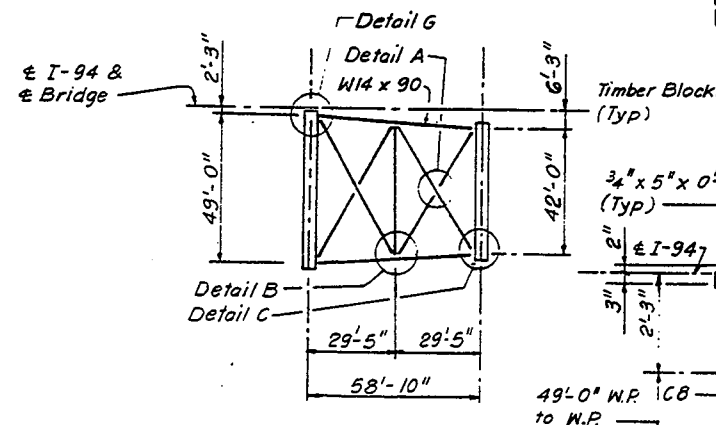
SHT. S42 OF S54



TOP BRACING PLAN
(South bound Bridge)



ELEVATION



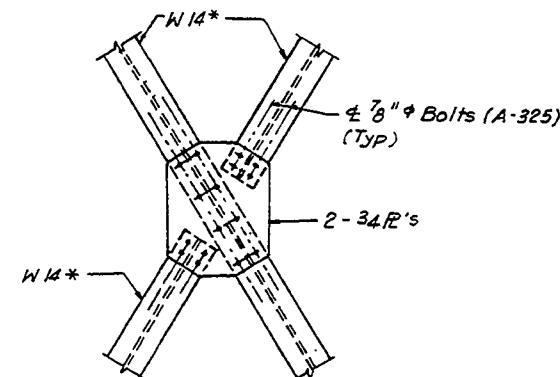
BOTTOM BRACING PLAN

3-3/4" Bolts @ 24" ± W/1/2" x 3" x 0'-3" Fill Plates or Washers (Typ)

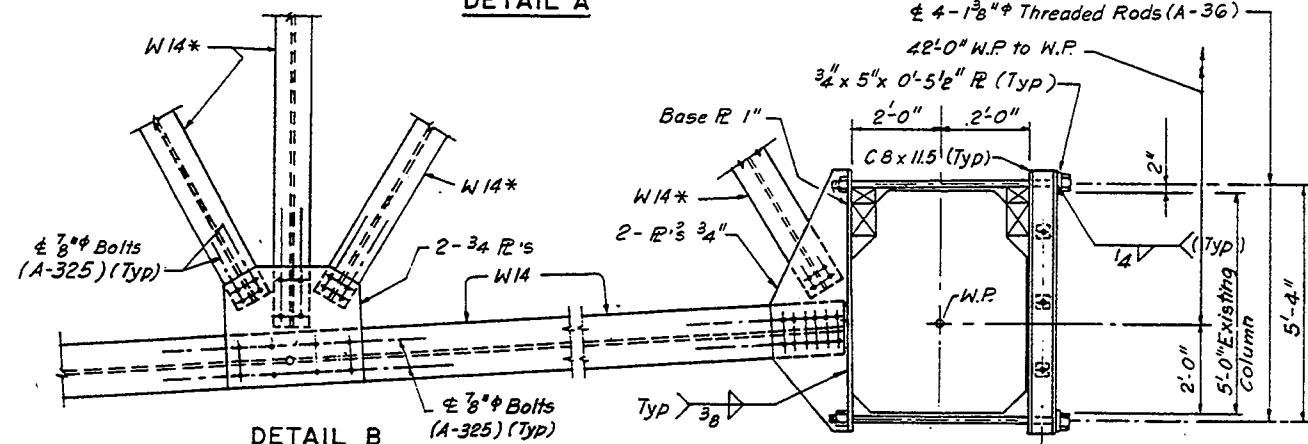
Timber Blocking Each Side of Column as Required to Provide Clearance for Stage II Construction Form Work

DETAIL G
Pier 4 Shown

* Provide Fill R's as Required

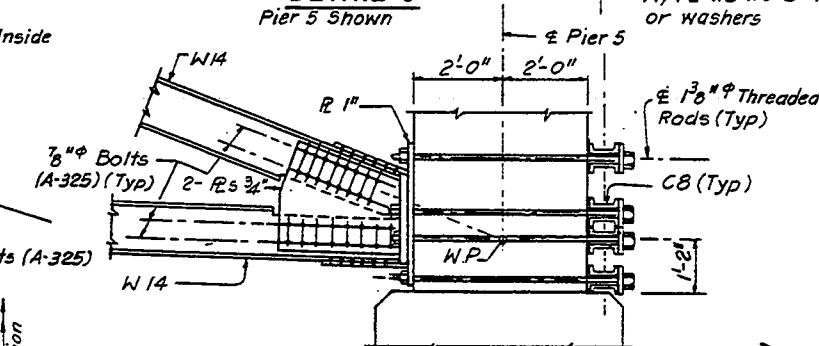


DETAIL A



DETAIL B

DETAIL C
Pier 5 Shown



DETAIL E
Pier 5 Shown



NOTES FOR TEMPORARY MATERIAL

1. No point required
2. Contractor may substitute a larger size material as approved by the Engineer.
3. Price for Temporary bracing to be Lump Sum.
4. Estimated Weight of Structural Steel for Temporary Support System = 94,000 lbs. (as shown)

NOTES:

1. Piers shall be Entirely Braced before 2-Way Traffic is Placed on the South bound Truss.
2. Tie Rods must be Tightened to Prevent Vertical Movement of Brackets.
3. All Blocking shall be Hardwood.
4. All Bracing shall be Installed with a very Tight Fit to Insure Transfer of Horizontal Loads to Pier

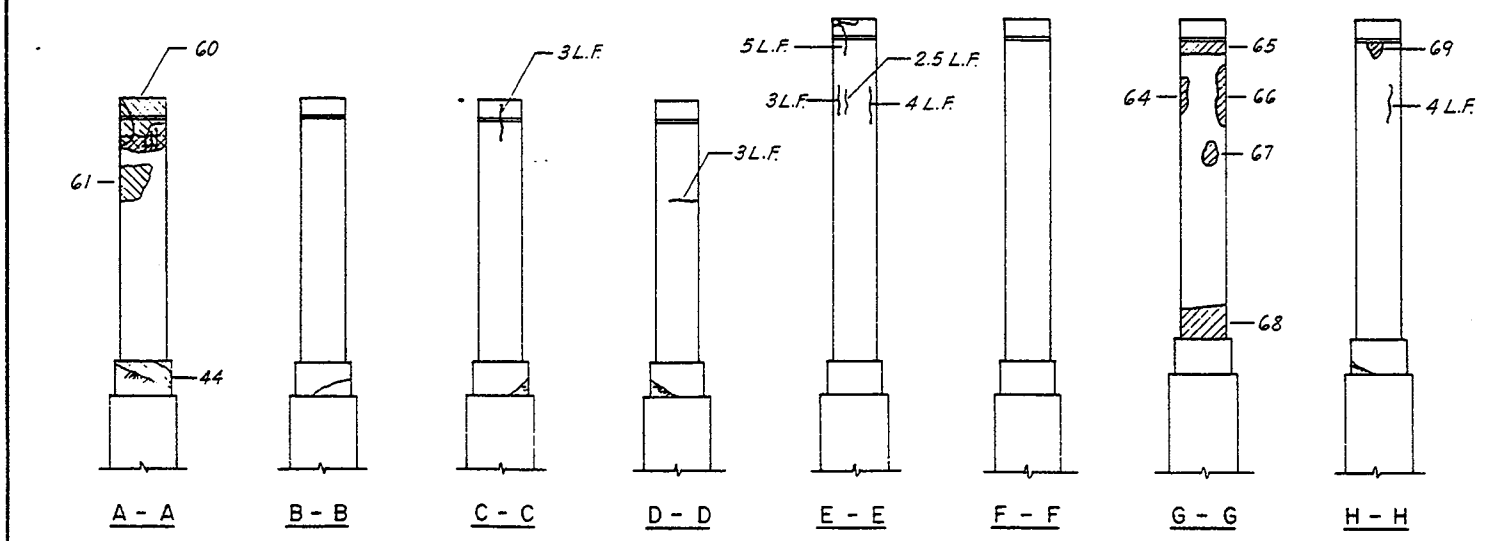
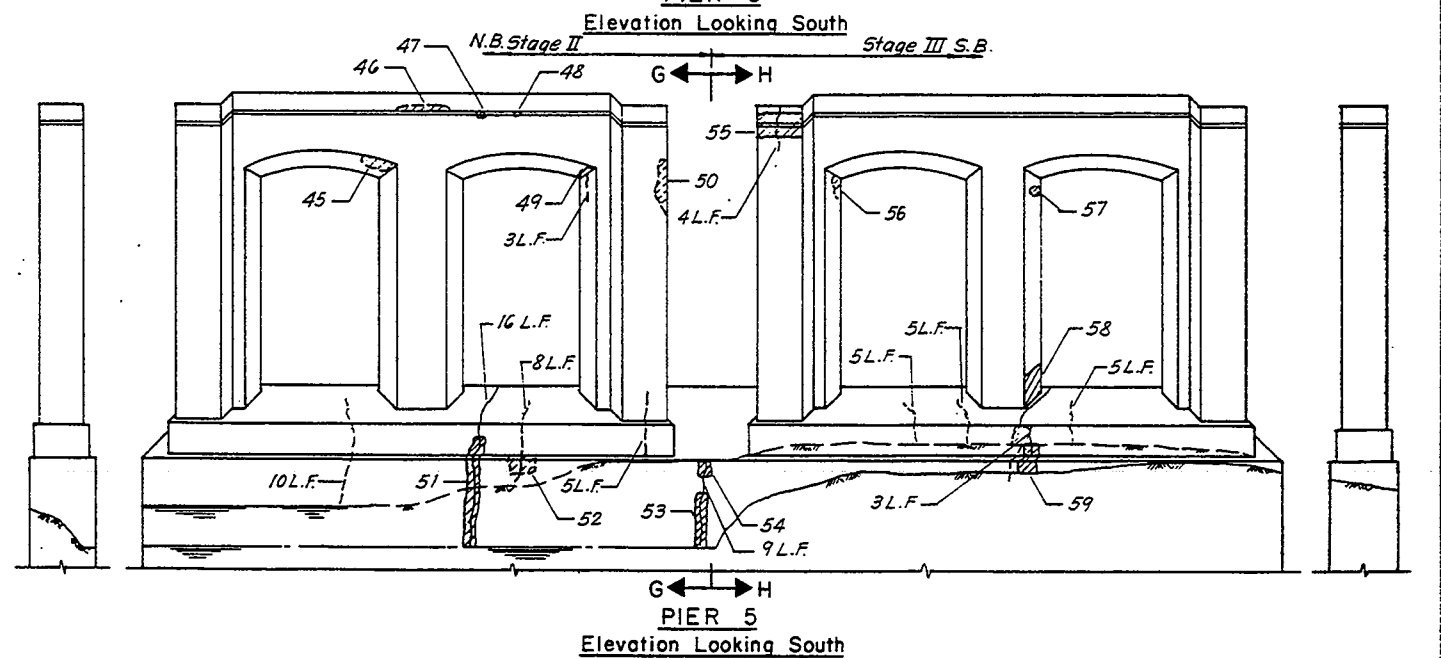
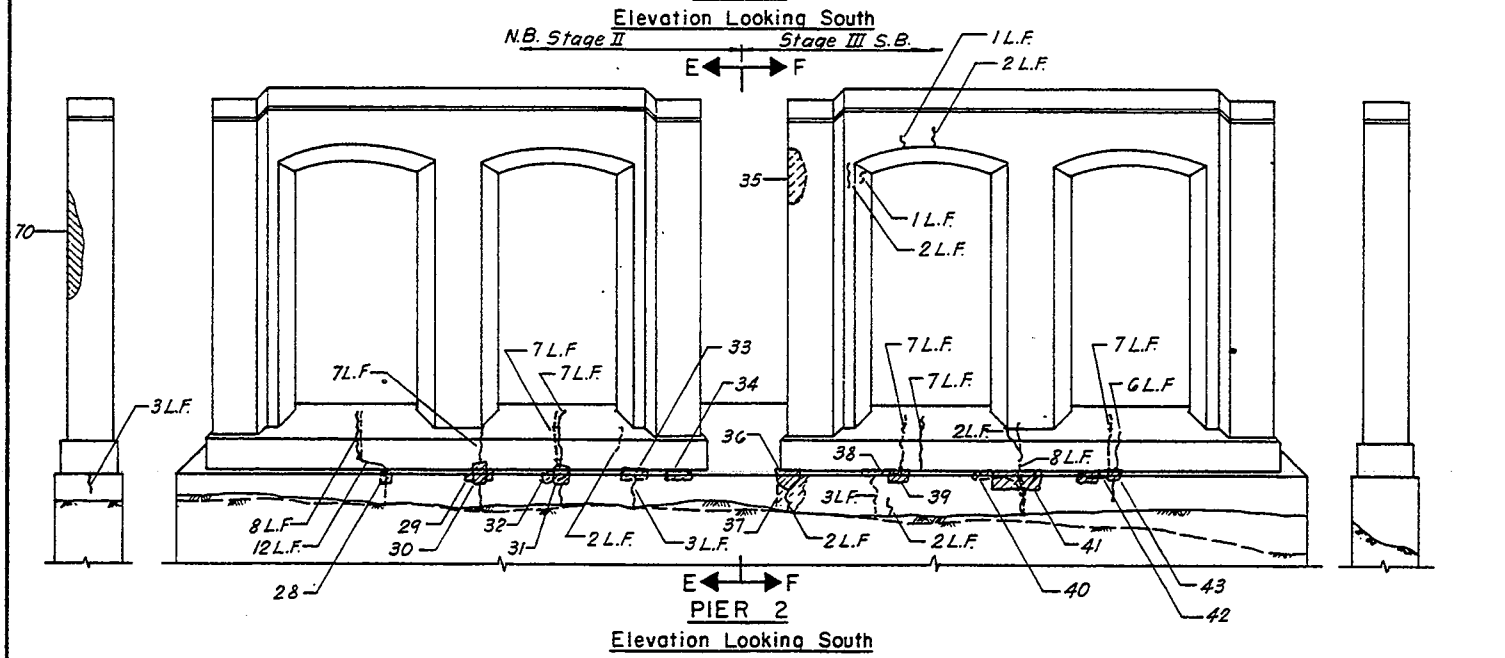
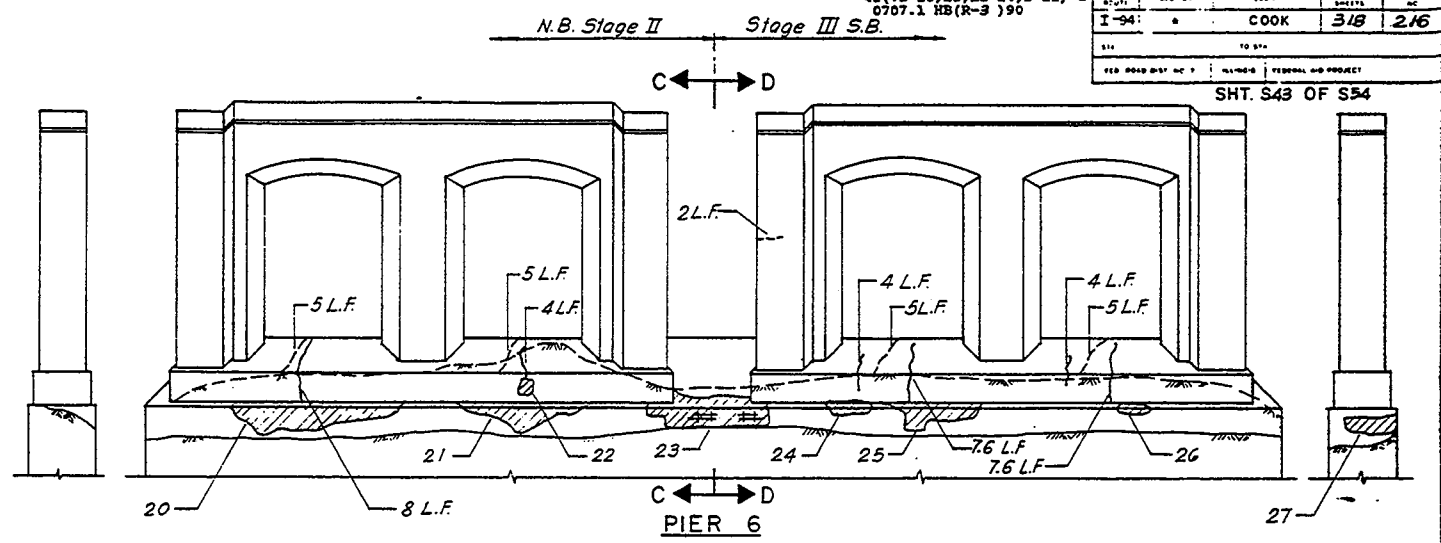
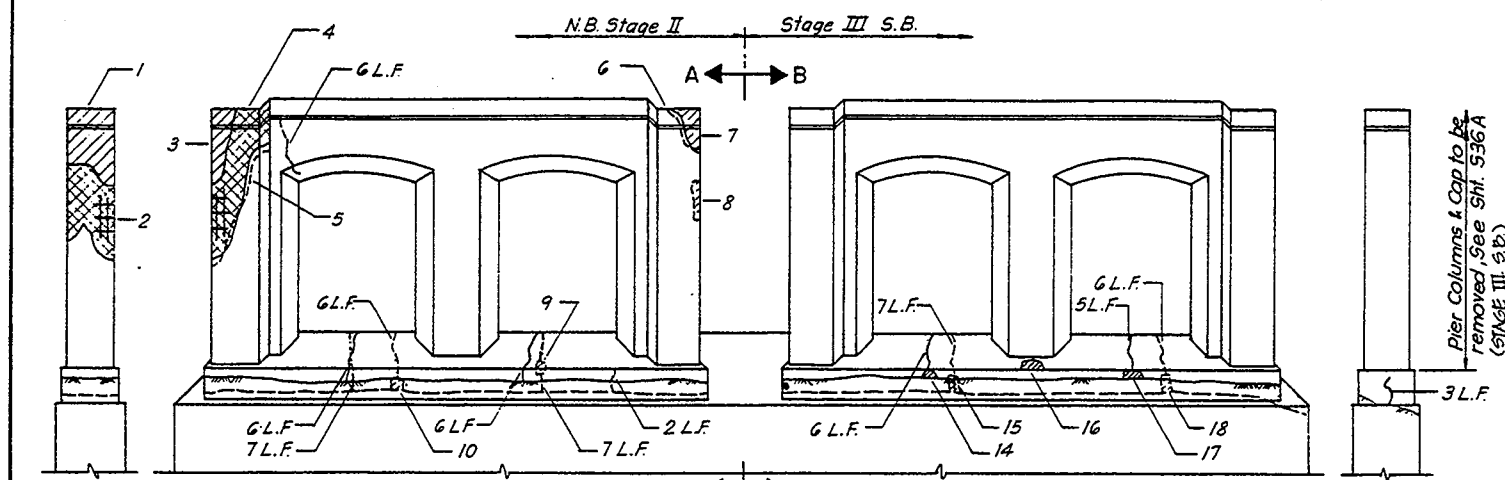
(Continuation of Notes)
Steel Removal Material to become property of Contractor.

Note:
The contractor has the option to submit an alternate temporary bracing system subject to the approval of the Engineer. See the special provision for Installing Temporary Bracing System.

Notes:

1. Contractor shall verify actual field conditions prior to bid, as previous Contractor had option to propose alternate support system.
2. Removal of temporary bracing (Structural Steel Support System) installed in previous contract shall be paid for by the Contract Unit Price per pound for Structural

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TEMPORARY BRACING AT PIER NO. 4
FA.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE DRAWN BY J.C.
DATE NOV. 1991 CHECKED BY J.M.



SUMMARY OF REPAIRS											
NO.	SIZE	SQ. FT.	NO.	SIZE	SQ. FT.	NO.	SIZE	SQ. FT.	NO.	SIZE	SQ. FT.
1	4x6	24	25	4x1	4	49	1x2	*			
2	4x7	28	26	2x1	*	50	1x5	5			
3	1.5x7	10.5	27	5x1.5	*	51	1x10	10			
4	2x12	24	28	1x1	*	52	2x2	4			
5	4x8	32	29	2x1	2	53	1x6	6			
6	4x2	8	30	2x2	4	54	1x2	2			
7	4x2	8	31	1x2	2	55	4x2	8			
8	1x4	4	32	2x2	4	56	1x2	*			
9	1x1	*	33	2x1	*	57	1x1	*			
10	1x1	*	34	2x1	*	58	3x3	9			
			35	2x4	*	59	2x2	4			
			36	2x2	4	60	4x4	16			
			37	2x3	6	61	3x3	9			
14	1x1	*	38	3x1	*						
15	1x2	*	39	1x2	2						
16	2x1	*	40	5x2	10	64	1x3	*			
17	2x1	*	41	4x2	8	65	4x1	*			
18	1x2	*	42	3x1	*	66	1x6	6			
			43	1x1	*	67	2x2	*			
20	16x2	32	44	1x2	2	68	4x3	12			
21	12x2	24	45	1x3	*	69	1x2	*			
22	1x1	*	46	5x1	*	70	1.5x6	9			
23	10x3	30	47	1x1	*						
24	2x1	2	48	.6x.6	*						

BILL OF MATERIAL				
ITEM	UNIT	TOTAL	CONST.	STAGES
Epoxy Crack Sealing	Lin. Ft.	321	171	150
Epoxy Mortar Repair	Cu. Ft.	8.7	4.1	4.6
Formed Conc. Repair (Depth ≤ 5")	Sq. Ft.	236	172	39
Formed Conc. Repair (Depth > 5")	Sq. Ft.	165	151	14

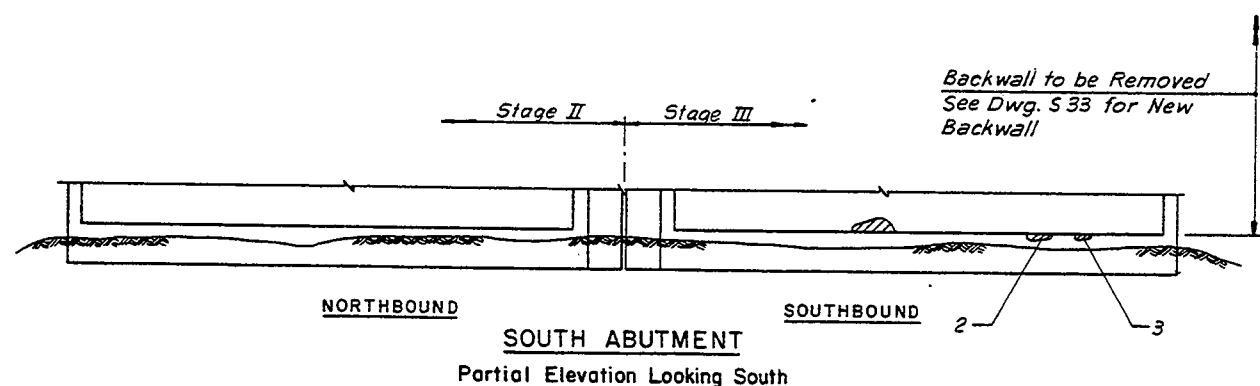
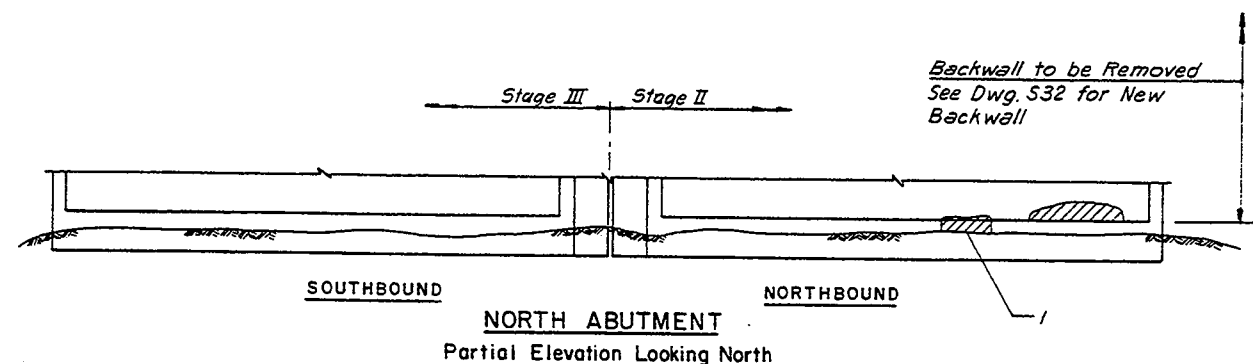
- LEGEND:
 — Crack Sealing Near Side
 - - - Crack Sealing Far Side
 [Hatched Box] Concrete Repair Area Near Side
 [Cross-hatched Box] Concrete Repair Area Far Side

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 PIER REPAIRS
 FAI-94 OVER LITTLE CALUMET RIVER
 COOK COUNTY
 STA. 172-54.39 SN 016-0158 (S. BOUND)
 SN 016-0159 (N. BOUND)
 SCALE
 DATE NOV. 1991
 DRAWN BY B.A.
 CHECKED BY J.M.

* Depth of 1/2" or less.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-94	6	COOK	318	217
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ALLIANCE	FEDERAL AID PROJECT	

SHT. 544 OF 554



SUMMARY OF MAT'L		
NO.	SIZE (FT.)	SQ. FT.
1	4x2	8
2	1x.8	*
3	1x.6	*

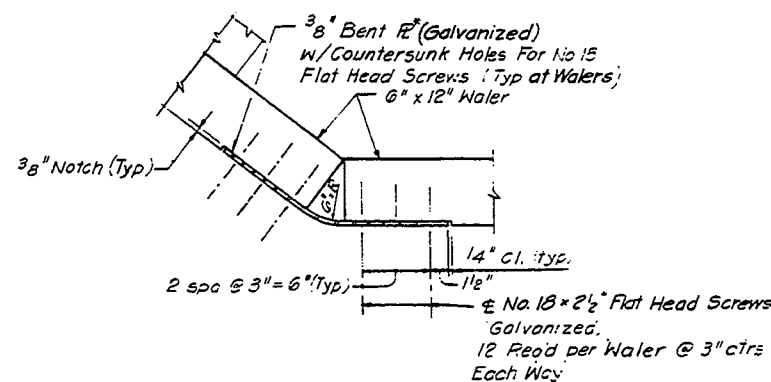
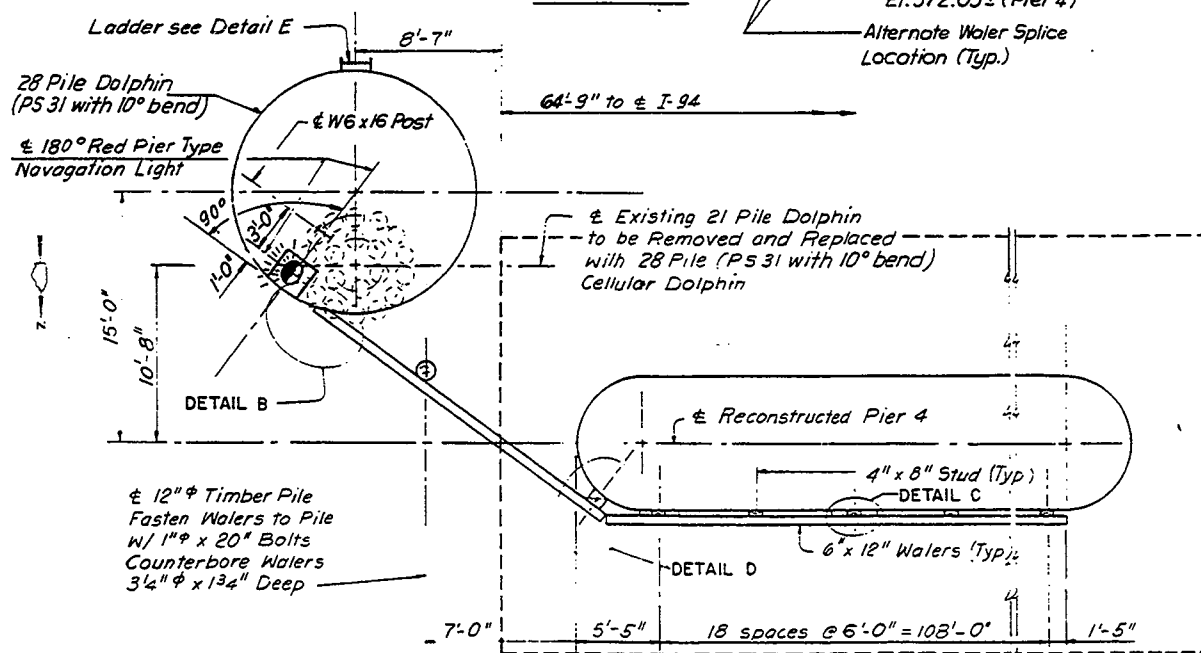
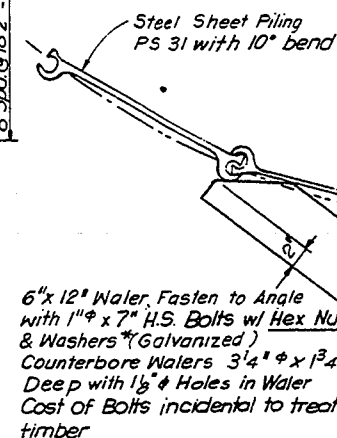
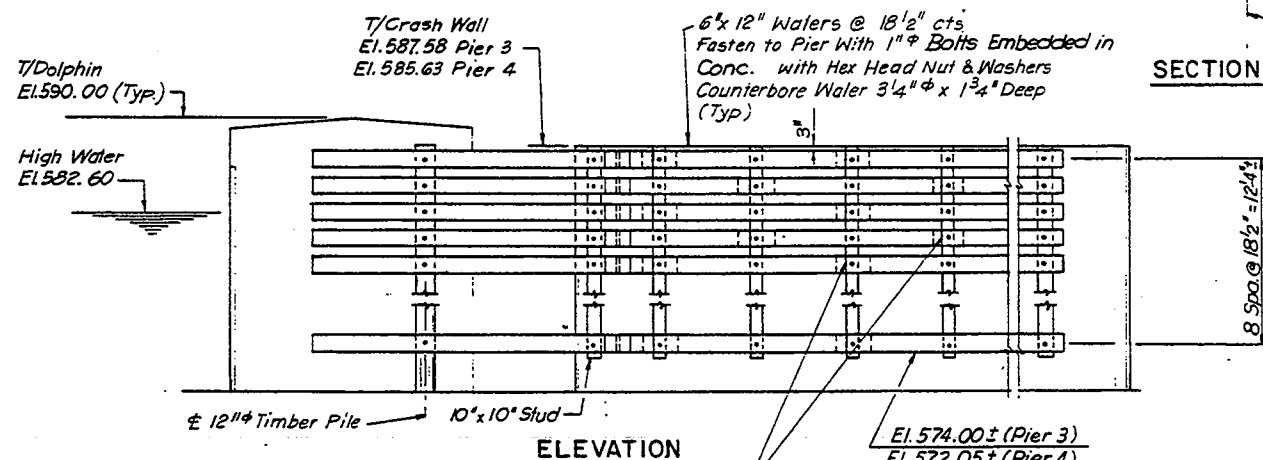
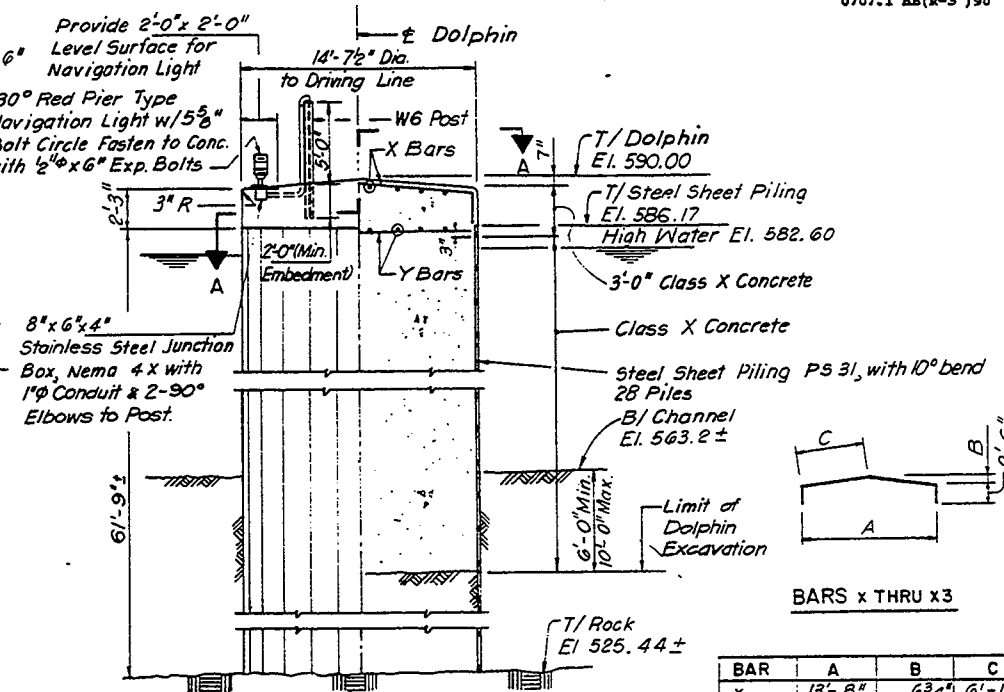
* Depth of 1/2" or less

BILL OF MATERIAL				
ITEM	UNIT	TOTAL	CONST. STAGES	
			II	III
Formed Conc. Repair (Depth < 5")	Lin. Ft.	8	8	
Epoxy Mortar Repair	Cu. Ft.	.20		.20

LEGEND:

 Concrete Repair Area Near Side

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ABUTMENT REPAIRS
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158(S. BOUND)
SN 016-0159(N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY P.G.
CHECKED BY J.M.



All Expansion Bolts, Nuts, Washers
Plates and Angles shall be *Galvanized M232.
All Timber Walers, Studs and Piles shall
be Creosoted Yellow Pine.
* Galvanizing shall comply with AASHTO
M232 for hot dip process or with ASTM M298
Class 50 for Mechanical Plating Method.

11) &	IC COW	SECTION	COW	TOTAL INSETS	WMS IN
	I-94	*	COOK	3/8	2/8
	STA TO STA				
	FED ROAD DIST NO * ALLIANCE PERSONNEL AND PRODUCT				

BILL OF MATERIAL *				
BAR	NO.	SIZE	LENGTH	SHAPE
x	8	# 6	18'-8"	┌──┐
x1	8	# 6	18'-0"	┌──┐
x2	8	# 6	16'-8"	┌──┐
x3	8	# 6	13'-11"	┌──┐
y	8	# 6	13'-8"	=====
y1	8	# 6	13'-0"	=====
y2	8	# 6	11'-8"	=====
y3	8	# 6	8'-11"	=====
ITEM			UNIT	QUANTITY
Dolphin Excavation			C.Y.	50
Class X Concrete			C.Y.	215
Treated Timber			F.B.M	8150
Furnishing Creosoted Piles			L.F	45
Driving Timber Piles			L.F	45
Reinforcement Bars			Lbs.	690
Steel Sheet Piling (S.P.)			S.F.	2840
Bois Embedded in Concrete, 1" Ø			Ea.	180

* Quantities are For One Dolphin
and One Fender System

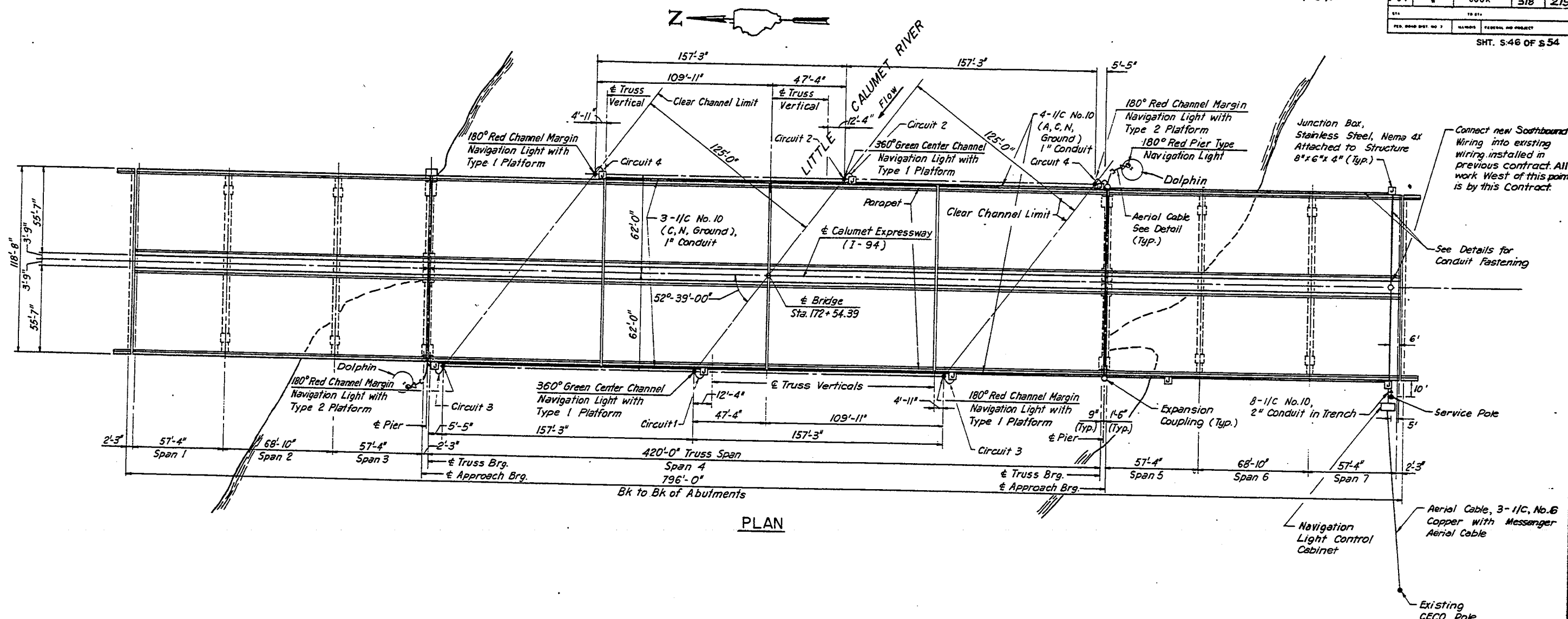
BAR	A	B	C
X	13'-8"	6'3 1/2"	6'-10"
X1	13'-0"	6'2"	6'-6"
X2	11'-6"	5'3 1/4"	5'-10"
X3	8'-11"	4'2 1/2"	4'-5 1/2"

[illegible]

* 42 (VB-20, 12, EB-14, B-11) &
0707.1 EB(R-3) 90

SECTION	CONTRACT	TOTAL SHEETS	SHEET NO.
I-94	COOK	318	219
STA.	TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FEDERAL AID PROJECT	

SHT. 546 OF 554



PLAN

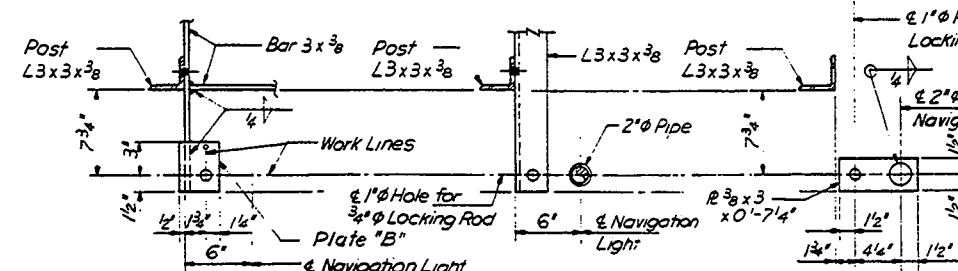
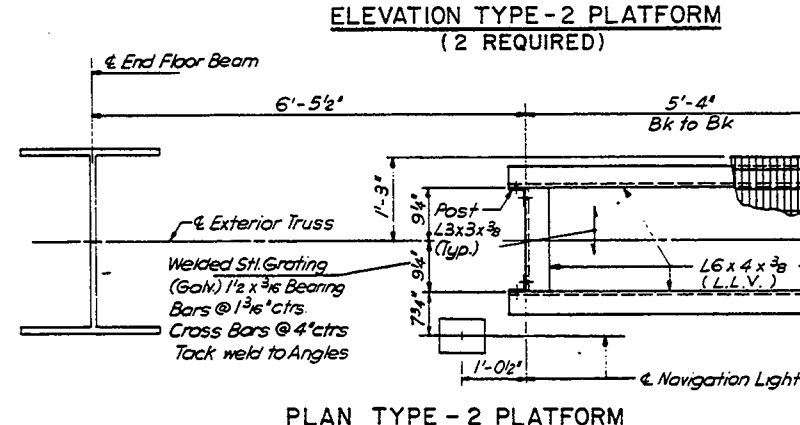
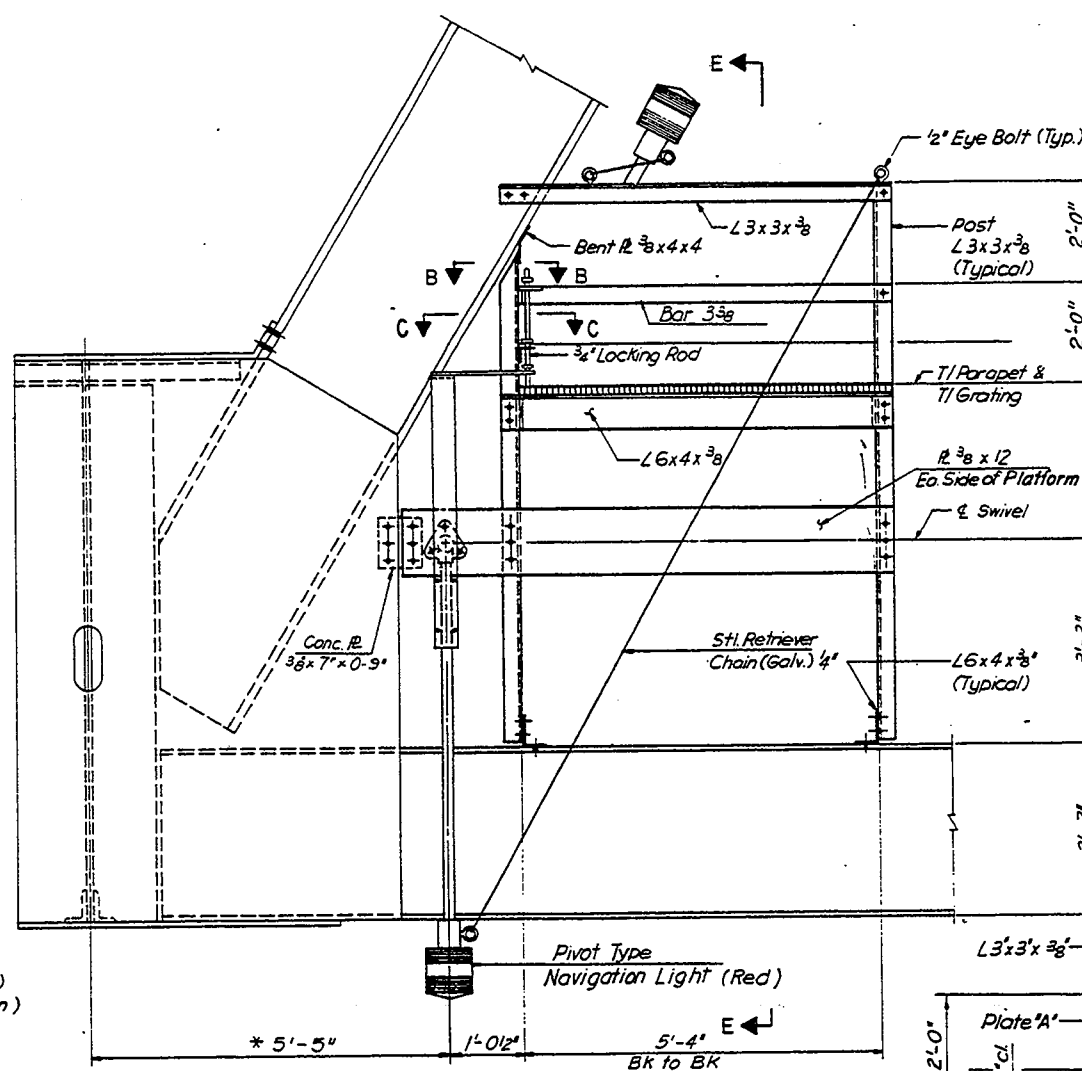
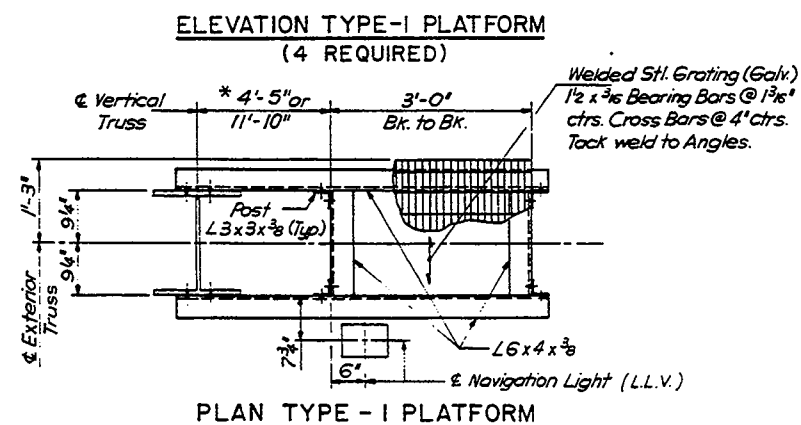
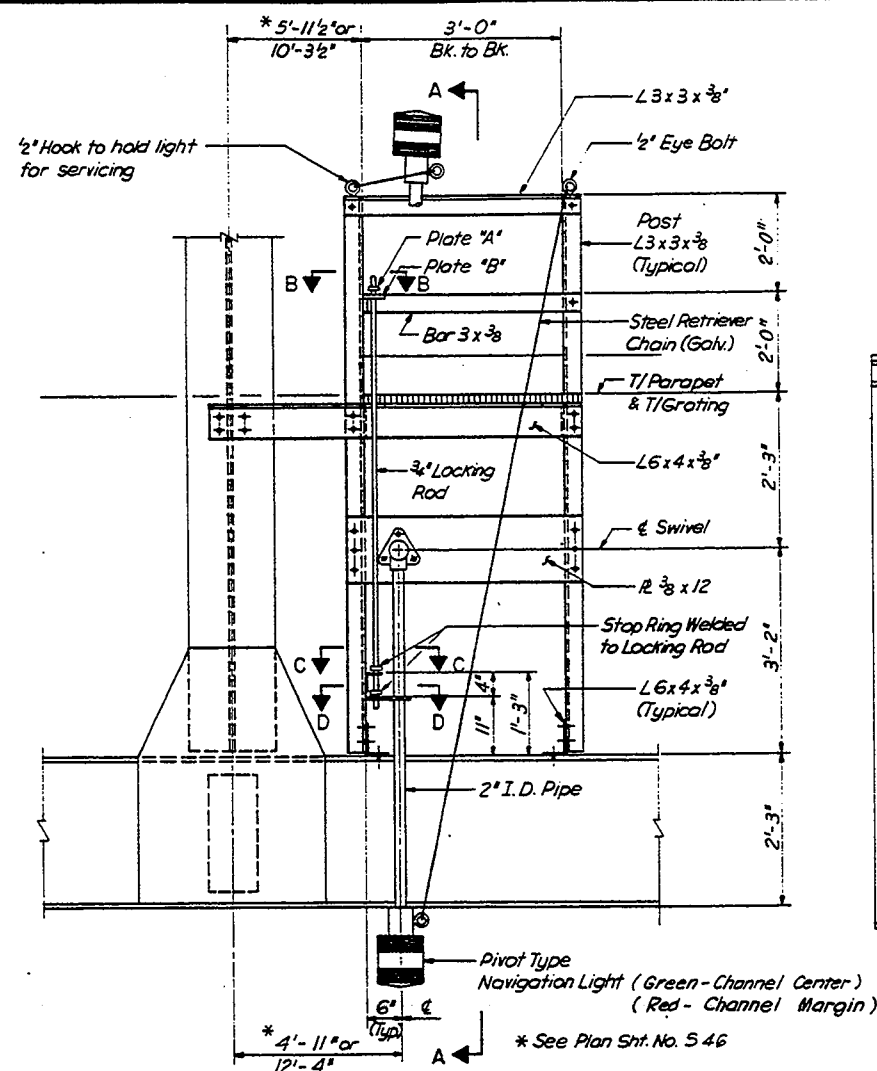
NOTES:

1. For Platform Details See Sht. No. 547
2. For Electrical Details, See Sht. Nos. 118 - 119.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
NAVIGATION LIGHTS - PLAN
F.A.I.-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016 - 0158 (S. BOUND)
SN 016 - 0159 (N. BOUND)
SCALE 1" = 30'
DATE JUNE 1991
DRAWN BY P.G.
CHECKED BY J.M.

SECTION	SECTION	COUNT	TOTAL	DATE
I-94	COOK	318	220	
STA	TO STA			
FED. ROAD DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		

SHT. S47 OF S84



SECTION C-C

SECTION D-D

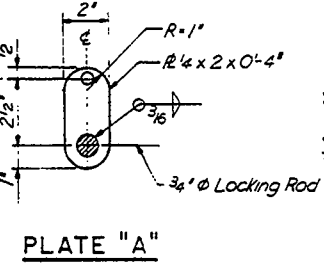
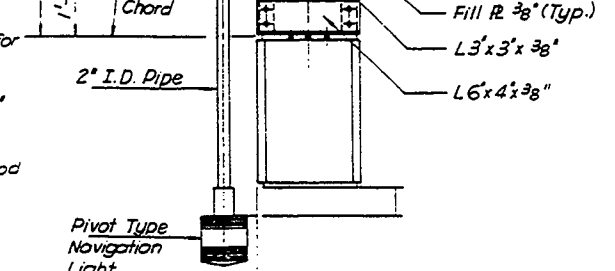
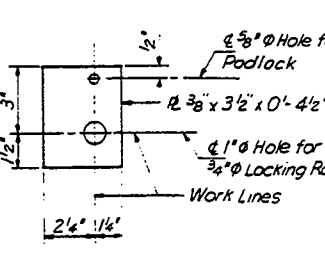


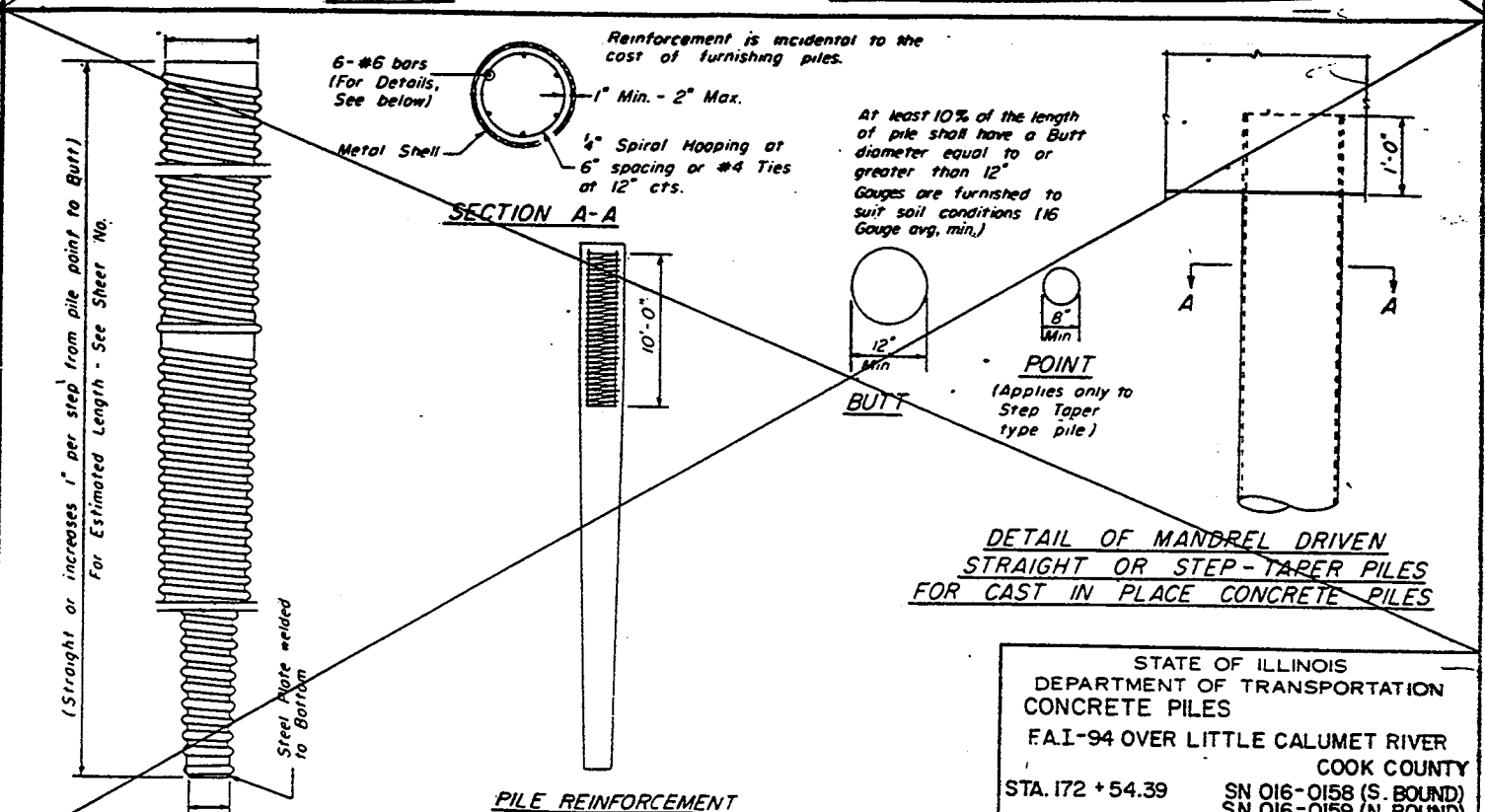
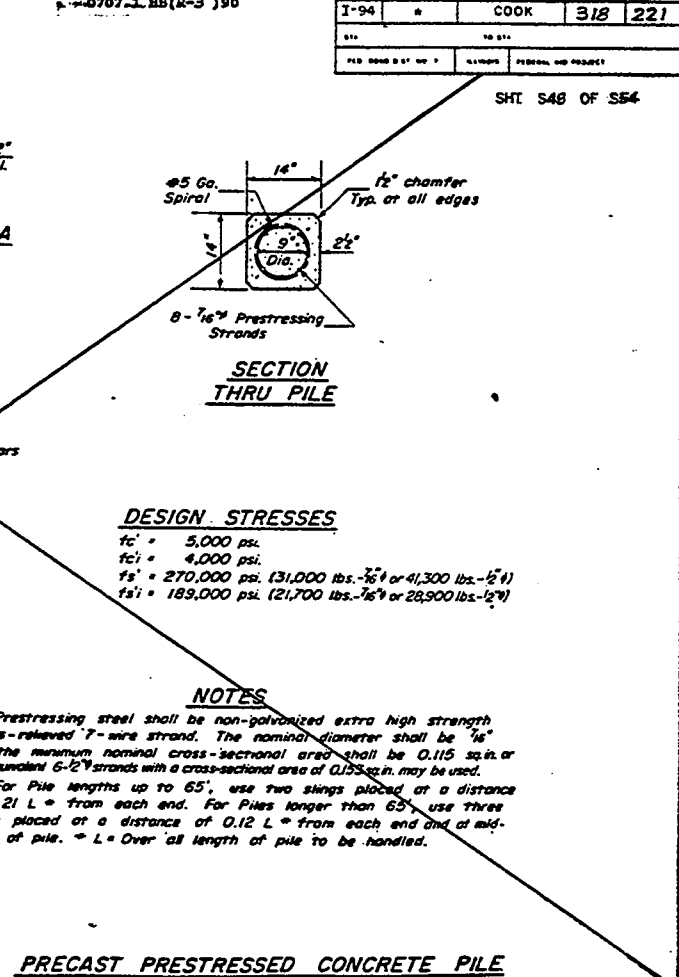
PLATE "B"



SECTION A-A

NOTES:
All Bolts to be 3/4" H. S., Holes to be 1 3/16" Except as Noted.

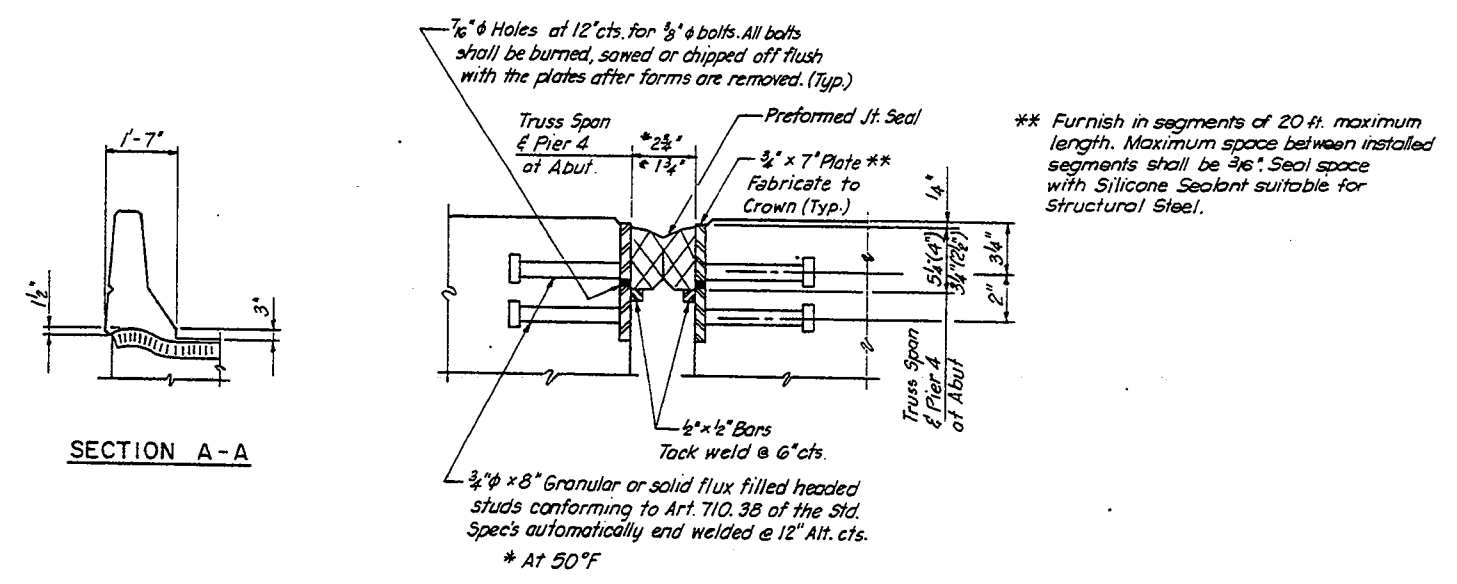
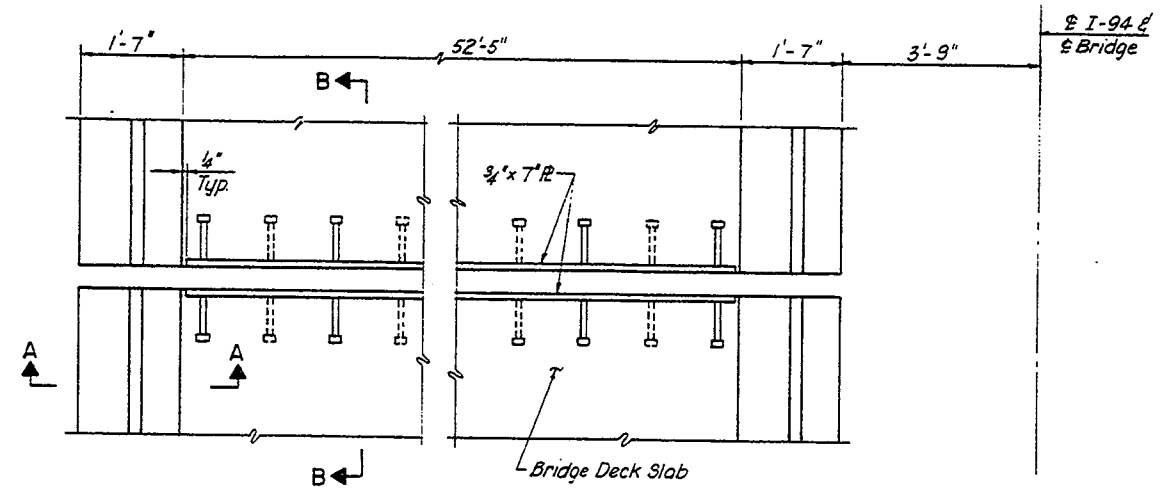
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
NAVIGATION LIGHTING DETAILS - II
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY EBP
CHECKED BY J.M.



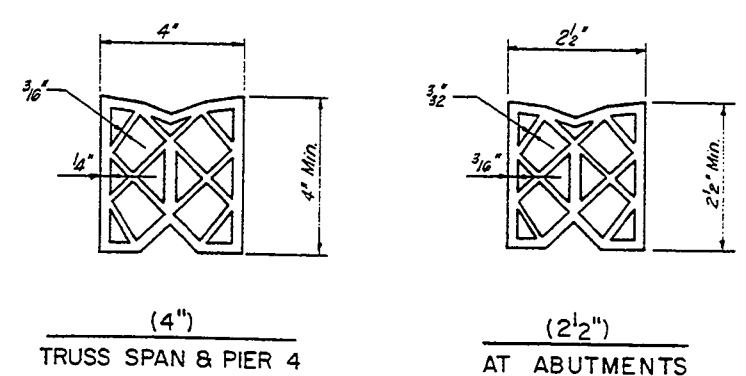
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
CONCRETE PILES
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE DRAWN BY PG
DATE NOV. 1991 CHECKED BY J.M.

NO.	SECTION	COUNT	TOTAL	SHEET
I-94	0	COOK	318	222
STA.	TO STA.	ALIGNED	EXTENSION AND PROJECT	
FED. ROAD DIST. NO. 1				

SHT. S49 OF S54



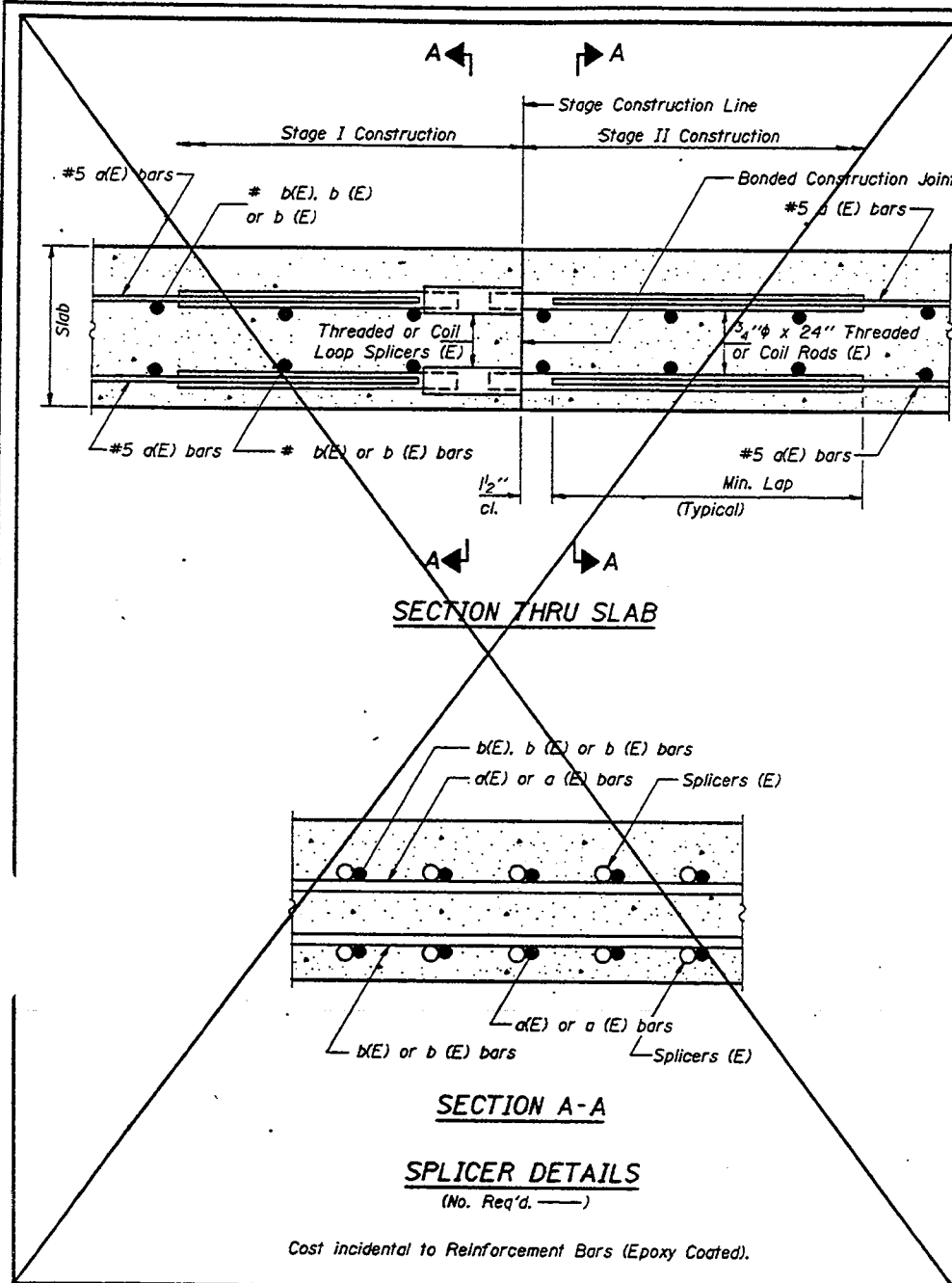
Note: After Fabrication all surfaces of the steel plates shall be given one shop coat of paint specified for Structural Steel.



PREFORMED JOINT SEAL DETAILS

BILL OF MATERIAL				
ITEM	UNIT	TOTAL	CONSTR. STAGE	
			II	III
Preformed Joint Seal (2 1/2")	Lin. Ft.	222.6	111.3	111.3
Preformed Joint Seal (4")	Lin. Ft.	445.2	222.6	222.6

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PREFORMED JOINT SEAL DETAILS
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S.BOUND)
SN 016-0159 (N.BOUND)
SCALE
DATE NOV. 1991
DRAWN BY S.P.
CHECKED BY J.M.



ROLLED THREAD DOWEL BAR

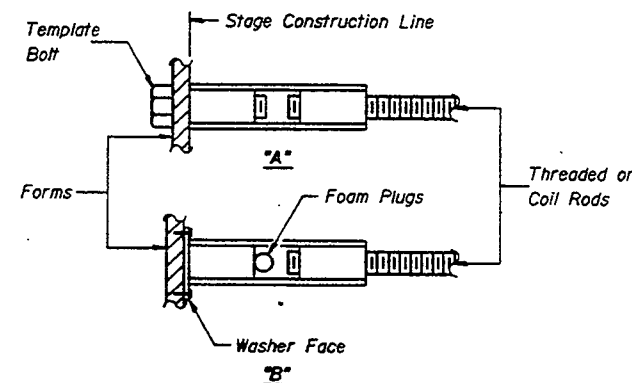
•• ONE PIECE

Wire Connector

WELDED SECTIONS

SPLICER ALTERNATIVES

**** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.**



INSTALLATION AND SETTING METHODS

"A" : Set splicer by means of a template bolt.

"B" : Set splicer by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.

NOTES

Steel Splicer (Coupler) assembly shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Steel Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length and have effective tensile stress area equal to or greater than that of the lapped reinforcement bars.

Splicer (coupler) assembly in the slab shall be epoxy coated in accordance with the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed splicer (coupler) assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_T$
(Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{sallow} \times A_T$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.

f_{sallow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

A_r = Tensile stress area of lapped reinforcement bars.

 $\sigma_c = 28 \text{ day concrete}$

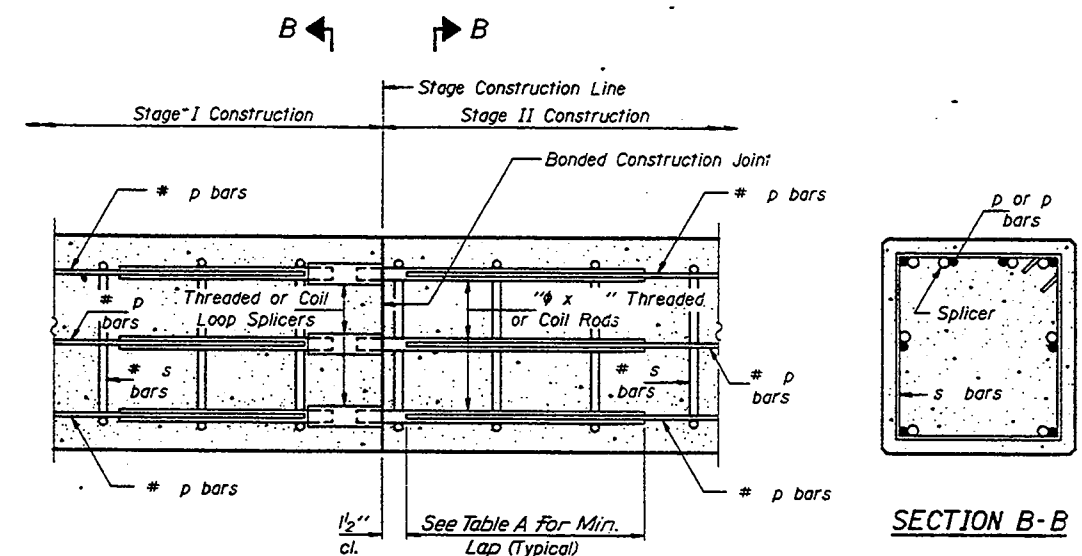
Typical Splicer (Coupler) Assembly Sizes:

In Slabs: #5 bar lap with $\frac{3}{4}"$ Splicer (Coupler) x 2'-0" Splicer Rods

Minimum Capacity = 23.0 kips-tension
Minimum Pull-out Strength = 9.2 kips-tension

#7 bar lap with 1" ϕ Splicer (Coupler) x 3'-5" Splicer Rods	Minimum Capacity = 45.1 kips-tension Minimum Pull-out Strength = 18.0 kips-tension
---	---

In Sub-Structure	#8 bar lap with 1'4" ϕ Splicer (Coupler) x 4'-6" Splicer Rods	Minimum Capacity = 58.9 kips-tension Minimum Pull-out Strength = 23.6 kips-tension
------------------	--	---



SECTION THRU ABUTMENTS AND PIERS

No epoxy coating required.

SPLICER DETAILS

Cost incidental to Reinforcement Bars.

MINIMUM LAPS		NO. REQ'D.
BAR	LAP	
#5	2'-2"	24
#7	3'-3"	264
#9	5'-5"	134
#11	8'-5"	4

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
BAR SPLICER DETAILS
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE DRAWN BY K.C.
DATE NOV. 1991 CHECKED BY J.M.

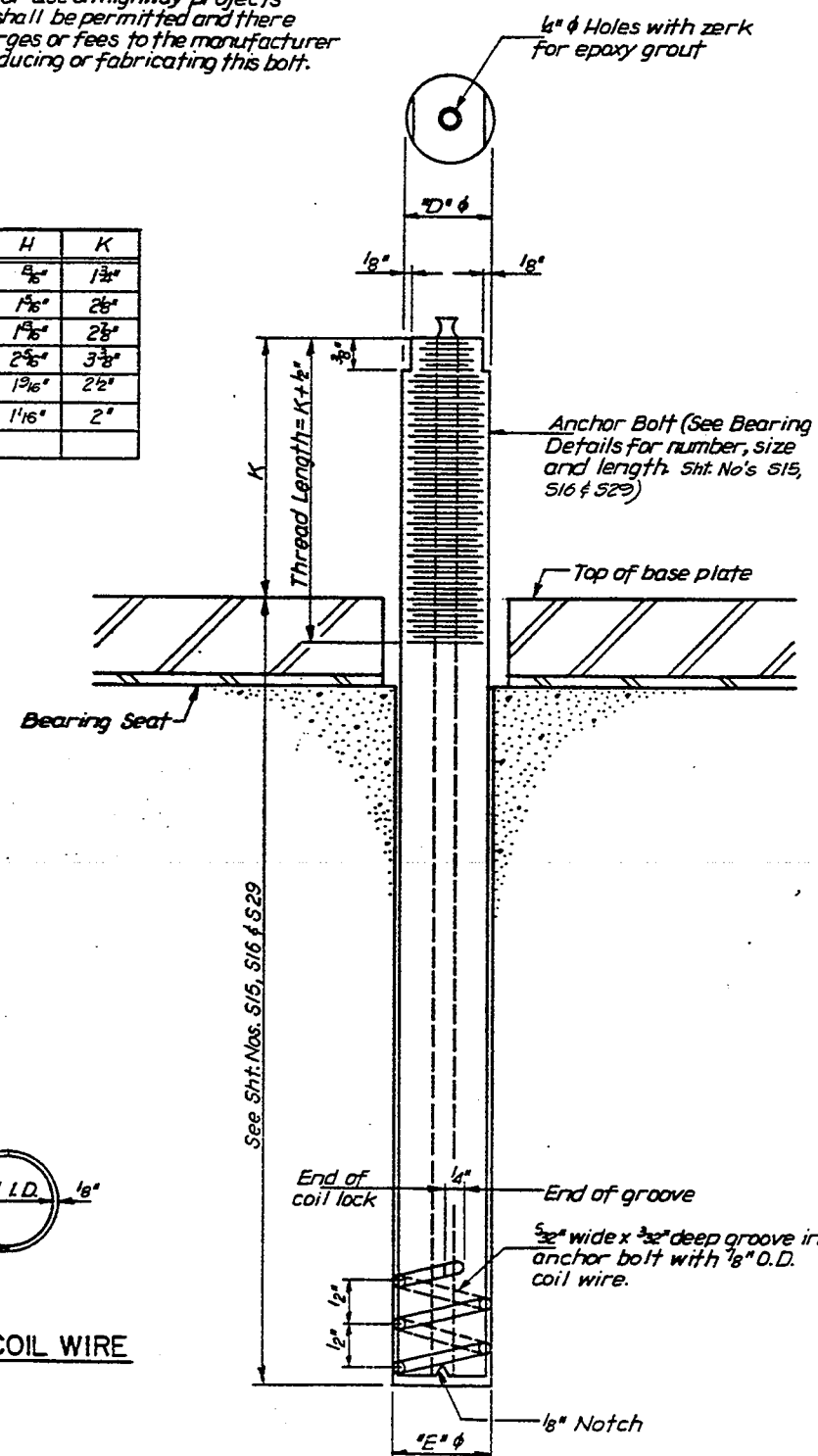
The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

* 42 (VB-10, 12, BB-14, B-11) &
0707.1 BB(R-3) 90

DATE	BY	CHKD	APPD	REV
1-94		COOK	318	225

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D	E	H	K
1"	1 1/8"	1 1/2"	1 3/4"
1 1/2"	1 3/8"	1 5/8"	2"
2"	1 7/8"	2 1/8"	2 1/4"
2 1/2"	2 1/4"	2 5/8"	3 1/8"
3 1/4"	2 3/4"	3 1/2"	3 3/4"
4"	3 1/4"	4 1/8"	4 1/2"



ILLINOIS COIL-LOCK ANCHOR BOLT

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A519, Grade D26 and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire.

The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.

The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade I and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE FOR THE ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. A threaded rod stud with nut and washer conforming to ASTM A307.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

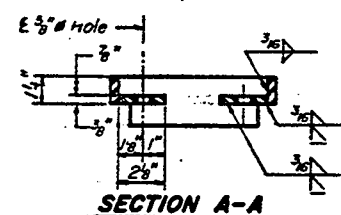
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	
ILL. COIL-LOCK ANCHOR BOLT	
FAI-94 OVER LITTLE CALUMET RIVER	
COOK COUNTY	
STA. 172 + 54.39	SN 016-0158 (S. BOUND)
	SN 016-0159 (N. BOUND)
SCALE	
DATE NOV. 1991	CHECKED BY J. M.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

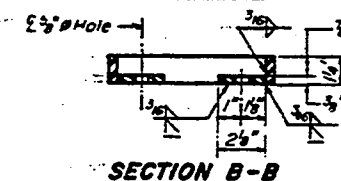
42 (VB-10, 12, HB-14, B-11) &
0707.1 HB(R-3) 90

DATE	REVISION	BY	CHKD	APP'D
1-94	1	COOK	3/8	226

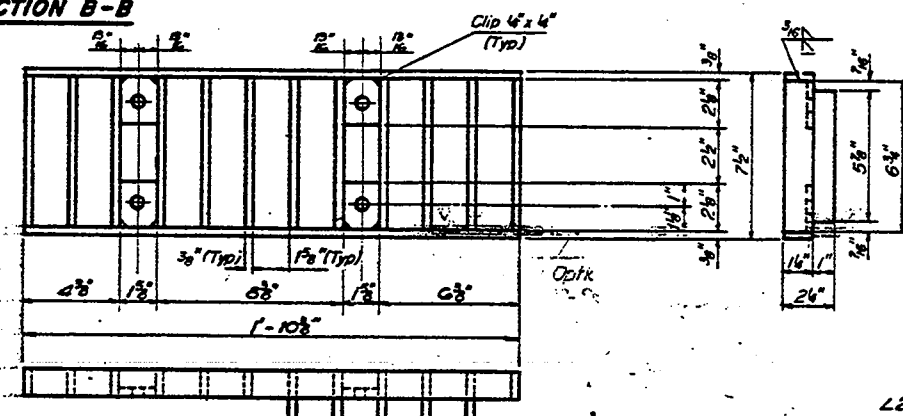
SHT 553 OF 554



SECTION A-A



SECTION B-B



GRATE

Notes:

Hollow structural steel tubing shall conform to the requirements of A.S.T.M. designation A-500 Grade B, or A-501 Structural Steel Tubing.

All other shapes, plates and bars shall conform to the requirements of A.A.S.H.T.O. M 183.

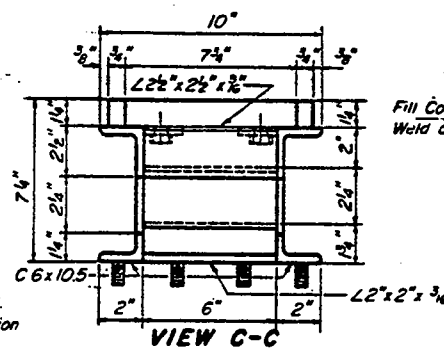
Bolts, studs, washers and nuts shall conform to the requirements of A.S.T.M. A-307.

The Grate, Frame, and Downspout shall be galvanized after shop fabrication in accordance with A.A.S.H.T.O. M-111 & A.S.T.M. A-385.

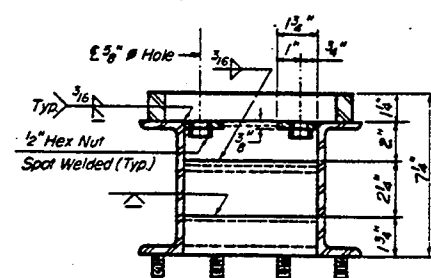
All bolts, washers and nuts shall be galvanized in accordance with A.A.S.H.T.O. M 232.

Cost of the Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for Drainage Scupper Special.

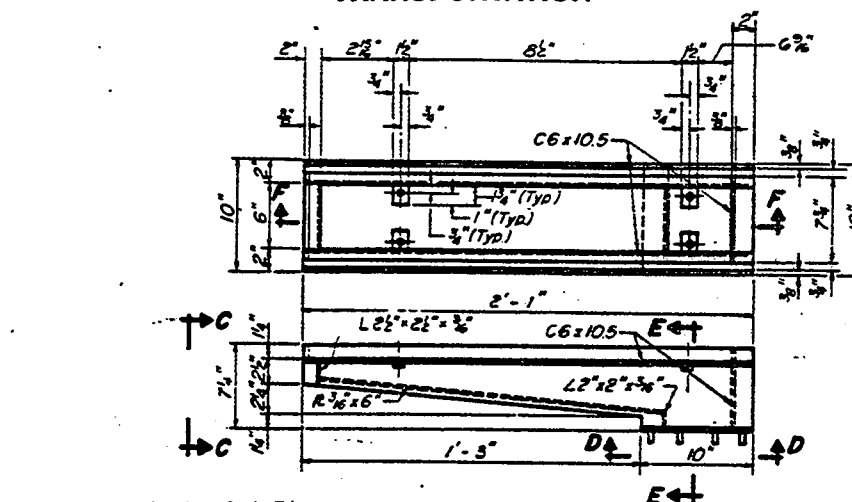
For Scupper locations, See Sheet #1.



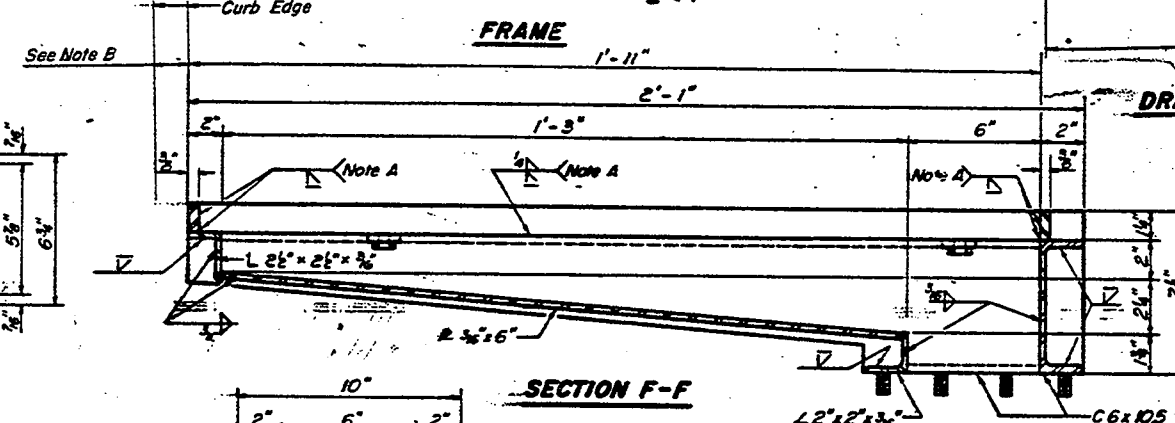
VIEW C-C



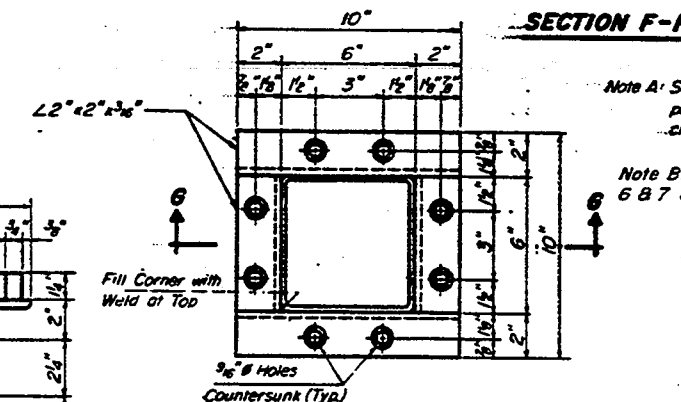
SECTION E-E



FRAME



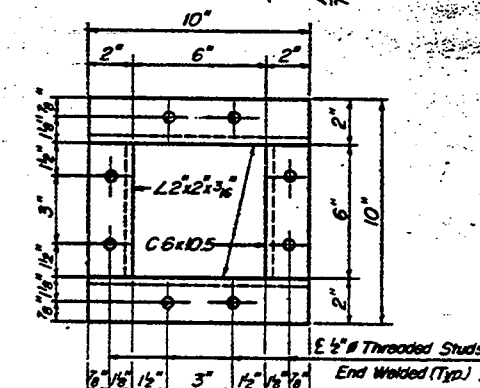
DRAINAGE SCUPPER



SECTION F-F

Note A: Surface of welds shall be recessed 1/8" Max. or placed flush with inside face of bars to provide clearance for Grate.

Note B: 2" Offset for Scuppers in Spans 1, 2, 3, 5, 6 & 7 only.



VIEW D-D

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
DRAINAGE SCUPPER SPECIAL	Each	56

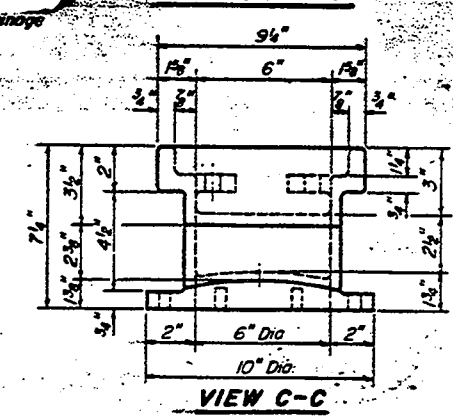
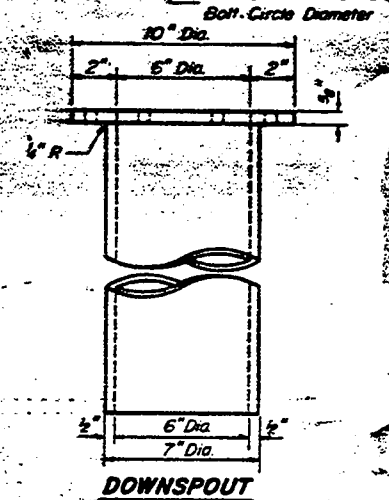
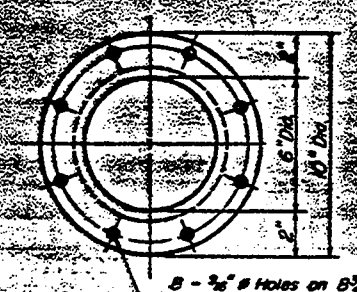
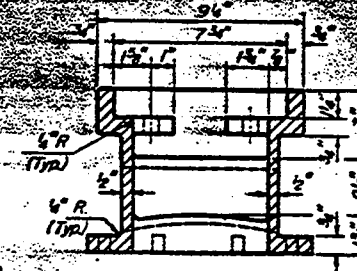
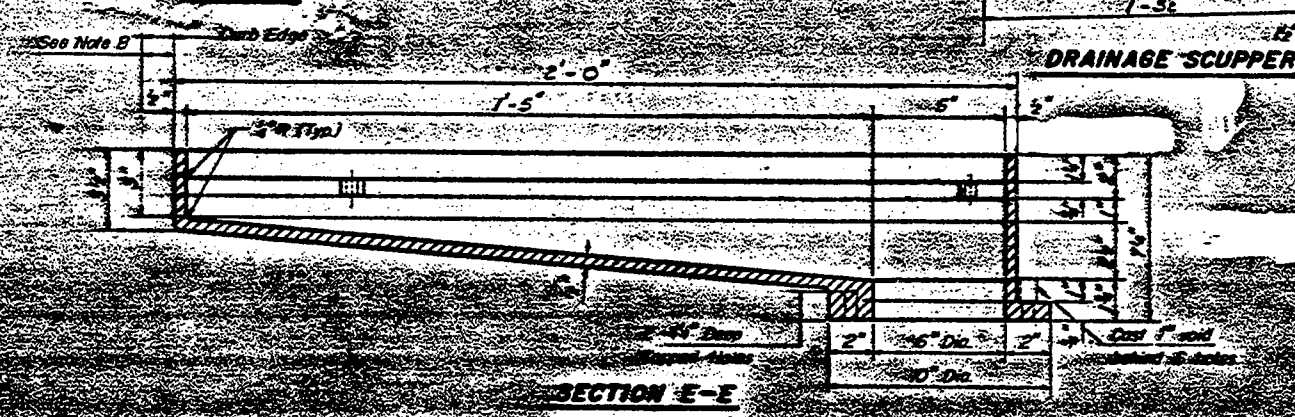
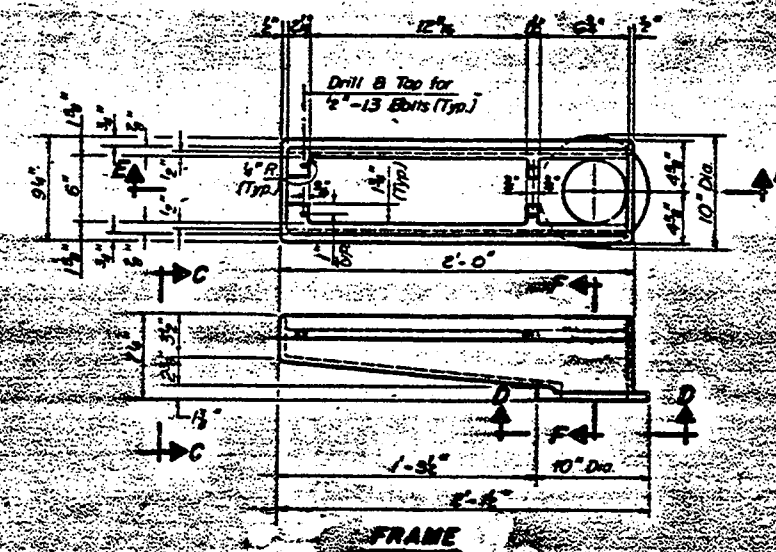
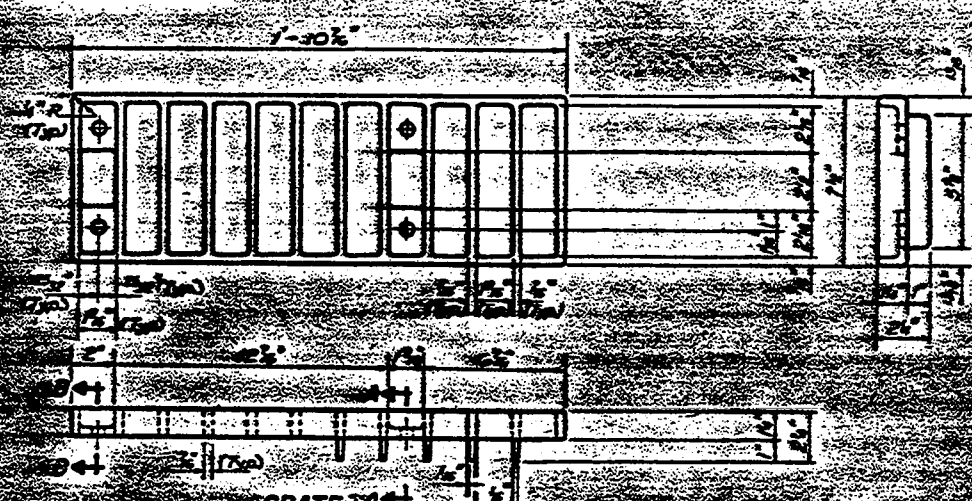
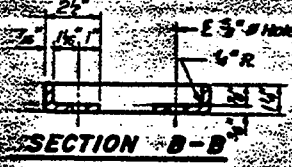
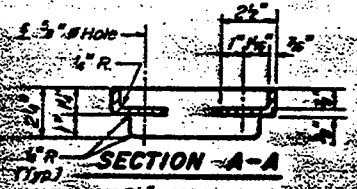
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
STEEL DRAINAGE SCUPPER
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172 + 54.39 SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
DRAWN BY P. J. M.
CHECKED BY J. M.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

42 (VD-10, 12, RD-14, D-11) &
9707.1 RD(2-5) 90

1-94	COOK	3/8	227
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Notes:
1. All cast iron parts shall be gray iron conforming to the requirements of AASHTO M-105, Class 30.
2. Bolts and washers shall conform to the requirements of A.S.T.M. A-307.
3. All bolts and washers shall be galvanized in accordance with A.A.S.H.T.O. M-232.
4. As an alternate bolts and washers may be stainless steel conforming to the requirements of A.S.T.M. A-193, Type 304.
5. Cost of the Grate, Frame, Downspout, bolts and washers including complete installation of Scupper shall be paid for at the unit bid price for Drainage Scupper Special.
6. The Contractor may use of his option steel drainage scuppers or cast iron drainage scuppers.
7. For Scupper locations, see Sheet #1.

Note A
2" Offset for Scuppers in Spans
1, 2, 3, 5, 6 & 7 Only.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ALTERNATE CAST IRON DRAINAGE SCUPPER
FAI-94 OVER LITTLE CALUMET RIVER
COOK COUNTY
STA. 172-54.39
SN 016-0158 (S. BOUND)
SN 016-0159 (N. BOUND)
SCALE
DATE NOV. 1991
CHECKED BY J.M.