

INDEX OF SHEETS ON SHEET NO.2

STATION EQUATIONS

STA. 466+76.62 BACK= STA. 466+72.95 AHEAD	1
STA. 487+58.11 BACK= STA. 604+00.00 AHEAD	2
STA. 863+54.84 BACK= STA. 863+57.30 AHEAD	3
STA. 1011+36.07 BACK= STA. 1011+00.00 AHEAD	4
STA. 1049+93.21 BACK= STA. 1050+17.27 AHEAD	5
STA. 1128+90.50 E.B. BACK= STA. 1128+90.50 AHEAD & EXPWY. = STA. 1129+76.71 W.B. BACK	6

WHEREVER IN THESE PLANS THE DESIGNATED PROJECT IS SHOWN AS I-UI-55-6()264 OR I-FI-55-6()264, IT SHALL BE INTERPRETED TO BE I-IR-FI-55-6(124)264.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALES
PLAN 1 INCH = 50 FT.
PROFILE, HOR. 1 INCH = 50 FT.
PROFILE, VERT. 1 INCH = 5 FT.
CROSS-SECTIONS 1 INCH = 5 FT. VERT. 10' HOR.

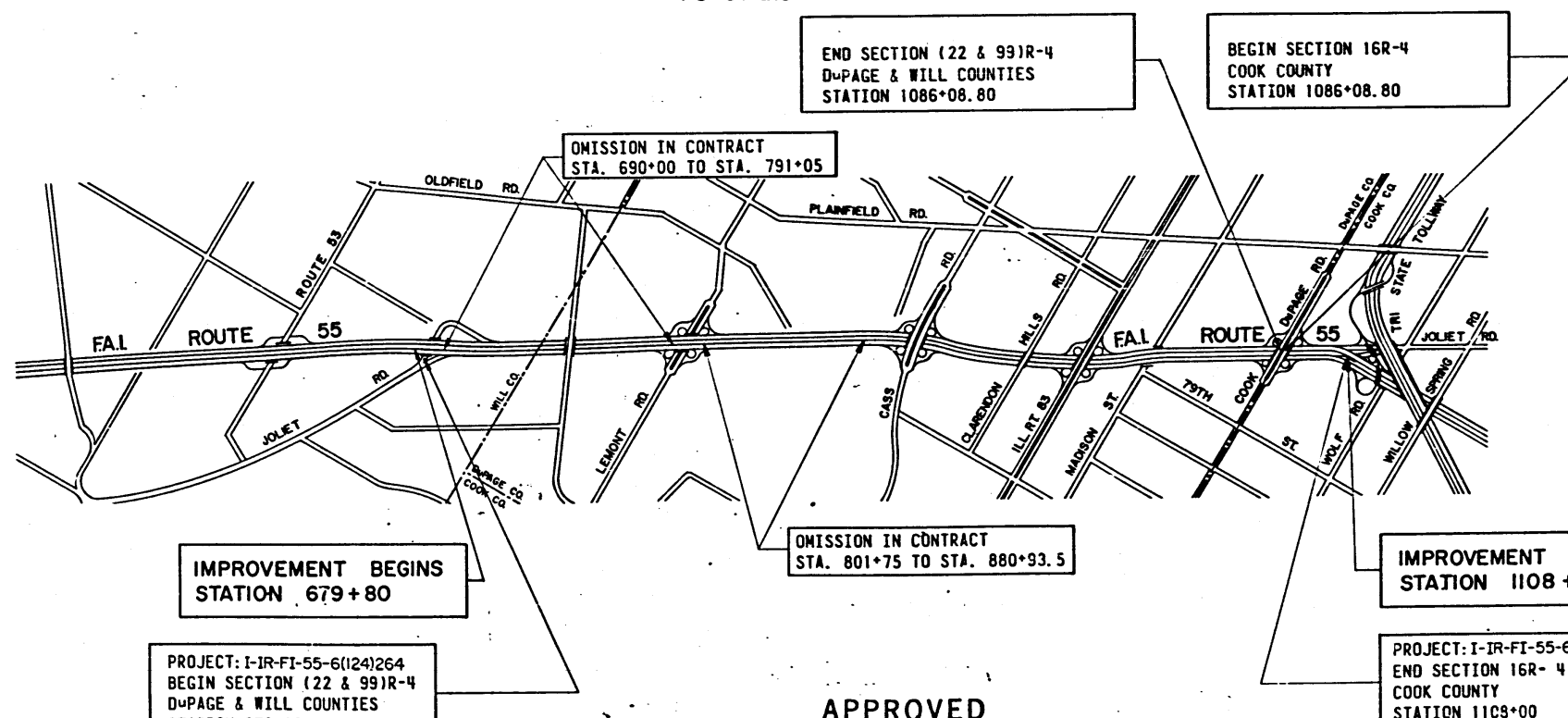
F.A.I. ROUTE 55 ADLAI E. STEVENSON EXPRESSWAY REHABILITATION

SECTION (22,99,16) R-4
PROJECT I-IR-FI-55-6(124)264
WILL, DUPAGE & COOK COUNTIES
PC-91-213-75

SECTION	SHEET	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99,16) R-4	WILL, DUPAGE & COOK	119	1



LOCATION OF SECTION INDICATED THUS:—



IMPROVEMENT BEGINS
STATION 679+80

PROJECT: I-IR-FI-55-6(124)264
BEGIN SECTION (22 & 99)R-4
DUPAGE & WILL COUNTIES
STATION 679+80

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
[Signature]

IMPROVEMENT ENDS
STATION 1108+00

PROJECT: I-IR-FI-55-6(124)264
END SECTION 16R-4
COOK COUNTY
STATION 1108+00

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
SUBMITTED 4/19	APPROVED [Signature]
DESIGNED BY [Signature]	DISTRICT ENGINEER
CHECKED BY [Signature]	CHIEF ENGINEER
APPROVED [Signature]	DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED [Signature]	DATE
DIVISION ADMINISTRATOR	

MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

ADLAI E. STEVENSON EXPRESSWAY

PROJECT: I-IR-FI-55-6(124)264

GROSS LENGTH = 40,638.35 LIN. FT.
NET LENGTH = 22,605.30 LIN. FT. OR (4.281 MILES)

IGR-4
GROSS LENGTH = 2,191.20 LIN. FT.
NET LENGTH = 2,191.20 LIN. FT. OR (0.415 MILES)

PROJECT LENGTH=24,796.50 LIN. FT. OR (4.696 MILES)

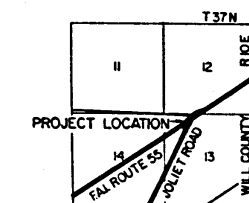
JOB NUMBER CONTRACT NO. 82510

COUNTY WILL, DuPage, Cook SECTION (22,99,16) R-4 F.A.I.ROUTE 55

Reel 1-117

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99) R-4	WILL DU PAGE	1:9	40
FED. ROAD DIST. NO. 7	ILLINOIS	FA. PROJ. I-UT-55-61	1264	

16 R-4 COOK



LOCATION SKETCH

GENERAL NOTES

All Reinforcement Bars Shall Be Lapped 24 Diameters Unless Otherwise Shown.

It Shall Be The Responsibility of The Contractor to Verify All Dimensions and Conditions Existing in the Field Prior to Construction and Ordering of Materials.

Protective Coat Shall Not Be Applied to Surfaces to Which Waterproofing Membrane System is Applied

The Concrete Rail Section Above The Mandatory Construction Joint at The Top of The Slab Shall Be Constructed of Class X Concrete, Except The Aggregates Shall Conform to The Requirements of Hand-rail Concrete.

Special Care Shall Be Taken in Compacting Bituminous Concrete Surface Along Expansion Joints to Achieve Proper Density and to Form 1/4 Lip. Smaller Rollers and Steel Plates Shall be Used For This Purpose as Directed by The Engineer.

Field Welding of Construction Accessories Will Not Be Permitted to 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.

The Basic Lead Silico Chromate Point System Shall Be Used for Shop and Field Painting of New Steel. For Painting Existing Steel See Special Provisions.

Expansion Bolts Shall Consist of Self-Drilling Expansion Shields and 3/4" ϕ Hooked Bolts. Hooked Bolts Shall Extend a Minimum of 12" into New Concrete.

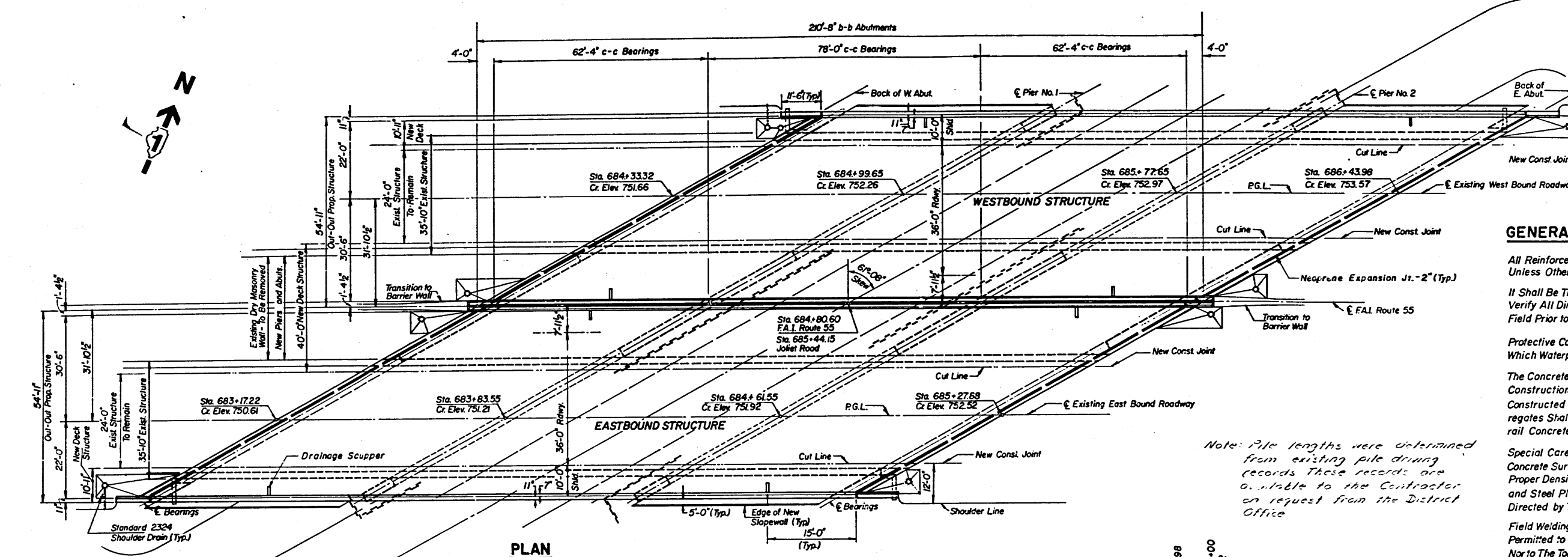
30 MPH Speed Limit Shall Be Maintained on The Structure for a Period of 3 Days After Completion of Each Deck Concrete Pouring Operation.

Calculated Weight of Structural Steel = 236,370 Lbs.

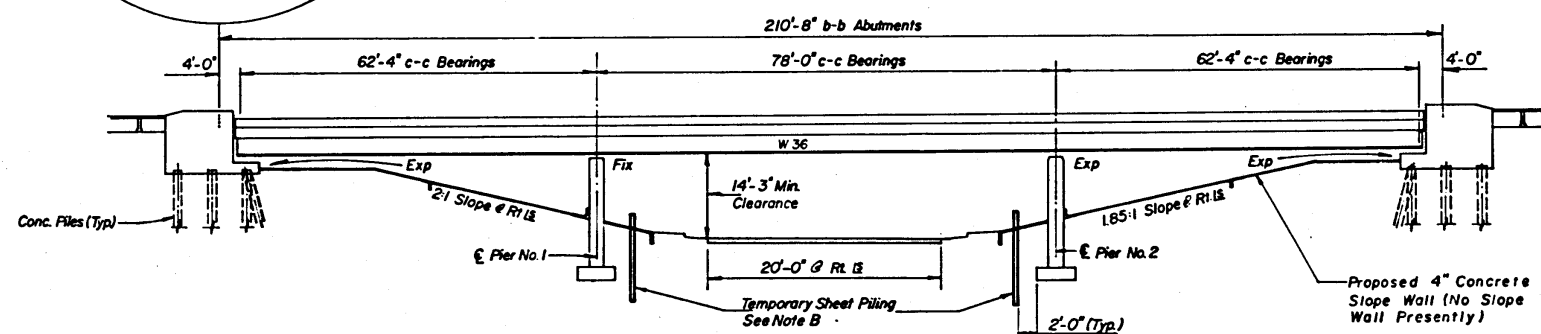
Work This Sheet with Sheet No. 41

NOTE "B"

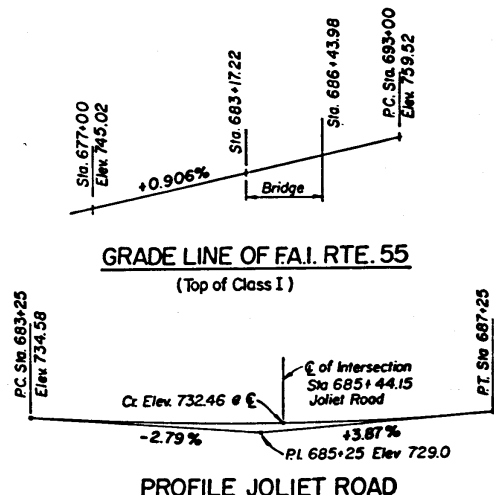
Temporary sheeting may be pulled once the excavated material has been replaced. The operation of driving sheeting removal and replacement of soil, and pulling of sheeting may be done pier by pier provided the Joliet Road roadway is always protected by sheeting during removal and replacement.



PLAN



ELEVATION



GRADE LINE OF F.A.I. RTE. 55
(Top of Class I)

PROFILE JOLIET ROAD

NOTES

DESIGN STRESSES

- f_c = 1400 P.S.I. Except as Follows:
- f_c = 1200 P.S.I. For Deck Slab
- f_c = 1000 P.S.I. For Concrete in Contact With Earth
- f_s = 20,000 P.S.I. M 183 Structural
- f_s = 20,000 P.S.I. Reinforcement Steel
- v = 75 P.S.I. Allowable Shear Stress in Footings
- n = 10

DESIGN SPECIFICATIONS AASHTO 1974
As Applicable.

DESIGN LOADING HS 20-44

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

GENERAL PLAN AND ELEVATION F.A.I. ROUTE 55 OVER JOLIET ROAD

STATION 684+80.6

SECTION 99R-4
AS BUILT SECTION 29R-14B-F

F.A.I. ROUTE 55

WILL COUNTY

MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

SCALE
DATE:

DRAWN BY: PB
CHECKED BY: AA

16 R-4 COO

Item	Unit	Super	Sub	Total
Bit. Concrete Surface Course, Mix D, Special	Ton	177	—	177
Protective Coat	Sq. Yd.	353	—	353
Concrete Removal	Cu. Yd.	177	9	186
Structure Excavation	Cu. Yd.	—	1175	1175
Class X Concrete	Cu. Yd.	374.3	443.1	817.4
Waterproofing Membrane System	Sq.Yd.	2510	—	2510
Reinforcement Bars	Pound	120,450	52290	172,740
Furnishing Concrete Piles	Lin.Ft.	—	494	494
Driving Concrete Piles	Lin.Ft.	—	494	494
Slope Wall- 4 Inch	Sq.Yd.	—	2363	2363
F & E Structural Steel	L.Sum	1	—	1
Drainage Scuppers	Each	8	—	8
2" Neoprene Expansion Joint *	Lin.Ft.	443	—	443
Deck Slab Repair (Partial)	Sq.Yd.	37	—	37
Deck Slab Repair (Full Depth)	Sq.Yd.	17	—	17
Cleaning & Painting Steel, Bridge No.1	L.Sum	1	—	1
Temporary Sheet Piling, Bridge No.1	L.Sum	—	1	1
Expansion Bolts (3/4")	Each	—	312	312

SECTION A-A

Edge of New Deck

5'-0"

6"

6x6" Wire Mesh
#58/100 Sq Ft

4" Slab

2'-0"

SECTION THRU SLOPEWALL

12'-0" Existing

10'-0" at Right E

4" Conc. Slopewall

1.85:1 RI E (W. Abut.)

2:1 RI E (E. Abut.)

2' P.I.F.

New Pier Section

Back of Abutment

Slope 2:1

6"

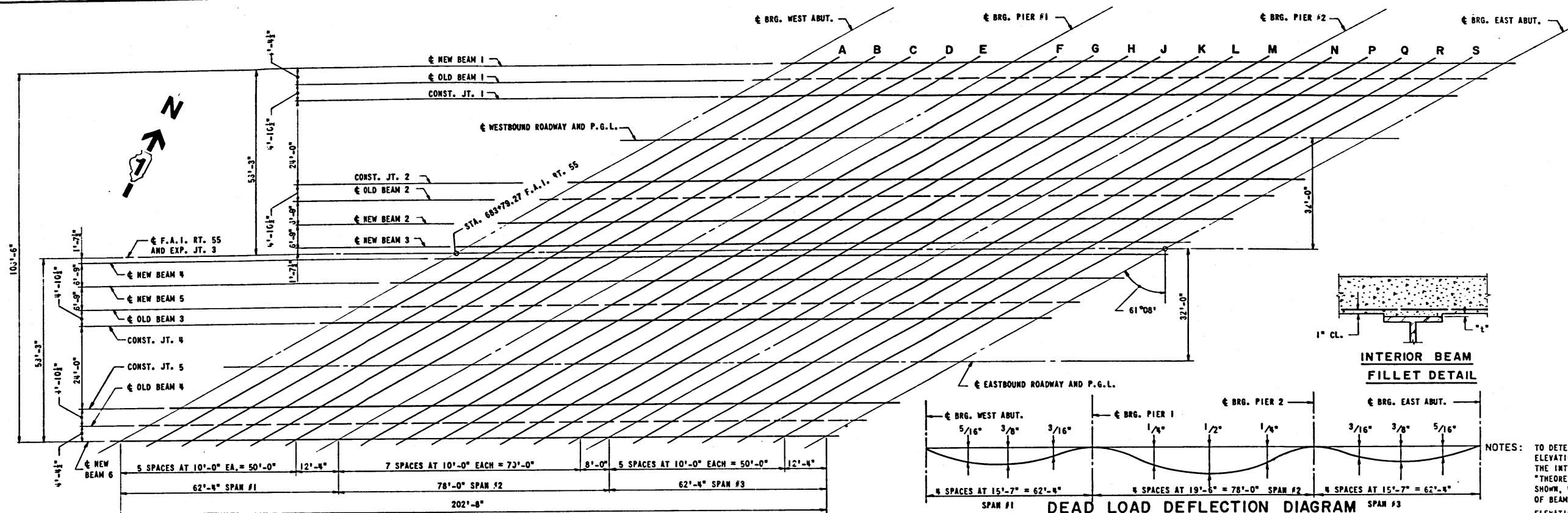
2'-0"

6"

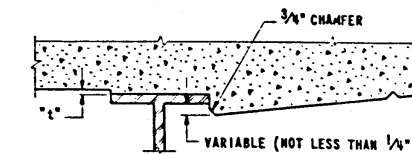


SCALE	DRAWN BY: P.B.
DATE:	CHECKED BY: A.A.

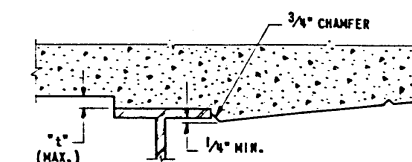
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,39) R-4	WILL DU PAGE	119	42
FED. ROAD DIST. NO. 7	ILLINOIS	FA PROJ I-UI-55-64	1264	
16 R-4 COOK				



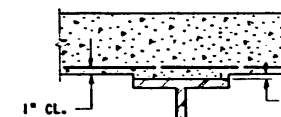
PLAN



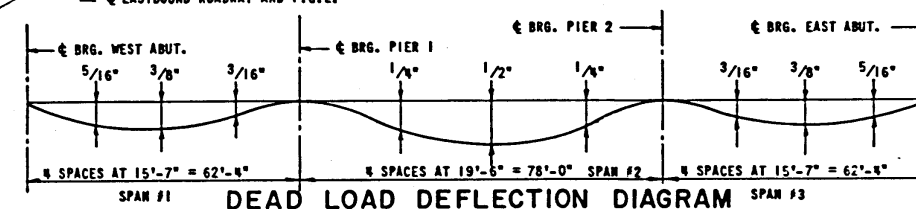
BEAM NO. 1
AT MINIMUM FILLET



BEAM NO. 1
AT MAXIMUM FILLET



INTERIOR BEAM
FILLET DETAIL



DEAD LOAD DEFLECTION DIAGRAM

NOTE: THE ABOVE DEFLECTIONS ARE NOT TO BE USED IN THE FIELD IF THE ENGINEER IS WORKING FROM THE GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS AS SHOWN BELOW.

NOTES: TO DETERMINE "L" AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED: ELEVATIONS OF THE TOP FLANGES OF THE BEAMS SHALL BE TAKEN AT THE INTERVALS SHOWN. THESE ELEVATIONS SUBTRACTED FROM THE "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION" SHOWN, MINUS 7" EQUALS THE FILLET HEIGHTS "L" ABOVE TOP FLANGE OF BEAM. ELEVATIONS ARE GIVEN AT TOP OF CONCRETE SLAB. OFFSETS ARE MEASURED POSITIVE NORTH OF F.A.I. RT. 55 AND NEGATIVE SOUTH OF F.A.I. RT. 55.

LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
C BRG. - WEST ABUT.	NEW BM.1	684+75.862	53.250	751.600		B	NEW BM.1	684+95.862	53.250	751.782	751.814	D	NEW BM.1	685+15.862	53.250	751.963	751.986	C BRG. - PIER NO. 1	NEW BM.1	685+38.195	53.250	752.165	
	OLD BM.1	684+67.926	48.875	751.620			OLD BM.1	684+87.926	48.875	751.801	751.833		OLD BM.1	685+07.926	48.875	751.982	752.006		OLD BM.1	685+30.259	48.875	752.184	
	CONST. JT.1	684+59.083	44.000	751.641			CONST. JT.1	684+79.083	44.000	751.822	751.854		CONST. JT.1	684+99.083	44.000	752.003	752.027		CONST. JT.1	685+21.416	44.000	752.206	
	CONST. JT.2	684+15.547	20.000	751.246			CONST. JT.2	684+35.547	20.000	751.428	751.460		CONST. JT.2	684+55.547	20.000	751.609	751.633		CONST. JT.2	684+77.880	20.000	751.311	
	OLD BM.2	684+06.704	15.125	751.065			OLD BM.2	684+26.704	15.125	751.246	751.278		OLD BM.2	684+46.704	15.125	751.427	751.451		OLD BM.2	684+69.037	15.125	751.630	
	NEW BM.2	683+94.459	8.375	750.813			NEW BM.2	684+14.459	8.375	750.994	751.027		NEW BM.2	684+34.459	8.375	751.176	751.199		NEW BM.2	684+56.792	8.375	751.378	
	NEW BM.3	683+82.215	1.625	750.562			NEW BM.3	684+02.215	1.625	750.743	750.775		NEW BM.3	684+22.215	1.625	750.924	750.948		NEW BM.3	684+44.548	1.625	751.126	
	EXP. JT.3	683+79.267	0.000	750.501			EXP. JT.3	683+99.267	0.000	750.682	750.714		EXP. JT.3	684+19.267	0.000	750.863	750.887		EXP. JT.3	684+41.600	0.000	751.066	
	NEW BM.4	683+76.319	-1.625	750.508			NEW BM.4	683+96.319	-1.625	750.689	750.722		NEW BM.4	684+16.319	-1.625	750.971	750.894		NEW BM.4	684+38.653	-1.625	751.073	
	NEW BM.5	683+64.075	-8.375	750.538			NEW BM.5	683+84.075	-8.375	750.719	750.751		NEW BM.5	684+04.075	-8.375	750.900	750.924		NEW BM.5	684+26.408	-8.375	751.103	
	OLD BM.3	683+51.830	-15.125	750.567			OLD BM.3	683+71.830	-15.125	750.749	750.781		OLD BM.3	683+91.830	-15.125	750.930	750.954		OLD BM.3	684+14.164	-15.125	751.132	
	CONST. JT.4	683+42.987	-20.000	750.589			CONST. JT.4	683+62.987	-20.000	750.770	750.802		CONST. JT.4	683+82.987	-20.000	750.951	750.975		CONST. JT.4	684+05.321	-20.000	751.154	
	CONST. JT.5	682+99.451	-44.000	750.194			CONST. JT.5	683+19.451	-44.000	750.376	750.408		CONST. JT.5	683+39.451	-44.000	750.557	750.580		CONST. JT.5	683+61.785	-44.000	750.759	
	OLD BM.4	682+90.608	-48.875	750.013			OLD BM.4	683+10.608	-48.875	750.194	750.226		OLD BM.4	683+30.608	-48.875	750.375	750.399		OLD BM.4	683+52.942	-48.875	750.578	
	NEW BM.6	682+82.672	-53.250	749.850			NEW BM.6	683+02.672	-53.250	750.031	750.063		NEW BM.6	683+22.672	-53.250	750.212	750.236		NEW BM.6	683+45.005	-53.250	750.414	
A	NEW BM.1	684+85.862	53.250	751.691	751.711	C	NEW BM.1	685+05.862	53.250	751.872	751.905	E	NEW BM.1	685+25.862	53.250	752.053	752.063	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE ADLAI E. STEVENSON EXPRESSWAY F.A.I. ROUTE 55 REHABILITATION PROJECT DECK ELEVATIONS F.A.I. ROUTE 55 OVER JOLIET ROAD STATION 684+80.6 F.A.I. ROUTE 55 WILL COUNTY AS BUILT SECTION 29R-IHB-F					
	OLD BM.1	684+77.926	48.875	751.710	751.730		OLD BM.1	684+97.926	48.875	751.891	751.924		OLD BM.1	685+17.926	48.875	752.073	752.082						
	CONST. JT.1	684+69.083	44.000	751.732	751.752		CONST. JT.1	684+89.083	44.000	751.913	751.946		CONST. JT.1	685+09.083	44.000	752.094	752.103						
	CONST. JT.2	684+25.547	20.000	751.337	751.357		CONST. JT.2	684+45.547	20.000	751.518	751.551		CONST. JT.2	684+65.547	20.000	751.700	751.709						
	OLD BM.2	684+16.704	15.125	751.155	751.175		OLD BM.2	684+36.704	15.125	751.337	751.370		OLD BM.2	684+56.704	15.125	751.518	751.527						
	NEW BM.2	684+04.459	8.375	750.904	750.924		NEW BM.2	684+24.459	8.375	751.085	751.118		NEW BM.2	684+44.459	8.375	751.266	751.276						
	NEW BM.3	683+92.215	1.625	750.652	750.672		NEW BM.3	684+12.215	1.625	750.833	750.866		NEW BM.3	684+32.215	1.625	751.015	751.024						
	EXP. JT.3	683+89.267	0.000	750.592	750.612		EXP. JT.3	684+09.267	0.000	750.773	750.806		EXP. JT.3	684+29.267	0.000	750.954	750.963						
	NEW BM.4	683+86.319	-1.625	750.599	750.619		NEW BM.4	684+06.319	-1.625	750.780	750.813		NEW BM.4	684+26.319	-1.625	750.961	750.971						
	NEW BM.5	683+74.075	-8.375	750.628	750.648		NEW BM.5	683+94.075	-8.375	750.810	750.843		NEW BM.5	684+14.075	-8.375	750.991	751.000						
	OLD BM.3	683+61.830	-15.125	750.658	750.678		OLD BM.3	683+81.830	-15.125	750.839	750.872		OLD BM.3	684+01.830	-15.125	751.021	751.030						
	CONST. JT.4	683+52.987	-20.000	750.679	750.699		CONST. JT.4	683+72.987	-20.000	750.861	750.894		CONST. JT.4	683+92.987	-20.000	751.042	751.051						
	CONST. JT.5	683+09.451	-44.000	750.285	750.305		CONST. JT.5	683+29.451	-44.000	750.466	750.499		CONST. JT.5	683+49.451	-44.000	750.647	750.657						
	OLD BM.4	683+00.608	-48.875	750.103	750.123		OLD BM.4	683+20.608	-48.875	750.285	750.318		OLD BM.4	683+40.608	-48.875	750.466	750.475						
	NEW BM.6	682+92.672	-53.250	749.940	749.960		NEW BM.6	683+12.672	-53.250	750.121	750.154		NEW BM.6	683+32.672	-53.250	750.303	750.312						

Work This Sheet with Sheet No. 43

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

DECK ELEVATIONS
F.A.I. ROUTE 55 OVER JOLIET ROAD
STATION 684+80.6

F.A.I. ROUTE 55 WILL COUNTY AS BUILT SECTION 29R-IHB-F

MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

SCALE:

DRAWN BY: H.Z.

FAI RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
55	(22,99) R-4	WILL DU PAGE	119	43
FED. ROAD DIST. NO. 7		ILLINOIS	FA PROJ. I-UI-55-61	1264

16 R-4 COOK

LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
F	NEW BM.1	685+48.195	53.250	752.256	752.264
	OLD BM.1	685+40.259	48.875	752.275	752.283
	CONST. JT.1	685+31.416	44.000	752.297	752.304
	CONST. JT.2	684+87.880	20.000	751.902	751.910
	OLD BM.2	684+79.037	15.125	751.720	751.728
	NEW BM.2	684+66.792	8.375	751.469	751.476
	NEW BM.3	684+54.548	1.625	751.217	751.225
	EXP. JT.3	684+31.600	0.000	751.157	751.164
	NEW BM.4	684+48.653	-1.625	751.164	751.171
	NEW BM.5	684+36.408	-8.375	751.193	751.201
	OLD BM.3	684+24.164	-15.125	751.223	751.231
	CONST. JT.4	684+15.321	-20.000	751.244	751.252
G	NEW BM.1	685+58.195	53.250	752.346	752.369
	OLD BM.1	685+50.259	48.875	752.366	752.389
	CONST. JT.1	685+41.416	44.000	752.387	752.410
	CONST. JT.2	684+97.880	20.000	751.993	752.015
	OLD BM.2	684+89.037	15.125	751.811	751.834
	NEW BM.2	684+76.792	8.375	751.559	751.582
	NEW BM.3	684+64.548	1.625	751.308	751.331
	EXP. JT.3	684+61.600	0.000	751.247	751.270
	NEW BM.4	684+58.653	-1.625	751.254	751.277
	NEW BM.5	684+46.408	-8.375	751.284	751.307
	OLD BM.3	684+34.164	-15.125	751.314	751.336
	CONST. JT.4	684+25.321	-20.000	751.335	751.358
H	NEW BM.1	685+68.195	53.250	752.437	752.473
	OLD BM.1	685+60.259	48.875	752.456	752.492
	CONST. JT.1	685+51.416	44.000	752.478	752.514
	CONST. JT.2	685+07.880	20.000	752.083	752.119
	OLD BM.2	684+99.037	15.125	751.902	751.937
	NEW BM.2	684+86.792	8.375	751.650	751.686
	NEW BM.3	684+74.548	1.625	751.398	751.434
	EXP. JT.3	684+71.600	0.000	751.338	751.374
	NEW BM.4	684+68.653	-1.625	751.345	751.381
	NEW BM.5	684+56.408	-8.375	751.375	751.410
	OLD BM.3	684+44.164	-15.125	751.404	751.440
	CONST. JT.4	684+35.321	-20.000	751.426	751.461
J	NEW BM.1	685+78.195	53.250	752.528	752.568
	OLD BM.1	685+70.259	48.875	752.547	752.587
	CONST. JT.1	685+61.416	44.000	752.568	752.608
	CONST. JT.2	685+17.880	20.000	752.174	752.214
	OLD BM.2	685+09.037	15.125	751.992	752.032
	NEW BM.2	684+96.792	8.375	751.741	751.781
	NEW BM.3	684+84.548	1.625	751.489	751.529
	EXP. JT.3	684+81.600	0.000	751.428	751.468
	NEW BM.4	684+78.653	-1.625	751.436	751.476
	NEW BM.5	684+66.408	-8.375	751.465	751.505
	OLD BM.3	684+54.164	-15.125	751.495	751.535
	CONST. JT.4	684+45.321	-20.000	751.516	751.556

LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
K	NEW BM.1	685+88.195	53.250	752.618	752.652
	OLD BM.1	685+80.259	48.875	752.638	752.671
	CONST. JT.1	685+71.416	44.000	752.659	752.693
	CONST. JT.2	685+27.880	20.000	752.264	752.298
	OLD BM.2	685+19.037	15.125	752.083	752.117
	NEW BM.2	685+06.792	8.375	751.831	751.865
	NEW BM.3	684+94.548	1.625	751.580	751.613
	EXP. JT.3	684+91.600	0.000	751.519	751.553
	NEW BM.4	684+88.653	-1.625	751.526	751.560
	NEW BM.5	684+76.408	-8.375	751.556	751.590
	OLD BM.3	684+64.164	-15.125	751.585	751.619
	CONST. JT.4	684+55.321	-20.000	751.607	751.641
L	NEW BM.1	685+98.195	53.250	752.709	752.729
	OLD BM.1	685+90.259	48.875	752.728	752.748
	CONST. JT.1	685+81.416	44.000	752.750	752.769
	CONST. JT.2	685+37.880	20.000	752.355	752.375
	OLD BM.2	685+29.037	15.125	752.173	752.193
	NEW BM.2	685+16.792	8.375	751.922	751.942
	NEW BM.3	685+04.548	1.625	751.670	751.690
	EXP. JT.3	685+01.600	0.000	751.610	751.629
	NEW BM.4	684+98.653	-1.625	751.617	751.636
	NEW BM.5	684+86.408	-8.375	751.646	751.666
	OLD BM.3	684+74.164	-15.125	751.676	751.696
	CONST. JT.4	684+65.321	-20.000	751.698	751.717
M	NEW BM.1	686+08.195	53.250	752.800	752.805
	OLD BM.1	686+00.259	48.875	752.819	752.824
	CONST. JT.1	685+91.416	44.000	752.840	752.845
	CONST. JT.2	685+47.880	20.000	752.446	752.451
	OLD BM.2	685+39.037	15.125	752.264	752.269
	NEW BM.2	685+26.792	8.375	752.012	752.018
	NEW BM.3	685+14.548	1.625	751.761	751.766
	EXP. JT.3	685+11.600	0.000	751.700	751.705
	NEW BM.4	685+08.653	-1.625	751.707	751.713
	NEW BM.5	684+96.408	-8.375	751.737	751.742
	OLD BM.3	684+84.164	-15.125	751.767	751.772
	CONST. JT.4	684+75.321	-20.000	751.788	751.793
Q	NEW BM.1	686+16.195	53.250	752.872	752.872
	OLD BM.1	686+08.259	48.875	752.891	752.891
	CONST. JT.1	685+99.416	44.000	752.913	752.913
	CONST. JT.2	685+55.880	20.000	752.518	752.518
	OLD BM.2	685+47.037	15.125	752.337	752.337
	NEW BM.2	685+34.792	8.375	752.085	752.085
	NEW BM.3	685+22.548	1.625	751.833	751.833
	EXP. JT.3	685+19.600	0.000	751.773	751.773
	NEW BM.4	685+16.653	-1.625	751.780	751.780
	NEW BM.5	685+04.408	-8.375	751.810	751.810
	OLD BM.3	684+92.164	-15.125	751.839	751.839
	CONST. JT.4	684+83.321	-20.000	751.861	751.861
R	NEW BM.1	686+26.195	53.250	752.963	752.969
	OLD BM.1	686+18.259	48.875	752.982	752.988
	CONST. JT.1	686+09.416	44.000	753.003	753.010
	CONST. JT.2	685+65.880	20.000	752.609	752.615
	OLD BM.2	685+57.037	15.125	752.427	752.433
	NEW BM.2	685+44.792	8.375	752.176	752.182
	NEW BM.3	685+32.548	1.625	751.924	751.930
	EXP. JT.3	685+29.600	0.000	751.863	751.870
	NEW BM.4	685+26.653	-1.625	751.871	751.877
	NEW BM.5	685+14.408	-8.375	751.900	751.907
	OLD BM.3	685+02.164	-15.125	751.930	751.936
	CONST. JT.4	684+93.321	-20.000	751.951	751.958

LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
N	NEW BM.1	686+36.195	53.250	753.053	753.074
	OLD BM.1	686+28.259	48.875	753.073	753.093
	CONST. JT.1	686+19.416	44.000	753.094	753.114
	CONST. JT.2	685+75.880	20.000	752.699	752.720
	OLD BM.2	685+67.037	15.125	752.518	752.538
	NEW BM.2	685+54.792	8.375	752.266	752.287
	NEW BM.3	685+42.548	1.625	752.015	752.035
	EXP. JT.3	685+39.600	0.000	751.954	751.974
	NEW BM.4	685+36.653	-1.625	751.961	751.982
	NEW BM.5	685+24.408	-8.375	751.991	752.011
	OLD BM.3	685+12.164	-15.125	752.020	752.041
	CONST. JT.4	685+03.321	-20.000	752.042	752.062
P	NEW BM.1	686+46.195	53.250	753.144	753.176
	OLD BM.1	686+38.259	48.875	753.163	753.195
	CONST. JT.1	686+29.416	44.000	753.185	753.216
	CONST. JT.2	685+85.880	20.000	752.790	752.822
	OLD BM.2	685+77.037	15.125	752.608	752.640
	NEW BM.2	685+64.792	8.375	752.357	752.388
	NEW BM.3	685+52.548	1.625	752.105	752.137
	EXP. JT.3	685+49.600	0.000	752.045	752.076
	NEW BM.4	685+46.653	-1.625	752.052	752.083
	NEW BM.5	685+34.408	-8.375	752.081	752.113
	OLD BM.3	685+22.164	-15.125	752.111	752.143
	CONST. JT.4	685+13.321	-20.000	752.133	752.164
Q	NEW BM.1	686+56.195	53.250	753.235	753.268
	OLD BM.1	686+48.259	48.875	753.254	753.287
	CONST. JT.1	686+39.416	44.000	753.275	753.309
	CONST. JT.2	685+95.880	20.000	752.881	752.914
	OLD BM.2	685+87.037	15.125	752.699	752.732
	NEW BM.2	685+74.792	8.375	752.447	752.481
	NEW BM.3	685+62.548	1.625	752.196	752.229
	EXP. JT.3	685+59.600	0.000	752.135	752.169
	NEW BM.4	685+56.653	-1.625	752.142	752.176
	NEW BM.5	685+44.408	-8.375	752.172	752.206
	OLD BM.3	685+32.164	-15.125	752.202	752.235
	CONST. JT.4	685+23.321	-20.000	752.223	752.257

LINE	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
S	NEW BM.1	686+66.195	53.250	753.325	753.349
	OLD BM.1	686+58.259	48.875	753.344	753.368
	CONST. JT.1	686+49.416	44.000	753.366	753.390
	CONST. JT.2	686+05.880	20.000	752.971	752.995
	OLD BM.2	685+97.037	15.125	752.790	752.813
	NEW BM.2	685+84.792	8.375	752.538	752.562
	NEW BM.3	685+72.548	1.625	752.286	752.310
	EXP. JT.3	685+69.600	0.000	752.226	752.250
	NEW BM.4	685+66.653	-1.625	752.233	752.257
	NEW BM.5	685+54.408	-8.375	752.263	752.286
	OLD BM.3	685+42.164	-15.125	752.292	752.316
	CONST. JT.4	685+33.321	-20.000	752.314	752.338
CONST. JT.5	684+89.785	-44.000	751.919	751.943	
OLD BM.4	684+80.942	-48.875	751.738	751.761	
NEW BM.6	684+73.005	-53.250	751.574	751.598	
Q BRG. - EAST ABUT.	NEW BM.1	686+78.529	53.250	753.437	
	OLD BM.1	686+70.592	48.875	753.456	
	CONST. JT.1	686+61.749	44.000	753.478	
	CONST. JT.2	686+18.213	20.000	753.083	
	OLD BM.2	686+09.370	15.125	752.901	
	NEW BM.2	685+97.126	8.375	752.650	
	NEW BM.3	685+84.881	1.625	752.398	
	EXP. JT.3	685+81.934	0.000	752.338	
	NEW BM.4	685+78.986	-1.625	752.345	
	NEW BM.5	685+66.741	-8.375	752.374	
	OLD BM.3	685+54.497	-15.125	752.404	
	CONST. JT.4	685+45.654	-20.000	752.426	
CONST. JT.5	685+02.118	-44.000	752.031		
OLD BM.4	684+93.275	-48.875	751.849		
NEW BM.6	684+85.339	-53.250	751.686		

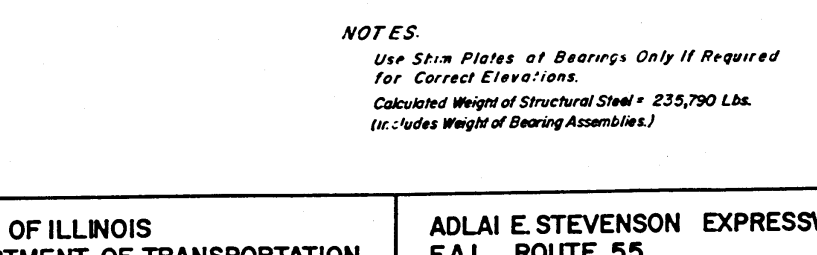
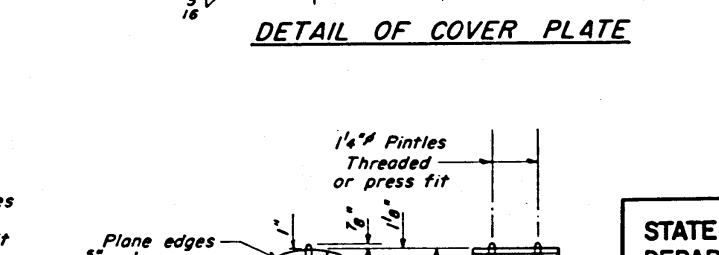
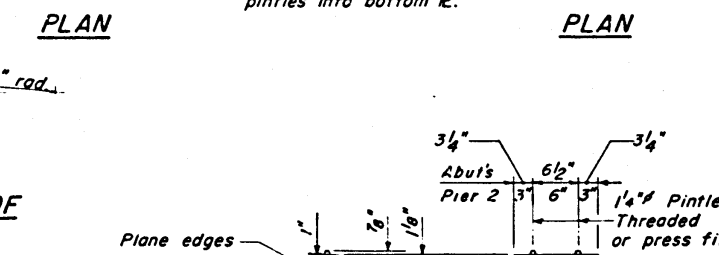
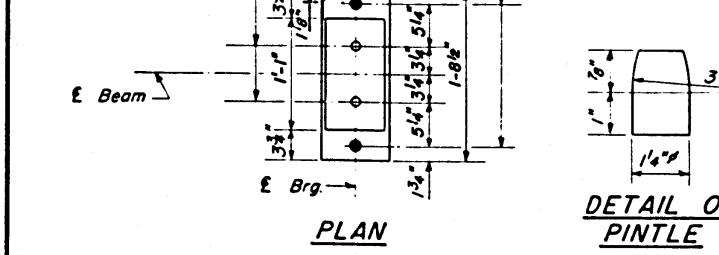
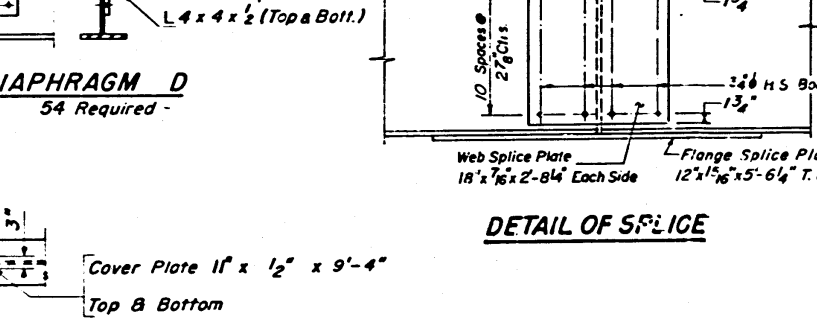
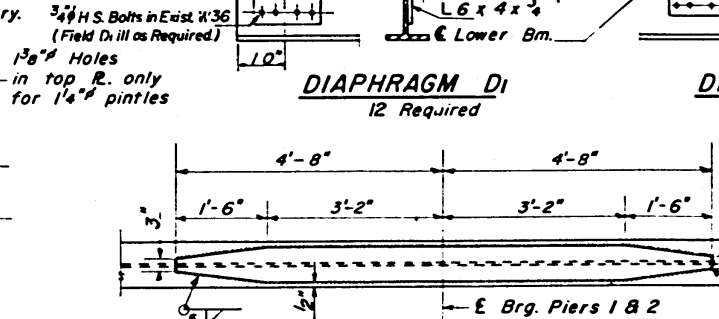
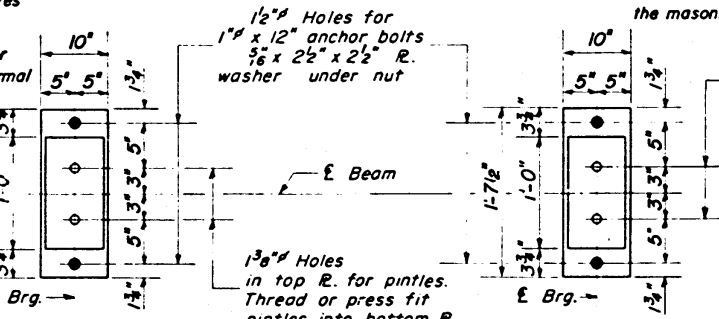
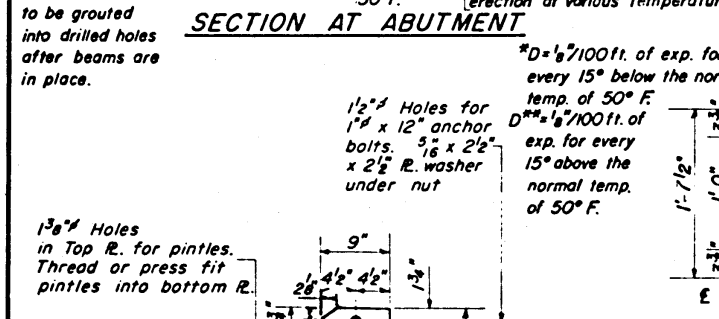
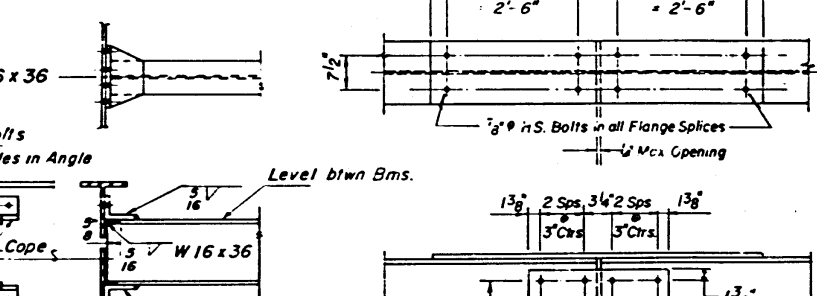
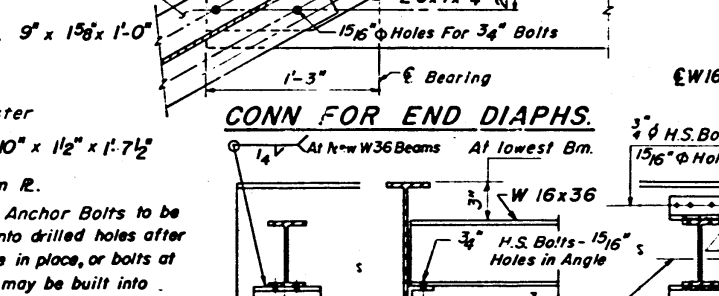
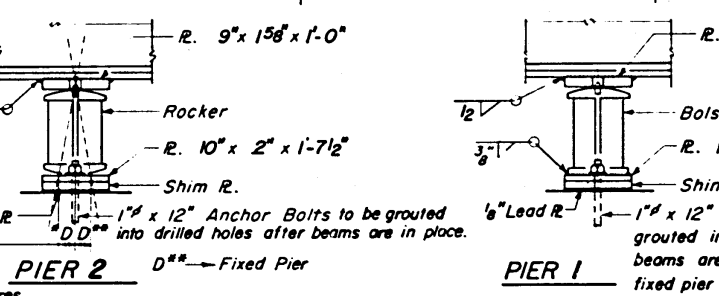
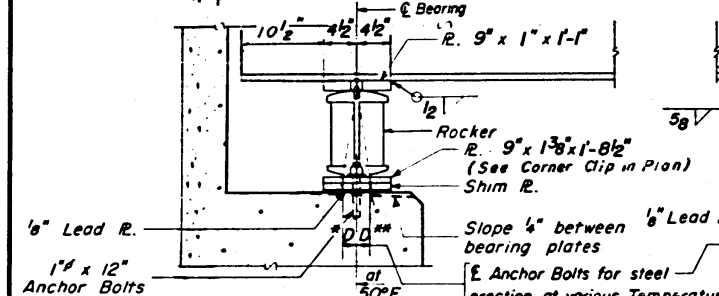
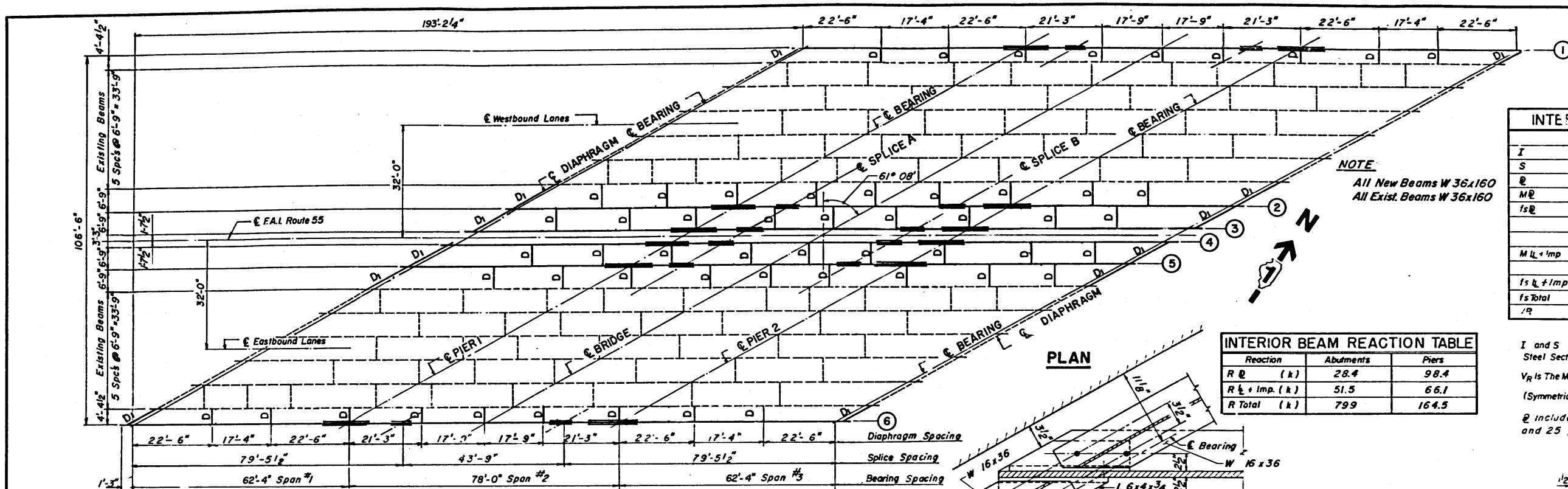
FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99) R-4	WILL DU PAGE	119	46
FED. ROAD DIST. NO. 7	ILLINOIS	FA PROJ I-UI-55-6	1264	

16 R-4 COOK

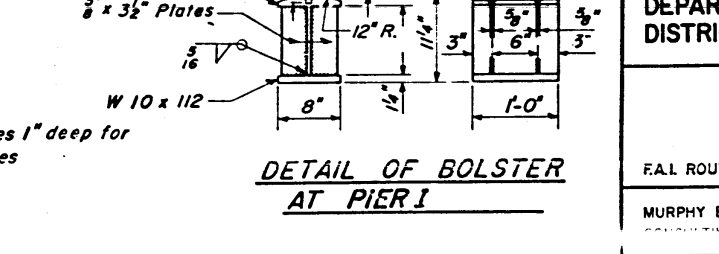
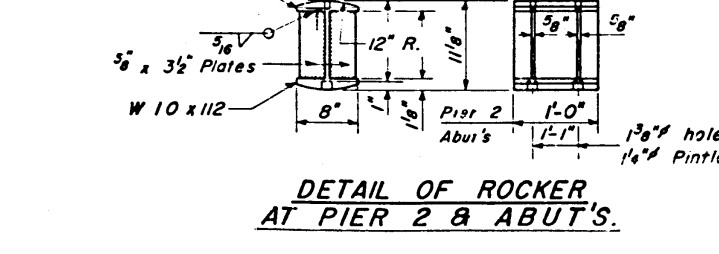
INTERIOR BEAM MOMENT TABLE				
	0.4 Span or 3	Pier 1 or 2	0.5 Span 2	
I (in ⁴)	9760	13,424	9760	
S (in ³)	542	726	542	
M (k/ft)	1.249	1.295	1.249	
M _R (ft-k)	322	-651.3	299.3	
f _s (ksi)	7.13	10.77	6.63	
M L + Imp (ft-k)	524.7	-478.8	519.6	
f _s L + Imp (ksi)	11.62	7.91	11.50	
f _s Total (ksi)	18.75	18.68	18.13	
f _r (ksi)	50.7		51.5	

I and S are the Moment of Inertia and Section Modulus of the Steel Section Respectively
 V_R is The Maximum Live Load Plus Impact Shear Range in the Span
 (Symmetrical About 0.5 Span 2)
 M includes Weight of Beam, Slab, Curb, Pcrapet 13¹/₂" I-11 and 25 pcf Future Wearing Surface

INTERIOR BEAM REACTION TABLE		
Reaction	Abutments	Piers
R _Q (k)	28.4	98.4
R _L + Imp. (k)	51.5	66.1
R Total (k)	799	164.5



TOP OF BEAM ELEVATIONS						
Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
Br. W. Abut.	750.92	750.13	749.89	749.83	749.86	749.17
Br. Pier 1	751.48	750.70	750.45	750.39	750.42	749.73
Splice A	751.64	750.65	750.60	750.55	750.58	749.89
Splice B	752.04	751.25	751.00	750.94	750.97	750.29
Br. Pier 2	752.19	751.40	751.15	751.10	751.13	750.44



NOTES:
 Use Shim Plates at Bearings Only If Required for Correct Elevations.
 Calculated Weight of Structural Steel = 235,790 Lbs.
 (Includes Weight of Bearing Assemblies.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

FRAMING PLAN AND BEARING DETAILS
F.A.I. ROUTE 55 OVER JOLIET ROAD
STATION 684+80.6
WILL COUNTY
AS BUILT SECTION 29R-1MB-F

F.A.I. ROUTE 55
MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

SCALE:
DATE:

DRAWN BY: B.J.M.
CHECKED BY: J.R.L.

FAI ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99) R-3	WILL DU PAGE	119	48
FED. ROAD DIST. NO. 7	ILLINOIS	FA PROJ I-UI-55-6	1264	
16 R-3		COOK		

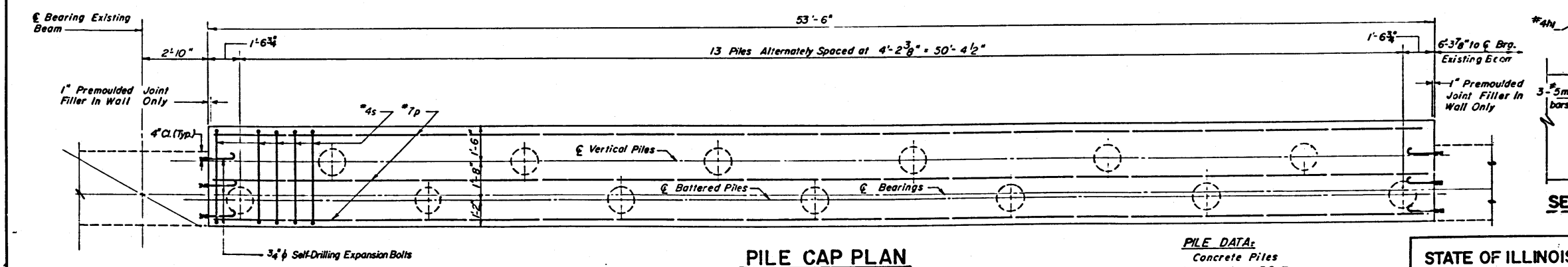
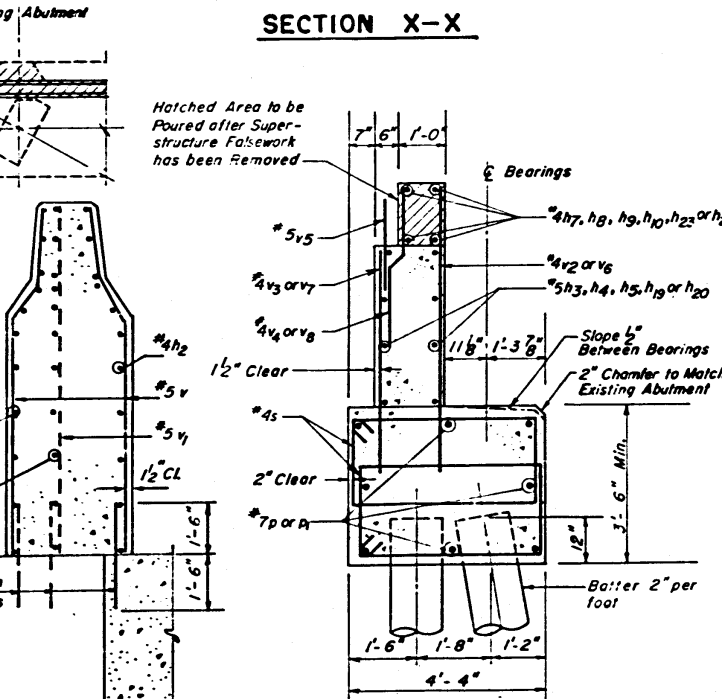
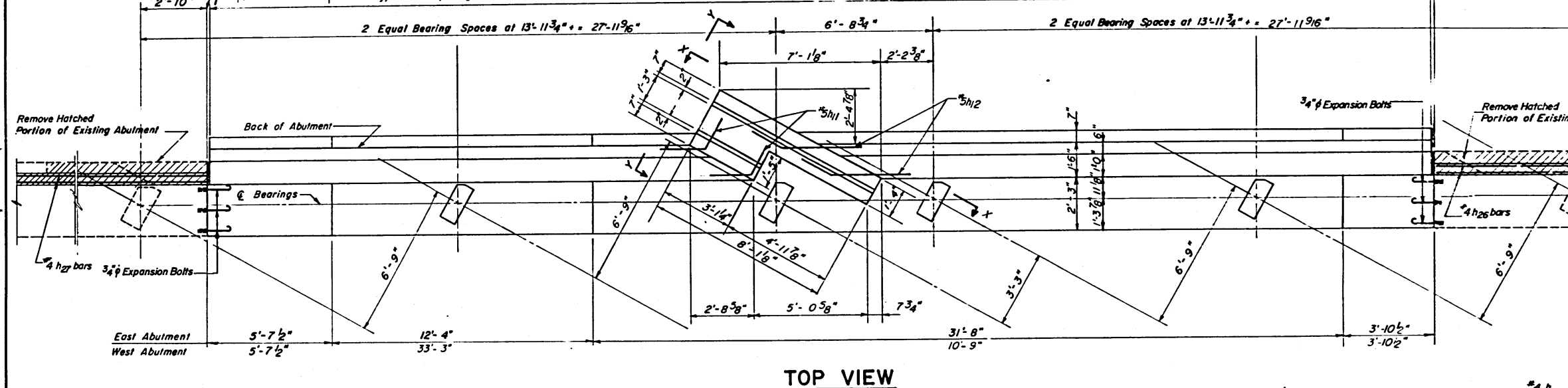
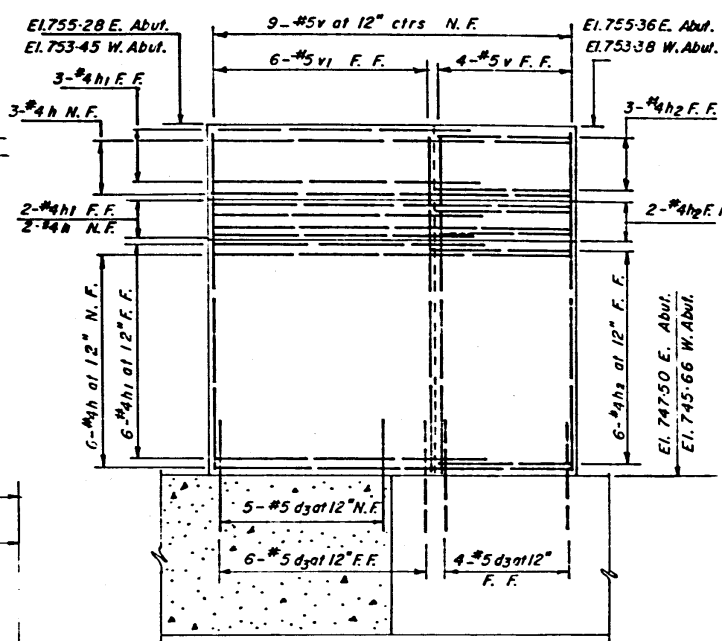
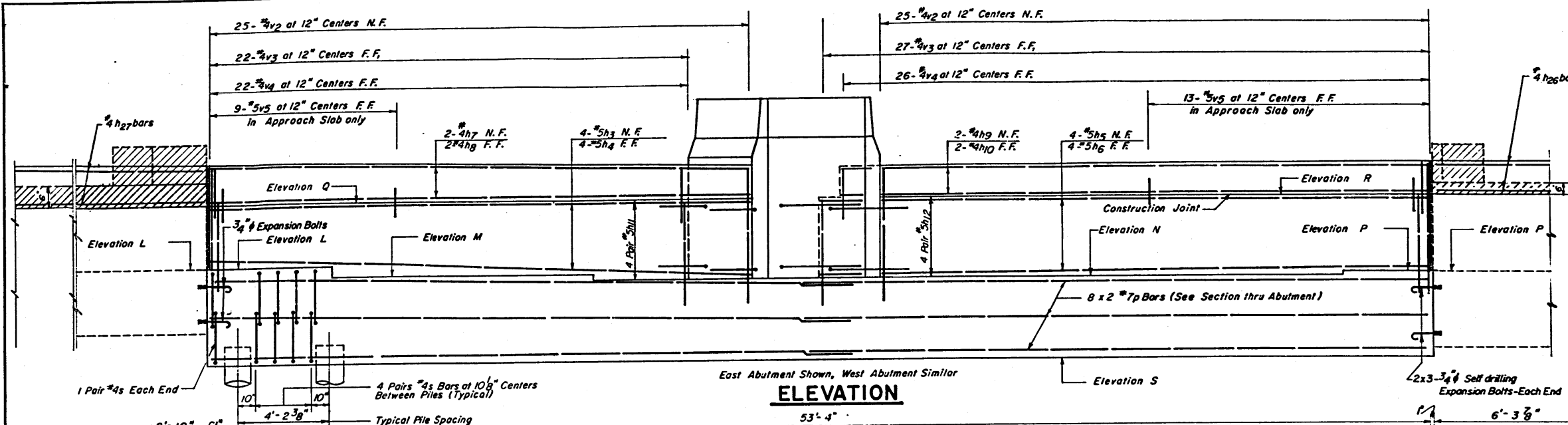


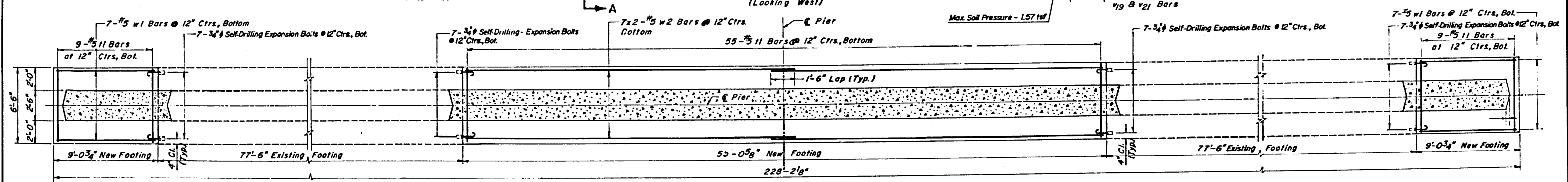
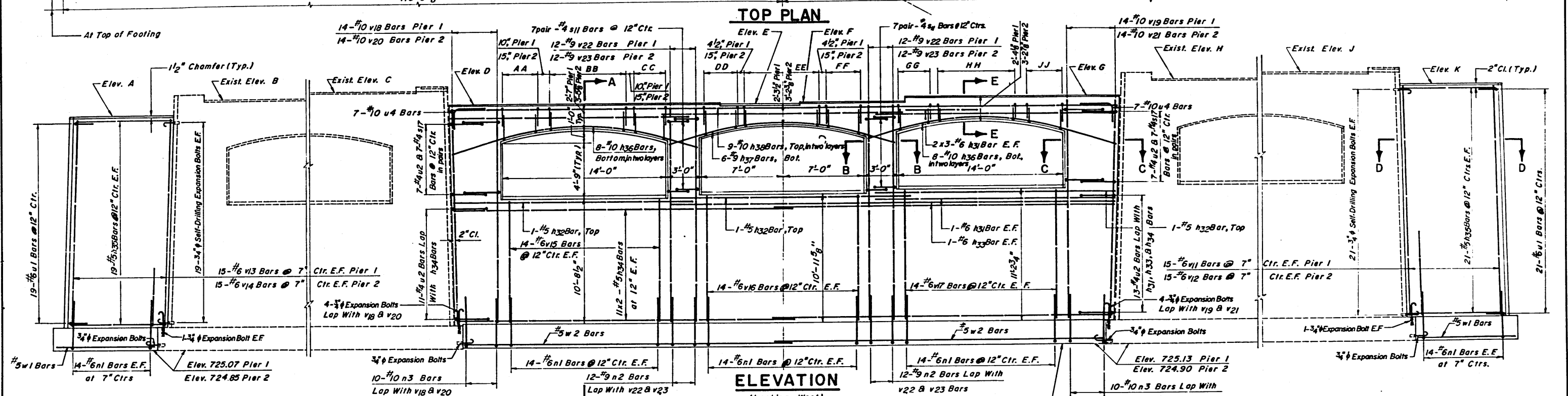
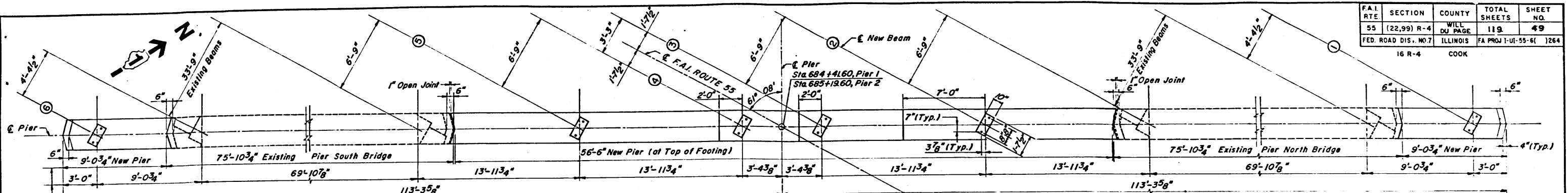
TABLE OF ELEVATIONS							
Location	L*	M	N	P*	Q	R	S
East Abutment	748.26	747.81	747.50	747.72	751.32	751.06	744.00
West Abutment	745.88	745.66	745.97	746.43	749.12	749.39	742.16

*Existing Elevation - Verify in Field

PILE DATA:
Concrete Piles
Capacity: 30 Tons
Estimated Length: 13'
No. Required: 13

Work This Sheet with Sheet No. 47.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE		ADLAI E. STEVENSON EXPRESSWAY F.A.I. ROUTE 55 REHABILITATION PROJECT	
ABUTMENTS F.A.I. ROUTE 55 OVER JOLIET ROAD STATION 684 + 80.6			
F.A.I. 55		WILL COUNTY	
MURPHY ENGINEERING INCORPORATED		SCALE: 1" = 10'	
		DRAWN BY: R. J. W. CHECKED BY: C. K.	



FOOTING PLAN

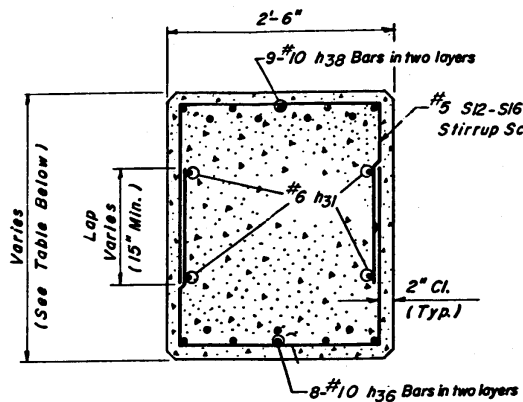
Work This Sheet With "Pier Details" Sheet No. 50.

TABLE OF ELEVATIONS										
	A	B*	C*	D	E	F	G	H*	J*	K
PIER 1	745.48	746.57	747.08	746.17	746.14	746.20	746.45	747.63	748.14	747.23
PIER 2	746.16	746.35	746.86	746.85	746.82	746.87	747.12	747.40	747.91	747.11

* Elevations of Existing Piers

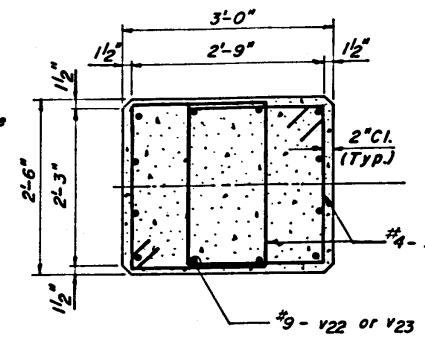
STIRRUP SCHEDULE					
PIER 1			PIER 2		
BAR	NO. OF PAIRS	SPACING	BAR	NO. OF PAIRS	SPACING
AA s12	5	10"	s15	3	15"
BB s13	7	10"	s12	6	15"
CC s12	5	10"	s15	3	15"
DD s14	10	4 1/2"	s16	3	15"
EE s13	6	15"	s14	6	15"
FF s14	10	4 1/2"	s16	3	15"
GG s14	5	10"	s15	3	15"
HH s13	7	10"	s14	6	15"

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE		ADLAI E. STEVENSON EXPRESSWAY F.A.I. ROUTE 55 REHABILITATION PROJECT	
PIERS F.A.I. ROUTE 55 OVER JOLIET ROAD STATION 684+80.60			
F.A.I. ROUTE 55		WILL COUNTY	
MURPHY ENGINEERING INCORPORATED CONSULTING ENGINEERS		SCALE: DATE:	
		DRAWN BY: B.J.M. CHECKED BY: J.R.L.	

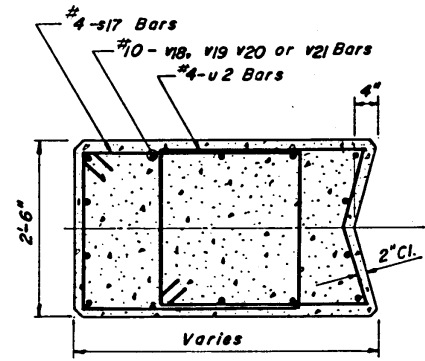


SECTION E-E

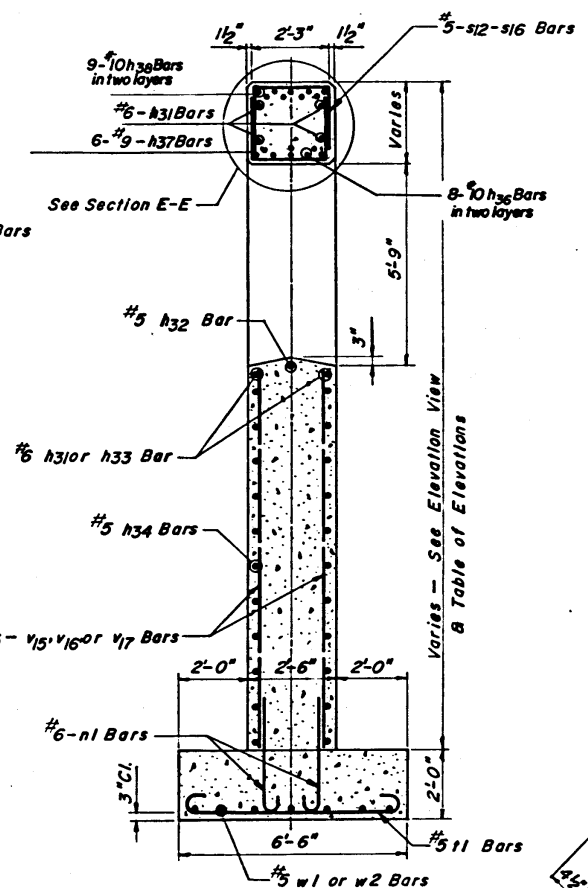
DEPTHS OF CAP BEAM (Measured at Minimum Point)				
STEEL BEAM NO.	2	4	5	
PIER NO. 1	2'-4 1/8"	2'-3 1/2"	2'-7"	
PIER NO. 2	3'-2 1/8"	3'-2 3/8"	3'-5 1/8"	



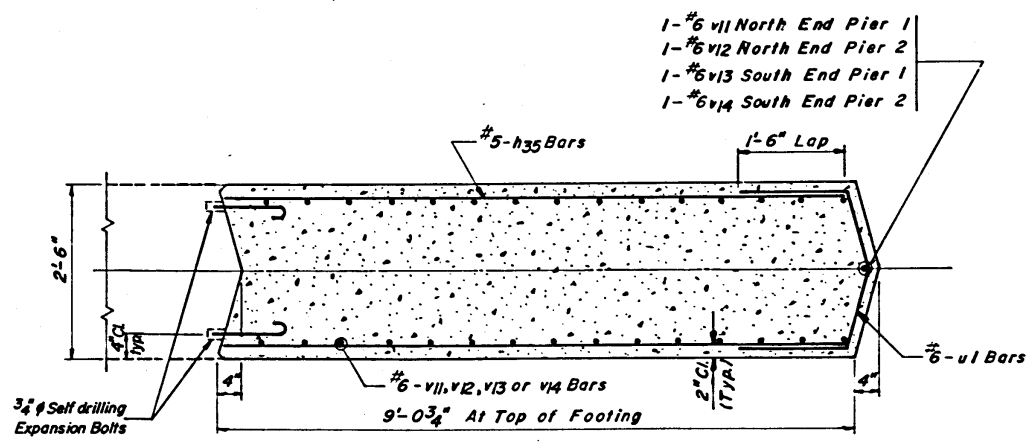
SECTION B-B



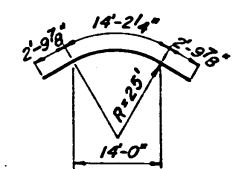
SECTION C-C



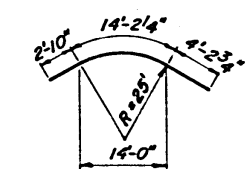
SECTION A-A



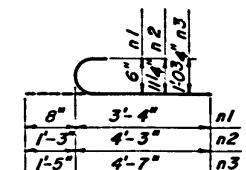
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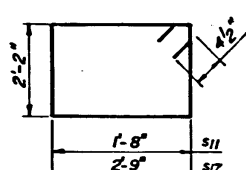
Bar h37



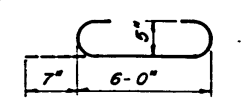
Bar h36



Bars n1, n2, n3



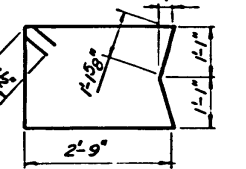
Bar s11 & s17



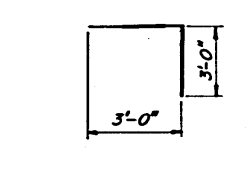
Bar t1



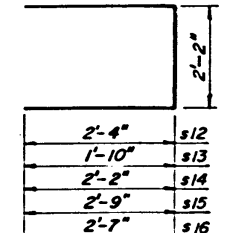
Bar u1



Bar u2



Bar u4



Bar s12-s16

REINFORCEMENT SCHEDULE				
BAR	NO.	SIZE	LENGTH	SHAPE
h31	28	#6	20'-6"	—
h32	6	#5	20'-6"	—
h33	4	#6	38'-0"	—
h34	88	#5	29'-0"	—
h35	160	#5	8'-9"	—
h36	32	#10	21'-3"	—
h37	12	#9	19'-10"	—
h38	18	#10	56'-6"	—
n1	280	#6	4'-0"	—
n2	48	#9	5'-6"	—
n3	40	#10	6'-0"	—
s11	56	#4	8'-5"	—
s12	64	#5	6'-10"	—
s13	80	#5	5'-10"	—
s14	168	#6	6'-6"	—
s15	24	#6	7'-8"	—
s16	48	#6	7'-4"	—
s17	28	#4	10'-7"	—
t1	146	#5	7'-2"	—
u1	80	#6	5'-4"	—
u2	76	#4	10'-9"	—
u4	28	#10	6'-0"	—
v11	31	#6	19'-11"	—
v12	31	#6	20'-10"	—
v13	31	#6	18'-2"	—
v14	31	#6	19'-1"	—
v15	56	#6	10'-6"	—
v16	56	#6	10'-9"	—
v17	56	#6	11'-0"	—
v18	14	#10	18'-10"	—
v19	14	#10	19'-1"	—
v20	14	#10	19'-9"	—
v21	14	#10	20'-0"	—
v22	24	#9	18'-10"	—
v23	24	#9	19'-9"	—
w1	28	#5	8'-9"	—
w2	28	#5	28'-9"	—

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Class X Concrete	Cu. Yd.	301.2
Reinforcement Bars	Lbs.	39,230
Expansion Bolts (3/4")	Each	240

Work This Sheet With "Piers" Sheet No. 49

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

PIER DETAILS
F.A.I. ROUTE 55 OVER JOLIET ROAD
STATION 684+80.60
F.A.I. ROUTE 55 WILL COUNTY
SECTION 99R-4
AS BUILT SECTION 20R-110 F

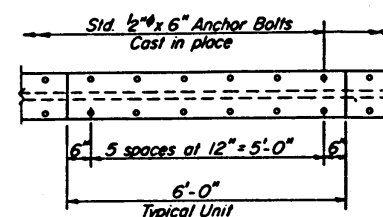
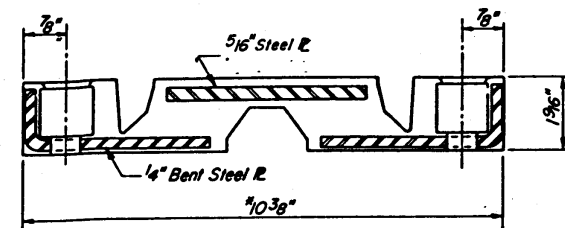
MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

SCALE:
DATE:

DRAWN BY: B.J.M.
CHECKED BY: J.R.L.

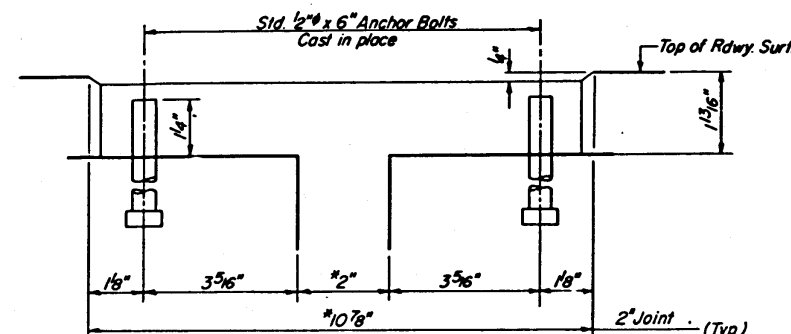
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,09) R-4	WILL DU PAGE	119	93
FED. ROAD DIST. NO. 7	ILLINOIS	FA PROJ. I-UI-55-6(	1264	

16 R-4 COOK



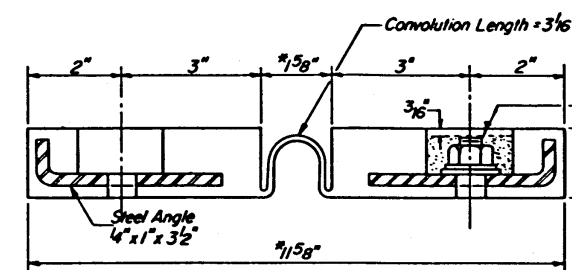
PLAN

Note: Anchor bolts require a clipped washer, lockwasher and hex nut.

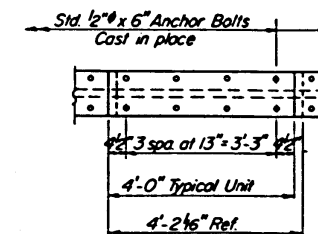


CROSS SECTION
*At 50°F
Dimensions are at right angles.

TRANSFLEX MODEL 200A
(Structural Rubber Products Co.)

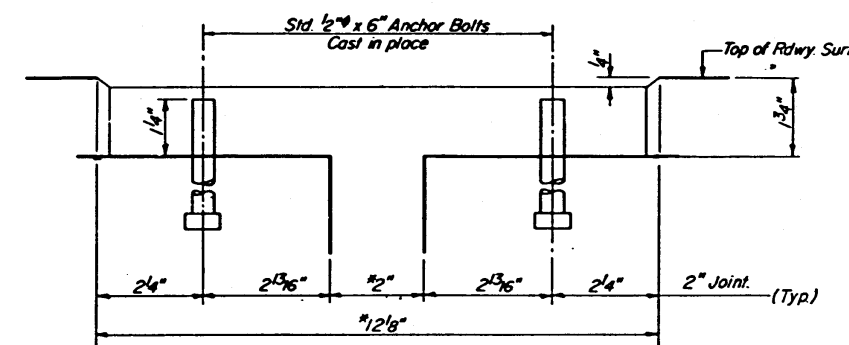


Fill with Epoxy Compound after Assembly-3/16\"/>



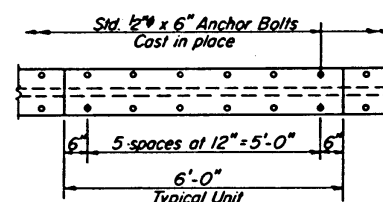
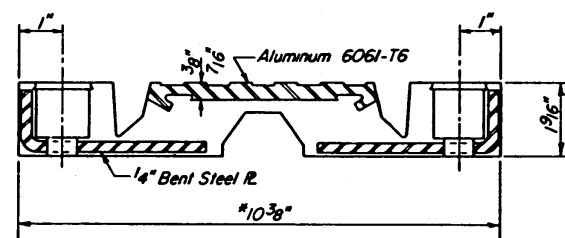
PLAN

Note: Anchor bolts require a flat washer and locknut.



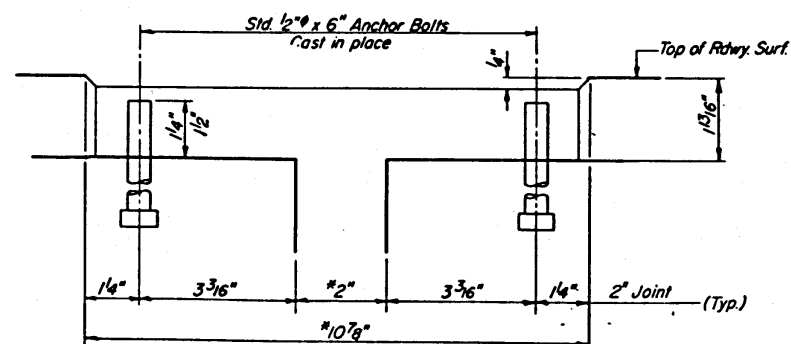
CROSS SECTION
*At 50°F
Dimensions are at right angles.

FEL-SPAN MODEL T-30
(Fel-Pro Building Products Inc.)



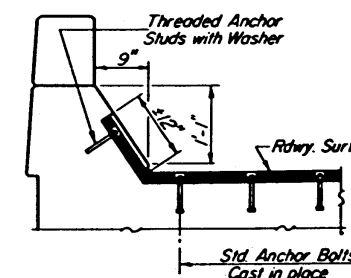
PLAN

Note: Anchor bolts require a clipped washer, lockwasher and hex nut.

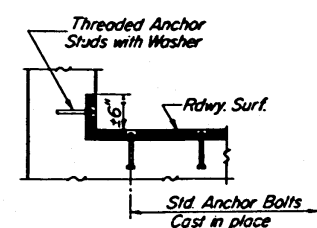
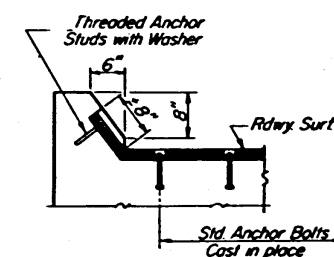


CROSS SECTION
*At 50°F
Dimensions are at right angles.

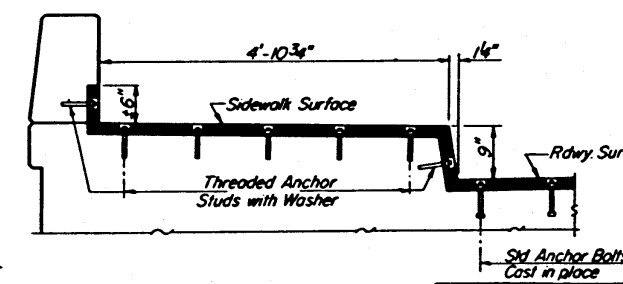
WAROFLEX MODEL SR 2
(Watson-Bowman Associates Inc.)



AT CURBS



AT ABUTMENT



AT SIDEWALK

NOTE: Joint openings shall be adjusted in accordance with Article 503.07(c) of the Std. Spec's. when the deck is poured at an ambient temperature other than 50°F

TYPICAL END TREATMENTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

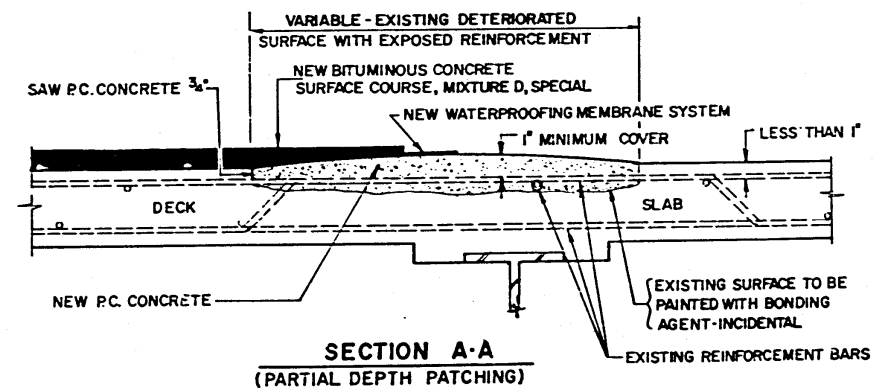
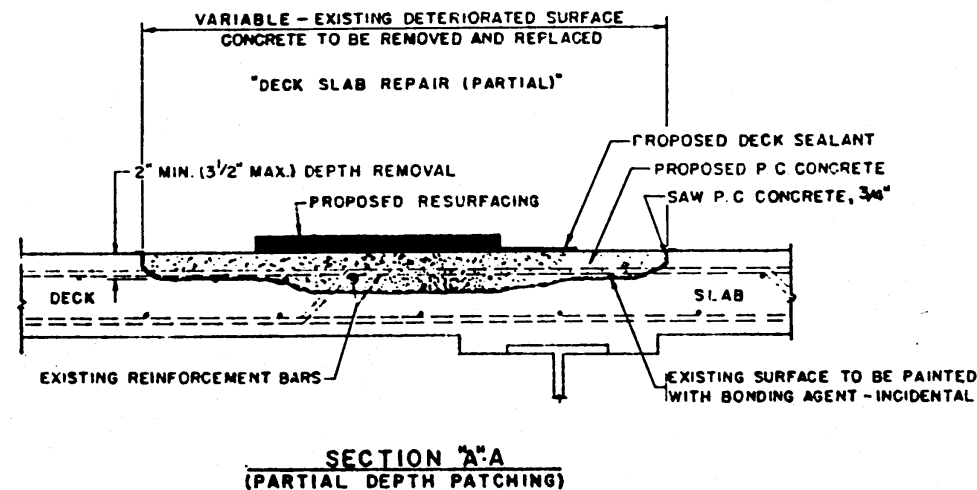
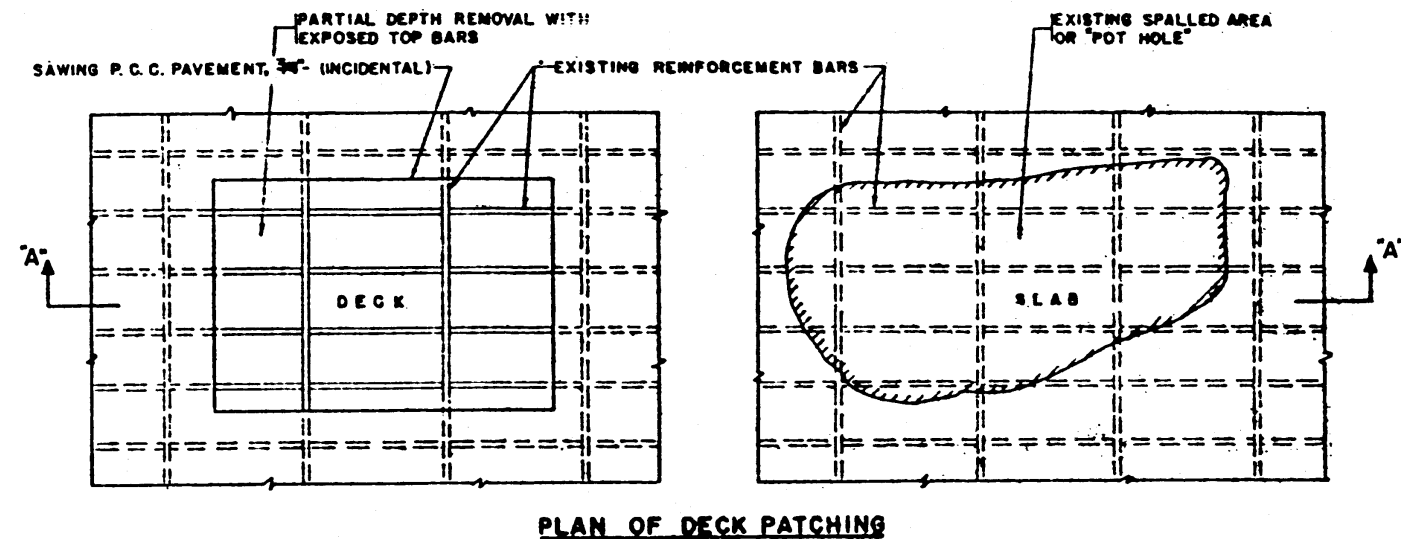
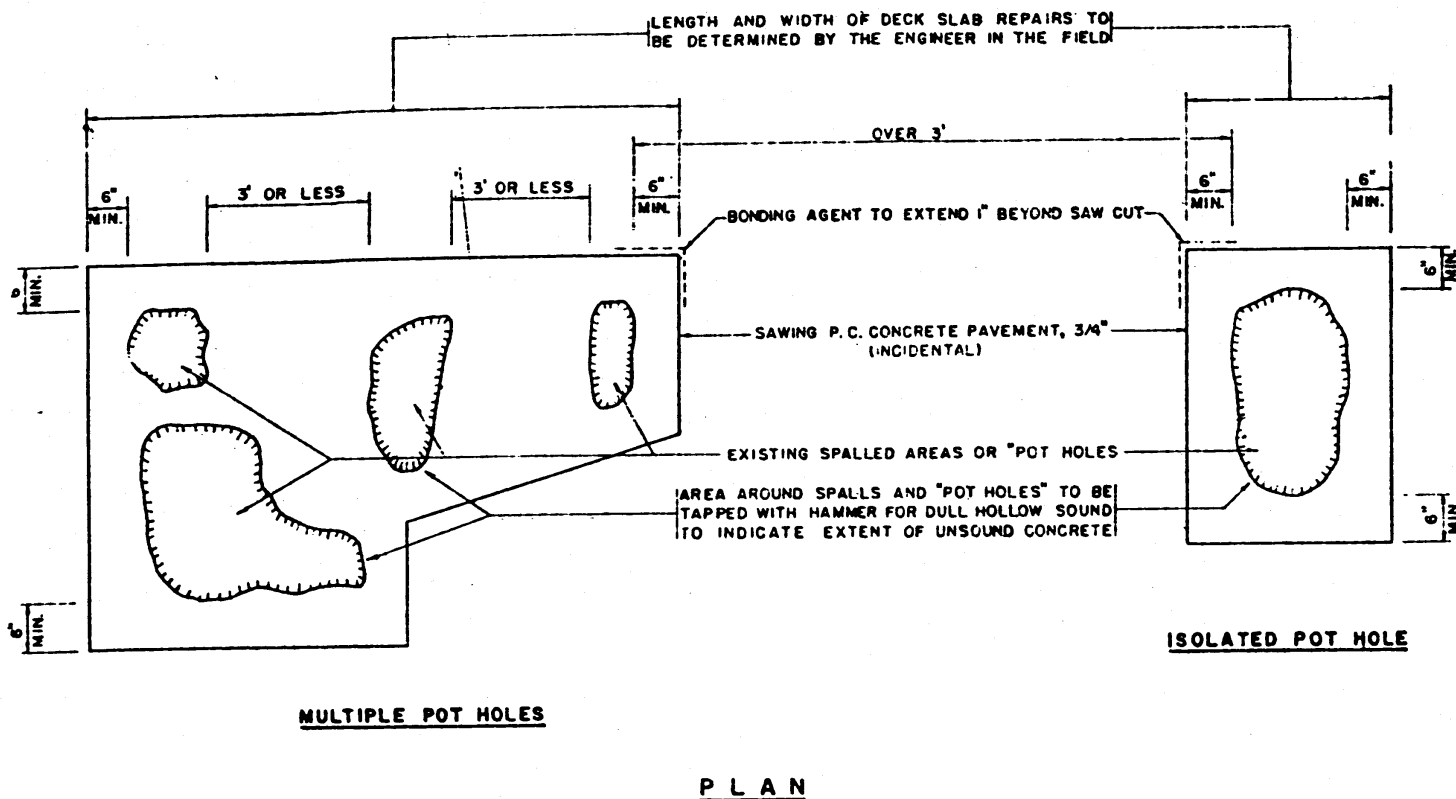
2" NEOPRENE EXPANSION JOINT

SECTIONS (16, 22 & 99) R-4

MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

DRAWN PB
CHECKED

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99) R-4	WILL DU PAGE	119	94
FED. ROAD DIST NO. 7	ILLINOIS	FA PROJ I-UI-55-61	1264	
16 R-4		COOK		



NOTES:

- ALL EXISTING REINFORCEMENT BARS SHALL REMAIN IN PLACE EXCEPT AS PROVIDED UNDER "PARTIAL DEPTH PATCHING". "TYING TOGETHER" OF LOOSE BARS WILL BE REQUIRED.
- BONDING AGENTS ARE TO BE EXTENDED AT LEAST 1 INCH BEYOND THE PERIMETER OF THE PATCH IN ORDER TO INSURE PROPER BONDING OF THE EDGES.
- WHEN DEPTH OF REPAIRS OR DETERIORATION EXCEED 3 1/2 INCHES, FULL DEPTH REMOVAL AND REPLACEMENT WITH P.C. CONCRETE IS REQUIRED. THIS WORK WILL BE PAID AS "DECK SLAB REPAIR (FULL DEPTH)".
- IN ORDER TO PREVENT FRACTURE OF THE DECK, ALL HAND AND MECHANICAL TOOLS USED FOR REMOVING THE SURFACE CONCRETE FROM THE BRIDGE, SHALL BE LIMITED TO 45 POUNDS IN WEIGHT UNLESS OTHERWISE APPROVED BY THE ENGINEER.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

TYPICAL DETAILS
OF
DECK SLAB REPAIRS

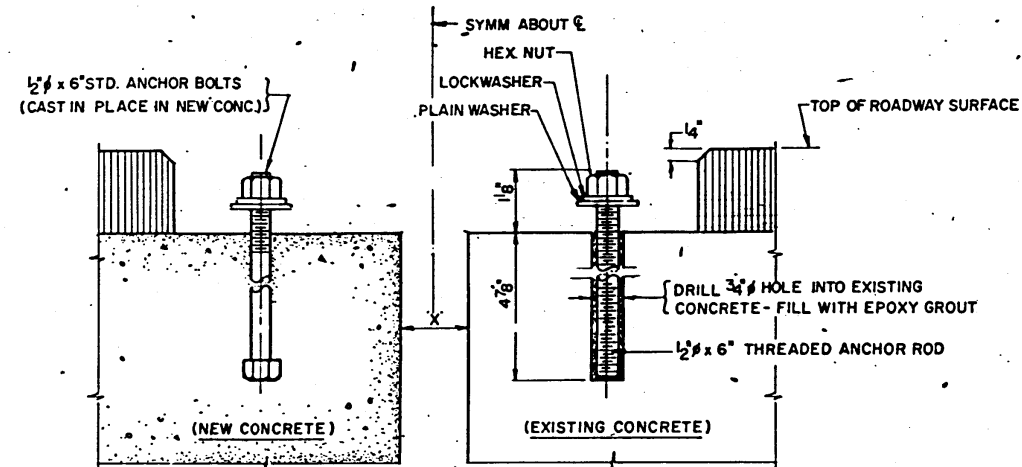
SECTIONS 116, 22 & 991 R-4

MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

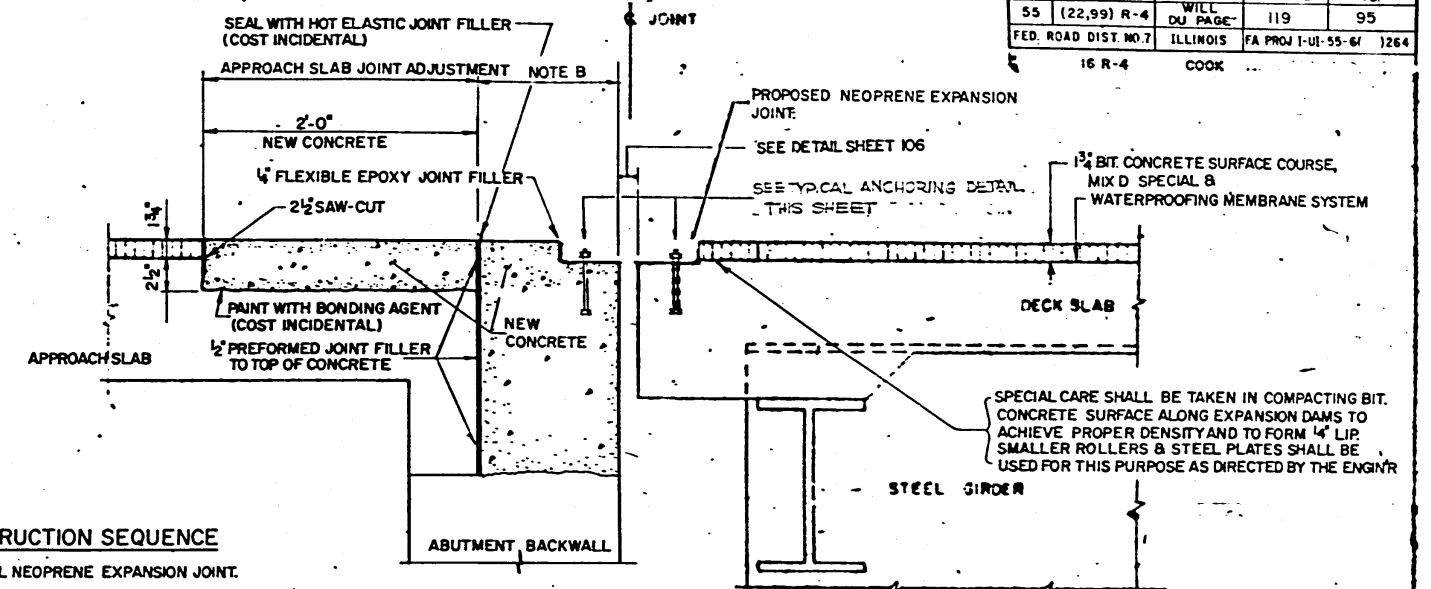
SCALE:
DATE:

DRAWN BY: P.B.
CHECKED BY: A.A.

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99) R-4	WILL DU PAGE	119	95
FED. ROAD DIST. NO. 7	ILLINOIS	FA PROJ. I-UI-55-61	1264	
16 R-4 COOK				



TYPICAL ANCHORING DETAIL



CONSTRUCTION SEQUENCE

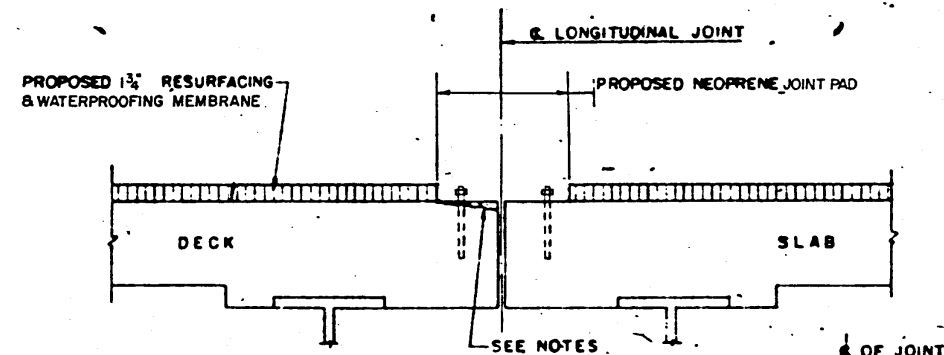
1. INSTALL NEOPRENE EXPANSION JOINT.
2. RESURFACE TO EDGE OF EXPANSION JOINT.
3. SAW-CUT, REMOVE BIT SURFACE & P.C. CONCRETE.
4. CONSTRUCT CONCRETE JOINT AS SHOWN

NOTE B:

APPROACH SLAB REMOVAL & REPLACEMENT (SPECIAL)

AT CERTAIN LOCATIONS OR IF IN THE OPINION OF THE ENGINEER, PARTIAL DEPTH REPAIR ADJACENT TO THE ADJUSTMENT IS NECESSARY THE WORK WILL BE PAID FOR AS DECK SLAB REPAIR PARTIAL AND OR "APPROACH SLAB JOINT ADJUSTMENT".

APPROACH SLAB JOINT ADJUSTMENT



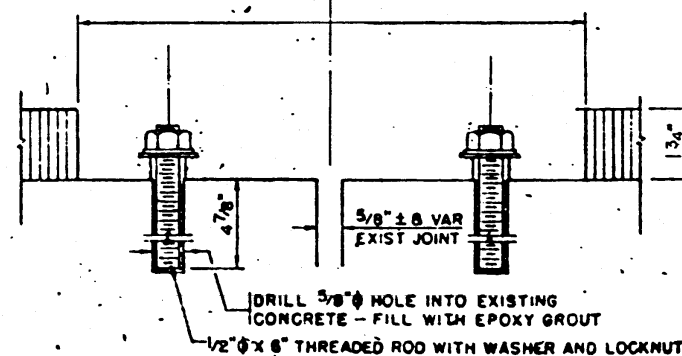
NOTES

ANY UNSOUND CONCRETE OR DIFFERENCE IN ELEVATION ACROSS THE JOINT TO BE CORRECTED BY SCARIFICATION AND/OR REPAIR THE AREA WITH EPOXY MORTAR OR RICH MIX CONCRETE - SEE SPECIAL PROVISIONS.

THE CONCRETE SURFACE SHALL BE CLEANED, DRY AND FREE OF ANY PROTRUSIONS.

BASIS OF PAYMENT:

PER LINEAL FOOT FOR "NEOPRENE EXPANSION JOINT" WHICH PRICE SHALL INCLUDES THE CUTTING, DRILLING, EPOXY, GROUTING, ANCHOR RODS AND HARDWARES.



TYPICAL DETAIL OF NEOPRENE LONGITUDINAL JOINT ADJUSTMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

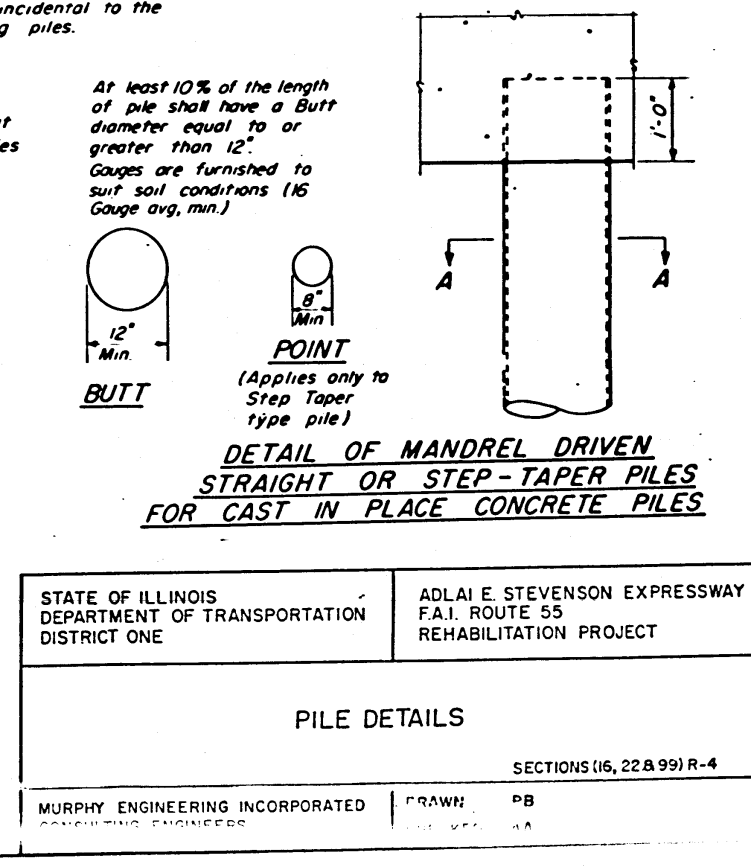
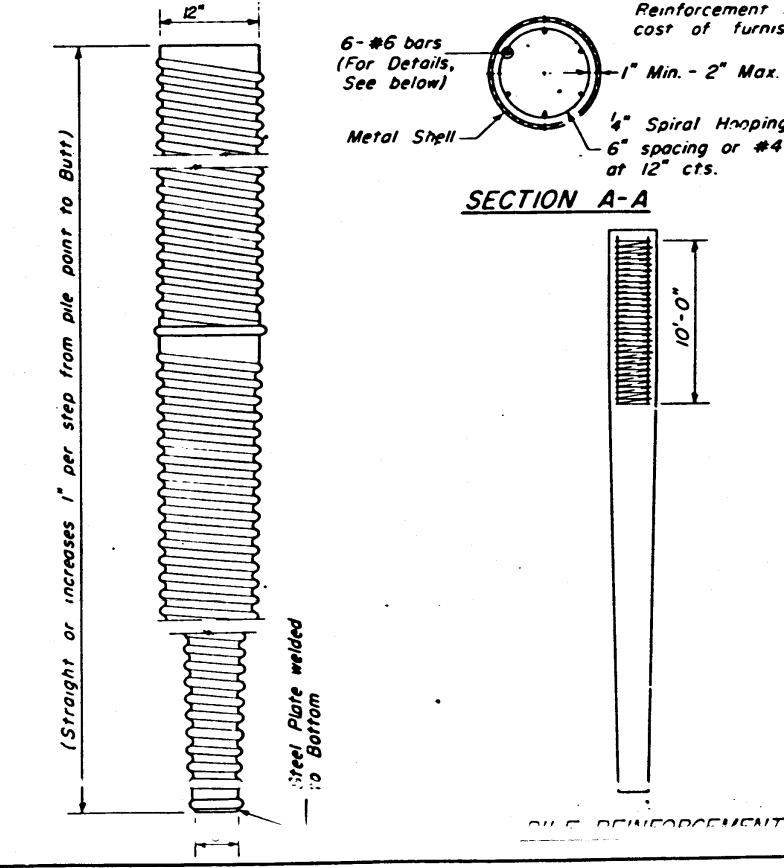
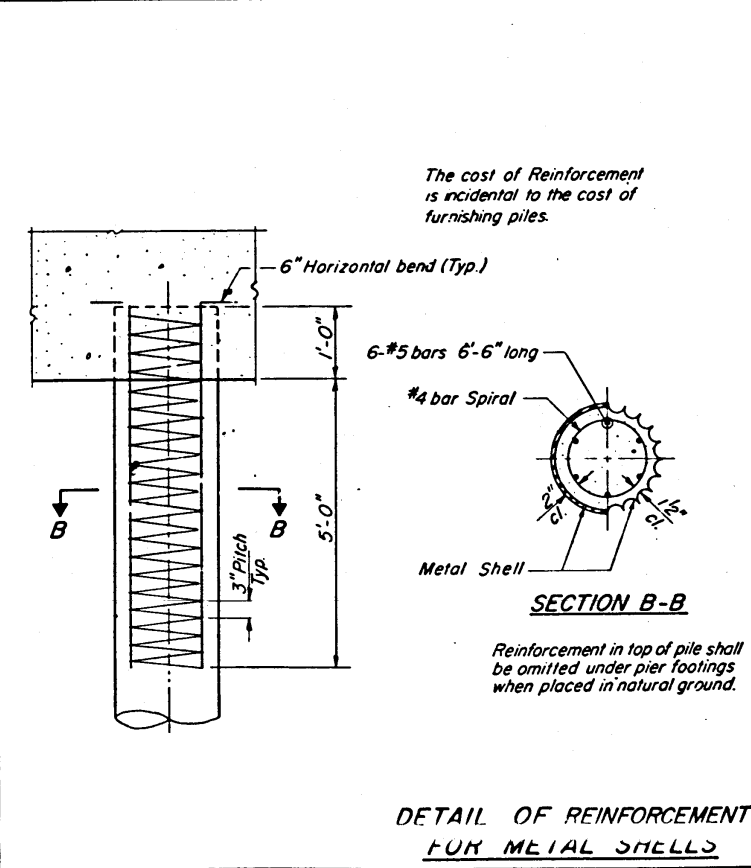
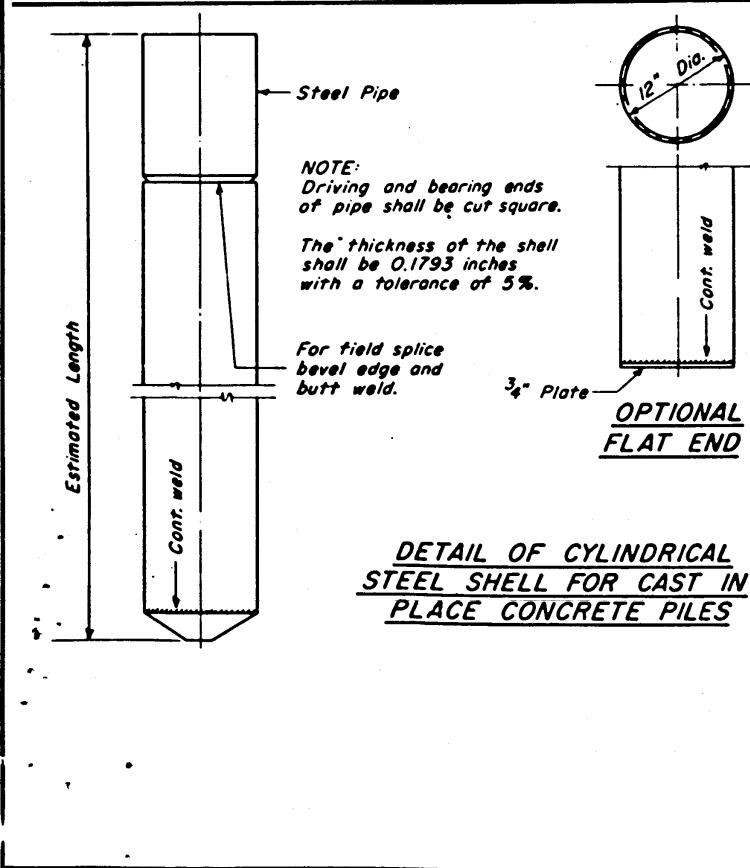
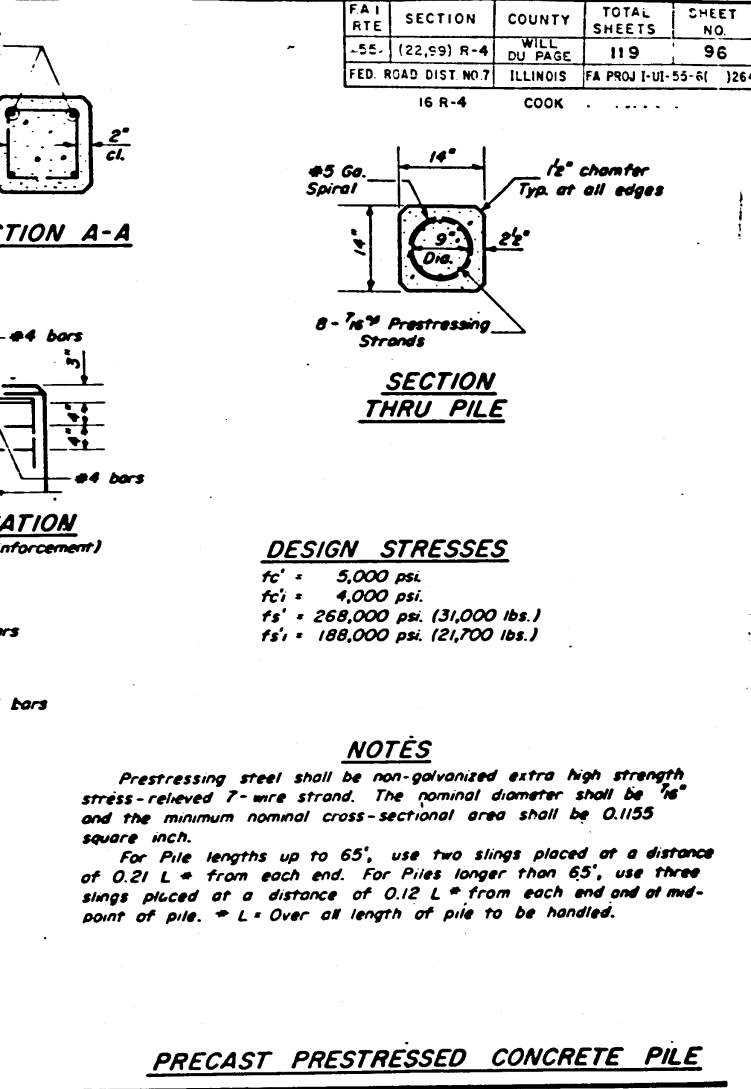
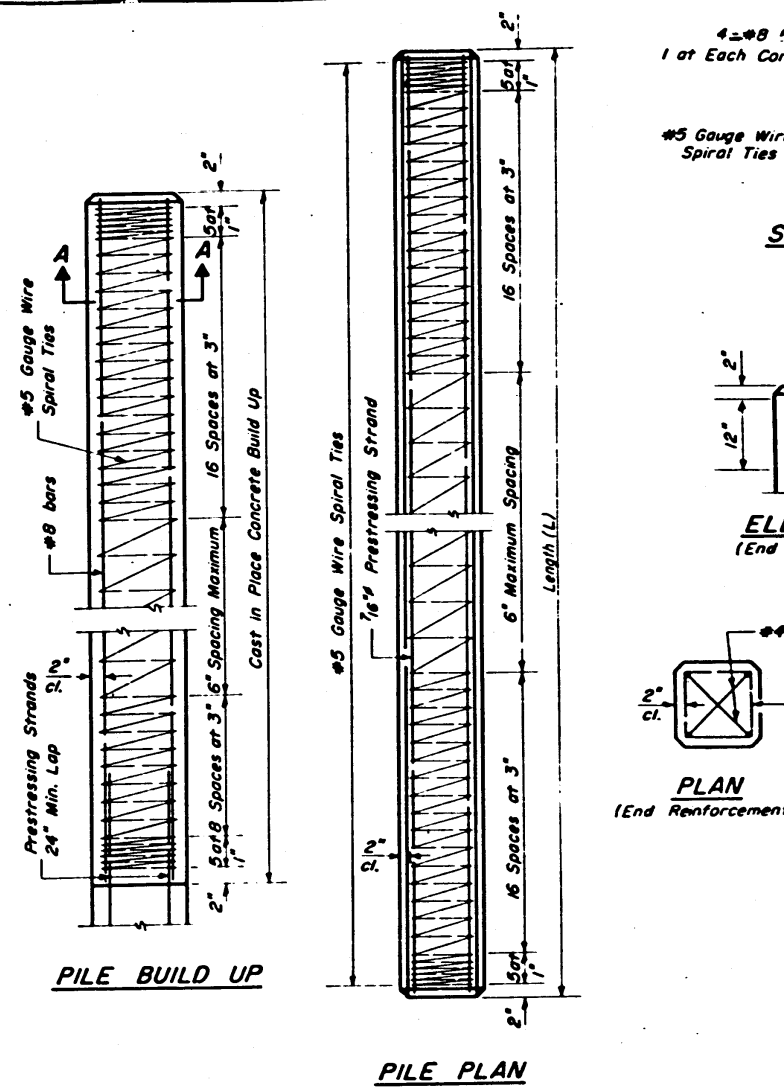
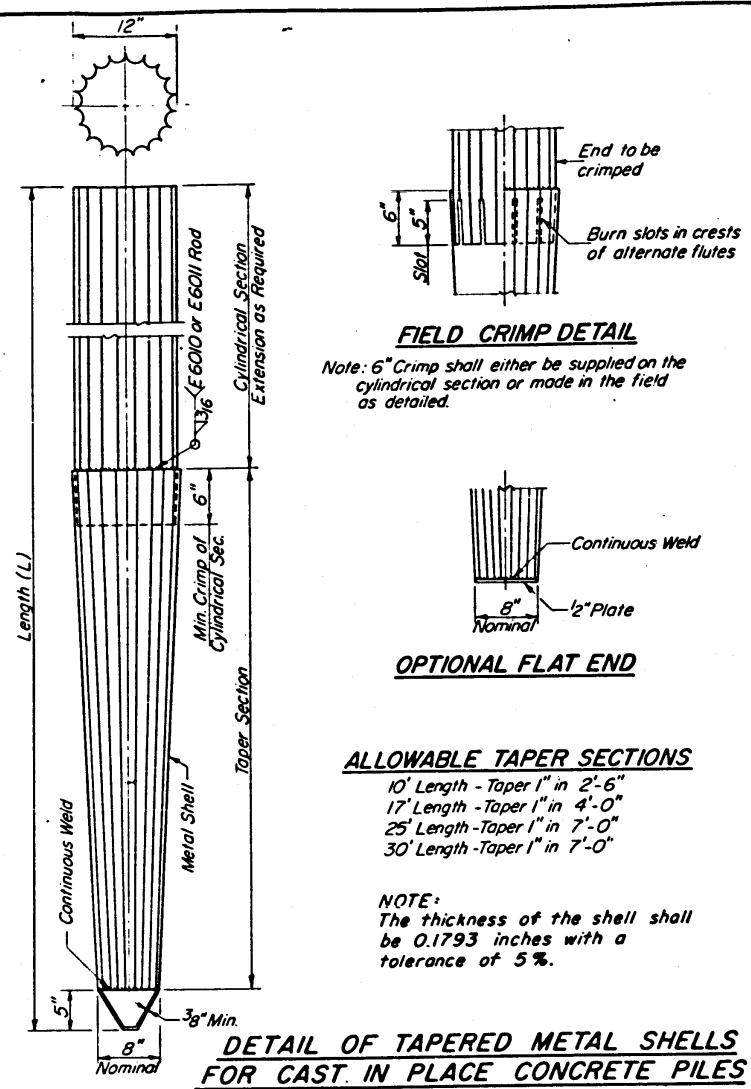
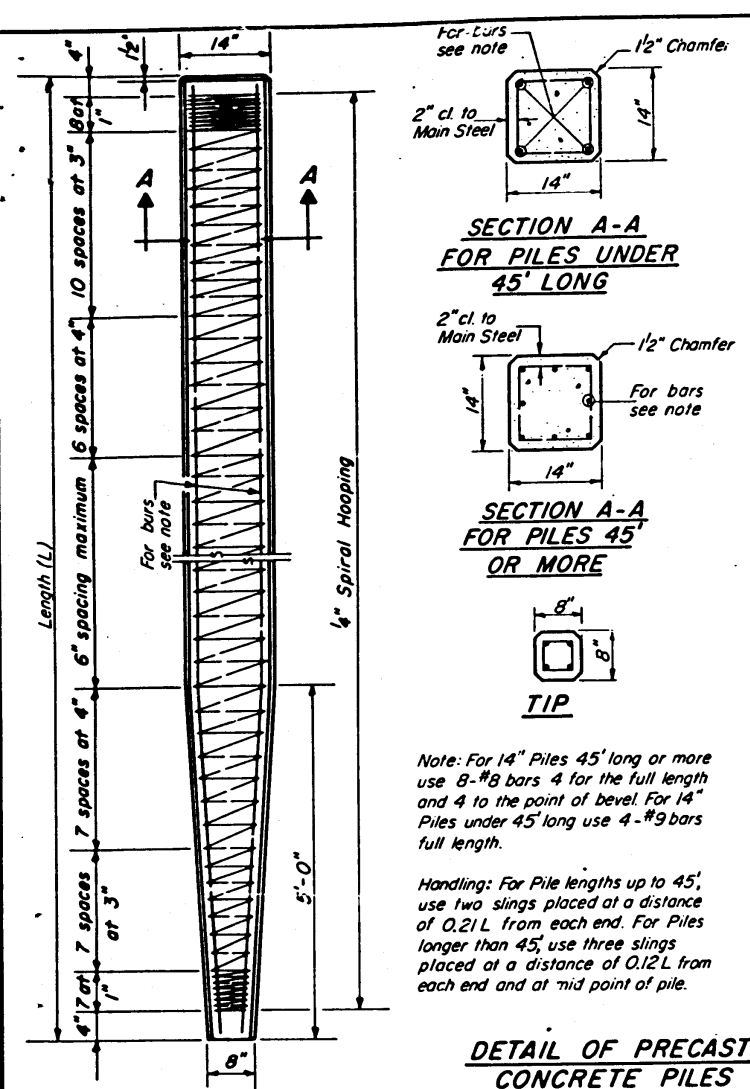
ANGLE EXPANSION JOINT ADJUSTMENT
AND
LONGITUDINAL JOINT ADJUSTMENT

MURPHY ENGINEERING INCORPORATED

SCALE:

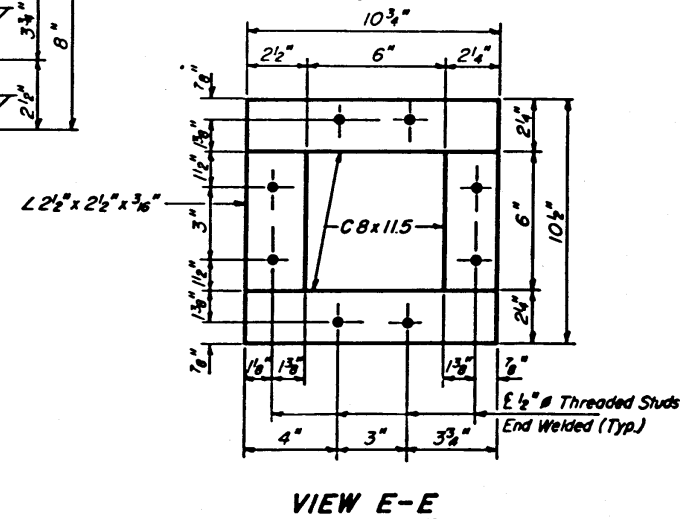
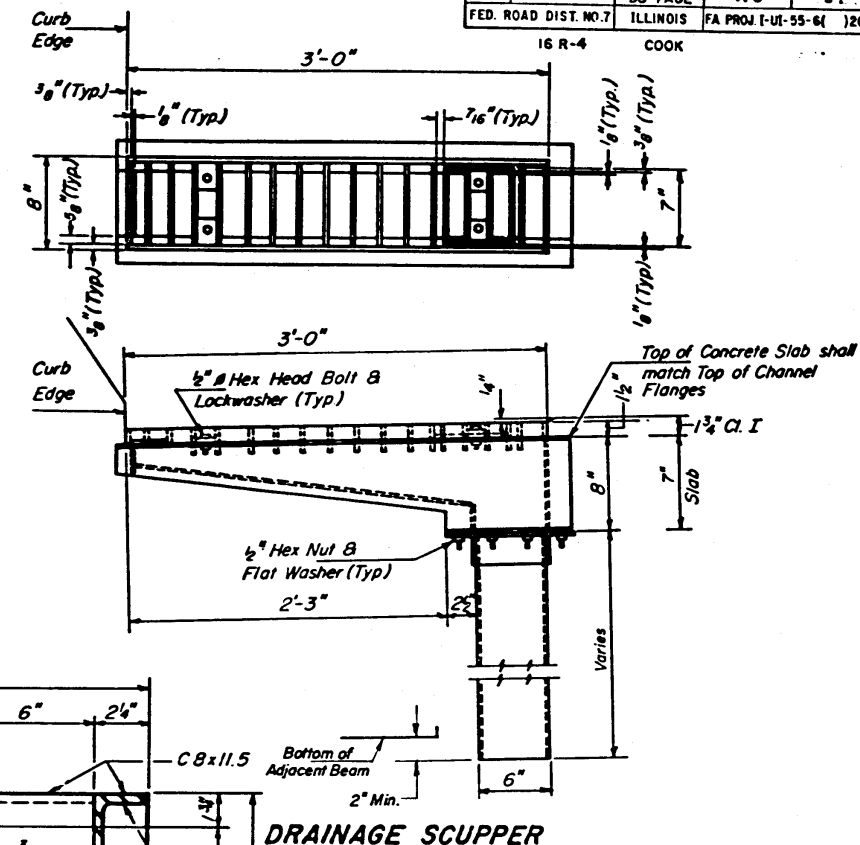
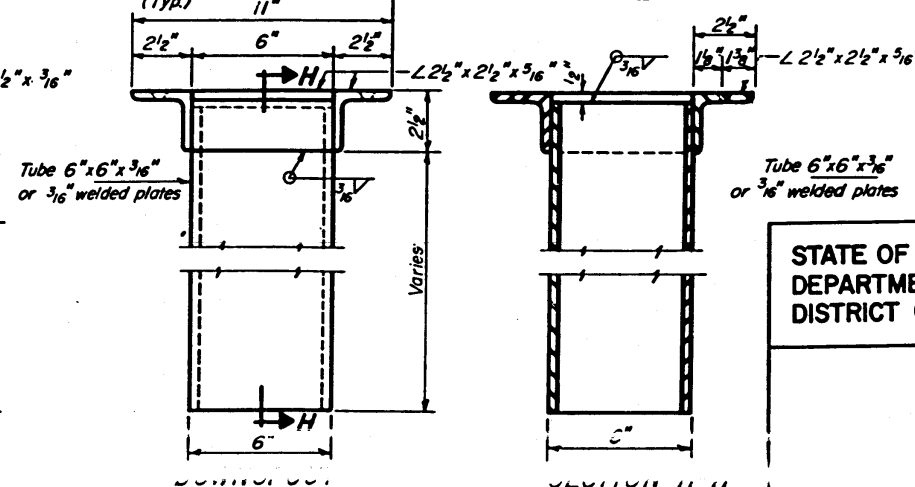
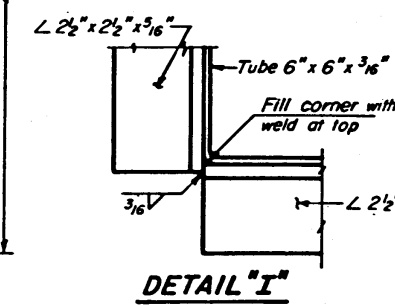
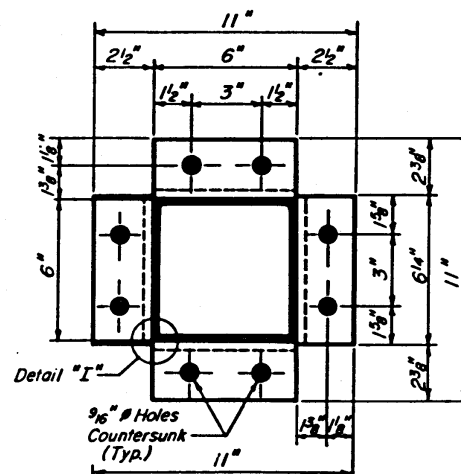
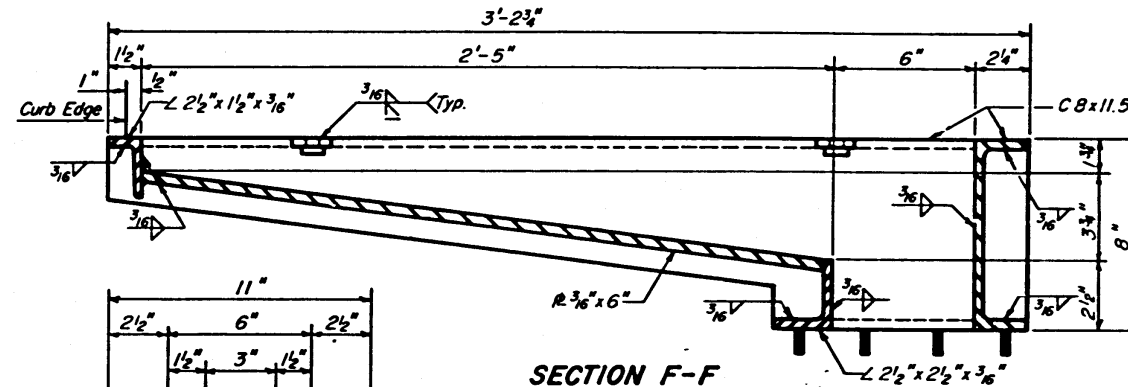
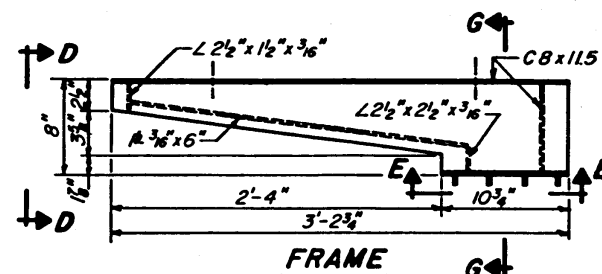
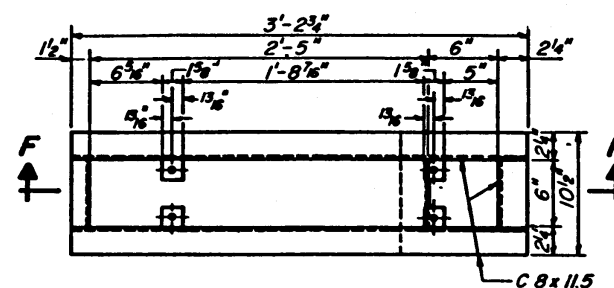
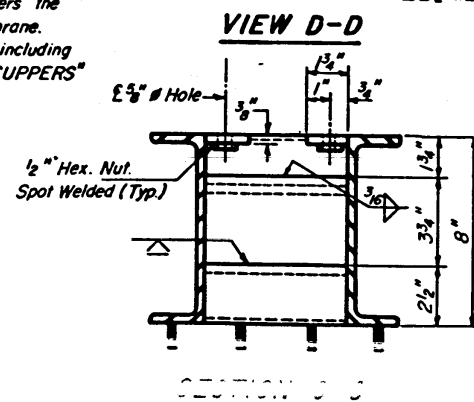
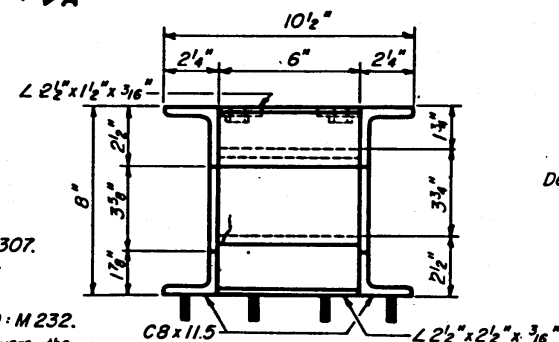
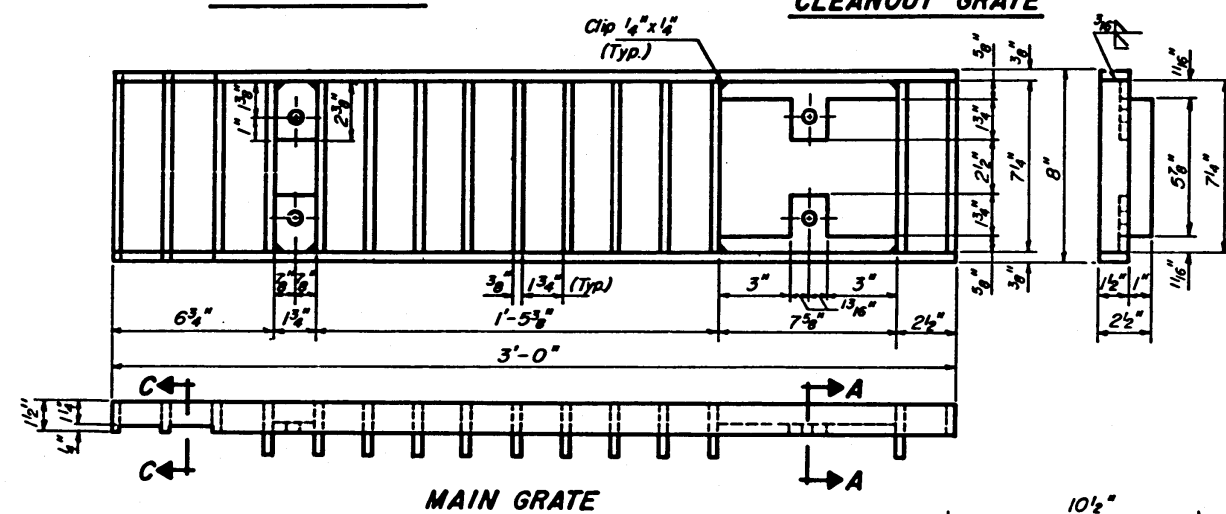
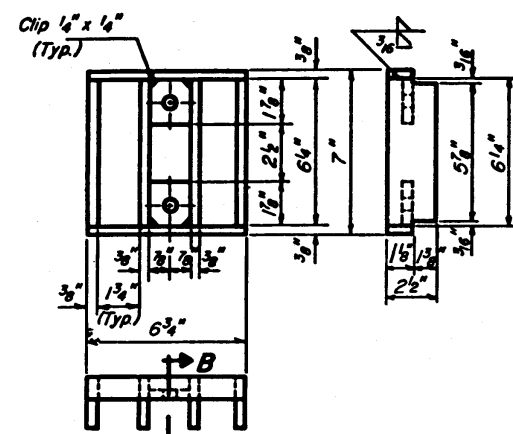
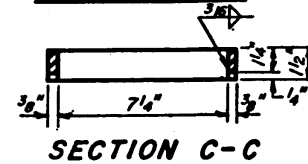
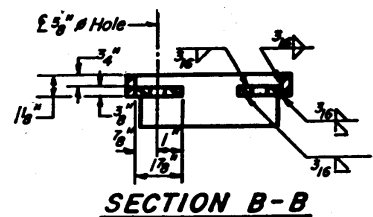
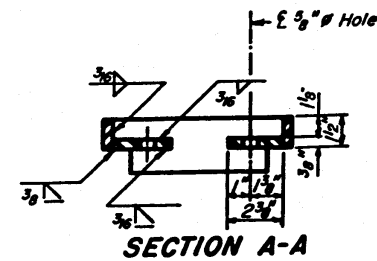
DRAWN BY: PB
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FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-55-	(22,59) R-4	WILL DU PAGE	119	96
FED. ROAD DIST NO.7	ILLINOIS	FA PROJ I-UI-55-6(	1264	
16 R-4		COOK		



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE	ADLAI E. STEVENSON EXPRESSWAY F.A.I. ROUTE 55 REHABILITATION PROJECT
PILE DETAILS	
SECTIONS (16, 22 & 99) R-4	
MURPHY ENGINEERING INCORPORATED CONSULTING ENGINEERS	DRAWN PB CHECK KA

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99) F-4	WILL DU PAGE	119	97
FED. ROAD DIST. NO. 7		ILLINOIS	FA PROJ I-UI-55-64	(26)



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 Main Grate, Cleanout Grate, Frame and Downspout shall be galvanized after shop fabrication in accordance with A.A.S.H.T.O. M111 & ASTM A-385.

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

The Waterproofing Membrane System shall be installed such that the membrane covers the frame flanges and extends down into the frame with the grates placed on top of the membrane.

Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT ONE

ADLAI E. STEVENSON EXPRESSWAY
F.A.I. ROUTE 55
REHABILITATION PROJECT

DRAINAGE SCUPPER

MURPHY ENGINEERING INCORPORATED
CONSULTING ENGINEERS

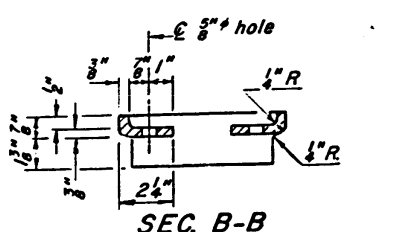
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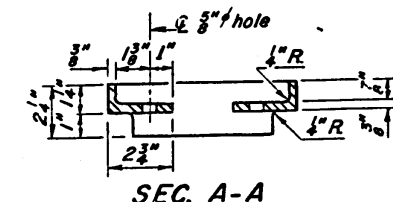
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

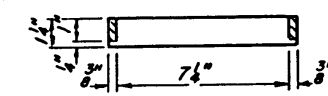
FAI RYE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(22,99) R-4	WILL DU PAGE	119	97A
FED. ROAD DIST. NO. 7	ILLINOIS	FA PROJ I-UI-55-6(122)264		
16 R-4 COOK				



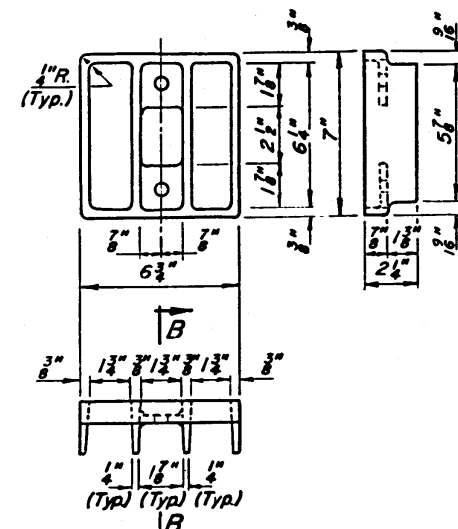
SEC. B-B



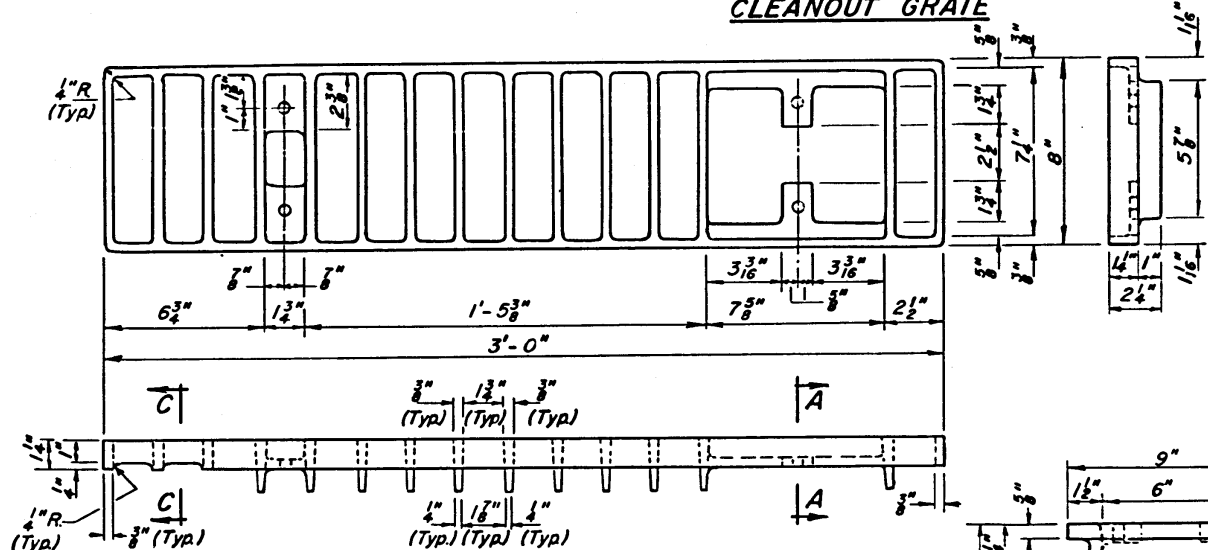
SEC. A-A



SEC. C-C



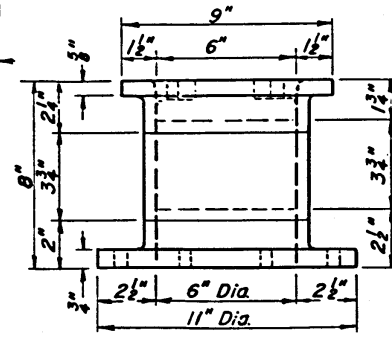
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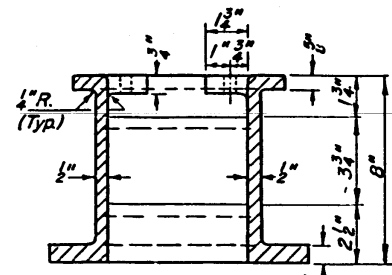
MAIN GRATE

NOTES:
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 30.
Bolts, washers and nuts shall conform to the requirements of ASTM A-307.
All bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232.
The waterproofing membrane system shall be installed such that the membrane covers the frame flanges and extends down into the frame with the grates placed on top of the membrane.
Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS".
The Contractor may use at his option steel frames and steel grates or cast frames and cast grates, but will not be allowed to use steel grates with cast frames nor cast grates with steel frames.

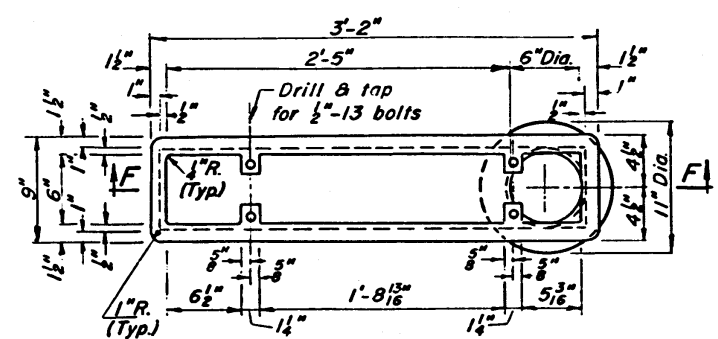
DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	APPROVED



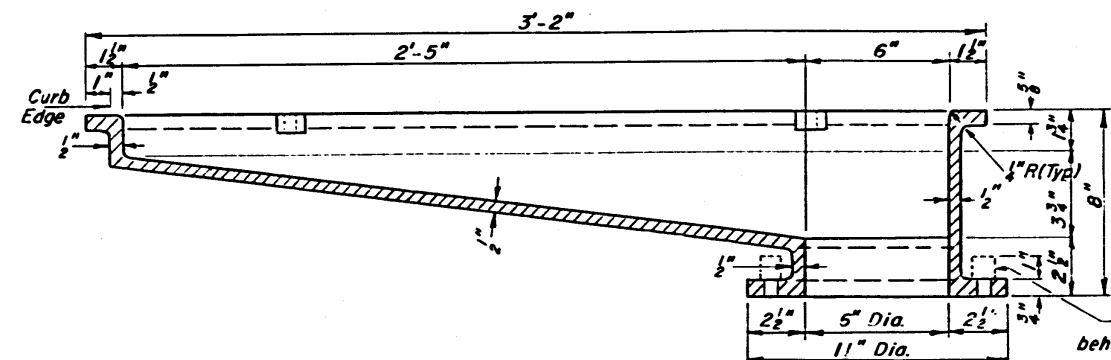
VIEW D-D



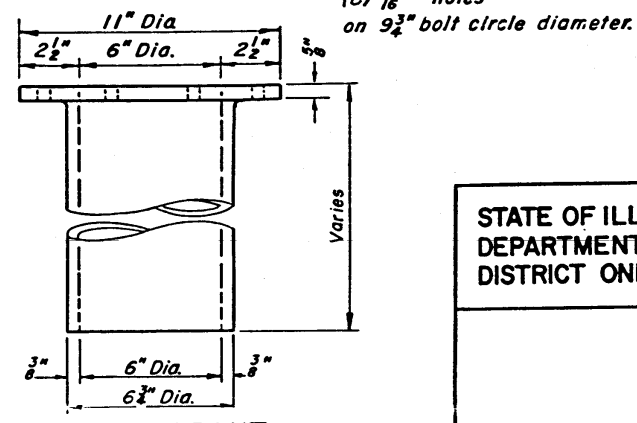
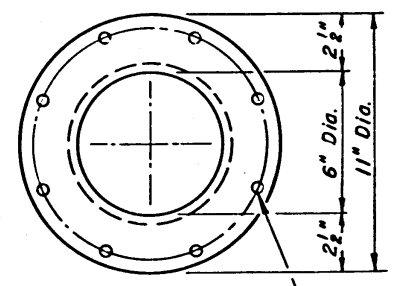
SEC. G-G



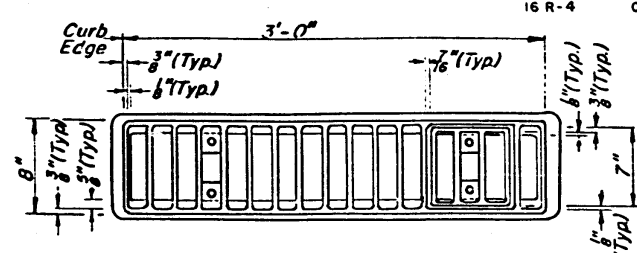
FRAME



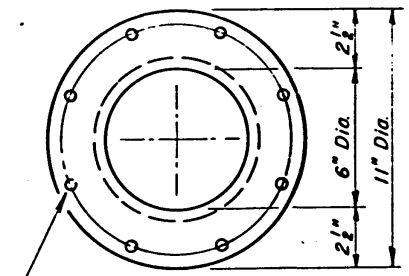
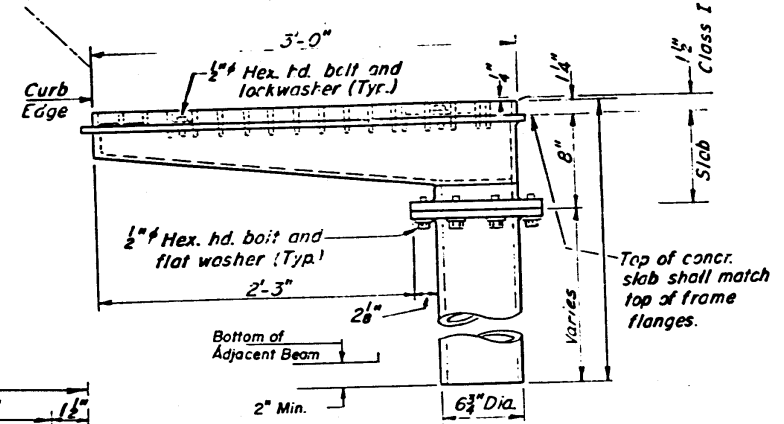
SECTION F-F



DOWNSPOUT



DRAINAGE SCUPPER



VIEW E-E

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE	ADLAI E. STEVENSON EXPRESSWAY F.A.I. ROUTE 55 REHABILITATION PROJECT
ALTERNATE - CAST IRON DRAINAGE SCUPPER	
MURPHY ENGINEERING INCORPORATED	SCALE: DRAWN BY: PB CHECKED BY: AA