



### SOIL BORING LOG

GSI Job No. 10025

Page 1 of 1

Date 3/13/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY NW  
 SECTION (0707-608&B1) HB-B & LOCATION SE 1/4, SEC. 11, TWP. T38N, RNG. R12E, 3rd PM  
 COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO.	Station	DEPTH (ft)	BLOW (6")	UCS (tsf)	M O I S T Qu T (%)	Surface Water Elev. n/a ft	Stream Bed Elev. n/a ft	Groundwater Elev. First Encounter 598.5 ft	Upon Completion n/a ft	After Hrs.	DEPTH (ft)	BLOW (6")	UCS (tsf)	M O I S T Qu T (%)
016-1510 & 016-1511	41+24.39													
SB-15	41+45													
		77.30R Left												
		Ground Surface Elev. 602.50 ft												
		18.0" ASPHALT, 18.0" CRUSHED STONE												
			24								14			
			22		3						50/4"			14
			16											
		599.50												
		CLAY LOAM-dark brown & gray-very stiff to hard (Fill)												
			8											
			8	4.6	14									
			6	B										
			-5											
			8											
			9	2.0	10									
			9	P										
			-5											
		594.00												
		CRUSHED STONE-dense to very dense (Fill)												
			17											
			19		7									
			-10											
			18											
			20		4									
			23											
			-5											
			8											
			10		11									
			-15											
			15											
			21		9									
			29											
			-19											
			22											
			-20											
			15											
			-40											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, from 137 (Rev. 8-99)

### ROCK CORE LOG

GSI Job No. 10025

DATE 3/13/2012

LOGGED BY DR

FAP 373 (IL 171) DESCRIPTION 1st Ave. Bridge Rehabilitation & Replacement, 47th St. to 55th St.  
 SECTION (0707-608&B1) HB-B & LOCATION SEC 11, 12, 13 & 14 T 38 N, R 12 E, 3rd PM  
 COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. 016-1510 & 016-1511 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft  
 Station 41+24.39 Core Diameter 2.0 in  
 BORING NO. SB-15 Top of Rock Elev. 566.0  
 Station 41+45 Begin Core Elev. 565.5  
 Offset 77.3' Left  
 Ground Surface Elev. 602.6

SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE  
 RUN 1 (-37.0' to -47.0')  
 Light gray with horizontal to wavy bedding. Weathered with numerous horizontal & vertical fractures throughout.

DEPTH (ft)	RECOVERY (%)	ROQ (%)	CORRECTION (min)	STRENGTH (tsf)
1	69.0	32.0	n/a	37.3
-42				
-47				

Color pictures of the cores Yes. Cores will be stored for examination for \_\_\_\_  
 The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)



USER NAME = Lin.39	DESIGNED - HP	REVISED -
FILE NAME =	CHECKED - RPW	REVISED -
...\\0161511.60W78.039_Soil_Boring_(SB 15).dgn	DRAWN - AJF	REVISED -
PLOT DATE = 6/9/2015 8:54:56 AM	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS (1 OF 6)  
STRUCTURE NO. 016-1511**

SHEET NO. SA39 OF SA44 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	101
CONTRACT NO. 60W78				
ILLINOIS FED. AID PROJECT				









### SOIL BORING LOG

GSI Job No. 10025  
Page 1 of 2  
Date 3/19/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY NW  
SECTION (0707-608&611)HB-B & 0707-608HB-B-1 LOCATION SE 1/4, SEC. 11, TWP. T38N, RNG. R12E, 3<sup>rd</sup> PM  
COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO.	STATION	BORING NO.	Station	Offset	Ground Surface Elev.	ft	D (ft)	B (/6")	U (tsf)	M (%)	Surface Water Elev.		D (ft)		B (/6")		U (tsf)		M (%)		
											n/a	ft	n/a	ft	n/a	ft	n/a	ft	n/a	ft	n/a
016-1510 & 016-1511	41+24.39	SB-36	42+35	76.10ft Right	602.70						n/a	ft	n/a	ft							
15.0" ASPHALT																					
CRUSHED STONE-dense (Fill)	601.45																				
CLAY LOAM-dark brown & gray-very stiff to hard (Fill)	599.20																				
SAND, GRAVEL & FRACTURED ROCK-gray-loose to medium dense	594.20																				
CLAY SAND, GRAVEL & FRACTURED ROCK-gray-very dense	570.70																				
FRACTURED ROCK & GRAVEL-gray-very dense	565.70																				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



### SOIL BORING LOG

GSI Job No. 10025  
Page 2 of 2  
Date 3/19/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY NW  
SECTION (0707-608&611)HB-B & 0707-608HB-B-1 LOCATION SE 1/4, SEC. 11, TWP. T38N, RNG. R12E, 3<sup>rd</sup> PM  
COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO.	STATION	BORING NO.	Station	Offset	Ground Surface Elev.	ft	D (ft)	B (/6")	U (tsf)	M (%)	Surface Water Elev.		D (ft)		B (/6")		U (tsf)		M (%)		
											n/a	ft	n/a	ft	n/a	ft	n/a	ft	n/a	ft	n/a
016-1510 & 016-1511	41+24.39	SB-36	42+35	76.10ft Right	602.70						n/a	ft	n/a	ft							
FRACTURED ROCK & GRAVEL-gray-very dense (continued)																					
Drillers Observation: Apparent bedrock	560.70																				
Borehole continued with rock coring.	559.20																				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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BBS, from 137 (Rev. 8-99)

### ROCK CORE LOG

PAGE 1 of 1  
DATE 3/19-20/2012  
LOGGED BY DR  
GSI JOB No. 10025

ROUTE FAP 373 (IL 171) DESCRIPTION 1st Ave. Bridge Rehabilitation & Replacement, 47th St. to 55th St.  
SECTION (0707-608&611) HB-B & 0707-608HB-B-1 LOCATION SEC 11, 12, 13 & 14, T 38 N, R 12 E, 3rd PM  
COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO.	STATION	BORING NO.	Station	Offset	Ground Surface Elev.	ft	D (ft)	B (/6")	U (%)	R (%)	C (/ft)	S (tsf)
016-1510 & 016-1511	41+24.39	SB-36	42+35	76.1' Right	602.7							
CORING BARREL TYPE & SIZE NX Double Swivel-10 ft Core Diameter 2.0 in Top of Rock Elev. 580.7 Begin Core Elev. 559.2												
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-43.5' to -53.5') Light gray & fine grained with horizontal bedding. Horizontal fractures @ -44.7', -45.6', -47.1', -47.4', -48.3', -49.0' & -49.4'. Horizontal fracture with 1/2" clay parting @ -49.7'. Horizontal fractures @ -50.5', -51.3' & -52.1'.												



Color pictures of the cores Yes. Cores will be stored for examination for  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)





### SOIL BORING LOG

GSI Job No. 10025

Page 1 of 1

Date 3/27/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY NW  
 SECTION (0707-608&B1) HB-B & LOCATION SW 1/4, SEC. 12, TWP. T38N, RNG. R12E, 3rd PM  
 COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station	Offset	Ground Surface Elev.	DRILLING METHOD				HAMMER TYPE				Surface Water Elev.	Stream Bed Elev.	Groundwater Elev. First Encounter	Upon Completion	After	Hrs.	D E P T H (ft)	B L U G S (in)	U C S (tsf)	M O I S T (%)
				(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)										
016-1510 & 016-1511 41+24.39	SB-48 40+57	0.00ft	602.60									n/a	n/a	588.6	n/a						
14.0" ASPHALT, 4.0" GRAVEL & STONE																					
CLAY LOAM-brown & gray-very stiff to hard (Fill)																					
FRACTURED ROCK & GRAVEL-gray-medium dense																					
Clayey SAND, GRAVEL & FRACTURED ROCK-gray-dense to very dense																					
Drillers Observation: Apparent bedrock																					
Borehole continued with rock coring.																					
Clayey SAND, GRAVEL & FRACTURED ROCK-gray-medium dense																					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
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 SECTION (0707-608&B1) HB-B & LOCATION SEC 11, 12, 13 & 14 T 38 N, R 12 E, 3rd PM  
 COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. Station	BORING NO. Station	Offset	Ground Surface Elev.	CORING BARREL TYPE & SIZE	Core Diameter	Top of Rock Elev.	Begin Core Elev.	D E P T H (ft)	C O R E R E C O V E R Y (%)	R E C O V E R Y (%)	R E C O V E R Y (%)	C O R E D I A M E T E R (in)	S T R E N G T H (tsf)
016-1510 & 016-1511 41+24.39	SB-48 40+57	Baselines	602.6	NX Double Swivel-10 ft	2.0 in	568.1	567.1						
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-35.5' to -45.5') Light gray mottled gray, slightly porous with horizontal bedding. Horizontal fractures @ -35.6' & -35.8'. Vertical fracture from -36.0' to -36.9'. Horizontal fracture @ -37.5'. Transverse fracture with 1/2" clay parting from -38.1' to -38.4'. Horizontal fractures @ -39.3', -40.2' & -40.4'. Weathered vertical fracture from -41.5' to -42.4'.													



Color pictures of the cores Yes. Cores will be stored for examination for \_\_\_\_  
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FILE NAME =	CHECKED - RPW	REVISED -
...\\0161511.60W78.043.Soil.Boring.(SB 48).dgn	DRAWN - AJF	REVISED -
PLOT DATE = 6/9/2015 8:55:14 AM	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (5 OF 6)  
 STRUCTURE NO. 016-1511  
 SHEET NO. SA43 OF SA44 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	105
CONTRACT NO. 60W78				
ILLINOIS FED. AID PROJECT				



### SOIL BORING LOG

GSI Job No. 10025  
Page 1 of 2  
Date 3/16/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY NW  
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COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO.	BORING NO.	Station	Offset	Ground Surface Elev.	D (ft)	B (/6")	U (tsf)	M (%)	Description		D (ft)	B (/6")	U (tsf)	M (%)
									Surface Water Elev.	Stream Bed Elev.				
016-1510 & 016-1511	SB-49	41+24.39	0.00ft	602.70					n/a	n/a	n/a			
					12.0"				ASPHALT					
					601.70				CRUSHED STONE with Clay-medium dense (Fill)					
					599.20				CLAY LOAM-dark brown & gray-very stiff to hard (Fill)					
					594.70				SAND, GRAVEL & FRACTURED ROCK-gray-medium dense to very dense					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO.	BORING NO.	Station	Offset	Ground Surface Elev.	D (ft)	B (/6")	U (tsf)	M (%)	Description		D (ft)	B (/6")	U (tsf)	M (%)
									Surface Water Elev.	Stream Bed Elev.				
016-1510 & 016-1511	SB-49	41+24.39	0.00ft	602.70					n/a	n/a	n/a			
									Drillers Observation: Apparent bedrock.					
					560.20				Borehole continued with rock coring.					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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PAGE 1 of 1  
DATE 3/16/2012  
LOGGED BY DR  
GSI JOB No. 10025

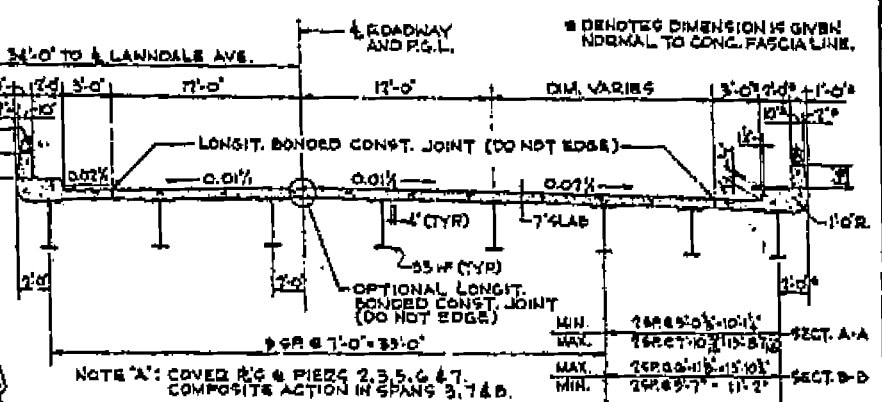
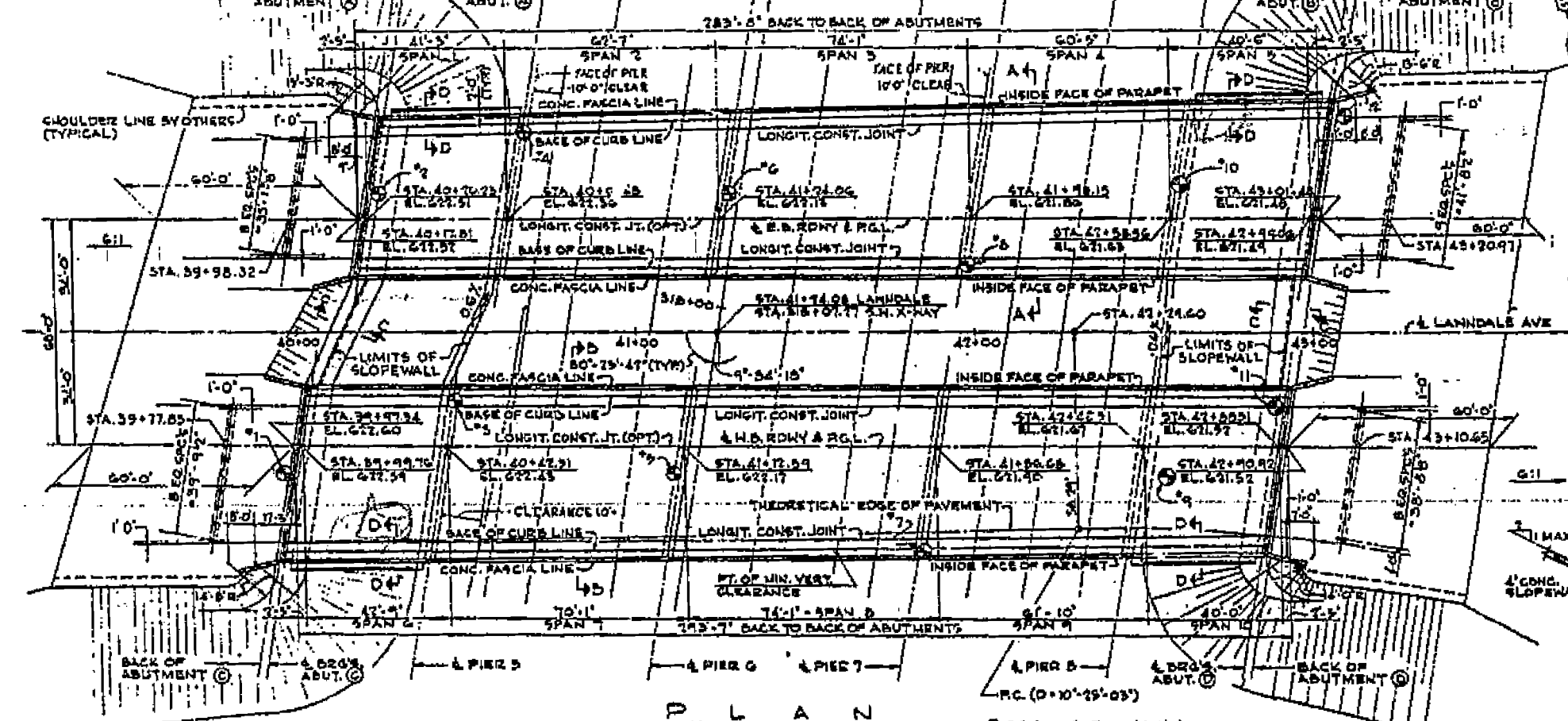
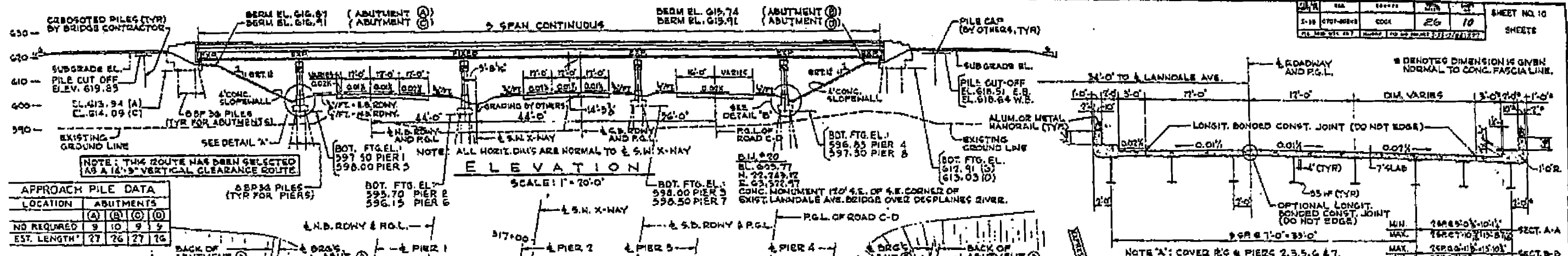
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SECTION (0707-608&611) HB-B & 0707-608HB-B-1 LOCATION SEC 11, 12, 13 & 14 T 38 N, R 12 E, 3rd PM  
COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. 016-1510 & 016-1511 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft  
Station 41+24.39 Core Diameter 2.0 in  
BORING NO. SB-49 Top of Rock Elev. 582.7  
Station 41+98 Begin Core Elev. 560.2  
Offset Baseline  
Ground Surface Elev. 602.7

DEPTH (ft)	RECOVERY (%)	RQD (%)	CORRECTED (min)	STRENGTH (tsf)
1	79.0	75.5	n/a	48.8
47.5				
52.5				

SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE  
RUN 1 (-42.5' to -52.5')  
Light gray mottled gray with horizontal bedding. Horizontal fractures @ -43.7', -44.9', -47.0' & -48.1'. Horizontal fractures with thin clay partings @ -48.2', -48.5' & -48.6'.

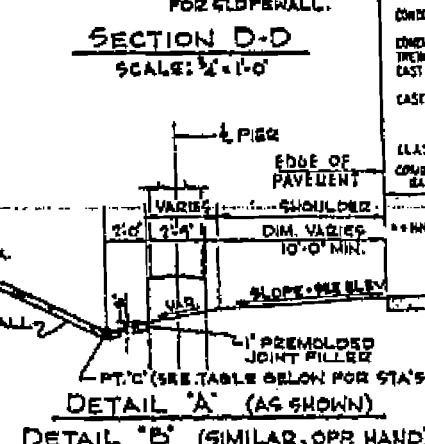
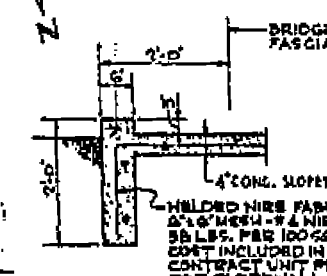
Color pictures of the cores Yes. Cores will be stored for examination for  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)



**TOTAL BILL OF MATERIAL - SECTION 0707-6088B**

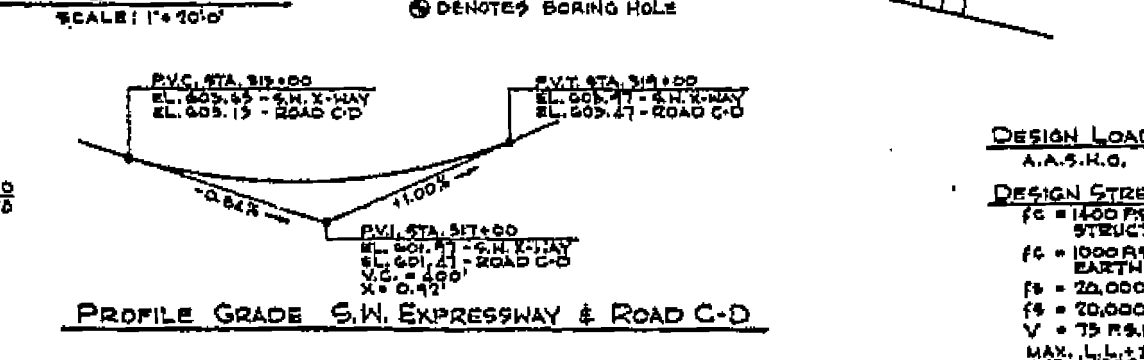
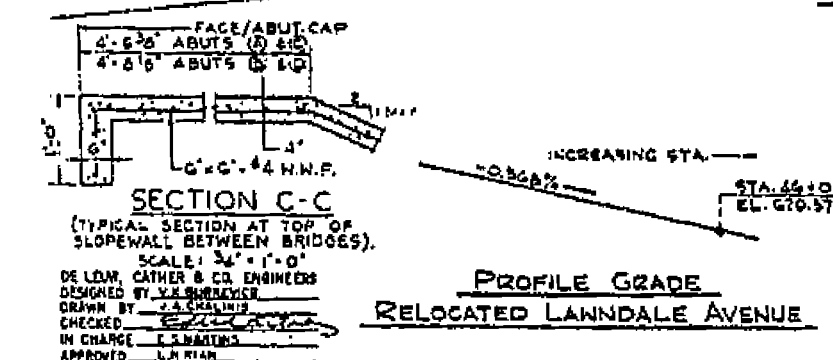
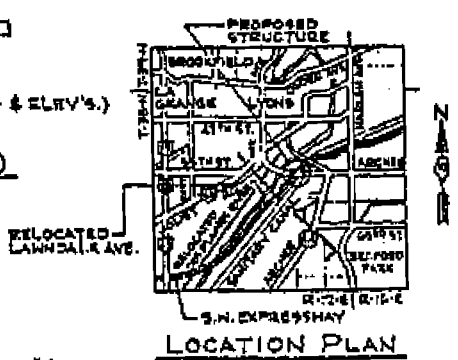
ITEM	UNIT	QUANTITY	TOTAL
CLASS 2 CONCRETE	CU YD	81.8	715.3
PROTECTIVE COAT	SQ YD	3,587	3,587
FURNISHING & ERECTING STRUCTURAL STEEL	TON	706.513	706.513
REINFORCEMENT BARS	TON	220.403	220.403
FURNISHING CRUSHED PILES 20 1/2" TO 30 FEET	LINE FT	880	880
DRIVING TIMBER PILES	LINE FT	880	880
FURNISHING STEEL PILES 4" DIA	LINE FT	5,160	5,160
DRIVING STEEL PILES	LINE FT	5,160	5,160
WAVE PLATES	EA	2	2
SLOPEWALL 4' HIGH ALUMINUM HANDRAIL	LINE FT	1,143	1,407
CONDUIT IN TRENCH, 2" DIA.	LINE FT	80	80
STEEL CONDUIT MOUNTED, 2" DIA. CONCRETE TYPE 2	LINE FT	1,080	1,080
CONDUIT IN CONCRETE, 1 1/2" DIA. GALVANIZED STEEL	LINE FT	36	36
CONDUIT, 2" GALVANIZED STEEL TRENCH AND BACKFILL	LINE FT	64	64
EAST 100% JUNCTION BOX, 18" DIA. 12" HIGH	EA	4	4
CASE IRON JUNCTION BOX, 18" DIA. 12" HIGH	EA	6	6
CLASS A EXCAVATION	CU YD	312	312
CONDUIT MOUNTED, 2" DIA. GALVANIZED STEEL	LINE FT	128	128

\*\*\* INCLUDES 22 CYLINDERS FOR 103 WALL OF ROAD WALL



**STATIONS & ELEVATIONS OF PT.'S**

ABUT.	STATION	ELEVATION
ABUT. (A)	317+28.53	601.92
ABUT. (B)	317+08.13	600.76
ABUT. (C)	318+91.72	602.10
ABUT. (D)	318+21.02	601.62



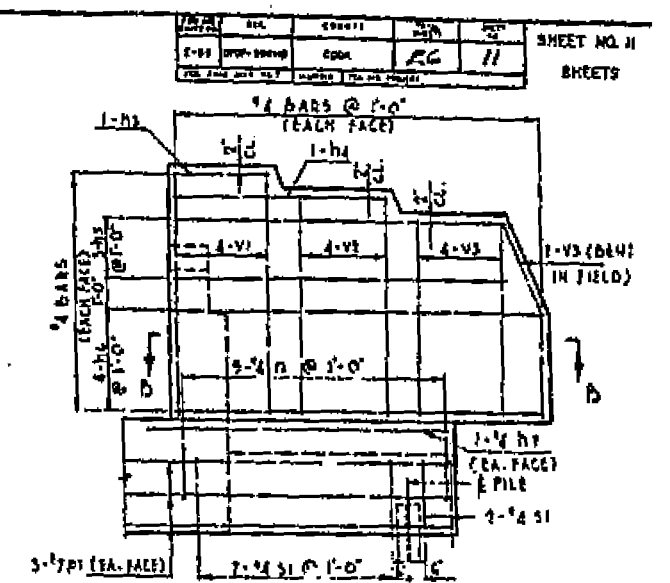
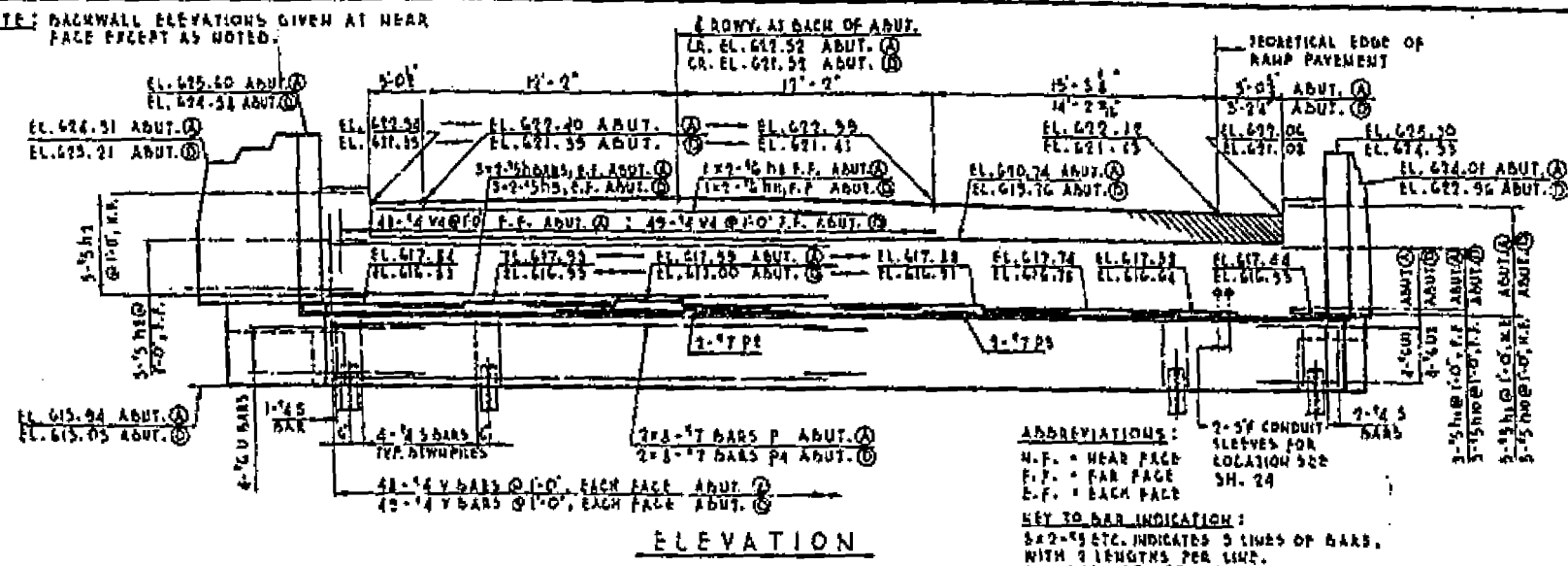
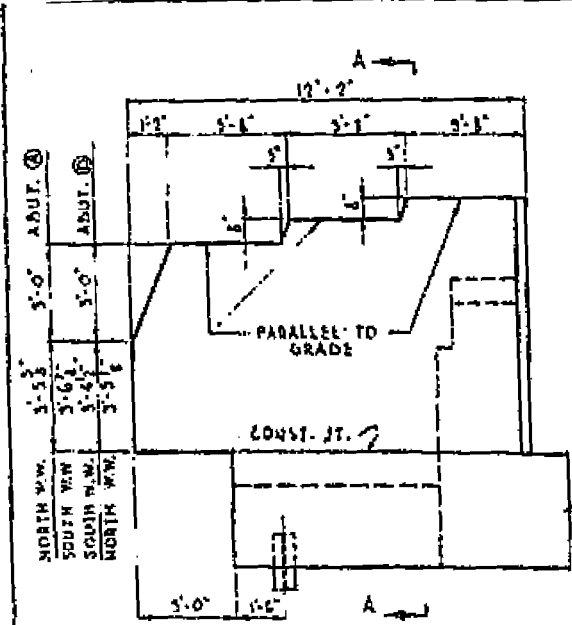
**DESIGN LOADINGS:**  
A.A.S.H.O. H20-516 WITH FUTURE WEARING SURFACE 15%  
**DESIGN STRESSES:**  
FC = 1400 P.S.I. SUPERSTRUCTURE AND SUBSTRUCTURE WITHOUT EARTH PRESSURE.  
FC = 1000 P.S.I. SUBSTRUCTURE WITH EARTH PRESSURE.  
FS = 20,000 P.S.I. REINFORCEMENT BARS.  
FS = 20,000 P.S.I. STRUCTURAL STEEL, A-36  
V = 75 P.S.I. SHEAR IN PIER FOOTINGS.  
MAX. L.L. DEFLECTION ≤ 1/1000 (NON-COMPOSITE) AND 1/2000 (COMPOSITE).

**ILLINOIS DIVISION OF HIGHWAYS**  
**SOUTHWEST EXPRESSWAY**  
**LANNDALE AVE. OVER 2A.I.55**  
**GENERAL PLAN AND ELEVATION**  
SCALE: AS NOTED

JOB NO. 1178  
Approved by: J.A. Smith, Chief Engineer, Cook County, Illinois  
Revised: 10-24-77, Added dimensions for clearance of Pier 2



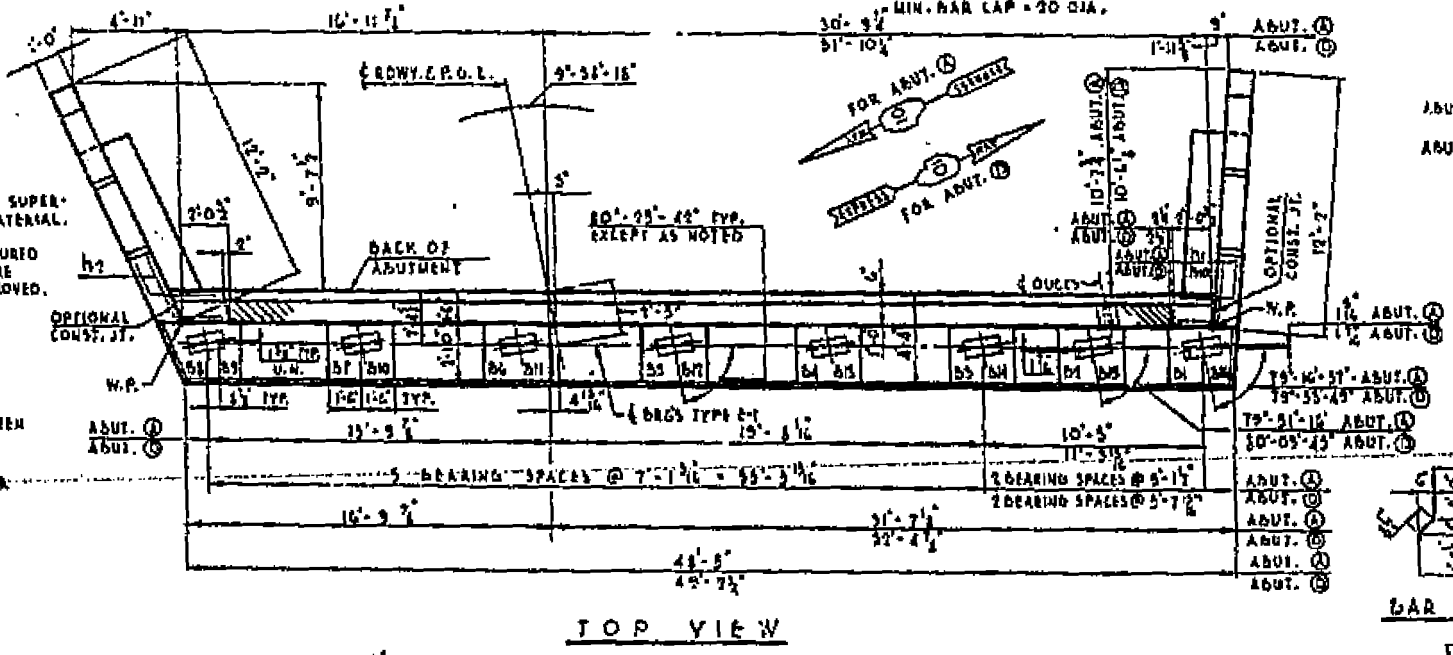
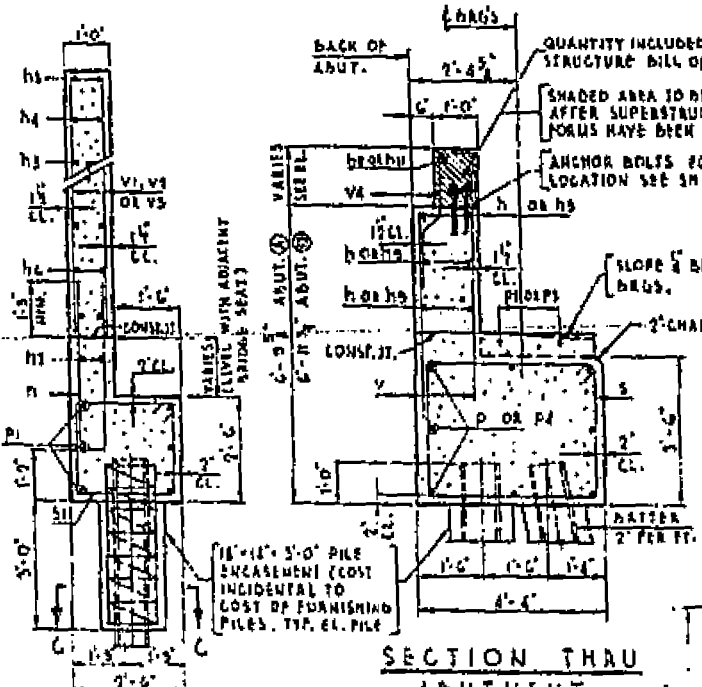
NOTE: BACKWALL ELEVATIONS GIVEN AT NEAR FACE EXCEPT AS NOTED.



WING WALL ELEVATION DIMENSIONS

ELEVATION

WING WALL ELEVATION REINFORCEMENT



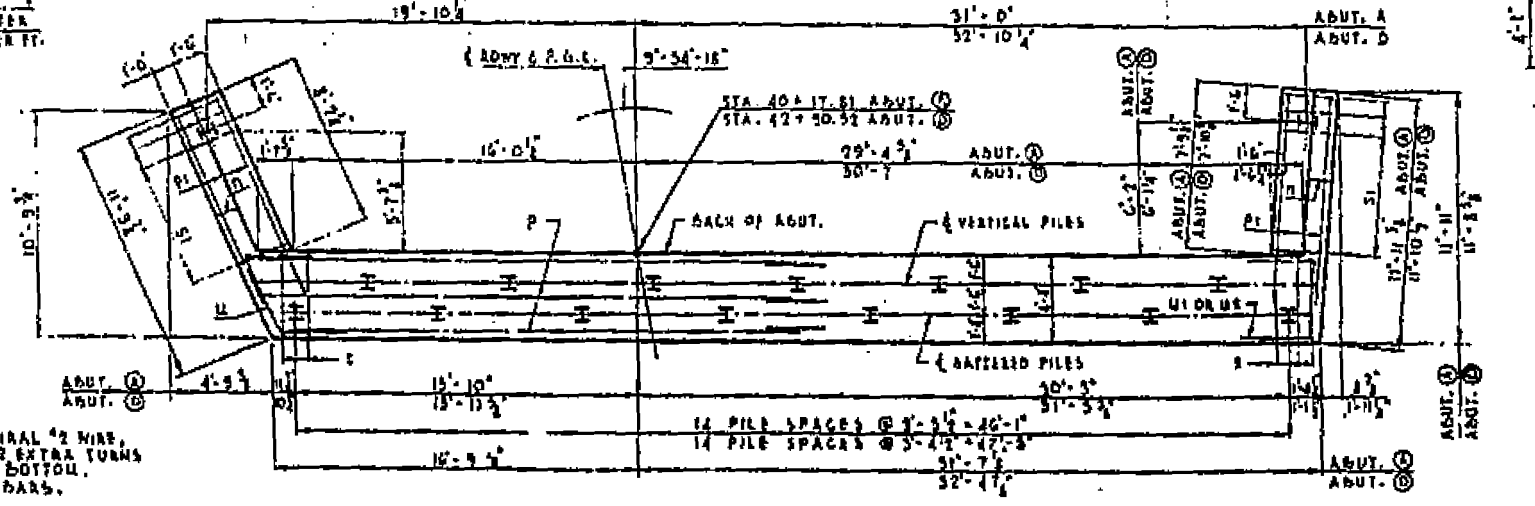
TOP VIEW

SECTION THRU ABUTMENT

PILE DATA	
OUT. (A)	ABUT. (D)
PILE TYPE	2 HP 36
MIN. CAPACITY TONS	32
NO. REQUIRED	17
PILE LENGTH FEET	34

\* INCLUDING TEST PILE

SECTION C-C



PLAN - PILE CAP

SECTION B-B

BAR LIST (2 ABUT'S)

BAR	QUANTITY	TOTAL	SIZE	LENGTH	SHAPE
h1	12	12	3	24'-0"	
h2	4	4	3	4'-0"	
h3	4	4	3	4'-0"	
h4	4	4	3	4'-0"	
h5	4	4	3	4'-0"	
h6	12	12	4	10'-0"	
h7	4	4	4	9'-0"	
h8	12	12	3	24'-0"	
h9	4	4	3	4'-0"	
h10	4	4	3	4'-0"	
h11	4	4	3	4'-0"	
h12	12	12	4	10'-0"	
h13	4	4	4	9'-0"	
h14	4	4	3	4'-0"	
h15	4	4	3	4'-0"	
h16	4	4	3	4'-0"	
h17	4	4	3	4'-0"	
h18	4	4	3	4'-0"	
h19	4	4	3	4'-0"	
h20	4	4	3	4'-0"	
h21	4	4	3	4'-0"	
h22	4	4	3	4'-0"	
h23	4	4	3	4'-0"	
h24	4	4	3	4'-0"	
h25	4	4	3	4'-0"	
h26	4	4	3	4'-0"	
h27	4	4	3	4'-0"	
h28	4	4	3	4'-0"	
h29	4	4	3	4'-0"	
h30	4	4	3	4'-0"	
h31	4	4	3	4'-0"	
h32	4	4	3	4'-0"	
h33	4	4	3	4'-0"	
h34	4	4	3	4'-0"	
h35	4	4	3	4'-0"	
h36	4	4	3	4'-0"	
h37	4	4	3	4'-0"	
h38	4	4	3	4'-0"	
h39	4	4	3	4'-0"	
h40	4	4	3	4'-0"	
h41	4	4	3	4'-0"	
h42	4	4	3	4'-0"	
h43	4	4	3	4'-0"	
h44	4	4	3	4'-0"	
h45	4	4	3	4'-0"	
h46	4	4	3	4'-0"	
h47	4	4	3	4'-0"	
h48	4	4	3	4'-0"	
h49	4	4	3	4'-0"	
h50	4	4	3	4'-0"	
h51	4	4	3	4'-0"	
h52	4	4	3	4'-0"	
h53	4	4	3	4'-0"	
h54	4	4	3	4'-0"	
h55	4	4	3	4'-0"	
h56	4	4	3	4'-0"	
h57	4	4	3	4'-0"	
h58	4	4	3	4'-0"	
h59	4	4	3	4'-0"	
h60	4	4	3	4'-0"	
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h70	4	4	3	4'-0"	
h71	4	4	3	4'-0"	
h72	4	4	3	4'-0"	
h73	4	4	3	4'-0"	
h74	4	4	3	4'-0"	
h75	4	4	3	4'-0"	
h76	4	4	3	4'-0"	
h77	4	4	3	4'-0"	
h78	4	4	3	4'-0"	
h79	4	4	3	4'-0"	
h80	4	4	3	4'-0"	
h81	4	4	3	4'-0"	
h82	4	4	3	4'-0"	
h83	4	4	3	4'-0"	
h84	4	4	3	4'-0"	
h85	4	4	3	4'-0"	
h86	4	4	3	4'-0"	
h87	4	4	3	4'-0"	
h88	4	4	3	4'-0"	
h89	4	4	3	4'-0"	
h90	4	4	3	4'-0"	
h91	4	4	3	4'-0"	
h92	4	4	3	4'-0"	
h93	4	4	3	4'-0"	
h94	4	4	3	4'-0"	
h95	4	4	3	4'-0"	
h96	4	4	3	4'-0"	
h97	4	4	3	4'-0"	
h98	4	4	3	4'-0"	
h99	4	4	3	4'-0"	
h100	4	4	3	4'-0"	

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS 4 CONCRETE	CU YD	450.19
REINFORCEMENT BARS	POUNDS	3377
FORMWORK STEEL SHEET PILING	SQ FT	324
TEST PILE STEEL ANCHOR	EACH	1
PROTECTIVE FOLI	SQ YD	1
CLASS 4 GRANULATION	CU YD	87

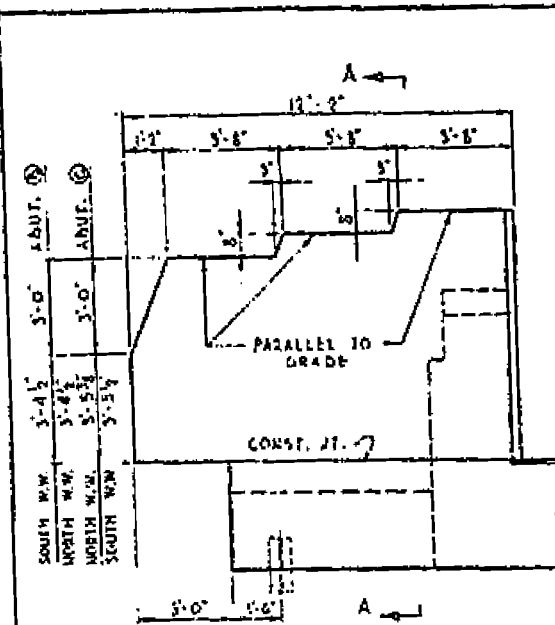
ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY  
LAWDALE AVE. OVER IAL 55  
ABUTMENT A & D

DE LEW, CATHY & CO. ENGINEERS  
DESIGNED BY: J. M. DEW  
DRAWN BY: J. M. DEW  
CHECKED: J. M. DEW  
IN CHARGE: J. M. DEW  
APPROVED: J. M. DEW

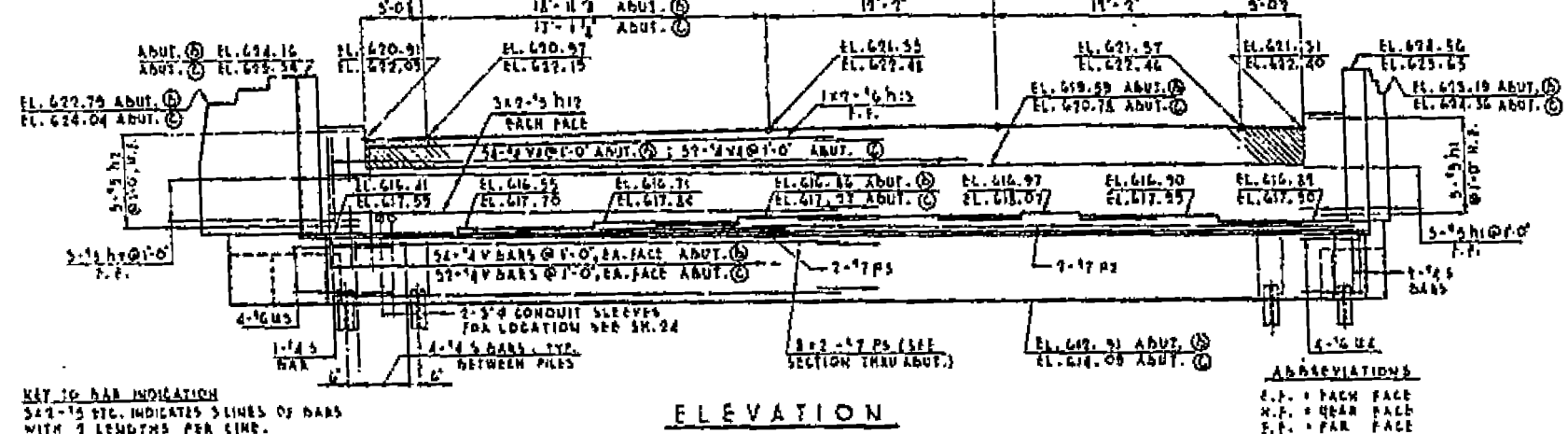
JOB NO. 1179

FOR INFORMATION ONLY

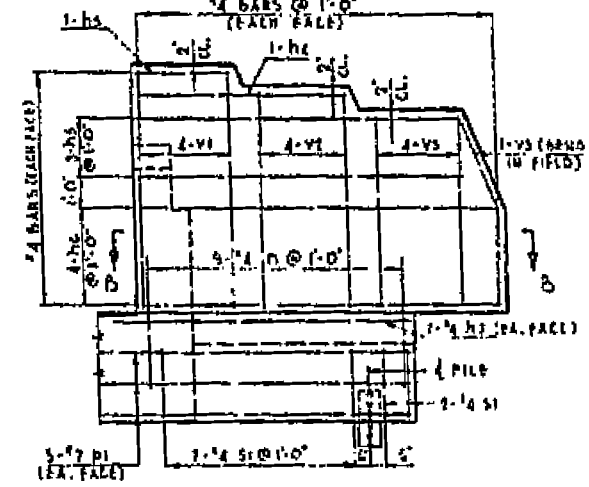
NOTE: BACKWALL ELEVATIONS GIVEN AT NEAR FACE EXCEPT AS NOTED.



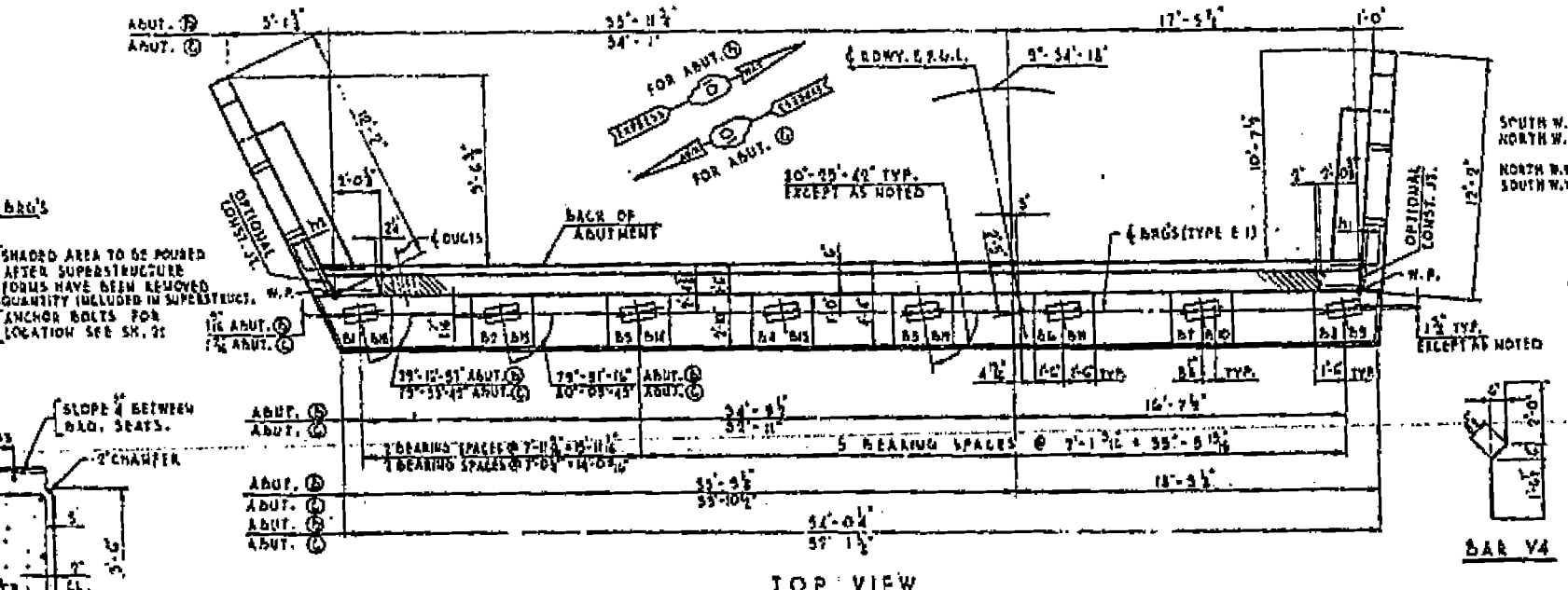
WING WALL ELEVATION DIMENSIONS



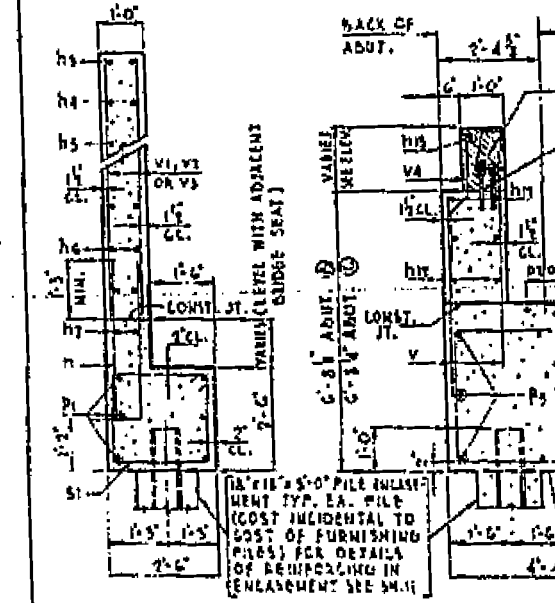
ELEVATION



WING WALL ELEVATION REINFORCEMENT



TOP VIEW



SECTION A-A

SECTION THRU ABUTMENT

FILE DATA		
	ABUT. B	ABUT. C
FILE TYPE	EBP36	EBP36
MIN. CAPACITY (TONS)	32	32
NO. REQUIRED	17	17
EST. LENGTH (FEET)	30	30

SECTION A-B

BAR LIST (2 ABUT'S)						
BAR	QUANTITY	ABUT. QUANT.	TOTAL	SIZE	LENGTH	SHAPE
B1	4	8	12	3	4'-0"	
B2	4	8	12	3	4'-0"	
B3	4	8	12	4	3'-0"	
B4	4	8	12	4	2'-4"	
B5	10	10	20	4	10'-3"	
B6	16	16	32	4	11'-6"	
B7	4	8	12	4	9'-3"	
B8	10	10	20	4	17'-9"	
B9	2	4	6	6	23'-4"	
B10	16	16	32	4	8'-3"	
B11	12	12	24	4	10'-3"	
B12	2	4	6	3	20'-0"	
B13	2	4	6	3	10'-0"	
B14	4	8	12	7	10'-0"	
B15	33	33	66	4	15'-1"	
B16	18	18	36	4	8'-1"	
B17	4	8	12	6	10'-0"	
B18	4	8	12	6	10'-1"	
B19	108	104	212	4	4'-6"	
B20	16	16	32	4	7'-6"	
B21	16	16	32	4	4'-3"	
B22	70	70	140	4	6'-0"	
B23	54	57	111	4	4'-3"	

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU YD	35.1
REINFORCEMENT BARS	POUND	3763
FURNISHING STEEL PILES	LINE FT.	618
DRIVING STEEL PILES	LINE FT.	618
PROTECTIVE COAT	SQ YD	1
CLASS A EXCAVATION	CU YD	16

ILLINOIS DIVISION OF HIGHWAYS  
 SOUTHWEST EXPRESSWAY  
 LAWNDALE AVE. OVER I-55  
 ABUTMENT B & C

DE LEON, CATHY & CO. ENGINEERS  
 DESIGNED BY: T. N. HUN  
 DRAWN BY: A. BURNAS  
 CHECKED: [Signature]  
 IN CHARGE: J. MARTINS  
 APPROVED: L. N. HAN

JOB NO. 1179

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

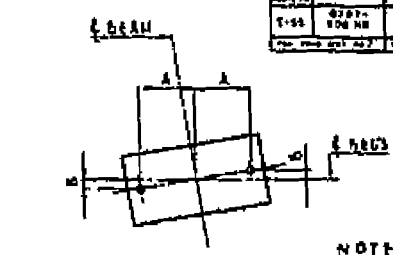
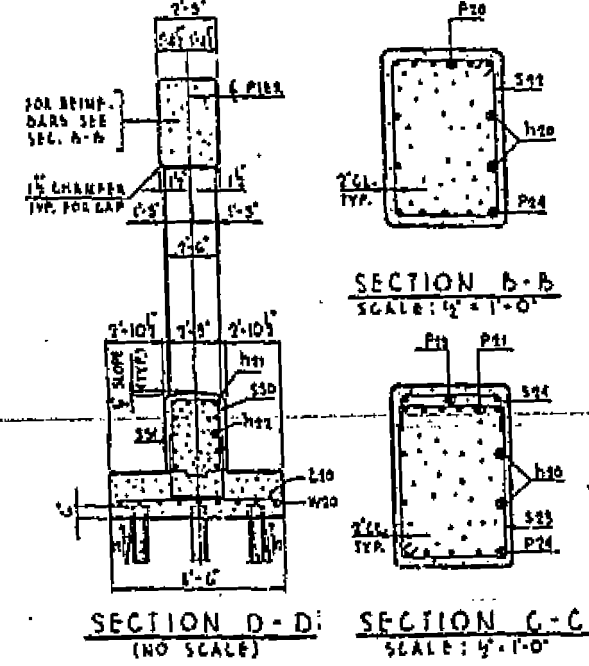
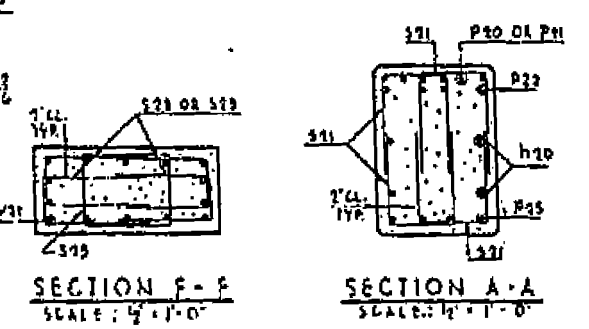
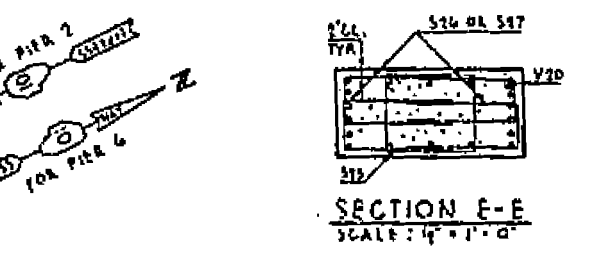
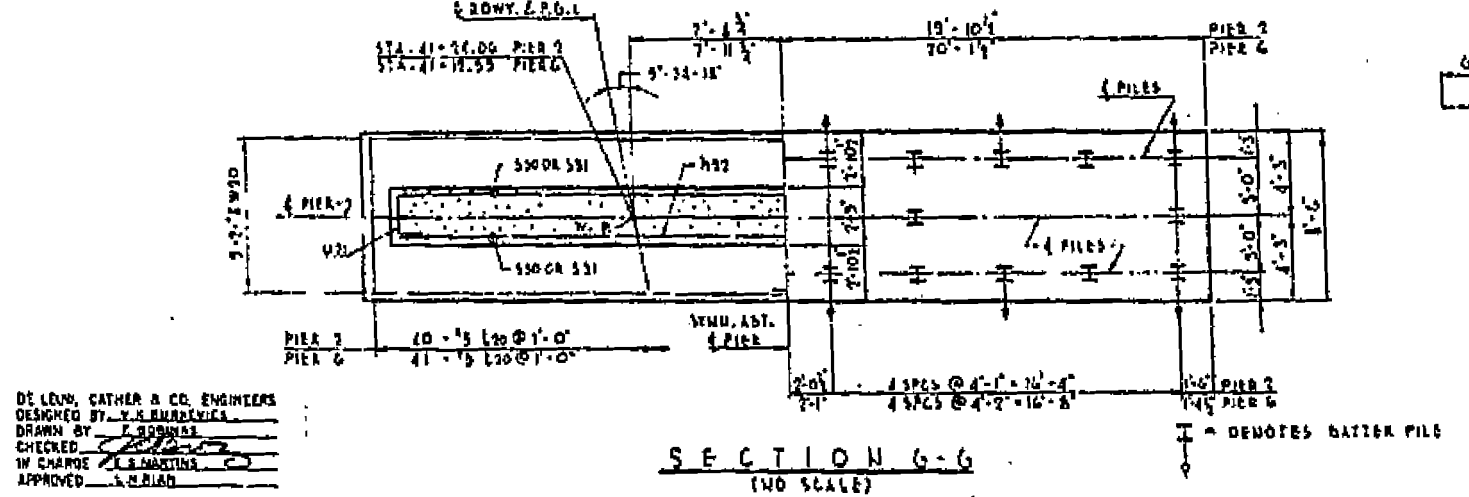
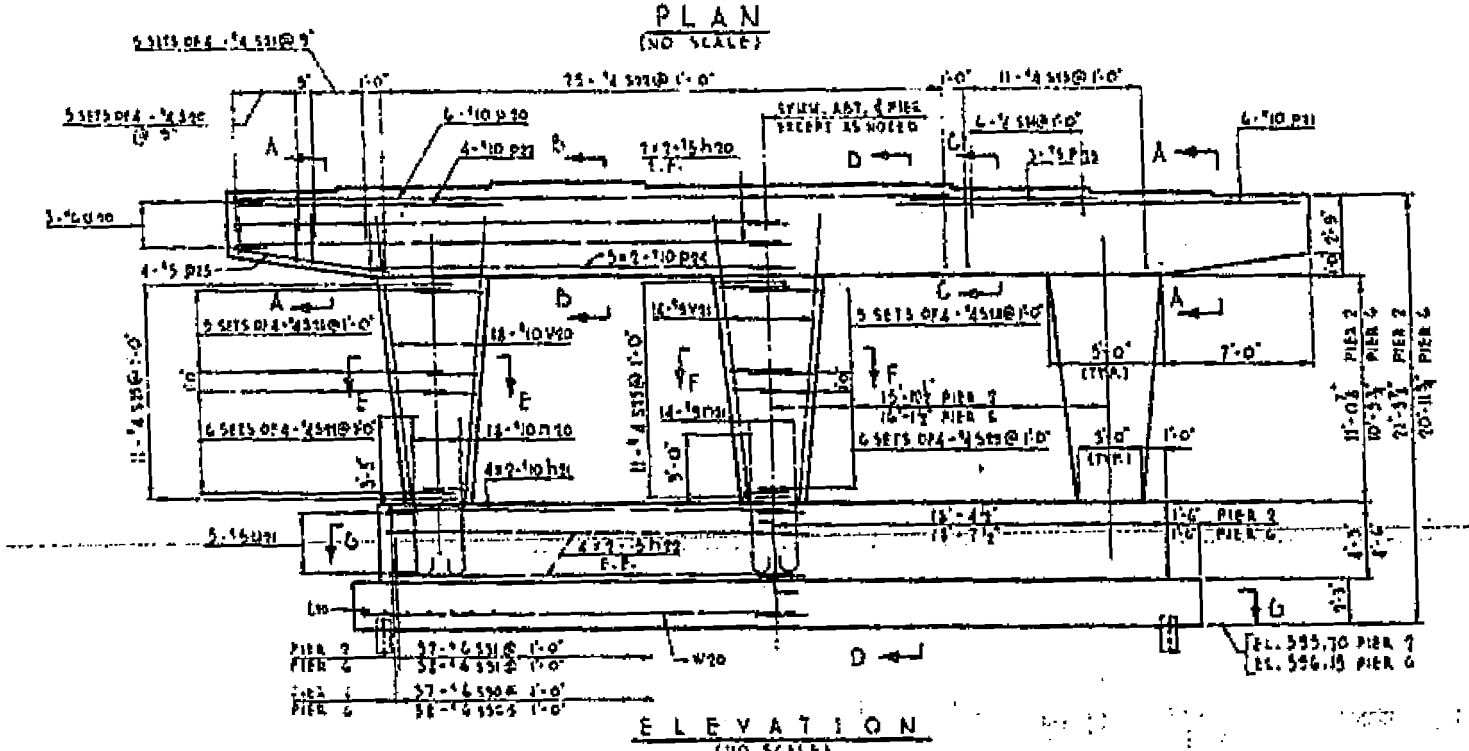
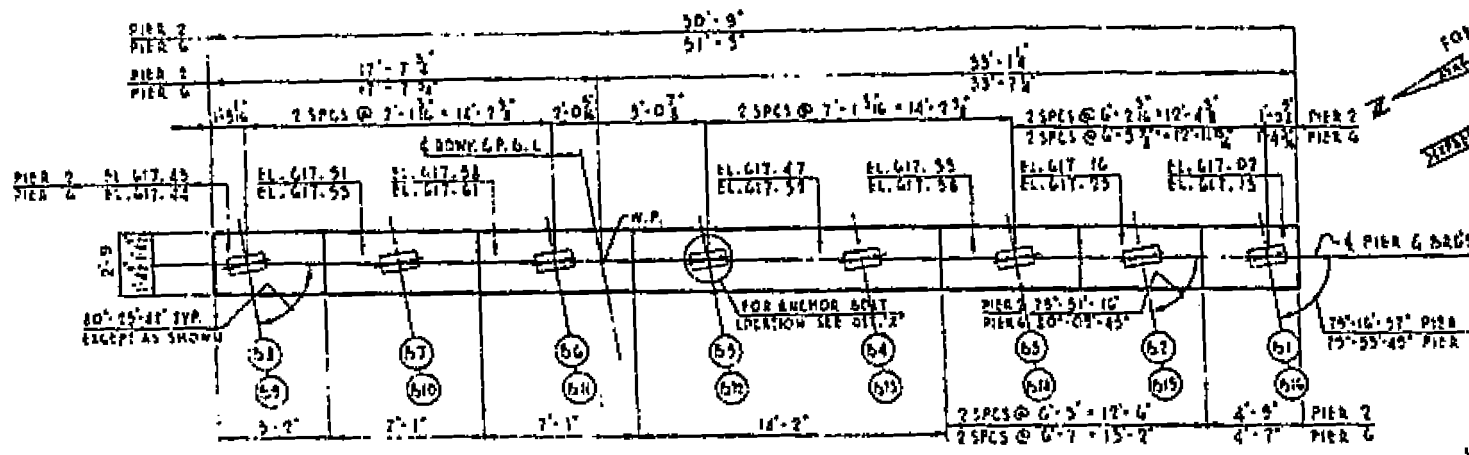
EXISTING PLANS (3 OF 8)  
 STRUCTURE NO. 016-1511

SHEET NO. SAX3 OF SAX8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	109

CONTRACT NO. 60W78  
 ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY



BEAM	A	B
B1	7'-5"	7'-6"
B2	7'-5"	7'-6"
B3 THRU B14	7'-5"	7'-6"
B15	7'-5"	7'-6"
B16	7'-5"	7'-6"

NOTE:  
ALL ANCHOR BOLTS TO PROJECT 2" ABOVE FINISHED CONCRETE, EXCEPT AS NOTED. 3/4" SPACE REINFORCEMENT IN LAP TO MISS ANCHOR BOLTS.  
ALL EDGES TO HAVE 5/8" 1/2" CHAMFER EXCEPT AS NOTED.  
POUR STEPS MONOLITHICALLY WITH PIER CAP.  
KEY TO BAR INDICATION  
5/8" - 1/2" DIA. BARS 5 LINES OF BARS WITH 1 LAMINAE PER LINE.  
MIN. BAR LAP = 20 DIA.

BAR LIST (2 PIERS)					
BAR NUMBER	PIER 2	PIER 6	TOTAL	SIZE	LENGTH SHAPE
N70	8	8	16	5	26'-5"
N71	8	8	16	10	18'-9"
N72	16	16	32	5	19'-5"
N73	36	36	72	10	7'-11"
N74	14	14	28	5	7'-5"
P80	6	6	12	10	53'-5"
P81	6	6	12	10	26'-5"
P82	8	8	16	10	18'-0"
P83	2	2	4	5	8'-0"
P84	10	10	20	10	20'-0"
P85	8	8	16	5	7'-3"
S20	40	40	80	4	6'-1"
S21	40	40	80	4	6'-7"
S22	28	28	56	4	13'-1"
S23	11	11	22	4	12'-5"
S24	6	6	12	4	21'-5"
S25	25	25	50	4	9'-1"
S26	40	40	80	4	7'-1"
S27	21	21	42	4	6'-1"
S28	20	20	40	4	7'-3"
S29	14	14	28	4	6'-5"
S30	27	27	54	6	10'-7"
S31	27	27	54	6	9'-5"
U20	40	41	81	5	8'-0"
U21	6	6	12	6	6'-4"
U22	10	10	20	5	5'-4"
V20	36	36	72	10	14'-0"
V21	14	14	28	5	14'-0"
W20	18	18	36	8	21'-0"

BAR	L	D
S20	2'-5"	1'-7"
S21	2'-6"	1'-7"
S22	1'-6"	2'-0"
S23	2'-10"	1'-5"
S24	2'-4"	1'-5"
S25	2'-10"	1'-7"
S26	2'-4"	1'-7"
S27	2'-0"	2'-4"
S28	1'-6"	2'-4"

FILE DATA		
PIER 2	PIER 6	
2 BHP 36	2 BHP 36	
MIN. CAPACITY TONS	32	32
NO. REQUIRED	24	24
EST. LENGTH FEET	17	70
CUT OFF ELEV.	596.20	596.65

ALL BAR DIMENSIONS ARE OUT TO OUT. PREFIX ALL BAR MARKS FOR SHIPMENT WITH A NUMBER INDICATING THE PIER WHERE THE BARS WILL BE USED. EXAMPLE: 2000000 BARS FOR PIER 2 FOR ALL PIERS BAR SUFFIXES BEGIN AT 20.

BILL OF MATERIAL (2 PIERS)		
ITEM	UNIT	QUANTITY
CLASS 1 CONCRETE	CU YD	76.8
REINFORCEMENT BARS	POUNDS	13,336
FURNISHING STEEL PILES 2 BHP 36	LIN FT	480
TEST PILE STEEL 2 BHP 36	EACH	1
DRIVING STEEL PILES	LIN FT	480
CLASS 2 EXCAVATION	CU YD	87

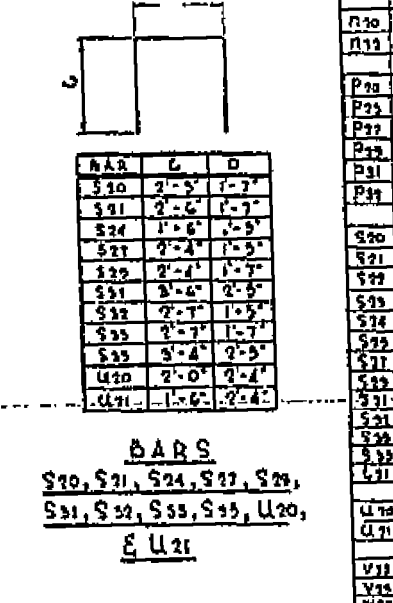
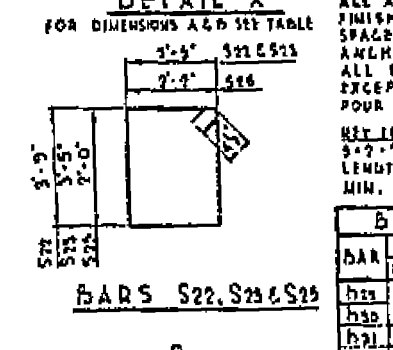
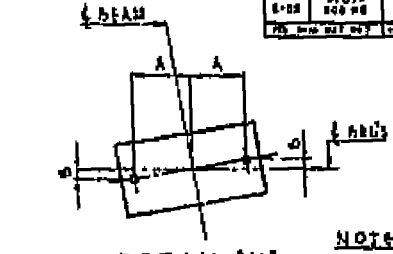
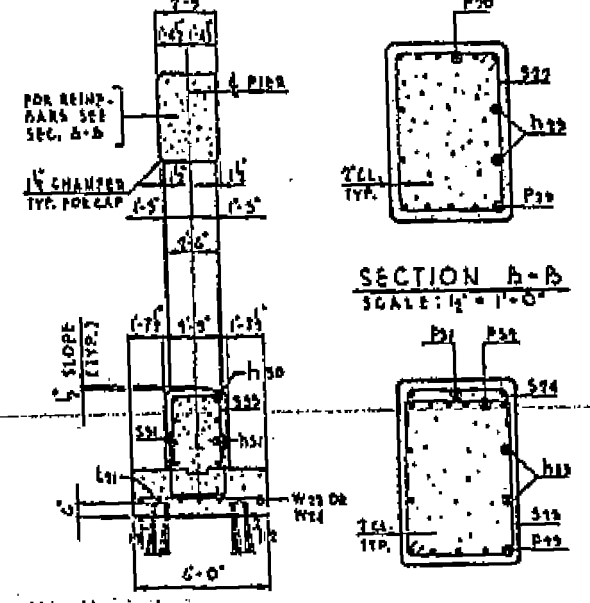
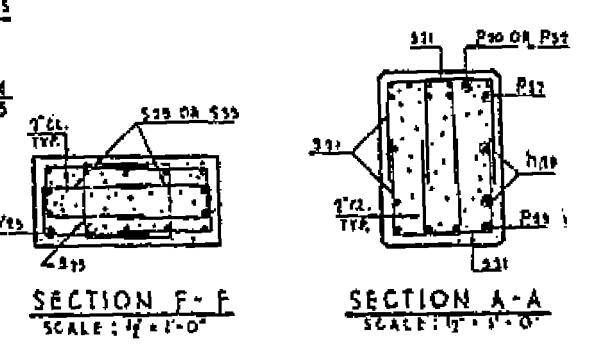
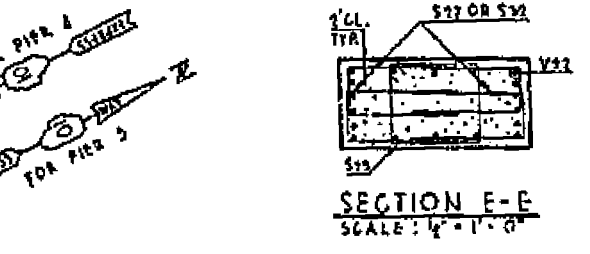
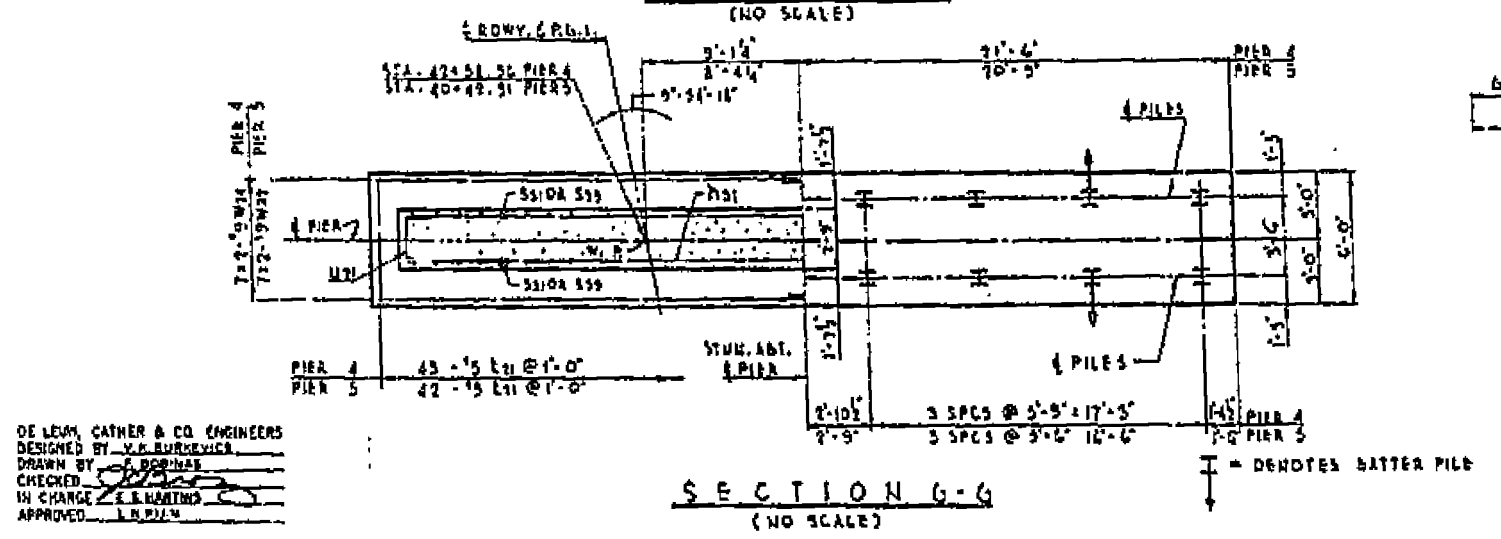
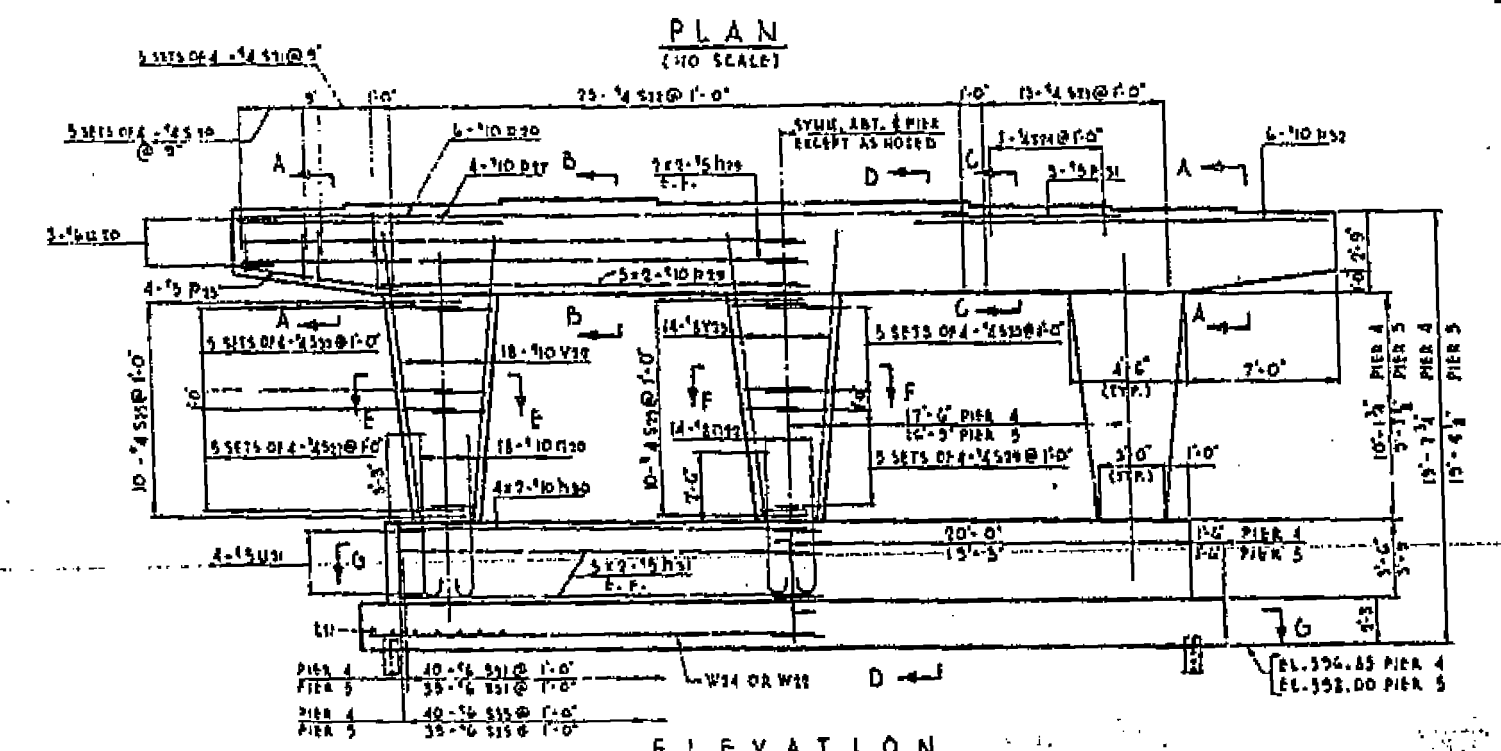
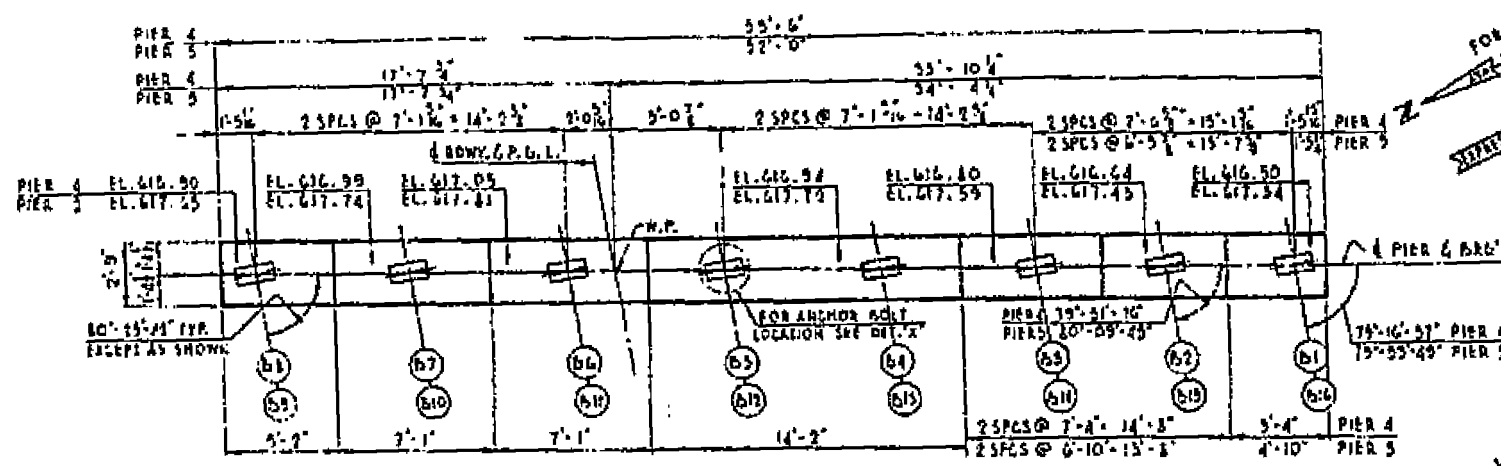
ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY  
LAWDALE AVE. OVER I-55  
PIERS 2 AND 6  
SCALE AS NOTED

DE LOU, CATHER & CO. ENGINEERS  
DESIGNED BY: Y. K. HUNDWICK  
DRAWN BY: F. JOHNSON  
CHECKED BY: J. S. MARTIN  
APPROVED: J. M. RIAN

408 NO. 1173







BEAM	A	B
B1	3' 1/2"	1' 1/2"
B2	8' 1/2"	1' 1/2"
B3 THRU B6	8' 1/2"	1' 1/2"
B7	7' 3/4"	1' 1/2"
B8	7' 3/4"	1' 1/2"

NOTE:  
 ALL ANCHOR BOLTS TO PROJECT 3/4" ABOVE FINISHED CONCRETE, EXCEPT @ BEAM PROJECTIONS SPACE REINFORCEMENT IN CAP TO MISS ANCHOR BOLTS.  
 ALL EDGES TO HAVE STG. 1/4" CHAMFER EXCEPT AS NOTED.  
 FOUR STEPS UNMOLDED WITH PIER CAP.  
 KEY TO BAR ORIENTATION:  
 S-2, S-10 ETC. MEANS 5 LINES OF BARS WITH 2 LENGTHS PER LINE.  
 MIN. BAR LAP = 20 DIA.

BAR LIST (2 PIERS)							
BAR	NUMBER	PIER 4	PIER 5	TOTAL	SIZE	LENGTH	SHAPE
h21	3	3	10	13	5	27'-9"	—
h22	3	3	10	13	10	21'-3"	—
h23	12	12	24	36	5	20'-0"	—
h24	36	36	72	108	10	7'-11"	—
h25	14	14	28	42	8	4'-1"	—
P20	6	6	12	18	10	33'-3"	—
P21	3	3	6	9	5	7'-3"	—
P22	3	3	6	9	10	11'-2"	—
P23	10	10	20	30	10	21'-3"	—
P24	3	3	6	9	5	8'-0"	—
P25	6	6	12	18	10	22'-0"	—
S20	40	40	80	120	4	6'-1"	—
S21	40	40	80	120	4	6'-7"	—
S22	25	25	50	75	4	13'-1"	—
S23	13	13	26	39	4	12'-9"	—
S24	7	7	14	21	4	5'-8"	—
S25	30	30	60	90	4	9'-1"	—
S26	40	40	80	120	4	6'-1"	—
S27	10	10	20	30	4	6'-3"	—
S28	40	40	80	120	4	6'-7"	—
S29	18	18	36	54	4	6'-3"	—
S30	40	40	80	120	4	6'-3"	—
S31	43	43	86	129	5	6'-2"	—
U20	6	6	12	18	6	6'-4"	—
U21	8	8	16	24	5	5'-4"	—
V11	36	36	72	108	10	13'-9"	—
V15	14	14	28	42	8	12'-9"	—
W22	—	14	14	28	8	11'-9"	—
W24	14	—	14	28	8	11'-9"	—

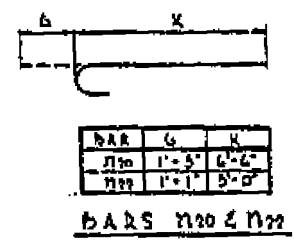
BAR LIST (2 PIERS)

ALL BAR DIMENSIONS ARE OUT TO OUT. DEPTH ALL BAR MARKS FOR SHIPMENT WITH A NUMBER INDICATING THE PIER WHERE THE BARS WILL BE USED. EXAMPLE: 4 PUSHBARS BARS B10 FOR PIER 4 FOR ALL PIERS, BAR SUPPLIES B616 AT 10.

BILL OF MATERIAL (2 PIERS)			
ITEM	UNIT	PIER 4	PIER 5
CLASS 2 CONCRETE	CU YD	68.0	66.2
REINFORCEMENT BARS	POUND	11873	11805
FURNISHING STEEL PILES 8 HP 36	LIN FT	500	504
TEST PILE STEEL 8 HP 36	BALE	1	—
DRIVING STEEL PILES	LIN FT	300	500
CLASS A EXCAVATION	CU YD	84	77

PILE DATA		
PILE TYPE	PIER 4	PIER 5
MIN. CAPACITY TONS	31.5	31.5
NO. REQUIRED	16	16
EST. LENGTH FEET	20	19
LIT OFF ELEV.	597.55	598.30

\* INCLUDES 1 TEST PILE



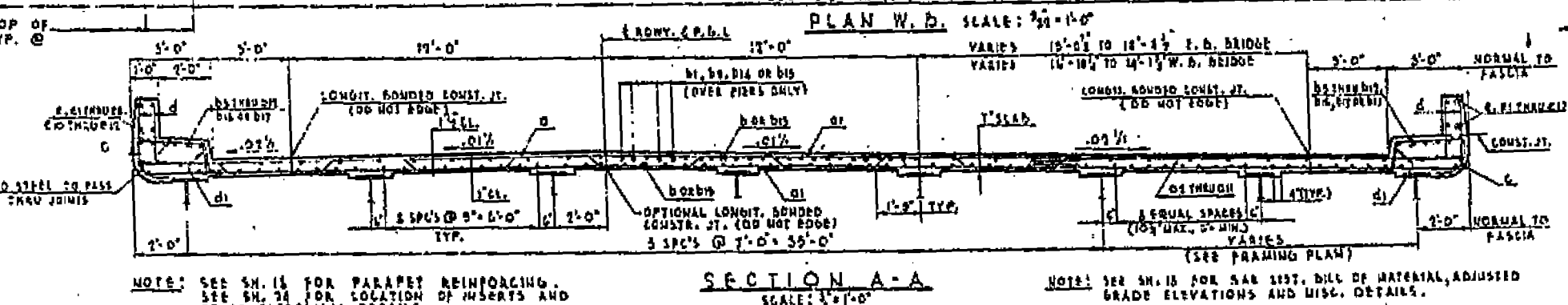
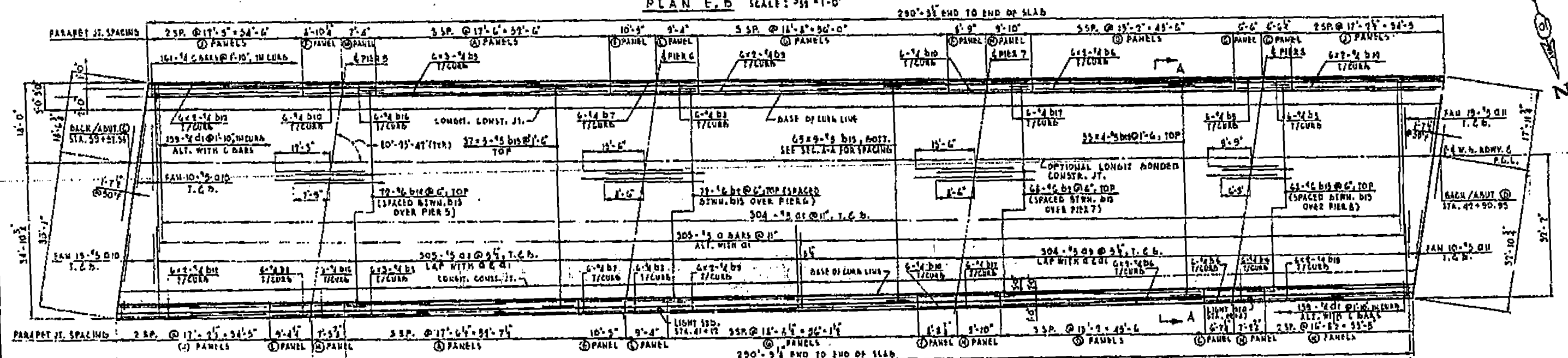
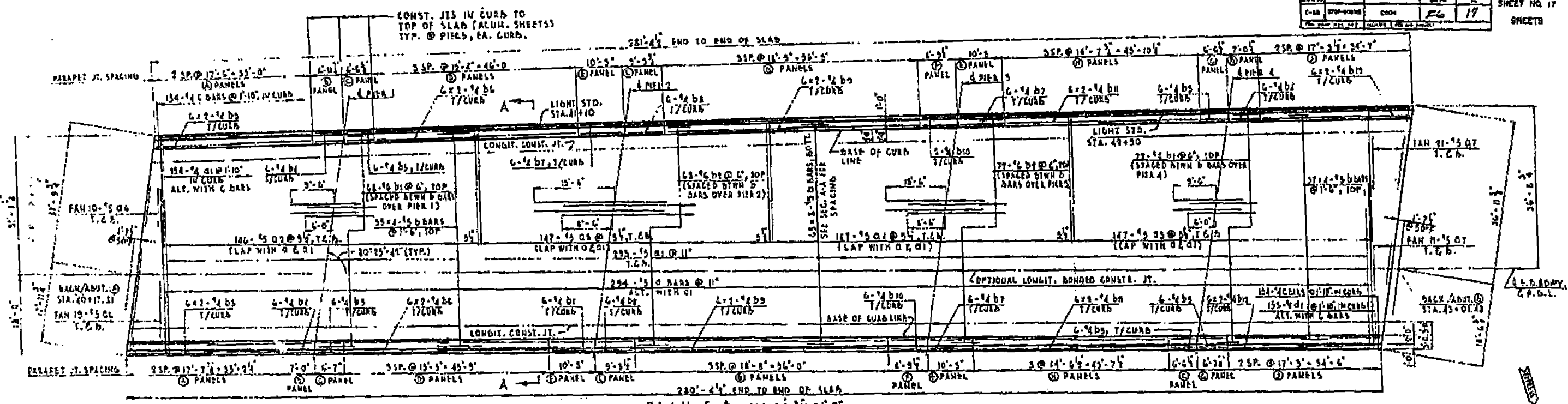
FOR ELECTRICAL DETAILS ENDED IN PIERS SEE SH. 24

DE LEEM, CATHER & CO. ENGINEERS  
 DESIGNED BY V.K. BURKOVIC  
 DRAWN BY J. BOBINAS  
 CHECKED BY E. HARTING  
 APPROVED L.R. DILLON

JOB NO. 1129

ILLINOIS DIVISION OF HIGHWAYS  
 SOUTHWEST EXPRESSWAY  
 LAWNDALE AVE. OVER FA. 55  
 PIERS 4 AND 5  
 SCALE AS NOTED DATE

FOR INFORMATION ONLY



DE LEW, CATHEN & CO. ENGINEERS  
DESIGNED BY J.C. BRIDGEMAN  
DRAWN BY J. BOHANNAN  
CHECKED BY J. BOHANNAN  
APPROVED BY J. BOHANNAN

KEY TO BAR INDICATIONS:  
1574-15 ETC. INDICATES 35 LINES OF BARS WITH 4 LENGTHS PER LINE. MIN. BAR LAPS = 20 DIA.

ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY  
LAWDALE AVE. OVER FA.I. 55  
SUPERSTRUCTURE-SLAB DETAILS

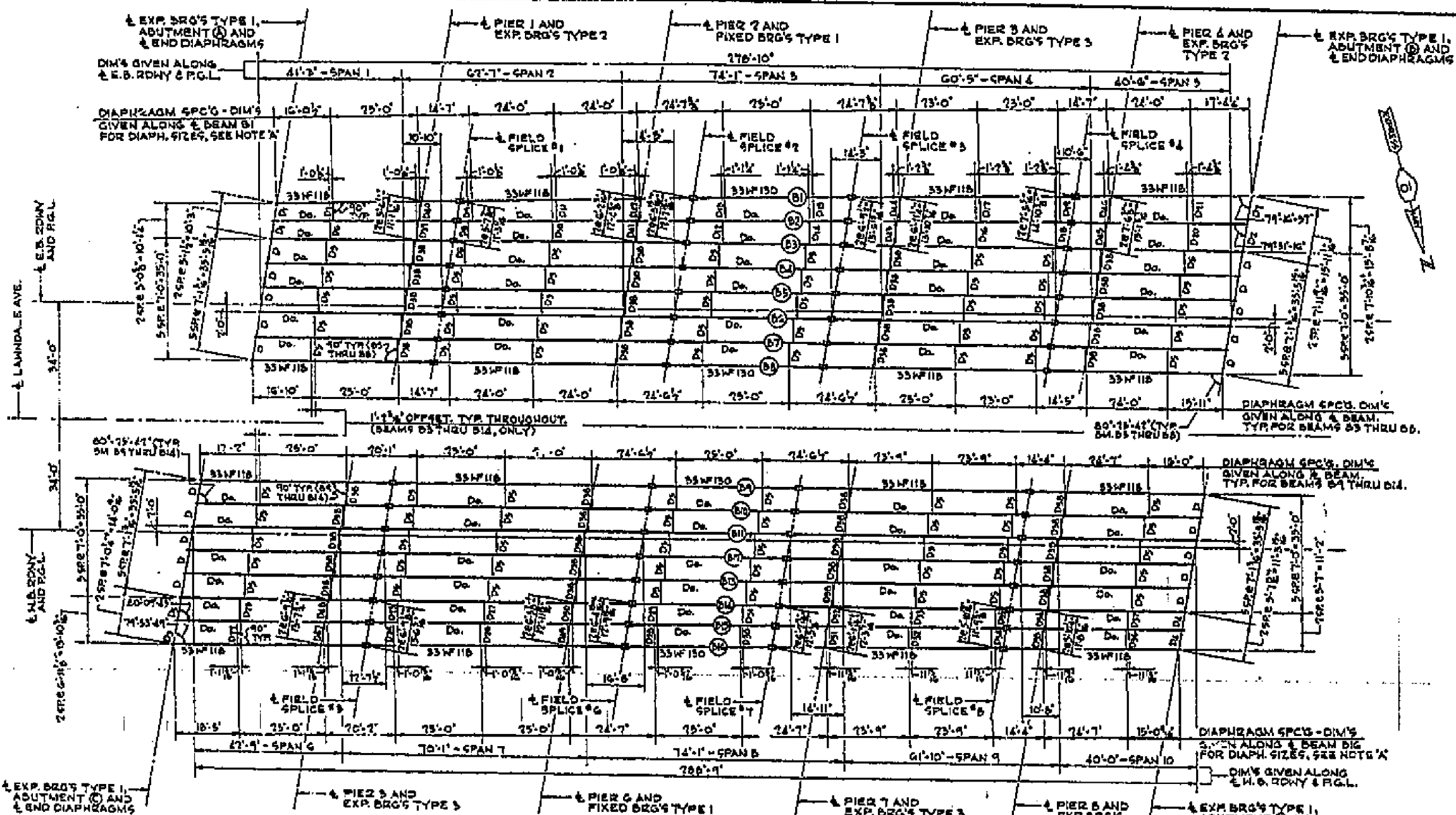
SCALE: AS NOTED

JOB NO. 1179

FOR INFORMATION ONLY

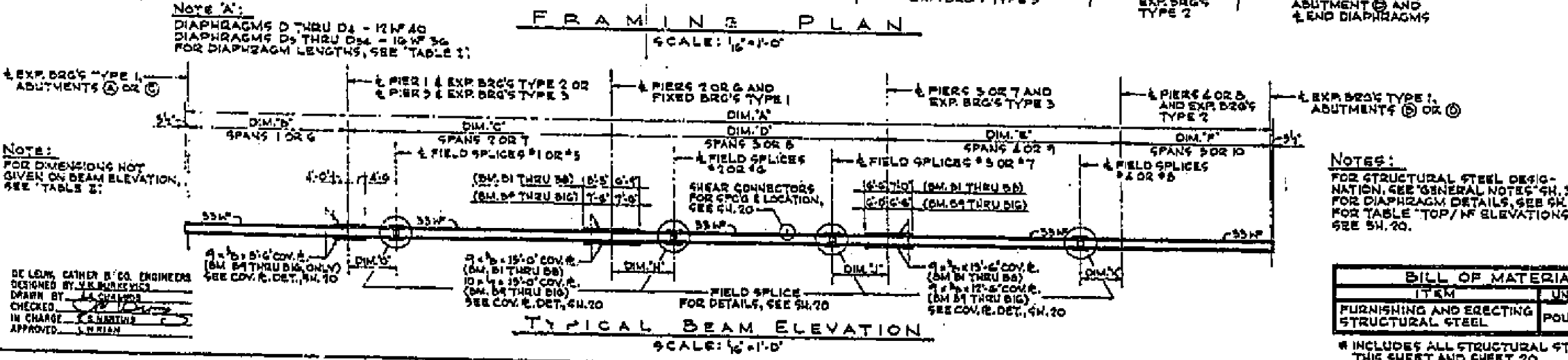
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**TABLE I**

DIAPH.	LENGTH	NO. REQ'D	DIAPH.	LENGTH	NO. REQ'D
D1	7'-1 1/2"	20	D15	6'-5 1/2"	1
D2	5'-1 1/2"	2	D16	6'-5 1/2"	1
D3	7'-11 1/2"	2	D17	6'-1 1/2"	1
D4	7'-0 1/2"	2	D18	6'-7 1/2"	1
D5	5'-7 1/2"	2	D19	5'-11 1/2"	1
D6	7'-0"	60	D20	5'-11 1/2"	1
D7	5'-2 1/2"	1	D21	5'-9 1/2"	1
D8	5'-7 1/2"	1	D22	5'-10"	1
D9	5'-7 1/2"	1	D23	5'-7 1/2"	1
D10	5'-7 1/2"	1	D24	5'-7 1/2"	1
D11	5'-10 1/2"	1	D25	7'-0"	40
D12	6'-4 1/2"	1	D26	5'-5 1/2"	1
D13	6'-2 1/2"	1	D27	5'-5 1/2"	1
D14	6'-7 1/2"	1			
D15	6'-6 1/2"	1			
D16	7'-0 1/2"	1			
D17	7'-0 1/2"	1			
D18	7'-3 1/2"	1			
D19	7'-3 1/2"	1			
D20	7'-8 1/2"	1			
D21	7'-8 1/2"	1			
D22	6'-10"	1			
D23	6'-10 1/2"	1			
D24	7'-0 1/2"	1			
D25	7'-5 1/2"	1			
D26	7'-5 1/2"	1			
D27	6'-8 1/2"	1			
D28	6'-4 1/2"	1			
D29	6'-4 1/2"	1			
D30	6'-4 1/2"	1			
D31	6'-0 1/2"	1			
D32	6'-0 1/2"	1			
D33	5'-9 1/2"	1			
D34	5'-9 1/2"	1			



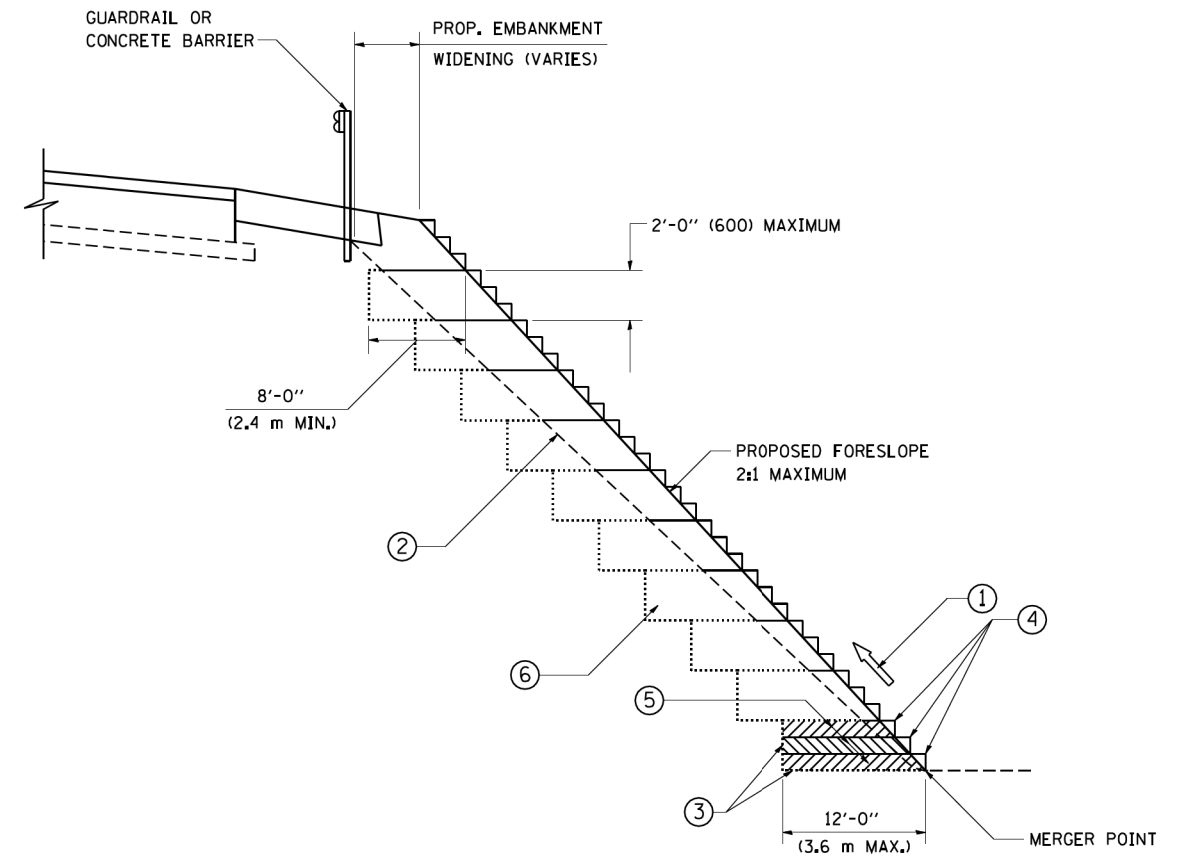
**TABLE II**

BEAM DIM.	D1	D2	D3 THRU D4	D5 THRU D6	D15	D16
A	280'-9"	280'-7 1/2"	279'-9"	289'-8"	289'-10 1/2"	290'-1 1/2"
B	41'-4 1/2"	41'-3 1/2"	41'-5"	42'-4"	42'-4 1/2"	42'-9 1/2"
C	67'-9 1/2"	67'-8 1/2"	67'-7"	70'-1"	70'-1 1/2"	70'-2 1/2"
D	74'-4 1/2"	74'-7 1/2"	74'-1"	74'-1"	74'-1 1/2"	74'-2 1/2"
E	60'-7 1/2"	60'-6 1/2"	60'-5"	61'-10"	61'-10 1/2"	61'-11 1/2"
F	40'-7 1/2"	40'-6 1/2"	40'-6"	40'-0"	40'-0 1/2"	40'-0 1/2"
G	10'-10 1/2"	10'-10 1/2"	10'-10"	11'-7 1/2"	11'-7 1/2"	11'-7 1/2"
H	14'-8 1/2"	14'-8 1/2"	14'-8"	15'-6"	15'-6 1/2"	15'-6 1/2"
J	14'-3 1/2"	14'-3 1/2"	14'-3"	14'-11"	14'-11 1/2"	14'-11 1/2"
K	10'-6 1/2"	10'-6 1/2"	10'-6"	10'-8"	10'-8 1/2"	10'-8 1/2"

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	655,040

ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY  
**LAWDALE AVE. OVER FA. I. 55**  
FRAMING PLAN



**TYPICAL BENCHING DETAIL  
FOR EMBANKMENT**

**NOTES:**

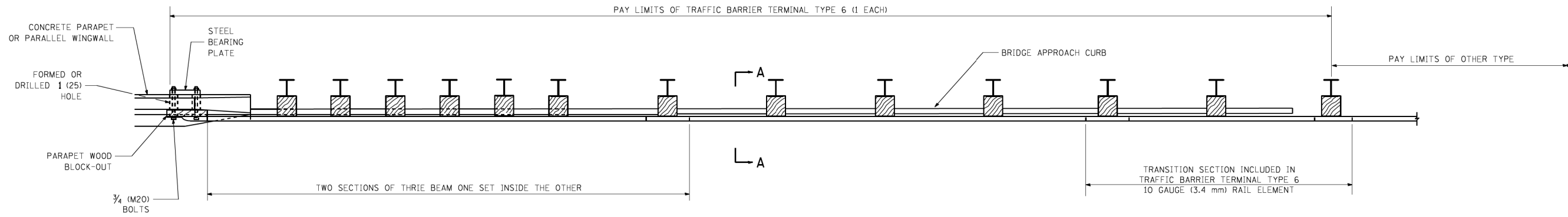
- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)  
UNLESS OTHERWISE SHOWN.

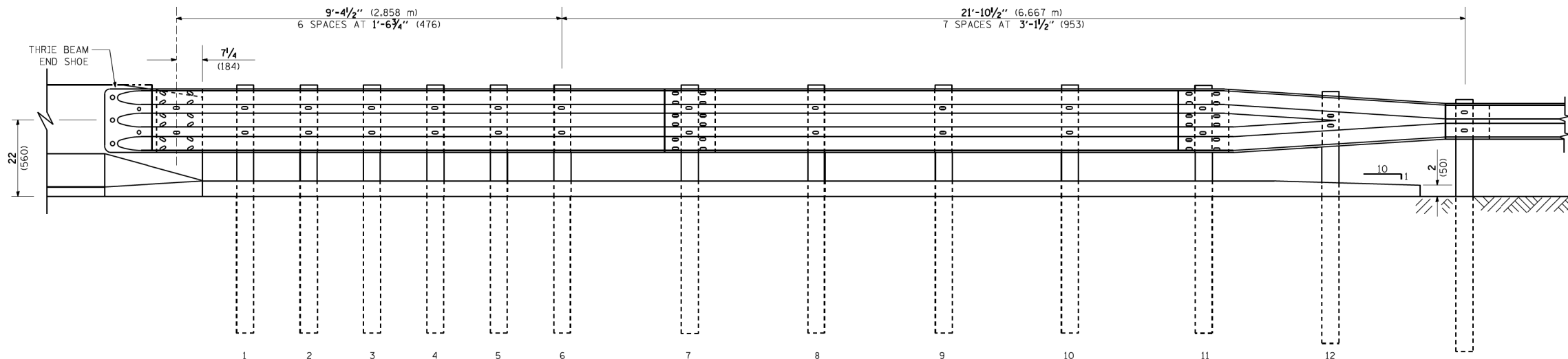
FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BENCHING DETAIL FOR EMBANKMENT WIDENING</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	CHECKED - S.E.B.	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	373	0707-608HB-B-1	COOK
PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -	REVISED -					<b>BD-51</b>		CONTRACT NO. 60W78	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT											

**PARAPET OR WINGWALL**

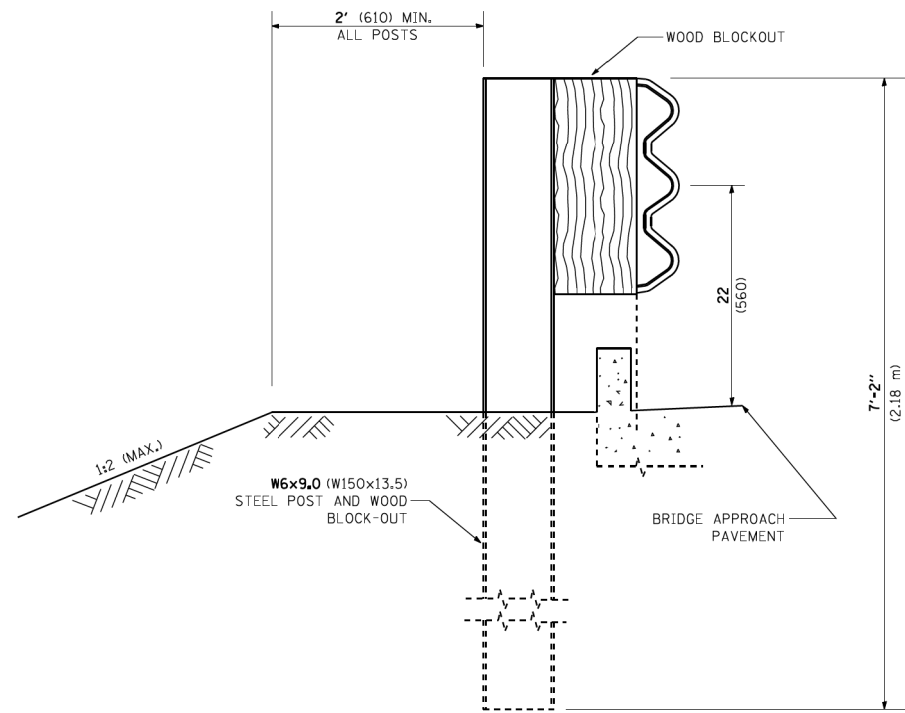
PAY LIMITS OF TRAFFIC BARRIER TERMINAL TYPE 6 (1 EACH)



**PLAN**



**ELEVATION**



**SECTION A-A**

**GENERAL NOTES**

TO BE USED WHEN CONNECTING TO EXISTING GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.

SEE STANDARD 630001 FOR DETAILS OF GUARDRAIL NOT SHOWN.

THRIE BEAM RAIL SHALL BE BOLTED TO BLOCK-OUT AT ALL POSTS.

SEE STANDARD 420401 FOR DETAILS OF BRIDGE APPROACH PAVEMENT.

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = c:\Projects\diststd2007\bm22.dgn

USER NAME = bauerdl

DESIGNED -	REVISED - STATE STANDARD:
DRAWN -	631031-05 - 02/19/2008
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPE 6 TERMINAL  
FOR USE WITH 21" HIGH SPBGR**

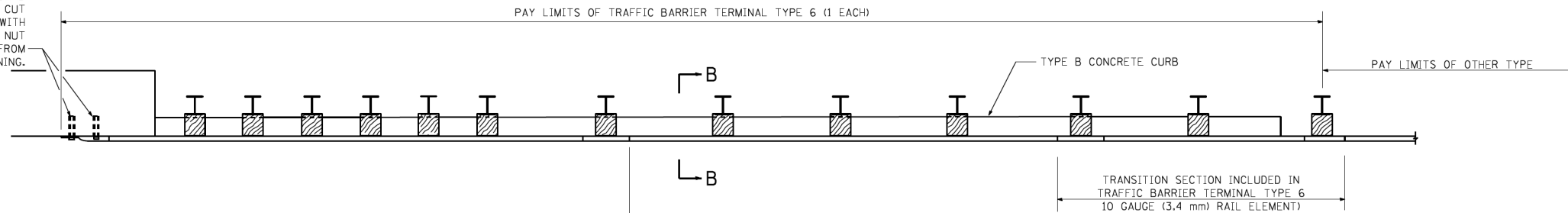
SCALE: NONE SHEET NO. 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	116
<b>BM 22</b>		<b>CONTRACT NO. 60W78</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

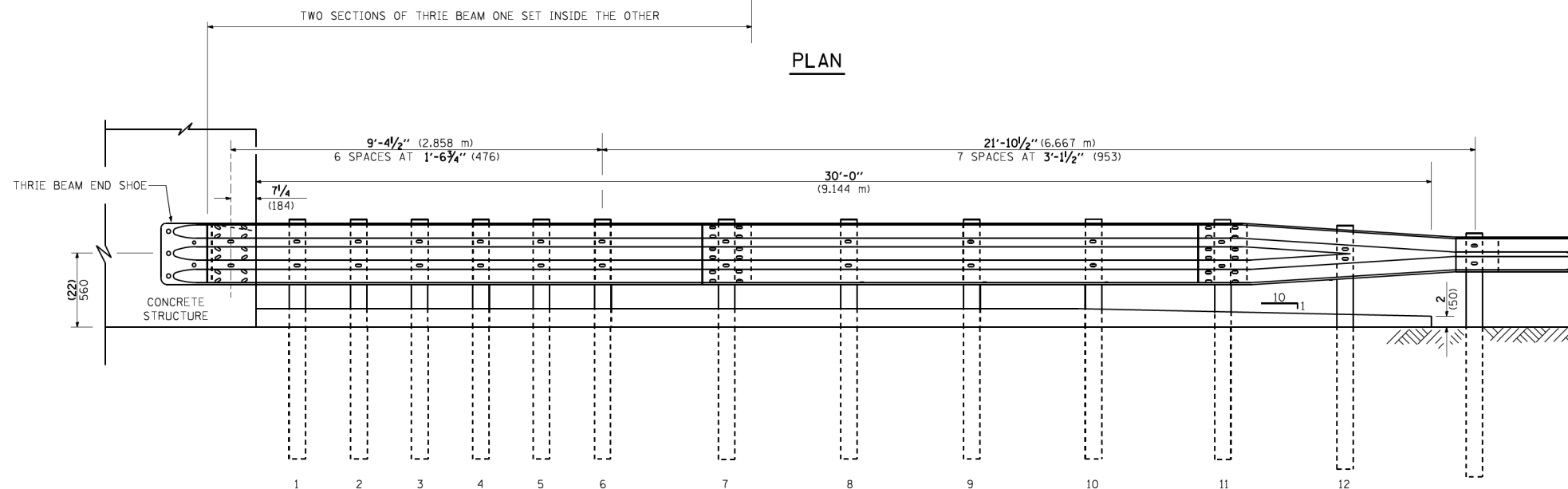
**OTHER CONCRETE STRUCTURE**

5 EPOXY GROUTED 3/4" (M20) ANCHOR BOLTS WITH STANDARD WASHERS. AFTER TIGHTENING, CUT THE ANCHOR BOLTS FLUSH WITH NUTS, AND DAMAGE THE NUT TO PREVENT IT FROM LOOSENING.

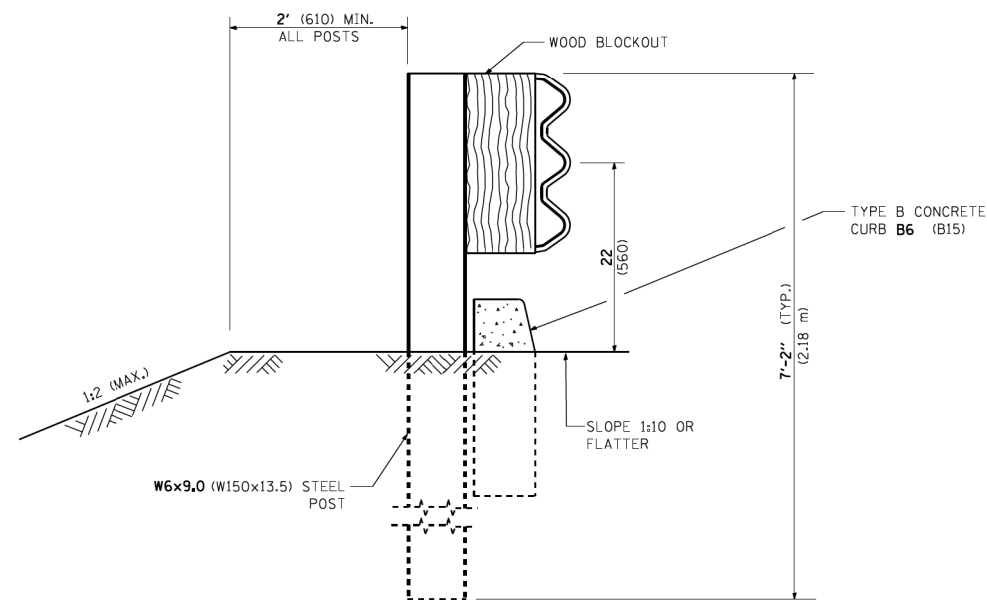
PAY LIMITS OF TRAFFIC BARRIER TERMINAL TYPE 6 (1 EACH)



**PLAN**



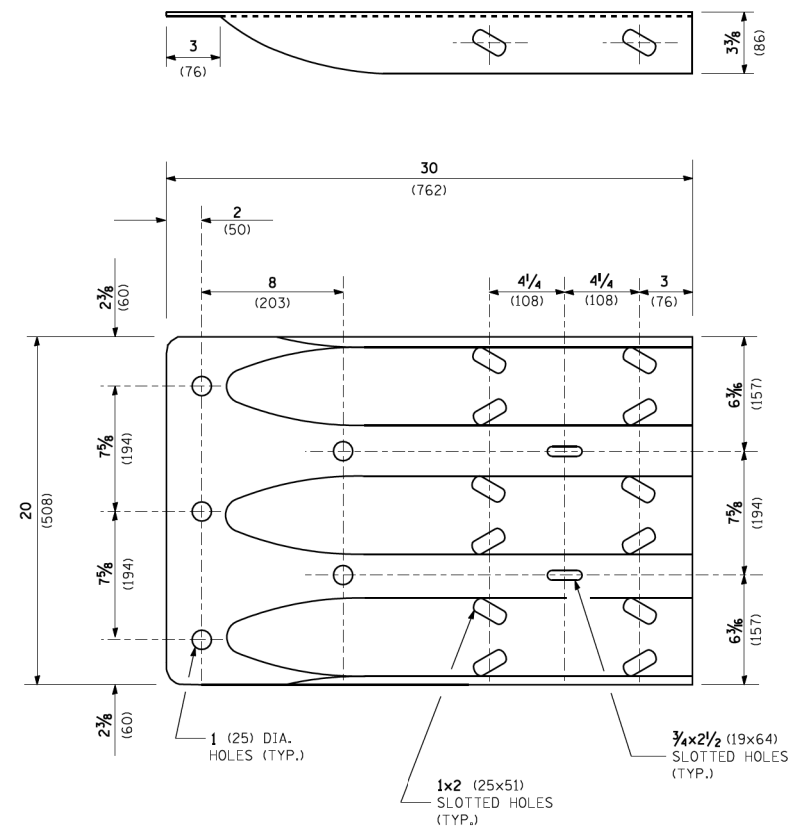
**ELEVATION**



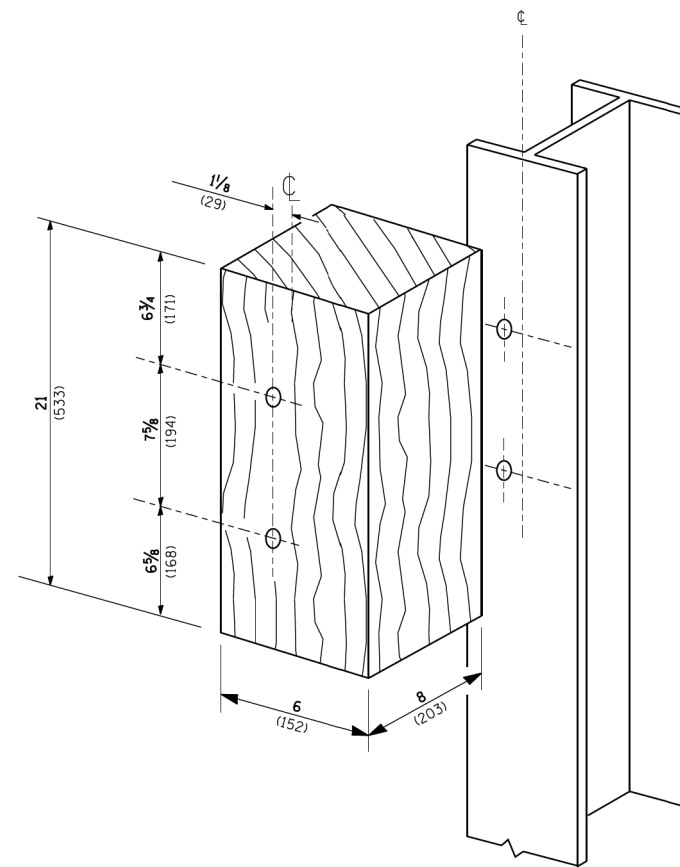
**SECTION B-B**

FILE NAME = c:\Projects\diststd2007\bm22.dgn	USER NAME = bauerdl	DESIGNED -	REVISED - STATE STANDARD;	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPE 6 TERMINAL FOR USE WITH 21" HIGH SPBGR</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	631031-05 - 02/19/2008		373	0707-608HB-B-1	COOK	127	117			
		CHECKED -	REVISED -		<b>BM 22</b>			CONTRACT NO. 60W78				
		DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
				SCALE: NONE	SHEET NO. 2 OF 3 SHEETS	STA.	TO STA.					

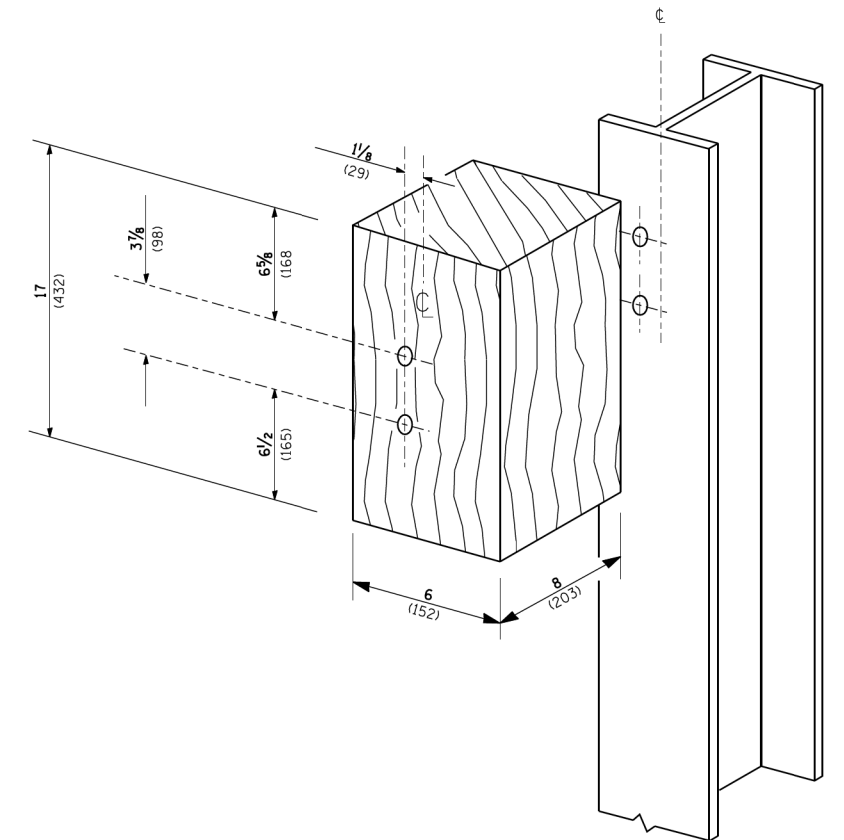




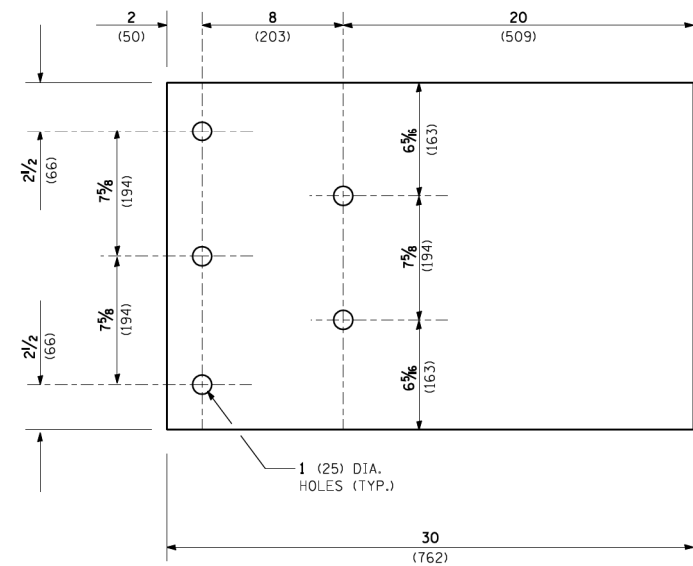
THRIE BEAM END SHOE DETAIL



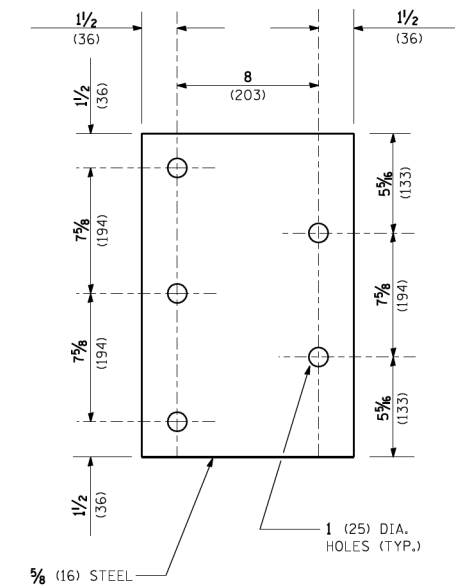
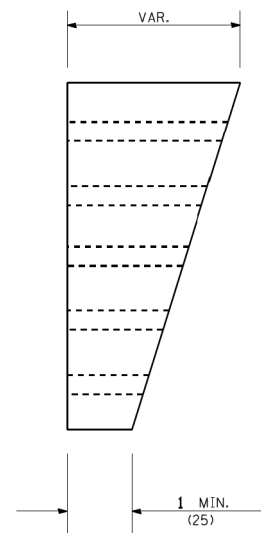
POSTS 1-11 WOOD BLOCKOUT DETAIL



POST 12 WOOD BLOCKOUT DETAIL



PARAPET WOOD BLOCK-OUT DETAIL



PARAPET STEEL BEARING PLATE DETAIL

(5 EACH INDIVIDUAL 5x5x3/8 (125x125x16) STEEL PLATES WITH CENTERED 1 (25) HOLES MAY BE SUBSTITUTED FOR THE PLATE SHOWN.)

FILE NAME = c:\Projects\diststd2007\bm22.dgn

USER NAME = bauerdl  
PLOT SCALE = 50.0000' / IN.  
PLOT DATE = 2/21/2008

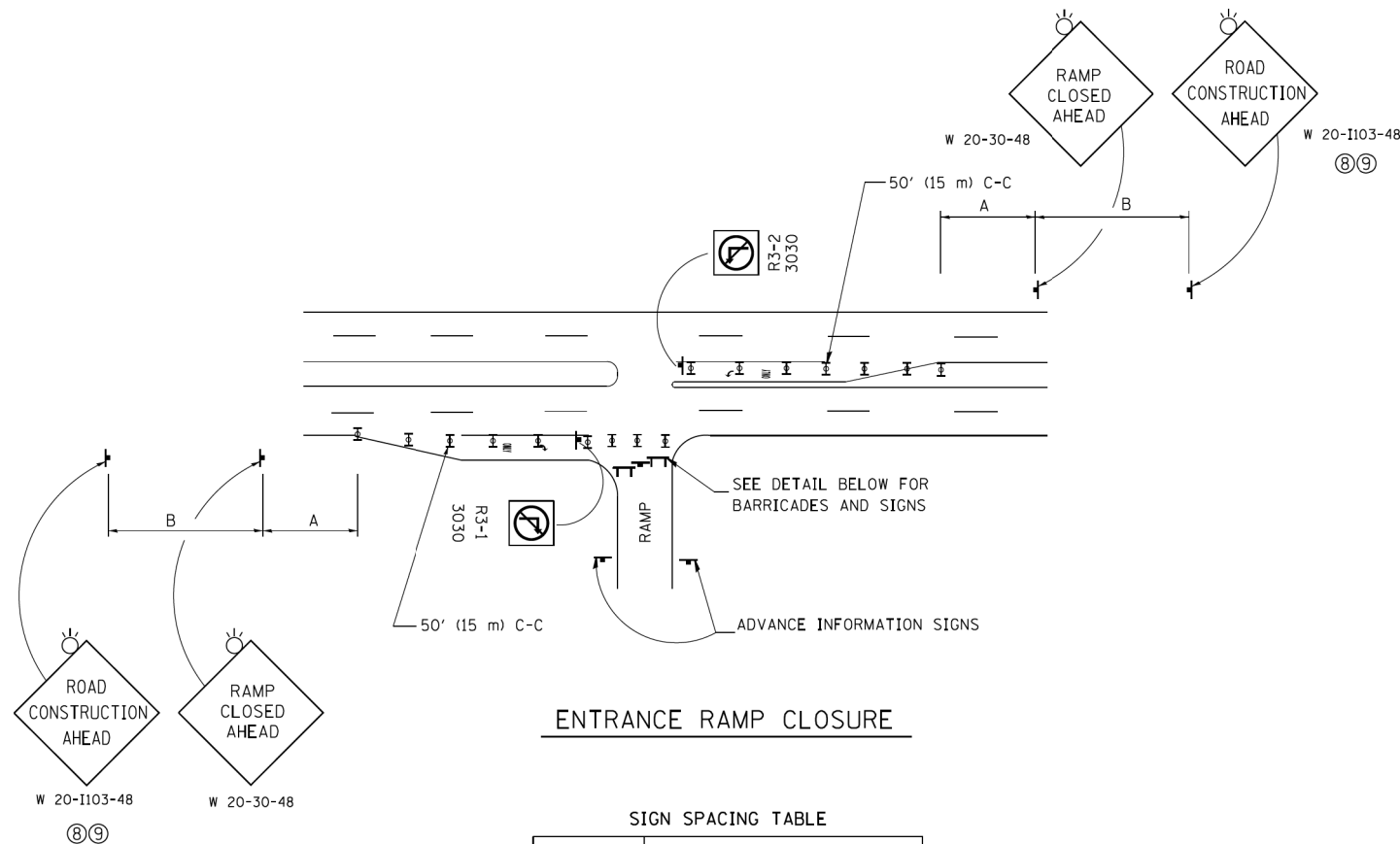
DESIGNED -  
DRAWN -  
CHECKED -  
DATE -  
REVISED - STATE STANDARD;  
631031-05 - 02/19/2008  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPE 6 TERMINAL  
FOR USE WITH 21" HIGH SPBGR

SCALE: NONE SHEET NO. 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	118
BM 22			CONTRACT NO. 60W78	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

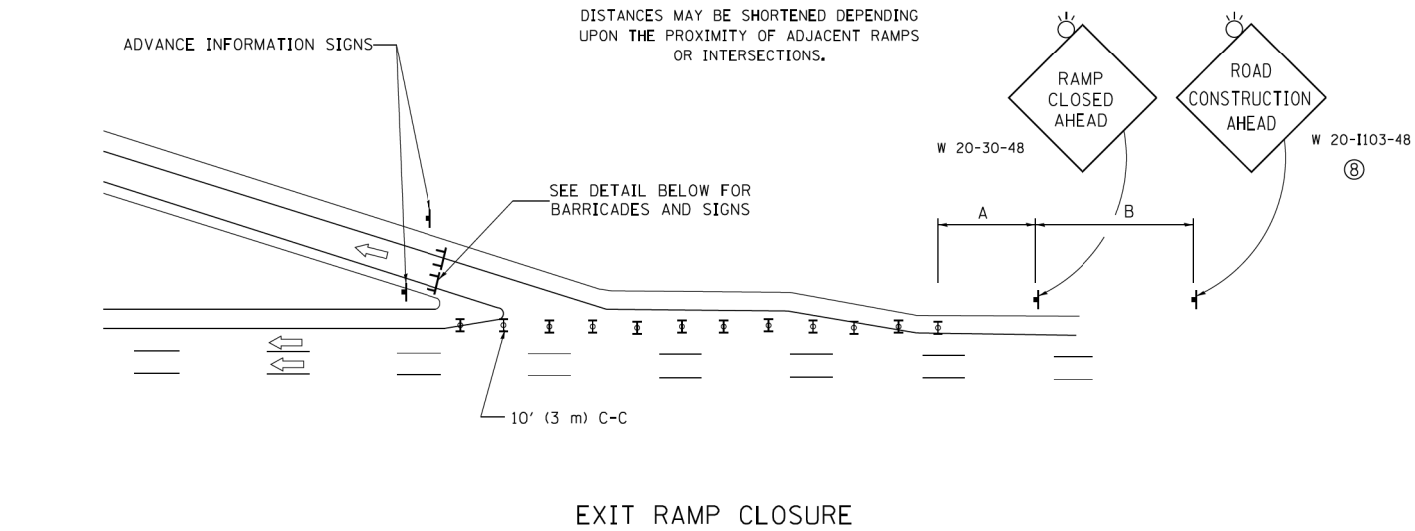


**ENTRANCE RAMP CLOSURE**

**SIGN SPACING TABLE**

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

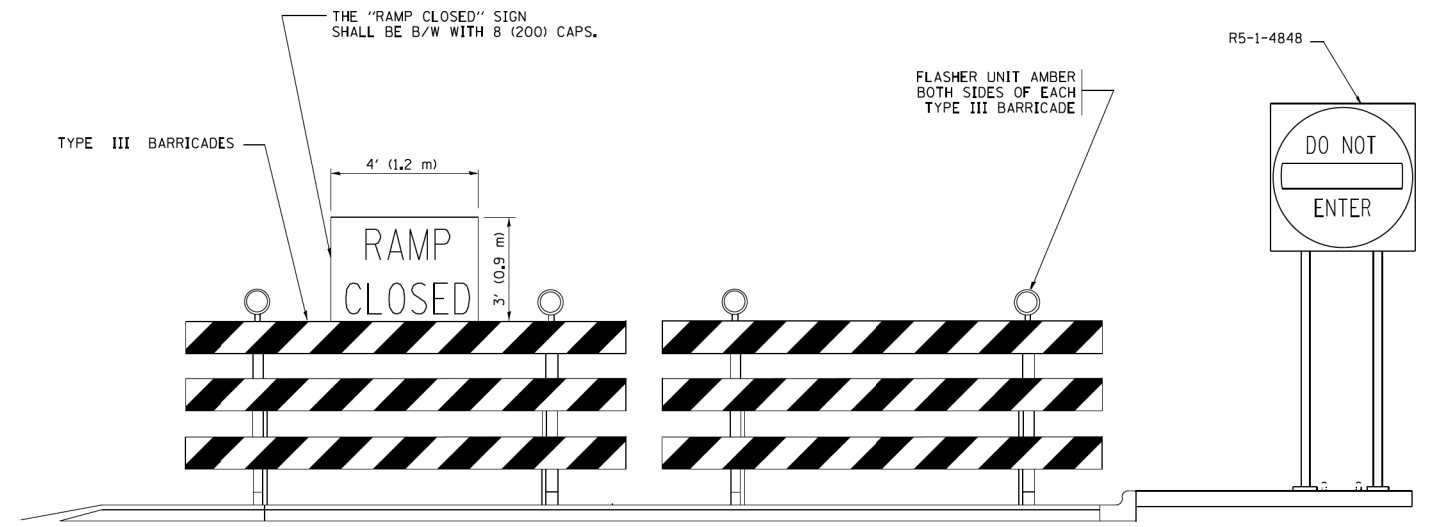
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



**EXIT RAMP CLOSURE**

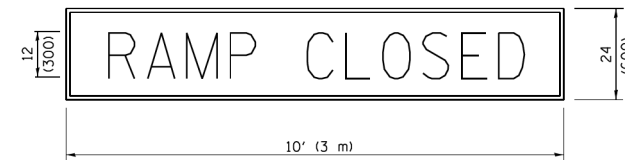
**SYMBOLS**

- ▬ TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- ▬ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



**DETAIL FOR REQUIRED BARRICADES & SIGNS**

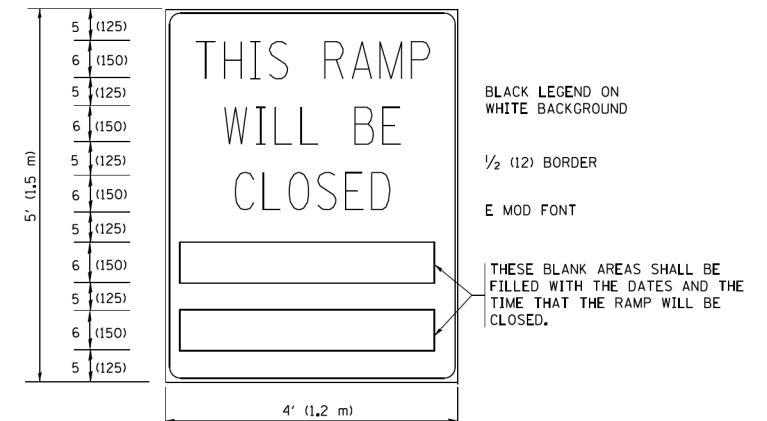
**RAMP CLOSURE ADVANCE WARNING SIGN**



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY  
E MOD FONT  
1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

**RAMP CLOSURE ADVANCE INFORMATION SIGN**



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

**GENERAL NOTES:**

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

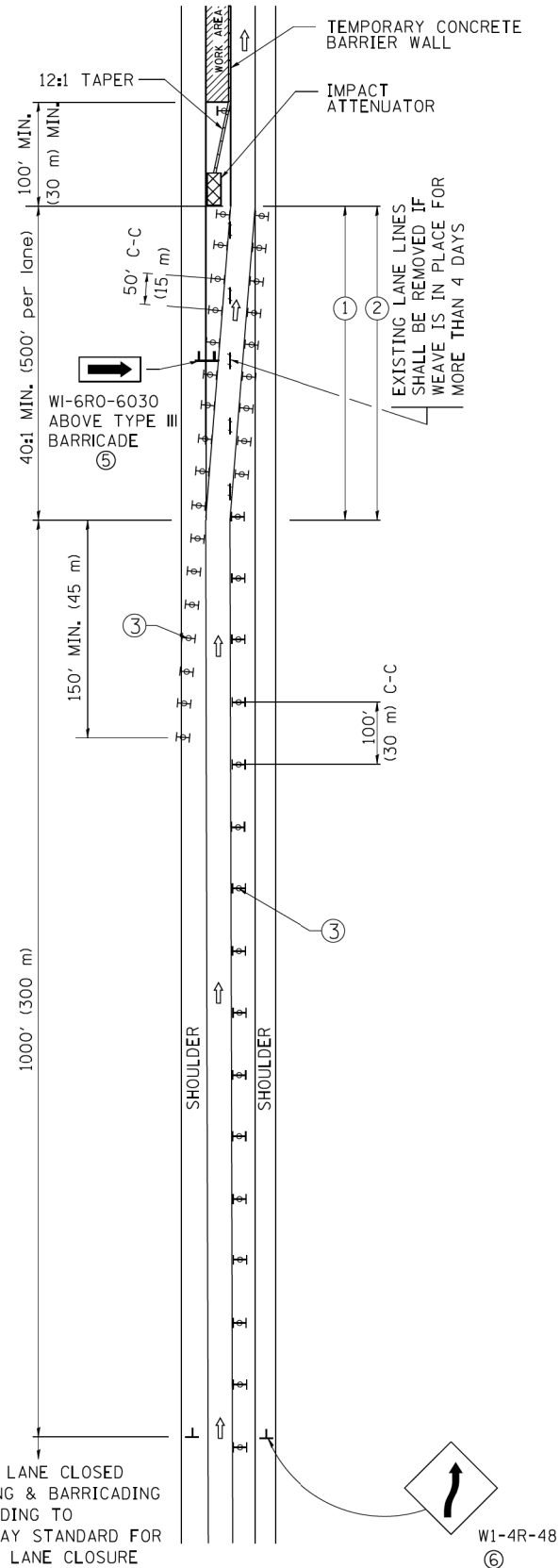
FILE NAME =	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06
ca:\pwork\pwork\footemj\d0108315\td08.sgn		DRAWN -	REVISED - SPB 01-07
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - SPB 12-09
	PLOT DATE = 7/8/2013	DATE - 02-83	REVISED - MD 06-13

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

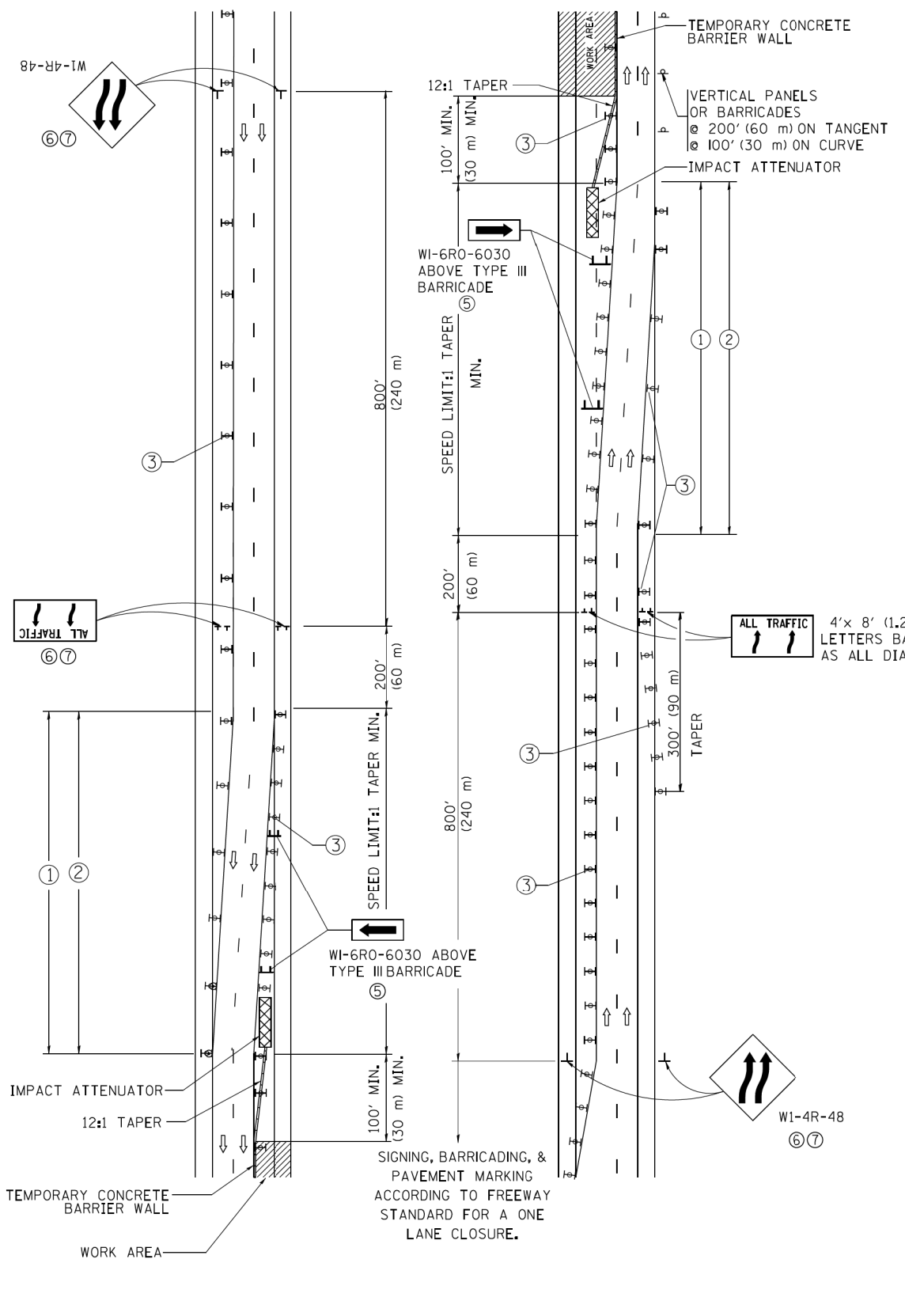
<b>ENTRANCE AND EXIT RAMP CLOSURE DETAILS</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	119
TC-08		CONTRACT NO. 60W78		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

# SINGLE LANE WEAVE



# MULTI-LANE WEAVE



### GENERAL NOTES

- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
- ② CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- ③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ⑤ TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- ⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- ⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

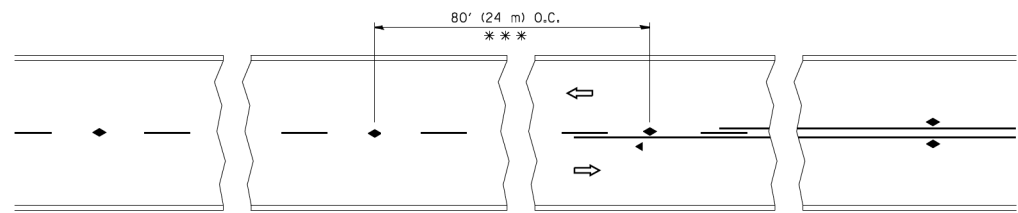
ALL TRAFFIC 4'x 8' (1.2 m x 2.4 m); 1 (25) BORDER; 10 (250) CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS.

**SYMBOLS**

- ↑ DIRECTION OF TRAFFIC
- ▨ WORK AREA
- ┌ SIGN ON PORTABLE OR PERMANENT SUPPORT
- I TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- ▬ TEMPORARY CONCRETE BARRIER WALL
- ▣ IMPACT ATTENUATOR
- ◊ W1-4R-48
- ◊ W24-1-48

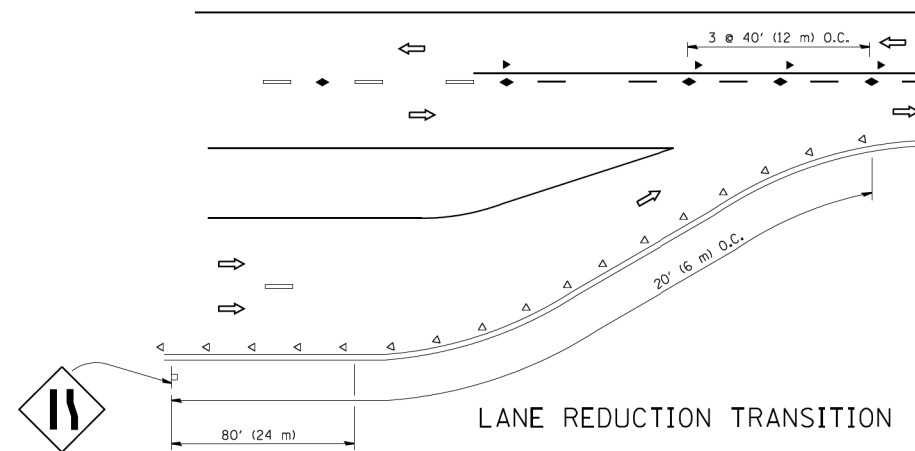
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE &amp; MULTI-LANE WEAVE</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pw\work\pwwork\footemj\d0108315\td09.sgn		DRAWN -	REVISED - SPB 01-07		373	0707-608HB-B-1	COOK	127	120			
PLOT SCALE = 50.000' / in.		CHECKED -	REVISED - SPB 12-09		<b>TC-09</b>		CONTRACT NO. 60W78					
PLOT DATE = 7/1/2013		DATE - 02-87	REVISED - MD 06-13		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

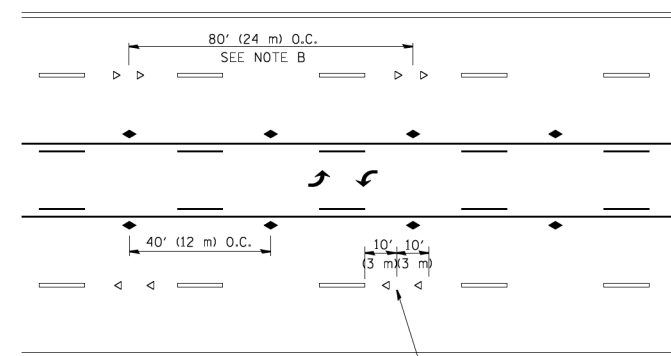


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

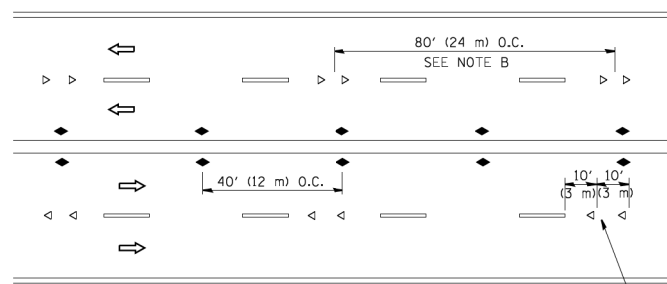
TWO-LANE/TWO-WAY



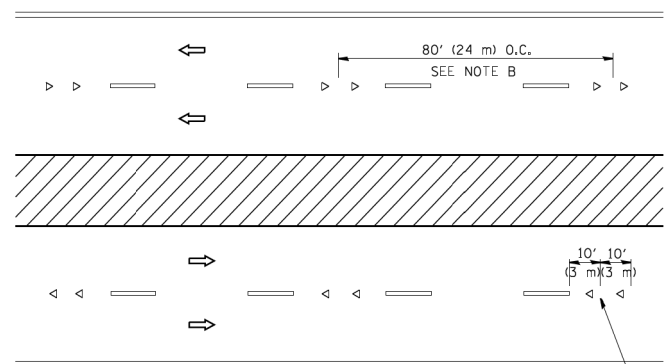
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

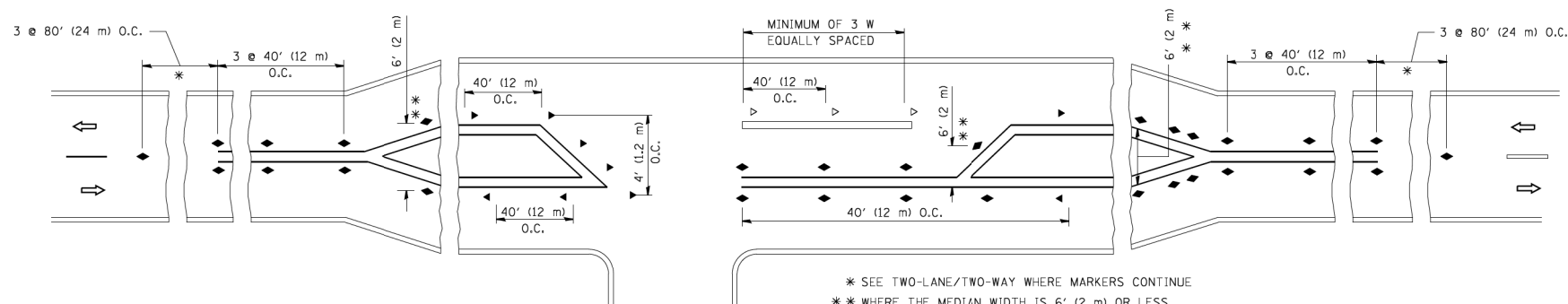
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



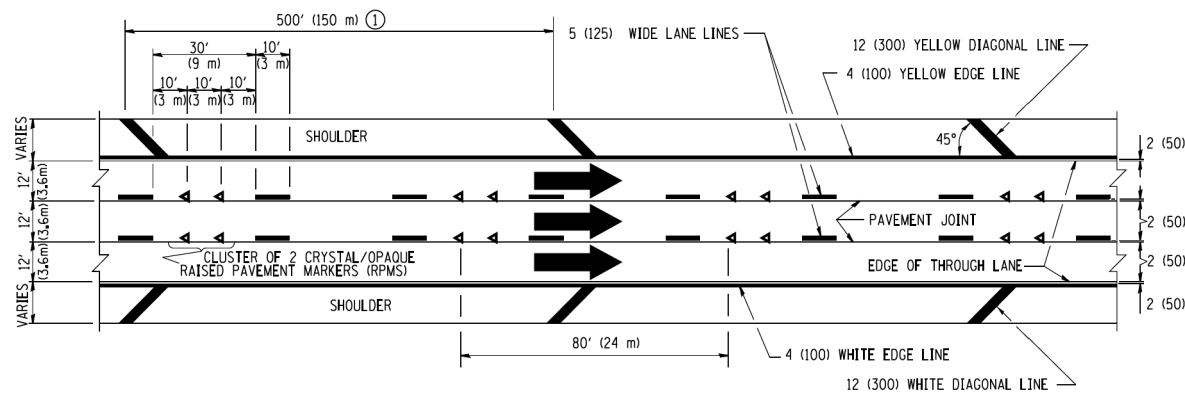
\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = lryso	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwork\pwork\lryso\d0108315\tcl1.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99		373	0707-608HB-B-1	COOK	127	121			
		PLOT SCALE = 50.000' / IN.	REVISED - T. RAMMACHER 01-06-00		<b>TC-11</b>			<b>CONTRACT NO. 60W78</b>				
		PLOT DATE = 3/2/2011	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

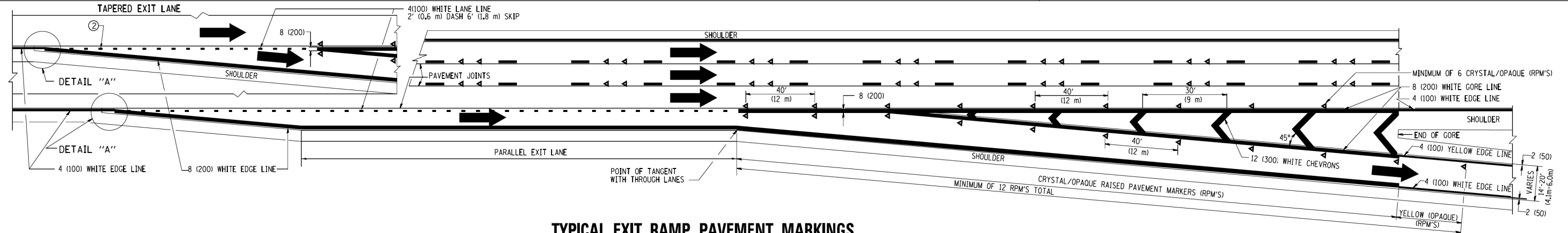




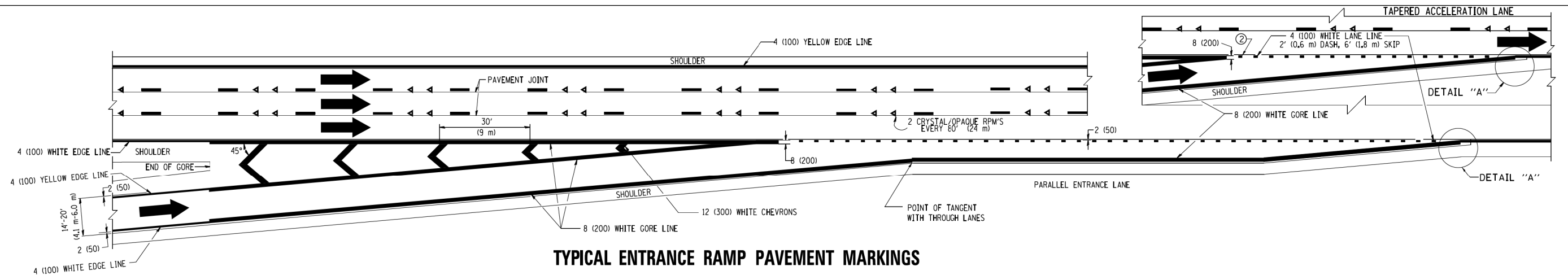
**TYPICAL EDGE LINES & LANE LINES**

**PAVEMENT MARKING MATERIALS**

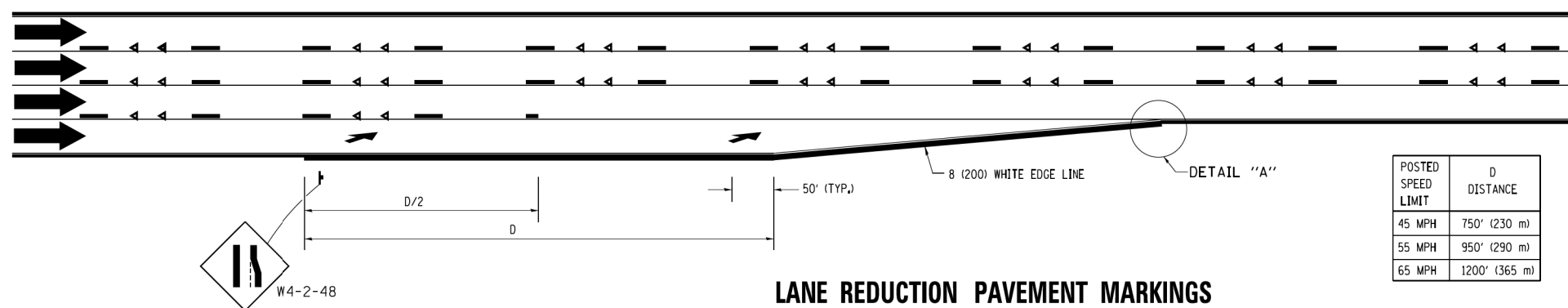
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE; INLAID OR GROOVED IN SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENT PROJECTS.
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC PROJECTS.



**TYPICAL EXIT RAMP PAVEMENT MARKINGS**

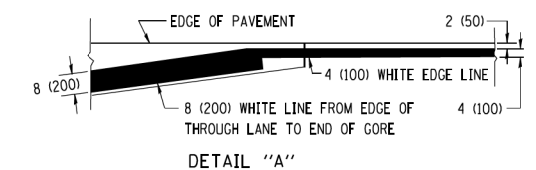


**TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS**



**LANE REDUCTION PAVEMENT MARKINGS**

POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)



**NOTES:**

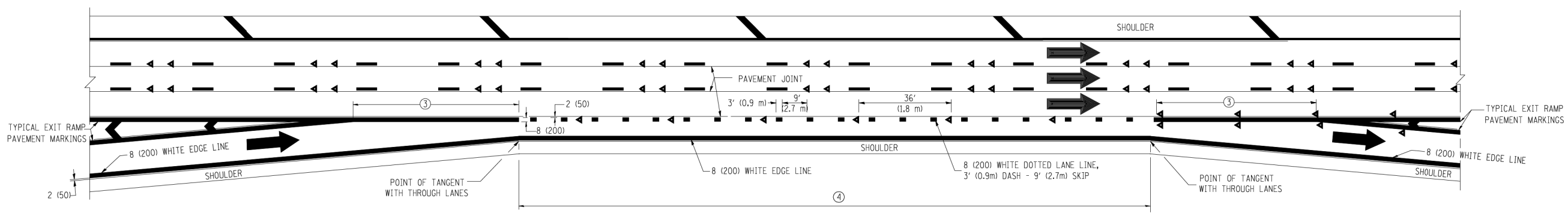
- ① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
- ② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

FILE NAME =	USER NAME = footemj	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06
ca:\pwork\pwork\footemj\d0108315\tcl2.dgn		DRAWN -	REVISED - S.P.B. 01-07
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - S.P.B. 01-10
	PLOT DATE = 7/8/2013	DATE - 01-90	REVISED - M.D. 05-13

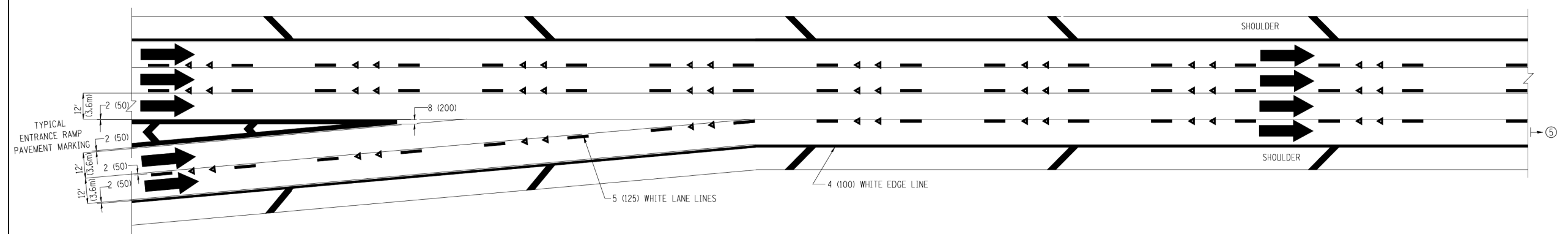
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS</b>	
SCALE: NONE	SHEET NO. 1 OF 2 SHEETS
STA.	TO STA.

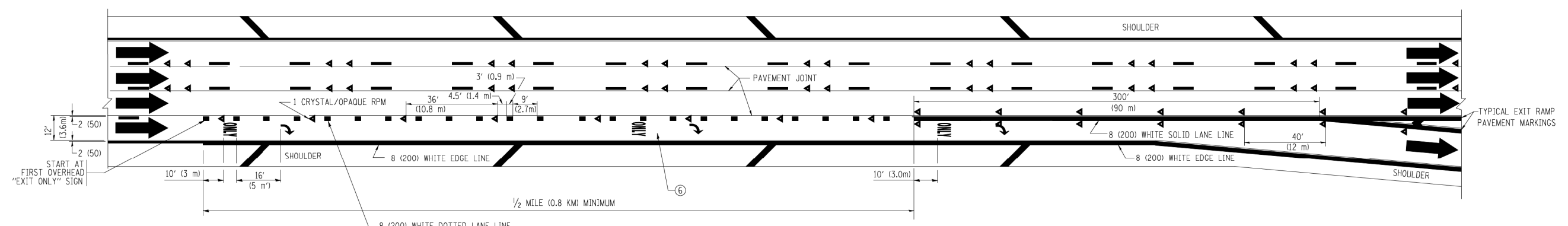
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	122
TC-12			CONTRACT NO. 60W78	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



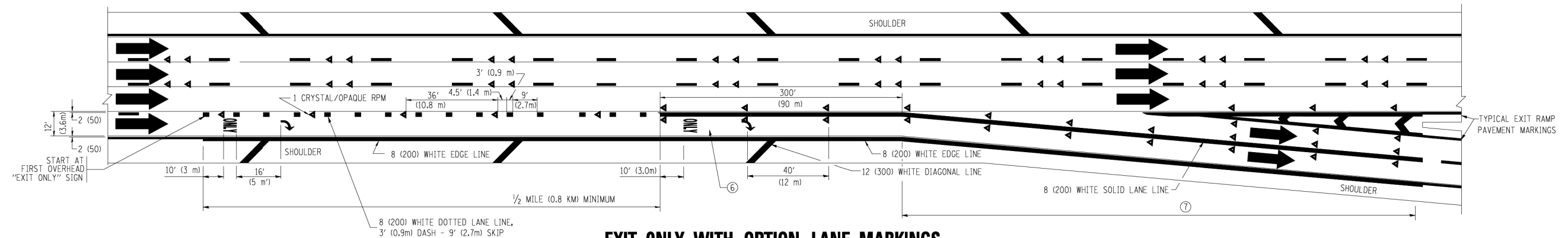
**AUXILIARY LANE MARKINGS**



**TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS**



**EXIT ONLY LANE MARKINGS**



**EXIT ONLY WITH OPTION LANE MARKINGS**

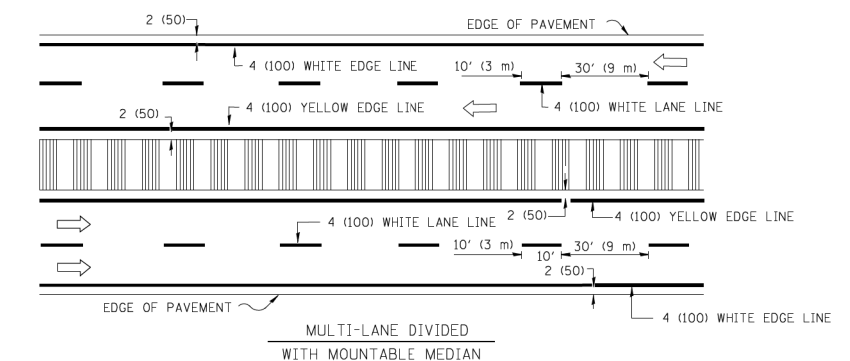
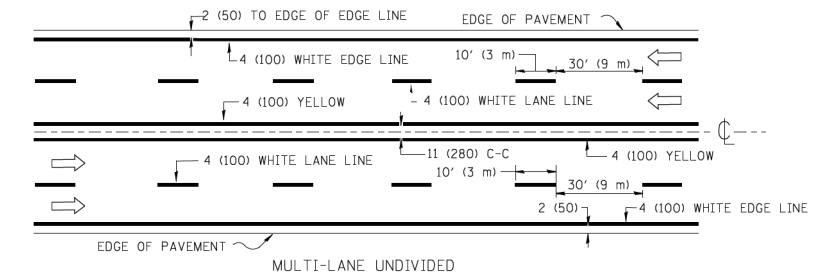
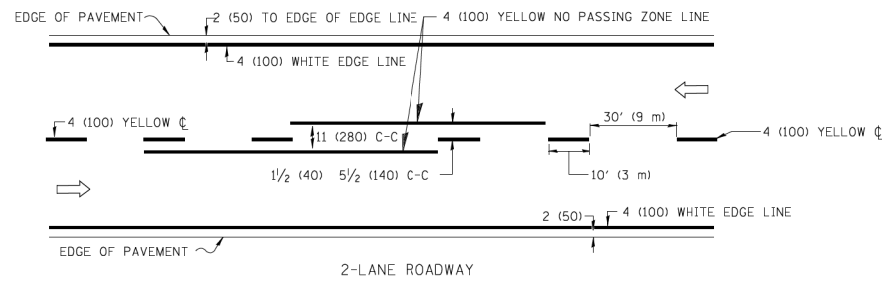
- NOTES**
- ③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
  - ④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
  - ⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
  - ⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.
  - ⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

FILE NAME =	USER NAME = lgyso	DESIGNED - D.W.S.	REVISED - D.W.S. 07-96
ca:\pwork\pwork\LEYSAN\0108315\to12.dgn		DRAWN -	REVISED - J.A.F. 02-06
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/22/2010	DATE - 01-90	REVISED - S.P.B. 01-10

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

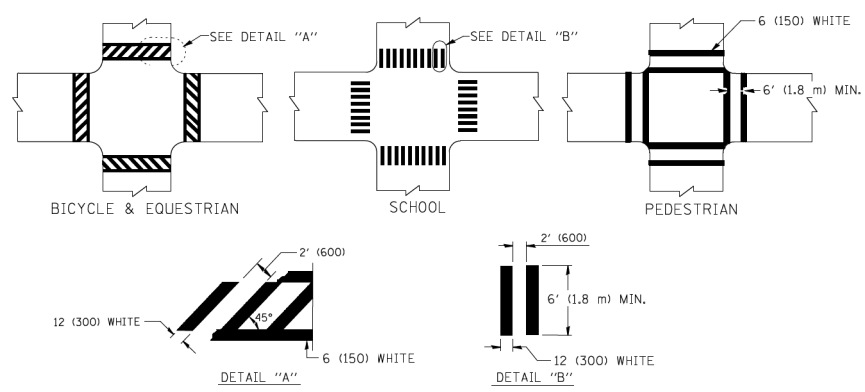
<b>MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS</b>			
SCALE: NONE	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608HB-B-1	COOK	127	123
<b>TC-12</b>		CONTRACT NO. 60W78		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

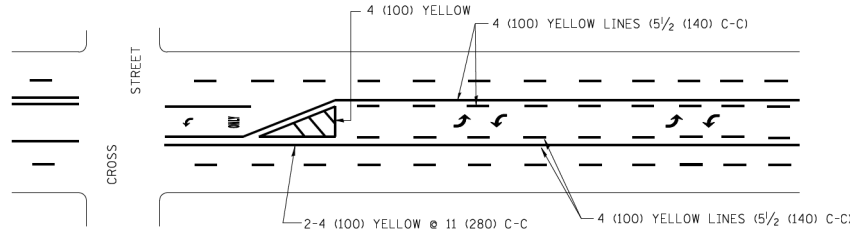
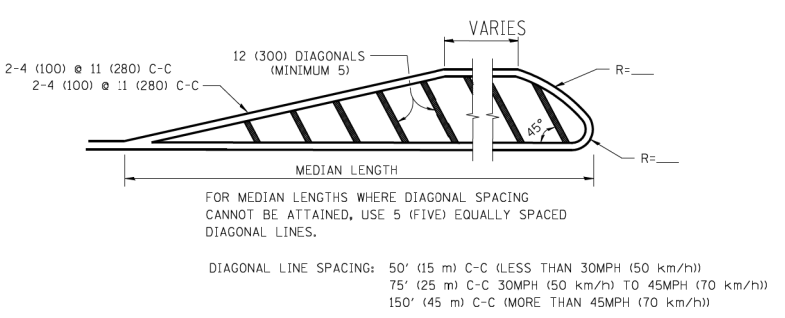
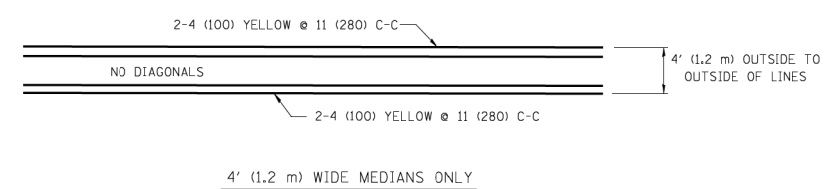


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

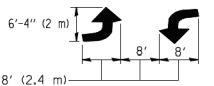
**TYPICAL LANE AND EDGE LINE MARKING**



**TYPICAL CROSSWALK MARKING**

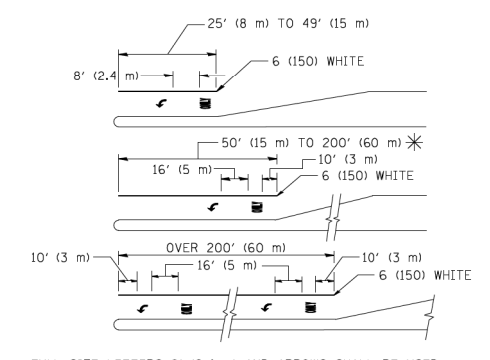


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



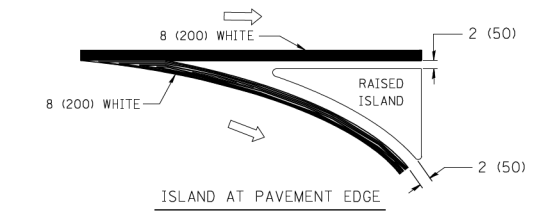
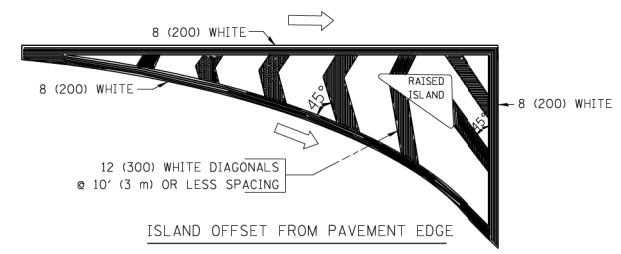
**TYPICAL PAINTED MEDIAN MARKING**

**TYPICAL LEFT (OR RIGHT) TURN LANE**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

**TYPICAL TURN LANE MARKING**



**TYPICAL ISLAND MARKING**

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

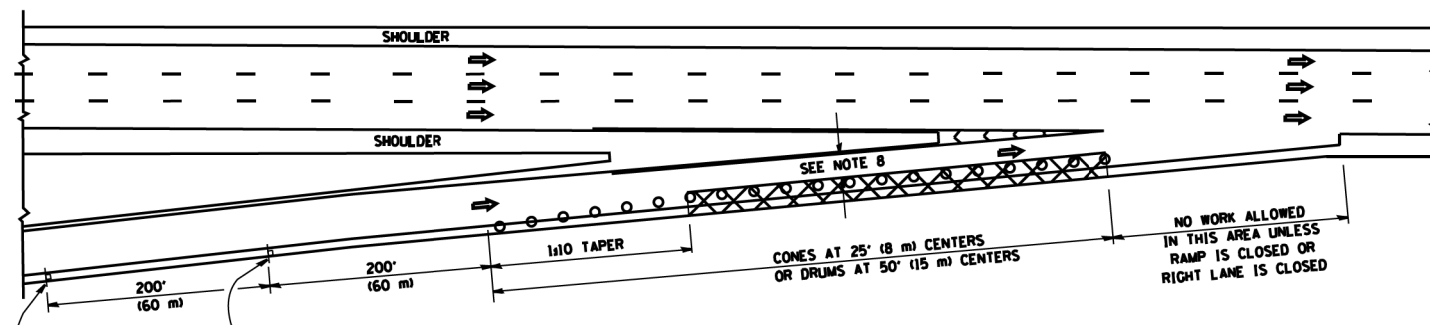
FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
ca:\pwork\pwork\drivakosgn\d0108315\td3.dgn		DRAWN -	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

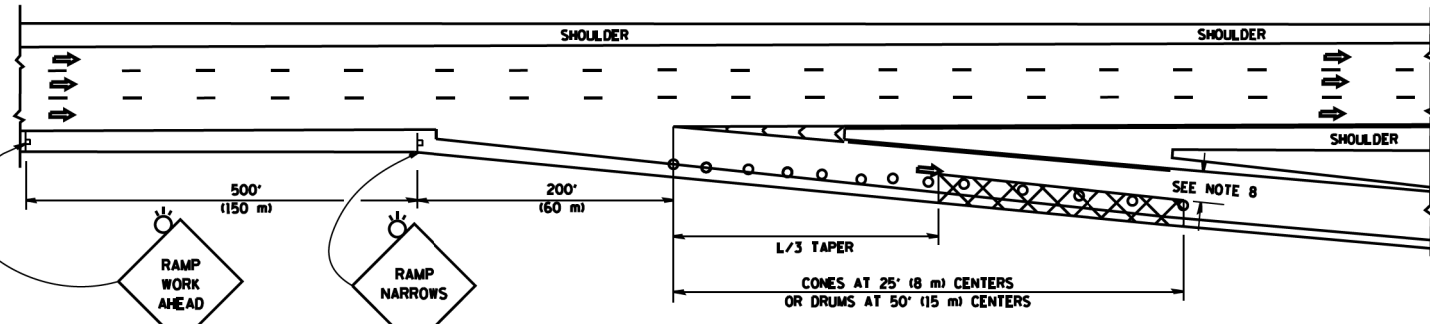
<b>DISTRICT ONE</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
<b>TYPICAL PAVEMENT MARKINGS</b>		373	0707-608HB-B-1	COOK	127	124
SCALE: NONE		<b>TC-13</b>		CONTRACT NO. 60W78		
SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

**PARTIAL RAMP CLOSURE DETAILS**

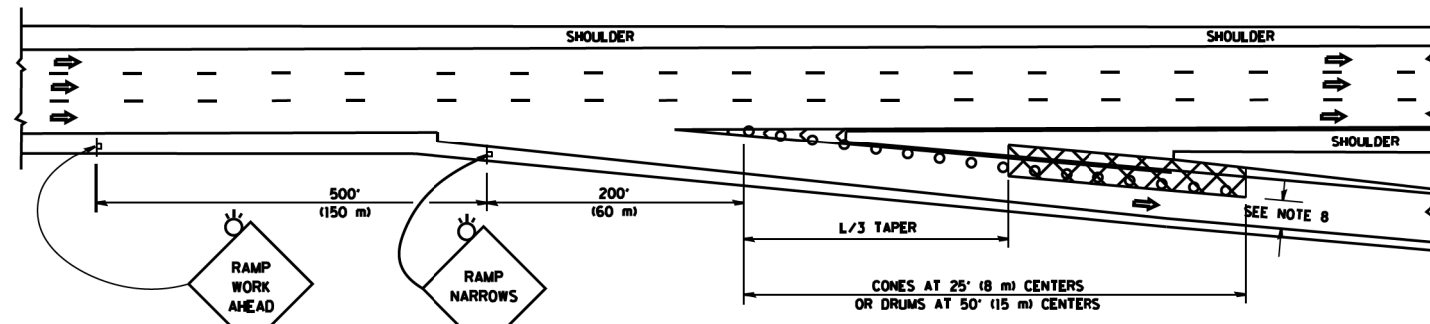
**SHOULDER CLOSURE DETAILS**



**TYPICAL ENTRANCE RAMP**



**TYPICAL EXIT RAMP**



**TYPICAL EXIT RAMP**

**SYMBOLS**

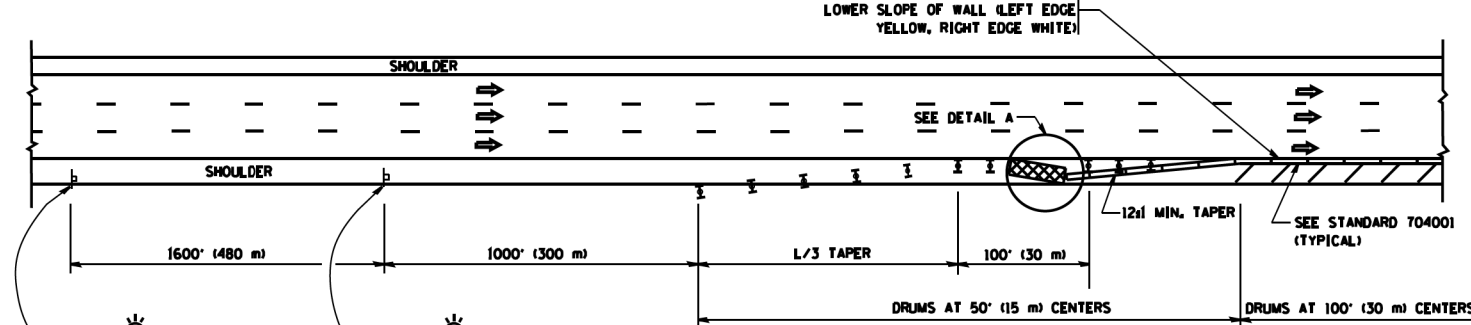
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

**GENERAL NOTES**

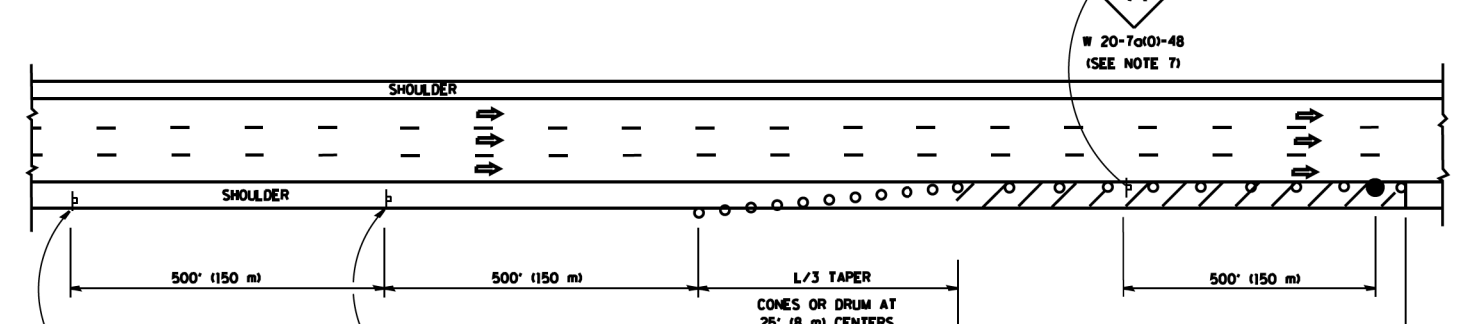
1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER	METRIC    ENGLISH
	$L = 0.65(WNS)$ $L = (WNS)$

W = WIDTH OF OFFSET IN FEET (METERS)  
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

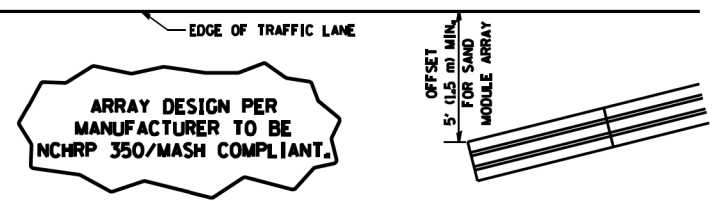


**PERMANENT SHOULDER CLOSURE**



**DAYTIME SHOULDER CLOSURE**

THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



**DETAIL "A"  
IMPACT ATTENUATOR, TEMPORARY  
(SEE NOTE 5)**

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCR OACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION  
16' MIN. WIDTH CURVE SECTION.

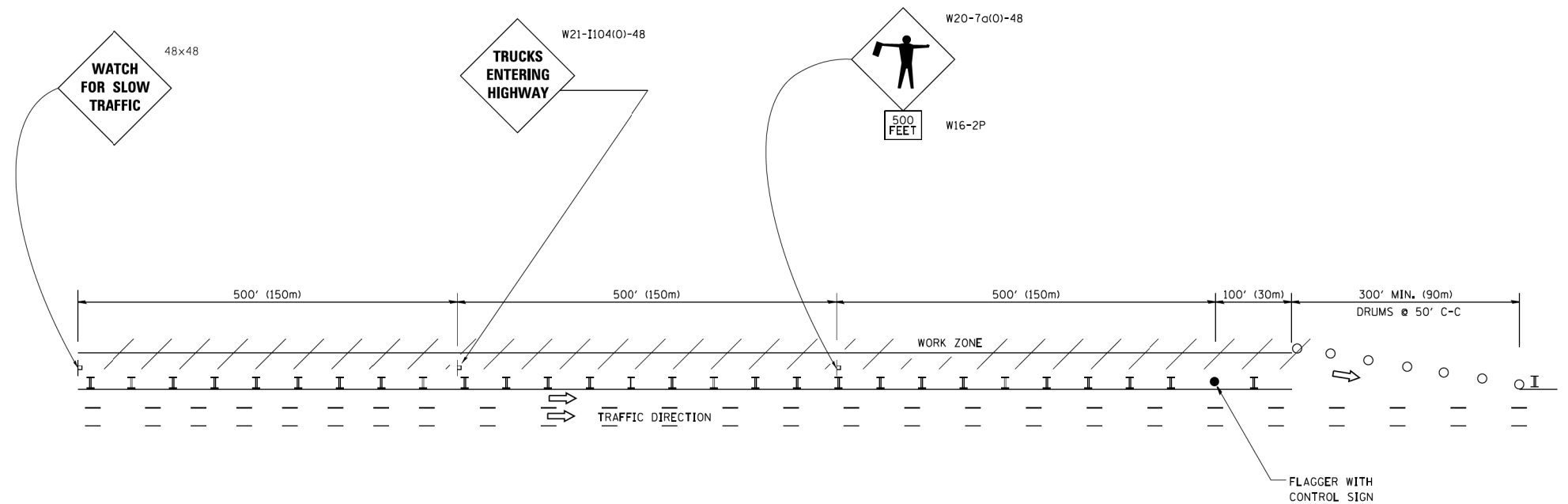
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = leysa	DESIGNED -	REVISED - J.A.F. 12-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwork\pwork\leysa\00108315\tcl7.dgn		DRAWN - D.W.S.	REVISED - S.P.B. 01-07		373	0707-608HB-B-1	COOK	127	125			
PLOT SCALE = 100.0000' / 1" =		CHECKED -	REVISED - S.P.B. 12-09		TC-17			CONTRACT NO. 60W78				
PLOT DATE = 4/17/2014		DATE - 11-96	REVISED - M.D. 06-13		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

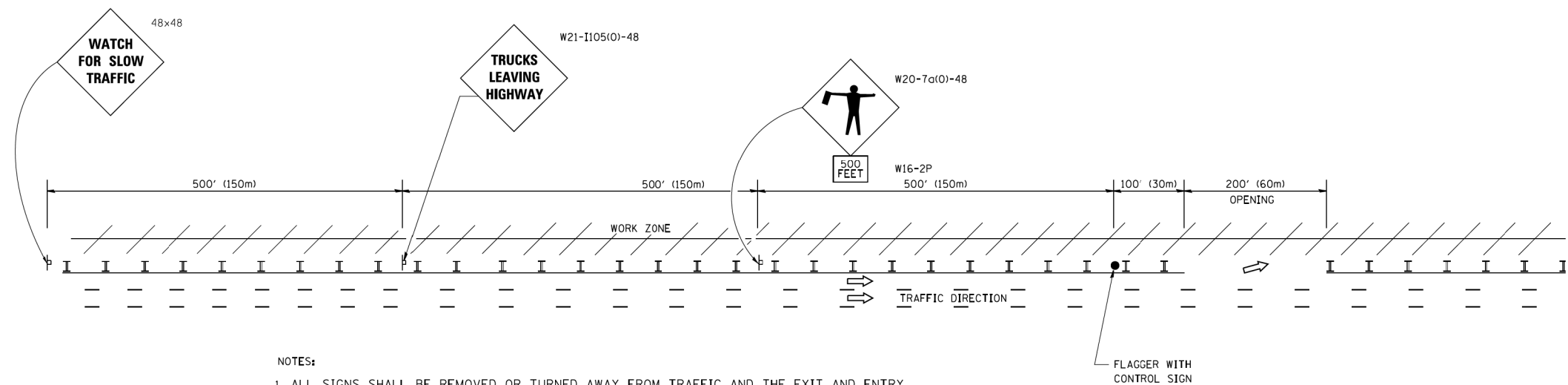


SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



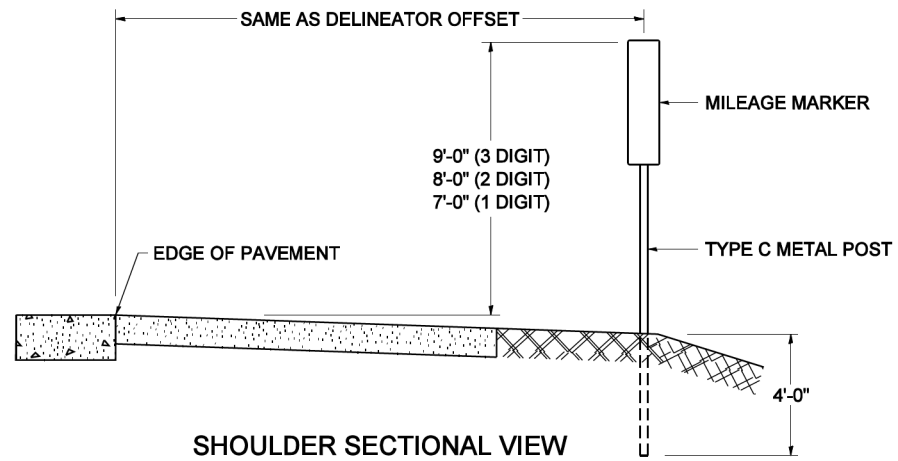
NOTES:

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

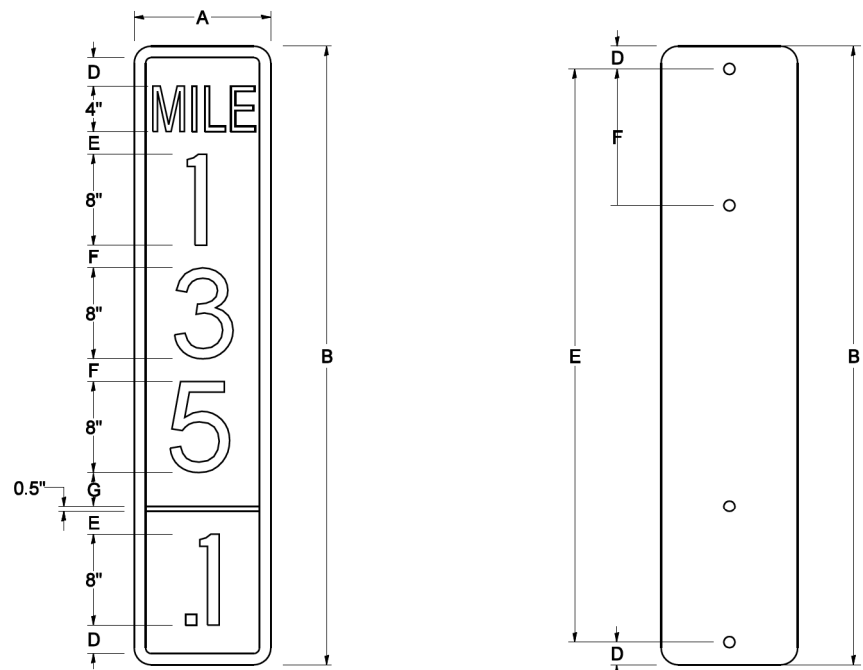
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 02-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwork\pwork\footemj\d0108315\tcl8.dgn		DRAWN -	REVISED - S.P.B. 01-07			373	0707-608HB-B-1	COOK	127	126
		CHECKED -	REVISED - S.P.B. 12-09			<b>TC-18</b>		CONTRACT NO. 60W78		
		DATE -	REVISED - M.D. 06-13			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.			

### STANDARD DESIGN FOR MILE POST



SHOULDER SECTIONAL VIEW

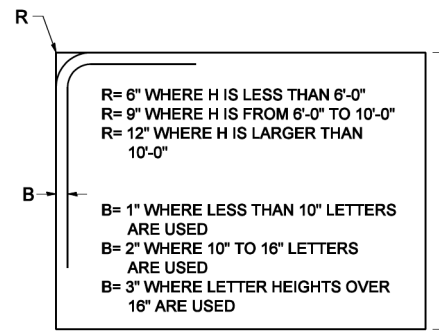


SIGN SIZE	DIMENSIONS							
	A	B	C	D	E	F	G	DIGIT
12 x 24	12.0	24.0	1.5	1.5	1.5	N/A	1.5	1
12 x 36	12.0	36.0	1.5	2.0	2.0	2.0	1.5	2
12 x 48	12.0	48.0	1.5	2.5	2.0	2.0	2.5	3

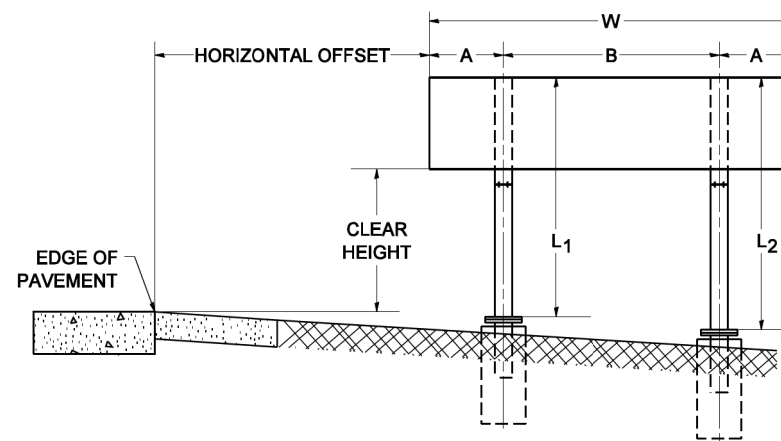
BLANK	A	B	C	D	E	F
B9-1224	12.0	24.0	1.5	2.0	20.0	N/A
B9-1236	12.0	36.0	1.5	2.0	32.0	12.0
B9-1248	12.0	48.0	1.5	2.0	44.0	12.0

SIGN SIZE	SERIES					BORDER	BLANK STD.
	LINES						
	1	2	3	4	5		
12 x 24	4C	8D	4C	N/A	N/A	0.5	B9-1224
12 x 36	4C	8D	8D	4C	N/A	0.5	B9-1236
12 x 48	4C	8D	8D	8D	4C	0.5	B9-1248

### BORDER AND RADIUS LAYOUT



### MAJOR GUIDE SIGN LAYOUT

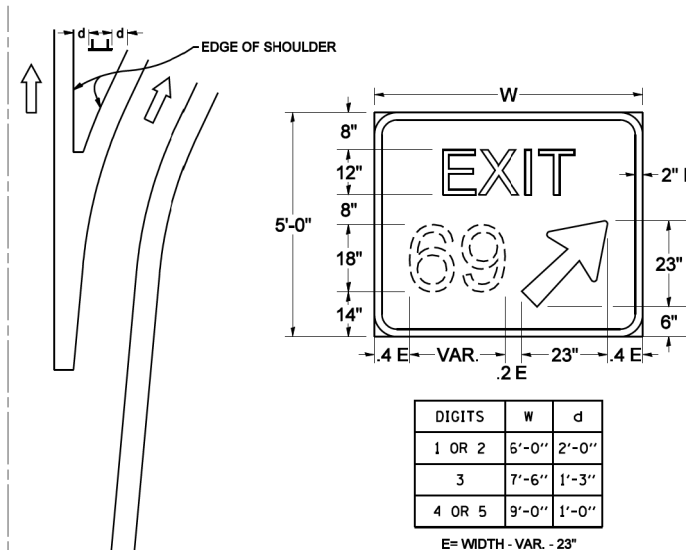


NUMBER OF STEEL SUPPORTS	A	B
2	.2 W	.6 W
3	.15 W	.35 W
4	.125 W	.25 W
5	.1 W	.2 W

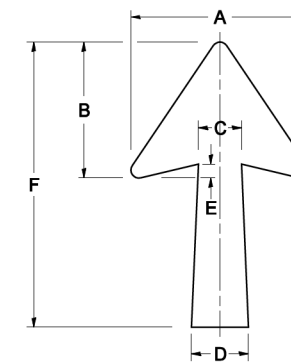
"L1 IS THE LENGTH OF SUPPORT, NOT INCLUDING THE STUB PROJECTION, CLOSEST TO THE EDGE OF THE PAVEMENT."

"A" IS THE DISTANCE FROM THE SIGN EDGE TO THE CENTERLINE OF THE NEAREST SUPPORT. "B" IS THE DISTANCE BETWEEN CENTERLINES OF SUPPORTS.

### GORE SIGNS

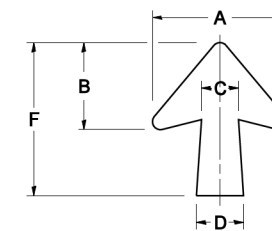


### STANDARD ARROWS FOR INTERSTATE GUIDE SIGNS



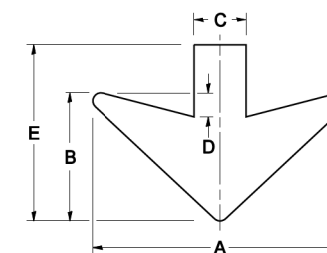
ARROW SYMBOL	A	B	C	D	E	F	R
24 1/4 x 15 1/8	15 1/8	11 1/8	3 3/4	5	1 1/2	24 1/4	5/8
29 1/4 x 18 1/4	18 1/4	14	4 1/2	6	1 1/2	29 1/4	3/4
35 1/8 x 22 1/4	22 1/4	17	5 3/8	7 1/8	1 3/4	35 1/8	1
18 1/4 x 11 1/4	11 1/4	8 3/4	3 1/8	3 3/8		18 1/4	

NOTE: D & F ARE RECOMMENDED DIMENSIONS. TAPER SHOULD BE HELD CONSTANT FOR LONGER OR SHORTER SHAFT LENGTHS



ARROW SYMBOL	A	B	C	D	E	F	R
17 1/4 x 14 1/4	14 1/4	9 3/8	3 3/8	4 1/2	5/8	17 1/4	3/4
20 1/4 x 17 1/4	17 1/4	11 3/4	4 3/8	5 5/8	1 1/2	20 1/4	
25 x 21 1/8	21 1/8	14 1/4	5	6 3/4	1 3/4	25	1
9 3/8 x 8 1/8	8 1/8	5 1/8	2 1/8	2 1/8		9 3/8	1/2

### DOWN ARROWS



ARROW SYMBOL	A	B	C	D	E	R
16 1/2 x 24	24	12	5	1 1/2	16 1/2	3/4
22 x 32	32	16	6 1/2	3	22	1