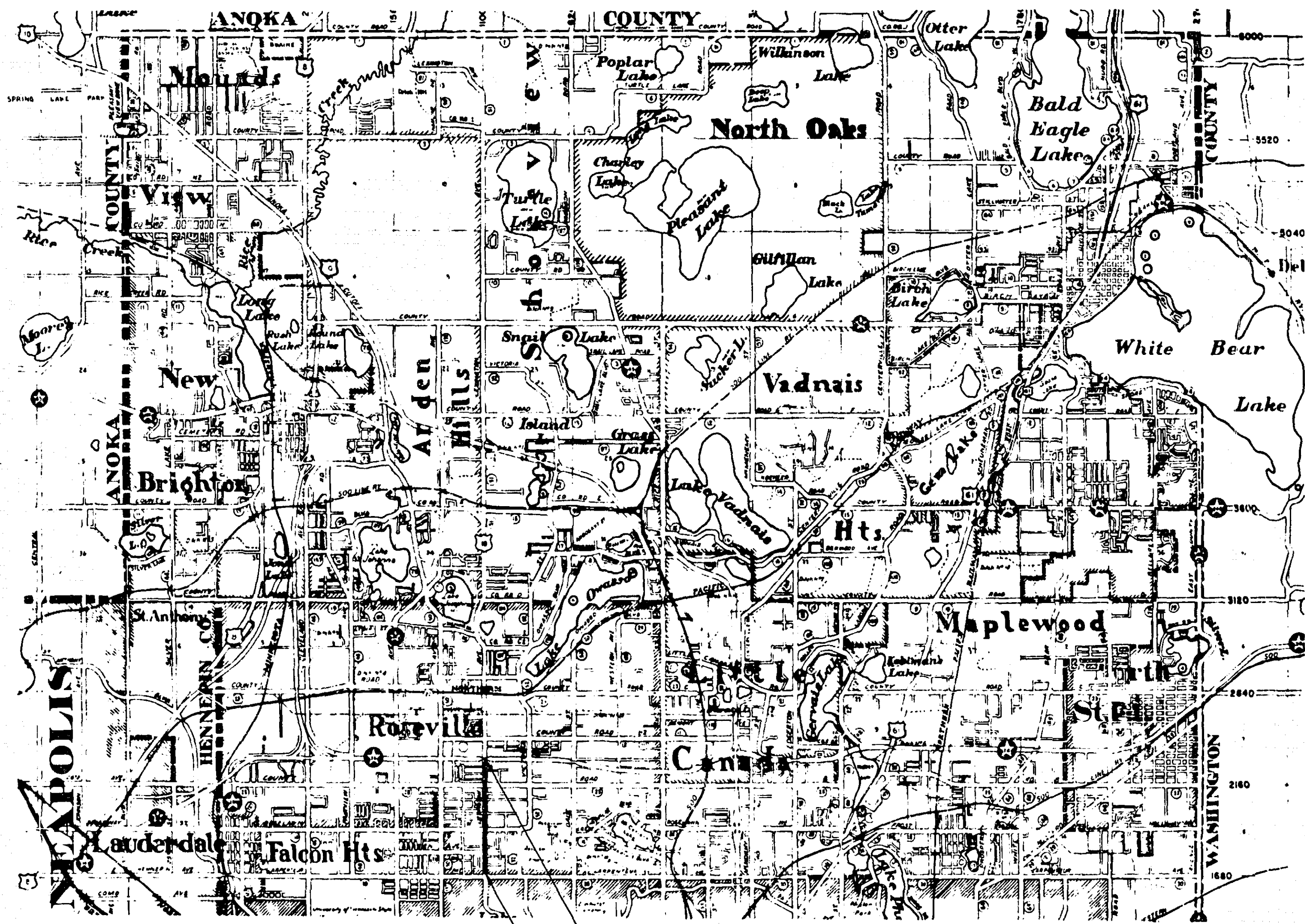


RIGHT OF WAY MAP
LEXINGTON AVENUE
FROM LARPENTEUR AVE. TO T.H. 36
S.A.P. 62-651-04



CITY OF ST. PAUL

END PROJECT
STA. 62+83
BEGIN PROJECT
STA. 0+35

RECOMMENDED FOR APPROVAL W. V. Blum DATE 6/5/72
DIRECTOR OF SAFETY
RECOMMENDED FOR APPROVAL M. J. Fink DATE 6/5/72
MAINTENANCE ENGINEER
RECOMMENDED FOR APPROVAL H. A. Wilco DATE 6/5/72
CONSTRUCTION ENGINEER
RECOMMENDED FOR APPROVAL B. A. Aker DATE 6/2/72
RECOMMENDED FOR APPROVAL _____ DATE _____
APPROVED _____ DATE _____
COUNTY ENGINEER

RECOMMENDED FOR APPROVAL Dean R. Pankla DATE 8-29-72
COUNTY ENGINEER
APPROVED _____ DATE _____
CHAIRMAN OF THE RAMSEY COUNTY BOARD
APPROVED _____ DATE _____
MAYOR, VILLAGE OF ROSEVILLE
APPROVED _____ DATE _____

MINNESOTA STATE HIGHWAY DEPARTMENT MICROFILMED
RAMSEY CO. ENGINEER
RECOMMENDED FOR APPROVAL _____ DATE _____
DISTRICT STATE AID ENGINEER
APPROVAL _____ DATE _____
STATE AID ENGINEER

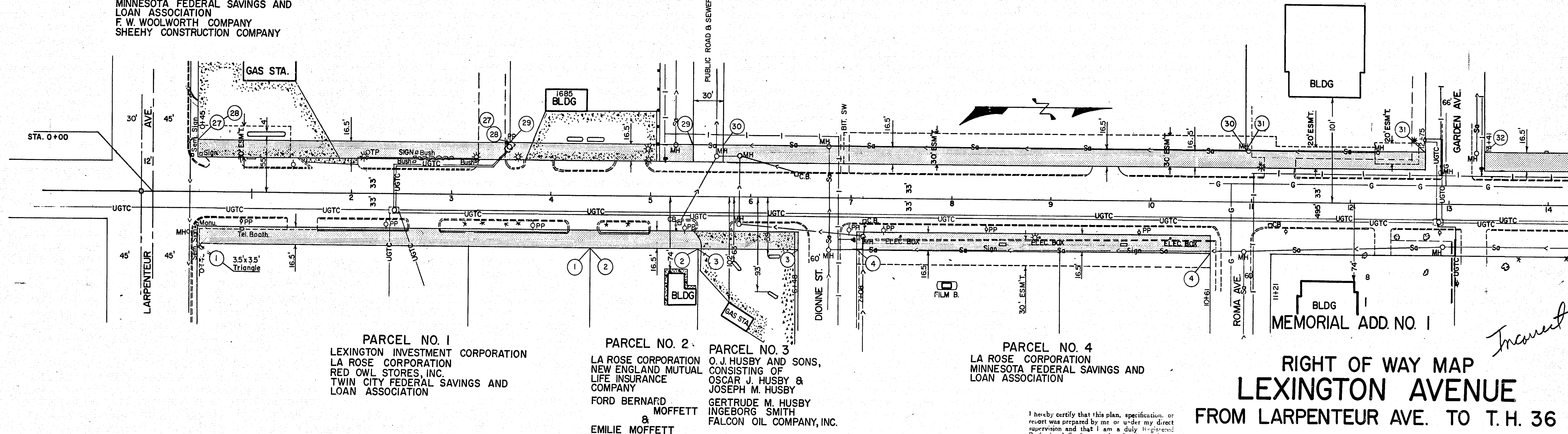
Incorrect

PARCEL NO. 31
ILMICA REALITY CO.
ROSEVILLE THOMAS MC AN CORP.

PARCELS NO. 27 & 28
LEXINGTON HOLDING COMPANY
STANDARD OIL COMPANY
S.J. KRANNAK
ERNA B. KRANNAK
MINNESOTA FEDERAL SAVINGS AND
LOAN ASSOCIATION
F.W. WOOLWORTH COMPANY
SHEEHY CONSTRUCTION COMPANY

PARCEL NO. 29
MARGOLIS BROTHERS COMPANY
FALCON HEIGHTS STATE BANK

PARCEL NO. 30
ALLEN I. NILVA



I hereby certify that this plan, specification, or
report was prepared by me or under my direct
supervision and that I am a duly Registered
Professional Engineer under the laws of the
State of Minnesota
Joseph A. Peroutka
Date June 2, 1972 Reg. No. 8271

MICROFILMED
RAMSEY CO. ENGR.

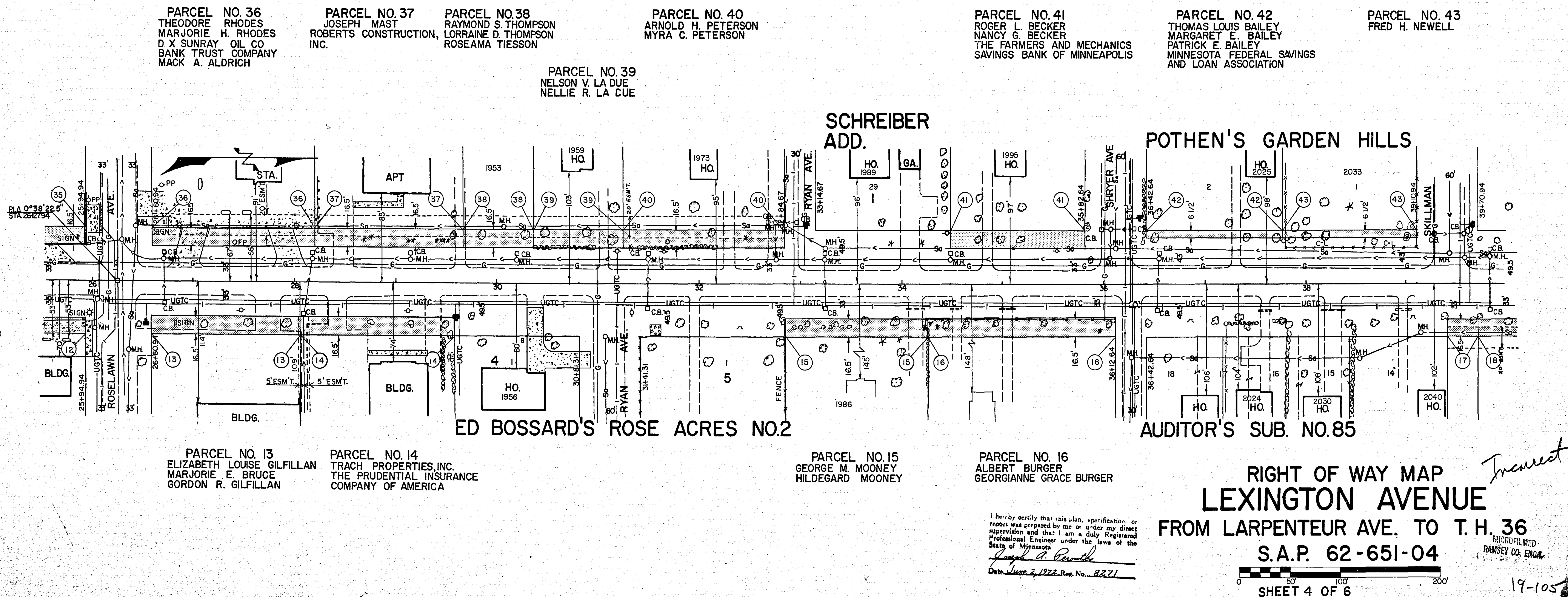
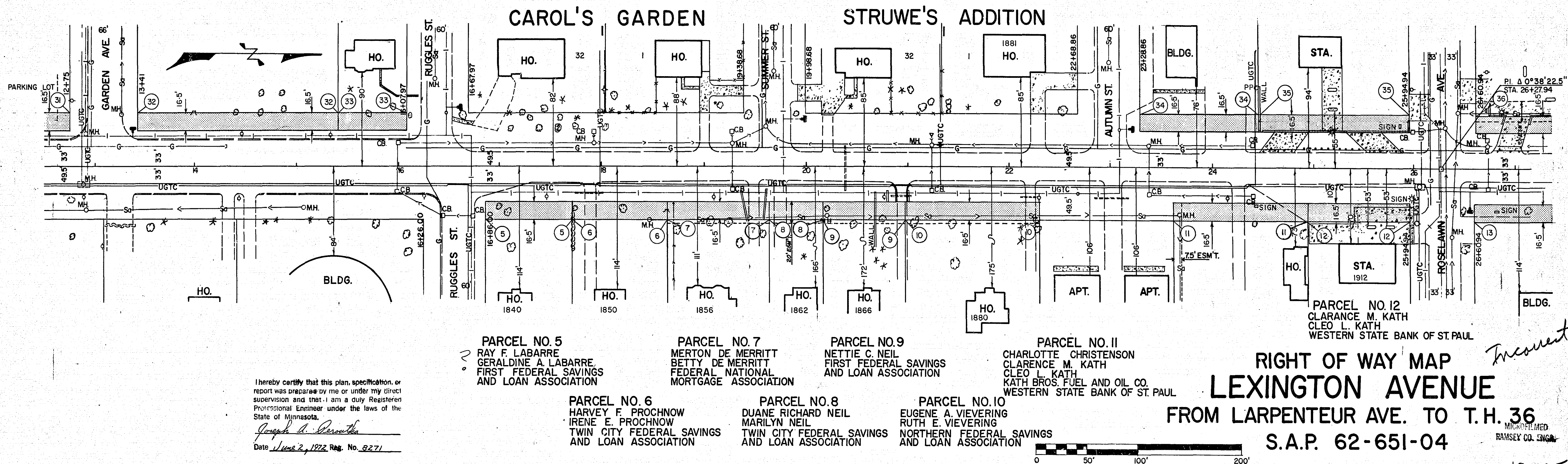
19-105

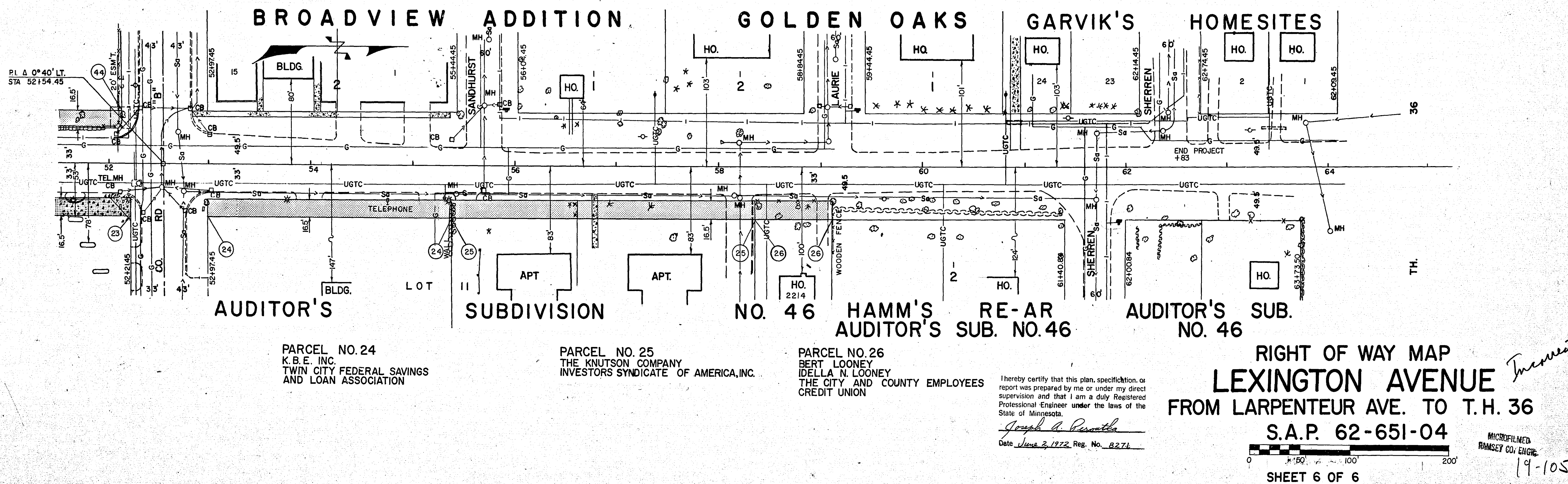
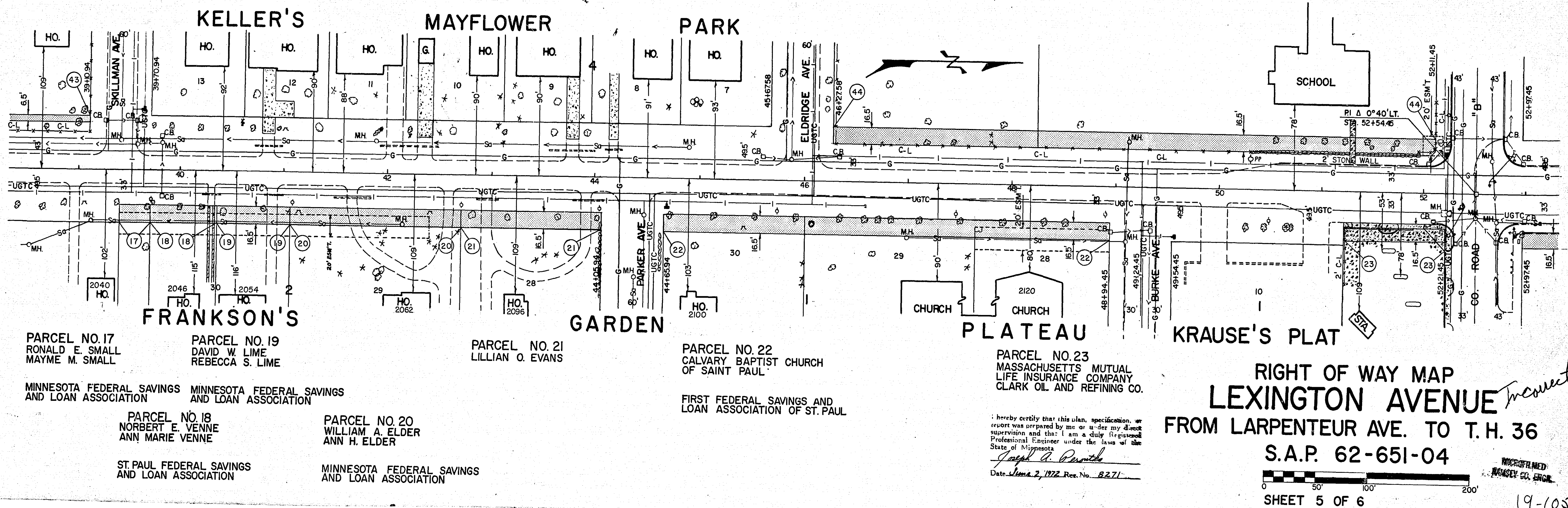
PARCEL NO. 32
ABE SECHTER
MOLLIE SECHTER
ROSE B. GOLDMAN

PARCEL NO. 33
LEO F. POTHEN
RICHARD F. MOONEY

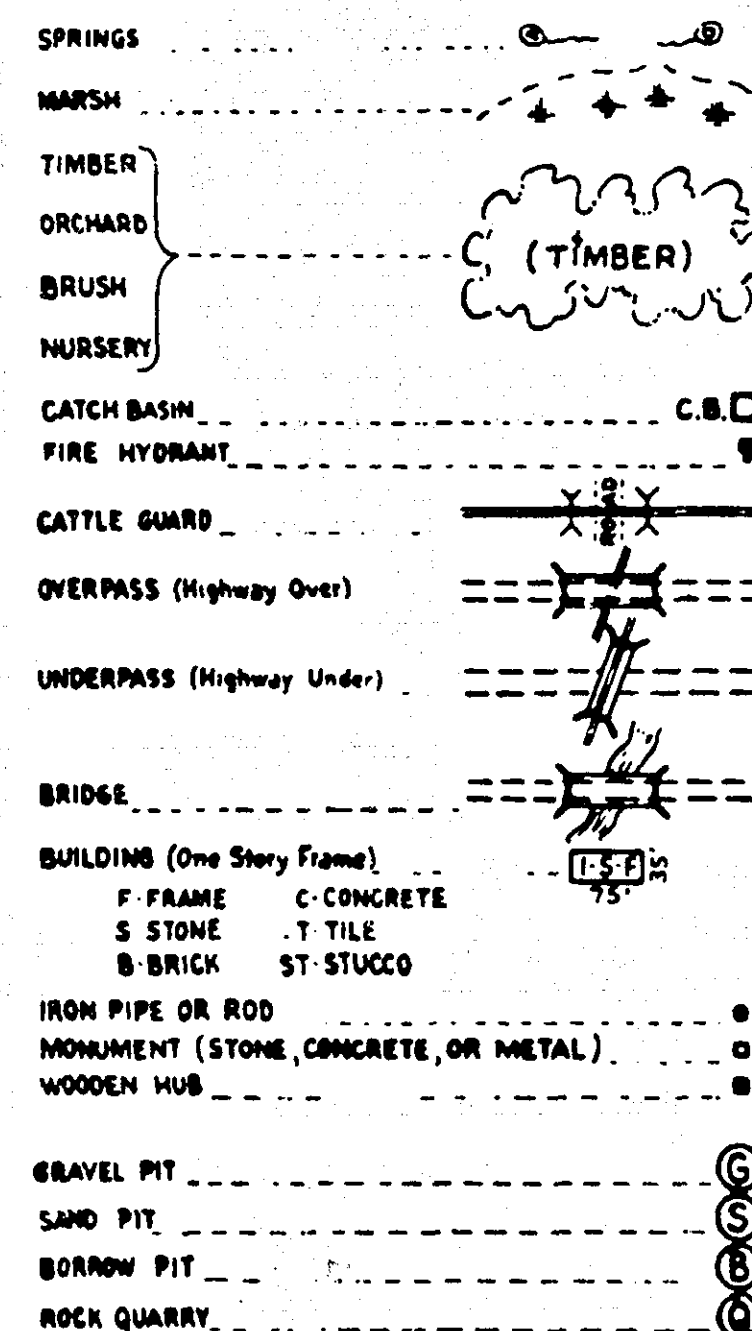
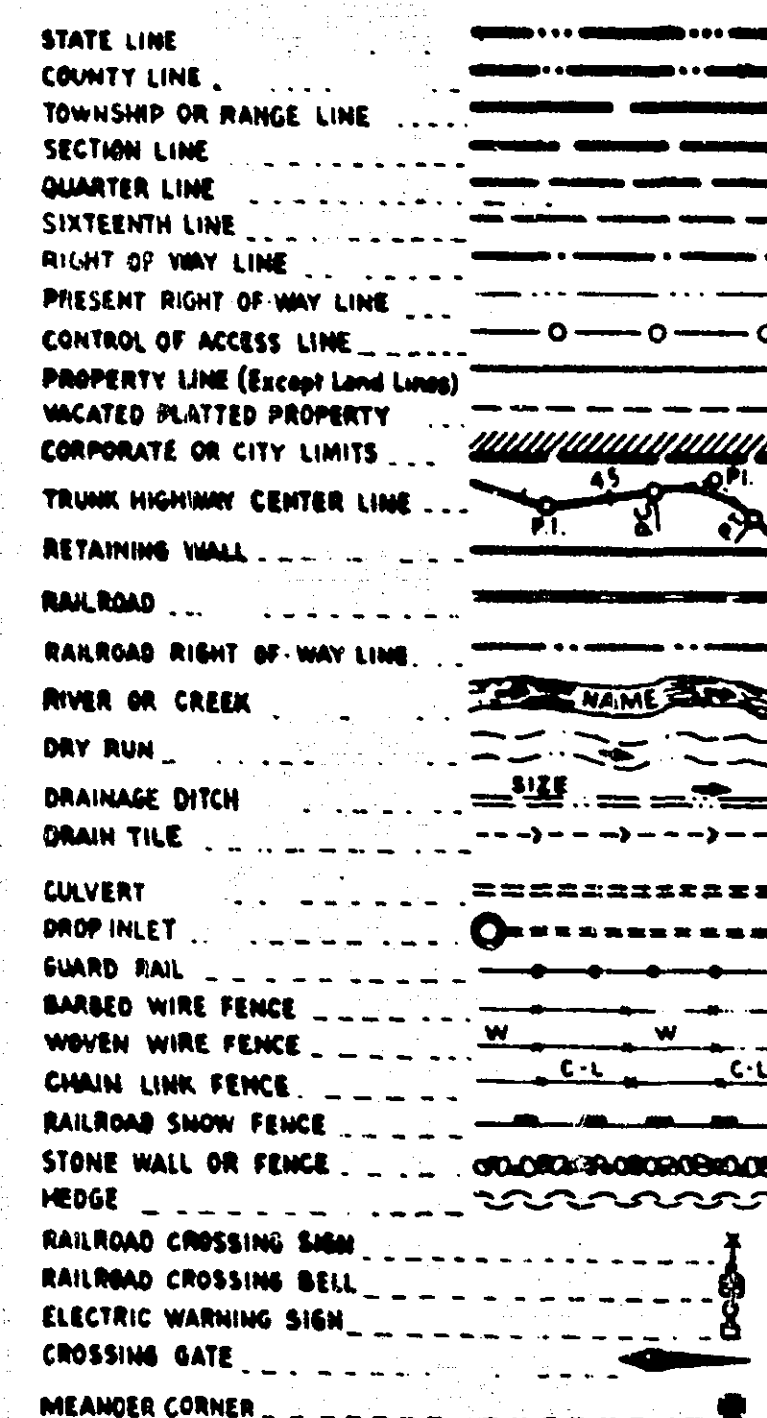
PARCEL NO. 34
FRED F. RAHN
HENRIETTA A. RAHN
TWIN CITY FEDERAL SAVINGS
AND LOAN ASSOCIATION

PARCEL NO. 35
SHELDON E. SMITH INVESTMENTS, INC.
SHELL OIL COMPANY, DEL. CORP.

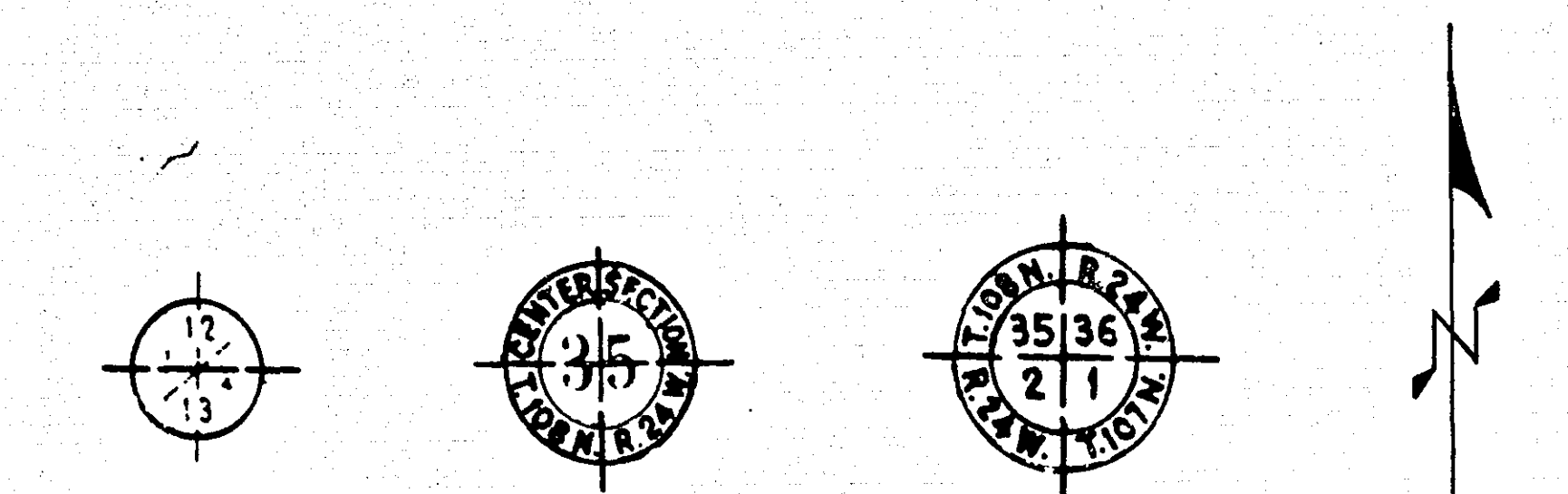
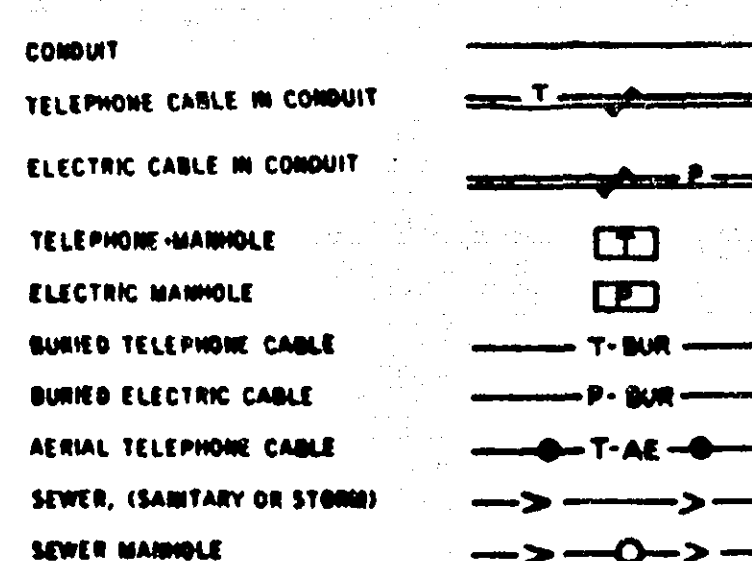
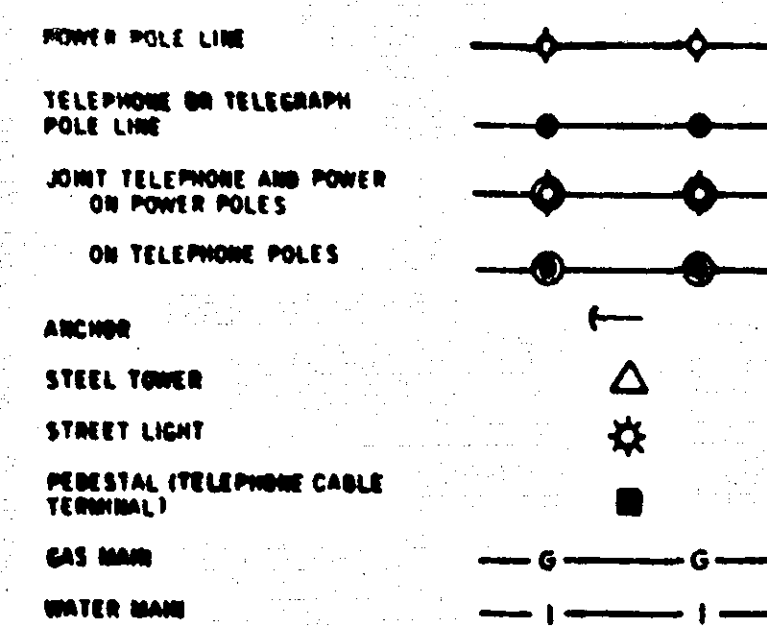




PLANS SYMBOLS



UTILITIES SYMBOLS



PIT DATA

PIT NO. Located in Dead Haul

PIT NO. Located in Dead Haul

THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1968 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED JULY 1, 1969 SHALL GOVERN.

OFFICE OF COUNTY ENGINEER

RAMSEY COUNTY

CONSTRUCTION PLAN FOR GRADING AND CONCRETE SURFACING

LEXINGTON AVENUE

BETWEEN LARPEN TEUR AVE. AND T.H. 36

FROM: A POINT 47 FEET NORTH OF THE SOUTH EAST CORNER OF SECTION 15, T. 29 N., R. 23 W. TO: A POINT 1028.55 FEET NORTH OF THE SOUTH EAST CORNER OF SECTION 10, T. 29 N., R. 23 W.

GROSS LENGTH 6,248 FEET 1.1833 MILES
BRIDGES - LENGTH 0 FEET 0 MILES
EXCEPTIONS - LENGTH 0 FEET 0 MILES
NET LENGTH 6,248 FEET 1.1833 MILES

PLAN, 1 INCH = 50 FEET
PROFILE, HORIZ. 1 INCH = 50 FEET, VERT. 1 INCH = 5 FEET
CROSS-SECTIONS, 1 INCH = 10 FEET
LAYOUT, 0.75 INCH = 5280 FEET

DESIGN DESIGNATION

ADT 1971 = 10,000 - 20,000
ADT 1985 = 20,000
DHV
D (DIRECTIONAL DISTRIBUTION) = 50-50
T (HEAVY COMMERCIAL) = 5%

DESIGN LOAD = 9 TON
SOIL FACTOR = 100 %
DESIGN SPEED = 45 M.P.H.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION & ESTIMATED QUANTITIES
3-5	DRAINAGE CHART & DETAILS
6	PAVEMENT DETAILS
7	CLEARING & GRUBBING CHART & MISC. CHARTS
8-12	PLAN PROFILES & CONSTRUCTION PLANS
13-21	CROSS SECTIONS

RECOMMENDED FOR APPROVAL *W. J. Schmitt* 4/10/71

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APPROVED *W. J. Schmitt* 4/10/71

APPROVED *W. J. Schmitt* 4/10/71

APPROVED *W. J. Schmitt* 4/10/71

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Floyd M. Lyndberg REG. NO. 6334 DATE 4/30/71

W. J. Schmitt 4/10/71

W. J. Schmitt 4/10/71

W. J. Schmitt 4/10/71

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W. J. Schmitt 4/10/71

W. J. Schmitt 4/10/71

W. J. Schmitt 4/10/71

W. J. Schmitt 4/10/71

DRAWN BY	CHECKED BY
<i>R. Bock E.T.</i>	<i>R. Bock E.T.</i>
<i>R. Weber A.E.T.</i>	<i>R. Weber A.E.T.</i>
<i>P. Schacht E.T.</i>	<i>P. Schacht E.T.</i>
<i>H. Hack A.E.T.</i>	
<i>H. Larson</i>	
<i>J. Gage A.E.T.</i>	

NOT BUILT

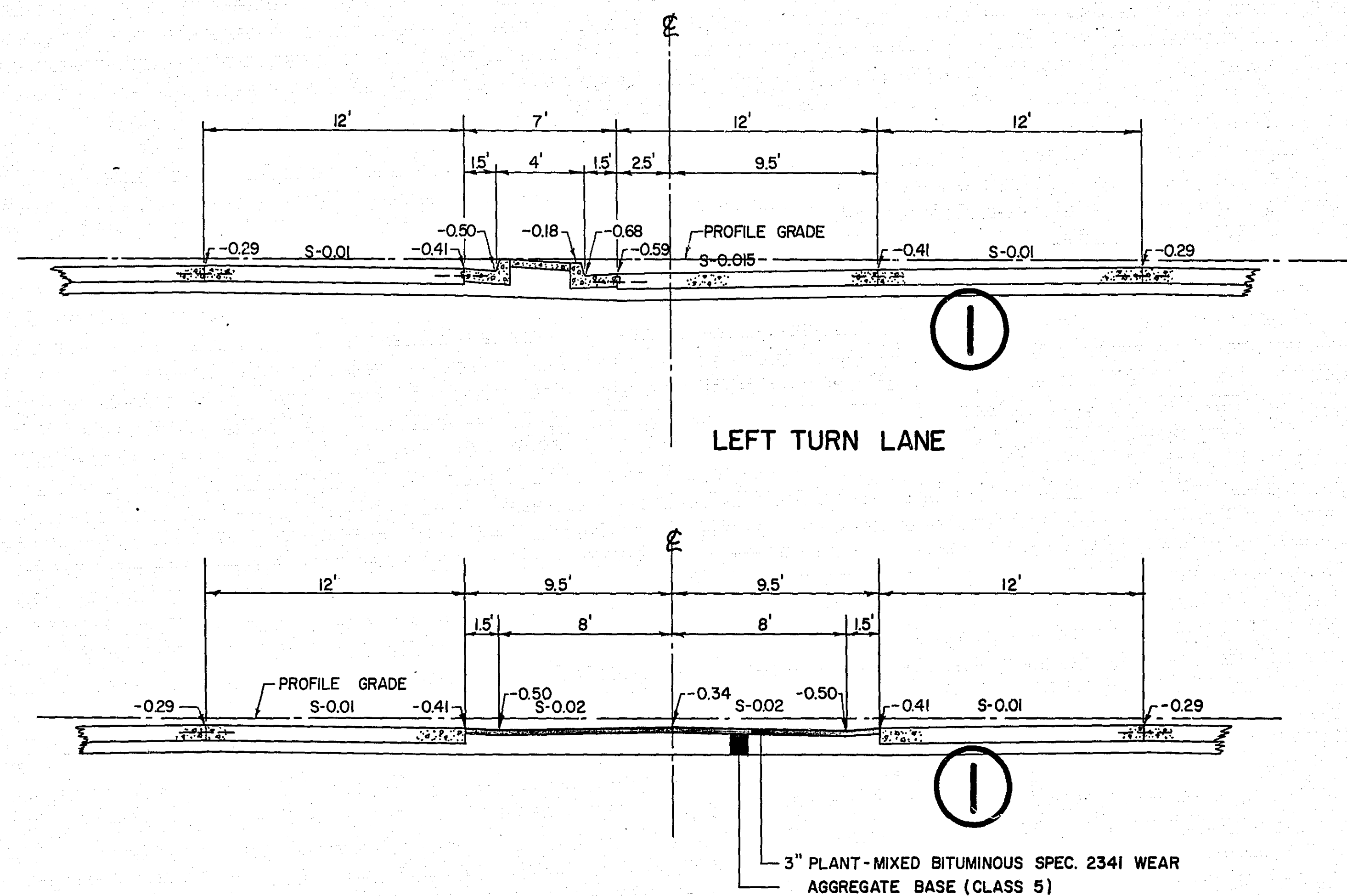
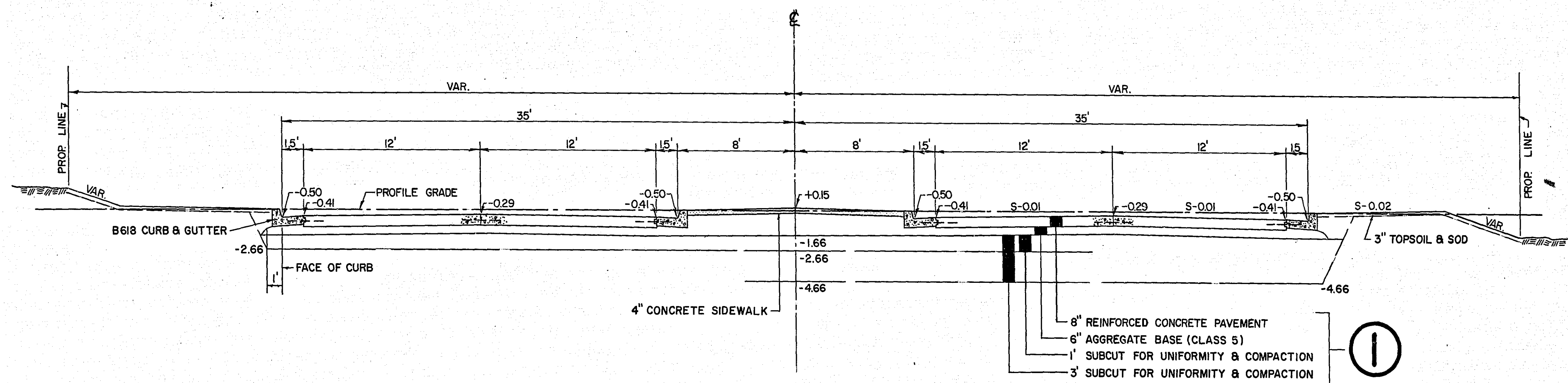
STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	TOTAL ESTIMATED QUANTITIES	ITEM
2021.501	MOBILIZATION	1	LUMP SUM
2101.502	CLEARING	131	TREE
2101.507	GRUBBING	134	TREE
2104.502	REMOVE PAVEMENT	14,228	S.Y.
2104.503	REMOVE CURB AND GUTTER	200	L.F.
2104.504	REMOVE CURB	250	L.F.
2104.506	REMOVE SIDEWALK	610	S.F.
2104.510	REMOVE FENCE, WOOD RAIL	241	L.F.
2104.510	REMOVE FENCE, CHAIN LINK	667	L.F.
2104.511	REMOVE MANHOLES & CATCH BASINS	49	STRUCTURE
2104.515	REMOVE PIPE SEWERS	1301	L.F.
2104.507	REMOVE MASONRY AND CONCRETE STRUCTURE	33.3	C.Y.
2105.501	COMMON EXCAVATION	87,128	C.Y.
104.604	REMOVE HYDRANT	8	EACH
504.666	INSTALL HYDRANT	8	EACH
2130.501	WATER	500	(M)GAL
2211.501	AGGREGATE BASE CLASS 5	21,200	TON
504.652	WATER MAIN INSULATION	590	S.Y.
2301.502	CONCRETE PAVEMENT STANDARD WIDTH	35,820	S.Y.
2301.503	CONCRETE PAVEMENT IRREGULAR WIDTH	5,289	S.Y.
2301.511	STRUCTURAL CONCRETE	9,136	C.Y.
2301.521	PAVEMENT REINFORCEMENT, TYPE 612XD4.3XD4	41,109	S.Y.
2301.529	REINFORCEMENT BARS	36,000	POUND
2301.531	STANDARD JOINTS, DESIGN CID	16,736	L.F.
2301.531	STANDARD JOINTS, DESIGN LIT	13,646	L.F.
2301.531	STANDARD JOINTS, DESIGN L2KT	23,688	L.F.
2301.531	STANDARD JOINTS, DESIGN L3	6,809	L.F.
2301.536	DOWEL BAR ASSEMBLIES	16,736	L.F.
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	96	TON
2341.508	WEARING COURSE MIXTURE	1,471	TON
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	2,634	GAL
123.603	BACKHOE RENTAL	20	HOUR
2451.503	GRANULAR BACKFILL	1000	C.Y.
2503.502	15" REINFORCED CONCRETE SEWER, CLASS III	2806	L.F.
2503.502	27" REINFORCED CONCRETE SEWER, CLASS III	149	L.F.
2501.536	15" CONCRETE APRONS	10	APRON
2506.506	CONSTRUCT MANHOLES, DESIGN A OR F	21.8	L.F.
2506.509	CONSTRUCT CATCH BASINS, DESIGN RC-2	49	STRUCTURE
2506.509	CONSTRUCT CATCH BASINS, DESIGN LP-4	14	STRUCTURE
506.623	INSTALL CATCH BASINS	6	STRUCTURE
2506.511	RECONSTRUCT MANHOLES	4.0	L.F.
2506.516	CASTING ASSEMBLIES	47	ASSEMBLY
2506.521	INSTALL CASTINGS	50	ASSEMBLY
2506.522	ADJUST FRAME AND RING CASTING	4	ASSEMBLY
2521.501	4" CONCRETE WALK	17,132	S.F.
2531.501	CONCRETE CURB AND GUTTER, DESIGN B618	18,041	L.F.
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	28	S.Y.
2557.501	WIRE FENCE, DESIGN 3669322	161	L.F.
2575.505	SODDING	15,300	S.Y.
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	1.1	TON
557.603	INSTALL CHAIN LINK FENCE	556	L.F.
557.604	INSTALL FENCE, WOOD RAIL	223	L.F.
504.679	ADJUST VALVE BOX	32	BOX
565.632	CONCRETE HANDHOLES	14	HANDHOLE
565.635	RIGID METALLIC CONDUIT 3"	644	L.F.
504.679	ADJUST VALVE BOX (HOUSE SERVICES)	45	BOX

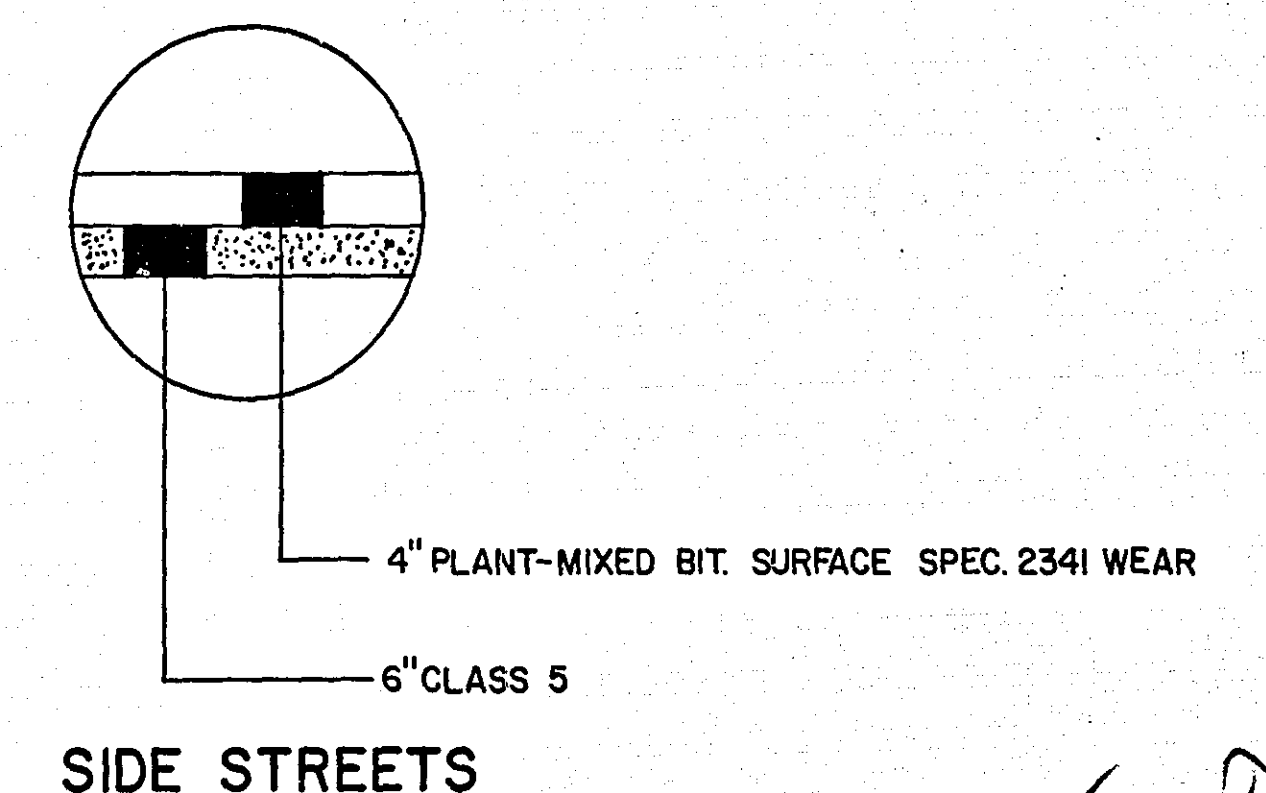
STANDARD DETAIL PLATES

0001A	SPECIFICATION REFERENCE TO STANDARD PLATES
1120L	CONTRACTION JOINTS
1140K	LONGITUDINAL JOINTS
1141B	PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION
1150L	CONSTRUCTION OF HEADER JOINTS
3000F	REINFORCED CONCRETE PIPE
3100F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
4000G	MANHOLE OR CATCH BASIN
4005H	MANHOLE OR CATCH BASIN
4016C	CURB OPENING CATCH BASIN
4021B	PRECAST CURB OPENING CATCH BASIN
4102C	MANHOLE OR CATCH BASIN RING CASTING
4110D	COVER CASTING FOR MANHOLE
4180F	MANHOLE STEP CASTING
7100D	CONCRETE CURB AND GUTTERS
8000C	STANDARD BARRICADES
8008D	CONTRACTORS SIGN
8117C	PRECAST CONCRETE HANDHOLES
9102C	SODDING AT PIPE CULVERT ENDS

TYPICAL SECTION



BITUMINOUS MEDIAN SECTION



I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Harold A. Wilk, P.E.
 Date 4/20/71 Reg. No. 2225

S.A.P. No. 62-651-01 C.T.B.

MICROFILMED
 Sheet No. 2 of 21 Sheets

NOT BUILT

19-105

CHART

S.A.P. NO. 62-651-01 C.T.B.

SHEET 3 OF 12 SHEETS

19-105

The drawing consists of three views of a gutter installation:

- FRONT VIEW:** Shows a cross-section of the gutter. The gutter is 3' wide. The curb is 1' high. The gutter is 2" deep. The gutter is 3' wide. The gutter is 3' high. The gutter is 4" wide. The gutter is 8" high.
- SIDE VIEW:** Shows a side view of the gutter. The gutter is 2" deep. The gutter is 2' MIN. high. The gutter is 8" high. The gutter is 3' wide.
- TOP VIEW:** Shows a top view of the gutter and casting. The gutter is 8" wide. The gutter is 6" wide. The gutter is 8" high. The gutter is 3' wide.

Labels and dimensions include:

- DRAINS
- 3'
- 1'
- CONC. CURB
- NORMAL GUTTER LINE
- 8" BRICK, CONCRETE OR BLOCK WALLS
- 3'
- 3'
- 4"
- 8"
- NORMAL CROWN 15'
- 2"
- TOP OF CURB = PROFILE GRADE
- * * -0.57'
- 2' MIN.
- 8"
- 3'
- 8" GUTTER
- CASTING
- CONCRETE SURFACE
- TOP VIEW
- * * WARP GUTTER TO THIS LINE
- * * ELEV COMPUTED TO THIS POINT, DETERMINE IN FIELD TO FIT EXISTING CONDITIONS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota

Harold A. Wilke P.E.

Date 2/20/71 Reg. No. 2215

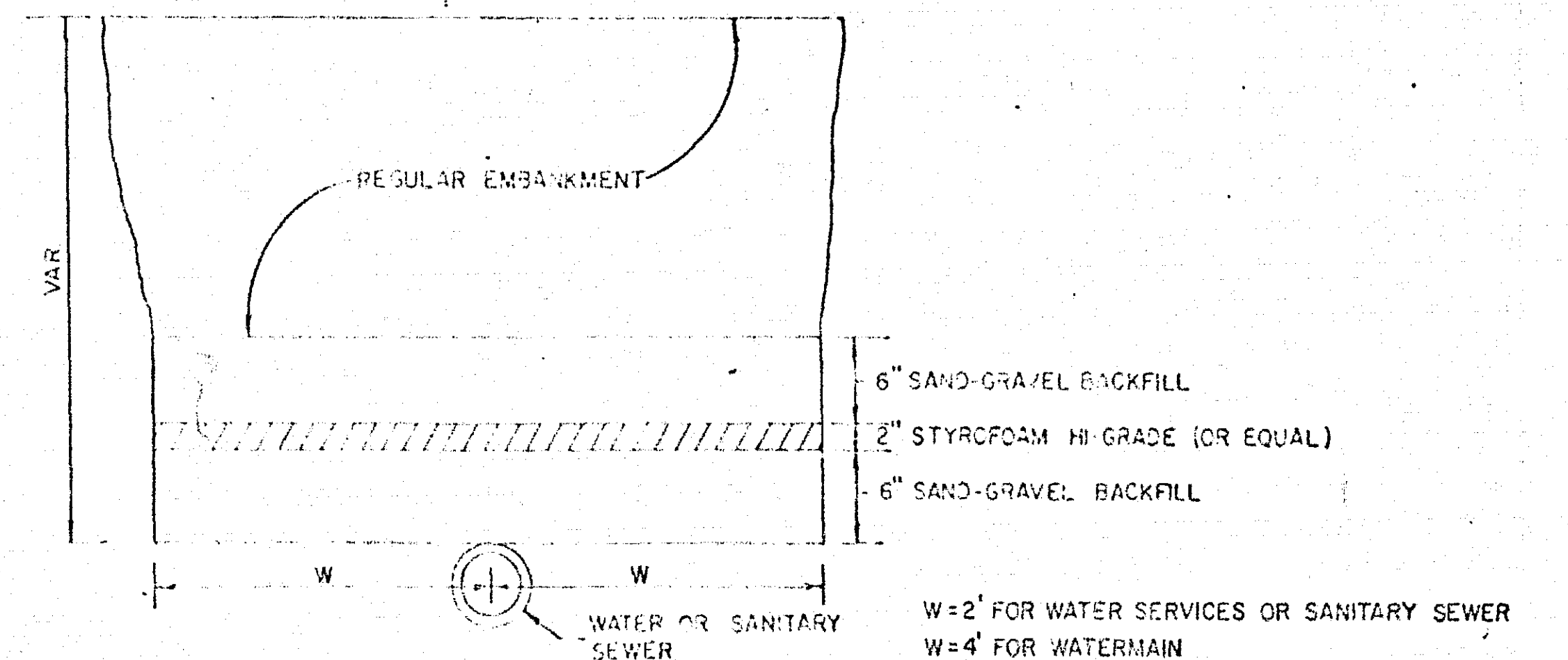
DRAINAGE

CHART

STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	CASTING ASSEMBLY	ELEVATION				ADJUST CASTING ASSEMBLY	RECONSTRUCT C.B. OR M.H. LIN. FT.	INSTALL CASTING ASSEMBLY	INSTALL CONCRETE PIPE SEWER LINEAR FEET					MOVING M.H. OR C.B. LIN. FT.	REMOVE PIPE SEWER LIN. FT.	15" APRON	CLASS	DRAINS TO		REMARK		
							PROFILE	ORIGINAL GRATE OR RING	NEW GRATE OR RING	C.B. OR M.H. INVERT				12"	15"	18"	27"	18" ARCH					STRUCTURE NO.	INV. EL.			
26+62	LT. 28	75	C.B.				944.08	943.49												7				M.H. 76		REMOVE	
26+75	LT. 21	76	M.H.			A	944.08	943.49	943.78			I												M.H. 72			
28+17	LT. 29	78	C.B.				943.64	942.58												8				M.H. 79		REMOVE	
28+11	LT. 215	79	M.H.			A	943.64	943.85	943.34			I												M.H. 72			
28+09	RT. 25	80	C.B.				943.64	941.33												59				M.H. 79		REMOVE	
29+22	LT. 28	81	C.B.				943.91	941.91												7				M.H. 82		REMOVE	
28+09	RT. 37.5	80A	M.H.	A. OR F.	5.9	E	943.64		943.6±	937.8±		I		10										C.B. 86			
29+20	LT. 21	82	M.H.			A	943.91	942.95	943.61			I												M.H. 79			
28+19	LT. 37	83	C.B.	L.P.-4	5.10	D	943.63		943.63	939.20				16										M.H. 79	938.92		
28+19	RT. 3.5	34	C.B.	R.C.-2	5.59	B	943.63		942.98	937.55				18										M.H. 79	937.37		
28+19	RT. 8.5	85	C.B.	R.C.-2	5.72	B	943.63		943.16	937.60				15										C.B. 84	937.55		
28+19	RT. 37	86	C.B.	L.P.-4	6.40	D	943.63		943.63	937.90				28										C.B. 85	937.60		
28+19	RT. 49	87	AP.				943.63			944.3±				6					I					C.B. 86	941.0	WITH TRASH GUARD	
30+23	LT. 32	88	C.B.				944.58	942.28												11				M.H. 89		REMOVE	
30+20	LT. 21	89	M.H.			A	944.58	943.23	944.28			I												M.H. 82			
30+23	LT. 49	90	AP.				944.58			943.1±				22										M.H. 89	941.0	WITH TRASH GUARD	
31+09	RT. 49	91	M.H.			A	945.16	945.48	945.5±			I															
31+49	LT. 28	92	C.B.				945.43	944.24												7				M.H. 93		REMOVE	
31+51	LT. 21	93	M.H.			A	945.43	945.02	945.13			I												M.H. 89			
31+49	RT. 24	94	C.B.				945.43	944.23												45				M.H. 93		REMOVE	
31+60	LT. 34.5	95	C.B.	R.C.-2	4.13	B	945.51		945.04	941.07				17										M.H. 93	940.90		
31+60	LT. 8.5	96	C.B.	R.C.-2M	4.13	C	945.51		945.04	941.07				17										M.H. 93	940.90		
31+60	RT. 8.5	97	C.B.	R.C.-2M	3.96	C	945.51		945.04	941.24				17										C.B. 96	941.07		
31+60	RT. 34.5	98	C.B.	R.C.-2	3.70	B	945.51		945.04	941.50				26										C.B. 97	941.24		
32+69	LT. 57	99A	C.B.				946.25	945.81																		O.K. LEAVE	
32+76	LT. 57	100	M.H.				946.30	946.42			0.20±																
32+85	LT. 53	101	M.H.			A	945.68					I															
32+76	LT. 22	102	M.H.			A	946.30	946.97	946.00			I															
33+27	RT. 23	103A	C.B.				946.64	945.22												44				C.B. 92		REMOVE	
33+26	LT. 21	103B	M.H.			A	946.64	945.82	946.34			I												M.H. 103B			
33+27	LT. 28	103C	C.B.				946.64	945.85																		REMOVE	
33+22	LT. 32	103D	M.H.			A	946.61	946.47	946.21			I															
34+50	LT. 22	104A	M.H.			A	947.48	946.73	947.18			I												M.H. 103B			
34+50	LT. 32	104B	C.B.				947.48	946.64												10						REMOVE	
34+50	LT. 49	105A	P.				947.48			947.0±				22					I					M.H. 104A	944.50	WITH TRASH GUARD	
35+97	LT. 49	106	C.B.				948.48	948.69																		MATCH CURB TO C.B.	
36+06	LT. 49	107	M.H.				948.54	949.22			0.10±													M.H. 108		DETERMINE ELEV. IN F	
36+06	LT. 21	108	M.H.			A	948.54	949.28	948.24			I												M.H. 108A			
36+13	LT. 30	109	M.H.			A	948.59	949.43	948.21			I														MATCH CURB TO C.B.	
36+28	LT. 50	110	C.B.				948.69	948.50																		ADJ. BY TEL. CO.	
36+31	RT. 17	111	M.H.				948.72		948.38																	O.K. LEAVE	
36+28	RT. 72	112	M.H.				948.69	949.79																			
36+53	LT. 27	113	C.B.				948.86	946.89																		REMOVE	
36+53	LT. 21	114	M.H.			A	948.86	948.72	948.56			I								6				M.H. 114			
36+53	RT. 25	115	C.B.				948.86	947.77																	M.H. 108		
																				46				M.H. 114		REMOVE	
36+62	LT. 49	118	A.P.				948.92			948.0±				14													
36+62	LT. 34.5	119	C.B.	R.C.-2	4.04	B	948.92		948.45	944.58				15					I					C.B. 119	946.0	WITH TRASH GUARD	
36+62	LT. 8.5	120	C.B.	R.C.-2M	4.04	C	948.92		948.45	944.57				16										M.H. 114	944.20		
36+62	RT. 8.5	121	C.B.	R.C.-2M	3.87	C	948.92		948.45	944.74				17										M.H. 114	944.42		
36+62	RT. 34.5	122	C.B.	R.C.-2	3.61	B	948.92		948.45	945.00				26										C.B. 120	944.57		
38+50	RT. 71	123	M.H.				950.20	948.01																	C.B. 121	944.74	
39+25	LT. 43	124	C.B.				950.71	951.00																		O.K. LEAVE	
39+41	LT. 35	125	M.H.			A	950.82	951.54	957.0±			I								17				C.B. 125		MOVE TO #132	
39+57	LT. 45	126	C.B.				950.93	950.78																			
39+57	LT. 22	127	M.H.			A	950.93	951.94	950.63			I								23				M.H. 127		MOVE TO #133	
39+81	LT. 39	128	C.B.				951.09	948.55																			
39+81	LT. 23	129	M.H.			A	951.09	950.40	950.79			I								62				M.H. 129		REMOVE	
39+81	RT. 25	130	C.B.				951.09	948.10									</										

DRAINAGE CHART

STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	CASTING ASSEMBLY	ELEVATION				ADJUST CASTING ASSEMBLY	RECONSTRUCT C.B. OR M.H. LIN. FT.	INSTALL CASTING ASSEMBLY	INSTALL CONCRETE PIPE SEWER LINEAR FEET				MOVING M.H. OR C.B.	REMOVE PIPE SEWER LIN. FT.	15" APRON	CLASS	DRAINS TO		REMARK
							PROFILE	ORIGINAL GRATE OR RING	NEW GRATE OR RING	C.B. OR M.H. INVERT				12"	15"	18"	27"	18" ARCH				STRUCTURE NO.	INV. EL.	
49+10	LT. 41	156	M.H.			A	948.21	948.86	948.2±															
48+97	RT. 45	57	C.B.				948.14	949.14											37			C.B. 159		REMOVE
49+34	RT. 23	158	C.B.				948.35	949.32											21			C.B. 159		REMOVE
49+34	RT. 44	59	C.B.			A	948.35	947.24	945.3±															CHANGE TO M.H.
49+10	RT. 52	160	M.H.			A	948.21	946.93																
48+72	LT. 37	161	C.B.	L.P.-4	4.72	D	948.05		948.05	944.00					31							C.B. 162	943.69	
48+72	LT. 6	162	C.B.	L.P.-4	5.03	D	948.05		948.05	943.69					3							C.B. 163	943.60	
48+72	RT. 2.65	163	C.B.	L.P.-4	5.12	D	948.05		948.05	943.60					34							C.B. 165	943.26	
49+64	RT. 34.5	164	C.B.	R.C.-2	3.76	B	948.53		948.06	944.46					32							M.H. 159	942.24	
48+72	RT. 37	165	C.B.	L.P.-4	5.46	D	948.05		948.05	943.26					62							M.H. 159	942.64	
48+72	RT. 49	166	A.P.				948.05			947.0±					12							C.B. 165	945.50	WITH TRASH GUARD
52+06	LT. 26	167	C.B.				948.43	947.73											29			C.B. 168		REMOVE
52+29	LT. 44	168	C.B.				948.33	947.39											52			C.B. 169		REMOVE
52+81	LT. 51	169	C.B.			A	948.13	947.38																CHANGE TO M.H.
52+96	LT. 27	170	C.B.				948.07	947.44																REMOVE
52+99	RT. 26	171	C.B.				948.06	947.51											44			M.H. 175		REMOVE
52+76	RT. 44	172	C.B.				948.15	947.45											28					REMOVE
52+33	RT. 48	173	C.B.				948.32	947.54											28					REMOVE
52+12	RT. 26	174	C.B.				948.40	947.87											43					REMOVE
52+55	RT. 26	175	M.H.			A	948.23	948.07	948.07±													M.H. 169		
52+71	LT. 33	176	M.H.			A	948.17	947.71																
51+95	LT. 3.5	178	C.B.	R.C.-2	3.97	B	948.47		947.82	944.01					64							M.H. 175	943.34	
51+95	LT. 8.5	179	C.B.	R.C.-2	4.10	B	948.47		948.00	944.06					5							C.B. 178	944.01	
51+95	LT. 34.5	180	C.B.	R.C.-2	3.84	B	948.47		948.00	944.32					26							C.B. 179	944.06	
52+11	RT. 35	182	C.B.	R.C.-2	3.66	B	948.41		948.00	944.50					40							M.H. 175	944.05	
52+29.5	RT. 49	183	C.B.	R.C.-2	3.66	B	948.32		947.35±	943.85					42							M.H. 175	943.41	
52+76.5	RT. 64	184	C.B.	R.C.-2	3.66	B	948.23		947.35±	943.85					39							M.H. 175	943.41	
52+76	RT. 25	185	M.H.			A	948.23	947.72	947.93															
55+89	LT. 54	186	C.B.				946.83	946.99																
55+63	LT. 52	187	M.H.			A	946.99	947.34	947.34															MATCH CURB TO C.B.
55+40	LT. 22	188	C.B.				947.09	946.41																
55+43	RT. 26	189	M.H.			A	947.08	946.52	946.74										38			M.H. 187		REMOVE
55+69	RT. 25	190	C.B.				947.00	946.72											77			M.H. 187		REMOVE
55+33	LT. 34.5	191	C.B.	R.C.-2	4.35	B	947.12		946.65	942.46					35							M.H. 187	942.11	
55+33	LT. 4.2	193	C.B.	R.C.-2	4.05	B	947.12		946.65	942.76					30							C.B. 191	942.46	
55+33	RT. 8.5	194	C.B.	R.C.-2	3.92	B	947.12		946.65	942.89					13							C.B. 193	942.76	
55+38	RT. 34.5	195	C.B.	R.C.-2	3.68	B	947.12		946.65	943.15					26							C.B. 194	942.89	
58+09	LT. 23	196	A.P.				943.87												13			M.H. 197		REMOVE
58+22	LT. 21	197	M.H.			A	943.61		943.31															
58+14	RT. 24	198	M.H.			A	943.73	943.88	943.41															
58+22	RT. 28	199	C.B.			A	943.61	943.63	943.25															
59+00	LT. 53	200	C.B.				942.35	940.77																CHANGE TO M.H.
59+30	LT. 54	202	C.B.				941.87	940.77																MATCH CURB TO C.B.
59+08	LT. 55	203	M.H.				942.24																	O.K. LEAVE
59+09	LT. 24	204	M.H.			A	942.24		941.94															
61+75	LT. 24	207	M.H.			A	940.38	940.40	940.06															
61+71	RT. 26	208	M.H.			A	940.35		939.97															
62+45	LT. 55	209	M.H.				940.91	940.10																O.K. LEAVE
62+39	LT. 33	210	M.H.			A	940.86	940.25	940.40															
61+17	LT. 8.5	211	C.B.	R.C.-2M	3.65	C	940.22		939.75	936.26					161							M.H. 209	934.65	INCLUDES 12-7.5° BENDS
61+17	LT. 37	212	C.B.	L.P.-4	4.35	D	940.22		940.22	936.54					26							C.B. 211	936.26	
61+17	RT. 8.5	213	C.B.	R.C.-2M	3.48	C	940.22		939.75	936.43					17							C.B. 211	936.26	
61+17	RT. 37	214	C.B.	L.P.-4	4.17	D	940.22		940.22	936.72					28							C.B. 213	936.43	
62+27	LT. 55	215	C.B.				939.61																	O.K. LEAVE
62+59	LT. 55	216	C.B.				939.56																	O.K. LEAVE
TOTALS													50	2806	149			1301	10					



WATER AND SANITARY SEWER INSULATION DETAIL

NOTE 1 NEENAH R-3246-B TO HAVE FRONT FLANGE REMOVED
 NOTE 2 REQUIRED 12\"X37\" SHEET STEEL 4 GAUGE BENT TO FORM A \"U\" SHAPED SECTION WITH A 4\" LEG - 6\" BACK - 2\" LEG THE 6\" BACK SHALL BE 37\" LONG THE LEGS SHALL BE 35.5\" LONG AND THE 4\" LEGS SHALL HAVE SLOTS FOR BOLTS SO THAT IT CAN BE ATTACHED TO THE FRAME IN THE SAME MANNER AS THE CURB BOX.

A GRATE NO. 770, FLANGE NO. 771, COVER 712 M.H.D.
 B NEENAH INLET FRAME, GRATE, CURB BOX, R-3246-B OR EQUAL (INCLUDED WITH STRUCTURE, NOT SPERATE PAY ITEM)
 C NEENAH INLET FRAME, GRATE, R-3246-B OR EQUAL (INCLUDED WITH STRUCTURE, NOT SPERATE PAY ITEM) SEE NOTE 2
 D RING CASTING NO. 790-2 & COVER NO. 712 M.H.D. (INCLUDED WITH STRUCTURE, NOT SPERATE PAY ITEM)
 E USE CASTING FROM JOB

CATCH BASINS
 & MANHOLES

R.C.-2 & R.C.-2M DETAIL ON SHEET NO. 3
 L.P.-4 STANDARD PLATE NO. 4016C OR 4021B
 A OR F STANDARD PLATE NO. 4000G OR 4005H

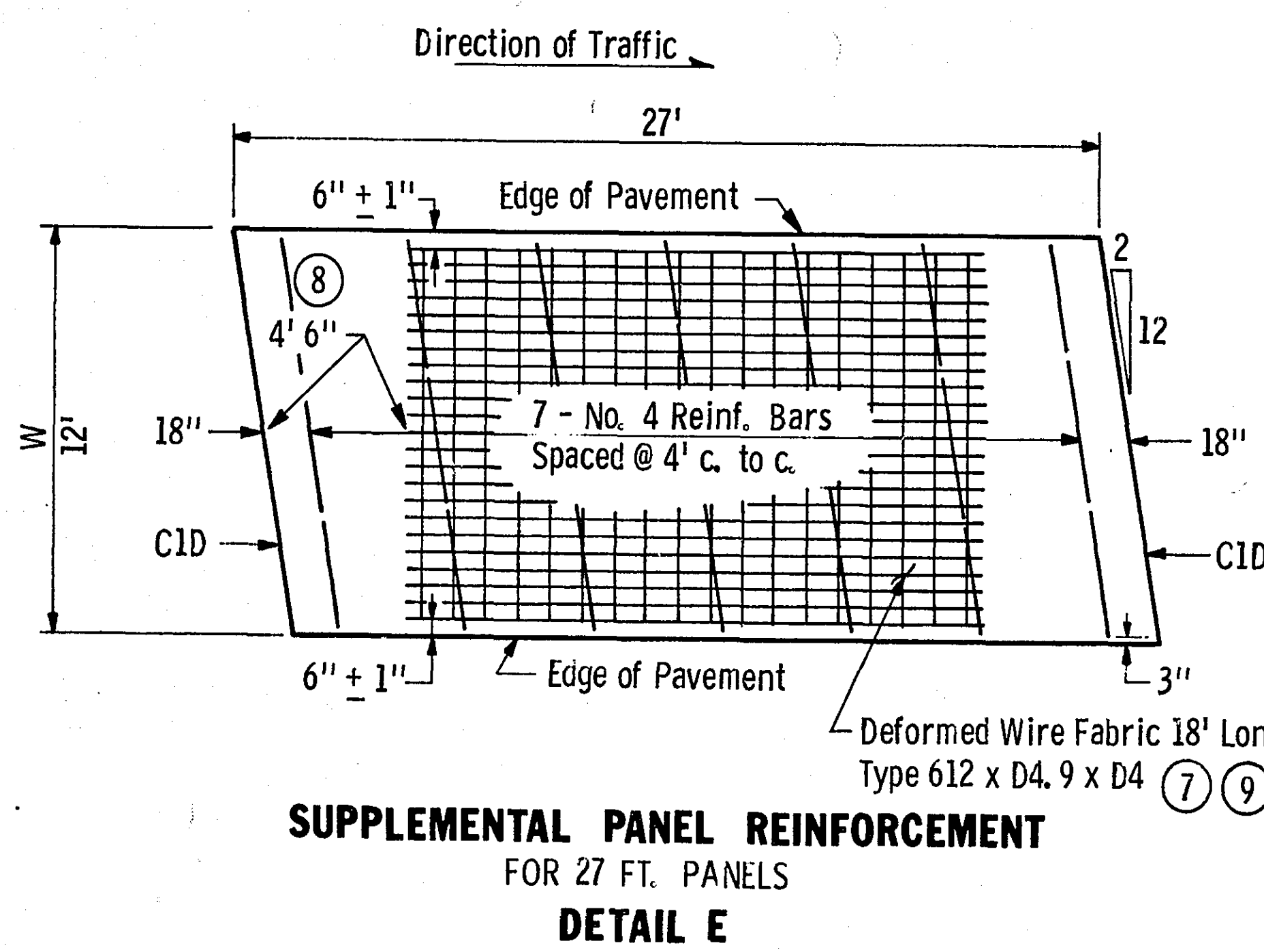
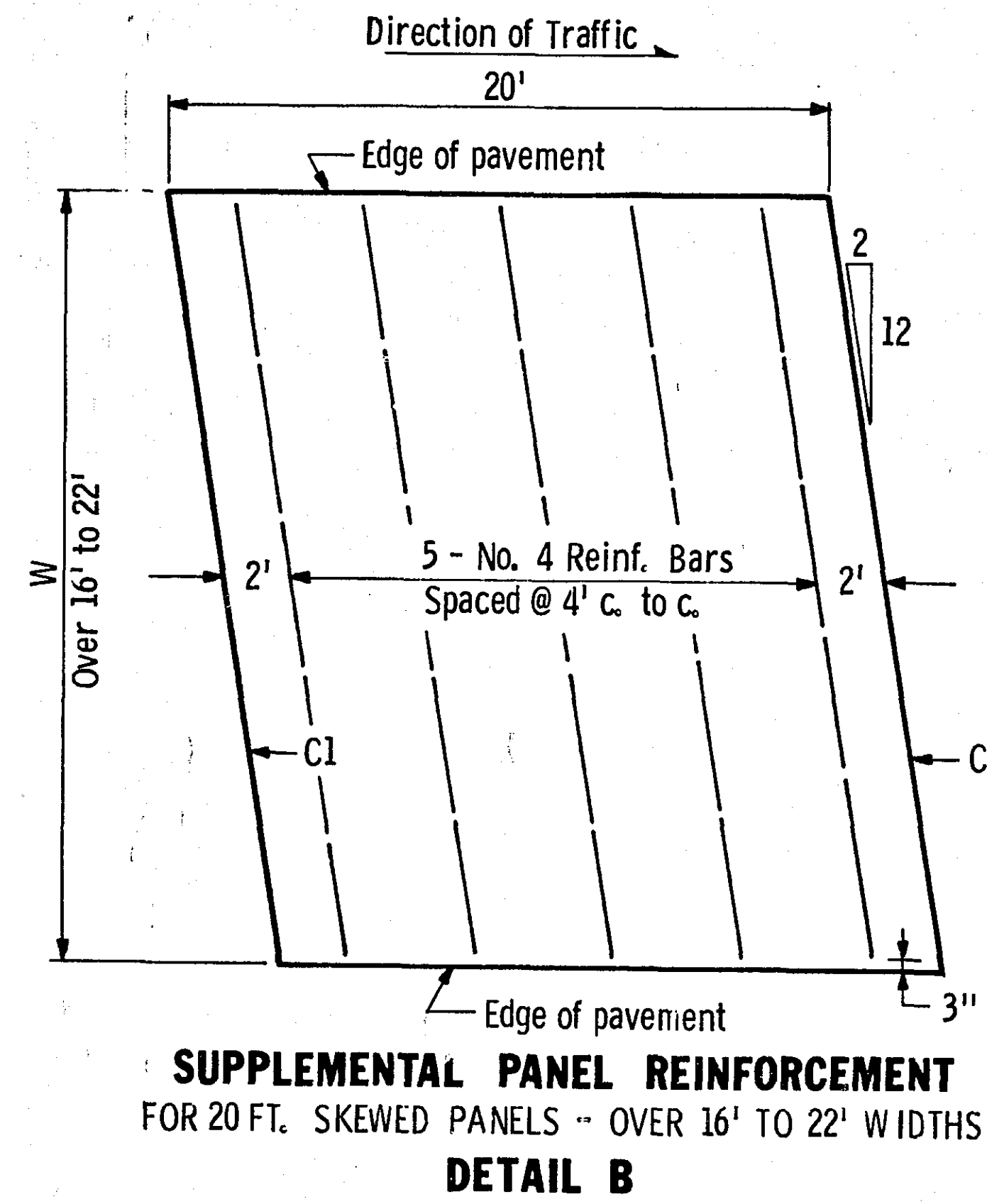
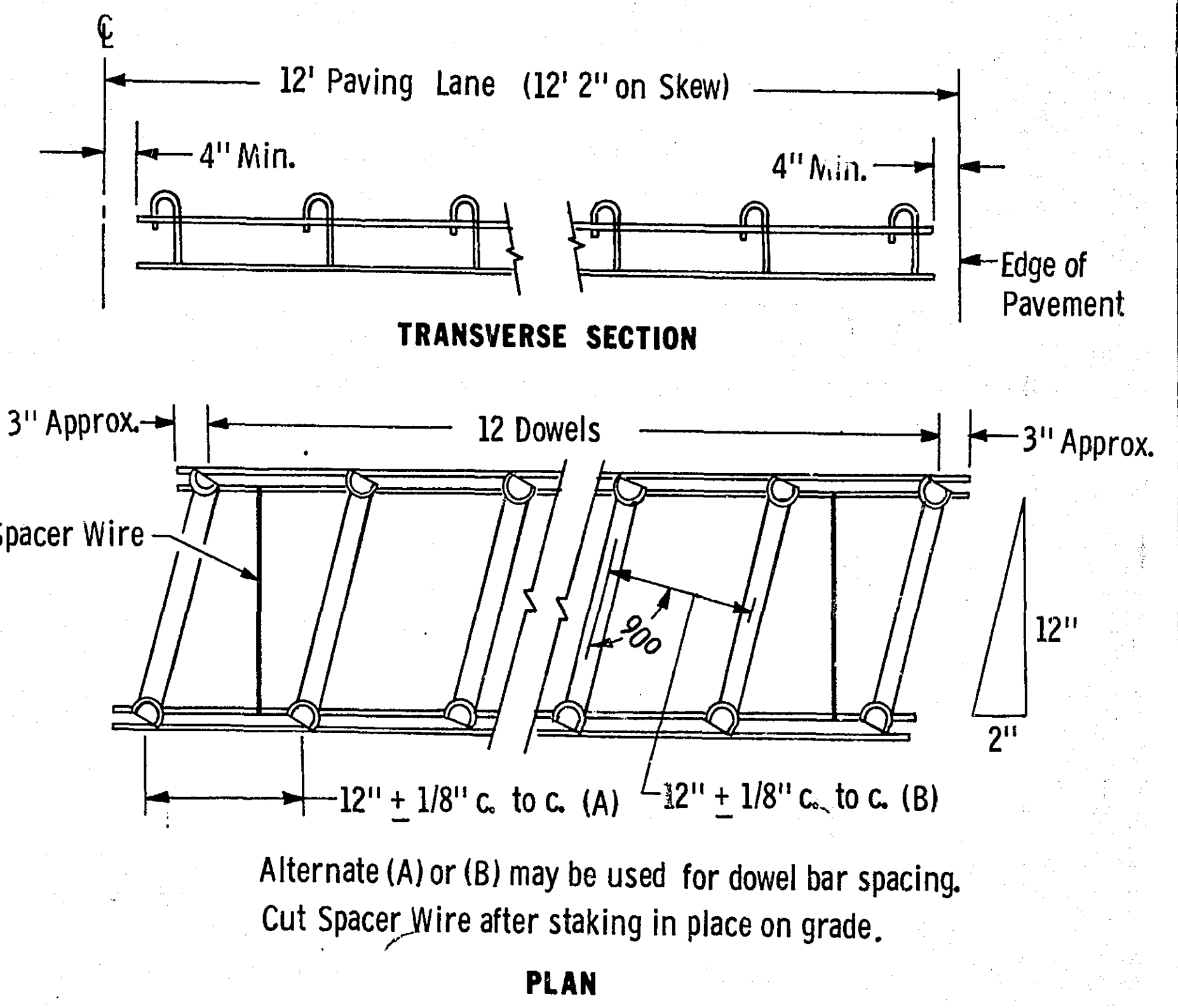
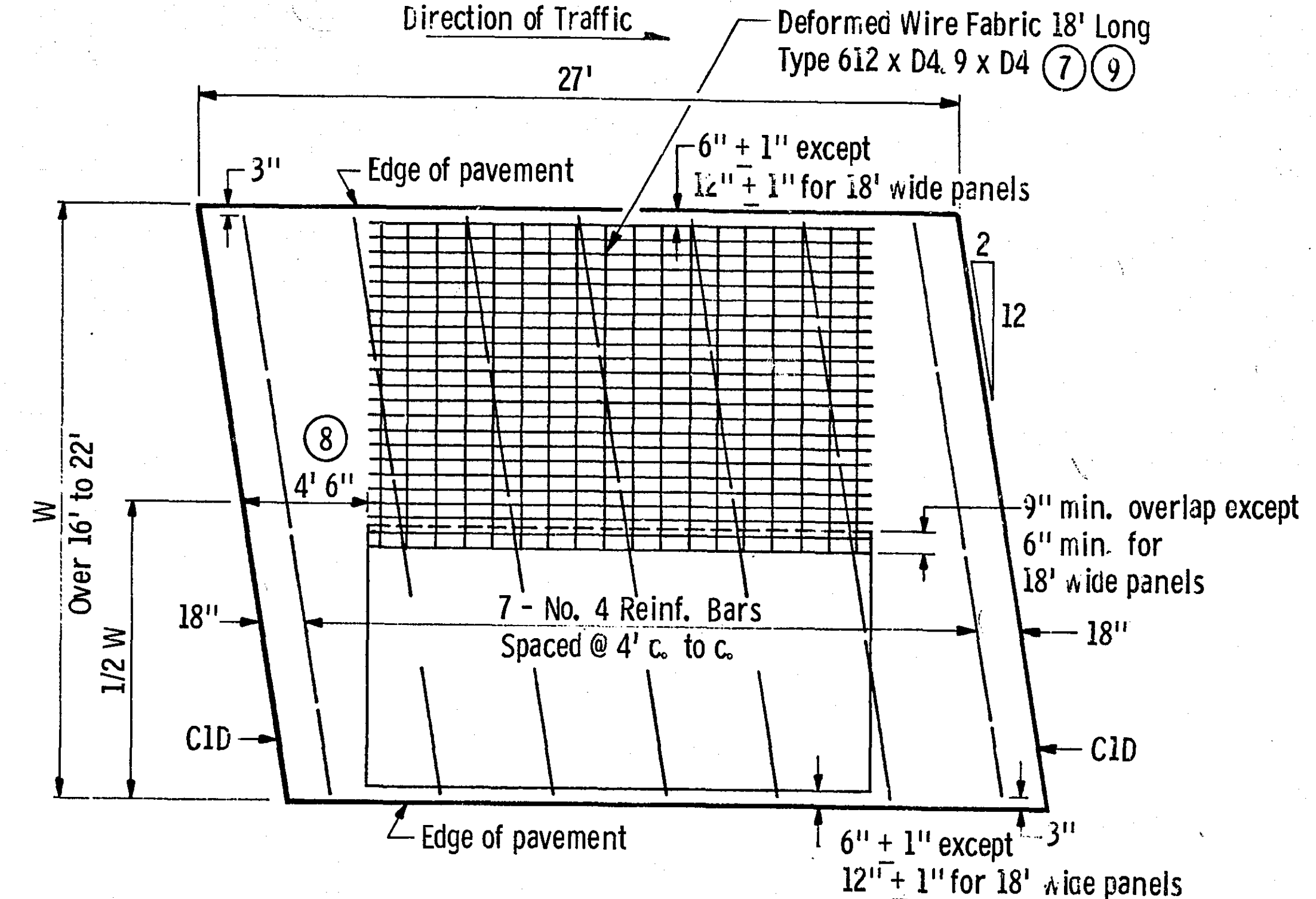
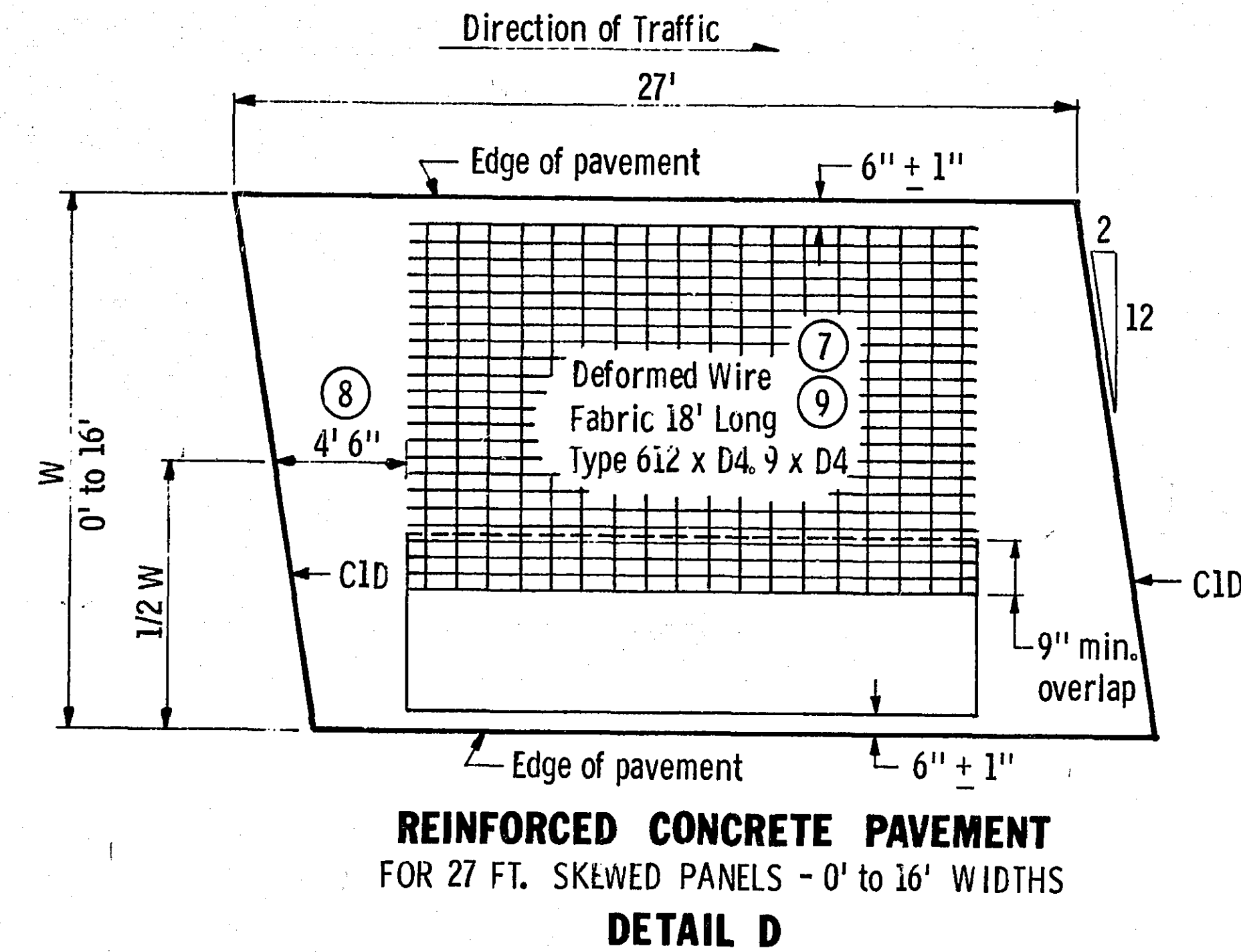
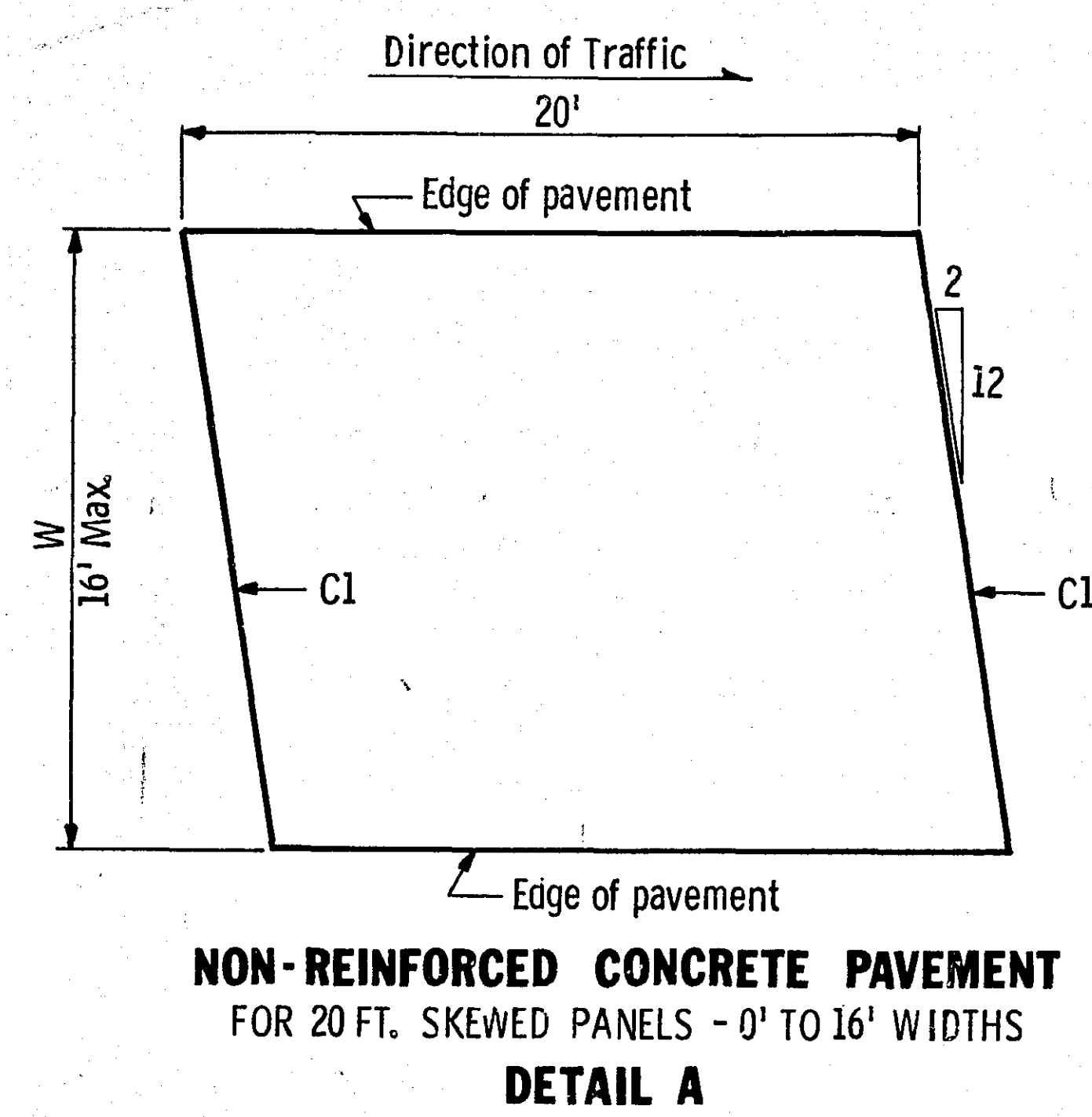
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
 Date: 4/24/71 Reg. No. 3216

S.A.P. NO. 62-651-OI C.T.B.

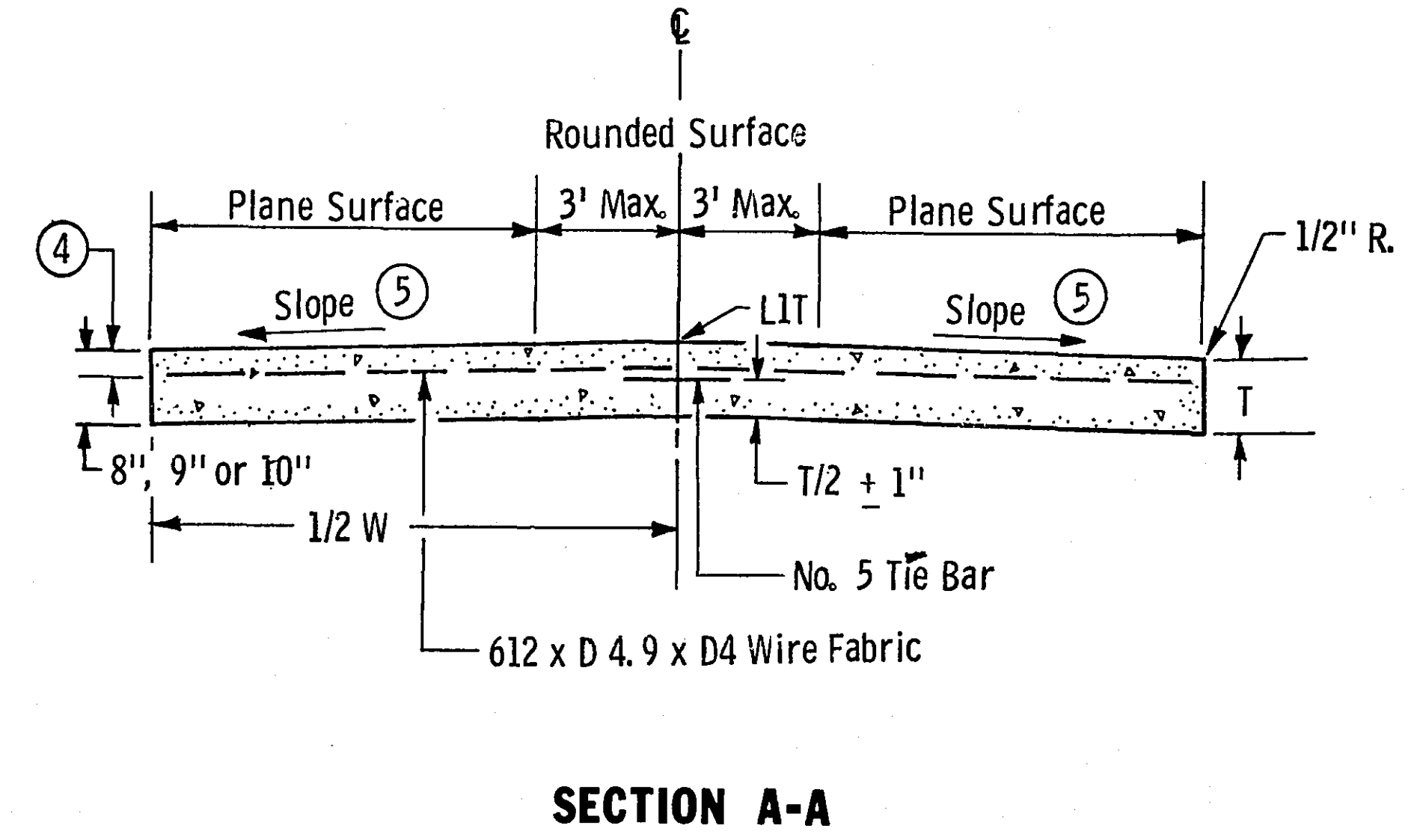
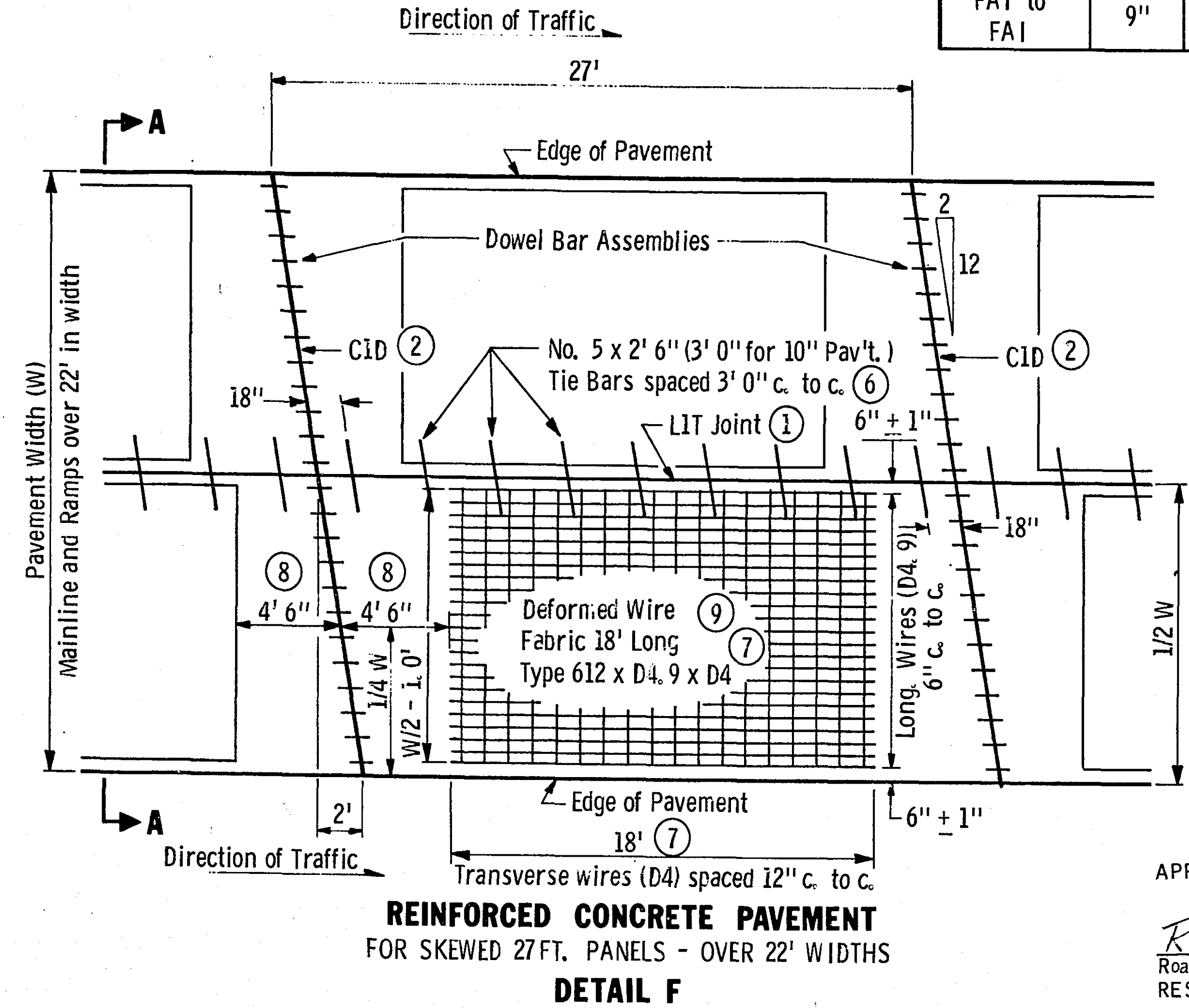
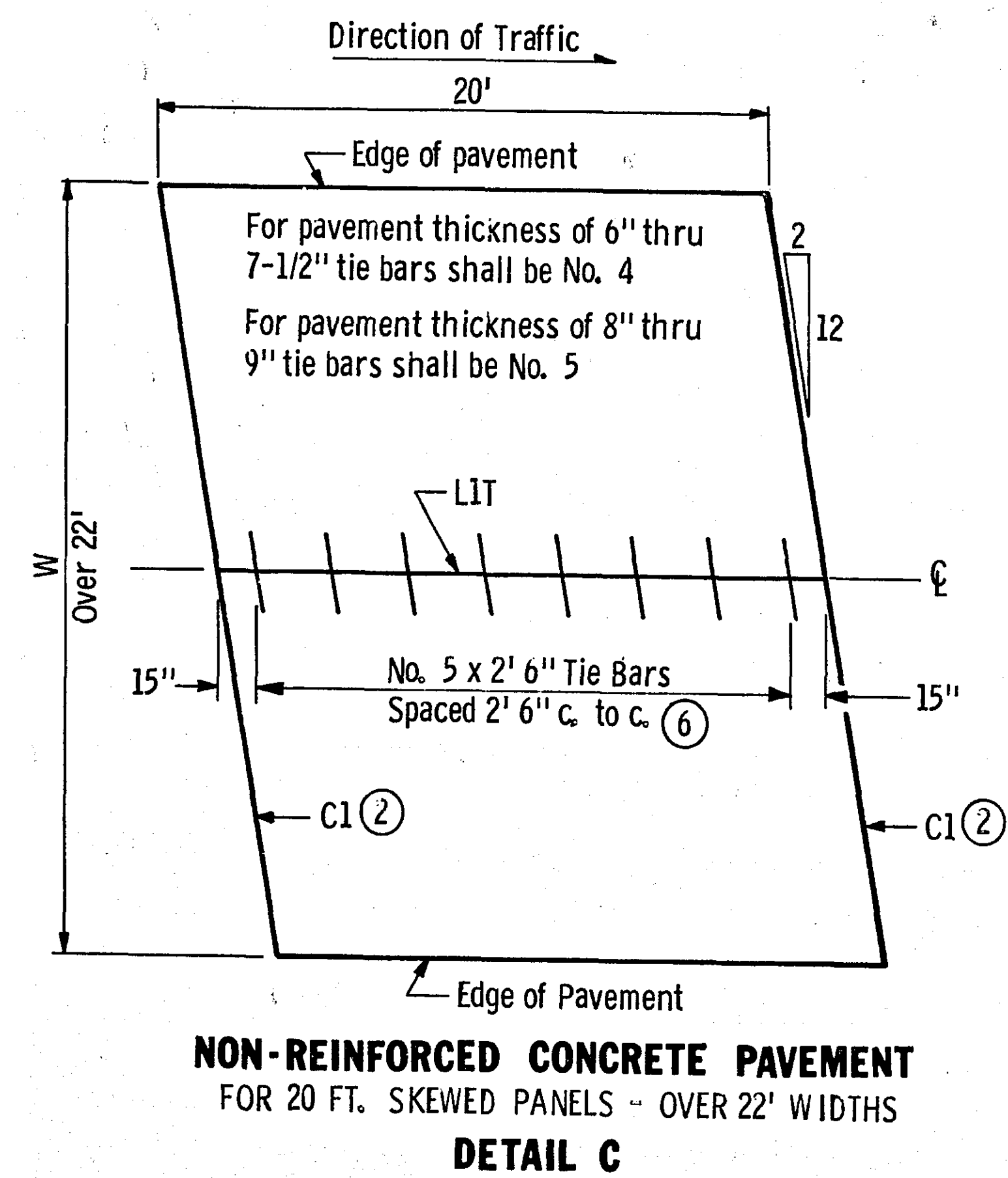
MICROFILMED
 RAMSEY CO. ENR

SHEET NO. 5 OF 21 SHEETS

19-105



RAMP DESIGN									
③ TST-HCADT	Pav't. Thick.	Pav't. Width	Panel Length	Fabric Reinf.	④ Supple. Reinf.	Skew. Cont. Jts.	L Jt.	Control Cont. Joints Spacing @	See Detail
0 to 125	8"	0 to 16'	20'	None	No	C1	None	40'	A
0 to 125	8"	Over 16' to 22'	20'	None	Yes	C1	None	40'	B
0 to 125	8"	Over 22'	20'	None	No	C1	Yes	40'	C
Over 125	8"	0 to 16'	27'	612 x D4, 9 x D4	No	C1D	None	27'	D
Over 125	8"	Over 16' to 22'	27'	612 x D4, 9 x D4	Yes	C1D	None	27'	G
Over 125	8"	Over 22'	27'	612 x D4, 9 x D4	No	C1D	Yes	27'	F
FAI to FAI	9"	0 to 16'	27'	612 x D4, 9 x D4	No	C1D	None	27'	D
FAI to FAI	9"	Over 16' to 22'	27'	612 x D4, 9 x D4	Yes	C1D	None	27'	G
FAI to FAI	9"	Over 22'	27'	612 x D4, 9 x D4	No	C1D	Yes	27'	F



- NOTES:**
- When pavement width exceeds 25 feet the longitudinal joint shall be LIT or L2KT
 - Control contraction joints, made with removable inserts or sawed, shall be spaced at:
27' for 27' panel lengths
40' for 20' panel lengths
 - Tractor semi-trailer, heavy commercial average daily traffic includes only traffic categories 3, 4 and 5 of traffic assignment.
 - The steel fabric and any supplemental bars shall be placed within the limits of 1-1/2" below the surface to one inch below mid-depth of planned T.
 - See typical sections and plan sheets for cross slopes.
 - When rigid pavement adjoins flexible pavement, bridge approaches, R. R. crossings or other types of free ends the following modifications shall be made:
A. For non-reinforced concrete pavement the first or last ten joints shall have doweled contraction joints (skewed). Tie bars shall be spaced as shown, except the first and last tie bar of each panel shall be 10" from and parallel to the contraction joint.
B. For reinforced concrete pavement in the first or last nine panels at free ends, an additional tie bar shall be placed 9" from and parallel to the contraction joint at each end of the panel.
 - For pavement thickness of 10", fabric shall be type 612 x D5, 5 x D4 22' long.
 - 2' 6" for pavement thickness of 10".
 - Fabric Reinforcement will be measured for payment by area in sq. yds. of pavement constructed with reinforcement.

APPROVED Mar. 16, 1971
Road Design Standards Engineer
RESEARCH AND STANDARDS
DIVISION

CONCRETE PAVEMENT WITH SKEWED JOINTS
20 FT. AND 27 FT. PANELS

S.A.P. NO. 62-651-01 C.T.B.

CLEARING & GRUBBING					
STATION	LOCATION LT. RT.	TYPE	CLEAR	GRUB	
12+45	33'	12"MAPLE			
12+76	32'	14"MAPLE			
17+00	37'	36"ELM			
17+09	44'	36"ELM			
17+11	36'	4"MAPLE			
17+40	36'	10"POP.			
17+58	36'	10"THPOP	2		
17+74	37'	18"POP.			
17+74	39'	38"ELM			
18+04	37'	14"POP			
18+22	41'	36"ELM			
18+63	41'	STUMP			
20+20	39'	40"MAPLE			
21+06	39'	40"MAPLE			
26+50	39'	14"ELM			
27+13	39'	14"ELM			
27+53	40'	24"ELM			
27+93	39'	18"ELM			
28+74	38'	20"ELM			
28+78	40'	4"PIKE			
29+13	40'	24"ELM			
29+17	40'	4"PIKE			
29+33	40'	4"PIKE			
29+48	40'	11"PIKE			
29+52	40'	18"ELM			
29+35	34'	4"PIKE			
31+83	39'	24"ELM			
32+09	39'	36"ELM			
32+40	38'	STUMP			
32+70	38'	24"ELM			
33+07	38'	24"MAPLE			
33+35	38'	20"ELM			
33+65	38'	34"ELM			
33+94	38'	36"ELM			
34+22	38'	4"PIKE			
34+23	40'	6"PIKE			
34+28	36'	6"PIKE			
34+35	39'	8"PIKE			
34+44	37'	26"ELM			
34+65	37'	26"ELM			
34+76	40'	28"B.E.			
34+93	36'	24"ELM			
35+00	40'	30"B.E.			
35+15	40'	34"B.E.			
35+41	36'	20"ELM			
35+97	43'	10"PIKE			
36+06	36'	36"COTT.			
36+42	36'	36"ELM			
36+50	40'	36"ELM			
36+86	33'	STUMP			
37+10	34'	40"ELM			
37+32	34'	40"ELM			
37+39	40'	32"ELM			
37+68	40'	36"ELM			
37+75	34'	36"ELM			
37+97	40'	TRI 10"ELM	3		
37+97	33'	36"ELM			
38+16	41'	18"ELM			
38+41	33'	36"ELM			
38+65	34'	16"MAPLE			
38+68	40'	48"ELM			
38+87	30"	28"MAPLE			
39+07	30"	STUMP			
39+39	30"	18"ELM			
39+61	46'	26"ELM			
39+69	34'	14"ELM			
39+91	40'	18"ELM			
40+00	34'	30"ELM			
40+19	40'	14"ELM			
40+40	34'	14"ELM			
40+45	40'	12"ELM			

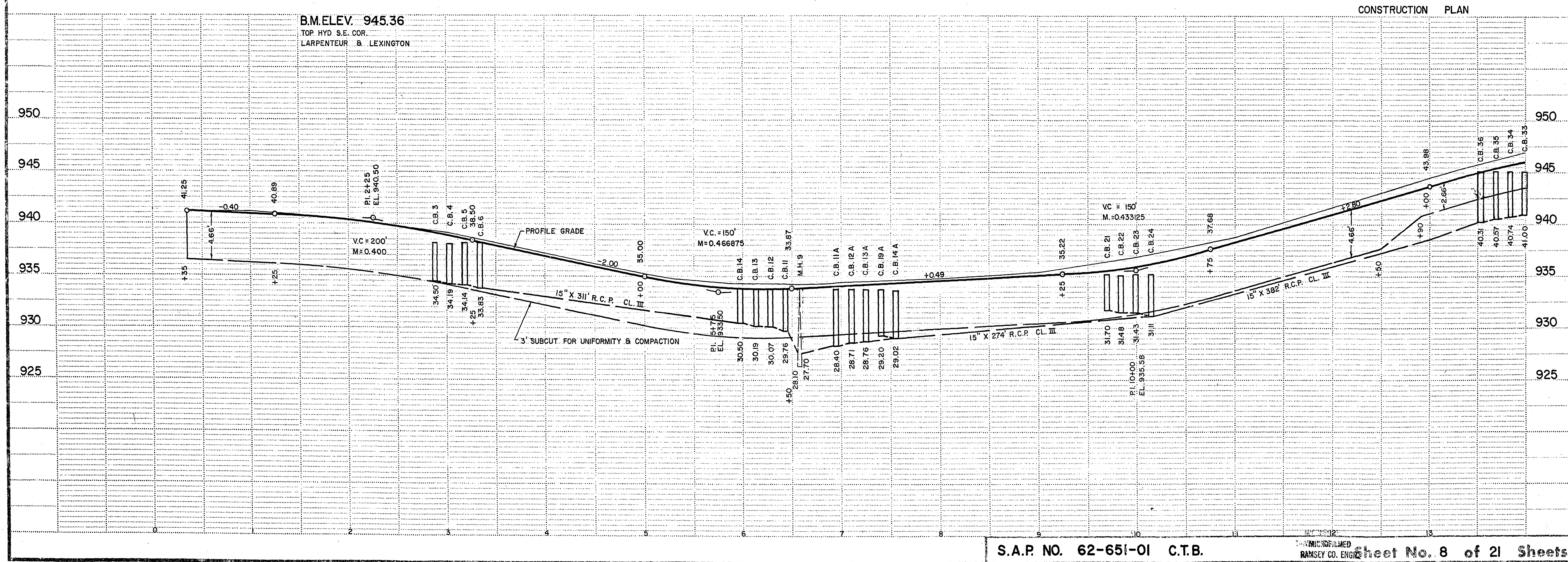
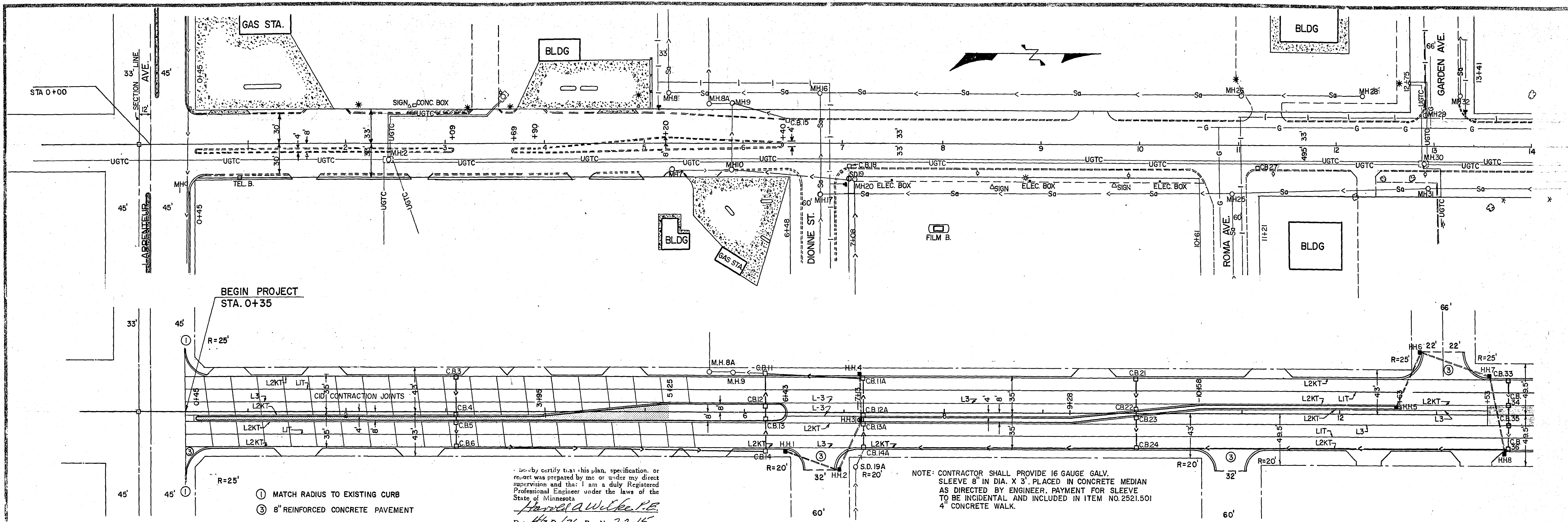
CLEARING & GRUBBING					
STATION	LOCATION LT. RT.	TYPE	CLEAR	GRUB	
40+70	40'	12"ELM			
40+79	34'	36"ELM			
41+01	40'	STUMP			
41+03	35'	8"PIKE			
41+31	40'	24"ELM			
42+00	34'	STUMP			
42+21	40'	20"ELM			
42+41	34'	STUMP			
42+50	36'	6"PIKE			
42+63	40'	26"ELM			
42+81	34'	18"ELM			
43+12	40'	24"MAPLE			
43+15	36'	24"ELM			
43+59	40'	20"ELM			
43+63	34'	26"ELM			
43+93	39'	26"ELM			
44+02	34'	36"ELM			
44+72	34'	30"ELM			
45+13	34'	30"ELM			
45+52	40'	6"PIKE			
45+52	34'	34"ELM			
45+92	34'	30"ELM			
46+34	34'	36"ELM			
46+58	34'	20"ELM			
46+71	34'	20"ELM			
46+77	35'	STUMP			
46+84	34'	18"ELM			
47+11	34'	18"ELM			
47+18	37'	24"ASH			
47+44	38'	22"ASH			
47+51	34'	36"ELM			
47+80	38'	10"PIKE			
47+91	34'	28"MAPLE			
48+31	34'	28"ELM			
48+52	34'	24"ELM			
52+15	46'	12"ELM			
56+48	38'	12"PIKE			
56+54	36'	8"PIKE			
56+60	36'	12"PIKE			
56+62	40'	12"PIKE			
56+91	38'	12"PIKE			
57+04	40'	18"APPLE			
57+34	40'	12"PIKE			
57+43	42'	12"OAK			
57+41	32'	36"THOAK	2		
57+46	40'	4"OAK			
57+71	32'	30"OAK			
58+20	32'	48"THCOTT	2		
59+12	33'	12"OAK			
59+38	36'	20"ELM			
59+79	33'	8"OAK			
59+89	29'	8"OAK			
60+03	40'	4"ELM			
60+04	41'	6"OAK			
60+09	29'	24"ELM			
60+32	33'	8"OAK			
60+49	40'	10"ELM			
60+54	41'	8"ELM			
60+72	32'	38"OAK			
61+18	37'	24"ELM			
61+37	36'	12"ELM			
62+02	38'	28"OAK			
62+37	42'	30"B.E.			
TOTALS			131	134	

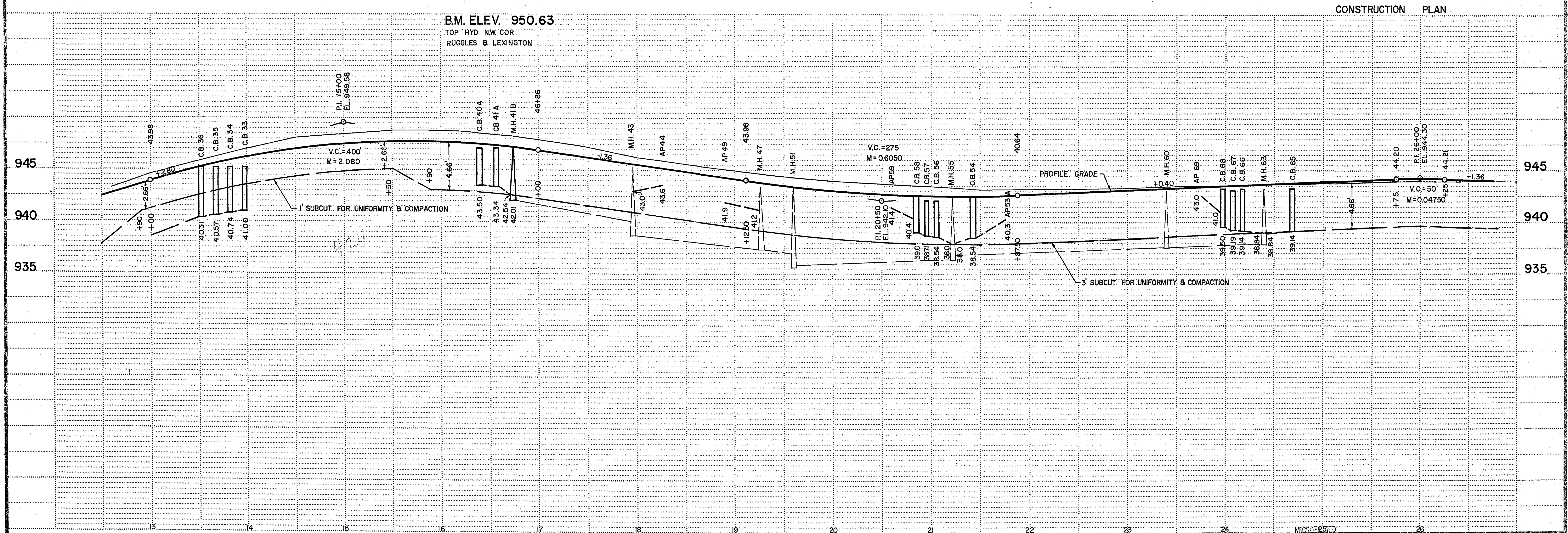
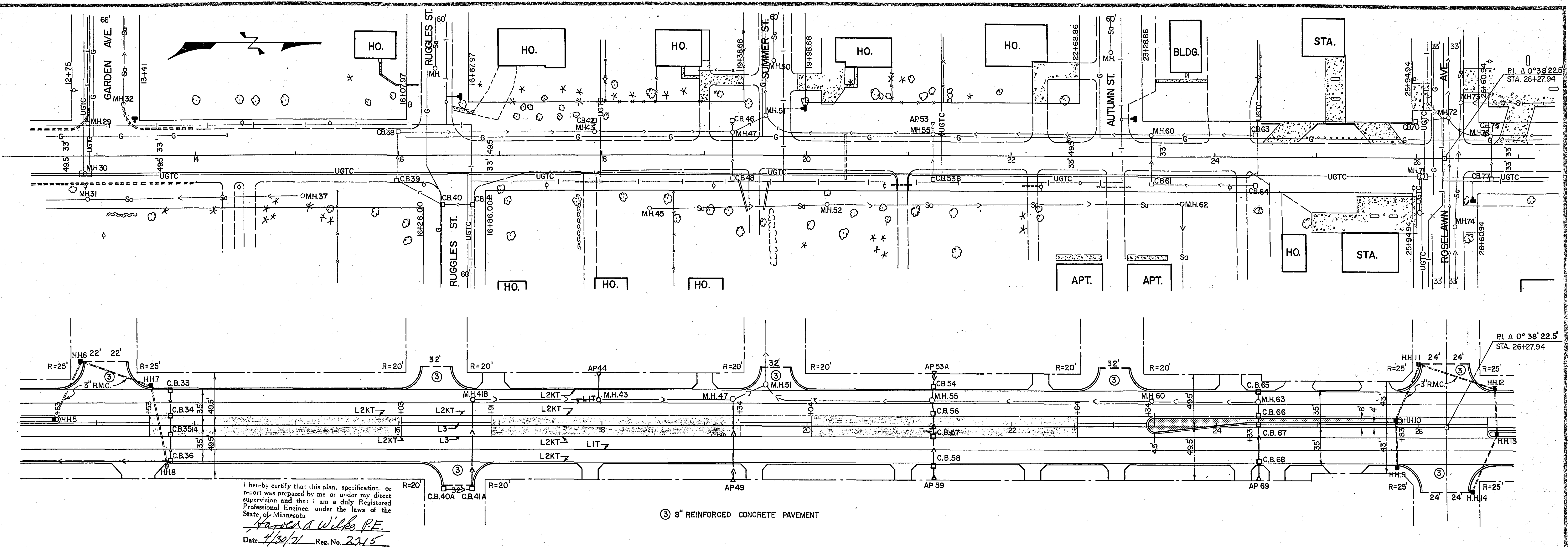
HYDRANT CHART			
REMOVE		INSTALL	
STATION	LOCATION	STATION	LOCATION
5+14	LT. 35'	5+14	LT. 48.5'
7+02	RT. 40'	7+02	RT. 55'
13+32	LT. 34'	13+39	LT. 50'
23+20	LT. 35'	23+28	LT. 50'
26+56	RT. 40'	26+60	RT. 50'
29+59	RT. 32'	29+59	RT. 48.5'
44+69	RT. 26'	44+69	RT. 48.5'
52+21	LT. 36'	52+11	LT. 48.5'

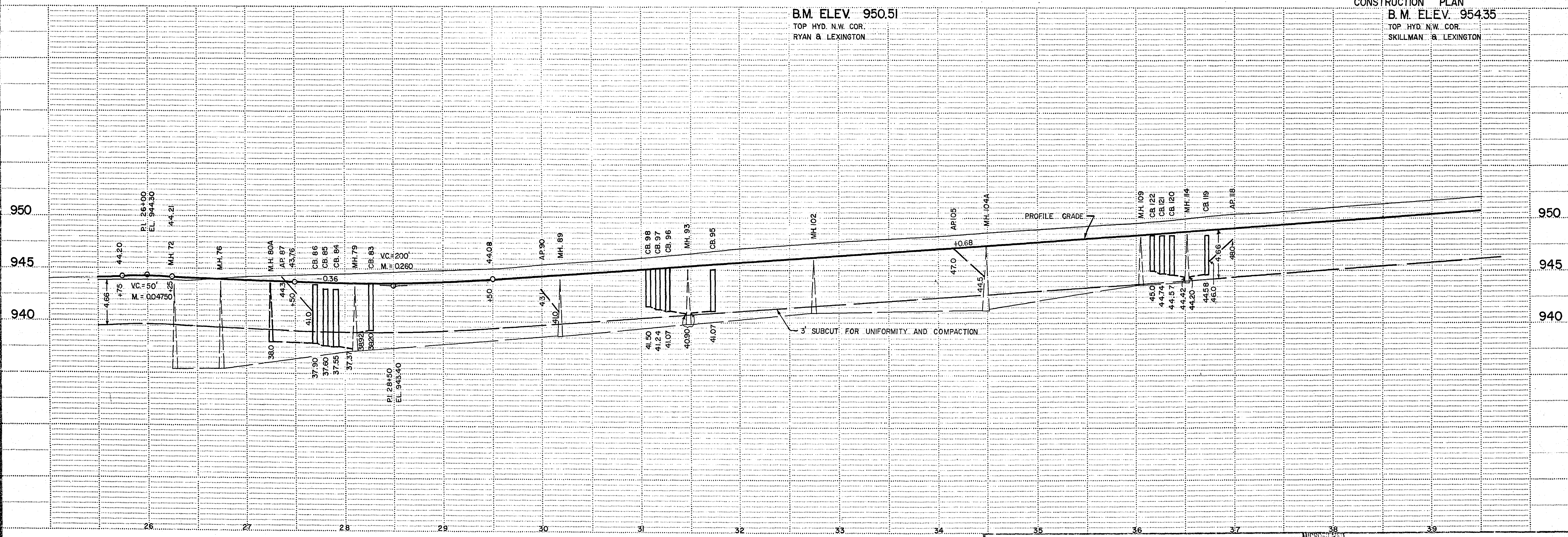
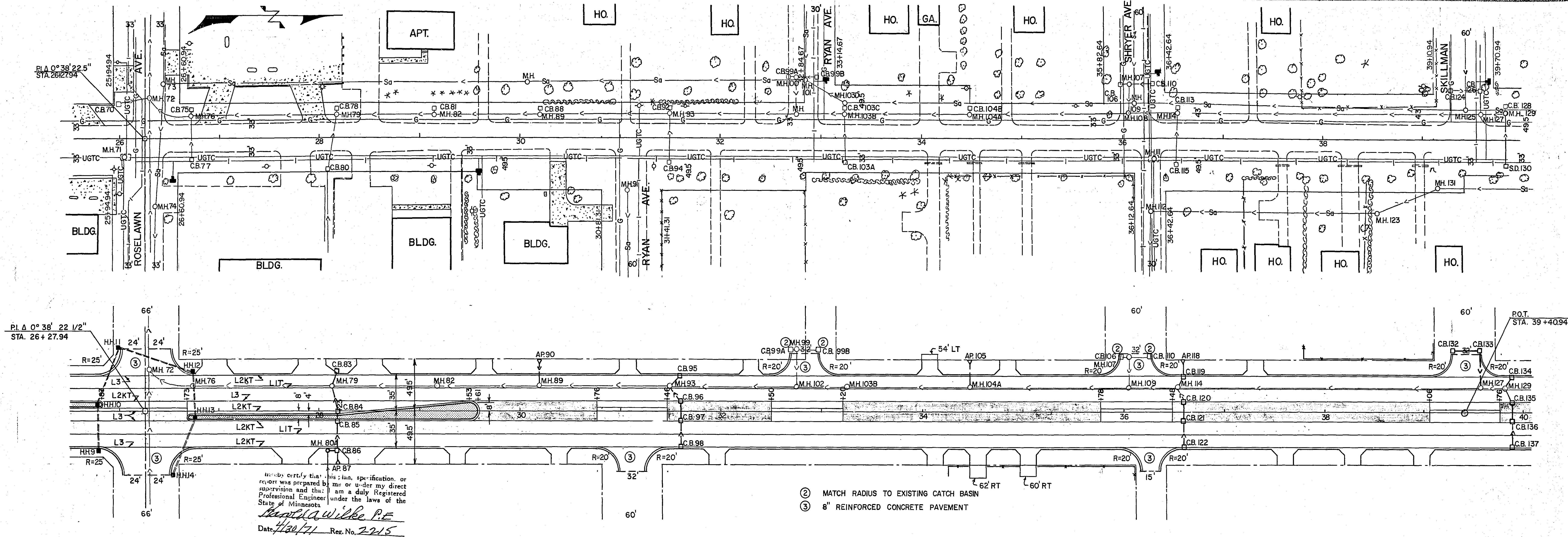
F. & I. HANDHOLE			
NO.	STATION	LOCATION	3" R.M.C. LIN. FT.
1	6+42	RT. 37'	57'
2	6+96	RT. 55'	53'
3	7+16	RT. 6'	43'
4	7+16	LT. 37'	
5	12+58	LT. 6'	60'
6	12+84	LT. 60'	74'
7	13+55	LT. 37'	75'
8	13+70	RT. 37'	
9	25+79	RT. 37'	43'
10	25+78	LT. 6'	59'
11	26+02	LT. 60'	78'
12	26+77	LT. 37'	43'
13	26+78	RT. 6'	59'
14	26+54	RT. 60'	

FENCE CHART						
FROM		TO		TYPE	REMOVE FENCE	INSTALL FENCE
STATION	LOCATION	STATION	LOCATION			F. & I. FENCE
34+25	RT. 33'	36+13	RT. 33'	WOOD2-RAIL	168'	
34+25	RT. 50.5'	36+13	RT. 50.5'	WOOD2-RAIL		168'
37+18	RT. 33'		RT. 50.5'	4'CHAINLINK	18'	
37+43	RT. 33'		RT. 50.5'	3'CHAINLINK	18'	
37+77	LT. 33'	39+11	LT. 33'	4'CHAINLINK	168'	
37+77	LT. 50.5'	39+11	LT. 50.5'	4'CHAINLINK		134'
46+28	LT. 33'	50+35	LT. 33'	5'CHAINLINK	425'	
46+28	LT. 50.5'	50+35	LT. 50.5'	5'CHAINLINK		407'
50+35	LT. 50.5'	51+96	LT. 50.5'	3'CHAINLINK		161'
51+96	LT. 33'	52+11	LT. 38'	3'CHAINLINK	28'	
51+21	RT. 33'		RT. 43'	3'CHAINLINK	10'	
58+36	RT. 33'	58+91	RT. 33'	WOOD2-RAIL	55'	
58+36	RT. 50.5'	58+91	RT. 50.5'	WOOD2-RAIL		55'
59+11	RT. 33'		RT. 50.5'	WOOD3-RAIL	18'	
51+96	LT. 50.5'	52+11	LT. 50.5'	3'CHAINLINK		15'
TOTALS					908'	779'

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Harold A. W. R.F.
 Date: 4/20/71 Rev. No. 2-15



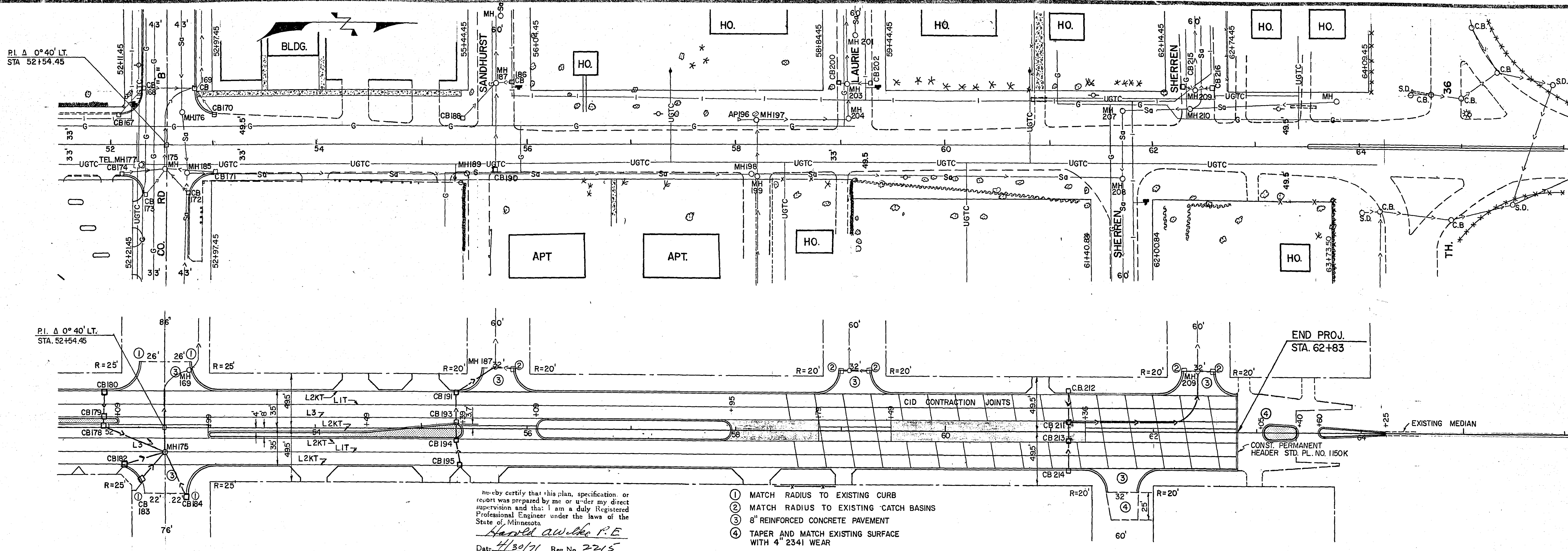




S.A.P. NO. 62-651-01 C.T.B.

Sheet No. 10 of 21 Sheets

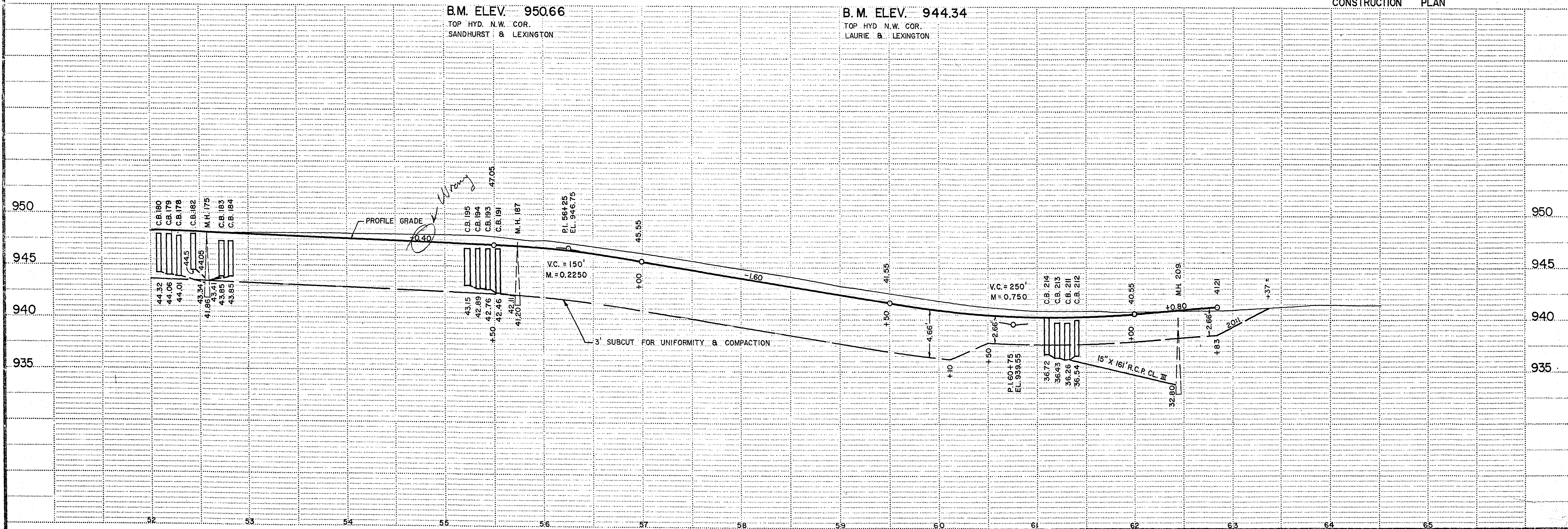
19-105



B.M. ELEV. 950.66
TOP HYD. N.W. COR.
SANDHURST & LEXINGTON

B.M. ELEV. 944.34
TOP HYD. N.W. COR.
LAURIE & LEXINGTON

CONSTRUCTION PLAN



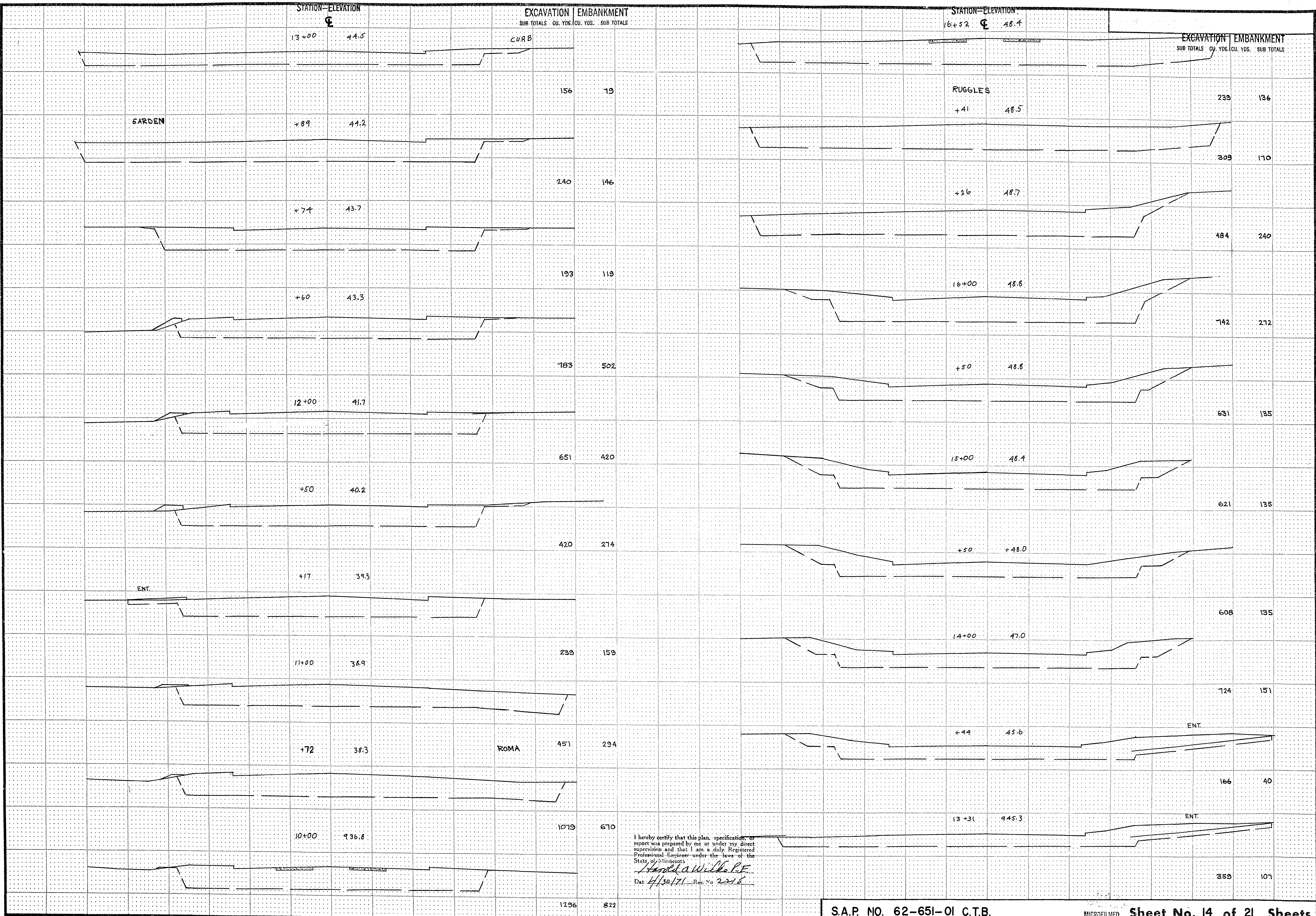
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RAMSEY CO. ENGR.

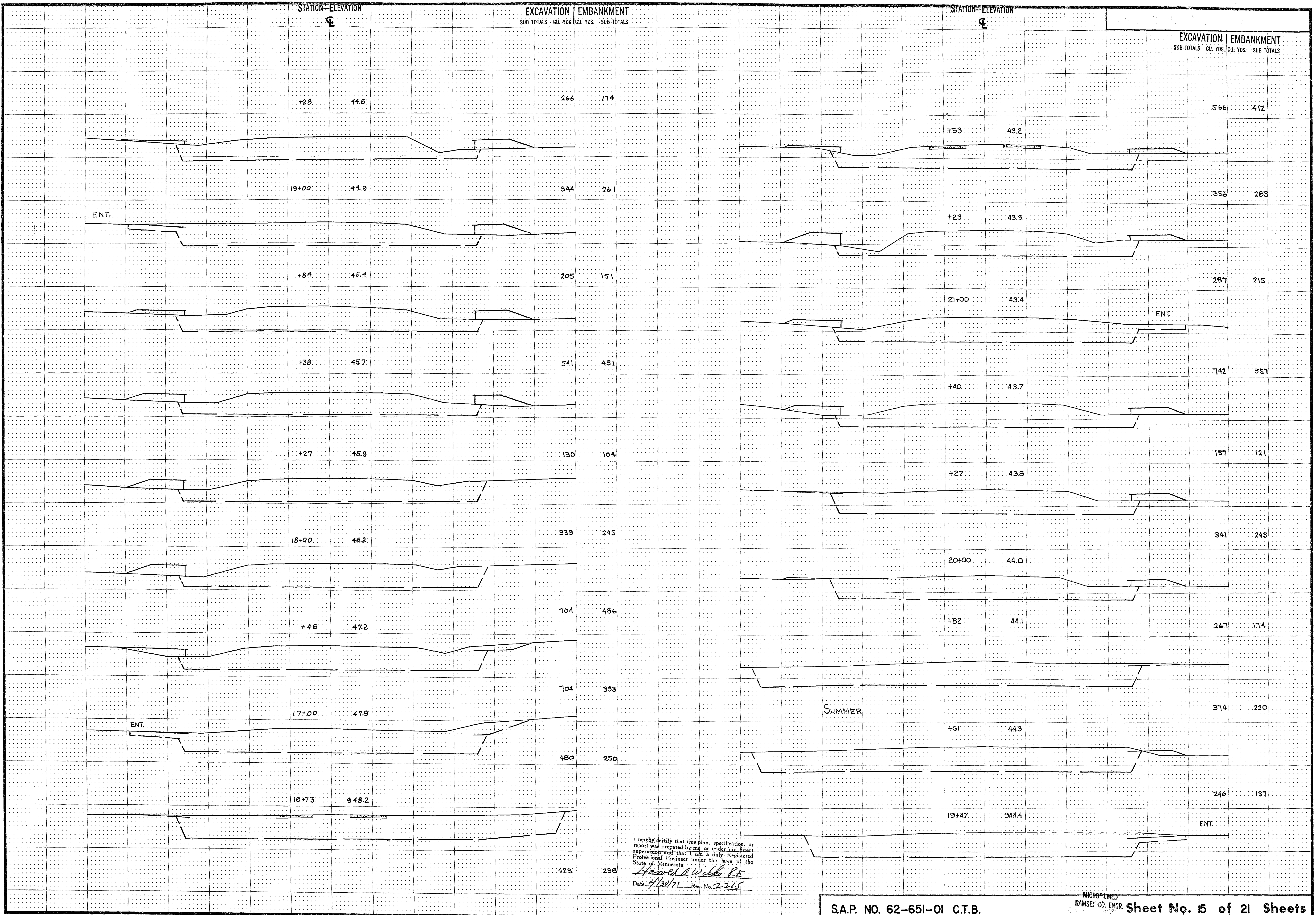
Sheet No. 12 of 21 Sheets

17-105 *

FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. RYDER CO. - MINNEAPOLIS, ST. PAUL



FUNCTIONAL CROSS SECTION - OPEN DOTTED
M. A. RAMSEY CO. - MINNEAPOLIS - ST. PAUL



19-105

FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. MINNEAPOLIS - ST. PAUL

STATION-ELEVATION
±

EXCAVATION EMBANKMENT
SUB TOTALS CU. YDS. CU. YDS. SUB TOTALS

STATION-ELEVATION
±

EXCAVATION EMBANKMENT
SUB TOTALS CU. YDS. CU. YDS. SUB TOTALS

±73 43.7

321 223

28+00 44.5

1314 819

±42 43.6

365 263

27+00 44.2

955 629

24+00 43.5

498 356

±42 43.9

ROSELAWN

214 189

±62 43.5

463 315

±28 43.9

275 189

±14 43.3

651 447

±14 43.9

136 95

AUTUMN

23+00 43.2

218 144

±07 43.9

122 87

ENT.

±84 43.3

248 166

26+00 43.9

481 341

±67 43.2

230 162

±65 43.9

305 205

ENT.

±21 43.2

ENT.

±40 43.8

482 327

22+00 43.2

280 175

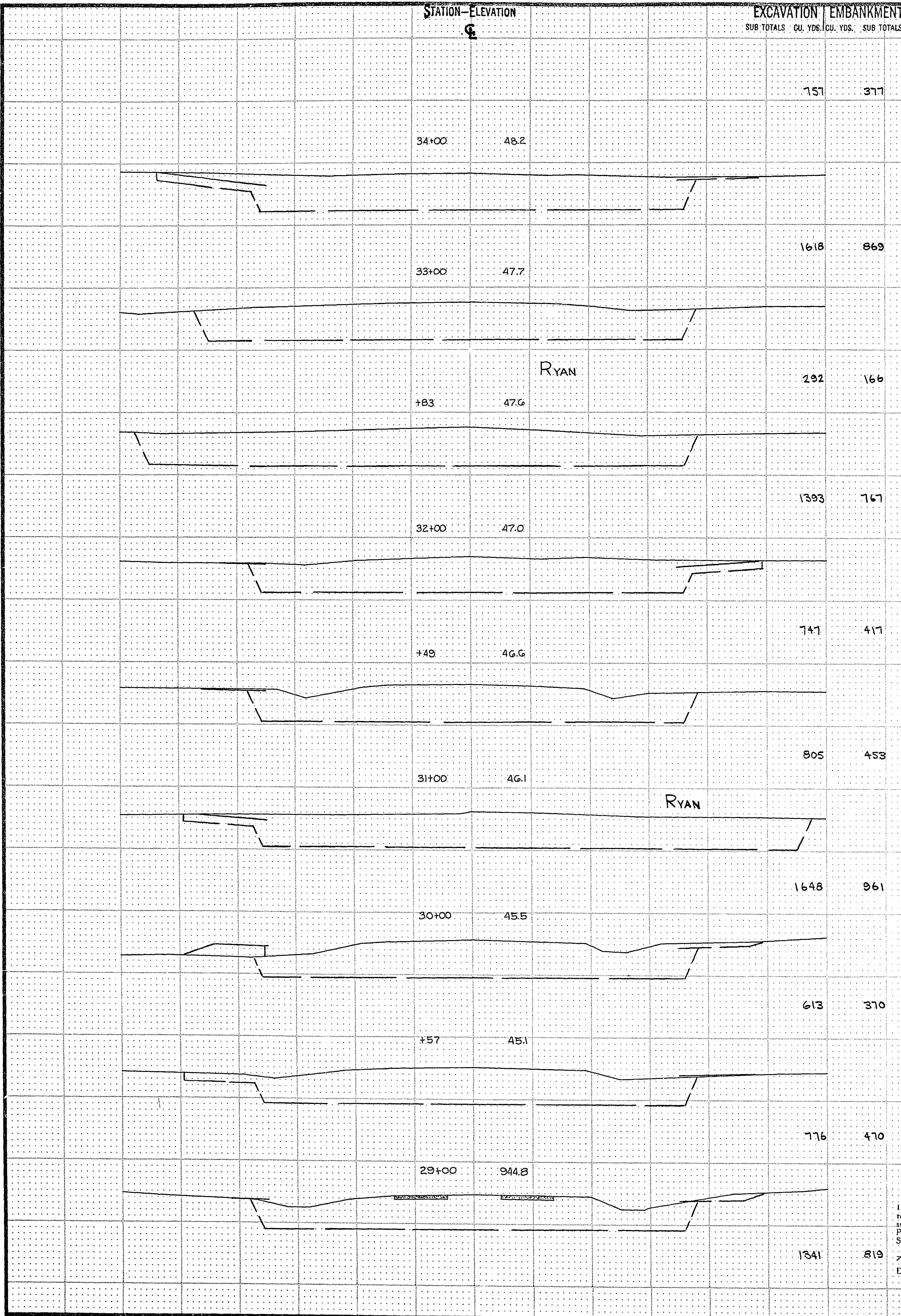
25+00 43.7

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Harold A. W. P.E.
Date *4/30/71* Reg. No. *2218*

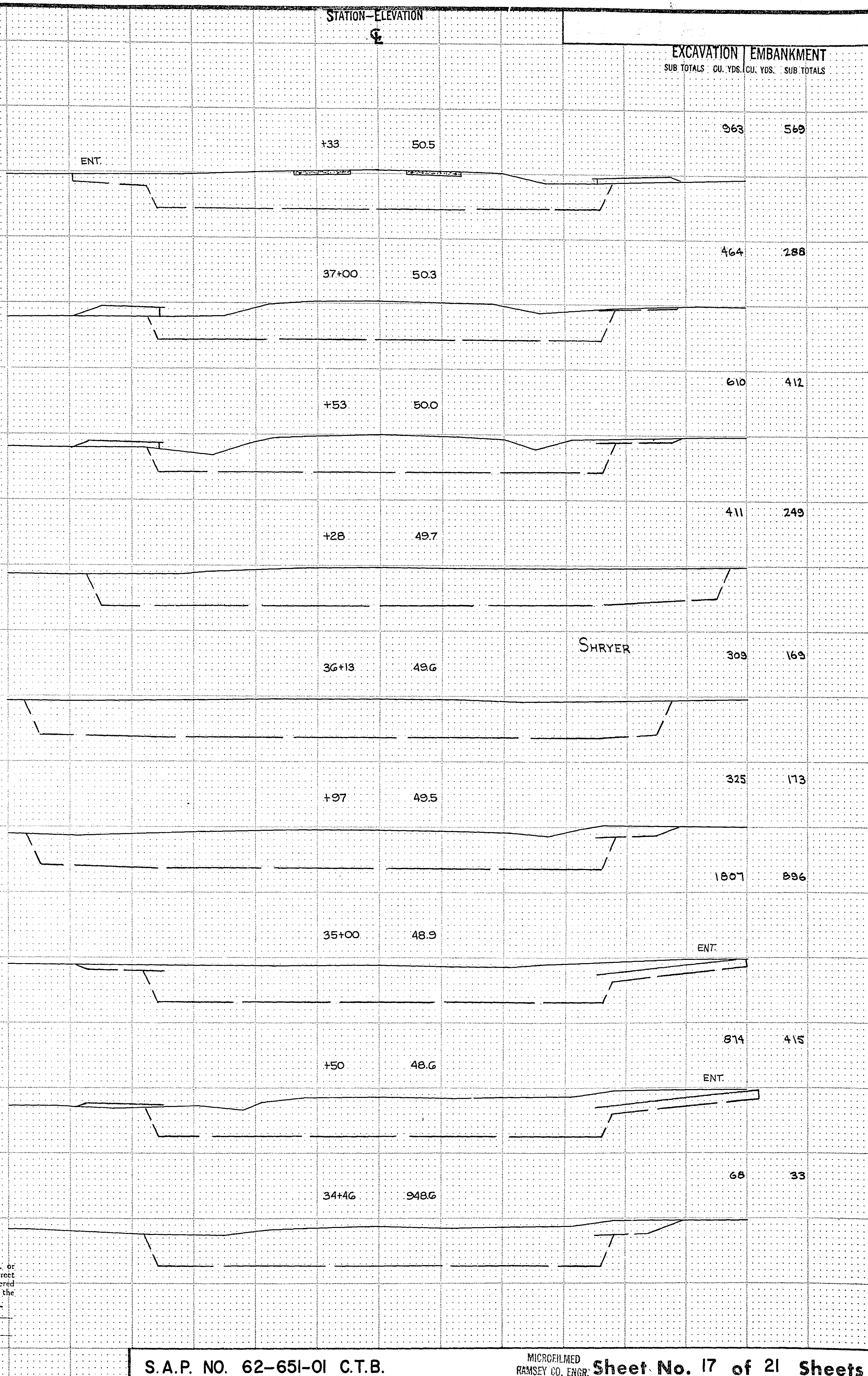
S.A.P. NO. 62-651-01 C.T.B.

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RAMSEY CO. ENGR. Sheet No. 16 of 21 Sheets

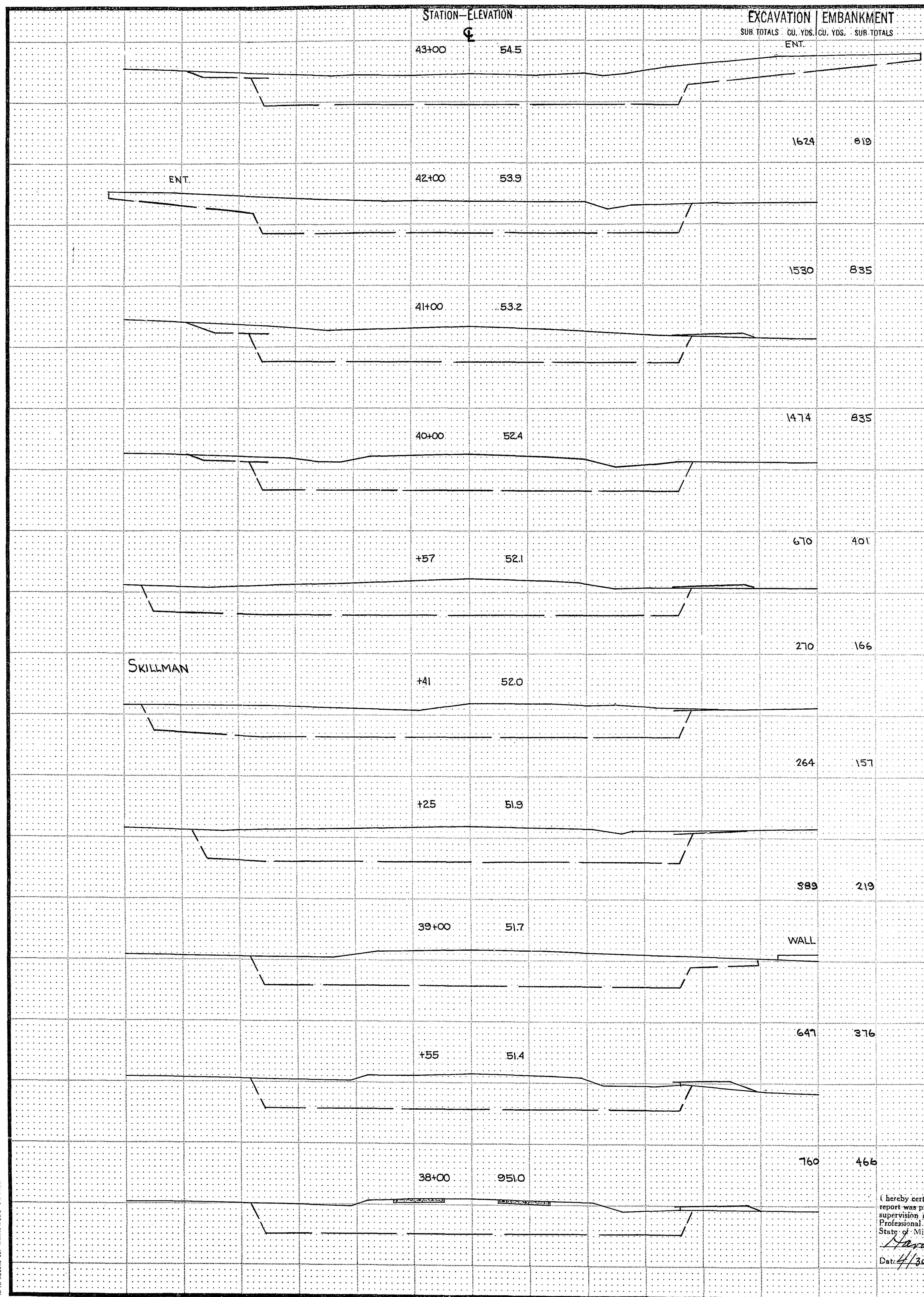
19-105



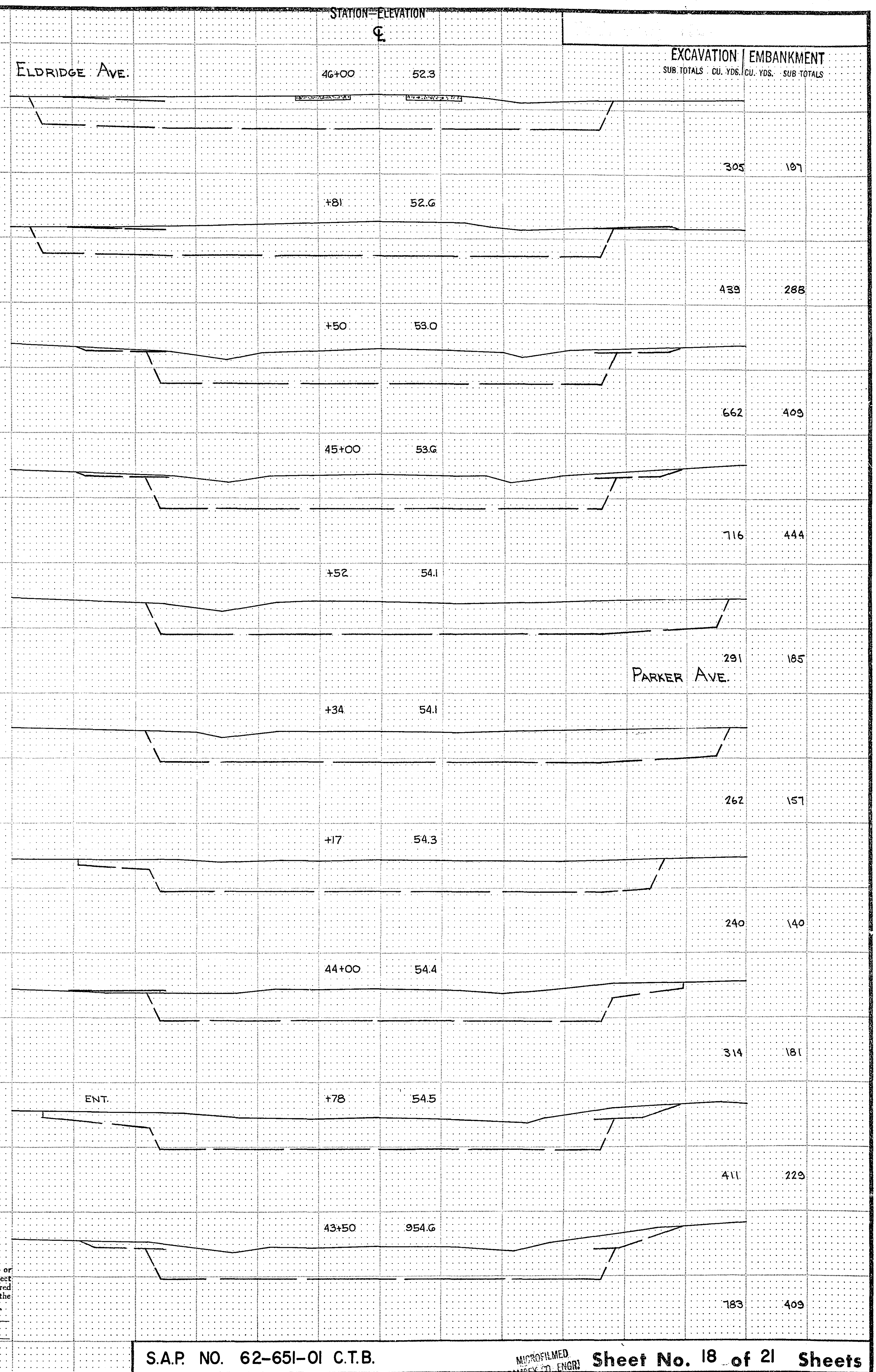
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Date 4/30/71 Reg. No. 2215
H. A. ROGERS P.E.



FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS, ST. PAUL



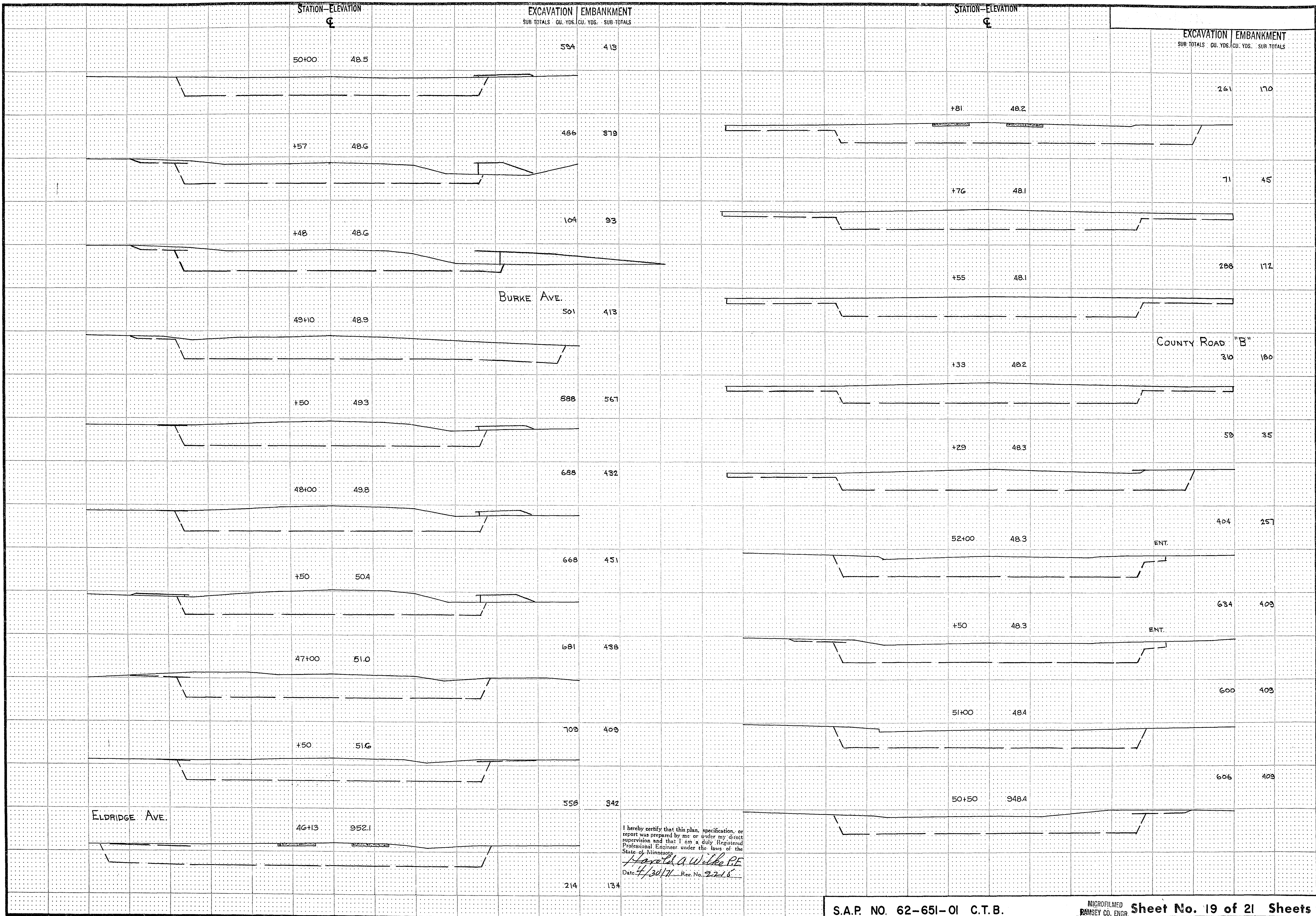
ELDRIDGE AVE.



I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Harold A. Wilke P.E.
Date 4/30/71 Reg. No. 2215

S.A.P. NO. 62-651-01 C.T.B.

FUNCTIONAL CROSS SECTION OPEN DOTTED
H. A. ROGERS CO. MINNEAPOLIS - ST. PAUL



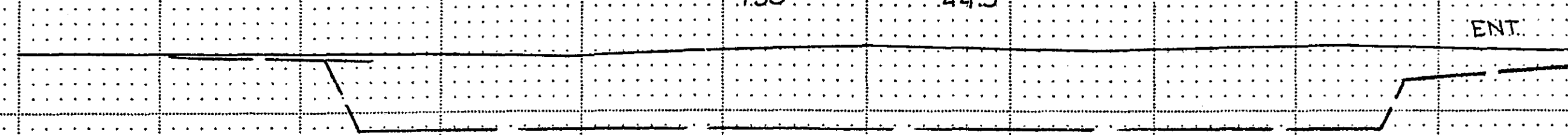
FUNCTIONAL CROSS SECTION - OPEN DOTTED
R. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

STATION-ELEVATION
±

EXCAVATION EMBANKMENT
SUB TOTALS CU. YDS. CU. YDS. SUB TOTALS

STATION-ELEVATION
±

EXCAVATION EMBANKMENT
SUB TOTALS CU. YDS. CU. YDS. SUB TOTALS



±30 44.3

ENT.

44 25

424 246

58+00 44.8

57+00 46.3

1370 822

56+00 47.5

1406 833

±89 47.5

170 103

SANDHURST

±71 47.6

309 185

±58 47.8

230 134

ENT.

55+00 48.0

947 536

ENT.

ENT.

54+00 48.1

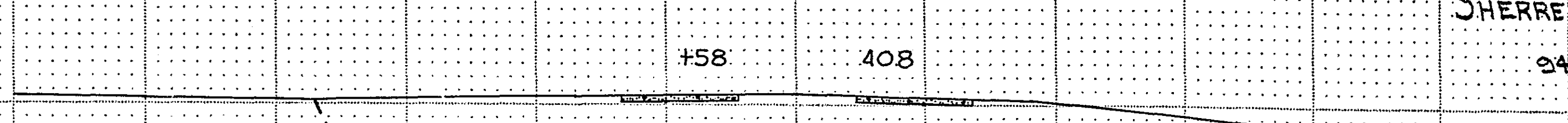
1489 819

ENT.

53+00 948.1

1361 819

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Handwritten signature: David A. Wilk, P.E.
Date: 4/30/71 - Rec. No. 2218



±58 40.8

±48 40.8

61+00 40.8

±84 40.9

60+00 41.7

±30 42.8

±16 43.0

59+00 43.2

58+33 944.3

LAURIE

SHERREN

24 41

76 51

351 259

124 66

811 571

1006 725

228 159

268 173

1062 619

S A P NO. 62-651-01 C.T.B.

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RAMSEY CO. ENGR.

Sheet No. 20 of 21 Sheets

19-105

FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS, ST. PAUL

