Rev. 2-28-77 RWB Revised 1-19-77

STATEMENT OF ESTIMATED QUANITITIES S.A.P. 62-615-04

ITEM NO	EST. ITEM	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	ENGINEER'S ESTIMATE AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	40,400 00	40,400 00
2101.502	CLEARING	TREE	162	100 00	16,200 00
2101.507	GRUBBING	TREE	152	50 00	7,600 00
2104.501	REMOVE FENCE	L.F.	973	0 80	778 40
2104.501	REMOVE SEWER PIPE	L.F.	188	3 50	658 00
2104.501	REMOVE CULVERT PIPE	L.F.	592	2 00	1,184 00
2104.501	REMOVE MASONARY WALL	L.F.	163	2 60	423 80
2104.503	REMOVE SIDEWALK	S.F.	210	0 75	157 50
2104.505	REMOVE CONCRETE PAVEMENT	S.Y.	16,131	1 30	20,970 30
2104.509	REMOVE MANHOLES	EACH	1	65 00	65 00
2104.509	REMOVE CATCH BASINS	EACH	7	65 00	455 00
2104.521	SALVAGE TRAFFIC BARRIER	L.F.	552	1 50	828 00
2104.521	SALVAGE SEWER PIPE	L.F.	1,357	4 50	6,106 50
105.601	SALVAGE COMMON EXCAVATION (EV)	C.Y.	23,441	0 25	5,860 25
2105.501	COMMON EXCAVATION	C.Y.	110,114	0 85	93,596 90
2130.501	WATER	(M)GAL.	150	6 50	975 00
2211.501	AGGREGATE BASE, CLASS 5M	TON	4,578	3 85	17,625 30
2211.501	AGGREGATE BASE, CLASS 6	TON	16,599	3 25	53,946 75
2211.501	AGGREGATE BASE, CLASS 4	TON	40,966	2 75	112,656 50
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	904	68 00	61,472 00
2331.510	BINDER COURSE MIXTURE	TON	4,587	6 50	29,815 50
2331.514	BASE COURSE MIXTURE	TON	15,005	6 25	93,781 25
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	18	68 00	1,224 00
2341.508	WEARING COURSE MIXTURE	TON	300	7 50	2,250 00
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	5,085	0 58	2,949 30
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	15,164	0 58	- 8,795 12
2361.504	ASPHALT CEMENT	TON	137	68 00	9,316 00
2361.508	WEARING COURSE MIXTURE	TON	2,210	7 80	17,238 00
2451.509	AGGREGATE BEDDING (LV)	C.Y.	300	4 00	1,200 00
2501.511	15" C. S. PIPE CULVERT, 16 GAUGE	L.F.	44	9 00	396 00
2501.515	15" C. S. PIPE APRONS	EACH	4	85 00	340 00
2501.515	15" R. C. PIPE APRONS	EACH	8	100 00	800 00
2501.515	18" R. C. PIPE APRONS	EACH	3	133 00	399 00
2501.515	24" R.C. PIPE APRONS	EACH	2	160 00	- 320 00
2501.515	30" R. C. PIPE APRONS	EACH	2	205 00	410 00
2503.511	15" R. C. PIPE SEWER, CLASS IV	L.F.	3,697	10 50	38,818 50
2503.511	18" R. C. PIPE SEWER, CLASS III	L.F.	1,720	12 25	21,070 00
2503.511	21" R. C. PIPE SEWER, CLASS III	L.F.	698	13 90	9,702 20
2503.511	24" R. C. PIPE SEWER, CLASS III	L.F.	355	15 50	5,502 50
2503.511	27" R. C. PIPE SEWER, CLASS III	L.F.	1,245	17 60	21,912 00
* 2503.511	27" R. C. PIPE SEWER, CLASS V	L.F.	86	80 00	6,880 00
2503.511	30" R. C. PIPE SEWER, CLASS III	L.F.	1,133	18 00	20,394 00
2506.508	CONSTRUCT MANHOLES, DESIGN A OR F	EACH	30	600 00	18,000 00
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P.4	EACH	46	550 00	25,300 00
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.2	EACH	3	500 00	1,500 00
2506.511	RECONSTRUCT MANHOLES	L.F.	41.3	55 00	2,271 50
2506.521	INSTALL CASTINGS	EACH	6	90 00	420 00
2506.522	ADJUST FRAME & RING CASTING	EACH	17	65 00	1105 00
2511.503	GROUTED RIPRAP, CLASS A	C.Y.	26	30 00	780 00
2506.504	FILTER BLANKET, TYPE I	C.Y.	9	15 00	135 00
2521.501	4" CONCRETE WALK	S.F.	1,160	1 25	1,450 00
2531.501	CONCRETE CURB & GUTTER, DESIGN B618	L.F.	16,524	2 75	45,441 00
2531.503	CONCRETE MEDIAN	S.Y.	215	16 50	3,547 50
2531.507	7" CONCRETE DRIVEWAY PAVEMENT	S.Y.	55	9 00	495 00
2535.501	BITUMINOUS CURB	L.F.	671	1 25	838 75
2554.511	INSTALL TRAFFIC BARRIER, DESIGN B	L.F.	552	5 50	3,036 00
2554.521	ANCHORAGE ASSEMBLIES	EACH	4	210 00	840 00
2557.501	WIRE FENCE, DESIGN WOOVEN WIRE	L.F.	350	5 60	1,960 00
2571.501	FURNISH & PLANT EVERGREEN TREES (BLACK HILL SPRUCE, 8'-10' HIGH)	TREE	15	225 00	3,375 00
2571.501	FURNISH & PLANT EVERGREEN TREES (COLORADO BLUE SPRUCE, 8'-10' HIGH	TREE	6	225 00	1,350 00
2571.501	FURNISH & PLANT EVERGREEN TREES (COLORADO BLUE SPRUCE, 5'-6' HIGH)	TREE	8	150 00	1,200 00
2571.502	FURNISH & PLANT SHADE TREES (CRIMSON KING MAPLE, 1 1/2"-2" DIA.)	TREE	1	250 00	250 00
2571.502	FURNISH & PLANT SHADE TREES (SUNBURST LOCUST, 1 1/2"-2" DIA.)	TREE	1	250 00	250 00
2571.541	TRANSPLANT TREE (PINES, 1/2"-2" DIA.)	TREE	24	40 00	960 00
2571.541	TRANSPLANT TREE (PINES, 2"-4" DIA.)	TREE	62	50 00	3,100 00
2575.501	ROADSIDE SEEDING	ACRE	1	150 00	150 00
2575.502	SEED, MIXTURE 6	POUND	75	0 85	63 75
2575.505	SODDING	S.Y.	26,178	0 80	20,942 40
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	2.3	225 00	517 50
2575.551	TOPSOIL BORROW	C.Y.	2,618	4 25	11,126 50
411.609	FLAGSTONE RETAINING WALL	S.F.	1,158	5 00	5790 00
504.679	ADJUST VALVE BOX	EACH	15	65 00	975 00
545.602	RELOCATE ELECTRICAL SIGN	UNIT	1	800 00	800 00
545.602	RELOCATE ELECTRICAL LIGTHT	UNIT	2	700 00	1,400 00
	ALTERNATE "A" (ADD or DEDUCT)	**LUMP SUM**	**1**	TOTAL:	894,842 47

MICROFILMED RAMSEY CO. DEPT.

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	UNIT PRICE	VICTORIA ST. 62-652-02 QUANTITY	VICTORIA ST. 62-652-02 AMOUNT	LEXINGTON AVE. 62-651-05 QUANTITY	LEXINGTON AVE. 62-651-05 AMOUNT
2021.501	MOBILIZATION	LUMP SUM	12,000 00	.33	4,000 00	.67	8,000 00
2101.502	CLEARING	TREE	150 00	4	600 00	1	150 00
2101.507	GRUBBING	TREE	100 00	3	300 00	1	100 00
2104.501	REMOVE CONCRETE CURB	L.F.	2 00	30	60 00		
2104.501	REMOVE SEWER PIPE	L.F.	3 50			90	315 00
2104.501	REMOVE CULVERT PIPE	L.F.	2 00	293	586 00	47	94 00
2104.523	SALVAGE HYDRANT	EACH	300 00	1	300 00		
105.601	SALVAGE COMMON EXCAVATION (E.V.)	C.Y.	1 25	3558	4447 50		
2105.501	COMMON EXCAVATION (E.V.)	C.Y.	1 25	4211	5263 75	9677	12,096 25
2105.523	COMMON BORROW (L.V.) FROM STOCKPILE AT SITE	C.Y.	1 25			5871	7338 75
2130.501	WATER	(M) GAL.	6 50	25	162 00	35	227 50
2211.501	AGGREGATE BASE, CLASS "5M"	TON	3 85	1899	7311 15	3711	14,286 35
2211.501	AGGREGATE BASE, CLASS "4"	TON	2 75	4671	12,845 25	9355	25,726 25
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	80 00	40	3,200 00	76	6080 00
2331.514	BASE COURSE MIXTURE	TON	6 50	832	5408 00	1528	9932 00
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	80 00	60	4800 00	125	10,000 00
2341.508	WEARING COURSE MIXTURE	TON	7 50	604	4530 00	1074	8055 00
2341.510	BINDER COURSE MIXTURE	TON	7 00	604	4228 00	1074	7518 00
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	0 60	480	288 00	882	529 00
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	0 60	1593	955 80	3190	1914 00
2501.511	18" C.S. PIPE CULVERT, 16 GAUGE	L.F.	10 00	80	800 00		
2501.515	15" R.C. PIPE APRONS	EACH	100 00	2	200 00	3	300 00
2501.515	18" R.C. PIPE APRONS	EACH	133 00	1	133 00		
2503.511	36" R.C. PIPE SEWER, CL. II	L.F	19 00			242	4598 00
2501.515	27" R.C. PIPE APRONS	EACH	184 00			1	184 00
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F.	10 50	288	3024 00	209	2194 50
2503.511	18" R.C. PIPE SEWER, CL. II	L.F.	12 25	392	4802 00		
2503.511	27" R.C. PIPE SEWER, CL. II	L.F.	17 60			415	7304 00
2503.511	30" R.C. PIPE SEWER, CL. II	L.F.	18 00	16	288 00	400	7200 00
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EACH	650 00			3	1950 00
2506.509	CONSTRUCT CATCH BASIN, DESIGN L.P.-4	EACH	600 00	6	3600 00	6	3600 00
2506.509	CONSTRUCT CATCH BASIN, DESIGN R.C.-2	EACH	550 00	1	550 00		
2506.511	RECONSTRUCT MANHOLE	L.F.	60 00			6.0	360 00
2506.521	INSTALL CASTING	EACH	45 00			1	45 00
2506.522	ADJUST FRAME AND RING CASTING	EACH	65 00	2	130 00	7	455 00
2506.508	CONSTRUCT CATCH BASINS, DESIGN A OR F	EACH	650 00	1	650 00		
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	3 50	981	3433 50	2497	8739 50
2531.503	CONCRETE MEDIAN	S.Y.	16 50			564	9306 00
2535.501	BITUMINOUS CURB	L.F.	1 25	220	275 00	327	408 75
2575.505	SODDING	S.Y.	0 80	2815	2252 00	6132	4905 60
2575.531	COMMERICAL FERTILIZER ANALYSIS 12-12-12	TON	350 00	0.20	70 00	0.40	140 00
2575.551	TOPSOIL BORROW	C.Y.	4 50	235	1057 50	511	2299 50
504.666	INSTALL HYDRANT	EACH	300 00	1	300 00		
504.679	ADJUST VALVE BOX	BOX	55 00	4	220 00	4	220 00
565.610	REVISE SIGNAL SYSTEM	SYSTEM	3000 00			1	3000 00
					81,070 45		169,571 95
	NON-PARTICATING FOR WALK & BIKEWAY						
2211.501	AGGREGATE BASE CLASS "4"	TON	3 00	160	480 00	240	720 00
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	80 00	5	400 00	7	560 00
2341.508	WEARING COURSE MIXTURE	TON	8 00	84	672 00	127	1016 00
					1552 00		2296 00
	GRAND TOTAL				$ 82,622.45		$171,867.95

REVISED	DATE	
BRP	6-30-76	DESIGNED BY
		DRAWN BY
		CHECKED BY

MICROFILMED
RAMSEY CO. SURV.

BID TABULATIONS TAKEN Sept 7th 1977 — Victoria & Lexington & the Soo Line RR Crossing (62-652-02) & (62-551-05)

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	VICTORIA ST. & SOO LINE 62-652-02 ESTIMATED QUANTITIES	LEXINGTON AVE. & SOO LINE 62-651-05 ESTIMATED QUANTITIES	TOTAL ESTIMATED QUANTITIES	AVERAGE 3 LOW BIDDERS	SHAFER Unit Price	SHAFER Amount	ARCON Unit Price	ARCON Amount	Mc CROSSAN Unit Price	Mc CROSSAN Amount	C.W HOULE Unit Price	C.W HOULE Amount	R.W. MOORE Unit Price	R.W. MOORE Amount	ALEXANDER Unit Price	ALEXANDER Amount
2021.501	MOBILIZATION	LUMP SUM	0.33	0.67	1.0	7733.33	25000.00	25000.00	50000.00	50000.00	15700.00	15,700.00	14000.00	14,000.00	15000.00	15,000.00	3,000.00	3,000.00
2101.502	CLEARING	TREE	4	1	5	91.00	75.00	375.00	60.00	300.00	138.00	690.00	90.00	450.00	100.00	500.00	110.00	550.00
2101.507	GRUBBING	TREE	3	1	4	54.33	75.00	300.00	60.00	240.00	28.00	112.00	50.00	200.00	50.00	200.00	30.00	120.00
2104.501	REMOVE CONCRETE CURB	L.F.	30		30	1.75	2.00	60.00	2.25	67.50	1.00	30.00	1.20	36.00	2.00	60.00	2.50	75.00
2104.501	REMOVE SEWER PIPE	L.F.		90	90	5.67	5.00	450.00	6.00	540.00	6.00	540.00	5.00	450.00	2.00	180.00	10.80	972.00
2104.501	REMOVE CULVERT PIPE	L.F.	~~293~~ 303	47	350	4.00	3.00	1,050.00	4.00	1400.00	5.00	1,750.00	4.00	1400.00	2.00	700.00	10.80	3,780.00
2104.523	SALVAGE HYDRANT	EACH	1		1	250.00	250.00	250.00	200.00	200.00	300.00	300.00	350.00	350.00	200.00	200.00	350.00	350.00
105.601	SALVAGE COMMON EXCAVATION (E.V.)	C.Y.	3,558		3,558	1.42	1.75	6226.50	1.26	4483.08	1.25	4,447.50	2.30	8,183.40	2.40	8,539.20	2.50	8,895.00
2105.501	COMMON EXCAVATION (E.V.)	C.Y.	4,211	9,677	13,888	1.36	1.75	24,304.00	1.51	20,970.88	.83	11,527.04	1.90	26,387.20	1.60	22,220.80	3.00	41,664.00
2105.523	COMMON BORROW (L.V.) FROM STOCKPILE AT SITE	C.Y.		5,871	5,871	.98	1.25	7,338.75	.70	4,109.70	1.00	5,871.00	1.90	11,154.90	1.40	8,219.40	1.75	10,274.25
2130.501	WATER	(M) GAL.	25	35	60	9.67	8.00	480.00	6.00	360.00	15.00	900.00	7.00	420.00	10.00	600.00	7.00	420.00
2211.501	AGGREGATE BASE, CLASS "5M"	TON	1,899	3,711	5,610	4.39	4.20	23,562.00	4.49	25,188.90	4.47	25,076.70	4.00	22,440.00	4.40	24,684.00	4.50	25,245.00
2211.501	AGGREGATE BASE, CLASS "4"	TON	4,671	9,355	14,026	2.81	2.40	33,662.40	3.07	43,059.82	2.95	41,376.70	2.70	37,870.20	2.60	36,467.60	3.32	46,566.32
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	40	76	116	74.50	73.50	8,526.00	75.00	8,700.00	75.00	8,700.00	77.96	9,043.36	75.00	8,700.00	72.00	8,352.00
2331.514	BASE COURSE MIXTURE	TON	832	1,528	2,360	7.96	8.05	18,998.00	7.45	17,582.00	7.75	18,290.00	7.09	16,734.40	7.45	17,582.00	7.99	18,856.40
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	60	125	185	74.50	73.50	13,597.50	75.00	13,875.00	75.00	13,875.00	77.96	14,422.60	75.00	13,875.00	72.00	13,320.00
2341.508	WEARING COURSE MIXTURE	TON	604	1074	1,678	8.33	8.85	14,850.30	7.95	13,340.10	8.20	13,759.60	8.47	14,212.66	7.95	13,340.10	8.40	14,095.20
2341.510	BINDER COURSE MIXTURE	TON	604	1,074	1,678	8.03	8.40	14,095.20	7.55	12,668.90	8.15	13,675.70	8.47	14,212.66	7.55	12,668.90	8.25	13,843.50
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	480	882	1,362	.61	.55	749.10	.52	708.24	.75	1,021.50	.65	885.30	.60	817.20	.75	1,021.50
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	1,593	3,190	4,783	.49	.45	2,152.35	.47	2248.01	.40	1,913.20	.11	526.13	.50	2,391.50	.75	3,587.25
2501.511	18" C.S. PIPE CULVERT, 16 GAUGE	L.F.	80		80	16.70	15.00	1,200.00	17.10	1368.00	18.00	1,440.00	13.50	1,080.00	15.00	1,200.00	13.00	1,040.00
2501.515	15" R.C. PIPE APRONS	EACH	2	3	5	181.67	150.00	750.00	195.00	975.00	200.00	1,000.00	200.00	1,000.00	160.00	800.00	324.00	1,620.00
2501.515	18" R.C. PIPE APRONS	EACH	1		1	206.67	200.00	200.00	205.00	205.00	215.00	215.00	220.00	220.00	180.00	180.00	378.00	378.00
2503.511	36" R.C. PIPE SEWER, CL. II	L.F.		242	242	29.37	30.00	7260.00	28.70	6945.40	30.00	7,260.00	29.00	7,018.00	29.40	7,114.80	37.80	9,147.60
2501.515	27" R.C. PIPE APRONS	EACH		1	1	238.33	225.00	225.00	240.00	240.00	250.00	250.00	250.00	250.00	220.00	220.00	432.00	432.00
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F.	288	~~289~~ 289	577	19.30	15.00	8655.00	26.90	15,521.30	16.00	9,232.00	12.50	7,212.50	15.00	8,655.00	16.20	9,347.40
2503.511	18" R.C. PIPE SEWER, CL. II	L.F.	392		392	19.10	17.00	6,664.00	22.30	8,741.60	18.00	7,056.00	13.50	5,292.00	17.40	6,820.80	17.28	6,773.76
2503.511	27" R.C. PIPE SEWER, CL. II	L.F.		415	415	25.93	28.00	11,620.00	25.80	10,707.00	24.00	9,960.00	19.50	8,092.50	22.10	9,171.50	23.76	9,860.40
2503.511	30" R.C. PIPE SEWER, CL. II	L.F.	16	400	416	25.07	25.00	10,400.00	23.20	9,651.20	27.00	11,232.00	21.00	8,736.00	24.80	10,316.80	32.40	13,478.40
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EACH		3	3	858.33	1,100.00	3,300.00	725.00	2,175.00	750.00	2,250.00	700.00	2,100.00	650.00	1,950.00	594.00	1,782.00
2506.509	CONSTRUCT CATCH BASIN, DESIGN L.P.-4	EACH	6	6	12	808.33	825.00	9,900.00	900.00	10,800.00	700.00	8,400.00	750.00	9,000.00	850.00	10,200.00	540.00	6,480.00
2506.509	CONSTRUCT CATCH BASIN, DESIGN R.C.-2	EACH	1		1	641.67	825.00	825.00	500.00	500.00	600.00	600.00	500.00	500.00	520.00	520.00	540.00	540.00
2506.511	RECONSTRUCT MANHOLE	L.F.		6.0	6.0	100.00	100.00	600.00	100.00	600.00	100.00	600.00	110.00	660.00	100.00	600.00	75.60	453.60
2506.521	INSTALL CASTING	EACH		1	1	91.67	100.00	100.00	75.00	75.00	100.00	100.00	35.00	35.00	100.00	100.00	95.00	95.00
2506.522	ADJUST FRAME AND RING CASTING	EACH	2	7	9	95.00	100.00	900.00	75.00	675.00	110.00	990.00	85.00	765.00	100.00	900.00	95.00	855.00
2506.508	CONSTRUCT CATCH BASINS, DESIGN A OR F	EACH	1		1	691.67	900.00	900.00	525.00	525.00	650.00	650.00	600.00	600.00	480.00	480.00	540.00	**540.00**
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	981	2,497	3,478	4.48	4.40	15303.20	4.09	14,225.02	4.95	17,216.10	4.80	16,694.40	4.60	15,998.80	6.50	22,607.00
2531.503	CONCRETE MEDIAN	S.Y.		564	564	20.52	19.00	10716.00	21.87	12,334.68	20.70	11,674.80	21.00	11,844.00	16.00	9,024.00	18.00	10,152.00
2535.501	BITUMINOUS CURB	L.F.	220	327	547	1.48	1.47	804.09	1.23	672.81	1.75	957.25	1.58	864.26	1.50	820.50	1.80	984.60
2575.505	SODDING	S.Y.	2,815	6,132	8,947	1.11	1.00	8947.00	.95	8,499.65	1.37	12,257.39	1.00	8,947.00	1.45	12,973.15	1.10	9,841.70
2575.531	COMMERICAL FERTILIZER ANALYSIS 12-12-12	TON	0.2	0.4	0.6	318.33	300.00	180.00	325.00	195.00	330.00	198.00	315.00	189.00	300.00	180.00	325.00	195.00
2575.551	TOPSOIL BORROW	C.Y.	235	511	746	5.60	6.00	4,476.00	4.75	3,543.50	6.05	4,513.30	5.50	4,103.00	7.00	5,222.00	7.30	5,445.80
504.666	INSTALL HYDRANT	EACH	1		1	300.00	250.00	250.00	150.00	150.00	500.00	500.00	360.00	360.00	600.00	600.00	810.00	810.00
504.679	ADJUST VALVE BOX	BOX	4	4	8	76.67	100.00	800.00	55.00	440.00	75.00	600.00	50.00	400.00	80.00	640.00	55.00	440.00
565.610	REVISE SIGNAL SYSTEM (1)	SYSTEM		1	1	1476.67	1,500.00	1,500.00	1,395.00	1,395.00	1535.00	1,535.00	1,650.00	1,650.00	1,500.00	1,500.00	1,510.00	1,510.00
	PARTICIPATING NON-~~PARTICATING~~ FOR WALK & BIKE WAY																	
2211.501	AGGREGATE BASE CLASS "4"	TON	160	240	400	4.72	3.50	1400.00	3.25	1,300.00	7.40	2,960.00	5.50	2200.00	5.00	2,000.00	4.90	1,960.00
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	5	7	12	74.50	73.50	882.00	75.00	900.00	75.00	900.00	77.96	935.52	75.00	900.00	72.00	864.00
2341.508	WEARING COURSE MIXTURE	TON	84	127	211	12.93	12.25	2584.75	11.95	2521.45	14.60	3,080.60	8.47	1,787.17	12.00	2,532.00	15.05	3,175.55
						$14,680.69	TOTALS:	$284,869.14		$290,923.74		$297,183.38		$297,564.16		$298,565.05		$335,796.23

REVISED 8-3-77 | DATE 6-30-76 | DESIGNED BY | DRAWN BY | CHECKED BY

MICROFILMED
RAMSEY CO. ENGR.

25-102

Fed. Proj. No.

SCALE: 1" = 50'

R. L. GOULD & COMPANY

ARDEN HILLS

SHOREVIEW

LOUIS M. LANGE JR.
ANNA M. LANGE

HAROLD E. THOLE
DARLENE L. THOLE
GOVERNMENT NATIONAL MORTGAGE ASSOC.

ANN ARNNDEL

ISLAND LAKE

HEIGHTS

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 Feb. 9 '76 Reg. No. 5782

CONST. LIMITS
APRON 218+14 LT 65'± INV. 929.2 ±
CONST. M.H. 218+14 LT 36.8' INV. 929.00
16.5' ADDITIONAL R/W
0.50
27"x886' R.C.P. SEWER CLASS II
CONST. LIMITS
CONSTRUCT M.H. 227+00 LT 36.8' INV. 924.57
ACQUIRE A 10'x10' TRIANGLE
35' R.
GRAY FOX RD.
MAKE SUITABLE CONNECTION TO EXISTING 42" R.C.P.
LEXINGTON AVE.
B624 CURB & GUTTER
B624 CURB & GUTTER
ACQUIRED BY PLAT
EXISTING 42" R.C.P.
REMOVE EXISTING SEWER STUB
4' GRAVEL SHOULDER
CONST. LIMITS
5' UTILITY EASEMENT
5' UTILITY EASEMENT
8' BIKE & WALKWAY
16.5' ADDITIONAL R/W
EXISTING SHOREVIEW SANITARY SEWER EASEMENT
ISLAND LK. RD.
COUNTY RD. E
R.R.
SOO
100'
+29 N. RAIL OF SO. TRACK 943.79
+39 S. RAIL OF N. TRACK 943.78
35' R.
20' R.

B.M. ELEV. 949.58
TOP HYD. S.E. CORNER CO. RD. "E" & LEXINGTON AVE.

B.M. ELEV. 935.03
TOP HYD. N.E. CORNER ISLAND LK. RD. & LEXINGTON AVE.

+63 BEGIN GRADE REVISIONS
V.C. = 100'
M = 0.13750
P.I. 215+00
E.L. 945.60
-1.60
P.I. 216.25
E.L. 944.98
-0.50
-1.04
P.I. P.C. 217+40
E.L. 943.78
-1.00
P.I. 218+50
E.L. 942.68
V.C. = 220'
M = 0.5500
-3.00
V.C. = 100'
M = 0.31875
P.I. 221+50
E.L. 933.68
-0.45
V.C. = 50'
M = 0.575
P.I. 225+00
E.L. 932.11
+0.47
+46 @ GRAY FOX ROAD

950
945
940
935
930

214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229

OFFICE OF
RAMSEY COUNTY ENGINEER
WIDENING AT
LEXINGTON AVE. & SOO LINE R.R.
DATE: FEB. 1976
APPROVED _____ DATE _____
CITY OF SHOREVIEW
APPROVED _____ DATE _____
CITY OF ARDEN HILLS

S.A.P. No. 62-651-05 Sheet No. ____ of ____ Sheets

MICROFILMED
HIGHWAY DEPT.

25-102

PLANS SYMBOLS

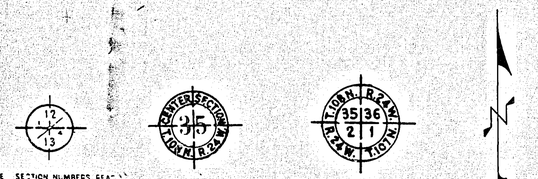
STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT-OF-WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER

SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN C.B.
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F-FRAME C-CONCRETE
S-STONE T-TILE
B-BRICK ST-STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
OR TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN

CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE



NOTE SECTION NUMBERS READ FROM THE SOUTH

PIT DATA

_____PIT NO._____ Located in .....
Dead Haul .....

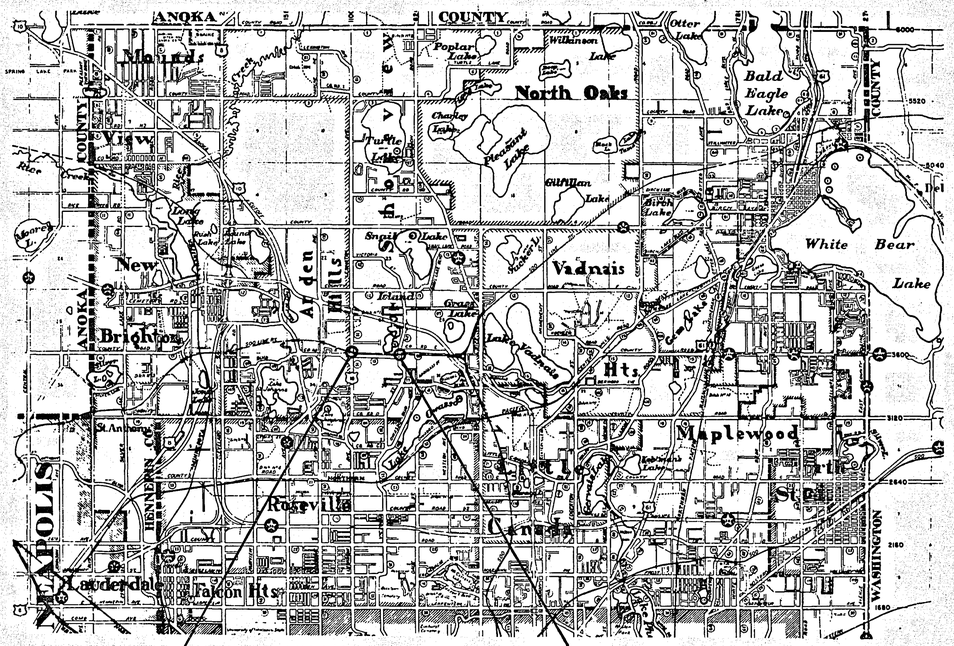
_____PIT NO._____ Located in .....
Dead Haul .....

THE "MINNESOTA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1972 AS AMENDED BY " SUPPLEMENTAL SPECIFICATIONS" DATED APRIL 1, 1976

C.S.A.H. 52 (VICTORIA GEOMETRICS) S.A.P. 62-652-02
FROM: 405' SO. OF CO. RD. "E" TO: 402' NO. OF CO. RD. "E"
IN SHOREVIEW

C.S.A.H. 51 (LEXINGTON GEOMETRICS) S.A.P. 62-651-05
FROM: 35' NO. OF CO. RD. "E" TO: 1472' NO. OF CO. RD. "E"
IN SHOREVIEW AND ARDEN HILLS

	S.A.P. 62-652-02		S.A.P. 62-651-05	
GROSS LENGTH	807 FEET	0.153 MILES	1437 FEET	0.272 MILES
BRIDGE LENGTH	0 FEET	0 MILES	0 FEET	0 MILES
EXCEPTION LENGTH	0 FEET	0 MILES	0 FEET	0 MILES
NET LENGTH	807 FEET	0.153 MILES	1437 FEET	0.272 MILES



CITY OF ST. PAUL

LEXINGTON AVE. AND SOO LINE RAILROAD

VICTORIA ST. AND SOO LINE RAILROAD

DESIGN DESIGNATION

	S.A.P. 62-652-02	S.A.P. 62-651-05
ADT 1975	6,000	7,600
ADT 1995	10,000	14,000
Σ N18 20YR.	1,825,997	2,358,622
STABILOMETER "R" VALUE	18	18
DESIGN LOAD	9 TON	9 TON
DESIGN SPEED	45 M.P.H.	45 M.P.H.

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY

CONSTRUCTION PLAN
FOR GEOMETRICS AND WIDENING, RAILROAD CROSSING AND RAILROAD SIGNALS.

VICTORIA ST. AND SOO LINE R.R.
LEXINGTON AVE. AND SOO LINE R.R.

C.S.A.H. 52	VICTORIA GEOMETRICS	S.A.P. 62-652-02	ACC'T. NO. 50138
	RR CROSSING WIDENING	S.A.P. 62-652-03	
	RR CROSSING SIGNALS	S.A.P. 62-652-04	
C.S.A.H. 51	LEXINGTON GEOMETRICS	S.A.P. 62-651-05	ACC'T. NO. 50136
	RR CROSSING WIDENING	S.A.P. 62-651-06	
	RR CROSSING SIGNALS	S.A.P. 62-651-07	

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES & DETAILS
3	TYPICAL SECTIONS
4	PLAN & PROFILES (VICTORIA ST.)
5-6	PLAN & PROFILES (LEXINGTON AVE.)
7-14	CROSS SECTIONS (VICTORIA ST.)
15-23	CROSS SECTIONS (LEXINGTON AVE)

APPROVED _____ COUNTY ENGINEER DATE 8-10-77
APPROVED _____ CHAIRMAN OF THE RAMSEY COUNTY BOARD DATE _____
APPROVED _____ CITY OF SHOREVIEW DATE 8-23-76
APPROVED _____ CITY OF ARDEN HILLS DATE 8-23-76
APPROVED _____ SOO LINE RAILROAD DATE 8/2/76

RECOMMENDED FOR APPROVAL _____ ENVIRONMENTAL ENGINEER DATE 8/31/76
RECOMMENDED FOR APPROVAL _____ MAINTENANCE ENGINEER DATE 8/3/76
RECOMMENDED FOR APPROVAL _____ CONSTRUCTION ENGINEER DATE 8/4/76
RECOMMENDED FOR APPROVAL _____ R/W ENGINEER DATE 8/6/76
RECOMMENDED FOR APPROVAL _____ TRAFFIC ENGINEER DATE 8-3-76
APPROVED _____ COUNTY ENGINEER DATE 8/6/76

MINNESOTA STATE HIGHWAY DEPARTMENT
RECOMMENDED FOR APPROVAL _____ DATE 9-3-76
DISTRICT STATE AID ENGINEER
RECOMMENDED FOR APPROVAL _____ DATE 9-2-76
APPROVAL _____ DATE 9/9/76
STATE AID ENGINEER

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 Aug 6 '76 Reg. No. 5782

REVISED	DATE		
RAB	8-3-76	DESIGNED BY	
		DRAWN BY	
APPROVED		CHECKED BY	
RAMSEY CO. ENGR.			
APPROVED			

RAMSEY COUNTY

S.A.P. No. 62-652-02 & 62-651-05

Sheet No. 1 of 23 Sheets

25-102

STATEMENT OF ESTIMATED QUANTITIES

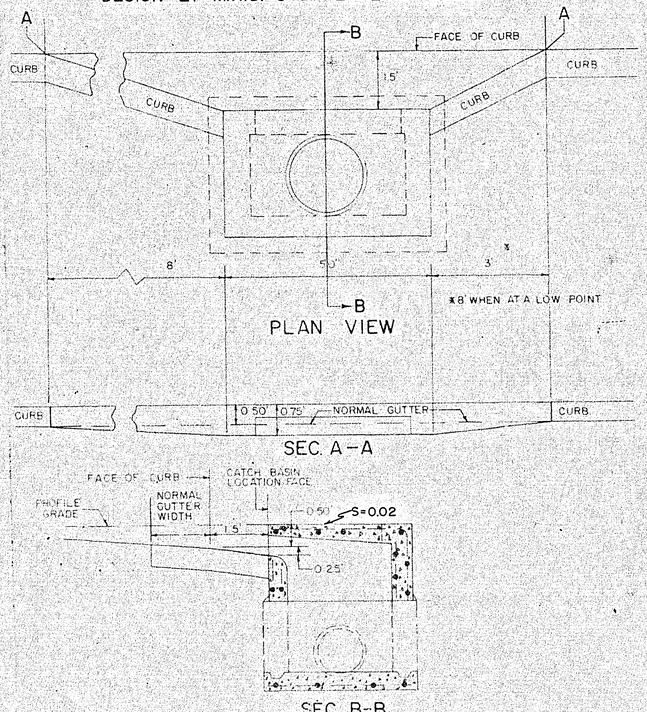
ITEM NO.	ITEM	UNIT	VICTORIA ST. & SOO LINE 62-652-02 ESTIMATED QUANTITIES	LEXINGTON AVE. & SOO LINE 62-651-05 ESTIMATED QUANTITIES	TOTAL ESTIMATED QUANTITIES
2021.501	MOBILIZATION	LUMP SUM	0.33	0.67	1.0
2101.502	CLEARING	TREE	4	1	5
2101.507	GRUBBING	TREE	3	1	4
2104.501	REMOVE CONCRETE CURB	L.F	30		30
2104.501	REMOVE SEWER PIPE	L.F		90	90
2104.501	REMOVE CULVERT PIPE	L.F	293*	47	350
2104.523	SALVAGE HYDRANT	EACH	1		1
105.601	SALVAGE COMMON EXCAVATION (E.V.)	C.Y.	3,558		3,558
2105.501	COMMON EXCAVATION (E.V.)	C.Y.	4,211	9,677	13,888
2105.523	COMMON BORROW (L.V.) FROM STOCKPILE AT SITE	C.Y.		5,871	5,871
2130.501	WATER	(M) GAL.	25	35	60
2211.501	AGGREGATE BASE, CLASS "5M"	TON	1,899	3,711	5,610
2211.501	AGGREGATE BASE, CLASS "4"	TON	4,671	9,355	14,026
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	40	76	116
2331.514	BASE COURSE MIXTURE	TON	832	1,528	2,360
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	60	125	185
2341.508	WEARING COURSE MIXTURE	TON	604	1,074	1,678
2341.510	BINDER COURSE MIXTURE	TON	604	1,074	1,678
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	480	882	1,362
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	1,593	3,190	4,783
2501.511	18" C.S. PIPE CULVERT, 16 GAUGE	L.F	80		80
2501.515	15" R.C. PIPE APRONS	EACH	2	3	5
2501.515	18" R.C. PIPE APRONS	EACH	1		1
2503.511	36" R.C. PIPE SEWER, CL. III	L.F		242	242
2501.515	27" R.C. PIPE APRONS	EACH		1	1
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F	288	209**	577
2503.511	18" R.C. PIPE SEWER, CL. III	L.F	392		392
2503.511	27" R.C. PIPE SEWER, CL. II	L.F		415	415.
2503.511	30" R.C. PIPE SEWER, CL. II	L.F	16	400	416
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EACH		3	3
2506.509	CONSTRUCT CATCH BASIN, DESIGN L.P.-4	EACH	6	6	12
2506.509	CONSTRUCT CATCH BASIN, DESIGN R.C.-2	EACH	1		1
2506.511	RECONSTRUCT MANHOLE	L.F		6.0	6.0
2506.521	INSTALL CASTING	EACH		1	1
2506.522	ADJUST FRAME AND RING CASTING	EACH	2	7	9
2506.508	CONSTRUCT CATCH BASINS, DESIGN A OR F	EACH	1		1
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F	981	2,497	3,478
2531.503	CONCRETE MEDIAN	S.Y.		564	564
2535.501	BITUMINOUS CURB	L.F	220	327	547
2575.505	SODDING	S.Y.	2,815	6,132	8,947
2575.531	COMMERICAL FERTILIZER ANALYSIS 12-12-12	TON	0.2	0.4	0.6
2575.551	TOPSOIL BORROW	C.Y.	235	511	746
504.666	INSTALL HYDRANT	EACH	1		1
504.679	ADJUST VALVE BOX	BOX	4	4	8
565.610	REVISE SIGNAL SYSTEM (1)	SYSTEM		1	1
	NON-PARTICATING FOR WALK & BIKEWAY				
2211.501	AGGREGATE BASE CLASS "4"	TON	160	240	400
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	5	7	12
2341.508	WEARING COURSE MIXTURE	TON	84	127	211

* QUANTITY ADJUSTED TO 303 TO MATCH TOTAL ESTIMATED QUANTITY

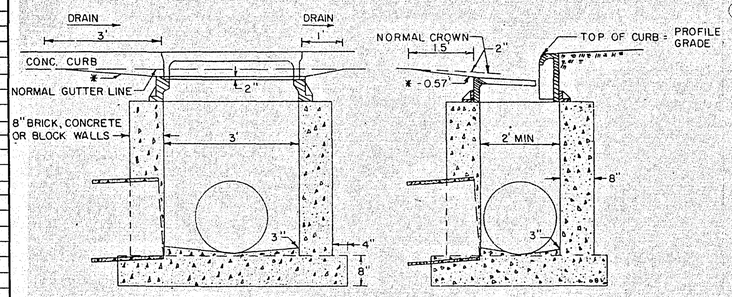
** QUANTITY ADJUSTED TO 280 TO MATCH FINAL ESTIMATED QUANTITY

REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
	6-30-76			

CURB OPENING CATCH BASIN INSTALLATION DETAIL
DESIGN L.P. M.H.D. STD. PLATE NO. 4021C

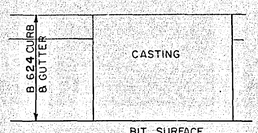


CATCH BASIN DESIGN NO. R.C.-2



* WARP GUTTER TO THIS LINE.

* ELEV. COMPUTED TO THIS POINT. DETERMINE IN THE FIELD TO FIT EXISTING CONDITIONS.

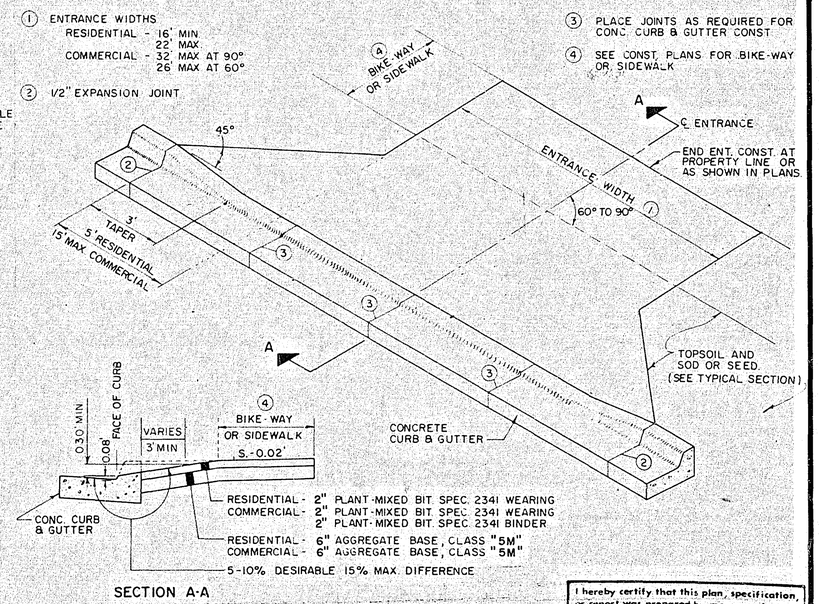


(1) ITEM CONSIST OF THE INSTALLATION OF TWO LOOP DETECTORS

STANDARD DETAIL PLATES

0002A	SPECIFICATIONS REFERENCE TO STANDARD PLATES
3000G	REINFORCED CONCRETE PIPE
3006B	GASKET JOINT FOR R.C. PIPE
3100F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3145A	CONCRETE PIPE JOINT TIES
4000G	MANHOLE OR CATCHBASIN
4005J	MANHOLE OR CATCHBASIN
4010E	CONCRETE SHORTCONE & ADJUSTING RING
4011C	PRECAST CONCRETE BASE
4021C	PRECAST CURB OPENING CATCH BASIN
4101B	RINGCASTING FOR MANHOLE OR CATCH BASIN
4110D	COVER CASTING FOR MANHOLE
4180F	MANHOLE STEP CASTING
4142D	BEEHIVE GRATE CASTING FOR CATCH BASIN
7036A	PEDESTRIAN CURB RAMP
7065C	BITUMINOUS CURB
7100D	CONCRETE CURB AND GUTTER
7105C	CONCRETE MEDIAN
8000F	STANDARD BARRICADES
8130B	SAWCUT LOOP DETECTORS

BITUMINOUS ENTRANCE DETAIL



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.

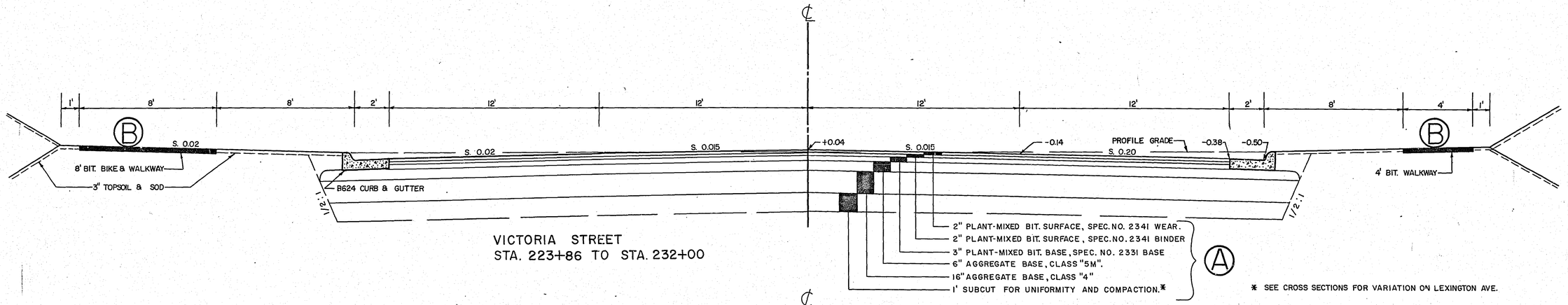
Date Aug. 25, '76 Reg. No. 5782

S.A.P. NO. 62-652-02 & 62-651-05 Sheet No. 2 Of 23 Sheets

RAMSEY CO. ENGR.

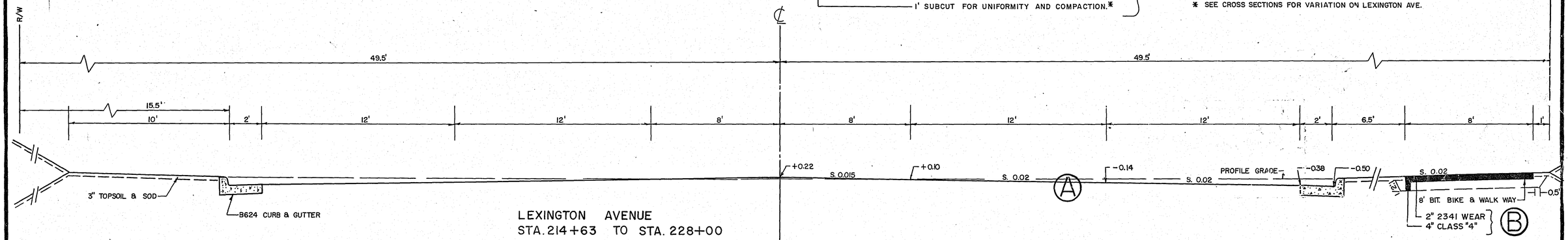
25-102

TYPICAL SECTIONS

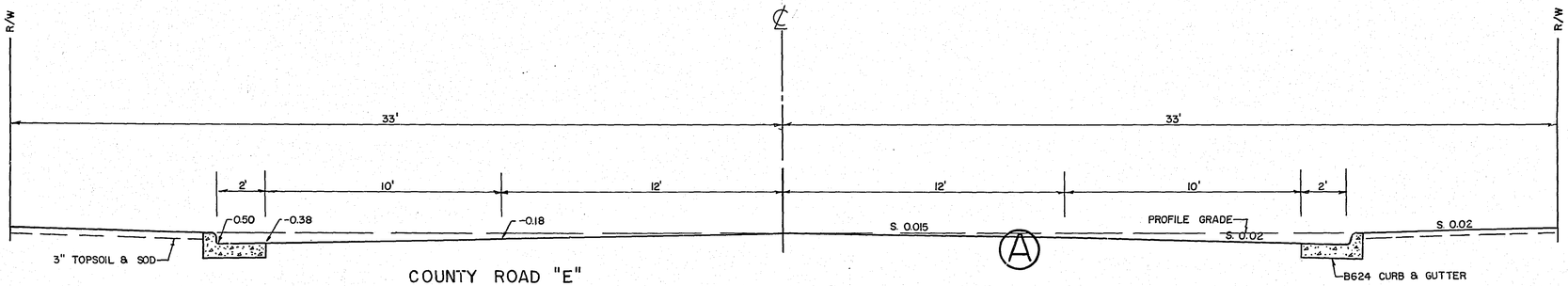


VICTORIA STREET
STA. 223+86 TO STA. 232+00

* SEE CROSS SECTIONS FOR VARIATION ON LEXINGTON AVE.



LEXINGTON AVENUE
STA. 214+63 TO STA. 228+00



COUNTY ROAD "E"
STA. 74+50 TO 76+00

REVISED	DATE
DESIGNED BY	
DRAWN BY	
CHECKED BY	

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.
Signature
Date Aug 25, 76 Reg. No. 5882

25-102

S.A.P. NO. 62-652-02 & 62-651-05

MICROFILMED Sheet No. 3 of 23 Sheets

NOTE: TIE APRONS & LAST TWO SECTIONS OF CONCRETE PIPE. PAYMENT SHALL BE INCIDENTAL TO ITEM NO. 2503.511, R.C. PIPE-SEWER.

① DEPRESS CURB & GUTTER AS PER STANDARD PLATE NO. 7036A

② MATCH RADIUS TO EXISTING CATCH BASIN

③ REMOVE CONC. CURB TO MAKE SUITABLE CONNECTION TO B624

74+50 BEGIN NEW CONSTRUCTION TAPER TO EXISTING

SCALE: 1" = 30'

END WALK & BIKEWAY
FILL LOW AREA
233
234

APRON 223+90± LT. 28' INV. 956.61
P.T.
CONST. LIMITS
PARKING
CONST. C.B. L.P.4 STA. 225+76 LT. 27.5' INV. ~~951.34~~ 951.28
15" COTTON REMOVE
18" COTTON REMOVE
CONST. C.B. L.P.4 STA. 75+85 ± RT. 26.5 INV. ~~948.0~~ 948.48
15" X 53' R.C.P. CL. II
35' R
8' WALK & BIKEWAY
18" X 186' R.C.P. CL. II
REMOVE EXISTING 18" C.M.P.
SAW CUT
REMOVE
SALVAGE & INSTALL HYDRANT LOCATION TO BE DETERMINED BY SHOREVIEW
8624 CURB & GUTTER
6' GRAVEL SHOULDER
CONST. LIMITS
25' R
18" X 84' R.C.P. CL. II
4' NORTH BOUND BIT. WALK & BIKEWAY
CONST. LIMITS
CONST. C.B. L.P.4 STA. 228+20 RT. 27.5' INV. ~~947.0~~ 947.33
T-BUR
P.T. 224+49.22
OWASSO ST
40'
SHORVIEW LAKE
OUTLET CONTROL ELEV. 945.7 ±

CO. RD. E
REMOVE
+36
SECTION LINE
4' GRAVEL SHOULDER
24'
CONST. C.B. L.P.4 STA. 76+10 ± LT. 26.5 INV. ~~947.40~~ 947.90
15" X 82' R.C.P. CL. II
15" X 75' R.C.P. CL. II
227+98.40
228+66.89
228+32.50
77.52
77.64
77.56
14'
26'
43'
6'
35' R
18" X 50' R.C.P. CL. II
45°
30' R
24'
+47
CONST. C.B. L.P.4 STA. 229+32± RT. 48' INV. ~~947.55~~ 947.78
APRON STA. 228+42 RT. 80' INV. ~~946.76~~ 946.93
CLEAN DITCH
15" X 72' R.C.P. CL. II
15" X 68' R.C.P. CL. II
EXIST. 18"
946.3
944.2
945.8
50' EXT. 30"
RR
33'
BIT. CURB
MATCH AND OVER EXIST. CO RD E
946.5
+50 END CURB
EXIST 18" C.M.

APRON STA. 228+93 LT. 52' INV. ~~950.00~~ 949.97
CONST. C.B. L.P.4 STA. 229+22 LT. 27.5' INV. ~~949.22~~ 948.82
CONST. LIMITS
RELOCATE BY PARKS DEPT.
SIGN
P.I. 231+17.65 Δ 0° 42' LT.
REMOVE 24" MAPLE
8' BIT. WALK & BIKEWAY
REMOVE 3" ASH
8624 CURB & GUTTER
BIT. CURB 150' TAPER
VICTORIA ST.
SAW CUT
229+18.85
REMOVE
UGTC BIT. CURB
UGTC
NOTE: CALL PHONE CO. FOR EXACT LOCATIONS
CONST. C.B. RC-2 STA. 229+81 ± RT. 37' INV. ~~948.00~~ 947.86
REMOVE
SAN. SEWER ENDS
BLDG.
* C.B. TO BE DESIGN A OR F WITH BEEHIVE CASTING NO. 730-6

B.M. ELEV. 956.69
TOP OF HYD. S.W. COR. CO. RD. E' & VICTORIA ST.

B.M. ELEV. 956.13
TOP HYD. N.E. COR. CO. RD 'E' & VICTORIA ST.

RECORDED & INDEXED
CONFORMING TO
COUNTY RECORDS
COUNTY SURVEYOR
DATE

960
955
950
957.71
+50
-1.49
953.24
-3.42
1' SUBCUT FOR UNIFORMITY & COMPACTION
+50
V.C. = 100'
M = 0.31125
+10 LOW POINT
953.00
+1.00
P.I. 228+50
EL. 952.50
+50
V.C. = 50'
M = 0.1250
+00
953.0
+22 LOW POINT
-1.00
V.C. = 100'
M = 0.56250
954.25
+00
P.I. 228+74.5
EL. 953.25
P.I. 229+50
EL. 952.50
+3.50
+00
959.85
P.I. 231+50
EL. 953.50
V.C. = 100'
M = 0.2750
+1.30
960.15
+00

955
950
+1.40
V.C. = 50'
M = 0.131250
P.I. 75+00
EL. 953.10
+56.44
-0.70
73+50
74+00
75+00
76+00
76+50
CO. RD. "E" WEST

955
950
-0.30
0
1+50
CO. RD. "E" EAST

225
226
227
228
229
230
231
232

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 Aug. 25, 76 Reg. No. 5282

DESIGNED BY
DRAWN BY
CHECKED BY
REVISED DATE

S.A.P. No 62-652-02

Sheet No. 4 of 23 Sheets

25-102 48 48

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE: 1"=30'

① DEPRESS CURB & GUTTER AS PER STANDARD PLATE NO. 7036A

NOTE: SEE CROSS SECTIONS FOR SEWER INFORMATION.

② MATCH CURB TO EXISTING C.B.

NOTE: LOOP DETECTORS SHALL BE SAWCUT INTO FINAL SURFACE ONLY. LOCATIONS SHALL BE DETERMINED BY THE TRAFFIC ENGR.

NOTE: TIE APRONS & LAST TWO SECTIONS OF CONCRETE PIPE. PAYMENT SHALL BE INCIDENTAL TO 2503.511 R.C. PIPE SEWER.

ADJUST METAL FRAME & COVER ON HANDHOLE "7" INCIDENTAL

RAMSEY COUNTY
STOCKPILE SITE

ARDEN HILLS

R.L. GOULD & COMPANY

LOUIS M. LANGE JR.
ANNA M. LANGE

SHOREVIEW

COUNTY RD. "E"

LEXINGTON AVENUE

SOO LINE R.R.

24"C.I.P. INV. 929.9

P.I. STA. 214+28.53

EXIST. SIGNAL POLE

H.H. 5

H.H. 6 INPLACE HANDHOLE

H.H. 7

H.H. 8

INPLACE 1-1/4" R.S.C. AND

INPLACE 3" R.S.C. DO NOT DISTURB

INSTALL 6'x18' LOOP DETECTOR.

INSTALL 6'x 46' LOOP DETECTOR

ABANDON EXIST. LOOP DETECTORS

B624 CURB & GUTTER

5" ELM REMOVE

CONST. LIMITS

APRON 217+00± LT.65' OUTLET ~~935.2±~~ 935.69

CONST. C.B. 216+88 LT.35.5' INV. ~~938.09~~ 938.12

CONST. C.B. 216+88 RT.35.5' INV 939.70

15"x175' R.C.P. CLASS IV @ 2.26%

DESIGN FLOW 18 C.F.S. PER B.S.E. & ASSOC.

APRON 218+14 LT. 65'± INV. ~~929.2 ±~~ 931.47

CONST. M.H. 218+14 LT. 37.3' INV. ~~929.00~~ 929.27

27"x 45" R.C.P. CLASS II

27"x 286' R.C.P. SEWER CLASS II

16.5' ADDITIONAL R/W TO BE ~~ACQUIRED PRIOR~~ TO START OF PROJECT.

CONST. C.B. 221+00 LT. 35.5' INV. ~~927.32~~ 927.72

APRON INV. ~~930.0~~ 928.80 222+50 LT. 53'

15"x 35' R.C.P. CLASS IV

CONST. MH. INV. 926.40 222184 LT. 37.5'

15"x 75' R.C.P. CLASS IV

15"x 122' R.C.P. CLASS III

30"

B624 CURB & GUTTER

CONST. C.B. 221+00 RT. 35.5' INV. ~~928.07~~ 928.26

RELOCATE HYDRANT AS DIRECTED BY SHOREVIEW

16.5' ADDITIONAL R/W TO BE ACQUIRED PRIOR TO START OF PROJECT.

5' UTILITY EASEMENT

9' BIT. BIKE & WALKWAY

CONSTRUCT 3-CABLE GUARDRAIL AS PER STD. PLATE NO. 8313 B (NO ANCHORAGE ASSEMBLIES)

• DENOTES MEDIAN HOLE

DESIGN FLOW 3 C.F.S. A CB TO BE DESIGNED PER R.C.W.S. DIST. WITH BEEHIVE CASTING NO. 730-6 INV. 927.15

RAMSEY COUNTY

STA. 222+99.29

MEDIAN

PLAN VIEW

PLACEMENT OF MEDIAN HOLES

16 GA. GALV. SLEEVE (8" DIA.)

FUTURE SIGN POST

NOTES:

1.) PAYMENT FOR SLEEVE TO BE INCIDENTAL AND INCLUDED IN ITEM NO. 2531.503 CONCRETE MEDIAN.

2.) WHERE CONCRETE MEDIAN IS PLACED ON EXISTING CONCRETE PAVEMENT, THE EXISTING PAVEMENT SHALL BE BROKEN OUT TO ACCOMMODATE SLEEVE. PAYMENT SHALL BE INCIDENTAL TO ITEM NO. 2531.503.

3.) • DENOTES PLACEMENT OF MEDIAN HOLES ON CONSTRUCTION PLAN.

B.M. 949.58
TOP NUT S.E. CORNER CO. RD. "E" & LEXINGTON AVE.

P.I. 214+54 ELEV. 946.18

214+86.5 ELEV. 945.82

V.C.=200' M.=0.400

1.60

3.42'

P.I. 215+86.5 EL. 944.22

1' SUBCUT FOR UNIFORMITY & COMPACTION

WARP GUTTER GRADE & TYPICAL SECTION TO MEET R.R. TRACKS

0.00%

44.22

P.I. 218.00 EL 44.22

M.H.

V.C.=150' M.=0.3750

2.00

42.72

P.I. 219+50 EL 941.22

V.C.=150' M.=0.3319

38.39

3.77

37.45

4.50

O.B.

V.C.=200' M.=0.830

P.I. 221+50 EL 933.68

2.42

33.06

M.H.

0.45

30"x 150' R.C.P. CLASS II @ 0.50

27" x 286' R.C.P. CLASS II @ 0.50

INV. 927.57

INV. 927.32

SEE CROSS SECTIONS FOR SUBCUT

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 Aug. 25, 72 Reg. No. 5782

REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
BKP	6-30-76			
Bas	5-3-72			
LKF	8-18-72			
Bas	8-25-72			

S.A.P. No. 62-65i-05

Sheet No. 5 of 23 Sheets

25-102

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

① DEPRESS CURB & GUTTER AS PER STANDARD PLATE NO. 7036 A

NOTE: SEE X-SECTIONS FOR SEWER INFORMATION.

SCALE: 1"=30'

ARDEN HILLS

CONST. LIMITS

CONSTRUCT C.B. 225+00 LT. 35.5' INV. ~~924.82~~ 922.68

APPROX I.E. 922.61

16.5' ADDITIONAL R/W TO BE ACQUIRED PRIOR TO START OF PROJECT.

CONSTRUCT M.H 227+00 LT. 37.3' INV. ~~923.42~~ 922.92

30"X 250' R.C.P. SEWER CLASS II

36"X 200' R.C.P. SEWER CLASS II

GRAY FOX ROAD

MAKE SUITABLE CONNECTION TO EXISTING 42" R.C.P.

42"

INV 922.55

24" C.M.P.

T-BUR

LEXINGTON AVENUE

223 224 225 226 227 228 229 230 231 232

34' 49.5' 33'

27"x71" R.C.P. CLASS II @ 2%

BIT. CURB

TAPER 15:1

4' GRAVEL SHOULDER

20" VIT

G

SAN

M.H.

8' BIT. BIKE & WALKWAY

27" 20'R

REMOVE

C.B.

W.S.O.

5' UTILITY EASEMENT ①

12" C.M.P.

24" C.M.P.

CONST. LIMITS

CONSTRUCT C.B. 225+00 RT. 37' INV. ~~926.24~~ 925.81

MAKE SUITABLE CONNECTION TO EXISTING M.H. INV. 928.07

2" C.M.P.

27" R.C.P.

ISLAND LAKE ROAD

H.O.

DESIGN FLOW 17.5 C.F.S. PER O.S.M. & ASSOC.

* ISLAND LK. RD. TO BE CENTERED IN RIGHT OF WAY.

SHOREVIEW

AS-BUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY:
DATE:

940 935 930

V.C. = 50'
M = 0.0575

32.22 32.23

-0.45 +0.47

-.75 +.25 +2.42

+46 ℄ GRAY FOX ROAD

M.H.

30"X250' R.C.P. CLASS II @ 0.50

36"X 200' R.C.P. CLASS II @ 0.70

36"X 42' R.C.P. CL II

EXISTING 42" R.C.P.

SEE CROSS SECTIONS FOR SUBCUT

INV. 925.32
INV. 924.82

INV. 923.92

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: Aug. 25 '76 Reg. No. 5782

REVISED	DATE
R.E.	8-3-76
I.K.F.	8-12-77

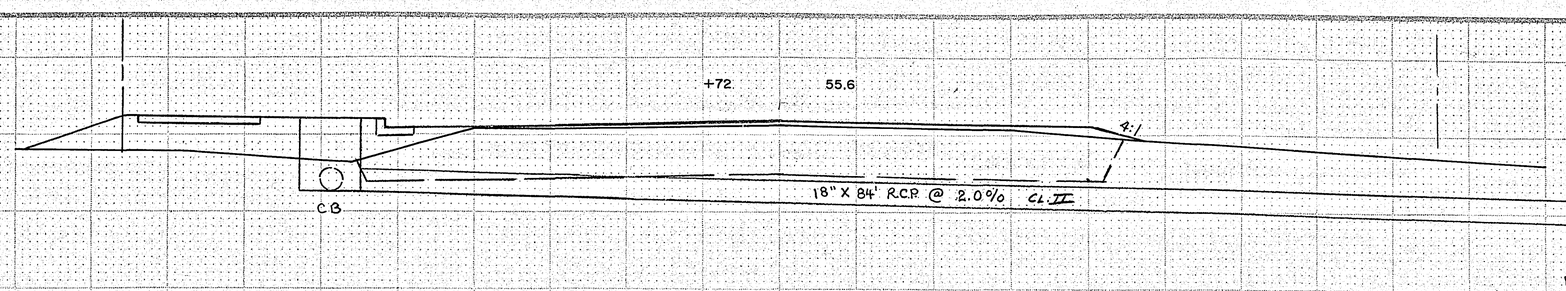
DESIGNED BY
DRAWN BY
CHECKED BY

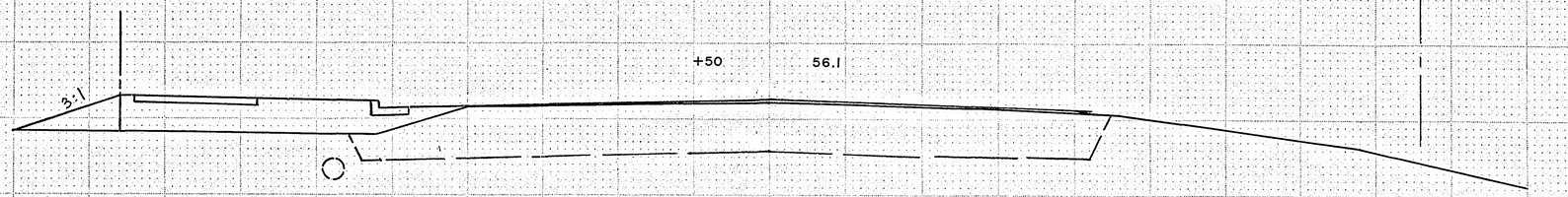
S.A.P. NO. 62-651-05

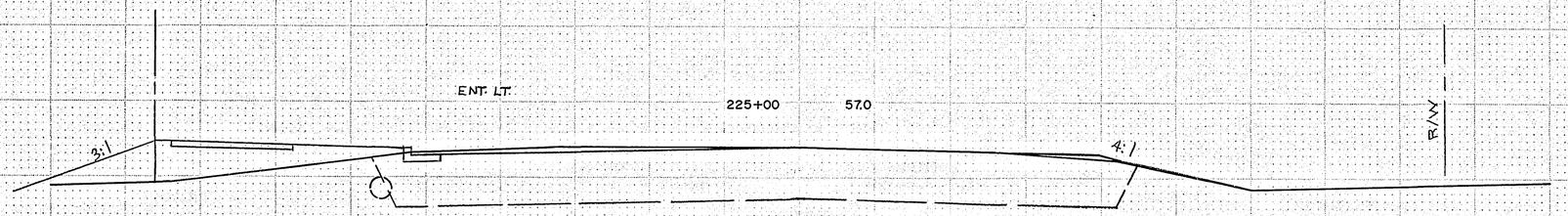
Sheet No. 6 of 23 Sheets

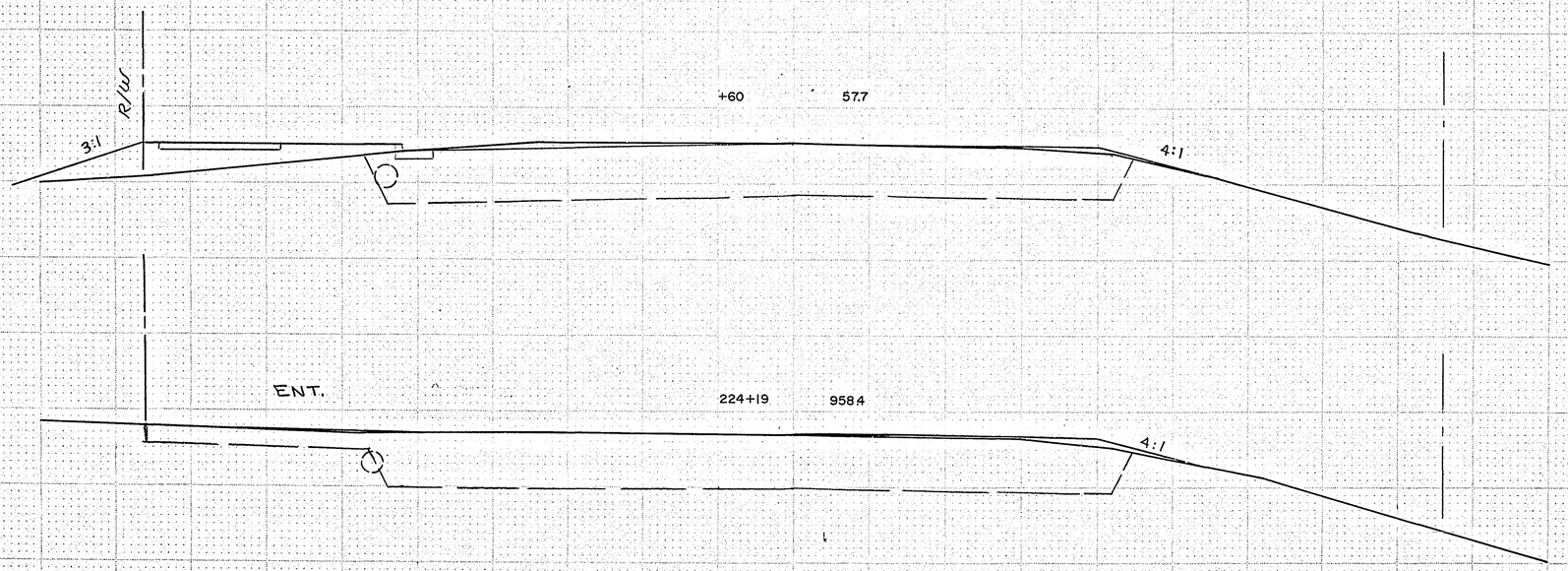
25-102

Fed. Proj. No.









EXC.	EMB.
149	92
121	87
305	214
256	157
281	102
121	32

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:

Wayne E. Conrad

Date Aug. 25, 76 Reg. No. 6782

MICROFILMED
RAMSEY CO. ENGR.

S.A.P. NO. 62-652-02

Sheet No. 7 of 23 Sheets

25-102

CHECKED BY

FUNCTIONAL CROSS SECTION - OPEN DITCH
N. A. ROSAS CO., MINNEAPOLIS-ST. PAUL

227+00 53.9

+50 54.5

3:1

R/W

+23 54.9

OWASSO ST.

℄ OWASSO ST.
226+08 55.1

ENT.

R/W

ENT. 225+93 955.3

OWASSO ST.

CB

Fed. Proj. No.	EXC	EMB
	332	179
	202	122
	129	70
	129	70

DESIGNED BY
DRAWN BY
CHECKED BY

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

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.
Mark R. Leonard
Date: Aug. 25, 76 Reg. No. 5782

S.A.P NO. 62-652-02

MICROFILMED RAMSEY CO. ENGR.

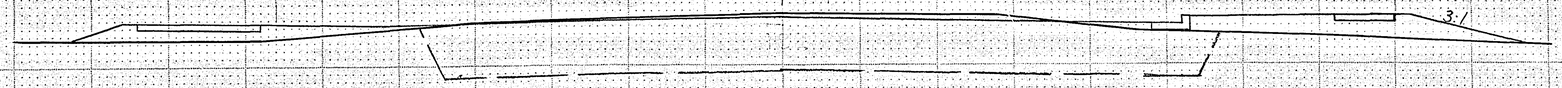
Sheet No. 8 of 23 Sheets

25-102

Fed. Proj. No.

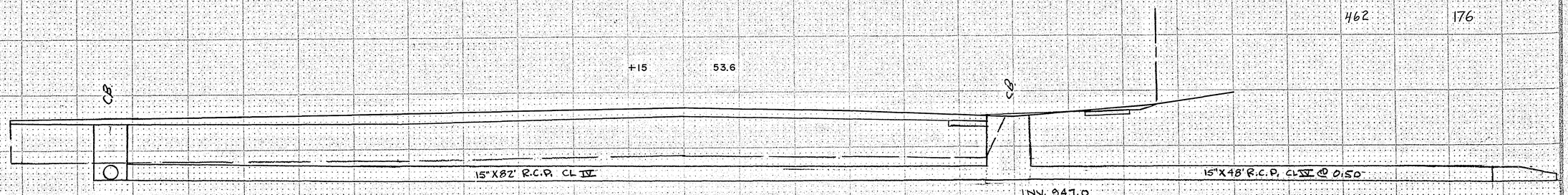
EXC. EM 13.

+60 53.3



462 176

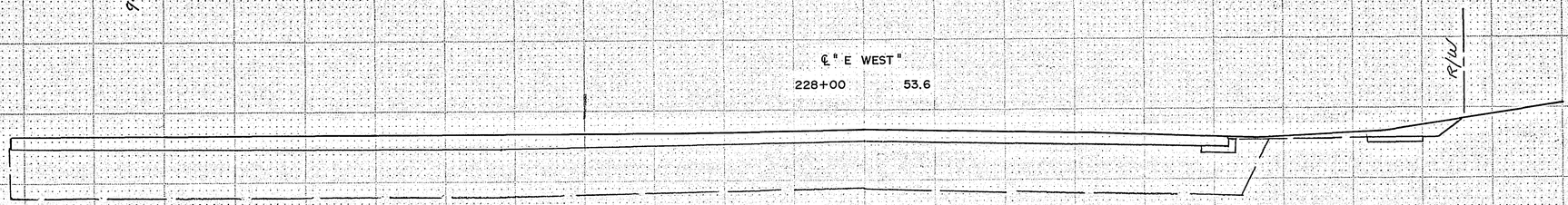
+15 53.6



217 38

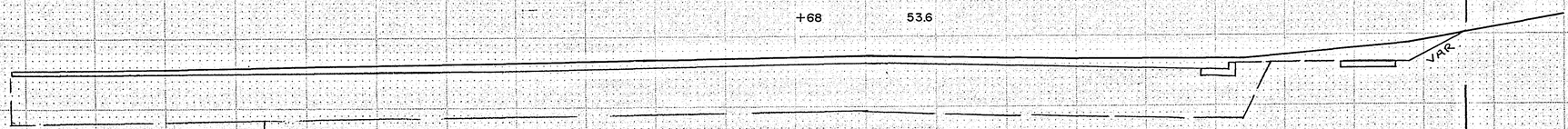
℄ " E WEST "

228+00 53.6



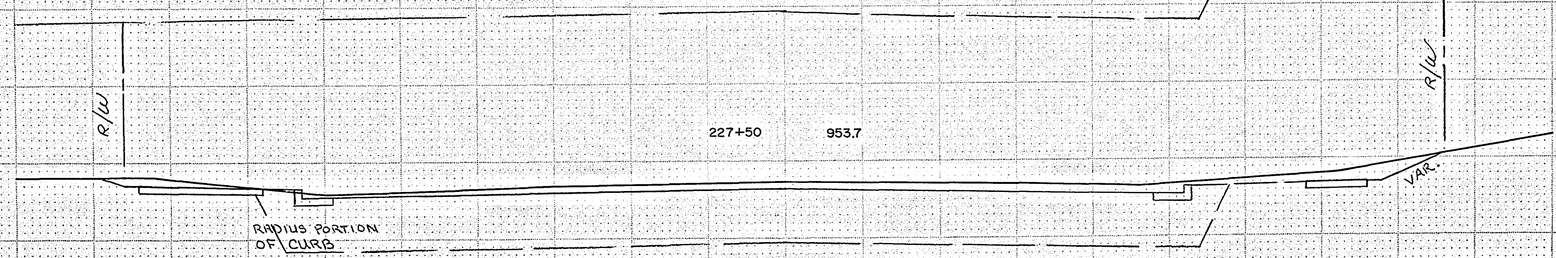
461 92

+68 53.6



207 49

227+50 953.7



412 123

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 Aug. 25, 19 Reg. No. 5782

S.A.P NO. 62-652-02

MICROFILMED RAMSEY CO. ENGR. Sheet No. 9 of 23 Sheets

25-102

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

Fed. Proj. No.

	EXC.	EMB.
+37 53.8 CO. RD. "E"	186	40
	151	54
+25 53.6 CB. 15" X 35' RCP Cl. III; 15" X 15' RCP CL III; RADIUS PORTION OF CURB; CB; 18" X 72' RCP CL II; INV. 939.0; 948.22; 947.13	137	73
+10 53.3	69	48
229+00 53.3 3:1	43	40
228+93 53.3 CB 15" X 35' RCP 3:1		

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Date: Aug. 25, 76 Reg. No. 5782

S.A.P NO. 62-652-02

MICROFILMED RAMSEY CO. ENGR.

Sheet No. 10 of 23 Sheets

25-102

CHECKED BY

FUNCTIONAL CROSS SECTION - OPEN DOTTED

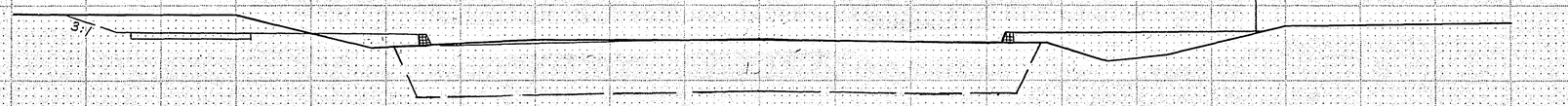
H. A. ROGERS CO., MINNEAPOLIS-ST. PAUL

Fed. Proj. No.	
EXC.	EMB.
186	100
77	27
331	141
434	145
343	78
317	68

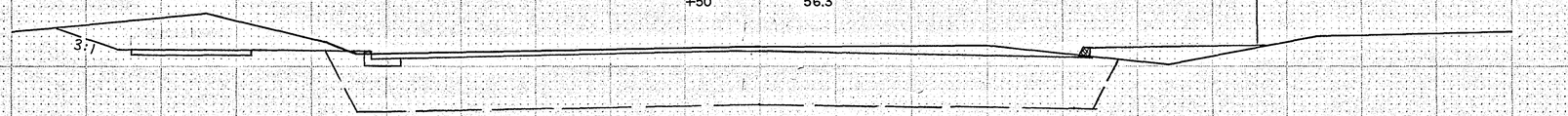
+13 58.1 ENT. RT



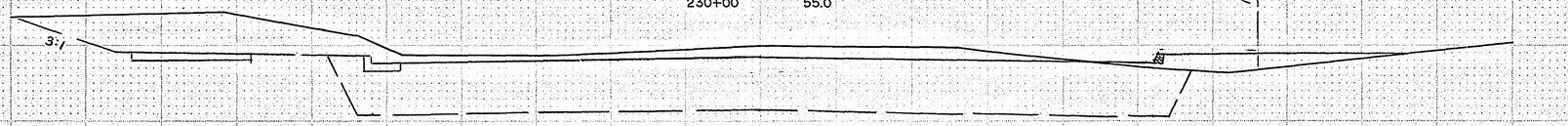
231+00 57.7



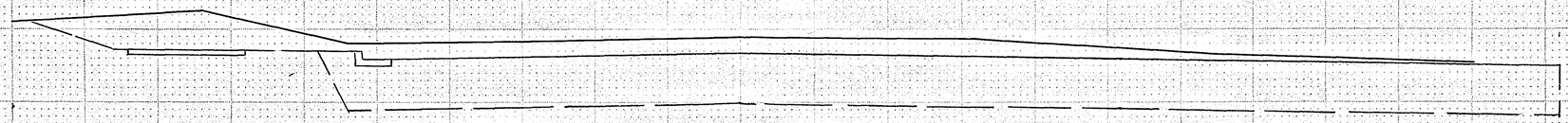
+50 56.3



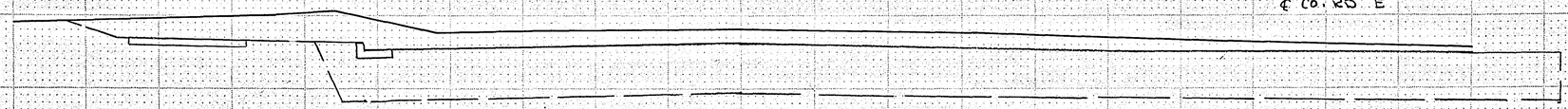
230+00 55.0



+72 54.5



229+50 954.1



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Date Aug. 25, 76 Reg. No. 5782

S.A.P. NO. 62-652-02

MICROFILMED RAMSEY CO. ENGR. Sheet No. 11 of 23 Sheets

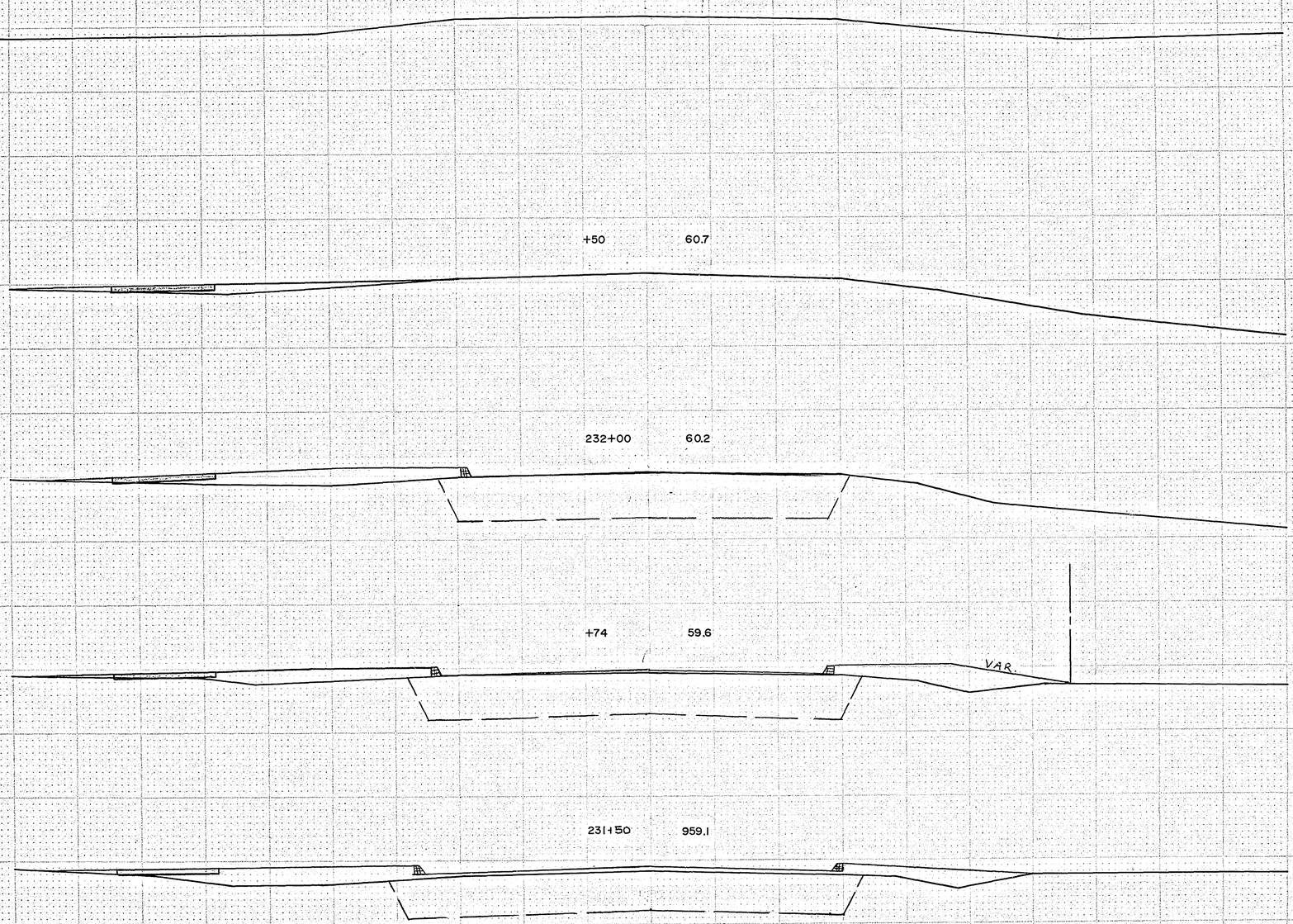
25-102

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

CHECKED BY

Fed. Proj. No.

	EXC.	EMB.
ENT. LT. 233+00 60.7	0	8
+50 60.7	98	52
232+00 60.2	268	55
+74 59.6	249	73
231+50 959.1		



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.

Wayne Leonard

Date July 25, 1967 Reg. No. 5782

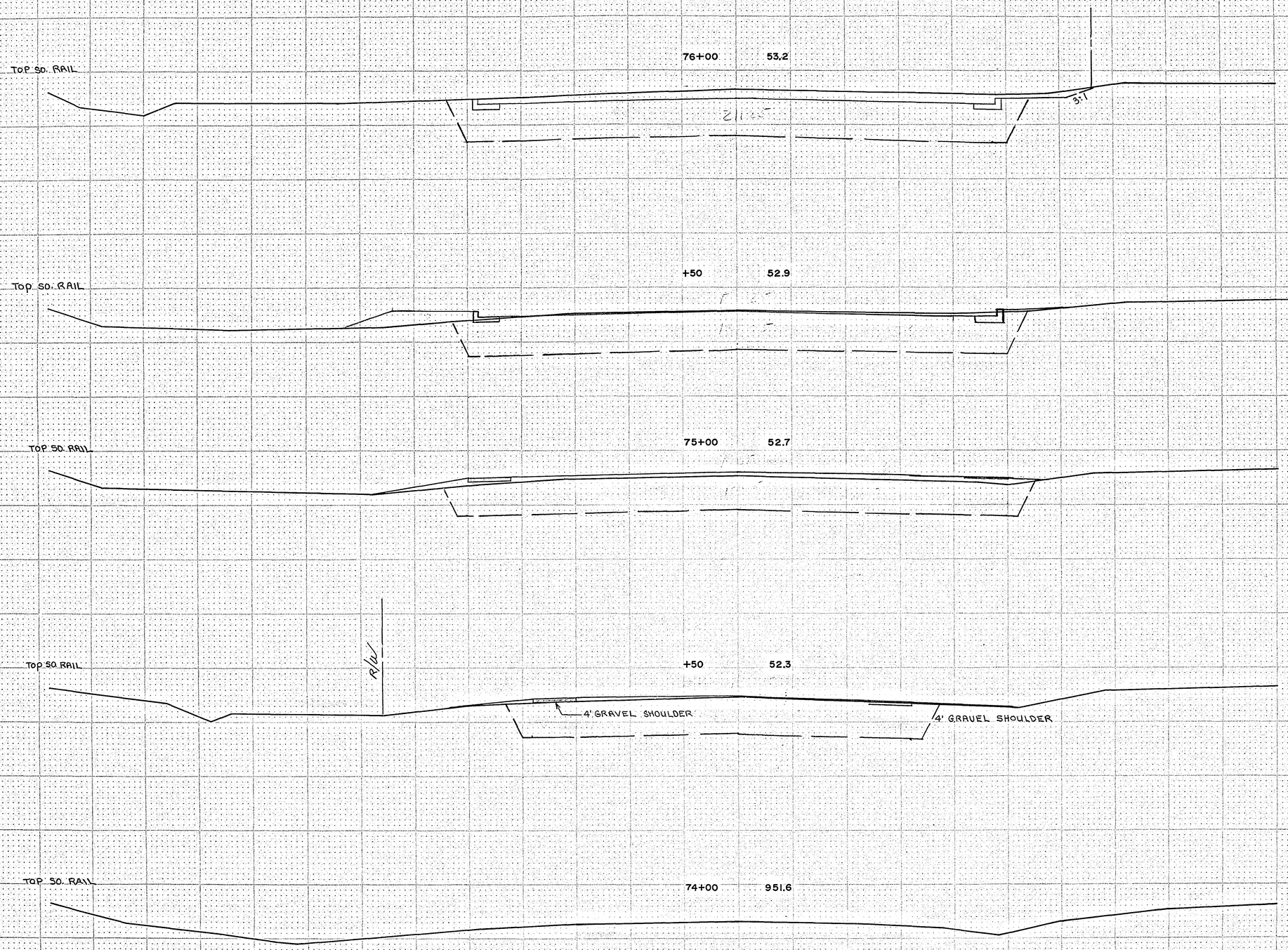
S.A.P. NO. 62-652-02

MICROFILMED RAMSEY CO. ENGR.

Sheet No. 12 of 23 Sheets

25-102

Fed. Proj. No.	EXC.	EMB.
	366	105
	318	130
	264	112



COUNTY ROAD "E" (WEST)

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.

Albert A. Sunnarborg

Date: Aug. 15, 76 Reg. No. 5782

S.A.P. NO. 62-652-02

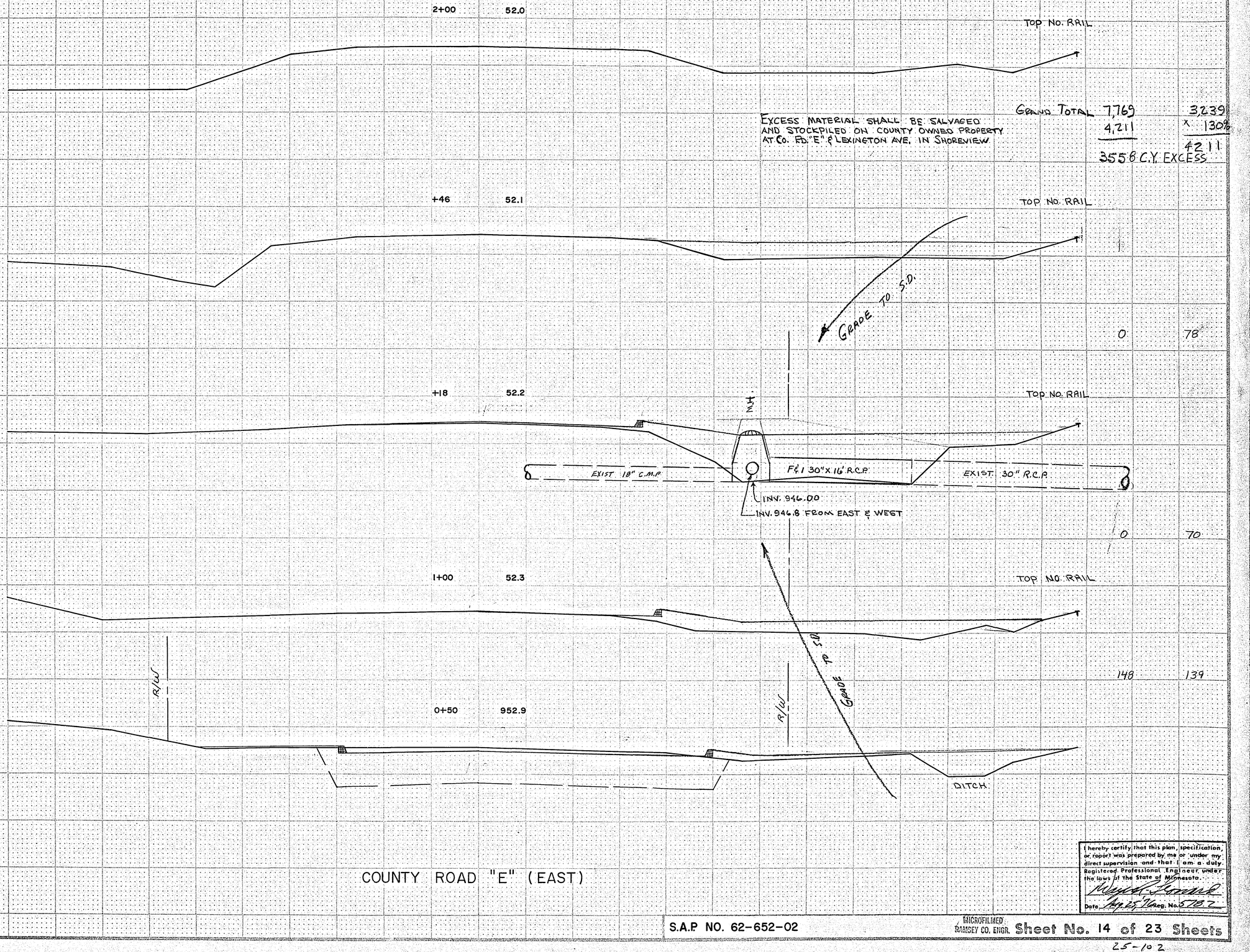
Sheet No. 13 of 23 Sheets

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MICROFILMED
RAMSEY CO. ENGR.

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

Fed. Proj. No.



COUNTY ROAD "E" (EAST)

DRAWN BY
CHECKED BY

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

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 Aug. 25, '70 Reg. No. 5702

S.A.P. NO. 62-652-02

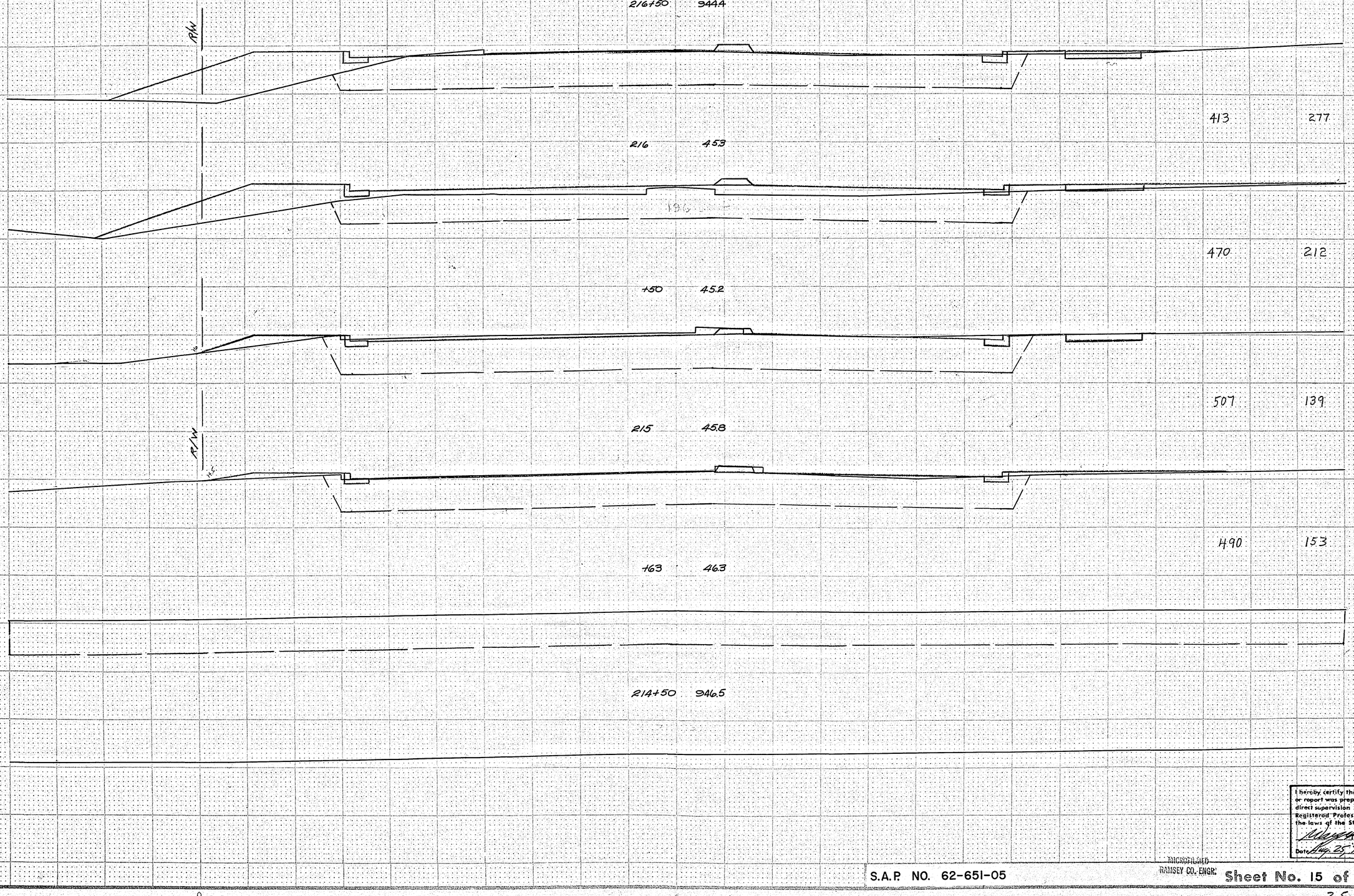
MICROFILMED
RAMSEY CO. ENGR.

Sheet No. 14 of 23 Sheets

25-102

Fed. Proj. No.

	EXC.	EMB.
216+50	325	208
216	413	277
+50	470	212
215	507	139
+63	490	153
214+50		



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 Aug. 25, 72 Reg. No. 5782

MICROFILMED

RAMSEY CO. ENGR.

S.A.P. NO. 62-651-05

Sheet No. 15 of 23 Sheets

25-102

CHECKED BY

FUNCTIONAL CROSS SECTION - OPEN DOTTED

H. A. ROGERS CO., MINNEAPOLIS-ST. PAUL

Fed. Proj. No.

EXC. EMB.

R/W

217+43 9442

TOP NORTH RAIL

+38 443

TOP RAIL

+25 443

TOP RAIL

+22 443

TOP SOUTH RAIL

+22 444

187 186

217 444

VAR.

3:1

15"X 22' RCP CL III

PJ522

107 105

216+87 9444

R/W

3:1

3:1

15" x 75' R.C.P. @ 2.26%

INV. 939.7

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Date Aug. 25, Reg. No. 5782

S.A.P. NO. 62-651-05

MICROFILMED RAMSEY CO. ENGR.

Sheet No. 16 of 23 Sheets

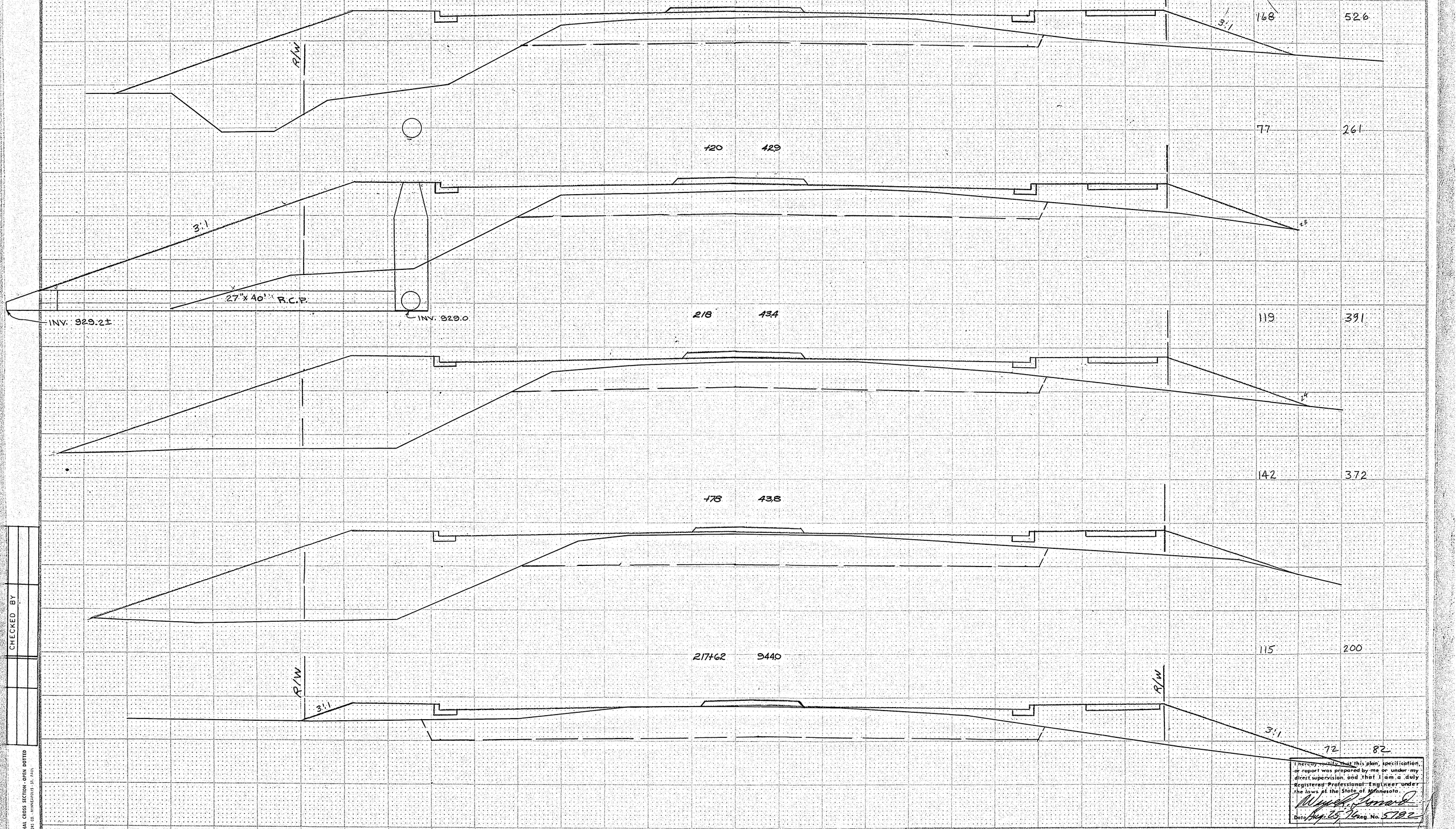
25-102

FUNCTIONAL CROSS SECTION - OPEN DOTTED

M. L. KOENIG CO., MINNEAPOLIS - ST. PAUL

Fed. Proj. No.

		EXC.	EMB.
218+33	94+26	168	526
120	129	77	261
218	134	119	391
142			372
178	138	115	200
217+62	94+10	72	82



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.

Wayne R. Leonard

Date Aug. 25, 76 Reg. No. 5782

CHECKED BY

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

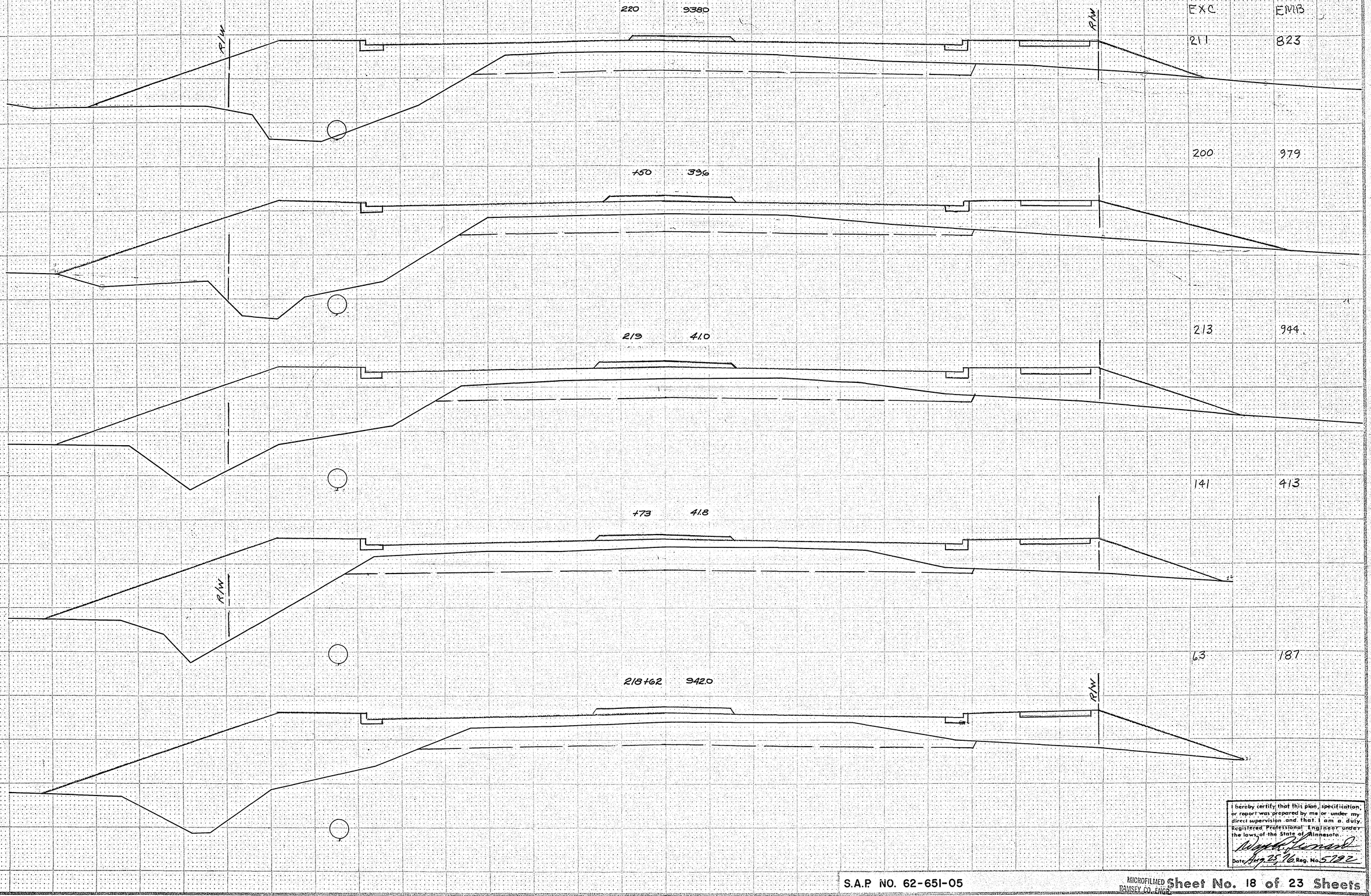
S.A.P. NO. 62-651-05

MICROFILMED
RAMSEY CO. ENGR.

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25-102

Fed. Proj. No.



DRAWN BY

CHECKED BY

FUNCTIONAL CROSS SECTION - OPEN DOTTED
N. A. ROSTI CO., MINNEAPOLIS - ST. PAUL

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 July 25 '76 Reg. No. 5792

S.A.P NO. 62-651-05

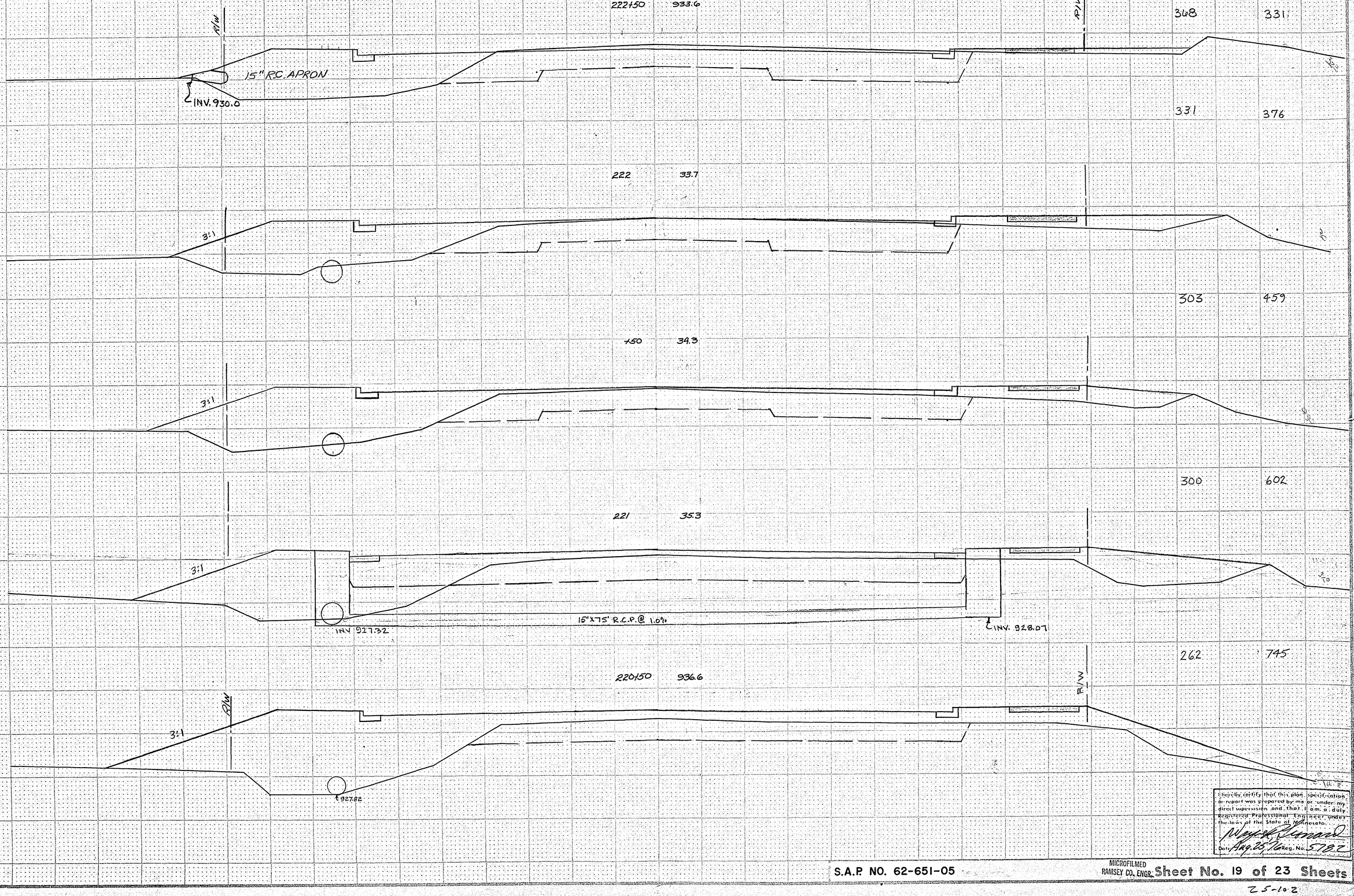
MICROFILMED RAMSEY CO. ENGR.

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Fed. Proj. No.

		EXC	EMB
222+50	933.6	368	331
		331	376
222	33.7	303	459
+50	34.3	300	602
221	35.3	262	745
220+50	936.6		



	DESIGNED BY	DRAWN BY	CHECKED BY
DATE	6-30-76	8-2-76	8-12-76
	BRD	BRD	LRF

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

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 Aug. 25 '76 Reg. No. 5782

S.A.P NO. 62-651-05

MICROFILMED RAMSEY CO. ENGR.

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25-102

Fed. Proj. No.

225+00 9333

R/W

27" X71' R.C.P. @ 2.0%

INV. 934.82

INV. 926.24

R/W

27" X58' R.C.P.

INV. 928.07

EXC. EMB.

EXISTING M.H. STA. 225+49 RT. 65'

485 236

435 289

150 332

392 330

224 334

388 318

450 33.5

390 322

223+00 9337

R/W

3:1

3:1

R/W

3:1

36.9

REVISED	DATE	
BRP	6-30-76	DESIGNED BY
Eliot	8-23-76	DRAWN BY
TKF	3-25-77	CHECKED BY

FUNCTIONAL CROSS SECTION - OPEN DOTTED

M. A. ROGERS CO., MINNEAPOLIS - ST. PAUL

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 Aug 25 1976 Reg. No. 5782

S.A.P. NO. 62-651-05

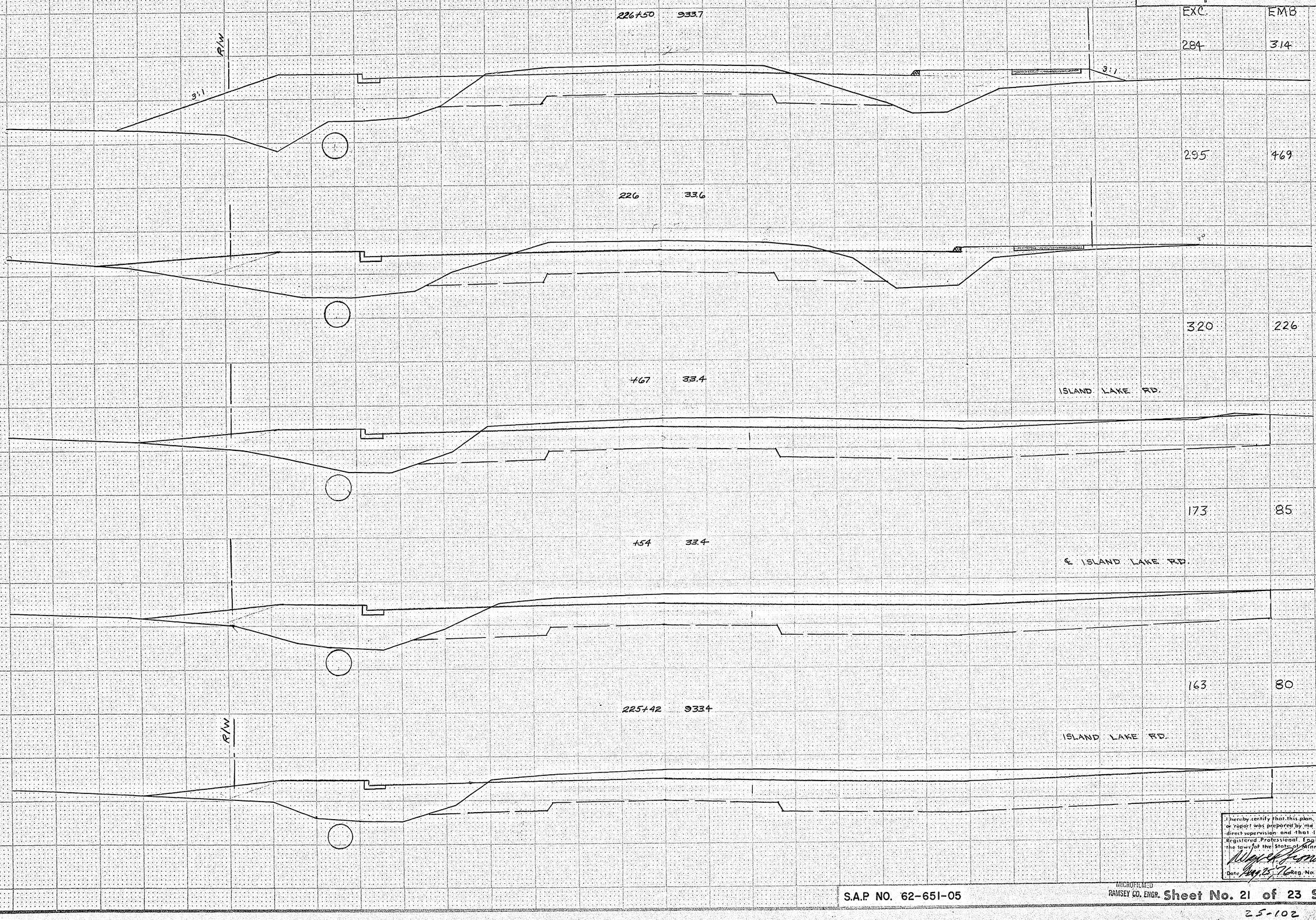
MICROFILMED RAMSEY CO. ENGR.

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25-102

Fed. Proj. No.

	EXC.	EMB
226+50 933.7	284	314
	295	469
226 33.6	320	226
467 33.4 ISLAND LAKE RD.	173	85
454 33.4 ℄ ISLAND LAKE RD.	163	80
225+42 9334 ISLAND LAKE RD.		



REVISED	DATE
BKP	6-30-76
[illegible]	8-27-76

DESIGNED BY
DRAWN BY
CHECKED BY

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

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.
Wayne A. Howard
Date: Aug. 25, 76 Reg. No. 5782

S.A.P NO. 62-651-05

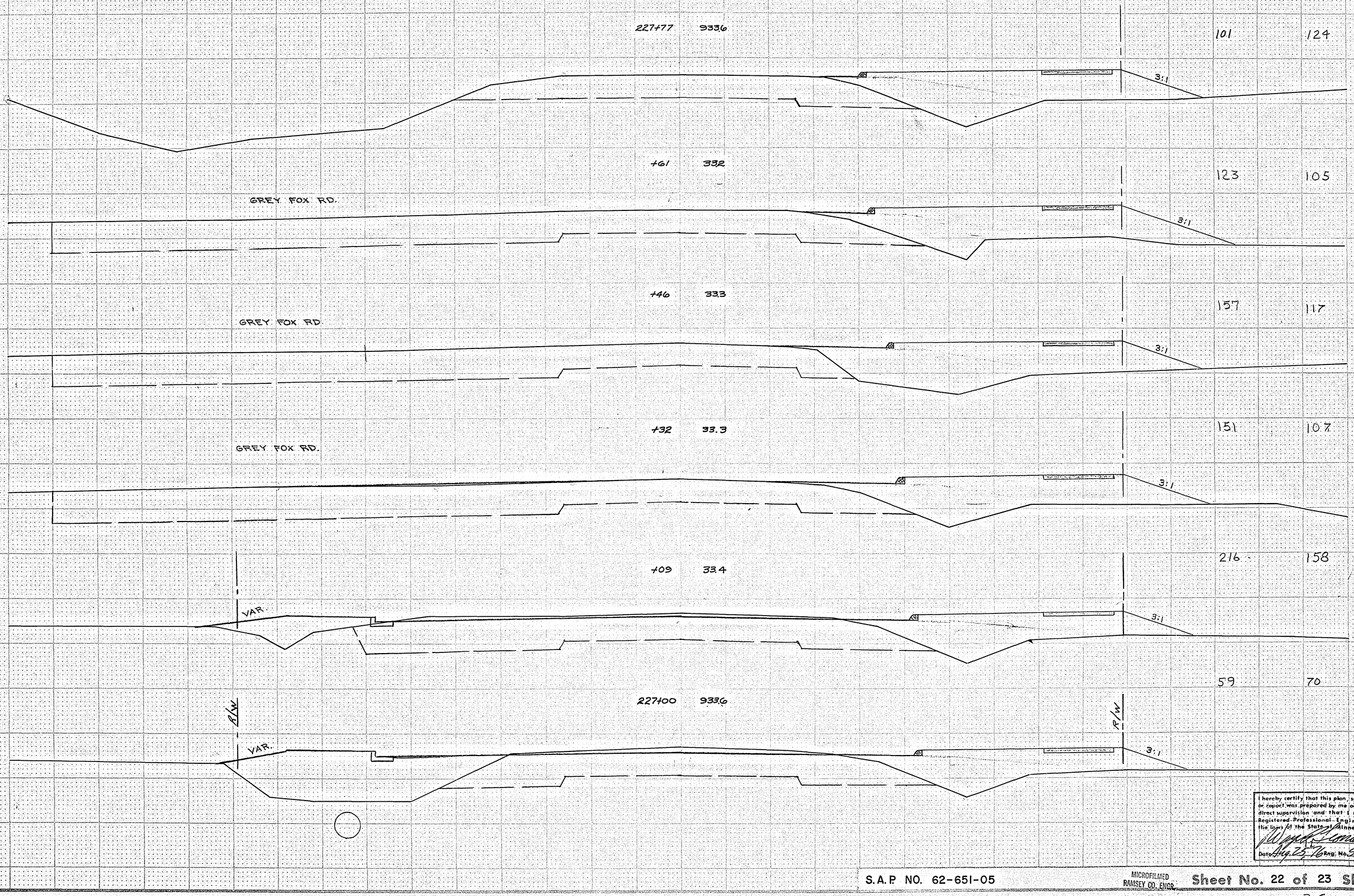
MICROFILMED
RAMSEY CO. ENGR.

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25-102

Fed. Proj. No.

		EXC.	EMB.
227+77	933.6	101	124
+61	33.2	123	105
+46	33.3	157	117
+32	33.3	151	107
+09	33.4	216	158
227+00	933.6	59	70



DESIGNED BY
DRAWN BY
CHECKED BY
5-27-76

FUNCTIONAL CROSS SECTION OPEN DOTTED
H. A. KOLEY CO. - JENSEN-HOLLS ST. PAUL

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.

Wyndy Leonard

Date Aug. 25, 76 Reg. No. 5752

S.A.P. NO. 62-651-05

MICROFILMED RAMSEY CO. ENGR.

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25-102

Fed. Proj. No.

EXC EM8

229+50 933.3

229 33.3

R/W

+55 33.2

+22 33.1

4' GRAVEL SHOULDER

228+00 933.1

R/W

3:1

GRAND TOTAL	9,762	12,381	
		X 130%	
5871 C.Y. COMMON BORROW SHALL BE OBTAINED FROM STOCKPILE ON COUNTY OWNED PROPERTY AT COUNTY RD "E"		16,095	
		- 9,762	
		6,333 C.Y. COMMON BORROW	

46 60

REVISED DATE

DESIGNED BY

DRAWN BY

CHECKED BY

FUNCTIONAL CROSS SECTION - OTH DOTTED
H. A. ROSPAR CO. - MINNEAPOLIS - ST. PAUL

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 Aug. 25, 1967 Reg. No. 5782

S.A.P. 62-651-05

MICROFILMED RAMSEY CO. ENGR.

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