LEXINGTON AVENUE S.A.P. NO. 62-651-09 C.T.B. BIDS RECEIVED MAY 23, 1979

LEXINGTON AVE. C.T.B. 62-651-09 T.H. 36 to COUNTY RD. "C"

STATEMENT OF ESTIMATED QUANITITIES

ITEM NO	ITEM	UNIT	ESTIMATED QUANTITIES	AVERAGE 3 LOW BIDDERS	SHAFER CONTRACTING UNIT PRICE	SHAFER CONTRACTING AMOUNT	TOTAL ASPHALT UNIT PRICE	TOTAL ASPHALT AMOUNT	C.S. McCROSSAN UNIT PRICE	C.S. McCROSSAN AMOUNT	ARCON CONSTRUCTION UNIT PRICE	ARCON CONSTRUCTION AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	37,200.00	30,000.00	30,000.00	29,000.00	29,000.00	52,600.00	52,600.00	56,600.00	56,600.00
2101.502	CLEARING	TREE	53	100.00	125.00	6,625.00	100.00	5,300.00	75.00	3,975.00	75.00	3,975.00
2101.507	GRUBBING	TREE	55	66.67	100.00	5,500.00	75.00	4,125.00	25.00	1,375.00	60.00	3,300.00
2104.501	REMOVE CONC. CURB & GUTTER	L.F.	691	1.70	2.00	1,382.00	1.10	760.10	2.00	1,382.00	2.50	1,727.50
2104.501	REMOVE SEWER PIPE	L.F.	500	5.75	4.00	2,000.00	7.25	3,625.00	6.00	3,000.00	6.00	3,000.00
2104.505	REMOVE CONCRETE PAVEMENT	S.Y.	6,130	2.28	3.00	18,390.00	2.00	12,260.00	1.85	11,340.50	2.20	13,486.00
2104.509	REMOVE CATCH BASINS	EACH	8	193.33	100.00	800.00	80.00	640.00	400.00	3,200.00	125.00	1,000.00
2104.523	SALVAGE CASTINGS	EACH	9	87.67	150.00	1,350.00	43.00	387.00	70.00	630.00	50.00	450.00
2104.523	SALVAGE HYDRANT	EACH	2	335.00	350.00	700.00	155.00	310.00	500.00	1,000.00	400.00	800.00
2104.521	SALVAGE FENCE, 72" CHAIN LINK	L.F.	10	13.33	10.00	100.00	10.00	100.00	20.00	200.00	10.00	100.00
2105.501	COMMON EXCAVATION	C.Y.	25,451	2.54	2.75	69,990.25	2.95	75,080.45	1.93	49,120.43	2.15	54,719.65
2105.525	TOPSOIL BORROW (L.V.)	C.Y.	1,333	6.30	6.50	8,664.50	6.50	8,664.50	5.90	7,864.70	5.25	6,998.25
2130.501	WATER	(M) GAL.	150	13.33	10.00	1,500.00	10.00	1,500.00	20.00	3,000.00	11.00	1,650.00
2211.501	AGGREGATE BASE, CLASS 6	TON	7,840	5.15	4.70	36,848.00	5.50	43,120.00	5.25	41,160.00	5.60	43,904.00
2211.501	AGGREGATE BASE, CLASS 4	TON	9,416	4.65	4.45	41,901.20	4.50	42,372.00	5.00	47,080.00	4.60	43,313.60
2211.501	AGGREGATE BASE, CLASS 3	TON	9,699	4.45	4.45	43,160.55	4.25	41,220.75	4.65	45,100.35	4.60	44,615.40
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	352	118.33	120.00	42,240.00	120.00	42,240.00	115.00	40,480.00	120.00	42,240.00
2331.508	WEARING COURSE MIXTURE	TON	374	22.00	13.00	4,862.00	13.00	4,862.00	40.00	14,960.00	13.00	4,862.00
2331.510	BINDER COURSE MIXTURE	TON	1,759	10.00	9.40	16,534.60	9.40	16,534.60	11.20	19,700.80	9.40	16,534.60
2331.514	BASE COURSE MIXTURE	TON	5,966	9.98	9.40	56,080.40	9.38	55,961.08	11.15	66,520.90	9.30	55,483.80
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	1,832	.93	.90	1,648.80	.90	1,648.80	1.00	1,832.00	.90	1,648.80
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	5,495	.53	.65	3,571.75	.65	3,571.75	.30	1,648.50	.65	3,571.75
2361.504	ASPHALT CEMENT	TON	57	118.33	120.00	6,840.00	120.00	6,840.00	115.00	6,555.00	120.00	6,840.00
2361.508	WEARING COURSE MIXTURE	TON	815	19.17	17.00	13,855.00	16.95	13,814.25	23.55	19,193.25	16.95	13,814.25
2451.507	GRANULAR BEDDING	C.Y.	400	9.50	6.00	2,400.00	8.50	3,400.00	14.00	5,600.00	6.00	2,400.00
2501.515	15" R.C. APRONS	EACH	2	218.33	175.00	350.00	180.00	360.00	300.00	600.00	205.00	410.00
2503.511	15" R.C. PIPE SEWER, CLASS IV	L.F.	2,592	20.00	19.00	49,248.00	20.00	51,840.00	21.00	54,432.00	32.65	84,628.80
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	292	22.00	21.00	6,132.00	22.00	6,424.00	23.00	6,716.00	22.10	6,453.20
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	168	25.00	24.00	4,032.00	26.00	4,368.00	25.00	4,200.00	31.80	5,342.40
2506.508	CONSTRUCT MANHOLES, DESIGN A or F	EACH	3	1,000.00	1,200.00	3,600.00	900.00	2,700.00	900.00	2,700.00	850.00	2,550.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN A or F	EACH	4	833.33	900.00	3,600.00	700.00	2,800.00	900.00	3,600.00	830.00	3,320.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.-2	EACH	12	866.67	700.00	8,400.00	1,000.00	12,000.00	900.00	10,800.00	800.00	9,600.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P.-4	EACH	18	1,166.67	900.00	16,200.00	1,000.00	18,000.00	1,600.00	28,800.00	1,150.00	20,700.00
2506.511	RECONSTRUCT MANHOLES	L.F.	49.9	121.67	115.00	5,738.50	120.00	5,988.00	130.00	6,487.00	120.00	5,988.00
2506.521	INSTALL CASTINGS	EACH	7	163.33	150.00	1,050.00	180.00	1,260.00	160.00	1,120.00	250.00	1,750.00
2506.522	ADJUST FRAME & RING CASTINGS	EACH	25	131.67	115.00	2,875.00	120.00	3,000.00	160.00	4,000.00	150.00	3,750.00
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	6,525	6.07	6.00	39,150.00	6.50	42,412.50	5.70	37,192.50	7.22	47,110.50
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	S.Y.	80	24.67	20.00	1,600.00	29.00	2,320.00	25.00	2,000.00	23.22	1,857.60
2535.501	BITUMINOUS CURB	L.F.	780	2.17	2.00	1,560.00	2.00	1,560.00	2.50	1,950.00	2.00	1,560.00
2571.502	F&P SHADE TREES (2½" SUGAR MAPLE)	TREE	3	215.00	185.00	555.00	300.00	900.00	160.00	480.00	204.20	612.60
2571.502	F&P SHADE TREES (2½" RED MAPLE)	TREE	7	219.00	192.00	1,344.00	300.00	2,100.00	165.00	1,155.00	281.50	1,970.50
2571.502	F&P SHADE TREES (2½" HACKBERRY)	TREE	8	211.67	180.00	1,440.00	300.00	2,400.00	155.00	1,240.00	211.20	1,689.60
2571.502	F&P SHADE TREES (2½" AMERICAN LINDEN)	TREE	6	206.00	168.00	1,008.00	300.00	1,800.00	150.00	900.00	250.60	1,503.60
2571.502	F&P SHADE TREES (2½" GREEN ASH)	TREE	9	206.00	168.00	1,512.00	300.00	2,700.00	150.00	1,350.00	232.00	2,088.00
2571.541	TRANSPLANT TREES (2" to 3" PINE)	TREE	6	70.00	35.00	210.00	100.00	600.00	75.00	450.00	100.00	600.00
2571.541	TRANSPLANT TREES (2" ASH)	TREE	6	70.00	35.00	210.00	100.00	600.00	75.00	450.00	100.00	600.00
2575.505	SODDING	S.Y.	16,000	1.11	1.10	17,600.00	1.15	18,400.00	1.07	17,120.00	.98	15,680.00
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	0.6	300.00	350.00	210.00	300.00	180.00	250.00	150.00	300.00	180.00
503.602	F&I TRASH GUARD FOR 15" R.C.P. APRON	EACH	2	275.00	300.00	600.00	375.00	750.00	150.00	300.00	215.00	430.00
504.602	ADJUST VALVE BOX	EACH	15	91.67	100.00	1,500.00	85.00	1,275.00	90.00	1,350.00	125.00	1,875.00
504.602	INSTALL HYDRANT	EACH	2	683.33	450.00	900.00	900.00	1,800.00	700.00	1,400.00	450.00	900.00
504.602	RELOCATE DRINKING FOUNTAIN	EACH	1	533.33	450.00	450.00	900.00	900.00	250.00	250.00	900.00	900.00
504.605	2" INSULATION (WATERMAIN)	S.Y.	356	12.67	18.00	6,408.00	5.00	1,780.00	15.00	5,340.00	17.10	6,087.60
563.504	4" WIDE YELLOW LINES	L.F.	8,750	.73	.72	6,300.00	.75	6,562.50	.72	6,300.00	.72	6,300.00
563.504	4" WIDE WHITE LINES	L.F.	7,000	.72	.70	4,900.00	.75	5,250.00	.70	4,900.00	.70	4,900.00
563.603	PAVEMENT MESSAGE (M)	EACH	12	160.00	155.00	1,860.00	170.00	2,040.00	155.00	1,860.00	155.00	1,860.00
563.603	PAVEMENT MESSAGE (ONLY)	EACH	4	170.00	160.00	640.00	180.00	720.00	160.00	640.00	160.00	640.00
		TOTAL				608,126.55		623,127.28		658,750.93		670,872.00

LEXINGTON AVE. S.A.P. 62-651-09 C.T.B. T.H.36 to COUNTY RD."C" 4-12-79

STATEMENT OF ESTIMATED QUANITITIES

ITEM NO	ITEM	UNIT	ESTIMATED QUANITITIES	UNIT PRICE	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	30,600 00	30,600 00
2101.502	CLEARING	TREE	53	125 00	6625 00
2101.507	GRUBBING	TREE	55	90 00	4,950 00
2104.501	REMOVE CONC. CURB & GUTTER	L.F.	691	1 10	760 10
2104.501	REMOVE SEWER PIPE	L.F.	500	4 50	2250 00
2104.505	REMOVE CONCRETE PAVEMENT	S.Y.	6,130	1 45	8,888 50
2104.509	REMOVE CATCH BASINS	EACH	8	300 00	2,400 00
2104.523	SALVAGE CASTINGS	EACH	9	50 00	450 00
2104.523	SALVAGE HYDRANT	EACH	2	300 00	600 00
2104.521	SALVAGE FENCE, 72" CHAIN LINK	L.F.	10 *	5 00	50 00
2105.501	COMMON EXCAVATION	C.Y.	25,451	2 20	55,992 20
2105.525	TOPSOIL BORROW (L.V.)	C.Y.	1,333	6 30	8,397 90
2130.501	WATER	(M) GAL.	150	20 00	3,000 00
2211.501	AGGREGATE BASE, CLASS 6	TON	7,840	5 00	39,200 00
2211.501	AGGREGATE BASE, CLASS 4	TON	9,416	4 75	44,726 00
2211.501	AGGREGATE BASE, CLASS 3	TON	9,699	4 50	43,645 50
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	352	120 00	42,240 00
2331.508	WEARING COURSE MIXTURE	TON	374	40 00	14,960 00
2331.510	BINDER COURSE MIXTURE	TON	1,759	12 85	22,603 15
2331.514	BASE COURSE MIXTURE	TON	5,966	9 35	55,782 10
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	1,832	2 00	3664 00
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	5,495	2 00	10,990 00
2361.504	ASPHALT CEMENT	TON	57	120 00	6,840 00
2361.508	WEARING COURSE MIXTURE	TON	815	20 00	16,300 00
2451.507	GRANULAR BEDDING	C.Y.	400	8 00	3,200 00
2501.515	15" R.C. APRONS	EACH	2	350 00	700 00
2503.511	15" R.C. PIPE SEWER, CLASS IV	L.F.	2,592	23 00	59616 00
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	292	26 00	7592 00
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	168	32 00	5,376 00
2506.508	CONSTRUCT MANHOLES, DESIGN A or F	EACH	3	900 00	2,700 00
2506.509	CONSTRUCT CATCH BASINS, DESIGN A or F	EACH	4	900 00	3,600 00
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.-2	EACH	12	800 00	9,600 00
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P.-4	EACH	18	1,200 00	21,600 00
2506.511	RECONSTRUCT MANHOLES	L.F.	49 9	110 00	5,489 00
2506.521	INSTALL CASTINGS	EACH	7	150 00	1,050 00
2506.522	ADJUST FRAME & RING CASTINGS	EACH	25	200 00	5,000 00
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	6,525	6 25	40,781 25
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	S.Y.	80	19 00	1,520 00
2535.501	BITUMINOUS CURB	L.F.	780	2 20	1,716 00
2571.502	F.&P. SHADE TREES (2½" SUGAR MAPLE)	TREE	3	200 00	600 00
2571.502	F.&P. SHADE TREES (2½" RED MAPLE)	TREE	7	200 00	1400 00
2571.502	F.&P. SHADE TREES (2½" HACKBERRY)	TREE	8	200 00	1,600 00
2571.502	F.&P. SHADE TREES (2½" AMERICAN LINDEN)	TREE	6	200 00	1,200 00
2571.502	F.&P. SHADE TREES (2½" GREEN ASH)	TREE	9	200 00	1800 00
2571.541	TRANSPLANT TREES (2" to 3" PINE)	TREE	6	90 00	540 00
2571.541	TRANSPLANT TREES (2" ASH)	TREE	6	90 00	540 00
2575.505	SODDING	S.Y.	16,000	1 00	16,000 00
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	0.6	300 00	180 00
503.602	F.&I. TRASH GUARD FOR 15" R.C.P. APRON	EACH	2	250 00	500 00
504.602	ADJUST VALVE BOX	EACH	15	70 00	1,050 00
504.602	INSTALL HYDRANT	EACH	2	600 00	1,200 00
504.602	RELOCATE DRINKING FOUNTAIN	EACH	1	1,000 00	1,000 00
504.605	2" INSULATION (WATERMAIN)	S.Y.	356	13 00	4,628 00
563.504	4" WIDE YELLOW LINES	L.F.	8,750	0 80	7,000 00
563.504	4" WIDE WHITE LINES	L.F.	7,000	0 80	5,600 00
563.603	PAVEMENT MESSAGE (↰)	EACH	12	155 00	1,860 00
563.603	PAVEMENT MESSAGE (ONLY)	EACH	4	158 00	632 00
		TOTAL			642,789 70

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 (NAME)
DRY RUN
DRAINAGE DITCH (SIZE)
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
ON 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 T-BUR
BURIED ELECTRIC CABLE P-BUR
AERIAL TELEPHONE CABLE T-AE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE

GROSS LENGTH	3,530 FEET =	0.67 MILES
BRIDGES LENGTH	0 FEET =	0 MILES
EXCEPTIONS LENGTH	0 FEET =	0 MILES
NET LENGTH	3,530 FEET	0.67 MILES

PLAN, = 0 10' 30' 50'
PROFILE HORZ. = 0 10' 20' 30' 40' 50'
PROFILE VERT. = 0 20' 40'
CROSS SECTIONS = 0 5' 10'
LAYOUT MAP = 0 5 10' 5,280'

ANOKA COUNTY
RAMSEY COUNTY
Mounds View
North Oaks
Vadnais Heights
New Brighton
Arden Hills
Roseville
Lauderdale
Falcon Hts
Maplewood
Little Canada
North St. Paul
White Bear Lake
Bald Eagle Lake
Poplar Lake
Wilkinson Lake
Otter Lake
Turtle Lake
Snail Lake
Island Lake
Gilfillan Lake
Birch Lake
Grass Lake
Lake Owasso
Lake Josephine
Lake Gervais
Beaver Lake
Lake Phalen
Lake Como
Lake Monitor
Lake Johanna
Rice Creek
Rice Creek Diversion
Owasso Creek
Snail Lake Creek
Trout Brook
Trout Brook Diversion
Lake Valentine
Lake Wabasso
Lake Emily
Lake Deer
Lake Wasserman
Lake Vadnais
Lake Gervais
Lake Josephine
Lake Owasso
Lake Como
Lake Monitor
Lake Johanna
Lake Phalen
Beaver Lake
Lake Wasserman
Lake Emily
Lake Deer
Lake Valentine
Lake Wabasso

STATEMENT OF ESTIMATED QUANITITIES

ITEM NO.	ITEM	UNIT	ESTIMATED QUANITITIES	FINAL ESTIMATED QUANITITIES
2021.501	MOBILIZATION	LUMP SUM	1	
2101.502	CLEARING	TREE	53	
2101.507	GRUBBING	TREE	55	
2104.501	REMOVE CONC. CURB & GUTTER	L.F.	691	
2104.501	REMOVE SEWER PIPE	L.F.	500	
2104.505	REMOVE CONCRETE PAVEMENT	S.Y.	6,130	
2104.509	REMOVE CATCH BASINS	EACH	8	
2104.523	SALVAGE CASTINGS	EACH	9	
2104.523	SALVAGE HYDRANT	EACH	2	
2104.521	SALVAGE FENCE, 72" CHAIN LINK (1)	L.F.	10 *	
2105.501	COMMON EXCAVATION	C.Y.	25,451	
2105.525	TOPSOIL BORROW (L.V.)	C.Y.	1,333	
2130.501	WATER	(M) GAL.	150	
2211.501	AGGREGATE BASE, CLASS 6 (2)	TON	7,840	
2211.501	AGGREGATE BASE, CLASS 4	TON	9,416	
2211.501	AGGREGATE BASE, CLASS 3	TON	9,699	
2331.504	BITUMINOUS MATERIAL FOR MIXTURE (3)	TON	352	
2331.508	WEARING COURSE MIXTURE (4)	TON	374	
2331.510	BINDER COURSE MIXTURE	TON	1,759	
2331.514	BASE COURSE MIXTURE	TON	5,966	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	1,832	
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	5,495	
2361.504	ASPHALT CEMENT	TON	57	
2361.508	WEARING COURSE MIXTURE	TON	815	
2451.507	GRANULAR BEDDING	C.Y.	400	
2501.515	15" R.C. APRONS	EACH	2	
2503.511	15" R.C. PIPE SEWER, CLASS IV	L.F.	2,592	
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	292	
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	168	
2506.508	CONSTRUCT MANHOLES, DESIGN A or F	EACH	3	
2506.509	CONSTRUCT CATCH BASINS, DESIGN A or F	EACH	4	
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.-2	EACH	12	
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P.-4	EACH	18	
2506.511	RECONSTRUCT MANHOLES	L.F.	49.9	
2506.521	INSTALL CASTINGS	EACH	7	
2506.522	ADJUST FRAME & RING CASTINGS	EACH	25	
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	6,525	
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	S.Y.	80	
2535.501	BITUMINOUS CURB	L.F.	780	
2571.502	F&P SHADE TREES (2½" SUGAR MAPLE)	TREE	3	
2571.502	F&P SHADE TREES (2½" RED MAPLE)	TREE	7	
2571.502	F&P SHADE TREES (2½" HACKBERRY)	TREE	8	
2571.502	F&P SHADE TREES (2½" AMERICAN LINDEN)	TREE	6	
2571.502	F&P SHADE TREES (2½" GREEN ASH)	TREE	9	
2571.541	TRANSPLANT TREES (2" to 3" PINE)	TREE	6	
2571.541	TRANSPLANT TREES (2" ASH)	TREE	6	
2575.505	SODDING	S.Y.	16,000	
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	0.6	
503.602	F.&I. TRASH GUARD FOR 15" R.C.P. APRON	EACH	2	
504.602	ADJUST VALVE BOX	EACH	15	
504.602	INSTALL HYDRANT	EACH	2	
504.602	RELOCATE DRINKING FOUNTAIN	EACH	1	
504.605	2" INSULATION (WATERMAIN)	S.Y.	356	
563.504	4" WIDE YELLOW LINES	L.F.	8,750	
563.504	4" WIDE WHITE LINES	L.F.	7,000	
563.603	PAVEMENT MESSAGE (↰)	EACH	12	
563.603	PAVEMENT MESSAGE (ONLY)	EACH	4	

STANDARD DETAIL PLATES

0003 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 H	REINFORCED CONCRETE PIPE
3006 C	GASKET JOINT FOR R.C. PIPE
3100 F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
4000 G	MANHOLE OR CATCH BASIN
4005 J	MANHOLE OR CATCH BASIN
4010 E	CONCRETE SHORT CONE AND ADJUSTING RING
4011 D	PRECAST CONCRETE BASE
4021 C	PRECAST CURB OPENING CATCH BASIN
4101 B	RING CASTING FOR MANHOLE OR CATCH BASIN
4110 D	COVER CASTING FOR MANHOLE
4140 D	SPECIAL GRATE CASTING FOR CATCH BASIN
4180 F	MANHOLE STEP CASTING
4181 A	ALUMINUM MANHOLE STEP
4108 D	MANHOLE ADJUSTING RING
7036 B	PEDESTRIAN CURB RAMP
7065 C	BITUMINOUS CURB
7100 E	CONCRETE CURB AND GUTTERS
8000 F	STANDARD BARRICADES

HYDRANT CHART

REMOVE		INSTALL		ADJUST	
STATION	LOCATION	STATION	LOCATION	STATION	LOCATION
78+45	LT. 30'	AS DIRECTED BY THE			
98+49	LT. 28'	CITY OF ROSEVILLE			

CLEAR, GRUB, & TRANSPLANT CHART

STATION	LOCATION LT.	LOCATION RT.	DESCRIPTION	CLEAR	GRUB	TRANSPLANT	TRANSPLANT TO LT	TRANSPLANT TO RT.
70+31		41'	12" ELM	1	1			
70+50		41'	12" ELM	1	1			
71+15		40'	18" ELM	1	1			
73+41		58'	10" COTT.	1	1			
73+48		59'	10" COTT.	1	1			
74+43		49'	6" POP.	1	1			
74+72		54'	12" COTT.	1	1			
74+75		53'	3-8" COTT.	3	3			
75+15	29'		20" OAK	1	1			
76+17		47'	STUMP	0	1			
76+17		56'	STUMP	0	1			
78+22		39'	21" B.E.	1	1			
78+43		45'	10" B.E.	1	1			
85+85 to 86+60		36'	6-2" ASH			6	AS DIRECTED	
86+06 to 86+22			4-2" PINE			4	AS DIRECTED	
88+75		40'	3-12" COTT.	3	3			
89+00	45'		4" COTT.	1	1			
89+05	44'		12" COTT.	1	1			
89+20		47'	QUINT 10" COTT.	5	1			
89+62		45'	26" COTT.	1	1			
90+05 to 90+30		35'	17-5" B.E.	17	17			
90+60		40'	4" POP.	1	1			
91+45		45'	7-12" WILLOWS	7	7			
91+80		44'	10" COTT.	1	1			
92+61	30'		20" OAK	1	1			
93+63	30'		20" OAK	1	1			
93+80	32'		STUMP	0	1			
98+25		42'	3" PINE			1	AS DIRECTED	
99+16		45'	10" MAPLE	1	1			
99+35		44'	3" PINE			1	AS DIRECTED	
101+79	35' to W.		3-STUMP	0	3			
TOTALS				53	55	12		

(1) * SALVAGE 10 L.F. OF FENCE (72" CHAIN LINK) STA. 99+00 RT. 45' TO 55' RETURN TO OWNER (CITY OF ROSEVILLE)

(2) INCLUDE 168 TON FOR PATH

(3) INCLUDES 22 TON FOR BITUMINOUS PATH AND ENTRANCES

(4) TO BE USED FOR BITUMINOUS PATH AND ENTRANCES

REVISED	DATE		
H.M.B.	3-20-79	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

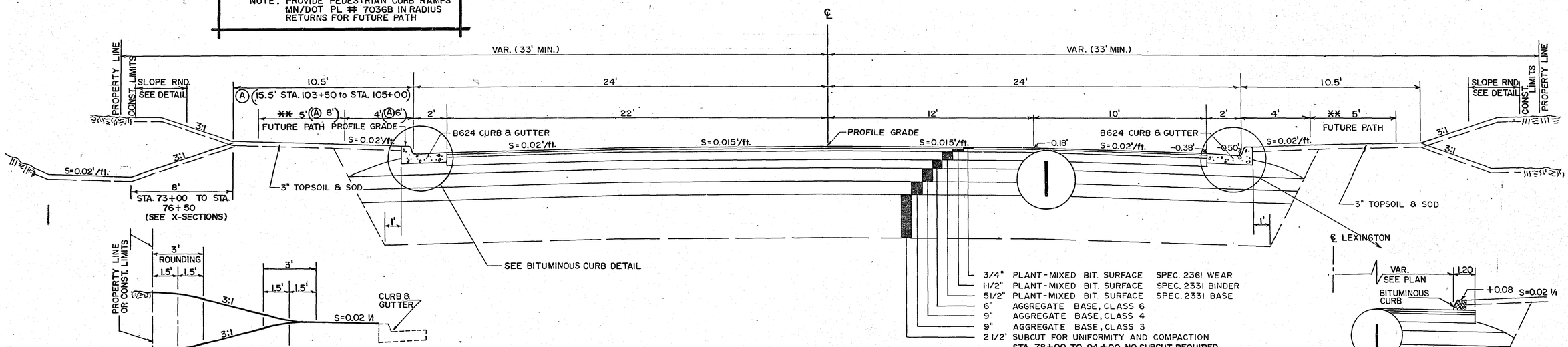
L. Wayne Grooms

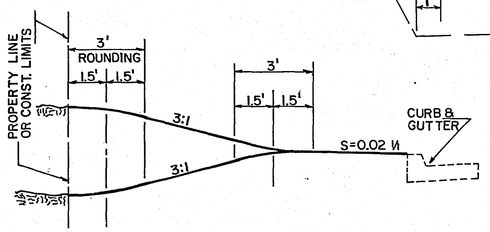
Date 7-13-79 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B. Sheet No. 2 of 38 Sheets

TYPICAL SECTIONS

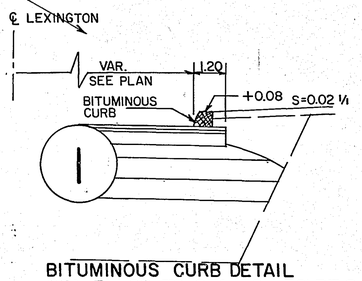
** FUTURE PATH
NOTE: PROVIDE PEDESTRIAN CURB RAMPS MN/DOT PL # 7036B IN RADIUS RETURNS FOR FUTURE PATH



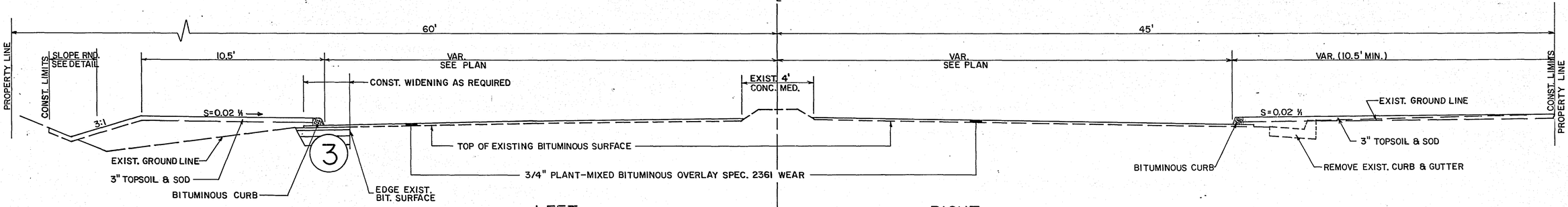


SLOPE ROUNDING DETAIL

STA. 72+50 TO STA. 105+00

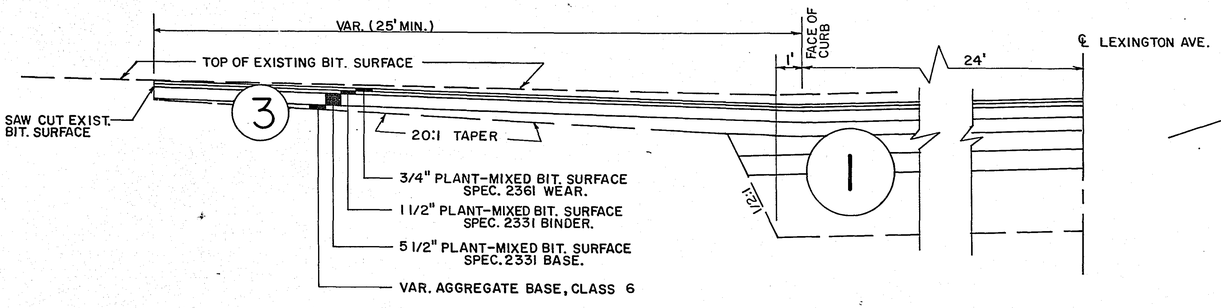


BITUMINOUS CURB DETAIL
STA. 71+60 TO STA. 72+50 RT. & LT.

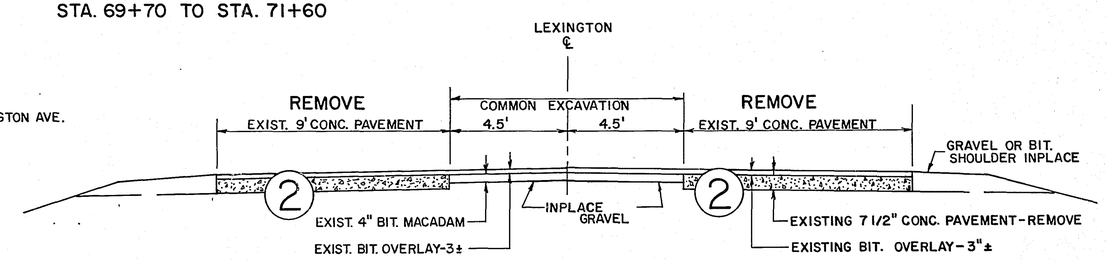


LEFT
STA. 70+65 TO STA. 71+60

RIGHT
STA. 69+70 TO STA. 71+60



TYPICAL SIDE STREET APPROACH



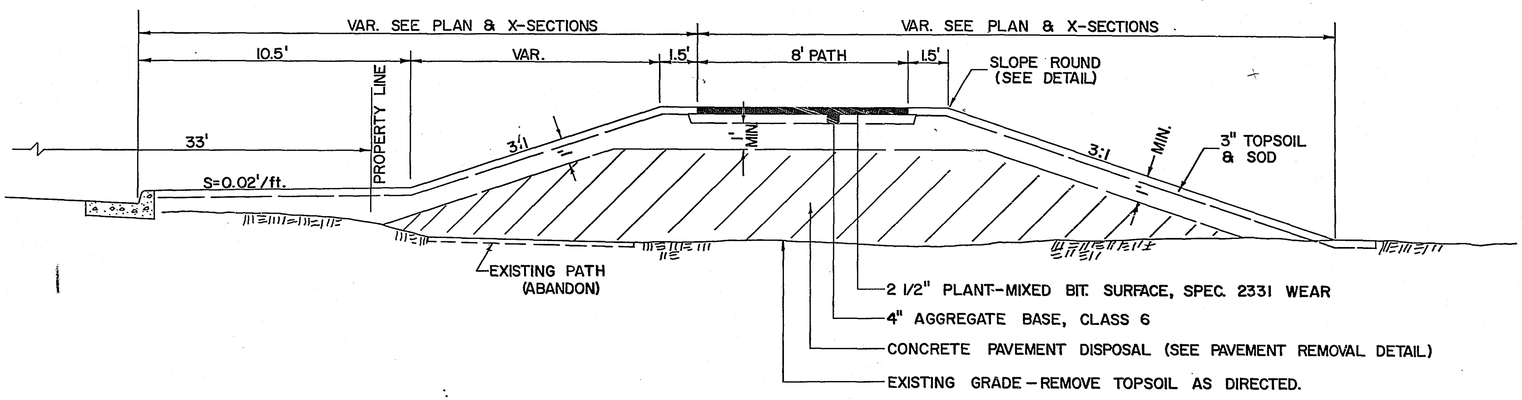
CONCRETE PAVEMENT REMOVAL STA. 71+60 TO STA. 102+25
(SEE DISPOSAL AREA DETAIL)

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.
Warren P. Leonard
Date 7-18-78 Reg. No. 5782

SAP. NO. 62-651-09 C.T.B.

Sheet No. 3 of 38 Sheets

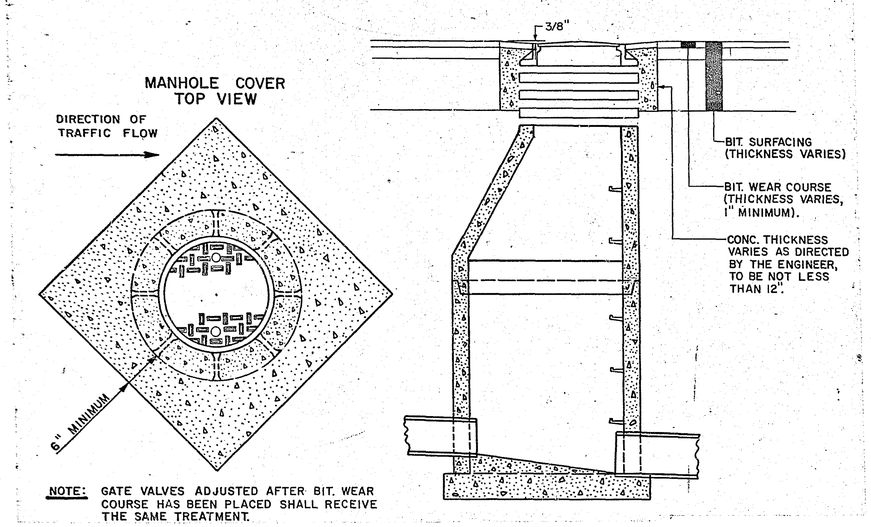


CONCRETE DISPOSAL AREA

RIGHT

STA. 95+00 TO STA. 102+00

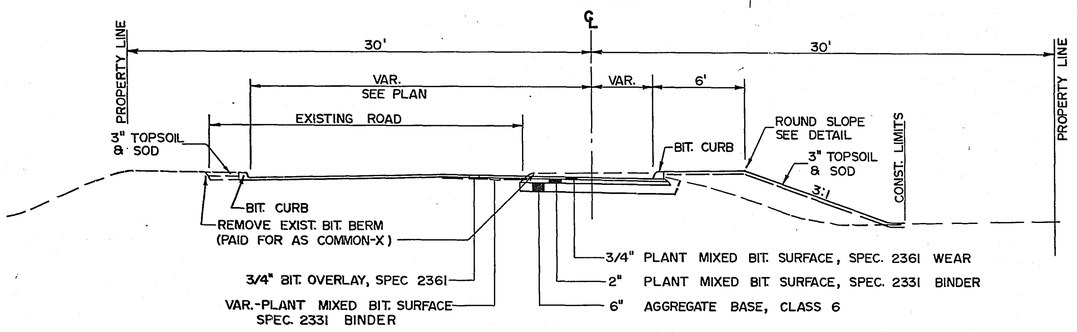
MANHOLE RECONSTRUCTION DETAIL



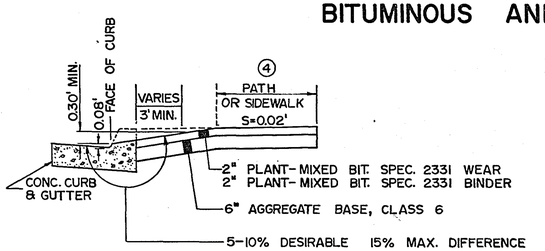
NOTE: GATE VALVES ADJUSTED AFTER BIT. WEAR COURSE HAS BEEN PLACED SHALL RECEIVE THE SAME TREATMENT.

GRANDVIEW AVE.

TYPICAL SECTION

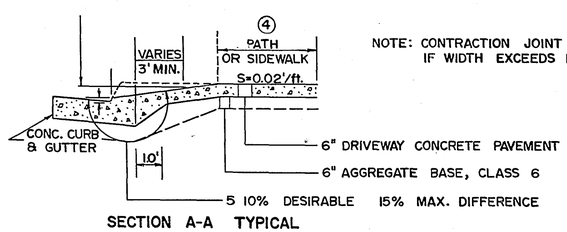


BITUMINOUS AND CONCRETE ENTRANCE DETAILS



SECTION A-A TYPICAL

BITUMINOUS



NOTE: CONTRACTION JOINT REQUIRED IF WIDTH EXCEEDS 16'

SECTION A-A TYPICAL

CONCRETE

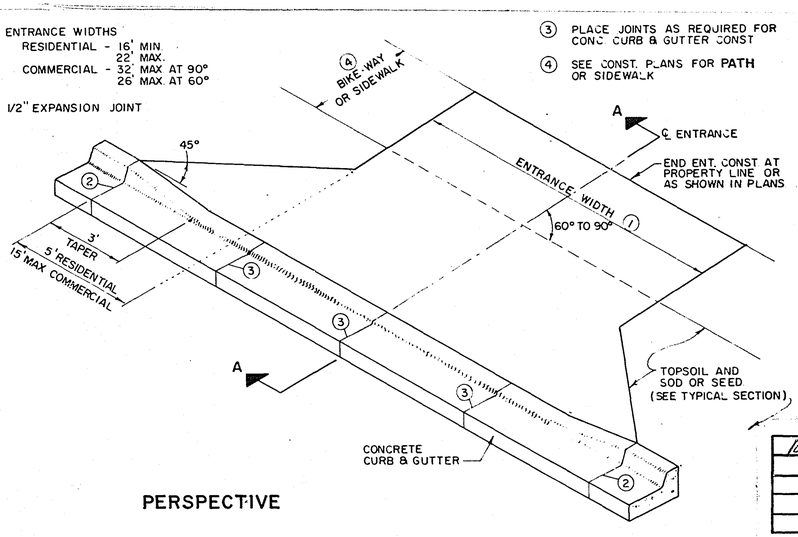
NOTE: THE EXACT LOCATION, WIDTH & TYPE OF ENTRANCE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

① ENTRANCE WIDTHS
RESIDENTIAL - 16' MIN. 22' MAX.
COMMERCIAL - 32' MAX AT 90° 26' MAX AT 60°

② 1/2" EXPANSION JOINT

③ PLACE JOINTS AS REQUIRED FOR CONC CURB & GUTTER CONST

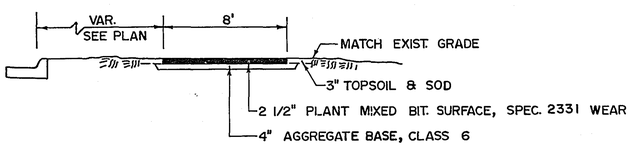
④ SEE CONST. PLANS FOR PATH OR SIDEWALK



PERSPECTIVE

BITUMINOUS PATH

TYPICAL SECTION



RIGHT

STA. 93+80± TO STA. 94+80

SEE PLANS & X-SECTIONS

REVISED	DATE		
W.W.B.	3-20-74	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.

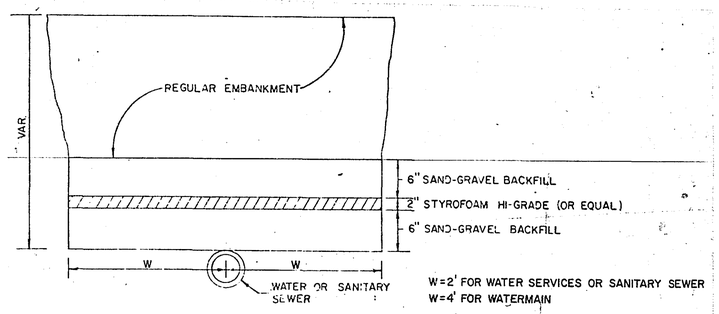
Date 4-18-75 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B. Sheet No. 4 of 38 Sheets

DRAINAGE CHART

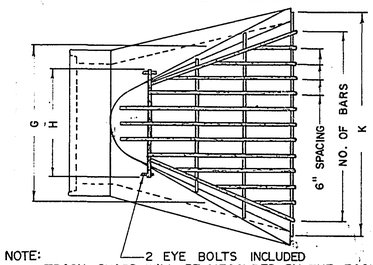
STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	CASTING ASSEMBLY	ELEVATION PROFILE	ELEVATION ORIGNAL GRATE OR RING	ELEVATION NEW GRATE OR RING	ELEVATION C.B. or M.H. INVERT	ADJUST CASTING ASSEMBLY	RECONSTRUCT CATCH BASIN OR MAN HOLE LIN. FT.	INSTALL CASTING ASSEMBLY	FURNISH AND INSTALL PIPE SEWER REINFORCED CONCRETE PIPE 12"	15"	18"	21"	24"			CORRUGATED STEEL PIPE 12"	15"	18"			APRON	CLASS	DRAINS TO STRUCTURE NO.	DRAINS TO INVERT EL.	REMARKS
				EXISTING																									
69+75	RT. 53'	1	C.B.	ST.				932.38			1																		ADJUST IF NECESSARY
70+04	RT. 47'	2	S.D.	ST.				929.86																					O.K. LEAVE
71+20	LT. 30'	3	C.B.	ST.				926.91			1																		ADJUST IF NECESSARY
71+60	RT. 32'	4	C.B.	ST.			925.93	925.37	926.02		1																		
72+35	RT. 60'	5	MH.	SAN.			923.50	922.79																					O.K. LEAVE
72+52	RT. 53'	6	MH.	ST.				921.89																					O.K. LEAVE
72+62	RT. 60'	7	MH.	SAN.				919.49																					O.K. LEAVE
72+91	RT. 31'	8	MH.	ST.			922.28	921.68	922.42		1																		
72+96	RT. 37'	9	MH.	SAN.			922.19	918.86	921.0			8.1	1																
74+00	LT. 36'		West end of pipe					912.54																					
74+03	RT. 48'	10	AP.	ST.				911.72																					
74+03	RT. 32'	11	MH.	ST.			920.96	917.34	921.14			7.3	1																
75+35	RT. 35'	12	MH.	ST.			921.48	919.64	920.2±		1																		
75+35	LT. 20'	13	MH.	ST.			921.48	920.71	921.14		1																		①
75+47	LT. 40'	14	MH.	SAN.				914.74	920.0±			9.3	1																
75+55	RT. 32'	15	MH.	ST.				920.29	920.8±		1																		
75+60	RT. 39'	16	MH.	SAN.				920.19	920.4±		1																		
78+56	LT. 44'	17	MH.	WA.				930.84																					ADJUST BY OTHERS
78+62	LT. 74'	18	C.B.	ST.				931.40																					REMOVE
78+65	LT. 74'	19	MH.	ST.				931.74																					O.K. LEAVE
78+65	RT. 21'	20	MH.	ST.			930.75	930.62	930.41		1																		
75+55	RT. 125±	15A	MH.	ST.				916.6±																					
78+65	RT. 73'	21	C.B.	ST.				932.23																					REMOVE
78+79	RT 30'	22	MH.	SAN.				931.28	930.7±		1																		
78+97	LT. 75'	23	C.B.	ST.				931.69																					REMOVE
79+13	RT. 24'	24	C.B.	ST.				935.97																					REMOVE
79+19	LT. 25'	25	C.B.	ST.				931.15																					REMOVE
79+03	LT. 38'	26	MH.	SAN.				932.20	932.1±		1																		
81+34	LT. 37'	27	MH.	SAN.			934.77	936.78	935.8±			5.1	1																
81+53	RT. 36'	28	MH.	SAN.			934.85	936.66	935.6±			7.0	1																
82+86	LT. 37'	29	MH.	SAN.			934.65	937.09	935.8±			5.6	1																
84+90	RT. 37'	30	MH.	SAN.			931.21	930.92	931.4±		1																		
85+24	LT. 38'	31	MH.	SAN.				930.83	930.6±		1																		
88+46	LT. 38'	32	MH.	SAN.				918.78	918.5±			7.5	1																
88+46	RT. 37'	33	MH.	SAN.				917.83	917.4±		1																		
90+24	LT. 38'	34	MH.	SAN.			910.58	910.21	910.8±		1																		
91+15	LT. 37'	35	MH.	SAN.			906.71	905.21	906.0±		1																		
94+00	LT. 46'	36	MH.	GAS				898.65																					ADJUST BY OTHERS
94+15	LT. 38'	37	MH.	SAN.				898.41	898.1±		1																		
95+07	RT. 33'	38	MH.	SAN.			895.15				1																		UNABLE TO LOCATE
95+08	LT. 40'	39	MH.	SAN.				898.09																					O.K. LEAVE
96+50	RT. 33'	40	S.D.	ST.				891.30																					REMOVE
97+75	LT. 30'	41	AP.	ST.				890.66																					
98+03	LT. 54'	42	MH.	SAN.				895.23																					REMOVE
98+13	LT. 32'	43	MH.	ST.			894.36	893.02	894.48		1																		O.K LEAVE
98+13	RT. 77'	44	MH.	ST.				892.28																					
98+37	LT. 34'	45	AP.	ST.				890.34																					O.K. LEAVE
98+46	LT. 42'	46	MH.	SAN.				892.71																					REMOVE
99+56	LT. 48'	47	MH.	SAN.				895.12																					O.K. LEAVE
101+87	LT. 43'	48	MH.	SAN.				895.33																					O.K. LEAVE
102+56	LT. 31'	49	MH.	ST.			900.06	900.04	900.20		1																		
102+68	RT. 30.	50	MH.	ST.			900.24	900.35	900.36																				O.K. LEAVE

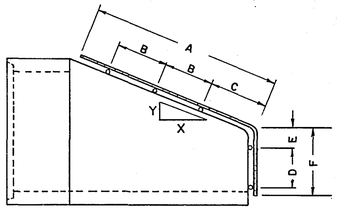
① REPLACE S.D. GRATE WITH M.H. COVER, ACQUIRE FROM RAMSEY CO. (PAYMENT INCIDENTAL)



WATER AND SANITARY SEWER INSULATION DETAIL

3/4" BARS FOR TRANSVERSE AND EDGE REINFORCEMENT





1/2" BARS FOR LONGITUDINAL INTERIOR BARS, WELD EACH INTERSECTION.

CONTRACTOR SHALL FURNISH SUITABLE LOCKING DEVICE APPROVED BY ENGINEER.

NOTE: 2 EYE BOLTS INCLUDED

TRASH GUARD WILL BE MEASURED BY THE EACH AND PAID FOR AS ITEM NO. 503.602, F & I. TRASH GUARD FOR R.C.P. APRON WHICH PRICE WILL BE COMPENSATION IN FULL FOR ALL NECESSARY WORK TO INSTALL TRASH GUARDS.

SIZE	NO. OF BARS	SLOPE	A	B	C	D	E	F	G	H	K
12"	5	3 to 1	24	10	10	5	2	8	24		30
15"	6	"	24	10	10	6	2	10	26		34
18"	7	"	24	10	10	6	3	12	28		40
21"	8	"	36	16	16	7	3	12	34		50
24"	9	"	44	20	20	10	4	16	36		52
27"	10	"	50	23	23	10	4	16	38		58
30"	11	"	56	26	26	12	4	18	42		64
36"	13	"	64	30	30	12	4	18	48		76
42"	15	"	68	32	32	16	8	26	60		88
48"	16	"	76	36	36	14	10	28	62		92
54"	17	2.4 to 1	76	36	36	16	12	32	68		96

TRASH GUARD
(FOR CONCRETE APRON)
(GALVANIZED)

REVISED	DATE		
NBB	3-20-79	DESIGNED BY	
RJohnson	4-19-79	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.

Date 7-18-79 Reg. No. 5782

DRAINAGE CHART

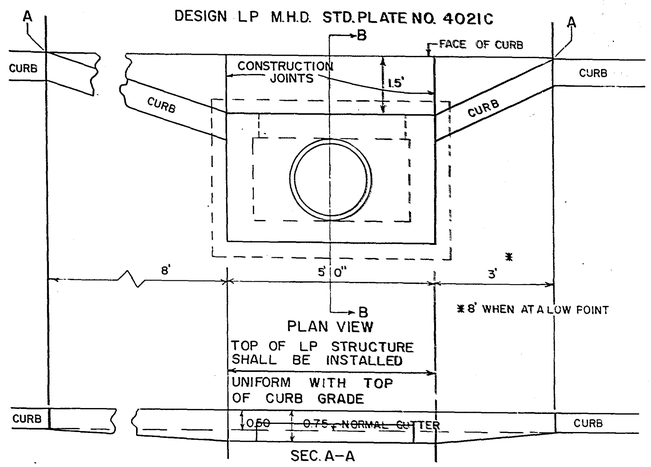
STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	CASTING ASSEMBLY	ELEVATION PROFILE	ELEVATION ORIGNAL GRATE OR RING	ELEVATION NEW GRATE OR RING	ELEVATION C.B. or M.H. INVERT	ADJUST CASTING ASSEMBLY	RECONSTRUCT CATCH BASIN OR MAN HOLE L.IN. F.T.	INSTALL CASTING ASSEMBLY	FURNISH AND INSTALL PIPE SEWER REINFORCED CONCRETE PIPE 12"	15"	18"	21"	24"	CORRUGATED STEEL PIPE 12"	15"	18"	APRON	CLASS	DRAINS TO STRUCTURE NO.	DRAINS TO INVERT EL.	REMARKS
EXISTING																										
102+69	RT. 92	51	A.P.	S.T.				889.50																		O.K. LEAVE
102+75	LT. 51	52	S.D.	S.T.				896.19																		O.K. LEAVE
103+00	LT. 52	53	C.B.	S.T.				899.50																		O.K. LEAVE
103+28	LT. 42	54	M.H.	SAN.				900.68	900.6±		1															
103+33	RT. 37	55	M.H.	SAN.				900.88	900.8±		1															
103+48	LT. 52	56	C.B.	S.T.				900.26																		O.K. LEAVE
103+65	RT. 36	57	M.H.	S.T.			902.38	900.89	902.62		1															
103+73	LT. 83	58	M.H.	SAN.				902.16																		
103+81	RT. 24	59	C.B.	S.T.			902.90	901.94	902.90		1															
104+33	LT. 44	60	M.H	SAN.				906.59																		O.K. LEAVE
103+65	LT. 52	61	M.H.	ST.				903.01																		O.K. LEAVE
TOTALS											25	49.9	7													
NEW STRUCTURES																										
81+95±	LT. 50.5	114	C.B.	R.C.-2	5.0	B			934.80	930.10					28'									114A	929.80	
74+00	LT. 43.5	101	S.D.	A OR F	5.1	D			918.0±	913.0±							8'							11		CONNECT TO EXISTING
74+00	RT. 57±	102	A.P.							912.5 ±					18'							15"		11	912.0±	INCLUDE TRASH GUARD
74+36	LT. 25.5	103	C.B.	L.P.-4	5.0	C	920.82		920.85	916.35					54'									104	915.85	
74+36	RT. 25.5	104	C.B.	L.P.-4	5.5	C	920.82		920.85	915.85					34'									11	915.50	
76+00	LT. 25.5	105	C.B.	L.P.-4	5.0	C	921.07		921.10	916.60					54'									106	916.10	
76+00	RT. 25.5	106	C.B.	L.P.-4	5.5	C	921.07		921.10	916.10					46'									15	915.60	
78+56.5	LT. 55.5	107	C.B	R.C.-2	4.4	B			931.2 ±	927.0					10'									108	926.8	
78+65	LT. 50	108	M.H.	A OR F	7.2	A			931.2±	923.9±																BUILD OVER EXISTING STORM SEWER
78+56.5	RT. 55.5	109	C.B.	R.C.-2	5.6	B			931.7±	926.3					36'									20	925.9	
79+02.6	RT. 55.5	110	C.B.	R.C.-2	4.7	B			931.3±	926.8					46'									109	926.3	
79+02.6	LT. 55.5	111	C.B.	R.C.-2	4.4	B			931.2±	927.0					38'									108	926.6	
79+41	LT. 25.5	112	C.B.	L.P.-4	5.5	C	932.48		932.51	927.50					48'									111	927.0	
79+60	RT. 25.5	113	C.B.	L.P.-4	5.5	C	933.06		933.09	928.10					95'									20	926.20	
82+25±	LT. 50.5	114A	C.B.	R.C.-2	5.0	B			934.60	929.80					80'									114B	929.00	
84+77	LT. 25.5	115	C.B.	L.P.-4	5.8	C	931.48		931.51	926.21					38'									116	925.45	
85+10	LT. 50.5	116	C.B.	R.C.-2	6.0	B			931.2±	925.45					28'									117	924.89	
85+38	LT. 50.5	117	C.B.	R.C.-2	6.5	B			931.2±	924.89					82'									118	923.25	
85+65	RT. 27.3	118	C.B.	L.P.-4	6.5	C	929.21		929.24	923.25					235'									119	914.53	
88+00	RT. 25.5	119	C.B.	L.P.-4	6.2	C	920.17		920.20	914.53					90'									123	911.18	
88+00	LT. 25.5	120	C.B.	L.P.-4	6.5	C	920.17		920.20	914.18					38'									121	913.42	
88+32	LT. 50.5	121	C.B.	R.C.-2	5.8	B			919.0±	913.42					28'									122	912.86	
88+60	LT. 50.5	122	C.B.	R.C.-2	5.9	B			918.6±	912.86					84'									123	911.18	
88+90	RT. 27	123	M.H.	A OR F	5.3	A	916.32		916.38	911.18					230'									125	902.62	
91+00	LT. 25.5	124	C.B.	L.P.-4	4.7	C	907.33		907.36	903.2					57'									125	902.62	
91+20	RT. 25.5	125	C.B.	L.P.-4	5.6	C	906.70		907.73	902.62					249'									126	894.53	
93+69	RT. 25.5	126	C.B.	L.P.-4	5.2	C	898.97		899.00	894.28						292'								132	888.85	
93+65	LT. 25.5	127	C.B.	L.P.-4	4.7	C	898.97		899.00	894.81					53'									126	894.28	
94+02±	LT. 55±	128	C.B.	R.C.-2	4.0	B			899.0±	895.23					42'									127	894.81	
94+30±	LT. 55±	129	C.B.	R.C.-2	3.7	B			899.0±	895.51					28'									128	895.23	
95+69±	LT. 39±	130	S.D.	A OR F	3.3	D			893.1 ±	890.05					92'									133	889.13	
96+58 ±	RT. 88±	131	S.D.	A OR F	2.4	D			891.3 ±	889.0					61'									132	886.6	
96+61	RT. 25.5	132	C.B.	L.P.-4	5.6	C	893.67		893.70	888.6							160'							44	887.0	
96+61	LT. 25.5	133	C.B.	L.P.-4	5.1	C	893.67		893.70	889.13					53'									132	888.6	
98+40	LT. 40	134A	A.P.							892.5±					18'							15"		43	892.0±	INCLUDE TRASH GUARD
98+56	LT. 25.5	134	C.B.	L.P.-4	5.0	C	894.58		894.61	890.11					53'									135	889.58	
98+56	RT. 25.5	135	C.B.	L.P.-4	5.5	C	894.58		894.61	889.58					66'									44	888.92	
82+50	RT. 27.3	114B	M.H.	A OR F	5.9	A	934.73		934.79	929.00					315'									118	923.25	
93+00	LT. 36±	127A	S.D.	A OR F	5.1	D			900.5 ±	895.5					65'											
															2592'	292'		168'					2			

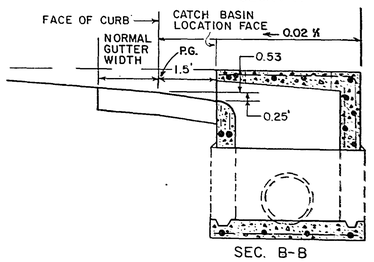
CASTINGS — A = M.H.D. NO. 700-7, COVER CASTING NO. 712 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM.)
B = NEENAH INLET FRAME, GRATE AND CURB BOX NO. R-3067 OR EQUAL (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM.)
C = M.H.D. NO. 790-2, COVER CASTING NO. 712 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM.)
D = M.H.D. NO. 700-7, COVER CASTING NO. 720 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM.)

MANHOLES & CATCH BASINS — R.C.-2 DETAIL ON SHEET NO. 6
A. OR F., M.H.D. STD. PLATE NO. 4000G OR 4005I
L.P.-4, M.H.D. STD. PLATE NO. 4021C

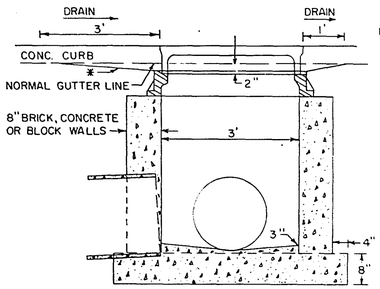
CURB OPENING CATCH BASIN INSTALLATION DETAIL

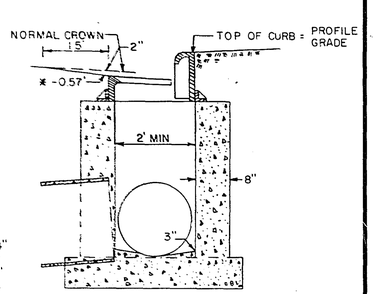
DESIGN LP M.H.D. STD. PLATE NO. 4021C

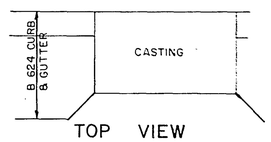




CATCH BASIN DESIGN NO. R.C.-2







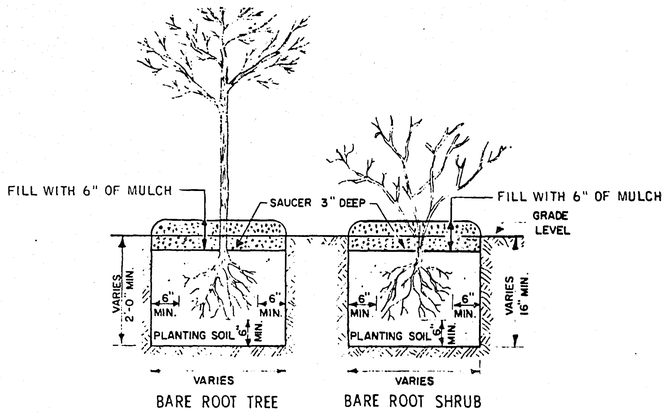
REVISED	DATE	
H.L.B.	3-20-79	DESIGNED BY
		DRAWN BY
		CHECKED BY

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.

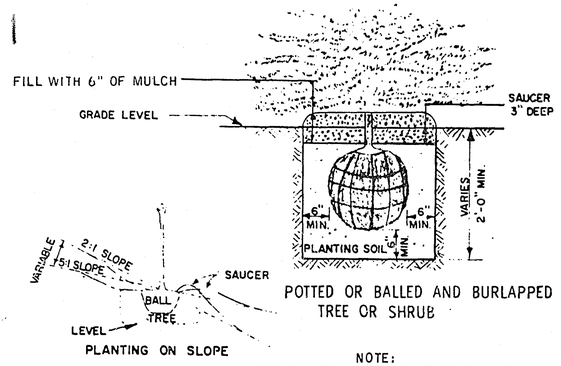
Date 5-18-79 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B

Sheet No. 6 of 38 Sheets



BARE ROOT TREE BARE ROOT SHRUB

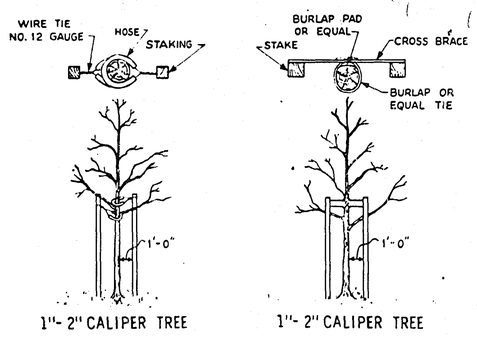


POTTED OR BALLED AND BURLAPPED TREE OR SHRUB

PLANTING ON SLOPE

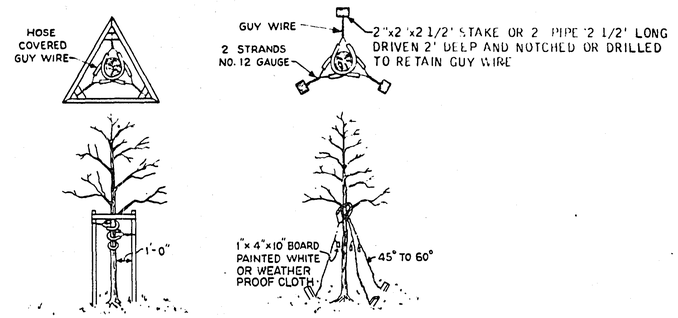
NOTE:
SET PLANTS AT THE SAME OR SLIGHTLY LOWER DEPTH AS THEY GREW IN THE NURSERY OR FIELD. ALL PLANTS SHALL BE PLACED IN A PLUMB POSITION.

PLANTING METHODS



1"- 2" CALIPER TREE 1"- 2" CALIPER TREE

ALL STAKES ARE NOMINAL 2"x2" OR 2 1/2" DIAMETER, 8' LONG WITH 2' IN THE GROUND. CROSS BRACES ARE NOMINAL 1"x3" MATERIAL



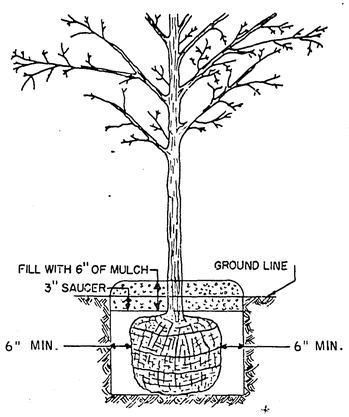
2"- 3" CALIPER TREE BARE ROOT

BALLED AND BURLAPPED DECIDUOUS TREE 2" OR LARGER AND EVERGREEN TREE.

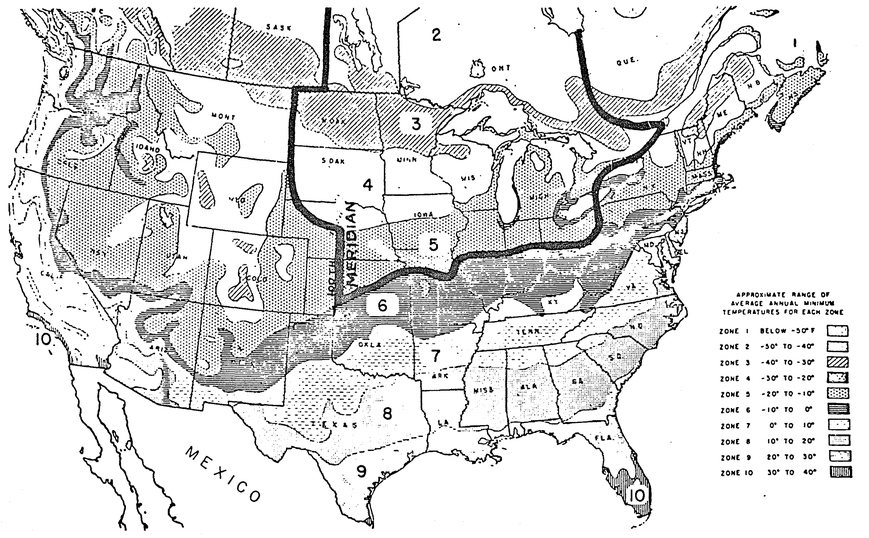
STAKING AND GUYING METHODS

LEGEND

- SM — SUGAR MAPLE
- RM — RED MAPLE
- H — HACKBERRY
- AL — AMERICAN LINDEN
- GA — GREEN ASH



BALLED AND BURLAPPED DECIDUOUS TREES 2" CALIPER OR LARGER



APPROXIMATE RANGE OF AVERAGE ANNUAL MINIMUM TEMPERATURES FOR EACH ZONE

ZONE 1	BELOW -50° F
ZONE 2	-50° TO -40°
ZONE 3	-40° TO -30°
ZONE 4	-30° TO -20°
ZONE 5	-20° TO -10°
ZONE 6	-10° TO 0°
ZONE 7	0° TO 10°
ZONE 8	10° TO 20°
ZONE 9	20° TO 30°
ZONE 10	30° TO 40°

SM-69

The Zones of Plant Hardiness—This is an adapted version of the color map on the reverse side. It may be useful for small-scale reproduction in books, magazines, and nursery catalogs. This map is not copyrighted, and permission for reproducing it is not required.

APPROVED FEB. 67

V. K. Thostenson

Design Standards Engineer
ENGINEERING STANDARDS DIVISION

GENERAL NOTES

MULCH MATERIAL All plant installations shall be mulched to a minimum depth of 6 inches and 24 inches in diameter with wood chips, unless noted otherwise on this plan.

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

SCALE 1" = 30'

NOTE: REMOVAL OF ENTRANCE CULVERTS SHALL BE INCIDENTAL TO COMMON EXCAVATION.

EXISTING MN/DOT ORNAMENTAL LIGHT. (DO NOT DISTURB)

TH. 36

C.B.1 · C.B. · C.B.3 · C.B.4 · C.B. · C.B. 103 · C.B. 104 · C.B. 105 · C.B. 106

SD.101 · SD.2

M.H. 5 · M.H. 6 · M.H. 7 · M.H. 8 · M.H. 9 · M.H. 11 · M.H. 12 · M.H. 13 · M.H. 14 · M.H. 15 · M.H. 15A · M.H. 16

AP. 10 · AP. 102

CONST. LIMITS · BITUMINOUS · BITUMINOUS OVERLAY · CURB · REMOVE CONCRETE CURB · CONST. LIMITS

CONSTRUCT WIDENING (SEE DETAIL)

BIT. CURB

GRANDVIEW AVE.

HO. · HO.

70 · 71 · 72 · 73 · 74 · 75 · 76 · 77 · 78

+50 · +25 · +00

24' · 27' · 45' · 60' · 33' · 49.5' · 32' · 35'R · 25'R · 80' · 60' · WSO 16'

Sa · T

RM · AL · H · GA · SM

MATCH TO EXISTING 24" R.C.P.

EL. 913± · 8'x24" R.C.P. · EXISTING 24" R.C.P.

AP. 102 · 912.5 ± · 912.0 ±

EL. 916.35 · 54" x 15" R.C.P.

EL. 915.85 · 34" x 15" R.C.P.

EL. 915.50 · INV. EL. 909.72

EL. 916.60 · 54" x 15" R.C.P.

EL. 916.10 · 46" x 15" R.C.P.

EL. 915.60 · INV. EL. 909.14

927.22 · 926.72 · 926.32 · 926.38

+25 · +37.5 · 3.96 · 5.15 · +12.5 · +25 · +3.68 · 5.15

V.C.=575' · M=5.49125

PROPOSED PROFILE GRADE = ℄

EXIST. 30" · EXIST. 30" · EXIST. 36" · EXIST. 36" · EXIST. 42" · EXIST. 15" · EXIST. 21"

EL. 916.73 · EL. 913.45 · EL. 910.66 · EL. 910.18 · EL. 909.72 · EL. 912.96 · EL. 910.46 · EL. 909.14 · EL. 909.94

2.5' SUBCUT FOR UNIFORMITY & COMPACTION

Pt. 74+25 · EL. 915.34

930 · 925 · 920 · 915 · 910

REVISED	DATE	
	3-20-74	DESIGNED BY
		DRAWN BY
		CHECKED BY

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Date 7-18-75 Reg No. 5782

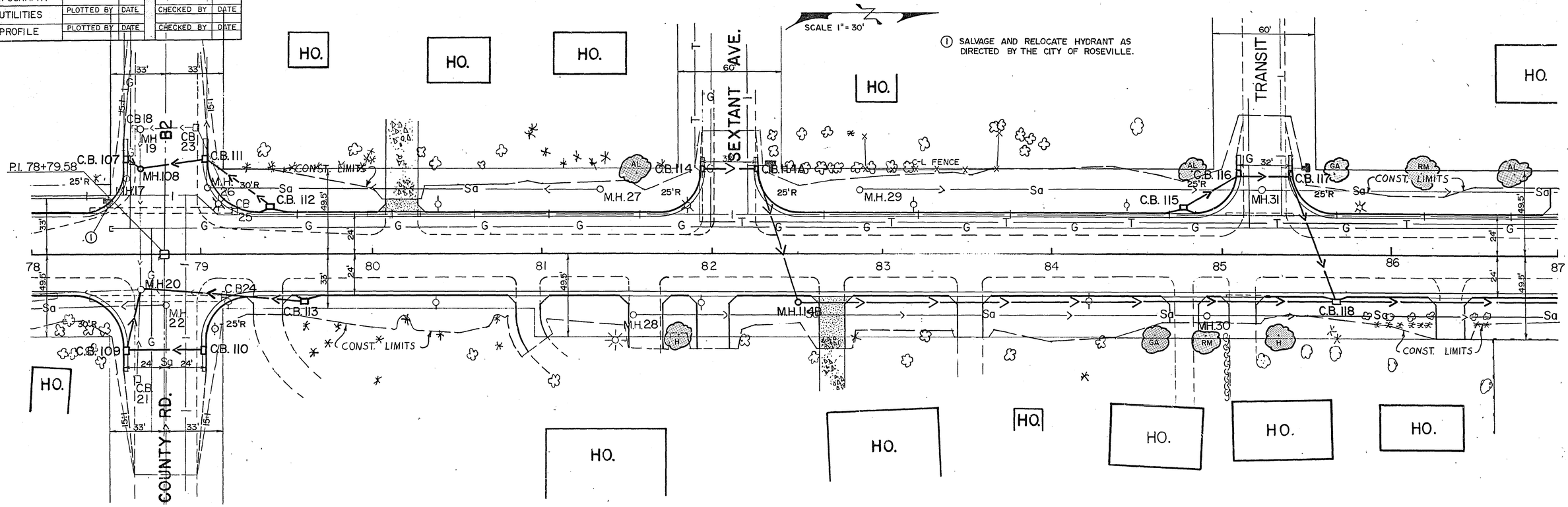
S.A.P. No. 62-651-09 C.T.B.

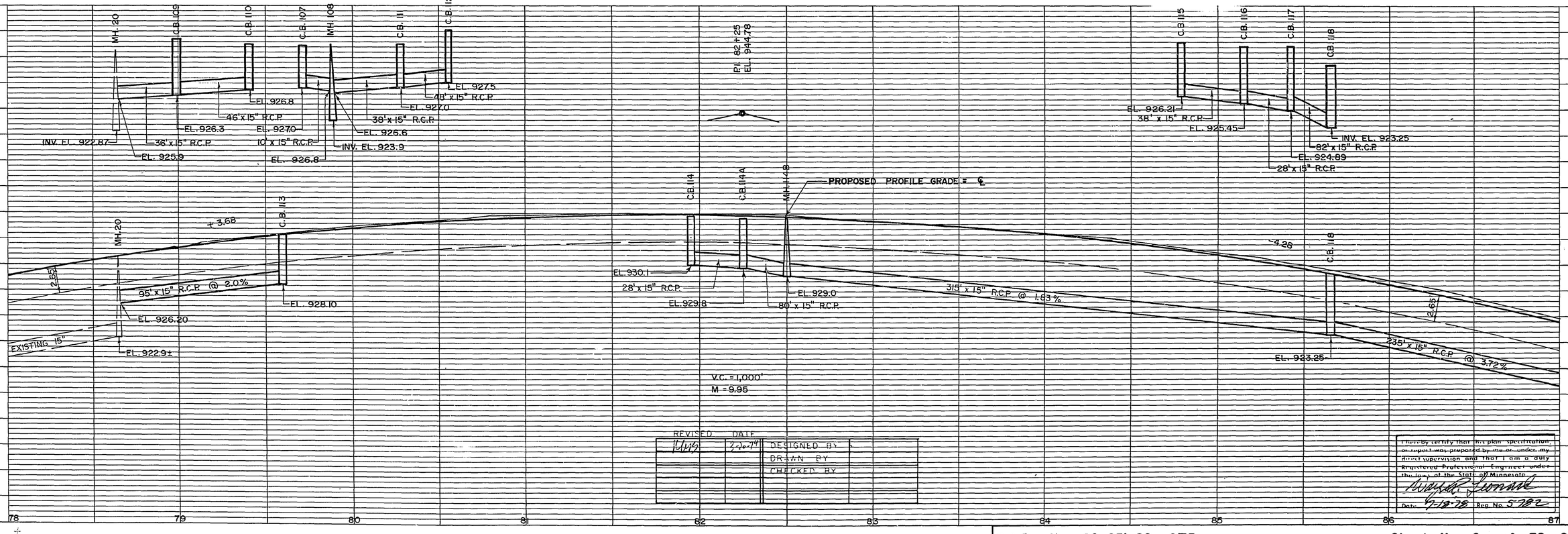
Sheet No. 8 of 38 Sheets

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				

SCALE 1"= 30'

① SALVAGE AND RELOCATE HYDRANT AS DIRECTED BY THE CITY OF ROSEVILLE.





REVISED	DATE	
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		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.

Date: 7-18-78 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 9 of 38 Sheets

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

SCALE 1" = 30'

BROOKS

WILLIAMS BROS. PIPELINE CO.

STD. OIL CO. PIPE

OAKCREST

NOTE: GRADE IF NECESSARY TO OBTAIN PROPER DRAINAGE TO SD.127A

HO.

CONST. LIMITS

C.B. 119, C.B. 120, C.B. 121, C.B. 122, C.B. 124, C.B. 125, C.B. 126, C.B. 127, C.B. 128, C.B. 129

MH. 123, M.H. 32, M.H. 33, M.H. 34, M.H. 35, M.H. 36, M.H. 37, M.H. 38, M.H. 39

SD. 127A, S.D. 130

17 TREES

BRUSH

EXISTING PATH

CONST. BIT. PATH (SEE DETAIL)

TEL. BOX

CAUTION
PIPE LINE CROSSINGS

CENTRAL PARK

POSSIBLE WATERMAIN INSULATION (SEE DETAIL SHEET NO. 5)
AREA TO BE DETERMINED BY ROSEVILLE AT THE TIME OF CONSTRUCTION

235' x 15" R.C.P. @ 3.72%

90' x 15" R.C.P. @ 3.72%

230' x 15" R.C.P. @ 3.72%

244' x 15" R.C.P. @ 3.25%

292' x 18" R.C.P @ 1.86 %

EXISTING ℄ GRADE

PROPOSED PROFILE GRADE = ℄

V.C. = 100'
M = 0.18

V.C. = 250'
M = 1.05

2.5' SUBCUT FOR UNIFORMITY & COMPACTION

APPROX. TOP of 42" SAN. SEWER

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Date 7-18-72 Reg. No. 5782

REVISED	DATE	DESIGNED BY
	2-20-71	DRAWN BY
		CHECKED BY

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 10 of 38 Sheets

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

SCALE 1"=30'

HO.

① SALVAGE AND RELOCATE HYDRANT AS DIRECTED BY THE CITY OF ROSEVILLE.

② MATCH B624 CONC. CURB & GUTTER TO EXISTING CONC. CURB. & GUTTER.

Ⓐ REMOVE INPLACE HANDHOLE, PAYMENT SHALL BE INCIDENTAL TO COMMON EXCAVATION.

ROSE PLACE

NORTHERN R.R.

RD. "C"

BURLINGTON COUNTY

END PROJECT STA. 105+00

P.I. 104+60.06

CONST. LIMITS

CLOSE ENTRANCE

EXISTING PATH

CONSTRUCT PATH (SEE DETAIL)

SALVAGE 10 L.F. OF FENCE (72" CHAIN LINK)

EXIST. P.V.C. WATER SERVICE TO D.F. BURIED APPROX 1 FT.– RELOCATE AS DIRECTED

EXIST. DRINKING FOUNTAIN — RELOCATE TO STA. 96+50 RT. 90'±

REMOVE CONC. C. & G.

REMOVE 3" R.S.C PAVEMENT SHALL BE INCIDENTAL TO COMMON EXCATION.

REMOVE EXISTING C. & G. AS REQUIRED.

③ SEE INSET

EROSION CONTROL SCHEDULE ACCORDING TO STD. SPEC. 1803.5 REQUIRED.

S.D. 130 · C.B. 33 · C.B. 32 · S.D. 131 · C.B. 134 · C.B. 135 · MH. 44 · MH. 43 · APRON 134A · S.D. 134C · MH. 134B · AP. 134E · MH. 134D · MH. 48 · MH. 49 · S.D. 52 · CB. 53 · CB. 56 · MH. 61 · MH. 54 · MH. 60 · MH. 58 · MH. 50 · MH. 55 · MH. 57 · CB. 59 · AP. 51 · S.D. 40 · C.B. 132

16' x 15" R.C.P. · EL. 896.28 · EL. 894.2 · EL. 894.0

17' x 15" R.C.P. · EL. 892.05 · EL. 891.2 · EL. 891.0

18' x 15" R.C.P. · EL. 892.5± · EL. 891.5±

61' x 15" R.C.P. · EL. 889.0 · INV. EL. 888.6

53' x 15" R.C.P. · EL. 889.13 · EL. 890.11

92' x 15" R.C.P. · EL. 890.05

53' x 15" R.C.P.

66' x 15" R.C.P. · INV. EL. 886.48 · EL. 888.92 · EL. 889.58

160' x 24" R.C.P. @ 1.0% · INV. EL. 886.48 · EL. 887.0 · EL. 888.6

137' x 15" R.C.P. @ 0.5% · EL. 889.58 · EL. 890.31 · EL. 890.11

175' x 15" R.C.P. @ 1.6% · EL. 894.0 · EL. 891.2

EXIST. 48" · EXIST. 15"

PROPOSED PROFILE GRADE=℄

+0.52 · +2.27 · +1.48 · +5.0

V.C.=100' M=0.21875

V.C.=100' M=0.09875

V.C.=200' M=0.88

ADJUST GRADE TO MEET TRACKS

2.5' SUBCUT FOR UNIFORMITY & COMPACTION

VARIBLE SUBCUT FOR UNIFORMITY & COMPACTION

EXISTING 15" R.C.P.

P.I. 100+45 EL. 894.46 · P.I. 101+75 EL. 898.66 · P.I. 103+75 EL. 901.82

EL. 896.99 · EL. 894.54 · EL. 890.35

INSET

CONSTRUCT TEMPORARY TRANSITION SECTION STATION 105+00 to 106+20. GRADE TO FULL WIDTH OF PROPOSED ROADWAY. SURFACE TO EXISTING WIDTH AS FOLLOWS:
3/4" 2361 WEAR
3" 2331 BINDER
6" AGGREGATE BASE CL 6

0.81' · 20:1

REVISED	DATE
Bob Johnson	10-5-78
Bob Johnson	4-5-79
Chris Miranda	7-20-79

DESIGNED BY
DRAWN BY
CHECKED BY

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Date 4-19-76 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 11 of 38 Sheets

BEGIN PROJECT
STA. 69+70

BIT. OVERLAY

LEXINGTON AVE.

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

T.H. 36 RAMP

GRANDVIEW AVE.

69 70 71 72 73 74 75 76 77

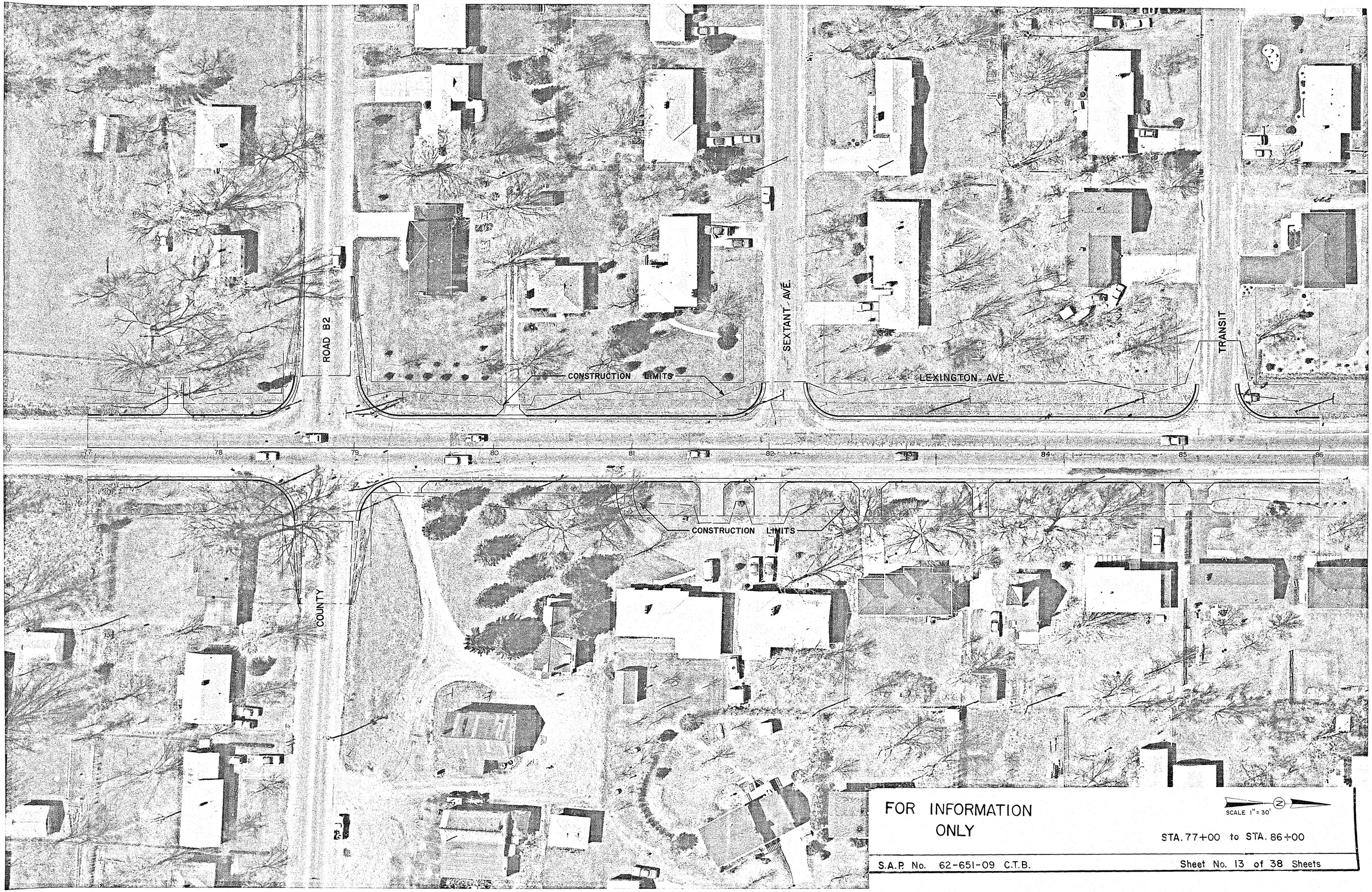
FOR INFORMATION ONLY

SCALE 1" = 30'

STA. 69+70 to STA. 77+00

S.A.P. No. 62-651-00 C.T.B.

Sheet No. 12 of 38 Sheets



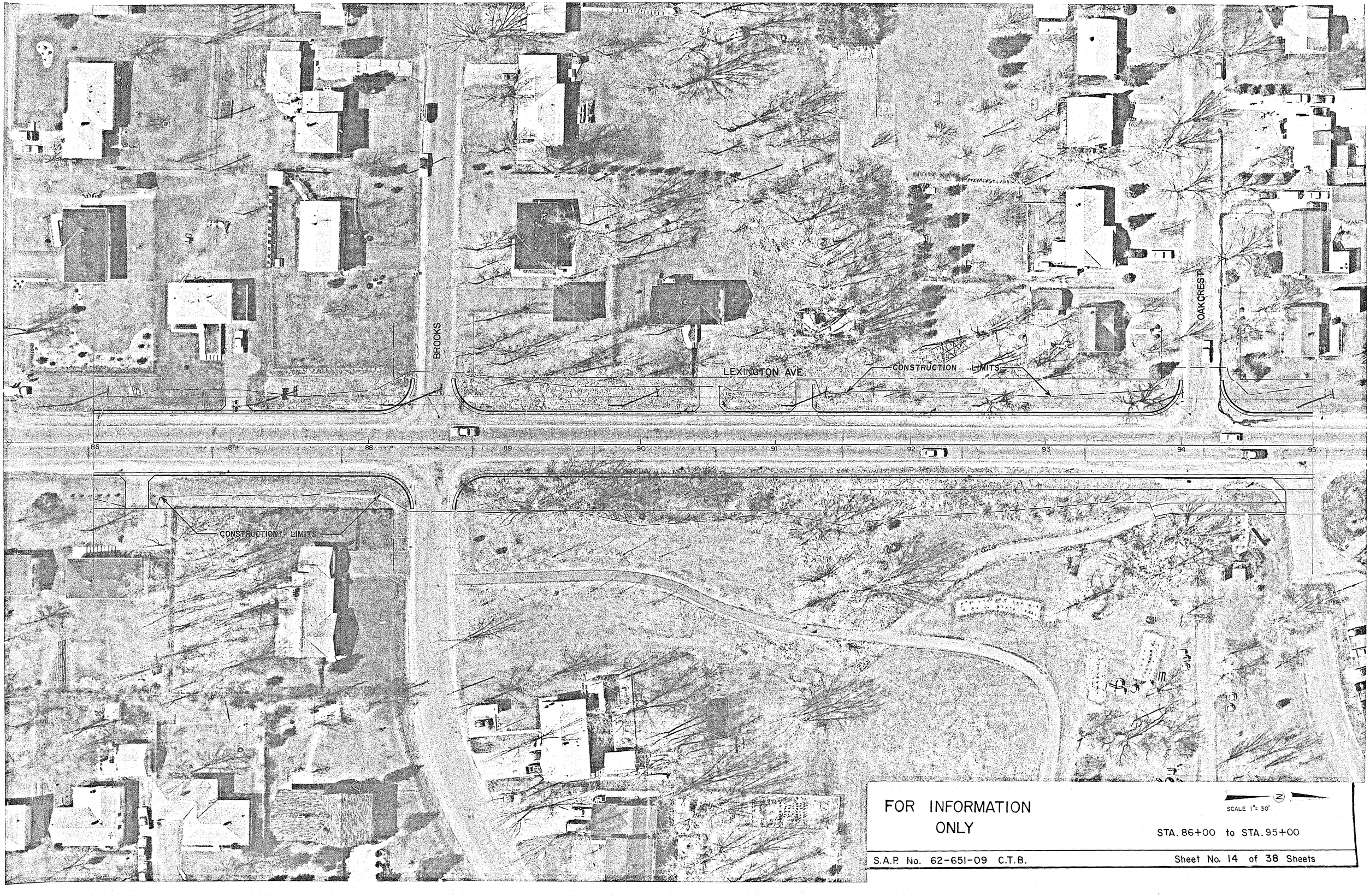
FOR INFORMATION ONLY

SCALE 1"=30'

STA. 77+00 to STA. 86+00

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 13 of 38 Sheets



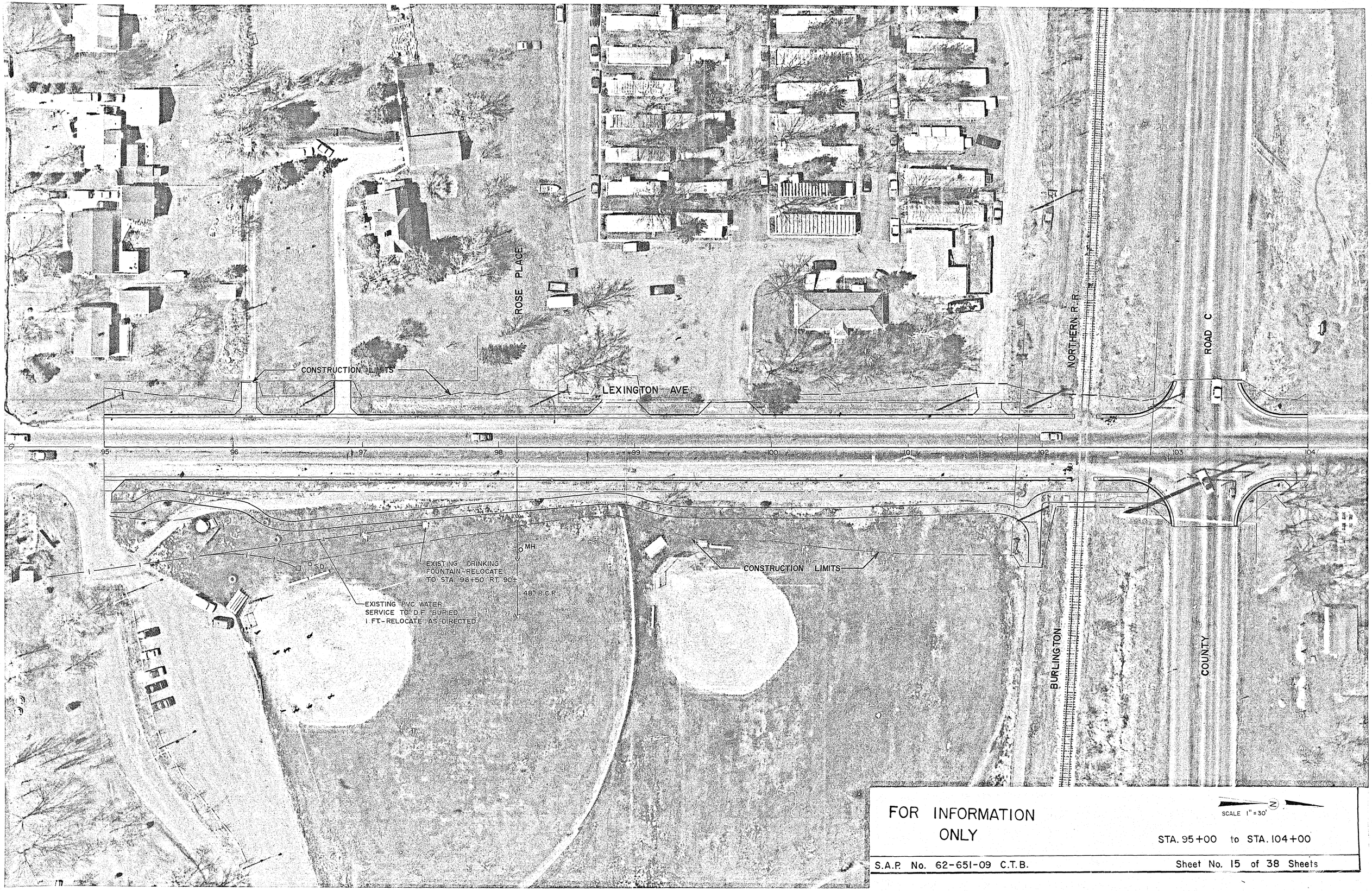
FOR INFORMATION ONLY

SCALE 1"= 30'

STA. 86+00 to STA. 95+00

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 14 of 38 Sheets



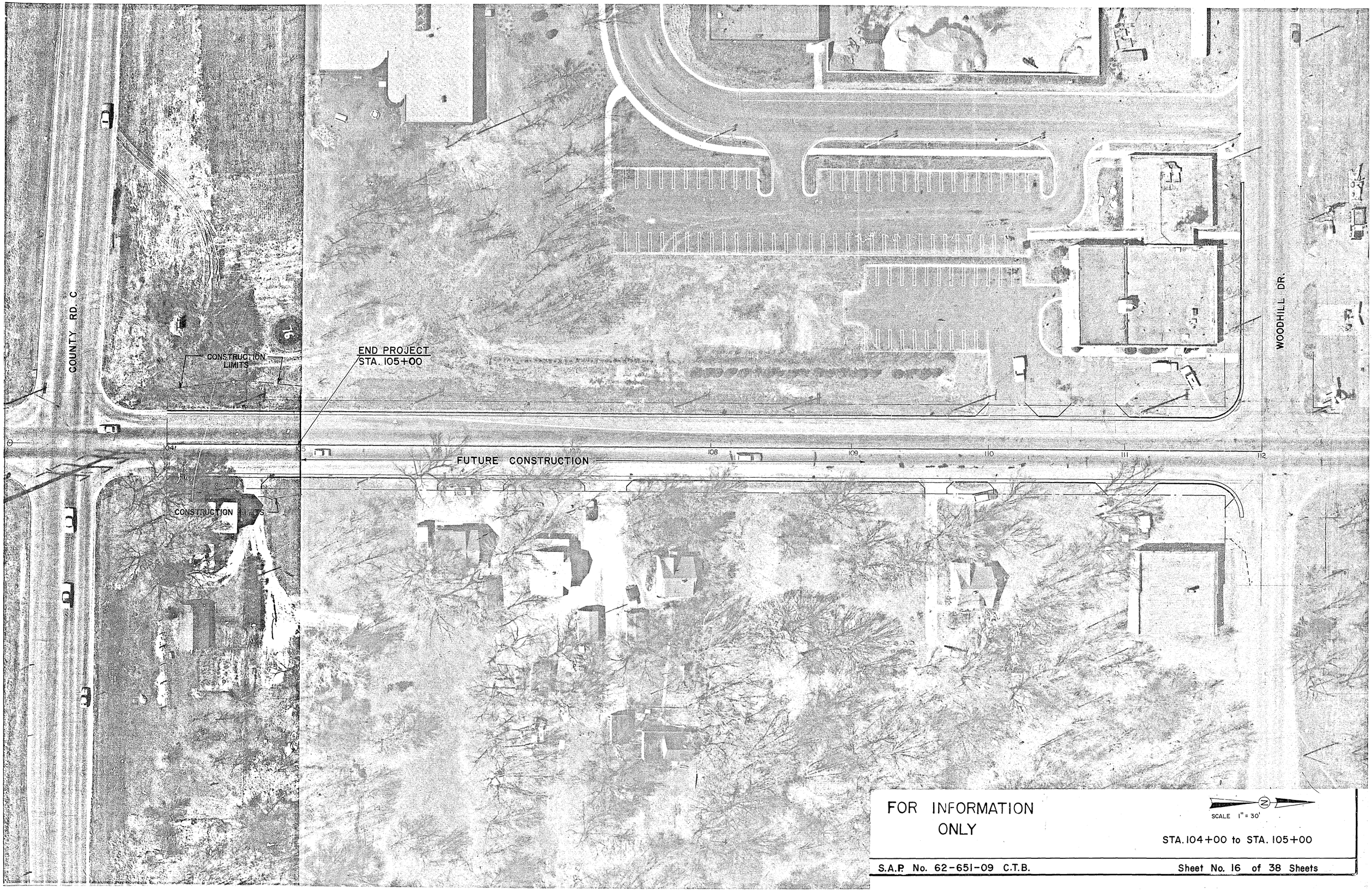
FOR INFORMATION ONLY

SCALE 1" = 30'

STA. 95+00 to STA. 104+00

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 15 of 38 Sheets



FOR INFORMATION ONLY

SCALE 1" = 30'

STA. 104+00 to STA. 105+00

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 16 of 38 Sheets

COM.	EXC.	REG. EMB.
67	41	
233	99	
76	17	

+07 24.6

INPLACE CONC. PAVEMENT (TYP.)

72+00 24.7

+72 25.6

71+60 925.7

INPLACE CONC. PAVEMENT (TYP.)

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.

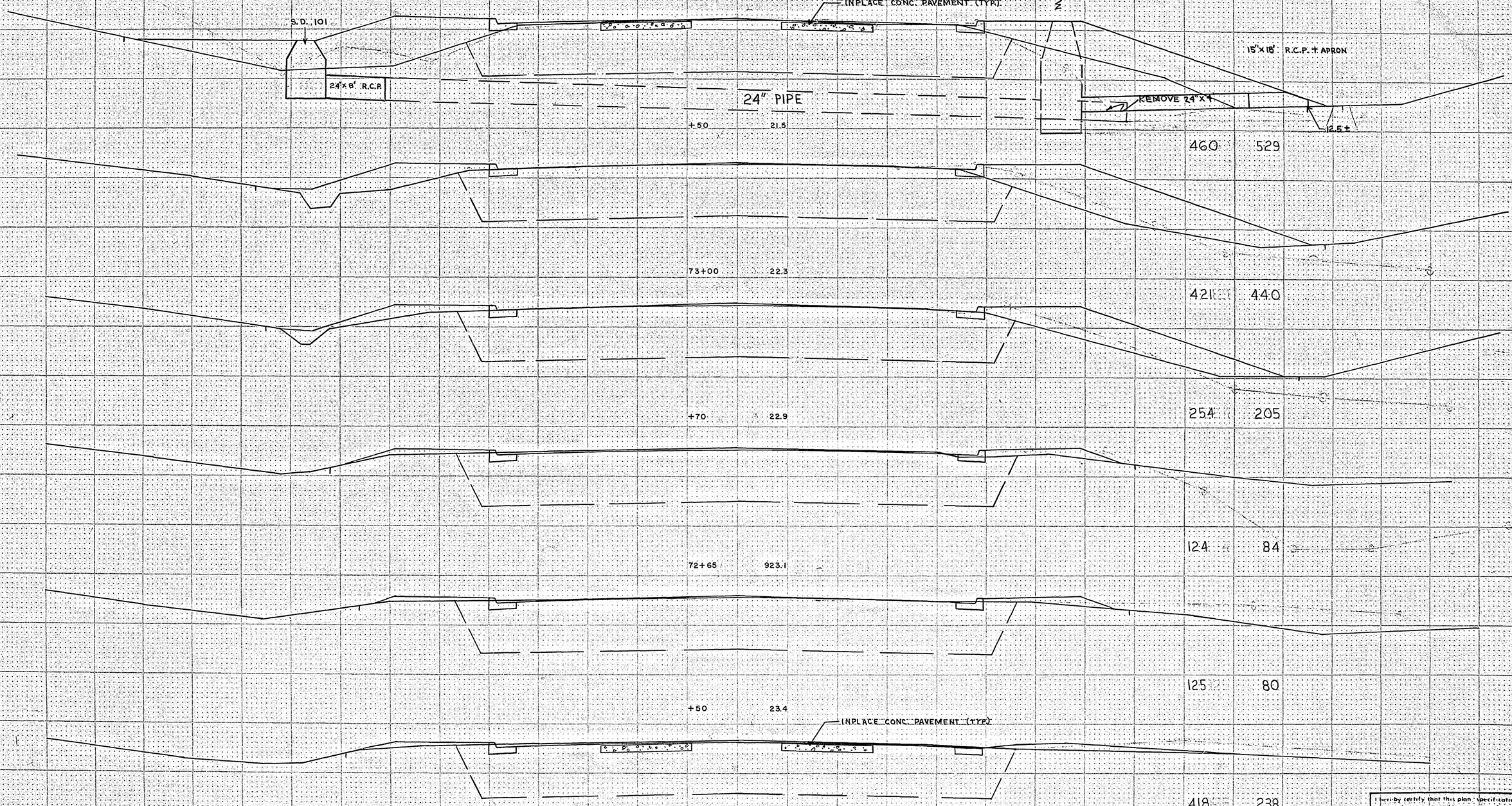
Date 7-18-75 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 17 of 38 Sheets

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

		COM. EXC.	REG. EMB.
74+00	21.1		
+50	21.5	460	529
73+00	22.3	421	440
+70	22.9	254	205
72+65	923.1	124	84
+50	23.4	125	80
		418	238



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.

Wayne F. Leonard

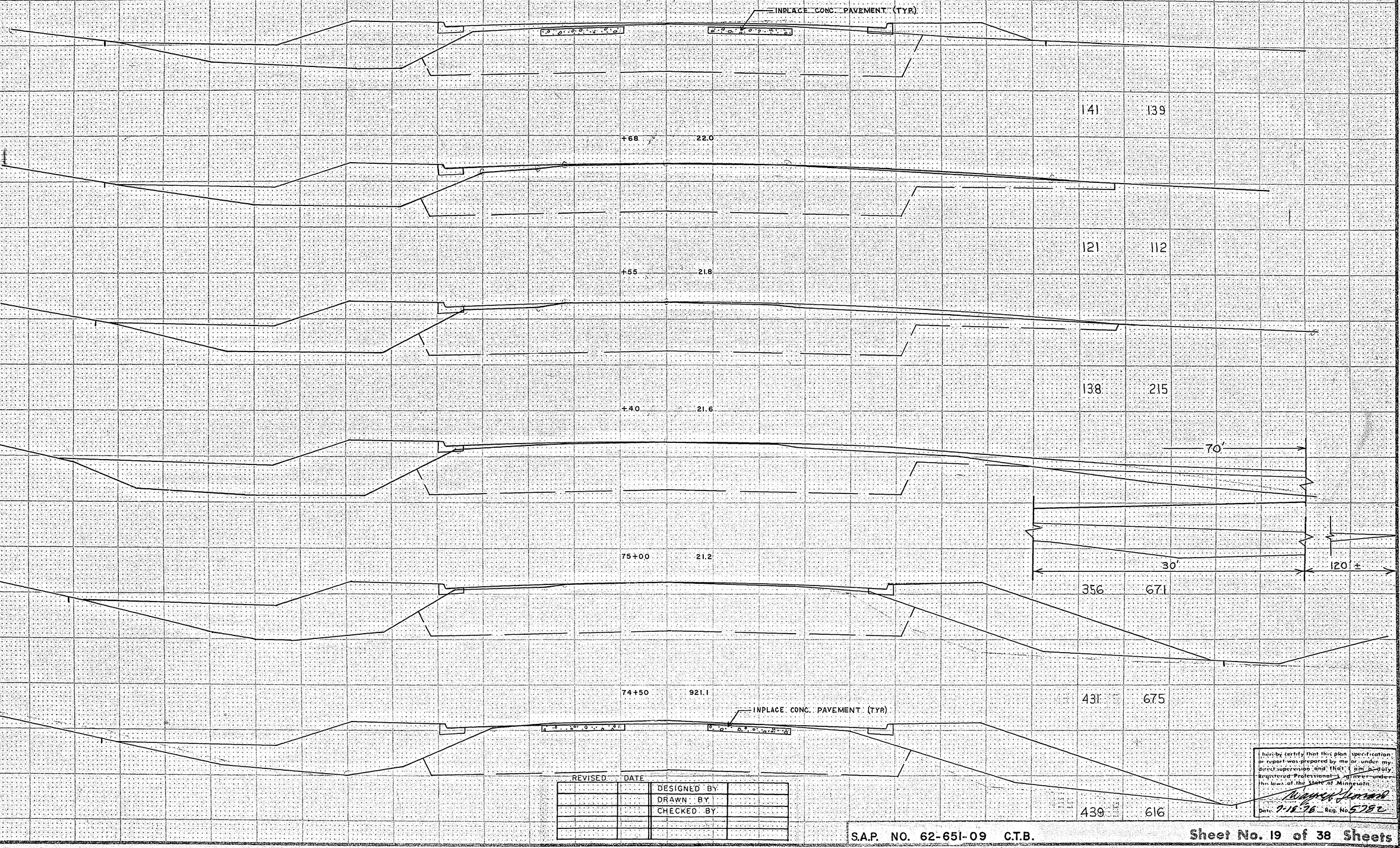
Date: 7-18-78 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 18 of 38 Sheets

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

	COM. EXC.	REG. EMB.
+84 22.2	141	139
+68 22.0	121	112
+55 21.8	138	215
+40 21.6	356	671
75+00 21.2	431	675
74+50 921.1	439	616



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.

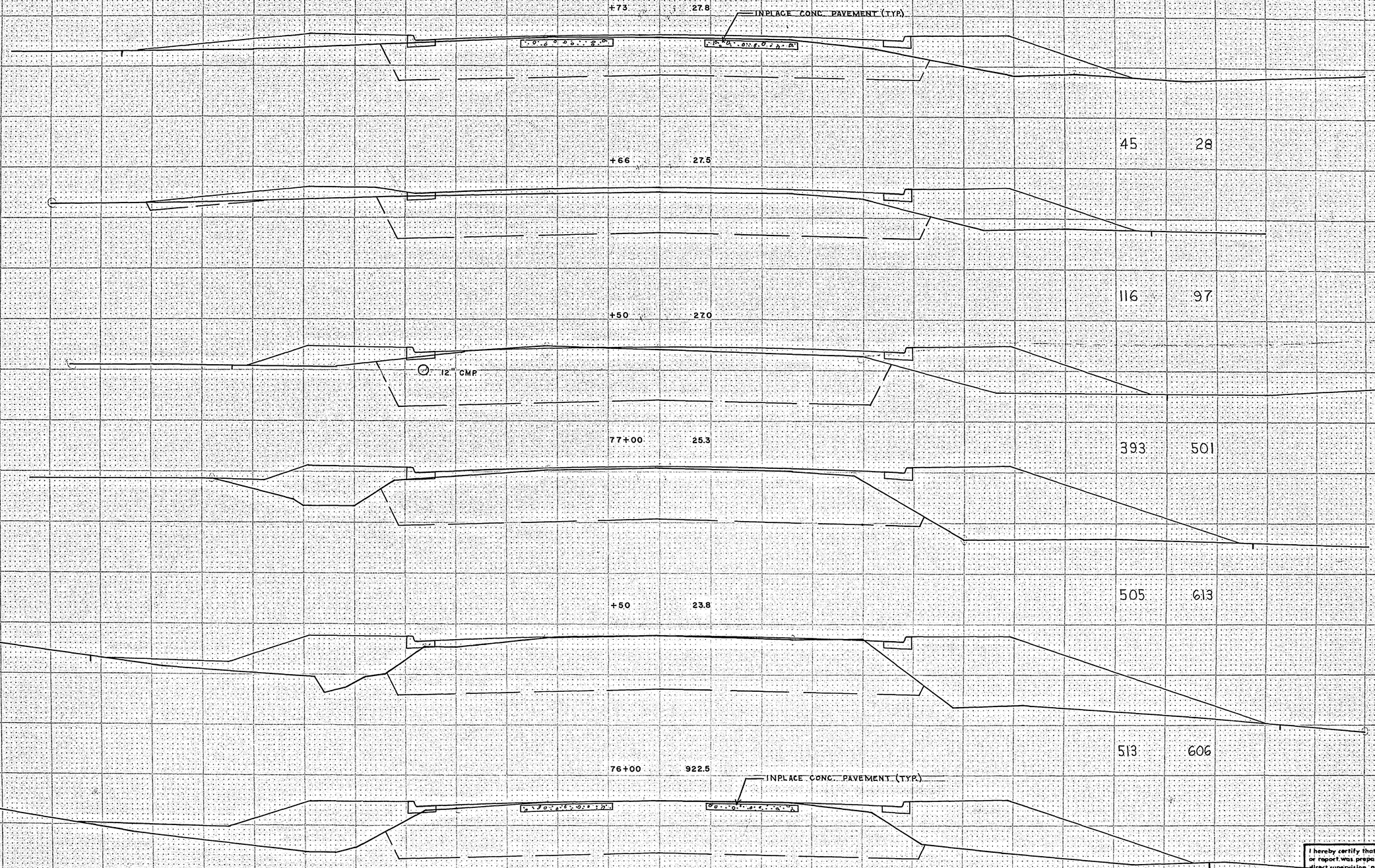
Date 7-18-76 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 19 of 38 Sheets

FUNCTIONAL CROSS SECTION-OPEN DITCH
M. A. HICKS CO. - MINNEAPOLIS - ST. PAUL

		C.Y. EXC.	C.Y. EMB.
+73	27.8		
		45	28
+66	27.5		
		116	97
+50	27.0		
		393	501
77+00	25.3		
		505	613
+50	23.8		
		513	606
76+00	922.5		
		133	165



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

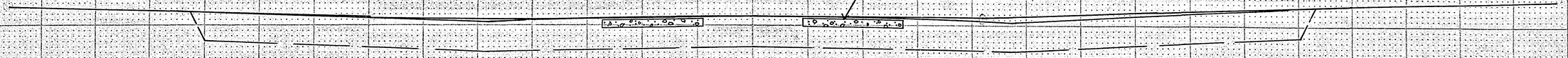
REVISED	DATE		
		DESIGNED BY	
		DRAWN BY	
		CHECKED BY	

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.
Date 7-18-78 Reg. No. 5782

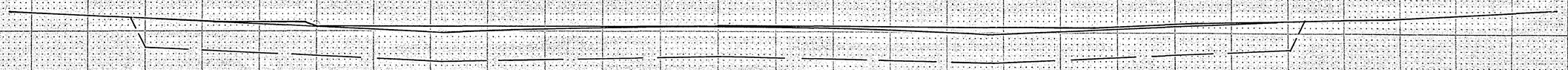
S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 20 of 38 Sheets

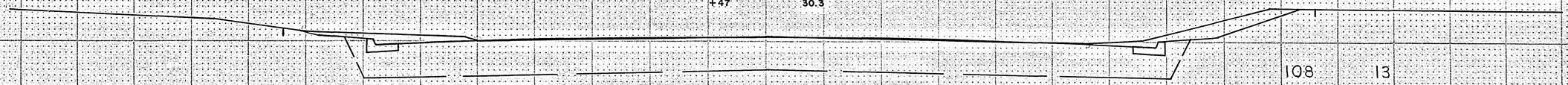
		COM. EXC.	REG. EMB.
+63	30.7		



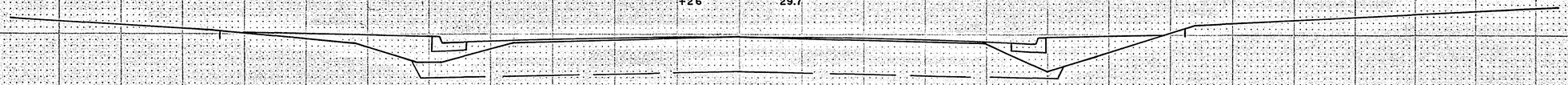
		67	0
+56	30.5		



		74	0
+47	30.3		

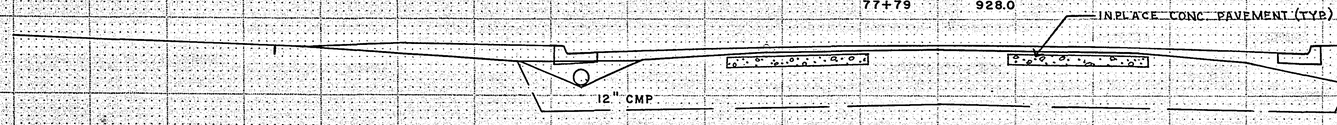


		108	13
+26	29.7		



		87	40
78+00	28.8		

		98	59
77+79	928.0		



		36	23

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.

Warren Leonard

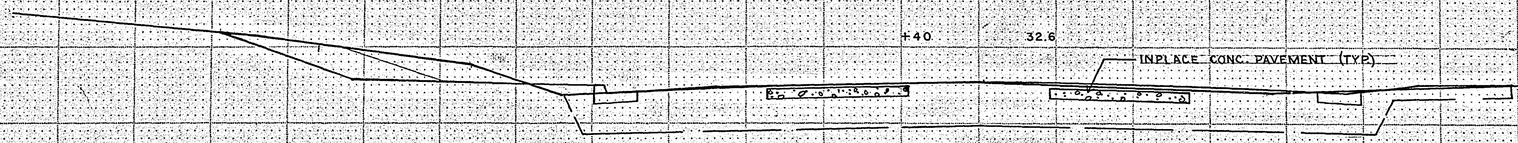
Date 7-18-78 Reg. No. 5782

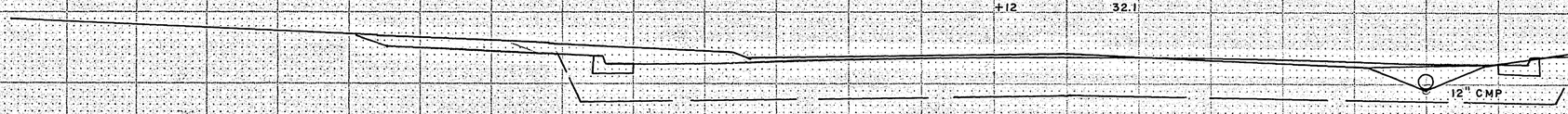
S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 21 of 38 Sheets

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

	C.O.M.	EXC.	REG. EMB.
+40 32.6			
	GI.	4	
+32 32.5			
	115	4	
+12 32.1			
	92	0	
79+00 31.7			
	197	0	
+97 31.7			
	158	0	
78+79 31.1			





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.

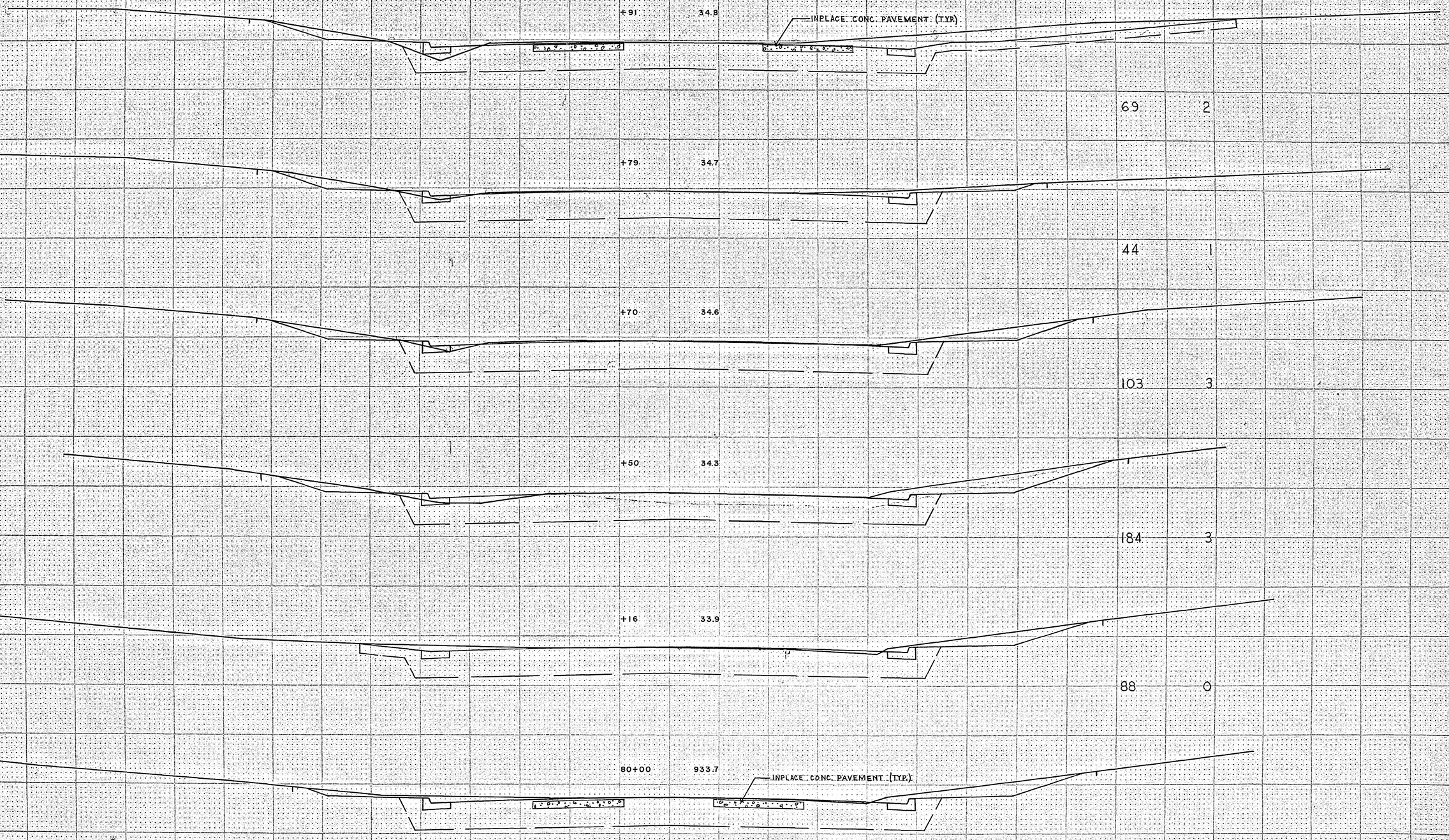
Date 7-18-76 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 22 of 38 Sheets

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

		COM. EXC.	REG. EMB.
+91	34.8	69	2
+79	34.7	44	1
+70	34.6	103	3
+50	34.3	184	3
+16	33.9	88	0
80+00	933.7	321	7



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.

Wayne H. Tinnes

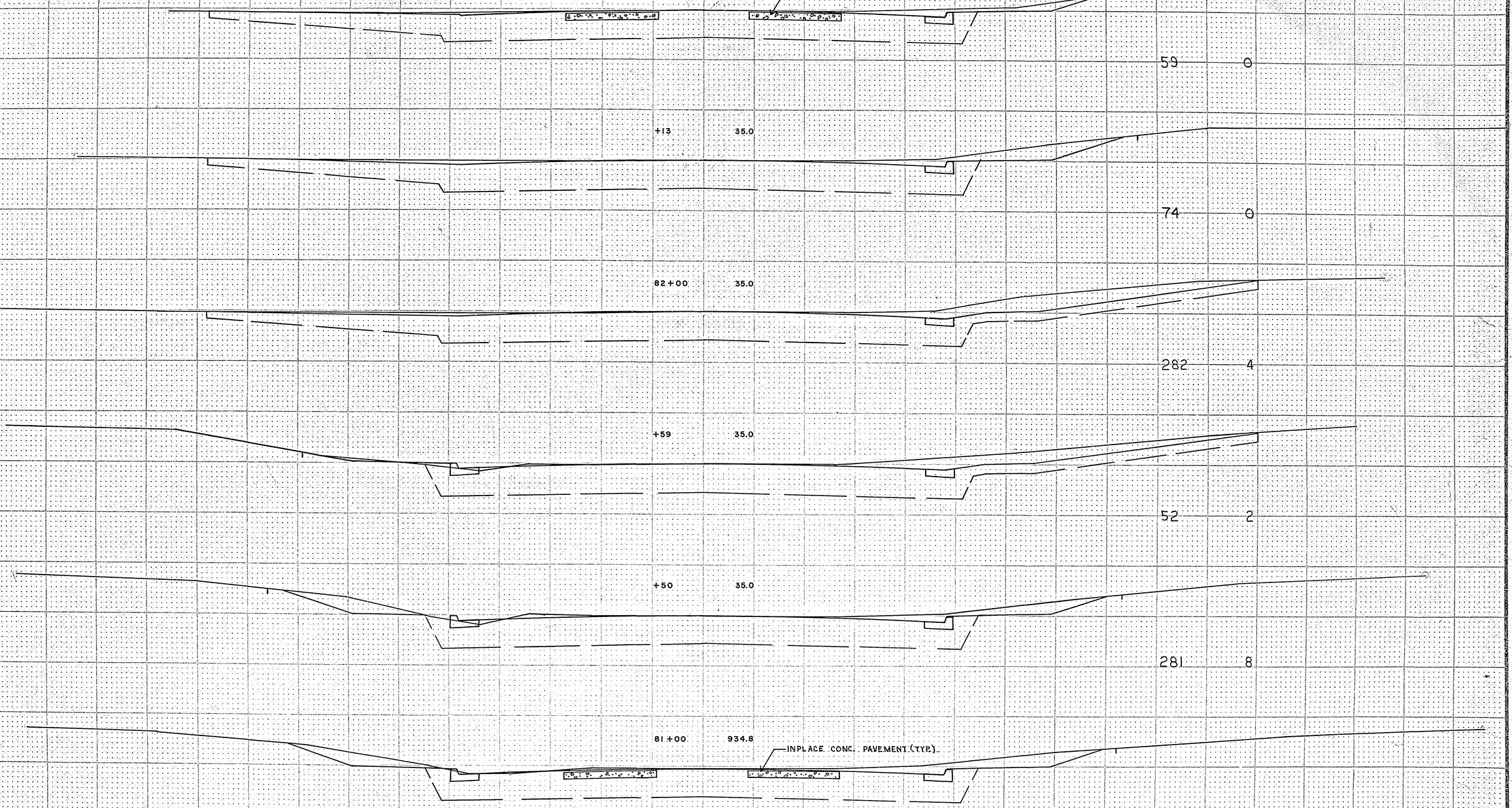
Date 9-18-78 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 23 of 38 Sheets

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

		COM. EXC.	REG. EMB.
+25	34.9	59	0
+13	35.0	74	0
82+00	35.0	282	4
+59	35.0	52	2
+50	35.0	281	8
81+00	934.8	56	2



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

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.

Warren K. Leonard

Date 7-18-76 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

	COM. EXC.	REG. EMB.
+65 33.5 —INPLACE CONC. PAVEMENT (TYP.)	79	4
+51 33.7	57	3
+41 33.7	226	10
83+00 34.3	184	7
+69 34.6	111	4
82+50 934.8 —INPLACE CONC. PAVEMENT (TYP.)	143	2

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.

Warren K. Isaacson

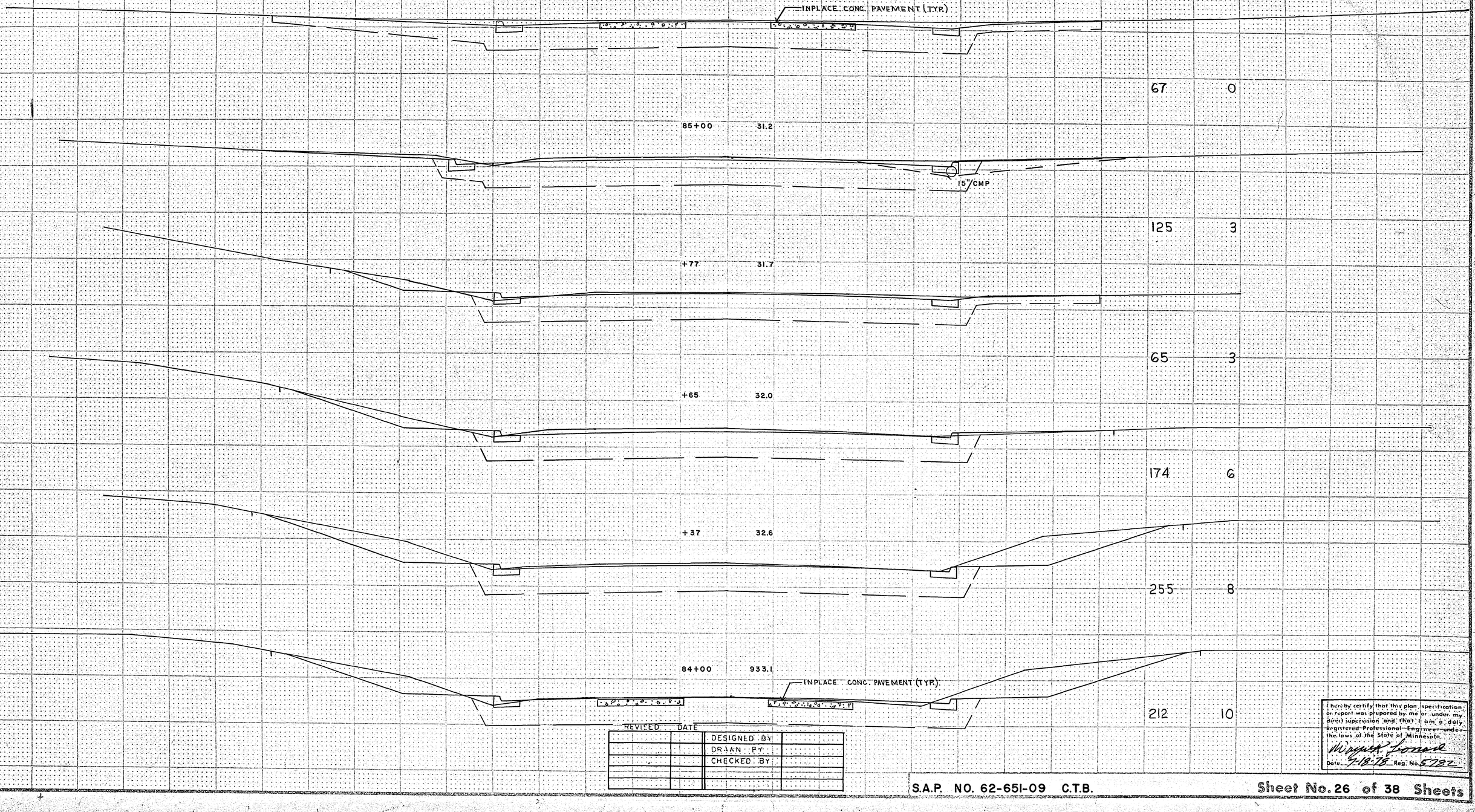
Date: 9-18-76 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 25 of 38 Sheets

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

		COM. EXC.	REG. EMB.
+11	31.0		
		67	0
85+00	31.2		
		125	3
+77	31.7		
		65	3
+65	32.0		
		174	6
+37	32.6		
		255	8
84+00	933.1		
		212	10



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

REVISED	DATE		
		DESIGNED BY	
		DRAWN BY	
		CHECKED BY	

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Date 9-18-78 Reg. No. 5782

S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 26 of 38 Sheets

	COM. EXC.	REG. EMB.
+50 26.8 INPLACE CONC. PAVEMENT (TYP.)	94	9
+31 27.5	147	13
86+00 28.5	237	19
+50 30.0	67	2
+38 30.3	107	2
85+24 930.7 INPLACE CONC. PAVEMENT (TYP.)	103	0

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.

Date 7-18-78 Reg. No. 5782

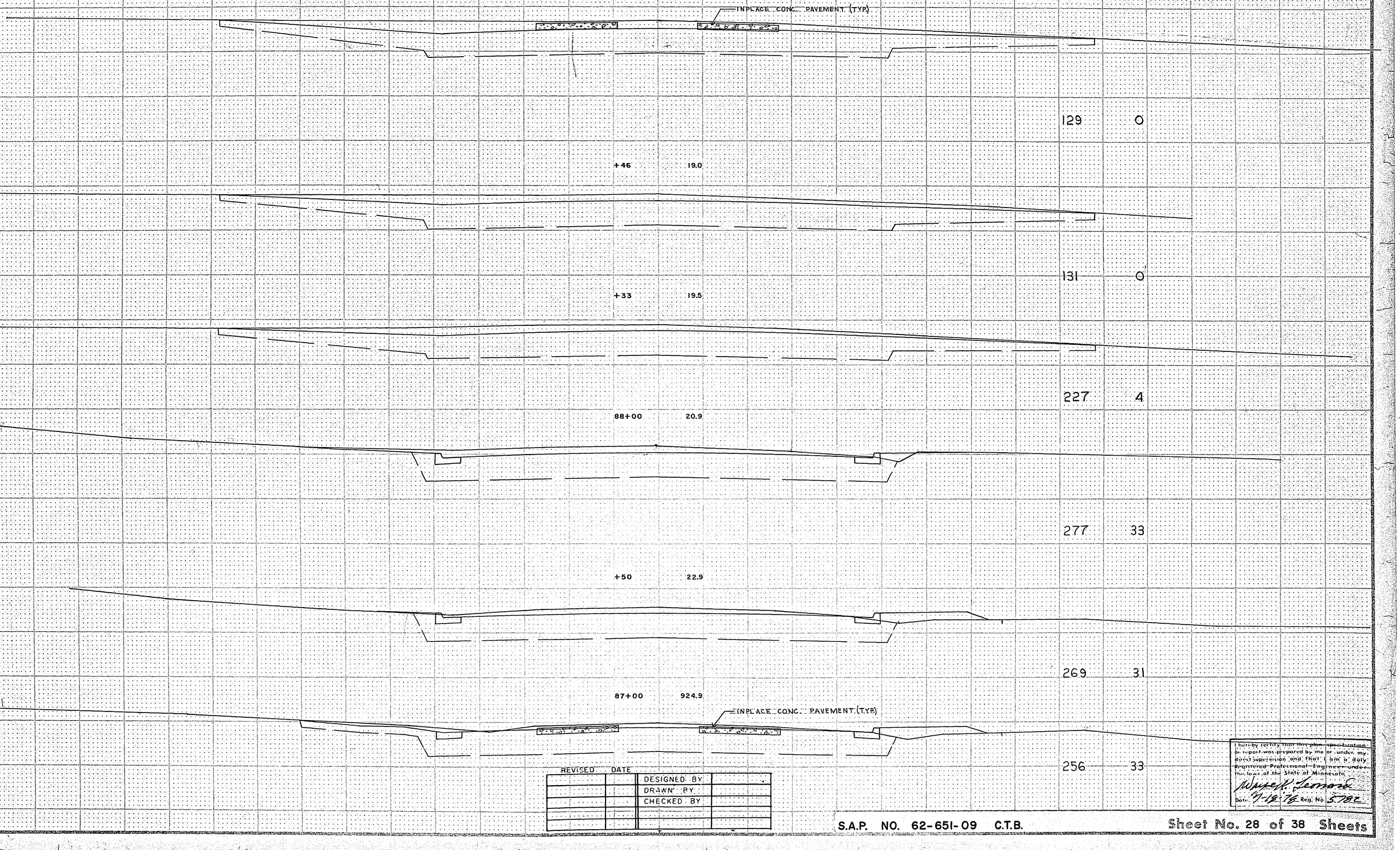
S.A.P. NO. 62-651-09 C.T.B.

Sheet No. 27 of 38 Sheets

FUNCTIONAL CROSS SECTION - OPEN DOTTED

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

		COM. EXC.	REG. EMB.
+61	18.4		
		129	0
+46	19.0		
		131	0
+33	19.5		
		227	4
88+00	20.9		
		277	33
+50	22.9		
		269	31
87+00	924.9		
		256	33



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.

Wayne K. Leonard

Date: 7-19-76 Reg. No. 5782

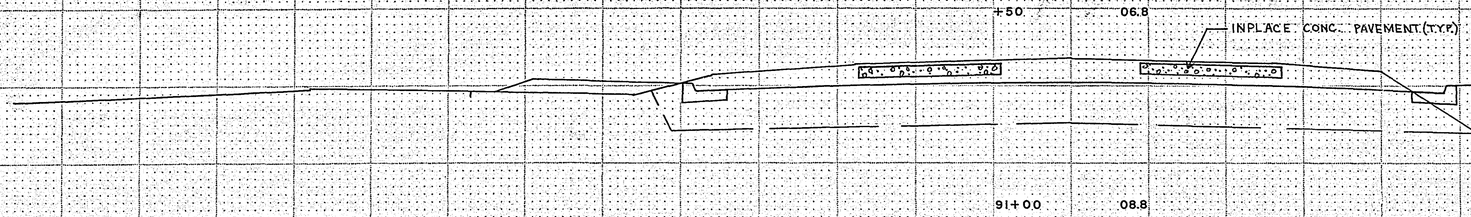
S.A.P. NO. 62-651-09 C.T.B.

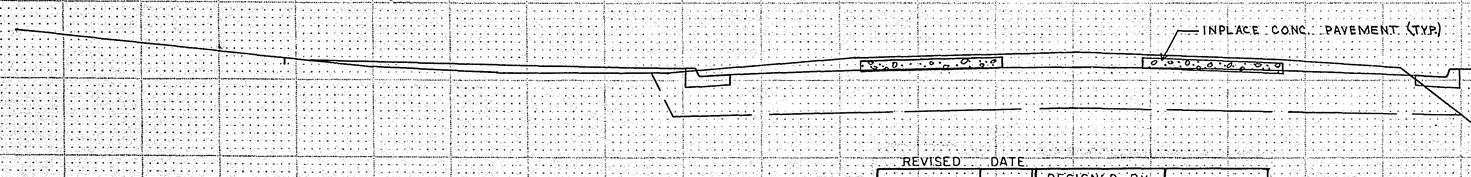
Sheet No. 28 of 38 Sheets

FUNCTIONAL CROSS SECTION - OPEN DOTTED

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

	COM. EXC.	REG. EMB.
+50 06.8		
91+00 08.8	319	195
	318	142
+50 10.9		
90+00 12.8	289	277
+50 14.8	276	322
	267	251
89+00 916.8	277	91





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.

Warren Simons

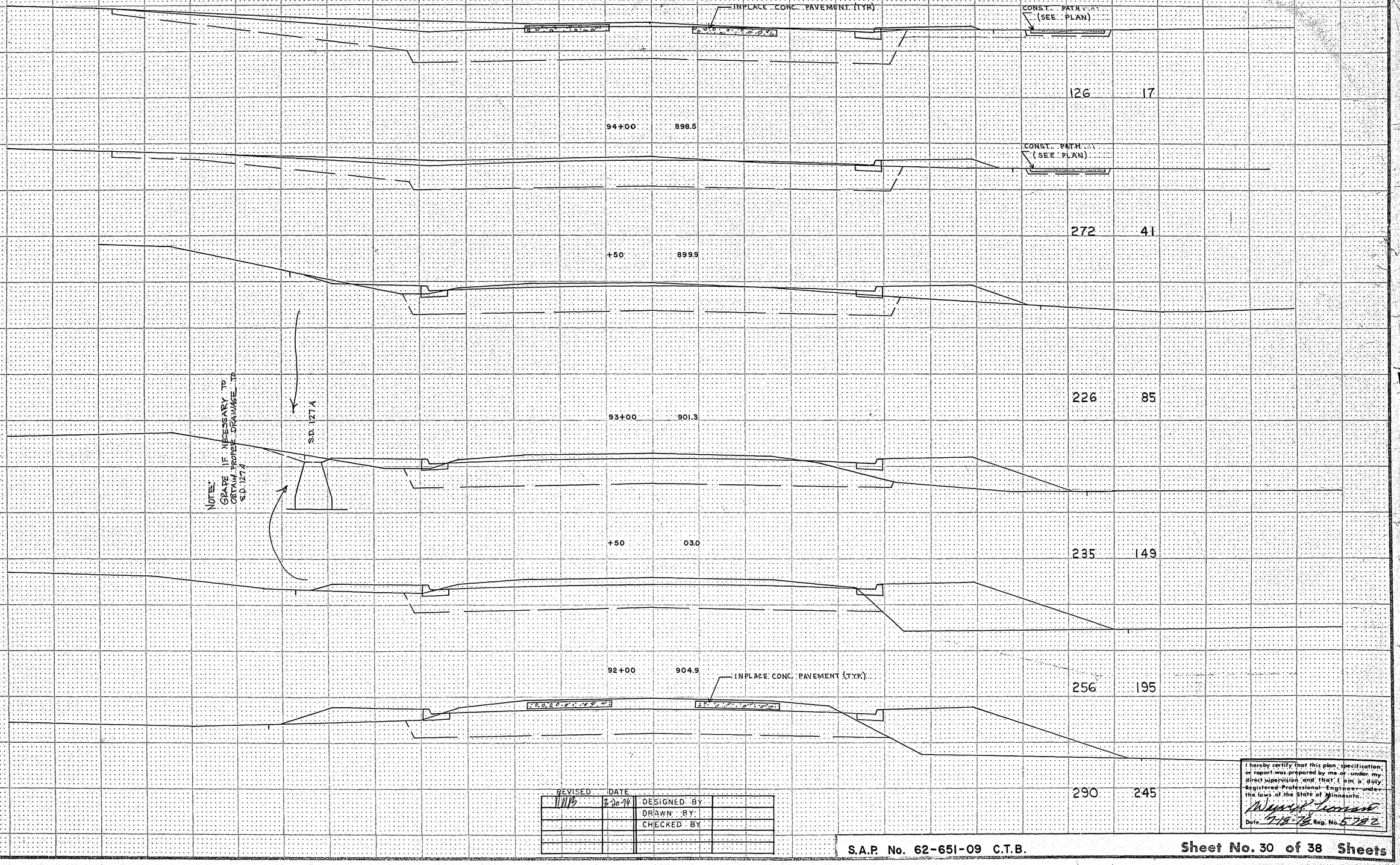
Date 7-18-75 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 29 of 38 Sheets

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

		COM. EXC.	REG. EMB.
+16	98.0		
		126	17
94+00	898.5		
		272	41
+50	899.9		
		226	85
93+00	901.3		
		235	149
+50	03.0		
		256	195
92+00	904.9		
		290	245



REVISED	DATE	
11/15	3-20-74	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.

Date 7-15-76 Reg. No. 5782

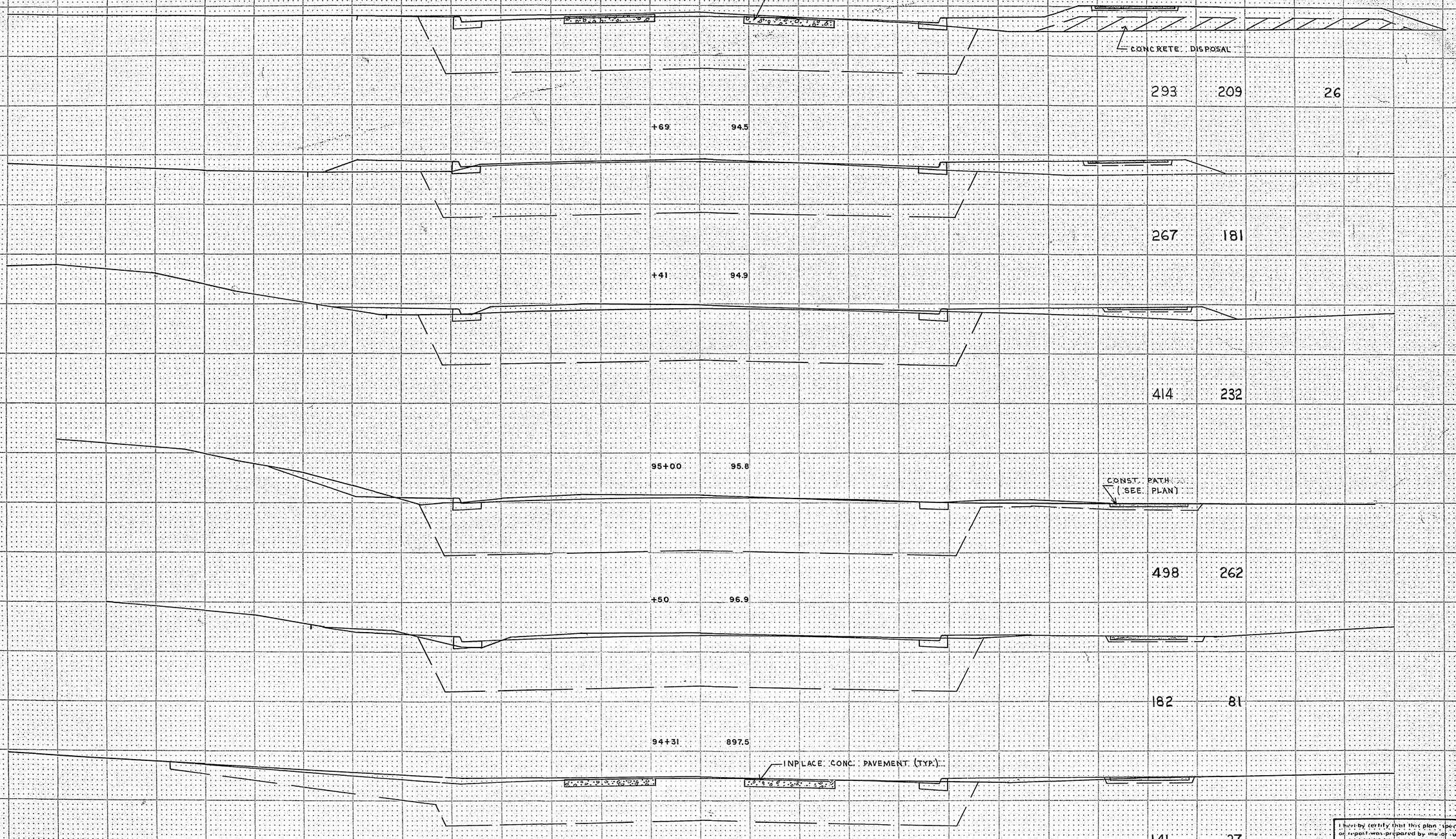
S.A.P. No. 62-651-09 C.T.B.

Sheet No. 30 of 38 Sheets

FUNCTIONAL CROSS SECTION - OPEN DITCH

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

		COM. EXC.	REG. EMB.	CONC. DISPOSAL
96+00	94.2	293	209	26
+69	94.5	267	181	
+41	94.9	414	232	
95+00	95.8	498	262	
+50	96.9	182	81	
94+31	897.5	141	37	



REVISED	DATE		
		DESIGNED BY	
		DRAWN BY	
		CHECKED BY	

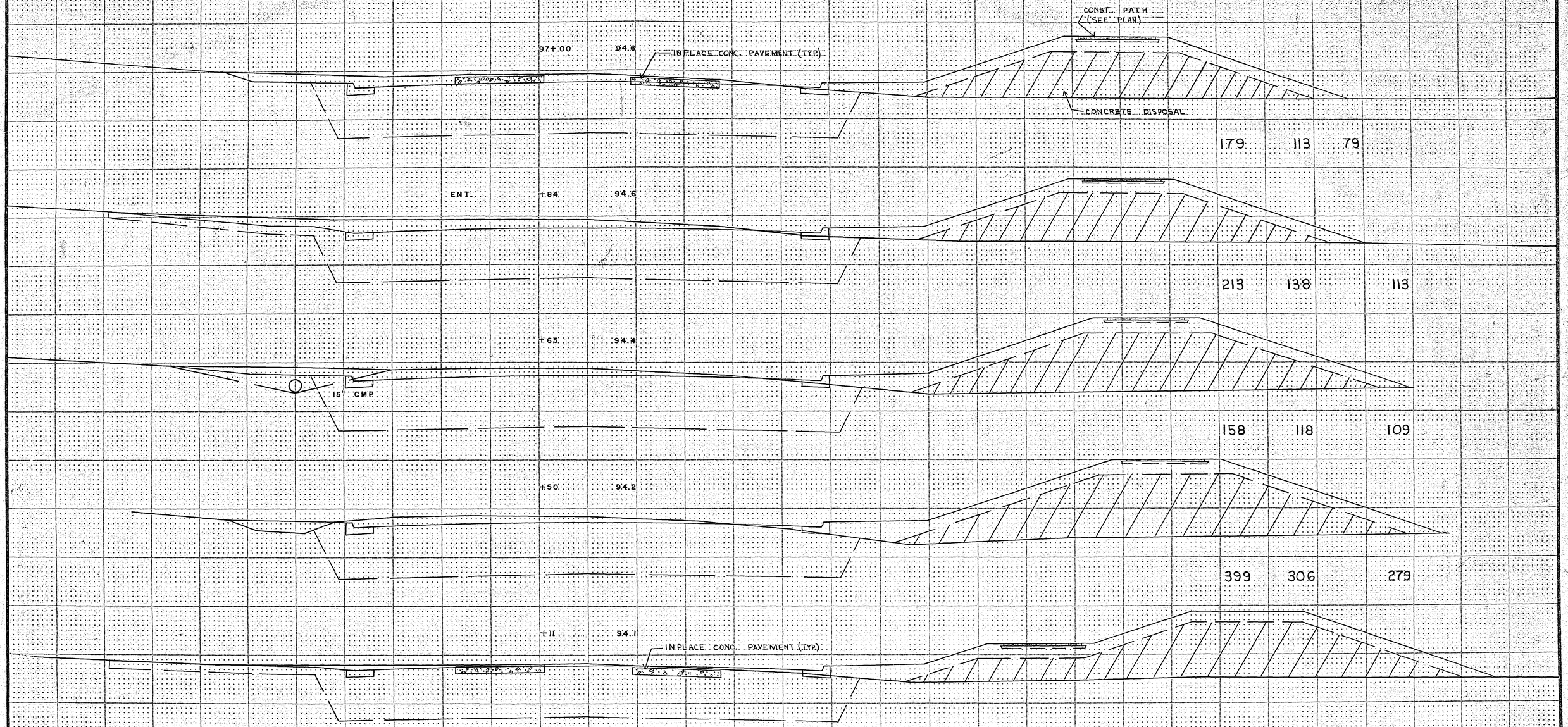
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Date 7-18-78 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 31 of 38 Sheets

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

			COM. EXC.	REG. EMB.	CONC. DISPOSAL
97+00	94.6	IN PLACE CONC. PAVEMENT (TYP.)	179	113	79
ENT. +84.	94.6		213	138	113
+65.	94.4	15" CMP	158	118	109
+50.	94.2		399	306	279
+11	94.1	IN PLACE CONC. PAVEMENT (TYP.)	111	78	45



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.

Date 7-18-78 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 32 of 38 Sheets

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

	COM. EXC.	REG. EMB.	CONC. DISPOSAL
+37 95.3 — INPLACE CONC. PAVEMENT (TYP.); CONST. PATH (SEE PLAN); 15" RCP APRON	173	159	15
+13 95.2 — EXISTING 48" R.C. PIPE (DO NOT DISTURB)	95	84	17
98+00 95.2	259	165	49
+75 95.1 — 15" RCP APRON	254	185	64
+50 95.0 — EXISTING DRINKING FOUNTAIN — RELOCATE AS DIRECTED (SEE PLAN)	454	350	163
97+05 894.7 — INPLACE CONC. PAVEMENT (TYP.); CONCRETE DISPOSAL	52	42	23

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.

Wayne K. Forward

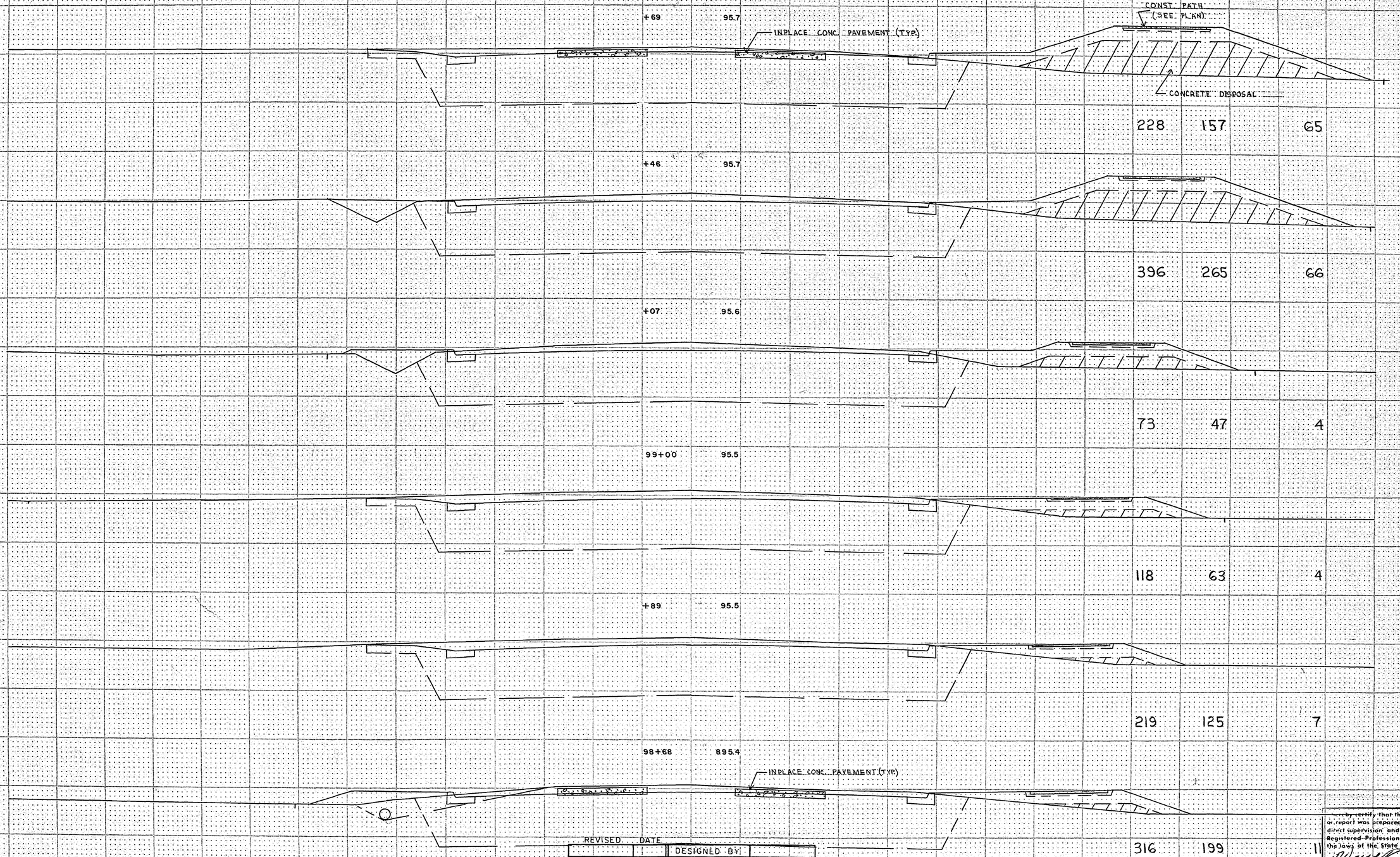
Date: 7-18-76 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 33 of 38 Sheets

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

		COM. EXC.	REG. EMB.	CONC. DISPOSAL
+69	95.7	228	157	65
+46	95.7	396	265	66
+07	95.6	73	47	4
99+00	95.5	118	63	4
+89	95.5	219	125	7
98+68	895.4	316	199	11



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

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.

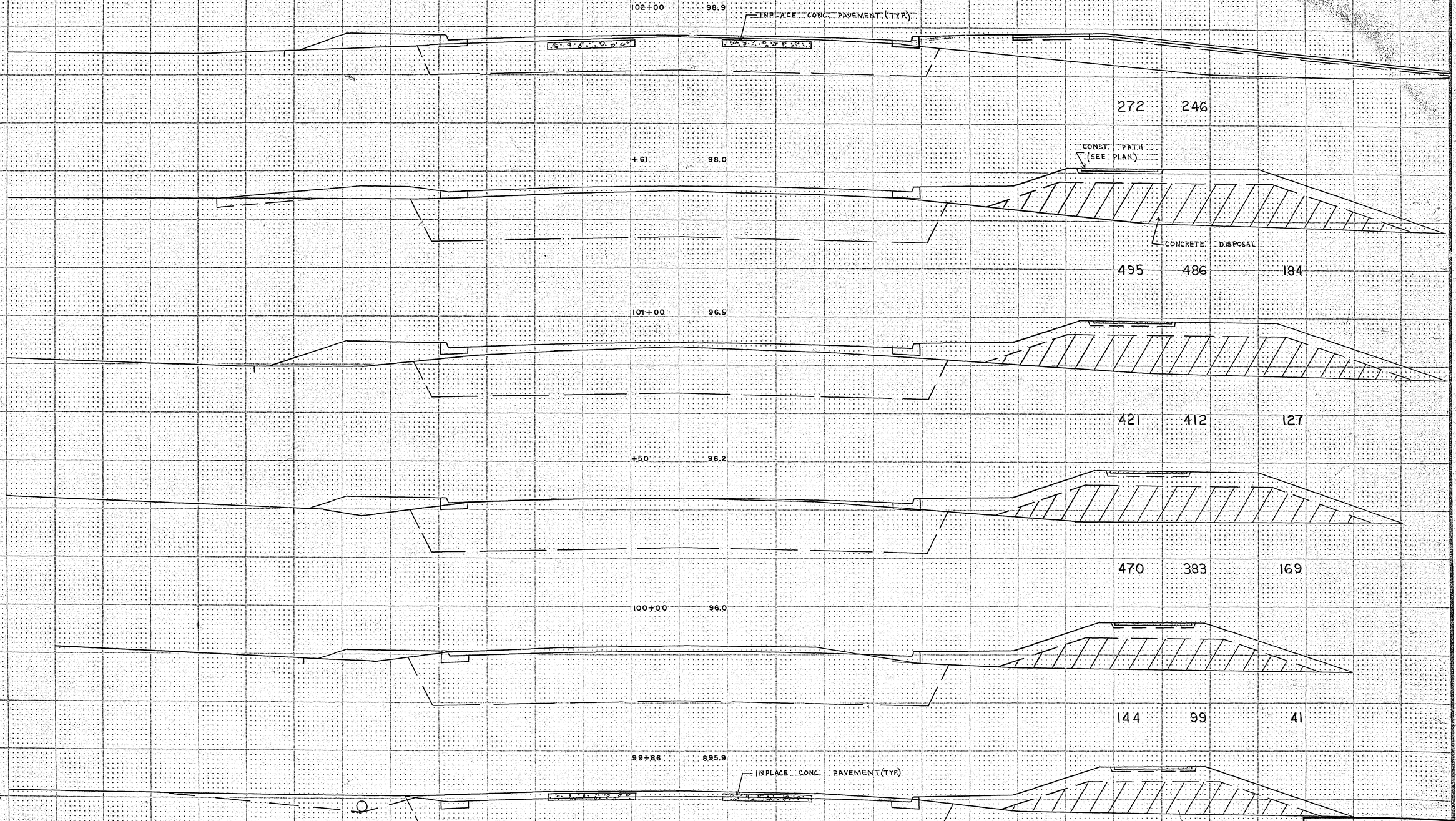
Wayne R. Leonard

Date 5-13-78 Reg. No. 5782

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 34 of 38 Sheets

		COM. EXC.	REG. EMB.	CONC. DISPOSAL
102+00	98.9	272	246	
+61	98.0	495	486	184
101+00	96.9	421	412	127
+50	96.2	470	383	169
100+00	96.0	144	99	41
99+86	895.9	175	113	51



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.

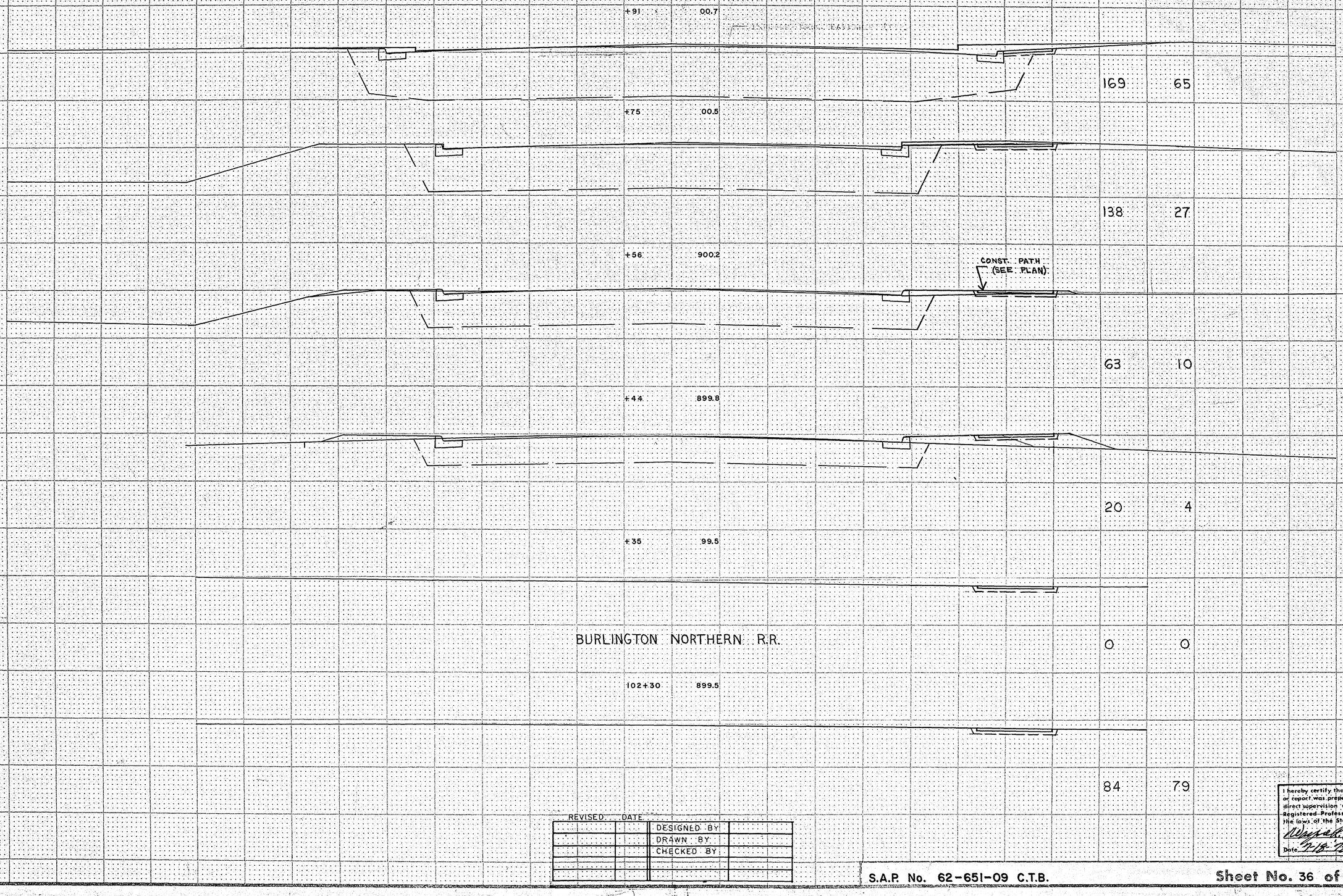
Date 5-13-94 Reg. No. 5752

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 35 of 38 Sheets

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

		COM. EXC.	REG. EMB.
+91	00.7		
		169	65
+75	00.5		
		138	27
+56	900.2		
		63	10
+44	899.8		
		20	4
+35	99.5		
		0	0
BURLINGTON NORTHERN R.R.			
102+30	899.5		
		84	79



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.
Warren Thomas
Date 7-18-79 Reg. No. 5792

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 36 of 38 Sheets

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

		COM. EXC.	REG. EMB.
104+00	03.5		
		100	54
+89	03.0		
		145	83
+73	02.5		
		300	148
+48	01.8		
		399	168
+22	01.2		
		348	141
103+00	900.8		
		130	56

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.

Date 5-19-78 Reg. No. 5752

S.A.P. No. 62-651-09 C.T.B.

Sheet No. 37 of 38 Sheets

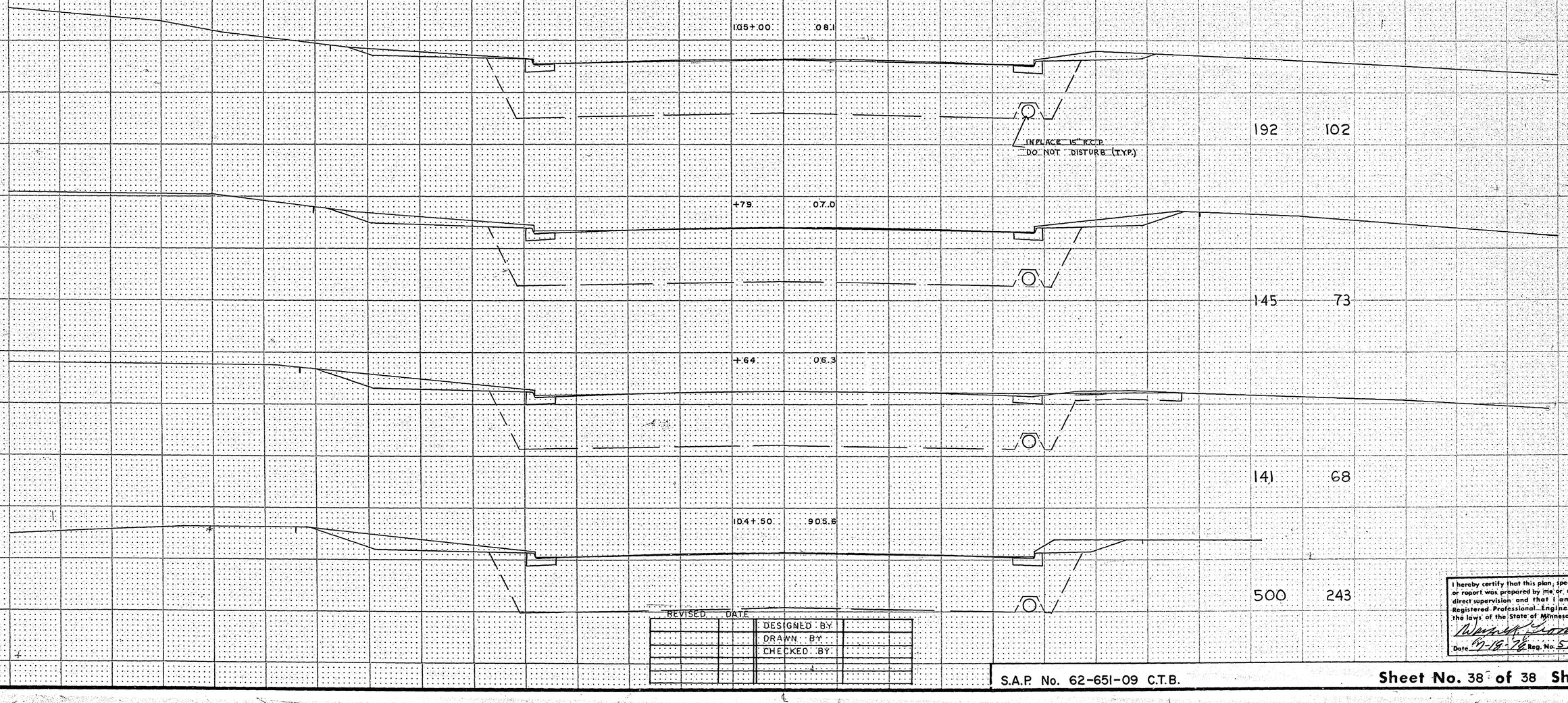
FUNCTIONAL CROSS SECTION-OPEN ROTTED
K. A. MOSER CO. MINNEAPOLIS-ST. PAUL

COM. EXC.	REG. EMB.
	16,186 × 1.33
25,451 C.Y.	21,527 C.Y. - 3,924 C.Y. EXCESS

CONC. DISPOSAL AREA
1711 C.Y.

END PROJECT STA. 105+00

PROVIDE 20:1 TAPER OUT OF SUBCUT AS DIRECTED



REVISED	DATE		
		DESIGNED BY	
		DRAWN BY	
		CHECKED BY	

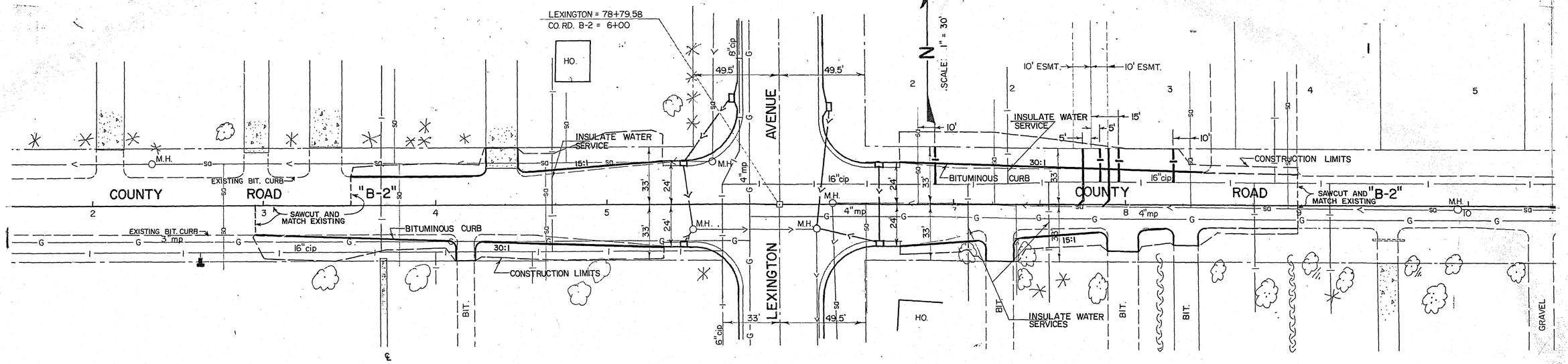
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Warren Thomas
Date 5-18-76 Reg. No. 5782

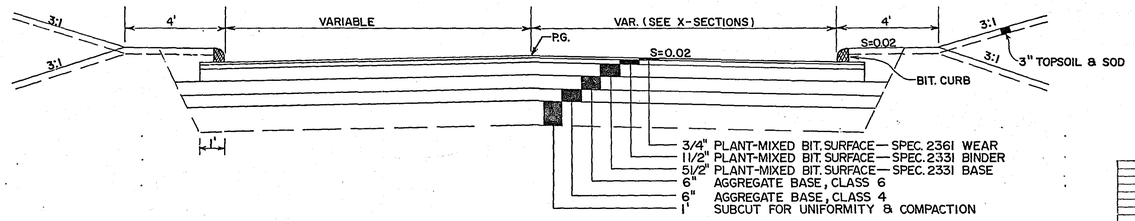
S.A.P. No. 62-651-09 C.T.B.

Sheet No. 38 of 38 Sheets

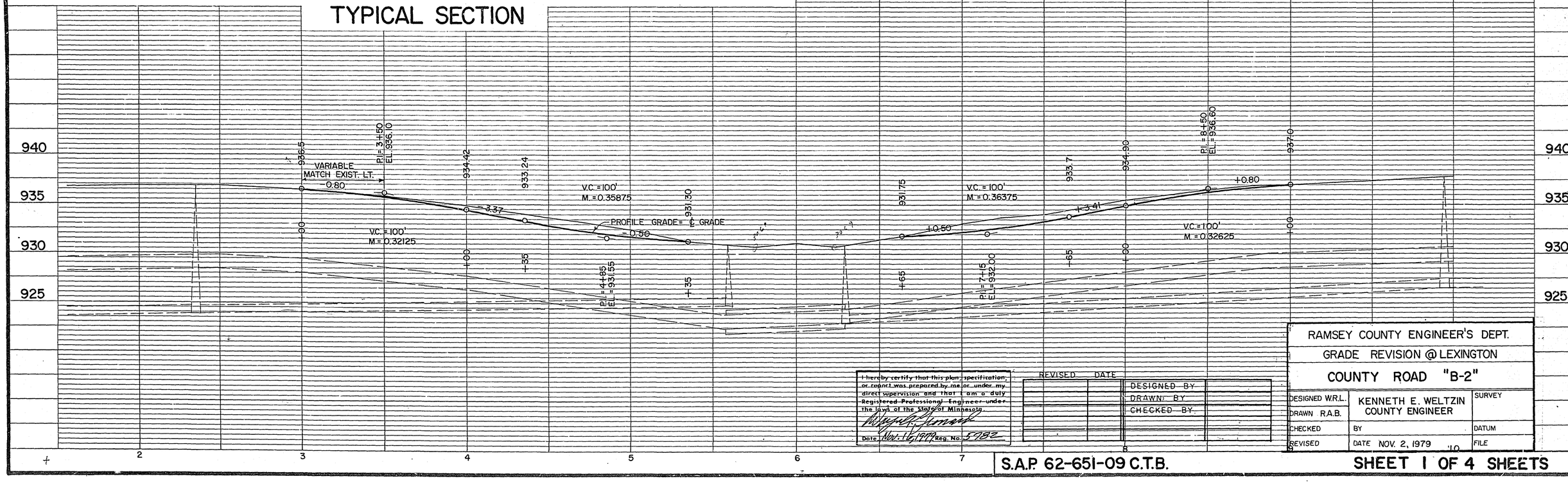
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

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





TYPICAL 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.

Date: Nov. 16, 1979 Reg. No. 5782

REVISED	DATE

DESIGNED BY
DRAWN BY
CHECKED BY

RAMSEY COUNTY ENGINEER'S DEPT.

GRADE REVISION @ LEXINGTON

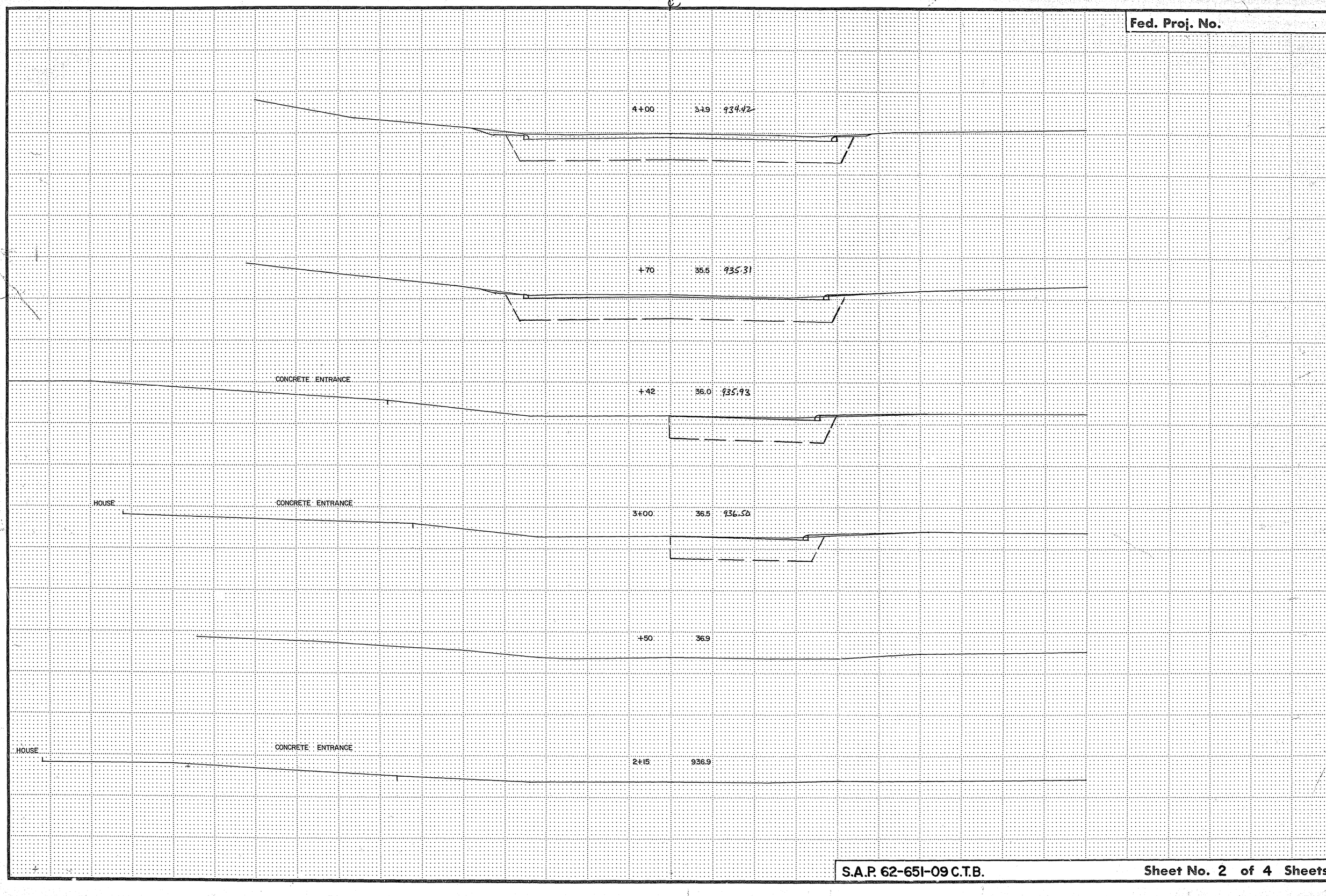
COUNTY ROAD "B-2"

DESIGNED W.R.L.	KENNETH E. WELTZIN COUNTY ENGINEER	SURVEY
DRAWN R.A.B.		
CHECKED	BY	DATUM
REVISED	DATE NOV. 2, 1979	FILE

S.A.P. 62-651-09 C.T.B.

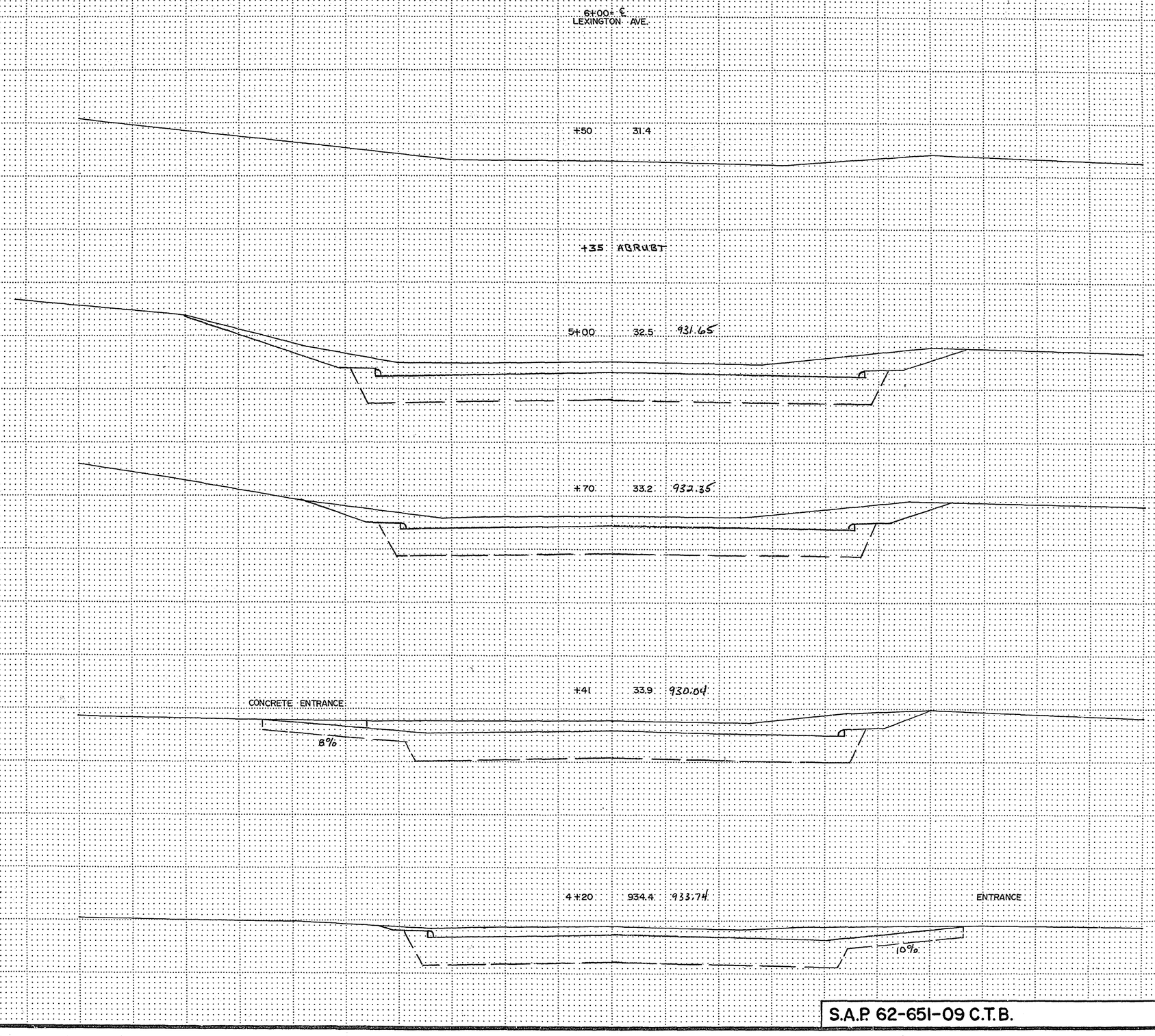
SHEET 1 OF 4 SHEETS

Fed. Proj. No.



Copy Equipment Form #1

Fed. Proj. No.

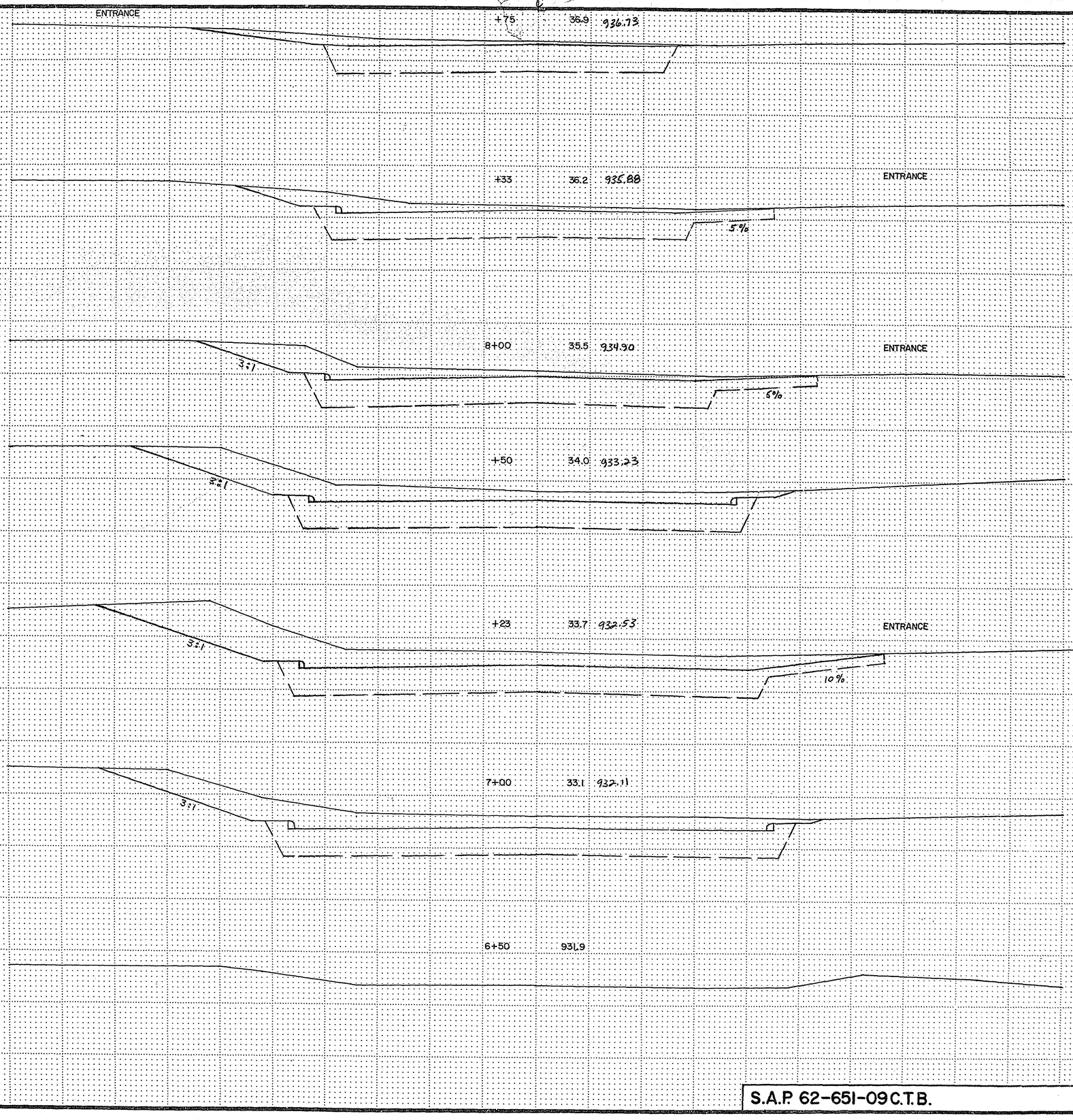


Copy Equipment Form #1

S.A.P. 62-651-09 C.T.B.

Sheet No. 3 of 4 Sheets

Fed. Proj. No.



S.A.P. 62-651-09 C.T.B.

Sheet No. 4 of 4 Sheets

Copy Equipment Form #1