MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

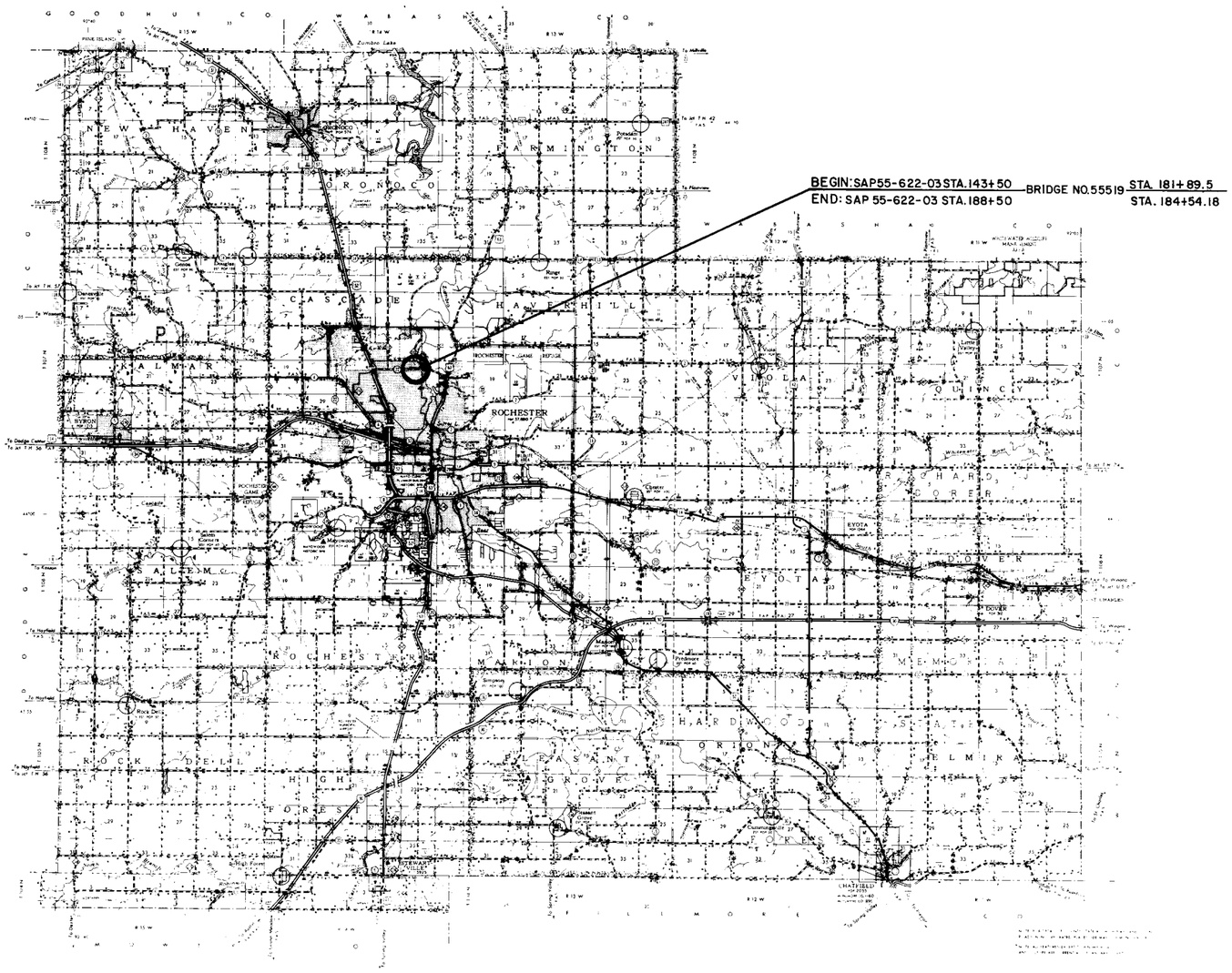
CONSTRUCTION PLAN FOR GRADING, SURFACING, STORM SEWER & CONC. CURB AND GUTTER.

LOCATED ON C.S.A.H. 22 **BETWEEN** T.H. 52 **AND** T.H. 63 IN ROCHESTER **(GEOGRAPHIC DESCRIPTION)**

FROM 655.14' W. OF S.E. COR., N.E. 1/4, N.E. 1/4 SEC. 22 T.107 N. R.14 W. **TO** 3844.86' E. OF S.E. COR, NE1/4, NE1/4, SEC. 22 T. 107 N. R.14 W. **(LEGAL DESCRIPTION)**

STATE PROJ. NO.		
GROSS LENGTH	FEET	MILES
BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	FEET	MILES
NET LENGTH	FEET	MILES

~~STATE PROJ. NO.~~ SAP 55-622-03		
GROSS LENGTH 4500.00	FEET 0.852	MILES
BRIDGES-LENGTH 264.68	FEET 0.050	MILES
EXCEPTIONS-LENGTH	FEET	MILES
NET LENGTH 4235.32	FEET 0.802	MILES



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 (TIMBER)
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 (G)
SAND PIT (S)
BORROW PIT (B)
ROCK QUARRY (Q)
SLOPE EASEMENT SE

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

ALLBINSON MPLS 55419

SCALES

PLAN 0 40'
PROFILE 0 4' VERT. 0 40' HOR.
INDEX MAP 0 10560'
CROSS SECTIONS 0 5' VERT. 0 10' HOR.

MINN. PROJ. NO.

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" SHALL GOVERN

INDEX

SHEET NO.1	TITLE SHEET
SHEET NO.2	ESTIMATE OF QUANTITIES.
SHEET NO.3&4	TYPICAL SECTIONS AND DETAIL DRAWINGS.
SHEET NO.5-9	PLAN AND PROFILE FOR GRADING, SIDEWALK CURB & GUTTER & SURFACING.
SHEET NO.10-12	PLAN AND PROFILE FOR STORM SEWER AND UTILITIES.
SHEET NO.13	TRAFFIC CONTROL LAYOUT.
SHEET NO.14-21	CROSS-SECTIONS

DESIGN DESIGNATION

R

ΣN18(20)

ADT (Current Year) = 11978
ADT (Future Year) = 21560
DHV (Design Hr. Vol.) =
D (Directional Distr.) = %
T (Heavy Commercial) = 4.2 %
SOIL FACTOR 130
9 TON DESIGN

Design Speed 50 MPH
Based on Stopping Sight Distance
Height of eye 3.75 Height of object 0.5
Design Speed not achieved at:

STA.	TO STA.	MPH
STA.	TO STA.	MPH
STA.	TO STA.	MPH

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

DATE 1-30-85 REG. NO. 10219 ENGR. [signature]

COUNTY Olmsted

Recommended for Approval _____ 19__
DISTRICT STATE AID ENGINEER

Recommended for Approval Delbert D. Ofterdahl 2-22 1985
STATE AID PLANS AND SPECS ENGINEER

Approved _____ 19__
STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

STATE AID PROJ. NO. 55-622-03
~~STATE PROJ. NO.~~

SHEET NO. 1 **OF** 21 **SHEETS**

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	PARTICIPATING MUNICIPAL	NON-PARTICIPATING MUNICIPAL	TOTAL ESTIMATED QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM	1		1
	2101.502	CLEARING	TREE	6		6
	2101.507	GRUBBING	TREE	8		8
	2104.501	REMOVE PIPE CULVERTS	LIN. FT.	303		303
	2104.501	REMOVE CURB & GUTTER	LIN. FT.	182		182
	2104.501	REMOVE CONCRETE MEDIAN	LIN. FT.	29		29
	2104.521	SALVAGE PIPE CULVERT	LIN. FT.	225		225
	2104.523	SALVAGE CONCRETE APRONS	EACH	7		7
	2105.501	COMMON EXCAVATION (P)	CU. YD.	20673		20673
	2105.507	SUBGRADE EXCAVATION (P)	CU. YD.	10784		10784
	2105.521	GRANULAR BORROW (LV)	CU.YD.	4950		4950
	2105.525	TOPSOIL BORROW (LV)	CU.YD.	2858		2858
(1)	2211.501	AGGREGATE BASE CLASS 2	TON	**15088**		**15088**
	2221.501	AGGREGATE SHOULDERING CLASS 2	TON	**2269**		**2269**
	2331.504	BITUMINOUS MAT'L. FOR MIXTURE	TON	**1237**		**1237**
(2)	2331.508	WEARING COURSE MIXTURE	TON	778		778
	2331.510	BINDER COURSE MIXTURE	TON	2362		2362
	2331.514	BASE COURSE MIXTURE	TON	**20538**		**20538**
	2331.516	SHOULDER MIXTURE	TON	204		204
	2361.504	ASPHALT CEMENT	TON	83		83
	2361.508	WEARING COURSE MIXTURE	TON	1187		1187
	2357.502	BITUMINOUS MAT'L. FOR TACK COAT	GALLON	**3450**		**3450**
	2451.507	GRANULAR BEDDING (LV)	CU.YD.	16		16
	2501.511	18"C.S. PIPE CULVERT	LIN. FT.	44		44
	2501.515	18"G.S. PIPE APRON	EACH	2		2
	2501.515	12" R.C. PIPE APRON (OUTLET)	EACH	3		3
	2501.515	15" R.C. PIPE APRON (OUTLET)	EACH	1		1
	2501.515	18" R.C. PIPE APRON (INLET)	EACH	1		1
	2501.521	58" SPAN R.C. PIPE-ARCH CULV. CLASS 2 A	LIN. FT.	120		120
	2501.521	65" SPAN R.C. PIPE-ARCH CULV. CLASS 2 A	LIN. FT.	350		350
	2501.525	58" SPAN R.C. PIPE-ARCH APRONS	EACH	2		2
(3)	2501.573	INSTALL CONCRETE APRONS	EACH	3		3
(4)	2503.511	10"C.S. PIPE SEWER	LIN.FT.	190		190
	2503.511	12" R.C. PIPE SEWER CL 4	LIN. FT.	624		624
	2503.511	15" R.C. PIPE SEWER CL4	LIN. FT.	82		82
	2503.511	18" R.C. PIPE SEWER CL2	LIN. FT.	390		390
	2503.511	21" R.C. PIPE SEWER CL2	LIN. FT.	540		540
	2503.511	24" R.C. PIPE SEWER CL2	LIN. FT.	270		270
	2503.511	30" R.C. PIPE SEWER CL2	LIN. FT.	11		11
	0504.602	ADJUST VALVE BOX	EACH		1	1
	0504.602	RELOCATE HYDRANT	EACH		1	1
	0504.603	HYDRANT ADJUSTMENT	LIN. FT.		0.85	0.85
	2506.508	CONSTRUCT MANHOLE DESIGN C	EACH	5		5
	2506.508	CONSTRUCT MANHOLE DESIGN SPEC. 2	EACH	2		2
	2506.508	CONSTRUCT MANHOLE DESIGN SPEC. 3	EACH	1		1
	2506.509	CONSTRUCT CATCH BASIN DESIGN C	EACH	28		28
(5)	2506.511	RECONSTRUCT MANHOLE	LIN. FT.	8		8
	2506.522	ADJUST FRAME AND RING CASTING	EACH	7		7
	0506.604	CONST 65"SPAN x 12"PIPE TEE FIELD CONNECTION	EACH	2		2
	2511.501	RANDOM RIPRAP CL. III	CU.YD.	20		20
	2511.511	GRANULAR FILTER	CU.YD.	10		10
	2521.501	4"CONCRETE WALK	SQ.FT.	8927		8927
	2531.501	CONCRETE CURB AND GUTTER DESIGN B624	LIN. FT.	7829		7829
	2531.505	CONCRETE MEDIAN	LIN.FT.	16		16
	2535.501	BITUMINOUS CURB	LIN.FT.	646		646
	2575.501	ROADSIDE SEEDING (P)	ACRE	3.2		3.2
	2575.502	SEED MIXTURE 5	POUND	160		160
	2575.505	SODDING	SQ.YD.	12262		12262
	2575.511	MULCH MATERIAL TYPE 1	TON	8		8
	2575.519	DISC ANCHORING (P)	ACRE	3.2		3.2
	0575.607	COMMERCIAL FERT. ANALYSIS 10-10-10	POUND	640		640
	0563.601	TRAFFIC CONTROL	LUMP SUM	1		1
(6)	0575.602	HAY OR STRAW BALES	EACH	150		150

(P) PLAN QUANTITY

(1) ITEM NO. 2211.501 AGGREGATE BASE, CLASS 2 INCLUDES **14,210** TONS FOR MAINLINE AND RIGHT AND LEFT TURN LANES, 681 TONS FOR APPROACH AND SERVICE DRIVE AND **197** TONS FOR 5 APPROACHES

(2) ITEM NO. 2331.508 WEARING COURSE MIXTURE INCLUDES 78 TONS FOR APPROACH AND SERVICE DRIVE AND 700 TONS FOR USE IN CONJUNCTION WITH TRAFFIC CONTROL.

(3) ITEM NO. 2501.573 INSTALL CONCRETE APRONS INCLUDES ONE 18"R.C. APRON AND TWO 65" SPAN R.C. APRONS.

(4) ITEM NO. 2503.511 10"C.S. PIPE SEWER INCLUDE ONE-85° ELBOW.

(5) ITEM NO. 2506.511 RECONSTRUCT MANHOLE INCLUDES 4.5 LIN. FT. FOR MANHOLE 43' LEFT STA. 160+89 AND 3.5 LIN. FT FOR MANHOLE 43' RIGHT STA. 171+20.

(6) ITEM NO. 0575.602 HAY OR STRAW BALES TO BE USED FOR EROSION CONTROL.

BASIS PLANNED QUANTITIES

BITUMINOUS WEARING COURSE
BITUMINOUS MATERIAL - 6.0 % OF MIXTURE BY WEIGHT.
BITUMINOUS MIXTURE - 110 POUNDS / SQ.YD. / INCH OF DEPTH.

BITUMINOUS BINDER COURSE
BITUMINOUS MATERIAL - 5.5% OF MIXTURE BY WEIGHT,
BITUMINOUS MIXTURE - 110 POUNDS / SQ.YD. / INCH OF DEPTH.

BITUMINOUS BASE COURSE
BITUMINOUS MATERIAL - 5.1% OF MIXTURE BY WEIGHT,
BITUMINOUS MIXTURE - 110 POUND / SQ.YD. / INCH OF DEPTH.

SHOULDER MIXTURE
BITUMINOUS MATERIAL - 6.5% OF MIXTURE BY WEIGHT.
BITUMINOUS MIXTURE - 110 POUNDS / SQ.YD. / INCH OF DEPTH.

2361 WEARING COURSE
BITUMINOUS MATERIAL - 7.0% OF MIXTURE BY WEIGHT.
BITUMINOUS MIXTURE - 110 POUNDS / SQ.YD. / INCH OF DEPTH

AGGREGATE BASE AND AGGREGATE SHOULDERING
140 POUNDS / CU. FT.

BITUMINOUS MAT'L. FOR TACK COAT
0.05 GALLON / SQ.YD.

SEED MIXTURE 5
50 POUNDS / ACRE.

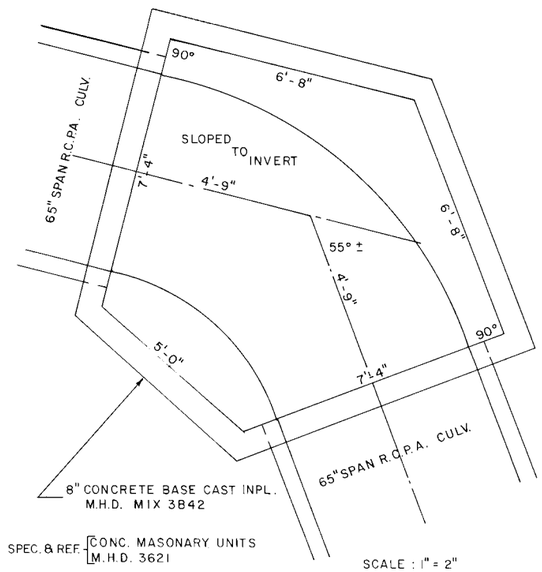
MULCH MAT'L. TYPE 1.
2.5 TONS / ACRE.

COMMERCIAL FERTILIZER
200 POUNDS / ACRE.

LOCATION OF SODDING		
LEFT	MEDIAN	RIGHT
*STA. 143+50 TO 163+40	STA. 146+73 TO 178+00	STA. 143+50 TO 167+00
CULVERT ENDS STA. 174+54 AND STA. 179+34		

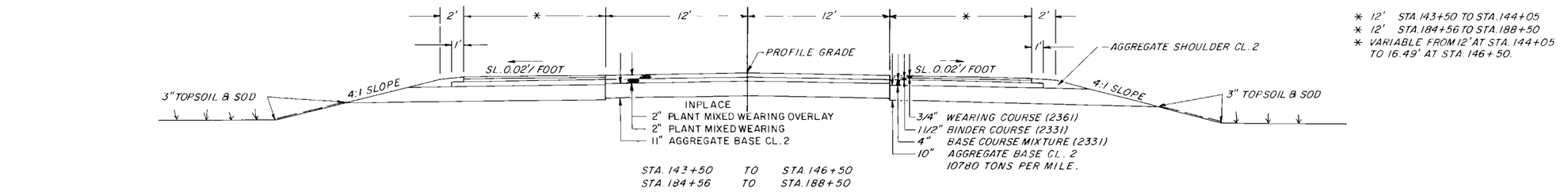
* INCLUDES SERVICE DRIVE AND APPROACH

LOCATION OF SEEDING AND MULCH	
LEFT	RIGHT
STA. 163+40 TO 182+00	STA. 167+00 TO 182+00



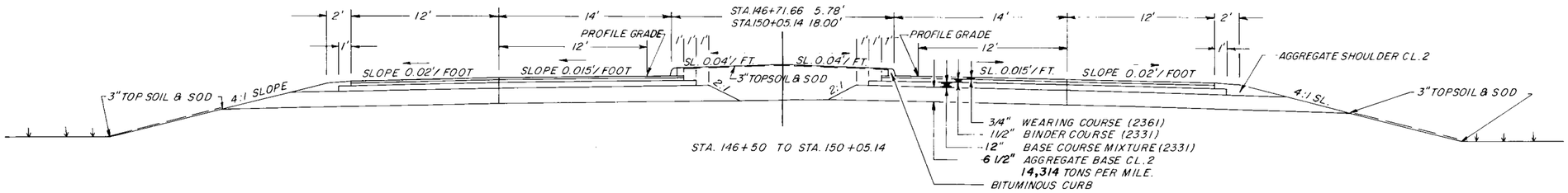
M.H. DESIGN SPECIAL 2

TYPICAL SECTIONS

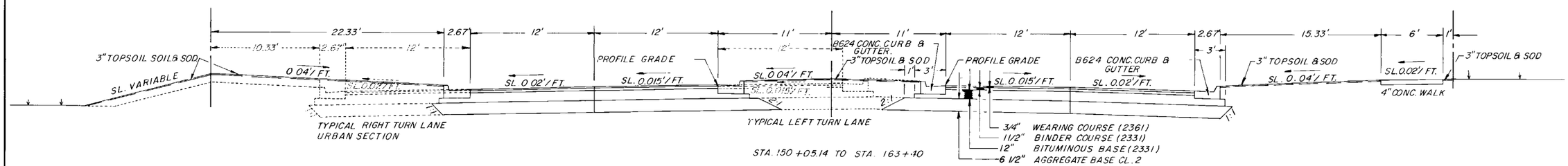


* 12' STA. 143+50 TO STA. 144+05
* 12' STA. 184+56 TO STA. 188+50
* VARIABLE FROM 12' AT STA. 144+05 TO 16.49' AT STA. 146+50.

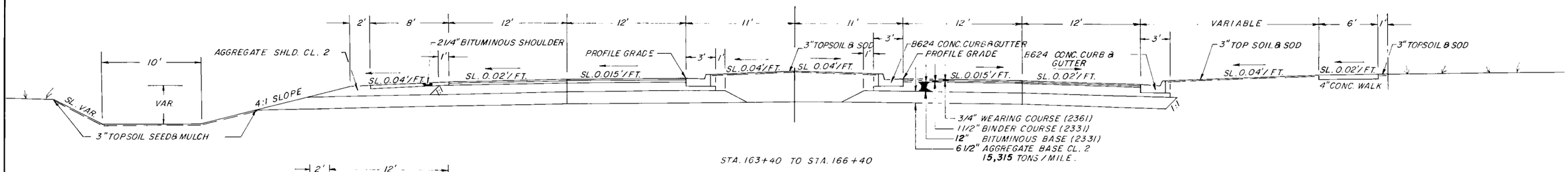
STA. 143+50 TO STA. 146+50
STA. 184+56 TO STA. 188+50



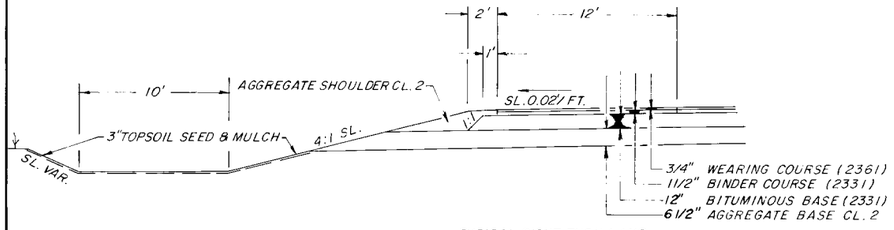
STA. 146+50 TO STA. 150+05.14



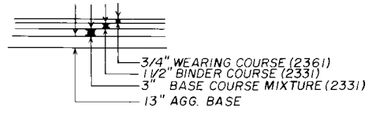
STA. 150+05.14 TO STA. 163+10



STA. 163+40 TO STA. 166+40



TYPICAL RIGHT TURN LANE
RURAL SECTION



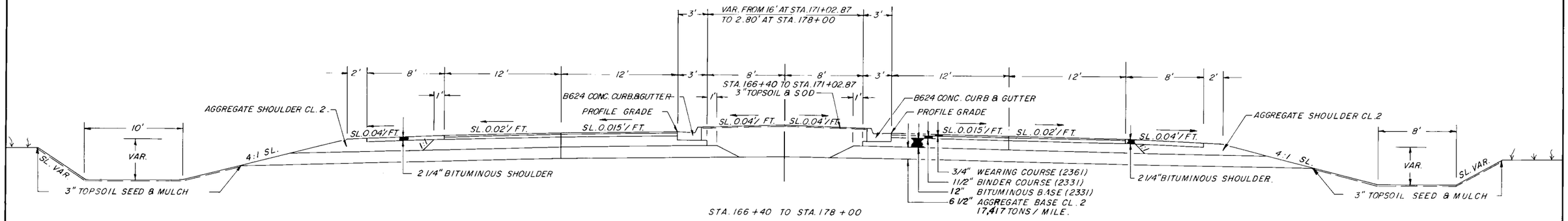
APPROACHES & DRIVEWAY SECTION

SCALES FOR S.A.P NO. 55-622-03

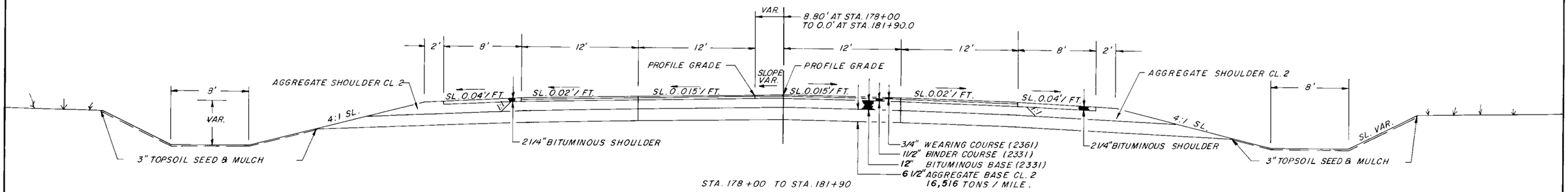
PLAN = 40 0 80 HORZ. SCALE FEET

PROFILE = 40 0 80 HORZ. SCALE FEET; 4 0 8 VERT. SCALE FEET; 10 5 0 20 HORZ. SCALE FEET; 5 0 10 VERT. SCALE FEET

TYPICAL SECTIONS



STA. 166+40 TO STA. 178+00



STA. 178+00 TO STA. 181+90

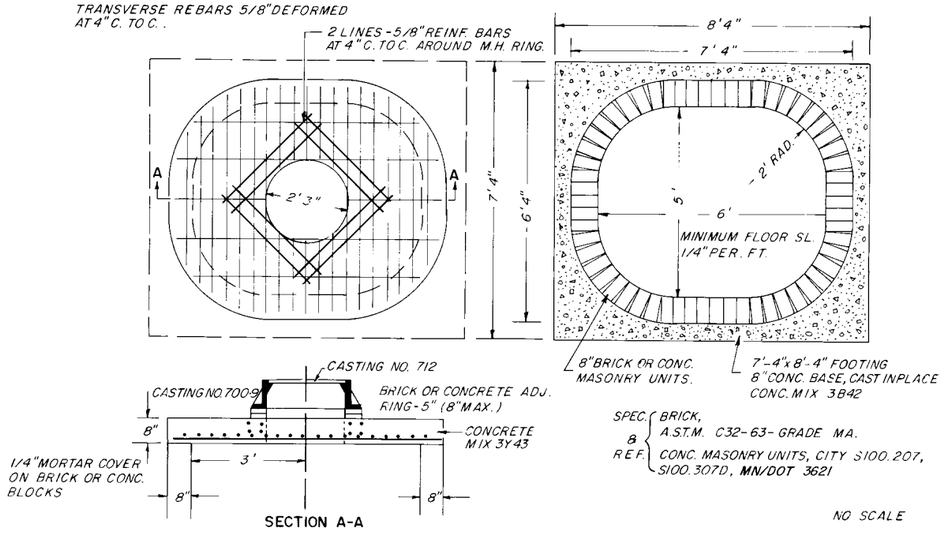
STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

PLATE NO.		DESCRIPTION
0004	A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000	H	REINFORCED CONCRETE PIPE
3014	J	REINFORCED CONCRETE PIPE ARCH DETAIL
3040	F	CORRUGATED METAL PIPE CULVERT
3100	F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3110	F	CONCRETE APRON FOR REINFORCED CONC. PIPE-ARCH
3123	H	METAL APRON FOR C. M. PIPE
3124	B	METAL APRON CONNECTION
3145	C	CONCRETE PIPE JOINT TIES EYE BOLT TIE
3133	A	RIPRAP AT R.C.P. OUTLETS
3221	C	CORRUGATED STEEL PIPE COUPLING BAND
4002	E	MANHOLE OR CATCH BASIN
4010	F	CONC. SHORT CONE & ADJUSTING RING
4011	D	PRECAST CONCRETE BASE
4101	G	RING CASTING FOR MANHOLE OR CATCH BASIN, 9" CASTING NO. 700-9
4110	D	COVER CASTING FOR MANHOLE CASTING NO. 712
4129	F	CATCH BASIN FRAME CASTING GRATE FRAME NO. 802A
4151	B	GRATE CASTING FOR CATCH BASIN, GRATE CASTING NO. 811
4160	D	CURB BOX CASTING FOR CATCH BASIN, CURB BOX CASTING NO. 823A
4180	G	MANHOLE OR CATCH BASIN STEP
7036	C	PEDESTRIAN CURB RAMP
7065	C	BITUMINOUS CURB
7100	F	CONCRETE CURB AND GUTTERS DESIGN "B"
7111	G	INSTALLATION OF CATCH BASIN CASTINGS
8000	H	STANDARD BARRICADES
9000	B	APPROACHES AND ENTRANCES
9102	C	SODDING AT PIPE CULVERT ENDS

MAN HOLE DESIGN SPEC. 3

NOTE:
LONGITUDINAL REBARS 5/8" DEFORMED AT 12" C. TO C.
TRANSVERSE REBARS 5/8" DEFORMED AT 4" C. TO C.



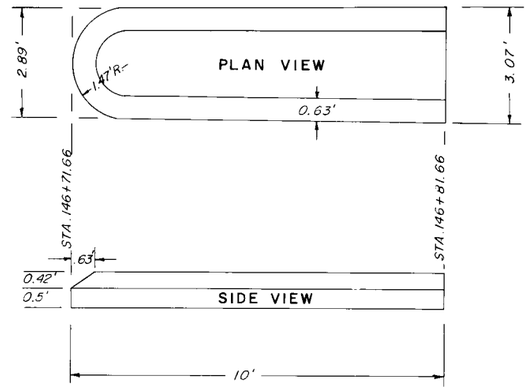
PLAN OF SLAB & REINFORCING

SPEC. & REF.
BRICK, A.S.T.M. C32-63-GRADE MA.
CONC. MASONRY UNITS, CITY S100.207, S100.307D, MN/DOT 3621

NO SCALE

PLAN OF FOOTING & BARREL.

CONCRETE MEDIAN MOUNTABLE TYPE



NO SCALE

STA. 145+24 LT. F. ENT.
INPL. 18"x 46' CMP W/ APRONS
REMOVE 51 LIN. FEET PIPE CULV.
NO ENT. REQ'D.

BEGIN TEMPORARY CONNECTION
STA. 143+50.0
BEGIN WIDENING TAPER STA. 144+05.14
RATE OF WIDENING 0.018333'/ FOOT.

BLK. – 14 LOT – 1

SUNRISE ESTATES SECOND

EXCEPTION NO. 2

BEGIN: SAP 55-622-03
STA. 143+50.00

22 21 20 +09 +41 +87 +24

CHAIN-L ⊠DELEC. CHAIN-L CHAIN-L CHAIN-L

BITUMINOUS WALK

OUTLOT "A"

2' AGG. SHLD.
INPL. AGGREGATE SHLD. VAR. WIDTH
INPL. 24' BITUMINOUS SURFACE
INPL. AGGREGATE SHLD. VAR. WIDTH
2' AGG. SHLD.

137 138 139 140 141 142 143 144 145 146 147 148 149

+05.14 +71.66 +81.66

SURVEY LINE
CONST. ℄

12' ℄ WEST BOUND LANE
BITUMINOUS CURB
BITUMINOS CURB
℄ EAST BOUND LANE

G BITUMINOUS G BIKE G WAY G G G G G G G G G G G G G G G G G G G

80' 80' 166.11' 65' 5.04' 139.96' 125'

14 23 24 25 13 14 7 *UNPLATED*

STA. 146+50 BEGIN GRADING

CONST. CONCRETE MEDIAN NOSE MOUNTABLE TYPE STA. 146+71.66 TO STA. 146+81.66 10 LIN. FEET.

VERTICAL CONTROL

ELEVATIONS SHOWN IN THIS PLAN ARE BASED ON MEAN SEA-LEVEL DATUM, 1929 ADJ. AND TIED TO THE U.S. LEVEL NET.

LOCATION: BRASS PLUG IN N.E. CORNER BR. No. 9214 37st. OVER T.H. 52

B.M. No. 5508 EE

ELEVATION 1080.319

FINISHED GRADES AT	39.69	39.24	38.79	38.34	37.89	37.44	36.98	36.51	36.02	35.52	35.00	34.46	33.91	33.34	32.76	32.16	31.55	30.92	30.28	29.62	28.95	28.62	27.55	26.83	26.09	25.34
	+20	+40	+60	+80		+20	+40	+60	+80		+20	+40	+60	+80		+20	+40	+60	+80		+20	+40	+60	+80			
No. FT. LT. & RT. CONST. ℄	0'	0.27'	0.64'	1.01'	1.37'	1.74'	2.11'	2.47'	2.84	3.21'	3.57'	3.94'	4.31'	4.67'	5.04'	5.41'	5.77'	6.14	6.51	6.87	7.24'	7.61'	7.97'	8.34'	8.71'	9.07'						

1050 1045 1040 1035 1030 1025

-2.25% PVC +00 ELEV. 37.44

P.I. +00
ELEV. 32.94
400' V.C.
M 0.775

-3.8% PVT +00 ELEV. 25.34

137 138 139 140 141 142 143 144 145 146 147 148 149

+50

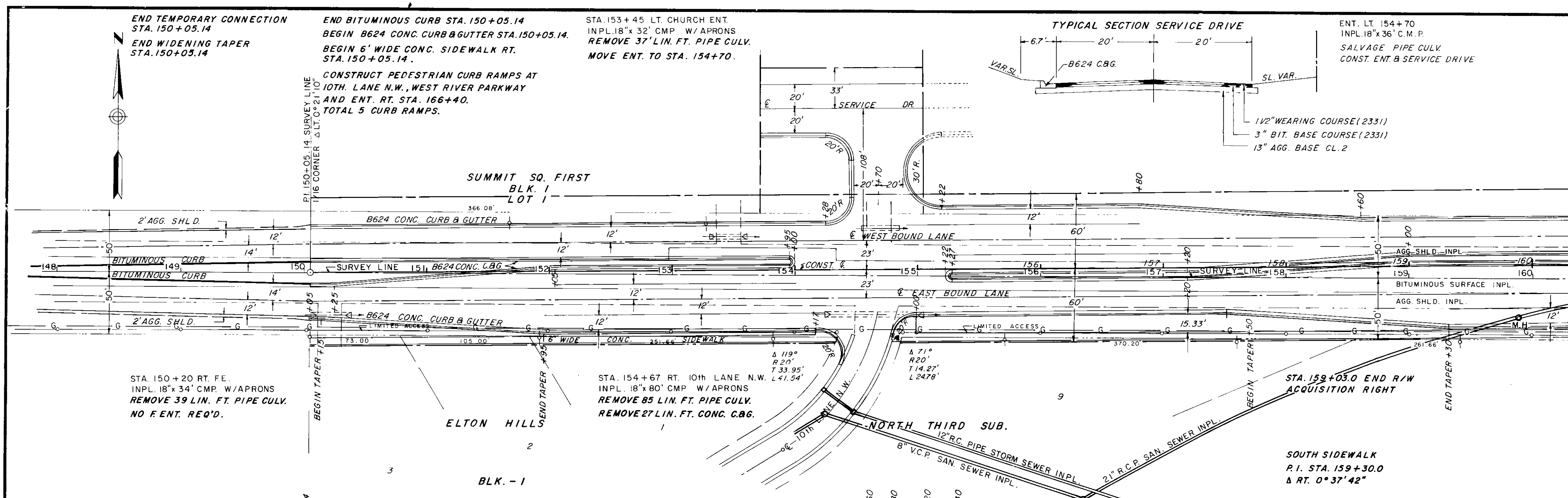
SUBGRADE TREATMENT:
SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTHS AND IN LOCATIONS AS SHOWN IN THE CROSS SECTIONS.

ROCHESTER
Department of Public Service
Plan & Profile

GRADING, CURB & GUTTER, SIDEWALK AND SURFACING.

Drawn By
Checked By
Michael J. Sheehan
4/7/83 10397

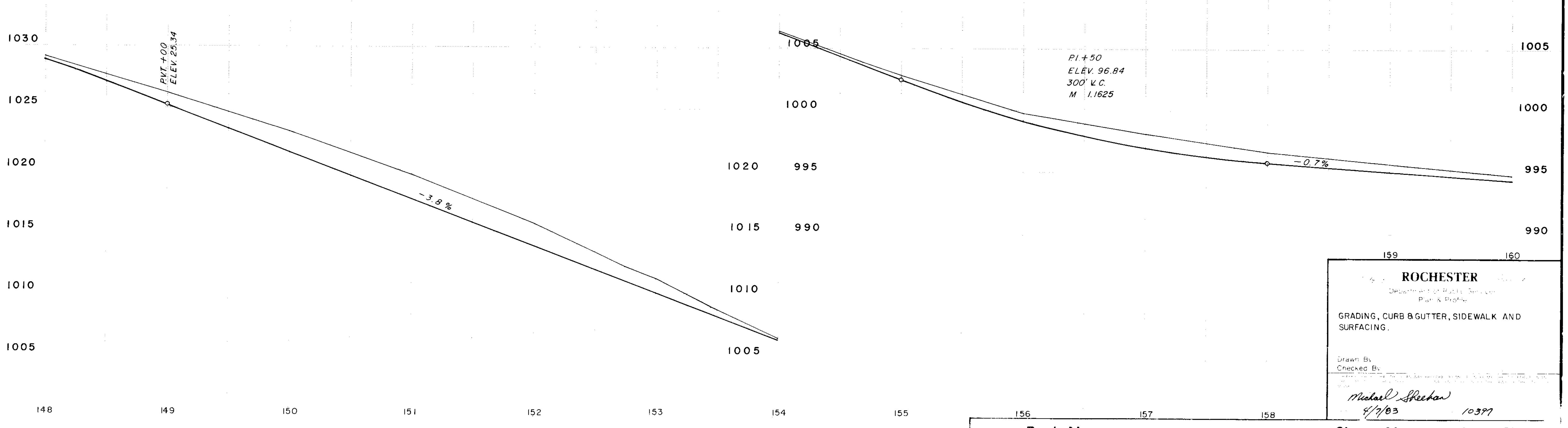
Proj. No. SAP 55-622-03 OLMSTED COUNTY **Sheet No.** 5 **of** 21 **Sheets**



B.M. EL. 1005.26
STA. 154+84 RT. 51' TOP HYD.

FINISHED GRADES AT NO. FT. LT. & RT. CONST. ℄

Station	Finished Grade	No. Ft. Lt. & Rt. Const. ℄
	25.34	9.07'
+20	24.58	9.44'
+40	23.82	9.81'
+60	23.06	10.17'
+80	22.30	10.54'
	21.54	10.91'
+05.14	21.34	11.00'
+20	20.78	11.00'
+40	20.02	
+60	13.26	
+80	18.50	
	17.74	11.00'
+20	16.98	
+40	16.22	
+60	15.46	
+80	14.70	
	13.94	11.00'
+20	13.18	
+40	12.42	
+60	11.66	
+80	10.90	
	10.14	11.00'
+20	09.38	
+40	08.62	
+60	07.86	
+80	07.10	
	06.34	11.00'
+20	05.58	
+40	04.82	
+60	04.06	
+80	03.30	
	02.54	11.00'
+20	01.80	
+40	01.10	
+60	00.45	
+80	99.83	
	99.26	11.00'
+20	98.72	
+40	98.23	
+60	97.78	
+80	97.37	
	97.01	11.00'
+20	96.68	
+40	96.40	
+60	96.15	
+80	95.95	
	95.79	11.00'
+20	95.65	
+40	95.51	
+60	95.37	
+80	95.23	
	95.09	11.00'
+20	94.95	
+40	94.81	
+60	94.67	
+80	94.53	
	94.39	11.00'



FIELD BOOK NO.

ROCHESTER

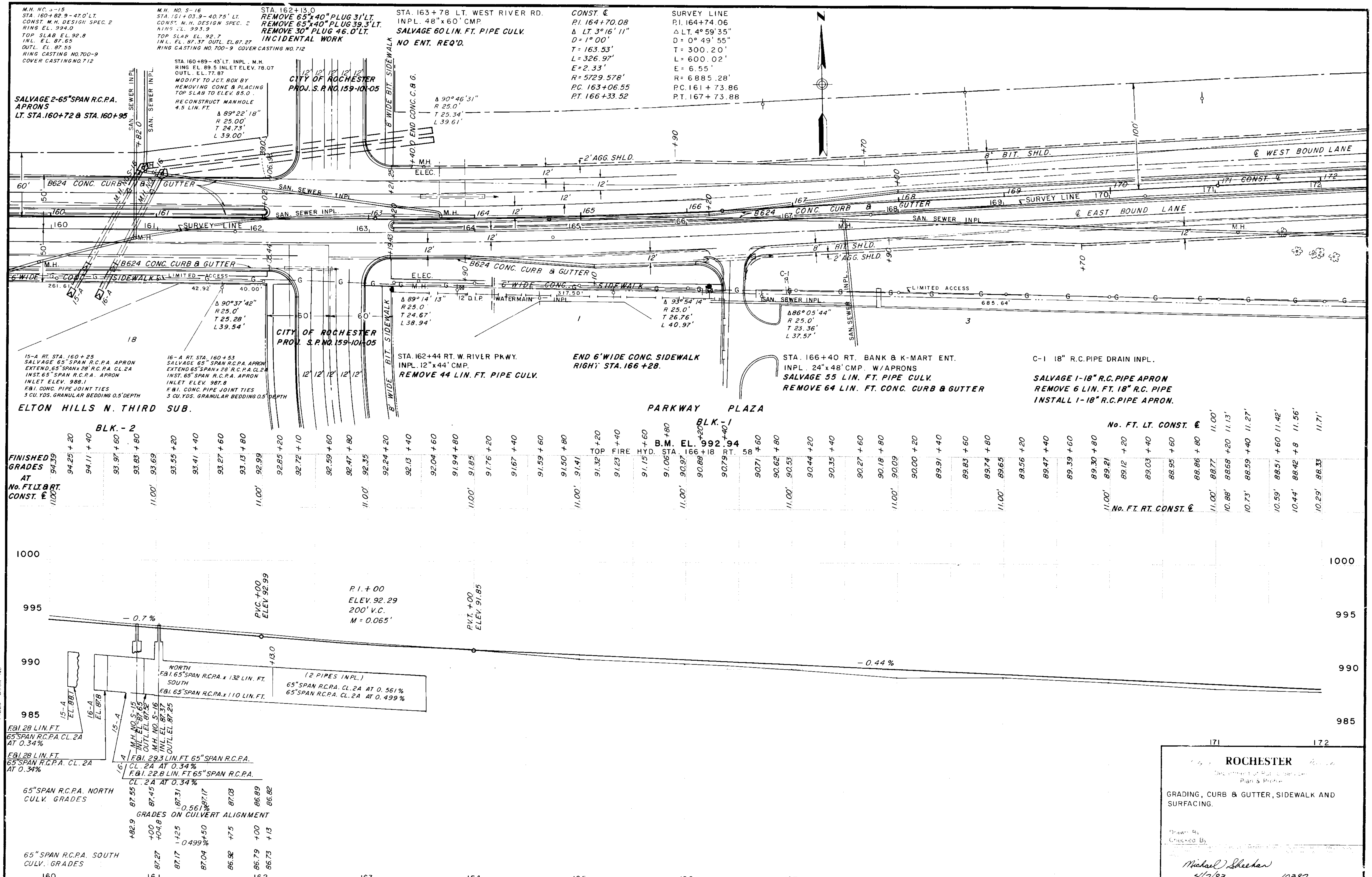
Department of Public Services
Plan & Profile

GRADING, CURB & GUTTER, SIDEWALK AND SURFACING.

Drawn By
Checked By

Michael Sheehan
4/7/83 10397

Proj. No. SAP 55-622-03 OLMSTED COUNTY **Sheet No.** 6 **of** 21 **Sheets**



ROCHESTER

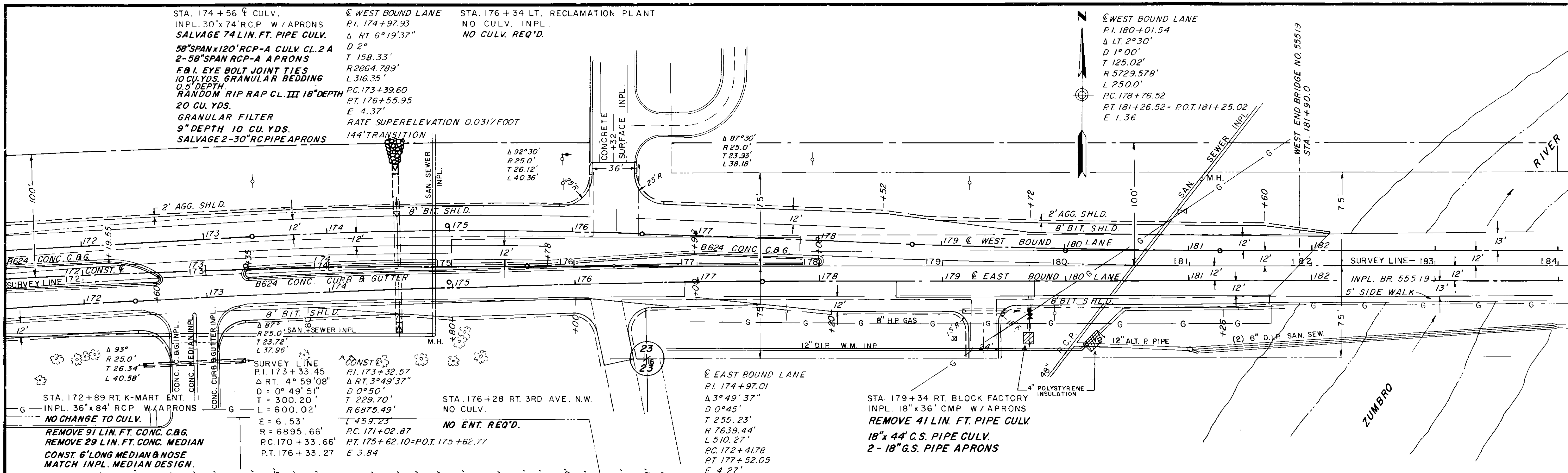
Department of Public Services
Plan & Profile

GRADING, CURB & GUTTER, SIDEWALK AND SURFACING.

Drawn By
Checked By

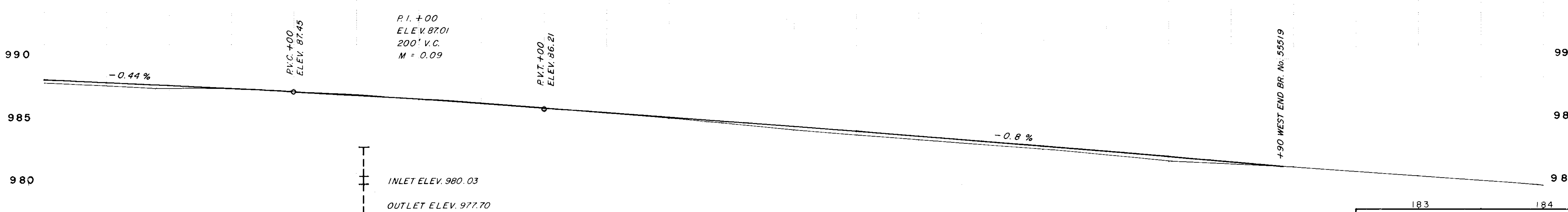
Michael Sheehan
4/7/83 10397

Proj. No. SAP 55-622-03 OLMSTED COUNTY **Sheet No.** 7 **of** 21 **Sheets**



AT	No. FT. LT. CONST. ℄	FINISHED GRADES	No. FT. RT. CONST. ℄
	11.71'	88.33	10.79'
+20	12.13'	88.24	9.92'
+40	12.56'	88.15	9.54'
+60	12.98'	88.07	9.17'
+80	13.41'	87.98	8.79'
	13.83'	87.89	8.42'
+20	14.33'	87.80	7.98'
+40	14.83'	87.71	7.55'
+60	15.47'	87.63	7.11'
+80	15.95'	87.54	6.68'
+	16.30'	87.45	6.24'
+20	16.83'	87.36	5.78'
+40	17.18'	87.26	5.33'
+60	17.48'	87.16	4.87'
+80	17.59'	87.04	4.42'
	17.83'	86.92	3.96'
+20	17.90'	86.79	3.47'
+40	17.83'	86.66	2.99'
+60	17.69'	86.52	2.50'
+80	17.34'	86.37	2.02'
	16.74'	86.21	1.53'
+20	16.40'	86.05	1.26'
+40	15.72'	85.89	1.00'
+60	14.91'	85.73	0.73'
+80	14.04'	85.57	0.47'
	13.17'	85.41	0.20'
+20	12.29'	85.25	0.12'
+40	11.42'	85.09	0.05'
+60	10.54'	84.93	0.00'
+80	9.67'	84.77	
	8.80'	84.61	0.00'
+20	7.92'	84.45	
+40	7.05'	84.29	
+60	6.18'	84.13	
+80	5.30'	83.97	
	4.51'	83.81	0.00'
+20	3.74'	83.65	
+40	3.07'	83.49	
+69	2.43'	83.33	
+80	1.91'	83.17	
	1.41'	83.01	0.00'
+20	1.02'	82.85	
+40	0.67'	82.69	
+60	0.42'	82.53	
+80	0.21'	82.37	
	0.09'	82.21	0.00'
+20	0.02'	82.05	
+40	0.00'	81.89	
+60		81.73	
+80		81.57	
+90	0.00'	981.49	0.00'

B.M. EL. 980.32
BRASS PLUGE S.E. COR. BR.-55519



FIELD BOOK NO.

SUBGRADE TREATMENT:
SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTH AND IN LOCATIONS AS SHOWN IN THE CROSS SECTIONS.

COMMON EXC. 19830 CU. YDS.
SUBGRADE EXC. 10784 CU. YDS.
GRANULAR BORROW 5513 CU. YDS. (LV)
TOPSOIL BORROW 2858 CU. YDS. (LV)

EMB. 26973 CU. YDS.

NOTE: APPROXIMATELY 1312 CU. YDS. OF BITUMINOUS PAVEMENT AND BITUMINOUS SHLD. IS INCLUDED IN COMMON EXCAVATION QUANITITY AND WILL BE PAID AS COMMON EXCAVATION. BITUMINOUS SURFACING AND BITUMINOUS SHOULDER MATERIALS ARE NOT TO BE PLACED IN ROAD EMBANKMENT AND ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

ROCHESTER
Department of Public Services
Plan & Profile

GRADING, CURB & GUTTER, SIDEWALK AND SURFACING.

Drawn By
Checked By

Michael Sheehan
4/7/83 10397

STA. 194 + 33 LT. RES. DR.
INPL. 18"x 32' CMP. W/APRONS
NO CHANGE

ZUMBRO RIVER

EAST END BR No. 55519
STA. 184+56

BR. No. 55519
INPLACE 13'

13'
12'
12'

184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196

NO CHANGE

5' SIDEWALK

CONST. 2' AGGREGATE SHOULDER
CONST. 12' BITUMINOUS LANE
CONST. 12' BITUMINOUS LANE
CONST. 2' AGGREGATE SHOULDER

END: SAP 55-622-03
STA. 188+50.00

INPLACE AGGREGATE SHLD. VAR. WIDTH
INPL. 24' BIT. SURFACE
INPLACE AGG. SHOULDER VAR. WIDTH

75'
75'

SURVEY LINE

194 + 33

TEMPORARY CONSTRUCTION LANE WIDENING
BETWEEN STA. 184+56 TO STA. 188+50

P.I. 192 + 63.12
Δ RT. 22° 03' 50"
D = 2° 14' 59"
T = 496.52'
L = 980.74'
E = 47.95'
R = 2546.79'
P.C. 187 +66.60
P.T. 197 +47.34

B.M. EL. 980.32
BRASS PLUG S.E. COR. BR.-55519

985
980
975
970

END: SAP 55-622-03
STA. 188+50.00

985
980
975

195 | 196

COMMON EXC. 843 CU. YDS.
EMB. 0 CU. YDS.

NOTE: *EXCESS COMMON EXCAVATION TO BE USED IN EMBANKMENT BETWEEN STA. 165+00 AND STA. 181+90.*

+56 +50

184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194

ROCHESTER

GRADING, CURB & GUTTER, SIDEWALK AND SURFACING.

Designed By
Checked By

Michael J. Sheehan
4/7/83 10397

Proj. No. SAP55-622-03 OLMSTED COUNTY Sheet No. 9 of 21 Sheets

END TEMPORARY CONNECTION STA. 150+05.14

END WIDENING TAPER STA.150+05.14

P.I. 150+05.14 SURVEY LINE 1/16 CORNER Δ LT 0° 21' 10"

C.B.9
CONST. ℄ STA. 150+12 10' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 20.92 OULET ELEV. N. 16.55
INLET ELEV. S. 16.65
GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(26 LIN. FT. 12" R.C. PIPE CL. 4)

C.B.10
CONST. ℄ STA. 150+12 36' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 20.50 OUTLET ELEV. NO. 16.31
INLET ELEV. SO. 16.41
GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(6 LIN. FT. 12" R.C. PIPE CL. 4)

C.B 14 A
CONST ℄ STA. 154+46.8 24.8 LT.
C.B. DESIGN C
GRATE EL 03.74 OUTLET EL. SO. 99.67
GRATE FRAME NO.802 A GRATE NO. 811
CURB BOX NO. 823 A
6 LIN. FT. OF 12" R.C.P. CL. 4
12"x12" FIELD TEE CONNECTION

M.H. 4
CONST. ℄ STA. 150+12 42' LT.
CONST. MANHOLE DESIGN "C"
RING ELEV. 21.22 OUTLET ELEV. E. 15.59
INLET ELEV. S. 16.09
RING CASTING NO. 700-9 COVER CASTING NO. 712
(382 LIN. FT. 18" R.C. PIPE CL. 2)

C.B. 11
CONST. ℄ STA. 153+94 48' RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 05.75 OUTLET ELEV. N. 02.25
GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(50 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 12
CONST. ℄ STA. 153+94 2' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 06.59 OUTLET ELEV. NO. 01.86
INLET ELEV. SO. 01.96 GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(8 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 13
CONST. ℄ STA. 153+94 10' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 06.41 OUTLET ELEV. NO. 01.71
INLET ELEV. SO. 01.81 GRATE FRAME NO. 802 A
GRATE NO 811 CURB BOX NO. 823 A
(26 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 14
CONST. ℄ STA. 153+94 36' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 05.99 OUTLET ELEV. NO. 01.47
INLET ELEV. SO. 01.57. GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(6 LIN. FT. 12" R.C. PIPE CL. 4)

M.H. 5
CONST. ℄ STA. 153+94 42' LT.
CONST. MANHOLE DESIGN "C"
RING ELEV. 06.71 OUTLET ELEV. E. 00.70
INLET ELEV. SO. 01.45. INLET ELEV. W. 00.95
RING CASTING NO. 700-9 COVER CASTING NO. 712 (272 LIN. FT. 21" R.C. PIPE CL. 2)

C.B. 15
CONST. ℄ STA. 156+66 36' RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 97.08 OUTLET ELEV. N. 93.58
GRATE FRAME NO. 802 A. GRATE NO. 811
CURB BOX NO. 823 A
(26 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 16
CONST. ℄ STA. 156+66 10' RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 97.50 OUTLET ELEV. NO. 93.34
INLET ELEV. SO. 93.44 GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(8 LIN. FT. 12" R.C. PIPE CL. 4)

M.H. 6
CONST. ℄ STA. 156+66 42' LT.
CONST. MANHOLE DESIGN "C"
RING ELEV. 97.10 OUTLET ELEV. E. 92.12
INLET ELEV. S. 92.95 INLET ELEV. W. 92.20
INLET ELEV. N. 93.32 RING CASTING NO. 700-9
COVER CASTING NO. 712
(268 LIN. FT. 21" R.C. PIPE CL. 2)

C.B. 17
CONST. ℄ STA. 156+66 2' RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 97.68 OUTLET ELEV. N. 93.20
INLET ELEV. S. 93.30 GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(44 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 18
CONST. ℄ STA. 156+66 48' LT
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 96.84 OUTLET ELEV. S. 93.34
GRATE FRAME NO. 802 A GRATE NO. 811
CURB BOX NO. 823 A
(6 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 21
CONST. ℄ STA. 159+34 10' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 94.69 OUTLET ELEV. N. 90.06
INLET ELEV. S. 90.16 GRATE NO. 811
GRATE FRAM NO. 802 A CURB BOX NO. 823 A
(26 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 22
CONST. ℄ STA. 159+34 36' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 94.27 OUTLET ELEV. N. 89.74
INLET ELEV. S. 89.84 GRATE NO. 811
GRATE FRAM NO. 802 A CURB BOX NO. 823 A
(6 LIN. FT. 15" R.C. PIPE CL. 4)

M.H. 7
CONST. ℄ STA. 159+34 42' LT.
CONST. MANHOLE DESIGN "C"
RING ELEV. 94.99 OUTLET ELEV. E. 89.12
INLET ELEV. S. 89.92 INLET ELEV. W. 89.32
RING CASTING NO. 700-9 COVER CASTING NO. 712
(58 LIN. FT. 24" R.C. PIPE CL. 2)

SUMMIT SQ. FIRST BLK. 1 LOT 1

B624 CONC. CURB & GUTTER

℄ WEST BOUND LANE

℄ CONST. ℄

℄ EAST BOUND LANE

BITUMINOUS SURFACE INPL.

2' AGG. SHLD.

BITUMINOUS CURB

SURVEY LINE

6' WIDE CONC. SIDEWALK

LIMITED ACCESS

12" R.C.P. -0.6%

18" R.C.P. -3.873%

21" R.C.P. -3.172%

15" R.C.P. -0.5%

24" R.C.P. -0.688%

24" R.C.P. -0.63%

8 LIN. FT 12" R.C.P. -0.5%

366.08

73.00

105.00

251.65

370.20

26.66

15.33

Δ 119° R 20' T 33.95' L 41.54'

Δ 71° R 20' T 14.27' L 24.78'

W-46 6" GATE VALVE & BOX INPL.
58.5' RT. STA. 154+73
NO CHANGE

W-47 HYDRANT INPL. 56.33' RT. STA. 154+84
RELOCATE HYDRANT ASSEMBLY 51' RT.
STA. 155+01. SEE DETAIL DRAWING BELOW.

22 1/2°
16.8'
±31'
6" W.M. INP

C.B. 7
CONST. ℄ STA. 150+12 36' RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 20.50 OUTLET ELEV. N. 17.0
GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(26 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 8
CONST. ℄ STA. 150+12 10' RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 20.92 OUTLET ELEV. NO. 16.76
INLET ELEV. S. 16.86
GRATE FRAME NO. 802 A
GRATE NO. 811 CURB BOX NO. 823 A
(20 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 19
CONST. ℄ STA. 159+34 48' RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV 94.03 OUTLET ELEV. N. 90.53
GRATE FRAME NO. 802 A GRATE NO. 811
CURB BOX NO. 823 A
(50 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 20
CONST. ℄ STA. 159+34 2' LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 94.89 OUTLET ELEV N. 90.19
INLET ELEV. S. 90.29 GRATE NO. 811
GRATE FRAME NO. 802 A CURB BOX NO. 823 A
(8 LIN. FT. 12" R.C. PIPE CL. 4)

STA. 159+03.0 END R/W ACQUISITION RIGHT

M.H. 22 SAN. SEWER MANHOLE INPL.
42.86' RT. STA. 159+90 ELEV. 92.69
ADJUST FRAME AND RING CASTING
TO ELEV. 93.88

ELTON HILLS

BLK. - 1

NORTH THIRD SUB.

12" R.C. PIPE STORM SEWER INPL.

8" V.C.P. SAN. SEWER INPL.

21" R.C.P. SAN. SEWER INPL.

C.B. INPL.

W. WATERMAIN INPL.

G. TOTH

B.M. EL. 1005.26
STA. 154+84 RT 51' TOP HYD

FINISHED GRADES AT NO. FT. LT. & RT. CONST. ℄

STORM SEWER GRADES LT.

P.V.T. +00 ELEV 25.34

M.H. 4 OUTLET ELEV. 16.09 12" R.C.P. S.
STA. 150+12 OUTLET ELEV. 15.59 18" R.C.P. E.

FUTURE STORM SEWER CONSTRUCTION 18" R.C.P.

382 LIN. FEET 18" R.C. PIPE CL. 2 -3.873 %

-3.8 %

INLET ELEV. 01.45 12" R.C.P. S.
INLET ELEV. 00.95 18" R.C.P. W.
M.H. 5
STA. 153+94 OUTLET ELEV. 00.70 21" R.C.P. E.

272 LIN. FEET 21" R.C. PIPE CL. 2 -3.172 %

P.I. +50
ELEV. 96.84
300' V.C.
M 0.5167

INLET ELEV. 92.95 12" R.C.P. S.
INLET ELEV 93.32 12" R.C.P. N.
INLET ELEV. 92.20 21" R.C.P. W.
OUTLET ELEV 92.12 21" R.C.P. E.
M.H. 6
STA. 156+66

-0.7%

INLET ELEV. 89.72 15" R.C.P.
INLET ELEV. 89.32 21" R.C.P.
M.H. 7
STA. 159+34 OUTLET ELEV. 89.12 24" R.C.P.

268 LIN. FEET 21" R.C. PIPE CL. 2 -1.061 %

58 LIN. FT. 24" R.C.P. CL. 2 -0.688%

INLET ELEV. 88.75 24" R.C.P.
M.H. 8
STA. 159+91.77 OUTLET ELEV. 88.72 24" R.C.P.
STORM SEWER GRADE LT.

FIELD BOOK NO.

City of ROCHESTER Minnesota
Department of Public Services
Plan & Profile

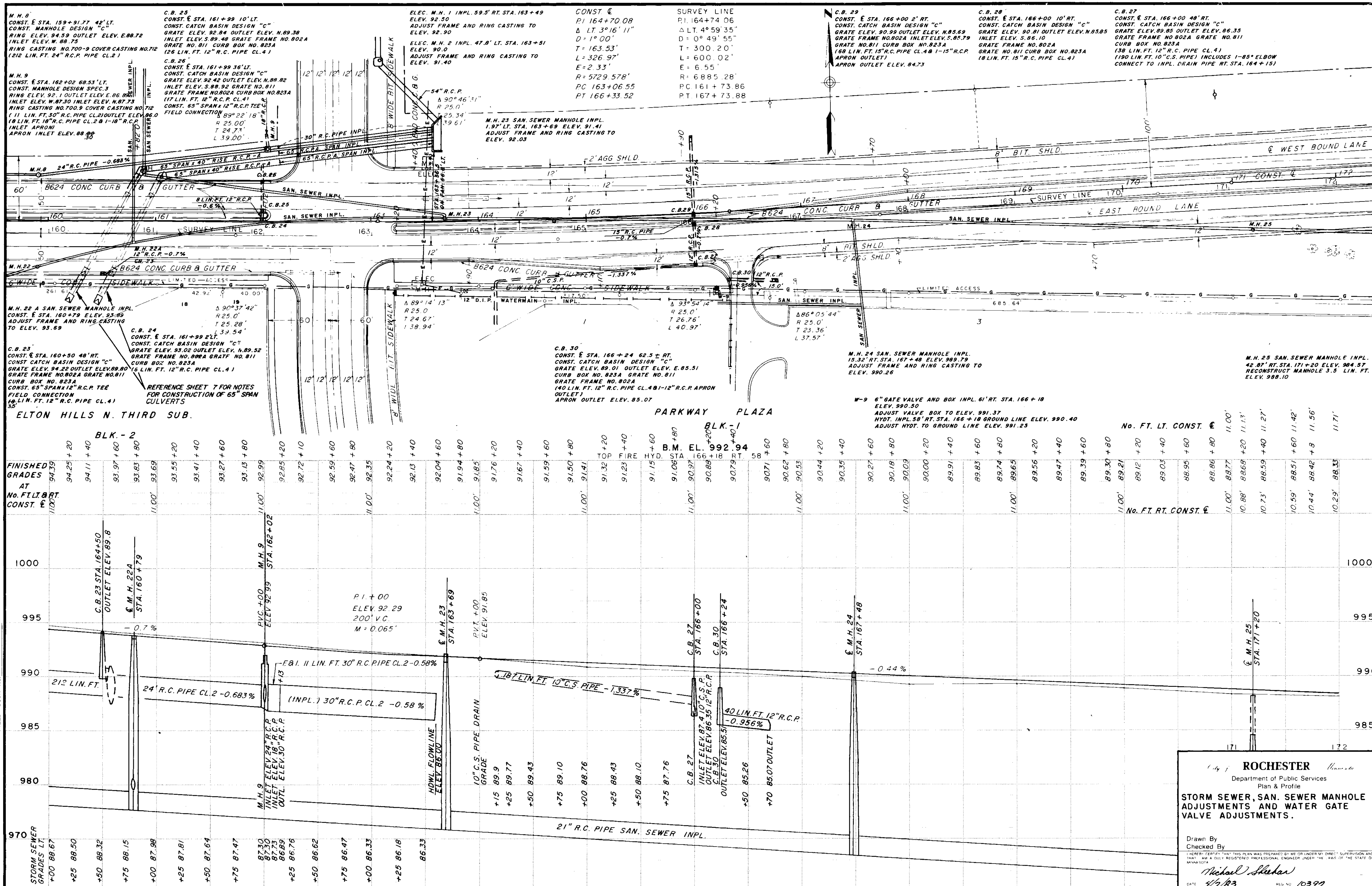
STORM SEWER, SAN. SEWER MANHOLE ADJUSTMENTS, WATER GATE VALVE ADJUSTMENTS AND HYDRANT ASSEMBLY RELOCATION.

Drawn By
Checked By

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

Michael J. Sheehan
DATE 4/7/83 REG NO. 10397

Proj. No. SAP 55-622-03 OLMSTED COUNTY Sheet No. 10 of 21 Sheets



City of ROCHESTER Minnesota

Department of Public Services

Plan & Profile

STORM SEWER, SAN. SEWER MANHOLE ADJUSTMENTS AND WATER GATE VALVE ADJUSTMENTS.

Drawn By

Checked By

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

Michael Sheehan

DATE 4/7/83 REG. NO. 10397

C.B. 32
CONST. ℄ STA. 172+59 8.2'RT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 87.91 OUTLET ELEV. N.W. 84.00
GRATE FRAME NO. 802A
GRATE NO. 811 CURB BOX NO. 823A
45 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 32
CONST. ℄ STA. 172+19 11.07'LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 88.09 OUTLET ELEV. N. 83.63
INLET ELEV. S.E. 83.73
GRATE FRAME NO. 802A
GRATE NO. 811 CURB BOX NO. 823A
152 LIN. FT. 12" R.C. PIPE CL. 4 AND
1-12" R.C. PIPE APRON OUTLET)
APRON OUTLET ELEV. 81.43

℄ WEST BOUND LANE
P.I. 174+97.93
Δ RT 6°19'37"
D 2°
T 158.33'
R 2864.789'
L 316.35'
P.C. 173+39.60
P.T. 176+55.95
E 4.37'
RATE SUPERELEVATION 0.031/FOOT
144' TRANSITION

Δ 92°30'
R 25.0'
T 26.12'
L 40.36'

CONCRETE +32 SURFACE INPL.

C.B. 33
CONST. ℄ STA. 177+99 1'LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 84.45 OUTLET ELEV. N. 80.52
GRATE FRAME NO. 802A
GRATE NO. 811 CURB BOX NO. 823A
(6 LIN. FT. 12" R.C. PIPE CL. 4)

C.B. 34
CONST. ℄ STA. 177+99 7.8'FT. LT.
CONST. CATCH BASIN DESIGN "C"
GRATE ELEV. 84.45 OUTLET ELEV. N. 80.32
INLET ELEV. S. 80.42
GRATE FRAME NO. 802A
GRATE NO. 811 CURB BOX NO. 823A
(48 LIN. FT. 12" R.C. PIPE CL. 4 AND
1-12" R.C. PIPE APRON OUTLET)
APRON OUTLET ELEV. 80.1

℄ WEST BOUND LANE
P.I. 180+01.54
Δ LT 2°30'
D 1°00'
T 125.02'
R 5729.578'
L 250.0'
P.C. 178+76.52
P.T. 181+26.52 = P.O.T. 181+25.02
E 1.36

M.H. 10 SAN. SEWER MANHOLE INPL.
69' LT. STA. 181+10 ELEV. 980.50
NO CHANGE

G-10 VALVE BOX INPL. 43' RT. STA. 180+95
ELEV. 973.50
ADJUST VALVE BOX TO ELEV. 979.20
ADJUSTMENT TO BE BY OTHERS

WEST END BRIDGE NO. 55519
STA. 181+90.0

RIVER

B624 CONC. C.&G.

2' AGG. SHLD.
8" BIT. SHLD.
12' 12'
100'
SURVEY LINE
CONST. ℄
C.B. 32
C.B. 31
B624 CONC. CURB & GUTTER
8" BIT. SHLD.
Δ 93°
R 25.0'
T 26.34'
L 40.58'
CONC. C.&G. INPL.
CONC. MEDIAN INPL.
CONC. CURB & GUTTER INPL.
SURVEY LINE
P.I. 173+33.45
Δ RT. 4°59'08"
D = 0°49'51"
T = 300.20'
L = 600.02'
E = 6.53'
R = 6895.66'
P.C. 170+33.66'
P.T. 176+33.21

Δ 87°30'
R 25.0'
T 23.93'
L 38.18'
25' R
75'
12'
8" BIT. SHLD.
2' AGG. SHLD.
Δ 89°
R 25.0'
T 23.72'
L 37.96'
SAN. SEWER INPL.
M.H. 26

CONST. ℄
P.I. 173+32.57
Δ RT. 3°49'37"
D 0°50'
T 229.70'
R 6875.43'
L 459.23'
P.C. 171+02.87
P.T. 175+62.10 = P.O.T. 175+62.77
E 3.84

M.H. 26 SAN. SEWER MANHOLE INPL.
55.34' RT. STA. 174+84 ELEV. 981.17
ADJUST FRAME AND RING CASTING TO
ELEV. 982.20

℄ EAST BOUND LANE
P.I. 174+97.01
Δ 3°49'37"
D 0°45'
T 255.23'
R 7639.44'
L 510.27'
P.C. 172+41.78
P.T. 177+52.05
E 4.27'

12" D.I.P. W.M. INPL
6" H.P.
15" R.C.P. SAN. SEWER
18" R.C.P. SAN. SEWER INPL.
4" POLYSTYRENE INSULATION
12" ALT. P.PIPE
(2) 6" D.I.P. SAN. SEW.
2' AGG. SHLD.
8" BIT. SHLD.
179 ℄ WEST BOUND 180 LANE
179 ℄ EAST BOUND 180 LANE
SURVEY LINE — 183
INPL. BR. 55519
5' SIDE WALK
ZUMBRO

STA.	172	173	174	175	176	177	178	179	180	181	182	183	184
No. FT. LT CONST. ℄	11.71'	12.13'	12.56'	12.98'	13.41'	13.83'	14.33'	14.83'	15.41'	15.95'	16.30'	16.83'	17.18'
AT FINISHED GRADES	88.33	88.24 +20	88.15 +40	88.07 +60	87.98 +80	87.89 +00	87.80 +20	87.71 +40	87.63 +60	87.54 +80	87.45 +	87.36 +20	87.26 +40
No. FT. RT. CONST. ℄	10.79'	9.92'	9.54'	9.17'	8.79'	8.42'	7.98'	7.55'	7.11'	6.68'	6.24'	5.78'	5.33'

STA.	174	175	176	177	178	179	180	181	182	183	184
No. FT. LT CONST. ℄	17.18'	17.48'	17.59'	17.83'	17.90'	17.83'	17.69'	17.34'	16.74'	16.40'	15.72'
AT FINISHED GRADES	87.26 +40	87.16 +60	87.04 +80	86.92	86.79 +20	86.66 +40	86.52 +60	86.37 +80	86.21	86.05 +20	85.89 +40
No. FT. RT. CONST. ℄	5.33'	4.87'	4.42'	3.96'	3.47'	2.99'	2.50'	2.02'	1.53'	1.26'	1.00'

STA.	177	178	179	180	181	182	183	184
No. FT. LT CONST. ℄	14.91'	14.04'	13.17'	12.29'	11.42'	10.54'	9.67'	8.80'
AT FINISHED GRADES	85.73 +60	85.57 +80	85.41	85.25 +20	85.09 +40	84.93 +60	84.77 +80	84.61
No. FT. RT. CONST. ℄	0.73'	0.47'	0.20'	0.12'	0.05'	0.00'	0.00'	0.00'

STA.	184	183	182	181	180	179	178	177	176	175	174	173	172
No. FT. LT CONST. ℄	7.92'	7.05'	6.18'	5.30'	4.51'	3.74'	3.07'	2.43'	1.91'	1.41'	1.02'	0.67'	0.42'
AT FINISHED GRADES	84.45 +20	84.29 +40	84.13 +60	83.97 +80	83.81	83.65 +20	83.49 +40	83.33 +60	83.17 +80	83.01	82.85 +20	82.69 +40	82.53 +60
No. FT. RT. CONST. ℄	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'

STA.	182	181	180	179	178	177	176	175	174	173	172
No. FT. LT CONST. ℄	0.21'	0.09'	0.02'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'
AT FINISHED GRADES	82.37 +80	82.21	82.05 +20	81.89 +40	81.73 +60	81.57 +80	81.49 +90	81.41	81.33 +20	81.25 +40	81.17 +60
No. FT. RT. CONST. ℄	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'	0.00'

B.M. EL. 980.32
BRASS PLUGE S.E. COR. BR-55519

FIELD BOOK NO

990
985
980
975
970
965

C.B. 32 STA. 172+19
C.B. 31 STA. 172+59
-0.44%
45 LIN. FT. -0.6% 12" R.C.P.
OUTLET ELEV. 81.43
P.I. +00 ELEV. 87.01 200' V.C. M = 0.09
P.V.C. +00 ELEV. 87.45
INLET ELEV. 980.03
OUTLET ELEV. 977.70
℄ M.H. 26 STA. 174+84
21" R.C. PIPE SAN. SEWER INPL.
P.V.T. +00 ELEV. 96.21
C.B. 33 & 34 STA. 177+99
-0.8%
OUTLET ELEV. 980.1
M.H. 10 STA. 181+10
+90 WEST END BR. No. 55519

City of ROCHESTER Minnesota
Department of Public Services
Plan & Profile

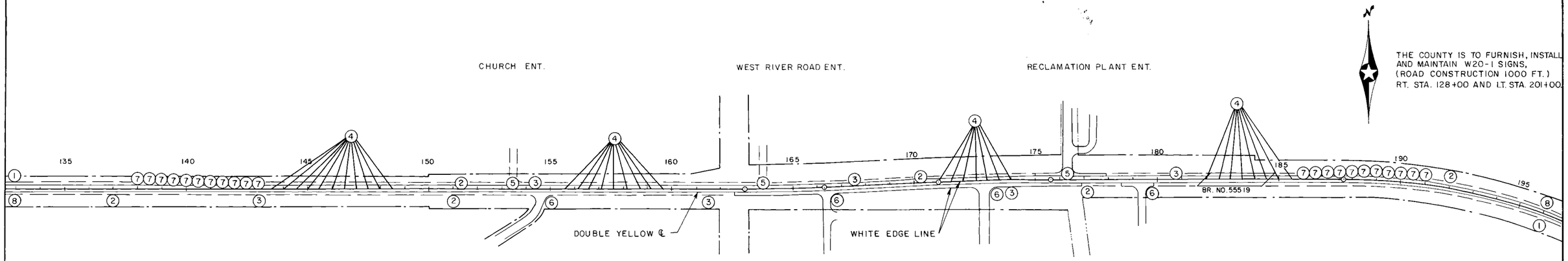
STORM SEWER, SEWER MANHOLE ADJUSTMENTS AND WATER GATE VALVE ADJUSTMENTS.

Drawn By
Checked By

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

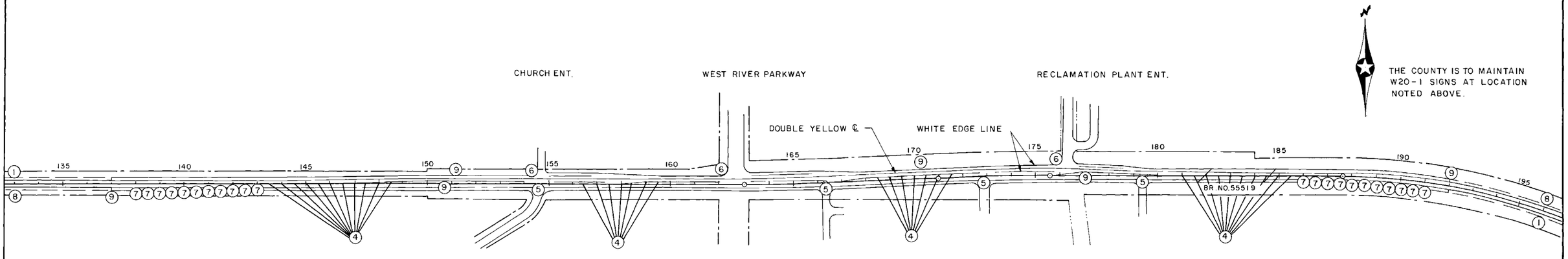
Michael Stelle Lee
DATE 4/7/83 REG NO. 10317

Proj. No. S.A.P. 55-622-03 OLMSTED COUNTY Sheet No. 12 of 21 Sheets



TRAFFIC CONTROL LAYOUT

FIRST STAGE



TRAFFIC CONTROL LAYOUT

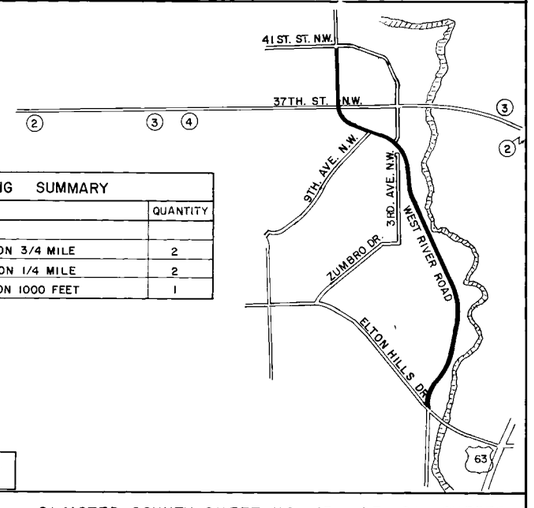
SECOND STAGE

SIGNING, BARICADES AND STRIPPING SUMMARY

INDEX	SIGN	MESSAGE OR SYMBOL	SIZE	APPROXIMATE QUANTITY
①	G20-2	END CONSTRUCTION	60"x24"	2
②	R4-1	DO NOT PASS	24"x30"	6
③	W21-X1	NO SHOULDER	48"x48"	6
③	W13-1	XX M.P.H.	18"x18"	6
⑤⑥	R1-1	STOP	30"x30"	7
⑦	W1-6	LARGE ARROW-SINGLE HEAD	48"x24"	22
⑧	W5-1	ROAD NARROWS 500 FT.	36"x36"	2
⑨	R4-1	DO NOT PASS	24"x30"	6
⑨	W13-1	XX M.P.H.	18"x18"	6
	TYPE	BARRICADE		
④	I	BARRICADE WITH STEADY BURN LIGHT		86
⑤	III	BARRICADE (5 REQ'D. EACH LOCATION x 4 LOC'S.)		20
⑥	III	BARRICADE		4
⑦	III	BARRICADE		22
	III	BARRICADE (SEE NOTE 6)		6
		TEMPORARY STRIPPING		
		WHITE EDGE LINE		25,000 LIN. FT.
		DOUBLE YELLOW ℄		11,000 LIN. FT.
		OBLITERATE TEMPORARY STRIPPING		7,600 LIN. FT.

NOTES:

1. FLASHING LAMPS SHALL BE USED ON ALL ADVANCE WARNING SIGNS.
2. ADVISORY SPEED TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. TEMPORARY STRIPPING SHALL BE USED TO GUIDE TRAFFIC BETWEEN STA. 137+00 AND 192+00.
4. TEMPORARY STRIPPING NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION FOR VEHICULE OPERATORS SHALL BE OBLITERATED AS SOON AS PRACTICABLE.
5. TYPE I BARRICADES WITH STEADY BURN LIGHT TO BE PLACED AS SHOWN AT 50' INTERVALS FROM STA. 143+00 TO STA. 186+00.
6. THE CONTRACTOR SHALL FURISH SIX (6) TYPE III BARRICADES WITH APPROPRIATE LAMPS TO BE USED AT THE DIRECTION OF THE ENGINEER.
7. ALL TRAFFIC CONTROL DEVICES SHOWN SHALL BE FURNISHED, INSTALLED, MAINTAINED, REMOVED BY, AND REMAIN THE PROPERTY OF THE CONTRACTOR.



ADVANCE SIGNING SUMMARY

	SIGN	MESSAGE	QUANTITY
2	W20-1	ROAD CONSTRUCTION 3/4 MILE	2
3	W20-1	ROAD CONSTRUCTION 1/4 MILE	2
4	W20-1	ROAD CONSTRUCTION 1000 FEET	1

ADVANCE SIGNING LAYOUT