MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR GRADING, STORM SEWER AND BITUMINOUS PAVING

LOCATED ON C.S.A.H. 22 **BETWEEN** T.H. 52 **AND** C.R.133 IN ROCHESTER **(GEOGRAPHIC DESCRIPTION)**

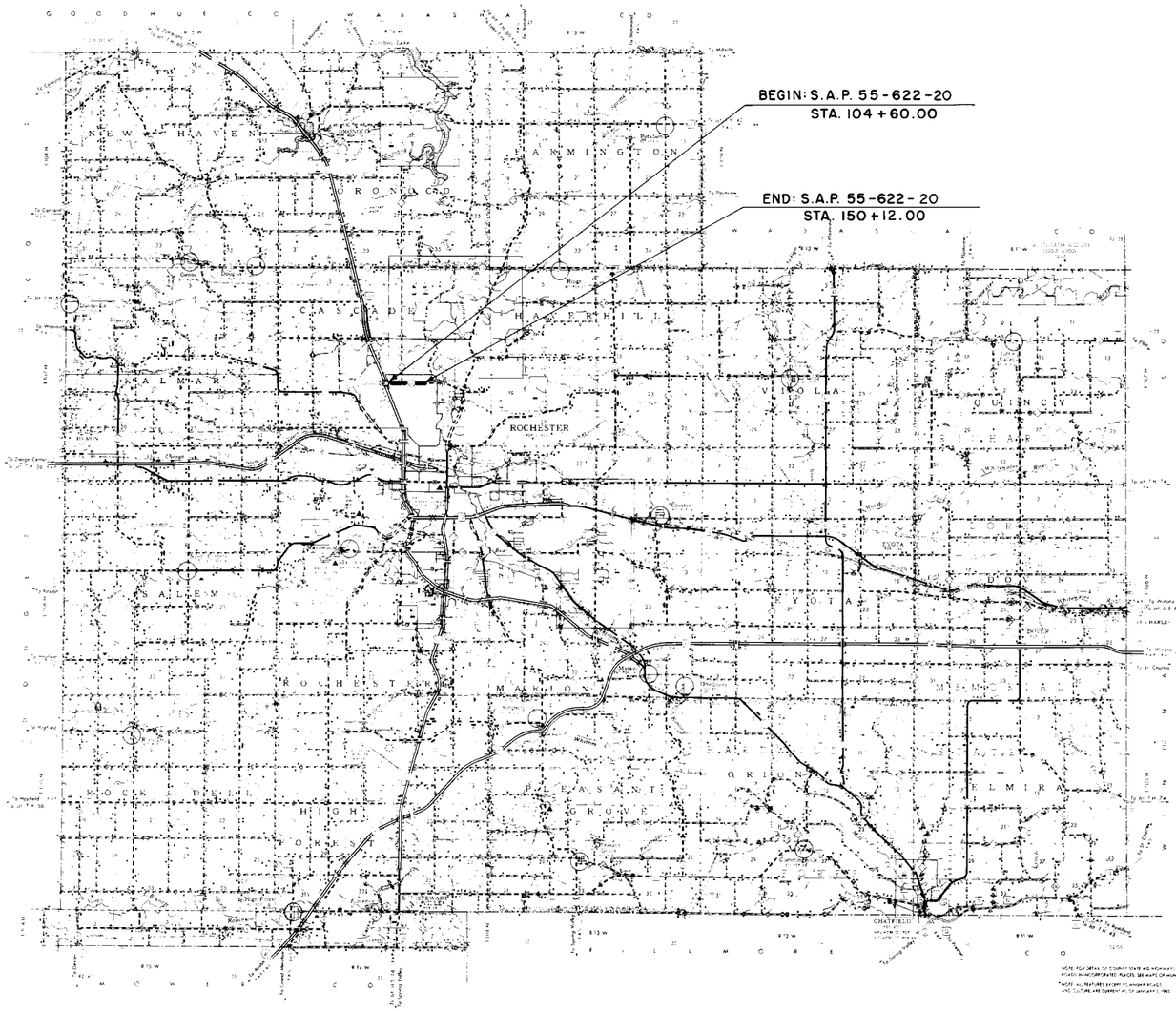
FROM 4545.14'W. OF S.E. COR., N.E. 1/4, N.E. 1/4, SEC. 22 T107N-R14W **TO** S.E. COR., N.E. 1/4, N.E. 1/4, SEC. 22 T107N-R14W **(LEGAL DESCRIPTION)**

STATE PROJ. NO. .....

GROSS LENGTH	FEET		MILES
BRIDGES-LENGTH	FEET		MILES
EXCEPTIONS-LENGTH	FEET		MILES
NET LENGTH	FEET		MILES

~~**STATE PROJ. NO.**~~ S.A.P. 55-622-20

GROSS LENGTH	4552.00	FEET 0.862	MILES
BRIDGES-LENGTH		FEET	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH	4552.00	FEET 0.862	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 (Lined Fence)
VACATED (PLATTED) PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
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
SLOPE EASEMENT

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

SCALES

PLAN	0'	50'
PROFILE	0'	50'
INDEX MAP	0'	10,560'
CROSS SECTIONS	0'	10'

ALBINSON MPLS. 55406

72065

MINN. PROJ. NO. .....

GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AS AMENDED BY THE JANUARY 2, 1991, SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN.

INDEX

SHEET NO. 1	TITLE SHEET.
SHEET NO. 2	ESTIMATE OF QUANTITIES.
SHEET NO. 3-4	TYPICAL SECTIONS.
SHEET NO. 5	STORM SEWER QUANTITY TABULATIONS.
SHEET NO. 6-9	GRADING PLAN AND PROFILE SHEETS.
SHEET NO. 10-13	STORM SEWER AND SURFACING PLAN AND PROFILE.
SHEET NO. 14	PLAN AND PROFILE RIGHT TURN LANES 18TH. AVE. N.W.
SHEET NO. 15-15A	TRAFFIC CONTROL PLAN.
SHEET NO. 16-32	CROSS SECTIONS.
SHEET NO. 33-37	RETAINING WALL PLANS.

APPROVED 4-30 1992, Roger E. Plumb
DIRECTOR OF PUBLIC SERVICES
CITY OF ROCHESTER

DESIGN DESIGNATION

R=16 ESN18[20] = 2,092,567
ADT (Current Year) = 20,877 (1992) Design Speed 50 MPH
ADT (Future Year) = 37,579 (2012) Based on STOPPING Sight Distance
DHV (Design Hr. Vol.) = ... % Height of eye 3.5 Height of object 0.5
D (Directional Distr.) = ... % Design Speed not achieved at: .....
T (Heavy Commercial) = 4.2 % STA. TO STA. MPH
SOIL FACTOR 130 STA. TO STA. MPH
9 TON DESIGN SHOULDER WIDTH 0' STA. TO STA. MPH
HIGH DENSITY ARTERIAL 4 TRAFFIC LANES 0 PARKING LANES
A "NO PARKING" RESOLUTION WILL BE REQUIRED.

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 2-5-92 REG. NO. 10397 ENGR. Michael J. Hueber
COUNTY Olmsted
Recommended for Approval 2/12 1992
DISTRICT STATE AID ENGINEER
Recommended for Approval 2-4 1992
STATE AID PLANS AND SPECS ENGINEER
Approved 3/5 1992 Julie Stallman
for STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
....
DIVISION ADMINISTRATOR DATE

STATE AID PROJ. NO. 55-622-20
~~**STATE PROJ. NO.**~~ ..... **SHEET NO.** 1 **OF** 37 **SHEETS**

AS BUILT PLANS

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	PARTICIPATING MUNICIPAL	NON PARTICIPATING MUNICIPAL	STORM SEWER MUNICIPAL NON PARTIC.	STORM SEWER MUNICIPAL PARTIC.	TOTAL ESTIMATED QUANTITIES
(14)	2101.502	CLEARING	TREE	8	5			13
(14)	2101.507	GRUBBING	TREE	8	4			12
	2104.501	REMOVE PIPE CULVERTS	LIN. FT.	215				215
	2104.501	REMOVE TILE DRAIN	LIN. FT.	886				886
	2104.501	REMOVE SEWER PIPE (STORM)	LIN. FT.	235				235
	2104.501	REMOVE CURB AND GUTTER	LIN. FT.	180				180
	2104.503	REMOVE CONCRETE DRIVE	SQ. FT.		675			675
	2104.503	REMOVE CONCRETE WALK	SQ. FT.	2325	2136			4461
	2104.509	REMOVE CATCH BASINS	EACH	2				2
	2104.513	SAW BITUMINOUS PAVEMENT	LIN. FT.	569	4203			4772
	2104.523	SALVAGE CASTINGS	EACH	3				3
	2104.523	SALVAGE LIGHT STANDARD AND LUMINAIRE	EACH	2				2
(1)	2105.515 (P)	UNCLASSIFIED EXCAVATION	CU. YD.	47779	1298			49077
	2105.525	TOPSOIL BORROW (LV)	CU. YD.	1997	135			2132
(2)	2211.501	AGGREGATE BASE, CLASS 2	TON	8258	983			9241
(3)	2211.501	AGGREGATE BASE, CLASS 5 (MODIFIED)	TON	7312				7312
(4)	2331.508	TYPE 31A WEARING COURSE MIXTURE	TON		300			300
(5)	2331.508	TYPE 31B WEARING COURSE MIXTURE	TON	257	26			283
(6)	2331.514	TYPE 31B BASE COURSE MIXTURE	TON	28262	153			28415
(7)	2331.521	IRREGULAR WIDTH PAVING	SQ. YD.	8856	540			9396
	2341.508	TYPE 41A WEARING COURSE MIXTURE	TON	1877				1877
	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	9906	222			10128
	2402.583	ORNAMENTAL METAL RAILING, TYPE S	LIN. FT.	310				310
	2411.501	STRUCTURAL CONCRETE MIX NO. 3Y43 (P)	CU. YD.	165				165
	2411.501	STRUCTURAL CONCRETE MIX NO. 1A43 (P)	CU. YD.	125				125
	2411.511	STRUCTURE EXCAVATION, CLASS U (P)	CU. YD.	566				566
	2411.521	GRANULAR BACKFILL (LV)	CU. YD.	145				145
	2411.541	REINFORCEMENT BARS	POUND	19955				19955
	2451.507	GRANULAR BEDDING (LV)	CU. YD.		290			290
	2501.515	12" G.S. PIPE APRON	EACH				1	1
	2501.521	21" SPAN C.S. PIPE-ARCH CULVERT	LIN. FT.	42				42
	2501.525	21" SPAN G.S. PIPE-ARCH APRONS	EACH	2				2
	2502.541	4" PERFORATED P.E. PIPE DRAIN/GEOTEXTILE KNIT SOCK	LIN. FT.	1680				1680
	2502.541	6" PERFORATED P.E. PIPE DRAIN/GEOTEXTILE KNIT SOCK	LIN. FT.	330				330
	2502.541	6" PERFORATED T.P. P.V.C. SEWER PIPE/GEOTEXTILE KNIT SOCK	LIN. FT.		80			80
(9)	2503.511	12" C.S. PIPE SEWER	LIN. FT.				67	67
	2503.511	12" R.C. PIPE SEWER CL. 4	LIN. FT.			216	1371	1587
	2503.511	15" R.C. PIPE SEWER CL. 3	LIN. FT.			35	1723	1758
	2503.511	18" R.C. PIPE SEWER CL. 3	LIN. FT.				716	716
	2503.511	21" R.C. PIPE SEWER CL. 3	LIN. FT.				92	92
	2503.511	24" R.C. PIPE SEWER CL. 3	LIN. FT.				103	103
	0504.602	ADJUST GATE VALVE	EACH		2			2
	2506.502	CONSTRUCT DRAINAGE STRUCTURE, DESIGN A	EACH			1	11	12
	2506.502	CONSTRUCT DRAINAGE STRUCTURE, DESIGN C	EACH			6	44	50
	2506.502	CONSTRUCT DRAINAGE STRUCTURE, DESIGN 54-4020	EACH				2	2
	2506.502	CONSTRUCT DRAINAGE STRUCTURE, DESIGN 72-4020	EACH				1	1
	2506.502	CONSTRUCT DRAINAGE STRUCTURE, DESIGN 78-4020	EACH				1	1
	2506.503	RECONSTRUCT DRAINAGE STRUCTURE	LIN. FT.				7	7
(10)	2506.516	CASTING ASSEMBLY	EACH				3	3
	2506.522	ADJUST FRAME AND RING CASTING	EACH	1		6	2	9
	0506.602	CONNECT INTO EXISTING STORM SEWER	EACH			2	10	12
	2521.501	3" CONCRETE WALK	SQ. FT.		15520			15520
	2521.501	4" CONCRETE WALK	SQ. FT.		20449			20449
	2531.501	CONCRETE CURB AND GUTTER, DESIGN B624	LIN. FT.	17635	4340			21975
	2531.501	CONCRETE CURB AND GUTTER, DESIGN B624 (MODIFIED)	LIN. FT.		73			73
13	2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.		294			294
	2545.521	4" RIGID STEEL CONDUIT	LIN. FT.	441				441
	0545.602	P.V.C. HANDHOLE WITH CONCRETE COVER	EACH	4				4
	0545.602	INSTALL SALVAGED LIGHT STANDARD AND LUMINAIRE	EACH	2				2
(11)	0545.603	RECONSTRUCT ELECTRIC STRUCTURE	LIN. FT.	4				4
	0563.601	TRAFFIC CONTROL	LUMP SUM	1				1
	2575.505	SODDING, TYPE BOULEVARD	SQ. YD.	19604	1431			21035
	2580.501	TEMPORARY LANE MARKING	ROAD STA.	92				92
(12)	0105.604	CRUSHED LIMESTONE	TON	3,890				3,890
(13)	2531.507	7" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.		32			32

(1) UNCLASSIFIED EXCAVATION INCLUDES SUBGRADE TREATMENT AS SHOWN IN TYPICAL SECTIONS AND CROSS SECTIONS.
(2) INCLUDES 5436 TONS FOR MAINLINE, 1758 TONS FOR 19 TURN LANES, 1278 TONS FOR 12 APPROACHES AND 769 TONS BASE FOR CURB & GUTTER CONST. ON FRONTAGE ROADS.
(3) INCLUDES 5436 TONS FOR MAINLINE, 1544 TONS FOR 17 TURN LANES AND 332 TONS FOR 11 APPROACHES.
(4) FOR BITUMINOUS OVERLAY ON FRONTAGE ROADS.
(5) INCLUDES 257 TONS FOR 12 APPROACHES AND 26 TONS FOR 2 TURN LANES ON 18TH. AVE. N.W.
(6) INCLUDES 21759 TONS FOR MAINLINE, 6146 TONS FOR 19 TURN LANES, 408 TONS FOR 12 APPROACHES AND 102 TONS FOR MATERIAL ALONG CURB & GUTTER ON FRONTAGE ROADS.
(7) INCLUDES 2281 SQ.YDS. FOR 12 APPROACHES AND 7115 SQ.YDS. FOR 19 TURN LANES.
(8) INCLUDES 1360 TONS FOR MAINLINE AND 517 TONS FOR 17 TURN LANES.
(9) INCLUDES 2-45° BENDS.
(10) CASTING ASSEMBLIES FOR M.H. NO. 7, M.H. NO. 8 AND M.H. NO. 9.
(11) ELECTRIC MANHOLE
(12) CRUSHED LIMESTONE TO BE PLACED IN 1.0' SUBGRADE TREATMENT AREA FROM STA. 109+00 TO STA. 116+00.
(13) ALL CAPILETS REQUIRING EXCAVATION AND 1" GRAVEL SHALL BE CONSIDERED INCIDENTAL WORK AND TO BE CONSIDERED PART OF CONCRETE DRIVEWAY PAVEMENT.
(14) AS DIRECTED BY THE ENGINEER.

BASES OF ESTIMATED QUANTITIES

AGGREGATE BASE CLASS 2	140 LBS. PER CU. FT. COMPACTED.
AGGREGATE BASE CLASS 5	140 LBS. PER CU. FT. COMPACTED.
BITUMINOUS BASE COURSE	BITUMINOUS MIXTURE 110 LBS. PER SQ. YD. PER INCH OF DEPTH.
BITUMINOUS WEARING COURSE	BITUMINOUS MIXTURE 110 LBS. PER SQ. YD. PER INCH OF DEPTH.

STANDARD PLATES

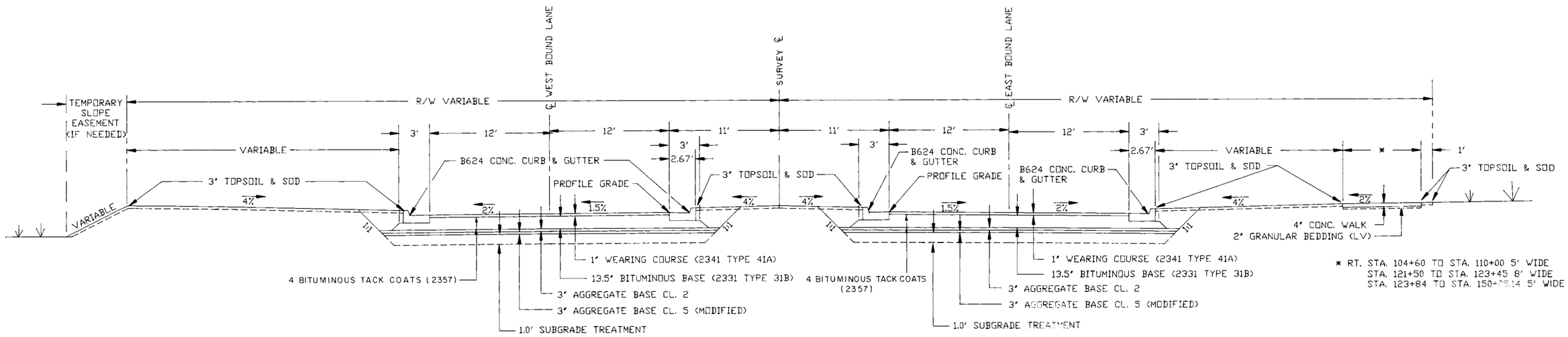
THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT

PLATE NO.	DESCRIPTION
0005 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 L	REINFORCED CONCRETE PIPE
3040 F	CORRUGATED METAL PIPE CULVERT
3122 K	METAL APRON FOR C.M. PIPE-ARCH CULVERT
3123 J	METAL APRON FOR C.S. PIPE
3124 B	METAL APRON CONNECTION
3145 E	CONCRETE PIPE TIES
3221 C	CORRUGATED STEEL PIPE COUPLING BAND
4000 I	MANHOLE OR CATCH BASIN
4002 E	MANHOLE OR CATCH BASIN
4010 G	CONCRETE SHORT CONE AND ADJUSTING RING
4011 D	PRECAST CONCRETE BASE
4020 E	MANHOLE OR CATCH BASIN
4101 C	RING CASTING FOR MANHOLE OR CATCH BASIN
4110 D	COVER CASTING FOR MANHOLE
4129 F	CATCH BASIN FRAME CASTING
4154 B	CATCH BASIN GRATE CASTING
4160 D	CURB BOX CASTING FOR CATCH BASIN
4180 H	MANHOLE OR CATCH BASIN STEP
7035 J	CONCRETE WALK AND CURB RETURNS AT ENTRANCES
7036 D	PEDESTRIAN CURB RAMP
7100 F	CONCRETE CURB AND GUTTERS
7110 E	CURB AND GUTTER CONSTRUCTION AT CATCH BASIN
7111 G	INSTALLATION AND REINFORCEMENT OF CATCH BASIN CASTINGS
8000 I	STANDARD BARRICADES

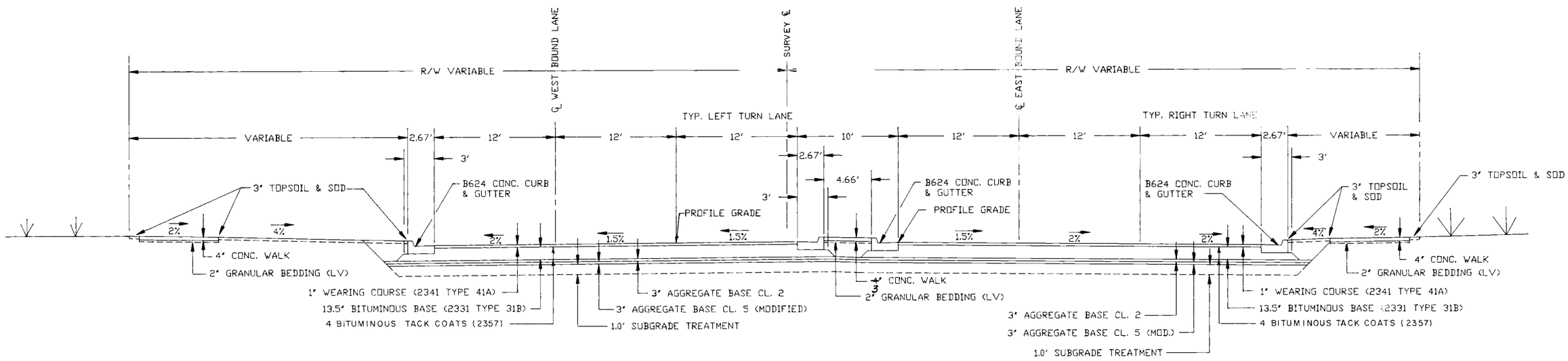
CONCRETE DRIVES

STATION	LOCATION	REMOVE CONC. DRIVE SQ. FT.	6" CONC. DRWY. PAV'T. SQ. YD.
109+69	LT.		11
109+92	RT.		22
110+34	LT.	74	11
110+48	RT.		17
111+50	LT.		11
111+68	LT.		16
112+71	RT.		11
112+88	LT.		11
113+35	RT.	159	21
113+55	LT.		11
116+34	LT.		11
116+98	LT.		11
117+13	LT.		11
118+35	LT.	80	11
118+95	LT.		11
119+11	LT.	80	11
119+75	LT.		13
120+42	LT.	195	27
121+39	LT.	87	12
121+67	LT.		17
122+28	LT.		17

TYPICAL SECTIONS



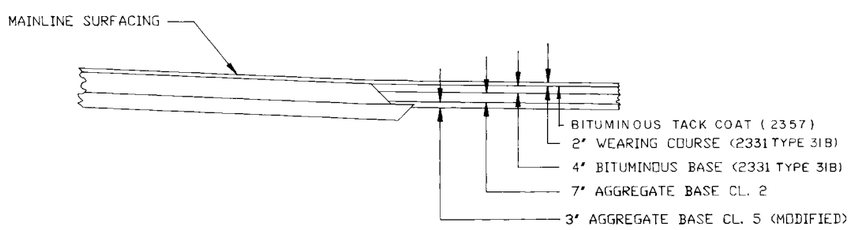
STA. 104+60 TO STA. 150+05.14

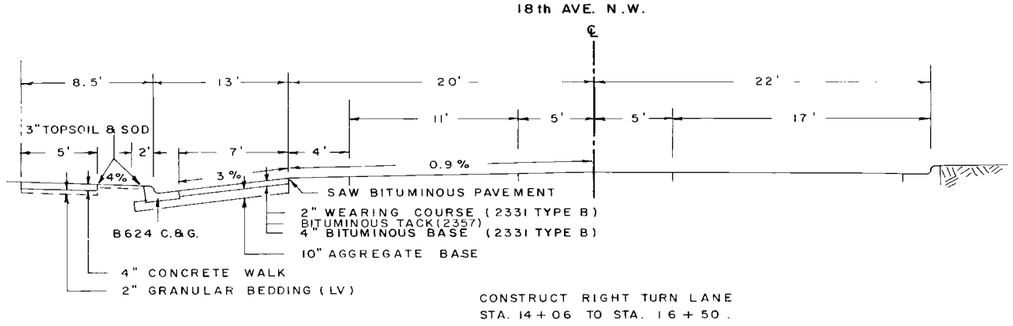


LEFT TURN LANE: STA. 104+60 TO STA. 109+00
STA. 107+80 TO STA. 112+10
STA. 110+90 TO STA. 115+15
STA. 114+05 TO STA. 120+00
STA. 118+20 TO STA. 124+15
STA. 123+10 TO STA. 128+95
STA. 127+40 TO STA. 133+55
STA. 132+25 TO STA. 138+40

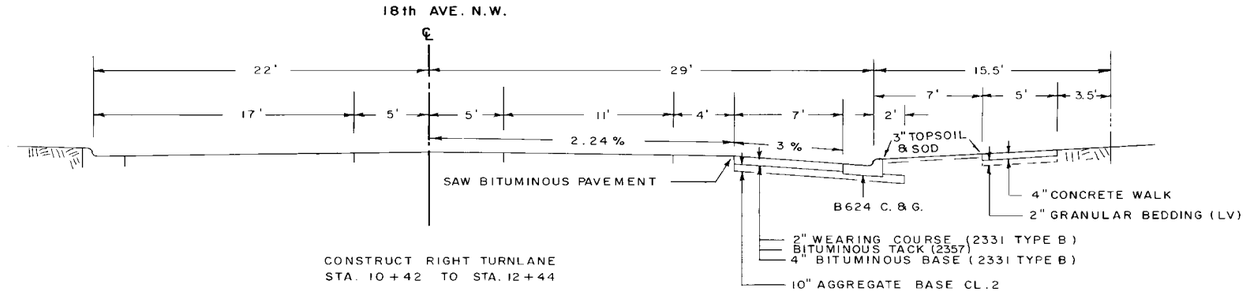
RIGHT TURN LANE: STA. 104+60 TO STA. 107+00
STA. 104+80 TO STA. 109+00
STA. 107+80 TO STA. 113+60
STA. 109+70 TO STA. 114+85
STA. 118+30 TO STA. 123+90
STA. 123+40 TO STA. 127+15
STA. 124+35 TO STA. 129+20
STA. 130+25 TO STA. 133+10
STA. 140+70 TO STA. 145+05

TYPICAL STREET AND APPROACH SECTIONS

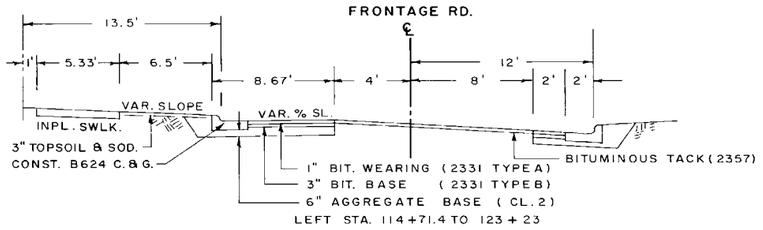




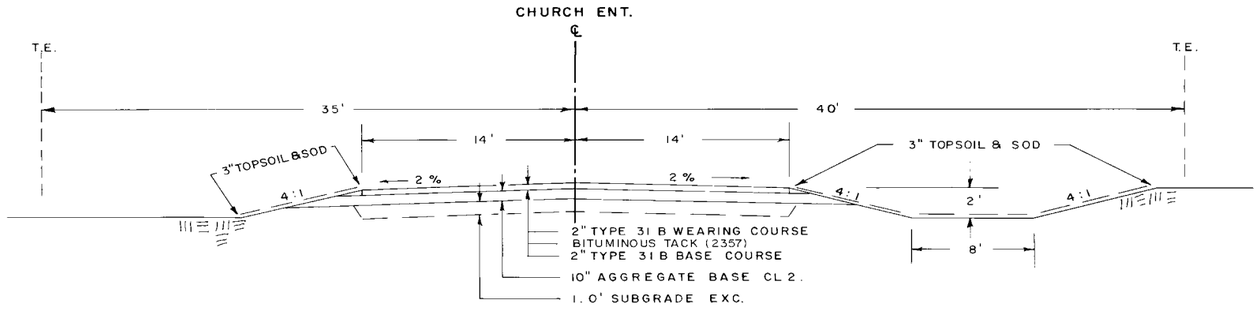
CONSTRUCT RIGHT TURN LANE
STA. 14+06 TO STA. 16+50.



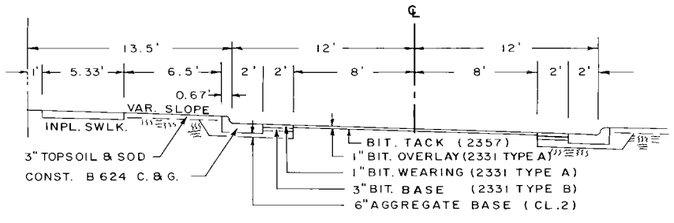
CONSTRUCT RIGHT TURNLANE
STA. 10+42 TO STA. 12+44



LEFT STA. 114+71.4 TO 123+23



RIGHT STA. 145+21.45



LEFT STA. 108+05.5 TO STA. 114+71.4
RIGHT STA. 109+40 TO STA. 114+34.0

STRUCTURE NO.	STATION	LOCATION	CONSTRUCTION DESIGN M.H.	CONSTRUCTION DESIGN C.B.	CONSTRUCTION QUANTITY EST.	CONSTRUCTION QUANTITY FINAL	TOP CASTING ELEV.	INLET ELEV.	INLET ELEV.	INLET ELEV.	OUTLET ELEV.	FRAME CASTING NO.	GRATE NO.	CURB BOX NO.	RING CASTING NO.	COVER CASTING NO.	12" R.C. PIPE LIN. FT.	15" R.C. PIPE LIN. FT.	18" R.C. PIPE LIN. FT.	21" R.C. PIPE LIN. FT.	24" R.C. PIPE LIN. FT.	30" R.C. PIPE LIN. FT.	36" R.C. PIPE LIN. FT.		6" PERF. T.P. PVC. SEWER PIPE LIN. FT.		12" C.S. PIPE LIN. FT.				APRON INLET 12" G.S.	APRON OUTLET	FLOWS TO	% GRADE	CLASS
C.B. 1	106+61	48' RT.		C	I		1064.52				1060.77 S.	802A	816	823A			157																C.B. 5	3.582	IV
C.B. 2	107+34	36' LT.		C	I		1062.21				1058.21 N.	802A	816	823A			8																M.H. 1	1.0	IV
M.H. 1	107+34	44' LT.	C		I		1062.90	1058.17 S.			1058.07 E.				700-7	712	77														M.H. 2	5.151	IV
C.B. 3	107+73	2' LT.		C	I		1061.45				1057.45 N.	802A	816	823A			8														C.B. 4	1.0	IV
C.B. 4	107+73	10' LT.		C	I		1061.27	1057.41 S.			1057.31 N.E.	802A	816	823A			52														M.H. 2	6.25	IV
C.B. 5	108+07	48' RT.		C	I		1059.51	1055.29 W.			1055.19 N.	802A	816	823A			92														M.H. 2	1.0	IV
C.B. 6	* 107+90	* 85' LT.		C	I		*1058.26				1054.45 S.E.	802A	816	823A			50														M.H. 2	0.3	IV
M.H. 2	108+11	44' LT.	78-4020		I		1059.47	1054.31 S.	1054.31 S.W.	1054.31 N.W 1054.31 W.	1054.06 E.				700-9	712		405													M.H. 3	3.606	III
C.B. 6B	* 111+64	* 100' RT.		C	I		*1049.40	1045.50 S.W.			1045.00 N.E.	802A	816	823A			53								80	(INCLUDES	1-45°	BEND)			C.B. 6A	1.735	IV
C.B. 6A	112+00	* 62' RT.		A	I		*1048.15	1044.15 S.W.			1043.90 N.	802A	816	823A				14													C.B. 7	0.7	III
C.B. 7	112+00	48' RT.		C	I		1044.77	1040.80 S.			1040.70 N.	802A	816	823A				53													C.B. 8	0.7	III
C.B. 8	112+16	2' LT.		C	I		1045.00	1040.36 S.W.			1040.26 N.	802A	816	823A				8													C.B. 9	1.0	III
C.B. 9	112+16	10' LT.		C	I		1044.82	1040.20 S.			1040.10 N.	802A	816	823A				36													C.B. 10	1.0	III
C.B. 10	112+16	45.6' LT.		C	I		1044.22	1039.78 S.			1039.68 N.	802A	816	823A				8													M.H. 3	1.5	III
M.H. 3	112+16	54' LT.	A		I		1044.60	1039.60 S.	1039.60 W.		1039.35 E.				700-7	712			219												M.H. 4	3.786	III
C.B. 11	113+98	2' LT.		C	I		1038.56				1034.56 N.	802A	816	823A			8														C.B. 12	1.0	IV
C.B. 12	113+98	10' LT.		C	I		1038.38	1034.52 S.			1034.42 N.E.	802A	816	823A			47														C.B. 15	6.674	IV
C.B. 13	114+35	* 69' RT.		C	I		*1038.27				1032.86 N.	802A	816	823A				21													C.B. 14	0.8	III
C.B. 14	114+35	48' RT.		C	I		1036.69	1032.93 S.E.	1032.69 S.		1032.19 N.	802A	816	823A						84											C.B. 15	0.8	III
M.H. 6	114+95	* 61' RT.	EXISTING	M.H.							1033.62 N.W.						62														C.B. 14	1.185	IV
C.B. 15	114+35	36' LT.		72-4020	I		1036.93	1031.55 S.	1032.31 S.W.		1031.41 N.	802A	816	823A						8											M.H. 4	0.9	III
C.B. 16	114+35	47' LT.		C	I		*1034.77				1031.27 S.	802A	816	823A			10														M.H. 4	1.0	IV
M.H. 4	114+35	44' LT.	54-4020		I		1036.51	1031.21 N.	1031.41 S.	1031.21 W.	1030.20 E.				700-7	712					45										M.H. 5	2.193	III
M.H. 5	114+76	42' LT.	EXISTING	M.H.			NEW 1035.80	1029.30 W. NEW																						EXISTING	M.H. 7		
C.B. 17	117+90	36' RT.		C	I		1033.30				1029.30 N.	802A	816	823A			26														C.B. 18	0.5	IV
C.B. 18	117+90	10' RT.		C	I		1033.72	1029.19 S.			1029.09 N.	802A	816	823A			8														C.B. 19	0.5	IV
C.B. 19	117+90	2' RT.		C	I		1033.90	1029.07 S.			1028.97 N.	802A	816	823A			37														M.H. 7	0.5	IV
C.B. 20	117+90	36' LT.		C	I		1033.30				1029.30 S.	802A	816	823A			FIELD	CONNECT	DIRECTLY	INTO	EXISTING	36" R.C.	PIPE	STORM	SEWER										
C.B. 21	120+15	* 70' LT.		C	I		*1033.00				*1028.13 S.E.	802A	816	823A			43														C.B. 22	1.00	IV
M.H. 7	118+04	34' LT.	EXISTING C.B.				NEW 1033.43	NEW 1028.80 S.	NEW 1028.00 N.						700-9	712														EXISTING	M.H. 8		
C.B. 22	120+50	44' LT.		C	I		*1032.10	*1027.70 N.W.			1027.60 S.	802A	816	823A			11	FIELD	CONNECT	INTO	EXISTING	36"	R.C.	PIPE	STORM	SEWER							1.429	IV
M.H. 8	121+26	33' LT.	EXISTING C.B.				NEW 1032.17	*1028.13 N.							700-9	712														EXISTING	M.H. 9		
C.B. 23	121+50	36' LT.		C	I		1031.86	1027.82 E.			1027.72 S.W.	802A	816	823A				20	FIELD	CONNECT	INTO	EXISTING	36"	R.C.	PIPE	STORM	SEWER						4.909	III
C.B. 24	121+58	36' LT.		C	I		1031.92				1027.92 W.	802A	816	823A			8														C.B. 23	2.5	IV
C.B. 26	121+50	10' LT.		C	I		1032.28				1028.78 S.	802A	816	823A			8														C.B. 28	0.5	IV
C.B. 28	121+50	2' LT.		C	I		1032.46	1028.76 N.			1028.46 S.	802A	816	823A			50														C.B. 30	1.75	IV
C.B. 29	121+42	48' RT.		C	I		1031.65				1027.64 E.	802A	816	823A			8														C.B. 30	0.5	IV
C.B. 30	121+50	48' RT.		C	I		1031.62	1027.62 N.	1027.62 N.		1027.37 E.	802A	816	823A				43	FIELD	CONNECT	INTO	EXISTING	M.H. 9								EXISTING	M.H. 9	0.6	III
M.H. 9	121+99	42' RT.	EXISTING C.B.				NEW 1032.11	NEW 1026.69 W.							700-9	712														EXISTING	M.H. 10		
M.H. 10	122+30	74' RT.	EXISTING M.H.			NO	CHANGE																							EXISTING	M.H. 11		
M.H. 11	123+21	71' RT.	EXISTING M.H.			NO	CHANGE																							EXISTING	M.H. 12		
C.B. 31	124+22	48' LT.		C	I		1034.63				1030.32 S.	802A	816	823A				27													M.H. 13A	0.9	III
M.H. 13A	* 124+17	21' LT.	54-4020		I		1035.00	1028.00 N.E.	1030.10 N.		1027.75 S.				700-9	712			24												C.B. 32	1.1	III
C.B. 32	124+23	2' RT.		A	I		1035.75	1027.54 N.			1027.44 S.	802A	816	823A					8												C.B. 33	1.1	III
C.B. 33	124+23	10' RT.		A	I		1034.52	1027.39 N.			1027.29 S.	802A	816	823A					26												C.B. 34	1.2	III
C.B. 34	124+29	36' RT.		A	I		1034.18	1027.03 N.			1026.93 S.	802A	816	823A					8												M.H. 13	1.5	III
M.H. 13	124+27	44' RT.		A	I		1034.87	1029.88 E	1026.87 N.		1025.43 S.W.				700-7	712								58	FIELD	CONNECT	INTO	EXISTING	M.H. 12		M.H. 12	0.8	III
M.H. 12	123+77	70' RT.	EXISTING M.H.					NEW 1025.00 N.E.																										
C.B. 35	127+18	36' LT.		C	I		1041.99				1037.99 S.	802A	816	823A			39														C.B. 36	0.4	IV
C.B. 36	127+10	2' RT.		C	I		1042.44	1037.85 N.			1037.75 S.	802A	816	823A			8														C.B. 37	0.4	IV
C.B. 37	127+10	10' RT.		C	I		1041.98	1037.73 N.			1037.63 S.	802A	816	823A			32														M.H. 14	0.4	IV
C.B. 38	127+00	48' RT.		C	I		1041.11				1037.11 N.	802A	816	823A			8														M.H. 14	0.4	IV
M.H. 14	127+00	40' RT.	A		I		1041.42	1037.52 N.	1037.09 S.	1034.43 E.	1034.18 W.				700-9	712		273													M.H. 13	1.598	III
C.B. 39	130+00	49' LT.									1042.40 S.																67	(LENGTH	INCLUDES	2-45° BENDS)	1	C.B. 40	0.6	
C.B. 40	129+40	36' LT.		C	I		1044.67	1039.25 E.			1039.15 S.	802A	816	823A			26														C.B. 41	0.8	IV
C.B. 41	129+40	10' LT.		A	I		1045.09	1038.97 N.			1038.87 S.	802A	816	823A			8														C.B. 42	0.8	IV
C.B. 42	129+40	2' LT.		A	I		1045.27	1038.84 N.			1038.74 S.	802A	816	823A			38														C.B. 43	0.9	IV
C.B. 43	129+41	36' RT.		A	I		1044.67	1038.43 N.			1038.33 S.	802A	816	823A			8														M.H. 15	2.0	IV
M.H. 15	129+40	44' RT.		A	I		1045.36	1038.25 N.			1038.15 W.				700-7	712	240														M.H. 14	2.0	IV
C.B. 44	137+25	36' RT.		C	I		1043.65				1039.65 N.	802A	816	823A			26														C.B. 45	0.5	IV
C.B. 45	137+25	10' RT.		C	I		1044.07	1039.54 S.			1039.44 N.	802A	816	823A			13														C.B. 46	0.5	IV
C.B. 46	137+25	2.33' LT.		C	I		1044.19	1039.40 S.			1039.30 N.	802A	816	823A			34														C.B. 47	0.5	IV
C.B. 47	137+25	36' LT.		C	I		1043.65	1039.15 S.			1039.05 N.	802A	816	823A			8														M.H. 16	1.7	IV
M.H. 16	137+31.25	41' LT.	C		I		1044.29	1038.98 S.W.			1038.73 E.				700-7	712		425													M.H. 17	0.8	III
C.B. 48	141+50	41.33' RT.		C	I		1040.27				1036.27 N.	802A	816	823A			31														C.B. 49	0.5	IV
C.B. 49	141+50	10' RT.		C	I		1040.80	1036.13 S.			1036.03 N.	802A	816	823A			20														C.B. 50	0.5	IV
C.B. 50	141+50	10' LT.		C	I		1040.80	1035.95 S.			1035.85 N.	802A	816	823A			26														C.B. 51	0.5	IV
C.B. 51	141+50	36' LT.		C	I		1040.38	1035.74 S.			1035.64 N.	802A	816	823A			8														M.H. 17	1.0	IV
M.H. 17	141+56.25	41' LT.	A		I		1041.01	1035.56 S.W.	1035.36 W.		1035.26 E.				700-7	712		334 ~~425~~													M.H. 18	~~1.801~~ 1.433	III
C.B. 52	~~144+82~~ 144+69	48' RT.		C	I		1035.~~50~~ 85				1031.~~50~~ 81 N.E.	802A	816	823A			~~10~~ 41														C.B. 53	0.30 1.34	IV
C.B. 53	~~144+82~~ 144+69	10' RT.		C	I		~~1035.50~~ 1035.85	~~1031.70~~ 1031.60 S.W.			~~1030.90~~ 1030.80 N.	802A	816	823A			~~20~~ 46														C.B. 55 C.B. 54	03 0.5	IV
C.B. 54	~~144+48~~ 144+48	10' LT.		C	I		~~1035.40~~ 1035.40	~~1030.90~~ 1030.80 S.W.			~~1030.10~~ 1030.00 N.	802A	816	823A			~~26~~ 45														C.B. 55	3.260 0.5	IV
C.B. 55	~~144+84~~ 144+79	36' LT.		C	I		~~1033.79~~ 1033.87	~~1031.47~~ 1031.37 S.	1031.475 W		~~1030.30~~ 1030.20 N.	802A	816	823A			8														M.H. 18	1.0	IV
M.H. 18	~~144+90.25~~ 144+81.25	41' LT.	C		I		~~1036.45~~ 1036.45	~~1031.75~~ 1031.75 S.W.	1031.51 1028.94 W.		1028.65 E.				700-7	712			~~431~~ 522	FIELD	CONNECT	INTO	EXISTING	M.H. 4A							EXISTING	M.H. 4A	3.046	III
M.H. 4A	150+12	42' LT.	EXISTING	M.H.				NEW 1015.69 W.																										
C.B. 22A	121+20	* 70' LT.		C	I		* 1033.00				* 1028.50 S.	802A	816	823A			37			FIELD	CONNECT	INTO	EXISTING	M.H. 8							EXISTING	M.H. 8	1.00	IV

* LOCATION AND/OR ELEVATION TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION

STORM SEWER S.A.P. 55-622-20

Sheet No. 5 of 37 Sheets

AS BUILT PLANS

TARGET ENT. LT. 108 + 39
INPL. 15"x120' C.M.P. & 2 APRONS

REMOVE 43 LIN. FT. INCLUDING APRON AT INL.
REMOVE 12 LIN. FT. INCLUDING APRON AT OUTL.
SEAL INL. & OUTL. OF REMAINING CULV.
REMOVE 180 LIN. FT. CONC. C. & G.
SAW BITUMINOUS PAV'T.
130 LIN. FT.

CONST. B624 CURB & GUTTER FRONTAGE ROAD
LT. STA. 108 + 94.6 TO STA. 114 + 42
1095 LIN. FT.
SAW BITUMINOUS PAV'T. 1095 LIN. FT.

REMOVE 71 SQ. FT. CONC. SIDEWALK
(NON-PARTICIPATING ITEM)

BEGIN: S.A.P. 55-622-15
STA. 104 + 60.00

℄ T.H. 52 N.B.L.

REMOVE CONCRETE SIDEWALK
RT. STA. 106 + 85 TO STA. 108 + 30
REMOVE 725 SQ. FT.

ENT. RT. 106 + 99
SAW BITUMINOUS PAV'T.
32 LIN. FT.

21ST. AVE. N.W. RT. 108 + 55
INPL. 15"x 70' R.C. PIPE & 2 APRONS
REMOVE 82 LIN. FT.
SAW BITUMINOUS PAV'T.
34 LIN. FT.

CONST. B624 CURB & GUTTER
FRONTAGE ROAD. 958 LIN. FT.
RT. STA. 109 + 40 TO STA. 114 + 40
SAW BITUMINOUS PAV'T.
958 LIN. FT.

B.M. EL. 1064.07
ARROW ON HYD. S.W.
INTER. 37th & 21th

P.I. 101 + 00
ELEV. 1088.49
730' V.C.
M = 5.475

P.V.T. +65 ELEV. 1073.16

P.I. 106 + 00
ELEV. 1067.49

P.I. 109 + 00
ELEV. 1057.0

P.V.C. +00 ELEV.

PROFILE ℄
75' LT.
75' RT.

UNNCLASSIFIED EXC.	49,077 CU.YDS. *	
TOPSOIL BORROW	2,039 CU.YDS. (LV)	
EMB.	34,637 CU.YDS.	

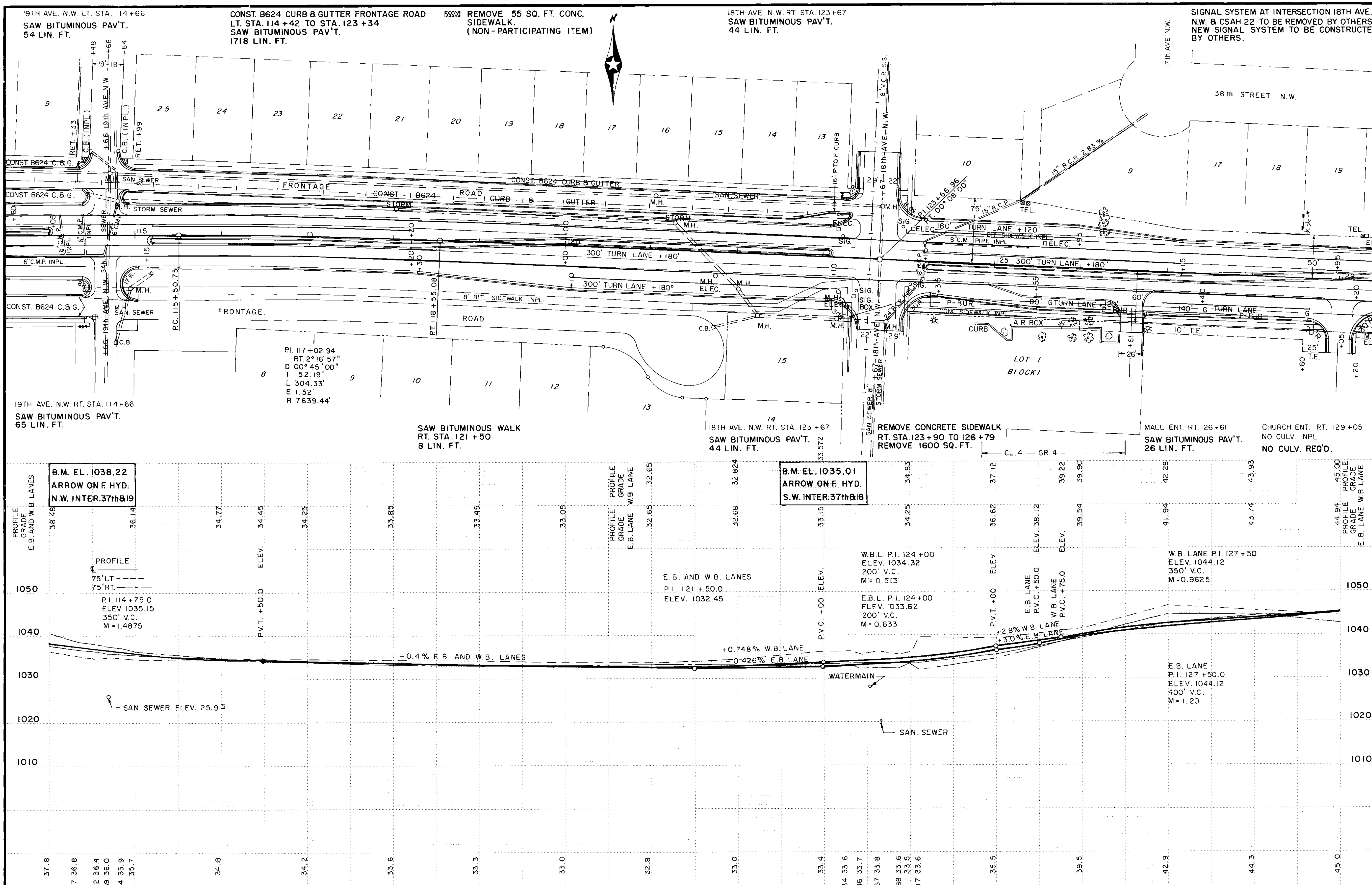
NOTE: SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTHS AND IN LOCATIONS AS SHOWN IN THE CROSS SECTIONS. SUBGRADE EXCAVATION QUANTITY IS INCLUDED IN UNCLASSIFIED EXCAVATION QUANTITY.

NOTE: UNCLASSIFIED EXCAVATION INCLUDES ALL BITUMINOUS SURFACING AND BITUMINOUS WALKS.

* INCLUDES 47,336 CU.YDS. MAINLINE C.S.A.H. 22, 420 CU.YDS. RIGHT TURN LANES ON 18th AVE. N.W., 443 CU.YDS. ENTRANCE RIGHT STA. 145 + 21 AND 878 CU.YDS. FOR CURB & GUTTER CONST. ON FRONTAGE ROADS.

~~State Proj. No.~~ S.A.P. 55-622-20

AS BUILT PLANS



~~State Proj. No.~~ S.A.P. 55-622-20 **Sheet No.** 7 **of** 37 **Sheets**

AS BUILT PLANS

15TH AVE. N.W. LT. STA. 132+96

SALVAGE LIGHT STANDARD & LUMINAIRE
30' LT. STA. 132+63
INSTALL LIGHT STANDARD & LUMINAIRE
41' LT. STA. 132+49

SAW BITUMINOUS PAV'T.
42 LIN. FT.

BLK. 2

EXCEPTION NO. 2

66'

15th AVE. N.W.

300' TURN LANE + 180'

110' TURN LANE + 120'

220' TURN LANE + 180'

P - BUR

CHAIN-L

10' T.E.

10' PUBLIC UTILITY EASEMENT

8' BIT. PATH INPL.

BITUMINOUS

CONC. - CURB

SIGN

DAY CARE BLDG.

PARKING LOT

M.H. #350

M.H. #349

HO.

GA.

BLK. 1

CHURCH

CHURCH ENT. RT. 141+97
NO CULV. INPL.
MOVE ENT. TO RT. STA. 145+21.45

℄ CULV. STA. 129+68
INPL. 24"x66' R.C. PIPE & 2-APRONS
REMOVE 78 LIN. FT.

15TH AVE. NW. RT. STA. 132+96
SAW BITUMINOUS PAV'T.
42 LIN. FT.

SALVAGE LIGHT STANDARD & LUMINAIRE 50' RT. STA. 132+77
INSTALL LIGHT STANDARD & LUMINAIRE
52' RT. STA. 132+49

CL. 4 — GR. 4

B.M. EL. 1049.79
T. SQ. VAL. F. HYD.
50' LT. 132+74

PROFILE GRADE W.B. LANE
PROFILE GRADE E.B. LANE
PROFILE GRADE E.B. AND W.B. LANES

W.B. LANE P.V.T. +25.0 ELEV. 45.32
E.B. LANE P.V.T. +50.0 ELEV. 45.62

PROFILE ℄
75' LT.
75' RT.

+0.6% E.B. AND W.B. LANES

P.V.C. + 20 ELEV. 46.94
P.V.T. +80.0 ELEV. 46.67
P.V.C. + 00 ELEV. 40.50

-0.7475%
-0.94%

WATERMAIN

P.I. 133+00
ELEV. 1047.42
160' V.C.
M = 0.2695

P.I. 141+00
ELEV. 1041.44

1050
1040
1030

129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
45.0	45.5	46.4	46.9	47.7	48.0	48.1	48.0	47.6	47.0	46.0	45.0	44.0	42.8	41.5	39.7

+55 45.3 + 68 45.3 | + 66 47.4 + 78 47.5 | + 14 47.8 + 26 47.8

~~State Proj. No.~~ S.A.P. 55-622-20

Sheet No. 8 of 37 Sheets

END: SAP 55-622-~~15~~ 20
STA. 150+12.00

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

BLK. 14
SUNRISE ESTATES SECOND

BLK. 1 LOT 1
SUMMIT SQ. FIRST

CHAIN - L

+87

+53

10' T.E.

50'

60'

B624 CONC. CURB AND GUTTER INPL. 12'

B624 CONC. CURB AND GUTTER INPL. 12'

144 145 150 155

B624 CONC. CURB AND GUTTER INPL. 12' LT. TURN LANE

B624 CONC. CURB AND GUTTER INPL. 12' RT. TURN LANE

60' 50' 60' 60'

220' TURN LANE +180'

150'

SIGN

P — BUR — 15' T.E. — 10' PUBLIC UTILITY EASEMENT — P — BUR — 10' T.E.

6" CONC. SIDEWALK INPL.

ELEC. M.H. # 290

+50

3 2 1

UNPLATTED

10TH LANE N.W.

ELTON HILLS
BLK. 1

14' 14'

40' 35'

CHURCH

M.H. # S-1

PARKING LOT (INPL.)

55'

CONST. CHURCH ENT. RT. STA. 145+21.45
1 EACH ADJUST FRAME AND RING CASTING
443 CU. YDS. UNCLASSIFIED EXC.
53 CU. YDS. TOPSOIL BORROW (LV)
784 SQ. YDS. SODDING TYPE BOULEVARD
498 TONS AGG. BASE CL. 2 10" DEPTH
100 TONS TYPE 31B WEARING COURSE 2" DEPTH
100 TONS TYPE 31B BASE COURSE 2" DEPTH
21" SPAN x 42 C.S. PIPE-ARCH STA. 1+80
2-21" SPAN G.S. PIPE-ARCH APRONS
1254 CU. YDS. EMBANKMENT

M.H. # S-1 175' RT. STA. 145+21.45
TOP CASTING ELEV. 32.29
ADJUST FRAME & RING CASTING
TO ELEV. 33.90

STA. 150+05.14
SAW BITUMINOUS PAV'T.
48 LIN. FT.

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

PROFILE GRADE E.B. AND W.B. LANES

37.90 36.07 33.88 31.33 28.42 25.16 21.54 17.74 13.94

PROFILE GRADE E.B. AND W.B. LANES

PROFILE
℄
75' L.T.
75' RT.

1040
1030
1020
1010
1000

ELEV.

P.V.T. +00

P.I. 146+00
ELEV. 1036.74
800' V.C.
M = 2.86

-3.8%

+05.14

39.7 37.9 35.0 32.2 29.0 25.3 21.5 17.7 13.9 10.1 06.3

144 145 146 147 148 149 150 151 152 153 154 155

~~State Proj. No.~~ SAP 55-622-20

STA. 107+60
6' LT. F.&I. P.V.C. HANDHOLE WITH CONC. COVER
6' LT. TO 41' LT. F.&I. 4" RIGID STEEL CONDUIT
6' LT. TO 52' RT. F.&I. 4" RIGID STEEL CONDUIT
41' LT. & 52' RT. F.&I. PIPE CAPS.

110+50
110+25
110+00
109+75
109+50
109+25
109+00

CONST. 4" PERFORATED CORRUGATED POLYETHYLENE DRAINAGE TUBING WITH GEOTEXTILE KNIT SOCK AT STA. 110+75, 111+00, 111+25 111+50, 111+75, 112+00, 112+25, 112+50, 112+75, 113+00, 113+25 113+50, 113+75, 114+00 AND STA. 114+25. SKEW 7° 109+31
CONST. 6" (P.E.) WITH GEOTEXTILE KNIT SOCK 51' LT. STA. ~~111+06~~ TO C.B.10 AND FROM 46' LT. STA. 112+30 TO M.H. NO. 4.

P.I. 109+03.55 = STATE HWY DEPT. 6+00

+69 9.8' CONC. DR. | +34 9.4' CONC. DR. | +50 10.1' BIT DR. | +68 14.7' BIT DR. | +88 9.9' CONC. DR. | +55 9.0' CONC. DR.

CONST B624 CURB & GUTTER | FRONTAGE ROAD | CONST B624 CURB & GUTTER

ALL LATTERALS 6" TILE
15" R.C. PIPE CL. III
18" R.C. PIPE CLASS III
6" P.E.

200' TURN LANE +120' | 190' TURN LANE 110 +20 | 200' TURN LANE + 180'

CONST. 3" CONC. WALK | CONST. 4" CONC. WALK

10' T.E. | T.E. 10'

C.B.1 | C.B.2 | C.B.3 | C.B.4 | C.B.5 | C.B.6 | C.B.6A | C.B.6B | C.B.7 | C.B.8 | C.B.9 | C.B.10 | C.B.11 | C.B.12 | C.B.13 | C.B.14 | C.B.15 | C.B.16

M.H.1 | M.H.2 | M.H.3 | M.H.4

120' TAPER | +60' TURN LANE | 90' TURN LANE | 70' | 45° JUNCTION BOX | 28.5

BEGIN: S.A.P. 55-622-~~15~~ 20
STA. 104+60.00

℄ T.H. 52 N.B.L.

3" CONCRETE WALK 48' RT.
STA. 107+07 JUNCTION BOX
12" R.C. PIPE ON LINE
C.B. 1 TO 5 (28.5' RT.)
TO DESIGN C CATCH BASIN
ON AMOCO APPROACH
(NO CASTING)

STA. 108+30 TO STA. 108+76
70' RT. F.&I. 4" RIGID STEEL CONDUIT
STA. 108+30 & STA. 108+76 70' RT.
F.&I. PIPE CAPS.

STA. 109+10
6' RT. F.&I. P.V.C. HANDHOLE WITH CONCRETE COVER
6' RT. TO 51' LT. F.&I. 4" RIGID STEEL CONDUIT
6' RT. TO 40' RT. F.&I. 4" RIGID STEEL CONDUIT
51' LT. & 40' RT. F.&I. PIPE CAPS.

21st AVE. N.W. +55

47 CONST. C.B. 6B 100' RT. STA. 111+64
CONST. ~~50~~ LIN. FT. 6" PERF. P.V.C.
WITH GEOTEXTILE KNIT SOCK
QUANTITY INCLUDES 1-45° BEND

STA. 111+00 TO STA. 114+80
REMOVE 766 LIN. FT. TILE DRAIN.

+92 20.7' BIT DR. | +48 16.8' CONC. DR. | +71 10' CONC. DR. | +35 20' CONC. DR. | +55 20th AVE. N.W. | 15'R

83.77 | 83.80 | 83.02 | 81.40 | 78.97 | 75.72 | 73.37 | 71.69 | 67.49 | 63.99 | 60.49 | 57.0 | 53.20 | 49.40 | 45.60 | 41.80 | 38.48 PROFILE GRADE E.B. AND W.B. LANES

P.I. 101+00
ELEV. 1088.49
730' V.C.
M = 5.475

-4.2%

P.V.T. +65 ELEV. 1073.16

P.I. 106+00
ELEV. 1067.49

-3.49667%

12" R.C. PIPE CL. III
47'
58.07
5.151%
54.31
54.06
WATERMAIN

M.H. NO. 1 44' LT. STA. 107+34

M.H. NO. 2 44' LT. STA. 108+11

15" R.C. PIPE CL. III AT 3.606%

P.I. 109+00
ELEV. 1057.0

-3.8%

P.V.C. +00 ELEV.

18" R.C. PIPE CL. III AT 3.786%

39.6
39.35

M.H. NO. 3 54' LT. STA. 112+16

1070 | 1060 | 1050 | 1040 | 1030

99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114

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AS BUILT PLANS

CONST. 4"(P.E.) WITH GEOTEXTILE KNIT SOCK AT STA. 114+50 AND STA. 114+75. FIELD CONNECT TUBING INTO INPLACE M.H. 5 ELEV. 31.6

(INPL.)
M.H. NO. 5 42' LEFT STA. 114+76
INPL. NORTH 30" STORM SEWER. NO CHANGE
EAST 36" R.C. STORM SEWER. NO CHANGE
WEST 15"x31' R.C. STORM SEWER & 1 APRON. REMOVE
REMOVE 37 LIN. FT. STORM SEWER
FIELD CONNECTION ELEV. 1029.30 WEST
ADJUST FRAME AND RING CASTING
FROM ELEV. 1035.57 TO ELEV. 1035.80

(INPL.)
M.H. NO. 7 34' LT. STA. 118+04
SALVAGE MEDIAN DRAIN
RECONSTRUCT DRAINAGE STRUCTURE +2.48 LIN. FT.
F.& I. RING CASTING NO. 700-9 & COVER CASTING NO. 712
FIELD CONNECTION ELEV. 1028.00 NORTH
FIELD CONNECTION ELEV. 1028.80 SOUTH

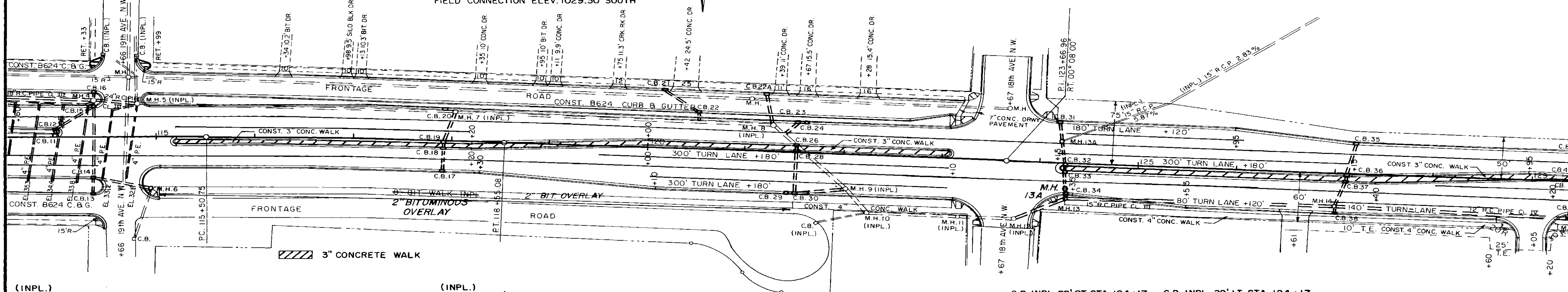
C.B. 20 36' LT. STA. 117+90
FIELD CONNECTION ELEV. 1029.30 SOUTH

C.B. 22 44' LT. STA. 120+50
FIELD CONNECTION ELEV. 1027.50

(INPL.)
M.H. NO. 8 33' LT. STA. 121+26
SALVAGE MEDIAN DRAIN
RECONSTRUCT DRAINAGE STRUCTURE +2.32 LIN. FT.
F.& I. RING CASTING NO. 700-9 & COVER CASTING NO. 712

C.B. 23 36' LT. STA. 121+50
FIELD CONNECTION ELEV. 1026.91

CONST. 7" CONCRETE DRIVEWAY PAVEMENT AT NORTH FRONTAGE ROAD AND 18th AVE. N.W. 32 SQ.YDS.



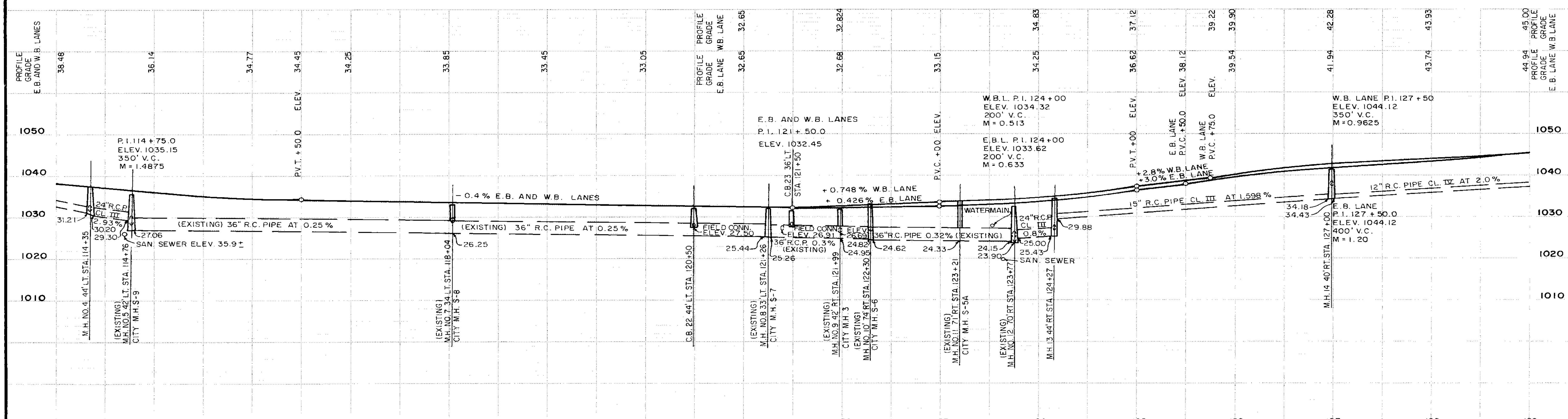
(INPL.)
M.H. NO. 6 61' RT. STA. 114+95
INPL. WEST 18"x52' R.C.P. & 1 APRON REMOVE
N.E. 18"x29' C.M.P. & 1 APRON REMOVE
SOUTH 12"x53' R.C. PIPE
REMOVE 90 LIN. FT. STORM SEWER
FIELD CONNECTION ELEV. 1033.62 WEST

(INPL.)
M.H. NO. 9 42' RT. STA. 121+99
SALVAGE MEDIAN DRAIN
RECONSTRUCT DRAINAGE STRUCTURE +2.16 LIN. FT.
F.& I. RING CASTING NO. 700-9 & COVER CASTING NO. 712
FIELD CONNECTION ELEV. 1026.69 WEST

(INPL.)
M.H. NO. 12 70' RT. STA. 123+77
FIELD CONNECTION ELEV. 1025.00 N.E.

C.B. INPL. 22' RT. STA. 124+17
REMOVE CATCH BASIN
REMOVE 64 LIN. FT.
STORM SEWER

C.B. INPL. 22' LT. STA. 124+17
REMOVE CATCH BASIN
REMOVE 44 LIN. FT. STORM SEWER
REMOVE 120 LIN. FT. TILE DRAIN



AS BUILT PLANS

INPL. WATER GATE VALVE
50' LT. STA. 132 + 74
ADJUST GATE VALVE

INPL. WATER GATE VALVE
48' LT. STA. 132 +84
ADJUST GATE VALVE

3" CONCRETE WALK

STA. 132 +15
7' LT. F. & I. P.V.C. HANDHOLE WITH CONC. COVER
7' LT. TO 39' LT. F. & I. 4" RIGID STEEL CONDUIT
7' LT. TO 50' RT. F. & I. 4" RIGID STEEL CONDUIT
39' LT. & 50' RT. F. & I. PIPE CAPS

71' LT. STA. 132 +96
F. & I. 45 LIN. FT. 4" RIGID STEEL CONDUIT
F. & I. 2 - PIPE CAPS

STA. 133 +65
6' RT. F. & I. P.V.C. HANDHOLE WITH CONC. COVER
6' RT. TO 39' LT. F. & I. 4" RIGID STEEL CONDUIT
6' RT. TO 38' RT. F. & I. 4" RIGID STEEL CONDUIT
39' LT. & 38' RT. F. & I. PIPE CAPS

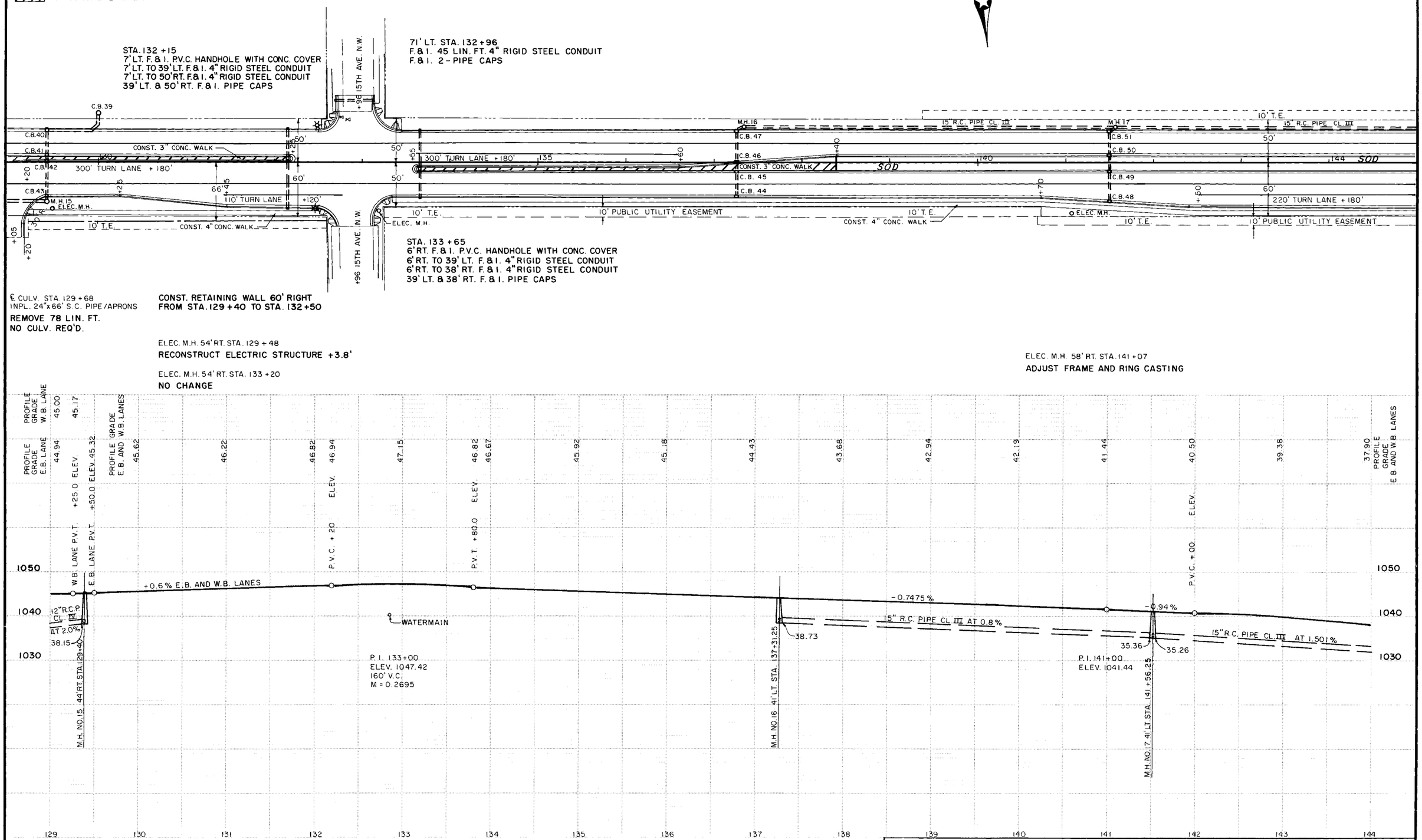
℄ CULV. STA. 129 + 68
INPL. 24"x66' S.C. PIPE/APRONS
REMOVE 78 LIN. FT.
NO CULV. REQ'D.

CONST. RETAINING WALL 60' RIGHT
FROM STA. 129 +40 TO STA. 132 +50

ELEC. M.H. 54' RT. STA. 129 + 48
RECONSTRUCT ELECTRIC STRUCTURE +3.8'

ELEC. M.H. 54' RT. STA. 133 +20
NO CHANGE

ELEC. M.H. 58' RT. STA. 141 +07
ADJUST FRAME AND RING CASTING



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AS BUILT PLANS

(INPL.)
M.H. NO. 4A 42' LT. STA. 150 + 12
FIELD CONNECTION ELEV. 1015.69

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

END: SAP 55-622-~~15~~ 20
STA. 150 + 12.00

STA. 145 + 21.45

+87 +53

15" R.C. PIPE CL. III — MH 18 — MH 18 — 18" R.C. PIPE CL. III

MH 4A (INPL.) (INPL.) 18" R.C. PIPE

C.B. 54 — C.B. 55 — ~~C.B. 56~~ — ~~C.B. 54~~ — C.B. 53 — ~~C.B. 53~~

SOD 144 145 150 155

250' TURN LANE + 150' — 3" CONCRETE WALK — SOD

220' TURN LANE + 180' — C.B. 52 — ~~C.B. 52~~

C.B. 10 (INPL.) B624 CONC. CURB AND GUTTER INPL. 12'
C.B. 9 (INPL.) B624 CONC. CURB AND GUTTER INPL. 12'
C.B. 8 (INPL.) B624 CONC. CURB AND GUTTER INPL. 12' LT. TURN LANE
C.B. 7 (INPL.) B624 CONC. CURB AND GUTTER INPL. 12' RT. TURN LANE

60' 50' 60' 60' 60' 50' +25

10' PUBLIC UTILITY EASEMENT
15' T.E. CONST. 4" CONC. WALK
10' T.E.
6' CONC. SIDEWALK INPL.
10TH LANE N.W.

+50

Δ R 30' Δ R 30'

LB LB 33' 33'

BEGIN RADIUS STA. 144 + 73.45
END RADIUS STA. 145 + 69.45
11th AVE. N.W.

PROFILE GRADE E.B. AND W.B. LANES

37.90 36.07 33.88 31.33 28.42 25.16 21.54 17.74 13.94

P.V.T. + 00 ELEV.

15" R.C. PIPE CL. III AT 1.435% ~~1.501%~~
28.94 28.69
P.I. 146 + 00
ELEV. 1036.74
800' V.C.
M = 2.86
144 - 9025
M.H. NO. 18 41' LT. STA. ~~145 + 81.25~~

18" R.C. PIPE CL. III AT 3.488% ~~3.646%~~
15.69 15.59
-3.8%
(INPL.) 18" R.C. PIPE 3.873%
M.H. NO. 4A 42' LT. STA. 150 + 12 (INPL.)

1040 1030 1020 1010 1000

144 145 146 147 148 149 150 151 152 153 154 155

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AS BUILT PLANS

NOTE : ALL ITEMS ARE NON - PARTICIPATING.

RES. DR. LT. 15 + 11

CONST. CONCRETE DRIVE
APPROACH TYPE B ENTRANCE
20 SQ.YDS. 6" CONC. DRIVEWAY
PAVEMENT

RES. DR. LT. 15 + 45

CONST. CONCRETE DRIVE
APPROACH TYPE B ENTRANCE
19 SQ.YDS. 6" CONC. DRIVEWAY
PAVEMENT

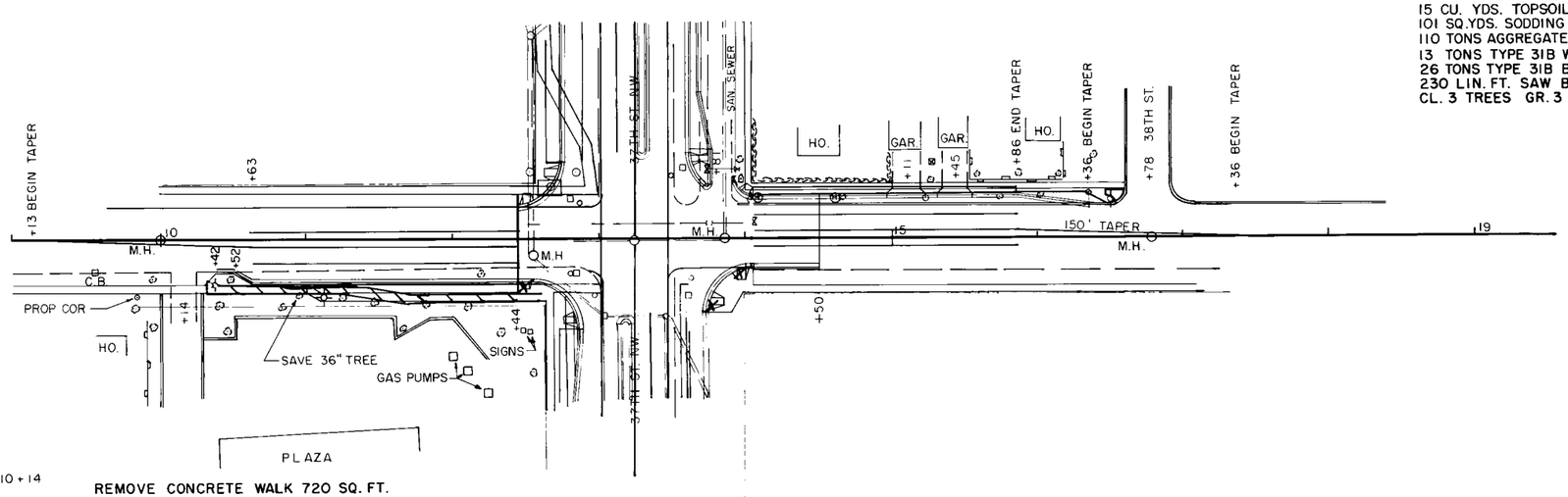
38TH ST. NW. LT. 16 + 78

NO CHANGE

REMOVE CONCRETE WALK 1290 SQ. FT.
LEFT STA. 14+06 TO 38TH ST. NW. (STA. 16+64)

CONSTRUCT 5' WIDE CONC. WALK 965 SQ. FT.
LEFT STA. 14+06 TO STA. 16+64

CONSTRUCT RIGHT TURN LANE
LEFT STA. 14+06 TO STA. 16+36
230 LIN. FT. B624 CONC. CURB & GUTTER
220 CU. YDS. UNCLASSIFIED EXC.
15 CU. YDS. TOPSOIL BORROW (LV)
101 SQ.YDS. SODDING TYPE BOULEVARD
110 TONS AGGREGATE BASE CL.2 10" DEPTH
13 TONS TYPE 31B WEARING COURSE 2" DEPTH
26 TONS TYPE 31B BASE COURSE 4" DEPTH
230 LIN. FT. SAW BITUMINOUS PAVEMENT
CL. 3 TREES GR. 3 TREES



PLAZA ENT. RT. 10 + 14

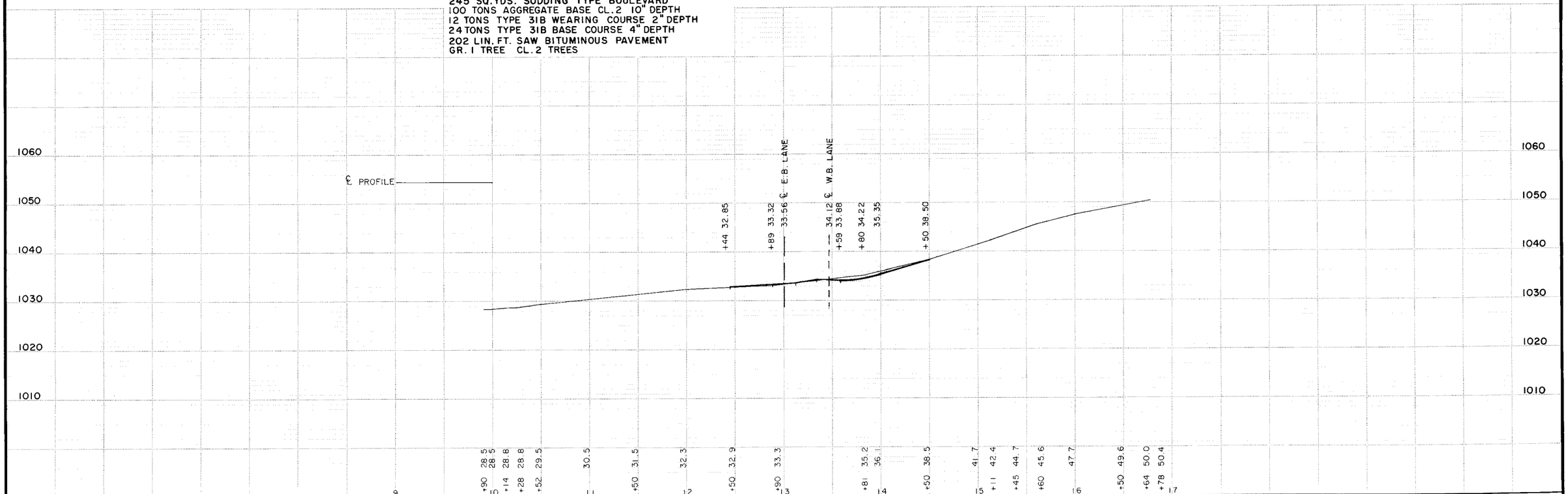
NO CHANGE

REMOVE CONCRETE WALK 720 SQ. FT.

RIGHT STA. 11 + 00 TO STA. 12 + 44
CONST. 5' WIDE WALK FROM STA. 11+00 TO STA. 12+44 720 SQ.FT.

CONSTRUCT RIGHT TURN LANE RIGHT STA. 10+42 TO STA. 12+44

202 LIN. FT. B624 CONC. CURB & GUTTER
200 CU.YDS. UNCLASSIFIED EXC.
25 CU.YDS. TOPSOIL BORROW (LV)
245 SQ.YDS. SODDING TYPE BOULEVARD
100 TONS AGGREGATE BASE CL.2 10" DEPTH
12 TONS TYPE 31B WEARING COURSE 2" DEPTH
24 TONS TYPE 31B BASE COURSE 4" DEPTH
202 LIN. FT. SAW BITUMINOUS PAVEMENT
GR. 1 TREE CL. 2 TREES



RIGHT TURN LANES ON 18TH AVE. N.W.

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AS BUILT PLANS

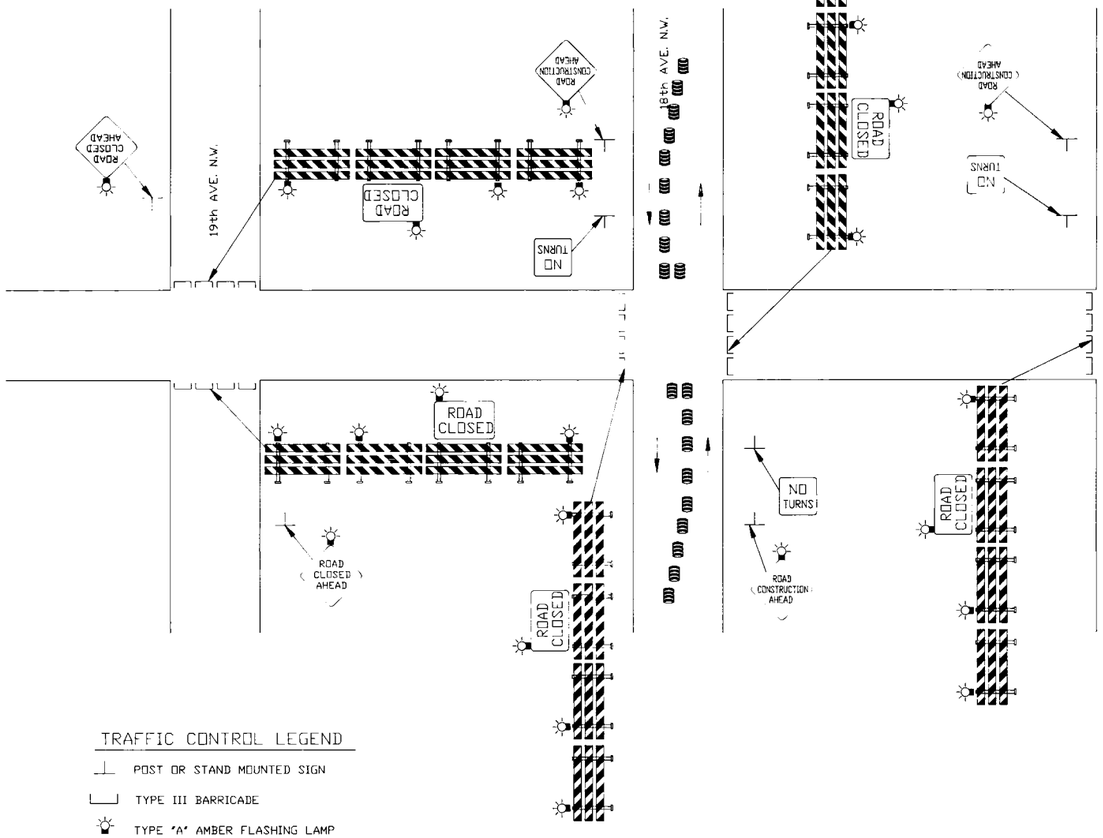
ESTIMATE OF TRAFFIC CONTROL DEVICES STAGE 1

DEVICE	NUMBER	SIZE	COLOR	QUANTITY	DEVICE	NUMBER	SIZE	COLOR	QUANTITY
NO TURNS	R3-3	24 x 24	BLK/WH	4		REBOUNDABLE PLASTIC DRUM	APPROX. 36"	WH/OR	20
ROAD CLOSED	R11-2	48 X 30	BLK/WH	8		TYPE III	MIN. 6'	OR & WH	32
ROAD CONSTRUCTION AHEAD	W20-1	48 x 48	BLK/OR	4		TYPE A	FLASHING LAMP	AMBER	38
ROAD CLOSED AHEAD	W20-3	48 x 48	BLK/OR	2					

N

TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL LAYOUTS NOT DRAWN TO SCALE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL ON THIS PROJECT.
3. THE LOCATION OF SIGNS AND DEVICES WILL BE STAKED BY THE ENGINEER IN THE FIELD.
4. REBOUNDABLE PLASTIC DRUMS WILL BE USED TO CLOSE LEFT TURN LANES ON 18th AVE. N.W.
5. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFROM TRAFFIC CONTROL DEVICES INCLUDING APPENDIX B DATED MARCH 1990.
6. CONSTRUCTION ZONE SIGNING SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL INCLUDE, BUT NOT BE LIMITED TO SIGNS FOR LANE CLOSURES, MACHINERY AHEAD, BUMP, DIP, LOOSE GRAVEL, ETC. THE NUMBER AND LOCATION WILL BE DETERMINED BY THE CONTRACTORS OPERATION.



TRAFFIC CONTROL LEGEND

- POST OR STAND MOUNTED SIGN
- TYPE III BARRICADE
- TYPE "A" AMBER FLASHING LAMP

TRAFFIC CONTROL PLAN
STAGE 1

AS BUILT PLANS

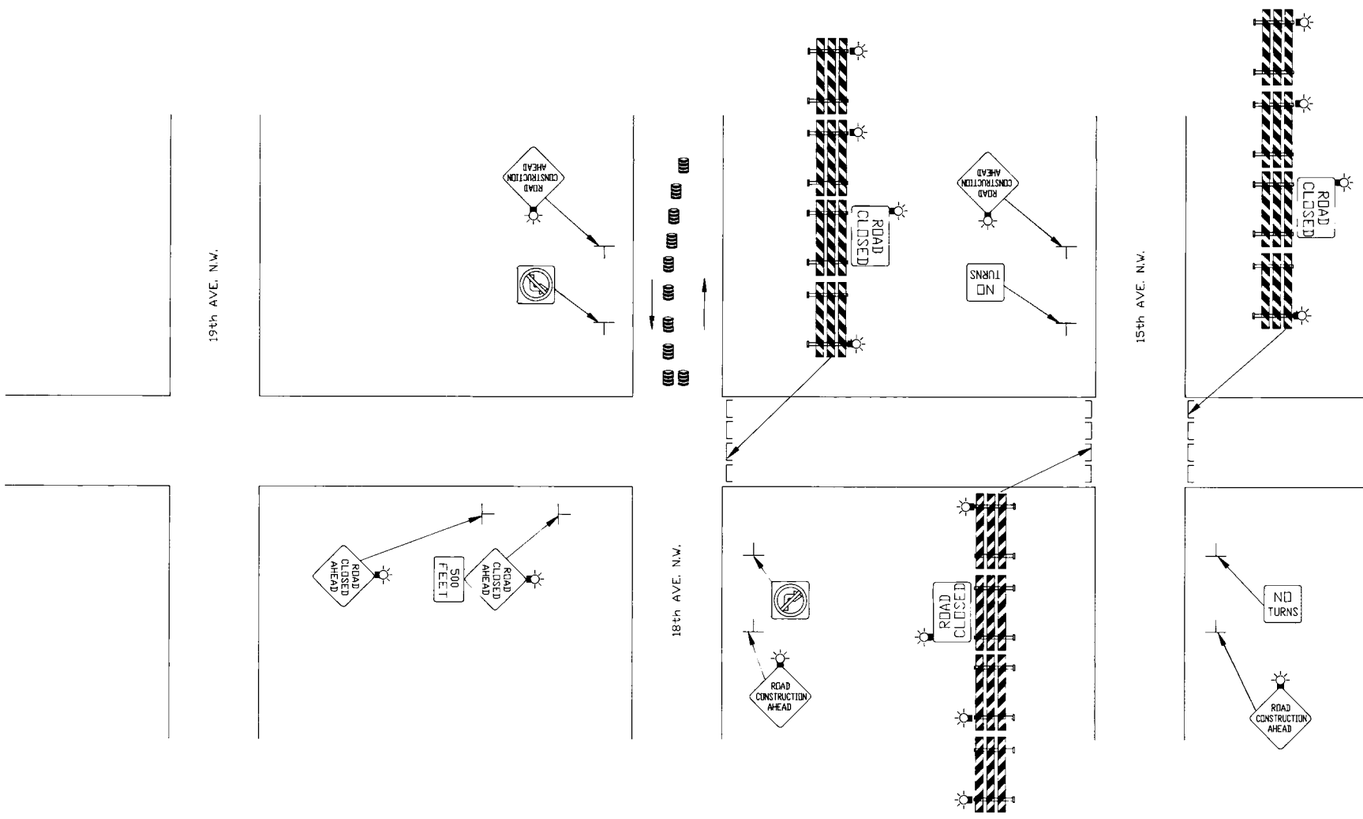
ESTIMATE OF TRAFFIC CONTROL DEVICES STAGE 2

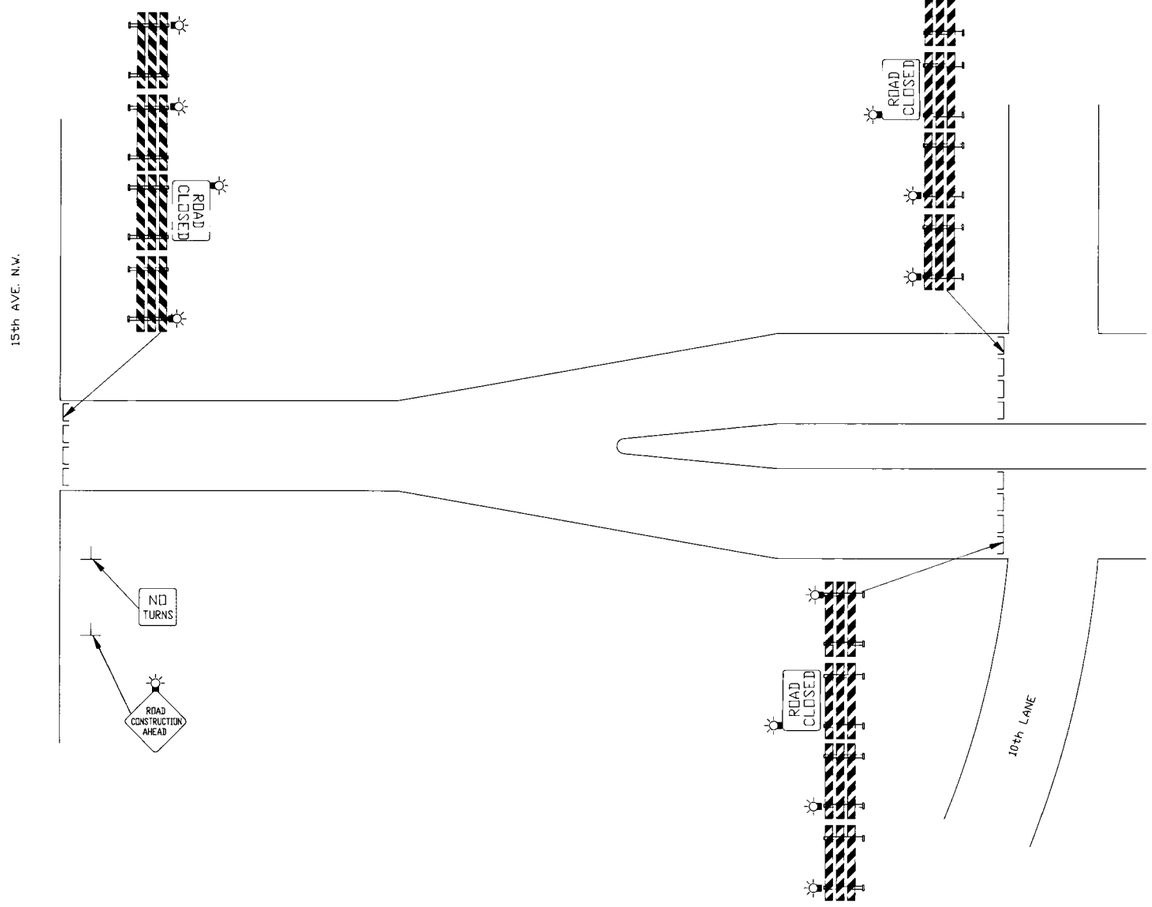
DEVICE	NUMBER	SIZE	COLOR	QUANTITY	DEVICE	NUMBER	SIZE	COLOR	QUANTITY
	R3-1	24 x 24	BLK/R/WH	1		W20-3	48 x 48	BLK/OR	2
	R3-2	24 x 24	BLK/R/WH	1		X3-4	12 x 8	BLK/OR	1
	R3-3	24 x 24	BLK/WH	2		REBOUNDABLE PLASTIC DRUM	APPROX. 36'	WH/OR	10
	R11-2	48 X 30	BLK/WH	5		TYPE III	MIN. 6'	OR & WH	20
	W20-1	48 x 48	BLK/OR	4		TYPE A	FLASHING LAMP	AMBER	26



TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL LAYOUTS NOT DRAWN TO SCALE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL ON THIS PROJECT.
3. THE LOCATION OF SIGNS AND DEVICES WILL BE STAKED BY THE ENGINEER IN THE FIELD.
4. REBOUNDABLE PLASTIC DRUMS WILL BE USED TO CLOSE, SOUTHBOUND, LEFT TURN LANE ON 18th AVE. N.W.
5. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFROM TRAFFIC CONTROL DEVICES INCLUDING APPENDIX B DATED MARCH 1990.
6. CONSTRUCTION ZONE SIGNING SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL INCLUDE, BUT NOT BE LIMITED TO SIGNS FOR LANE CLOSURES, MACHINERY AHEAD, BUMP, DIP, LOOSE GRAVEL, ETC. THE NUMBER AND LOCATION WILL BE DETERMINED BY THE CONTRACTORS OPERATION.





TRAFFIC CONTROL LEGEND

- POST OR STAND MOUNTED SIGN
- TYPE III BARRICADE
- TYPE "A" AMBER FLASHING LAMP

TRAFFIC CONTROL PLAN STAGE 2

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