

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
STORM SEWER, GRADING
CONSTRUCTION PLAN FOR 8 BITUMINOUS SURFACE

County State Aid Highway No. 8

Between T.H. NO. 65 And CSAH NO. 35

From 1263.37' EAST OF N.W. COR. SEC. 12-30-24 To N. 1/4 COR. SEC. 12-30-24

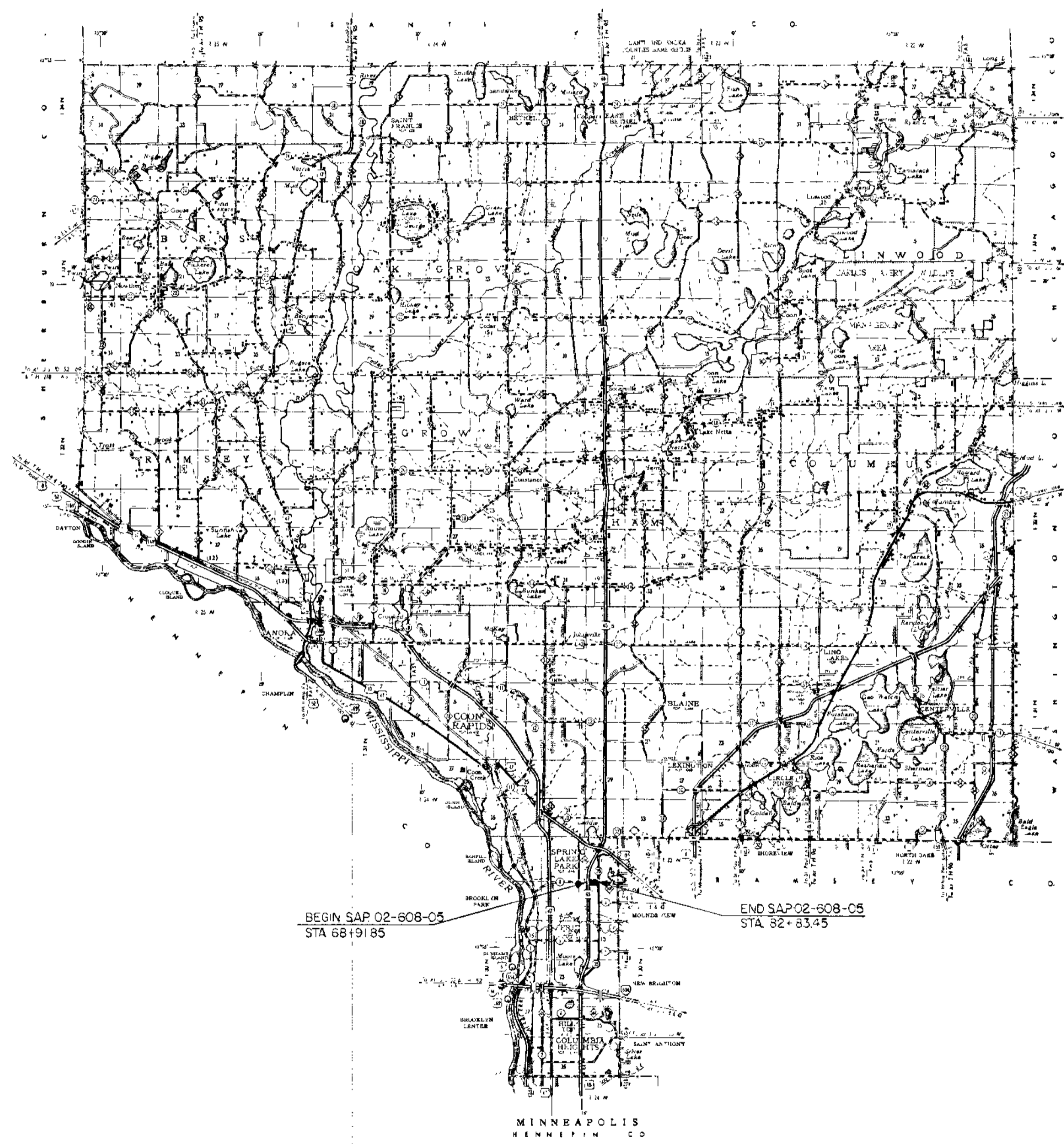
GROSS LENGTH 1391.60 FEET 0.264 MILES
BRIDGES LENGTH _____ FEET _____ MILES
EXCEPTIONS LENGTH _____ FEET _____ MILES
NET LENGTH 1391.60 FEET 0.264 MILES

INDEX OF SHEETS

- Sheet No. 1 Title Sheet & Layout Map
- No. 2 East Quarter & Typical Sec.
- No. 3 Plan & Profile
- No. 4 Cross Section

CONVENTIONAL SIGNS

- STATE LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- STATE QUARTER LINE
- RIGHT OF WAY LINE
- PRESENT RIGHT OF WAY LINE
- CONTROL OF ACCESS LINE
- PROPERTY LINE (EXCEPT LINE)
- UNLATERATED PLATED PROPERTY
- UNLATERATED CITY LINES
- TOWN-HIGHWAY CENTER LINE
- RETAINING WALL
- RAILROAD
- RAILROAD RIGHT OF WAY LINE
- RIVER OR CREEK
- DRY RUN
- DRAINAGE DITCH
- ELECTRIC POWER LINE
- TELEPHONE OR TELEGRAPH LINE
- JOINT TELEPHONE AND TOWER
- POWERTOWER
- TELEPHONE CABLE (AERIAL)
- TELEPHONE CABLE UNDERGROUND
- POWER CABLE UNDERGROUND
- SEALED CURB
- DEVELOP
- DRIP ALLEY
- GRAVE MARK
- BARRIED WIRE FENCE
- WOVEN WIRE FENCE
- CHAIN LINK FENCE
- RAILROAD SLOTTED FENCE
- STONE WALL OR FENCE
- WATER PIPE
- SEWER PIPE
- DRAIN TILE
- SPRING
- WASH
- TRAILER
- ORCHARD
- DRUSH
- MURSTERN
- DATE-BORN
- YAMBUKE
- FIRE HYDRANT
- STREET LIGHT
- RAILROAD CROSSING SIGN
- RAILROAD CROSSING BELL
- ELECTRIC WARNING SIGN
- CROSSING GATE
- BATTLE CAMP
- OVERPASS Highway Over
- UNDERPASS Highway Under
- BRIDGE
- BUILDING (One Story Frame)
- FRAME
- STONE
- BRIDGE
- NON PIPE OR TUB
- MONUMENT (STONE, CONCRETE OR METAL)
- WOODEN
- GRAVEL PIT
- SAND PIT
- BURROW PIT
- ROCK QUARRY
- MEANDER CORNER



DESIGN DESIGNATION

ADT (CURRENT YEAR) 2,000
ADT (FUTURE YEAR) 4,600
T (HEAVY COMMERCIAL) 300-600
9 Ton Design, Soil Factor - 50
Design Speed 30 MPH LOCALLY RESTRICTED
Design Speed not achieved at:
STA _____ TO STA _____ MPH _____
S+A _____ TO STA _____ MPH _____

SPECIFICATIONS

THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, DATED JAN. 1, 1968 SHALL GOVERN

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT

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

Edling J. Lundgren COUNTY ENGINEER DATE Jan. 16, 1968

ANOKA COUNTY REG. NO. 2551

RECOMMENDED FOR APPROVAL *W. J. Weis* DISTRICT ENGINEER 3/11/68

RECOMMENDED FOR APPROVAL *R. E. Weisbach* 9-8-68

APPROVED 4/9/68 *Stanley M. Gray* STATE AID ENGINEER

Minn. Proj. No. _____ County Proj. No. _____

State Proj. No. _____ S.A.P. 02-608-05

STATEMENT OF ESTIMATED QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2104.501	REMOVE PORT. CULV.	LIN. FT.	5
2105.501	COMMON EXCAVATION	CU. YD.	1,268
2105.523	COMMON BORROW	CU. YD.	3,495
2105.525	TOPSOIL BORROW	CU. YD.	300
2130.501	WATER	M. GAL.	15
2131.501	CALCIUM CHLORIDE TYPE 2	TON	7
2207.503	BITUMINOUS MATERIAL FOR MIX	GAL.	22,710
2207.512	BITUMINOUS STABIL. SUBGRADE	SQ. YD.	7,400
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	34
2341.507	WEARING COURSE MIXTURE + FILLER	TON	611
2341.513	BITUMINOUS MIXTURE FOR DRIVEWAY RP	TON	10
2347.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	370
2501.511	36" METAL PIPE CULV. (12' CL. 4)	LIN. FT.	22
2501.534	12" CONCRETE APRON	APRON	12
2505.511	INSTALL METAL CULV.	LIN. FT.	5
2505.515	CASTING ASSEMBLY	ASSEMBLY	7
2505.522	ADJUST WATER HOUSING	ASSEMBLY	3
2505.525	ADJUST WATER HOUSING	HOUSING	2
2505.527	REVISE SIGNAL SYSTEM	SYSTEM	1
2505.528	SODDING	SQ. YD.	2,700
ALTERNATE NO. 1			
2503.502	12" REINFORCED CONC. SEWER CL. 4	LIN. FT.	112
2503.502	15" REINFORCED CONC. SEWER CL. 4	LIN. FT.	319
2506.508	CONST. M.H. (DRY WELL)	STRUCTURE	3
2506.509	CONST. C.B. (DRY WELL)	STRUCTURE	4
2506.509	15" POTATED REINF. CONC. SEWER CL. 4	LIN. FT.	450
ALTERNATE NO. 2			
2503.502	12" REINFORCED CONC. SEWER CL. 4	LIN. FT.	112
2503.502	15" REINFORCED CONC. SEWER CL. 4	LIN. FT.	304
2506.506	CONST. M.H.	LIN. FT.	16
2506.507	CONST. C.B.	LIN. FT.	12

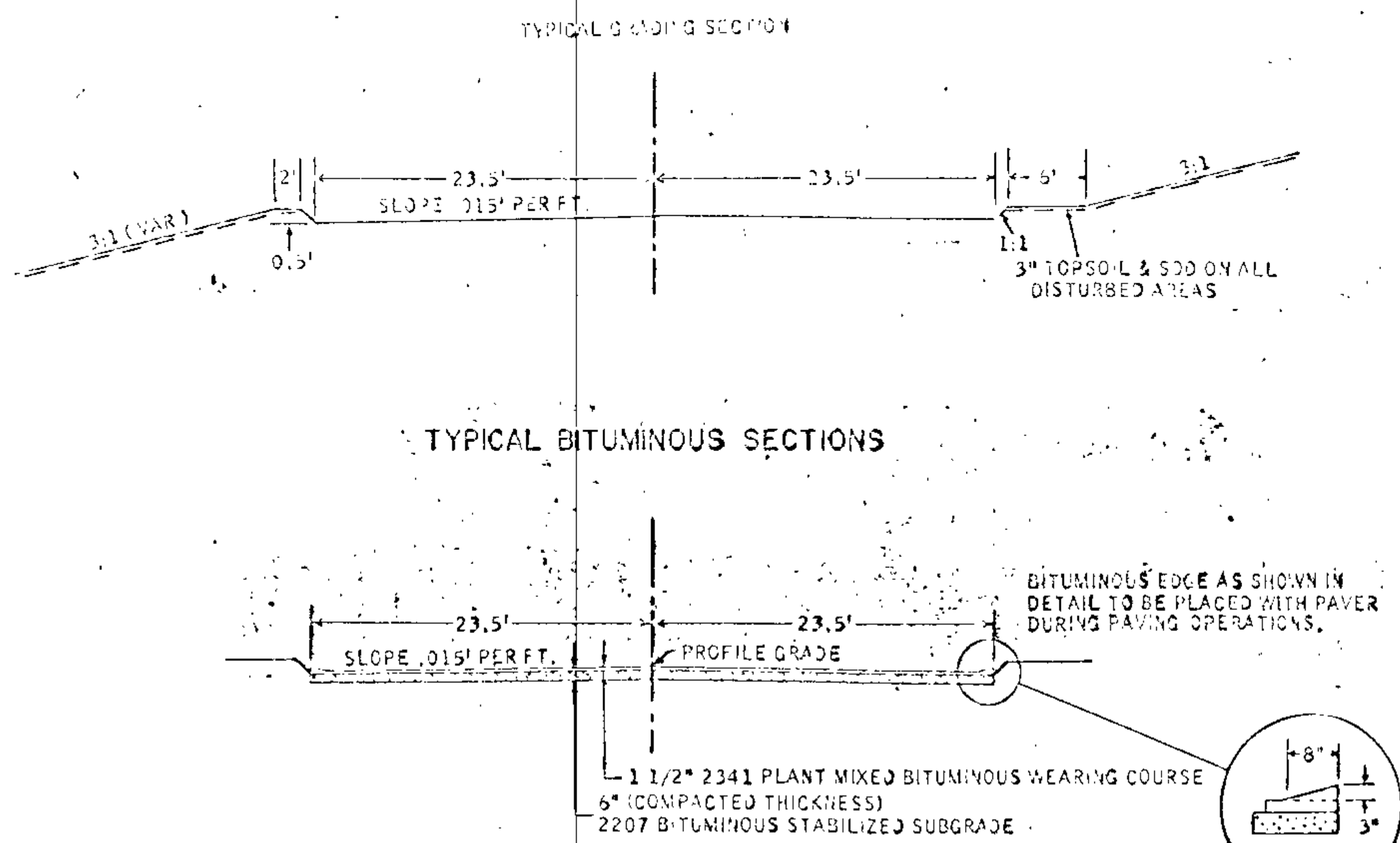
COMMON BORROW, IN THE ESTIMATE AMOUNT OF 3,495 CU. YDS., TO BE OBTAINED FROM EXCESS OF COMMON EXCAVATION FROM JOBS S.A.P. 02-606-05, S.A.P. 02-608-03, & S.A.P. 02-608-04. THIS ITEM TO BE PAID FOR BY VEHICULAR MEASURE.

3 CURB BOXES WILL NOT BE REQUIRED WITH FRAME CASTING NO. 301; CONTRACTOR SHALL FURNISH & INSTALL A 1/8 INCH THICK STEEL COVER OVER CURB BOX OPENING. THIS SHALL BE CONSIDERED AN INCIDENTAL ITEM AND NO DIRECT COMPENSATION SHALL BE MADE. THE PROVISION OF 1903 SHALL NOT APPLY TO THIS ITEM.

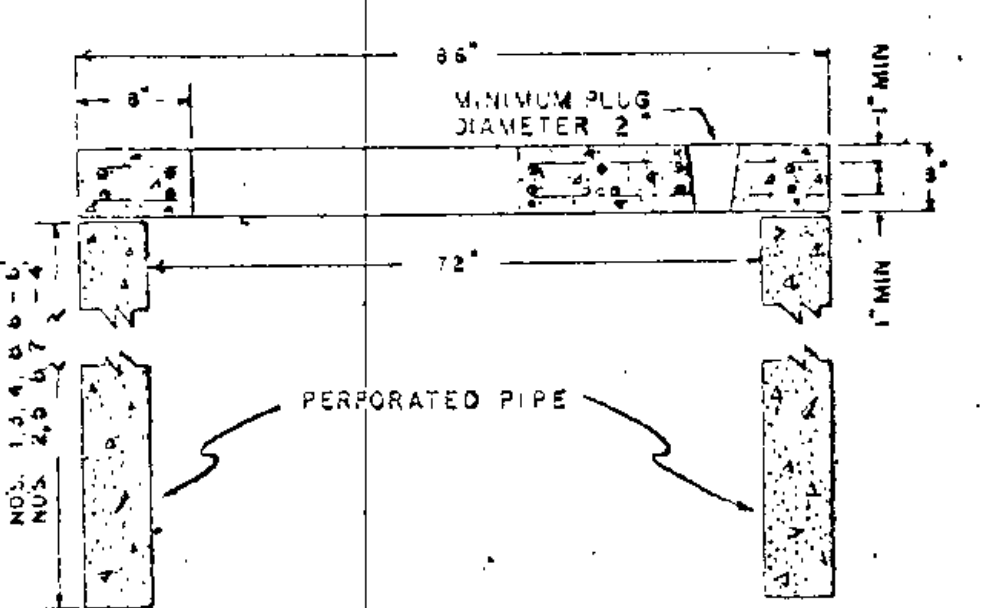
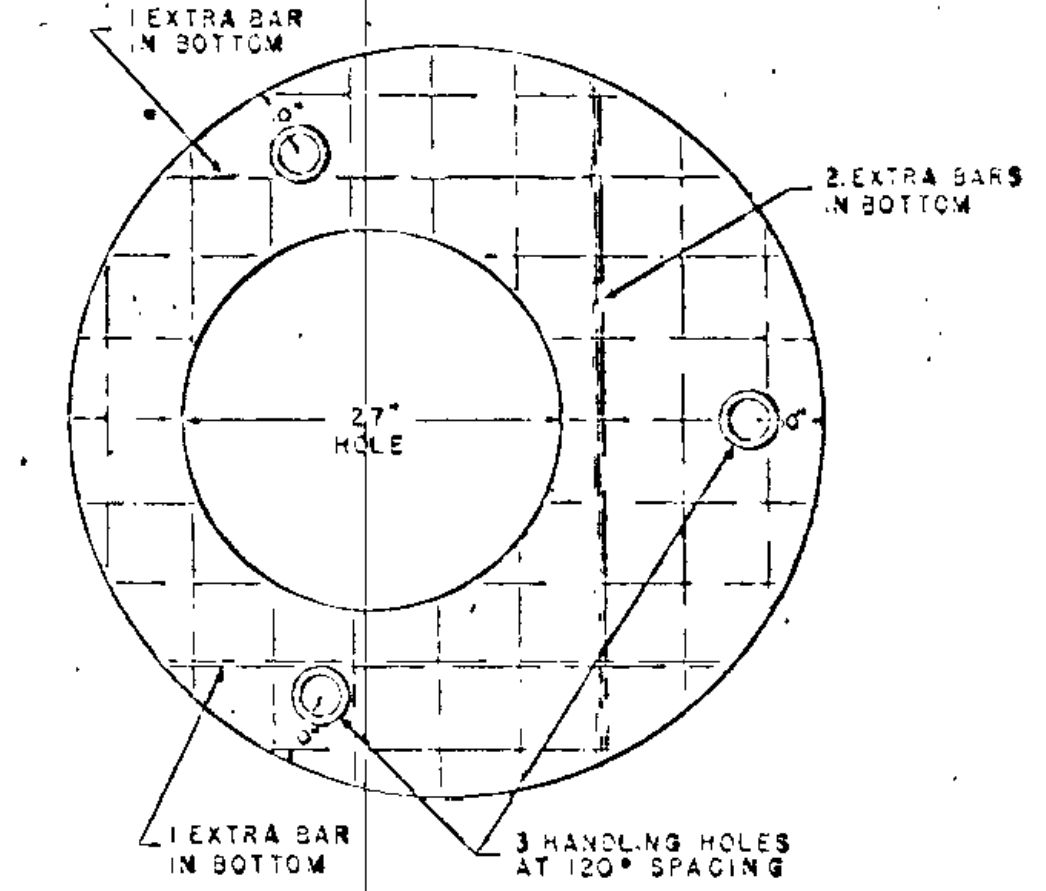
X THE PROVISIONS OF 1903 SHALL NOT APPLY TO THESE ITEMS.

The following Standard Detail plates, approved by the Bureau of Public Roads, shall apply on this project.

PLATE NO.	DESCRIPTION
3002 F	REINFORCED CONCRETE PIPE.
3100 E	CONCRETE APRON FOR REINFORCED CONCRETE PIPE.
4001 D	MANHOLE OR CATCH BASIN.
4005 D	MAN HOLE OR CATCH BASIN.
4101 B	RING CASTING FOR MAN HOLE OR CATCH BASIN.
4110 D	COVER CASTING FOR MAN HOLE.
4125 D	CATCH BASIN FRAME CASTING.
4149 C	GRATE CASTING FOR CATCH BASIN.
8009 C	STANDARD
8009 C	STANDARD



DRY WELL & CATCH BASIN CONSTRUCTION ALT. NO. 1

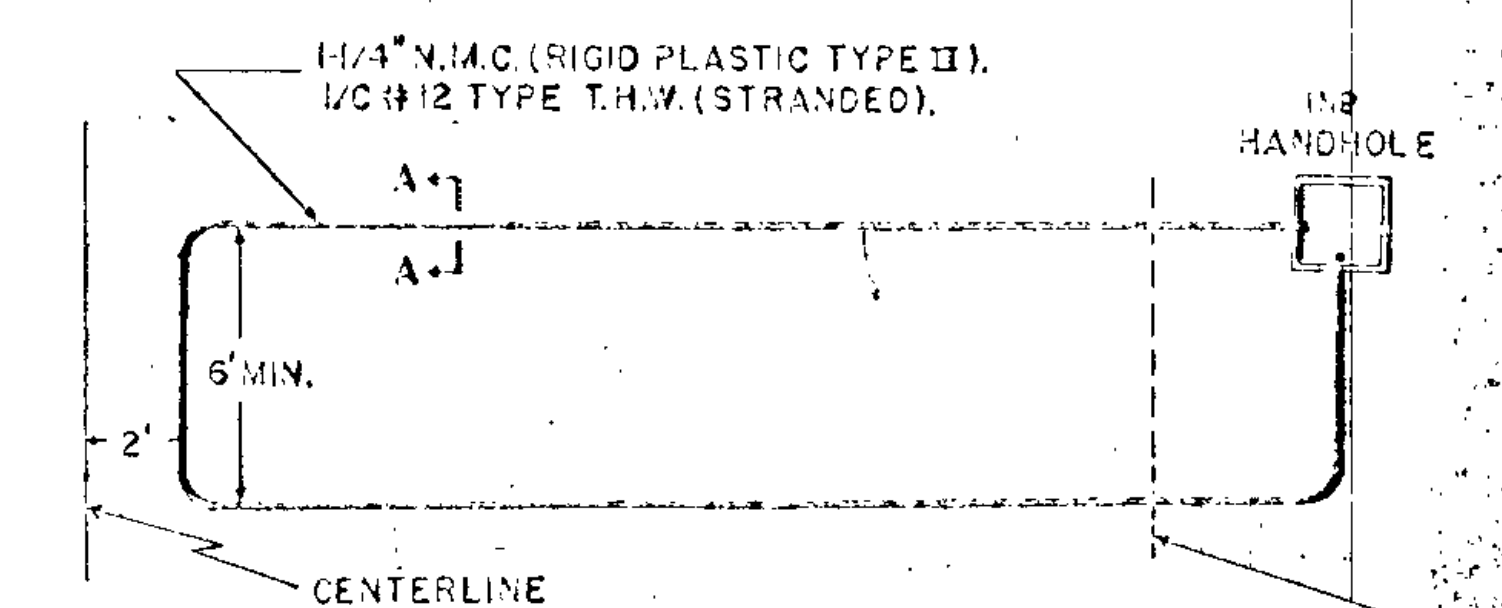


LOOP DETECTOR DETAIL

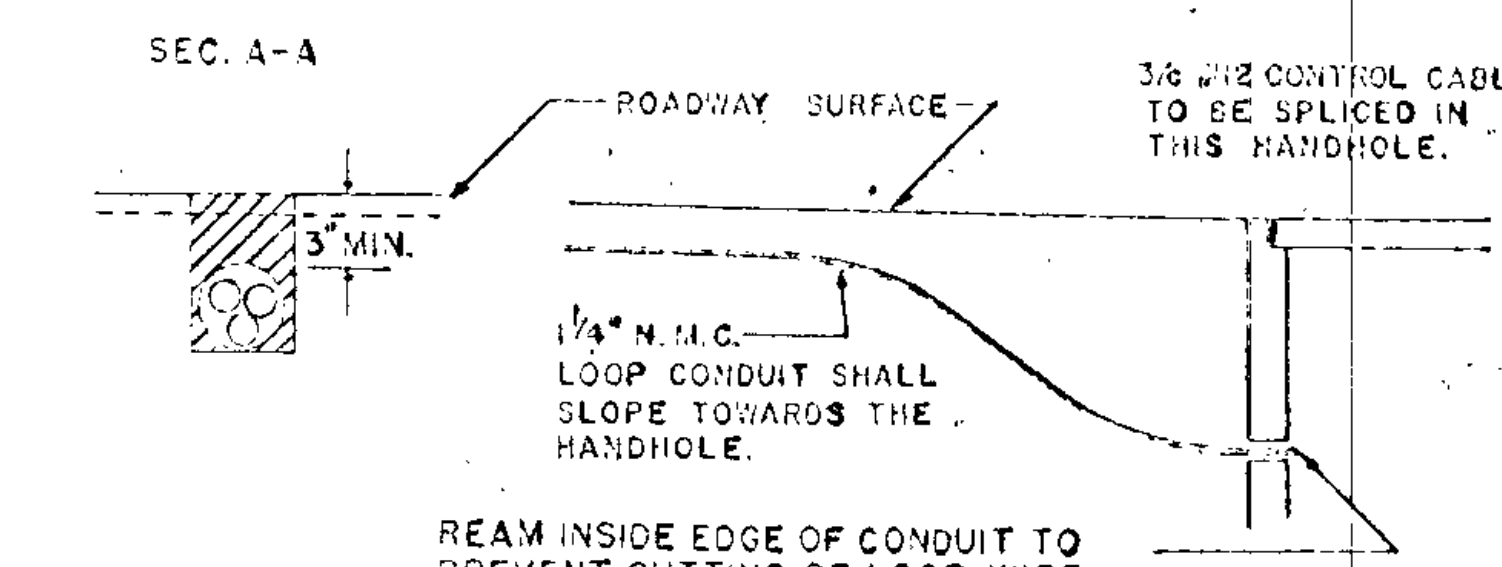
SCALE NONE

NOTE: NUMBER OF TURNS IN THE LOOPS SHALL BE AS SPECIFIED BY THE ENGINEER IN THE FIELD.

THE LOOP SHALL BE ONE CONTINUOUS WIRE WITH NO SPLICES AND EACH TURN SHALL BE PULLED TIGHT WITH NO SLACK IN THE HANDHOLE.



ALL CORNERS SHALL BE STANDARD 90° CONDUIT BENDS.



THE LOOP DETECTOR SHALL BE PLACED AFTER COMPLETION OF THE BITUMINOUS STABILIZED BASE AND PRIOR TO PAVING THE FINAL BITUMINOUS MAT.

NOTE: ALL BITUMINOUS MATERIAL SHALL BE REMOVED AS COMMON EXCAVATION AND USED IN THE EMBANKMENT.

NOTE: THE EMBANKMENT SHALL BE COMPACTED BY THE ORDINARY COMPACTION AS PROVIDED IN 2110.302, EXCEPT THAT THE COMPACTION SHALL BE ACCOMPLISHED BY AN APPROVED VIBRATING COMPACTOR. THE COMPACTOR SHALL HAVE AN EMPTY WEIGHT OF NOT LESS THAN 3 TONS AND A DRUM OF NOT LESS THAN 30 INCHES IN DIAMETER NOR LESS THAN 40 INCHES IN LENGTH.

NOTE: THE UPPER 1.0' OF NATURAL SOIL IS CONSIDERED UNSUITABLE FOR USE IN THE UPPER 1.0' OF ROADWAY. THIS PORTION SHALL BE PLACED BELOW THE UPPER 1.0' OF EMBANKMENT DURING CONSTRUCTION.

BASIS OF PLANNED QUANTITIES

2207 BITUMINOUS STABILIZED SUBGRADE
BITUMINOUS MATERIAL FOR MIX 0.5 GAL. PER SQ. YD. PER INCH THICKNESS

2341 PLANT MIXED BITUMINOUS BINDER COURSE
BITUMINOUS MIXTURE 165 LBS. PER SQ. YD.
BITUMINOUS MATERIAL 4.5% OF MIXTURE BY WT.

2341 PLANT MIXED BITUMINOUS WEARING COURSE
BITUMINOUS MIXTURE 165 LBS. PER SQ. YD.
BITUMINOUS MATERIAL FOR TACK COAT 0.05 GAL. PER SQ. YD.
BITUMINOUS MATERIAL 5.5% OF MIXTURE BY WT.



VILLAGE OF SPRING LAKE PARK

ST PAUL WATER WORKS EASEMENT

CITY OF FRIDLEY

STA. 69+37 LT.
69+44 LT.
INP LOOP DETECTOR MAY BE ABANDON INP.
F&I: NEW LOOP DETECTOR
SEE SHEET NO. 2

STA. 69+25 C
INP 36" X 37" C.M.P.
TO REMAIN
INP APRON FOR 36" C.M.P.
REMOVE
F&I: 36" X 22" C.M.P. CULV. (EXT RT. ONLY)
INSTALL APRON FOR 36" C.M.P.

BEG. N SAP 02-608-05
STA. 68+91.85

END SAP 02-608-05
STA. 82+83.45

ADJUST ITEMS

STATION	LOCATION	TYPE
69+19	21' LT.	STORM M.H.
69+62	33' RT.	WATER GATE
69+68	33' RT.	SAN. M.H.
69+74	33' RT.	WATER GATE
69+75	21' RT.	SAN. M.H.

STORM SEWER SYSTEM ALT. NO. 1 (SEE SHEET NO. 4)

NO.	STATION	LOCATION	TYPE	DESIGN	LIN. FT.	TOP CAST.	OUTLET	GRATE	NO.	FRAME NO.	INLET	RCP DIA.	CL.
1	72+50	295 RT.	M.H.	SPECIAL	6.7	902.00	899.90	711	700-7	7	225	12"	
2	72+50	239 RT.	C.B.	"	4.7	900.85	896.60	810	801	1		6"	
3	72+50	239 LT.	C.B.	"	6.7	900.85	897.20	810	801	2		48"	
4	77+00	239 RT.	M.H.	"	6.7	901.80	898.00	711	700-7	1	450		
5	77+00	239 RT.	C.B.	"	4.7	900.70	896.40	810	801	4		6"	
6	77+00	239 LT.	C.B.	"	6.7	900.70	896.70	810	801	5		48"	
7	70+25	295 RT.	M.H.	"	4.0	903.00	898.60	711	700-7	OUT	94"		
8	77+00	36' LT.	"	R.C.P. APRON			899.00			6		4"	

NOTE: M.H. NO. 4 TO M.H. NO. 1 SHALL BE PERFORATED PIPE

B.M. NO. 11 ELEV. 905.58
TOP HYD. RT. STA. 82+30

B.M. NO. 9 ELEV. 904.87
TOP HYD. SW. JCT. TH. NO. 65 & CSAH. NO. 8

B.M. NO. 10 ELEV. 900.95
TOP HYD. RT. STA. 73+74

