

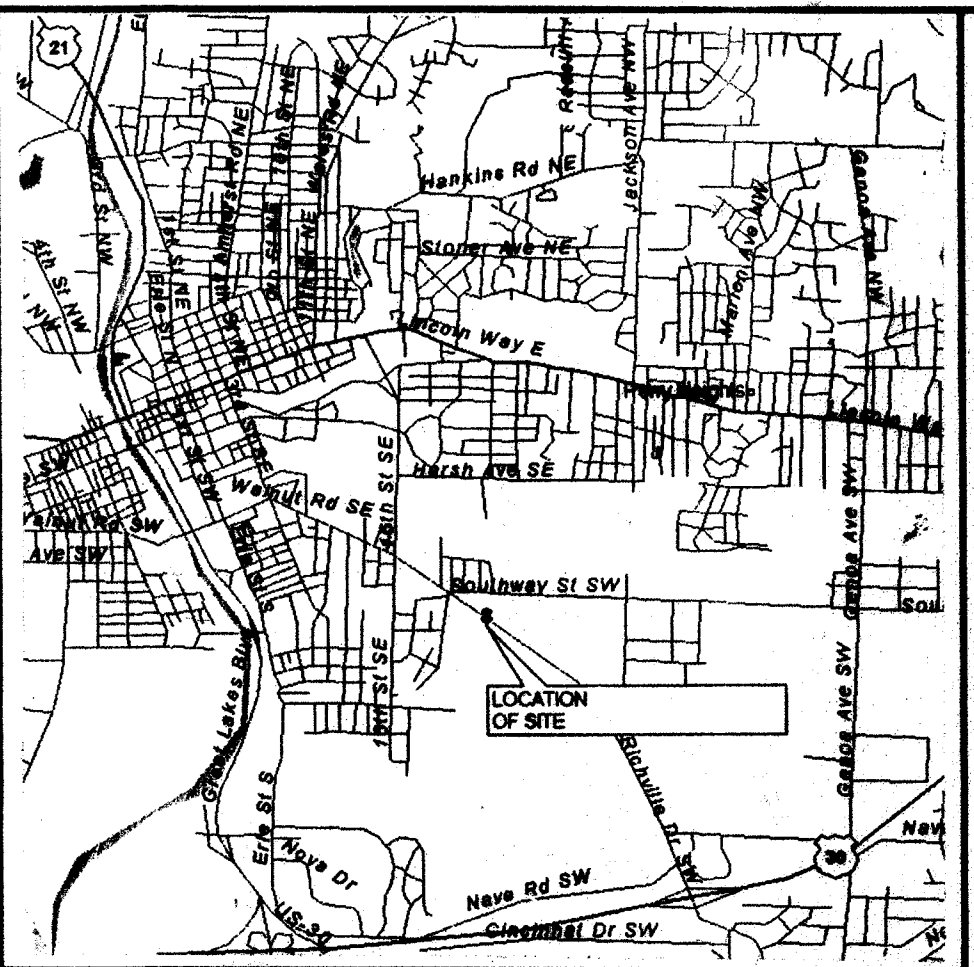
AUGUSTA LAKES NO. 1

SITUATED IN THE CITY OF MASSILLON, COUNTY OF
STARK, STATE OF OHIO AND BEING PART OF
OUTLOTS 707 & 708

NOVEMBER 6, 2000

28 LOTS

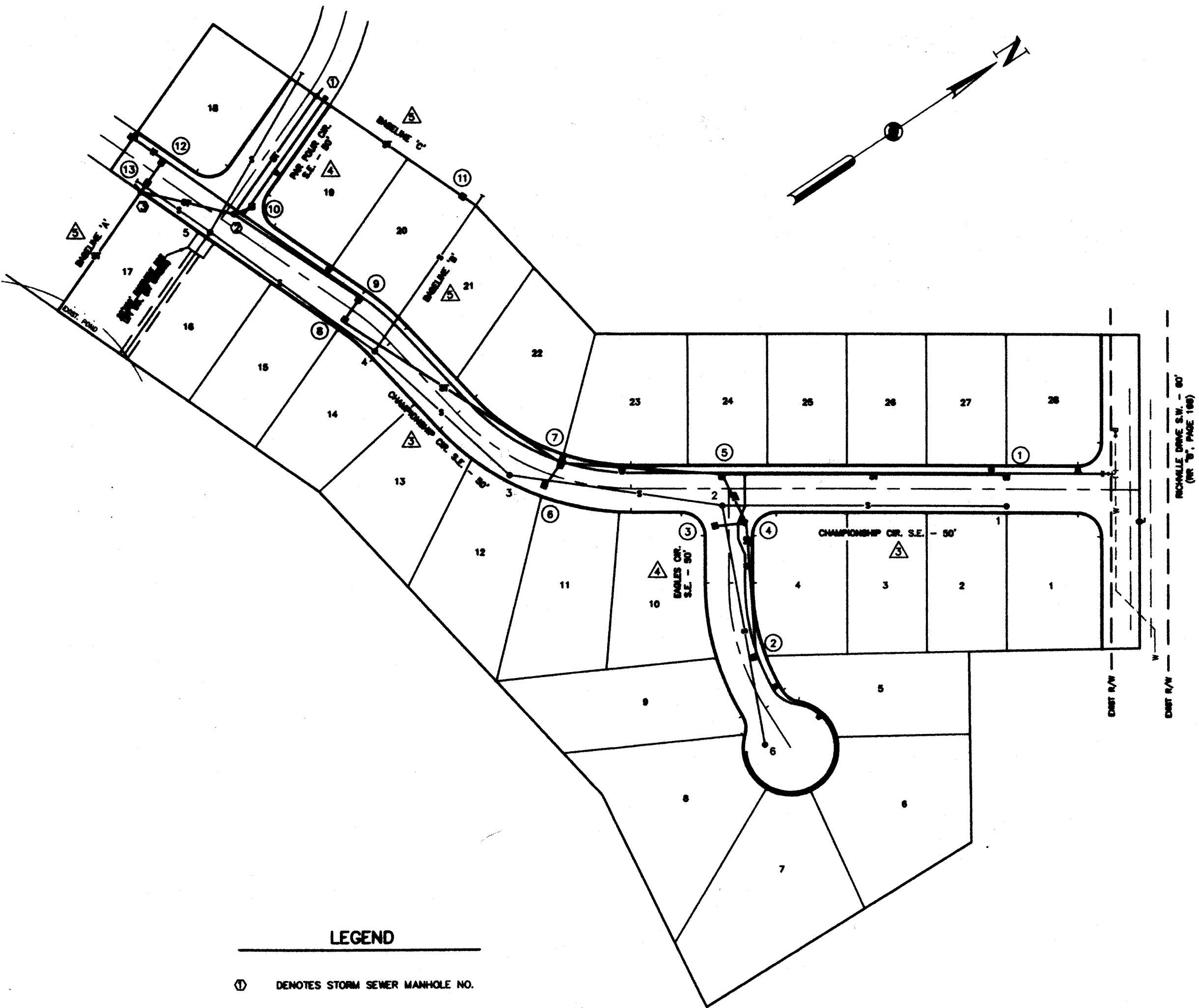
PREPARED BY:
HAMMONTREE & ASSOCIATES, LTD
ENGINEERS, PLANNERS & SURVEYORS
NORTH CANTON, OHIO



VICINITY MAP

INDEX OF SHEETS

1. COVER SHEET & UTILITY SCHEMATIC
2. TYPICAL SECTION, ESTIMATED QUANTITIES & NOTES
3. CHAMPIONSHIP CIR.
STA. 49+25.00 TO STA. 61+17.84
4. EAGLES CIR. STA. 40+00.00 TO STA. 42+90.11 PAR FOUR CIR.
STA. 30+00.00 TO STA. 31+65.00
5. BASELINE 'A' STA. 68+21.00 TO STA. 70+00.00 BASELINE 'B' STA. 20+00.00 TO STA. 22+81.68 BASELINE 'C' STA. 10+00.00 TO STA. 12+03.00
6. INTERSECTION DETAILS
CHAMPIONSHIP CIR. & RICHVILLE DR.
CHAMPIONSHIP CIR. & EAGLES CIR.
EAGLES CUL-DE-SAC
7. INTERSECTION DETAILS
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15. STORM WATER POLLUTION PREVENTION DETAILS
16. STANDARD DETAILS
17. STANDARD DETAILS
18. STANDARD DETAILS
19. FINAL PLAT



TOTAL LIN. FT. ROADS = 1638
TOTAL LIN. FT. SANITARY SEWER = 1871
TOTAL LIN. FT. STORM SEWER = 1992

LEGEND

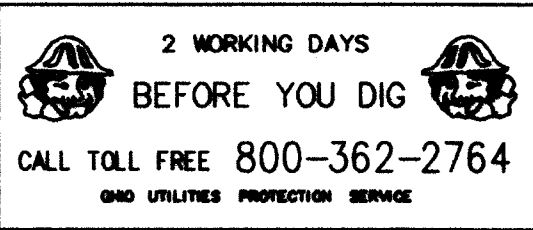
- ① DENOTES STORM SEWER MANHOLE NO.
- 2 DENOTES SANITARY SEWER MANHOLE NO.
- △ DENOTES SHEET NO.
- ④ DENOTES CATCH BASIN NO.
- S ——— SANITARY SEWER
- ST ——— STORM SEWER
- W ——— WATER



DEVELOPER:
JANDA DEVELOPMENT LIMITED, LLC
ATTN. STEVE SMITH, PRESIDENT
6501 HIGHMILL AVE. N.W.
MASSILLON, OHIO 44646
PHONE: (330) 832-1040

APPROVED James J. Banks DATE 11-27-00
MASSILLON CITY ENGINEER

APPROVED _____ DATE _____
CONSUMERS OHIO WATER COMPANY



HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON OHIO 44705
5335 STONEMAN ROAD, NORTH CANTON, OHIO 44720
PHONE: (330) 498-8817 FAX: (330) 498-0148
TOLL FREE: 1-800-384-8817

COVER SHEET
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF
STARK, STATE OF OHIO AND BEING PART OF
OUTLOTS 707 & 708

DESIGNED BY: JDS CHECKED BY: MLD
DRAWN BY: LJP REVIEWED BY: JDS
F.B. 459, PG. 1
COPYRIGHT: 2000 DATE: 11/6/00
BY: HAMMONTREE & ASSOCIATES, LTD.

REVISION BY: DATE: DESCRIPTION:
REVISION BY: DATE: DESCRIPTION:
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ESTIMATED QUANTITIES

ITEM	QUAN.	UNIT	DESCRIPTION
EARTHWORK & ROADS			
201	LUMP	SUM	CLEARING AND GRUBBING
203	24663	CU. YD.	EXCAVATION INCLUDING EMBANKMENT CONST. (ROADS ONLY) ①
203	6522	SQ. YD.	SUBGRADE COMPACTION
301	611	CU. YD.	4" BITUMINOUS AGGREGATE BASE
304	916	CU. YD.	6" AGGREGATE BASE
404	229	CU. YD.	1-1/2" ASPHALT CONCRETE
407	AS REQ'D	GAL.	TACK COAT (0.4 GAL./SQ. YD.)
408	2197	GAL.	PRIME COAT (0.4 GAL./SQ. YD.)
604	6	EACH	STANDARD MONUMENT
604	6	EACH	MONUMENT BOX ASSEMBLY
606	62.5	LIN. FT.	GUARDRAIL, TYPE 5
608	1464	SQ. YD.	CONCRETE WALK (BY HOMEOWNER)
608	6	EACH	CURB RAMP, TYPE 1 (BY HOMEOWNER)
609	3204	LIN. FT.	MASSILLON STANDARD CONCRETE CURB AND GUTTER
651	3325	CU. YD.	TOPSOIL STOCKPILED
659	1958	SQ. YD.	SEEDING AND MULCHING
SANITARY			
603	1871	LIN. FT.	8" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	22	EACH	6" ON 8" WYE W/6" 45° BEND, ASTM D-3034
603	973	LIN. FT.	6" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	4	EACH	8" PLUG & MARKER
604	7	EACH	SANITARY SEWER MANHOLE, MASSILLON STANDARD
604	-	EACH	DROP ATTACHMENT
DRAINAGE			
207	AS REQ'D	SQ. YD.	TEMPORARY SEEDING & MULCHING
207	1300	LIN. FT.	FILTER FABRIC FENCE
207	13	EACH	INLET PROTECTION
207	1	EACH	CONSTRUCTION ENTRANCE
601	3	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C W/FILTER
603	614	LIN. FT.	12" TYPE "B" CONDUIT (707.33)
603	301	LIN. FT.	15" TYPE "B" CONDUIT (707.33)
603	300	LIN. FT.	18" TYPE "B" CONDUIT (707.33)
603	160	LIN. FT.	24" TYPE "B" CONDUIT (707.33)
603	343	LIN. FT.	30" TYPE "B" CONDUIT (707.33)
603	20	LIN. FT.	30" TYPE "C" CONDUIT (707.33)
603	100	LIN. FT.	36" TYPE "B" CONDUIT (707.33)
603	154	LIN. FT.	36" TYPE "C" CONDUIT (707.33)
603	874	LIN. FT.	6" TYPE "B" CONDUIT (STORM LATERAL)
604	13	EACH	STANDARD CATCH BASIN, MASSILLON STD. TYPE "A"
604	3	EACH	STORM MANHOLE COMPLETE
WATERLINE			
638	1551	LIN. FT.	8" DUCTILE IRON WATERLINE PRESSURE CLASS 350 W/POLYWRAP, JOINTS & FITTINGS
638	206	LIN. FT.	2" HDPE TUBULAR WATERLINE W/TRACER WIRE & MARKER TAPE, JOINTS & FITTINGS
638	3	EACH	8" MJ TAPPED PLUG
638	3	EACH	8" GATE VALVE
638	1	EACH	2" CORP. STOP
638	2	EACH	8" X 8" MJ TEE
638	4	EACH	2" X 1" TEE
638	1	EACH	2" BLOW-OFF VALVE
638	666	LIN. FT.	1" SERVICE CONNECTION (BY OTHERS)
638	28	EACH	1" CURB STOP (BY OTHERS)
638	4	EACH	6" FIRE HYDRANT ASS'Y. COMPLETE, TYPE II
638	4	EACH	8"-45° MJ ELBOW
638	4	EACH	8"-22.5° MJ ELBOW

* ITEM NUMBERS REFER TO STATE OF OHIO DEPARTMENT TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, JANUARY 1, 1997.

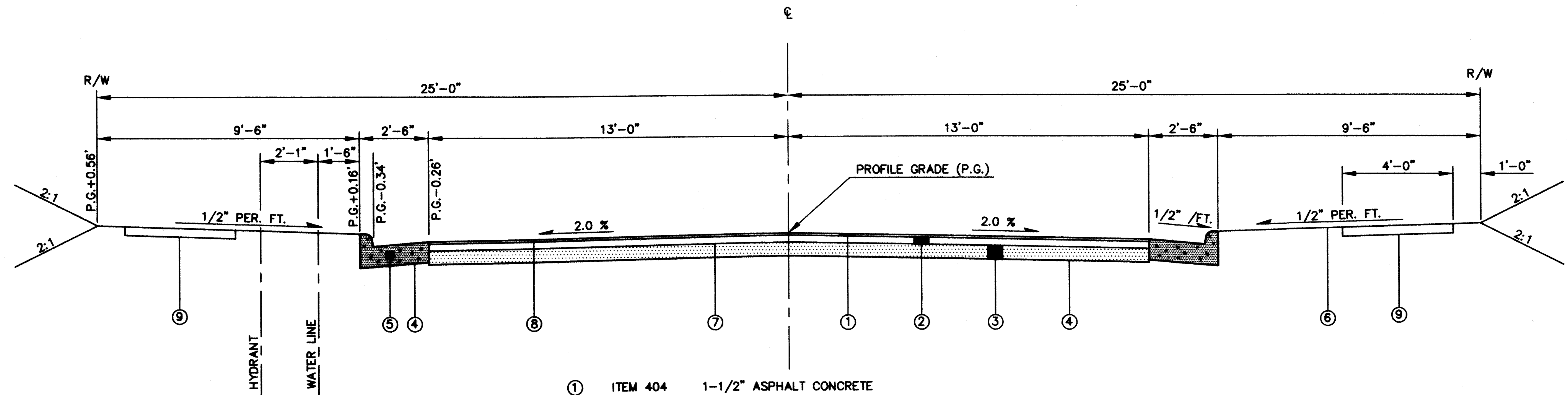
① EARTHWORK SUMMARY (ROADS ONLY)

EXCAVATION = 24663 CU. YD.
EMBANKMENT +15% = 22048 CU. YD.
EXCESS = 2615 CU. YD. (USE TO FILL LOTS)
ASSUME 1' OF TOPSOIL REMOVED & STOCKPILED

② ADDITIONAL TEMPORARY EROSION CONTROL QUANTITIES
MAY BE REQUIRED AT THE DIRECTION OF THE
MASSILLON CITY ENGINEER AND/OR THE STARK
COUNTY SOIL & WATER CONSERVATION DISTRICT.

50' R/W TYPICAL SECTION

SCALE: 3/8"=1'



- ① ITEM 404 1-1/2" ASPHALT CONCRETE
② ITEM 301 4" BITUMINOUS AGGREGATE BASE
③ ITEM 304 6" AGGREGATE BASE (2-3" LIFTS)
④ ITEM 203.13 COMPACTED SUBGRADE
⑤ ITEM 609 MASSILLON STANDARD CONCRETE CURB AND GUTTER
⑥ ITEM 659 SEEDING AND MULCHING
⑦ ITEM 408 PRIME COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.
⑧ ITEM 407 TACK COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD. (AS REQUIRED)
⑨ ITEM 408 CONCRETE WALK (4" THICKNESS, INCREASE TO 6" @ DRIVEWAYS)
WALK CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL HOMEOWNER.

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES.

2. ALL SUBGRADE COMPACTION AND ALL 304 AGGREGATE BASE SHALL BE INSPECTED AND APPROVED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO PLACEMENT OF ANY 304 AGGREGATE BASE OR 301 BITUMINOUS AGGREGATE BASE.
3. ALL TRENCHES BENEATH THE PROPOSED PAVEMENT OR EXISTING PAVEMENT SHALL BE COMPACTED IN LIFTS. IN A MANNER, AND WITH MATERIAL SPECIFIED BY THE MASSILLON ENGINEERING DEPARTMENT OR ANY APPLICABLE, O.D.O.T. SPECIFICATIONS.

4. THE COMPLETE RIGHT-OF-WAY IS TO BE GRADED AS SHOWN ON THE TYPICAL SECTION. DURING CONSTRUCTION OF THE ROAD, THE DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING THE TYPICAL SECTION BETWEEN THE PAVEMENT AND THE RIGHT-OF-WAY LINE.

PRIOR TO THE COMMENCEMENT OF ANY PROJECT, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE CITY ENGINEER'S OFFICE. AT THIS TIME, THE PROJECT WILL BE DISCUSSED IN REGARD TO PROCEDURE, MATERIALS, INSPECTION, ETC...

6. THE DEVELOPER/CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PREVENT SOIL EROSION AND DOWNWASH OF GRITS AND SEDIMENTS AS REQUIRED BY THE CITY OF MASSILLON ENGINEER.

7. INSPECTIONS - SEE CITY OF MASSILLON SUBDIVISION REGULATIONS, SEC. 1111.03

8. CONSTRUCTION RESPONSIBILITIES - SEE CITY OF MASSILLON REGULATIONS, SEC. 1111.04

WATER LINE NOTES

1. MINIMUM COVER OVER 8" WATER LINE = 4'.
2. MAINTAIN MINIMUM 4' HORIZONTAL SEPARATION BETWEEN WATER AND STORM SEWER LINES.
3. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.
4. WATER MAIN MATERIALS SHALL CONFORM TO AWWA C151 FOR DUCTILE IRON PIPE AND AWWA C900 FOR PVC PIPE.
5. WATER MAIN PRESSURE TESTING SHALL CONFORM TO AWWA C600.
6. WATER MAIN DISINFECTION SHALL CONFORM TO AWWA C651.
7. THE PROPOSED FACILITIES WILL MAINTAIN A MINIMUM 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
8. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS. THE WATER SYSTEM MAY GRANT SPECIAL PERMISSION FOR BUILDINGS SIX STORIES OR HIGHER.
9. CONTRACTOR TO USE CONSUMERS OHIO WATER COMPANY DETAILS AND SPECIFICATIONS.
10. CONTRACTOR TO INSTALL SERVICE CONNECTIONS ALONG THE 2" MAIN LINE. SERVICE CONNECTIONS ALONG THE 8" MAIN WATER LINE TO BE INSTALLED BY OTHERS.

STORM SEWER NOTES

1. ALL STORM SEWER WITHIN THE ROAD RIGHT-OF-WAY MAY BE EITHER REINFORCED CONCRETE PIPE (708.02) OR CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33).
2. STORM SEWER BENEATH CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "B" CONDUIT.
3. STORM SEWER OUTSIDE OF CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "C" CONDUIT.
4. CURB INLET CATCH BASINS ARE TO BE CITY OF MASSILLON, TYPE "A". REFER TO CITY OF MASSILLON STANDARD DRAWINGS FOR MANHOLE & CATCH BASIN DETAILS (SEE SHEETS 17, 18 & 19).
5. A 6" STORM LATERAL SHALL BE INSTALLED TO SERVE EACH LOT HAVING STORM SEWER AVAILABLE WITHIN THE ROAD RIGHT-OF-WAY OR ON A SIDE LOT LINE. LATERALS SHALL BE CORE DRILLED INTO THE SIDE OF THE MAIN STORM PIPE OR STORM MANHOLE AND EXTEND TO THE RIGHT-OF-WAY OR BEYOND FURTHEST UTILITY. PLUG THE END OF THE LATERAL AND PROVIDE A LOCATION MARKER.

SANITARY SEWER NOTES

1. ALL SANITARY SEWERS & APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS IN EFFECT AT TIME OF CONSTRUCTION.
2. ALL SANITARY SEWER LATERALS TO BE 6" DIAMETER.
3. ROOF DRAINS, FOUNDATION DRAINS & OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
4. MINIMUM COVER OVER SANITARY SEWER SHALL BE 3 FT.
5. SANITARY LATERALS SHALL EXTEND TO THE RIGHT-OF-WAY LINE OR BEYOND THE FURTHEST UTILITY - WHICHEVER IS GREATER. THE END OF THE SERVICE LATERAL SHALL BE PLUGGED AND A LOCATION MARKER PROVIDED.
6. NO CHANGES TO SANITARY SERVICE LOCATIONS SHALL BE MADE WITHOUT THE APPROVAL OF THE CITY ENGINEER.
7. PVC GRAVITY SEWER PIPE SHALL CONFORM TO ASTM D-3034 AS AN ALTERNATE TO PVC GRAVITY SEWER, SHOWN IN QUANTITIES VITRIFIED CLAY PIPE SEWER, EXTRA STRENGTH, ASTM C-700 MAY BE USED.
8. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & WATERLINE IS 18 INCHES. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & STORM SEWER IS 12 INCHES.
9. JOINT SPECIFICATIONS SHALL MEET ASTM-3212
10. MANHOLE SPECIFICATIONS SHALL MEET ASTM C-478 AND C-443
11. BEDDING SPECIFICATIONS SHALL MEET ASTM D-2321, CLASS II
12. LEAKAGE TEST LIMITS: 100 GAL./INCH OF DIA./MILE/DAY MAXIMUM.
13. ALL MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH ASTM C-1244.
14. PIPE DEFLECTION TESTS SHALL BE PERFORMED ACCORDING TO GLUMBD SECTION 33.85 AND THE ASTM SPECIFICATION FOR THE PIPE BEING TESTED. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED 5%.

O.D.O.T. STANDARD DRAWING LIST

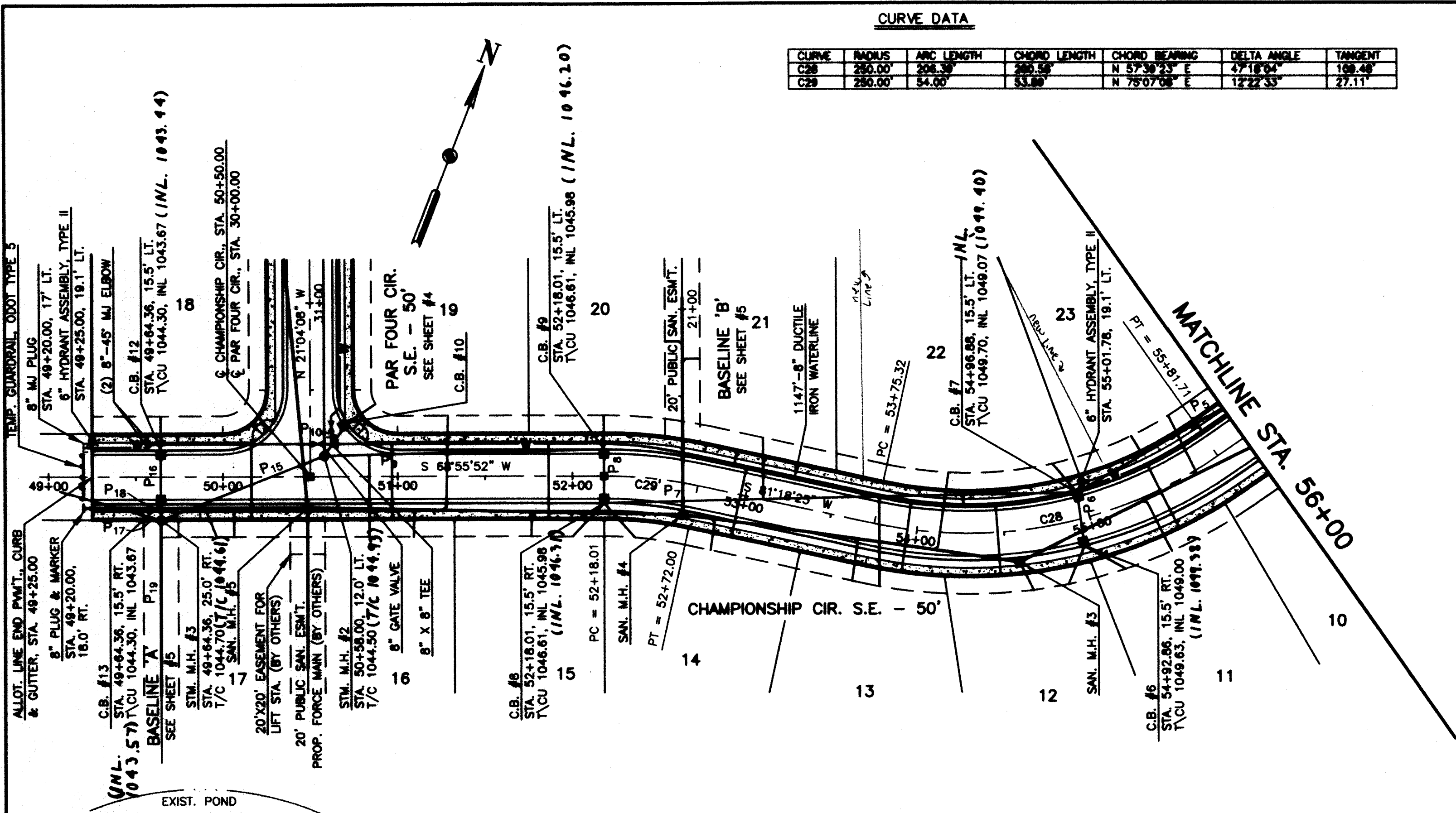
DRAWING NO.	DATE	
BP-7.1	10-30-92	CURB RAMPS
MC-1	6-13-69	ROADWAY ITEMS
GR-2.1M	4-14-98	GUARDRAIL TYPE 5

DESIGNED BY: JDS	CHECKED BY: JDS	REVIEWED BY: MLD	DATE: 11/28/00
DRAWN BY: LJP	DATE: 11/28/00	DATE: 11/28/00	DATE: 11/28/00
F.B. PAGE: 1	DATE: 11/28/00	DATE: 11/28/00	DATE: 11/28/00
COPYRIGHT: 2000	DATE: 11/28/00	DATE: 11/28/00	DATE: 11/28/00
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SCALE: AS SHOWN

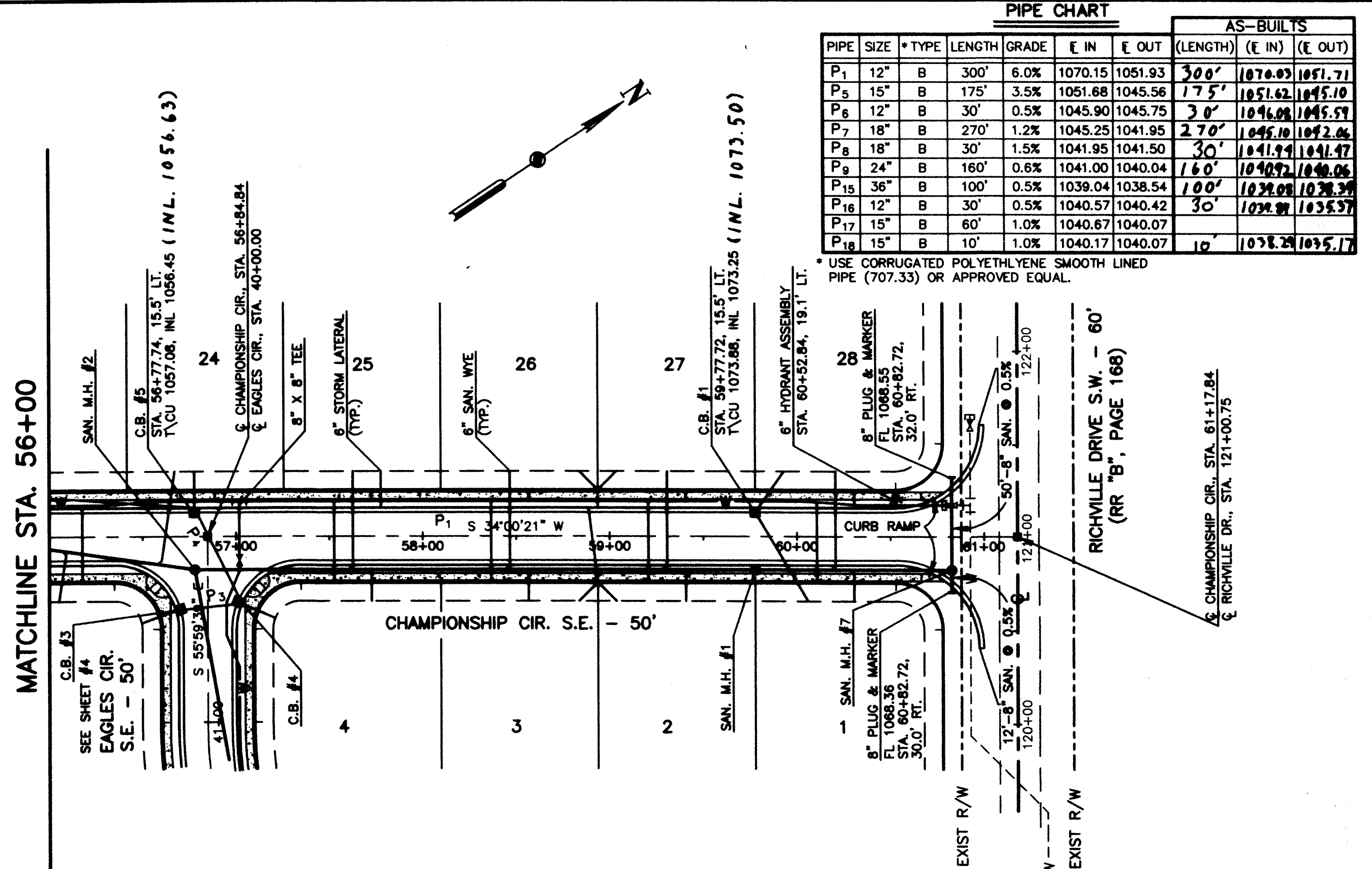
TYPICAL SECTION, ESTIMATED QUANTITIES & NOTES
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

HAMMOTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON, OHIO
5233 STONESHAM ROAD, NORTH CANTON, OHIO 44720
PHONE: CANTON (330) 468-8817 FAX: (330) 468-0748
TOLL FREE: 1-800-944-8817



CURVE DATA

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C1	250.00	208.36	208.36	N 57°39'23" E	27°18'04"	108.48
C2	250.00	54.00	53.98	N 79°07'08" E	12°22'33"	27.11



PIPE CHART

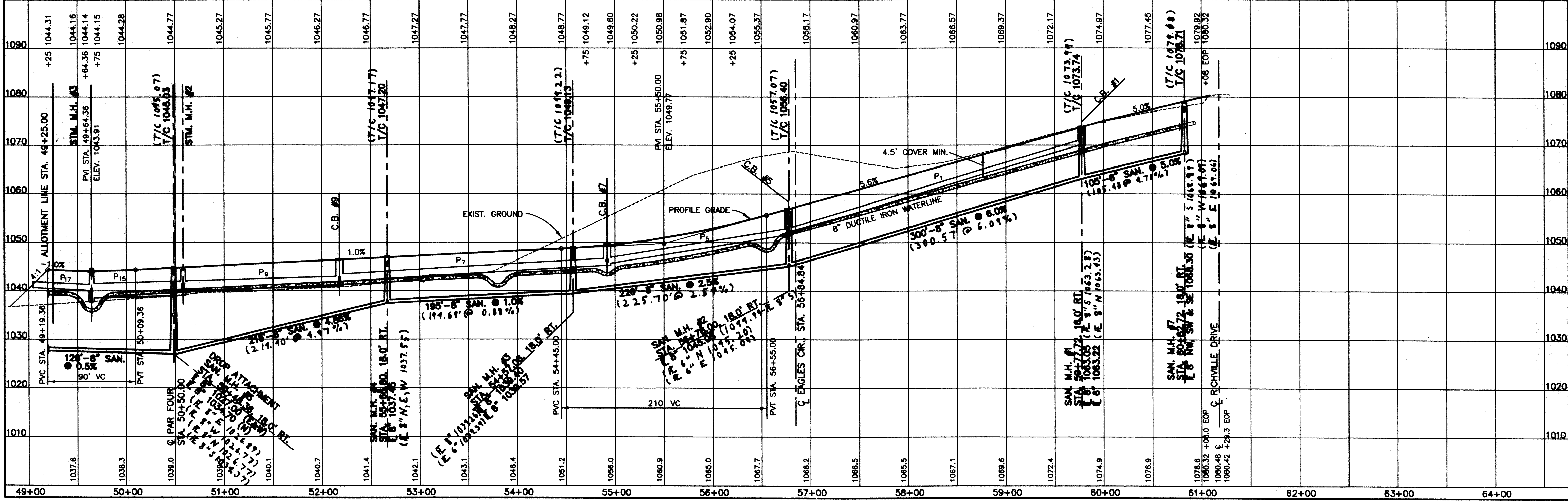
PIPE	SIZE	* TYPE	LENGTH	GRADE	E IN	E OUT	AS-BUILTS (LENGTH) (E IN) (E OUT)
P1	12"	B	300'	6.0%	1070.15	1051.93	300' 1070.15 1051.93
P2	15"	B	175'	3.5%	1051.68	1045.56	175' 1051.68 1045.56
P3	12"	B	30'	0.5%	1045.90	1045.75	30' 1045.90 1045.75
P4	18"	B	270'	1.2%	1045.25	1041.95	270' 1045.25 1041.95
P5	18"	B	30'	1.5%	1041.95	1041.50	30' 1041.95 1041.50
P6	24"	B	160'	0.6%	1041.00	1040.04	160' 1041.00 1040.04
P7	36"	B	100'	0.5%	1039.04	1038.54	100' 1039.04 1038.54
P8	12"	B	30'	0.5%	1040.57	1040.42	30' 1040.57 1040.42
P9	15"	B	60'	1.0%	1040.67	1040.07	60' 1040.67 1040.07
P10	15"	B	10'	1.0%	1040.17	1040.07	10' 1040.17 1040.07

* USE CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.

BENCHMARK:
CHISLED "X" NORTH FLANGE BOLT, FIRE HYDRANT
SOUTH SIDE RICHVILLE DRIVE.
ELEV. = 1109.07

• T/C DENOTES PROP. CURB BOX
• T/C DENOTES TOP OF COVER
• T/C DENOTES TOP OF CURB

NOTE: ALL CATCH BASINS ARE STANDARD
UNLESS OTHERWISE NOTED.



DESIGNED BY: JDS CHECKED BY: MLD REVISION BY: DATE: DESCRIPTION: **SAN. + STM. AS-BUILTS**

DRAWN BY: LIP REVIEWED BY: JDS REVISION BY: DATE: DESCRIPTION: **12/27/02**

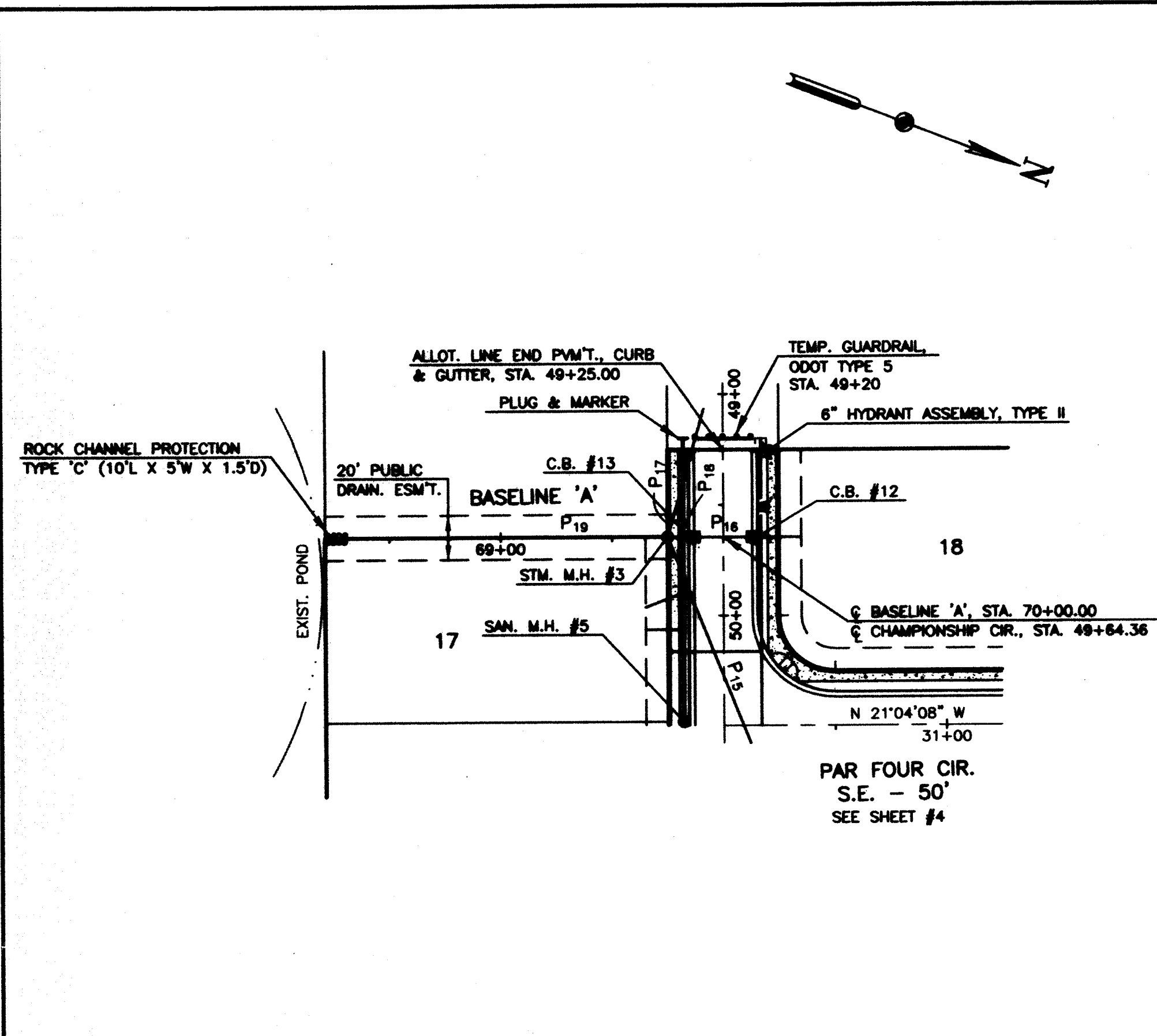
F.B. 459, PG. 1 REVISION BY: JDS DATE: 12/19/00 DESCRIPTION: PER C.O.W.C. COMMENTS

COPYRIGHT: 2000 DATE: 11/6/00 REVISION BY: JDS DATE: 11/30/00 DESCRIPTION: PER C.O.W.C. COMMENTS

SCALE: HORIZ: 1"=50' VERT: 1"=10'

PLAN & PROFILE
CHAMPIONSHIP CIR. - STA. 49+25.00 TO STA. 61+17.84
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STATE OF OHIO AND BEING OUTLOT 870

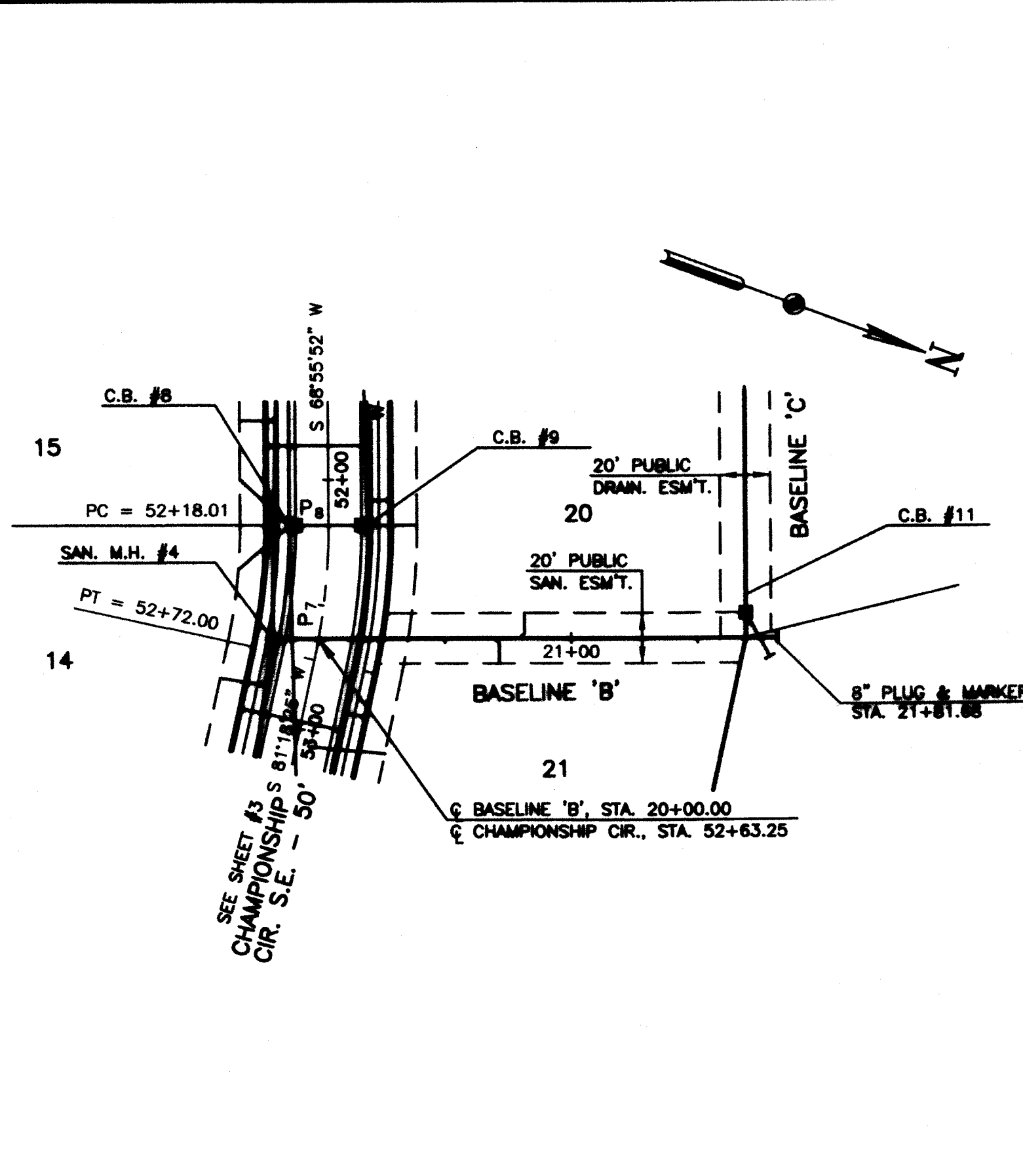
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BENCHMARK:
CHISLED "X" NORTH FLANGE BOLT, FIRE HYDRANT
SOUTH SIDE RICHVILLE DRIVE.
ELEV. = 1109.07

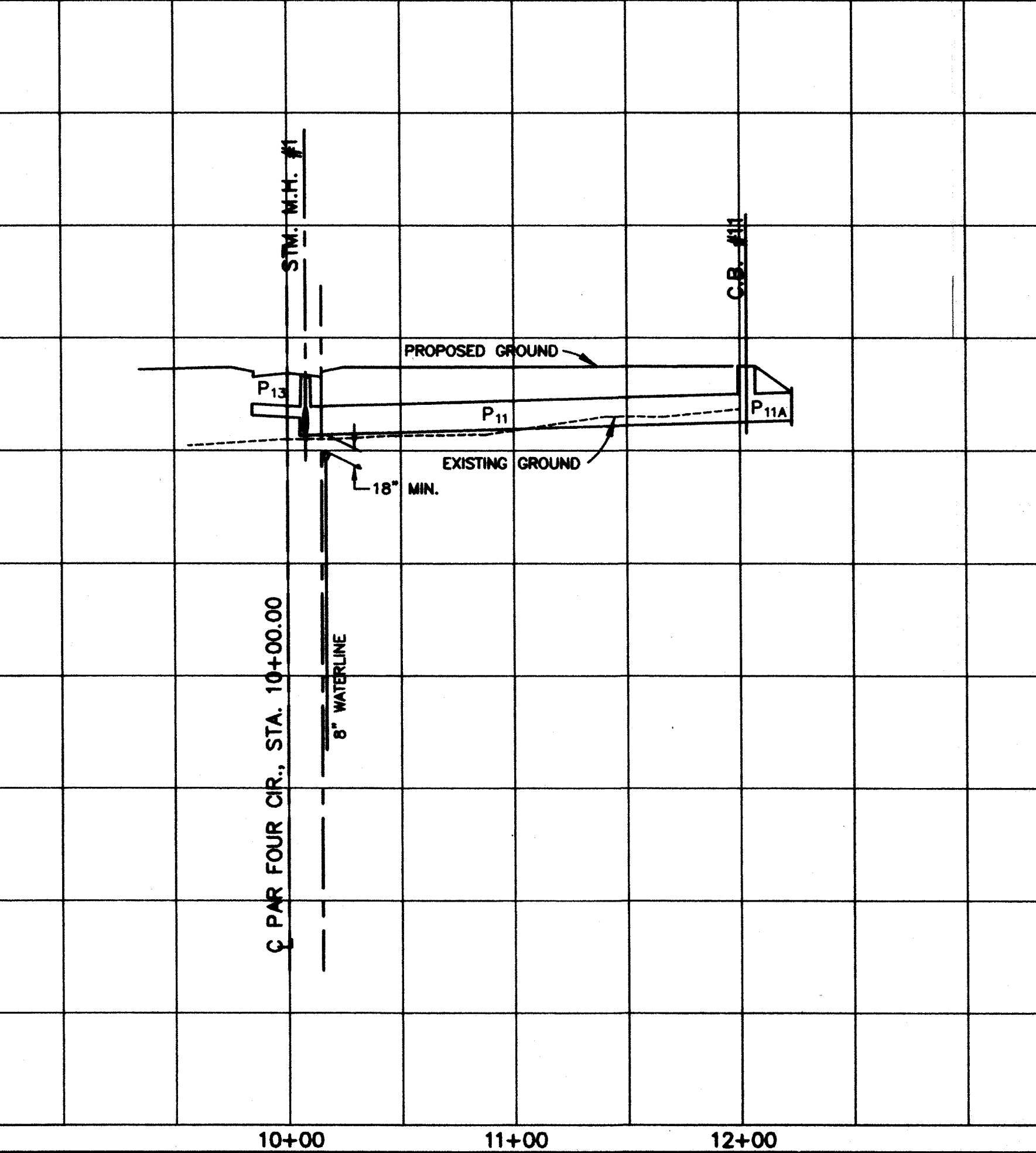
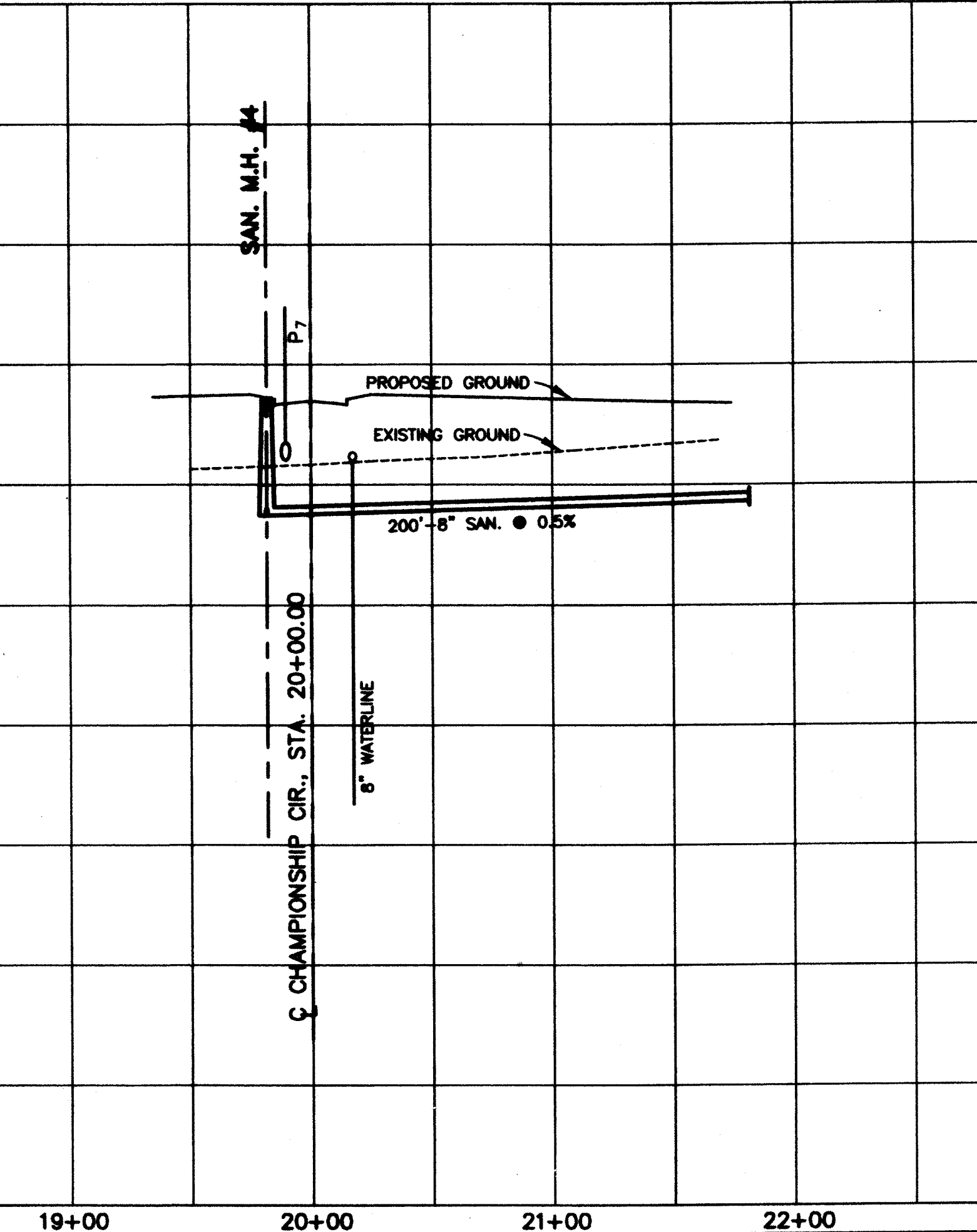
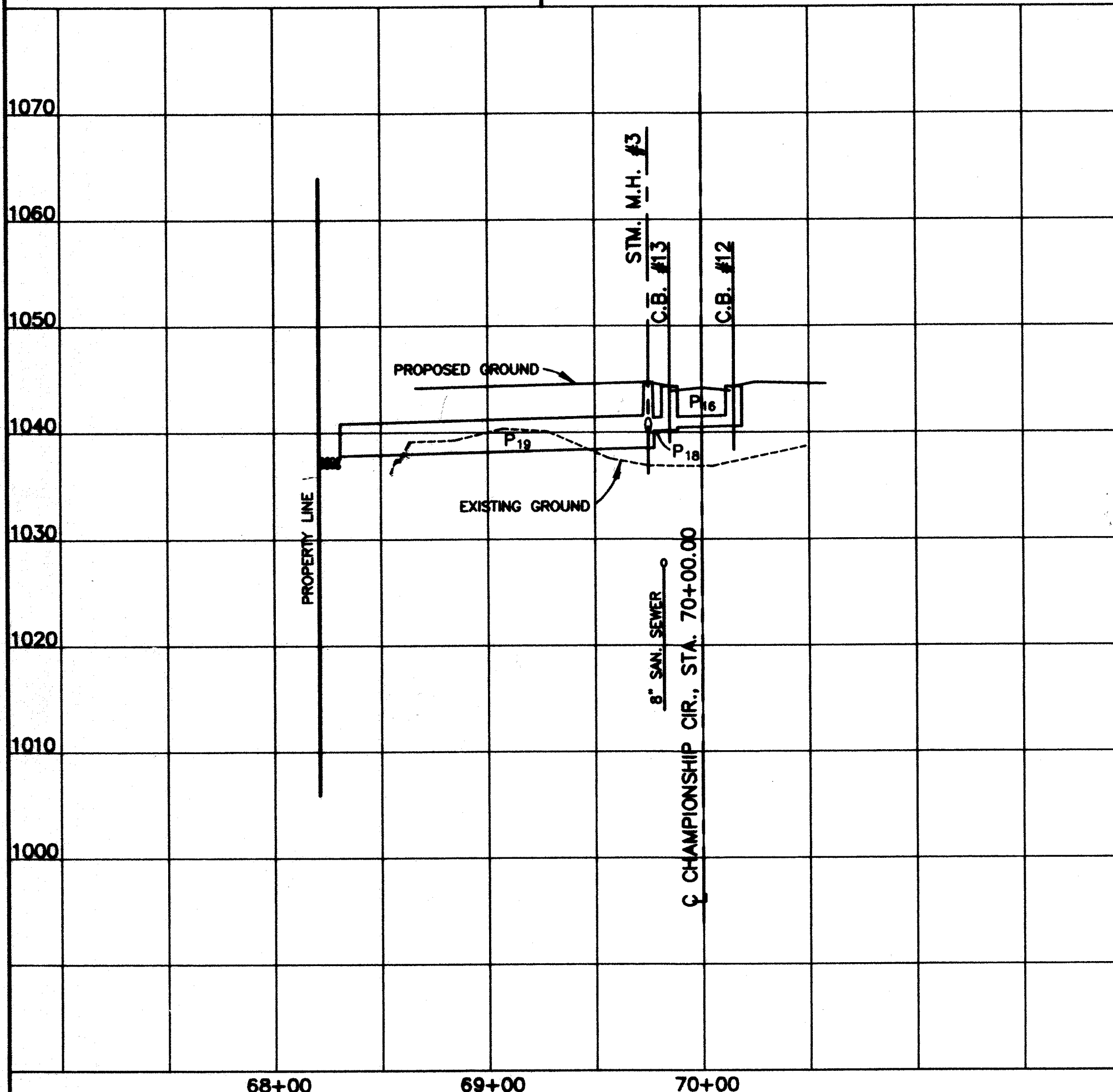
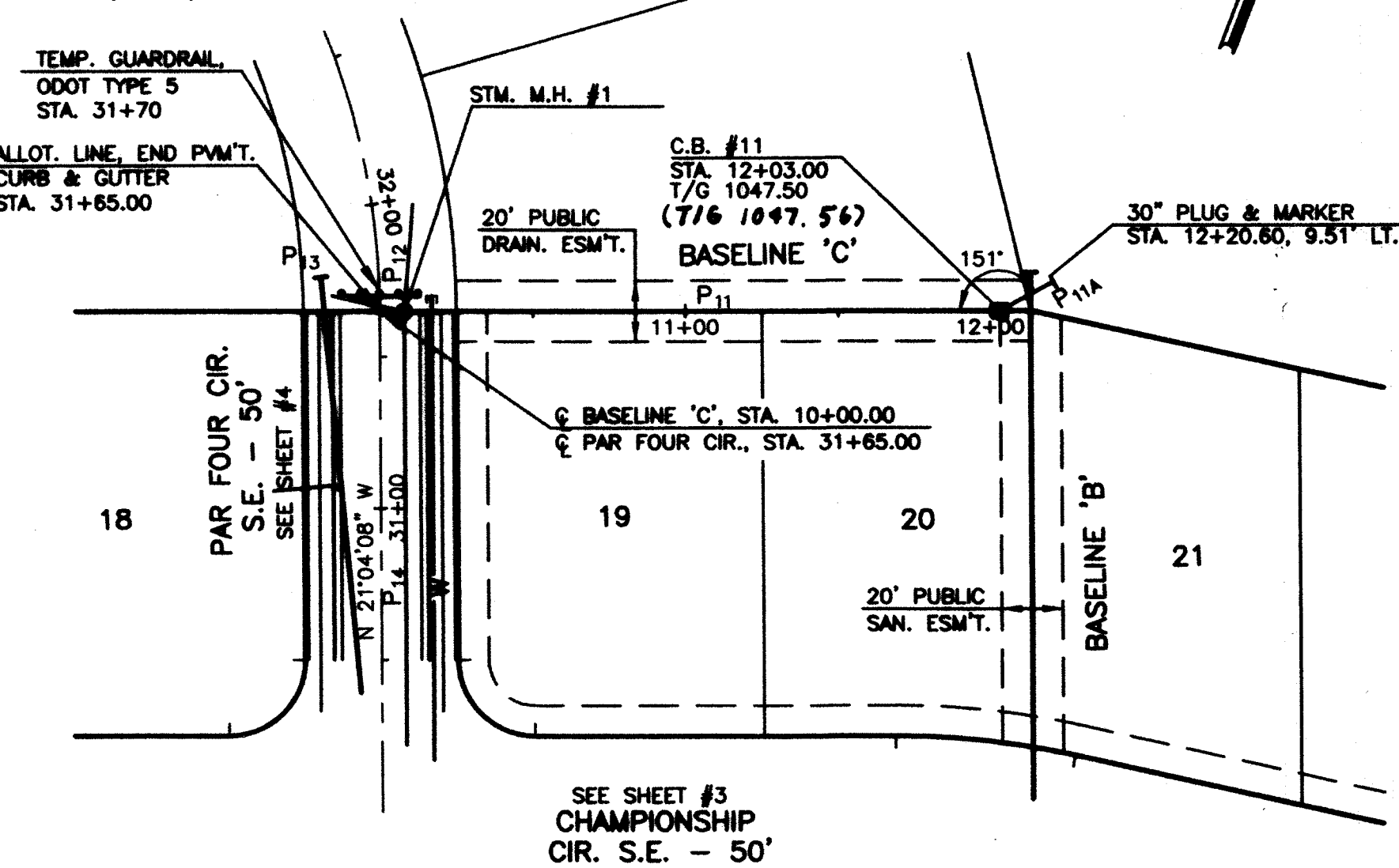
• DENOTES PROP. CURB BOX
T/C DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

NOTE:
ALL CATCH BASINS ARE STANDARD
UNLESS OTHERWISE NOTED.



PIPE CHART									
PIPE	SIZE	* TYPE	LENGTH	GRADE	AS-BUILTS		AS-BUILTS		
					E IN	E OUT	(LENGTH)	(E IN)	(E OUT)
P ₁₁	30"	B	188'	0.6%	1042.47	1041.35	188'	1042.47	1041.35
P _{11A}	30"	C	20'	0.6%	1042.59	1042.47	20'	1042.59	1042.47
P ₁₉	36"	C	154'	0.5%	1038.54	1037.77	154'	1038.54	1037.77

* USE CORRUGATED POLYETHYLENE SMOOTH LINED
PIPE (707.33) OR APPROVED EQUAL.



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DRAWN BY: LJP REVIEWED BY: JDS
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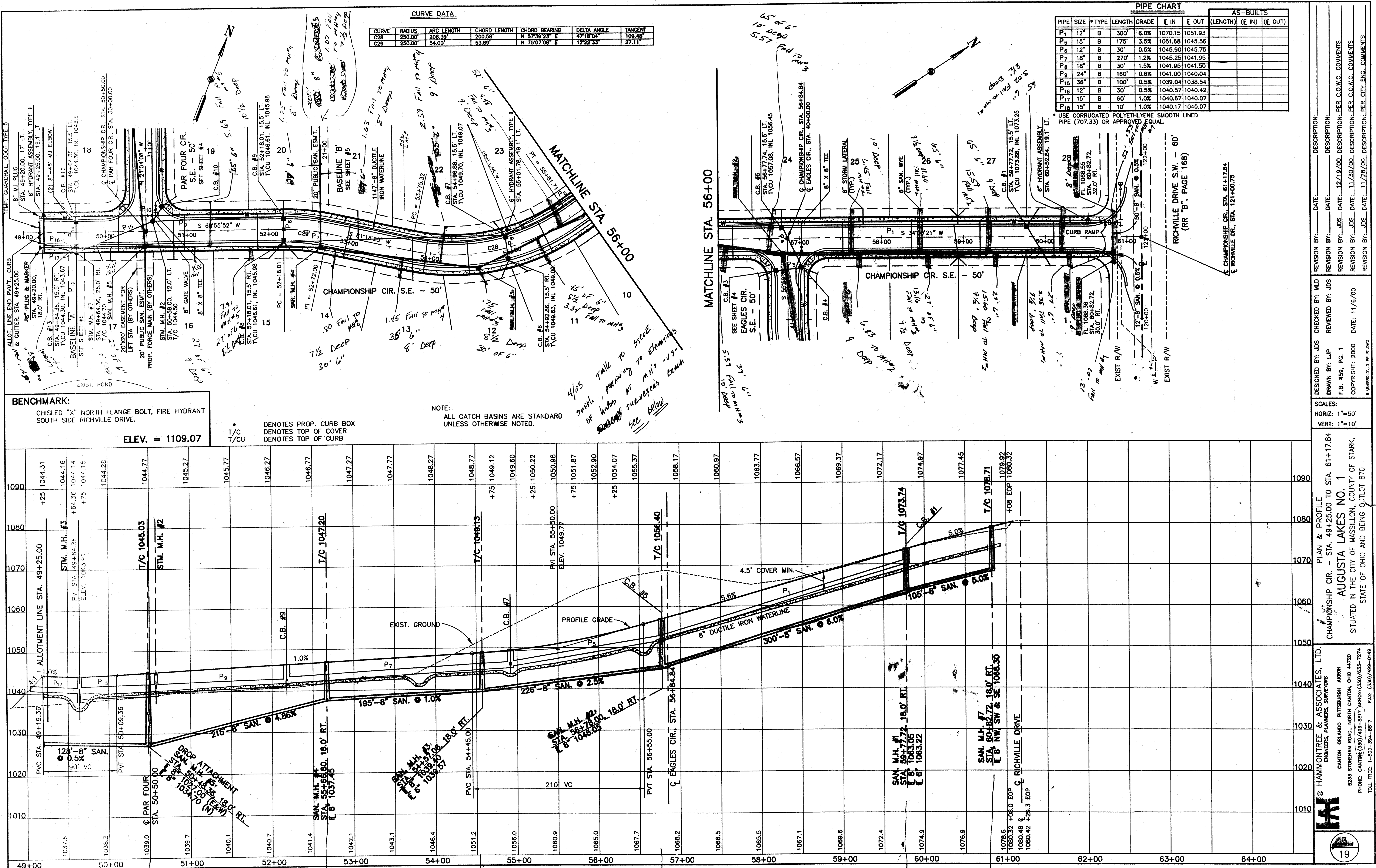
SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

PLAN & PROFILE
BASELINE 'A' - STA. 68+21.00 TO STA. 70+00.00
BASELINE 'B' - STA. 20+00.00 TO STA. 21+81.68
BASELINE 'C' - STA. 10+00.00 TO STA. 11+96.00

AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,
STATE OF OHIO AND BEING OUTLOT 870

© HAMMONTREE & ASSOCIATES, LTD.
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5
19



BENCHMARK:
CHISLED "X" NORTH FLANGE BOLT, FIRE HYDRANT
SOUTH SIDE RICHVILLE DRIVE.
ELEV. = 1109.07

NOTE:
ALL CATCH BASINS ARE STANDARD
UNLESS OTHERWISE NOTED.

• DENOTES PROP. CURB BOX
• T/C DENOTES TOP OF COVER
• T/CU DENOTES TOP OF CURB

PIPE CHART										AS-BUILTS		
PIPE	SIZE	* TYPE	LENGTH	GRADE	IN	OUT	IN	OUT	IN	(LENGTH)	(IN)	(OUT)
P1	12"	B	300'	6.0%	1070.15	1051.93						
P5	15"	B	175'	3.5%	1051.68	1045.56						
P6	12"	B	30'	0.5%	1045.90	1045.75						
P7	18"	B	270'	1.2%	1045.25	1041.95						
P8	18"	B	30'	1.5%	1041.96	1041.50						
P9	24"	B	160'	0.6%	1041.00	1040.04						
P15	36"	B	100'	0.5%	1039.04	1038.54						
P16	12"	B	30'	0.5%	1040.57	1040.42						
P17	15"	B	60'	1.0%	1040.67	1040.07						
P18	15"	B	10'	1.0%	1040.17	1040.07						

* USE CORRUGATED POLYETHYLENE SMOOTH LINED
PIPE (707.33) OR APPROVED EQUAL.

DESIGNED BY: JDS
CHECKED BY: MLD
DRAWN BY: LJP
F.B. #: 459, PG. 1
COPYRIGHT: 2000
DATE: 11/6/00

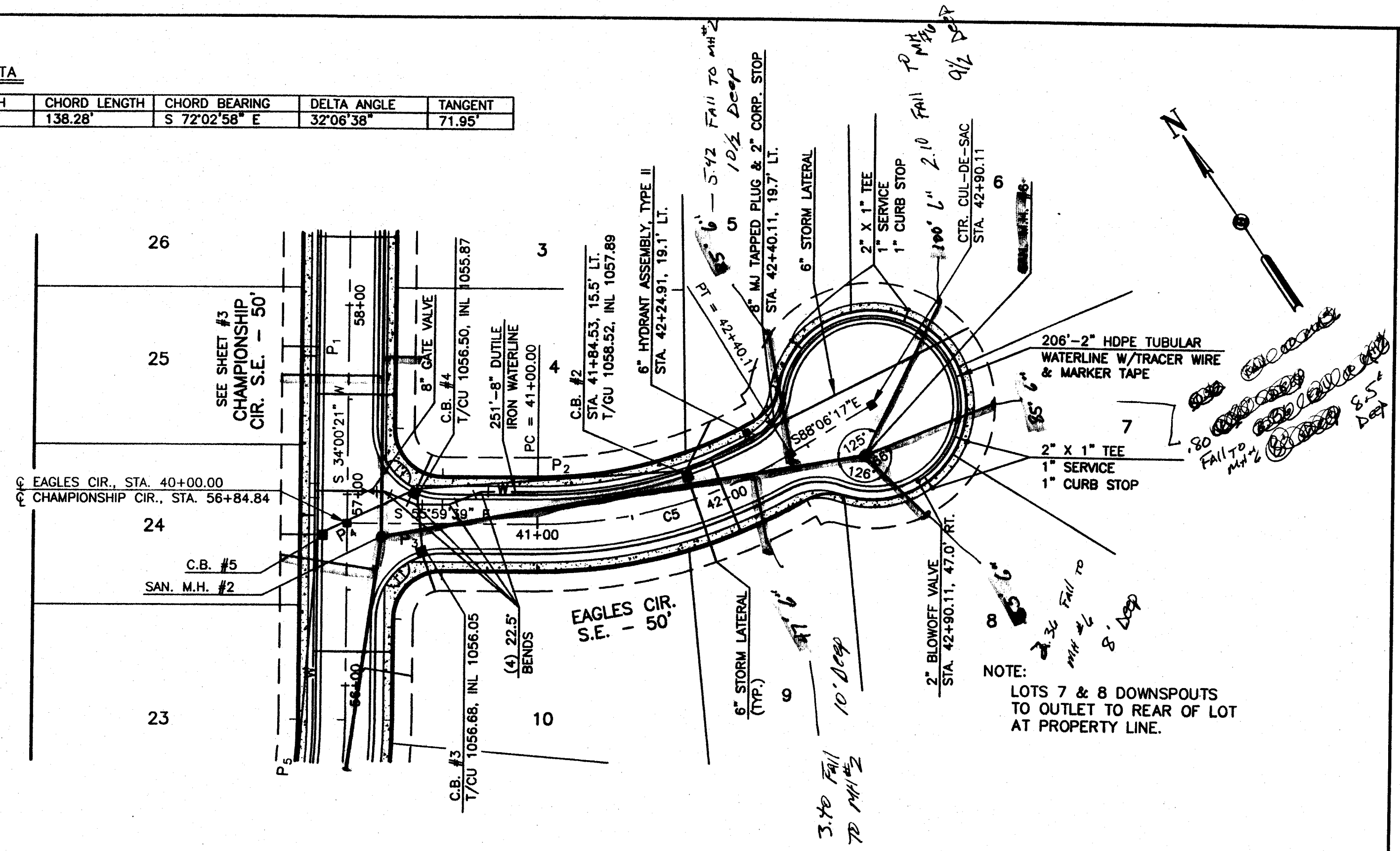
REVISION BY: JDS
REVISION BY: JDS
REVISION BY: JDS
REVISION BY: JDS

SCALE:
HORIZ. 1"=50'
VERT. 1"=10'

PLAN & PROFILE
CHAMPIONSHIP CIR. - STA. 49+25.00 TO STA. 61+17.84
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,
STATE OF OHIO AND BEING OUTLOT 870

© HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON OHIO 44702
5333 STONEHAM ROAD, NORTH CANTON, OHIO 44720
PHONE: CANTON (330) 499-8817 FAX: (330) 499-0149
TOLL FREE: 1-800-394-8817

CURVE DATA					
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C5	250.00'	140.11'	138.28'	S 72°02'58" E	32°06'38"
					71.95°



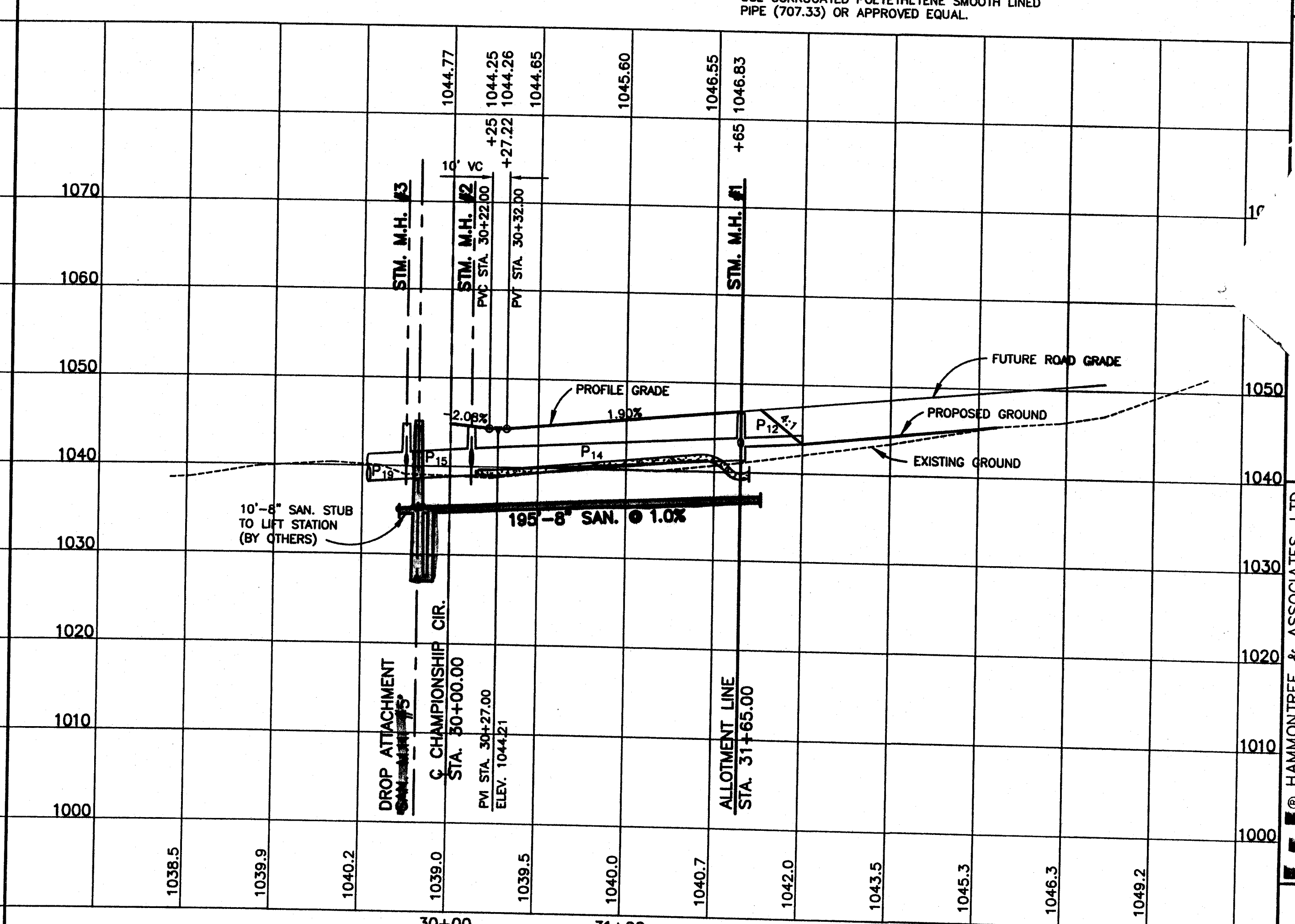
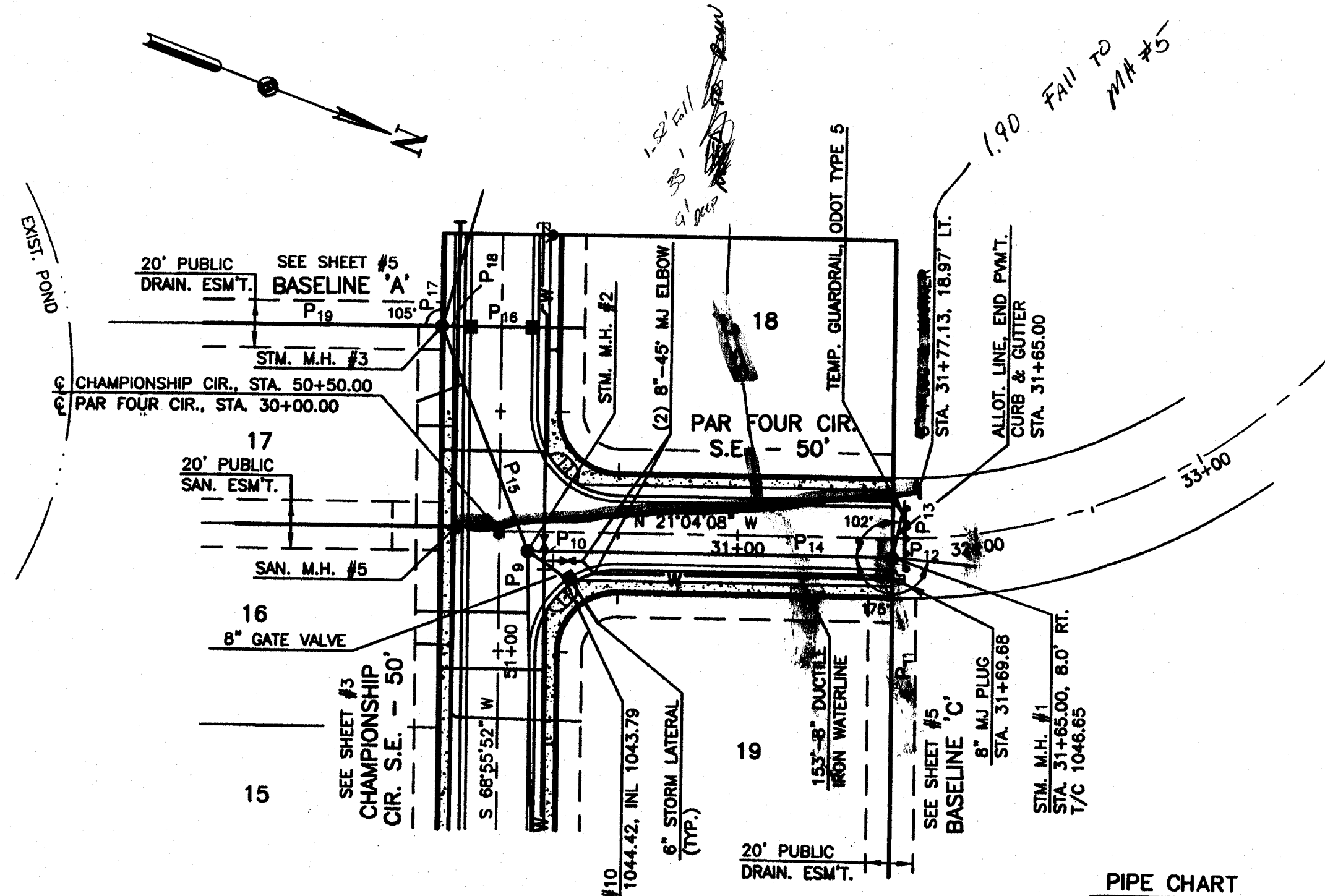
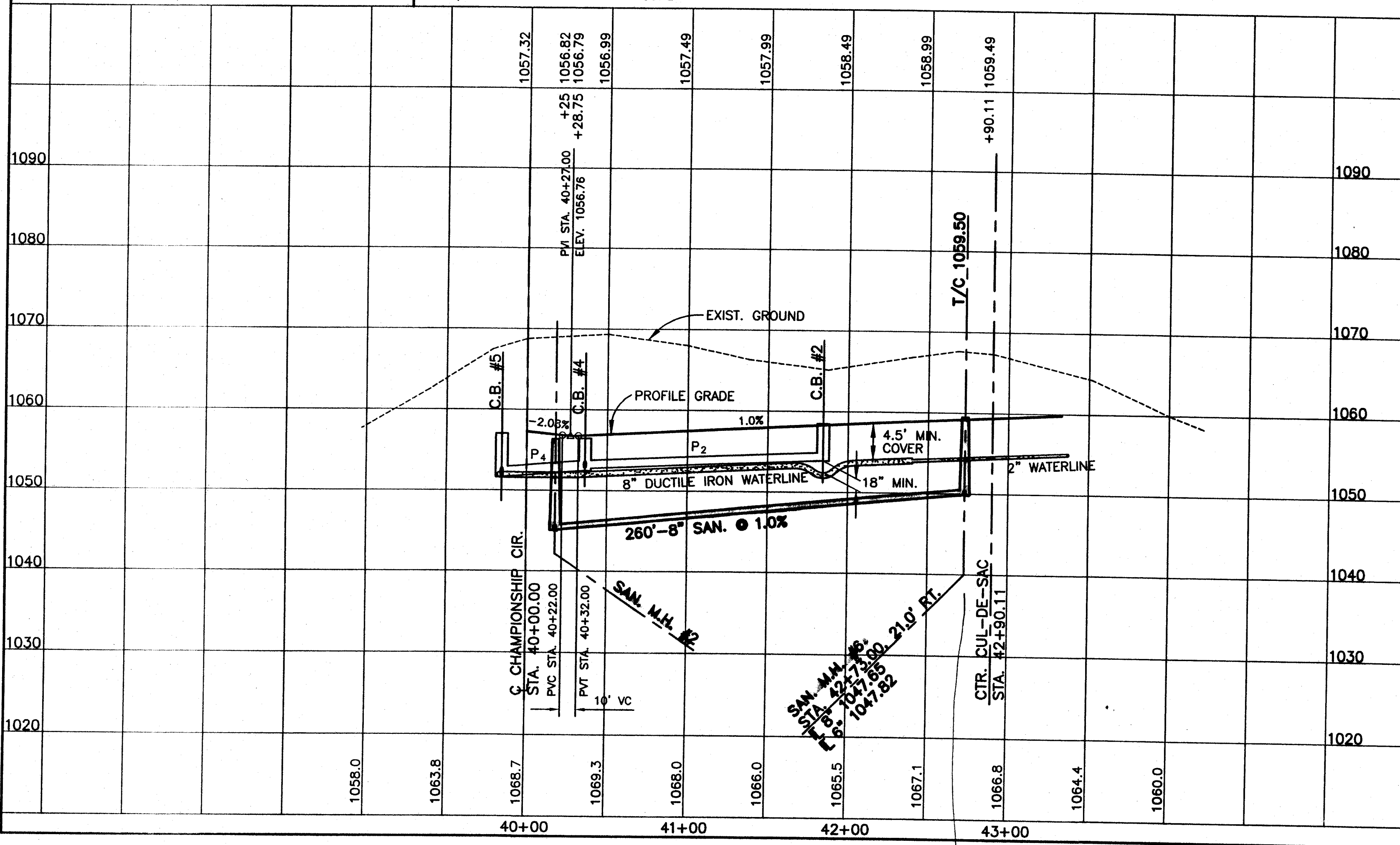
BENCHMARK:
CHISLED "X" NORTH FLANGE BOLT, FIRE HYDRANT
SOUTH SIDE RICHVILLE DRIVE.

ELEV. = 1109.07

DS
•
T/C
T/CU

DS DENOTES 6" DOWNSPOUT CONNECTOR
DENOTES PROP. CURB BOX
DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

NOTE:
ALL CATCH BASINS ARE STANDARD
UNLESS OTHERWISE NOTED.



PIPE CHART

PIPE	SIZE	*TYPE	LENGTH	GRADE	E IN	E OUT	AS-BUILTS		
							(LENGTH)	(E IN)	(E OUT)
P2	12"	B	145'	0.8%	1053.95	1052.77			
P3	12"	B	32'	0.5%	1052.93	1052.77			
P4	15"	B	56'	1.5%	1052.52	1051.68			
P10	12"	B	20'	0.5%	1040.69	1040.59			
P12	12"	B	35'	1.0%	STUB	1042.85			
P13	12"	B	22'	1.2%	1043.11	1042.85			
P14	30"	B	155'	1.8%	1041.35	1039.54			

* USE CORRUGATED POLYETHYLENE SMOOTH LINED
PIPE (707.33) OR APPROVED EQUAL.

DESIGNED BY: JDS

CHECKED BY: MLD

DATE: 11/28/00

REVISION BY: JDS

REVISION BY: JDS

DATE: 11/28/00

REVISION BY: JDS

REVISION BY: JDS

DATE: 11/28/00

REVISION BY: JDS

REVISION BY: JDS

DATE: 11/28/00

SCALE: 1"=50'

VERT: 1"=10'

STATION: 42+90.11

STATION: 31+65.00

STATION: 1

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ENGINEERS, PLANNERS, SURVEYORS

CANTON ORLANDO PITTSBURGH AKRON

5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720

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TOLL FREE: 1-800-384-8817 FAX: (330) 499-0746

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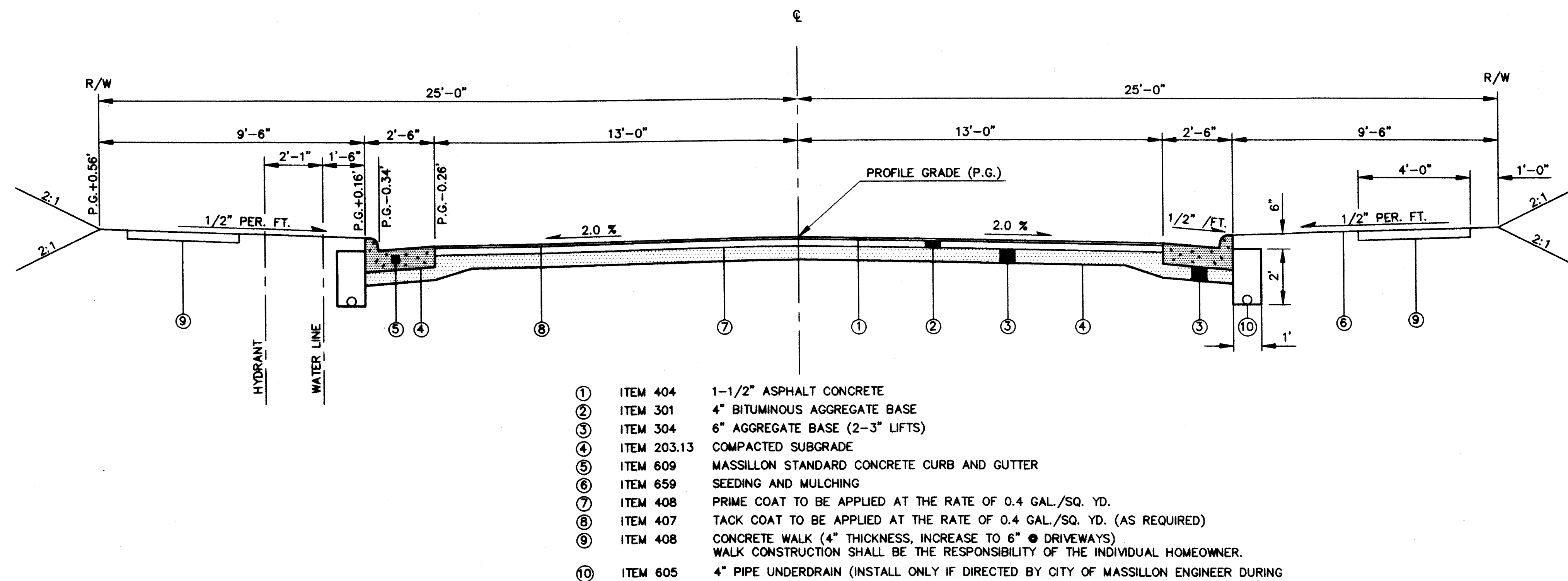


ITEM#	QUAN.	UNIT	DESCRIPTION
EARTHWORK & ROADS			
201	LUMP	SUM	CLEARING AND GRUBBING
203	11,705	CU. YD.	EXCAVATION INCLUDING EMBANKMENT CONST. (ROADS ONLY) ①
203	9,062	SQ. YD.	SUBGRADE COMPACTION
301	869	CU. YD.	4" BITUMINOUS AGGREGATE BASE
304	1,304	CU. YD.	6" AGGREGATE BASE
404	326	CU. YD.	1-1/2" ASPHALT CONCRETE
407	AS REQ'D	GAL.	TACK COAT (0.4 GAL./SQ. YD.)
408	3,129	GAL.	PRIME COAT (0.4 GAL./SQ. YD.)
604	8	EACH	STANDARD MONUMENT
604	8	EACH	MONUMENT BOX ASSEMBLY
605	AS REQ'D	LIN. FT.	4" PIPE UNDERDRAIN (2,673 LIN. FT., MAX. AMOUNT THAT WOULD BE REQUIRED)
606	62.5	LIN. FT.	GUARDRAIL, TYPE 5
608	2,062	SQ. YD.	CONCRETE WALK (BY HOMEOWNER)
608	6	EACH	CURB RAMP, TYPE 1 (BY HOMEOWNER)
609	4,461	LIN. FT.	MASSILLON STANDARD CONCRETE CURB AND GUTTER
651	5,453	CU. YD.	TOPSOIL STOCKPILED
659	2,545	SQ. YD.	SEEDING AND MULCHING
SANITARY			
603	2,134	LIN. FT.	8" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	30	EACH	6" ON 8" WYE W/6" 45° BEND, ASTM D-3034
603	1,878	LIN. FT.	6" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	2	EACH	8" PLUG & MARKER
603	6	EACH	6" SERVICE STACK (28 VERT. FT.)
604	11	EACH	SANITARY SEWER MANHOLE, MASSILLON STANDARD (133 VERT. FT.)
604	1	EACH	DROP ATTACHMENT (5 VERT. FT.)
DRAINAGE			
602	0.74	CU. YD.	CONCRETE MASONRY (2 EA. HW-4B HEADWALL)
603	1,282	LIN. FT.	8" TYPE "E" CONDUIT (707.45) (STORM LATERAL)
603	379	LIN. FT.	8" TYPE "E" CONDUIT (707.45) (DOWNSPOUT CONN.)
603	136	LIN. FT.	12" TYPE "B" CONDUIT (707.33)
603	486	LIN. FT.	15" TYPE "B" CONDUIT (707.33)
603	639	LIN. FT.	18" TYPE "B" CONDUIT (707.33)
603	951	LIN. FT.	24" TYPE "B" CONDUIT (707.33)
603	409	LIN. FT.	24" TYPE "C" CONDUIT (707.33)
603	1	EACH	6" ON 8" WYE
604	16	EACH	STANDARD CATCH BASIN, MASSILLON STD. TYPE "A"
604	1	EACH	CATCH BASIN, ODOT 2-2-A
604	2	EACH	CATCH BASIN, ODOT 2-3
604	2	EACH	8" CLEANOUT
603	200	LIN. FT.	12" TYPE "C" CONDUIT (707.33)-OPTIONAL SEE SHEET 17
604	1	EACH	CATCH BASIN, ODOT 2-2-A-OPTIONAL SEE SHEET 17
WATERLINE			
638	1,764	LIN. FT.	8" DUCTILE IRON WATERLINE PRESSURE CLASS 350 W/POLYWRAP, JOINTS & FITTINGS
638	166	LIN. FT.	4" DUCTILE IRON WATERLINE PRESSURE CLASS 350 W/POLYWRAP, JOINTS & FITTINGS
638	66.3	LIN. FT.	2" HDPE TUBULAR WATERLINE W/TRACER WIRE & MARKER TAPE, JOINTS & FITTINGS
638	4	EACH	8" MJ TAPPED PLUG
638	1	EACH	4" MJ TAPPED PLUG
638	5	EACH	8" GATE VALVE
638	1	EACH	4" GATE VALVE
638	6	EACH	2" CURB STOP
638	2	EACH	8" X 8" MJ TEE
638	1	EACH	8" X 4" MJ TEE
638	12	EACH	2" X 1" TEE
638	5	EACH	2" BLOW-OFF VALVE
638	892	LIN. FT.	1" SERVICE CONNECTION (BY OTHERS) Δ
638	46	EACH	1" CURB STOP (BY OTHERS) Δ
638	34	EACH	1" CORPORATION STOP (BY OTHERS) Δ
638	3	EACH	6" FIRE HYDRANT ASS'Y. COMPLETE, TYPE III
EROSION/SEDIMENT CONTROL			
207 $\odot$	AS REQ'D	SQ. YD.	TEMPORARY SEEDING & MULCHING
207	AS REQ'D	SQ. YD.	PERMANENT SEEDING & MULCHING
207	1,695	LIN. FT.	FILTER FABRIC FENCE
207	5	EACH	INLET PROTECTION
207	18	EACH	CURB INLET PROTECTION
207	2	EACH	CONSTRUCTION ENTRANCE

① EARTHWORK SUMMARY (ROADS ONLY)
EXCAVATION = 11,705 CU. YD.
EMBANKMENT +15% = 11,061 CU. YD.
EXCESS = 644 CU. YD. (USE TO FILL LOTS)
ASSUME 1' OF TOPSOIL REMOVED & STOCKPILED

3 SERVICE CONNECTION TO INCLUDE CORPORATION STOP, 1" TYPE "K" COPPER TUBING • REQUIRED LENGTH, SERVICE BOX & CURB STOP.

SCALE: 3/8"=1'



CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES

2. ALL SUBGRADE COMPACTION AND ALL 304 AGGREGATE BASE SHALL BE INSPECTED AND APPROVED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO PLACEMENT OF ANY 304 AGGREGATE BASE OR 301 BITUMINOUS AGGREGATE BASE.
3. ALL TRENCHES BENEATH THE PROPOSED PAVEMENT OR EXISTING PAVEMENT SHALL BE COMPACTED IN LIFTS, IN A MANNER, AND WITH MATERIAL SPECIFIED BY THE MASSILLON ENGINEERING DEPARTMENT OR ANY APPLICABLE, O.D.O.T. SPECIFICATIONS.

PRIOR TO THE COMMENCEMENT OF ANY PROJECT, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE CITY ENGINEER'S OFFICE. AT THIS TIME, THE PROJECT WILL BE DISCUSSED IN REGARD TO PROCEDURE, MATERIALS, INSPECTION, ETC...

1. MINIMUM COVER OVER 8" WATER LINE = 4'.
2. MAINTAIN MINIMUM 4' HORIZONTAL SEPARATION BETWEEN WATER AND STORM SEWER LINES.
3. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.
4. WATER MAIN MATERIALS SHALL CONFORM TO AWWA C151 FOR DUCTILE IRON PIPE AND AWWA C900 FOR PVC PIPE.
5. WATER MAIN PRESSURE TESTING SHALL CONFORM TO AWWA C600.
6. WATER MAIN DISINFECTION SHALL CONFORM TO AWWA C651.
7. THE PROPOSED FACILITIES WILL MAINTAIN A MINIMUM 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
8. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS. THE WATER SYSTEM MAY GRANT SPECIAL PERMISSION FOR BUILDINGS SIX STORIES OR HIGHER.
9. CONTRACTOR TO USE CONSUMERS OHIO WATER COMPANY DETAILS AND SPECIFICATIONS.
10. CONTRACTOR TO INSTALL SERVICE CONNECTIONS ALONG THE 2" MAIN LINE. SERVICE CONNECTIONS ALONG THE 8" MAIN WATER LINE TO BE INSTALLED BY OTHERS.

1. ALL STORM SEWER WITHIN THE ROAD RIGHT-OF-WAY MAY BE EITHER REINFORCED CONCRETE PIPE (706.02) OR CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33).
2. STORM SEWER BENEATH CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "B" CONDUIT.
3. STORM SEWER OUTSIDE OF CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "C" CONDUIT.
4. CURB INLET CATCH BASINS ARE TO BE CITY OF MASSILLON, TYPE "A". REFER TO CITY OF MASSILLON STANDARD DRAWINGS FOR MANHOLE & CATCH BASIN DETAILS (SEE SHEET 19).
5. A 6" STORM LATERAL SHALL BE INSTALLED TO SERVE EACH LOT HAVING STORM SEWER AVAILABLE WITHIN THE ROAD RIGHT-OF-WAY OR ON A SIDE LOT LINE. LATERALS SHALL BE CORE DRILLED INTO THE SIDE OF THE MAIN STORM PIPE OR STORM MANHOLE AND EXTEND TO THE RIGHT-OF-WAY OR BEYOND FURTHEST UTILITY. PLUG THE END OF THE LATERAL AND PROVIDE A LOCATION MARKER.

1. ALL SANITARY SEWERS & APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS IN EFFECT AT TIME OF CONSTRUCTION.
2. ALL SANITARY SEWER LATERALS TO BE 6" DIAMETER.
3. ROOF DRAINS, FOUNDATION DRAINS & OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
4. MINIMUM COVER OVER SANITARY SEWER SHALL BE 3 FT.
5. SANITARY LATERALS SHALL EXTEND TO THE RIGHT-OF-WAY LINE OR BEYOND THE FURTHEST UTILITY - WHICHEVER IS GREATER. THE END OF THE SERVICE LATERAL SHALL BE PLUGGED AND A LOCATION MARKER PROVIDED. 1
6. NO CHANGES TO SANITARY SERVICE LOCATIONS SHALL BE MADE WITHOUT THE APPROVAL OF THE CITY ENGINEER.
7. PVC GRAVITY SEWER PIPE SHALL CONFORM TO ASTM D-3034 AS AN ALTERNATE TO PVC GRAVITY SEWER, SHOWN IN QUANTITIES VTRIFIED CLAY PIPE SEWER, EXTRA STRENGTH, ASTM C-700 MAY BE USED.
8. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & WATERLINE IS 18 INCHES. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & STORM SEWER IS 12 INCHES.
9. JOINT SPECIFICATIONS SHALL MEET ASTM-3212
10. MANHOLE SPECIFICATIONS SHALL MEET ASTM C-478 AND C-443
11. BEDDING SPECIFICATIONS SHALL MEET ASTM D-2321, CLASS II
12. LEAKAGE TEST LIMITS: 100 GAL./INCH OF DIA./MILE/DAY MAXIMUM
13. ALL MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH ASTM C-1244.
14. PIPE DEFLECTION TESTS SHALL BE PERFORMED ACCORDING TO QUMBRB SECTION 33.85 AND THE ASTM SPECIFICATION FOR THE PIPE BEING TESTED. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED 5%.
15. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.

O.D.O.T. STANDARD DRAWING LIST		
DRAWING NO.	DATE	
BP-7.1	10-30-92	CURB RAMPS
MC-1	6-13-69	ROADWAY ITEMS
HW-4B	4-1-80	HEADWALLS
CB 2-2-A	5-1-79	CATCH BASIN
CB 2-3	5-1-79	CATCH BASIN

* USE CORRUGATED POLYETHYLENE SAE PIPE (707.33) OR APPROVED EQUAL

ELEV. = 1081.11



PLAN & PROFILE
CHAMPIONSHIP CIR. - STA. 39+59.60 TO STA. 49+25
AUGUSTA LAKES NO. 2
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,
STATE OF OHIO AND BEING OUTLOT 870

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS

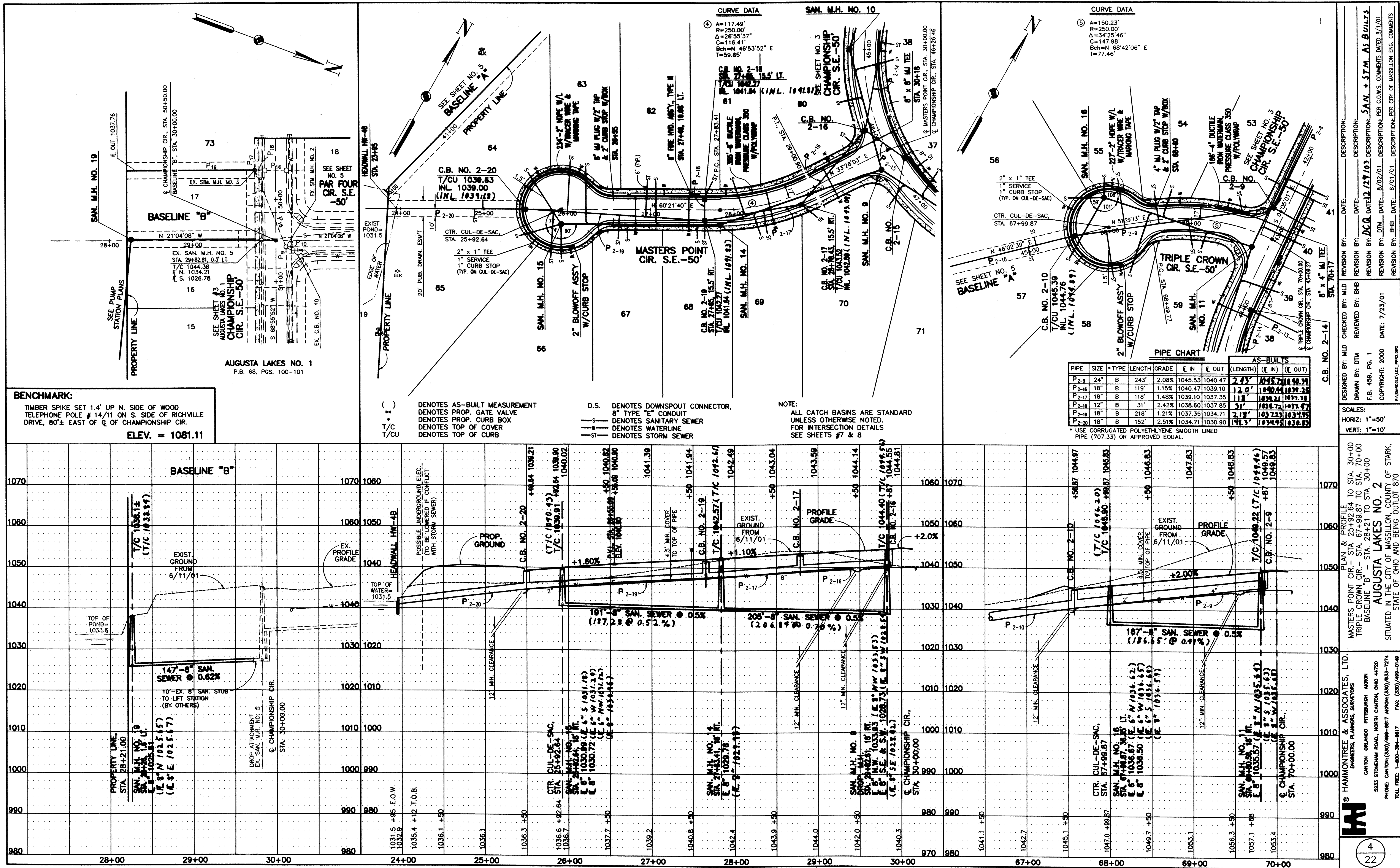
CANTON ORLANDO PITTSBURGH AKRON

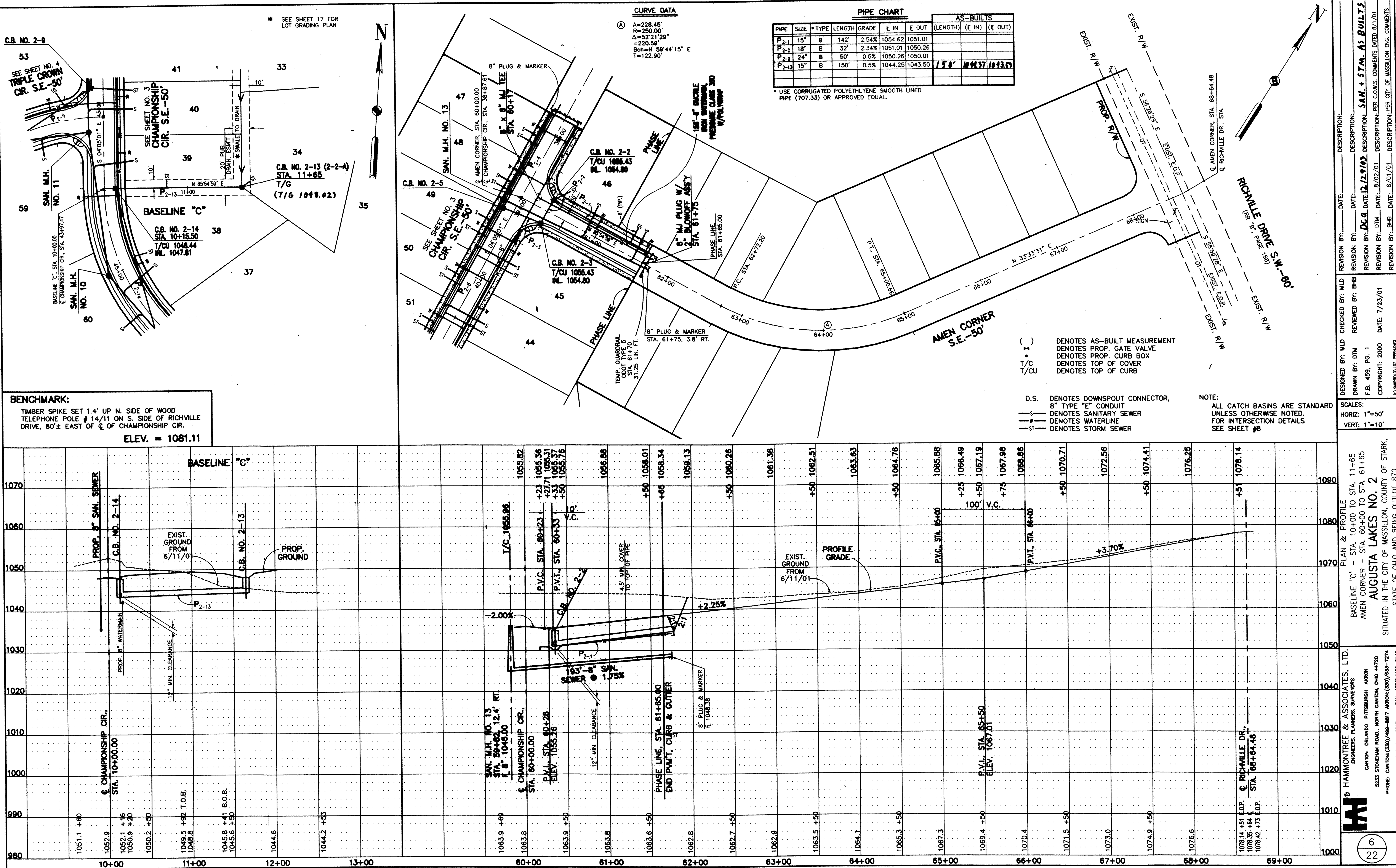
5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720

PHONE: CANTON: (330)/498-8817 AKRON: (330)/633-7274

3
22

9/21





ADVANCE SEWER SYSTEMS, INC.

4141 SOUTHWAY ST. S.W.

CANTON, OHIO 44706

OFFICE - (330) 477-8087

Phase 1

PROJECT NAME: AUGUSTA LAKES - CITY OF MASSILLON

COUNTY: Stark

CONT. NAME: Oakes Land & Excavating

DATE: June 11, 2001

PIPE SIZE: 8" Sanitary

MANHOLE #
5 to 4
STREET NAME
Championship Cir.

WYE # 1- 57'R

2- 78'T

3-127'R

Total 214 Ft.

MANHOLE #
4 to 3
STREET NAME
Championship Cir.

WYE # 1- 20'R

2- 97'R

3-146'L

Total 195 Ft.

PROBLEM:

PROBLEM:

MANHOLE #
7 to 1
STREET NAME
Championship Cir.

WYE # 1- 51'L

2- 61'R

total 105 Ft.

MANHOLE #
1 to 2
STREET NAME
Championship Cir.

WYE # 1- 47'L

2- 58'R

3-117'L

4-126'R

5-203'L

6-214'R

Total 303 Ft.

PROBLEM:

PROBLEM:

ADVANCE SEWER SYSTEMS, INC.

4141 SOUTHWAY ST. S.W.
 CANTON, OHIO 44706
 OFFICE - (330) 477-8087

PROJECT NAME: AUGUSTA LAKES - CITY OF MASSILLON

COUNTY: _____

CONT. NAME: _____

DATE: _____

PIPE SIZE: 8" Sanitary

MANHOLE #
2 to 6

STREET NAME
Eagle Cir.

MANHOLE #
2 to 3

STREET NAME
Championship Cir.

WYE # 1-194'R

WYE # 1- 10'R

2-214'L

2- 60'L

Total 261 Ft.

3-110'R

4-142'L

Total 226 Ft.

PROBLEM: _____

PROBLEM: _____

MANHOLE #

STREET NAME

MANHOLE #

STREET NAME

WYE #

WYE #

PROBLEM: _____

PROBLEM: _____

ADVANCE SEWER SYSTEMS, INC.

4141 SOUTHWAY ST. S.W.

CANTON, OHIO 44706

OFFICE - (330) 477-8087

Phase 2

PROJECT NAME: AUGUSTA LAKES (City of Massillon)

COUNTY: Stark

CONT. NAME: Oakes Land & Excavating

DATE: 7/03/02

PIPE SIZE: 8" Sanitary

MANHOLE #

5 to 17

STREET NAME

Par Four Cir.

WYE # 1-129'L

2-200'R

Total 233 Ft.

MANHOLE #

17 to 18

STREET NAME

Par Four Cir.

WYE # 1- 50'R

2-125'L

3-136'R

Total 149 Ft.

PROBLEM:

PROBLEM:

MANHOLE #

11 to 10

STREET NAME

Championship Cir.

WYE # 1- 40'L

Total 180 Ft.

MANHOLE #

14 to 15

STREET NAME

Masters Point Cir.

WYE # 1- 27'L

2- 77'R

3-107'L

4-145'R

Total 188 Ft.

PROBLEM:

PROBLEM:

ADVANCE SEWER SYSTEMS, INC.

4141 SOUTHWAY ST. S.W.

CANTON, OHIO 44706

OFFICE - (330) 477-8087

PROJECT NAME: AUGUSTA LAKES

COUNTY:

CONT. NAME:

DATE:

PIPE SIZE: 8" Sanitary

MANHOLE #

STREET NAME

11 to 12

Championship Cir.

WYE # 1- 26'R

2- 80'L

3- 88'R

4-146'R

5-194'L

Total 224 Ft.

PROBLEM:

MANHOLE #

STREET NAME

11 to 16

Triple Crown Cir.

WYE # 1- 50'L

2-107'R

3-125'L

Total 189 Ft.

PROBLEM:

MANHOLE #

STREET NAME

9 to 14

Master Point Cir.

WYE # 1-157'L

2-166'R

Total 204 Ft.

PROBLEM:

MANHOLE #

STREET NAME

9 to 10

Championship Cir.

WYE # 1- 88'L

2-123'R

Total 154 Ft.

PROBLEM:

ADVANCE SEWER SYSTEMS, INC.

4141 SOUTHWAY ST. S.W.
CANTON, OHIO 44706
OFFICE - (330) 477-8087

PROJECT NAME: AUGUSTA LAKES

COUNTY:

CONT. NAME:

DATE:

PIPE SIZE: 8" Sanitary

MANHOLE # STREET NAME
9 to 8 Championship Cir.

MANHOLE # STREET NAME
8 to 5 Championship Cir.

WYE # 1- 26'T

WYE # 1- 5'T

2- 58'T

2- 43'T

3-129'T

3-141'T

4-220'T

Total 231 Ft.

Total 185 Ft.

PROBLEM:

PROBLEM:

MANHOLE # STREET NAME

MANHOLE # STREET NAME

WYE #

WYE #

PROBLEM:

PROBLEM:

ADVANCE SEWER SYSTEMS, INC.

4141 SOUTHWAY ST. S.W.

CANTON, OHIO 44706

OFFICE - (330) 477-8087

PROJECT NAME: AUGUSTA LAKES (City of Massillon)

COUNTY: Stark

CONT. NAME: Bitzel Excavating

DATE: April 25, 2002

PIPE SIZE: 8" Sanitary

MANHOLE #
1 to EX

STREET NAME

WYE #

Total 148 Ft.

PROBLEM:

MANHOLE #

STREET NAME

WYE #

PROBLEM:

MANHOLE #
1 to Lift Station

STREET NAME

WYE #

Total 206 Ft.

PROBLEM:

MANHOLE #

STREET NAME

WYE #

PROBLEM: