

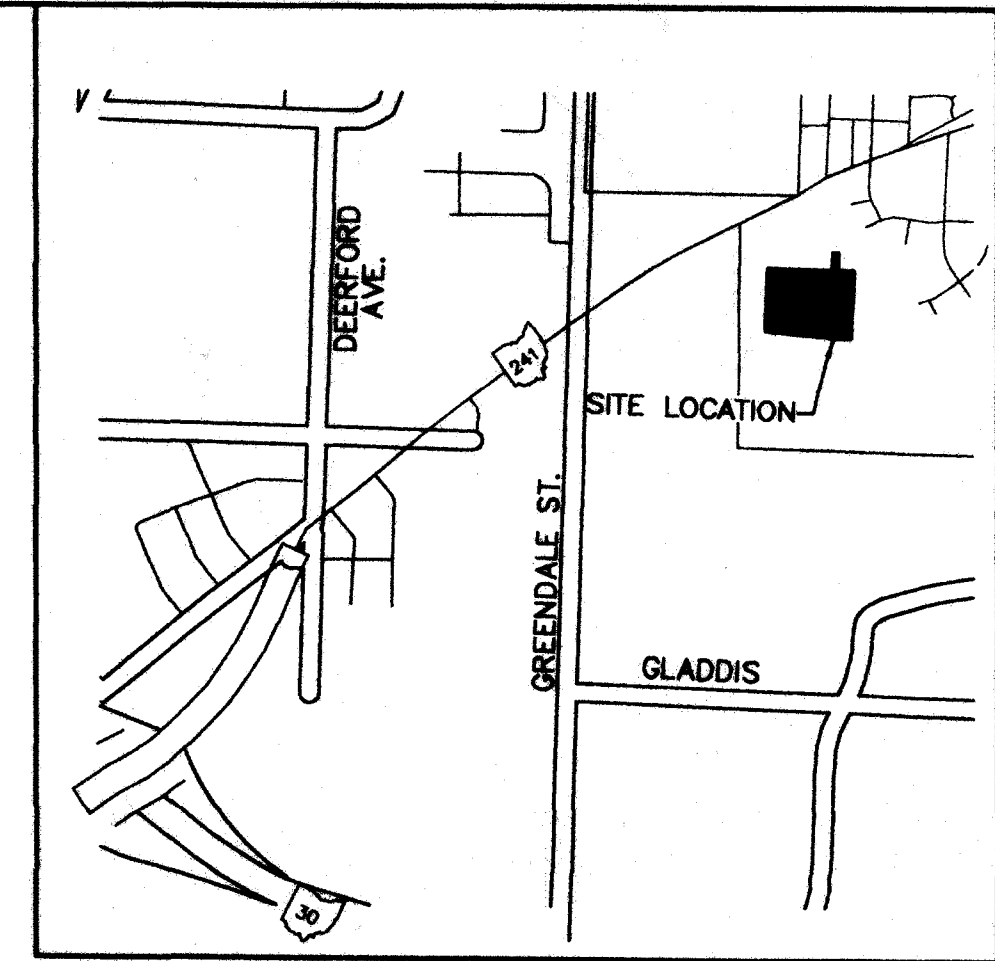
COUNTRY VIEW ESTATES NO. 5

LOCATED IN THE CITY OF MASSILLON,
COUNTY OF STARK, STATE OF OHIO
AND BEING PART OF OUTLOT 602

FEBRUARY, 2001

20 LOTS

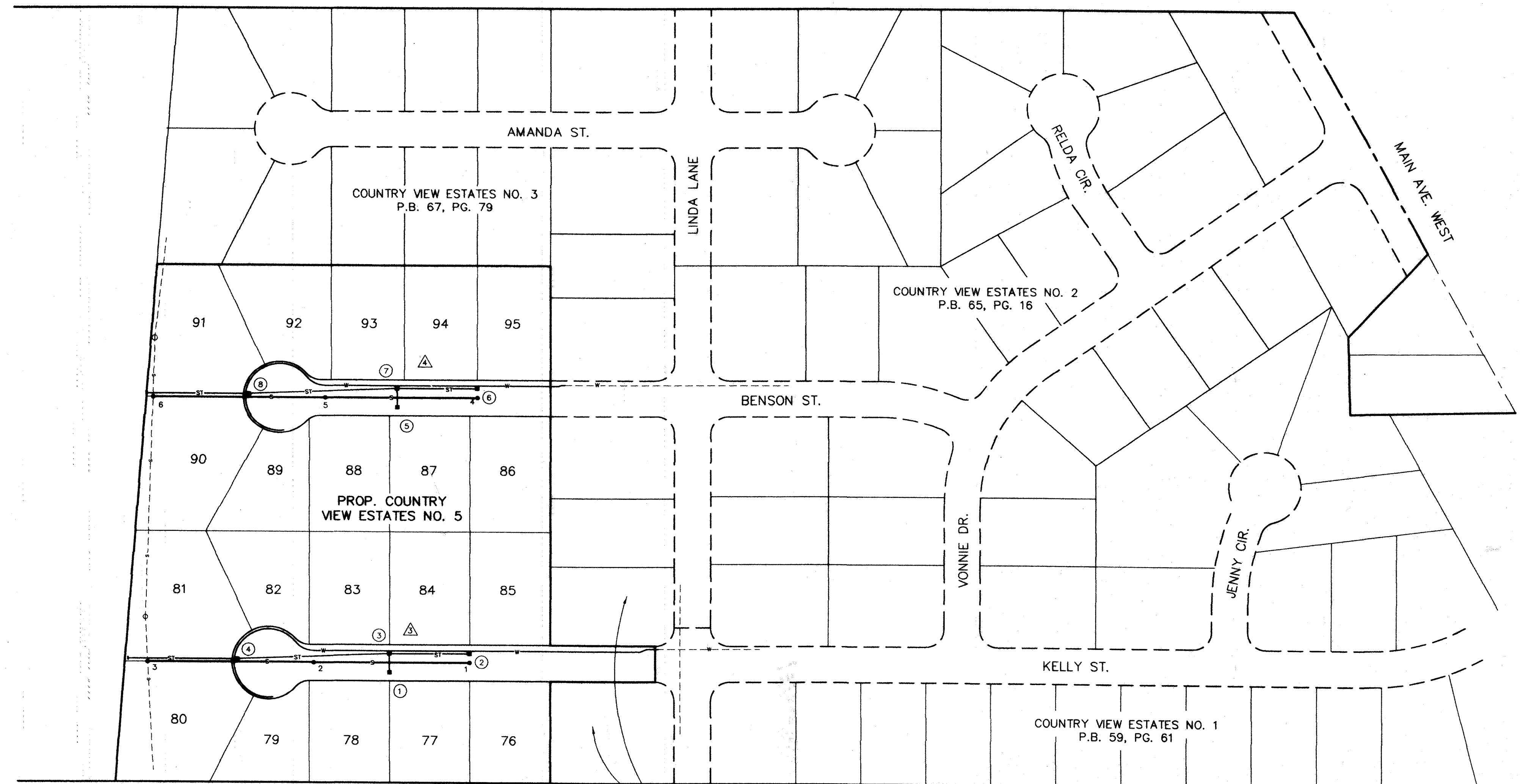
PREPARED BY:
HAMMONTREE & ASSOCIATES, LTD
ENGINEERS, PLANNERS & SURVEYORS
NORTH CANTON, OHIO



VICINITY MAP
NOT TO SCALE

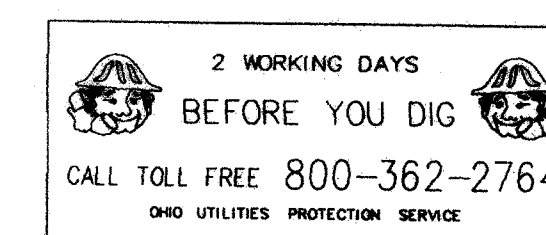
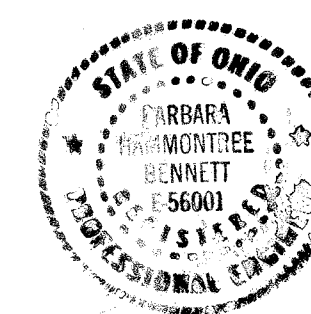
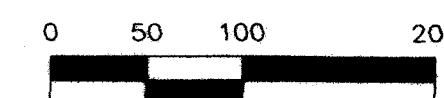
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LEGEND

- 1 DENOTES SANITARY SEWER MANHOLE NO.
- △ DENOTES SHEET NO.
- ③ DENOTES CATCH BASIN NO.
- S DENOTES SANITARY SEWER
- ST DENOTES STORM SEWER
- W DENOTES WATERLINE



APPROVED MICHAEL S. ARMOGIDA DATE 4/18/01

STARK COUNTY SANITARY ENGINEER
FOR ACCEPTANCE OF EFFLUENT ONLY
BY: End P. Miller

APPROVED SD D. J. [Signature] DATE 4-24-01

MASSILLON CITY ENGINEER

APPROVED Donald L. Snyder DATE 5/10/01

CONSUMERS OHIO WATER COMPANY

DEVELOPER:
REALTY EXECUTIVES
EDWARD J. ALLMAN, JR.
4200 MUNSON ST. N.W.
CANTON, OHIO 44718
PHONE: (330) 492-2128

COUNTRY VIEW ESTATES NO. 5
COVER SHEET
OUTLOT 602, CITY OF MASSILLON
COUNTY OF STARK AND STATE OF OHIO
DEVELOPER: REALTY EXECUTIVES

© HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON OHIO PITTSBURGH ARRON
5533 STONHAM ROAD, NORTH CANTON, OHIO 44720
PHONE: CANTON (330)/498-8817 ARRON (330)/633-7274
TOLL FREE: 1-800-394-8617 FAX: (330)/498-0149

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DESIGNED BY: BAK CHECKED BY: MLD
DRAWN BY: BAK REVIEWED BY: BHB
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BY: REVISIONS

SCALE:
1"=200'

1
13

ITEM*	QUAN.	UNIT	DESCRIPTION
			EARTHWORK & ROADS
201	LUMP	SUM	CLEARING AND GRUBBING
203	185	CU. YD.	EXCAVATION (ROADS ONLY) ①
203	2866	CU. YD.	EMBANKMENT CONST. (ROADS ONLY) ①
203	4241	SQ. YD.	SUBGRADE COMPACTION
301	413	CU. YD.	4" BITUMINOUS AGGREGATE BASE
304	619	CU. YD.	6" AGGREGATE BASE
404	155	CU. YD.	1-1/2" ASPHALT CONCRETE
407	AS REQ'D	GAL.	TACK COAT (0.4 GAL./SQ. YD.)
408	1487	GAL.	PRIME COAT (0.4 GAL./SQ. YD.)
604	3	EACH	STANDARD MONUMENT
604	2	EACH	MONUMENT BOX ASSEMBLY
608	964	SQ. YD.	CONCRETE WALK (BY HOMEOWNER)
609	2152	LIN. FT.	MASSILLON STANDARD CONCRETE CURB AND GUTTER
651	2200	CU. YD.	TOPSOIL STOCKPILED
659	1247	SQ. YD.	SEEDING AND MULCHING

603	887	LIN. FT.	8" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	16	EACH	6" ON 8" WYE W/6" 45° BEND, ASTM D-3034
603	753	LIN. FT.	6" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
604	6	EACH	SANITARY SEWER MANHOLE, MASSILLON STANDARD (50 VERT. FT.)

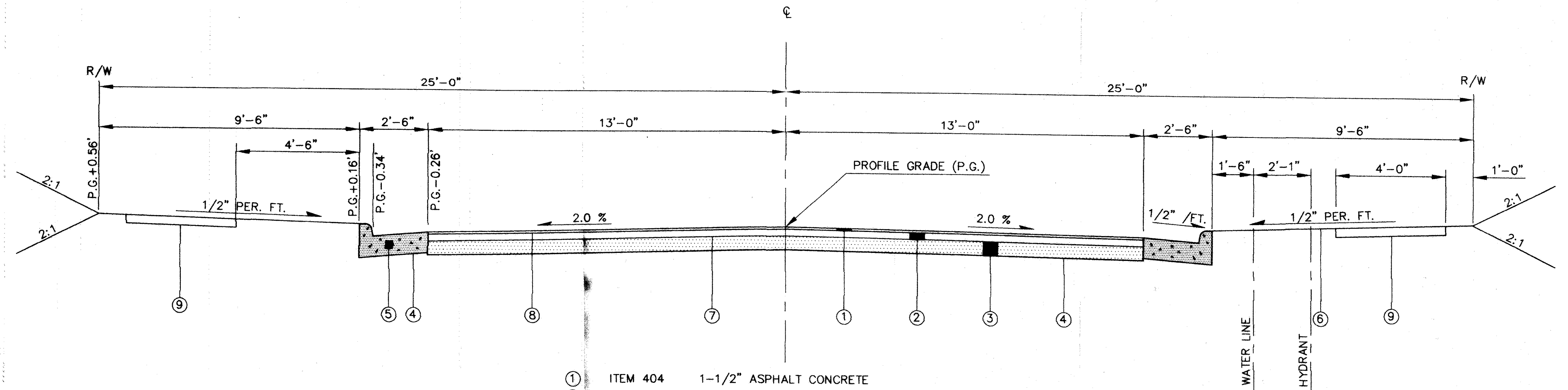
2072	800	SQ. YD.	TEMPORARY SEEDING & MULCHING
207	210	LIN. FT.	FILTER FABRIC FENCE
207	8	EACH	INLET PROTECTION
207	2	EACH	CONSTRUCTION ENTRANCE
602	0.66	CU. YD.	CONCRETE MASONRY (2 EA. HW-4A HEADWALL)
603	272	LIN. FT.	12" TYPE "B" CONDUIT (706.02)
603	413	LIN. FT.	15" TYPE "B" CONDUIT (706.02)
603	20	LIN. FT.	18" TYPE "B" CONDUIT (706.02)
603	271	LIN. FT.	18" TYPE "C" CONDUIT (706.02) OR APPROVED EQUAL
603	707	LIN. FT.	6" TYPE "E" CONDUIT (STORM LATERAL)
604	8	EACH	STANDARD CATCH BASIN, MASSILLON STD. TYPE "A"
207	1	LUMP	SEDIMENT TRAP
201	480	LIN. FT.	DIVERSION DITCH

638	859	LIN. FT.	8" DUCTILE IRON WATERLINE, JOINTS & FITTINGS
638	421	LIN. FT.	2" COPPER WATERLINE, JOINTS & FITTINGS
638	2	EACH	8" MJ TAPPED PLUG
638	2	EACH	2" CORP. STOP
638	8	EACH	2" X 1" TEE
638	12	EACH	8" X 1" TEE
638	2	EACH	2" BLOW-OFF VALVE
638	364	LIN. FT.	1" SERVICE CONNECTION
638	20	EACH	1" CURB STOP
638	2	EACH	6" FIRE HYDRANT ASS'Y. COMPLETE, TYPE III

① EARTHWORK SUMMARY (ROADS ONLY)
EXCAVATION = 185 CU. YD.
EMBANKMENT +15% = 2866 CU. YD.
FILL NEEDED = 2681 CU. YD.
ASSUME 1' OF TOPSOIL HAS ALREADY BEEN REMOVED & STOCKPILED
TOPSOIL QUANTITIES NOT INCLUDED IN EARTHWORK TOTALS.

ENGINEER'S ESTIMATE		
	<u>LIN. FT.</u>	<u>COST</u>
TOTAL ROADWAY	902	\$122,268
TOTAL SANITARY SEWER	875	\$55,045
TOTAL STORM SEWER	976	\$36,651

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. |

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 ALL 304 AGGREGATE BASE OR 301 BITUMINOUS AGGREGATE BASE BY CITY (330) 830-1722.
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 TO THE ROAD, THE DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING THE TYPICAL SECTION BETWEEN THE PAVEMENT AND THE RIGHT-OF-WAY LINE.

5. 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... CONTACT MASSILLON CITY ENGINEER'S OFFICE AT (330) 830-1722 TO SCHEDULE THIS MEETING. A MINIMUM OF 72 HOURS NOTICE IS REQUIRED.

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
9. STREET LIGHTING IS REQUIRED. DEVELOPER SHALL CO-ORDINATE WITH ELECTRIC UTILITY COMPANY FOR POLE LOCATION AND TYPE.
10. THE CITY SHALL INSTALL, AT THE DEVELOPER'S COST, STREET SIGNS & POLES REPRESENTING THE NAMES OF ALL STREETS AT ALL INTERSECTIONS, STOP SIGNS, AND DIRECTIONAL SIGNS AS NECESSARY. ALL SIGNS SHALL CONFORM WITH CITY OF MASSILLON REGULATIONS.

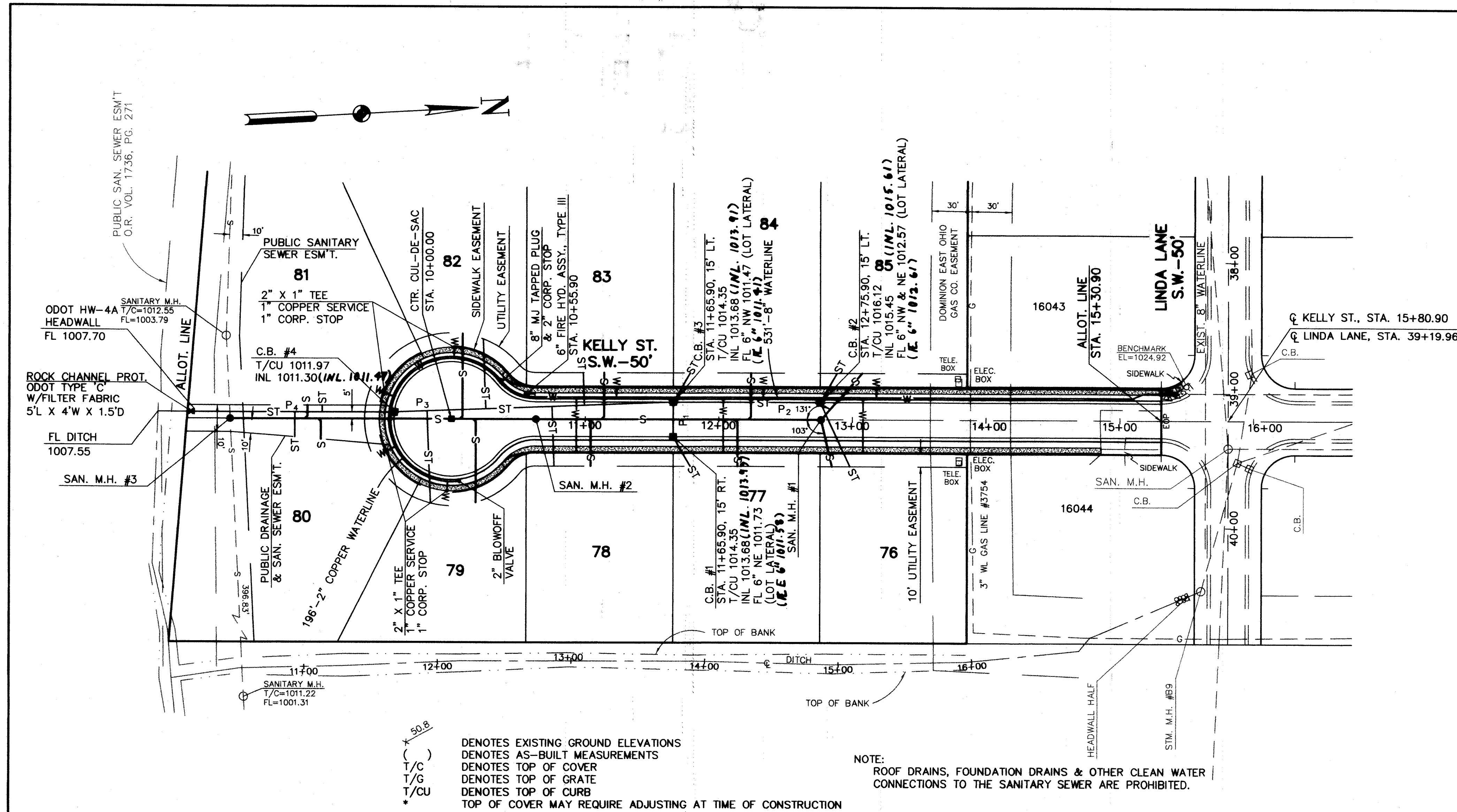
1. MINIMUM COVER OVER 8" WATER LINE = 4'

2. MAINTAIN MINIMUM 4' HORIZONTAL SEPARATION BETWEEN WATER AND STORM SEWER LINES.
3. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & WATERLINE IS 18 INCHES.
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.

1. ALL STORM SEWER WITHIN THE ROAD RIGHT-OF-WAY MUST BE REINFORCED CONCRETE PIPE (706.02), CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33) MAY BE SUBSTITUTED FOR THE REINFORCED CONCRETE PIPE WHERE THE COVER OF SAID PIPE IS ACCEPTABLE BY THE CITY.
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, MI TYPE "A", REFER TO CITY OF MASSILLON STANDARD DRAWINGS FOR MANHOLE & CATCH BASIN DETAILS (SEE SHEETS 10, 11 & 12).
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 10' BEYOND THE RIGHT-OF-WAY, OR BEYOND FURTHEST UTILITY OR AS NOTED ON PLANS FOR SEWERS ON LOT LINES. PLUG THE END OF THE LATERAL AND PROVIDE A LOCATION MARKER.

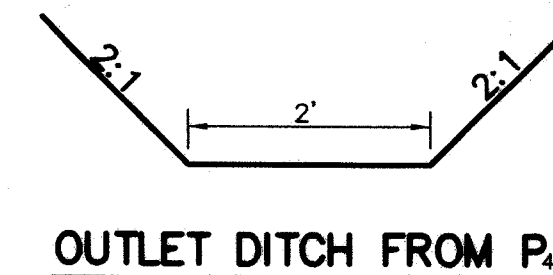
1. ALL SANITARY SEWERS & APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS IN EFFECT AT TIME OF CONSTRUCTION.
2. ALL SANITARY SEWER LATERALS TO BE 6" DIAMETER.
3. ROOF DRAINS, FOUNDATION DRAINS & OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
4. MINIMUM COVER OVER SANITARY SEWER SHALL BE 3 FT.
5. SANITARY LATERALS SHALL EXTEND TO 10' BEYOND 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 GULMBR SECTION 33.85 AND THE ASTM SPECIFICATION FOR THE PIPE BEING TESTED. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED 5%.
15. ALL SANITARY SEWERS MUST PASS A LOW PRESSURE AIR TEST, WHICH SHALL MEET THE REQUIREMENTS OF ASTM F-1417
16. ALL SANITARY SEWERS, 8-INCH DIAMETER AND LARGER, MUST PASS AN INTERNAL TELEVISION INSPECTION. THE CONTRACTOR SHALL PROVIDE COMPLETE INTERNAL INSPECTION VIDEO TAPE TO MASSILLON CITY ENGINEER'S OFFICE. THE VIDEO TAPING PROCEDURE SHALL BE IN ACCORDANCE WITH THE CITY OF MASSILLON ENGINEER'S OFFICE.
17. PRIOR TO COMMENCEMENT OF CONSTRUCTION OF SANITARY MANHOLES ON THE EXISTING SEWER LINE, THE CONTRACTOR SHALL CONTACT THE STARK COUNTY SANITARY ENGINEERING DEPARTMENT AT LEAST 48 HOURS IN ADVANCE

O.D.O.T. STANDARD DRAWING LIST		
DRAWING NO.	DATE	
HW-4A	4-1-80	HEADWALL
MC-1	6-13-69	ROADWAY ITEMS

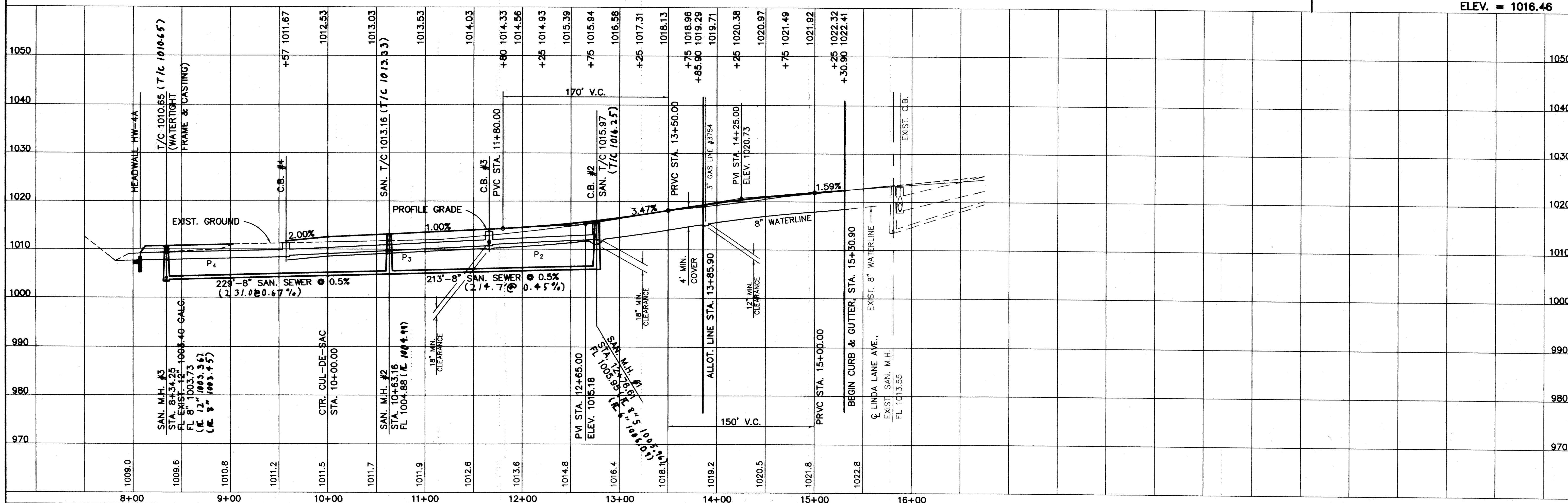


PIPE CHART									
PIPE	SIZE	* TYPE	LENGTH	GRADE	E IN	E OUT	AS-BUILTS		
							(LENGTH)	(E IN)	(E OUT)
P1	12"	B	26'	1.0%	1011.23	1010.97	29'	1011.33	1011.01
P2	12"	B	110'	1.0%	1012.07	1010.97	110'	1012.11	1010.91
P3	15"	B	209'	1.0%	1010.72	1008.63	211'	1010.71	1008.52
P4	18"	C	150'	0.45%	1008.38	1007.70	153'	1008.37	1007.82

* USE R.C.P. (706.02), CORRUGATED POLYETHYLENE
SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL
① USE 10' LENGTH OF TYPE "B" PIPE IN PUBLIC R/W



BENCHMARK:
CHISELED "+" ON NORTH FLANGE BOLT ON HYDRANT,
S.W. CORNER OF LINDA LANE & KELLY.
ELEV. = 1024.92
RAILROAD SPIKE SET 1' UP NORTH SIDE OF CHERRY
TREE AT STATION 59+00 9' LEFT ON OAK RIDGE
STREET.
ELEV. = 1016.46



DESIGNED BY: BAK
CHECKED BY: BHB
DRAWN BY: LJP
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REVIEWED BY: BHB
DATE: 2/05/01

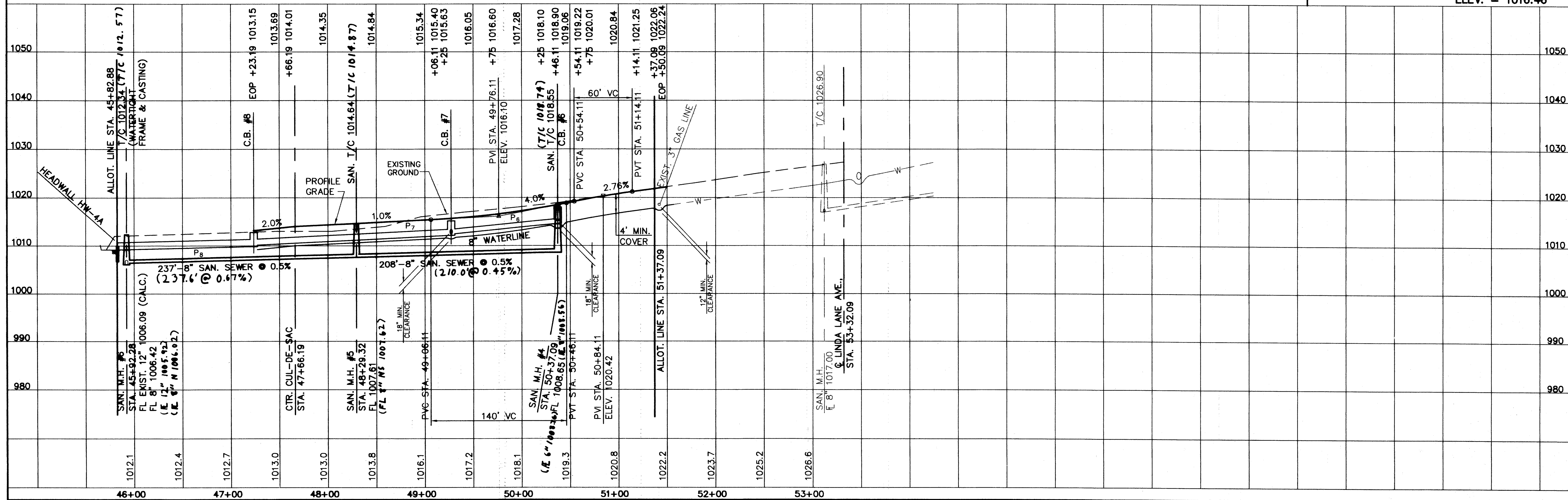
DATE: 4/5/01
DESCRIPTION: PER MASSILLON CITY ENG. COMMENTS

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

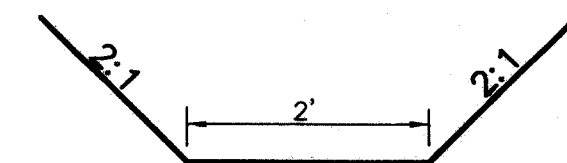
PLAN & PROFILE
KELLY ST. STA. 10+00.00 TO STA. 15+30.90
COUNTRY VIEW ESTATES NO. 5
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,
STATE OF OHIO ALSO BEING PART OF OUTLOT 602

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ENGINEERS, PLANNERS, SURVEYORS
CANTON, OHIO 44705
5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720
PHONE: (330) 499-8817 FAX: (330) 499-0149
TOLL FREE: 1-800-394-8817

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* USE R.C.P. (706.02), CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL
① USE 10' LENGTH OF TYPE "B" PIPE IN PUBLIC R/W



OUTLET STRUCTURE DETAIL FROM P₈

BENCHMARK:

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REVISION BY: _____ DATE: _____ DESCRIPTION: _____
 REVISION BY: _____ DATE: _____ DESCRIPTION: _____
 REVISION BY: _____ DATE: _____ DESCRIPTION: _____
 REVISION BY: DCQ DATE: 3/19/03 DESCRIPTION: SAN. & STM. AS BUILTS
 REVISION BY: BAK DATE: 4/5/01 DESCRIPTION: PER MASSILLON CITY ENG. COMMENTS

DESIGNED BY: BAK CHECKED BY: BHB
DRAWN BY: LJP REVIEWED BY: BHB
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PLAN & PROFILE
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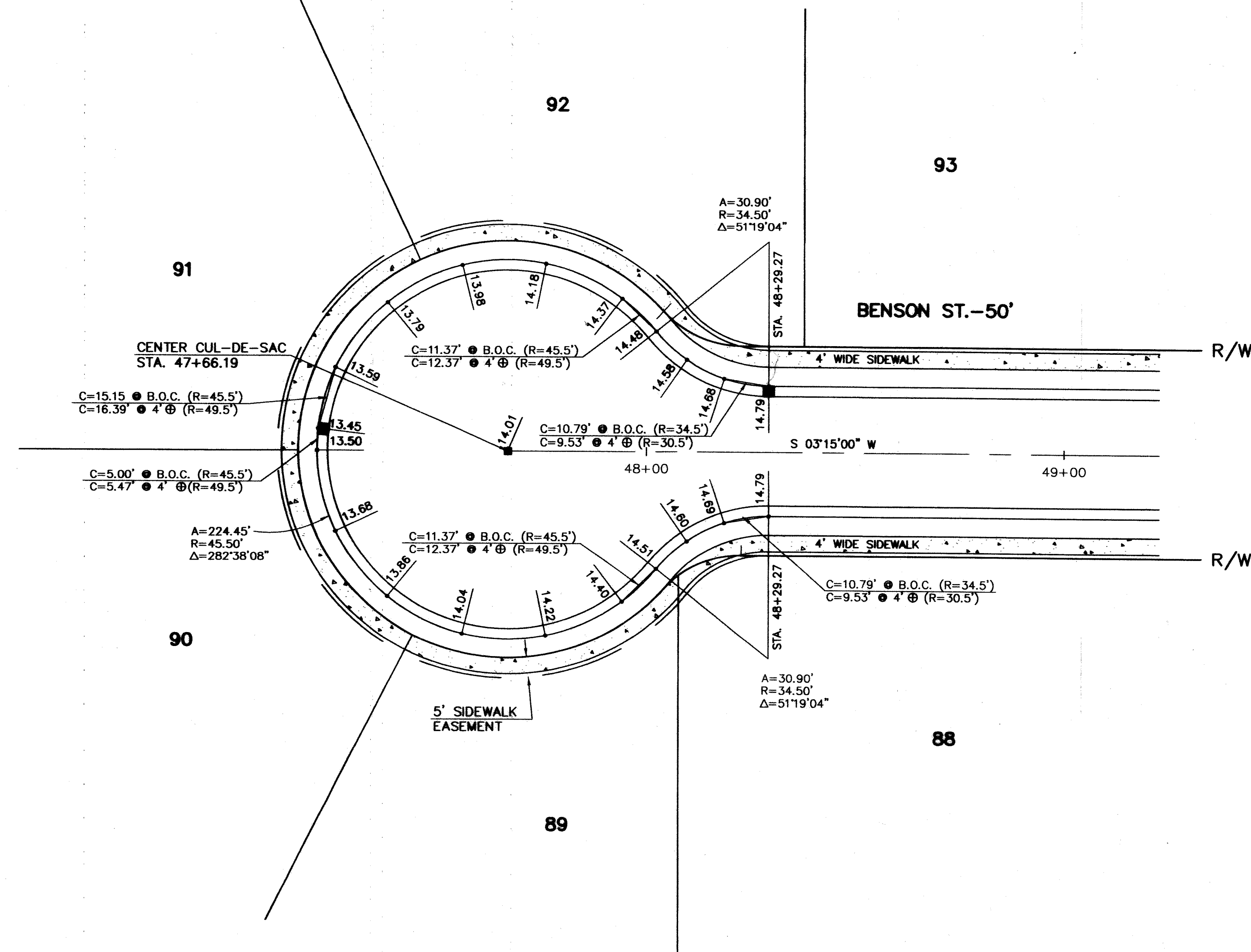
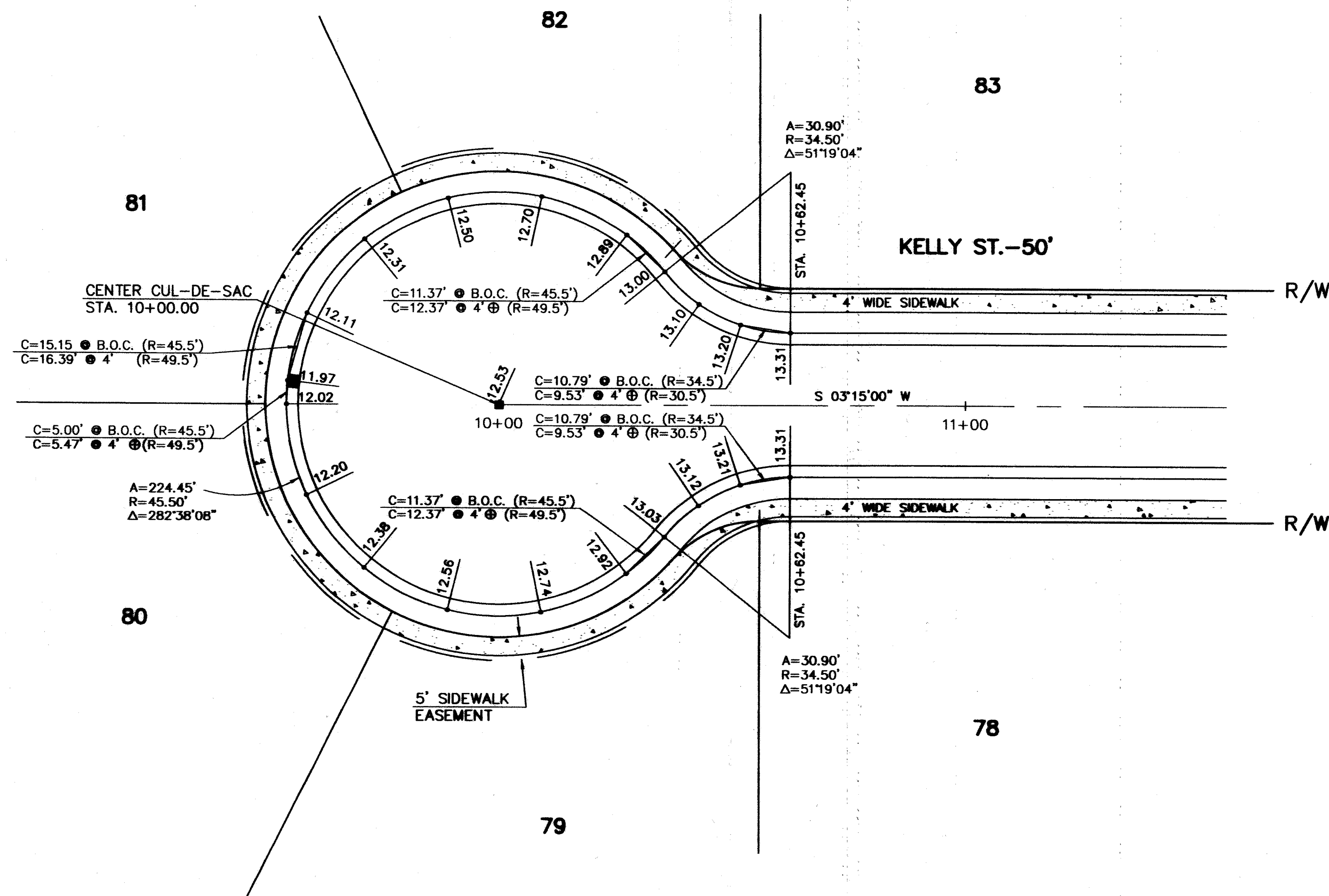
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ENGINEERS, PLANNERS, SURVEYORS

CANTON PITTSBURGH AKRON

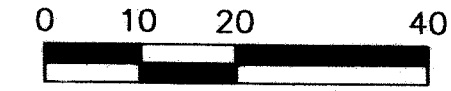
5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720

PHONE: CANTON: (330)/499-8817 AKRON: (330)/633-7274

TOLL FREE: 1-800-394-8817 FAX: (330)/499-0149



NOTES:
 B.O.C. DENOTES BACK OF CURB.
 4' @ DENOTES 4' OFFSET FOR CURB STAKES.
 CHORD DISTANCES ON FILLETS
 ARE 10' @ B.O.C. (R=34.5') & 8.84' @
 4' @ B.O.C. (R=30.5') UNLESS NOTED.
 CHORD DISTANCES ON CUL-DE-SAC
 ARE 20' @ B.O.C. (R=45.5') & 21.76' @
 4' @ B.O.C. (R=49.5') UNLESS NOTED.
 * SPOT ELEVATIONS ARE TO TOP OF 6" CURB.



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 CANTON, OHIO 44720
 5333 STONEHAM ROAD, NORTH CANTON, OHIO 44720
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 TOLL FREE: 1-800-394-8817 FAX: (330) 498-0148

COUNTRY VIEW ESTATES NO. 5
 INTERSECTION DETAILS
 KELLY ST. (CUL-DE-SAC SOUTH)
 BENSON ST. (CUL-DE-SAC SOUTH)

DESIGNED BY:	DATE:	DESCRIPTION:
BAK	2/05/01	INTERSECTION DETAILS
BAK	2/05/01	INTERSECTION DETAILS
BAK	2/05/01	INTERSECTION DETAILS
BAK	2/05/01	INTERSECTION DETAILS
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SCALE: 1"=20'
 5
 13