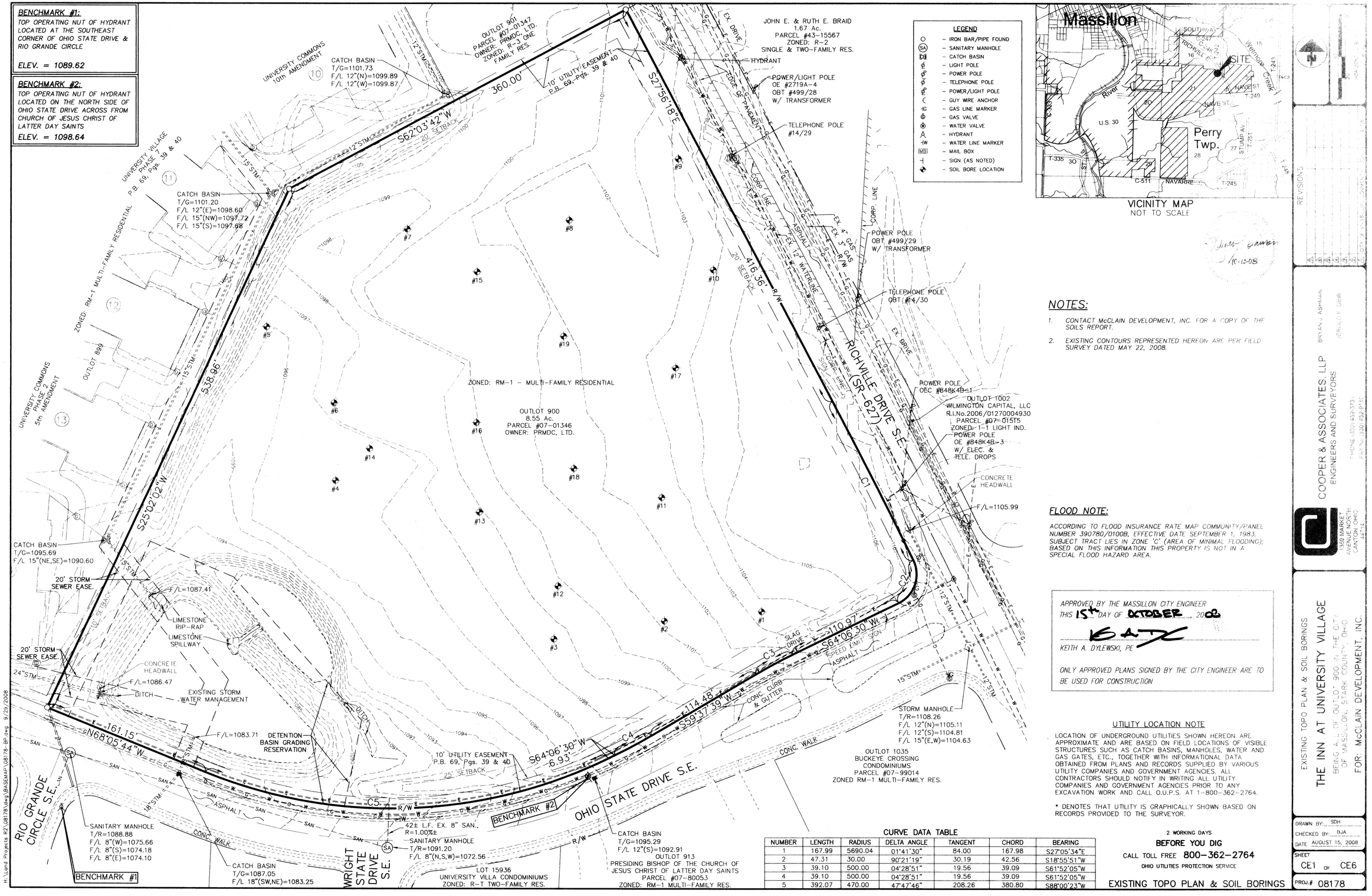
BENCHMARK #1:
TOP OPERATING NUT OF HYDRANT LOCATED AT THE SOUTHEAST CORNER OF OHIO STATE DRIVE & RIO GRANDE CIRCLE

ELEV. = 1089.62

BENCHMARK #2:
TOP OPERATING NUT OF HYDRANT LOCATED ON THE NORTH SIDE OF OHIO STATE DRIVE ACROSS FROM CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS

ELEV. = 1098.64



LEGEND

- IRON BAR/PIPE FOUND
- SANITARY MANHOLE
- CATCH BASIN
- LIGHT POLE
- POWER POLE
- TELEPHONE POLE
- POWER/LIGHT POLE
- GUY WIRE ANCHOR
- GAS LINE MARKER
- GAS VALVE
- WATER VALVE
- HYDRANT
- WATER LINE MARKER
- MAIL BOX
- SIGN (AS NOTED)
- SOIL BORE LOCATION

VICINITY MAP
NOT TO SCALE

NOTES:

1. *CONTACT McCLAIN DEVELOPMENT, INC. FOR A COPY OF THE SOILS REPORT.*
2. *EXISTING CONTOURS REPRESENTED HEREON ARE PER FIELD SURVEY DATED MAY 22, 2008.*

FLOOD NOTE:

ACCORDING TO FLOOD INSURANCE RATE MAP COMMUNITY/PANEL NUMBER 390780/0100B, EFFECTIVE DATE SEPTEMBER 1, 1983. SUBJECT TRACT LIES IN ZONE 'C' (AREA OF MINIMAL FLOODING); BASED ON THIS INFORMATION THIS PROPERTY IS NOT IN A SPECIAL FLOOD HAZARD AREA.

APPROVED BY THE MASSILLON CITY ENGINEER
THIS 15th DAY OF OCTOBER, 2008

KEITH A. DYLEWSKI, PE

ONLY APPROVED PLANS SIGNED BY THE CITY ENGINEER ARE TO BE USED FOR CONSTRUCTION

UTILITY LOCATION NOTE

LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON FIELD LOCATIONS OF VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER AND GAS GATES, ETC., TOGETHER WITH INFORMATIONAL DATA OBTAINED FROM PLANS AND RECORDS SUPPLIED BY VARIOUS UTILITY COMPANIES AND GOVERNMENT AGENCIES. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL O.U.P.S. AT 1-800-362-2764.

* DENOTES THAT UTILITY IS GRAPHICALLY SHOWN BASED ON RECORDS PROVIDED TO THE SURVEYOR.

CURVE DATA TABLE

NUMBER	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD	BEARING
1	167.99	5690.04	01°41'30"	84.00	167.98	S27°05'34"E
2	47.31	30.00	90°21'19"	30.19	42.56	S18°55'51"W
3	39.10	500.00	04°28'51"	19.56	39.09	S61°52'05"W
4	39.10	500.00	04°28'51"	19.56	39.09	S61°52'05"W
5	392.07	470.00	47°47'46"	208.26	380.80	S88°00'23"W

2 WORKING DAYS
BEFORE YOU DIG
CALL TOLL FREE **800-362-2764**
OHIO UTILITIES PROTECTION SERVICE

EXISTING TOPO PLAN & SOIL BORINGS

REVISIONS
10-15-08

COOPER & ASSOCIATES, LLP
ENGINEERS AND SURVEYORS
BRYAN - ASHLAND
GENEVA - GIRARD
1359 MARKET AVENUE NORTH CANTON, OHIO 44714
PHONE (330) 452-9119
FAX (330) 452-9110

EXISTING TOPO PLAN & SOIL BORINGS
THE INN AT UNIVERSITY VILLAGE
BEING A.K.A. OUTLOT 900 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO
FOR: McCLAIN DEVELOPMENT, INC.

DRAWN BY: SDH
CHECKED BY: BJA
DATE AUGUST 15, 2008
SHEET CE1 OF CE6
PROJ.# 08178

H:\Land Projects R2\08178\dwg\BASEMAP\08178-BP.dwg 9/29/2008

BENCHMARK #1:
TOP OPERATING NUT OF HYDRANT LOCATED AT THE SOUTHEAST CORNER OF OHIO STATE DRIVE & RIO GRANDE CIRCLE

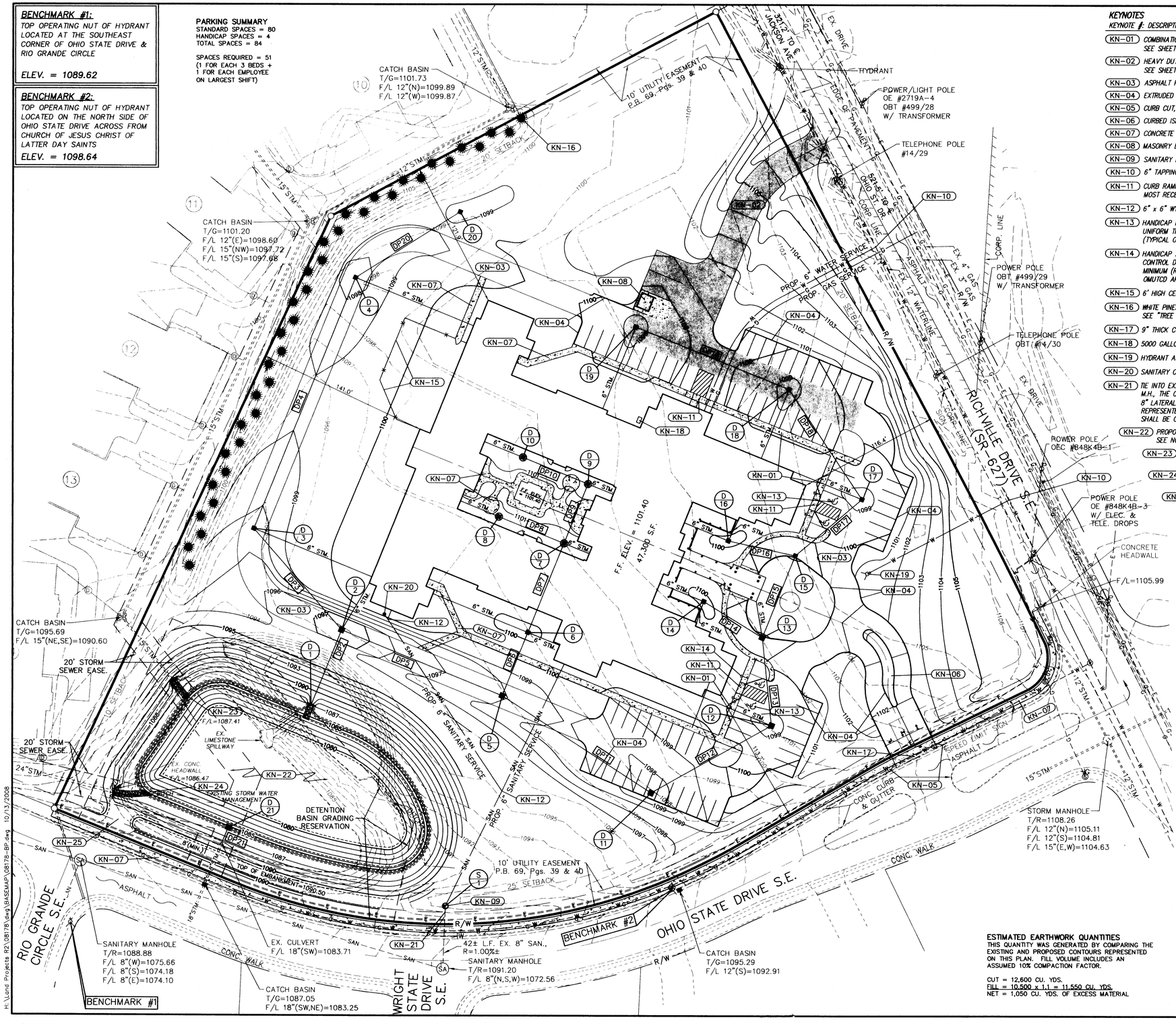
ELEV. = 1089.62

BENCHMARK #2:
TOP OPERATING NUT OF HYDRANT LOCATED ON THE NORTH SIDE OF OHIO STATE DRIVE ACROSS FROM CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS

ELEV. = 1098.64

PARKING SUMMARY
STANDARD SPACES = 80
HANDICAP SPACES = 4
TOTAL SPACES = 84

SPACES REQUIRED = 51
(1 FOR EACH 3 BEDS + 1 FOR EACH EMPLOYEE ON LARGEST SHIFT)



KEYNOTES

KEYNOTE #: DESCRIPTION; REFERENCE DRAWING #

- KN-01 COMBINATION CONCRETE CURB & WALK, SEE SHEET CE4
- KN-02 HEAVY DUTY ASPHALT PAVEMENT, SEE SHEET CE4
- KN-03 ASPHALT PAVEMENT, SEE SHEET CE4
- KN-04 EXTRUDED ASPHALT CURB, SEE SHEET CE4
- KN-05 CURB CUT, SEE SHEET CE4
- KN-06 CURBED ISLAND
- KN-07 CONCRETE WALK, SEE DETAIL ON SHEET CE4
- KN-08 MASONRY ENCLOSED DUMPSTER OVER 7' REINFORCED CONC.
- KN-09 SANITARY DROP MANHOLE, SEE KEYNOTE 21 AND SHEET CE4
- KN-10 6" TAPPING SLEEVE & VALVE
- KN-11 CURB RAMP, TYPE B2 (DOUBLE SIDED PARALLEL) PER ODOT'S MOST RECENT STANDARD CONSTRUCTION DRAWINGS BP-7.1
- KN-12 6" x 6" WYE
- KN-13 HANDICAP PAVEMENT MARKING AS PER OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 3B-19 (TYPICAL OF 4)
- KN-14 HANDICAP SIGN AS PER OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), R7-8, WITH A $250 FINE MINIMUM (R7-H8b) SIGN MOUNTED DIRECTLY BENEATH (SEE OMUTCD APPENDIX C). (TYPICAL OF 4)
- KN-15 6' HIGH CEDAR FENCE
- KN-16 WHITE PINES TO BE PLANTED TO AUGMENT EXISTING BUFFER SEE "TREE PLANTING DETAIL" ON SHEET CE4 (TYPICAL OF 36)
- KN-17 9" THICK CONCRETE DRIVE APRON SEE DETAIL ON SHEET CE4
- KN-18 5000 GALLON GREASE TRAP, SEE PLUMBING PLANS
- KN-19 HYDRANT ASSEMBLY, COMPLETE
- KN-20 SANITARY CLEANOUT
- KN-21 TIE INTO EX. 8" SAN. LATERAL. PRIOR TO ORDERING THE SAN. M.H., THE CONTRACTOR SHALL LOCATE & EXPOSE THE EXIST. 8" LATERAL. IF ITS LOCATION OR RATE DIFFERS FROM WHAT IS REPRESENTED ON THESE PLANS, THE PROJECT ENGINEER SHALL BE CONTACTED FOR FURTHER DIRECTION.
- KN-22 PROPOSED STORM WATER MANAGEMENT (SWM) BASIN, SEE NOTES & DETAILS ON SHEET CE6
- KN-23 ROCK CHANNEL PROTECTION, L=20', W=5', D=2.5', TYPE 'B' ROCK WITH GEOTEXTILE UNDERLAY
- KN-24 ROCK CHANNEL PROTECTION, L=27', W=5', D=2.5', TYPE 'B' ROCK WITH GEOTEXTILE UNDERLAY
- KN-25 EMERGENCY SPILLWAY, SEE DETAIL ON SHEET CE6

ESTIMATED EARTHWORK QUANTITIES
THIS QUANTITY WAS GENERATED BY COMPARING THE EXISTING AND PROPOSED CONTOURS REPRESENTED ON THIS PLAN. FILL VOLUME INCLUDES AN ASSUMED 10% COMPACTION FACTOR.

CUT = 12,600 CU. YDS.
FILL = 10,500 x 1.1 = 11,550 CU. YDS.
NET = 1,050 CU. YDS. OF EXCESS MATERIAL

PROPOSED STORM DATA

D1: HEADWALL HW-D (SEE DETAIL SHEET CE4) F/L 24"(N)=1085.50 ROCK CHANNEL PROTECTION, L=12', W=5', D=2.5', TYPE 'B' ROCK WITH GEOTEXTILE UNDERLAY

DP2: 67 L.F. 24" STM SEWER R=6.04%

D2: ODOT C.B. 2-3 T/GRATE=1094.50 F/L 6"(N)=1092.50 F/L 15"(NW)=1091.55 F/L 24"(E,S)=1089.55

DP3: 111 L.F. 15" STM SEWER R=1.86%

D3: ODOT C.B. 2-2B T/GRATE=1097.40 F/L 6"(E)=1095.15 F/L 15"(N,SE)=1093.61

DP4: 223 L.F. 15" STM SEWER R=0.35%

D4: ODOT C.B. 2-2B T/GRATE=1097.40 F/L 6"(E)=1095.15 F/L 10"(NE)=1094.82 F/L/ 15"(S)=1094.40

DP5: 143 L.F. 24" STM SEWER R=1.78%

D5: ODOT C.B. 2-3 T/GRATE=1097.90 F/L 12"(N)=1095.10 F/L 24"(E,W)=1092.10

DP6: 56 L.F. 12" STM SEWER R=1.00%

D6: ODOT C.B. 2-2B T/GRATE=1099.40 F/L 6"(E,W)=1097.00 F/L 10"(N)=1095.83 F/L 12"(S)=1095.66

DP7: 79 L.F. 10" STM SEWER R=1.00% IN 16" STEEL CASING PIPE

D7: C.B. S T/GRATE=1099.90 F/L 6"(E)=1097.90 F/L 8"(W)=1097.32 F/L 8"(N)=1096.79 F/L 10"(S)=1096.62

DP8: 58 L.F. 8" STM SEWER R=1.00%

D8: C.B. S T/GRATE=1099.90 F/L 6"(W)=1097.90 F/L 8"(E)=1097.90

DP9: 53 L.F. 8" STM SEWER R=1.00%

D9: C.B. S T/GRATE=1099.90 F/L 6"(E)=1097.90 F/L 8"(S,W)=1097.32

DP10: 58 L.F. 8" STM SEWER R=1.00%

D10: C.B. S T/GRATE=1099.90 F/L 6"(W)=1097.90 F/L 8"(E)=1097.90

DP11: 147 L.F. 24" STM SEWER R=0.24%

D11: C.B. 2-3 T/GRATE=1097.20 F/L 24"(NE,W)=1092.45

DP12: 114 L.F. 24" STM SEWER R=0.20%

D12: ODOT C.B. 2-3 T/GRATE=1098.75 F/L 6"(W)=1096.00 F/L 18"(NW)=1093.18 F/L 24"(SW)=1092.68

DP13: 73 L.F. 18" STM SEWER R=0.75%

D13: ODOT C.B. 2-3 T/GRATE=1099.40 F/L 6"(NW)=1097.00 F/L 8"(W)=1096.43 F/L 18"(N,SE)=1093.73

DP14: 57 L.F. 8" STM SEWER R=1.00%

D14: C.B. S T/GRATE=1099.50 F/L 6"(W,S)=1097.50 F/L 8"(E)=1097.00

DP15: 73 L.F. 18" STM SEWER R=0.56%

D15: ODOT C.B. 2-2B T/GRATE=1099.40 F/L 8"(W)=1096.43 F/L 18"(NE,S)=1094.14

DP16: 57 L.F. 8" STM SEWER R=1.00%

D16: C.B. S T/GRATE=1099.50 F/L 6"(N,W)=1097.50 F/L 8"(E)=1097.00

DP17: 72 L.F. 18" STM SEWER R=0.40%

D17: ODOT C.B. 2-2B T/GRATE=1098.75 F/L 6"(W)=1096.50 F/L 15"(NW)=1094.68 F/L 18"(SW)=1094.43

DP18: 109 L.F. 15" STM SEWER R=0.67%

D18: ODOT C.B. 2-2B T/GRATE=1098.75 F/L 6"(S)=1096.50 F/L 15"(W,SE)=1095.41

DP19: 137 L.F. 15" STM SEWER R=0.25%

D19: ODOT C.B. 2-2B T/GRATE=1098.75 F/L 6"(S)=1096.50 F/L 15"(E)=1095.75

DP20: 102 L.F. 10" STM SEWER R=1.65%

D20: C.B. S T/GRATE=1098.50 F/L 10"(SW)=1096.50

PROPOSED SANITARY DATA

S1: SAN. DROP MANHOLE (SEE KEYNOTE 21 & DETAIL SHEET CE4) T/R=1093.00 F/L 6"(NE)=1086.00 F/L 6"(NE)=1073.25± F/L 8"(S)=1073.08±

PROPOSED STORM DATA (CONT.)

DP21: (TIE INTO EX. 18" CULVERT) 13 L.F. 18" STM SEWER R=1.24%

D21: ODOT C.B. 2-3 (CONTROL STRUCTURE) (SEE DETAIL, SHEET CE6) T/GRATE=1089.50 F/L 9"(ORIFICE)(NE)=1086.67 F/L 5"(ORIFICE)(NE)=1085.50 F/L 18"(SW)=1083.87 BOT. SUMP=1083.62

PROPOSED SITE PLAN/UTILITY PLAN

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REVISIONS

1	CITY OF MASSILLON COMMENTS	BDB 10/13/08
2	ADDED SWM BASIN	BDB 10/03/08

HORIZONTAL SCALE 1" = 40'

COOPER & ASSOCIATES, LLP
ENGINEERS AND SURVEYORS
BRYAN J. ASHMAN
JEROLD E. GEIB
PHONE (330) 452-5731
FAX No.(330) 452-9110
350 MARKET AVENUE NORTH
CANTON, OHIO 44714

PROPOSED SITE PLAN/UTILITY PLAN
THE INN AT UNIVERSITY VILLAGE
BEING ALL OF OUTLOT 900 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO
FOR: McCLAIN DEVELOPMENT, INC.

DRAWN BY: SDH
CHECKED BY: BJA
DATE: AUGUST 15, 2008
SHEET CE2 OF CE6
PROJ.# 08178

BENCHMARK #1:
TOP OPERATING NUT OF HYDRANT LOCATED AT THE SOUTHEAST CORNER OF OHIO STATE DRIVE & RIO GRANDE CIRCLE

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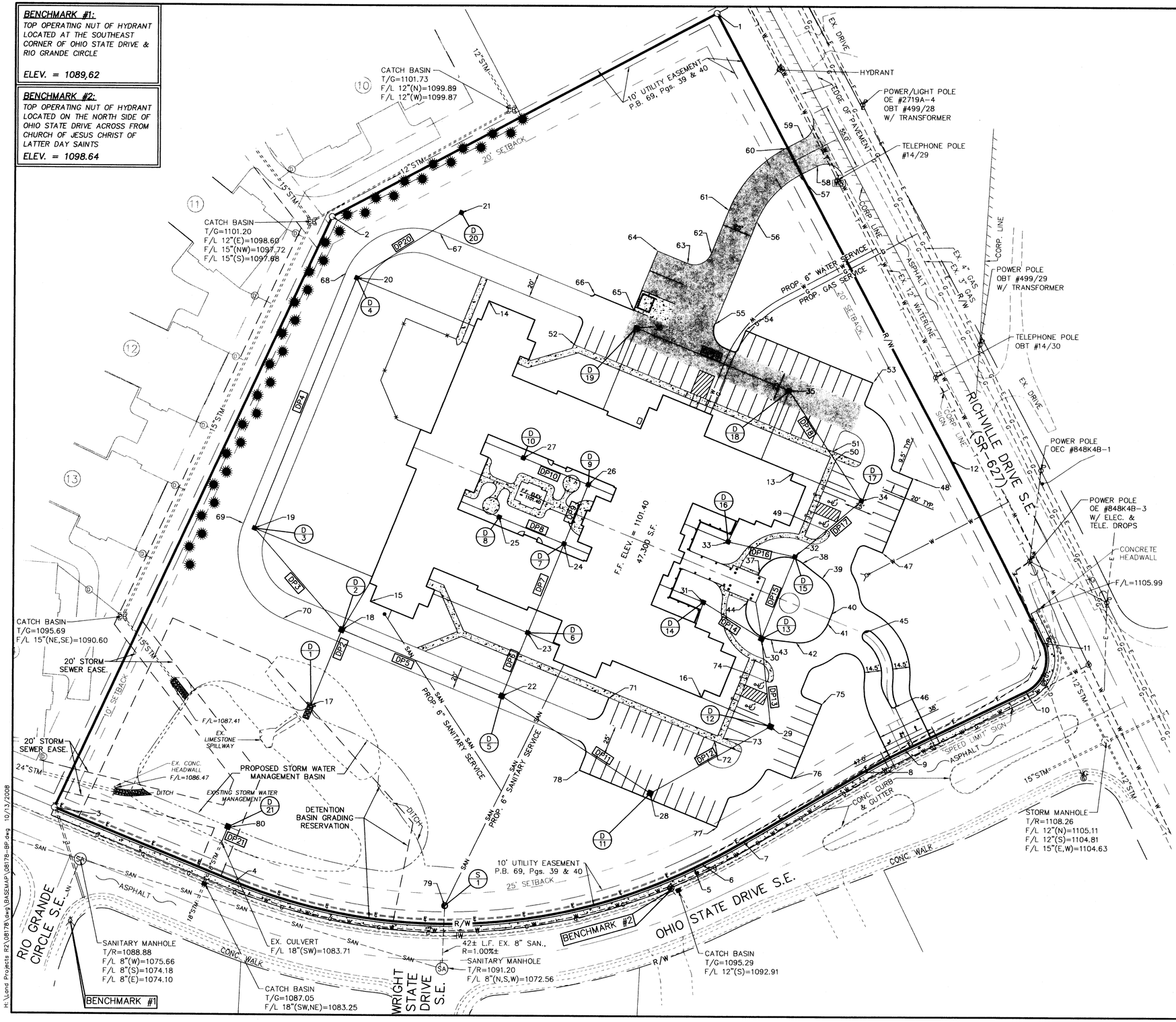

COORDINATE TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	11777.39573	10166.99656	N/A	PROP. COR.
2	11608.72754	9848.95405	N/A	PROP. COR.
3	11120.40010	9620.89157	N/A	PROP. COR.
4	11060.28141	9770.40758	N/A	PROP. COR.
5	11073.52847	10150.98100	N/A	PROP. COR.
6	11076.55507	10157.21615	N/A	PROP. COR.
7	11094.98724	10191.69035	N/A	PROP. COR.
8	11152.86922	10290.45674	N/A	PROP. COR.
9	11171.30146	10324.93089	N/A	PROP. COR.
10	11219.76069	10424.76593	N/A	PROP. COR.
11	11260.01652	10438.57275	N/A	PROP. COR.
12	11409.56481	10362.06915	N/A	PROP. COR.
13	11399.30271	10231.59208	1101.40	BLDG. COR.
14	11539.71939	9979.06439	1101.40	BLDG. COR.
15	11291.89431	9881.82989	1101.40	BLDG. COR.
16	11213.97453	10156.42382	1101.40	BLDG. COR.
17	11206.19010	9833.07526	SEE SHEET CE2	HEADWALL
18	11268.27752	9858.25764	SEE SHEET CE2	C.B.
19	11351.68492	9785.64340	SEE SHEET CE2	C.B.
20	11558.29622	9869.44399	SEE SHEET CE2	C.B.
21	11612.38515	9955.92166	SEE SHEET CE2	C.B.
22	11214.39893	9991.10162	SEE SHEET CE2	C.B.
23	11266.48669	10012.22818	SEE SHEET CE2	C.B.
24	11339.86559	10041.99032	SEE SHEET CE2	C.B.
25	11361.69165	9988.17793	SEE SHEET CE2	C.B.
26	11388.67230	10061.78610	SEE SHEET CE2	C.B.
27	11410.49836	10007.97371	SEE SHEET CE2	C.B.
28	11134.77937	10114.24398	SEE SHEET CE2	C.B.
29	11190.24403	10213.62463	SEE SHEET CE2	C.B.
30	11261.36907	10205.34610	SEE SHEET CE2	C.B.
31	11292.32573	10157.53989	SEE SHEET CE2	C.B.
32	11331.22824	10233.58250	SEE SHEET CE2	C.B.
33	11342.28667	10177.79976	SEE SHEET CE2	C.B.
34	11376.37469	10288.03080	SEE SHEET CE2	C.B.
35	11466.86742	10227.88362	SEE SHEET CE2	C.B.
36	11517.99856	10101.15784	SEE SHEET CE2	C.B.
37	11316.65637	10203.86523	1100.00	E/P
38	11324.81233	10239.23754	1099.56	E/P
39	11312.14161	10255.70025	1100.00	E/P
40	11282.93373	10263.61906	1100.70	E/P
41	11275.13294	10260.45509	1100.70	E/P
42	11259.69400	10234.42366	1100.00	E/P
43	11262.07509	10213.77933	1099.56	E/P
44	11292.56565	10194.08578	1100.00	E/P
45	11267.22438	10290.15696	1101.40	E/P
46	11206.46430	10316.07979	1102.00	E/P
47	11333.34721	10305.65001	1100.25	E/P
48	11394.97094	10330.64531	1100.25	E/P
49	11357.77848	10245.41619	1100.25	E/P
50	11410.59883	10266.84073	1100.00	E/P
51	11417.11152	10264.08671	1100.00	E/P
52	11503.99365	10049.88419	1100.00	E/P
53	11473.77461	10297.32139	1101.00	E/P
54	11516.62331	10191.68054	1101.00	E/P
55	11521.51789	10166.31032	1101.00	E/P
56	11605.76771	10200.48189	1104.00	E/P
57	11644.10882	10235.36050	1106.45	E/P
58	11651.94847	10250.42530	1107.00	E/P
59	11674.15224	10238.93635	1107.00	E/P
60	11666.28565	10223.81978	1106.45	E/P
61	11615.16418	10177.31496	1104.00	E/P
62	11579.68109	10162.92309	1102.35	E/P
63	11571.41880	10143.38509	1101.45	E/P
64	11581.53473	10118.44413	1101.20	E/P
65	11532.76864	10098.66479	1099.20	E/P
66	11545.88192	10066.33481	1100.25	E/P
67	11595.10385	9938.32983	1099.00	E/P
68	11562.05478	9860.17721	1097.70	E/P
69	11355.44348	9776.37662	1097.70	E/P
70	11277.29109	9809.42674	1095.70	E/P
71	11213.40050	10080.03480	1099.00	E/P
72	11177.88372	10167.60653	1100.00	E/P
73	11180.44938	10174.58284	1100.00	E/P
74	11233.27443	10195.99580	1100.25	E/P
75	11208.84487	10256.23031	1100.25	E/P
76	11147.21565	10231.24853	1100.25	E/P
77	11106.93768	10169.58748	1099.25	E/P
78	11153.35423	10055.14206	1099.25	E/P
79	11041.34106	9944.45165	SEE SHEET CE2	SAN. M.H.
80	11105.47893	9764.77438	SEE SHEET CE2	C.B.

HORIZONTAL SCALE
1" = 40'

REVISIONS

1	CITY OF MASSILLON COMMENTS	SDH	9/08
2	ADDED SWM BASIN	BDB	10/03/08

COOPER & ASSOCIATES, LLP
ENGINEERS AND SURVEYORS
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CANTON, OHIO 44714
PHONE (330) 452-5731
FAX No.(330) 452-9110

GEOMETRIC DATA

THE INN AT UNIVERSITY VILLAGE

BEING ALL OF OUTLOT 900 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO

FOR: McCLAIN DEVELOPMENT, INC.

DRAWN BY: SDH
CHECKED BY: BJA
DATE: AUGUST 15, 2008
SHEET CE3 OF CE6
PROJ.# 08178

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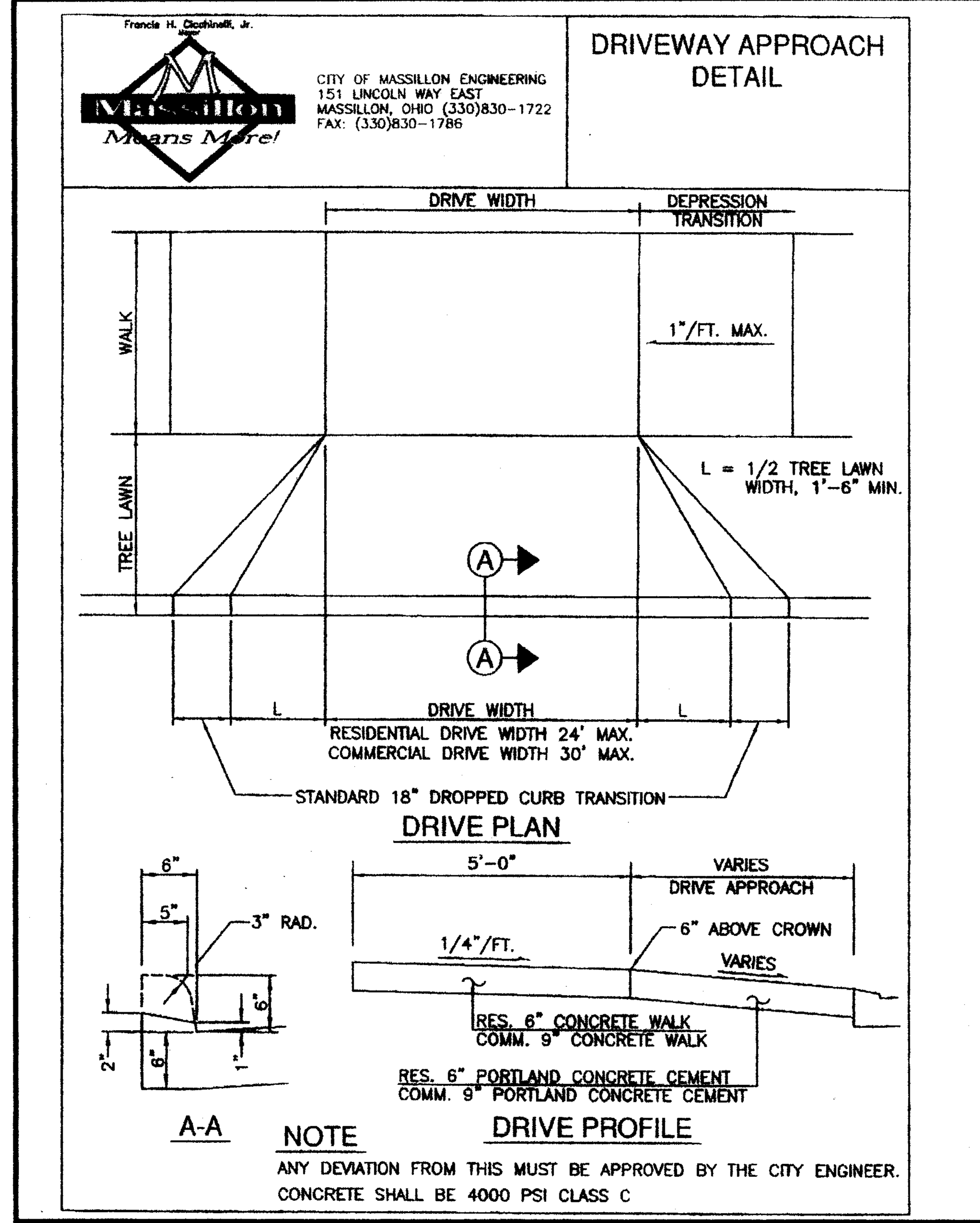
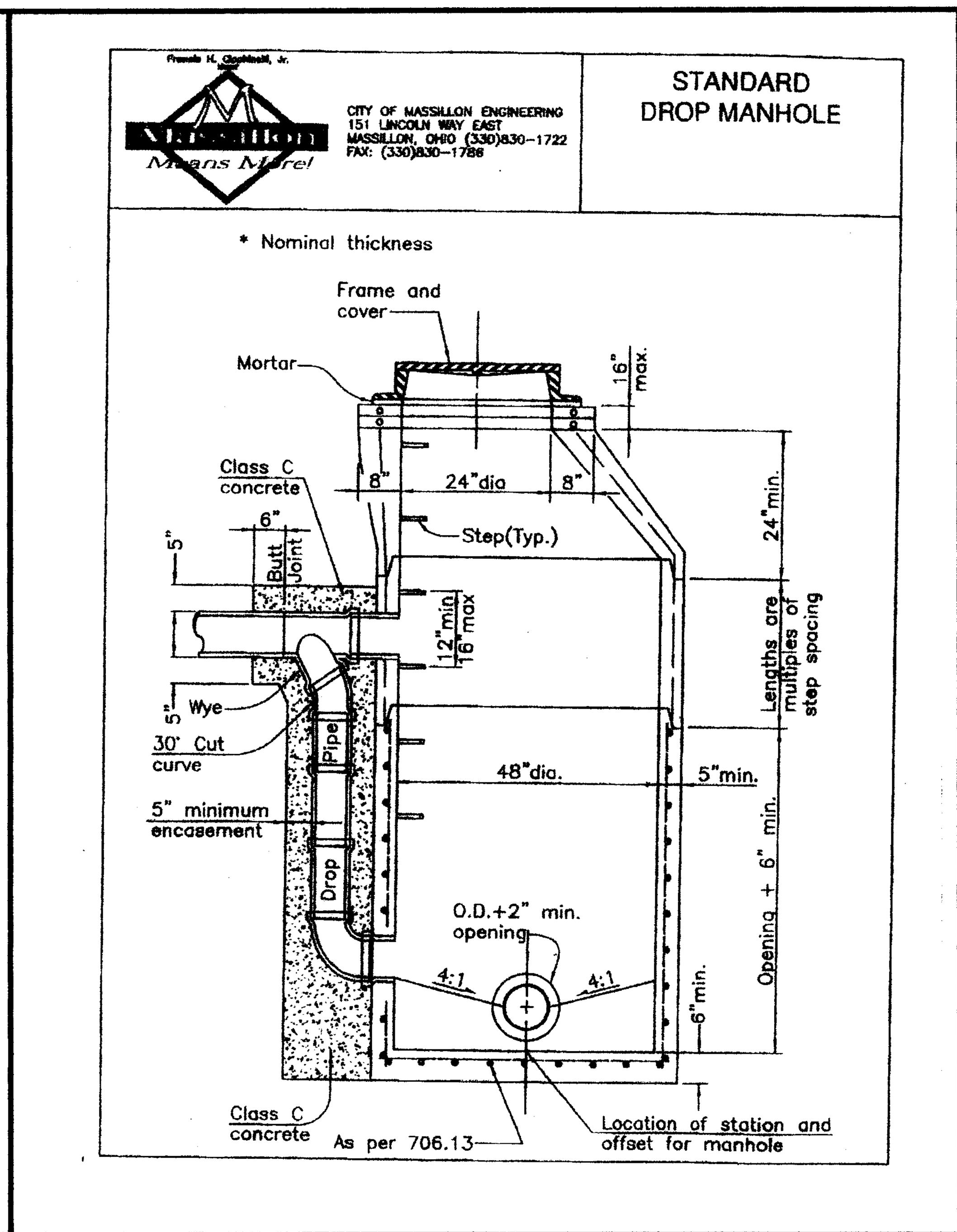
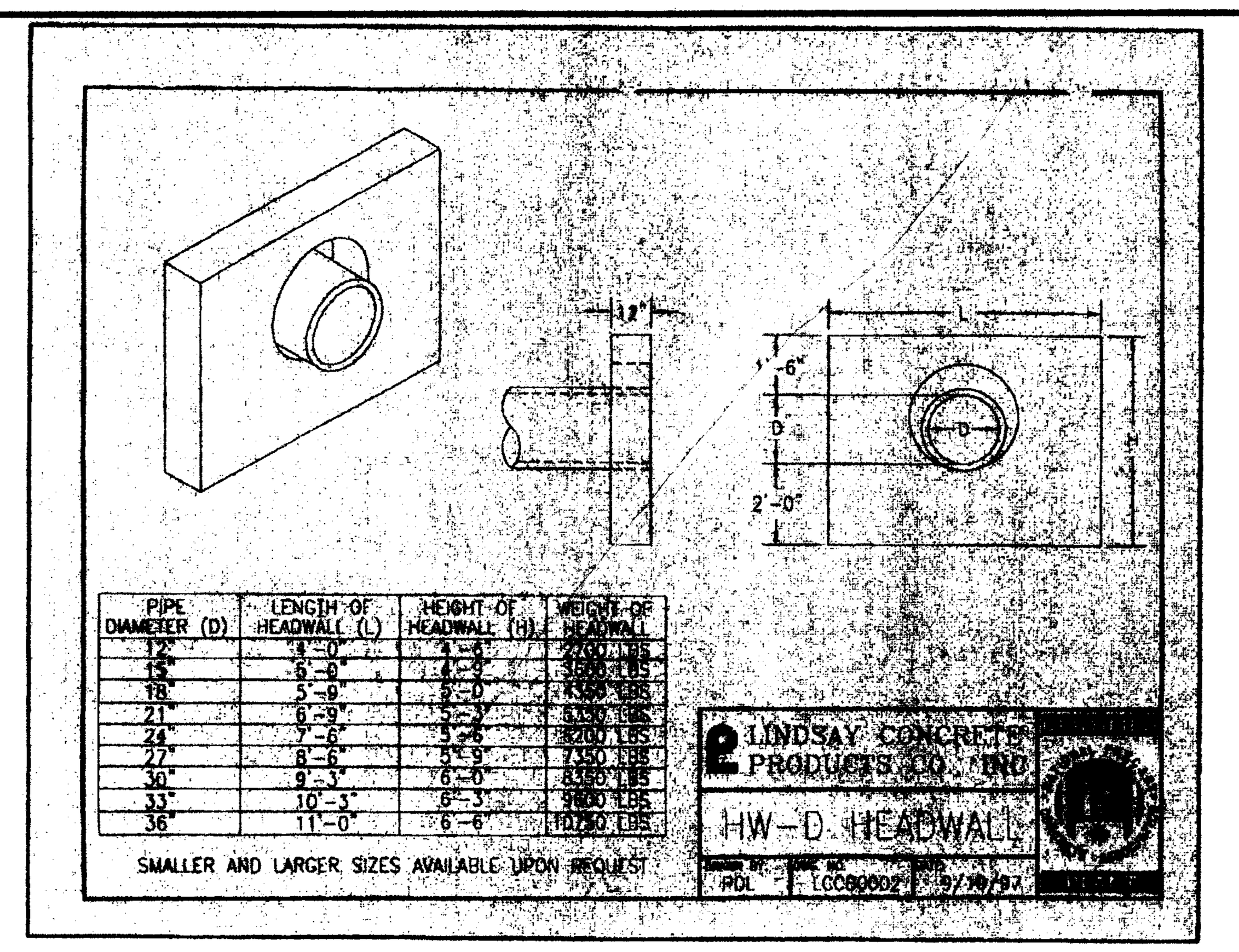
GEOMETRIC DATA

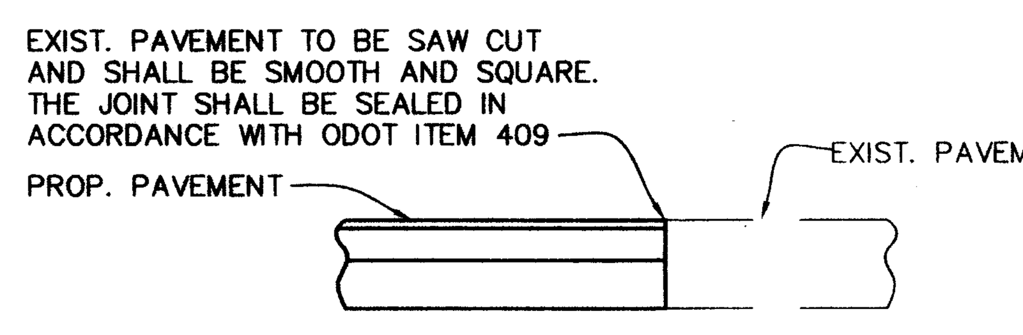






PIPE DIAMETER (D)	LENGTH OF HEADWALL (L)	HEIGHT OF HEADWALL (H)	WEIGHT OF HEADWALL
12"	4'-0"	4'-6"	2700 LBS
15"	5'-0"	4'-9"	3500 LBS
18"	5'-9"	5'-0"	4350 LBS
21"	6'-9"	5'-3"	[illegible] LBS
24"	7'-6"	5'-6"	6200 LBS
27"	8'-6"	5'-9"	7350 LBS
30"	9'-3"	6'-0"	8350 LBS
33"	10'-3"	6'-3"	9600 LBS
36"	11'-0"	6'-6"	10750 LBS

SMALLER AND LARGER SIZES AVAILABLE UPON REQUEST



JOINT BETWEEN NEW AND EXISTING ASPHALT

SCALE: NONE

NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES AND ORDINANCES OF THE CITY OF MASSILLON; IN LIEU OF ANY MUNICIPAL REGULATIONS PERTINENT TO A SUBJECT ITEM TO BE CONSTRUCTED, THE CONTRACTOR SHALL BE BOUND BY THE STATE OF OHIO – DEPARTMENT OF TRANSPORTATION – CONSTRUCTION & MATERIAL SPECIFICATIONS DATED JANUARY 1, 2008 (HEREINAFTER REFERRED TO AS ODOT SPECIFICATIONS) PLUS ANY REFERENCED ODOT STANDARD CONSTRUCTION DRAWING.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR THIS PROJECT.
3. EXISTING FIELD CONDITIONS SHALL BE FIELD CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO BIDDING. SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLANS AND EXISTING FIELD CONDITIONS; THE CONTRACTOR SHALL SEEK WRITTEN CLARIFICATION FROM THE ENGINEER PRIOR TO THE BID SUBMISSION. SHOULD THE CONTRACTOR ENCOUNTER CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT–ISSUING AGENCIES, THE CONTRACTOR SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER PRIOR TO BID SUBMISSION.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO USE CONSTRUCTION MEANS AND METHODS THAT WILL PROTECT PROPERTY AND PREVENT BODILY INJURY AND/OR DEATH. THE CONTRACTOR SHALL COMPLY WITH THE SAFETY REQUIREMENTS OF CITY, STATE, AND FEDERAL GOVERNMENTS.
5. THE CONTRACTOR SHALL PERFORM WORK SO AS TO NOT DISTURB, DAMAGE OR DESTROY ANY MAILBOX, PAPER BOX, TELEPHONE OR POWER POLES, SIGNS, FENCES, RETAINING WALLS, LANDSCAPING ITEMS, ETC. ANY ITEM DAMAGED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE NOTED ON THE PLANS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING, WHICH SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 201. THIS WORK SHALL CONSIST OF CLEARING, GRUBBING, SCALPING, REMOVAL OF TREES & STUMPS, PAVEMENT & CURBS & SIDEWALKS, AND REMOVING AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS DESIGNATED ON THE PLANS.
7. ALL ELEVATIONS ON THESE PLANS ARE BASED ON LOCAL BENCH MARKS.
8. CONSTRUCT AND MAINTAIN EROSION AND SEDIMENT CONTROLS IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN.
9. THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 ORC. LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

FIRST ENERGY
1910 W. MARKET ST. BLDG 1
AKRON, OHIO 44313
CONTACT = KEN DOWNS
PHONE = 330–384–4839

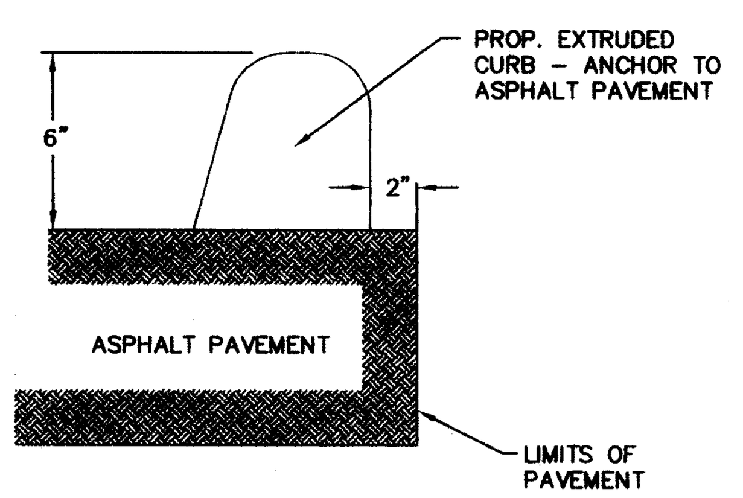
SBC
50 W. BOWERY 6TH FLOOR
AKRON, OHIO 44308
CONTACT = JIM SIEGMUND
PHONE = 330–384–3947

MASSILLON CABLE
814 CABLE CT. NW
MASSILLON, OHIO
CONTACT = JEFF CAMPBELL
PHONE = 330–833–4134

DOMINION EAST OHIO – GAS
7015 FREEDOM AVENUE NW
NORTH CANTON, OHIO 44720
CONTACT = HARVEY YERGIN
PHONE = 330–266–2049

CITY OF MASSILLON ENGINEERS
MUNICIPAL GOVT. ANNEX
151 LINCOLN WAY EAST
MASSILLON, OHIO 44646
CONTACT = KEITH A. DYLEWSKI, PE
PHONE = 330–830–1722

10. WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT. IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT (OR APPURTENANCE) TO BE CONNECTED DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.
11. EARTHWORK SHALL BE IN ACCORDANCE WITH ODOT ITEM 203 – ROADWAY EXCAVATION AND EMBANKMENT. SUBGRADE COMPACTION SHALL BE IN ACCORDANCE WITH ODOT ITEM 204 – SUBGRADE COMPACTION.
12. PLACE PROPOSED PAVEMENT IN THE LOCATIONS REPRESENTED ON THE PLANS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE REFERENCED ODOT ITEMS AND THE TYPICAL SECTIONS SHOWN ON THE PLANS.
13. STORM SEWERS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 603. BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT STANDARD CONSTRUCTION DRAWING (SCD) DM–1.4 – CONDUIT INSTALLATION.
14. UNLESS OTHERWISE NOTED, ALL STORM SEWER INSTALLATIONS ARE TO BE INSTALLED USING TYPE B CONDUITS WITH CLASS B BEDDING IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 603. ONE OF THE FOLLOWING MATERIALS SHALL BE USED:
    a. REINFORCED CONCRETE PIPE (RCP) IN ACCORDANCE WITH ODOT ITEM 706.02
    b. HIGH–DENSITY CORRUGATED POLYETHYLENE (HDPE) SMOOTH LINED PIPE IN ACCORDANCE WITH ODOT ITEM 707.33
    c. POLYVINYL CHLORIDE SOLID WALL PIPE (PVC) IN ACCORDANCE WITH ODOT ITEM 707.45, 8" DIAMETER AND SMALLER ONLY.
15. CONSTRUCT ALL MANHOLES, CATCH BASINS, AND INLETS REPRESENTED ON THE PLANS IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 604. THIS SHALL INCLUDE ALL APPURTENANCES NECESSARY TO PROVIDE A COMPLETE FINISHED STRUCTURE, SUCH AS CAST FRAMES, GRATES, COVERS, STEPS AND OTHER SPECIFIED MATERIALS.
16. ALL CATCH BASINS LOCATED IN PAVED AREAS SHALL BE EQUIPPED WITH BICYCLE SAFE GRATES.
17. CONCRETE SIDEWALKS AND CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 608 – WALKS, CURB RAMPS, AND STEPS AND IN ACCORDANCE WITH THE ARCHITECTURAL PLAN DETAILS.
18. SEED AND MULCH ALL DISTURBED AND PROPOSED YARD AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 659. USE TYPE 1 – LAWN MIXTURE UNLESS OTHERWISE SPECIFIED. PLACE A MINIMUM OF 4" TOPSOIL OVER ALL AREAS TO RECEIVE SEEDING AND MULCHING.
19. FOR CONSTRUCTION DETAILS OF ODOT CATCH BASINS REFER TO ODOT STANDARD ROADWAY CONSTRUCTION DRAWINGS CB–1.1 & CB–1.2.
20. SANITARY SEWER PERMIT IS REQUIRED FOR THIS SITE, CONTACT CITY OF MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIREMENTS.
21. CONCRETE/DRIVEWAY PERMIT IS REQUIRED FOR THIS SITE, CONTACT CITY OF MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIREMENTS.
22. RIGHT–OF–WAY PERMITS ARE REQUIRED FOR ANY WORK IN STREET R.O.W., CONTACT CITY OF MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIREMENTS.

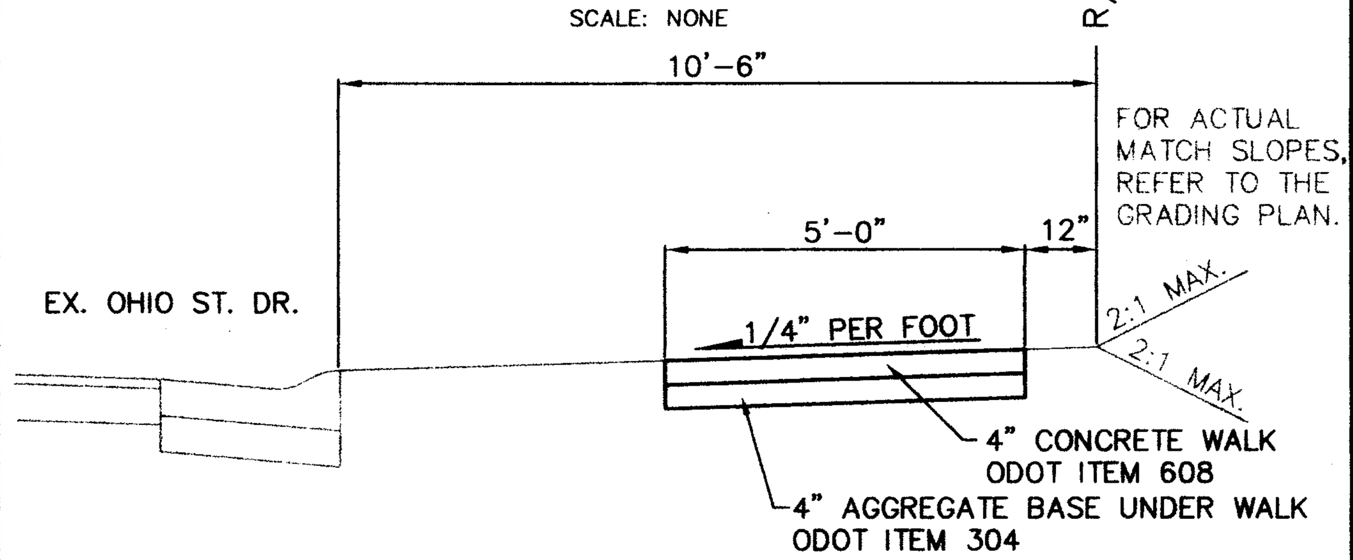


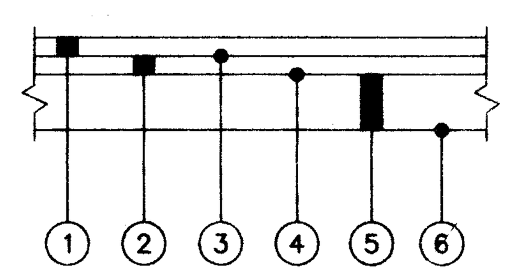
EXTRUDED ASPHALT CURB DETAIL

SCALE: NONE

SIDEWALK DETAIL

SCALE: NONE





1. ITEM 448 – 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1
2. ITEM 448 – 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2
3. ITEM 407 – TACK COAT (SEE NOTE 1)
4. ITEM 408 – BITUMINOUS PRIME COAT (0.4 GAL./S.Y.)
5. ITEM 304 – 6" AGGREGATE BASE
6. ITEM 203 – COMPACTED SUBGRADE

TYPICAL PAVEMENT SECTION

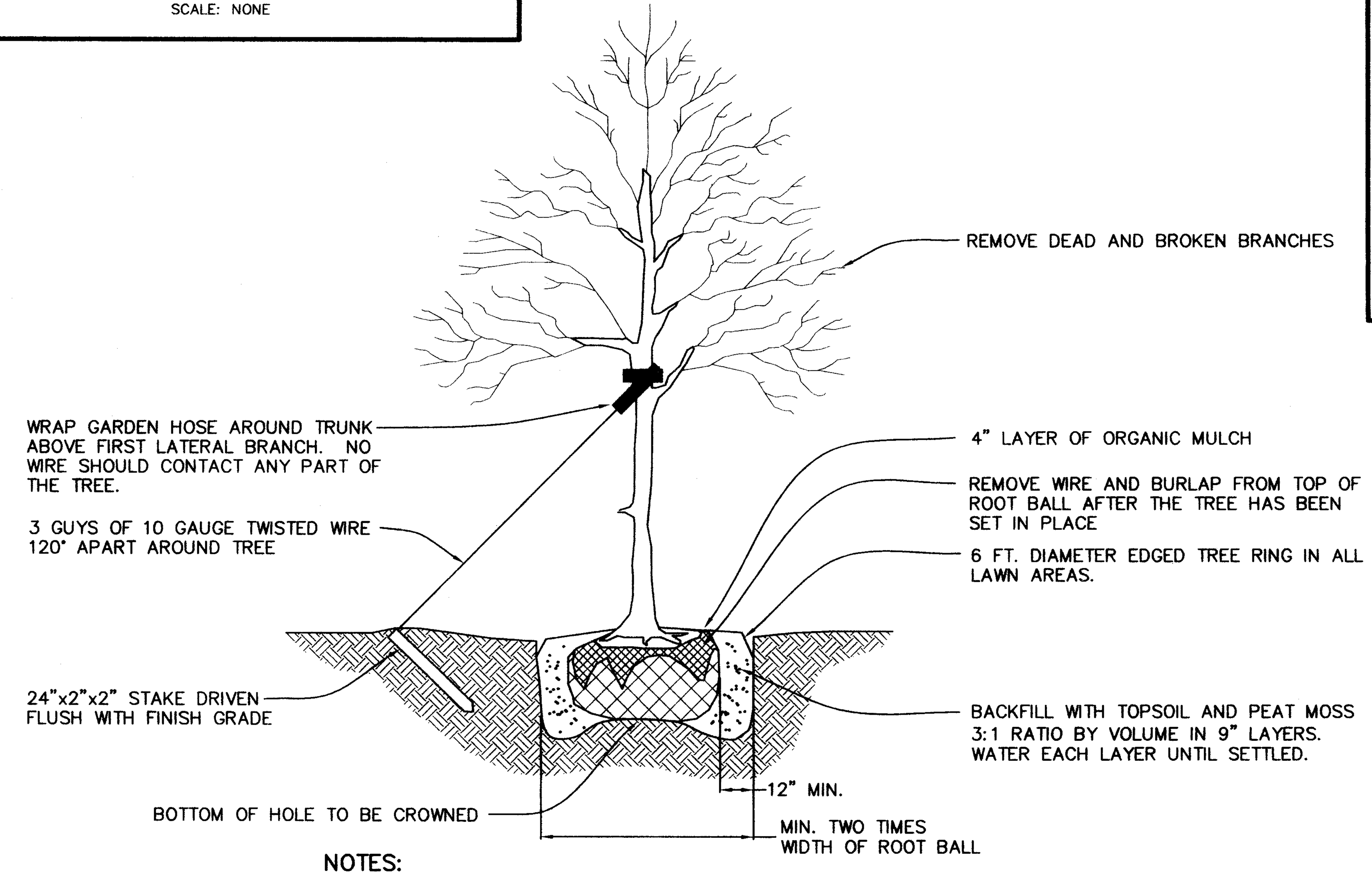
1. ITEM 448 – 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1
2. ITEM 448 – 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2
3. ITEM 407 – TACK COAT (SEE NOTE 1)
4. ITEM 408 – BITUMINOUS PRIME COAT (0.4 GAL./S.Y.)
5. ITEM 304 – 6" AGGREGATE BASE
6. ITEM 203 – COMPACTED SUBGRADE

HEAVY DUTY PAVEMENT SECTION

NOTE:
IF BOTH 448 PAVEMENTS ARE PLACED ON THE SAME DAY, THE TACK COAT MAY BE OMITTED, OTHERWISE THE TACK COAT SHALL BE APPLIED AT A RATE OF 0.075 GAL. PER SQ. YD.

PAVEMENT SECTIONS

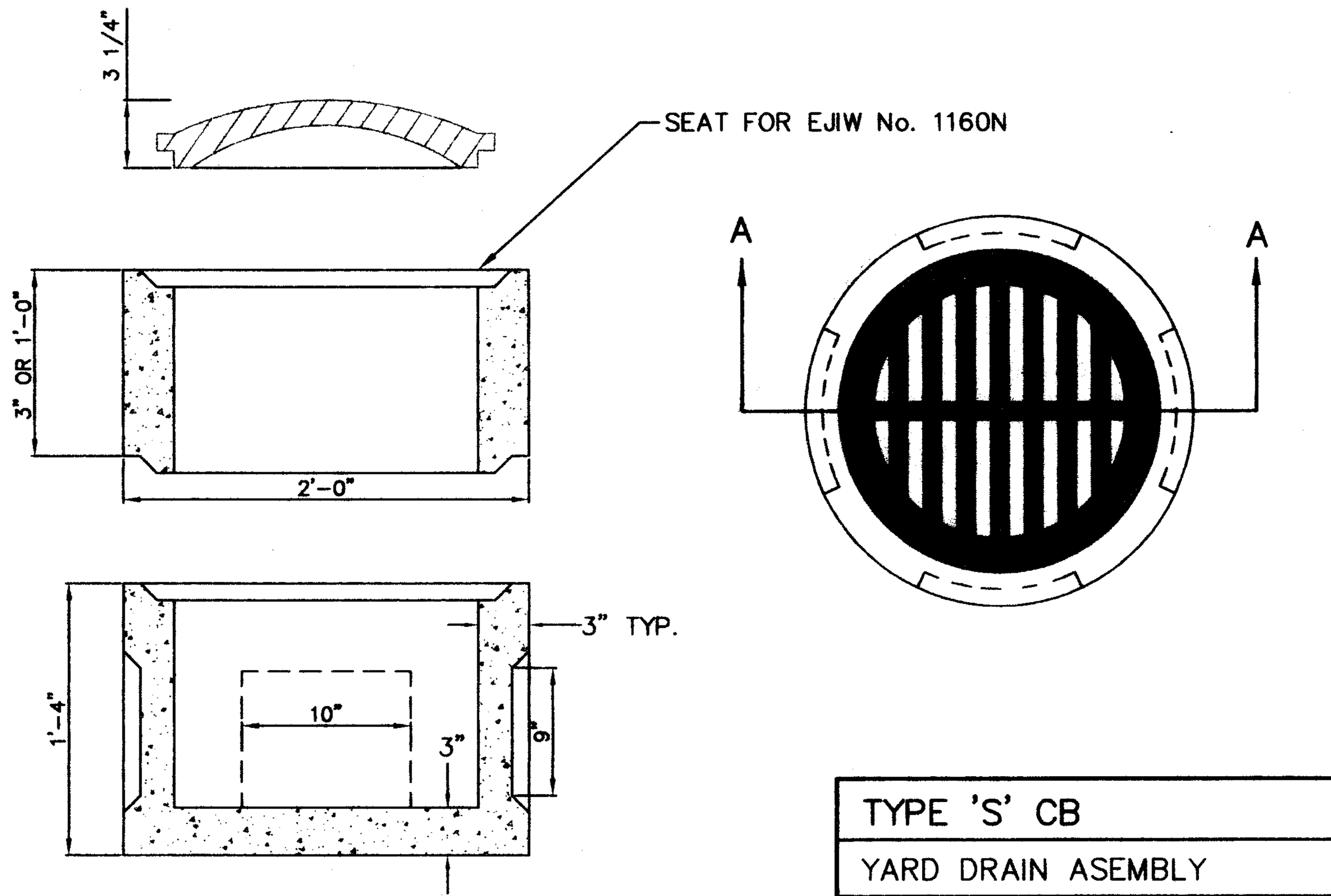
SCALE: NONE



NOTES:
1.) TOP OF ROOT BALL SHOULD BE 2–4" ABOVE FINSHED GRADE AFTER SETTLING
2.) STAKES ARE TO BE REMOVED AFTER ONE GROWING SEASON.
3.) FERTILIZER SHALL BE ADDED TO THE BACKFILL AT A RATE DESIGNATED BY THE MANUFACTURER.
4.) TREE MUST BE STRAIGHT BEFORE COMPLETION OF BACKFILL
5.) DO NOT BURY TRASH (TAGS, STRINGS, ETC.) IN BACKFILL

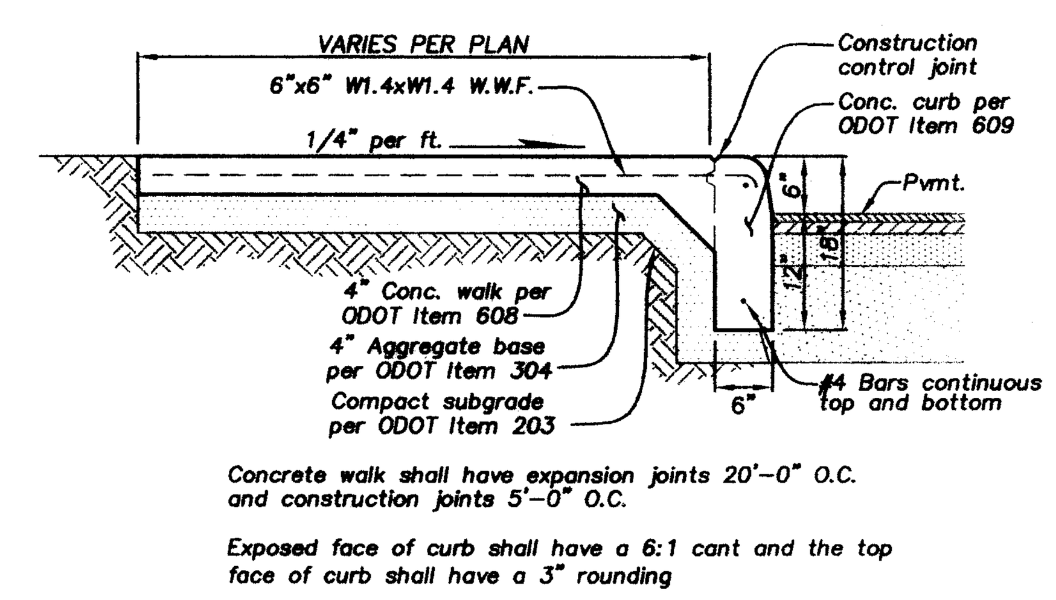
TREE PLANTING DETAIL

SCALE: NONE



SECTION A–A

TYPE 'S' CB	
YARD DRAIN ASEMBLY	
R.J. MIGCHELBRINK JR. INC.	
3234 MYERSVILLE RD. UNIONTOWN, OH. 44685	216–699–2812



Concrete walk shall have expansion joints 20'–0" O.C. and construction joints 5'–0" O.C.

Exposed face of curb shall have a 6:1 cant and the top face of curb shall have a 3" rounding

COMBINATION CONCRETE CURB AND WALK

SCALE: NONE

NOTES & DETAILS

REVISIONS

1	CITY OF MASSILLON COMMENTS	SDH 9/08

BRYAN J. ASHMAN
JEROLD E. GEIB
COOPER & ASSOCIATES, LLP
ENGINEERS AND SURVEYORS
PHONE (330) 452-5731
FAX No.(330) 452-9110
1359 MARKET AVENUE NORTH
CANTON, OHIO 44714

NOTES & DETAILS
THE INN AT UNIVERSITY VILLAGE
BEING ALL OF OUTLOT 900 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO
FOR: McCLAIN DEVELOPMENT, INC.

DRAWN BY: SDH
CHECKED BY: BJA
DATE AUGUST 15, 2008
SHEET CE4 OF CE6
PROJ.# 08178

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BENCHMARK #1:
TOP OPERATING NUT OF HYDRANT LOCATED AT THE SOUTHEAST CORNER OF OHIO STATE DRIVE & RIO GRANDE CIRCLE

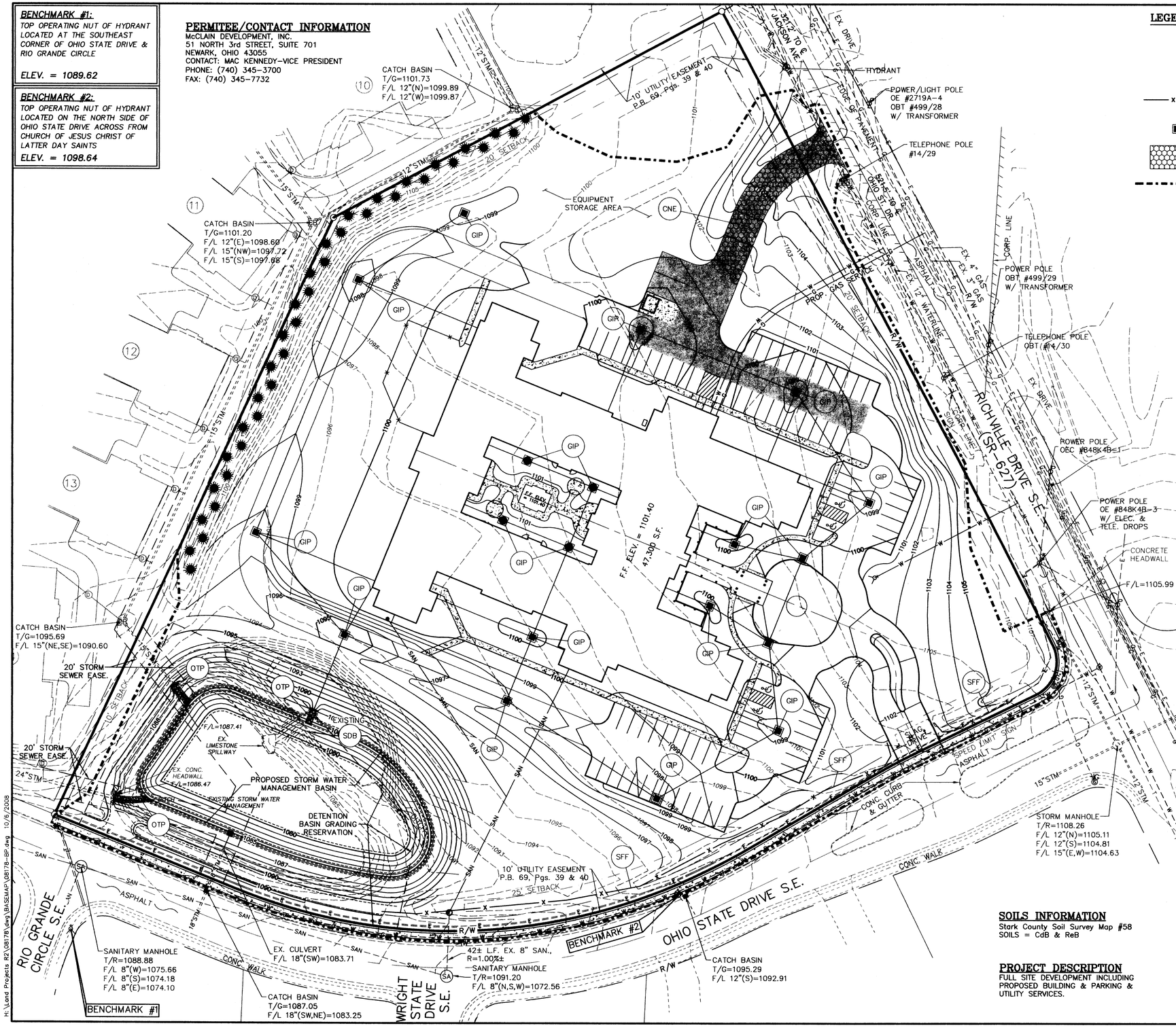
ELEV. = 1089.62

BENCHMARK #2:
TOP OPERATING NUT OF HYDRANT LOCATED ON THE NORTH SIDE OF OHIO STATE DRIVE ACROSS FROM CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS

ELEV. = 1098.64

PERMITEE/CONTACT INFORMATION

McCLAIN DEVELOPMENT, INC.
51 NORTH 3rd STREET, SUITE 701
NEWARK, OHIO 43055
CONTACT: MAC KENNEDY–VICE PRESIDENT
PHONE: (740) 345–3700
FAX: (740) 345–7732



LEGEND

- OTP — ROCK OUTLET PROTECTION AS PER SPECIFICATIONS LISTED IN SECTION 4.4 OF RWLD
- SDB — SEDIMENT BASIN AS PER SPECIFICATIONS LISTED IN SECTION 6.1 OF RWLD. SEE SWP3 NOTE 17
- SFF — SILT FENCE AS PER SPECIFICATIONS LISTED IN SECTION 6.3 OF RWLD.
- GIP — INLET PROTECTION PER SPECIFICATIONS FOR GEOTEXTILE INLET PROTECTION AS LISTED IN SECTION 6.4 OF RWLD.
- CNE — CONSTRUCTION ENTRANCE AS PER SPECIFICATIONS LISTED IN SECTION 7.4 OF RWLD
- LIMITS OF IMPACT = 8.4 Ac.

STORMWATER POLLUTION PREVENTION PLAN NOTES

1. CONSTRUCT IN ACCORDANCE WITH THESE PLANS AND THE MOST RECENT EDITION OF THE RAINWATER AND LAND DEVELOPMENT HANDBOOK (RWLD), PUBLISHED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES. THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL MEASURES SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) AND THE STARK SOIL AND WATER CONSERVATION DISTRICT. IF CONFLICTS EXIST REGARDING THE EROSION AND SEDIMENT CONTROL PRACTICES, THE MORE RESTRICTIVE SHALL APPLY.
2. TEMPORARILY STABILIZE DISTURBED AREAS THAT WILL REMAIN IDLE FOR 21 DAYS OR LONGER WITHIN 7 DAYS OF LAST DISTURBANCE OR WITHIN 2 DAYS FOR AREAS WITHIN 50 FEET OF A STREAM. PERMANENTLY STABILIZE DISTURBED AREAS WITHIN 7 DAYS OF REACHING FINAL GRADE. WHEN SEASONAL CONDITIONS PROHIBIT THE APPLICATION OF TEMPORARY OR PERMANENT SEEDING, THE AREA SHALL BE MULCHED IN ACCORDANCE WITH RWLD SPECIFICATIONS.
3. TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH RWLD SPECIFICATIONS, SECTION 7.8.
4. MULCHING SHALL BE IN ACCORDANCE WITH THE RWLD SPECIFICATIONS, SECTION 7.9.
5. PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH RWLD SPECIFICATIONS, SECTION 7.10.
6. ALL SLOPES STEEPER THAN 3:1 REQUIRE THE FOLLOWING:
   – GRADE TREATMENT (SURFACE ROUGHENING), AS PER SPECIFICATIONS LISTED IN SECTION 7.6 OF RWLD.
   – EROSION CONTROL MATTING, AS PER SPECIFICATIONS LISTED IN SECTION 7.12 OF RWLD.
7. INSTALL ALL EROSION AND SEDIMENT CONTROL ITEMS BEFORE ANY CLEARING AND GRUBBING OR EARTHWORK IS BEGUN.
8. PROTECT UNDISTURBED AREAS THROUGHOUT CONSTRUCTION. DO NOT STORE EQUIPMENT, VEHICLES OR MATERIALS IN THESE PROTECTED AREAS. DO NOT DISTURB THESE AREAS.
9. OFF–SITE VEHICLE TRACKING OF SEDIMENTS SHALL BE MINIMIZED. ALL OFF–SITE TRACKING OF SEDIMENTS SHALL BE CLEANED UP AT THE END OF EACH WORK DAY.
10. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
11. IMPLEMENT NON–SEDIMENT POLLUTION CONTROLS IN ACCORDANCE WITH THE SPECIFICATIONS PROVIDED IN SECTION 8.1 OF RWLD. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF. SOLID, SANITARY AND TOXIC WASTE MUST BE DISCHARGED OF IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR OUT ONTO THE GROUND OR INTO STORM SEWERS ANY SOLVENTS, PAINTS, GASOLINE, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS AND OTHER SUCH TOXIC OR HAZARDOUS WASTES.
12. PROVIDE EROSION AND SEDIMENT CONTROL MEASURES FOR "SMALL CONSTRUCTION SITE CONTROLS" IN ACCORDANCE WITH THE SPECIFICATIONS PROVIDED IN SECTION 8.2 OF RWLD.
13. A PRE–CONSTRUCTION MEETING IS REQUIRED WITH STARK SWCD (330–830–7700) PRIOR TO BEGINNING WORK.
14. EROSION AND SEDIMENT CONTROL MUST BE INSPECTED ONCE EVERY 7 DAYS AND FOLLOWING STORM EVENTS WITH 0.5 INCH OR GREATER RAINFALL DURING A 24 HOUR PERIOD. A WRITTEN LOG OF THESE INSPECTIONS MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. THE LOG SHOULD INDICATE THE DATES OF INSPECTIONS, INSPECTOR, INSPECTION WEATHER CONDITIONS, OBSERVATIONS, ACTIONS TAKEN TO CORRECT PROBLEMS, AND THE DATE THE ACTION WAS TAKEN.
15. ANY NEEDED REPAIRS OF EROSION AND SEDIMENT CONTROL MEASURES, STRUCTURES, DEVICES OR RELATED ITEMS SHALL BE MADE WITHIN 3 DAYS.
16. THE CONTRACTOR SHALL PREVENT AND/OR REDUCE AND CONTROL SOIL EROSION RESULTING FROM THE PROPOSED IMPROVEMENTS. THE USE OF SILT FENCING, JUTE MATTING, TEMPORARY SEEDING, SILT CHECKS, INLET PROTECTION AROUND ALL CATCH BASINS, STABILIZED CONSTRUCTION ENTRANCE(S), ETC. WILL BE REQUIRED. SEDIMENT CONTROL STRUCTURES/DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL RAINWATER AND LAND DEVELOPMENT – OHIO'S STANDARDS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION. SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUED INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS SET FORTH ON THE APPROVED STORMWATER POLLUTION PREVENTION PLAN IF APPLICABLE, OR AS DETAILED ON THE CONSTRUCTION PLANS, AS SPECIFIED BY THE CITY OF MASSILLON.
17. THE EXISTING SEDIMENT BASIN LOCATED NORTH OF THE EXISTING SWM BASIN SHALL REMAIN IN OPERATION UNTIL THE SITE WORK IS COMPLETE AND THE DISTURBED AREAS ARE STABILIZED. ONCE THE SITE CONSTRUCTION IS COMPLETE AND STABILIZED, THE CONTRACTOR SHALL ACQUIRE APPROVAL FROM STARK COUNTY'S SOIL AND WATER CONSERVATION DISTRICT TO REMOVE THE SEDIMENT BASIN AND CONSTRUCT THE PROPOSED SWM BASIN REPRESENTED ON THESE PLANS.

SCHEDULE OF CONSTRUCTION ACTIVITY

1. MARK LIMITS OF DISTURBANCE AND INSTALL PERIMETER CONTROLS. INSTALL CONSTRUCTION ENTRANCE(S) AND PREPARE THE SUPPORT AREA.
2. PROTECT SOIL STOCKPILES. CONSTRUCT SEDIMENT TRAPPING BMPs AND NECESSARY DIVERSIONS.
3. PERFORM CLEARING AND GRADING.
4. APPLY EROSION CONTROL STABILIZATION TO GRADED AREAS TO REMAIN TEMPORARILY DORMANT.
5. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER.
6. APPLY AGGREGATE BASE TO ROADWAY.
7. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTINGS.
8. COMPLETE FINAL PAVING.
9. UPON ACHIEVING >75 SEED GERMINATION, CURB INLET PROTECTION MAY BE REMOVED.
10. ACQUIRE APPROVAL FROM STARK COUNTY'S SOIL AND WATER CONSERVATION DISTRICT TO REMOVE THE EXISTING SEDIMENT BASIN AND CONSTRUCT THE PROPOSED SWM BASIN REPRESENTED ON THESE PLANS.

SOILS INFORMATION

Stark County Soil Survey Map #58
SOILS = CdB & ReB

PROJECT DESCRIPTION

FULL SITE DEVELOPMENT INCLUDING PROPOSED BUILDING & PARKING & UTILITY SERVICES.

HORIZONTAL SCALE 1" = 40'

REVISIONS

1	ADDED SWM BASIN	BDB 10/03/08
2	CITY OF MASSILLON COMMENTS	SDH 9/08

COOPER & ASSOCIATES, LLP
ENGINEERS AND SURVEYORS
BRYAN J. ASHMAN
JEROLD E. GEIB
PHONE (330) 452-5731
FAX No.(330) 452-9110
1359 MARKET AVENUE NORTH CANTON, OHIO 44714

EROSION CONTROL PLAN

THE INN AT UNIVERSITY VILLAGE

BEING ALL OF OUTLOT 900 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO

FOR: McCLAIN DEVELOPMENT, INC.

DRAWN BY: SDH
CHECKED BY: BJA
DATE AUGUST 15, 2008
SHEET CE5 OF CE6
PROJ.# 08178

EROSION CONTROL PLAN

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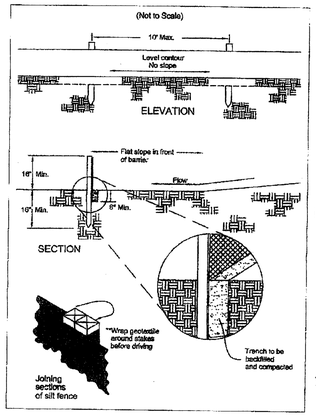


1. Silt fence shall be constructed before upslope land disturbance begins.
2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are dissipated along its length.
3. Ends of the silt fences shall be brought upslope slightly so that water ponded by the silt fence will be prevented from flowing around the ends.
4. Silt fence shall be placed on the flattest area available.
5. Where possible, vegetation shall be preserved for 5 feet (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.
6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface.
7. The silt fence shall be placed in an excavated or sliced trench cut a minimum of 8 inches deep. The trench shall be made with a trencher, cable laying machine, slicing machine, or other suitable device that will ensure an adequately uniform trench depth.
8. The silt fence shall be placed with the stakes on the downslope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. Excess material shall lay on the bottom of the 8-inch deep trench. The trench shall be backfilled and compacted on both sides of the fabric.
9. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the ground, (see detail).
10. Maintenance—Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under the fabric or around the fence ends, or in any other way allows a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) the layout of the silt fence shall be changed, 2) accumulated sediment shall be removed, or 3) other practices shall be installed.

   Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence.

   Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

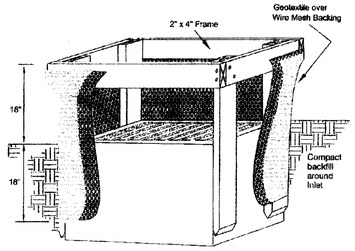
Criteria for silt fence materials

1. Fence post – The length shall be a minimum of 32 inches. Wood posts will be 2-by-2-in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 16 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to sediment/water loading.
2. Silt fence fabric – See chart below.

Table 6.3.2 Minimum criteria for Silt Fence Fabric (ODOT, 2002)

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4632
Maximum Elongation at 60 lbs	50%	ASTM D 4632
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4833
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4533
Apparent Opening Size	≤ 0.84 mm	ASTM D 4751
Minimum Permittivity	1X10-2 sec.-1	ASTM D 4491
UV Exposure Strength Retention	70%	ASTM G 4355

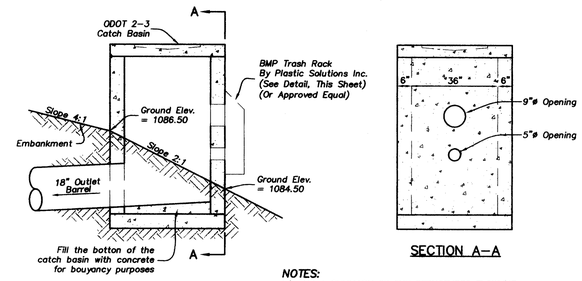
SILT FENCE
SCALE: NONE



SECTION

1. Inlet protection shall be constructed either before upslope land disturbance begins or before the inlet becomes functional.
2. The earth around the inlet shall be excavated completely to a depth at least 18 inches.
3. The wooden frame shall be constructed of 2-inch by 4-inch construction grade lumber. The 2-inch by 4-inch posts shall be driven one (1) ft. into the ground at four corners of the inlet and the top portion of 2-inch by 4-inch frame assembled using the overlap joint shown. The top of the frame shall be at least 8 inches below adjacent roads if ponded water will pose a safety hazard to traffic.
4. Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the frame.
5. Geotextile material shall have an equivalent opening size of 20-40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. It shall extend from the top of the frame to 18 inches below the inlet notch elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.
6. Backfill shall be placed around the inlet in compacted 6-inch layers until the earth is even with notch elevation on ends and top elevation on sides.
7. A compacted earth dike or check dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression. The top of the dike shall be at least 6 inches higher than the top of the frame.

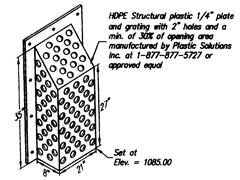
GEOTEXTILE INLET PROTECTION
SCALE: NONE



SECTION A–A

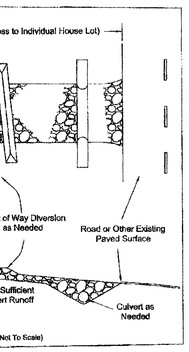
NOTES:
1.) FOR A SUMMARY OF THE STRUCTURES FLOWLINE DATA, SEE THE PROPOSED STORM DATA ON SHEET CE2.
2.) THIS STRUCTURE SHALL BE EQUIPPED WITH STEPS AND MEET THE REQUIREMENTS OF ODOT'S SCD MH–1.1.

CONTROL STRUCTURE DETAIL – "D21"



NOTE:
Debris cage shall have an open bottom and an open back.

BMP TRASH RACK DETAIL
SCALE: NONE



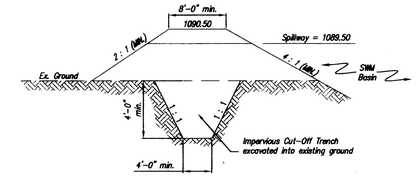
1. Stone Size—ODOT # 2 (1.5–2.5 inch) stone shall be used, or recycled concrete equivalent.
2. Length—The Construction entrance shall be as long as required to stabilize high traffic areas but not less than 70 ft. (exception: apply 30 ft. minimum to single residence lot).
3. Thickness –The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.
4. Width –The entrance shall be at least 14 feet wide, but not less than the full width at points where ingress or egress occurs.
5. Geotextile –A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong rot-proof polymeric fibers and meet the following specifications:

Figure 7.4.1

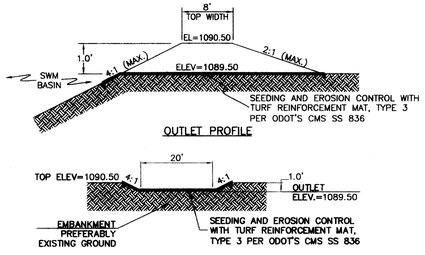
Geotextile Specifications for Construction Entrance	
Minimum Tensile Strength	200 lbs.
Minimum Puncture Strength	80 psi.
Minimum Tear Strength	80 lbs.
Minimum Burst Strength	320 psi.
Minimum Elongation	20%
Equivalent Opening Size	EOS < 0.6 mm.
Permittivity	1x10-3 cm/sec.

6. Timing—The construction entrance shall be installed as soon as is practicable before major grading activities.
7. Culvert –A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.
8. Water Bar –A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.
9. Maintenance –Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.
10. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction site shall be restricted from muddy areas.
11. Removal—the entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

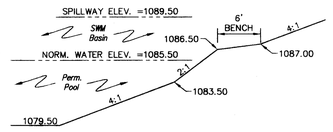
CONSTRUCTION ENTRANCE
SCALE: NONE



SWM BASIN TYPICAL EMBANKMENT SECTION



SWM BASIN – EMERGENCY SPILLWAY



SWM BASIN TYPICAL SECTION

WATER QUALITY SUMMARY

PRACTICES BEING UTILIZED = WET EXTENDED RETENTION BASIN, 24 HR. DRAW DOWN
EXT. RETENTION VOLUME REQ. = 23,159 CF
EXT. RETENTION VOLUME PROV. = 28,500 CF

PERM. POOL VOLUME REQ. = 29,335 CF
PERM. POOL VOLUME PROV. AT 6' DEPTH = 96,300 CF

SWM BASIN NOTES:

1.) THE CONTRACTOR'S BID PRICE FOR THE CONTROL STRUCTURE SHALL INCLUDE THE BMP TRASH RACK.

2.) THERE IS AN EXISTING SEDIMENT BASIN CONSTRUCTED TO THE NORTH OF THE EXISTING SWM BASIN. THIS SEDIMENT BASIN SHALL REMAIN IN OPERATION UNTIL THE SITE WORK IS COMPLETE AND THE SITE IS STABILIZED. ONCE THE SITE CONSTRUCTION IS COMPLETE AND STABILIZED, THE CONTRACTOR SHALL ACQUIRE APPROVAL FROM STARK COUNTY'S SOIL AND WATER CONSERVATION DISTRICT TO REMOVE THE SEDIMENT BASIN AND CONSTRUCT THE PROPOSED SWM BASIN REPRESENTED ON THESE PLANS.

3.) THE DEVELOPER PLANS ON INSTALLING A POND AERATOR. THE DEVELOPER SHALL BE RESPONSIBLE FOR COORDINATION WITH THE ELECTRICAL CONTRACTOR FOR THE INSTALLATION OF AN ELECTRICAL SERVICE FOR A PROPOSED POND AERATOR.

REVISIONS

1	ADDED SWM BASIN DETAILS	BDB 10/03/08

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EROSION CONTROL & STORM WATER MANAGEMENT DETAILS
THE INN AT UNIVERSITY VILLAGE
BEING ALL OF OUTLOT 900 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO
FOR: McCLAIN DEVELOPMENT, INC.

DRAWN BY: BDB
CHECKED BY: BJA
DATE: AUGUST 15, 2008
SHEET CE6 OF CE6
PROJ.# 08178