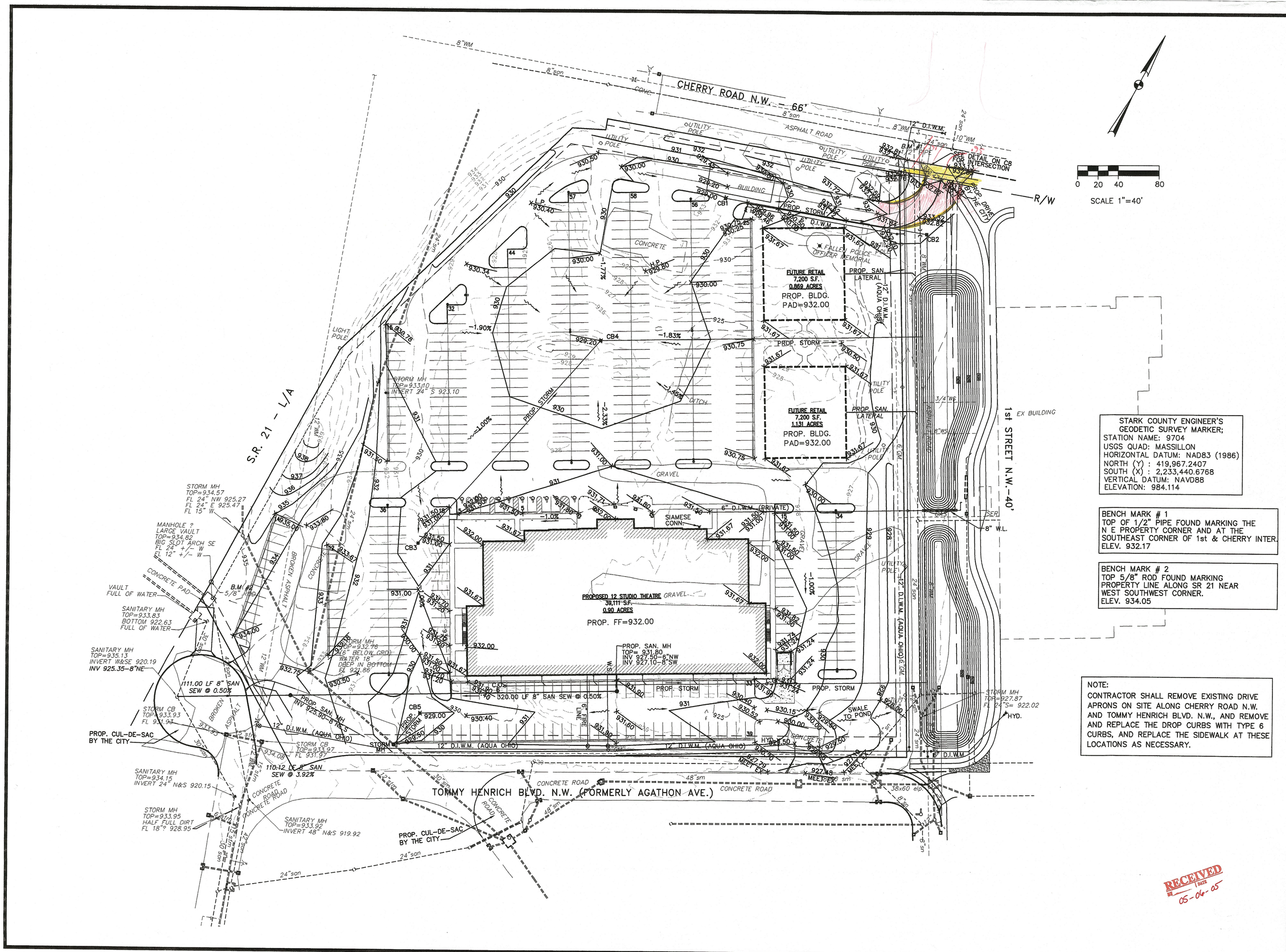


STATE OF OHIO
DAVID L. KOONTZ
E-48828
REGISTERED
PROFESSIONAL ENGINEER

REVISIONS				
NO.	DESCRIPTIONS	DATE	BY	APP'D

DESIGNED BY DLK
DRAWN BY ELR
CHECKED BY DLK
APPROVED BY DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
SITE AND GRADING PLAN

JOB NO. E04042
DATE 3/30/2005
SCALE 1"=40'
SHEET C1

RECEIVED
BY DATE
05-06-05

E:\E04042 GREAT ESCAPES\C1-GP.DWG

PROJECT DESCRIPTION:

GREAT ESCAPES 12 STUDIO THEATRE SITE
CHERRY ROAD NW – MASSILLON , OHIO

SITE GRADING PREPARED BY:
CTI ENVIRONMENTAL, INC.

ENGINEERS IN WATER AND EARTH SCIENCES
1549-A BOETTLER ROAD
UNIONTOWN, OHIO 44685
PHONE: 330-455-7733
PHONE: 330-896-3442

CONTACT PERSON:
DAVID L. KOONTZ P.E.
Reg. Engineer No. E-48626

START DATE: 12/15/2004
COMPLETION DATE: 5/31/2005

CONSTRUCTION SEQUENCE:

1. INSTALL ALL SEDIMENT CONTROL DEVICES (SILT FENCE, STRAW BALE BARRIERS, CHECK DAMS, ETC.) AS PER THE OHIO STANDARDS FOR STORM WATER MANAGEMENT LAND DEVELOPMENT AND URBAN STREAM PROTECTION, RAINWATER AND LAND DEVELOPMENT MANUAL.
2. THE STARK SOIL AND WATER CONSERVATION DISTRICT MUST INSPECT AND APPROVE ALL SEDIMENT CONTROL DEVICES PRIOR TO ANY EARTH MOVING ACTIVITY. A PRECONSTRUCTION MEETING IS REQUIRED.
3. CLEAR AND GRADE THE SITE – CONSTRUCT PROPOSED IMPROVEMENTS AND ALL UTILITIES.
4. PERMANENTLY STABILIZE ALL DISTURBED AREAS (ODOT 659). THE STARK SOIL AND WATER CONSERVATION DISTRICT MUST APPROVE ALL STABILIZATION PRIOR TO THE REMOVAL OF ANY SEDIMENT CONTROL DEVICES.

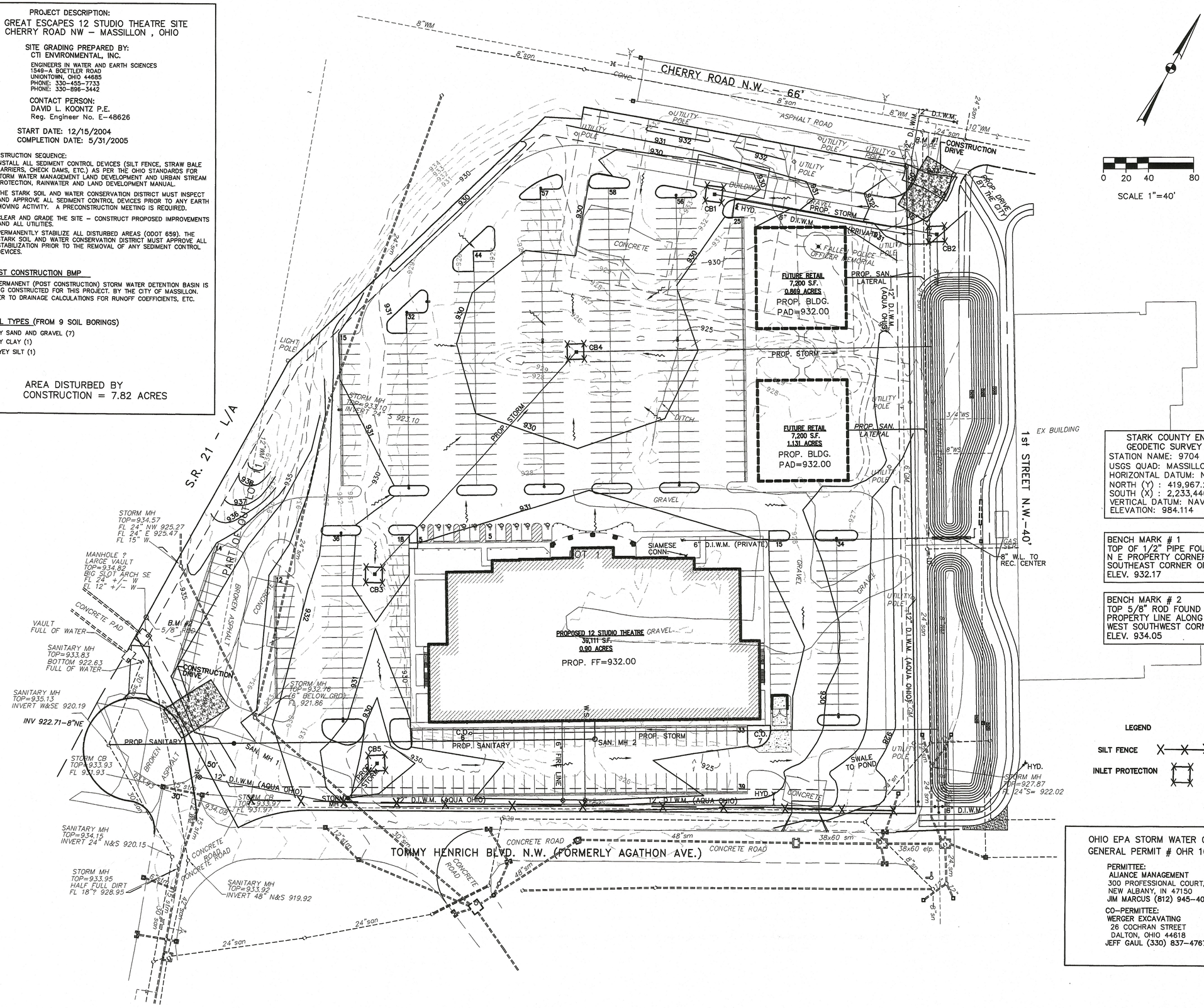
POST CONSTRUCTION BMP

A PERMANENT (POST CONSTRUCTION) STORM WATER DETENTION BASIN IS BEING CONSTRUCTED FOR THIS PROJECT. BY THE CITY OF MASSILLON. REFER TO DRAINAGE CALCULATIONS FOR RUNOFF COEFFICIENTS, ETC.

SOIL TYPES (FROM 9 SOIL BORINGS)

SILTY SAND AND GRAVEL (7)
SILTY CLAY (1)
CLAYEY SILT (1)

AREA DISTURBED BY
CONSTRUCTION = 7.82 ACRES



STARK COUNTY ENGINEER'S
GEODETIC SURVEY MARKER;
STATION NAME: 9704
USGS QUAD: MASSILLON
HORIZONTAL DATUM: NAD83 (1986)
NORTH (Y) : 419,967.2407
SOUTH (X) : 2,233,440.6768
VERTICAL DATUM: NAVD88
ELEVATION: 984.114

BENCH MARK # 1
TOP OF 1/2" PIPE FOUND MARKING THE N E PROPERTY CORNER AND AT THE SOUTHEAST CORNER OF 1st & CHERRY INTER.
ELEV. 932.17

BENCH MARK # 2
TOP 5/8" ROD FOUND MARKING PROPERTY LINE ALONG SR 21 NEAR WEST SOUTHWEST CORNER.
ELEV. 934.05

LEGEND

SILT FENCE

INLET PROTECTION

OHIO EPA STORM WATER CONSTRUCTION
GENERAL PERMIT # OHR 109743

PERMITTEE:
ALIANCE MANAGEMENT
300 PROFESSIONAL COURT, SUITE 200
NEW ALBANY, IN 47150
JIM MARCUS (812) 945-4006

CO-PERMITTEE:
WERGER EXCAVATING
26 COCHRAN STREET
DALTON, OHIO 44618
JEFF GAUL (330) 837-4767

REVISIONS			
NO.	DESCRIPTIONS	DATE	BY	APP'D

DESIGNED BY DLK
DRAWN BY ELR
CHECKED BY DLK
APPROVED BY DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
EROSION CONTROL PLAN

JOB NO. E04042
DATE 3/30/2005
SCALE 1"=40'
SHEET C2

E:\E04042 GREAT ESCAPES\C2-C2A-SWPPP.DWG

EROSION CONTROL GENERAL NOTES

1. THE EROSION CONTROL MEASURES DESCRIBED HEREIN ARE TYPICAL. THE CONTRACTOR SHALL USE THIS PLAN AS A GUIDE TO CONTROL EROSION. IN THE EVENT OF ADVERSE WEATHER CONDITIONS, ETC. ADDITIONAL MEASURES SHOULD BE TAKEN TO ESTABLISH AND MAINTAIN PROTECTIVE VEGETATION.

✳ 2. CONTINUOUS MAINTENANCE WILL BE REQUIRED AS NECESSARY UNTIL PERMANENT, STABLE VEGETATIVE COVER HAS BEEN ESTABLISHED AND EROSION HAS BEEN CONTROLLED. THIS INCLUDES BUT IS NOT LIMITED TO RESEEDING, MULCHING, EARTH FILLING, ETC.

✳ 3. DISTURBED AREAS SHALL BE KEPT TO A MINIMUM WITH RESPECT TO AREAS EXPOSED AND TIME OF EXPOSURE. ALL TOPSOIL SHALL BE STOCKPILED. DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR 21 DAYS OR MORE , (INCLUDING STOCKPILED TOPSOIL) SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPROPIATE MEANS WITHIN 7 DAYS.

✳ 4. TEMPORARY EROSION CONTROL SHALL CONFORM TO O.D.O.T. ITEM 207, TEMPORARY SOIL EROSION AND SEDIMENT CONTROL AS TYPIFIED ON THE PLAN.

5. THE ESTABLISHMENT OF PERMANENT GROUND COVER SHALL CONFORM TO O.D.O.T. ITEM 659, SEEDING AND MULCHING.

6. IF SMALL RILLS OR GULLIES DEVELOP, TEMPORARY DIVERSIONS OF EARTH FILL OR STRAW BALES SHOULD BE INSTALLED UNTIL SATISFACTORY SEEDING IS ESTABLISHED.

7. TO ASSIST IN EROSION CONTROL, ALL TREES AND VEGETATION OUTSIDE OF GRADED AREAS SHALL REMAIN.

8. TEMPORARY STRAW BALE SEDIMENT CONTROL DIKES SHALL BE PER DETAIL ON PLAN. SILT FENCE FABRIC SHALL BE EXXON GTF-100S OR APPROVED EQUAL.

9. ADJACENT ROADS SHALL BE KEPT FREE OF DIRT AND DEBRIS AT ALL TIMES.

✳ 10. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (1996).

11. ALL S.W.P.P.P. ITEMS MUST BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS.

12. EROSION CONTROL BLANKETS WITH MATTING WILL BE USED ON DITCHES GREATER THAN 1.5% AND ALL OTHER SLOPES GREATER THAN 6.0% GRADE.

13. OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.

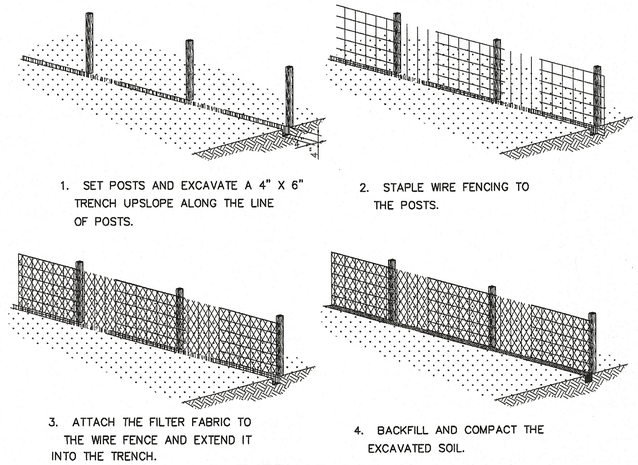
✳ 14. REGULAR INSPECTION AND MAINTENANCE WILL BE PROVIDED FOR ALL EROSION CONTROL PRACTICES. PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE KEPT THROUGHOUT CONSTRUCTION PERIOD. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY 7 DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD. PROVIDE NAME OF INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION, CERTIFICATION OF COMPLIANCE AND CORRECTIVE MEASURES TAKEN.

15. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.

16. SEDIMENT PONDS/ TRAPS AND PERIMETER CONTROLS SHALL BE IMPLEMENTED AS A FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE STABILIZED.

17. OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON THE PLAN.

✳ NOTE:
TEMPORARY SEEDING WILL NOT BE PRACTICAL OR NECESSARY DURING WINTER MONTHS.



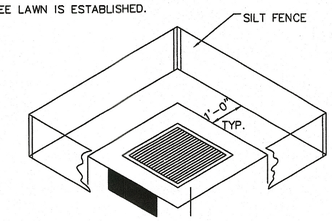
1. SET POSTS AND EXCAVATE A 4" X 6" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
2. STAPLE WIRE FENCING TO THE POSTS.
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

SILT FENCE DETAIL

NO SCALE

REQUIRED EROSION CONTROL FOR ALL PROPOSED CURB INLETS

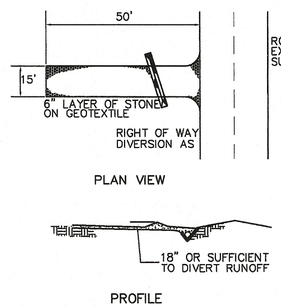
1. INSTALL SILT FENCE ENTIRELY AROUND EACH INLET AND MAINTAIN AS REQUIRED.
2. UPON INSTALLATION OF THE CURB AND GUTTER, MAINTAIN THE SILT FENCE BEHIND THE CURB, AND PLACE STRAW BALES IN THE GUTTER.
3. MAINTAIN THE STRAW BALES UNTIL THE BASE COURSE OF ASPHALT PAVING IS INSTALLED.
4. MAINTAIN THE SILT FENCE BEHIND THE CURB UNTIL THE GRASS IN THE TREE LAWN IS ESTABLISHED.



INLET PROTECTION

INLET PROTECTION TO BE PLACED AT ALL INLETS AS INLETS ARE INSTALLED, AND MAINTAINED UNTIL SITE IS STABILIZED.

SILT FENCE FILTER FOR INLETS

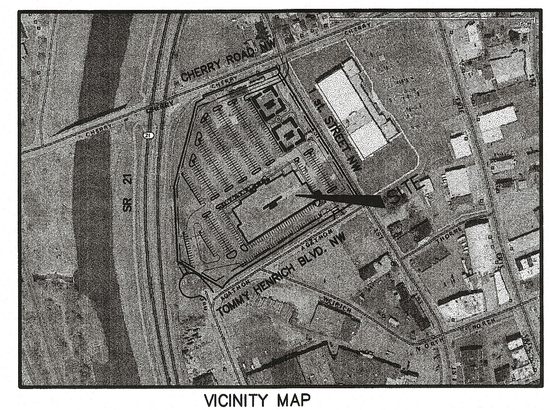


TEMPORARY CONSTRUCTION DRIVE

NO SCALE

TEMPORARY CONSTRUCTION DRIVE NOTES:

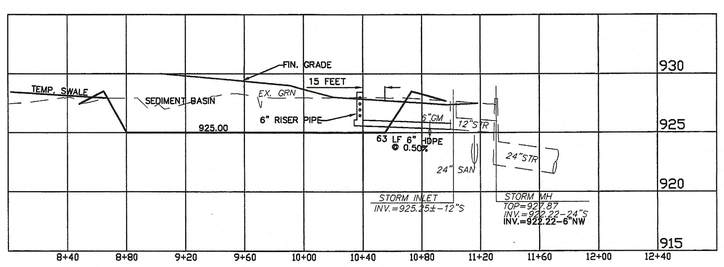
1. STONE SIZE- TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT
2. LENGTH- THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FEET.
3. THICKNESS- THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK.
4. WIDTH- THE ENTRANCE SHALL BE AT LEAST 15 FEET WIDE.
5. BEDDING- A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LBS. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LBS.
6. CULVERT- A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.



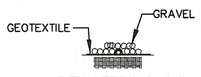
VICINITY MAP
NO SCALE

TEMPORARY SEDIMENT BASIN
DA= 7.82 AC± (PROPOSED)
525 CY STORAGE REQUIRED
840 CY STORAGE PROVIDED 923.50-926.00
6" STAND PIPE W/ 1" DIAMETER HOLES WRAPPED IN FILTER FABRIC
DEWATERING ORIFICE SHALL BE 2" DIAMETER
TOP ELEVATION OF 6" STAND PIPE = 926.00

ELEVATIONS
927.50± - EXISTING GROUND (SEE GRADING PLAN)
926.00 - TOP OF 6" RISER PIPE
923.50 - INVERT OF 6" OUTLET PIPE



OUTLET PROFILE



DEWATERING PIPE SECTION

SEDIMENT TRAP PROFILE
NO SCALE

SPECIFICATIONS FOR SEDIMENT TRAP

1. SEDIMENT TRAPS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. THE POOL AREA SHALL BE CLEARED AS NEEDED TO FACILITATE SEDIMENT CLEANOUT.
3. CUT-AND-FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. DIKES DIRECTING WATER TO THE TRAP SHALL BE HIGHER THAN THE HEIGHT OF THE EXISTING GROUND.
5. ✳ TEMPORARY SEEDING SHALL BE ESTABLISHED ON ALL NONSUBMERGED AREAS OF THE SEDIMENT TRAP.
6. THE STORAGE VOLUME SHALL BE ACHIEVED TO THE DIMENSIONS SHOWN IN THE PLANS TO ACHIEVE 67 CY OF STORAGE VOLUME BELOW THE CREST OF THE OUTLET FOR EVERY ACRE OF CONTRIBUTING DRAINAGE AREA.
7. THE OUTLET PIPE MAY NEED TO BE EXTENDED AS CITY CONSTRUCTION DEMOLISHES STORM INLET.
8. SEDIMENT SHALL BE REMOVED AND THE SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS FILLED ONE-HALF THE POND'S ORIGINAL DEPTH. REMOVED SEDIMENT SHALL BE SPREAD IN A SUITABLE AREA AND STABILIZED SO IT WILL NOT ERODE.
9. THE RISER PIPE AND OUTLET PIPE SHAL BE REMOVED, AND THE SEDIMENT BASIN FILLED AND PERMANENTLY STABILIZED WHEN THE DRAINAGE AREA HAS BEEN STABILIZED.

REVISIONS

NO.	DESCRIPTIONS	DATE	BY	APP'D

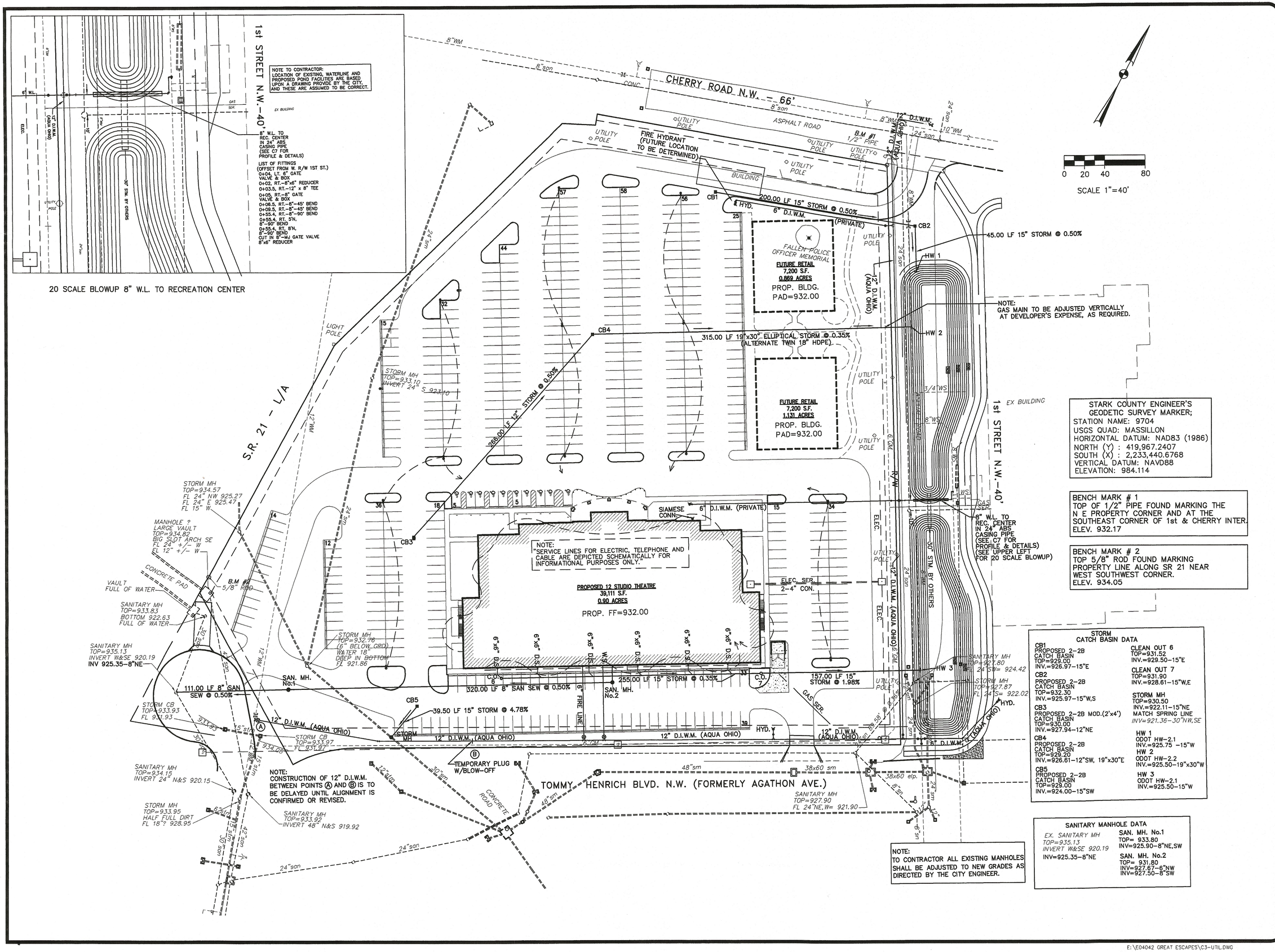
DESIGNED BY DLK
DRAWN BY ELR
CHECKED BY DLK
APPROVED BY DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
EROSION CONTROL DETAILS

JOB NO. E04042
DATE 3/18/2005
SCALE NO SCALE
SHEET C2A

E:\E04042 GREAT ESCAPES\C2-C2A-SWPPP.DWG



STARK COUNTY ENGINEER'S GEODETIC SURVEY MARKER;
STATION NAME: 9704
USGS QUAD: MASSILLON
HORIZONTAL DATUM: NAD83 (1986)
NORTH (Y) : 419,967.2407
SOUTH (X) : 2,233,440.6768
VERTICAL DATUM: NAVD88
ELEVATION: 984.114

BENCH MARK # 1
TOP OF 1/2" PIPE FOUND MARKING THE N E PROPERTY CORNER AND AT THE SOUTHEAST CORNER OF 1st & CHERRY INTER.
ELEV. 932.17

BENCH MARK # 2
TOP 5/8" ROD FOUND MARKING PROPERTY LINE ALONG SR 21 NEAR WEST SOUTHWEST CORNER.
ELEV. 934.05

STORM CATCH BASIN DATA

CB1
PROPOSED 2-2B CATCH BASIN
TOP=929.00
INV.=926.97-15"E

CB2
PROPOSED 2-2B CATCH BASIN
TOP=932.30
INV.=925.97-15"W,S

CB3
PROPOSED 2-2B MOD.(2'x4') CATCH BASIN
TOP=930.00
INV.=927.94-12"NE

CB4
PROPOSED 2-2B CATCH BASIN
TOP=928.20
INV.=926.61-12"SW, 19"x30"E

CB5
PROPOSED 2-2B CATCH BASIN
TOP=929.00
INV.=924.00-15"SW

CLEAN OUT 6
TOP=931.52
INV.=929.50-15"E

CLEAN OUT 7
TOP=931.90
INV.=928.61-15"W,E

STORM MH
TOP=930.50
INV.=922.11-15"NE
MATCH SPRING LINE
INV=921.36-30"NW,SE

HW 1
ODOT HW-2.1
INV.=925.75 -15"W

HW 2
ODOT HW-2.2
INV.=925.50-19"x30"W

HW 3
ODOT HW-2.1
INV.=925.50-15"W

SANITARY MANHOLE DATA

EX. SANITARY MH
TOP=935.13
INVERT W&SE 920.19
INV=925.35-8"NE

SAN. MH. No.1
TOP= 933.80
INV=925.90-8"NE,SW

SAN. MH. No.2
TOP= 931.80
INV=927.67-6"NW
INV=927.50-8"SW

REVISIONS			
NO.	DESCRIPTIONS	DATE	BY	APP'D

DESIGNED BY DLK
DRAWN BY ELR
CHECKED BY DLK
APPROVED BY DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
UTILITY PLAN

JOB NO. E04042
DATE 4/6/2005
SCALE 1"=40'
SHEET C3

E:\E04042 GREAT ESCAPES\C3-UTIL.DWG

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES, ORDINANCES, AND STANDARD SPECIFICATIONS OF THE CITY OF MASSILLON. IN LIEU OF ANY LOCAL SPECIFICATIONS, WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS MOST RECENT EDITION.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION.

3. ALL EXISTING CONDITIONS SHALL BE FIELD CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO BIDDING AND CONSTRUCTION. SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR MUST SEEK WRITTEN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.

4. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING AGENCIES, THE CONTRACTOR MUST SEEK WRITTEN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.

5. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONSTRUCT ALL ITEMS ON THESE PLANS USING CONSTRUCTION MEANS AND METHODS THAT WILL PROTECT PROPERTY AND PREVENT BODILY INJURY AND/OR DEATH. THE CONTRACTOR SHALL TAKE ANY NECESSARY SAFETY PRECAUTIONS TO COMPLY WITH THE SAFETY REQUIREMENTS OF THE CITY, STATE AND FEDERAL GOVERNMENTS.

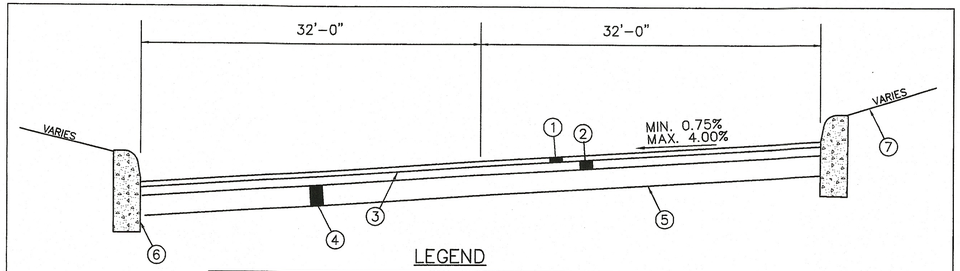
6. CONSTRUCTION SHALL BE PERFORMED AND EQUIPMENT STORED IN A MANNER WHICH PERMITS EXISTING FACILITIES TO PERFORM WITHOUT INTERRUPTION.

7. ALL DISTURBED YARD AREAS SHALL BE FINE GRADED, SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH ODOT ITEM 659.

8. EMBANKMENT CONSTRUCTION AND SUBGRADE COMPACTION SHALL BE IN GENERAL CONFORMANCE WITH ODOT SPECIFICATIONS AND MORE SPECIFICALLY AS FOLLOWS:
   - A. 100% UNDER PAVEMENT.
   - B. 95% STANDARD PROCTOR IN UTILITY TRENCHES.
   - C. 90% STANDARD PROCTOR IN YARD AREAS.

9. THE FOLLOWING MATERIALS ARE APPROVED FOR THE STORM SEWER UNLESS OTHERWISE DESIGNATED ON THE PLAN. INSTALLATION TO BE IN ACCORDANCE WITH ODOT TYPE 'B' UNLESS OTHERWISE NOTED.
   - A. REINFORCED CONCRETE PIPE PER ODOT ITEM 706.02 AND 706.04
   - B. HIGH DENSITY POLYETHYLENE CORRUGATED PIPE WITH SMOOTH INTERIOR PER ODOT ITEM 707.33.
   - C. PVC (SDR 35) IN ACCORDANCE WITH ODOT ITEM 707.45 AND ASTM D-3034.

10. CATCH BASINS/INLETS TO BE IN ACCORDANCE WITH THE ODOT TYPES AS SPECIFIED ON THIS PLAN. CATCH BASINS/INLETS TOP SLAB & GRATE SHALL BE MODIFIED FOR HIGHWAY LOADING AS REQUIRED. GRATES TO BE BIKE SAFE.

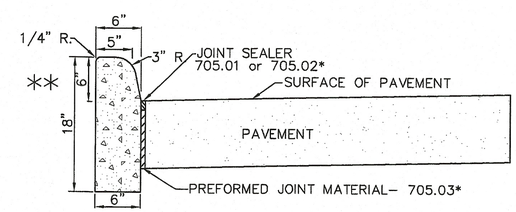


LEGEND

1	ITEM 404 –	ASPHALT CONCRETE SURFACE COURSE 1" THICK
2	ITEM 301 –	BITUMINOUS AGGREGATE BASE 2-1/2" THICK
3	ITEM 408 –	BITUMINOUS PRIME COAT (0.4 GAL./S.Y.)
4	ITEM 304 –	AGGREGATE BASE 6" THICK(2-3" LIFTS)
5	ITEM 203 –	SUBGRADE COMPACTION
6	ITEM 609 –	TYPE 2 CONCRETE CURB
7	ITEM 659 –	SEEDING AND MULCHING

PARKING LOT ASPHALT PAVEMENT TYPICAL

SCALE: NONE



* – Expansion joint material and joint sealer is not required when curb is adjacent to flexible type pavement.

TYPE 2 CONCRETE CURB DETAIL

NO SCALE

REVISIONS

NO.	DESCRIPTIONS	DATE	BY	APP'D

DESIGNED BY DLK
DRAWN BY ELR
CHECKED BY DLK
APPROVED BY DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
GENERAL NOTES AND PARKING LOT TYPICAL SECTION

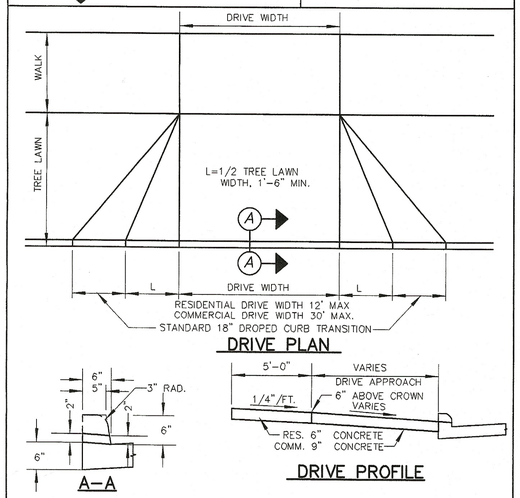
JOB NO. E04042
DATE 12/30/2004
SCALE 1"=40'
SHEET C4

E:\E04042 GREAT ESCAPES\C4-GN TYP.dwg

E:\E04042 GREAT ESCAPES\C4-GN TYP.dwg, 1/14/2005 8:23:40 AM, ELR02

Francis H. Ciochinelli, Jr.
Massillon Means More!
CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830-1722
FAX: (330)830-1786

DRIVEWAY APPROACH DETAIL



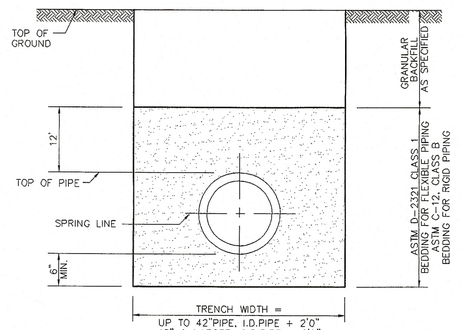
NOTE

ANY DEVIATION FROM THIS MUST BE APPROVED BY THE CITY ENGINEER.

NO SCALE

Francis H. Ciochinelli, Jr.
Massillon Means More!
CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830-1722
FAX: (330)830-1786

TRENCH DETAIL



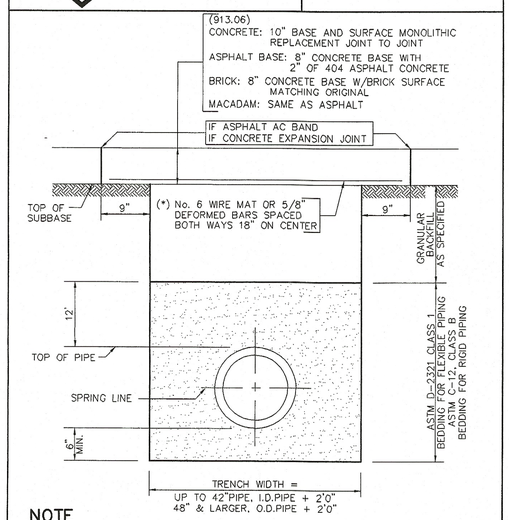
NOTE

(*) MUST BE USED WHEN WIDTH OF TRENCH IS GREATER THAN 3' AT THE SUBBASE LEVEL

NO SCALE

Francis H. Ciochinelli, Jr.
Massillon Means More!
CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830-1722
FAX: (330)830-1786

OPEN CUT DETAIL



NOTE

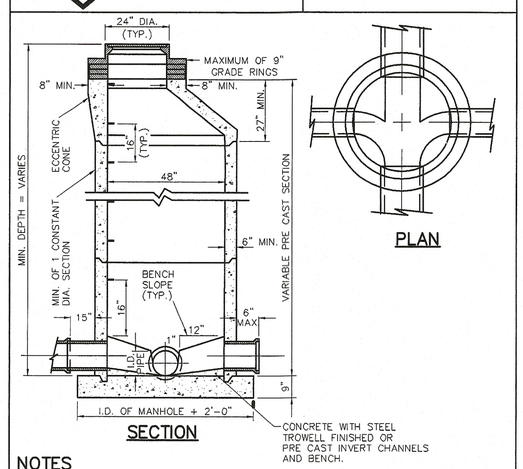
(*) MUST BE USED WHEN WIDTH OF TRENCH IS GREATER THAN 3' AT THE SUBBASE LEVEL

CONCRETE BASE SHALL BE OF 1:2:4, 6BAG MIX, PORTLAND CEMENT CONCRETE USING HIGH EARLY STRENGTH CEMENT AND IT MUST BE CURED AT LEAST 48 HRS.

NO SCALE

Francis H. Ciochinelli, Jr.
Massillon Means More!
CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830-1722
FAX: (330)830-1786

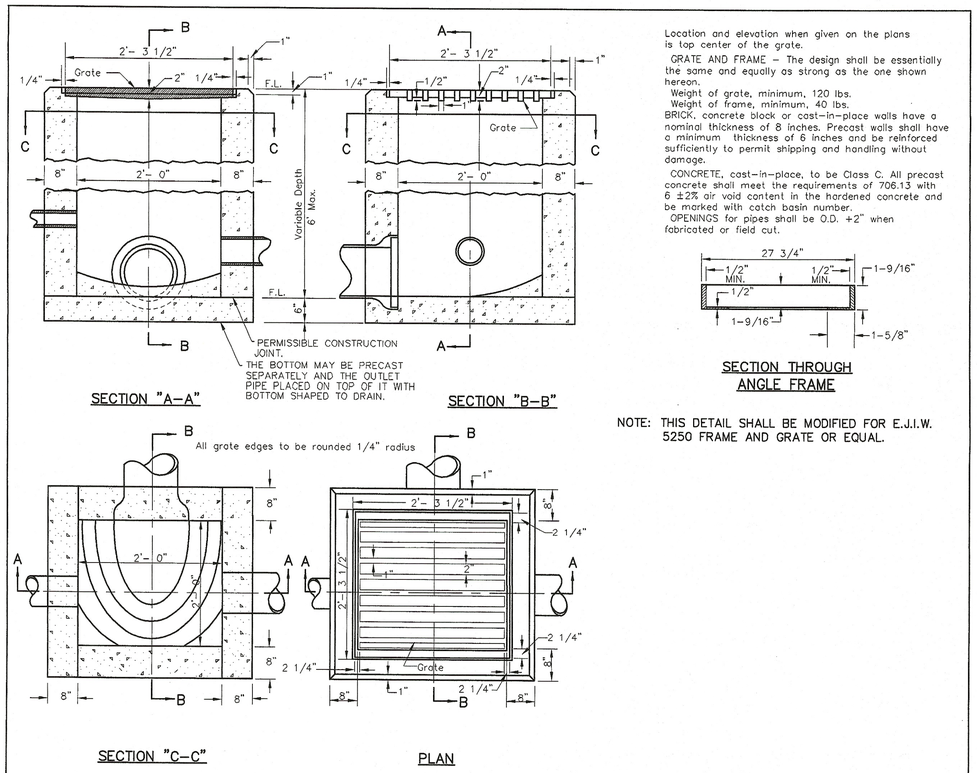
MANHOLE



NOTES

1. IF TOP STEP IS IN 24" DIA. OPENING IT MAY PROJECT NO MORE THAN 3 1/2".
2. M.A. IND. PS-1-PF STEPS OR APPROVED EQUAL.
3. FOR SPECIFICATIONS REGARDING CONCRETE TO BE USED IN MANHOLES SEE ITEM NO. 4&16.
4. FOR PVC & ABS PIPE CONNECTIONS USE ASTM C-923 FLEXIBLE GASKET SUCH AS A-LOK, DURA SEAL III, KOR-N-SEAL OR APPROVED EQUAL. THIS METHOD ALSO ACCEPTABLE FOR VCP.
5. PRE CAST MANHOLES SECTIONS SHALL MEET ASTM C478.
6. MANHOLE JOINTS SHALL MEET ASTM C443.

NO SCALE



Location and elevation when given on the plans is top center of the grate.

GRATE AND FRAME - The design shall be essentially the same and equally as strong as the one shown hereon.

Weight of grate, minimum, 120 lbs.

Weight of frame, minimum, 40 lbs.

BRICK, concrete block or cast-in-place walls have a nominal thickness of 8 inches. Precast walls shall have a minimum thickness of 6 inches and be reinforced sufficiently to permit shipping and handling without damage.

CONCRETE, cast-in-place, to be Class C. All precast concrete shall meet the requirements of 706.13 with 6 ±2% air void content in the hardened concrete and be marked with catch basin number.

OPENINGS for pipes shall be O.D. +2" when fabricated or field cut.

SECTION THROUGH ANGLE FRAME

NOTE: THIS DETAIL SHALL BE MODIFIED FOR E.J.I.W. 5250 FRAME AND GRATE OR EQUAL.

STANDARD NO. 2-2-B CATCH BASIN

NO SCALE

REVISIONS

NO.	DESCRIPTIONS	DATE	BY	APP'D

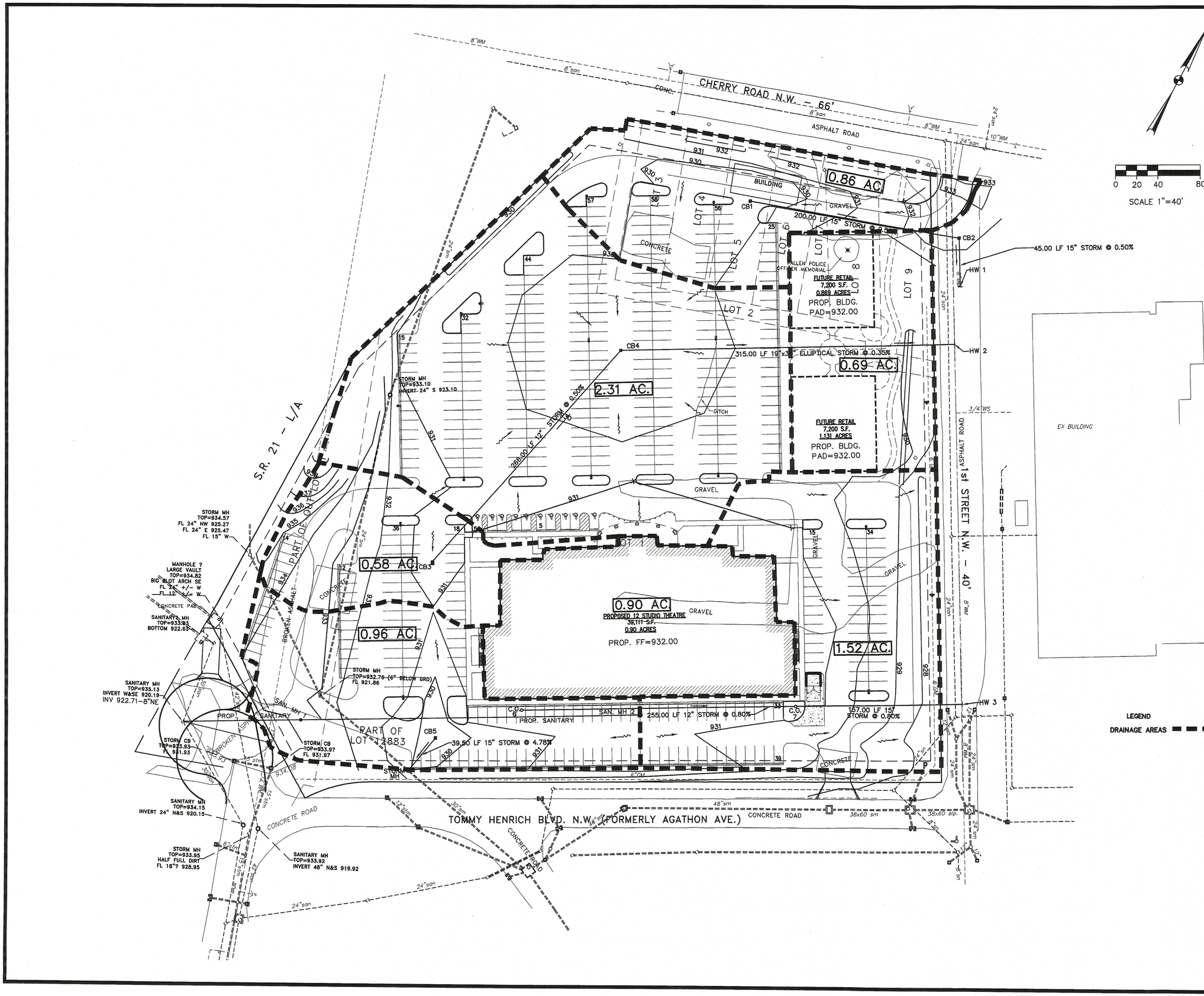
DESIGNED BY DLK
DRAWN BY ELR
CHECKED BY DLK
APPROVED BY DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
DETAILS

JOB NO. E04042
DATE 3/18/2005
SCALE NONE
SHEET C5

E:\E04042 GREAT ESCAPES\C5-DETAILS.dwg



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REVISIONS			
NO.	DESCRIPTIONS	DATE	BY	APP'D

DESIGNED BY	DLK
DRAWN BY	ELR
CHECKED BY	DLK
APPROVED BY	DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
DRAINAGE AREAS

JOB NO.	E04042
DATE	3/18/2005
SCALE	1"=40'
SHEET	C6

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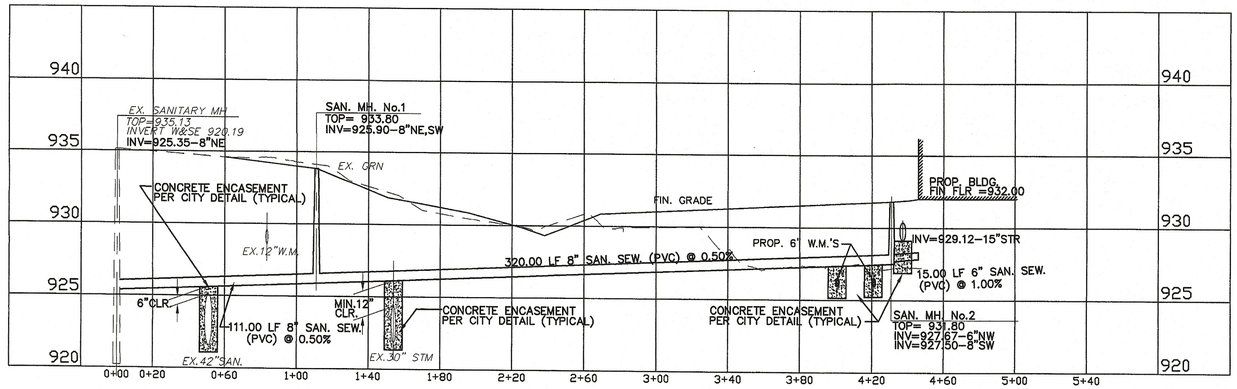
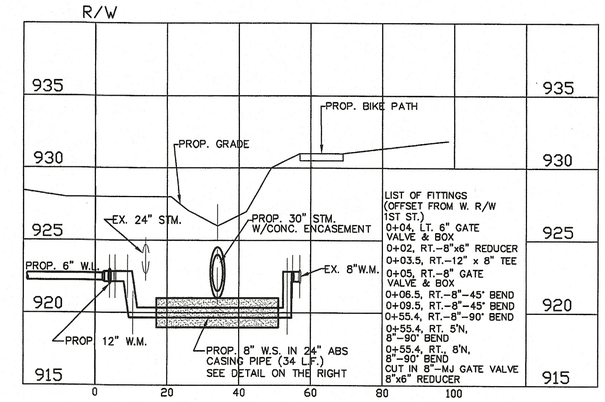
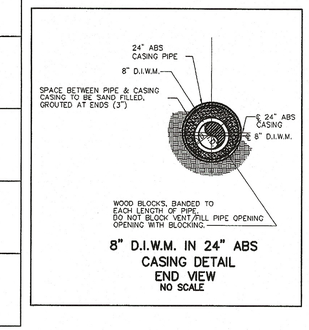


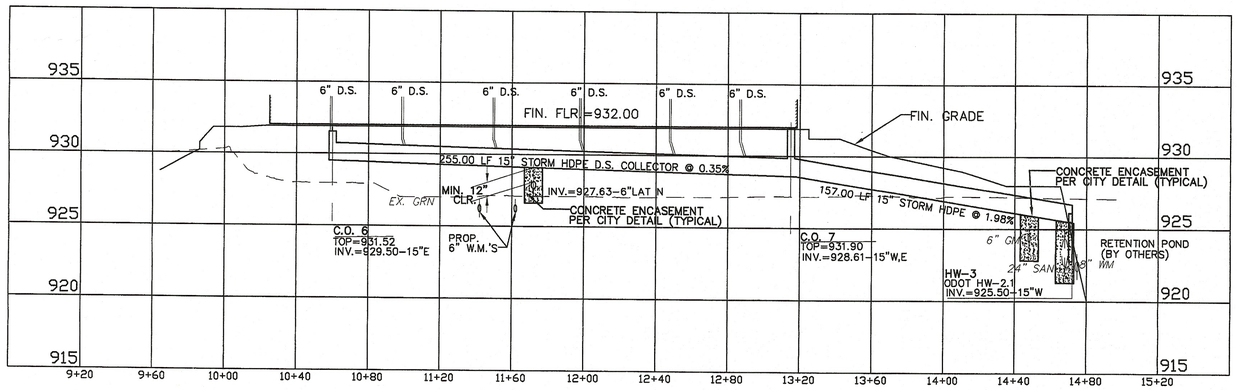
SANITARY SEWER PROFILE SOUTH SIDE BUILDING



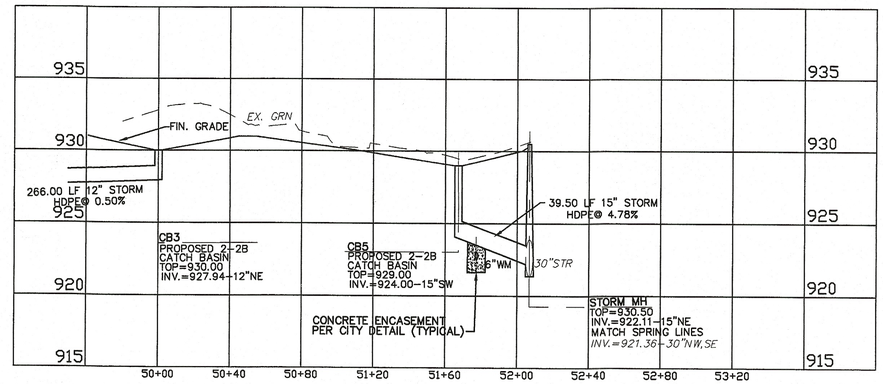
8" D.I.W.M. PROFILE NORTH POND
(VIEWING NORTHERLY)
SCALE THIS PROFILE ONLY
HOR. 1"=20' - VERT 1"=5'



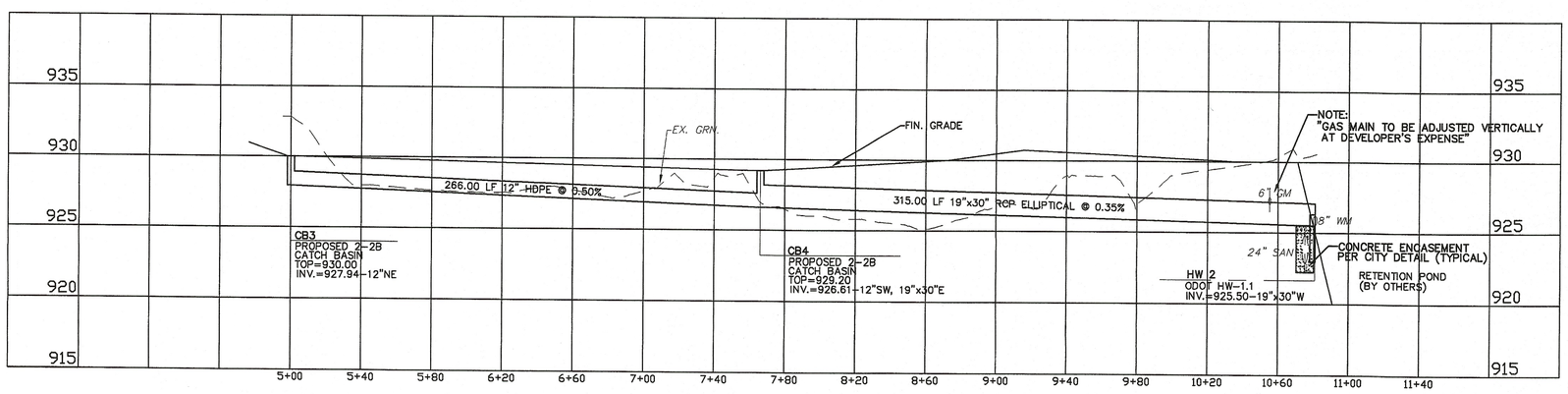
8" D.I.W.M. IN 24" ABS
CASING DETAIL
END VIEW
NO SCALE



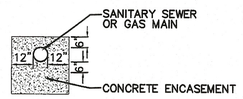
STORM SEWER PROFILE SOUTH SIDE BUILDING



STORM SEWER PROFILE SOUTHWEST SIDE BUILDING



STORM SEWER PROFILE NORTH & NORTHWEST SIDE BUILDING



CONCRETE ENCASEMENT DETAIL
FOR CROSSINGS WITH LESS THAN
2' CLEARANCE PROVIDE 10 L.F.
ON PROTECTED PIPE
NO SCALE

HORIZONTAL SCALE 0 20 40 80

VERTICAL SCALE 0 5 10

REVISIONS			
NO.	DESCRIPTIONS	DATE	BY	APP'D

DESIGNED BY DLK
DRAWN BY ELR
CHECKED BY DLK
APPROVED BY DLK

CTI ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
STORM SEWER AND SANITARY SEWER PROFILES

JOB NO. E04042
DATE 3/30/2005
SCALE AS NOTED
SHEET C7

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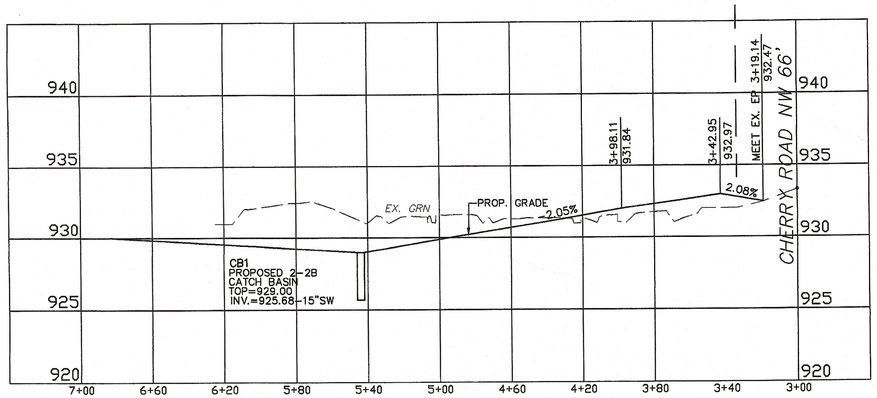
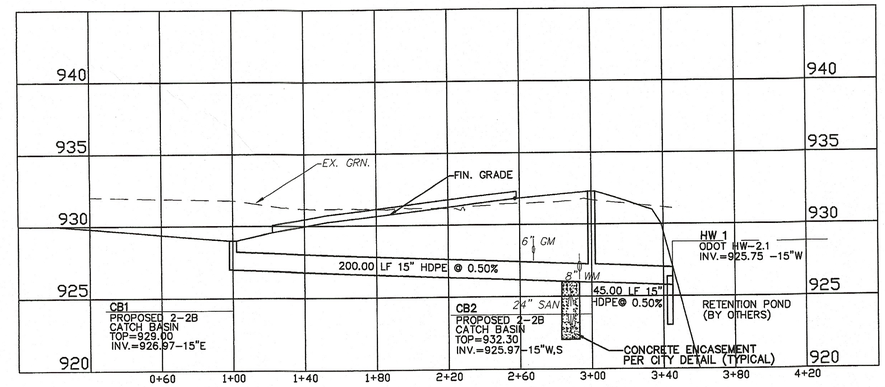


NE DRIVE PROFILE

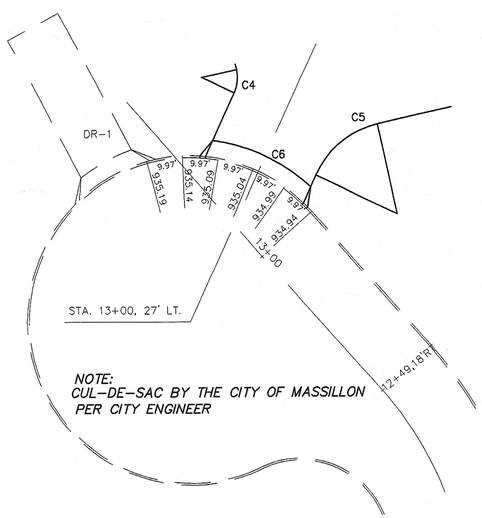


STORM SEWER PROFILE NORTH DRIVE ENTRANCE

HORIZONTAL SCALE 0 20 40 80

VERTICAL SCALE 0 5 10

NUMBER	C4	C5	C6
DELTA ANGLE	37°38'49"	52°21'11"	34°54'55"
RADIUS	10.00'	25.00'	50.00'
TANGENT	3.41'	12.29'	15.72'
CHORD LENGTH	6.45'	22.06'	30.00'
ARC LENGTH	6.57'	22.84"	30.47'
CHORD DIRECTION	N 06°09'04" E	N 51°09'04" E	N 65°01'31" W



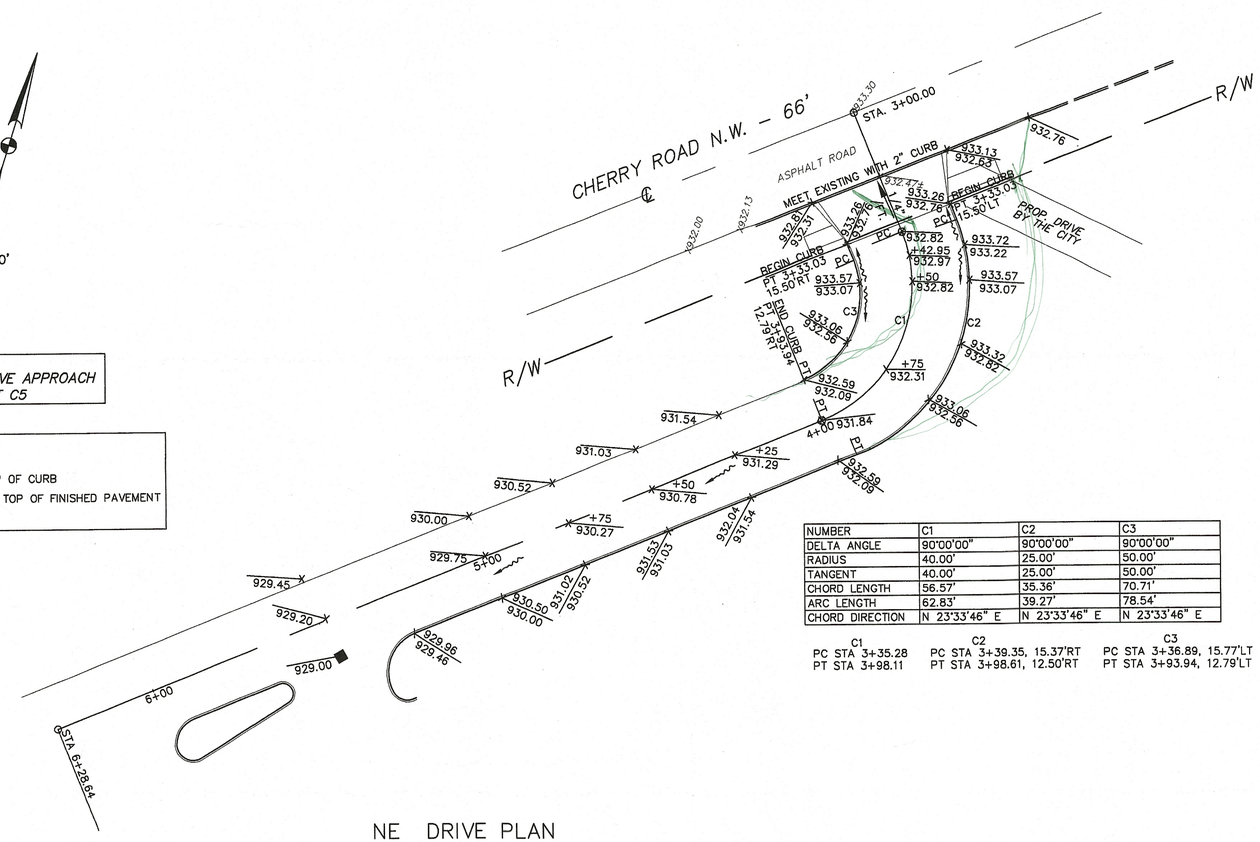
SW DRIVE PLAN

SCALE 1"=20'

NOTE:
CONSTRUCT CURB AND DRIVE APPROACH
PER CITY DETAIL ON SHEET C5

LEGEND

933.06 / 932.56 — TOP ELEVATION DENOTES TOP OF CURB; BOTTOM ELEVATION DENOTES TOP OF FINISHED PAVEMENT



NE DRIVE PLAN

NUMBER	C1	C2	C3
DELTA ANGLE	90°00'00"	90°00'00"	90°00'00"
RADIUS	40.00'	25.00'	50.00'
TANGENT	40.00'	25.00'	50.00'
CHORD LENGTH	56.57'	35.36'	70.71'
ARC LENGTH	62.83'	39.27'	78.54'
CHORD DIRECTION	N 23°33'46" E	N 23°33'46" E	N 23°33'46" E

C1
PC STA 3+35.28
PT STA 3+98.11

C2
PC STA 3+39.35, 15.37'RT
PT STA 3+98.61, 12.50'RT

C3
PC STA 3+36.89, 15.77'LT
PT STA 3+93.94, 12.79'LT

REVISIONS

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ENVIRONMENTAL, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
UNIONTOWN, OHIO

GREAT ESCAPES THEATRE
MASSILLON, OHIO
DRIVE DETAILS

JOB NO. E04042
DATE 3/18/2005
SCALE AS NOTED
SHEET C8

E:\E04042 GREAT ESCAPES\C7-C8- PRO 40PP24X36.DWG