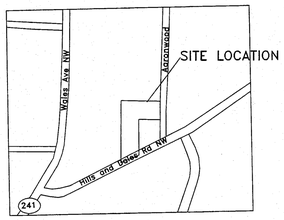
ALTA/ACSM LAND TITLE SURVEY

HOLLAND INVESTMENT PARTNERS, LTD., (INSTRUMENT #200004100019989)

OUT LOT 573, CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO

VICINITY MAP

1"=1000'



LEGEND:

- —OH— OVERHEAD UTILITIES
- —C— UNDERGROUND COMMUNICATION
- —E— UNDERGROUND ELECTRIC
- —ST— STORM SEWER
- —G— 4" GAS LINE
- —SAN— SANITARY SEWER LINE
- —W— WATER LINE
- FIRE HYDRANT (UNLESS NOTED AS PIV)
- UTILITY POLE
- LIGHT POLE
- GUY WIRE ANCHOR
- TRAFFIC BOX
- SIGNAL POLE
- MONITORING WELL
- (11) REFERENCE TO SCHEDULE "B"
- R/W RIGHT-OF-WAY
- ○ 5/8" ROD FOUND (UNLESS NOTED OTHERWISE)
- ● 5/8" ROD SET
- —CORP— CITY OF MASSILLON CORPORATION LINE
- —R/W— RIGHT-OF-WAY
- —℄— CENTER LINE
- —X— 6' HIGH CHAIN LINK FENCE
- SIGN
- WATER VALVE
- GAS VALVE

SCHEDULE B SECTION TWO

(11) Volume 53 Page 6 – City of Massillon Annexation Map. (Affects property, Annexation into the City of Massillon)

(12) Volume 3579 Page 224 – Easement to Ohio Edison Company. (Affects property, Poles Approximately 2' from limits of County Road 98)

(13) Volume 352, Page 250 – Easement and Right of Way to the Ohio Edison Company. (Affects property, 10' wide easement Along west property line and building service, see map.)

DATUM & BASIS OF BEARINGS

THE STARK COUNTY GEODETIC REFERENCE SYSTEM POINTS USED AS REFERENCE STATIONS TO ESTABLISH THE DATUM ARE DESIGNATED AS JAC165.

ALL BEARINGS SHOWN ARE BASED ON GRID NORTH. ALL DIMENSIONS SHOWN ARE GROUND DISTANCES. TO OBTAIN A GRID DISTANCE, MULTIPLY THE GROUND DISTANCE BY THE PROJECT COMBINED FACTOR (PCF) OF 0.999894.

THE STARK COUNTY GEODETIC REFERENCE SYSTEM IS BASED ON OHIO STATE PLANE COORDINATES, NORTH ZONE, NAD83 HORIZONTAL (1986 ADJUSTMENT) AND NAVD88 VERTICAL.

SOURCES USED:

1. PLAT OF SURVEY: SHISLER & ASSOCIATES – SEPTEMBER, 1980
   SHISLER & ASSOCIATES – NOVEMBER 23, 1973
   SHISLER & ASSOCIATES – SEPTEMBER, 1981
   SHISLER & ASSOCIATES – OCTOBER, 1992
2. DEEDS AS NOTED
3. TITLE COMMITMENT NO. 2013-3-2 DATED February 19, 2013 @ 8:00am
4. UTILITY MAP PROVIDED BY DOMINION EAST OHIO
5. UTILITY MAP PROVIDED BY OHIO EDISON A FIRST ENERGY COMPANY
6. STARK COUNTY GIS DATA
7. STARK COUNTY SANITARY ENGINEERING DEPT.
8. MASSILLON TAX MAP 5D, AND 5C
9. CITY OF MASSILLON ANNEXATION MAP – VOLUME 53 PAGE 6
9. IMPROVEMENT PLANS FOR HILLS AND DALES RELOCATION STA. 8+0 TO 12+0 – MASSILON CITY ENGINEER

CERTIFICATION

TO: Ohio Bar Title Insurance Company

TO: Holland Investment Partners, LTD., and Ohio limited partnership

TO: Campbell Real Estate, Ltd. and an Ohio limited liability company

TO: Aaronwood Title Agency, Inc.

This is to certify that this map or Plat and the survey on which it is based were made in accordance with 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 4, 5, 7(b), 8, 11(b), and 20(b) of Table A thereof. The field work was completed on May 16, 2013. I further certify that this map or plat and the survey on which it is based is based on the legal description contained in Title Commitment No. 2013-3-2 dated February 19, 2013 at 8:00am and that it meets the Minimum Standards for Boundary Surveys in the State of Ohio as set forth in Ohio Administrative Code, Chapter 4733-37.

STATE OF OHIO
CURTIS G. DEIBEL
6673
REGISTERED PROFESSIONAL SURVEYOR

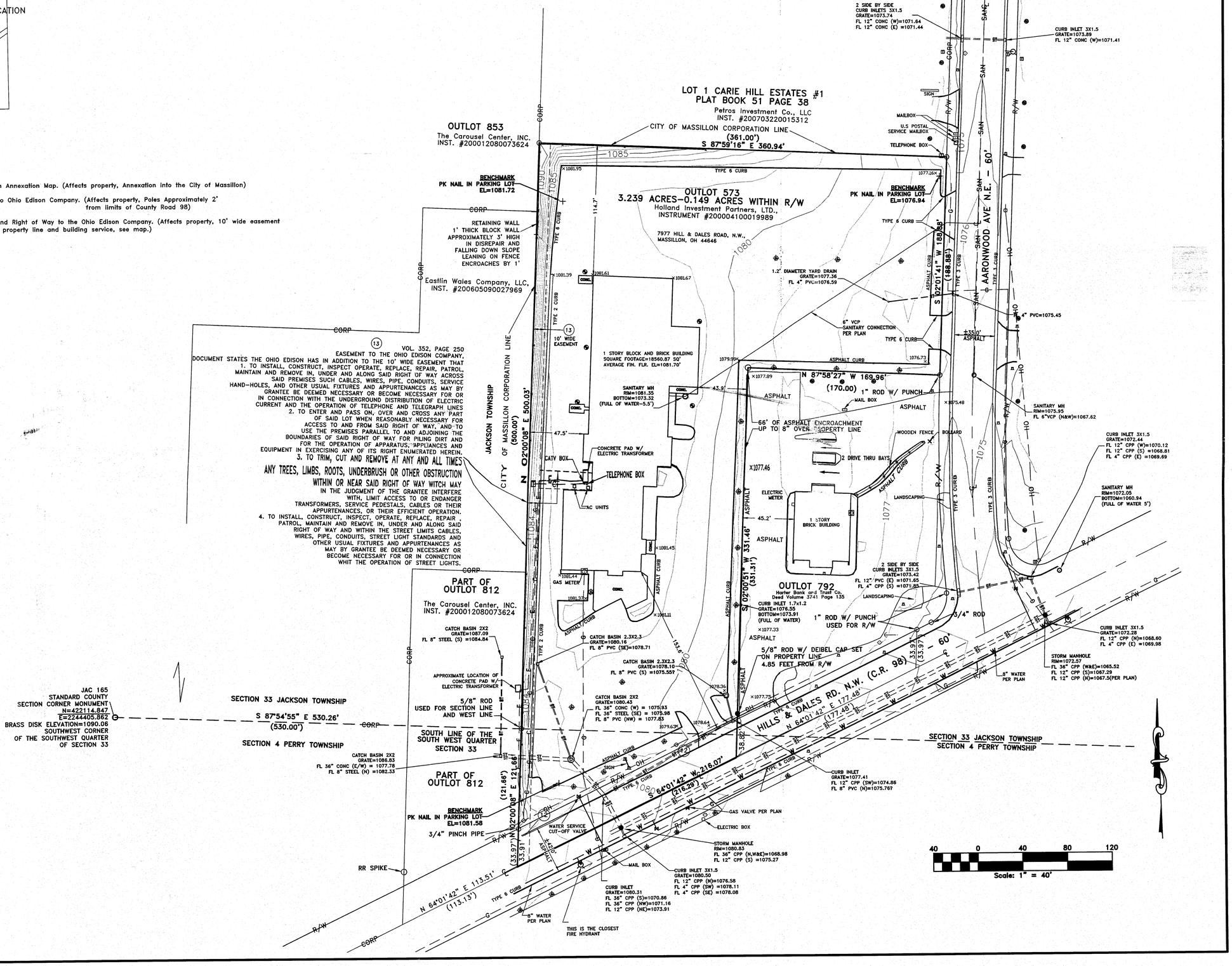
7/15/2013

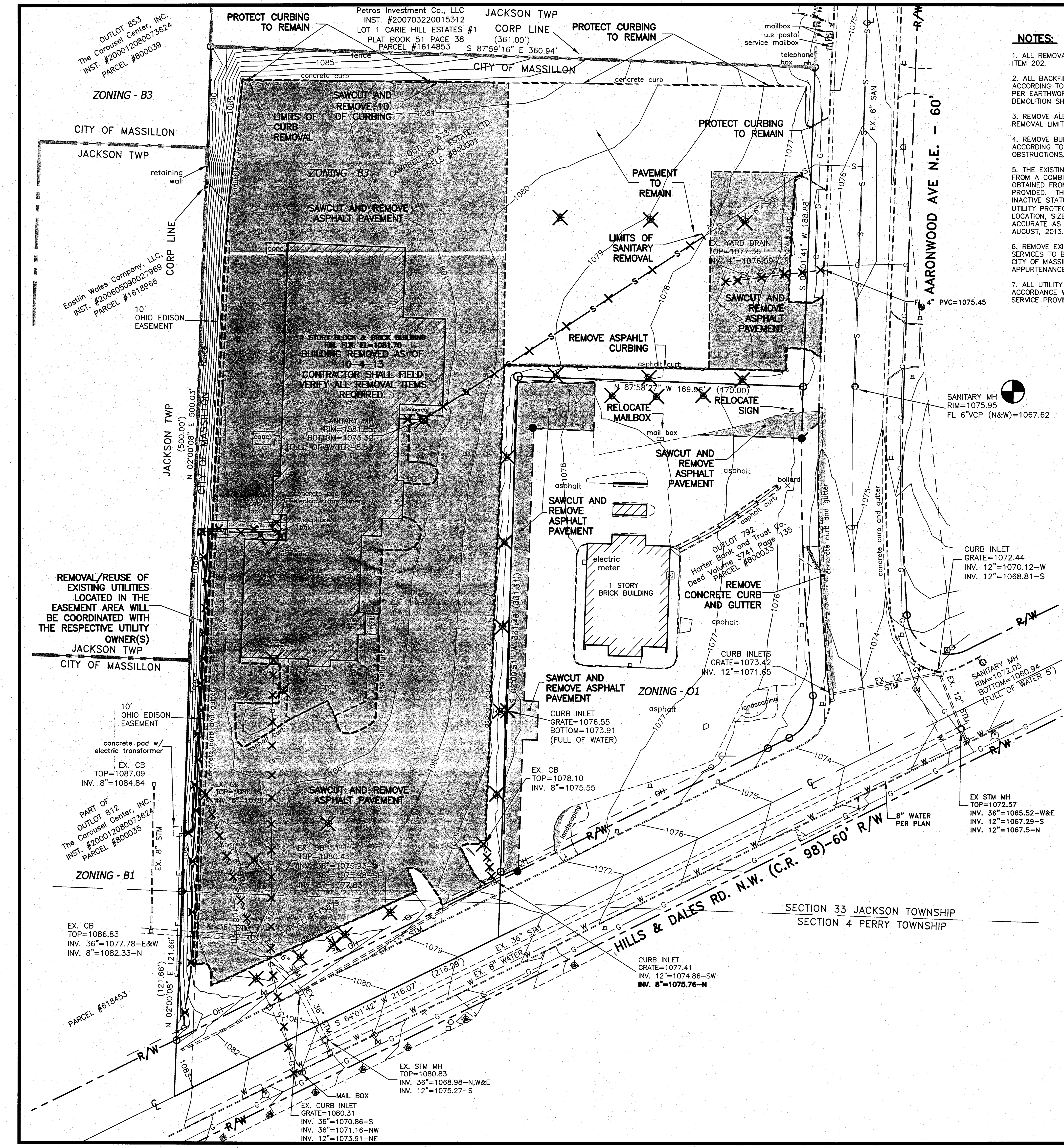
CURTIS G. DEIBEL, P.S.#6673 DATE

deibel surveying inc

1850 KIMBALL RD. S.E.
CANTON, OHIO 44707
OFFICE: (330) 455-2999
FAX: (330) 455-3299
E-mail: info@deibelsurveying.com

REVISION	DESCRIPTION	NAME	DATE
1)	IMPROVEMENTS ADDED	GJC	7/11/13
2)	IMPROVEMENTS ADDED	SFB	8/22/13





NOTES:

1. ALL REMOVAL ITEMS TO COMPLETED IN ACCORDANCE WITH ODOT ITEM 202.

2. ALL BACKFILL OF REMOVAL EXCAVATIONS TO BE COMPLETED ACCORDING TO ODOT ITEM 203 – EXCAVATION & EMBANKMENT AND PER EARTHWORK SPECIFICATIONS. ALL BACKFILL RESULTING FROM DEMOLITION SHALL BE PREMIUM BACKFILL AS SPECIFIED.

3. REMOVE ALL PAVEMENT, STONE BASE AND CURBING WITHIN REMOVAL LIMITS PER ODOT ITEM 202.

4. REMOVE BUILDINGS AND FOUNDATIONS IN THEIR ENTIRETY ACCORDING TO ODOT ITEM 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

5. THE EXISTING UNDERGROUND UTILITIES AS SHOWN ARE OBTAINED FROM A COMBINATION OF FIELD LOCATION AND RECORD INFORMATION OBTAINED FROM THE RESPECTIVE UTILITY COMPANIES, WHERE PROVIDED. THESE UTILITIES, THEIR LOCATION AND THEIR ACTIVE OR INACTIVE STATUS, SHOULD BE VERIFIED BY CONTACTING THE OHIO UTILITY PROTECTION SERVICE (O.U.P.S.), PRIOR TO CONSTRUCTION. LOCATION, SIZE, DEPTH AND STATUS OF USE ARE SHOWN AS ACCURATE AS POSSIBLE WITH THE AVAILABLE EXISTING DATA AS OF AUGUST, 2013.

6. REMOVE EXISTING SANITARY SEWER LATERALS AND WATER SERVICES TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF MASSILLON. COORDINATE REMOVAL OF SERVICES AND APPURTENANCES WITH THE CITY OF MASSILLON.

7. ALL UTILITY SERVICE LATERAL REMOVALS SHALL BE COMPLETED IN ACCORDANCE WITH AND COORDINATED WITH THE RESPECTIVE UTILITY SERVICE PROVIDERS.

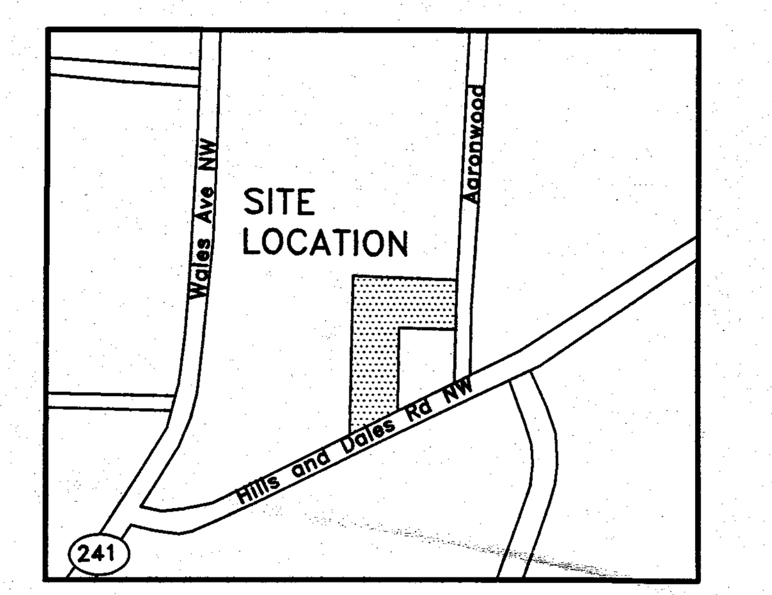
0' 30' 60' 90'

SCALE: 1" =30'

BENCHMARK: ELEV. =1075.95
TOP OF CASTING OF SANITARY MANHOLE LOCATED IN THE AARONWOOD DRIVE, EAST OF THE PROPERTY.

LEGEND:

℄	CENTER LINE
R/W	RIGHT OF WAY
—OH—	OVERHEAD UTILITIES
—C—	UNDERGROUND COMMUNICATION
—E—	UNDERGROUND ELECTRIC
—G—	GAS LINE
—S—	SANITARY SEWER LINE
—W—	WATER LINE
	FIRE HYDRANT (UNLESS NOTED AS PIV)
	UTILITY POLE
	LIGHT POLE
	GUY WIRE ANCHOR
	TRAFFIC BOX
	SIGNAL POLE
—X—	CHAIN LINK FENCE
	SIGN
	WATER VALVE
	SANITARY MANHOLE
	STORM MANHOLE
	LIMITS OF REMOVAL
	ITEM TO BE REMOVED



VICINITY MAP
1"=1000'

APPROVAL BY THE MASSILLON CITY ENGINEER THIS 21ST
DAY OF JANUARY, 2014.

KEITH A. DYLEWSKI, P.E., P.S.

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

UNDERGROUND UTILITIES
TWO WORKING DAYS BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005

SōL HARRIS/DAY architecture

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED
PROFESSIONAL ENGINEER

not published, all rights reserved

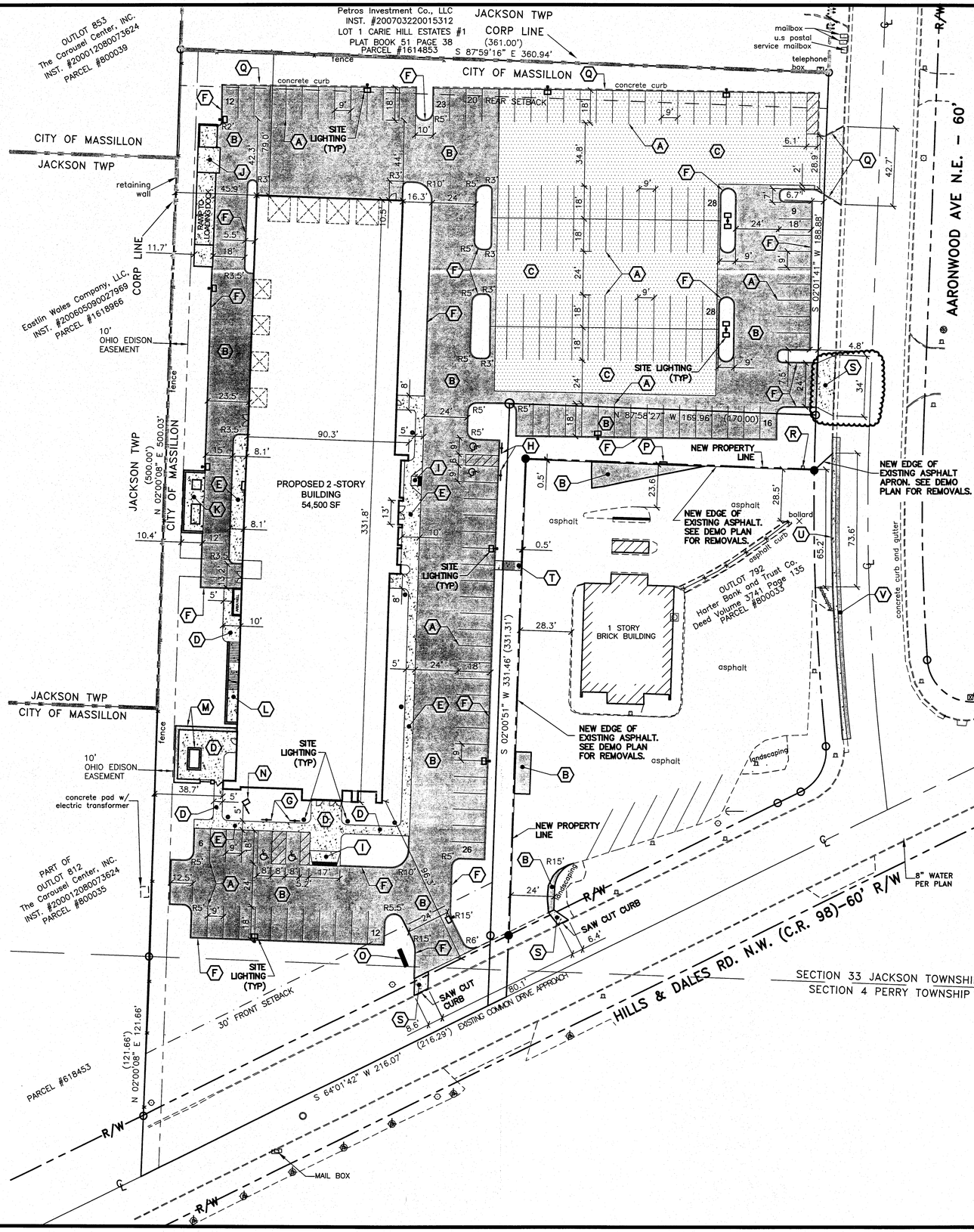
NEW CORPORATE OFFICE FOR:
CAMPBELL OIL
Hills and Dales Road
Massillon, Ohio 44646

MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

EXISTING CONDITIONS/ REMOVALS PLAN

C1.0



KEYED NOTES

- (A) STRIPE PAVEMENT AS SHOWN. STRIPING SHALL BE 4" WIDE. PER ODOT ITEM 641. VERIFY COLOR W/ OWNER.
- (B) CONSTRUCT ASPHALT PAVEMENT. SEE DETAIL SHEET C2.1.
- (C) MILL AND OVERLAY REMAINING EXISTING ASPHALT PAVEMENT. SEE DETAIL SHEET C2.1.
- (D) CONSTRUCT CONCRETE WALK. SEE DETAIL SHEET C2.1.
- (E) CONSTRUCT INTEGRAL CONCRETE CURB & WALK. SEE DETAIL SHEET C2.1.
- (F) CONSTRUCT 6" X 18" CONCRETE CURBING. SEE DETAIL SHEET C2.1.
- (G) CONSTRUCT VAN-ACCESSIBLE HANDICAP PARKING SIGNAGE. SEE DETAIL SHEET C2.1.
- (H) CONSTRUCT HANDICAP PARKING SIGNAGE. SEE DETAIL SHEET C2.1.
- (I) CONSTRUCT HANDICAP ACCESSIBLE RAMP. SEE DETAIL SHEET C2.1.
- (J) CONSTRUCT EXTERIOR LOADING DOCK. SEE ARCHITECTURAL PLANS FOR DETAILS.
- (K) CONSTRUCT MASONRY UTILITY ENCLOSURE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- (L) CONSTRUCT STAIR WELL. SEE ARCHITECTURAL PLANS FOR DETAILS.
- (M) CONSTRUCT MASONRY SITTING WALLS. SEE ARCHITECTURAL PLANS FOR DETAILS.
- (N) INSTALL FLAG POLE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- (O) INSTALL MONUMENT SIGN. SEE ARCHITECTURAL PLANS FOR DETAILS.
- (P) RELOCATED MAILBOX.
- (Q) PROTECT EXISTING CURBING TO REMAIN.
- (R) RELOCATED SIGN.
- (S) INSTALL/EXTEND CONCRETE APRON. SEE DETAILS SHEET C2.1.
- (T) INSTALL CONCRETE STAIRS AND RAILS. SEE ARCHITECTURAL PLANS FOR DETAILS.
- (U) INSTALL 168 LF OF ODOT TYPE 3 CONCRETE CURB AND GUTTER.
- (V) SAWCUT AND REPLACE ASPHALT AS NECESSARY TO INSTALL CURBING. SEE PAVEMENT RESTORATION DETAILS SHEET C-2.1.

SCALE: 1" =30'

LEGEND:

- ℄ CENTER LINE
- R/W RIGHT OF WAY
- —OH— OVERHEAD UTILITIES
- —C— UNDERGROUND COMMUNICATION
- —E— UNDERGROUND ELECTRIC
- —G— GAS LINE
- —S— SANITARY SEWER LINE
- —W— WATER LINE
- FIRE HYDRANT (UNLESS NOTED AS PIV)
- UTILITY POLE
- LIGHT POLE
- GUY WIRE ANCHOR
- TRAFFIC BOX
- SIGNAL POLE
- —X— CHAIN LINK FENCE
- SIGN
- WATER VALVE
- (S) SANITARY MANHOLE
- STORM MANHOLE
- 5/8" ROD FOUND
- 5/8" ROD TO BE SET
- PROPOSED SITE LIGHTING FIXTURE

NOTES:

1. DIMENSIONS SHOWN ARE TO THE FACE OF CURB, FACE OF BUILDING, OR EDGE OF PAVEMENT, UNLESS NOTED OTHERWISE.
2. CONTRACTOR SHALL VERIFY BUILDING FOOTPRINT WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING CONSTRUCTION. ALL BUILDING DIMENSIONS SHALL BE OBTAINED FROM THE ARCHITECTURAL PLANS.

PROPERTY INFORMATION

PARCEL NUMBER: 800001 & 615879
EXISTING USE: COMMERCIAL
PROPOSED USE: COMMERCIAL
AREA OF PARCEL = 3.24 ACRES
AREA OF PROPERTY TO BE ADDED = 0.19 ACRES
TOTAL DEVELOPMENT AREA = 3.43 ACRES

ZONING INFORMATION

ZONING: GENERAL BUSINESS DISTRICT (B-3)
FRONT YARD SETBACK: 30'
REAR YARD SETBACK: 20'
SIDE YARD SETBACK: NONE
MAXIMUM BUILDING HEIGHT: 30' (3 STORIES)

PARKING INFORMATION

BUILDING USES:

PROFESSIONAL OFFICE: 22,937 SQ. FT.
STORAGE/MECHANICAL: 26,360 SQ. FT.
ASSEMBLY: 5,030 SQ. FT. (239 SEATS)

PARKING REQUIREMENTS

PROFESSIONAL OFFICE: ONE SPACE PER 200 SQUARE FEET OF FLOOR AREA.
AUDITORIUM/ASSEMBLY: ONE SPACE PER EVERY 4 SEATS.

ASSEMBLY = 239/4 = 60 SPACES
PROFESSIONAL OFFICE = 22,937/200= 114 SPACES
STORAGE/MECHANICAL = NONE

TOTAL SPACES REQUIRED = 114 SPACES

TOTAL SPACES PROVIDED = 160 SPACES

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005

SOL HARRIS/DAY architecture
8877 Frank Ave NW
North Canton, OH 44720
ph: 330.493.8282
fx: 330.493.5777
www.solharriday.com

[DESIGNED FOR PEOPLE, DESIGNED FOR LIFE.]

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED PROFESSIONAL ENGINEER

not published, all rights reserved

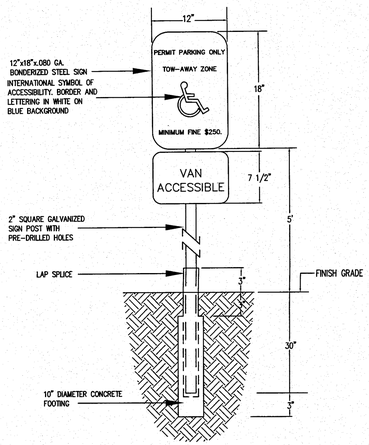
NEW CORPORATE OFFICE FOR:
CAMPBELL OIL
Hills and Dales Road
Massillon, Ohio 44646

MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

DIMENSIONED SITE PLAN

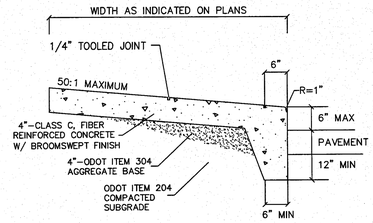
C2.0



HANDICAP SIGN DETAIL

NO SCALE

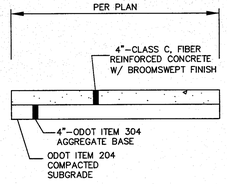
NOTES:
1. REFLECTIVE BLUE BACKGROUND WHITE LETTERING AND SYMBOL LETTERING MINIMUM 1" HEIGHT
2. SIGN TO BE MOUNTED ON 2" METAL POST.
3. ONE SIGN PER HANDICAPPED SPACE.
4. VAN ACCESSIBLE SIGN TO BE MOUNTED BELOW STANDARD HC SIGN WHERE SPECIFIED ON PLANS. COLORING AND LETTERING TO MATCH HC SIGN.



NOTES:
1. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE TO BE 4,000 PSI IN 28 DAYS.
2. PROVIDE SAWED JOINTS (¼" D X ⅛"W) AT MINIMUM 5'-0" SPACINGS. EXPANSION JOINTS SHALL BE USED WHERE THE WALK ABUTS THE EXISTING WALK, BUILDING, OR CURB AND AT MAXIMUM 20'-0" INTERVALS PERPENDICULAR TO THE BUILDINGS.
3. STRUCTURAL FIBERS SHALL BE TUF-STRAND FS OR APPROVED EQUAL.
4. STRUCTURAL FIBER DOSING RATE TO BE A MINIMUM OF 5 LB/CY.

INTEGRAL CURB & WALK DETAIL

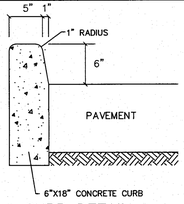
NO SCALE



NOTES:
1. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE TO BE 4,000 PSI IN 28 DAYS.
2. PROVIDE SAWED JOINTS (¼" D X ⅛"W) AT MINIMUM 5'-0" SPACINGS. EXPANSION JOINTS SHALL BE USED WHERE THE WALK ABUTS THE EXISTING WALK, BUILDING, OR CURB AND AT MAXIMUM 20'-0" INTERVALS PERPENDICULAR TO THE BUILDINGS.
3. STRUCTURAL FIBERS SHALL BE TUF-STRAND FS OR APPROVED EQUAL.
4. STRUCTURAL FIBER DOSING RATE TO BE A MINIMUM OF 5 LB/CY.

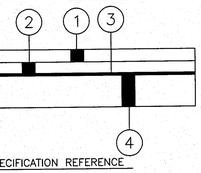
CONCRETE WALK DETAIL

NO SCALE



CURB DETAIL

NO SCALE

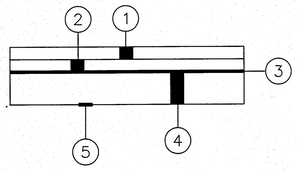


O.D.O.T. SPECIFICATION REFERENCE

1. ITEM 448 – 1-1/2" ASPHALT SURFACE COURSE, TYPE 1
2. ITEM 448 – 1/2" ASPHALT INTERMEDIATE (LEVELING) COURSE, TYPE 1
3. ITEM 407 – TACK COAT – (0.10 GALLONS PER SQ. YD.)
4. EXISTING PAVEMENT – 2" TO BE MILLED FROM SURFACE. ALL CRACKS 1/4" WIDE AND GREATER SHALL BE ROUTED AND SEALED

PAVEMENT OVERLAY SECTION

NO SCALE

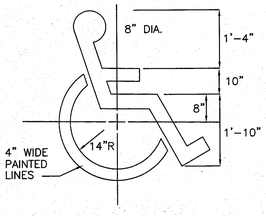


O.D.O.T. SPECIFICATION REFERENCE

1. ITEM 448 – 1-1/2" ASPHALT SURFACE COURSE, TYPE 1
2. ITEM 448 – 2-1/2" ASPHALT INTERMEDIATE COURSE, TYPE 2
3. ITEM 408 – PRIME COAT – (0.40 GALLONS PER SQ. YD.)
4. ITEM 304 – 8" AGGREGATE BASE (2– 4" LIFTS)
5. ITEM 204 – SUBGRADE COMPACTION

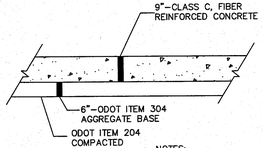
ASPHALT PAVEMENT SECTION

NO SCALE



PAVEMENT MARKING DETAIL

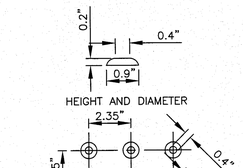
NO SCALE



NOTES:
1. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE TO BE 4,000 PSI IN 28 DAYS.
2. PROVIDE SAWED JOINTS (¼" D X ⅛"W) AT MINIMUM 6'-0" SPACINGS.
3. STRUCTURAL FIBERS SHALL BE TUF-STRAND FS OR APPROVED EQUAL.
4. STRUCTURAL FIBER DOSING RATE TO BE A MINIMUM OF 5 LB/CY.
5. PAVEMENT THICKNESS PROVIDED IS BASED UPON ASSUMED SOIL CONDITIONS. CONTRACTOR SHALL OBTAIN SOIL TESTING TO VERIFY REQUIRED BUILD UP.

CONCRETE PAVEMENT DETAIL

NOT TO SCALE

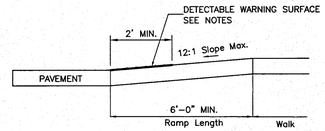


SQUARE PATTERN, PARALLEL ALIGNMENT

DETECTABLE WARNING SURFACE NOTES:

1. SURFACE SHALL CONSIST OF TRUNCATED DOMES ALIGNED ON A SQUARE GRID PATTERN WITH THE DIRECTION OF TRAFFIC.
2. SEE DETAIL FOR TRUNCATED DOME DIMENSIONS AND SPACINGS.
3. WARNING SURFACE SHALL CONTRAST VISUALLY WITH THE ADJOINING WALK SURFACES. EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALK SURFACE. CONTRAST SHALL BE MINIMUM OF 70%.
4. DECTABLE WARNING SURFACE SHALL BE DURABLE, UV PROTECTED, POLYURETHANE MATS OR TILES.
5. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

TRUNCATED DOMES DETAILS

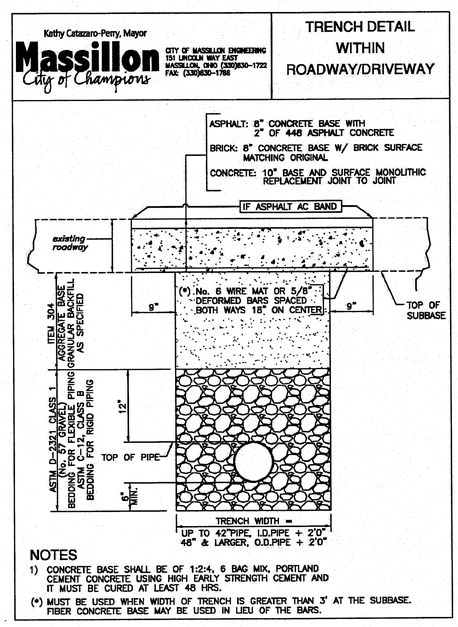


HANDICAP RAMP DETAIL

NO SCALE

Kathy Catazaro-Perry, Mayor
Massillon City of Champions
CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830-1722
FAX: (330)830-1788

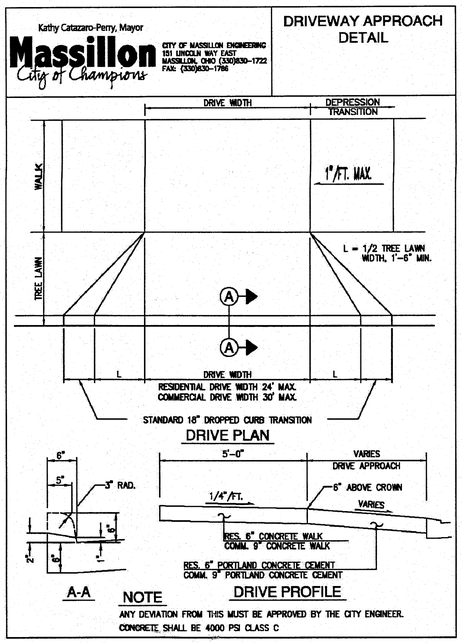
TRENCH DETAIL WITHIN ROADWAY/DRIVEWAY



NOTES
1) CONCRETE BASE SHALL BE OF 1:2:4, 6 BAG MIX, PORTLAND CEMENT CONCRETE USING HIGH EARLY STRENGTH CEMENT AND IT MUST BE CURED AT LEAST 48 HRS.
(*) MUST BE USED WHEN WIDTH OF TRENCH IS GREATER THAN 3' AT THE SUBBASE. FIBER CONCRETE BASE MAY BE USED IN LIEU OF THE BARS.

Kathy Catazaro-Perry, Mayor
Massillon City of Champions
CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830-1722
FAX: (330)830-1788

DRIVEWAY APPROACH DETAIL



DRIVE PLAN

A-A

DRIVE PROFILE

NOTE
ANY DEVIATION FROM THIS MUST BE APPROVED BY THE CITY ENGINEER.
CONCRETE SHALL BE 4000 PSI CLASS C

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005

SOL HARRIS/DAY architecture
8577 Frank Ave NW
North Canton, Ohio 44720
phone: 330.493.3722
fx: 330.493.5777
www.solharrisday.com

[DESIGNED FOR PEOPLE. DESIGNED TO PERFORM.]

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED
PROFESSIONAL ENGINEER

not published, all rights reserved

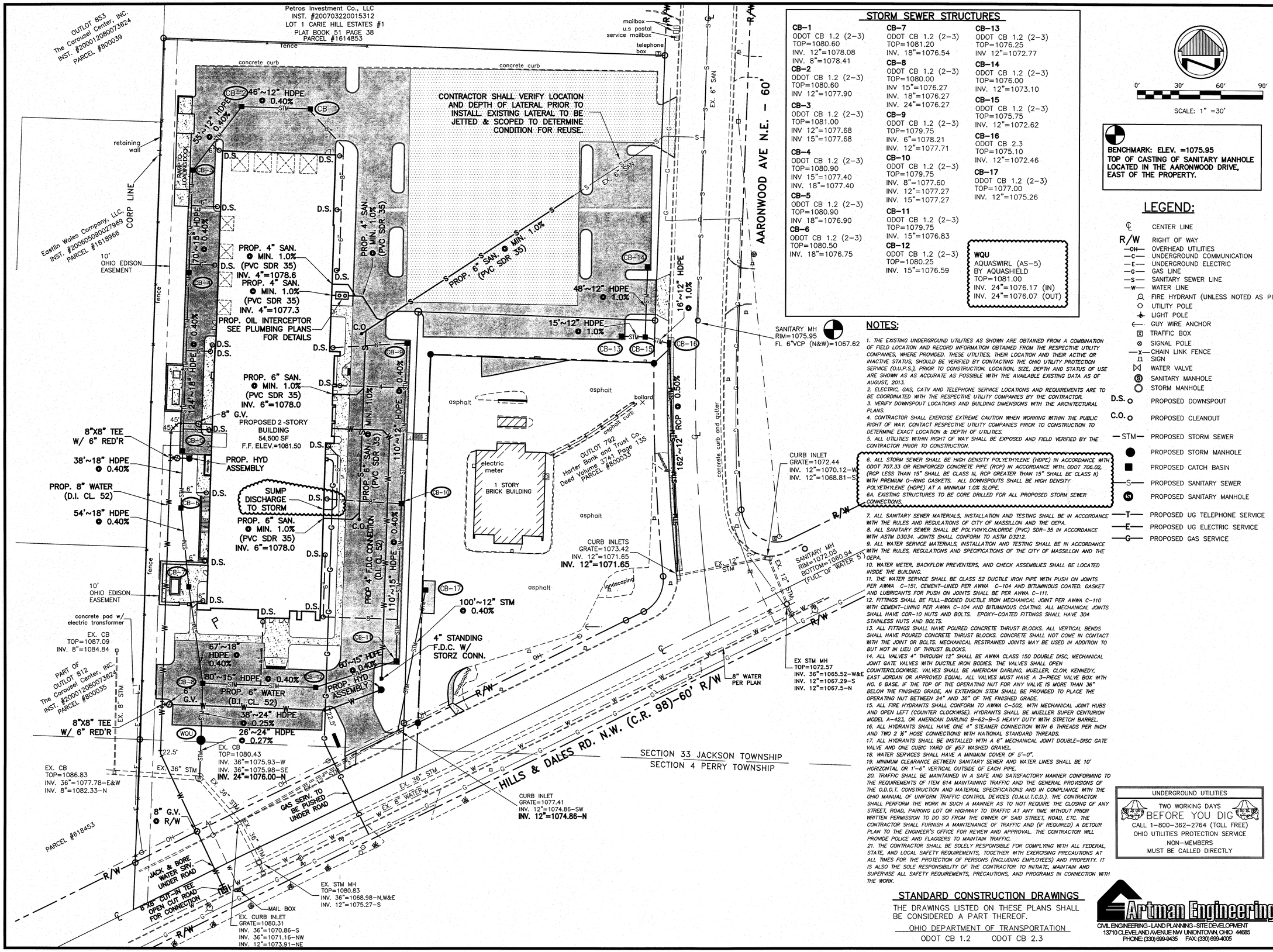
NEW CORPORATE OFFICE FOR:
CAMPBELL OIL
Hills and Dales Road
Massillon, Ohio 44646

MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

SITE DETAILS

C2.1



STORM SEWER STRUCTURES

CB-1
ODOT CB 1.2 (2-3)
TOP=1080.60
INV. 12"=1078.08
INV. 8"=1078.41

CB-2
ODOT CB 1.2 (2-3)
TOP=1080.60
INV 12"=1077.90

CB-3
ODOT CB 1.2 (2-3)
TOP=1081.00
INV 12"=1077.68
INV 15"=1077.68

CB-4
ODOT CB 1.2 (2-3)
TOP=1080.90
INV 15"=1077.40
INV. 18"=1077.40

CB-5
ODOT CB 1.2 (2-3)
TOP=1080.90
INV 18"=1076.90

CB-6
ODOT CB 1.2 (2-3)
TOP=1080.50
INV. 18"=1076.75

CB-7
ODOT CB 1.2 (2-3)
TOP=1081.20
INV. 18"=1076.54

CB-8
ODOT CB 1.2 (2-3)
TOP=1080.00
INV 15"=1076.27
INV. 18"=1076.27
INV. 24"=1076.27

CB-9
ODOT CB 1.2 (2-3)
TOP=1079.75
INV. 6"=1078.21
INV. 12"=1077.71

CB-10
ODOT CB 1.2 (2-3)
TOP=1079.75
INV. 8"=1077.60
INV. 12"=1077.27
INV. 15"=1077.27

CB-11
ODOT CB 1.2 (2-3)
TOP=1079.75
INV. 15"=1076.83

CB-12
ODOT CB 1.2 (2-3)
TOP=1080.25
INV. 15"=1076.59

CB-13
ODOT CB 1.2 (2-3)
TOP=1076.25
INV 12"=1072.77

CB-14
ODOT CB 1.2 (2-3)
TOP=1076.00
INV. 12"=1073.10

CB-15
ODOT CB 1.2 (2-3)
TOP=1075.75
INV. 12"=1072.62

CB-16
ODOT CB 2.3
TOP=1075.10
INV. 12"=1072.46

CB-17
ODOT CB 1.2 (2-3)
TOP=1077.00
INV. 12"=1075.26

WQU
AQUASWIRL (AS-5)
BY AQUASHIELD
TOP=1081.00
INV. 24"=1076.17 (IN)
INV. 24"=1076.07 (OUT)

NOTES:

1. THE EXISTING UNDERGROUND UTILITIES AS SHOWN ARE OBTAINED FROM A COMBINATION OF FIELD LOCATION AND RECORD INFORMATION OBTAINED FROM THE RESPECTIVE UTILITY COMPANIES, WHERE PROVIDED. THESE UTILITIES, THEIR LOCATION AND THEIR ACTIVE OR INACTIVE STATUS, SHOULD BE VERIFIED BY CONTACTING THE OHIO UTILITY PROTECTION SERVICE (O.U.P.S.). PRIOR TO CONSTRUCTION. LOCATION, SIZE, DEPTH AND STATUS OF USE ARE SHOWN AS AS ACCURATE AS POSSIBLE WITH THE AVAILABLE EXISTING DATA AS OF AUGUST, 2013.
2. ELECTRIC, GAS, CATV AND TELEPHONE SERVICE LOCATIONS AND REQUIREMENTS ARE TO BE COORDINATED WITH THE RESPECTIVE UTILITY COMPANIES BY THE CONTRACTOR.
3. VERIFY DOWNSPOUT LOCATIONS AND BUILDING DIMENSIONS WITH THE ARCHITECTURAL PLANS.
4. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING WITHIN THE PUBLIC RIGHT OF WAY. CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION & DEPTH OF UTILITIES.
5. ALL UTILITIES WITHIN RIGHT OF WAY SHALL BE EXPOSED AND FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. ALL STORM SEWER SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) IN ACCORDANCE WITH ODOT 707.33 OR REINFORCED CONCRETE PIPE (RCP) IN ACCORDANCE WITH ODOT 706.02. (RCP LESS THAN 15" SHALL BE CLASS III, RCP GREATER THAN 15" SHALL BE CLASS II) WITH PREMIUM O-RING GASKETS. ALL DOWNSPOUTS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) AT A MINIMUM 1.0% SLOPE.
6A. EXISTING STRUCTURES TO BE CORE DRILLED FOR ALL PROPOSED STORM SEWER CONNECTIONS.
7. ALL SANITARY SEWER MATERIALS, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF CITY OF MASSILLON AND THE OEPA.
8. ALL SANITARY SEWER SHALL BE POLYVINYLCHLORIDE (PVC) SDR-35 IN ACCORDANCE WITH ASTM D3034. JOINTS SHALL CONFORM TO ASTM D3212.
9. ALL WATER SERVICE MATERIALS, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH THE RULES, REGULATIONS AND SPECIFICATIONS OF THE CITY OF MASSILLON AND THE OEPA.
10. WATER METER, BACKFLOW PREVENTERS, AND CHECK ASSEMBLIES SHALL BE LOCATED INSIDE THE BUILDING.
11. THE WATER SERVICE SHALL BE CLASS 52 DUCTILE IRON PIPE WITH PUSH ON JOINTS PER AWWA C-151, CEMENT-LINED PER AWWA C-104 AND BITUMINOUS COATED. GASKET AND LUBRICANTS FOR PUSH ON JOINTS SHALL BE PER AWWA C-111.
12. FITTINGS SHALL BE FULL-BODIED DUCTILE IRON MECHANICAL JOINT PER AWWA C-110 WITH CEMENT-LINING PER AWWA C-104 AND BITUMINOUS COATING. ALL MECHANICAL JOINTS SHALL HAVE COR-10 NUTS AND BOLTS. EPOXY-COATED FITTINGS SHALL HAVE 304 STAINLESS NUTS AND BOLTS.
13. ALL FITTINGS SHALL HAVE POURED CONCRETE THRUST BLOCKS. ALL VERTICAL BENDS SHALL HAVE POURED CONCRETE THRUST BLOCKS. CONCRETE SHALL NOT COME IN CONTACT WITH THE JOINT OR BOLTS. MECHANICAL RESTRAINED JOINTS MAY BE USED IN ADDITION TO BUT NOT IN LIEU OF THRUST BLOCKS.
14. ALL VALVES 4" THROUGH 12" SHALL BE AWWA CLASS 150 DOUBLE DISC, MECHANICAL JOINT GATE VALVES WITH DUCTILE IRON BODIES. THE VALVES SHALL OPEN COUNTERCLOCKWISE. VALVES SHALL BE AMERICAN DARLING, MUELLER, CLOW, KENNEDY, EAST JORDAN OR APPROVED EQUAL. ALL VALVES MUST HAVE A 3-PIECE VALVE BOX WITH NO. 6 BASE. IF THE TOP OF THE OPERATING NUT FOR ANY VALVE IS MORE THAN 36" BELOW THE FINISHED GRADE, AN EXTENSION STEM SHALL BE PROVIDED TO PLACE THE OPERATING NUT BETWEEN 24" AND 36" OF THE FINISHED GRADE.
15. ALL FIRE HYDRANTS SHALL CONFORM TO AWWA C-502, WITH MECHANICAL JOINT HUBS AND OPEN LEFT (COUNTER CLOCKWISE). HYDRANTS SHALL BE MUELLER SUPER CENTURION MODEL A-423, OR AMERICAN DARLING B-62-B-5 HEAVY DUTY WITH STRETCH BARREL.
16. ALL HYDRANTS SHALL HAVE ONE 4" STEAMER CONNECTION WITH 6 THREADS PER INCH AND TWO 2 ½" HOSE CONNECTIONS WITH NATIONAL STANDARD THREADS.
17. ALL HYDRANTS SHALL BE INSTALLED WITH A 6" MECHANICAL JOINT DOUBLE-DISC GATE VALVE AND ONE CUBIC YARD OF #57 WASHED GRAVEL.
18. WATER SERVICES SHALL HAVE A MINIMUM COVER OF 5'-0".
19. MINIMUM CLEARANCE BETWEEN SANITARY SEWER AND WATER LINES SHALL BE 10' HORIZONTAL OR 1'-6" VERTICAL OUTSIDE OF EACH PIPE.
20. TRAFFIC SHALL BE MAINTAINED IN A SAFE AND SATISFACTORY MANNER CONFORMING TO THE REQUIREMENTS OF ITEM 614 MAINTAINING TRAFFIC AND THE GENERAL PROVISIONS OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS AND IN COMPLIANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (O.M.U.T.C.D.). THE CONTRACTOR SHALL PERFORM THE WORK IN SUCH A MANNER AS TO NOT REQUIRE THE CLOSING OF ANY STREET, ROAD, PARKING LOT OR HIGHWAY TO TRAFFIC AT ANY TIME WITHOUT PRIOR WRITTEN PERMISSION TO DO SO FROM THE OWNER OF SAID STREET, ROAD, ETC. THE CONTRACTOR SHALL FURNISH A MAINTENANCE OF TRAFFIC AND (IF REQUIRED) A DETOUR PLAN TO THE ENGINEER'S OFFICE FOR REVIEW AND APPROVAL. THE CONTRACTOR WILL PROVIDE POLICE AND FLAGGERS TO MAINTAIN TRAFFIC.
21. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

STANDARD CONSTRUCTION DRAWINGS

THE DRAWINGS LISTED ON THESE PLANS SHALL BE CONSIDERED A PART THEREOF.

OHIO DEPARTMENT OF TRANSPORTATION
ODOT CB 1.2 ODOT CB 2.3

0' 30' 60' 90'
SCALE: 1" =30'

BENCHMARK: ELEV. =1075.95
TOP OF CASTING OF SANITARY MANHOLE LOCATED IN THE AARONWOOD DRIVE, EAST OF THE PROPERTY.

LEGEND:

- ℄ CENTER LINE
- R/W RIGHT OF WAY
- —OH— OVERHEAD UTILITIES
- —C— UNDERGROUND COMMUNICATION
- —E— UNDERGROUND ELECTRIC
- —G— GAS LINE
- —S— SANITARY SEWER LINE
- —W— WATER LINE
- FIRE HYDRANT (UNLESS NOTED AS PIV)
- UTILITY POLE
- LIGHT POLE
- GUY WIRE ANCHOR
- TRAFFIC BOX
- SIGNAL POLE
- —x— CHAIN LINK FENCE
- SIGN
- WATER VALVE
- (S) SANITARY MANHOLE
- STORM MANHOLE
- D.S. PROPOSED DOWNSPOUT
- C.O. PROPOSED CLEANOUT
- —STM— PROPOSED STORM SEWER
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- —S— PROPOSED SANITARY SEWER
- (S) PROPOSED SANITARY MANHOLE
- —T— PROPOSED UG TELEPHONE SERVICE
- —E— PROPOSED UG ELECTRIC SERVICE
- —G— PROPOSED GAS SERVICE

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

SOL HARRIS/DAY architecture
8877 Frank Ave NW
North Canton, Ohio 44720
ph: 330.493.3728
fx: 330.493.5777
www.solharris.com
[DESIGNED FOR PEOPLE, DESIGNED FOR LIFE.]

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED PROFESSIONAL ENGINEER

not published, all rights reserved

NEW CORPORATE OFFICE FOR:
CAMPBELL OIL
Hills and Dales Road
Massillon, Ohio 44646

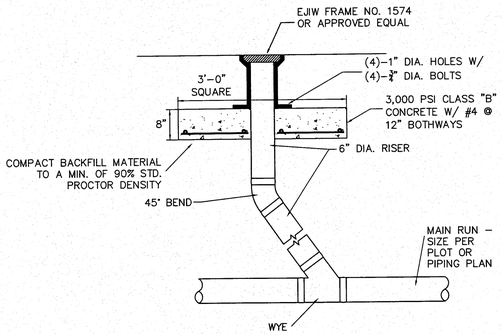
MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

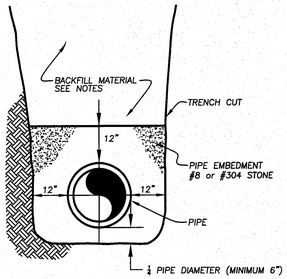
SITE UTILITY PLAN

C3.0

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005



UTILITY CLEANOUT



GRANULAR EMBEDMENT
PLASTIC PIPE

Trench Excavation. The trench excavation for both sewer and water pipe bedding shall be true to line and grade, as shown on the plans. The banks of the trench shall be kept as nearly vertical as possible and shall be properly drained. The bottom of the trenches shall not be more than twenty-four inches wider than the outside diameter of the pipe, with a minimum clearance between the bottom of the pipe and the trench bottom of one-fourth of the pipe diameter (but not less than six inches) in order that the pipe may be bedded in No. 8 or 304 stone. Shale, ledge rock, boulders and large stones shall be removed from the trench to give a minimum clearance from pipe or fittings of six inches.

Unstable Ground. Wherever wet, unstable or other undesirable soil is encountered which does not provide proper bearing for pipe, such material shall be excavated to good ground and the excavation refilled with suitable material to the required subgrade, compacting the fill in six-inch layers. If it would be more economical and desirable, soft ground may be crossed by supporting the pipe on concrete cradles, poured to cover the lower quadrant of the pipe. In no case shall any pipe or appurtenances be laid in or on topsoil.

Sheeting, Shoring and Bracing. All excavation shall be adequately protected from caving. If such caving occurs and disturbs the bedding, the grade or the alignment of the piping, the work shall be removed, suitable sheeting, shoring and bracing provided, and the work reinstalled.
The sheeting and bracing, in general, shall be removed as backfilling progresses and in such a manner as to avoid caving of the trench. Voids left by the withdrawal of sheeting shall be carefully filled and tamped.

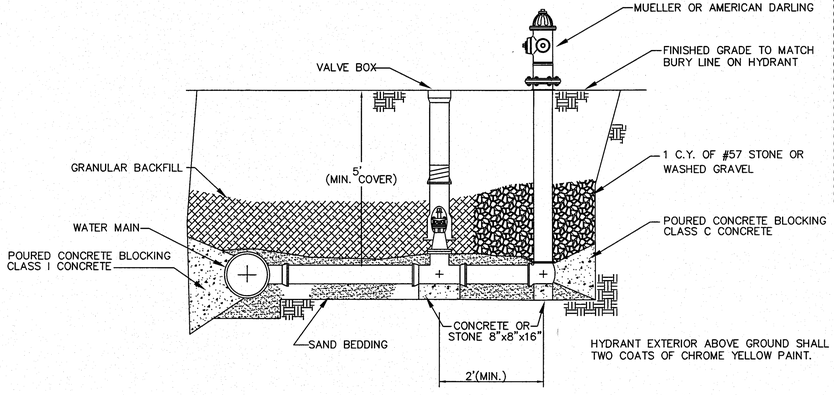
Backfill for Water Mains. After the piping has been laid to line and grade, trenches shall be backfilled with No. 8 or 304 limestone, carefully deposited under and on both sides of the pipe, thoroughly and carefully rammed by hand tamping methods until such fill has been brought to the center line of pipe. Then, fine, loose earth shall be placed and thoroughly and carefully rammed by hand tamping methods until such fill has been brought to six inches above the pipe. This portion of the backfill shall be carefully placed and thoroughly compacted until a firm and continuous support on the bottom and sides is secured.
Where the trench is excavated through cinder fill or other material which, in the opinion of the inspector, is not suitable for backfill, suitable material for backfilling shall be hauled to the site. The remainder of the trench may then be backfilled by hand or mechanical equipment. Water settling may be permitted if it is possible to do so without floating the pipe.

Backfill for Sanitary Sewers. After sewer piping has been approved for line and grade, trenches shall be backfilled with No. 8 or 304 limestone or slag, carefully deposited under and around the pipe, thoroughly and carefully rammed by hand tamping methods until enough limestone or slag fill has been placed to provide a cover of at least six inches above the top of the pipe. This backfill shall provide a firm and continuous support on the bottom and sides of the pipe.
The remainder of the backfill shall consist of material previously excavated and may be placed by hand or mechanical equipment. Water settling will be permitted, providing floating of the pipe does not occur.

Backfill for Storm Sewers. After sewer piping has been approved for line and grade, trenches shall be backfilled with No. 8 or 304 limestone or slag, carefully deposited under and around the pipe, thoroughly and carefully rammed by hand tamping methods until enough limestone or slag fill has been placed to extend up around the pipe a distance from the bottom of the pipe as shown.

Backfill in Paved Areas. Wherever trenches occur in existing roadways and paved areas, the backfill shall consist of No. 8 or 304 stone. It shall be thoroughly compacted in six-inch layers, or puddled with hose and long nozzles, after the backfill is in place. When the area is to be paved with asphalt, the top eight inches of the backfill shall consist of crushed slag or limestone to match the existing road base and shall then be paved to match existing road or paved area. For all concrete pavement, the concrete must project at least one foot beyond the trench sides.

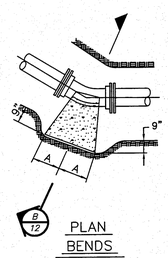
TRENCH DETAIL



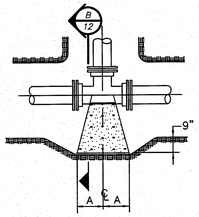
HYDRANT EXTERIOR ABOVE GROUND SHALL RECEIVE TWO COATS OF CHROME YELLOW PAINT.

FIRE HYDRANT ASSEMBLY

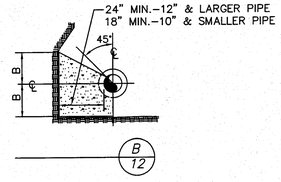
NO SCALE



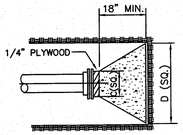
PLAN
BENDS



PLAN
TEES



ELEVATION
BENDS & TEES



PLAN & ELEVATION
PLUGS

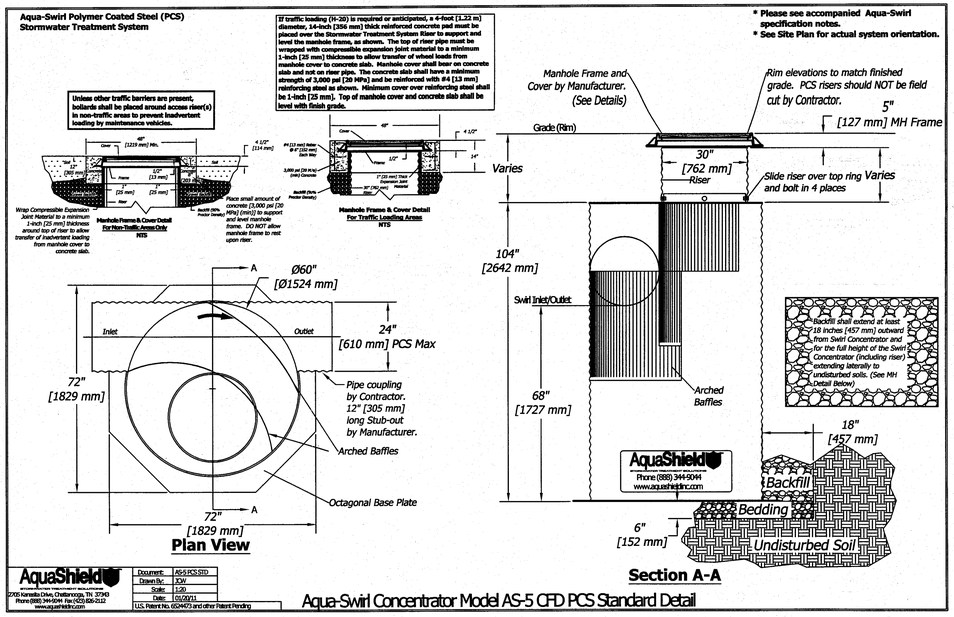
NOTE: BASED ON 150 P.S.I. STATIC PRESSURE PLUS A.W.W.A. WATER HAMMER.
ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.

TYPE	SIZE	90° BENDS		45° BENDS		22–1/2° & 11–1/4° BENDS		TEES		PLUGS	
		A	B	A	B	A	B	A	B	C	D
2000 P.S.F. SOIL	6" *	18"	11"	10"	11"	6"	9"	11"	13"	10"	24"
	8"	25"	14"	14"	14"	9"	11"	15"	17"	12"	32"
	10"	27"	20"	16"	19"	10"	15"	18"	22"	14"	40"
	12"	33"	23"	18"	23"	12"	18"	21"	26"	16"	47"
	14"	39"	26"	22"	26"	13"	22"	24"	30"	18"	54"
	16"	43"	30"	24"	30"	14"	26"	28"	33"	20"	63"
	20"	50"	39"	27"	39"	17"	32"	33"	42"	24"	74"
	24"	60"	45"	33"	45"	20"	38"	40"	49"	28"	88"

*6" OR LESS

BLOCKING DETAILS

NO SCALE



AQUA-SWIRL™ PCS SPECIFICATION NOTES

03-19-13

1. Manufacturer shall be responsible for complete assembly of Swirl Concentrator.
2. Polymer Coated Steel (PCS) Swirl Concentrator shall be fabricated from polymer pre-coated steel sheet for corrugated steel pipe, and shall comply with ASTM A 760 and ASTM A 742.
3. Stub outs and internal components shall be supplied by manufacturer and MIG welded using accepted welding practices.
4. Manufacturer shall supply direct access to Swirl Concentrator via 30-inch ID riser(s). Riser should not be field cut by Contractor, Riser should maintain its finish cut length as supplied by manufacturer to match final grade per approved site elevations (as indicated on approved shop drawing). If necessary to extend riser, Contractor should use adjusting rings to bring top of structure to grade.
5. Contractor shall supply pipe couplings to and from Swirl Concentrator, which shall be Mar-Mac, Fernco, or Mission style flexible boot with stainless steel tension bands and shear guard. Mar-Mac couplings should be used for connections to corrugated plastic pipe and are recommended for use with larger diameter pipe (e.g. 24" ID and larger). A concrete cradle is recommended beneath Mar Mac's to prevent joint movement.
6. Contractor shall prepare excavation and off-load Swirl Concentrator. Contractor is responsible for bedding and backfill around Swirl Concentrator as detailed on site plan. (see notes 11 and 12)
7. Manufacturer shall supply standard manhole frame(s) and cover(s). (Traffic rated H20)
8. Where traffic loading (H-20) is required or anticipated, a 4-foot diameter, 14-inch thick reinforced concrete pad must be placed over the Swirl Concentrator to support and level the manhole frame. The top of riser pipe must be wrapped with compressible expansion joint material to a minimum 1-inch thickness to allow transfer of wheel loads from manhole cover to concrete slab. Manhole cover shall bear on concrete slab and not on riser pipe. The concrete slab shall have a minimum strength of 3,000 psi and be reinforced with #4 reinforcing steel (per drawing). Minimum cover over reinforcing steel shall be 1-inch. Top of manhole cover and concrete slab shall be level with finish grade.
9. Unless other traffic barriers are present, bollards shall be placed around access risers in non-traffic areas to prevent inadvertent loading by maintenance vehicles. Sample of typical bollard installation detail and recommended locations of bollards around the Swirl Concentrator can be provided upon request.
10. Where high groundwater elevations are present or anticipated, Contractor shall supply concrete anti-floatation pad underneath and poured over the octagonal base plate of the swirl (see Anti-Floatation Base Detail) to prevent buoyancy and base plate deflection (details, if necessary, available upon request).
11. Excavation and Bedding – The trench and trench bottom shall be constructed in accordance with ASTM A 798 Section 5, Trench Excavation, Section 6, Foundation, and Section 7, Bedding. The PCS Swirl Concentrator shall be installed on a stable base consisting of at least 6-inches of fine, readily compacted soil or granular fill material, and compacted to 95% proctor density. Bedding shall not contain stones retained on a 3-inch ring, frozen lumps, highly plastic clay, organic material, corrosive material, or other deleterious foreign materials. All required safety precautions for Swirl Concentrator installation are the responsibility of the Contractor and shall be per OSHA approved methods.
12. Backfill Requirements – Backfill materials shall be fine, readily compacted soil or granular fill material, and compacted to 90% proctor density. Processed granular materials with excellent structural characteristics are preferred. Coarse grained soils of USCS Groups GW, GP, GM, GC, SW, and SP as described in ASTM D 2487 are generally acceptable materials when compacted to 90% proctor density. Backfill shall not contain stones retained on a 3-inch ring, frozen lumps, highly plastic clay, organic material, corrosive material, or other deleterious foreign materials. Backfilling shall conform to ASTM A 798, Section 10, Structural Backfill Placement. Backfill shall be placed in 6 to 12 inch layers or "lifts" and compacted before adding the next lift. Backfill shall extend at least 18 inches outward from Swirl Concentrator and for the full height of the Swirl Concentrator (including riser(s)) extending laterally to undisturbed soils..

SOL HARRIS/DAY architecture
[DESIGNED FOR PEOPLE, DESIGNED FOR LIFE.]
5577 Frank Ave NW
North Canton, Ohio 44720
ph: 330.493.3722
fx: 330.493.3777
www.solharrisday.com

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED
PROFESSIONAL ENGINEER

not published, all rights reserved

NEW CORPORATE OFFICE FOR:
CAMPBELL OIL
Hills and Dales Road
Massillon, Ohio 44646

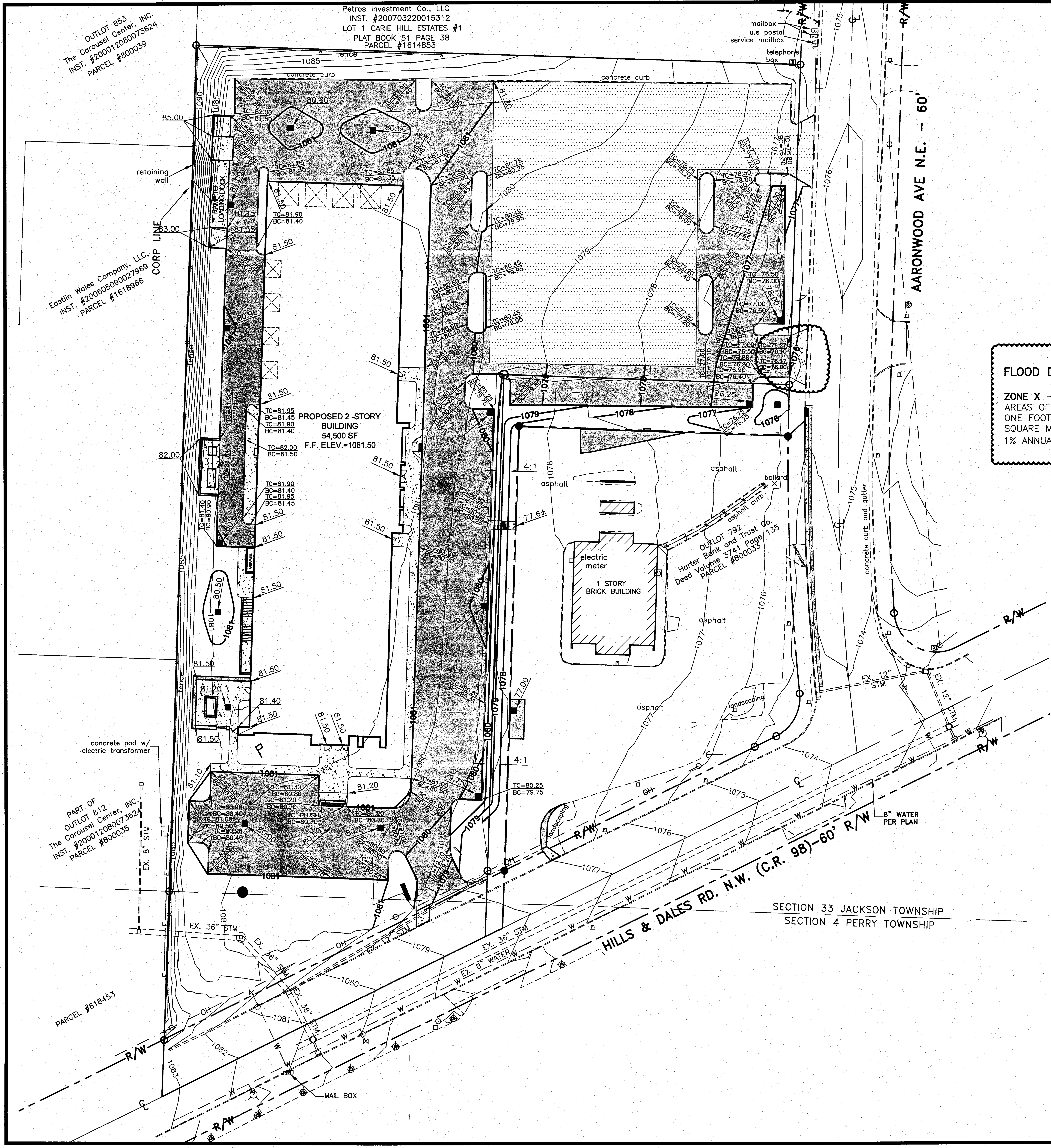
MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

SITE UTILITY DETAILS

C3.1

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005



SCALE: 1" =30'

BENCHMARK: ELEV. =1075.95
TOP OF CASTING OF SANITARY MANHOLE LOCATED IN THE AARONWOOD DRIVE, EAST OF THE PROPERTY.

FLOOD DATA: FIRM PANEL 3915C0184E

ZONE X – AREA OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD OF LESS THAN ONE FOOT OR DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

LEGEND:

Symbol	Description
℄	CENTER LINE
R/W	RIGHT OF WAY
—OH—	OVERHEAD UTILITIES
—C—	UNDERGROUND COMMUNICATION
—E—	UNDERGROUND ELECTRIC
—G—	GAS LINE
—S—	SANITARY SEWER LINE
—W—	WATER LINE
	FIRE HYDRANT (UNLESS NOTED AS PIV)
	UTILITY POLE
	LIGHT POLE
	GUY WIRE ANCHOR
	TRAFFIC BOX
	SIGNAL POLE
—X—	CHAIN LINK FENCE
	SIGN
	WATER VALVE
	SANITARY MANHOLE
	STORM MANHOLE
—1170—	EXISTING CONTOUR
—1170—	PROPOSED CONTOUR
	PROPOSED CATCH BASIN
TC=18.40 BC=17.90	TOP OF CURB BOTTOM OF CURB

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005

SōL HARRIS/DAY architecture
6677 Frank Ave NW
North Canton, OH 44720
ph: 330.493.3722
fx: 330.493.5777
www.solharrisday.com
[DESIGNED FOR PEOPLE. DESIGNED FOR LIFE.]

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED
PROFESSIONAL ENGINEER

not published; all rights reserved

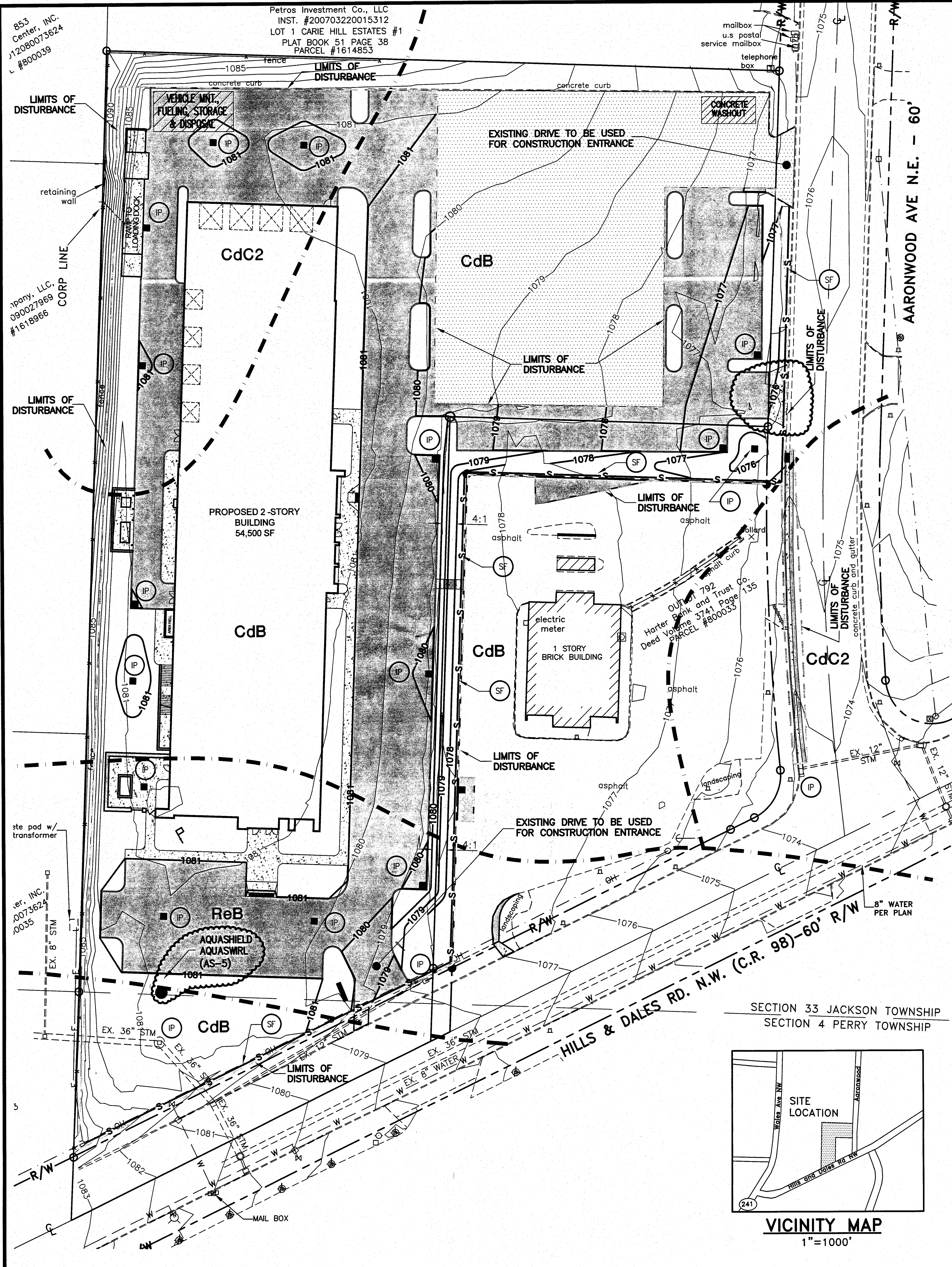
NEW CORPORATE OFFICE FOR:
CAMPBELL OIL
Hills and Dales Road
Massillon, Ohio 44646

MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

SITE GRADING PLAN

C4.0



GENERAL NOTES

-SEDIMENT PONDS/TRAPS AND PERIMETER CONTROLS SHALL BE IMPLEMENTED AS A FIRST STEP OF GRADING WITHIN 7 DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS HAVE BEEN STABILIZED.
-DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR A PERIOD OF 14 DAYS OR MORE, SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPROPRIATE MEANS WITHIN 7 DAYS.
-OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON PLAN.
-ALL EROSION AND SEDIMENTATION CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO'S STANDARDS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION, RAINWATER AND LAND DEVELOPMENT HANDBOOK.
-OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
-EROSION AND SEDIMENT CONTROL PRACTICES NOT ALREADY SPECIFIED ON THIS PLAN MAY BE NECESSARY DUE TO UNFORESEEN ENVIRONMENTAL CONDITIONS AND/OR CHANGES IN DRAINAGE PATTERNS CAUSED BY EARTH MOVING ACTIVITY.
-A COPY OF THE SWP3 MUST BE KEPT ON SITE DURING NORMAL WORKING HOURS.
-CONSTRUCTION MANAGER MUST MAINTAIN A DOCUMENT SIGNED BY ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED IN THE SWP3 IMPLEMENTATION. THE DOCUMENT MUST CERTIFY THE CONTRACTOR HAS READ AND UNDERSTANDS THE SWP3.
-CONSTRUCTION MANAGER WILL DIRECT WHICH CONTRACTOR IS RESPONSIBLE IMPLEMENTING WHICH BMP.
-CONSTRUCTION MUST COMPLY WITH ALL LOCAL EROSION AND SEDIMENT CONTROL REGULATIONS.
-NO SOLID OR LIQUID WASTE SHOULD BE DISCHARGED INTO STORM WATER RUNOFF.
-SWPPP MUST SHOW COMPLIANCE WITH LOCAL WASTE DISPOSAL, SANITARY, AND HEALTH REGULATIONS.
-IF MUD, SOIL, OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AS DIRECTED BY THE CITY/TOWNSHIP OR ITS ENGINEER AT THE END OF EACH WORK DAY.
-DISTURBED AREAS ARE NOT CONSIDERED STABILIZED UNTIL VEGETATIVE GROWTH IS AT LEAST 70% OR EQUIVALENT.
-TRENCH DEWATERING MUST PASS THROUGH A FILTER BAG.

WINTERIZATION
ANY DISTURBED AREA THAT IS NOT GOING TO BE WORKED FOR 14 DAYS OR MORE MUST BE SEEDED AND MULCHED BY NOVEMBER 1 OR MUST HAVE DORMANT SEEDING OR MULCH COVER APPLIED BETWEEN NOVEMBER 1 AND MARCH 1.

MAINTENANCE AND INSPECTION
- INSPECTION AND MAINTENANCE RECORDS MUST BE AVAILABLE FOR REVIEW ON SITE AT ALL TIMES.
- PERMANENT RECORDS OF MAINTENANCE AND INSPECTION MUST BE MAINTAINED A MINIMUM OF ONCE EVERY SEVEN DAYS AND AFTER STORM EVENTS GREATER THAN 0.5 INCH IN A 24 HOUR PERIOD.
- INSPECTION RECORDS SHALL INCLUDE THE NAME OF INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION, CERTIFICATION OF COMPLIANCE, CORRECTIVE MEASURES TAKEN.
- RECORDS MUST BE MAINTAINED FOR 2 YEARS AFTER NOTICE OF INTENT PER OHIO EPA NPDES PERMIT.

REPAIRS
ANY EROSION CONTROL MEASURES, STRUCTURES, DEVICES, OR RELATED ITEMS IN NEED OF REPAIR WILL BE MADE WITHIN 10 DAYS.

BORROW/SPOIL REMOVAL:
IT IS NOT ANTICIPATED THAT BORROW OR SPOIL MATERIAL WILL BE TRANSPORTED ON OR OFF THE PROJECT SITE.

PROJECT NARRATIVE:
CAMPBELL OIL COMPANY IS PROPOSING TO RE-DEVELOP AN EXISTING COMMERCIAL SITE. THE REDEVELOPEMENT WILL CONSIST OF A NEW 54,550 SQ. FT. OFFICE BUILDING AND PARKING FACILITIES. UPON COMPLETION OF THE PROJECT, THE SITE IMPERVIOUS AREA WILL DECREASE FROM 2.70 ACRES TO 2.36 ACRES.

POST CONSTRUCTION:

POST-CONSTRUCTION STORM WATER QUALITY:
THE SITE IS A RE-DEVELOPMENT PROJECT. UPON DEVELOPMENT THE IMPERVIOUS AREA WILL BE DECREASED BY 12.6%. THEREFORE, WATER QUALITY VOLUME IS REQUIRED FOR 7.4% OF THE IMPERVIOUS AREA. POST-CONSTRUCTION STORM WATER QUALITY WILL BE PROVIDED BY AN ONSITE AQUASHIELD AQUASWIRL WATER QUALITY UNIT. THE UNIT WILL BE INSTALLED INLINE ON THE NEW STORM SEWER, PRIOR TO CONNECTION TO THE EXISTING STORM SEWER SYSTEM.
THE DRAINAGE AREA TO THE WATER QUALITY UNIT WILL BE 1.96 ACRES. THE TOTAL PROJECT AREA IS 3.43 ACRES. THEREFORE, 57% OF THE AREA IS BEING TREATED.

INSPECTIONS AND CERTIFICATIONS:
CONTRACTOR SHALL COORDINATE INSPECTION OF THE INSTALLATION FOR THE WATER QUALITY UNIT WITH THE MANUFACTURER OR DESIGN ENGINEER. INSTALLATION OF THE STRUCTURE MUST BE ACCEPTED AND CERTIFIED TO BY THE MANUFACTURER OR DESIGN ENGINEER OF RECORD.

SITE DATA

TOTAL DEVELOPMENT AREA = 3.43 ACRES
RECEIVING STREAM: MUNICIPAL STORM SEWER SYSTEM
SOIL TYPE: C

PRESENT CONDITIONS
LAND USE = COMMERCIAL
CURVE NUMBER = 93 (WEIGHTED)
IMPERVIOUS AREA = 2.70 ACRES

PROPOSED CONDITIONS
LAND USE = COMMERCIAL
CURVE NUMBER = 91 (WEIGHTED)
IMPERVIOUS AREA = 2.36 ACRES
DISTURBED AREA = 2.73 ACRES

SEQUENCE OF CONSTRUCTION

BUILDING COMMENCEMENT PHASE:

1. INSTALL INLET PROTECTION FOR EXISTING CATCH BASINS.
2. REMOVE EXISTING PAVEMENT ONLY AS NECESSARY TO CONSTRUCT NEW BUILDING AND INSTALL UTILITY SERVICES.
3. INSTALL SILT FENCING AROUND THE PERIMETER OF THE PAVEMENT REMOVAL AREA.
4. BEGIN BUILDING CONSTRUCTION.
5. UTILITY TRENCHES SHALL BE BACKFILLED AND STABILZED UPON INSTALLATION.

SITE CONSTRUCTION PHASE:

1. INSTALL PERIMETER SILT FENCE.
2. REMOVE EXISTING SITE IMPROVEMENTS.
3. ROUGH GRADE SITE.
4. CONSTRUCT STORM SEWER. INSTALL SILT FENCE CATCH BASIN PROTECTION AS SEWERS ARE CONSTRUCTED.
5. INSTALL REMAINING UTILITIES.
6. INSTALL CURBING AND PAVEMENT BASE.
7. STABILIZE ALL SLOPES OUTSIDE THE CURBING LIMITS.
8. FINISH REMAINING SITE WORK AND STABILIZE THE REMAINDER OF THE SITE.
9. ONCE SITE IS STABILIZED, REMOVE REMAINING EROSION AND SEDIMENT CONTROLS.

ESTIMATED PROJECT SCHEDULE

STARTING DATE: JANUARY, 2014
ENDING DATE: SEPTEMBER, 2014

0' 30' 60' 90'
SCALE: 1" =30'

BENCHMARK: ELEV. =1075.95
TOP OF CASTING OF SANITARY MANHOLE LOCATED IN THE AARONWOOD DRIVE, EAST OF THE PROPERTY.

LEGEND:

- ℄ CENTER LINE
- R/W RIGHT OF WAY
- —OH— OVERHEAD UTILITIES
- —C— UNDERGROUND COMMUNICATION
- —E— UNDERGROUND ELECTRIC
- —G— GAS LINE
- —S— SANITARY SEWER LINE
- —W— WATER LINE
- FIRE HYDRANT (UNLESS NOTED AS PIV)
- UTILITY POLE
- LIGHT POLE
- GUY WIRE ANCHOR
- TRAFFIC BOX
- SIGNAL POLE
- —x— CHAIN LINK FENCE
- SIGN
- WATER VALVE
- SANITARY MANHOLE
- STORM MANHOLE
- —1170— EXISTING CONTOUR
- —1170— PROPOSED CONTOUR
- PROPOSED CATCH BASIN
- (SF) —S— - SILT FENCE
- (IP) - SILT FENCE CATCH BASIN PROTECTION/DAN DEE BAG
- - FLOW ARROW
- - LIMITS OF CLEARING AND GRADING
- WbB - SOIL TYPE

OPERATOR:
CAMPBELL OIL COMPANY
ATTN: BRIAN BURROW
611 ERIE STREET S.
MASSILLON, OHIO 44646
(330) 833-8555

CERTIFICATION:

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL STATEMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ENSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

NAME: ____________

TITLE: ____________

SIGNATURE: ____________

DATE: ____________

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005

SōL HARRIS/DAY architecture
[designed for people. designed for life.]

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED PROFESSIONAL ENGINEER

not published, all rights reserved

NEW CORPORATE OFFICE FOR:
CAMPBELL OIL
Hills and Dales Road
Massillon, Ohio 44646

MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

SWP3

C5.0

TEMPORARY SEEDING SPECIES SELECTION			
SEEDING DATES	SPECIES	LB/1000ft.²	PER ACRE
MARCH 1 TO AUGUST 15	OATS TALL FESCUE ANNUAL RYEGRASS	3 1 1	4 BUSHEL 40 LB. 40 LB.
	PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 LB. 40 LB. 40 LB.
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	55 LB. 142 LB. 17 LB. 17 LB.
	OATS TALL FECUE ANNUAL RYEGRASS	3 1 1	3 BUSHEL 40 LB. 40 LB.
AUGUST 16 TO NOVEMBER 1	RYE TALL FESCUE ANNUAL RYEGRASS	3 1 1	2 BUSHEL 40 LB. 40 LB.
	WHEAT TALL FESCUE ANNUAL RYEGRASS	3 1 1	2 BUSHEL 40 LB. 40 LB.
	PERENNIAL RYE TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 LB. 40 LB. 40 LB.
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	40 LB. 40 LB. 40 LB.
NOVEMBER 1 TO FEBRUARY 29	USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING		
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

1. STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSION AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.
2. TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 14 DAYS OR GREATER. THESE IDLE AREAS SHOULD BE SEEDED WITHIN 7 DAYS AFTER GRADING
3. THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. HOWEVER, TEMPORARY SEEDING SHALL NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE.
4. SOIL AMENDMENTS--TEMPORARY VEGETATION SEEDING RATES SHALL ESTABLISH ADEQUATE STRANDS OF VEGETATION WHICH MAY REQUIRE THE USE OF SOIL AMMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL BE USED.
5. SEEDING METHOD--SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

MULCHING TEMPORARY SEEDING

1. APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES AND WITH FAVORABLE SOIL CONDITIONS AND ON VERY FLAT AREAS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.
2. MATERIALS
- STRAW-IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90LB./1000 SQ. FT. (TWO TO THREE BALES). THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000 SQ.-FT. SECTIONS AND SPREAD TWO 45 LB. BALES OF STRAWIN EACH SECTION.
- HYDROSEEDERS-IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2000 LB./AC. OR 46LB./1000 SQ. FT.
- OTHER-OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS/AC.

3. STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER. ANCHORING METHODS:
- MECHANICAL-A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 IN.
- MULCH NETTINGS-NETTINGS SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATION RUNOFF AND ON CRITICAL SLOPES.
- SYNTHETIC BINDERS-SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
- WOOD CELLULOSE FIBER-WOOD-CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./AC. THE WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./GAL.

PERMANENT SEEDING			
SEED MIX	SEEDING RATE		NOTES:
	LB./AC.	LB./1000FT.²	
GENERAL USE			
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20-40 10-20 20-40	1/2-1 1/4-1/2 1/2-1	FOR CLOSE MOWING & FOR WATERWAYS WITH <2.0 FT/SEC VELOCITY
TALL FESCUE	40-50	1-1 1/4	
TURF-TYPE (DWARF) FESCUE	90	2 1/4	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE	40-50	1-1 1/4	
CROWN VETCH TALL FESCUE	10-20 20-30	1/4-1/2 1/2-3/4	DO NOT SEED LATER THAN AUGUST
FLAT PEA TALL FESCUE	20-25 20-30	1/2-3/4 1/2-3/4	DO NOT SEED LATER THAN AUGUST
ROAD DITCHES AND SWALES			
TALL FESCUE	40-50	1-1 1/4	
TURF-TYPE (DWARF) FESCUE KENTUCKY BLUEGRASS	90 5	2 1/4 0.1	
LAWNS			
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100-120	2 2	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100-120	2 1 1/2	FOR SHADED AREAS
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

SITE PREPARATION

1. A SUBROLLER, PLOW OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLIP-PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
2. THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
3. RESOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION

1. LIME--AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, LIME SHALL BE APPLIED AT THE RATE OF 100LB./1000 SQ.FT. OR 2 TONS/AC.
2. FERTILIZER--FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 25 LB./1000 SQ.FT. OR 1000 LB./AC. OF 10-10-10 OR 12-12-12 ANALYSIS.
3. THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING-TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3 IN. ON SLOPING LAND, THE SOIL SHALL BE WORKED ON THE CONTOUR.

SEEDING DATES AND SOIL CONDITIONS

SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THE ABOVE SPECIFIED DATES, ADDITIONAL MULCH AND ITTIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE FOLLOWING SECTION ON DORMANT SEEDING.

DORMANT SEEDINGS

1. SEEDINGS SHALL NOT BE PLANTED FROM OCTOBER 1 THROUGH NOVEMBER 20. DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.
2. THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING":
- FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
- FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZER, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
- APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED.
- WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

MULCHING

1. MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. DORMANT SEEDING SHALL BE MULCHED. 100% OF THE GROUND SURFACE SHALL BE COVERED WITH AN APPROVED MATERIAL.

2. MATERIALS

- STRAW--IF STRAW IS USED IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1000 SQ.FT. (TWO TO THREE BALES). THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000 SQ.FT. SECTIONS AND SPREAD TWO 45 LB. BALES OF STRAW IN EACH SECTION.
- HYDROSEEDERS--IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2000 LB./AC. OR 46 LB./1000 SQ.FT.
- OTHER--OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS/AC.

3. STRAW MULCH ANCHORING METHODS

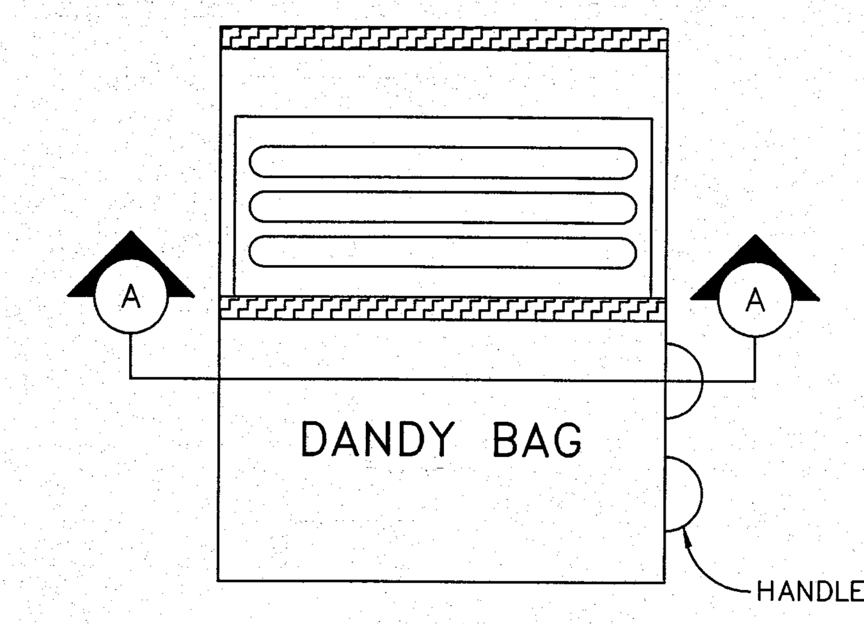
STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.

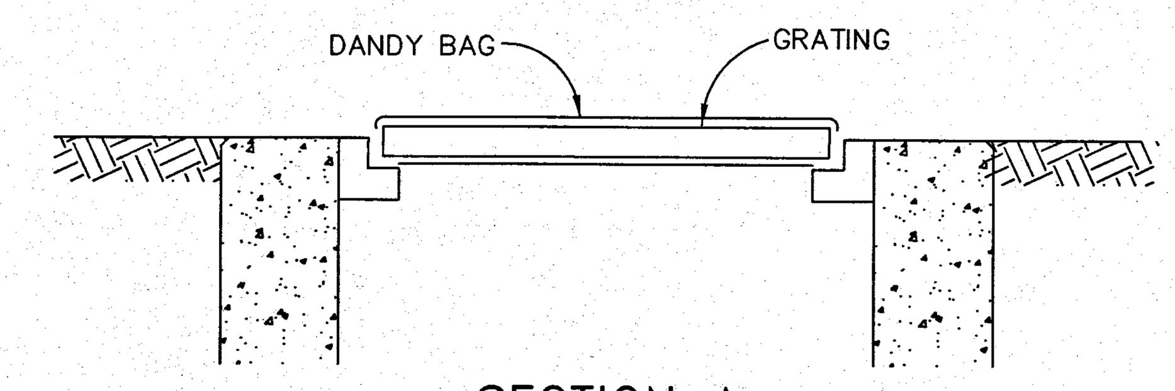
- MECHANICAL--A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 IN.
- MULCH NETTINGS--NETTINGS SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
- ASPHALT EMULSION--ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURER OR AT THE RATE OF 160 GAL./AC.
- SYNTHETIC BINDERS--SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET TERRA TACK, OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
- WOOD CELLLULOSE FIBER--WOOD CELLULOSE FIBER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./AC. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL. OF WOOD CELLULOSE FIBER.

IRRIGATION

PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED FOR ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

EXCESSIVE IRRIGATION RATES SHALL BE AVOIDED AND IRRIGATION MONITORED TO PREVENT EROSION AND DAMAGE FROM RUNOFF.





SECTION A

INSTALLATION: STAND GRATE ON END. PLACE DANDY BAG OVER GRATE. FLIP GRATE OVER SO THAT OPEN END IS UP. PULL UP SLACK. TUCK FLAP IN. BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR DANDY BAG WILL NOT FIT PROPERLY. HOLDING HANDLES, CAREFULLY PLACE DANDY BAG WITH GRATE INSERTED INTO CATCH BASIN FRAME SO THAT RED DOT ON THE TOP OF THE DANDY BAG IS VISIBLE.

MAINTENANCE: AFTER SILT HAS DRIED, REMOVE IT FROM THE SURFACE OF DANDY BAG WITH BROOM.

INLET PROTECTION (IP)

NOT TO SCALE

NON-SEDIMENT POLLUTION CONTROL

1. EDUCATE CONSTRUCTION PERSONNEL, INCLUDING SUBCONTRACTORS WHO MAY USE OR HANDLE HAZARDOUS OR TOXIC MATERIALS, MAKING THEM AWARE OF THE FOLLOWING GENERAL GUIDELINES:

DISPOSAL AND HANDLING OF HAZARDOUS AND OTHER CONSTRUCTION WASTE

DO:
- PREVENT SPILLS
- USE PRODUCTS UP
- FOLLOW LABEL DIRECTIONS FOR DISPOSAL
- REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH
- RECYCLE WASTES WHENEVER POSSIBLE

DON'T:
- DON'T POUR INTO WATERWAYS, STORM DRAINS OR ONTO THE GROUND
- DON'T POUR DOWN THE SINK, FLOOR DRAIN OR SEPTIC TANKS
- DON'T BURY CHEMICALS OR CONTAINERS
- DON'T BURN CHEMICALS OR CONTAINERS
- DON'T MIX CHEMICALS TOGETHER

2. WASTE DISPOSAL CONTAINERS SHALL BE PROVIDED FOR THE PROPER COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, SANITARY GARBAGE, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS TO BE USED ON-SITE. CONTAINERS SHALL BE COVERED AND NOT LEAKING. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL. CONSTRUCTION DEMOLITION AND DEBRIS (CD&D) WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ORC 3714 AT AN APPROVED OHIO EPA CD&D LANDFILL.

3. NO CONSTRUCTION RELATED WASTE MATERIALS ARE TO BE BURIED ON-SITE. BY EXCEPTION, CLEAN FILL (BRICKS, HARDENED CONCRETE, SOIL) MAY BE UTILIZED IN A WAY THAT DOES NOT ENCROACH UPON NATURAL WETLANDS, STREAMS OR THEIR FLOODPLAINS. FILLING OF STREAM SIDE AREAS IS FILL MAY NOT RESULT IN THE CONTAMINATION OF WATERS OF THE STATE. UNLESS PROHIBITED BY LOCAL ORDINANCE OR ZONING.

4. CONSTRUCTION AND DEMOLITION DEBRIS (CD&D) DISPOSAL. CD&D WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ORC 3714 AT AN APPROVED OHIO EPA CD&D LANDFILL. CD&D WASTE IS DEFINED AS ALL MATERIALS ATTACHED TO A STRUCTURE, WHICH IS BEING DEMOLISHED (FOR MATERIALS CONTAINING ASBESTOS SEE ITEM 12).

5. HANDLING CONSTRUCTION CHEMICALS. MIXING, PUMPING, TRANSFERRING OR OTHER HANDLING OF CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH OR STORM DRAIN.

6. EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED AWAY FROM WATERCOURSES, DITCHES OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. THESE AREAS MUST BE INSPECTED EVERY SEVEN CLAYS AND WITHIN 24 HRS. OF A 0.5 INCH OR GREATER RAIN EVENT TO ENSURE THERE ARE NO EXPOSED MATERIALS WHICH WOULD CONTAMINATE STORM WATER. SITE OPERATORS MUST BE AWARE THAT SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) REQUIREMENTS MAY APPLY. AN SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVEGROUND TANK OF 660 GALLONS OR MORE, ACCUMULATIVE ABOVEGROUND STORAGE OF 1330 GALLONS OR MORE, OR 42,000 GALLONS OF UNDERGROUND STORAGE. SOILS THAT HAVE BECOME CONTAMINATED MUST BE DISPOSED OF ACCORDANCE WITH ITEM 8 "CONTAMINATED SOILS".

7. CONCRETE WASH WATER/WASH OUTS. CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED ON THE LOT AWAY FROM ANY WATER CONVEYANCES.

8. CONTAMINATED SOILS. IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT LICENSED SANITARY LANDFILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). PLEASE BE AWARE THAT STORM WATER RUN OFF ASSOCIATED WITH CONTAMINATED SOILS ARE NOT AUTHORIZED UNDER OHIO EPA'S GENERAL STORM WATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES. IN THE EVENT THERE ARE LARGE EXTENSIVE AREAS OF CONTAMINATED SOILS ADDITIONAL MEASURES ABOVE AND BEYOND THE CONDITIONS OF OHIO EPA'S GENERAL CONSTRUCTION STORM WATER PERMIT WILL BE REQUIRED. DEPENDING ON THE EXTENT OF CONTAMINATION, ADDITIONAL TREATMENT AND/OR COLLECTION AND DISPOSAL MAY BE REQUIRED. ALL STORM WATER DISCHARGES ASSOCIATED WITH THE CONTAMINATED SOILS MUST BE AUTHORIZED UNDER AN ALTERNATE NPDES (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT.

9. SPILL REPORTING REQUIREMENTS: SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, KITTY LITTER OR OTHER ABSORBANT MATERIAL AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILLS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378). SPILLS OF 25 GALLONS OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MIN. OF THE DISCOVERY OF THE RELEASE. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS OF THE STATE, MUST BE REPORTED TO OHIO EPA'S HOTLINE.

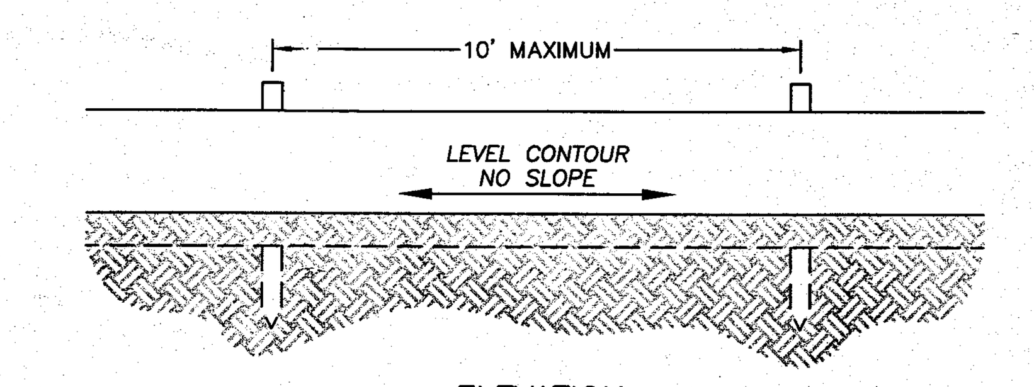
10. OPEN BURNING. NO MATERIALS MAY BE BURNED WHICH CONTAIN RUBBER, GREASE, ASPHALT, OR PETROLEUM PRODUCTS SUCH AS TIRES, CARS, AUTOPARTS, PLASTICS OR PLASTIC COATED WIRE. (SEE OAC 3745-19) OPEN BURNING IS NOT ALLOWED IN RESTRICTED AREAS. RESTRICTED AREAS ARE DEFINED AS: L) WITHIN CORPORATION LIMITS; 2) WITHIN 1000 FEET OUTSIDE A MUNICIPAL CORPORATION HAVING A POPULATION OF 1000 TO 10,000; AND 3) A ONE MILE ZONE OUTSIDE OF A CORPORATION OF 10, 000 OR MORE. OUTSIDE A RESTRICTED AREA, NO OPEN BURNING CAN TAKE PLACE WITHIN A 1000 FEET OF AN INHABITED BUILDING LOCATED OFF THE PROPERTY WHERE THE FIRE IS SET. OPEN BURNING IS PERMISSIBLE IN A RESTRICTED AREA FOR THE FOLLOWING ACTIVITIES: HEATING TAR, WELDING AND ACETYLENE TORCHES, SMUDGE POTS AND SIMILAR OCCUPATIONAL NEEDS, AND HEATING FOR WARMTH OR OUTDOOR BARBEQUES. OUTSIDE OF RESTRICTED AREAS, OPEN BURNING IS PERMISSIBLE FOR LANDSCAPE WASTES (PLANT MATERIAL), LAND-CLEARING WASTES (PLANT MATERIAL, WITH PRIOR WRITTEN PERMISSION FROM OHIO EPA), AND AGRICULTURAL WASTES (MATERIAL GENERATED BY CROP, HORTICULTURAL, OR LIVESTOCK PRODUCTION PRACTICES. THIS INCLUDES FENCE POSTS AND SCRAP LUMBER, BUT NOT BUILDINGS).

11. DUST CONTROL/SUPPRESSANTS. DUST CONTROL IS REQUIRED TO PREVENT NUISANCE CONDITIONS. DUST CONTROLS MUST BE USED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND NOT BE APPLIED IN A MANNER, WHICH WOULD RESULT IN A DISCHARGE TO WATERS OF THE STATE. ISOLATION DISTANCES FROM BRIDGES, CATCH BASINS, AND OTHER DRAINAGEWAYS MUST BE OBSERVED. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN PRECIPITATION IS IMMINENT AS NOTED IN THE SHORT TERM FORECAST. USED OIL MAY NOT BE APPLIED FOR DUST CONTROL.

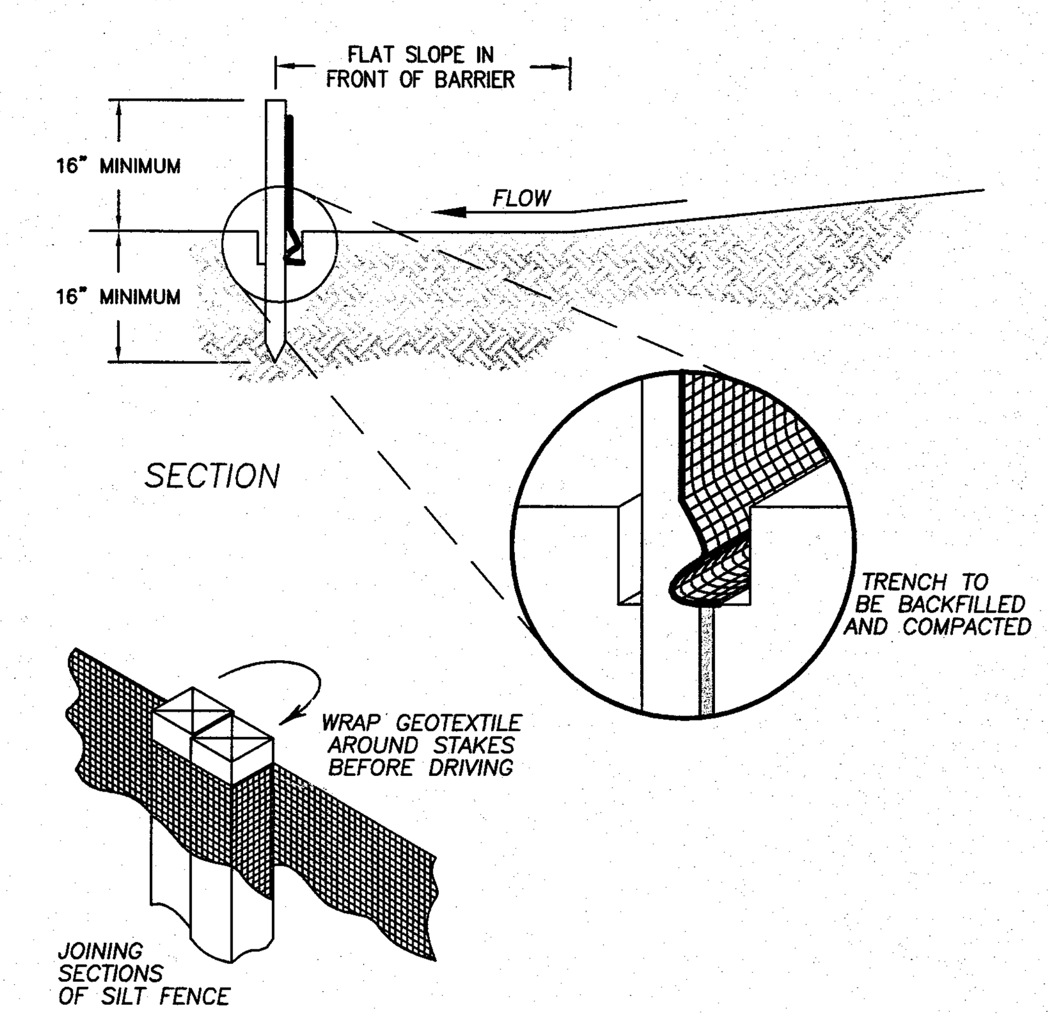
12. OTHER AIR PERMITTING REQUIREMENTS: ALL CONTRACTORS AND SUB CONTRACTORS MUST BE MADE AWARE THAT CERTAIN ACTIVITIES ASSOCIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS. ACTIVITIES INCLUDING BUT NOT LIMITED TO MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC., WILL REQUIRE SPECIFIC OHIO EPA AIR PERMITS FOR INSTALLATION AND OPERATION. THESE ACTIVITIES MUST SEEK AUTHORIZATION FROM THE CORRESPONDING DISTRICT OF OHIO EPA. NOTIFICATION FOR RESTORATION AND DEMOLITION MUST BE SUBMITTED TO OHIO EPA FOR ALL COMMERCIAL SITES TO DETERMINE IF ASBESTOS CORRECTIVE ACTIONS ARE REQUIRED.

13. PROCESS WASTE WATER/LEACHATE MANAGEMENT. ALL CONTRACTORS SHALL BE MADE AWARE THAT OHIO EPA'S CONSTRUCTION GENERAL PERMIT ONLY ALLOWS THE DISCHARGE OF STORM WATER. OTHER WASTE STREAMS/DISCHARGES INCLUDING BUT NOT LIMITED TO VEHICLE AND/OR EQUIPMENT WASHING, LEACHATE ASSOCIATED WITH ON-SITE WASTE DISPOSAL, CONCRETE WASH OUTS, ETC ARE A PROCESS WASTEWATER. THEY ARE NOT AUTHORIZED FOR DISCHARGE UNDER THE GENERAL STORM WATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES. ALL PROCESS WASTEWATERS MUST BE COLLECTED AND PROPERLY DISPOSED AT AN APPROVED DISPOSAL FACILITY. IN THE EVENT THERE ARE LEACHATE OUTBREAKS ASSOCIATED WITH ONSITE DISPOSAL, MEASURES MUST BE TAKEN TO ISOLATE THIS DISCHARGE FOR COLLECTION AND PROPER DISPOSAL. INVESTIGATIVE MEASURES AND CORRECTIVE ACTIONS MUST BE IMPLEMENTED TO IDENTIFY AND ELIMINATE THE SOURCE OF ALL LEACHATE OUTBREAKS.

14. PERMIT TO INSTALL (PTI) REQUIREMENTS: ALL CONTRACTORS AND SUB CONTRACTORS MUST BE MADE AWARE THAT A PTI MUST BE SUBMITTED AND APPROVED BY OHIO EPA PRIOR TO THE CONSTRUCTION OF ALL CENTRALIZED SANITARY SYSTEMS, INCLUDING SEWER EXTENSIONS, AND SEWERAGE SYSTEMS (EXCEPT THOSE SERVING ONE, TWO, AND THREE FAMILY DWELLINGS) AND POTABLE WATER LINES. THE ISSUANCE OF AN OHIO EPA CONSTRUCTION GENERAL STORM WATER PERMIT DOES NOT AUTHORIZE THE INSTALLATION OF ANY SEWERAGE SYSTEM WHERE OHIO EPA HAS NOT APPROVED A PTI.



ELEVATION



FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LBS	ASTM D 4632
MAXIMUM ELONGATED AT 60 LBS	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS	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 (SF)

NOT TO SCALE

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 WHICH 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 FT. (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 IN. ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 IN. 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 IN. OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTION 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 DETAILS).
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 FENCE 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):

Artman Engineering
CIVIL ENGINEERING - LAND PLANNING - SITE DEVELOPMENT
13710 CLEVELAND AVENUE NW UNIONTOWN, OHIO 44685
PHONE: (330) 699-9435 FAX: (330) 699-4005

SŌL HARRIS/DAY architecture
6577 Frank Ave NW
North Canton, OH 44720
ph: 330.493.3722
fx: 330.493.5777
www.solharrisday.com
[DESIGNED FOR PEOPLE. DESIGNED FOR LIFE.]

PERMIT SET 2013.10.18

STATE OF OHIO
C. BRENT ARTMAN
E-65963
REGISTERED
PROFESSIONAL ENGINEER

not published; all rights reserved

NEW CORPORATE OFFICE FOR:

CAMPBELL OIL

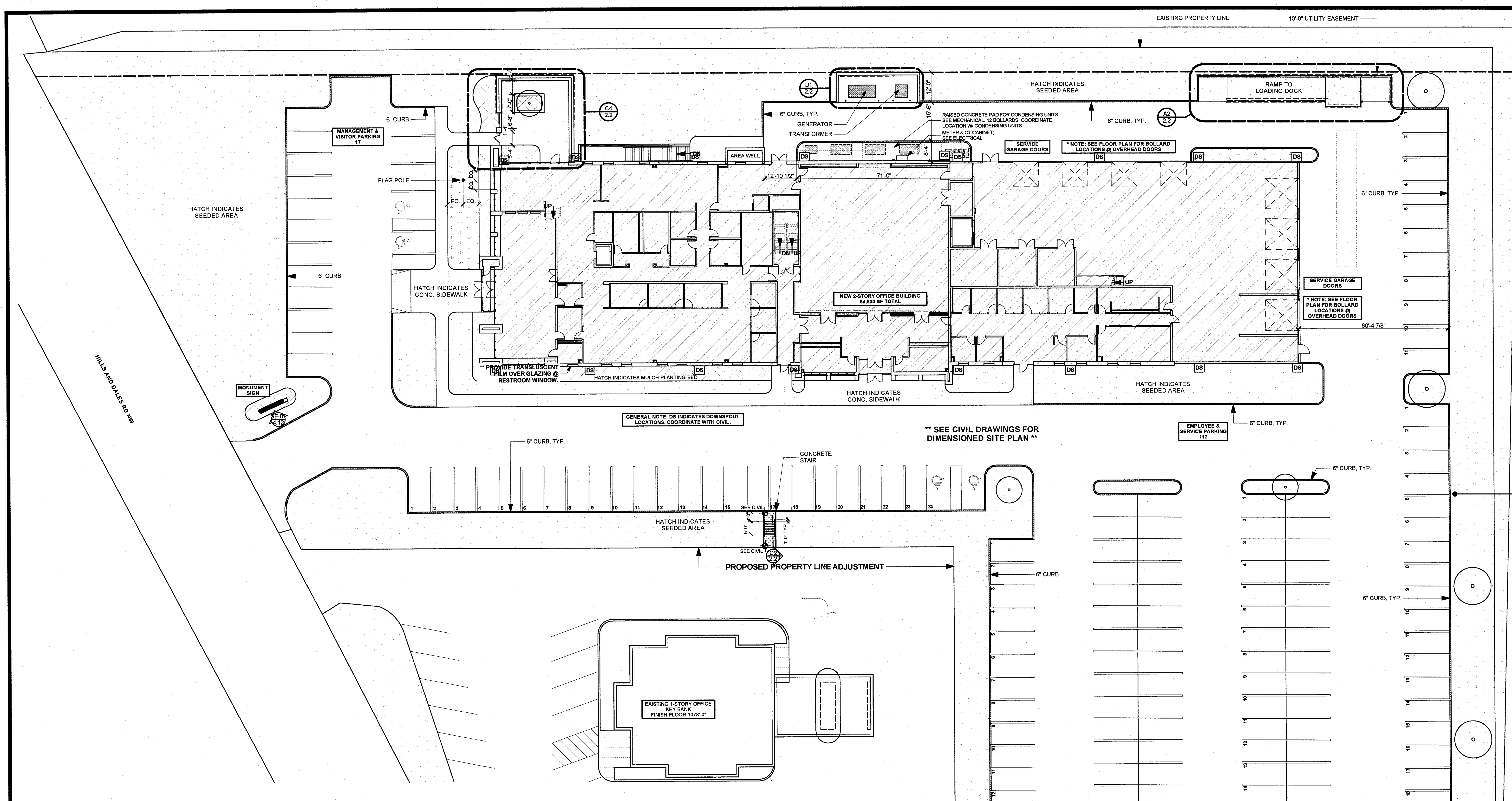
Hills and Dales Road
Massillon, Ohio 44646

MARK	DATE	DESCRIPTION
01	2013/11/18	BUILDING DEPARTMENT COMMENTS
02	2013/12/9	CITY ENGINEER'S REVIEW ADDENDUM NO. 1

PROJECT NO: 12.082
DATE: 2013.11.18

SWP3 DETAILS

C5.1



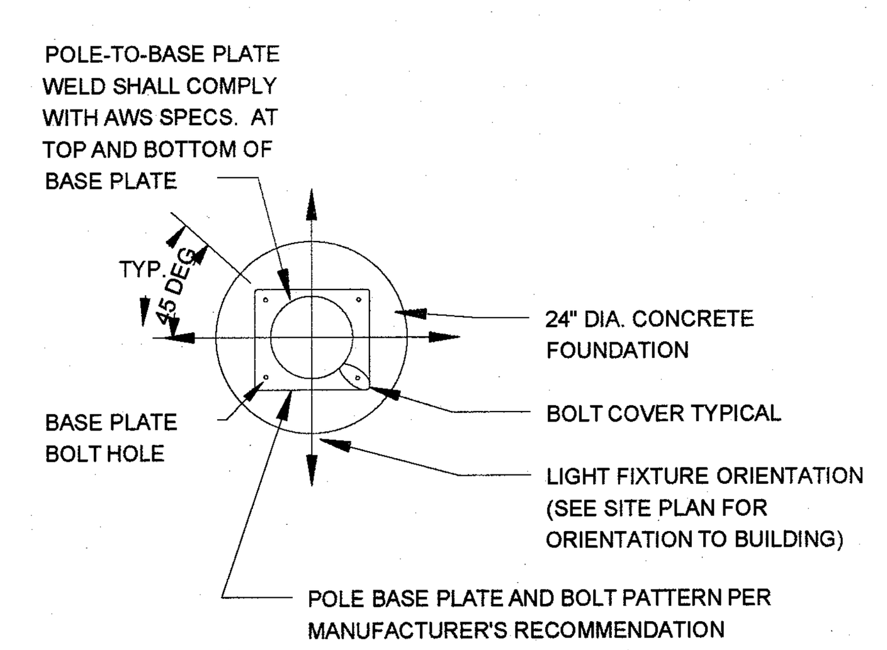
B1 SITE PLAN W/ FIRST FLOOR

SCALE: 1" = 20'

FLAG POLE NOTES

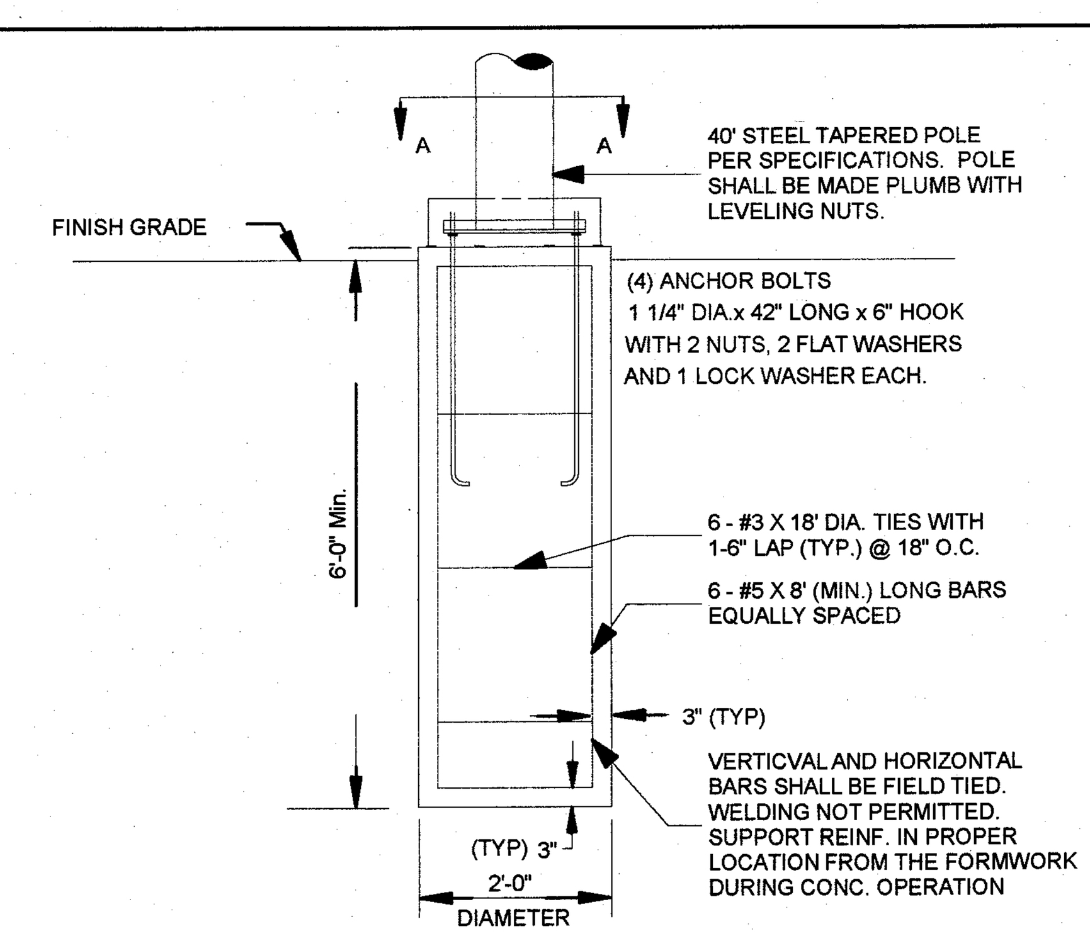
NOTES:

1. 3500 PSI MIN. 28 DAY COMPRESSIVE STRENGTH CONCRETE WITH GRADE 60 REINFORCING STEEL
2. IF WATER IS PRESENT IN HOLE, REMOVE BEFORE POURING CONCRETE.
3. FOUNDATION EXCAVATION SHALL BE BY 24" AUGER IN UNDISTURBED OR PROPERLY COMPACTED FILL PER SPECIFICATIONS.
4. FOUNDATION SHALL HAVE A MINIMUM ALLOWABLE END BEARING OF 2000 PSF.
5. FOUNDATION HAS BEEN DESIGNED FOR A COHESIVE SOIL BASED ON A MINIMUM COHESIVE VALUE OF 1000 PSF.
6. FOUNDATION HAS BEEN DESIGNED FOR A GRANULAR SOIL BASED ON A MINIMUM LATERAL SOIL PRESSURE OF 1000 PSF, UTILIZING AASHTO FIGURE 1.8.2C(4) OF "EMBEDMENT OF POSTS WITH OVERTURNING LOADS".



A4 FLAG POLE DETAIL A

SCALE: 1" = 1'-0"



A3 FLAG POLE DETAIL

SCALE: 1/2" = 1'-0"

SōL HARRIS/DAY architecture
3722 Whipple Ave NW
Canton, OH 44718
ph: 330.493.3722
fx: 330.493.5777
www.harrisday.com

BID SET - 2013.11.18

STATE OF OHIO DOMENIC FERRANTE 12906 REGISTERED ARCHITECT

DOMENIC FERRANTE, LICENSE #12906 EXPIRATION DATE 12/31/2013

not published; all rights reserved

NEW CORPORATE OFFICE FOR:

Campbell Oil Company

7977 Hills and Dales Rd. NE
Massillon, Ohio 44646

MARK	DATE	DESCRIPTION

PROJECT NO: 12.082

DATE: 2013.11.18

SITE DEVELOPMENT PLAN

2.1