

PIPE CHART AS BUILT

PIPE	SIZE	*TYPE	LENGTH	GRADE	ℓ IN	ℓ OUT
P2	24"	B	43.9	2.57%	1075.31	1074.00
P3	24"	C	153'	1.00%	1074.00	1072.53
P4	12"	B	21.9'	1.68%	1070.05	1069.68
P5	12"	B	9.9'	0.10%	1069.64	1069.63

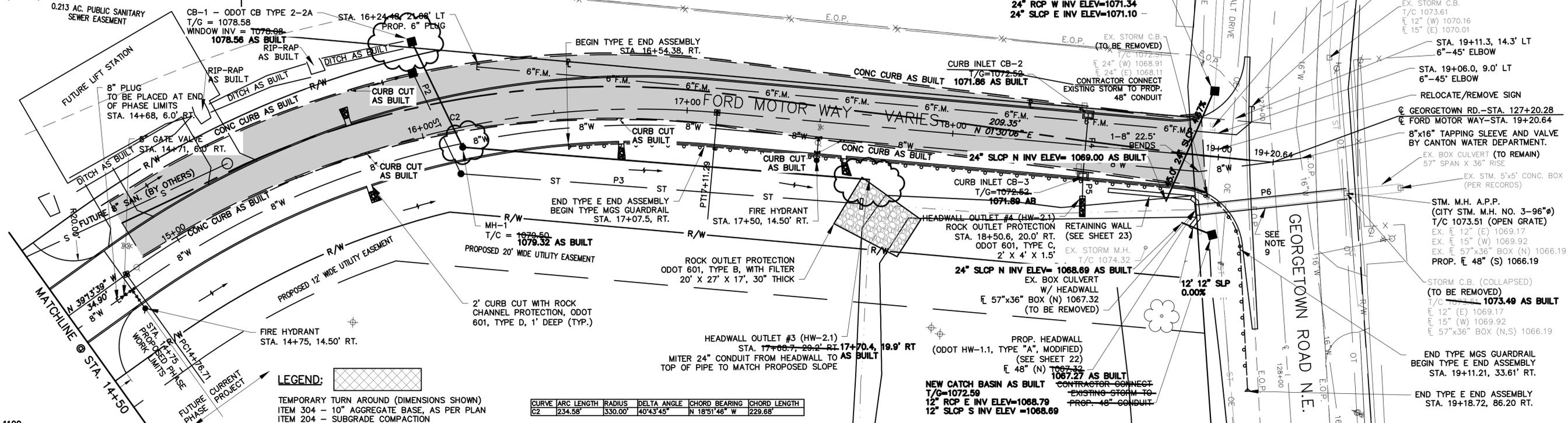
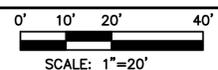
*USE CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33), OR APPROVED EQUAL.

STRUCTURAL CHART

PIPE	TYPE	T/C	STATION/OFFSET
CB-1	ODOT 2-2A	1078.58	STA. 16+02.22, 23.81' LT
MH-1	24" DRAIN BASIN	1079.50	STA. 16+10.41, 17.02' RT
CB-2	CURB INLET CB	1072.52	STA. 18+50, 11.50' LT
CB-3	CURB INLET CB	1072.52	STA. 18+50, 11.50' RT
CB-4	SQUARE-TOP CB	1074.46	STA. 18+97.08, 24.56' LT

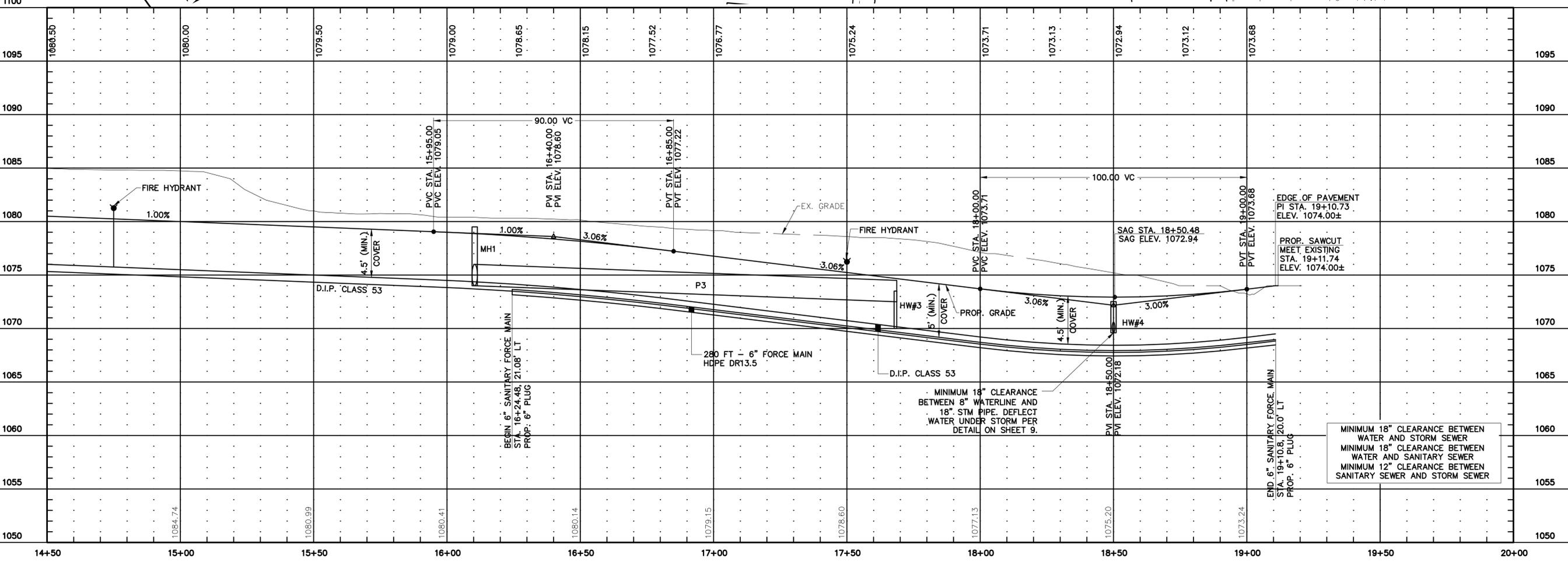
NOTES:

- FOR CURB INLET CATCH BASIN NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 1.
- FOR PRECAST STORM OR SANITARY MANHOLE NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 12.
- FOR MANHOLE COVER NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 12.
- FOR UTILITY TRENCH NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 19.
- SEE SHEET 18 FOR CURB CUT DETAIL AND STATION CALLOUTS.
- FOR CONCRETE CURB NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 30.
- FOR ALL GRADING SEE SHEET 18 UNLESS OTHERWISE NOTED.
- 24" DRAIN BASIN SHALL BE AS MANUFACTURED BY NYLOPLAST OR AN APPROVED EQUAL.
- REMOVE EXISTING CULVERT FROM INLET HEADWALL TO EXISTING CATCH BASIN TO BE REMOVED.
- SEE SHT. 4 FOR MOT DETOUR NOTES FOR THE INSTALLATION OF THE 48" CULVERT.



LEGEND:
 [Hatched Box] TEMPORARY TURN AROUND (DIMENSIONS SHOWN)
 ITEM 304 - 10" AGGREGATE BASE, AS PER PLAN
 ITEM 204 - SUBGRADE COMPACTION

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C2	234.58'	330.00'	40°43'45"	N 18°51'46" W	229.68'



MINIMUM 18" CLEARANCE BETWEEN WATER AND STORM SEWER
 MINIMUM 18" CLEARANCE BETWEEN WATER AND SANITARY SEWER
 MINIMUM 12" CLEARANCE BETWEEN SANITARY SEWER AND STORM SEWER

HAMMOTREE & ASSOCIATES, LIMITED
 ENGINEERS, PLANNERS, SURVEYORS
 5233 STONEHAM RD. NORTH CANTON, OH 44720
 PHN: (330) 499-8817 FAX: (330) 499-0149
 TOLL FREE: 1-800-394-8817
 www.hammotree-engineers.com

DATE: _____ DATE: _____ DATE: _____ DATE: _____
 REV. BY: _____ REV. BY: _____ REV. BY: _____ REV. BY: _____
 FLD BK: 549 BK PG: 76 CRW OHF: BJJ CPYRIGHT: 2011 TAB: PP-2
 DESN BY: JDS REG CHKD BY: JDS RWD BY: JDS DATE: 05/02/17
 SCALE: HORIZ: 1"=20' VERT: 1"=5' CONTOUR INT: _____

PLAN & PROFILE (STA. 14+50 TO STA. 20+00)
 NE CANTON INDUSTRIAL PARK
 FOR: CITY OF CANTON/COIC
 LOCATED IN THE CITY OF CANTON
 STARK COUNTY, OHIO

13/29

CFM ✓
JAE ✓
BAB ✓
we // done!



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

OCT 31 2012

OCT 29 2012

Regulatory Division
North Branch
LRH-2012-158-TUS-Unnamed tributary to East Branch Nimishillen Creek

APPROVED JURISDICTIONAL DETERMINATION

Mr. Jeff Rice
Hammontree & Associates, Limited
5233 Stoneham Road
North Canton, Ohio 44720-1594

Dear Mr. Rice:

I refer to the "*Wetland Delineation Report NE Canton Industrial Park, Canton Community Improvement Corporation, City of Canton, Stark County, Ohio*" report dated December 30, 2011, that you submitted and which was received in the Huntington District office on January 5, 2012. The report contains information concerning potential waters of the United States for an approximately 98-acre property. The proposed project is located south of 8th Street NE and west of Trump Avenue in Canton Township, Stark County, Ohio. A total of nine (9) potential waters of the United States were identified on the proposed property: three (3) streams (Stream 1, Stream 3, and Stream 4); one (1) pond; and five (5) wetlands (Wetlands D, E, F, G and H).

The United States Corps of Engineers (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR 328 and 33 CFR 329. Section 404 of the Clean Water Act requires a Department of the Army (DA) permit be obtained prior to discharging dredged or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 requires a DA permit be obtained for any work in, on, over or under a navigable water. Our December 2, 2008 headquarters guidance entitled "Revised Guidance on Clean Water Act Jurisdiction Following the U.S. Supreme Court Decision in *Rapanos v. United States* and *Carabell v. United States*" was followed in the final verification of Clean Water Act jurisdiction.

Based on a review of the submitted information, a site visit conducted on July 3, 2012 and other information available to us, we have determined: the upper section of Stream 1 (approximately 384 linear feet) is seasonal-intermittent flowing relatively permanent water (RPW); the lower section of Stream 1 (approximately 1,865 linear feet) is perennial flowing, RPW; Stream 3 (approximately 178 linear feet) is seasonal-intermittent flowing RPW; and Stream 4 (approximately 96 linear feet) is a seasonal-intermittent flowing RPW. Streams 1, 3 and 4 are indirect tributaries to the Tuscarawas River, a traditional navigable water (TNW) and are therefore jurisdictional.

Wetland D (approximately 4.5-acres) abuts Stream 3 and Wetland G (approximately 5.32-acres) abuts Stream 1; Wetlands D and G are jurisdictional. Wetland H (approximately 1.02-acres) is adjacent to Stream 1 and was determined to have a significant nexus to the Tuscarawas River, a TNW. The three (3) streams totaling approximately 2,523 linear feet and three (3) wetlands (Wetlands D, G and H) totaling approximately 10.84-acres have been correctly delineated as illustrated on the attached figure titled "*Delineation Map NE Canton Industrial Park, Canton Community Improvement Corporation, Located in Stark County, Ohio Lat., Long (map center): 40.7950, -81.3298*" and dated July 24, 2012, and are waters of the United States, subject to regulation under Section 404 of the Clean Water Act.

One (1) pond, totaling approximately 0.37-acre, was constructed in uplands and has been determined not to be a water of the United States. Two (2) wetlands (Wetland E and F) are surrounded by upland and do not present a hydrological connection to the tributary system. Based on the absence of a hydrological connection or adjacency to a water of the United States, Wetlands E and F are determined to be isolated. Isolated waters are only regulated under Section 404 of the Clean Water Act when the use, degradation or destruction of which could affect interstate or foreign commerce. Isolated Wetlands E and F, totaling approximately 0.61-acre, have no substantial connection to interstate or foreign commerce and are not considered to be waters of the United States. Therefore, no authorization would be required from this office for the placement of dredged or fill material into these wetlands. However, you should contact the Ohio Environmental Protection Agency, Division of Surface Water, at 614-644-2001 to determine state permit requirements.

In accordance with the June 5, 2007 Joint Memorandum between the United States Environmental Protection Agency (USEPA) and the Corps and the January 28, 2008 Corps' Memorandum regarding coordination on jurisdictional determinations, this determination was coordinated with the USEPA Region 5 and Corps Headquarters, with coordination completed on October 10, 2012.

Based on the information provided, your delineation is verified. This jurisdictional verification is valid for a period of five (5) years from the date of this letter unless new information warrants revision of the delineation prior to the expiration date. This letter contains an approved jurisdictional determination for the subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the Great Lakes and Ohio River Division Office at the following address:

Appeal Review Officer
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-7261 Fax: (513) 684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by December 22, 2012. **It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.**

This determination has been conducted to identify the limits of the Corps' Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service (NRCS), prior to starting work.

If you have any questions concerning the above, please contact Laurie Moore at (513) 825-1901, by mail at the above address, or by email at laurie.a.moore@usace.army.mil.

Sincerely,

A handwritten signature in black ink that reads "Teresa Spagna". The signature is written in a cursive, flowing style.

Teresa Spagna
Regulatory Project Manager
North Branch

Enclosures

Copies furnished:

Ric Queen, Ohio EPA- via email at ric.queen@epa.state.oh.us

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Hammontree & Associates, Limited		File Number: LRH-2012-158-TUS	Date: October 29, 2012
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/mcet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Ginger Mullins, Chief, Regulatory Division, 304-399-5610
Michael E. Hatten, Chief, North Branch, 304-399-5210
Mark Taylor, Chief, Energy Resource Branch, 304-399-5610
LuAnne Conley, Chief, South/Transportation Branch, 304-399-5710
Address: U.S. Army Corps of Engineers
Regulatory Division
502 8th Street
Huntington, WV 25701

If you only have questions regarding the appeal process you may also contact:

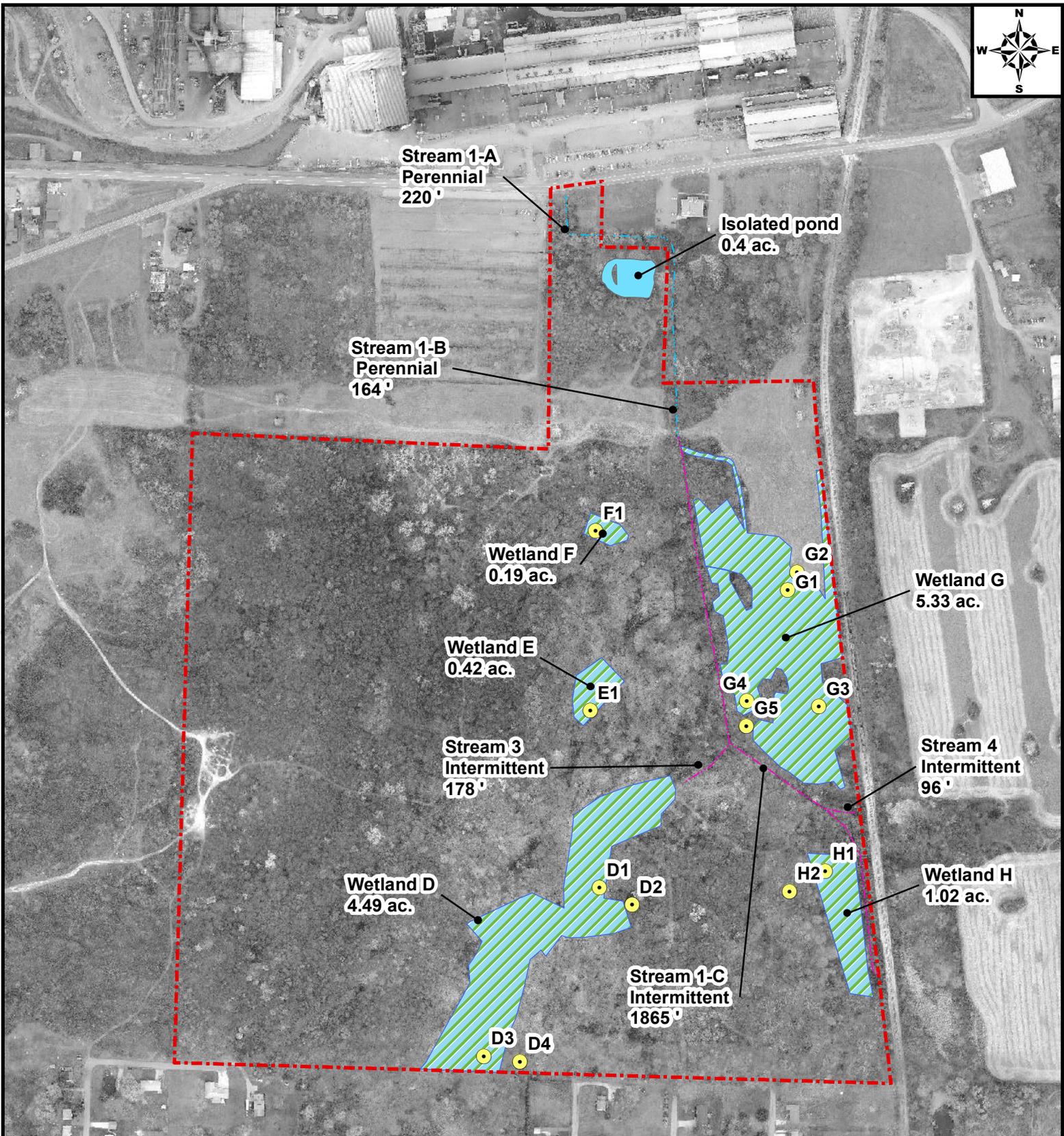
Appeal Review Officer
U.S. Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, OH 45202-3222
TEL (513) 684-6212; FAX (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date: _____

Telephone number: _____



Legend

Sample point	Wetland
Perennial_stream	Isolated pond
Intermittent_stream	Property line

Map sources: Aerial photograph (Stark County Engineer, 2009)

0 200 400

Feet
1 inch = 400 feet
Map date: 7/24/2012

DELINEATION MAP
NE Canton Industrial Park
Canton Community Improvement Corporation
Located in Stark County, OH
Lat, Long (map center):
40.7950, -81.3298

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS - PLANNERS - SURVEYORS

5322 Stoneham Rd.
North Canton, OH 44720
(330) 499- 8817 Fax: (330) 499-7274
Toll Free: 1-800-394-8817
www.hammontree-engineers.com

ALAN HAROLD
Stark County Auditor
FEE P

MAR 23 2011

TRANSFERRED *if*
TRANSFER NOT NECESSARY
DEPUTY *ACS*
IN COMPLIANCE WITH ORC 319.202



Instr: 201103230011480
P: 1 of 6 F: \$60.00 03/23/2011
Rick Campbell 12:28PMEASE
Stark County Recorder T20110008637

ROAD ACCESS AND PIPELINE EASEMENT

This Agreement made and entered into by and between OHIO POWER COMPANY, an Ohio corporation, Grantor, and the CANTON COMMUNITY IMPROVEMENT CORPORATION, a non profit corporation organized and existing under the laws of the State of Ohio, Grantee.

WITNESSETH:

For valuable consideration and the considerations hereinafter expressed, Grantor hereby grants to Grantee, its successors and assigns, the right, privilege and easement to construct, install, replace, operate, maintain, inspect, repair and remove a publicly dedicated access road and a catch basin along with three pipelines and appurtenances ("Pipeline Facilities") one eight (8") inch water line, one eight (8") inch sanitary sewer line, one fifteen (15") storm sewer line and a catch basin and easement in, on, under, through, and across lands owned by Grantor situated in City of Canton, Stark County, Ohio, and acquired by deed dated February 18, 1965 and recorded in Volume 3068 Page 347 of the Stark County, Ohio Recorder of Deeds.

The location and route of said pipelines, catch basin permanent easement and temporary easement are more specifically depicted in Exhibit "A" and shown on Exhibit "B" attached hereto and incorporated by reference herein for all purposes.

Together with the right of ingress and ingress to and from the same with such entry being made along the easement area. To have and to hold said rights, privileges and easements as to said Grantee and its successors and assigns.

As additional consideration for the rights herein granted, Grantee, by its acceptance hereof, agrees to be bound by the following terms and conditions.

83-00060 - MAP 160 - (01-0100) 3-23-11 JL

EASEMENT UNLL

68

02339

1. All work relating to said facilities shall be at Grantee's expense and Grantee shall, after construction, maintenance, repair, replacement or removal of said facilities, restore the affected area to the grade and condition existing prior to such activity and in a manner satisfactory to Grantor. Grantee shall bury its facilities so as to maintain a minimum cover of forty eight inches (48").

2. Grantee agrees to maintain a minimum distance of thirty (30) feet from any tower leg, pole, foundation, guy anchor or other facilities and associated equipment located on the property.

3. Grantee acknowledges that the easement is located in close proximity to high voltage electric facilities. The Grantor shall not be liable for any ground faults, induced voltage, current, or any electrical interference whatsoever that may be imposed, or that would affect the Grantee's facilities as constructed and maintained in the easement areas herein granted. If any of the above described events or other events caused by the Grantor's facilities occur, any remedy to eliminate the event shall be at the sole cost of Grantee.

A. Grantor excepts and reserves, for itself, its successors and assigns, the right to use, operate, maintain, repair, replace, renew, upgrade, install, or remove, all existing electric lines, access roads, and all other facilities now existing or hereafter installed on the above described Premises.

B. All work shall be conducted in accordance with applicable OSHA safety regulations, and in such manner as to avoid contact with energized high voltage overhead electric lines present on said Premises.

C. Grantor's towers, structures, conductors and other facilities shall not be disturbed. Access to Grantor's electrical facilities shall be maintained and available at all times.

D. No drilling or trenching shall be conducted directly beneath the electric lines or immediately adjacent to towers or other structures without the consent of Grantor.

E. No equipment shall be refueled while under, or in the vicinity of the electric lines.

4. No work done by Grantee in connection with the construction, operation, maintenance, replacement, repairing and removal of said facilities shall disturb or damage the property, fences, gates, drains, ditches, and Grantor's property markers; and in the event it does, Grantee shall immediately notify Grantor and shall reimburse Grantor for its expense incurred in repairing or replacing said property, fences, gates, drains, ditches and property markers. In addition, Grantee shall reimburse Grantor for all damages to crops and timber and to any other property owned by the Grantor.



Instr: 201103230011480
P: 3 of 6 F: \$60.00 03/23/2011
Rick Campbell 12:28PMEASE
Stark County Recorder T20110008637

5. Grantee shall at all times maintain said facilities in a thoroughly safe operating condition, and shall at any time upon the written request of Grantor promptly repair said facilities in such manner as shall be satisfactory to Grantor.

6. Each party agrees to be responsible for any negligent acts or negligent omissions by or through itself of its agents, employees and contracted servants and each party further agrees to defend itself and themselves and pay any judgments and costs arising out of such negligent acts or negligent omissions, and nothing in this contract shall impute or transfer any such liability from one to the other.

7. INSURANCE

A. Coverage. Grantee agrees to obtain comprehensive general liability insurance, covering bodily injury, death and property damage, at its expense, naming Grantor as an additional insured, which shall be in an amount not less than \$1,000,000 for bodily injury, including death, to any one person; not less than \$2,000,000 for bodily injury, including death, to more than one person in the same accident or occurrence; not less than \$1,000,000 for damage to or destruction of property, including the loss of use thereof, in any one occurrence; and an aggregate limit not less than \$2,000,000. The insurance shall include comprehensive public liability insurance, covering bodily injury, and death.

Grantee shall, at all times during the term of this easement, maintain workers' compensation insurance to comply with the applicable laws of the State of Ohio.

B. Insurance Certificate. Grantee shall, prior to the commencement of the term of this Easement and at such other times as Grantor shall request, furnish to Grantor a certificate from Grantee's insurance carrier acceptable to Grantor, that a policy of insurance has been issued by it to Grantee providing for indemnity insurance and that such policy is in force. Such certificate shall state that the insurance carrier will give Grantor fifteen (15) days prior written notice of any cancellation of or material change in such policy. If the certificate recites that it is subject to any exceptions contained in the policy of insurance, such exceptions shall be stated in full in said certificate and Grantor may, in its discretion, require Grantee, before this Easement shall become effective, to obtain a policy of insurance which is not subject to any exceptions which Grantor finds objectionable.

8. Grantee agrees not to construct any facility or building within the easement area. Also, Grantee agrees not to plant any trees, shrubs or any type of vegetation within the easement area.

This easement is granted subject to all existing outstanding rights, including but not limited to, leases, easements, exceptions, reservations, covenants, conditions, highways, uses, liens, and encumbrances of record affecting the above described land which are now in force and effect, if any, and to any state of facts an examination of the premises or an accurate survey would disclose.

This indenture shall be binding upon and inure to the benefit of the parties hereto, their respective successors and assigns.

DATED this 18th day of March, 2011.

OHIO POWER COMPANY

By: Dean A. Berry
Dean A. Berry
Manager, Real Estate & Workplace Services
American Electric Power Service Corporation
Authorized Signer


Instr: 201103230011480 03/23/2011
P: 4 of 6 F: \$60.00
Rick Campbell 12:28PMEASE
Stark County Recorder T20110008637

STATE OF OHIO)
COUNTY OF FRANKLIN)

The foregoing instrument was acknowledged before me this 18th day of March, 2011, by Dean A. Berry, Real Estate & Workplace Services, American Electric Power Service Corporation, as Authorized Signer for Ohio Power Company, an Ohio corporation on behalf of the corporation.



Joyce H. Leachman
Notary Public for the
State of Ohio
My commission expires 8/1/2015

Joyce H. Leachman
Notary Public
My commission expires: 8/1/2015

This instrument was prepared by Land Management Section, 700 Morrison Road, Gahanna, Ohio 43230-6642, for and on behalf of Ohio Power Company.



CHARLES F. HAMMONTREE, P.E., P.S.
 BARBARA H. BENNETT, P.E., P.S., LEED-AP
 JAMES C. BOLLIBON, P.E., P.S.
 KEITH A. BENNETT, P.E., P.S.
 ROBERT J. HAMMONTREE, II
 DANIEL J. GRINSTEAD, P.E.
 KARL J. OPRISCH, P.E.
 NICHOLAS G. COPPAGE, P.E.
 MARK E. FRANZEN, P.E.
 PAUL V. McOUADE, P.E.
 MICHAEL M. VALE, P.E., CPESC, CPSWQ

HAMMONTREE & ASSOCIATES, LIMITED
Consulting Engineers - Planners - Surveyors

5233 STONEHAM ROAD
 NORTH CANTON, OHIO 44720

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 TOLL FREE 1-800-394-8817
 FAX (330) 499-0149
 www.hammontree-engineers.com

C. JASON POPA, P.E.
 JENNIFER D. SCHUMACHER, P.E., LEED-AP
 WILLIAM L. CROXTON, P.E.
 THOMAS R. POWELL, P.E.
 ROBERT L. FREY, P.E., P.S.
 MELINDA C. CHASE, P.E.
 BRENT M. WINSLOW, P.S.
 GARY L. TOUSSANT, P.S.

August 31, 2010

Exhibit "A"



Instr: 201103230011480
 P: 5 of 6 F: \$60.00 03/23/2011
 Rick Campbell 12:28PMEASE
 Stark County Recorder T20110008637

**DESCRIPTION OF A 0.336 ACRE
 PUBLIC ROAD ACCESS & PUBLIC UTILITIES EASEMENT**

Situated in the City of Canton, County of Stark, State of Ohio and being part of Outlot 1125. Also being part of a tract conveyed to the Ohio Power Company by a deed recorded in Volume 3068, Page 347 of the Stark County Deed Records.

Beginning at a Stark County Disk (CAN-029) in a monument box found at the NW corner of Section 12 (formerly Canton Township), thence S 01°30'39" W, a distance of 800.17' to a point; Thence N 85°30'37" E, a distance of 13.86' to a ½ inch iron bar; Thence N 85°29'48" E, a distance of 180.63' to a point and the true point of beginning.

1. Thence N 08°19'48" W, a distance of 174.23' to a point;
2. Thence N 85°33'44" E, a distance of 84.19' to a point;
3. Thence S 08°19'48" E, a distance of 174.13' to a point;
4. Thence S 85°29'48" W, a distance of 84.19' to a point and the true point of beginning.

The above described public road access & public utilities easement contains 0.336 acres of which no acres lie within the public right-of-way as surveyed under the supervision of Brent Winslow, P.S. #7281 of Hammontree and Associates, Limited, Engineers and Surveyors of North Canton, Ohio in March of 2010.

The basis of bearings is Ohio State Plane Coordinate System, North Zone (3401), NAD 83 (1986). The Stark County Geodetic Reference System used as reference stations to establish the datum are designated as CAN029 and CAN050.

R:\Stark\City\Canton\69\ccicpld\2010-8-16_easement'.doc

CANTON, OH
 330-499-8817

PITTSBURGH, PA
 724-468-4622

WEIRTON, WV
 304-794-4138

ST. CLAIRSVILLE, OH
 740-695-7237

AKRON, OH
 330-693-7274



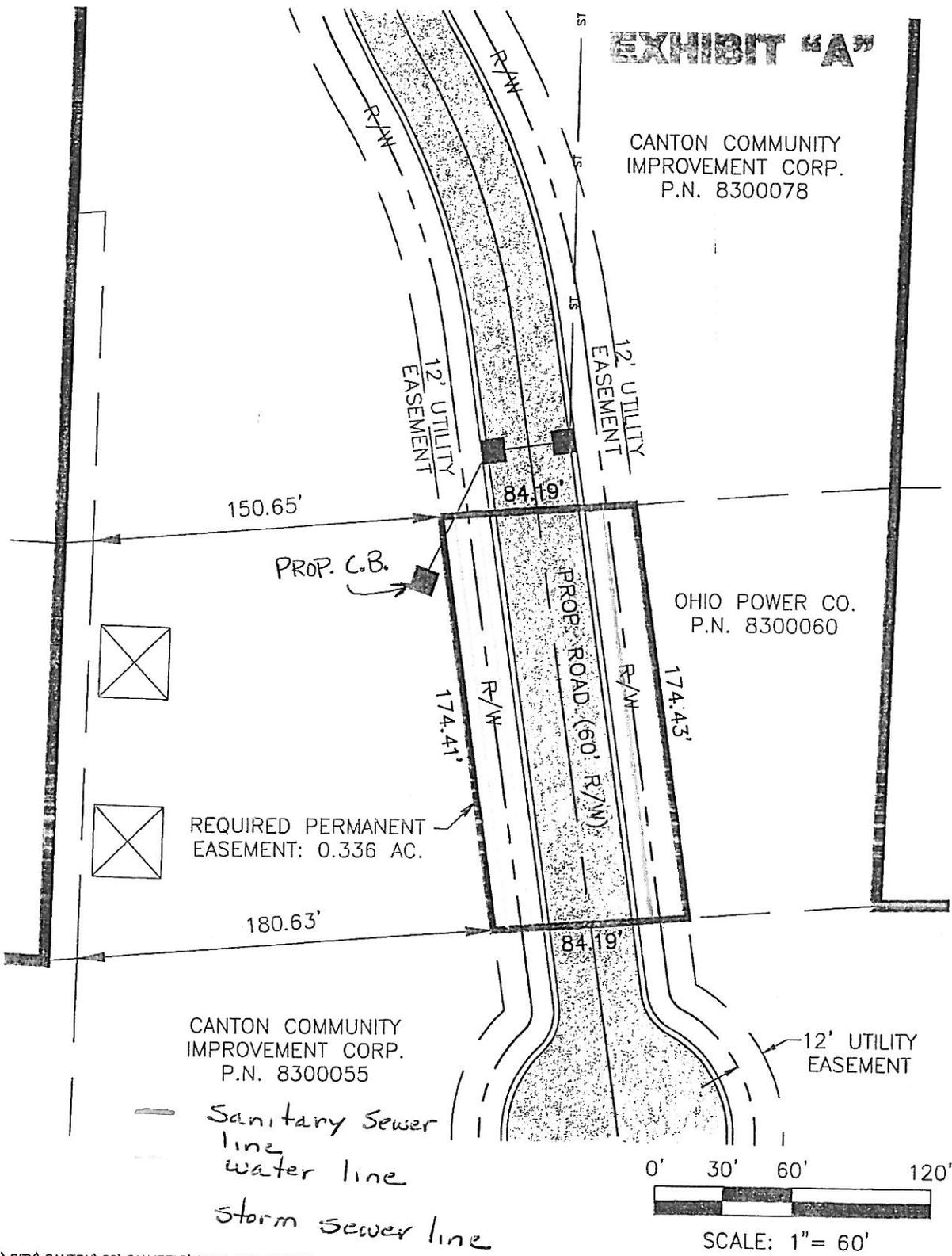
Instr: 201103230011480 03/23/2011
 P: 6 of 6 F: \$60.00
 Rick Campbell 12:28PM ERSE
 Stark County Recorder T20110008637

EXHIBIT "A"

CANTON COMMUNITY
 IMPROVEMENT CORP.
 P.N. 8300078

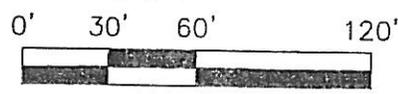
OHIO POWER CO.
 P.N. 8300060

CANTON COMMUNITY
 IMPROVEMENT CORP.
 P.N. 8300055



REQUIRED PERMANENT
 EASEMENT: 0.336 AC.

Sanitary Sewer line
 water line
 storm sewer line



SCALE: 1" = 60'

R:\STARK\CITY\CANTON\69\CANJRS\2010-05-18.DWG

EASEMENT
N.E. CANTON INDUSTRIAL PARK
 FOR: CANTON COMMUNITY IMPROVEMENT CORP.
 LOCATED IN THE CITY OF CANTON
 STARK COUNTY, OHIO

DESN BY: BAB FLD BK: _____
 DRWN BY: BAB BK PG: _____
 CHKD BY: JDS CRW CHF: _____
 RVWD BY: JDS CPYRGT: 2010
 DATE: 05/18/10 TAB: EASMENT

HAMMONTREE & ASSOCIATES, LTD.
 ENGINEERS, PLANNERS, SURVEYORS
 CANTON-AKRON-PITTSBURGH
 5233 STONEHAM ROAD NORTH CANTON, OHIO 44720
 CANTON: (330)499-8817 AKRON: (330)633-7274
 TOLL FREE: 1-800-394-8817 FAX: (330)499-0149
 www.hammontree-engineers.com

ACKNOWLEDGEMENTS

I HEREBY AFFIRM THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS PLAT OF NE CANTON INDUSTRIAL PARK LOCATED IN FORMER O.L. 1118, 1119, 1124, 1132 & 1192, IN THE CITY OF CANTON, STARK COUNTY, OHIO, REPRESENTS A SURVEY MADE UNDER MY SUPERVISION THAT CONFORMS WITH THE MINIMUM STANDARDS FOR BOUNDARY SURVEYS IN THE STATE OF OHIO, AS ADOPTED BY THE STATE BOARD OF REGISTRATION IN OAC CHAPTER 4733.37, AND THAT ALL CORNER MARKERS WILL BE SET AS NOTED ON THIS PLAT.

HAMMONTREE & ASSOCIATES, LTD

Joseph A. Corall
JOSEPH A. CORALL, P.S. 8911

9-29-2017
DATE



KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED OWNERS OF THE LAND SHOWN ON THIS PLAT, DO HEREBY ACKNOWLEDGE THE MAKING OF THE SAME TO BE THEIR FREE ACT AND DEED AND DO HEREBY DEDICATE THE STREETS & EASEMENTS SHOWN HEREON TO PUBLIC USE FOREVER.

Thomas M. Bernabei 12/1/2017
OWNER- THOMAS M. BERNABEI
BOARD PRESIDENT
CANTON COMMUNITY IMPROVEMENT CORP.

STATE OF OHIO Stark
COUNTY OF Stark

BEFORE ME, A NOTARY PUBLIC, IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED THE ABOVE NAMED OWNERS OF THE LAND SHOWN ON THIS PLAT, WHO ACKNOWLEDGED THAT THEY DID SIGN THE FOREGOING INSTRUMENT AND THAT IT WAS THEIR FREE ACT AND DEED ACCORDING TO LAW. IN TESTIMONY WHEREOF, I HAVE HERETO SUBSCRIBED MY NAME AND AFFIXED MY OFFICIAL SEAL AT Canton, OHIO, THIS 1st DAY OF December 2017.

04-05-2022
MY COMMISSION EXPIRES



Tammy Steier
NOTARY PUBLIC

Tammy Steier
PRINT NAME

APPROVED BY THE CITY OF CANTON PLANNING COMMISSION AT A MEETING HELD THIS 10th DAY OF October, 2017.

Thomas M. Bernabei
CHAIRMAN- MAYOR THOMAS M. BERNABEI

Watt Bailey
SECRETARY- WATT BAILEY

RECEIVED AND RECOMMENDED FOR ACCEPTANCE THIS 16 DAY OF October, 2017.

Daniel J. Moeglin
CITY OF CANTON ENGINEER- DANIEL J. MOEGLIN, PE

RECEIVED AND ASSIGNED CITY LOT NUMBER 43246 & OUTLOT NUMBERS 1402 & 1403 AS RECORDED IN LOT SCHEDULE 3, PAGE(S) 135 THIS 15th DAY OF NOVEMBER, 2017.

Daniel J. Moeglin
CITY OF CANTON ENGINEER- DANIEL J. MOEGLIN, PE

I HEREBY CERTIFY THAT THE N.E. CANTON INDUSTRIAL PARK NO. 1 RECORD PLAT AND THE DEDICATION OF STREETS AND EASEMENTS SHOWN HEREIN WAS APPROVED BY ORDINANCE NO. 246/2017 PASSED THIS 13th DAY OF NOVEMBER, 2017 & RECORDED IN ORDINANCE RECORD VOLUME 59, PAGE 692-697

David R. Dougherty
CLERK OF CANTON CITY COUNCIL- DAVID R. DOUGHERTY

ENTERED FOR TRANSFER THIS 18th DAY OF December, 2017.

Alan Harold
STARK COUNTY AUDITOR- ALAN HAROLD

RECEIVED FOR RECORD THIS 27th DAY OF December, 2017.

RECORDED IN OFFICIAL RECORD IMAGING NUMBER:

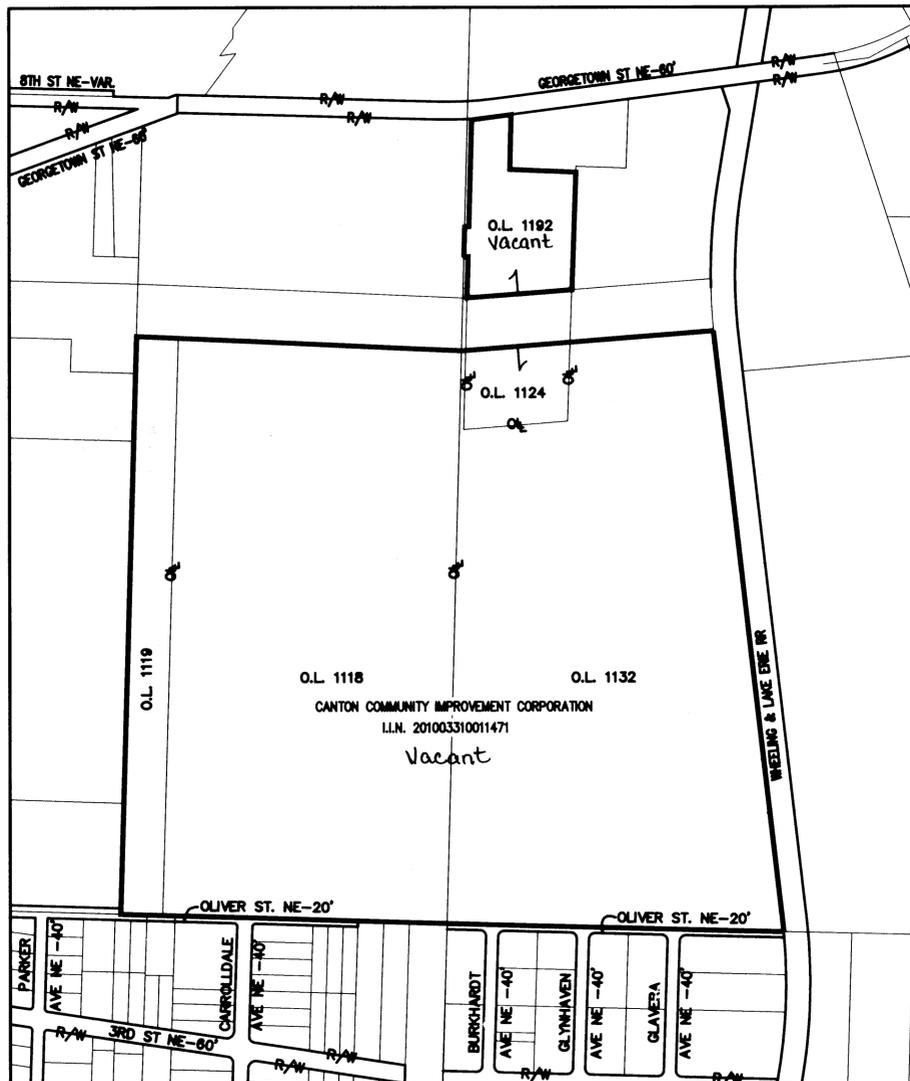
201712270054973



Rick Campbell
STARK COUNTY RECORDER- RICK CAMPBELL

N.E. CANTON INDUSTRIAL PARK NO. 1
LOCATED IN ALL OF OUTLOTS 1118, 1119, 1124, 1132, & 1192
CITY OF CANTON, STARK COUNTY, OHIO

SEPTEMBER 2017
1 LOT & 2 OUTLOTS



ORIGINAL DEED DESCRIPTION
1"=300'

PLAT OF LANDS OF THE DEDICATORS FROM WHICH LAND IS TAKEN IN ACCORDANCE WITH ORC 711.02(B)

OWNER/ DEVELOER
CANTON COMMUNITY IMPROVEMENT CORP.
218 CLEVELAND AVENUE S.W., 5TH FLOOR
CANTON, OH 44702

ATTN: L. RAFAEL RODRIGUEZ
330-438-4129

ENGINEER/ SURVEYOR
HAMMONTREE & ASSOCIATES, LTD.
5233 STONEHAM RD.
NORTH CANTON, OH 44720

TELE: 330-499-8817
FAX: 330-499-0149

BASIS OF BEARINGS

THE OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE (3401), GRID NORTH. THE STARK COUNTY GEODETIC REFERENCE SYSTEM POINTS USED AS REFERENCE STATIONS TO ESTABLISH THE DATUM ARE DESIGNATED AS CAN-029 AND CAN-050.

ALL BEARINGS 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 0.99990349.

DATA USED

TAX MAPS: CANTON TWP. NW 12, NE 11, SW 12, SE 11,

CANTON CITY 69, 160

PLATS: BOOK 25, PG. 12; BOOK 25, PG. 137;
BOOK 16, PG. 95-97; BOOK 15, PG. 25;

I.N. 200610240065451
I.N. 200406030039518 (ANNEXATION)

MAP OF SURVEY: OHIO POWER COMPANY O-298833C

ALTA/ASCM LAND TITLE SURVEY,
BY H&A DATED MARCH 2010

DEDICATION: INSTRUMENT NO. 200610240065451

DEEDS: I.N. 200709120049849
I.N. 200306240059465
I.I.N. 201003310011471

SUMMARY OF AREA

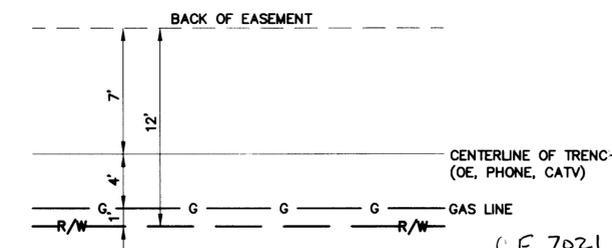
LOTS/ OUTLOTS =	897
ROAD =	93.861 AC.
TOTAL ACREAGE =	169 1,288 AC.
	95.066 AC.

LEGEND

- R/W = RIGHT OF WAY
- ⊕ = CENTERLINE
- = 5/8" IRON BAR W/ H&A CAP SET
- = MARKER FOUND AS NOTED
- _L = OUTLOT LINE

PUBLIC UTILITY EASEMENT:

IT IS HEREBY EXPRESSLY UNDERSTOOD THAT A TWELVE (12.00) FOOT WIDE EASEMENT BEING PARALLEL WITH AND CONTIGUOUS TO, THE NEWLY DEDICATED STREETS AND HIGHWAYS WITHIN THIS ALLOTMENT SHALL BE RESERVED FOR THE POWER COMPANY, TELEPHONE COMPANY, CABLE/TV COMPANY, AND THE GAS COMPANY TO BE USED FOR INSTALLING, OPERATING, MAINTAINING AND SERVICING OF POLE LINES, UNDERGROUND CABLES AND CONDUITS. THE CHARACTER OF THE INSTALLATION AND STRUCTURES WHICH MAY BE CONSTRUCTED, RECONSTRUCTED, REMOVED AND MAINTAINED IN, ON, AND THROUGH THESE EASEMENTS SHALL INCLUDE A/L INCIDENTAL APPURTENANCES SUCH AS GUYS, CONDUITS, POLES, ANCHORS, TRANSFORMERS, PAD MOUNTED TRANSFORMERS, PADS, HANDHOLES, ETC. SAID EASEMENT RIGHTS SHALL INCLUDE THE RIGHT, WITHOUT LIABILITY THEREFORE, TO REMOVE TREES AND LANDSCAPING INCLUDING LAWNS, FLOWERS OR SHRUBBERY WITHIN SAID EASEMENT PREMISES WHICH MAY INTERFERE WITH THE INSTALLATION, MAINTENANCE, REPAIR OR OPERATION OF ELECTRIC CURRENT, AND THE RIGHT OF ACCESS, INGRESS TO AND FROM ANY OF THE WITHIN PREMISES, FOR EXERCISING ANY OF THE PURPOSES OF THIS RIGHT OF WAY AND EASEMENT GRANT.



C.F. 7021
4-38-47

HAMMONTREE & ASSOCIATES, LTD.
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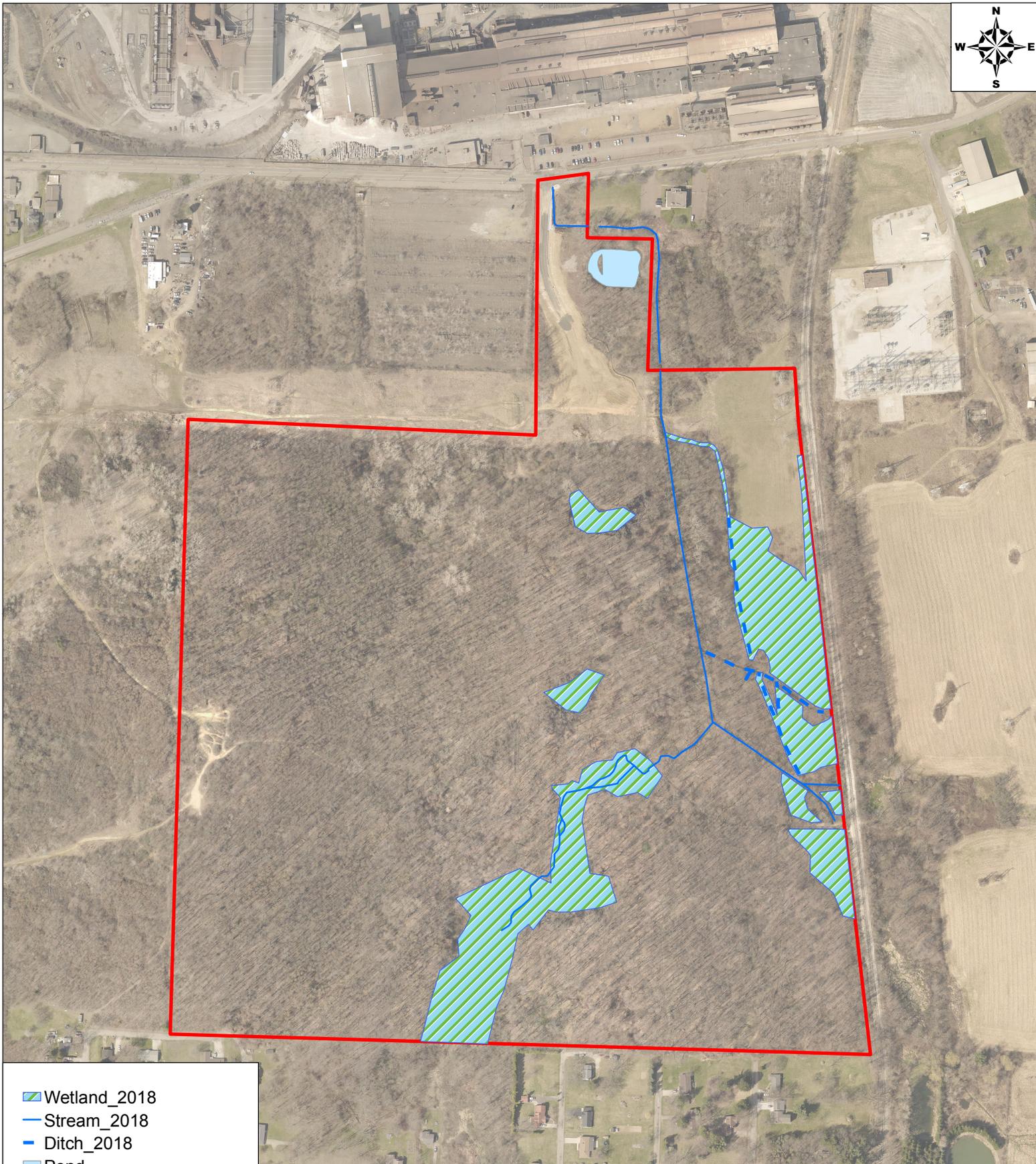
DESC.	DATE	REV. BY	DATE	REV. BY	DATE	REV. BY	DATE	REV. BY
FLD BK:	549							
BK PG:	34							
CRW CHG:	JLS							
CPYRIGHT:	2017							
RVWD BY:	JAC							
DATE:	09/21/17							

DESIGN BY: JAC
DRAWN BY: JLB
CHKD BY: JMS
RVWD BY: JAC
DATE: 09/21/17

SCALES
HORIZ: CONTOUR INT:
VERT: CONTOUR INT:

FINAL PLAT- COVER SHEET
N.E. CANTON INDUSTRIAL PARK NO. 1
FOR: CANTON COMMUNITY IMPROVEMENT CORP.
LOCATED IN ALL OF OUTLOTS 1118, 1119, 1124,
1132 AND 1192 IN THE CITY OF CANTON
STARK COUNTY, OHIO

1/3



-  Wetland_2018
-  Stream_2018
-  Ditch_2018
-  Pond
-  Delineation Boundary

0 200 400
 Feet
1 inch = 400 feet

Date drawn: 11/7/2018
Drawn by: JAR

Wetland Delineation Map

NE Canton Industrial Park

City of Canton

Located in Stark County, OH

Map center: 40.7967 , -81.3296 (NAD 83)

Map sources:
Aerial photo (Stark County GIS, 2018)

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS - PLANNERS - SURVEYORS



5233 Stoneham Rd.
North Canton, OH 44720
Toll Free: 1-800-394-8817
www.hammontree-engineers.com

September 21, 2011

Ms. Jennifer Schumacher
Project Manager
Hammontree and Associates
5233 Stoneham Road
North Canton, OH 44720

Re: Report of Preliminary Subsurface Exploration
Proposed Canton Industrial Park Roadway
Canton, Stark County, Ohio
PSI Project Number: 0145-442

Dear Ms. Schumacher:

In compliance with your instructions, we have conducted a preliminary geotechnical subsurface exploration and pavement analysis for the above referenced project. The results of this exploration, together with our recommendations, are to be found in the accompanying report, three (3) copies of which are being transmitted herewith.

After the plans and specifications are complete, PSI should review the final design drawings and specifications in order to verify that the recommendations are properly interpreted and implemented. It is also considered imperative that the geotechnical engineer or its representative be present throughout earthwork operations and pavement installation to observe field conditions with respect to the design assumptions and specifications.

Should you have any questions regarding the contents of this submittal, please do not hesitate to contact us at 330-478-0081.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.



Nicholas S. Campanella
Branch Manager



A. Veeramani, P.E.
District Manager

REPORT OF
PRELIMINARY GEOTECHNICAL SUBSURFACE EXPLORATION

FOR THE

PROPOSED CANTON INDUSTRIAL PARK ROADWAY
CANTON, STARK COUNTY, OHIO

PREPARED FOR

HAMMONTREE AND ASSOCIATES, LTD.
5233 STONEHAM ROAD
NORTH CANTON, OHIO 44720

PREPARED BY

PROFESSIONAL SERVICE INDUSTRIES, INC.
4579 NAVARRE ROAD S.W.
CANTON, OH 44706

PSI FILE NUMBER: 0145442

TABLE OF CONTENTS

PROJECT INFORMATION	Page 1
Project Authorization.....	Page 1
Project Description.....	Page 1
Purpose and Scope of Services	Page 1
SITE AND SUBSURFACE CONDITIONS	Page 2
Site Location and Description	Page 2
Subsurface Conditions.....	Page 2
Groundwater Conditions	Page 3
EVALUATION AND RECOMMENDATIONS	Page 4
Site Preparation and Earthwork Operations.....	Page 4
Sewer and Water Main Excavation Support.....	Page 5
Sewer and Water Main Support	Page 6
Manhole Structures.....	Page 6
Sewer and Water Main Backfill Operations.....	Page 6
Pavement Design and Construction	Page 7
Excavations.....	Page 8
Weather Considerations	Page 8
REPORT LIMITATIONS	Page 9
APPENDIX	

Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011

PROJECT INFORMATION

Project Authorization

This report presents the results of a preliminary geotechnical subsurface exploration and subsurface exploration conducted for Hammontree and Associates LTD., in connection with the proposed Canton Industrial Park Roadway, in the city of Canton, Stark County, Ohio. Ms. Jennifer Schumacher of Hammontree and Associates, LTD authorized PSI to perform the geotechnical investigation by signing PSI proposal dated August 5, 2011. This exploration was accomplished in general accordance with PSI Proposal No. 145-31788 dated October 15, 2010.

Project Description

Project information has been provided by Ms. Jennifer Schumacher of Hammontree and Associates. PSI has also received preliminary site layout plan and plan and profile drawings for the proposed development prepared by Hammontree and Associates LTD., dated August 1, 2011. The project consists of Canton Industrial park development, which includes construction of a roadway and associated utilities. The proposed roadway will be constructed to the south of Georgetown Road and will traverse the existing woods south approximately 900 linear feet. Additionally, a sanitary sewer and a water main will be constructed within right of way. The sanitary sewer will consist of approximately 725 linear feet of 8" diameter precast sewer pipe with an invert depth of approximately 6 to 7 feet. The sanitary line will be constructed offset the centerline of the road in the southbound lane. The water main will consist of approximately 900 linear feet of 12" water main with a proposed invert depth of approximately 5 feet. The water main will be placed in the northbound lane offset the curb-line approximately 5 feet.

Based on the topographical information provided on the plan and profile drawings, there is a maximum elevation difference of about 10 to 15 feet throughout the development areas. Based on the proposed grade for the new roadway, a majority of the site will be cut to subgrade elevation with maximum cut depth of about 3 feet.

If any of the information noted above has changed or is incorrect, please inform PSI so that the recommendations presented in this report can be reviewed and amended, if appropriate.

Purpose and Scope of Services

The purpose of this exploration was to evaluate the soil and groundwater conditions at the site to provide recommendations, from a geotechnical engineering viewpoint, for pavement

**Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011**

design and construction, site preparation and other construction considerations. The scope of the exploration and analysis included a reconnaissance of the project site, drilling 4 test borings to a depth of approximately 15 to 20 feet below the existing surface grades, a laboratory testing program, and an engineering analysis and evaluation of the subsurface materials.

The scope of services did not include an environmental assessment for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site. Any statements in this report or on the boring logs regarding odors, colors or unusual or suspicious items or conditions are strictly for the information of the client.

SITE AND SUBSURFACE CONDITIONS

Site Location and Description

The proposed Canton Industrial Park Roadway project is located south of Georgetown Street in-between Trump Avenue SE and Marietta Avenue NE in the City of Canton, Stark County, Ohio. Additionally, the Industrial Park project is located across from the existing Ford Plant on Georgetown Street. The surface of the proposed construction area is currently covered with grass, overgrown vegetation, and trees. Surface drainage was fair during the field drilling operations. Based on the topographical information provided on the plan and profile drawings, there is a maximum elevation difference of about 10 to 15 feet throughout the development areas. We recommend that all utility lines be located and marked prior to construction activities.

Subsurface Conditions

The general subsurface conditions at the site were explored with a total of four (4) test borings for the proposed Canton Industrial Park Roadway. The test borings were drilled to depths ranging from approximately 15 to 20 feet below the existing surface grades utilizing ATV mounted drilling equipment at the locations shown on the site plan included in the Appendix of this report. The locations of the test borings were selected and field located by representatives of Hammontree and Associates, Ltd via GPS surveying equipment. In addition, Hammontree and Associates, Ltd also provided top-of-hole boring elevations.

Field and laboratory testing were accomplished in general accordance with applicable ASTM and standards. The subsurface materials encountered in the test borings have been visually classified. The boring logs in the Appendix include the results of the field and laboratory testing, as well as other pertinent subsurface information. Representative soil samples were

Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011

placed in sample jars, and are stored in the laboratory for further analysis, if requested. Unless notified otherwise, all samples will be disposed of after 90 days following this report date.

The surface of the site, at test boring locations B-1 through B-4 is covered with topsoil ranging in thickness from about 3 to 5 inches. The thickness of the surficial topsoil should be considered variable throughout the proposed construction areas.

The topsoil at all test boring locations B-1 through B-4 was underlain by natural soils that extended to the terminal depths of the test borings at approximately 15 to 20 feet beneath existing grades. The natural soils consisted of various combinations of silty clay, clayey silt, sandy silt, silty sand, silt, sand containing varying amounts of gravel, rock fragments, with trace amounts of organics and coal. The natural soils exhibited a moisture content ranging from about 4 to 28 percent. The cohesive soils exhibited a soft to stiff consistency and the granular soils exhibited a very loose to medium dense relative density based on the Standard Penetration tests.

The above subsurface material description is of a generalized nature and is provided to highlight the major strata encountered. The boring logs included in the Appendix should be reviewed for specific information at the individual boring locations. The stratifications shown on the boring logs represent the conditions only at the actual test positions. Variations may occur and should be expected between the boring locations. The stratifications represent the approximate boundary between the subsurface materials and the transition may be gradual or not clearly defined.

Groundwater Conditions

The following table illustrates the groundwater levels encountered at the test boring locations during the field drilling operations:

Boring Number	Water During Drilling (Feet)	Water Upon Completion (Feet)
B-1	9.0	10.1
B-2	8.0	11.5
B-3	5.0	7.6
B-4	8.0	11.0

Note that groundwater levels fluctuate seasonally as a function of rainfall. During a time of year or weather different from the time of drilling, there may be a considerable change in the water table or the occurrence of water where not previously encountered. Furthermore, the

Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011

water levels in the boreholes often are not representative of the actual groundwater level, because the boreholes remain open for a relatively short time. Therefore, we recommend that the contractor determine the actual groundwater levels at the time of construction to evaluate groundwater impact on the construction procedures.

EVALUATION AND RECOMMENDATIONS

Site Preparation and Earthwork Operations

It is recommended that all site preparation and earthwork operations be conducted in accordance with the following generalized procedures:

Prior to the initiation of any earthwork operations, general site area clearing should be carried out. However, the decision in connection with the precise extent of required cut and fill should be determined in the field by a representative of PSI following observation of the exposed subgrades and proofrolling operations.

Careful visual control of clearing and stripping operations should be maintained to assure that all deleterious materials are removed. The extent to which deleterious materials are to be removed should be determined in the field following visual observation of the exposed subgrades. Subsequent to the site area clearing and stripping, all structural subgrade sectors should be subjected to critical proof-rolling operations and careful observation of subgrade reactions. Any sectors that exhibit instability are to be undercut to such depths as may be necessary to assure satisfactory supporting properties. The undercut areas shall be backfilled with approved fill materials, placed and compacted under carefully controlled procedures as described below.

All areas that are to receive structural fill should be filled on a critically controlled, lift-by-lift basis employing select, clean, organically free materials. All structural fill should be verified and approved by the project's geotechnical engineer prior to placement. Individual fill lifts are to be of maximum 8-inch loose measure thickness and each individual lift is to be adjusted in moisture content to within plus or minus two percent of the optimum moisture content as determined in accordance with ASTM Standard Proctor method D-698. However, for granular fill materials, the moisture-density compaction curve for the fill will not be sensitive to placement moisture. Accordingly, the density defined for an energy corresponding to ASTM D-698 should be used for control of fill placement. The fill materials are to be systematically compacted such that an in-place density of at least 98 percent of the maximum laboratory density as determined in accordance with the above-referenced ASTM method is achieved. Specifications should require that the resulting subgrade and fill materials' densities be verified by test measurements conducted by the geotechnical

Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011

engineer.

Careful attention will be required in fine-grading the subgrade surfaces in order to eliminate undulations and depressions that would tend to collect water. The pavement subgrade surface should be graded in a manner such that positive drainage towards the pavement edges and/or drainage systems will be insured.

Throughout the course of the earthwork operations, surface grades are to be maintained to facilitate positive drainage within the construction area and to prevent inundation of either the existing subgrade or new fill material. No water should be allowed to impound on the subgrade surfaces during this time. It is imperative that drainage be implemented as soon as possible, in advance of or at the start of construction.

Sanitary Sewer and Water Main Excavation Support

Based on the information provided by Hammontree and Associates LTD., it appears that the Water/sewer pipes will be bearing within the area's natural soil formations. In view of the results of the test boring operations, laboratory test studies, analysis and provided information, consideration should be given to the following factors in the design and installation of the proposed sewer and water main lines.

The majority of the proposed sewer and water main installations will be located within the pavement or right-of-way areas of the proposed roadway. Therefore, based on the locations of the proposed sewer lines and water mains and as per OSHA excavation regulations, open cut excavation is possible up to a maximum depth of twenty (20) feet. The excavation slopes should follow OSHA guidelines for type 'C' soils. If temporary excavation support is required, the contractor or specialty subcontractor should be responsible to design and install the required system. For the various subsurface formations encountered, the following soil parameters may be adopted for determining lateral earth pressures:

Type of Soil	Unit Weight (pcf)	Effective Strength	Undrained Strength
Silty Clay/Sandy Clay	120	$\phi' = 24^\circ, C' = 100 \text{ psf}$	$\phi = 0^\circ, C = 1000 \text{ psf}$
Silty Sand/ Sand	120	$\phi' = 30^\circ, C' = 0 \text{ psf}$	$\phi = 30^\circ, C = 0 \text{ psf}$

The design groundwater depth should be determined based on the actual groundwater conditions encountered in the field during construction.

Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011

Sewer and Water Main Support

For the structural and functional integrity of the sewer lines and water main, it is imperative that the pipes have adequate foundation, i.e., the subsurface materials should have adequate support capabilities and also be able to provide uniform bedding to the pipe. The bedding may be provided either with shaped bottom and tamped backfill, or by compacted granular bedding with tamped backfill. The granular bedding should meet the specification for Type 2 bedding (i.e., ODOT's Construction and Material Specifications Item #603.04). The bedding shall extend up around the pipe for a depth of 6 inches or 30 percent of the outside diameter of the pipe, whichever is greater. The remainder of the backfill should be compacted soil. Granular bedding not only provides firm uniform support for the pipe but also stabilizes the trench bottom.

The subsoil at and below the sewer line and water main bearing elevations may exhibit relatively loose or soft structural states. Within such sectors, undercutting and replacement of the questionable soils with coarse aggregates (such as #1 and #2 stones) will be required. The decision in connection with the extent of undercutting or stabilization can be made only in the field following careful visual examination of the exposed bearing materials.

Manhole Structures

Within the area's overburdened soils, freestanding excavations will not be possible for the proposed manhole structures. Therefore, a lateral support system will be required for the manhole excavations. The magnitude of the lateral earth pressures may be calculated utilizing the previously outlined soil parameters.

It is recommended that the maximum soil pressures resulting from the above-discussed loading conditions as well as the weight of the manhole and other facilities associated with the structure should not exceed 2,000 psf. Based on the recommended bearing pressure, the anticipated settlement will be less than 1.0-inch. It is recommended that suitability of the bearing surfaces be verified by the project's geotechnical engineer.

Sewer and Water Main Backfill Operations

Any backfill required against the manhole structures, sewers and water mains should consist of freely draining granular materials. The backfill is to be placed on a controlled lift-by-lift basis. Individual fill lifts are to be of maximum 8-inch loose measure thickness, and each individual lift is to be adjusted in moisture content to within plus or minus 2 percent of the

**Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011**

optimum moisture content as determined by ASTM D-698. The fill materials are to be systematically compacted, such that an in-place density of at least 98 percent of the maximum laboratory density as determined by the above-referenced ASTM method is achieved.

It must be recognized that, over a time period, the backfill against the manholes will be saturated. Under this circumstance it is possible that the bottom slab for the manhole will be subjected to hydrostatic uplift that should be considered in the design. Uplift may be resisted either by assuring that the dead loads of the proposed structure counter balance the buoyancy forces or by providing a system of pressure relief valves. Lateral pressures acting on the manholes can be defined based on the effective strength parameters recommended in a previous section plus hydrostatic pressure. Specifications should require that the resulting fill materials' densities be verified by test measurements conducted by the geotechnical engineer.

Pavement Design and Construction

Pavement design for the roadway structures will include proper preparation of subgrade sectors, careful design of the pavement area drainage systems and utilization of an aggregate base course with an asphalt concrete surface course.

Inclusion of adequate surface and subsurface drainage systems along and beneath the roadway is considered imperative in order to maintain the compacted subgrades as close to optimum moisture conditions as possible. A subsurface drainage system consisting of perforated drain pipes bedded in and backfilled with suitable filter materials should be installed along either side of the roadway at an elevation such that groundwater will be maintained a minimum of three (3) feet below the top of the pavement structures. The filter around the drainage members is to terminate in direct contact with the aggregate base course for the pavements. All subgrade sectors should be graded to direct water by gravity toward the drainage lines. At all low points and at regular intervals, lateral underdrain lines connected to suitably located outlet points are to be provided. Site surface grades should be such that no pavement sectors are allowed to impound water. All surface and subsurface water is to be directed to the existing or new storm sewer line or drainage ditches.

The results of the laboratory tests indicate that a design CBR value of 6 and subgrade modulus(k) of 120 pci can be utilized for the design of the proposed pavement structures, provided that the subgrade materials consist of properly compacted structural fill or natural soils, as recommended.

**Re: Canton Industrial park Roadway
Hammtree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011**

All materials to be employed and field operations required in connection with the contemplated pavement structures should follow recommendations and procedural details as per the Ohio Department of Transportation.

Excavations

In Federal Register, Volume 54, No. 209 (October, 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, Part 1926, Subpart P." This document was issued to better insure the safety of workers entering trenches or excavations. It is mandated by this federal regulation that all excavations, whether they be utility trenches, basement excavations or foundation excavations, be constructed in accordance with the new OSHA guidelines. It is PSI's understanding that these regulations are being strictly enforced. If they are not followed closely, the owner and the contractor could be liable for substantial penalties.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person" as defined in "CFR Part 1926," should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations.

PSI is providing this information solely as a service to the client. PSI is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred. Materials removed from the excavation should not be stockpiled immediately adjacent to the excavation, inasmuch as this load may cause a sudden collapse of the embankment.

Weather Considerations

The soils encountered at this site are known to be sensitive to disturbances caused by construction traffic and to changes in moisture content. During wet weather periods, increases in the moisture content of the soil can cause significant reduction in the soil strength and support capabilities. Care should be exercised during the grading operations at the site. Due to the fine-grained nature of the surficial soils, the traffic of heavy equipment, including heavy compaction equipment, may very well create pumping and a general deterioration of those soils in the presence of water. Therefore, the grading

**Re: Canton Industrial park Roadway
Hammontree and Associates, LTD.
PSI File No.: 0145442
September 21, 2011**

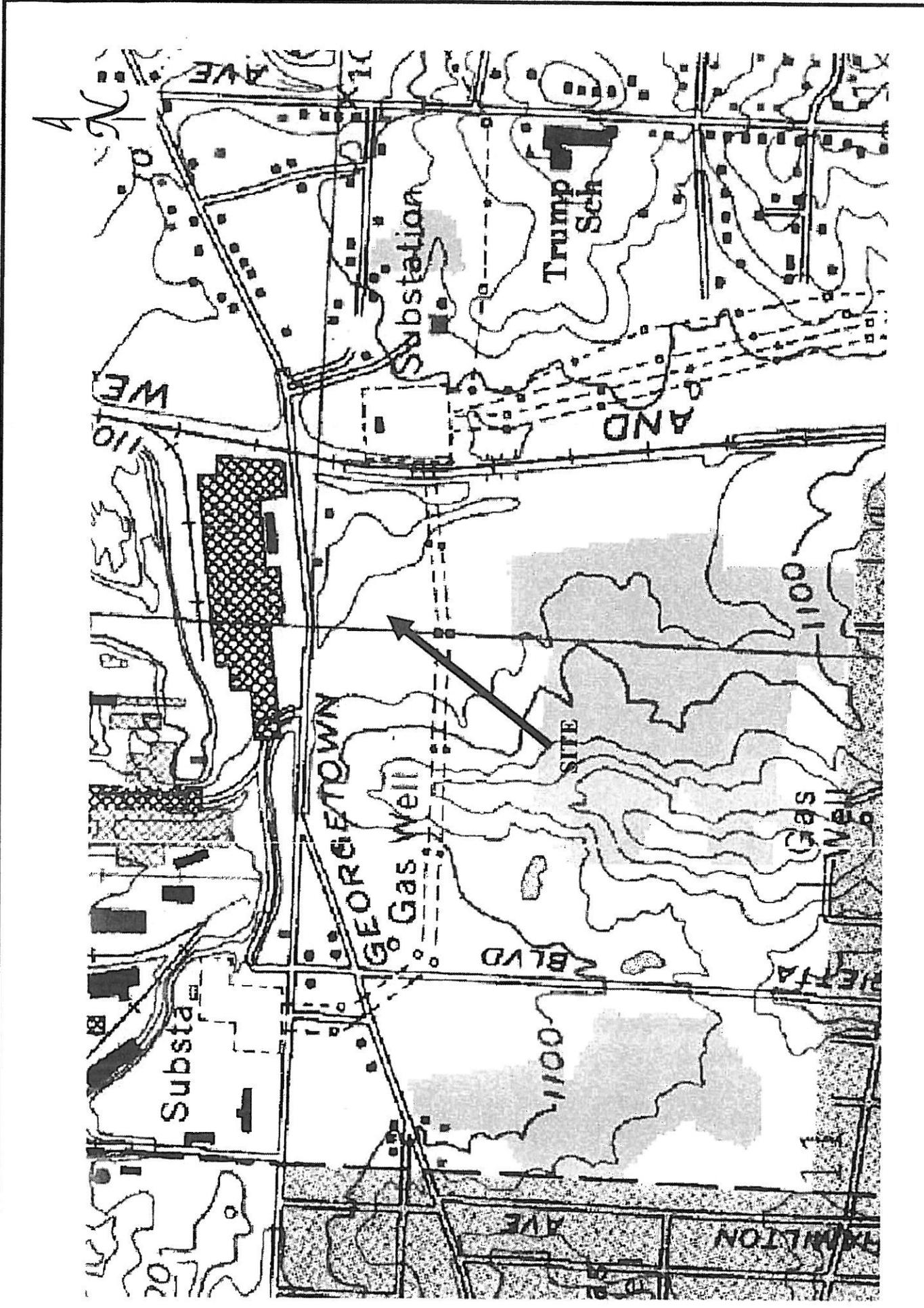
should, if at all possible, be performed during a dry season. A layer of crushed stone may be required to allow the movement of construction traffic over the site during the rainy season. The contractor should maintain positive site drainage and if wet/pumping conditions occur, the contractor will be responsible to over excavate the wet soils and replace them with a properly compacted structural fill.

REPORT LIMITATIONS

The recommendations submitted in this report are based on the available subsurface information developed by PSI and on the design information furnished by Ms. Jennifer Schumacher of Hammontree and Associates, LTD. If there are any revisions to the plans for the proposed project or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be retained to determine if changes in the recommendations are required. If PSI is not retained to perform these functions, PSI will not be responsible for the impact of those conditions on the recommendations for the project.

The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

After the plans and specifications are complete, it is recommended that PSI be provided the opportunity to review the final design drawings and specifications, in order to verify that the earthwork and recommendations are properly interpreted and implemented. At that time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of Hammontree and Associates LTD, for the specific application to the Proposed Canton Industrial Park Roadway, in the city of Canton, Stark County, Ohio.



<p>[psi] Information To Build On Engineering • Consulting • Testing</p>	<p>Proposed New Entrance Roadway Canton Industrial Park Canton, Stark County, Ohio</p>	<p>Date: 09/22/11</p>	<p>Site Vicinity Map</p>
<p>Drawing provided by Hammonree</p>		<p>PSI Project No.: 0145442</p>	



OLD REPUBLIC
PARKING LOT

EXIST. POND
EDM'T.

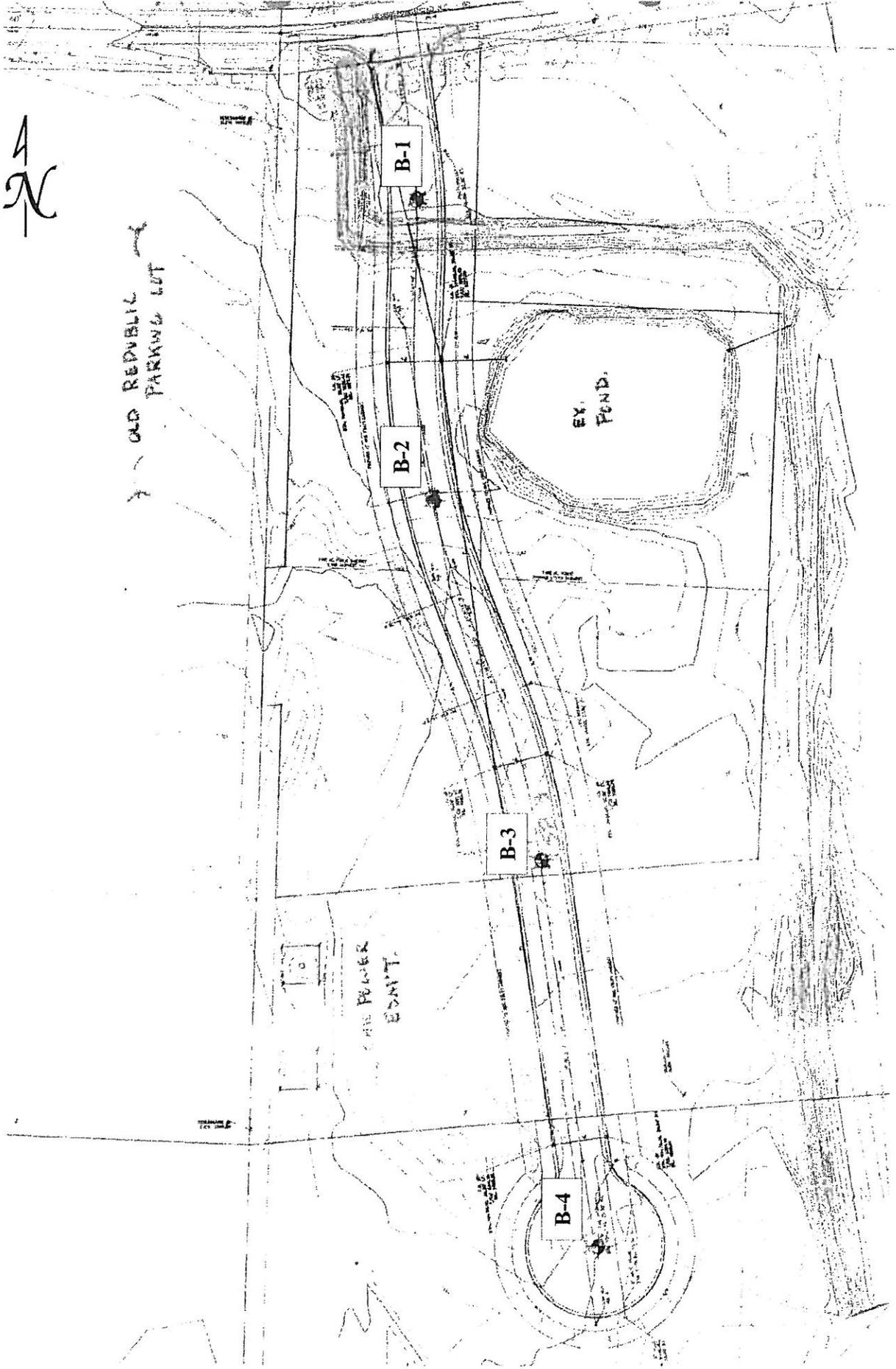
EX.
POND.

B-1

B-2

B-3

B-4





Professional Service Industries, Inc.
 4579 Navarre Road, SW
 Canton, OH 44706
 Telephone: (330) 478-0081
 Fax: (330) 478-3267

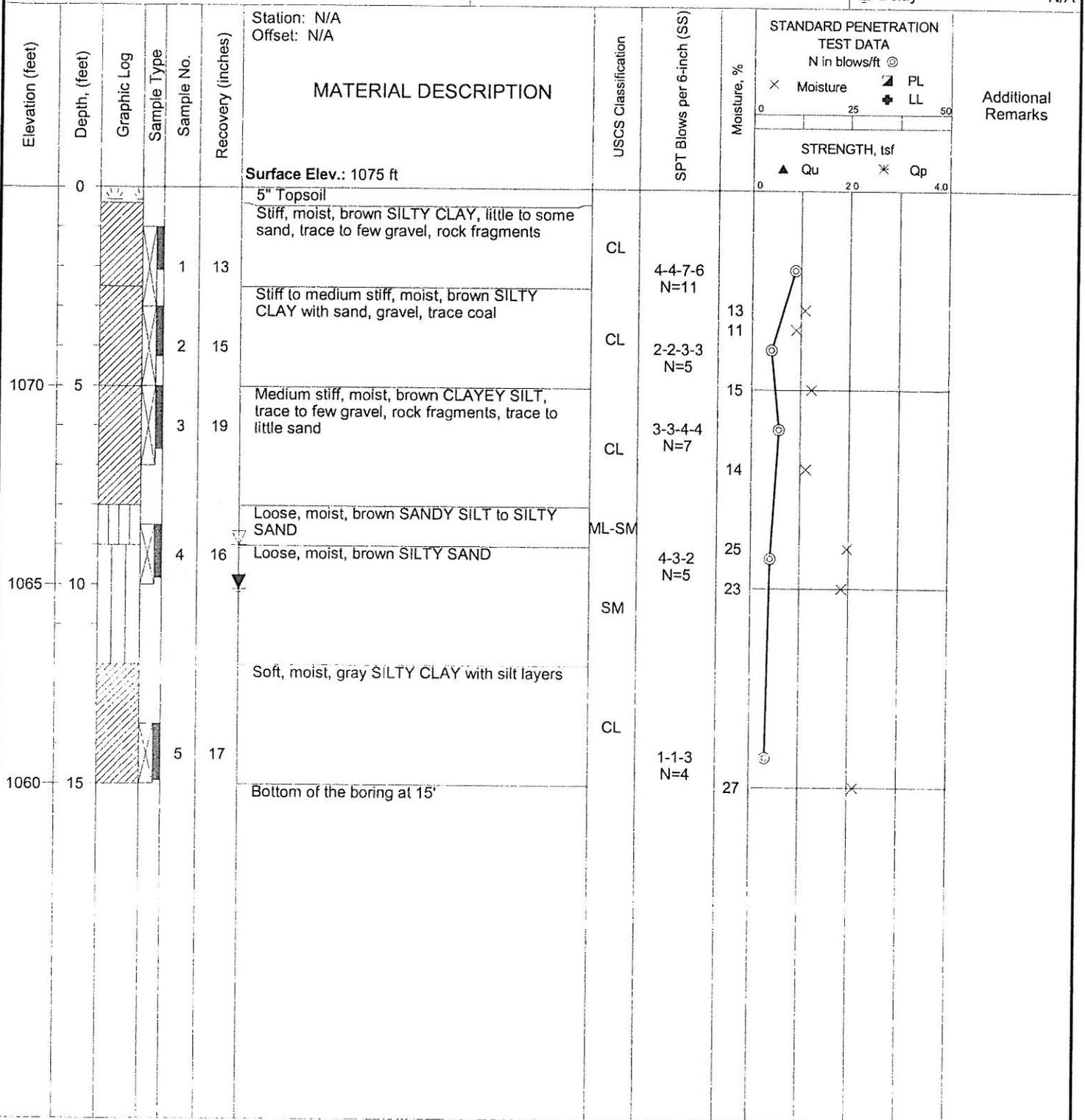
LOG OF BORING B-1

Sheet 1 of 1

PSI Job No.: 0145442
 Project: Proposed Canton Industrial Park
 Location: Canton, Ohio
 Stark County

Drilling Method: Hollow Stem Auger
 Sampling Method: SS
 Hammer Type: Automatic
 Boring Location:

WATER LEVELS	
▽ While Drilling	9 feet
▽ Upon Completion	10.1 feet
▽ Delay	N/A



Completion Depth: 15.0 ft
 Date Boring Started: 9/7/11
 Date Boring Completed: 9/7/11
 Logged By:
 Drilling Contractor: PSI, Inc.

Sample Types:

- Auger Cutting
- Split-Spoon
- Rock Core
- Shelby Tube
- Hand Auger
- Calif. Sampler
- Texas Cone

Latitude:
 Longitude:
 Drill Rig:
 Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



Professional Service Industries, Inc.
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 Canton, OH 44706
 Telephone: (330) 478-0081
 Fax: (330) 478-3267

LOG OF BORING B-2

PSI Job No.: 0145442
 Project: Proposed Canton Industrial Park
 Location: Canton, Ohio
 Stark County

Drilling Method: Hollow Stem Auger
 Sampling Method: SS
 Hammer Type: Automatic
 Boring Location:

WATER LEVELS
 ▽ While Drilling 8 feet
 ▼ Upon Completion 11.5 feet
 ▽ Delay N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	STANDARD PENETRATION TEST DATA		Additional Remarks
									Moisture, %	N in blows/ft	
						Station: N/A Offset: N/A					
						Surface Elev.: 1080 ft					
	0					4" Topsoil	CL				
				1	15	Medium stiff, moist, brown SILTY CLAY with sand, some gravel	SP	2-3-3-2 N=6	25		
				2	17	Loose, moist, brown FINE to COARSE SAND, little to some gravel, silt	SP	2-2-2-1 N=4	12		
1075	5			3	3	Loose, moist, brown FINE to MEDIUM SAND, little to some gravel, silt	SP	2-3-2-1 N=5	6		
				4	3				7		
						▽ Very loose, very moist, brown SANDY SILT					
1070	10			4	14		ML	1-2-1 N=3	28		
						▼ Loose, moist, brown SILT, little to some fine sand, some clayey layers, trace gravel	ML				
1065	15			5	17		ML	3-4-4 N=8	23		
						Bottom of boring at 15'					

Completion Depth: 15.0 ft
 Date Boring Started: 9/7/11
 Date Boring Completed: 9/7/11
 Logged By:
 Drilling Contractor: PSI, Inc.

Sample Types:
 Auger Cutting
 Split-Spoon
 Rock Core
 Shelby Tube
 Hand Auger
 Calif. Sampler
 Texas Cone

Latitude:
 Longitude:
 Drill Rig:
 Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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 Canton, OH 44706
 Telephone: (330) 478-0081
 Fax: (330) 478-3267

LOG OF BORING B-3

Sheet 1 of 1

PSI Job No.: 0145442
 Project: Proposed Canton Industrial Park
 Location: Canton, Ohio
 Stark County

Drilling Method: Hollow Stem Auger
 Sampling Method: SS
 Hammer Type: Automatic
 Boring Location:

WATER LEVELS	
While Drilling	5 feet
Upon Completion	7.6 feet
Delay	N/A

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	STANDARD PENETRATION TEST DATA		Additional Remarks
										Moisture, %	N in blows/ft	
							Surface Elev.: 1082 ft					
	0						4" Topsoil	CL				
	1080			1	18		Stiff, moist, light brown SILTY CLAY, trace to little sand, trace gravel, hair roots	SC-SM	4-6-4-4 N=10	12	16	
				2	15		Very loose, moist, brown FINE to MEDIUM SAND, little to some silt, gravel	SP	3-2-2-2 N=4	11	16	
	5			3	17		Very loose, very moist, brown SILTY SAND, some gravel	SM	2-1-2-2 N=3	16	15	
	1075			4	10		Very loose, very moist, brown SANDY SILT, some sand layers, trace to little clay	ML	4-4-5 N=9	19	9	
				5	12		Loose, moist, brown SANDY SILT, trace to little gravel	SP	14-13-12 N=25	9		
	1070						Medium dense, very moist, brown FINE to COARSE SAND, little to some silt, trace silt layers, little gravel					
	15						Bottom of boring at 15'					

Completion Depth: 15.0 ft
 Date Boring Started: 9/7/11
 Date Boring Completed: 9/7/11
 Logged By:
 Drilling Contractor: PSI, Inc.

Sample Types:
 Auger Cutting
 Split-Spoon
 Rock Core
 Shelby Tube
 Hand Auger
 Calif. Sampler
 Texas Cone

Latitude:
 Longitude:
 Drill Rig:
 Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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 Canton, OH 44706
 Telephone: (330) 478-0081
 Fax: (330) 478-3267

LOG OF BORING B-4

Sheet 1 of 1

PSI Job No.: 0145442
 Project: Proposed Canton Industrial Park
 Location: Canton, Ohio
 Stark County

Drilling Method: Hollow Stem Auger
 Sampling Method: SS
 Hammer Type: Automatic
 Boring Location:

WATER LEVELS	
▽ While Drilling	8 feet
▼ Upon Completion	11 feet
∇ Delay	N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	STANDARD PENETRATION TEST DATA		Additional Remarks
										Moisture, %	N in blows/ft	
							Surface Elev.: 1085 ft					
							3" Topsoil	ML				
				1	19		Medium dense, moist, light brown SANDY SILT with gravel, rock fragments	SP	8-8-10-8 N=18	4	×	
				2	17		Loose, moist, brown with trace black SILTY SAND with gravel, rock fragments, trace hair roots, trace to little clay	SM	7-5-5-7 N=10	8	×	
1080	5			3	18		Medium dense, moist, light brown SILTY SAND with sandstone fragments, few gravel	SM	13-11-5-4 N=16	7	×	
							Medium dense, moist, brown SILTY SAND, some gravel, rock fragments	SM		6	×	
				4	11		Very loose, very moist, brown SAND, some gravel, little to some silt	SP	2-2-2 N=4	4	×	
1075	10						Very loose, very moist, brown SAND, trace silt, trace to little gravel	SP		12	×	
				5	15			SP	1-2-1 N=3	20	×	
1070	15							SP				
				6	16			SP	1/12"-2			
1065	20						Bottom of boring at 20'			21	×	

Completion Depth: 20.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 9/7/11	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 9/7/11	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By:	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI, Inc.			

The stratification lines represent approximate boundaries. The transition may be gradual.



GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System and ASTM D2487 and ASTM D2488 are used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

- N: Standard "N" penetration. Blows per foot of a 140 pound hammer falling 30 inches on a 2 inch O.D. split-spoon.
- Q_u : Unconfined compressive strength, tsf.
- Q_p : Penetrometer value, index value of unconfined compressive strength, tsf.
- W_c : Water content, %.
- PL: Plastic Limit, %.
- LL: Liquid Limit, %.
- PI: Plasticity Index.
- γ_d : Natural dry density, pcf.
- ▼ Groundwater level observed at time noted after completion of boring.

DRILLING AND SAMPLING SYMBOLS

- SS: Split-Spoon – 1 3/8" ID., 2" O.D., except where noted.
- ST: Shelby Tube – 3" O.D., except where noted
- AU: Auger Sample.
- RC: Rock Core (approx. 2" diameter)
- WS: Washed Sample

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION (Terzaghi & Peck, 1948)

TERM (COHESIONLESS SOILS)	STANDARD PENETRATION RESISTANCE
---------------------------	---------------------------------

Very Loose	0 - 4
Loose	5 - 10
Medium	11 - 30
Dense	31 - 50
Very Dense	51 and over

TERM (COHESIVE SOILS)	Q_u - (TSF)
-----------------------	---------------

Very Soft	0 - 0.25
Soft	0.25 - 0.49
Medium	0.50 - 0.99
Stiff	1.00 - 1.99
Very Stiff	2.00 - 4.00
Hard	4.00+

PARTICLE SIZE (ASTM D2487 AND D422)

Boulders \geq 12 in. (300mm)	Medium Sand < 2mm (#10 sieve) to 425 μ m (#40 sieve)
Cobbles < 12 in. (300mm) to 3 in. (75 mm)	Fine Sand < 425 μ m (#40 sieve) to 75 μ m (#200 sieve)
Gravel < 3 in. (75mm) to 4.75mm (#4 sieve)	Silt < 75 μ m (#200 sieve) to 5 μ m
Coarse Sand < 4.75mm (#4 sieve) to 2mm (#10 sieve)	Clay < 5 μ m

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS	
			GRAPH	LETTER		
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES	
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES	
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES	
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
		SANDS WITH FINES (LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES	
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES	
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES	
		FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
					CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
					OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS		
			CH	INORGANIC CLAYS OF HIGH PLASTICITY		
OH			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS		
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

NE CANTON INDUSTRIAL PARK

GP. 1148

LOCATED IN THE CITY OF CANTON,
STARK COUNTY, OHIO

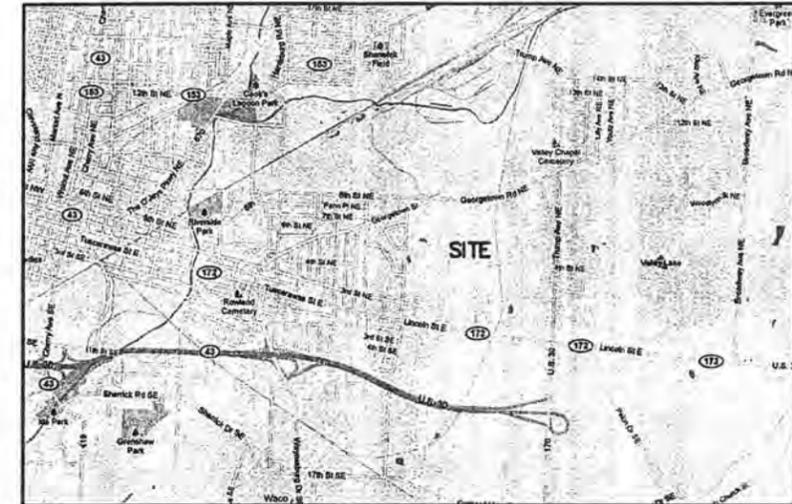
JULY 2017

INDEX OF SHEETS

COVER SHEET	1	INTERSECTION DETAILS	20
TYPICAL SECTION & DETAILS	2	STRUCTURE NOTES	21
GENERAL NOTES	3	HEADWALL DETAILS	22
GENERAL NOTES	4	RETAINING WALL DETAILS	23
GENERAL NOTES	5	SWP3 NOTES	24
CITY OF CANTON STANDARD DRAWINGS	6	SWP3 PLAN	25
CITY OF CANTON STANDARD DRAWINGS	7	SWP3 PLAN	26
CITY OF CANTON STANDARD DRAWINGS	8	SWP3 DETAILS	27
CITY OF CANTON WATERLINE DETAILS	9	SWP3 DETAILS	28
ESTIMATED QUANTITIES	10	SWP3 DETAILS	29
SITE LAYOUT PLAN	11		
PLAN & PROFILE - FORD MOTOR WAY			
STA. 9+00 TO STA. 14+50	12		
STA. 14+50 TO STA. 20+00	13		
CROSS SECTIONS			
STA. 10+00 TO STA. 11+50	14		
STA. 12+00 TO STA. 14+00	15		
STA. 14+50 & STA. 16+50	16		
STA. 17+00 & STA. 18+50	17		
STA. 19+75 TO STA. 19+00, STA. 10+71	18		
STA. 127+35.02	19		

LEGEND

EX. MONUMENT BOX	—G—	GAS LINE
PROP. MONUMENT BOX	⊙	GAS LINE MARKER
EX. MONUMENT (FOUND)	⊙	GAS METER
1/2" BAR W/ H&A CAP (SET)	⊙	GAS VALVE
BENCHMARK (AS NOTED)	⊙	GAS TANK
BOUNDARY LINE	—G—	GAS WELL
CENTER LINE	—S—	SANITARY SEWER LINE
LOT LINE	⊙	SANITARY SEWER LINE MARKER
PROPERTY LINE	⊙	SANITARY M.H./ C.O.
R/W	M.H.	MANHOLE
()	C.O.	CLEAN OUT
E.O.P.	—ST—	STORM SEWER LINE
F.F.	⊙	STORM SEWER LINE MARKER
EX. CONTOUR LINE	⊙	STORM CATCH BASIN
PROP. CONTOUR LINE	⊙	STORM CURB INLET
-980-	⊙	STORM MANHOLE
⊙	⊙	STORM DOWNSOUT
⊙	⊙	STORM HEADWALL
⊙	C.B.	CATCH BASIN
⊙	C.I.	CURB INLET
⊙	T/G	TOP OF GRATE
⊙	T/C	TOP OF COVER
⊙	T/CU	TOP OF CURB
⊙	⊙	FLOWLINE
⊙	Y.D.	YARD DRAIN
⊙	D.S.	DOWN SPOUT
⊙	—OT—	OVERHEAD TELEPHONE LINE
⊙	—UT—	UNDERGROUND TELEPHONE LINE
⊙	⊙	TELEPHONE LINE MARKER
⊙	⊙	TELEPHONE BOX
⊙	⊙	TELEPHONE MANHOLE
⊙	—OTV—	OVERHEAD TV LINE
⊙	—UTV—	UNDERGROUND TV LINE
⊙	⊙	TV LINE MARKER
⊙	⊙	TV/CABLE BOX
⊙	⊙	TV/CABLE MANHOLE
⊙	—W—	WATER LINE
⊙	⊙	WATER LINE MARKER
⊙	⊙	WATER MANHOLE
⊙	⊙	WATER METER
⊙	⊙	WATER VALVE
⊙	⊙	WATER SPRINKLER
⊙	⊙	FIRE HYDRANT
⊙	⊙	MONITORING WELL



SITE ADDRESS— GEORGETOWN ROAD NE, CANTON, OH

APPROVALS

Dan Moeglin 9/3/17
CITY OF CANTON ENGINEER DATE

APPROVED BY STARK COUNTY SOIL & WATER CONSERVATION DISTRICT BY A LETTER DATED 8/2/17

OEPA GENERAL STORM WATER PERMIT NO: JGC06179*AG

APPROVED BY THE OEPA FOR SANITARY SEWER EXTENSION BY A LETTER DATED N/A

OEPA PERMIT TO INSTALL NO: N/A

APPROVED BY THE OEPA FOR WATERLINE EXTENSION BY A LETTER DATED OCTOBER 26, 2012

ENGINEER/SURVEYOR	DEVELOPERS
HAMMONTREE & ASSOCIATES, LIMITED 5233 STONEHAM ROAD NORTH CANTON, OHIO 44720 ATTN.— ROGER E. GRIMM, JR., P.E. PHN.— (330) 499-8817 FAX— (330) 499-0149	CITY OF CANTON 2436 30TH STREET N.E. CANTON, OH 44705 ATTN.— DANIEL J. MOEGLIN, PE PHN.— (330) 489-3381 CANTON COMMUNITY IMPROVEMENT CORPORATION (CCIC) 218 CLEVELAND AVENUE S.W., 5TH FLOOR CANTON, OHIO 44702 ATTN.— L. RAFAEL RODRIGUEZ PHN.— (330) 438-4129

BENCHMARK #1: MAG NAIL SET 1.5FT UP EAST SIDE OF 18" LOCUST TREE, 70FT SOUTH OF MONUMENT BOX (CAN026) (AS SHOWN ON PLANS) - TREE REMOVED (2017) ELEV. = 1078.17
BENCHMARK #2: MAG NAIL SET 1.5FT UP NORTH SIDE POWER POLE #797B1-125, 10FT SOUTH OF GUY POLE (WEST OF FORD MOTOR WAY) ELEV. = 1088.99
BENCHMARK #3: MAG NAIL SET 1.5FT UP NORTH SIDE POWER POLE #797B1-123 (AS SHOWN ON PLANS) ELEV. = 1085.96
BENCHMARK #5: MAG NAIL SET 0.7FT UP ON POWER POLE #797B1/83 ON SOUTH SIDE OF POLE (AS SHOWN ON PLANS) ELEV. = 1080.93
BENCHMARK #6: P.K. NAIL FOUND 0.7FT UP SOUTH SIDE OF POWER POLE #796D3-166 ELEV. = 1083.81

ODOT STANDARD DRAWING LIST

SCD NUMBER	ITEM	DATE
HW-2.1	HALF-HEIGHT HEADWALL	7/20/12
HW-1.1	FULL-HEIGHT HEADWALLS	7/20/12

CITY STANDARD DRAWING LIST

SCD NUMBER	ITEM	DATE
1	CURB INLET CATCH BASIN	MAR. 2012
10	PRECAST STORM OR SANITARY MANHOLE	JAN. 2012
12	MANHOLE COVER	FEB. 2014
19	UTILITY TRENCH REQUIREMENTS	6/10/13
21	CONCRETE ENCASEMENT DETAIL	NOV. 2011
30	CONCRETE CURB AND COMBINED CURB & GUTTER	MAR. 2012

ODOT SUPP. SPECIFICATION LIST

SUPP. SPEC.	ITEM	DATE
800	REVISIONS TO 2016 C&MS	7/21/17

SANITARY	UTILITY CONTACTS	ELECTRIC
CANTON CITY ENGINEER'S OFFICE 2436 30TH STREET N.E. CANTON, OH 44705 PHN— 330-489-3381	CANTON WATER DEPARTMENT, ENGINEERING OFFICE 2664 HARRISBURG ROAD NE CANTON, OH 44705 PHN— 330-489-3310	AEP OHIO 301 CLEVELAND AVE. SW P.O. BOX 24400 CANTON, OH 44701-4400 PHN— 330-438-7762
WATER	TELEPHONE	CABLE
CANTON WATER DEPARTMENT, ENGINEERING OFFICE 2664 HARRISBURG ROAD NE CANTON, OH 44705 PHN— 330-489-3310	AT&T 50 W. BOWERY ST., 4TH FLOOR AKRON, OHIO 44308 PHN— 330-384-2245	TIME WARNER CABLE 5520 WHIPPLE AVE NW N. CANTON, OH 44720 PHN— 330-494-9200
GAS		
DOMINION EAST OHIO 320 SPRINGSIDE DR., SUITE 320 AKRON, OH 44333 PHN— 330-664-2409		

**CONTRACTOR: WENGER EXCAVATING
CONSTRUCTED: 2017-2018**

**NOTE: PROJECT NOT COMPLETED PER ROAD OR UTILITY
PLAN QUANTITIES AND LIMITS. SEE AS-BUILT DRAWING
2018-01-02_Canton Industrial SITE_AS_BUILT-PP-2**

UNDERGROUND UTILITIES

2 WORKING DAYS
BEFORE YOU DIG

CALL TOLL FREE 800-362-2764

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

STATE OF OHIO
ROGER E. GRIMM, JR.
E-88187
REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO
MELINDA C. CHASE
E-71774
REGISTERED PROFESSIONAL ENGINEER

FOR SHEETS 21-23

HAMMONTREE & ASSOCIATES, LIMITED
ENGINEERS, PLANNERS, SURVEYORS
5233 STONEHAM RD. NORTH CANTON, OH 44720
PHN. (330) 499-8817 FAX. (330) 499-0149
TOLL FREE: 1-800-394-8817
www.hammontree-engineers.com

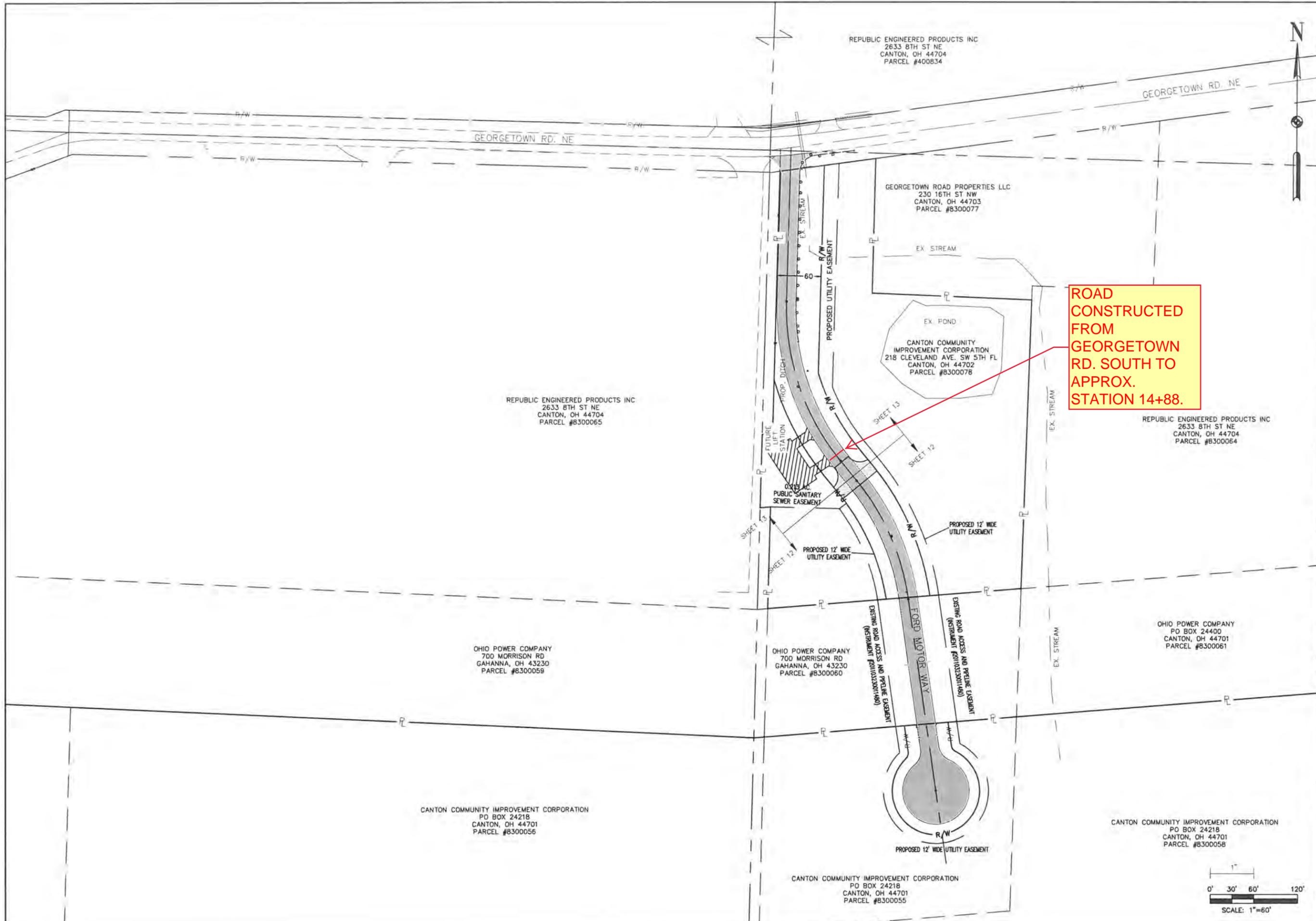
COVER SHEET
NE CANTON INDUSTRIAL PARK
FOR: CITY OF CANTON/CCIC
LOCATED IN THE CITY OF CANTON
STARK COUNTY, OHIO

DESIGN BY: REG
DRAWN BY: REG
CHKD BY: JDS
RWD BY: JDS
DATE: 05/02/17

FLD BK: 549
BK PG: 7B
CSW CHF: BJJ
CPYRIGHT: 2011
TAB: COVER

SCALE:
HORIZ:
VERT:
CONTOUR INT:

1
29



**ROAD
CONSTRUCTED
FROM
GEORGETOWN
RD. SOUTH TO
APPROX.
STATION 14+88.**

HAMMONTREE & ASSOCIATES, LIMITED
 ENGINEERS, PLANNERS, SURVEYORS
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 TOLL FREE: 1-800-194-8817
 www.hammontree-engineers.com

NE CANTON INDUSTRIAL PARK
 FOR: CITY OF CANTON/CCIC
 LOCATED IN THE CITY OF CANTON
 STARK COUNTY, OHIO

DESIGN BY: JEG	DATE: 05/02/17	DESC:
DRWN BY: JDS	REV. BY: JEG	DESC:
CHKD BY: JDS	REV. BY: JDS	DESC:
RWMD BY: JDS	REV. BY: JDS	DESC:

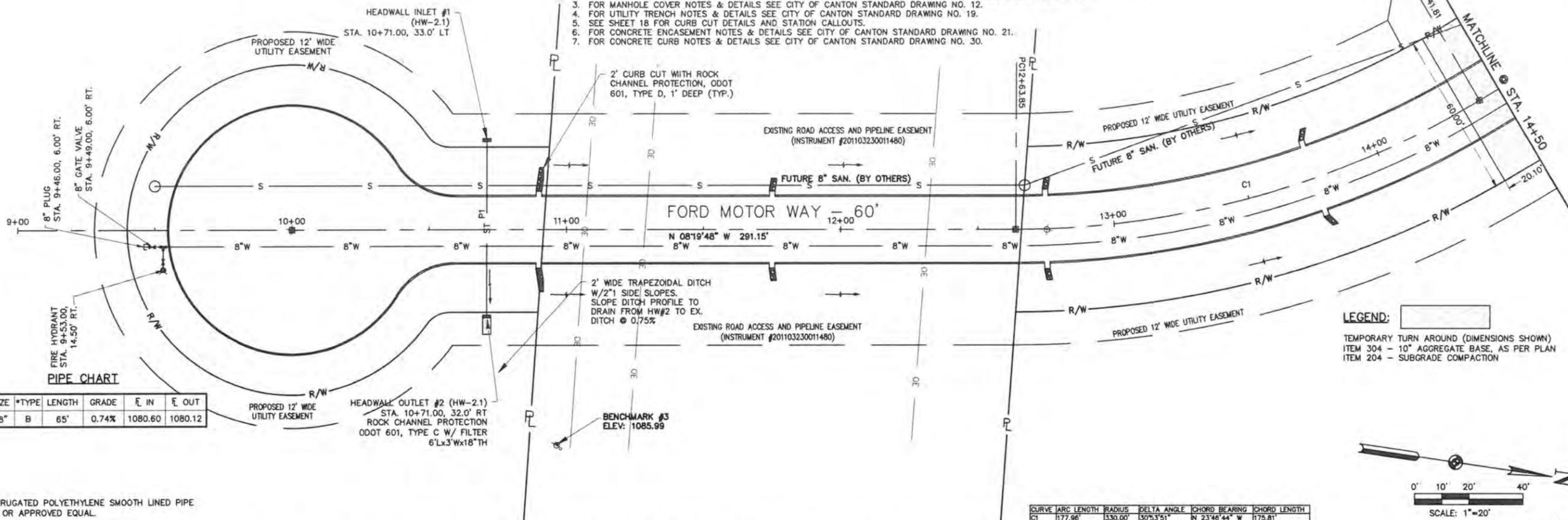
FLD BK: 549
 BK PG: 76
 CRW CHG: BJH
 CPYRIGHT: 2011
 DATE: 05/02/17
 TAB: SITE

SCALE: 1"=60'

11
29

NOTES:

1. FOR CURB INLET CATCH BASIN NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 1.
2. FOR PRECAST STORM OR SANITARY MANHOLE NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 10.
3. FOR MANHOLE COVER NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 12.
4. FOR UTILITY TRENCH NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 19.
5. SEE SHEET 18 FOR CURB CUT DETAILS AND STATION CALLOUTS.
6. FOR CONCRETE ENCASEMENT NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 21.
7. FOR CONCRETE CURB NOTES & DETAILS SEE CITY OF CANTON STANDARD DRAWING NO. 30.



PIPE CHART

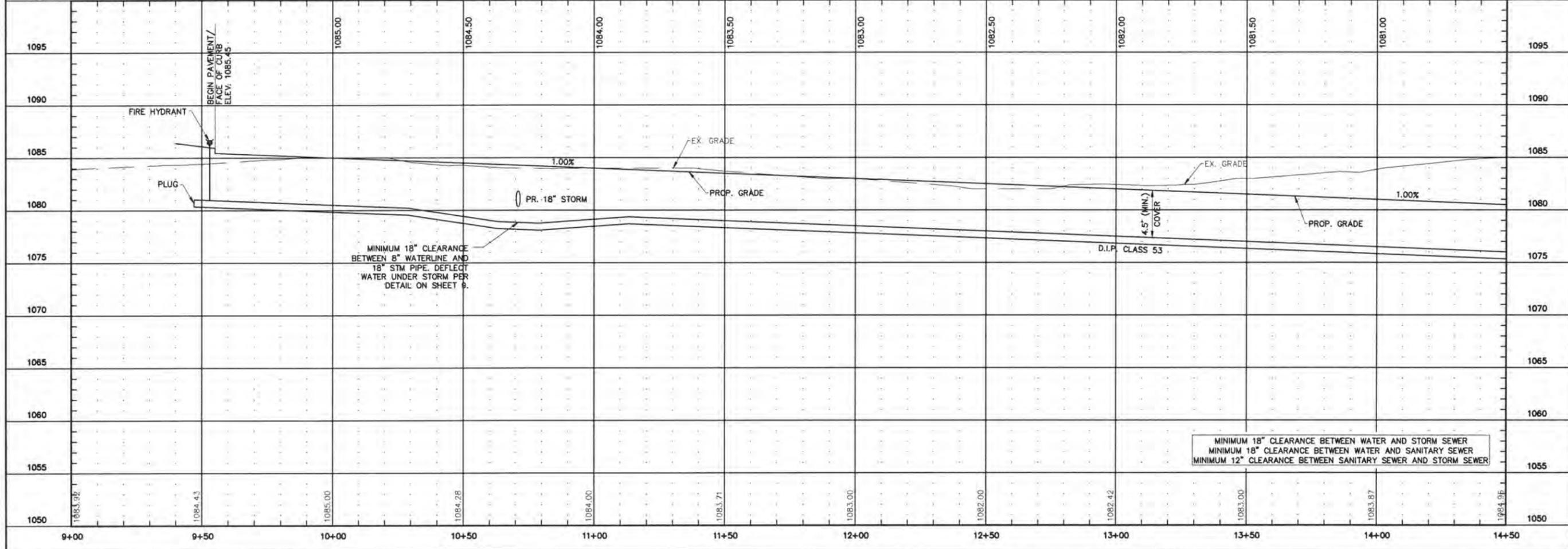
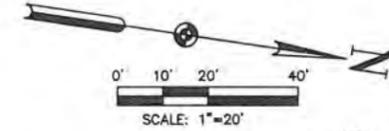
PIPE	SIZE	*TYPE	LENGTH	GRADE	ℓ IN	ℓ OUT
P1	18"	B	65'	0.74%	1080.60	1080.12

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

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	177.96'	530.00'	305.351°	N 23°46'44" W	175.81'

LEGEND:

- TEMPORARY TURN AROUND (DIMENSIONS SHOWN)
- ITEM 304 - 10" AGGREGATE BASE, AS PER PLAN
- ITEM 204 - SUBGRADE COMPACTION



MINIMUM 18" CLEARANCE BETWEEN WATER AND STORM SEWER
 MINIMUM 18" CLEARANCE BETWEEN WATER AND SANITARY SEWER
 MINIMUM 12" CLEARANCE BETWEEN SANITARY SEWER AND STORM SEWER

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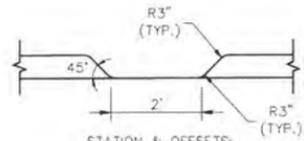
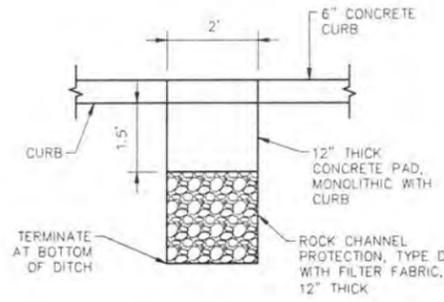
NE CANTON INDUSTRIAL PARK
 FOR: CITY OF CANTON/CCC
 LOCATED IN THE CITY OF CANTON
 STARK COUNTY, OHIO

DATE: _____
 REV. BY: _____
 FLD BK: 549
 BK PG: 76
 CRW CHG: BJJ
 CPYRIGHT: 2011
 DATE: 05/02/17
 TAB: PP-1

SCALES
 HORIZ: 1"=20'
 VERT: 1"=5'
 CONTOUR INT: _____

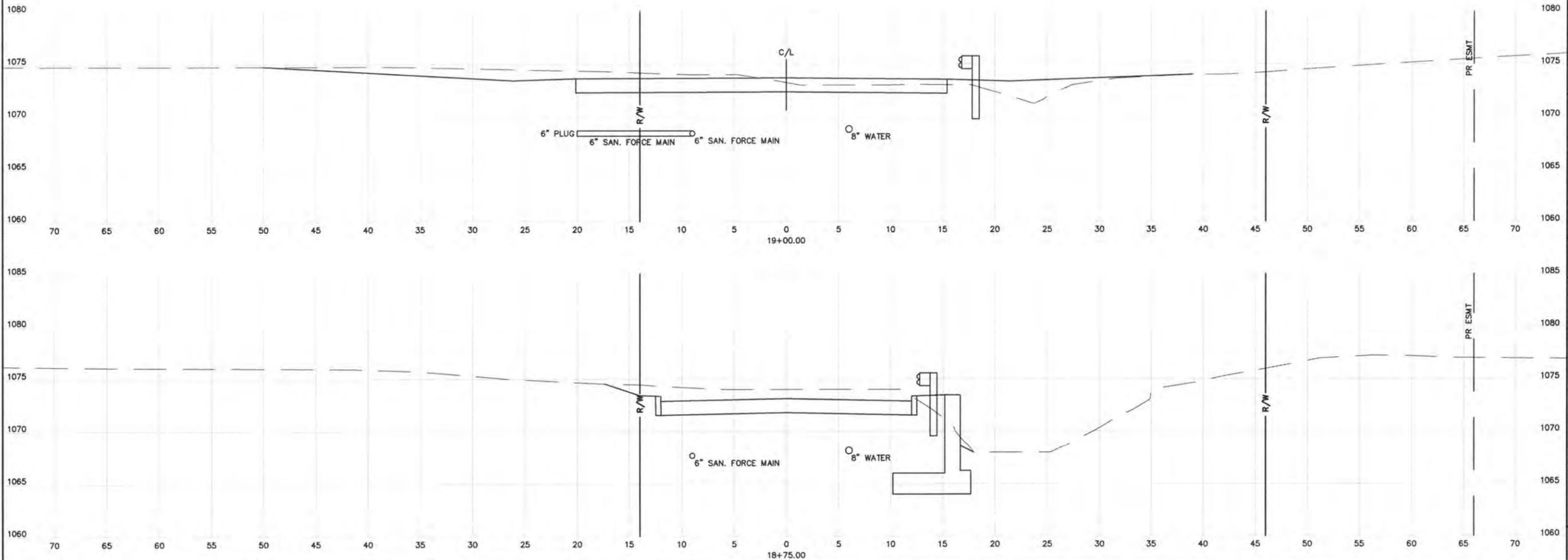
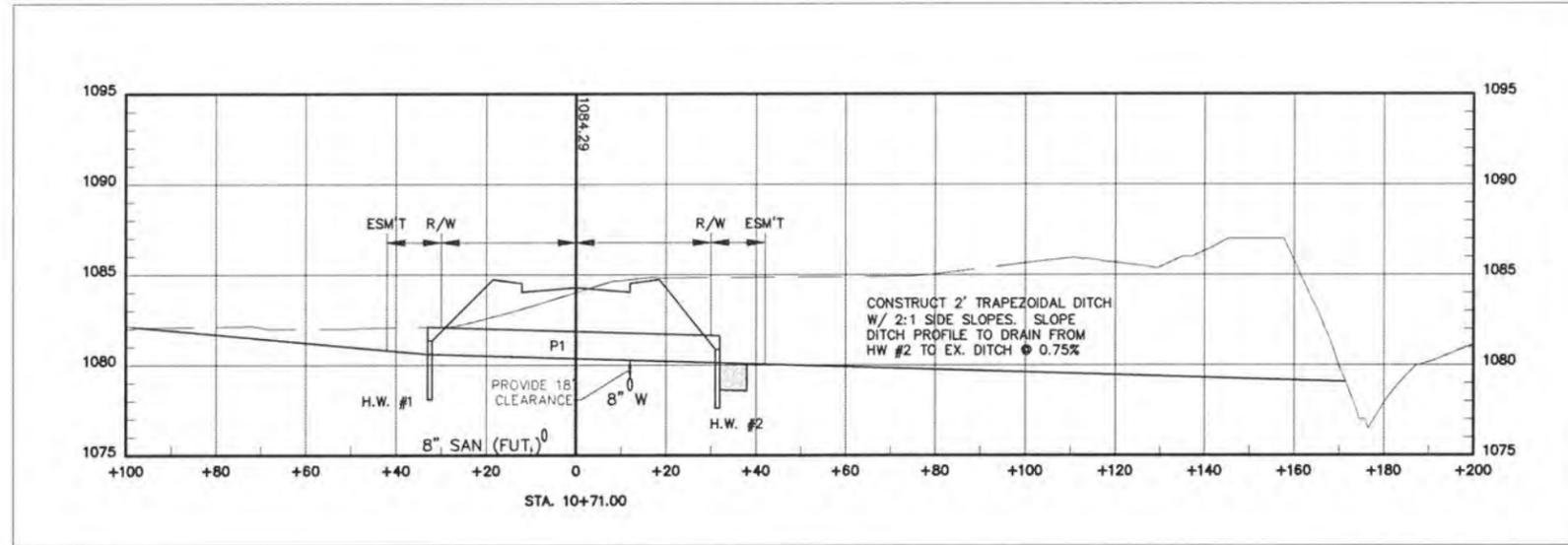
12
29

CURB CUT DETAIL
NTS



STATION & OFFSETS:

- STA. 10+90, LT. & RT.
- STA. 11+75, LT. & RT.
- STA. 12+75, LT. & RT.
- STA. 13+75, LT. & RT.
- STA. 15+75, LT. & RT.
- STA. 16+75, RT.
- STA. 17+60, RT.



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DESIGN BY: REG	DATE: 05/02/17	REV. BY: 549	DATE:
DRWN BY: REG	DATE:	REV. BY: 7E	DATE:
CHKD BY: JDS	DATE:	REV. BY: BJJ	DATE:
RWD BY: JDS	DATE:	REV. BY:	DATE:
DATE: 05/02/17	TAB: CS-2	REV. BY:	DATE:

CROSS SECTION (STA. 15+00 TO STA. 18+50, STA. 127+35.02)

NE CANTON INDUSTRIAL PARK

FOR: CITY OF CANTON/CCIC

LOCATED IN THE CITY OF CANTON
STARK COUNTY, OHIO

HORIZ: 1" = 20'

VERT: 1" = 5'

CONTOUR INT:

18
29