

CASE No. 17-2502-GA-BLN
PIR 751 MILLERTON STREET SE AND MARIETTA AVENUE SE
CANTON TOWNSHIP, STARK COUNTRY, OHIO
12-INCH HIGH PRESSURE PIPELINE REPLACEMENT

ATTACHMENT G

OHIO ENVIRONMENTAL PROTECTION AGENCY
NOI GENERAL CONSTRUCTION STORMWATER PERMIT

**Division of Surface Water - Notice of Intent (NOI) For Coverage Under Ohio
Environmental Protection Agency General NPDES Permit**

(Read accompanying instructions carefully before completing this form.)

Submission of this NOI constitutes notice that the party identified in Section I of this form intends to be authorized to discharge into state surface waters under Ohio EPA's NPDES general permit program. Becoming a permittee obligates a discharger to comply with the terms and conditions of the permit. Complete all required information as indicated by the instructions. Do not use correction fluid on this form. Forms transmitted by fax will not be accepted. A check for the proper amount must accompany this form and be made payable to "Treasurer, State of Ohio." (See the fee table in Attachment C of the NOI instructions for the appropriate processing fee.)

I. Applicant Information/Mailing Address**Company (Applicant) Name:** The East Ohio Gas Company**Mailing (Applicant) Address:** 320 Springside Drive, Suite 320**City:** Akron**State :** OH**Zip Code:** 44333**Country:** USA**Contact Person:** Greg Eastridge**Phone:** (330) 664-2576**Fax:** (330) 664-2669**Contact E-mail Address:** gregory.k.eastridge@dom.com**II. Facility/Site Location Information****Facility/Site Name:** PIR 751 - Millerton Street SE & Marietta Avenue SE**Facility Address:** Millerton Street SE & Marietta Avenue SE**City:** Canton Township**State:** OH**Zip Code:** 44707**County:** Stark**Township:****Facility Contact Person:** Dave Hollendonner**Phone:** (330) 664-2677**Fax:** (330) 664-2691**Facility Contact E-mail Address:** david.hollendonner@dom.com**Latitude:** 40.77708**Longitude:** -81.33785**Facility/Map Attachment** PIR 751_NOI USGS
Map.pdf**Receiving Stream or MS4:** Un-named tributary to Sherrick Run, Canton Township MS4, Sherrick Run (HUC 05040001 050)**III. General Permit Information****General Permit Number:** OHC000004**Initial Coverage:** Y **Renewal Coverage:** N**Type of Activity:** Construction Site Stormwater General Permit**SIC Code(s):****Existing NPDES Facility Permit Number:****ODNR Coal Mining Application Number:****If Household Sewage Treatment System, is system for:****New Home Construction:****Replacement of failed existing
system:****Outfall****Design Flow
(MGD):****Associated Permit Effluent Table:****Receiving Water :****Latitude****Longitude****Are These Permits Required?****PTI:** NO**Individual 401 Water Quality Certification:** NO**Individual NPDES:** NO**Isolated Wetland:** NO**U.S. Army Corp Nationwide Permit:** NO**Proposed Project Start Date(if applicable):** March 01, 2018**Estimated Completion Date(if applicable):** August 01, 2018**Total Land Disturbance (Acres):** 2**MS4 Drainage Area (Sq. Miles):****SWP3 Attachment(s):** <None>**IV. Payment Information****Check #:****Check Amount:****Date of Check:****For Ohio EPA Use Only****Check ID(OFA):****ORG #:****Rev ID:****DOC #:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on 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.

Applicant Name (printed or typed):**Title:**

Signature:	Date:
-------------------	--------------



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

Jul 28, 2017

The East Ohio Gas Company
Greg Eastridge
320 Springside Drive, Suite 320
Akron, OH 44333

Re: Approval Under Ohio EPA National Pollutant Discharge Elimination System (NPDES) - Construction Site Stormwater General Permit - OHC000004

Dear Applicant,

Your NPDES Notice of Intent (NOI) application is approved for the following facility/site. Please use your Ohio EPA Facility Permit Number in all future correspondence.

Facility Name:	PIR 751 - Millerton Street SE & Marietta Avenue SE
Facility Location:	Millerton Street SE & Marietta Avenue SE
City:	Canton Township
County:	Stark
Township:	
Ohio EPA Facility Permit Number:	3GC09520*AG
Permit Effective Date:	Jul 28, 2017

Please read and review the permit carefully. The permit contains requirements and prohibitions with which you must comply. Coverage under this permit will remain in effect until a renewal of the permit is issued by the Ohio EPA.

If more than one operator (defined in the permit) will be engaged at the site, each operator shall seek coverage under the general permit. Additional operator(s) shall submit a Co-Permittee NOI to be covered under this permit. There is no fee associated with the Co-Permittee NOI form.

Please be aware that this letter only authorizes discharges in accordance with the above referenced NPDES CGP. The placement to fill into regulated waters of the state may require a 401 Water Quality Certification and/or Isolated Wetlands Permit from Ohio EPA. Also, a Permit-To-Install (PTI) is required for the construction of sanitary or industrial wastewater collection, conveyance, storage, treatment, or disposal facility; unless a specific exemption by rule exists. Failure to obtain the required permits in advance is a violation of Ohio Revised Code 6111 and potentially subjects you to enforcement and civil penalties.

To view your electronic submissions and permits please Logon in to the Ohio EPA's eBusiness Center at <http://ebiz.epa.ohio.gov>.

If you need assistance or have questions please call (614) 644-2001 and ask for Construction Site Stormwater General Permit support or visit our website at <http://www.epa.ohio.gov>.

Sincerely,

Craig W. Butler
Director

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ATTACHMENT H

**U.S. FISH & WILDLIFE SERVICE INFORMATION FOR
PLANNING AND CONSULTATION (“IPaC”)**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Stark County, Ohio



Local office

Ohio Ecological Services Field Office

☎ (614) 416-8993

📠 (614) 416-8994

4625 Morse Road, Suite 104
Columbus, OH 43230-8355

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the **Endangered Species Act** are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none">• Incidental take of the northern long-eared bat is not prohibited at this location. Federal action agencies may conclude consultation using the streamlined process described at https://www.fws.gov/midwest/endangered/mammals/nlebs7.html No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the ~~take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct)~~ of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)



May 24, 2017

Corporate Headquarters
1500 North Mantua Street
P.O. Box 5193
Kent, Ohio 44240-5193
330.673.5685
Toll Free 1.800.828.8312
Fax 330.673.0860

Dave Hollendonner
The East Ohio Gas Company
320 Springside Drive, Suite 320
Akron, Ohio 44333

RE: *Field Summary Report*—PIR 751 – Millerton Street SE and Marietta Avenue SE, Canton Township, Stark County, Ohio

Dear Mr. Hollendonner:

As requested, Davey Resource Group performed an ecological study on the area encompassing PIR 751 – Millerton Street SE and Marietta Avenue SE. The project area includes 30 feet from the road centerline and/or 20 feet from the edge of pavement for all roads within the project area; a utility easement that extends south from the intersection of 17th Street SE and Marietta Avenue SE for approximately 550 feet, then extends southwest towards Waynesburg Drive SE, crossing Adelman's Truck Parts; a parcel located at the southeast corner of 17th Street SE and Waynesburg Drive SE; and two parcels abutting Adelman's Truck Parts to the north. This survey was performed to collect information on wetlands, streams, potential endangered species habitat, and to map existing stormwater features. The data presented in this report reflect ecological information collected during the field survey. Maps depicting all ecological data collected in the field are located in Attachment A. Representative photographs of the project area are included in Attachment B.

SITE DESCRIPTION

The project area was surveyed on September 8, 19, and 27, 2016, and March 6, 2017. The project area is located within industrial, residential, commercial, recreational, and institutional areas with land covers of mowed grass, lawn trees, pavement, successional woods, emergent wetland, scrub/shrub wetland, and forested wetland.

WATER RESOURCE DELINEATION - WETLANDS

Three (3) wetlands were identified within the project area. The function and quality of these wetlands have been assessed using the Ohio Environmental Protection Agency Rapid Assessment Method, v. 5.0 (ORAM). This assessment method evaluates wetlands based on the level of disturbance, function, and integrity. Using the ORAM, wetlands are categorized as Category 1 (low quality), Category 2 (moderate quality), or Category 3 (high quality).

Wetland A has emergent, scrub/shrub, and forested vegetative communities; the 0.002 ac area of Wetland A within the project area is forested. This wetland is located east and west of Marietta Avenue SE, at the northern end of the project area; a culvert running beneath Marietta Avenue provides hydrological connection between the two areas of Wetland A. It has medium buffers (82 to <164 feet), and is bordered by an industrial plant to the south, a National Lime and Stone Distribution yard to the west, and by young successional woods to the east and north. This wetland is also dissected by Marietta Avenue SE. This wetland is regularly inundated, providing possible amphibian breeding habitat, and has numerous tussocks formed from *Scirpus cyperinus* (cottongrass bulrush). Wetland A received an ORAM score of 45.5, placing it within Category 2.

Wetland B is an emergent wetland located within the stream channel of Stream 1. It is located south of the intersection of 17th Street SE and Marietta Avenue SE. The wetland has narrow (32 to <82 feet) buffers and is surrounded by mowed grass fields. This wetland receives perennial surface water from Stream 1 and has a moderate cover of the invasive species *Phalaris arundinacea* (reed canary grass). Wetland B received an ORAM score of 25, placing it within Category 1.

Wetland C is mainly an emergent wetland with some areas of scrub/shrub vegetation. It is located east of Waynesburg Drive SE within the undeveloped parcels north of Adelman's Truck Parts and Sales. This wetland extends along the riparian corridor of Stream 1, and receives seasonal intermittent surface water from the stream. Wetland C also receives groundwater as indicated by the presence of groundwater species including *Acorus calamus* (single-vein sweetflag). This wetland receives stormwater and toxic pollutants from Adelman's Truck Parts to the south. Wetland C received an ORAM score of 41, placing it within the Modified Category 2.

Photographs of the wetlands are included in Attachment B. A table listing the wetlands within the project area is included in Attachment C. The ORAM forms are included in Attachment D.

WATER RESOURCE DELINEATION – STREAMS

Two (2) perennial streams were identified within the project area. The Qualitative Habitat Evaluation Index (QHEI) and the Headwater Habitat Evaluation Index (HHEI), as developed by the Ohio EPA, were used to assess the habitat value of the streams. The specific assessment method used is based on the drainage area of the stream or the maximum pool depth. That is, the HHEI protocol is used for streams having watersheds less than one (1) square mile or a maximum pool depth less than 40 centimeters; the QHEI protocol is used for streams having watersheds greater than one (1) square mile and pool depths greater than 40 centimeters.

The QHEI evaluates habitat characteristics in streams that are important to fish communities. A stream designated as having Coldwater Habitat (CWH) is capable of supporting native cold water fish. Streams that are designated Exceptional Warmwater Habitat (EWH) are waterways with unique assemblages of aquatic life. The Warmwater Habitat (WWH) designation is applicable to most of the state's rivers and streams. Waterways with this designation are capable of supporting warm water aquatic organisms. Modified Warmwater Habitat (MWH) applies to extensively modified habitats that may be capable of supporting warm water aquatic organisms. A designation of Limited Resource Water (LRW) aquatic life use is used for streams with extremely limited physical habitat.

As the drainage area for Stream 2 (Sherrick Run) is greater than one (1) square mile, the QHEI was used to assess the habitat value of this stream. This stream crosses into the project area at two locations. The first is through the easement of Adelman's Truck Parts and Sales at the southwestern part of the project area (east of Waynesburg Drive SE) and the second is underneath a bridge crossing Waynesburg Drive SE. The substrate of this stream is composed primarily of cobble and silt. The stream has sparse (5->25%) instream cover from undercut banks, overhanging vegetation, and logs/woody debris. The stream is recovering from channelization and has very narrow to narrow riparian buffers (<5-10 meters) of wetland, young woods, and industrial development. This stream has received a score of 46.5, using the QHEI protocol. Based on this QHEI score, Stream 2 has the potential to attain the Modified Warmwater Habitat (MWWH) designation. Further, this reach of Sherrick Run has been designated as MWWH by the Ohio EPA based on physical, chemical, and biological evaluation per Ohio Administrative Code Chapter 3745-1.

The HHEI assessment method uses three (3) metrics to assess potential habitat: channel substrate composition, bankfull width, and maximum pool depth. These metrics are used to distinguish between Class I, II, and III primary headwater habitat streams. Generally, a Class I stream has ephemeral flow, Class II has intermittent or perennial flow with warm water, and a Class III stream has perennial flow with cool-cold water.

As the drainage area for Stream 1 is less than one (1) square mile, the HHEI was used to assess the habitat value of this stream. The stream crosses through the project area at two separate locations. The northern crossing is located south of the intersection of 17th Street SE and Marietta Avenue SE, south of the mowed recreational field. Wetland B is located within the channel of Stream 1 at this crossing. The second crossing is located north of Adelman's Truck Parts and Sales lot. Wetland C is located along the riparian corridor of Stream 1, within the second crossing of the stream in the project area. One (1) HHEI form was completed for Stream 1 as no significant changes to the character of the stream were observed between the two project area locations, other than a slightly increased amount of silt was observed at the first crossing. The substrate of Stream 1 is composed primarily of cobble and silt and the maximum pool depth was 20.3 centimeters. The surrounding floodplain is composed of immature forest, mature forest/wetland, and industrial development. Stream 1 has received a score of 66, using the HHEI protocol. This places it within the range of a Modified Class II primary headwater habitat stream.

Photographs of these streams are included in Attachment B. A table listing the streams within the project area is included in Attachment C. The QHEI and HHEI forms are included in Attachment E.

INDIANA BAT (*MYOTIS SODALIS*) AND NORTHERN LONG-EARED BAT (*MYOTIS SEPTENTRIONALIS*) HABITAT SURVEY

Summer roosting habitat for the Indiana bat and the northern long-eared bat includes trees that contain characteristics such as exfoliating bark, dead wood, crevices, and cavities. To support a maternity colony, trees with a large amount of these habitat features need to have good solar exposure. These bats tend to inhabit trees at the edges of woodlots and along watercourses where they can travel and forage. Occasionally the northern long-eared bat may roost in structures like barns and sheds.

The project area was evaluated for potential habitat for these bats. No wooden structures occur in the project area. However, several areas of successional woods are located within the project area. A wooded stand approximately twelve (12) acres in size is located north of Adelman's Truck Parts. These woods are dominated by *Prunus serotina* (black cherry), *Quercus palustris* (pin oak), and *Juglans nigra* (black walnut). The approximate diameter at breast height (DBH) is nine (9) inches and the understory ranges from open to very dense, mainly composed of *Lonicera tatarica* (twinsisters), *Lonicera japonica* (Japanese honeysuckle), and *Rosa multiflora* (multiflora rose). Additionally, the riparian corridor of Stream 1 that flows through these woods may provide potential foraging opportunities for the bats.

Successional woods are located within and extending beyond the northern end of the project area along both sides of Marietta Avenue SE. These stands include *Quercus palustris* (pin oak), *Acer saccharinum* (silver maple), *Q. alba* (white oak), *Prunus serotina* (black cherry), and *Ulmus americana* (American elm). The DBH of these stands ranges from six (6) to twelve (12) inches, and the understory is fairly sparse with some saplings and *Frangula alnus* (glossy false buckthorn). Wetland A, located within these stands, could provide foraging opportunities for the bats.

Additionally, fourteen (14) trees were identified that have characteristics that may potentially provide habitat and/or support maternity roosts for the bats. The locations of these trees are marked on the map included in Attachment A. Photographs of these trees are included in Attachment B. The tree species, size, and habitat characteristics are listed in the table in Attachment F.

CULTURAL RESOURCES

Prior to the field survey, a review of the Ohio Historical Preservation Office (OHPO) data records for National Register Listed Districts, National Register Listed Properties, Archaeological Inventory Properties, Ohio Historic Inventory Properties, and Archaeological Phases 1–3 Survey Areas was done for PIR 751 – Millerton Street SE and Marietta Avenue SE and areas immediately adjacent. No Listed Districts, Listed Properties, Archaeological Properties, Ohio Historic Inventory structures, or Survey Areas were identified within or adjacent to the project area.

If you have any questions or comments concerning this field summary report or if you need additional information, please contact me at 330-673-5685, ext. 8027 or via e-mail at valerie.locker@davey.com.

Sincerely,

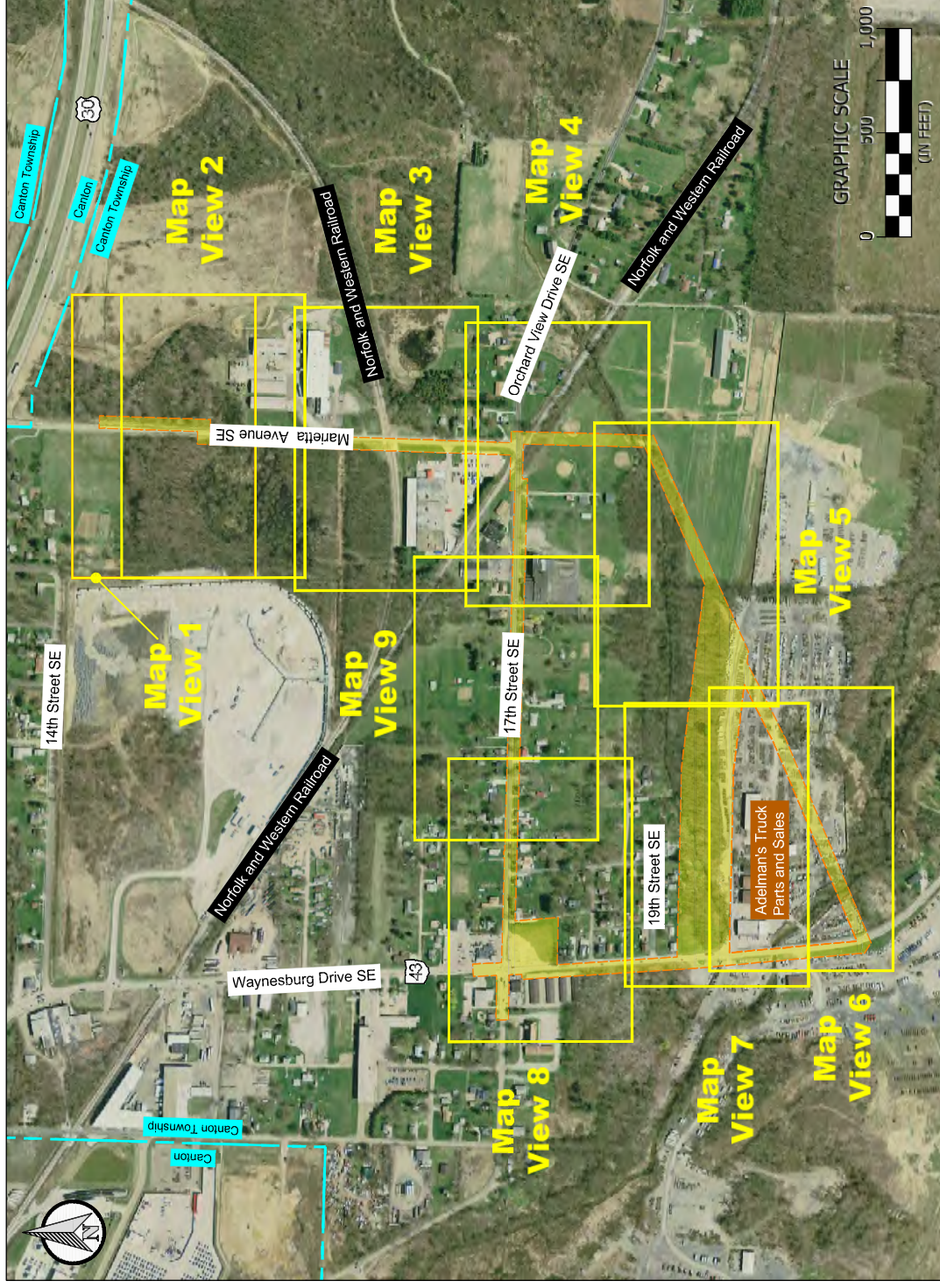


Valerie Locker, Project Manager
Natural Resource Consulting

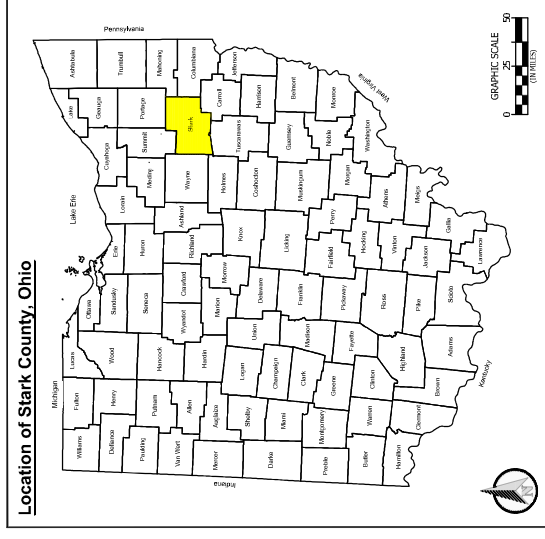
cc: Greg Eastridge, Dominion Resources Services, Inc.
Rachel Kohnke, Davey Resource Group

Attachment A
Ecological Feature Maps

Map View Location Map



= Approximate study area



The information presented is not a survey or engineering product, and should not be used for any purpose provided by applicable law or regulation that requires a surveying or engineering license.

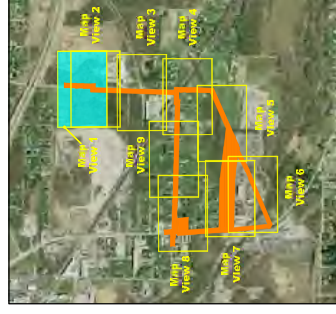
Prepared by:
DAVEY
RESURFACING
A Division of The Davey Tree Expert Company

Prepared for:
The East Ohio Gas Company

PIR 751 - Millerton Street SE and Marietta Avenue SE
Pipeline Replacement Project
Canton Township, Stark County, Ohio

Data used to produce this map were collected on September 8, 19, and 27, 2016 and March 6, 2017

Location
Map



- = Existing gas line
- = Proposed gas line
- = Gas line stake

- = Approximate study area
- = Perennial stream
- = Non-jurisdictional roadside ditch
- ~ = Direction of flow
- () = Existing culvert(s)
- = Non-jurisdictional swale

- 1 = Potential roost tree for the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*)

- 1 = Areas of wetlands delineated within study area (0.658 acre)

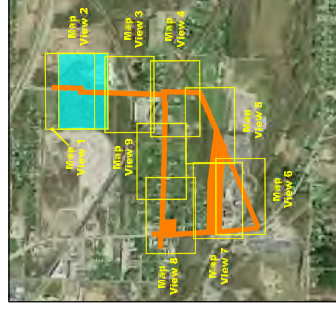


Prepared by:

The East Ohio Gas Company

PIR 751 - Millerton Street SE and Marietta Avenue SE
Pipeline Replacement Project
Canton Township, Stark County, Ohio

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- GAS = Existing gas line
- GAS = Proposed gas line
- = Gas line stake

- = Approximate study area
- = Perennial stream
- = Non-jurisdictional roadside ditch
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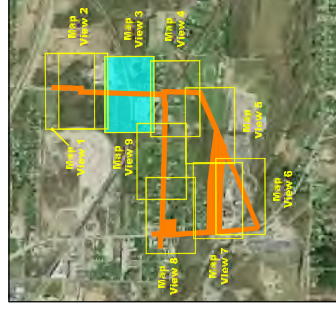
- 1 = Areas of wetlands delineated within study area (0.658 acre)



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The East Ohio Gas Company

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Canton Township, Stark County, Ohio

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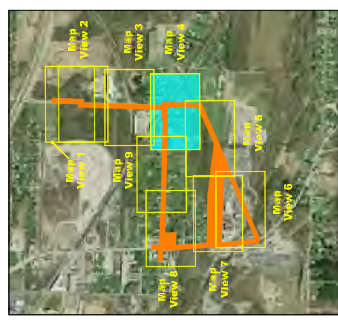
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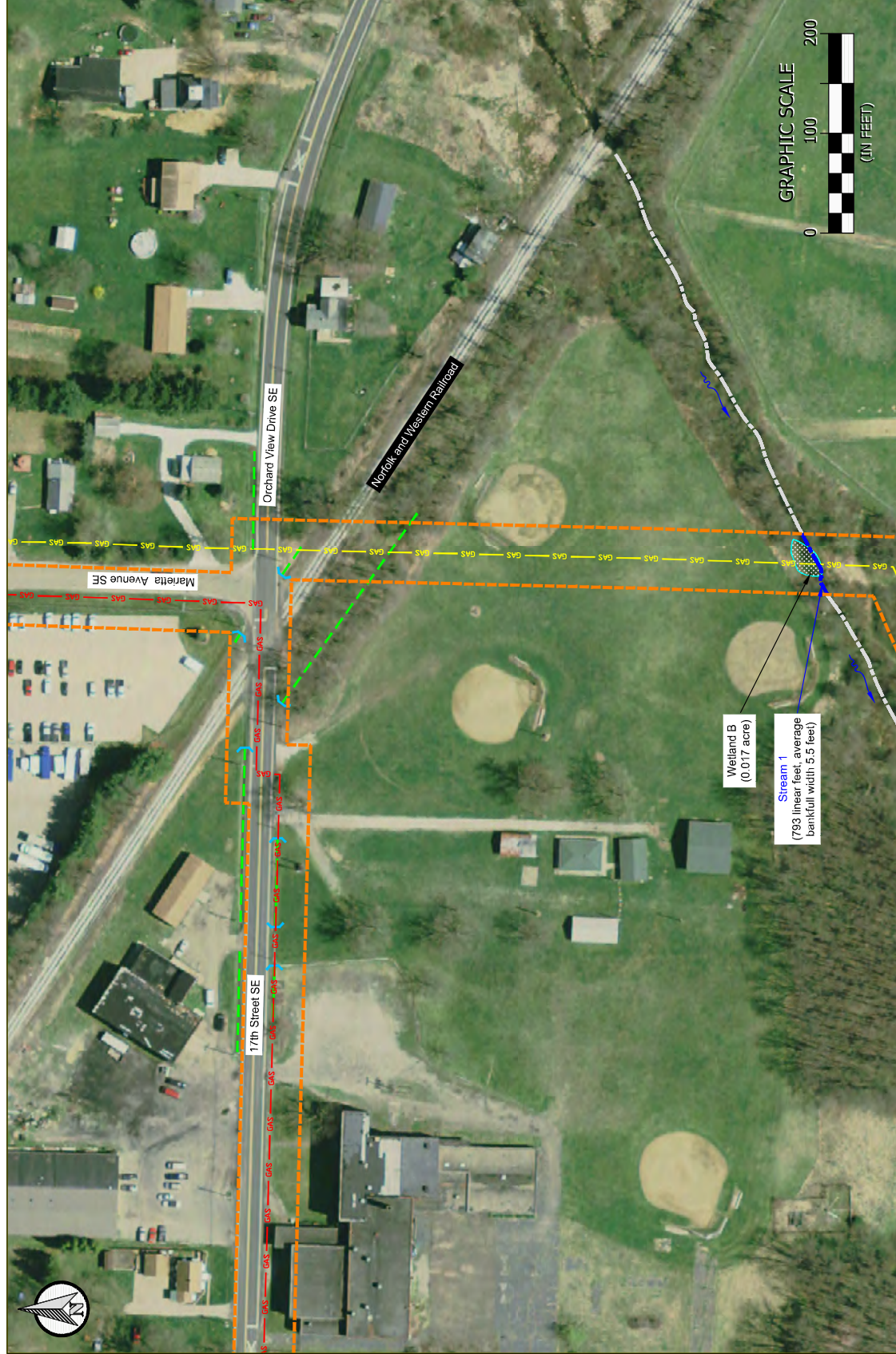
Prepared by:
The East Ohio Gas Company

PIR 751 - Millerton Street SE and Marietta Avenue SE
Pipeline Replacement Project
Canton Township, Stark County, Ohio

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- 1 = Areas of wetlands delineated within study area (0.658 acre)

- = Approximate study area
- = Perennial stream
- = Non-jurisdictional roadside ditch
- = Direction of flow
- = Existing culvert(s)
- = Non-jurisdictional swale

Prepared by:

DAVEY
RESURFACING
A Division of The Davey Tree Expert Company

Prepared for:

The East Ohio Gas Company

PIR 751 - Millerton Street SE and Marietta Avenue SE
Pipeline Replacement Project
Canton Township, Stark County, Ohio

Data used to produce this map were collected on September 8, 19, and 27, 2016 and March 6, 2017

Map View 4 of 9



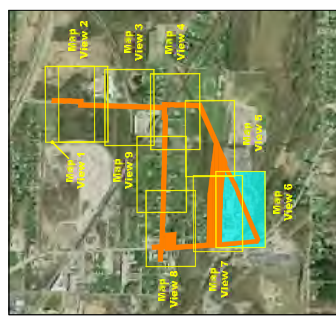
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Prepared by:
The East Ohio Gas Company

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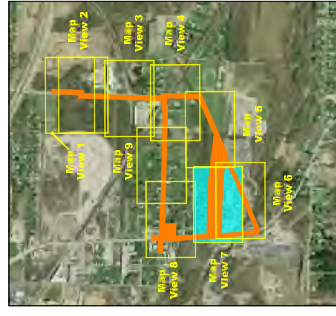
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The East Ohio Gas Company

PIR 751 - Millerton Street SE
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Pipeline Replacement Project
Canton Township, Stark County, Ohio

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— = Areas of wetlands delineated within study area (0.658 acre)

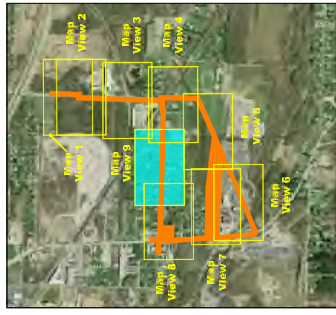
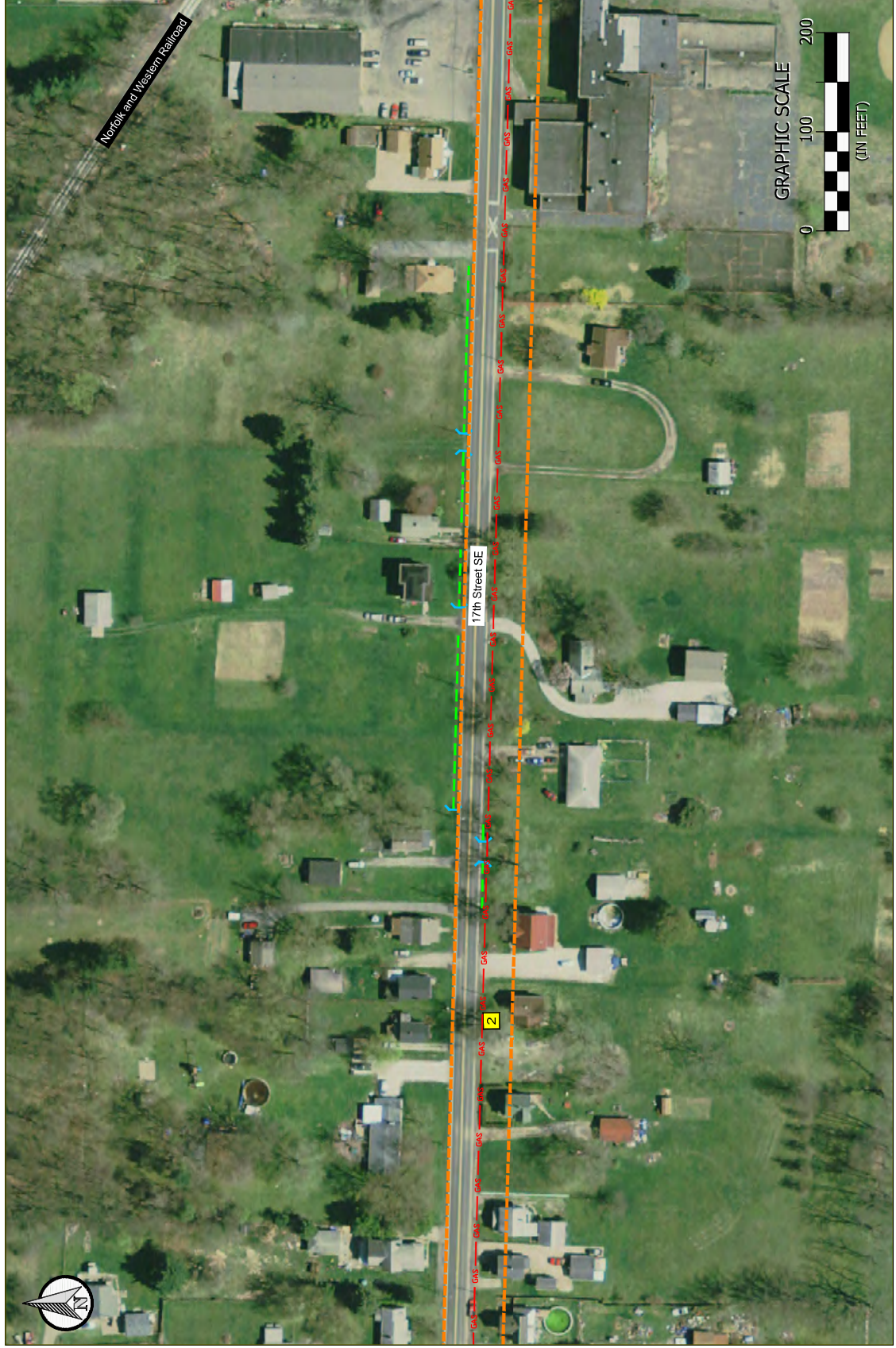
Prepared by:
DAVEY
 CONSULTING
 A Division of The Davey Tree Expert Company

Prepared for:
The East Ohio Gas Company

PIR 751 - Millerton Street SE and Marietta Avenue SE
 Pipeline Replacement Project
 Canton Township, Stark County, Ohio

Data used to produce this map were collected on September 8, 19, and 27, 2016 and March 6, 2017

Map View **7** of **9**



- Existing gas line
- Proposed gas line
- Gas line stake

- Approximate study area
- Perennial stream
- Non-jurisdictional roadside ditch
- Direction of flow
- Existing culvert(s)
- Non-jurisdictional swale

- 1** = Potential roost tree for the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*)
- 2** = Areas of wetlands delineated within study area (0.658 acre)



Prepared by:
The East Ohio Gas Company

PIR 751 - Millerton Street SE and Marietta Avenue SE
Pipeline Replacement Project
Canton Township, Stark County, Ohio

Data used to produce this map were collected on September 8, 19, and 27, 2016 and March 6, 2017

Attachment B

Photographs

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 1. Industrial development, including Adelman's Truck parts shown above, is the predominant land use associated with the PIR 751 – Millerton Street SE and Marietta Avenue SE project.



Photograph 2. Residential development is located along Waynesburg Drive SE and 17th Street SE, within the project area.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 3. Several commercial developments, such as the Waco Market, are located throughout the project area.



Photograph 4. Part of the easement for PIR 751 crosses through a mowed grass recreational field.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 5. The Canton Township Fire Department Station #2, an institutional development, is located at the corner of 17th Street SE and Waynesburg Drive SE..

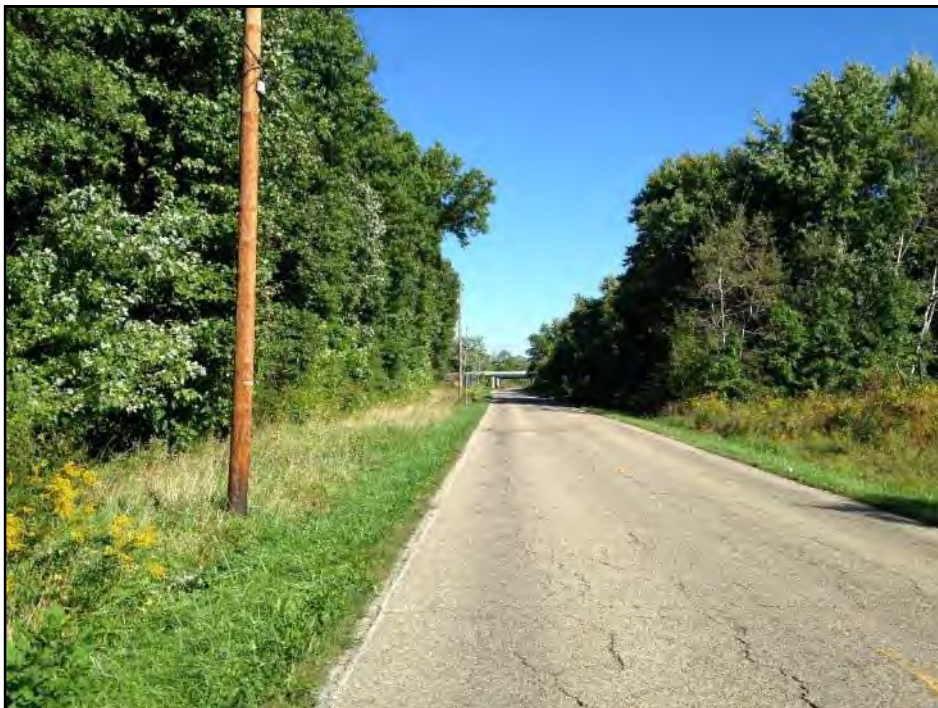


Photograph 6. Roadside ditches are located throughout the project area.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 7. The undeveloped parcels located north of Adelman's Truck Parts and south of 19th Street SE, are primarily composed of successional woods.



Photograph 8. Successional woods are located on both sides of Marietta Avenue SE at the northern end of the project area.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 9. Wetland A has forested vegetation within the project area.



Photograph 10. A culvert running beneath Marietta Avenue connects Wetland A on the east and west sides of the street.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 11. Wetland B, an emergent wetland, is located within the stream channel of Stream 1.



Photograph 12. Wetland C is located in the western part of the project area within the floodplain of Stream 1, and continues to extend off-site.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 13. Looking upstream, Wetland C is located along the banks and floodplain of Stream 1.



Photograph 14. Stream 1 flows west through a forested area before draining to Stream 2 (Sherrick Run) outside the project area.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 15. The substrate of Stream 1 is dominated by cobble and silt.



Photograph 16. Stream 2 (Sherrick Run) flows north out of the project area under a bridge that crosses Waynesburg Drive SE.

***PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016***



Photograph 17. Looking downstream of Sherrick Run there is a forested canopy before entering Adelman's Truck Parts.



Photograph 18. The dominant substrate types of Stream 2 are cobble and silt.

PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016



Photograph 19. Tree number 1 is a *Prunus serotina* (black cherry).



Photograph 20. Tree number 2 is an *Acer saccharinum* (silver maple).

PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016



Photograph 21. Tree number 3 is an *Acer saccharinum* (silver maple).



Photograph 22. Tree number 4 is a *Prunus serotina* (black cherry).

PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016



Photograph 23. Tree number 5 is a *Prunus serotina* (black cherry).



Photograph 24. Tree number 6 is a *Salix nigra* (black willow).

PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016



Photograph 25. Tree number 7 is a *Populus deltoides* (eastern cottonwood).



Photograph 26. Tree number 8 is a *Prunus serotina* (black cherry).

PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016



Photograph 27. Tree number 9 is a *Prunus serotina* (black cherry).



Photograph 28. Tree number 10 is a *Prunus serotina* (black cherry).

PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016



Photograph 29. Tree number 11 is a *Prunus serotina* (black cherry).



Photograph 30. Tree number 12 is dead.

PIR 751 – Millerton Street SE and Marietta Avenue SE
Photographed September 27, 2016



Photograph 31. Tree number 13 is dead.



Photograph 32. Tree number 14 is a *Salix nigra* (black willow).

Attachment C

Wetlands and Streams Delineated Within PIR 751

Wetland	Wetland (acre) within Project Area	Land Cover within Project Area	ORAM	Category
A	0.002	Forested	45.5	2
B	0.017	Emergent	25	1
C	0.639	Emergent	41	Mod 2 ¹
Total	0.658			

¹Modified Category 2

Stream	Stream Length (lf) within Project Area	Bankfull Width (feet)	Flow Regime	Dominant Substrate Type(s)	HHEI/QHEI	Class/Designation
1	793	5.5	Perennial	Cobble and silt	66	Modified II PHWH ²
2 (Sherrick Run)	86	20.0	Perennial	Cobble and silt	46.5	MWWH ²
Total	879					

¹ Primary Headwater Habitat

² Modified Warmwater Habitat

Attachment D

ORAM Forms

Site: PIR 751 - Millerton Street SE and Marietta Avenue SE				Date: 9/27/2016	
Wetlands: Wetland A				Rater: Rachel Kohnke	
Wetland Acreage:	0.148+	ORAM Score:	45.5	ORAM Category:	Category 2

3	3
Subtotal	Points

Metric 1. Wetland Area (size). (max 6 pts)Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
☒ 3 to <10 acres (1.2 to <4ha) (3 pts)
☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
☐ <0.1 acres (0.04ha) (0 pts)

10	7
Subtotal	Points

Metric 2. Upland buffers and surrounding land use. (max 14 pts)2a. Calculate average buffer width (select one, do not double check)

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use (select one or double check & average)

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
☒ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

22	12
Subtotal	Points

Metric 3. Hydrology. (max 30 pts)3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
☐ Other groundwater (3)
☒ Precipitation (1)
☐ Seasonal/Intermittent surface water (3)
☐ Perennial surface water (lake or stream) (5)

3d. Duration inundation/saturation.(select one or double check & average)

- ☐ Semi- to permanently inundated/saturated (4)
☒ Regularly inundated/saturated (3)
☐ Seasonally inundated (2)
☐ Seasonally saturated in upper 30cm (12in) (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
☐ Between stream/lake and other human use (1)
☒ Part of wetland/upland (e.g. forest), complex (1)
☐ Part of riparian or upland corridor (1)

3e. Modifications to natural hydrologic regime.(select one or double check & average)

- ☐ None or none apparent (12)
☒ Recovered (7)
☒ Recovering (3)
☐ Recent or no recovery (1)

3c. Maximum water depth. Select only 1.

- ☐ >0.7 (27.6in) (3)
☒ 0.4 to 0.7m (15.7 to 27.6in) (2)
☐ <0.4m (<15.7in) (1)

Check all disturbances observed

- ☒ ditch ☐ point source (nonstormwater)
☐ dike ☒ filling/grading
☐ tile ☒ road bed/RR track
☐ weir ☐ dredging
☒ stormwater input ☐ other- list

34.5	12.5
Subtotal	Points

Metric 4. Habitat Alteration and Development. (max 20 pts.)4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
☒ Recovered (3)
☐ Recovering (2)
☐ Recent or no recovery (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
☒ Recovered (6)
☒ Recovering (3)
☐ Recent or no recovery (1)

4b. Habitat development. Select one.

- ☐ Excellent (7)
☐ Very good (6)
☒ Good (5)
☐ Moderately good (4)
☐ Fair (3)
☐ Poor to fair (2)
☐ Poor (1)

Check all disturbances observed

- ☒ mowing ☐ shrub/sapling removal
☐ grazing ☐ herbaceous/aquatic bed removal
☐ clearcutting ☒ sedimentation
☐ selective cutting ☐ dredging
☐ woody debris removal ☐ farming
☐ toxic pollutants ☐ nutrient enrichment

34.5	subtotal this page
------	--------------------

Site: PIR 751 - Millerton Street SE and Marietta Avenue SE		Date: September 27, 2016
Wetland:	Wetland A	Rater: Rachel Kohnke

34.5 subtotal first page

34.5	0
Subtotal	Points

Metric 5. Special Wetlands. (max 10 pts.)

Check all that apply and score as indicated

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Bog (10 pts) |
| <input type="checkbox"/> | Fen (10 pts) |
| <input type="checkbox"/> | Old Growth Forest (10 pts) |
| <input type="checkbox"/> | Mature forested wetland (5 pts) |
| <input type="checkbox"/> | Lake Erie coastal/tributary wetland-unrestricted hydrology (10 pts) |
| <input type="checkbox"/> | Lake Erie coastal/tributary wetland-restricted hydrology (5 pts) |
| <input type="checkbox"/> | Lake Plain Sand Prairies (Oak Openings) (10 pts) |
| <input type="checkbox"/> | Relict Wet Prairies (10 pts) |
| <input type="checkbox"/> | Known occurrence state/federal threatened or endangered species (10) |
| <input type="checkbox"/> | Significant migratory songbird/waterfowl habitat or usage (10 pts) |
| <input type="checkbox"/> | Category 1 Wetland. See Question 1 of Qualitative Rating. (-10 pts) |

45.5	11
Subtotal	Points

Metric 6. Plant Communities, interspersions, microtopography. (max 20 pts.)

6a. Wetland Vegetation Communities

Score all present using 0 to 3 scale

- | | |
|--------------------------|--------------|
| <input type="checkbox"/> | Aquatic bed |
| <input type="checkbox"/> | Emergent |
| <input type="checkbox"/> | Shrub |
| <input type="checkbox"/> | Forest |
| <input type="checkbox"/> | Mudflats |
| <input type="checkbox"/> | Open water |
| <input type="checkbox"/> | Other (list) |

6b. Horizontal (plan view) interspersions

Select only one

- | | |
|-------------------------------------|---------------------|
| <input type="checkbox"/> | High (5) |
| <input type="checkbox"/> | Moderately high (4) |
| <input checked="" type="checkbox"/> | Moderate (3) |
| <input type="checkbox"/> | Moderately low (2) |
| <input type="checkbox"/> | Low (1) |
| <input type="checkbox"/> | None (0) |

6c. Coverage of invasive plants.

Refer to Table 1 ORAM long

form for list. Add or deduct

points for coverage

Frangula alnus
Phalaris arundinacea
Lonicera japonica

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Extensive >75 % cover (-5) |
| <input type="checkbox"/> | Moderate 25-75% cover (-3) |
| <input checked="" type="checkbox"/> | Sparse 5-25% cover (-1) |
| <input type="checkbox"/> | Nearly Absent <5% cover (0) |
| <input type="checkbox"/> | Absent (1) |

6d. Microtopography

Score all present using 0 to 3 scale

- | | | |
|--------------------------|---|---------------------------------|
| <input type="checkbox"/> | 2 | Vegetated hummocks/tussocks |
| <input type="checkbox"/> | 1 | Coarse woody debris >15 cm (6") |
| <input type="checkbox"/> | | Standing dead > 25 cm (10") dbh |
| <input type="checkbox"/> | 1 | Amphibian breeding pools |

Vegetation Community Cover Scale

0	Absent or comprises <0.1 ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
moderate	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1 ha (0.2471 acres)
1	Low 0.1 ha to <1 ha (0.2471 acres to 2.47 acres)
2	Moderate 1 ha to <4 ha (2.47 acres to 9.88 acres)
3	High 4 ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

45.5 **GRAND TOTAL (max 100 pts)**

End of Quantitative Rating. Complete Categorization Worksheets.

Comments: _____

Site: PIR 751 - Millerton Street SE and Marietta Avenue SE				Date: 9/27/2016	
Wetlands: Wetland B				Rater: Rachel Kohnke	
Wetland Acreage:	0.017+	ORAM Score:	25	ORAM Category:	Category 1

0	0
Subtotal	Points

Metric 1. Wetland Area (size). (max 6 pts)

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

4	4
Subtotal	Points

Metric 2. Upland buffers and surrounding land use. (max 14 pts)

2a. Calculate average buffer width (select one, do not double check)

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use (select one or double check & average)

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

19	15
Subtotal	Points

Metric 3. Hydrology. (max 30 pts)

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☒ Perennial surface water (lake or stream) (5)

3d. Duration inundation/saturation.

(select one or double check & average)

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3e. Modifications to natural hydrologic regime.

(select one or double check & average)

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3c. Maximum water depth. Select only 1.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

Check all disturbances observed

- ☐ ditch
- ☐ dike
- ☐ tile
- ☐ weir
- ☐ stormwater input
- ☐ point source (nonstormwater)
- ☐ filling/grading
- ☐ road bed/RR track
- ☒ dredging
- ☐ other- list

26	7
Subtotal	Points

Metric 4. Habitat Alteration and Development. (max 20 pts.)

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select one.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

Check all disturbances observed

- ☐ mowing
- ☐ grazing
- ☐ clearcutting
- ☐ selective cutting
- ☐ woody debris removal
- ☐ toxic pollutants
- ☐ shrub/sapling removal
- ☐ herbaceous/aquatic bed removal
- ☒ sedimentation
- ☒ dredging
- ☐ farming
- ☒ nutrient enrichment

Site: PIR 751 - Millerton Street SE and Marietta Avenue SE		Date: September 27, 2016
Wetland:	Wetland B	Rater: Rachel Kohnke

26 subtotal first page

26	0
Subtotal	Points

Metric 5. Special Wetlands. (max 10 pts.)

Check all that apply and score as indicated

- ☐ Bog (10 pts)
- ☐ Fen (10 pts)
- ☐ Old Growth Forest (10 pts)
- ☐ Mature forested wetland (5 pts)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10 pts)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5 pts)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10 pts)
- ☐ Relict Wet Prairies (10 pts)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/waterfowl habitat or usage (10 pts)
- ☐ Category 1 Wetland. See Question 1 of Qualitative Rating. (-10 pts)

25	-1
Subtotal	Points

Metric 6. Plant Communities, interspersions, microtopography. (max 20 pts.)

6a. Wetland Vegetation Communities

Score all present using 0 to 3 scale

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other (list) _____

6b. Horizontal (plan view) interspersions

Select only one

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☒ None (0)

6c. Coverage of invasive plants.

Refer to Table 1 ORAM long

form for list. Add or deduct

points for coverage

Phalaris arundinacea

- ☐ Extensive >75 % cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly Absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography

Score all present using 0 to 3 scale

- ☐ Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15 cm (6")
- ☐ Standing dead > 25 cm (10") dbh
- ☐ 1 Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1 ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
moderate	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1 ha (0.2471 acres)
1	Low 0.1 ha to <1 ha (0.2471 acres to 2.47 acres)
2	Moderate 1 ha to <4 ha (2.47 acres to 9.88 acres)
3	High 4 ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

25 **GRAND TOTAL (max 100 pts)**

End of Quantitative Rating. Complete Categorization Worksheets.

Comments: _____

Site: PIR 751 - Millerton St SE & Marietta Ave SE, Canton Twp, Stark Co, Ohio				Date: 9/27/2016	
Wetlands: Wetland C				Rater: Jeff Pettit	
Wetland Acreage:	0.639+	ORAM Score:	41	ORAM Category:	Modified 2

2	2
Subtotal	Points

Metric 1. Wetland Area (size). (max 6 pts)

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

9	7
Subtotal	Points

Metric 2. Upland buffers and surrounding land use. (max 14 pts)

2a. Calculate average buffer width (select one, do not double check)

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use (select one or double check & average)

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☒ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

26	17
Subtotal	Points

Metric 3. Hydrology. (max 30 pts)

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☒ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3d. Duration inundation/saturation.

(select one or double check & average)

- ☒ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

3b. Connectivity. Score all that apply.

- ☒ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3e. Modifications to natural hydrologic regime.

(select one or double check & average)

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

3c. Maximum water depth. Select only 1.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

Check all disturbances observed

- ☒ ditch
- ☐ dike
- ☒ tile
- ☒ weir
- ☒ stormwater input
- ☐ point source (nonstormwater)
- ☒ filling/grading
- ☐ road bed/RR track
- ☐ dredging
- ☐ other- list

35	9
Subtotal	Points

Metric 4. Habitat Alteration and Development. (max 20 pts.)

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select one.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

Check all disturbances observed

- ☐ mowing
- ☐ grazing
- ☐ clearcutting
- ☐ selective cutting
- ☐ woody debris removal
- ☒ toxic pollutants
- ☐ shrub/sapling removal
- ☐ herbaceous/aquatic bed removal
- ☒ sedimentation
- ☐ dredging
- ☐ farming
- ☒ nutrient enrichment

Site: PIR 751 - Millerton St SE & Marietta Ave SE, Canton Twp, Stark Co, OH		Date: September 27, 2016
Wetland:	Wetland C	Rater: Jeff Pettit

35 subtotal first page

35	0
Subtotal	Points

Metric 5. Special Wetlands. (max 10 pts.)

Check all that apply and score as indicated

- ☐ Bog (10 pts)
- ☐ Fen (10 pts)
- ☐ Old Growth Forest (10 pts)
- ☐ Mature forested wetland (5 pts)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10 pts)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5 pts)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10 pts)
- ☐ Relict Wet Prairies (10 pts)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/waterfowl habitat or usage (10 pts)
- ☐ Category 1 Wetland. See Question 1 of Qualitative Rating. (-10 pts)

41	6
Subtotal	Points

Metric 6. Plant Communities, interspersions, microtopography. (max 20 pts.)

6a. Wetland Vegetation Communities

Score all present using 0 to 3 scale

- ☐ Aquatic bed
- ☐ 2 Emergent
- ☐ 0 Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other (list) _____

6b. Horizontal (plan view) interspersions

Select only one

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants.

Refer to Table 1 ORAM long

form for list. Add or deduct

points for coverage

Phalaris arundinacea

- ☐ Extensive >75 % cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☒ Nearly Absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography

Score all present using 0 to 3 scale

- ☐ Vegetated hummocks/tussocks
- ☐ 1 Coarse woody debris >15 cm (6")
- ☐ 1 Standing dead > 25 cm (10") dbh
- ☐ 1 Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1 ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
moderate	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1 ha (0.2471 acres)
1	Low 0.1 ha to <1 ha (0.2471 acres to 2.47 acres)
2	Moderate 1 ha to <4 ha (2.47 acres to 9.88 acres)
3	High 4 ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

41 **GRAND TOTAL (max 100 pts)**

End of Quantitative Rating. Complete Categorization Worksheets.

Comments: _____

Attachment E
QHEI and HHEI Forms



Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score:

46.5

Stream/Location Stream 2 (Sherrick Run) - PIR 751 Millerton St SE and Marietta Ave SE, Canton RM: _____ Date: 9/27/2016
STORET#: _____ Scorers Full Name & Affiliation: Rachel Kohnke / Davey Resource Group
River Code: _____ Lat/Long.: 40.775212, -81.346643 Office verified location ☐

1] **SUBSTRATE** Check **ONLY Two** substrate **TYPE BOXES**:
estimate % or note every type present

Check ONE (Or 2 & average)

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<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> </							

Stream & Location: 0

METHOD

BOAT

WADE

L. LINE

OTHER

SECCHI DEPTH

1st

2nd

cm

cm

DISTANCE

0.5 Km

0.2 Km

0.15 Km

0.12 Km

OTHER

CANOPY

>85%-OPEN

55%-<85%

30%-<55%

10%-<30%

<10%-CLOSED

Consider maintenance status and basin issues. Write something to aide understanding of overall QHEI score.

Stream Drawing:



Primary Headwater Habitat Evaluation Form
HHEI Score (sum of metrics 1, 2, 3):

66

SITE NAME / LOC. **Stream 1 - PIR 751: Millerton St. SE and Marietta Ave. SE, Canton Township, Stark County, Ohio**
SITE NUMBER _____ RIVER BASIN **Tuscarawas** Drainage Area (mi²) **0.87**
Length of Stream Reach (l) **200 ft** Lat. **40.77593** Long. **-81.34646** RIVER MILE **n/a**
DATE **9/27/2016** SCORER **Jeff Pettit** COMMENTS **Modified Class II PWHH**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWHH Streams" for Instructions

STREAM CHANNEL ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☒ RECOVERING ☐ RECENT OR NO RECOVERY
MODIFICATIONS:

1. **SUBSTRATE** (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	0%	<input checked="" type="checkbox"/> <input type="checkbox"/> SILT [3 pts]	25%
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	0%	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	5%
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pts]	0%	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	0%
<input checked="" type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	30%	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pts]	0%
<input type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	20%	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	0%
<input type="checkbox"/> <input type="checkbox"/> SAND (<2 mm) [6 pts]	15%	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3pts]	5%

Total of Percentages of (A)
Bldr Slabs, Boulder, Cobble, Bedrock: **30%**

(B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **15**

TOTAL NUMBER OF SUBSTRATE TYPES: **6**

HHEI
Metric
Points

Substrate

Max = 40

21

A + B

2. **Maximum Pool Depth** (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes). (Check *ONLY* one box):

<input type="checkbox"/> >30 centimeters [20 pts]	<input type="checkbox"/> >5 cm - 10 cm [15 pts]
<input type="checkbox"/> >22.5 - 30 cm [30 pts]	<input type="checkbox"/> <5 cm [5 pts]
<input checked="" type="checkbox"/> >10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER/MOIST CHANNEL [0 pts]

Pool Depth
Max=30

25

COMMENTS: _____

MAXIMUM POOL DEPTH (centimeters) **20.3**

3. **BANK FULL WIDTH** (Measured as the average of 3-4 measurements) (Check *ONLY* one box):

<input type="checkbox"/> >4.0 meters (>13') [30 pts]	<input type="checkbox"/> >1.0 m - 1.5 m (>3'3"-4'8") [15 pts]
<input type="checkbox"/> >3.0-4.0 m (>9' 7"-13') [25 pts]	<input type="checkbox"/> ≤1.0 m (≤ 3'3") [5 pts]
<input checked="" type="checkbox"/> >1.5-3.0 m (>4' 8"-9' 7") [20 pts]	

Bankfull
Width
Max=30

20

COMMENTS: _____

AVERAGE BANKFULL WIDTH (meters) **1.7**

This information must also be completed.

RIPARIAN ZONE AND FLOODPLAIN QUALITY

*NOTE: River Left (L) and Right (R) as looking downstream.

RIPARIAN WIDTH

L	R
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	

(Per Bank)
Wide > 10 m
Moderate 5 - 10 m
Narrow < 5 m
None

(FLOODPLAIN QUALITY)

L	R
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	

(Most Predominant per Bank)
Mature Forest, Wetland
Immature Forest, Shrub or Old Field
Residential, Park, New Field
Fenced Pasture

L	R
<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>	

Conservation Tillage
Urban or Industrial
Open Pasture, Row Crop
Mining or Construction

COMMENTS: _____

FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input type="checkbox"/> Dry channel, no water, (Ephemeral)

COMMENTS: _____

SINUOSITY (Number of bends per 200 ft (61 m) of channel) (Check *ONLY* one box):

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> > 3

STREAM GRADIENT ESTIMATE

<input type="checkbox"/> Flat (0.5 ft/100 ft)	<input type="checkbox"/> Flat to Moderate	<input type="checkbox"/> Moderate (2 ft/100 ft)	<input type="checkbox"/> Moderate to Severe	<input type="checkbox"/> Severe (10 ft/100 ft)
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Location / Stream Name: Stream 1 - PIR 751: Millerton St. SE and Marietta Ave. SE, Canton Township, Stark County, Ohio

Additional Stream Information (This Information Must Also Be Completed):

QHEI PERFORMED? ☒ Yes ☐ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S): _____
☒ WWH Name: Nimishillen Creek Distance from Evaluated Stream 3.57 miles
☒ CWH Name: _____ Distance from Evaluated Stream _____
☒ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.

USGS Quad Name: Canton East NRCS Soil Map Page: _____ NRCS Soil Map Stream Order: 1
County: Stark Township/City: Canton Township

MISCELLANEOUS

Base Flow Conditions? (Y/N) Y Date of Last Precipitation: 26-Sep-16 Quantity: 0.03 inch

Photograph Information: See Attached

Elevated Turbidity? (Y/N): N Canopy (% open): 20

Were samples collected for water chemistry?(Y/N) N (Note lab sample no. or id. and attach results) Lab No.: _____

Field Measures: Temp (C) _____ Dissolved Oxygen (mg/l) _____ pH(S.U.) _____ Conductivity(μs) _____

Is the sampling reach representative of the stream (Y/N)? _____ If not, please explain: _____

Additional comments/description pollution impacts: : Junkyard located approx. 100 feet south of stream. Some encroachment from residential use to the north.

BIOTIC EVALUATION

Performed? (Y/N) N (If yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID Number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) _____ Voucher? (Y/N) _____ Salamanders Observed? (Y/N) _____ Voucher? (Y/N) _____
Frogs/Tadpoles Observed? _____ Voucher? (Y/N) _____ Aquatic Macroinvertebrates Observed? (Y/N) _____ Voucher?(Y/N) _____

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location.

FLOW →

Location/Stream Name: Stream 1 - PIR 751: Millerton St. SE and Marietta Ave. SE, Canton Township, Stark Col **Date:** 9/27/2016

Attachment F Tree Habitat Characteristics

Tree ID	Tree Species	DBH (inches)	Tree Condition	Available Sun to Habitat Features*	Roost Tree Characteristics	Address	Location	Maternity or Habitat
1	<i>Prunus serotina</i>	34	Fair	Fair sun	Exfoliating bark, crevices, and dead wood	1618 Marietta Ave SE	Within tree lawn	Habitat
2	<i>Acer saccharinum</i>	42	Good	Poor sun	Exfoliating bark and crevices	2408 17 th St SE	Within tree lawn	Habitat
3	<i>Acer saccharinum</i>	34	Good	Poor sun	Small amount of exfoliating bark and crevices	1724 Waynesburg Dr SE	Within tree lawn	Habitat
4	<i>Prunus serotina</i>	24	Fair	Good sun	Small amount of exfoliating bark and dead wood	NA	Within easement	Habitat
5	<i>Prunus serotina</i>	24	Fair	Good sun	Small amount of exfoliating bark and dead wood	NA	Within easement	Habitat
6	<i>Salix nigra</i>	36	Dead	Full sun	Small amount of exfoliating bark and dead wood	NA	Within easement	Habitat
7	<i>Populus deltoides</i>	32	Poor	Good sun	Small amount of exfoliating bark and dead wood	NA	Within easement	Habitat
8	<i>Prunus serotina</i>	20	Dead	Good sun	Large amount of exfoliating bark, cavities, and dead wood	NA	Within easement	Maternity
9	<i>Prunus serotina</i>	17	Critical	Full sun	Small amount of exfoliating bark and dead wood	NA	Within easement	Habitat
10	<i>Prunus serotina</i>	8	Poor	Good sun	Small amount of exfoliating bark and dead wood	NA	Within easement	Habitat
11	<i>Prunus serotina</i>	17	Fair	Fair sun	Small amount of crevices, dead wood, and exfoliating bark	NA	Within easement	Habitat
12	Dead	24	Dead	Good sun	Small amount of dead wood, crevices, and cavities	NA	Within easement	Habitat
13	Dead	18	Dead	Good sun	Small amount of dead wood and crevices	NA	Within easement	Habitat
14	<i>Salix nigra</i>	34	Critical	Full sun	Dead wood, crevices, and cavities	NA	Within easement	Maternity

*Full Sun = 80-100% solar exposure
 Good Sun = 60-80% solar exposure
 Fair Sun = 30-60% solar exposure
 Poor Sun = 0-30% solar exposure

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Commission of Ohio Docketing Information System on

12/20/2017 2:58:37 PM

in

Case No(s). 17-2502-GA-BLN

Summary: Letter of Notification of Dominion Energy Ohio for PIR 751 Pipeline Replacement Project - Part 4 of 5 electronically filed by Teresa Orahod on behalf of Sally W. Bloomfield