



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

Ohio EPA JUL 2 '19
Entered Directors Journal

Certified Mail

**Re: Enterprise Park
Permit - Intermediate
Approval
401 Wetlands
Trumbull
DSW401175502**

9489 0090 0027 6054 1477 66

July 2, 2019

Anthony Cafaro, Jr.
North Eastwood, LLC
5577 Youngstown-Warren Road
Niles, Ohio 44446

Subject: **Enterprise Park**
Trumbull County / Howland Township
Grant of a Section 401 Water Quality Certification
Corps Public Notice No. LRP-2017-1643
Ohio EPA ID No. 175502

Dear Stakeholders:

I hereby authorize the above referenced project under the following authorities, and it is subject to the following modifications and/or conditions:

Section 401 Water Quality Certification

Pursuant to Section 401 of the Federal Water Pollution Control Act, Public Law 95-217, I hereby certify that the above-referenced project will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act. This authorization is specifically limited to a Section 401 Water Quality Certification (here after referred to as "certification") with respect to water pollution and does not relieve the Certification Holder of further certifications or permits as may be necessary under the law. I have determined that a lowering of water quality in the Mahoning River Watershed (HUC 05030103) as authorized by this certification is necessary. I have made this determination based upon the consideration of all public comments, if submitted, and the technical, social, and economic considerations concerning this application and its impact on waters of the state.

PART I ON-SITE WATER RESOURCES AND IMPACTS

A. Watershed Setting

The project is located in the Lower Mosquito Creek watershed (HUC 05030103-05-03), in Howland Township, Trumbull County, which has an area of 138 square miles. Mosquito Creek is a warmwater habitat (WWH) stream and agricultural supply, industrial water supply and primary contact recreation water with an antidegradation category of high quality water. Other Ohio EPA Aquatic Life Use Designations located in this watershed, as found in OAC rule 3745-1-21, include WWH. The 102.12-acre project site is located immediately east of Mosquito Creek from approximate river mile 3.4 to 4.3.

B. Project Description

The project involves construction of a hospital and attendant medical/educational/residential campus which would serve the Trumbull County portion of the Youngstown-Warren Metropolitan Statistical Area. In addition to the hospital, plans for the campus include a combination of educational, medical and general office, assisted living and residential facilities and appurtenant features such as parking lots, access roads and storm water management systems.

C. Impacts to Waters of the State

1. Streams

Stream impacts will include a combination of earthen fill and culverts to accommodate the construction of buildings and appurtenant features.

Stream ID	Existing Use	Type* E, I, or P	HHEI Score*	Impact Type	Total Length on Site (LF)	Total Length Impacted (LF)	Percent Avoided
Stream 1	Class I PWHH	I	21	Culvert	1619.8	162.0	90%
Stream 2	Class I PWHH	I	27	Culvert/ Fill	2283.5	174.0	92%
Stream 3	Class I PWHH	I	31	Fill	412.6	412.6	0%
Stream 4	Class I PWHH	E	19	Fill	184.7	184.7	0%
Stream 5	Class I PWHH	I	25	Fill	171.3	171.3	0%
Stream 6	Class I PWHH	I	22	Fill	173.9	173.9	0%

Stream 7	Class II PWHH	P	31	Culvert/ Fill	898.8	200.0	78%
Stream 8	Class I PWHH	I	22	Culvert/ Fill	274.7	130.0	53%
Totals					6,019	1,608.5	73%

* As provided by applicant

2. Wetlands

Wetland impacts involve earthen fill to accommodate the construction of buildings and appurtenant features.

Wetland ID	Isolated or Non-isolated?	Forested or Non-Forested	Category	Total Acreage on Site	Total Acreage Impacted	Percent Avoided
Wetland A	Non-isolated	Forested	2	3.45	3.45	0%
Wetland B	Non-isolated	Forested	2	5.11	5.11	0%
Wetland C	Non-isolated	Forested	2	5.55	4.21	19%
		Non-forested			0.31	
Wetland D	Non-isolated	Forested	2	0.57	0.26	54%
Wetland E	Non-isolated	Forested	2	0.33	0.33	0%
Wetland F	Non-isolated	Forested	3	25.20	0	100%
Wetland G	Non-isolated	Forested	2	0.34	0.34	0%
Wetland H	Non-isolated	Forested	2	15.12	1.51	87%
		Non-forested			0.43	
Totals				55.67	15.95	71%

3. Lakes

Impacts to lakes are not authorized under this certification.

PART II TERMS & CONDITIONS

- A. This certification shall remain valid and in effect as long as the 404 Permit issued by the U.S. Army Corps of Engineers for this project is in effect.

- B. Terms and conditions outlined in this section apply to project construction as described in this certification.
- C. The Certification Holder shall notify Ohio EPA, in writing, and in accordance with *Part IV (NOTIFICATIONS TO OHIO EPA)* of this certification, upon the start and completion of site development and construction.
- D. A copy of this certification shall remain on-site for the duration of the project construction activities.
- E. In the event of an inadvertent spill, the Certification Holder must immediately call the Ohio EPA Spill Hotline at 1-800-282-9378, as well as the Ohio EPA Section 401 Manager (614-644-2001).
- F. Unpermitted impacts to surface water resources and/or their buffers occurring as a result of this project must be reported within 24 hours of occurrence to Ohio EPA, Division of Surface Water, Section 401 Manager (614-644-2001), for further evaluation.
- G. Pesticide application(s) for the control of plants and animals shall be applied in accordance with rule 3745-1-01 of the Ohio Administrative Code and may require a pesticide applicator license from the Ohio Department of Agriculture.
- H. Any authorized representative of the director shall be allowed to inspect the authorized activity at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this certification.
- I. In the event that there is a conflict between the certification application, including the June 28, 2019 mitigation plan, and the conditions within this certification, the condition shall prevail unless Ohio EPA agrees, in writing, that the certification application or other provision prevails.
- J. The Certification Holder shall provide electronic maps of the development area and the mitigation area to Ohio EPA 401 Section within 30 days of the date of this certification. When sending the electronic files, include the Ohio EPA ID Number and the Army Corps of Engineers Number (if applicable). If possible, these electronic maps shall be GIS shape files or Geodatabase files. If this is not possible, the electronic maps shall be in another electronic format readable in GIS (GIF, TIF, etc). The electronic files shall be sent to the following e-mail address: EPA.401Webmail@epa.ohio.gov

If the files are too large to send by e-mail (over 25 MB), a disk containing the electronic files shall be mailed to the following address:

Ohio Environmental Protection Agency
Division of Surface Water
Attn: 401 Manager
50 West Town Street, Suite 700
PO Box 1049
Columbus, OH 43216-1049

- K. This project may require other permits from Ohio EPA. For information concerning application procedures, contact the Ohio EPA District Office as follows:

Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087
330-963-1200

Additional information regarding environmental permitting assistance at Ohio EPA can be found at http://www.epa.ohio.gov/dir/permit_assistance.aspx

L. Best Management Practices (BMPs)

1. All water resources and their buffers which are to be avoided, shall be clearly indicated on site drawings demarcated in the field and protected with suitable materials (e.g., silt fencing) prior to site disturbance. These materials shall remain in place and be maintained throughout the construction process and removed after completion of construction.
2. All BMPs for storm water management shall be designed and implemented in accordance with the most current edition of the Ohio Department of Natural Resources Rainwater and Land Development Manual, unless otherwise required by the National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges associated with construction activities (construction general permit), if required.

A copy of the Rainwater and Land Development Manual is available at:
http://epa.ohio.gov/Portals/35/storm/technical_assistance/RLD_11-6-14All.pdf

A copy of the NPDES construction general permit is available on the "Construction Activities" tab at:
http://www.epa.ohio.gov/dsw/storm/construction_index.aspx

3. Straw bales shall not be used as a form of erosion/sediment control.

4. Fill material shall consist of suitable non-erodible material and shall be stabilized to prevent erosion.
5. Materials used for fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Broken asphalt is specifically excluded from use as fill or bank protection.
6. Concrete rubble used for fill or bank stabilization shall be in accordance with ODOT specifications; free of exposed re-bar; and, free of all debris, soil and fines.
7. Chemically treated lumber which may include, but is not limited to, chromated copper arsenate and creosote treated lumber shall not be used in structures that come into contact with waters of the state.
8. Trees removed from temporary impact areas to facilitate construction shall be replaced with appropriate tree species native to Ohio.
9. All temporary fill material must be removed to an area that has no waters of the state at the completion of construction activities and the stream bottom restored to pre-construction elevations to the maximum extent practicable.
10. Areas excavated as compensatory cut areas for floodplain fill shall be revegetated by seeding with a native seed mix appropriate for riparian areas.
11. Other required permits, including the storm water construction general permit and flood plain permit(s) should be obtained before commencement of construction.
12. Culverts
 - a. Stream culverts shall be installed and designed at the streambed slope to allow for the natural movement of aquatic organisms and bedload to form a stable bed inside the culvert.
 - b. The culvert base or invert with the substrate shall be installed below the sediment to allow natural channel bottom to develop and to be retained.
 - c. The channel bottom substrate shall be similar to and contiguous with the immediate upstream and downstream reaches of the stream. The culvert shall be designed and sized to accommodate bankfull discharge and match the existing depth of flow to facilitate the passage of aquatic organisms.

- d. Where culverts are installed for temporary crossings, the bottom elevations of the stream shall be restored as nearly as possible to pre-project conditions.

M. Wildlife Protection

1. No in-water work shall take place in perennial streams during the environmental window April 15 to June 30, unless specifically approved by the Ohio Department of Natural Resources, Division of Wildlife, in writing, with a copy provided to Ohio EPA prior to undertaking any in-water work during the environmental window.
2. If native mussels and/or mussel beds, not previously identified, are encountered at any time during construction or dredging activities, work must cease immediately and the Ohio Department of Natural Resources' Division of Wildlife must be contacted for further evaluation.
3. In the event that an eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) is encountered during construction of the project, work should immediately cease and the Ohio Department of Natural Resources, Division of Wildlife contacted. Caution should be employed during construction and during the snakes' active season (March 15 - November 15).

PART III MITIGATION

A. Description of Required Mitigation

As mitigation for impacts to 15.21 acres of forested Category 2 wetland and 0.74 acres of non-forested Category 2 wetland, mitigation will consist of both on-site wetland preservation and off-site mitigation. On-site mitigation will include the preservation of 27.09 acres of forested Category 2 and forested Category 3 wetlands preserved long-term within an environmental covenant.

For the off-site mitigation, the certification holder shall purchase 30.5 credits (1.5 non-forested credits and 29.0 forested credits) from Stream + Wetlands Foundation's Pittsburgh North In-Lieu Fee Program (ILFP) servicing the Mahoning River Watershed (HUC 05030103) and Shenango River Watershed (HUC 05030102).

As mitigation for impacts to 1,608.5 linear feet of stream impact including 184.7 linear feet ephemeral, 1,223.8 linear feet intermittent and 200 linear feet perennial stream, mitigation will consist of both on-site stream preservation and off-site

mitigation. On-site preservation will include 388.1 linear feet of Stream 2, 537.6 linear feet of Stream 7 and 4,111.7 linear feet of Mosquito Creek (Stream 9). A total of 5037.4 LF of stream and riparian buffer will be preserved long-term on-site within an environmental covenant

Additionally, the Certification Holder shall purchase 1,620 stream credits from Stream + Wetlands Foundation's Pittsburgh North In-Lieu Fee Program (ILFP) servicing the Mahoning River Watershed (HUC 05030103) and Shenango River Watershed (HUC 05030102).

B. Mitigation Plan

As mitigation for impacts described in Part I.C of this certification the Certification Holder shall implement the mitigation plan dated June 28, 2019, and in accordance with the conditions in this certification.

C. Timing of Mitigation Requirements

1. By no later than 120 days of the date of this certification, a copy of a fully executed in-lieu fee program agreement with Stream + Wetlands Foundation shall be provided to Ohio EPA. **Impacts to waters of the state shall not occur until credits have officially been purchased.**

D. Long Term Protection

1. For the above described preservation area, the Certification Holder shall submit to Ohio EPA an acceptable, notarized, recorded, and filed Environmental Covenant prior construction activities authorized in the certification. The Environmental Covenant shall include, as attachments, a metes and bounds (survey) description of the protected area, survey map, and an aerial photograph showing the boundaries of the protected area and all mitigation areas inside the protected area and shall protect, the approximately 1.23 acre Area A and the approximately 37.11 acre Area B, including all wetlands, streams and buffers located within these areas.
2. Signs shall be placed within visual distance along the preserved mitigation area that indicate the area is a protected wetland and stream mitigation project and that mowing, dumping, or any other activity that would result in a degradation of the wetlands and streams without prior authorization from Ohio EPA is prohibited.

E. Reporting

1. Annual Update Reports

A mitigation and project update report shall be submitted to Ohio EPA by December 31 of each year following the date of this Certification. Each update report shall contain, at a minimum, the following information:

- a. The status of all of the mitigation required for the project as specified in the application, June 28, 2019 mitigation plan and certification including the filing of the required Environmental Covenant;
- b. The status of the filling activities at the development site including dates filling was started and completed, or are expected to be started and completed. If filling activities have not been completed, a drawing shall be provided, which shows the locations and acreage/feet of wetlands/streams that have not yet been filled. If filling activities have been completed, then as-built drawings shall be submitted, which show where fill was placed;
- c. A discussion of the extent to which the mitigation has been completed according to the timelines specified in this certification;
- d. Current contact information for all responsible parties including phone number, e-mail, and mailing addresses. For the purposes of this condition, responsible parties include, but may not be limited to the Certification Holder, consultant, Environmental Covenant holder, and Environmental Covenant owner;

F. Performance Goals – Preserved Wetlands and Streams

Preserved wetlands and streams and their buffers shall be subject to an environmental covenant that specifies the activities that are allowed and/or prohibited within the boundaries of the wetland and associated buffers to be preserved. All provisions must protect the long-term health and existing functions of the wetlands and associated buffers.

PART IV NOTIFICATIONS TO OHIO EPA

All notifications, correspondence, and reports regarding this certification shall reference the following information:

Certification Holder Name: North Eastwood, LLC
Project Name: Enterprise Park
Ohio EPA ID No.: 175502

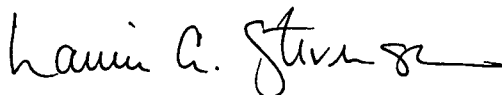
and shall be sent to:

Ohio Environmental Protection Agency
Division of Surface Water, 401/IWP Unit
Lazarus Government Center
50 West Town Street
P.O. Box 1049
Columbus, Ohio 43216-1049

You are hereby notified that this action of the director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within 30 days after notice of the director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Treasurer, State of Ohio," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the director within three days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, Ohio 43215

Sincerely,



Laurie A. Stevenson
Director

ec: Cassandra Forsyth, cassandra.p.forsyth@usace.army.mil,
Department of the Army, Pittsburgh District, Corps of Engineers
Tyler Bintrim, tyler.j.bintrim@usace.army.mil, Department of the Army,
Pittsburgh District, Corps of Engineers
Peter Swenson, swenson.peter@epa.gov, U.S. EPA, Region 5
Patrice Ashfield, Patrice.Ashfield@fws.gov, U.S. Fish & Wildlife Service
John Kessler, John.Kessler@dnr.state.oh.us, ODNR, Office of Real Estate

Dave Snyder, dsnyder@ohiohistory.org, Ohio Historical Preservation Office
Cara Hardesty, cara.hardesty@epa.ohio.gov, Ohio EPA, DSW,
401/Wetlands/Mitigation Section

Marianne Piekutowski, marianne.piekutowski@epa.ohio.gov, Ohio EPA, DSW
Andrea Kilbourne, andrea.kilbourne@epa.ohio.gov, Ohio EPA, DSW, Mitigation
Coordinator

Kristopher Weiss, kristopher.weiss@epa.ohio.gov, Ohio EPA, PIC

Richard Blasick, richard.blasick@epa.ohio.gov, Ohio EPA, DSW, NEDO

Vince Messerly, vmesserly@streamandwetlands.org, Stream + Wetlands
Foundation

Devin Schenk, dschenk@TNC.org, The Nature Conservancy

Benjamin Latoche, BLatoche@HZWenv.com, HZW Environmental Consultants,
LLC

Attachments: Response to Comments (Includes Impacts Map)

Ohio EPA has developed a customer service survey to get feedback from regulated entities that have contacted Ohio EPA for regulatory assistance, or worked with the Agency to obtain a permit, license or other authorization. Ohio EPA's goal is to provide our customers with the best possible customer service, and your feedback is important to us in meeting this goal. Please take a few minutes to complete this survey and share your experience with us at

<http://www.surveymonkey.com/s/ohioepacustomersurvey>



Division of Surface Water Response to Comments

**Project: Enterprise Park, Section 401 Water Quality Certification
Ohio EPA ID #: 175502**

Agency Contacts for this Project

Division Contact: Cara Hardesty, Division of Surface Water, (614) 644-2143,
Cara.Hardesty@epa.ohio.gov

Public Involvement Coordinator: Kristopher Weiss, (614) 644-2160,
Kristopher.Weiss@epa.ohio.gov

Ohio EPA held a public hearing and comment period on Dec. 3, 2018, regarding a section 401 Water Quality Certification (WQC) application submitted by North Eastwood, LLC for the purpose of providing the Trumbull County portion of the Youngstown-Warren Metropolitan Statistical Area with access to comprehensive healthcare, educational and complementary residential facilities. This document summarizes the comments and questions received at the public hearing and during the associated comment period, which ended on Dec. 10, 2018.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. Many commenters provided multiple comments.

Wetland Categorization

Comment 1: Several commenters requested that Ohio EPA re-evaluate the classification of wetlands on the site, including the category 2 wetlands, based on wetlands relative functions, especially dealing with water storage. Another commenter requested that the results of Ohio

EPA's wetland classification verification be placed in the public record.

Response 1: The wetland categorization scored by HZW Environmental Consultants on Aug. 19, 2017, was verified during the pre-application process for the project. On May 17, 2018, Ohio EPA determined there was a wetland scoring boundary split between Wetland H (Category 2) and Wetland F (Category 3) on the site, based on distinct differences in dominant sources of hydrology (See Attachment 1). Ohio EPA also determined there was a scoring boundary split between Wetland A (Category 2) and Wetland H, based on distinct dominant sources of hydrology. Additionally, Ohio EPA changed the classification of Wetland E from Category 1 to Category 2. The wetland categorization for Wetlands B, C, D and G were verified and accepted by Ohio EPA as proposed. This information is available as a public record.

Alternatives Analysis

Comment 2: One commenter expressed concern that the alternatives analysis was inadequate, that National Environmental Policy Act (NEPA) reviews need to include an alternative that avoids, minimizes and then, if necessary, mitigates impacts.

Response 2: Ohio EPA assesses environmental impacts to surface waters regulated under Section 401 of the Clean Water Act by requiring that key information be included with a Water Quality Certification application. This includes an alternatives analysis that evaluates various ways to avoid and minimize impacts. Mitigation for authorized impacts to surface waters is a requirement of the Water Quality Certification. NEPA is a federal process that applies to major federal actions and, in the context of 404 permitting, would be handled by the U.S. Army Corps of Engineers, not Ohio EPA.

Comment 3: Several commenters raised concerns about whether the on-site plan adequately considered the 2011 Lower Mosquito Creek Watershed Balanced Growth Plan analysis of the lower Mosquito Creek watershed for development and conservation.

Response 3: Ohio EPA reviewed and considered the Lower Mosquito Creek Watershed Balanced Growth Plan with respect to the permit application. As part of the review, the Agency

compared the balanced growth plan's recommended priority conservation areas (PCAs) and priority development areas (PDAs) within the site and regional area with the proposed project plan (please see Attachment 2). While that plan does not control Ohio EPA's permitting decision, the Agency found the proposed project to be in general accordance with the plan and considered the on-site alternative to be an acceptable alternative that adequately balances conservation of aquatic resources with development.

Comment 4: **A few commenters were concerned whether the on-site plan adequately considered the 2010 Howland Township Comprehensive Plan, particularly regarding the priority placed on natural resource preservation.**

Response 4: Ohio EPA reviewed and considered the Howland Township Comprehensive Plan with respect to the permit application. As part of the review, the Agency compared the future initiatives recommended uses within the site and regional area with the proposed project plan (Attachment 2). While that plan does not control Ohio EPA's permitting decision, the Agency found the proposed project plan, which incorporates mixed-use development and on-site preservation and protection of the Mosquito Creek corridor, to be in general accordance with the plan and considered the on-site alternative to be an acceptable alternative that adequately balances preservation of environmentally sensitive aquatic resource areas with development.

Off-site Alternatives

Comment 5: **Several commenters expressed concern for the alternatives analysis, including that the project purpose and need was unclear, that based on the minimum acreage requirements, other off-site locations should be suitable and wondered why some off-site alternatives that appeared to meet the alternatives analysis criteria (e.g., site 10, 15 and 18) were removed for consideration. One commenter expressed concern the off-site alternatives analysis was not based on actual criteria and appears to provide only unsuitable sites for the analysis.**

Response 5: The alternatives analysis was based on information provided primarily in the permit application, supplemental information by HZW, including the March 14, 2019, response letter to the

U.S. Army Corps of Engineers, Dec. 26, 2018, and June 14, 2019, response letters to Ohio EPA (please see Attachment 3) and in email correspondence, including an email received on June 18, 2019, from HZW clarifying the revised minimum acreage requirement for the project was approximately 55 acres. Ohio EPA reviewed the alternatives with the understanding that the project purpose is "to provide the Trumbull County portion of the Youngstown-Warren Metropolitan Statistical Area with access to comprehensive healthcare, educational, and complementary residential facilities". The project purpose was applied to the evaluation of on-site and off-site alternatives criteria. Most of Mercy Health's hospital siting criteria, including sufficient parcel size, proximity to geographic center, accessibility, located in current or future limits of Warren and environmental feasibility, were also taken into consideration. The environmental feasibility considerations presented in the application were considered secondary after taking into account the estimated aquatic resource impacts. Ohio EPA did not consider proximity to accessory amenities or appropriateness of existing zoning as factors in the alternatives analysis. Ohio EPA reviewed the sites that were listed as practicable as well as those listed as unpracticable in the permit application with equal consideration. It is Ohio EPA's position that the applicant submitted an acceptable alternative analysis that met the regulatory requirements for the Agency to complete the application review.

Comment 6:

Several commenters voiced concern with the negative social and economic impact that the project could generate if the current St. Joseph Hospital on Eastland Avenue is not renovated because the demand for this building is diminished from implementation of the on-site alternative. One of these commenters was concerned this could translate into residents of the City of Warren paying for the remediation of this building through local tax monies, which would result in the on-site alternative becoming a financial drain on the local residents. The commenter pointed to the fact that there is a second St. Joseph Hospital located on Todd Avenue in Warren that is currently abandoned, and tax payers may have to foot the bill for the remediation and/or demolition of this site as well. Many commenters were concerned with empty and/or abandoned buildings and resultant blight, including the abandoned St. Joseph Hospital on Todd Avenue. Several commenters were

concerned with population decline in Warren, and voiced concern regarding constructing additional medical offices and other infrastructure when empty professional office space and hospital space currently exist in the community, which should be maintained first. A few commenters wondered why the former Kmart Distribution Center on Perkins-Jones Road in Bazetta Township was not considered a viable off-site alternative. One commenter wondered why the old WCI site was not considered a viable off-site alternative. One commenter wondered why the Copperweld site on Mahoning or the Packard/Delphi plant on Larchmont were not considered viable off-site alternatives. One commenter also wondered why sites that could not be annexed to Warren were included in the off-site alternatives, if this was a prerequisite to Mercy Health. Several commenters wondered why additional alternate sites were not also considered as potential off-site alternatives. These sites included available vacant sites within the community, and purchasing the homes immediately east of the proposed on-site alternative.

Response 6: Please see previous Response 5 and associated attachments for more details on the off-site alternatives and the additional sites mentioned in Comment 6. Ohio EPA inquired about the feasibility of purchasing homes immediately east of the proposed on-site alternative during the Feb. 7, 2019. site visit. According to HZW, the feasibility of purchasing homes immediately east of the proposed on-site alternative was determined by the company to be infeasible given some homeowners unwillingness to sell their properties.

Selected Alternative End Users

Comment 7: A few commenters were concerned about the commitment of specific end users to occupy the proposed development.

Response 7: A letter of interest from Mercy Health, dated May 23, 2018, for the on-site alternative was provided with the initial permit application. However, Ohio EPA received concerns that the closing of the Lordstown General Motors plant in late 2018, may negatively impact the regional economy and; therefore, alter Mercy Health's commitment to the project. In light of these concerns, Ohio EPA requested the applicant provide

up-to-date correspondence from Mercy Health, affirming their continued commitment to the project, including whether Mercy Health was still committed to the alternatives provided in the permit application, or if other alternatives may be more appropriate. A second letter from Mercy Health, dated Jan. 21, 2019, was submitted to Ohio EPA which reaffirmed Mercy Health's continued commitment to the project. Ohio EPA has no reason to believe Mercy Health has altered their commitment since the Jan. 21, 2019 letter. Letters from other proposed end-users included with the permit application, such as for Akron Children's Hospital's proposed pediatric specialty care, EDM Management's proposed senior living complex, and P & S Equities, Inc. proposed residential development, also indicate their commitment to the project, but stress the importance that Mercy Health also be committed to providing the hospital facility as a key component of the medical/educational/residential campus. As stated in Response 5, the project purpose is "to provide the Trumbull County portion of the Youngstown-Warren Metropolitan Statistical Area with access to comprehensive healthcare, educational, and complementary residential facilities". If the concern is that they are going to get the 401 and then impact the site for something other than a hospital, the project description in the 401 Water Quality Certification clearly states that, "the project would construct a new St. Joseph hospital and attendant medical/educational/residential campus which would serve the Trumbull County portion of the Youngstown-Warren Metropolitan Statistical Area". The construction of a hospital is key to Ohio EPA's approval of the project.

Selected Alternative Logistics/Access

Comment 8: Several commenters were concerned with access to the site, including for those without transportation and for the potential for an increase in congestion and accidents near the on-site area, which was described as a high-accident area.

Response 8: Ohio EPA considered access to the site, including safety, as part of the accessibility, technical feasibility and logistics review components for the alternatives analysis.

Comment 9: One commenter commented that the on-site location provided the best alternative for access. Another

commenter commented that the on-site alternative was easily accessible.

Response 9: Noted, and considered as part of the antidegradation review

Reliability of the Selected Alternative

Comment 10: A few commenters were concerned with potential building problems which may occur with the on-site alternative as a result of building on wetlands.

Response 10: Ohio EPA reviewed geotechnical conditions as part of the technical and environmental feasibility components of the on-site review. Ohio EPA considered factors such as characteristics and properties of soils on the site, a review of depth to ground water and siting recommendations presented in the preliminary geotechnical report and feasibility of the storm water plan.

Support for the Project, Including Considering Social and Economic Need of the Local Economy

Comment 11: Many commenters expressed their general support for the project. Many (approximately twelve) of these commenters provided their support that the project would provide substantial needed social and economic opportunity for the region, including the creation of jobs, educational opportunity and increased tax base. Several (approximately six) of these commenters expressed support that the proposed on-site location was the best location for the proposed project. One of these commenters believed that it follows balanced growth as outlined in the Lower Mosquito Creek Watershed Balanced Growth Plan. It was frequently mentioned by supporters that the project provided a unique opportunity to improve the quality of life in the community, including increased educational opportunity and cutting-edge health care facilities, enhanced by the various proposed partnerships that would be located on the site. A few (approximately four) of these commenters commented that the need for the project was particularly important in light of the advanced median age of the population base. It was also mentioned that Eastwood complex is a financial hub in Trumbull County, and that this site would add tremendous value for the mall and all municipalities in

the area and bring tax dollars and revenue and jobs in a time when it is much needed. The importance of this project, concurrent with adhering to proper environmental due diligence, was stressed by many of the commenters.

Response 11: Noted, and considered as part of the antidegradation review.

Economic Concern for the On-site Alternative

Comment 12: One commenter was concerned that the value of adjacent homes would decrease with the proposed on-site alternative.

Response 12: With any development, there are potential positive and negative economic and social implications. Ohio EPA's antidegradation analysis considered this information and based on the totality of information determined that the requested water quality impacts were acceptable.

Comment 13: Several commenters expressed concern for the loss of wetlands and habitat quality as lost economic value and a lost asset for recreation, eco-tourism and for benefiting future generations of area residents.

Response 13: Impacts to economic value of the surface waters for recreation, tourism, aesthetics and other human use were reviewed during the alternatives analysis. Recreation, education and research, are considered functions or services under Ohio rules (Ohio Administrative Code 3745-1-54). Ohio EPA reviewed the regional significance of the functions and services the wetlands perform before making a decision regarding the water quality certification for the project.

Comment 14: One commenter expressed concern about the economic cost associated with potential flooding in downstream communities.

Response 14: Degradation to the ecosystem, as well as degradation to human welfare, were considered during the antidegradation review of the project. As part of the technical review, Ohio EPA requested more information regarding the applicant's storm water plan for the site. In response, HZW submitted a storm water plan and report on Feb. 12, 2019. The storm water report provided details and calculations demonstrating

that peak post-development rates of storm water runoff would be less than or equal to the peak pre-development rates of storm water runoff. Ohio EPA Division of Surface Water (DSW) completed an internal technical review of the proposed storm water plan. According to a storm water specialist with Ohio EPA, DSW, Northeast District Office on March 25, 2019, the calculations provided in the storm water plan were acceptable. Furthermore, the soil types and soil properties on the site should not be an issue for the proposed basins or underground detention, given that basins and underground detention do not rely on soil infiltration like bioretention and other practices. Ohio EPA requires the applicant obtain the required storm water construction general permit before commencing construction.

Anticipated Impact on Aquatic Life and Wildlife, Including Threatened and Endangered Species and Aquatic Habitat

Comment 15: Many commenters were concerned that the proposed development plan did not adequately protect the environment - the high-quality forested stream/wetland corridor, the Ohio Department of Natural Resources classified floodplain forest plant community, the wetlands, streams and the habitat it provides along Mosquito Creek. One commenter also raised concern for the need for some aquatic species, such as amphibians, to have access to both wet and dry land within contiguous habitat. A few commenters mentioned the adjacent properties were already preserved, and this should continue. A few commenters also wanted to know about other projects with comparable impacts Ohio EPA has approved.

Response 15: Degradation to the ecosystem, as well as degradation to human welfare, were considered during the antidegradation review of the project. Ohio EPA understands the sensitive and high-quality nature of the Mosquito Creek riparian corridor and worked with the applicant to develop a project footprint that minimizes impacts to the floodplain forest wetlands and streams, and that provides adequate buffer and long-term protection to these wetlands and streams.

It is difficult to directly compare different projects due to the unique aspects of each project that Ohio EPA reviews, the fact that projects are reviewed on a case-by-case basis, and the multiple variables involved in determining a permit

decision for a given project. However, the following projects located in Northeast Ohio had permitted wetland fill equal to or exceeding 16 acres and were approved between 2002 and present:

- LEIMCO (LEIMCO Development Company, Ltd, Lake County): 28.72 acres of wetland impacts (2006)
- CAK Runway 5/23 Improvement (Akron Canton Regional Airport, Stark and Summit Counties): 24.13 acres of wetland impacts (2006)
- Sunoco Mogadore-Vanport Pipeline (Sunoco Logistics Partners, L.P., Portage County): 16.79 acres of wetland impacts (2013)
- Scotts Hyponex 2 (Scotts Miracle-Gro Company, Wayne County): 24.90 acres of wetland impacts (2013)
- NEXUS Gas Transmission Project (Nexus Gas Transmission, LLC, multiple counties): 121.77 acres of wetland impacts (2017)
- Kinder Morgan Utopia Pipeline Project (Kinder Morgan Cochin, LLC, multiple counties): 26 acres of wetland impacts (2017)
- Rover Pipeline Project (Rover Pipeline, LLC, multiple counties): 81.34 acres of wetland impacts (2017)

Also, annual reports summarizing Section 401 Water Quality Certifications and Isolated Wetland Permits Ohio EPA has issued are available from 2002 through 2014 here (the 2002 report summarizes Isolated Wetland Permits only):
<https://www.epa.state.oh.us/dsw/401/permitting#149524502-annual-reports>

Comment 16: Many commenters were concerned that the application did not adequately address potential rare plants and wildlife in the area, and that in-depth inventories of species on the site and in the area by experts needed to be conducted.

Response 16: Information concerning threatened and endangered species comes from the comments received from U.S. Fish & Wildlife Service (USFWS) and Ohio Department of Natural Resources (ODNR). The applicant demonstrated that they contacted USFWS and ODNR and requested comments for the completeness review. According to the comments Ohio EPA received in the Environmental Review letter from ODNR dated Sept. 18, 2018, the Natural Heritage Database listed records for grove sandwort (*Moehringia lateriflora*), a

floodplain forest plant community, and Mosquito Creek floodplain conservation site within a one-mile radius of the project. Due to the project being within the habitat range of state-listed threatened and endangered fish species, ODNR recommended that no in-water work occur in perennial streams at least from April 15 to June 30. Additional considerations, such as significant degradation to aquatic life and/or aquatic organisms, impacts to unique or rare natural resources, sensitivity of the site design to the natural features of the site including existing flora and fauna, etc. were considered during the antidegradation review of the project.

Comment 17: Several commenters mentioned the significance of the site as an important migratory bird corridor and bird habitat, including its designation by the National Audubon Society as an Important Bird Area for wintering waterfowl. One commenter noted that some bird species require large acreage of uninterrupted forests.

Response 17: The impacts to aquatic-dependent species, including aquatic-dependent birds and their habitat, were considered during the antidegradation review of the project. The site was confirmed to be located within the Mosquito Creek Corridor, a National Audubon Society designated Important Bird Area. An environmental review was conducted by ODNR, which did not list any specific concerns related to bird species.

Comment 18: Several commenters expressed concern for potential impacts to amphibians, particularly various *Ambystoma* species of salamanders on the site, as well as to native fish species in Mosquito Creek. One commenter expressed concern that the site should first be evaluated as a potential breeding ground for the blue spotted salamander and three rare unisexual complexes of these salamanders known to occur in Howland Township, as well as concern that the project may fragment these potential populations and negatively impact their gene pool and existence.

Response 18: As previously mentioned, impacts to unique or rare natural resources and sensitivity of the site design to the natural features of the site were considered during the antidegradation review of the project. In addition, the impacts

to aquatic-dependent species, including amphibians and their habitat, were considered during the antidegradation review of the project. Maintenance of biodiversity (i.e., the number of community types, different species, and genetic variants of species found in a given area) is considered a function or service in Ohio's rules (Ohio Administrative Code 3745-1-54). Ohio EPA reviewed the regional significance of the functions and services the wetlands perform before making a decision on the water quality certification for the project. An environmental review was conducted by ODNR, which did not list any specific concerns related to amphibian species.

Cumulative Impacts

Comment 19: Several commenters were concerned with cumulative impacts to surface waters from the proposed on-site project combined with the proposed highway expansion at Hwy 46 and Hwy 82. Two commenters were concerned with the cumulative past and present impacts adjacent development of the Eastwood Mall and Baseball Stadium have had on the wetlands, floodplain, forests, water quality and flood protection, and that further filling would cause further degradation.

Response 19: Cumulative impacts, including past, present and reasonably foreseeable future impacts on the resources proposed for impact were considered during the antidegradation review of the project. HZW provided additional information on cumulative impacts to the Mahoning River Watershed in their response letter dated June 14, 2019, (please see Attachment 3). Information on the baseball stadium was not provided, and Ohio EPA could not locate permitting records of the baseball stadium during an internal records search. However, given the mapped location of the 100-year floodplain, it is reasonable to assume adjacent wetlands have been filled to accommodate past developments. For present and future projects within the Mahoning River Watershed, the letter acknowledges the large-impact scale of the Enterprise Park project, as well as the proposed TJX HomeGoods Distribution Center in Lordstown, which proposes to impact 0.56 acres of wetlands and 6,547.0 linear feet of stream. However, the letter also notes the relative rarity of projects of this scale in Northeast Ohio. According to the Ohio EPA 'Biological and Water Quality Study of the Lower Mahoning River Watershed, 2011 and

2013. Ashtabula, Columbiana, Mahoning and Trumbull Counties, Ohio and Lawrence County, Pennsylvania.' (2018), the Mosquito Creek Watershed is approximately 140.6 square miles/89,984 acres in area. Approximately 5.13 percent (7.07 square miles/4,534 acres) of the landcover within the Mosquito Creek Watershed is woody wetlands, 0.23 percent (0.32 square miles/204 acres) is emergent herbaceous wetlands and 22.4 percent (30.87 square miles/19,787 acres) of the watershed is developed. The 102.12-acre Enterprise Park project proposes to impact 15.21 acres of woody wetland and 0.74 acres of emergent herbaceous wetland, which would impact approximately 0.34 percent of the total existing woody wetlands, 0.36 percent of the total existing emergent herbaceous wetlands and 0.33 percent of the total existing wetlands within the Mosquito Creek Watershed, and would increase the developed land by 0.11 percent of the total watershed area. The Enterprise Park project proposes to impact 1,608.5 linear feet of stream. This would represent a 15.30 percent increase in stream impacts within the Mahoning River Watershed.

Human Health and Welfare

Comment 20: Ohio EPA received several comments regarding the negative impact the on-site alternative would have on human health. These commenters expressed concern about the impacts the project would have on trees, streams and wetlands, that is, the local ecosystem, and therefore, human health.

Response 20: Ohio EPA understands the interconnection between ecological health and human health and protecting human health and the environment are the Agency's primary goals. In addition to the impacts to ecological health, human health and welfare considerations, including storm water, water quality, drinking water supply, impacts to recreation, direct and indirect impacts to aquatic resources and cumulative impacts, were also considered during the antidegradation review of the project. Please see the following responses for more information relevant to this comment: Responses 13, 14, 19, 22, 24 and 27. In accordance with the wetland antidegradation rule (Ohio Administrative Code 3745-1-54), in order to avoid and mitigate for direct and indirect impacts to aquatic resources, Ohio EPA required long-term preservation of adequate buffers around the proposed preserved on-site streams and wetlands, as well as

additional compensatory mitigation for impacts to aquatic resources proposed for the project.

Comment 21: **A few commenters expressed concern that the location is not any appropriate or safe location for a hospital in respect to potential flooding.**

Response 21: Degradation to human health and welfare, were considered during the antidegradation review of the project. The facilities would be located outside of the 100-year floodplain. Construction would be subject to local building codes as well.

Comment 22: **Several commenters expressed concern for sewer overflows. Concerns included that the existing 8-inch sewer line proposed to be used for the site is inadequate and there is a history of the sewer clogging resulting in raw sewage backing up into Mosquito Creek during a flood.**

Response 22: Degradation to the ecosystem, as well as degradation to human welfare, were considered during the antidegradation review of the project. The Trumbull County Sanitary Engineers' Office indicated that there are no known operational nor functional issues with the sewer. Historically, the county had sanitary sewage overflows along manholes within the vicinity of the project associated with past operation issues and 100-year and 500-year flood events. There are no direct downstream sanitary overflows along the sewer and no combined sewer overflows. There is available capacity in the sewer, but the project connection would have to be evaluated for approval by both Trumbull County and Ohio EPA.

Comment 23: **A few commenters who are adjacent residents expressed concern for the safety and privacy of their families, including children, in terms of a decrease in privacy and increase in traffic congestion and noise.**

Response 23: Degradation to human welfare was considered during the antidegradation review of the project as it relates to water quality impairments. ; However, traffic congestion and noise issues are not direct considerations of the 401 water quality certification review.

Water Quality

Comment 24: Many commenters raised concerns with the potential for increased pollution loading and degradation of water quality in Mosquito Creek and adjacent Category 3 wetlands, particularly from runoff of pollutants from the site and the loss of wetlands to filter storm water runoff. One commenter was concerned with downstream impacts to the Mahoning River.

Response 24: Degradation to the water quality of Mosquito Creek, as well as the degradation of wetlands and other streams on the site, were considered during the antidegradation review of the project. Nutrient removal or transformation and sediment contaminant retention are considered functions or services in Ohio's rules (Ohio Administrative Code 3745-1-54). Ohio EPA considered the regional significance of the functions and services the wetlands perform before making a decision on the water quality certification.

Storm Water/Flooding

Comment 25: Many commenters were concerned with the on-site location regarding the potential for flooding, including mention that part of the proposed development is located in the 100-year floodplain, that the area is flood prone, swampy, low in elevation and adjacent to Mosquito Creek, and there was concern that removing trees and filling wetlands and the unnamed tributary streams would further exacerbate flooding. A 2003 flood was mentioned, during which heavy inundation occurred in the area of the Eastwood Mall. Many commenters mentioned they live adjacent to or near the proposed project site and were concerned storm water would run off from the site and flood their property. One commenter was concerned that mitigating for wetland loss outside of the lower Mosquito Creek corridor would negatively impact flood storage capacity. One commenter requested that the applicant provide a true and accurate representation of the 100-year floodplain.

Response 25: Ohio EPA requested the applicant minimize impacts within the 100-year floodplain, and obtain any necessary floodplain permits or approvals with the local floodplain administrator before commencing construction. In response to comments from Ohio EPA, HZW submitted final revisions to the impacts plan on June XX, 2019, which included a revised 100-year

floodplain boundary and impacts map (please see Attachment 1). Ohio EPA conducted an initial review of the draft proposed storm water plan, please see Response 14. Based on the preliminary review, Ohio EPA considered the proposed plan acceptable.

Comment 26: Several commenters that the proposed storm water treatment and/or information on the proposed storm water treatment is inadequate and that information on the volume of water and the kinds of pollutants or the effectiveness of the treatment of those pollutants has not been properly addressed. Commenters also requested that green infrastructure be incorporated into the project, to protect and maintain the sustainability of existing and future infrastructure. One commenter was concerned about the potential change in post-construction rates of storm water flow versus pre-construction rates.

Response 26: Please see Response 14 regarding Ohio EPA's technical review of the proposed storm water plan.

Ground Water

Comment 27: A few commenters expressed their concern about how the proposed project would affect ground water and ground water recharge.

Response 27: Ground water exchange, including the discharge and recharge of ground water, and water storage, are considered functions or services in Ohio's rules (Ohio Administrative Code 3745-1-54). Ohio EPA considered the regional significance of the functions and services the wetlands perform before making a decision on the water quality certification for the project. Also, Ohio EPA Division of Drinking and Ground Waters (DDAGW) completed a technical review of the proposed project. DDAGW determined the project would have no impact on any public water supply.

Permit Application

Comment 28: One commenter asked whether the applicant would need to reapply for a permit as they add each of the seven buildings proposed for the site in the permit

application. Another commented that permitting should be done building by building.

Response 28: This type of project would be permitted as a single and complete project, whereby all impacts proposed for the entire site would be permitted under one 401/404 permit; therefore, the applicant would not need to re-apply for each building. The permit assumes the plan presented in the permit application is what will be constructed, and impacts may not exceed those permitted in a water quality certification.

Comment 29: **One commenter asked where they could obtain a copy of the permit application.**

Response 29: An electronic copy of the permit application is available on the Ohio EPA website:
<http://wwwapp.epa.state.oh.us/dsw/401Applications/175502/>
and in Ohio EPA eDocs.

Comment 30: **One commenter wondered why the wetlands on site were not assessed with the Vegetation Index of Biotic Integrity (VIBI), rather than with the Ohio Rapid Assessment Method (ORAM).**

Response 30: An ORAM form is required to be submitted for all wetland characterizations associated with Section 401 Water Quality Certification applications. However, a VIBI may also be conducted, when it is determined that the additional data provided by the VIBI would be useful to more accurately characterize a wetland. For this project, VIBIs were conducted for both Wetland A and Wetland F.

Comment 31: **One commenter suggested that an Environmental Impact Assessment (EIA) should be done prior to making a permit decision.**

Response 31: Ohio EPA assesses environmental impacts to surface waters regulated under Section 401 of the Clean Water Act by requiring that key information be included with a Water Quality Certification application. The purpose and need of the project, an alternatives analysis, public involvement, evaluation of individual and cumulative impacts, intra-agency and inter-agency consultation and coordination, and mitigation of the resources are required as part of the Water Quality Certification application process. The need for

Environmental Impact Statements or an Environmental Assessment are determined by Federal regulations and are not applicable to state 401 regulations.

Mitigation

Comment 32: Several commenters were concerned that mitigation should occur within the Lower Mosquito Creek Watershed, and that if it did not, this would be a net loss of wetlands within this watershed and negatively impact the functions these wetlands are providing. One commenter stressed the importance of not only mitigating near the site, but of mitigating as close in time as possible to when impacts occur. Another commenter questioned if on-site replacement of wetlands had been considered.

Response 32: Mitigation for the project is a combination of on-site preservation and off-site mitigation, with off-site mitigation located within a service area as close as available to the site. Ohio EPA accepted the on-site preservation based on many factors, including that the preservation is of Category 3 wetlands, high quality Category 2 wetlands with reasonable potential to reestablish superior functions if preserved, and wetlands pivotal to the protection of the Category 3 wetlands. Ohio EPA regulations favor wetland mitigation bank credit and in-lieu fee credit over on-site permittee-responsible wetland mitigation (such as on-site wetland establishment); therefore, the purchase of in-lieu fee credits is an acceptable method of compensatory mitigation for the project in conjunction with the on-site preservation.

Comment 33: Several commenters were concerned that preservation of the Category 3 wetlands should not be considered toward mitigation credit for impacts to the Category 2 wetlands on the site. One commenter also was concerned that stream mitigation should entail restoration, not solely preservation.

Response 33: Preservation in accordance with Ohio Administrative Code 3745-1-54 may be an acceptable component of mitigation. Preserved areas require long-term protection, such as an environmental covenant or conservation easement. An Environmental Covenant, held by Howland Township, will be placed on the preserved portion of the site, which encompasses 27.41 acres of Category 2 and 3 wetlands. As

mentioned in Response 32, preservation is not the sole component of mitigation for the project.

Public Comment Period

Comment 34: A few commenters were concerned with the length of the comment period and expressed that it was too short. One commenter requested an additional 30-day comment period.

Response 34: The application was posted to the Ohio EPA website on Nov. 3, 2018. The public notice was published on Nov. 3 as well and included information regarding the Dec. 3, 2018, public hearing (30 days before the public hearing). The public notice specified that comments could be submitted to Ohio EPA through Dec. 10, 2018, (five business days after the public hearing). Ohio EPA also announced an extension during the public hearing. Comments were accepted through Dec. 10, 2018. These procedures and timelines are standard and in accordance with Ohio's rules.

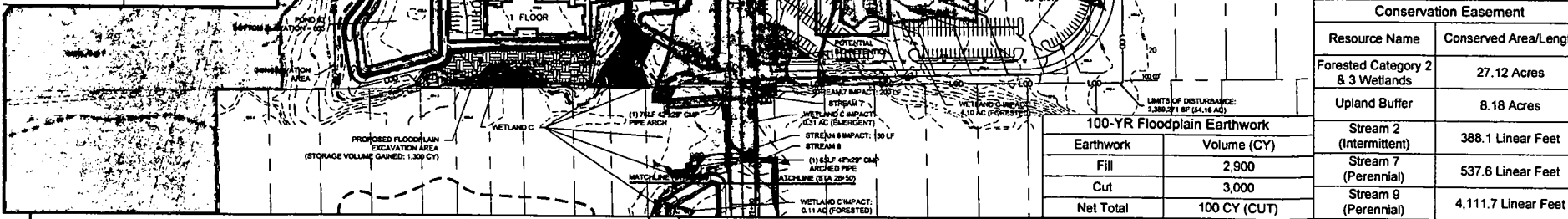
End of Response to Comments

Response to Comments

Attachment 1

Wetland Impacts		
Wetland Name	Permanent Impacts (AC)	Temporary Impacts (AC)
Wetland A (Forested)	3.45	
Wetland B (Forested)	5.11	
Wetland C (Forested)	4.21	
(Emergent)	0.31	
Wetland D (Forested)	0.26	
Wetland E (Forested)	0.33	
Wetland G (Forested)	0.34	
Wetland H (Forested)	1.51	0.05
(Emergent)	0.38	
Total	15.90	0.05

Stream Impacts	
Stream Name	Permanent Impacts (LF)
Stream 1 (Intermittent)	162.0
Stream 2 (Intermittent)	174.0
Stream 3 (Intermittent)	412.6
Stream 4 (Ephemeral)	184.7
Stream 5 (Intermittent)	171.3
Stream 6 (Intermittent)	173.9
Stream 7 (Perennial)	200.0
Stream 8 (Intermittent)	130.0
Total	1,608.5



EXISTING LEGEND	
---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
---	EXISTING PROPERTY LINE
---	EXISTING EASEMENT
---	EXISTING EDGE OF ROAD
---	EXISTING STRUCTURE
---	EXISTING GAS LINE

PROPOSED LEGEND	
---	EXISTING WATER LINE
---	EXISTING WATER VALVE
---	EXISTING SANITARY LINE
---	EXISTING SANITARY MANHOLE
---	EXISTING STORM SEWER
---	EXISTING CATCH BASIN
---	EXISTING OVERHEAD ELECTRIC LINE
---	EXISTING POWER POLE
---	EXISTING STREAM
---	EXISTING TREELINE
---	EXISTING SOILS
---	EXISTING FORESTED WETLANDS (CAT 1 OR 2)
---	EXISTING FORESTED WETLANDS (CAT 3)
---	EXISTING EMERGENT WETLANDS (CAT 3)
---	EXISTING SIGN
---	LIMITS OF DISTURBANCE

PROPOSED LEGEND	
---	MAJOR CONTOUR
---	MINOR CONTOUR
---	PROPOSED SANITARY LINE
---	PROPOSED SANITARY MANHOLE
---	PROPOSED GAS LINE
---	PROPOSED WATER LINE
---	PROPOSED WATER VALVE
---	PROPOSED FIRE HYDRANT

100-YR Floodplain Earthwork	
Earthwork	Volume (CY)
Fill	2,900
Cut	3,000
Net Total	100 CY (CUT)

Conservation Easement	
Resource Name	Conserved Area/Length
Forested Category 2 & 3 Wetlands	27.12 Acres
Upland Buffer	8.18 Acres
Stream 2 (Intermittent)	388.1 Linear Feet
Stream 7 (Perennial)	537.6 Linear Feet
Stream 9 (Perennial)	4,111.7 Linear Feet

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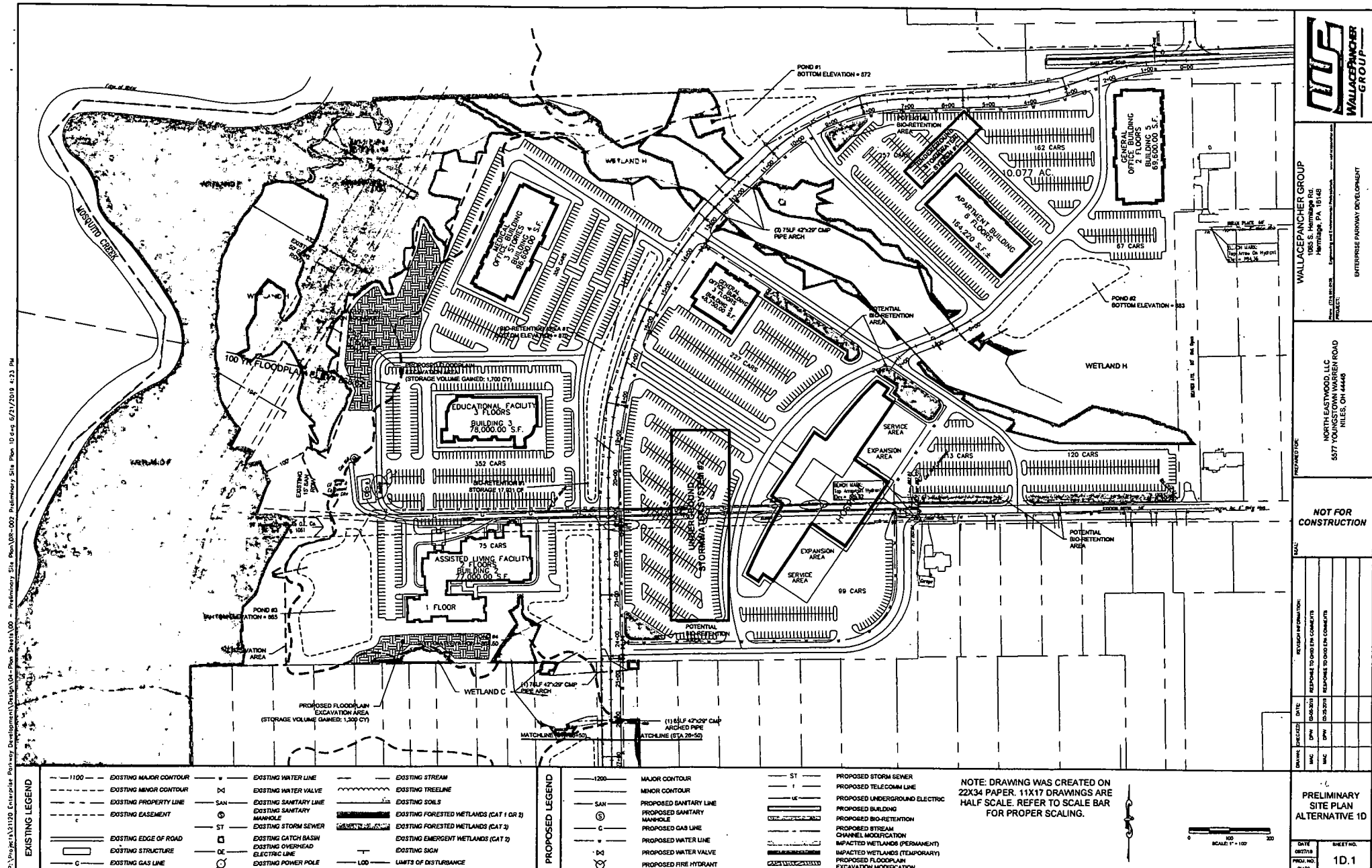
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**ITEM 6.2.1
LAYOUT AND
ROAD EXTENSION
ALTERNATIVE 1D
[REVISION 1]**

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DATE: 08/27/19
REVISED: 10/21/20
BY: [Signature]
CHECKED: [Signature]
DATE: 08/27/19
REVISED: 10/21/20
BY: [Signature]
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WALLACEPANCHER GROUP
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Engineering and Construction Management
PROJECT:

PREPARED FOR:
NORTH EASTWOOD, LLC
5577 YOUNGSTOWN WARREN ROAD
NILES, OH 44448

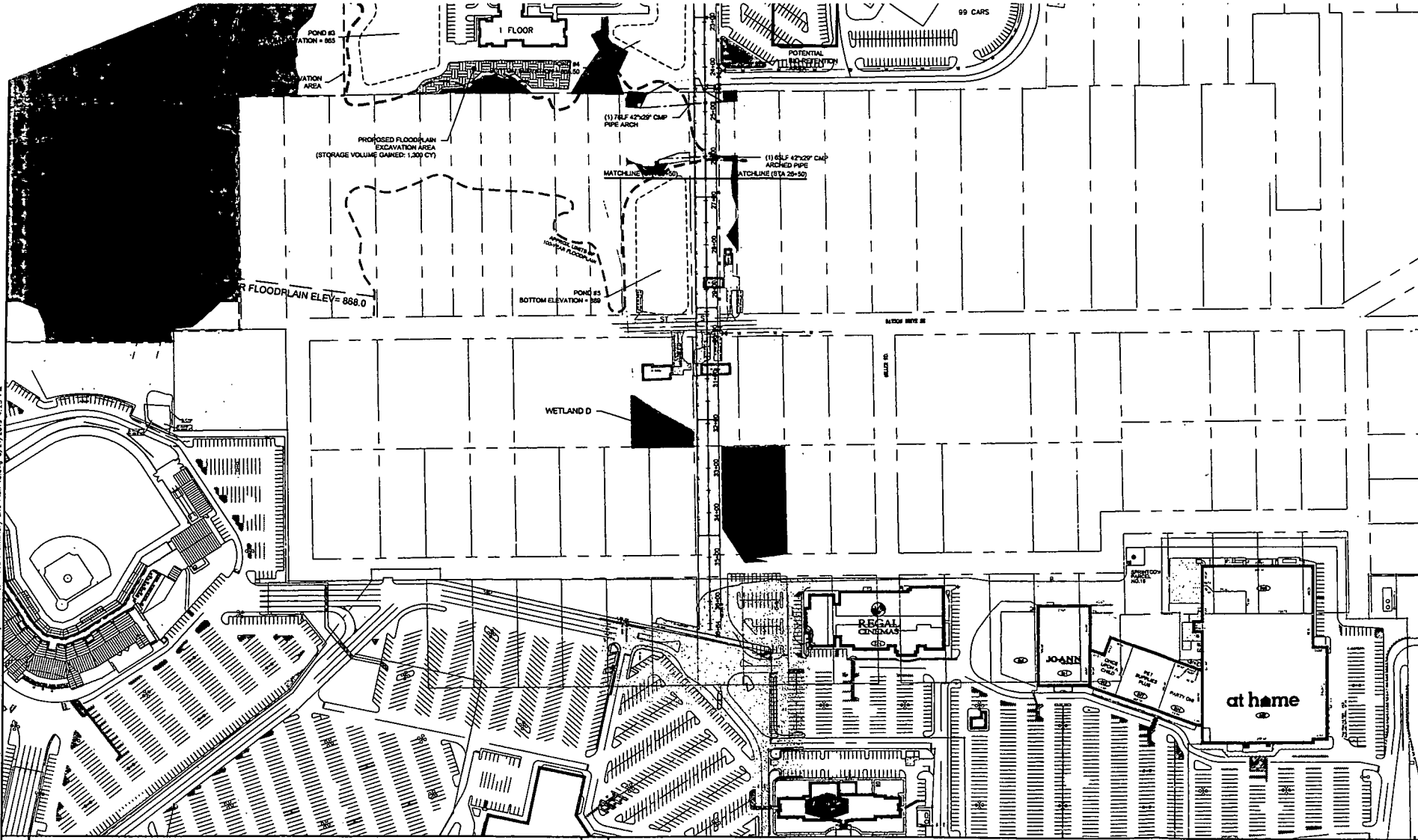
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DRAWN		CHECKED	DATE	REVISION INFORMATION	REASON
MAC	DPW		05-05-2019	RESPONSE TO ORO EPM COMMENTS	
MAC	DPW		05-25-2019	RESPONSE TO ORO EPM COMMENTS	

PRELIMINARY
SITE PLAN
ALTERNATIVE 1D

DATE 08/27/18	SHEET NO. 1D.1
PROJ. NO. 21120	

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EXISTING LEGEND	
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--- 1200 ---	EXISTING MINOR CONTOUR
---	EXISTING PROPERTY LINE
---	EXISTING EASEMENT
---	EXISTING EDGE OF ROAD
---	EXISTING STRUCTURE
---	EXISTING GAS LINE
---	EXISTING WATER LINE
---	EXISTING WATER VALVE
---	EXISTING SANITARY LINE
---	EXISTING SANITARY MANHOLE
---	EXISTING STORM SEWER
---	EXISTING CATCH BASIN
---	EXISTING OVERHEAD ELECTRIC LINE
---	EXISTING POWER POLE
---	EXISTING STREAM
---	EXISTING TREELINE
---	EXISTING SOILS
---	EXISTING FORESTED WETLANDS (CAT 1 OR 2)
---	EXISTING FORESTED WETLANDS (CAT 3)
---	EXISTING EMERGENT WETLANDS (CAT 2)
---	EXISTING SIGN
---	LIMITS OF DISTURBANCE

PROPOSED LEGEND	
---	MAJOR CONTOUR
---	MINOR CONTOUR
---	PROPOSED SANITARY LINE
---	PROPOSED SANITARY MANHOLE
---	PROPOSED GAS LINE
---	PROPOSED WATER LINE
---	PROPOSED WATER VALVE
---	PROPOSED FIRE HYDRANT
---	PROPOSED STORM SEWER
---	PROPOSED TELECOMM LINE
---	PROPOSED UNDERGROUND ELECTRIC
---	PROPOSED BUILDING
---	PROPOSED BIO-RETENTION
---	PROPOSED STREAM CHANNEL MODIFICATION
---	IMPACTED WETLANDS (PERMANENT)
---	IMPACTED WETLANDS (TEMPORARY)
---	PROPOSED FLOODPLAIN EXCAVATION MODIFICATION

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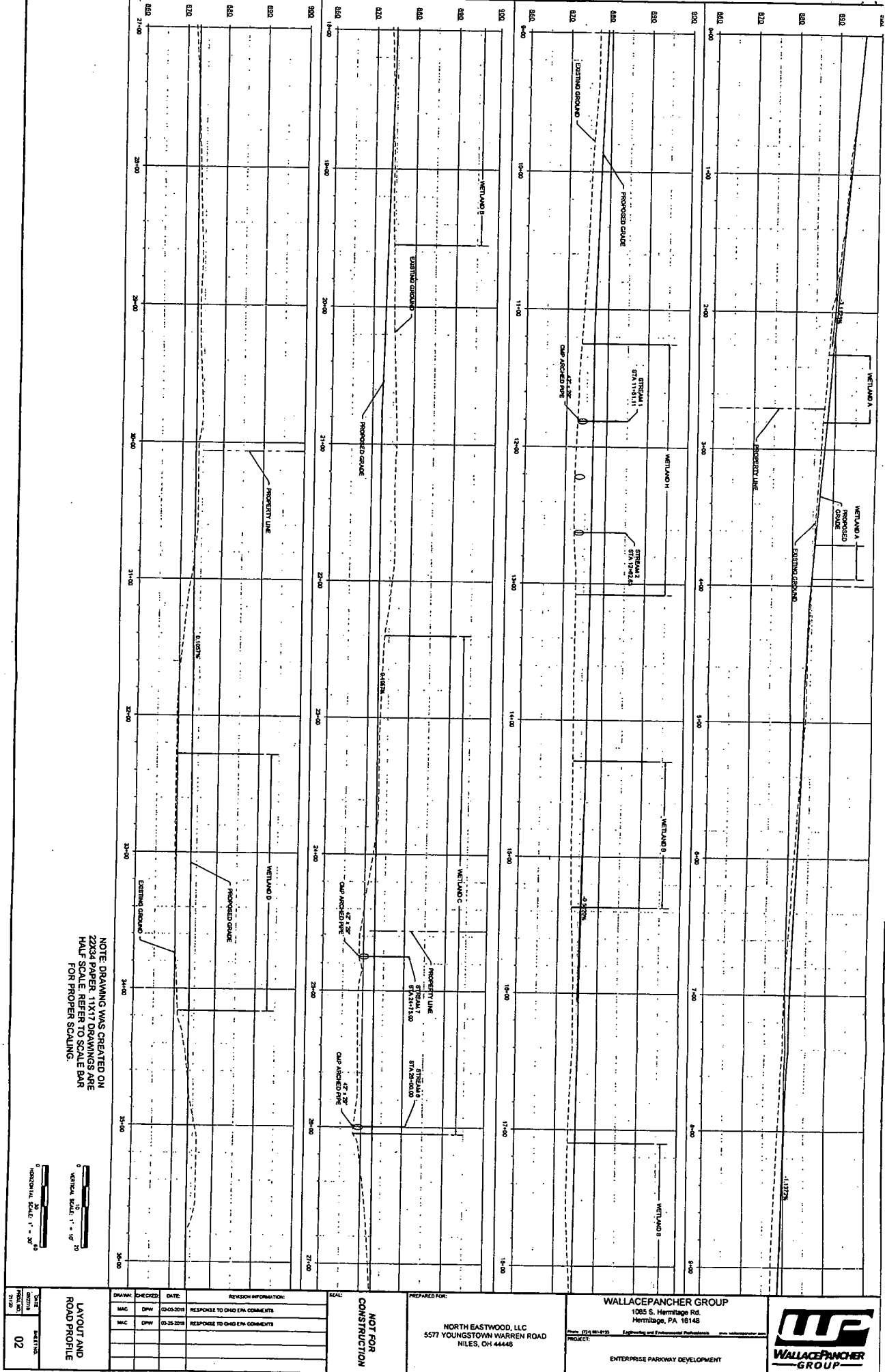
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at home

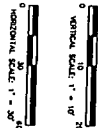
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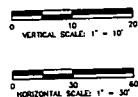
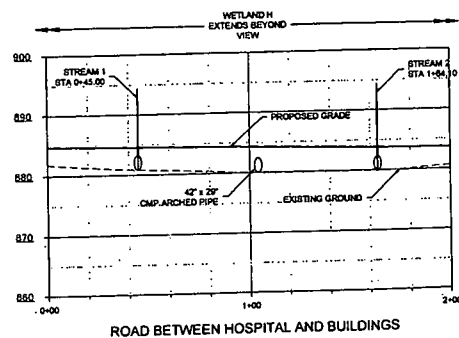
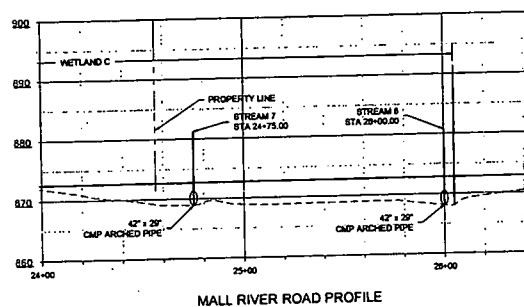
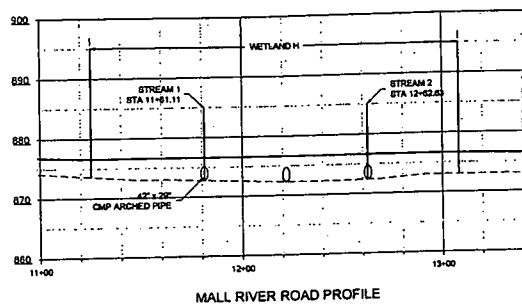
WALLACEPANCHER GROUP	
1095 S. Main St. Harrisburg, PA 17148 Tel: 717.634.1233 Fax: 717.634.1234 www.wallacepancher.com	
ENTERPRISE PARKWAY DEVELOPMENT	
NORTH EASTWOOD, LLC 5577 YOUNGWOOD PARKWAY WILKES, OH 44156	
NOT FOR CONSTRUCTION	
PRELIMINARY SITE PLAN ALTERATION 1D	
DATE 06/27/19	SHEET NO. 10.2



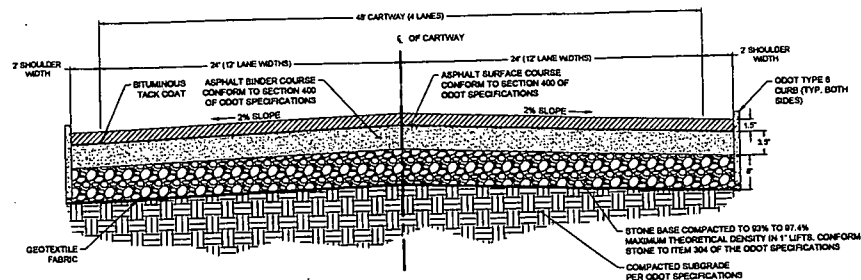
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DATE 07/19/2019 PROJECT NO. 02	LAYOUT AND ROAD PROFILE	DRAWN BY MAC	CHECKED BY DFW	DATE 03-05-2019	RESPONSE TO CHD EIR COMMENTS	REVISION INFORMATION	PREPARED FOR NORTH EASTWOOD, LLC 5577 YOUNGSTOWN WARREN ROAD NILES, OH 44448	WALLACEPANCHER GROUP 1065 S. Hermitage Rd. Hermitage, PA 16148 Phone: (724) 941-9191 Engineering and Environmental Professionals www.wallacepancher.com	
		DATE 07/19/2019	PROJECT NO. 02	DRAWN BY MAC	CHECKED BY DFW	DATE 03-05-2019	RESPONSE TO CHD EIR COMMENTS	PROJECT ENTERPRISE PARKWAY DEVELOPMENT	



NOTE: DRAWING WAS CREATED ON 22X34 PAPER. 11X17 DRAWINGS ARE HALF SCALE. REFER TO SCALE BAR FOR PROPER SCALING.

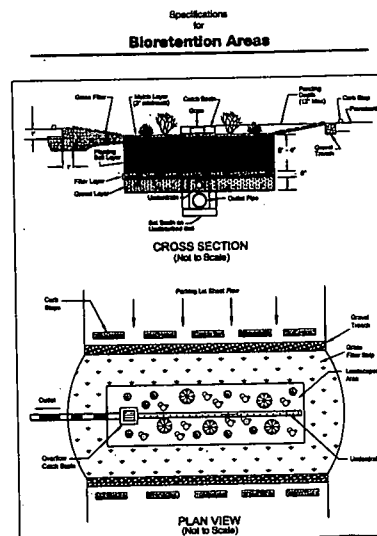


NOTE8:

1. CONTRACTOR TO VERIFY STABILITY OF THE SUBGRADE
2. SUBGRADE AND STONE BASE TO BE PROOFROLLED
3. ALL BITUMINOUS PAVEMENT CONFORMS TO DODOT SPECIFICATIONS, LATEST EDITION.
4. ALL SUBGRADE MATERIAL MUST CONFORM TO DODOT SPECIFICATIONS, SECTION 301.
5. SUBGRADE TO BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST, ASTM D 1557, A PROCTOR TEST OF THE SUBGRADE SOIL SHOULD BE PERFORMED IMMEDIATELY PRIOR TO CONSTRUCTION
6. BITUMINOUS TACK COAT MUST BE ADDED BETWEEN BITUMINOUS LAYERS OF ASPHALT

DETAIL
N.T.S.

CROWNED ROADWAY AND PAVEMENT

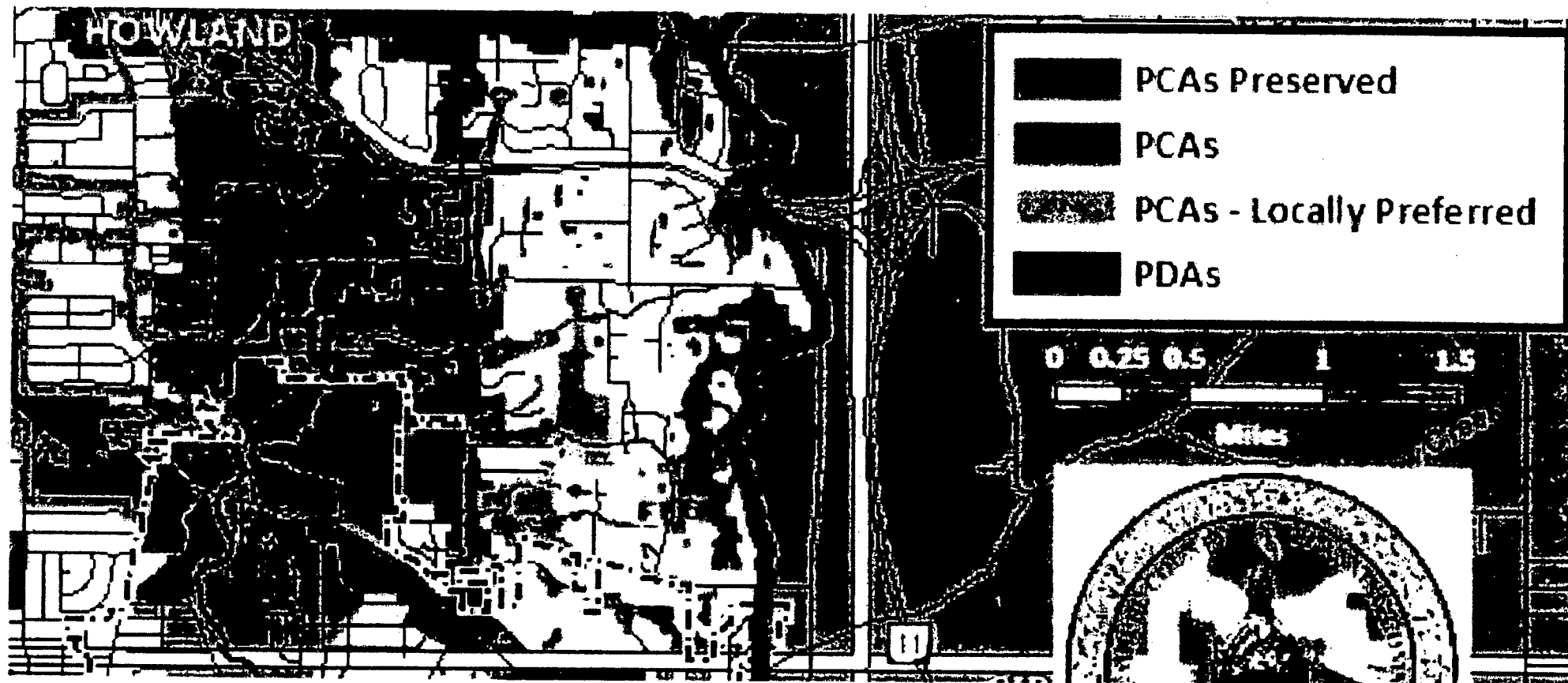


NOTES:

1. ONLY USE NATIVE VEGETATION FOR BIORETENTION AREAS.
2. REFER TO THE LATEST EDITION OF THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) RAINWATER AND LAND DEVELOPMENT MANUAL FOR FURTHER SPECIFICATIONS.

Response to Comments

Attachment 2



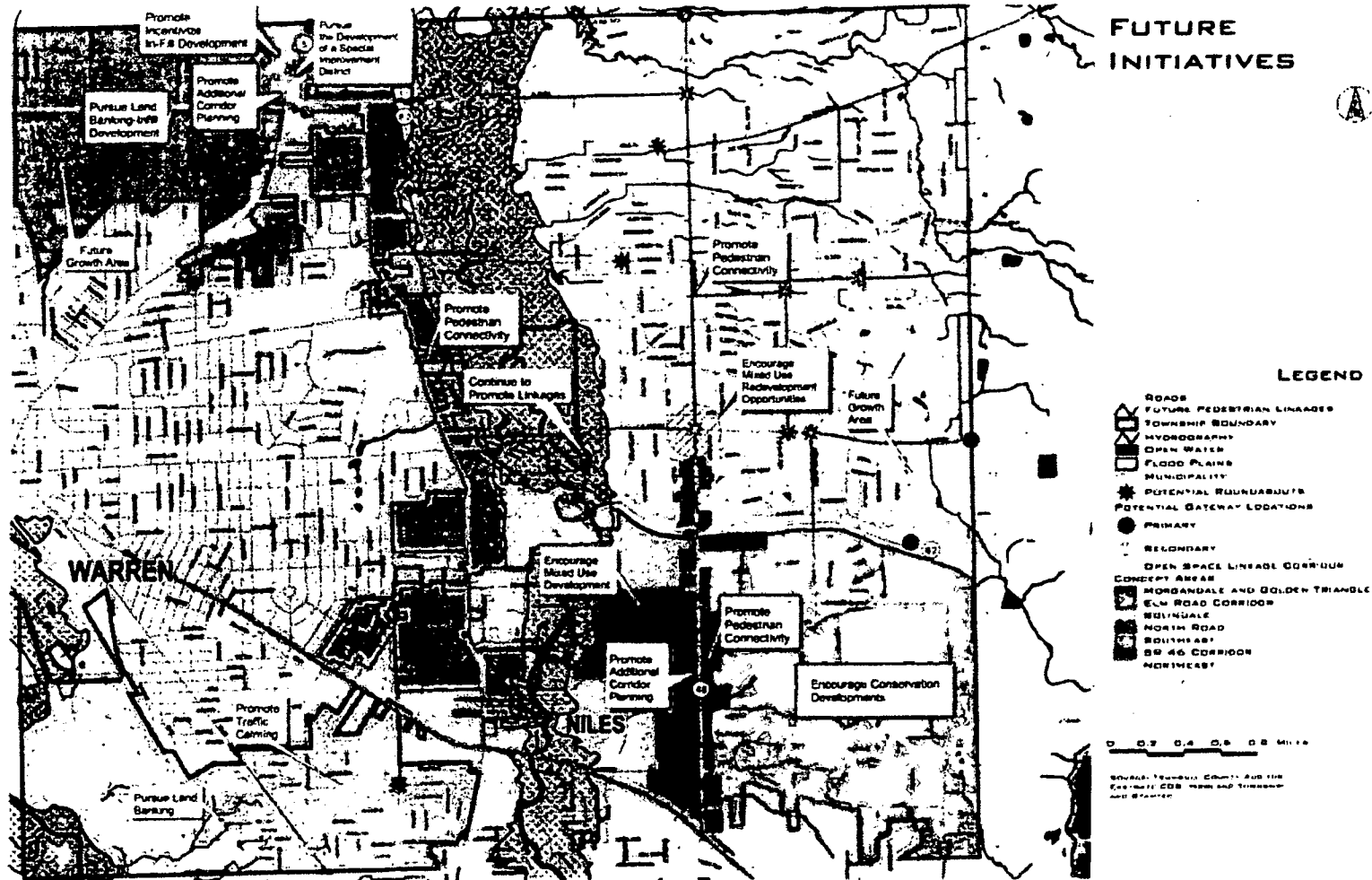
— approx. site boundary

2010



HOWLAND TOWNSHIP

COMPREHENSIVE COMMUNITY PLAN

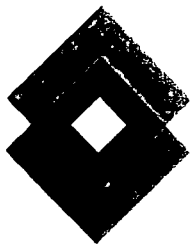


HOWLAND TOWNSHIP COMPREHENSIVE COMMUNITY PLAN

★ Approx. site location

Response to Comments

Attachment 3



HZW
Environmental
Consultants

March 14, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

**Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps'
February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA#
LRP-2017-1643)**

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the Corps.¹ For ease of reference, each of the Corps' comments is reiterated below in italics, followed by North Eastwood's response.

I. SUMMARY OF PUBLIC COMMENTS RECEIVED BY THE CORPS

¹ North Eastwood has responded to similar comments provided by Ohio EPA in conjunction with its review of the application for the state water quality certification required for the Project. Those responses, dated December 26, 2018 and February 12, 2019, have been provided to the Corps previously, and are incorporated by reference herein. See December 26, 2018 letter from B. Latoche, HZW Environmental Consultants, to J. Boyle et al, Ohio EPA re North Eastwood LLC/Enterprise Park at Eastwood/Preliminary Response to Comments (December 26, 2018 Response to Ohio EPA Comments) and February 12, 2019 letter from B. Latoche, HZW Environmental Consultants, to C. Hardesty, Ohio EPA re North Eastwood LLC/ Enterprise Park at Eastwood/Response to Ohio EPA's January 11, 2019 Comments on the Application for a Water Quality Certification (February 12, 2019 Response to Ohio EPA Comments). We urge the Corps to reanalyze the initial Application and to study in detail each of the prior submissions that we have made to the Ohio EPA.

- a. In a letter from Ohio History Connection (Ohio State Historic Preservation Office) dated September 12, 2018, they stated that the project site has not been surveyed for archeological resources since the mid-1800's and the location has remained relatively undisturbed from modern construction activity. They also requested that any buildings that appear to be over 50 years old in the "area of Potential Effect (APE)" should be documented and evaluated for National Register of Historic Places (NRHP) eligibility.

Response: In response to the State Historic Preservation Office's (SHPO's) request, the Applicant contracted the services of cultural resource consulting firm EMH&T to perform a Phase I Cultural Resources Survey within the proposed footprint of the Project. Phase I Cultural Resources Survey for the Approximately 54 Ac. Enterprise Parkway Development in Howland Township, Trumbull County, Ohio was issued on March 5, 2019, and is included as Attachment 1. This report concludes that no archeological sites were identified within the boundaries of the Project footprint. It also states that while one (1) structure greater than 50 years old was located within the study area, this residential home was otherwise unremarkable and thus is not eligible for addition to the National Register of Historic Places. As such, the Applicant believes that SHPO's comment has been addressed and that the Project will have no effect on cultural resources.

- b. In an email from the U. S. Environmental Protection Agency (USEPA) Region 5 dated September 19, 2018 they state you have not demonstrated compliance with several aspects of the 404(b)(1) Guidelines (Guidelines) regarding purpose, need, and alternatives; avoidance and minimization; and mitigation as outlined below:
- i. They do not believe you have addressed the purpose, need, and alternatives within your application. They state that the Akron Children's Hospital has expressed interest for possible future use, not a current need; they request you consider a phased approach where the Akron Children's Hospital wing is not built until it is needed, which will avoid portions of Wetland B and Wetland C on-site. They state that the project purpose of creating an attractive facility and competing economically with area hospitals are too narrow to comply with the Guidelines and should not be considered when determining the Least Environmentally Damaging Practicable Alternative (LEDPA). In addition, they state that the provided third reason for dismissing the alternative of upgrading the existing hospital is cost. However, they refer to the application stating that the cost of upgrading the current facility was cited in the application as being "80-85%" of that of building the preferred new structure. The reasoning stated in the application that it is not feasible due to cost is contradictory and they state that this should not be considered when determining the LEDPA. They also request additional information regarding the existing utility installation as cited as a reason for not considering the expansion at the existing facility.

Response: US EPA's Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Guidelines) prohibit the discharge of dredged or fill material "if there is a practical alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does

not have other significant adverse environmental consequences." An alternative is practicable "if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." 40 CFR 230.10. With respect to Enterprise Park, a fulsome analysis of alternatives available, both off-site and on-site, that meets the criteria outlined in the *Guidelines* has been undertaken to arrive at the LEDPA.

With respect to off-site alternatives, the siting criteria outlined by Mercy Health for selection of a site for a new St. Joseph Hospital was quite specific. Mercy Health's criteria included: availability of the real estate for acquisition, location of the real estate within the current or future limits of the City of Warren; parcel size of a minimum of twenty five (25) acres with an additional five (5) acres for expansion; proximity of the real estate to the geographic center of Trumbull County; proximity of the real estate to complementary amenities such as hotels, restaurants, financial institutions, various services, and retail facilities; appropriateness of existing zoning; superior vehicular accessibility to the site; easy identifiability of the Project location; and environmental considerations. Mercy Health was aided in its search by its real estate consultant, Cushman & Wakefield. Mercy Health, with Cushman & Wakefield's assistance, evaluated twenty three (23) potential sites against its siting criteria. Given the size of the undertaking and the specifics of Mercy Health's criteria, only one site, Enterprise Park at Eastwood, met all of Mercy Health's requirements. As a result, no other site is a "practical alternative" (as defined in 40 CFR 230.10) for the Project; and thus no other site is "available and capable" of consideration. Please refer to the initial Application to the Corps and to the Ohio EPA, specifically Items 5.2.1 and 5.2.2, pages 22-32; Item 5.2.3, pages 34-36; and Item 5.5, pages 42-47 for additional information regarding off-site alternatives, the potential impacts of not proceeding with the Project at the subject site, and the social and economic considerations relating to the choice of Enterprise Park as the site for the Project. Also, refer to the *December 26, 2018 Response to Ohio EPA Comments* and the *February 12, 2019 Response to Ohio EPA Comments* at p 15.

With respect to on-site alternatives, North Eastwood considered four (4) on-site alternatives for the Project: Alternative 1A, Alternative 1B, Alternative 1C and Alternative 1D, to arrive at selection of Alternative 1D as the LEPDA. As discussed at length in the Application, the geographic constraints of the site, coupled with the size of the building proposed by St. Joseph, limit the options that are available for the layout of the Project. Alternative 1D can accommodate the Project and, just as importantly, presents the least adverse impact to wetlands and jurisdictional waters of all other options considered as required by 40 CFR 230.10.

US EPA also suggests that the expression of interest by Akron Children's Hospital reflects a possible future need rather than a current need. Consequently, impacts to Wetlands C and D could be avoided by removing Akron Children's Hospital from the equation. In actuality, the statement by Grace Wakulchik, President of Akron Children's Hospital, is that "Akron Children's Hospital is committed to continue working with Mercy Health and the St. Joseph Hospital staff to provide pediatric care

in the existing hospital facility and the new health care facility when it is completed" which clearly reflects Akron Children's Hospital's current commitment to the Project. See Application at Exhibit 16. Also, the delivery of specialty pediatric services is an important and closely aligned component of what Mercy Health hopes to provide to the community and cannot and should not be removed from the Project.

Moreover, in our analysis of the initial Application pertaining to Akron Children's Hospital, we have been unable to locate any reference to its expression of "interest for possible future use" or "not a current need" or the requirement for a separate "wing" in any of the narrative or exhibits. Also, we see no reference in the Application to support the assumption that Mercy Health or Akron Children's Hospital anticipate a separate and distinct building wing in order to house the Akron Children's facilities. We are advised that the pediatric services provided by Akron Children's Hospital would be fully integrated into various areas of St. Joseph's Hospital, with perhaps only one isolated area utilized exclusively by Akron Children's Hospital. Have we missed something? If so, please refer us to where these sentiments are stated by Akron Children's Hospital, and we shall attempt to clarify the issue and/or obtain a supplemental letter of explanation from same.

The primary focus of US EPA's comment is the threshold decision by Mercy Hospital to relocate as opposed to upgrading and expanding at its existing location. US EPA suggests that the "unattractiveness" of the existing facility and the inability to compete as a result are not legitimate factors for consideration. First of all, use of the phrase "unattractive facility" on page 23 of the Application should not be misconstrued to refer only to the physical aspects - - - the appearance - - - of the hospital building. To the contrary, the reference to "unattractive" in characterizing Mercy Health's decision should be read in a much broader context, i.e. unattractive from an economic perspective; unattractive in terms of Mercy Health's ability to remain competitive in the marketplace; unattractive to Mercy Health in its efforts to locate a site that is easily accessible; unattractive in terms of offering expansion capabilities; and unattractive insofar as the image and presentation to the public of a new St. Joseph's Hospital which Mercy Health requires in its efforts to properly serve the Trumbull County area.

In any event, the decision by Mercy Hospital to relocate its existing facility was based on a comprehensive analysis of continuing to do business at the existing location in light of the need for an upgrade and expansion of those facilities. As noted in the Application at p 23, Mercy Health concluded, with the assistance of experts, Halsa Advisors and Strollo Architects, that upgrading and expanding at its existing location was not feasible on the basis of cost, the inordinate length of time it would take to implement the upgrade and expansion, the major inconveniences to patients, staff and visitors during multiple phases of construction and the significant operating inefficiencies associated with such a project. Moreover, the location of Enterprise Park in the geographic center of the community to be served by Mercy Health, the superior vehicular accessibility at Enterprise Park, the synergies presented by complementary medical, educational, office and residential facilities

proposed within Enterprise Park, and the proximity to complementary amenities such as hotels, restaurants etc. all contributed to the decision by Mercy Health to relocate to Enterprise Park. Thus, to single out the statement regarding the "unattractiveness" of the existing facility and to misconstrue this word by affording it a very narrow and restrictive meaning ignores the multiple reasons underlying Mercy Health's decision.

Furthermore, the seemingly contradictory position relating to the comparative "cost" of a brand new versus a renovated hospital facility is not at all incongruous if one understands the various factors weighed by Mercy Health, Cushman and Wakefield, and Halsa Advisors. As these entities analyzed the facts, the actual "cost" of staying in the existing hospital building extends far beyond a comparison of merely the hard construction expenditures of renovation and expansion versus new construction. "Cost" as used by Mercy Health in its decision making process, includes the numerous lost opportunities that would certainly result from their staying in St. Joseph's present facility and renovating same, versus moving to Enterprise Park - - - i.e. the loss of traffic access, the unquantifiable but real expense due to inconveniencing the patrons and staff for a period of up to five years during the various renovation phases; the costly minimization of market presence by being located in a primarily residential area that is devoid of amenities such as those available at the Eastwood Mall Complex, etc. Each of these factors represent real/genuine costs that would be precipitated by staying at the existing St. Joseph site. In effect, when added to the construction expenditures of a new as opposed to a renovated building, the true overall price to be paid by remaining on Eastland Avenue could far exceed the cost of moving and constructing a modern and well-located facility at Enterprise Park. The bottom line is that Mercy Health intends to provide a bigger, better, and more appealing hospital to the residents of Trumbull County, and if they were to accept anything less, it would exact a huge "cost" on them.

In any event, even if the out-of-pocket hard construction expenditures represented the sole meaning of the word "cost" in the context of Mercy Health's analysis, the comparison of cost between the two options would not necessarily be contradictory because the hard cost of construction relating to a renovation and expansion of any building is extremely difficult to ascertain. The 85% cost estimate of renovation is likely to be a low estimate, given the inherent problems associated with renovating existing buildings, such as the potential need for asbestos remediation, the vagaries of existing utility installations, the distinct possibility of not being able to acquire the necessary adjacent property for additional parking, etc. In any event, the pure dollars and cents side of upgrading and expanding the existing facility merely represents one of multiple factors considered in detail by Mercy Health and its consultants. As the quote from the Halsa flyer, Exhibit 15 of the Application observes "... we'll tell you when a [converted] building isn't the right solution to your problems... we've saved our clients millions of dollars on buildings.... that weren't strategically justified".

In answer to another question raised in the US EPA letter, the phrase “vagaries of existing utility installations” refers to the oftentimes unpredictable placement, size, and installation method of utility lines and services existing within the walls, ceilings, and floor slabs of any existing structure. During initial construction phases, it is not at all uncommon for various tradesmen to extend utilities wherever and however they deem appropriate, many times in locations that are inconsistent with the detailed working drawings as prepared by the architects and engineers. These in-field modifications are not intended to be malicious, nor are they intended to defeat the purposes of the working drawings; rather, these changes reflect responses to unanticipated field conditions which invariably arise during the renovation of an existing structure. In any event, when plans for demolition, utility relocations, utility upgrades, etc. are developed in connection with a building renovation, the consistent unpredictability of existing utility installations often gives rise to extremely expensive in-field construction expenditures, that cannot be budgeted for as part of the original cost estimates. Accordingly, based on this factor alone, the 85% cost estimate of a renovation could conceivably increase to 90-95% of the expenditure related to the construction of an entirely new building.

- ii. *The USEPA does not feel that the design including parking lots, which constitute the large portion of the proposed impacts to aquatic resources, meets the avoidance and minimization requirement for the Guidelines. They request that you consider construction of a parking garage to replace the majority of the proposed parking lot spaces in order to comply with the Guidelines.*

Response: The Guidelines require evaluation of “practicable” alternatives to the proposed discharge that either avoid a discharge or minimize the potential adverse impacts of the discharge on the aquatic ecosystem. 40 CFR 230.10(a)(1)(i) and (d). North Eastwood has evaluated construction of a parking garage in lieu of the surface parking and concluded that the construction of a parking garage is cost prohibitive and not a “practicable” alternative for the Project within the meaning of 40 CFR 230.12(a)(2). The cost per square foot to construct a parking garage as well as the cost of long term maintenance of a parking garage far exceeds the cost to construct and maintain on-grade or surface parking. There are numerous other reasons why this option is not practicable, including resistance to payment of parking fees, aesthetics etc. that were explained in North Eastwood’s response to a similar comment by Ohio EPA. *See pages 6-8 of February 12, 2019 Response to Ohio EPA Comments.*

North Eastwood had nonetheless further evaluated the size of the parking areas proposed in its original Application in an effort to significantly reduce the number of parking spaces. These reductions were obtained by the elimination in its entirety of one parking field previously intended as parking for the apartment building, as well as the redesign of the parking lot serving the assisted living facility. Together, these modifications resulted in the elimination for 187 previously planned parking spaces. The reductions are further explained on pages 5-6 of the *February 12, 2019 Response to Ohio EPA Comments*. Accordingly, North Eastwood has revised its site map of

Alternative 1-D, which is both the LEDPA and the selected alternative for the Project.
See February 12, 2019 Response to Ohio EPA Comments.

- iii. The USEPA cited that the Federal 2008 Mitigation Rule states that there is greater risk and uncertainty associated with ILF programs than mitigation banks regarding the implementation of the compensatory mitigation project and its adequacy to compensate for lost functions and services. They recommend that you seek out other sources of mitigation before ILF programs, such as available credits from mitigation banks in the service area or secondary service area.

Response: When considering options for providing the required compensatory mitigation, both US EPA and the Corps are required to consider type and location options in the order or "hierarchy" set forth in 40 CFR 230.93(b) and 33 CFR 332.3(b). *See Compensatory Mitigation for Losses of Aquatic Resources* 73 Fed Reg. 19594 (April 10, 2008) (2008 Federal Mitigation Rule). While the purchase of credits from a mitigation bank with a service area that encompasses the area where the impacts will occur is the first option in the hierarchy, that option simply is not available to the Applicant. As far as the Applicant and its consultants are aware, no such mitigation bank credits are currently available within the Mahoning River watershed, either in a primary or secondary service area capacity. As such, our mitigation proposal offers the purchase of In-Lieu Fee Program (ILFP) credits. The purchase of ILFP credits is the second option described in the hierarchy of the 2008 Federal Mitigation Rule. There is nothing in the 2008 Federal Mitigation Rule to suggest that this approved method of satisfying compensatory mitigation requirements is not an acceptable method of doing so once the availability of purchase of credits from a mitigation bank has been exhausted as implied by US EPA's comment. Notwithstanding, if you are aware of any mitigation banks with available credits, please notify us immediately and we will adjust our proposed mitigation plan accordingly.

- c. In a letter from Ohio Department of Natural Resources (ODNR) dated September 18, 2018, they provided the following comments:

- i. The ODNR noted the presence of Grove sandwort (*Moehringia lateriflora*), state potentially threatened, floodplain forest plant community, and Mosquito Creek Floodplain Conservation Site within one-mile of the project.

Response: As discussed in the original permit application and re-submitted here for your reference, the Applicant presents the following information regarding these resources:

1. Mosquito Creek Floodplain Conservation Site: This resource is shown over ½ mile north of the Project Area. Thus, it will not be impacted by the Project.
2. Floodplain Forest Plant Community*: This resource is located partially on the western periphery of the Project Area and abuts Mosquito Creek. The Project will

not involve work within the forest as identified in the letter so this resource will not be impacted by the Project.

3. *Moehringia lateriflora* (Grove Sandwort – Potentially Threatened): According to ODNR, *M. lateriflora* prefers 'damp, open woodlands.' HZW notes that the footprint of the Project lies primarily within thick, shrub-filled, upland woodlands. Therefore, impacts to *M. lateriflora* by the Project are not anticipated.

* Slight change from original permit package as a small amount of impact to the 100-year floodplain has since been identified.

- ii. Within the ODNR, the Division of Wildlife (DOW) noted that the project is within range of the state and federally listed endangered species: Indiana bat (*Myotis sodalis*), clubshell (*Pleurobema clava*), and eastern massasauga rattlesnake (*Sistrurus catenatus*). The project is within the range of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. The project is within range of the following state listed threatened and endangered species: black sandshell (*Ligumia recta*), northern brook lamprey (*Ichthyomyzon fossor*), mountain brook lamprey (*Ichthyomyzon greeleyi*), spotted turtle (*Clemmys guttata*), northern harrier (*Circus cyaneus*), upland sandpiper (*Bartramia longicauda*), least bittern (*Ixobrychus exilis*), and black bear (*Ursus americanus*). The ODNR DOW provides additional information regarding the need for surveys, construction windows, and construction limitations to protect the state listed threatened and endangered species.

Response: The Applicant presents the following information:

- **Indiana Bat and Eastern Massasauga Rattlesnake:** Tragus Environmental Consulting, Inc. performed a bat mist-net study of the Project Area on June 16 & 17 of 2018 and subsequently issued a report that is included in the original application package as Exhibit 6. No listed species were caught during the survey. In fact, only three (3) big brown bats (*Eptesicus fuscus*) were encountered over the nine (9) net-night equivalent study. Thus, HZW assumes the project will not affect any listed bat species.
- **Clubshell and Black Sandshell:** The largest stream proposed to be impacted by the Project, Stream 7, has a drainage area of approximately 0.8 square miles at the proposed point of impact. Such a stream is not large enough to support either of these species of mussels. Thus, impacts to these species are not anticipated.
- **Eastern Hellbender:** ODNR-DOW states in their September 18, 2018 letter that, "this project is not likely to impact this species."
- **Northern Brook Lamprey and Brook Lamprey:** ODNR-DOW states in their September 18, 2018 letter that, "The DOW recommends no in-water work in perennial streams at least April 15 to June 30 to reduce impacts to indigenous

aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species." The Applicant is committed to abiding by these in-water work restriction dates; thus, impacts to these species are not anticipated.

- **Spotted Turtle:** ODNR-DOW states in their September 18, 2018 letter that, "this project is not likely to impact this species."
- **Northern Harrier:** The northern harrier requires large grasslands or marshes to nest. No such habitat exists within the project area. Thus, impacts to the northern harrier are not anticipated.
- **Least Bittern:** The least bittern requires dense emergent wetlands with thick stands of cattails, sedges, and sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. No such habitat exists within the project area. Thus, impacts to the northern harrier are not anticipated.
- **Upland Sandpiper:** The upland sandpiper requires dry grasslands to nest. No such habitat exists within the project area. Thus, impacts to the northern harrier are not anticipated.
- **Black Bear:** ODNR-DOW states in their September 18, 2018 letter that, "this project is not likely to impact this species."

iii. *The ODNR Division of Water Resources requested that you contact the local floodplain administrator.*

Response: Representatives of the Applicant have begun informal consultations with the local floodplain administrator (the Trumbull County Engineer's Office). It has been conveyed to the Applicant that a floodplain development permit will be needed but can readily be obtained should the Project be approved at a Federal and State level.

- d. *The Byers family, local landowners, expressed concern regarding the fill of wetlands and the alteration of the water retention once the wetlands are filled. They are concerned about floodwater and stormwater runoff during construction.*
- e. *Mr. David Hochedel stated that there are upland alternatives to the site that have less environmental impacts (e.g., water resources).*
- f. *Ms. Heather Garner and Ms. Sharon Darby are nearby residents that also express concern for the project.*
- g. *Mr. Jack Mullen, a local landowner, noted the following concerns: conformance with the Lower Mosquito Creek Watershed Balanced Growth Plan, state and federally listed threatened and*

endangered species, proposed impacts to Category 3 wetlands, alternative site locations, environmental impacts of parking lots (e.g., runoff), loss of vernal ponds, and loss of wetlands.

- h. Ms. Colleen McLean, Howland Township resident, noted the following concerns: the addition of impervious surfaces within the floodplain, decrease in the retention of floodwaters resulting from wetland and stream fill, alternatives analysis, and mitigation for OEPA Category 3 wetland loss. She is also concerned about the effectiveness of preserving Category 3 wetlands onsite with the runoff from the development.

Response: The Applicant feels it most appropriate to group items I(d) – I(h) together as the comments are somewhat similar. Please refer to the bulleted list below for responses:

- **Stormwater Runoff/Floodwater Volume:** The Project's stormwater management system has been designed so that peak post-development flows will not exceed peak pre-development flows. In addition, the Applicant is committed to obtaining a floodplain development permit through the local floodplain administrator and abiding by any terms and conditions set forth therein. Thus, the Applicant finds concern about increased flooding due to construction of the Project unfounded. Please refer to Attachment 9 – Enterprise Park Development Post-Construction Stormwater Management Narrative included with the *February 12, 2019 Response to Ohio EPA Comments*.
- **Stormwater Runoff Quality:** The Applicant notes that it is bound by local, state, and federal law regarding the quality of discharged stormwater effluent to waterways. These laws include various requirements such as guaranteed detention times and appropriate outfall structures that are designed to ensure water quality is not impacted downstream of development. As such, the Applicant feels that the concern about stormwater runoff quality is unfounded.
- **Viability of Alternatives:** The Applicant has already provided a copious amount of information regarding both on and off-site alternatives and intends on providing even more via this letter. A multitude of factors have led them to the stark conclusion that the Project, as outlined in the Application and the *February 12, 2019 Response to Ohio EPA Comments*, is the LEDPA.
- **Watershed Balanced Growth Plan:** According to the Priority Development Areas Map included in the 2011 Lower Mosquito Creek Balanced Growth Plan, a majority of the Project is proposed within a Priority Development Area (Attachment 2). Thus, the Applicant believes the Project is consistent with the spirit and goals of the Balanced Growth Plan.

- **Threatened and Endangered Species:** Please refer to the response to Item I(c)(ii) above as well as information included with the original application submittal. The Applicant has found no evidence that the Project will negatively impact threatened or endangered species to date.
- **Impacts to Category 3 Wetlands:** The Applicant designed the Project specifically to avoid impacts to Category 3 wetlands and has presented it as such. Thus, the Applicant finds this comment unfounded.
- **Loss of Aquatic Resources:** The Applicant has presented to the agencies what they believe to be a robust mitigation plan for the loss of waters incurred by the Project. This plan should more than compensate for the proposed impacts and provide a net gain of functions and values of waterways to the Mahoning River watershed.

II. CORPS COMMENTARY

- a. *The Corps agrees with the Ohio History Connection and is requiring a Phase I Assessment for the entire project site to evaluate the site for potential historic properties with the Corps Permit Area.*

Response: Please refer to the response given to Item I(a).

- b. *The Corps agrees that you need to provide additional information to support the LEDPA; the provided information does not meet the Guidelines definition of LEDPA, as outlined in the USEPA comments. Please provide additional details in regards to the Guidelines (e.g., purpose, need, and alternatives; avoidance and minimization; and mitigation). The project purpose and need are too narrow and a majority of the focus on the need for the new hospital and supporting structures. As discussed on the call on February 15, 2019 with you and your consultant, the Corps, and the Ohio Environmental Protection Agency (OEPA), not all of the development on the site is in direct support of the establishment and operation of the Mercy Hospital' therefore, the project purpose must be expanded to include the revised purpose and need. Both on-site and off-site alternatives analysis must take into account the revised project purpose and need.*

Response: Please refer to the response given to Item I(b)(i) in response to US EPA's comment regarding the identification of the LEDPA. In addition, with respect to the Corps' comment that "not all of the development on the site is in direct support of the establishment and operation of the Mercy Hospital" we refer you to Item 5.1 of the initial Application. In the very first paragraph of that Item, it is stated in broad terms that "[t]he purpose of the Project is to provide the Trumbull County portion of the Youngstown/ Warren Metropolitan Statistical Area (the Youngstown/Warren MSA) with access to comprehensive healthcare and educational services..." The third paragraph of that same Item further explains that "[m]ore specifically, the primary purpose of the Project is to accommodate the development of a hospital operated by Mercy Health dba St. Joseph's Hospital encompassing approximately 350,000 square feet on 5-6 floors, and costing in the range of \$250 million. Utilizing St. Joseph's Hospital as the anchor of and catalyst for other medical facilities, the Cafaro

Company envisions Enterprise Park as a comprehensive medical-related campus that will include, *in addition to the hospital...*. The narrative then proceeds to lists seven additional types of buildings, each of which are complementary to and closely related to the primary hospital purpose, such as a medical office building, a medical/educational center, an assisted living and memory care facility, an additional office building to provide associated medical, healthcare and/or educational services, an apartment building which is intended to house the various healthcare and education professionals at Enterprise Park, a doctor's office to accommodate the staff and physicians employed at the hospital, and a 2-3 floor building to allow for the expansion requirements of St. Joseph's main facility. In light of this explanation as included in the initial Application, we question how and why the Corps states that the various ancillary developments on the site are not in support of the establishment and operation of a hospital. To the contrary, the inherent synergies among these supplemental facilities will bolster and aid the mission of each of them.

Even though these additional facilities may not be owned directly by Mercy Health, the non-hospital uses are clearly complementary to the operation of the hospital and vice versa. The alternatives analyses in the original Application and in the subsequent follow up letters to Ohio EPA support and explain not only the rationale for the location of the hospital at Enterprise Park, but also the need for these symbiotic facilities.

Page 36 of the initial Application further explains "...the essential synergy that will occur amongst the various medical-related facilities. Mercy Health is attracted to Enterprise Park not only by its demographic, accessibility, and growth advantages, but also by the presence of supportive co-occupants at this Project; and certainly few, if any of the other proposed occupants would be drawn to Enterprise Park without the magnet provided by St. Joseph's Hospital. Enterprise Park has been conceived as a Project wherein each occupant will provide some degree of attraction to the campus; while simultaneously each occupant will, to a varying extent, be parasitic to the cumulative draw provided by each of the other occupants". In other words, as our direct response to the US EPA's comment, we believe that the Application makes it exceedingly clear that all of the developments on the site will support the establishment and operation of the Mercy Health Hospital.

- c. The Corps cannot permit speculative development and requests additional information regarding the development of the office building and medical office building as no additional information regard the proposed tenants is included with the application. In addition, Mercy Health stated in a letter to the Cafaro Corporation on January 21, 2019, "At the same time that we were receiving community and local Board member reaction to those articles, we were beginning our long-range impact assessment of how a full closure of the GM plant at Lordstown will impact volume demand and the related sizing of future investments in facilities." As such, it appears that the determination of the size of the facility required is not finalized; over-estimation without a tangible need for the facilities would be deemed as speculative development. If the project includes speculative development, the most the Corps can do would be to make the permit decision on a

provisional permit. Prior to the discharge of fill, you would be required to provide the Corps with an update to the tenant plans and commitments and the Corp would need to approve in writing.

Response: The development is not speculative. The January 21, 2019 letter from Don Kline, President, Great Lakes Group, Bon Secours Mercy Health, reaffirms Mercy Health's longstanding commitment to the Project. While the January 21, 2019 letter does indicate that further discussions are expected as to the "size and scope" of the hospital, North Eastwood understands these considerations to be related to the design development phase of the Project requiring formal architectural layout and specific department by department space planning. This aspect of the development process will not begin until the requisite approvals are provided by Ohio EPA and the Corps. In other words, Mercy Health and its architects are not considering any revision to the ground floor building footprint. *See December 26, 2019 Response to Ohio EPA Comments.*

As to additional information which specifies the proposed tenants of both the office building and medical office building, such edifices are intended to accommodate medical professionals working at or in conjunction with Mercy Hospital, the YSU/Kent State medical/education facility, or one of the other tenants at Enterprise Park. The exact tenant composition (i.e. the names of particular physicians or health related firms) has not been and cannot be determined at this time with the granularity suggested by this comment.

- d. *The Table 1- Off-Site Alternative Analysis in the permit application includes a lengthy list of alternative locations. Define 'Proximity to Geographic Center', 'Proximity to Accessory Amenities', and 'Accessibility' with objective and measureable terms to clearly define the alternatives analysis. In addition, include the estimated environmental impacts (i.e., potential loss of waters of the US) for each alternative. This information is not included in Section 5.2.5., as referenced in the original permit application on page 25 for the Section 404 Individual Permit Pre-Application Notification narrative.*

Response: The Applicant presents the following definitions:

- **Proximity to Geographic Center** – As the Project is expected to act as a hub for vital medical services for the Trumbull County region, a centralized location is paramount. Potential development sites located on the periphery of the geographic center would incur an unacceptable amount of travel distance in medical emergencies, an unsafe amount of travel distance for seriously ailing/elderly patients, and an inconvenient amount of travel distance for any other employee, patient, student, or guest of the medical/educational campus.
- **Proximity to Accessory Amenities** - Mercy Health realized that the proximity of various amenities to any potential site was of high importance. Such amenities would include hotels, retailers, restaurants, entertainment, places of worship, banking services, etc.

- **Accessibility** - Perhaps the single most consequential factor impacting Mercy Health's decision was vehicular access (especially as compared to the purely localized access which characterizes their existing hospital site). Logic dictates that a medical/educational campus of this size in a centralized location will need to be surrounded by a very robust vehicular infrastructure system. Such a system is not only necessary to support the medical staff, employees, and visitors to the campus, but also for the access of emergency vehicles and community transportation (e.g. senior transports) that will be utilizing the hospital on the daily basis.

In addition, a revised Table 1 – Off-Site Alternatives Analysis is included as **Attachment 3**.

- e. *The application stated that the project is not anticipated to have any lasting, area-wide effect on aquatic biota. Provide tabulated information regarding the estimated presence of streams and wetlands within the watershed and the cumulative impacts of loss of streams and wetland within the HUC 12 (050301030503; Lower Mosquito Creek). Include a cumulative impacts analysis to determine if the proposed project in conjunction with other past, current, and reasonably foreseeable future actions would result in a significant cumulative impact to aquatic resources.*

Response: Please refer to Section 5.6 of the initial Application as well as the response to a similar question raised by the Ohio EPA included in the *February 12, 2019 Response to Ohio EPA Comments*. The Applicant notes that any future development that directly impacts waterways in the watershed will have to be approved by both the Corps and the Ohio EPA in a process similar to the one they are preceding through now. As such, it is up to said agencies to determine and manage cumulative impacts to the watershed.

- f. *The wetland mitigation plan, as amended and provided in the February 12, 2019 submittal, does not meet the requirements of the 2008 Mitigation Rule. Include or address all components of the 2008 Mitigation Rule (i.e., objectives, site selection, site protection instrument, baseline information, determination of credits, mitigation workplan, performance standards, monitoring requirements, long-term management plan, adaptive management plan, financial assurances, and other information), as applicable, in addition to the information required per items (g) – (j) below. In addition, specifically address the items in 33 CFR 323.3(h) to justify preservation as a component of the mitigation plan.*

Response: The Applicant believes that its proposed mitigation plan meets the applicable requirements of the *2008 Federal Mitigation Rule*. With respect to the use of preservation as a component of compensatory mitigation, 40 CFR 323.3(h) provides that:

(h) **Preservation.** (1) Preservation may be used to provide compensatory mitigation for activities authorized by DA permits when all of the following criteria are met:

- (i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed;
- (ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available;
- (iii) Preservation is determined by the district engineer to be appropriate and practicable;
- (iv) The resources are under threat of destruction or adverse modification; and
- (v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g. easement, title transfer to state resource agency or land trust).

The Applicant believes the current mitigation proposal satisfies each of these items, as summarized below:

- (1)(i) The wetland to be preserved is a Category 3, high quality resource that abuts Mosquito Creek, a waterway of great local importance/concern. As such, this feature has an important role in providing physical, chemical, and biological functions for the watershed.
- (1)(ii) As development continues around the Mosquito Creek corridor, the wetland to be preserved becomes an oasis of ecological value and biodiversity. Thus, it stands to reason that the proposed preservation would contribute significantly to the ecological sustainability of the watershed.
- (1)(iii) Due to the reasons listed above and below, the Applicant believes that the district engineer should determine this component of the mitigation plan (i.e., preservation) as both appropriate and practicable.
- (1)(iv) The Applicant notes that the proposed project is located in a well developed area of Trumbull County and includes a hospital that is intended to be an important medical hub in the region. Should this hospital decide to expand in the future, further impacts to wetlands would likely be justified on the basis of 'public need'. As a result, dedication of these Category 3 wetlands to conservation and their protection through an environmental covenant (discussed below) will limit any such future impact.
- (1)(v) The Applicant intends to provide such protections to these wetlands and is working with both the Corps and the Ohio EPA to develop an instrument that will satisfy both parties. Please see further discussion below.

The Applicant's response to the comments set forth in your letter are outlined below. With respect to the long term management of the conservation area, Ohio EPA has suggested use of an "environmental covenant" prepared in accordance with Ohio's

Uniform Environmental Covenants Act at RC 5301.80 et seq. Ohio EPA has developed a template specific to use in connection with its issuance of Section 401 water quality certifications which appears at Ohio EPA's website. The Agency has directed us to use that template in connection with the preservation component of the Applicant's proposed mitigation plan. Ohio EPA has advised that it has worked previously with the Corps' Pittsburgh District to accomplish preservation through use of an environmental covenant. Applicant plans to prepare a draft environmental covenant for review by both Ohio EPA and the Corps via separate submittal.

- g. The wetland conservation easement includes a 50-foot sewer easement and 50-foot Ohio Edison electric easement. Per your February 12, 2019 letter to the Corps and OEPA, you state, "Allowable activities within this easement[s] would include the construction, inspection, and maintenance of the [line/structures] or portions thereof from time to time, and ultimately replacement of the line at the end of its service life." The conservation easement is in place to protect the wetland and mitigation area in perpetuity; ongoing use, occasional maintenance to lines, and eventual replacement of the utilities does not meet this requirement and must be excluded from the conservation easement. The wetland mitigation plan must be updated to reflect the portion of the wetland that is not within the utility easements. Upon completion of the wetland mitigation plan, the total amount of preserved wetland must be recalculated and a revised mitigation plan and commitment must be resubmitted to the Corps.
- h. The Corps will require a 3.0:1 mitigation ratio for all PFO wetland impacts and is in agreement with the proposed 2.0:1 mitigation ratio for the PEM wetland impacts. The total impacts to wetlands as of the February 12, 2019 is 0.73 acre of PEM impacts and 15.21 acres of PFO impacts. Therefore, the total mitigation requirement is 46.63 acres of mitigation for PFO impacts and 1.48 acres of mitigation for the PEM impacts for a total of 48.11 acres of required mitigation.
- i. You propose to purchase 27.8 ILF wetland credits from the Streams + Wetlands Foundation which will offset the 0.74 acre of PEM impacts and 8.8 acres of PFO impacts. The remaining 6.4 acres of PFO impacts will need to be mitigated for at a 10:1 ratio for preservation only or additional ILF wetlands credit purchased at a 3:1 ratio will be required. Resubmit the mitigation plan to account for the revised mitigation requirement outlined above.

Response: With respect to the Corps' comments at g., h. and i. above, we do not see any requirement in the 2008 Federal Mitigation Plan for the blanket exclusion of credit for easement areas within the proposed conservation areas, nor do we see the requirement for a 3.0:1 mitigation ratio for PFO impacts or the requirement for a 10:1 ratio for preservation. We believe that the exclusion and the mitigation ratios are overly conservative. The ratios in particular exceed what Ohio has included by rule in its program and what other Corps Districts have required under similar circumstances (and indeed what the Pittsburgh District itself has required previously). The Applicant is willing to further discuss with the Corps the proposed exclusion and ratios, but believes that the discussion would be greatly facilitated by the Corps' identification of the basis for its insistence on the exemption and ratios.

- j. *The Corps is in agreement with the amount of stream mitigation necessary for the proposed project as identified in the supplement information in Table 2 – Stream Mitigation requirements provided to the OEPA and the Corps on February 12, 2019.*

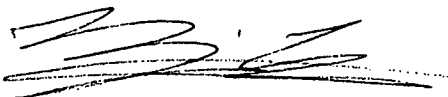
Response: The Applicant appreciates this information and affirms to keep the stream portion of the proposed mitigation plan as-is.

CLOSING

The Applicant and HZW appreciate the Corps' attention to this matter and respectfully request that this letter and its contents be reviewed at your earliest possible convenience. Should any additional information and/or clarifications be required, please do not hesitate to contact HZW with such a query.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC



Benjamin Latoche
Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District
Mr. Jeffery Boyles, Ohio Environmental Protection Agency
Ms. Cara Hardesty, Ohio Environmental Protection Agency

BDL:bdl
Attachments

ATTACHMENT 1

PHASE I ARCHEOLOGICAL SURVEY



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**Phase I Cultural Resources Survey for the
approximately 54 ac. Enterprise Parkway Development
in Howland Township, Trumbull County, Ohio**

HzW Environmental Consultants LLC

March 05, 2019

2019-0058

emht.com

**Phase I Cultural Resources Management
Investigations for the approximately 54 ac.
Enterprise Parkway Development in Howland
Township, Trumbull County, Ohio**

By:

Elaine Meyer-Landis

Submitted to:

**HZW Environmental Consultants LLC
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Submitted by:

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Lead Agency:

United States Army Corps of Engineers, Pittsburgh District (USACE)

Project #: 2019-0058

05 March 2019

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i. Abstract

Phase I Cultural Resources Management investigations were conducted by the Cultural Resources Department of EMH&T for the approximately 54 ac. Enterprise Parkway Development in Howland Township, Trumbull County, Ohio in February 2019. These investigations were performed for HzW Environmental Consultants LLC under direction of the United States Army Corps of Engineers, Pittsburgh District (USACE).

The project is located north of the City of Niles. It includes an irregularly shaped area located west of SR 46 and sits at the end of three residential roads; Hiram Place, Kenyon Drive and Dawson Drive. The area is a mix of woods, private residences, and modern commercial developments. The proposed project consists of the construction of an office park containing office buildings, an apartment building, assisted living facility, hospital, and associated parking lots.

Through a combination of shovel testing and visual inspection of the entire project area, no archaeological sites were identified.

A windshield survey of the houses and buildings surrounding the project area failed to identify any historically significant architectural properties. There are no historic properties in the area of potential effects for this project. As a result, no further work is recommended.



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1. Introduction

Phase I Cultural Resources Management investigations were conducted by the Cultural Resources Department of EMH&T for the approximately 54 ac. Enterprise Parkway Development in Howland Township, Trumbull County, Ohio in February 2019. These investigations were performed for HzW Environmental Consultants LLC under direction of the United States Army Corps of Engineers, Pittsburgh District (USACE).

The project is located north of the City of Niles. It includes an irregularly shaped area located west of SR 46 and sits at the end of three residential roads; Hiram Place, Kenyon Drive and Dawson Drive (Figures 1-2). The area is a mix of woods, private residences, and modern commercial developments. The proposed project consists of the construction of an office park containing office buildings, an apartment building, assisted living facility, hospital, and associated parking lots.

This area, which is located between the Cities of Niles, Warren and Howland Center, has seen a great deal of recent development associated with their growth. The area surrounding the project includes private houses to the east, woods to the west, and large-scale modern commercial developments to the north and south. The area to the west and north of the project is very well wooded. Large portions of the property are being preserved as wooded conservation areas as well. The Area of Potential Effects (APE) for this particular project should largely be limited to the footprint of the project area and immediately adjacent areas.



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2. Environmental Setting

2.1 Physiography

Trumbull County is contained entirely within the Appalachian Plateaus physiographic province (Brockman 1998). More specifically the county contains three different physiographic sections. The southern half of the county contains the Killbuck Glaciated Pittsburgh Plateau (Brockman 1998). The northern half is primarily the Grand River Low Plateau with a small section of the Grand River Finger Lake Plain in the northwestern corner of the county (Brockman 1998).

2.2. Geomorphology

Trumbull County was enveloped at least two times by glaciers, the Illinoian and the Wisconsinan. These glacial advances brought with them huge amounts of glacial drift. This glacial debris, which consists of boulders, pebbles, sand, silt, and clay, varies in thickness from a few inches to over a hundred feet (USDA, SCS 1992).

2.3. Geology

The bedrock in Trumbull County is sedimentary in nature. There are three distinct layers of bedrock in Trumbull County. The Devonian shales are located in the northwestern part of the county, Mississippian shales and sandstones throughout the majority of the county and the Pennsylvanian sandstones in the southern part of the county (USDA, SCS 1992).

2.4. Hydrology

The waterways which developed from the melting of the Wisconsinan glaciation have not changed a good deal. The Mahoning River or its direct tributaries drain most of the county. These include Eagle Creek and Mosquito Creek (Sherman 2000 [1925]). A small portion in the northwest corner of the county is drained by the Grand River system north into Lake Erie and the eastern edge of the county drains into the Shenango River in Pennsylvania (Sherman 2000 [1925]).

2.5 Soils

The project area is contained within the Chili-Jimtown-Oshtemo soil association (USDA, SCS 1992). This association consists of nearly level to very steep, well and somewhat poorly drained soils (USDA, SCS 1992). The project is contained within the following soil types: Damascus loam (Da) with nearly level to depressional areas, Holly silt loam (Ho) with 0-3% slope, Jimtown loam (JtA) with 0-2% slope, and Oshtemo sandy loam (OsB) with 2-6% slope (USDA, SCS 1992). Damascus soils are poorly drained soils, Holly soils are very poorly drained, Jimtown soils are somewhat poorly drained, and Oshtemo soils are well-drained (USDA, SCS 1992). Well more than half of the project is composed of poorly drained soils.



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3. Prehistoric Cultural Setting

3.1. Introduction

Ohio has a long culture history dating back to the end of the last ice age. The following text is meant as a brief introduction to what is known of the unrecorded prehistoric period in Ohio. This summary is merely meant as an introduction to the various cultures and artifacts which may be encountered during the current cultural resources management investigation.

3.2. Paleo-Indian Period: 10050-8050 BC

It is generally accepted that the Paleo-Indians migrated to this area from the Southwest and Plains states. These nomadic people traveled in small groups hunting and gathering. In addition to the rather sparse plant foods, many types of animals were hunted. They hunted and butchered mammoths and mastodons but it appears that they killed weakened or wounded individuals as well as scavenged carcasses. Other large mammals that may have been hunted include giant beaver, giant ground sloth and bison. In addition to the mega-fauna, caribou, elk and rabbit have all been located in dated Paleo-Indian contexts. Archaeological evidence recovered from eastern Paleo-Indian sites has confirmed the use of nut and berry resources by these early inhabitants (Hooge and Lepper 1992).

Paleo-Indian sites are typically located near kettle bogs, end moraines and glacial kames (Tankersley et al. 1990). In Ohio, the majority of the Paleo-Indian sites are comprised mostly of isolated find spots of fluted points (Prufer and Baby 1963). Other site types include small campsites, chert quarries, butchering and kill sites. Sites which may be associated with habitation are usually located on hilltops and bluffs which overlook the larger tributary valleys.

Paleo-Indian artifacts include fluted projectile points, lanceolate shaped projectile points, drills, burins made on flakes and broken points, denticulates, alternately beveled knives, backed knives, unifacial knives, square knives, unifacial endscrapers with and without graver spurs, sidescrapers, pitted stones and adzes to name a few of the more common cultural trappings (Gramly 1992, Converse 1973). Subsurface features and evidence of structural remains are exceedingly rare from this period.

3.3. Archaic Period: 8050-300 BC

3.3.1. Early Archaic Period: 8050-4550 BC

With the recession of the glacier and the extinction of the Pleistocene mega-fauna, the Early Archaic Indians faced some major changes. Broad leaf forests were replacing the spruce and pines that previously dominated the terrain. Increasing dryness and warming made large, previously inhospitable tracts of land available and opened up the majority of Ohio to settlement. More space, combined with the increasing sources of food, led to a sustained population growth throughout the Archaic. Archaic populations had base camps which were centrally located for the best access to the most resources (Chapman 1985). From these base camps smaller groups or individuals would make forays to collect resources to bring back to the base camps (Chapman 1985). During the winter, small family groups would radiate out from the base camp, returning



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again when resources were more plentiful. Early Archaic groups were still nomadic in nature, much like the Paleo-Indians of the preceding period.

With the expansion of the broadleaf forests, plant foods became more prominent in the diet (Fagan 1995). In addition, herd animals became the focus of hunting. Deer, elk, caribou and bison were probably the main sources of protein. Smaller animals that are common today such as rabbits, squirrel, mink, fox and others were also important for their meat as well as fur.

Early Archaic artifacts include large beveled knives such as Dovetails (St. Charles), Thebes and Lost Lakes, Kirk varieties, and bifurcated points such as Lake Eries, MacCorkles and LeCroys (Justice 1987, Converse 1973). Tools found on Early Archaic sites include endscrapers, sidescrapers and utilized flakes among others. Groundstone and slate artifacts became common during this period for the first time. These included various axes, chisels, gouges, and bannerstones. Early Archaic artifacts are found throughout the state in geographically diverse environments and made from many different flint types. This would seem to indicate that Early Archaic populations were utilizing a wider range of food sources and habitats than previously exploited in the Paleo-Indian Period.

3.3.2. Middle Archaic Period: 4550-3050 BC

The Middle Archaic Period in Ohio is not very well understood. Many Middle Archaic sites within Ohio consist of isolated finds and small lithic scatters only identifiable as such based on the recovery of diagnostic point types.

This period occurs at the end of a warm, dry trend known as the hypsithermal climatic interval. The drying of the environment led to a decrease in forests, which were being replaced by grasslands. This in turn led to technological developments to deal with the more arid environment. In more northerly climes like Michigan this period is marked by a transition from a spruce to pine to deciduous forest (Fitting 1970). Important sites from this period are all located well south of the Ohio region. New groundstone implements such as pitted anvils, grinding stones and pestles make their appearance. These appear to be a result of utilizing more plant foods, especially nuts and starchy seeds that become more common with the drying of the environment. Whitetail deer and turkey were the most important game animals. Riverine resources such as shellfish, fish and waterfowl were also important. The ephemeral nature of most Middle Archaic sites in Ohio suggests a low population with high mobility. It has been postulated that during this time period the lack of Middle Archaic type sites is best explained by a lack of environments to which the Middle Archaic people were best adapted (Fitting 1970).

Middle Archaic artifacts which may be encountered in Ohio include; Eva points, Morrow Mountain points, Raddatz points and White Springs points. The ranges for these are all limited to extreme southern Ohio along the Ohio River, with the exception of Raddatz points which are found throughout Ohio (Justice 1987).

3.3.3. Late Archaic Period: 3050-300 BC

During the Late Archaic Period, rising waters from the melting of the last of the glaciers created a focus on riverine environments. Plant foods seemed to gain importance and a population increase followed accordingly (Fagan 1995). A more sedentary lifestyle is evident with good examples of



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storage pits and re-occupied base camps. Pottery was first introduced in the Southeast during this period around 2500 BC (Fagan 1995). It is also during this period that rather unique culturally based mortuary expressions are first seen.

The Glacial Kame Culture (2950-2450 BC) is a unique burial cult of the Late Archaic Period. It was labeled based on the way the dead were buried in the gravelly glacial deposits of the same name. It is most common in the northwest part of the state. This culture was involved in the importation of exotic trade goods. Conch shells were brought from the coasts, cannel coal from Southern Ohio and copper from the Upper Peninsula of Michigan. Some of the burial items recovered include; sandal sole gorgets, shell gorgets, copper celts and awls, birdstones, humped back gorgets and constricted center gorgets (Converse 1979).

Late Archaic artifacts include the following point types; various Brewerton, Matanzas, Table Rock, Bottleneck, Lamoka, Karnak, McWhinney, Ashtabula, Turkey tail and Meadowood points (Justice 1987). Slate gorgets are first present during this period and are often found as burial goods. Many of these point types have overlapping distributions indicating a lot of movement between peoples and a high diversity of tool types.

3.4. Woodland Period

3.4.1. Early Woodland Period: 500 BC-100 AD

The Early Woodland Period is sometimes known as the period of the Adena Culture. The Early Woodland period is marked by changes in subsistence practices, social organization, cultural traits and regional exploitation of resources. The Early Woodland populations likely followed a hunter-gatherer subsistence pattern with a greater reliance on gathering. There also appears to have been a primitive form of social hierarchy beginning among populations of the Early Woodland period. It is during the Early Woodland period that the practice of constructing earthen mounds for burial practices first begins. It is also during this period that a greater degree of regionalism and territorialism is seen.

It is during the Early Woodland period in Ohio that the use of ceramic vessels becomes common. These early ceramics are usually quite thick and usually poorly fired. The ceramics were often flat-bottomed vessels with lug handles. Often, cordmarking is present on the exterior and interior of the vessel. Latter ceramic designs include stamped designs and incised lines (Tuck 1978). The practice of building earthworks and burial mounds also first appears during the Early Woodland period.

The construction of residential dwellings as well as the increased use of ceramics is often used to suggest an increase in sedentism of the Early Woodland populations. The Early Woodland peoples also appear to have had established home ranges which a single political unit (likely the family) would exploit for providing the necessary resources for survival.

Artifacts which are considered to be diagnostic of the Early Woodland (Adena Culture) of Ohio include weak-shouldered lobate-stemmed spear or dart points such as Cresap Stemmed, Kramer, Robbins, Dickson Contracting Stemmed, and Adena Stemmed projectile points, bar and keel shaped gorgets, cigar-shaped and block-end-tube smoking pipes, quadricconcave gorgets, bi-concave gorgets, elliptical gorgets, indented gorgets, loafstones, bar amulets, keyhole pendants,



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bell-shaped pendants, boatstones, bust-type birdstones, and expanding center gorgets (Webb and Snow 1945; Webb and Baby 1966[1957]; Dragoo 1963, Converse 1978).

3.4.2. Middle Woodland Period: AD 0-450

The Middle Woodland period is perhaps one of the most visible of all of Ohio's prehistoric populations due to their construction of large-scale geometric earthworks. For this reason, the Middle Woodland period of Ohio is often thought of as the period of the Hopewell culture. The Hopewell culture practiced an elaborate mortuary cult that involved mound and earthwork construction, the importation of exotic trade goods, elaborate ceremonial items and cremation practices.

It is during the Middle Woodland period that there appears to be an increase in the levels of social organization as evidenced by the burial populations and associated burial items, which have been recovered. However, the burial populations are limited and do not appear to include any individuals of the perceived lower classes of Hopewell society.

The Middle Woodland period is also noted for its monumental architecture in the form of large geometric earthworks. These shapes include circles, octagons and squares and more symbolic forms such as a bear paw, a menorah-like form, a horseshoe-like form (Atwater 1820; Squier and Davis 1848), and even what appears to be an outline of a giant Hopewellian House for the Dead [Mound City] (Shumaker 1965). The Hopewell peoples also constructed large earthen enclosures which were often placed in specific locations to take advantage of natural features such as is seen at Fort Hill in Highland County and at Fort Ancient in Warren County.

The ceramic technology becomes more refined during the Middle Woodland period. The ceramics which are produced by the Middle Woodland populations are thinner walled than that of the Early Woodland and are better fired. The highest quality ceramics are often recovered in burial mound contexts. The utilitarian ceramics are more rarely encountered. This is likely due to the poor preservation factors at most of these habitation sites (Licking County Archaeological and Landmarks Society [LCALS] 1985).

Artifacts which are considered to be diagnostic of the Middle Woodland (Hopewell Culture) of Ohio include projectile points such as Snyders, Steuben Expanded Stem, Bakers Creek and Chesser Notched. Other items which are considered diagnostic are bladelets, prepared bladelet cores, squared celts, rectangular two-hole gorgets, expanding center gorgets, boat shaped gorgets, reel-shaped gorgets, boatstones, anchor pendants, shovel-shaped pendants, pentagonal pendants, trapezoidal pendants, cones, and bust type birdstones, among other items.

3.4.3. Late Woodland: AD 500-1000

The Late Woodland period is markedly different from the preceding prehistoric periods in Ohio. During the Late Woodland period, regionalism of specific cultural groups becomes apparent in the archaeological record. The evidence of long distance trafficking of exotic trade goods is no longer as prevalent as it was in the preceding Middle Woodland period. Late Woodland populations practiced agricultural oriented subsistence practices. The crops produced by these populations included maize, beans, sunflower and squash among other cultigens. Other features of Late Woodland life included living in more permanent villages, some of which were surrounded



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by palisades that were likely for defensive purposes, midden dumps and longhouses. Social organization during this period is much more complex than the preceding periods and may have been moving towards a chiefdom system when the prehistoric period ended in Ohio. There are three traditions of the Late Woodland period in Northern Ohio as well as several distinct cultural manifestations.

3.4.4. Whittlesey (AD 900-1650)

Whittlesey cultural manifestations (AD 900-1650) are primarily located in the northern portions of Ohio. The geographic region in which they were located can be described as being south of Lake Erie from the Pennsylvania state line to the western end of Lake Erie, as well as on some of the islands. The Whittlesey people lived in villages that encompassed an area of approximately 1.6 ha (4 a.). Often these villages were situated on high bluffs that were located on bends in the major rivers. They would also locate their villages at inaccessible parcels of land found at the confluence of streams. The Whittlesey villages were often fortified with timber stockades that surrounded the village for protection. Occasionally, the villages were also surrounded by earthen embankments with the ditches located on the outside. These populations practiced a mixed subsistence economy that consisted of the Eastern Agricultural Complex (EAC), wild game resources, river resources, and wild plant crops such as nuts and berries.

Artifacts that are commonly found at Whittlesey sites include a large variety of musical instruments including bird bone flutes, elk rib rasps, and turtle shell rattles. In addition to ceramic smoking pipes, they also smoked tobacco in conoidal, rectanguloid, vasiform, keel shaped and effigy stone pipes. Other artifacts which are often recovered from Late Woodland sites include triangular arrow points, Jack's Reef points, antler knapping tools, groundstone chisels, adzes and celts, chisels made of elk antler and beaver incisors, triangular flint knives, bone awls, hoes, bone hairpins and combs, bone and stone pendants, net sinkers and bone fishhooks.



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4. Historic Setting

4.1. Protohistoric to Historic

During the mid 1600's, European traders and explorers traveled through the Great Lakes region in search of pelts for the lucrative fur trade. The French primarily traded with the Great Lakes Indians, while the English concentrated on trading with the Iroquois and other groups east of the Great Lakes. The first recorded village in Ohio, Teanontoria was located on the western bank of the Maumee River (Tanner 1987). The Tionontati Indians occupied it in 1652-1653 (Tanner 1987). In the 1670's, three recorded Shawnee villages on the banks of the Little Miami also appear in Ohio (Tanner 1987). The Iroquois Wars of 1641-1701, were sporadic hostilities that covered a large area from the Plains to New England and into Canada. The fur trade played a major role in Iroquois aggressions towards their neighboring native populations. The large quantities of furs east of the Great Lakes had become depleted and were no longer able to support the Five Nations. They began to move westward into the land of the French and their allies. The Iroquois' westward expansion was greatly aided by the supplied firearms from the British. The Hurons, being decimated by the Iroquois, sought refuge among the Erie of Ohio and other native groups. Later the Iroquois expelled the Erie from their lands in northern Ohio (Tanner 1987). During the 1670's, the Iroquois were being ravaged by European diseases and could no longer sustain their widespread attacks. This gave the Great Lakes Indians and their French allies time to rebuild their numbers and defenses, thus ending the Iroquoian threat.

During the early to late 1700's, the French and British rivalry over the Indian trade had hit its peak. The French concentrated their trade on the Mississippi and the area surrounding Detroit. Using the numerous waterways for transportation they spread their trade across the Great Lakes region. The British concentrated mainly in the town of Albany in New York (Tanner 1987). In Ohio at this time, the Shawnee Indians began to consolidate its scattered groups in the lower half of the state. In the 1750's, the French and Indian forces fought the British at Pickawillany, capturing British traders and a Miami leader (Tanner 1987). The French then began to move south into Kentucky and into eastern Ohio, securing trade with the Indians. They remained in control of the trade in Ohio until the beginning of the Seven Years War in Europe. The conflict between France and Great Britain climaxed in the French and Indian War of 1754-60 (Tanner 1987). The war began with the defeat of General Braddock's British forces at Fort Duquesne in 1755 (Tanner 1987). The Great Lakes Indians supported the French as a way to stop the land hungry British from taking more Indian lands. The Indians concentrated their attacks on the British outposts and small settlements, also sending large numbers to aid the French battling the British militia. The final battle of the French and Indian War took place in Montreal on September of 1760 (Tanner 1987). With the French capitulation, and surrender of all military posts, the British gained full control of the trade routes. In 1763, Great Britain was granted the Ohio lands under the laws set forth in the Treaty of Paris (Tanner 1987).

The Ohio lands consisted of at least six different tribal groups circa 1768. The Ottawa and Miami were located in the northwest. The Shawnee were located primarily in the southwest. The Wyandot were located in the north-central part of the state. The Delaware and Mingo were in the eastern half of the state. The conflicts between the tribes had lessened considerably due to their concerns with the British. In 1795, the Treaty of Greenville was established to move all native peoples north of the 42nd parallel (Tanner 1987). The last major development involving the Ohio Native Americans, British and Americans was The War of 1812. The battles that ensued



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culminated in the defeat of the British and the Indians being sent to reservations in Northwest Ohio.

4.2. Trumbull County History

On July 10, 1800, Trumbull County was established and named for the governor of Connecticut, Jonathan Trumbull (Warren-Trumbull County Bicentennial Commission 1976). It was originally part of the Western Reserve land grant. The first white resident of the county was a hunter who was known as "Old Merryman", who settled in Warren Township in the mid to late 1700s (Everts 1874). Other early settlers of the county were Ephrain Quinby, Richard Storer, John Young, James Mahon, William Fenton, Francis Carlton, Ebenezer King, William Cook, Edward Jones, and Jonathan and Josilan Church (Everts 1874).

In 1788, the first log cabin was constructed by John Young, on the crest of Lane's Hill in Warren Township. In 1800, the first log schoolhouse was built in Warren Township, north of city hall, with the first school teacher being George Parsons. The first jail was a room of Ephrain Quinby's house, which stood near Erie station on south Main Street. In 1801, the county's first merchant was James E. Caldwell who would use canoes and rafts on the Mahoning River to bring in his supplies (Warren-Trumbull County Bicentennial Commission 1976). The first gristmill was located in Warren and was erected by Henry Lane Jr. and Charles Dailey in June 1802. Also in 1802, the first hotel was erected by Jesse Holliday on the southeast corner of Main and Market Streets. The first courthouse of the county was a log cabin that was built by James Scott in 1805 and was located at the corner of Mahoning Avenue and High Street (Warren-Trumbull County Bicentennial Commission 1976).

4.3 Howland Township History

Howland Township was named after its purchaser, Joseph Howland. It was officially organized as a township in 1812 (Upton 1909). The first settler was John Adgate who arrived in 1799 (Upton 1909). Among the other early settlers was the family of Daniel Hanks, who were credited with arriving on the first covered carriage in the township. Richard Hank kept a hotel at Howland Springs where General Garfield was said to frequent. The Seely family was another early family whose descendents still reside in the township (Upton 1909).

The first schoolhouse was constructed of logs on July 4, 1804 (Upton 1909). The first frame barn was built by Barber King in 1822 (Upton 1909). The first store was run by John Collins. The first recorded marriage was between Jack Legg and Conny Ward in 1803 (Upton 1909).



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5. Literature Review

5.1. Introduction

The literature review at the State Historic Preservation Office (SHPO) encompassed the immediate area surrounding the project area. This area includes a portion of the United States Geological Survey (USGS) 1994 Girard and 1994 Warren, Ohio 7.5 Minute Series (Topographic) maps.

5.2. William C. Mills' *An Archaeological Atlas of Ohio* (1914)

In the early part of the past century the director of the Ohio Archaeological and Historical Society, William C. Mills, produced a generalized map of mound and site locations at the county level through personal inspection and correspondence. Examination of William C. Mills' *Archaeological Atlas of Ohio* (1914) failed to show any resources located within or near the project area (Figure 6).

5.3. Ohio Archaeological Inventory Forms

A search was conducted of the Ohio Archaeological Inventory (OAI) forms to determine if any previously documented archaeological sites were located within the study radius. No previously identified sites were identified.

5.4. Ohio Historic Inventory Forms

A search was conducted of the Ohio Historic Inventory (OHI) files to determine if any previously documented historic buildings or structures were located within the study area. There were six OHI files located along SR 46.

The John Hyre Residence (TRU-1083-18) is a mid-19th century Greek Revival style house located at 1360 SR 46. Modern aerials indicate this house has been demolished. The house located at 1155 SR 46 (TRU-2500-18) is a c.1900 vernacular style house. Modern aerials indicate that this house has been demolished. The house located at 1424 SR 46 (TRU-2501-18) is a c.1900 vernacular style house. Modern aerials indicate that this house has been demolished. The house located at 1524 SR 46 (TRU-2502-18) is a c.1900 vernacular style house. This house is located approximately 1,750 ft. to the east of the project. The house located at 1546 SR 46 (TRU-2503-18) is a c.1900 vernacular style house. Modern aerials indicate that this house has been demolished. The house located at 1894 SR 46 (TRU-2505-18) is a c.1900 vernacular style house. Modern aerials indicate that this house has been demolished.

5.5. Ohio Genealogical Society Cemeteries

A review of the archived Ohio Genealogical Society (OGS) Cemeteries files stored at the SHPO was conducted. There was one OGS Cemetery identified within the study area. The Seely Cemetery (OGS#11626) is located southeast of the project on the east side of SR 46.



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5.6. Consensus Determination of Eligibility Files

A review of the archived Consensus Determination of Eligibility (DOE) files stored at the SHPO was conducted. There was one DOE property identified within the study area.

The John Hyre Residence (TRU-1083-18) is located at 1360 SR 46. As noted, modern aerials indicate this house has been demolished.

5.7. National Register of Historic Places Files

A search of the National Register of Historic Places (NRHP) files was conducted for historic properties in the vicinity of the project area. There were no NRHP properties located within the study area.

5.8. National Historic Landmark Files

A review of the archived National Historic Landmarks (NHL) files stored at the SHPO was conducted. There were no NHL properties identified within the study area.

5.9. Cultural Resources Management Reports

Review of the Cultural Resources Management (CRM) reports indicated that there was one prior CRM study conducted in the near vicinity of the project area.

Lee, Alfred

1993 Phase I Literature Review and Project Overview and Phase II Locational Reconnaissance for the TRU-46-5.5 Project Area, Howland Township, Trumbull County, Ohio.

This survey was for the SR 46 improvement project. It failed to identify any archaeological sites in or near the project area.

5.10. Historic Atlases and Topographic Maps

Historic atlases and the 7.5 and 15 minute topographic maps of Howland Township, Trumbull County were researched for the location of historic buildings and for past owners and their possible historical importance.

The *Combination Atlas Map of Trumbull County, Ohio* (Everts 1874) indicates that the John Hank estate and Amos Dunlap owned the property containing the project area (Figure 3). There were no houses located in the project area.

The *Atlas and Directory of Trumbull County, Ohio* map (The American Atlas Company 1899) indicates that Cornelius Easthope and Amos Dunlap owned the project area (Figure 4). There were no houses located in the project area.

The United States Geological Survey (USGS) 1906 *Youngstown* and 1908 *Warren, Ohio Quadrangle 15 Minute Series (Topographic)* maps indicated that there were no houses within the project area (Figure 5). The USGS 1994 *Girard* and 1994 *Warren, Ohio Quadrangle 7.5 Minute*



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Series (Topographic) maps indicate there are possibly as many as three to four houses located along Dawson Drive within the project area (Figure 2). Based on the Trumbull County Auditor information, the houses along this street are typical mid-century ranch and split level type houses.

5.11. Landowner Research

The county histories were researched for information regarding the previous landowners, Amos Dunlap and Cornelius Easthope. No information regarding the landowners could be found. It is presumed that they were not important to the historic development of the area.



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6. Research Design

The research design is a series of general questions used to direct the fieldwork by focusing the efforts towards a specific goal. The goal of this particular project is to locate, document and evaluate for the National Register of Historic Places all the cultural resources which may be located within the project area. The research design draws on the information gathered from the environmental situation, prehistoric and historic settings, locally specific literature review, historic maps and atlas review and authors' experience in the region. These factors are taken together to form a series of general research questions that are formulated prior to the initiation of fieldwork. The goal of the research questions is to develop expectations as to where and why cultural resources are located within the project area.

6.1. Fieldwork Methodologies

There are three basic methodologies that may be utilized during the fieldwork portion of these Cultural Resources Management Investigations; visual inspection, surface collection and subsurface investigations. The use of each methodology is dependent on the conditions experienced in the field.

6.1.1. Visual Inspection

All portions of the project area will be subjected to visual inspection. Visual inspection will be utilized to identify any structures, buildings, objects, or properties that are over 50 years old. It will also be used as a supplementary form of investigation to examine portions of the project area that may be steep, disturbed, or saturated.

6.1.2. Surface Collection

Any portions of the project area which offer sufficient bare ground surface visibility (>50%) will be subjected to surface collection methodologies. Surface collection will be conducted through pedestrian transects which will be paced at 3 m (10 ft) intervals. Where possible, all encountered artifacts may be initially flagged with pin flags for the purpose of defining spatial distribution of encountered archaeological sites. The pin flags will also allow the Principal Investigator to review the locations of the artifacts and to determine if concentrations, densities, or clusters are apparent on the inter-site level. If the Principal Investigator deems that there are no concentrations, densities, or clusters present at the encountered site, then the location and boundaries of the site will be plotted on a map and the artifacts will be grab sampled. If the Principal Investigator observes concentrations, densities, or clusters at an identified site then the artifacts will be collected by grid blocks, or the artifacts will be piece plotted.

6.1.3. Subsurface Investigation

All portions of the project area which do not offer sufficient bare ground surface visibility (<50%), and are less than 15 degrees slope will be investigated through subsurface testing methodologies. Subsurface testing in the form of shovel test units will be performed at 15 m or 50 ft intervals in the form of a grid system across the whole of the project area except in areas of low probability. If the project consists of a corridor, units will be excavated at 15 m or 50 ft intervals along the length of the corridor except in areas of low probability. Areas of low



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probability include areas such as those that are seasonally inundated and poorly drained. In this case intervals may be increased at the discretion of the field supervisor. Also, the areas immediately surrounding known historic structures may be excavated at decreased intervals due to the increased probability of remains. These shovel test units measure 0.5 m x 0.5 m (1.6 ft x 1.6 ft). All soil from each unit will be screened through 0.25 in² hardware cloth. The artifacts from each unit will be bagged and labeled as such. The floor of each unit will be scraped level and examined for subsurface features. Any cultural features identified within a shovel test unit will be exposed, troweled and cleaned for pictures and a plan view drawing. Depending on the size and location of the feature it could either be quartered or halved and excavated by hand with appropriate profile drawings and pictures taken. If stratified fill is evident then the remaining portions of the feature could be excavated accordingly. A sample of fill measuring 3 liters (size permitting) will be collected for the purpose of flotation to recover organic remains (primarily prehistoric features). A portion of the feature not to exceed one half of the total size may be left *in situ* at the discretion of the field supervisor.

6.2. Artifact Analysis Methodologies

6.2.1. Prehistoric Period Artifact Analysis Methodology

After the completion of the fieldwork, trained personnel will conduct a detailed analysis on the artifacts that are recovered. All of the artifacts that are recovered will be maintained and inventoried by site designation. The artifacts that are non-diagnostic in nature will be classed into their functional attributes (described below). The analyses that will be conducted on the temporally diagnostic prehistoric artifacts that may be recovered from the project area will be based upon various projectile point and tool form typology sources and guides which will include but may not be limited to Bell (1958, 1960), Converse (1973, 1974, 1978, 1994), DeRegnaucourt and Georgiady (1998), Gramly (1992), Justice (1987), Perino (1968, 1971) and Waldorf and Waldorf (1987). A chert type analysis will also be performed on all of the chert artifacts that are collected based solely on the macroscopic attributes of each type.

6.2.2. Historic Period Artifact Analysis Methodology

After the completion of the fieldwork, an artifact analysis will be conducted by trained personnel, on the historic period artifacts that may have been recovered. Historic period artifacts will be maintained and inventoried by site. They will be typed through the use of various guidebooks and other resources for the purpose of determining the approximate age of the artifacts as well as to aid in site interpretation. The guidebooks and resources which will be used include, but are not limited to, the following: Ball (1984), DeBolt (1994), Feild (2001), Gurke (1987), Hume (1969), Ketchum (2000), Kovel and Kovel (1986a, 1986b), Lehner (1988), Majewski and O'Brien (1987), Manson and Snyder (1997), McAllister (2001), Newman (1970), Shuman (1998), South (1977), Sussman (1977) and Thorn (1947). After an analysis has been performed and the artifacts have been inventoried, the site will be analyzed as to function, economic status of the inhabitants (when possible) and artifact patterning (when possible).

6.3. Background Information

A review of the archived OAI forms stored at the SHPO was conducted in order to get the necessary background information. This research indicated that there have been very few prior



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archaeological surveys in the immediate study area. As a result, there were no archaeological sites recorded in the study area. The project area is largely wooded and is located a few hundred feet east of Mosquito Creek. Ordinarily, well-drained areas near major streams contain a high probability for prehistoric era archaeological sites. This generalization is tempered by the fact that the project area is generally not well-drained and contains large scattered wetlands which total 16.34 acres of the project area.

Based on the review of historic maps and atlases, there were no historic houses located within the project area. The property is located well off any historic roads in the interior of a wooded parcel. The only houses noted were some mid-20th century ranch and split-level style houses along a portion of Dawson Drive.

6.4. Expected Results

The information gathered from the literature review indicates that well more than half of the project area consists of poorly drained soils. Consequently, portions of the project area consist of large, forested wetlands. The poorly drained nature of the project area reduces the chances that large, diverse prehistoric era archaeological sites would be located in the project area.

Review of the historic atlases and topographic maps and the county auditor website indicated no historic houses located within the project area aside from some mid-20th century ranch and split-level houses. As a result, it is unlikely that there are any historic era archaeological sites located in the project area.

6.5. Curation and Submission of Artifacts

In accordance with the property laws of the State of Ohio, all artifacts remain the property of the landowner till such a time as they relinquish their rights with the understanding that the artifacts will become the property of an acceptable curation facility. With the full cooperation of the landowner and pending acceptance of the artifacts by the selected curation facility, all artifacts will be washed and prepared for permanent curation. Until this time all artifacts will be stored in a temporary manner in a limited access facility under the direction of the Cultural Resources Department.



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7. Field Work and Interpretation

7.1. Fieldwork

Fieldwork was conducted for the approximately 54 ac. Enterprise Parkway Development in Howland Township, Trumbull County, Ohio in February 2019.

The project is located north of the City of Niles (Figures 1 and 2). It is composed almost entirely of woods with some small residential parcels. The project necessitated the use of shovel testing field methods (Figure 7). A number of large, previously delineated wetlands, totaling 16.34 acres, were located throughout the project and were not tested (Exhibits 1-3). The woods were fairly open and for the most part, standard shovel testing at 15 m intervals was able to be conducted. The intervals between units were paced so some human error is expected.

Datum 1 was established at the northeastern corner of the project area and was utilized in testing the northeastern portion of the project, which is located directly west of Hiram Place SE. This portion of the project was entirely wooded (Exhibit 4). Transect lines ran in an east-west direction between two large previously delineated wetlands. A spoil pile of dirt was located within the project and adjacent to Hiram Place SE (Exhibit 5). No archaeological sites were identified within this portion of the project area.

Datum 2 was established at the western terminus of Kenyon Drive. This datum was used to test the bulk of the project area located between two large delineated wetlands. Transect lines also ran in an east-west direction within a wooded area with a number of substantial wetlands and streams (Exhibit 6). An existing gravel drive and adjacent sanitary sewer easement ran due west off of Kenyon Drive toward a gas well and a pair of tanks located at the western end of the project (Exhibits 7-8). Another gas well was located within the project near the end of Kenyon Drive (Exhibit 9). Several spoil and rubble piles were also located along either side of the drive and around the gas wells (Exhibit 10). As a result, soil disturbance was encountered within those areas. No archaeological sites were identified within this portion of the project area.

Datum 3 was located within the southern portion of the project area and was established at the northeast corner of the 7672 Dawson Drive SE property parcel. This datum was utilized in testing three residential lots and sections of woods, which are located between a delineated wetland to the north and the Eastwood Mall to the south (Exhibits 11-13). This section of the project included a number of delineated wetlands and is essentially divided by Dawson Drive SE. Transect lines ran in a north-south direction along opposite sides of the road. Portions of the yards contained disturbance due to previous construction activities conducted on the properties throughout the years. The southern end of this area was found to have also been disturbed with dirt and gravel piles, likely as a result of the mall construction (Exhibit 14). Two of the houses within this portion of the project were built in 1974 (Exhibits 15-16), while the third house was built in 1955 (Exhibit 17). They are further described below. No archaeological sites were identified within this portion of the project area.

7.2. Architecture Descriptions

Three houses are located directly within the project area. The house located at 7662 Dawson Drive SE was built in 1974 (Exhibit 15). This Split-Level house has a hipped roof with asphalt



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shingles, an attached one-bay garage, aluminum siding, front concrete porch with metal railing, a brick chimney and metal chimney within the roof's surface, and front picture, casement, and horizontal sliding windows with aluminum shutters. It does not meet the minimum 50 year age for consideration onto the NRHP.

The house located at 7672 Dawson Drive SE was built in 1974 (Exhibit 16). This Ranch type house has a hipped asphalt shingle roof, a brick chimney within the roof's surface, an attached one-bay garage, a front concrete porch with metal railing, front picture window, and 1/1 type windows with aluminum shutters. It does not meet the minimum 50 year age for consideration onto the NRHP.

The house located at 7695 Dawson Drive SE was built in 1955 (Exhibit 17). This Vernacular style house has a gabled asphalt shingle roof, aluminum siding, 1/1 type and front bay windows, a side one-story addition, a side overhang addition, and a front concrete porch with metal railings.

7.3. Area of Potential Effects (APE)

The APE for this project has been limited to the footprint of the ground disturbance and immediately adjacent properties. This is justified by the fact that the project is surrounded by modern commercial developments to the north and south and dense woods to the northwest and west. Additionally, large wooded portions of the property are being preserved as conservation areas. The Trumbull County auditor's website (www.auditor.co.trumbull.oh.us) was referenced in identifying historic buildings. A total of eight houses constructed more than 50 years ago were identified within the APE (Figure 7). They were built from 1952 to 1967 and are summarized in the table below.

Address	Date	Style/Type	Additions/ Alterations	Detached Garage/ Outbuilding	Exhibit #
8205 Hiram Pl.	1967	Ranch	Yes	Yes	18
8226 Hiram Pl.	1965	Ranch	Yes	Yes	19
8082 Kenyon Dr.	1960	Ranch	Yes	No	20
8102 Kenyon Dr.	1959	Split-Level	Yes	No	21
8128 Kenyon Dr.	1964	Vernacular	Yes	No	22
8156 Kenyon Dr.	1956	Ranch	Yes	Yes	23
7648 Dawson Dr. SE	1952	Vernacular	Yes	Yes	24
7761 Dawson Dr. SE	1955	Ranch	Yes	Yes	25

7.4. Conclusions

The fieldwork that was conducted for the approximately 54 ac. Enterprise Parkway Development in Howland Township, Trumbull County, Ohio identified no archaeological sites within the project area. Nine houses more than 50 years old were identified within the APE, one of which is located directly within the project area.



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8. Expected Results Evaluation

There were expected results prepared before the commencement of the field work portion of these investigations, based on the background information and previous experience in the area. These questions were formulated so that the field work portion of these investigations could be conducted with some direction and with a set of goals in mind.

The background research indicated that the project area was largely poorly drained and significant wetlands were located both within and surrounding the project. It was expected that there was a low chance that diverse, large-scale prehistoric period archaeological sites would be located within the project area. No prehistoric period archaeological sites were found.

Following a review of the historic maps and atlases for the project area, it was believed to be unlikely that historic era archaeological sites worthy of study would be located within the project area. As expected, no historic period archaeological sites were identified.

Exhibit A
Legal Description of Covenant Area

May 14, 2019

**State of Ohio
County of Trumbull
Howland Township**

LEGAL DESCRIPTION

Lands of North Eastwood LLC

Exhibit A

Conservation Easement Areas A and B

Situated in the State of Ohio, County of Trumbull, Howland Township and being parts of Sections 37 and 38 in the original survey of Howland Township, and also being part of lands owned by North Eastwood LLC, as recorded in Instrument No. 201501300001788, and 201811120022362, of the Trumbull County Record of Deeds;

Conservation Easement Area A

Commencing at a 5/8" diameter iron pin in the southerly line of Mall River Road, variable width right-of-way, as shown on the Goldco Plat No.1 as recorded in Volume 52, Page 87 of the Trumbull County Record of Plats, southerly line also being the corporation line of the City of Warren, at the north west corner of Lot 13 in the Beaver Plat No. 1 as recorded in Volume 22, Page 38 of the Trumbull County Record of Plats;

Thence N 85° 43' 37" W, along the southerly line of Mall River Road right-of-way and the southerly line of Howland Township Board of Trustees as recorded in Instrument No. 201102090002519 of the Trumbull County Record of Deeds, and the southerly Corporation Line of the City of Warren, and passing over a 5/8" diameter iron pin, at a distance of 411.46 feet at the southeasterly property corner of Howland Township Board of Trustees, a total distance of 1,184.86 feet, to the **TRUE PLACE OF BEGINNING** for the herein described conservation easement area A;

Thence S 24° 10' 20" E, leaving the southerly property line of Howland Township Board of Trustees, also being the southerly Corporation Line of the City of Warren, and entering upon the lands of North Eastwood LLC, and along a conservation easement boundary, a distance of 43.04 feet;

**Conservation Easement Areas A & B
Lands of North Eastwood LLC
Legal Description**

May 14, 2019

Thence the following four (4) courses along a conservation easement boundary;

S 77° 16' 15" W, a distance of 358.03 feet;
N 57° 03' 40" W, a distance of 79.41 feet;
N 89° 06' 25" W, a distance of 45.67 feet;

N 54° 47' 55" W, a distance of 208.44 feet to the southerly property line of the lands of Howland Township Board of Trustees, and also being the southerly Corporation Line of the City of Warren;

Thence S 85° 43' 37" E, along the south property line of the lands of Howland Township Board of Trustees, and the southern Corporation Line of the City of Warren, a distance of 615.95 feet and returning to the **True Place of Beginning** and enclosing an area of 53,495.41 sq. ft. or 1.2281 acres of land, more or less.

Conservation Easement Area B

Commencing at a 5/8" diameter iron pin in the southerly line of Mall River Road, variable width right-of-way, as shown on the Goldco Plat No.1 as recorded in Volume 52, Page 87 of the Trumbull County Record of Plats, southerly line also being the corporation line of the City of Warren, at the north west corner of Lot 13 in the Beaver Plat No. 1 as recorded in Volume 22, Page 38 of the Trumbull County Record of Plats;

Thence N 85° 43' 37" W, along the southerly line of Mall River Road right-of-way and the southerly line of Howland Township Board of Trustees as recorded in Instrument No. 201102090002519 of the Trumbull County Record of Deeds, and the southerly Corporation Line of the City of Warren, and passing over a 5/8" diameter iron pin, at a distance of 411.46 feet at the southeasterly property corner of Howland Township Board of Trustees, a total distance of 1,820.27 feet, to the **TRUE PLACE OF BEGINNING** for the herein described conservation easement area B;

Thence S 54° 49' 58" E, leaving the southerly property line of Howland Township Board of Trustees, also being the southerly Corporation Line of the City of Warren, and entering upon the lands of North Eastwood LLC, and along a conservation easement boundary, a distance of 187.68 feet;

**Conservation Easement Areas A & B
Lands of North Eastwood LLC
Legal Description**

May 14, 2019

Thence the following twenty nine (29) courses along a conservation easement boundary;

N 78° 28' 44" W, a distance of 73.02 feet;
S 29° 06' 12" W, a distance of 303.69 feet;
N 38° 23' 03" W, a distance of 34.43 feet;
N 21° 26' 09" W, a distance of 41.64 feet;
N 59° 30' 45" W, a distance of 19.50 feet;
S 15° 02' 21" W, a distance of 79.07 feet;
S 24° 40' 37" W, a distance of 54.37 feet;
S 66° 34' 02" W, a distance of 50.51 feet;
S 11° 59' 45" E, a distance of 38.25 feet;
S 89° 40' 47" W, a distance of 21.20 feet;
N 18° 14' 42" W, a distance of 34.91 feet;
S 87° 18' 09" W, a distance of 21.74 feet;
S 55° 42' 14" W, a distance of 54.58 feet;
S 36° 38' 05" W, a distance of 56.63 feet;
S 11° 59' 43" W, a distance of 132.45 feet;
S 29° 37' 29" E, a distance of 62.12 feet;
S 26° 44' 22" W, a distance of 179.69 feet;
N 52° 24' 23" W, a distance of 52.83 feet;
S 32° 29' 03" W, a distance of 29.34 feet;
S 18° 19' 43" E, a distance of 91.74 feet;
S 63° 22' 14" E, a distance of 53.50 feet;
S 36° 38' 34" W, a distance of 39.75 feet;
S 04° 24' 00" E, a distance of 59.74 feet;
S 82° 08' 20" W, a distance of 89.97 feet;
S 41° 40' 48" W, a distance of 59.54 feet;
S 66° 56' 21" W, a distance of 34.20 feet;
S 02° 00' 46" E, a distance of 11.00 feet;
S 78° 16' 21" E, a distance of 29.20 feet;

S 05° 07' 12" W, a distance of 216.99 feet to the northerly property line of Joseph D. Jr. and Terra A. DiGiovanni, as recorded in Official Record 550, Page 941 of the Trumbull County Record of Deeds;

Thence N 84° 36' 01" W, along the northerly property line of Joseph D. Jr. and Terra A. DiGiovanni, a distance of 233.53 feet;

**Conservation Easement Areas A & B
Lands of North Eastwood LLC
Legal Description**

May 14, 2019

Thence S 05° 21' 24" W, along the westerly property line of the lands of Joseph D. Jr. and Terra A. DiGiovanni, a distance of 524.36 feet to the northerly property line of the lands of Byer, as recorded in Official Record 838, Page 56 of the Trumbull County Record of Deeds;

Thence N 84° 09' 00" W, along the northerly property line of the lands of Byer, a distance of 150.00 feet to the northwesterly property corner of the lands of Byer;

Thence S 05° 21' 24" W, along the westerly property line of the lands of Byer, a distance of 25.00 feet to the Corporation Line of the City of Niles and also being the northeasterly property corner of the lands of City of Niles, as recorded in Official Record 1385, Page 349 of the Trumbull County Record of Deeds;

Thence N 84° 09' 00" W, along the Corporation Line of the City of Niles, and along the northerly property line of the lands of City of Niles, a distance of 766.58 feet;

Thence S 05° 51' 00" W, continuing along the Corporation Line of the City of Niles, and along the westerly property line of the lands of City of Niles, a distance of 783.02 feet;

Thence N 84° 08' 56" W, continuing along the Corporation Line of the City of Niles, and along the northerly property line of the lands of City of Niles, a distance of 326.96 feet, to the centerline of Mosquito Creek;

Thence the following twenty-three (23) courses along the centerline of Mosquito Creek;

N 15° 55' 00" E, a distance of 108.92 feet;
N 19° 54' 00" E, a distance of 344.47 feet;
N 33° 18' 00" E, a distance of 214.99 feet;
N 26° 21' 01" E, a distance of 240.05 feet;
N 09° 00' 13" W, a distance of 183.76 feet;
N 26° 31' 08" E, a distance of 69.83 feet;
N 65° 32' 36" E, a distance of 85.47 feet;
S 67° 26' 05" E, a distance of 152.62 feet;
S 89° 31' 33" E, a distance of 141.79 feet;
N 23° 25' 48" E, a distance of 56.59 feet;
N 06° 34' 27" W, a distance of 124.16 feet;

**Conservation Easement Areas A & B
Lands of North Eastwood LLC
Legal Description**

May 14, 2019

N 14° 17' 15" E, a distance of 40.22 feet;
N 35° 08' 40" E, a distance of 120.00 feet;
N 67° 08' 30" E, a distance of 155.00 feet;
N 11° 00' 00" E, a distance of 165.00 feet;
N 35° 45' 00" E, a distance of 250.00 feet;
N 54° 35' 00" E, a distance of 280.00 feet;
N 12° 00' 00" E, a distance of 125.00 feet;
N 29° 00' 00" W, a distance of 310.00 feet;
N 22° 45' 00" W, a distance of 220.00 feet;

N 47° 00' 00" E, a distance of 120.00 feet to the southwesterly property corner of the lands of Howland Township Board of Trustees;

S 80° 04' 10" E, along the southerly property line of the lands of Howland Township Board of Trustees, a distance of 470.00 feet;

N 72° 42' 00" E, continuing along the southerly property line of the lands of Howland Township Board of Trustees, and also being the southerly Corporation Line of the City of Warren, a distance of 65.00 feet;

Thence S 85° 43' 37" E, along the south property line of the lands of Howland Township Board of Trustees, and the southern Corporation Line of the City of Warren, a distance of 389.73 feet and returning to the **True Place of Beginning** and enclosing an area of 1,616,542.78 sq. ft. or 37.1107 acres of land, more or less.

Combining the acreage from Conservation Area A (1.2281 acres), and Conservation Area B (37.1107 acres) creating a total of 38.3388 acres

The above said legal description is not based on an actual field boundary survey but is based on the following information (1) Replat of Lot 1 in The Marion Plaza, Inc., Plat No. 1, prepared by Lynn, Kittinger & Noble, Inc., dated January 21, 1999, stamped and signed by Carroll L. Hermann, P.S., Ohio Registration License No. 5663 and recorded in Plat Book 48, Page 43 of the Trumbull County Record of Deeds; (2) ALTA/ACSM Land Title Survey, prepared by Lynn, Kittinger & Noble, Inc., dated November 2014, last revised January 23, 2015, stamped and signed by Carroll L. Hermann, P.S., Ohio Registration License No. 5663.

North Eastwood LLC
File No. 21 Final

IT IS SO AGREED:

OWNER: NORTH EASTWOOD, LLC

By: _____
Anthony M. Cafaro, Jr.

Title: Authorized Agent

Date: _____

STATE OF OHIO)
) SS:
COUNTY OF TRUMBULL)

Personally appeared before me, the undersigned, a Notary Public in and for said County and State, Anthony M. Cafaro, Jr., known to me to be the Authorized Agent of North Eastwood, LLC, the limited liability company which executed the foregoing instrument for and on behalf of said limited liability company, being thereunto duly authorized; that the same is his free act and deed as such Authorized Agent and the free act and deed of said limited liability company.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal at Niles, Ohio, this _____ day of _____, 20____.

Notary Public

**HOLDER: THE BOARD OF TOWNSHIP TRUSTEES OF
HOWLAND TOWNSHIP, TRUMBULL COUNTY, OHIO**

By: _____
Matthew G. Vansuch

Title: Trustee for Howland Township, Trumbull County, Ohio

Date: _____

STATE OF)
COUNTY OF) SS:
)

Before me, a notary public, in and for said county and state, personally appeared, Matthew G. Vansuch, a duly authorized Trustee of Howland Township, Trumbull County, Ohio, who acknowledged to me that he did execute the foregoing instrument on behalf of Howland Township, Trumbull, County, Ohio.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal at _____, this _____ day of _____, 20____.

Notary Public

**HOLDER: THE BOARD OF TOWNSHIP TRUSTEES OF
HOWLAND TOWNSHIP, TRUMBULL COUNTY, OHIO**

By: _____
Dr. James J. LaPolla, Jr.

Title: Trustee for Howland Township, Trumbull County, Ohio

Date: _____

STATE OF)
COUNTY OF) SS:
)

Before me, a notary public, in and for said county and state, personally appeared, Dr. James J. LaPolla, Jr., a duly authorized Trustee of Howland Township, Trumbull County, Ohio, who acknowledged to me that he did execute the foregoing instrument on behalf of Howland Township, Trumbull, County, Ohio.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal at _____, this _____ day of _____, 20____.

Notary Public

**HOLDER: THE BOARD OF TOWNSHIP TRUSTEES OF
HOWLAND TOWNSHIP, TRUMBULL COUNTY, OHIO**

By: _____
Rick G. Clark

Title: Trustee for Howland Township, Trumbull County, Ohio

Date: _____

STATE OF)
COUNTY OF) SS:
)

Before me, a notary public, in and for said county and state, personally appeared, Rick G. Clark, a duly authorized Trustee of Howland Township, Trumbull County, Ohio, who acknowledged to me that he did execute the foregoing instrument on behalf of Howland Township, Trumbull, County, Ohio.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal at _____, this _____ day of _____, 20____.

Notary Public

OHIO ENVIRONMENTAL PROTECTION AGENCY

By: _____
Laurie A. Stevenson, Director

Date: _____

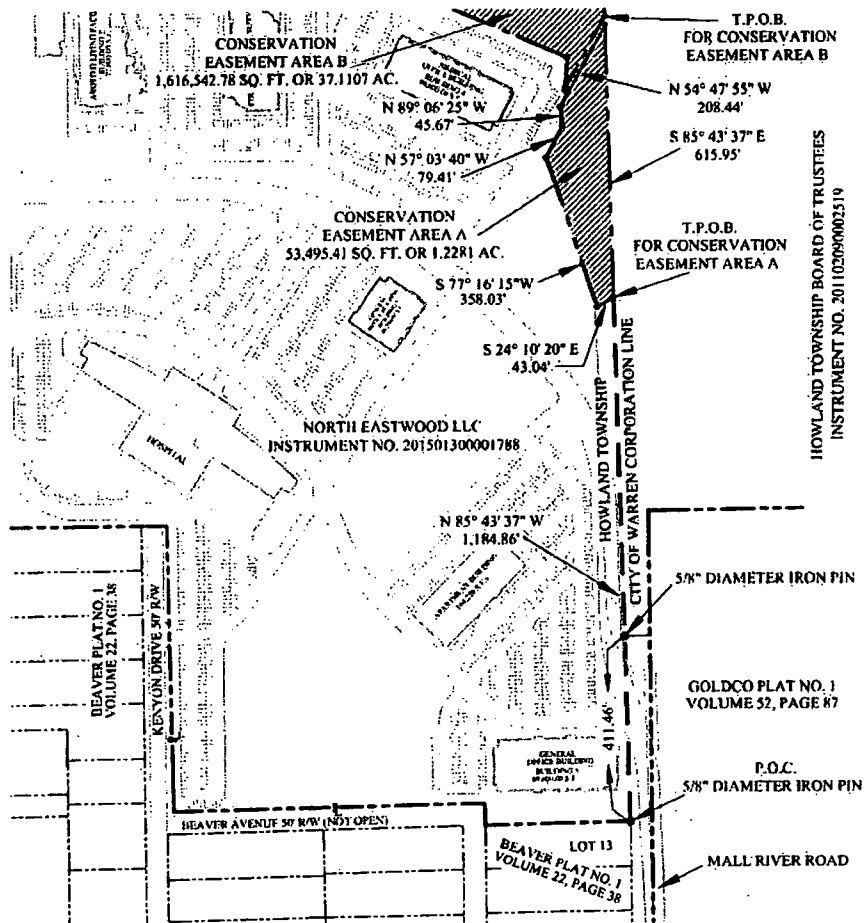
STATE OF OHIO)
) SS:
COUNTY OF FRANKLIN)

Before me, a notary public, in and for said county and state, personally appeared, Laurie A. Stevenson, the Director of Ohio EPA, who acknowledged to me that she did execute the foregoing instrument on behalf of Ohio EPA.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal at _____, this _____ day of _____, 20____.

Notary Public

Exhibit B Metes and Bounds Graphic of Covenant Area

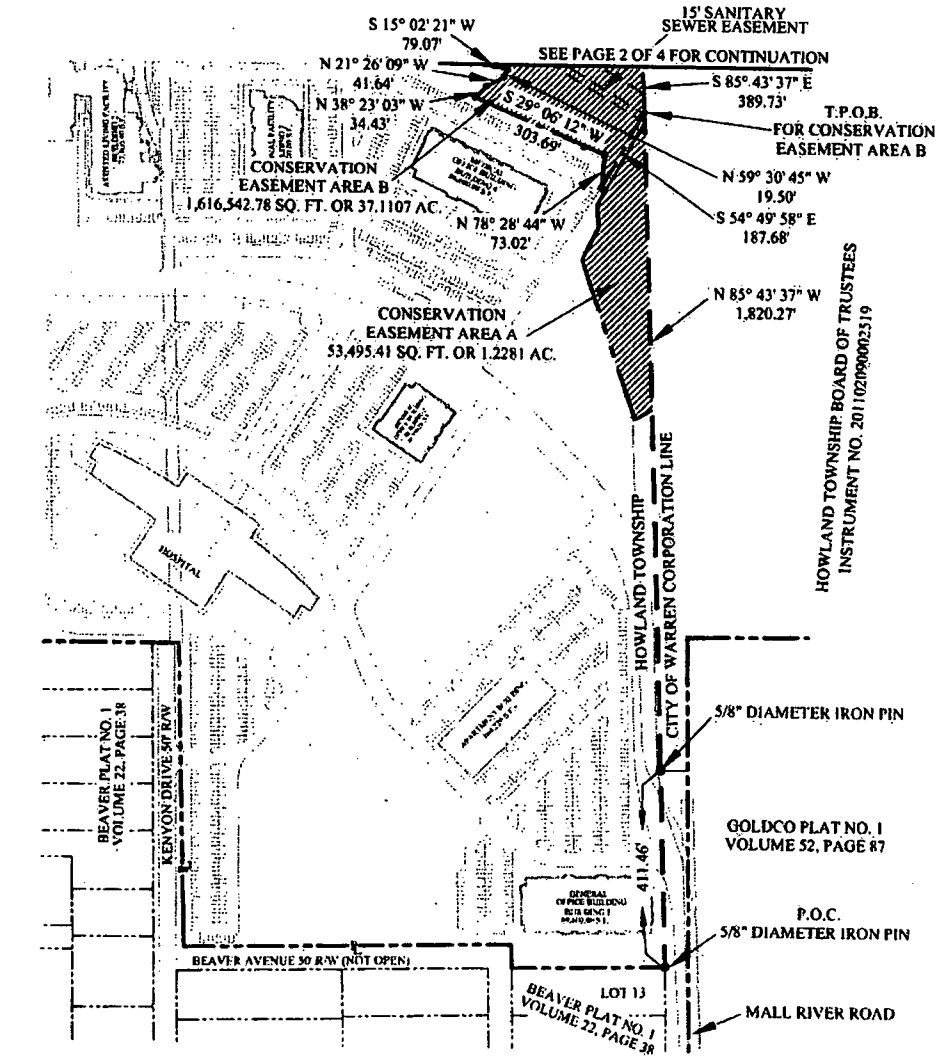


SCALE = 1" = 300'

LOCATION PLAN
NORTH EASTWOOD LLC
STATE OF OHIO
COUNTY OF TRUMBULL, HOWLAND TOWNSHIP
CONSERVATION EASEMENT AREAS A AND B
MAY 14, 2019

EXHIBIT B

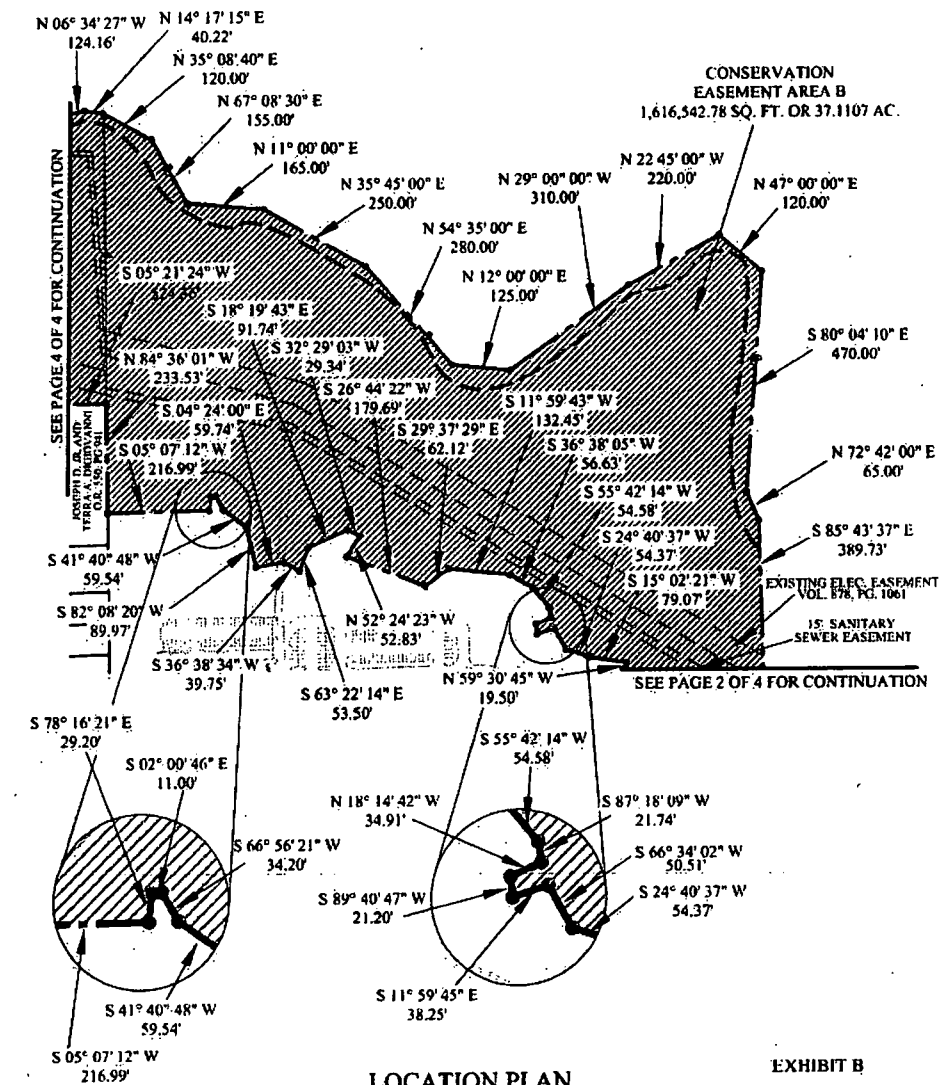
1 OF 4



SCALE = 1" = 300'

LOCATION PLAN
NORTH EASTWOOD LLC
STATE OF OHIO
COUNTY OF TRUMBULL, HOWLAND TOWNSHIP
CONSERVATION EASEMENT AREAS A AND B
MAY 14 2019

EXHIBIT B



SCALE = 1" = 300'

LOCATION PLAN
NORTH EASTWOOD LLC
STATE OF OHIO
COUNTY OF TRUMBULL, HOWLAND TOWNSHIP
CONSERVATION EASEMENT AREAS A AND B
MAY 14, 2019

EXHIBIT B

Exhibit C
Aerial Image of Covenant Area

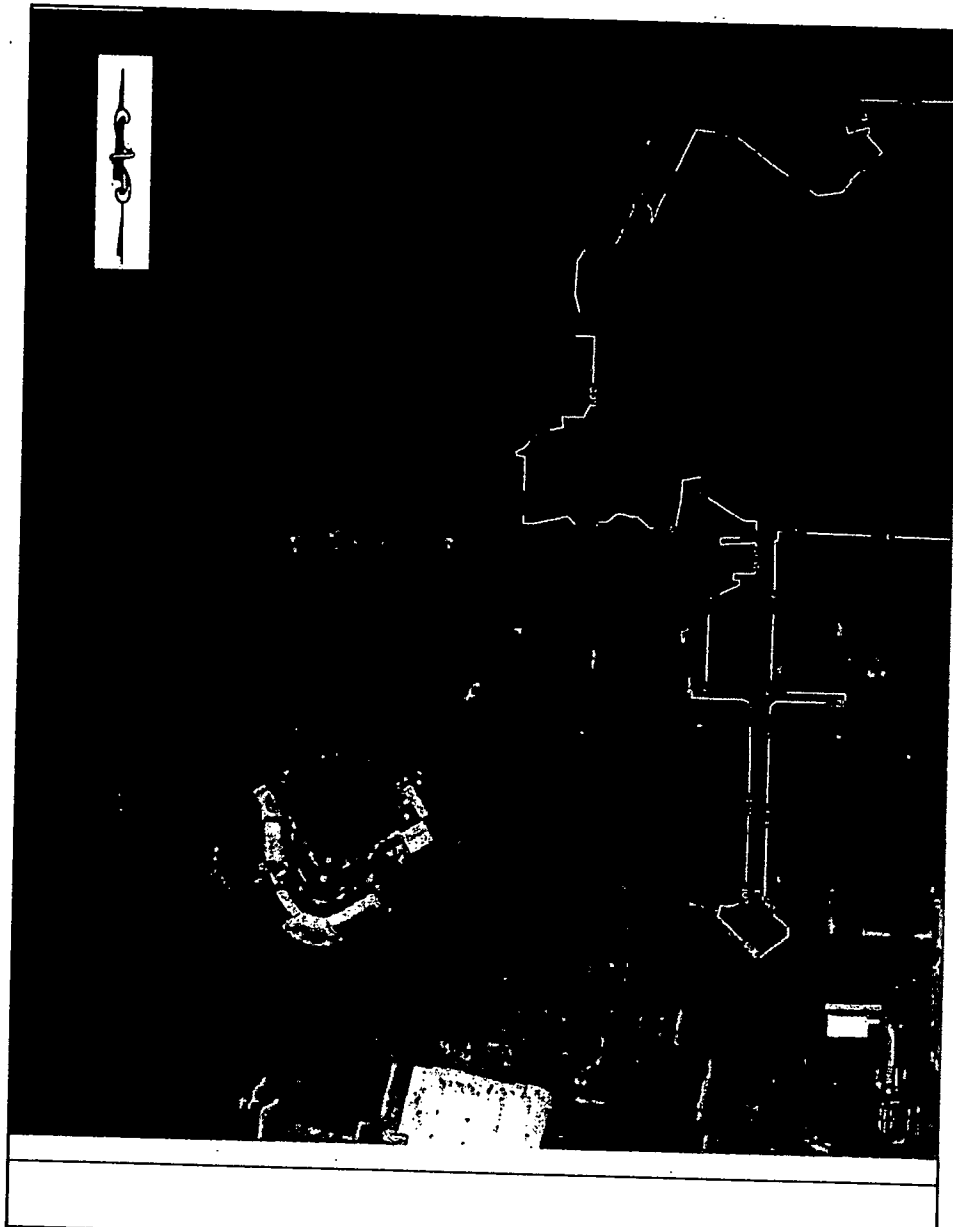


EXHIBIT 'C'

LEGEND			
	LIMITS OF DISTURBANCE		WETLAND CATEGORY 3
	PERENNIAL STREAM BUFFER		WETLAND CATEGORY 2
	INTERMITTENT STREAM BUFFER		CONSERVATION LIMIT
	CATEGORY 2&3 WETLAND BUFFER		STREAM

CAFARO

Commercial & Industrial
Real Estate Developers

Drawn by
J.E.B.

Date
10/22/2015

Scale
1" = 50'

NORTH EASTWOOD

1340 N.E.25 CORTLAND RD. HOLLAND, OHIO

EXHIBIT 3
VEGETATION INDEX OF BIOTIC INTEGRITY
FLORISTIC QUALITY REPORT
WETLAND F

VEGETATION INDEX OF BIOTIC INTEGRITY – FLORISTIC QUALITY REPORT

**WETLAND F
ENTERPRISE PARKWAY DEVELOPMENT
HOWLAND TOWNSHIP, TRUMBULL COUNTY,
OHIO**

November 2017

Prepared for:
North Eastwood, LLC
5577 Youngstown-Warren Road
Niles, Ohio 44446

Prepared by:



HZW Environmental
Consultants

6105 Heisley Road ♦ Mentor, Ohio 44060
440-357-1260 ♦ Fax 440-357-1510

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APPENDICES

Appendix A – VIBI-FQ Plot Location Map
Appendix B – Photographic Log
Appendix C – Field Data Sheets
Appendix D – Spreadsheet Results

TABLES

Table 1 – Cover Classes
Table 2 – Nested Quadrat Dimensions

BDL:bd1\H17205-01
Appendices

I:\2017\H17205-01\Non-Mosquito (Wet A)\NEastwood WetF VIBI-FQ Rpt.docx

VEGETATION INDEX OF BIOTIC INTEGRITY – FLORISTIC QUALITY REPORT

Wetland F
Enterprise Parkway Development
Howland Township, Trumbull County, Ohio (H17205-01)

1.0 INTRODUCTION

On September 6, 2017, HZW Environmental Consultants, LLC (HZW) conducted a Vegetation Index of Biotic Integrity – Floristic Quality (VIBI-FQ) at a study area located east of Mosquito Creek within the proposed Enterprise Parkway Development in Howland Township, Trumbull County, Ohio (herein referred to as the “Study Area”). The Study Area is located within a large wetland complex (labeled Wetland F) that abuts Mosquito Creek. This study was conducted in accordance with HZW’s letter agreement with North Eastwood, LLC (herein referred to as “the Client”).

1.1 Purpose

The primary purpose of this VIBI-FQ was to determine the quality of the vegetative community within the Study Area. This method was developed by the Ohio Environmental Protection Agency (Ohio EPA) in order to both categorize natural wetlands, as well as rate the progress of those created and/or enhanced for mitigation or other purposes. This comprehensive metric can also be used to objectively show the difference between two or more vegetative communities of different qualities/types.

1.2 Methods of Investigation

All investigative methods and field procedures were performed in accordance with the guidelines established in the Integrated Wetland Assessment Program Part 9: Field Manual for the Vegetation Index of Biotic Integrity for Wetlands, Version 1.5 (Field Manual). This document calls for the establishment of a 0.10 hectare (ha) plot containing ten 0.01 ha modules within wetlands that are large enough to encompass such a configuration. Each of these modules was then examined, as either an “intensive” or “residual” module, for vegetation presence and prevalence. The document recommended that at least four modules be chosen for greater scrutiny (i.e. intensive) whereas data from the other six was to be combined (i.e. residual).

Although the methods differed slightly between intensive and residual modules, the type of data taken was the same. Species presence, percent areal cover (i.e. cover class), woody stem count, and basal area of woody species within both types of modules were recorded. The cover class codes utilized are described in **Table 1**, below.

Table 1 Cover Classes

Class	Percent Cover
1	Solitary/Few
2	0-1
3	1-2
4	2-5
5	5-10
6	10-25
7	25-50
8	50-75
9	75-95
10	95-99

However, in intensive modules, a nested corner approach was applied to achieve a heightened level of certainty. To clarify, two (2) opposite corners were chosen within each intensive module and square quadrants were laid out within them. These quadrats were then examined, smallest to largest, with species presence being indicated at first level encountered. The dimensions of each square quadrat can be found below in Table 2.

Table 2 Nested Quadrat Dimensions

Quadrat Size (meters)	Quadrat Area (meters squared)	Depth Code
10x10	1000	1
3.16x3.16	10	2
1x1	1	3
0.32x0.32	0.1	4

After the presence of all species had been recorded for both corners, the percent areal cover was estimated over the entire module for each. This procedure was then completed for the remaining three (3) intensive modules. Within residual modules, presence and cover data was recorded only at a depth of one (1). After all six (6) residual modules had been sampled; the cover data was averaged to come up with a cover class appropriate for the entire residual portion, or depth code "R".

Once this information was collected, a representative numerical score was calculated based on which type of wetland was examined. Using the Integrated Wetland Assessment Program Part 4: A Vegetation Index of Biotic Integrity (VIBI-FQ) and Tiered Aquatic Life Uses (TALUs) for Ohio Wetlands, a derived numeric metric was then used to categorize the wetland into one of four General Wetland Aquatic Life Use Designations. These included Limited Quality Wetland Habitat (LQWLH), Restorable Wetland Habitat (RWLH), Wetland Habitat (WLH), and Superior Wetland Habitat (SWLH). Such designations are also synonymous with Category 1, modified Category 2, Category 2, and Category 3 wetland types, respectively.

2.0 SITE DESCRIPTION

On September 6, 2017, Benjamin Latoche and Rachel Davidson, Environmental Biologists of HZW, conducted a field investigation of the Study Area. The Study Area is located within the forested portion of the Wetland F complex under ownership of the Client. Presently, the Study Area consists of a nearly-mature floodplain swamp forest.

2.1 Wetland Characteristics

The portion of the wetland within the Study Area consists of both a distinct vegetative community as well as dual hydrogeomorphic (HGM) classifications. This area is an oak-maple forested swamp (Vegetation Code lai) containing a mix of native and adventive species. As for hydrology, this wetland receives water from both precipitation (HGM classification IA - 'Depression; Surface Water') and Mosquito Creek flooding (HGM classification IIIB - 'Riverine; Mainstem Depression'). HZW choose to evaluate this wetland using the HGM classification IIIB as such is the primary source of hydrology.

2.2 Plot Setup and Configuration

Due to the relatively large size of Wetland F, HZW was able to utilize the standard 2x5 module VIBI-FQ plot configuration. Each module corner was marked in the field with vibrantly-painted oak stake. Terminal posts were inscribed with identifying markings designating their proper module corners as described in the Field Manual (e.g. 1-2, 3-4, 5-1). A diagram showing the plot and is included in Appendix A.

3.0 FIELD INVESTIGATION

Prior to HZW's arrival to the Study Area on September 6, 2017, the Study Area had remained relatively undisturbed for at least five (5) decades. A brief photographic log showing the site conditions is included as **Appendix B**.

Once the plot was demarcated and the photographs taken, HZW began to collect vegetation data. A total of 37 species were identified. Water and soil samples were **not** obtained for laboratory analysis. Field data sheets can be found in **Appendix C**.

4.0 RESULTS

Upon return to the office, HZW entered recorded data into a Microsoft Excel spreadsheet designed by the Ohio EPA to calculate VIBI-FQ scores.

4.1 Regional Considerations

The Study Area is dominated by trees and is not a coastal wetland. Additionally, the Study Area is located within the Erie/Ontario Drift and Lake Plain (EOLP) Ecoregion. Surface water depression forested wetland categorizations are based on a set of numerical scoring ranges that are unique for the EOLP Ecoregion.

4.2 Score and Classification

After all metrics were calculated and summed, the wetland received a total score of 62. This indicates that this portion of the wetland is considered SWLH. This classification is roughly equivalent to a Category 3 (high quality) ORAM score. Spreadsheet results for this sampling event can be found in **Appendix D**.

5.0 DISCUSSION

The portion of Wetland F identified within the proposed Enterprise Parkway Development footprint is only a very small fraction of the entire wetland complex. This complex likely abuts Mosquito Creek on both sides and can potentially be over 100 acres in size. The fact that an examination of this small portion of the wetland led to a relatively high VIBI-FQ score (62) implies that the wetland as a whole may be of even higher quality.

6.0 REFERENCES

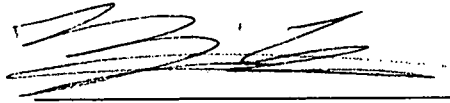
A bibliography of references reviewed as part of this delineation is presented subsections below.

6.1 Bibliography

1. Mack, John J. 2004a. Integrated Wetland Assessment Program Part 2: An Ordination and Classification of Wetlands in the Till and Lake Plains and Allegheny Plateau Regions, Ohio Environmental Protection Agency, Wetland Ecology Group, Division of Surface Water, Columbus, Ohio.
2. Mack, John J. 2004b. Integrated Wetland Assessment Program Part 4: A Vegetation Index of Biotic Integrity (VIBI-FQ) and Tiered Aquatic Life Uses (TALUs) for Ohio Wetlands, Ohio Environmental Protection Agency, Wetland Ecology Group, Division of Surface Water, Columbus, Ohio.
3. Mack, John J. and Brian D. Gara 2015. Integrated Wetland Assessment Program Part 9: Field Manual for the Vegetation Index of Biotic Integrity for Wetlands, Version 1.5, Ohio Environmental Protection Agency, Wetland Ecology Group, Division of Surface Water, Columbus, Ohio.

7.0 QUALIFICATIONS

This VIBI-FQ was conducted by Benjamin Latoche and Rachel Davidson, Environmental Scientists of HZW, on September 7, 2076. Data collection and report writing was completed by Mr. Latoche. The signatures of the environmental professionals responsible for the preparation of this report are provided below.

A handwritten signature in black ink, appearing to read 'B. Latoche', written over a horizontal line.

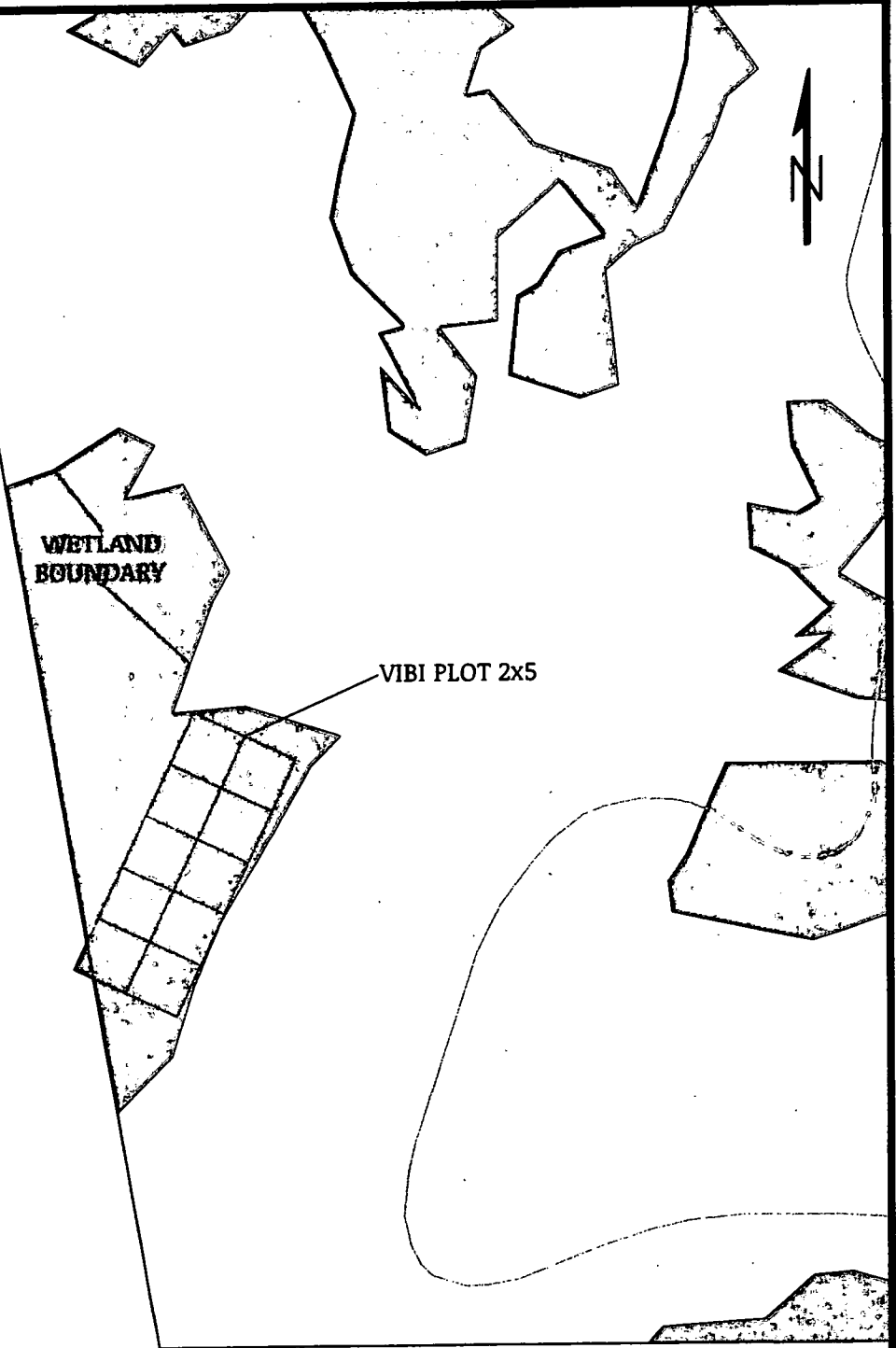
Benjamin Latoche
Project Manager

A handwritten signature in black ink, reading 'Rachel Davidson', written over a horizontal line.

Rachel Davidson
Environmental Scientist I

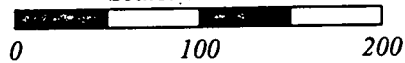
APPENDIX A

PLOT LOCATION MAP



— STUDY AREA

Scale: 1" = 100'



HZW Environmental
Consultants

FIGURE 1
VIBI PLOT LOCATION MAP
WETLAND F
ENTERPRISE PARKWAY DEVELOPMENT
HOWLAND TOWNSHIP, TRUMBULL COUNTY, OHIO

APPENDIX B

PHOTOGRAPHIC LOG



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6

APPENDIX C

FIELD DATA SHEETS

BACKGROUND INFORMATION FORM FOR VIBI SUBMISSIONS

Site name and county: Enterprise Parkway Development - Wetland F - Trumbull Co

Investigator(s): B. Latoche, R. Davidson

Sampling date(s): 9/7/2017

Affiliation: HZW Environmental Consultants, LLC

Address: 6105 Heisley Road, Mentor, OH 44060

Phone number: (440) 357-1260

e-mail address: BLatoche@HZZWEnv.com

Plant community(ies) (describe):

Forested: oak-maple 1(A)(i)

HGM Class(es) (describe):

Depression: Surface Water + Riverine Mainstem Depression I(A) + III(B)

☒ YES ☐ NO Is the wetland an automatic category 3 using the ORAM v. 5.0 Narrative Rating? If yes, describe.

Large complex, good buffers, multiple sources of hydrology

☒ YES ☐ NO Is the wetland degraded but still exhibits at least one function or value at medium to high levels? If yes, describe.

Antidegradation category in accordance with OAC Rule 3745-1-54 (Circle One):

Category 1

Category 2

☒ Category 3

Wetland Tiered Aquatic Life Use. Using Tables 5-7 in the Field Manual, describe the wetland's Tiered Aquatic Life Use:

SWLH; Designations: D, F, G

☒ YES ☐ NO Map attached of wetland location. If no, include sketch of general location of wetland include north arrow, landmarks, roads, etc.

See report.

☒ USGS Topo Map ☒ National Wetland Inventory ☐ Ohio Wetland Inventory ☒ Soil Survey

☒ Delineation report ☐ Other (list)

BACKGROUND INFORMATION FORM FOR VIBI SUBMISSIONS

Site name and county: Enterprise Parkway Development - Wetland F - Trumbull Co

Site sketch and plot location(s) (or attach map)

See report

Rationale for location of plot(s): Describe the reasons for establishing the vegetation sampling plot or plots in the configuration, direction, and locations used to sample the site.

See report.

I hereby certify that I am sufficiently proficient in the identification of the vascular flora of Ohio vegetatively, in fruit, and in flower to enable the collection of vegetation data for the accurate calculation of a Vegetation Index of Biotic Integrity score, or that I have collected voucher specimens for identification and confirmation by an experienced botanist, and that the location of the plot or plots and the quantitative vegetation data collected therein, is representative of the plant community(ies) and quality of the wetland being sampled.

Signature

Benjamin Lefele

Name (print)

Date

9/6/17

Investigator(s):	B. Lohde, R. Davidson
Site Name:	EPD - Wer F
County:	Trumbull
Date:	9/5/17

Total Modules	10
Intensive Modules	4
Plot Configuration	2x5
Total area (ha)	0.10

visual estimate of % open water over entire site	0
visual estimate of % unvegetated open over entire site	0
visual estimate of % invasive species over entire site	< 1%

module	corner	water depth: center of intensive mods (cm)	depth to saturated soil center of intensive mods (cm)	number of hummocks level 2 3.16x3.16m (count)	coarse woody debris 0-12cm level 1 10x10m (count)	coarse woody debris >40cm level 1 10x10m (count)
2		0	0	0	2	0
3		0	0	0	0	0
8		0	0	0	0	0
9		0	0	0	1	0

* keep separate count of with or without outlets to streams

SOIL CHARACTERISTICS

CENTER OF PLOT

matrix color	%mottle	texture*	hydr. cond.**
5cm			
20cm			

* LM=loam SAL=sandy loam SIL=silty loam CL=clay loam SACL=sandy clay loam SICL=silty clay loam C=clay SAC=sandy clay SIC=silty clay
P=peat M=muck SP - sandy peat or muck (Oak Openings) ** I=indundated S=saturated M=moist D=dry

Parameter	Soil Sample	Water Sample	clip plots	pH	Temp
Collected?	Y <u>N</u>	Y <u>N</u>	Y <u>N</u>	Y <u>N</u>	Y <u>N</u>
Time Collected?					
If No, reason?					
List Mod/Corner, Location					
Reading					
Calibrated Prior to Reading?				Y N	Y N

pc=previously collected, nw=no water, ns=sulfur, e=not able to be sampled, na=not applicable

APPENDIX D

SPREADSHEET RESULTS

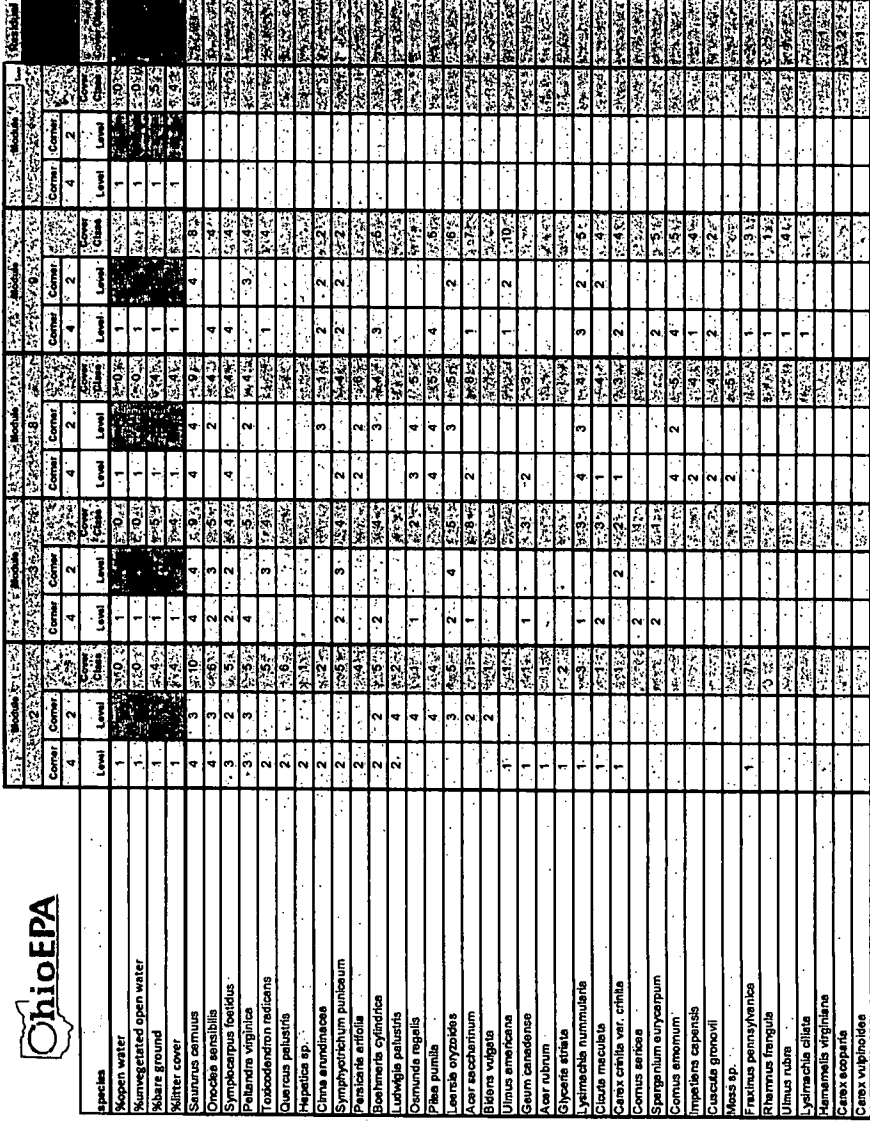
Site Information			
Site Name:	Enterprise Parkway Development - Wetland F	Site Code:	
County:	Trumbull	Sampling date(s):	9/6/2017
Collector(s):	B. Latoche, R. Davidson	Affiliation:	HZW Environmental Consultants, LLC
Phone number:	(440) 357-1260	Email address:	B.Latoche@HZZWEnv.com
			Create Summary Report

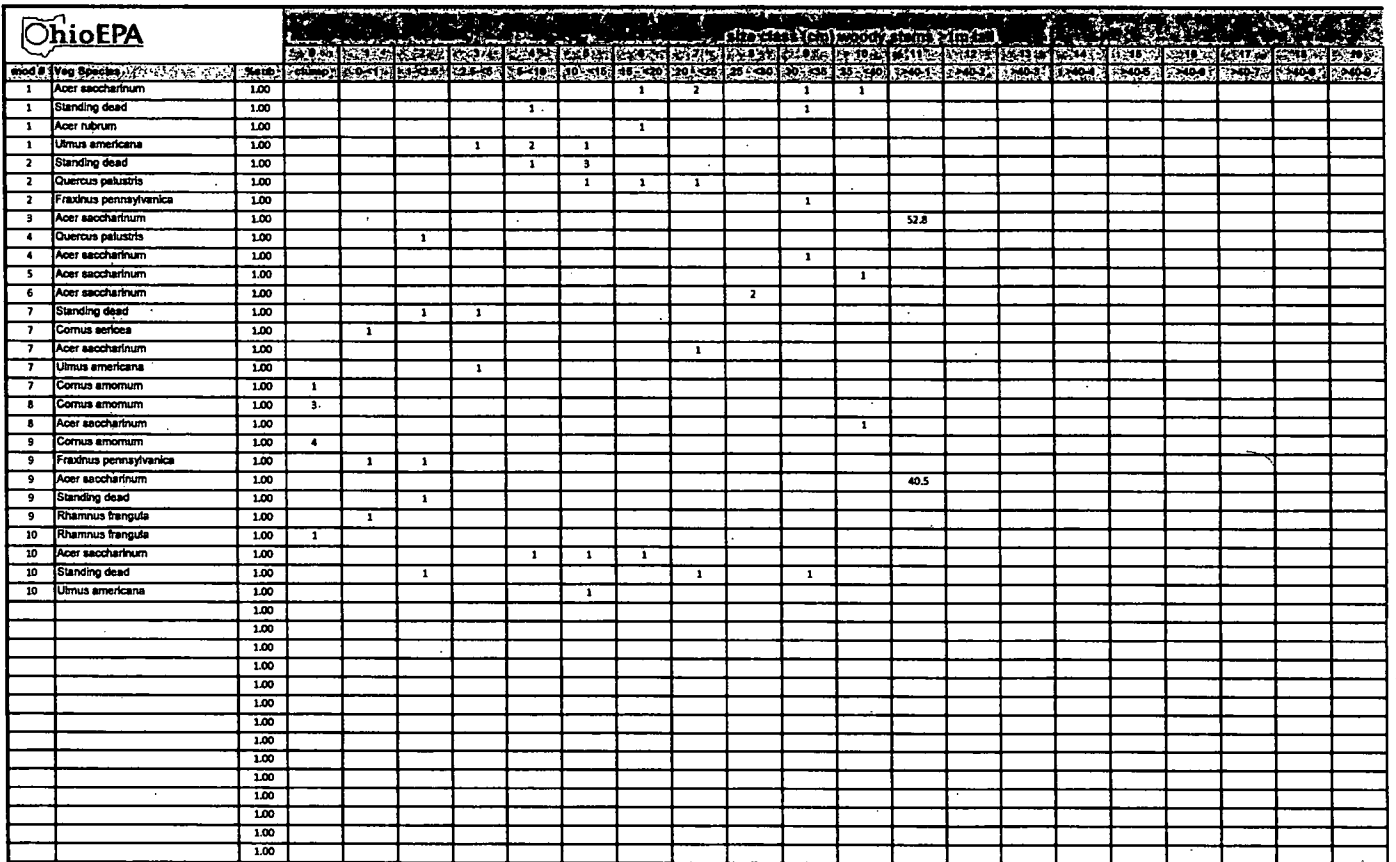
Plot Information	
General Plot Information	
Monitoring Type	VIBI & VIBI FQ
Monitor Event	1st
Total Modules	10
Intensive Modules	4
Plot Configuration	VIBI-Std (2x5)
Area (ha)	0.10
Latitude	41.222000
Longitude	-80.753500
Centerline	210
Army Corps Region	NCNE
Plant Community Information	
VEG Class	FOREST
1st Plant Community	
Veg. Group	Swamp forest
Veg. Modifier	oak-maple
Other	
2nd Plant Community	
VEG Class	EMERGENT
Veg. Group	Marsh
Veg. Modifier	mixed emergent marsh
Other	
HGM Information	
Primary HGM Class	RIVERINE
Sub class	Mainstem depression
Secondary HGM Class	DEPRESSION
Sub class	Surface water
Sub or Super Sample	NO
% Sub or Super Sample	100%
Total plot canopy closure %	95%
Total plot herbaceous cover %	90%

VIBI Calculation Summary Information					
Metric	Statewide	ACOE Region	% Statewide	% ACOE Region	VIBI FQ
Carex	3	3	NA	NA	NA
Cyperaceae	3	3	NA	NA	NA
Dicot	21	21	NA	NA	NA
Shade	14	14	7	7	NA
Shrub	2	2	NA	NA	NA
Hydrophyte	28	27	NA	NA	NA
Seedless Vascular Plant	2	2	7	7	NA
Annual/Perennial ratio	0.37	0.32	NA	NA	NA
FOAI	19.33	19.33	7	7	23.33
Weighted C of C	4.69	4.69	NA	NA	39.07
%bryophyte	0.80%	0.80%	0	0	NA
%hydrophyte	95.45%	95.45%	10	10	NA
%sensitive	39.64%	39.64%	10	10	NA
%tolerant	25.84%	25.84%	7	7	NA
%invasive graminoids	0.00%	0.00%	NA	NA	NA
Pole timber (small tree)	0.30	0.30	3	3	NA
Subcanopy IV	0.00	0.00	0	0	NA
Canopy IV	0.22	0.22	0	0	NA
Biomass	0	0	NA	NA	NA
%unvegetated	NA	NA	NA	NA	NA
Stem/ha Wetland Species Percentages					
Stem/ha wetland trees	300.00	300.00			
Stem/ha wetland shrubs	90.00	90.00			
%buttonbush	0.00%	0.00%			
%perennial native hydrophytes	91.92%	92.24%			
%perennial native	92.24%	92.24%			
%perennial	93.74%	93.74%			
%adventives	1.50%	1.50%			
%open water	0.00%	0.00%			
%unvegetated open water	0.00%	0.00%			
%bare ground	5.50%	5.50%			
Wetness index	0.83	0.83			
Summary					
Average %Cover of Plot	233.67%	VIBI Total Score	51	51	62

* If total %cover is < 75% for non-forested veg classes, then weighted CofC VIBI-FQ metric score is proportioned.

Species	Common Name	Co/C	Tolerance	Nativity	Form	Shade	Type	WET	Habit	EMP	MW	NCNE	Relative Cover	Weighted Co/C
Acer rubrum	RED MAPLE	2	tolerant	native	tree	tree	DI	FAC	W	FAC	FAC	FAC	1.06991E-05	2.13982E-05
Acer saccharinum	SILVER MAPLE	3	midrange	native	tree	tree	DI	FACW	W	FACW	FACW	FACW	0.173870712	0.521612137
Bidens vulgata	TALL BEGGAR'S-TICKS	2	tolerant	native	forb	full	DI	(FACW)	AN	FAC	FACW	FAC	1.06991E-05	2.13982E-05
Boehmeria cylindrica	FALSE NETTLE	4	midrange	native	forb	shade	DI	FACW+	PE	FACW	OBL	OBL	0.023537971	0.094151884
Carex crinita var. crinita	TASSELED SEDGE	3	midrange	native	sedge	shade	MO	OBL	PE	OBL	OBL	OBL	0.005895192	0.017685576
Carex scoparia	POINTED BROOM SEDGE	3	midrange	native	sedge	full	MO	FACW	PE	FACW	FACW	FACW	0.000534954	0.001604862
Carex vulpinoidea	FOX SEDGE	1	tolerant	native	sedge	full	MO	OBL	PE	OBL	FACW	OBL	1.06991E-05	1.06991E-05
Cicuta maculata	SPOTTED WATER-HEMLOCK	3	midrange	native	forb	full	DI	OBL	PE	OBL	OBL	OBL	0.009104915	0.027314745
Cinna arundinacea	COMMON WOOD-REED	4	midrange	native	grass	shade	MO	FACW	PE	FACW	FACW	FACW	0.001080607	0.004322427
Cornus amomum	SILKY DOGWOOD	2	tolerant	native	shrub	full	DI	FACW	W	FACW	FACW	FACW	0.016048617	0.032097233
Cornus sericea	RED-OSIER DOGWOOD	3	midrange	native	shrub	full	DI	FACW+	W	FACW+	FACW+	FACW+	1.06991E-05	3.20972E-05
Cuscuta gronovii	COMMON DODDER	3	midrange	native	forb	full	DI	(FACW+)	AN	(FACW+)	(FACW+)	(FACW+)	0.004279631	0.012838893
Fraxinus pennsylvanica	GREEN ASH	3	midrange	native	tree	tree	DI	FACW	W	FACW	FACW	FACW	0.041726403	0.12517921
Geum canadense	WHITE AVENS	2	tolerant	native	forb	shade	DI	FACU	PE	FACU	FAC	FAC	0.003220422	0.006440845
Glyceria striata	FOWL MANNA GRASS	2	tolerant	native	grass	shade	MO	OBL	PE	OBL	OBL	OBL	0.000534954	0.001069908
Hammamelis virginiana	WITCH-HAZEL	5	midrange	native	sm tree	shade	DI	FAC-	W	FACU	FACU	FACU	1.06991E-05	5.34954E-05
Hepatica sp.	HEPATICA	5	midrange		0 forb	shade	DI	UPL	PE	UPL	UPL	UPL	1.06991E-05	5.34954E-05
Impatiens capensis	SPOTTED TOUCH-ME-NOT	2	tolerant	native	forb	partial	DI	FACW	AN	FACW	FACW	FACW	0.007489354	0.014978709
Leersia oryzoides	RICE CUT GRASS	1	tolerant	native	grass	full	MO	OBL	PE	OBL	OBL	OBL	0.042796311	0.042796311
Ludwigia palustris	WATER-PURSLANE	3	midrange	native	forb	full	DI	OBL	AN	OBL	OBL	OBL	0.000534954	0.001604862
Lysimachia ciliata	FRINGED LOOSESTRIFE	4	midrange	native	forb	shade	DI	FACW	PE	FACW	FACW	FACW	1.06991E-05	4.27963E-05
Lysimachia nummularia	MONEYWORT	0	tolerant	adventive	forb	advent	DI	OBL	PE	FACW	FACW	FACW	0.014978709	0
Moss sp.	ND	-1	ND	native	bryo	bryo	BR	ND	BR	ND	ND	ND	0.008024308	
Onoclea sensibilis	SENSITIVE FERN	2	tolerant	native	fern	full	SVP	FACW	PE	FACW	FACW	FACW	0.034237049	0.068474098
Osmunda regalis	ROYAL FERN	7	sensitive	native	fern	shade	SVP	OBL	PE	OBL	OBL	OBL	0.008569961	0.059989729
Peltandra virginica	ARROW-ARUM	5	midrange	native	forb	full	MO	OBL	PE	OBL	OBL	OBL	0.023537971	0.117689855
Persicaria arifolia	HALBERD-LEAVED TEARTHUM.B	4	midrange	native	forb	full	DI	OBL	AN	OBL	OBL	OBL	0.022468063	0.089872253
Pilea pumila	CANADIAN CLEARWEED	2	tolerant	native	forb	partial	DI	FACW	AN	FACW	FACW	FACW	0.019793294	0.039586588
Quercus palustris	PIN OAK	5	midrange	native	tree	tree	DI	FACW	W	FACW	FACW	FACW	0.018723386	0.09361693
Rhamnus frangula	GLOSSY BUCKTHORN	0	tolerant	adventive	shrub	advent	DI	FAC	W	FAC	FACW	FAC	1.06991E-05	0
Saururus cernuus	LIZARD'S-TAIL	8	sensitive	native	forb	shade	MO	OBL	PE	OBL	OBL	OBL	0.352534612	2.820276892
Spartanium eurycarpum	GIANT BUR-REED	4	midrange	native	forb	full	MO	OBL	PE	OBL	OBL	OBL	0.008035007	0.03214003
Symphyotrichum puncteum	FEN ASTER	7	sensitive	native	forb	full	DI	OBL	PE	OBL	OBL	OBL	0.016048617	0.112340316
Symplocarpus foetidus	SKUNK-CABBAGE	6	sensitive	native	forb	shade	MO	OBL	PE	OBL	OBL	OBL	0.01925834	0.11555004
Toxicodendron radicans	POISON-IVY	1	tolerant	native	vine	partial	DI	FAC	W	FAC	FAC	FAC	0.015513663	0.015513663
Ulmus americana	AMERICAN ELM	2	tolerant	native	tree	tree	DI	FACW-	W	FACW	FACW	FACW	0.103791753	0.207583506
Ulmus rubra	SLIPPERY ELM	3	midrange	native	tree	tree	DI	FAC	W	FAC	FAC	FAC	0.003744677	0.011234032





ATTACHMENT B
INDIVIDUALIZED COMMENT RESPONSE LETTERS

EXHIBIT 1
APRIL 11, 2019 LETTER FROM K. HORROCKS, OHIO HISTORY CONNECTION, TO C. FORSYTH,
US ARMY CORPS OF ENGINEERS



In reply, refer to
2018-TRU-42847

April 11, 2019

Cassandra Forsyth
U.S. Army Corps of Engineers, Pittsburgh District
1000 Liberty Ave
Pittsburgh, PA 15222
cassandra.p.forsyth@usace.army.mil

**RE: Enterprise Parkway Development, Howland Township, Nile, Trumbull County, Ohio
(CELRP-RG 2017-1643)**

Dear Ms. Forsyth,

This is in response to the correspondence, received on April 4, 2019, regarding the proposed Enterprise Parkway Development, Howland Township, Nile, Trumbull County, Ohio (CELRP-RG 2017-1643). We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to *Phase I Cultural Resources Survey for the approximately 54 ac. Enterprise Parkway Development in Howland Township, Trumbull County, Ohio* by EMH&T (2019).

A literature review, visual inspection, shovel test excavation, and windshield survey (for history/architecture resources) was completed as part of the investigations. No archaeological sites were identified during this survey. Our office agrees no further archaeological work is necessary. Three (3) residential structures are located within the project area, two (2) dating to 1974 and one (1) dating to 1955. They are not recommended eligible for listing in the National Register of Historic Places (NRHP). Our office agrees with this recommendation.

Based on the information provided, we agree the project will not affect historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org. Thank you for your cooperation.

Sincerely,



Krista Horrocks, Project Reviews Manager
Resource Protection and Review

cc: Joel Brown, EMH&T (JBrown@emht.com)

RPR Serial No: 1078648

EXHIBIT 2

**MAY 24, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS, TO T.
BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF US EPA**



May 24, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the United States Environmental Protection Agency (USEPA). For ease of reference, the original comments are reiterated below in italics, followed by North Eastwood's response.

In an email from the U. S. Environmental Protection Agency (USEPA) Region 5 dated September 19, 2018 they state you have not demonstrated compliance with several aspects of the 404(b)(1) Guidelines (Guidelines) regarding purpose, need, and alternatives; avoidance and minimization; and mitigation as outlined below:

- i. *They do not believe you have addressed the purpose, need, and alternatives within your application. They state that the Akron Children's Hospital has expressed interest for possible future use, not a current need; they request you consider a phased approach where the Akron Children's Hospital wing is not built until it is needed, which will avoid portions of Wetland B and Wetland C on-site. They state that the project purpose of creating an attractive facility and competing economically with area hospitals are too narrow to comply with the Guidelines and should not be considered when determining the Least Environmentally Damaging Practicable Alternative (LEDPA). In addition, they state that the provided third reason for dismissing the alternative of upgrading the existing hospital is cost. However, they refer to the application stating that the cost of upgrading the current facility was cited in the application as being "80-85%" of that of building the preferred new structure. The reasoning stated in the application that it is not feasible due to cost is contradictory and they state that this should not be considered when determining the LEDPA. They also request additional information regarding the existing utility installation as cited as a reason for not considering the expansion at the existing facility.*

Response: *US EPA's Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Guidelines)* prohibit the discharge of dredged or fill material "if there is a practical alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." An alternative is practicable "if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." 40 CFR 230.10. With respect to Enterprise Park, a fulsome analysis of alternatives available, both off-site and on-site, that meets the criteria outlined in the *Guidelines* has been undertaken to arrive at the LEDPA.

With respect to off-site alternatives, the siting criteria outlined by Mercy Health for selection of a site for a new St. Joseph Hospital was quite specific. Mercy Health's criteria included: availability of the real estate for acquisition, location of the real estate within the current or future limits of the City of Warren; parcel size of a minimum of twenty five (25) acres with an additional five (5) acres for expansion; proximity of the real estate to the geographic center of Trumbull County; proximity of the real estate to complementary amenities such as hotels, restaurants, financial institutions, various services, and retail facilities; appropriateness of existing zoning; superior vehicular accessibility to the site; easy identifiability of the Project location; and environmental considerations. Mercy Health was aided in its search by its real estate consultant, Cushman & Wakefield. Mercy Health, with Cushman & Wakefield's assistance, evaluated twenty three (23) potential sites against its siting criteria. Given the size of the undertaking and the specifics of Mercy Health's criteria, only one site, Enterprise Park at Eastwood, met all of Mercy Health's requirements. As a result, no other site is a "practical alternative" (as defined in 40 CFR 230.10) for the Project; and thus no other site is "available and capable" of consideration. Please refer to the initial Application to the Corps and to the Ohio EPA, specifically Items 5.2.1 and 5.2.2, pages 22-32; Item 5.2.3, pages 34-36; and Item 5.5, pages 42-47 for additional information regarding off-site alternatives, the potential impacts of not proceeding with the Project at the subject site, and the social and economic considerations relating to the choice of Enterprise Park as the site for the Project. Also, refer to the *December 26, 2018 Response to Ohio EPA Comments* and the *February 12, 2019 Response to Ohio EPA Comments* at p 15.

With respect to on-site alternatives, North Eastwood considered four (4) on-site alternatives for the Project: Alternative 1A, Alternative 1B, Alternative 1C and Alternative 1D, to arrive at selection of Alternative 1D as the LEPDA. As discussed at length in the Application, the geographic constraints of the site, coupled with the size of the building proposed by St. Joseph, limit the options that are available for the layout of the Project. Alternative 1D can accommodate the Project and, just as importantly, presents the least adverse impact to wetlands and jurisdictional waters of all other options considered as required by 40 CFR 230.10.

US EPA also suggests that the expression of interest by Akron Children's Hospital reflects a possible future need rather than a current need. Consequently, impacts to Wetlands C and D could be avoided by removing Akron Children's Hospital from the equation. In actuality, the statement by Grace Wakulchik, President of Akron Children's Hospital, is that "Akron Children's Hospital is committed to continue working with Mercy Health and the St. Joseph Hospital staff to provide pediatric care in the existing hospital facility and the new health care facility when it is completed" which clearly reflects Akron Children's Hospital's current commitment to the Project. *See* Application at Exhibit 16. Also, the delivery of specialty pediatric services is an important and closely aligned component of what Mercy Health hopes to provide to the community and cannot and should not be removed from the Project.

Moreover, in our analysis of the initial Application pertaining to Akron Children's Hospital, we have been unable to locate any reference to its expression of "interest for possible future use" or "not a current need" or the requirement for a separate "wing" in any of the narrative or

exhibits. Also, we see no reference in the Application to support the assumption that Mercy Health or Akron Children's Hospital anticipate a separate and distinct building wing in order to house the Akron Children's facilities. We are advised that the pediatric services provided by Akron Children's Hospital would be fully integrated into various areas of St. Joseph's Hospital, with perhaps only one isolated area utilized exclusively by Akron Children's Hospital. Have we missed something? If so, please refer us to where these sentiments are stated by Akron Children's Hospital, and we shall attempt to clarify the issue and/or obtain a supplemental letter of explanation from same.

The primary focus of US EPA's comment is the threshold decision by Mercy Hospital to relocate as opposed to upgrading and expanding at its existing location. US EPA suggests that the "unattractiveness" of the existing facility and the inability to compete as a result are not legitimate factors for consideration. First of all, use of the phrase "unattractive facility" on page 23 of the Application should not be misconstrued to refer only to the physical aspects - - - the appearance - - - of the hospital building. To the contrary, the reference to "unattractive" in characterizing Mercy Health's decision should be read in a much broader context, i.e. unattractive from an economic perspective; unattractive in terms of Mercy Health's ability to remain competitive in the marketplace; unattractive to Mercy Health in its efforts to locate a site that is easily accessible; unattractive in terms of offering expansion capabilities; and unattractive insofar as the image and presentation to the public of a new St. Joseph's Hospital which Mercy Health requires in its efforts to properly serve the Trumbull County area.

In any event, the decision by Mercy Hospital to relocate its existing facility was based on a comprehensive analysis of continuing to do business at the existing location in light of the need for an upgrade and expansion of those facilities. As noted in the Application at p 23, Mercy Health concluded, with the assistance of experts, Halsa Advisors and Strollo Architects, that upgrading and expanding at its existing location was not feasible on the basis of cost, the inordinate length of time it would take to implement the upgrade and expansion, the major inconveniences to patients, staff and visitors during multiple phases of construction and the significant operating inefficiencies associated with such a project. Moreover, the location of Enterprise Park in the geographic center of the community to be served by Mercy Health, the superior vehicular accessibility at Enterprise Park, the synergies presented by complementary medical, educational, office and residential facilities proposed within Enterprise Park, and the proximity to complementary amenities such as hotels, restaurants etc. all contributed to the decision by Mercy Health to relocate to Enterprise Park. Thus, to single out the statement regarding the "unattractiveness" of the existing facility and to misconstrue this word by affording it a very narrow and restrictive meaning ignores the multiple reasons underlying Mercy Health's decision.

Furthermore, the seemingly contradictory position relating to the comparative "cost" of a brand new versus a renovated hospital facility is not at all incongruous if one understands the various factors weighed by Mercy Health, Cushman and Wakefield, and Halsa Advisors. As these entities analyzed the facts, the actual "cost" of staying in the existing hospital building extends far beyond a comparison of merely the hard construction expenditures of renovation and expansion versus new construction. "Cost" as used by Mercy Health in its decision making process, includes the numerous lost opportunities that would certainly result from their staying in St. Joseph's present facility and renovating same, versus moving to Enterprise Park - - - i.e. the loss of traffic access, the unquantifiable but real expense due to inconveniencing the patrons and staff for a period of up to five years during the various renovation phases; the costly minimization of market presence by being located in a primarily residential area that is devoid of amenities such as those available at the Eastwood Mall Complex, etc. Each of these factors represent real/genuine costs that would be precipitated by staying at the existing St. Joseph site. In effect, when added to the construction expenditures of a new as opposed to a renovated building, the true overall price to be paid by remaining on Eastland Avenue could far exceed the

cost of moving and constructing a modern and well-located facility at Enterprise Park. The bottom line is that Mercy Health intends to provide a bigger, better, and more appealing hospital to the residents of Trumbull County, and if they were to accept anything less, it would exact a huge "cost" on them.

In any event, even if the out-of-pocket hard construction expenditures represented the sole meaning of the word "cost" in the context of Mercy Health's analysis, the comparison of cost between the two options would not necessarily be contradictory because the hard cost of construction relating to a renovation and expansion of *any* building is extremely difficult to ascertain. The 85% cost estimate of renovation is likely to be a low estimate, given the inherent problems associated with renovating existing buildings, such as the potential need for asbestos remediation, the vagaries of existing utility installations, the distinct possibility of not being able to acquire the necessary adjacent property for additional parking, etc. In any event, the pure dollars and cents side of upgrading and expanding the existing facility merely represents one of multiple factors considered in detail by Mercy Health and its consultants. As the quote from the Halsa flyer, Exhibit 15 of the Application observes "... we'll tell you when a [converted] building isn't the right solution to your problems... we've saved our clients millions of dollars on buildings.... that weren't strategically justified".

In answer to another question raised in the US EPA letter, the phrase "vagaries of existing utility installations" refers to the oftentimes unpredictable placement, size, and installation method of utility lines and services existing within the walls, ceilings, and floor slabs of any existing structure. During initial construction phases, it is not at all uncommon for various tradesmen to extend utilities wherever and however they deem appropriate, many times in locations that are inconsistent with the detailed working drawings as prepared by the architects and engineers. These in-field modifications are not intended to be malicious, nor are they intended to defeat the purposes of the working drawings; rather, these changes reflect responses to unanticipated field conditions which invariably arise during the renovation of an existing structure. In any event, when plans for demolition, utility relocations, utility upgrades, etc. are developed in connection with a building renovation, the consistent unpredictability of existing utility installations often gives rise to extremely expensive in-field construction expenditures, that cannot be budgeted for as part of the original cost estimates. Accordingly, based on this factor alone, the 85% cost estimate of a renovation could conceivably increase to 90-95% of the expenditure related to the construction of an entirely new building.

- ii. *The USEPA does not feel that the design including parking lots, which constitute the large portion of the proposed impacts to aquatic resources, meets the avoidance and minimization requirement for the Guidelines. They request that you consider construction of a parking garage to replace the majority of the proposed parking lot spaces in order to comply with the Guidelines.*

Response: The *Guidelines* require evaluation of "practicable" alternatives to the proposed discharge that either avoid a discharge or minimize the potential adverse impacts of the discharge on the aquatic ecosystem. 40 CFR 230.10(a)(1)(i) and (d). North Eastwood has evaluated construction of a parking garage in lieu of the surface parking and concluded that the construction of a parking garage is cost prohibitive and not a "practicable" alternative for the Project within the meaning of 40 CFR 230.12(a)(2). The cost per square foot to construct a parking garage as well as the cost of long term maintenance of a parking garage far exceeds the cost to construct and maintain on-grade or surface parking. There are numerous other reasons why this option is not practicable, including resistance to payment of parking fees, aesthetics etc. that were explained in North Eastwood's response to a similar comment by Ohio EPA. *See pages 6-8 of February 12, 2019 Response to Ohio EPA Comments.*

North Eastwood had nonetheless further evaluated the size of the parking areas proposed in its original Application in an effort to significantly reduce the number of parking spaces. These

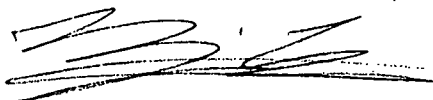
reductions were obtained by the elimination in its entirety of one parking field previously intended as parking for the apartment building, as well as the redesign of the parking lot serving the assisted living facility. Together, these modifications resulted in the elimination for 187 previously planned parking spaces. The reductions are further explained on pages 5-6 of the *February 12, 2019 Response to Ohio EPA Comments*. Accordingly, North Eastwood has revised its site map of Alternative 1-D, which is both the LEDPA and the selected alternative for the Project. See February 12, 2019 Response to Ohio EPA Comments.

- iii. *The USEPA cited that the Federal 2008 Mitigation Rule states that there is greater risk and uncertainty associated with ILF programs than mitigation banks regarding the implementation of the compensatory mitigation project and its adequacy to compensate for lost functions and services. They recommend that you seek out other sources of mitigation before ILF programs, such as available credits from mitigation banks in the service area or secondary service area.*

Response: When considering options for providing the required compensatory mitigation, both US EPA and the Corps are required to consider type and location options in the order or "hierarchy" set forth in 40 CFR 230.93(b) and 33 CFR 332.3(b). See Compensatory Mitigation for Losses of Aquatic Resources 73 Fed Reg. 19594 (April 10, 2008) (2008 Federal Mitigation Rule). While the purchase of credits from a mitigation bank with a service area that encompasses the area where the impacts will occur is the first option in the hierarchy, that option simply is not available to the Applicant. As far as the Applicant and its consultants are aware, no such mitigation bank credits are currently available within the Mahoning River watershed, either in a primary or secondary service area capacity. As such, our mitigation proposal offers the purchase of In-Lieu Fee Program (ILFP) credits. The purchase of ILFP credits is the second option described in the hierarchy of the 2008 Federal Mitigation Rule. There is nothing in the 2008 Federal Mitigation Rule to suggest that this approved method of satisfying compensatory mitigation requirements is not an acceptable method of doing so once the availability of purchase of credits from a mitigation bank has been exhausted as implied by US EPA's comment. Notwithstanding, if you are aware of any mitigation banks with available credits, please notify us immediately and we will adjust our proposed mitigation plan accordingly.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC



Benjamin Latoche
Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

EXHIBIT 3
MAY 25, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS, TO T.
BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF THE OHIO
DEPARTMENT OF NATURAL RESOURCES



HZW
Environmental
Consultants

May 25, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the Ohio Department of Environmental Protection (ODNR). For ease of reference, the original comments are reiterated below in italics, followed by North Eastwood's response.

In a letter from Ohio Department of Natural Resources (ODNR) dated September 18, 2018, they provided the following comments:

- i. *The ODNR noted the presence of Grove sandwort (Moehringia lateriflora), state potentially threatened, floodplain forest plant community, and Mosquito Creek Floodplain Conservation Site within one-mile of the project.*

Response: As discussed in the original permit application and re-submitted here for your reference, the Applicant presents the following information regarding these resources:

- 1. Mosquito Creek Floodplain Conservation Site:** This resource is shown over ½ mile north of the Project Area. Thus, it will not be impacted by the Project.
- 2. Floodplain Forest Plant Community*:** This resource is located partially on the western periphery of the Project Area and abuts Mosquito Creek. The Project will not involve work within the forest as identified in the letter so this resource will not be impacted by the Project.
- 3. Moehringia lateriflora (Grove Sandwort – Potentially Threatened):** According to ODNR, *M. lateriflora* prefers 'damp, open woodlands.' HZW notes that the footprint of the Project

lies primarily within thick, shrub-filled, upland woodlands. Therefore, impacts to *M. lateriflora* by the Project are not anticipated.

* Slight change from original permit package as a small amount of impact to the 100-year floodplain has since been identified.

- ii. Within the ODNR, the Division of Wildlife (DOW) noted that the project is within range of the state and federally listed endangered species: Indiana bat (*Myotis sodalis*), clubshell (*Pleurobema clava*), and eastern massasauga rattlesnake (*Sistrurus catenatus*). The project is within the range of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. The project is within range of the following state listed threatened and endangered species: black sandshell (*Ligumia recta*), northern brook lamprey (*Ichthyomyzon fossor*), mountain brook lamprey (*Ichthyomyzon greeleyi*), spotted turtle (*Clemmys guttata*), northern harrier (*Circus cyaneus*), upland sandpiper (*Bartramia longicauda*), least bittern (*Ixobrychus exilis*), and black bear (*Ursus americanus*). The ODNR DOW provides additional information regarding the need for surveys, construction windows, and construction limitations to protect the state listed threatened and endangered species.

Response: The Applicant presents the following information:

- **Indiana Bat and Eastern Massasauga Rattlesnake:** Tragus Environmental Consulting, Inc. performed a bat mist-net study of the Project Area on June 16 & 17 of 2018 and subsequently issued a report that is included in the original application package as Exhibit 6. No listed species were caught during the survey. In fact, only three (3) big brown bats (*Eptesicus fuscus*) were encountered over the nine (9) net-night equivalent study. Thus, HZW assumes the project will not affect any listed bat species.
- **Clubshell and Black Sandshell:** The largest stream proposed to be impacted by the Project, Stream 7, has a drainage area of approximately 0.8 square miles at the proposed point of impact. Such a stream is not large enough to support either of these species of mussels. Thus, impacts to these species are not anticipated.
- **Eastern Hellbender:** ODNR-DOW states in their September 18, 2018 letter that, "this project is not likely to impact this species."
- **Northern Brook Lamprey and Brook Lamprey:** ODNR-DOW states in their September 18, 2018 letter that, "The DOW recommends no in-water work in perennial streams at least April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species." **The Applicant is committed to abiding by these in-water work restriction dates;** thus, impacts to these species are not anticipated.
- **Spotted Turtle:** ODNR-DOW states in their September 18, 2018 letter that, "this project is not likely to impact this species."
- **Northern Harrier:** The northern harrier requires large grasslands or marshes to nest. No such habitat exists within the project area. Thus, impacts to the northern harrier are not anticipated.
- **Least Bittern:** The least bittern requires dense emergent wetlands with thick stands of cattails, sedges, and sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. No such habitat exists within the project area. Thus, impacts to the northern harrier are not anticipated.

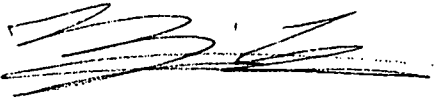
- **Upland Sandpiper:** The upland sandpiper requires dry grasslands to nest. No such habitat exists within the project area. Thus, impacts to the northern harrier are not anticipated.
- **Black Bear:** ODNR-DOW states in their September 18, 2018 letter that, "this project is not likely to impact this species."

iii. *The ODNR Division of Water Resources requested that you contact the local floodplain administrator.*

Response: Representatives of the Applicant have begun informal consultations with the local floodplain administrator (the Trumbull County Engineer's Office). It has been conveyed to the Applicant that a floodplain development permit will be needed but can readily be obtained should the Project be approved at a Federal and State level.

Thank you,

HW ENVIRONMENTAL CONSULTANTS, LLC



Benjamin Latoche
Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

EXHIBIT 4

MAY 26, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS, TO T. BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF THE BYERS FAMILY



HZW
Environmental
Consultants

May 26, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the Byers family. For ease of reference, the original comments are reiterated below in *italics*, followed by North Eastwood's response.

The Byers family, local landowners, expressed concern regarding the fill of wetlands and the alteration of the water retention once the wetlands are filled. They are concerned about floodwater and stormwater runoff during construction.

The Project's stormwater management system has been designed so that peak post-development flows will not exceed peak pre-development flows. In addition, the Applicant is committed to obtaining a floodplain development permit through the local floodplain administrator and abiding by any terms and conditions set forth therein. Thus, the Applicant finds concern about increased flooding due to construction of the Project unfounded.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Enterprise Park
DA# LRP-2017-1643
May 26, 2019

Benjamin Latoche
Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

EXHIBIT 5

**MAY 27, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS, TO T.
BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF
DAVID HOCHEDER**



HZW
Environmental
Consultants

May 27, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the Mr. David Hochedel. For ease of reference, the original comments are reiterated below in italics, followed by North Eastwood's response.

Mr. David Hochedel stated that there are upland alternatives to the site that have less environmental impacts (e.g., water resources).

The Applicant has already provided a copious amount of information regarding both on and off-site alternatives within the initial permit application package and through subsequent submittals.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC

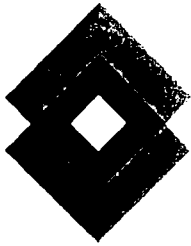
Benjamin Latoche

Enterprise Park
DA# LRP-2017-1643
May 27, 2019

Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

EXHIBIT 6
MAY 28, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS, TO T.
BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF
HEATHER GARNER



HZW
Environmental
Consultants

May 28, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the Ms. Heather Garner. For ease of reference, the original comments are reiterated below in italics, followed by North Eastwood's response.

Ms. Heather Garner has concerns regarding the Project robbing her family of safety and privacy.

These concerns are outside the scope of the Clean Water Act, no responses are tendered.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Benjamin Latoche

Enterprise Park
DA# LRP-2017-1643
May 28, 2019

Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

EXHIBIT 7
MAY 29, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS TO T.
BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF
SHARON DARBY



HZW
Environmental
Consultants

May 29, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by Ms. Sharon Darby. For ease of reference, the original comments are reiterated below in italics, followed by North Eastwood's response.

Ms. Sharon Darby, a local landowner, expressed concern regarding the fill of wetlands and the alteration of the water retention once the wetlands are filled. They are concerned about floodwater and stormwater runoff during construction.

The Project's stormwater management system has been designed so that peak post-development flows will not exceed peak pre-development flows. In addition, the Applicant is committed to obtaining a floodplain development permit through the local floodplain administrator and abiding by any terms and conditions set forth therein. Thus, the Applicant finds concern about increased flooding due to construction of the Project unfounded.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Enterprise Park
DA# LRP-2017-1643
May 29, 2019

Benjamin Latoche
Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

EXHIBIT 8
MAY 30, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS TO T.
BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF
JACK MULLEN



May 30, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the Mr. Jack Mullen. For ease of reference, the original comments are reiterated below in italics, followed by North Eastwood's response.

Mr. Jack Mullen, a local landowner, noted the following concerns: conformance with the Lower Mosquito Creek Watershed Balanced Growth Plan, state and federally listed threatened and endangered species, proposed impacts to Category 3 wetlands, alternative site locations, environmental impacts of parking lots (e.g., runoff), loss of vernal ponds, and loss of wetlands.

Stormwater Runoff/Floodwater Volume: The Project's stormwater management system has been designed so that peak post-development flows will not exceed peak pre-development flows. In addition, the Applicant is committed to obtaining a floodplain development permit through the local floodplain administrator and abiding by any terms and conditions set forth therein. Thus, the Applicant finds concern about increased flooding due to construction of the Project unfounded. Please refer to **Attachment 9 – Enterprise Park Development Post-Construction Stormwater Management Narrative** included with the *February 12, 2019 Response to Ohio EPA Comments*.

Stormwater Runoff Quality: The Applicant notes that it is bound by local, state, and federal law regarding the quality of discharged stormwater effluent to waterways. These laws include various requirements such as guaranteed detention times and appropriate outfall structures that are designed to ensure water quality is not impacted downstream of development. As such, the Applicant feels that the concern about stormwater runoff quality is unfounded.

Viability of Alternatives: The Applicant has already provided a copious amount of information regarding both on and off-site alternatives within the initial application and through subsequent submittals.

Watershed Balanced Growth Plan: According to the Priority Development Areas Map included in the 2011 Lower Mosquito Creek Balanced Growth Plan, a majority of the Project is proposed within a Priority Development Area (Attachment 1). Thus, the Applicant believes the Project is consistent with the spirit and goals of the Balanced Growth Plan.

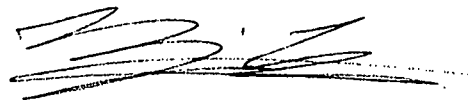
Threatened and Endangered Species: Please refer to the response to Item I(c)(ii) above as well as information included with the original application submittal. The Applicant has found no evidence that the Project will negatively impact threatened or endangered species to date.

Impacts to Category 3 Wetlands: The Applicant designed the Project specifically to avoid impacts to Category 3 wetlands and has presented it as such. Thus, the Applicant finds this comment unfounded.

Loss of Aquatic Resources: The Applicant has presented to the agencies what they believe to be a robust mitigation plan for the loss of waters incurred by the Project. This plan should more than compensate for the proposed impacts and provide a net gain of functions and values of waterways to the Mahoning River watershed.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC



Benjamin Latoche
Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

ATTACHMENT 1

PRIORITY DEVELOPMENT AREAS MAP

Priority Development Areas (PDAs) - Lower Mosquito Creek Watershed

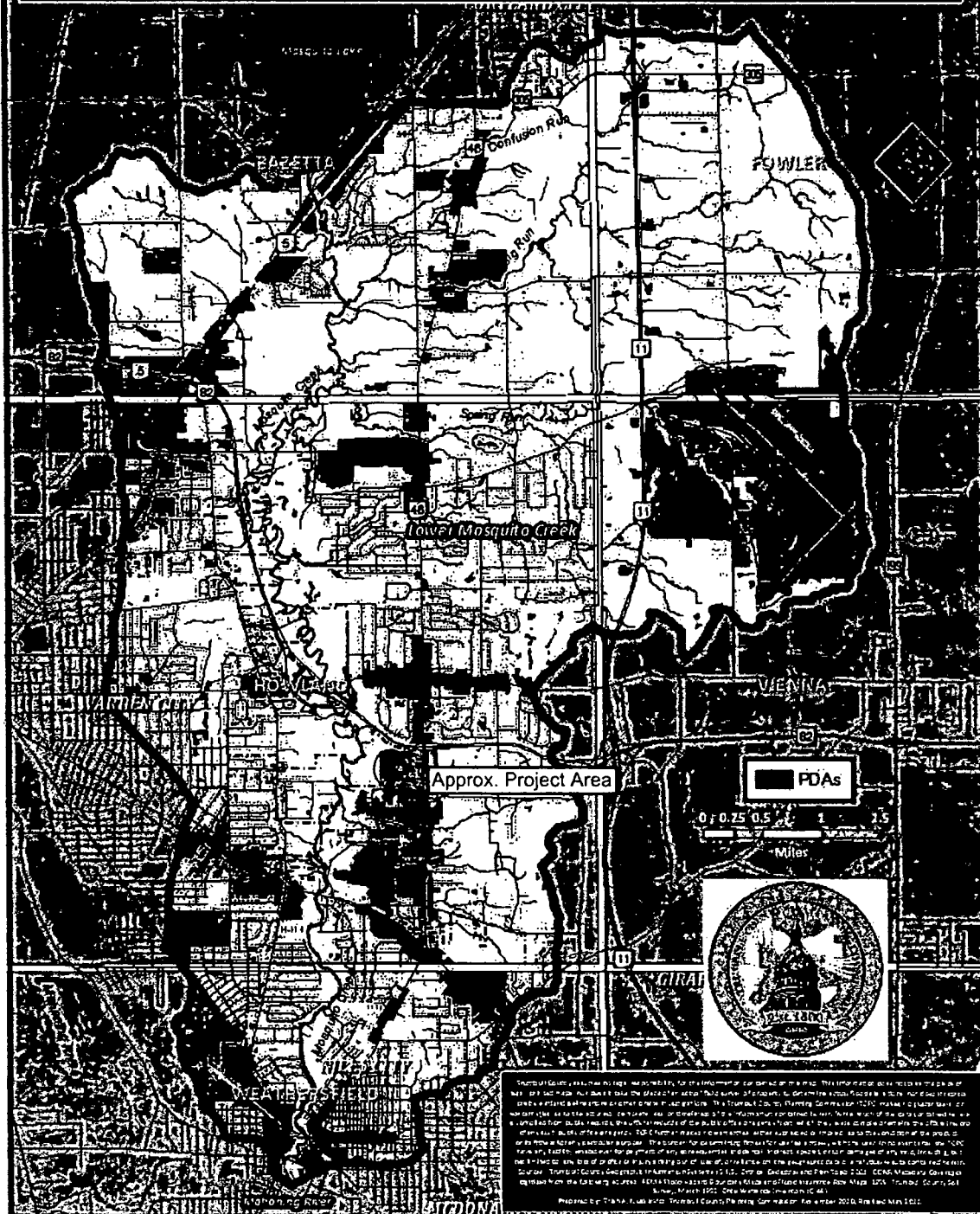


EXHIBIT 9
MAY 31, 2019 LETTER FROM B. LATOCHE, HZW ENVIRONMENTAL CONSULTANTS TO T.
BINTRIM, US ARMY CORPS OF ENGINEERS, RESPONDING TO COMMENTS OF
COLLEEN MACLEAN



May 31, 2019

VIA ELECTRONIC MAIL

Mr. Tyler J. Bintrim
Chief, Northern Branch
Regulatory Division
Pittsburgh District, Corps of Engineers
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Re: North Eastwood, LLC/Enterprise Park at Eastwood/ Response to the Army Corps' February 26, 2019, Comments on the Application for a Section 404 Individual Permit (DA# LRP-2017-1643)

Dear Tyler:

On February 26, 2019, the US Army Corps of Engineers (Corps) provided comments regarding North Eastwood, LLC's (North Eastwood's or Applicant's) application for an individual permit to authorize impacts to wetlands and jurisdictional waters in connection with the development of Enterprise Park at Eastwood in Trumbull County, Ohio (the Project). The purpose of this Project is to accommodate a state-of-the-art hospital to be operated by Mercy Health as well as complementary medical, educational, office and residential facilities. The Project will allow Trumbull County residents access to comprehensive healthcare services on property immediately north of the existing Eastwood Mall complex. The purpose of this letter is to provide a thorough response to the issues raised by the Ms. Colleen McLean. For ease of reference, the original comments are reiterated below in italics, followed by North Eastwood's response.

Ms. Colleen McLean, Howland Township resident, noted the following concerns: the addition of impervious surfaces within the floodplain, decrease in the retention of floodwaters resulting from wetland and stream fill, alternatives analysis, and mitigation for OEPA Category 3 wetland loss. She is also concerned about the effectiveness of preserving Category 3 wetlands onsite with the runoff from the development.

Stormwater Runoff/Floodwater Volume: The Project's stormwater management system has been designed so that peak post-development flows will not exceed peak pre-development flows. In addition, the Applicant is committed to obtaining a floodplain development permit through the local floodplain administrator and abiding by any terms and conditions set forth therein. Thus, the Applicant finds concern about increased flooding due to construction of the Project unfounded. Please refer to **Attachment 9 – Enterprise Park Development Post-Construction Stormwater Management Narrative** included with the *February 12, 2019 Response to Ohio EPA Comments*.

Stormwater Runoff Quality: The Applicant notes that it is bound by local, state, and federal law regarding the quality of discharged stormwater effluent to waterways. These laws include various requirements such as guaranteed detention times and appropriate outfall structures that are designed to ensure water quality is not impacted downstream of development. As such, the Applicant feels that the concern about stormwater runoff quality is unfounded.

Viability of Alternatives: The Applicant has already provided a copious amount of information regarding both on and off-site alternatives within the initial application and through subsequent submittals.

Watershed Balanced Growth Plan: According to the Priority Development Areas Map included in the 2011 Lower Mosquito Creek Balanced Growth Plan, a majority of the Project is proposed within a Priority Development Area (Attachment 1). Thus, the Applicant believes the Project is consistent with the spirit and goals of the Balanced Growth Plan.

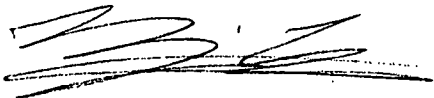
Threatened and Endangered Species: Please refer to the response to Item I(c)(ii) above as well as information included with the original application submittal. The Applicant has found no evidence that the Project will negatively impact threatened or endangered species to date.

Impacts to Category 3 Wetlands: The Applicant designed the Project specifically to avoid impacts to Category 3 wetlands and has presented it as such. Thus, the Applicant finds this comment unfounded.

Loss of Aquatic Resources: The Applicant has presented to the agencies what they believe to be a robust mitigation plan for the loss of waters incurred by the Project. This plan should more than compensate for the proposed impacts and provide a net gain of functions and values of waterways to the Mahoning River watershed.

Thank you,

HZW ENVIRONMENTAL CONSULTANTS, LLC

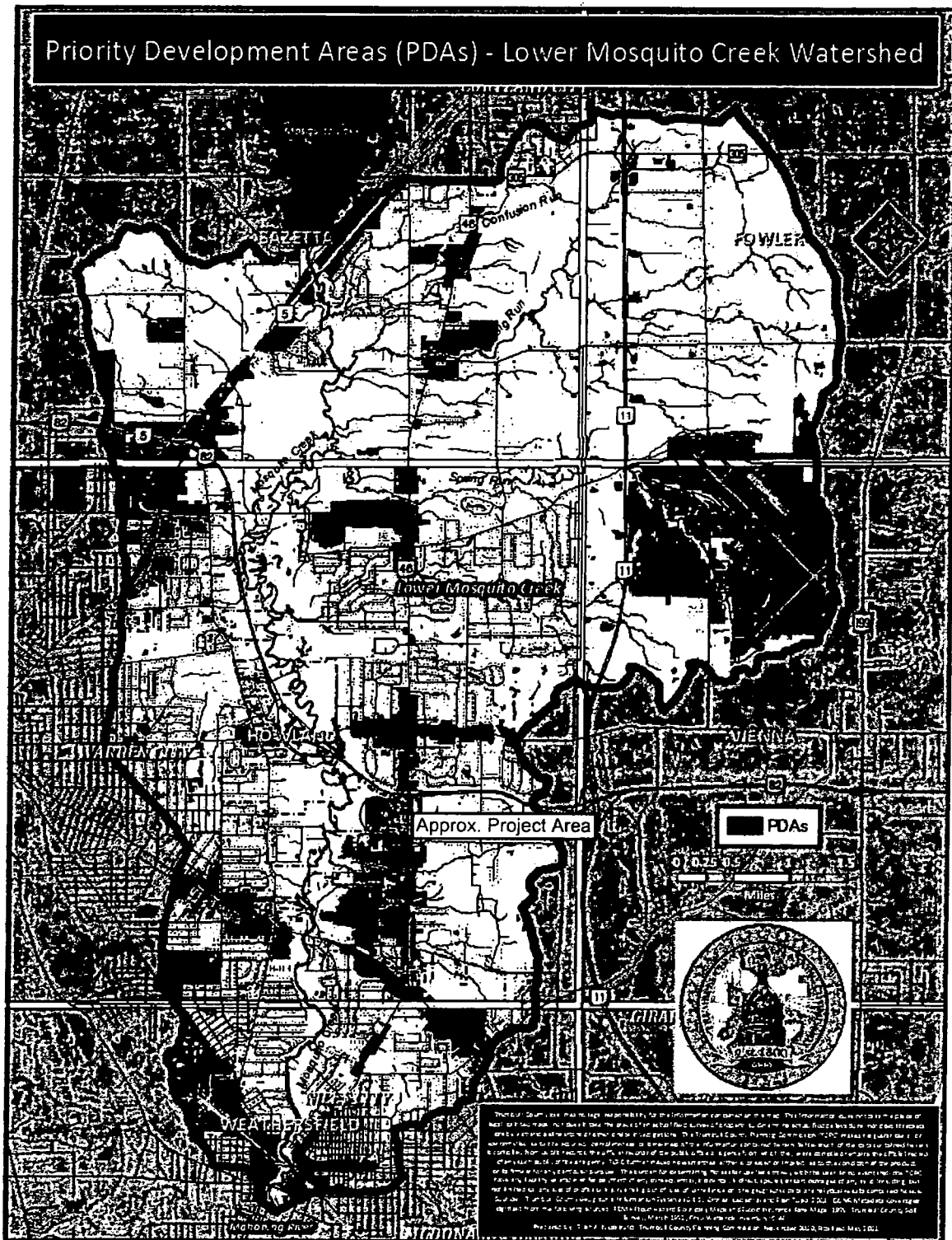


Benjamin Latoche
Project Manager

EC: Ms. Cassandra Forsyth, Army Corps of Engineers – Pittsburgh District

ATTACHMENT 1

PRIORITY DEVELOPMENT AREAS MAP



ATTACHMENT C
NARRATIVE DESCRIPTION OF OFF-SITE ALTERNATIVES

OFF-SITE ALTERNATIVE ANALYSIS NARRATIVE SUPPLEMENT

Enterprise Park (DA# LRP-2017-1643)

April 2019

ALTERNATIVE 2 – OLD AVALON GOLF COURSE

The Old Avalon Golf Course (Alternative 2) is located in Howland Township and is currently available for acquisition. At 129 acres in size, the property does contain an adequate amount of developable area. Alternative 2 is located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 2 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 2 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: five [5] acres of wetlands and 2,500 linear feet of streams). Considering all of this information, Alternative 2 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 3 – 48 NORTH RIVER ROAD

The property at 48 North River Road (Alternative 3) is located in Warren Township and is currently available for acquisition. At 48 acres in size, the property does not contain an adequate amount of developable area. Alternative 3 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 3 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 3 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 20 acres of wetlands and 400 linear feet of streams). Considering all of this information, Alternative 3 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 4 – 6101 PARKMAN ROAD

The property 6101 Parkman Road (Alternative 4) is located in Champion Township and is currently available for acquisition. At 29 acres in size, the property does not contain an adequate amount of developable area. Alternative 4 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 4 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 4 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 20 acres of wetlands and 1,500 linear feet of streams). Considering all of this information, Alternative 4 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 5 – 116 ACRES OFF OF OH-5

The property that is 116 acres off of OH-5 (Alternative 5) is located in Braceville Township and is currently available for acquisition. At 116 acres in size, the property does contain an adequate amount of developable area. Alternative 5 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 5 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 5 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 25 acres of wetlands and 500 linear feet of streams). Considering all of this information, Alternative 5 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 6 – 52 ACRES OFF OF STATE ROAD

The property that is 52 acres off of State Road (Alternative 6) is located in Champion Township and is currently available for acquisition. At 52 acres in size, the property does contain an adequate amount of developable

area. Alternative 6 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 6 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 6 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands and 1,000 linear feet of streams). Considering all of this information, Alternative 6 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 7 – 8213 OH-45

The property located at 8213 OH-45 (Alternative 7) is located in the Village of Lordstown and is currently available for acquisition. At 45 acres in size, the property does not contain an adequate amount of developable area. Alternative 7 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 7 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 7 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands and 1,000 linear feet of streams). Considering all of this information, Alternative 7 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 8 – 3284 NILES-CORTLAND ROAD

The property located at 3284 Niles-Cortland Road (Alternative 8) is located in the City of Cortland and is currently available for acquisition. At 20 acres in size, the property does not contain an adequate amount of developable area. Alternative 8 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 8 is suitable to the development of the Project. Regarding accessibility, the property does meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 9 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 5 acres of wetlands and 200 linear feet of streams). Considering all of this information, Alternative 8 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 9 – 2894 WEST MARKET STREET

The property located at 2894 West Market Street (Alternative 9) is located in the City of Warren and is currently available for acquisition. At 22 acres in size, the property does not contain an adequate amount of developable area. Alternative 9 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 8 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 9 location may be environmentally feasible, but a brownfield investigation would have to be conducted. Considering all of this information, Alternative 9 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 10 – 34 ACRES OFF OF ENTERPRISE DRIVE

The property that is 36 acres off of Enterprise Drive (Alternative 10) is located in the City of Warren and is currently available for acquisition. At 34 acres in size, the property does not contain an adequate amount of developable area. Alternative 10 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 10 is suitable to the development of the Project. Regarding accessibility, the property does meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 10 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 7.5 acres of wetlands and 200 linear feet of streams). Considering all of this information, Alternative 10 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 11 – 356 ACRES OFF OF COLLAR PRICE ROAD

The property that is 356 acres off of Collar Price Road (Alternative 11) is located in the City of Hubbard and is currently available for acquisition. At 356 acres in size, the property does contain an adequate amount of developable area. Alternative 11 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 10 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 11 location likely would not be environmentally feasible, but at a minimum Clean Water Act permitting would be required (estimated impacts: 25 acres of wetlands and 2,000 linear feet of streams). Considering all of this information, Alternative 11 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 12 – 6756 BELMONT AVENUE

The property located at 6756 Belmont Avenue (Alternative 12) is located in the City of Girard and is currently available for acquisition. At 38 acres in size, the property does not contain an adequate amount of developable area. Alternative 12 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 12 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 12 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands and 1,000 linear feet of streams). Considering all of this information, Alternative 12 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 13 – 1166 YOUNGSTOWN-KINGSVILLE ROAD

The property located at 1166 Youngstown-Kingsville Road (Alternative 13) is located in Vienna Township and is currently available for acquisition. At 39 acres in size, the property does not contain an adequate amount of developable area. Alternative 13 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 13 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 13 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands and 2,500 linear feet of streams). Considering all of this information, Alternative 13 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 14 – INTERSECTION OF NORTH MAIN & SPRING STREETS

The property located at the intersection of North Main & Spring Streets (Alternative 14) is located in the City of Hubbard and is currently available for acquisition. At 40 acres in size, the property does not contain an adequate amount of developable area. Alternative 14 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 14 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 14 location likely would not be environmentally feasible, but at a minimum Clean Water Act permitting would be required (estimated impacts: 20 acres of wetlands/lake and 2,000 linear feet of streams). Considering all of this information, Alternative 14 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 15 – INTERSECTION OF SUSSEX & EASTLAND AVENUES

The property located at the intersection of Sussex & Eastland Avenues (Alternative 15) is located in the City of Warren and is currently available for acquisition. At 50 acres in size, the property does contain an adequate amount of developable area. Alternative 15 is located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 15 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 15 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 15 acres of wetlands and 500 linear feet of streams). Considering all of this

information, Alternative 15 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 16 – 4075 KING GRAVES ROAD

The property located at 4075 King Graves Road (Alternative 16) is located in Vienna Township and is currently available for acquisition. At 60 acres in size, the property does contain an adequate amount of developable area. Alternative 15 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 16 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 16 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands/ponds and 200 linear feet of streams). Considering all of this information, Alternative 16 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 17 – 62 ACRES OFF OF LIBERTY STREET

The property that is 62 acres off of Liberty Street (Alternative 17) is located in the City of Hubbard and is currently available for acquisition. At 62 acres in size, the property does contain an adequate amount of developable area. Alternative 17 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 17 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 17 location likely would not be environmentally feasible, but at a minimum Clean Water Act permitting would be required (estimated impacts: 30 acres of wetlands/lake and 3,000 linear feet of streams). Considering all of this information, Alternative 17 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 18 – 65 ACRES OFF OF PERKINS JONES ROAD

The property that is 65 acres off of Perkins Jones Road (Alternative 18) is located in the City of Warren and is currently available for acquisition. At 65 acres in size, the property does contain an adequate amount of developable area. Alternative 18 is located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 18 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 18 location would likely be environmentally feasible as no Clean Water Act permitting would be required. Considering all of this information, Alternative 18 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 19 – 87 ACRES OFF OF KING GRAVES ROAD

The property that is 87 acres off of King Graves Road (Alternative 19) is located in Vienna Township and is currently available for acquisition. At 87 acres in size, the property does contain an adequate amount of developable area. Alternative 19 is located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 19 is not suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 19 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 15 acres of wetlands/ponds and 2,000 linear feet of streams). Considering all of this information, Alternative 19 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 20 – 1600 SALT SPRINGS ROAD

The property located at 1600 Salt Springs Road (Alternative 20) is located in the City of Niles and is currently available for acquisition. At 90 acres in size, the property does contain an adequate amount of developable area. Alternative 20 is not located within an appropriate proximity to the geographic center for the purposes of the

Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 20 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 20 location may be environmentally feasible, but a brownfield investigation would have to be conducted. Additionally, Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands/ponds and 500 linear feet of streams). Considering all of this information, Alternative 20 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 21 – 1260 NORTH MAIN STREET

The property located at 1260 North Main Street (Alternative 21) is located in the City of Niles and is currently available for acquisition. At 100 acres in size, the property does contain an adequate amount of developable area. Alternative 21 is located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 21 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 21 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands and 1,500 linear feet of streams). Considering all of this information, Alternative 21 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 22 – 106 ACRES OFF OF BELMONT AVENUE

The property that is 106 acres off of Belmont Avenue (Alternative 22) is located in the City of Girard and is currently available for acquisition. At 106 acres in size, the property does contain an adequate amount of developable area. Alternative 22 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 22 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 22 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands and 200 linear feet of streams). Considering all of this information, Alternative 22 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 23 – 135 ACRES OFF OF NEWTON MANOR DRIVE

The property that is 134 acres off of Newton Manor Drive (Alternative 23) is located in Warren Township and is currently available for acquisition. At 135 acres in size, the property does contain an adequate amount of developable area. Alternative 23 is not located within an appropriate proximity to the geographic center for the purposes of the Project. The property is not near enough to the accessory amenities needed to support the Project. The current zoning of Alternative 23 is suitable to the development of the Project. Regarding accessibility, the property does not meet the standard needed for successful implementation of the Project. Siting the Project at the Alternative 23 location would likely be environmentally feasible, but Clean Water Act permitting would be required (estimated impacts: 10 acres of wetlands and 1,000 linear feet of streams). Considering all of this information, Alternative 23 is not practicable, let alone the Least Environmentally Damaging Practicable Alternative (LEDPA).

ATTACHMENT D
EXCERPT FROM APPLICATION

Unfortunately, the shopping mall industry is suffering through extremely trying times. As widely reported, shopping patterns have changed dramatically as a result of escalating on-line sales; major department store anchors have closed their doors; and numerous specialty stores have filed for bankruptcy.

The owner and developer of both Enterprise Park and the Eastwood Complex, the Cafaro Company, recognizes the critical issues facing each of its malls including Eastwood; and it has come to the inevitable conclusion that the only way to thrive in this difficult economic climate is to diversify into alternative uses - - - not functioning merely as a pure retail project. Accordingly, the Eastwood Complex has already, over the past several years, made concerted efforts in order to broaden its customer appeal by adding a variety of uses such as entertainment venues, lodging, offices, etc. Nonetheless, Eastwood's efforts have not been entirely successful in counteracting its dilemma. Accordingly, the Eastwood Complex would very much welcome an infusion of activity and traffic in and near the Complex that would be precipitated by the "Enterprise Park Medical/Education Campus". For Trumbull County, for the citizens of Niles and Warren, for the thousands of mall employees, and for each of the residents in the Trumbull County area, it is important that Eastwood remain as a viable entity; and the development of the Project would be of assistance in that regard.

5.2.3 On-Site Alternatives Analysis (Avoidance/Minimization)

Each of the factors relating to the possibility of off-site avoidance by relocating to an alternative site has been thoroughly discussed above. Those issues are essentially factual and straight-forward; however the answers to questions relating to on-site avoidance when dealing with the construction of numerous buildings on a 103 acre tract are, by their very nature, much more indefinite and obscure. If the Project were merely a 1-2 acre development with one building intended, and the initial site layout provided for the building to encroach approximately 20 feet onto a portion of a wetland ecosystem that was present on the subject site, it would be simple and inconsequential to the project to slide the building over by 20 feet in order to readily remedy the situation. However the issues of avoidance relative to a massive development such as the Project are much more complex, with illusive and often contradictory solutions.

The Applicant's thinking evolved through four (4) primary design iterations to determine a final 'Least Environmentally-Damaging Practicable Alternative' (LEDPA). These iterations are labeled as Alternatives 1A, 1B, 1C (Item 6.2.2), and 1D (Item 6.2.1). The details of such are summarized in the table below and the narrative to follow.

Table 2 - On-Site Alternatives Analysis

Alternative	Building Square Footage	Avoidance of Category 3 Wetlands	Total Wetland Impacts (Acreage)	Total Stream Impacts (Linear Feet)	Avoided Wetland Acreage	Avoided Stream (Linear Feet)	LEDPA?
1A	1,404,466	No	55.80	10,278.0	0	0	No
1B	1,200,000	Yes	30.54	5,418.2	25.26	4,859.8	No
1C	921,600	Yes	24.07	4,349.7	31.73	5,928.3	No
1D	876,000	Yes	16.34	1,727.5	39.46	8,550.5	Yes

In analyzing the plans for Enterprise Park, it is important to consider the overall setting of the site. Due to its locale and the geographic restraints which are present on all four sides of the site, the Project can only be developed by utilizing a predominantly north/south oriented internal roadway system, connecting Mall River Road at the north perimeter to the parcels owned by Cafaro which are contiguous to the Eastwood Mall Complex at the south edge of the site. All east/west oriented roadways must consequently be relegated to non-primary service and local access type drives. Based upon the prerequisite of a north/south primary traffic pattern, it is only logical to extend Mall River Road through the approximate mid-point of the developable property, thus bisecting the Project in order to allow for construction of buildings on either side of the roadway. This is exactly what the Project site plan depicts.

In order to accommodate St. Joseph Hospital's massive building size, however, it is clear that the precise placement of this north/south roadway must necessarily be located slightly west of due center, thus providing adequate space to accommodate on the east side of the roadway St. Joseph's 350,000 square foot facility, as well as the hospital's needed parking, driveways, and service areas.

Therefore, the current plans show that the hospital edifice has appropriately been placed east of the curved extension of Mall River Road. However, such placement of the hospital building on the eastside of the road will, as a matter of course, impact some portions of Category 2 wetlands. It could be argued that the St. Joseph Hospital building could potentially be relocated slightly to the north and east - or slid somewhat toward the south; nonetheless, neither of these minor relocations would result in the avoidance of the wetlands which exist in both directions. Furthermore, although a re-sited hospital building would be meaningless in addressing the stated goal of avoidance, sliding the proposed building to either the north or to the south would, according to the Mercy Health architectural consultants, negatively impact the hospital's desired traffic flow, parking distribution, building visibility, service area access, and ease of interaction with the other Campus occupants.

The Cafaro Company's in-house development personnel and its outside consultants have intensively studied various layout alternatives relating to the Project, but they have been unable to develop modifications to the site plan that would materially minimize, let alone eliminate the incursions onto Category 2 wetland areas by the proposed buildings, parking areas, etc. They have thus concluded that further on-site avoidance is impossible, short of abandoning Enterprise Park in its entirety.

The spatial considerations and the irregular shape of the Project Area's perimeter boundaries, as well as the size and configuration of the buildings within the proposed Project manifestly require:

1. A primary north/south roadway, situated slightly west of center on the site.
2. The most expansive parcel being situated remotely from the west side of the site where the Category 3 wetlands are situated.
3. The positioning of the largest building, St. Joseph Hospital, on the east side of the north/south roadway, oriented in a generally northwest direction facing Mall River Road, and with the front face of the hospital building parallel to the roadway. Such placement of St. Joseph Hospital is most appropriate, since this allows the largest building to be placed in the deepest and largest potentially developable tract. An analysis of the site plans will show that the distance from the center-line of Mall River Road to the eastern most property line (at a point where the property is adjacent to Hiram Place and Kenyon Drive) is approximately 1,400 feet; whereas the distance from the Mall River Road center-line to the east property line at a point farther south is only approximately 750 feet. To situate the hospital at any location other than as now proposed would be impracticable and would serve no useful purpose relating to "avoidance/minimization".
4. Movement either north or south from the location presently proposed for the hospital would be ineffective in reaching full or even substantive avoidance of wetlands; and a relocation to the south would also impinge upon the property needed by St. Joseph Hospital for their future expansion building.
5. The arrangement of the smaller buildings on the west side of the roadway so as to better permit them to visually relate to and interact with the anchor hospital; and such will allow more than adequate space between the smaller structures and the Category 3 wetlands which are situated to their immediate west.

The Applicant has also examined the impacts of not proceeding with the Project as has been set forth throughout this narrative; those conclusions may be summarized as follows:

1. As to St. Joseph Hospital, if the Project Area is not available to them, it is quite probable that they will stay at their present location and inevitably face extremely strong competition from the Steward Healthcare organization. Such a static posture by Mercy Health could (and more than likely would) eventually lead to the closure of St. Joseph's in Trumbull County, precipitating the loss of thousands of jobs, as well as a corresponding reduction of Warren City income taxes, a reduction that would be catastrophic to the Warren City operating budget.
2. As to Akron Children's Hospital, it is apparent that this entity will not unilaterally depart from St. Joseph's existing Warren building if that structure were to remain in place; however, the chances of an Akron Children's Hospital expansion at the Eastland

Avenue location will be virtually non-existent. The Children's Hospital presently partners with Mercy Health in Mahoning County, and it is inconceivable that the Akron Hospital would venture out on their own in order to construct a new freestanding facility in Trumbull County. Wherever Mercy Health goes, so will go Akron Children's Hospital.

3. An abandonment of the Project would aggravate the present problem of net outflow of Trumbull County dollars to surrounding communities. Due to the relatively poor identifiability of the current St. Joseph Hospital and its exceedingly isolated location insofar as traffic access is concerned, a fair number of Trumbull County residents are expending their healthcare dollars not in the County, but elsewhere. Unfortunately, without the Project, the loss of consumer dollars that could otherwise be spent locally will undoubtedly continue, and more than likely will intensify.
4. Without the Project, the potential for an historically significant collaboration by Youngstown State University and Kent State University could be squandered, which would represent an enormous missed opportunity for the area, not only from an economic perspective, but also in terms of establishing a model for future collaborative efforts between these two (2) educational institutions. Furthermore, the loss of the YSU/Kent State Medical/Educational facility would allow the existing scarcity of nurses and other medical technicians to continue to exist, further diminishing the overall quality of healthcare in the Youngstown-Warren MSA.
5. Although it is conceivable that EDM Management could potentially locate an alternate suitable site in Trumbull County for their purposes, such is definitely not a certainty, and there is serious doubt that they would be willing to enter into this new Trumbull County portion of the marketplace without the co-occupancy support of the other proposed Enterprise Park users. This would constitute one more missed opportunity in Trumbull County for both improved healthcare and economic development. The same may be said of the loss of potential office buildings which would house numerous types of medical and related healthcare services that are planned within the Project Area.
6. The potential impact on the future of the present Eastwood Mall Complex could be significant. In terms of lost jobs, reduced taxes, and the minimization of services and conveniences available to the public, the diminishment of Eastwood's long-term vitality would certainly constitute a major economic loss and an impairment to the lifestyle now experienced by Trumbull County residents.
7. In light of an abandonment of Enterprise Park and the predictable corresponding deterioration of the Eastwood Mall Complex, it is entirely possible, and perhaps probable, that the major roadway changes as outlined by the Trumbull County Engineer (refer to Exhibit 21) would be delayed, and potentially cancelled in their entirety. Such would precipitate the loss of millions of construction dollars, and would have a major negative impact on traffic flow improvements that otherwise could support other types of development and growth in the area.

8. If this narrative is being read by an individual in Columbus, Ohio, or San Antonio, Texas, or Charlotte, North Carolina (each of which areas are accustomed to and enjoy consistent growth and economic vitality) it may be difficult to fully appreciate the psyche of those in northeast Ohio, especially those residing in Mahoning and Trumbull Counties. Currently, there exists widespread enthusiasm and support for the Project (in whatever form it may evolve); and thus the abandonment of it would be received as a huge blow by the Trumbull and Mahoning County residents. This immediate geographic region has been in a protracted malaise since the abrupt closing of the steel mills 35 years ago; this area has lost population each year since then; the tax base of Trumbull County is at a standstill (and perhaps is decreasing if inflation were to be taken into account).

Finally, the Applicant also examined the possibility of constructing a significantly smaller development. Unfortunately, the reduction in the size of the Project would necessarily run contrary to the fundamental principal of cooperative interaction and reciprocal support amongst the various Enterprise Park occupants, i.e. the underlying theory upon which this Project is based. Also, an elimination of the number or size of the proposed buildings and services may render this Project economically unfeasible, especially since over one-half of the Enterprise site has already been deemed undevelopable.

The primary reason why Enterprise Park can succeed is the essential synergy that will occur amongst the various medical-related facilities. Mercy Health is attracted to Enterprise Park not only by its demographic, accessibility, and growth advantages, but also by the presence of complementary co-occupants at this Project; and certainly few, if any, of the other proposed occupants would be drawn to Enterprise Park without the magnet provided by St. Joseph Hospital. Enterprise Park has been conceived as a Project wherein each occupant will provide some degree of attraction to the campus; while simultaneously each occupant will, to a varying extent, be parasitic to the cumulative draw provided by each of the other occupants.

Accordingly, Enterprise Park can be an excellent example of the widely accepted axiom that "the whole is greater than the sum of its parts". To reduce the magnitude and/or the number of buildings at Enterprise Park would be self-defeating, in that such would eliminate the synergy that is intended as the proposition which underlies the Enterprise Park project.

5.2.4 Mitigation

In order to mitigate for the unavoidable loss of 16.34 acres of wetlands and 1,727.5 linear feet of streams, the Applicant proposes a comprehensive and multifaceted array of mitigation measures. A short summary of these efforts is included below:

- Primary Mitigation (as required by the Ohio Administrative Code)
 - Purchase of 32.0 units of wetland credits from the Wetland + Stream Foundation Mahoning River watershed In-Lieu Fee Program.
 - Preservation of 25.26 acres of Category 3 wetlands, 0.15 acres of Category 2 wetlands, 0.35 acres of wetland buffers and 4,859.8 linear feet of stream.

Table 1 - Off-Site Alternatives Analysis

Alternative	Availability of Acquisition	Location	Sufficient Parcel Size	Proximity to Geographic Center	Proximity to Accessory Amenities	Appropriateness of Existing Zoning	Accessibility	Environmental Feasibility	Estimated Aquatic Resource Impact	Practicable?
#1 (Enterprise Park at Eastwood)	Applicant Owned	Howland Twp.	Yes (103 AC)	Yes	Yes	Yes	Yes	Yes (CWA Permits Needed)	35.95 AC Wetland 1,000 LF Stream	No
#2 (Old Aviation Golf Course)	Yes	Howland Twp.	Yes (129 AC)	Yes	No	Yes	No (No Exit Ramps from OH-82/11)	Yes (CWA Permits Needed)	5 AC Wetland 2,500 LF Stream	No
#3 (48 AC N. River Road)	Yes	Warren Twp.	Yes (48 AC)	No	No	No	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	20 AC Wetland 400 LF Stream	No
#4 (6101 Parkman Road)	Yes	Champlon Twp.	Yes (29 AC)	No	No	No	No (Only Serviced by US-422)	Yes (CWA Permits Needed)	20 AC Wetland 1,500 LF Stream	No
#5 (116 AC OH-5)	Yes	Braceville Twp.	Yes (116 AC)	No	No	Yes	No (No Exit Ramps from OH-5/US-80)	Yes (CWA Permits Needed)	25 AC Wetland 500 LF Stream	No
#6 (52 AC State Road)	Yes	Champlon Twp.	Yes (52 AC)	No	No	No	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	10 AC Wetland 1,000 LF Stream	No
#7 (8213 OH-45)	Yes	Village of Lordstown	Yes (45 AC)	No	No	No	No (Only Major Thoroughfare is Toll Road US-80)	Yes (CWA Permits Needed)	10 AC Wetland 1,000 LF Stream	No
#8 (3284 Niles-Cortland Road)	Yes	Cortland	No (20 AC)	No	No	Yes	Yes (Serviced by OH-46/305)	Yes (CWA Permits Needed)	5 AC Wetland 200 LF Stream	No
#9 (2894 West Market Street)	Yes	City of Warren	No (22 AC)	No	No	No	No (No Major Thoroughfares)	N/A Brownfield Study Needed	None	No
#10 (34 AC Enterprise Drive)	Yes	City of Warren	Yes (34 AC)	No	No	Yes	Yes (Serviced by OH-82/US-422)	Yes (CWA Permits Needed)	7.5 AC Wetland 200 LF Stream	No
#11 (356 AC Collar Price Road)	Yes	City of Hubbard	Yes (356 AC)	No	No	Yes	No (No Major Thoroughfares)	No (Significant Aquatic Resources)	25 AC Wetland 2,000 LF Stream	No
#12 (6756 Belmont Avenue)	Yes	City of Girard	Yes (38 AC)	No	No	No	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	10 AC Wetland 1,000 LF Stream	No
#13 (1166 Youngstown-Kingsville Road)	Yes	Vienna Twp.	Yes (39 AC)	No	No	Yes	No (No Major Thoroughfares)	No (Significant Aquatic Resources)	10 AC Wetland 2,500 LF Stream	No
#14 (North Main & Spring Street)	Yes	City of Hubbard	Yes (40 AC)	No	No	Yes	No (No Major Thoroughfares)	No (Significant Aquatic Resources)	20 AC Wetland/Lake 2,000 LF Stream	No
#15 (Sussex & Eastland Avenue)	Yes	City of Warren	Yes (50 AC)	Yes	No	No	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	15 AC Wetland 500 LF Stream	No
#16 (4075 King Graves Road)	Yes	Vienna Twp.	Yes (60 AC)	No	No	Yes	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	10 AC Wetland/Pond 200 LF Stream	No

#17 (62 AC Liberty Street)	Yes	City of Hubbard	Yes (62 AC)	No	No	No	No (No Major Thoroughfares)	No (Significant Aquatic Resources)	30 AC Wetland 3,000 LF Stream	No
#18 (65 AC Perkins Jones Road)	Yes	City of Warren	Yes (65 AC)	Yes	No	Yes	No (Only Major Thoroughfare is OH-5)	Yes	None	No
#19 (87 AC King Graves Road)	Yes	Vienna Twp.	Yes (87 AC)	Yes	No	No	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	15 AC Wetland 2,000 LF Stream	No
#20 (1600 Salt Springs Road)	Yes	City of Niles	Yes (90 AC)	No	No	Yes	No (No Major Thoroughfares)	N/A Brownfield Study Needed	10 AC Wetland/Pond 500 LF Stream	No
#21 (1260 N. Main Street)	Yes	City of Niles	Yes (100 AC)	Yes	No	Yes	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	10 AC Wetland 1,500 LF Stream	No
#22 (106 AC Belmont Avenue)	Yes	City of Girard	Yes (106 AC)	No	No	Yes	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	10 AC Wetland 200 LF Stream	No
#23 (135 AC Newton Manor Drive)	Yes	Warren Twp.	Yes (135 AC)	No	No	Yes	No (No Major Thoroughfares)	Yes (CWA Permits Needed)	10 AC Wetland 1,000 LF Stream	No

*Annexation and rezoning under discussion with the City of Warren.