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November 27, 2019

Via Electronic Filing

Ms. Tamara Turkenton
Executive Director
Ohio Power Siting Board
180 East Broad Street, 6th Floor
Columbus, OH 43215

Ms. Tanowa Troupe
Administration/Docketing
Ohio Power Siting Board
180 East Broad Street, 11th Floor
Columbus, OH 43215-3793

Re: The Ohio State University
Case No. 19-1641-EL-BGN

Dear Ms. Turkenton and Ms. Troupe:

I am writing to update the Application in the above referenced matter in two ways. First, on page 108 the Application states:

> *"A survey of wetlands, streams, vegetation and ecological features was conducted on May 7, 2019 (Exhibit R and Exhibit S), except for the laydown area which is in progress at the time of the submittal of this application. The exhibits will be updated to reflect the results of the laydown area study as a supplemental filing to this application."*

That laydown study is now complete. As such, The Ohio State University hereby updates its Application with the enclosed Exhibit R that includes a wetland survey of the laydown area. *See* Revised Exhibit R "Addendum One" at pages 28-47.

Second, the Application states that the proposed facility will interconnect to the electric substation on the corner of John Herrick and Cannon Drives. The Application correctly describes the location and the substation is correctly shown on the maps. However, the Application incorrectly labels the substation as the "Buckeye" substation rather than the correct name, which is the "OSU" substation. *See e.g.*, Application pp. 3, 10, 17, 20, 23, 30, 35, and 36. Please accept this letter as a correction to change the name to the "OSU" substation throughout the Application.

Very truly yours,

/s/ Steven D. Lesser

Steven D. Lesser
Counsel for The Ohio State University

SURFACE WATERS REPORT

The Ohio State University

Combined Heat and Power Facility

Franklin County, Ohio

May 2019

TRC Project No. 314315.0000.0000

Prepared For:

Engie

1971 Neil Avenue, Suite 406

Columbus, OH 43210

Phone: (614) 357-2566

Prepared By:

TRC Environmental Corporation

690 Taylor Road, Suite 100

Gahanna, OH 43230

Phone: (614) 335-6223

Mike Sponsler
Senior Project Manager

Justin Pitts
Ecological Project Manager

CONFIDENTIAL BUSINESS INFORMATION

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B. Photographic Log

ACRONYM LIST

FEMA	Federal Emergency Management Agency
GPS	Global Positioning System
HUC	hydrologic unit code
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
Ohio EPA	Ohio Environmental Protection Agency
Project	Combined Heat and Power Facility
Report	Surface Waters Report
TRC	TRC Environmental Corporation
U.S.	United States
USACE	United States Army Corps of Engineers
USDA-NRCS	United States Department of Agriculture – Natural Resources Conservation Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

On behalf of ENGIE, TRC Environmental Corporation (TRC) has prepared this Surface Waters Report (Report) as part of the environmental studies conducted for the Combined Heat and Power Facility (Project) located in the City of Columbus, Franklin County, Ohio. This Report contains the methodology and results of the investigations performed by TRC. Mr. Justin Pitts (TRC), an environmental scientist who has been performing wetland delineations for over twelve years, was the lead field scientist and primary author of this Report.

The primary objective of the survey was to identify and evaluate wetlands and other waters of the U.S. within the Study Area, such that the resources could be considered in the planning, design, permitting, and installation of the proposed Project in accordance with Ohio Administrative Code (OAC) Chapter 4906-4-08 (B)(1)(a)(iv-v)-(b). In addition, TRC evaluated areas of potentially suitable wooded habitat for the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*).

The Study Area consists of the potential construction impact area and a 100-foot (30-meter) buffer totaling approximately 1,153 acres (467 hectares) of primarily mowed/maintained commercial properties, parking lots, sidewalks and local roadways. The Project Area is approximately 1.76 acres (0.71 hectare) in total size located on The Ohio State University (OSU) campus in the City of Columbus, Franklin County, Ohio (Appendix A, Figure 1). Of the 1.76 acres (0.71 hectare) to be disturbed, approximately 1.35 acres (0.54 hectare) is the existing Howlett Greenhouse in the northeast quadrant of the John H. Herrick Drive intersection with Vernon L. Tharp Street. The remaining 0.41 acre (0.17 hectare) is mowed/maintained urban lands, parking lots, sidewalk and local roadways. The final constructed footprint of the facility will be 1.35 acres (0.54 hectare)

The Study Area lies within the Eastern Corn Belt Plains, which typically have loamy and well-drained soils, and most commonly characterized by its rolling plains and local end moraines (Wilken, Jiménez Nava and Griffith 2011). The vegetation of the ecoregion was originally dominated by American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), and American basswood (*Tilia americana*) forests. The proposed Project is located within the Ohio River drainage basin. The United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) maintains a classification system for identifying watersheds by hydrologic unit code (HUC). The Project is located within the Upper Scioto (HUC 05060001) river basin

(USDA-NRCS 2013). At the time of the Survey, the Study Area was located within a high intensity urban setting.

2.0 Methodology

Pursuant to the USACE wetlands and other waters of the U.S. delineation methodology, potential wetland and other waters of the U.S. located within the Study Area were identified, delineated, and mapped through the combined use of existing available public source information and field investigations.

2.1 Desktop Review Methodology

The sources utilized for desktop review included the following: the United States Geological Survey (USGS) Alger, Ohio (1994) 7.5 minute series topographical quadrangle map (USGS 2016) (Appendix A, Figure 1); soil datasets acquired from the NRCS Web Soil Survey (USDA 2019) for Franklin County, Ohio (Appendix A, Figure 2); the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory Map (NWI) for Ohio (USFWS 2019) (Appendix A, Figure 3); and the Federal Emergency Management Agency (FEMA) flood hazard risk map (FEMA 2019) (Appendix A, Figure 4). Sources were reviewed to identify conditions that may be present in the Study Area. These potential conditions are defined in Section 2.2. The results of the desktop review were used to aid in the field investigation.

2.2 Field Methodology

2.2.1 Surface Waters

Wetland resources within the Study Area were identified and their boundaries determined in accordance with the U.S. Army Corps of Engineers *Wetlands Delineation Manual (1987 Manual)* (USACE 1987), utilizing the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (Regional Supplement)* (USACE 2010). Consistent with the *1987 Manual*, wetland determinations were based on dominant plant species, soil characteristics, and hydrologic characteristics. In addition, wetlands and other waters of the U.S. were evaluated in accordance with the Ohio Environmental Protection Agency (Ohio EPA) as part of the State of Ohio's Water Quality Standards (OAC Chapter 3745-1). Field surveys were conducted on May 7, 2019. Areas that exhibited hydric soils, wetland hydrology, and a dominance of hydrophytic vegetation were considered potentially jurisdictional wetlands.

The Study Area was screened for the presence of WOTUS that met the criteria specified in the *1987 Manual*. Other waters of the U.S. consist of ephemeral, intermittent, and perennial streams, as well as open water features, such as ponds. Drainage channels that exhibited defined "bed and bank" and an ordinary high-water mark in the channel were identified and delineated as jurisdictional streams. Wetlands or other WOUS are considered potentially jurisdictional until verified by the USACE.

Potentially suitable wooded habitat for the Indiana bat and northern long-eared bat within the Study Area was evaluated. Individuals conducting the vegetative survey for the proposed Project familiarized themselves with the habitat requirements of the species identified through desktop review. Data developed from publicly available data sources were utilized during the vegetative survey to document areas where land cover types may provide suitable habitat for the Indiana bat, northern long-eared bat, and other state and federal listed species and species of concern. Land cover types were field-verified, and locations of suitable habitat were documented through the use of a Global Positioning System (GPS) receiver capable of sub-meter accuracy (Model R1, handheld, Trimble, Sunnyvale, California).

3.0 Results

During the investigations identified within this report, no wetlands or streams were identified within the area to be disturbed for the Project.

3.1 Background Resources

3.1.1 USGS Topographic Map

Based on the desktop review, the Study Area contained no wetland features according to the Southwest Columbus, Ohio USGS topographic quadrangle (Appendix A, Figure 1) (USGS 2016). The majority of the terrain is almost completely level, with the exception of the Olentangy River. The elevation ranges from approximately 720 feet to 750 feet (220 meters to 229 meters) above mean sea level.

3.1.2 Soils

According to the soil dataset acquired from the NRCS Web Soil Survey for Hardin County, Ohio, the Study Area is underlain by seven (7) different soil types. The soils are mapped as non-hydric and non-hydric with hydric inclusions. Hydric inclusions indicate the soils are inclined to contain

small areas of hydric soil. (USDA 2015) (Table 3.1.1 and Appendix A, Figure 2). Throughout the Study Area, soils and hydrology have been greatly influenced by urban development.

Table 3.1.1 Soils Mapped within the Study Area

Soil Code	Soil Name	Percent (%) in Study Area	Hydric Status
CfB	Celina-Urban land complex, 2 to 6 percent slopes	1.22	Non-hydric with Hydric Inclusions
EmB	Eldean-Urban land complex, 2 to 6 percent slopes	35.59	Non-hydric with Hydric Inclusions
MnC	Miamian-Urban land complex, 6 to 12 percent slopes	0.61	Non-hydric
Rs	Ross silt loam, 0 to 2 percent slopes, occasionally flooded	5.64	Non-Hydric with Hydric Inclusions
Ut	Udorthents-Urban land complex, gently rolling	10.50	Non-Hydric
Uw	Urban land-Genesee complex, occasionally flooded	46.44	Non-Hydric
Ux	Urban land-Ockley complex, 0 to 6 percent slopes	X.xx	Non-Hydric

3.1.3 National Wetland Inventory

According to the USFWS NWI (USFWS 2019), no wetlands or riverine systems are mapped within the Study Area, which was confirmed during field investigations. However, the Olentangy River is identified in close proximity to the area to be disturbed for utility lines.

3.1.4 FEMA Flood Hazard

According to the FEMA mapping, the Study Area is not located within a FEMA Special Flood Zone Hazard Area. (FEMA 2019) (Appendix A, Figure 3).

3.2 Detailed Delineations

TRC performed the surface waters survey at the beginning of the normal growing season in Ohio, on May 7, 2019. Weather conditions were normal for the time of year, between 72° and 75° Fahrenheit (22° and 24° Celsius), with no rain. The last date of precipitation was on Saturday, May 4, 2019. No wetlands or streams were identified within the Study Area. The Olentangy River

is located in close proximity to the proposed area to be disturbed; however, based on design considerations the Olentangy River is not located within the potential construction impact area.

4.0 References

FEMA. 2019. *FEMA Flood Map Service Center.* https://msc.fema.gov/portal.

USACE. 1987. *Corps of Engineers Wetlands Delineation Manual.* Vicksburg, MS: Environmental Laboratory U.S. Army Corps of Engineers, Waterways Experiment Station, Wetlands Research Program Technical Report Y-87-1.

USACE. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0).* U.S. Army Corps of Engineers, Vicksburg: U.S. Army Engineer Research and Development Center, 154, 176.

USDA. 2015. "National Hydric Soils List." Excel spreadsheet, Natural Resources Conservation Service, U.S. Department of Agricuture. http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/.

—. 2019. *Web Soil Survey 3.0.* http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

USDA-NRCS. 2013. *Watershed Boundary Dataset.* Accessed May 2019. https://datagateway.nrcs.usda.gov/GDGOrder.aspx.

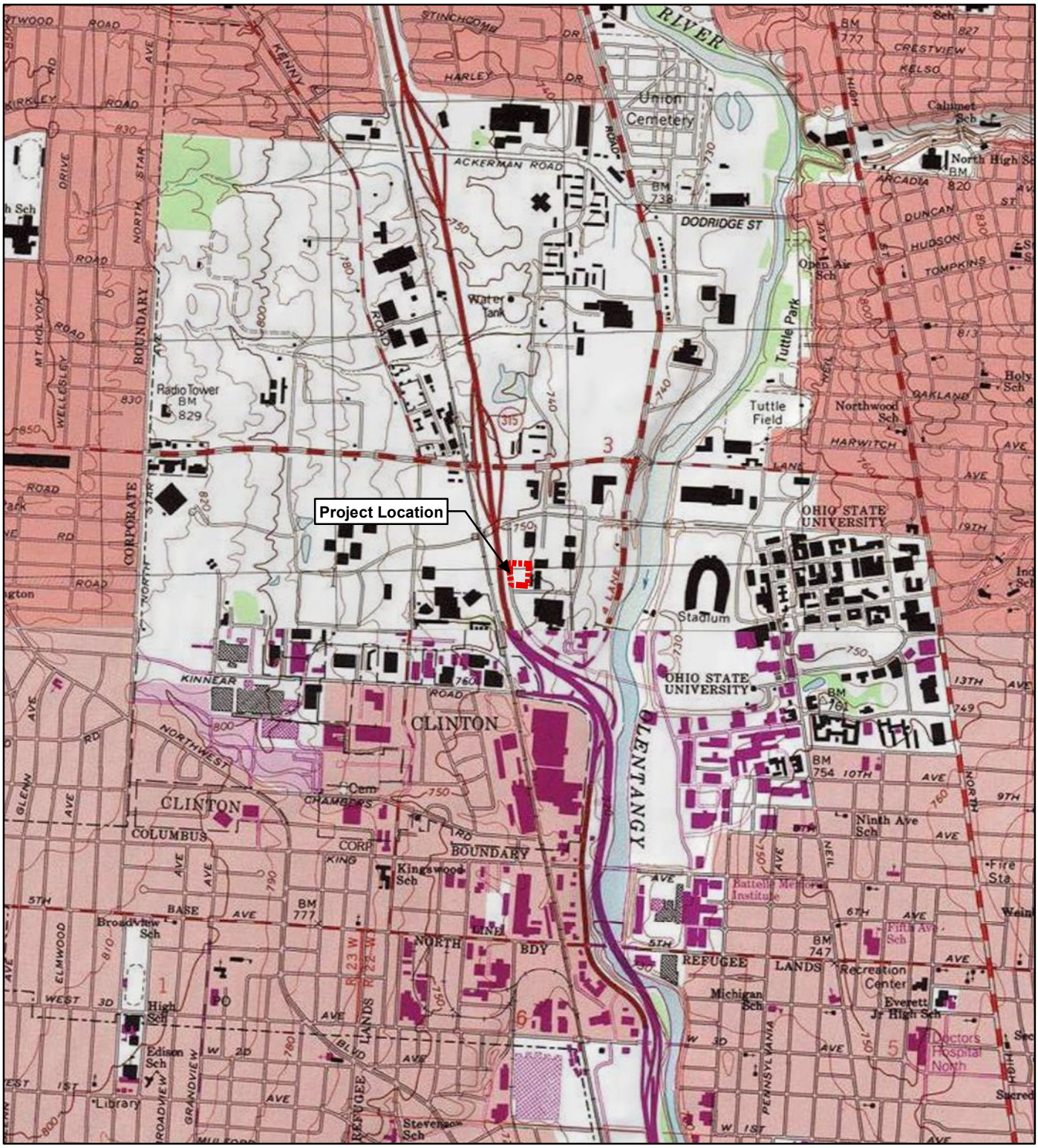
USFWS. 2019. *National Wetlands Inventory.* May 5. Accessed May 2019.

USGS. 1994. "Topographical Quadrangle Maps (7.5-minute series)." U.S. Geological Survey.

Wilken, Ed, Francisco Jiménez Nava, and Glenn Griffith. 2011. *North American Terrestrial Ecoregions Level III.* Commission for Environmental Cooperation, Canada. http://www.cec.org/Atlas/Files/Terrestrial_Ecoregions_L1/TerrestrialEcoregions_L1_GeoPDF.zip .

Appendix A

Figures



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

1 " = 2,000 '
1:24,000

0 2,000 4,000
FEET

LEGEND

PROPOSED PLANT PROJECT AREA

TRC

670 Morrison Rd
Suite 220
Gahanna, Ohio 43230
Phone: 614.655.5360

TRC - GIS

PROJECT:

THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:

USGS TOPOGRAPHIC MAP

WORKING COPY

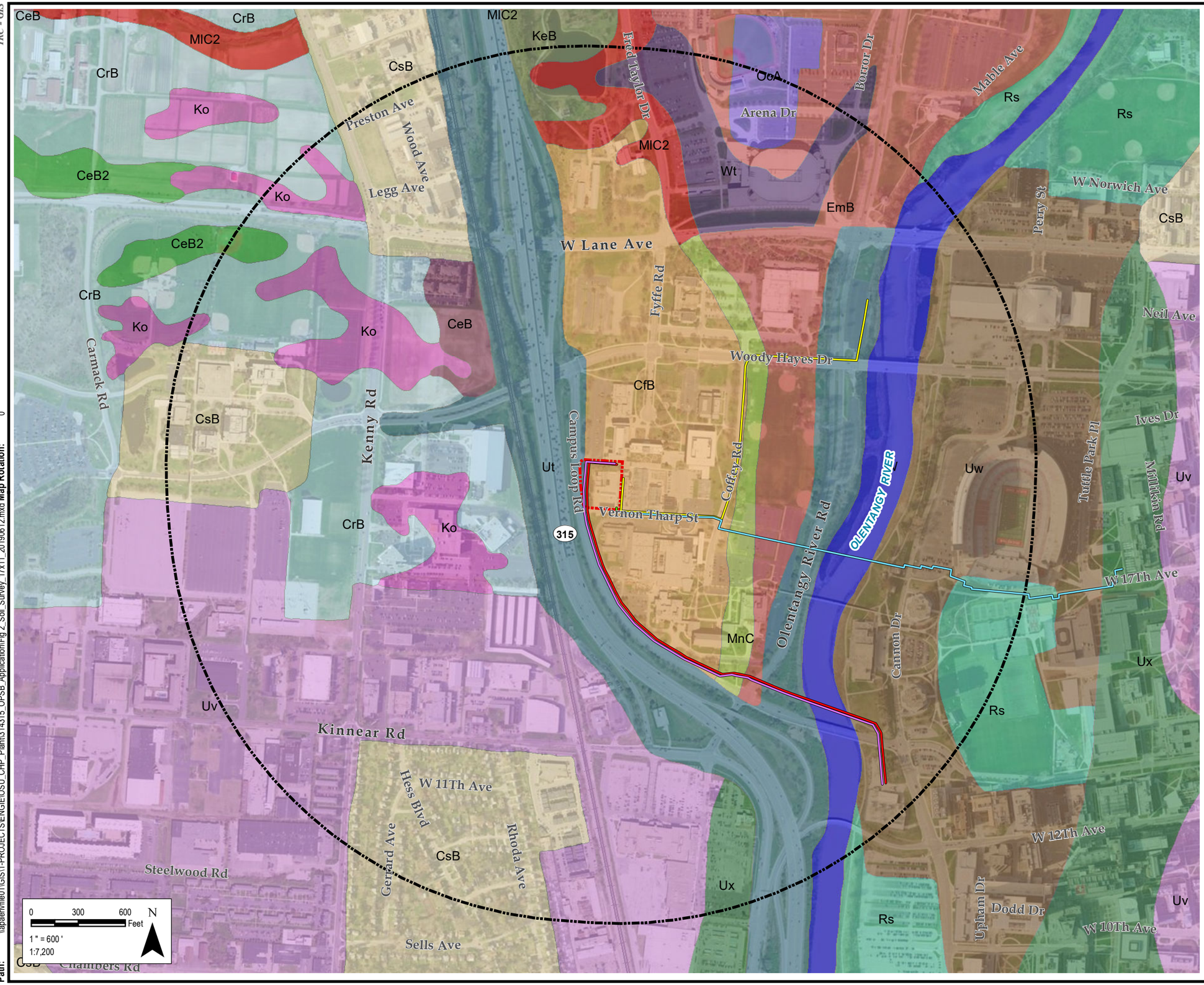
DRAWN BY:	S. MOTURI
CHECKED BY:	J. PAPEZ
APPROVED BY:	J. PITTS
DATE:	JUNE 2019
PROJ. NO.:	314315
FILE:	fIG 1 USGS_8.5x11.mxd

FIGURE 1

\\apaenvfile01\GIS\1-PROJECTS\ENGIE\OSU_CHP_Plant\314315_OPSB_Application\fIG 1 USGS_8.5x11.mxd -- Saved By: SMOTURI on 6/12/2019, 16:35:16 PM

TRC - GIS

Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet (Foot US)
Map Rotation: 0
Plot Date: 6/12/2019, 16:20:11 PM by SMOTURI -- LAYOUT: ANSI B (11"x17")
Path: \\apaenvfile01\GIS\1-PROJECTS\ENGIE\OSU_CHP_Plant\314315_OPSB_Application\Fig 2_Soil_Survey_17x11_20190612.mxd



LEGEND

- PROPOSED PLANT PROJECT AREA
- HALF-MILE BUFFER FROM PROPOSED PLANT
- CELINA SILT LOAM, 2 TO 6 PERCENT SLOPES (CeB)
- CELINA SILT LOAM, 2 TO 6 PERCENT SLOPES, ERODED (CeB2)
- CELINA-URBAN LAND COMPLEX, 2 TO 6 PERCENT SLOPES (CfB)
- CROSBY SILT LOAM, 2 TO 6 PERCENT SLOPES (CrB)
- CROSBY-URBAN LAND COMPLEX, 2 TO 6 PERCENT SLOPES (CsB)
- ELDEAN-URBAN LAND COMPLEX, 2 TO 6 PERCENT SLOPES (EmB)
- KENDALLVILLE SILT LOAM, 2 TO 6 PERCENT SLOPES (KeB)
- KOKOMO SILTY CLAY LOAM (Ko)
- MIAMIAN SILTY CLAY LOAM, 6 TO 12 PERCENT SLOPES, ERODED (MIC2)
- MIAMIAN-URBAN LAND COMPLEX, 6 TO 12 PERCENT SLOPES (MnC)
- OCKLEY SILT LOAM, 0 TO 2 PERCENT SLOPES (OcA)
- ROSS SILT LOAM, OCCASIONALLY FLOODED (Rs)
- UDORTHENTS-URBAN LAND COMPLEX, GENTLY ROLLING (Ut)
- URBAN LAND-CELINA COMPLEX, 2 TO 12 PERCENT SLOPES (Uv)
- URBAN LAND-GENESEE COMPLEX, OCCASIONALLY FLOODED (Uw)
- URBAN LAND-OCKLEY COMPLEX, 0 TO 6 PERCENT SLOPES (Ux)
- WATER (W)
- WESTLAND SILTY CLAY LOAM (Wt)

PROPOSED UTILITY ROUTES

- 13.8KV TRANSMISSION
- COMMUNICATIONS
- NATURAL GAS
- WATER
- SANITARY

NOTES

1. BASE MAP IMAGERY FROM 3-INCH ORTHOIMAGERY 2017 WEB SERVICE, CITY OF COLUMBUS.
2. SOIL SURVEY DATA FROM ODNR, 1999
3. PROPOSED PLANT BOUNDARY AND BUFFER CREATED BY TRC.

PROJECT:
THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:
WORKING COPY
USDA SOIL SURVEY

DRAWN BY:	W. EVARTS	PROJ. NO.:	314315
CHECKED BY:			
APPROVED BY:			
DATE:	JUNE 2019		

FIGURE 2

TRC
670 Morrison Rd, Suite 220
Gahanna, OH 43230
Phone: 614.655.5360
www.trcsolutions.com

FILE NO.: Fig 2_Soil_Survey_17x11_20190612.mxd

TRC - GIS

Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet (Foot US)
Map Rotation: 0

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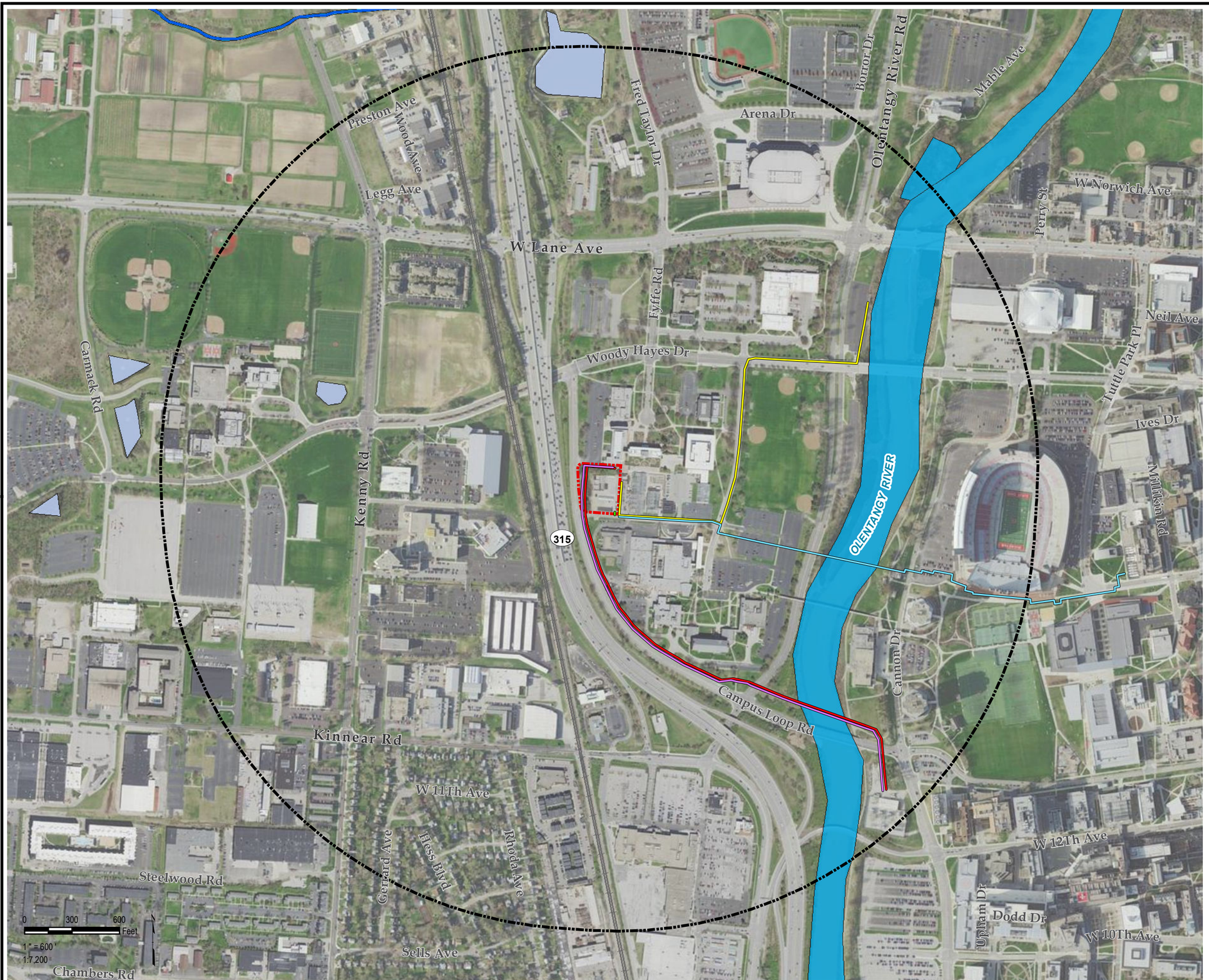

LEGEND

- PROPOSED PLANT PROJECT AREA
- HALF-MILE BUFFER FROM PROPOSED PLANT
- STREAM/RIVER (NHD)

NATIONAL WETLANDS INVENTORY

- FRESHWATER POND
- RIVERINE

PROPOSED UTILITY ROUTES

- 13.8KV TRANSMISSION
- COMMUNICATIONS
- NATURAL GAS
- WATER
- SANITARY

NOTES

1. BASE MAP IMAGERY FROM 3-INCH ORTHOIMAGERY 2017 WEB SERVICE, CITY OF COLUMBUS.
2. STREAM/RIVER DATA FROM NHD.USGS.GOV
3. NWI DATA FROM U.S. FISH & WILDLIFE, WETLANDS MAPPER, 2019.
4. PROPOSED PLANT BOUNDARY AND BUFFER CREATED BY TRC.

N

0 600 1,200 Feet
1 " = 600 '
1:7,200

PROJECT:
THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:
NATIONAL WETLAND INVENTORY MAP
WORKING COPY

DRAWN BY:	S. MOTURI	PROJ. NO.:	314315
CHECKED BY:	J. PAPEZ		
APPROVED BY:	M. SPONSLER		
DATE:	JUNE 2019		

FIGURE 3

TRC
670 Morrison Rd, Suite 220
Gahanna, OH 43230
Phone: 614.655.5360
www.trcsolutions.com

FILE NO.: Fig 3_NWI_17x11_20190612.mxd

TRC - GIS

Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet (Foot US)
Map Rotation: 0

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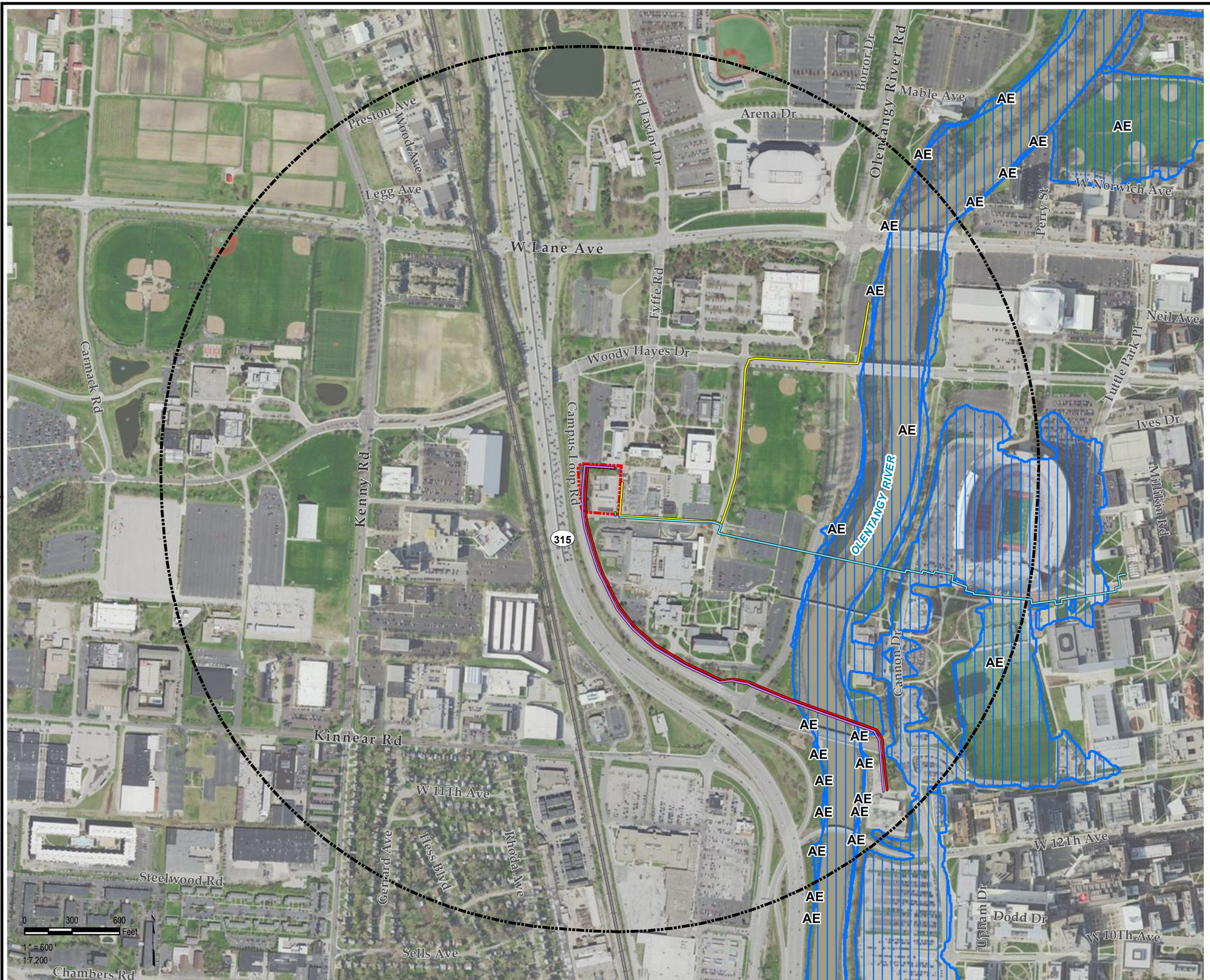


LEGEND

- PROPOSED PLANT PROJECT AREA
- HALF-MILE BUFFER FROM PROPOSED PLANT
- SPECIAL FLOOD HAZARD AREA (1% PROBABILITY OF FLOODING EVERY YEAR)

PROPOSED UTILITY ROUTES

- 13.8KV TRANSMISSION
- COMMUNICATIONS
- NATURAL GAS
- WATER
- SANITARY

NOTES

1. BASE MAP IMAGERY FROM 3-INCH ORTHOIMAGERY 2017 WEB SERVICE, CITY OF COLUMBUS.
2. SPECIAL FLOOD HAZARD AREA (SFHA) FROM FRANKLIN COUNTY AUDITOR WEBSITE, 2019.
3. PROPOSED PLANT BOUNDARY AND BUFFER CREATED BY TRC.

N

0 600 1,200 Feet
1 " = 600 '
1:7,200

PROJECT:
THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:
FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD HAZARD MAP

DRAWN BY:	S. MOTURI	PROJ. NO.:	314315
CHECKED BY:	J. PAPEZ		
APPROVED BY:	M. SPONSLER		**FIGURE 4**
DATE:	JUNE 2019		

TRC
670 Morrison Rd, Suite 220
Gahanna, OH 43230
Phone: 614.655.5360
www.trcsolutions.com

FILE NO.: Fig 4_FEMA_17x11_20190612.mxd

Appendix B

Photographic Log

PROJECT AREA PHOTOGRAPHS

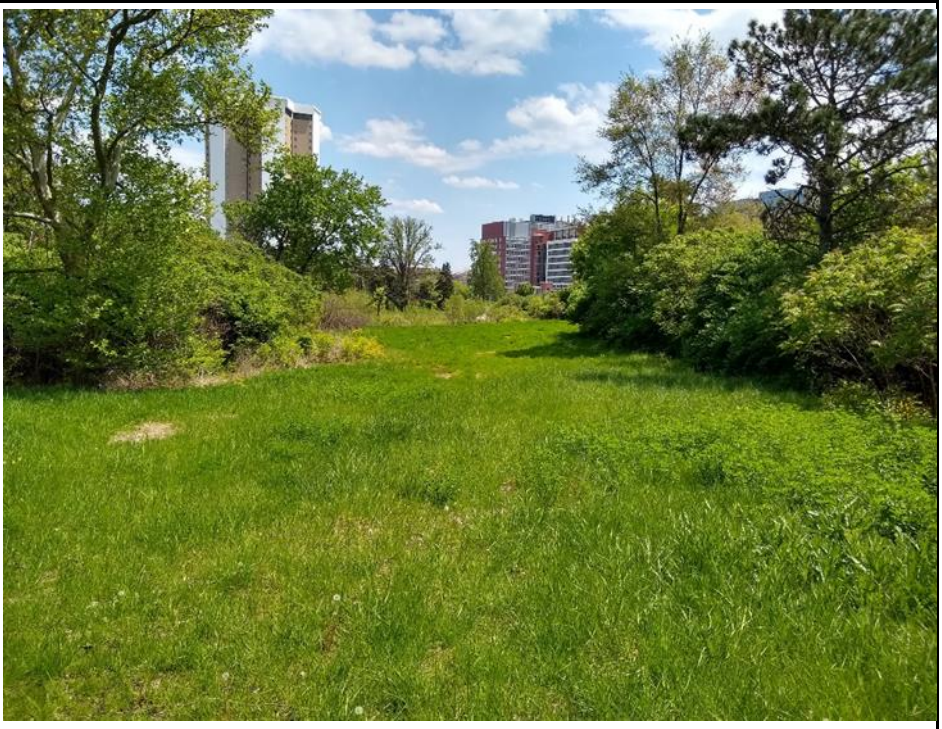
Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		

Photo ID: Photo 1 **Date:** May 7, 2019 **Feature:** **Comments:** Facing west along Vernon L Tharp Street. The area is highly disturbed from previous construction and maintenance activities.	
Photo ID: Photo 2 **Date:** May 7, 2019 **Feature:** **Comments:** Facing north along the eastern limits of the Combined Heat and Power (CHP) Facility. The area is highly disturbed from previous construction and maintenance activities.	

Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 3 **Date:** May 7, 2019 **Feature:** **Comments:** Facing east along the northern limits of the CHP facility. The area is highly disturbed from previous construction and maintenance activities.		
Photo ID: Photo 4 **Date:** May 7, 2019 **Feature:** **Comments:** Facing south along the western limits of the Combined Heat and Power (CHP) Facility. The area is highly disturbed from previous construction and maintenance activities.		

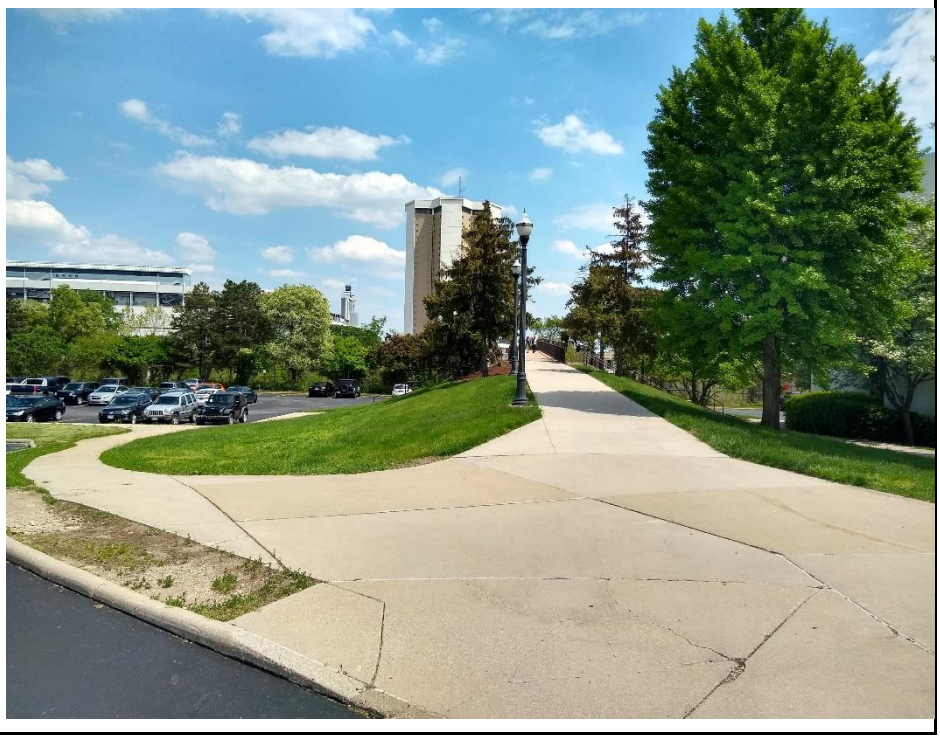
Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 5 **Date:** May 7, 2019 **Feature:** **Comments:** Facing northeast; existing structures within the limits of the CHP Facility.		
Photo ID: Photo 6 **Date:** May 7, 2019 **Feature:** **Comments:** Facing south; mowed and maintained area east of John H Herrick Drive. The existing vegetation will likely be removed as part of the CHP Project.		

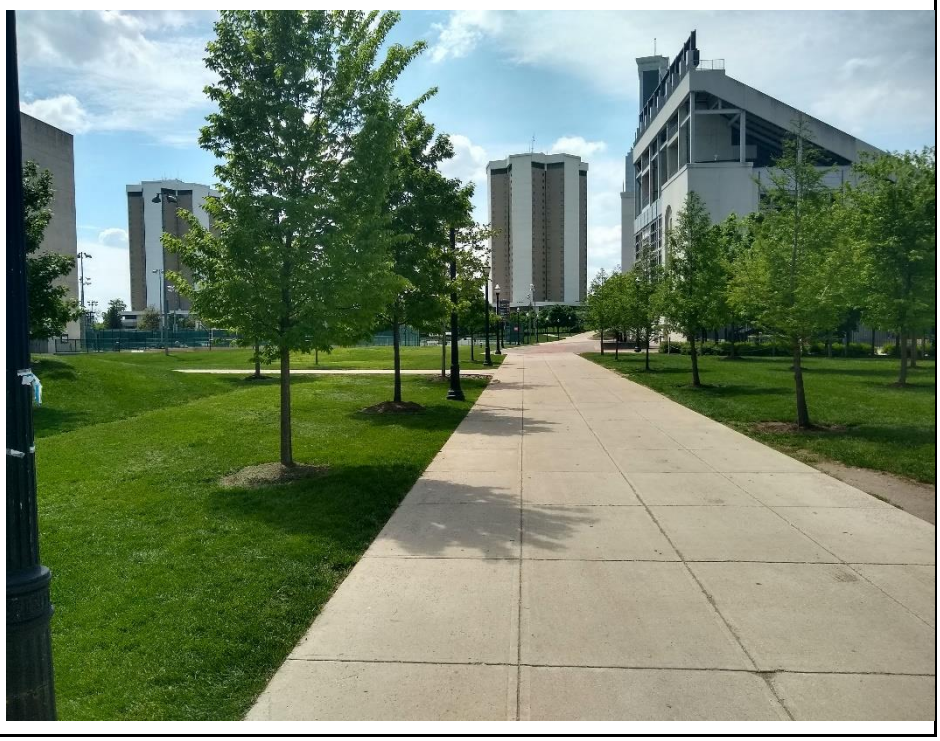
Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 7 **Date:** May 7, 2019 **Feature:** **Comments:** Facing north; mowed and maintained area east of John H Herrick Drive. The existing vegetation will likely be removed as part of the CHP Project.		
Photo ID: Photo 8 **Date:** May 7, 2019 **Feature:** **Comments:** Facing west; mowed and maintained area north of John H Herrick Drive.		

Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 9 **Date:** May 7, 2019 **Feature:** **Comments:** Facing east; mowed and maintained utility right-of-way east of Olentangy River Road.		
Photo ID: Photo 10 **Date:** May 7, 2019 **Feature:** **Comments:** Facing south; paved parking lot east of Olentangy River and north of Woody Hayes Drive.		

Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 11 **Date:** May 7, 2019 **Feature:** **Comments:** Facing west along Woody Hayes Drive; area is highly disturbed from previous construction and maintenance activities.		
Photo ID: Photo 12 **Date:** May 7, 2019 **Feature:** **Comments:** Facing south along Coffey Drive; area is highly disturbed from previous construction and maintenance activities.		

Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 13 **Date:** May 7, 2019 **Feature:** **Comments:** Facing west along Vernon L Tharp Street from Coffey Road. The area is highly disturbed from previous construction and maintenance activities.		
Photo ID: Photo 14 **Date:** May 7, 2019 **Feature:** **Comments:** Facing north along Coffey Drive; area is highly disturbed from previous construction and maintenance activities.		

Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 15 **Date:** May 7, 2019 **Feature:** **Comments:** Facing east; highly disturbed area west of the pedestrian bridge over the Olentangy River.		
Photo ID: Photo 16 **Date:** May 7, 2019 **Feature:** **Comments:** Facing east; highly disturbed area west of the pedestrian bridge over the Olentangy River.		

Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 17 **Date:** May 7, 2019 **Feature:** **Comments:** Facing east; highly disturbed area east of the pedestrian bridge over the Olentangy River.		
Photo ID: Photo 18 **Date:** May 7, 2019 **Feature:** **Comments:** Facing west; highly disturbed area east of The Ohio Stadium.		

Engie	**State**: Ohio	**County:** Franklin
Project Name: The Ohio State University Combined Heat and Power Project		
Photo ID: Photo 19 **Date:** May 7, 2019 **Feature:** **Comments:** Facing east along West 17th Avenue. Highly disturbed area east of The Ohio Stadium.		
Photo ID: Photo 20 **Date:** May 7, 2019 **Feature:** **Comments:** Facing northeast; mowed and maintained area north of West 17th Avenue.		

ADDENDUM 1

SURFACE WATERS REPORT

ADDENDUM 1

The Ohio State University

Combined Heat and Power Facility

Franklin County, Ohio

October 2019

TRC Project No. 314315.0000.0000

Prepared For:

Engie

1971 Neil Avenue, Suite 406

Columbus, OH 43210

Phone: (614) 357-2566

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TRC Environmental Corporation

690 Taylor Road, Suite 100

Gahanna, OH 43230

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Mike Sponsler
Senior Project Manager

Justin Pitts
Ecological Project Manager

CONFIDENTIAL BUSINESS INFORMATION

TABLE OF CONTENTS

List of Tables

Appendices:

ACRONYM LIST

May 2019 Report	May 2019 Surface Waters Report
FEMA	Federal Emergency Management Agency
GPS	Global Positioning System
HUC	Hydrologic Unit Code
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
Ohio EPA	Ohio Environmental Protection Agency
Project	Combined Heat and Power Facility
Report	Surface Waters Report
TRC	TRC Environmental Corporation
U.S.	United States
USACE	United States Army Corps of Engineers
USDA-NRCS	United States Department of Agriculture – Natural Resources Conservation Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

On behalf of ENGIE, TRC Environmental Corporation (TRC) has prepared this Addendum 1 to the May 2019 Surface Waters Report (May 2019 Report) (TRC Environmental Corporation 2019), for the Combined Heat and Power Facility (Project), located in the City of Columbus, Franklin County, Ohio (Figure 1). This Addendum 1 contains the methodology and results of the investigations performed by TRC on October 22, 2019. Mr. Justin Pitts (TRC), an environmental scientist who has been performing wetland delineations for over 12 years, was the lead field scientist and primary author of Addendum 1.

The primary objective of the survey was to identify and evaluate wetlands and other waters of the United States (U.S.) within the Addendum 1 Study Area, such that the resources could be considered in the planning, design, permitting, and installation of the proposed Project in accordance with the Ohio Administrative Code (OAC) Chapter 4906-4-08 (B)(1)(a)(iv-v)-(b). In addition, TRC evaluated areas of potentially suitable wooded habitat for the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and other state and federal listed species and species of concern.

For this Addendum, TRC surveyed an additional 8.5 acres (3.5 hectares) of primarily undeveloped, rotational cropland (Figure 1). Across the two (2) studies, the combined Study Area for the Project is approximately 1,161.5 acres (470.0 hectares). The October 2019 Addendum 1 Study Area includes the potential construction impact area for the development of the laydown yard for the proposed Project.

The Study Area lies within the Eastern Corn Belt Plains, which typically have loamy and well-drained soils, and most commonly characterized by its rolling plains and local end moraines (Wilken, Jiménez Nava and Griffith 2011). The vegetation of the ecoregion was originally dominated by American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), and American basswood (*Tilia americana*) forests. The proposed Project is located within the Ohio River drainage basin. The United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) maintains a classification system for identifying watersheds by hydrologic unit code (HUC). The Project is located within the Upper Scioto (8-Digit HUC: 05060001) river basin (USDA/NRCS, Watershed Boundary Dataset 2013). At the time of the Survey, the Study Area was located within a high intensity urban setting.

2.0 METHODOLOGY

Pursuant to the United States Army Corps of Engineers (USACE) wetlands and other waters of the U.S. delineation methodology, potential wetland and other waters of the U.S. located within the Addendum 1 Study Area would be identified, delineated, and mapped through the combined use of existing available public source information and field investigation.

2.1 Desktop Review Methodology

The sources utilized for Addendum 1 desktop review included the following: the United States Geological Survey (USGS) Southwest Columbus, Ohio (1965) topographical quadrangle (USGS 1965) (Figure 2); soil datasets acquired from the NRCS Web Soil Survey (USDA 2019b) for Franklin County, Ohio (Figure 3); the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Map (NWI) near Columbus, Ohio (USFWS 2019) and the USGS National Hydrography Dataset (NHD) (USGS 2017) (Figure 4); and the Federal Emergency Management Agency (FEMA) flood hazard risk map (FEMA 2019) (Figure 5). Sources were reviewed to identify conditions that may be present within the Addendum 1 Study Area. The potential conditions are defined in Section 2.2. The results of the desktop review were used to aid in the Addendum 1 field investigation.

2.2 Field Methodology

2.2.1 Surface Waters

Wetland resources within the Addendum 1 Study Area were to be identified and their boundaries determined in accordance with the USACE *Wetlands Delineation Manual (1987 Manual)* (USACE 1987), utilizing the *Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Midwest (Version 2.0)* (Regional Supplement) (USACE 2010). Consistent with the *1987 Manual*, wetland determinations were based on dominant plant species, soil characteristics, and hydrologic characteristics. In addition, wetlands and other waters of the U.S. were evaluated in accordance with the State of Ohio's Water Quality Standards (OAC Chapter 3745-1) as managed by the Ohio Environmental Protection Agency (Ohio EPA). Field surveys were conducted on October 22, 2019. Areas that exhibited hydric soils, wetland hydrology, and a dominance of hydrophytic vegetation were considered potentially jurisdictional wetlands.

The Addendum 1 Study Area was screened for the presence of waters of the U.S. that met the criteria specified in the *1987 Manual*. Other waters of the U.S. consist of ephemeral, intermittent and perennial stream, as well as open water features such as ponds. Drainage channels that exhibited defined "bed and

bank" and an ordinary high-water mark in the channel were identified and delineated as jurisdictional streams. Wetlands and other waters of the U.S. are considered potentially jurisdictional until verified by the USACE.

Potentially suitable wooded habitat for the Indiana bat and northern long-eared bat within the Addendum 1 Study Area was evaluated. Individuals conducting the vegetative survey for the proposed Project familiarized themselves with the habitat requirements of the species identified through desktop review. Data developed from publicly available data sources were utilized during the vegetative survey to document areas where land cover types may provide suitable habitat for the Indiana bat, northern long-eared bat, and other state and federal listed species and species of concern. Land cover types were field-verified, and locations of suitable habitat were documents through the use of a Global Positioning System (GPS) receiver capable of sub-meter (Model R1, handheld, Trimble, Sunnyvale, California).

3.0 RESULTS

During the investigations identified within this report, no wetlands or other waters of the U.S. were identified within the Addendum 1 Study Area.

3.1 Background Resources

3.1.1 USGS Topographic Map

Based on the desktop review, the Addendum 1 Study Area contained no wetland features according to the Southwest Columbus, Ohio USGS topographical quadrangle (USGS 1965) (Figure 2).

3.1.2 Soils

According to the soil dataset acquired from the NRCS Web Soil Survey for Franklin County, Ohio, the Addendum 1 Study Area is underlain by three (3) soil types. The soils are mapped as non-hydric and non-hydric with hydric inclusions. Hydric inclusions indicate the soils are inclined to contain small areas of hydric soil (USDA 2019a) (Table 3.1.1 and Figure 3). Throughout the Addendum 1 Study Area, soils and hydrology have been greatly influenced by activities associated with rotational cropland.

Table 3.1.1 Soils Mapped within the Addendum 1 Study Area

Soil Code	Soil Name	Hydric Status
CeB	Celina silt loam, 2 to 6 percent slopes	Non-hydric with Hydric Soil Inclusions
CrB	Crosby silt loam, 2 to 6 percent slopes	Non-hydric with Hydric Soil Inclusions
Ko	Kokomo silty clay loam	Non-hydric

3.1.3 National Wetlands Inventory and National Hydrography Dataset

According to the USFWS NWI (USFWS 2019) and USGS NHD (USGS 2017), no wetlands or riverine systems are mapped within the Addendum 1 Study Area (Figure 4), which was confirmed during field investigations.

3.1.4 FEMA Flood Hazard

According to the FEMA mapping, the Addendum 1 Study Area is not located within a FEMA Special Flood Zone Hazard Area (FEMA 2019) (Figure 5).

3.2 Detailed Delineations

TRC performed this surface waters survey at the end of the normal growing season in Ohio on October 22, 2019. Weather conditions were normal for the time of year, between 62° and 64° Fahrenheit (17° and 18° Celsius), with no rain. The last date of precipitation was on Sunday, October 20, 2019. No wetlands or other waters of the U.S. were identified within the Addendum 1 Study Area. At the time of the investigations, several deciduous and conifer tree species were located along the southern and eastern boundary of the Addendum 1 Study Area. However, these species of trees did not exhibit characteristics suitable for state or federally listed species in Ohio. As proposed, the Project will not require tree removal.

4.0 REFERENCES CITED

FEMA. 2019. *FEMA Flood Map Service Center.* https://msc.fema.gov/portal.

TRC Environmental Corporation. 2019. "Surface Waters Report." Surface Water Report.

USACE. 1987. *Corps of Engineers Wetlands Delineation Manual.* Vicksburg, MS: Environmental Laboratory U.S. Army Corps of Engineers, Waterways Experiment Station, Wetlands Research Program Technical Report Y-87-1.

USACE. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest (Version 2.0).* U.S. Army Corps of Engineers, Vicksburg: U.S. Army Engineer Research and Development Center Environmental Laboratory, 176.

USDA. 2019a. "National Hydric Soils List." Excel spreadsheet, Natural Resources Conservation Service, U.S. Department of Agricuture. http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/.

—. 2019b. *Web Soil Survey 3.0.* http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

USDA/NRCS. 2013. *Watershed Boundary Dataset.* Accessed April 7, 2017. https://datagateway.nrcs.usda.gov/GDGOrder.aspx.

USFWS. 2019. *National Wetlands Inventory Online Mapper 2.0.* https://www.fws.gov/wetlands/data/mapper.HTML.

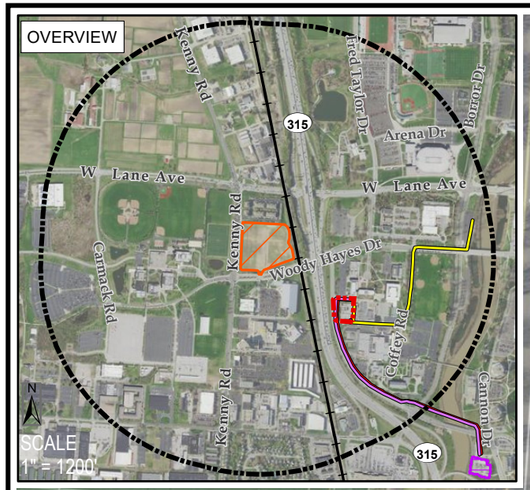
USGS. 2017. *National Hydrography Dataset.* https://nhd.usgs.gov/data.html.

USGS. 1965. "Topographical Quadrangle Maps (7.5-minute series)." U.S. Geological Survey.

Wilken, Ed, Francisco Jiménez Nava, and Glenn Griffith. 2011. *North American Terrestrial Ecoregions Level III.* Commission for Environmental Cooperation, Canada. http://www.cec.org/Atlas/Files/Terrestrial_Ecoregions_L1/TerrestrialEcoregions_L1_GeoPDF.zip .

Appendix A

Figures



LEGEND

- PROPOSED PLANT PROJECT
- PROPOSED LAYDOWN
- HALF-MILE BUFFER FROM PROPOSED LAYDOWN AREA
- OBSERVATION

PROPOSED UTILITY

- 13.8KV
- COMMUNICATIONS
- NATURAL GAS
- TREATED WATER
- SANITARY

NOTES

1. BASE MAP IMAGERY FROM 3-INCH ORTHOIMAGERY 2017 WEB SERVICE, CITY OF COLUMBUS.
2. OBSERVATIONS ARE COLLECTED BY TRC 2019.
3. PROPOSED PLANT PROJECT AREA AND BUFFER ARE CREATED BY TRC.
4. PROPOSED PLANT LAYOUT AND UTILITIES DATA PROVIDED BY ENGIE.

0 50 100 Feet

1 " = 100 '

1:1,200

PROJECT:

THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:

AERIAL MAP

DRAWN BY:	S. MOTURI	PROJ. NO.:	314315
CHECKED BY:	J.PITTS		
APPROVED BY:	M. SPONSLER		**FIGURE 1**
DATE:	NOVEMBER 2019		

TRC
670 Morrison Rd, Suite 220
Gahanna, OH 43230
Phone: 614.655.5360
www.trcsolutions.com

FILE NO.: Fig 1_Observations_17x11_20191101.mxd

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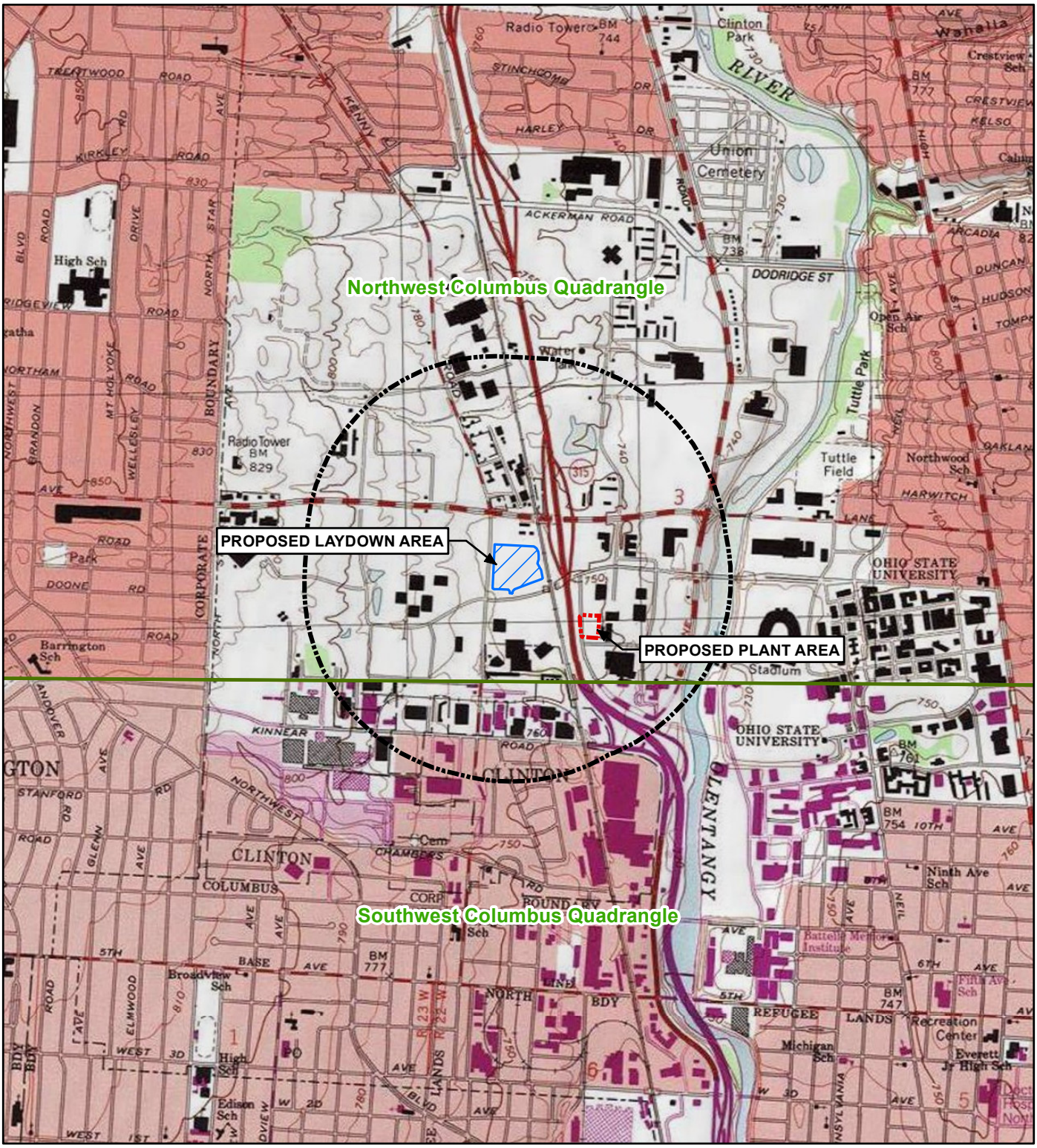

BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

1 " = 2,000 '
1:24,000

0 2,000 4,000 FEET

PROPOSED PLANT PROJECT AREA
PROPOSED LAYDOWN AREA
HALF-MILE BUFFER FROM PROPOSED LAYDOWN AREA

TRC
670 Morrison Rd
Suite 220
Gahanna, Ohio 43230
Phone: 614.655.5360
TRC - GIS

PROJECT:
THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:
USGS TOPOGRAPHIC MAP

DRAWN BY:	S. MOTURI
CHECKED BY:	J. PITTS
APPROVED BY:	M. SPONSLER
DATE:	NOVEMBER 2019
PROJ. NO.:	314315
FILE:	Fig 2 USGS_8.5x11.mxd

FIGURE 2

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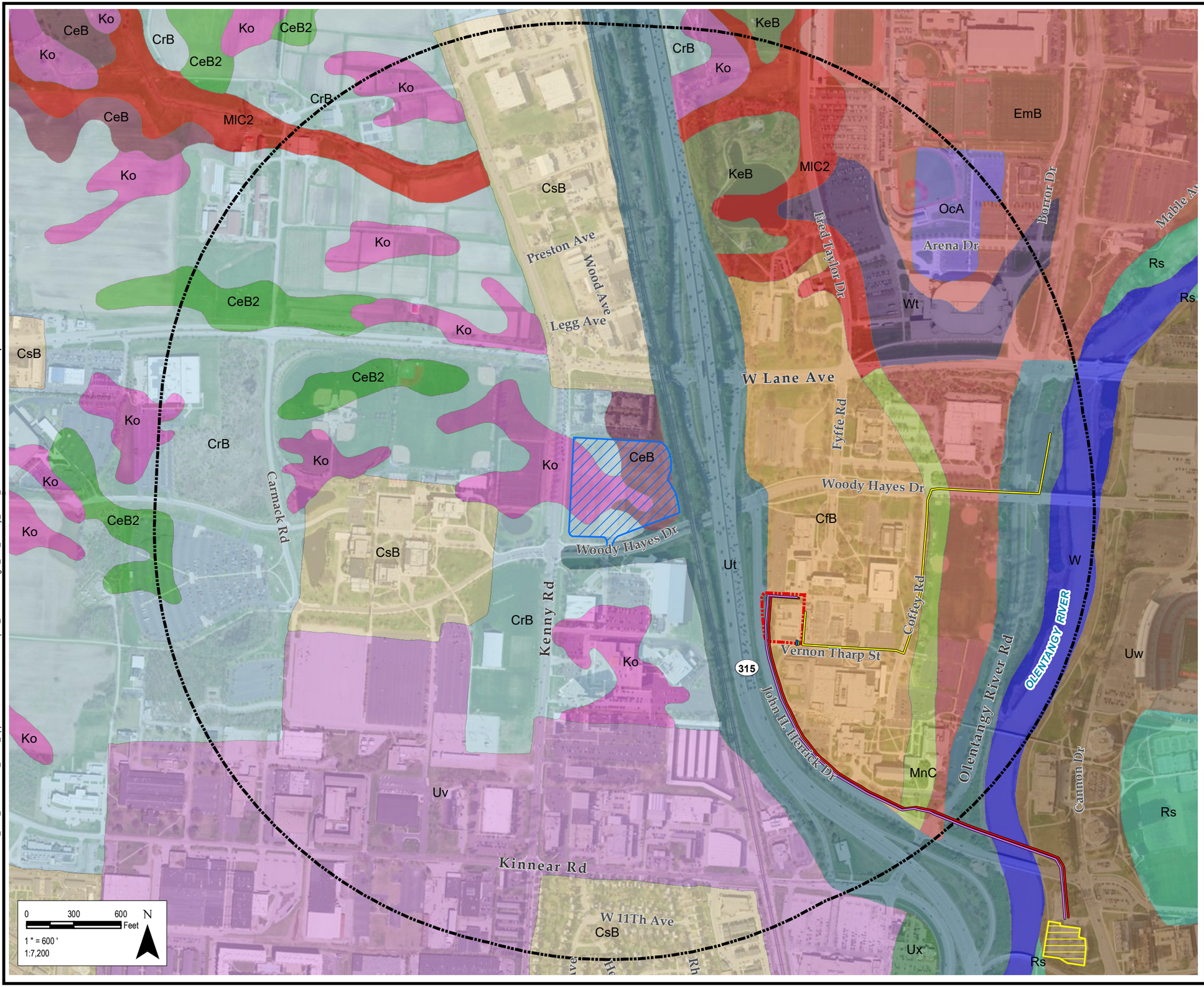

LEGEND

- PROPOSED PLANT PROJECT AREA
- PROPOSED LAYDOWN AREA
- EXISTING SUBSTATION
- HALF-MILE BUFFER FROM PROPOSED LAYDOWN AREA
- CELINA SILT LOAM, 2 TO 6 PERCENT SLOPES
- CELINA SILT LOAM, 2 TO 6 PERCENT SLOPES, ERODED (CeB2)
- CELINA-URBAN LAND COMPLEX, 2 TO 6 PERCENT SLOPES (CfB)
- CROSBY SILT LOAM, 2 TO 6 PERCENT SLOPES
- CROSBY-URBAN LAND COMPLEX, 2 TO 6 PERCENT SLOPES (CsB)
- ELDEAN-URBAN LAND COMPLEX, 2 TO 6 PERCENT SLOPES (EmB)
- KENDALLVILLE SILT LOAM, 2 TO 6 PERCENT SLOPES
- KOKOMO SILTY CLAY LOAM (Ko)
- MIAMIAN SILTY CLAY LOAM, 6 TO 12 PERCENT SLOPES, ERODED (MIC2)
- MIAMIAN-URBAN LAND COMPLEX, 6 TO 12 PERCENT SLOPES (MnC)
- OCKLEY SILT LOAM, 0 TO 2 PERCENT SLOPES
- ROSS SILT LOAM, OCCASIONALLY FLOODED
- UDORTHENTS-URBAN LAND COMPLEX, GENTLY ROLLING (Ut)
- URBAN LAND-CELINA COMPLEX, 2 TO 12 PERCENT SLOPES (Uv)
- URBAN LAND-GENESEE COMPLEX, OCCASIONALLY FLOODED (Uw)
- URBAN LAND-OCKLEY COMPLEX, 0 TO 6 PERCENT SLOPES (Ux)
- WATER (W)
- WESTLAND SILTY CLAY LOAM (Wt)

PROPOSED UTILITY ROUTES

- 13.8KV TRANSMISSION
- COMMUNICATIONS
- NATURAL GAS
- TREATED WATER
- SANITARY

NOTES

1. BASE MAP IMAGERY FROM 3-INCH ORTHOIMAGERY 2017 WEB SERVICE, CITY OF COLUMBUS.
2. SOIL SURVEY DATA FROM ODNR, 1999
3. PROPOSED PLANT BOUNDARY AND BUFFER CREATED BY TRC.

PROJECT:
THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:
USDA SOIL SURVEY

DRAWN BY:	W. EVARTS	PROJ. NO.:	314315
CHECKED BY:	J. PITTS		
APPROVED BY:	M. SPONSLER		**FIGURE 3**
DATE:	NOVEMBER 2019		

TRC
670 Morrison Rd, Suite 220
Gahanna, OH 43230
Phone: 614.655.5360
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FILE NO.: Fig 3_Soil_Survey_17x11_20191101.mxd

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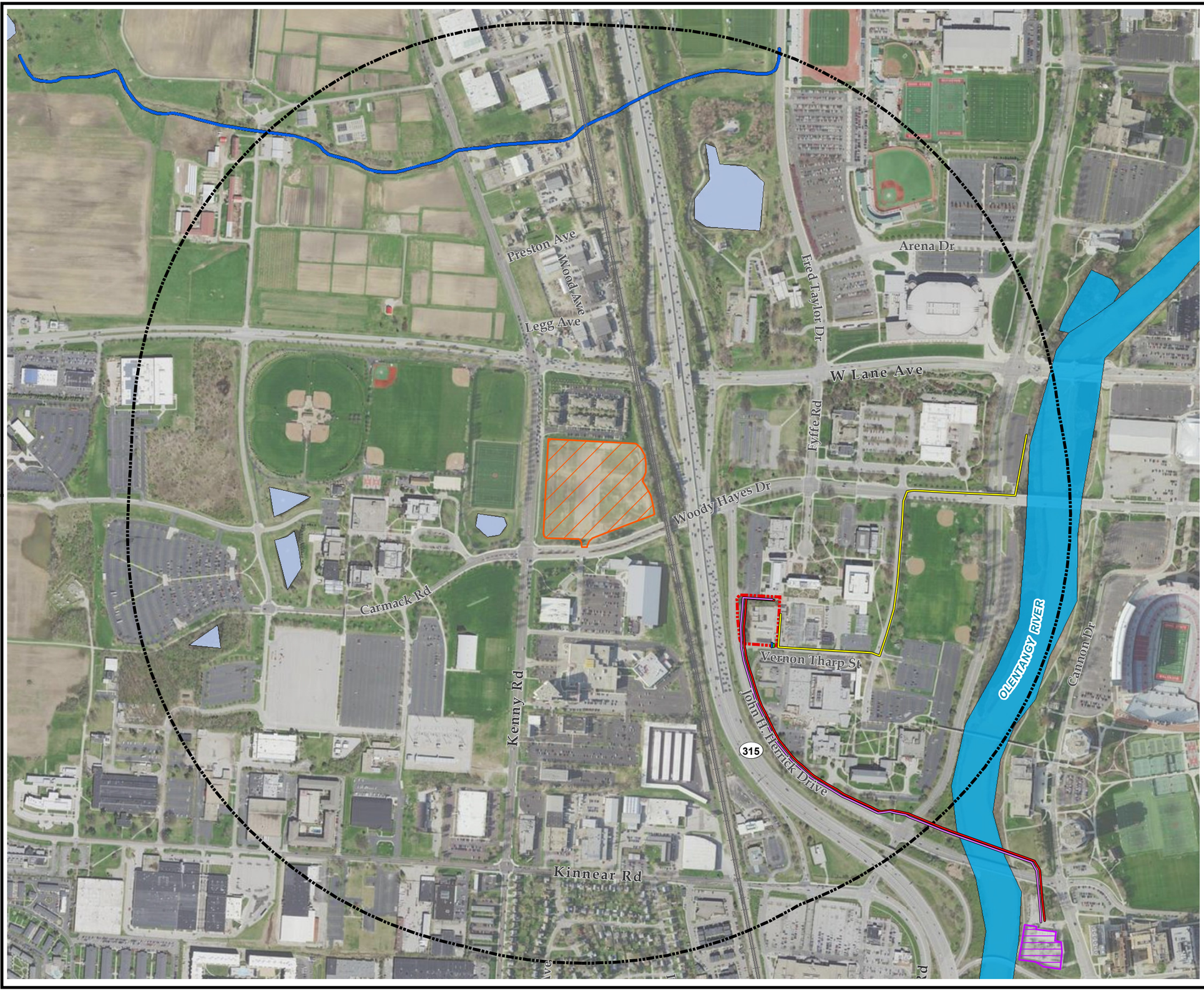
TRC – GIS



LEGEND

- PROPOSED PLANT PROJECT AREA
- PROPOSED LAYDOWN AREA
- HALF-MILE BUFFER FROM PROPOSED LAYDOWN AREA
- EXISTING SUBSTATION
- STREAM/RIVER (NHD)

NATIONAL WETLANDS INVENTORY

- FRESHWATER POND
- RIVERINE

PROPOSED UTILITY ROUTES

- 13.8KV TRANSMISSION
- COMMUNICATIONS
- NATURAL GAS
- TREATED WATER
- SANITARY

NOTES

1. BASE MAP IMAGERY FROM 3-INCH ORTHOIMAGERY 2017 WEB SERVICE, CITY OF COLUMBUS.
2. STREAM/RIVER DATA FROM NHD.USGS.GOV
3. NWI DATA FROM U.S. FISH & WILDLIFE, WETLANDS MAPPER, 2019.
4. PROPOSED PLANT BOUNDARY AND BUFFER CREATED BY TRC.

N

0 600 1,200 Feet

1 " = 600 '

1:7,200

PROJECT:

THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:

SURFACE WATERS MAP

DRAWN BY:	S. MOTURI	PROJ. NO.:	314315
CHECKED BY:	J. PAPEZ		
APPROVED BY:	M. SPONSLER		**FIGURE 4**
DATE:	NOVEMBER 2019		

TRC
670 Morrison Rd, Suite 220
Gahanna, OH 43230
Phone: 614.655.5360
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FILE NO.: Fig 4_SurfaceWaters_17x11_20191101.mxd

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Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet (Foot US)
Map Rotation: 0

TRC - GIS

TRC - GIS

Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet (Foot US)
Map Rotation: 0

Plot Date: 11/1/2019, 10:54:58 AM by SMOTURI -- LAYOUT: ANSI B(11"x17")
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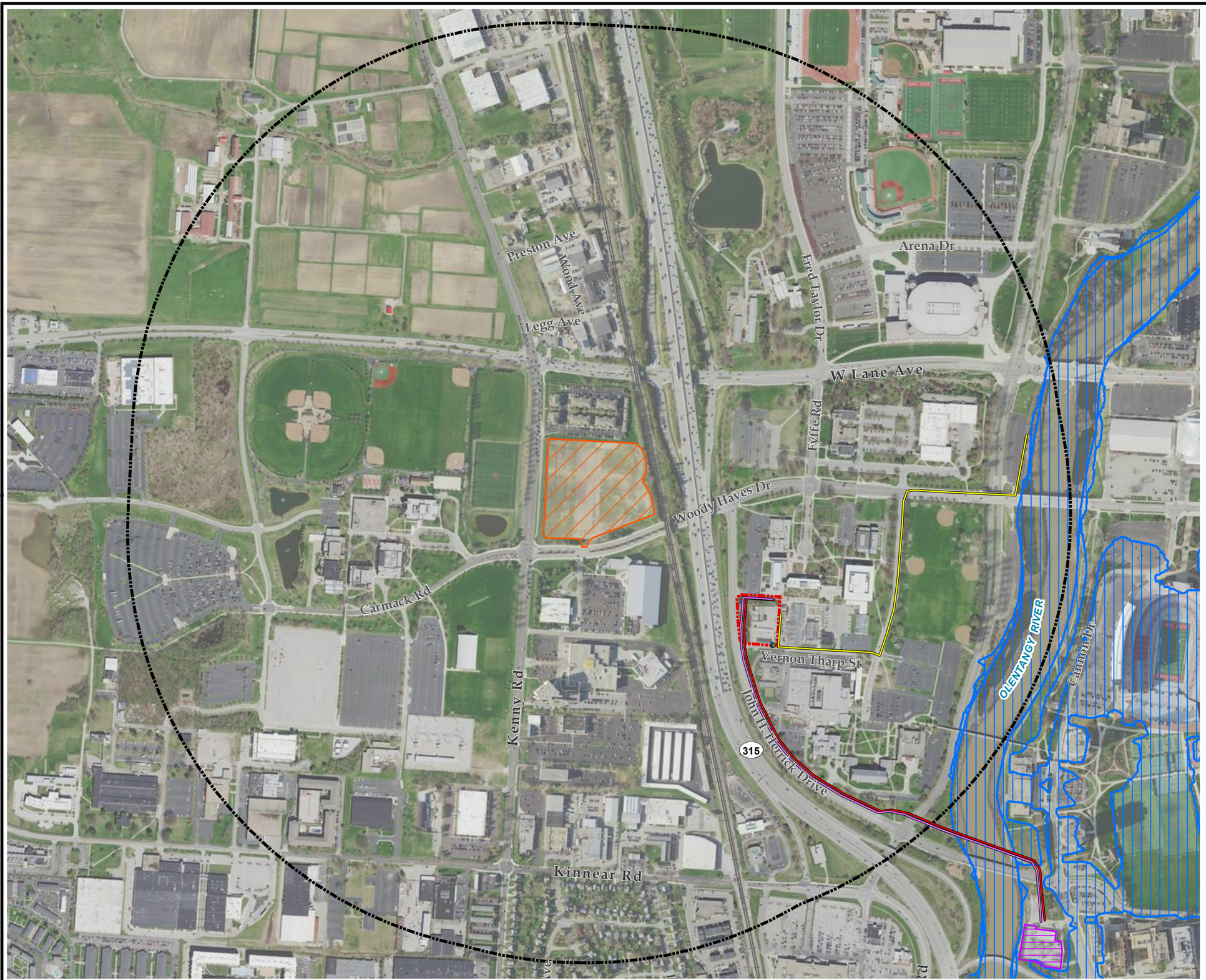

LEGEND

- PROPOSED PLANT PROJECT AREA
- PROPOSED LAYDOWN AREA
- HALF-MILE BUFFER FROM PROPOSED LAYDOWN AREA
- EXISTING SUBSTATION
- SPECIAL FLOOD HAZARD

PROPOSED UTILITY ROUTES

- 13.8KV TRANSMISSION
- COMMUNICATIONS
- NATURAL GAS
- TREATED WATER
- SANITARY

NOTES

1. BASE MAP IMAGERY FROM 3-INCH ORTHOIMAGERY 2017 WEB SERVICE, CITY OF COLUMBUS.
2. SPECIAL FLOOD HAZARD AREA (SFHA) FROM FRANKLIN COUNTY AUDITOR WEBSITE, 2019.
3. PROPOSED PLANT BOUNDARY AND BUFFER CREATED BY TRC.

N

0 600 1,200 Feet

1 " = 600 '
1:7,200

PROJECT:
THE OHIO STATE UNIVERSITY
COMBINED HEAT AND POWER PROJECT
COLUMBUS, OH

TITLE:
FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD HAZARD MAP

DRAWN BY:	S. MOTURI	PROJ. NO.:	314315
CHECKED BY:	J. PAPEZ		
APPROVED BY:	M. SPONSLER		**FIGURE 5**
DATE:	NOVEMBER 2019		

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Phone: 614.655.5360
www.trcsolutions.com

FILE NO.: Fig 5_FEMA_17x11_20191101.mxd

Appendix B

Photographic Log

PHOTOGRAPHIC RECORD
Addendum 1 Surface Waters Report

Client Name:	Site Location:	Project No.
ENGIE	Franklin County, Ohio	314315.0000.0000

Photo No. 1. **Date:** October 22, 2019 **Description:** Facing southeast; view of Addendum 1 Study Area. The Study Area is primarily undeveloped, rotational cropland.	

Photo No. 2. **Date:** October 22, 2019 **Description:** Facing west; view along the southern boundary of the Addendum 1 Study Area.	

PHOTOGRAPHIC RECORD
Addendum 1 Surface Waters Report

Client Name:	Site Location:	Project No.
ENGIE	Franklin County, Ohio	314315.0000.0000

Photo No. 3. **Date:** June 26, 2019 **Description:** Facing east; view along the southern boundary of the Addendum 1 Study Area.	

Photo No. 4. **Date:** October 22, 2019 **Description:** Facing north; view of Addendum 1 Study Area from the southern boundary.	

PHOTOGRAPHIC RECORD
Addendum 1 Surface Waters Report

Client Name:	Site Location:	Project No.
ENGIE	Franklin County, Ohio	314315.0000.0000

Photo No. 5.	
Date: October 22, 2019	
Description: Facing northwest; view of Addendum 1 Study Area.	

Summary: Correspondence Supplementing Application With Complete Exhibit R electronically filed by Mr. Trevor Alexander on behalf of The Ohio State University