

PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

For Planning Commission Meeting of January 18, 2017

**SUBJECT: NorthSky Wetland Use Permit for City Planning Commission Approval
(2701 Pontiac Trail)
File No. WUP16-002**

PROPOSED CITY PLANNING COMMISSION MOTION

The Ann Arbor City Planning Commission hereby approves the Wetland Use Permit for the NorthSky Site Plan.

STAFF RECOMMENDATION

Staff recommends that the **wetland use permit** be **postponed** because additional information is required from the project engineer before a determination on the appropriate pipe size under Pontiac Trail can be made.

LOCATION

The site is located on the west side of Pontiac Trail, north of Skydale and south of Dhu Varren Roads, in the Northeast planning area and the Traver Creek watershed (Ward 1).

DESCRIPTION OF PETITION

The NorthSky Site Plan was approved on March 21, 2016 by City Council. Wetland Use Permits are typically considered in tandem with a site plan, but the need for a wetland use permit was identified by city staff several months after the NorthSky SP was approved. No wetlands are being removed, and the NorthSky site has historically drained to the wetland across Pontiac Trail. This permit is requested to formalize this flow of stormwater from the new development to the existing wetland.

From the application: A wetland use permit is requested to allow stormwater from the NorthSky development to discharge to wetlands on the opposite side of Pontiac Trail. The property is owned by others, therefore an easement is being obtained by the petitioner. The project includes these activities that are regulated under the City of Ann Arbor Wetlands Protection Ordinance:

- Discharge pre-treated stormwater from the project site to off-site regulated wetlands in excess of 10 acres.
- No cut or fill is proposed within the wetlands and no permanent impact to the long term hydrology of the wetlands is proposed.

STAFF COMMENTS

Systems Planning – Staff approval of the Wetland Ust Permit application is anticipated, but additional information is necessary and has been requested from the project engineer to allow staff to confirm that the the size of the pipe(s) used under the road is appropriate. Once this information is received, staff will complete the review of the wetland use permit.

Prepared by Jill Thacher
Reviewed by Matthew Kowalski
Mg/
1/13/17

Attachments: Revised 10/26/16 Wetland Use Permit Application and Attachments

c: Owner/Petitioner: Trowbridge Land Holdings, LLC
2617 Beacon Hill Drive
Auburn Hills, MI 48326

Petitioner's Agent: Brooks Williamson and Associates, Inc.
30366 Beck Road
Wixom, MI 48393

Systems Planning
File No. WUP16-002

BROOKS WILLIAMSON

AND ASSOCIATES, INC.

ENVIRONMENTAL
CONSULTING

30366 BECK ROAD
WIXOM, MI 48393

PHONE 248 · 624 · 9100
FAX 248 · 624 · 3963

October 26, 2016

Mr. Brett Lenart, AICP
Planning & Development Services
City of Ann Arbor
301 East Huron Street
Ann Arbor, MI 48104

**RE: Wetland Use Permit Application – Revised per pipe sizing
Northsky Development, Section 16, T.2S., R.6E. 2665 Pontiac Trail, City of Ann
Arbor, Washtenaw Co., Michigan.**

Dear Mr. Lenart,

Enclosed is a City of Ann Arbor Wetland Use Permit Application for a permit for discharge of stormwater into City regulated wetlands. The project is located at 2665 & 2735 Pontiac Trail in Section 16, City of Ann Arbor, Washtenaw County. Wetlands are present on parcels across the street from the project that fall under the jurisdiction of the City of Ann Arbor Wetlands Protection Ordinance. The purpose of this document is to identify the activities associated with these off-site wetlands and to address these activities for City review. This application does not address the Northsky project site itself.

The information being submitted includes the following:

- Completed application form
- Application fee
- Letter of authorization from owner
- Adjacent riparian and effected property owners
- Site location map
- Reduced site plan
- Wetland map

-
- Alternatives to proposed work
 - A copy of the Wetland Determination Report (Attachment A).
 - A copy of the Wetland Drainage Easement (Attachment B).
 - A copy of the Wetland Survey (Attachment C).

We believe this information is sufficient to initiate the review process. Should you require additional information or if you have any questions, please do not hesitate to contact me.

Sincerely,



Christopher G. Kunkle
Brooks Williamson and Associates, Inc.

Enclosures

cc: Mr. Brad Byarski
Mr. Bruce Michael
Mr. Dan LeClair

(BWA file # 16-072)

TROWBRIDGE COMPANIES

2617 Beacon Hill Drive
Auburn Hills, Michigan 48326

July 15, 2016

Don Berninger
Brooks Williamson & Associates, Inc.
30366 Beck Road
Wixom, MI 48393

**RE: Letter of Authorization for Agent
Northsky Development, Section 16, T.2S., R.6E. City of Ann Arbor, Washtenaw
Co., Michigan**

Dear Mr. Berninger:

As the owner of property at 2655 Pontiac Trail, Ann Arbor, Michigan, this letter will serve as my authorization for Brooks Williamson & Associates, Inc. to act as my agent for the purpose of submitting correspondence and permit applications to the Michigan Department of Environmental Quality (MDEQ) and the City of Ann Arbor. Further, this letter authorizes the MDEQ and the City to access my parcel, upon notification and in the company of a representative of Brooks Williamson & Associates, and myself.

Thank you very much.

Sincerely,

Property Purchaser and Applicant

Sincerely,
Trowbridge Land Holdings, LLC



Bruce Michael, Agent, and not individually

APPLICATION FOR LOCAL WETLAND PERMIT (SUPPLEMENT TO D.E.Q. WETLAND APPLICATION)

This application for a local permit and the State of Michigan MDEQ "Application for Permit" shall be completed and submitted to the local municipality when seeking a wetland permit required by local ordinance. Please staple this application to the front of the completed MDEQ Application and submit both applications to the local municipality. For additional copies of this form contact: MDEQ Land & Water Mgt. Div. Wetland Unit, P.O. Box 30028, Lansing, MI 48909; phone: (517) 373-6537.

FOR MUNICIPALITY USE ONLY		
Name of Local Government: _____	Process# _____	
Date Application Received: _____	Fee Received:\$ _____	
Date Application Determined to be Complete: _____		
By: _____	Dept: _____	Phone #: _____

FOR STATE MDEQ USE ONLY	
Date received from local government: _____	By: _____
DEQ File #: _____	

FOR APPLICANT'S USE - (COMPLETE ITEMS 1 THRU 13)

- Read all instructions before filling out this Application. **(TYPE OR PRINT)**
- Boxes below (): Each box is to be *initialed* by the Applicant when that item has been completed and has been attached to this Application. This application will be considered "Administratively Incomplete" until all items below have been executed.

(1) Parcel identification # (Sidwell# or Legal Description):
09-09-16-201-009 + I-09-16-250-022

(2) Address of Property, if applicable 2655 + 2735 PONTIAC TRAIL,
ANN ARBOR, MI

(3) Area Location Map (*with parcel identified*) is attached.

(4) The name, address and telephone number of all persons and entities having a legal interest in the property in addition to the "owner" as identified in Paragraph 2 of the Michigan DEQ Application for permit and their interest (land contract, etc.):

SEE ATTACHED _____ Day phone: _____

_____ Day phone: _____

_____ Day phone: _____

(5) If applicant is not the owner of the property, a letter of authorization from the owner is required and is attached.

(6) Type of project proposed: RESIDENTIAL SUB - STORMWATER DISCHARGE

(7) Name, address and phone # of engineer and contractor (indicate "None" if not yet secured): DAN UCLAIR, GREENTECH ENGINEERING
5111 W. PONTIAC TRAIL, WIXOM, MI 48393

(8) Local Municipal Wetland Map, showing this parcel, is attached.
NA - PER CITY

(9) Wetland boundaries on this site have been field identified and surveyed and maps are attached: No X Yes (If yes, indicate by whom).

SEE ATTACHED

Date(s)

Local government

Michigan DEQ

Applicant's Consultant

9.7.16

Name and telephone number of applicant's Wetland Consultant:

BROOKS WILLIAMSON + ASSOC.

(10) For those projects involving site plans or plats, the applicant shall elect to have the application processed under one of the following two procedures: The *property owner* or *agent* is to initial *only one* of these two boxes.

"The wetland application shall be reviewed immediately, either prior to or concurrent with the review of the site plan, plat or other proposed land use submitted by the applicant, with the understanding that the land use review may not be completed at the time the decision is rendered on the wetland application. Election of this alternative may require a re-opening of the wetland application if the land use approval is inconsistent with the wetland approval;" or

"The wetland application shall be reviewed and acted upon concurrent with the review of the site plan, plat or other proposed land use submitted by the applicant, and the 90 day review period limitation specified in Section 6(6) of Act 203 of the Public Acts of 1979, as amended, is hereby extended accordingly."

Christoph A. Kuehl

Signature of Property Owner or Agent

9.19.16

Date

(11) TO BE COMPLETED BY THE APPLICANT ONLY IF THE MUNICIPALITY'S WETLAND ORDINANCE REGULATES NON-CONTIGUOUS WETLANDS LESS THAN TWO ACRES IN AREA AND ONLY IF THE LOCAL ORDINANCE REQUIRES SUCH FIELD INFORMATION.

NA

In the event the applicant requests a permit with respect to a noncontiguous wetland less than two acres in area, the applicant shall complete either (a) or (b) below:

(a) An acknowledgement that one or more of the following criteria exist in the wetland in question. Initial each of the following statements that apply to this wetland:

- i. The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Section 6 of the Endangered Species Act of 1974, Act No. 203 of the Public Acts of 1974, being Section 299.226 of the Michigan Compiled Laws.
- ii. The site represents what is identified as a locally rare or unique ecosystem.
- iii. The site supports plants or animals of an identified local importance.
- iv. The site provides groundwater recharge documented by a public agency.
- v. The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.
- vi. The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for many forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened or endangered wildlife species.
- vii. The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.
- viii. The site provides pollution treatment by serving as a biological and chemical oxidation basin.
- ix. The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
- x. The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.

(b) Or, an analysis prepared by the applicant or the applicant's consultant, with respect to each of the ten Criteria in (11) (a) above detailing whether each criterion exist or do not exist in the wetland in question, including specific reasons for the conclusion with respect to each criterion. Initial this box if the analysis has been completed and is attached.

(12) M.D.E.Q. "Application for Permit" form has been completed and is attached to this application. NA - PEVZ CITY

(13) Applicant - Initial one or both boxes below as they apply to your project:

The applicant hereby requests review and a local wetland use permit from the local municipality with the understanding that the municipality has a local wetland ordinance and jurisdiction over the proposed use(s) in this wetland.

In addition to the above, the applicant hereby requests review and a State MDEQ Wetland Use Permit with the understanding that the State also has jurisdiction over the proposed use(s) in this wetland and the Local Municipality will submit a copy of this application to the MDEQ for the applicant as required by State Law.

.....
READ CAREFULLY BEFORE SIGNING
.....

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in the application and to the best of my knowledge believe such information is true and accurate. By signing this application, I agree to allow representatives to enter upon said property in order to inspect the proposed project. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirements of obtaining the permit requested hereon before commencing the project. I understand that the payment of a fee does not guarantee the issuance of a permit.

SUBMIT LETTER OF AUTHORIZATION FROM PROPERTY OWNER IF AGENT SIGNS APPLICATION. (See item #5 on Page 2)

Print Name and Title: Property Owner Agent

CHRISTOPHER G KUNKLE - BROOKS WILLIAMSON + ASSOC.

Signature: Christopher G. Kunkle Date: 9.19.16

**Supplementary Information for
City of Ann Arbor Wetland Use Permit Application**

SYNOPSIS OF PROPOSED PROJECT

The purpose of the project is to discharge pre-treated stormwater from the proposed Northsky development to wetlands located on property owned by others located off-site to the east of Pontiac Trail.

These activities are not regulated by the MDEQ.

The project includes the following activities regulated under the City of Ann Arbor Wetlands Protection Ordinance:

- Discharge pre-treated stormwater from the project site to off-site regulated wetlands (in excess of 10 acres in size).
- No cut or fill is proposed within the wetlands and no permanent impact to the long term hydrology of the wetlands is proposed.

PROPERTY OWNER & APPLICANT

The property owner/applicant is:

Trowbridge Land Holdings, LLC
Trowbridge Companies
2617 Beacon Hill Drive
Auburn Hills, Michigan 48326

Attn: Mr. Bruce Michael, Agent
(248) 703-4653
brucemich@gmail.com

PROJECT LOCATION

The project site is located in Part of Section 16, T.2S., R.6E., City of Ann Arbor, Washtenaw County, Michigan. The wetland that is the subject of this application is located east of Pontiac Trail and south of Dhu Varren Road (Figure 1).

The parcel identification numbers for the Northsky site are listed below:

09-09-16-201-009

I -09-16-250-027

The parcel identification numbers for the off-site wetland are listed below:

I-09-09-16-201-009

I-09-09-16-201-014

I-09-09-16-201-015

I-09-09-16-201-016

ADJACENT OR IMPACTED PROPERTY OWNERS

09-09-16-201-009 BH A2 NORTH, LLC NORTH SKY NEIGHBORHOOD LLC C/O PHOENIX CONTRACTORS Address: 2655 PONTIAC TRL	I -09-16-201-015 WILLIAM F DUFEK Address: 2672 PONTIAC TRL
I -09-16-250-027 NORTH SKY NEIGHBORHOOD, LLC C/O PHOENIX CONTRACTORS, INC. Address: 2735 PONTIAC TRL	I -09-16-201-014 DUFEK SHERI R & WILLIAM Address: PONTIAC TRL VACANT
I -09-16-250-013 AVRAM ANCA TTEE Address: 2806 BATESON CT	I -09-16-201-013 MANN THOMAS F AND SUSAN Address: PONTIAC TRL VACANT
I -09-16-250-031 GHIORGHU MARIAN G AND GHIORGHU PETRUTA Address: BATESON CT	I -09-16-201-009 MURPHY GARY AND BYCH CHRISTINA Address: 2600 PONTIAC TRL
I -09-16-250-030 ROMERO MARIO & BRIGITTE Address: 2821 BATESON CT	I -09-16-201-010 FORSHEE JAMES H Address: PONTIAC TRL
09-09-16-200-172 COMMERCIAL PROPERTY INVESTORS OF PONTIAC TRAIL LLC Address: 2710 PONTIAC TRL	I -09-16-201-011 FORSHEE JAMES H Address: 2520 PONTIAC TRL
09-09-16-200-171 COMMERCIAL PROPERTY INVESTORS OF PONTIAC TRAIL LLC Address: 2750 PONTIAC TRL	09-09-16-201-006 MW LAND, LLC ATTN: SANTOSH MEHRA Address: PONTIAC TRL VACANT
I -09-16-201-016 MANN THOMAS F & SUSAN H Address: 2670 PONTIAC TRL	

EXISTING SITE CONDITIONS AND REGULATION

A large wetland basin exists east of Pontiac Trail into which it is proposed pre-treated stormwater from the Northsky site will discharge. Stormwater has historically discharged from the Northsky site and other property west of Pontiac Trail into this wetland. The main body of the wetland that is the focus of this application falls within the four (4) parcels located east of Pontiac Trail noted above. The portion of the wetland located within these four (4) parcels totals approximately 0.5 acres. The wetland system of which this is a part continues southeast from this initial basin and is in excess of 10 acres in overall size.

The general topography west of Pontiac Trail, that includes the Northsky parcel, is significantly higher than the east side of the road. Surface water from several parcels including portions of the Northsky site historically flowed under Pontiac Trail through an 18" culvert and day lighted on the east side of the road. Surface water then flowed, over upland, and ultimately discharged into the aforementioned off-site wetland. Recent road improvements carried out by the City included the replacement of the 18" culvert. The majority of the original culvert was replaced with a 24" culvert. Due to apparent constraints with existing underground utility lines, the eastern section of this culvert was decreased from 24" to 12" (per Greentech Engineering).

Water discharge calculations from Greentech Engineering confirm that this 12" section is undersized for the current and proposed discharge through this area. Therefore, additional culverts are required to manage stormwater and alleviate backup that may be caused by the recent culvert reduction. Two (2) additional 8" culverts are being proposed to run parallel to the existing 12" culvert in this area. These additional culverts will outlet near the existing 12" outlet. Intermittent surface water is proposed to continue to discharge from the existing and additional proposed culverts over upland for an approximate distance of 32 feet to the wetland edge, then into the approximately 10-acre wetland complex. Historical mapping indicates a large source of hydrology for this wetland has been and continues to be from parcels west of Pontiac Trail.

The proposed Northsky Development will meet the stormwater discharge rates required per the City and Washtenaw County Drain Commission. Additionally,

although overall volume is proposed to increase slightly, surface water flow rates to the wetland will actually be reduced from current conditions.

BWA has reviewed the State of Michigan rules and statutes and has determined that no MDEQ permit is required per the Natural Resources and Environmental Protection Act (1994 P.A. 451), Part 301, Inland Lakes and Streams Protection, and Part 303, Wetland Protection for the proposed culvert improvements. Due to the large size of the receiving wetlands, it is not anticipated that the proposed changes to the hydrologic inputs will negatively affect the existing hydrologic regime of the wetland system.

PROPOSED ACTIVITIES

The proposed project involves the discharge of pre-treated stormwater from the Northsky project site via an existing and additional proposed culverts under Pontiac Trail to a large off-site wetland system east of the road. No stormwater storage is being proposed within the off-site wetland. The stormwater will discharge from the culverts and flow over uplands before reaching the wetland.

Locations of activities involving wetlands are indicated Figures 2 and 3.

Impacts to Wetlands Regulated by the City of Ann Arbor

Stormwater Management Activities

Stormwater Discharge to Existing Off-site Wetland System

- Pre-treated stormwater will be directed to the existing off-site wetland system east of Pontiac Trail via the existing 12" culvert combined with two proposed additional 8" culverts.
- The proposed stormwater management system for the Northsky development has been designed per City of Ann Arbor and Washtenaw County Drain Commission guidelines for detention of a 100-year storm event.
- The detention/sedimentation system for the overall Northsky site has been designed to accommodate the currently proposed residential housing development with associated roads and utilities.
- Outfall culverts for the two (2) additional proposed 8" culverts include flared end sections and approximately 2 cubic yards of rip-rap to be located upslope from the wetland line.

Preservation of Existing Natural Wetland under Drainage Easement

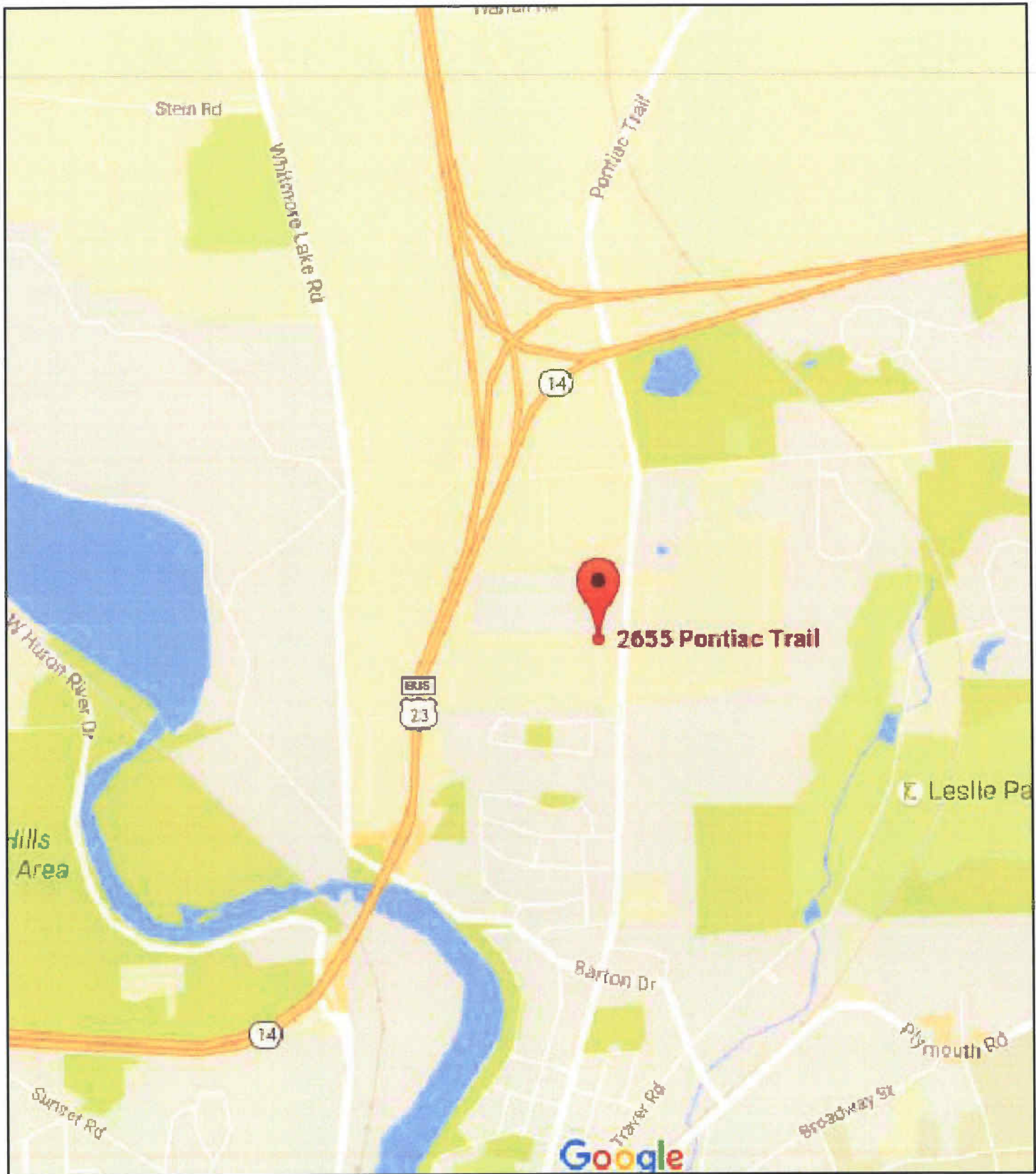
The applicant is preserving approximately a 0.5-acre portion of the existing natural off-site wetland by placing it under a drainage easement as required by the City (Attachment B).

ALTERNATIVES AND MINIMIZATION OF IMPACTS

Surface water from several parcels located on the west side of Pontiac trail, including portions of the proposed Northsky site, historically have flowed under Pontiac Trail through an existing culvert and day lighted on the east side of the road, ultimately discharging over uplands into the existing large wetland system located there.

The proposed project intends to maintain this historical surface water pathway to prevent flooding of property on the west side of Pontiac Trail and to maintain historical hydrologic inputs to the existing wetland.

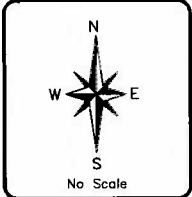
Prudent and feasible alternatives to the proposed activities do not exist.



Site Location

Northsky Development

City of Ann Arbor , Washtenaw County, MI



BROOKS WILLIAMSON
AND ASSOCIATES, INC.

Environmental Consulting

30366 BECK ROAD
WIXOM, MI 48393
PHONE: (248) 624-9100
FAX: (248) 624-3963

DATE	9.19.16
PROJECT NUMBER	16-072
FIGURE	1



Activity Location Map

Northsky Development

City of Ann Arbor, Washtenaw County, MI



BROOKS WILLIAMSON
AND ASSOCIATES, INC.

Environmental Consulting

30366 BECK ROAD
WIXOM, MI 48393
PHONE: (248) 624-9100
FAX: (248) 624-3963

DATE
9.19.16

PROJECT NUMBER
16-072

FIGURE
2

Attachment A:

**Brooks Williamson and Associates
Wetland Report**

Northsky Development

Wetland Delineation and Determination of Jurisdiction

Part of Section 16, T.2S., R.6E.
City of Ann Arbor
Washtenaw County, Michigan

September 2016

Northsky Development

Wetland Delineation and Determination of Jurisdiction

Part of Section 16, T.2S., R.6E.
City of Ann Arbor
Washtenaw County, Michigan

September 2016

Prepared For:

Mr. Bruce Michael
51111 West Pontiac Trail
Wixom, MI 48393

Prepared By:

Brooks Williamson and Associates, Inc.
30366 Beck Road
Wixom, Michigan 48393

BWA 16-072

Executive Summary

This document with associated field mapping is a determination of the existence and extent of any wetlands, ponds, lakes, or streams on parcels of land located east of Pontiac Trail and south of Dhu Varren Road, City of Ann Arbor, Michigan (Figure 1). The purpose of this work was to delineate, with flagging, the boundaries of any wetlands, ponds, lakes, or streams present on the parcels and determine whether or not these are subject to the following regulations:

- a) Natural Resources and Environmental Protection Act (1994 P.A. 451),
 - Part 301, Inland Lakes and Streams Protection;
 - Part 303, Wetland Protection;
- b) Any regulation of wetlands, lakes, and streams by the City of Ann Arbor.

The wetland and water features on the parcels were delineated at the request of Mr. Bruce Michael. This work revealed that one (1) wetland area is present on the parcels. It is our opinion that the wetland is subject to regulation by the Michigan Department of Environmental Quality (MDEQ) and City of Ann Arbor (City). A Permit will be required by the MDEQ and the City for construction activities involving the regulated area.

These findings represent the opinion of Brooks Williamson and Associates, Inc. Wetland delineation in the field conforms to currently accepted State of Michigan (State) wetland definitions and procedures.

Wetland Definition and Methodology

The State and local municipalities, if applicable, are bound by P.A. 451 of 1994, Part 303, Wetland Protection, as "...land characterized by the presence of water at a frequency and duration sufficient to support and that under normal circumstances does support wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or marsh..."

The methodology used in defining the location of wetland areas and their boundaries within the parcels is the United States Army Corps of Engineers Wetlands Delineation Manual, 1987.

County Soil Survey

The Washtenaw County Soil Survey was reviewed prior to the site visit. Three (3) soil mapping units are shown on the parcels (Figures 2a, 2b). These are Fox sandy loam (FoB, FoD), Miami loam (MmB, MmD), and Matherton sandy loam (MdA).

Of these three units, none are hydric. A hydric soil is a soil that is saturated, flooded, or

ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic (wetland) vegetation.

Wetland Delineation Results and Site Description

The referenced parcels were delineated on September 7th, 2016. One wetland area was identified on the parcels. The wetland/upland boundaries were flagged with fluorescent pink and blue survey ribbon. The wetland limits are identified on the attached map with flag numbers (Figure 3).

Please note that this map shows only an approximate location of wetland–upland boundaries, lakes, ponds, or streams. We recommend that the delineation flagging be surveyed and incorporated into the site plan once development or sale of the property is being considered. The wetland delineation results are briefly described below:

Wetland #1

This area is an emergent wetland with a scrub shrub fringe. Dominant wetland vegetation includes broadleaf cattail (*Typha latifolia*), glossy buckthorn (*Rhamnus frangula*), and orange jewelweed (*Impatiens capensis*). Wetland hydrology is indicated by saturated soils at the surface. The soil survey did not indicate hydric soils within parcel boundaries, however, soil pits dug on site did reveal hydric soils within the wetland boundaries. The upland vegetation includes common buckthorn (*Rhamnus cathartica*) and amur honeysuckle (*Lonicera maackii*).

Wetland Regulation by the State of Michigan

Pursuant to P.A. 451 of 1994, Part 303, Wetland Protection, the Michigan Department of Environmental Quality (MDEQ) assumes authority over wetlands that are contiguous to an inland lake, pond, or stream, within 500 feet of an inland lake, pond, or stream, or within 1,000 feet of a Great Lake, Lake St. Clair, the St. Clair River, or the Detroit River. In counties with a population of greater than 100,000, isolated wetlands five acres in size or greater are also regulated. The population of Wayne County was in excess of 100,000 at the time the law was enacted.

The MDEQ may also exert regulatory control over isolated wetlands less than five acres in size "...if the department determines that protection of the area is essential to the preservation of the natural resources of the state from pollution, impairment, or destruction and the department has so notified the owner".

Additionally, the wetlands may also be regulated by the State under Federal guidelines. According to the current document outlining Federal criteria for wetland regulation,

Draft Guidance on Identifying Waters Protected by the Clean Water Act, a wetland is regulated if: it is adjacent to or abuts navigable/interstate waters (or their tributaries) or relatively permanent waters; if there is a "significant nexus" between the wetland and navigable/interstate waters. Please note that these guidelines are not yet in official use, but could become so at any time.

In our opinion, the wetland on this property is subject to regulation by the MDEQ, as it is greater than five acres in size and is contiguous to an off-site stream.

Regulation of Inland Lakes and Streams by the State of Michigan

P.A. 451 of 1994, Part 301, Inland Lakes and Streams Protection, regulates natural or artificial inland streams that have definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water; and natural or artificial lakes or ponds with a surface area of five acres or greater. The Great Lakes and Lake St. Clair are not considered to be inland lakes under this act.

No lakes or streams were found on this site.

Please note that the following activities are prohibited within regulated inland lakes and streams without a MDEQ permit:

1. Dredging or filling bottomland;
2. Constructing, enlarging, extending, removing or placing a structure on bottomland;
3. Erecting, maintaining or operating a marina;
4. Creating, enlarging or diminishing an inland lake or stream;
5. Structurally interfering with the natural flow of an inland lake or stream;
6. Constructing, dredging, commencing, extending or enlarging an artificial canal, channel, ditch, lagoon, pond, lake, or similar waterway where the purpose is ultimate connection with an existing inland lake or stream, or where any part of the artificial waterway is located within 500 feet of the ordinary high water mark of an existing inland lake or stream;
7. Connecting any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake or similar water with an existing inland lake or stream for navigation or any other purpose.

Regulation by City of Ann Arbor

At the time of delineation, the City of Ann Arbor has a wetland ordinance that requires a permit for any impacted wetland. The section regarding the wetland on these parcels reads as follows:

Upon application for a wetland use permit in a noncontiguous wetland that is less than 2 acres in size, the city shall approve the permit unless the city determines that the wetland is essential to the

preservation of the natural resources of the city. The city shall provide these findings in writing to the permit applicant, stating the reasons for its determination. In making this determination, the city must find that 1 or more of the following exist at the particular site:

(a)The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Part 365 of the Natural Resources and Environmental Protection Act, 1994 PA 451.

(b)The site represents what is identified as a locally rare or unique ecosystem.

(c)The site supports plants or animals of an identified local importance.

(d)The site provides groundwater recharge documented by a public agency.

(e)The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.

(f)The site provides wildlife habitat by providing breeding, nesting, or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened, or endangered wildlife species.

(g)The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.

(h)The site provides pollution treatment by serving as a biological and chemical oxidation basin.

(i)The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.

(j)The site provides sources of nutrients in water food cycles and nursery grounds, and sanctuaries for fish.

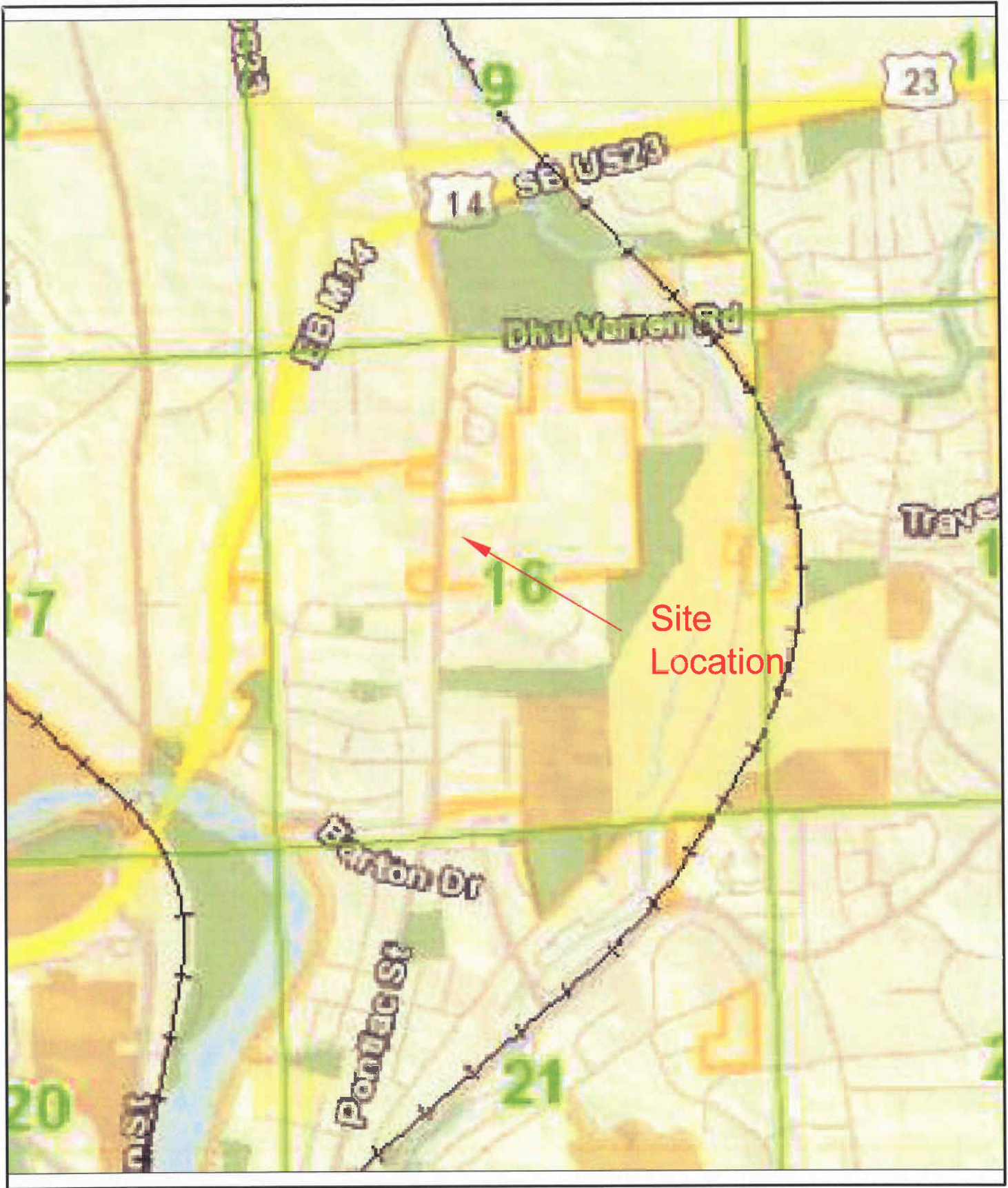
In our opinion, the wetland on this property is subject to regulation by the City, as it is greater than five acres in size and is contiguous to a stream.

Confirmation by Regulatory Agencies

Numerous natural environmental factors and human induced changes may cause changes in the extent of wetland on a parcel over a period of time. The water resources identified on the property represent what this firm believes the MDEQ and the City would consider to be wetland, lake, pond, or stream based on the condition of the site at the time of inspection and recent regulatory policies and attitudes.

In BWA's opinion, any work done within the State regulated wetland boundaries will require a permit from the MDEQ and City. However, please note that the MDEQ and City have the final determination of the presence of wetlands and their respective

jurisdictional statuses. If questions arise, a jurisdictional confirmation from the MDEQ and City should be requested. Purchase or detailed planning should generally be considered only after receiving written confirmation.



Site Location

Northsky Development

City of Ann Arbor

Washtenaw County



BROOKS WILLIAMSON
AND ASSOCIATES, INC.
Environmental Consulting
30366 Beck Road
Wixom, MI 48393
Phone: (248) 624-9100
Fax: (248) 624-3963

DATE	September 2016
PROJECT NUMBER	16-072
FIGURE	1

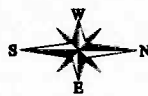


Site Location

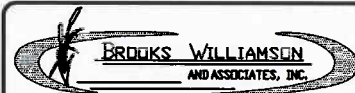
Northsky Development

City of Ann Arbor

Washtenaw County



No Scale



Environmental Consulting

30366 Beck Road
 Wixom, MI 48393
 Phone: (248) 624-9100
 Fax: (248) 624-3963

DATE
 September 2016

PROJECT NUMBER

16-072

FIGURE

2a

Map Unit Legend

Washtenaw County, Michigan (MI161)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FoB	Fox sandy loam, 2 to 6 percent slopes	1.6	16.2%
FoD	Fox sandy loam, 12 to 18 percent slopes	4.5	46.8%
MdA	Matheron sandy loam, 0 to 4 percent slopes	3.0	30.5%
MmB	Miami loam, 2 to 6 percent slopes	0.0	0.0%
MmD	Miami loam, 12 to 18 percent slopes	0.6	6.5%
Totals for Area of Interest		9.7	100.0%

Site Location

Northsky Development

City of Ann Arbor

Washtenaw County



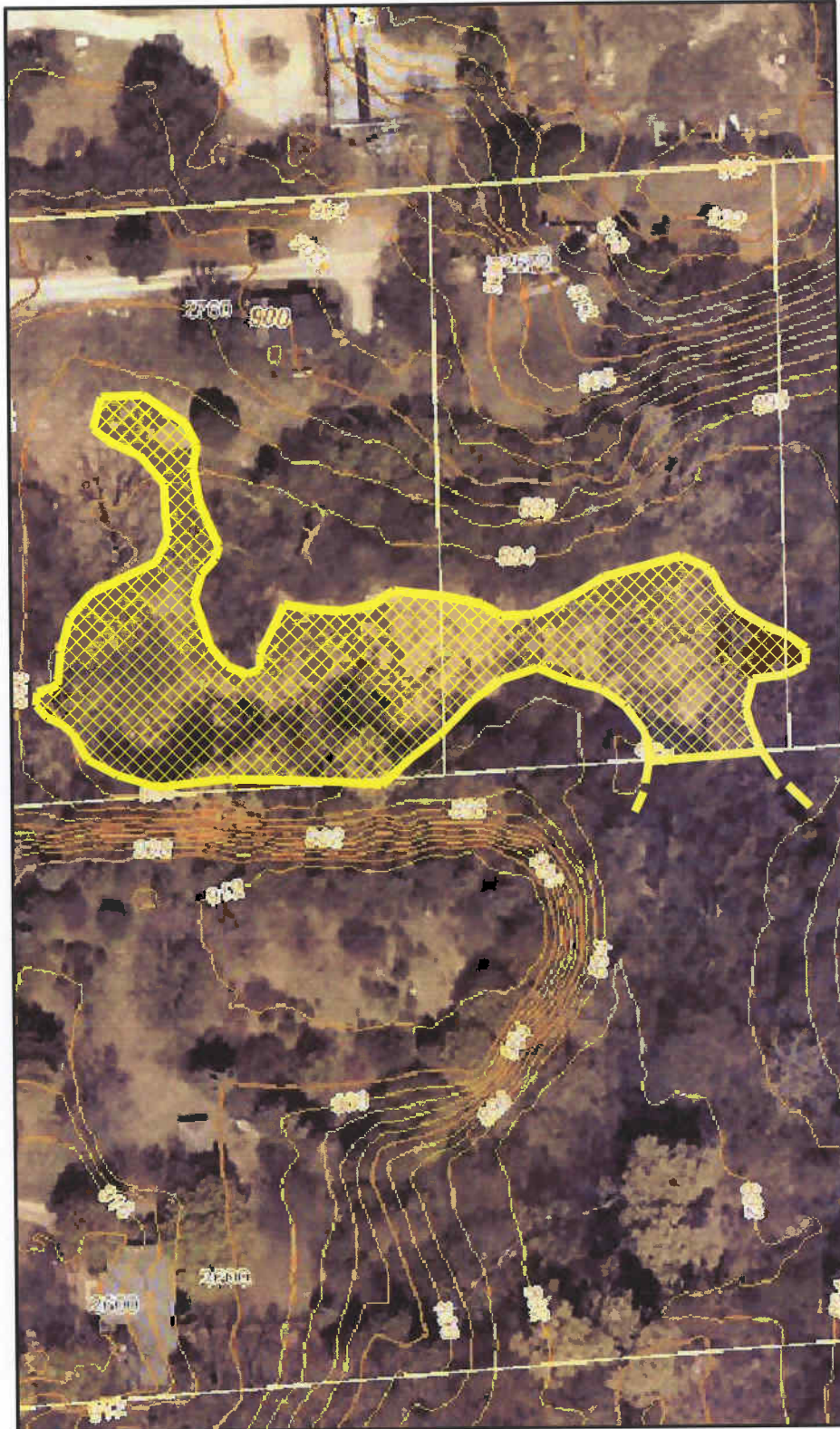
Environmental Consulting

30366 Beck Road
 Wixom, MI 48393
 Phone: (248) 624-9100
 Fax: (248) 624-3963

DATE
 September 2016

PROJECT NUMBER
 16-072

FIGURE
 2b



= Wetland Area

Site Location
Northsky Development
 City of Ann Arbor Washtenaw County

N
 W E
 S
 No Scale

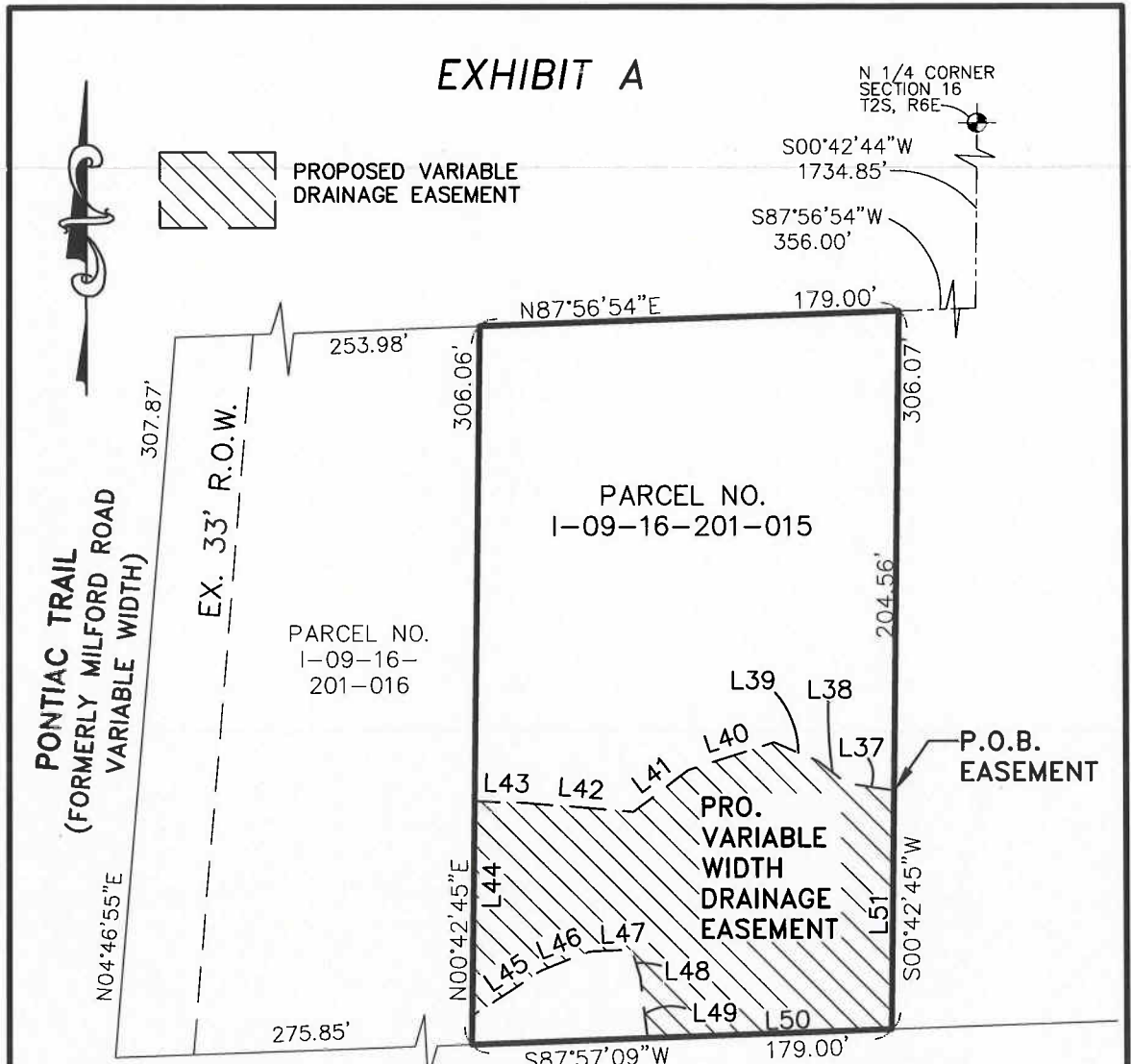
BROOKS WILLIAMSON
 AND ASSOCIATES, INC.
 Environmental Consulting
 30366 Beck Road
 Wixom, MI 48393
 Phone: (248) 624-9100
 Fax: (248) 624-3963

DATE
 September 2016
 PROJECT NUMBER
 16-072
 FIGURE
 3

Attachment B

Drainage Easement over Wetlands

EXHIBIT A



LEGAL DESCRIPTION PARCEL 1-09-16-201-015:

PART OF THE NORTHWEST 1/4 OF SECTION 16, TOWN 2 SOUTH, RANGE 6 EAST, ANN ARBOR TOWNSHIP, WASHTENAW COUNTY, MICHIGAN, DESCRIBED AS:
 COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 16; THENCE S00°42'44"W 1734.85 FEET; THENCE S87°56'54"W 356.00 FEET TO THE POINT OF BEGINNING; THENCE S00°42'45"W 306.07 FEET; THENCE S87°57'09"W 179.00 FEET; THENCE N00°42'45"E 306.06 FEET; THENCE N87°56'54"E 179.00 FEET TO THE POINT OF BEGINNING.

PROPOSED VARIABLE WIDTH DRAINAGE EASEMENT:

PART OF THE NORTHWEST 1/4 OF SECTION 16, TOWN 2 SOUTH, RANGE 6 EAST, ANN ARBOR TOWNSHIP, WASHTENAW COUNTY, MICHIGAN, DESCRIBED AS:
 COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 16; THENCE S00°42'44"W 1734.85 FEET; THENCE S87°56'54"W 356.00 FEET; THENCE S00°42'45"W 259.27 FEET TO THE POINT OF BEGINNING; THENCE N81°09'28"W 20.72 FEET; THENCE N52°00'19"W 15.40 FEET; THENCE N66°38'34"W 20.25 FEET; THENCE S72°24'50"W 38.31 FEET; THENCE S52°50'58"W 29.80 FEET; THENCE N85°07'57"W 46.29 FEET; THENCE N88°16'37"W 21.27 FEET; THENCE S00°42'45"W 91.32 FEET; THENCE N56°34'19"E 35.15 FEET; THENCE N68°39'44"E 21.60 FEET; THENCE N86°52'17"E 18.02 FEET; THENCE S18°07'25"E 12.33 FEET; THENCE S06°29'47"E 26.27 FEET; THENCE N87°57'09"E 104.55 FEET; THENCE N00°42'45"E 101.51 FEET TO THE POINT OF BEGINNING.

LINE TABLE		
LINE	BEARING	LENGTH
L37	N81°09'28"W	20.72'
L38	N52°00'19"W	15.40'
L39	N66°38'34"W	20.25'
L40	S72°24'50"W	38.31'
L41	S52°50'58"W	29.80'
L42	N85°07'57"W	46.29'
L43	N88°16'37"W	21.27'
L44	S00°42'45"W	91.32'
L45	N56°34'19"E	35.15'
L46	N68°39'44"E	21.60'
L47	N86°52'17"E	18.02'
L48	S18°07'25"E	12.33'
L49	S06°29'47"E	26.27'
L50	N87°57'09"E	104.55'
L51	N00°42'45"E	101.51'



5111 W. Pontiac Trail
 Wixom, MI 48393
 Phone: (248) 668-0700
 Fax: (248) 668-0701

CLIENT:
TROWBRIDGE DEVELOPMENT

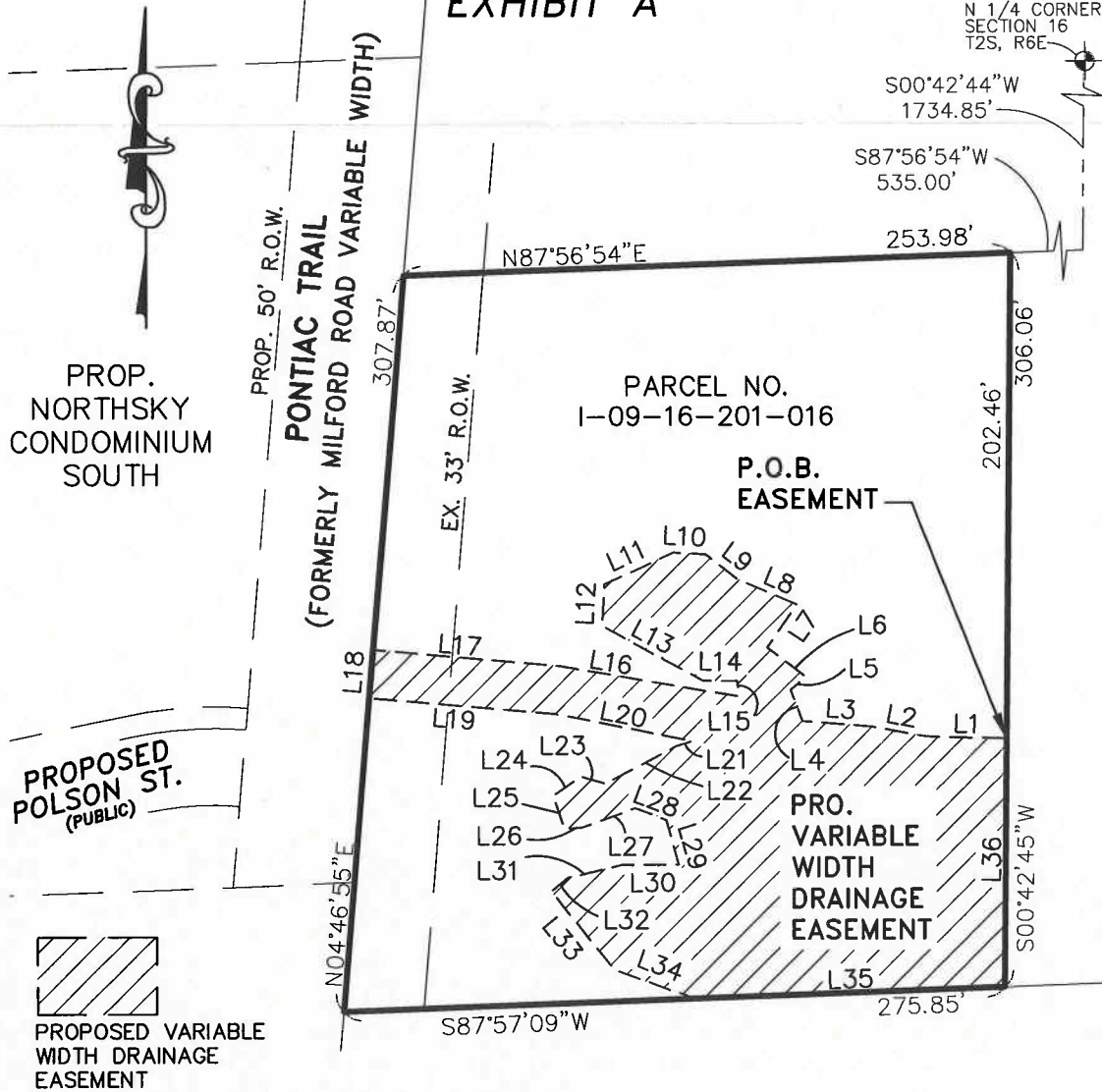
PROPOSED DRAINAGE EASEMENT

NORTHSKY DEVELOPMENT
 SECTION: 16 TOWNSHIP: 2 S. RANGE: 6 E.
 ANN ARBOR TOWNSHIP
 WASHTENAW COUNTY
 MICHIGAN

DATE: 9-14-16
 DRAWN BY: PWK
 CHECKED BY: DJL

 FBK: 1
 CHF:
 SCALE HOR 1"=60 FT.
 VER 1"= -- FT.

EXHIBIT A



PROPOSED VARIABLE WIDTH DRAINAGE EASEMENT

LINE TABLE			LINE TABLE		
LINE	BEARING	LENGTH	LINE	BEARING	LENGTH
L1	N88°16'37"W	33.61'	L19	S85°00'05"E	78.20'
L2	N79°38'36"W	22.78'	L20	S78°43'21"E	58.23'
L3	N85°22'34"W	29.35'	L21	S73°26'38"W	6.77'
L4	N19°53'33"W	13.99'	L22	S62°29'18"W	33.95'
L5	N49°26'50"E	8.12'	L23	N74°14'29"W	10.61'
L6	N51°54'36"W	19.99'	L24	S55°41'32"W	13.87'
L7	N34°13'52"E	21.52'	L25	S18°51'38"E	14.61'
L8	N66°32'48"W	26.73'	L26	N86°37'25"E	7.15'
L9	N52°06'09"W	16.87'	L27	N70°00'27"E	23.63'
L10	N86°46'42"W	13.41'	L28	S69°08'04"E	14.08'
L11	S65°42'21"W	31.85'	L29	S15°37'26"E	19.19'
L12	S03°03'34"W	17.54'	L30	S89°38'11"W	23.70'
L13	S61°35'24"E	47.78'	L31	S77°02'15"W	23.23'
L14	S89°04'05"E	14.41'	L32	S51°26'21"W	9.03'
L15	S04°13'44"E	6.46'	L33	S38°32'26"E	41.96'
L16	N80°15'52"W	75.76'	L34	S69°48'59"E	35.43'
L17	N85°00'05"W	78.20'	L35	N87°57'09"E	129.69'
L18	S04°46'55"W	20.07'	L36	N00°42'45"E	103.60'



5111 W. Pontiac Trail
Wixom, MI 48393
Phone: (248) 668-0700
Fax: (248) 668-0701

CLIENT:

TROWBRIDGE DEVELOPMENT

PROPOSED DRAINAGE EASEMENT

NORTHSKY DEVELOPMENT
SECTION: 16 TOWNSHIP: 2 S. RANGE: 6 E.
ANN ARBOR TOWNSHIP
WASHTENAW COUNTY
MICHIGAN

DATE: 9-14-16

DRAWN BY: PWK

CHECKED BY: DJL

0 30 60

FBK:

CHF:

1/2

SCALE HOR 1"=60 FT.
VER 1"=--- FT.

13-174

EXHIBIT A

LEGAL DESCRIPTION PARCEL I-09-16-201-016:

PART OF THE NORTHWEST 1/4 OF SECTION 16, TOWN 2 SOUTH, RANGE 6 EAST, ANN ARBOR TOWNSHIP, WASHTENAW COUNTY, MICHIGAN, DESCRIBED AS:
 COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 16; THENCE S00°42'44"W 1734.85 FEET; THENCE S87°56'54"W 535.00 FEET TO THE **POINT OF BEGINNING**; THENCE S00°42'45"W 306.06 FEET; THENCE S87°57'09"W 275.85 FEET TO THE CENTERLINE OF PONTIAC TRAIL; THENCE ALONG SAID CENTERLINE N04°46'55"E 307.87 FEET; THENCE N87°56'54"E 253.98 FEET TO THE **POINT OF BEGINNING**.

PROPOSED VARIABLE WIDTH DRAINAGE EASEMENT:

PART OF THE NORTHWEST 1/4 OF SECTION 16, TOWN 2 SOUTH, RANGE 6 EAST, ANN ARBOR TOWNSHIP, WASHTENAW COUNTY, MICHIGAN, DESCRIBED AS:
 COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 16; THENCE S00°42'44"W 1734.85 FEET; THENCE S87°56'54"W 535.00 FEET; THENCE S00°42'45"W 202.46 FEET TO THE **POINT OF BEGINNING**; THENCE N88°16'37"W 33.61 FEET; THENCE N79°38'36"W 22.78 FEET; THENCE N85°22'34"W 29.35 FEET; THENCE N19°53'33"W 13.99 FEET; THENCE N49°26'50"E 8.12 FEET; THENCE N51°54'36"W 19.99 FEET; THENCE N34°13'52"E 21.52 FEET; THENCE N66°32'48"W 26.73 FEET; THENCE N52°06'09"W 16.87 FEET; THENCE N86°46'42"W 13.41 FEET; THENCE S65°42'21"W 31.85 FEET; THENCE S03°03'34"W 17.54 FEET; THENCE S61°35'24"E 47.78 FEET; THENCE S89°04'05"E 14.41 FEET; THENCE S04°13'44"E 6.46 FEET; THENCE N80°15'52"W 75.76 FEET; THENCE N85°00'05"W 78.20 FEET; THENCE S04°47'06"W 20.07 FEET; THENCE S85°00'05"E 78.20 FEET; THENCE S78°43'21"E 58.23 FEET; THENCE S73°26'38"W 6.77 FEET; THENCE S62°29'18"W 33.95 FEET; THENCE N74°14'29"W 10.61 FEET; THENCE S55°41'32"W 13.87 FEET; THENCE S18°51'38"E 14.61 FEET; THENCE N86°37'25"E 7.15 FEET; THENCE N70°00'27"E 23.63 FEET; THENCE S69°08'04"E 14.08 FEET; THENCE S15°37'26"E 19.19 FEET; THENCE S89°38'11"W 23.70 FEET; THENCE S77°02'15"W 23.23 FEET; THENCE S51°26'21"W 9.03 FEET; THENCE S38°32'26"E 41.96 FEET; THENCE S69°48'59"E 35.43 FEET; THENCE N87°57'09"E 129.69 FEET; THENCE N00°42'45"E 103.60 FEET TO THE **POINT OF BEGINNING**.



CIVIL ENGINEERS & LAND SURVEYORS

51111 W. Pontiac Trail
 Wixom, MI 48393
 Phone: (248) 668-0700
 Fax: (248) 668-0701

CLIENT: TROWBRIDGE DEVELOPMENT		DATE: 9-14-16				
PROPOSED DRAINAGE EASEMENT		DRAWN BY: PWK				
NORTHSKY DEVELOPMENT		CHECKED BY: DJL				
SECTION: 16 TOWNSHIP: 2 S. RANGE: 6 E.						
ANN ARBOR TOWNSHIP WASHTENAW COUNTY MICHIGAN		<table border="1" style="margin: auto;"> <tr> <td style="padding: 2px;">FBK:</td> <td style="font-size: 2em; text-align: center;">2/2</td> </tr> <tr> <td style="padding: 2px;">CHF:</td> <td></td> </tr> </table>	FBK:	2/2	CHF:	
FBK:	2/2					
CHF:						
		SCALE HOR 1"= 60 FT. VER 1"= -- FT.				

13-174

Attachment C:

Wetland Survey

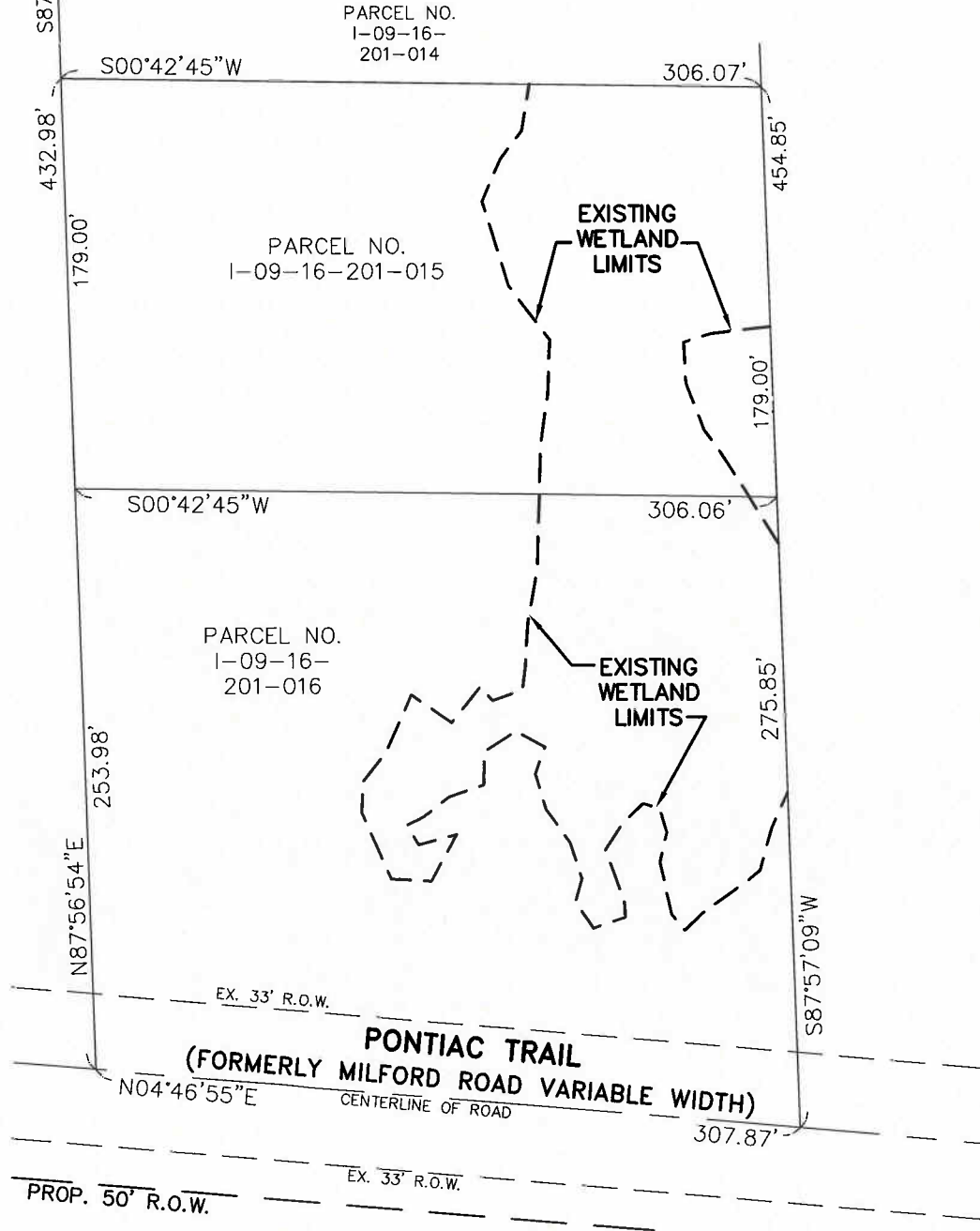
N 1/4 CORNER
SECTION 16
T2S, R6E

S00°42'44"W
1734.85'

NOTE:
THIS SURVEY FOR WETLAND DELINEATION
ONLY. GREENTECH ENGINEERING, INC. HAS
NOT PERFORMED A BOUNDARY SURVEY OF
THE PARCELS CONTAINED HEREON, AND
THE PARCEL DESCRIPTION DOES NOT
NECESSARILY REFLECT FIELD MEASURED
VALUES.



SCALE: 1" = 60'



5111 W. Pontiac Trail
Wixom, MI 48393
Phone: (248) 668-0700
Fax: (248) 668-0701

CLIENT:

TROWBRIDGE

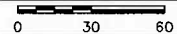
WETLAND SURVEY

NORTHSKY DEVELOPMENT
SECTION: 16 TOWNSHIP: 2 S. RANGE: 6 E.
CITY OF ANN ARBOR
WASHTENAW COUNTY
MICHIGAN

DATE: 9-17-16

DRAWN BY: PWK

CHECKED BY: DJL



FBK: --

CHF: --

SCALE HOR 1"=60 FT.
VER 1"= -- FT.

1

13-174