



COMMUNITY DEVELOPMENT • 115 Executive Parkway, Suite 400 • Hudson, Ohio 44236 • (330) 342-1790

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DATE: September 7, 2016

TO: City of Hudson Planning Commission for September 12, 2016 Meeting

FROM: Greg Hannan, City Planner  
Mark Richardson, Community Development Director

SUBJECT: Conditional Use and Site Plan Review for– 5778 Hudson Drive (Parcel No. 3001703 and 3009605) – City of Hudson Salt Storage Building and Hudson City Schools Bus Maintenance Facility

ZONING: District 8– Industrial/Business Park

PC Case No: 2016-23

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### **Project Introduction**

Application has been received for proposed construction of a 15,000 square foot salt storage building with abutting paved areas and a 12,000 square foot bus maintenance building with 67 bus parking spaces and 118 vehicular parking spaces.

The subject property is located within District 8 Industrial/Business Park. The subject property is adjacent to the following uses:

- North: Large acreage single family residential development fronting Barlow Road within District 3 and undeveloped rear acreage of 5714 Darrow Road.
- East: 5700 Darrow multi-tenant office building is located across Hudson Drive.
- South: Vacant land is abutting to the south with multiple single family residential lots within District 8 further to the south.
- West: Undeveloped portions of the subject property are located to the west.

The following information is attached to this report.

1. Preliminary comment letter from Greg Hannan, City Planner, dated August 23, 2016.
2. Preliminary comment letter from Thom Sheridan, City Engineer, dated August 30, 2016.
3. Preliminary comment letter from Shawn Kasson, Fire Marshal, dated September 6, 2016.
4. Wetland Delineation Report and wetland setback deviation request, prepared by EnviroScience, dated June 27, 2016 and September 6, 2016 respectively.
5. Wetland delineation acceptance letter from Army Corp of Engineers dated August 4, 2016.
6. Traffic Impact Study executive summary, prepared by TMS Engineers, dated December 15, 2015.

7. Decision of the Board of Zoning and Building Appeals Dated July 21, 2016 for Docket 2016-14.
8. Letter from Warren Brown, owner of Parcel 3001561, received August 31, 2016.
9. Site improvement plans prepared by Environmental Design Group received August 8, 2016.
10. Site architectural renderings prepared by Hasenstab Architects, received August 8, 2016.

**Applicable Zoning District Standards, Section 1205.11**

Staff compared the proposal to zoning district standards and comments on the following:

Loading areas: Loading areas are to be sited to the side or rear of the buildings. The proposed salt storage building design contains overhead doors facing Hudson Drive; however, these doors will be used on a limited basis and are not for daily deliveries.

**Applicable Use Regulations, Section 1206**

Governmental facilities, offices, and services are permitted as a conditional use within District 8. The use is subject to compliance with the general criteria and standards applicable to conditional uses per Section 1206.02(b). Staff provides the following summary:

- (1) *The use is consistent with the policies and intent of the Comprehensive Plan.*

The proposed development is in compliance with the Comprehensive Plan's Community Facilities and Service Plan. The existing city owned parcels (Koberna Site) are specifically acknowledged as suitable for the establishment of a public works facility and other public uses.

- (2) *The use is physically and operationally compatible with the surrounding neighborhood and surrounding existing uses.*

The proposed use is adjacent to commercial uses to the north and east, vacant land to the south, and large lot residential development to the north. To buffer the adjacent residential development to the north, the applicant has proposed a 50 ft setback from the shared property line to the vehicular parking, a 75 foot setback to the bus parking, and a 125 foot setback the maintenance building. The bus parking areas are located approximately 600 feet from the adjacent residential structures. Section 1207.04 requires a Bufferyard D (25 ft, substantial) at this location; however, the submitted landscape plan is in excess of the planting requirements for Bufferyard E (40 ft, major). Staff requests the depicted Bufferyard E be incorporated along with a revision to the plantings schedule to replace the proposed smaller shrubs with additional evergreen trees. The combination of the proposed setbacks, landscape plan and the existing woodlands will address potential adverse impacts related to noise and lighting.

- (3) *The use can generally be accommodated on the site consistent with any architectural and design standards set forth in the applicable district regulations of this Code.*

The design is subject to review and approval by the Design Subcommittee for Development within District 6 and 8 per the standards of LDC Section 1207.18(h).

- (4) *Access points are located as far as possible from intersections and adequate sight distances are maintained.*

The development is proposed with a single access point along Hudson Drive approximately 700 feet south of the intersection with Darrow Road.

- (5) *On-site and off-site traffic circulation patterns shall not adversely impact adjacent uses.*

A traffic impact study has been submitted and accepted by the City Engineer.

- (6) *The use will be adequately served by public facilities and services*

Public utilities are available to the facility.

- (7) *The use provides adequate off-street parking on the same property as the use.*

The applicant has proposed a parking count in compliance with the LDC standards.

- (8) *The use will be screened with fencing and/or landscaping in excess of what is required in of this Code if the use may otherwise result in an adverse impact.*

As discussed in item (2) above enhanced landscaping has been proposed to buffer the development from adjacent residential development along Barlow Road.

- (9) *The use is proposed at a density consistent with that of the existing neighborhood.*

Not Applicable

**Special Conditions for Outdoor Activity and Storage Areas**

- (A) *Outdoor operations or activities shall not include the storage or accumulation of waste products, including tires, waste oils, grease, or other flammable, toxic, or hazardous materials.*

- (B) *The manner of outdoor operations or activities shall facilitate access for fire fighting, shall prevent hazards from fire or explosion, and shall prevent accumulation of stagnant water.*

The project is not proposed to contain any outdoor storage of waste oil, tires, or other hazardous materials.

**Applicable Zoning Development and Site Plan Standards, Section 1207**

Staff compared the proposal to zoning development and site plan standards. We comment on the following:

**Wetland/Stream Corridor Protection** The City of Hudson GIS does not indicate any applicable streams within the development area. The site does contain significant areas of Category II wetlands proposed for disturbance. The ACOE has accepted the delineation and the applicant intends to seek a wetland fill permit. Category I wetlands do not require a setback; however, Category II and III wetlands are subject to a 100 foot setback from buildings and parking areas. The proposed rear paved areas are proposed at a 20 foot setback to the residual wetland areas. Planning Commission may modify this reduced wetland setback regulation upon finding all of the criteria of Section 1207.18(b)(6)(E). The applicant's wetland consultant has provided documentation regarding the applicable standards noting the various erosion control and

stormwater management practices which will be implemented to protect the adjacent wetland area.

Landscaping Bufferyard D (25ft, substantial) is applicable to the north as residentially used property is abutting. The proposal depicts grading limits up to 20 feet from the northern property line and a 50 foot depth landscaping buffer to be installed between the bus parking and the property line. The number of proposed plantings is substantial and significantly exceeds the requirements of Bufferyard D. A bufferyard is not required along the south boundary as the abutting property is not residentially zoned or residentially used. Staff understands to applicant is working to adjust the southern limits of disturbance to provide some setback from the southern property line and to establish tree protection fencing.

The plans proposes adequate interior planting areas for the vehicular parking; however, additional shrubs are required to comply with the applicable standards.

Parking The development contains 107 vehicular parking spaces and 68 bus spaces. Hudson City Schools has stated the current facility contains 80 staff members and 68 buses. The proposed stall dimensions are acceptable.

Exterior lighting: Lighting plan including photometrics is required prior to the issuance of a zoning certificate.

Access/Circulation/Pedestrian Linkage: All portions of a building shall be within 150 feet of a public street or fire access road with appropriate turning radii noted. The applicant has received a variance for the proposed access drive of 700+ feet from Hudson Drive per BZBA case 2016-14.

Engineering Review: City Engineer Thom Sheridan has submitted a preliminary review letter dated August 30, 2016. Mr. Sheridan notes the traffic impact study has been reviewed and indicates no major infrastructure changes are needed to accommodate the development other than changes to the signal timing at Terex Road and Hudson Drive.

Fire Department: Fire Marshal Shawn Kasson has completed a preliminary review letter dated September 6, 2016. Mr. Kasson commented on appropriate locations for fire lanes, fire department connections, and knox boxes.

Industrial Design: Application for building design approval was submitted with the application for site plan approval. The proposed 15,000 sq ft salt storage building adjacent to Hudson Drive is proposed with a pitched roof, asphalt shingles, and a mix of textured block and face brick at the wall surfaces. Additionally, a substantial landscaping screen has been proposed to buffer the view from Hudson Drive. The 10,500 sq ft bus maintenance facility is located over 700 feet from Hudson Drive and contains varied roof forms and a combination of face brick and textured block for the wall surfaces. The design subcommittee has completed a preliminary review of the project and is scheduled to meet on September 12, 2016 before the Planning Commission to complete its review and forward a recommendation.



**Findings, Required Action, and Recommendation**

Staff has separated its recommendations for the conditional use approval and the site plan approval. Staff recommends the Planning Commission maintain this separation in its final action.

**Conditional Use Findings and Action:**

**Findings:**

The staff finds that the application complies with the purposes and intent of the code, community plans, and the general conditional use criteria of Section 1206.02 except as discussed above and recommended below.

**Required PC Action, Chapter 1203.02(d)**

The Planning Commission is authorized, according to Section 1202.02, to hold public hearings, review, and take final action on proposed conditional use applications. The PC shall consider the development application, the staff report, and the evidence from the public hearing, and then take final action. The PC shall approve, approve with conditions, or deny the application based on its compliance with the appropriate review standards. All decisions of the Commission shall be based on findings of fact related to the relevant standards of the Code.

**Conditional Use Recommendation**

After the conclusion of the public hearing and the review of applicable testimony, the Planning Commission may act on the request. Subject to the testimony of the public hearing, staff suggests the following motion:

Approve the conditional use for Case 2016-23 for the City of Hudson salt storage facility and Hudson City Schools Bus maintenance facility to be located at Parcel No.'s 3001703 and 3009605, Hudson Drive according to the plans and information submitted on or about August 8, 2016.

**Site Plan Findings and Action:**

**Findings:**

Staff finds that the application complies with the purposes and intent of the code and community plans, regulations that minimize land disturbance and protect environmental features, and other applicable development regulations as specified in Section 1204.04 except as discussed within the body of the report.

**Required PC Action, Chapter 1203.09(g)(3)**

The PC shall consider the development application, the staff report, and then take final action. PC shall approve, approve with conditions, or deny the application based on its compliance with the appropriate review standards. All decisions of the Commission shall be based on findings of fact related to the relevant standards of the Code.

Site Plan Recommendation

Approve the application for site plan approval for the City of Hudson salt storage facility and Hudson City Schools Bus maintenance facility to be located at Parcel No.'s 3001703 and 3009605, Hudson Drive according to the plans and information submitted on or about August 8, 2016.

1. Planning Commission modifies the wetland setback to allow the limits of disturbance to be set at the limits of the wetland fill permit subject to the acceptance of the fill permit request from the Army Corp of Engineers.
2. Incorporate the following revisions related to landscaping:
  - a. Incorporate bufferyard E along the north property line adjacent to residential uses
  - b. Revise the planting schedule to replace the proposed smaller shrubs with additional evergreen trees.
3. Lighting plan including photometrics is required prior to the issuance of a zoning certificate.
4. Planning Commission accepts the recommendation of the Design Subcommittee for Development in Districts 6 and 8 and approves the project design.
5. The final design must be accepted by City Engineer Thom Sheridan.
6. The comments of Fire Inspector Shawn Kasson must be addressed per the September 6, 2016 correspondence.
7. The applicant shall install silt fencing and/or polypropylene fencing to mark and protect the approved clearing limits, which shall be maintained by the applicant.
8. Satisfaction of the above conditions prior to scheduling of a preconstruction meeting with City Officials and no clearing or construction of any kind shall commence prior to the issuance of a Zoning Certificate.



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August 23, 2016

Chris Papp  
City of Hudson  
115 Executive Parkway  
Hudson, Ohio 44236

RE: PC 2016-23-Site Plan Review for Hudson Salt Dome and Bus Garage Facility

Mr. Papp-

Thank you for your submission of the site plan application for the proposed City of Hudson Salt Storage Facility and Hudson City Schools Bus Maintenance Facility. The application has been scheduled for the Planning Commission (PC) agenda for the September 12, 2016 meeting. In preparation for such, I am forwarding preliminary comments related to compliance with the Land Development Code (LDC). In addition to these comments, engineering design related comments will be forwarded under separate cover. Our goal is to provide you an opportunity to respond to the below comments by September 2, 2016. We will revise the comments accordingly for the staff report scheduled to be issued on September 7, 2016. Additionally I am available to meet and review the comments at your convenience.

### **Chapter 1205 – District Regulations**

#### **1205.09 District 8:**

Use: Governmental facilities are allowed as a conditional use within District 8.

<b>Setbacks</b>	<b>Required</b>	<b>Proposed</b>
Front	50 ft	acceptable (150+ft)
Side and Rear	25 ft	acceptable
Front parking	25ft	acceptable
Perimeter setback to adjacent residential zoning	100 ft to structures, 50 ft to vehicles	Acceptable (residential parcels are abutting to the north)

- a. Maximum structure height: Permitted: 50ft  
Proposed: 30 ft (both structures)

- b. Minimum parcel size:
 

Permitted:	two acres
Proposed:	3.2 acres – salt storage parcel 6.5 acres – bus maintenance parcel
- c. Sidewalks:
  - i. Shall be provided along one side of an abutting public street. Sidewalk exists across Hudson Drive.
  - ii. Shall be provided along all facades that feature a customer entrance and along a building façade abutting a public parking lot. A sidewalk has been appropriately proposed along the west side of the 118 space parking field.
- d. Location parking: no more than 25% or one aisle bay shall be located within the front yard unless screened with mounding and trees. The proposed development is acceptable.
- e. Loading areas: Loading areas must be sited to the side or rear of the buildings. Proposed design contains overhead door facing Hudson Drive; however, these doors will be used on a limited basis and are not for daily deliveries.

### **Section 1207 Zoning Development and Site Plan Standards**

The proposed development is subject to compliance with Section 1207.18 Zoning and Development Standards for District 6 and 8

#### **Maximum Impervious Surface**

Permitted:	75%
Proposed:	Design appears to comply; however, the proposed impervious surface coverage should be labeled on the plans.

#### **Tree and Vegetation Protection**

Limits of disturbance need to be depicted on the plans.

#### **Wetland/Stream Corridor Protection**

The site contains significant areas of Category II wetlands proposed for disturbance. The City of Hudson GIS does not indicate any applicable streams within the development area. Staff understands the ACOE has accepted the delineation and the applicant intends to seek a wetland fill permit. Category I wetlands do not require a setback; however, Category II and III wetlands are subject to a 100 foot setback from buildings and parking areas. Planning Commission may modify wetland setback regulations upon finding all of the following as applicable:

1. A parcel existing at the time of the effective date of this ordinance is made unbuildable or cannot be put to reasonable use without the modification;
2. The requested modification does not impair the flood control, soil erosion control, sediment control, water quality protection, or other functions of the wetland area, through the use of best management practices. This determination shall be based on technical and scientific data;
3. Practical alternatives to the proposed activity are not available;
4. No decrease in storm water infiltration into the soil or wetland area will occur;
5. The modification will not increase the likelihood for flood or erosion damage to either the applicant's property or to other properties; and
6. Culverting of watercourses is avoided.

The following additional information is needed to review the proposed wetland disturbance:

1. Provide a standalone exhibit indicating the location and acreage of wetlands proposed for removal and the residual setbacks proposed for the parking and building areas.
2. Submit written documentation from the wetland consultant regarding the above standards and any requested setback modification.

#### Landscaping

1. Bufferyards – Bufferyard D (25ft) is applicable to the north as residentially used property is abutting. The proposal depicts grading limits up to 20 feet from the northern property line and a 50 foot depth landscaping buffer to be installed between the parking lot and the property line. Staff suggests reducing the grading swale to establish a limit of disturbance at 20 feet from the northern property line, and concentrating the plantings within the remaining 30 feet of disturbed area adjacent to the paved areas. A bufferyard is not required along the south boundary as the abutting property is not residentially zoned or residentially used.
2. Street trees along Hudson Drive should be preserved during construction or replanted.
3. Front yard: A minimum of 10 % of the front yard setback shall be developed with a mix of trees, shrubs, and plantings. Additionally, perimeter parking lot landscaping (10 ft depth) is required. The proposed plantings comply with the applicable standards.
4. Interior island landscaping is required at a ratio of 160 sq ft per 10 parking spaces. The proposed 118 space parking lot must accommodate 1,888 sq ft of interior island landscaping. This requirement has been met. Each area shall incorporate at least one tree and four shrubs. The plan incorporates significant areas to accommodate the required plantings along the southern portion of the parking lot; however additional plantings are needed.
5. Dumpster enclosure: a solid fence and/or landscaping shall be incorporated for any proposed dumpster enclosures.

#### Stormwater Management

Design to be reviewed by City of Hudson Engineering Dept.

#### Parking

1. Count: Governmental facilities are not listed within the parking requirement table. Documentation should be submitted indicating the proposed parking accommodates the required need.
2. Stall dimensions: parking stalls of 9ft by 19ft, parking aisle width of 24ft, and drive aisles of 20ft width are applicable. Staff recommends reducing the stall depth by 2.5 feet along the eastern and north perimeter of the parking lot as vehicle overhang is acceptable at these locations. Landscaping may not intrude into the overhang area.
3. Exterior lighting: Lighting plan including photometrics is required prior to the issuance of a zoning certificate.

#### Access/Circulation/Pedestrian Linkage:

1. The traffic study completed for the site has been forwarded to the City Engineer for review.

2. Emergency access: All portions of a building shall be within 150 feet of a public street or fire access road with appropriate turning radii noted. The applicant has received a variance for the proposed drive of 700+ feet from Hudson Drive per BZBA case 2016-14.
- f. Building Design: the proposed building design will be subject to review and recommendation by the Design Subcommittee for development within District 6 & 8.

Additional Comment:

1. Lot Split: The establishment of two parcels for the development along with associated easements is subject to submittal of an administrative lot split application:  
<http://www.hudson.oh.us/DocumentCenter/View/545>

Summary:

1. Submit the following additional information:
  - a. Traffic Impact Analysis
2. Impervious Surface Coverage: the proposed impervious surface coverage should be labeled on the plans.
3. Label the limits of disturbance on the plans.
4. Wetlands: The following additional information should be submitted:
  - a. Submit a copy of the wetland delineation report
  - b. Submit a copy of the ACOE acceptance of the wetland boundary.
  - c. Provide a standalone exhibit indicating the location and acreage of wetlands proposed for removal and the residual setbacks proposed for the parking and building areas.
  - d. Submit written documentation from the wetland consultant regarding the above standards and any requested setback modification.
5. Landscaping:
  - a. Bufferyard at north property line: Staff suggests reducing the grading swale to establish a limits of disturbance at 20 feet from the northern property line, and concentrating the plantings within the remaining 30 feet of disturbed area adjacent to the paved areas.
  - b. Street trees along Hudson Drive should be preserved during construction or replanted.
  - c. Interior island landscaping: The plan incorporates significant areas to accommodate the required plantings along the southern portion of the parking lot; however additional plantings are needed.
  - d. Dumpster enclosure: a solid fence and/or landscaping shall be incorporated for any proposed dumpster enclosures.
6. Parking demand: Documentation should be submitted indicating the proposed parking accommodates the required need.
7. Exterior lighting plan will need to be submitted prior to issuance of a zoning certificate.
8. Lot Split: The establishment of two parcels for the development along with associated easements is subject to submittal of an administrative lot split application:  
<http://www.hudson.oh.us/DocumentCenter/View/545>

Please contact me for any assistance I can provide.

Sincerely,

Gregory P. Hannan, AICP  
City Planner

CC: Mark Richardson, Community Development Director  
Thom Sheridan, City Engineer



ENGINEERING • 115 Executive Parkway, Suite 400 • Hudson, Ohio 44236 • (330) 342-1770

**Date:** August 30, 2016  
**To:** Greg Hannan, City Planner, Community Development  
**From:** Thomas J. Sheridan, P.E., P.S., City Engineer  
**Re:** **Koberna – Bus Garage/Salt Storage Site Plan Review**

The City of Hudson Engineering Department has reviewed the plans submitted August 8, 2016.

Note: The City of Hudson Engineering Standards (Engineering Standards) and Land Development Code (LDC) are available online at the City of Hudson Website [www.hudson.oh.us](http://www.hudson.oh.us) under the Engineering Dept. and Community Development Department respectively. The standards are also available in print for a fee. Please contact our office (330-342-1770) if you would like a cost for the printed version.

The Site Plan, traffic study and wetland delineation have been reviewed and are **Approved.**

The wetland delineation has been approved by the USACE. Wetland impacts will be credited to a wetland bank per the City applicant.

The traffic impact study has been reviewed and no major infrastructure changes are needed for this development with the exception of signal timing changes at the intersection of Terex Road & Hudson Drive.

If you have any questions, please contact our office.

Sincerely,

Thomas J. Sheridan, P.E., P.S.  
Hudson City Engineer

C: File.





SHAWN KASSON  
Fire Marshal

[skasson@hudson.oh.us](mailto:skasson@hudson.oh.us)  
(330) 342-1869

# M E M O R A N D U M

**DATE:** September 6, 2016

**TO:** Greg Hannan, City Planner

**FROM:** Shawn Kasson, Fire Marshal SK

**SUBJECT:** Hudson Salt Storage & Bus Garage Facilities – 5778 Hudson Drive – MPC Case #2016-23

I have reviewed the site improvement plan set for the proposed Hudson Salt Storage & Bus Garage Facilities – 5778 Hudson Drive dated 02/26/16. Upon review I have the following comments:

- The fire department connection (FDC) must meet City of Hudson specifications.
- The FDC riser pipe must be painted red in color.
- The FDC must be furnished with an approved means to identify the protected building.
- The on-site fire hydrant must meet City of Hudson specifications.
- The access drive in front of the fire hydrant and FDC is designated as a fire lane.
- The fire lane area must be identified with approved signage. Curbs in fire lane area must be painted red in color.
- The following equipment must be protected from vehicle impact in an approved manner (6" curb with setback or bollards):
  - On-site fire hydrant
  - Fire department connection (FDC)
  - Natural gas meters
  - Ground mounted electrical transformers (If provided)
  - Generators (If provided)
- Knox Boxes must be furnished and installed in approved locations at the site entry gate at the access point for each building.

Please contact me with any questions.

September 6, 2016

City of Hudson  
Attn: Mr. Greg Hannan  
115 Executive Parkway, Suite 400  
Hudson, Ohio 44236

**Re: City of Hudson – Proposed Salt Storage Facility and School Bus Garage  
Wetland Variance Request**  
*Koberna Property, 5810 Hudson Drive  
City of Hudson, Summit County, Ohio*

Dear Mr. Hannan:

On behalf of the City of Hudson, we request a variance relieving the City of Hudson from the existing riparian and wetland setbacks for the proposed Hudson Salt Storage Facility and School Bus Garage. Below is a section of your code referring to wetland setbacks:

*"All buildings, accessory structures, parking areas or lots, and other paved areas shall be setback a minimum distance of 100 feet from the delineated edge of any Category II or III wetlands. Such 100-foot setback shall remain undisturbed except that in order to accommodate exceptional site conditions, the Planning Commission may permit limited grading, on a case-by-case basis, to within a distance of 50 feet from the delineated edge of any wetlands. All disturbed areas shall be restored with native plantings and landscaping. A setback is not required from Category I wetland."*

We have reviewed site revisions with the Assistant City Engineer to limit impacts to onsite water resources while achieving adequate space for the Hudson City Schools Bus Garage and Salt Storage Facility. This includes the construction of two structures with parking and driveway space, stormwater management facilities, utilities, and required grading. We request relief from required setbacks within the proposed footprint of the attached plan (Figure 1; Attachment A).

*B. The Planning Commission may modify wetland setback regulation upon finding all of the following as applicable:*

- 1. Parcel existing at the time of the effective date of this ordinance is made unbuildable or cannot be put to reasonable use without the modification.*

We believe that given the topography and location of wetlands on the Koberna property, this parcel could not be put to a reasonable use without modifying the



5070 Stow Road  
Stow, OH 44224

current wetland setbacks. A non-preferred alternative would be to fill additional wetlands and to shift the setbacks.

*2. The request modification does not impair the flood control, soil erosion control, sediment control, water quality protection, or other functions of the wetland area, through the use of best management practices. This determination shall be based on technical and scientific data.*

All best management practices (BMPs) will be implemented per the Ohio EPA General Storm Water Permit requirements. During the construction phase, a Storm Water Pollution Prevention Plan (SWPPP) will be implemented to ensure that erosion and sediment control structures will be properly installed and maintained to address these concerns.

The Storm Water Management Facilities (i.e. two detention basins) will provide Post-Construction Storm Water Quality and Storm Water Management. All of the building and parking runoff will be treated by the basins before being discharged to the stream and wetland areas.

*3. Practical alternatives to the proposed activity are not available.*

Multiple options were evaluated to avoid and minimize impacts to onsite wetlands (including setbacks) while trying maintaining required parking, garage, and driveway space for the proposed salt storage and school bus garage. The presented plan is the most feasible option for achieving the required developable space while avoiding and minimizing impacts to onsite water resources. In total, the proposed plan avoids approximately 78% (or 16.4 of 20.9 acres) of onsite wetland.

*4. No decrease in storm water infiltration into the soil or wetland area will occur.*

Storm water will be directed and retained into two storm water management basins which will also perform water quality treatment.

*5. The modification will not increase the likelihood for flood or erosion damage to either the applicant's property or to other properties.*

During construction, best management practices, as outlined in the SWPPP, will be employed to protect water resources from construction runoff. Storm water management and erosion control structures will be designed to minimize erosion

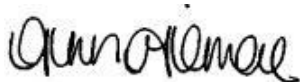
and flooding. Once complete, the constructed storm water management basins will control all post-construction storm water. Combined, these measures will reduce the possibility of flooding and erosion during and after construction.

*6. Culverting of watercourses is avoided.*

A small ephemeral stream located within the foot print may need to be culverted or filled during construction. These impacts are pending approval from the United States Army Corps of Engineers (USACE) and Ohio EPA. Proposed impacts to this stream will be mitigated offsite. No culverts are planned for onsite intermittent streams.

In addition to specific setbacks as codified by a city, the USACE and/or Ohio EPA may impose wetland and riparian area setbacks as part of the issued permit and Water Quality Certification. We are pursuing an Individual (404) permit through the USACE and a 401 Water Quality Certification with the Ohio EPA concurrently. Any outlined setbacks that are required by either agency will be observed if applied to this project. Please let me know if additional information is necessary regarding the proposed development of the Koberna property. I can be reached anytime at AGilmore@EnviroScienceInc.com or at 330-688-0111.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann Gilmore", written in a cursive style.

Ann Gilmore  
Wetland Ecologist

Enclosures

**Attachment A:**  
**Proposed Site Plan**



# WETLAND AND OTHER WATERS DELINEATION REPORT

Prepared for:

Christopher J. Papp, PE  
The City of Hudson  
115 Executive Parkway, Suite 400  
Hudson, Ohio 44236

for:

**Koberna Property Project**  
**Approximately 40 acres**  
**5810 Hudson Drive,**  
**City of Hudson, Summit County, Ohio**

Prepared by:



5070 Stow Rd.  
Stow, OH 44224  
800-940-4025

[www.EnviroScienceInc.com](http://www.EnviroScienceInc.com)

ES Project # 8861

June 27, 2016

#### **STATEMENT OF CERTIFICATION**

*The analyses, opinions and conclusions in this report are based entirely on EnviroScience's unbiased, professional judgment. EnviroScience's compensation is not in any way contingent on any action or event resulting from this study. Neither EnviroScience nor any EnviroScience employee has any vested interest in the property examined in this study.*

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## **EXECUTIVE SUMMARY**

The City of Hudson is proposing to develop the Koberna Property, located at 5810 Hudson Drive in the City of Hudson, Summit County, Ohio. A delineation of wetlands and other waters was conducted by the Environmental Design Group in June 2015. In May 2016, EnviroScience, Inc. performed a confirmation of wetland boundaries and other waters. The property is approximately 40 acres, located on the west side of Hudson Drive, south of the intersection with Barlow Road. The project area is bound to the south by Terex Road and to the west by a railroad track. The approximate center coordinates of 41.219341°, -81.447191°.

The project area exists as open field, forest, and wetland. The surrounding land use consists of urban residential and commercial properties and forest. Five (5) distinct vegetative communities were identified within the project area. Four (4) wetland community types were identified onsite and include palustrine emergent (PEM), palustrine emergent and scrub-shrub (PEMSS), and palustrine forested (PFO).

Four (4) wetlands were identified and delineated within the study area accounting for 20.986 acres of wetland onsite. One (1) ephemeral stream and three (3) intermittent streams were identified, accounting for an additional 0.206 acres and approximately 1,970 linear feet of waterway within the project area.

These wetlands and waterbodies are under the jurisdiction of the Ohio EPA or U.S. Army Corps of Engineers (USACE). The project area is in the Buffalo District of the USACE. No filling may occur within these areas without their written permission. Please contact the Ohio EPA Division of Surface Water at (614) 644-2001 or the Buffalo District USACE at (716) 879-4330 before working in these areas.

## 1.0 INTRODUCTION AND SITE DESCRIPTION

The City of Hudson is proposing to develop the Koberna Property, located at 5810 Hudson Drive in the City of Hudson, Summit County, Ohio. A delineation of wetlands and other waters was conducted by the Environmental Design Group in June 2015. In May 2016, EnviroScience, Inc. performed a confirmation of wetland boundaries and other waters. The property is approximately 40 acres, located on the west side of Hudson Drive, south of the intersection with Barlow Road. The project area is bound to the south by Terex Road and to the west by a railroad track. The approximate center coordinates of 41.219341°, -81.447191°.

The project area exists as open field, forest, and wetland. The surrounding land use consists of urban residential and commercial properties and forest. Five (5) distinct vegetative communities were identified within the project area. Four (4) wetland community types were identified onsite and include palustrine emergent (PEM), palustrine emergent and scrub-shrub (PEMSS), and palustrine forested (PFO). The project area contains four (4) wetlands, one (1) ephemeral stream, and three (3) intermittent streams.

The site is located in the Cuyahoga River watershed (Hydrologic #04110002), which drains approximately 804 square miles in northeast Ohio. It is within Erie Drift Plain ecoregion (Woods *et al.* 1998) of Ohio. The study area is located within the area covered by the Northcentral and Northeast Regional Supplement (USACE 2012) and associated plant list (Lichvar 2014). The project area is regulated by the USACE Buffalo District.

## 2.0 METHODS

Government agencies regulate coastal and inland waters for commerce, flood control and water quality. These water bodies provide numerous functions and values necessary to protect and sustain our quality of life. Wetlands comprise a significant portion of regulated waters. The USACE and U.S. Environmental Protection Agency (EPA) jointly define wetlands as:

"Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

The remaining deepwater aquatic habitats (open waters) are defined by the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) as:



" . . . areas that are permanently inundated at mean annual water depths >6.6 ft or permanently inundated areas <6.6 ft in depth that do not support rooted emergent or woody plant species."

The methods used for determining and delineating wetlands and open waters strictly adhere to those found in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE 2012). Wetlands and open water boundaries were determined by the disappearance of one or more of their diagnostic characteristics.

Ordinary high water marks (OHWM) defined the outermost regulatory boundaries of ephemeral and open waters.

Each sample plot and the perimeter of each wetland and other water was surveyed and marked in the field with plain pink flags and pink "wetland boundary" flags, respectively. A global positioning system (GPS) unit with submeter accuracy was used, in conjunction with aerial photography and topographic maps, for the survey. Computer Aided Design (CAD) software was used to determine wetland dimensions and Geographic Information Systems (GIS) software was used to produce a map of the project area showing wetlands and other waters.

## **2.1 WETLANDS**

### **2.1.1 Determination**

A review of secondary literature sources was performed to find known wetlands and other significant ecological resources and areas with high potential for wetlands in or near the proposed project area. Resources included the following:

1. U.S. Geological Survey (USGS) topographic maps;
2. National Wetlands Inventory (NWI) maps;
3. Web Soil Survey; and
4. Aerial Photographs.

A field inspection of the project area was then completed to identify major plant communities and to visually locate potential wetlands. The routine, onsite (Level 2) wetland determination was used to perform the delineation. Wetland communities were classified according to the classification scheme of Cowardin *et al.* (1979) (Table 1). Mature nonwetland communities that had reached a stable equilibrium were classified according to Anderson (1982) and Gordon (1966, 1969). Disturbed and successional nonwetland communities were classified as one of the categories described in Table 2.

**Table 1. Wetland Communities (Cowardin *et al.* 1979)**

Community	Description
PEM	Palustrine Emergent
PSS	Palustrine Scrub-Shrub
PFO	Palustrine Forested
POW	Palustrine Open Water

**Table 2. Disturbed and Successional Nonwetland Communities**

Community		Description
Disturbed	Urban	regularly maintained land; residential; industrial
	Agricultural	land used for producing crops or raising livestock; cropland; pastureland
	Cleared	disturbed areas devoid of most vegetation from recent clearing, grading or filling
Successional	Open Field	herbaceous community without woody vegetation
	Old Field	herbaceous community having woody vegetation coverage of <50%
	Scrub-Shrub	community dominated by woody vegetation <6 m (20 ft) tall
	Forest	community dominated by woody vegetation >6 m (20 ft) tall

Sample plots were established within each natural community and potential wetland within the study area. Complete data for each sample plot were collected and recorded on the USACE's Routine Wetland Determination Data Forms contained in the applicable USACE Regional Supplement (USACE 2012). Vegetation, hydrology and soils were evaluated at each sample plot.

#### 2.1.1.1 Vegetation

To detect the presence or absence of hydrophytic vegetation, four plant strata were evaluated within specific radii of the plot center. Each stratum was ranked by aerial cover in descending order of abundance. Table 3 provides information on each vegetative stratum.

**Table 3. Vegetative Strata**

Stratum	Definition	Survey Area
Tree	woody plants > or equal to 3 in. (7.6 cm) diameter at breast height (dbh), regardless of height	30 ft (9.1 m) radius
Sapling/shrub	woody plants <3 in. (7.6 cm) dbh and $\geq$ 3.28 ft (1 m) tall	15 ft (4.6 m) radius
Herbaceous	herbs and woody plants less than 3.28 ft (1 m) in height	5 ft (1.5 m) radius
Woody vines	woody vines >3.28 ft (1 m) in height	30 ft (9.1 m) radius

Percent dominance was obtained for each species and within each stratum. Dominant species are those which cumulatively totaled in order of abundance immediately exceed 50% and also include any individual species with an abundance of 20% or more (USACE 2012). Dominant taxa were identified using recognized local guides: nomenclature follows the *National List of Scientific Plant Names* (USDA 1982). Following the identification of each plant species present within the plot, all dominant species within each stratum were assigned a wetland indicator status according to Lichvar (2014). Indicators are summarized in Table 4.

**Table 4. Plant Indicators**

Indicator	Category	Definition
OBL	Obligate Wetland	almost exclusively (>99% of occurrences) found in wetlands
FACW	Facultative Wetland	most likely found in wetlands (67-99% of occurrences)
FAC	Facultative	equally likely found in wetlands or nonwetlands (34-66%)
FACU	Facultative Upland	most likely found in nonwetlands (1-33% occurrence in wetlands)
UPL	Obligate Upland	almost exclusively found in nonwetlands (<1% occurrence in wetlands)

An 'NI' (no indicator) designation represents species where not enough information is available to assign an indicator; an 'NL' (no listing) designation is given to species whose identification was not determined sufficiently enough to assign an indicator. Once the indicator status is assigned to each dominant species, the evaluator can perform the percent dominance test according to the protocol outlined within the applicable Regional Supplement (USACE 2012) to determine if the plot meets the criterion for hydrophytic vegetation.



#### **2.1.1.2 Hydrology**

To detect the presence or absence of wetland hydrology, surface and subsurface hydrologic indicators were evaluated at the sample plot and throughout the adjacent community. Primary sources of wetland hydrology include direct precipitation, headwater flooding, backwater flooding, groundwater or any combination of these. When obtaining data at each sample plot, the evaluator observes evidence of hydrology. Primary indicators of hydrology (only one of these is necessary to indicate sufficient wetland hydrology) include the presence of surface water, water marks, sediment deposits, drift deposits, etc. (USACE 2012). Secondary indicators of hydrology (which requires two or more at each sample plot) include surface soil cracks, drainage patterns, crayfish burrows, etc. (USACE 2012).

#### **2.1.1.3 Soils**

The upper horizons of the soil at each sample plot were examined to detect the presence or absence of hydric soils indicators. Current USACE guidance requires the evaluator to assess the upper 20 inches of soil for hydric soil characteristics. Most indicators of hydric soils require an assessment of soil matrix color and mottle characteristics (Environmental Laboratory 1987, USACE 2012) for each horizon. These characteristics were determined by comparing a moist sample with *Munsell Soil Color Chart* (Munsell Color 2009) or *The Globe Soil Color Book* (Visual Color Systems, 2004).

#### **2.1.2 ORAM Categorization**

Each wetland system was categorized in accordance with version 5.0 of the Ohio EPA's Ohio Rapid Assessment Method for Wetlands (ORAM) (Mack 2000, 2001). Field scoring forms are contained in Appendix E.

Ohio EPA has established three primary and three intermediate categories of wetland quality which are based on a wetland's size, its hydrologic function, the types of plant communities present, the physical structure of the wetland plant community and the wetland's level of disturbance (OAC 3745-1-54). The relationship between the various wetland categories and their respective ORAM scores is presented in Table 5. EnviroScience also evaluated the project area for the presence of state threatened and endangered species as part of the ORAM evaluation.

Category 3 wetlands have the highest quality, and are generally characterized by a high level of biological diversity and topographical variation, large numbers of native species, or a high level of functional importance to its surroundings. Category 2 wetlands have

the capability to support a moderate wildlife community or maintain mid-level hydrological functions. Category 2 also includes wetlands that may be of lower quality or degraded but have reasonable potential to be restored (Modified Category 2). Category 1 wetlands are of the lowest quality, and are generally characterized by hydrological isolation, lack of plant species diversity, insufficient habitat availability, and limited potential to perform major wetland functions (OAC 3745-1-54).

**Table 5. ORAM Scores and Categories**

ORAM Score	ORAM Category	Description
0-29.9	Category 1	Lowest quality, and are generally characterized by hydrological isolation, lack of plant species diversity, insufficient habitat availability, and limited potential to perform major wetland functions.
30-34.9	Category 1 or 2 (Gray Zone)	ORAM score is insufficient to categorize wetland. In absence of a nonrapid method such as VIBI, assign the wetland to the higher functional category (Category 2)
35-44.9	Modified Category 2	Category 2 wetlands that may be of lower quality or degraded but have reasonable potential to be restored.
45-59.9	Category 2	Wetlands that have the capability to support a moderate wildlife community or maintain mid-level hydrological functions.
60-64.9	Category 2 or 3 (Gray Zone)	ORAM score is insufficient to categorize wetland. In absence of a nonrapid method such as VIBI, assign the wetland to the higher functional category (Category 3)
65-100	Category 3	Highest quality, generally characterized by a high level of biological diversity and topographical variation, threatened or endangered species, large numbers of native species, or a high level of functional importance to its surroundings.

Since the ORAM is a rapid assessment method, there are certain wetland scores which fail to clearly differentiate the wetland's functional category. The so-called "gray zone" wetlands fall between the definite scoring breaks between the categories. Ohio EPA requires that "gray zone" wetlands be considered as the higher category unless more detailed functional assessments such as the VIBI or AmphIBI are conducted on those wetlands. As a result of this requirement, wetlands whose scores fall between the breakpoints for Categories 1 and 2 (1 or 2 gray zone wetlands) wetlands will be considered as Category 2 wetland for purposes of this report. Wetlands whose scores fall between the breakpoints for Categories 2 and 3 wetlands (2 or 3 gray zone wetlands) will be considered a Category 3 wetland for purposes of this report.



### 2.1.3 Cowardin Wetland Classification

The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory uses the *Classification of Wetlands and Deepwater Habitats of the United States* to classify wetland habitat types (Cowardin *et al.* 1979). This classification system is hierarchical and defines five major systems – Marine, Estuarine, Riverine, Lacustrine, and Palustrine. The Palustrine system was the only type of wetland system identified within the study area and is defined as including all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean driven-derived salts is below 0.5 percent (Cowardin *et al.* 1979).

## 2.2 OTHER WATERS

Other waters include ephemeral and open waters. These waters are broken down into two categories: 1) ponds and lakes; and 2) streams and rivers.

### 2.2.1 Ponds and Lakes

Palustrine systems other than wetlands, and lacustrine waters are addressed as ponds and lakes, respectively. These non-linear open waters may harbor important aquatic communities such as vegetated shallows (aquatic bed) and mud flats. They are classified according to Cowardin *et al.* (1979).

### 2.2.2 Streams and Rivers

Riverine systems are linear flowing waters bounded by a channel. Cowardin *et al.* (1979) divides these systems into four groups, however, for the purpose of this report streams are placed into three regulatory types, listed below.

**Ephemeral:** An ephemeral stream only conveys runoff precipitation and meltwater. It is permanently located above the water table and is most often dry.

**Intermittent:** An intermittent stream is located below the water table for parts of the year, but does have dry periods.

**Perennial:** A perennial stream typically has flowing water throughout the entire year.

In addition to flow characteristics, the USACE has defined other regulatory categories that apply to streams, which are listed below (USACE and USEPA, 2007).

Traditional Navigable Waters (TNW): all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

Relatively Permanent Waters (RPW): non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).

Non-Relatively Permanent Waters (Non-RPW): non-navigable tributaries of traditional navigable waters that are not relatively permanent where the tributaries typically do not have continuous flow at least seasonally (e.g., typically three months).

The Corps and USEPA will assert jurisdiction under the Clean Water Act on Traditional Navigable Waters (TNWs) and all wetlands adjacent to them, non-navigable tributaries of TNWs that are Relatively Permanent Waters (RPW) [i.e., tributaries that typically flow year-round or have continuous flow at least seasonally]; and wetlands that directly abut such tributaries. In addition, the agencies will assert jurisdiction over every water body that is not an RPW if that water body is determined (on the basis of a fact-specific analysis) to have a significant nexus with a TNW.

"A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological, integrity of a TNW. Principal considerations when evaluating significant nexus include the volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a TNW, plus the hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands."

In 2015, the USEPA and USACE issued the Clean Water Rule, which attempts to clarify the definition of waters of the U.S. On October 9, 2015, the Sixth U.S. Circuit Court of appeals issued a nationwide Order of Stay barring implementation of the rule pending appeal.

### **2.2.3 HHEI and QHEI**

Data collection for all streams included the completion of either the Ohio EPA Headwater Habitat Evaluation Index (HHEI) for primary headwater habitat (PHWH) streams or the Qualitative Habitat Evaluation Index (QHEI) for larger streams. Biologists are Ohio EPA trained to assess streams using the QHEI and HHEI. Following the Ohio EPA guidance, any stream with a drainage area of less than or equal to one mi<sup>2</sup> (2.589 km<sup>2</sup>) and pools with maximum water depths less than or equal to 15.75 in (40 cm) were evaluated using the HHEI (Ohio EPA 2012). The QHEI was used to evaluate streams with drainage areas greater than one mi<sup>2</sup> and pools with maximum water depths greater than 15.75 in (40 cm). The assessment location is representative of the stream/headwater within the project area.

## **3.0 LITERATURE REVIEW**

### **3.1 USGS TOPOGRAPHIC MAP**

The U.S. Geological Survey (USGS) 7.5-minute topographic series map of the site (Hudson Quadrangle) is shown on Figure 2 (Appendix A). The project area is shown south of Barlow Road, bound to the east and south by roads and to the west by a railroad track. The property is depicted as mostly forested with an intermittent stream flowing northwest across the southern portion of the project area. This stream corresponds to Stream S-2. Elevations with the site range from approximately 1,030 feet above mean sea level (AMSL) to 1,095 feet AMSL.

### **3.2 NWI MAP**

The National Wetlands Inventory (NWI) map (Hudson Quadrangle) of the study area is shown on Figure 3 in Appendix A. A palustrine scrub-shrub broad-leaf deciduous and palustrine emergent persistent (PSS1/EM1C) wetland complex is depicted in the southwestern portion of the project area. This feature corresponds to Wetland W-3.

### **3.3 COUNTY SOIL SURVEY**

The study area is found on the *Soil Survey of Summit County, Ohio* and was accessed on the Soil Survey Geographic (SSURGO) Database (USDA Web Soil Survey, 2010) (Appendix A: Figure 4). Seven (7) soil types and Water (W) were identified within the project area. One (1) soil type, Damascus loam (Da), is listed as hydric within Summit County. All other soil types are listed as not hydric or predominantly non-hydric. Table 6 summarizes onsite soil data.



**Table 6. Soil Types Mapped in Summit County**

Symbol	Soil Name	Status	Common Landform	Percent Hydric	Acres in Project Area	Percent Within Project Area
BgB	Bogart loam, 2 to 6 percent slopes	Not Hydric	N/A	0	1.1814	2.9
Da	Damascus loam	All Hydric	depressions	100	4.5965	11.5
EIB	Ellsworth silt loam, 2 to 6 percent slopes	Not Hydric	till plains	0	10.6221	26.5
EIE2	Ellsworth silt loam, 12 to 25 percent slopes, moderately eroded	Not Hydric	hillsides	0	2.6215	6.5
MgA	Mahoning silt loam, 0 to 2 percent slopes	Predominantly Non-Hydric	drainageways on uplands, depressions on uplands	5	5.3858	13.4
MgB	Mahoning silt loam, 2 to 6 percent slopes	Not Hydric	till plains	0	11.7435	29.3
Up	Udorthents-pits complex	Not Hydric	N/A	0	0.448	1.1
W	Water	Not Hydric	N/A	0	3.4841	8.7

### **3.4 AERIAL PHOTOGRAPHY**

A recent aerial photograph of the project area is shown on Figure 5 (Appendix A). The project area is located on the west side of Hudson Drive and is bound to the west by a railroad track. The project area is mostly forested with an open field in the central portion of the property. Two (2) saturated, non-forested wetlands are discernable from the aerial located in the southwestern portion of the project area. The surrounding land use consists of forested, commercial, and residential land uses.

### **3.5 FEMA FLOOD INSURANCE RATE MAP**

The Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate Maps (FIRM), which show the locations of predictable floodplain during precipitation flood events. The FIRM map (Appendix A: Figure 6) of the study area was examined and the project area is not located within a designated 100-Year Floodplain area.

### 3.6 OHIO NATURAL HERITAGE DATABASE

The Ohio Department of Natural Resources (ODNR) Natural Heritage Database contains no records of rare or endangered species within a one (1) mile radius of the site (Appendix C). There are no records of capture locations of the federally endangered Indiana bat (*Myotis sodalis*) within five (5) miles of the site. However, there is a record of a winter hibernaculum within ten (10) miles of the site. No other unique ecological areas, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, parks or forests, or other protected natural areas within a one (1) mile radius of the project area were noted.

### 3.7 U.S. FISH AND WILDLIFE SERVICE

The project area was examined for suitable habitat for federally listed species whose known range includes Summit County, Ohio. These species are the federally endangered Indiana bat (*Myotis sodalis*), the federally threatened northern long-eared bat (*Myotis septentrionalis*), the federally threatened northern monkshood (*Aconitum noveboracense*), and the federal species of concern, the bald eagle (*Haliaeetus leucocephalus*).

Living or dead trees with shedding or peeling bark or cavities may serve as roosting trees for the Indiana bat and/or the northern long-eared bat. In addition, sheds and barns may serve as roosting habitat for the northern long-eared bat. No winter hibernaculum, sheds, or barns were observed within the project area. Approximately 32 acres within the study area is composed of forested land. The forest can be categorized as a second growth and late successional forest; dominant tree species include red oak (*Quercus rubra*), red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), black cherry (*Prunus serotina*), white ash (*Fraxinus americana*), green ash (*Fraxinus pennsylvanica*), tulip poplar (*Liriodendron tulipifera*), and American elm (*Ulmus americana*). Several trees and several standing dead trees within the study area displayed characteristics that may qualify as potential habitat for both bat species. Due to the habitat features onsite including forest, streams, and wetlands, the project area could potentially serve as roosting and foraging habitat for both bat species. If tree clearing is proposed, coordination with the USFWS is recommended. If trees must be cleared, the USFWS will likely require that this be completed between October 1<sup>st</sup> and March 31<sup>st</sup>. Representative photographs of the onsite forest community are included in Appendix B.

Habitat for the northern monkshood is cool, moist shaded cliff faces or talus slopes in wooded ravines, near water seeps. Suitable habitat for the northern monkshood is not located within the project area.

The bald eagle nests in large trees near water. No bald eagles or nests were observed within or adjacent to the project area.

#### 4.0 RESULTS

Twelve (12) sample plots were established within five (5) vegetative communities. Three (3) of these communities are considered wetland communities. Table 7 summarizes the sample plot data.

**Table 7. Sample Plot Results.**

Sample Plot	Photo*	Community**	Hydrophytic Vegetation	Wetlands Hydrology	Hydric Soil	Status	Location
1	1	PFO	X	X	X	Wetland	W-1
2	2	PEM	X	X	X	Wetland	W-2
3	3	PFO	X	X	X	Wetland	W-2
4	4	PEMSS	X	X	X	Wetland	W-2
5	5	Forest				Non-Wetland	SP-5
6	6	Forest				Non-Wetland	SP-6
7	7	PEM	X	X	X	Wetland	W-4
8	8	Open field				Non-Wetland	SP-8
9	9	PEM	X	X	X	Wetland	W-3
10	10	Forest				Non-Wetland	SP-10
11	11	PFO	X	X	X	Wetland	W-4
12	12	PFO	X	X	X	Wetland	W-4

\*photos are located in Appendix B; \*\*PEM = Palustrine Emergent, PEMSS = Palustrine Emergent and Scrub-shrub, PFO=Palustrine Forested.

Each sample plot, delineated wetland, and other waters are illustrated on Figure 5 (Appendix A). The following section describes general conditions found within each plant community and summarizes information from the data forms, located in Appendix D.

#### 4.1 NONWETLANDS

Two (2) upland communities, including open field and forest, exist within the project area. The forest community is represented by Sample 5, 6, and 10. Dominant tree species within this community include red maple (*Acer rubrum*, FAC), sugar maple (*Acer saccharum*, FACU), American beech (*Fagus grandifolia*, FACU), white ash (*Fraxinus*



*americana*, FACU), tulip poplar (*Liriodendron tulipifera*, FACU), black cherry (*Prunus serotina*, FACU), and Northern red oak (*Quercus rubra*, FACU). The shrub/sapling layer includes young trees, northern spicebush (*Lindera benzoin*, FAC), Morrow's honeysuckle (*Lonicera morrowii*, FACU), black raspberry (*Rubus occidentalis*, UPL), hawthorn (*Crataegus* sp., NI). The herbaceous stratum is dominated by Pennsylvania sedge (*Carex pensylvanica*, UPL), mayapple (*Podophyllum peltatum*, FACU), yellow trout lily (*Erythronium americanum*, UPL), and seedlings of black cherry, Morrow's honeysuckle, and northern spicebush.

The open field community is represented by Sample Plot 8. Typical herbaceous vegetation within this community include orchard grass (*Dactylis glomerata*, FACU), Canadian thistle (*Cirsium arvense*, FACU), Indian hemp (*Apocynum cannabinum*, FAC), wild rye (*Elymus* sp., NI), black-eyed Susan (*Rudbeckia hirta*, FACU), giant ironweed (*Vernonia gigantea*, FAC), and American elm seedlings (*Ulmus americana*, FACW).

## 4.2 WETLANDS

Four (4) wetlands were identified and delineated within the project area. The onsite portions of these wetlands consist of palustrine emergent (PEM), palustrine emergent and scrub-shrub (PEMSS), and palustrine forested (PFO) vegetative communities. These wetlands have been categorized using the Ohio Rapid Assessment Method for Wetlands v.5.0 (ORAM); the scoring forms are included in Appendix E. Wetland results are given in Table 8 and are briefly described in the following section. Wetland size has been determined for the portion of the wetlands within the study area. These wetlands are illustrated on Figure 5 (Appendix A).

**Table 8. Wetland Results within the Project Area.**

Wetland	Photo*	Cowardin Class	ORAM Score	ORAM Category	Size Within Study Area (acres)
W-1	13	PFO	30.5	1 or 2 gray zone	0.422
W-2	14-15	PEM	43.5	Modified 2	0.127
		PEMSS			0.471
		PFO			0.320
W-3	16	PEM	36	Modified 2	6.075
		PFO			0.291
W-4	17-21	PEM	56.5	Category 2	0.823
		PFO			12.365
Total Wetlands					20.896

\*photos are located in Appendix B

Wetland W-1 is a PFO wetland located in the northwestern portion of the project area. This wetland is located on a hillside and is receiving hydrology from precipitation, from runoff from adjacent uplands, and a PVC pipe that is conducting surface water from Wetland W-4 into W-1. Sample Plot 1 represents typical vegetation within W-1. The tree stratum is dominated by silver maple (*Acer saccharinum*, FACW), American elm (*Ulmus americana*, FACW), and green ash (*Fraxinus pennsylvanica*, FACW). The shrub layer is dominated by glossy buckthorn (*Frangula alnus*, FAC) and Morrow's honeysuckle (*Lonicera morrowii*, FACU). Typical herbaceous vegetation within this wetland includes graceful sedge (*Carex gracillima*, FACU), white grass (*Leersia virginica*, FACW), white avens (*Geum canadense*, FAC), jumpseed (*Persicaria virginica*, FAC), sweet wood reed (*Cinna arundinacea*, FACW), farewell-summer (*Symphotrichum lateriflorum*, FAC), and oldfield cinquefoil (*Potentilla simplex*, FACU). This wetland assessed within the range of a Category 1 or 2 gray zone wetland using the ORAM scoring method. This score was a result of small wetland size, narrow upland buffers, past hydrologic disturbances, habitat alteration, fair habitat development, and a moderate amount of invasive species cover.

Wetland W-2 is comprised of PEM, PEMSS, and PFO vegetation. W-2 begins as a depression in the north and connects along a swale to a large depressional wetland located on the right descending bank (RDB) of Stream S-2. An intermittent stream, Stream S-1, flows north to south through W-2 into S-2. Sample Plots 2, 3, and 4 represent typical vegetative communities within W-2. Sample Plot 2 represents PEM vegetation within the northern portion of W-2. The dominant herbaceous species within this portion of the wetland is common reed (*Phragmites australis*, FACW), small amounts of glossy buckthorn and black willow (*Salix nigra*, OBL) are growing in the shrub layer along the margins of the wetland. Sample Plot 3 represents PFO vegetation within this wetland. Dominant tree species include American elm and green ash. The shrub layer is dominated by Morrow's honeysuckle. Dominant herbaceous species within this portion of the wetland include fowl manna grass (*Glyceria striata*, OBL), and eastern woodland sedge (*Carex blanda*, FAC). Sample Plot 4 represents the PEMSS portion of W-2 which occupies the majority of this wetland. The dominant shrub species include black willow and silky dogwood (*Cornus amomum*, FACW). The herbaceous layer is dominated by skunk cabbage (*Symplocarpus foetidus*, OBL) and reed canary grass (*Phalaris arundinacea*, FACW). W-2 assessed within the range of a Modified 2 wetland using the ORAM scoring method. This score resulted from narrow upland buffers, habitat alteration, and moderate invasive species cover. This wetland had multiple sources of hydrology, good hydrologic connectivity, sparse habitat features, and moderately low interspersions.



Wetland W-3 is comprised of PEM and PFO vegetation. Sample Plot SP-9 represents typical vegetation within W-3. Dominant herbaceous vegetation within this wetland include common reed, reed canary grass, and cattail (*Typha angustifolia*, OBL). Wetland W-3 assessed within the range of Modified 2 wetland using the ORAM scoring method. Factors contributing to this score include relatively large wetland size, medium upland buffers, multiple sources of hydrology, hydrologic connectivity, low interspersions, and extensive invasive species cover.

Wetland W-4 is a large forested wetland complex with PFO and PEM components. Sample Plots 7, 11, and 12 are representative of onsite conditions. Sample Plot 7 represents the PEM portion of W-4 in the western portion of the wetland. Typical herbaceous species include field horsetail (*Equisetum arvense*, FAC), chufa (*Cyperus esculentus*, FACW), spreading bent (*Agrostis stolonifera*, FACW), flat-top goldenrod (*Euthamia graminifolia*, FAC), common reed, common fox sedge (*Carex vulpinoidea*, FACW), and Indian hemp. Sample Plots 11 and 12 are representative of onsite PFO conditions. Dominant tree species within this wetland include green ash and American elm. The shrub/sapling layer is dominated by young trees, northern spicebush, and Morrow's honeysuckle. Dominant herbaceous plants include fowl manna grass, graceful sedge, and jumpseed. The woody vine layer contains poison ivy. Wetland W-4 assessed within the range of a Category 2 wetland. This score resulted from past modifications to the natural hydrologic regime, sparse invasive species cover, and moderate surrounding land use. Wetland W-4 is a large forested wetland with moderate degree of interspersions, multiple sources of hydrology, good hydrologic connectivity, good habitat development, and good habitat features.

#### **4.3 Streams and Rivers**

One (1) ephemeral stream and three (3) intermittent streams were identified and delineated within the project area. The results are depicted in Table 9 and illustrated on Figure 5 (Appendix A). All onsite streams have been assessed using the Headwater Habitat Evaluation Index (HHEI), the scoring form is included in Appendix F.

**Table 9. Stream Results within the Project Area.**

Stream	Photos*	Type	Average Bankfull Width (feet)	Depth at Time of Survey (inch)	Length Within Project Area (linear feet)	Area Within Project Area (acres)	HHEI Score
S-1	22-23	Intermittent	2.2	10.0	305	0.015	29
S-2	24-25	Intermittent	6.0	12.0	1210	0.167	59
S-3	26-27	Intermittent	0.8	5.0	152	0.003	37
S-4	28-29	Ephemeral	3.0	4.0	303	0.021	47
<b>Total Stream</b>					<b>1,970</b>	<b>0.206</b>	

\*photos are located in Appendix B

Stream S-1 is an intermittent stream that begins within Wetland W-2 and flows south through W-2 into S-2. S-1 assessed within the range of a Class Primary Headwater Habitat (PHWH) using the HHEI scoring method.

Stream S-2 is an intermittent stream that flows onsite from a culvert under Hudson Drive. S-2 flows through W-3 and W-2b to a culvert located in the southeastern portion of the project area and continues to flow northwest offsite under a three-sided box culvert where the railroad crosses. There is a manhole located east of the culvert at the western terminus of W-2b. S-2 assessed within the range of a Modified Class II PHWH using the HHEI.

Stream S-3 begins in Wetland W-3 and conducts water from adjacent uplands to Stream S-2. S-3 is an intermittent stream and assessed within the range of a Class II PHWH.

Stream S-4 is an ephemeral stream located in the eastern portion of the project area beginning in W-4c and flowing south offsite. S-4 had interstitial flow at the time of survey and assessed within the range of a Class II PHWH.

#### **4.4 PONDS AND LAKES**

No ponds or lakes were identified within the study area.

#### **5.0 REGULATORY JURISDICTION**

The streams, wetlands and deepwater habitats described in this document are under the jurisdiction either of the U.S. Army Corps of Engineers or the Ohio EPA. No filling may occur in these areas without their written permission. Please contact the Ohio EPA



Division of Surface Water at (614) 644-2001 or the Buffalo District USACE at (716) 879-4330 before working in these areas.

The following information is excerpted and summarized from the 2007 *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook*.

"In 2001, the ... U.S. Supreme Court's decision in the *Solid Waste Agency of Northern Cook County (SWANCC) v. Corps* held that isolated, intrastate, non-navigable waters could not be regulated under the CWA based solely on the presence of migratory birds. Following the SWANCC decision it generally was believed that a water body (including a wetland) was subject to CWA jurisdiction if the water body was part of the U.S. territorial seas, or a traditional navigable water, or any tributary to a traditional navigable water, or a wetland adjacent to any one of the above. In addition, isolated wetlands and other waters might be considered jurisdictional where they had the necessary link to either navigable waters or interstate commerce."

In the state of Ohio, the Ohio EPA isolated wetland permitting program was legislatively created in response to the 2001 SWANCC decision. On July 17, 2001, House Bill 231 was signed into law, establishing a permanent permitting process for isolated wetlands. The provisions of House Bill 231 were incorporated in Sections 6111.021 through 6111.029 of the Ohio Revised Code.

"In 2006, the Supreme Court once again addressed the jurisdictional scope of Section 404 of the CWA, specifically the term "the waters of the U.S.," in *Rapanos v. U.S.* and in *Carabell v. U.S.* (hereafter referred to as *Rapanos*).

The decision provides two new analytical standards for determining whether water bodies that are not traditional navigable waters (TNWs), including wetlands adjacent to those non-TNWs, are subject to CWA jurisdiction: (1) if the water body is relatively permanent, or if the water body is a wetland that directly abuts (e.g., the wetland is not separated from the tributary by uplands, a berm, dike, or similar feature) a relatively permanent water body (RPW), or (2) if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs. CWA jurisdiction over TNWs and their adjacent wetlands was not in question in this case, and, therefore, was not affected by the *Rapanos* decision. In addition, at least five of the Justices in *Rapanos* agreed that CWA jurisdiction exists over all TNWs and over all wetlands adjacent to TNWs.

The Memo states that the [Corps and USEPA] will assert jurisdiction over the following categories of water bodies: TNWs; all wetlands adjacent to TNWs; non-navigable tributaries of TNWs that are relatively permanent (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally); and wetlands that directly abut such tributaries. In addition, the agencies will assert jurisdiction over every water body that is not an RPW if that water body is determined (on the basis of a fact-specific analysis) to have a significant nexus with a TNW. The classes of water body that are subject to CWA jurisdiction only if such a significant nexus is demonstrated are: non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally; wetlands adjacent to such tributaries; and wetlands adjacent to but that do not directly abut a relatively permanent, non-navigable

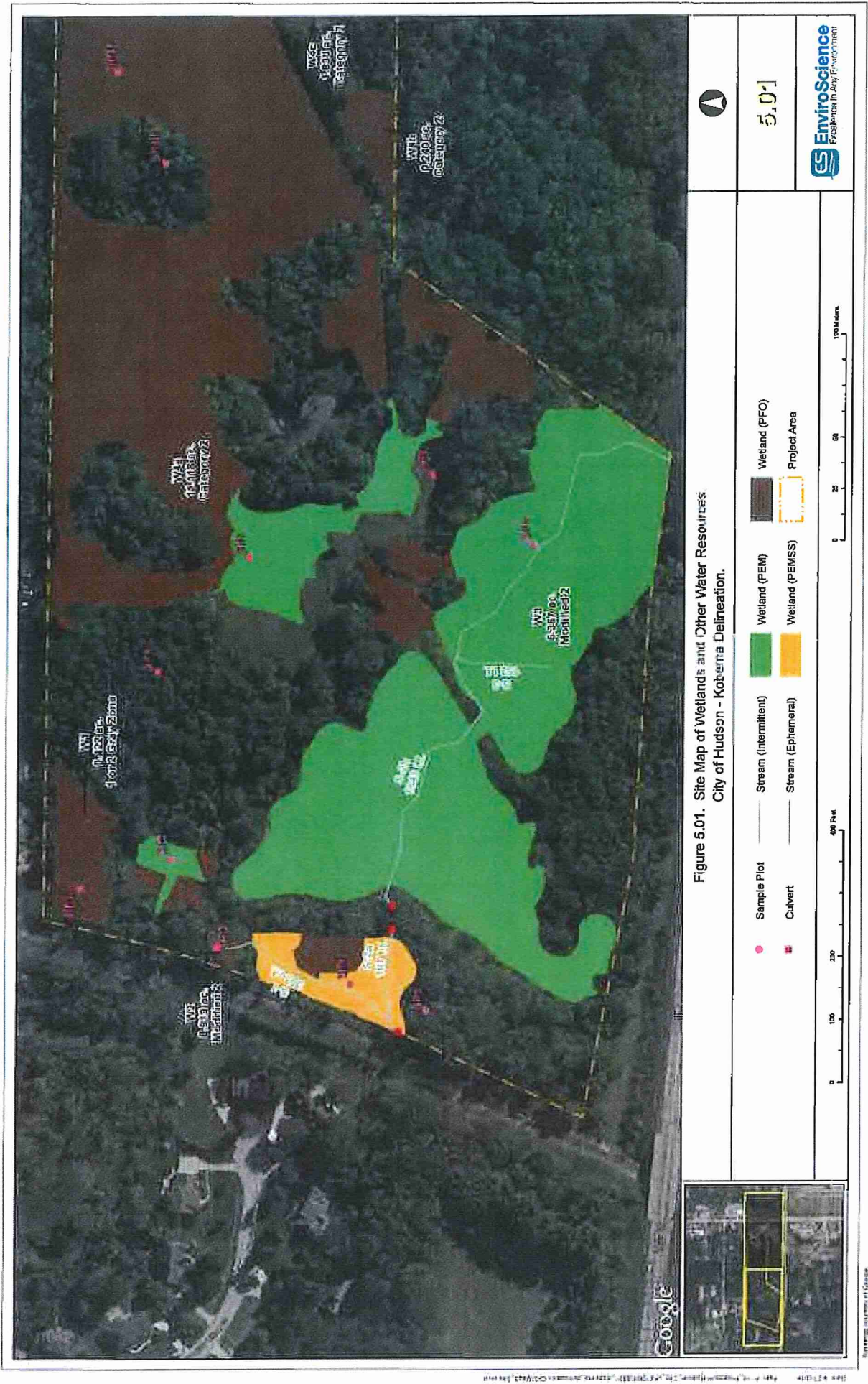
tributary. A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological, integrity of a TNW. Principal considerations when evaluating significant nexus include the volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a TNW, plus the hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands."

## **6.0 ASSUMPTIONS AND DISCLAIMERS**

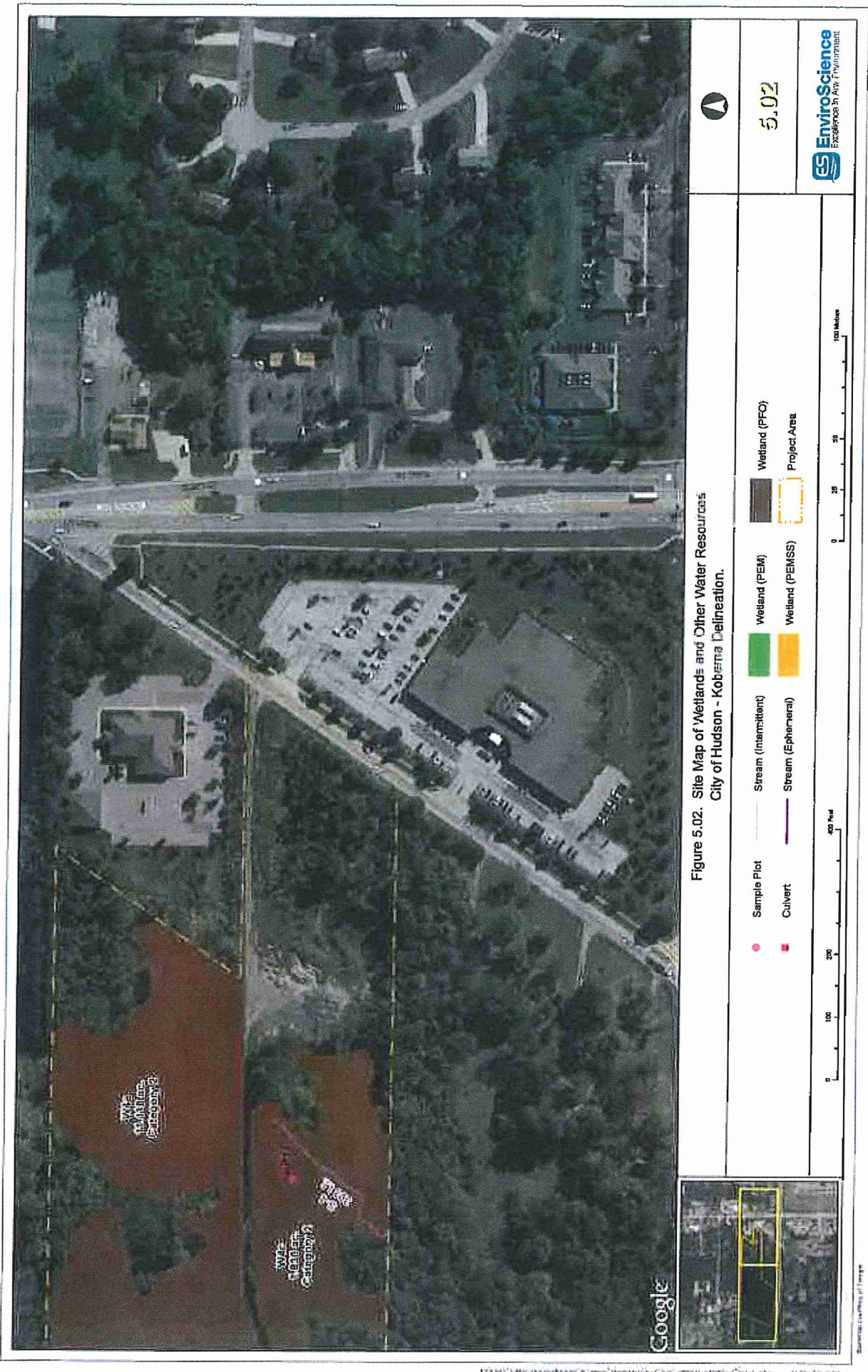
The constant influence of human activity on the study area can result in a rapid change of ecological boundaries. Over time, natural succession and changes in hydrology can also affect their boundaries. Precision of GPS collected data is subject to variation caused by canopy cover, atmospheric interference and satellite configuration. Because slight inaccuracies are possible, all acreages and derived boundaries presented in this report are approximate.

The results and conclusions contained in this report apply to the year and date in which the data were collected. This report is not considered officially valid until it is approved by the Corps. The report is then valid for a period of five years. Refer to the Corps' Regulatory Guidance Letter # 94-1 (23 May 1994).













REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
BUFFALO DISTRICT, CORPS OF ENGINEERS  
1776 NIAGARA STREET  
BUFFALO, NEW YORK 14207-3199

RECEIVED  
AUG 08 2016  
ENGINEERING

August 4, 2016

Regulatory Branch

SUBJECT: Preliminary Jurisdictional Determination for Department of the Army Application  
No. 2016-00830

City of Hudson  
Attn: Mr. Christopher Papp  
115 Executive Parkway, Suite 400  
Hudson, OH 44236

Dear Mr. Papp:

I have reviewed the wetland delineation map you submitted for a 40-acre parcel located at 5810 Hudson Drive, in the City of Hudson, Summit County, Ohio.

I have evaluated your submitted wetland delineation map and have determined that the wetland and water boundaries shown on the map accurately represent on-site conditions. Please note that this is a Preliminary Jurisdictional Determination (JD). Preliminary JDs are non-binding written indications that there may be Waters of the United States (WOUS) on your parcel and approximate locations of those waters. Preliminary JDs are advisory in nature and may not be appealed.

Pursuant to Regulatory Guidance Letter 08-02, any permit application made in reliance on this Preliminary JD will be evaluated as though all wetlands or waters on the site are regulated by the Corps. Further, all waters, including wetlands will be used for purposes of assessing the area of project related impacts and compensatory mitigation. If you require a definitive response regarding Department of the Army jurisdiction for any or all of the waters identified on the submitted drawings, you may request an approved jurisdictional determination from this office. If an approved JD is requested, please be aware that this is often a lengthy process and we may require the submittal of additional information.

I have enclosed the Preliminary JD Form with this letter. The form and attached table identifies the extent of waters on the site and specific terms and conditions of the Preliminary JD. Please sign and return a copy of this form to my attention so that I may complete my evaluation of your file. If you do not respond within fifteen days of this letter, I will assume you no longer wish to pursue the jurisdictional determination and will withdraw your application.

In accordance with Regulatory Guidance Letter 05-02, "Preliminary JDs are not definitive determinations of areas within regulatory jurisdiction and do not have expirations dates." However, I strongly recommend that the boundaries of WOUS be re-evaluated by a qualified wetland biologist after five years of the date of this letter. This will ensure that any changes are

Regulatory Branch

SUBJECT: Preliminary Jurisdictional Determination for Department of the Army Application No. 2016-00830

appropriately identified and you do not inadvertently incur a violation of Federal law while constructing your project or working on your project site.

Lastly, this determination has been conducted only to identify the limits of waters that may be subject to Corps Clean Water Act or Rivers and Harbors Act jurisdiction. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resource Conservation Service prior to starting work.

Questions pertaining to this matter should be directed to me at 716-879-4363, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: [Peter.j.krakowiak@usace.army.mil](mailto:Peter.j.krakowiak@usace.army.mil)

Sincerely,

Peter J. Krakowiak  
Biologist

Enclosures



**ATTACHMENT**

**PRELIMINARY JURISDICTIONAL DETERMINATION FORM**

**BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD):** August 4, 2016

**B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:**  
City of Hudson  
Attn: Mr. Christopher Papp  
115 Executive Parkway, Suite 400  
Hudson, OH 44236

**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:** LRB, City of Hudson –  
Koberna Property, DA No. 2016-00830

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:**  
**(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)**

State: Ohio County/parish/borough: Summit City: Hudson  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.21883°  
N, Long. -81.45102° W.

Universal Transverse Mercator:

Name of nearest waterbody: Mud Brook

Identify (estimate) amount of waters in the review area:

Non-wetland waters: See attached table

Cowardin Class: See attached table

Stream Flow: See attached table

Wetlands: See attached table

Cowardin Class: See attached table

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: NA

Non-Tidal: NA

**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

☐ Office (Desk) Determination. Date:

☒ Field Determination. Date(s): July 28, 2016

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

**SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply**

- checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☒ U.S. Geological Survey Hydrologic Atlas:

☒ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Hudson.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Summit County.

☒ National wetlands inventory map(s). Cite name: Hudson.

☐ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Googlemaps (ORM2).

or ☐ Other (Name & Date):

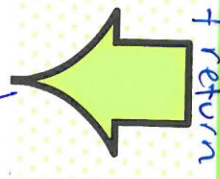
☐ Previous determination(s). File no. and date of response letter:

☐ Other information (please specify):

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

\_\_\_\_\_  
Signature and date of  
Regulatory Project Manager  
(REQUIRED)

\_\_\_\_\_  
Signature and date of  
person requesting preliminary JD  
(REQUIRED, unless obtaining  
the signature is impracticable)



<b>Site number</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Cowardin Class</b>	<b>Estimated amount of aquatic resource in review area</b>	<b>Class of aquatic resource</b>
W1	41.22029	-81.44997	PFO	0.422 acre	non-section 10 – wetland
W2	41.21922	-81.45061	PEM/PSS/PFO	0.919 acre	non-section 10 – wetland
W3	41.21871	-81.44945	PEM/PFO	6.367 acres	non-section 10 – wetland
W4a	41.22006	-81.44516	PEM/PFO	11.118 acres	non-section 10 – wetland
W4b	41.21891	-81.44526	PFO	0.240 acre	non-section 10 – wetland
W4c	41.21922	-81.44405	PEM/PFO	1.830 acres	non-section 10 – wetland
S-1	41.21957	-81.45057	Riverine - intermittent	305 linear feet	non-section 10 – stream
S-2a	41.21897	-81.45074	Riverine - perennial	167 linear feet	non-section 10 – stream
S-2b	41.21881	-81.45001	Riverine - perennial	1043 linear feet	non-section 10 – stream
S-3	41.21837	-81.44908	Riverine - perennial	152 linear feet	non-section 10 – stream
S-4	41.21912	-81.44438	Riverine - ephemeral	303 linear feet	non-section 10 – stream





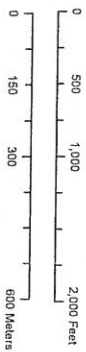
Date: 5/31/2016 Path: P:\110\_Projects\Hudson\_City\_of\470NR\8861\_Koberna\_delineation\GIS\Map2\_Topo.mxd

Base map courtesy of National Geographic Society (2013).

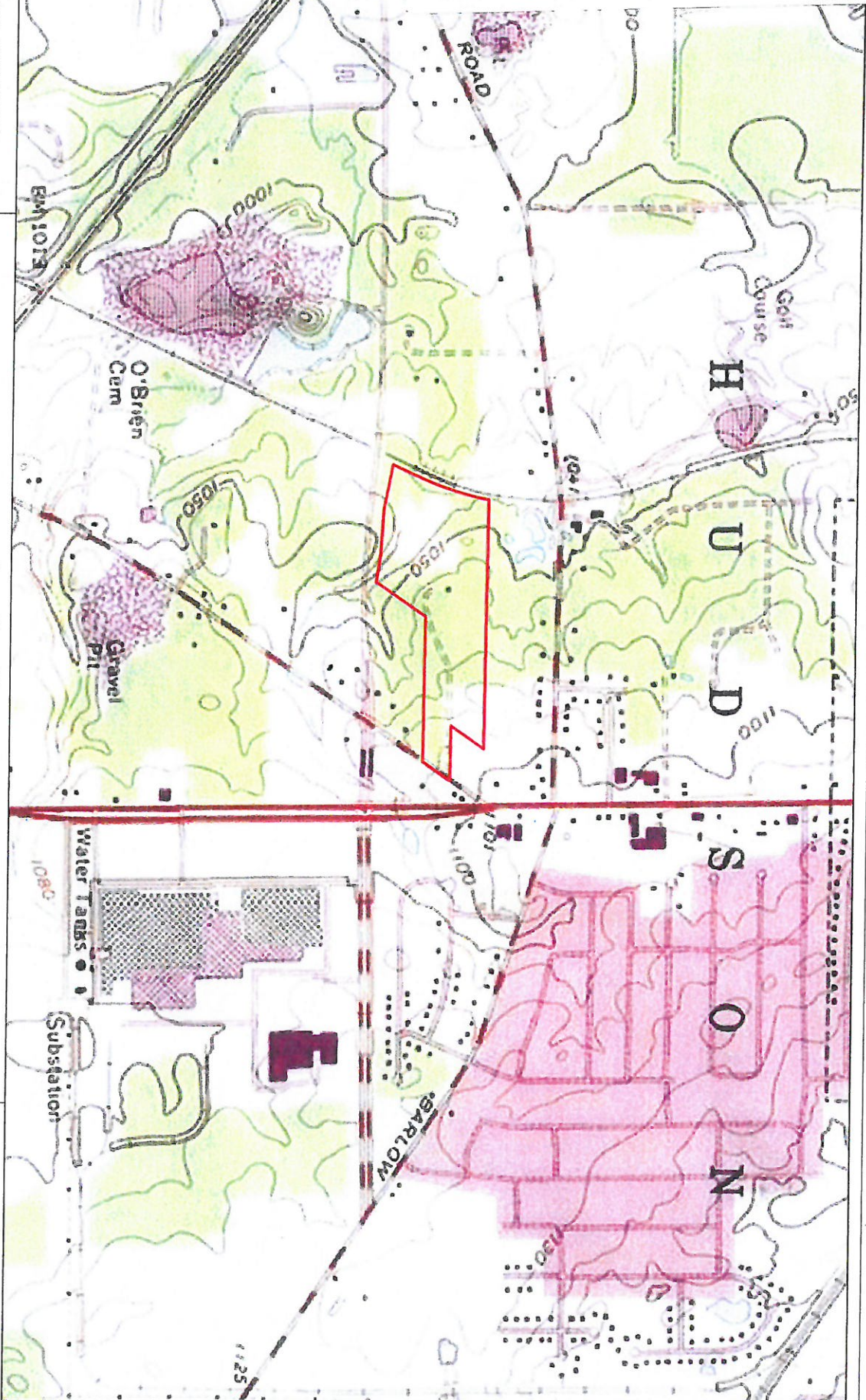
Figure 2. USGS 7.5-minute  
Topographic Map of Hudson Quadrangle.  
City of Hudson - Koberna Property.



Project Area



EnviroScience  
Excellence In Any Environment







Basemap courtesy of Google.

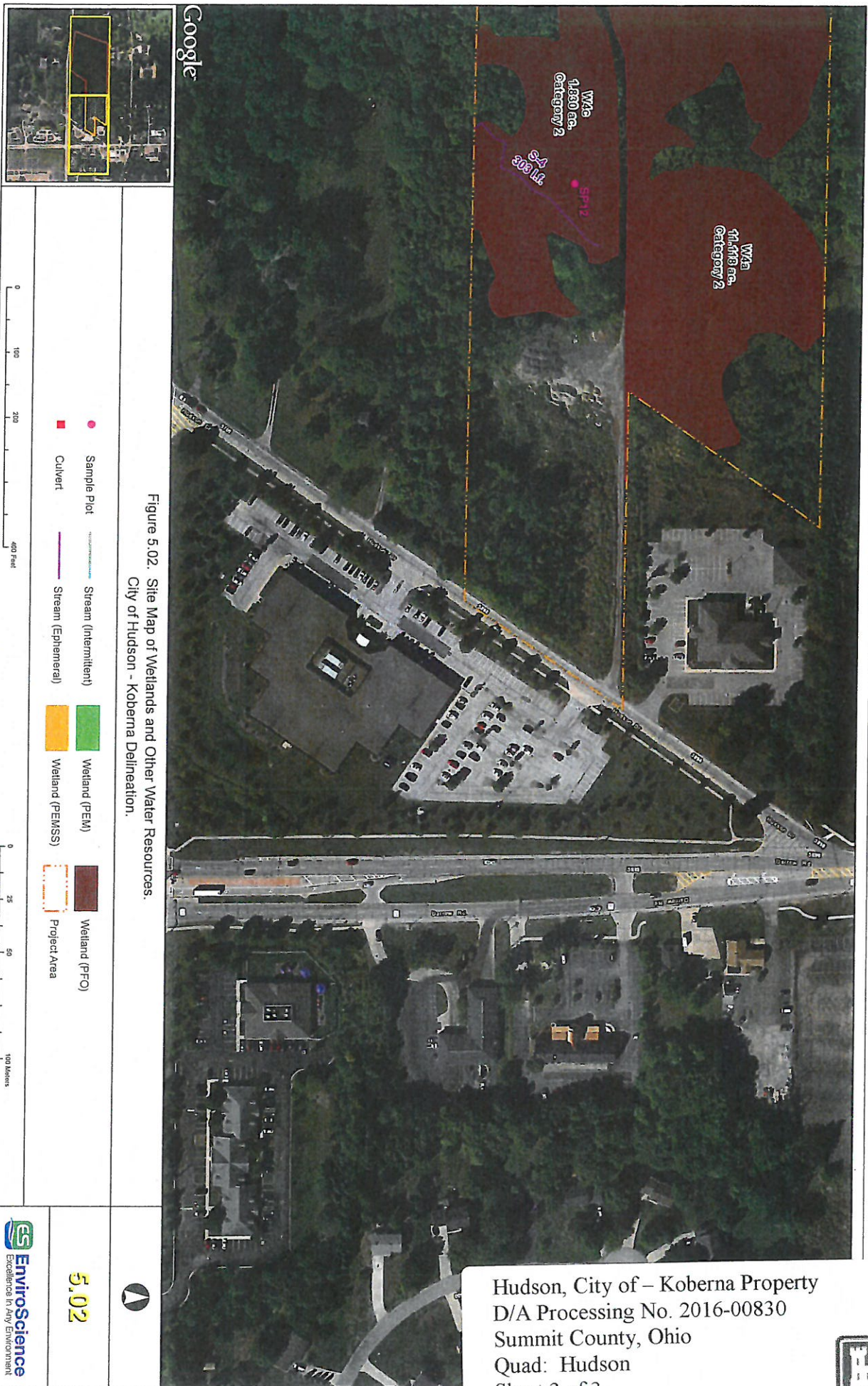


Figure 5.01. Site Map of Wetlands and Other Water Resources.  
City of Hudson - Koberna Delineation.





Basemap courtesy of Google.



5.02



Hudson, City of – Koberna Property  
D/A Processing No. 2016-00830  
Summit County, Ohio  
Quad: Hudson  
Sheet 3 of 3



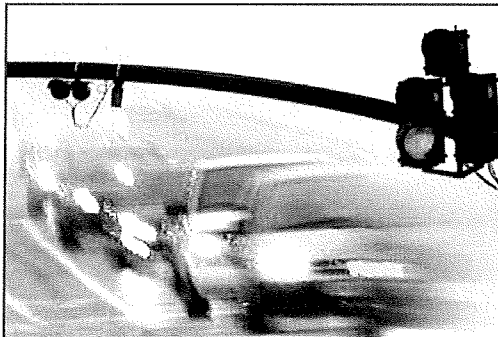
# TRAFFIC IMPACT STUDY

## Koberna Site

### Hudson, Ohio

December 15, 2015

Prepared for:  
City of Hudson  
51 South Main Street  
Hudson, OH 44236



Providing Practical Experience  
Technical Excellence and  
Client Responsiveness

---

## **TMS Engineers, Inc.**

**Transportation Management Services**

2112 Case Parkway South - Unit 7 • Twinsburg, Ohio 44087

Tel: (330) 686-6402 • Fax: (330) 686-6417

Email: [Mail@TMSengineers.com](mailto:Mail@TMSengineers.com)

Web site: [http:// www.TMSengineers.com](http://www.TMSengineers.com)





# **TRAFFIC IMPACT STUDY**

**KOBERNA SITE**

**HUDSON, OHIO**

**DECEMBER 15, 2015**

Prepared For:

**THE CITY OF HUDSON  
51 SOUTH MAIN STREET  
HUDSON, OHIO 44236**

Prepared By:

**TMS ENGINEERS, INC.  
2112 CASE PARKWAY SOUTH #7  
TWINSBURG, OHIO 44087**

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## ***EXECUTIVE SUMMARY***

This Traffic Impact Study (TIS) has been prepared at the request of the City of Hudson for the proposed development of the Koberna site. The project site is located west of Hudson Road and north of Terex Road in the City of Hudson, Summit County, Ohio. **Figure 1, Page 2** shows the proposed location of the development.

The proposed development is expected to consist of relocating the Hudson Schools bus garage facility and the salt dome facility from their existing location at the northwest quadrant of the Owen Brown Street and Morse Road intersection.

The analysis of the site will include 2 access scenarios. The first scenario will include only a single access point along Hudson Road. The second scenario will include an access driveway along Hudson Road and an access driveway along Terex Road. The study will also analyze the impact of converting Hudson Road from a one-way roadway between Darrow Road (State Route 91) and Terex Road to a two-way roadway.

2016 will be analyzed as the opening year for the development. The Year 2036 will be analyzed as the future twenty year analysis.

From the collected traffic data, it was determined that there were five distinct peak hours. The following are the five hours that were analyzed as part of this report

1. 8:00 AM to 9:00 AM
2. 11:00 AM to NOON
3. NOON to 1:00 PM
4. 3:00 PM to 4:00 PM
5. 5:00 PM to 6:00 PM

These periods will be analyzed since they reflect the period of the highest volume of traffic flow for both the study area roadways and the existing bus garage site.

The proposed development will generate additional traffic which may impact the area roadways. This traffic impact study presents an assessment of the impact of the traffic generated by the proposed development on the existing road network adjacent to the site. The results of the analysis have been used to determine what improvements will be required to handle the traffic which will be associated with this use.

The relocated development is expected to generate the following average hourly traffic during the peak periods:

**EXISTING TRIP GENERATION**  
Hudson Bus Garage & Salt Dome Site

TIME PERIOD	ENTERING		EXITING		TOTAL TRIPS	
	TOTAL	BUSES	TOTAL	BUSES	VEHICLES	BUSES
8 - 9 AM	41	26	52	28	93	54
11 - NOON	54	0	64	51	118	51
NOON - 1 PM	58	49	74	2	132	51
3 -4 PM	29	8	38	4	67	12
5 - 6 PM	8	0	9	0	17	0

***Recommended Improvements to Serve Existing Conditions***

No improvements were found to be necessary to accommodate the existing 2015 traffic at the existing intersections within the study area.

***Recommend Improvements to Serve Future Conditions without the Development***

No improvements were found to be necessary to accommodate the expected 2016 and 2036 No Build traffic at the existing intersections within the study area with a one-way Hudson Road.

The following improvement was found to be necessary to accommodate the expected 2016 No Build traffic at the existing intersections within the study area with a two-way Hudson Road.

- Darrow Road & Hudson Road  
- Install traffic signal control.

No additional improvements were found to be necessary to accommodate the expected 2036 No Build traffic at the existing intersections within the study area with a two-way Hudson Road.

***Recommended Improvements to Mitigate the Traffic Associated with the Development***

No improvements were found to be necessary to accommodate the expected 2016 and 2036 Build traffic at the existing intersections within the study area with a one-way Hudson Road and single site access driveway.

No improvements were found to be necessary to accommodate the expected 2016 and 2036 Build traffic at the existing intersections within the study area with a one-way Hudson Road and two site access driveways.

No improvements were found to be necessary to accommodate the expected 2016 and 2036 Build traffic at the existing intersections within the study area with a two-way Hudson Road and single site access driveway.

No improvements were found to be necessary to accommodate the expected 2016 and 2036 Build traffic at the existing intersections within the study area with a two-way Hudson Road and two site access driveways.

The analysis of the ODOT turn lane warrants graphs determined that exclusive turn lanes along Hudson Road and Terex Road are not warranted under the four analysis scenarios that were evaluated for the 2016 and 2036 build conditions.

The intersection of Darrow Road and Hudson Road currently intersects at an acute angle. It is our recommendation that Hudson Road at Darrow Road be re-aligned to create a ninety-degree intersection if Hudson Road is converted to two-way traffic flow with traffic signal control at the intersection.

The proposed access drive along Hudson Road is recommended to be located directly across from the north access drive for existing development along the east side of Hudson Road.

The Terex Road bridge over the railroad tracks creates a vertical curve in the roadway that could limit the available sight distance of vehicles at a proposed site access driveway along Terex Road. It is our recommendation that a proposed access driveway along Terex Road be located across from the existing PASCO, Inc. driveway. The driveway location is located approximately 800 feet from the railroad overpass bridge and should provide adequate sight distance.

The recommended lane use and traffic control for the study area to accommodate expected traffic volumes with a one-way Hudson Road and single site access driveway (1W1A) can be seen in **Figure 48, Page 112.**

The recommended lane use and traffic control for the study area to accommodate expected traffic volumes with a one-way Hudson Road and two site access driveways (1W2A) can be seen in **Figure 49, Page 113.**

The recommended lane use and traffic control for the study area to accommodate expected traffic volumes with a two-way Hudson Road and single site access driveway (2W1A) can be seen in **Figure 50, Page 114.**

The recommended lane use and traffic control for the study area to accommodate expected traffic volumes with a two-way Hudson Road and two site access driveways (2W2A) can be seen in **Figure 51, Page 115**

### ***Conclusion***

Based upon the results of the analysis in this study, it can be seen that the development traffic can be accommodated without impacting the area roadway network

— O H I O —

# HUDSON

COMMUNITY DEVELOPMENT • 115 Executive Parkway, Suite 400 • Hudson, Ohio 44236 • (330) 342-1790

## BOARD OF ZONING AND BUILDING APPEALS

**APPEALS DOCKET NO. 2016-14  
5778 HUDSON DRIVE  
VARIANCE**

**DECISION IS PERMANENT  
REMOVE BACKUP PAPERWORK  
TO RETENTION FILE ON  
DECISION DATE 2021**

### **VIA CERTIFIED MAIL DECISION**

Based on the evidence presented to the Board by Frank Comeriato, Assistant City Manager, City of Hudson, representing the applicant and property owner, City of Hudson, 115 Executive Parkway, Hudson, Ohio 44236, for the property located at 5778 Hudson Drive in District 8 [Industrial/Business Park] at a public hearing held in the 2<sup>nd</sup> Floor Meeting Room at Town Hall, 27 East Main Street, Hudson, Ohio 44236 at 7:30 p.m., on Thursday, July 21, 2016, the Board of Zoning and Building Appeals hereby grants:

A variance to the emergency access requirement that adequate access be provided for emergency vehicles and for those persons rendering fire protection and emergency services to permit development of the school bus maintenance building pursuant to Sections 1207.13(c)(9)(J)(ix), "Transportation/Circulation-Streets, Easements, and Alleyways – Emergency Access-Dead-End Length" of the City of Hudson Land Development Code.

After reviewing the application, the hearing of evidence under oath, reviewing all documentary submissions of interested parties and by taking into consideration the personal knowledge of the property in question, the Board of Zoning and Building Appeals finds and concludes:

1. The property in question will yield a reasonable return and there can be a beneficial use of the property without the variance, however, for this particular use, the variance is a necessary step in the use of this property.
2. The variance is substantial because this type of variance can result in serious consequences if not carefully considered and vetted and confirmed.
3. The essential character of the neighborhood would not be substantially altered and adjoining properties would not suffer a substantial detriment as a result of the variance because of the carefully planned and considered building of the access road.
4. The variance would not adversely affect the delivery of governmental services, (e.g. water, sewer, garbage).
5. The applicant purchased the property with knowledge of the zoning restriction.



6. The applicant's predicament feasibly cannot be resolved through some method other than the requested variance.
7. The spirit and intent behind the zoning requirement would be observed and substantial justice would be done by granting the variance.

Dated: July 21, 2016

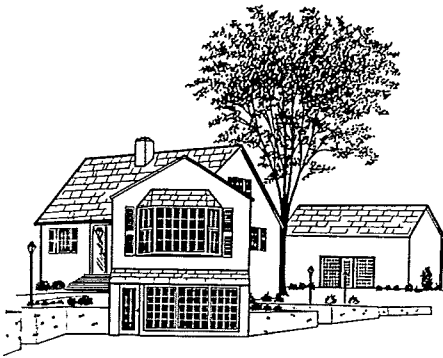
CITY OF HUDSON  
BOARD OF ZONING AND BUILDING APPEALS

  
David W. Lehman, Chairman

*I certify that this is a true and accurate copy of the Decision reached by the Board of Zoning and Building Appeals at the July 21, 2016 meeting.*

  
Judy Westfall, Clerk

Failure of an applicant to commence substantial construction or action with regard to the variance approval within one (1) year of receiving approval of the variance and to complete such construction within two (2) years of receiving approval of the variance shall automatically render the decision of the BZBA null and void, pursuant to Section 1203.08 (3), "Variances – Lapse".



## **BROWN FARMS**

34 Wellgate Dr.  
Hudson, OH 44236  
(330) 650-0340

August 30, 2016

Planning Commission  
City of Hudson  
115 Executive Parkway  
Hudson, Ohio 44236

Ref: Salt Storage and School Bus Garage Construction

Dear Members:

For your consideration, I have attached our earlier request to limit grading at the property line we share with the City.

Without some set back protection, we ask for a temporary fence along the property line where grading is planned.

Thank you for your time on this matter.

Very truly yours,

A handwritten signature in dark ink, appearing to be 'W. Brown', followed by a horizontal line.

Warren Brown

