• Narrative
• Special Use Permit Application
• Flood Plain Map and Wetland Map
• 250’ Buffer Property List
• Kane County Land Use Opinion
• Illinois DNR Review
• Kane County Stormwater Permit
• FAA Approvals
• Driveway Permit Authorization
• Batavia Fire District Approval
• State of Illinois Fire Marshall Approval
• Property Value Study
• Environmental Reports
  a. NEPA
  b. Phase 1
  c. Arch Report
  d. Approval by Army Corps of Engineers
• Construction Drawings
Narrative

Please find enclosed an application for a Shortwave Radio Station. This station will be broadcasting Christian broadcasts in Illinois and all over the world. A search for a property was conducted which resulted in reviewing and eliminating over 1000 properties within Kane County. The perfect property would have the following criteria:

1. Placed in an area that meets the broadcasting requirements.
2. The owner of the land is willing to lease several acres of their land.
3. Property large enough for this type of facility.
4. Meets the zoning requirements including but not limited to size and zoning district.
5. Has no detrimental effect on wetlands.
6. Does not affect floodplain.
7. Does not have a negative effect on aviation due to height or proximity to airports.
8. Does not have a negative effect on surrounding lands, uses, or development.
9. Generally has little topography or other construction limitations.

This property meets or exceeds all of these requirements. You will find enclosed that all other necessary approvals have been obtained other than this Special Use Permit approval. Much time, effort and cost have been spent over the last many months to obtain these approvals from the local and Federal agencies. The cover letter included is a picture of a similar facility from a similar distance from the road. The photo was also zoomed in or the masts would be even less visible.

These facilities are unmanned, produce no significant sound or smell and are rarely visited. While future development in this area is unlikely due to the general type of ownership, enclosed is a study proving that these types of facilities do not have a negative effect on property values. I do wish to stress that this is not an opinion, or internet research, but factual documentation of properties and their values before and after a communications facility was constructed nearby.

Ursanav and Parable Broadcasting respectfully request approval of this Special Use Permit.

Thank you for your time,

Derek McGrew

317-507-4541
INSTRUCTIONS AND APPLICATION FOR ZONING MAP AMENDMENT
AND/OR SPECIAL USE

A request for the rezoning of property or for a special use in Kane County must be filed with all of the attached forms filled out completely.

The application must be signed by the owner of record of the property. In the case of property under purchase contract, the owner of record must sign and the contract purchaser should also sign the application as such purchaser is usually the person who will eventually establish the proposed zoning. Owner and contract purchaser must include their address and phone number on the application.

A **Land Use Opinion Report** from the Kane-DuPage Soil & Water Conservation District Office must accompany the application for rezoning or special use. Information on obtaining their report is available on their website which is noted below. Their report will be forwarded directly to our office.

An **Endangered Species Consultation Agency Action Report** from the Illinois Department of Natural Resources must accompany any rezoning request involving land zoned F-District Farming. Information on obtaining their report is available on their website which is noted below. Their report will be forwarded directly to our office.

Contact with local and/or state highway departments may be necessary. Authority for the location of entrances and exits from property to be rezoned must be obtained from the highway department having jurisdiction. If a township, county or state road is adjacent to the property involved in the rezoning, it may be necessary to dedicate right-of-way. To determine this, contact the Kane County Department of Transportation.

In submitting an application for rezoning, the required fees are as follows: **Residential Use:** $800.00 for areas of less than two (2) acres; $900.00 for two (2) acres but less than five (5) acres; $1,125.00 for five (5) acres but less than ten (10) acres; $1,200.00 for ten (10) acres or more, plus $50.00 per acre or portion thereof over 10 acres. **Non-Residential Use:** $1,500.00 for areas of less than two (2) acres; $1,800.00 for two (2) acres but less than five (5) acres; $2,250.00 for five (5) acres but less than ten (10) acres; $2,250.00 for ten (10) acres or more, plus $75.00 per acre, or portion thereof over ten acres. ALSO, each request for a variation, as part of a rezoning or special use petition, shall be assessed a fee of one hundred dollars ($100.00). Said fee must accompany application for rezoning or special use.

When land and/or the use of land (for which rezoning, special use, or variance is required by Appendix B), is maintained, used or commenced prior to obtaining said rezoning, special use, or variance, by one who knows or should have known the requirements for said rezoning, special use, or variance the fees above specified shall be **increased by one hundred (100) percent.** The payment of such additional fee
shall not relieve any persons from fully complying with the requirements of Appendix B, in the execution of the rezoning, special use, or variance, nor from any other penalties prescribed therein.

Mark VanKerkhoff, Director
Development and Community Services Dept.

Dated: April 12, 2019

Please make note of the addresses below:

Kane County Zoning Board of Appeals
Attn: Zoning Enforcement Officer
719 Batavia Avenue
Geneva, IL 60134
(630) 444-1236

Kane Dupage Soil & Water Conservation District Office
2315 Dean Street
St. Charles, IL 60174
(630) 584-7961
www.kanedupageswed.org/luo.pdf

Endangered and Threatened Species Program Manager
EcoCAT Consultation Program
Office of Realty & Capital Planning
217-785-5500
http://dnr.illinois.gov/ecopublic/

Kane County Department of Transportation
41W011 Burlington Road
St. Charles, IL 60175
(630) 584-1170
APPLICATION FOR ZONING MAP AMENDMENT
AND/OR SPECIAL USE

Instructions:

To request a map amendment (rezoning) for a property, complete this application and submit it with all required attachments to the Subdivision and Zoning Division.

When the application is complete, we will begin the review process.

The information you provide must be complete and accurate. If you have a question please call the subdivision and zoning division, and we will be happy to assist you.

<table>
<thead>
<tr>
<th>1. Property Information:</th>
<th>Parcel Number (s):</th>
<th>11-26-400-009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address (or common location if no address is assigned):</td>
<td>40W015 Seavey Road</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Applicant Information:</th>
<th>Name</th>
<th>Derek McGrew on behalf of URSANAV and Parable Broadcasting</th>
<th>Phone</th>
<th>317-507-4541</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>85 Rangeway Road, North Billerica, MA 01862</td>
<td>Fax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:derek@cellusite.net">derek@cellusite.net</a></td>
<td>Email</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Owner of record information:</th>
<th>Name</th>
<th>Mary Coffey and Joe Reckinger</th>
<th>Phone</th>
<th>630-777-9140</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>39W840 Seavey Road</td>
<td>Fax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td></td>
<td>Email</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Zoning and Use Information:**

2040 Plan Land Use Designation of the property: Open Space

Current zoning of the property: F

Current use of the property: Agricultural

Proposed zoning of the property: F

Proposed use of the property: Wireless Communications

If the proposed Map Amendment is approved, what improvements or construction is planned? (An accurate site plan may be required)

Short Wave Radio Station

---

**Attachment Checklist**

☑ Plat of Survey prepared by an Illinois Registered Land Surveyor.

☑ Legal description

☑ Completed Land Use Opinion (Available in pdf form at www.kanedupageswed.org/luo.pdf), as required by state law, mailed to: The Kane Dupage Soil and Water Conservation District, 545 S. Randall Road, St. Charles, IL 60174.

☑ Endangered Species Consultation Agency Action Report (available in pdf form at http://dnr.illinois.gov/ecopublic/) to be filed with the Illinois Department of Natural Resources. (* This report may best be accessed with Internet Explorer on some computers, per the State)

☑ List of record owners of all property within 250 feet of the subject property

☐ Trust Disclosure (If applicable)

☐ Findings of Fact Sheet

☐ Application fee (make check payable to Kane County Development Department)

---

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

---

Record Owner

[Signature]

Date: 07/03/2020

Applicant or Authorized Agent

[Signature]

Date
## Findings of Fact Sheet – Map Amendment and/or Special Use

- **The Kane County Zoning Board is required to make findings of fact when considering a rezoning.** *(map amendment)*
- **You should "make your case" by explaining specifically how your proposed rezoning relates to each of the following factors.*

<table>
<thead>
<tr>
<th>Name of Development/Applicant</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derek McGrew</td>
<td>07/03/2020</td>
</tr>
</tbody>
</table>

### 1. How does your proposed use relate to the existing uses of property within the general area of the property in question?  
The proposed use will relate well to the area. The proposed use is an unmanned facility with little area of disturbance. The facility produces virtually no sound, no pollution and nearly no traffic. The property is a perfect fit for this type of project.

### 2. What are the zoning classifications of properties in the general area of the property in question?  
F and F-1

### 3. How does the suitability of the property in question relate to the uses permitted under the existing zoning classification?  
While searching for a suitable location for a facility such as this one, there are many factors that have to be considered. These factors include environmental, aeronautical, zoning, construction, surrounding property interest and use and others. This property was selected because it is one of the very few that meets all criteria. Well over 1000 properties were eliminated in the search for placement of this facility. This property not only meets all necessary criteria, but is far from other residential uses and is adjacent to another wireless communications facility.

### 4. What is the trend of development, if any, in the general area of the property in question?  
There has not been any trend of development in this area, and much of the surrounding property is owned by either the same owner as this project, or County Forest Preserve. So, there is no reason to believe that there will be any significant future development along Seavey Road.

### 5. How does the projected use of the property, relate to the Kane County 2040 Land Use Plan?  
The 2040 Land Use plan makes no mention of wireless communications or towers, so it is difficult to relate a use that wasn’t considered in the Land Use Plan. Generally, wireless communications facilities are preferred to be placed in either Agricultural or Industrial zoning districts and uses. This property is not only Agricultural in use, but also is surrounded by land that is Agricultural in zoning and use. As this property is classified as Open Space, the use will relate well with the plan as the proposed use encumbers very little square footage and therefore very little effect on the property’s natural resources.
The Kane County Zoning Board is required to make findings of fact when considering a special use.

Special Uses shall be considered at a public hearing before the Zoning Board of Appeals. In its report of findings of facts, recommendations shall be made to the County Board following the public hearing. The Zoning Board will not recommend a special use unless the following items are addressed:

6. Explain how the establishment, maintenance or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.

The shortwave radio station will have no negative effect whatsoever on the public health, safety, morals, comfort or general welfare of the surrounding area. It could easily be argued that a Christian Radio station promotes the health, morals, comfort and general welfare of the area. The local fire department, DNK, County Stormwater, Federal Aviation Administration, State Fire Marshall and building department have all approved of this project.

7. Explain how the special use will not be injurious to the use, enjoyment and value of other property in the immediate vicinity.

Wireless communications facilities have no fact-based documented effect on the surrounding area or immediate vicinity of the facility. Please find attached within a property value study documenting that there is no effect.

8. Explain how the special use will not impede the normal, orderly development and improvement of the surrounding property.

The proposed use does not have any effect on the normal development of surrounding properties. Although in this location it is unlikely, residential subdivisions are often built around existing telecommunications facilities.

9. Will adequate utility, access roads, drainage and other necessary facilities be provided? Please explain:

Yes. A new access road will be constructed along with necessary utilities such as power and fiber to the facility.
10. Will adequate measures be provided for ingress and egress and so designed to minimize the traffic and congestion? Please explain:

The facility has no measurable effect on traffic. The facility would be visited on average once per month.

11. Will the special use conform to the regulations of the district in which it is located? Please explain:

Yes. The facility is proposed to meet or exceed all setback requirements.
CERTIFICATION OF NOTIFICATION
OF PROPERTY OWNERS WITHIN 250 FEET OF SUBJECT PROPERTY

To: KANE COUNTY ZONING BOARD OF APPEALS
From: Derek McGrew/Applicant
85 Rangeway Road #110
North Billerica, MA 01862

(Ph #) 317-507-4541

The undersigned, being sworn upon this oath, deposes and says that the list below includes the names and addresses of all owners of property within 250 feet of the property referred to in petition for

(circle one) Variance Rezoning Special Use

for the purpose of Construction of a short wave radio station facility

and, further, that all persons owning property within 250 feet of the parcel referred to in petition have been notified of the intent of the petitioner(s).

Petitioner's property is located in Section 26, Township 39N, County of Kane. (Legal Description Attached)

List names of property owners below. (Property Owners do not have to sign this form)

NAME
Mary and Edwin Dunteman
Richard and Susan A Nye
Joe Reckinger and Mary Coffey
Charles, Francis and Mary Coffey
JW KL J Hoscheid K Dunteman
Forest Preserve District of Kane County

ADDRESS (street, city, state and zip code)
02S848 Bliss Road, Sugar Grove, IL 60554
40W257 Seavey Road, Batavia, IL 60510
39W840 Seavey Road, Batavia, IL 60510
40W015 Seavey Road, Batavia, IL 60510
2 S 848 Bliss Road, Sugar Grove, IL 60554
1996 S Kirk Road Suite 320, Geneva, IL 60134

By:

Subscribed and sworn to before me
this ___ day of ____________, 20___

____________________________
(Notary)
# Time Estimate

## Rezonings and Special Uses

(After all required documents have been submitted)

<table>
<thead>
<tr>
<th>Action</th>
<th>Average Number of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>KDS &amp; WCD AND IDOC APPLICATIONS</td>
<td>30</td>
</tr>
<tr>
<td>(Kane-DuPage Soil &amp; Water Conservation District; Illinois Department of Natural Resources)</td>
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</tr>
<tr>
<td>Technical Staff Review</td>
<td>20</td>
</tr>
<tr>
<td>(Meeting held each Monday morning—Petitions scheduled as time permits.)</td>
<td></td>
</tr>
<tr>
<td>Zoning Board Public Hearing</td>
<td>30</td>
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<tr>
<td>(Hearing held as needed—published 15 days prior to hearing—Statutory requirement)</td>
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<tr>
<td>Development Committee</td>
<td>20</td>
</tr>
<tr>
<td>Agenda set for County Board Meeting</td>
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</tr>
<tr>
<td>(Meeting held third Tuesday of each month)</td>
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<tr>
<td>County Board Meeting</td>
<td>20</td>
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<tr>
<td>Final Decision</td>
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<tr>
<td>(Meeting held second Tuesday of each month)</td>
<td></td>
</tr>
</tbody>
</table>

**Total 120**

(4 MONTHS)
Wetland Map

Floodplain Map
Situs Address Buffer

Parcel Number: 1126400009  Distance: 250 feet  Submit

Include Source Parcel: Yes  No

This list contains situs addresses for parcels within 250 feet of parcel 1126400009†

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Address</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
</tr>
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<tbody>
<tr>
<td>1126400009</td>
<td></td>
<td></td>
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<tr>
<td>1125300007</td>
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<tr>
<td>1126400008</td>
<td>39W978 SEAVEY RD</td>
<td>BATAVIA</td>
<td>IL</td>
<td>60510-9402</td>
</tr>
<tr>
<td>1126400001</td>
<td>40W410 SEAVEY RD</td>
<td>BATAVIA</td>
<td>IL</td>
<td>60510-9404</td>
</tr>
<tr>
<td>1126400002</td>
<td>40W018 SEAVEY RD</td>
<td>BATAVIA</td>
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<td>60510-9778</td>
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<tr>
<td>1126400006</td>
<td>40W015 SEAVEY RD</td>
<td>BATAVIA</td>
<td>IL</td>
<td>60510-9419</td>
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<tr>
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<td>40W257 SEAVEY RD</td>
<td>BATAVIA</td>
<td>IL</td>
<td>60510-9420</td>
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</tr>
<tr>
<td>1136100001</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

250 foot buffer of 1126400009 returned 12 parcels
*Indicates condo parcel

This information is based on current GIS Parcel Data

NOTE: Condo Parcels may be included that are beyond the buffer due to the nature of how condos are mapped!
†It will not include any records that could not be compressed due to system locks in the GIS system
‡‡Count includes only unique parcel polygons. All Condos are counted grouped by their associated "-000" communal polygon
January 21, 2020

Prepared for:
Kane County

Petitioner:
Derek McGrew
103 Wilshire Court
Noblesville IN 46062
Petitioner: Derek McGrew, 103 Wilshire Ct, Noblesville, IN 46062
Contact Person: Derek McGrew, 317-507-4541
Unit of Government Responsible for Permits: Kane County
Acreage: 6.76
Location of Parcel: Section 26, Township 39N, Range 7E
Property Address/PIN#: 40W015 Seavey Road, North Aurora
Existing Land Use: Agricultural
Surrounding Land Use: Agricultural
Proposed Land Use: Wireless communication tower

Natural Resource Concerns

Land Cover in the Early 1800’s: This site is located in an area previously identified as forest. (See page 2 for more information.)

Kane County Green Infrastructure Plan: This site is located in an area indicated Environmental Resource Area (with buffer) and Remnant Oak Woodland. (See page 3.)

Wetlands: The National Wetland Inventory map identifies a wetland adjacent to the site. The ADID wetland map does not identify wetland areas on this site. In the event that any indications of wetlands are identified on this site during the proposed land use change, a wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of any wetlands. (See page 4 & 5 for more wetland information.)

Floodplain: There are no floodplain areas identified on this site. (See page 6.)

Streams: There are no streams on this site. (See page 7.)

Regulations: Please note that additional permits are required for any development impacting wetlands, streams or floodplain areas. Please see page 8 for regulation information.

Aquifer Sensitivity: This site is classified as having a high potential for aquifer contamination. (See page 9.)

Topography and Drainage: Please refer to page 10 for information regarding site topography and drainage.

Stormwater: See page 11 for information regarding stormwater management.

Soil Erosion: Any development on this site should include a soil erosion and sediment control plan. (See page 11.)
**Building Limitations:** Soils at this site may contain limitations for dwellings with basements, dwellings without basements, and small commercial buildings. See page 13 and attached Soils Tables located on the final pages this report. All information is from the Soil Survey of Kane County, Illinois.

![Soil Survey Chart]

**Hydric Soils:** There are hydric soils identified on this site. (See page 14.)

![Hydric Soil Chart]

**LESA-Prime Farmland:** Sites with a score of 26-33 or greater on the Land Evaluation (LE) portion of the LESA score are considered to have high value farmland soils. This site has a score of 26 placing it within the definition of high value soils/prime farmland. (See Page 16 for more information.)

**LAND USE OPINION**

**Land Use Opinion:** The most current natural resource data indicates the following concerns for this site: Adjacent Wetlands, Soil Limitations, Aquifer Sensitivity, LESA – Prime Farmland, Soil Erosion and Sediment Control, and Stormwater Management. Based on the information in this report, it is the opinion of the Kane-DuPage Soil and Water Conservation District Board that this site may not be suited for land use change unless the previously mentioned concerns are addressed.
SITE INSPECTION

A site inspection was conducted by Resource Assistant, Jennifer Shroder on January 7, 2020. The following photos were taken during this inspection and reflect the site conditions at that time.
This report presents natural resource information to officials of the local governing body and other decision makers. Decisions concerning variations, amendments or relief of local zoning ordinance may reference this report. Also, decisions concerning the future of a proposed subdivision of vacant or agricultural lands, and the subsequent development of these lands because of these decisions may reference this report. This report is a requirement under the Soil and Water Conservation District Act contained in ILCS 70, 405/1 ET seq.

This report intends to present the most current natural resource information available in an understandable format. It contains a description of the present conditions and resources available and their potential impact on each other. This information comes from standardized data, on-site investigations and other information furnished by the petitioner.

Please read the entire report to coordinate and interrelate all natural resource factors considered. This report, when used properly, will provide the basis for good land use change decisions and proper development while protecting the natural resource base of the county.

The conclusion of this report in no way indicates the impossibility of a certain land use. However, it should alert the reader to possible problems that may occur if the capabilities of the land are ignored. Please direct technical questions about data supplied in this report to:

Kane-DuPage
Soil and Water Conservation District
2315 Dean Street, Suite 100
St. Charles, IL 60175
Phone: (630) 584-7960
These surveys represent one of the earliest detailed maps for Illinois. The surveys began in 1804 and were largely completed by 1843. They predate our county land ownership maps and atlases. These plat maps and field notebooks contain a wealth of information about what the landscape was like before the flood of settlers came into the state.

The vast majority of the landscape of Illinois in the early 1800’s consisted of two different natural resource areas. These two areas were prairie and forest. Prairie and woodland ecosystems are extremely valuable resources for many reasons. These areas:

- provide wildlife habitat and support biodiversity
- provide areas for recreational opportunities
- improve soil health and reduce soil loss
- improve air and water quality

Other designations include, cultural (or agricultural area), marsh, wet prairie, wetland, barrens and water. Please note that these designations are based on surveys taken in the early 1800’s, and may not represent exact site conditions.

This site is located in an area surveyed as forest on the land cover in the early 1800’s map. The District recommends preserving as much as of the natural character of the site as possible during this land use change. It is also recommended that native plants be utilized for landscaping whenever possible. Removal of invasive species is also encouraged.
From the Kane County Green Infrastructure Plan, “Green infrastructure is an interconnected system of natural areas and open spaces including woodlands, wetlands, trails and parks, which are protected and managed for the ecological values and functions they provide to people and wildlife. The Kane County 2040 Green Infrastructure Plan includes analysis of existing natural resources in the County and recommendations for green infrastructure priorities and approaches. The ultimate goal of the Kane County 2040 Green infrastructure Plan is to lay the groundwork for green infrastructure planning and projects at the regional, community, neighborhood and site levels.”

The benefits of green infrastructure include:
- Preservation of habitat and biodiversity
- Water and soil conservation
- Flood storage and protection
- Improved public health
- Encourage local food production
- Economic benefits
- Mitigation and adaptation for climate change

This site includes the following priority areas as designated on the Kane County 2040 Green Infrastructure Plan: Remnant Oak Woodlands, Environmental Resource Area (with buffer).
Wetlands are some of the most productive and diverse ecological systems on earth. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency define wetlands as follows, “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.” Some other common wetlands located in this part of Illinois are fens and wet meadows.

Wetlands function in many ways to benefit mankind. Some of their many functions and benefits include:

- Controlling flooding by offering a slow release of excess water downstream or through the soil.
- Cleansing water by filtering out sediment and pollutants.
- Functioning as rechargers of our valuable groundwater.
- Providing essential breeding, rearing, and feeding grounds for many species of wildlife.

The National Wetland Inventory Map identifies wetlands adjacent to this site. The types of wetlands identified adjacent to this site include: PEMA—Palustrine Emergent Temporarily Flooded. In the event that any indications of wetlands are identified on this site during the proposed land use change, a wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of these wetlands. Please see page 8 for wetland regulation information.

Figure 3: National Wetland Inventory Map
Released in August of 2004, the Kane County Advanced Identification of Aquatic Resources (or ADID) study is a cooperative effort between federal, state, and local agencies to inventory, evaluate, and map high quality wetland and stream resources in the county. ADID studies are part of a U.S. Environmental Protection Agency program to provide improved awareness of the locations, functions, and values of wetlands and other waters of the United States. The primary purpose is to identify wetlands and streams unsuitable for dredging and filling because they are of particularly high quality. This information can be used by federal, state, and local governments to aid in zoning, permitting, and land acquisition decisions. In addition, the information can provide data to agencies, landowners, and private citizens interested in restoration, acquisition, or protection of aquatic sites and resources. For more detailed information regarding wetlands in Kane County, please refer to the full Kane County ADID study at: http://dewprojects.countyofkane.org/adid/index.htm

A review of the Kane County ADID map revealed that no ADID wetlands were identified on this site.
From FEMA’s Floodplain Natural Resources and Functions Chapter 8, “Undeveloped floodplain land provides many natural resources and functions of considerable economic, social and environmental value. Nevertheless, these and other benefits are often overlooked when local land-use decisions are made. Floodplains often contain wetlands and other important ecological areas as part of a total functioning system that impacts directly on the quality of the local environment.”

There are so many benefits of the floodplain that not all can be listed here, but the following is a general list of benefits and functions:

- natural flood storage and erosion control
- water quality maintenance
- groundwater recharge
- nutrient filtration
- biological productivity/wildlife habitat
- recreational opportunities/aesthetic value

According to the Flood Insurance Rate Map, no part of this site is within the boundaries of a 100-year floodplain. This development should not impede the beneficial functions of the floodplain. Please see page 8 for information regarding floodplain regulations.
**Rivers and Streams** are necessary components of successfully functioning ecosystems. It is important to protect the beneficial functions and integrity of our local streams and rivers. Development near stream systems has the potential to increase flooding, especially in urban areas where there is a lot of impervious surface and a greater amount of stormwater runoff. Pollution is also an issue for stream systems in urban and rural areas. It is rare for any surface waters to be impacted by only one source of pollution. With few exceptions, every land-use activity is a potential source of nonpoint source water pollution (IEPA—Nonpoint Source Pollution).

The Illinois Environmental Protection Agency provides the following in regards to nonpoint source pollution, “Nonpoint source pollution (NPS) occurs when runoff from rain and snowmelt carries pollutants into waterways such as rivers, streams, lakes, wetlands, and even groundwater. Examples of or sources of NPS pollution in Illinois include runoff from farm fields, livestock facilities, construction sites, lawns and gardens, city streets and parking lots, surface coal mines, and forestry. The major sources of NPS pollution in Illinois are agriculture, urban runoff, and habitat modification.”

Local watershed management planning is an important effort that involves citizens of a watershed in the protection of their local water resources. Water quality is a reflection of its watershed.

**Common Watershed Goals:**

- Protect and restore natural resources
- Improve water quality
- Reduce flood damage
- Enhance and restore stream health
- Guide new development to benefit watershed goals
- Preserve and develop green infrastructure
- Enhance education and stewardship

There are many subwatershed plans that have already been developed in Kane County. Please follow the link to the Kane County 2040 Green Infrastructure Plan. See page 108 for a list of local watershed plans.

http://countyofkane.org/FDER/Pages/development/planning.aspx

**Nutrient management** is of vital importance to the health of our rivers and streams. Nutrient load in our local streams and rivers has contributed to the Gulf of Mexico hypoxia, or a “dead zone” located where the Mississippi River meets the Gulf of Mexico. This dead zone has little to no biological activity. Yearly averages indicate the dead zone to be greater than 5,000 square miles in size. Illinois was required and has introduced a plan to reduce nutrient loss from point source pollution sources, such as wastewater treatment plants and industrial wastewater, as well as nonpoint pollution sources. Read Illinois’s Plan for reducing nutrient loss here:

http://www.epa.illinois.gov/topics/water-quality/watershed-management/excess-nutrients/nutrient-loss-reduction-strategy/index
The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State’s boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against floodway encroachment, maintenance and enhancement of water quality, protection of fish and wildlife habitat as well as recreational resources. Unregulated use of waters within the State of Illinois could permanently destroy or alter the character of these valuable resources and adversely impact the public. Therefore, please contact the proper regulatory authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

**Who Must Apply:**

**Wetland and/or Floodplain Permit:** Anyone proposing to dredge, fill, riprap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, floodplain or floodway subject to State or Federal regulatory jurisdiction should apply for agency approvals.

**Construction Permit:** Anyone disturbing an acre or more of land during proposed construction activities should apply for the NPDES General Construction Permit ILR10. Building and stormwater permits should also be obtained locally from municipal government and/or Kane County.

**NPDES General Construction Permit ILR10:**
Illinois Environmental Protection Agency, Division of Water Pollution Control, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794. (217) 782-0610.

http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/construction/index

**Coordination:** We recommend early coordination with the regulatory agencies BEFORE finalizing work plans. This allows the agencies to recommend measures to mitigate/compensate for adverse impacts. Also, the agency can make possible environmental enhancement provisions early in the project planning stage. This could reduce time required to process necessary approvals. Please be advised that failure to coordinate with regulatory agencies could result in project shut down, fines and/or imprisonment.

**REGULATORY INFORMATION**

**REGULATORY AGENCIES:**

**Wetland/U.S. Waters:** U.S. Army Corps of Engineers, Chicago District, 111 North Canal Street, Chicago, IL 60606-7206. Phone: (312) 353-6400.
http://www.lrc.usace.army.mil/

**Wetland/Isolated:** Kane County Water Resources Division, 719 Batavia Avenue, Geneva, IL 60134. (630) 232-3400.
http://www.countyofkane.org/FDER/Pages/environmentalResources/water.aspx

**Floodplains:** Illinois Department of Natural Resources\Office of Water Resources, 2050 W. Stearns Road, Bartlett, IL 60103. (847)608-3100.
https://www.dnr.illinois.gov/WaterResources/Pages/Permit%20Programs.aspx
Figure 6: Aquifer Sensitivity Map


The map aquifer sensitivity to contamination (Dey et al 2007) is a representation of the potential vulnerability of aquifers in an area to contamination from sources of contaminants at or near the surface. The U.S. Environmental Protection Agency (1993) defines aquifer sensitivity/contamination potential as “a measure of the ease with which a contaminant applied on or near the land surface can migrate to an aquifer.”

Aquifers function as a storage area for groundwater recharge, which makes them a reliable source of fresh water. Groundwater accounts for a considerable percentage of the drinking water in Kane County. The chart below shows the aquifer sensitivity classifications. This site is classified as having a high potential for contamination.

A = High Potential, B = Moderately High Potential, C=Moderate Potential, D = Moderately Low Potential, E = Low Potential

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Aquifers are greater than 50ft thick and within 5ft of the surface</td>
</tr>
<tr>
<td>A2</td>
<td>Aquifers are greater than 50ft thick and between 5 and 20ft below the surface</td>
</tr>
<tr>
<td>A3</td>
<td>Aquifers are between 20 and 50ft thick and within 5ft of the surface</td>
</tr>
<tr>
<td>A4</td>
<td>Aquifers are between 20 and 50ft thick and between 5 and 20ft below the surface</td>
</tr>
<tr>
<td>B1</td>
<td>Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both within 5ft of the surface</td>
</tr>
<tr>
<td>B2</td>
<td>Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 5 and 20ft below the surface</td>
</tr>
<tr>
<td>E1</td>
<td>Sand and gravel or high-permeability bedrock aquifers are not present within 100 ft of the land surface</td>
</tr>
</tbody>
</table>
USGS Topographic maps and other topographic surveys give information on elevations, which are important to determine slopes, natural drainage directions, and watershed information. Elevations determine the area of impact of flooding. Slope information determines steepness and erosion potential of the site. Slope has the greatest impact in determining the erosion potential of a site during construction activities. Drainage directions determine where water leaves the property in question, possibly impacting surrounding natural resources.

It is important to consider drainage during any proposed construction onsite. Any areas where water leaves the site should be monitored for potential pollutants which could contaminate downstream waters.

The high point of this property is located in the northern portion of the site at an elevation of approximately 710 feet above mean sea level. The property generally drains to the southeast via overland. The lowest elevation on the property is approximately 698 feet above sea level.
STORMWATER

Any proposed removal of vegetation, compaction of soil, and addition of impervious surfaces (rooftops, roadways, etc.) will greatly increase the amount of stormwater runoff generated on this site. The District recommends the use of onsite stormwater management strategies whenever possible. IEPA now recommends that stormwater pollution prevention plans include post-construction stormwater management which retains the greatest amount of post-development stormwater runoff practicable, given the site and project constraints. From the ILR10 permit for construction sites 1 acre or more, “Such practices include but are not limited to: stormwater detention structures (including wet ponds); stormwater retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices).”

Site assessment with soil testing should help to determine what stormwater management practices are best for your site. Insufficient stormwater management has the potential to cause or aggravate flooding conditions on surrounding properties, or elsewhere in the watershed. Please refer to the Kane County Stormwater Ordinance for stormwater requirements and minimum standards.

http://www.countyofkane.org/FDER/Pages/environmentalResources/waterResources/

SOIL EROSION

Development on this site should include the use of a soil erosion and sedimentation control plan. Due to the soil type and slope of the site, the District believes that the potential for soil erosion during and after any proposed construction could be large. Furthermore, the erosion and resulting sedimentation may become a primary nonpoint source of water pollution. Eroded soil during the construction phase can create unsafe conditions on roadways, degrade water quality, and destroy aquatic ecosystems lower in the watershed. Soil erosion also increases the risk of flooding due to choking culverts, ditches, and storm sewers, and by reducing the capacity of natural and man-made detention facilities.

Erosion and sedimentation control measures include: 1) staging the construction to minimize the amount of disturbed areas present at the same time, 2) maintaining or planting vegetative groundcover, and 3) keeping runoff velocities low.

Soil erosion and sedimentation control plans, including maintenance responsibilities, should be clearly communicated to all contractors working on the site. Special care must be taken to protect any wetlands, streams and other sensitive areas.

SOILS INFORMATION

IMPORTANCE OF SOILS INFORMATION

Soils information is taken from the Soil Survey of Kane County, Illinois, United States Department of Agriculture, Natural Resource Conservation Service. This information is important to all parties involved in determining the suitability of the proposed land use change.

SOIL MAP UNITS

The soil survey map of this area (Table 1) indicates soil map units. Each soil map unit has limitations for a variety of land uses such as septic systems, and buildings site development, including dwellings with and without basements. Some soils contain limiting conditions for building site development. See Soils Interpretations section and attached Soil Table.

The Soil Survey Geographic (SSURGO) data base was produced by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies for the Soil Survey of Kane County, Illinois. The soils were mapped at a scale of 1:12,000. The enlargement of these maps to scales greater than that at which they were originally mapped can cause misunderstanding of the detail of the mapping. If enlarged, maps do not show the small areas of contrasting soil that could have been shown at a larger scale. The depicted soil boundaries and interpretations derived from them do not eliminate the need of onsite sampling, testing, and detailed study of specific sites for intensive uses. Thus, this map and its interpretations are intended for planning purposes only.

<table>
<thead>
<tr>
<th>SOIL MAP UNIT</th>
<th>PERCENT OF PARCEL</th>
<th>ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>103A—Houghton</td>
<td>&lt;1%</td>
<td>0.01</td>
</tr>
<tr>
<td>152A—Drummer</td>
<td>2%</td>
<td>0.10</td>
</tr>
<tr>
<td>223B—Varna</td>
<td>48%</td>
<td>3.22</td>
</tr>
<tr>
<td>223C2—Varna</td>
<td>34%</td>
<td>2.33</td>
</tr>
<tr>
<td>232A—Ashkum</td>
<td>16%</td>
<td>1.10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>6.76</strong></td>
</tr>
</tbody>
</table>

Table 1: Soil Map Units

All percentages and acreages are approximate.

We suggest that a geotechnical engineer conduct an on site investigation. This should determine, specifically, what soils type is present at a particular location, along with its associated limitations or potential for a particular use. It will also assist in determining which types of engineering procedures are necessary to account for the limitations of the soil on the site.
Figure 8: Soil Survey Map

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Areas shaded red represent VERY LIMITING limitations for building site development, areas shaded yellow represent SOMEWHAT LIMITING limitations for building site development, and areas shaded green represent NOT LIMITING limitations for building site development.

The soil limitation ratings are used mainly for engineering designs of dwellings with or without basements, local streets and roads, small commercial buildings, septic tank absorption fields, and etc. The ratings of not limiting, somewhat limiting, and very limiting are based on national averages and are defined and used as follows:

Not Limiting (Slight) - This limitation rating indicates that the soil properties are generally favorable for the specified use and that any limitations are minor and easily overcome.

Somewhat Limiting (Moderate) - This rating indicates that the soil properties and site features are unfavorable for the specified use, but that the limitations can be overcome or minimized with special planning and design.

Very Limiting (Severe) - This indicates that one or more soil properties or site features are very unfavorable and difficult. A major increase in construction effort, special designs, or intensive maintenance is required. These costly measures may not be feasible for some soils that are rated as severe.

There are limitations for building site development on this site. A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.
**HYDRIC SOILS**

**Figure 9: Hydric Soils**

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Hydric soils are shaded purple and soils with hydric inclusions are shaded yellow.

**Hydric soils** are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

**Hydric inclusions** are small areas, or inclusions, of nonhydric soils in the higher positions of the landform or map units dominantly made of nonhydric soils with inclusions of hydric soils in the low positions on the landform.

Hydric soils provide limitations for building site development due to their potential for ponding and poor drainage capacity. This often results in the need for improved drainage onsite prior to any proposed development. Any change to the natural drainage onsite has the potential to create flooding issues on and adjacent to the site. Hydric soils are often organic (peat or muck) and not suitable construction material. Hydric soils also may indicate wetlands onsite.

**The NRCS Soil Survey indicates hydric soils on this site.** A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.
**LESA– PRIME FARMLAND**

NOTE: The Kane County LESA System was revised and updated in 2004. Scores are reflected through a 33 point system used for the soils or Land Evaluation (LE) portion of the LESA Score.

Through the use of Kane County’s Land Evaluation and Site Assessment System (LESA), a numerical value was determined for this site. The LESA System is designed to determine the quality of land for agricultural uses and to assess sites or land areas for their long term agricultural economic viability. In agricultural land evaluation, soils of a given area are rated ranging from the best to the worst suited for a stated agricultural use, i.e., cropland, forest land, or range-land. A relative value is determined for each soil. The best soils are assigned a value of 33 and all others are assigned lower values. Therefore, the closer the relative value is to 33, the more valuable and more productive the site’s soils are for agricultural purposes.

The land evaluation represents thirty-three percent of the total LESA score. It is based on data from the National Cooperative Soil Survey. The site assessment portion of a LESA represents sixty-seven percent of the LESA score. It is based on factors such as zoning and land use compatibility.

The land evaluation for this site is 26, which does represent the upper percent level of agricultural productivity.
Our opinion is based on information from the following sources:


Kane County’s Wetlands and Streams Advanced Identification (ADID) Study completed in 2004.


United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County, IL SSURGO soil layer certified in 2007, and DuPage County, IL SSURGO soil layer certified in 2007 and accompanying interpretations.


An on-site investigation conducted by the SWCD Resource Assistant, Jennifer Shroder on January 7, 2020.

We respectfully submit this information in compliance with the Illinois Soil and Water Conservation Districts Act (ILCS 70, 405/1 et seq). The District Board reviews proposed developments. Jennifer Shroder, Resource Assistant, prepared this report.

cc: Derek McGrew
103 Wilshire Ct
Noblesville, IN 46062
Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Map unit: 103A - Houghton muck, 0 to 2 percent slopes

Component: Houghton, muck (90%)

The Houghton, muck component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on outwash plains. The parent material consists of herbaceous organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 45 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Map unit: 152A - Drummer silty clay loam, 0 to 2 percent slopes

Component: Drummer, drained (94%)

The Drummer, drained component makes up 94 percent of the map unit. Slopes are 0 to 2 percent. This component is on outwash plains on plains. The parent material consists of loess over stratified foamy outwash. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 2w. This soil meets hydric criteria.

Map unit: 223B - Varna silt loam, 2 to 4 percent slopes

Component: Varna (90%)

The Varna component makes up 90 percent of the map unit. Slopes are 2 to 4 percent. This component is on ground moraines. The parent material consists of thin mantle of loess or other silty material and in the underlying till. Depth to a root restrictive layer, dense material, is 24 to 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent.

Map unit: 223C2 - Varna silt loam, 4 to 6 percent slopes, eroded

Component: Varna, eroded (96%)

The Varna, eroded component makes up 96 percent of the map unit. Slopes are 4 to 6 percent. This component is on ground moraines. The parent material consists of thin mantle of loess or other silty material and in the underlying till. Depth to a root restrictive layer, dense material, is 24 to 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent.
The Ashkum, drained component makes up 92 percent of the map unit. Slopes are 0 to 2 percent. This component is on ground moraines on uplands. The parent material consists of clayey colluvium over till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 2w. This soil meets hydric criteria.
Dwellings With Basements

Rating Options

Attribute Name: Dwellings With Basements

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

<table>
<thead>
<tr>
<th>Map symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Component name and % composition</th>
<th>Rating reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>103A</td>
<td>Houghton muck, 0 to 2 percent slopes</td>
<td>Very limited</td>
<td>Houghton, muck 90%</td>
<td>Ponding</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Subsidence</td>
<td></td>
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<td></td>
<td></td>
<td>Depth to saturated zone</td>
<td></td>
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<td></td>
<td>Organic matter content</td>
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<td></td>
<td></td>
<td>Houghton, ponded 4%</td>
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<td>Subsidence</td>
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<td></td>
<td>Depth to saturated zone</td>
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<td></td>
<td>Organic matter content</td>
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<td></td>
<td>Depth to saturated zone</td>
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<td>Willette, muck 1%</td>
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<td>Ponding</td>
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<td>Subsidence</td>
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<td></td>
<td></td>
<td></td>
<td>Depth to saturated zone</td>
<td></td>
</tr>
<tr>
<td>152A</td>
<td>Drummer silty clay loam, 0 to 2 percent slopes</td>
<td>Very limited</td>
<td>Drummer, drained 94%</td>
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<td>Ponding</td>
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<td>Shrink-swell</td>
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<td>Ponding</td>
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<td>Shrink-swell</td>
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<td>Harpster, drained 3%</td>
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<td>Ponding</td>
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<td></td>
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<td>Shrink-swell</td>
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<td>Varna silt loam, 2 to 4 percent slopes</td>
<td>Somewhat limited</td>
<td>Varna 90%</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<td>Depth to saturated zone</td>
<td></td>
</tr>
<tr>
<td>223C2</td>
<td>Varna silt loam, 4 to 6 percent slopes, eroded</td>
<td>Somewhat limited</td>
<td>Varna, eroded 96%</td>
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<td></td>
<td></td>
<td>Depth to saturated zone</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Shrink-swell</td>
<td></td>
</tr>
<tr>
<td>232A</td>
<td>Ashkum silty clay loam, 0 to 2 percent slopes</td>
<td>Very limited</td>
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Dwellings Without Basements

Rating Options

Attribute Name: Dwellings Without Basements

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. “Not limited” indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. “Somewhat limited” indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. “Very limited” indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

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<th>Rating reasons</th>
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<tr>
<td>103A</td>
<td>Houghton muck, 0 to 2 percent slopes</td>
<td>Very limited</td>
<td>Houghton, muck 90%</td>
<td>Ponding</td>
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<td>Organic matter content</td>
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<td>Willette, muck 1%</td>
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<td>152A</td>
<td>Drummer silty clay loam, 0 to 2 percent slopes</td>
<td>Very limited</td>
<td>Drummer, drained 94%</td>
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<td>223B</td>
<td>Varna silt loam, 2 to 4 percent slopes</td>
<td>Somewhat limited</td>
<td>Varna 90%</td>
<td>Shrink-swell</td>
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<tr>
<td>223C2</td>
<td>Varna silt loam, 4 to 6 percent slopes, eroded</td>
<td>Somewhat limited</td>
<td>Varna, eroded 96%</td>
<td>Shrink-swell</td>
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<td>232A</td>
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<td>Orthents, clayey 2%</td>
<td>Shrink-swell</td>
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Small Commercial Buildings

Rating Options

Attribute Name: Small Commercial Buildings

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification of the soil). The properties that affect excavation include depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

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Federal Agencies
U. S. Army Corps of Engineers
Regulatory Branch
231 S LaSalle Street, Suite 1500
Chicago, Illinois 60604
(312)846-5330
http://www.usace.army.mil

U.S.D.A. Natural Resources Conservation Service
2315 Dean Street Suite 100
St. Charles, Illinois 60175
(630)584-7960 ext. 3
http://www.il.nrcs.usda.gov/

U.S. Fish & Wildlife Service
Chicago Illinois Field Office
230 South Dearborn Suite 2938
Chicago, IL 60604
(847)298-3250
http://www.fws.gov/

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604
(312)353-2000 or (800)621-8431
http://www.epa.gov/region5/
r5hotline@epa.gov

State Agencies
Illinois Department of Natural Resources
1 Natural Resources Way
Springfield, Illinois 62702-1271
(217)782-6302
http://dnr.state.il.us/

Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-3397
http://www.epa.state.il.us/

Illinois Department of Transportation
2300 South Dirksen Parkway
Schaumburg, Illinois 62764-0001
(217)782-7820/(800)452-4368
http://www.idot.illinois.gov/

Illinois Natural History Survey
1816 South Oak Street MC652
Champaign, Illinois 61820
(217)333-6880
http://www.inhs.uiuc.edu/

County Offices
Kane County
Government Center
719 South Batavia Ave.
Geneva, IL 60134
(630)232-3400
http://www.countyofkane.org/

Development Department
(630)232-3492

Department of Environmental Management
(630)208-5118

Forest Preserve District
1996 South Kirk Road, Suite 320
Geneva, IL 60134
(630)232-5980
forestpreserve.countyofkane.org

Health Department
1240 North Highland Avenue
Aurora, IL 60506
(630)208-3801
December 20, 2019

Mr. Derek McGrew
103 Wilshire Court
Noblesville, IN 46062

RE:  Aurora West Shortwave
Consultation Program
EcoCAT Review #2004878
Kane County

Dear Mr. McGrew:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. Additionally, the Department may offer advice and recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, et seq.]; the *Illinois Wildlife Code* [520 ILCS 5, et seq.]; and the *Herptiles-Herps Act* [510 ILCS 69].

The proposed action consists of installation of an AM shortwave radio station telecommunications facility located at 40W015 Seavey Road in Batavia, IL. The EcoCAT system identified Nelson Lake Marsh Illinois Natural Area Inventory (INAI) Site and Nelson Lake Marsh Nature Preserve approximately 0.6 miles from the proposed facility. This area contains records for the State-listed black tern (*Chlidonias niger*), black-crowned night heron (*Nycticorax nycticorax*), common moorhen (*Gallinula galeata*), least bittern (*Ixobrychus exilis*) and yellow-headed blackbird (*Xanthocephalus xanthocephalus*).

Due to the potential presence of the listed migratory birds in the area, the Department recommends the project proponent consider adopting the U.S. Fish & Wildlife Service-Midwest Regions “Endangered Species recommendations for Communication Tower Siting, Construction, Operation, and Decommissioning Recommendations”. Please use the link below to access the USFWS recommendations:


Given the above recommendations are adopted, the Department has determined that impacts are unlikely. **In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.**
Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project’s implementation, the applicant must comply with the applicable statutes and regulations.

Please contact me with any questions about this review.

Sincerely,

Adam Rawe
Resource Planner
Office of Realty & Capital Planning
Illinois Dept. of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
adam.rawe@illinois.gov
Phone: (217) 785-4991
KANE COUNTY
STORMWATER
PERMIT
NO. PRSW202000340

This project has been permitted for the following:

[X] Soil Erosion & Sediment Control
[ ] Stormwater Detention
    Wetland Impact(s)
    Floodplain Impact(s)

This project allows for the following specific activity(s):
Construction of a Shortwave Radio Station, access drive and equipment pad. BMP to be
constructed as Watershed Benefit Measure in existing depressional storage area.

Project Name: Shortwave AM at 39W840 Seavey
Site Location: 
Township(s): Blackberry
    Section(s): 
Applicant/Owner: UrsaNav applicant / Coffey & Reckinger owners

Issued By: Jodie Wollnik Signature: ___________________________ Date: 06/05/2020

Permit to be posted in a visible location
When calling with questions or to request an inspection, please refer to permit number.
Standard Conditions that apply to all permitted projects:

1. This permit does not include authorization from any other Kane County Department or Division. No guarantee for the construction of the permitted improvements is granted based on this permit alone. Additional permits or authorizations from other local agencies may be required.
2. This permit does not relieve the permittee of the responsibility to obtain federal and/or state authorizations required for the construction of the permitted activity. If the permittee is required by law to obtain approval from any federal or state agency to do the work, this permit is not effective until federal or state approval.
3. All developments shall meet the requirements of §201, §202, Articles 3 and 6 of the Kane County Stormwater Management Ordinance (the “Ordinance”), latest edition.
4. The site is to be stabilized as soon as possible during the construction process. All disturbed area shall be stabilized within 14 days of final grading or when left idle for more than seven days.
5. This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit, and does not authorize any damage to private property or invasion of private rights.
6. The Division in issuing this permit has relied upon the statements and representations made by the permittee; if any statement or representation made by the permittee is false, the Division may revoke the necessary based on conditions found in the field during construction.
7. The previous mentioned conditions do not preclude additional improvements or further reviews that may be necessary based on conditions found in the field during construction.
8. The expiration date for this permit is 12/31/2023 in accordance with the Kane County Stormwater Ordinance refer to §501 of the Ordinance for renewal options.

Standard conditions below apply to this permitted activity:

Offsite outfall is not currently functioning due to a failure in the Village of North Aurora. The Village is currently working on repairs, therefore no additional offsite outfall work is required as part of this project.

The applicant has certified that the property owner is aware that any additional impervious surfaces added to the property in the future will trigger stormwater detention for the AM Radio improvements in addition to the owner’s improvements.

The applicant will record the final Declaration of Restriction and Covenant and provide record drawings for the WBM prior to release of the LOC

The approved plans are dated June 1, 2020. The access drive past the house as well as the equipment pad are required to drain to the WBM in the depressional storage area.

All erosion control measures shall be installed in accordance with Article 3 "Erosion and Sediment Control (NRCS)" of the Ordinance and with the plan specifications as listed on the site improvement plans. Kane County shall be notified upon completion of the installation of the soil erosion measures.

The proposed development may not impede flow through the site. No fill material shall be placed within any overland flood route, floodplain or existing depressional area.

Record Drawing or a final grading survey shall be submitted prior to final inspection for review of the constructed improvements.
** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

<table>
<thead>
<tr>
<th>Structure:</th>
<th>Antenna Tower Aurora Array Tower 1</th>
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<tbody>
<tr>
<td>Location:</td>
<td>Batavia, IL</td>
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<tr>
<td>Latitude:</td>
<td>41-49-29.33N NAD 83</td>
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<td>Longitude:</td>
<td>88-23-50.89W</td>
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<tr>
<td>Heights:</td>
<td>702 feet site elevation (SE)</td>
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<td>199 feet above ground level (AGL)</td>
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<td>901 feet above mean sea level (AMSL)</td>
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This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 09/05/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.
This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact our office at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-AGL-2117-OE.

**Signature Control No: 429684274-432699046**

Bill Ratts
Technician

Attachment(s)
Frequency Data
Map(s)

cc: FCC
### Frequency Data for ASN 2020-AGL-2117-OE

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** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

<table>
<thead>
<tr>
<th>Structure:</th>
<th>Antenna Tower Aurora Array Tower 2</th>
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<tr>
<td>Location:</td>
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<td>Latitude:</td>
<td>41-49-31.33N NAD 83</td>
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<td>Heights:</td>
<td>706 feet site elevation (SE)</td>
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<tr>
<td></td>
<td>199 feet above ground level (AGL)</td>
</tr>
<tr>
<td></td>
<td>905 feet above mean sea level (AMSL)</td>
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</table>

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

See attachment for additional condition(s) or information.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 09/05/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.

(b) extended, revised, or terminated by the issuing office.

(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO
SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (816) 329-2544, or William.M.Ratts@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-AGL-2118-OE.

Signature Control No: 429684347-432699408 ( DNE )
Bill Ratts
Technician

Attachment(s)
Additional Information
Map(s)

cc: FCC
This determination is for the structure only. No frequencies have been added to case and therefore were not evaluated.
Derek:

As long as you are using the existing entrance that is already there along Seavey Road, no permit is necessary.

Regards,

Rod Feece
Highway Commissioner
Blackberry Township
Elburn, IL  60119
☎ 630-365-9109 x2
☎ 630-365-6568
✉️ roads@blackberrytwp.com
🌐 www.blackberrytwp.com

This transmission may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If you are not the intended recipient, consider yourself notified that any disclosure, copying, distribution, use, or reliance on this transmission is strictly prohibited. Please destroy this transmission in any format and notify the sender, if you received this transmission in error.
Thank you.

Rod,

Can you please confirm that Blackberry Twp is aware that we are planning to improve and use the existing farm entrance just East of the address and on the parcel listed below and that no permit is necessary?

40W015 Seavey Road, Batavia, IL. Parcel 11-26-400-009

Thanks!

Derek McGrew
CSite, LLC
103 Wilshire Court
Noblesville, IN  46062
317-507-4541
🌐 www.cellusite.net
Every Site, Every Day
June 16, 2020

Derek McGrew
CSite, LLC
103 Wilshire Ct.
Noblesville, IN 46062

RE: UrsaNav
40W015 Seavey Rd.
Batavia, IL 60510
Kane County Permit #2020-00729

Mr. McGrew,
The generator installation plans, received June 10, 2020, for the above address have been reviewed and approved with the following comment(s):

1. Please contact the IL Office of the State Fire Marshal for guidance on above-ground fuel storage installations. The plans may be required to be submitted for review and permit.
2. Construction and electrical requirements are subject to the Kane County Building Department review and approval.
3. The ability of the Batavia Fire Department to provide service depends greatly on access to the site. As the installation appears to be unmanned, it is recommended that the roadway provide a vehicle weight capacity of 75,000 pounds, and that the roadway be kept free of obstructions at all times including mud, ice, and snow.
4. Access to the site includes keyed access to the gate and the building. A Batavia Fire Department lock box is required. They may be purchased through the City of Batavia Community Development Office (630-454-2700).
5. A fire suppression plan has been received, reviewed, and approved.
6. The proposed fire alarm must have a plan submitted to the fire department for review and approval.
7. The project has been submitted under two different addresses, the above listed address and in your email as 39W840 Seavey Rd. Please confirm the correct address for the project.
8. The fire alarm and fire suppression systems installations require an acceptance test upon completion. Please allow 48 hours when scheduling.
Sincerely,

John Kessler

Fire Marshal
Batavia Fire Department
630-454-2100
June 18, 2020

Derek McGrew
URSANAV
85 Rangeway Road, Suite 110
North Billerica, MA 01862

Re: Parable Broadcasting
39W840 Seavey Road
Batavia, IL 60510
KANE COUNTY

Dear Mr. McGrew:

Applications and drawings have been reviewed by the Technical Services Division of the Office of the Illinois State Fire Marshal (OSFM), for the proposed installation of above ground bulk storage tanks (ASTs) at the above referenced location.

A copy of this review letter is being returned to you as well as to the local fire department and a fire prevention inspector from the Office of the Illinois State Fire Marshal. You are required to contact the OSFM Fire Prevention Division Regional Office via written correspondence when all work has been completed and before the proposed tanks are filled with product to request that an on-site inspection can be scheduled. The installation shall not be placed in operation until approval is given by the OSFM. The written request to schedule an inspection may be emailed to SFM.FirePreventionChicago@illinois.gov or faxed to AST Inspections at 312-814-3459. The faxed or e-mailed correspondence must include the address of the tank installation and a name and phone number of a contact person who the OSFM should contact regarding the tank installation inspection and a copy of the plan review letter. The findings of this review are effective for a period of twelve (12) months from the date of this letter. If the proposed installation is not made within this time period, the findings will be considered void, and re-application to the Office of the State Fire Marshal is required. No extensions will be issued. This review specifically pertains to:

ONE (1) NEW 693 GALLON CAPACITY, ABOVEGROUND, INDOOR BULK LIQUID DIESEL STORAGE TANK(S).

This review does not pertain to the installation, removal, lining or abandonment of underground storage tanks at this facility. Nor does this review pertain to any other existing or future aboveground or LP-Gas storage tanks located at this site other than those specified on the application and in this review letter.

The installation appears to conform to Title 41 Illinois Administrative Code Part 160 “Storage, Transportation, Sale and Use of Gasoline and Volatile Oils: Rule and Regulations Relating to General Storage” with the following noted exceptions and special conditions:
GENERAL

1. This review does not pertain to the dispensing of fuel from this tank(s) (such as gasoline or diesel fuel) into the fuel tank(s) of motor vehicles. Any tank installed at this site for the purpose of dispensing fuel into other vehicles shall have a “Dispensing Only” application submitted to the OSFM’s Division of Technical Services and shall be installed in compliance with Title 41 Illinois Administrative Code 180. (Bulk truck and tank car loading/unloading is not considered “dispensing” and therefore is permitted.)

2. The findings of this review pertain specifically to the product listed and do not automatically pertain to any other classification of flammable or combustible liquid being stored in the tank(s).

3. In accordance with OSFM policy, when an integral fuel supply tank for a generator is located inside of any occupancy, building or any modular structure that the tank and its venting must comply with Part 160 and the requirements of the Policy on the “Indoor Storage Tanks of Flammable and Combustible Liquids” which require that the tank’s vents and fill piping terminate outside of the building or structure. In those situations where the generator is integrated with the fuel supply tank and is located outside of an occupancy, building or any modular structure, and the fuel contained is a combustible liquid, the fuel supply tank must be in compliance with Part 160 and OSFM Policy 07-TS-004 with the exception that:

   • The tank’s vents may terminate inside the generator compartment provided the compartment is louvered on multiple sides and the louvers are located or extend to the lower portion of the walls or doors. (If the generator compartment is not louvered, the tank vents must extend to the outside of the generator compartment).

   • The fuel fill port may be located in the generator housing whether louvered or not provided the fill cap is a tight-fit.

VALVES AND PIPING

4. Any indoor product piping shall be so located that any leakage resulting from pipe failure would not unduly expose persons. Piping shall be arranged so leakage can readily be controlled by operation of an accessible remotely located valve(s).

5. Any indoor product piping shall be of steel or nodular iron, or otherwise be protected by materials having a fire resistance rating of no less than 2-hours.

SITE LAYOUT AND SAFETY FEATURES

6. No combustible material shall be permitted under, or within 10 feet of any storage tanks.

7. All electrical installations, appliances, equipment, and wiring shall conform to the provisions of NFPA 70(1984), Chapter 5 and application sections thereof.

INDOOR TANKS

8. If the building containing the indoor flammable/combustible liquid storage tank/s also contains other occupancy types (such as office or combustible storage areas) then the tank shall be separated from
those areas of the building by 2-hour fire resistant construction, by a fire insulated tank listed in accordance with UL 2085, or a fire resistant tank listed in accordance with UL 2080. Aboveground indoor Class III B liquid storage tanks are not required to be physically separated from other areas of an occupancy by fire-rated barriers or by fire-rated tank design, regardless of occupancy classification.

The Office of the State Fire Marshal recommends contact with all local authorities to ensure compliance with their regulations as well as the findings of this review letter.

The Office of the State Fire Marshal will conduct an inspection as soon as possible after notification of the completion of all work. If work at the installation site is found to be incomplete or in violation of applicable regulations, follow-up inspections will be conducted at the convenience of the assigned fire prevention inspector, with use of the tanks prohibited until such final inspection occurs.

Respectfully,

Bernie Arends
OSFM Division of Technical Services

c: OSFM Fire Prevention Portal
   Fire Chief, Batavia Fire Department
   Additional To: Tank Owner
APPLICATION FOR NON-DISPENSING ABOVEGROUND BULK STORAGE TANK INSTALLATION

Complete and file with site plans, 8½ x 11” only, at the above address.

(1) OWNER OF TANKS - Corporation, partnership, or other business entity: (Must be mailing address):
Name Parable Broadcasting
Street Address 440 Monticello Ave, Suite 2200
City Norfolk State VA Zip 23510
Contact Person Phone Charles Schue
Email Address cschue@ursanav.com

(2) FACILITY - (Name and address where tanks are located):
Name Joe Reckinger and Mary Coffey
Street Address 39W840 Seavey Road
City Batavia State IL Zip 60510
Contact Person Phone Derek McGrew / 317-507-4541
Email Address derek@cellusite.net

(3) PERSON/COMPANY INSTALLING TANK(S): I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that all information submitted is true, accurate and complete.
Company Name URSANAV
Address 85 Rangeway Road, Suite 110
City North Billerica State MA Zip 01862
Telephone # 703-623-5212 Fax #
Email Address cschue@ursanav.com
Name of Authorized Representative Derek McGrew
Title or Position Agent
Signature 06/17/2020

(4) SITE STATUS – (Check all that apply): □ Installing Initial AST □ Relocating Existing AST at Site
□ Replacing Existing AST □ Adding Additional AST at Existing AST Site

(5) GENERAL INFORMATION - Fill in the appropriate blanks for the AST system(s) that will be installed.
Attach additional sheet(s) if more space is needed.

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<th>Tank Number</th>
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<th>Product to be Stored</th>
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<th>Material of Construction of Piping</th>
<th>Size of Emergency Vent</th>
<th>Is Secondary Containment Provided? Y/N</th>
<th>Is Tank Electrically Grounded? Y/N</th>
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(8) METHOD OF SECONDARY CONTAINMENT:

☐ Earthen Dike  ☑ Double Walled Tank  ☐ Steel Catch-Pan

☐ Concrete Dike  ☑ Tank Vaulted in Concrete  ☐ Other (explain below)

Explanation: ____________________________

(9) PURPOSE OF TANK INSTALLATION (Tanks for dispensing fuel into motor vehicles require filing of different application):

☐ Waste Oil Storage  ☑ Emergency Generator Fuel  ☐ Process Liquids

☐ Auto Lube Oil Storage Heating Oil  ☐ Bulk Petroleum Storage  ☐ Other (explain below)

Explanation: ____________________________

(10) WILL TANK(S) BEAR THE LISTING LABEL OF UL OR ANOTHER NATIONAL TESTING LAB?

☐ UL 142, ☑ UL 2080, ☐ UL 2085 ☐ UL 2244 ☐ UL 2245 (Check all that apply)

☐ Another National Testing Lab: Name: ____________________________

(11) IF TANK(S) DO NOT BEAR THE LABEL OF A RECOGNIZED LAB, TO WHAT SPECIFICATIONS ARE THEY CONSTRUCTED?

Explanation: ____________________________________________

(12) WILL TANK(S) BE FABRICATED ON SITE (FIELD ERECTED) OR PRE-FABRICATED AT FACTORY?

☐ Fabricated On Site  ☑ Pre-Fabricated at Factory

(13) IS A REGULAR VENT OPENINGS AT LEAST 1 ¼" IN DIAMETER BEING PROVIDED? (Note: IF a pump is used to fill the tank, and a tight connection is made to the fill pipe, the vent shall not be smaller than the fill pipe.)

☐ Yes  ☐ No: ____________________________

(14) IS ABOVEGROUND PIPING PROTECTED AGAINST MECHANICAL INJURY REASONABLY POSSIBLE? ☑ Yes  ☐ No

(15) METHOD FIRE SUPPRESSION PROVIDED?

☐ Portable fire extinguishers (Minimum rating of 4A:60 BC)  ☐ Foam Suppression System

☐ Other (Explain): Fire Suppression Plan

(16) WILL TANK(S) BE LOCATED “INDOORS”? (If “No”, disregard following questions)

☑ Yes  ☐ No

(a) Type of occupancy ____________________________

(e.g., Hospital, Auto Dealer, Industrial Factory, Liquid Warehouse, Service Station, etc.)

(b) Is the tank separated from other areas of the building by fire resistant construction? (A 2-hour fire-rated separation is required except for 2-hour fire-rated ASTs or if only Class IIIB liquids are being stored)

☐ Yes  ☑ No

(c) Method of accomplishing 2-hour fire rated separation between ASTs and other areas of the building:

☐ Fire-Rated AST  ☑ Fire-Rated Separation Provided by Building Components

(d) Is the tank vented to the exterior? (Exterior venting required except for Class IIIB liquids)

☐ Yes  ☐ No

(e) Does the fill line terminate exterior to the building? (Exterior fill is required except for Class IIIB liquids)

☐ Yes  ☐ No

MAKE SURE SITE PLANS IDENTIFY ALL TANKS, PIPING, BUILDINGS AND PROPERTY LINES WITH ALL SEPARATION DISTANCES SHALL BE IDENTIFIED INSUFFICIENT INFORMATION OR ILLEGIBILITY IS CAUSE FOR RETURN OR DENIAL
Market Impact Analysis
Effect Wireless Towers Have On Surrounding Properties

By
Jim Snodgrass – Wall & Associates
Lejo Harmeson – Wall & Associates
Darren Snodgrass – TNG Wireless Consulting
Personal Background

Jim Snodgrass has been a Real Estate Broker on the West Side of Indianapolis since 1969. Formerly Vice President of Residential Sales at F.C. Tucker Company, Jim has developed no less than 6 subdivisions in Western Marion County, Hendricks County and Morgan County. Principal at Wall & Associates since its’ inception in 1989 Jim has been actively involved in residential development and sales along with commercial / industrial projects.

Lejo Harmeson has been a Real Estate Broker in the Central Indiana market since 1991. He is the current Managing Broker for Wall & Associates. Lejo has been involved in residential and commercial transactions in Hendricks, Marion, Morgan, Putnam, Montgomery, Hamilton, Hancock, Madison, Shelby, Monroe and Delaware Counties. Prior to working with Wall & Associates Lejo was involved in the Mortgage Banking side of the real estate business.

Darren Snodgrass has been an Indiana Real Estate Broker since 1986. He has been in the Wireless Site Acquisition and Development industry since 1994. Darren has been the President of Site Development Services for a local Wireless Infrastructure business as well as a National Project Director for the third largest Tower Company in the United States, SBA Communications. Darren has directed or been intimately involved in the development and launching of two carrier networks. He has also had responsibility for the development of over 2000 sites from the Great Lakes Region to the West Coast and the Pacific Northwest. Darren formed TNG Wireless in 2013.
Executive Summary

In preparation of this report a study of the market results for the two areas in question were pulled from Metropolitan Indianapolis Board of Realtor’s database site. MIBOR has all transaction records of real estate deals performed by member Realtors for Brown County, Shelby County, Johnson County, Morgan County, Putnam County, Hendricks County, Marion County, Hancock County, Madison County, Hamilton County, Boone County and Montgomery County.

Two Tower sites were reviewed. The first was the Verizon / American Tower location near the subject property and the second was the Self Support Structure located off of SR 39 at the CountryMark location. An analysis area of ½ mile was used for each tower location. Summaries were pulled from each area by year and are a part of this report in the back up documentation. Aspects reviewed were:

Minimum List Price
Maximum Sale Price
List Price Average
List Price Median
Minimum Sold Price
Maximum Sold Price
Sold Price Average
Sold Price Median
Average Days on the Market.

A line was drawn at the year of the construction of the tower with the year prior and the subsequent years listed as references and comparisons. A summary of those results are included in this report. Facts all indicate that there was no decrease in Average Sold Price and Median Sold price in either instance, nor was there any lengthening of the Average Days on the market.
These facts compel us to draw the conclusion that the construction of the towers in these two locations in or near the Town of Monrovia, Morgan County, Indiana had no adverse effect on the surround property values. This would lead to conclude that the addition of another similar structure in the same area as the existing Verizon / American Tower Monopole would likewise have no adverse effect on the surround property values.

James F. Snodgrass  
Broker – Principal – Wall & Associates  
9020 Crawfordsville Road  
Indianapolis, IN 46234

Lejo Harmeson  
Managing Broker – Principal – Wall & Associates  
9020 Crawfordsville Road  
Indianapolis, IN 46234

Darren S. Snodgrass  
Principal  
TNG Wireless  
1829 Fortner Drive  
Indianapolis, IN 46231
## Existing Self Support Tower - 1/2 Mile Radius - Built 2011

<table>
<thead>
<tr>
<th></th>
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<td>$49,900.00</td>
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<td>$141,900.00</td>
<td>$48,900.00</td>
<td>$133,734.00</td>
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<tr>
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## Existing American Tower - 1/2 Mile Radius - Built 2007

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<td>$164,900.00</td>
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<td>$101,000.00</td>
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<td>$167,280.00</td>
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1 Property Sold that year
Aerial Map with ½ mile ring – Existing Self Support Tower

Map with ½ mile ring – Existing Self Support Tower
### Quick Statistics (20 Listings Total)

<table>
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<tr>
<th>Price Range</th>
<th>Count</th>
<th>Average</th>
<th>Median</th>
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<tr>
<td>$75,000 - $89,900</td>
<td>49</td>
<td>89</td>
<td>87/2</td>
</tr>
<tr>
<td>$90,000 - $104,900</td>
<td>21</td>
<td>104</td>
<td>102/2</td>
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<tr>
<td>$105,000 - $119,900</td>
<td>9</td>
<td>119</td>
<td>118</td>
</tr>
<tr>
<td>$120,000 - $134,900</td>
<td>21</td>
<td>134</td>
<td>133</td>
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<tr>
<td>$135,000 - $149,900</td>
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<td>149</td>
<td>149</td>
</tr>
<tr>
<td>$150,000 - $164,900</td>
<td>11</td>
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</tr>
<tr>
<td>$165,000 - $179,900</td>
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<tr>
<td>$180,000 - $194,900</td>
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<tr>
<td>$195,000 - $209,900</td>
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</tr>
</tbody>
</table>

### Notes
- **Average:** Calculated by summing all values and dividing by the number of values.
- **Median:** The middle value when all values are sorted in ascending order.

---

**Prepared by:** J. Lamerson
**Date:** 02/10/01
**Location:** 120 W. Washington St.
**District:** Market
**Type:** Residential

---

**Property Type:** One of Residential, Residential Lease, Office, Commercial, Vacant.
**Listings:** As of 09/19/00, 10:44 AM.
<table>
<thead>
<tr>
<th>Median</th>
<th>Average</th>
<th>Min</th>
<th>Max</th>
<th>Sold Price</th>
<th>List Price</th>
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</thead>
<tbody>
<tr>
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<td>$94,800</td>
<td>$110,900</td>
<td>$99,000</td>
<td>$103,000</td>
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Quick Statistics (23 Listings Total)
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<thead>
<tr>
<th>Quick Stats: (33 Listings Total)</th>
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</thead>
<tbody>
<tr>
<td><strong>Sold Price</strong></td>
</tr>
<tr>
<td>Median $128,500</td>
</tr>
<tr>
<td>Min $127,717</td>
</tr>
<tr>
<td>Max $131,900</td>
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<tr>
<td>Average $129,771</td>
</tr>
<tr>
<td><strong>List Price</strong></td>
</tr>
<tr>
<td>Median $177,000</td>
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<tr>
<td>Min $177,000</td>
</tr>
<tr>
<td>Max $177,000</td>
</tr>
<tr>
<td>Average $177,000</td>
</tr>
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</table>

Prepared by Lelo Hamerson
<table>
<thead>
<tr>
<th>Sold Price</th>
<th>List Price</th>
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</thead>
<tbody>
<tr>
<td>$139,900</td>
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<tr>
<td>$133,734</td>
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<tr>
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Quick Statistics (32 Listings Total)

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<tr>
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<th>Max:</th>
<th>Min:</th>
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</thead>
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<tr>
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<td>3</td>
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<tr>
<td>89%</td>
<td>2/1</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>48%</td>
<td>3/2</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

Prepared by: Leo Hamreman
CM1 1-Line

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not followed the guidelines for development of an appraisal or analysis contained in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation.
<table>
<thead>
<tr>
<th>Price</th>
<th>Median</th>
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Quick Statistics (1 Listing Total)
## Residential

### Sold Properties

<table>
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<tr>
<th>MLS #</th>
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<th>Address</th>
<th>Area</th>
<th>Subdivision</th>
<th>Bd</th>
<th>Bth</th>
<th>Gar</th>
<th>FP</th>
<th>LevL</th>
<th>Yr Bt</th>
<th>SFOpt</th>
<th>SFMU</th>
<th>$/$SqFt</th>
<th>List Price</th>
<th>Sold Price</th>
<th>DOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2720241</td>
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<td>125 East Main Street</td>
<td>5502</td>
<td>NO SUBDIVISION</td>
<td>2</td>
<td>2/0</td>
<td>2CDTC</td>
<td>0</td>
<td>1LEV</td>
<td>1900</td>
<td>224</td>
<td>1,056</td>
<td>$82.86</td>
<td>$89,900</td>
<td>$87,500</td>
<td>117</td>
</tr>
</tbody>
</table>

# LISTINGS: 1

- **Medians:**
  - 2/0
  - 1900
  - 224
  - 1,056
  - $82.86
  - $89,900
  - $87,500
  - 117

- **Minimums:**
  - 2/0
  - 1900
  - 224
  - 1,056
  - $82.86
  - $89,900
  - $87,500
  - 117

- **Maximums:**
  - 2/0
  - 1900
  - 224
  - 1,056
  - $82.86
  - $89,900
  - $87,500
  - 117

- **Averages:**
  - 2/0
  - 1900
  - 224
  - 1,056
  - $82.86
  - $89,900
  - $87,500
  - 117

### Quick Statistics (1 Listing Total)

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Average</th>
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<td>Sold Price</td>
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<tr>
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<th>Median</th>
<th>Average</th>
<th>Max</th>
<th>Min</th>
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<td>$169,900</td>
<td>$235,000</td>
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</tr>
<tr>
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<td>$115,000</td>
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Quick Stats (3 Listings Total)

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<th>Max</th>
<th>Min</th>
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<tbody>
<tr>
<td>Sold Price</td>
<td>$158,900</td>
<td>$169,900</td>
<td>$235,000</td>
<td>$115,000</td>
</tr>
<tr>
<td>List Price</td>
<td>$169,333</td>
<td>$169,000</td>
<td>$235,000</td>
<td>$115,000</td>
</tr>
</tbody>
</table>

- **Avrage**: 3.4
- **Max**: 3.0
- **Min**: 2.0
- **# Listings**: 3

Sold Price: $158,900
List Price: $169,333

- **Property Type**: Residential
- **Area**: Subdivision
- **Address**: 28065 S. 8811 W. Salt Lake City, UT 84121
- **MLS #**: Sold Date: 03/15/2000

Prepared by: Lyle & Karen Houseman

Lisitngs as of 09/19/16 at 10:16 AM
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<tr>
<th>Price</th>
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<th>Average</th>
<th>Max</th>
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Quick Statistics (1 Listing Total)

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<th>Address</th>
<th>Area</th>
<th>Subdivision</th>
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<th>DOM</th>
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<td>270 East Main Street</td>
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<td>Median</td>
<td>Average</td>
<td>MAX</td>
<td>MIN</td>
<td># LISTINGS</td>
<td># LISTINGS</td>
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<tr>
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<tr>
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<td>$2,574</td>
<td>$3,060</td>
<td>$1,489</td>
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<tr>
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<td>$2,574</td>
<td>$3,060</td>
<td>$1,489</td>
<td>4</td>
<td>30</td>
<td></td>
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</tr>
<tr>
<td>$1,422</td>
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<td>$3,060</td>
<td>$1,489</td>
<td>4</td>
<td>30</td>
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<tr>
<td>$1,422</td>
<td>$2,574</td>
<td>$3,060</td>
<td>$1,489</td>
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<td>30</td>
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Quick Statistics (4 Listings Total)
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<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
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<tr>
<td>3/2/1</td>
<td>1/12/6</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
</tr>
<tr>
<td>3/2/1</td>
<td>1/12/6</td>
<td>1/15/5</td>
<td>1/15/5</td>
<td>1/15/5</td>
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<td>1/15/5</td>
</tr>
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This is a broker price opinion of comparative market analyses and should not be considered an appraisal in making any decision that relates upon my work. You should know that I have not followed the guidelines for development of an appraisal or analysis used in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation.

Copyright MIBOR 2016 All rights reserved.
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Prepared by: Leo Hammon

Date: 09/19/16 at 10:28 am
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**Sold:** Residential

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*Prepared by/Leo Faramoson*
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Quick Statistics (1 Listing Total)
March 13, 2020

UrsaNav, Inc.
85 Rangeway Road, Building 3, Suite 110
North Billerica, MA 01862

RE: FCC NEPA Summary Report for:
   Aurora West – Reckinger Site
   40W015 Seavey Road
   Batavia, Kane County, IL 60150
   TCNS ID: 193600

RESCOM Environmental Corp has completed a NEPA Summary Report for the above referenced property. Based on the information presented in this report, the proposed project will have no adverse effect upon any of the National Environmental Policy Act (NEPA) Special Interest Items referenced in 47 CFR Subpart 1, Chapter 1, Sections 1.1301-1.1319.

Thank you for the opportunity to provide this service and we look forward to working with you in the future. If you have any questions or comments, please call our office at (231) 409-2563.

Sincerely,

RESCOM Environmental Corp

Andrew Smith
Project Manager
andrew.smith@rescom.org

RESCOM File 19100090
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**NEPA/NHPA SCREENING CHECKLIST**

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Will the facility be located in an officially designated wilderness area, per 47 CFR §1.1307(a)(1)?

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Consulting Agency To Contact: NPS, USFWS & BLM  
Comments: See attached documentation

Will the facility be located in a designated wilderness preserve, per 47 CFR §1.1307(a)(2)?

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Consulting Agency To Contact: NPS, USFS & BLM  
Comments: See attached documentation

Will the facility affect listed or proposed threatened or endangered species or designated critical habitats; or jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats, as determined by the Secretary of the Interior pursuant to the Endangered Species Act of 1973, per 47 CFR §1.1307(a)(3)?

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Consulting Agency To Contact: USFWS & State Equivalent  
Comments: See attached documentation

Will the facility affect districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture, that are listed, or are eligible for listing in the National Register of Historic Places, per 47 CFR §1.1307(a)(4)?

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Consulting Agency To Contact: SHPO, THPO & NHOs  
Comments: See attached documentation

Will the facility affect Indian religious sites, per 47 CFR §1.1307(a)(5)?

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Consulting Agency To Contact: THPO, NHOs & Bureau of Indian Affairs  
Comments: See attached documentation

Will the facility be located in a floodplain, per 47 CFR §1.1307(a)(6)?

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Consulting Agency To Contact: FEMA  
Comments: See attached documentation

Will the facility involve a significant change in surface features, per 47 CFR §1.1307(a)(7)?

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Consulting Agency To Contact: US Army Corps of Engineers  
Comments: See attached documentation

Will the facility be equipped with high intensity white lights in a residential neighborhood, per 47 CFR §1.1307(a)(8)?

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Consulting Agency To Contact: Not Applicable  
Comments: This category was not reviewed by RESCOM Environmental Corporation

Facilities that may result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 CFR §1.1307 (b).

<table>
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Consulting Agency To Contact: Not Applicable  
Comments: This category was not reviewed by RESCOM Environmental Corporation

Preparer certifies that to the best of their knowledge the above information is accurate.

Prepared By: ___________________________  Company: RESCOM Environmental
(Print name): Andrew Smith  Date: March 13, 2020
NEPA SUMMARY REVIEW

PROJECT OVERVIEW:
RESCOM Environmental completed a NEPA Summary for the above referenced project to determine potential affects to Special Interest Items 1-9 listed in 47 CFR Subpart 1, Chapter 1, Section 1.1307(a). This NEPA Impact Assessment was performed in consideration of 47 CFR Subpart 1, Chapter 1, Sections 1.1301-1.1319 and the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (NPAC). Ursa Nav proposes the construction of an antenna array telecommunications facility. Work includes the construction of two 184’ guyed towers, one 30’ monopole style tower, and a generator and shelter on a new concrete slab all within a fenced compound.

REGULATORY SUMMARY:
Based on CFR 36, Part 800, Subpart B of the National Historic Preservation Act and the FCC's NPA, new construction projects are required to be submitted for Section 106 Review to State Historic Preservation Offices and interested Tribal Groups. Additionally, based on 47 CFR Subpart 1, Chapter 1, Section 1.1306 (Note 1), construction of new telecommunications facilities requires a review of impacts to the following Special Interest Items: wilderness areas, wildlife preserves, threatened and endangered species, designated floodplains, and changes to surface features.

AREA OF POTENTIAL EFFECTS:
Based on the height of the tower and procedures outlined by the NPA, the Area of Potential Effects (APE) for indirect visual effects is a 0.5-mile radius from the tower center. The Visual APE is largely buffered by agricultural and residential development. The APE for direct effects is limited to the new tower footprint and the limited access and utilities routed to the new tower.

HISTORIC RESEARCH:
State Historic Preservation Office records were reviewed to determine if any listed or eligible historic resources exist within the APE. Additionally, RESCOM reviewed the National Register of Historic Places (NRHP) online database and Google Earth layer to determine if any listed historic resources exist within the APE. RESCOM identified no historic resources within the project APEs that required SHPO evaluation. Historic resource information and photographs are included within the SHPO submission in Attachment A.

SITE RECONNAISSANCE:
RESCOM Environmental completed a site visit to photograph the subject property, adjacent properties, and any present historic resources within the indirect visual APE. An archaeological survey was conducted as ground disturbing activities are associated with the proposed project and archaeological clearance was recommended (See Attachment A).

SHPO CONSULTATION:
RESCOM consulted with the Illinois State Historic Preservation Office's (SHPO) to conduct a Section 106 Review for the proposed project. RESCOM provided a cultural resources evaluation report for Section 106 Review to the SHPO on January 10, 2020, requesting concurrence of the “no historic properties” determination. The Illinois SHPO did not respond, and the filing expired on February 10, 2020. The NPA states that when a SHPO fails to comment on a recommendation of no historic properties the proponent can assume concurrence of the determination of “no historic properties.” Therefore, as of February 10, 2020, requirements with respect to SHPO consultation are deemed complete.

The SHPO consultation process allows additional consulting parties to comment on impacts to historic resources from federal undertakings. RESCOM consulted with the appropriate jurisdiction officials as well as a local historic preservation entity to seek comment on effects from the undertaking. Letters were mailed to these groups on January 10, 2020, outlining the proposed project and inviting them to comment on the potential for the proposed project to effect historic resources. RESCOM contacted the Kane County Chronicle and posted a “Public Participation” ad in the paper on December 12, 2019. The proposed project was described in detail and “questions, comments, and correspondence” were solicited.
NEPA SUMMARY REVIEW

from the public regarding potential effect to historic properties. RESCOM did not receive any response from the public concerning historic properties for this project.

Per the NPA, the applicant must allow a period of 30 days for the public and all consulting parties to provide comment on the proposed project. All requirements with respect to SHPO consultation are complete. See Attachment A for full SHPO details.

TRIBAL CONSULTATION:
RESCOM utilized the Tower Construction Notification System (TCNS) maintained by the Federal Communications Commission (FCC) to identify any tribal entities with interest in the area of the proposed project. The FCC responded, assigning the project with TCNS number 193600. All tribal groups have either responded indicating no concern with the proposed project, provided an exclusion via TCNS, or been closed out by the FCC. Therefore, all requirements with respect to THPO consultation are complete. All Tribal consultation documentation is in Attachment B.

All Tribes do request immediate notification should human remains or objects under NAGPRA become uncovered during construction.

WILDERNESS AREAS & WILDLIFE PRESERVES:
RESCOM reviewed maps published by the National Forest Service, the US Fish and Wildlife Service (USFWS), and Wilderness.net, and found no Wildlife Preserves, Wilderness Areas, National Grasslands, National Forests, or National Scenic Trails are located at or near the subject property. Additionally, no Wildlife Preserves, Wilderness Areas, National Grasslands, National Forests, or National Scenic Trails were noted during the site visit (See Attachment C).

THREATENED & ENDANGERED SPECIES & CRITICAL HABITATS:
An informal biological assessment was conducted at the subject property to determine if habitats necessary to support listed species or critical habitats exist at the subject property and in the immediate vicinity. The informal biological assessment is based on visual observations of on-site conditions and general habitats as compared to data acquired from the U.S. Fish and Wildlife Service (USFWS).

Based on information obtained from the USFWS, habitats necessary to support federally listed threatened and endangered species do not occur at or in the vicinity of the subject property. Therefore, the proposed project will not affect any listed threatened or endangered species. In addition, there are no designated critical habitats at or in the vicinity of the subject property (See Attachment C).

DESIGNATED FLOODPLAINS:
RESCOM reviewed flood insurance maps published by the Federal Emergency Management Agency. The subject property is not within the boundary of a designated floodplain (See Attachment C).

CHANGES TO SURFACE FEATURES:
RESCOM reviewed a digitized National Wetlands Inventory (NWI) map compiled with data maintained by the USFWS. Based on a review of the NWI map, the proposed project will not fall within a designated wetland. Furthermore, the scope of project does not call for wetland fill, water diversion, or deforestation. Therefore, the proposed project will not cause a significant change in surface features (See Attachment C).
CONCLUSIONS:
Based on information provided by the applicant, information acquired by RESCOM Environmental, and the outcome of the SHPO, THPO, and Public consultation processes, RESCOM has determined the proposed project will not adversely affect any of the Special Interest Items 1-9 listed in 47 CFR Subpart 1, Chapter 1, Sections 1.1301-1.1319 and the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (NPAC).

Andrew Smith - Project Manager
March 13, 2020

Attachments:
A. State Historic Preservation Office Consultations
B. Native American Tribal Consultations
C. Informal Biological Assessment & Maps
November 13, 2019

UrsaNav, Inc.
85 Rangeway Road
Bldg. 3; Suite 110
N. Billerica, MA 01862

Re: Phase I Environmental Site Assessment
Aurora West- Reckinger Site
39W840 Seavey Road
Batavia, Kane County, Illinois

RESCOM Environmental Corp. has completed a Phase I Environmental Site Assessment for the above referenced property. This assessment was performed in conformance with the American Society for Testing and Materials (ASTM) Standard Practice E1527.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property. It is the opinion of the Environmental Professional that no further inquiry is required.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

This Phase I Environmental Site Assessment has been prepared for the exclusive use of UrsaNav, Inc. Thank you for the opportunity to provide this service and we look forward to working with you in the future. If you have any questions or comments, please call our office at (231) 409-2563.

Sincerely,

RESCOM Environmental Corp

Susan Blackmore, LPG
Environmental Professional

Joseph P. Lee
Environmental Professional

RESCOM File: 19100090
ASTM E 1527
PHASE I ENVIRONMENTAL SITE ASSESSMENT

AURORA WEST- RECKINGER SITE
39W840 SEAVEY ROAD
BATAVIA, KANE COUNTY, ILLINOIS

Prepared for:

UrsaNav, Inc.
85 Rangeway Road
Bldg. 3, Suite 110
N. Billerica, MA 01862

November 13, 2019

Prepared by:

RESCOM Environmental Corp
PO Box 361
Petoskey, Michigan 49770
(231) 409-2563
RESCOM ID: 19100090

Prepared by: Susan Blackmore, LPG
Environmental Professional

Reviewed by: Joseph P. Lee
Environmental Professional
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Appendix B – Historical Topographic Maps and Aerial Photographs
Appendix C – ERIS Database Search Report
Appendix D – Site Photographs
Appendix E – Resumes of Environmental Professionals
INTRODUCTION

Executive Summary
The report of findings for the property located at the Aurora West- Rickinger Site, 39W840 Seavey Road in Batavia, Kane County, Illinois, are summarized as follows:

Findings
1. The subject property consists of a planted corn field south of Seavey Road with an access easement to the east and north and measures approximately 8-acres. UrsaNav, Inc proposes to construct a guyed style telecommunication tower array, a fenced compound area, an equipment shelter and a 12’ wide gravel access drive from Seavey Road.

2. RESCOM Environmental Corp. (RESCOM) personnel completed a site visit on October 22, 2019. No evidence of underground or aboveground storage tanks, abandoned drums, electrical transformers that may contain polychlorinated biphenyls (PCBs), hazardous substance releases or other visible signs of recognized environmental conditions (RECs) were noted on the subject property at the time of the site visit.

3. The surrounding property uses are as follows: farmland to the north followed by a residence and Seavey Road; farmland with a pond to the east; farmland to the south followed by a wooded area; and farmland to the west followed by Lake Run.

4. Based on historical information collected by RESCOM, the subject property appears to have been farmland since at least 1964. No other property uses, or development of the subject property was identified through the historic research.

5. RESCOM personnel contacted Mr. Joseph Reckinger, property representative, regarding the subject property on November 12, 2019. Mr. Reckinger was not aware of any environmental concerns at or near the subject property. Mr. Reckinger stated that the subject property use currently is farmland and he was not aware of any prior uses other than for agriculture (row crops). Mr. Reckinger has owned the property for at least 50 years.

6. A regulatory review of available federal, state, local and tribal environmental databases was completed to determine if the subject property or any surrounding properties, within guidelines established by the American Society for Testing and Materials (ASTM), are listed as environmentally contaminated sites. The regulatory review indicates that the subject property parent parcel is not listed as a site of environmental concern. No surrounding properties was identified within ASTM search criteria.

Recommendations
This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property. It is the opinion of the Environmental Professional that no further inquiry is required.
ARCHEOLOGICAL RECORDS CHECK AND PHASE IA
ARCHEOLOGICAL RECONNAISSANCE OF APPROXIMATELY 8-ACRES
FOR AURORA WEST - RECKINGER SITE IN KANE COUNTY, ILLINOIS.

November 5, 2019

PREPARED BY:

RESCOM Environmental Corp
P.O. Box 361
Petoskey, Michigan 49770
(231) 409-2563

RESCOM ID: 19100090

Andrew M. Smith, M.A.
Principal Investigator
INTRODUCTION

In response to a request, RESCOM Environmental Corp., has completed a Phase Ia archaeological reconnaissance and records check for a proposed tower site in Kane County, Illinois (Figure 1). The project area is located at 41°49'31.0"N 88°23'52.0"W in Blackberry Township in the SE¼ of the SE¼ of Section 26, Township 39 North, Range 7 East, as seen on the Sugar Grove, IL, USGS 7.5' topographical quadrangle (Figure 2). The project area consists of a planted corn field south of Seavey Rd with an access easement to the east and north and measures approximately 8-acres (3.2 hectares). The proposed construction is to be contained within a 5.41-acres fenced compound however, an additional buffer around the compound was also investigated at the time of field work (Figures 3 & 4).

An archaeological records check was conducted by RESCOM Environmental Corp. on October 22, 2019 and determined that no archaeological sites have been recorded within the project area. Fieldwork was conducted on October 24, 2019 by Andrew Smith, M.A., Ball State University 2010, and Jamie Cochran-Smith M.A., Ball State University 2011, and required 4 hours.

One small lithic scatter site (11K1437) and one isolated find (11K1438) were discovered during the current survey. This report details the results of the records check and Phase Ia field reconnaissance and presents the conclusions and recommendations of RESCOM concerning any additional archaeological investigations.

Figure 1. Location of Kane County within Illinois.
Figure 2. Location of the project area on the Sugar Grove, IL 7.5’ USGS topographic quadrangle.
Figure 3. Engineer drawings of proposed work.

Figure 4. Aerial photograph showing area surveyed.
NATURAL SETTING

The project area is located in the northeastern part of the state and lies within the Wheaton Morainal Country physiographic zone within the Great Lakes Section (Leighton et al. 1948). The general description of the zone is:

“characterized by glacial morainic topography (mostly of the Cary substage), which is more complex in detail and has more lakes and swamps than do the open stretches of the adjoining Bloomington Ridged Plain. It includes a series of broad parallel morainic ridges, which encircle Lake Michigan. In detail the topography is complicated by a variety of elongated hills, mounds, basins, sags, and valleys. The area is dominated by the Valparaiso moraine, which has the highest elevation and, except where interrupted by valleys, is continuous from Wisconsin to Indiana. With the exception of the Tinley moraine, all other moraines are discontinuous geographic features — those in front of the Valparaiso moraine are overridden by it and those behind are either interrupted by the Chicago Lake Plain or merge with ground moraines. Karnes, kame terraces, kettles, basins, and eskers, although not abundant, occur more commonly than elsewhere in the state. Fox Lake and associated lakes are conspicuous water bodies. Small basins of extinct lakes and ponds underlain by stratified silts and clays are found throughout the area.” (Leighton et al. 1948).

The topography has been modified throughout the last 12,000 years by rivers and streams eroding through the till and contains complex interlobate landscapes. The bedrock geology of the project area is composed primarily of Silurian rocks (Kolata 2005).

Soils within the project area include Varna silt loam, 2 to 6 percent slopes (eroded in higher slopes) and Drummer silty clay loam, 0 to 2 percent slopes (Web Soil Survey accessed October 23, 2019). The Varna Series consists of very deep and moderately well drained soils found on convex slopes of the relatively undissected till plains of Wisconsinan Age (USDA 2008). The Drummer Series consists of very deep, poorly drained soils formed in loess and located on nearly level or depressions in outwash plains, stream terraces, and till plains of Wisconsinan Age (USDA 2015).

Prior to Euroamerican settlement the Kane Country was primarily forested with interspersed wetlands. Many aquatic as well as mammalian species would have been available throughout the prehistoric period. These species would have been representative of the eastern mixed woodland fauna and could have included any of the following: porcupine, black bear, fisher, eastern spotted skunk, river otter, wapiti (elk), bison, opossum, eastern cottontail, woodchuck, gray squirrel, fox squirrel, southern flying squirrel, beaver, raccoon, striped skunk and white-tailed deer.

Given the environmental conditions of the project area and surrounding region, there is the potential for the project area to contain previously unrecognized archaeological sites. The following sections describe previous research conducted in and near the project area and provide a general background of regional Illinois prehistory.
CULTURAL SETTING

Illinois’ history is long and complex, dating at least to 12,000 years ago and includes a wide variety of societies and cultures. Many parts of Illinois’ history are unknown due to limited historic documentation, or in the case of prehistoric cultures, the limited archaeological record. The following is a table showing the archaeological periods commonly used to describe cultures and cultural changes in the Midwest in general and in northern Illinois in particular.

### Regional Prehistory

<table>
<thead>
<tr>
<th>Period</th>
<th>Date Ranges (All B.P.)</th>
<th>Diagnostic Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Archaic</td>
<td>9,000-8,000</td>
<td>Glacial retreat, bevel edged points, bifurcate points, broad spectrum hunting and gathering, probable larger populations than preceding period (see Anderson and Hanson 1988, Fagan 1987, Justice 1987).</td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>8,000-5,000</td>
<td>Hypsithermal maximum, side-notched points, large settlements along waterways, continued broad spectrum hunting and gathering including more nut utilization (see Dincauze and Mulholland 1977, Fagan 1987, Simons et al. 1984).</td>
</tr>
<tr>
<td>Late Archaic</td>
<td>5,000-3,500</td>
<td>Large diversity of lithic artifact types from large spear points to small darts, large trade networks develop, beginning of elaborate burial practices, large amounts of fire-cracked rock and highly visible surface sites (see Fagan 1987, Lovis and Robertson 1989, Prufer and Pedde 2001, Winters 1968, Yarnell 1988).</td>
</tr>
<tr>
<td>Early Woodland</td>
<td>3,500-2,100</td>
<td>First pottery use, large contracting stemmed points, increased reliance on domesticated plants, greater ceremonial exchange, and continuation of elaborate burial practices (see Dragoo 1976, Griffin 1978, Yarnell 1964).</td>
</tr>
<tr>
<td>Middle Woodland</td>
<td>2,100-1,600</td>
<td>Large corner notched points, expanded stemmed points, large trade networks extending to the Rocky Mountains and the Gulf of Mexico, increased reliance on domesticated plants, permanent villages, heavily decorated ceramics (see Fagan 1987, Justice 1987, Ottesen 1985, Smart and Ford 1983).</td>
</tr>
<tr>
<td>Late Woodland</td>
<td>1,600-1,000</td>
<td>Localized resource procurement, breakdown of large trade networks, intrusive burial practices, maize introduction, small triangular points probably indicative of the first bow and arrow, collared ceramics (see Baerreis and Freeman 1958, Fagan 1987, Hall 1987, Justice 1987).</td>
</tr>
<tr>
<td>Mississippian</td>
<td>1,000-500</td>
<td>Maize dependence and large hierarchical permanent settlements. Pyramid mounds and shell-tempered pottery common.</td>
</tr>
<tr>
<td>Protohistoric</td>
<td>500-</td>
<td>Social instability, widespread population movements, similar subsistence strategies to the Late Woodland (see Brown and Sasso 2001, Brose et al. 2000, Emerson 1999).</td>
</tr>
</tbody>
</table>
Regional History

The first Europeans to explore Illinois were Jacques Marquette and Louis Jolliet in 1673 near the Grand Village of Kaskaskia (Jensen 2001). Later settlement included French fur trading posts and strategic forts. In 1763 control of Illinois was ceded by the French to the British (Jensen 2001). After the American Revolution Illinois was ceded to the American government in the Treaty of Paris (Jensen 2001). Illinois gained statehood in 1818 and Kane County was established in 1836. The City of Geneva serves as county seat.

PREVIOUS INVESTIGATIONS

An archaeological records check conducted via the Illinois SHPO online database (HARGIS) determined no previously recorded archaeological sites overlap the project area. HARGIS shows twenty-six archaeological sites within a mile of the project location (Tables 1). No resources listed in the National Register of Historic Places are present within a mile of the project.

Table 1. Sites within a mile of the project area.

<table>
<thead>
<tr>
<th>Site</th>
<th>Type</th>
<th>Temporal Affiliation</th>
<th>NRHP Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>11K0654</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K0655</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K0656</td>
<td>Habitation/House – Standing Structure</td>
<td>Historic – Early Industrial (1871-1900), Urban Industrial (1901-1945), Post-War (1946-Present)</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K0659</td>
<td>Habitation/Farmstead – Destroyed</td>
<td>Historic – Early Industrial (1871-1900), Urban Industrial (1901-1945)</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K0660</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K0781</td>
<td>Habitation/Commercial – Standing Structure</td>
<td>Historic – Early Industrial (1871-1900), Urban Industrial (1901-1945), Post-War (1946-Present)</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1015</td>
<td>Lithic Scatter</td>
<td>Prehistoric – Early Archaic</td>
<td>Undetermined / Further Work Recommended</td>
</tr>
<tr>
<td>11K1016</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1017</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1018</td>
<td>Lithic Scatter</td>
<td>Prehistoric – Middle Archaic</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1019</td>
<td>Isolated Find – Kirk Corner-Notched</td>
<td>Prehistoric – Early Archaic</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1020</td>
<td>Lithic Scatter</td>
<td>Prehistoric – Early Archaic</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1021</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1022</td>
<td>Lithic Scatter</td>
<td>Prehistoric – Paleoindian / Early Archaic</td>
<td>Undetermined / Further Work Recommended</td>
</tr>
<tr>
<td>11K1023</td>
<td>Isolated Find – Biface Fragment</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1024</td>
<td>Isolated Find – Kirk Corner-Notched</td>
<td>Prehistoric – Early Archaic</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1025</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Undetermined / Further Work Recommended</td>
</tr>
<tr>
<td>11K1144</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1145</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Undetermined / Further Work Recommended</td>
</tr>
<tr>
<td>11K1146</td>
<td>Lithic Scatter</td>
<td>Prehistoric – Middle Archaic</td>
<td>Undetermined / Further Work Recommended</td>
</tr>
<tr>
<td>11K1148</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1149</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1192</td>
<td>Lithic Scatter</td>
<td>Prehistoric - Unknown</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>11K1383</td>
<td>Information Not Available</td>
<td>Information Not Available</td>
<td>Information Not Available</td>
</tr>
<tr>
<td>11K1390</td>
<td>Information Not Available</td>
<td>Information Not Available</td>
<td>Information Not Available</td>
</tr>
</tbody>
</table>

**METHODS**

Fieldwork was conducted on October 24, 2019 by Andrew Smith and Jamie Cochran-Smith. The project area consisted of an 8-acre planted corn field with surface visibility ranging between 60-80% (Figure 5). A pedestrian survey at 10-meter intervals was conducted throughout the entire project area in order to identify any cultural materials or possible prior disturbance. Upon recovering artifacts during the pedestrian survey, pedestrian intervals were reduced to 1-meter and artifacts identified were collected and their location documented to determine site boundaries. Surface visibility in the proposed access easement was limited on the east side of the project area, however, shovel testing was no necessary due to high levels of soil erosion (Figure 6). The access easement was visually examined and in addition to erosion, evidence of previous disturbance due to heavy vehicle traffic is present (see Figure 6).

**LABORATORY METHODS**

Artifacts collected during the project were washed in water and dried at room temperature. Artifacts were identified and cataloged according to a hierarchical key and were counted and weighed. Artifacts were cataloged and photographed by RESCOM personnel and accession and catalog numbers were applied. Upon completion of the project, all project documentation and collected materials will be curated at the Illinois State Museum under the accession number of 19.2.
Figure 5. Photograph showing surface visibility within the project area.

Figure 6. Photograph of access easement; note previously disturbed soils.
RESULTS

Two sites (11K1437 & 11K1438) were recorded during the current survey. Site 11K1437 is a 5-m by 5-m lithic scatter within a plowed area in fairly eroded soils. A total of four artifacts were recovered from 11K1437 all consisting of chipped stone chert flakes with no diagnostic features (Table 2, Figures 7 & 8). Due to the lack of diagnostic artifacts recovered from 11K1437, a particular temporal affiliation could not be established.

Site 11K1438 is an isolated find within a plowed area in fairly eroded soils and consists of a single chipped stone chert flake (Table 3, Figures 9 & 10). No diagnostic artifacts were recovered from 11K1438 and a temporal affiliation could be established.

Both sites recorded during the survey do not appear to have the potential to provide information important in prehistory and do not appear to qualify for the National Register of Historic Places. Additionally, isolated finds are not considered eligible for listing on the National Register of Historic Places. Based on the very ephemeral seeming nature of the recorded sites, no further archaeological work is recommended.

Table 2. Artifacts recovered from site 11K1437.

<table>
<thead>
<tr>
<th>Accession No</th>
<th>Artifact</th>
<th>No</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.2.1437.1</td>
<td>Chipped Stone Chert Debitage</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Figure 7. Site 11K1437 within the surveyed area.
Figure 8. Location of 11K1437 as seen on the Sugar Grove, IL 7.5’ USGS topographic quadrangle.
Table 3. Artifacts recovered from site 11K1438.

<table>
<thead>
<tr>
<th>Accession No</th>
<th>Artifact</th>
<th>No</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.2.1438.1</td>
<td>Chipped Stone</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Chert</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Debitage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 9. Site 11K1438 within the surveyed area.
Figure 10. Location of 11K1438 as seen on the Sugar Grove, IL 7.5’ USGS topographic quadrangle.
CONCLUSIONS AND RECOMMENDATIONS

In response to a request, RESCOM Environmental Corp., has completed a Phase Ia archaeological reconnaissance and records check for a proposed tower site in Kane County, Illinois. The project area is located at 41°49'31.0"N 88°23'52.0"W in Blackberry Township in the SE¼ of the SE¼ of Section 26, Township 39 North, Range 7 East, as seen on the Sugar Grove, IL, USGS 7.5’ topographical quadrangle. The project area consists of a planted corn field south of Seavey Rd with an access easement to the east and north and measures approximately 8-acres (3.2 hectares). The proposed construction is to be contained within a 5.41-acres fenced compound however, an additional buffer around the compound was also investigated at the time of field work.

Two sites (11K1437 & 11K1438) were discovered during the current survey. Site 11K1437 consists of a small lithic scatter with no diagnostic artifacts and does not appear to provide information important in prehistory. Additionally, site 11K1437 is outside of the proposed compound and is not expected to be affected as a result of the current project. Due to the ephemeral nature of the site and its location in relation to the proposed work no further work is recommended. Site 11K1438 is an isolated find which are not considered eligible for listing on the National Register of Historic Places. It is our recommendation that there are no archaeological sites eligible for listing on the National Register of Historic Places within the project area and we recommend archaeological clearance.
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Lovis, William and James Robertson  

Ottesen, Anne I.  

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United States Department of Agriculture

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Yarnell, R.

May 27, 2020

UrsaNav, Inc.
85 Rangeway Road, Building 3, Suite 110
North Billerica, MA 01862

RE: Environmental Compliance Efforts:
Aurora West
1 mile east of intersection of Seavey Rd. & Bliss Rd.
Batavia, Kane County, IL 60510

Dear UrsaNav Inc.,

RESCOM Environmental has reviewed construction drawings for the above listed project. The plans call for removal of soil from the perimeter of an existing wetland for use in raising the elevation of a proposed roadbed. The soil being removed is minimal, and will, in fact, increase the size of the existing Freshwater Emergent Wetland. Because the construction will occur in an area without the potential for runoff of sediments into nearby streams and no modification of any streams are required the United States Army Corp. of Engineers and the United States Fish and Wildlife Service delegate the authority of permits to the local level. No additional consultation at the federal level is required for this undertaking.

If you have any questions or would like to provide comments on the proposed project, please feel free to contact me directly at 260-385-6999 or by email.

Sincerely,

RESCOM Environmental Corp

Andrew Smith
Project Manager
andrew.smith@rescom.org
SITE NAME: AURORA WEST - RECKINGER
SITE ADDRESS: 40W015 SEAVEY ROAD
               BATAVIA, IL 60510
JURISDICTION: KANE COUNTY
SITE TYPE: RAW LAND

PROJECT INFORMATION

SCOPE OF WORK

THE SCOPE OF WORK CONSISTS OF:

- NEW FLOOR CONTINUOUS FIRM-New & Adjusted LEASE AREA
- (6) NEW ENTRY DOORS
- (1) NEW EXISTING DOOR
- (1) NEW EXISTING WINDOW
- (2) NEW EXISTING WINDOWS

- CONTACTOR SHALL FURNISH ALL MATERIAL WITH THE EXCEPTION OF URBAN NAVIGATION RISER.
- ALL MATERIAL WILL BE INSTALLED BY THE CONTRACTOR, UNLESS STATED OTHERWISE.

APPLICABLE BUILDING CODES AND STANDARDS

ALL WORK MUST COMPLY WITH CODES TAKING EFFECT IN THE COUNTY OF KANE AND IN ACCORDANCE WITH THE RELEVANT CODES OF THE FUTURE, AS ADAPTED IN THE LOCAL GOVERNMENT.

ELECTRICAL CODE: 2012 INTERNATIONAL BUILDING CODE AS ADAPTED

ELECTRICAL CODE: 2011 NATIONAL ELECTRICAL CODE

SITE LOCATION MAP

DIRECTIONS

SCAN OR CODE FOR LINK TO SITE LOCATION MAP

DRAWING INDEX

T-1

AURORA WEST RECKINGER

PROJECT CONSULTANTS

COMMUNICATIONS FACILITIES

NOTE: DRAWING SCALES ARE FOR 11"X17" SHEETS UNLESS OTHERWISE NOTED.
SOIL EROSION AND SEDIMENT CONTROL NOTES

1. All excavation and fill areas shall be covered and protected in accordance with the approved method for the prevention of sedimentation. Temporary erosion control and sediment control measures shall be established and maintained at all times in accordance with the approved method for the prevention of sedimentation.

2. The erosion control measures shall be performed in accordance with the approved method for the prevention of sedimentation.

3. All excavations shall be kept free of water and shall be kept free of debris and trash.

4. All fill areas shall be kept free of water and shall be kept free of debris and trash.

5. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

6. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

7. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

8. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

9. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

10. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

11. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

12. All excavation and fill areas shall be kept free of water and shall be kept free of debris and trash.

EROSION CONTROL - SILT FENCE

1. Erosion control measures shall be performed and completed as specified in the project.

2. Erosion control measures shall be performed and completed as specified in the project.

3. Erosion control measures shall be performed and completed as specified in the project.

C-61
SCALE: N.T.S.
Total Impervious Area:  
Proposed road 24910 sq ft = 0.57ac

Total undisturbed area= 35 ac  
(0.57ac)/35 ac x 100= 1.6% > 1%

Detention Required: No, 24910 sq ft < 25000 sq ft

Stormwater/ Mitigation BMP- Yes, New Impervious Area > 5,000 sq. Ft and greater than 1% of the Site area.

1. Filling in depressed detention

   The proposed road profile across the depressed area mostly follow the existing ground profile. No fill below hwl 697 ft. elevation. therefore, there are no filling in the existing depressed detention.
   (See C-6K)

2. Mitigation BMP Volume:

   VBMP = 1in x NIHDA  
   Total Excavation on the Existing Pond

   VBMP =1in x 1ft/12in x 24910 sq ft = 2075 cu ft/27 cu ft/cu yd = 76.9 cu yd

3. The total excavation in the existing pond is BMP-76.9 cu. yd. 
   Excavated soil should be dispersed on the property above the elevation 697.5' except the overflow route area.
EXPLODED VIEW

D ETAIL A
ASSEMBLED VIEW

SPLICE DETAIL
EXPLODED VIEW

ISOMETRIC VIEW
(FOR REFERENCE ONLY)
NOTES:
1. MATERIAL: HIGH IMPACT PVC, SLIGHT COLOR VARIATION CAN OCCUR BETWEEN BATCHES.

ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY PER FACTORY TOLERANCES, CONTACT PLP FOR MORE INFORMATION.
PLP® Distribution Products

**SWAN-FLIGHT™ DIVERTER**

**Description**
The PLP® Distribution Products SWAN-FLIGHT™ Diverter is designed for use on overhead conductors to control geometric visibility for swans flying near overhead lines and fossil-fueled generating units. The conductors passively deflect swans without causing them to collide with the conductors. The SWAN-FLIGHT™ Diverter is lightweight, offering minimal electrical resistance and ease of installation, often allowing for a one-time installation. The SWAN-FLIGHT™ Diverter is a lightweight, effective, and economical solution for maintaining overhead line visibility.

**Materiales**
Manufactured from a high-performance extruded polyvinyl chloride (PVC), the SWAN-FLIGHT™ Diverter possesses excellent thermal properties, strength properties, and will retain good physical characteristics within a range of extreme temperatures. Additionally, it is resistant to acid and bases, which optimizes its service life and minimizes maintenance requirements.

**Spacing**
The recommended spacing for the SWAN-FLIGHT™ Diverter is generally recommended at 50’ intervals, depending upon local conditions. Since wind resistance is very limited, sufficient SWAN-FLIGHT™ Diverter can be used to ensure adequate spacing with minimal aesthetic impact. For the design of the SWAN-FLIGHT™ Diverter, the following design guidelines are recommended:

- Increased conductor size to provide improved visibility where necessary, while minimizing fixed light polishing impact.
- Economical and easily applied
- Lightweight
- Long service life without deterioration of aesthetic properties
- Minimal wind resistance
- Manufactured from gray or yellow high-impact PVC with UV protection

**Visibility**
The variable spacing enhances the visibility of the cable or conductor to ensure visibility, but remains undetectable to utility operators.

**Application**
Ensure the correct height from swans (FLIGHT™ Diverter) is used. For detailed installation specifications, refer to the manufacturer’s instructions. The application is specific to the utility and equipment requirements.

**SWAN-FLIGHT™ Diverter - Product Data**

<table>
<thead>
<tr>
<th>PLP Catalog No.</th>
<th>Conductor Range (inches)</th>
<th>Diametrical Length (inches)</th>
<th>Diameter of Divertor Coil (inches)</th>
<th>Approximate Weight (lb)</th>
<th>Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>STC-0400</td>
<td>0.157 - 0.240</td>
<td>20 - 50</td>
<td>0.075 - 0.100</td>
<td>9.0 - 10.5</td>
<td>Black</td>
</tr>
<tr>
<td>STC-0500</td>
<td>0.250 - 0.440</td>
<td>20 - 50</td>
<td>0.076 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Silver</td>
</tr>
<tr>
<td>STC-0600</td>
<td>0.300 - 0.440</td>
<td>20 - 50</td>
<td>0.071 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Brown</td>
</tr>
<tr>
<td>STC-1400</td>
<td>0.450 - 0.450</td>
<td>20 - 50</td>
<td>0.075 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Green</td>
</tr>
<tr>
<td>STC-1500</td>
<td>0.500 - 0.700</td>
<td>20 - 50</td>
<td>0.060 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Purple</td>
</tr>
<tr>
<td>STC-2200</td>
<td>0.771 - 0.880</td>
<td>20 - 50</td>
<td>0.050 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Red</td>
</tr>
<tr>
<td>STC-3200</td>
<td>0.857 - 1.000</td>
<td>20 - 50</td>
<td>0.060 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Orange</td>
</tr>
<tr>
<td>STC-4000</td>
<td>0.971 - 1.200</td>
<td>20 - 50</td>
<td>0.060 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Pink</td>
</tr>
<tr>
<td>STC-5000</td>
<td>1.122 - 1.250</td>
<td>20 - 50</td>
<td>0.050 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Gray*</td>
</tr>
<tr>
<td>STC-8000</td>
<td>1.587 - 1.600</td>
<td>20 - 50</td>
<td>0.060 - 0.100</td>
<td>9.5 - 10.5</td>
<td>Black</td>
</tr>
</tbody>
</table>

*Color chart is for reference only.**
400A 5PH, 480V/277V SERVICE
SWITCHBOARD WITH GENERATOR INPUT
IN TYPE SR OUTDOOR ENCLOSURE

FRONT VIEW

LEFT SIDE VIEW

RIGHT SIDE VIEW

ONE LINE DIAGRAM

CONTRACTOR

DESIGNER

DRAWN BY

DATE

REVISION

E-3

CT CABINET SPECIFICATIONS

PROJECT NUM: 2019.0356.0001

FULLERTON ENGINEERING DESIGN

1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
DESIGN TEL: INT. 909.810.5807
www.FullertonEngineering.com
SECTION A-A

- 3/8-7 SHELL HINGE REINFORCED 3/8 IN. SS 3-HELIX 3 PLACES

- 1/8-8 LIFTING BOLTS 3 PLACES

NOTE:
1. DIMENSIONS IN INCHES ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
GENERAL NOTES:
1. DESIGN IS BASED ON THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2020 AND THE UNIT STATES DESIGN METHOD IN THE
2. FREEBOARD AND FREEBOARD IN ACCORDANCE WITH RECOMMENDATIONS REPORT (PDF) DATE: JULY 2020 BY IMO INC.
3. SUPPLY FRAMEWORK, INSTALLATION AND INSTALLATION OF TERMINAL CONCEDE TO COMMERCIAL AS JS-AG AND JS-01.
4. ANY MATERIAL SUBSTITUTION MUST BE APPROVED FROM THE PROJECT OWNER PRIOR TO PROCUREMENT.
5. IN CASE OF CONFLICTING INFORMATION BETWEEN DRAWINGS AND SPECIFICATIONS, THE MOREすべ mạch specifications will be treated as the construction
6. SITE LOCATION THE TANJUNG SITE ASIA-WEST-BEACON, BALI, INDONESIA.

GENERAL SCOPE OF WORK AND CONTRACTOR REQUIREMENTS:
1. SUPPLY AND INSTALL CONCRETE, REINFORCEMENT, AND EMBEDDED ITEMS REQUIRED TO COMPLETE THE WORK SHOWN ON THE CONCRETE DRAWINGS.
2. COMPLETE SHOP DRAWINGS FOR REINFORCED AND REINFORCED STEEL TO BE SUBMITTED FOR REVIEW PRIOR TO COMPLETION OF FOUNDATION.
3. ERGONOMIC TO FACILITATE THE ASSEMBLY ON THE FOUNDATION.
4. ALL WORK TO COMPLY WITH ALL SAFETY ASPECTS AS SHOWED BY THE OSHA SAFETY REGULATIONS AND VERIFIED THROUGH SAFETY SPECIFICATIONS.
5. IN CASE OF CONFLICTING INFORMATION BETWEEN DRAWINGS AND SPECIFICATIONS, THE MOREすべ mạch specifications will be treated as the construction.
6. PREPARE TO FILL THE FOUNDATION USING THE 225 AND 325 RIVER SAND.
7. PROVIDE A COMMISSIONING OF CONCRETE AND FOR ALL CONSTRUCTION WORK PREVIOUS IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.
8. REPORT ALL HAZARDS OR INCURSIONS TO THE OWNER OF ANY HAZARDS OR INCIDENTS.
9. CEILING AND ELECTRICAL INSTALLATION IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.
10. PROVISIONS TO ENSURE THE SECURITY OF THE WORK.

EXCAVATION AND BACKFILL:
1. ALL SLOPES ARE DESIGNED TO BE SHOWN AT THE EXCAVATION AND LEVELS SHOWN ON THE DRAWINGS AND MUST BE ON LEVELS SHOWN ON THE DRAWINGS.
2. ALL SLOPES ARE DESIGNED TO BE SHOWN AT THE EXCAVATION AND LEVELS SHOWN ON THE DRAWINGS.
3. ALL SLOPES ARE DESIGNED TO BE SHOWN AT THE EXCAVATION AND LEVELS SHOWN ON THE DRAWINGS.
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9. ALL SLOPES ARE DESIGNED TO BE SHOWN AT THE EXCAVATION AND LEVELS SHOWN ON THE DRAWINGS.
10. ALL SLOPES ARE DESIGNED TO BE SHOWN AT THE EXCAVATION AND LEVELS SHOWN ON THE DRAWINGS.

CONCRETE:
1. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.
2. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.
3. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.
4. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.
5. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.
6. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.
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9. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.
10. CONCRETE SHALL BE MIXED AND PLACED AS SHOWN ON THE DRAWINGS.