Appendix 7.3
Construction Drawings
SITE NAME: BEACH PARK
T-MOBILE ID #: CH76369D
ECO-SITE ID #: IL-0019
12849 W. FORD STREET
BEACH PARK, IL 60087

PROJECT INFORMATION
COUNTY: LAKE
SITE NAME: BEACH PARK
T-MOBILE ID #: CH76369D
ECO-SITE ID #: IL-0019
SITE ADDRESS: 12849 W. FORD STREET
BEACH PARK, IL 60087
LATITUDE: 41° 25' 18.70" N
42.4316611
LONGITUDE: 87° 55' 54.20" W
87.9317222
LANDOWNER: JERRY NIELENSEN
CONTACT: 11230 W. WASHWORTH RD.
BEACH PARK, IL 60099
(847) 435-2757
APPLICANT: ECO-SITE
240 LOOK FARM ROAD
SUITE 410
DURHAM, NC 27707
ECO-SITE.COM
T-MOBILE PROJECT MANAGER: TBD

VICINITY MAP

LOCATION MAP

SCOPE OF WORK
INSTALL 108'-0" MONOPOLAR TOWER, 8'-0" HIGH CHAIN-LINK FENCE WITH DIAGONAL OPALINE GREEN SLATS, TEMPORARY SILT FENCE, RETENTION LEASE AREA WITH GRASS, CONCRETE PAD, ICE BRIDGE, EQUIPMENT CAVITIES, (1) ECO-SITE M-FRAME, (1) T-MOBILE M-FRAME, (1) FUTURE GENERATOR ON 8"-0" CONCRETE PAD, (1) TELECOM/FIBER BOX, (1) POWER BOX, (1) COMMUNITY FRAHMEN BOX FLUSH T-MOBILE M-FRAME, (1) T-MOBILE ANTENNA, POWER CABLE EXTENSION, ROW OF 2'-0" HIGH ARBORVECTA TREES, DOT LOW GROW NATIVE SWEET WAX, 8'-0" WIDE UTILITY EASEMENT, 12'-0" WIDE ACCESS EASEMENT.

DIRECTIONS
DIRECTIONS FROM CHICAGO-MITCHELL INTERNATIONAL AIRPORT: GET ON I-190 E; HEAD SOUTHEAST; TAKE THE I-190 RAMP TO I-95/294/CHICAGO LOOP; FOLLOW I-94 N AND I-94 W TO I-153 E/FORD AVE IN WARRICK. TAKE THE IL-153 E/FORD AVE EXIT FROM I-94 W. CONTINUE ONTO I-190 E. TAKE EXIT 15C FOR I-290 S/FOR THE I-90/94/290 INTERCHANGE. MERGE ONTO IL-190 E/FORD AVE. FOLLOW IL-153 E/FORD AVE TO W FORD ST. FOR THE BEACH PARK.

SPECIAL NOTES
1. ECO CONDITIONS WILL BE CHANGED AND VERIFIED IN FIELD. IF SIGNIFICANT DEVIATIONS OR DEVIATIONS ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION, A REPAIR PERMIT WILL BE OBTAINED AND CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
2. CONTRACTOR SHALL CONFORM TO ALL PLANS AND SPECIFICATIONS WHICH THE ENGINEER MAY IMMEDIATELY NOTIFY THE CONTRACTOR IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
3. THESE DRAWINGS ARE FULL SIZE AND SCALEABLE ON 11" X 17" SHEET SIZE AND ARE NOT REDUCIBLE IN SIZE.
4. STATEMENT THAT COMPLIANCE WITH THE ENERGY CODE IS NOT REQUIRED. Scope of work does not involve modifications to exterior envelope of building, HVAC systems or electrical lighting.

DO NOT SCALE DRAWINGS
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
### Antenna & Cable Schedule

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</tbody>
</table>

### Future T-Mobile Antenna

1. **Total:** 3 for Sector 4

#### Proposed FRSs to be Installed Stacked on Proposed Pipe Mount

- **Sector C @ 270°**
- **Proposed FRSs to be Installed:** Types: 3
- **Proposed Cowper 6G-1120-4-99 Antenna Mounting Arm:** Type: Each Sector

#### Proposed Cowper WC-136 Work Platform:

- **Type:** Each Sector

#### Proposed Cowper WC-136 Work Platform:

- **Type:** Each Sector
- **Proposed Cowper WC-136 Work Platform:** Type: Each Sector

#### Proposed Cowper WC-136 Work Platform:

- **Type:** Each Sector
- **Proposed Cowper WC-136 Work Platform:** Type: Each Sector
### Structural General Notes

#### 1. General Conditions

1.1 Design and construction of all work shall conform to the International Building Code, AD 218-05, and Steel Construction Manual 12th Edition. In case of conflict between the codes, standards, regulations, specifications, general notes and/or manufacturer’s requirements, use the most stringent provision.

1.2 It is the expressed intent of parties involved in this project that the Contractor or Subcontractor or Independent Contractor or the perspective employers shall, except as directed by the architect, engineer, or construction manager, the owner, and the client, comply with the warranty provisions and liability provisions. The Contractor shall indemnify the owner against loss, damage, or liability. Any expense arising in connection with the work shall be shared among the parties. The owner shall be responsible for any fault or failure of the work in accordance with the contractual provisions.

1.3 Do not scale drawings.

1.4 Verify all equipment mounting dimensions per manufactured drawings. See manufacturer enclosure connection details to foundations.

1.5 Submit one set and two prints of all structural shop drawings. Marked up s/draft shall be returned.

1.6 Design loads are:

- Dead load of equipment cabinets: \( \text{Max.} 10,000 \text{ LBS} \)

2.2 A geotechnical report was not provided. Foundations are designed for an assumed minimum soil bearing capacity of 2000 psi. A geotechnical investigation shall be performed prior to construction. If soil bearing capacity is less than what is specified here, contact architect for a structural change.

3.0 Concrete

3.1 Wet or exceed the following codes and standards:

- Design:
  - ADA 2005
- Construction:
  - AD 1980

3.2 Concrete strength at 28 days shall be 4000 psi minimum.

3.3 Do not field bend or use weld to grade 60 reinforced steel.

3.4 Provide air entrained concrete with air content of 5 to 7% for all concrete exposed to earth or weather.

3.5 Maximum aggregate size: 3/4" for footings, walls, beams, slabs and columns. 3/8" for concrete topping. DO NOT use any aggregate which has calcium chloride on water.

3.6 Minimum cover for reinforcing steel unless increased cover is necessary to meet fire ratings indicated:

- Cast against and exposed earth.
- Exposed to earth and weather. 11/2 to 2 bars.
- Exposed to earth and weather. 6 to 8 bars.
- Interior exposure, beams and columns.
- Interior exposure. Beams and columns.
- Fire exposure, beams and columns.

4.0 Compaction. The structural fill material shall be well graded granular soil and shall be placed in layers of 4 inches. Each layer shall be compacted to a minimum of 95% compaction based on ASTM D-1557 prior to succeeding layers.

### Alternate Slab Detail

#### Scale: 1" = 1'-0"

### Concrete Pad Detail

#### Scale: 1" = 1'-0"

---

**Sheet Title:** CONCRETE PAD DETAIL

**Sheet Number:** A-5
Appendix 7.4
Permits and Documentation
Building Permit
DEPARTMENT OF BUILDING AND ZONING
VILLAGE OF BEACH PARK
11270 WEST WADSWORTH ROAD, BEACH PARK, IL 60089

NOTE: No permit will be issued until this application has been completely filled in and submitted to the DEPARTMENT together with two sets of plans. PLEASE TYPE with dark ribbon or use ball point pen to permit duplication.

Fill in these sections below that apply to your project requirements. Leave others blank.

☐ FLOOD PLAIN  ☐ PARTIAL  ☐ NONE
STATE OF ILLINOIS  ☐ PIN #: 04-31-130-001 & 004
COUNTY OF LAKE

Eco-Site - Tower Owner
(Applicant’s Name)

Owner, Name: Village of Beach Park
Property Address: 12849 W. Ford Street
City: Beach Park  ZIP: 60087
Home Phone: 919-883-5023  Work Phone: 919-883-5023  Eco-Site:

Application is hereby made for permit to erect, construct, alter or install structures or facilities as checked or described below:

BUILDING:
☐ Single Family Dwelling  ☐ Single Family Dwelling
☐ Modular or Sectional
☐ With Mechanics  ☐ Without Mechanics
☐ Stories  ☐ Stories

☐ Multiple Family Dwelling
☐ Modular or Sectional
☐ With Mechanics  ☐ Without Mechanics
☐ Stories  ☐ Stories

☐ Commercial Building
☐ Public Building
☐ Industrial Building
☐ Institutional Building
☐ Farm Building
☐ Pole Building
☐ Storage

ACCESSORY
☐ Attached Garage  ☐ Detached Garage  ☐ Patio With Foundation
☐ Porch or Deck

BUILDING:
☐ Basement  ☐ Storage Building
☐ Ground Floor
☐ Stories
☐ Stories
☐ Stories

INCIDENTAL
☐ Breakaway
☐ Ground Floor
☐ Stories
☐ Stories

REMODELING:
☐ Alteration  ☐ Addition (Area  ☐ Volume  ☐ Cu. Ft)
☐ Attic  ☐ Under-porch
☐ Repair  ☐ Roofing  ☐ Siding
☐ Foundation  ☐ Demolishing

PLUMBING:
☐ Base Mh.  ☐ Fixtures
☐ ELECTRICAL WORK
☐ Sprinkler  ☐ Commercial

HEATING:
☐ Air Conditioner
☐ Floor Area  ☐ Mobile Home or RV Site
☐ Number of Pads
☐ Water Supply
☐ Well  ☐ “dis.”
☐ Connection to Existing Public Main or Well
☐ Supply system for other than residential use
☐ Sewage Disposal:
☐ Septic  ☐ Number of Bed rooms
☐ Repairs
☐ Privy

MISCELLANEOUS STRUCTURES:
☐ Swimming Pool:
☐ Private above ground  ☐ Private partially or totally submerged  ☐ Commercial Site

☐ Temporary
☐ Office  ☐ Toilets
☐ House trailer or mobile home  ☐ Emergency Circumstances
☐ Other  ☐ Specialty reason
☐ Specialty reason

☐ Special
☐ Building to be moved
☐ Fire damaged
☐ Change in use
☐ Disassembled

CERTIFICATE OF OCCUPANCY:
☐ Other (specify)

☐ Certificate of occupancy  ☐ Conditional Use Permit

EXAM OF PLAN:
☐ C Examine plans  ☐ A.G. Exemption
Total value of project $150,000.00

Describe briefly: Proposed Wireless Telecommunication Facility to include 102 multi-carrier monopole tower, ground equipment in fenced compound & gated access road.

Wireless Telecommunication Facility

Tony Phillips-SAC
Signature of Owner or Authorized Agent

540 W. Madison-16th Floor-Chicago, IL 60661
Address

In consideration of this application, information, plans, and other attached data being made a part hereof, and issuance of permits, the same conform to the regulations set forth in the Beach Park Building and Zoning Ordinances and other applicable ordinances. We also agree that all work performed under said permit will be in conformance with the same and that owner will not authorize any changes in said application, except by written application, signed by each party authorized to the Building Official, and that the use and use of the said premises as hereabove

Signed of Owner or Authorized Agent

ISSUED BY
Village of Beach Park
VILLAGE OF BEACH PARK

BUILDING PERMIT

Location of work to be performed:
12849 FORD ST
Lot #
Subdivision
Parcel # 04-31-130-001

Applicant:
ECO-SITE
240 LEIGH FRM ROAD SUITE 415
DURHAM NC 27707

Owner VILLAGE OF BEACH PARK
Description of work to be performed:

THIS IS THE CONSTRUCTION OF A 105 MONOPOLE FOR USE AS A CELLULAR TOWER. ALL WORK ON AND IN THE PROPERTY SHALL COMPLY WITH ALL VILLAGE OF BEACH PARK CODES AND ORDINANCES INCLUDING BUT NOT LIMITED TO THE ZONING APPROVALS AND APPROVING ORDINANCES, FAA APPROVALS, US ARMY CORP APPROVALS, LAKE COUNTY STORM WATER MANAGEMENT APPROVALS AND THE ACCESS AND PERMIT IS FOR THE TEMPORARY WHILE FINAL ARMY CORP PERMITTING IS COMPLETED AND APPROVED. FOLLOW ALL APPROVED TIME PLANS AS APPROVED BY OUR VILLAGE ENGINEER. THE ACTUAL ADDRESS WILL BE THE FORD STREET ADDRESS AND A BEACH ROAD ADDRESS WILL BE ASSIGNED BY DECEMBER 1, 2015. ALL WORK REGARDING THE SHELTER BUILDING, GENERATOR, FENCED AND LANDSCAPED ENCLOSURE, ROADWAY ETC... SHALL COMPLY WITH ALL CODES AND ORDINANCES AND PLANS THAT HAVE BEEN APPROVED.

1. ALL WORK AND REQUIREMENTS SHALL COMPLY WITH ALL VILLAGE OF BEACH PARK CODES AND ORDINANCES AND THE SITE AND LEASE AGREEMENTS BY AND BETWEEN THE VILLAGE OF BEACH PARK AND ANY AND ALL CARRIERS.
2. ANY DAMAGE TO ANY VILLAGE OR PUBLIC PROPERTY SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR. THE REPAIRS SHALL BE TO ANY AND ALL VILLAGE SPECIFICATIONS AND SHALL BE APPROVED BY THE VILLAGE.
3. YOU SHALL COMPLY WITH ALL PROVISIONS OF THE VILLAGE OF BEACH PARK RIGHT OF WAY ORDINANCE AS WELL AS ANY TREE PRESERVATION ORDINANCE. THESE ORDINANCES ARE VERY COMPREHENSIVE AND SHOULD BE REVIEWED.
4. PROVIDE 6 FOOT CHAIN LINK FENCING TO ENCLOSE THE CONSTRUCTION SITE AND ACROSS THE ENTRANCE TO THE SITE.
5. THE VILLAGE SHALL BE NOTIFIED OF THE START DATE OF THE WORK.
6. ALL CONTRACTORS SHALL BE INSURED FOR THE WORK THEY ARE PERFORMING. PROVIDE COPIES OF THEIR INSURANCES TO THE VILLAGE.
7. THERE SHALL BE A LETTER SUBMITTED FROM THE CELLULAR SERVICE PROVIDER INDICATING THAT THERE SHALL BE NO INTERFERENCE WITH ANY AND ALL VILLAGE OF BEACH PARK AND AREA MUNICIPAL AND PUBLIC SAFETY COMMUNICATIONS SYSTEMS, RADIO FREQUENCIES USED IN ANY AND ALL PUBLIC SAFETY AGENCIES IN AND AROUND THE VILLAGE OF BEACH PARK AND ANY AND ALL VILLAGE OF BEACH PARK OR SHERIFF'S OFFICE COMMUNICATION SYSTEMS AND RADIO FREQUENCIES. THE CELLULAR SERVICE PROVIDER MAY BE ASKED TO PROVIDE A FREQUENCY PROPAGATION AND INTERFERENCE STUDY SHOWING THAT THE AFOREMENTIONED SHALL NOT HAPPEN.
8. THE FACILITY SHALL COMPLY WITH SECTION 785.55 TECHNICAL REQUIREMENTS OF TITLE 83, CHAPTER 1, SUBCHAPTER F. PART 785 OF THE STATE OF ILLINOIS ADMINISTRATIVE CODE. THIS WOULD INCLUDE BUT IS NOT LIMITED TO POWER AND COMMUNICATIONS SYSTEMS, DETECTION SYSTEMS, VENTILATION, SUPPRESSION AND INSPECTIONS. THERE ARE SEVERAL REQUIREMENTS WITHIN THESE SUB-SECTIONS.
9. ALL WORK ON THIS PROJECT SHALL TAKE PLACE FROM THE BEACH ROAD ACCESS.
10. CONTRACTOR PARKING SHALL BE ON SITE AND NOT ON BEACH ROAD.
11. PROVIDE A SURVEY OF THE INSTALLATIONS WHEN COMPLETED TO INSURE COMPLIANCE WITH ORDINANCES OR A SURVEYOR TO LAYOUT THE SITE PRIOR TO CONSTRUCTION TO INSURE COMPLIANCE.
13. PROVIDE COPIES OF SOIL BORING AND SOIL CAPACITY TEST DATA THAT YOU HAVE TAKEN FOR THIS SITE AND USED FOR THE ANALYSIS OF YOUR STRUCTURAL REQUIREMENTS. THE DATA SAMPLES SHALL BE FROM AT LEAST THE DEPTH LEVEL OF THE FOOTING.
14. THE TOWER AND ALL ANTENNA FEED LINES SHALL BE PROPERLY GROUNDED PER ALL APPLICABLE CODES AND STANDARDS INCLUDING BUT NOT LIMITED TO NFPA 70, 350 AND 780.
15. ANY DAMAGE TO ANY OF THE PUBLIC INFRASTRUCTURE AND OR EQUIPMENT AND FACILITIES SHALL BE REPAIRED TO VILLAGE STANDARDS BY THE CONTRACTOR.
16. THE MONOPOLE SHALL BE PAINTED THE COLOR THAT WAS APPROVED IN THE ZONING VARIANCE ORDINANCE.
17. THERE IS INDICATION OF A GENERATOR INSIDE THE ENCLOSURE BUT NO DETAILS ON THIS UNIT WERE PROVIDED. PLEASE PROVIDE DETAILS OF THIS UNIT. IS THIS UNIT NATURAL GAS OR DIESEL POWERED?
18. PROVIDE WEEKLY WORK SCHEDULES OF THE PROJECT SO THE VILLAGE IS REGULARLY AWARE OF THE PROGRESS OF THE PROJECT.
19. ALL WORK FOR THIS PROJECT SHALL COMPLY WITH ALL VILLAGE OF BEACH PARK CODES AND ORDINANCES INCLUDING BUT NOT LIMITED TO THE 2006 INTERNATIONAL BUILDING CODE (INCLUDING SECTION 3108), 2008 NEC NFPA 70, 72, 76, 77, 101, 853 AND 780. ALL ZONING, ARCHITECTURAL AND VILLAGE BOARD APPROVALS AND REQUIREMENTS AND THOSE OF THE VILLAGE ENGINEER FROM RHMG ENGINEERS INC.
20. PROVIDE COPIES OF YOUR REQUIRED CONFINED SPACE, HIGH ANGLE AND BELOW GROUND EMERGENCY PLANS DURING CONSTRUCTION AND ALSO REMOVALS.
21. ANY TEMPORARY POWER INSTALLATIONS, INCLUDING BACK UP POWER SOURCE, MUST BE APPROVED PRIOR TO INSTALLATION AND OR USE.
22. ALL OF THE COMMENTS ON THIS REVIEW AND THE SUBMITTED PLAN SETS, DOES NOT RELIEVE THE APPLICANT FROM ANY AND ALL ASSOCIATED REQUIREMENTS AND CODE COMPLIANCE.

The following inspections are required and must be approved prior to occupancy or use:

**BUILDING OVERALL**

Driveway Base

Driveway Final
Electric Service
Final Carpentry
Final Electrical
FIRE ALARM
FOOTINGS
PRE-CON SITE MEETING
Rough Electrical
Rough Framing
Rough Grading
Silt Fence
Slab Pre-Pour Shed
Wall Pre-Pour

I have received an approved set of plans and am aware of the inspections required.

[Signature]
Building Officer
[Date]

[Signature]
Owner/Contractor
[Date]

This permit is to be posted where visible from the street.

CALL J.U.L.I.E. (1-800-892-0123) PRIOR TO THE START OF ANY EXCAVATION.
CONSTRUCTION HOURS MONDAY THROUGH FRIDAY, 7:00AM TO 6:00PM and SATURDAY AND SUNDAY 8:00AM TO 5:00PM. CALL 847-246-6006 TO SCHEDULE ALL INSPECTIONS.
USACE Regional Permit 8

The USACE Regional Permit 8 has not yet been issued. A copy of the USACE Regional Permit 8 will be forwarded to the FCC when issued.
USACE Regional Permit 8 Application
Schumm Consulting LLC
220 A Thornhill Ct.
Lake Barrington, IL 60010
(847)975-8391

Kathleen Chernich
U. S. Army Corps of Engineers
Chicago District Regulatory Branch
231 South LaSalle St.
Chicago, IL  60604-1437

October 20, 2015

RE:  LRC-2015-00778

Dear Ms. Chernich;

On behalf of the Village of Beach Park,  Schumm Consulting is submitting this application for permits to conduct work in Beach Park, Lake County, Illinois to construct a 154 foot monopole communications tower and associated equipment within a 60’ x 60’ equipment lease area at the property. The project includes a 12-foot wide proposed access and 8 foot wide utility easement that extends south connecting with West Beach Road. The current site hosts a fallow agricultural field.

On October 20, 2015, Schumm Consulting met with Julie Crane of Lake County SMC, and Mike Murphy of Army Corps of Engineers for a PJD and it was determined and recommended that the proposed work fall under the RP8, Category I, as only .01 acres of disturbance will occur on the site.

Please consider this our request and notification that this project be permitted under Regional Permit 8. The project will include the installation of a utility tower and pad, as well as a small access road. The site plan includes a small grade crossing over the wetland. All protection strategies will be implemented to avoid any additional wetland impacts.

Thank you for your Consideration.

Sincerely,

Nancy Schumm CWS #147
Table of Contents Notification of Proposed Activity

Notification of activity
  Cover letter
  Project Street Map
  Latitude and Longitude
  SESC plans
  Watershed plan statement
  Minimization of impact
  No mitigation statement

RP 8 statements a-u
RP7 temporary construction activities c-i

Additional Attachments:
  Joint Application form
  Wetland delineation
  Project plans
  USFWS study and statement of no effect
  IDNR Eco-Cat
  IHPA letter of no impact
Project Street Map

Latitude and Longitude: 42.42222 N, -87.88056 W

SESC plans: Please see attached plans page 4
Watershed plan statement: The site is in the Bulls Brook, Bull Creek watershed a subwatershed of the Des Plaines River, and will support the plan by implementing appropriate site protection during construction and the installation of native plantings around the pad to filter any run-off. The installation will follow the regulations of the Lake County SMC Watershed Development Ordinance for sediment and erosion control and low impact developments.

Minimization of impact to the site will be accomplished with sediment and erosion control measures, installation of a gravel driveway and planting of a native plant buffer around the exterior fencing of the pad.

No mitigation will be required as the impact to a wetland is less than ½ acres and only 0.01 acres.

RP 8 statements a-u

a. This project falls under Category I because the impact to WOUS is only 0.01 acres and the wetland is not a high-quality aquatic resource.
b. This will not be Category II as it is not over 0.5 acres of impact to WOUS.
c. No mitigation is required with the impact to only 0.01 acres.
d. There will be no discharge of dredged or fill materials into the Des Plaines River, which this watershed is a tributary to.
e. There will be only minimal disturbance during construction activities and they will not impact any waterbody because soil erosion and sediment control measures will be implemented (please see page 4 of plans). No outfall installation will be needed.
f. There is no conservation area adjacent to the site. The site is located in a residential area.
g. No facilities will be installed in a river, perennial, intermittent or ephemeral stream or creek. There is a pipe that will be installed in a ditch under the access road.
h. Any runoff from the site will be infiltrated, detained or treated prior to discharge into WOUS.
i. A buffer of native plants will be constructed around the site pad even though they are not required by regulation for the construction of poles or utility towers.
j. There will be no discharge of materials from the site during construction activities or post-construction.
k. The site will be restored to pre-construction conditions including pre-graded contours, and protection of disturbed areas with native vegetation.
l. The area of WOUS impacted will be limited to 0.01 acres for the construction of an access road.
m. The construction zone for the site is limited to the allowed width of 50 feet. Please see plans sheet number c-2.0
n. Vegetation shall be cleared to allow access to the site, but shall be minimized to the utility corridor.
o. Please see construction plans for information on location of access areas. No directional drilling is needed.
p. No directional drilling will occur.
q. Trench excavation shall be temporary, but no materials will be stored in wetlands or WOUS.
r. No impact will occur to existing hydrology. Impact to the wetland area will be 0.01 acres and will be reduced by activity and SESC plans.
s. Please see plans page 5 for information on backfilling of trench and roadway over wetland.
t. All disturbed areas will be stabilized immediately upon completion of construction and will be inspected after every .5 inches of rainfall, and/or every 7 days in compliance with the Lake County Watershed Development Ordinance.
u. Please see below for Permit 7 (temporary construction activities c-i)
c. Fill shall be composed of non-erodible materials and be constructed to withstand expected high flows.
d. The construction entrance will cross over the wetlands, therefor low ground pressure equipment will be used to carry materials to the site, or other protective measures will be utilized to minimize soil disturbance such as timber matts.
e. All materials used for temporary construction activities will be moved to an upland area immediately following completion of the activity.
f. The construction area will be restored to pre-construction conditions including grading to original contours and revegetating disturbed areas with appropriate native vegetation upon completion of the project.
g. No cofferdams are needed nor will they be used during activities.
h. No cofferdams will be needed or used during this activity.
i. No instream work will occur on this project.
# Joint Application Form for Illinois

**Items 1 and 2 for Agency Use**

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<th>Date Received</th>
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## 3. Applicant’s Name: Marc Samko
- Company Name (if any): Jon Kindseth
- Email Address: msamko@co sitios com

### 2a. Co-Applicant/Property Owner Name (if needed or if different from applicant):
- Company Name (if any): Village of Beach Park - Village Administrator
- Address: 240 Leigh Farm Road, Suite 415
  - Durham, NC 27707
- Email Address: jkindseth@villageofbeachpark.com

### 2b. Applicant’s Phone No. w/area code:
- Business: 1-312-498-4927
- Residence: Fax:

## 4. Authorized Agent (an agent is not required):
- Nancy Schrumm, CWS, CPESC, CMS4S
- Company Name (if any): Schrumm Consulting
- Address: 220 A. Thornhill Court
  - Lake Barrington, Illinois 60010
- Email Address: nancy.schrumm@gmail.com

## Statement of Authorization

I hereby authorize Nancy Schrumm to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

Applicant’s Signature: [Signature]
Date: 10/21/2016

## 5. Adjoining Property Owners (Upstream and Downstream of the water body and within Visual Reach of Project)

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<tr>
<th>Name</th>
<th>Mailing Address</th>
<th>Phone No. w/area code</th>
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<tr>
<td>b.</td>
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<tr>
<td>c.</td>
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<tr>
<td>d.</td>
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## 6. Project Title:
CH783689D - Beach Park

## 7. Project Location:
1249 West Ford Street, Beach Park, Illinois 60099

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<th>UTM Zone</th>
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<th>Easting</th>
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<td>4697032.32</td>
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<table>
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<tr>
<th>WATERWAY</th>
<th>RIVER MILE (if applicable)</th>
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<tbody>
<tr>
<td>Upper Des Plaines River (watershed)</td>
<td></td>
</tr>
<tr>
<td>Bull’s Creek Watershed (sub-watershed)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>STATE</th>
<th>ZIP CODE</th>
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<tbody>
<tr>
<td>Lake County</td>
<td>Illinois</td>
<td>60099</td>
</tr>
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</table>
8. PROJECT DESCRIPTION (Include all features):
Eco-Site proposes to construct a 154-foot Monopole communications tower and associated equipment within a 60-foot by 60-foot (3,600 square feet) equipment lease area at the above property. The project includes a 12-foot wide proposed access and 8-foot wide utility easement that extends south connecting with West Beach Road. Currently the site habitat consists of an agricultural field.

9. PURPOSE AND NEED OF PROJECT:
To provide wireless phone, data, and emergency services coverage to the community of Beach Park and the adjacent Wadsworth communities.

10. COMPLETE THE FOLLOWING FOUR BLOCKS IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

11. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS FOR WATERWAYS:

<table>
<thead>
<tr>
<th>Type:</th>
<th>Amount in Cubic Yards:</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

12. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (See Instructions)
N/A

13. DESCRIPTION OF AVOIDANCE, MINIMIZATION AND COMPENSATION (See Instructions)
N/A

14. Date activity is proposed to commence: January 5, 2016
Date activity is expected to be completed: February 1, 2016

15. Is any portion of the activity for which authorization is sought now completed? Yes ☐ No ☒
N/A

16. List all approvals or certifications received from other Federal, interstate, state, or local agencies for structures, construction, discharges or other activities described in this application:

<table>
<thead>
<tr>
<th>Issuing Agency</th>
<th>Type of Approval</th>
<th>Identification No.</th>
<th>Date of Application</th>
<th>Date of Approval</th>
<th>Date of Denial</th>
</tr>
</thead>
</table>

17. CONSENT TO ENTER PROPERTY LISTED IN PART 7 ABOVE IS HEREBY GRANTED. Yes ☒ No ☐

18. APPLICATION VERIFICATION (SEE SPECIAL INSTRUCTIONS)
Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Signature of Applicant or Authorized Agent: [Signature]
Date: 10-21-15

Signature of Applicant or Authorized Agent: [Signature]
Date: [Date]

Signature of Applicant or Authorized Agent: [Signature]
Date: [Date]

☐ Corps of Engineers ☐ Ill. Dept. of Natural Resources ☐ Ill. Environmental Protection Agency ☐ Applicant's Copy

SEE INSTRUCTIONS FOR ADDRESS
5. ADJOINING PROPERTY OWNERS (Upstream and Downstream of the water body and within Visual Reach of Project)

a. Nationstar Mortgage LLC
   13025 West Beach Road
   Wadsworth, Illinois 60083
   1-888-480-2432

b. Brian R. and Janice L. Bell
   38585 North Bayonne Avenue
   Beach Park, Illinois 60087
   Phone number not available

c. Village of Beach Park
   12846 West Beach Road
   Beach Park, Illinois 60087
   847-746-1770

d. George F. and Pauline K. Umek
   12941 West Ford Street
   Beach Park, Illinois 60087
   Phone number not available

e. Carl Dickson
   12846 West Ford Street
   Beach Park, Illinois 60087
   847-623-2723

f. Waukegan Park District
   3391 West Beach Road
   Waukegan, Illinois 60087
   847-360-4700

g. Joshua J. and Christine O. Heck
   38580 North Bayonne Avenue
   Wadsworth, Illinois 60083
   Phone number not available

h. Village of Beach Park
   12849 West Ford Street
   Beach Park, Illinois 60087
   847-746-1770

i. Waukegan Park District
   3391 West Beach Road
   Waukegan, Illinois 60087
   847-360-4700
16. List all approvals or certifications and denials received from other Federal, interstate, state, or local agencies for structures, construction, discharges or other activities described in this application.

<table>
<thead>
<tr>
<th>Issuing Agency</th>
<th>Type of Approval</th>
<th>Identification Number</th>
<th>Date of Application</th>
<th>Date of Approval</th>
<th>Date of Denial</th>
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</thead>
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<tr>
<td>Illinois Historic Preservation Agency</td>
<td>No objection to the proposed undertaking</td>
<td>IHPA LOG #004050115</td>
<td>April 29, 2015 and September 2, 2015</td>
<td>May 20, 2015 and September 10, 2015</td>
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<tr>
<td>United States Fish and Wildlife Services Midwest Region</td>
<td>No effect determination</td>
<td>Not provided – Online submission</td>
<td>February 6, 2015</td>
<td>February 6, 2015</td>
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<tr>
<td>Illinois Department of Natural Resources EcoCAT</td>
<td>No records within the Illinois Natural Heritage Database</td>
<td>IDNR Project Number: 1509281</td>
<td>February 17, 2015</td>
<td>February 17, 2015</td>
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<tr>
<td>Tribal Consultation via FCC’s Tower Construction Notification System (TCNS)</td>
<td>Email concurrences</td>
<td>TCNS# 122939</td>
<td>February 6, 2015</td>
<td>Final concurrence: July 2, 2015</td>
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<tr>
<td>Conditional Use and Variance Applications</td>
<td>Ordinance approving conditional use and variances</td>
<td>2015-O-17</td>
<td>April 3, 2015</td>
<td>May 28, 2015</td>
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<td>Federal Aviation Administration</td>
<td>Determination of No Hazard to Air Navigation</td>
<td>2015-AGL-7517-OE</td>
<td>May 19, 2015</td>
<td>July 8, 2015</td>
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<td>Plan Commission &amp; Zoning Board of Appeals Meeting</td>
<td>Motion to recommend approval</td>
<td>Not provided</td>
<td>May 7, 2015</td>
<td>May 7, 2015</td>
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<tr>
<td>Lake County SMC</td>
<td>WDP</td>
<td>#15-05-093</td>
<td>October 5, 2015</td>
<td>Pending subject to ACE</td>
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</table>
Please see the Wetland Delineation located within the NEPA Report in Appendix 7.2
Please see the Construction Drawings located in Appendix 7.3
Please see the NEPA Report in Appendix 7.2 for the USFWS study and statement of no effect; IDNR EcoCAT results, and IHPA letter of no impact
Watershed Development Ordinance Permit

The Watershed Development Ordinance Permit has not yet been issued. A copy of the permit will be forwarded to the FCC when issued.
Watershed Development Ordinance Permit Application
Beach Park
Eco-Site #IL-0019
T-Mobile #CH76369D
12849 W. Ford Street
Beach Park, IL 60087

Lake County
Stormwater Management Report

W-T CIVIL ENGINEERING, LLC
Civil and Structural Engineers
2675 Pratum Avenue
Hoffman Estates, IL 60192
Tel. (224) 293-6333  Fax (224) 293-6444
Project #CE15084

September 10, 2015

Todd O. Abrams, PE, CFM
Illinois Registered Professional Engineer
No. 062-061600 - Expires 11-30-2015
Stormwater Management Submittal

Table of Contents

- Project Narrative

- Maps
  - USGS Map
  - FIRM Panel #17097C0067K
  - Flood Profile Page 186P
  - Floodway Data Table 12
  - Lake County Topography
  - NRCS Soil Survey

- Wetland Delineation Report, prepared by Trileaf Environmental & Property Consultants, Dated June 17, 2015

- Floodplain Calculations
  - Compensatory Storage Cross Section Exhibits, EX 1.0 and EX 2.0
  - Compensatory Storage Calculations

- Maintenance
Project Narrative

The project is located at 12849 West Ford Street in Beach Park, Illinois. The site is located on the north side of Beach Road, approximately 0.25 miles west of Green Bay Road. The property, along with the properties to the west, north, and east are currently undeveloped agricultural land. There is an existing waterway and floodplain located along the east side of the property.

The project will consist of a new 3,600 square foot lease area, telecommunications tower, associated telecommunications equipment, and new 12 foot wide access road to the site. The 30 feet of access road closest to Beach Road will be asphalt, while the remainder will be compacted gravel. The lease area will also consist of compacted gravel. The total disturbed area is approximately 0.888 acres.

A wetland delineation report for the property was prepared by Trileaf Environmental & Property Consultants. A copy of this report is included in this submittal.

Based on FIRM panel 17097C0067K, there is Zone A floodplain located on the east and south side of the property. According to floodway data cross section V-V, the 100 year base flood elevation at the southern limit of the project is 701.10. Filling of the floodplain is necessary to construct the access road. Based on the Lake County Watershed Development Ordinance, compensatory storage volume for the filled area will be provided at a rate of 1.2:1.
Please see Floodplain Map in Appendix 7.1
<table>
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<tr>
<th>CROSS SECTION</th>
<th>DISTANCE (^1) (FEET)</th>
<th>WIDTH (^2) (FEET)</th>
<th>SECTION AREA (^3) (SQUARE FEET)</th>
<th>MEAN VELOCITY (^4) (FEET PER SECOND)</th>
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<td>701.1</td>
<td>701.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

\(^1\) Feet above mouth at Des Plaines River
\(^2\) Elevation computed without consideration of backwater effects from Des Plaines River
Lake County Topography
Disclaimer: The selected feature may not occur anywhere in the current map extent. A Registered Land Surveyor should be consulted to determine the precise location of property boundaries on the ground. This map does not constitute a regulatory determination and is not a base for engineering design. This map is intended to be viewed and printed in color.
The soil surveys that comprise your AOI were mapped at 1:12,000. Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale. Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County, Illinois
Survey Area Data: Version 8, Sep 13, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 13, 2012—Mar 28, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
Hydrologic Soil Group

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
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</thead>
<tbody>
<tr>
<td>153A</td>
<td>Pella silty clay loam, 0 to 2 percent slopes</td>
<td>B/D</td>
<td>1.2</td>
<td>75.5%</td>
</tr>
<tr>
<td>979B</td>
<td>Grays and Markham silt loams, 2 to 4 percent slopes</td>
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<tr>
<td>Totals for Area of Interest</td>
<td></td>
<td></td>
<td>1.6</td>
<td>100.0%</td>
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</tbody>
</table>

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher
Please see the Wetland Delineation located within the NEPA Report in Appendix 7.2
Compensatory Storage Cross Section Exhibits, EX 1.0 and EX 2.0
Compensatory Storage Calculations
AVERAGE END AREA CUT- FILL CALCULATIONS
BELOW 100-YR BFE (701.10)

<table>
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<th>SECTION</th>
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<th>FILL AREA (SF)</th>
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</tbody>
</table>

TOTAL SECTIONAL VOLUMES = 87.49 CY (CUT) 36.44 CY (FILL)

TOTAL FILL = 36.44 CY
TOTAL CUT = 87.49 CY

COMPENSATORY STORAGE VOLUME REQUIRED AT 1.2:1 RATIO OF CUT TO FILL = 43.73 CY

87.49 C.F. > 43.73 C.F. OK
Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan.

During construction the contractor shall:

- Clean up and grade the work area to eliminate concentration of runoff.
- Cover the open ends of pipes in trenches at the close of each working day.
- Inspect, maintain or replace (at inspector’s discretion) erosion and sediment control items.

Prior to any landscaping/restoration work, the contractor shall:

- Remove and replace plugged filter fence storm drain protection devices.
- All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be conducted at least once every seven days and within 24 hours of the end of each 0.25 inches or greater or rainfall, or equivalent snowfall.
- The contractor shall follow inspection procedures as outlined in the Stormwater Pollution Prevention Plan

Following construction (Station Manager)

- Clean sedimentation out of the catch basins and the underground detention system - as necessary
- Mow the grass in the green spaces and the detention pond as necessary
- Follow the maintenance schedule outlined in the attached Stormceptor System Owner’s Manual
Preliminary Jurisdictional Determination
October 21, 2015

Mr. Jon Kindseth, Village Administrator
Village of Beach Park
11270 W. Wadsworth Road
Beach Park, IL  60099

Subject:   SMC File #: 15-05-093
           USACE #:  LRC-2015-00778
           CH76369D – Beach Park, 12849 W. Ford Street, Beach Park, Lake County, IL
           PRELIMINARY WETLAND JURISDICTIONAL DETERMINATION

Dear Mr. Kindseth:

This letter responds to the request for a preliminary wetland jurisdictional determination (PJD) for the subject project, submitted on your behalf by Trileaf Environmental & Property Consultants (Trileaf) and received by the Lake County Stormwater Management Commission (SMC) on October 9, 2015. SMC Regulatory Staff reviewed source materials and performed a site reconnaissance on October 20, 2015, in the company of Mr. Michael Murphy of the U.S. Army Corps of Engineers (USACE) and Ms. Nancy Schumm of Schumm Consulting LLC. The wetlands/waters referenced in this letter are shown on the enclosed exhibit entitled “Wetland/Floodplain Map” (Trileaf, not dated).

Based on our findings, the subject property contains one (1) apparent Waters of the United States (WOUS), which is subject to regulation by the USACE under Section 404 of the federal Clean Water Act, as follows:

➢ The area identified as “Wetland” is an apparent WOUS. This area has a clearly discernible hydrologic connection to the traditionally navigable Des Plaines River (via the Upper Des Plaines River sub-watershed). This determination does not include a field verification of the delineated WOUS boundaries. You may request a boundary verification from the USACE (SMC is not authorized to verify WOUS boundaries). The surveyed WOUS boundaries will need to be included on the development plans for permitting purposes.

This PJD has been approved by SMC’s Chief Engineer and the findings are valid for a period of three (3) years from the date of this letter, unless new information warrants a revision before the expiration date. If you disagree with the findings of this PJD, you may request a final (approved) JD from the USACE.

For your information, SMC determined the jurisdiction of potential WOUS based on guidance provided in the EPA/USACE Memorandum entitled “Clean Water Act Jurisdiction following the U.S. Supreme Court’s decision in Rapanos v. United States & Carabell v. United States,” dated June 5, 2007 (revised December 2, 2008), and the USACE’s Jurisdictional Determination Form Instructional Guidebook dated May 30, 2007.
Permitting Considerations

This letter satisfies the requirement for a written jurisdictional determination under Article 10, Section 1001 of the Lake County Watershed Development Ordinance (WDO). A Watershed Development Permit (WDP) from SMC will be required for the proposed project, which involves public development in a regulatory floodplain, in accordance with the applicable provisions of the WDO. Please coordinate with Mr. Scott Griffith, SMC’s Regulatory Engineer Supervisor, at 847-377-7701 for the appropriate permit application form and procedures with respect to the WDO Standard Provisions and with Juli Crane, SMC’s Principal Wetland Specialist, at 847-377-7708 for approval of the project with respect to the WDO Wetland Provisions. Please note that the surveyed wetland boundaries will need to be included on the project plans for permitting purposes.

If the proposed development will impact WOUS, a separate wetland permit from the USACE will be required. Please refer to the USACE-Chicago District’s web site for the permit application submittal requirements: http://www.lrc.usace.army.mil/Missions/Regulatory/Illinois/AppChecklist.aspx. The USACE may require SMC’s technical review/approval of the proposed soil erosion and sediment control plan (SE/SC) for the development as a condition of the USACE permit. We will advise you if our SE/SC review/approval is required.

We would like to be of assistance. If you have any questions, or would like to set up a meeting, please call our office at 847-377-7705 or e-mail Juli Crane at jcrane@lakecountyil.gov. If you have any additional concerns that have not been addressed by the regulatory staff, you may contact Chief Engineer Kurt Woolford kwoolford@lakecountyil.gov or Executive Director Michael Warner mwarner@lakecountyil.gov at 847-377-7700.

If you would like to provide feedback regarding the SMC permit/inspection process please go to: (password – survey)
http://www.lakecountyil.gov/Stormwater/Pages/PermitProcessSurvey.aspx

Sincerely,

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION

Kurt Woolford, P.E., CFM Juli E, Crane, PWS, CWS
Chief Engineer Principal Wetland Specialist

Enclosure: Wetland/Floodplain Map (Trileaf, not dated).

cc: K. Chernich/M. Murphy/M. Navis, USACE
    K. Dubowski, Trileaf
    N. Schumm, Schumm Consulting
    S. Griffith, SMC

This document was digitally transmitted. Please print out a copy of the document and retain for your records. If you are unable to print the document, or desire a hard copy mailed to you, please notify SMC at your earliest convenience.
Appendix 7.5
FCC EA Deficiency Checklist
FCC ENVIRONMENTAL ASSESSMENT

The Spectrum and Competition Policy Division, Wireless Telecommunications Bureau sends “deficiency letters” to individual licensees and applicants, including tower owners, who have submitted environmental assessments (EAs) with applications (i.e., a filed FCC Form 601 or FCC Form 854) when the EA submitted is insufficient or lacks necessary documentation.

The following checklist is now used by the staff as an attachment to each deficiency letter to inform the licensee, applicant, or tower owner (collectively, “Applicant”) concerning compliance with 47 C.F.R. § 1.1307 of the Commission’s rules. In addition to compiling this information, Applicants are required to comply with all of the Commission’s environmental rules, including 47 C.F.R. § 1.1311 (i.e., “environmental information to be included in the environmental assessment (EA)”), to determine whether a proposed facility may have significant effect on the environment.

For purposes of ease of review, Trileaf is providing explanation for each of the compliance criteria.

Pursuant to 47 C.F.R. § 1.1307, this EA provides insufficient information regarding the proposed facility’s compliance with the following NEPA requirements:

__________ (a)(1) will be located in an officially designated wilderness area
Trileaf used site observations and reviewed the U.S. Geological Survey (USGS) 7.5-Minute Series Quadrangle (Wadsworth Quadrangle, IL) and the National Wilderness Preservation System website and determined that the Project site is not located in an officially designated wilderness area. See Appendix 7.2.

__________ (a)(2) will be located in an officially designated wildlife preserve
Trileaf used site observations and reviewed the U.S. Geological Survey (USGS) 7.5-Minute Series Quadrangle (Wadsworth Quadrangle, IL) and the United States Fish & Wildlife Service National Wildlife Refuge System website and determined that the Project site is not located in an officially designated wildlife preserve. See Appendix 7.2

__________ (a)(3) may affect listed threatened or endangered species or designated critical habitats; or is likely to 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
Trileaf used site observations, performed an Informal Biological Assessment, and consulted with the Midwest Region Section 7 Technical Assistance website of the United States Fish and Wildlife Service as well as the Illinois Department of Natural Resources Ecological Compliance Assessment Tool (EcoCAT), and determined that no federally listed or state listed threatened or endangered species will be affected by the Project. See Appendix 7.2.
(a)(4) may affect districts, sites, buildings, structures or objects significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible for listing, in the National Register of Historic Places

On April 29, 2015, Trileaf submitted the Form 620, with a “No Effect on Historic Properties in the Area of Potential Effects” determination. The Illinois Historic Preservation Agency (IHPA) concurred with Trileaf’s findings on May 20, 2015, stating there will be no effect on historic buildings, structures, districts, objects, or archaeological resources within the area of potential effects. See Appendix 7.2.

(a)(5) may affect Indian religious sites

Trileaf contacted all interested Tribal organizations through the FCC’s Tower Construction Notification System (TCNS). No tribes objected to this undertaking. The correspondence is included in Appendix 7.2.

(a)(6) will be located in a floodplain

Trileaf reviewed the USGS topographic map, the Flood Insurance Rate Map (17097C0067K) to determine if the project was located within the 100-year flood plain. Trileaf determined that the property is located in Zone X, areas determined to be outside the 500-year floodplain. However, the southern portion of the access/utility easement is located in Zone A and Zone AE. Therefore, the access/utility easement associated with the project site is located within a 100-Year Flood Plain and floodway. As a result, this environmental assessment is needed. The base flood elevation (BFE) was determined by the Flood Insurance Rate Map to be 701 feet above mean sea level. A copy of the FEMA flood map can be found in Appendix 7.2.

(a)(7) construction will involve significant change in surface features (e.g., wetland fill, deforestation or water diversion)

Trileaf reviewed the conducted field visit and the US Fish and Wildlife Service’s National Wetlands Inventory Map, included in Appendix 7.2, and the USGS topographic map, included in Appendix 7.1. Trileaf determined that the site is not located in a recognized National Wetland area. However, Trileaf’s site assessment revealed evidence of potential wetlands or hydrophytic vegetation located on or in the immediate vicinity of the project site. Additionally, a review of the United States Department of Agriculture (USDA) Soil Survey (websoilsurvey.sc.egov.usda.gov) indicated hydric soils at the project site. Based on this review, Trileaf recommended a wetland delineation take place for the proposed project site. The wetland delineation identified that designated wetland areas are located within the vicinity of this project and significant changes in surface features resulting from the proposed undertaking are anticipated.

(a)(8) will be equipped with high intensity white lights which are to be located in residential neighborhoods, as defined by the applicable zoning law

Towers less than 499 feet are not equipped with high intensity white lights. Verizon Wireless will not utilize high intensity white lights for the proposed undertaking.

(b) would cause human exposure to levels of radiofrequency radiation in excess of Commission-adopted guidelines

The Radio Frequency will be in compliance with local zoning requirements and FCC guidelines.
Appendix 7.6
Qualifications
KRISTIN K. DUBOWSKI

PROJECT MANAGER

Education
B.S., Zoology – 2006
Michigan State University
East Lansing, Michigan

Fields of Special Competence
Ms. Dubowski specializes in environmental remediation and state and federal environmental regulations. Further specialization includes performing Phase I Environmental Site Assessments, Phase II Environmental Site Assessments, National Programmatic Agreement reviews (NPA), NEPA compliance, and Section 106 compliance for both commercial and wireless communications projects.

Experience
Ms. Dubowski has experience performing NEPA compliance, NPA Reviews, preparing State Historic Preservation Office documents, and Section 106 compliance reports under the Federal Communications Commission’s standards for wireless communication projects throughout the Midwest.

Ms. Dubowski has experience performing Phase I Environmental Site Assessments, Phase II Environmental Site Assessments, Lead-based Paint Surveys, Mold Assessments, including air sampling for mold, Lead-in-water sampling, and Asbestos sampling/inspections for industrial, commercial, and residential properties.

Certifications and Affiliations
OSHA 40 hour HAZWOPER and Refresher Courses
Asbestos Building Inspector and Refresher Courses
ASTM course for Phase I Environmental Site Assessment Practices For Commercial Real Estate: Transaction Screens & Phase I Site Assessments
Attachmen1. Consultant Information

Provide a current copy of the resume or curriculum vitae for the Principal Investigator and any researcher or other person who contributed to, reviewed, or provided significant input into the research, analysis, writing or conclusions presented in this filing.

A current copy of the resume for the Principal Investigator and any researcher or other person who contributed to, reviewed, or provided significant input into the research, analysis, writing or conclusions presented in this filing.

Jill M. Kotwasinski, M.S., RPA

SENIOR PROJECT SCIENTIST

Education
M.S. Anthropology: Archaeology Concentration, University of Wisconsin Milwaukee, Milwaukee, WI 2014

B.S. North American Archaeology; Minor in Environmental Studies University of Wisconsin La Crosse, La Crosse, WI 2011

Professional Permits and Qualifications
Secretary of Interior Qualified Archaeology (Prehistoric and Historic Periods) Registered Professional Archaeologist

Fields of Special Competence
Ms. Kotwasinski specializes in conducting and managing Phase I, II, and II prehistoric and historical archaeological investigations. Ms. Kotwasinski has experience in cultural resource management implementation and compliance for construction, commercial, and wireless communications projects. Ms. Kotwasinski has interest and experience in environmental remediation and state and federal environmental regulations and performing Phase I Environmental Site Assessments.

Experience
Ms. Kotwasinski has experience performing NEPA compliance, NPA Reviews, and Section 106 compliance reports under the Federal Communications Commission’s standards for wireless communication projects throughout the Midwest. Ms. Kotwasinski has experience presenting scientific research in the professional environment and at conferences. Furthermore, she has experience in both field and laboratory settings. Her field experience includes performing, under Section 106, literature
reviews and archaeological field survey, testing, and data recovery efforts throughout the Great Lakes and Midwest. She specializes in Midwest and the Great Lakes region prehistoric ceramic analysis and classification. Ms. Kotwasinski has experience performing informal biological assessments, wetland and floodplain determinations, threatened and endangered species evaluations, and critical habitat research.

**Selected Professional Employment and Positions**

*Archaeological Lab Technician*, Mississippi Valley Archaeology Laboratory, 2007-2011

**Selected Publications**

*Analysis of Stylistic Attributes on Oneota Pottery from the Pammel Creek Site* La Crosse, Wisconsin, University of Wisconsin-La Crosse, Undergraduate Honors Thesis, 2011.

**Selected Presentations**

“A Compositional Perspective on Ceramics from the 2011 UWM Excavations at the Aztalan Site” co-author Dr. John D. Richards Paper presented at the 78th Meeting of the Society for American Archaeology Honolulu, Hi 2013.

“Analysis of Stylistic Attributes on Oneota Pottery from the Pammel Creek Site La Crosse, Wisconsin” Paper presented at Undergraduate Research Day University of Wisconsin La-Crosse 2011.

**Certifications/Affiliations**

Society for American Archaeology
The Student Conservation Association
Midwest Archaeological Conference
Member of the Wisconsin Archeological Survey
Kevin McHugh

1924 Hayselton Drive
Jefferson City, Missouri 65109
573-634-3191
E-mail: mchugk@yahoo.com

Education

- University of Virginia – Master of Arts in Architectural History
- University of Kansas – Bachelor of General Studies in Art History
- Continuing Education in Computer Programs such as EXCEL, Word, PowerPoint, ARCVIEW

Employment

CEO, Architectural Research LLC
Jefferson City, Missouri 2014 – Present

- Provide research for historic architectural resources in five Midwestern states
- Provide Section 106 compliance materials for State Historic Preservation Offices
- Support effective working relationships with individuals, private companies and public agencies

Grant Manager, Seagull Environmental Technologies
Contractor for the State Emergency Management Agency (SEMA), Jefferson City, Missouri 2012 - 2014

- Responsible for compliance issues on up to fourteen separate projects
- Responsible for monitoring grants in excess of $15 million
- Interact with the public as well as federal and state agencies

Senior Environmental Specialist and Architectural Historian
Missouri Department of Transportation, Jefferson City Missouri 1995 - 2011

- Provide ongoing environmental and architectural expertise in project management for MoDOT staff to meet National Environmental Policy Act (NEPA) regulations and complete MoDOT projects on time
- Meet with staff and consultants as project core team member/lead work
- Develop and present PowerPoint presentations on involved topics such as Section 4(f) and Section

Applicant’s Name: Eco-Site
Project Name: Palatine
Project Number: 616455
FCC Form 620
6(f) compliance for engineering staff
• Compose a wide variety of business correspondence with state agencies and contractors so that borrow sites obtain environmental compliance
• Successfully respond to all inquiries regarding project status
• Write decision making documents such as Categorical Exclusions (CE2s) for the Federal Highway Administration (FHWA) with legal sufficiency on a multiplicity of environmental and historic preservation issues
• Research a multitude of subjects from local history to environmental regulations
• Provide expertise in mentoring junior employees
• Serve as lead worker, supervising and coordinating with other employees so that MoDOT projects come in on time and under budget
• Review and edit material from cover letters to environmental documents
• Monitor and resolve difficult environmental compliance situations with local governments and agencies
• Consistently receive “exceeds expectations” on yearly employee evaluations
• Multiple MoDOT award winner in innovation and productivity

Manager, Community College of Aurora Bookstore

Denver, Colorado 1995

• Manage $1 million bookstore
• Train and instruct three full-time office employees
• Achieve complete knowledge of bookkeeping and cash flow management
• Ability to compose a wide variety of business correspondence
• Responsible for hiring and training up to five seasonal employee
JOSEPH D. OSBOURNE

GROUP MANAGER
GREAT LAKES REGION HEADQUARTERS

Education
M. S., Wildlife and Fisheries Resources, West Virginia University
B. S., Wildlife, Purdue University

Fields of Special Competence
Mr. Osbourne specializes in environmental site inspections and state and federal environmental regulations. Further specialization includes performing Phase I Environmental Site Assessments (ESA), National Environmental Policy Act (NEPA) and National Programmatic Agreement (NPA) site reviews, and wetland delineations.

Experience
Mr. Osbourne has extensive experience performing site inspections and background research for Phase I ESAs, NEPA site reviews, and NPA site reviews. He has conducted research, mapping, wetland delineation, and state agency correspondence activities for wireless communications and commercial development projects throughout the United States. Mr. Osbourne has researched aerial photography, historic topographic maps, National Wetland Inventory maps, Federal Emergency Management Agency Flood Insurance Rate Maps, city directories, and title information associated with Phase I ESAs and NEPA site reviews. Mr. Osbourne also has extensive experience conducting historic architectural reviews and Native American tribal consultations in accordance with Section 106 of the National Historic Preservation Act.

Certifications/Affiliations
40-hour OSHA Hazardous Waste Site Operations Training
Florida Department of Environmental Protection Wetland Delineation Certification
National Technical Committee for Hydric Soils Specialized Training for Wetland Scientists Certification