

**BOLINGBROOK PARK DISTRICT**  
**Annerino Community Center – Board Room**  
**Workshop Meeting Agenda**  
**Wednesday, May 19, 2021**  
**6:30 PM**

**NOTICE. MEETING MODIFICATION DUE TO COVID-19**

“Pursuant to the Governor’s Executive Orders, the Governor has made a disaster declaration in response to COVID-19. In accordance with 5 ILCS 120/7(e), the head of the public body has determined that an in-person meeting of all of the individual Board members under the Open Meetings Act is not practical or prudent. At least one board member will attend in person. Members of the public may continue to attend the meeting in-person or virtually. Public comment may be emailed to Executive Director Ron Oestreich [roestreich@bolingbrookparks.org](mailto:roestreich@bolingbrookparks.org) at least two hours prior to the scheduled meeting. Said email will be read by a representative of the Board at said meeting or otherwise placed into the record.

**Public (Zoom Meeting) Participation directions and link are located below**

1. Call to order
2. Roll call
3. Approval of Agenda
4. District Operations and Activities Update
5. Communication from the Public
6. Unfinished Business
7. New Business
8. Closed Session pursuant to 5 ILCS 120/2 (c) for the purpose of discussing:
  - (1) The employment, discipline and performance of specific employees.
  - (2) Collective negotiating matters.
  - (5) The purchase or lease of real property.
  - (6) The setting of a price for sale or lease of property.
  - (11) Pending or probable litigation.
  - (21) Approval or semi-annual review of closed meeting minutes.
9. Motion to adjourn

**Public Participation Instructions for Workshop Session:**

Join Zoom Meeting

<https://zoom.us/j/96652823092?pwd=UVFrc3BoOVE2R0FBY0dzMGQyVct0QT09>

Meeting ID: 966 5282 3092. Passcode: 445366

One tap mobile: +13126266799,,96652823092#,,,,\*445366# US (Chicago)

- **Please be sure to use your legal name.** Any use of inappropriate names may result in ejection from the meeting. Plan to join the meeting at least 5 minutes prior to start of meeting.
- **Items for Public Comment may also be emailed to [roestreich@bolingbrookparks.org](mailto:roestreich@bolingbrookparks.org) by 4:30 pm on 5/19/2021 to be read at the workshop during Communication from the Public.**

**BOLINGBROOK PARK DISTRICT**  
**Annerino Community Center - Board Room**  
**Board Meeting Agenda**  
**Wednesday, May 19, 2021**  
**7:00 PM**

**NOTICE. MEETING MODIFICATION DUE TO COVID-19**

“Pursuant to the Governor’s Executive Orders, the Governor has made a disaster declaration in response to COVID-19. In accordance with 5 ILCS 120/7(e), the head of the public body has determined that an in-person meeting of all of the individual Board members under the Open Meetings Act is not practical or prudent. At least one board member will attend in person. Members of the public may continue to attend the meeting in-person or virtually. Public comment may be emailed to Executive Director Ron Oestreich [roestreich@bolingbrookparks.org](mailto:roestreich@bolingbrookparks.org) at least two hours prior to the scheduled meeting. Said email will be read by a representative of the Board at said meeting or otherwise placed into the record.

**Public (Zoom Meeting) Participation directions and link are located below**

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Approval of Agenda
5. Approval of:
  - A. Monthly Board Workshop Meeting Minutes of April 15, 2021
  - B. Closed Session Meeting Minutes of April 15, 2021
  - C. Monthly Board Meeting Minutes of April 15, 2021
6. Correspondence from the Public
7. Communication from the Public
8. Attorney’s Report
9. Leadership Team Report
10. Treasurer’s Report
  - A. Approval of Disbursements – approval of payment of bills including travel reimbursement in the amount of \$739,658.40, subject to audit.
11. Committee Reports
  - A. Administration and Personnel – **President Vastalo**
  - B. Finance and Technology – **Commissioner McCloud**

- C. Buildings, Grounds, and Natural Resources – Commissioner Allen
  - *Approve Resolution 21-17 awarding contract in the amount of \$383,200.00 to Integral Construction for the Weber Path & Lily Cache Path and Bridge Project (Romeoville, Illinois).*
  - *Reject all bids for the Outdoor Pelican Harbor Bathhouse Flooring Replacement.*
- D. Recreation and Facilities – Commissioner Hix
  - Recreation Division: (Dance, Gymnastics, REACH, Athletes, Events)
  - Facilities Division: (Pre School/Day Camp, Adults, Fitness, Aquatics, Museum)
- E. Marketing – Commissioner Andrews
- F. Golf Course and Ashbury’s – Commissioner Andrews
- G. NWCSRA - Commissioner Andrews

- 12. Unfinished Business
- 13. Administer Oath of Office to elected Park Board Commissioners Jake McVey and Christian Cairy.
- 14. Recognition of outgoing Commissioners Denise Allen and Melissa McCloud
- 15. New Business
  - A. Election of Board Officers
- 16. Announcements
- 17. Closed Session pursuant to 5 ILCS 120/2 (c) for the purpose of discussing:
  - (1) The employment, discipline and performance of specific employees.
  - (2) Collective negotiating matters.
  - (5) The purchase or lease of real property.
  - (6) The setting of a price for sale or lease of property.
  - (11) Pending or probable litigation.
  - (21) Approval or semi-annual review of closed meeting minutes.
- 18. Adjournment
- 19. Citizens’ Guide to Addressing the Park Board:

Anyone wishing to speak under the agenda item entitled “Comments from the Public” shall adhere to the following guidelines:

- 1. A person shall be permitted to speak upon being recognized by the chairperson. Please stand (if possible), announce your name and address before commencing. All comments under COMMENTS FROM THE PUBLIC are limited three (3) minutes, and each person shall only be permitted to speak once.
- 2. All speakers shall address their comments to the chairperson. The chairperson may request that the appropriate member of the Park Board or staff respond to the comment.

3. The chairperson shall preserve order and decorum. The chairperson shall decide all questions of order.
4. When addressing the Park Board, members, administrative officers and other persons permitted to speak shall confine their remarks to the matter at hand and avoid personal remarks, the impugning of motives, and merely contentious statements. If any person indulges in such remarks or otherwise engages in conduct injurious to the harmony of the Park Board and the meeting, the chairperson may immediately terminate the opportunity to speak. This decision is at the discretion of the chairperson or upon the affirmative vote of two-thirds ( $\frac{2}{3}$ ) of the park board commissioners present. Any person, except a member of the Board, who engages in disorderly conduct during a meeting, may be ejected from the meeting upon motion passed by a majority of the Board present.
5. Please do not repeat comments that have already been made by others.

### **Public Participation Instructions for Regular Board Meeting**

Join Zoom Meeting

<https://zoom.us/j/96652823092?pwd=UVFrc3BoOVE2R0FBY0dzMGQyVct0QT09>

Meeting ID: 966 5282 3092. Passcode: 445366

One tap mobile: +13126266799,,96652823092#,,,,\*445366# US (Chicago)

- **Please be sure to use your legal name.** Any use of inappropriate names may result in ejection from the meeting. Plan to join the meeting at least 5 minutes prior to start of meeting.
- **Items for Public Comment may also be emailed to [roestreich@bolingbrookparks.org](mailto:roestreich@bolingbrookparks.org) by 4:30 pm on 5/19/2021 to be read at the workshop during Communication from the Public.**



**BOLINGBROOK PARK DISTRICT**  
**Annerino Community Center – Board Room**  
**Workshop Meeting Minutes**  
**April 15, 2021**

President Vastalo called the meeting to order at 6:30pm. Roll call: Andrews, McCloud, Hix, Allen, President Vastalo.

Motion Commissioner Vastalo, second Commissioner Hix to approve agenda as submitted. Roll call: Ayes: McCloud, Andrews, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

**District Operations and Activities Update**

Executive Director Ron Oestreich reviewed the following Resolutions and Action Item:

- Resolution 21-16 approving the terms and authorizing the execution of a donation agreement between the Bolingbrook Park District and Pulte Home Company, LLC.

Oestreich said this is the property (Essington and Hassert) we have been discussing at the last two board meetings. This will be the district's 51<sup>st</sup> property. The agreements have been worked through Tressler and their attorney and it is coming before the board tonight for approval.

- Approve Addendum to the Intergovernmental Agreement by and between Valley View School District 365U and the Bolingbrook Park District.

Oestreich said this is in regard to Central Park parking lot. The Annerino Community Center shares the parking lot with BJ Ward Middle School. This addendum is for sharing costs of replacement of the parking lot.

- Approve Resolution 21-13 awarding a contract in the amount of \$586,053.00 to Hacienda Landscaping for Century Park OSLAD Development, including all four alternatives (Minooka, IL).
- Approve Resolution 21-14 awarding a contract in the amount of \$1,035,490.88 to Abbey Paving Co., Inc. for the Central Park Pavement Improvements Project (Aurora, Illinois).

Oestreich reported the entire project is about \$13,000 over. We did not initially include the \$90,000 engineering fees. We had to spend the money on engineering due to the flooding in certain areas of the parking lot.

Commissioner Hix asked: Does the project include the drive by the newer entrance and the path back towards the tennis courts? Oestreich said yes and the engineers are well aware of the underground stream.

Commissioner Hix asked: Are we doing anything to fortify the underlayment that is there now? Chris Corbett, Superintendent of Projects and Planning said they scoped every storm drain on every culvert with a camera. They determined where there were breaks, debris, blockages. They also did 10-15 core samples of different aspects of the parking lot to see what the underlayment was and what type of stone is there. There was an extensive study done on the entire parking lot.

- Approve Resolution 21-15 approving Conveyance of Easement to the Bolingbrook Park District - Bella Vista Townhome HOA Lot 5.

### **Operational Updates** – Chris Corbett

Next month two action items will be presented to the Board:

- Outdoor Pelican Harbor Bath House – installation of epoxy flooring for outdoor bath house.
- Completion of the bike trail system from Veterans Parkway all the way through to the intersection of Hassert, Bradford and Weber roads. All the pieces are in place. Construction set in early June. Completion by the end of September. This has been a community effort.

Mike Baiardo, Director of Recreation and Facilities gave a brief update for Recreation and Facilities Comprehensive Plan for 2021 to 2023.

- Finished the first quarter of 2021
- Working on Phase 6 of the Comprehensive Plan
- Working as a group to provide and build written process for starting new services
- Reworking and evaluating surveying our customers
- Working with Managers to put together a Fulltime Staff Manual
- Unifying youth athletics for the entire community of Bolingbrook
- State of Illinois Department of Human Services – working on submitting application for funding of our REACH program.

### **Communication from the Public**

None

### **New Business**

None

### **Closed Session**

Commissioner Vastalo made a motion to enter into Closed Session at 6:46pm pursuant to 5 ILCS 120/2 (c) for the purpose of discussing: (1) The employment, discipline and performance of specific employees. Commissioner Hix seconded. Roll call: Ayes: McCloud, Andrews, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

Commissioner Vastalo made a motion to adjourn from Closed Session at 6:55pm. Commissioner Allen seconded. Roll call: Ayes: McCloud, Andrews, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

### **Adjournment**

Commissioner Vastalo made a motion to adjourn from the Work Shop Meeting at 6:56pm. Commissioner Allen seconded. Roll call: Ayes: McCloud, Andrews, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

**Minutes Verification Signature**

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**Bolingbrook Park District Board Secretary  
Denise Allen**

**BOLINGBROOK PARK DISTRICT**  
**Annerino Community Center – Board Room**  
**Board Meeting Minutes**  
**April 15, 2021**

Commissioner Vastalo called the meeting to order at 7:00pm. Roll call: McCloud, Andrews, Hix, Allen, President Vastalo.

President Vastalo began the meeting with the Pledge of Allegiance.

Motion Commissioner Vastalo, second Commissioner Hix to approve the agenda. Roll call: Ayes: McCloud, Andrews, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

Motion Commissioner Vastalo, second Commissioner Allen to approve the following meetings:

- Monthly Work Shop Meeting Minutes of March 18, 2021
- Monthly Board Meeting Minutes of March 18, 2021
- Special Board Meeting Minutes of March 30, 2021

Roll Call: Ayes: Hix, Andrews, McCloud, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

**CORRESPONDENCE FROM THE PUBLIC**

None

**COMMUNICATION FROM THE PUBLIC**

None

**ATTORNEY'S REPORT**

No formal report.

**REVIEW OF CLOSED SESSION MEETING MINTUES**

Commissioner Allen said the Board has done a semi-annual review of Closed Session Minutes as well as Closed Session Recordings. The Board has found that the following Closed Session minutes from September 17, 2020 need to remain confidential and are not available for public inspection.

The Board reviewed Closed Session recordings and found that the recordings from April 18, 2019 and June 20, 2019 can be destroyed. Recordings from May 16, 2019 need to be kept.

Commissioner Allen made a motion and a vote to report on review of Closed Session Meeting Minutes and Recordings. Commissioner Hix seconded. Roll call: Ayes: Andrews, McCloud, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

## **LEADERSHIP TEAM REPORT**

Executive Director Ron Oestreich had two introductions:

Tina Simpson, Accounting Supervisor introduced Daniel Finn as the districts Natural Resources, Horticultural and Turf Manager. Tina said Dan started with the Bolingbrook Park District in March of 2019 in the roll of Horticulturist. He is an ISA Certified Arborist, Certified Prescribed Burn Manager and holds an Illinois Pesticide Applicator License. Dan enjoys running, camping, hiking and back packing with his wife Stephanie and his son Cayden who is three years old. Tina happily shared that Dan and his wife are expecting their second child in October.

Sarah Sielisch, Aquatic Manager introduced Lindsey Pollina the new Dance Program Manager. Sarah said Lindsey comes to the district from Crystal Lake Park District. Lindsey was their Cultural Arts Special Events Supervisor for three years. Prior to that she worked at Glenview Park District and danced there. Lindsey did a lot of jobs at Glenview Park District from swim lessons, lifeguard, summer camp, score keeper and much more. Lindsey attended the University of Kentucky where she received her major in Leadership Development and Minored in Dance.

## **TREASURER'S REPORT**

Commissioner Hix made a motion for the payment of bills including travel reimbursement in the amount of \$462,236.10, subject to audit. Commissioner Allen seconded. Roll call: Ayes: McCloud, Andrews, Allen, Hix, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

Commissioner Hix said the district has been looking at cash the flow of the district in light of the changes the county has made for a multiple tax payment system as opposed to two major payments. It will be split into 4 payments. The district is in a very sound position and looking at the possibility of creating a credit facility with a local bank so the district has a back up plan if needed.

## **COMMITTEE REPORTS**

**Administration and Personnel** – Commissioner Vastalo reported:

Pulte Homes is donating cash and land at the corner of Essington and Hassert called Sawgrass. It will be our 51<sup>st</sup> property. 4.85 acres will be a land donation with the remaining 1.54136 acres being a cash equivalency of \$246,617.60 which will become a playground.

*With staff recommendation Commissioner Vastalo made a motion to approve resolution 21-16. Approving the terms and authorizing the execution of a donation agreement between the Bolingbrook Park District and Pulte Home Company, LLC. Commissioner Hix seconded. Roll call: Ayes: Andrews, McCloud, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.*

*With staff recommendation Commissioner Vastalo made a motion to approve Addendum to the Intergovernmental Agreement by and between Valley View School District 365U and the Bolingbrook Park District. Commissioner Allen seconded. Roll call: Ayes: McCloud, Andrews, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.*

Commissioner Vastalo reported all the districts audits balanced.

Commissioner Vastalo announced we have two new Board Members that will be sworn in next month. Christian Cairy and Jake McVey were elected to 4-year terms. Sadly, we will have to say Good Bye to Denise Allen and Melissa McCloud.

**Finance and Technology** – Commissioner McCloud reported:

The auditors have completed final field work for the 2020 audit. Staff is now assisting with updating statistical information and writing the 2020 financial summary. The 2020 Comprehensive Annual Financial Report (CAFR) will be presented to the Board of Commissioners for approval at the June 17, 2021 Board meeting.

**Buildings, Grounds and Natural Resources** – Commissioner Allen reported:

OSLAD – Century Park Construction - On April 1, 2020 six contractors submitted bids. The low bid of \$586,053.00 was provided by Hacienda Landscaping. Hacienda Landscaping has performed similar jobs for the Park District in the past with outstanding results. Bids came in much lower than anticipated. As a result, the Park District will be matching the State of Illinois at 50% for a total expense by each entity at \$320,127.

*With Staff Recommendation Commissioner Allen made a motion to approve Resolution 21-13 awarding a contract in the amount of \$586,053.00 to Hacienda Landscaping for Century Park OSLAD Development, including all four alternates (Minooka, Illinois). Commissioner Andrews seconded. Roll call: Ayes: Hix, McCloud, Andrews, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.*

ACC Asphalt Replacement Project - On April 1, 2020 seven contractors submitted bids. The low bid of \$1,035,490.88 was provided by Abbey Paving Co., Inc. Reference checks for Abbey Paving came back positive, which included references from the Village of Bolingbrook and WB Olson. The Park District budgeted \$850,000 for this project. Valley View School District 365U has tentatively agreed to assist in funding the project by providing \$262,440 in accordance with the Intergovernmental Agreement.

*With Staff Recommendation Commissioner Allen made a motion to approve Resolution 21-14 awarding a contract in the amount of \$1,035,490.88 to Abbey Paving Co., Inc. for the Central Park Pavement Improvements Project (Aurora, Illinois). Commissioner McCloud seconded. Roll call: Hix, McCloud, Andrews, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.*

Hartz Homes (Bella Vista) will be installing the bike trail along Bradford Place within the next month, now that the Easement with Stahelin Commercial has been recorded and approved with Will County.

*With Staff Recommendation Commissioner Allen made a motion to approve Resolution 21-15 approving conveyance of easement to the Bolingbrook Park District – Bella Vista Townhome HOA Lot 5. Commissioner Andrews seconded. Roll call: Ayes: Hix, McCloud, Andrews, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.*

**Recreation & Facilities** – Commissioner Hix reported

Commissioner Hix said he was very excited as he read through the report this month to see the number of areas that are growing in participation. Hix thinks it is really neat to see people starting to come out for the good again and be involved on an active basis. Hix thanked staff from all areas of the district for getting activities running and trying to get the community back in sync again.

- REACH is moving back to the schools.
- DanceForce is having their Spring Concert on May 23.
- Gymnastics/Cheer/Ninja programs are growing with 20 classes going with 122 participants.
- Martial Arts has 66 students.
- Group Fitness/Group Exercise was well attended with 815 participants in February and 1,320 in March.
- 4,105 visits to the LifeStyles Fitness Center. 900 more than the previous month.
- Pelican Harbor coming on line soon. Open swim and private rentals are growing.
- 1,644 Lap Swimmers.
- HONC has been active particularly continue the school program.
- Hidden Lakes Bait Shop opened and the first Fishing Derby is Saturday, April 17 with four more to follow.

Executive Director Ron Oestreich said he is looking forward to the construction of a new bait shop at Hidden Lakes this year. Oestreich said we will complete the items in our annual work plan as approved in the district’s budget. Oestreich said we are making some adjustments to our overall project plan. We have chosen to gracefully back out of the \$505,700.00 IDNR Museum Grant that we were awarded in 2020 for the Hidden Lakes Bait Shop and Learning Pavilion. This does not change our commitment in constructing a new bait shop with working rest rooms by the end of 2021.

Due to the unfortunate situation of COVID-19 many grants have already begun to scale back from their original projections. Bolingbrook Park District experienced this in 2014 with a similar IDNR grant for the outdoor pavilion at HONC. The district was awarded \$104,000 grant in which we completed the project with full expenditures of the original plan however all grants were frozen by the governor. We did eventually receive the \$104,000 in 2020 six years after completion of the project.

BPD Administration and Board did not feel comfortable in this current environment to spend \$505,700.00 with no immediate guarantee of reimbursement. It is not fiscally responsible to spend that money when we are carefully watching all other spending. We budgeted \$200,000 in capital expenditures toward the bait shop project this year and we are committed to completing it by end of 2021. This will feature a new shop with working rest rooms for public use. The learning pavilion will not be part of the new facility at this time. We will evaluate this addition in the future

**Marketing** – Commissioner Andrews reported:

Details and information on Pelican Harbor operations for the summer was released the first of April. The newsletter delivered to homes on April 5 gave details on the hours, time slots, how to reserve time slots, parties, outings, Pelican Pass sales and more.

Bookings are now being accepted for parties and outings. New this year is the use of DocuSign for the party and private pool rental agreements. This allows for easier tracking and eliminates the need for customers to come into the facility for their agreements. The team also streamlined the booking process for group outings to Pelican Harbor. These new systems will be monitored and adjusted as needed. Thank you to the IT team for helping with these changes. Another exciting change is the addition of the sports party by the athletics manager. We are confident this will be a welcomed addition by our community.

March social media and e-mail marketing statistics going sky high! Total e-mail data base contacts was 16,004.

***Design work completed in March***

Brochure Pages Designed	94
Digital Assets	81
Print Materials Created	45
Photos Edited	871

The customer care team is off to a great start. Total calls received at all locations in March was 3,466. Total transactions in March was \$84,414.48. Total calls have increased 55% since January and total transactions also increased 68% since January.

### **Golf Course & Ashbury's – Commissioner Andrews reported:**

March Overall Revenue exceeded target by 11.5%. YTD is also below target by 33% and last year by 87%.

Greens Fee Revenue exceeded target by 70%! With that in mind we are beginning to see increased restaurant traffic as well as increased banquet bookings in upcoming months.

Ashbury's is now open. Their hours are 11:00am to 9:00pm. Mother's Day Brunch is May 9. Nine, Wine & Dine is Saturday, May 15.

Operational Expenses are projected at a savings of 76%, which will translate into a positive bottom line. Payroll was over by 11%, but OPEX was down.

### **NWCSRA - Commissioner Andrews reported:**

NWCSRA will be working with Campfire Concepts to redefine the NWCSRA brand. This will include gathering community input through interviews and focus group discussions, completing a brand audit, logo update, brand style guideline and website redesign.

The agency will update financial software and explore options for recreational software updates; replace several older vehicles in the fleet in accordance with replacement plan.

Development of the Sensory Room at Bolingbrook Park District with a focus on enhancing sensory and military veteran programming.

NWCSRA Day Camp planning is in full swing. Three locations have been determined throughout our members agencies based on estimations of 65% of usual camper return.

NWCSRA Golf Outing & Fundraiser is scheduled for June 17 at Lockport Township Park District's Prairie Bluff Golf Course. It will feature an 11:30am shotgun start, plenty of contests/games/raffles, and a banquet dinner. Staff and annual participants are excited to return to the course after having a socially-distanced golf outing last year.

### **UNFINISHED BUSINESS**

None

### **COMMUNICATIONS FROM THE PUBLIC**

Executive Director Ron Oestreich received two questions from resident Robert Widuch:

1. What is the timeline for the bait shop project?
  - The project will be out to bid in July with a bid award in August and a start in September.
2. How many people have signed up for Rescheduled Volunteer Cleanup Day?
  - 30 volunteers have signed up and the meeting time is 9:00am at Hidden Oaks Nature Center.

Jake McVey introduced himself as the recently elected Park Board Commissioner for the Bolingbrook Park District. Jake said he started working at the Park District in 2012 and said if feels good to come full circle and make his way back. Jake said he is excited to serve.

Christian Cairy introduced himself as the recently elected Park Board Commissioner for the Bolingbrook Park District. Christian thanked the board for their support and look forward to working with the staff at the Park District and listening to the residents and taking their ideas and concerns to the Board.

Commissioner Hix congratulated all the candidates from the April Consolidated Election.

**NEW BUSINESS**

None

**ANNOUNCEMENTS**

Commissioner Vastalo said Happy Mother's Day!

Commissioner Hix welcomed Dan Finn and Lindsey Pollina. Hix said they are joining an excellent organization and promised them a challenge.

**CLOSED SESSION**

None

**ADJOURNMENT**

Motion Commissioner Vastalo, second Commissioner Hix to adjourn from the regular board meeting at 7:32pm. Roll call: Ayes: Andrews, McCloud, Hix, Allen, President Vastalo. Nays: None. Absent: None. Motion passed 5/0.

**Minutes Verification Signature**

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**Bolingbrook Park District Board Secretary  
Denise Allen**



# ADMINISTRATION AND PERSONNEL

## *Monogram Group Featuring Bolingbrook Park District Website Project*

- The Monogram Group has been so impressed with the District operations, they have chosen to feature us and our project on all their social channels. They will be telling our story and highlighting our brand through a 6-week campaign. Below are some of the stories they are hoping to tell:
  - History of our organization
  - Why we do what we do
  - Our approach to the website project
  - Our brand approaches
  - Our relationship with Monogram Group and Pilot Digital
  - The actual project processes

Monogram Group gets to feature their work within their industry. We will share these stories with our residents to bring them in on the process of developing the new website.

## *Foundation for Bolingbrook Parks Update*

- The Foundation for Bolingbrook Parks currently has \$8,549,08 in the bank. On June 19, the 3<sup>rd</sup> Annual Glow Golf fundraiser will be held at Boughton Ridge Golf Course, beginning at 7:30pm.
- The Foundation will be active this summer supporting the BPD events such as the Kids Try-Athlon, Parkies 5K, the Dedication of Plimmer Park, and BRAC Jam in September.
- Next meeting is Tuesday, June 8 at 4:30pm. Annerino Community Center.

## *Internal Audits*

<b>Cash Bank Audit</b>	<b>Status</b>
Pelican Harbor	Balanced
<b>All Day Cash Drawer</b>	
BRAC	Balanced
<b>Inventory Audit</b>	
Pelican Harbor	Balanced

# FINANCE AND TECHNOLOGY

## *Finance*

### *Comprehensive Annual Financial Report 2020*

- Tricia Dubiel, Superintendent of Business and Finance, and her team, did an excellent job of completing the 2020 audit. The restrictions of the pandemic made the audit more challenging. The team rose to the challenge and worked through the additional restrictions. The Comprehensive Annual Financial Report for 2020 will be presented at the June 17 Board Meeting for review and acceptance. Dan Berg from Sikich, LLC will be attending the Board workshop at 6:30 pm on June 17 to present.

## *Business and Technology*

### *Time and Attendance Software Transition*

- The team has been hard at work preparing for the time and attendance software transition from VSI's FinTrac to Ascentis. With FinTrac going end of life as of June 30, 2021, we plan to have staff begin punching into the new system as of May 31, 2021. This will allow us to process two payrolls prior to removing the FinTrac system.

### *VSI MainTrac 10.2 Going End of Life*

- MainTrac 10.2 is going end of life on June 30, 2021. This is the current version being utilized by the Buildings, Grounds, and Natural Resources Department. The new version of MainTrac has been moved under the RecTrac software as an additional module. The Buildings, Grounds, and Natural Resources Department will be going through an upgrade on MainTrac in June to move to the new version.

## *Statistics*

- 105 refunds processed
- 83 support tickets completed
- 1 new user training was held

# BUILDINGS, GROUNDS & NATURAL RESOURCES

## Approvals

### ***Lily Cache Path & Bridge Project***

- As included in the 2018 Referendum, the Bolingbrook Park District included the completion of the District's Comprehensive Bike Trail that links the east side of town to the west side through a series of bike trails in the community. In 1<sup>st</sup> Quarter 2021, the Park District successfully finalized all required Easements, permitting for this project to go out to bid.
- Bids went out on Tuesday, April 6 for construction of the bike trail along Weber Road, installation of the 56' long bridge and bike trail from Veterans Parkway through Drafke Park connecting to the Lily Cache Greenway Trail. Construction is anticipated to begin late May with substantial completion by end of August.
- On April 29, seven contractors submitted bids. The low bid of \$263,774.00 was provided by Hacienda Landscaping. Hacienda Landscaping has formally requested to withdraw their bid due to error in their base bid amount and so their bid is not responsive. The lowest responsive and responsible bid was submitted by Integral Construction. The estimate from Upland Design (Architect) for the project was \$479,539.00. Integral Construction has completed other projects for Upland Design with quality results. Reference checks to other communities has verified work quality and results as well.

#### Bid Summary

Hacienda Landscaping	\$263,774.00	*Disqualified
Integral Construction	\$383,200.00	
Copenhaver Construction	\$419,282.00	
Maneval Construction	\$419,939.62	
D Construction	\$479,188.00	
Innovation Landscape	\$491,083.24	
Conley Excavating	\$525,689.00	

*Staff Recommendation: Approve Resolution 21-17 awarding contract in the amount of \$383,200.00 to Integral Construction for the Weber Path & Lily Cache Path and Bridge Project (Romeoville, Illinois).*

## Bid Rejection

### ***Outdoor Pelican Harbor Bathhouse Flooring Replacement***

- The 2021 budget included funds to replace the eight-year old 'Sundeck' flooring in the Outdoor Pelican Harbor Bathhouse and family changing rooms.

- On April 19, staff released bid documents for replacement with an epoxy surface similar to the product installed during the BRAC Renovation. Three contractors submitted sealed bids prior to the bid opening on May 4. The lowest bid of \$50,786 is substantially over the budgeted \$30,000 originally scheduled to occur in 2023. At this time, staff is not comfortable with the timing, scope of work and other issues associated with the project. Staff are planning on possibly putting the project out to bid at a later date. Staff recommend a motion to reject all bids for this project.

Bid Summary

Tiles in Style, LLC	\$50,786.00
CCI Flooring, Inc.	\$52,500.00
Artlow Systems, Inc.	\$62,474.00

*Staff Recommendation: Reject all bids for the Outdoor Pelican Harbor Bathhouse Flooring Replacement.*

## **Buildings, Grounds, and Natural Resources Update**

### ***Congratulations to Sara Earhart and Jose Ruiz Alcantara For Promotions***

- Sara Earhart has been promoted to fill the Horticulturist position from her Full -Time Natural Resources Grounds Worker position. Her first day in her new position was Monday, May 3. Sara has been with BPD for two years. She will complete her Certificate of Ornamental Horticulture from the College of DuPage this spring. Sara also is a Certified Arborist and has an Illinois Pesticide Applicator License.
- Jose Ruiz Alcantara has been with the BPD for the past 15 years as a grounds worker and is being promoted to the Crew Leader of Turf position. Jose began his new role on Monday, May 3 as well. Jose has worked on the Horticulture Crew for most of his time at the District and is able to operate all equipment and has much landscaping experience. Congratulations Sara and Jose!

### ***Welcome Matt Sienko***

- Congratulations and welcome to Matt Sienko. Matt is our new Natural Resources Crew Leader. Matt comes to us most recently from Pizzo and Associates where he has been a Restoration Technician since 2011. Matt resides in Orland Park, attended the University of Illinois where he studied Atmospheric Sciences and Physics. He is a Certified Prescribed Burn Manager, where he has over 2000 acres of prescribed burn experience, and is licensed by the State of Illinois as a Pesticide Applicator.

### ***Certified Playground Safety Inspector***

- Both Dave Cluts and Juan Reyes recently passed their CPSI. This certification typically is held over three days in person. With the current pandemic, it was held virtually and consisted of much additional self-directed study units. It is followed up with an intense exam. The District values the importance of keeping all of our playgrounds safe and within the required guidelines and is excited to have three of our staff now Certified as Playground Safety Inspectors! They have been busy auditing the new playgrounds and keeping up with inspections. Their certification is good for three years. Congratulations!

## ***Spring Preparations***

- DuPage River Sweep will be held Saturday, May 15 at Hidden Lakes Historic Trout Farm. We are expecting about 30 volunteers to collect garbage and hand pull invasive plants. The NRHT staff will soon be planting 4,300 annual flowers at our facilities and at select parks. The staff will also be planting 6 new memorial trees in May. Mowing and landscape maintenance are now in full swing. Seasonal and permanent part time staff will be starting in May, and 2 full time positions are posted to fill those vacated by promotions.

## ***Athletics***

- Staff has been working diligently on getting soccer, football, baseball and softball fields prepped for permitted play for the spring season. Staff has been lining fields bi-weekly and dragging baseball and softball fields multiple times a week. They have been setting up for field rentals as well as BAC leagues.

## ***Boughton Ridge Golf Course***

- Per our Capital Asset Replacement Plan, Leibold Irrigation, Inc. has completed the installation of the irrigation pump with improvements that include a floating intake flume that will pull water from beneath the pond surface instead of the bottom of the pond. This will result in less mechanical maintenance and increased longevity to the system.

## ***Congratulations to Lahla Greenberg, Gold Award***

- Lahla Greenberg, an Ambassador Girl Scout of Bolingbrook Troop 70744 has completed her Gold Star Award requirements by building and installing two Free Little Libraries. They are located in Liberty Park and Indian Boundary Park, both by the playgrounds. Lahla, like many, was impacted by the pandemic as her original project (remodeling the ticket booth at BHS) was canceled. In true Girl Scout fashion, she persevered. This should bring enjoyment to many for years to come.

## ***Project Updates***

- Valley View School District 365U is updating the lighting near BJ Ward Elementary School and the parking lot shared mutually between the school and the Annerino Community Center. New wiring and light poles are being installed. School anticipates completion by end of May.
- Contractors installed a 10" HVAC duct from the Men's Lifestyles locker room to the Indoor Pelican Harbor customer care desk the week of May 17 to provide additional heating / cooling to the desk staff. Engineers redirected the HVAC ductwork from the unit currently in the mezzanine at the BRAC to the locker room unit due to insufficient air flow from the original design.
- Staff installed new door hardware on the doors that separate the Pelican Harbor and Lifestyles locker rooms to allow for key overrides should there be any emergencies.
- ADA Paving Improvement project is close to completion. Staff are working with the contractor to complete the asphalt work and finish the concrete work at Indian Boundary Park. Staff anticipate completion of this project by end of May.

- 2021 Playgrounds – Plimmer Park playground is open to the public. Draffe Park was opened to the public the week of May 17. Ivanhoe Park likely will be opened the week of May 24 and staff anticipate The Forest to be open late May, early June. Due to manufacturing delays caused by COVID, benches are planning on being installed by mid-June. Signs are posted at each park informing patrons of the anticipated bench installs. Installations have gone according to plan.
- Asphalt repair at the Annerino Community Center / Central Park is scheduled to begin on Monday, June 7. Staff are working with the contractor to finalizing schedule so proper signage and information can go out to patrons with assistance from our marketing team. More details will come as project progresses. Staff is anticipating completion by end of August.
- Staff are replacing their eight-year old flooring in the BRAC Dance Room the week of May 17. Floor is being replaced with a specialized dance floor.
- OSLAD at Century Park construction started with removal of the playground by Kids Around The World (KATA) the week of May 17. Staff anticipate mobilization by Hacienda Landscaping in late May. Substantial completion is still expected to be complete by early September.

# RECREATION AND FACILITIES

## Recreation Division

### **REACH**

- VVSD has 4 weeks remaining, ending on Friday, June 4. Pioneer is the only school that has enough enrollment to have REACH on-site. BJ Ward, Tibbott, Salk, Wood View, and Independence REACH operates out of the Annerino Community Center. REACH has experienced steady enrollment to provide for the families that need REACH services.

### **Pre School / Early Childhood**

#### **Preschool**

- The 2020-2021 School Year is near completion and Preschool Graduation and Step-Up programs are planned for outside at all three sites on Monday, May 17 & Tuesday, May 18. Each Preschool Family is allowed to bring 4 people to attend their child's program.
- Registration continues for the 2021-2022 school year with 110 currently enrolled. The Pre-K Program at Hidden Oaks already has 12 enrollees. Typically, this class has 7-8 preschoolers for the school year.

#### **Early Childhood**

- Early Childhood program enrollment is moving in a positive direction with 38 enrollees in six programs for April and early May. Summer registration is picking up for classes that will be held mostly at Annerino this coming season.

### **Dance**

- The 2021 May Dance Concert: From The Heart is scheduled for Sunday, May 23. There will be two concert times, one at 4pm and one at 6pm. 2021 Dance Photos and Dress Rehearsal for the May Concert will be held during the week of May 10 and 17.
- The dance department is currently providing dance programming after school at BJ Ward, Independence, Tibbott, and Irene King schools Tuesdays-Fridays in conjunction with Valley View School District 365U and the 21<sup>st</sup> Century Grant program.
- Junior and Senior Companies will be having their annual Awards Ceremony outside at the Bolingbrook Recreation and Aquatics Center on Friday, May 14. The awards Ceremony will be followed by a pool party at Pelican Harbor for DanceForce members to celebrate the end of a great season.
- Dancers will be attending Star Quest competition in University Park, Illinois over Memorial Day weekend. DanceForce dancers participated in the Rainbow competition April 16-18 where dancers walked away with two solos placing in the top 10 and three dancers receiving the Dancer of the Year Title Award.
- Auditions for the 2021/2022 year will be held in June. Information is being sent out to current and former dancers.

## ***Gymnastics/Cheer/Ninja***

- Spring session 2 began April 12 and currently has a total of 36 classes running with 286 participants. Gymnastics has 21 classes running with 156 participants. Ninjas has 14 classes running with 86 participants, which is an increase of 26 participants and 4 ninja classes from last session. Cheer has one class running with 8 participants.

## ***Theatre***

- Rehearsals for “When Bad Things Happen to Good Actors” have been taking place at the Annerino Multipurpose Room. There will be two shows- May 20 and 21. Tickets are on sale at the ACC and BRAC front desks for \$5 each.

## ***Youth Athletics & Martial Arts***

- The April - May session for youth athletic programs currently has 110 enrolled. 15 of the 16 offered classes are running. Martial arts have 138 enrolled in the spring session between the three martial arts programs, Illinois Shotokan Karate, Tae Kwon Do, and Modern Arnis.

## ***Adult Athletics***

- The Adult Softball Leagues started the last week in April. There are 38 teams in 6 leagues.

## ***Youth***

- Registration for special summer camps is open and there are new offerings we are co-oping with the Downers Grove Park District on. Virtual classes are still being offered with Fun with Academics based in California. Enrollees can take classes with others throughout the United States. It is a way to connect youth of the same age and interest.

## ***Camp Alotta Fun***

- Registration for Camp Alotta Fun is open and ongoing. Camp Alotta Fun will be held at the Bolingbrook Recreation and Aquatics Complex this summer beginning on June 7 and running 10 weeks through August 13. Staff hiring is being finalized and plans are set for fun and safe summer.

## ***Special Events***

- Summer Concerts are scheduled at the Roger C. Claar Performing Arts Center, 375 W. Briarcliff Road starting June 2- August 25 from 7:30-9:00 pm. The Bolingbrook Park District sponsors the first six concerts.
- Wednesday Night Concert Lineup sponsored by the Bolingbrook Park District
  - June 2 - Voyage
  - June 9 - Return2SouL
  - June 16 - Rhythm Giants
  - June 23 - The Walk-ins
  - June 30 - June's Got the Cash
  - July 7 – The Millennials



# *Facilities Division*

## *Fitness*

- Members will no longer need to make advance reservations for visits beginning May 1. This news has been well-received by members and puts the facility one step closer to normalcy.
- Rave reviews have come in on our new Aerobic room flooring! Staff and participants have loved having class in this room this past month!
- The fitness center recorded 3,904 visits in April. Lifestyles is averaging 126 guest visits per day which places the center around 40% of April 2019 visits. This also represents a tripling in monthly visits since the restart of fitness center access in July of 2020.
- April recorded 21 new memberships and 9 renewals. April numbers were a bit lower than anticipated however May has started off very strong. Staff is expecting these numbers to increase as the weather continues to improve and comfort levels increase.
- Group exercise continued to grow, recording 1,478 visits for April, compared to 1,320 for March.
  - Lifestyles hosted their first Virtual Webinar on April 15, “Top 5 questions I get asked as a trainer.” The webinar ran successfully with 5 participants.
  - Outdoor Body Pump release event was a success with 20 total participants on a beautiful April 26 evening.
  - April offered Aqua Ex. four times a week, every class has been full with 10 participants total.
  - Hybrid classes continue to be offered, giving members an option for classes in the event they do not or cannot come to the facility.

# *Aquatics*

## *Pelican Harbor Indoor/Outdoor Aquatic Park*

- Pelican Harbor is happy to announce that Pelican Passes went on sale April 15.
- Members are required to reserve time slots for lap swimming and open swimming in advance, subject to capacity limits.
- Currently Pelican Harbor has 1,290 Annual Memberships.
- Currently Pelican Harbor has sold 315 Summer Pelican Passes for the 2021 season.

## *Indoor Open Swim and Private Rentals*

- Indoor Pelican Harbor is welcoming back patrons to open swim on Saturdays and Sundays from 12:00 pm-2:00 pm and 2:30 pm-4:30 pm.
  - Also held open swim during spring break April 5-9 12:00pm-2:00pm and 2:30pm-4:30pm.
  - Each time block for April was at capacity and most May slots are filled as well.
  - Total open swim guests for April reached 971 participants (100% of capacity).
- Pelican Harbor offers private rentals on Saturday and Sunday evenings from 5:15 pm-7:15 pm. April was 100% booked for private rentals.

## *Lap swimming*

- Staff greeted a total of 1,715 lap swimmers for the month of April.

## *Swim lessons*

- Pelican Harbor is holding private, semi-privates, babies, adult, and group lessons.
- Total number of participants for swim lessons was 267, Pelican Harbor was 100% full for swim lessons.
- Pelican Harbor continued to demonstrate a great capability to adapt by making accommodations for numerous participants who were on the waitlist to get them enrolled in a class.

## *Pelican Harbor*

- Pelican Harbor Outdoor Aquatic Park is scheduled to open on Saturday, June 5!  
Initially, the front of the park will be open Monday-Thursday and the full park on Friday-Sunday.
- Initially, Daily Admissions will be by reservation only (Noon to 5:30pm)
- Pelican Harbor is preparing for summer. Park Attendants, Custodians, Concessions, Admissions and Party Host positions have all been filled. Pelican Harbor is currently still filling the Lifeguard and Swim Instructor positions. Currently Pelican Harbor has 80 Lifeguards and 40 Swim Instructors.
- New and Renewal Lifeguard classes have been occurring in small groups and staff has been creative with getting their skills accomplished while remaining safe. Lifeguards are already beginning to shadow and prepping for the summer.
- New and Renewal Swim Instructor classes have been occurring as well and prepping for the summer.
- Training week for all Aquatic Staff is May 24-27, 4pm-7pm.

# *Museum*

## *Hidden Oaks Nature Center*

The month of April was very active with 32 separate events held by Hidden Oaks Nature Center staff. Highlights include:

- April kicked off with the return of the annual Flashlight Easter Egg Hunt. This year's event sold out. The event was held by dividing guests into age groups and having each group hunt a separate location for safety.
- Spring Break camp hosted a total of 35 campers over three days. Campers enjoyed beautiful spring weather to play outdoor games, hunt for wood land creatures, and play lawn games.
- Eleven guests enjoyed an afternoon learning about the bee apiary on-site at Hidden Oaks. Special guests included our beekeepers, Kim and Pete, who gave a firsthand look at the inner workings of the hives and the guests even got to meet the Queen!
- Staff hosted a volunteer event with 30 eager helpers in attendance. The group cleaned a wide variety of trash from Hidden Oaks and Boan Woods. Highlights included a Buick dashboard and shopping cart.



- Hidden Oaks partnership with Indian Prairie School District continued through March with students dissecting an owl pellet, learning about animal habitats, and more.
- Hidden Oaks participated with dance and fitness to bring programming to students at five Valley View schools as part of their 21<sup>st</sup> Century Grant program.
- The Community Garden Plots opened for planting on April 15. A total of fifty-five of the available 75 plots have been rented.

## *Hidden Lakes Trout Farm*

- The Tackle Box Bait Shop opened for business on Thursday, April 1<sup>st</sup>.

- Natural Resources staff worked hard removing trees, clearing brush, and repairing winter wear throughout the grounds to make sure the area is in good condition for guests. A big thank you to the crew for working at Hidden Lakes.
- The first fishing derby of the season was held on Saturday, April 17. A total of 128 anglers attended to create the highest attended derby in at least the past 13 years. Thanks to all for making the day a success. A special thank you to Park Police Officer Lou Escobar for spending time at the derby and sending up the department's drone for some fantastic aerial photos of the event.



***Upcoming Fishing Derby Dates and Times***

May 15	3:00 – 6:00pm	Catfish Derby
June 19	10:00am – Noon	Kids Derby
August 21	6:00 – 10:00pm	Night Catfish Derby
September 25	3:00 – 6:00pm	Catfish Derby

# MARKETING AND CUSTOMER CARE

## *Summer Parks / Tails 2 Trails Challenge*

- With the release of the June BPD News will come the newest edition of the Summer Parks Challenge. This will be the fourth time we've done this. The challenge gets families out to our parks around Bolingbrook. To complete the challenge, participants have to answer questions about a specific feature of the park they're at. Once they go to all 15 parks and answer the questions, they return the form and get a prize. This year's prize will be a Bolingbrook Park District snack case. This is a great opportunity for people to get to parks they may normally not go to or not know about, including the new playgrounds we've installed as a result of the 2018 referendum.
- New this year will be Tails 2 Trails Challenge. We have over 10 miles of trails in the park district and we're encouraging people to get out with their dogs to walk all of them! It will be very similar to the parks challenge, where participants will be asked to answer questions about things they see on the trails. Once they turn in their forms, the prize will be for the dogs, a Bolingbrook Park District dog bandana.

## **April Social Media & E-Mail Marketing Statistics:**

Total Fans (Facebook, Instagram, and Twitter): 18,704

Total Engagement: (The sum of reactions, comments and shares): 1,965

Total Page Content Clicks: (The number of times people clicked on a post): 4,719

Total E-Mail Database Contacts: 16,044

## *Design work completed in April*

Brochure Pages Designed	92
Digital Assets	40
Print Materials Created	12
Photos Edited	197

## *Customer Care Team*

Location	Total Calls Received in April	Total Transactions in April
Annerino Community Center	2538	\$54,914.29
Bolingbrook Recreation & Aquatic Complex	2006	\$64,363.86
Pelican Harbor Indoor	290	\$21,077.52
Lifestyles Fitness Center	Desk Closed	Desk Closed
Hidden Oaks Nature Center	Facility Closed	Facility Closed
<b>Total</b>	<b>4,834</b>	<b>\$140,355.67</b>

**Since January, calls have increased by 3,500!**

**Since January, total transaction revenue has increased by over \$138,000**



# BOUGHTON RIDGE GOLF COURSE & ASHBURYS



## Preliminary Golf and Restaurant Monthly Performance

April Preliminary 2021	2021	2021			YTD	YTD		YTD	2021 vs.
Month Actual	Month Actual	Month Budget	Var	%	2021 Actual	2021 Budget	%	2020	2020 Actual
Golf Greens Fees Revenue	\$27,455	\$22,575	4,880	17.8%	\$48,383	\$29,109	39.8%	\$4,926	89.8%
Golf Rentals	\$9,190	\$6,507	2,683	0.0%	\$12,087	\$7,488	38.0%	\$620	94.9%
Pro Shop Revenue	\$1,696	\$1,650	46	0.0%	\$2,339	\$1,950	16.6%	\$240	0.0%
Restaurant Food Revenue	\$12,433	\$15,025	-2,592	-20.8%	\$29,465	\$47,897	-62.6%	\$32,731	-11.1%
Restaurant Liquor Revenue	\$15,965	\$18,848	-2,883	-18.1%	\$31,542	\$51,971	-64.8%	\$37,846	-20.0%
Food and Bev Event Revenue	\$3,980	\$2,500	1,480	37.2%	\$7,355	\$6,250	15.0%	\$10,132	-37.8%
Banquet Revenue (Food and Bev)	\$17,828	\$7,540	10,288	57.7%	\$23,780	\$18,850	20.7%	\$36,974	-55.5%
<b>Total Revenue (after comps)</b>	<b>\$89,229</b>	<b>\$78,429</b>	<b>10,800</b>	<b>12.1%</b>	<b>\$157,984</b>	<b>\$169,588</b>	<b>-7.3%</b>	<b>\$128,764</b>	<b>18.5%</b>
Payroll Expense	\$40,947	\$32,037	8,910	21.8%	\$103,135	\$91,008	11.8%	125,755	-21.9%
Est. Food and Bev COGS	32.5%	32.7%	0.2%	0.2%	38.0%	33.0%	5.0%	41%	2.0%
Est. OPEX (Operating Expense)	\$33,000	\$51,407	-18,407	-55.8%	\$151,001	\$179,154	-18.6%	157,912	-4.6%

- **Overall Revenue**
  - April Overall Revenue exceeded target by 12%. YTD is below target by 7%, but up from last year (month one of Stay at Home Order) by 18.5%.
  - Greens Fee Revenue exceeded target by 18%. YTD is above by 39% and over last year by 90%.
  - Food and Beverage were back open at lower capacity levels. Ashbury's rolled out the new menu on May 1, which should increase traffic as the operation is allowed to open more.
  - For the first time in a year, Banquet Revenue exceeded target! May and June bookings look strong as well.
  
- **Operational Expenses**
  - Operational Expenses are projected at a savings of 55% for April with a YTD savings of 19%. Payroll is slightly over, due to increased golf and banquet traffic.





### ***Summer Program Registration***

- Registration for summer programs began on May 10. Registrant numbers have continued to climb throughout the spring season. Three Day Program sites are now operating, Romeoville as well as the reopening of both Plainfield and Bolingbrook locations. Larger than originally estimated numbers of participants have signed up for Summer Camp offerings. The ability to increase capacity will provide opportunities to increase numbers allowed in programs and transportation as we enter the bridge phase of the reopening plan.

### ***Healthy Minds, Healthy Bodies Program***

- Each of the member agencies have agreed to join with NWCSRA to conduct the Healthy Minds, Healthy Bodies program. This program is for military service members with a disability. The goal of the program is offer healthy program opportunities for service members to encourage community interaction (fitness membership, personal training, social programs).

### ***Re-Brand of NWCSRA***

- NWCSRA staff will kick off their agency rebrand project with Campfire Concepts on June 7. Over the course of the next six months, NWCSRA will be gathering community input through focus groups with staff, board members and participants/family members, completing a brand audit, logo update, creating brand style guidelines and website redesign. In addition to updating brand identity, technology upgrade projects to communication network as well as financial and registration software will be completed this year to enhance the customer experience for both participants and staff.

### ***NWCSRA Annual Golf Outing – June 17***

- The NWCSRA Annual Golf Outing will be held at Prairie Bluff Golf Course on June 17. The event will feature a shotgun start at 11:30am and banquet dinner at 5pm. Excited to return to a traditional Golf Outing format this year. Foursomes and sponsorships are available. Thank you to the Bolingbrook Park District and the Foundation for Bolingbrook Parks for supporting of our Annual Golf Outing fundraiser.

**Summarized Revenue and Expense Analysis**  
**As of April 30, 2021**

	Revenue			Expense			Surplus/(Deficit)		
	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
<b>Primary Operating Funds</b>									
General	533,330	549,141	15,811	1,767,924	1,548,063	219,860	(1,234,593)	(998,922)	235,671
Recreation (Excluding Rev Facilites)	346,225	338,159	(8,066)	960,561	843,855	116,707	(614,336)	(505,696)	108,640
Museum	15,281	22,896	7,614	131,861	56,598	75,263	(116,580)	(33,703)	82,877
Special Recreation	1,969	34	(1,936)	187,259	76,377	110,882	(185,290)	(76,344)	108,946
Revenue Facilities									
Aquatics	106,835	157,439	50,604	279,551	207,108	72,443	(172,716)	(49,670)	123,047
Lifestyles	110,454	38,051	(72,403)	111,643	90,414	21,229	(1,189)	(52,363)	(51,174)
*Golf/Ashbury's			-	-	-	-	-	-	-
Total Revenue Facilities	217,289	195,490	(21,799)	391,194	297,523	93,672	(173,905)	(102,033)	71,872
<b>Total Primary Operating Funds</b>	<b>1,114,095</b>	<b>1,105,720</b>	<b>(8,376)</b>	<b>3,438,800</b>	<b>2,822,416</b>	<b>616,384</b>	<b>(2,324,704)</b>	<b>(1,716,696)</b>	<b>608,008</b>
<b>Other Operating Funds</b>									
Audit	47	3	(44)	21,071	18,010	3,061	(21,024)	(18,007)	3,017
Insurance/Worker's Comp	356	10	(347)	88,921	63,472	25,448	(88,564)	(63,463)	25,102
IMRF	147	17	(130)	121,063	101,577	19,485	(120,915)	(101,560)	19,355
Social Security	171	19	(152)	156,855	92,933	63,921	(156,683)	(92,914)	63,770
Paving & Lighting	75	3	(72)	4,349	7,214	(2,865)	(4,274)	(7,211)	(2,937)
Police	48	2	(46)	500	3,000	(2,500)	(452)	(2,998)	(2,546)
<b>Total Operating Funds</b>	<b>1,114,940</b>	<b>1,105,773</b>	<b>(9,167)</b>	<b>3,831,557</b>	<b>3,108,623</b>	<b>722,934</b>	<b>(2,716,617)</b>	<b>(2,002,850)</b>	<b>713,768</b>
Capital	5,872	260,055	254,183	1,036,330	688,540	347,790	(1,030,458)	(428,485)	601,973
Debt Service	1,680	1,616	(64)	-	1,586	(1,586)	1,680	30	(1,650)
Working Cash	755	43	(712)	-	-	-	755	43	(712)
<b>Total All Funds</b>	<b>1,123,248</b>	<b>1,367,488</b>	<b>244,240</b>	<b>4,867,887</b>	<b>3,798,749</b>	<b>1,069,138</b>	<b>(3,744,639)</b>	<b>(2,431,261)</b>	<b>1,313,378</b>



MINUTES OF a Regular meeting of the Board of Park Commissioners of the Bolingbrook Park District, Will County, Illinois, Held at the Recreational Center, 201 Recreation Drive, Bolingbrook, Illinois, within Said District, at 7:00 P.M. on Wednesday, May 19, 2021.

The President called the meeting to order and directed the Secretary to call the roll.

Upon the roll being called, \_\_\_\_\_ the President, and the following Park Commissioners at said location answered being Present:

\_\_\_\_\_  
\_\_\_\_\_.

The following Park Commissioners were absent from the meeting:

\_\_\_\_\_.

Park Commissioner \_\_\_\_\_ present and the Secretary read in full the following: **RESOLUTION NO. 21-17**

**RESOLUTION AWARDED A CONTRACT IN THE AMOUNT OF \$383,200.00 TO INTEGRAL CONSTRUCTION FOR THE WEBER PATH & LILY CACHE PATH AND BRIDGE PROJECT (ROMEOVILLE, ILLINOIS)**

**RESOLUTION NO. 21-17**

**RESOLUTION AWARDING A CONTRACT IN THE AMOUNT OF \$383,200.00 TO INTEGRAL CONSTRUCTION FOR THE WEBER PATH & LILY CACHE PATH AND BRIDGE PROJECT (ROMEOVILLE, ILLINOIS)**

WHEREAS, the Bolingbrook Park District (“Park District”) is a duly organized unit of local government organized and operating under the Constitution and laws of the State of Illinois; and

WHEREAS, the Park District derives its rights, power and authority from the various sections of The Park District Code (the “Code”); and

WHEREAS, the Board of Park Commissioners of the Bolingbrook Park District has determined that it is necessary and in the best interests of the Park District to award a contract in the amount of \$383,200.00 to Integral Construction of Romeoville, for the Weber Path & Lily Cache Path and Bridge Project with said work consists of the provision of materials, labor, and equipment necessary to remove and install asphalt and concrete paving, crosswalk striping, pedestrian bridge and abutments, and restore lawn; and

WHEREAS, Hacienda Landscaping, had submitted the lowest bid per the April 29, 2021 bid opening but their bid was erroneous and therefore withdrawn at Hacienda’s request and therefore was not responsive;

WHEREAS, Integral Construction, has submitted the lowest responsible bid per the April 29, 2021 bid opening for the Weber Path & Lily Cache Path and Bridge Project; and

WHEREAS, the Board of Park Commissioners hereby finds and declares that it is in the best interests of the Park District to award the bid and enter into a contract;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF PARK COMMISSIONERS OF THE BOLINGBROOK PARK DISTRICT, WILL COUNTY, ILLINOIS, AS FOLLOWS:

SECTION ONE: The recitals set forth hereinabove shall be and are hereby incorporated as findings as if said recitals were fully set forth within this Section One.

SECTION TWO: The Board of Park Commissioners of the Bolingbrook Park District hereby approves the award of the bid to the lowest responsible bidder, Integral Construction, in the total amount not to exceed \$383,200.00, as set forth in Exhibit 1 attached hereto and made a part hereof. The Board directs staff to take the necessary steps to enter into said contract with Integral Construction of Romeoville, Illinois.

SECTION THREE: Any and all policies or resolutions of the Park District that conflict with the provisions of this resolution shall be and are hereby repealed to the extent of such conflict.

SECTION FOUR: This Resolution shall be in full force and effect from and after its passage as provided by law.

PASSED THIS 19<sup>th</sup> day of May, 2021.

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSENT: \_\_\_\_\_

APPROVED THIS 19<sup>th</sup> day of May, 2021.

\_\_\_\_\_  
President, Board of Park Commissioners

ATTEST:

\_\_\_\_\_  
Secretary, Board of Park Commissioners

JMO/og1/#4825-0607-5369/5.20.21

Park Commissioner \_\_\_\_\_ moved and Park Commissioner \_\_\_\_\_ seconded the motion that the resolution as presented and read be approved.

After a full discussion thereof, the President directed that the roll be called for a vote upon the motion to adopt said resolution as read.

Upon the roll being called, the following Park Commissioners voted:

AYE: \_\_\_\_\_

NAY: \_\_\_\_\_

ABSENT: \_\_\_\_\_

Whereupon the President declared the motion carried and the resolution adopted, approved, and signed the same in open meeting, and directed the Secretary to record same in the records of the Board of Park Commissioners of the Bolingbrook Park District, Will County, Illinois, which was done.

Other business not related to the passage of this resolution was duly transacted at the meeting.

Upon motion duly made and seconded, the meeting was adjourned.

\_\_\_\_\_  
Secretary, Board of Park Commissioners  
Bolingbrook Park District  
Will County, Illinois

STATE OF ILLINOIS    )  
                                  ) SS.  
COUNTY OF WILL     )

I, the undersigned, do hereby certify that I am the duly qualified and acting Secretary of the Board of Park Commissioners (the "Board") of the Bolingbrook Park District, Will County, Illinois (the "District"), and as such official I am the keeper of the records and filed of the District and the Board.

I further certify that the foregoing constitutes a full, true, and complete transcript of the minutes of the meeting of said Board held on the 19<sup>th</sup> day of May, 2021 insofar as same relate to the adoption of the following: **RESOLUTION 21-17**

**RESOLUTION AWARDING A CONTRACT IN THE AMOUNT OF \$383,200.00 TO INTEGRAL CONSTRUCTION FOR THE WEBER PATH & LILY CACHE PATH AND BRIDGE PROJECT (ROMEOLVILLE, ILLINOIS)**

a true, correct, and complete copy of which resolution as adopted at said meeting appears in the foregoing transcript of the minutes of said meeting.

I do further certify that the deliberations of the members of the Board of Park Commissioners on the adoption of said resolution were conducted openly, that the vote on the adoption of said resolution was taken openly, that said meeting was called and held at a specified time and place convenient to the public, that notice of said meeting was duly given to all news media requesting such notice, that an agenda for said meeting was posted at the location where said meeting was held and at the principal office of the Board at least 48 hours in advance of the holding of said meeting, that said meeting was called and held in strict compliance with the provisions of "AN ACT in Relation to Meetings," approved July 11, 1957, as amended (the "Open Meetings Act"), and with the provisions of the Park District Code of the State of Illinois, as amended, and that the Board has complied with all of the provisions of said Act and said Code and with all of the procedural rules of the Board in the passage of said ordinance.

IN WITNESS WHEREOF I hereunto affix my official signature at Bolingbrook, Illinois, this 19<sup>th</sup> day May, 2021.

\_\_\_\_\_  
Secretary, Board of Park Commissioners  
Bolingbrook Park District  
Will County, Illinois



Bidder Name: Integral Construction

Address: \_\_\_\_\_

\_\_\_\_\_

Phone #: \_\_\_\_\_

## CONTRACT DOCUMENTS AND SPECIFICATIONS

### FOR

### Weber Path & Lily Cache Path and Bridge

**BOLINGBROOK PARK DISTRICT  
301 RECREATION DRIVE  
BOLINGBROOK, IL 60440  
(630) 739-4696**

**April 29, 2021**

Prepared By:



**UPLAND DESIGN Ltd.  
24042 Lockport St., Suite 200, Plainfield, Illinois 60544  
1250 W. 18<sup>th</sup> Street, Chicago, Illinois 60608  
PH: (815) 254-0091**

Project #715 and #861

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## **ADVERTISEMENT FOR BID**

The Bolingbrook Park District will accept sealed bids for WEBER PATH & LILY CACHE PATH AND BRIDGE until THURSDAY, APRIL 29, 2021 AT 1:00 P.M.

The proposed work consists of the provision of materials, labor, and equipment necessary to remove and install asphalt and concrete paving, crosswalk striping, pedestrian bridge and abutments, and restore lawn.

As of 1:00 P.M. APRIL 6, 2021, Bid Documents are available at the Buildings & Grounds Facility offices, 301 Recreation Drive, Bolingbrook, Illinois 60440, (630) 739-4696.

Bids will be publicly opened and read at 1:00 P.M. APRIL 29, 2021 at the Buildings & Grounds Facility, 301 Recreation Drive, Bolingbrook, Illinois 60440. Bids received after this time will be returned unopened. No oral proposals or modifications will be considered. The park district reserves the right to reject any and/or all bids, to waive any informality, and to accept the bid that is in the best interest of the Bolingbrook Park District. All contracts for the construction of public works are subject to the Illinois Prevailing Wage Act (820 ILCS 130/1-12).

All proposals must include a ten percent (10%) Bid Guarantee. No bidder may withdraw his proposal after the hour set for the opening thereof, or before award of the contract, unless said award is delayed for a period exceeding thirty (30) calendar days.



## INSTRUCTIONS TO BIDDERS

### Project Identification

**Project Name:** Weber Path & Lily Cache Path and Bridge

**Project Owner:** Bolingbrook Park District  
301 Recreation Drive  
Bolingbrook, Illinois 60440

**Project Locations:** Weber Rd & Bradford Place  
Bolingbrook, Illinois 60490  
  
1125 Quail Run Ave  
Bolingbrook, Illinois 60490

**Bid Opening:** April 29, 2021 at 1:00 P.M.  
Bolingbrook Park District Building & Grounds Facility  
301 Recreation Drive  
Bolingbrook, Illinois 60440

**Project Scope:** The proposed work consists of the provision of materials, labor, and equipment necessary to remove and install asphalt and concrete paving, crosswalk striping, pedestrian bridge and abutments, and restore lawn.

**Begin Work:** Work can commence May, 2021.

**Completion Deadline:** August 31, 2021.

### **Contract Documents**

The work shall be performed in accordance with the plans and specifications entitled Weber Path & Lily Cache Path and Bridge.

### **Bid Security**

A ten percent (10%) bid security in the form of a bid bond, postal money order, certified check, or cashier's check made payable to the Owner must accompany the bid. Failure to furnish a bid security in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid, in the absolute discretion of the Owner.

### **Preparation and Submission of Bids**

Before submitting proposal, each bidder shall examine carefully all documents pertaining to the work and visit the site to verify conditions under which work will be performed. Submission of bid will be considered presumptive evidence that the Bidder has visited the site and is conversant with local facilities and difficulties, the requirements of the documents and of pertinent State or Local Codes, State of Labor and Material Markets, and has made due allowance in his bid for all contingencies. Include in bid all costs of labor, material, equipment, allowance, fees, permits, guarantees, applicable taxes, insurance and contingencies, with overhead and profit necessary to produce a complete project, or to complete those portions of the work covered by the specifications on which proposal is made, including all trades, without further cost to the Owner. Obtain all permits and arrange for all inspections. Pay all fees and costs incurred. No compensation will be allowed by reason of any difficulties which the Bidder could have discovered or reasonably should have discovered prior to bidding.

All proposals must be made upon the bid form furnished by the Owner included herewith and should give the amounts bids for work, in numbers, and must be signed and acknowledged by the Contractor. The proposal submitted must not contain erasures, inter-lineations, or other corrections unless each correction is suitably authenticated by affixing in the margin immediately opposite the correction the surname or surnames of the person or persons signing the bid. The bid form should not be removed from the specifications booklet.

### **Award of Contract**

Award of the contract will be made to the lowest responsive, responsible bidder, as determined by the Owner. The Owner may reject any or all of the bids on any basis and without disclosure of a reason. The failure to make such a disclosure shall not result in accrual of any right, claim, or cause of action by any unsuccessful bidder against the Owner.

### **Non-Discrimination**

During the performance of this contract, the Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoffs or termination; rates of pay or other forms of compensation; and, selection for training including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

The Contractor will comply with all provisions of the Equal Employment Opportunity as required by the Human Rights Act and rules and regulations of the Illinois Department of Human Rights published at 44 II Administrative Code Section 750, *et seq.*

### **Contract and Insurance**

The accepted bidder shall enter into a written contract; provide the Owner with copies of Workman's Compensation and Public Liability Insurance Policies or certificates therefore, within ten (10) calendar days of the "Written Notice to Proceed" and prior to the commencement of work.

### **Sales Tax Exemption**

The Bolingbrook Park District is a municipal tax exempt body. Proof of tax exempt status is available upon request. Taxes should not be reflected in the bid price.

## **GENERAL REQUIREMENTS**

### **Provisions Included**

In resolving inconsistencies among two or more sections of the Contract Documents, precedence shall be given in the following order:

First	Agreement
Second	Laws and Regulations
Third	General Requirements
Fourth	Specifications
Fifth	Contract Drawings
Sixth	Provisions Included

### **Extra Work**

The Contractor must have a work order for extra work in writing indicating such work and same must be signed by the Owner prior to construction of such work.

### **Definitions**

- a. Contractor - The person, firm or corporation with whom Owner has entered into the Agreement.
- b. Owner - The Bolingbrook Park District
- c. Contract Documents - The Invitation to Bidders, Instructions to Bidders, Contractor's Bid (including documentation accompanying the Bid any post Bid documentation submitted prior to the Notice of Award), Addenda (which pertain to the Contract Documents), Agreement, Bonds, General Requirements including materials incorporated by the Provisions Included section, Specifications, Plans and/or Drawings as the same are more specifically identified in the Agreement, together with all amendments, modifications, and supplements issued on or after the execution of the Agreement.
- d. Subcontractor - Any person, firm or corporation with a direct contract with the Contractor who acts for or in behalf of the Contractor in executing any part of the Contract, but does not include one who merely furnishes the material.

### **Bonds**

With Bid, and attached thereto, each Bidder shall furnish Bid Security payable to the Owner in the amount of 10% of Bid Amount. The Bid security can be in the form of a bid bond, money order or cashier's check. The Bonding Company shall have an Illinois Agent and/or be an Illinois Corporation with an in-state office. Include allowance in Bid for Performance Bond and Labor and Materials Bond in the amount of 100% of the Contract Unit Price using forms provided in the Contract Documents.

### **Payment**

At least ten (10) days before each progress payment fall due (but no more than once a month), the Contractor will submit to the Owner a partial payment estimate filled out and signed by the Contractor covering the work performed during the periods covered by partial payment estimate and supported by such data as the Owner may reasonably require. The Owner will within ten (10) days after receipt of each partial payment estimate, either indicate his approval of payment or present the partial payment estimate to the Contractor indicating in writing his reasons for refusing to approve payment. In the latter case, the Contractor may make the necessary corrections and resubmit the partial payment estimate. The Owner will pay the Contractor within forty-five (45) days of presentation of an approved partial estimate submitted by the last day of the month.

The Owner shall retain ten (10) percent of the amount of each payment until final completion and acceptance of all work covered by the Contract Documents. The Owner at any time, however, after fifty (50) percent of the work has been completed, if he finds that satisfactory progress is being made, may reduce retainage to five (5) percent on the current and remaining estimates. On completion of the work, payment will be made in full including retained percentages less authorized deductions.

The Contractor shall submit Partial Waivers of Lien, including the first payout, from Contractors, Subcontractors, and Materials Suppliers for each payout. Final Payment will be made within approximately thirty (30) days of final inspection and approval and receipt of all waivers, sworn statements, guarantee statements, and other documents set forth in the Contract Documents submitted by the last day of the month.

### **Indemnification**

Duty to Defend, Indemnify, Give Notice: Contractor shall defend all suits brought against the Owner, and their representatives, officers agents and employees by any person (whether employed by Contractor, or not) for damage to property and/or injury to persons (including death) alleged or claimed to have been caused by or through the performance by Contractor of the work, including work required by Guarantees or the condition of the site, and shall indemnify and hold harmless the Owner, and their representatives, officers, agents, and employees in their individual or their official capacities, from and against all claims, damages, losses and expenses, including attorney's fees, caused by or growing out of, incidental to, the performance of the work covered by these Contract Documents. The Contractor shall pay, liquidate, and discharge all claims or demands for personal injury (including death), and for loss of and damage to all property caused by, growing out of or incidental to the performance of the work by the Contract Documents including, without limiting the foregoing thereto, damage to the work and other property of the Owner and including all damages for the obstruction of private driveways, streets and alleys and all costs and expenses of suits and reasonable attorney's fees.

The obligation set forth in this Section shall, but not by way of limitation, specifically include all claims and judgment arising or alleged to arise under the Illinois laws regarding Structural Work (Illinois Revised Statutes, Chapter 48, Section 60 et. seq.) and regarding the Protection of Adjacent Landowners (Illinois Revised Statutes, Chapter 17 1/2, Section 51 et. seq.). In the event of any such injury (including death) or loss or damage (or claims therefore), the Contractor shall give immediate notice thereof to the Owner. The Contractor shall not be required to indemnify and hold Harmless the individual or their official capacities for such claims or demands which result solely from their own negligence.

In any and all claims against the Owner, their respective agents, employees, and representatives in their personal capacities as individuals as well as in their public and official capacities, made by any employee of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts they may be liable, the indemnification obligation under this Section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under any Workman's Compensation Act, any Disability Benefit Act or any other Employee Benefit Act.

### **Permits, Fees and Inspection**

The Contractor shall obtain all permits and arrange for all inspections required by State, County, Local and other authorities having lawful jurisdiction. The Contractor will pay all permit fees.

### **Subcontracts**

Contractor operating under direct contracts with the Owner may let Subcontractors for the performance of such portions of the work as are usually executed by special trades. All such Subcontractors shall be based on conformance with all pertinent conditions set forth in the Contract Documents. The Contractor shall not, without written consent of the Owner, make any assignments or subcontracts for the execution of any of the works hereby quoted.

### **Bidder's Representative**

Bidder shall, at all times, utilize competent employees, to perform the specified work. Bidder shall provide a competent on-site Site Supervisor who possesses good command of the English language (speaking, reading, and writing) for the work location at all times when the Bidder is providing work. The site supervisor shall be authorized to act on behalf of the Bidder and to supervise the work in a manner that will comply with all requirements of the plans and specifications.

### **Materials and Workmanship**

All materials shall conform to the requirements of the Contract Documents. All materials are subject to the approval by the Owner both before and after incorporation into the project. All materials shall be new, of first quality, the best workmanship, and of the latest design. This does not apply to the incorporation of existing or salvaged materials into the project if specified in the Contract Documents. Any item of labor or material not shown as a separate pay item in the Bid shall be supplies as shown on the plans or required for construction and installed as incidental to the contract.

### **Utilities and Underground Facilities**

Prior to commencement of any work, the Contractor shall notify all public and private utility companies which may have facilities in the area before construction begins. The Contractor shall make necessary arrangements for having these companies protect, brace, or move their facilities as may be necessary for construction of the improvements. Costs incurred due to the moving or protection of utilities or in satisfying the requirements of the utility companies shall be incidental to the cost of the proposed improvements.

When the Contract Documents include information pertaining to the location of underground facilities, such information represents only the opinion of the Owner as to the approximate location of such utilities and is only included for the convenience of the bidder. At the locations wherein detailed positions of these facilities become necessary to the new construction, the Contractor shall, at his own expense, furnish all labor and tools to either verify and substantiate the location or establish the position of the facilities. The Owner assumes no responsibility whatever in respect to the sufficiency or accuracy of the information shown on the Contract Documents relative to the location of underground facilities or the manner in which they are to be removed or adjusted.

### **Abandonment**

Should the Bidder abandon or neglect the work, or if the Owner at any time is convinced that the work is unreasonably delayed, or that the conditions of the contract is being willfully violated, or executed carelessly, or in bad faith, he may notify the Bidder in writing, and if his notification be without effect within twenty-four (24) hours after the delivery hereof, then and in that case the contractor shall discontinue all work under the contract and the Owner shall have full authority to make arrangements for the completion of the contract at the expense of the Bidder.

### **Pre-Construction Meeting**

Contractor shall attend a pre-construction meeting with the Owner prior to initiation of the work. At the meeting the Contractor shall present his schedule for performing the work as well as discuss his proposed methodology for performing the work.

### **Protection of the Public, Work, and Property**

The Contractor shall provide and maintain all necessary watchmen, barricades, lights, warning signs, and other signals and take all necessary precautions for the protection of all work from damages, and shall take all reasonable precautions to protect the project property from injury or loss arising in connection with his contract.

The Contractor shall make good any damage, injury or loss to his work and to the property of the Owner resulting from lack of reasonable protective precautions, except such as may be caused by agents or employees of the Owner. He shall adequately protect adjacent private and public property, as provided by law and these specifications.

### **Site Clean-Up**

The Contractor shall keep the site free from accumulations of debris, rubbish, and waste materials at all times. The Contractor shall arrange for the removal and disposition of debris, rubbish, and waste materials at no cost to the Owner. If the Contractor fails to remove any debris, rubbish, or waste materials within five (5) days of written notice to clean the site, the Owner may remove the materials and charge the cost thereof to the Contractor.

When the Contractor's equipment is operated upon an existing pavement used by traffic, the Contractor shall clean the pavement of all dirt and debris at the end of each day's operations, and at other times as directed by the Owner, the Engineer, or the roads governing authority. The cleaning work shall be considered as incidental to the contract.

### **Insurance**

The Contractor shall not commence work under the Agreement until he has obtained all insurance required, and it has been approved by the Owner. All such insurance shall be purchased only from companies licensed and dully authorized by the Department of Insurance of the State of Illinois to do business in Illinois and to write the types of insurance policies as herein specified. Said companies must have a policy holder's rating of A+ and a financial rating of AAAAA as stated in the latest edition of Best's Insurance Guide. The insurance coverage must be maintained by the Contractor until all work is completed and accepted by the Owner as set forth in the Contract Documents.

- a. Workman's Compensation and occupational disease insurance covering all employees in statutory limits who perform any obligations assumed under Agreement.
- b. Public liability and property damage liability insurance covering all operations under Agreement. Public liability insurance shall be in an amount not less than \$1,000,000 on account of any one occurrence, including accidental death. Property damage insurance shall be in an amount not less than \$1,000,000 for bodily injury per person with an aggregate limit of not less than \$2,000,000.
- c. Automobile liability insurance on all self-propelled vehicles used in connection with Agreement, whether owned, non-owned, or hired. Comprehensive automobile liability insurance shall provide not less than \$1,000,000 per person and \$1,000,000 per accident, and property damage coverage in limits of an amount not less than \$1,000,000 per accident.
- d. Public Liability and Property Damage Insurance for Owner shall include the Owner as named insured under the foregoing Public Liability and Property Damage Insurance or the Contractor shall provide a separate policy for the Owner in accordance with the requirements under the foregoing Public Liability and Property Damage Insurance. Said insurance shall afford the Owner the same protection and in the same amounts as required in Paragraph (b) above, and shall protect the Owner from all claims for bodily injury and property damage arising from its ownership of the premises and general supervision of the work, including claims by employees of the Contractor.

Within ten (10) calendar days after receipt of the " Notice of Award", the Contractor shall file with the Owner, a Certificate of Insurance showing complete coverage of all insurance required by this Section signed by the insurance companies or their authorized agents, certifying to the name and address of the party insured, the description of the work covered by such insurance, the insurance policy numbers, the limits of liability of the policies and the dates of their expirations, with a further certification from said insurance companies that their policies will not be modified amended, changed, canceled or terminated without 30 business days prior written notice to the Owner. Such certification must be in the form acceptable to the Owner. If any form of umbrella or excess coverage policy is utilized by the Contractor, the Owner reserves the right to require a copy of the entire policy. **The Bolingbrook Park District, Upland Design Ltd. , Strand Associates, Inc. shall be named as additional insured.** (Use additional insured endorsement - Owners, Lessees or Contractors (Form B) a sample is included in this bid packet).

### **Construction Schedule**

The Contractor shall submit to the Superintendent of Projects and Planning within ten (10) days after the effective date of award a schedule outlining construction methods and a timetable for completion of the project. The construction schedule must be approved by the Superintendent of Projects and Planning prior to commencing work. All work on the project, including punch list, shall be complete by the date indicated in "Instructions to Bidders".

### **Line and Grade Stakes**

Stakes for lines and grades shall be provided by the Contractor. Prior to commencing work and before pouring or finally adjusting any structure or closing any excavation, the Contractor shall verify the correctness of any grades so as to conform to the Contract Documents.

### **Construction Observation**

The Superintendent of Projects and Planning shall observe the work on behalf of the Bolingbrook Park District and will provide general assistance during construction insofar as proper interpretation of the Contract Documents is affected. The Superintendent of Projects and Planning shall not be responsible for the acts of omission of the Contractor's superintendent or other employees.

All materials used and all completed work by the Contractor shall be subject to the observation of the Superintendent of Projects and Planning. The Contractor shall furnish such samples of materials for examination and tests as may be requested by the Superintendent of Projects and Planning and shall furnish information required concerning the nature or source of any materials or equipment which he proposes to use. Any material, equipment, or work which does not satisfactorily meet the Contract Documents may be rejected by the Superintendent of Projects and Planning by giving written notice to the Contractor. All rejected materials, equipment, or work shall be promptly removed and replaced at the Contractor's expense.

### **Laws and Certification**

The Bidder shall at all times observe and comply with all Federal, State and Local laws, regulations and ordinances which in any manner affect the conduct of the work. Any complaint, claim or action brought against the Bidder for failing to observe or comply with any law, ordinance, or regulation shall be the sole responsibility of the Bidder and shall in no way extend to or expose the Owner to liability and the Bidder shall indemnify and hold harmless the Owner from any and all such complaints, claims, or actions. All workmanship and materials shall conform and comply with the requirements of the building ordinances and rules and regulations of all departments and bureaus of the county, city and state having lawful jurisdiction. All of which are hereby made a part of these specifications, or indicated on the drawings.

### **Change Orders**

Changes to facilitate ADA Paving Improvements in the best interest of the Owner may be made by the Superintendent of Projects and Planning, with the understanding of both parties that no change in contract price is involved. Where proposed changes involve a modification to the contract sum, the contract time,

or material change in the work (i.e., other than minor field changes) a written change order shall be prepared by the Bidder and approved by the Superintendent of Projects and Planning prior to any change taking place.

**Field Representative**

Field representatives may be appointed by the Owner to see that the work is performed in accordance with the Contract Documents. Field representatives shall have the authority to condemn and/or reject defective work and materials. Field representatives shall have no authority to permit deviation from the Contract Documents and the Contractor shall be liable for any deviations made without a written order from the Superintendent of Projects and Planning.

**Guarantee-Warranty**

The Contractor shall guarantee-warranty all materials for a period of one (1) year from date of acceptance by the Bolingbrook Park District. The warranty shall include all labor and material costs associated with repairs or replacement.

**Substance Abuse Prevention Policy**

Pursuant to P.A. 95-0635 (the "Substance Abuse Prevention on Public Works Act"), employees of the contractor and the employees of the subcontractor are prohibited from the use of drugs or alcohol, as defined in the Act, while performing work on any public works project.

Before the contractor or subcontractor commences work, the Contractor and any Subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in P.A. 95-0635 or shall have a collective bargaining agreement in effect dealing with the subject matter of P.A. 95-0635.

The Contractor and any Subcontractor shall file with the public body engaged in the construction of the public works: a copy of the substance abuse prevention program along with a cover letter certifying that their program meets the requirements of the Act or a letter certifying that the Contractor or Subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act. A certification form is attached and must be completed by the Contractor and each Subcontractor to this Contract.

**Drug-Free Workplace Act**

Pursuant to Ill.Rev.Stat.ch 127 Para 132.311 et. Seq. ("Drug-Free Workplace Act"), the Contractor shall certify with the Owner that it will provide a drug-free workplace. A certification form is attached to this document and must be completed by the Bidder.

**Wage Rates/Prevailing Wage Ordinance**

Each Contractor or Subcontractor performing Work on this project shall comply in all respects with all laws governing the employment of labor, Social Security, and Unemployment Insurance of both the State and Federal government. There shall be paid each employee engaged in Work under this Contract at the site of the Project, no less than the minimum wage for the classifications of labor employed in compliance with 820 ILCS 130/1 et seq., as now existing or hereafter amended. A copy of the "General Prevailing Hourly Rates" is hereafter included.

In accordance with 820 ILCS 130/5, The Contractor and each subcontractor shall make and keep, for a period of not less than 3 years, records of all laborers, mechanics and other workers employed by them on the Project; the record shall include each worker's name, address, telephone number when available, social security number, classification or classifications, the hourly wages paid in each period, the number of hours worked each day, and the starting and ending times of work each day.



The Contractor and each subcontractor shall submit monthly, in person, by mail, or electronically, a certified payroll to the Bolingbrook Park District. The certified payroll shall consist of a complete copy of the records. The certified payroll shall be accompanied by a statement signed by the Contractor or subcontractor which avers that:

- (i) such records are true and accurate;
- (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required; and
- (iii) the contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class B misdemeanor.

Upon two (2) business days' notice, the Contractor and each subcontractor shall make available for inspection the records to the Bolingbrook Park District, its officers and agents, and to the Director of Labor and his deputies and agents at all reasonable hours at a location within the State. The Contractor and each subcontractor shall permit his or her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.

## Will County Prevailing Wage Rates posted on 2/10/2021

Trade Title	Rg	Type	C	Base	Foreman	Overtime				H/W	Pension	Vac	Trng	Other Ins
						M-F	Sa	Su	Hol					
ASBESTOS ABT-GEN	All	ALL		44.40	45.40	1.5	1.5	2.0	2.0	16.10	14.21	0.00	0.90	
ASBESTOS ABT-MEC	All	BLD		38.44	41.51	1.5	1.5	2.0	2.0	14.07	12.51	0.00	0.77	
BOILERMAKER	All	BLD		51.56	56.20	2.0	2.0	2.0	2.0	6.97	21.58	0.00	1.20	
BRICK MASON	All	BLD		47.56	52.32	1.5	1.5	2.0	2.0	11.20	20.51	0.00	0.97	
CARPENTER	All	ALL		49.76	54.74	2.0	2.0	2.0	2.0	11.79	25.74	0.00	0.73	
CEMENT MASON	All	ALL		44.19	46.19	2.0	1.5	2.0	2.0	10.90	27.92	0.00	0.50	
CERAMIC TILE FINISHER	All	BLD		41.80	41.80	1.5	1.5	2.0	2.0	11.25	13.41	0.00	0.88	
COMMUNICATION TECHNICIAN	All	BLD		38.50	42.35	1.5	1.5	2.0	2.0	15.94	14.27	0.00	0.75	1.85
ELECTRIC PWR EQMT OP	All	ALL		54.90	59.90	1.5	1.5	2.0	2.0	12.72	18.42	0.00	3.40	
ELECTRIC PWR GRNDMAN	All	ALL		42.82	59.90	1.5	1.5	2.0	2.0	9.93	14.37	0.00	2.66	
ELECTRIC PWR LINEMAN	All	ALL		54.90	59.90	1.5	1.5	2.0	2.0	12.72	18.42	0.00	3.40	
ELECTRICIAN	All	BLD		47.00	51.23	1.5	1.5	2.0	2.0	16.39	19.26	0.00	1.23	4.21
ELEVATOR CONSTRUCTOR	All	BLD		58.47	65.78	2.0	2.0	2.0	2.0	15.73	18.41	4.68	0.63	
GLAZIER	All	BLD		46.35	47.85	1.5	2.0	2.0	2.0	14.79	22.67	0.00	1.26	
HEAT/FROST INSULATOR	All	BLD		51.25	54.33	1.5	1.5	2.0	2.0	14.07	14.26	0.00	0.77	
IRON WORKER	All	ALL		45.00	49.50	2.0	2.0	2.0	2.0	12.46	27.07	0.00	0.95	
LABORER	All	ALL		44.40	45.15	1.5	1.5	2.0	2.0	16.10	14.21	0.00	0.90	
LATHER	All	ALL		49.76	54.74	2.0	2.0	2.0	2.0	11.79	25.74	0.00	0.73	
MACHINIST	All	BLD		49.68	52.18	1.5	1.5	2.0	2.0	7.93	8.95	1.85	1.47	
MARBLE FINISHER	All	ALL		35.73	49.05	1.5	1.5	2.0	2.0	11.20	18.71	0.00	0.87	
MARBLE MASON	All	BLD		46.71	51.38	1.5	1.5	2.0	2.0	11.20	19.98	0.00	0.95	
MATERIAL TESTER I	All	ALL		34.40		1.5	1.5	2.0	2.0	16.10	14.21	0.00	0.90	
MATERIALS TESTER II	All	ALL		39.40		1.5	1.5	2.0	2.0	16.10	14.21	0.00	0.90	
MILLWRIGHT	All	ALL		49.76	54.74	2.0	2.0	2.0	2.0	11.79	25.74	0.00	0.73	
OPERATING ENGINEER	All	BLD	1	52.10	56.10	2.0	2.0	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	BLD	2	50.80	56.10	2.0	2.0	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	BLD	3	48.25	56.10	2.0	2.0	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	BLD	4	46.50	56.10	2.0	2.0	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	BLD	5	55.85	56.10	2.0	2.0	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	BLD	6	53.10	56.10	2.0	2.0	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	BLD	7	55.10	56.10	2.0	2.0	2.0	2.0	20.90	17.85	2.00	2.15	

OPERATING ENGINEER	All	FLT	1	59.35	59.35	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	FLT	2	57.85	59.35	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	FLT	3	51.50	59.35	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	FLT	4	42.80	59.35	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	FLT	5	60.85	59.35	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	FLT	6	41.00	59.35	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	HWY	1	50.30	54.30	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	HWY	2	49.75	54.30	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	HWY	3	47.70	54.30	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	HWY	4	46.30	54.30	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	HWY	5	45.10	54.30	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	HWY	6	53.30	54.30	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
OPERATING ENGINEER	All	HWY	7	51.30	54.30	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15	
PAINTER	All	ALL		48.30	54.34	1.5	1.5	1.5	2.0	12.51	14.24	0.00	1.87	
PAINTER - SIGNS	All	BLD		40.74	45.75	1.5	1.5	2.0	2.0	3.04	3.90	0.00	0.00	
PILEDRIVER	All	ALL		49.76	54.74	2.0	2.0	2.0	2.0	11.79	25.74	0.00	0.73	
PIPEFITTER	All	BLD		50.75	53.75	1.5	1.5	2.0	2.0	10.85	20.85	0.00	2.92	
PLASTERER	All	BLD		45.00	47.70	1.5	1.5	2.0	2.0	15.75	18.14	0.00	1.25	
PLUMBER	All	BLD		52.00	55.10	1.5	1.5	2.0	2.0	16.22	15.60	0.00	1.40	
ROOFER	All	BLD		45.75	49.75	1.5	1.5	2.0	2.0	11.23	13.61	0.00	0.91	
SHEETMETAL WORKER	All	BLD		50.33	52.85	1.5	1.5	2.0	2.0	11.00	18.46	0.00	1.29	2.39
SPRINKLER FITTER	All	BLD		51.75	54.50	1.5	1.5	2.0	2.0	13.90	17.00	0.00	0.75	
STONE MASON	All	BLD		47.56	52.32	1.5	1.5	2.0	2.0	11.20	20.51	0.00	0.97	
TERRAZZO FINISHER	All	BLD		43.54	43.54	1.5	1.5	2.0	2.0	11.25	15.61	0.00	0.90	
TERRAZZO MASON	All	BLD		47.38	50.88	1.5	1.5	2.0	2.0	11.25	17.07	0.00	0.94	
TILE MASON	All	BLD		48.75	52.75	1.5	1.5	2.0	2.0	11.25	16.90	0.00	0.95	
TRAFFIC SAFETY WORKER	All	HWY		36.75	38.35	1.5	1.5	2.0	2.0	7.95	8.20	0.00	0.75	
TRUCK DRIVER	All	ALL	1	40.70	41.25	1.5	1.5	2.0	2.0	9.90	10.64	0.00	0.15	
TRUCK DRIVER	All	ALL	2	40.85	41.25	1.5	1.5	2.0	2.0	9.90	10.64	0.00	0.15	
TRUCK DRIVER	All	ALL	3	41.05	41.25	1.5	1.5	2.0	2.0	9.90	10.64	0.00	0.15	
TRUCK DRIVER	All	ALL	4	41.25	41.25	1.5	1.5	2.0	2.0	9.90	10.64	0.00	0.15	
TUCKPOINTER	All	BLD		47.25	48.25	1.5	1.5	2.0	2.0	8.59	19.48	0.00	0.94	

**Legend**

**Rg** Region

**Type** Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers

## C Class

**Base** Base Wage Rate

**OT M-F** Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.

**OT Sa** Overtime pay required for every hour worked on Saturdays

**OT Su** Overtime pay required for every hour worked on Sundays

**OT Hol** Overtime pay required for every hour worked on Holidays

**H/W** Health/Welfare benefit

**Vac** Vacation

**Trng** Training

**Other Ins** Employer hourly cost for any other type(s) of insurance provided for benefit of worker.

## Explanations WILL COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

## EXPLANATION OF CLASSES

**ASBESTOS - GENERAL** - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

**ASBESTOS - MECHANICAL** - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

## CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

## COMMUNICATIONS TECHNICIAN

Installation, operation, inspection, maintenance, repair and service of radio, television, recording, voice, sound and vision production and reproduction, telephone and telephone interconnect, facsimile, equipment and appliances used for domestic, commercial, educational and entertainment purposes, pulling of wire through conduit but not the installation of conduit.

#### MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

#### OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

#### OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines; ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types: Creter Crane: Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

#### OPERATING ENGINEER - FLOATING

Class 1. Craft Foreman; Master Mechanic; Diver/Wet Tender; Engineer; Engineer (Hydraulic Dredge).

Class 2. Crane/Backhoe Operator; Boat Operator with towing endorsement; Mechanic/Welder; Assistant Engineer (Hydraulic Dredge); Leverman (Hydraulic Dredge); Diver Tender.

Class 3. Deck Equipment Operator, Machineryman, Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 lbs. or more); Tug/Launch Operator; Loader/Dozer and like equipment on Barge, Breakwater Wall, Slip/Dock, or Scow, Deck Machinery, etc.

Class 4. Deck Equipment Operator, Machineryman/Fireman (4 Equipment Units or More); Off Road Trucks; Deck Hand, Tug Engineer, Crane Maintenance (50 Ton Capacity and Under) or Backhoe Weighing (115,000 pounds or less); Assistant Tug Operator.

Class 5. Friction or Lattice Boom Cranes.

Class 6. ROV Pilot, ROV Tender

TRAFFIC SAFETY - Effective November 30, 2018, the description of the traffic safety worker trade in this County is as follows:

Work associated with barricades, horses and drums used to reduce lane usage on highway work, the installation and removal of temporary, non-temporary or permanent lane, pavement or roadway markings, and the installation and removal of temporary road signs.

#### TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

#### TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

#### Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

#### LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

#### MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".



## **TECHNICAL SPECIFICATIONS**

### **SCOPE OF WORK**

The proposed work consists of the provision of materials, labor, and equipment necessary to remove and install asphalt and concrete paving, crosswalk striping, pedestrian bridge and abutments, and restore lawn. Contractors bidding on the project must have a minimum of 5 years of applicable experience.

### **CLEAN-UP**

Contractor is responsible for cleanup at the end of each working day, and at the completion of the project, which shall include proper disposal of all unused materials.

### **WARRANTY**

The warranty period shall be for ONE (1) year. It shall cover all materials, labor and workmanship. The warranty period will start upon acceptance of the project by staff.

### **MATERIAL PURCHASE**

All material shall be supplied by and fully installed by Contractor, unless noted in the bid form or plans.

Bidder's Name: Integral Construction Inc.

**CONTRACTORS BID  
WEBER PATH & LILY CACHE PATH AND BRIDGE**

Name of Bidder: Integral Construction Inc.

Address: 320 Rocbaar Dr. Romeoville, IL 60446

Phone: 844-317-7403 Fax: 844-317-7402

Email: cosinski@buildintegral.com

Having examined the Contract Documents and having thoroughly examined the site and pertinent areas adjacent thereto, acknowledging the same to be accurate and complete insofar as pertinent details are concerned, we the undersigned agree to furnish all labor, materials, equipment, tools and services or whatever else is required for construction of the project in accordance with the Contract Documents, within the time set forth therein and at the prices included herewith.

The Bidder acknowledges receipt of the following Addenda, which are part of the Contract Documents: Numbers 1, 2,    ,    ,    .

The undersigned agrees to execute a Contract for this work and present the same to the Owner within five (5) days after the date of written notice of the award of the Contract to him. The undersigned further agrees that he will commence work not later than ten (10) days after written notice to proceed and execution and approval of the Contract and the Contract Bond(s) unless otherwise provided, and will diligently prosecute the work in such a manner and with such materials, equipment, and labor as will insure its completion within the time limit specified herein, it being understood and agreed that the completion within the time limit is an essential part of the Contract.

Accompanying this bid is a bid security complying with the requirements of the Contract Documents, for ten percent (10%) of the total base bid price. The amount of the bid security is:

10% of Base Bid Amount

(Contractor to fill in Amount)

If this Bid is accepted and the undersigned fails to execute a Contract as required herein, it is hereby agreed that the amount of the check or draft shall become the property of the Owner and shall be considered as payment of damages due to delay of said Contract. In submitting this Bid, it is understood that the right is reserved by the Owner to reject any and all Bids and it is agreed that this Bid may not be withdrawn during the period of days provided in the Contract Documents.

The base bid amount is the summation of the cost of the items of work and is equal to the summation of the extension of the unit prices. Contractor must include unit pricing for bid to be considered.

TO: **Bolingbrook Park District**  
**WEBER PATH & LILY CACHE PATH AND BRIDGE**  
 301 Recreation Drive, Bolingbrook, IL 60440

The undersigned bidder has carefully examined the plans and specifications for the **WEBER PATH AND LILY CACHE PATH AND BRIDGE**, in **Bolingbrook, Illinois** as prepared by Upland Design Ltd. and having carefully examined the site and completely familiarized him/herself with local conditions affecting the cost of the work: hereby states that he/she will provide all necessary labor, equipment, tools, machinery, apparatus and all other means of construction, do all the work and furnish all materials, called for by said plans and specifications in the manner prescribed by in accordance with the requirements of the contract, specification and drawings: and will accept as full and complete payment therefore the base bid amount which is the summation of the cost of the items of work and is equal to the summation of the extension of the unit prices.

S.Y.= Square Yard  
 C.Y.= Cubic Yard

L.F.= Linear Foot  
 S.F.= Square Foot

L.S.= Lump Sum

**Base Bid**

Item #	Description	Quantity	Unit	Installed Unit Price	Item Total:
1	Site Preparation, Removals and Earthwork, Complete (excluding bridge abutment area).	1	L.S.	\$ 46,604.00	\$ 46,604.00
2	Unsuitable foundation material per specification (to be used only with approval of Owner's Representative)	50	C.Y.	\$ 78.400	\$ 3,920.00
3	Undercut, Removals and Placement of PGE at Trail (to be used only with approval of Owner's Representative)	200	C.Y.	\$ 67.200	\$ 13,440.00
4	Traffic Control at Veterans Parkway	1	L.S.	\$ 3,360.00	\$ 3,360.00
5	Silt Fence	3208	L.F.	\$ 2.240	\$ 7,186.00
6	Asphalt Paving	2384	S.Y.	\$ 21.280	\$ 50,732.00
7	Asphalt Paving - Binder and Surface Only, Reuse Base	1102	S.Y.	\$ 14.000	\$ 15,428.00
8	Concrete Paving	898	S.F.	\$ 8.400	\$ 7,543.00
9	Concrete Testing	1	L.S.	\$ 2,240.00	\$ 2,240.00
10	Detectable Warning / Truncated Domes	92	S.F.	\$ 39.196	\$ 3,606.00
11	B6-12 Curb	16	L.F.	\$ 39.188	\$ 627.00
12	Depressed Curb including Curb Transitions	78	L.F.	\$ 39.205	\$ 3,058.00
13	Relocate/Reinstall Relocated Bench	1	EACH	\$ 560.00	\$ 560.00



Deviations from specifications (use additional paper if necessary).

Bidder hereby certifies:

- a. That this Bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation.
- b. That he has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid.
- c. That he has not solicited or induced any person, firm, or corporation to refrain from Bidding.
- d. That he has not sought by collusion or otherwise to obtain for himself any advantage over any other Bidder or over the Owner.
- e. That all contractors and subcontractors rendering services under this contract shall comply with all provisions of the Illinois prevailing Wage Act to the extent applicable, 820 ILCS 130/.01 et seq. and as amended January 1, 2010.
- f. That his is not barred from Bidding for this Contract as a result of the violation of Section 33E-3 or Section 33E-4 of the Illinois Criminal Code of 1961 (Ill. Rev. Stat. ch. 38, Paragraph 33E-1 et. seq.).
- g. That he shall comply with provisions of the Veterans Preference Act (Ill. Rev. Stat. ch. 126.5, Paragraph 23).
- h. That he shall comply with the Employment of Illinois on Public Works Act.
- i. That he shall comply with the Illinois Human Rights Act and the rules and Regulations of the Illinois Department of Human Rights published at 44 Illinois Administrative Code Section 750, et seq.

**FIRM NAME:** Integral Construction Inc. (SEAL)

**ADDRESS:** 320 Rocbaar Dr. Romeoville, IL 60446

**SIGNED BY:** *Joseph N. Zinchuk* 4/29/2021  
(Signature and Date)

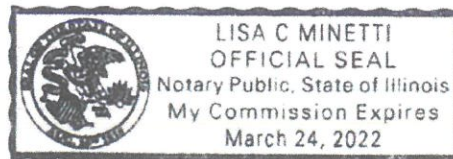
Joseph Zinchuk  
(Printed Name)

Principal  
(Title)

**ATTEST:** *Cheryl A. Sisk*  
(Secretary)

Subscribed and Sworn to me before this 29th day of April, 20 21

*Lisa C Minetti*  
(Notary Public)



**BOLINGBROOK PARK DISTRICT  
CONTRACTOR'S CERTIFICATION**

- (1) Pursuant to P.A. 85-1295 (720 ILCS 5/33E-1 *et seq.*) the undersigned contractor hereby certifies to the Bolingbrook Park District that the contractor is not barred from bidding on the contract as a result of violation of either Section 33 E-3 or 33-4 or that Act.
- (2) The contractor further certifies that the contractor is not delinquent in the payment of any tax administered by the Illinois Department of Revenue or,
- a) is contesting such liability or the amount of tax in accordance with procedures established by the appropriate revenue act, or
  - b) has entered into an agreement with the Department of Revenue for payment of all taxes due and is in compliance with that Agreement.

Dated: 4/29/2021

Integral Construction Inc.

(Company)

320 Rocbaar Dr.

(Mailing Address)

Romeoville, IL 60446

844-317-7403

(Area Code) (Phone Number)

*Cheryl A. J. J.*

Principal

Primary Contract (Signature), Title

**BOLINGBROOK PARK DISTRICT  
ANTI-COLLUSION AFFIDAVIT OF COMPLIANCE**

Christopher Osinski, being  
first and duly sworn, deposes and says:

That he is Principal of

\_\_\_\_\_  
(Partner, Officer, Owner, etc.)

Integral Construction Inc.

\_\_\_\_\_  
(Contractor)

The party making the foregoing proposal or bid, that such bid or proposal is genuine and not collusive, or sham: that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any contractor or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person, to fix the bid price element or said bid, or that of any other contractor, or to secure any advantages against any other or any person interested in the proposed contract.

Christopher Osinski

\_\_\_\_\_  
(Name of Contractor, if Contractor is an Individual)

(Name of Partner, if Partner is a Partnership)

(Name of Officer, if Contractor is a Corporation)

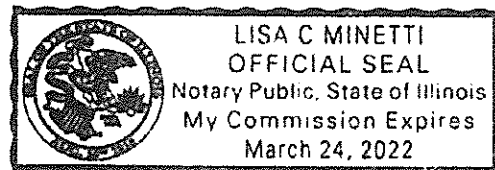
The above statements must be subscribed and sworn to before a notary public.  
Subscribed and sworn to

This 29th day of April.

By \_\_\_\_\_

*Lisa C. Minetti*

\_\_\_\_\_  
(Notary Public)



**BOLINGBROOK PARK DISTRICT  
INDEMINITY HOLD HARMLESS AGREEMENT**

To the fullest extent permitted by law, the Contractor hereby agrees to defend, indemnify and hold harmless the Bolingbrook Park District, its officials, agents and employees against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in anywise accrue against the Bolingbrook Park District, its officials, agents and employees, arising in whole or in part of in consequence of the performance of this work by the Contractor, its employees, or subcontractors, or which may in anywise result in therefore, except that arising out of the sole legal cause of the Bolingbrook Park District, its agents or employees, the Contractor shall, at its own expense, appear, defend and pay all charges of attorneys and all cost and other expenses arising therefore or incurred in connections therewith, and, if any judgment shall be rendered against the Bolingbrook Park District, its officials, agents and employees, in any such action, the Contractor shall, at its own expense, satisfy and discharge the same.

Contractor expresses, understands and agrees that any performance bond or insurance policies required by this contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Bolingbrook Park District, its officials, agents and employees as herein provided.

The Contractor further agrees that to the extent that money is due the Contractor, by virtue of this contract as shall be considered necessary in the judgment of the Bolingbrook Park District may be retained by the Park District to protect itself against said loss until such claims, suits, or judgments shall have been settled or discharged and/or evidence to that extent shall have been furnished to the satisfaction of the Bolingbrook Park District.

CONTRACTOR:

*Charles A. Smith*

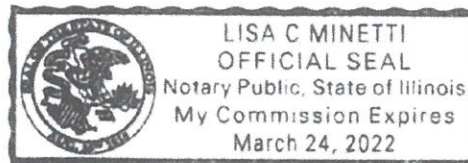
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ATTEST:

*Lisa C. Minetti*

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(Notary Public)





## STATEMENT OF EXPERIENCE

List five Similar Projects your organization has completed in the last 2 years that include removals and install asphalt and concrete paving, crosswalk striping, pedestrian bridge and abutments, and lawn restoration, landscape installation, and landscape restoration.

1. Company Name: Naperville Park District  
Contact Person: Mike Piszynski  
Phone: 630-848-5030  
Project Description:  
Date of Completion: October 2020
  
2. Company Name: Oak Forest Park District  
Contact Person: Cindy Grannan  
Phone: 708-687-7270  
Project Description:  
Date of Completion: Nov. 2019
  
3. Company Name: Oak Brook Park District  
Contact Person: Bob Johnson  
Phone: 630-645-9540  
Project Description:  
Date of Completion: November 2020
  
4. Company Name: Schaumburg Park District  
Contact Person: Niki Rao  
Phone: 847-985-2115  
Project Description:  
Date of Completion: June 2020
  
5. Company Name: Elk Grove Township  
Contact Person: Michael Sweeney  
Phone: 847-437-0300  
Project Description:  
Date of Completion: March 2020

**SUBCONTRACTORS**

The following list includes all subcontractors who will perform work representing five percent or more of the total base bid. The Bidder represents that the subcontractors are qualified to perform the work required.

Category	Subcontractor Name	Address
1. Site Concrete	Paul Herrera Construction or Onus Construction	Marengo, IL or Addison, IL
2. Asphalt Paving	Matthew Paving or Oak Lawn Blacktop	Oak Lawn, IL or Mokena, IL
3. Site Furnishings	Art Thureson, Inc.	Milford, MI
4.		
5.		
6.		
7.		
8.		
9.		
10.		

**SUBSTANCE ABUSE PREVENTION PROGRAM**

Pursuant to Public Act 95-0635, the undersigned hereby certifies that it is in compliance with the terms and provisions of the Substance Abuse Prevention on Public Works Act. In particular, the undersigned hereby represents and warrants to the Bolingbrook Park District as follows:

**[Complete either A or B below]**

A. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has signed collective bargaining agreements that are in effect for all of its employees, and that deal with the subject matter of Public Act 95-0635.

\_\_\_\_\_  
Contractor/Subcontractor

\_\_\_\_\_  
Name of Authorized Representative (type or print)

\_\_\_\_\_  
Title of Authorized Representative (type or print)

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Authorized Representative

B. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has in place for all of its employees not covered by a collective bargaining agreement that deals with the subject of the Act, the attached substance abuse prevention program that meets or exceeds the requirement of Public Act 95-0635 **[attach a copy of the program]**.

Integral Construction Inc.  
\_\_\_\_\_  
Contractor/Subcontractor

Christopher Osinski  
\_\_\_\_\_  
Name of Authorized Representative (type or print)

Principal  
\_\_\_\_\_  
Title of Authorized Representative (type or print)

Date: 4/29/2021

*Christopher A. Osinski*  
\_\_\_\_\_  
Signature of Authorized Representative

## **CONTRACTOR'S DRUG-FREE WORKPLACE CERTIFICATION**

Pursuant to Ill.Rev.Stat. ch. 127 Para. 132.311 et. seq. ("Drug-Free Workplace Act), the undersigned contractor hereby certifies to the contracting agency that it will provide a drug-free workplace by:

- (a) Publishing a statement:
  - (1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
  - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
  - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
    - (A) Abide by the terms of the statement; and
    - (B) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
  - (1) The dangers of drug abuse in the workplace;
  - (2) The grantee's or contractor's policy of maintaining a drug free workplace;
  - (3) Any available drug counseling, rehabilitation, and employee assistance program; and
  - (4) The penalties that may be imposed upon employees for drug violations.
- (c) Making it a requirement to give a copy of the statement required by subsection (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.

**DRUG FREE WORKPLACE CERTIFICATION**  
**PAGE TWO**

(d) Notifying the contracting agency within 10 day after receiving notice under part (B) of paragraph (3) of subsection (a) from an employee or otherwise receiving actual notice of such conviction.

(e) Imposing a sanction on or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by any employee who is so convicted, as required by Ill.Rev. Stat. ch. 127 Para. 132.315.

(f) Assisting employees in selecting a course of action in the event drug counseling treatment, and rehabilitation is required and indicating that a trained referral team is in place.

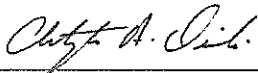
(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of this Section.

Failure to abide by this certification shall subject the

Contractor to the penalties provided in Ill.Rev.Stat. ch. 127  
Para. 132.316.

Integral Construction Inc.  
Contractor

ATTEST:



DATE: 4/29/2021



# SUBSTANCE ABUSE PREVENTION POLICY

*Integral Construction Inc. is committed to taking any and all reasonable actions to create and maintain a workplace free from any substance abuse.*

*Integral Construction Inc. will work diligently to increase awareness of the dangers of substance abuse within our workplace and throughout the construction industry.*

*Disclaimer: This policy is intended for reference purposes only and all applicable state and local laws or statutes shall be consulted and enforced prior to implementation.*

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## **SCOPE OF POLICY**

This document contains procedures for implementing a drug and alcohol testing program, Integral Construction Inc. prohibits the use, possession, sale, purchase, manufacture, distribution, transfer or consumption of alcohol and all illegal drugs, including legally regulated drugs.

This program applies to all employees and potential employees of the company, as well as subcontractors at all tiers, including non-bargaining and bargaining unit employees.

## **DEFINITIONS**

Banned Substances: Illegal substances, as defined by federal/state laws, including:

- a. Amphetamines
- b. Opiates
- c. Phencyclidine (PCP)
- d. Cocaine
- e. THC (Marijuana/Cannabinoids)
- f. Intoxicants (drug and alcohol)
- g. Synthetic drugs

Third-Party Administrator: Integral Construction Inc. may retain a third-party administrator to perform testing and reporting procedures. See Appendix A: Additional Definitions.

## **POLICIES AND PROCEDURES**

A urine drug screen shall be administered under the following circumstances.

1. **Pre-Hire Drug Screening.** All potential employees must submit to a urine drug screen no later than the commencement of employment. Pre-hire drug screening will test for the presence of illegal drugs and substances and the illegal use of prescription drugs. This screen does not include an alcohol test. Potential employees who refuse to submit to this test will not be permitted to work for the company.

If the employer participates in a pre-screen/certification program through a collective bargaining agreement (CBA) or other arrangement, and the potential employee has undergone a prior screening to which, through the CBA or other arrangement, the company is provided access to the results/certification, then the potential employee shall be deemed to have complied with the company's pre-hire drug screening requirements.

2. **Existing Employees.** Existing employees who are transferred from another location must submit to a urine drug screen prior to entering the jobsite. This screen tests for the presence of





illegal drugs and substances and the illegal use of prescription drugs. This screen does not include an alcohol test. Employees who refuse to submit to this test will not be permitted to work for the company.

If the employer participates in a pre-screen/certification program through a CBA or other arrangement, and the employee has undergone a prior screening to which the company has access to the results/certification, then the employee shall be deemed to have complied with the company's pre-hire drug screening requirements. Likewise, if an employee has undergone a urine drug screen with the company within the previous three (3) months, and the company deems this test sufficient, then the employee shall be deemed to have complied with the company's pre-hire drug screening requirements.

3. **Testing for Cause.** All employees may be tested for cause when a reasonable suspicion exists that the employee appears to be under the influence of illegal drugs or illegally using prescription drugs, synthetic drugs and/or alcohol.
4. **Causal/Incident-Related.** All employees who are involved with, or may have contributed to, an incident that results in property damage or requires treatment beyond onsite first aid are required to submit to a drug screen and alcohol test. (Note: a company may also require a drug screen and/or alcohol test for incidents resulting in first aid treatment. Please consult your state/local laws pertaining to testing procedures to verify if such a practice is permissible).
5. **Random.** When pennitted by law, employees may be randomly selected for unannounced drug and alcohol screening using a scientifically/statistically valid computerized number generation process. Employees are notified of selection no more than 48 hours prior to testing.
6. **Reinstatement, Return-to-Duty and Follow-Up Testing.** After signing an agreement or participating in substance abuse counseling established by the company, the employee must complete a drug screen before returning to active employment.

## **TESTING PROCEDURES**

### **I. Drug Screening of Applicants for Employment**

1. Upon entering the jobsite or workplace, all applicants will proceed to the project office or trailer. They will be advised whether specimen collection will occur onsite in an approved facility or at an approved clinic offsite.
2. Each applicant will read and sign a Drug Screen Consent Form prior to any test being administered.
3. On a preprinted, itemized form furnished by the employer, each applicant will be asked to identify any medication he/she is taking or has taken during the 30 days preceding the test.
4. A formal chain of custody will be established for every drug screen.



5. A split sample consisting of two urine collection containers sealed in a plastic container will be furnished to the applicant. (Note: Testing may be performed by a third-party administrator.) The containers must contain an amount of urine sufficient for one Enzyme Medical Immunoassay Test (EMIT) and two Gas Chromatography/Mass Spectrometry (GC/MS) tests (no less than 2 ounces of urine per container). Each applicant's urine specimen will be collected and temperature tested for verification. The second container will be used in the event the first container becomes contaminated.
6. Before the specimen leaves the applicant's sight, the urine containers will be sealed with security tape that has been initialed by applicant.
7. Specimens collected onsite will be transported to a laboratory in accordance with the chain of custody procedures. A portion of the sample will be tested using the EMIT; if positive, another portion and/or the split sample will be tested for verification using the GC/MS test.
8. The remainder of the urine specimen and split sample will remain at the laboratory for 30 days following the test.
9. Upon signing a form giving consent to use the urine sample for drug screening, the applicant is eligible for employment on a 72-hour probationary basis. This consent form is co-signed by the collection specialist.
10. Any applicant who refuses to submit to a drug screening will not be eligible for employment.
11. The employer receives the drug test results within 72 hours. If the applicant's test results in a confirmed positive, as confirmed by a medical review officer (MRO), he/she will be terminated immediately and paid for all hours worked, if permissible by state/local law. The individual will not be eligible for employment with the employer for a period to be determined by the employer, not exceeding one year. If hired later by the employer, and contingent on a negative drug screen, the employee may be tested periodically without notice for a period of up to one year from the date of hire.
12. If any individual who has tested positive by the MRO wants to confirm the results of the GC/MS test, he/she may do so by having a GC/MS test performed on the previously collected split urine specimen at a certified National Institute on Drug Abuse (NIDA) or Substance Abuse and Mental Health Services Administration (SAMHSA) laboratory of his/her choice. The specimen will be shipped directly from the employer's lab to the lab of the employee's choice. The costs of this test will be borne by the employee. If the results of this test are negative, the individual will be reinstated with full back pay and benefits, and will be reimbursed for the cost of the test. The individual must exercise the option of a second GC/MS test within 24 hours of being notified of the positive results.





13. Pre hire drug screens include tests for at least the following (a five- panel drug screen):

- a) Amphetamines
- b) Opiates
- c) Phencyclidine (PCP)
- d) Cocaine
- e) THC (Marijuana/Canabinoids)

Integral Construction Inc. reserves the right to administer testing for additional substances (For more information on seven-panel, 10-panel, 12- panel and hair follicle tests, refer to the "Best Practices" section of the Construction Coalition for a Drug- and Alcohol-Free Workplace website at [www.drugfreeconstruction.org](http://www.drugfreeconstruction.org) ).

## II. Drug Screening of Transferred Employees

The procedure for testing employees transferred from another jobsite is the same as the pre-hire procedure.

## III. "For Cause" Testing Procedures

1. All employees working for Innovation Landscape, Inc. may be tested for illegal drugs, substances, synthetic drugs and alcohol if there is reasonable suspicion that the employee is under the influence of alcohol, any of the substances identified in paragraph 13 or abuse of prescription medication. For the purpose of this program, the term "reasonable suspicion" shall be defined as "aberrant behavior or unusual on-duty behavior of an individual employee who:
  - a. is observed on duty by either the employee's immediate supervisor, higher ranking employee, or other managerial personnel who have been trained to recognize the symptoms of drug abuse, cimpairment or intoxication (observations shall be documented by the observers);
  - b. exhibits the type of behavior that shows accepted symptoms of intoxication or impairment caused by controlled substances or alcohol or addiction to or dependence upon said controlled substances; and
  - c. such conduct cannot reasonably be explained by other causes such as fatigue, lack of sleep, side effect of prescription or over-the- counter medications, illness, reaction to noxious fumes or smoke.

2. Testing of this type will not be conducted without the written approval of the company's superintendent or designated manager. The jobsite superintendent or designated manager must document in writing who is to be tested and why the test was ordered, including the specific objective facts constituting reasonable suspicion leading to the test being ordered, and the name of any source(s) of this information. One copy of this document shall be given to the employee before he/she is required to be tested. After receiving a copy of the document, the affected employee shall be given enough time to read the document.
3. When a supervisor, higher ranking employee or other managerial personnel has reasonable suspicion to believe an employee is using, consuming or under the influence of an alcoholic beverage, non- prescription controlled substance (other than over-the-counter medication), and/or non-prescribed narcotic drug while on duty, that person will notify the jobsite superintendent or designated manager for the purpose of observation and confirmation of the employee's condition. The employee will be given an opportunity to explain his/her condition, such as reaction to a prescribed drug, fatigue, lack of sleep, exposure to noxious fumes, reaction to over-the-counter medication or illness. If, after this explanation, the jobsite superintendent or designated manager continues to have reasonable suspicion that the employee is using, consuming and/or under the influence of an alcoholic beverage, non-prescribed controlled substance or non-prescribed narcotic while on duty, then, by a written order signed by the superintendent or designated manager, the employee may be ordered to immediately submit to a drug and alcohol screen. Refusal to submit to testing after being ordered to do so may result in disciplinary action up to and including discharge.
4. Employee drug screens for cause will include testing for alcohol, as well as the same drugs as the pre-hire screening test. Each employee will read and execute a consent form prior to any test being administered. Failure to execute the consent form will result in termination.
5. Reasonable suspicion testing shall be performed at a NIDA/SAMI-ISA-approved clinic. The individual will be immediately accompanied to the clinic by a company representative. Samples will be taken as per the pre-hire procedure.
6. An EMIT test and, if positive, a confirming GC/MS test, will be performed on the urine sample. The remainder of the sample and the split sample will be stored at the laboratory for 30 days.
7. If an employee's test is positive, his/her employment will be terminated immediately. The employee will be given a copy of the results of the drug screen. He/she may have the second container tested at his/her own expense as per the pre-hire procedure.
8. Alcohol detection will be based on a evidential breath alcohol device approved by the National Highway Traffic Safety Act. If an employee's test results indicate he/she is legally intoxicated at or above the state of jurisdiction's legal limit, he/she may be subject to discipline up to and including discharge.





#### IV. Causal/Incident-Related Testing

Subject to applicable law and consistent with reasonable suspicion, the company reserves the right to require its employees to present themselves for testing within 24 hours following an employee's involvement in an accident, near accident or an incident resulting in lost work time, property damage, and/or injury to any employee or other person while on the company's premises, on the job or otherwise working for the company.

#### V. Random Testing

Subject to applicable law, the company reserves the right to require its employees to present themselves for random, unannounced testing. The company will adopt an objective procedure, using a statistically valid number generation process, to randomly select employees to be tested.

Upon anonymous selection, the company will notify the employee(s) to report immediately for drug testing. The company solely determines the time and frequency of random drug tests. Any employee may be selected for random testing in accordance with state/local laws. An employee could be randomly selected for testing more than once a year.

#### VI. Reinstatement, Return-to-Duty and Follow-Up Testing/Rehabilitation Programs

The company maintains a referral relationship with drug and alcohol abuse services. Additionally, certain health insurance benefits may provide help to employees who suffer from substance abuse and/or other personal or emotional problems; however, it is the responsibility of each employee to seek necessary professional assistance before alcohol and drug problems lead to disciplinary action.

If the company mandates a sponsored rehabilitation program, the employee will be subjected to a drug screen following the procedures outlined in Section I (Drug Screening of Applicants for Employment) prior to reinstatement. In addition, per post-rehabilitation program monitoring guidelines, the company may subject the employee to follow-up testing for a period to be determined in cooperation with the rehabilitation program and employer. Testing will follow the procedures outlined in Section V (Random Testing).



VII. Drug and Alcohol Testing Requirements for Employees with a Commercial Driver's License (CDL)

The United States Department of Transportation (DOT) requires that all employees maintaining a CDL and operating commercial motor vehicles be subjected to the drug screen policies outlined in the "Testing Procedures" section of this document. CDL employees, per the DOT, are required to submit to a minimum five-panel drug screen for the presence of:

1. Amphetamines
2. Opiates
3. Phencyclidine (PCP)
4. Cocaine
5. THC (Marijuana/Canabinoids)

A positive test result requires the employee to be immediately removed from operating any commercial motor vehicles on public roadways. In addition, employees whose test produces a positive result must complete return-to-duty and follow-up testing after completion of an approved rehabilitation program as prescribed by a substance abuse professional. Follow-up testing must include a minimum of six unannounced, directly observed drug screens within 12 months of the initial return-to-duty screen following the procedures outlined in Section V (Random Testing).

For more information on the DOT's CDL drug screening requirements, visit:  
[http://www.fmcsa.dot.gov/documents/Drug Alcohol Test Brochure2009 5 08 compliant rev2.pdf](http://www.fmcsa.dot.gov/documents/Drug_Alcohol_Test_Brochure2009_5_08_compliant_rev2.pdf)

VIII. Disciplinary Policies and Procedures

For examples of disciplinary procedures and appeals processes, visit the "Best Practices" section of the Construction Coalition for a Drug- and Alcohol-Free Workplace website at [www.drugfreeconstruction.com](http://www.drugfreeconstruction.com).

First Offense

Disciplinary actions defined by the company

Second Offense

Disciplinary actions defined by the company.

Appealing Disciplinary Action



Appeals process defined by the company.

#### Substance Abuse Rehabilitation

Following a positive result, the company retains the right to enter the employee into an approved substance abuse rehabilitation program. Upon completion of the program, the employee will be subjected to drug screening procedures outlined in Section VI (Reinstatement, Return-to-Duty and Follow-Up Testing/Rehabilitation Programs).

#### IX. Policy Amendments

##### Review Procedures

The company will undertake a comprehensive review of the policy biennially. A review panel consisting of senior management, safety professionals and site employees will assess the relevance and current status of the policy's components, as well as incorporate updated procedures and requirements that will ensure the policy meets or exceeds industry requirements. Any policy changes made as a result of the review will be made available and provided to every employee as an addendum to the company's Employment Policies and Procedures Handbook.

In addition to the biennial policy update, the company may undertake revisions due to new regulatory requirements. Any revisions made outside the biennial review will be provided as a separate addendum to all employees.

#### X. Confidentiality Statement

Employee information, including drug screen results and rehabilitative programs, will be treated as medical records and will remain strictly confidential following HIPAA guidelines for patient confidentiality.

Employee requests to release the results of drug screens to any party outside the company must be made in writing and given to the employee's immediate supervisor and designated safety and health officer.





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**SAMPLE CONSENT FORM**

Pre Hire

Release form for obtaining urine samples for drug screening and permission to furnish the results to the company.

For Cause

Release form for obtaining urine samples for drug screening and permission to furnish the results to the company.  
Release form for obtaining NHTSA-approved evidential breath alcohol test and permission to furnish the results to the company.

Post Incident

Release form for obtaining test samples for drug and alcohol screening following any incident requiring medical care.

I hereby authorize the *Company*, its physicians or agents, to take the indicated sample from me to use for the purposes indicated above. I understand why these samples are being requested and I give permission for the results to be released to the company and to my employer (if different).

I further release and hold harmless the owner, the company and its subcontractors from any consequences arising out of the drug and/or alcohol test or results therefrom.

---

Name (please print)	Social Security Number		
Signature (required)	Date		
Street	City	State	Zip
Phone Number (with area code)			
Witness	Date		
Employer	Occupation		



**Bolingbrook Park District  
Prevailing Wage Act  
Contractor/Subcontractor Requirements**

The Illinois Prevailing Wage Act, 820 ILCS 130/.01 *et seq.* ("the Act") required contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the "prevailing rate of wages" (hourly cash wages plus fringe benefits) in the county where the work is performed. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website at:

<http://www.state.il.us/agency/idol/rates/rates.HTM>

All contractors and subcontractors rendering services under this contract shall comply with all requirements of the Act to the extent applicable, *including but not limited to*, all wage, notice and record keeping duties.

I hereby agree to adhere to all requirements of the State of Illinois Prevailing Wage Act including changes to the Act in Public Acts 96-0185 and 96-0437 effective January 1, 2010.

Contractor: Integral Construction Inc. Date: 4/29/2021

Contractor Representative Signature: 

Printed Name: Christopher Osinski

EMPLOYMENT OF ILLINOIS WORKERS ON PUBLIC WORKS ACT CERTIFICATION

Christopher Osinski, being

first and duly sworn, deposes and says:

That he is Principal of

(Partner, Officer, Owner, etc.)

Integral Construction Inc.

(Contractor)

The undersigned hereby agrees that, to the extent required by the Employment of Illinois Workers on Public Works Act (30 ILCS 570/1 et seq.), as now existing or hereafter amended, the undersigned shall comply with the Illinois labor employment requirements as set forth in the Act.

*Christopher A. Osinski*

(Name of Contractor, if Contractor is an Individual)  
(Name of Partner, if Partner is a Partnership)  
(Name of Officer, if Contractor is a Corporation)

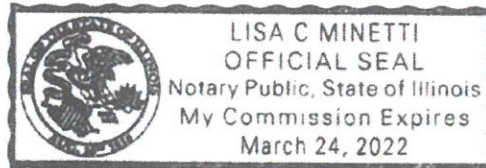
The above statements must be subscribed and sworn to before a notary public.  
Subscribed and sworn to

This 29th day of April.

By Lisa C Minetti

(Notary Public)

151439



**BOLINGBROOK PARK DISTRICT  
FAIR EMPLOYMENT PRACTICES  
AFFIDAVIT OF COMPLIANCE**

NOTE: THIS AFFIDAVIT MUST BE EXECUTED AND SUBMITTED WITH THE SIGNED CONTRACT FORM. NO CONTRACTS WILL BE ACCEPTED BY THE BOARD OF COMMISSIONERS OF THE BOLINGBROOK PARK DISTRICT UNLESS SAID AFFADIVIT IS SUBMITTED CONCURRENTLY WITH THE CONTRACT.

Christopher Osinski

(Name)

being first duly sworn, deposes and says that he/she is the

Principal

(Title)

of Integral Construction Inc.

(Name of Company)

and that he/she has the authority to make the following affidavit, that he/she has knowledge of the Bolingbrook Park District Bid Specifications and Documents and Ordinances relating to Fair Employment Practices and knows and understands the contents thereof: that he/she certifies hereby that it is the policy of

Integral Construction Inc.

(Name of Company)

to comply with the Equal Employment Opportunity requirements in 44 Illinois Administrative Code Section 750 *et seq.*

**Section I.** This EQUAL EMPLOYMENT OPPORTUNITY CLAUSE is required by the Illinois Human Rights Act and the Rules and Regulations of the Illinois Department of Human Rights published at 44 Illinois Administrative Code Section 750, *et seq.*

**Section II.** In the event of the Contractor's noncompliance with any provision of this Equal Employment Opportunity Clause, the Illinois Human Right Act, or the Rules and Regulations for Public Contracts of the Department of Human Rights (hereinafter referred to as the Department) the Contractor may be declared non-responsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and this agreement may be canceled or voided in whole or in part, and other sanctions or penalties may be imposed or remedies involved as provided by statute or regulation.

During the performance of this Agreement, the Contractor agrees:

- A. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service; and, further, that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate action to rectify any underutilization.
- B. That, if it hires additional employee in order to perform this Agreement, or any portion hereof, it will determine the availability (in accordance with the Department's Rules and Regulations for Public Contracts) of minorities and women in the area from which it may reasonably recruit and it will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
- C. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.
- D. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and Department's Rules and Regulations for Public Contract.
- E. That it will submit reports as required by the Department's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts.
- F. That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts.
- G. That it will include verbatim or by reference the provisions of this Equal Employment Opportunity Clause in every subcontract it awards under which any portion of this Agreement obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as the other provisions of this Agreement, the Contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting

agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Department to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

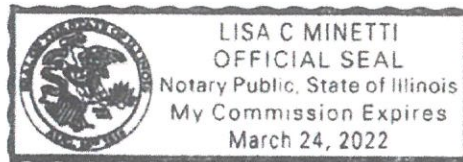
**Section III.** For the purposes of subsection G of Section II, "subcontract" means any agreement, arrangement or understanding, written or otherwise, between the Contractor and any person under which any portion of the Contractor's obligations under one or more public contracts is performed, undertaken or assumed; the term "subcontract", however, shall not include any agreement, arrangement or understanding in which the parties stand in the relationship of an employer and an employee, or between a Contractor or other organization and its customers.

*Cheryl A. Dick*  
(Signature)

SUBSCRIBED and sworn to before me this 29th day of April, \_\_\_\_\_

*Lisa C Minetti*  
(Notary Public)

#171277



**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_

as Principal, hereinafter called Contractor, and \_\_\_\_\_  
as Surety, hereinafter call Surety, are held and firmly bound unto the Bolingbrook Park District as Oblige, hereinafter call Owner, in the amount of \_\_\_\_\_ (Dollars) (\$ \_\_\_\_\_ (One hundred Percent of the Contract Price) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by a written agreement dated the \_\_\_\_\_ day of \_\_\_\_\_, 2021 entered into a contract with Owner for:

**WEBER PATH & LILY CACHE PATH AND BRIDGE**

In accordance with Contract Documents prepared by:

Bolingbrook Park District  
301 Recreation Drive  
Bolingbrook, Illinois 60440

which contract is by reference made a part hereof, and is hereinafter referred as the Contract.

NOW THEREFORE, the condition of this obligation is such that if the said Contractor shall in all respects well and truly keep and perform the said Contract, and shall pay all sums of money due or to become due, for any labor, materials, apparatus, fixtures or equipment furnished for the purpose of constructing the work provided in said contract, and shall defend, indemnify and save harmless the Owner against any and all liens, encumbrances, damages, claims, demands, expenses, costs and charges of every kind except as otherwise provided in said Contract Documents arising out of or in relation to the performance of said work and the provisions of said contract, and shall remove and replace any defects in workmanship or materials which may be apparent or may develop within a period of one (1) year from the date of final acceptance, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same shall in any ways affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

Surety companies executing Bonds must hold Certificates or Authority as Acceptable Sureties (31 CFR 223) and be authorized to transport business in the State where the Project is located.

Signed and sealed the \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
(Contractor)

(SEAL)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Surety)

(SEAL)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)

**LABOR AND MATERIALS BOND**

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_

Principal, hereinafter called Contractor, and \_\_\_\_\_ as Surety, hereinafter call Surety, are held and firmly bound unto the Bolingbrook Park District as Oblige, hereinafter call the Owner, in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) (One Hundred Percent of the Contract Price) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by a written agreement dated the \_\_\_\_ day of \_\_\_\_\_, 2021 entered into a contract with Owner for:

**WEBER PATH & LILY CACHE PATH AND BRIDGE**

In accordance with Contract Documents prepared by:

BOLINGBROOK PARK DISTRICT  
301 RECREATION DRIVE  
BOLINGBROOK, IL 60440

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW THEREFORE, the condition of this obligation is such that, if Contractor shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. Claimant is defined as one having a direct contract with the Contractor or with a Subcontractor of the Contractor for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
2. The above named Contractor and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
  - a) Unless claimant, other than one having a direct contract with the Contractor, shall have given written notice to any two of the following: the Contractor, the Owner, or the Surety above named, within ninety (90) days after such claimant did or



performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Contractor, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

- b) After the expiration on one (1) year following the date on which Contractor ceased Work on said Contract it being understood, however, that if nay limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
- c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien by presented under and against this bond.

Surety companies executing Bonds must hold Certificates of Authority as Acceptable Sureties (31 CFR 223) and be authorized to transact business in the State where the Project is located.

Signed and sealed the \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
(Contractor) (SEAL)  
\_\_\_\_\_  
(Witness)  
\_\_\_\_\_  
(Title)  
\_\_\_\_\_  
(Surety) (SEAL)  
\_\_\_\_\_  
(Witness)  
\_\_\_\_\_  
(Title)

**THIS ENDORSEMENT CHANGES THE POLICY, PLEASE READ IT CAREFULLY**

**ADDITIONAL INSURED - OWNERS, LESSEES OR  
CONTRACTORS (FORM B)**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

**Name of Person or Organization**

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement).

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

The General Aggregate Limit under LIMITS OF INSURANCE (SECTION III) applies separately to each of your projects away from premises owned by or rented to you.

**AGREEMENT**

**BOLINGBROOK PARK DISTRICT  
WEBER PATH & LILY CACHE PATH AND BRIDGE**

This Agreement, made and concluded this \_\_\_\_\_ day of \_\_\_\_\_, 2021 between the Bolingbrook Park District, party of the first part hereinafter referred to as the Owner, and \_\_\_\_\_ his/their executors, administrators, successors or assigns, known as the party of the second part, hereinafter referred to as the Contractor.

**WITNESSETH:** That for and in consideration of the payments and agreement mentioned in the Proposal hereto attached, to be made and performed by the Owner, and according to the terms expressed in the Bond referring to these presents, the Contractor agrees with said Owner at his/their own proper cost and expense to do all the work, furnish all materials and all labor necessary to complete the work in accordance with the Contract Documents hereinafter described and in full compliance with all of the plans of this agreement.

And it is also understood the Contract Documents as defined in the General Requirement are all essential documents of this Contract and are part thereof.

In witness thereof, the said parties have executed these presents on the date above mentioned.

**BOLINGBROOK PARK DISTRICT (OWNER)**

**(SEAL)**

**By:** \_\_\_\_\_

**Attest:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**(Type or Print)**

**(Type or Print)**

**Title:** \_\_\_\_\_

**Title:** \_\_\_\_\_

\_\_\_\_\_**(CONTRACTOR)**

**(SEAL)**

**By:** \_\_\_\_\_

**Attest:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**(Type or Print)**

**(Type or Print)**

**Title:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**SECTION 00 0110**  
**TABLE OF CONTENTS**

**ITEM**

Section 01 1300 – Submittals  
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Section 01 2100 – Site Preparation  
Section 01 5713 – Erosion Control  
Section 01 7300 – Execution Requirements  
Section 01 7700 – Project Closeout

Section 03 1100 – Concrete Formwork  
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Section 03 3000 – Cast-in-Place Concrete  
Section 06 1200 – Structural Steel  
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Section 31 3219 – Geotextiles  
Section 31 3700 – RipRap  
Section 31 6216 – Steel Pipes  
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Section 32 1313 – Concrete Paving  
Section 32 9219 – Lawn Seeding

**APPENDIX**

Geotechnical Investigation Report, Soil Borings  
Westland Assessment Report

**DRAWINGS – Separate Sheets**

Drawing set title: Weber Path & Lily Cache Path and Bridge

END OF SECTION

## **SECTION 01 1300** **SUBMITTALS**

### 1.0 CONTRACTOR'S CONSTRUCTION SCHEDULES

1.1 Immediately after notification of Contract Award, the Contractor shall prepare and deliver to the Owner's Representative for approval, a Construction Schedule. This Schedule shall include a breakdown of the various divisions of the Work, and shall show the date of commencement and the date of completion of each division of the Work. This Schedule shall be prepared on the basis of the Contractor's stated Final Completion Date and in consultation with Contractors for any other work involved in the completion of the Project, and with the Owner's Representative's consent or direction, shall be revised from time to time as required. This Schedule shall include the Owner's equipment installation timetable (if any) as furnished by him/her.

### 2.0 CONTRACTOR PAYOUTS AND LIEN WAIVERS

2.1 Contractor shall submit payment requests in **triplicate** using standard AIA Document G702 "Application and Certificate for Payment."

2.2 Waivers of lien shall be submitted in **triplicate** from all major Subcontractors or suppliers as directed by the Owner.

### 3.0 SURVEY DATA

3.1 Contractor shall be responsible for properly laying out the Work, and for lines and measurements for the Work executed under Contract Documents. Verify figures shown on the drawings before laying out the Work, and report errors or inaccuracies in writing to the Owner's Representative before commencing work. The Owner's Representative will in no case assume responsibility for laying out the Work.

3.2 Establish necessary reference lines and permanent bench marks from which built object lines and elevations shall be established. Contractor shall establish two such bench marks in widely separated locations and be responsible for proper location and level of the work and for maintenance of reference lines and bench marks. Establish bench marks and axis lines showing exact floor elevations and other lines and dimensional reference points as required for information and guidance of all trades.

3.3 Each Subcontractor, as it applies to his/her work, shall verify grades, lines, levels, locations, and dimensions as shown on drawings and report any errors or inconsistencies to the Owner's Representative before commencing work. Starting of work by Subcontractor shall constitute acceptance.

### 4.0 SHOP DRAWINGS, PRODUCT DATA, SAMPLES (SUBMITTALS)

4.1 The contractual requirements for shop drawings, product data, and samples are specified in the General and Supplemental Conditions. The Contractor shall submit shop drawings, product data, and samples.

4.2 Within thirty (30) days after award of Contract, Contractor shall prepare a schedule of specific target dates for submission and return of Owner's Representative reviewed submittals required by Contract Documents.

4.3 No Portion of work requiring such submittal will be permitted to start until submission has been reviewed by the Owner's Representative. Changes or modification to Contract Documents shall not be initiated by corrections to submittals.

4.4 Submittals which reflect major design changes to the Contract Drawings or Specifications must be accompanied by a separate letter justifying change, and will require that a change order be executed prior to acceptance

## 5.0 SUBMITTAL PROCEDURES BY CONTRACTOR

### 5.1 Shop Drawings

A. Submit to the Owner's Representative four (4) copies of Shop Drawings for review. The Owner's Representative's check of any Contractor's Shop Drawings will cover approval of material and design only, and while figures or dimension will be checked in a general way, the responsibility for correctness of all drawings will rest with the Contractor submitting the Shop Drawings. After review, three (3) copies of the Shop Drawings with corrections or accompanying comments will be returned to the Contractor for resubmission, if required, after corrections have been made. For final resubmission, after corrections have been made, the Contractor shall send prints to the Owner's Representative for distribution. The Owner's Representative review of the Shop Drawings does not relieve the Contractor from furnishing materials and performing work as required by the Contract Documents. No extension of time will be granted for review and approval.

### 5.2 Product Data

A. Submit to the Owner's Representative three (3) copies of the manufacturer's specification, installation instructions and general recommendations for applicable products. Include manufacturer's certification or other data substantiating that the materials comply with the requirements, and are recommended by manufacturer for the application shown and specified. Indicate by copy of transmittal form that Installer has received copy of the instructions and recommendations. Hardware schedules and collection of catalog cuts such as light fixtures, site furniture, etc., shall be presented in bound brochures, three (3) copies each

### 5.3 Samples

A. Submit to the Owner's Representative two (2) samples and color data information for all finishes and finish materials.

## 6.0 DISTRIBUTION

6.1 Contractor is responsible for obtaining and distributing required submittal items to his/her Subcontractors and material suppliers after, as well as before, items are stamped "Approved."

## 7.0 SHOP DRAWINGS FILE TO OWNER

7.1 At completion of construction, Contractor shall furnish for Owner's use one (1) unused copy of all Shop Drawings, manufacturer's diagrams, literature, etc., that were used in execution of the Work.

END OF SECTION

**SECTION 01 5000**  
**TEMPORARY FACILITIES**

**1.0 GENERAL**

- 1.1 Contractor shall provide temporary facilities and controls as specified or as required for protection of the Work in accordance with applicable codes.
- 1.2 All temporary connections to utilities and services shall be acceptable to Owner and local authorities having jurisdiction thereof. OSHA Standards and Regulations shall apply if more restrictive.
- 1.3 Contractor shall note that if any part of the permanent building equipment (plumbing, heating, electrical) is used to provide temporary utilities, this shall not void or shorten the equipment guarantee provided by the Contractor and material and equipment supplier and as described in Contract Documents.

**2.0 TEMPORARY WATER**

- 2.1 The Contractor shall provide temporary water service for construction operations.

**3.0 TEMPORARY SANITARY FACILITIES**

- 3.1 Provide and maintain required sanitary facilities for work force.

**4.0 CONSTRUCTION AIDS**

- 4.1 Contractor shall furnish, maintain, and remove at completion, all temporary ladders, ramps, barricades, enclosures, fences, walks and like facilities, as required for proper execution of Work for all trades, except as otherwise specifically required under individual section.
- 4.2 All such apparatus, equipment, and construction shall meet all requirements of OSHA and other applicable state or local laws.
- 4.3 Contractor and each of their Subcontractors, for their own use, shall provide all scaffolding required for execution of their own work. Scaffolding shall not be built into walls of buildings.

**5.0 WATER AND SNOW CONTROL**

- 5.1 From commencement to final payment Contractor shall keep all parts of the Work free from accumulation of water, snow and ice for the protection of their Work. Protect the Work against weather damage.

**6.0 TEMPORARY FIELD OFFICES**

- 6.1 Contractor, at his/her option, shall provide and maintain a field office. Construction sheds, trailers and temporary offices provided by Contractor shall be maintained in good condition. Field office is not a pay item and if included at Contractor's option will be considered incidental to the project cost.

**7.0 TEMPORARY LIGHT AND POWER**

- 7.1 The Contractor shall provide electrical power during construction operations.



7.2 Contractor shall provide his own extension cords and lamps, if required, and shall also be responsible to see that these are furnished by or for each of his/her Subcontractors as they may be required.

7.3 Where service of characteristics, quality or locations other than described above may be required, each Contractor requiring same shall provide such additional service and necessary equipment at his/her own expense.

#### 8.0 SHORING AND BRACING

8.1 The Contractor shall provide, install and maintain all shoring and bracing or other devices necessary to maintain all aprons, curbs, pavements, and existing structure, etc., at their present levels and in their present location and condition during construction. Demolish all such work after it is not needed and required and remove it from the premises.

END OF SECTION

**SECTION 01 2100**  
**SITE PREPARATION AND PROTECTION OF EXISTING FACILITIES**

1.0 GENERAL

1.1 Description

- A. This work shall consist of the complete removal of all items called for in the plans and specifications or as otherwise implied in a safe and orderly manner creating as little disturbance as possible.
- B. All areas indicated for construction of any kind shall be cleared of any debris, undergrowth, weeds, stumps, roots, and marked trees which might interfere with the progress of that work. Unmarked trees or any plant material indicated to be saved by the Owner or Owner's Representative shall be given special protection as specified.

2.0 PRODUCTS (not applicable)

3.0 EXECUTION

3.1 Safety of Operations

- A. Work site safety is the Contractor's responsibility. During removal operations, proper signs and security fence shall be installed by the Contractor prior to commencing work. Barricades shall be used to warn and protect the public against hazards. If a street must be temporarily closed to traffic, it shall be the Contractor's obligation to make arrangements for permission from the governing agency prior to closing. After such approval is obtained, the Contractor shall notify the Owner, local law enforcement, and Fire Department of actual times and dates of closure.

3.2 Protection and restoration of Items to Remain

- A. Locations and dimensions shown in the Drawings for existing facilities are in accordance with available information obtained without uncovering, measuring or other verification and are not guaranteed. The Contractor shall protect from damage private and public utilities encountered during the Work. The Contractor shall, before an excavation begins, call J.U.L.I.E. or Digger (depending on service location).
- B. Extreme care shall be utilized when removing any item adjacent to structures, utilities, paving, vegetation or any item not indicated for removal or relocation whether shown on the Drawings or not. These items shall be properly protected as required to keep them from damage or other disturbance of any kind during the course of work. Existing utilities shall be protected and maintained to prevent leakage, settlement or other damage. Damage to any of the above shall be repaired or replaced to former condition as required by the utility company or Owner at the Contractor's expense. Repair of damaged utility shall be completed within 24 hours of damage occurring.
- C. The Contractor shall, at no additional cost to the Owner, provide and install safeguards acceptable to the Owner to protect public and private property. During removal operations, proper signs and security fence shall be installed by the Contractor prior to commencing work. Barricades shall be used to warn and protect the public against hazards.
  - 1. If a street must be temporarily closed to traffic, it shall be the Contractor's obligation to make arrangements for permission from the governing agency prior to closing. After such approval is

obtained, the Contractor shall notify the Owner, local law enforcement, and Fire Department of actual times and dates of closure.

2. If public or private property is damaged or destroyed or its use interfered with by the Contractor, the Contractor's agents or the Contractor's employees, such interference shall be terminated and damaged or destroyed property repaired and restored immediately to its former condition by the Contractor at the Contractor's expense.
3. Should the Contractor refuse or not respond promptly to a written request to restore damaged or destroyed property to its original condition, the Owner may have such property restored by other means at the Contractor's expense.

### 3.3 Protection and Restoration of trees, shrub and plant material

- A. Trees, shrubs, plants, and other landscaping not designated for removal shall be left in place and protected from damage or injury during construction. The Contractor shall provide full and adequate protection against construction damage to all landscaping that is to remain.
- B. No traffic, storage of Equipment, vehicles or materials shall be allowed within the drip line of trees not designated for removal unless plans permit such activity. In addition, plans may indicate no-construction activity areas that are larger than the dripline (see plan notes).
- C. Where excavation operations occur and where tree roots 2 inch or greater in diameter are discovered, the Contractor shall promptly notify the Owner's Representative, who will determine how these tree roots are to be handled.
- D. Root pruning shall occur on all tree roots larger than one inch diameter. Such roots shall be cleanly cut in place. Root pruning shall be done so as not to disturb remaining fibrous roots.
- E. Promptly cover exposed roots and maintain moisture on them to keep them alive.
- F. Failure to promptly preserve the viability of roots on trees to be saved may result in the Owner making corrective action. Given the urgency needed in keeping desirable tree roots alive, the Owner may take such action following as little as twenty-four hour notice to the Contractor. Reasonable costs for any and all such action by Owner may be charged to the Contractor and/or deducted from project monies due to the Contractor.

### 3.4 Plant Damage Compensation

- A. The Owner shall be reimbursed for trees or other plant material not ordered or designated to be removed but that are destroyed or irreparably damaged by Contractor operations as determined by the Owner's Representative. At a minimum, the Contractor shall reimburse Upland Design and/or other Owner consultant for time and materials expended related to tree damage (such as meetings, measuring, preparing reports and preparing change orders)
- B. Damage to tree trunks, branches and roots shall be reported to the owner's representatives immediately.
- C. The penalty for each incidence of trunk damage to trees shall be \$450.00.
- D. The penalty for each incidence of branch or root damage shall be \$100.00 per caliper inch.

- E. The penalty for compaction of soil by unauthorized vehicle travel on the grounds shall be \$.45 per square foot of traveled area.
- F. Where the damaged tree is a heritage tree or landscape specimen, the reimbursement amount will be based on a benefit-based-valuation. This service is to be conducted by a certified arborist trained in tree appraisals that is approved by the Owner and the cost of the service will be borne solely by the contractor.
- G. The penalty for damage to a shrub shall be the removal and replacement cost as determined by at least two written quotes obtained by the Owner.

### 3.5 Removal Responsibility

- A. All debris, paving, equipment, fencing, trees, stumps, sod or soil to be cleared and removed from the project area shall be legally disposed of off site at the arrangement and expense of the Contractor. No materials will be stockpiled on site for future disposal; materials used for fill or topsoil may be stored on site. No excavation areas will be left in unsafe or unsightly conditions at day's end. The Contractor will be responsible for all transportation and disposal fees associated with this work. Burning of any materials on site is prohibited unless indicated otherwise on plans.

END OF SECTION

**SECTION 01 5713**  
**EROSION CONTROL**

1.0 GENERAL

1.1 Description

A. Erosion Control shall consist of furnishing all labor, materials, tools and equipment necessary to place riprap material, silt fencing, erosion control blankets and triangular silt dikes in the locations indicated on the drawings .

1.2 Incorporated Specifications

A. The following specifications are incorporated into the document

1. "Standard Specifications for Road and Bridge Construction" – latest edition - Illinois Department of Transportation
  - a. Section 280 Temporary Erosion Control
  - b. Article 1005.01 Stone for Erosion Protection, Sediment Control and Rockfill
  - c. Article 1081.10 Special Erosion Control Materials
  - d. Article 251.04 Erosion Control Blanket
2. Contractor shall adhere to the above specifications unless applicable items of work or materials are modified herein.

2.0 MATERIALS

2.1 Riprap

A. Riprap fill shall consist of sound, durable cobbles and crushed rock having a maximum diameter of eight inches (8") as measured in the smallest dimension. Riprap shall be well graded and meet the gradation requirements for RR3 in accordance with the above referenced and incorporated specification.

2.2 Silt Fence

A. Silt fence shall be polypropolyne fabric. Stakes for silt fence shall be wooden or metal and at least five feet (5') long.

2.3 Erosion Control Blanket

A. 3:1 and Greater Slopes shall be Curlex I Single Net. As manufactured by:

1. American Excelsior Company, 850 Avenue H East, Arlington, Texas 76011, (800) 777-7645

a. All staples shall be E-Staple, 4-inch bio-degradable. As manufactured by: American Excelsior Company OR [www.Greenstake.com](http://www.Greenstake.com)

B. Erosion control blanket shall be approved by the Department of Transportation. All netting shall be single sided and white UV reactive. Netting shall begin to bio-degrade within 15-18 months of installation. Netting shall have an opening between 1/2" x 1/2" and 2" x 1". Staple shall be 100% Polyhydroxyalkanoate (PHA) plastic, biodegradable from microbial activity in accordance to ASTM D5338 and ASTM D5271. Staples shall completely biodegrade within 24 months of installation. Staples shall be 4 inches (4") in length, T-Shaped and have barbed head and shoulders.

## 2.4 Triangle Silt Dike Barrier

- A. Triangular silt dike barrier shall be urethane foam and geotextile fabric and shall have protective aprons on both sides of the barrier. Barrier shall be eight inches (8") wide.

## 3.0 EXECUTION

### 3.1 Riprap Installation

- A. Riprap shall be placed in a twelve inch (12") thick layer or as shown on the drawings or as directed by Owner and worked as required to provide a well graded matrix of stone pieces.

### 3.2 Silt Fence

- A. Silt fencing shall be placed in the locations shown on the plans and in accordance with the above incorporated specifications. Staking shall be a minimum of eight feet (8') apart. Silt fence shall remain in place for the duration of the construction project and shall only be removed with prior approval.

### 3.3 Erosion Control Blanket

- A. Erosion control blankets shall be placed in accordance with the above incorporated specifications. Before barrier installation, ensure areas to be covered are smooth and free of ruts, depressions, rocks or clods over eighteen inches (18") in diameter, sticks and any other debris that will prevent contact between the blanket and soil. Erosion control blanket to be installed within 24 hours after seeding. Staking shall be a minimum of six feet (6') apart and staked per the manufacturer's instructions.

### 3.4 Triangular Silt Dike Barrier

- A. Triangular silt dike barrier shall be placed in the locations shown on the plans and in accordance with the above incorporated specifications.
- B. Secure triangular silt dike by burying the first six inches (6") of the leading edge apron in a two to three inch trench. 4 to 5 staples shall be used on the front apron and 4 to 5 staples shall be used on the rear apron on each seven foot (7') section. Water flow is not allowed under the barrier.
- C. The barrier shall remain in place for the duration of the construction project and shall only be removed with prior approval. Contractor shall routinely inspect and maintain the barrier. Contractor to ensure that barrier is free of accumulated silt, debris, and other miscellaneous material. Accumulated sediment deposit shall be removed if more than eight inches (8"). Torn or punctured barrier shall be repaired or replaced as directed by the Owner's Representative.
- D. Contractor shall be required to obtain approval for removal of silt fence. Remove fence, take off site, fill in trenches with topsoil, seed, cover with blanket, and roll as needed to match existing grade and conditions.

END OF SECTION

**SECTION 01 7300**  
**EXECUTION REQUIREMENTS**

1.0 GENERAL

1.1 Summary

A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. General installation of products.
3. Progress cleaning.
4. Starting and adjusting.
5. Protection of installed construction.
6. Correction of the Work.

2.0 PRODUCTS (Not Used)

3.0 EXECUTION

3.1 Examination

A. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction affecting the Work.

1. Before construction, verify the location and invert elevation at points of connection of storm sewer, and sanitary sewer.
2. Verify location of existing water lines, electric and private utilities.

B. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of conditions.

3.2 Preparation

A. Field Measurements: Take field measurements as required to fit the Work properly. Re-check measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Owner's Representative. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.3 Construction Layout

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Owner promptly.
- B. General: Lay out the Work using accepted surveying practices.
  - 1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
  - 2. Establish dimensions within tolerances indicated.
  - 3. Inform installers of lines and levels to which they must comply.
  - 4. Check the location, level and plumb, of every major element as the Work progresses.
  - 5. Notify Owner when deviations from required lines and levels exceed allowable tolerances.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures. Transfer survey markings and elevations for use with control lines and levels. Level foundations from two or more locations.

### 3.4 Field Engineering

- A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

### 3.5 Installation

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  - 1. Make vertical work plumb and make horizontal work level.
  - 2. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
- B. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- D. Tools and Equipment: Do not use tools or equipment that produces harmful noise levels.
- E. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

### 3.6 Progress Cleaning

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80° F.



3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  1. Remove liquid spills promptly.
  2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.
- I. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### 3.7 Protection of Installed Construction

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

### 3.8 Correction of the Work

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
  1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

END OF SECTION

**SECTION 01 7700**  
**PROJECT CLOSEOUT**

**1.0 CLEANING UP**

- 1.1 Contractors shall, prior to punch list preparation, remove trash and debris and clean all walks, drives and parking areas.
- 1.2 Upon completion of work, Contractor shall remove all temporary structures, fences, surplus materials, and rubbish of every kind from site and dispose of legally, except in cases where permits require silt fences to remain.
- 1.3 If Contractor fails to clean up, the Owner may do so and the cost thereof shall be charged to the Contractor as provided in the General Conditions.

**2.0 AS-BUILT DRAWINGS/SPECIFICATIONS**

- 2.1 Contractor shall maintain one set of Drawings and one set of bound specifications on which he/she shall record every deviation that is made from original drawings and specifications at the time the change is made.
- 2.2 Contractor shall keep a neat and complete record of exact manner in which all work is installed. Dimensions shall be included to accurately locate items that will be concealed and which may later be necessary to locate for service.
- 2.3 This record set of drawings and specifications shall be kept by Contractor at the job site for inspection by the Owner and the Owner's Representative.
- 2.4 At completion of the Work, Contractor shall arrange above records in order properly indexed and certify by endorsement thereof that each of the revised drawings and specifications is complete and accurate.
- 2.5 Before final payment is made, the Contractor shall deliver the annotated as-built drawings and specifications to the Owner's Representative. The as-built drawings and specifications created by the Contractor at all times remain the property of the Owner.
- 2.6 No review or receipt of such records by the Owner or the Owner's Representative of any deviation from the Contract Documents does in any way relieve the Contractor from his/her responsibility to perform the work in accordance with the Contract Documents
- 2.7 Where indicated on the Drawings, as-built drawings shall be a topographic survey that is prepared and sealed by an Illinois licensed surveyor. See Drawings for additional requirements. Items 2.1 through 2.6 above shall also apply.

### 3.0 PUNCH LIST

- 3.1 Upland Design Ltd. and the Owner shall make a final inspection of work after Contractor notifies the Owner that work is substantially complete. The Contractor will be notified in writing of incomplete and/or unaccepted items in a written punch list. These items, if any, are to be corrected or completed before final acceptance is granted by Owner. Failure of the Owner's Representative to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Following Contractor completion of all punch list work, Owner shall provide a written notice of final acceptance to Contractor.

### 4.0 MAINTENANCE AND OPERATION INSTRUCTION

- 4.1 Prior to final payment, Contractor shall arrange all technical instruction of Owner's maintenance personnel, either by his/her own or the equipment manufacturer's personnel.

### 5.0 GUARANTEES

- 5.1 The Contractor shall guarantee all workmanship and materials, including plant material for a period of one (1) year from the date of the final acceptance letter, except where certain guarantees are otherwise specified in writing to be longer than one year.
- 5.2 At the completions of the work, all such guarantees covering material, workmanship, maintenance, etc., as specified, shall be procured by the Contractor from the various suppliers and subcontractors, and forwarded to the Owner, together with a letter, addressed to the Owner, giving a summary of guarantees attached stating, the character of work, name of the Contractor, name of the material or equipment supplier, period of guarantee and condition of guarantee. This shall be done within fifteen (15) days of the punch list date.
- 5.3 Neither the final payment nor termination of the guarantee period, nor any provision in the Contract Documents, shall relieve the Contractor of the responsibility for negligence, faulty materials or workmanship within the extent and period provided by law. Upon written notice, the Contractor shall remedy any defects, and shall pay all expenses for damage to other work resulting from that defect.
- 5.4 If the drawings and/or specifications provide for methods of construction and installation, or materials which cannot be guaranteed by the Contractor for the indicated period, the Contractor shall so inform the Owner in writing prior to submitting a bid. Otherwise the Contractor shall guarantee all methods of construction and installation, and materials for the indicated period of time.

END OF SECTION

SECTION 03 11 00  
CONCRETE FORMWORK

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included:
  - 1. Forms for cast-in-place concrete.
  - 2. Form accessories.
  - 3. Openings for other work.
  - 4. Form stripping.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

1.02 REFERENCES

- A. ACI 117–Tolerances for Concrete Construction.
- B. ACI 301–Structural Concrete for Buildings.
- C. ACI 318–Building Code Requirements for Reinforced Concrete.
- D. ACI 347–Recommended Practice for Concrete Formwork.
- E. PS1–Construction and Industrial Plywood.

1.03 DESIGN

- A. All formwork shall comply with ACI 347 and ACI 301.
- B. CONTRACTOR shall assume the responsibility for the complete design and construction of the formwork.

1.04 SUBMITTALS

- A. Submit shop drawings in accordance with Section 01 13 00–Submittals for form ties, form coatings, form liners (if any), and any other form accessories.
- B. Submit geometry of forms for circular structures.

PART 2–PRODUCTS

2.01 FORMS

- A. Forms shall be of wood, plywood, steel, fiberboard lined, or other approved materials which will produce concrete which meets the specified requirements. The type, size, quality, and

shape of all materials of which the forms are made are subject to the review of OWNER'S REPRESENTATIVE.

- B. Caution shall be exercised in the use of wood or composition forms or form liner to be certain that no chemical reaction will take place which causes a damaging effect on the concrete surface.

## 2.02 FORM TIES–NONREMOVABLE

- A. Internal wall ties shall contain positive stops at the required wall thickness. The exterior clamp portions of the tie shall be adjustable in length. Ties shall have cones on the water side of water-containing structures. Ties shall also have cones on the exterior side of all structures which have PVC water-stopped construction joints. Ties shall provide a positive disconnection on both ends 1 to 1 1/2 inches inside the finished face of the concrete.
- B. All wall ties used in the placement of structures which have PVC or hydrophilic water-stopped construction joints shall contain integral waterstops. All such ties shall be crimped or deformed in such a manner that the bond between concrete and tie cannot be broken in removal of the outer units. This portion of the tie shall not be removed prior to 24 hours after completion of the concrete placement.
- C. The use of wood spacers and wire ties will not be approved.

## 2.03 FORM TIES–REMOVABLE

- A. Taper ties which are designed to be removed entirely from the wall may be used with forms designed for this tie type and spacing.
- B. Tie holes shall be plugged with either a neoprene plug, Sure-Plug by Dayton Superior, Inc., or an EPDM rubber plug, X-Plug by Sika Greenstreak, or equal.
- C. Cementitious waterproofing material for patching taper tie holes shall be Hey Di K-11, Xypex Patch-N-Plug, or equal. Taper tie holes above the normal operating water surface shall be patched with mortar mix as specified in Section 03 30 00–Cast-in-Place Concrete for patching tie holes.

## 2.04 FORM COATINGS

- A. Provide commercial formulation form-coating compounds that will not bond with, stain, nor adversely affect concrete surfaces requiring bond or adhesion, nor impede the wetting of surfaces to be cured with water or curing compounds.

## 2.05 CHAMFER STRIPS

- A. Provide 3/4-inch by 3/4-inch wood or plastic chamfer strips at all exposed corners, except as noted.

## 2.06 KEYWAYS

- A. Keyways shall be formed with wood inserts.

## PART 3-EXECUTION

### 3.01 CONSTRUCTION

- A. Forms shall conform to the shape, line, grade, and dimensions as shown on the drawings. They shall be mortar-tight and sufficiently rigid to prevent displacement or sagging between supports and shall support the loads and pressures without deflection from the prescribed lines. They shall be properly braced or tied together so as to maintain position and shape. Spacing of ties shall be recommended by the tie manufacturer.
- B. Formwork and finished concrete construction shall meet the tolerances specified in ACI 117.
- C. All exposed curved surfaces shall be formed to the continuous surface of the radius specified. Where segmented forms are proposed, a form system which deviates more than 3/8 inches from a circle through pan edges will not be allowed.
- D. Architectural surfaces and surfaces to be fitted with equipment shall be formed to match the shape intended. Where indicated on the drawings, the form shall be lined with minimum 3/8-inch masonite and shimmed as required.
- E. When forms are placed for successive concrete placement, thoroughly clean concrete surfaces, remove fins and laitance, and tighten forms to close all joints. Align and secure joints to avoid offsets.
- F. At the request of OWNER'S REPRESENTATIVE, temporary openings shall be provided at the base of column forms and wall forms and at other points where necessary to facilitate cleaning and observation immediately before depositing concrete.
- G. Provide inserts and provide openings in concrete form work to accommodate work of other trades. Verify size and location of openings, recesses, and chases with the trade requiring such items. Securely support items to be built into forms.
- H. Provide top forms for inclined surfaces where the slope is too steep to place and vibrate concrete.
- I. Bevel wood inserts for forming keyways (except in expansion joints where inserts shall have square edges), reglets, recesses, and the like to allow for ease of removal. Inserts shall be securely held in place prior to concrete placement. Unless otherwise shown, chamfer strips shall be placed in the angles of the forms to provide 3/4-inch bevels at exterior edges and corners of all exposed concrete.
- J. The forms shall be oiled with a field-applied commercial form oil or a factory-applied nonabsorptive liner. Oil shall not stain or impede the wetting of surfaces to be cured with water or curing compounds. The forms shall be coated prior to placing reinforcing steel. Oil on reinforcement will not be permitted.
- K. All form surfaces shall be thoroughly cleaned, patched, and repaired before reusing and are subject to review of OWNER'S REPRESENTATIVE.

### 3.02 FORM REMOVAL

- A. Supporting forms and shoring shall not be removed until the member has acquired sufficient strength to support its own weight and the construction live loads on it.
- B. All form removal shall be accomplished in such a manner that will prevent injury to the concrete.
- C. Forms shall not be removed before the expiration of the minimum times as stated below or until the concrete has attained its minimum 28-day design strength as confirmed by concrete cylinder tests, unless specifically authorized by OWNER'S REPRESENTATIVE.
  - 1. Wall and vertical faces: 24 hours.
  - 2. Columns: 24 hours.
  - 3. Beams and elevated slabs: 14 days.

END OF SECTION

## SECTION 03 20 00

### CONCRETE REINFORCEMENT

#### PART 1–GENERAL

##### 1.01 SUMMARY

- A. Work includes providing complete, in-place, all steel and fibers required for reinforcement of cast-in-place concrete as shown on the drawings.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

##### 1.02 REFERENCES

- A. Applicable standards listed in this section include, but are not necessarily limited to the following:
  - 1. ACI 315–Manual of Standard Practice for Detailing Reinforced Concrete Structures.
  - 2. ACI 318–Building Code Requirements for Reinforced Concrete.
  - 3. ASTM A1064–Standard Specifications for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.
  - 4. ASTM A615–Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
  - 5. ASTM A996–Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcing.
  - 6. ASTM C1116–Standard Specification for Fiber-Reinforced Concrete.
  - 7. CRSI–Manual of Standard Practice.

##### 1.03 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 13 00–Submittals.
- B. Provide complete shop drawings of all material to be furnished and installed under this section:
  - 1. Before fabrication of the reinforcement is begun, CONTRACTOR shall obtain the approval of OWNER'S REPRESENTATIVE on reinforcing bar lists and placing drawings.
  - 2. These drawings and lists shall show in detail the number, size, length, bending, and arrangement of the reinforcing. Reinforcing supports shall also be located on the shop drawings.
  - 3. Shop drawings shall be in accordance with ACI 315.

##### 1.04 PRODUCT HANDLING

- A. Delivery:
  - 1. Deliver reinforcement to the job site bundled, tagged, and marked.
  - 2. Use metal tags indicating bar size, lengths, and other information corresponding to markings shown on placement diagrams.



- B. Storage: Store reinforcement at the job site on blocks and in a manner to prevent damage and accumulation of dirt and excessive rust.

## PART 2-PRODUCTS

### 2.01 MATERIALS

- A. Reinforcing bars shall comply with ASTM A615 or A996 Type R, Grade 60. Reinforcing bars required to be welded shall be ASTM A706 low alloy.
- B. Steel wire and welded wire fabric shall comply with ASTM A1064. Fabric shall be provided in flat sheets. Rolled fabric shall not be used.
- C. Reinforcement supports including bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcement in place shall be:
  - 1. Wire bar-type supports complying with CRSI recommendations, unless otherwise indicated.
  - 2. For slabs on grade, supports with sand plates, or horizontal runners where base material will not support chair legs.
  - 3. For exposed-to-view concrete surfaces or where the concrete surface will be exposed to weather or moisture, where legs of supports are in contact with forms, supports with either hot-dipped galvanized or plastic protected legs.
  - 4. When supports bear directly on the ground and it is not practical to use steel bar supports, precast concrete blocks may be used to support only the bottom lift of reinforcement. The precast blocks must be solid, be of an equal or higher strength than the concrete being placed, must provide adequate support to the reinforcement, and be of proper height to provide specified reinforcing cover. The use of face bricks, hollow concrete blocks, rocks, wood blocks, or other unapproved objects will not be permitted.
- D. Mechanical Splices and Threaded Couplers:
  - 1. Mechanical splices shall be Zap Screwlok by Bar Splice Products, Inc., or equal.
  - 2. Threaded couplers and dowel bar replacements shall be Dowel Bar Splicer System by Dayton/Richmond, or equal.
  - 3. Mechanical splices and couplers shall be capable of developing at least 125% of the yield strength of the reinforcing bar.

### 2.02 FABRICATION

- A. General:
  - 1. Fabricate reinforcing bars to conform to required shapes and dimensions with fabrication tolerances which comply with CRSI Manual.
  - 2. In case of fabricating errors, do not rebend or straighten reinforcement in a manner that will injure or weaken the material.
  - 3. Unless otherwise shown on the drawings, all end hook dimensions shall conform with "ACI Standard Hooks."
- B. Reinforcement with any of the following defects shall be deemed unacceptable and will not be permitted in the work:
  - 1. Bar lengths, depths, and bends exceeding specified fabrication tolerances.
  - 2. Bend or kinks not indicated on drawings or final shop drawings.
  - 3. Bar with reduced cross section because of excessive rusting or other cause.

## PART 3-EXECUTION

### 3.01 INSPECTION

- A. Examine the substrate, formwork, and the conditions under which concrete reinforcement is to be placed.
- B. Correct conditions detrimental to the proper and timely completion of the work.
- C. Do not proceed until unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. General:
  - 1. Comply with the specified standards for details and methods of placing reinforcement and supports.
  - 2. Clean reinforcement to remove loose rust, mill scale, earth, and other materials which reduce or destroy bond with concrete.
- B. Placing Reinforcement:
  - 1. All reinforcing shall be placed in accordance with Contract drawings and with shop drawings stamped and approved by OWNER'S REPRESENTATIVE.
  - 2. Position, support, and secure reinforcing against displacement by formwork, construction, or concrete placement operations.
  - 3. Support reinforcing by metal chairs, runners, bolsters, spacers, and hangers as needed.
  - 4. Unless otherwise shown on the drawings, the reinforcement is to be so detailed and placed as to allow the following concrete protection:
    - a. Three inches of cover where the concrete is placed directly against ground.
    - b. Two inches of cover where the concrete is placed in forms but is to be exposed to weather, liquid, or the ground.
    - c. One-inch cover in slabs and walls not exposed to weather, liquid, or the ground.
    - d. One and one-half-inch cover in beams, girders, and columns not exposed to weather, liquid, or the ground. This cover applies to beam stirrups and column ties where applicable.
  - 5. Reinforcement shall be positioned within  $\pm 3/8$ -inch for members with depth to tension reinforcing from compression face less than or equal to 8 inches. Tolerance shall be  $\pm 1/2$  inch for members with depth to tension reinforcing from compression face greater than 8 inches. Tolerance on dimension between adjacent bars in slab and wall reinforcing mats shall be 1 inch. Secure against displacement by anchoring at the supports and bar intersections with wire or clips.
  - 6. Bars shall be securely tied at all intersections except where spacing is less than 1 foot in each direction when alternate intersections shall be tied. To avoid interference with embedded items, bar spacing may be varied slightly if acceptable to OWNER'S REPRESENTATIVE. Tack welding of reinforcing will not be permitted.
  - 7. Set wire ties so that twisted ends are directed away from exposed concrete surfaces.
  - 8. If reinforcing must be cut because of openings or embedded items in the concrete, additional reinforcing must be provided adjacent to the opening at least equal in cross sectional area to that reinforcing which was cut, and it shall extend a minimum of 36 bars diameters beyond the opening on each side or as shown on the drawings. At sumps or depressions in slabs, bars shall be bent and/or extended under sumps or depressions.

9. Wall reinforcing mats shall be secured in a vertical plane by providing clearance from forms with bar supports and by using Z-shaped bars at  $\pm 4$  feet on center wired between two mats of steel, spacing and staying both of them. Nails shall not be driven into the forms to support reinforcement and neither shall wire for this purpose come in contact with the forms. Alternate top transverse bars in slab shall be supported by individual bar chairs at approximately 3-foot 0-inch centers. Bottom longitudinal bars shall be supported by continuous bar chairs at approximately 4-foot 0-inch centers.
  10. If carrier bars are to be used, CONTRACTOR shall provide reinforcing bars for this purpose in addition to the reinforcing called for by the drawings and specifications.
- C. Reinforcement Supports:
1. Strength and number of supports shall be sufficient to carry reinforcement.
  2. Do not place reinforcing bars more than 2 inches beyond the last leg of any continuous bar support.
  3. Do not use supports as bases for runways for concrete-conveying equipment and similar construction loads.
- D. Welded Wire Fabric:
1. Install welded wire fabric in as long of lengths as practicable.
  2. Lap adjoining pieces at least one full mesh.
  3. Fabric shall be supported with bar supports.
- E. Splices:
1. Provide standard reinforcement splices by lapping ends, placing bars in contact, and tightly wire tying.
  2. Lap splices in reinforcing shall be provided as shown on the drawings. Where lap splice lengths are not shown on the drawings, provide Class B, Category 1 lap splices in accordance with ACI 318.
  3. Adjacent splices of tangential bars in circular slabs and horizontal bars in circular walls shall be staggered a minimum of one full lap splice length or 3 feet, whichever is greater, unless otherwise shown. Stagger dimension shall be measured from center to center of lap splices.
  4. For circular walls, horizontal bar lap splices shall not coincide in vertical arrays more frequently than every third bar.
  5. Mechanical splices and threaded dowel bar inserts may be used where approved by OWNER'S REPRESENTATIVE.
- F. Embedded Items:
1. Allow other trades to install embedded items as necessary.
  2. Particularly after bottom layer of reinforcing is placed in slabs, allow electrical contractors to install conduit scheduled for encasement in slabs prior to placing upper layer of reinforcing.
- G. Minimum Reinforcing: Where reinforcing is not shown, provide a minimum of No. 4 at 8-inch centers each way in members 10 inches or less in thickness and No. 5 at 12-inch centers each way in each face in members greater than 10 inches thick.

END OF SECTION

## SECTION 03 30 00

### CAST-IN-PLACE CONCRETE

#### PART 1—GENERAL

##### 1.01 SUMMARY

- A. Work Included:
  - 1. All cast-in-place concrete as shown except as noted otherwise.
  - 2. Expansion joint fillers, bonding agents, patching mortars, curing compounds, nonshrink grout, and other related items and accessories.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

##### 1.02 REFERENCES

- A. ACI 211.1—Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete.
- B. ACI 301—Specifications for Structural Concrete.
- C. ACI 304R—Guide for Measuring, Mixing, Transporting, and Placing Concrete.
- D. ACI 305R—Guide to Hot Weather Concreting.
- E. ACI 306R—Guide to Cold Weather Concreting.
- F. ACI 308—Specification for Curing Concrete.
- G. ACI 309—Guide for Consolidation of Concrete.
- H. ACI 318—Building Code Requirements for Structural Concrete and Commentary.
- I. ASTM C31—Standard Practice for Making and Curing Concrete Test Specimens in the Field.
- J. ASTM C33—Standard Specification for Concrete Aggregates.
- K. ASTM C39—Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- L. ASTM C40—Standard Test Method for Organic Impurities in Fine Aggregates for Concrete.
- M. ASTM C88—Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate.
- N. ASTM C94—Standard Specification for Ready-Mixed Concrete.
- O. ASTM C143—Standard Test Method for Slump of Hydraulic-Cement Concrete.
- P. ASTM C150—Standard Specification for Portland Cement.

- Q. ASTM C156–Standard Test Method for Water Loss (from a Mortar Specimen) Through Liquid Membrane-Forming Curing Compounds for Concrete.
- R. ASTM C172–Standard Practice for Sampling Freshly Mixed Concrete.
- S. ASTM C231–Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
- T. ASTM C260–Standard Specification for Air-Entraining Admixtures for Concrete.
- U. ASTM C309–Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
- V. ASTM C494–Standard Specification for Chemical Admixtures for Concrete.
- W. ASTM C618–Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
- X. ASTM C652–Standard Specification for Hollow Brick (Hollow Masonry Units Made From Clay or Shale).
- Y. ASTM D994–Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
- Z. ASTM D1752–Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.

### 1.03 SUBMITTALS

- A. Submit shop drawings in accordance with Section 01 13 00–Submittals.
- B. Submit the following information:
  1. Gradation of fine and coarse aggregate–ASTM C33.
  2. Specific gravity and dry rodded density of each aggregate.
  3. Test of deleterious substances in fine and coarse aggregate–ASTM C33.
  4. Design mix of each individual concrete mix to be used.
  5. Previous test results or trial batch results with 7- and 28-day compressive strengths for each concrete mix proposed.
  6. Certified mill test results for cement identifying brand, type, and chemistry of cement to be used.
  7. Brand, type, principal ingredient, and amount of each admixture to be used.
- C. It is important that the above data be submitted to OWNER’S REPRESENTATIVE well in advance of anticipated concreting operations to avoid any delay in construction.

## PART 2–PRODUCTS

### 2.01 CEMENT

- A. Cement shall be Portland cement conforming to ASTM C150. Cement used for structures exposed to wastewater, sludge, combined sewage, or sanitary sewage shall be Type II or Type I/II. All other cement shall be Type I or Type I/II. Type III cement shall be used only

when permitted by OWNER'S REPRESENTATIVE. All cement shall be the product of one reputable manufacturer and mill.

- B. Cement shall be stored in a dry, weathertight, properly ventilated structure with the floor raised not less than 1 foot above the ground.

2.02 FLY ASH

- A. All fly ash used as an admixture in Portland cement concrete shall be Class C or F conforming to the requirements of ASTM C618.

2.03 AGGREGATE

- A. All aggregates shall be washed and shall consist of natural sand, gravel, or crushed rock and shall have clean, hard, durable, uncoated grains of strong minerals. The amounts of deleterious substances present in the fine and coarse aggregate expressed in percentages by weight shall not exceed the following:

Deleterious Substance	Aggregate	
	Fine	Coarse
Clay Lumps and Friable Particles	3.0	3.0
Coal and Lignite	0.5	0.5
Mineral finer than No. 200 sieve	3.0	
Soft Fragments	3.0	3.0
Chert*	---	5.0
Sum of Chert and Clay Lumps		5.0

\* Material classified as chert and having a bulk specific gravity of less than 2.45. The percentage of chert shall be determined on the basis of the weight of chert in the sample retained on a 3/8-inch sieve divided by the weight of the total sample.

- B. The combined amount of all deleterious substances in an aggregate shall not exceed 5% of the weight of the aggregate.
- C. If required by OWNER'S REPRESENTATIVE, sodium sulfate soundness tests (ASTM C88) shall be performed on the aggregate. When the aggregate is subjected to 5 cycles, the weight loss shall not exceed 12%. Samples of proposed aggregates shall be submitted to an independent laboratory for testing in advance of concrete work. All testing shall be performed in accordance with ASTM C33. Certified test results shall be submitted to OWNER'S REPRESENTATIVE confirming that aggregate complies with all stated specifications. Report shall identify source of aggregate and absorbed water.
- D. Fine aggregate shall be well-graded from coarse to fine and shall conform to the following requirements:

Percentage by Weight	
Passing 3/8-inch sieve	100
Passing No. 4 sieve	95-100
Passing No. 8 sieve	80-100
Passing No. 16 sieve	50-85
Passing No. 30 sieve	25-60

Percentage by Weight	
Passing No. 50 sieve	5-30
Passing No. 100 sieve	0-10

- E. Gradation of fine aggregate shall be reasonably uniform and not subject to the extreme percentages of gradation specified above. The fineness modulus shall be not less than 2.3 or more than 3.1, nor shall the fineness modulus of any sample vary by more than +0.20 from the fineness modulus of the representative sample used in proportioning the concrete.
- F. If required by OWNER'S REPRESENTATIVE, fine aggregate shall be subjected to the color-metric test for organic impurities (ASTM C40) and shall not produce a color darker than Figure 1, unless they pass the mortar strength test. Aggregate producing color darker than Figure 2 shall not be used in any event.
- G. Coarse aggregate shall be well-graded from coarse to fine, and when tested by laboratory sieves having square openings, shall conform to the following requirements:

	Percentage by Weight Aggregate	
	3/4-inch Stone	1 1/2-inch Stone
Passing 2-inch sieve	---	100
Passing 1 1/2-inch sieve	---	90-100
Passing 1-inch sieve	100	20-55
Passing 3/4-inch sieve	90-100	0-15
Passing 3/8-inch sieve	20-55	0-5
Passing No. 4 sieve	0-10	---
Passing No. 8 sieve	0-5	---

- H. The 3/4-inch aggregate shall be used in concrete members no thinner than 4 inches and less than 10 inches thick. A blend of 3/4-inch and 1 1/2-inch aggregate shall be used in members 10 inches thick and thicker with the 3/4-inch aggregate comprising between 35% and 65% of the total course aggregate. When members thinner than 10 inches are placed monolithically with members thicker than 10 inches, the aggregate requirements for the thinner member shall apply.
- I. Aggregates must be allowed to drain for at least 12 hours before being used. The ground upon which aggregates are stored must be hard, firm, well-drained, and free from all vegetable matter. Various sizes of aggregates must be stored separately, and if they have become contaminated or merged with each other, they shall not be used.

#### 2.04 WATER

- A. Water used in mixing concrete shall be clean and free from injurious amounts of oil, alkali, organic matter, or other deleterious substances.

#### 2.05 ADMIXTURES

- A. Water Reducing Admixture shall be Master Pozzolith® 200 by BASF Admixtures, Inc., Daracem 19 by Grace, or equal. Water reducing admixture shall conform to ASTM C494, Type A and Type F. Water reducing admixture shall not reduce durability, shall increase strength 10%, and shall not affect bleeding characteristics over reference mix.

- B. Air-Entraining Admixture shall be equal to MasterAir® AE 90 by BASF Admixtures, Inc., Darex by Grace Construction Products, or equal. Air-entraining admixture shall conform to ASTM C260.
- C. No other admixture will be allowed without written approval of OWNER'S REPRESENTATIVE. All admixture shall be compatible with cement, aggregate, and water used.

2.06 PROPORTIONING

- A. The proportions of aggregate to cement shall be such as to produce a workable mixture that can be thoroughly compacted and that will work readily in the forms and around reinforcement without permitting materials to segregate or excess water to collect on the surfaces. The combined aggregates shall be such that when separated on the No. 4 sieve, the weight passing the sieve shall not be less than 30% nor greater than 50%.
- B. Concrete of various classes shall have the following maximum water/cement or water/(cement + fly ash) ratio minimum compressive strengths at 28 days and minimum cement and fly ash contents:

Class	Maximum Water/ Cement or Water/ (Cement+Fly Ash)	Minimum 28 Day Strength-Pounds per Square Inch	Cement Content-Pounds per Cubic Yard	Fly Ash- Pounds per Cubic Yard	
				Type C	Type F
AA	0.42	4,500	611	---	---
A	0.45	4,000	564	---	---
A-FA	0.45	4,000	480	110	125
B	0.53	3,500	517	---	---
C	0.53	3,000	517	---	---
X	---	2,000	376	---	---

- C. Except as otherwise indicated on the drawings or specified, all concrete shall be Class A or Class A-FA concrete.
- D. All concrete mixes shall be designed for a strength of 15% above that specified to allow for job variations. All mixes shall be designed in accordance with ACI 211.1 by a competent concrete OWNER'S REPRESENTATIVE or competent laboratory technician. Required materials test data shall be submitted with design mixes for review and approval by OWNER'S REPRESENTATIVE. Mix computations shall be submitted if requested by OWNER'S REPRESENTATIVE.
- E. The slump for all concrete shall be 3 inches and concrete with a slump within the range of 2 to 3 1/2 inches will be acceptable unless otherwise stated.
- F. A water-reducing admixture shall be used in all concrete. A qualified representative of the manufacturer shall be available to assist in proportioning the concrete, advise on the proper addition of the admixture to the concrete, and advise on adjustments of concrete proportions to suit job conditions.
- G. An air-entraining admixture shall be used in all concrete except as noted. Air content shall be tested by the pressure method as outlined in ASTM C231 and shall be between 4% to



7% by volume. An air-entraining admixture is not required for concrete patching and for concrete floors, equipment pads, and supports in interior heated buildings where the concrete will be protected from freezing during and after construction.

- H. CONTRACTOR shall submit to OWNER'S REPRESENTATIVE concrete cylinder compressive strength results from previous projects for the same concrete mixes proposed on the current project. If this information is not available, one cubic yard trial batches of each individual mix proposed for use shall be made prior to use in the work. Four test cylinders shall be made for each trial batch, two to be tested at 7 days and two at 28 days. The trial batches shall be made preceding actual placement operations so that the results of the 7-day tests can be obtained. All costs for material, equipment, and labor incurred during design of concrete mixes shall be borne by CONTRACTOR.
- I. All aggregates shall be measured by weight. The concrete mixer is to be equipped with an automatic water-measuring device that can be adjusted to deliver the desired amount of water.

#### 2.07 JOINT FILLER

- A. Expansion joints shall have standard 1/2-inch-thick cork expansion joint filler, W. R. Meadows, or equal, meeting ASTM D1752–Type II. Exceptions to this are expansion joints in exterior concrete walks and between concrete walks and other structures which shall be asphalt expansion joint filler, 1/2-inch-thick, Grace, W.R. Meadows, or equal, meeting ASTM D994.

#### 2.08 BONDING AGENT

- A. Acceptable manufacturers include MasterEmaco® P 124 by BASF, or equal.

#### 2.09 PATCHING ADDITIVE

- A. Acceptable manufacturers include MasterEmaco® A 660 by BASF, Sonocrete by Sonneborn Contech Co., or equal.

#### 2.10 NONSHRINK GROUT

- A. Acceptable manufacturers include Dayton Superior, Master Builders, or equal. Grout shall be nonshrink, nonmetallic and shall achieve a strength of 7,500 psi in 28 days.

### PART 3–EXECUTION

#### 3.01 MIXING

- A. Ready-mixed concrete shall be batched, mixed, and delivered in accordance with ASTM C94 and ACI 304R. In general, concrete shall be mixed 50 revolutions at plant, 20 upon arrival at site, and 20 each time water is added; maximum of 110 revolutions at mixing speed. Concrete shall be delivered and discharged within 1 1/2 hours or before the drum has revolved 300 times after introduction of water to the cement and aggregates or the cement to the aggregates. Truck mixers shall be equipped with drum revolution counters. In no event shall concrete which has taken its initial set be allowed to be used. Retempering of concrete is not permitted.

- B. A representative of OWNER'S REPRESENTATIVE may be at the batching plant periodically to observe the batching and mixing.
- C. No water shall be added on the job unless required by CONTRACTOR and with the knowledge of OWNER'S REPRESENTATIVE; the amount of water, if added, shall be recorded on all copies of the delivery tickets. If water is added, CONTRACTOR shall verify that the required water-cement ratio is not exceeded.
- D. Concrete shall have a temperature not less than 60°F nor more than 80°F as delivered to the jobsite.
- E. With each load of concrete, CONTRACTOR shall obtain delivery tickets and shall make these tickets available for review by OWNER'S REPRESENTATIVE. Delivery tickets shall provide the following information:
  - 1. Date.
  - 2. Name of ready-mix concrete plant, job location, and CONTRACTOR.
  - 3. Type of cement and admixtures, if any.
  - 4. Specified cement content in sacks per cubic yard of concrete and approved concrete mix number or designation.
  - 5. Amount of concrete in load, in cubic yards.
  - 6. Water-cement ratio.
  - 7. Water added at job, if any.
  - 8. Truck number and time dispatched.
  - 9. Number of mixing drum revolutions.
- F. For job-mixed concrete, all concrete materials shall be mixed in a machine batch mixer for at least 1 1/2 minutes after all ingredients are in the mixer and shall continue until there is a uniform distribution of the materials and the mass is uniform in color and homogeneous. The mixer shall not be loaded beyond the capacity given by the manufacturer and shall be rotated at the speed recommended by the manufacturer. The mixer is to be provided with positive timing device that will positively prevent discharging the mixture until the specified mixing time has elapsed.

### 3.02 JOINTS

- A. CONTRACTOR shall place all joints as shown on the drawings or specified herein. If approved by OWNER'S REPRESENTATIVE, CONTRACTOR may, at his own expense, place construction joints in addition to and at places other than those shown on the drawings. Unless otherwise shown, all joints shall be straight, truly vertical or horizontal, and proper methods shall be employed to obtain this result.
- B. Where construction joints are not shown on the drawings or specified elsewhere, CONTRACTOR shall provide construction joints in walls as follows:
  - 1. Vertical construction joints at 60 feet on center maximum but not more than 15 feet from corners or intersections.
  - 2. Horizontal construction joints at 18 feet on center maximum for walls 12 inches or more in thickness.
  - 3. Horizontal construction joints at 8 feet on center maximum for walls 10 inches or less in thickness.
- C. Immediately after completion of the first pour at a joint, the concrete surface, reinforcement, and waterstop projecting beyond the joint shall be thoroughly cleaned and laitance removed. The waterstops shall not be disturbed after the concrete in the first pour at a joint has set. Concrete around waterstops shall be thoroughly compacted by hand spading and vibrating.

Immediately before the second pour, all extraneous matter shall be removed from the joint, the waterstop and steel cleaned, and the surface thoroughly wetted.

- D. Concrete at all joints shall have been in place at least 48 hours before abutting concrete is placed. At least two hours must elapse after depositing concrete in columns or walls before depositing in beams, girders, or slab supported thereon. Beams, girders, brackets, column capital, and haunches shall be considered as part of the floor system and shall be placed integrally therewith.

### 3.03 BONDING TO EXISTING CONCRETE

- A. When placing new concrete adjacent to existing concrete, the existing concrete shall be thoroughly roughened, cleaned, and saturated with water 24 hours before pouring new concrete. Existing concrete is defined as concrete more than six months old. At time of new pour, remove any standing water and apply bonding agent. Bonding agent shall be applied in accordance with manufacturer's recommendations.

### 3.04 PATCHING EXISTING CONCRETE

- A. When patching existing concrete, remove poor concrete until firm hard concrete is exposed; roughen and clean surface of the existing concrete, clean any exposed reinforcing bars, and pour new concrete. Concrete finish shall match existing concrete. New concrete shall be 4,000 psi 28-day strength mixed with patching additive, mixed according to manufacturer's instructions. Concrete shall not be air-entrained.

### 3.05 EMBEDDED ITEMS IN CONCRETE

- A. All sleeves, inserts, anchors, and embedded items required for adjoining work or for its support shall be placed prior to concreting.
- B. All contractors whose work is related to the concrete or must be supported by it shall be given ample notice and opportunity to introduce and/or furnish embedded items before the concrete is placed.
- C. Embedded items shall be positioned accurately and supported against displacement. Reinforcing bars shall clear embedded items a minimum of 2 inches.

### 3.06 PLACING CONCRETE

- A. Before placing concrete, all equipment, forms, ground, reinforcements, and other surfaces with which the concrete will come in contact are to be thoroughly cleaned of all debris, ice, and water. Ground shall be wetted prior to placement of concrete on it.
- B. After reinforcement is placed and before concrete is placed over it, OWNER'S REPRESENTATIVE shall be allowed sufficient time to observe the reinforcing.
- C. Unless otherwise authorized by OWNER'S REPRESENTATIVE, all concrete shall be placed in the presence of OWNER'S REPRESENTATIVE.
- D. Concrete shall be conveyed from the mixer to the place of final deposit as rapidly as practicable by methods that will prevent the segregation or loss of materials. Chuting for conveying purposes must be accomplished in such a manner as to prevent segregation or loss of materials. Receiving hoppers shall be installed at the chute discharge and at no point in its travel from the mixer to place of final deposit shall the concrete pass through a free

vertical drop of more than 3 feet. Elephant trunks or tremies shall be used in all wall pours to prevent coating of forms and reinforcing bars.

- E. Care shall be taken to avoid an excess of water on the concrete surface. Excess water shall be drained or otherwise removed from the surface. Dry cement or a mixture of cement and sand shall not be sprinkled directly on the surface to absorb water.
- F. Concrete in wall and beam pours shall be deposited in approximately horizontal layers not to exceed 18 inches in thickness. Each layer shall be well worked into the preceding layer while both layers are still soft.
- G. Concrete shall be deposited as nearly as practicable in its final position to avoid segregation from rehandling or flowing. The maximum allowable lateral movement of the concrete after being deposited is 3 feet. Once concreting is started, it shall be carried on as a continuous operation until the placing of the section or panel is completed.
- H. All concrete shall be placed with the aid of mechanical vibrating equipment in accordance with ACI 309. In congested areas, vibration shall be supplemented by hand spading adjacent to the forms. Vibration should secure the desired results within 5 to 15 seconds at intervals of 18 inches apart maximum. The vibrator shall penetrate the preceding layer of concrete. Vibrators shall have a frequency of not less than 10,000 impulses per minute when in operation submerged in concrete.
- I. A sufficient number of spare vibrators shall be kept in ready reserve to provide adequate vibration in case of breakdown of those in use.
- J. In placing concrete in beams where it is intended to be continuous and monolithic with the slab above, a delay to provide for settlement of the deep concrete shall be scheduled before placing the upper concrete in the slab. The length of delay shall be as long as possible and still permit the revibration of the deep concrete.
- K. Concrete is not to be placed under water. A suitable means shall be provided for lowering the water level below surfaces upon which concrete is to be placed. This may require excavating approximately 12 inches below the bottom of the concrete surface and refilling with gravel and compacting. The groundwater shall not be allowed to rise to the bottom of the concrete until 24 hours after the concrete pour has been completed. Water shall not be allowed to fall upon or run across the concrete during this period.
- L. No extra payment will be allowed for dewatering, undercutting, and gravel fill.

### 3.07 MOIST CURING

- A. All concrete shall be maintained in a moist condition for at least 7 days after being deposited except that for high-early strength concrete, a 3-day period will be sufficient. Moist curing shall be accomplished by one of the following methods:
  - 1. Wood forms left in place and kept wet at all times. If wood forms are not going to be kept wet or if metal forms are used, they shall be removed as soon as practicable and other methods of moist curing shall be started without delay.
  - 2. Use of a curing compound conforming to ASTM C309, Type I as approved by OWNER'S REPRESENTATIVE. Curing compound shall be applied at a uniform rate as indicated by the manufacturer sufficient to comply with the requirements of the test water retention of ASTM C156. Curing compound applied to vertical concrete surfaces after forms are removed shall be specially adapted to provide required coverage on the vertical surface. On nonformed surfaces, the curing compound shall be applied immediately after the disappearance of the water sheen after finishing of the concrete. Curing compound shall

not be used on concrete surfaces that are to be painted, receive ceramic tile or resilient flooring, or be waterproofed. Care shall be taken not to get curing compound on construction joints, reinforcing steel, and other surfaces against which new concrete will be poured.

3. Use of plastic film. Plastic film shall have a minimum thickness of 4 mils. It shall be placed over the wet surface of the fresh concrete as soon as possible without marring the surface and shall be weighted so that it remains in contact with all exposed surfaces of the concrete. All joints and edges shall be lapped and weighted. Any tears in the film shall be immediately repaired.
  4. Application of wet coverings weighing 9 ounces per square yard such as burlap, cotton mats, or other moisture-retaining fabrics. The covering system shall include two layers and shall be kept continuously moist so that a film of water remains on the concrete surface throughout the curing period.
  5. Use of an approved waterproof curing paper. Edges of adjacent sheets shall be overlapped several inches and tightly sealed.
  6. Ponding of water or continuous sprinkling of water is permitted. Sprinkling at intervals will not be permitted.
  7. Construction joints shall be moist cured by one of the methods listed above except by Method "2."
- B. The use of moist earth, sand, hay, or another method that may discolor hardened concrete will not be permitted.

### 3.08 HOT WEATHER CONCRETING

- A. When the atmospheric temperature exceeds 80°F during concrete placement, this section and ACI 305 shall apply in addition to all other sections of the specifications.
- B. The temperature of the delivered concrete shall not exceed 85°F.
- C. Care shall be exercised to keep mixing time and elapsed time between mixing and placement at a minimum. Ready-mix trucks shall be dispatched so as to avoid delay in concrete placement, and the work shall be organized to use the concrete promptly after arrival at the jobsite.
- D. The subgrade, forms, and reinforcing shall be sprinkled with cool water just prior to placement of concrete. Prior to placing concrete, there shall be no standing water or puddles on the subgrade.
- E. If approved by OWNER'S REPRESENTATIVE, an admixture for retarding the setting of the concrete may be used.
- F. Exposed concrete surfaces shall be carefully protected from drying. Continuous water curing is preferred. Curing compounds shall be white pigmented.

### 3.09 COLD WEATHER CONCRETING

- A. Conditions of this section shall apply, in addition to all other sections of the specifications, when placing concrete in cold weather. Cold weather is defined as a period when, for more than 3 successive days, the average daily temperature drops below 40°F. When temperatures above 50°F occur during more than half of any 24-hour period, the period will no longer be regarded as cold weather. The average daily temperature is the average of the highest and lowest temperature during the period from midnight to midnight. Cold weather concreting shall conform to all requirements of ACI 306.1, except as modified by the requirements of these specifications.

- B. Detailed procedures for the production, placement, protection, curing, and temperature monitoring of concrete during cold weather shall be submitted to OWNER'S REPRESENTATIVE. Cold weather concreting shall not begin until these procedures have been reviewed for conformance with ACI 306.1.
- C. All concrete materials, forms, ground, mixing equipment, and other surfaces with which the concrete is to come in contact shall be free from frost, and the temperature of contact surfaces shall be 35°F or above. Ground upon which concrete is to be placed shall not be frozen at any depth.
- D. The mixing water and aggregates shall be heated and when entering the mixer shall have temperatures not exceeding 175°F and 80°F, respectively. Concrete temperature as mixed shall not exceed 80°F and shall typically be between 55°F and 70°F. Concrete, when placed in the forms, shall have a temperature of not less than 50°F.
- E. Freshly placed concrete shall be protected by adequate covering, insulating, or housing and heating. If heating is used, ambient temperature inside the housing shall be maintained at a minimum of 70°F for 3 days or 50°F for 5 days. The maximum ambient temperature during curing shall not exceed 80°F. If insulating methods are used, recommendations contained in ACI 306R shall be followed. Surface temperature shall be maintained at 50°F for 7 days. After the curing period, the temperature of the concrete shall be reduced uniformly at a rate not to exceed 40°F per 24 hours until outside air temperature is reached. Heating of enclosure shall continue if it is anticipated that the outside air temperature will drop more than 20°F in the next 24 hours. The concrete temperature shall be obtained by attaching a thermometer provided by CONTRACTOR to the concrete surface. Concrete shall be kept moist.
- F. If heating is used, the housing shall be constructed weathertight and shall be constructed in a manner that will provide uniform air circulation and air temperatures over the complete concrete area that is being cured. Special attention shall be given to the edges and ends of a concrete pour with the housing extending at least 5 feet beyond any concrete surface being protected. The housing shall be in place and heat applied within 2 hours after concrete placement.
- G. Heating may be by steam or hot air. Heaters shall be vented to outside of the housing. Open burning salamanders will not be permitted. Heating devices shall not be placed so close to the concrete as to cause rapid drying or discoloration from smoke.
- H. If heating is used, CONTRACTOR shall provide sufficient 24-hour inspection of the heaters to provide compliance with the above-specified temperature requirements during the curing period. CONTRACTOR shall provide maximum-minimum thermometers for OWNER'S REPRESENTATIVE's use.
- I. The use of calcium chloride, salts, or other chemical admixtures for the prevention of freezing is prohibited.
- J. Salts or other deleterious materials shall not be used on temporary or permanent structures above concrete surfaces that are being placed, finished, or cured.

### 3.10 FINISHING

#### A. Flat Work:

1. Floated Finish: Place, consolidate, strike off, and level concrete eliminating high spots and low spots. Do not work concrete further until it is ready for floating. Begin floating with a hand float, a bladed power float equipped with float shoes, or a powered disk float when the bleed water sheen has disappeared and the surface has stiffened sufficiently to permit the operation. Immediately refloat the slab to a uniform texture.
2. Light Troweled Finish: Float concrete surface, then power trowel the surface. Hand trowel the surface smooth and free of trowel marks.
3. Hard Troweled Finish: Float concrete surface, then power trowel the surface. Hand trowel the surface smooth and free of trowel marks. Continue hand troweling until a ringing sound is produced as the floor is troweled.
4. Tolerance for concrete floors shall be 1/4 inch within 10 feet in any direction. Straight edge shall be furnished by CONTRACTOR.
5. Broom or Belt Finish: Immediately after concrete has received a floated finish, give the concrete surface a coarse transverse scored texture by drawing a broom or burlap belt across the surface.
6. The above finishes shall be used in the following locations:
  - a. Float Finish: Surface to receive roofing, waterproofing, or sand bed terrazzo.
  - b. Light Troweled Finish: Submerged tank slabs.
  - c. Hard Troweled Finish: Building floors.
  - d. Broom or Belt Finish: Exterior slabs, sidewalks, tops of walls, and tank slabs to receive grout topping.

#### B. Formed Surfaces:

1. Within 2 days after removing forms and prior to application of a curing compound, all concrete surfaces shall be observed and any poor joints, voids, stone pockets, or other defective areas shall be patched at once before the concrete is thoroughly dry. Defective areas shall be chipped away to remove all loose and partially bonded aggregate. The area shall be thoroughly wetted and filled with as dry as practical mortar mix placed to slightly overfill the recess. Mortar shall include a bonding agent. After partial set has taken place, the excess mortar shall be removed flush with the surface on the concrete using a wood float. All patching shall be cured, protected, and covered as specified for concrete. All cracks, leaks, or moist spots that appear shall be repaired. No extra compensation will be allowed CONTRACTOR for such work.
2. The exterior or removal portion of nonremovable ties shall be removed with the use of a special tool designed for this purpose. Cutting or chipping of concrete to permit removal of exterior portion will not be permitted.
3. For nonremovable ties, tie rod holes left by the removal of the exterior portion of the tie and cone shall be thoroughly wetted and filled by ramming with as dry as practical mortar mix in such a manner such that it completely fills the hole. Mortar shall include a bonding agent. All patching shall be cured, protected, and covered as specified for concrete. The holes are to be filled immediately after removal of the exterior portion of the tie.
4. Holes left by removable ties shall be filled by installing a neoprene plug near the center of the wall. The balance of the hole shall be filled with mortar as specified above to within 1 inch of the face of the wall. The remainder of the hole shall be filled with a waterproofing compound.
5. All finished or formed surfaces shall conform accurately to the shape, alignment, grades, and sections as shown or prescribed by OWNER'S REPRESENTATIVE. All surfaces shall be free from fins, bulges, ridges, offsets, honeycombing, or roughness. All sharp angles, where required, shall be rounded or beveled. Any formed surface to be painted shall be free of any material that will be detrimental to the paint. The surface of the concrete shall be given one of the following finishes immediately after form stripping:

- a. Finish A shall be referred to as a sack finish. Surfaces shall be free of contaminants prior to sacking. After wetting the surface, a grout shall be rubbed in using a rubber float or burlap. After the grout hardens sufficiently, it shall be scraped from the surface with the edge of a steel trowel without disturbing the grout in the air holes. After further drying, the surface shall be rubbed with burlap to remove all surface grout. The entire surface shall be finished to secure a continuous, hard, dust-free uniform texture surface free from pinholes and other minor imperfections. Finish A will be required for all unpainted surfaces, interior surfaces of equipment rooms, operation areas, and permanently exposed vertical surfaces. Where steel-faced forms are used to form walls, the portion of wall to receive the sack finish shall first be roughened by brush blasting or other acceptable method to achieve a texture similar to 40 to 60 grit sandpaper.
  - b. Finish B shall be the same as Finish A, except that the final burlap rubbing may be omitted, providing the steel trowel scraping removes the loose buildup from the surface. Finish B shall be provided for waterproof- and moistureproof-coated surfaces.
  - c. Finish C shall be referred to as a finish that has surface imperfections less than 3/8 inches in any dimension. Surface imperfections greater than 3/8 inches shall be repaired or removed and the affected areas neatly patched. Finish C or smoother shall be provided for interior surfaces of wet wells, tanks, and channels from 1 foot below minimum water surfaces and down and otherwise unfinished interior surfaces.
  - d. Finish D shall be the finish for surfaces that may be left as they come from the forms, except that tie holes shall be plugged and defects greater than 1/2 inch in any dimension shall be repaired. Finish D shall be provided for surfaces to be buried or covered by other construction such as masonry veneer.
- C. All precautions shall be taken to protect the concrete from stains or abrasions, and any such damage shall be removed or repaired under this Contract.

### 3.11 LOADING OF CONCRETE STRUCTURES

- A. No concrete structure or portion thereof shall be loaded with its design load until the concrete has obtained its specified 28-day compressive strength. This shall include but not be limited to vertical live load, equipment loading, water loading, groundwater loading, and backfill load. Concrete strength at time of loading shall be determined by testing field-cured concrete cylinders.
- B. Extreme care shall be taken so that construction loads do not exceed design loading of the structure.

### 3.12 NONSHRINK GROUT

- A. Nonshrink, nonmetallic grout shall be used for filling recesses and pockets left for equipment installation and for setting of base plates. The material used shall be approved by OWNER'S REPRESENTATIVE. Store, mix, and place the nonshrinking compound as recommended by the manufacturer. The minimum compressive strength shall be 5,000 psi at age 7 days and 7,500 psi at age 28 days.

### 3.13 TESTING AND SAMPLING

- A. The following tests of fresh concrete shall be performed by CONTRACTOR. CONTRACTOR shall prepare, protect, transport, and have tested all cylinders at his expense.
  - 1. Sampling of concrete for slump tests, air tests, temperature tests, and for making concrete test cylinders shall be performed in accordance with ASTM C172.



2. Cylinders:
    - a. Three test cylinders shall be made for each pour less than 25 cubic yards, four test cylinders shall be made for each pour between 25 and 100 cubic yards, and eight test cylinders shall be made for each pour in excess of 100 cubic yards. Each concrete mix shall be represented by at least four cylinders for the entire job. Concrete for cylinders shall be collected near the middle of the load and/or as requested by OWNER'S REPRESENTATIVE.
    - b. Cylinders shall be made and tested in accordance with ASTM C31 and ASTM C39, respectively. The cylinders must be kept moist and at temperatures between 60°F and 80°F and shall remain undisturbed and stored in a location free from vibration. In hot weather, the cylinders shall be covered with wet burlap and stored in a shaded area. It is CONTRACTOR's responsibility to provide a suitable protected location for storing cylinders on the jobsite.
    - c. After 24 hours, the cylinders shall be transferred to an independent testing laboratory acceptable to OWNER. The cylinders shall be packed in sawdust or other cushioning material for transit to avoid any bumping or jarring of the cylinders.
    - d. Cylinders shall be broken at 7 and 28 days or as requested by OWNER'S REPRESENTATIVE. Test results shall be transmitted immediately and directly to OWNER'S REPRESENTATIVE and OWNER. Test data shall include date and location of pour and concrete mix used.
  3. Slump Test: CONTRACTOR shall make one slump test near the beginning of all pours with two tests being made for all pours in excess of 25 yards or as requested by OWNER'S REPRESENTATIVE. Slump tests shall conform to ASTM C143.
  4. Air Test:
    - a. When air-entrained concrete is used, the air content shall be checked by CONTRACTOR near the beginning of all pours with at least two checks being made for all pours in excess of 25 cubic yards, or as requested by OWNER'S REPRESENTATIVE.
    - b. The air contents shall be checked using the pressure method in accordance with ASTM C231. The pocket-sized alcohol air indicator shall not be used unless it is first used in conjunction with the pressure method test.
- B. All costs of additional testing and sampling of fresh or hardened concrete needed because of suspected or actual violation of the specifications shall be borne by CONTRACTOR.

### 3.14 RECORDS

- A. A record is to be kept of all concrete work. The record shall include the date, location of pour, concrete mix, slump, air content, test cylinder identification, concrete temperature, and ambient air temperature. In addition, for cold weather concreting the record shall include the daily maximum-minimum thermometer readings of all thermometers during the entire curing period for all concrete pours. The project representative will keep this record, and CONTRACTOR shall assist in obtaining needed information.

### 3.15 CONCRETE REMOVAL AND PATCHING

- A. All areas disturbed as a result of concrete removal or repair shall be patched as specified in Bonding to Existing Concrete.

### 3.16 CURING AND SEALING

- A. Install cure-seal hardener product in accordance with manufacturer's instructions. Apply only to those floors noted to be sealed in the finish schedule.

- B. Where product will be used for moist curing, sealing and hardening, apply to new concrete as soon as the concrete is firm enough to walk on after troweling. Where product will be used for sealing and hardening only, surface must be free of dust, dirt, laitance, curing compounds, and any material that would inhibit the penetration of the product. In some instances, the floor may need to be stripped and neutralized before application.
- C. Spray on at rate of 200 square feet per gallon.
- D. Keep surfaces wet with cure-seal hardener for minimum soak-in period of 30 minutes, without allowing drying out or becoming slippery. In hot weather, slipperiness may appear before the 30-minute time period has elapsed. If that occurs, apply more cure-seal hardener as required to keep entire surface in a nonslippery state for the first 15 minutes. For the remaining 15 minutes, mist the surface as needed with water to keep the material in a nonslippery state.
- E. After this period, when treated surface becomes slippery, lightly mist with water until slipperiness disappears.
- F. Wait for surface to become slippery again and then flush entire surface with water removing all residue of cure-seal hardener.
- G. Squeegee surface completely dry, flushing any remaining slippery areas until no residue remains.
- H. Wet vacuum or scrubbing machines may be used to remove residue, provided manufacturer's instructions are followed.
- I. Protect installed floors until chemical reaction process is complete; at least 3 months.
- J. Clean up spills immediately and spot-treat stains with good degreaser or oil emulsifier.
- K. Protection and cleaning of floors are the responsibility of CONTRACTOR until final completion. Replace concrete that becomes stained because of improper precautions or lack of cleaning.

END OF SECTION

SECTION 05 12 00  
STRUCTURAL STEEL

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included:
  - 1. Structural carbon steel framing members.
  - 2. Steel base plates and bearing plates.
  - 3. Structural steel bolted connections and anchor bolts.
  - 4. Welding of structural steel.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

1.02 REFERENCES

- A. AISC–Code of Standard Practice–Manual of Steel Construction–Allowable Stress Design (ASD).
- B. ASTM A36/A36M–Standard Specification for Carbon Structural Steel.
- C. ASTM A53–Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- D. ASTM A123–Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- E. ASTM A143–Standard Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement.
- F. ASTM A153–Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- G. ASTM A307–Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60000 PSI Tensile Strength.
- H. ASTM A325–Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
- I. ASTM A384–Standard Practice for Safeguarding Against Warpage and Distortion During Hot-Dip Galvanizing of Steel Assemblies.
- J. ASTM A385–Standard Practice for Providing High-Quality Zinc Coatings (Hot-Dip).
- K. ASTM A500–Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
- L. ASTM A780–Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.

- M. ASTM A992/A992M–Standard Specification for Structural Steel.
- N. AWS A2.4–Symbols for Welding, Brazing, and Nondestructive Examination.
- O. AWS D1.1–Structural Welding Code.
- P. SSPC (Steel Structures Painting Council)–Painting Manual.

#### 1.03 SUBMITTALS FOR REVIEW

- A. Comply with pertinent provisions of Section 01 13 00–Submittals.
- B. Provide shop drawings with complete details and schedules for fabrication and shop assembly of members.
  - 1. Include details of cuts, connections, camber, holes, and other pertinent data.
  - 2. Indicate welds by AWS symbols, and show size, length, and type of weld.
  - 3. Provide setting drawings, templates, and directions for installation of anchor bolts and other anchorages.
  - 4. Identify details by reference to sheet and detail number on the drawings.
- C. Mill Test Reports: Submit indicating structural strength and composition.
- D. Unless shown otherwise, all connections shall be designed and detailed by the fabricator to support one-half of the total uniform load capacity shown in the tables for uniform load constants in the AISC Specifications.
- E. Except as shown otherwise, structural steel details shall conform to standard practice as illustrated in Structural Shop Drafting Textbook of the AISC.
- F. Indicate all temporary bracing or cabling required to stabilize the structural frame during erection.

#### 1.04 QUALITY ASSURANCE

- A. Fabricate structural steel members in accordance with AISC Code of Standard Practice.
- B. Welders Certificates: Certify welders employed on the work, verifying AWS qualification within the previous 12 months.

#### 1.05 QUALIFICATIONS

- A. Qualify welding processes and welding operators in accordance with AWS “Standard Qualifications Procedures.”
- B. CONTRACTOR shall design connections not detailed on the drawings under direct supervision of a professional structural Owner’s Representative experienced in design of this work and licensed in the State of Illinois.

## 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all materials to job site properly marked to identify the structure for which it is intended and at such intervals to insure uninterrupted progress of the work. Marking shall correspond to markings indicated on the shop drawings.
- B. Store all members off the ground using pallets, platforms, or other supports.
- C. Do not store materials on the structure in a manner that might cause distortion or damage to the members of the supporting structures.
- D. In the event of damage, immediately make all repairs and replacements necessary at no additional cost to OWNER.

## PART 2-PRODUCTS

### 2.01 MATERIALS

- A. Structural Steel Members:
  - 1. ASTM A36/A36M (channels, angles, plates).
  - 2. ASTM A992-50 (wide flange sections).
- B. Structural Tubing: ASTM A500, Grade B.
- C. Pipe: ASTM A53, Grade B.
- D. Bolts, Nuts, and Washers: ASTM A307 or ASTM A325, galvanized in accordance with ASTM A123 and A153.
- E. Anchor Bolts: ASTM F1554 Grade 36.
- F. Welding Electrodes: Comply with AWS D1.1; E70XX electrodes. For ASTM A992 steel and any other steel with 50 ksi or greater yield strength, use only E7018 or other E70XX electrodes specifically permitted by AWS D1.1.

### 2.02 FABRICATION

- A. Fabrication and Assembly:
  - 1. Fabricate items of structural steel in accordance with AISC Specifications and as indicated on the approved shop drawings.
  - 2. Properly mark and match-mark materials for field assembly and for identification as to structure and site for which intended.
  - 3. Fabricate for delivery sequence which will expedite erection and minimize field handling of materials.
  - 4. Where finishing is required, complete the assembly, including welding of units, before start of finishing operation.
  - 5. Provide finish surfaces of members exposed in the final structure free of markings, burrs, and other defects.

- B. Connections:
  - 1. Bolts and washers of all types and sizes shall be provided for completion of all field erection.
  - 2. Comply with AWS Code for procedures, appearance, and quality of welds used in correcting welded work.
  - 3. Assemble and weld built-up sections to produce true alignment of axes without warp.
  - 4. Welding shall be done by the shielded arc process.
  - 5. All welds shall be chipped, ground smooth, and primed immediately after fabrication.
  
- C. Holes for Other Work:
  - 1. Provide holes for securing other work to structural steel framing and for the passage of other work through steel framing members as indicated.
  - 2. Provide threaded nuts welded to framing and other specialty items as shown to receive other work.
  - 3. Drill, cut, or punch holes perpendicular to metal surfaces.
  - 4. Do not flame cut holes or enlarge holes by burning.
  - 5. Drill holes in all bearing plates.

## 2.03 FINISHES

- A. Structural steel for prefabricated pedestrian structure shall be finished as specified by the manufacturer.

## PART 3—EXECUTION

### 3.01 EXAMINATION

- A. Correct conditions detrimental to proper and timely completion of the work.
- B. Do not proceed until unsatisfactory conditions have been corrected.

### 3.02 ERECTION

- A. General: Comply with AISC Specifications and Code of Standard Practice and as specified herein.
  
- B. Surveys:
  - 1. Establish permanent bench marks necessary for the accurate erection of structural steel.
  - 2. Check elevations of concrete and masonry, bearing surfaces, and locations of anchor bolts and similar items before erection proceeds.
  
- C. Temporary Shoring and Bracing:
  - 1. Provide temporary shoring and bracing members with connection of sufficient strength to bear imposed loads.
  - 2. Provide temporary guidelines to achieve proper alignment of the structures as erection proceeds.
  - 3. Remove temporary connections and members when permanent members are in place and final connections are made.

- D. Anchor Bolts:
  - 1. Provide anchor bolts and other connectors for securing structural steel to foundations and other in-place work.
  - 2. Provide templates and other devices as needed for the presetting of bolts and other anchors to accurate locations.
  
- E. Setting Bases and Bearing Plates:
  - 1. Clean bearing surfaces free from bond-reducing materials and then roughen to improve bond to surface.
  - 2. Set loose and attached base plates and bearing plates for structural members using wedges, leveling nuts, or other adjusting devices.
  - 3. Tighten anchor bolts after the supported members have been positioned and plumbed. Do not remove wedges or shims, but if protruding, cut off flush with the edges of the base or bearing plates prior to packing with grout.
  - 4. Pack grout solidly between bearing surfaces and bases to ensure that no voids remain.
  - 5. Finish exposed surfaces, protect installed materials, and allow to cure in strict compliance with the manufacturer's instructions.
  
- F. Field Assembly:
  - 1. Set structural frames accurately to the lines and elevations indicated. Align and adjust the various members forming a part of a complete frame or structure before fastening permanently.
  - 2. Clean the bearing surfaces and other surfaces which will be in permanent contact before assembly.
  - 3. Perform necessary adjustments to compensate for discrepancies in elevation and alignment.
  - 4. Level and plumb individual members of the structure within specified AISC tolerances.
  - 5. Comply with AISC Specifications for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds.
  
- G. Gas Cutting:
  - 1. Do not use gas cutting torches in the field for correcting fabricating errors in the structural framing.
  - 2. Cutting will be permitted only on secondary members which are not under stress as acceptable to OWNER'S REPRESENTATIVE.
  - 3. When gas cutting is permitted, finish the sections equal to the sheared appearance.
  
- H. After erection, prime welds, abrasions, and surfaces not shop-primed or galvanized, except surfaces to be in contact with concrete.
  
- I. Comply with AWS Code for procedures of manual shielded metal arc welding, appearance and quality of weld made, and methods in correcting welding work.

### 3.03 FIELD QUALITY CONTROL

- A. CONTRACTOR shall inspect all field-bolted connections in accordance with the AISC Specifications.
  
- B. Field Welding:
  - 1. CONTRACTOR shall visually inspect all welds and test during erection of structural steel.

2. CONTRACTOR shall certify welders and conduct inspections and tests as required by applicable standards.
  3. CONTRACTOR shall record types and locations of defects found and record the work required and performed to correct deficiencies.
- C. Correction:
1. Correct deficiencies in structural steel work which inspections and test reports have indicated to be not in compliance with the specified requirements.
  2. CONTRACTOR shall perform all additional testing required to show compliance of corrected work.

END OF SECTION



## SECTION 05 56 00

### ANCHOR BOLTS AND POST-INSTALLED ANCHORS

#### PART 1–GENERAL

##### 1.01 SUMMARY

- A. Work Included: Anchor bolts, expansion bolts, adhesive anchors, and screw anchors.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

##### 1.02 REFERENCES

- A. ASTM A36/A36M–Standard Specification for Carbon Structural Steel.
- B. ASTM F1554–Anchor Bolts, Steel, 36, 55, and 105-ksi yield strength.
- C. ICC-ES International Code Council–Evaluation Service.
- D. AC 193–Acceptance Criteria for Mechanical Anchors in Concrete Elements.
- E. AC 308–Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete.
- F. ACI 355.2–Qualification of Post-Installed Mechanical Anchors in Concrete and Commentary.
- G. ACI 355.4–Qualification of Post-Installed Adhesive Anchors in Concrete and Commentary.

#### PART 2–PRODUCTS

##### 2.01 ANCHOR BOLTS

- A. Anchor bolts complete with washers and nuts shall be fabricated as shown or as specified by the equipment manufacturer and unless otherwise indicated shall be hot-dip galvanized carbon steel or 316 stainless steel. Anchor bolts shall, as a minimum, conform to the requirements of ASTM F1554-Grade 36.
- B. Stainless steel anchor bolts shall be used in all submerged locations, below final grade, and in contact with aluminum and other items not to be painted. Galvanized anchor bolts shall be used elsewhere.

##### 2.02 EXPANSION BOLTS

- A. Expansion bolts shall be KWIK Bolt TZ by Hilti, Inc., Power-Stud+ SD2, SD4, or SD6 by DeWalt, Strong-Bolt or Strong-Bolt 2 by Simpson Strong-Tie Anchor Systems, or approved equal.
- B. All expansion bolts shall comply with the 2018 International Building Code, AC 193, and ACI 355.2. They shall be ICC-ES approved for use in cracked and uncracked concrete.

- C. Expansion bolts will not be permitted as substitutes for embedded anchor bolts except with the prior written acceptance of OWNER'S REPRESENTATIVE or where otherwise specifically called for.
- D. Unless indicated otherwise on the drawings or specified, use the following bolt material for the various installation situations:
  - 1. Stainless Steel: For all submerged locations, below final grade, and in contact with aluminum appurtenances and other items not to be painted. Also for anchoring equipment, unless otherwise specified.
  - 2. Steel: In other locations in contact with items to be painted or encased in concrete.

### 2.03 ADHESIVE ANCHORS

- A. Adhesive anchors shall be HIT HY 200 by Hilti, Inc., Red Head C6+ or Red Head A7+ by ITW, Pure 110+ or AC200+ by DeWalt, Set-XP by Simpson Strong-Tie Anchor Systems, or approved equal.
- B. All adhesive anchors shall comply with the 2018 International Building Code, AC 308, and ACI 355.4. They shall be ICC-ES approved for use in cracked and uncracked concrete.

### 2.04 SCREW ANCHORS

- A. Screw anchors shall be KWIK HUS-EZ by Hilti, Inc., Screw-Bolt by DeWalt, Titen-HD by Simpson Strong-Tie Anchor Systems, or approved equal.
- B. All screw anchors shall comply with the 2018 International Building Code. They shall be ICC-ES approved for use in cracked and uncracked concrete.

## PART 3-EXECUTION

### 3.01 ANCHOR BOLTS

- A. Anchor bolts for structural members shall be located as shown and specified.
- B. Anchor bolts for mechanical equipment shall have embedment length, edge distances, and spacing as required by the equipment manufacturer.
- C. All dirt or foreign materials shall be removed prior to embedding into concrete. After anchor bolts have been embedded, their threads shall be protected by grease and by installing the nuts or by other means until the time of installation of the equipment or metal work.

### 3.02 EXPANSION BOLTS

- A. Unless otherwise noted on the drawings, expansion bolt edge distance and spacing shall be in accordance with manufacturer's printed installation instructions.
- B. Bolt embedment shall at least equal 6-bolt diameters.
- C. Installation procedures shall be in accordance with the manufacturer's printed installation instructions.

- D. Where location of bolts is adjustable, reinforcing steel shall be located prior to drilling holes and bolts shall be located to clear reinforcing steel.

### 3.03 ADHESIVE ANCHORS

- A. At locations shown on the drawings, reinforcing bars or threaded rod shall be provided in existing concrete by drilling holes, injecting epoxy adhesive, and inserting the reinforcing bar.
- B. All existing surfaces to receive adhesive anchors, including the entire area in contact with the new concrete, shall be cleaned and roughened to amplitude of 1/4 inch.
- C. Installation procedures shall be in accordance with the manufacturer's printed installation instructions.
- D. Where location of anchors is adjustable, reinforcing steel shall be located prior to drilling holes and anchors shall be located to clear reinforcing steel.
- E. CONTRACTOR shall arrange an anchor manufacturer's representative to provide on-site installation training for installation of their adhesive anchor system products. Submit documentation that all CONTRACTOR's personnel or subcontractors who install adhesive anchors have been trained prior to the announcement of anchor installation.

### 3.04 SCREW ANCHORS

- A. Unless otherwise noted on the drawings, screw anchor edge distance and spacing shall be in accordance with manufacturer's recommendations.
- B. Anchor embedment shall at least equal 6-bolt diameters.
- C. Installation procedures shall be in accordance with the manufacturer's printed installation instructions.
- D. Where location of anchors is adjustable, reinforcing steel shall be located prior to drilling holes and anchors shall be located to clear reinforcing steel.

END OF SECTION

## SECTION 31 23 00

### EXCAVATION, FILL, BACKFILL, AND GRADING

#### PART 1—GENERAL

##### 1.01 SUMMARY

- A. Work Included: Excavating, filling, backfilling, and grading for this work includes, but is not necessarily limited to:
  - 1. Excavating for foundations, roads, utilities, sidewalks, restoration, and miscellaneous areas.
  - 2. Furnishing and placing all fill and backfill.
  - 3. Furnishing and placing vapor barrier and granular cushion below interior slabs on grade.
  - 4. Furnishing and placing crushed stone mat below tank slabs and manhole/vault slabs where required.
  - 5. Rough and finish grading prior to paving, seeding, etc.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.
- C. Allowances: CONTRACTOR shall INCLUDE in the Bid the cost of replacing 50 cubic yards of unsuitable foundation material for structures and roads as defined in this section. The unit price shall include the cost of dewatering and slope stabilization and other incidental items associated with this work. Payment to CONTRACTOR for unsuitable foundation material for structures and roads will be adjusted, add or deduct, based upon the actual unsuitable material excavated (more or less than 50 cubic yards) and the unit price for replacing unsuitable foundation material. Volume shall be as measured in the ground. Extra payment will not be made for specified undercutting and filling or gravel bedding material required for placing concrete above water level as required under the concrete specifications. The Bid shall include any removal and replacement of excavated material so indicated on the drawings or specified herein.
- D. Payment: Common excavation shall include all excavation specified, undercutting, fill, backfill and grading, except rock excavation and unsuitable foundation material, as hereinafter described.

##### 1.02 REFERENCED STANDARDS

- A. ASTM C33—Standard Specification for Concrete Aggregates.
- B. ASTM D698—Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)).
- C. ASTM D1557—Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
- D. Standard Specifications: Unless otherwise indicated, Standard Specifications within this section shall refer to the State of Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, current edition, including all issued supplemental specifications.

### 1.03 SUBMITTALS

- A. Submit sources and gradations for materials proposed for use as compacted fill, utility trench backfill, trench bedding and cover material, crushed stone mat, and granular cushion.
- B. Submit samples of materials proposed for use in paragraph 1.03.A. to a soils testing laboratory for analysis of their suitability and for recommendations on moisture content during compaction, compaction methods, or other appropriate information. Testing shall be at OWNER's expense.
- C. Submit sufficient samples of each different type or classification of soil to obtain representative values.

### 1.04 JOB CONDITIONS

- A. The elevations shown for existing work and ground are reasonably correct, but are not guaranteed to be absolutely accurate. No extras will be allowed because of variations between drawings and actual grades.
- B. Soil borings were made and the soils information is included in an appendix to these Specifications. The information contained is not guaranteed to be indicative of conditions to be encountered during construction. It is CONTRACTOR's responsibility to make its own investigations to determine physical conditions at the site, which may affect the work.

## PART 2--PRODUCTS

### 2.01 COMPACTED FILL

- A. All fill and backfill material designated to be compacted fill shall be granular with no stones larger than 4 inches and shall be reasonably well-graded throughout the particle size range. A minimum 65% of the material shall pass the 3/4-inch sieve, and the material shall be capable of being compaction tested in accordance with ASTM D698, as determined by the Project Soils Owner's Representative. Of that portion of the material passing the No. 4 sieve, not more than 25% shall pass the No. 200 sieve, and material shall have less than 5% clay content. When placing fill during wet weather or in wet areas, this requirement shall be modified to not more than 5% passing the No. 200 sieve. Adequately dewatered areas are not defined as wet areas.
- B. Native material may be used as compacted fill if it meets the above specification. CONTRACTOR shall determine whether native material meets the above specification. CONTRACTOR shall provide all needed fill material whether from on-site or off-site at no additional cost to OWNER.

### 2.02 CRUSHED STONE MAT

- A. Crushed stone mat shall be 3/4-inch clear crushed stone and shall meet all requirements of IDOT Article 351, gradation CA7/11.

## 2.03 EMBANKMENT FILL

- A. Embankment fill shall contain no stumps, brush, rubbish, or other perishable material. The top 12 inches of the earth embankment shall be earthy material free from large stones.

## PART 3–EXECUTION

### 3.01 GENERAL

- A. Prior to all excavating, CONTRACTOR shall become thoroughly familiar with the site and site conditions.

### 3.02 PROTECTION

- A. CONTRACTOR shall provide all necessary sheeting, shoring, or other soil retention systems including all labor, material, equipment, and tools required, or as necessary to maintain the excavation in a condition to provide safe working conditions, to permit the safe and efficient installation of all items of Contract work, and to protect adjacent property. CONTRACTOR shall be held liable for any damage which may result to property from excavation or construction operations. Sheeting, shoring, and other soil retainage systems shall be withdrawn or removed in a manner so as to prevent subsequent settlement of structures, utilities, and other improvements.
- B. Design of sheet piling and other soil retaining systems shall be the sole responsibility of CONTRACTOR. Where such systems are shown on the drawings, no parameters such as embedment depth, section profile, presence or lack of walers, etc., nor system type or suitability shall be inferred. CONTRACTOR is responsible for designing and providing a fully functional system compatible with construction and site requirements.
- C. Nothing in this specification shall be deemed to allow the use of protective systems less effective than those required by the Occupational Safety and Health Administration (OSHA) and other applicable code requirements.

### 3.03 FINISH ELEVATIONS AND LINES

- A. CONTRACTOR is responsible for setting and establishing finish elevations and lines.

### 3.04 GRADE STAKES AND PROPERTY STAKES

- A. CONTRACTOR shall furnish and place in position all items necessary to control the horizontal and vertical accuracy of the Work including lasers, batterboards, string lines, plummets, and graduated poles.
- B. Where lasers are used, CONTRACTOR shall check the Work against intermediate grade stakes. Prior to initial use of the laser, CONTRACTOR shall set up laser on ground surface and check line and gradient controls. Lasers not functioning properly shall be immediately removed.
- C. If existing property stakes, not within the limits of the trench or street slope limits, are removed or damaged by CONTRACTOR, CONTRACTOR shall bear the cost of

replacement. Replacement shall be made by a legal survey performed by a licensed Land Surveyor hired by OWNER. Cost for survey shall be deducted from the Contract Price.

### 3.05 COMMON EXCAVATION

- A. After the site has been cleared and stripped, the site shall be cut and filled to the indicated subgrade as shown or specified.
- B. All excavated material that does not meet the specification for compacted fill or embankment fill or meets the specification but is not required for backfill or fill shall be classified as excess material and shall be removed from the site and disposed of at CONTRACTOR's expense. CONTRACTOR's expense shall include testing, certification, and documentation of uncontaminated soil CONTRACTOR intends to dispose of at a clean construction or demolition debris (CCDD) fill operation.
- C. All material other than suitable bearing soil or bedrock, as determined by the Project Soils Owner's Representative, shall be removed from under concrete to be poured on ground.
- D. Excavation for all footings, foundation walls, pits, etc., shall be large enough to provide adequate clearance for the proper execution for the work within them.
- E. Excavations scheduled to extend below groundwater shall not be started until the area has been dewatered. See Section 31 23 19–Dewatering.
- F. No footings or slabs shall bear on the top 2 feet of existing soil. Where planned subgrade is within 2 feet of existing grade, remove soils to 2 feet below existing grade and backfill with compacted fill up to subgrade elevation.
- G. When excavations reach subgrade elevations as shown on the drawings or as specified herein, the Project Soils Owner's Representative will observe the bottom material. Where, in the opinion of the Project Soils Owner's Representative, unsuitable foundation material is found at the level of the subgrade, original material below the excavation necessary for construction according to grades shown or specified, shall be removed and replaced with material and placing methods as specified under compacted fill and backfill.
- H. Excavations that are undercut beneath the foundation shall extend beyond the perimeter of the foundation 1 foot plus a distance at least equal to the depth of undercut below footing grade.
- I. CONTRACTOR shall backfill and compact all overexcavated areas.

### 3.06 PREPARATION OF SUBGRADE

- A. After the site has been cleared, stripped, and excavated to subgrade, thoroughly compact subgrade to the requirements specified for compacted fill below. Scarify and moisture condition the subgrade as recommended by the Project Soils Owner's Representative.
- B. Remove all ruts, hummocks, and other uneven surfaces by surface grading prior to placement of fill.

- C. All slab-on-grade and road subgrades shall be proofrolled with a heavy rubber-tired construction vehicle (such as a fully loaded tandem-axle dump truck) in the presence of the Project Soils Owner's Representative.
- D. OWNER'S REPRESENTATIVE may request the excavation of unsuitable materials in areas of unstable subgrade. The excavation of such materials, except in areas where CONTRACTOR has completed utility construction or placed street fill, shall be measured by OWNER'S REPRESENTATIVE for payment.
- E. The excavation and replacement of unstable utility trench backfill and/or street fill placed by CONTRACTOR shall be at CONTRACTOR's expense.
- F. Base course placed on unstable foundation shall be removed and replaced at CONTRACTOR's cost following excavation of the affected area.
- G. Where requested by OWNER'S REPRESENTATIVE in the field, excavation below subgrade areas shall be lined with geotextile material and backfilled with 3 inch crushed stone dense graded base as specified herein.

### 3.07 COMPACTED FILL AND BACKFILL

- A. All fill and backfill, except as otherwise specified, shall be compacted fill placed to within 4 inches of the bottom of the topsoil or to the bottom of the structure or other improvement.
- B. Unless otherwise noted, structures with a top slab shall not be backfilled until the slab is in place and has reached its specified 28-day strength.
- C. In fill areas above existing grade around structures, compacted fill shall be placed within a minimum of 10 feet from the structure.
- D. No fill shall be placed under water or over unsuitable subgrade conditions.
- E. All fill and backfill, except embankment fill and clay fill, shall be compacted as follows:
  - 1. Class 1 Compaction: This class of compaction shall apply to all fill areas under buildings, structures, piping, bituminous roadway and parking areas, curb and gutter, and backfill within 10 feet of structure walls. All compacted material shall be placed in uniform layers not exceeding 8 inches in loose thickness prior to compaction. Each layer shall be uniformly compacted to a dry density at least 95% of the maximum dry density as determined by a laboratory compaction test at the optimum moisture content (ASTM Test Designation D1557). Compaction shall be obtained by compaction equipment appropriate for the conditions.
  - 2. Class 2 Compaction: This class of compaction shall be used in excavated areas beyond 10 feet of structures without any piping or adjacent foundations. Material for backfill shall be granular material as specified above. The material shall be deposited, spread, and leveled in layers generally not exceeding 12 inches in thickness before compaction. Each layer of the fill shall be compacted to at least 90% of the maximum dry density (testing same as Class 1). Compaction shall be obtained by compaction equipment appropriate for the conditions.
- F. No frozen material shall be placed nor shall any material be placed on frozen ground.



- G. Four inches of clay fill shall be placed and compacted to at least a firm consistency in areas to be seeded or sodded prior to placement of topsoil.

### 3.08 MAINTENANCE OF SURFACE

- A. CONTRACTOR shall maintain all backfilling, resurfacing, repaving, and other surface improvements constructed under this Contract. CONTRACTOR shall, upon proper notice from OWNER, make all repairs in surfaces of trenches and excavations. All expenses incurred by OWNER and/or CONTRACTOR in making repairs and all expenses in maintaining trench and excavation surfaces shall be at the expense of CONTRACTOR regardless of the material used in backfilling trench excavations. OWNER reserves the right to make all emergency repairs necessary to make safe all streets and walks at the expense of CONTRACTOR regardless of the material used in backfilling trench excavations. A maintenance guarantee fund, if specified, will be withheld from the final amount due CONTRACTOR for a period of 6 months after acceptance of the Work to assure such maintenance.
- B. CONTRACTOR shall be responsible for controlling dust dispersion during utility and street construction. Remedial actions required as a result of inadequate dust control shall be CONTRACTOR's responsibility. To control dust, CONTRACTOR shall apply calcium chloride or ammonium lignin sulfonate in 12 to 14% solution or other dust control palliative acceptable to OWNER. Prior to application of dust palliative, the street shall be graded smooth.

### 3.09 EMBANKMENT FILL

- A. Embankment fill may be placed in fill areas to be seeded or sodded if no piping exists in the fill and the areas are at least 10 feet from any structure.
- B. Embankment fill shall be deposited, spread, and leveled in layers generally not exceeding 12 inches in thickness before compaction. Each layer shall be compacted to the degree that no further appreciable consolidation is evidenced under the action of the compaction equipment. The required compaction shall be obtained for each layer before any material for a succeeding layer is placed thereon. Compaction shall be obtained using the hauling and leveling equipment, and in addition, tamping rollers, pneumatic-tired rollers, vibratory rollers, or other types of equipment required to produce the desired results.

### 3.10 GRADING

- A. CONTRACTOR shall perform all rough and finish grading required to attain the elevations shown on the drawings.
- B. Grading Tolerances:
  - 1. Rough Grade: Buildings, parking areas, and sidewalks— $\pm 0.1$  feet.
  - 2. Finish Grade: Granular cushion or crushed stone mat under concrete slabs— $\pm 0.03$  feet.
  - 3. Lawn areas away from buildings, parking areas, and sidewalks— $\pm 0.25$  feet.

END OF SECTION

## SECTION 31 23 19

### DEWATERING

#### PART 1—GENERAL

##### 1.01 SUMMARY

- A. Work Included:
  - 1. Removal of groundwater to allow belowgrade construction.
  - 2. Site grading to prevent surface water from entering the excavation.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.
- C. Payment:
  - 1. The expense for making all extra excavations necessary to prevent water from interfering with the proper construction of the work and for forming all dams or diversions, digging of sumps or pump wells, bailing, and installation and pumping of wells shall be borne by CONTRACTOR.
  - 2. The cost for removal of groundwater and surface water shall be included in the prices bid for the work. No separate payment will be made for dewatering whether accomplished by use of sumps and pumps, well point systems, deep wells, or any other method.
  - 3. Any permits necessary for the dewatering operations shall be obtained and paid for by CONTRACTOR.

##### 1.02 REFERENCES

- A. Illinois Urban Manual.
- B. See Division 01, Regulatory Requirements for permit requirements and water, erosion, and sediment control.

##### 1.03 SYSTEM REQUIREMENTS

- A. CONTRACTOR shall, at its own expense, keep the excavation clear of water while structures, mains, and appurtenances are being built, utilities are being installed, and fill and backfill are being compacted. Under no conditions shall the work be laid in or under water. No water shall flow over the work until the joints are complete or the concrete has set.
- B. Wherever necessary, CONTRACTOR shall excavate in advance of the completed work, lead the water into sumps or pump wells, and provide erosion control measures to prevent water or sediment damage.
- C. CONTRACTOR's dewatering system shall ensure that soils within the trench will not be destabilized by hydrostatic uplift pressures from adjacent groundwater. If conditions warrant, CONTRACTOR shall furnish and install well point systems or deep wells.

- D. Dewatering shall be sufficient to lower the piezometric level to at least 2 feet below the bottom of the excavation. Additional lowering shall be provided as necessary to create a stable subgrade.
- E. In areas where rock is encountered, the water level shall be kept at or below top of rock, but at least 6 inches below bottom of concrete. Additional rock shall be removed as needed to provide clearances.
- F. The control of groundwater shall be such that softening or heaving of the bottom of excavations or formation of “quick” conditions or “boils” shall be prevented.
- G. Dewatering systems shall be designed and operated so as to prevent the migration or removal of soils.

#### 1.04 QUALITY ASSURANCE

- A. All dewatering shall be done in accordance with Illinois Urban Manual Code 813 and with all other applicable federal, state, and local code requirements.
- B. In particular, groundwater observation wells shall be provided and subsequently abandoned in accordance with the Illinois Urban Manual Code 996. CONTRACTOR shall complete all observation well construction and abandonment forms as required and shall submit the forms to OWNER within 15 days of construction or abandonment activities.

### PART 2–PRODUCTS

NOT APPLICABLE

### PART 3–EXECUTION

#### 3.01 DEWATERING

- A. Dewatering shall be started, and the water level shall be lowered as specified herein prior to beginning excavation and shall be continued until structure, main, or appurtenance has been completed and fill has been placed and compacted to final grade.
- B. CONTRACTOR shall provide at least two groundwater observation wells near each area to be excavated to aid CONTRACTOR in determining whether the minimum specified requirements have been met prior to excavation. The observation well shall be a minimum 2-inch-diameter slotted PVC pipe. The observation well shall be installed and backfilled in such a way as to allow an accurate determination of actual groundwater levels. The observation well shall be properly abandoned after use unless specified otherwise.
- C. CONTRACTOR shall provide all necessary materials and equipment to keep the excavation free from water during construction. CONTRACTOR shall at all times have on hand sufficient pumping equipment and machinery in good working condition for all ordinary emergencies, including power outages, and shall have available at all times competent workers for the operation of the pumping equipment. The dewatering systems shall not be shut down between shifts, on holidays or weekends, or during the work stoppages.

- D. CONTRACTOR shall meet all requirements of applicable IEPA permits for construction pit or trench dewatering.
- E. The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils, prevent disturbance of compacted fill or backfill, and prevent floatation or movement of all structures and pipelines.

### 3.02 PROTECTION

- A. CONTRACTOR shall take all necessary precautions during the dewatering operation to protect adjacent structures against subsidence, flooding, or other damage. The dewatering system shall be installed and operated so that the groundwater level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property. Any such facilities and structures damaged shall be repaired or replaced to the satisfaction of their owner.
- B. In areas where continuous operation of dewatering pumps is required, CONTRACTOR shall avoid noise disturbance to nearby residences to the greatest extent possible by using electric-driven pumps, or intake and exhaust silencers or housing to minimize noise from engine-driven generators or engine-driven pumps.

END OF SECTION

## SECTION 31 32 19

### GEOTEXTILES

#### PART 1–GENERAL

##### 1.01 SUMMARY

- A. Work Included: Geotextiles for areas below structures, at perforated drain pipe trenches, below base course, and below riprap.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

#### PART 2–PRODUCTS

##### 2.01 MATERIALS

- A. Geotextile for areas below structures, for use at perforated drain pipe trenches and pressure relief valves, and as specified elsewhere, shall be Mirafi 140N, or equal.
- B. Geotextile below riprap shall be Mirafi 180N, or equal.
- C. Geotextile below base course shall be Mirafi 600X, or equal.

#### PART 3–EXECUTION

##### 3.01 INSTALLATION

- A. Geotextile shall be installed in accordance with manufacturer's recommendations.
- B. Geotextile shall be lapped a minimum of 24 inches.
- C. If extensive areas of unstable subgrade are encountered on street areas, ENGINEER may request the furnishing and installation of construction fabric to obtain the necessary subgrade support for the roadway structure. Vibratory compaction shall not be used in the compaction of base course in areas where construction fabrics are used.
- D. CONTRACTOR shall protect the construction fabric from exposure to the sun until installation. Construction fabric shall be covered with stone or soil immediately upon placement.

END OF SECTION

## SECTION 31 37 00

### RIPRAP

#### PART 1–GENERAL

##### 1.01 SUMMARY

- A. Work Included: Furnishing and placing riprap.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

##### 1.02 REFERENCES

- A. Standard Specifications: Unless otherwise indicated, Standard Specifications shall refer to the State of Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, current edition, including all issued supplemental specifications.

#### PART 2–PRODUCTS

##### 2.01 MATERIALS

- A. Stone for riprap shall be durable quarry stone of approved quality. It shall be sound, hard, dense, resistant to the action of air and water, and free from seams, cracks, or other structural defects.
- B. Stone for riprap shall be in accordance with Standard Specifications, Section 1005.01 Gradation 4, Class A.

#### PART 3–EXECUTION

##### 3.01 PREPARATION

- A. The bed for the riprap shall be properly trimmed and shaped before geotextile and stone is placed. Bed shall be minimum 6 inches thick.
- B. Geotextile shall be placed below riprap. See Section 31 32 19–Geotextiles.

##### 3.02 INSTALLATION

- A. Riprap shall be provided in areas as designated on the drawings.
- B. Stone placed above the water line shall be placed by hand. It shall be laid with close, broken joints and shall be firmly bedded into the slope and against the adjoining stones. The stones shall be laid perpendicular to the slope with ends in contact.

- C. The riprap shall be thoroughly compacted as construction progresses, and the finished surface shall present an even, tight surface.
- D. The large stone shall be placed in the lower courses. Interstices between stones shall be chinked with spalls firmly rammed into place.
- E. Unless otherwise shown or specified, riprap shall be at least 18 inches in thickness, measured perpendicular to the slope.

END OF SECTION

## SECTION 31 62 16

### STEEL PILES

#### PART 1–GENERAL

##### 1.01 SUMMARY

- A. The work includes: Steel piles driven in-place.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.
- C. CONTRACTOR shall INCLUDE in the Lump Sum Bid the cost of providing 186 linear feet of installed HP 10 x 42 piles. Payment to CONTRACTOR for steel piles shall be adjusted, add or deduct, based upon the actual linear feet of installed piles (more or less than 186 linear feet) and the Unit Price Bid for HP 10 x 42 Steel Piles.

##### 1.02 REFERENCES

- A. Standard Specifications: Unless otherwise indicated, Standard Specifications shall refer to the Standard Specifications for Road and Bridge Construction, current edition, including all issued supplemental specifications.
- B. AWS: D1.1–Structural Welding Code.
- C. ASTM A572–Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel.
- D. ASTM D3966–Standard Test Methods for Deep Foundations Under Lateral Load.

##### 1.03 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 13 00–Submittals.
- B. Product Data: For each type of product indicated.
- C. Shop Drawings: Show fabrication and installation details for piles, including welds, splices, and tip details. Show details of pile load test frame and setup.
- D. Welding certificates.
- E. Material test reports and mill certificates.
- F. Pile-Driving Equipment: Include type, make, maximum rated energy, and rated energy per blow of hammer; ram weight; weight of drive cap; details, type, and structural properties of hammer cushion, and details of follower equipment.
- G. Pile-Driving Sequential Layout:
  - 1. Submit layout drawings showing the proposed sequence of driving the piles.
  - 2. On the sequential layout, show each pile by identification, its driving sequence number, type, size, load bearing capacity, and pile tip elevation as planned.



3. Submit a pile numbering plan that clearly identifies and numbers each pile for reference.
- H. Calculations: CONTRACTOR shall submit calculations, based on a Wave Equation Analysis Program (WEAP), demonstrating that the piles can be driven with reasonable effort to the design tip elevations and capacities without damage. Pile driving stresses indicated by the calculations shall not exceed 90 percent of the yield stress of the pile material. Except for piles driven to refusal in bedrock, the required number of hammer blows indicated by the calculations at the required bearing capacity shall be 5 to 10 blows per inch.
- I. Experience of Dynamic Testing Personnel.

#### 1.04 QUALITY CONTROL

- A. Driving Tolerances shall conform to the requirements of Section 512 of the Standard Specifications and the following, whichever is more stringent:
  1. Deviation from plumb and angle of batter: 1/4-inch per foot of pile length, but not more than 3 inches overall.
  2. Deviation from location of pile top: 3 inches.
- B. Driving logs shall be maintained by CONTRACTOR. The driving logs shall include the following information:
  1. Date.
  2. Location.
  3. Kind, size, ram weight, and maximum rated energy of hammer.
  4. Type of pile and size.
  5. Length pile taken in leads.
  6. Length of extensions.
  7. Final tip elevation.
  8. Elevation of cutoffs.
  9. Effective length left in place.
  10. Number of blows and average stroke for each foot of penetration in the last 4 to 5 feet of driving. For piles driven to refusal in bedrock, also record the penetration (or set) and average hammer stroke for the last 20 blows.
  11. Penetration in inches when restricked, if required.
  12. Average penetration in inches last 5 to 10 blows.
  13. Allowable bearing capacity in tons.
  14. Notes on unusual phenomena.
- C. Continuous driving records, showing number of blows per each foot of penetration and final driving resistance in blows per inch for last 3 inches of driving shall be kept on all test piles subjected to lateral load tests or dynamic pile load tests, in addition to above.
- D. CONTRACTOR shall perform lateral load tests on two different test piles, in accordance with ASTM D3966 Procedure B (Excess Loading), prior to driving production piles for Structure 84. Locations of test piles shall be as recommended by the Project Soils Owner's Representative. Test piles shall be specially designated as such. Test piles subjected to lateral load tests shall not be used as production piles. All testing shall be observed by the Project Soils Owner's Representative, or a representative thereof. Four copies of test piles and permanent pile record shall be furnished to OWNER'S REPRESENTATIVE. Records of permanent piles shall be submitted daily.

1. The reaction system for the load test shall be capable of providing a maximum lateral load of at least 60 kips to the pile heads of the test piles.
  2. A slope inclinometer pipe shall be installed along each test pile to at least 40 feet below the ground surface at the time of driving.
    - a. A steel pipe or tube that has an inner diameter of 5 to 6 inches shall be sufficiently welded to the test pile along its longitudinal axis at the midpoint of the web, so that it remains connected to the test pile through the driving process and the lateral load testing.
    - b. Upon completion of driving, a slope inclinometer pipe shall be grouted inside the steel pipe or tube.
    - c. The slope inclinometer will be read at the following intervals:
      - (1) Prior to starting the standard loading schedule;
      - (2) At 100 percent of design load during the increasing loading sequence of the standard loading schedule;
      - (3) At 200 percent of design load during the standard loading schedule;
      - (4) At zero percent of design load following the standard loading schedule;
      - (5) At maximum load during the excess loading schedule; and
      - (6) At zero percent of design load following the excess loading schedule.
- E. Dynamic Pile Load Tests:
1. A dynamic pile load test shall be performed in accordance with Section 512 of the Standard Specifications for Road and Bridge Construction only for each given pile size and pile capacity to confirm that the ultimate design capacity is being achieved and that the piles are not being overstressed during driving.
  2. A dynamic pile load test shall be performed on any test pile subjected to a lateral load test. This dynamic load test may count as one of the first two piles of every given pile size and capacity.
  3. The dynamic testing shall be performed during initial driving of the dynamically tested piles, and during restrike of these piles to evaluate the setup or relaxation of the soils and/or bedrock.
  4. The restrike on the dynamically tested piles shall occur a minimum of 7 days after end of initial driving (EOID).
  5. The results of the dynamic pile load test and minimum pile lengths shall dictate the driving criteria for the production piles.
  6. Four copies of the results of dynamic pile load tests shall be furnished to OWNER'S REPRESENTATIVE.
- F. Pile driving records shall be provided to the Project Soils Owner's Representative for review prior to acceptance of piles
- G. Use all means necessary to protect nearby structures and all site improvements from damage. Any damage shall be repaired at no cost to OWNER.

## PART 2-PRODUCTS

### 2.01 MATERIALS

- A. Piles shall conform to the requirements of Section 512 of the Standard Specifications.
- B. Pile size shall be as shown on the drawings. Piles shall be new and in good condition and shall be provided with handling holes or lifting lugs.

- C. All piles shall be fitted with driving tips to reduce the potential for pile damage during driving.

## PART 3—EXECUTION

### 3.01 PREPARATION

- A. Hammers for driving steel piles shall conform to Section 512 of the Standard Specifications. Obtain prior approval of hammer to be used. Use driving method which will not cause damage to nearby site improvements.
- B. Verify that site conditions will support driving equipment for performance of pile driving operations.
- C. Verify pile locations prior to commencing work.

### 3.02 COORDINATION

- A. Coordinate the work of this section with demolition, excavation, and underground utility work.

### 3.03 INSTALLATION

- A. Time of day restrictions are listed in Section 01 11 00—Summary of Work.
- B. Pile installation, splicing and inspection shall conform to the requirements of Section 512 of the Standard Specifications. If the top of the pile is severely damaged during driving, cut off the damaged portion square before splicing. Splices must be such that the pile can be maintained plumb and in true alignment.
- C. Provide hardened driving points as required to protect pile head during driving.
- D. Deliver hammer blows on central axis of pile. Provide full bearing on pile for distribution of hammer blow. Avoid damaging piles by overdriving.
- E. Drive piles to the required axial capacities indicated on the Drawings. Where piles are driven to refusal into the bedrock, refusal is defined as one inch or less of penetration after 20 consecutive blows of the hammer, operating at the required stroke determined by the dynamic testing. Estimated elevations of top of bedrock are noted in the geotechnical exploration report.
- F. Minimum pile capacities shall be as noted on the drawings.
- G. Cut off piles at elevations indicated.
- H. Piles that are driven out of position or are damaged shall be considered nonconforming piles and shall be removed or replaced with a replacement adjacent pile, subject to approval of Project Soils Owner's Representative, at no additional cost to OWNER.

- I. If pile driving operations are halted and the soils setup around the pile, thereby not allowing it to be driven to the correct tip elevations without overstressing the pile, CONTRACTOR shall install an adjacent replacement pile, subject to the approval of Project Geotechnical Owner's Representative, at no additional cost to OWNER.

END OF SECTION

**SECTION 32 1216**  
**ASPHALT PAVING**

1.0 GENERAL

1.1 Description

- A. This work consists of providing all labor, material, tools and equipment necessary to construct new asphalt paths

1.2 Code and Regulations

- A. Materials and methods used in the fulfillment of this Contract shall conform to the State of Illinois Standard Specifications for Road and Bridge Construction, hereby referred to as "State Specifications", latest edition, and all supplemental specifications and provisions adopted prior to the date of the Invitation to Bid for this project.

1.3 Submittals

- A. Provide product data for each product specified
- B. Job-Mix Designs: For each job mix proposed.
  - 1. Job-mix design documentation shall include the amount of RAP material, by percentage of total mix, to be utilized.
  - 2. Job-mix design documentation shall clearly indicate source/origin of RAP material.
- C. Qualification Data: For IDOT qualified manufacturer and installer.
- D. Material Certificates: For each paving material, from manufacturer
- E. Material Test Reports: For each paving material and mix.

2.0 MATERIALS

2.1 Crushed Aggregate Base

- A. CA-6 crushed aggregate, type B, shall be placed, to a compacted depth as indicated on plans, as a base course. The aggregate shall be thoroughly dry, unyielding and free of screening and dirt before proceeding with priming and paving, in accordance with material and placement standards of IDOT State Specifications.

2.2 Prime Coat

- A. The prime course shall consist of cutback asphalt MC-30 in conformance with Section 406.05 of the IDOT Specifications. Bituminous prime coat shall be applied with the application rate being a minimum of 0.30 gallons per square yard. Priming shall be applied through the use of a pressurized distributor vehicle or hand sprayer, at a rate of 0.2 to 0.5 gallons per square yard. Excess prime showing on the surface after the curing period, shall be blotted with sand prior to placement of the asphalt. All work and materials shall conform to applicable provisions of Section 406 of the IDOT Standard Specifications.

2.3 Asphalt Binder Course

- A. The asphalt binder course shall be HMA Binder Course Mix, IL9.5, N50, conforming the IDOT Standard Specifications. All work and materials shall be performed in accordance with applicable provisions of the IDOT Standard Specifications. The minimum thickness of the completed bituminous binder course shall be as noted on plans measured at any point on the pavement surface.

## 2.4 Asphalt Surface Course

- A. The asphalt surface course shall be HMA Surface Course Mix C, N50, constructed on previously placed bituminous binder course or compacted base, per plans. The minimum thickness of the finished bituminous surface course shall be as noted on plans measured at any point of the pavement surface per appropriate detail. The work and materials shall conform to applicable provisions of the IDOT Standard Specifications SECTION 1004.03
  - 1. The bituminous material used in the surface mixture shall be asphaltic cement grade 85-100 or 120-150 as approved by the Owner's Representative.
- B. The finished surface shall be true, uniform in texture, free from ruts, depressions, cracks, tears and checks, in conformance with Article 406.11 of the State Specifications. When tested, water should not stand or pool twenty-four hours after flooding

## 3.0 EXECUTION

### 3.1 Field Conditions

- A. Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met.

### 3.2 Methods

- A. Construction methods shall follow specifications described herein.

### 3.3 Protection of Vegetation

- A. Protection of existing vegetation shall conform with Article 201.01 of the State Specifications. Protected vegetation shall include all trees, shrubs, plants or other vegetation within or adjacent to the construction area.
- B. At no time shall any material or equipment be stored, nor any construction activity take place within the drip line of any tree, within or adjacent to the construction area, without the written approval of the Landscape Architect.

### 3.4 Restoration

- A. The Contractor shall be responsible for the restoration of adjacent turf or planting areas disturbed or damaged through the fulfillment of this Contract.
- B. Disturbed areas shall be restored by the placement of pulverized topsoil raked smooth and level with the finished pavement surface, free of any stones or debris. Seeding shall be as per landscape specification.

END OF SECTION

**SECTION 32 1313**  
**CONCRETE PAVING**

1.0 GENERAL

1.1 Description

- A. This work shall consist of all labor, equipment and materials necessary for complete installation of concrete work: slabs, paving, curbs, walls, footings, and concrete work as called for in the plans and details.
- B. All work, which is without a specification herein, shall be performed in accordance with the Standard Specifications for Road and Bridge Construction, latest edition adopted by the Illinois Department of Transportation.

1.2 Submittals

- A. Mix Design: Submit for approval mix design proposed for use.
- B. One copy of the delivery ticket shall be furnished to the Owner's Representative at the time the truck arrives at the job site.

2.0 MATERIALS

2.1 Crushed Aggregate Base

- A. CA-6 crushed aggregate, Type B, shall be placed, to a compacted depth as indicated on plans, as a base course. The aggregate shall be thoroughly dry, unyielding and free of screening and dirt before proceeding with priming and paving, in accordance with material and placement standards of IDOT State Specifications.

2.2 Concrete Materials

- A. The concrete shall be constructed of Portland Cement Concrete Type A, which shall have a minimum of six (6) bags of type one cement per cubic yard. Concrete shall meet ASTM C94.
- B. The coarse aggregate used shall contain a maximum of 2%, by volume, deleterious material (commonly called chert free aggregate) and the maximum size of the stone shall be three-quarter inch (3/4").
- C. Air content shall be not less than 5%, or more than 8%, and the slump shall not exceed four inches (4"). Fourteen (14) day compressive strength tests resulting in less than 3500 p.s.i. shall be cause for removal and replacement at Contractor's cost. Portland Cement shall conform to the requirements of the current ASTM Specifications for Air-Entraining Portland Cement.

2.3 Metal Reinforcing

- A. Metal shall be fabricated conforming to the most current standard of ASTM A616, Deformed Billet-Steel Bars for Concrete Reinforcement of the grades indicated on the drawings. Welded wire mesh or fabric shall conform to Specifications for Welded Steel Wire Fabric for Concrete Reinforcement ASTM 185-current year.

2.4 Additives

- A. Additives that have not been aforementioned within this specification shall not be used in any concrete without written approval from the Owner or Owner's Representative.

2.5 Forms

- A. Forms shall be of lumber with a minimum two-inch (2") nominal thickness and six-inch (6") nominal width or steel with equal rigidity. They shall be held securely in place by stakes, braces, or other means and shall not allow concrete leakage. Forms for curves shall be flexible or shall be curved forms conforming to radius of curves shown on drawings. The use of straight sections will not be permitted for curves. Forms shall be clean and those for surfaces to be exposed shall produce a smooth, even finish without fins or board marks.

## 2.6 Expansion Joint Material

- A. Expansion joint material shall meet the Illinois Department of Transportation Standard for Road and Bridge Construction, latest edition, Section 1051.00 Prefomed Expansion Joint Fillers. Approved filler shall be as described in Section 1051.03 Bituminous Prefomed Joint Filler and 1051.04 Prefomed Fiber Joint Filler and 1051.05 Bituminous Prefomed Inorganic Fiber Joint Filler and 1051.08 Prefomed Closed Cell Plastic Joint Filler. All applicable sections shall apply for the above approved items.

## 3.0 EXECUTION

### 3.1 Concrete Mixing

- A. Concrete shall be mixed only as required for immediate use and any which has developed initial set shall not be used. Concrete, which has partially hardened, shall not be re-tempered or re-mixed. The use of a fractional sack of cement will not be permitted unless the fractional part is measured by weight. The mixer shall be cleaned thoroughly each time when out of operation for more than thirty minutes.
- B. Concrete mixes will be measured as described in the current Method Test for Consistency of Portland Cement Concrete of the ASTM Designation C-143. The concrete shall at times be of such consistency and workability, that it will puddle readily into corners and angles of the forms and around joint, dowels, tie bars and reinforcement without excessive spading, segregation or undue accumulation of water.
- C. The mixing of concrete in truck mixers in route from the batching plant to the site will not be allowed without prior approval. Mixing shall take place at the batching plant. The mixing shall be done on a level area, sloping not more than two percent in any direction.
- D. The concrete shall be discharged within a period of one hour after the introduction of the mixing water with the dry materials or within a period of 1-1/2 hours after the cement has been placed in contact with the aggregates. It shall be within the specified limits for consistency and air content and it shall not be segregated.

### 3.2 Sub-grade

- A. Sub-grade or base shall be accurately graded and compacted as specified in Section 31 2000, EARTHWORK. The sub-grade or base shall be moistened just before the concrete is placed.

### 3.3 Forms

- A. The forms shall be set so that concrete slabs will have a slope of not less than one-quarter inch (1/4") per foot. Forms shall be held in line and grade by stake or braces at intervals to produce layout as specified in plans. Straight



lines shall change to curve where line is tangent to curve. Forms shall be constructed in a manner that will permit their removal from exposed areas without damage to fresh concrete. Forms shall be of the full depth of the structure. Provide uniform bearing for all forms. The inside surface of the forms shall be oiled with a light, clear paraffin-base oil which will not discolor or otherwise injuriously affect the concrete as on walls or other exposed surfaces. All forming shall be approved by Owner or Owner's Representative before pouring concrete.

### 3.4 Reinforcement

- A. All steel reinforcement shall be accurately placed in position shown on plans and firmly held during the placing of concrete. When placed in the work, steel shall be free from dirt, rust, mill scale, paint, oil or other foreign material. Bars shall be placed with a variation in spacing between adjacent bars of not more than one-sixth of the spacing shown on the plans, and the clear distance from the near surface of the concrete and the reinforcement shall not vary from the distance shown on the plans by more than one-fourth the plan distance. Bars shall be tied at all intersections except where the spacing is less than one foot in each direction in which case every other intersection shall be tied. Supports for reinforcement which are to remain in the work shall be either precast concrete blocks of approved shape and dimensions, or approved preformed steel bar-chairs.
- B. Bars shall not be spliced except as provided on the plans or as authorized by the Owner or Owner's Representative.

### 3.5 Placing Concrete

- A. Placing concrete shall not be permitted until the sub-grade and forms have been approved by the Owner or Owner's Representative. The concrete shall be placed in one pour for the full depth of stated structure unless otherwise approved by the Owner or Owner's Representative. The concrete shall be placed in successive batches for the entire width of structure. It shall be struck off from 1/2" to 3/4" higher than the finished grade, tamped until all voids are removed and free mortar appears on the surface. Finally, it shall be thoroughly spaded along the edges, struck off to the proper grade, and finished to a plane, even surface with floats and trowels. The final troweling shall be done with steel trowel, leaving a smooth even surface.

### 3.6 Finishing

- A. After the water sheen has disappeared, the surface shall be given a final finish by brushing with a whitewash brush. The brush shall be drawn across the sidewalk or structure at right angles to the edges of the walk or structure, with adjacent strokes slightly overlapping, producing a uniform, slightly roughened surface with parallel brush marks. Brush marks should be of a depth to produce a light broom finish.
- B. Edges on all concrete shall be rounded to a radius of one-quarter inch (1/4") with a finishing tool unless otherwise specified. All joints shall be rounded with a double edging tool having a radius of one-quarter inch (1/4") on each side and the surface shall then be brushed lightly to produce a slightly roughened surface and remove the finishing tool marks.
- C. The surface shall be divided by grooves called contraction joints constructed at right angles to the centerline of the sidewalk or structure. These joints shall

extend to one-quarter inch (1/4") the depth of the sidewalk, shall be not less than one-eighth inch (1/8") and no more than one-quarter inch (1/4") in width, and shall be edged with a jointing or edging tool having one-quarter inch (1/4") radius. The joints shall be five feet (5') apart on sidewalks and ten feet apart on curbs unless otherwise specified.

- D. Expansion joints shall be placed between all separate pours, all structures and at thirty foot intervals on both sidewalks and curbs.

### 3.7 Sandblast Finish

- A. Specified sandblast surfaces to be finished with silica sand suitable for intended purpose at least twelve (12) days after the concrete has been poured. Sandblast depth per plans, exposing the aggregate but not so deep as to drive the aggregate out of the wall or create voids in the surface. Create uniform pattern and exposure while avoiding over-blasting. Seal all surfaces with two (2) coats approved clear sealer after concrete has fully cured and dried.
- B. Sandblast sample shall be created by the Contractor for approval by Owner's Representative before work commences.

### 3.8 Protection

- A. Protection of Concrete shall be performed in following manner:
  - 1. Protection Against Vandalism: The Contractor shall take all necessary precautions to ensure the protection of work against vandalism or graffiti. Any work, which is blemished in the finish, will be cause for rejection of flat work or curbing.
  - 2. Protection Against Rain: The Contractor shall take such precautions as are necessary to protect the concrete from damage.
  - 3. Hot Weather Limitations - Casting of concrete during hot weather shall be limited by the temperature at the time of placing. Concrete shall not be cast when the temperature is above 90° F. Care shall be taken to properly wet and protect all concrete placed indirect sun or in hot weather.
  - 4. Cold Weather Limitations - No concrete shall be placed unless the temperature of the air in the shade and away from artificial heat is at least 32° F and rising unless specifically approved. All concrete poured at less than 40° F, or at a time when within 24 hours of pouring concrete the temperature shall dip below 40° F shall be insulated. The Contractor shall be responsible for the concrete placed during cold weather and any concrete injured by frost action shall be removed and replaced at Contractors expense.

### 3.9 Curing

- A. Forms shall be left in place for a period of not less than 12 hours. Immediately after they have been removed, all porous or honeycomb areas thus uncovered shall be filled smooth with mortar consisting of one part cement and two parts fine aggregate. Also, the ends of all expansion joints shall be cut open to the full width of the expansion joint material.
- B. Placing concrete, once started, shall be a continuous operation. No portion of a walk, curb or paved area shall be partially poured except as shown for installation of joints.

### 3.10 Footings

- A. Concrete footings shall be sloped at the top to ensure drainage away from the embedded item (post or otherwise). All footings shall be constructed as indicated on the detail drawings. All footings unspecified on drawings shall be according to the manufacturer's specifications of the product to be footed, but depth of all footings shall be a minimum of 42" below finished grade.

END OF SECTION

**SECTION 32 9219**  
**LAWN SEEDING**

1.0 GENERAL

1.1 Description

- A. This work consists of complete construction of lawn areas including: finish grading, tilling, cleaning seed bed, seeding, blanket, fertilizing, weed control, and mowing.

1.2 Submittals

- A. One seed tag for each seed type used on the site shall be saved and delivered to the Owner.

2.0 MATERIALS

2.1 Seed

- A. Seed shall be delivered to the site in the original sacks as received from the producer, and each sack shall be tagged in accordance with the agricultural seed laws of the United States and the State of Illinois. Each sack shall be tagged showing the dealer's guarantee as to the year grown, percentage of purity, percentage of germination and the date of the test by which the percentages of purity and germination were determined. All seed sown shall have a date of test within six (6) months of the date of sowing.

- B. Any seed delivered prior to use shall be stored in such a manner that it will be protected from damage by heat, moisture, rodents, or other causes.

- C. The new turf areas shall have a uniform seed mixture of one of the approved mixes listed below or an approved equal:

Field of Dreams Athletic Mixture by National Seed

- 30% Goalkeeper Perennial Ryegrass
- 30% Top Gun Perennial Ryegrass
- 20% Blue Moon Kentucky Bluegrass
- 20% Freedom III Kentucky Bluegrass

- D. The renovation lawn area shall have a uniform seed mixture of one of the approved mixes listed below or an approved equal:

Field of Dream Reseeder Mixture by National Seed

- 25% Accent Perennial Ryegrass
- 25% Caddieshack Perennial Ryegrass
- 25% Blue Chip Kentucky Bluegrass
- 25% Freedom III Kentucky Bluegrass

2.2 Blanket

- A. Blanket shall be excelsior for slopes greater than 1:4 and straw based on slopes less than 1:4. Both shall be weaved to prevent flyaway of fibers. Blanket shall be of consistent thickness, with fibers evenly distributed throughout the entire area of the blanket. The top and bottom of each blanket shall be covered with photodegradable or biodegradable netting. Material shall not contain any weed seed or chemical additives. Blanket stakes shall be bio-degradable (not metal).

2.3 Fertilizer

- A. Fertilizer shall be Nitrogen, Phosphorous and Potassium in the following mixes:

1. New Seeding Areas:10-24-18 with 30% of nitrogen in slow release formula
2. Over-seed Areas: 22-3-11 with 50% of nitrogen in slow release formula

### 3.0 EXECUTION

#### 3.1 Seeding Operations

- A. Remove all debris, including large stones, roots and construction materials. Fill all depressions in lawn area with topsoil prior to top dressing operations. No debris may be buried in pits on the site.
- B. Topsoil shall be applied at 6" depth. Topsoil may be blended with sand up to a ratio of 3 parts topsoil to 1 part sand to facilitate application. Contractor shall till; fine grade; remove all clumps, clay, sod clods, and undesirable materials. Seed bed shall be approved by Owner's representative before seeding.
- C. Seed shall be applied at the rates listed below for a dense stand with a Brillion, slit seeder, or other mechanical seeder. For new seeded areas, the entire seed bed area shall be covered with bio-degradable blanket. All seed areas must be completely and uniformly covered. Re-seed areas shall have no blanket applied.

#### 3.2 Seeding Rates

- A. Seed shall be applied at the following rates - except if dormant seeding is completed in late fall, then rates to be doubled:

Seed	Rate per 1000 square feet
Field of Dreams Athletic Mix	4.5 pounds
Field of Dreams Reseeder Mix (over seed in Spring)	2.5 pounds

#### 3.3 Fertilizing

- A. NEW SEEDING AREAS: 1.5 pounds of nitrogen fertilizer shall be applied per 1,000 square feet of turf shall be applied at time of initial seeding. See 2.3 for fertilizer mix. It shall be applied evenly over the planting area.
- B. RESEEDED AREAS: 0.75 pounds of nitrogen per 1,000 square feet shall be applied at time of overseeding, unless another amount is specified on plan. See 2.3 for fertilizer mix.

#### 3.4 Repairs

- A. The Contractor shall be responsible for the repair of any damage to existing lawns, which may result from his work, and such repairs shall be made swiftly in a thorough and workmanlike manner, with minimum inconvenience to the Owner and users of the site. Where lawn areas have been disturbed or damaged, the damaged lawn areas, ruts and depressions shall be cultivated, filled with topsoil, settled to proper grades and seeded. Repairs shall be made to the satisfaction of the Owner or Owner's representative.

#### 3.5 Maintenance

- A. It is the responsibility of the Contractor to maintain all seeded lawn areas; this may include cultivation, reseeding, fertilizing, watering, mowing, and the control of weeds until final acceptance has been granted. The Contractor shall mow the grass to a three -inch (3") height if it reaches a four-inch (4") height any time prior to final acceptance. The Owner's representative shall inspect the conditions of the stand to determine satisfaction or the need to improve the stand. Satisfaction is based on 95% coverage over the entire new seeding area

and over-seed areas. Maintenance shall continue by the Contractor until acceptance has been granted.

### 3.6 Watering

- A. Watering must be started immediately after the seed is installed. Watering should begin as soon as an area large enough to put down a sprinkler is ready.
- B. Thoroughly soak the seed and the soil under the seed. It should be moist at least 2 inches deep. Corners shall be noted and may need to be hand watered to ensure full coverage.
- C. After the first watering, water enough to keep the soil under the seed moist, but not muddy. In cool weather this may mean watering only every 3 or 4 days. In very hot weather, you may have to water daily. **Do not allow the seed or soil underneath to dry out between waterings.**
- D. In about two weeks the seed should have begun to knit to the soil underneath and the watering can be lessened to once or twice per week depending on the weather conditions.
- E. If an irrigation system is in place, it is the responsibility of the Contractor to ensure that the system is working and is covering all new seed areas. This responsibility continues until the site is turned over to the owner.
- F. Watering shall continue and be maintained by the contractor for at least 30 days beyond substantial completion. It is the contractor's responsibility to meet lawn establishment requirements – additional watering by contractor may be needed.

END OF SECTION

# Geotechnical Investigation Report

Lily Cache Path and Bridge  
1112-1116 Quail Run Avenue  
Bolingbrook, Illinois

*Project Number:*  
20-0068-151

*Date Submitted:*  
March 11, 2020

*Prepared for:*  
**Upland Design Ltd.**

24042 Lockport Street, Suite 200  
Plainfield, Illinois 60544  
Attn: Ms. Michelle A. Kelly

**PIONEER**  
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March 11, 2020

Upland Design Ltd.  
24042 Lockport Street, Suite 200  
Plainfield, IL 60544  
Attn: Michelle A. Kelly

**Re: Geotechnical Investigation Report  
Lily Cache Path and Bridge  
1112-1116 Quail Run Avenue  
Bolingbrook, Illinois  
Pioneer Project No. 20-0068-151**

Dear Ms. Kelly:

Pioneer Engineering & Environmental Services, LLC (Pioneer) was contracted to conduct a geotechnical investigation for the proposed Lily Cache Path and Bridge to be located at 1112-1116 Quail Run Avenue in Bolingbrook, Illinois. The investigation was performed in general accordance with Pioneer Proposal No. 15861, dated February 7, 2020. The scope of the investigation included drilling, sampling, and laboratory testing of soil obtained in three soil borings in support of the proposed foundation design of the project.

### **Project Overview**

The Project Site is an irregular-shaped parcel within Drafke Park and the surrounding wetland area to the east and south located in Bolingbrook, Illinois. Lily Cache Creek bisects the central portion of the property from east to west. The site is currently developed with two playground areas located in the west portion of the property. A paved trail/sidewalk extends from the northwest park boundary, across the central portion of the site, to Veterans Parkway.

The proposed development consists of the construction of a bridge over Lily Cache Creek and the renovation and extension of the existing trail. No other information is available on the proposed structure.

### **Site Historical Use**

A cursory review of Historical Aerial Photos was made to help determine if the past history of the site, such as previous structures, may provide insight into the existing site subsurface conditions. Aerial photos from 1939 to 2019 were reviewed to help determine where foundations or floors slabs from previous site use might be located. According to the aerial photos, by 1939, the Site was undeveloped and used for agricultural purposes. By 1988, the existing Drafke Park had been developed on the northwest portion of the site. By 2007, the existing trail was developed from the northwest park boundary to Veterans Parkway and the site was covered with some scattered trees and vegetation. The site has remained unchanged since, bringing the site to its current configuration.

### **Subsurface Investigation**

Three soil borings were performed for the current project (reference the attached Boring Location Diagram, Figure 1). The borings were located in the field using a hand-held GPS unit using the coordinate obtained from Google Earth. The borings were advanced with a small ATV-mounted Geoprobe drill rig, using 3 ¼-inch diameter hollow stem augers (HSAs). Borings B-1 and B-2 were located at each end of the proposed bridge



and were advanced to a depth of 29 feet below the existing surface grade. Boring B-3 was located along the existing paved trail near Veterans Parkway and was advanced to a depth of 15 feet below the existing surface grade.

The ground surface elevation at each boring location was interpolated from the "Topographic Survey - Lily Cache/Drafke Park," by Zeitler Consulting Inc., dated October 16, 2019. The elevations are assumed to be referenced to the North American Vertical Datum of 1988 (NAVD 88).

Representative soil samples were obtained from each sampling interval using the split barrel sampling procedure performed in accordance with ASTM Standard D 1586, "Method for Penetration Test and Split Barrel Sampling of Soils". In the split barrel sampling procedure, a 140-pound hammer falls 30 inches and drives a two-inch outer diameter split barrel sampler 18 inches into the soil. The number of blows required to drive the barrel sampler the final 12 inches is the Standard Penetration Resistance (SPT N-value) for that interval. This test result indicates the soil's relative density and comparative consistency, and provides a basis for estimating the relative strength and compressibility of soil. Representative soil samples were obtained at 2.5-foot intervals to a depth of 15 feet and at 5-foot intervals thereafter.

The soil samples obtained from each interval were logged in the field according to their predominant geological characteristics. The field logs were subsequently used to prepare the final boring logs that are included as an attachment to this report. Soil samples obtained from the drilling operations were identified by boring number and sampling depth, and brought to Pioneer's laboratory for further examination and testing. The borings were backfilled immediately after drilling to prevent a hazard to the public.

The soil samples were analyzed for physical soil parameters including moisture content and unconfined compressive strength. In addition, the soil was further classified in accordance with the Unified Soil Classification System. A natural moisture content test was performed for each sampling interval and/or stratum in accordance with ASTM Standard D 2216. The laboratory test data is included on the attached Boring Logs.

A summary of the depths and engineering properties of the profile soils is included in the following section.

### **Subsurface Conditions**

The following generalized soil profile was encountered in the borings.

- Bituminous Concrete Pavement over Sand and Gravel Base. The surface cover in the borings consisted of 3.5 to 4.5 inches of Bituminous Concrete Pavement over 8 to 9 inches of Sand and Gravel Base.
- Black and Olive Gray Silty Clay Transition Soil. The surface cover in Borings B-1 and B-3 is underlain by a deposit of Black and Olive Gray Silty Clay Transition Soil which extends to depths of 4 to 5 feet below existing grade (Elev. 645 to 644). The deposit, which is a Transition Soil from the previously overlying Topsoil and the underlying parent material, possesses Standard Penetration Test N-values of 5 to 7 blows per foot (bpf) and moisture contents ranging from 20.3 to 28.5 percent. It should be noted that, in Boring B-1, the Transition Soil is underlain by a 1-foot thick deposit of native Brown Silty Sand.
- Brown Silty Clay Fill. The surface cover in Boring B-2 is underlain by Brown Silty Clay Fill which extends to a depth of 4 feet below existing grade (Elev. 644.5). The Fill possesses an SPT N-value of 17 bpf and a moisture content of 9.3 percent.

- *Brown and Gray Mottled Silty Clay.* In Boring B-2, the Silty Clay Fill is underlain by a deposit of Brown and Gray Mottled Silty Clay which extends to a depth of 9 feet below existing grade (Elev. 639.5). The deposit possesses unconfined compressive strengths ranging from 0.3 to 0.5 tons per square foot (tsf) and moisture contents ranging from 11.4 to 22.7 percent.
- *Stiff to Very Tough Brown to Brown and Gray Silty Clay.* In Borings B-1 and B-3, the Silty Clay Transition Soil is underlain by a deposit of stiff to very tough Brown to Brown and Gray Silty Clay which extends to depths of approximately 6 to 12 feet below existing grade (Elev. 643 to 637). The deposit possesses unconfined compressive strengths ranging from 0.9 to 2.4 tsf and moisture contents ranging from 9.4 to 19.7 percent.
- *Medium Dense Brown Clayey Sand.* In Boring B-3, the Brown and Gray Silty Clay is underlain by a deposit of medium dense Brown Clayey Sand which extends to a depth of approximately 9 feet below existing grade (Elev. 640). The deposit possesses an SPT N-value of 16 bpf and a moisture content of 14.4 percent.
- *Very Tough to Hard Gray Silty Clay.* The Mottled Silty Clay in Boring B-2 and the Clayey Sand in Boring B-3 are underlain by a deposit of very tough to hard Gray Silty Clay which extends to depths of approximately 11.5 to 12.0 feet below existing grade (Elev. 637.5 to 636.5). The deposit possesses unconfined compressive strengths ranging from 2.0 to 5.8 tsf and moisture contents ranging from 14.1 to 16.9 percent.
- *Medium Dense to Dense Brown coarse to Fine Sand.* The Brown and Gray Silty Clay is underlain by a deposit of medium dense to dense Brown coarse to fine Sand which extends to depths of approximately 22 to 23 feet below existing grade (Elev. 627 to 625.5). The deposit possesses SPT N-values ranging from 10 to 31 bpf and moisture contents ranging from 5.9 to 23.9 percent. Boring B-3 was terminated within this deposit at a depth of 15 feet below existing grade.
- *Medium Dense to Very Dense Gray coarse to Fine Sand.* The Brown coarse to fine Sand is underlain by a deposit of medium dense to very dense Gray coarse to fine Sand which extends to a depth of approximately 28.5 feet below existing grade (Elev. 620). The deposit possesses SPT N-values ranging from 27 to 33 bpf and moisture contents ranging from 8.8 to 15.9 percent.
- *Top of Apparent Bedrock Surface.* Auger refusal was encountered in Borings B-1 and B-2 at a depth of 29.0 feet below existing grade on the apparent bedrock surface (Elev. 619.5). Bedrock coring was beyond the scope of this investigation.

Groundwater Conditions. Groundwater was encountered while drilling in all borings at a depth of 9 to 11 feet below existing grade. Groundwater was encountered after drilling completion in Borings B-1 and B-2 at depths of 8 feet and 10 feet, respectively.

Glacial soils in the Midwest typically oxidize from gray to brown above the level at which the soils remain saturated. The long-term groundwater level is often interpreted to be near this zone of color change. This color change was recorded upon encountering Gray Silty Clay at a depth of 9 feet below ground surface. It is recommended that a long-term groundwater level of 9 feet below existing ground surface should be used for design purposes.

Seasonal and yearly fluctuations in the water table can be expected due to variations in precipitation, evaporation, and surface runoff. Also, it is likely that pockets of perched groundwater may occur after precipitation events.

The subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the appendix should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratifications, penetration resistance, locations of the samples and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual.

## **Conclusions and Recommendations**

### **Site Preparation.**

Topsoil Stripping. The non-paved trail areas of the Site are covered with grassy and low-lying vegetation. The Topsoil and vegetation root mat should be removed to the depth encountered from the limits of the proposed bridge and trail.

### **Foundation System**

Design Criteria. The proposed development consists of the construction of a bridge over Lily Cache Creek. It is anticipated that the bridge will be supported by spread footings constructed at each side of Lily Cache Creek. For discussion purposes, it is assumed that the design bottom of footings will be 4 feet below lowest adjacent grade.

Footing Support Soils. The upper soil profile of Silty Clay Fill, Silty Clay Transition Soil, and Brown and Gray Mottled Silty Clay possesses poor engineering properties and will not provide positive support for the foundation loads. The poor quality soils were encountered to a depth of 6 to 9 feet below existing grade (Elev. 642.5 to 639.5). The underlying native very tough Brown Silty Clay and very tough to hard Gray Silty Clay possess adequate properties for support of the proposed bridge. The depth to top of adequate foundation bearing soil is presented in the following table.

**Table 1: Summary of Depth to Bearing Soil**

Structural Boring Number	Approximate Depth to Bearing Soil From Adjacent Grade (Feet)	Approximate Elevation of Bearing Soil (NAVD 88)	Soil Type at Recommended Footing Elevation
B-1	6.0	642.5	Brown Silty Clay
B-2	9.0	639.5	Gray Silty Clay

Foundation Type. Unsuitable soil will be encountered at design footing subgrade for the frost-depth footings as described above. The typical method to attain adequate support for the building loads is to remove the unsuitable soils as described above and replace them with structural fill. Undercuts should be expected for the shallow footings.

Footings founded at approximately 4 feet below lowest adjacent grade and supported on the very tough Brown Silty Clay, very tough to hard Gray Silty Clay, or a pad of Structural Fill can be dimensioned using a net allowable bearing capacity of 3,000 psf. The net allowable soil bearing pressure refers to that pressure which may be imposed on the foundation soils in excess of the final minimum surrounding overburden pressure.

Pioneer anticipates that properly designed and constructed footings supported upon the recommended, inspected, and approved very tough to hard Brown to Gray Silty Clay or a pad of Structural Fill should

experience a maximum total settlement on the order of 1/2-inch should be expected. Differential settlements ranging from 1/2 to 2/3 the total settlement are possible across the building area due to variations in subsurface conditions and foundation loadings.

The following should be used where unsuitable soil is encountered below the design footing subgrade and an undercut-replacement scheme is used for footing support. Any unsuitable soils such as Fill or Organic Silty Clay that are encountered at the design footing subgrade should be removed to the depth encountered and replaced with Structural Fill. Typical Structural Fill, such as 3-inch crushed limestone or concrete chocked with 1-inch nominal granular material (IDOT CA-7 gradation), should be placed in 18-inch lifts and compacted by use of a vibratory compactor or through the force of a backhoe's bucket to seat the stone. The width of the excavation should extend at least one foot horizontally beyond the perimeter of the footing on all sides for each one foot of vertical undercut below the bottom of the footing, thus providing for adequate lateral distribution of the foundation stresses.

An additional discussion of the placement and compaction of Structural Fill is included in the Earthwork Controls section of this report.

Additional Footing Design Criteria. All footings should be founded a minimum of 3.5 feet below final exterior grade to eliminate the effects of frost on footing behavior. In order to prevent local bearing failure, isolated column footings should have a minimum lateral dimension of 24-inches and continuous footings should have a minimum width of 18-inches. If the building is constructed during winter months or if the footings will likely be subjected to freezing temperatures after construction is completed, then the footings should be protected from freezing.

In order to limit the effects of differential movement that may occur due to variations in the character of the supporting soils and variations in seasonal moisture contents, Pioneer recommends that the continuous footings be suitably reinforced to make them as rigid as practical.

### Lateral Earth Pressure

Temporary shoring may be required, during the construction of the bridge, depending on the proximity to existing structures, utilities, and property lines. Temporary shoring and permanent below grade structures, should be designed in accordance with the recommendations in this section.

The following table presents recommended values of earth pressure and friction coefficients based on our experience with soils in the area. Equivalent fluid pressures are frequently used for the calculation of lateral earth pressures for the "at-rest", "active" and "passive" conditions, and are also provided. Earth pressures are influenced by the structural design of the temporary shoring, methods of construction and the strength of the subgrade. The "at-rest" condition ( $K_0$ ) assumes no wall rotation and is usually applicable for basement walls. The recommended design lateral earth pressures do not include a factor of safety and do not provide for possible hydrostatic pressure on the walls. The temporary shoring should also be adequately braced to resist the lateral earth pressures and any short-time construction loads in addition to permanent surcharge loads.

If temporary shoring is not free to rotate or deflect at the top, possibly due to tiebacks or walers, Pioneer recommends designing temporary shoring for the "at-rest" lateral earth pressure condition using  $K_0$ . Temporary shoring that is permitted to rotate and deflect at the top can be designed for the active lateral earth pressure condition using  $K_a$ .

**Table 2: Estimated Lateral Pressure and Friction Parameters**

EARTH PRESSURE CONDITIONS	COEFFICIENT FOR BACKFILL TYPE	EQUIVALENT FLUID PRESSURE (pcf)	DRAINED FRICTION ANGLE (degrees)	UNIT WEIGHT (pcf)
Active ( $K_a$ )	Granular - 0.27 Lean Clay - 0.36	Granular - 32 Lean Clay - 45	Granular - 35 Lean Clay - 28	Granular - 120 Lean Clay - 125
At-Rest ( $K_0$ )	Granular - 0.43 Lean Clay - 0.48	Granular - 52 Lean Clay - 60	Granular - 35 Lean Clay - 28	Granular - 120 Lean Clay - 125
Passive ( $K_p$ )	Granular - 3.69 Lean Clay - 2.77	Granular - 443 Lean Clay - 346	Granular - 35 Lean Clay - 28	Granular - 120 Lean Clay - 125
FRICTION COEFFICIENTS				
Concrete placed on Granular Fill			Tan $\delta$ = 0.45	
Concrete placed on Clay			Tan $\delta$ = 0.30	

Notes: The Equivalent Fluid Pressures in the table above are based on a moist, not submerged state.

Horizontal loads acting on a foundation wall are resisted by friction along the foundation base and by passive pressure against the footing face, which is perpendicular to the line of applied force. The passive pressures on the toe of the foundation wall can be computed by assuming a passive pressure coefficient from the table above for granular backfill on the consideration that some friction angle will develop between the backfill and the outer face of the structure. Passive resistance should be considered only for soils below the 3.5-foot frost depth.

**Seismic Design Criteria**

Based on the ASCE 7-10, Pioneer recommends the following seismic design criteria for the determination of maximum considered earthquake and design spectral response accelerations.

From Table 20.1-1, the soil profile of the project site is generally characterized as Site Class Profile D (“Stiff Soil”) based on the undrained shear strengths which are typically greater than 1,000 psf. While there are some strata of soils where the shear strength is less than 1,000 psf, the average shear strength is greater due to the very stiff and occasionally dense soil layers. Based upon the Maximum Considered Earthquake Ground Motion maps, the maximum considered earthquake spectral response acceleration at short periods ( $S_s$ ) and at 1-second periods ( $S_1$ ) are 0.159 g and 0.067 g, respectively, based upon a Site Class Profile D. The following additional parameters are recommended by the general ASCE procedure:

- Seismic Use Group Category - Category I
- Seismic Design Category (SDC) - Category B
- Adjusted maximum considered earthquake spectral response acceleration parameters  
 $S_{MS} = 0.255$   
 $S_{M1} = 0.161$
- For calculating the design spectral response accelerations utilize:  
 $S_{DS} = 0.170$   
 $S_{D1} = 0.107$

**Pavement Design Considerations**

Pavement Support. The proposed pavement areas should be excavated to design subgrade to 2-feet outside the limits of the paved area. Any Topsoil or root mat should be removed from the pavement area to a maximum depth of 2 feet below design subgrade and replaced with structural fill. Uniformity in support characteristics for the pavement can be attained by using the following procedures.

After removing the Topsoil and/or unsuitable Fill and excavating to pavement design subgrade, the exposed soil should be proofrolled with a vibratory steel drum roller or fully loaded truck. The subgrade should also be visually inspected for unsuitable soils. Any Fill containing a high content of topsoil, organic material, or wood debris should be removed to the depth encountered to a maximum depth of 2 feet below design subgrade.

All unsuitable soils, if any should be replaced with compacted structural fill. Structural fill should be an approved granular soil equivalent to an IDOT CA-6 or CA-7 gradation. If highly unstable areas are encountered, the structural fill should be IDOT CA-1 (3-inch nominal size) gradation. Use of a woven geotextile fabric should be considered for additional stability. Engineered fill should be placed and compacted in lifts with a maximum lift thickness of 8 inches. Each lift of IDOT CA-1 or CA-7 open graded granular soil should be compacted to a minimum of 75 percent of the relative density in accordance with ASTM Standards D 4253 and D 4254. If IDOT CA-6 granular material is used, the soil should be compacted to a minimum of 95 percent of the maximum density per ASTM D 1557 (Modified Proctor).

Pavement Section. Pioneer recommends a flexible pavement section be designed according to the State of Illinois Department of Transportation, Division of Highways, Highway Design Manual using AASHTO-H-20 loading as a maximum. The AASTHO design method takes into consideration the structural design traffic, the subgrade support value, and the structural layer coefficients for each component of the pavement system. Local pavement design practices are presented in the IDOT publication “Pavement Design Procedure” dated August 31, 1995. The following pavement sections, shown in Table 1, are considered the minimum pavement sections to be used for this project and are typically recommended in local practice, and are in general accordance with IDOT’s “Pavement Design Procedures”, for similar structures. It is recommended that the completed site plan analyzed to determine the most likely traffic patterns for heavy delivery trucks and garbage trucks. The recommended Heavy-Duty Pavement section should be used in these traffic corridors.

**Table 3: Pavement Section Recommendations**

Pavement Material	Compacted Material Thickness (Inches)		
	Flexible Pavement (Light Duty)	Flexible Pavement (Heavy Duty)	Rigid Pavement (Heavy Duty)
Portland Cement Concrete	—	—	6.5
Bituminous Surface Coarse	1.5	2	—
Bituminous Binder Coarse	1.5	3	—
Type B Granular Base Coarse (IDOT CA-6)	8	10	6
Total Pavement Section Thickness	11	15	12.5



The bituminous concrete binder and surface courses should consist of fine, dense, graded aggregate, Class I as defined in the IDOT Standard Specifications for Road and Bridge Construction. All placement and compaction activities should meet the requirements of the IDOT Standard Specifications.

The design of pavements should incorporate provisions for drainage of both the pavement surface and the base course layer. Should standing water be allowed to accumulate on the pavement surface or within the base course, the sub-grade will soften and it is likely that the pavement will deteriorate. The base course should be protected from water inflow along drainage paths. The base course should extend beyond the edges of the pavement in low areas to allow any water that enters the base course a path for exit.

**Earthwork Controls.**

Structural Fill should meet the following properties for use as pavement subgrade support soils.

**Table 4: Structural Fill Material Requirements**

Fill Type	USCS Classification	Acceptable Location for Placement
Cohesive	CL, CL-ML	Below floor slabs and pavement
Granular	GW, GP, GM, GC SW, SP, SM, SC	Below floor slabs, pavement and foundations
Unsuitable	CH, MH, ML, OL, OH, PT	Non-structural areas

Structural Fill should be placed and compacted in accordance with the following requirements.

**Table 5: Fill Placement and Compaction Requirements**

Description	Requirement
Fill Lift Thickness	10 inches loose measurement when sheepsfoot or steel drum rollers are used 6 inches loose measurement when jumping jacks or plate compactors are used
Minimum Compaction Requirement Below Foundations and Slabs-on-Grade and Upper 12 Inches of Paved Areas	95% of the maximum dry density per ASTM D-1557 (Modified Proctor)
Minimum Compaction Requirement Below 12 Inches of Paved Areas and Landscaped Areas	90% of the maximum dry density per ASTM D 1557 (Modified Proctor)
Moisture Content of Cohesive Soils	-2% to +3 % of optimum moisture content per ASTM D 1557
Open-graded Aggregate including IDOT CA-1 and CA-7 Gradations	Compact in 8-inch thick lifts loose measure to achieve stability through particle interlock

All subgrade surfaces should be protected during construction from deterioration or softening caused by frost or ponding of water. Water should not be allowed to stand in the excavations for a sustained period of time. All soft, loose, or disturbed soils should be removed to competent support materials. If the pavement subgrade is prepared in the winter, exposed subgrade soils should be protected from freezing. Structural fill should not be placed on frozen soils.

### Report Limitations

This geotechnical investigation report has been prepared to aid in the evaluation and design of this project. As a result, this report has provided generalized guidelines to be considered during the actual design and construction phases of the proposed building. The information provided in this report should be evaluated by, and the site improvements should be designed by a licensed structural engineer or architect. Should deviations from the noted subsurface conditions be encountered during construction, this information should be brought to Pioneer's attention. Pioneer would welcome the opportunity to provide field construction services for this project. The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the location diagram. It should be understood that this location was approximate, since the boring locations were not surveyed. This report does not reflect any variations that may occur between and beyond these borings.

This report has been prepared for the sole use of the client identified in the report and cannot be relied upon by other persons or entities without Pioneer's permission. The observations and conclusions contained herein are limited by the scope and intent of the work mutually agreed upon by the client and Pioneer and the work actually performed. There are no warranties, implied or expressed, concerning the integrity of the areas and/or mediums not analytically tested.

Pioneer appreciates the opportunity to provide our services for this project. Please feel free to contact us if you have any questions or concerns.

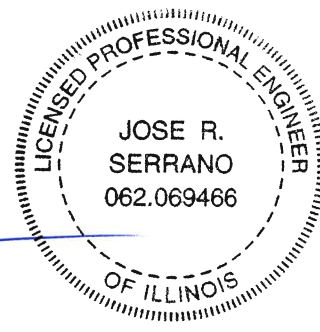
Respectfully Submitted,  
*Pioneer Engineering & Environmental Services, LLC*



Jason Gibbs, E.I.T.  
Project Manager



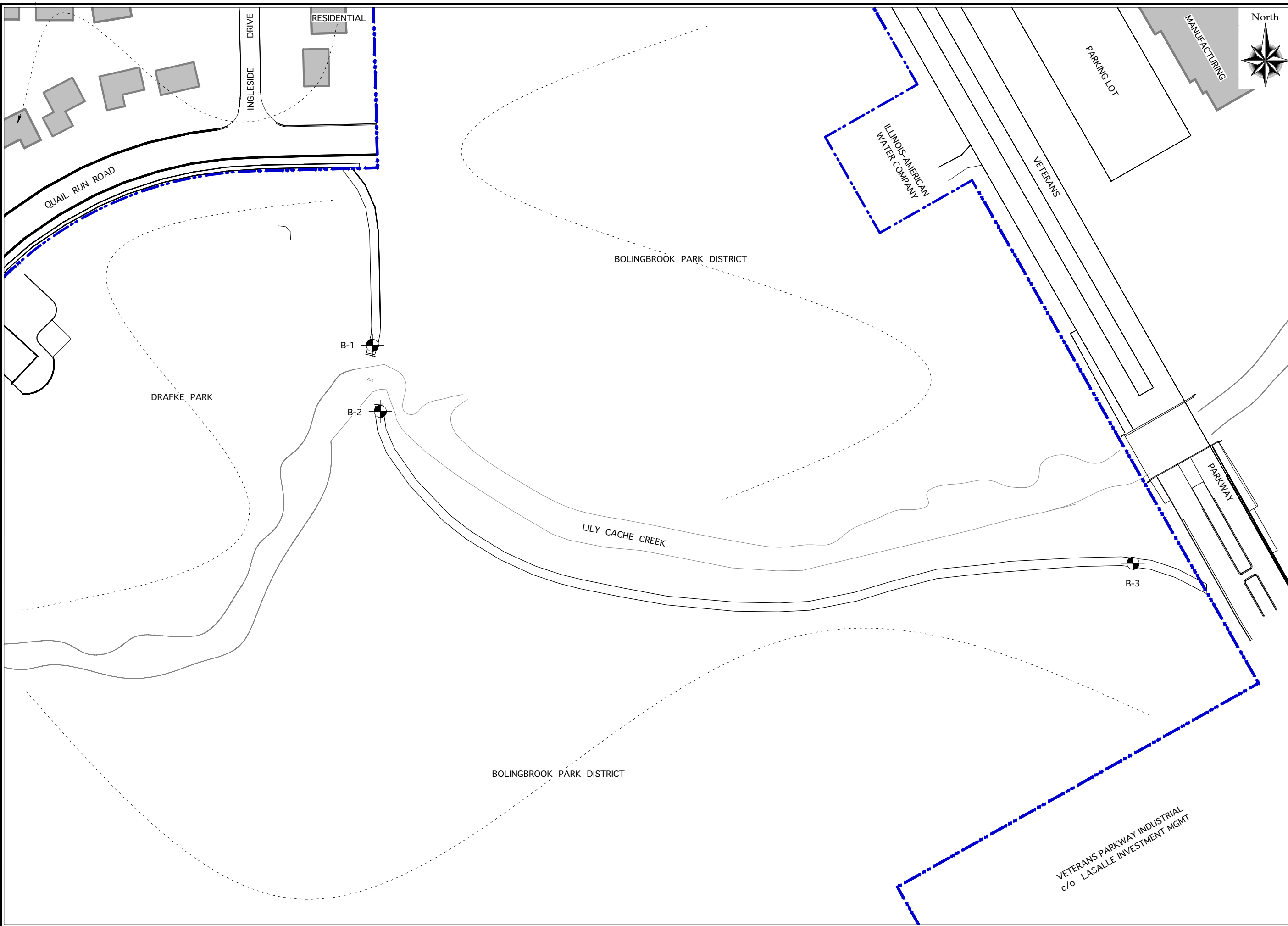
Jose R. Serrano, P.E.  
Geotechnical Engineer



11/30/21

Attachments: Boring Location Diagram (Figure 1)  
Boring Logs  
Soil Classification Chart





**FIGURE 1**  
**Soil Boring Locations**  
**& Site Diagram**  
**Drafke Park Bike Trail**  
**Bolingbrook, IL**

Scale:  
 1" = 100'  
 0' 100'

Drawn by:  
 M. Sanabria

Job No:  
 20-0068-151

Date:  
 February 2020

Checked by:  
 Stephanie Thompson

Legend:  
 - - - - - Approximate Property Line  
 ● Geotechnical Soil Boring Location



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# BORING LOG B-1

Sheet 1 of 1

**Project No.:** 20-0068-151  
**Project:** Lily Cache Path and Bridge  
**Location:** 1112-1116 Quail Run Ave  
 Bolingbrook, Illinois  
**Client:** Upland Design Ltd.

**Drilling Method:** 3.25" Hollow Stem Augers  
**Sampling Method:** Split-Spoon Sampling  
**Hammer Type:** Automatic Hammer  
**Drill Rig Type:** Geoprobe 7822DT  
**Backfill Method:** Auger Cuttings

WATER LEVELS	
▽ During Drilling	9 ft
▼ At Completion	8 ft
▽ After 3 Days	ft

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	USCS Classification	MATERIAL DESCRIPTION	Sample No.	Recovery (inches)	SPT Blows per 6-inch N-values	Hand Penetrometer Qp (tsf)	Unconfined Compressive Strength Qu (tsf)	Vane Shear (Peak) Su (tsf)	Moisture, %	Dry Density (pcf)	STANDARD PENETRATION TEST DATA		
														N in blows/ft	Moisture	
														STRENGTH, tsf		
														▲ Qu	* Qp	
					Surface Elev.: 648.70 ft NAVD 88											
0				AC/AB	4" Bituminous Concrete Pavement 9" Sand and Gravel Base	1						10.0		×		
				CL	Black Silty CLAY Transition Soil, trace fine sand	2	15	2/2/3 N=5				28.5		⊙	×	
645				CL		3	10	2/2/3 N=5				20.3		⊙	×	
	5			SM	Brown Silty SAND, trace gravel											
				CL	Brown Silty CLAY, little sand, trace gravel	4	13	1/2/5 N=7	1.5	2.4		16.2	116.8	⊙	×*	▲
640				CL		5	16	2/2/3 N=5	1.0	1.5		18.6	124.6	⊙	*▲	
	10			CL		6	16	6/11/17 N=28	1.5	2.3		9.4	134.5	×	*	▲
				SW	Brown Coarse to Fine SAND, with gravel, trace silt							8.2		×		
635				SW	-Heaving sand at 12.5 feet	7	15	11/13/14 N=27				13.1		×	⊙	
	15			SW		8	16	5/6/9 N=15				5.9		×	⊙	
630				SW		9	18	15/14/13 N=27				8.8		×	⊙	
	20			SW-SM	Gray Coarse to Fine SAND, little gravel, little silt											
625				SW-SM		10	4	50/4"// N=				10.6		×		
620				SW-SM	Auger Refusal at 29 Feet. Possible Top of Apparent Bedrock Surface.											

**Completion Depth:** 29.0 ft  
**Date Boring Started:** 2/21/20  
**Driller:** GA  
**Checked By:** JS  
**Logged By:** JV

**Sample Types:**  
 Vane Shear  
 Split-Spoon  
 Rock Core  
 Shelby Tube  
 Hand Auger  
 Auger Cutting

**Remarks:** Elevations based on "Topographic Survey - Lily Cache/Drafke Park," by Zeitler Consulting Inc., dated October 16, 2019

The stratification lines represent approximate boundaries. The transition may be gradual.



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# BORING LOG B-2

**Project No.:** 20-0068-151  
**Project:** Lily Cache Path and Bridge  
**Location:** 1112-1116 Quail Run Ave  
 Bolingbrook, Illinois  
**Client:** Upland Design Ltd.

**Drilling Method:** 3.25" Hollow Stem Augers  
**Sampling Method:** Split-Spoon Sampling  
**Hammer Type:** Automatic Hammer  
**Drill Rig Type:** Geoprobe 7822DT  
**Backfill Method:** Auger Cuttings

WATER LEVELS	
▽ During Drilling	11 ft
▼ At Completion	10 ft
▽ After 3 Days	ft

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	USCS Classification	MATERIAL DESCRIPTION	Sample No.	Recovery (inches)	SPT Blows per 6-inch N-values	Hand Penetrometer Qp (tsf)	Unconfined Compressive Strength Qu (tsf)	Vane Shear (Peak) Su (tsf)	Moisture, %	Dry Density (pcf)	STANDARD PENETRATION TEST DATA					
														N in blows/ft					
														STRENGTH, tsf					
														▲ Qu		* Qp			
					Surface Elev.: 648.70 ft NAVD 88														
0				AC/AB	4.5" Bituminous Concrete Pavement 8" Sand and Gravel Base	1						10.4		×					
				FILL	Brown Silty Clay FILL, little sand and coarse gravel	2	1	7/9/8 N=17				9.3		×	○				
645				FILL	Brown and Dark Gray Mottled Silty CLAY, little sand, trace gravel and sandstone pieces	3	2	4/3/3 N=6	0.25			22.7		×	○				
5				CL		4	8	2/2/2 N=4	0.5			11.4		×	○				
640				CL	Gray Silty CLAY, little sand, trace gravel and limestone pieces	5	13	2/6/7 N=13	3.5	5.8		15.0	127.2	×	○				*>
10				CL		6	18	8/10/15 N=25	3.5	5.4		14.1	124.5	×	○				*>
635				SW	Brown Coarse to Fine SAND, with gravel, trace silt -Heaving sand at 12.5 feet	7	18	10/12/16 N=28				13.9		×	○				
15				SW-SM		8	18	13/16/15 N=31				14.9		×	○				
630				SW-SM	Gray Coarse to Fine SAND, little gravel, little silt	9	18	15/17/16 N=33				15.9		×	○				
25				SW-SM		10	4	50/5"/ N=				10.4		×					
620				SW-SM	Auger Refusal at 29 Feet. Possible Top of Apparent Bedrock Surface.														

**Completion Depth:** 29.0 ft  
**Date Boring Started:** 2/21/20  
**Driller:** GA  
**Checked By:** JS  
**Logged By:** JV

**Sample Types:**  
 Vane Shear  
 Split-Spoon  
 Rock Core  
 Shelby Tube  
 Hand Auger  
 Auger Cutting

**Remarks:** Elevations based on "Topographic Survey - Lily Cache/Drafke Park," by Zeitler Consulting Inc., dated October 16, 2019

The stratification lines represent approximate boundaries. The transition may be gradual.



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# BORING LOG B-3

Sheet 1 of 1

**Project No.:** 20-0068-151  
**Project:** Lily Cache Path and Bridge  
**Location:** 1112-1116 Quail Run Ave  
 Bolingbrook, Illinois  
**Client:** Upland Design Ltd.

**Drilling Method:** 3.25" Hollow Stem Augers  
**Sampling Method:** Split-Spoon Sampling  
**Hammer Type:** Automatic Hammer  
**Drill Rig Type:** Geoprobe 7822DT  
**Backfill Method:** Auger Cuttings

WATER LEVELS	
▽ During Drilling	9 ft
▼ At Completion	ft
▽ After 3 Days	ft

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	USCS Classification	MATERIAL DESCRIPTION	Sample No.	Recovery (inches)	SPT Blows per 6-inch N-values	Hand Penetrometer Qp (tsf)	Unconfined Compressive Strength Qu (tsf)	Vane Shear (Peak) Su (tsf)	Moisture, %	Dry Density (pcf)	STANDARD PENETRATION TEST DATA	
														N in blows/ft	Moisture
														STRENGTH, tsf	
														▲ Qu	* Qp
					Surface Elev.: 648.90 ft NAVD 88										
	0			AC/B	3.5" Bituminous Concrete Pavement 8" Sand and Gravel Base	1						3.7		×	
				CL	Black to Olive Gray Silty CLAY Transition Soil, little sand, trace gravel	2		4/4/3 N=7	2.5	2.7		26.3	97.3	○	×
645				CL	Brown and Gray Silty CLAY, little sand, trace limestone pieces	3		2/2/2 N=4	1.0	0.9		19.7	108.2	○	×
	5			SC	Brown Clayey SAND, with gravel	4		6/9/7 N=16				14.4		○	
640				SC	▽										
	10			CL	Gray Silty CLAY, little sand, trace gravel	5		4/2/5 N=7	1.5	2.0		16.9	123.8	○	×
				SW	Brown Coarse to Fine SAND, trace gravel, trace silt	6		6/5/5 N=10				23.9		○	×
635				SW		7		10/12/13 N=25				13.9		○	×
	15				End of Boring at 15 Feet										

**Completion Depth:** 15.0 ft  
**Date Boring Started:** 2/21/20  
**Driller:** GA  
**Checked By:** JS  
**Logged By:** JV

**Sample Types:**  
 Vane Shear  
 Split-Spoon  
 Rock Core  
 Shelby Tube  
 Hand Auger  
 Auger Cutting

**Remarks:** Elevations based on "Topographic Survey - Lily Cache/Drafke Park," by Zeitler Consulting Inc., dated October 16, 2019

The stratification lines represent approximate boundaries. The transition may be gradual.

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		<b>GW</b>	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES		<b>GP</b>	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		(APPRECIABLE AMOUNT OF FINES)		<b>GM</b>	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		<b>SW</b>	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES		<b>SP</b>	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		(APPRECIABLE AMOUNT OF FINES)		<b>SM</b>	SILTY SANDS, SAND - SILT MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		<b>ML</b>	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				<b>CL</b>	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				<b>OL</b>	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		<b>MH</b>	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				<b>CH</b>	INORGANIC CLAYS OF HIGH PLASTICITY
				<b>OH</b>	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
				<b>PT</b>	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS
HIGHLY ORGANIC SOILS				<b>PT</b>	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

## Drilling and Sampling Abbreviations:

### Sample/Drilling:

SS- Split Spoon Sampler  
 ST- Shelby Tube Sampler  
 RC- Rock Core: NX, BX, AX  
 HSA- Hollow Stem Auger

### In-Situ Tests:

SPT-Standard Penetration Test  
 PMT-Pressuremeter Test  
 VS-Vane Shear  
 DCP-Dynamic Cone Penetrometer  
 Q<sub>p</sub>-Estimated Unconfined Compressive Strength using Pocket Penetrometer  
 Q<sub>u</sub>-Estimated Unconfined Compressive Strength using Rimac Tester

## Correlation of Penetration Resistances to Soil Properties:

### Relative Density- Sands, Silts

*More than 50% retained onto the No. 200 sieve*

### Consistency of Cohesive Soils

*More than 50% passing the No. 200 sieve*

<u>SPT-N Value</u>	<u>Relative Density</u>	<u>Unconfined Compressive Strength Q<sub>p</sub>, tsf</u>	<u>Consistency</u>
0-3	Very Loose	under 0.25	Very Soft
4-9	Loose	0.25-0.49	Soft
10-29	Medium Dense	0.50-0.99	Stiff
30-49	Dense	1.00-1.99	Tough
50-80	Very Dense	2.00-3.99	Very Tough
		4.00-8.00	Hard
		over 8.00	Very Hard

## Gradation Description and Terminology:

<u>Major Component of Sample</u>	<u>Size Range</u>	<u>Description of Minor Components</u>	<u>Percent of Dry Weight</u>
Boulders	Over 12 inches	Trace	1-9
Cobbles	12 inches to 3 inches	Little	10-19
Gravel	3 inches to No. 4 sieve	Some	20-34
<i>Coarse</i>	<i>3 inches to ¾ inches</i>	And	35-50
<i>Fine</i>	<i>¾ inches to No. 4 sieve</i>		
Sand	No. 4 sieve to No. 200 sieve		
<i>Coarse</i>	<i>No. 4 sieve to No. 10 sieve</i>		
<i>Medium</i>	<i>No. 10 sieve to No. 40 sieve</i>		
<i>Fine</i>	<i>No. 40 sieve to No. 200 sieve</i>		
Silt/Clay	Passing No. 200 sieve		



**PIONEER**  
Engineering & Environmental Services, LLC



**Bollinger Environmental, Inc.**  
4901 Forest Avenue, Suite C  
Downers Grove, Illinois 60515  
630-968-1960

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**WETLAND/WATERS OF THE U.S. (WOUS) ASSESSMENT REPORT  
BOLINGBROOK PATH SITE - DRAFKE PARK  
VILLAGE OF BOLINGBROOK, WILL COUNTY, ILLINOIS 60490**

Prepared for

Upland Design, Ltd.  
24042 W. Lockport St, Suite 200  
Plainfield, Illinois 60544

Prepared by

Bollinger Environmental, Inc.  
4901 Forest Avenue, Suite C  
Downers Grove, Illinois 60515

Bollinger Environmental Project No. 008-003-19

December 2019





December 31, 2019

**Email**

Ms. Michelle Kelly, PLA  
Upland Design, Ltd.  
24042 W. Lockport St, Suite 200  
Plainfield, Illinois 60544

Subject: Wetland/Waters of the U.S.(WOUS) Assessment of the Bolingbrook Path Site  
Drafke Park, Village of Bolingbrook, Will County, Illinois 60490  
(Bollinger Environmental Project No. 008-003-19)

Dear Ms. Kelly:

On December 23, 2019, Bollinger Environmental, Inc. (BEI) completed a wetland/Waters of the U.S. (WOUS) assessment of the Bolingbrook Path site at Drafke Park in the Village of Bolingbrook, Will County, Illinois 60490. Five (5) wetlands (i.e., Wetlands 1 - 5) and one (1) Waters of the U.S. (i.e., WOUS #1) were located within the project boundary limits. Flags for the wetlands/waters were labeled and numbered as follows:

<u>Area</u>	<u>Flags</u>
Wetland 1	WL 1 through WL 5
WOUS #1	WOUS 1 through WOUS 53 (1 - 32 north bank, 33 - 53 south bank)
Wetland 2	WL 201 through WL 211
Wetland 3	WL 301 through WL 315
Wetland 4	WL 401 through WL 424
Wetland 5	WL 501 through WL 517

Below are general regulations regarding wetlands/waters of the U.S. (WOUS) and any potential wetland/waters of the U.S. impacts should be coordinated with the Village of Bolingbrook (Village), the Will County Land Use Department (County), and the U.S. Army Corps of Engineers (USACE, Chicago District). This determination is the opinion of BEI and, therefore, we recommend confirming wetland boundaries with the USACE.

### **U.S. Army Corps of Engineers Regulations**

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into jurisdictional wetlands and “waters of the U.S.” under Section 404 of the Clean Water Act (Act). Jurisdictional areas covered by the Act are navigable waterways, tributaries to navigable waterways, and wetlands adjacent thereto. Isolated wetlands are exempt from federal regulations following the January 2001 Supreme Court decision (SWANCC v. USACE).

Under current USACE regulations (USACE 2017), to prevent a net loss of wetland, any disturbance of wetlands/waters of the U.S. area requires a permit application. Filling 0.10



acre or more of jurisdictional wetland/waters of the U.S. requires a permit with mitigation at a 1.5:1 replacement ratio. The mitigation ratio increases if an area is considered a High-Quality Aquatic Resource (HQAR). Areas of wetland/waters of the U.S. fill less than 0.10 acre also require a permit; however, mitigation may or may not be required depending on USACE discretion. This discretionary judgment is determined by the overall quality of the wetland and what impact the loss of wetland would have on the surrounding area.

USACE regulations require an upland buffer of native plants adjacent to all created, restored, enhanced and preserved wetlands 0.10 acre or larger. Buffer width requirements are as follows:

- For a linear body of water (e.g., river, stream, creek, etc.), the buffer shall be a minimum of 50 feet from the Ordinary High-Water Mark (OHWM) on both sides of the linear water body.
- For any other “waters of the U.S.”, including wetlands from 0.25 acres up to 0.50 acres, the buffer shall be a minimum of 30 feet.
- For any “waters of the U.S.”, including wetland over 0.50 acres, the buffer shall be minimum of 50 feet.
- For any area determined to be a HQAR, the buffer shall be 100 feet wide (80 foot minimum).

Generally, the following three steps must be attempted before authorization is issued:

- (1) Avoid wetland and “waters of the U.S.”;
- (2) Minimize wetland and “waters of the U.S.” fill; and
- (3) Provide compensatory mitigation.

The attached report describes the identified wetlands and provides the methodology and reference material used to assist in the wetland assessment. U.S. Army Corps of Engineers (USACE) Data Forms are also included. This assessment is based on field conditions at the time of the BEI site visit and our understanding of current federal, state and local regulations. An evaluation of historic site conditions was not performed.

Please contact our office should you have any additional questions or if we can be of further assistance.

Sincerely,

Paul Bollinger, PWS  
President/Ecologist  
BOLLINGER ENVIRONMENTAL, INC.



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**WETLAND/WATERS OF THE U.S. ASSESSMENT REPORT  
BOLINGBROOK PATH SITE  
VILLAGE OF BOLINGBROOK, WILL COUNTY, ILLINOIS 60490**

**INTRODUCTION**

On December 23, 2019, Bollinger Environmental, Inc. (BEI) completed a wetland/Waters of the U.S. (WOUS) assessment of the Bolingbrook Path site at Drafke Park in the Village of Bolingbrook, Will County, Illinois 60490. At the time of our investigation, five (5) wetlands (i.e., Wetlands 1 - 5) and one (1) Waters of the U.S. (i.e., WOUS #1) were located within the project boundary limits. Flags for the wetlands/waters were labeled and numbered as follows:

<u>Area</u>	<u>Flags</u>
Wetland 1	WL 1 through WL 5
WOUS #1	WOUS 1 through WOUS 53 (1 - 32 north bank, 33 - 53 south bank)
Wetland 2	WL 201 through WL 211
Wetland 3	WL 301 through WL 315
Wetland 4	WL 401 through WL 424
Wetland 5	WL 501 through WL 517

This report was prepared to document our findings and to determine if the on-site wetland/waters areas are jurisdictional under Section 404 of the Clean Water Act. Boundaries were delineated in accordance with methodology established by the U.S. Army Corps of Engineers (USACE). The approximate wetland boundaries are shown in Appendix A. Appendices illustrate the following:

- A) Exhibits
  - 1) Location Map
  - 2) Will County Wetland Map
  - 3) USFWS National Wetland Inventory (NWI) Map
  - 4) USDA Soil Survey Map
  - 5) FEMA Flood Insurance Rate Map (FIRM)
  - 6) USGS Topographic Map (10-foot contours)
  - 7) Will Topographic Map (2-foot Contours, 2017)
  - 8) Aerial Photograph - Wetland Boundaries and Data Point Locations
- B) Site Photographs
- C) U.S. Army Corps Data Forms
- D) Floristic Quality Assessments

The project known as the “Bolingbrook Path Site” is located at Drafke Park in the Village of Bolingbrook, Illinois, 60490. The site can also be accessed along Veterans Parkway (S. Washington Street, Naperville Road) approximately 700 feet north of Territorial Drive.



Geographically, the study area is found in the southwestern quarter of Section 17 of Township 37N, Range 10E, and east of the Third Principle Meridian. The property lies within the Lily Cache Creek drainage which is tributary to the DuPage River part of the larger Des Plaines River Watershed (HUC Code 07120004). The central portion of the study area is located approximately at 41.683641° North Latitude and -88.116120° West Longitude.

Wetlands and WOUS identified during this investigation are summarized below:

**Table 1. Wetland/Waters Investigation Summary**

AREA	NATIVE MEAN C	NATIVE FQAI	DOMINANT VEGETATION	TYPE
Wetland 1	3.33	8.16	common reed ( <i>Phragmites australis</i> )	Emergent
Waters of the U.S. #1 (WOUS #1, Lily Cache Creek)	n/a	n/a	unvegetated waters	Open Water Creek
Wetland 2	1.11	3.33	sandbar willow ( <i>Salix interior</i> ), gray dogwood ( <i>Cornus racemosa</i> ), & reed canary grass ( <i>Phalaris arundinacea</i> )	Scrub-Shrub / Emergent
Wetland 3	1.84	8.03	sandbar willow, reed canary grass, & common reed	Scrub-Shrub / Emergent
Wetland 4	2.07	7.75	sandbar willow, reed canary grass, & white avens ( <i>Geum canadense</i> )	Scrub-Shrub / Emergent
Wetland 5	3.25	11.26	reed canary grass, dock-leaf smartweed ( <i>Persicaria lapathifolia</i> ), & Devil's pitchfork ( <i>Bidens frondosa</i> )	Emergent

\*- Jurisdictional Status and boundary verification should be confirmed with the USACE (Chicago District).

## **METHODOLOGY**

Our methodology followed *The Corps of Engineers Wetland Delineation Manual*, dated January 1987 as well as the *Regional supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region*, dated August 2010. Both identify the mandatory technical criteria for wetland identification. The three essential characteristics of a jurisdictional wetland are hydrophytic vegetation, hydric soils and wetland hydrology as described below:

**D) Hydrophytic Vegetation:** Hydrophytic vegetation is defined as the community of macrophytes that occurs in areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to exert a controlling influence on the plant species present. Hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during the growing season. Wetland indicator status is the estimated probability a plant species occurs in a wetland area.



Lichvar (2016) designated indicator statuses for the U.S. Fish and Wildlife Service, Region 3, which are based on separating plants into five basic groups:

- (1) OBL (Obligate Wetland) almost always occur (estimated probability >99%) in wetlands under natural conditions;
- (2) FACW (Facultative Wetland) usually occur in wetlands (estimated probability 67-99%), but occasionally are found in nonwetlands;
- (3) FAC (Facultative) are equally likely to occur in wetlands or nonwetlands (estimated probability 34-66%);
- (4) FACU (Facultative Upland) usually occur in nonwetlands (estimated probability 67-99%), but occasionally are found in wetlands (estimated probability 1-33%); and
- (5) UPL (Upland) almost always occur (estimated probability >99%) in nonwetlands under natural conditions.

If greater than 50% of the plants present are FAC, FACW, or OBL the subject area is considered jurisdictional in terms of vegetation.

Indicator statuses were assigned to plants based on observations on their behavior throughout the region. However, some have been modified to best describe the plants in the Chicago region.

Vegetation was sampled within plots to quantitatively characterize wetland and/or upland plant communities within a given area. Within each plot visual estimates of percent cover of each plant species was made for each stratum (trees, saplings and shrubs, herbaceous plants and woody vines). The Dominance Test is then calculated by applying the 50/20 rule. If a plant community passes the Dominance Test, then the vegetation is hydrophytic and no further vegetative analysis is required. However, if the plant community fails the dominance test, and indicators of hydric soil and/or wetland hydrology are present then the Prevalence Index is applied. The Prevalence Index is a weighted average of wetland indicator status of all plant species within a sample plot. If the plant community satisfies the Prevalence Index, then the vegetation is hydrophytic. If the plant community fails Prevalence Index, then it must meet the test Morphological Adaptations to be considered hydrophytic. If this last test fails, then the vegetation is considered non-hydrophytic. Results of vegetative sampling are illustrated on the attached U.S. Army Corps of Engineers Data Forms.

A vegetative inventory was compiled for the wetland community. The inventory was then inputted into the Chicago Region FQA (*Floristic Quality Assessment*) Calculator (*Herman et. al., 2017*). Each native plant species has been given a coefficient of Conservatism value (C-value), ranging from 0 - 10. Conservatism meaning plants displaying varying degrees of



tolerance to disturbance, as well as varying degrees of fidelity to specific habitat integrity. A rating of 0 represents common species or species not likely to be found only in natural areas and a rating of 10 represents rare species or species most likely to be found only in natural areas. The Floristic Quality Assessment Index (FQAI) was developed in an attempt to evaluate the level of intrinsic biodiversity from areas with similar *C*-values, but otherwise differ significantly. This is accomplished by the following equation:

$$\text{FQAI} = \text{mean } C\text{-value} \sqrt{N}$$

According to Swink and Wilhelm (1994) and Wilhelm and Rericha (2017), if an area has an average *C*-value of 3.5 or higher or an FQAI of 35 or more, one can be fairly confident that the site has sufficient floristic quality to be at least of marginal natural area quality. If the average *C*-value is 4.5 or higher or has an FQAI of 45 or more, then it is almost certain that the remnant has natural area potential. According to the USACE, Chicago District, Regional Permit Program (2017), one of the ways a wetland can be considered a “high quality aquatic resource” if the average *C*-value is 3.5 or greater or if the area has an FQAI is 20 or greater.

**II) Hydric Soils:** According to the National Technical Committee for Hydric Soils a hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA Soil Conservation Service 1994). Repeated periods of saturation or inundation combined with microbial activity causes morphological changes within the soil. This promotes biogeochemical processes, such as the accumulation of organic matter and the reduction, translocation, or accumulation of iron and other reducible elements. The result of these processes is useful in identifying hydric soils during both wet and dry periods (USDA Natural Resources Conservation Service 2019). There are 20 hydric soil indicators in the Land Resource Region (LRR) M per the *Field Indicators of Hydric Soils in the United States* (Ver. 8.2, 2018) and if one is present it is considered a hydric soil. The hydric soil indicators include:

- A1. Histisol
- A2. Histic Epipedon
- A3. Black Histic
- A4. Hydrogen Sulfide
- A5. Stratified Layers
- A10. 2 cm Muck
- A11. Depleted Below A Dark Surface
- A12. Thick Dark Surface
- S1. Sandy Mucky Mineral
- S2. 5 cm Mucky Peat or Peat
- S4. Sandy Gleyed Matrix
- S5. Sandy Redox
- S6. Stripped Matrix
- S7. Dark Surface
- F1. Loamy Mucky Mineral
- F2. Loamy Gleyed Matrix
- F3. Depleted Matrix
- F6. Redox Dark Surface
- F7. Depleted Dark Surface
- F8. Redox Depressions

A soil pit is dug to the appropriate depth to describe the soils profile. Color of the soil matrix and redox, mottling, and gleying within the profile are described using the Munsell Soil Color Charts (Gretagmacbeth 2009). Generally, a hydric soil is present when there is an organic soil, histic epipedon, sulfidic material, aquic or peraquic moisture regime, reducing soils conditions, soil colors gleyed, bright mottles and/or low matrix chroma, soil listed on





the hydric soil list, and iron and manganese. Results of soil sampling and if they meet one of the indicators are illustrated on the attached U.S. Army Corps of Engineers Data Forms.

**III) Wetland Hydrology:** Wetland hydrology indicators are used in combination with indicators of hydric soil and hydrophytic vegetation. These other indicators reflect a sites history of past episodes of inundation or soil saturation and if it was repeated over a period of time. Areas that have hydrophytic vegetation and hydric soils generally have wetland hydrology (National Research Council 1995). Hydrologic indicators are the most brief of all wetland indicators as occur from recent or long-term meteorological conditions. Typically, the presence of water for a week or more during the growing season creates anaerobic conditions. Anaerobic conditions lead to the prevalence of wetland plants.

An area needs to meet one or more of the primary wetland hydrology indicators, which include: surface water, high water table, saturation, water marks, sediment deposits, drift deposits, algal mat or crust, iron deposits, inundation visible on aerial imagery, sparsely vegetated concave surface, water-stained leaves, aquatic fauna, true aquatic plants, hydrogen sulfide odor, oxidized rhizospheres on living roots, presence of reduced iron, recent iron reduction in tilled soils, thin muck surface, and gauge or well data. Or an area needs to meet two or more of the secondary indicators, which include: surface soil cracks, dry-season water table, crayfish burrows, saturation visible on aerial imagery, stunted or stressed plants, geomorphic position and the FAC-Neutral test. Results of hydrology are illustrated on the attached U.S. Army Corps of Engineers Data Forms.

## **RESULTS AND DISCUSSION**

The following is a brief description of the wetland area(s) identified on-site with a list of the dominant plant species, positive wetland hydrology, and soils observed. Detailed information regarding the identified wetland and wetland quality can be found on the attached USACE Data Forms (Appendix C) and Floristic Quality Assessment (Appendix D).

### **Wetland 1**

Wetland 1 is an emergent wetland characterized at Data Point 1A in Appendix A, Exhibit 8. The wetland had a Native Mean C-value of 3.33 and a Native FQAI of 8.16 (Appendix D) indicative of a wetland plant community of low floristic quality. The wetland was dominated by common reed (*Phragmites australis*) at Data Point 1A. Positive wetland hydrology was indicated by the presence of oxidized rhizospheres on living roots, geomorphic position, and a positive FAC-Neutral Test. Soils were mapped as Drummer silty clay loam, 0 to 2% slopes (152A). This soil unit series is included on the *National Hydric Soils List* by the Natural Resources Conservation Service (NRCS). Field sampled soil profiles revealed a low chroma matrix color with redoximorphic features (i.e., mottles) within the soil matrix and soil pore linings which is indicative of hydric soils.



### Waters of the U.S. #1 (WOUS #1, Lily Cache Creek)

WOUS #1 is a unvegetated waters characterized at Data Point 2A in Appendix A, Exhibit 8. Because the feature is unvegetated a plant inventory and floristic quality assessment could not be performed. Positive wetland hydrology was indicated by the presence of surface water, saturation, drainage patterns, and geomorphic position. Soils were mapped as Drummer silty clay loam, 0 to 2% slopes (152A). This soil unit series is included on the *National Hydric Soils List* by the NRCS. Field sampled soil profiles revealed a low chroma, gleyed matrix color which is indicative of hydric soils.

### Wetland 2

Wetland 2 is a scrub-shrub/emergent wetland characterized at Data Point 3A in Appendix A, Exhibit 8. The wetland had a Native Mean C-value of 1.11 and a Native FQAI of 3.33 (Appendix D) indicative of a wetland plant community of low floristic quality. The wetland was dominated by sandbar willow (*Salix interior*), gray dogwood (*Cornus racemosa*), and reed canary grass (*Phalaris arundinacea*) at Data Point 3A. Positive wetland hydrology was indicated by the presence of oxidized rhizospheres on living roots, geomorphic position, and a positive FAC-Neutral Test. Soils were mapped as Drummer silty clay loam, 0 to 2% slopes (152A). This soil unit series is included on the *National Hydric Soils List* by the NRCS. Field sampled soil profiles revealed a low chroma matrix color with redoximorphic features (i.e., mottles) within the soil pore linings which is indicative of hydric soils.

### Wetland 3

Wetland 3 is a scrub-shrub/emergent characterized at Data Point 4A in Appendix A, Exhibit 8. The wetland had a Native Mean C-value of 1.84 and a Native FQAI of 8.03 (Appendix D) indicative of a wetland plant community of low floristic quality. The wetland was dominated by sandbar willow, reed canary grass, and common reed at Data Point 4A. Positive wetland hydrology was indicated by the oxidized rhizospheres on living roots, geomorphic position, and a positive FAC-Neutral Test. Soils were mapped as Drummer silty clay loam, 0 to 2% slopes (152A). This soil unit series is included on the *National Hydric Soils List* by the NRCS. Field sampled soil profiles revealed a low chroma matrix color with redoximorphic features (i.e., mottles) within the soil pore linings which is indicative of hydric soils.





#### Wetland 4

Wetland 4 is a scrub-shrub/emergent characterized at Data Point 5A in Appendix A, Exhibit 8. The wetland had a Native Mean C-value of 2.07 and a Native FQAI of 7.75 (Appendix D) indicative of a wetland plant community of low floristic quality. The wetland was dominated by sandbar willow, reed canary grass, and white avens (*Geum canadense*) at Data Point 5A. Positive wetland hydrology was indicated by the presence of oxidized rhizospheres on living roots, geomorphic position, and a positive FAC-Neutral Test. Soils were mapped as Drummer silty clay loam, 0 to 2% slopes (152A). This soil unit series is included on the *National Hydric Soils List* by the NRCS. Field sampled soil profiles revealed a low chroma matrix color with redoximorphic features (i.e., mottles) within the soil pore linings which is indicative of hydric soils.

#### Wetland 5

Wetland 5 is an emergent wetland characterized at Data Point 6A in Appendix A, Exhibit 8. The wetland had a Native Mean C-value of 3.25 and a Native FQAI of 11.26 (Appendix D) indicative of a wetland plant community of moderate floristic quality. The wetland was dominated by reed canary grass, dock-leaf smartweed (*Persicaria lapathifolia*), and Devil's pitchfork (*Bidens frondosa*) at Data Point 6A. Positive wetland hydrology was indicated by the presence of oxidized rhizospheres on living roots, geomorphic position, and a positive FAC-Neutral Test. Soils were mapped as Drummer silty clay loam, 0 to 2% slopes (152A). This soil unit series is included on the *National Hydric Soils List* by the NRCS. Field sampled soil profiles revealed a low chroma matrix color with redoximorphic features (i.e., mottles) within the soil matrix and soil pore linings which is indicative of hydric soils.

Jurisdictional status and boundary verification should be coordinated with the USACE (Chicago District).



## REFERENCE MATERIAL

The following reference materials were reviewed and used to assist in the wetland field reconnaissance. Exhibits are included in Appendix A.

### LOCATION

The project known as the “Bolingbrook Path Site” is located at Drafke Park in the Village of Bolingbrook, Illinois, 60490. The site can also be accessed along Veterans Parkway (S. Washington Street, Naperville Road) approximately 700 feet north of Territorial Drive. Geographically, the study area is found in the southwestern quarter of Section 17 of Township 37N, Range 10E, and East of the Third Principle Meridian. The property lies within the Lily Cache Creek drainage which is tributary to the DuPage River which flows to the Des Plaines River (HUC Code 07120004). The central portion of the study area is located approximately at 41.683641° North Latitude and -88.116120° West Longitude.

### WILL COUNTY WETLAND MAP

The Will County Wetland Map indicates no wetland/Waters of the U.S. areas are mapped within the project boundaries (Exhibit 2). The Will County Wetland Map serves only as a large-scale guide and actual wetland locations and types often vary from that mapped.

### USFWS NATIONAL WETLAND INVENTORY MAP (NWI)

The U.S. Fish and Wildlife Service National Wetland Inventory map (NWI) indicates two linear wetlands are mapped within the project boundaries (Exhibit 3). One of the wetlands (i.e., R4SBCx) corresponds with Lily Cache Creek that flows through the site from east to west. The other wetland (i.e., R4SBC) corresponds with a small tributary to Lily Cache Creek named the “Naperville Road Tributary” that flows from north to south along the western side of Veterans Parkway (Naperville Road). The NWI serves only as a large-scale guide and actual wetland locations and types often vary from that mapped.

<u>Code</u>	<u>Description</u>
R4SBCx	Riverine, Intermittent, Streambed, Seasonally Flooded, excavated (aka Lily Cache Creek)
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded (aka Naperville Road Tributary)

### USDA SOIL SURVEY MAP

The Soil Survey of Will County, Illinois (Hanson 2004) was reviewed to determine the location of hydric soils within the project boundaries (Exhibit 4). Mapped hydric soils can be indicative of wetland conditions. Two (2) soil unit series are mapped within the property boundaries and are included below. Drummer silty clay loam (152A) is included on the *National Hydric Soils List*.



<u>Code</u>	<u>Description</u>	<u>Hydric Status</u>
152A	Drummer silty clay loam, 0 to 2% slopes	[Hydric]
440B	Jasper loam, 2 to 5% slopes, eroded	

#### FEMA FLOOD INSURANCE RATE MAP (FIRM)

The FEMA Flood Insurance Rate Maps (FIRMs) for Will County, Illinois and Incorporated Areas, (Exhibit 5) were reviewed to determine the presence of floodplain, which can be indicative of wetland hydrology. The FEMA 2019 FIRM (Panel #: 17197C0061G, 2/14/19) indicates that most of the project area is within and the regulatory floodway and *Zone AE (100-year floodplain with a base flood elevation (BFE) determination)*. The BFE at the upstream end of the site is 657' and corresponds with Lily Cache Creek elevational control via culverts running under Veterans Parkway (flow is from east to west). The downstream end of Lily Cache Creek, prior to leaving the project site, is at approximately 653'.

#### TOPOGRAPHIC MAPS

A USGS Topographic Map (5-ft. contours, 1988, Exhibit 6) and a Will County Topographic Map (2-ft. contours, 2014, Exhibit 7) were reviewed to evaluate the project site's topography and general drainage pattern on and off-site. Both maps show the project site drains east to west via Lily Cache Creek across approximately 10 feet of elevational relief (656' to 646'). The highest elevation area located along the creek, east of Veterans Parkway and the lowest near the southwestern corner of the project site.



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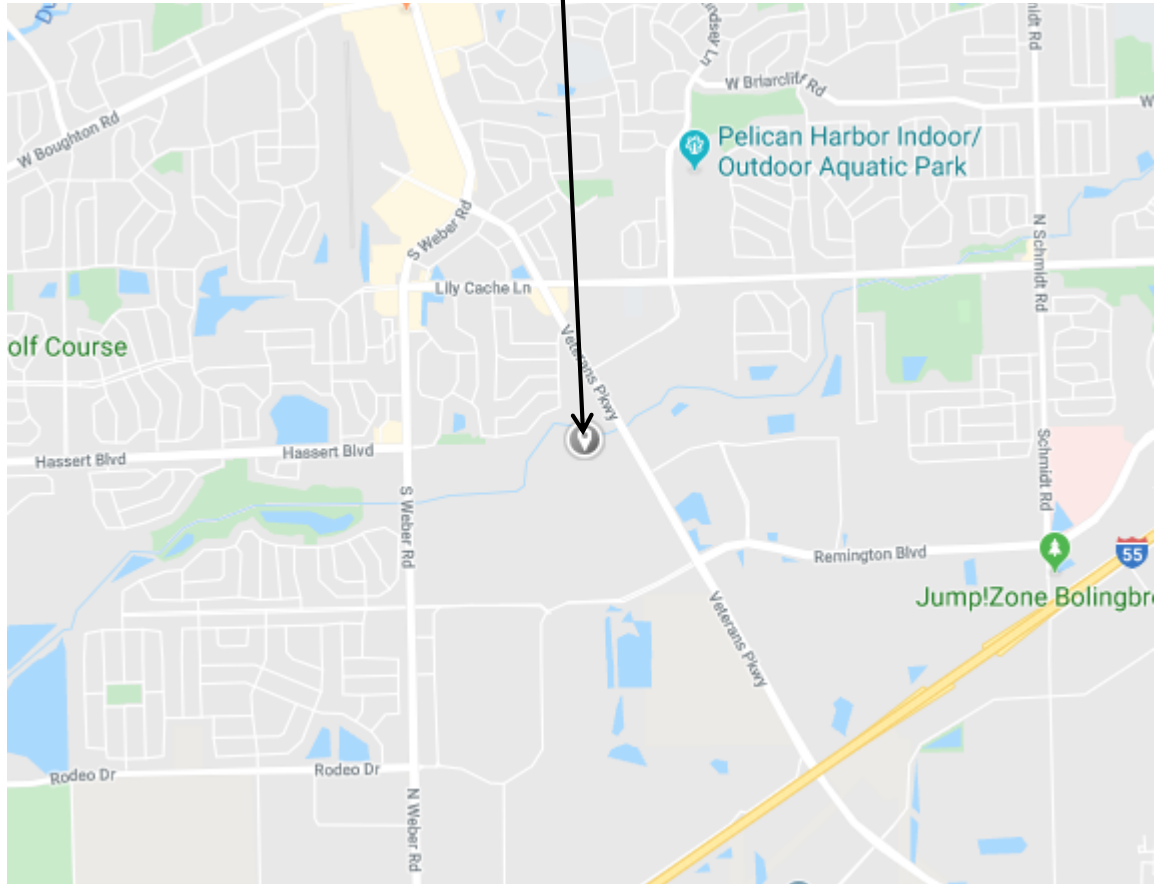
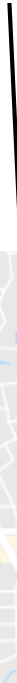
Wilhelm, Gerould & Laura Rericha. 2017. Flora of the Chicago Region: A Floristic and Ecological Synthesis. Indiana Academy of Science. Indianapolis. IN.

**APPENDIX A**

**EXHIBITS**



### Project Location



Source: Google Maps



Title: Location Map  
Project Number: 008-003-19  
Site: BBPD Path Project  
Client: Andrew Upland Design  
Exhibit: 1





Project Location



Source: Will County GIS



Title: Will County Wetland Map  
Project Number: 008-003-19  
Site: BBPD Path Project  
Client: Andrew Upland Design  
Exhibit: 2

N



### Project Location



#### Wetlands

-  Freshwater Emergent
-  Freshwater Forested/Shrub
-  Estuarine and Marine Deepwater
-  Estuarine and Marine
-  Freshwater Pond
-  Lake
-  Riverine
-  Other

Source: USFWS National Wetland Mapper



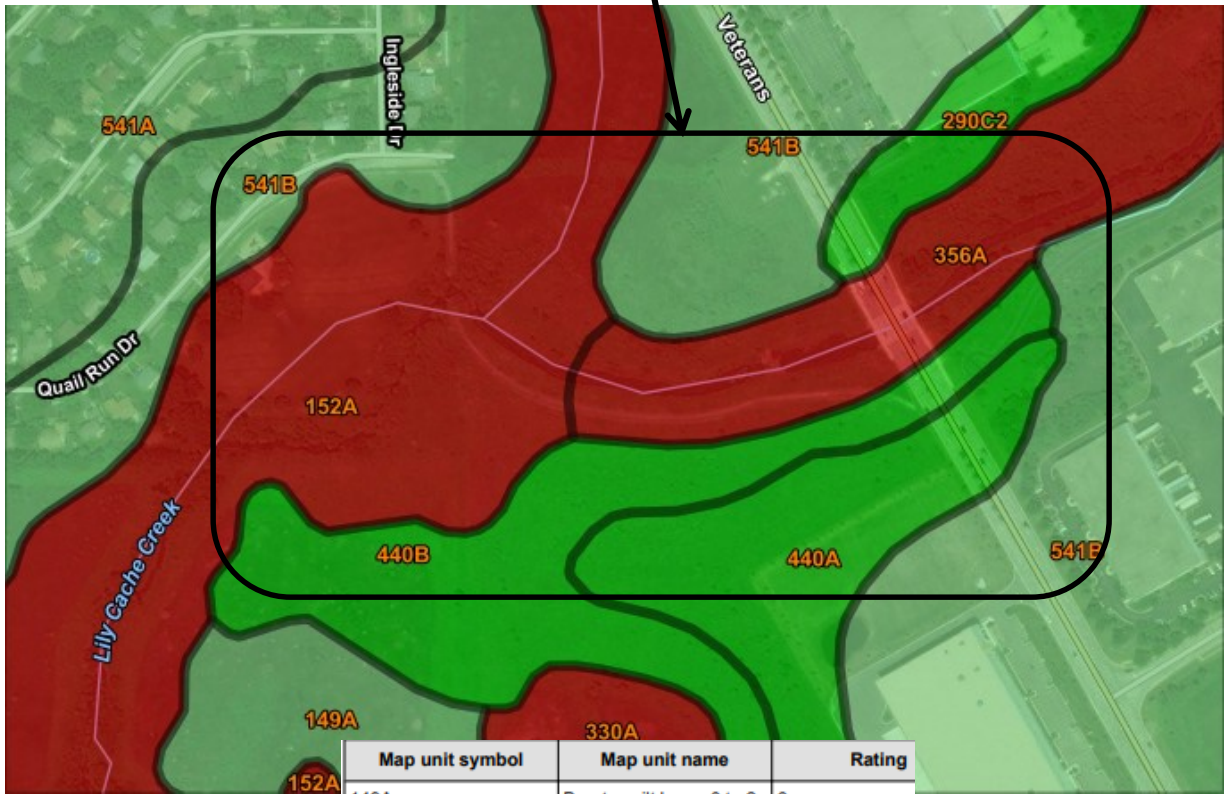
Title: National Wetland Inventory  
Project Number:008-003-19  
Site: BBPD Path Project  
Client: Andrew Upland Design  
Exhibit: 3



N



### Project Location



### LEGEND

#### Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Map unit symbol	Map unit name	Rating
149A	Brenton silt loam, 0 to 2 percent slopes	3
152A	Drummer silty clay loam, 0 to 2 percent slopes	100
290C2	Warsaw silt loam, 4 to 6 percent slopes, eroded	0
330A	Peotone silty clay loam, 0 to 2 percent slopes	100
356A	Elpaso silty clay loam, 0 to 2 percent slopes	100
440A	Jasper loam, 0 to 2 percent slopes	0
440B	Jasper loam, 2 to 5 percent slopes	0
541A	Graymont silt loam, 0 to 2 percent slopes	3
541B	Graymont silt loam, 2 to 5 percent slopes	5

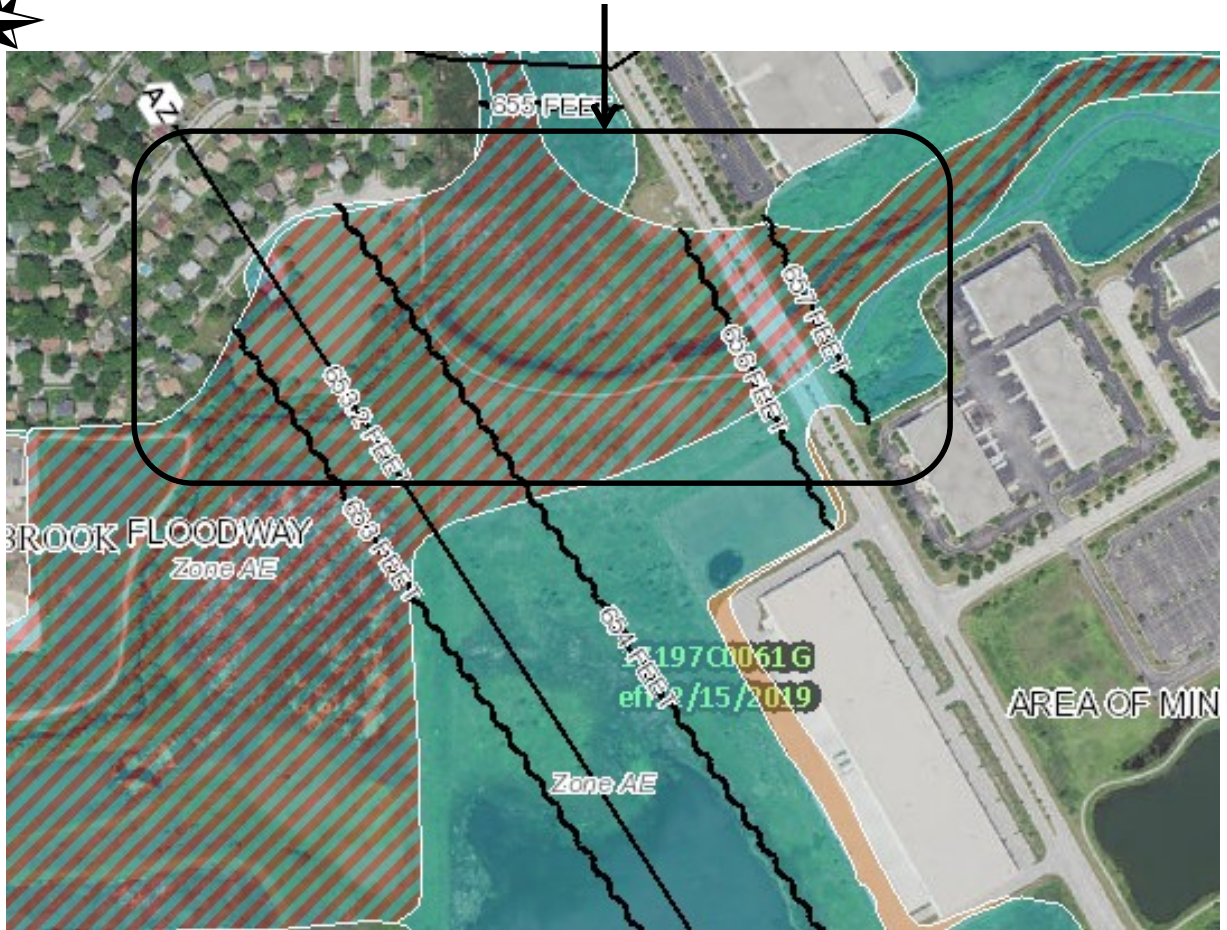
Source: Websoilsurvey.com



Title: USDA Soil Survey  
 Project Number:008-003-19  
 Site: BBPD Path Project  
 Client: Andrew Upland Design  
 Exhibit: 4



### Project Location









Source: FEMA

Panel #17197C0061G  
Effective Date: 2/15/19

### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D



Title: FEMA Map  
Project Number:008-003-19  
Site: BBPD Path Project  
Client: Andrew Upland Design  
Exhibit: 5





Project Location



Source: USGS.gov  
Romeoville Quadrangle, 2018



Title: USGS Topographic Map  
Project Number:008-003-19  
Site: BBPD Path Project  
Client: Andrew Upland Design  
Exhibit: 6



Project Location



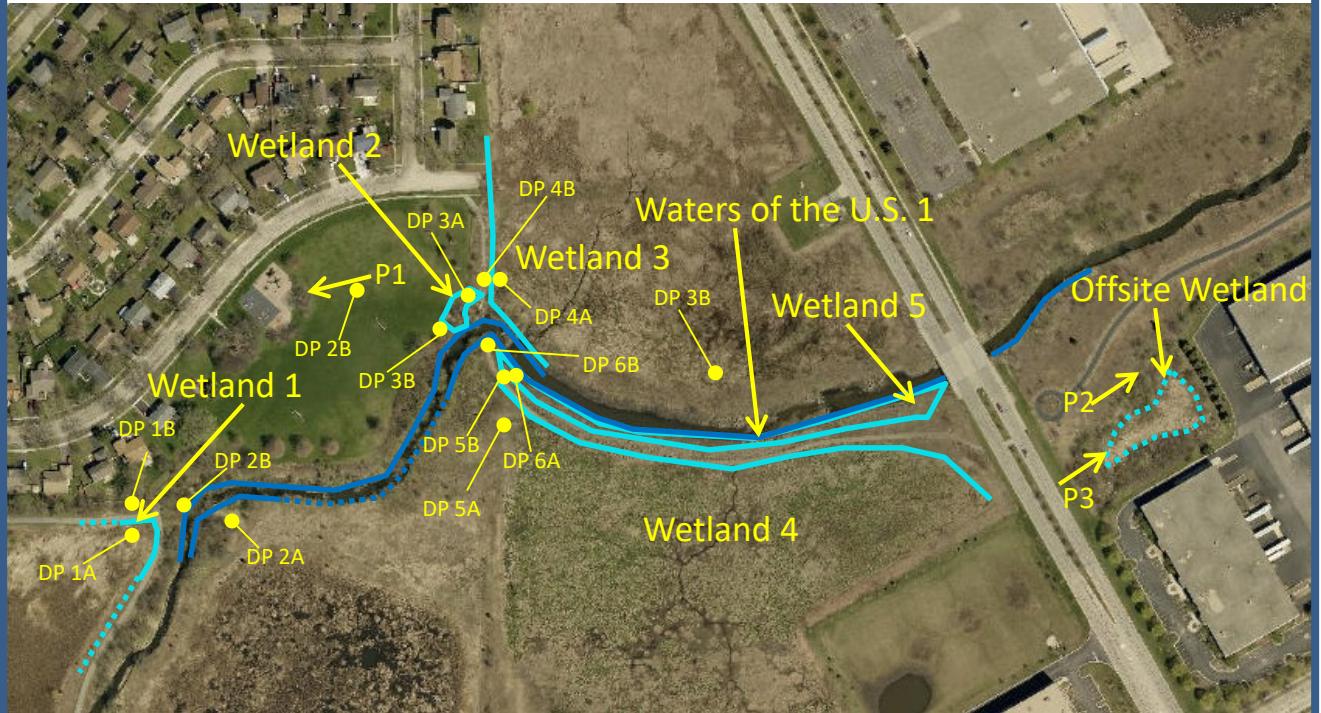
Source: Will County GIS



Title: Will County Contour Map  
Project Number: 008-003-19  
Site: BBPD Path Project  
Client: Andrew Upland Design  
Exhibit: 7



Project Location



Source: Will County GIS

Legend

Data Point Location = **DP 1A**

Flagged Waters of the U.S. Boundary =

Flagged Wetland Boundary =

Approximate Offsite Wetland =

Photo Location = **P1**



Title: Aerial Photograph  
 Project Number: 008-003-19  
 Site: BBPD Path Project  
 Client: Andrew Upland Design  
 Exhibit: 8

**APPENDIX B**  
**SITE PHOTOGRAPHS**





**Data Point 1A (Wetland 1)** facing southwest, December 23, 2019.



**Data Point 1B (Upland)** facing northeast, December 23, 2019.





**Data Point 2A (Waters of the U.S #1, WOUS #1, Lily Cache Creek) facing east, December 23, 2019.**



**Data Point 2B (Upland) facing north, December 23, 2019.**





**Photo Point 1 (P1)** facing west and showing a view of Drafke Park including a playground, manicured turf comprised of Kentucky blue grass (*Poa pratensis*), and ornamental tree plantings, December 23, 2019. Observed tree species include apple (*Malus* sp.), honey locust (*Gleditsia triacanthos*), and little leaved linden (*Tilia cordata*).



**Data Point 3A (Wetland 2)** facing south, December 23, 2019.





**Data Point 3B (Upland)** facing southeast, December 9, 2019.



**Data Point 4A (Wetland 3)** facing northeast, December 23, 2019.





**Data Point 4B (Upland) facing north, December 23, 2019.**



**Data Point 5A (Wetland 4) facing southwest, December 23, 2019.**





**Data Point 5B (Upland)** facing north, December 23, 2019.



**Data Point 6A (Wetland 5)** facing southeast, December 23, 2019.





**Data Point 6B (Upland)** facing north, December 23, 2019.



**Photo Point 2 (P2)** facing northeast and showing an upland area dominated by tall goldenrod (*Solidago altissima*) and Fuller's teasel (*Dipsacus fullonum*) with scattered patches of native grasses including Indian grass (*Sorghastrum nutans*) and big bluestem grass (*Andropogon gerardii*), December 23, 2019.





**Photo Point 3 (P3)** facing northeast and showing an off-site wetland/stormwater detention basin dominated by common reed (*Phragmites australis*), December 23, 2019.

**APPENDIX C**

**U.S. ARMY CORPS DATA FORMS**

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 1A (Wetland 1)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): sloping topography Local relief (concave, convex, none): concave  
 Slope (%): 4 - 6 Lat: 41.682495 Long: -88.118340 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>    </u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>    </u> )			
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
		=Total Cover		
Herb Stratum	(Plot size: <u>    </u> )			
1.	<u>Phragmites australis</u>	90	Yes	FACW
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
		90 =Total Cover		
Woody Vine Stratum	(Plot size: <u>    </u> )			
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
		=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC:     1     (A)  
 Total Number of Dominant Species Across All Strata:     1     (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>    0    </u>	x 1 = <u>    0    </u>
FACW species <u>    90    </u>	x 2 = <u>   180   </u>
FAC species <u>    0    </u>	x 3 = <u>    0    </u>
FACU species <u>    0    </u>	x 4 = <u>    0    </u>
UPL species <u>    0    </u>	x 5 = <u>    0    </u>
Column Totals: <u>    90    </u> (A)	<u>   180   </u> (B)
Prevalence Index = B/A = <u>    2.00    </u>	

**Hydrophytic Vegetation Indicators:**  
     1 - Rapid Test for Hydrophytic Vegetation  
  X   2 - Dominance Test is >50%  
  X   3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)



**SOIL**

Sampling Point: A (Wetland 1)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 4	10YR 2/1	80	10YR 4/2	20	C	M	Loamy/Clayey	Faint redox concentrations silty clay
4 - 20	10YR 2/1	75	10YR 4/2	20	C	M	Loamy/Clayey	Faint redox concentrations silty clay
			7.5YR 3/3	5	C	PL		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<p><b>Hydric Soil Indicators:</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input checked="" type="checkbox"/> Redox Depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> Coast Prairie Redox (A16)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12)</p> <p><input type="checkbox"/> Red Parent Material (F21)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (F22)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p><b>Restrictive Layer (if observed):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>      Yes <input checked="" type="checkbox"/>      No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Water Table Present?      Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Saturation Present?        Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____ (includes capillary fringe)</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 1B (Upland)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): 6 - 10 Lat: 41.682561 Long: -88.118365 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>    </u> (A) Total Number of Dominant Species Across All Strata: <u>    </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>    </u> (A/B)
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
				<u>    </u> = Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>    </u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: <u>    </u> Multiply by: <u>    </u> OBL species <u>    </u> x 1 = <u>    </u> FACW species <u>    </u> x 2 = <u>    </u> FAC species <u>    </u> x 3 = <u>    </u> FACU species <u>    </u> x 4 = <u>    </u> UPL species <u>    </u> x 5 = <u>    </u> Column Totals: <u>    </u> (A) <u>    </u> (B) Prevalence Index = B/A = <u>    </u>
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
				<u>    </u> = Total Cover	
Herb Stratum	(Plot size: <u>    </u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>    </u> 2 - Dominance Test is >50% <u>    </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Solidago altissima</u>	<u>    </u>	<u>    </u>	FACU	
2.	<u>Monarda fistulosa</u>	<u>    </u>	<u>    </u>	FACU	
3.	<u>Symphytotrichum drummondii</u>	<u>    </u>	<u>    </u>	UPL	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
				<u>    </u> = Total Cover	
Woody Vine Stratum	(Plot size: <u>    </u> )				<b>Hydrophytic Vegetation Present?</b> Yes <u>    </u> No <u>X</u>
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
				<u>    </u> = Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)					

**SOIL**

Sampling Point: 1B (Upland)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 20	10YR 3/1						Loamy/Clayey	silty clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 2A (WOUS #1)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): creek channel Local relief (concave, convex, none): concave  
 Slope (%): 0 - 2 Lat: 41.682692 Long: -88.117715 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: R4SBCx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
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Remarks:  
 Waters of the U.S #1 (WOUS #1, Lily Cache Creek) flows from east to west and is approximately 20 feet wide. The substrate consists of rock, broken concrete, and debris. Some riffles present. Depth of surface water was approximately 8 inches.

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>    </u> (A) Total Number of Dominant Species Across All Strata: <u>    </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>    </u> (A/B)
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>    </u> )				
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Prevalence Index worksheet:</b> Total % Cover of: <u>    </u> Multiply by: <u>    </u> OBL species <u>    </u> x 1 = <u>    </u> FACW species <u>    </u> x 2 = <u>    </u> FAC species <u>    </u> x 3 = <u>    </u> FACU species <u>    </u> x 4 = <u>    </u> UPL species <u>    </u> x 5 = <u>    </u> Column Totals: <u>    </u> (A) <u>    </u> (B) Prevalence Index = B/A = <u>    </u>
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		=Total Cover			
Herb Stratum	(Plot size: <u>    </u> )				
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>    </u> 2 - Dominance Test is >50% <u>    </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		=Total Cover			
Woody Vine Stratum	(Plot size: <u>    </u> )				
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>    </u> No <u>X</u>
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		=Total Cover			

Remarks: (Include photo numbers here or on a separate sheet.)  
 Unvegetated Waters

**SOIL**

Sampling Point: 'A (WOUS #1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 6	N 2.5/	100					Loamy/Clayey	gleyed clay w/ sand and pebbles
6 - 7								rock, concrete, debris

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 8  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): 0  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 2B (Upland)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): 45 Lat: 41.682628 Long: -88.117658 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Morus alba</u>	10	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>    1    </u> (A) Total Number of Dominant Species Across All Strata: <u>    2    </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>    50.0%    </u> (A/B)																
2. <u>    </u>																				
3. <u>    </u>																				
4. <u>    </u>																				
5. <u>    </u>																				
	10	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: right;">Multiply by:</td> </tr> <tr> <td>OBL species <u>    0    </u></td> <td>x 1 = <u>    0    </u></td> </tr> <tr> <td>FACW species <u>    0    </u></td> <td>x 2 = <u>    0    </u></td> </tr> <tr> <td>FAC species <u>    10    </u></td> <td>x 3 = <u>    30    </u></td> </tr> <tr> <td>FACU species <u>    90    </u></td> <td>x 4 = <u>    360    </u></td> </tr> <tr> <td>UPL species <u>    0    </u></td> <td>x 5 = <u>    0    </u></td> </tr> <tr> <td>Column Totals: <u>    100    </u> (A)</td> <td><u>    390    </u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>    3.90    </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>    0    </u>	x 1 = <u>    0    </u>	FACW species <u>    0    </u>	x 2 = <u>    0    </u>	FAC species <u>    10    </u>	x 3 = <u>    30    </u>	FACU species <u>    90    </u>	x 4 = <u>    360    </u>	UPL species <u>    0    </u>	x 5 = <u>    0    </u>	Column Totals: <u>    100    </u> (A)	<u>    390    </u> (B)	Prevalence Index = B/A = <u>    3.90    </u>	
Total % Cover of:	Multiply by:																			
OBL species <u>    0    </u>	x 1 = <u>    0    </u>																			
FACW species <u>    0    </u>	x 2 = <u>    0    </u>																			
FAC species <u>    10    </u>	x 3 = <u>    30    </u>																			
FACU species <u>    90    </u>	x 4 = <u>    360    </u>																			
UPL species <u>    0    </u>	x 5 = <u>    0    </u>																			
Column Totals: <u>    100    </u> (A)	<u>    390    </u> (B)																			
Prevalence Index = B/A = <u>    3.90    </u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>    </u>)</b>																				
1. <u>Lonicera tatarica</u>	90	Yes	FACU																	
2. <u>    </u>																				
3. <u>    </u>																				
4. <u>    </u>																				
5. <u>    </u>																				
	90	=Total Cover																		
<b>Herb Stratum (Plot size: <u>    </u>)</b>																				
1. <u>    </u>																				
2. <u>    </u>																				
3. <u>    </u>																				
4. <u>    </u>																				
5. <u>    </u>																				
6. <u>    </u>																				
7. <u>    </u>																				
8. <u>    </u>																				
9. <u>    </u>																				
10. <u>    </u>																				
		=Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>    </u>)</b>																				
1. <u>    </u>																				
2. <u>    </u>																				
		=Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																				

**Hydrophytic Vegetation Indicators:**  
     1 - Rapid Test for Hydrophytic Vegetation  
     2 - Dominance Test is >50%  
     3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes      No X

**SOIL**

Sampling Point: 2B (Upland)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 3/1	100					Loamy/Clayey	silty clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, ltd. State: IL Sampling Point: 3A (Wetland 2)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): concave  
 Slope (%): 0 - 1 Lat: 41.683437 Long: -88.116196 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>    </u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>    </u>	=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>    </u> )				
1.	<u>Salix interior</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	
2.	<u>Cornus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>30</u>	=Total Cover		
Herb Stratum	(Plot size: <u>    </u> )				
1.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>100</u>	=Total Cover		
Woody Vine Stratum	(Plot size: <u>    </u> )				
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>    </u>	=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>120</u>	x 2 = <u>240</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>130</u> (A)	<u>270</u> (B)
Prevalence Index = B/A = <u>2.08</u>	

**Hydrophytic Vegetation Indicators:**  
     1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No     

Remarks: (Include photo numbers here or on a separate sheet.)

**SOIL**

Sampling Point: iA (Wetland 2)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 2/1	90	2.5Y 3/3	10	C	PL	Loamy/Clayey	Distinct redox concentrations silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<p><b>Hydric Soil Indicators:</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> Coast Prairie Redox (A16)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12)</p> <p><input type="checkbox"/> Red Parent Material (F21)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (F22)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p><b>Restrictive Layer (if observed):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>      Yes <input checked="" type="checkbox"/>      No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
---	--

<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Water Table Present?      Yes <input type="checkbox"/>      No <input checked="" type="checkbox"/>      Depth (inches): _____</p> <p>Saturation Present?        Yes <input type="checkbox"/>        No <input checked="" type="checkbox"/>        Depth (inches): _____ (includes capillary fringe)</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 3B (Upland)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none  
 Slope (%): 0 - 1 Lat: 41.683402 Long: -88.116341 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>    </u>	=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>    </u> )				
1.	<u>Salix interior</u>	<u>80</u>	<u>Yes</u>	<u>FACW</u>	
2.	<u>Lonicera tatarica</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>90</u>	=Total Cover		
Herb Stratum	(Plot size: <u>    </u> )				
1.	<u>Bromus inermis</u>	<u>80</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>80</u>	=Total Cover		
Woody Vine Stratum	(Plot size: <u>    </u> )				
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		<u>    </u>	=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 2 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>80</u>	x 2 = <u>160</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>90</u>	x 4 = <u>360</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>170</u> (A)	<u>520</u> (B)
Prevalence Index = B/A = <u>3.06</u>	

**Hydrophytic Vegetation Indicators:**  
     1 - Rapid Test for Hydrophytic Vegetation  
     2 - Dominance Test is >50%  
     3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u>
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Remarks: (Include photo numbers here or on a separate sheet.)

**SOIL**

Sampling Point: 3B (Upland)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 2/1	100					Loamy/Clayey	silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<p><b>Hydric Soil Indicators:</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> Coast Prairie Redox (A16)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12)</p> <p><input type="checkbox"/> Red Parent Material (F21)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (F22)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p><b>Restrictive Layer (if observed):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>      Yes <input type="checkbox"/>      No <input checked="" type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Water Table Present?      Yes <input type="checkbox"/>      No <input checked="" type="checkbox"/>      Depth (inches): _____</p> <p>Saturation Present?        Yes <input type="checkbox"/>        No <input checked="" type="checkbox"/>        Depth (inches): _____ (includes capillary fringe)</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 4A (Wetland 3)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): concave  
 Slope (%): 0 - 1 Lat: 41.683786 Long: -88.115870 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>    </u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>    3    </u> (A) Total Number of Dominant Species Across All Strata: <u>    3    </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>    </u> = Total Cover																																					
Sapling/Shrub Stratum	(Plot size: <u>    </u> )				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: right;">Multiply by:</td> <td></td> <td></td> </tr> <tr> <td>OBL species <u>    0    </u></td> <td>x 1 =</td> <td><u>    0    </u></td> <td></td> </tr> <tr> <td>FACW species <u>120</u></td> <td>x 2 =</td> <td><u>240</u></td> <td></td> </tr> <tr> <td>FAC species <u>    0    </u></td> <td>x 3 =</td> <td><u>    0    </u></td> <td></td> </tr> <tr> <td>FACU species <u>    0    </u></td> <td>x 4 =</td> <td><u>    0    </u></td> <td></td> </tr> <tr> <td>UPL species <u>    0    </u></td> <td>x 5 =</td> <td><u>    0    </u></td> <td></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td></td> <td><u>240</u> (B)</td> <td></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td><u>2.00</u></td> <td></td> </tr> </table>	Total % Cover of:	Multiply by:			OBL species <u>    0    </u>	x 1 =	<u>    0    </u>		FACW species <u>120</u>	x 2 =	<u>240</u>		FAC species <u>    0    </u>	x 3 =	<u>    0    </u>		FACU species <u>    0    </u>	x 4 =	<u>    0    </u>		UPL species <u>    0    </u>	x 5 =	<u>    0    </u>		Column Totals: <u>120</u> (A)		<u>240</u> (B)		Prevalence Index = B/A =		<u>2.00</u>	
Total % Cover of:	Multiply by:																																				
OBL species <u>    0    </u>	x 1 =	<u>    0    </u>																																			
FACW species <u>120</u>	x 2 =	<u>240</u>																																			
FAC species <u>    0    </u>	x 3 =	<u>    0    </u>																																			
FACU species <u>    0    </u>	x 4 =	<u>    0    </u>																																			
UPL species <u>    0    </u>	x 5 =	<u>    0    </u>																																			
Column Totals: <u>120</u> (A)		<u>240</u> (B)																																			
Prevalence Index = B/A =		<u>2.00</u>																																			
1.	<u>Salix interior</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																																	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>10</u> = Total Cover																																					
Herb Stratum	(Plot size: <u>    </u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u>Phalaris arundinacea</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>																																	
2.	<u>Phragmites australis</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>																																	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>110</u> = Total Cover																																					
Woody Vine Stratum	(Plot size: <u>    </u> )				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>    </u>																																
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>    </u> = Total Cover																																					
Remarks: (Include photo numbers here or on a separate sheet.)																																					

**SOIL**

Sampling Point: A (Wetland 3)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 2/1	85	2.5YR 3/3	15	C	PL	Loamy/Clayey	Prominent redox concentrations silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<p><b>Hydric Soil Indicators:</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> Coast Prairie Redox (A16)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12)</p> <p><input type="checkbox"/> Red Parent Material (F21)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (F22)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p><b>Restrictive Layer (if observed):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>      Yes <input checked="" type="checkbox"/>      No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Water Table Present?      Yes <input type="checkbox"/>      No <input checked="" type="checkbox"/>      Depth (inches): _____</p> <p>Saturation Present?        Yes <input type="checkbox"/>        No <input checked="" type="checkbox"/>        Depth (inches): _____ (includes capillary fringe)</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 4B (Upland)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): 30 Lat: 41.683800 Long: -88.115931 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1.	_____	_____	_____	_____	
2.	_____	_____	_____	_____	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
5.	_____	_____	_____	_____	
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: _____)				
1.	<u>Salix interior</u>	20	Yes	FACW	
2.	_____	_____	_____	_____	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
5.	_____	_____	_____	_____	
		20 =Total Cover			
Herb Stratum	(Plot size: _____)				
1.	<u>Poa pratensis</u>	30	Yes	FAC	
2.	<u>Dipsacus fullonum</u>	10	Yes	FACU	
3.	<u>Phragmites australis</u>	10	Yes	FACW	
4.	<u>Phalaris arundinacea</u>	10	Yes	FACW	
5.	<u>Schizachyrium scoparium</u>	10	Yes	FACU	
6.	_____	_____	_____	_____	
7.	_____	_____	_____	_____	
8.	_____	_____	_____	_____	
9.	_____	_____	_____	_____	
10.	_____	_____	_____	_____	
		70 =Total Cover			
Woody Vine Stratum	(Plot size: _____)				
1.	_____	_____	_____	_____	
2.	_____	_____	_____	_____	
		=Total Cover			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>40</u>	x 2 = <u>80</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>20</u>	x 4 = <u>80</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>90</u> (A)	<u>250</u> (B)
Prevalence Index = B/A = <u>2.78</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

     3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)



**SOIL**

Sampling Point: 4B (Upland)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 2/1	100					Loamy/Clayey	silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, ltd. State: IL Sampling Point: 5A (Wetland 4)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): concave  
 Slope (%): 0 - 1 Lat: 41.683262 Long: -88.115981 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>    </u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>    2    </u> (A) Total Number of Dominant Species Across All Strata: <u>    2    </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>    </u> = Total Cover																																					
Sapling/Shrub Stratum	(Plot size: <u>    </u> )				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: center;"><u>    </u></td> <td style="text-align: right;">Multiply by:</td> <td style="text-align: center;"><u>    </u></td> </tr> <tr> <td>OBL species</td> <td style="text-align: center;"><u>    0    </u></td> <td>x 1 =</td> <td style="text-align: center;"><u>    0    </u></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;"><u>   135   </u></td> <td>x 2 =</td> <td style="text-align: center;"><u>   270   </u></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;"><u>    10    </u></td> <td>x 3 =</td> <td style="text-align: center;"><u>    30    </u></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;"><u>    0    </u></td> <td>x 4 =</td> <td style="text-align: center;"><u>    0    </u></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;"><u>    0    </u></td> <td>x 5 =</td> <td style="text-align: center;"><u>    0    </u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;"><u>   145   </u> (A)</td> <td></td> <td style="text-align: center;"><u>   300   </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td colspan="2" style="text-align: center;"><u>   2.07   </u></td> </tr> </table>	Total % Cover of:	<u>    </u>	Multiply by:	<u>    </u>	OBL species	<u>    0    </u>	x 1 =	<u>    0    </u>	FACW species	<u>   135   </u>	x 2 =	<u>   270   </u>	FAC species	<u>    10    </u>	x 3 =	<u>    30    </u>	FACU species	<u>    0    </u>	x 4 =	<u>    0    </u>	UPL species	<u>    0    </u>	x 5 =	<u>    0    </u>	Column Totals:	<u>   145   </u> (A)		<u>   300   </u> (B)	Prevalence Index = B/A =		<u>   2.07   </u>	
Total % Cover of:	<u>    </u>	Multiply by:	<u>    </u>																																		
OBL species	<u>    0    </u>	x 1 =	<u>    0    </u>																																		
FACW species	<u>   135   </u>	x 2 =	<u>   270   </u>																																		
FAC species	<u>    10    </u>	x 3 =	<u>    30    </u>																																		
FACU species	<u>    0    </u>	x 4 =	<u>    0    </u>																																		
UPL species	<u>    0    </u>	x 5 =	<u>    0    </u>																																		
Column Totals:	<u>   145   </u> (A)		<u>   300   </u> (B)																																		
Prevalence Index = B/A =		<u>   2.07   </u>																																			
1.	<u>Salix interior</u>	<u>   60   </u>	<u>Yes</u>	<u>FACW</u>																																	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>   60   </u> = Total Cover																																					
Herb Stratum	(Plot size: <u>    </u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  X  </u> 2 - Dominance Test is >50% <u>  X  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u>Phalaris arundinacea</u>	<u>   75   </u>	<u>Yes</u>	<u>FACW</u>																																	
2.	<u>Geum canadense</u>	<u>   10   </u>	<u>No</u>	<u>FAC</u>																																	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>   85   </u> = Total Cover																																					
Woody Vine Stratum	(Plot size: <u>    </u> )				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>    </u>																																
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																	
<u>    </u> = Total Cover																																					
Remarks: (Include photo numbers here or on a separate sheet.)																																					

**SOIL**

Sampling Point: iA (Wetland 4)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 2/1	85	2.5YR 3/3	15	C	PL	Loamy/Clayey	Prominent redox concentrations silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 5B (Upland)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none  
 Slope (%): 0 - 1 Lat: 41.683334 Long: -88.115913 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
=Total Cover				
Sapling/Shrub Stratum (Plot size: <u>    </u> )				
1. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
=Total Cover				
Herb Stratum (Plot size: <u>    </u> )				
1. <u>Daucus carota</u>	20	Yes	UPL	
2. <u>Solidago altissima</u>	20	Yes	FACU	
3. <u>Phalaris arundinacea</u>	20	Yes	FACW	
4. <u>Pastinaca sativa</u>	20	Yes	UPL	
5. <u>Penstemon digitalis</u>	3	No	FAC	
6. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
7. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
8. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
9. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
10. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
83 =Total Cover				
Woody Vine Stratum (Plot size: <u>    </u> )				
1. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2. <u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
=Total Cover				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC:     1     (A)  
 Total Number of Dominant Species Across All Strata:     4     (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC:     25.0%     (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>    0    </u>	x 1 = <u>    0    </u>
FACW species <u>    20    </u>	x 2 = <u>    40    </u>
FAC species <u>    3    </u>	x 3 = <u>    9    </u>
FACU species <u>    20    </u>	x 4 = <u>    80    </u>
UPL species <u>    40    </u>	x 5 = <u>    200    </u>
Column Totals: <u>    83    </u> (A)	<u>    329    </u> (B)
Prevalence Index = B/A = <u>    3.96    </u>	

**Hydrophytic Vegetation Indicators:**  
     1 - Rapid Test for Hydrophytic Vegetation  
     2 - Dominance Test is >50%  
     3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes      No X

Remarks: (Include photo numbers here or on a separate sheet.)

**SOIL**

Sampling Point: 5B (Upland)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 6	10YR 2/1	100					Loamy/Clayey	silty clay loam
6 - 16	10YR 2/1	80					Loamy/Clayey	mixed clay & rocks
	10YR 6/8	20						(possible historic fill material)

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 6A (Wetland 5)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): slight slope Local relief (concave, convex, none): concave  
 Slope (%): 4 - 6 Lat: 41.683310 Long: -88.115809 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>    </u>
Remarks: Wetland bordering Lily Cache Creek (WOUS #1).	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>    </u> )				
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		=Total Cover			
Herb Stratum	(Plot size: <u>    </u> )				
1.	<u>Phalaris arundinacea</u>	40	Yes	FACW	
2.	<u>Persicaria lapathifolia</u>	30	Yes	FACW	
3.	<u>Bidens frondosa</u>	30	Yes	FACW	
4.	<u>Chenopodium album</u>	5	No	FACU	
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		105	=Total Cover		
Woody Vine Stratum	(Plot size: <u>    </u> )				
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	
		=Total Cover			

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC:     3     (A)  
 Total Number of Dominant Species Across All Strata:     3     (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>    0    </u>	x 1 = <u>    0    </u>
FACW species <u>   100   </u>	x 2 = <u>   200   </u>
FAC species <u>    0    </u>	x 3 = <u>    0    </u>
FACU species <u>    5    </u>	x 4 = <u>   20   </u>
UPL species <u>    0    </u>	x 5 = <u>    0    </u>
Column Totals: <u>   105   </u> (A)	<u>   220   </u> (B)
Prevalence Index = B/A = <u>   2.10   </u>	

**Hydrophytic Vegetation Indicators:**  
     1 - Rapid Test for Hydrophytic Vegetation  
  X   2 - Dominance Test is >50%  
  X   3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No     

Remarks: (Include photo numbers here or on a separate sheet.)

**SOIL**

Sampling Point: iA (Wetland 5)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	10YR 3/1	65	2.5YR 3/4	35	C	PL/M	Loamy/Clayey	Prominent redox concentrations silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bolingbrook Path Site City/County: Bolingbrook / Will Sampling Date: 12/23/2019  
 Applicant/Owner: upland Design, Ltd. State: IL Sampling Point: 6B (Upland)  
 Investigator(s): Paul Bollinger (BEI) Section, Township, Range: SW 1/4 Sec. 17, T37N, R10E, & east of 3rd P.M.  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none  
 Slope (%): 0 - 1 Lat: 41.683381 Long: -88.115877 Datum: n/a  
 Soil Map Unit Name: Drummer silty clay loam, 0 to 2% slopes (152A) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes x No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>    </u> )	Absolute % Cover	Dominant Species?	Indicator Status																																		
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>    1    </u> (A) Total Number of Dominant Species Across All Strata: <u>    5    </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>    20.0%    </u> (A/B)																																	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
		<u>    </u> =Total Cover																																				
Sapling/Shrub Stratum	(Plot size: <u>    </u> )																																					
1.	<u>Salix interior</u>	20	Yes	FACW	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td></td> <td style="text-align: right;">Multiply by:</td> <td></td> </tr> <tr> <td>OBL species</td> <td style="text-align: center;"><u>    0    </u></td> <td>x 1 =</td> <td style="text-align: center;"><u>    0    </u></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;"><u>    20    </u></td> <td>x 2 =</td> <td style="text-align: center;"><u>    40    </u></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;"><u>    0    </u></td> <td>x 3 =</td> <td style="text-align: center;"><u>    0    </u></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;"><u>    60    </u></td> <td>x 4 =</td> <td style="text-align: center;"><u>    240    </u></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;"><u>    20    </u></td> <td>x 5 =</td> <td style="text-align: center;"><u>    100    </u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;"><u>    100    </u> (A)</td> <td></td> <td style="text-align: center;"><u>    380    </u> (B)</td> </tr> <tr> <td colspan="2"></td> <td colspan="2" style="text-align: center;">Prevalence Index = B/A =</td> <td style="text-align: center;"><u>    3.80    </u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>    0    </u>	x 1 =	<u>    0    </u>	FACW species	<u>    20    </u>	x 2 =	<u>    40    </u>	FAC species	<u>    0    </u>	x 3 =	<u>    0    </u>	FACU species	<u>    60    </u>	x 4 =	<u>    240    </u>	UPL species	<u>    20    </u>	x 5 =	<u>    100    </u>	Column Totals:	<u>    100    </u> (A)		<u>    380    </u> (B)			Prevalence Index = B/A =		<u>    3.80    </u>
Total % Cover of:		Multiply by:																																				
OBL species	<u>    0    </u>	x 1 =	<u>    0    </u>																																			
FACW species	<u>    20    </u>	x 2 =	<u>    40    </u>																																			
FAC species	<u>    0    </u>	x 3 =	<u>    0    </u>																																			
FACU species	<u>    60    </u>	x 4 =	<u>    240    </u>																																			
UPL species	<u>    20    </u>	x 5 =	<u>    100    </u>																																			
Column Totals:	<u>    100    </u> (A)		<u>    380    </u> (B)																																			
		Prevalence Index = B/A =		<u>    3.80    </u>																																		
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
3.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
4.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
		<u>    20    </u> =Total Cover																																				
Herb Stratum	(Plot size: <u>    </u> )																																					
1.	<u>Daucus carota</u>	20	Yes	UPL	<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>    </u> 2 - Dominance Test is >50% <u>    </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																	
2.	<u>Monarda fistulosa</u>	20	Yes	FACU																																		
3.	<u>Schedonorus pratensis</u>	20	Yes	FACU																																		
4.	<u>Trifolium repens</u>	20	Yes	FACU																																		
5.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
6.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
7.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
8.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
9.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
10.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
		<u>    80    </u> =Total Cover																																				
Woody Vine Stratum	(Plot size: <u>    </u> )																																					
1.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>    </u> No <u>X</u>																																	
2.	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>																																		
		<u>    </u> =Total Cover																																				
Remarks: (Include photo numbers here or on a separate sheet.)																																						



**SOIL**

Sampling Point: 6B (Upland)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 3/1	100					Loamy/Clayey	silty clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**APPENDIX D**  
**FLORISTIC QUALITY ASSESSMENTS**

**SITE:** Bolingbrook Path Site  
**LOCALE:** Wetland 1  
**BY:** Paul Bollinger (BEI)  
**NOTES:** 12/23/2019

CONSERVATISM-BASED METRICS		ADDITIONAL METRICS	
MEAN C (NATIVE SPECIES)	3.33	SPECIES RICHNESS (ALL)	8
MEAN C (ALL SPECIES)	2.50	SPECIES RICHNESS (NATIVE)	6
MEAN C (NATIVE TREES)	5.00	% NON-NATIVE	0.25
MEAN C (NATIVE SHRUBS)	n/a	WET INDICATOR (ALL)	-0.63
MEAN C (NATIVE HERBACEOUS)	3.00	WET INDICATOR (NATIVE)	-0.67
FOAI (NATIVE SPECIES)	8.16	% HYDROPHYTE (MIDWEST)	0.75
FOAI (ALL SPECIES)	7.07	% NATIVE PERENNIAL	0.63
ADJUSTED FOAI	28.87	% NATIVE ANNUAL	0.13
% C VALUE 0	0.25	% ANNUAL	0.13
% C VALUE 1-3	0.38	% PERENNIAL	0.75
% C VALUE 4-6	0.38		
% C VALUE 7-10	0.00		

SPECIES ACRONYM	SPECIES NAME (NW/PL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR			HABIT	DURATION	NATIVITY
					WET	NC-NE WET INDICATOR	WET INDICATOR (NUMERIC)			
barvul	Barbarea vulgaris	BARBAREA VULGARIS	Garden Yellow-Rocket	0	FAC	FAC	0	Forb	Biennial	Adventive
epicol	Epilobium coloratum	Epilobium coloratum	Purple-Leaf Willowherb	3	OBL	OBL	-2	Forb	Perennial	Native
impcap	Impatiens capensis	Impatiens capensis	Spotted Touch-Me-Not	3	FACW	FACW	-1	Forb	Annual	Native
monfis	Monarda fistulosa	Monarda fistulosa	Oswego-Tea	4	FACU	FACU	1	Forb	Perennial	Native
phrausu	Phragmites australis ssp. australis	PHRAGMITES AUSTRALIS	Common Reed	0	FACW	FACW	-1	Grass	Perennial	Adventive
salnig	Salix nigra	Salix nigra	Black Willow	5	OBL	OBL	-2	Tree	Perennial	Native
solalt	Solidago altissima	Solidago altissima	Tall Goldenrod	1	FACU	FACU	1	Forb	Perennial	Native
solgig	Solidago gigantea	Solidago gigantea	Late Goldenrod	4	FACW	FACW	-1	Forb	Perennial	Native

**SITE:** Bolingbrook Path Site  
**LOCALE:** Wetland 2  
**BY:** Paul Bollinger (BEI)  
**NOTES:** 12/23/2019

CONSERVATISM-BASED METRICS		ADDITIONAL METRICS	
MEAN C (NATIVE SPECIES)	1.11	SPECIES RICHNESS (ALL)	11
MEAN C (ALL SPECIES)	0.91	SPECIES RICHNESS (NATIVE)	9
MEAN C (NATIVE TREES)	0.00	% NON-NATIVE	0.18
MEAN C (NATIVE SHRUBS)	1.00	WET INDICATOR (ALL)	-0.09
MEAN C (NATIVE HERBACEOUS)	1.00	WET INDICATOR (NATIVE)	0.00
FOAI (NATIVE SPECIES)	3.33	% HYDROPHYTE (MIDWEST)	0.82
FOAI (ALL SPECIES)	3.02	% NATIVE PERENNIAL	0.82
ADJUSTED FOAI	10.05	% NATIVE ANNUAL	0.00
% C VALUE 0	0.36	% ANNUAL	0.00
% C VALUE 1-3	0.64	% PERENNIAL	1.00
% C VALUE 4-6	0.00		
% C VALUE 7-10	0.00		

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST		WET		HABIT	DURATION	NATIVITY
					WET INDICATOR	NC-NE WET INDICATOR	WET INDICATOR (NUMERIC)				
aceneg	Acer negundo	Acer negundo var. violaceum	Ash-Leaf Maple	0	FAC	FAC	0	0	Tree	Perennial	Native
corrac	Cornus racemosa	Cornus racemosa	Gray Dogwood	1	FAC	FAC	0	0	Shrub	Perennial	Native
falsca	Fallopia scandens	Polygonum scandens; Fallopia cristata	Climbing Black-Bindweed	3	FAC	FAC	0	0	Vine	Perennial	Native
geucan	Geum canadense	Geum canadense	White Avens	1	FAC	FAC	0	0	Forb	Perennial	Native
phaaru	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	FACW	-1	-1	Grass	Perennial	Adventive
rhacat	Rhamnus cathartica	RHAMNUS CATHARTICA	European Buckthorn	0	FAC	FAC	0	0	Shrub	Perennial	Adventive
rubocc	Rubus occidentalis	Rubus occidentalis	Black Raspberry	0	UPL	UPL	2	2	Shrub	Perennial	Native
salint	Salix interior	Salix interior	Sandbar Willow	2	FACW	FACW	-1	-1	Shrub	Perennial	Native
solalt	Solidago altissima	Solidago altissima	Tall Goldenrod	1	FACU	FACU	1	1	Forb	Perennial	Native
urtpro	Urtica dioica ssp. gracilis	Urtica procera; Urtica gracilis	Tall Nettle	1	FACW	FAC	-1	-1	Forb	Perennial	Native
vitrip	Vitis riparia	Vitis riparia var. syrticola	River-Bank Grape	1	FACW	FAC	-1	-1	Vine	Perennial	Native

**SITE:** Bolingbrook Path Site  
**LOCALE:** Wetland 3  
**BY:** Paul Bollinger (BEI)  
**NOTES:** 12/23/2019

CONSERVATISM-BASED METRICS		ADDITIONAL METRICS	
MEAN C (NATIVE SPECIES)	1.84	SPECIES RICHNESS (ALL)	28
MEAN C (ALL SPECIES)	1.25	SPECIES RICHNESS (NATIVE)	19
MEAN C (NATIVE TREES)	1.00	% NON-NATIVE	0.32
MEAN C (NATIVE SHRUBS)	1.50	WET INDICATOR (ALL)	-0.50
MEAN C (NATIVE HERBACEOUS)	1.94	WET INDICATOR (NATIVE)	-0.58
FOAI (NATIVE SPECIES)	8.03	% HYDROPHYTE (MIDWEST)	0.79
FOAI (ALL SPECIES)	6.61	% NATIVE PERENNIAL	0.57
ADJUSTED FOAI	15.17	% NATIVE ANNUAL	0.07
% C VALUE 0	0.50	% ANNUAL	0.11
% C VALUE 1-3	0.36	% PERENNIAL	0.79
% C VALUE 4-6	0.14		
% C VALUE 7-10	0.00		

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR		WET INDICATOR (NUMERIC)		HABIT	DURATION	NATIVITY
					INDICATOR	NC-NE	INDICATOR	WET			
acesai	Acer saccharinum	Acer saccharinum	Silver Maple	1	FACW	FACW	-1	Tree	Perennial	Native	
alisub	Alisma subcordatum	Alisma subcordatum	American Water-Plantain	3	OBL	OBL	-2	Forb	Perennial	Native	
amaret	Amaranthus retroflexus	AMARANTHUS RETROFLEXUS	Red-Root	0	FACU	FACU	1	Forb	Annual	Adventive	
andger	Andropogon gerardii	Andropogon gerardii	Big Bluestem	5	FAC	FACU	0	Grass	Perennial	Native	
ascinc	Asclepias incarnata	Asclepias incarnata	Swamp Milkweed	3	OBL	OBL	-2	Forb	Perennial	Native	
barvul	Barbarea vulgaris	BARBAREA VULGARIS	Garden Yellow-Rocket	0	FAC	FAC	0	Forb	Biennial	Adventive	
cxvulp	Carex vulpinoidea	Carex vulpinoidea	Common Fox Sedge	2	FACW	OBL	-1	Sedge	Perennial	Native	
corrac	Cornus racemosa	Cornus racemosa	Gray Dogwood	1	FAC	FAC	0	Shrub	Perennial	Native	
cypesc	Cyperus esculentus	Cyperus esculentus	Chufa	0	FACW	FACW	-1	Sedge	Perennial	Native	
dipsyl	Dipsacus fullonum	DIPSACUS SYLVESTRIS	Fuller's Teasel	0	FACU	FACU	1	Forb	Biennial	Adventive	
eleery	Eleocharis palustris	Eleocharis erythropoda; Eleocharis palustris major; Eleocharis smallii; Eleocharis xyridiformis; Eleocharis macrostachya	Common Spike-Rush	1	OBL	OBL	-2	Sedge	Perennial	Native	
epicol	Epilobium coloratum	Epilobium coloratum	Purple-Leaf Willowherb	3	OBL	OBL	-2	Forb	Perennial	Native	
eupser	Eupatorium serotinum	Eupatorium serotinum	Late-Flowering Thoroughwort	0	FAC	FAC	0	Forb	Perennial	Native	
geucan	Geum canadense	Geum canadense	White Avens	1	FAC	FAC	0	Forb	Perennial	Native	
lytsal	Lythrum salicaria	LYTHRUM SALICARIA	Purple Loosestrife	0	OBL	OBL	-2	Forb	Perennial	Adventive	
monfis	Monarda fistulosa	Monarda fistulosa	Oswego-Tea	4	FACU	FACU	1	Forb	Perennial	Native	
oenbie	Oenothera biennis	Oenothera biennis	King's-Cureall	0	FACU	FACU	1	Forb	Biennial	Native	
pendig	Penstemon digitalis	Penstemon digitalis	Foxglove Beardtongue	4	FAC	FAC	0	Forb	Perennial	Native	
pollap	Persicaria lapathifolia	Polygonum lapathifolium; POLYGONUM SCABRUM	Dock-Leaf Smartweed	0	FACW	FACW	-1	Forb	Annual	Native	
phaaru	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	FACW	-1	Grass	Perennial	Adventive	
phrausu	Phragmites australis ssp. australis	PHRAGMITES AUSTRALIS	Common Reed	0	FACW	FACW	-1	Grass	Perennial	Adventive	
poapra	Poa pratensis	POA PRATENSIS	Kentucky Blue Grass	0	FAC	FACU	0	Grass	Perennial	Adventive	
salint	Salix interior	Salix interior	Sandbar Willow	2	FACW	FACW	-1	Shrub	Perennial	Native	
erehie	Senecio hieracifolius	Erechtites hieracifolia	American Burnweed	0	FAC	FACU	0	Forb	Annual	Native	
solcar	Solanum carolinense	SOLANUM CAROLINENSE	Carolina Horse-Nettle	0	FACU	FACU	1	Forb	Perennial	Adventive	
solalt	Solidago altissima	Solidago altissima	Tall Goldenrod	1	FACU	FACU	1	Forb	Perennial	Native	
typang	Typha angustifolia	TYPHA ANGUSTIFOLIA	Narrow-Leaf Cat-Tail	0	OBL	OBL	-2	Forb	Perennial	Adventive	
verhas	Verbena hastata	Verbena hastata	Simpler's-Joy	4	FACW	FACW	-1	Forb	Perennial	Native	

**SITE:** Bolingbrook Path Site  
**LOCALE:** Wetland 4  
**BY:** Paul Bollinger (BEI)  
**NOTES:** 12/23/2019

CONSERVATISM-BASED METRICS		ADDITIONAL METRICS	
MEAN C (NATIVE SPECIES)	2.07	SPECIES RICHNESS (ALL)	21
MEAN C (ALL SPECIES)	1.38	SPECIES RICHNESS (NATIVE)	14
MEAN C (NATIVE TREES)	0.50	% NON-NATIVE	0.33
MEAN C (NATIVE SHRUBS)	1.50	WET INDICATOR (ALL)	-0.62
MEAN C (NATIVE HERBACEOUS)	2.67	WET INDICATOR (NATIVE)	-0.79
FOAI (NATIVE SPECIES)	7.75	% HYDROPHYTE (MIDWEST)	0.86
FOAI (ALL SPECIES)	6.33	% NATIVE PERENNIAL	0.57
ADJUSTED FOAI	16.91	% NATIVE ANNUAL	0.10
% C VALUE 0	0.43	% ANNUAL	0.10
% C VALUE 1-3	0.43	% PERENNIAL	0.86
% C VALUE 4-6	0.14		
% C VALUE 7-10	0.00		

SPECIES ACRONYM	SPECIES NAME (NWPL/MOHLERBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST		WET		HABIT	DURATION	NATIVITY
					WET INDICATOR	NC-NE WET INDICATOR	WET INDICATOR (NUMERIC)				
aceneg	Acer negundo	Acer negundo var. violaceum	Ash-Leaf Maple	0	FAC	FAC	0	0	Tree	Perennial	Native
acesai	Acer saccharinum	Acer saccharinum	Silver Maple	1	FACW	FACW	-1	-1	Tree	Perennial	Native
cxstri	Carex stricta	Carex stricta	Uptight Sedge	5	OBL	OBL	-2	-2	Sedge	Perennial	Native
corrac	Cornus racemosa	Cornus racemosa	Gray Dogwood	1	FAC	FAC	0	0	Shrub	Perennial	Native
dipsyl	Dipsacus fullonum	DIPSACUS SYLVESTRIS	Fuller's Teasel	0	FACU	FACU	1	1	Forb	Biennial	Adventive
elyvir	Elymus virginicus	Elymus virginicus	Virginia Wild Rye	3	FACW	FACW	-1	-1	Grass	Perennial	Native
geucan	Geum canadense	Geum canadense	White Avens	1	FAC	FAC	0	0	Forb	Perennial	Native
glehed	Glechoma hederacea	GLECHOMA HEDERACEA	Groundivy	0	FACU	FACU	1	1	Forb	Perennial	Adventive
helgro	Helianthus grosseserratus	Helianthus grosseserratus	Saw-Tooth Sunflower	4	FACW	FACW	-1	-1	Forb	Perennial	Native
impcap	Impatiens capensis	Impatiens capensis	Spotted Touch-Me-Not	3	FACW	FACW	-1	-1	Forb	Annual	Native
lytsal	Lythrum salicaria	LYTHRUM SALICARIA	Purple Loosestrife	0	OBL	OBL	-2	-2	Forb	Perennial	Adventive
morarb	Morus alba	MORUS ALBA VAR. TATARICA	White Mulberry	0	FAC	FACU	0	0	Tree	Perennial	Adventive
panvir	Panicum virgatum	Panicum virgatum	Wand Panic Grass	3	FAC	FAC	0	0	Grass	Perennial	Native
pollap	Persicaria lapathifolia	Polygonum lapathifolium; POLYGONUM SCABRUM	Dock-Leaf Smartweed	0	FACW	FACW	-1	-1	Forb	Annual	Native
phaaru	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	FACW	-1	-1	Grass	Perennial	Adventive
rosmul	Rosa multiflora	ROSA MULTIFLORA	Rambler Rose	0	FACU	FACU	1	1	Shrub	Perennial	Adventive
salint	Salix interior	Salix interior	Sandbar Willow	2	FACW	FACW	-1	-1	Shrub	Perennial	Native
spapec	Spartina pectinata	Spartina pectinata	Freshwater Cord Grass	4	FACW	FACW	-1	-1	Grass	Perennial	Native
typang	Typha angustifolia	TYPHA ANGUSTIFOLIA	Narrow-Leaf Cat-Tail	0	OBL	OBL	-2	-2	Forb	Perennial	Adventive
urtpro	Urtica dioica ssp. gracilis	Urtica procera; Urtica gracilis	Tall Nettle	1	FACW	FAC	-1	-1	Forb	Perennial	Native
vitrip	Vitis riparia	Vitis riparia var. syrticola	River-Bank Grape	1	FACW	FAC	-1	-1	Vine	Perennial	Native

**SITE:** Bolingbrook Path Site  
**LOCALE:** Wetland 5  
**BY:** Paul Bollinger (BEI)  
**NOTES:** 12/23/2019

CONSERVATISM-BASED METRICS		ADDITIONAL METRICS	
MEAN C (NATIVE SPECIES)	3.25	SPECIES RICHNESS (ALL)	19
MEAN C (ALL SPECIES)	2.05	SPECIES RICHNESS (NATIVE)	12
MEAN C (NATIVE TREES)	n/a	% NON-NATIVE	0.37
MEAN C (NATIVE SHRUBS)	1.00	WET INDICATOR (ALL)	-0.63
MEAN C (NATIVE HERBACEOUS)	3.30	WET INDICATOR (NATIVE)	-0.67
FQAI (NATIVE SPECIES)	11.26	% HYDROPHYTE (MIDWEST)	0.79
FQAI (ALL SPECIES)	8.95	% NATIVE PERENNIAL	0.42
ADJUSTED FQAI	25.83	% NATIVE ANNUAL	0.16
% C VALUE 0	0.47	% ANNUAL	0.26
% C VALUE 1-3	0.21	% PERENNIAL	0.68
% C VALUE 4-6	0.26		
% C VALUE 7-10	0.05		

SPECIES ACRONYM	SPECIES NAME (NWPL/MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	NC-NE WET INDICATOR	WET INDICATOR (NUMERIC)	HABIT	DURATION	NATIVITY
bidfro	Bidens frondosa	Bidens frondosa	Devil's-Pitchfork	1	FACW	FACW	-1	Forb	Annual	Native
cxstri	Carex stricta	Carex stricta	Uptight Sedge	5	OBL	OBL	-2	Sedge	Perennial	Native
chealb	Chenopodium album	CHENOPODIUM ALBUM; missouriense	Lamb's-Quarters	0	FACU	FACU	1	Forb	Annual	Adventive
corrac	Cornus racemosa	Cornus racemosa	Gray Dogwood	1	FAC	FAC	0	Shrub	Perennial	Native
cusgro	Cuscuta gronovii	Cuscuta gronovii	Common Dodder	5	UPL	UPL	2	Vine	Annual	Native
helgro	Helianthus	Helianthus grosseserratus	Saw-Tooth Sunflower	4	FACW	FACW	-1	Forb	Perennial	Native
leeroy	Leersia oryzoides	Leersia oryzoides	Rice Cut Grass	3	OBL	OBL	-2	Grass	Perennial	Native
lytsal	Lythrum salicaria	LYTHRUM SALICARIA	Purple Loosestrife	0	OBL	OBL	-2	Forb	Perennial	Adventive
oenble	Oenothera biennis	Oenothera biennis	King's-Cureall	0	FACU	FACU	1	Forb	Biennial	Native
panvir	Panicum virgatum	Panicum virgatum	Wand Panic Grass	3	FAC	FAC	0	Grass	Perennial	Native
peramp	Persicaria amphibia	Polygonum coccineum; Polygonum amphibium stipulaceum	Water Smartweed	4	OBL	OBL	-2	Forb	Perennial	Native
pollap	Persicaria lapathifolia	Polygonum lapathifolium; POLYGONUM SCABRUM	Dock-Leaf Smartweed	0	FACW	FACW	-1	Forb	Annual	Native
phaaru	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	FACW	-1	Grass	Perennial	Adventive
phrausu	Phragmites australis ssp. australis	PHRAGMITES AUSTRALIS	Common Reed	0	FACW	FACW	-1	Grass	Perennial	Adventive
rumcri	Rumex crispus	RUMEX CRISPUS	Curly Dock	0	FAC	FAC	0	Forb	Perennial	Adventive
senheb	Senna hebecarpa	Cassia hebecarpa	American Wild Sensitive.	9	FACW	FACW	-1	Forb	Perennial	Native
setfab	Setaria faberi	SETARIA FABERI	Japanese Bristle Grass	0	FACU	FACU	1	Grass	Annual	Adventive
spapec	Spartina pectinata	Spartina pectinata	Freshwater Cord Grass	4	FACW	FACW	-1	Grass	Perennial	Native
typang	Typha angustifolia	TYPHA ANGUSTIFOLIA	Narrow-Leaf Cat-Tail	0	OBL	OBL	-2	Forb	Perennial	Adventive



# Document A310™ – 2010

## Bid Bond

Bond Number: N/A

### CONTRACTOR:

*(Name, legal status and address)*

Integral Construction, Inc.  
320 Rocbaar Drive  
Romeoville IL 60446

### SURETY:

*(Name, legal status and principal place of business)*

Western Surety Company  
151 N. Franklin St.  
Chicago IL 60606

### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

### OWNER:

*(Name, legal status and address)*

Bolingbrook Park District  
301 Recreation Drive  
Bolingbrook IL

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

**BOND AMOUNT:** \$ Ten Percent of the Amount Bid

### PROJECT:

*(Name, location or address, and Project number, if any)*

Weber Path & Lily Cache Path and Bridge Improvements

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.



Signed and sealed this 29th day of April, 2021

Lisa C. Munn  
(Witness)

Quinn Stewart  
(Witness)

Integral Construction, Inc.  
(Contractor as Principal) (Seal)  
[Signature]  
(Title)

Western Surety Company  
(Surety) (Seal)  
[Signature]  
(Title) Laura Schindler, Attorney-In-Fact




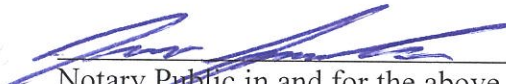
*Surety Company Acknowledgment*

STATE OF Wisconsin  
COUNTY OF Waukesha

SS:

On this 29<sup>th</sup> day of April 2021, before me personally appeared Laura Schindler, to me known, who, being by me duly sworn, did depose and say: that he/she resides at **Waukesha, Wisconsin**, that he/she is the **Attorney in Fact of the Western Surety Company**, the corporation described in and which executed the annexed instrument; that he/she knows the corporate seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; that he/she signed his/her name thereto by like order, and that the liabilities of said corporation do not exceed its assets as ascertained in the manner provided by law.



  
\_\_\_\_\_  
Notary Public in and for the above County and State

My Commission Expires: 12/09/2023

# Western Surety Company

## POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Todd Looker, Joseph L Vigna, Elizabeth M Fedyn, Dennis M Barton, Robert E Flath, Laura Schindler, Individually**

of Milwaukee, WI, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

**- In Unlimited Amounts -**

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 16th day of September, 2020.



WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

State of South Dakota }  
County of Minnehaha } ss

On this 16th day of September, 2020, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires  
June 23, 2021



J. Mohr, Notary Public

### CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 29th day of April, 2021.



WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

**Authorizing By-Law**

**ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY**

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.



Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
<b>Vendor: 11059 - Access One, Inc.</b>					
05/01/2021	4950917	Telephone Services-ACC	100-101-101-1010-70000	Telephone Service	187.04
05/01/2021	4950917	Fiber Network-Admin	100-101-101-1010-70200	Remote Communication Lines	2,899.20
05/01/2021	4950917	Seat License-Admin	100-101-101-1010-70200	Remote Communication Lines	35.28
05/01/2021	4950917	Telephone Services-BG NR	100-170-101-1010-70000	Telephone Service	124.52
05/01/2021	4950917	Fiber Network-BG NR	100-170-101-1010-70200	Remote Communication Lines	408.01
05/01/2021	4950917	Telephone Services-BG NR	100-171-101-1010-70000	Telephone Service	124.52
05/01/2021	4950917	Fiber Network-BG NR	100-171-101-1010-70200	Remote Communication Lines	408.01
05/01/2021	4950917	Telephone Services-ACC	200-102-101-2000-70000	Telephone Service-ACC	187.04
05/01/2021	4950917	Telephone Services-BRAC	200-102-101-2020-70000	Telephone Service-BRAC	145.66
05/01/2021	4950917	FiberNetwork-BRAC	200-102-101-2020-70200	Remote Communication Lines-BRAC	1,269.52
05/01/2021	4950917	Telephone Services - BRAC	200-250-308-5800-70000	Telephone Service	72.83
05/01/2021	4950917	Telephone Services-BRAC	200-251-290-6000-70000	Telephone Service	72.83
05/01/2021	4950917	Telephone Services-Oaks	300-300-308-9000-70000	Telephone Services-Oaks	233.61
05/01/2021	4950917	Fiber Network-Oaks	300-300-308-9000-70200	Remote Communication Lines	898.62
05/01/2021	4950917	Telephone Services- Lakes	300-305-308-9100-70000	Telephone Services-Lakes	58.81
05/01/2021	4950917	Telephone Services-Ash	400-475-475-5540-70000	Telephone Service-Ashbury's at BR	437.95
05/01/2021	4950917	FiberNetwork Ash	400-475-475-5540-70200	Remote Communication Lines-Ashbury's at BR	816.02
<b>Vendor 11059 - Access One, Inc. Total:</b>					<b>8,379.47</b>
<b>Vendor: 11649 - Action Flag Co.</b>					
04/19/2021	32565	Flags - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	812.95
<b>Vendor 11649 - Action Flag Co. Total:</b>					<b>812.95</b>
<b>Vendor: 10014 - Action Printing</b>					
04/12/2021	13344	April/May Newsletter Printing	100-101-101-1010-67600	Brochure-General Services	633.00
04/12/2021	13344	April/May Newsletter Printing	200-102-101-1010-67600	Brochure-Recreation Services	3,109.69
04/12/2021	13344	April/May Newsletter Printing	200-250-308-5800-67600	Brochure-Aquatics	685.00
04/12/2021	13344	April/May Newsletter Printing	200-251-290-6000-67600	Brochure-Fitness	316.00
04/12/2021	13344	April/May Newsletter Printing	300-300-308-9000-67600	Brochure-Oaks	369.00
04/12/2021	13344	April/May Newsletter Printing	400-475-480-5540-67600	Brochure-Ashbury's at BR	158.00
<b>Vendor 10014 - Action Printing Total:</b>					<b>5,270.69</b>
<b>Vendor: 10158 - Advance Auto Parts</b>					
04/12/2021	2377-820074	Tool for 221 Loader - Grounds & NRHT	100-171-101-1010-65300	Equipment Maintenance & Repairs	399.47
04/12/2021	2377-820074	Tool for 221 Loader - Grounds & NRHT	100-172-101-1010-65300	Equipment Maintenance & Repairs	399.47
04/19/2021	2377-821171	Rec 7 Parts - Grounds & NRHT	100-171-101-1010-65210	Vehicle Repairs & Service-Rec	22.99
04/19/2021	2377-821171	Trailer #1 Lamp - Grounds & NRHT	100-172-101-1010-65300	Equipment Maintenance & Repairs	23.78
04/05/2021	2377-819020	Oil Filters - Grounds	100-171-101-1010-65200	Vehicle Repairs & Service-Grounds	37.68
04/08/2021	2377-819515	Equipment Parts - Grounds	100-171-101-1010-64000	Equipment	45.04
04/09/2021	2377-819672	Trailer #11 Parts - Grounds	100-171-101-1010-65300	Equipment Maintenance & Repairs	83.83
<b>Vendor 10158 - Advance Auto Parts Total:</b>					<b>1,012.26</b>
<b>Vendor: 11405 - Advanced Turf Solutions, Inc.</b>					
03/30/2021	SO907085	Growth Regulator - Grounds	100-171-101-1010-63120	Materials-Athletic Fields	121.50
04/28/2021	SO917534	Specticle Total	100-171-101-1010-63120	Materials-Athletic Fields	510.00
04/28/2021	SO917534	Specticle G	100-171-101-1010-63120	Materials-Athletic Fields	420.00
04/05/2021	SO909179	Herbicide - NRHT	100-172-101-1010-63160	Materials-Natural Areas	359.00
<b>Vendor 11405 - Advanced Turf Solutions, Inc. Total:</b>					<b>1,410.50</b>

## Expense Approval Report

Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
<b>Vendor: 10020 - Airgas USA, LLC</b>					
03/31/2021	9978468128	Oxygen for Pool	200-250-308-5700-63210	Supplies-First Aid	104.66
04/12/2021	9112022772	Argon & Oxygen - Grounds	100-171-101-1010-63190	Fuel Purchases	269.22
04/12/2021	9112022772	Welding Helmet - Grounds	100-171-101-1010-64300	Safety Equipment	128.51
<b>Vendor 10020 - Airgas USA, LLC Total:</b>					<b>502.39</b>
<b>Vendor: 10033 - Alpha Graphics</b>					
04/14/2021	102661	Century Park OSLAD Project Sign	600-600-650-9610-76256	CARP-Century Park-Park Design Project (OSLAD)	252.40
<b>Vendor 10033 - Alpha Graphics Total:</b>					<b>252.40</b>
<b>Vendor: 10038 - Amazon</b>					
03/10/2021	657974953873	Archery Arm Guards	300-300-249-6495-63200	Supplies-Outdoor Recreation	23.98
03/10/2021	846695948975	AED Red Bag	200-250-308-5700-63200	Supplies-Lifeguard	37.99
03/10/2021	934536958453	Rep-Cal with Vitamin D	300-300-308-9000-63110	Supplies-Animal	16.63
03/14/2021	788436734533	Oaks Archery Supplies	300-300-249-6495-63200	Supplies-Outdoor Recreation	15.99
03/15/2021	569955894696	Counterfeit Money Checker	100-101-101-1010-63070	Computer Supplies	169.00
03/16/2021	468633794786	Replacement Power Adapter-AshTV	100-101-101-1010-63070	Computer Supplies	12.99
03/19/2021	799994947877	Zip Locks and Forks	200-250-308-5800-63000	Supplies -General	13.52
03/19/2021	993478953733	No Firearms Signs - Grounds	100-171-101-1010-63130	Materials-Park	77.70
03/22/2021	446363349494	Binoculars - Oaks Supplies	300-300-252-6520-63200	Supplies-EE	39.96
03/22/2021	446363349494	Ziploc Storage Bags - Oaks Supplies	300-300-252-6520-63200	Supplies-EE	9.71
03/22/2021	446363349494	Magnifying Glasses - Oaks Supplies	300-300-252-6520-63200	Supplies-EE	8.99
03/22/2021	446363349494	Tweezers - Oaks Supplies	300-300-252-6520-63200	Supplies-EE	6.96
03/22/2021	446363349494	Macro Lens - Oaks Supplies	300-300-252-6520-63200	Supplies-EE	13.99
03/22/2021	446363349494	Clipboards - Oaks Supplies	300-300-252-6520-63200	Supplies-EE	12.99
03/22/2021	446363349494	Lysol Wipes - Oaks Supplies	300-300-252-6520-63200	Supplies-EE	7.32
03/22/2021	994386989654	Hidden Lakes Supplies - Credit Card/Register Tape	300-305-308-9100-63050	Office Supplies	18.95
03/25/2021	597758546647	Volunteer Supplies - Trash Pickers	300-300-308-9000-64500	Equipment-Oaks	189.90
03/26/2021	976894596353	No Firearms Signs - Grounds	100-171-101-1010-63130	Materials-Park	51.80
03/27/2021	438486669345	Oaks Supplies - Thermal Laminating Pouches	300-300-308-9000-63050	Office Supplies	9.22
03/30/2021	456845883767	B&G Wash Bay Pressure Washer - Buildings	100-170-101-1010-65100	Maintenance & Repairs - B&G	171.88
03/31/2021	435687446388	Bag for Mannikins	200-250-308-5700-63210	Supplies-First Aid	18.99
03/06/2021	953685346338	Hidden Lakes Drain Pipe Rubber Covers - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	93.45
04/05/2021	697335499556	Oaks Supplies - Owl Pellets	300-300-252-6520-63200	Supplies-EE	77.98
04/07/2021	853736973476	Gift Cards	100-101-101-1010-63000	Director Expense	643.60
04/08/2021	456784664947	Amazon Preschool Sensory Bin Supplies	200-214-230-2060-82000	Fundraising Expense-Oaks Preschool	3.26
04/08/2021	456784664947	Amazon Preschool Sensory Bin Supplies	200-214-232-2000-82000	Fundraising Expense-ACC Preschool	3.27
04/08/2021	456784664947	Amazon Preschool Sensory Bin Supplies	200-214-232-2020-82000	Fundraising Expense-BRAC Preschool	3.26
<b>Vendor 10038 - Amazon Total:</b>					<b>1,753.28</b>
<b>Vendor: 10040 - Ambius, Inc.</b>					
05/01/2021	310392CS307968	Monthly Plant Rental - Buildings	100-170-101-1010-62000	Contractual Services	368.54
<b>Vendor 10040 - Ambius, Inc. Total:</b>					<b>368.54</b>
<b>Vendor: 11658 - Appliance Parts Supplies</b>					
04/21/2021	4634	B&G Dryer - Grounds	100-170-101-1010-65100	Maintenance & Repairs - B&G	42.31
04/23/2021	4641	B&G Dryer - Grounds	100-170-101-1010-65100	Maintenance & Repairs - B&G	7.46
<b>Vendor 11658 - Appliance Parts Supplies Total:</b>					<b>49.77</b>
<b>Vendor: 10070 - Aqua Pure Enterprises, Inc.</b>					
04/01/2021	0134574-IN	PH Tiles & Pool Chemicals - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	45.96

## Expense Approval Report

Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
04/01/2021	0134574-IN	PH Tiles & Pool Chemicals - Buildings	200-250-308-5800-63100	Supplies-Water Treatment	261.35
04/14/2021	0134736-IN	PH Tile and Chlorine Pump - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	1,055.05
04/21/2021	0134772-IN	Acid Chem Pump - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	1,477.41
04/21/2021	0134816-IN	BRAC Pool Kerick Valves for Chlorine Tablets - Bld	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	259.56
04/23/2021	0134833-IN	PH Pool Chemicals - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	2,570.46
04/26/2021	0134852-IN	PH Pool Chemicals - Buildings	200-250-308-5800-63100	Supplies-Water Treatment	8,139.79
04/06/2021	0134637-IN	PH Pool Chemicals - Buildings	200-250-308-5800-63100	Supplies-Water Treatment	5,190.73
04/07/2021	0134661-IN	PH Repair Materials - B&G Supplies	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	31.32
<b>Vendor 10070 - Aqua Pure Enterprises, Inc. Total:</b>					<b>19,031.63</b>
<b>Vendor: 10071 - Aramark</b>					
04/01/2021	23361244	Uniforms Buildings - BGNR	100-170-101-1010-63700	Uniforms	61.98
04/01/2021	23361244	Uniforms Grounds - BGNR	100-171-101-1010-63700	Uniforms	210.86
04/01/2021	23361244	Uniforms NR - BGNR	100-172-101-1010-63700	Uniforms	342.86
04/16/2021	23406764	Uniforms - Buildings	100-170-101-1010-63700	Uniforms	51.98
04/21/2021	23417609	Uniforms - Grounds	100-171-101-1010-63700	Uniforms	25.99
04/03/2021	23369530	Uniforms Grounds - BGNR	100-171-101-1010-63700	Uniforms	79.95
04/03/2021	23369530	Uniforms NR - BGNR	100-172-101-1010-63700	Uniforms	19.99
<b>Vendor 10071 - Aramark Total:</b>					<b>793.61</b>
<b>Vendor: 10082 - Atlas First Access, LLC</b>					
03/30/2021	E66672	Walk Behind Squeegee - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	35.17
<b>Vendor 10082 - Atlas First Access, LLC Total:</b>					<b>35.17</b>
<b>Vendor: 11376 - Bade Supply</b>					
04/13/2021	43779	Custodial Supplies B&G - Buildings	100-170-101-1010-63110	Supplies-Custodial	146.20
04/13/2021	43792	Custodial Supplies BRAC - Buildings	100-170-101-1010-63110	Supplies-Custodial	169.96
04/13/2021	43806	Custodial Supplies BRAC - Buildings	100-170-101-1010-63110	Supplies-Custodial	761.12
04/21/2021	44011	Custodial Supplies BRAC - Buildings	100-170-101-1010-63110	Supplies-Custodial	196.02
04/21/2021	44012	Custodial Supplies ACC - Buildings	100-170-101-1010-63110	Supplies-Custodial	169.96
<b>Vendor 11376 - Bade Supply Total:</b>					<b>1,443.26</b>
<b>Vendor: 11347 - Batteries Plus Bulbs #956</b>					
04/15/2021	P38733050	Hustler #4 Battery - NRHT	100-172-101-1010-65300	Equipment Maintenance & Repairs	111.95
04/19/2021	P38896730	Swim Team Battery	200-250-200-5020-63220	Supplies-Swim Team	20.95
<b>Vendor 11347 - Batteries Plus Bulbs #956 Total:</b>					<b>132.90</b>
<b>Vendor: 10095 - Baudville</b>					
05/06/2021	3780721	Award Trophies	100-101-101-1010-61100	Employee Recognition	141.94
<b>Vendor 10095 - Baudville Total:</b>					<b>141.94</b>
<b>Vendor: 11681 - Bee All About It</b>					
04/15/2021	114	Hidden Oaks Honey Inventory	300-300-304-8600-66400	Cost of Goods Sold-Oaks	480.00
<b>Vendor 11681 - Bee All About It Total:</b>					<b>480.00</b>
<b>Vendor: 10226 - BMO Harris MasterCard</b>					
03/26/2021	2744544	BPD - Gift Cards for Focus Group Participants	100-101-101-1010-67000	Marketing-General Services	160.00
03/29/2021	002	Rainbow Dance - Competition	200-213-222-4680-62010	Contractual-Competition Fees	183.00
03/29/2021	200091501	Eppley Inst- Capital Improvement Cert- Supt P&P	100-151-101-1010-61000	Employee Development	280.00
03/30/2021	139338948	Poolweb - Charger for Swim Team Horn	200-250-200-5020-63220	Supplies-Swim Team	95.44
03/31/2021	3767553020027745-7486217	Facebook - Ads	200-250-308-5800-67000	Marketing-Aquatics	100.00

## Expense Approval Report

Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
03/31/2021	3767553020027745-7486217	Facebook - Ads	200-251-290-6000-67000	Marketing-Facility	289.33
04/01/2021	INV01113913	SportsEngine - Team Unify 04012021-04302021	200-250-308-5800-61200	Dues/Certifications/Subscriptions	99.95
04/13/2021	1381805	HSI - CPR Manuals	810-100-810-9750-63110	Loss Prevention Training Materials	959.42
04/13/2021	1381809	HSI - CPR Certification Renewals	810-100-810-9750-63110	Loss Prevention Training Materials	60.00
04/13/2021	INV0000541	Bass Pro Shop - Village of Bolingbrook ATV	850-100-850-9850-64000	Police Equipment	3,000.00
04/15/2021	1526640	Issuu - Subscription	100-101-101-1010-67600	Brochure-General Services	120.00
04/15/2021	1526640	Issuu - Subscription	200-102-101-1010-67600	Brochure-Recreation Services	120.00
04/15/2021	1526640	Issuu - Subscription	200-250-308-5800-67600	Brochure-Aquatics	120.00
04/15/2021	1526640	Issuu - Subscription	200-251-290-6000-67600	Brochure-Fitness	120.00
04/15/2021	INV0000547	MinBackdropStudio	200-000-110000	Accounts Receivable	12.48
04/15/2021	INV0000547	MinBackdropStudio - Theatre Spring Show Backdrop	200-213-208-4630-63000	Supplies-Theatre	146.92
04/16/2021	214226909	Weissman - May Concert Costumes	200-213-224-4640-63600	Costume Expense-May Concert	47.45
04/19/2021	550945	Chicago Botanic Garden - Adult Trip Parking	200-200-210-2970-62000	Contractual Services-Adult Trips Programs	25.00
04/20/2021	INV81347026	Zoom Video Communications- Web Conferencing	100-101-101-1010-62200	Computer Maintenance & Support	59.96
04/21/2021	214234903	Weissman - May Concert Costumes 2021	200-213-224-4640-63600	Costume Expense-May Concert	796.92
04/21/2021	INV0000542	BRGC - Business Lunch	100-101-101-1010-63000	Director Expense	65.35
04/22/2021	INV0000538	Chicago Botanic Garden - Adult Trip Guest Lunch	200-200-210-2970-62000	Contractual Services-Adult Trips Programs	96.00
04/24/2021	INV0000543	Dominos - Road Rally	200-200-200-2940-63200	Supplies-Adult Programs	15.50
04/24/2021	INV0000544	Dominos - Road Rally	200-200-200-2940-63200	Supplies-Adult Programs	15.50
04/24/2021	INV0000545	Dominos - Road Rally	200-200-200-2940-63200	Supplies-Adult Programs	15.50
04/26/2021	214241768	Weissman - May Concert Costumes	200-213-224-4640-63600	Costume Expense-May Concert	308.42
04/29/2021	214249139	Weissman - May Concert Costumes	200-213-224-4640-63600	Costume Expense-May Concert	47.45
04/03/2021	1617	Swimgen - Report Cards Jan-Mar	200-250-308-5800-61200	Dues/Certifications/Subscriptions	28.80
04/06/2021	INV0000546	ShowStopper - Dance Competition - To be refunded	200-000-110000	Accounts Receivable	6,929.84
04/07/2021	207389281	Yeti	100-000-110000	Accounts Receivable	6.87
04/07/2021	207389281	Yeti - Outgoing Commissioner Gifts	100-101-101-1010-63001	Commissioner Expense	119.98
04/07/2021	214212568	Weissman - May Concert Costumes	200-213-224-4640-63600	Costume Expense-May Concert	1,913.92
04/07/2021	50583	NinjaZone - Monthly Dues	200-211-215-4455-62000	Contractual Services-Ninjas Programs	375.00
04/07/2021	K2R3V0	IAPD - Boot Camp	100-101-101-1010-63001	Commissioner Expense	431.00
04/08/2021	810910	ERC Wiping Products - Gym Wipes	200-251-290-6000-63200	Supplies-Facility	550.00
05/07/2021	214261442	Weissman - May Concert Costumes	200-213-224-4640-63600	Costume Expense-May Concert	85.07

Vendor 10226 - BMO Harris MasterCard Total: 17,800.07

## Vendor: 10140 - Brian J. Gilbert

04/28/2021	April 2021	April 2021-Systems Support Specialist	100-157-101-1010-63800	Mileage	33.10
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Vendor 10140 - Brian J. Gilbert Total: 33.10

## Vendor: 10151 - BWM Global, Inc.

04/19/2021	35062	Road Rally Giveaways	200-200-200-2940-63200	Supplies-Adult Programs	300.00
04/26/2021	35090	Road Rally Giveaways	200-200-200-2940-63200	Supplies-Adult Programs	430.00

Vendor 10151 - BWM Global, Inc. Total: 730.00

## Vendor: 11023 - Card Connect,LLC

04/30/2021	01_496022301881 04/21	BPD ACC Merchant Processing Fee	200-102-101-1010-62400	Merchant Processing Fees-Rec Services	884.06
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## Expense Approval Report

Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
04/30/2021	03_496022302889 04/21	BPD BRAC Merchant Processing Fee	200-102-101-1010-62400	Merchant Processing Fees-Rec Services	1,109.52
04/30/2021	04_496022305882 04/21	BPD Hidden Lakes Merchant Processing Fee	300-305-308-9100-62400	Merchant Processing Fees-Lakes	116.35
04/30/2021	05_496022306880 04/21	BPD PH Indoor Pool Merchant Processing Fee	200-250-308-5800-62400	Merchant Processing Fees-Aquatics	19.97
04/30/2021	05_496022306880 04/21	BPD BRAC LS Merchant Processing Fee	200-251-290-6000-62400	Merchant Processing Fees-Fitness Facility	19.96
04/30/2021	09_496022300883 04/21	BPD WEB Merchant Processing Fee	200-102-101-1010-62400	Merchant Processing Fees-Rec Services	1,366.89
04/30/2021	11_496270132889 04/21	BPD Business Office Merchant Processing Fee	200-102-101-1010-62400	Merchant Processing Fees-Rec Services	221.31
04/30/2021	496270132889 04/21	04/01/2021 - 04/30/2021	100-000-110000	Accounts Receivable	29.95
04/30/2021	496289133886 04/21	04/01/2021 - 04/30/2021	100-000-110000	Accounts Receivable	29.95
04/30/2021	496289134884 04/21	04/01/2021 - 04/30/2021	100-000-110000	Accounts Receivable	29.95
04/30/2021	INV00039107	Wireless Credit Card Service (2 Units)-PH	200-250-308-5800-62100	Contractual Services-Equipment	50.00
<b>Vendor 11023 - Card Connect,LLC Total:</b>					<b>3,877.91</b>
<b>Vendor: 10164 - Case Lots, Inc.</b>					
04/09/2021	4044	Custodial Supplies B&G - Buildings	100-170-101-1010-63110	Supplies-Custodial	1,281.00
<b>Vendor 10164 - Case Lots, Inc. Total:</b>					<b>1,281.00</b>
<b>Vendor: 10169 - CDW Government Inc.</b>					
04/20/2021	B993368	Airwatch Renewal-38 Licenses	100-101-101-1010-62200	Computer Maintenance & Support	1,643.50
04/20/2021	C007750	APC Battery Replacements (3)-ACCPHNAPC	600-600-600-9600-75000	Capital Expenditures-Computers	1,575.00
04/21/2021	C056724	3 Patch Panels-ACC Network Rack Relocation	600-600-650-9610-76000	CARP Expenditures-Computers	984.36
<b>Vendor 10169 - CDW Government Inc. Total:</b>					<b>4,202.86</b>
<b>Vendor: 10189 - Chicago Office Technology Grp Cotg-A Xerox Company</b>					
04/22/2021	IN2704813	Print Management Software Renewal	100-101-101-1010-62200	Computer Maintenance & Support	1,362.90
04/26/2021	IN2707758	Printer Management Services	100-101-101-1010-62250	Office Equipment Maintenance & Support	114.46
04/26/2021	IN2709600	Printer Management Services-Ashbury's	400-475-475-5540-62250	Office Equipment Maintenance & Support- Ash at BR	242.03
<b>Vendor 10189 - Chicago Office Technology Grp Cotg-A Xerox Company Total:</b>					<b>1,719.39</b>
<b>Vendor: 10196 - Chris Martner</b>					
03/30/2021	March 2021	March 2021 - Director BGNR	100-171-101-1010-63800	Mileage	37.24
03/30/2021	March 2021	March 2021 - Director BGNR	100-172-101-1010-63800	Mileage	37.24
<b>Vendor 10196 - Chris Martner Total:</b>					<b>74.48</b>
<b>Vendor: 10199 - Christopher Corbett</b>					
04/30/2021	April 2021	April 2021 - Supt of Projects & Planning	100-156-101-1010-63800	Mileage	350.56
<b>Vendor 10199 - Christopher Corbett Total:</b>					<b>350.56</b>
<b>Vendor: 10200 - Christy Sorenson</b>					
04/30/2021	April 2021	April 2021 - Program/Event Manager	200-102-101-1010-63800	Mileage	69.44
<b>Vendor 10200 - Christy Sorenson Total:</b>					<b>69.44</b>
<b>Vendor: 10214 - Clipper Magazine</b>					
03/29/2021	1000154076	Clipper Ad - Fitness	200-251-290-6000-67000	Marketing-Facility	2,248.75
<b>Vendor 10214 - Clipper Magazine Total:</b>					<b>2,248.75</b>
<b>Vendor: 11149 - Collette Vacations</b>					
04/30/2021	1038738 Deposit	Deposit Adult Trip-Rome & Amalfi Coast	200-200-230200	Travel Deposits - Collette	13,986.00
<b>Vendor 11149 - Collette Vacations Total:</b>					<b>13,986.00</b>
<b>Vendor: 10217 - Comcast Cable</b>					
04/11/2021	8771201430420228 05/21	BRAC Internet	200-102-101-2020-70200	Remote Communication Lines-BRAC	39.18

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Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
04/11/2021	8771201430420228 05/21	BRAC Internet	200-102-310-2020-70200	Remote Communication Lines- BRAC Childcare	10.00
04/11/2021	8771201430420228 05/21	BRAC Fitness Internet	200-251-290-6000-70200	Remote Communication Lines	89.17
04/20/2021	8771201430355952 05/21	BRAC Fitness Cable TV	200-102-101-2020-70200	Remote Communication Lines- BRAC	47.27
04/20/2021	8771201430355952 05/21	BRAC Fitness Cable TV	200-251-290-6000-70200	Remote Communication Lines	110.29
04/20/2021	8771201430577076 05/21	Ashbury TV/Internet	400-475-475-5540-70200	Remote Communication Lines- Ashbury's at BR	391.72
04/24/2021	8771201430425136 05/21	BGNR Internet	100-170-101-1010-70200	Remote Communication Lines	49.18
04/24/2021	8771201430425136 05/21	BGNR Internet	100-171-101-1010-70200	Remote Communication Lines	49.17
04/09/2021	8771201430059067 05/21	BRAC Cable TV	200-102-101-2020-70200	Remote Communication Lines- BRAC	34.02
04/09/2021	8771201430059067 05/21	BRAC Cable TV	200-251-290-6000-70200	Remote Communication Lines	79.38
05/02/2021	8771201430420269 05/21	ACC Internet #1	100-101-101-1010-70200	Remote Communication Lines	81.68
05/02/2021	8771201430420269 05/21	ACC Internet #1	200-102-101-2000-70200	Remote Communication Lines- ACC	81.67
05/04/2021	8771201430496947 05/21	ACC Internet #2	100-101-101-1010-70200	Remote Communication Lines	78.40
<b>Vendor 10217 - Comcast Cable Total:</b>					<b>1,141.13</b>
<b>Vendor: 11597 - Commercial Recreation Specialists Inc</b>					
04/12/2021	0015943	StrikeGuard Lightning (Bulldog / Remington)	600-600-600-9600-75123	Capital - Bull Dog and Remington Lightning Det Sys	9,960.00
<b>Vendor 11597 - Commercial Recreation Specialists Inc Total:</b>					<b>9,960.00</b>
<b>Vendor: 10218 - Commonwealth Edison</b>					
04/30/2021	02_0792103023 04/21	Electric Service - Indian Bndry - Socr Bball 5 LTG	200-102-306-2080-71000	Electric Service-Ball Fields	52.96
04/07/2021	01_7319017007 03/21	Electric Service - Wipfler Park	200-102-306-2080-71000	Electric Service-Ball Fields	28.09
05/03/2021	01_7319017007 04/21	Electric Service - Wipfler Park	200-102-306-2080-71000	Electric Service-Ball Fields	27.22
<b>Vendor 10218 - Commonwealth Edison Total:</b>					<b>108.27</b>
<b>Vendor: 10222 - Conserv F/S, Inc.</b>					
04/14/2021	6405231	Athletic Fields Material - Grounds	100-171-101-1010-63120	Materials-Athletic Fields	1,957.00
<b>Vendor 10222 - Conserv F/S, Inc. Total:</b>					<b>1,957.00</b>
<b>Vendor: 10227 - Correct Electric, Inc.</b>					
04/12/2021	21207	Annerino Fire Alarm Repair - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	384.00
04/09/2021	21143	Ashburys Fire Alarm - Buildings	600-600-650-9610-76274	CARP-AABRCG-Fire Alarm System	23,367.00
<b>Vendor 10227 - Correct Electric, Inc. Total:</b>					<b>23,751.00</b>
<b>Vendor: 11406 - Costco</b>					
03/26/2021	INV0000527	Hidden Lakes Concessions	300-305-260-7000-66300	Cost of Goods Sold-Bait Shop Concessions	109.69
<b>Vendor 11406 - Costco Total:</b>					<b>109.69</b>
<b>Vendor: 11599 - Craig Harper</b>					
03/26/2021	INV0000551	Return2SouL Concert June 9, 2021	200-201-306-2300-62000	Contractual Services-Concert Series	1,000.00
<b>Vendor 11599 - Craig Harper Total:</b>					<b>1,000.00</b>
<b>Vendor: 10241 - Customer Lifecycle, LLC</b>					
04/01/2021	114	Executive Training	100-151-101-1010-61000	Employee Development	7,000.00
<b>Vendor 10241 - Customer Lifecycle, LLC Total:</b>					<b>7,000.00</b>
<b>Vendor: 11474 - Davis Bancorp, Incorporated</b>					
04/30/2021	95757	2021 Secure Depository Services	100-101-101-1010-62420	Secure Depository Services	520.00
<b>Vendor 11474 - Davis Bancorp, Incorporated Total:</b>					<b>520.00</b>
<b>Vendor: 10264 - Delta Dental-Risk</b>					
05/01/2021	1443140	Dental Insurance May 2021	100-101-101-1010-61410	Healthcare-Dental	4,095.80
<b>Vendor 10264 - Delta Dental-Risk Total:</b>					<b>4,095.80</b>
<b>Vendor: 10275 - Direct Energy Business</b>					
04/14/2021	HS12403260	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	969.06
04/14/2021	HS12403260	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	861.38

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Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
04/14/2021	HS12403260	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	323.02
05/06/2021	HS12439001	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	672.14
05/06/2021	HS12439001	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	597.45
05/06/2021	HS12439001	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	224.05
<b>Vendor 10275 - Direct Energy Business Total:</b>					<b>3,647.10</b>
<b>Vendor: 10279 - Discount School Supply</b>					
04/10/2021	P40330540101	Oaks Preschool Supplies	200-214-230-2060-82000	Fundraising Expense-Oaks Preschool	281.13
<b>Vendor 10279 - Discount School Supply Total:</b>					<b>281.13</b>
<b>Vendor: 11131 - Domino's Pizza</b>					
04/10/2021	588322	Birthday Parties-Hidden Oaks	300-300-240-6490-63330	Supplies-Nature Parties	31.79
<b>Vendor 11131 - Domino's Pizza Total:</b>					<b>31.79</b>
<b>Vendor: 10291 - Drendel Property Management</b>					
04/29/2021	CM200	BRGC Maintenance April	400-400-410-5540-62000	Course Maintenance	15,000.00
<b>Vendor 10291 - Drendel Property Management Total:</b>					<b>15,000.00</b>
<b>Vendor: 10297 - Dynegy Energy Services</b>					
04/19/2021	146547421041	Electric-Annerino	100-101-101-1010-71000	Electric Service-ACC	1,997.94
04/19/2021	146547421041	Electric-B&G	100-170-101-1010-71000	Electric Service-B&G	1,281.66
04/19/2021	146547421041	Electric-Annerino	200-102-101-2000-71000	Electric Service-ACC	1,997.93
04/19/2021	146547421041	Electric-BRAC	200-102-101-2020-71000	Electric Service-BRAC	3,592.99
04/19/2021	146547421041	Electric - DD	200-102-101-2040-71000	Electric Service-DD	87.21
04/19/2021	146547421041	Electric - Lily Cache Sportsfield W Camp	200-102-306-2080-71000	Electric Service-Ball Fields	177.70
04/19/2021	146547421041	Electric- Indian Boundary Restroom Shelter	200-102-306-2080-71000	Electric Service-Ball Fields	50.60
04/19/2021	146547421041	Electric - Bulldog Park	200-102-306-2080-71000	Electric Service-Ball Fields	123.48
04/19/2021	146547421041	Electric-Remington Lakes	200-102-306-2080-71000	Electric Service-Ball Fields	1,567.80
04/19/2021	146547421041	Electric-Lily Cache Sportsfield East	200-102-306-2080-71000	Electric Service-Ball Fields	530.79
04/19/2021	146547421041	Electric - Indian Boundary Concession/Shelter	200-102-306-2080-71000	Electric Service-Ball Fields	548.32
04/19/2021	146547421041	Electric-BRAC	200-250-308-5800-71000	Electric Service-AQ	3,193.76
04/19/2021	146547421041	Electric - BRAC	200-251-290-6000-71000	Electric Service-Fitness	1,197.66
04/19/2021	146547421041	Electric-Nature Center	300-300-308-9000-71000	Electric Service-Oaks	1,081.77
04/19/2021	146547421041	Electric - Bait Shop	300-305-308-9100-71000	Electric Service-Lakes	489.33
04/19/2021	146547421041	Electric-Ashbury's	400-475-475-5540-71000	Electric Service-Ashbury's at BR	1,939.74
<b>Vendor 10297 - Dynegy Energy Services Total:</b>					<b>19,858.68</b>
<b>Vendor: 11040 - Engineering Resource Associates, Inc.</b>					
04/27/2021	W2021800.06	ACC Asphalt Engineer Fees	600-600-650-9610-76266	CARP-ACC-Paving - South & West Lot	10,590.73
<b>Vendor 11040 - Engineering Resource Associates, Inc. Total:</b>					<b>10,590.73</b>
<b>Vendor: 10311 - Enterprise Newspaper Bugle Newspaper</b>					
03/18/2021	49004	ACC Paving Project Bid Announcement	600-600-650-9610-76266	CARP-ACC-Paving - South & West Lot	93.10
04/22/2021	48995	Pelican Harbor Epoxy Flooring	600-600-650-9610-76264	CARP-PH-Bathroom Flooring	73.15
04/08/2021	48988	Weber Path & Lily Cache Path and Bridge Bid Announ	600-600-650-9610-75120	Capital-Lily Cache Greenway-Trail Connections	73.15
<b>Vendor 10311 - Enterprise Newspaper Bugle Newspaper Total:</b>					<b>239.40</b>
<b>Vendor: 10326 - Fidelity Security Ins/Eyemed</b>					
04/22/2021	164775190	Vision Insurance May 2021	100-101-101-1010-61420	Healthcare-Vision	568.34
<b>Vendor 10326 - Fidelity Security Ins/Eyemed Total:</b>					<b>568.34</b>
<b>Vendor: 10330 - First Eagle Bank</b>					
05/01/2021	15923	Elliptical Lease	200-251-290-6000-62100	Contractual Services-Equipment	1,427.35
<b>Vendor 10330 - First Eagle Bank Total:</b>					<b>1,427.35</b>
<b>Vendor: 10335 - Fitzgerald Lighting &amp; Maint</b>					
04/13/2021	35332	Field Lighting Indian Boundary - Buildings	840-100-840-9800-65010	Outdoor Lighting Repairs	988.00

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Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
04/13/2021	35334	Field Lighting Central - Buildings	840-100-840-9800-65010	Outdoor Lighting Repairs	821.06
04/14/2021	35331	Field Lighting LCSF - Buildings	840-100-840-9800-65010	Outdoor Lighting Repairs	1,203.75
04/14/2021	35333	Field Lighting Remington - Buildings	840-100-840-9800-65010	Outdoor Lighting Repairs	2,281.70
<b>Vendor 10335 - Fitzgerald Lighting &amp; Maint Total:</b>					<b>5,294.51</b>
<b>Vendor: 10376 - Gordon Food Service</b>					
04/26/2021	960058430	Bait Shop-Concessions	300-305-260-7000-66300	Cost of Goods Sold-Bait Shop Concessions	69.48
04/09/2021	960057958	Sensory Bin Supplies for Preschool	200-214-230-2060-82000	Fundraising Expense-Oaks Preschool	85.58
04/09/2021	960057958	Sensory Bin Supplies for Preschool	200-214-232-2000-82000	Fundraising Expense-ACC Preschool	47.31
04/09/2021	960057958	Sensory Bin Supplies for Preschool	200-214-232-2020-82000	Fundraising Expense-BRAC Preschool	35.00
<b>Vendor 10376 - Gordon Food Service Total:</b>					<b>237.37</b>
<b>Vendor: 10380 - Grainger</b>					
03/22/2021	9843198327	ComEd Bild Utility Incentive - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	-50.00
03/22/2021	9843198335	ComEd Bild Utility Incentive - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	-75.00
03/30/2021	9853361690	BRAC Extinguisher Covers - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	290.56
04/15/2021	9869991852	Drinking Fountain - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	113.08
04/15/2021	9869991852	Outdoor Lighting - Buildings	840-100-840-9800-65010	Outdoor Lighting Repairs	260.30
04/16/2021	9871256468	Bulbs for All Field - Return	840-100-840-9800-65010	Outdoor Lighting Repairs	-489.33
04/07/2021	9860978049	Bulbs for All Fields - Buildings	840-100-840-9800-65010	Outdoor Lighting Repairs	2,066.07
04/08/2021	9862151975	BRAC Bulb - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	45.95
04/08/2021	9862151983	Indoor Pool Bulb - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	160.15
<b>Vendor 10380 - Grainger Total:</b>					<b>2,321.78</b>
<b>Vendor: 10384 - Green Glen Nursery Inc</b>					
04/20/2021	35130	Arbor Day Tree - NRHT	100-172-101-1010-63120	Materials-Plant	250.00
<b>Vendor 10384 - Green Glen Nursery Inc Total:</b>					<b>250.00</b>
<b>Vendor: 11257 - Hacienda Landscaping Inc</b>					
04/20/2021	1 Drafke Park and Plimmer Parks	Pay App #1 - Plimmer Park	600-600-650-9610-76271	CARP-Plimmer Park-Playground	37,189.12
04/23/2021	1 ADA Paving Improvements 20...	ADA Paving 2021 - Pay App #1	500-575-400-9500-75900	ADA Transition Plan	31,169.52
04/28/2021	1 Ivanhoe Park and The Forest	Ivanhoe - Pay App #1	600-600-650-9610-76270	CARP-Ivanhoe Park-Playground	8,550.00
04/28/2021	1 Ivanhoe Park and The Forest	The Forest - Pay App #1	600-600-650-9610-76272	CARP-The Forest-Playground	7,200.00
04/28/2021	2 Drafke Park and Plimmer Parks	Pay App #2 - Drafke Park	600-600-650-9610-76269	CARP-Drafke-Playground	47,362.91
04/28/2021	2 Drafke Park and Plimmer Parks	Pay App #2 - Plimmer Park	600-600-650-9610-76271	CARP-Plimmer Park-Playground	4,003.20
<b>Vendor 11257 - Hacienda Landscaping Inc Total:</b>					<b>135,474.75</b>
<b>Vendor: 10400 - Heritage FS, Inc.</b>					
04/14/2021	32005351	Fuel Tank 3 and Diesel Fuel - Grounds	100-170-101-1010-63190	Fuel Purchases	225.86
04/14/2021	32005351	Fuel Tank 3 and Diesel Fuel - Grounds	100-171-101-1010-63190	Fuel Purchases	1,419.66
04/14/2021	32005351	Fuel Tank 3 and Diesel Fuel - Grounds	100-172-101-1010-63190	Fuel Purchases	1,580.98
<b>Vendor 10400 - Heritage FS, Inc. Total:</b>					<b>3,226.50</b>
<b>Vendor: 10403 - High PSI Ltd</b>					
04/12/2021	70903	B&G Wash Bay Pressure Washer - Buildings	100-170-101-1010-65100	Maintenance & Repairs - B&G	142.13
<b>Vendor 10403 - High PSI Ltd Total:</b>					<b>142.13</b>
<b>Vendor: 10408 - Home Depot Credit Services Dept. 32 - 2502239274</b>					
03/18/2021	5043793	Custodial Supplies - Buildings	100-170-101-1010-64000	Equipment	53.94
<b>Vendor 10408 - Home Depot Credit Services Dept. 32 - 2502239274 Total:</b>					<b>53.94</b>

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Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
<b>Vendor: 10578 - HR Source</b>					
05/05/2021	FY22-53523	2021-2022 Membership Dues	100-101-101-1010-61200	Dues & Subscriptions	2,030.00
<b>Vendor 10578 - HR Source Total:</b>					<b>2,030.00</b>
<b>Vendor: 10440 - Illinois American Water</b>					
04/12/2021	17_220005731813 05/21	Fire Services - Lily Cache Sports Fields	200-102-306-2080-71200	Water-Ball Fields	52.22
04/14/2021	18_220005731806 04/21	Water - Lily Cache Sports Fields	200-102-306-2080-71200	Water-Ball Fields	143.53
04/16/2021	02_210001000336 04/21	Water - Annerino	100-101-101-1010-71200	Water-ACC	191.90
04/16/2021	02_210001000336 04/21	Water - Annerino	200-102-101-2000-71200	Water-ACC	191.89
04/16/2021	03_210001000398 05/21	Fire Services - Annerino	100-101-101-1010-71200	Water-ACC	9.75
04/16/2021	03_210001000398 05/21	Fire Services - Annerino	200-102-101-2000-71200	Water-ACC	9.74
04/16/2021	04_210001347592 04/21	Water - B&G	100-170-101-1010-71200	Water-B&G	313.76
04/16/2021	05_210001347660 05/21	Fire Services B&G	100-170-101-1010-71200	Water-B&G	97.19
04/16/2021	08_210001615349 04/21	Water-Fire Bulldog Park	200-102-306-2080-71200	Water-Ball Fields	127.92
04/16/2021	11_210002217946 04/21	Water - B&G	100-170-101-1010-71200	Water-B&G	221.45
04/16/2021	15_220001014974 04/21	Water - Fire Trojan Concession Stand	200-102-306-2080-71200	Water-Ball Fields	104.31
04/16/2021	20_220016222937 04/21	Water-Fire Wipfler	200-102-306-2080-71200	Water-Ball Fields	47.35
04/20/2021	01_210000580204 04/21	Remington Lakes PIT - Water & Fire Protection	200-102-306-2080-71200	Water-Ball Fields	144.06
04/20/2021	12_210003536480 04/21	Water - DD	200-102-101-2040-71200	Water-DD	69.69
04/20/2021	13_210003536558 05/21	Fire Services - DD	200-102-101-2040-71200	Water-DD	19.49
04/20/2021	16_220004478867 04/21	Water - Indian Boundary Park	200-102-306-2080-71200	Water-Ball Fields	128.99
04/20/2021	19_220006393214 04/21	Water-Fire Indian Boundary Concessions	200-102-306-2080-71200	Water-Ball Fields	118.29
04/21/2021	06_210001383994 04/21	Water - BRAC	200-102-101-2020-71200	Water-BRAC	786.98
04/21/2021	06_210001383994 04/21	Water - BRAC	200-250-308-5800-71200	Water-AQ	3,934.90
04/21/2021	06_210001383994 04/21	Water - BRAC	200-251-290-6000-71200	Water-Fitness	524.65
04/21/2021	07_210001384058 05/21	Fire Services - BRAC	200-102-101-2020-71200	Water-BRAC	37.52
04/21/2021	07_210001384058 05/21	Fire Service - BRAC	200-250-308-5800-71200	Water-AQ	187.57
04/21/2021	07_210001384058 05/21	Fire Services - BRAC	200-251-290-6000-71200	Water-Fitness	25.01
04/27/2021	14_210002109922 04/21	Water - Pelican Harbor	200-250-308-5800-71200	Water-AQ	7,669.22
04/28/2021	09_210001975768 04/21	Water - Hidden Oaks	300-300-308-9000-71200	Water-Oaks	210.88
04/28/2021	21_210003373658 04/21	Water - Hidden Oaks	300-300-308-9000-71200	Water-Oaks	42.86
05/03/2021	10_210001975836 05/21	Fire Services - Hidden Oaks	300-300-308-9000-71200	Water-Oaks	201.57
<b>Vendor 10440 - Illinois American Water Total:</b>					<b>15,612.69</b>
<b>Vendor: 10858 - Illinois Office of the State Fire Marshal</b>					
04/22/2021	9644442	Annerino Boiler Inspection - Buildings	100-170-101-1010-62000	Contractual Services	165.00
<b>Vendor 10858 - Illinois Office of the State Fire Marshal Total:</b>					<b>165.00</b>
<b>Vendor: 11677 - Illinois Park and Recreation Foundation</b>					
04/27/2021	INV0000548	Diversity Equity & Inclusion Training	100-151-101-1010-61000	Employee Development	300.00
<b>Vendor 11677 - Illinois Park and Recreation Foundation Total:</b>					<b>300.00</b>
<b>Vendor: 11604 - Imagine Nation, LLC</b>					
04/14/2021	555	The Forest Playground Equipment	600-600-650-9610-76272	CARP-The Forest-Playground	45,000.00
04/14/2021	556	Ivanhoe Park Playground Equipment	600-600-650-9610-76270	CARP-Ivanhoe Park-Playground	60,000.00
<b>Vendor 11604 - Imagine Nation, LLC Total:</b>					<b>105,000.00</b>
<b>Vendor: 10446 - Industrial Electric Supply</b>					
04/16/2021	S100001802.001	Boan Woods Hand Dryer Switch - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	55.96
<b>Vendor 10446 - Industrial Electric Supply Total:</b>					<b>55.96</b>
<b>Vendor: 10450 - Insect Lore</b>					
04/20/2021	INV1208027	Butterflies for Preschool	200-214-230-2060-82000	Fundraising Expense-Oaks Preschool	42.00
04/20/2021	INV1208027	Butterflies for Preschool	200-214-232-2000-82000	Fundraising Expense-ACC Preschool	22.66

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Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
04/20/2021	INV1208027	Butterflies for Preschool	200-214-232-2020-82000	Fundraising Expense-BRAC Preschool	19.25
<b>Vendor 10450 - Insect Lore Total:</b>					<b>83.91</b>
<b>Vendor: 11684 - Joseph E. Matise</b>					
04/01/2021	INV0000554	The Walk-Ins Concert June 23, 2021	200-201-306-2300-62000	Contractual Services-Concert Series	900.00
<b>Vendor 11684 - Joseph E. Matise Total:</b>					<b>900.00</b>
<b>Vendor: 11403 - KeepitSafe, Inc.</b>					
04/30/2021	218594	Online Backup Services	100-101-101-1010-62200	Computer Maintenance & Support	3,157.98
<b>Vendor 11403 - KeepitSafe, Inc. Total:</b>					<b>3,157.98</b>
<b>Vendor: 11108 - Kemper Sports</b>					
05/01/2021	00065644	Kemper Management Fee	400-475-475-5550-62500	Contractual Services- Management Fee	7,472.17
<b>Vendor 11108 - Kemper Sports Total:</b>					<b>7,472.17</b>
<b>Vendor: 11145 - KEPRO</b>					
04/01/2021	SOINV-0019531	EAP Premium 2nd Qtr 2021	100-101-101-1010-61300	EAP Program	795.75
<b>Vendor 11145 - KEPRO Total:</b>					<b>795.75</b>
<b>Vendor: 11259 - Keystone Hatcheries LLC</b>					
04/16/2021	40432	Hidden Lakes Fish Stocking 2021	300-305-262-7020-63100	Stocking Services	2,197.50
<b>Vendor 11259 - Keystone Hatcheries LLC Total:</b>					<b>2,197.50</b>
<b>Vendor: 11488 - Kranz, Inc. Div. Imperial Dade</b>					
04/13/2021	1746710-00	Custodial Supplies BRAC - Buildings	100-170-101-1010-63110	Supplies-Custodial	600.06
04/13/2021	1746711-00	Custodial Supplies B&G - Buildings	100-170-101-1010-63110	Supplies-Custodial	634.75
04/27/2021	6534894-00	Vacuum Parts - Buildings	100-170-101-1010-65300	Maintenance & Repairs - Equipment	20.30
<b>Vendor 11488 - Kranz, Inc. Div. Imperial Dade Total:</b>					<b>1,255.11</b>
<b>Vendor: 11325 - Lakeshore Recycling Systems</b>					
04/08/2021	PS365277	Port-a-let Rental Central Sk Pk 031221-040821-Grds	100-171-101-1010-62030	Contractual Services-Portable Restroom Services	71.75
04/08/2021	PS365278	Hid Lks Hand Wash 031221- 040821 - Grounds	100-171-101-1010-62030	Contractual Services-Portable Restroom Services	64.01
04/08/2021	PS365278	Port-a-let Rental Hid Lks 031221- 040821 - Grounds	500-575-400-9500-63100	Park Accessibility Materials	315.68
04/08/2021	PS365279	Port-a-let Rental LCSF 031221- 040821 - Grounds	500-575-400-9500-63100	Park Accessibility Materials	91.61
04/08/2021	PS365280	Pit Stop Port-O-Let 03262021- 04082021	200-210-200-4020-63200	Supplies-Leagues	35.88
04/08/2021	PS365281	Port-a-let Rental Balstroke 040221-040821-Grounds	500-575-400-9500-63100	Park Accessibility Materials	22.90
04/08/2021	PS365282	Port-a-let Rental IB 040221- 040821 - Grounds	500-575-400-9500-63100	Park Accessibility Materials	39.46
04/08/2021	PS365283	Port-a-let Rental Remington 031221-040821- Grounds	500-575-400-9500-63100	Park Accessibility Materials	91.61
04/08/2021	PS365284	Port-a-let Rental IndChase 040221-040821 - Grounds	500-575-400-9500-63100	Park Accessibility Materials	22.90
04/08/2021	PS365285	Port-a-let Rental Winston 040221-040821 - Grounds	500-575-400-9500-63100	Park Accessibility Materials	25.61
04/08/2021	PS365286	Port-a-let Rental Prairie Trls 040221-040821-Grds	500-575-400-9500-63100	Park Accessibility Materials	22.90
<b>Vendor 11325 - Lakeshore Recycling Systems Total:</b>					<b>804.31</b>
<b>Vendor: 11683 - Larry Mann</b>					
04/01/2021	INV0000552	Concert Voyage June 2, 2021	200-201-306-2300-62000	Contractual Services-Concert Series	1,000.00
<b>Vendor 11683 - Larry Mann Total:</b>					<b>1,000.00</b>

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Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
<b>Vendor: 10553 - Larrys Mobile Lock Service</b>					
04/09/2021	343573	Keys - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	218.77
<b>Vendor 10553 - Larrys Mobile Lock Service Total:</b>					<b>218.77</b>
<b>Vendor: 10555 - Lauterbach &amp; Amen, LLP</b>					
03/12/2021	53908	FY 2020 Actuarial Report - GASB 74/75	800-100-800-9550-62510	Actuarial Reports	860.00
<b>Vendor 10555 - Lauterbach &amp; Amen, LLP Total:</b>					<b>860.00</b>
<b>Vendor: 10559 - Les Mills US Trading</b>					
04/01/2021	SIV0001322	Monthly Service Fee Les Mills Group Ex	200-251-292-6020-62000	Contractual Agreements-Group Exercise	532.00
05/01/2021	SIV0012706	Monthly Service Fee Les Mills Group Ex	200-251-292-6020-62000	Contractual Agreements-Group Exercise	532.00
<b>Vendor 10559 - Les Mills US Trading Total:</b>					<b>1,064.00</b>
<b>Vendor: 11600 - Matthew A Engler</b>					
04/19/2021	INV0000553	Rhythm Giants Concert - June 16, 2021	200-201-306-2300-62000	Contractual Services-Concert Series	1,250.00
<b>Vendor 11600 - Matthew A Engler Total:</b>					<b>1,250.00</b>
<b>Vendor: 10594 - McCann Industries, Inc.</b>					
04/08/2021	P28103	Oil for 221F Compact Loader - Grounds	100-171-101-1010-63110	Lubricants and Fluids	244.00
<b>Vendor 10594 - McCann Industries, Inc. Total:</b>					<b>244.00</b>
<b>Vendor: 10595 - McCloud</b>					
04/30/2021	16571646	Pest Control ACC - Buildings	100-170-101-1010-62000	Contractual Services	80.00
04/30/2021	16571647	Pest Control BRAC - Buildings	100-170-101-1010-62000	Contractual Services	70.00
04/30/2021	16571648	Pest Control Hidden Oaks - Buildings	100-170-101-1010-62000	Contractual Services	65.00
04/30/2021	16571649	Pest Control PH - Buildings	100-170-101-1010-62000	Contractual Services	65.00
<b>Vendor 10595 - McCloud Total:</b>					<b>280.00</b>
<b>Vendor: 10605 - Menards</b>					
03/30/2021	11231	Players Benches Return for Credit - Grounds	100-171-101-1010-63120	Materials-Athletic Fields	-147.52
03/31/2021	11281	PH Repair Supplies - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	72.32
03/31/2021	11295	Bait Shop Storm Door Replacement - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	141.28
03/04/2021	10050	Players Benches - Grounds	100-171-101-1010-63120	Materials-Athletic Fields	212.66
04/01/2021	11324	Ashburys Siding - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	22.94
04/01/2021	11327	Bait Shop Storm Door Replacement - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	154.60
04/12/2021	11859	Concessions Plumbing Supplies - Buildings	100-170-101-1010-65110	Maint. & Repairs-Park Structures & Storage Units	27.76
04/13/2021	11915	BRAC PH Supplies - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	215.45
04/14/2021	11954	Misc Supplies - Grounds	100-171-101-1010-63130	Materials-Park	192.43
04/14/2021	11959	Annerino Misc Rope - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	14.97
04/15/2021	12011	Supplies for Hidden Lakes Drains - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	19.98
04/16/2021	12059	Misc Supplies - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	43.59
04/16/2021	12076	Timer for Paint Hopper - Grounds	100-171-101-1010-63120	Materials-Athletic Fields	16.98
04/16/2021	12076	Premium Top Soil - Grounds	100-171-101-1010-63120	Materials-Athletic Fields	11.96
04/16/2021	12076	Misc Supplies - Grounds	100-171-101-1010-63130	Materials-Park	35.73
04/22/2021	12358	PH Rope - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	16.96
04/23/2021	12417	Park Supplies - Grounds	100-171-101-1010-63130	Materials-Park	18.91
04/23/2021	12421	BRAC Vent - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	16.97

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04/05/2021	11505	Concessions Toilet Repairs - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	43.20
04/05/2021	11507	Concessions Toilet Repairs Return - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	-9.98
04/05/2021	11509	Concessions Plumbing Lever - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	11.96
04/05/2021	11516	Indian Boundary - Bolt Cutter - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	22.77
04/07/2021	11591	Ashburys Hand Truck - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	67.99
04/07/2021	11602	PH Pool Supplies - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	42.13
04/09/2021	11708	Central & TBall Supplies - Buildings	100-170-101-1010-65110	Maint. & Repairs-Park Structures & Storage Units	74.32
04/09/2021	11730	PH Bathroom Plumbing Repair - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	131.31
<b>Vendor 10605 - Menards Total:</b>					<b>1,471.67</b>
<b>Vendor: 11538 - MetLife</b>					
04/16/2021	INV0000536	Life Insurance - Vol Insurance	100-000-220438	Vol Ins Payable-Term Life Insurance	49.64
04/16/2021	INV0000536	Life Insurance 2021	100-101-101-1010-61430	Healthcare-Life	932.49
<b>Vendor 11538 - MetLife Total:</b>					<b>982.13</b>
<b>Vendor: 10611 - Michael Ochs</b>					
04/29/2021	INV0000549	April Volleyball Officials	200-210-200-4020-62000	Contractual Services-Leagues	551.00
<b>Vendor 10611 - Michael Ochs Total:</b>					<b>551.00</b>
<b>Vendor: 10622 - Midwest Trading</b>					
04/06/2021	I484029	Community Gardens Raised Beds - NRHT	100-172-101-1010-63160	Materials-Natural Areas	93.75
04/07/2021	I484087	Community Gardens Raised Beds - NRHT	100-172-101-1010-63160	Materials-Natural Areas	156.25
<b>Vendor 10622 - Midwest Trading Total:</b>					<b>250.00</b>
<b>Vendor: 10938 - Mindsight</b>					
04/16/2021	INV4052	Network Switch Upgrade	600-600-650-9610-76000	CARP Expenditures-Computers	5,590.29
04/30/2021	INV4182	Network Switch Upgrade	600-600-650-9610-76000	CARP Expenditures-Computers	13,281.61
05/01/2021	INV4129	Network Managed Services	100-101-101-1010-62200	Computer Maintenance & Support	1,625.00
<b>Vendor 10938 - Mindsight Total:</b>					<b>20,496.90</b>
<b>Vendor: 10643 - Muzak LLC</b>					
05/01/2021	56105105	Muzak SubScription-ACC	200-102-101-1010-67000	Marketing-Recreation Services	100.68
05/01/2021	56109239	Muzak SubScription-Pelican Harbor	200-250-308-5800-62000	Contractual Services	4.00
05/01/2021	56109240	Muzak SubScription-Pelican Harbor	200-250-308-5800-62000	Contractual Services	41.00
05/01/2021	56109241	Muzak SubScription-Pelican Harbor	200-250-308-5800-62000	Contractual Services	10.00
05/01/2021	56109496	Muzak SubScription-BRAC	200-102-101-1010-67000	Marketing-Recreation Services	93.52
05/01/2021	56109563	Muzak SubScription-BRAC	200-102-101-1010-67000	Marketing-Recreation Services	0.23
05/01/2021	56109637	Muzak SubScription-Pelican Harbor	200-250-308-5800-62000	Contractual Services	0.23
<b>Vendor 10643 - Muzak LLC Total:</b>					<b>249.66</b>
<b>Vendor: 10664 - Nicor Gas</b>					
01/07/2021	20-21-00-2000 2 12/20	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	372.58
01/07/2021	20-21-00-2000 2 12/20	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	331.19
01/07/2021	20-21-00-2000 2 12/20	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	124.20
12/02/2020	20-21-00-2000 2 11/20	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	344.13
12/02/2020	20-21-00-2000 2 11/20	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	305.90
12/02/2020	20-21-00-2000 2 11/20	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	114.71
02/03/2021	20-21-00-2000 2 01/21	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	377.78
02/03/2021	20-21-00-2000 2 01/21	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	335.80
02/03/2021	20-21-00-2000 2 01/21	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	125.93



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Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
03/02/2021	20-21-00-2000 2 02/21	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	450.25
03/02/2021	20-21-00-2000 2 02/21	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	400.22
03/02/2021	20-21-00-2000 2 02/21	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	150.08
04/27/2021	01_53-69-23-7341 7 04/21	Natural Gas Services - Storage Building	100-101-101-1010-71110	Natural Gas-Storage Building	35.10
04/28/2021	03_11-73-40-2000 8 04/21	Natural Gas Services - Annerino	100-101-101-1010-71100	Natural Gas-ACC	364.75
04/28/2021	03_11-73-40-2000 8 04/21	Natural Gas Services - Annerino	200-102-101-2000-71100	Natural Gas-ACC	364.75
04/29/2021	02_32-67-60-2000 4 04/21	Natural Gas Services - BRAC	200-250-308-5800-71100	Natural Gas-AQ	695.49
04/29/2021	04_03-88-92-9123 7 04/21	Natural Gas Services - B&G	100-170-101-1010-71100	Natural Gas-B&G	470.81
04/29/2021	05_37-26-72-2000 4 04/21	Natural Gas Services - DD	200-102-101-2040-71100	Natural Gas-DD	109.45
04/05/2021	20-21-00-2000 2 03/21	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	364.71
04/05/2021	20-21-00-2000 2 03/21	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	324.19
04/05/2021	20-21-00-2000 2 03/21	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	121.57
05/04/2021	20-21-00 2000 2 04/21	Natural Gas Service - BRAC	200-102-101-2020-71100	Natural Gas-BRAC	273.01
05/04/2021	20-21-00 2000 2 04/21	Natural Gas Service - BRAC	200-250-308-5800-71100	Natural Gas-AQ	242.67
05/04/2021	20-21-00 2000 2 04/21	Natural Gas Service - BRAC	200-251-290-6000-71100	Natural Gas-Fitness	91.00
<b>Vendor 10664 - Nicor Gas Total:</b>					<b>6,890.27</b>
<b>Vendor: 10678 - Nutoys Leisure Products</b>					
04/12/2021	51341	Drafke Park Playground Equipment	600-600-650-9610-76269	CARP-Drafke-Playground	54,374.00
04/12/2021	51341	Plimmer Park Playground Equipment Purchase	600-600-650-9610-76271	CARP-Plimmer Park-Playground	49,993.00
<b>Vendor 10678 - Nutoys Leisure Products Total:</b>					<b>104,367.00</b>
<b>Vendor: 10684 - OffWorld Designs</b>					
03/10/2021	20121122	Uniforms - Buildings	100-170-101-1010-63700	Uniforms	555.25
03/10/2021	20121122	Uniforms - Grounds	100-171-101-1010-63700	Uniforms	708.75
03/10/2021	20121122	Uniforms - NRHT	100-172-101-1010-63700	Uniforms	319.00
<b>Vendor 10684 - OffWorld Designs Total:</b>					<b>1,583.00</b>
<b>Vendor: 10691 - Otis Elevator Company</b>					
03/29/2021	CYS22604001	Ashburys Elevator Repair - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	861.24
04/28/2021	CYS22668001	Ashburys Pit Pump Replacement - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	1,508.00
<b>Vendor 10691 - Otis Elevator Company Total:</b>					<b>2,369.24</b>
<b>Vendor: 11411 - Parkreation Inc.</b>					
04/07/2021	6793	OSLAD - Shelter Engineer Fees	600-600-650-9610-76256	CARP-Century Park-Park Design Project (OSLAD)	1,000.00
<b>Vendor 11411 - Parkreation Inc. Total:</b>					<b>1,000.00</b>
<b>Vendor: 10711 - Pike Systems, Inc.</b>					
04/15/2021	664998	Custodial Supplies BRAC - Buildings	100-170-101-1010-63110	Supplies-Custodial	500.28
<b>Vendor 10711 - Pike Systems, Inc. Total:</b>					<b>500.28</b>
<b>Vendor: 11382 - Preferred Electrical Construction Corp of Illinois Inc.</b>					
01/11/2021	10013	Ashburys Dishwasher Exhaust - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	1,070.00
<b>Vendor 11382 - Preferred Electrical Construction Corp of Illinois Inc. Total:</b>					<b>1,070.00</b>
<b>Vendor: 11045 - Pro-Pak Industries, Inc.</b>					
04/06/2021	5102657-1	Safety Vests for Staff - Grounds	100-171-101-1010-64300	Safety Equipment	439.73
<b>Vendor 11045 - Pro-Pak Industries, Inc. Total:</b>					<b>439.73</b>
<b>Vendor: 11093 - R.J. O'Neil, Inc.</b>					
04/21/2021	00113962	LCSF E & W, Bulldog RPZ Repair/Replacement-Bldgs	100-170-101-1010-62000	Contractual Services	2,975.00
04/21/2021	00113963	Ashburys Elevator Sump Pump - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	655.81
<b>Vendor 11093 - R.J. O'Neil, Inc. Total:</b>					<b>3,630.81</b>

## Expense Approval Report

Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
<b>Vendor: 10767 - Rendel'S GMC Collision Specialists</b>					
04/15/2021	104932	Hustler #7 Pulley Idler - NRHT	100-172-101-1010-65300	Equipment Maintenance & Repairs	16.64
04/20/2021	104987	Hustler 7 Parts - NRHT	100-172-101-1010-65300	Equipment Maintenance & Repairs	38.71
<b>Vendor 10767 - Rendel'S GMC Collision Specialists Total:</b>					<b>55.35</b>
<b>Vendor: 10775 - Richard Wostratsky</b>					
04/30/2021	INV0000550	April Softball Umpires	200-210-200-4020-62000	Contractual Services-Leagues	987.50
<b>Vendor 10775 - Richard Wostratsky Total:</b>					<b>987.50</b>
<b>Vendor: 10786 - Robinson Wholesale Bait</b>					
04/13/2021	82478	Bait 04-13-21	300-305-260-7000-66400	Cost of Goods Sold-Bait Shop Bait	221.20
04/20/2021	82627	Bait 04-20-2021	300-305-260-7000-66400	Cost of Goods Sold-Bait Shop Bait	272.95
04/27/2021	82793	Bait 04-27-2021	300-305-260-7000-66400	Cost of Goods Sold-Bait Shop Bait	241.20
04/06/2021	82321	Bait 04-06-21	300-305-260-7000-66400	Cost of Goods Sold-Bait Shop Bait	232.75
<b>Vendor 10786 - Robinson Wholesale Bait Total:</b>					<b>968.10</b>
<b>Vendor: 10785 - Robinson Wholesale</b>					
04/13/2021	766311-1	Tackle 04-13-21	300-305-260-7000-66410	Cost of Goods Sold-Bait Shop Tackle	72.08
04/06/2021	766013-1	Tackle 04-06-21	300-305-260-7000-66410	Cost of Goods Sold-Bait Shop Tackle	167.05
<b>Vendor 10785 - Robinson Wholesale Total:</b>					<b>239.13</b>
<b>Vendor: 10788 - Rollins Aquatic Solutions</b>					
04/21/2021	5920	Aquatic Vegetation Management - Hidden Lakes	100-172-101-1010-62000	Contractual Services	3,995.00
<b>Vendor 10788 - Rollins Aquatic Solutions Total:</b>					<b>3,995.00</b>
<b>Vendor: 10798 - Russo Power Equipment</b>					
02/16/2021	SPI10540506	Salt - Grounds	100-171-101-1010-63130	Materials-Park	2,596.33
<b>Vendor 10798 - Russo Power Equipment Total:</b>					<b>2,596.33</b>
<b>Vendor: 11473 - Ryan Kertson</b>					
04/30/2021	March - April 2021	March - April 2021 - Facility/Athletic Manager	200-102-101-1010-63800	Mileage	130.48
<b>Vendor 11473 - Ryan Kertson Total:</b>					<b>130.48</b>
<b>Vendor: 11555 - Sam Glenn, Inc.</b>					
05/15/2021	051620 Balance Due	All Staff - Virtual Keynote Presentation 2021	100-101-101-1010-61000	Employee Development	2,500.00
<b>Vendor 11555 - Sam Glenn, Inc. Total:</b>					<b>2,500.00</b>
<b>Vendor: 10806 - Santo Sport Store</b>					
04/21/2021	706075	Softballs	200-210-200-4020-63200	Supplies-Leagues	1,870.20
<b>Vendor 10806 - Santo Sport Store Total:</b>					<b>1,870.20</b>
<b>Vendor: 11590 - Sarah Sielisch</b>					
04/19/2021	INV0000540	CPRP Reimbursement - Aquatic Manager	100-151-101-1010-61000	Employee Development	250.00
<b>Vendor 11590 - Sarah Sielisch Total:</b>					<b>250.00</b>
<b>Vendor: 11607 - Sebert Landscaping</b>					
04/01/2021	220069	River Hills Prairie Trails Contracted Mowing April	100-172-101-1010-62000	Contractual Services	1,725.00
<b>Vendor 11607 - Sebert Landscaping Total:</b>					<b>1,725.00</b>
<b>Vendor: 10824 - Sherwin Williams</b>					
04/14/2021	0891-3	PH Pool Paint - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	348.18
04/16/2021	4791-3	PH Slide Paint - Buildings	100-170-101-1010-65120	Maintenance & Repairs - Other Facilities	52.66
<b>Vendor 10824 - Sherwin Williams Total:</b>					<b>400.84</b>

## Expense Approval Report

Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount	
<b>Vendor: 11438 - Sikich LLP</b>						
03/31/2021	496393	FY 2020 Audit Fee	800-100-800-9550-62500	Audit Fees	11,750.00	
					<b>Vendor 11438 - Sikich LLP Total:</b>	<b>11,750.00</b>
<b>Vendor: 10848 - Sportsfields Inc</b>						
04/12/2021	2021091	Clay Sand - Grounds	100-171-101-1010-63120	Materials-Athletic Fields	2,030.16	
					<b>Vendor 10848 - Sportsfields Inc Total:</b>	<b>2,030.16</b>
<b>Vendor: 11605 - StarGuard Elite, LLC</b>						
04/01/2021	1705	Risk Management & Life Guard Certifications	200-250-308-5800-62000	Contractual Services	4,395.00	
					<b>Vendor 11605 - StarGuard Elite, LLC Total:</b>	<b>4,395.00</b>
<b>Vendor: 10869 - Sunburst Sportswear, Inc.</b>						
04/13/2021	121857	Gymnastics Staff Uniform Sweatshirts	200-211-308-8800-63700	Uniforms	265.16	
					<b>Vendor 10869 - Sunburst Sportswear, Inc. Total:</b>	<b>265.16</b>
<b>Vendor: 10891 - The Foundation For Bolingbrook Park</b>						
04/20/2021	INV0000529	Foundation Funds Release 01/01/2021-03/31/2021	100-000-200200	Foundation Payable	426.00	
					<b>Vendor 10891 - The Foundation For Bolingbrook Park Total:</b>	<b>426.00</b>
<b>Vendor: 10133 - The Shop BB, Inc</b>						
04/26/2021	24053	Park Bench Signs	600-600-650-9610-76271	CARP-Plimmer Park-Playground	144.00	
					<b>Vendor 10133 - The Shop BB, Inc Total:</b>	<b>144.00</b>
<b>Vendor: 10129 - Tina Simpson</b>						
04/30/2021	INV0000555	PH Start Up Cash	200-000-100200	Facility Cash Drawers & Change Bank	2,100.00	
					<b>Vendor 10129 - Tina Simpson Total:</b>	<b>2,100.00</b>
<b>Vendor: 10923 - Traffic Control and Protection</b>						
04/28/2021	106847	Posts/Anchors - Grounds	100-171-101-1010-63130	Materials-Park	1,018.75	
04/28/2021	106848	Road Signs - Grounds	100-171-101-1010-63130	Materials-Park	487.45	
					<b>Vendor 10923 - Traffic Control and Protection Total:</b>	<b>1,506.20</b>
<b>Vendor: 10930 - Tressler, LLP</b>						
04/05/2021	428385	General Matters	100-101-101-1010-62500	Legal Services	3,900.00	
04/05/2021	428387	Corridor-1 Land Purchase	100-101-101-1010-62500	Legal Services	150.50	
04/05/2021	428388	Personnel	100-101-101-1010-62500	Legal Services	451.50	
04/05/2021	428389	Real Property Matters	100-101-101-1010-62500	Legal Services	2,801.00	
					<b>Vendor 10930 - Tressler, LLP Total:</b>	<b>7,303.00</b>
<b>Vendor: 10944 - United Healthcare</b>						
04/09/2021	676294559967	Medical Insurance May 2021	100-101-101-1010-61400	Healthcare-Medical	52,807.70	
					<b>Vendor 10944 - United Healthcare Total:</b>	<b>52,807.70</b>
<b>Vendor: 10955 - Upland Design Ltd.</b>						
04/13/2021	20-874-03	OSLAD Architectural Fees - Century Park	600-600-650-9610-76256	CARP-Century Park-Park Design Project (OSLAD)	4,420.00	
					<b>Vendor 10955 - Upland Design Ltd. Total:</b>	<b>4,420.00</b>
<b>Vendor: 10957 - US Post Office</b>						
04/30/2021	INV0000526	Pre-pay Postage for the June Newsletter	200-000-130020	Prepaid Postage Bulk Mailing	5,000.00	
					<b>Vendor 10957 - US Post Office Total:</b>	<b>5,000.00</b>
<b>Vendor: 10964 - Verizon Wireless</b>						
04/15/2021	9877735605	Cellular Service	100-101-101-1010-70100	Cellular Service	471.75	
04/15/2021	9877735605	Cellular Service	100-170-101-1010-70100	Cellular Service	284.13	
04/15/2021	9877735605	Cellular Service	100-171-101-1010-70100	Cellular Service	181.02	
04/15/2021	9877735605	Cellular Service	100-172-101-1010-70100	Cellular Service	166.85	
04/15/2021	9877735605	Cellular Service	200-102-101-1010-70100	Cellular Service	281.23	
04/15/2021	9877735605	Cellular Service	200-102-310-2020-70100	Cellular Service-BRAC Childcare	1.43	
04/15/2021	9877735605	Cellular Service	200-202-200-3400-70100	Cellular Service-Pioneer	57.08	
04/15/2021	9877735605	Cellular Service	200-202-200-3410-70100	Cellular Service-Tibbott	57.08	
04/15/2021	9877735605	Cellular Service	200-202-200-3420-70100	Cellular Service-Independence	57.08	
04/15/2021	9877735605	Cellular Service	200-202-200-3440-70100	Cellular Service-Jonas Salk	57.08	

## Expense Approval Report

Due Dates: 05/20/2021 - 05/20/2021

Payable Date	Payable Number	Description (Item)	Account Number	Account Name	Amount
04/15/2021	9877735605	Cellular Service	200-202-200-3460-70100	Cellular Service-BJ Ward	57.08
04/15/2021	9877735605	Cellular Service	200-202-200-3470-70100	Cellular Service-Wood View	57.08
04/15/2021	9877735605	Cellular Service	200-203-200-3200-70100	Cellular Service-Summer Camp	17.12
04/15/2021	9877735605	Cellular Service	200-250-308-5800-70100	Cellular Service-Aquatics	83.93
04/15/2021	9877735605	Cellular Service	200-251-290-6000-70100	Cellular Service-Fitness	28.87
04/15/2021	9877735605	Cellular Service	300-300-308-9000-70100	Cellular Services-Hidden Oaks	4.28
04/23/2021	9878373068	Cellular Data Services	100-170-101-1010-70100	Cellular Service	32.68
04/23/2021	9878373068	Cellular Data Service	100-171-101-1010-70100	Cellular Service	16.34
04/23/2021	9878373068	Cellular Data Service	200-102-101-1010-67000	Marketing-Recreation Services	8.17
04/23/2021	9878373068	Cellular Data Service	200-250-308-5800-67000	Marketing-Aquatics	8.17
04/23/2021	9878373068	Cellular Data Service	200-251-290-6000-67010	Marketing Retention-Facility	8.17
04/23/2021	9878373068	Cellular Data Service	300-300-308-9000-67000	Marketing-Hidden Oaks	8.17
04/23/2021	9878373069	Cellular Data Service	200-202-200-3400-70100	Cellular Service-Pioneer	15.29
04/23/2021	9878373069	Cellular Data Service	200-202-200-3410-70100	Cellular Service-Tibbott	15.29
04/23/2021	9878373069	Cellular Data Service	200-202-200-3420-70100	Cellular Service-Independence	15.29
04/23/2021	9878373069	Cellular Data Service	200-202-200-3440-70100	Cellular Service-Jonas Salk	15.28
04/23/2021	9878373069	Cellular Data Service	200-202-200-3460-70100	Cellular Service-BJ Ward	15.28
04/23/2021	9878373069	Cellular Data Service	200-202-200-3470-70100	Cellular Service-Wood View	15.29
<b>Vendor 10964 - Verizon Wireless Total:</b>					<b>2,036.51</b>
<b>Vendor: 10973 - Walmart Community</b>					
03/23/2021	INV0000530	Extension Cords	200-102-101-2020-64500	Equipment-BRAC	47.82
03/23/2021	INV0000531	Oaks Animal Supplies	300-300-308-9000-63110	Supplies-Animal	11.20
03/28/2021	INV0000532	Dance - February Concert Supplies	200-213-222-4600-63200	Supplies-DF Feb Concert	19.74
03/31/2021	INV0000533	Oaks Animal Supplies	300-300-308-9000-63110	Supplies-Animal	5.38
04/09/2021	INV0000535	Microwave	200-102-101-2000-63000	Supplies-ACC	55.00
<b>Vendor 10973 - Walmart Community Total:</b>					<b>139.14</b>
<b>Vendor: 10974 - Warehouse Direct</b>					
04/22/2021	4941400-0	Office Supplies	100-101-101-1010-63050	Office Supplies	177.93
04/23/2021	4941761-0	Office Supplies	100-101-101-1010-63050	Office Supplies	216.35
<b>Vendor 10974 - Warehouse Direct Total:</b>					<b>394.28</b>
<b>Vendor: 10975 - Waste Management of IL S.W.</b>					
04/01/2021	3411294-2007-9	B&G Facility Dumpster - Grounds	100-171-101-1010-62020	Contractual Services-Disposal Services	388.00
04/16/2021	3411962-2007-1	B&G Facility Dumpster - Grounds	100-171-101-1010-62020	Contractual Services-Disposal Services	326.39
04/16/2021	3412067-2007-8	Dumpster - Aerobics Room Flooring	600-600-650-9610-76244	CARP-BRAC-Aerobics/Dance Flooring	393.13
04/30/2021	6178717-2007-5	Recycle Facilities - Buildings	100-170-101-1010-62000	Contractual Services	58.43
04/30/2021	6178717-2007-5	Refuse Facilities - Buildings	100-170-101-1010-62000	Contractual Services	398.84
04/30/2021	6178717-2007-5	Recycle Facilities - Grounds	100-171-101-1010-62020	Contractual Services-Disposal Services	98.12
05/03/2021	3412285-2007-6	B&G Facility Dumpster - Grounds	100-171-101-1010-62020	Contractual Services-Disposal Services	325.86
<b>Vendor 10975 - Waste Management of IL S.W. Total:</b>					<b>1,988.77</b>
<b>Vendor: 11066 - Will County Recorder of Deeds</b>					
04/23/2021	40513172	Easement - Bella Vista - Bike Trail	600-600-650-9610-75120	Capital-Lily Cache Greenway-Trail Connections	103.00
<b>Vendor 11066 - Will County Recorder of Deeds Total:</b>					<b>103.00</b>
<b>Grand Total:</b>					<b>739,658.40</b>

**Report Summary****Fund Summary**

<b>Fund</b>	<b>Expense Amount</b>
100 - General	149,474.10
200 - Recreation	114,310.27
300 - Museum	8,280.09
400 - Golf Course	26,457.63
500 - Special Recreation	31,802.19
600 - Capital	385,573.15
800 - Audit	12,610.00
810 - Insurance/Worker's Comp	1,019.42
840 - Paving & Lighting	7,131.55
850 - Police	3,000.00
<b>Grand Total:</b>	<b>739,658.40</b>